

RCV..1
CV..1

Riduttori coassiali ad ingranaggi

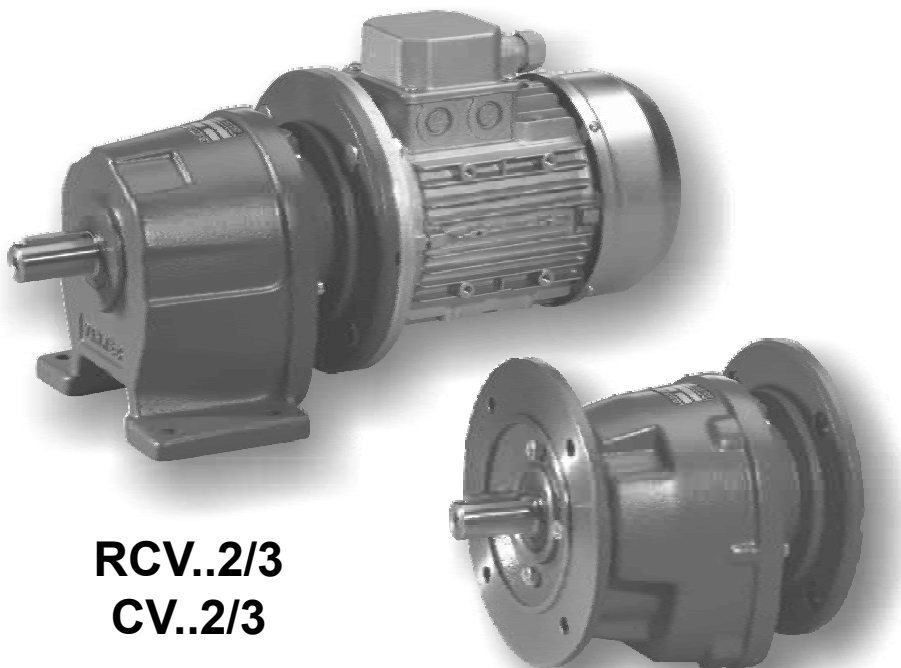
Helical gear reducers

Stirnradgetriebe




Motoreducteurs coaxiaux




Reductores de engranajes cilindricos

Ridutor coassial



RCV..2/3
CV..2/3

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| Simb. Symb. | U.M. | Descrizione | Description | Beschreibung |
|------------------|----------------------|--|---|---|
| C | — | Fattore di sollecitazione a carico radiale | <i>Radial load stress factor</i> | Belastungsfaktor Radialkraft |
| fa | — | Fattore di ventilazione | <i>Ventilation factor</i> | Kühlungsfaktor |
| fl | — | Fattore di lubrificazione | <i>Lubrication factor</i> | Schmierungsfaktor |
| fs | — | Fattore di servizio | <i>Service factor</i> | Betriebsfaktor |
| fu | — | Fattore di utilizzo | <i>Usage factor</i> | Nutzungsfaktor |
| Fa ₁ | [N] | Carico assiale massimo ammissibile sull'albero veloce | <i>Maximum permissible thrust load on input shaft</i> | Max. zul. Axialkraft an Eintriebswelle |
| Fa ₂ | [N] | Carico assiale massimo ammissibile sull'albero lento | <i>Maximum permissible thrust load on output shaft</i> | Max. zul. Axialkraft an Abtriebswelle |
| Fr ₁ | [N] | Carico radiale massimo ammissibile sull'albero veloce | <i>Maximum permissible radial load on input shaft</i> | Max. zul. Radialkraft an Eintriebswelle |
| Fr ₂ | [N] | Carico radiale massimo ammissibile sull'albero lento | <i>Maximum permissible radial load on output shaft</i> | Max. zul. Radialkraft an Abtriebswelle |
| Fr _c | [N] | Carico radiale di calcolo | <i>Calculated radial load</i> | Geschätzte Radiallast |
| Fr _{x1} | [N] | Carico radiale massimo ammissibile sull'albero veloce ricalcolato rispetto ad una distanza x dalla battuta dell'albero | <i>Maximum permissible radial load on input shaft recalculated with respect to different load application points</i> | Max. zul. Radialkraft an Eintriebswelle unter Berücksichtigung verschiedener Belastungen der Eintriebswelle |
| Fr _{x2} | [N] | Carico radiale massimo ammissibile sull'albero lento ricalcolato rispetto ad una distanza x dalla battuta dell'albero | <i>Maximum permissible radial load on output shaft recalculated with respect to different load application points</i> | Max. zul. Radialkraft an Abtriebswelle unter Berücksichtigung verschiedener Belastungen der Abtriebswelle |
| i | — | Rapporto di riduzione | <i>Reduction ratio</i> | Untersetzung |
| Jm | [Kg·m ²] | Momento d'inerzia del motore elettrico | <i>Motor moment of inertia</i> | Massenträgheitsmoment Elektromotor |
| Jr | [Kg·m ²] | Momento d'inerzia Riduttore | <i>Gear reducer moment of inertia</i> | Trägheitsmoment / Getriebe |
| Ju | [Kg·m ²] | Momento d'inerzia delle masse esterne | <i>Moment of inertia of external masses</i> | Massenträgheitsmoment der angetriebenen Massen |
| K | — | Fattore di accelerazione delle masse | <i>Acceleration factor of masses</i> | Belastungsfaktor |
| M ₁ | [Nm] | Momento torcente in entrata riduttore | <i>Transmitted torque at gear reducer entrance</i> | Effektives Eintriebsdrehmoment |
| M ₂ | [Nm] | Momento torcente in uscita riduttore | <i>Transmitted torque at gear reducer exit</i> | Effektives Abtriebsdrehmoment |
| Mn ₂ | [Nm] | Momento torcente nominale in uscita riduttore | <i>Gear reducer rated output torque</i> | Max. Abtriebsdrehmoment |
| Mr ₂ | [Nm] | Momento torcente richiesto in uscita riduttore | <i>Required torque at gear reducer output</i> | Benötigtes Abtriebsdrehmoment |
| Mc ₂ | [Nm] | Momento torcente di calcolo in uscita riduttore | <i>Calculated torque at gear reducer output</i> | Berechnetes Abtriebsdrehmoment |
| n ₁ | [min ⁻¹] | Velocità angolare in entrata riduttore | <i>Angular speed at gear reducer input</i> | Eintriebsdrehzahl |
| n ₂ | [min ⁻¹] | Velocità angolare in uscita riduttore | <i>Angular speed at gear reducer output</i> | Abtriebsdrehzahl |
| P ₁ | [kW] | Potenza in entrata riduttore | <i>Transmitted power at gear reducer input</i> | Eintriebsleistung |
| P ₂ | [kW] | Potenza in uscita riduttore | <i>Transmitted power at gear reducer output</i> | Abtriebsleistung |
| Pm | [kW] | Potenza nominale motore elettrico | <i>Motor rated power</i> | Motorleistung |
| Pn ₁ | [kW] | Potenza nominale in entrata riduttore | <i>Gear reducer rated input power</i> | Max. Eintriebsleistung |
| Pn ₂ | [kW] | Potenza nominale in uscita riduttore | <i>Gear reducer rated output power</i> | Max. Abtriebsleistung |
| Pr ₁ | [kW] | Potenza richiesta in entrata riduttore | <i>Required input power</i> | Benötigte Eintriebsleistung |
| Pt | [kW] | Potenza termica | <i>Thermic power</i> | Thermische Leistung |
| Rd | | Rendimento dinamico | <i>Dynamic efficiency</i> | Dynamischer Wirkungsgrad |
| ta | [°C] | Temperatura ambiente | <i>Ambient temperature</i> | Umgebungstemperatur |

| Simb. Symb. | U.M. | Description | Descripción | Descrição |
|------------------|----------------------|--|--|---|
| C | — | Facteur d'application de la charge radiale | <i>Factor de solicitación a carga radial</i> | Fatore de silitação a carga radial |
| fa | — | Facteur de ventilation | <i>Factor de vntilació</i> | Fatore de ventilação |
| fl | — | Facteur de lubrification | <i>Factor de lubricación</i> | Fatore de lubrificação |
| fs | — | Facteur de service | <i>Factor de servicio</i> | Fatore de serviço |
| fu | — | Facteur d' utilisation | <i>Factor de utilización</i> | Fatore de uso |
| Fa ₁ | [N] | Charge axiale maxi admissible sur l'arbre d'entrée | <i>Carga axial máxima admisible en el eje de entrada</i> | Carga empuxo maximo a colocar sobre eixo veloz |
| Fa ₂ | [N] | Charge axiale maxi admissible sur l'arbre de sortie | <i>Carga axial máxima admisible en el eje de salida</i> | Carga empuxo maximo a colocar sobre eixo lento |
| Fr ₁ | [N] | Charge radiale maxi admissible sur l'arbre d'entrée | <i>Carga radial máxima admisible en el eje de entrada</i> | Carga radial maximo a colocar sobre eixo veloz |
| Fr ₂ | [N] | Charge radiale maxi admissible sur l'arbre de sortie | <i>Carga radial máxima admisible en el eje de salida</i> | Carga radial maximo a colocar sobre eixo lento |
| Fr _c | [N] | Charge radiale calculée | <i>Carga radial calculada</i> | Carga radial de cálculo |
| Fr _{x1} | [N] | Charge radiale maxi admissible sur l'arbre d'entrée après application de facteurs de correction | <i>Carga radial máxima admisible sobre el eje de entrada recalculado respecto a otra distancia del punto de aplicación de la carga del rebaje del eje.</i> | carga radial maximo a colocar sobre o' eixo veloz calculado respeto a uma distancia da batida do eixo |
| Fr _{x2} | [N] | Charge radiale maxi admissible sur l'arbre de sortie après application de facteurs de correction | <i>Carga radial máxima admisible sobre el eje de salida recalculado respecto a otra distancia del punto de aplicación de la carga del rebaje del eje.</i> | Carga radial máximo a colocar sobre eixo lento calculado respeto a uma distancia da batida do eixo |
| i | — | Rapport de réduction | <i>Relación de reducción</i> | Razão de redução |
| Jm | [Kg·m ²] | Moment d'inertie du moteur électrique | <i>Momento de inercia del motor eléctrico</i> | Momento de inercia do motor eletrico |
| Jr | [Kg·m ²] | Moment d'inertie du réducteur | <i>Momento de inercia del reductor</i> | Momento de inercia redução |
| Ju | [Kg·m ²] | Moment d'inertie des masses extérieures | <i>Momento de inercia de las masas externas</i> | Momento de inercia da massa externa |
| K | — | Facteur d'accélération des masses | <i>Factor de aceleración de las masas</i> | Fatore de aceleração da massa |
| M ₁ | [Nm] | Couple applicable à l'entrée du réducteur | <i>Momento torsor de entrada del reductor</i> | Momento de torção em entrada redução |
| M ₂ | [Nm] | Couple transmissible en sortie | <i>Momento torsorde salida del reductor</i> | Momento de torção em saída redução |
| Mn ₂ | [Nm] | Couple nominal en sortie réducteur | <i>Momento torsor nominal de salida</i> | Momento de torção nominal em saída redução |
| Mr ₂ | [Nm] | Couple nécessaire en sortie réducteur | <i>Momento torsor de la salida</i> | Momento de torção repedir em saída redução |
| Mc ₂ | [Nm] | Couple calculé en sortie réducteur | <i>Momento torsor de de calculo de salida</i> | Momento de torção de calculo em saída redução |
| n ₁ | [min ⁻¹] | Vitesse d'entrée réducteur | <i>Velocidad angular a la entrada reductor</i> | Velocidade angolare em entrada redução |
| n ₂ | [min ⁻¹] | Vitesse de sortie réducteur | <i>Velocidad angular a la salida reductor</i> | Velocidade angolare em saída redução |
| P ₁ | [kW] | Puissance en entrée réducteur | <i>Potencia de entrada reductor</i> | Potência em entrada redução |
| P ₂ | [kW] | Puissance disponible en sortie réducteur | <i>Potencia de salida reductor</i> | Potência em saída redução |
| Pm | [kW] | Puissance nominale du moteur électrique | <i>Potencia nominal del motor eléctrico</i> | Potência nominal motor eletrico |
| Pn ₁ | [kW] | Puissance nominale en entrée réducteur | <i>Potencia nominal de entrada</i> | Potência nominal em entrada redução |
| Pn ₂ | [kW] | Puissance nominale en sortie réducteur | <i>Potencia nominal de salida</i> | Potência nominal em saída redução |
| Pr ₁ | [kW] | Puissance nécessaire en entrée réducteur | <i>Potencia de entrada requerida</i> | Potência repedir em entrada redução |
| Pt | [kW] | Puissance thermique | <i>Potencia térmica</i> | Potência termica |
| Rd | | Rendement dynamique | <i>Rendimiento dinámico</i> | Rendimento dinâmico |
| ta | [°C] | Température ambiante | <i>Temperatura ambiente</i> | Temperatura ambiente |

2 INFORMAZIONI GENERALI**Potenza nominale in entrata P_{n1} [kW]**

Potenza applicabile in entrata al riduttore, riferita alla velocità n_1 e ad un fattore di servizio $FS=1$. Per i motoriduttori vale:

$$P_{n1} = P_m \cdot FS$$

Potenza nominale in uscita P_{n2} [kW]

Potenza trasmessa all'uscita del riduttore. Si può calcolare con le seguenti formule:

$$P_{n2} = P_{n1} \cdot Rd$$

$$P_{n2} = \frac{M_{n2} \cdot n_2}{9550}$$

Momento torcente nominale in uscita M_{n2} [Nm]

Coppia trasmissibile in uscita al riduttore, riferita alla velocità n_1 e a quella corrispondente n_2 , e calcolata in base a un fattore di servizio $FS=1$.

$$M_{n2} = M_2 \cdot FS$$

Momento torcente richiesto in uscita Mr_2 [Nm]

Coppia richiesta dall'applicazione. Dovrà essere sempre soddisfatta la seguente condizione:

$$Mr_2 \leq M_{n2}$$

$$Mr_2 = \frac{Pr_1 \cdot 9550 \cdot Rd}{n_2}$$

Momento torcente di calcolo in uscita M_{c2} [Nm]

Coppia di calcolo da utilizzare per la selezione del riduttore.

$$M_{c2} = Mr_2 \cdot FS \leq M_{n2}$$

Rapporto di riduzione i

$$i = \frac{n_1}{n_2}$$

Rendimento dinamico Rd

Nel calcolo della Coppia M_{n2} indicata a catalogo, si è considerato il rendimento dei gruppi funzionanti a pieno carico dopo il rodaggio. I valori Rd dei riduttori sono i seguenti:

CV..1 - RCV..1

0.98

CV..2 - RCV..2

0.95

CV..3 - RCV..3

0.93

Velocità angolare n_1 - n_2 [min^{-1}]

È la velocità determinata dal tipo di motorizzazione (n_1) e dal conseguente rapporto di riduzione del riduttore (n_2).

