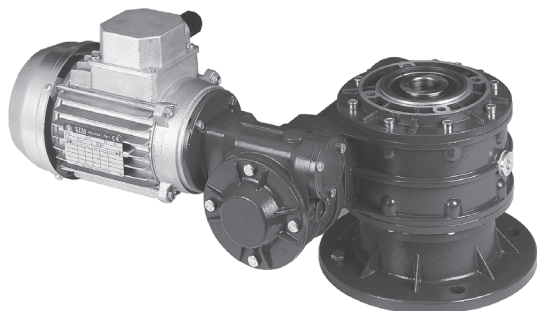
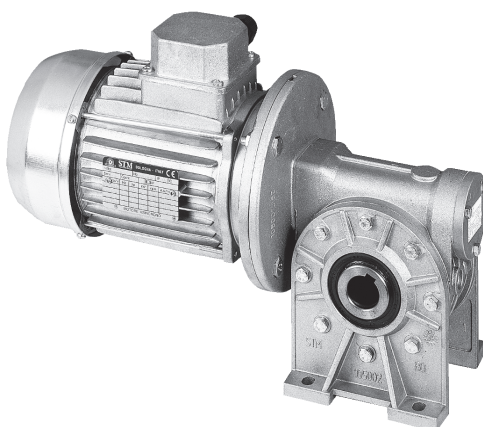




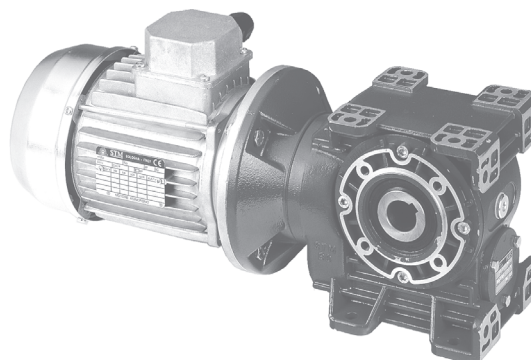
1.0 RIDUTTORI A VITE SENZA FINE WORM GEARBOXES SCHNECKENGETRIEBE

| | | | | Pag. Page Seite |
|------|------------------------------|----------------------------------|--------------------------------|-----------------------|
| 1.1 | Caratteristiche tecniche | <i>Technical characteristics</i> | Technische Eigenschaften | B2 |
| 1.2 | Designazione | <i>Designation</i> | Bezeichnungen | B4 |
| 1.3 | Versioni | <i>Versions</i> | Ausführungen | B6 |
| 1.4 | Lubrificazione | <i>Lubrication</i> | Schmierung | B11 |
| 1.5 | Carichi radiali e assiali | <i>Axial and overhung loads</i> | Radiale und Axiale Belastungen | B15 |
| 1.6 | Prestazioni riduttori | <i>Gearboxes performances</i> | Leistungen der Getriebe | B18 |
| 1.7 | Prestazioni motoriduttori | <i>Gearmotors performances</i> | Leistungen der Getriebemotoren | B30 |
| 1.8 | Dimensioni | <i>Dimensions</i> | Abmessungen | B40 |
| 1.9 | Accessori alberi lenti | <i>Accessories output shafts</i> | Zubehör Abtriebswellen | B57 |
| 1.10 | Accessori braccio di rezione | <i>Accessories torque arm</i> | Zubehör Drehmomentstütze | B58 |

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

B

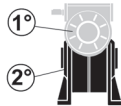


- **[*1] Bisporgenza Vite:**
1)RI-RMI CR-CB
 Nessuna indicazione = vite senza bisporgenza;
B = vite con bisporgenza.

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;

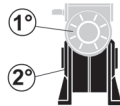
- **[*2] Cuscinetti Conici Uscita:**
 Nessuna indicazione = Cuscinetti Uscita del tipo radiale a una corona di sfere;
C = Cuscinetti conici in uscita.
N.B. Per Le versioni con limitatore di coppia questa opzione non è disponibile.
- **[*3] [*4] [*5] [*6] :**Limitatore di Coppia:
 Vedere Capitolo 4.0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

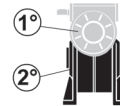
- **[*1] Doppelseitige Schneckenwelle**
1)RI-RMI CR-CB

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 | 28/50 | 28/63 | 28/70 | 40/85 | 50/110 | 63/130 | 85/150 | 85/180 |
| | | | 40/40 | 40/50 | 40/63 | 40/70 | 50/85 | 63/110 | 70/130 | 110/150 | 110/180 |
| 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

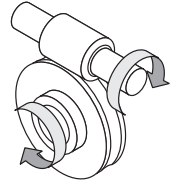
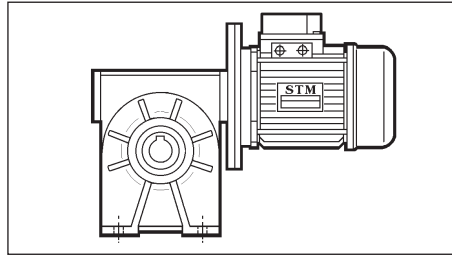
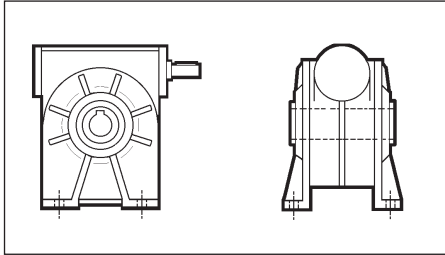
RI

RMI

Senso di rotazione standard
Standard direction of rotation
Drehrichtung Standard

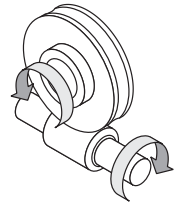
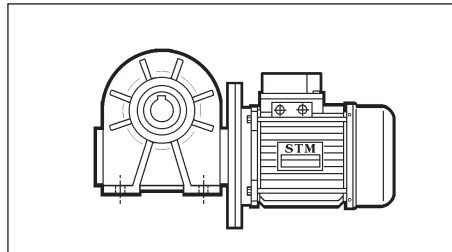
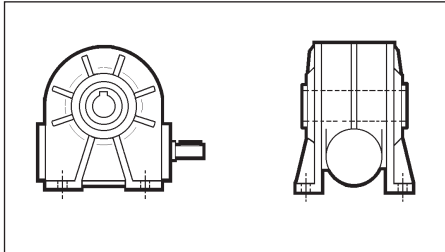
S

28 - 180



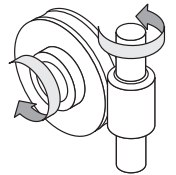
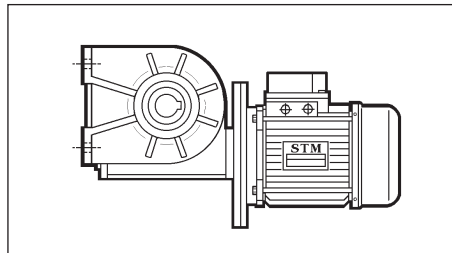
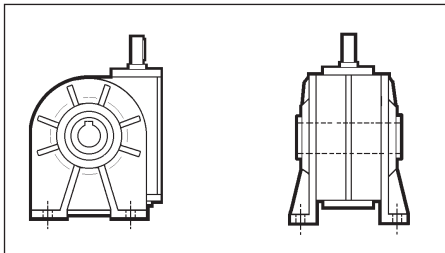
I

28 - 180



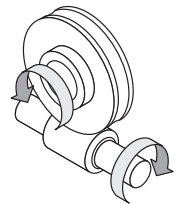
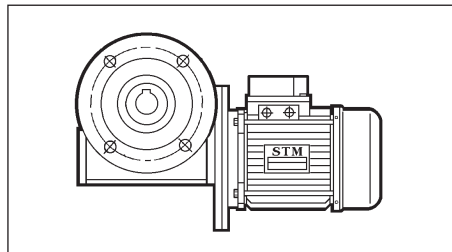
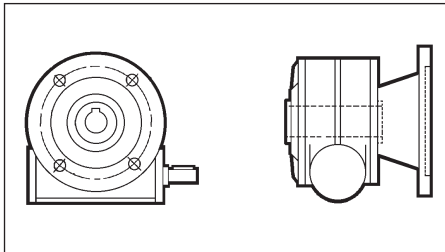
D

28 - 180



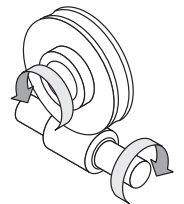
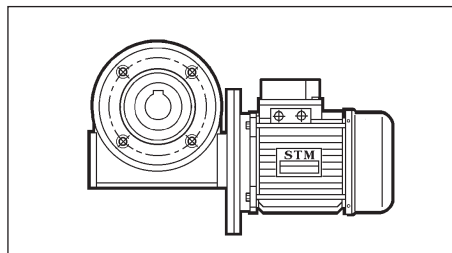
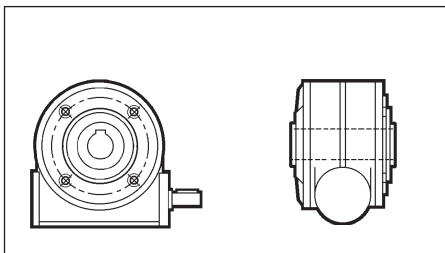
FL

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



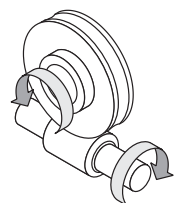
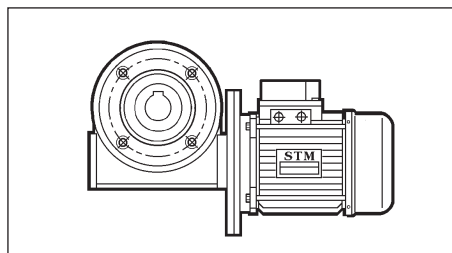
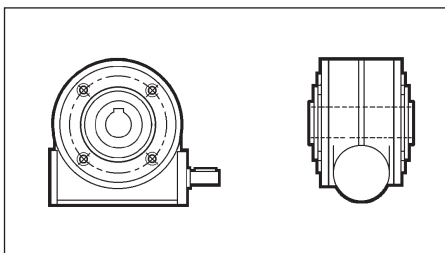
P

28, 85 - 180

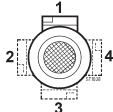


PP

40 - 70



STANDARD



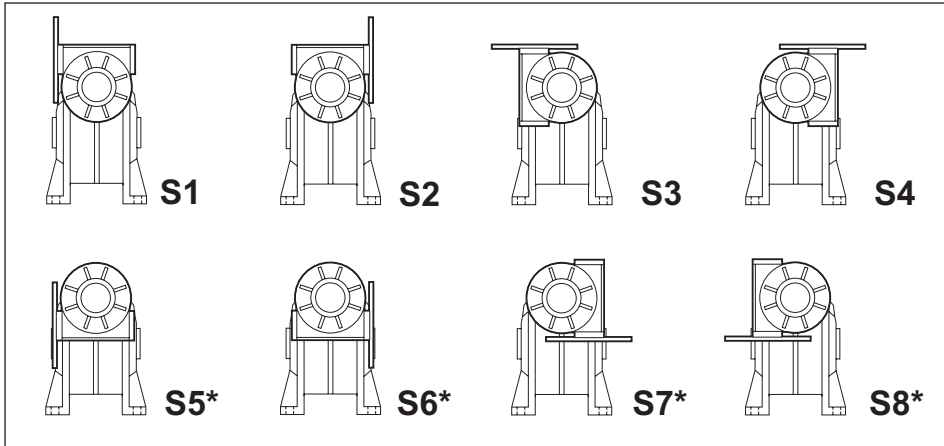
Posizione morsetti
Terminal board position
Lage des Klemmenkastens

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

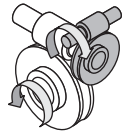
CRI - CRMI Versione di montaggio / *Mounting version* Montageausführungen

Senso di rotazione standard
Standard direction of rotation
Drehrichtung Standard

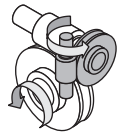
S
28 - 180



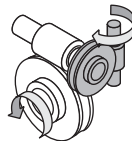
S1
S2



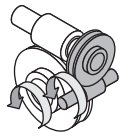
S3
S8



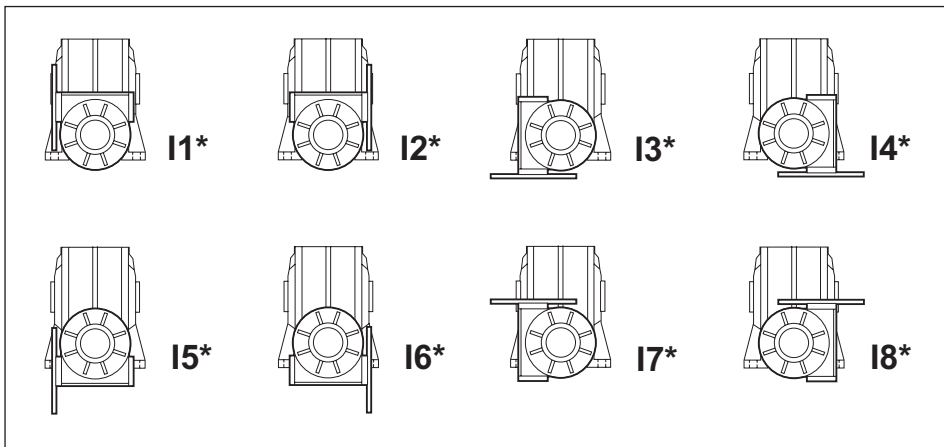
S4
S7



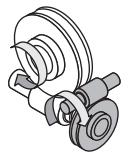
S5
S6



I
28 - 180



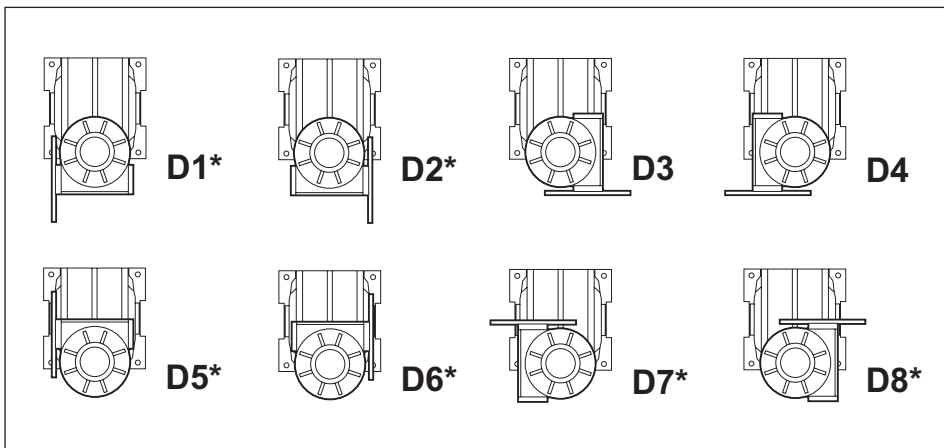
I1
I2
D5
D6



I3
I7
D4
D7



D
28 - 180



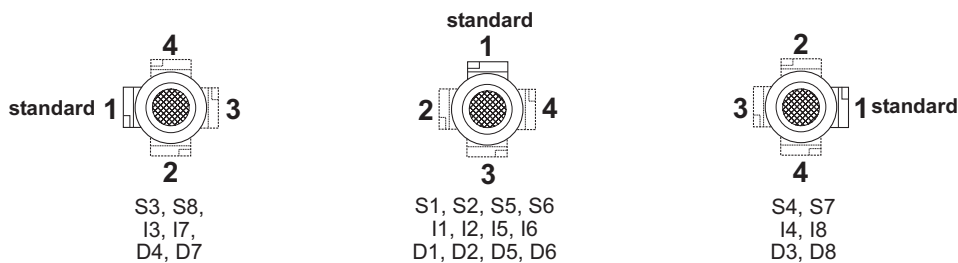
I4
I8
D3
D8



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 (*).

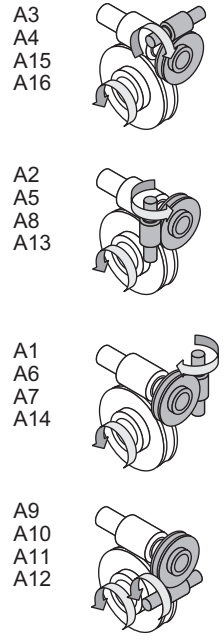
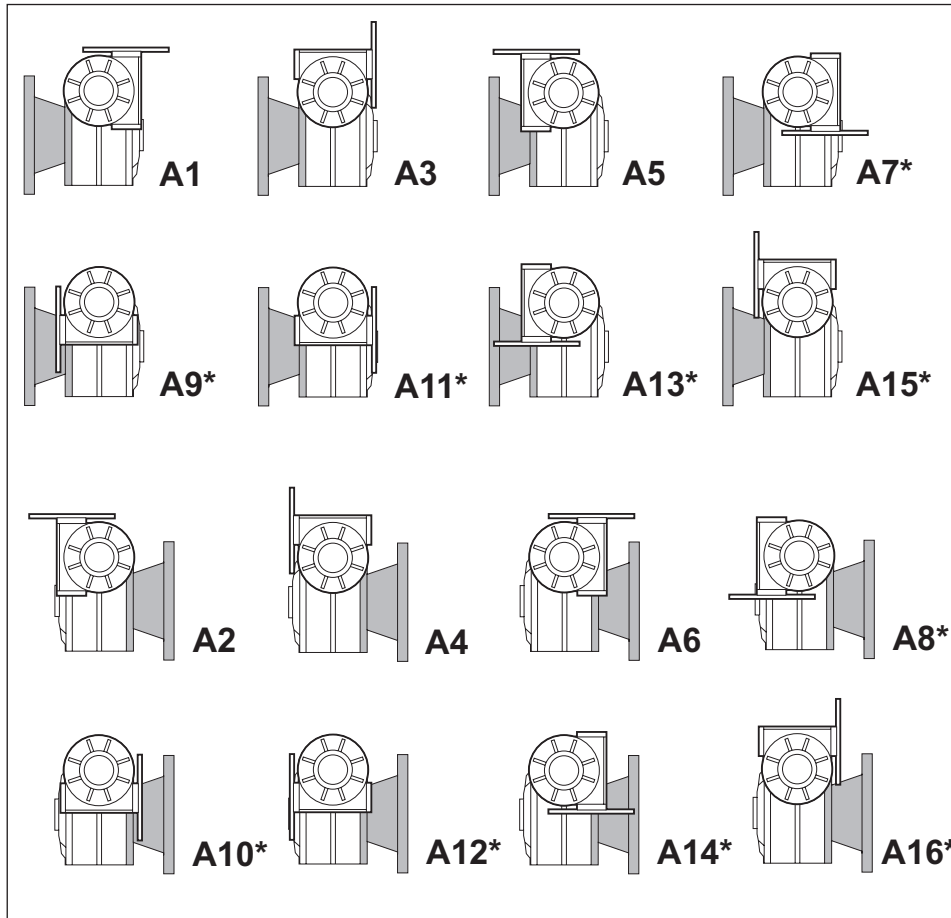
HINWEIS:
Während der Auswahl (der motorisierte oder PAM Getriebe – mit Motorflansch aufgebaut) bitte unsere Techniker die Möglichkeit B5/B14 Flansch auf der benötigte Ausführung befragen.

CRI - CRMI

Versione di montaggio / *Mounting version* Montageausführungen

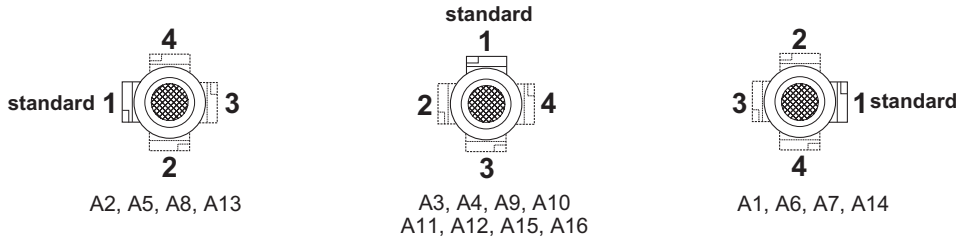
Senso di rotazione standard
Standard direction of rotation
Drehrichtung Standard

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.

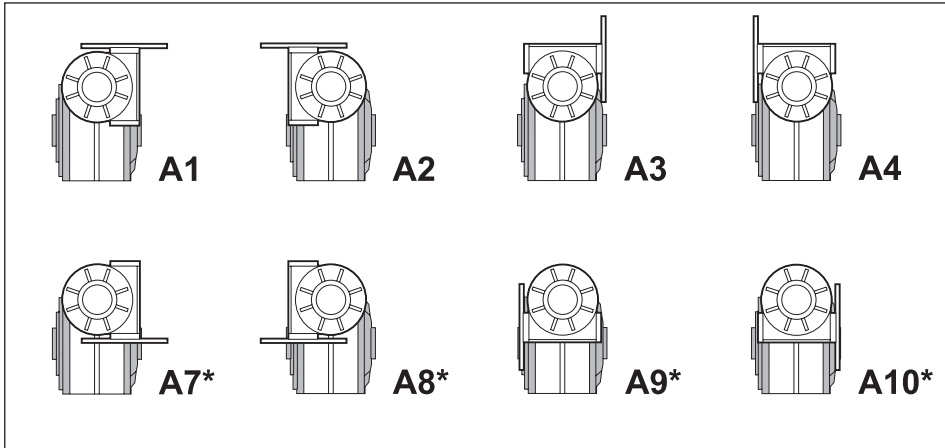
NOTE:
When selecting motorised or PAM (motorflange pre-arranged) gearboxes please ask our technicians availability of B5 and B14 flanges on the version marked (*).

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.

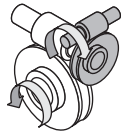
CRI - CRMI Versione di montaggio / *Mounting version* Montageausführungen

Senso di rotazione standard
Standard direction of rotation
Drehrichtung Standard

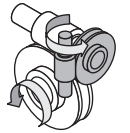
A
(PP)
40 - 70



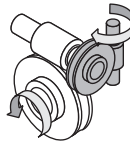
A3
A4
A15
A16



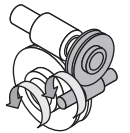
A2
A5
A8
A13



A1
A6
A7
A14



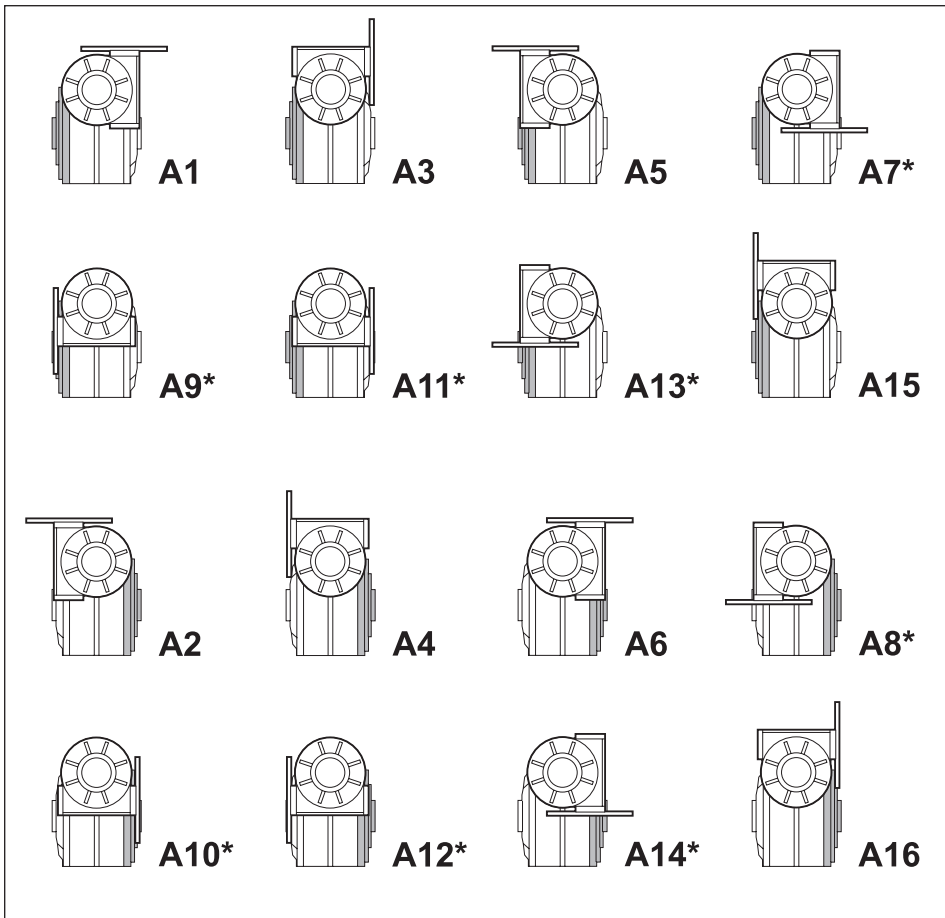
A9
A10
A11
A12



B

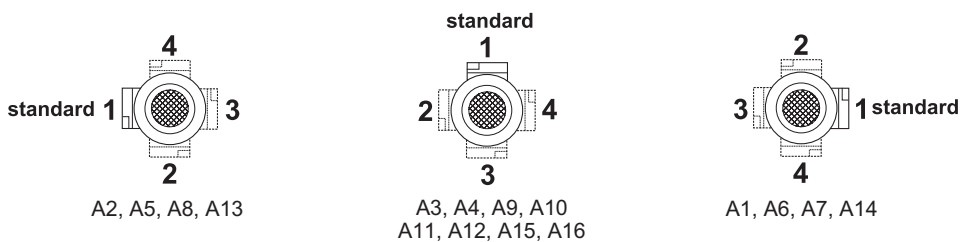


A
(P)
28,
85 - 180



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

Posizione morsetti / 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

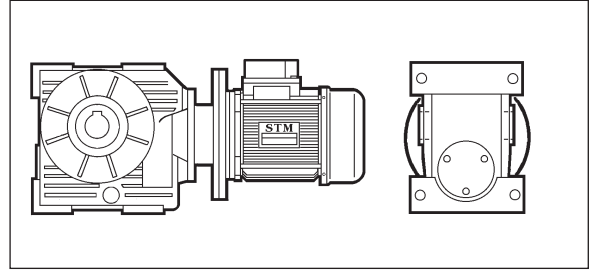
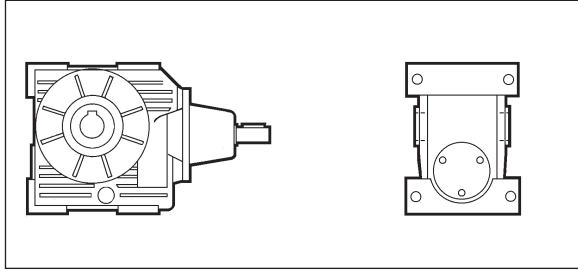
1.3 Versions

1.3 Ausführungen

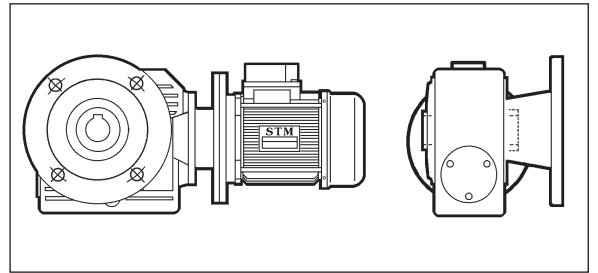
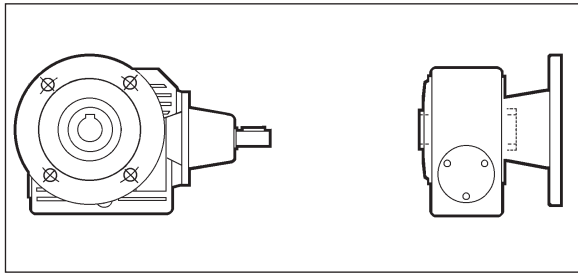
CR