È sempre consigliabile, dove la trasmissione lo permette, entrare con velocità inferiori a 1400 min^{-1} al fine di garantire condizioni ottimali di funzionamento. Sono comunque ammesse velocità di ingresso fino a 2800 min^{-1} senza incorrere in particolari controindicazioni.

GENERAL INFORMATION**Input rated power P_{n1} [kW]**

This is the applicable power at input relating to speed n_1 and a service factor $FS=1$. The following is valid for motor reducers:

$$P_{n1} = P_m \cdot FS$$

Output rated power P_{n2} [kW]

Power transmitted at gear reducer output can be calculated with the following formulas:

$$P_{n2} = P_{n1} \cdot Rd$$

$$P_{n2} = \frac{M_{n2} \cdot n_2}{9550}$$

Rated torque at output M_{n2} [Nm]

Torque transmitted at gear reducer output relating to speed n_1 and the corresponding n_2 , calculated on a service factor $FS=1$.

$$M_{n2} = M_2 \cdot FS$$

Required torque at output Mr_2 [Nm]

Torque corresponding to application requirements. The following conditions applies – always:

$$Mr_2 \leq M_{n2}$$

$$Mr_2 = \frac{Pr_1 \cdot 9550 \cdot Rd}{n_2}$$

Calculated torque at output M_{c2} [Nm]

Torque value to be used to select a gear reducer.

$$M_{c2} = Mr_2 \cdot FS \leq M_{n2}$$

Reduction ratio i

$$i = \frac{n_1}{n_2}$$

Dynamic efficiency Rd

Torque calculations M_{n2} indicated in the charts was calculated having units operating at maximum load after initial running-in. The gear reducer's Rd values are as follows:

:

CV..1 - RCV..1

0.98

CV..2 - RCV..2

0.95

CV..3 - RCV..3

0.93

Angular speed n_1 - n_2 [min^{-1}]

This is the speed that is determined by the type of motorisation (n_1) and the consequent reduction ratio (n_2).

$$n_2 = \frac{n_1}{i}$$

It is always advisable – where transmission allows it – to enter with speeds lower than 1400 min^{-1} in order to ensure optimum running conditions. However, input speeds of up to 2800 min^{-1} may be used without incurring any particular problems.

GRUNDLEGENDE INFORMATIONEN**Max. Eintriebsleistung P_{n1} [kW]**

Dies ist die max. zulässige Eintriebsleistung bei der Drehzahl n_1 und einem Sicherheitsfaktor $FS = 1$. Für Getriebemotoren gilt:

Max. Abtriebsleistung P_{n2} [kW]

Diese kann berechnet werden durch:

Maximale Abtriebsdrehmoment M_{n2} [Nm]

Übertragbares Abtriebsdrehmoment, abhängig von den Drehzahlen n_1 und n_2 . Berechnet auf Grundlage des Betriebsfaktors $FS=1$.

Benötigtes Abtriebsdrehmoment Mr_2 [Nm]

Folgende Bedingungen müssen immer gegeben sein:

Berechnetes Abtriebsdrehmoment M_{c2} [Nm]

Wird für die Auswahl des Getriebes benötigt.

Untersetzung i **Dynamischer Wirkungsgrad Rd**

Die Drehmomentangaben M_{n2} in den Tabellen sind mit dynamischem Wirkungsgrad und max. Motorleistung nach der Einlaufzeit angegeben. Die Rd -Werte sind folgenden:

Drehzahlen n_1 und n_2 [min^{-1}]

Die Drehzahl ist abhängig vom Motortyp (n_1) und dem daraus folgenden Umsetzungsverhältnis (n_2).

Eine Eingangsdrehzahl von ca. 1400 min^{-1} ist empfehlenswert, um einen optimalen Betrieb zu gewährleisten. Eintriebsdrehzahlen bis zu 2800 min^{-1} sind ebenfalls möglich.

INFORMATIONS GENERALES**Puissance nominale en entrée réducteur P_{n1} [kW]**

Puissance admissible en entrée par rapport à la vitesse n_1 et avec un facteur de service $FS=1$. Pour le moto-réducteur:

Puissance nominale en sortie réducteur P_{n2} [kW]

Puissance transmise en sortie réducteur qui peut être calculée avec les formules suivantes:

Couple nominal de sortie réducteur M_{n2} [Nm]

Couple transmissible en sortie réducteur par rapport à la vitesse n_1 et à la correspondant n_2 , calculée sur la base d'un facteur de service $FS=1$.

Couple nécessaire en sortie réducteur M_{r2} [Nm]

Couple nécessaire à l'application. Respecter toujours la condition suivante:

Calcul du couple en sortie réducteur M_{c2} [Nm]

Valeur du couple utilisée pour la sélection du réducteur.

Rapport de réduction i **Rendement dynamique R_d**

Les couples nominaux de sortie réducteur M_{n2} mentionnés dans les tableaux, ont été calculés avec un rendement R_d obtenu en fonctionnement à pleine charge après rodage:

| | | | | | |
|----------------|-------------|----------------|-------------|----------------|-------------|
| CV..1 - RCV..1 | 0.98 | CV..2 - RCV..2 | 0.95 | CV..3 - RCV..3 | 0.93 |
|----------------|-------------|----------------|-------------|----------------|-------------|

Vitesse angulaire n_1 - n_2 [min^{-1}]

C'est la vitesse relative au moteur sélectionné (n_1) et la vitesse consécutive (n_2) au rapport de réduction i choisi.

Il est toujours préférable, quand la transmission le permet, d'utiliser une vitesse inférieure à 1400 min^{-1} , afin de garantir des conditions de fonctionnement optimales. Cependant une vitesse d'entrée de 2800 min^{-1} peut être utilisée sans contre-indications particulières.

INFORMACIÓN GENERAL**Potencia nominal de entrada P_{n1} [kW]**

Potencia aplicable en la entrada del reductor, la cual hace referencia a la velocidad n_1 y a un factor de servicio $FS=1$. Para motorreductores es valida la siguiente formula:

$$P_{n1} = P_m \cdot FS$$

Potencia nominal de salida P_{n2} [kW]

Potencia transmitida a la salida del reductor. Se puede calcular con las siguientes formulas:

$$P_{n2} = P_{n1} \cdot Rd$$

$$P_{n2} = \frac{M_{n2} \cdot n_2}{9550}$$

Momento torsor nominal en la salida M_{n2} [Nm]

Par motor transmissible a la salida del reductor, referida a la velocidad n_1 y a la correspondiente n_2 , y calculada en base a un factor de servicio $FS=1$.

$$M_{n2} = M_2 \cdot FS$$

Momento torsor requerido en la salida M_{r2} [Nm]

Par motor requerido de la aplicación. Deberá ser siempre respetada la siguiente condición:

$$M_{r2} \leq M_{n2}$$

$$M_{r2} = \frac{P_{r1} \cdot 9550 \cdot Rd}{n_2}$$

Momento torsor de cálculo en la salida M_{c2} [Nm]

Par motor de cálculo de utilizar para la selección del reductor.

$$M_{c2} = M_{r2} \cdot FS \leq M_{n2}$$

Relación de reducción i

$$i = \frac{n_1}{n_2}$$

Rendimiento dinámico R_d

En el cálculo del par motor M_{n2} indicado en el catálogo, se ha considerado el rendimiento de los grupos funcionantes a plena carga después del rodaje. Los valores R_d de los reductores son los siguientes:

Velocidad angular n_1 - n_2 [min^{-1}]

Es la velocidad que viene determinada por el tipo de motorización utilizada (n_1) y de la consiguiente relación de reducción del reductor (n_2).

$$n_2 = \frac{n_1}{i}$$

Es aconsejable, siempre que la transmisión lo permita, entrar con velocidades inferiores a 1400 min^{-1} con el fin de garantizar las condiciones optimas de funcionamiento. También son admitidas velocidades de entrada de hasta 2800 min^{-1} sin incurrir en ninguna contraindicación.

INFORMAÇÃO GENERAL**Potência nominal em entrada P_{n1} [kW]**

Potência apropriado em entrada a redução referida a velocidade n_1 e a um fator de serviço $FS=1$. Para o motorreductor vale:

Potência nominal em saída P_{n2} [kW]

Potência transmitida a saída do reductor se pode colocar com a seguinte formula:

Momento torção nominal em saída M_{n2} [Nm]

Cópia transmissão em saída a redução, referida a velocidade n_1 e a aquela correspondente n_2 e calculada em base a um fator de serviço $FS=1$.

Momento torção repedir em saída M_{r2} [Nm]

cópia repedir da aplicação, deverá ser sempre satisfeito a seguinte condição:

Momento torção de calculo em saída M_{c2} [Nm]

cópia de calculo da utilizar para a seleção de redução.

Razão de redução i **Rendimento dinámico R_d**

No calculo da cópia M_{n2} indicada a catalogo, é considerado o rendimento do grupo funciona a tanta carga depois a primeira prova. O valor R_d da redução são o seguinte:

Velocidade angular n_1 - n_2 [min^{-1}]

É a velocidade determinada do tipo de motorização (n_1) e da consequente razão de redução de reductor (n_2).

É sempre aconselhavel onde a transmissão o permite, entrar com velocidade inferior a 1400 min^{-1} a fim de garantir condição ótima de funcionamento. São amissivel velocidade de ingresso fim a 2800 min^{-1} sem incorrer em particular contra indicação.

3 FATTORE DI SERVIZIO FS

Il fattore di servizio FS è il parametro che traduce in un valore numerico la gravosità del servizio che il riduttore è chiamato a svolgere, tenendo in considerazione, con sufficiente approssimazione della variabilità del carico e degli eventuali urti cui è sottoposto il riduttore per un determinato tipo di servizio.

Il grafico della tabella, permette di scegliere il fattore di servizio FS una volta stabilito i seguenti parametri:

- natura del carico in funzione del fattore di accelerazione delle masse K: A-B-C
- durata di funzionamento giornaliero: ore/giorno (h/d)
- frequenza di avviamento: avviamenti/ora
- classe di carico:
 - A** - $K \leq 0.30$ (carico uniforme)
 - B** - $0.30 < K \leq 3.0$ (carico con urti moderati)
 - C** - $3 < K \leq 10$ (carico con forti urti)

Eventuali valori intermedi di FS potranno essere ottenuti per interpolazione.

SERVICE FACTOR FS

The service factor FS is a parameter that translates the operational burden of the gear reducer when running into a numerical value, at the same time taking into consideration (with sufficient approximation) any load variations or eventual shocks that the gear reducer might incur for a certain type of duty.

The graph below will allow you to choose the service factor FS once you have established the following facts:

- type of load based on the acceleration factor of the masses K: A-B-C
- operational running times in hours per day: h/d
- number of starts and stops per hour
- type of load:
 - A** - $K \leq 0.30$ (uniform load)
 - B** - $0.30 < K \leq 3.0$ (moderate shock load)
 - C** - $3 < K \leq 10$ (heavy shock load)

Any eventual FS intermediate values can be obtained by interpolation.

BETRIEBSFAKTOR FS

Der Betriebsfaktor fs gibt die Betriebsbelastung durch einen numerischen Wert wieder.

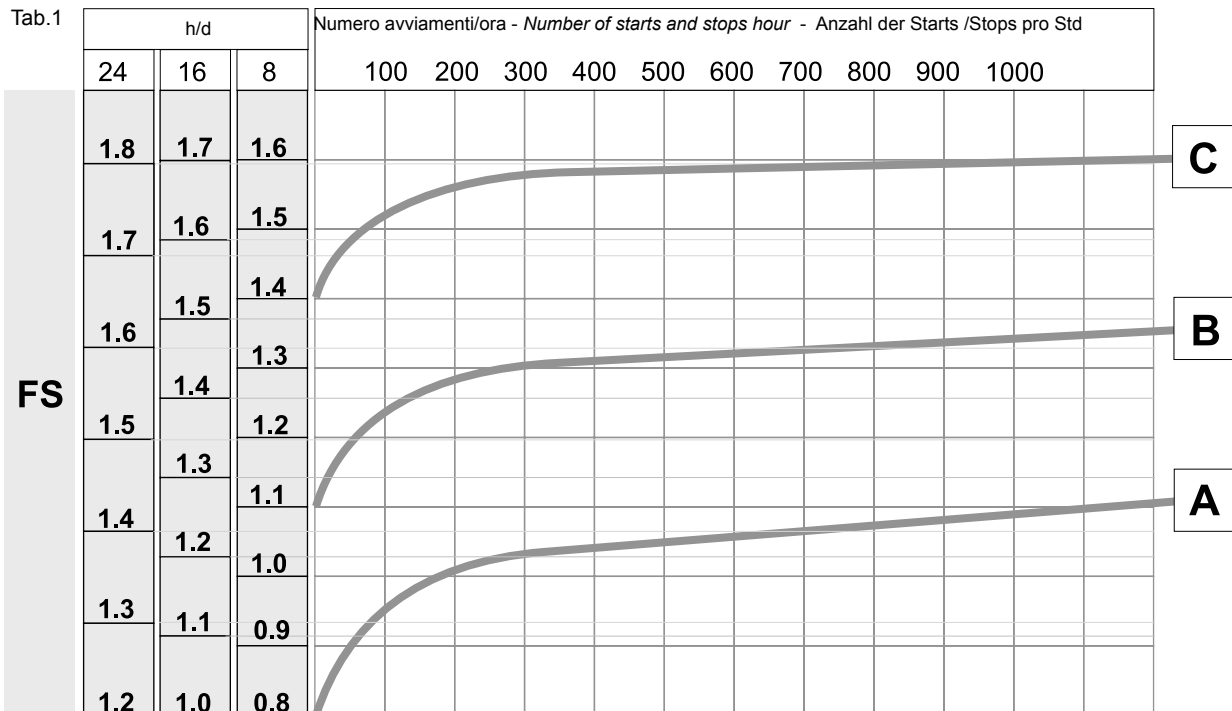
Diesen Wert sollte das Getriebe unter Beachtung der Belastungsvariabilität und den möglichen auftretenden Stößen erfüllen.