CB

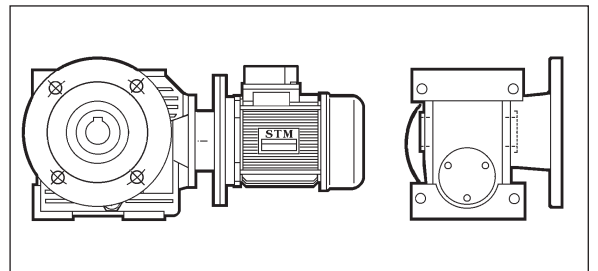
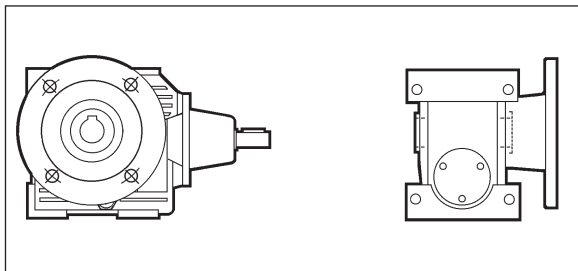
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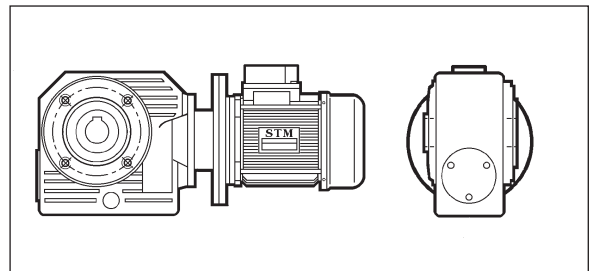
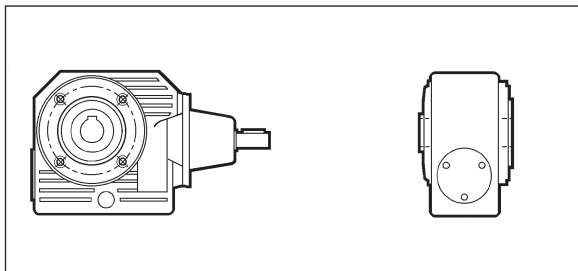
F, F1,
F2, F3, F4



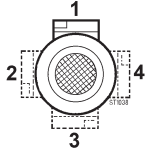
/F, /F1,
/F2, /F3, /F4



P

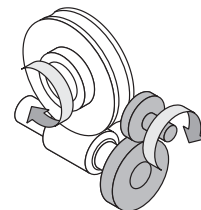


STANDARD

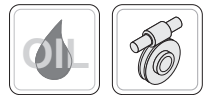


Posizione morsettieria
Terminal board position
Lage des Klemmenkastens

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 Ölfüllmengen 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 / Erhältlich 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.

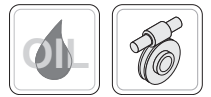
D) The gearboxes that need a specific assembling position have the indication of it on the label of the gearbox.

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.

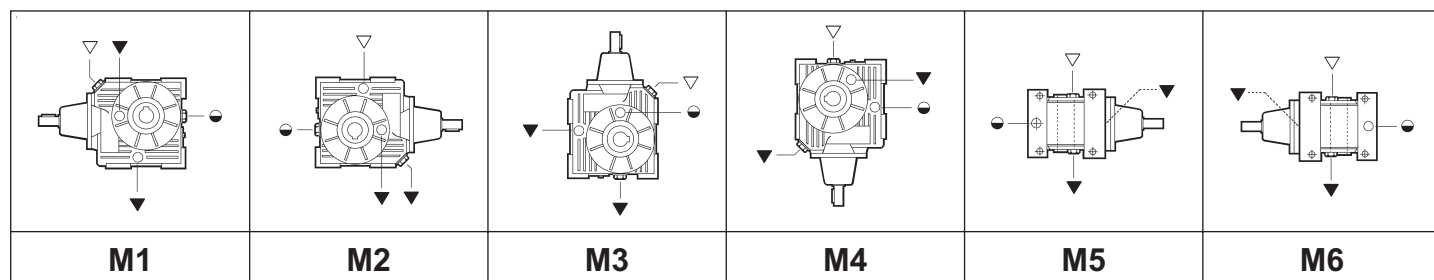
Die Getriebe in den Baugrößen 85-110 sind bei der Lieferung für die Ölschmierung vorbereitet, enthalten jedoch kein Schmiermittel. Dieses kann auf Anfrage geliefert werden.

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



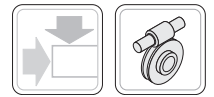
Tab. 2.4

| 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
RMI**



**CRI
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

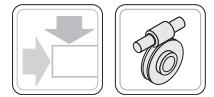


**RI
RMI**



**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 Fr₁ a 500 min⁻¹ e Fr₂ 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 Fr₁ at 500 min⁻¹ and Fr₂ at 14 min⁻¹ represent the maximum allowable loads.

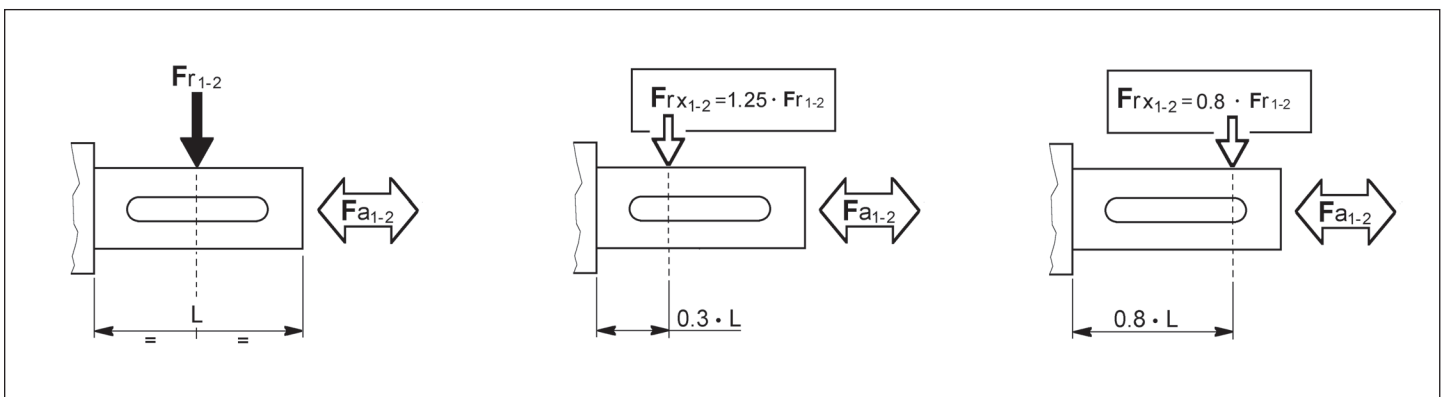
For loads which are not applied on the centre line of the output or input shaft, following values will be obtained:

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 Fr₁ bei 500 min⁻¹ und von Fr₂ 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 | | |



1.6 Prestazioni riduttori RI

1.6 RI Gearboxes performances

1.6 Leistungen der RI-Getriebe

RI 150



77

| 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 | 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 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 | 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 | Contattare il ns. servizio tecnico Contact our technical dept Wenden Sie sich an unseren technischen Service | | | | | | | | | | |
| n ₁ > 3000 | | | | | | | | | | | | | | |



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 | | |
| 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 | 56 | — |
| 7000 | 100x70 | 0.20 | 20 | 0.01 | 13 | | |
| 8000 | 100x80 | 0.18 | 16 | 0.01 | 11 | | |
| 10000 | 100x100 | 0.14 | 12 | 0.01 | 10 | | |

CRI 28/40



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 | | |
| 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 | | |
| 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 | | |
| 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 | | |
| 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 | | |
| 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 | | |

CRI 40/85



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.



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.

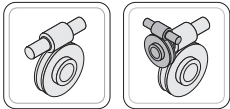
N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (come nel par. 1.7-A). Per maggiori informazioni contattare l'ufficio tecnico STM.

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).

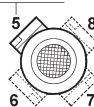
For the B14 flanges marked with (•) the holes to fit the motor are on the axles (like a +). Therefore we suggest to check the dimensions of the terminal board of the motor as it will be at 45° to the axles. Please, choose the terminal board position referring to the following sketch (in which N° 5 is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

| | | | | | |
|-----|------|----|-----|---------------|-------|
| 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 |
|----------------|--|--|--|------------------------------|-------|

| | | | | | |
|------|-------|-----|-----|---------------|-------|
| 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 | | | | | |



| | | | | | |
|-----|----|----|-----|---------------|-------|
| 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 | | | | | |

| | | | | | |
|-----|------|----|-----|---------------|-------|
| 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 |

| | | | | | |
|----------------|--|--|--|---|----------------------------------|
| 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

| 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 |

| | | | | | |
|------|-------|------|-----|--------------------|-------|
| 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 |

1.7 Gearmotors performances

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

| | | | | | |
|------|-------|-----|-----|----------------|-------|
| 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 |

1.7 Leistungen der Getriebemotoren

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

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

| | | | | | |
|------|-------|------|-----|--------------------|-------|
| 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 | | $n_1 = 2830 \text{ min}^{-1}$ | 80B 2 |
| | | $n_1 = 1390 \text{ min}^{-1}$ | 80D 4 |
| | | $n_1 = 1400 \text{ min}^{-1}$ | 90S 4 |
| | | $n_1 = 920 \text{ min}^{-1}$ | 90L 6 |

| | | | | | |
|-----|----|----|-----|---------------|-------|
| 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 |

1.7 Gearmotors performances

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

| | | | | | |
|-----|------|-----|------|----------------|-------|
| 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 |

1.7 Leistungen der Getriebemotoren

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

| | | | | | |
|------|-------|------|------|--------------------|-------|
| 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

1.7 Gearmotors performances

1.7 Leistungen der Getriebemotoren

| 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 |

| 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 |

| 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 |

| | | | | | |
|------|-------|------|------|--------------------|--------|
| 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 |

| | | | | | |
|-----|-----|------|-----|--------------------|--------|
| 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 |



| | | | | | |
|------|-------|------|------|--------------------|--------|
| 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' |  |  |
|----------------------------|----|----------|-----|---|---|
| 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 |



| | | | | | |
|------|------|------|-----|--------------------|--------|
| 63 | 15 | 362 | 1.7 | RMI 110 | 132S 6 |
| 56 | 51.3 | 411 | 1.5 | CB 110 | 100A 2 |
| 51 | 28 | 429 | 3.0 | RMI 150 | 100B 4 |
| 51 | 28 | 429 | 1.9 | RMI 130 | 100B 4 |
| 51 | 28 | 424 | 1.3 | RMI 110 | 100B 4 |
| 48 | 20 | 495 | 3.4 | RMI 150 | 132S 6 |
| 48 | 20 | 495 | 2.2 | RMI 130 | 132S 6 |
| 47 | 20 | 500 | 3.4 | RMI 150 | 112B 6 |
| 47 | 20 | 500 | 2.1 | RMI 130 | 112B 6 |
| 47 | 20 | 482 | 1.5 | RMI 110 | 112B 6 |
| 41 | 69.0 | 546 | 1.3 | CB 110 | 100A 2 |
| 41 | 69.0 | 550 | 1.3 | CB 110 | 90LB 2 |
| 36 | 80.2 | 578 | 1.1 | CB 110 | 100A 2 |
| 36 | 40 | 605 | 2.3 | RMI 150 | 100B 4 |
| 36 | 40 | 589 | 1.5 | RMI 130 | 100B 4 |
| 36 | 40 | 581 | 1.1 | RMI 110 | 100B 4 |
| 35 | 80.2 | 583 | 1.1 | CB 110 | 90LB 2 |
| 33 | 43.0 | 677 | 1.1 | CB 110 | 100B 4 |
| 29 | 49 | 702 | 1.9 | RMI 150 | 100B 4 |
| 29 | 49 | 692 | 1.3 | RMI 130 | 100B 4 |
| 29 | 49 | 682 | 0.9 | RMI 110* | 100B 4 |
| 28 | 51.3 | 807 | 1.0 | CB 110 | 100B 4 |
| 25 | 56 | 825 | 1.6 | RMI 150 | 100B 4 |
| 25 | 56 | 780 | 1.0 | RMI 130 | 100B 4 |
| 24 | 59.1 | 906 | 1.0 | CB 110 | 100B 4 |
| 24 | 40 | 881 | 2.6 | RMI 180 | 132S 6 |
| 21 | 69.0 | 1058 | 0.8 | CB 110 | 100B 4 |
| 20 | 70 | 946 | 1.3 | RMI 150 | 100B 4 |
| 20 | 70 | 946 | 0.9 | RMI 130 | 100B 4 |
| 19.4 | 49 | 1064 | 2.3 | RMI 180 | 132S 6 |
| 17.8 | 80 | 1065 | 1.1 | RMI 150 | 100B 4 |
| 17.0 | 56 | 1199 | 2.0 | RMI 180 | 132S 6 |
| 14.2 | 100 | 1251 | 0.8 | RMI 150 | 100B 4 |
| 13.6 | 70 | 1393 | 1.6 | RMI 180 | 132S 6 |
| 13.4 | 70 | 1344 | 1.0 | RMI 150 | 112B 6 |
| 11.9 | 80 | 1568 | 1.3 | RMI 180 | 132S 6 |
| 11.8 | 80 | 1512 | 0.9 | RMI 150 | 112B 6 |
| 10.1 | 140 | 1825 | 2.1 | CRMI 85/180 | 100B 4 |
| 10.1 | 140 | 1801 | 1.5 | CRMI 85/150 | 100B 4 |
| 10.1 | 140 | 1753 | 0.9 | CRMI 70/130 | 100B 4 |
| 9.5 | 100 | 1840 | 1.0 | RMI 180 | 132S 6 |
| 7.1 | 200 | 2508 | 1.6 | CRMI 85/180 | 100B 4 |
| 7.1 | 200 | 2474 | 1.2 | CRMI 85/150 | 100B 4 |
| 5.1 | 280 | 3085 | 1.2 | CRMI 85/180 | 100B 4 |
| 5.1 | 280 | 2990 | 0.8 | CRMI 85/150 | 100B 4 |
| 3.6 | 400 | 4527 | 1.0 | CRMI 85/180 | 100B 4 |

1.7 Gearmotors performances

| n_2 min ⁻¹ | ir | T2 Nm | FS' |  |  |
|----------------------------|----|----------|-----|--|--|
| 4 kW | | | | | |
| | | | | $n_1 = 2860 \text{ min}^{-1}$ $n_1 = 2860 \text{ min}^{-1}$ $n_1 = 1410 \text{ min}^{-1}$ $n_1 = 1425 \text{ min}^{-1}$ $n_1 = 950 \text{ min}^{-1}$ | 100B 2 112A 2 100BL 4 112A 4 132M 6 |

| | | | | | |
|-----|------|-----|-----|-----------------|---------|
| 409 | 7 | 80 | 4.2 | RMI 110 | 112A 2 |
| 409 | 7 | 80 | 4.2 | RMI 110 | 100B 2 |
| 409 | 7 | 80 | 2.2 | RMI 85* | 112A 2 |
| 409 | 7 | 80 | 2.2 | RMI 85* | 100B 2 |
| 286 | 10 | 114 | 3.4 | RMI 110 | 112A 2 |
| 286 | 10 | 114 | 3.4 | RMI 110 | 100B 2 |
| 286 | 10 | 114 | 1.8 | RMI 85* | 112A 2 |
| 286 | 10 | 114 | 1.8 | RMI 85* | 100B 2 |
| 286 | 10 | 112 | 0.9 | RMI 70* | 100B 2 |
| 204 | 7 | 161 | 3.0 | RMI 110 | 112A 4 |
| 204 | 7 | 160 | 1.5 | RMI 85* | 112A 4 |
| 201 | 7 | 161 | 0.8 | RMI 70* | 100BL 4 |
| 191 | 15 | 166 | 2.4 | RMI 110 | 112A 2 |
| 191 | 15 | 166 | 2.4 | RMI 110 | 100B 2 |
| 191 | 15 | 164 | 1.3 | RMI 85* | 112A 2 |
| 191 | 15 | 164 | 1.3 | RMI 85* | 100B 2 |
| 143 | 10 | 233 | 3.4 | RMI 130 | 112A 4 |
| 143 | 10 | 228 | 2.4 | RMI 110 | 112A 4 |
| 143 | 10 | 225 | 1.2 | RMI 85* | 112A 4 |
| 136 | 7 | 245 | 3.5 | RMI 130 | 132M 6 |
| 136 | 7 | 239 | 2.4 | RMI 110 | 132M 6 |
| 102 | 28 | 288 | 3.4 | RMI 150 | 112A 2 |
| 102 | 28 | 288 | 3.4 | RMI 150 | 100B 2 |
| 102 | 28 | 284 | 2.1 | RMI 130 | 112A 2 |
| 102 | 28 | 284 | 2.1 | RMI 130 | 100B 2 |
| 95 | 15 | 338 | 2.5 | RMI 130 | 112A 4 |
| 95 | 15 | 330 | 1.6 | RMI 110 | 112A 4 |
| 95 | 15 | 326 | 0.9 | RMI 85* | 112A 4 |
| 71 | 20 | 450 | 3.2 | RMI 150 | 112A 4 |
| 71 | 20 | 445 | 2.1 | RMI 130 | 112A 4 |
| 71 | 20 | 434 | 1.4 | RMI 110 | 112A 4 |
| 67 | 43.0 | 459 | 1.4 | CB 110 | 112A 2 |
| 67 | 43.0 | 459 | 1.4 | CB 110 | 100B 2 |
| 63 | 15 | 501 | 3.0 | RMI 150 | 132M 6 |
| 63 | 15 | 501 | 2.0 | RMI 130 | 132M 6 |
| 63 | 15 | 483 | 1.3 | RMI 110 | 132M 6 |
| 56 | 51.3 | 548 | 1.2 | CB 110 | 112A 2 |
| 56 | 51.3 | 548 | 1.2 | CB 110 | 100B 2 |
| 51 | 28 | 570 | 2.2 | RMI 150 | 112A 4 |
| 51 | 28 | 570 | 1.4 | RMI 130 | 112A 4 |
| 51 | 28 | 563 | 1.0 | RMI 110* | 112A 4 |
| 48 | 59.1 | 632 | 1.1 | CB 110 | 112A 2 |
| 48 | 59.1 | 632 | 1.1 | CB 110 | 100B 2 |
| 48 | 20 | 659 | 2.5 | RMI 150 | 132M 6 |
| 48 | 20 | 659 | 1.6 | RMI 130 | 132M 6 |
| 36 | 80.2 | 771 | 0.9 | CB 110* | 112A 2 |
| 36 | 80.2 | 771 | 0.9 | CB 110* | 100B 2 |
| 36 | 40 | 804 | 1.7 | RMI 150 | 112A 4 |
| 36 | 40 | 783 | 1.2 | RMI 130 | 112A 4 |
| 36 | 40 | 772 | 0.8 | RMI 110* | 112A 4 |
| 34 | 28 | 867 | 2.5 | RMI 180 | 132M 6 |
| 33 | 43.0 | 899 | 0.9 | CB 110* | 112A 4 |
| 29 | 49 | 933 | 1.4 | RMI 150 | 112A 4 |
| 29 | 49 | 919 | 1.0 | RMI 130* | 112A 4 |

1.7 Leistungen der Getriebemotoren

| n_2 min ⁻¹ | ir | T2 Nm | FS' |  |  |
|----------------------------|----|----------|-----|--|---|
| 4 kW | | | | | |
| | | | | $n_1 = 2860 \text{ min}^{-1}$ $n_1 = 2860 \text{ min}^{-1}$ $n_1 = 1410 \text{ min}^{-1}$ $n_1 = 1425 \text{ min}^{-1}$ $n_1 = 950 \text{ min}^{-1}$ | 100B 2 112A 2 100BL 4 112A 4 132M 6 |

| | | | | | |
|------|-----|------|-----|--------------------|--------|
| 25 | 56 | 1096 | 1.2 | RMI 150 | 112A 4 |
| 24 | 40 | 1174 | 2.0 | RMI 180 | 132M 6 |
| 24 | 40 | 1142 | 0.9 | RMI 130* | 132M 6 |
| 20 | 70 | 1257 | 0.9 | RMI 150 | 112A 4 |
| 17.8 | 80 | 1415 | 0.8 | RMI 150 | 112A 4 |
| 17.0 | 56 | 1599 | 1.5 | RMI 180 | 132M 6 |
| 13.6 | 70 | 1858 | 1.2 | RMI 180 | 132M 6 |
| 11.9 | 80 | 2091 | 1.0 | RMI 180 | 132M 6 |
| 10.2 | 140 | 2424 | 1.5 | CRMI 85/180 | 112A 4 |
| 10.2 | 140 | 2393 | 1.1 | CRMI 85/150 | 112A 4 |
| 7.1 | 200 | 3333 | 1.2 | CRMI 85/180 | 112A 4 |
| 7.1 | 200 | 3288 | 0.9 | CRMI 85/150 | 112A 4 |
| 5.1 | 280 | 4098 | 0.9 | CRMI 85/180 | 112A 4 |

| | | | | | |
|---------------|--|--|--|---|---------------------------------------|
| 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 |

| | | | | | |
|-----|----|------|-----|-----------------|---------|
| 411 | 7 | 110 | 3.1 | RMI 110 | 112B 2 |
| 410 | 7 | 110 | 3.1 | RMI 110 | 132S 2 |
| 288 | 10 | 155 | 2.5 | RMI 110 | 112B 2 |
| 287 | 10 | 156 | 2.5 | RMI 110 | 132S 2 |
| 206 | 7 | 225 | 3.1 | RMI 130 | 132S 4 |
| 206 | 7 | 220 | 2.2 | RMI 110 | 132S 4 |
| 192 | 15 | 230 | 2.7 | RMI 130 | 112B 2 |
| 192 | 15 | 227 | 1.7 | RMI 110* | 112B 2 |
| 191 | 15 | 231 | 2.7 | RMI 130 | 132S 2 |
| 191 | 15 | 228 | 1.7 | RMI 110* | 132S 2 |
| 144 | 10 | 317 | 2.5 | RMI 130 | 132S 4 |
| 144 | 10 | 310 | 1.7 | RMI 110 | 132S 4 |
| 136 | 7 | 337 | 2.5 | RMI 130 | 132ML 6 |
| 136 | 7 | 329 | 1.8 | RMI 110 | 132ML 6 |
| 103 | 28 | 410 | 3.4 | RMI 180 | 132S 2 |
| 96 | 15 | 465 | 2.7 | RMI 150 | 132S 4 |
| 96 | 15 | 460 | 1.8 | RMI 130 | 132S 4 |
| 96 | 15 | 449 | 1.2 | RMI 110* | 132S 4 |
| 72 | 20 | 613 | 3.3 | RMI 180 | 132S 4 |
| 72 | 20 | 613 | 2.3 | RMI 150 | 132S 4 |
| 72 | 20 | 605 | 1.5 | RMI 130 | 132S 4 |
| 63 | 15 | 705 | 3.0 | RMI 180 | 132ML 6 |
| 63 | 15 | 688 | 2.2 | RMI 150 | 132ML 6 |
| 63 | 15 | 688 | 1.4 | RMI 130 | 132ML 6 |
| 63 | 15 | 663 | 1.0 | RMI 110* | 132ML 6 |
| 51 | 28 | 807 | 2.3 | RMI 180 | 132S 4 |
| 51 | 28 | 776 | 1.6 | RMI 150 | 132S 4 |
| 51 | 28 | 776 | 1.0 | RMI 130* | 132S 4 |
| 48 | 20 | 907 | 1.9 | RMI 150 | 132ML 6 |
| 48 | 20 | 907 | 1.2 | RMI 130 | 132ML 6 |
| 36 | 40 | 1094 | 1.8 | RMI 180 | 132S 4 |
| 36 | 40 | 1094 | 1.3 | RMI 150 | 132S 4 |
| 36 | 40 | 1065 | 0.8 | RMI 130* | 132S 4 |
| 34 | 28 | 1161 | 0.8 | RMI 130* | 132ML 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 |
|---------------|--|--|--|---|--|

| | | | | | |
|------|----|------|-----|-----------------|---------|
| 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 |
|--------------|--|--|--|---|----------------------------|

| | | | | | |
|-----|----|------|-----|-----------------|--------|
| 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 in 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 |
|----------------|--|--|--|--|------------------|

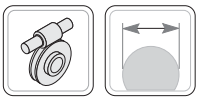
| | | | | | |
|-----|----|------|-----|-----------------|--------|
| 416 | 7 | 378 | 2.7 | RMI 180 | 160L 2 |
| 416 | 7 | 374 | 2.0 | RMI 150* | 160L 2 |
| 291 | 10 | 534 | 2.2 | RMI 180* | 160L 2 |
| 291 | 10 | 528 | 1.6 | RMI 150* | 160L 2 |
| 209 | 7 | 754 | 2.0 | RMI 180 | 180M 4 |
| 194 | 15 | 783 | 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 |
|--------------|--|--|--|--|------------------|

| | | | | | |
|-----|----|------|-----|-----------------|--------|
| 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).

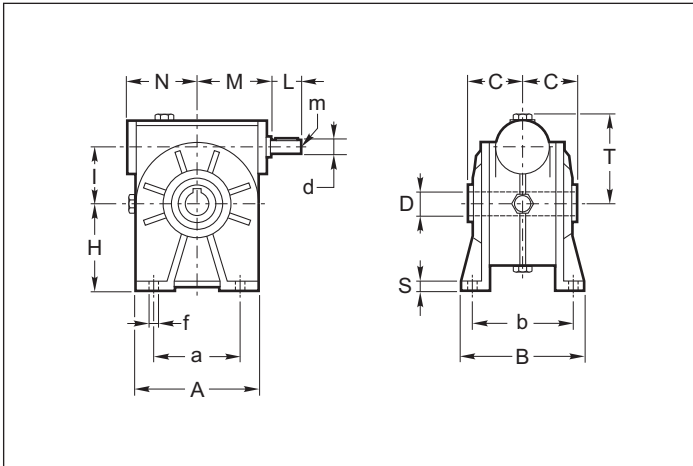
Die mit (—) gekennzeichneten Werte zeigen das für ein Getriebe bei FS=1 mögliche Maximaldrehmoment an. Um Schäden an Getriebe zu vermeiden, darf in diesen Fällen der Motor nicht mit voller Leistung gefahren werden.