Die Tabelle ermöglicht die Auswahl des Betriebsfaktors (FS), nachdem folgende Parameter einmal festgesetzt worden sind:

- Die Belastungsart ist abhängig von den Massenbeschleunigungsfaktoren K: A-B-C
- Tägliche Getriebeaufzeit (h/d)
- Starthäufigkeit. Starts/Std
- Belastungstypen:
 - A** - $K \leq 0.30$ (gleichmäßige Belastung)
 - B** - $0.30 < K \leq 3.0$ (leichte Stoßbelastung)
 - C** - $3 < K \leq 10$ (starke Stoßbelastung)

Dazwischen liegende Werte können interpoliert werden.

Tab.1



Fattore di accelerazione delle masse K

Serve per la determinazione del tipo di carico, e si ricava dalla relazione:

dove:

Ju [Kgm²]: momento d'inerzia dinamico delle masse esterne

Jm [Kgm²]: momento d'inerzia del motore elettrico

Acceleration factor of masses K

Used to determine the type of load, it can be obtained from the following equation:

$$K = \frac{J_u}{J_m}$$

where:

Ju [Kgm²]: dynamic moment of inertia of the external masses

Jm [Kgm²]: electric motor moment of inertia

Massenbeschleunigungsfaktor K

K dient dazu, den Belastungstyp zu bestimmen. Er lässt sich aus folgender Gleichung ableiten:

Hier gilt:

Ju [Kgm²]: Dynamischer Massenträgheitsmoment der angetriebenen Massen

Jm [Kgm²]: Massenträgheitsmoment des Elektromotors

4 POTENZA TERMICA

La potenza termica P_t è un valore che indica il limite termico del riduttore oltre il quale si producono danneggiamenti alle parti interne e un degrado del lubrificante.

I valori indicati nella seguente tabella, rappresentano la massima potenza trasmissibile dal riduttore in servizio continuo e alla temperatura ambiente t_a (°C).

THERMIC POWER

Thermic power P_t is a value that indicates the gear reducer's thermic limit, anything above this causes damage to internal components and will degrade the lubricant.

The values given in the following table represent the gear reducer's maximum transmissible power during a continuous run at a certain ambient temperature t_a (°C).

THERMISCHE LEISTUNG

Die thermische Leistung P_t gibt den thermischen Grenzwert an. Wird dieser überschritten, so kann dies zu einer Beschädigung der Bauteile und zu einer Verschlechterung der Schmierung führen.

Die in der Tabelle angegebenen Werte geben die maximale Leistung, bei ständiger Nutzung und in der Abhängigkeit der Umgebungstemperatur, wieder.

Tab.2

| Pt Potenza termica / Thermic power / Thermische Leistung [kW] | | | | | | | | | | | |
|--|--|-----------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| CV RCV | Temperatura ambiente / ambient temperature / Umgebungstemperatur (°C) | | | | | | | | | | |
| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
| 141 | 4.3 | 4.1 | 3.9 | 3.6 | 3.4 | 3.2 | 3.0 | 2.7 | 2.5 | 2.3 | 2.1 |
| 191 | 6.6 | 6.3 | 5.9 | 5.6 | 5.2 | 4.9 | 4.5 | 4.2 | 3.8 | 3.5 | 3.1 |
| 241 | 6.6 | 6.3 | 5.9 | 5.6 | 5.2 | 4.9 | 4.5 | 4.2 | 3.8 | 3.5 | 3.1 |
| 281 | 9.3 | 8.8 | 8.3 | 7.8 | 7.3 | 6.8 | 6.3 | 5.9 | 5.4 | 4.9 | 4.4 |
| 381 | 13.2 | 12.5 | 11.8 | 11.1 | 10.4 | 9.7 | 9.0 | 8.3 | 7.6 | 6.9 | 6.2 |
| 162 | 5.1 | 4.9 | 4.6 | 4.3 | 4.1 | 3.8 | 3.5 | 3.2 | 3.0 | 2.7 | 2.4 |
| 202 | 5.9 | 5.6 | 5.3 | 5.0 | 4.7 | 4.4 | 4.1 | 3.8 | 3.4 | 3.1 | 2.8 |
| 252 | 7.1 | 6.7 | 6.3 | 6.0 | 5.6 | 5.2 | 4.8 | 4.5 | 4.1 | 3.7 | 3.3 |
| 302 | 10.5 | 10.0 | 9.4 | 8.9 | 8.3 | 7.7 | 7.2 | 6.6 | 6.1 | 5.5 | 5.0 |
| 352 | 10.5 | 10.0 | 9.4 | 8.9 | 8.3 | 7.7 | 7.2 | 6.6 | 6.1 | 5.5 | 5.0 |
| 452 | 15.2 | 14.4 | 13.6 | 12.8 | 12.0 | 11.2 | 10.4 | 9.6 | 8.8 | 8.0 | 7.2 |
| 552 | 22.2 | 21.0 | 19.9 | 18.7 | 17.5 | 16.4 | 15.2 | 14.0 | 12.9 | 11.7 | 10.5 |
| 602 | 35.3 | 33.4 | 31.6 | 29.7 | 27.9 | 26.0 | 24.1 | 22.3 | 20.4 | 18.6 | 16.7 |

Se il funzionamento del riduttore è intermittente, il valore di P_t deve essere corretto tramite i fattori moltiplicativi indicati nella seguente tabella.

Per i riduttori con tre stadi di riduzione la verifica della potenza termica non è necessaria, perchè quest'ultima è superiore alla potenza trasmissibile P_{n1} .

If the running of the gear reducer is intermittent and not continuous, the P_t value must be corrected using the multiplying factors given in the following table.

Gear reducer's with three reduction stages do not necessitate a correction of the thermic power because it is higher than the transmissible power P_{n1} .

Im Falle, daß das Getriebe nicht gleichmäßig arbeiten sollte, muß der P_t -Wert korrigiert werden. Die Korrektur erfolgt durch Anwendung der Multiplikationsfaktoren, welche in der folgenden Tabelle angegeben sind.

Für dreistufige Getriebeuntersetzungen ist die Kontrolle der thermischen Leistung erforderlich. Hier ist die thermische Leistung größer als die übertragbare Leistung P_{n1} .

Tab.3

| fu | Fattore di utilizzo Usage factor Nutzungsfaktor | tf: tempo di funzionamento in minuti tf: running time in minutes tf: Betriebszeit in Minuten | | | | | |
|-----------|---|---|--|-------------|-------------|-------------|-----------|
| | | 10 | 20 | 30 | 40 | 50 | 60 |
| | | 1.7 | 1.4 | 1.25 | 1.15 | 1.08 | 1 |
| fa | Fattore di aerazione Ventilation factor Belüftungsfaktor | 1 | Riduttore senza ventilazione forzata Reducer without forced ventilation Getriebe ohne Druckentlüftung | | | | |
| | | 1.4 | Riduttore con ventilazione forzata Reducer with forced ventilation Getriebe mit Druckentlüftung | | | | |
| fl | Fattore di lubrificazione Lubrication factor Schmierfaktor | 0.9 | Olio minerale / Mineral oil / Mineralöl | | | | |
| | | 1 | Olio sintetico / Synthetic oil / Synthetisches Öl | | | | |

La condizione da verificare è la seguente:

Please check that the following condition applies:

Dies gilt unter der Voraussetzung, dass:

$$P_{r1} \leq P_t \cdot f_u \cdot f_a \cdot f_l$$

PUISSANCE THERMIQUE

La puissance thermique Pt est une valeur qui indique la limite thermique du réducteur après laquelle les parties intérieures pourraient subir des dommages et le lubrifiant pourrait se dégrader.

Les valeurs indiquées ci-dessous représentent la puissance maximale transmissible par le réducteur en service continu à la température ambiante ta (°C).

POTENCIA TÉRMICA

La Potencia térmica Pt es un valor que indica el límite térmico del reductor, superado el cual se producen daños a las partes internas y un degrado del lubricante.

Los valores indicados en la siguiente tabla representan la máxima potencia transmisible del reductor en servicio continuo a temperatura ambiente ta (°C).

POTÊNCIA TERMICA

A potência termica Pt é um valor que indica o limite termico do ridutor. Outra e qual se produz dano a parte externa e um consumo de lubrificante.

O valor indicado na seguinte tabela, representando a máxima potência transmissível do ridutor em serviço continua e a temperatura ambiente ta (°C).

Tab.2

| CV RCV | Pt Puisseance thermique / Potencia Térmica / Potência termica [kW] | | | | | | | | | | |
|-----------|--|------|------|------|------|------|------|------|------|------|------|
| | Température ambiante / Temperatura ambiente / Temperatura ambiente ta (°C) | | | | | | | | | | |
| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
| 141 | 4.3 | 4.1 | 3.9 | 3.6 | 3.4 | 3.2 | 3.0 | 2.7 | 2.5 | 2.3 | 2.1 |
| 191 | 6.6 | 6.3 | 5.9 | 5.6 | 5.2 | 4.9 | 4.5 | 4.2 | 3.8 | 3.5 | 3.1 |
| 241 | 6.6 | 6.3 | 5.9 | 5.6 | 5.2 | 4.9 | 4.5 | 4.2 | 3.8 | 3.5 | 3.1 |
| 281 | 9.3 | 8.8 | 8.3 | 7.8 | 7.3 | 6.8 | 6.3 | 5.9 | 5.4 | 4.9 | 4.4 |
| 381 | 13.2 | 12.5 | 11.8 | 11.1 | 10.4 | 9.7 | 9.0 | 8.3 | 7.6 | 6.9 | 6.2 |
| 162 | 5.1 | 4.9 | 4.6 | 4.3 | 4.1 | 3.8 | 3.5 | 3.2 | 3.0 | 2.7 | 2.4 |
| 202 | 5.9 | 5.6 | 5.3 | 5.0 | 4.7 | 4.4 | 4.1 | 3.8 | 3.4 | 3.1 | 2.8 |
| 252 | 7.1 | 6.7 | 6.3 | 6.0 | 5.6 | 5.2 | 4.8 | 4.5 | 4.1 | 3.7 | 3.3 |
| 302 | 10.5 | 10.0 | 9.4 | 8.9 | 8.3 | 7.7 | 7.2 | 6.6 | 6.1 | 5.5 | 5.0 |
| 352 | 10.5 | 10.0 | 9.4 | 8.9 | 8.3 | 7.7 | 7.2 | 6.6 | 6.1 | 5.5 | 5.0 |
| 452 | 15.2 | 14.4 | 13.6 | 12.8 | 12.0 | 11.2 | 10.4 | 9.6 | 8.8 | 8.0 | 7.2 |
| 552 | 22.2 | 21.0 | 19.9 | 18.7 | 17.5 | 16.4 | 15.2 | 14.0 | 12.9 | 11.7 | 10.5 |
| 602 | 35.3 | 33.4 | 31.6 | 29.7 | 27.9 | 26.0 | 24.1 | 22.3 | 20.4 | 18.6 | 16.7 |

Si le fonctionnement du réducteur est intermittent, la valeur Pt doit être corrigée avec les facteurs multiplicatifs suivants. Pour les réducteurs avec trois étages de réduction, le contrôle de la puissance thermique ne nécessite pas, puisque celle-ci est supérieure à la puissance transmissible Pn₁.

Si el funcionamiento del reductor es intermitente el valor de Pt debe ser corregido mediante los factores multiplicativos indicados en las siguientes tablas.

Para los reductores con tres estados de reducción la verificación de la potencia térmica no es necesaria porque esta última es superior a la potencia transmissible Pn₁.

Se o funcionamento do ridutore é intermitente, o valor de Pt ser correto com o fator multiplicativo indica na seguinte tabela.

Para o ridutor com três parti de redução a verificar da potência termica não é necessária, por que esta última e superior a potência transmissível Pn₁.

Tab.3

| fu | Facteur d'utilisation Factor de utilización Fatore de utilizzo | tf: temps de fonctionnement en minutes tf: tiempo de funcionamiento en minutos tf: tempo de funcionamento em minuto | | | | | |
|----|---|---|---|------|------|------|----|
| | | 10 | 20 | 30 | 40 | 50 | 60 |
| | | 1.7 | 1.4 | 1.25 | 1.15 | 1.08 | 1 |
| fa | Facteur d'aération Factor de Aereación Fatore de ventilação | 1 | Réducteur sans ventilation forcée Reductor sin ventilación forzada Redutor sem ventilação forçada | | | | |
| | | 1.4 | Réducteur avec ventilation forcée Reductor con ventilación forzada Redutor com ventilação forçada | | | | |
| fl | Facteur de lubrification Factor de Lubricación Fatore de lubrificação | 0.9 | Huile minérale / Aceite mineral / Olio mineral | | | | |
| | | 1 | Huile synthétique / Aceite sintético / olio sintético | | | | |

La condition à vérifier est la suivante:

La condición de verificar es la siguiente:

A condição de verificar é seguinte:

5 SCELTA

Per selezionare correttamente un riduttore o un motoriduttore, si consiglia di operare come segue:

Scelta motoriduttori RCV

- a) Determinare il fattore di servizio FS in funzione del tipo di carico, del numero di avviamenti/ora e del numero di ore di funzionamento giornaliero (tab.1).
- b) Dalla coppia Mr_2 conoscendo n_2 e il rendimento dinamico (Rd), ricavare la potenza di entrata richiesta dall'applicazione:

Il valore Rd del riduttore è riportato nella tabella a pag. 6.