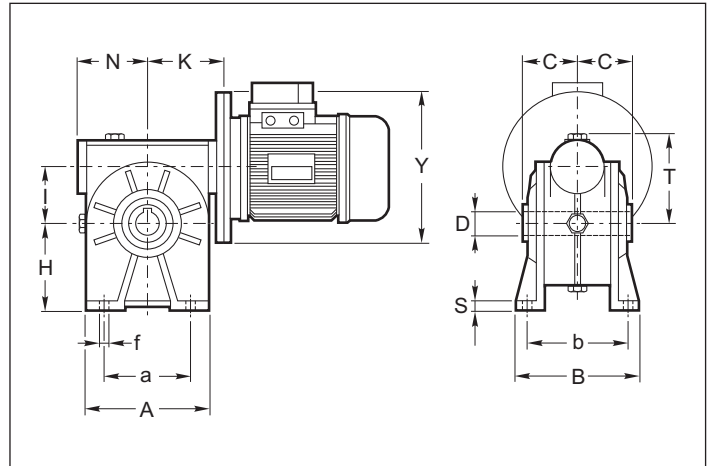
Dimensioni riduttori
Gearboxes dimensions
Abmessungen Getriebes

RI - RMI

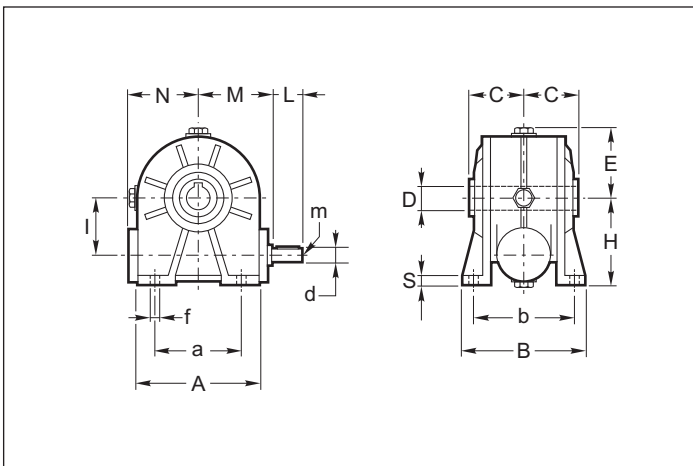
RI S



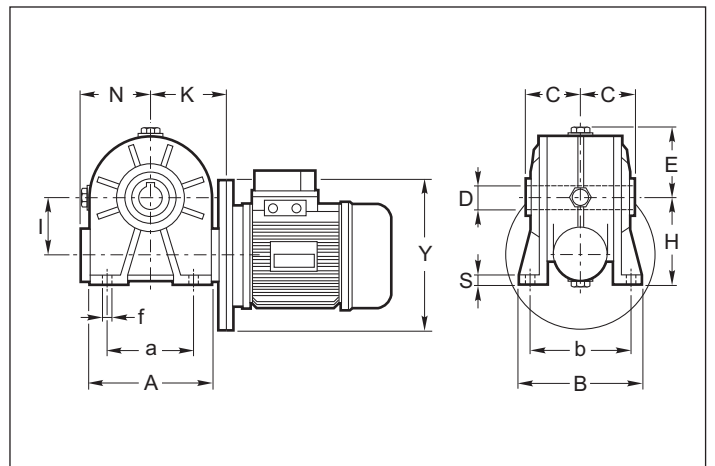
RMI S



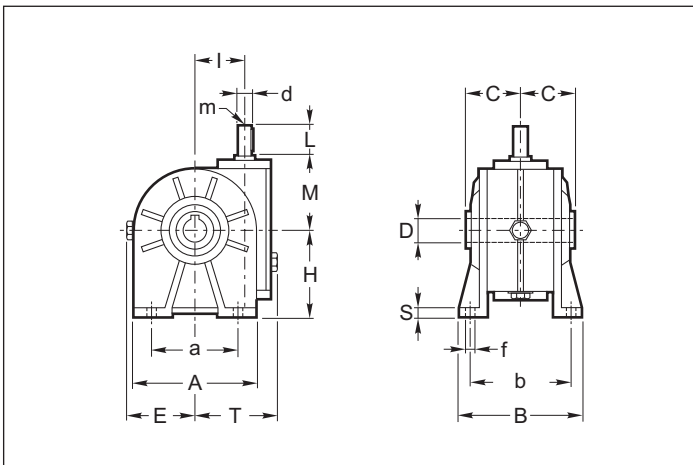
RI I



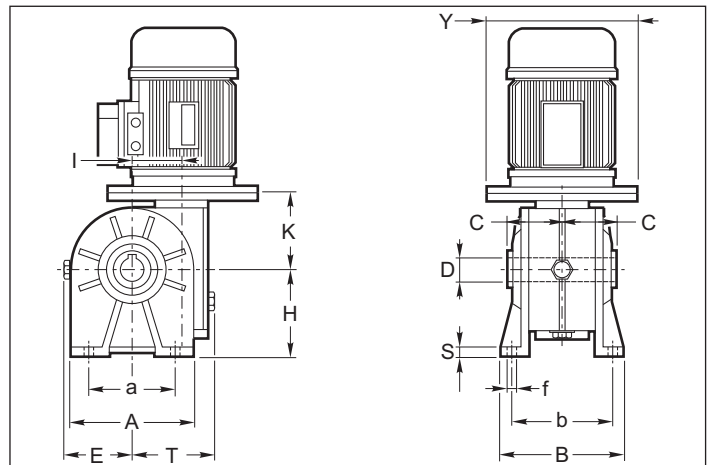
RMI I



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

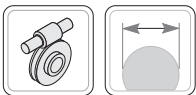
| RMI | 28 | | 70 | | 85 | | 110 | | 130 | | 150 | | 180 | |
|-----|-----|----|-----|-----|------|-----|-----|-------|-----|-----|-----|-----|-----|-----|
| | Y | K | Y | K | Y | K | Y | K | Y | K | Y | K | Y | K |
| B5 | 120 | 49 | 160 | 100 | 160 | 118 | 200 | 145 | 250 | 163 | 250 | 190 | — | — |
| | — | — | 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

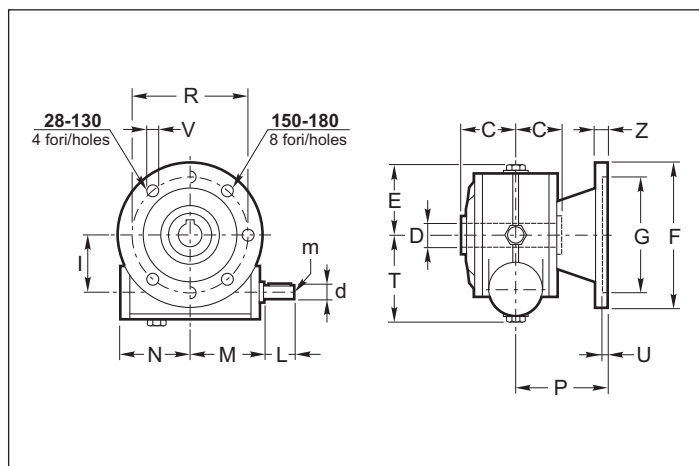


1.8 Dimensioni

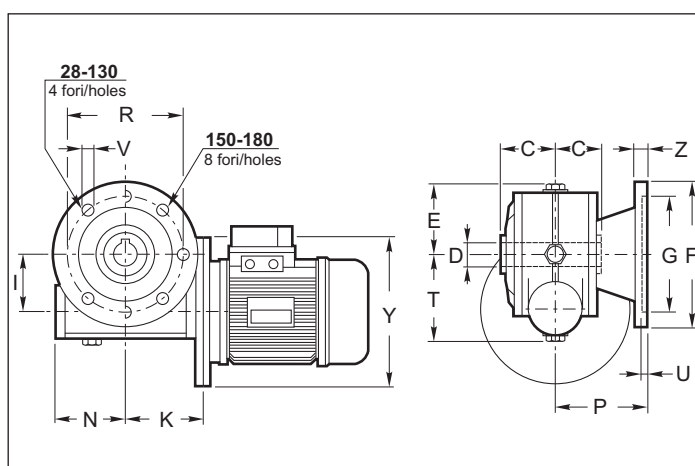
1.8 Dimensions

1.8 Abmessungen

RI FL



RMI FL

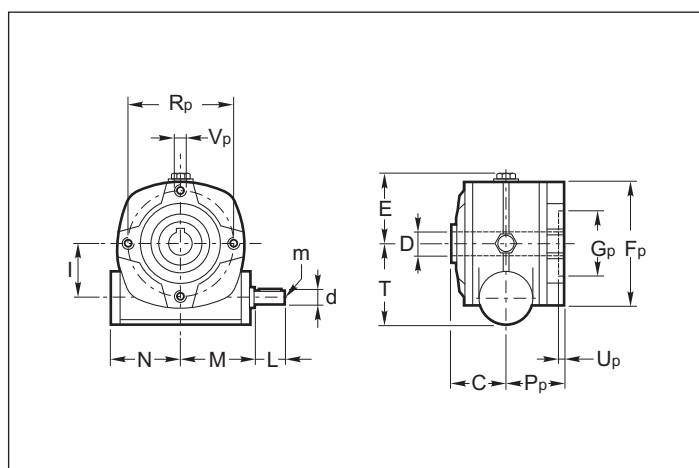


N.B.
Nelle grandezze 40, 50, 63, 70 la versione FL viene ottenuta applicando una flangia modulare sulla flangia pendolare della versione PP.

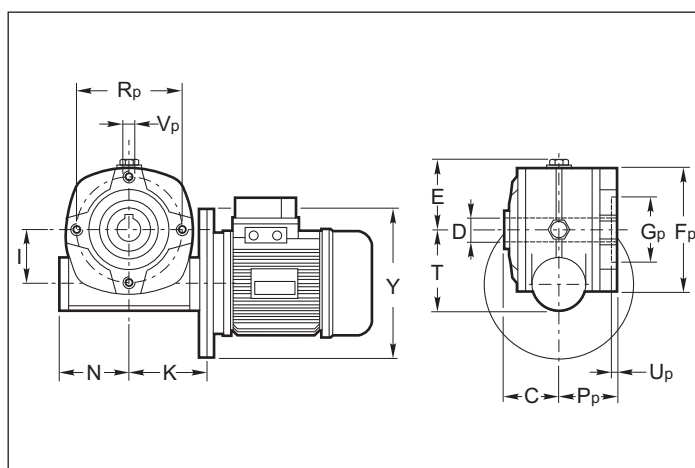
NOTE.
In sizes 40, 50, 63, 70, the FL version is obtained by applying a modular flange onto the shaft-mounted flange of the PP version.

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.

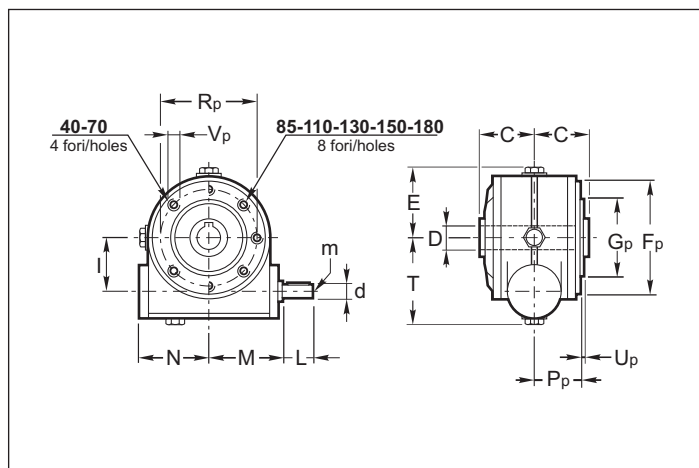
RI 28P



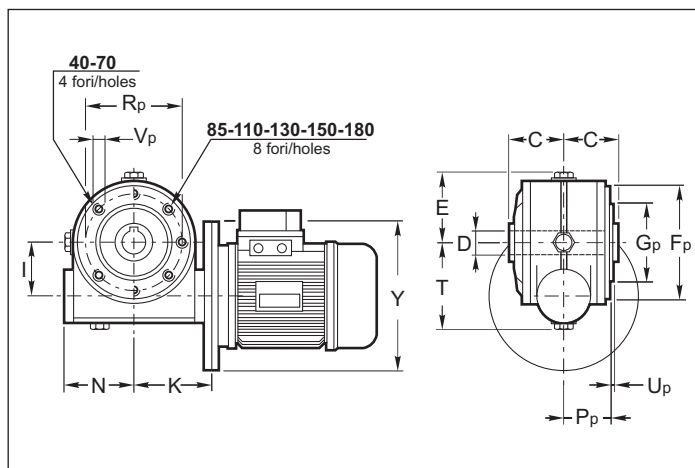
RMI 28P



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.

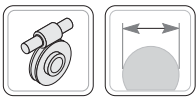
| RMI | 28 | | 70 | | 85 | | 110 | | 130 | | 150 | | 180 | |
|-----|-----|----|-----|-----|------|-----|-----|-------|-----|-----|-----|-----|-----|-----|
| | Y | K | Y | K | Y | K | Y | K | Y | K | Y | K | Y | K |
| B5 | 120 | 49 | 160 | 100 | 160 | 118 | 200 | 145 | 250 | 163 | 250 | 190 | — | — |
| | — | — | 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



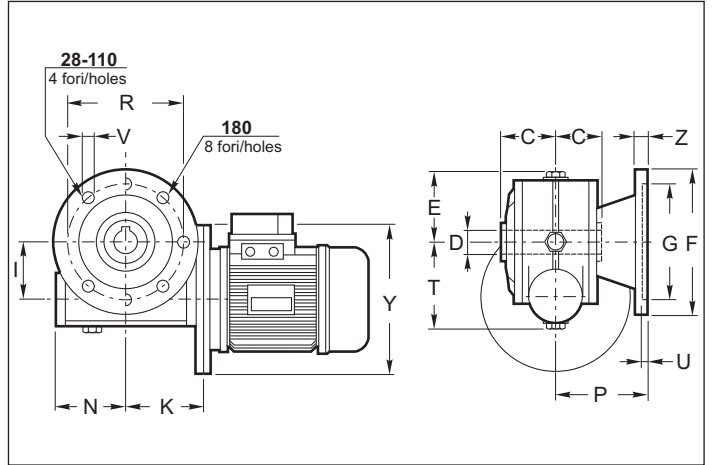
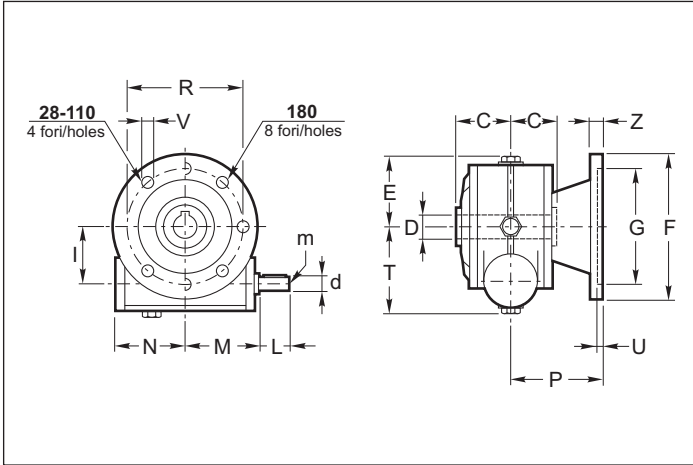
1.8 Dimensioni

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

(•) See note at the bottom of table 2.13

(•) Siehe Bemerkungen Tabelle 2.13 unten

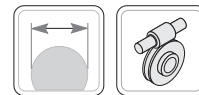
(***) Non disponibile in versione F2

(***) Version F2 not available.

(***) Nicht erhältlich in Ausuerung F2

Download
2D/3D





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

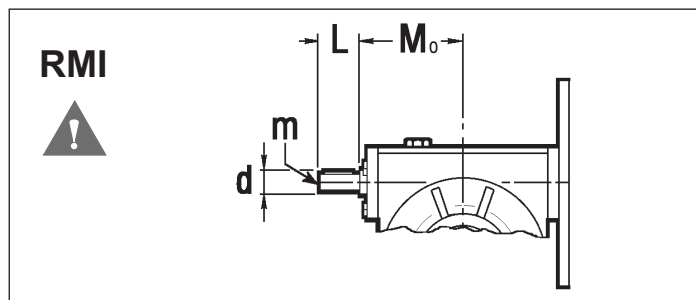
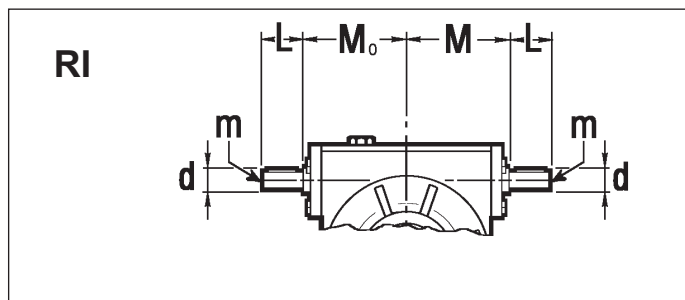
(•) See note at the bottom of table 2.13

(•) Siehe Bemerkungen Tabelle 2.13 unten

Esecuzione con vite bisporgente

Double extended input shaft

Ausführung mit beidseitiger Antriebswelle



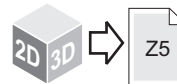
| RI RMI | d j6 | L | m | M | M ₀ |
|-----------|---------|-----|-----|-----|----------------|
| 28 | 9 | 20 | M4 | 47 | 47 |
| 40 | 11 | 22 | M5 | 64 | 64 |
| 50 | 14 | 30 | M6 | 74 | 74 |
| 63 | 18 | 45 | M6 | 96 | 85 |
| 70 | 19 | 40 | M8 | 97 | 97 |
| 85 | 24 | 50 | M8 | 115 | 115 |
| 110 | 28 | 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



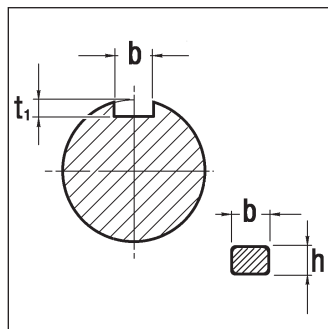
Linguette

Keys

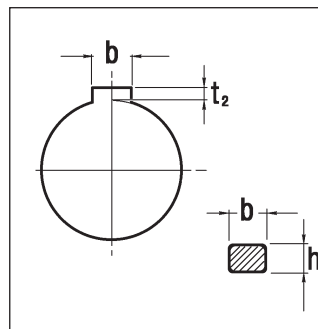
Federn

Albero entrata
Input shaft
Antriebswelle

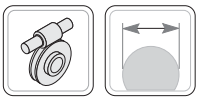
Albero uscita
Output shaft
Abtriebswelle



| 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 | |



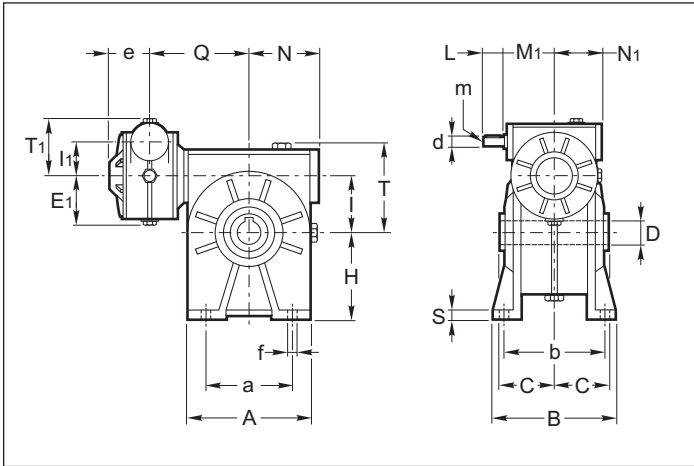
| D | b x h | t ₂ | |
|----|---------|----------------|-----------|
| 14 | 5 x 5 | 2.3 | +0.1 0 |
| 18 | 6 x 6 | 2.8 | |
| 19 | 6 x 6 | 2.8 | |
| 24 | 8 x 7 | 3.3 | |
| 25 | 8 x 7 | 3.3 | |
| 28 | 8 x 7 | 3.3 | +0.2 0 |
| 32 | 10 x 8 | 3.3 | |
| 35 | 10 x 8 | 3.3 | |
| 42 | 12 x 8 | 3.3 | |
| 48 | 14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



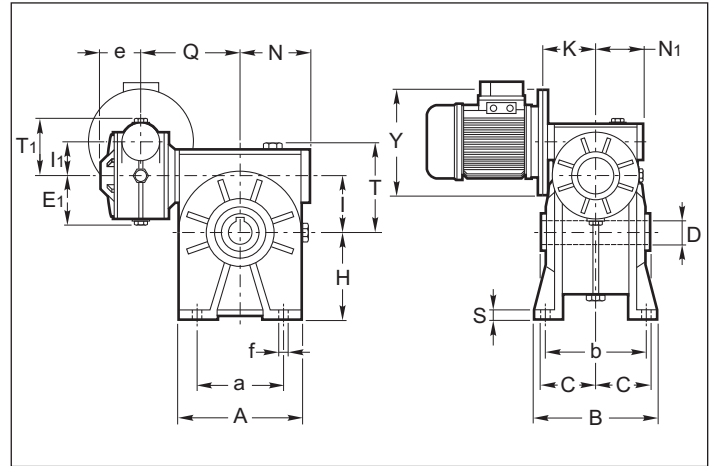
Dimensioni riduttori
Gearboxes dimensions
Abmessungen Getriebes

CRI - CRMI

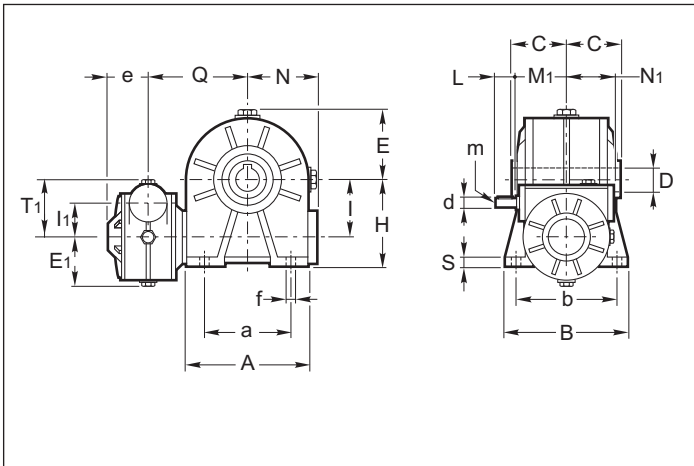
CRI S



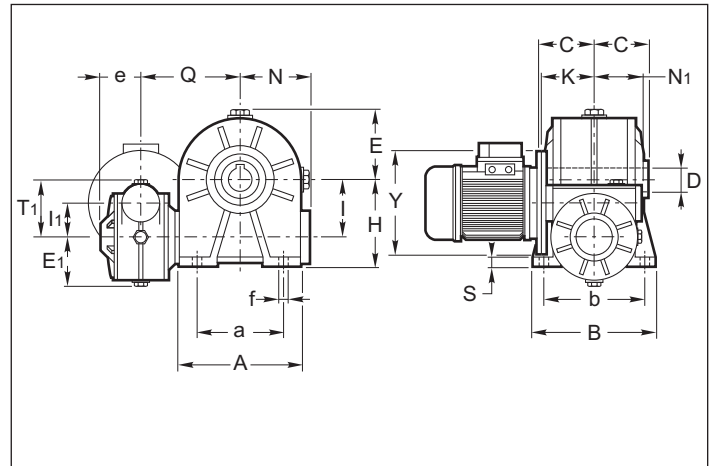
CRMI S



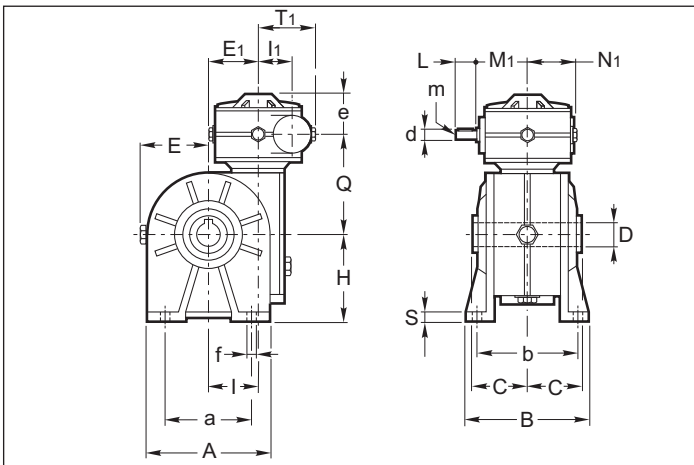
CRI I



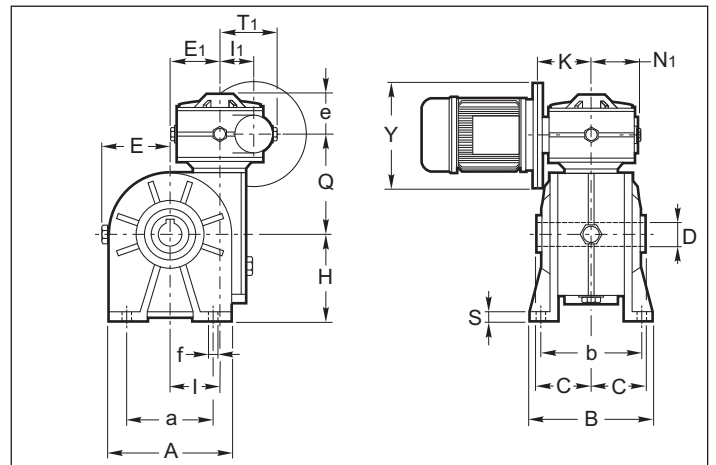
CRMI I



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/-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/-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/-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/-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/-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/-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/-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/-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/-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 | | 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 | | 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.

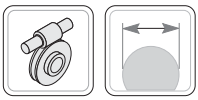
N.B. Le dimensioni delle linguette sono riportate di seguito.

(**) 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.

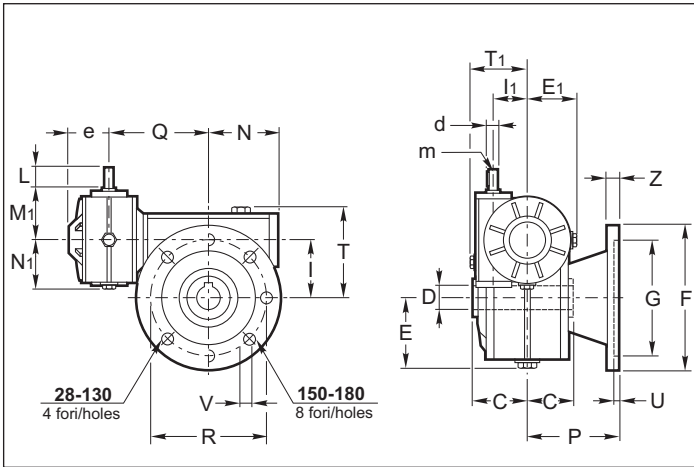


1.8 Dimensioni

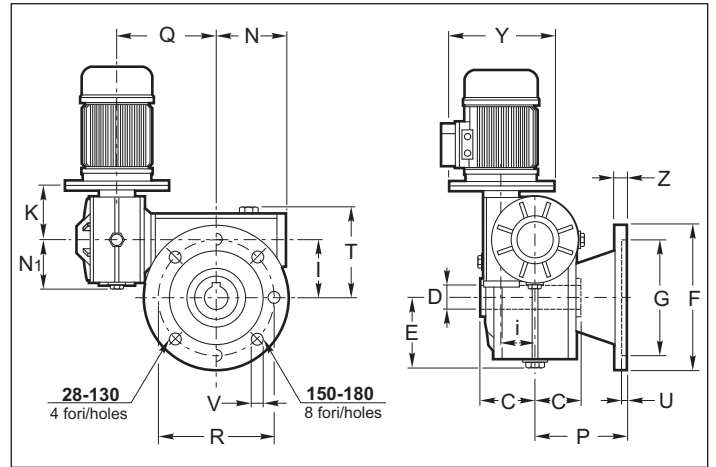
1.8 Dimensions

1.8 Abmessungen

CRI A(FL)



CRMI A(FL)

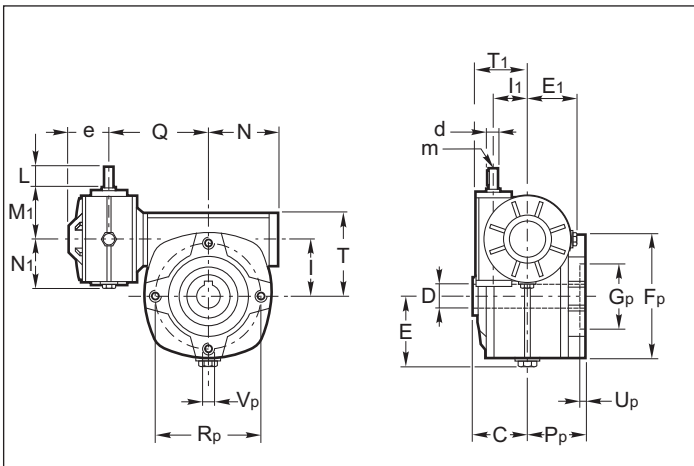


N.B.
 (*) Nelle grandezze .../40, .../50, .../63, .../70 la versione A(FL) viene ottenuta applicando una flangia modulare sulla flangia pendolare della versione A(PP).

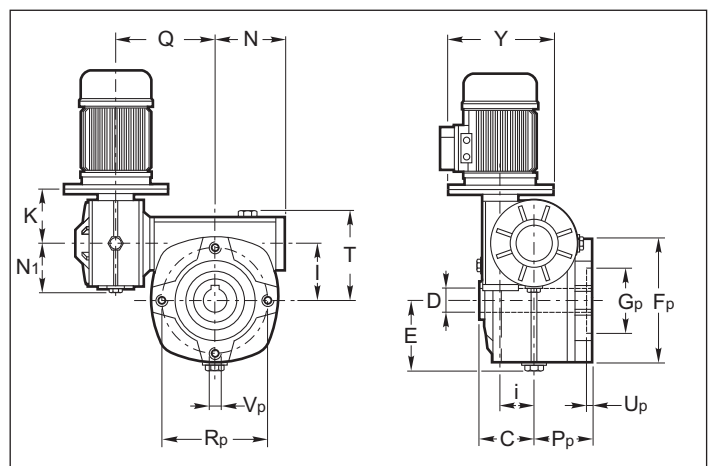
NOTE.
 (*) In sizes .../40, .../50, .../63, .../70 the FL version is obtained by applying a modular flange onto the shaft-mounted flange of the A(PP) version.