- c) Ricercare fra le tabelle dei dati tecnici dei motoriduttori quella corrispondente ad una potenza motore:

Scegliere poi, in base alla velocità di uscita n_2 , il motoriduttore con un fattore di servizio FS calcolato maggiore o uguale al fattore di servizio FS della tabella 1.

Scelta dei riduttori CV e dei riduttori predisposti per motori IEC

- a) Determinare il fattore di servizio Fs.
- b) Conoscendo la coppia di uscita richiesta dalla applicazione Mr_2 , si procede alla definizione della coppia di calcolo:
- c) Disponendo della coppia di calcolo M_{c2} e del rapporto di riduzione [i], si ricercherà nelle tabelle il riduttore che, in funzione del rapporto [i] prossimo a quello calcolato, proponga una coppia nominale in uscita:

Se al riduttore scelto dovrà essere applicato un motore elettrico forma B5 verificare l'applicabilità consultando le predisposizioni possibili (IEC B5, o IEC B14) riportate nelle tabelle dei dati tecnici.

SELECTION

To correctly select a gear reducer or motor reducer, please follow these suggestions:

Choosing a motor reducer RCV

- a) Determine the service factor FS according to the type of load, the number of starts and stops per hour and the daily running hours (tab. 1).
- b) Providing that torque Mr_2 , speed n_2 and dynamic efficiency Rd are known you can obtain the input power required by the application using the following equation:

$$Pr_1 = \frac{Mr_2 \cdot n_2}{9550 \cdot Rd} \text{ [kW]}$$

The Rd value of the gear reducer is shown on page 6.

- c) Consult the motor reducer technical data sheets and find the one corresponding to motor power:

$$P_m \geq Pr_1$$

Next, according to output speed n_2 , select a motor reducer having a calculated service factor FS higher than or equal to the service factor FS given in table 1.

Selecting CV gear reducers and reducers for IEC motors

- a) Determine the service factor Fs.
- b) Once you know the application required output torque, the calculation of the torque can be defined:
- c) Now that you have calculated the torque M_{c2} and you also have the reduction ratio [i], consult the tables to find the gear reducer that has a ratio closest to your calculated ratio and gives a rated output torque of:

$$Mn_2 \geq M_{c2}$$

If an electric motor shape B5 has to be fitted to your chosen gear reducer, please verify just how feasible this is by checking the possible predispositions (IEC B5 or IEC B14) given in the technical data charts.

GETRIEBEAUSWAHL

Zur richtigen Getriebeauswahl sollte folgendes beachtet werden:

Auswahl des RCV – Getriebes

- a) Festlegung des Betriebsfaktors FS in Abhängigkeit von der Belastung, der Starthäufigkeit pro Stunde und der täglichen Betriebsdauer (Tabelle 1).
- b) Ist das benötigte Abtriebsdrehmoment Mr_2 , die Abtriebsdrehzahl n_2 und der Wirkungsgrad μd bekannt, kann die Benötigte Leistung berechnet werden:

Der Wirkungsgrad Rd kann aus der Tabelle auf Seite 6 abgelesen werden.

- c) Wählen Sie aus der Tabelle mit den technischen Daten das Getriebe aus, das die gewünschte Motorleistung angibt:

Dann wird, auf der Basis der Abtriebsdrehzahl n_2 , derjenige Getriebemotor ausgewählt, der einen Betriebsfaktor FS aufweist, welcher größer oder gleich dem Betriebsfaktor FS aus der Tabelle 1 ist.

Auswahl der CV-Getriebe und der Getriebe für IEC-Motoren

- a) Festlegung des Betriebsfaktors fs.
- b) Ist das benötigte Abtriebsdrehmoment Mr_2 bekannt, kann das effektive Drehmome berechnet werden:
- c) Nachdem M_{c2} berechnet wurde und das Untersetzungsverhältnis [i] bekannt ist, kann aus den Auswahltabellen jenes Getriebe ausgewählt werden, das dem berechneten in Untersetzung und Abtriebsdrehmoment am nächsten kommt:

Sollte das ausgewählte Getriebe mit einem Drehstrommotor angetrieben werden, muss die Anbaumöglichkeit des Motors anhand der entsprechenden Auswahltabellen (IEC B5 oder IEC B14) geprüft werden.

SELECTION

Pour choisir correctement un réducteur ou un moto-réducteur utiliser la procédure suivante:

Sélection moto-réducteur RCV

- a) Déterminer le facteur de service FS en fonction du type de charge, du numero de démarrages et du temps de fonctionnement par jour. (tab.1).
- b) Du couple Mr_2 , connaissant n_2 et le rendement dynamique (Rd) du réducteur, déterminer la puissance d'entrée nécessaire à l'application:

Le valeur Rd du réducteur est indiquée dans le tableau à pag. 7.

- c) Rechercher parmi les tableaux des données techniques des moto-réducteurs celle qui Correspond à une puissance moteur:

Choisir, sur la base de la vitesse de sortie n_2 , le moto-réducteur avec facteur de service FS calculé supérieur ou égal au facteur de service FS du tableau 1.

Sélection des réducteurs CV et des réducteurs prévus pour moteur IEC

- a) Déterminer le facteur de service FS.
- b) Connaissant le couple de sortie nécessaire à l'application Mr_2 , le calcul du couple se fait comme suit:

- c) Connaissant Mc_2 et $[i]$, consulter la table de sélection des réducteurs en fonction de la vitesse n_1 et choisir le réducteur qui suivant le rapport de réduction $[i]$ le plus proche de celui calculé, fournira le couple nominal correspondant à:

Si le réducteur sélectionné doit être connecté à un moteur électrique B5, contrôler cette possibilité en consultant les prédispositions possibles (IEC B5, ou IEC B 14) indiquées dans les tableaux des données techniques.

SELECCION

Para la correcta selección de un reductor o motorreductor se aconseja seguir los siguientes pasos:

Selección del motorreductor RCV

- a) *Determinar el factor de servicio FS en función del tipo de carga, del número de arranques/hora y del número de horas de funcionamiento diario (tab.1).*
- b) *Del par motor Mr_2 , conociendo n_2 y el rendimiento dinámico (Rd) recalcular la potencia de entrada requerida de la aplicación:*

$$Pr_1 = \frac{Mr_2 \cdot n_2}{9550 \cdot Rd} \text{ [kW]}$$

El valor Rd reductor esta representado en la tabla a pag. 7.

- c) *Consultar entre las tablas de los datos técnicos de los motorreductores la que corresponde a una potencia del motor:*

$$Pm \geq Pr_1$$

Después, en base a la velocidad de salida n_2 seleccionar un motorreductor con un factor de servicio FS calculado, mayor o igual al factor de servicio FS de la tabla 1.

Selección de los reductores CV y de los motores predispuestos para motores IEC

- a) *Determinar el factor de servicio FS.*
- b) *Conociendo el par motor de salida para la aplicación Mr_2 , se procede a la definición del par motor calculado:*

$$Mc_2 = Mr_2 \cdot FS$$

- c) *Disponiendo del par motor de cálculo Mc_2 y de la relación de reducción $[i]$, buscar en las tablas el reductor que en función de la relación $[i]$ próximo al calculado proponga un motor nominal en salida:*

$$Mn_2 \geq Mc_2$$

Si al reductor seleccionado se le debe acoplar un motor eléctrico en forma B5 verificar su compatibilidad consultando las predisposiciones posibles (IEC B5 - IEC B14) presentadas en las tablas de los datos técnicos.

ESCOLHA

Para seleccionar corretamente um ridutor ou um motoridutor se aconselha de operar como segue:

E s-

Colha motoridutor RCV

- a) Determinar o fatore de serviço FS em função o tipo de carga do número de aviamento/hora e do número de hora de funcionamento diária (tab.1).
- b) Da cópia Mr_2 conhecendo n_2 e o rendimento dinâmico (Rd) recebe a potência da aplicação:

O valor Rd ridutor é reportado na tabela a pag. 7.

- c) Procura fazer a tabela do calculo tecnico do motoridutor aquela correspondente a uma potência motor:

Escolhendo depois, em base a velocidade de saída n_2 o motoridutor com un fatore de serviço FS calculado maior ou igual ao fatore de serviço FS da tabela 1.

Escolha do ridutor CV e do ridutor predisposição para motor IEC

- a) Determinar o fatore de serviço FS.
- b) Conhecendo a cópia de saída da aplicação Mr_2 , segue a definição da cópia de cálculo:

- c) Disposição da cópia de cálculo Mc_2 e da razão de redução $[i]$ se procurar na tabela o ridutor que em função da razão $[i]$ proximo aquele calculo, propondo uma cópia nominal em saída:

Se o ridutor escolhido deve ser aplicado um motor elétrico forma B5 verificar aplicação consultando a predisposição possível (IEC, B5 o IEC B14) riportar na tabela do cálculo tecnico.

6 VERIFICHE

Effettuata la corretta selezione del riduttore o motorriduttore, si consiglia di procedere alle seguenti verifiche:

Momento torcente massimo

I sovraccarichi istantanei previsti dall'applicazione non devono essere superiori al doppio dei valori di momento torcente del riduttore riportati a catalogo.

Potenza termica

La potenza termica del riduttore deve avere un valore uguale o maggiore della potenza richiesta dall'applicazione (pag. 10).

Carichi radiali e assiali

I carichi radiali e assiali agenti sugli alberi lenti e veloci devono rientrare nei valori di catalogo ammessi.

CHECK POINTS

Once you have correctly chosen the type of gear reducer or gearmotor, it is then advisable to check that the following apply:

Maximum torque

The maximum torque at instantaneous peak overloads of the application must not be higher than the double of the torque values of the gear reducer given in this catalogue.

Thermic power

A gear reducer's thermic power value must be equal to or higher than the power needed by the appliance. (See pg. 10).

Radial and thrust loads

Radial and thrust loads on the input and output shafts must be within the permissible loads given in this catalogue.

NACHKONTROLLEN

Nachdem das richtige Getriebe bzw. der richtige Getriebemotor ausgewählt wurde, empfehlen wir folgende Überprüfungen durchzuführen:

Maximales Drehmoment

Die unmittelbaren Überbelastungen, welche von der Anwendung vorgesehen sind, dürfen nicht mehr als das Doppelte der im Katalog angegebenen Drehmomentwerte sein.

Thermische Leistung

Die thermische Leistung des Getriebes sollte einen Wert größer oder gleich dem Wert haben, der der benötigten Leistung der Anwendung entspricht (s.S.10).

Radial und Axialbelastung

Die Radial- und Axialbelastungen, welche auf die Ein- und Abtriebswellen wirken, sollten innerhalb der zugelassenen Katalogwerte liegen.

CONTROLES

Après avoir correctement sélectionné le réducteur ou moto-réducteur, il est recommandé de vérifier ce qui suit:

Couple maximum

Les surcharges instantanées prévues par l'application ne doivent pas excéder le double des valeurs du couple du réducteur indiquées dans le catalogue.

Puissance thermique

La puissance thermique du réducteur doit avoir une valeur supérieure ou égale à la puissance nécessaire à l'application (pag. 11).

Charges radiales et axiales

Les charges radiales et axiales sur l'arbre d'entrée et de sortie doivent être dans les valeurs données.

VERIFICACIONES

Efectuada la correcta selección del reductor o motoreductor, se aconseja de proceder a las siguientes verificaciones:

Momento Torsor máximo

Las sobrecargas instantáneas previstas en la aplicación no tienen que ser superiores al doble de los valores del momento torsor del reductor presentados en el catálogo.

Potencia Térmica

La Potencia térmica del reductor debe tener un valor igual o mayor a la Potencia requerida de la aplicación pag. 11.

Cargas radiales y axiales

Las cargas radiales y axiales que actúan en los ejes lentos (salida) y rápidos (entrada) deben entrar en los valores admitidos en el catálogo.

VERIFIQUE

Efetuada a correta seleção do ridutor ou motoridutor se aconselha de seguir a seguinte verificação:

Momento de torção máximo

Mais carga instantane previsto da aplicação não deve ser superior a dobro do valor do momento torção do ridutor riporta a catalogo.

Potência termica

A potência termica do ridutor deve ter um valor igual ou maior da potência da aplicação (pag. 11).

Cargue radial e empuxo

A cargue radial e empuxo em função ao eixo lento e veloz devem rientrare no valor do catalogo metido.

7 CARATTERISTICHE COSTRUTTIVE

I riduttori e i motorriduttori VARMEC sono stati progettati interamente con l'ausilio di programmi tecnici su computer.

Ogni singolo componente è stato verificato e progettato tenendo conto del massimo carico applicabile al riduttore secondo normativa AGMA 2001-B88.

Casse e flange in alluminio non verniciato nelle grandezze 141 - 162, casse e flange in ghisa ad alta resistenza verniciate nelle altre grandezze. La forma arrotondata delle carcasse conferisce ai riduttori un'ottima rigidità ed una elevata compattezza e ne permette l'utilizzo in tutte le posizioni di montaggio possibili.

Le lavorazioni dei vari componenti avvengono su moderni centri di lavoro a controllo numerico che permettono di ottenere la massima precisione costruttiva.

Tutti gli ingranaggi sono costruiti con acciaio legato, cementati e temprati con successiva lavorazione di rettifica sui fianchi dei denti per migliorarne il rendimento e la silenziosità di funzionamento anche sotto carico.

L'albero ingresso è realizzato con acciaio legato, cementato e temprato; quello in uscita con acciaio bonificato.

I riduttori vengono verniciati con una polvere termoisolante a base di resine poliesteri, modificate con resina epossidica, colore Blu Bucciato RAL5010.

Maggiori informazioni sulle specifiche della vernice potranno essere richieste al nostro Ufficio Tecnico.

DESIGN CHARACTERISTICS

VARMEC gear reducers and motor-reducers have been entirely designed using leading edge technical computer software. Each single component has been designed and tested in consideration of the maximum loads applicable to the reducer in compliance with AGMA 2001-B88.