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

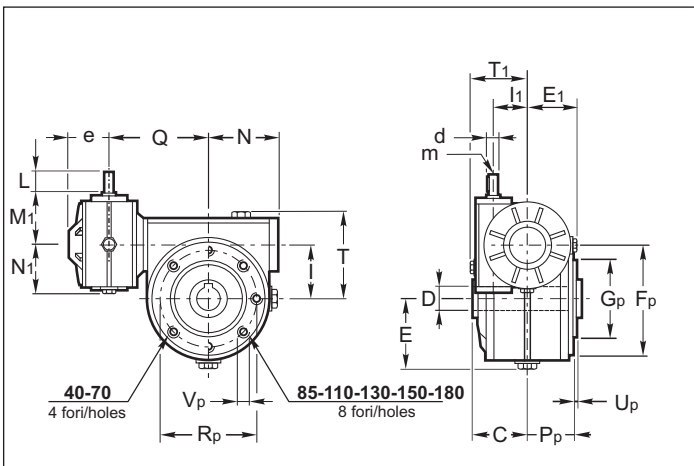
CRI .../28A(P)



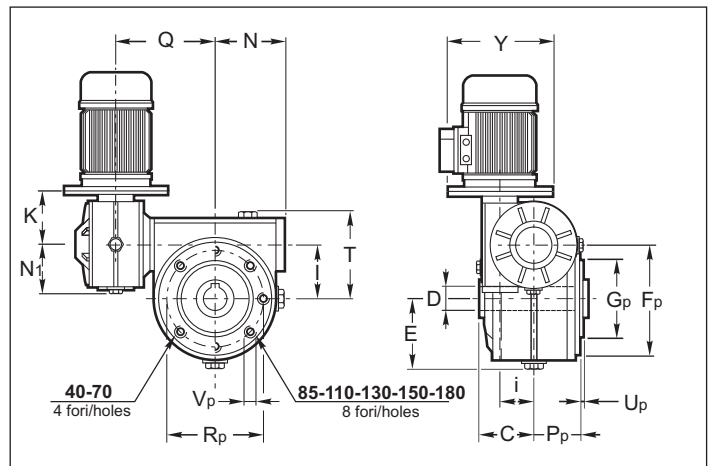
CRMI .../28A(P)

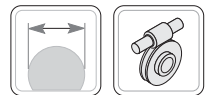


**CRI .../40A(PP) - .../70A(PP)
 CRI .../85A(P) - .../180A(P)**



**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

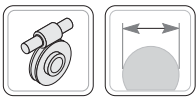
(•) See note at the bottom of table 2.13

(•) Siehe Bemerkungen Tabelle 2.13 unten

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



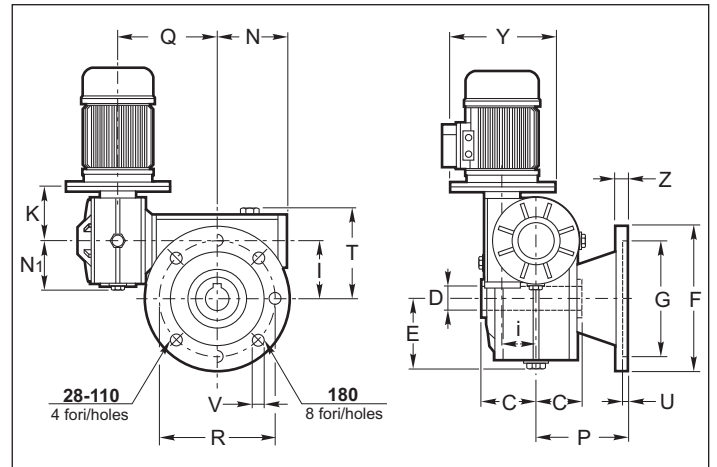
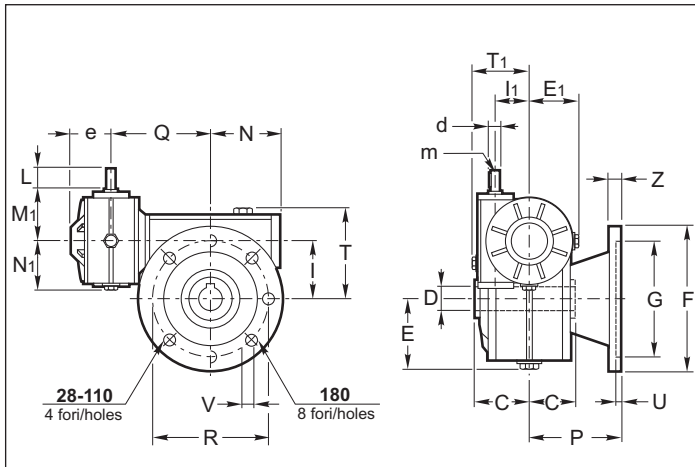
1.8 Dimensioni

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 | 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.

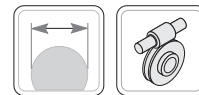
| CRI CRMI | C | D H7 | d j6 | E | E ₁ | e | Q | I | I ₁ | L | m | M ₁ | N | N ₁ | T | T ₁ |
|-------------|------|---------|---------|-----|----------------|-----|-------|-----|----------------|----|-----|----------------|------|----------------|-----|----------------|
| 28/28 | 30 | 14 | 9 | 40 | 40 | 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.

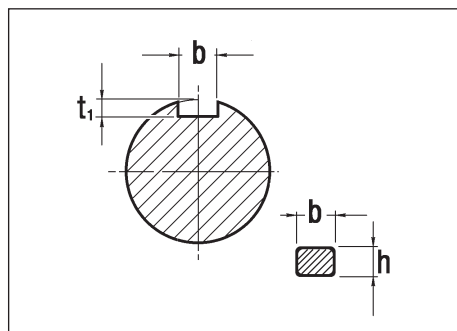
(**) Gearboxes assembled with combination kit, see also page B53.
NOTE. Sizes of feathers are shown below.

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

Linguette

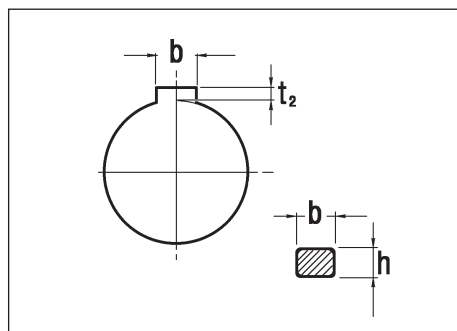
Keys

Federn



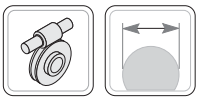
Albero entrata
Input shaft
Antriebswelle

| 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

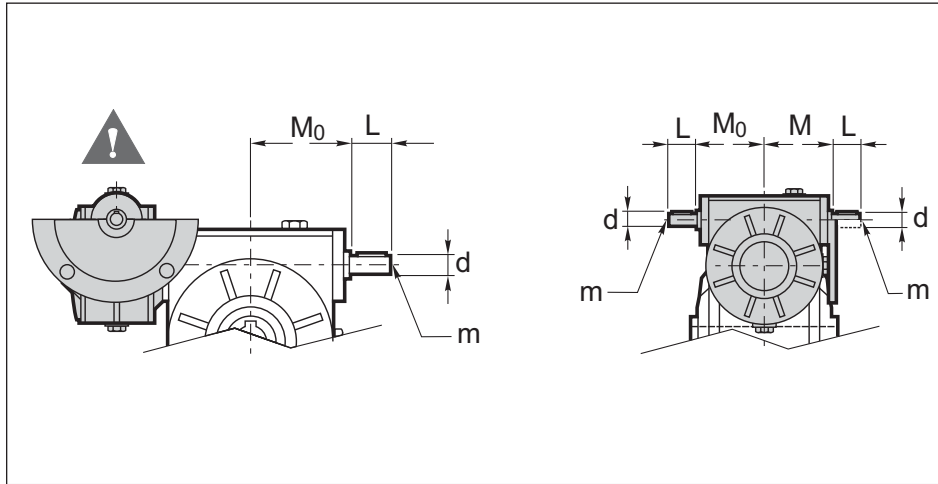
Double extended input shaft

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.

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.

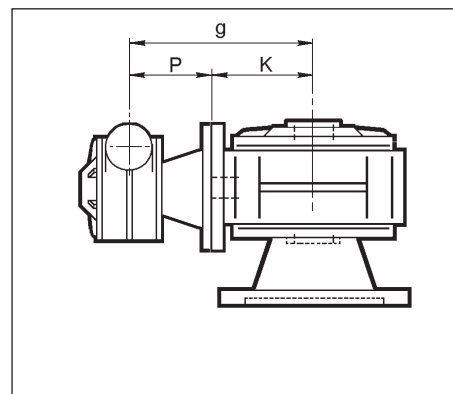
Wird das Kombinationsgetriebe 28/28 und 28/40 mit Hilfe des Montagekits gebildet, so befindet sich die Achse des ersten Getriebes immer in 45° bezüglich zur Horizontalen bzw. Vertikalen. Bei Auftragserteilung bitte die Montageposition angeben.

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.

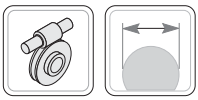


| CRI CRMI | P | K | g | Riduttore in entrata Input gearbox Erstes Getriebe | Kit di montaggio Assembling kit Montage-kit | Riduttore uscita Output gearbox Zweites Getriebe |
|-------------|------|------|-------|--|---|--|
| 28/28 | 53 | 49 | 102 | 28 F1 | KIT 28/28 | 28 IEC56 B14 |
| 40/40* | 82 | 63.5 | 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.

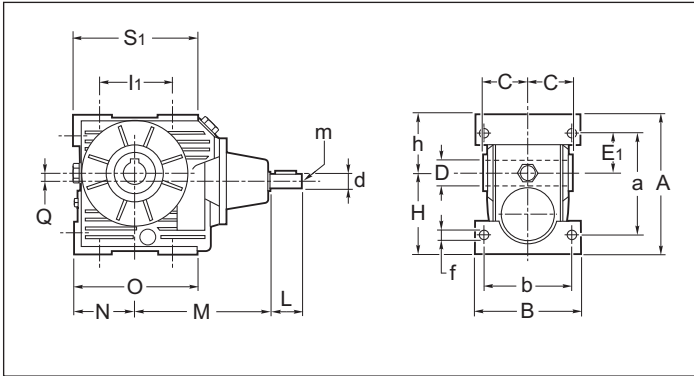
* Fuer die Getriebe Typ "G" ist bei dem Abtriebsgetriebe ein Montagekit mit Kuppung G in Stahl notwendig.



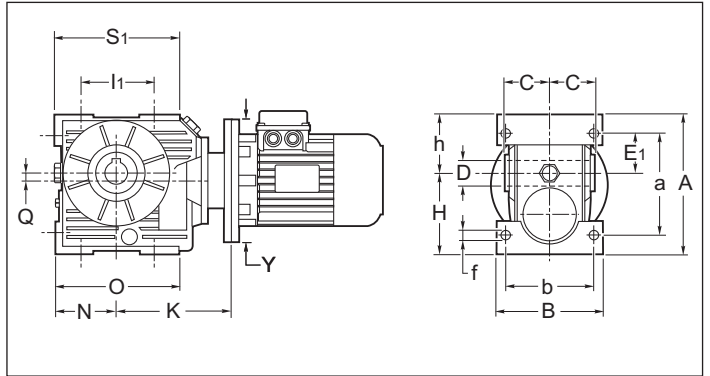
Dimensioni riduttori
Gearboxes dimensions
Abmessungen Getriebes