Casings and flanges made from non varnished aluminium in sizes 141 to 162. Casings and flanges of all other sizes are made from varnished, highly resistant cast iron. The rounded shape of the casings gives the gear reducers an optimum rigidity and solidity allowing for use in all possible assembly positions.

The manufacturing process of the various components is done by modern CNC machinery that gives maximum precision construction.

All gears are made from hardened and tempered alloy steel with successive corrections to better the performance and reduce noise levels even whilst running with a load.

The input shaft is made from hardened and tempered alloy steel; the output shaft from high strength steel. Gear reducers are varnished with a thermosetting powder based on polyester resins modified with an epoxy resin : colour Burnt Blue RAL5010.

Further information on varnish specifics can be had by contacting our technical office

CHARAKTERISTISCHE MERKMALE

VARMEC- Getriebe werden mit Hilfe führender Berechnungsverfahren ausgelegt, optimal berechnet und konstruiert. Jedes einzelne Bauteil ist so ausgewählt und optimiert, dass der Standard AGMA 2001-B88 erfüllt bzw. übertroffen wird.

Die Getriebegehäuse der Größen 141-162 sind aus nicht lackiertem, blankem Aluminium.

Die Getriebegehäuse ab der Größe 202 mit den zugehörigen schraubbaren Flanschen sind aus Grauguss.

Die besondere, runde Form des Gehäuses ermöglicht sehr hohe Stabilität und erlaubt den Einbau in allen Lagen.

Die Herstellung der Teile erfolgt auf modernsten Bearbeitungszentren mit zahlreichen Kontrollen, so dass alle Teile eine gleichbleibend hohe Qualität aufweisen.

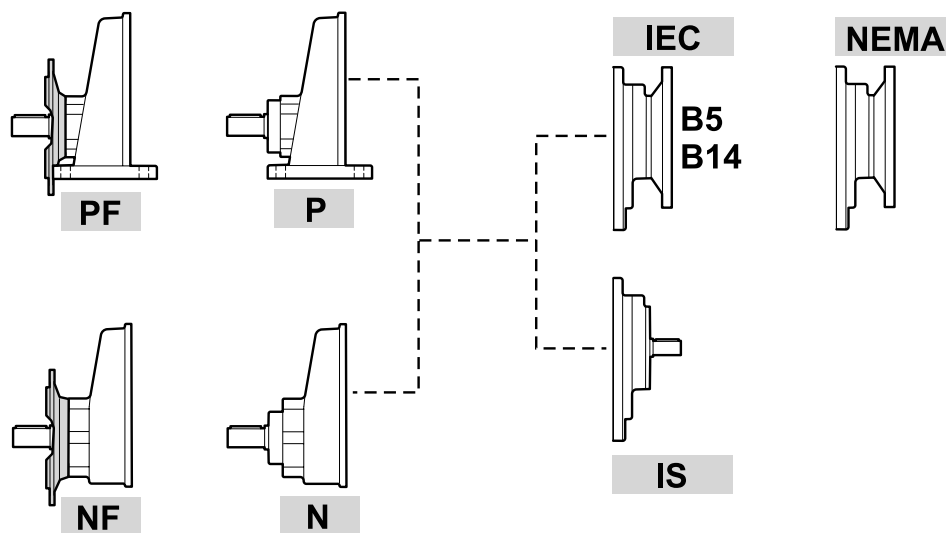
Alle Zahnräder sind aus legiertem, gehärtetem und geschliffenem Stahl.

Diese Verarbeitung garantiert eine hohe Leistungsfähigkeit und absolute Geräuschlosigkeit, auch unter hohen Belastungen.

Die Antriebswellen sind aus legiertem und gehärtetem Stahl; die Abtriebswellen aus hochlegiertem Stahl.

Die Getriebe ab der Größe 202 sind mit Duroplastpulver beschichtet auf der Basis von Polyesterharz in der Standardfarbe RAL 5010 (Blau).

Weitere Informationen über spezifische Lackierungen können in unserer technischen Abteilung nachgefragt werden

CV..1 - RCV..1

CARACTERISTIQUE DE FABRICATION

Les réducteurs et les moto-réducteurs VARMEC ont été conçus avec des technologies de pointe. Chaque élément a été vérifié et conçu tenant compte de la charge maximale applicable au réducteur selon la normative industrielle AGMA 2001-B88.

Carters et brides en aluminium non vernis dans les tailles 141-162, carters et brides en fonte à haute résistance vernis dans toutes les autres tailles.

La forme arrondie des carcasses confère aux réducteurs une très bonne rigidité et compacité et permet leur utilisation dans toutes les positions de montage possibles. La fabrication des différents composants est effectuée à l'aide de machines à commande numérique pour garantir à ces composants la plus haute des qualités.

Tous les engrenages sont fabriqués en acier lié, cémentés et trempés avec rectification sur les flancs des dents pour augmenter le rendement et réduire le niveau de bruit pendant le fonctionnement sous charge.

L'arbre d'entrée est en acier lié, cimenté et trempé; celui de sortie en acier hyper-trempé.

Les réducteurs sont peints avec une poudre thermo-durcissable à base de résines de polyester, modifiées avec résine époxydique de couleur Bleu Bucciato RAL5010.

Pour informations sur le vernis, s'adresser à notre Bureau Technique.

CARACTERÍSTICAS CONSTRUCTIVAS

Los reductores y motorreductores VARMEC han sido proyectados completamente con el apoyo de programas técnicos computarizados. Cada uno de los componentes ha sido proyectado y verificado teniendo en cuenta la máxima carga aplicable al reductor según la normativa AGMA 2001-B88.

Carcasas y bridas en aluminio no barnizado de medidas 141-162, carcasas y bridas en fundición de alta resistencia barnizadas en las otras medidas.

La forma redondeada de las carcacas confieren al reductor una óptima rigidez y una elevada compatibilidad que permite su utilización en todas las posiciones de montaje posibles.

La producción de cada uno de los componentes que integran el reductor se realiza mediante centros de mecanizados de control numérico que permiten obtener la máxima precisión constructiva.

Todos los engranajes son construidos en acero 18NiCrMo5 UNI 7846 tratados térmicamente, cementados y cada diente esta rectificado para mejorar su rendimiento y reducir su nivel de sonoridad bajo condiciones de carga.

El eje de entrada esta fabricado con acero 16CrNi4 UNI 7846 cementado y templado, y el eje de salida en acero 39NiCrMo3 UNI7845 bonificado.

Los reductores estan barnizados con polvo termo-endureciente a base de resinas de poliéster, modificadas con resinas epoxi de color azul RAL5010.

Informaciones especificas del barniz se pueden pedir en la oficina técnica.

CARACTÉRISTICA CONSTRUTIVA

O ridutor e o motoridutor Varmec são estado projetado interamente com programa técnico no computador.

Cada tipo de componente è estado verificado e projetado tendo conta de máximo carga aplicavel ao ridutor segundo a norma (agma 2001-B88).

Caixa e flange em aluminio não vernizado na grandeza 141-162.

Caixa e flange em ferro fundido a alta resistência vernizada na outra grandeza.

A forma arredondada de involucro confere ao ridutor uma ótima rigidez e uma elevada compacto e permite utilizo em toda a posição de montagem possível.

O trabalho de vários componente vem moderno, centro de trabalho a controlo númeroico que permite de receber a máxima precisão construtiva.

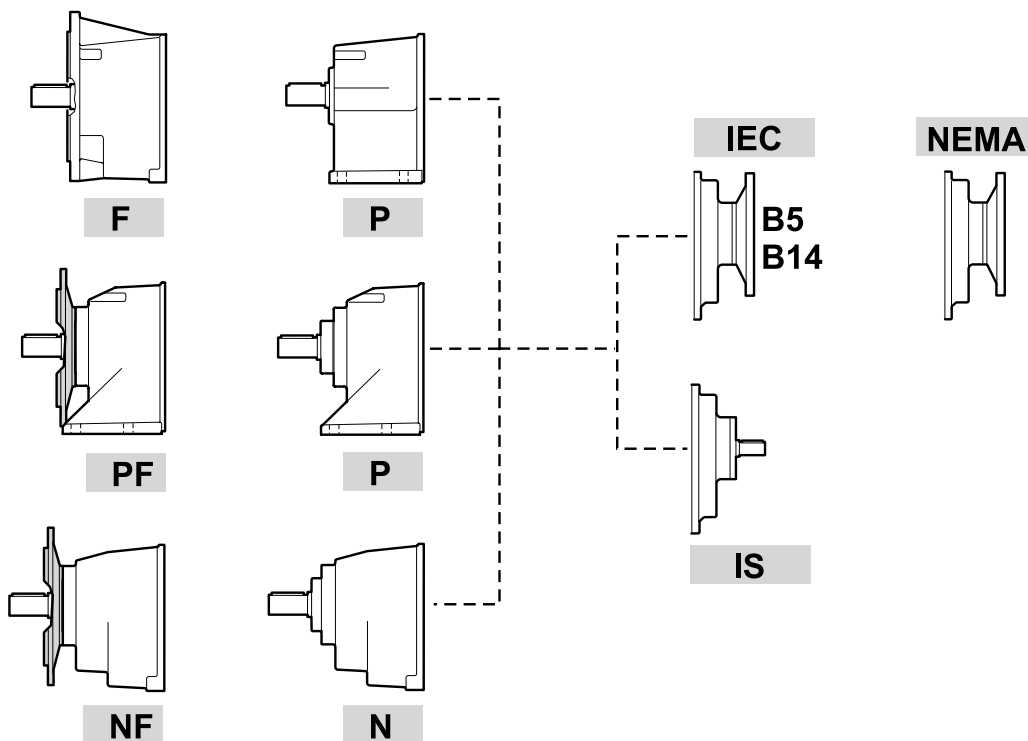
Toda a engrenagem são construida com aço legato, cementate e temprato.

Com sucessiva trabalhção de retificar ponta do dente para melhorar o rendimento e a silencioso de funcionamento também soto carga

O eixo ingresso è realizado com aço legato, cementate, temprato aquele em saida com aço bonificado

O ridutor vem vernizada com uma polvera termodurente a base de resine poliestere, modificata com resina epossidica cor azul escuro RAL5010.

Maior informação sobre espécie da vernice pode ser perguntada a nosso uficio técnico.

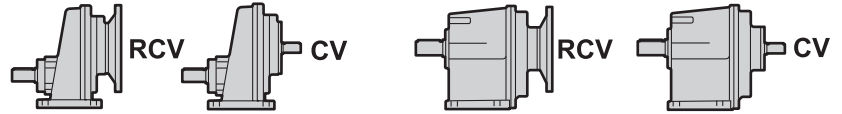
CV..2-3 - RCV..2-3

RIDUTTORE / GEAR REDUCER / GETRIEBE / REDUCTEUR / REDUCTOR / RIDUTOR

RCV 20 2 P 5.49 80B5 B3

RCV

TIPO DI RIDUTTORE
TYPE OF GEAR REDUCER
GETRIEBETYPEN
TYPE DE REDUCTEUR
TIPO DE REDUCTOR
TIPO DE RIDUTOR



20

GRANDEZZA
SIZE
GETRIEBEGRÖSSEN
TAILLE
TAMANO DEL REDUCTOR
GRANDEZA

14, 19, 24, 28, 38

16, 20, 25, 30, 35, 45, 55, 60

2

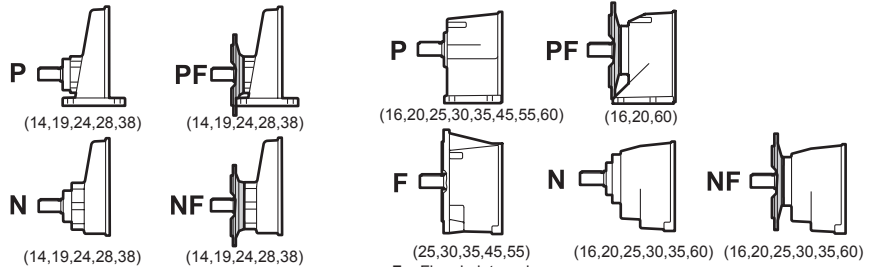
N° STADI DI RIDUZIONE
N. OF STAGES OF REDUCTION
ANZAHL DER UNTERSETZUNGEN
N.° STADES DE REDUCTION
N° ESTADOS DE REDUCCION
N° DE PARTE DE REDUÇÃO

1

2, 3

P

FORMA COSTRUTTIVA
STRUCTURAL SHAPE
BAUFORM
FORME CONSTRUCTIVE
FORMA CONSTRUCTIVA
FORMA CONSTRUTIVA



5.49

RAPPORTO DI RIDUZIONE
REDUCTION RATIO
UNTERSETZUNGSVERHÄLTNIS
RAPPORT DE REDUCTION
RELACION DE REDUCCION
RAZÃO DE REDUÇÃO

42

F = Flangia integrale
F = Flange mount
F = Integriertem Flansch
F = Bride monobloc
F = Brida integral
F = Brida integral

80B5

TIPO DI ENTRATA
TYPE OF INPUT
EINTRIEBSARTEN
TYPE D'ENTREE
TIPO DE ENTRADA
TIPO DE ENTRADA



IEC
63, 71, 80, 90, 100,
112, 132, 160, 180,
200 (B5,B14)



NEMA
56, 140, 180,
210, 250, 280

B3

POSIZIONE DI MONTAGGIO
ASSEMBLY POSITION
EINBAUPOSITION
POSITION DE MONTAGE
POSICION DE MONTAJE
POSIÇÃO DE MONTAGEM

22

....

OPZIONI
OPTIONS
SONDERAUSFÜHRUNGEN
OPTIONS
OPCIONES
OPÇÃO

Opzioni riduttori

- AV** Anelli di tenuta in entrata e uscita in Viton
EV Anelli di tenuta in entrata in Viton
EX Riduttore in versione Atex
OA I riduttori sono forniti con olio lubrificante alimentare
OS I riduttori della serie CV-RCV 45-55-60 solitamente sprovvisti di lubrificante, vengono forniti con olio sintetico
AU Dimensione dell'albero lento diverso dallo standard (specificare le dimensioni)
ME Riduttore con motore elettrico (specificare le caratteristiche del motore elettrico)

Options réducteurs

- AV** Bagues d'étanchéité en entrée et sortie en Viton
EV Bagues d'étanchéité en entrée en Viton
EX Réducteur en version Atex
OA Les réducteurs sont fournis avec huile lubrifiant alimentaire
OS Les réducteurs de la série CV-RCV 45-55-60 normalement dépourvus de lubrifiant, sont fournis avec huile synthétique
AU de l'arbre de sortie différents du standard (spécifier les dimensions).
ME Réducteur avec moteur électrique (spécifier les caractéristiques du moteur électrique)

Gear reducer options

- AV** Viton input and output oil seals
EV Viton input oil seals
EX Atex gear reducer version
OA Gear reducers are supplied with alimentary lubricant oil
OS Gear reducers from series CV-RCV 45-55-60 usually without lubricant, will come supplied with synthetic oil
AU The dimensions of the output shaft differ from standard (please specify dimensions)
ME Gear reducers with an electric motor (please specify the characteristics of the electric motor)

Opciones reductores

- AV** Anillos herméticos en entrada y salida en VITON
EV Anillos herméticos en entrada en viton
EX Reductor en versión Atex
OA Los reductores están provistos de aceite lubricante alimenticio
OS Los reductores de la serie CV-RCV 45-55-60 que no son provistos de lubricante, se abastecen con aceite sintético
AU Dimensiones del eje lento (salida) diferente del estándar (especificar las dimensiones)
ME Reductor con motor eléctrico (especificar las características del motor eléctrico).

Sonderausführungen

- AV** Dichtungsringe in Eintrieb und Abtrieb in Viton
EV Dichtungsringe in Eintrieb in Viton
EX Getriebe in Atex—Version
OA Die Getriebe der Größe CV-RCV 45-55-60 werden mit mineralischem Öl geliefert
OS Die Getriebe der Größe CV-RCV 45-55-60 werden mit synthetischem Öl geliefert
AU Die Abmessung der Abtriebswelle entspricht nicht der Standardversion (die Abmessungen sind zu spezifizieren)
ME Getriebe mit elektrischem Motor (die Eigenschaften des Motors sind zu spezifizieren)

Opção ridutor

- AV** Anel de segurança em entrada e saída em viton
EV Anel de segurança em entrada em viton
EX Ridutor em versão atex
OA O ridutor são fornido com óleo lubrificante alimentar
OS O ridutor da série CV-RCV 45-55-60 não tem lubrificante vem fornido com óleo sintético
AU Dimensão do eixo lento diferente da standart (especificar a dimensão)
ME Ridutor com motor elétrico (specificar a característica do motor elétrico)

MOTORE / MOTOR / MOTOREN / MOTEUR / MOTOR / MOTOR

T 80A 4 230/400 50 CLF A

| | | |
|----------------|--|--|
| T | TIPO MOTORE / TYPE OF MOTOR / MOTORTYP TYPE MOTEUR / TIPO DE MOTOR / TIPO DE MOTOR | T trifase TF trifase autofrenante M monofase MF monofase autofrenante T tri-phase TF self-locking tri-phase M monophase MF self-locking monophase T Drehstrommotor TF Drehstrom-Bremsmotor M Einphasenmotor MF Einphasen-Bremsmotor T triphasé TF triphasé auto M monophasé MF monophasé auto T trifásico - TF trifásico autofrenante - M monofásico - MF monofásico autofrenante T motor eléctrico trifásico TF motor eléctrico trifásico autofrenante M motor monofásico MF motor monofásico autofrenante |
| 80A | GRANDEZZA / SIZE / GRÖSSE TAILLE / TAMANO / GRANDEZA | |
| 4 | N° POLI / N. OF POLES / ANZAHL DER POLE N.° POLES / N° POLOS / N° PÓLO | |
| 230/400 | TENSIONE / VOLTAGE / SPANNUNG TENSION / TENSION / TENSÃO | |
| 50 | FREQUENZA / FREQUENCY / FREQUENZ FREQUENCE / FRECUENCIA / FREQUÊNCIA | |
| CLF | CLASSE ISOLAMENTO / INSULATION CLASS / ISOLATIONSKLASSE CLASSE ISOLEMENT / CLASE DE AISLAMIENTO / CLASSE ISOLAMENTO | |
| IP55 | PROTEZIONE / PROTECTION / SCHUTZ PROTECTION / PROTECCION / PROTEÇÃO | |
| A | POSIZIONE MORSETTIERA / POSITION OF TERMINAL BOX / POSITION DER KLEMMLEISTE POSITION BARRETTE DE CONNECTION / POSICION DE LA CAJA DE BORNES / POSIÇÃO | |
| | OPZIONI / OPTIONS / SONDERAUSFÜHRUNGEN OPTIONS / OPCIONES / OPÇÃO | |

9 LUBRIFICAZIONE

Tutti i riduttori di produzione VARMEC sono previsti con lubrificazione ad olio sintetico.

• I riduttori della grandezza RCV-CV 14-19-24-28-16-20-25-30-35 sono forniti con lubrificazione permanente e possono essere montati in tutte le posizioni di piazzamento. Questi riduttori non necessitano di alcuna manutenzione.

• I riduttori della serie RCV-CV 38-45-55-60 vengono normalmente forniti sprovvisti di lubrificante, se non specificato nell'ordine, e sarà cura del cliente immettere, prima della messa in opera, la giusta quantità di olio facendo sempre riferimento alla mezz'aria del tappo di livello. A tal proposito i riduttori sono muniti dei tappi di carico, scarico e livello olio; per i riduttori forniti completi di lubrificante si raccomanda, effettuata l'installazione, di sostituire il tappo chiuso, utilizzato per il trasporto, con il tappo di sfiato fornito a corredo.

Al fine di predisporre il corretto orientamento dei tappi, per una adeguata lubrificazione consigliamo di precisare sempre la posizione di montaggio desiderata. Nelle posizioni di montaggio che prevedono i riduttori con un asse verticale, dove lo sbattimento dell'olio durante il funzionamento non sarebbe sufficiente a garantire la corretta lubrificazione dei cuscinetti superiori, vengono montati dei cuscinetti autolubrificanti del tipo 2RS.

LUBRICATION

All VARMEC gear reducers come lubricated with a synthetic oil.

• Gear reducers size RCV-CV 14-19-24-28-16-20-25-30-35 are supplied with life lubrication and can be attached to any mounting position. These gear reducers do not necessitate any kind of maintenance.

• Gear reducers size RCV-CV 38-45-55-60 are usually supplied without lubricant, unless specifically stated otherwise on the order form. Users must therefore add the correct quantity of oil using the oil gauge level before any initial start-up.

For this purpose gear reducers are fitted with an oil filling cap, an oil gauge and a drain plug.

For gear reducers supplied with lubricant, we recommend that once installation is complete customers should substitute the closed plug used only during transport with the oil breather supplied.

We ask that all customers specify their required mounting position so that we at Varmec can fit plugs in the best position for adequate lubrication

Gear reducers are fitted with self-lubricating bearings type 2RS wherever a mounting position requires a gear reducer with a vertical axle and consequently where the shaking of the oil during running times wouldn't be enough to guarantee a correct lubrication to the upper bearings.

SCHMIERUNG

VARMEC – Getriebe bis zur Größe 35 sind mit langlebigem, synthetischen Öl gefüllt.

• Die Getriebe der Größe RCV-CV 14-19-24-28-16-20-25-30-35 benötigen keinerlei Wartung.

• Die Getriebe der Serie RCV-CV38-45-55-60 werden normalerweise mit mineralischer Schmierung für die Einbaulage B3 geliefert, wenn es nicht ausdrücklich in der Bestellung anders angegeben ist. Es ist somit die Aufgabe des Kunden, vor der ersten Inbetriebnahme, die richtige Ölmenge zu kontrollieren bzw. einzufüllen. Hierbei ist darauf zu achten, dass die richtige Ölmenge für die gewünschte Einbaulage eingefüllt wird und sich die Ölverschlussschraube auf der Mittellinie befindet. Deshalb sind die Getriebe mit Ölverschlussschrauben, Ölablassschraube und Ölstandsschraube ausgestattet. Bei diesen Getrieben muss nach dem Getriebeeinbau die Ölverschlussschraube, welche nur für den Transport benötigt wurde, mit dem Entlüftungsventil zu ersetzen. Dieses Ventil liegt der Lieferung bei, ansonsten ist es beim Getriebelieferanten anzufordern. Nachdem die Verschlüsse richtig eingebaut worden sind, wir empfehlen, die benötigte Ölmenge für die Einbaulage nochmals zu überprüfen. In den Einbaulagen, die Getriebe mit einer vertikalen Achse vorsehen, können selbstschmierende Lager des Typs 2 RS eingebaut werden, falls die Ölschmierung nicht ausreicht, um eine korrekte Schmierung der oberen Lager zu garantieren.

Lubrificanti consigliati

Recommended lubricants

Empfohlene Schmieröle

| Produttore Manufacturer Hersteller | Oli Minerali Mineral oils Mineralöle | | | Oli Sintetici Polialfaolefine (PAO) Poly-Alpha-Olefin synthetic oils (PAO) Synthetische Poly-Alpha-Olefin-Öle (PAO) | | | Oli Sintetici Poliglicoli (PG) Polyglycol synthetic oils (PG) Synthetische Polyglykolöle (PG) | | |
|--|--|---------------------|---------------------|---|--------------------------|--------------------------|---|----------------------|----------------------|
| | ISO VG 150 | ISO VG 220 | ISO VG 320 | ISO VG 150 | ISO VG 220 | ISO VG 320 | ISO VG 150 | ISO VG 220 | ISO VG 320 |
| AGIP | Blasia 150 | Blasia 220 | Blasia 320 | - | Blasia SX 220 | Blasia SX 320 | Blasia S 150 | Blasia S 220 | Blasia S 320 |
| BP | Energol GR-XP 150 | Energol GR-XP 220 | Energol GR-XP 320 | Energyn EPX 150 | Energyn EPX 220 | Energyn EPX 320 | Energyn SG 150 | Energyn SG-XP 220 | Energyn SG-XP 320 |
| CASTROL | Alpha SP 150 | Alpha SP 220 | Alpha SP 320 | Alphasyn EP 150 | Alphasyn EP 220 | Alphasyn EP 320 | Alphasyn PG 150 | Alphasyn PG 220 | Alphasyn PG 320 |
| CHEVRON | Ultra Gear 150 | Ultra Gear 220 | Ultra Gear 320 | Tegra Synthetic Gear 150 | Tegra Synthetic Gear 220 | Tegra Synthetic Gear 320 | HiPerSYN 150 | HiPerSYN 220 | HiPerSYN 320 |
| ESSO | Spartan EP 150 | Spartan EP 220 | Spartan EP 320 | Spartan S EP 150 | Spartan S EP 220 | Spartan S EP 320 | Glycolube 150 | Glycolube 220 | Glycolube 320 |
| KLÜBER | Klüberoil GEM 1-150 | Klüberoil GEM 1-220 | Klüberoil GEM 1-320 | Klübersynth EG 4-150 | Klübersynth EG 4-220 | Klübersynth EG 4-320 | Klübersynth GH 6-150 | Klübersynth GH 6-220 | Klübersynth GH 6-320 |
| MOBIL | Mobilgear XMP 150 | Mobilgear XMP 220 | Mobilgear XMP 320 | Mobilgear SHC XMP 150 | Mobilgear SHC XMP 220 | Mobilgear SHC XMP 320 | Glygoyle 22 | Glygoyle 30 | Glygoyle HE320 |
| OPTIMOL | Optigear BM 150 | Optigear BM 220 | Optigear BM 320 | Optigear Synthetic A 150 | Optigear Synthetic A 220 | Optigear Synthetic A 320 | Optiflex A 150 | Optiflex A 220 | Optiflex A 320 |
| SHELL | Omala 150 | Omala 220 | Omala 320 | Omala HD 150 | Omala HD 220 | Omala HD 320 | Tivela S 150 | Tivela S 220 | Tivela S 320 |
| TEXACO | Meropa 150 | Meropa 220 | Meropa 320 | Pinnacle EP 150 | Pinnacle EP 220 | Pinnacle EP 320 | - | Synlube CLP 220 | Synlube CLP 320 |
| TOTAL | Carter EP 150 | Carter EP 220 | Carter EP 320 | Carter SH 150 | Carter SH 220 | Carter SH 320 | Carter SY 150 | Carter SY 220 | Carter SY 320 |
| TRIBOL | 1100/150 | 1100/220 | 1100/320 | 1510/150 | 1510/220 | 1510/320 | 800/150 | 800/220 | 800/320 |

LUBRIFICATION

Tous les réducteurs Varmec sont prévus avec lubrification à huile synthétique.

• Les réducteurs de la taille RCV-CV 14-19-24-28-16-20-25-30-35 sont fournis avec lubrification permanente et peuvent être montés dans toutes les positions de placement. Ils ne nécessitent aucun entretien.

• Les réducteurs de la taille RCV-CV 38-45-55-60 sont fournis sans lubrifiant, sauf si c'est indiqué autrement dans la commande. L'utilisateur devra introduire la quantité d'huile nécessaire avant le démarrage, toujours tenant compte de la ligne médiane du bouchon de niveau. Pour les réducteurs fournis avec lubrifiant, il est recommandé, après installation, de remplacer le bouchon utilisé pour le transport par le bouchon d'évent fourni.

A fin de préparer l'orientation correcte des bouchons, pour une lubrification convenable, nous vous suggérons de préciser la position de montage désirée. Dans des positions de montage qui prévoient les réducteurs avec axe vertical, où le battage de l'huile pendant le fonctionnement ne garantirait pas la correcte lubrification des roulements supérieurs, des roulements auto-lubrifiants du type 2RS devront être montés.

LUBRICACIÓN

Todos los reductores de producción VARMEC son provistos de lubricación a aceite sintético.