CR - CB

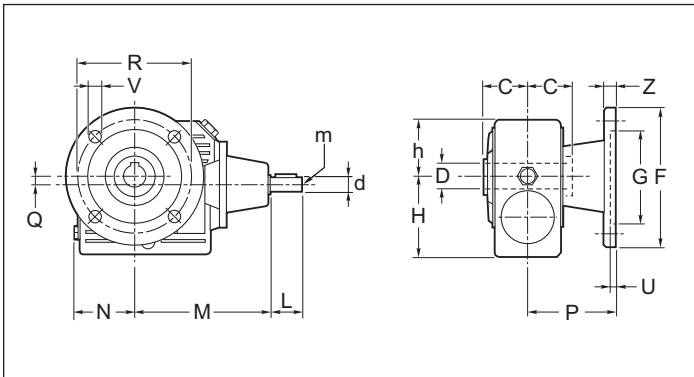
CR



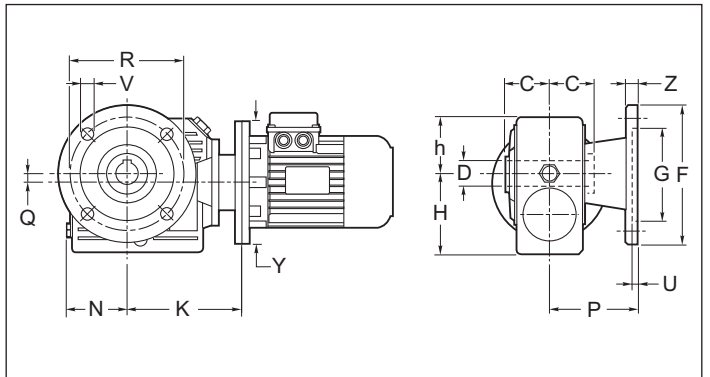
CB



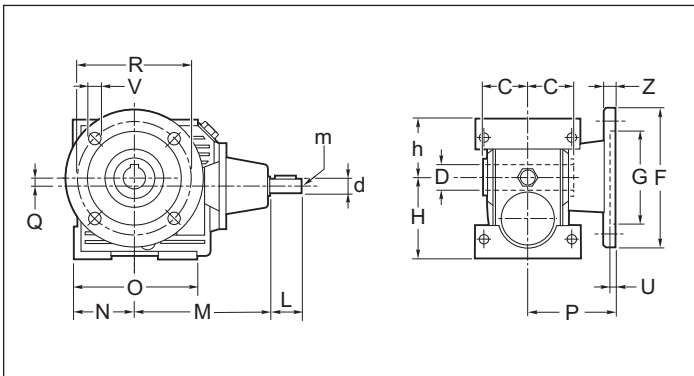
CRF



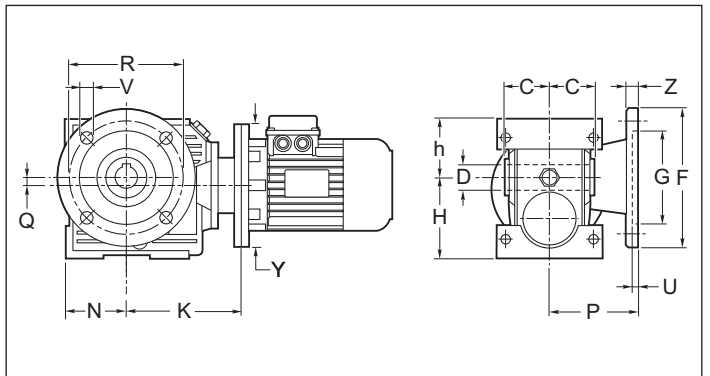
CBF



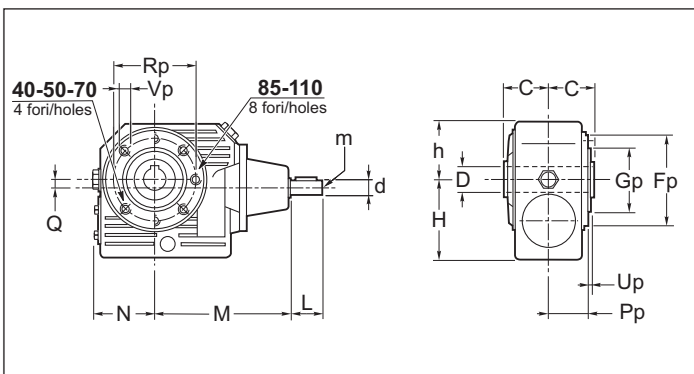
CR/F



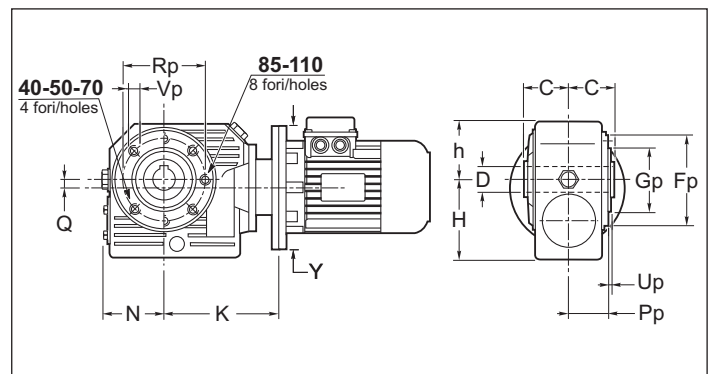
CB/F

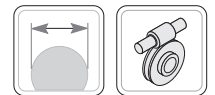


CRP



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 |

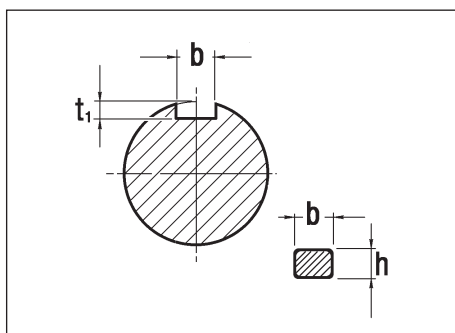
| | CB | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-------|-----|-----|
| | 40 | | 50 | | 70 | | 85 | | 110 | |
| | Y | K | Y | K | Y | K | Y | K | Y | K |
| B5 | 120 | 108 | 120 | 133 | 140 | 153 | 140 | 172.5 | 200 | 229 |
| | 140 | 108 | 140 | 133 | 160 | 153 | 160 | 172.5 | 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

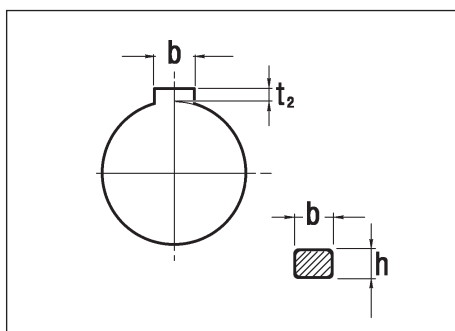


Keys

Albero entrata
Input shaft
Antriebswelle

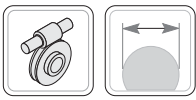
| d | b x h | t ₁ |
|----|--------|----------------|
| 14 | 5 x 5 | 3.0 +0.1/0 |
| 19 | 6 x 6 | 3.5 |
| 24 | 8 x 7 | 4.0 |
| 28 | 8 x 7 | 4.0 +0.2/0 |
| 32 | 10 x 8 | 5.0 |

Federn

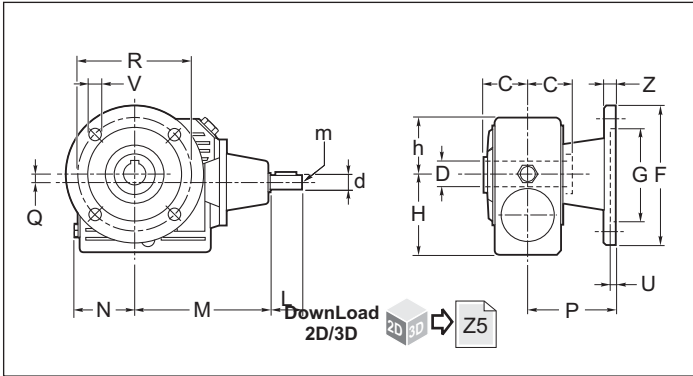


Albero uscita
Output shaft
Abtriebswelle

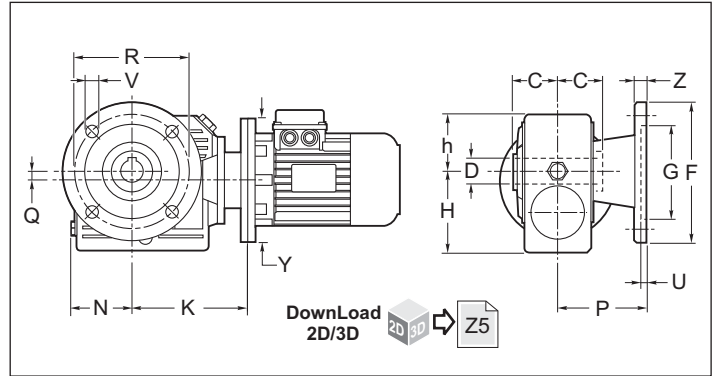
| D | b x h | t ₂ |
|----|--------|----------------|
| 19 | 6 x 6 | 2.8 +0.1/0 |
| 24 | 8 x 7 | 3.3 |
| 28 | 8 x 7 | 3.3 +0.2/0 |
| 32 | 10 x 8 | 3.3 |
| 42 | 12 x 8 | 3.3 |



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.

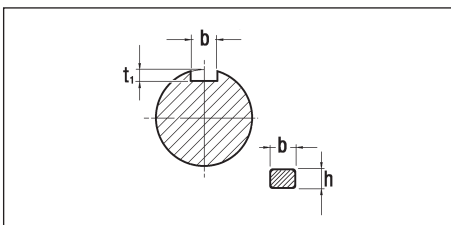
NOTE.
F1, F2 versions that are marked with (°) are obtained by applying a modular flange onto the shaft mounted flange on the PP version.

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

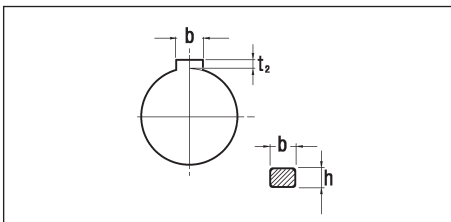


Keys

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

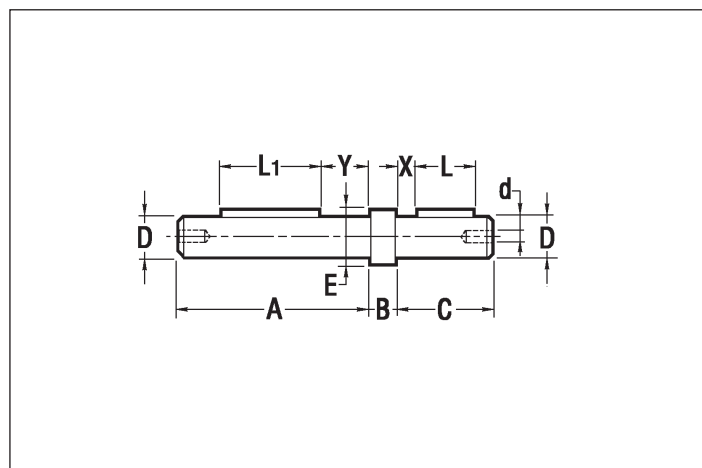
| D | b x h | t ₂ |
|----|--------|---------------------|
| 19 | 6 x 6 | 2.8 ^{+0.1} |
| 24 | 8 x 7 | 3.3 |
| 28 | 8 x 7 | 3.3 ^{+0.2} |
| 32 | 10 x 8 | 3.3 |
| 42 | 12 x 8 | 3.3 |



**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.

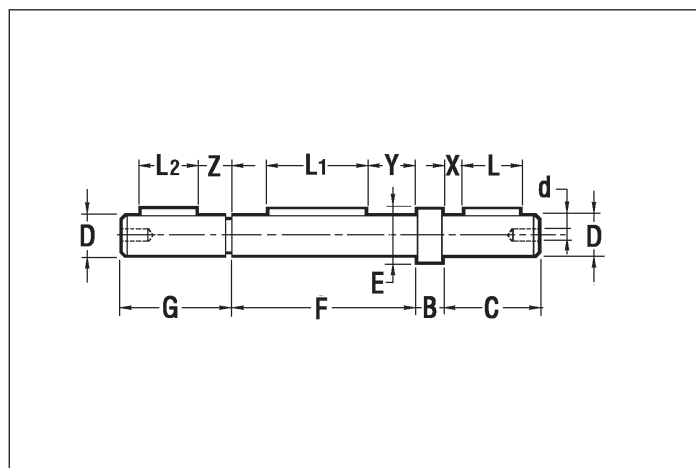
Albero lento
Single output shaft
Einseitige Abtriebswelle



**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.

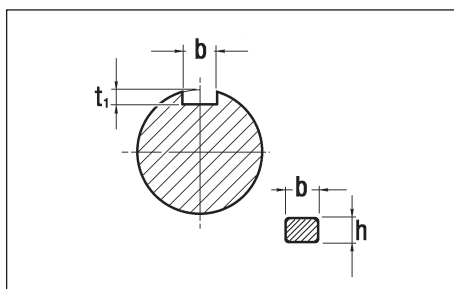
Albero lento bisporgente
Double output shaft
Beidseitige Abtriebswelle



**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 |

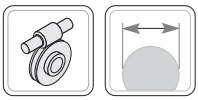


| D | b x h | t ₁ |
|----|---------|----------------|
| 14 | 5 x 5 | 3.0 + 0.1 |
| 19 | 6 x 6 | 3.5 0 |
| 24 | 8 x 7 | 4.0 |
| 25 | 8 x 7 | 4.0 |
| 28 | 8 x 7 | 4.0 |
| 32 | 10 x 8 | 5.0 |
| 42 | 12 x 8 | 5.0 + 0.2 |
| 48 | 14 x 9 | 5.5 0 |
| 55 | 16 x 10 | 6.0 |
| 65 | 18 x 11 | 7.0 |

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).

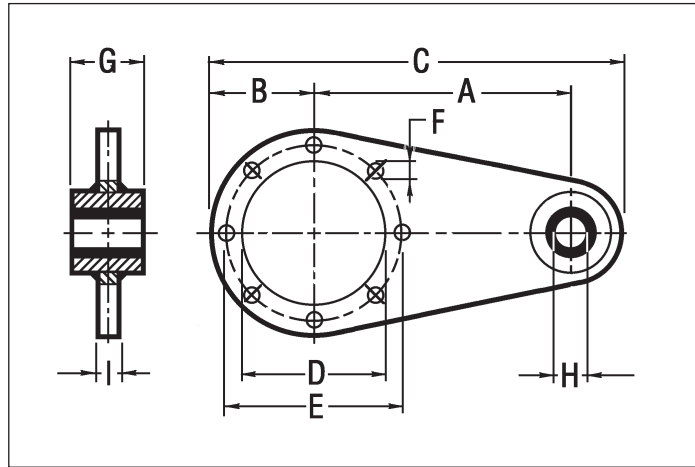


1.10 Accessori
Braccio di reazione

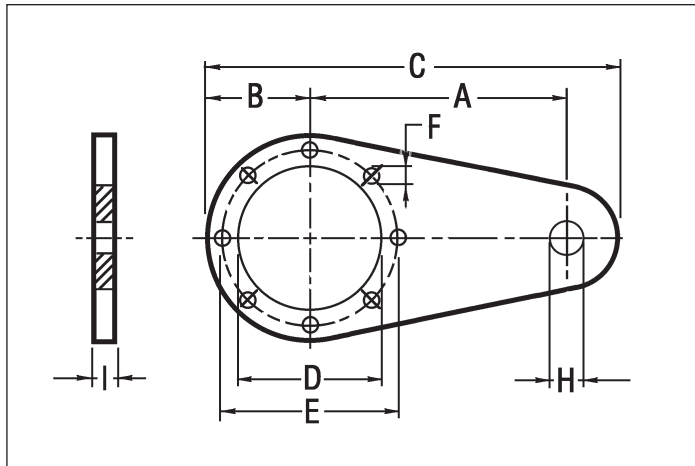
1.10 Accessories
Torque arm

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 |