• Los reductores de los tamaños RCV-CV 14-19-24-28-16-20-25-30-35 son equipados con lubricación permanente y pueden ser montados en todas las posiciones. Estos reductores no necesitan ningún mantenimiento.

• Los reductores de la serie RCV-CV 38-45-55-60 se suministran normalmente sin lubricante, sino está especificado en el pedido, y será el cliente a furnir antes de la puesta en marcha pondrá la cantidad necesaria de aceite refiriéndose a la línea mediana del tapón.

Los reductores llevan tapones de carga, descarga y nivel de aceite, para los reductores completos de lubricante se recomienda, después de la instalación de sustituir el tapón utilizado para el transporte con el tapón respiradero incluido.

Para preparar la correcta orientación de los tapones para una adecuada lubricación aconsejamos especificar siempre la posición de montaje deseada. En las posiciones de montaje de reductores con eje vertical, donde el batimiento del aceite durante el funcionamiento no es suficiente para garantizar la correcta lubricación de los cojinetes superiores, se instalan cojinetes lubricantes tipo 2RS.

LUBRIFICAÇÃO

Todo o ridutor de produção Varmec, são previsto com lubrificação a óleo sintético.

• O ridutor da grandeza RCV-CV14-19-24-28-16-20-25-30-35 são fornido com lubrificação permanente e pode ser montada em todas as posições. Este ridutor não necessita de alguma manutenção

• O ridutor da série RCV-CV 38-45-55-60 vem normalmente fato, que não tem lubrificante, se o cliente quiser tem que pedi-lo. O cliente tem que colocar antes do funcionamento a quantidade certa de óleo. Colocando óleo na metade da tampão da linha.

O ridutor tem tampão de carga escariga e linha de olio; para o ridutor forniti completo de lubrificante te recomendo efetuar instalação de deivar a tampa fechada utilizando para o transporte, com a tampa de respração juntos.

A fim de fazer o correto orientamento da tampa para uma adequada lubrificação, conselhando de entender sempre a posição de montagem desejada. Na posição de montagem que prever o ridutor com uma asse verticale onde o esbatimento do óleo, durante o funcionamento será suficiente a garantir a correta lubrificação do cuscineti superior, vem montada do cuscineti auto-lubrificante do tipo 2RS.

Lubrifiants recommandés**Lubricantes aconsejados****Lubrificantes aconselhados**

| Producteur Productor Productor | Huiles Mineraux Aceites minerales Óleos minerais | | | Huiles Syntétiques Polyalphaoléfine (PAO) Aceites sintéticos (PAO) Óleos sintéticos (PAO) | | | Huiles Syntétiques Polyglycols (PG) Aceites sintéticos (PG) Óleos sintéticos à base de poliglicóis | | |
|--------------------------------------|--|---------------------|---------------------|---|--------------------------|--------------------------|--|----------------------|----------------------|
| | ISO VG 150 | ISO VG 220 | ISO VG 320 | ISO VG 150 | ISO VG 220 | ISO VG 320 | ISO VG 150 | ISO VG 220 | ISO VG 320 |
| AGIP | Blasia 150 | Blasia 220 | Blasia 320 | - | Blasia SX 220 | Blasia SX 320 | Blasia S 150 | Blasia S 220 | Blasia S 320 |
| BP | Energol GR-XP 150 | Energol GR-XP 220 | Energol GR-XP 320 | Enersyn EPX 150 | Enersyn EPX 220 | Enersyn EPX 320 | Enersyn SG 150 | Enersyn SG-XP 220 | Enersyn SG-XP 320 |
| CASTROL | Alpha SP 150 | Alpha SP 220 | AlphaSP 320 | Alphasyn EP 150 | Alphasyn EP 220 | Alphasyn EP 320 | Alphasyn PG 150 | Alphasyn PG 220 | Alphasyn PG 320 |
| CHEVRON | Ultra Gear 150 | Ultra Gear 220 | Ultra Gear 320 | Tegra Synthetic Gear 150 | Tegra Synthetic Gear 220 | Tegra Synthetic Gear 320 | HiPerSYN 150 | HiPerSYN 220 | HiPerSYN 320 |
| ESSO | Spartan EP 150 | Spartan EP 220 | Spartan EP 320 | Spartan S EP 150 | Spartan S EP 220 | Spartan S EP 320 | Glycolube 150 | Glycolube 220 | Glycolube 320 |
| KLÜBER | Klüberoil GEM 1-150 | Klüberoil GEM 1-220 | Klüberoil GEM 1-320 | Klübersynth EG 4-150 | Klübersynth EG 4-220 | Klübersynth EG 4-320 | Klübersynth GH 6-150 | Klübersynth GH 6-220 | Klübersynth GH 6-320 |
| MOBIL | Mobilgear XMP 150 | Mobilgear XMP 220 | Mobilgear XMP 320 | Mobilgear SHC XMP 150 | Mobilgear SHC XMP 220 | Mobilgear SHC XMP 320 | Glygoyle 22 | Glygoyle 30 | Glygoyle HE320 |
| OPTIMOL | Optigear BM 150 | Optigear BM 220 | Optigear BM 320 | Optigear Synthetic A 150 | Optigear Synthetic A 220 | Optigear Synthetic A 320 | Optiflex A 150 | Optiflex A 220 | Optiflex A 320 |
| SHELL | Omala 150 | Omala 220 | Omala 320 | Omala HD 150 | Omala HD 220 | Omala HD 320 | Tivela S 150 | Tivela S 220 | Tivela S 320 |
| TEXACO | Meropa 150 | Meropa 220 | Meropa 320 | Pinnacle EP 150 | Pinnacle EP 220 | Pinnacle EP 320 | - | Synlube CLP 220 | Synlube CLP 320 |
| TOTAL | Carter EP 150 | Carter EP 220 | Carter EP 320 | Carter SH 150 | Carter SH 220 | Carter SH 320 | Carter SY 150 | Carter SY 220 | Carter SY 320 |
| TRIBOL | 1100/150 | 1100/220 | 1100/320 | 1510/150 | 1510/220 | 1510/320 | 800\150 | 800\220 | 800\320 |

Tab.4

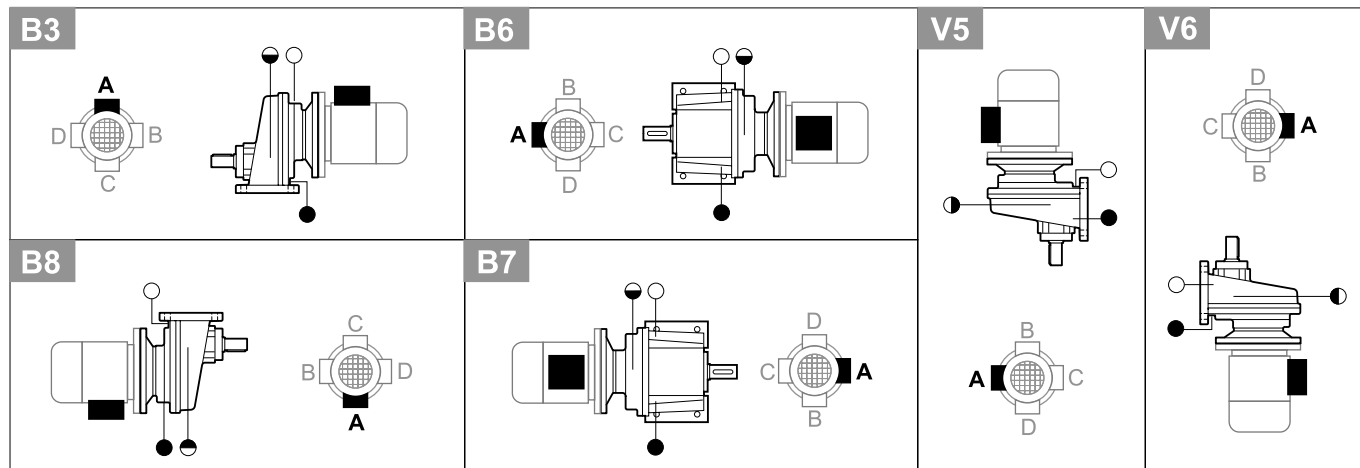
| RCV | Posizioni di montaggio / Assembly position / Einbaulage | | | | | | | | |
|---------|---|-----|-----|-----|-----|------|-----|------|-----|
| | B3 | B5 | B6 | B7 | B8 | V1 | V3 | V5 | V6 |
| 141 | 0.16 | | | | | | | | |
| 191 | 0.4 | | | | | | | | |
| 241 | 0.4 | | | | | | | | |
| 281 | 0.7 | | | | | 1.0 | 1.0 | 0.7 | |
| 381 | 0.8 | 0.8 | 1.5 | 1.5 | 2.0 | 1.0 | 2.0 | 1.0 | 2.0 |
| 162 | 0.18 | | | | | | | | |
| 202-203 | 0.55 | | | | | | | | |
| 252-253 | 0.7 | | | | | | | | |
| 302-303 | 1.3 | | | | | | | | |
| 352-353 | 1.3 | | | | | | | | |
| 452-453 | 2.5 | 2.3 | 2.5 | 2.5 | 2 | 2.9 | 3.4 | 3 | 3.4 |
| 552-553 | 3.8 | 3.5 | 3.5 | 3.5 | 3 | 4.5 | 5.8 | 5 | 5.5 |
| 602-603 | 8.5 | 8.5 | 8.0 | 8.0 | 8.5 | 12.5 | 12 | 12.5 | 12 |

Posizioni di montaggio e orientamento morsetteria

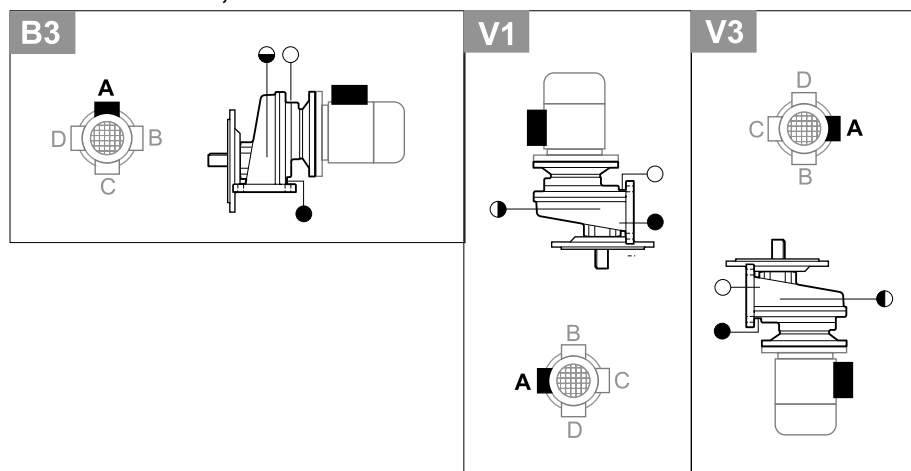
Assembly position and orientation of terminal box

Einbaulage und Einbau der Wartungsanschlüsse

CV..1 - RCV..1 / P, PF



CV..1 - RCV..1 / N, NF



- Carico olio / Breather plug / Öleinfüllung
- Livello olio / Level plug / Ölstand
- Scarico olio / Drain plug / Ölablass

Tab.4

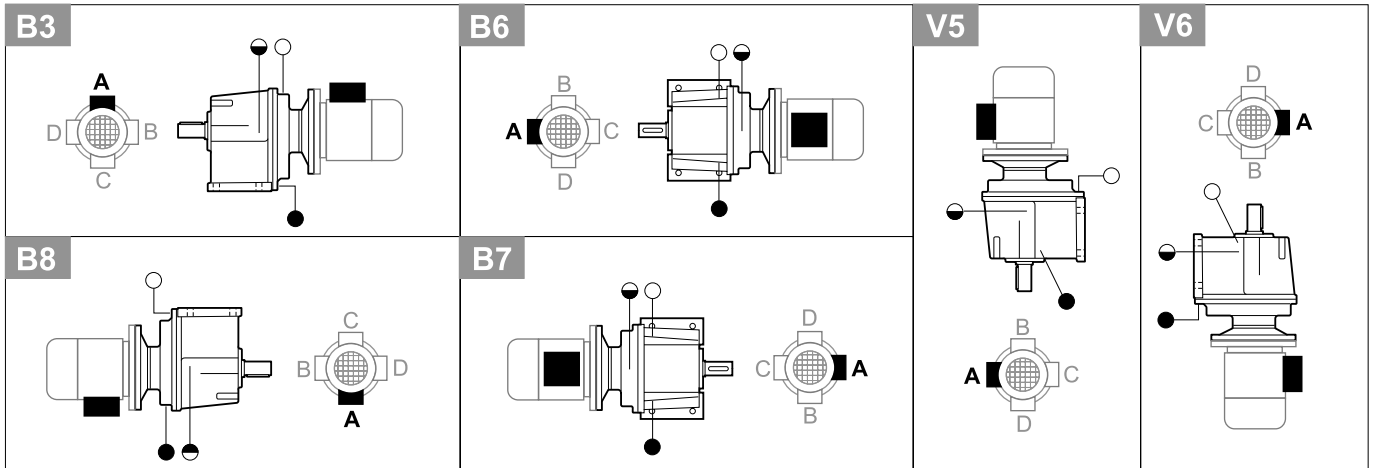
| RCV | Positions de montage / Posición de montaje / Posição de montagem | | | | | | | | |
|---------|--|-----|-----|-----|-----|------|-----|------|-----|
| | B3 | B5 | B6 | B7 | B8 | V1 | V3 | V5 | V6 |
| 141 | 0.16 | | | | | | | | |
| 191 | 0.4 | | | | | | | | |
| 241 | 0.4 | | | | | | | | |
| 281 | 0.7 | | | | 1.0 | | 1.0 | 0.7 | |
| 381 | 0.8 | 0.8 | 1.5 | 1.5 | 2.0 | 1.0 | 2.0 | 1.0 | 2.0 |
| 162 | 0.18 | | | | | | | | |
| 202-203 | 0.55 | | | | | | | | |
| 252-253 | 0.7 | | | | | | | | |
| 302-303 | 1.3 | | | | | | | | |
| 352-353 | 1.3 | | | | | | | | |
| 452-453 | 2.5 | 2.3 | 2.5 | 2.5 | 2 | 2.9 | 3.4 | 3 | 3.4 |
| 552-553 | 3.8 | 3.5 | 3.5 | 3.5 | 3 | 4.5 | 5.8 | 5 | 5.5 |
| 602-603 | 8.5 | 8.5 | 8.0 | 8.0 | 8.5 | 12.5 | 12 | 12.5 | 12 |

Position de montage et orientation barrette de connection

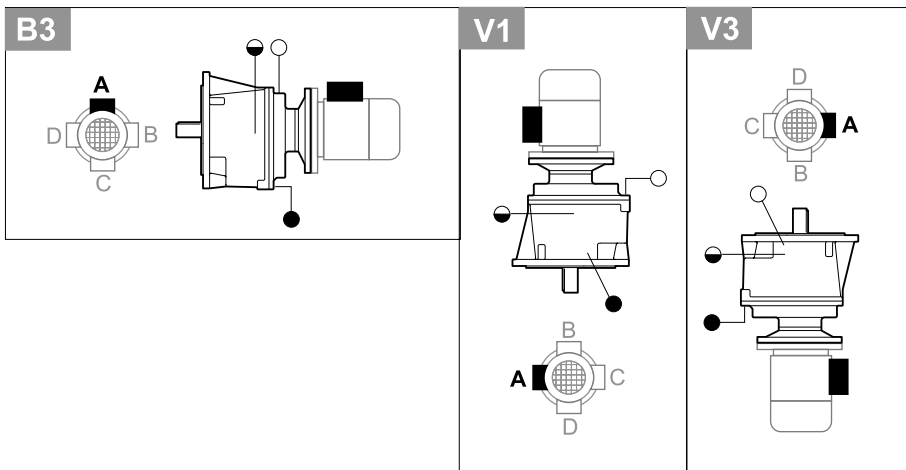
Posición de montaje y orientación de la caja de bornes

Posição de montagem e orientação de caixas de bornes

CV..2-3 - RCV..2-3 / P, PF



CV..2-3 - RCV..2-3 / F, N, NF



- Remplissage / Carga aceite / Bujão de enchimento de óleo
- Niveau d'huile / Nivel aceite / Nivel de óleo
- Vis de vidange / Descarga aceite / Escoamento de óleo

10 CARICHI RADIALI E ASSIALI

Gli alberi di entrata e uscita dei riduttori possono essere soggetti a carichi radiali, la cui entità può essere calcolata, in base al tipo di trasmissione realizzata, con la seguente formula:

| | |
|------------------|--|
| Frc | Carico radiale di calcolo sull'albero lento o veloce |
| M ₁₋₂ | Momento torcente sull'albero lento o veloce |
| D | Diametro primitivo della ruota per catena, ingranaggio, puleggia, ecc. |
| C = 1 | per trasmissioni a catena |
| C = 1.25 | per trasmissioni a ingranaggi |
| C = 1.5 | per trasmissioni a cinghie dentate |
| C = 2.5 | per trasmissioni a cinghie trapezoidali |
| C = 3.5 | per trasmissioni a ruote di frizione |

I valori riportati nella tab. 5 (pag. 28), rappresentano i carichi radiali massimi Fr₁₋₂, sopportabili dal riduttore, pertanto dovrà essere rispettata la seguente condizione:

- I carichi indicati sono riferiti alla mezzzeria della sporgenza dell'albero lento e veloce del riduttore (pag. 26) e valgono per qualunque direzione di applicazione e senso di rotazione.
- I carichi che si riferiscono a giri che non compaiono nelle tab. 5 si possono ottenere per interpolazione, senza superare i valori relativi a n₁=300 min⁻¹ (albero entrata) e n₂=20 min⁻¹ (albero uscita) che sono i massimi consentiti.
- Contemporaneamente al carico radiale Fr può agire un carico assiale Fa pari a:

- Nel caso in cui il valore del carico radiale sia nullo, si può considerare il carico assiale ammissibile pari al 50% del valore del carico radiale massimo sull'albero.
- Se il carico è applicato a una distanza x dalla battuta dell'albero lento o veloce (pag. 26), è necessario convertire il nuovo valore di carico radiale ammissibile Fr_x con la seguente relazione:

valida per $x > \frac{U}{2}$

RADIAL AND AXIAL LOADS

Input and output shafts of gear reducers can be subject to radial loads, the value of which can be calculated – based on the type of transmission carried out – using the following formula:

$$Frc = \frac{2000 \cdot M_{1-2} \cdot C}{D}$$

| | |
|------------------|--|
| Frc | Calculated radial load on input or output shafts |
| M ₁₋₂ | Transmitted torque at input or output shafts |
| D | Diameter of chain wheel, gear pulley etc. |
| C = 1 | for chain transmission |
| C = 1.25 | for gear transmission |
| C = 1.5 | for timing belt transmission |
| C = 2.5 | for V-belt transmission |
| C = 3.5 | for clutch wheel transmission |

The values given in table 5 (page 28) represent the maximum radial loads that the reducer can withstand and therefore the following condition must always apply:

$$Frc \leq Fr_{1-2}$$

- *The given loads refer to the centre of the input and output shaft (page 26) and are valid for any applicational direction and sense of rotation.*
- *Any loads relating to speeds that are not given in table 5 can be obtained by interpolation without exceeding the values for n₁=300 min⁻¹ (input shaft) and n₂=20 min⁻¹ (output shaft) which are the maximum allowed.*
- *An axial load Fa can act simultaneously with a radial load equal to:*

$$Fa_1 = 0.2 \cdot Fr_1$$

$$Fa_2 = 0.2 \cdot Fr_2$$

- *If the value of the radial load happens to be zero, the permitted axial load can be regarded as being 50% of the max radial load on the shaft.*
- *If the load is applied at x distance from the middle of the input or output shaft (page 26) it becomes necessary to convert the new max radial load value Fr_x using the following equation:*

$$Fr_{x1-2} = Fr_{1-2} \cdot \frac{a}{b+x}$$

Valid for $x > \frac{U}{2}$

RADIAL UND AXIALLASTEN

An Eintriebs- bzw. Abtriebswellen können sowohl Radial-als auch Axiallasten auftreten. Diese Belastungen können mit der folgenden Formel berechnet werden:

| | |
|------------------|--|
| Frc | Berechnete Radiallast an Eintriebs- bzw. Abtriebswelle |
| M ₁₋₂ | Übertragenes Drehmoment an Eintriebs- bzw. Abtriebswelle |
| D | Durchmesser von Kettenrad, Zahnrad, Riemenscheibe |
| C = 1 | für Kettenrad |
| C = 1.25 | für Zahnrad |
| C = 1.5 | für Zahnriemen |
| C = 2.5 | für Keilriemen |
| C = 3.5 | für Kupplungsrad |

Die Werte in den Tabellen 5 sind die max. zulässigen Radiallasten Fr₁₋₂ der Getriebe. Dazu müssen die folgenden Bedingungen gegeben sein:

- Der Wert der Radiallasten in der Tabelle ist der Nominalwert, dessen Angriffspunkt in der Mitte der Welle angesetzt ist und für jede Umdrehungsrichtung gilt.
- Belastungen für Drehzahlen, die nicht in den Tabellen 5 aufgeführt sind, müssen interpoliert werden. Der Wert für n₁ = 300 min⁻¹ (Eintriebswelle) und der Wert n₂ = 20 min⁻¹ (Abtriebswelle) sind Maximalwerte.
- Der Wert für die max. Axiallasten ist 1/5 der zulässigen Radiallasten aus der Tabelle, d.h.:

- Ist die Radiallast = Null, kann man die zulässige Axiallast auf 50% der maximalen Radiallast auf die Welle annehmen.
- Wenn die Last auf eine Distanz x der Eintriebs- oder Abtriebswelle (siehe Seite 26) angewendet wird, ist es notwendig den neuen zulässigen Wert der Radiallast Fr_x mit der folgenden Gleichungen umzurechnen:

Gültig für $x > \frac{U}{2}$

CHARGES RADIALES ET AXIALES

Les arbres d'entrée et de sortie des réducteurs subissent des charges radiales. Ces charges peuvent être calculées avec la formule suivante:

| | |
|------------------|---|
| Frc | Charge radiale calculée sur l'arbre d'entrée ou de sortie |
| M ₁₋₂ | Couple transmis sur l'arbre d'entrée ou de sortie |
| D | Diamètre de l'élément transmetteur (poulie, roue, pignon,...) |
| C = 1 | pour transmission par chaîne |
| C = 1.25 | pour transmission par engrenage |
| C = 1.5 | pour transmission par courroie dentée |
| C = 2.5 | pour transmission par courroie trapézoïdale |
| C = 3.5 | pour transmission par embrayage |

Les valeurs mentionnées dans le tableau 5, représentent les charges radiales maximales Fr₁₋₂, pour le réducteur, donc la condition suivante devra être respectée:

- Les charges indiquées se réfèrent à la ligne médiane de la saillie de l'arbre de sortie et d'entrée du réducteur (page 27), et sont valables pour toutes les directions d'application et sens de rotation.
- Les charges à des vitesses qui n'apparaissent pas dans les tableaux, peuvent être obtenues par interpolation, sans excéder les valeurs relatives à n₁=300 min⁻¹ (arbre d'entrée) et n₂=20 min⁻¹ (arbre de sortie), celles-ci étant le maximum applicables.
- Simultanément à la charge radiale Fr, une charge axiale Fa peut agir:

- Au cas où la valeur de la charge radiale est nulle, on peut considérer la charge axiale admissible égale au 50% de la valeur de la charge radiale maximale sur l'arbre.
- Si la charge est appliquée à une distance X du battement de l'arbre de sortie ou d'entrée (page 27), il faut transformer la nouvelle valeur de charge radiale admissible Fr_x avec la relation suivante:

valable pour $x > \frac{U}{2}$

CARGAS RADIALES Y AXIALES

Los ejes de entrada y salida de los reductores pueden estar expuestos a cargas radiales, las cuales se pueden calcular en base al tipo de la transmisión realizada mediante la siguiente fórmula:

$$Frc = \frac{2000 \cdot M_{1-2} \cdot C}{D}$$

| | |
|------------------|---|
| Frc | Carga radial de cálculo sobre el eje de salida o de entrada |
| M ₁₋₂ | Momento torsor sobre el eje de salida o entrada |
| D | Diámetro primitivo del piñón, engranaje, polea, etc |
| C = 1 | Para transmisiones a cadena |
| C = 1.25 | Para transmisiones a engranajes |
| C = 1.5 | Para transmisiones a correa dentada |
| C = 2.5 | Para transmisiones a correa trapecial |
| C = 3.5 | Para transmisiones a discos de fricción |

Los valores indicados en la tab. 5 (pag. 28) representan las cargas radiales máximas permitidas Fr₁₋₂ admitidas por el reductor, por lo tanto deberá respetarse la siguiente condición:

$$Frc \leq Fr_{1-2}$$

- Los valores de las cargas radiales mostradas en las tablas son válidas para cargas aplicadas a la mitad del eje de salida y de entrada del reductor y son válidas para cualquier posición de montaje y sentido de rotación.
- Las cargas que no aparecen en la tab.5 se pueden obtener por interpolación sin superar los valores relativos a n₁=300 min⁻¹ (eje de entrada) y n₂=20 min⁻¹ (eje de salida) que son los mayores permitidos:
- Simultáneamente a la carga radial Fr puede actuar una carga axial Fa igual a:

$$Fa_1 = 0.2 \cdot Fr_1$$

$$Fa_2 = 0.2 \cdot Fr_2$$

- En el caso que el cual el valor de la carga radial sea nulo, se puede considerar la carga axial admisible igual al 50% del valor de la carga radial máxima sobre el eje.
- Si la carga se aplica a una distancia X del rebaje del eje lento (salida) o rápido (entrada) es necesario convertir el nuevo valor de carga radial admisible Fr_x con la siguiente fórmula:

$$Fr_{x1-2} = Fr_{1-2} \cdot \frac{a}{b+x}$$

Vale para $x > \frac{U}{2}$

CARGUE RADIAL E EMPUXO

Eixo de entrada e saída do ridutor pode ser sujeito a cargue radial, a identificação pode ser calculada, em base a tipo de transmissão realizada com a seguinte fórmula:

| | |
|------------------|---|
| Frc | Carga radial de cálculo sobre eixo lento ou veloz |
| M ₁₋₂ | Momento de torção sobre eixo lento ou veloz |
| D | Diámetro primitivo da roda para correntes, engrenagem, pólia, etc |
| C = 1 | Para transmissões com correntes |
| C = 1.25 | Para transmissões a engrenagem |
| C = 1.5 | Para transmissões com correntes dentadas |
| C = 2.5 | Para transmissões com correias trapezóidais |
| C = 3.5 | Para transmissões a roda de frizão |

O valor escrito na tab. 5 (pag. 28) representando a carga radial máxima Fr₁₋₂ do ridutor. Por tanto deve ser respeitada a seguinte condições:

- A cargue indicada são referida a metade do comprimento do eixo lento e veloz do ridutor (pag. 27) e vale para cada direção de aplicação e senso de rotação.
- A cargue que se refiro a dizer –lo que não aparece na tab. 5 se pode ter para interpolação, sem superar o valor relativo a n₁=300 min⁻¹ (eixo de entrada) e n₂=20 min⁻¹ (eixo saída) que são o máximo consetivo.
- Contemporaneamente a carga radial Fr, pode agir uma carga empuxo Fa para a:

- No caso do valor da carga radial seja nulo, se pode considerar a carga empuxo amissivel para 50% do valor da carga radial máxima sobre eixo.
- Se a carga è aplicado uma distância y da extremidade do eixo lento ou veloz (pag. 27) é necessario converter o novo valor de carga radial amissivel Fr_x com a seguinte relação:

Valida para $x > \frac{U}{2}$

$F_{r_{1-2}}$ = Carico radiale ammissibile sulla mezzeria dell'albero veloce o lento

a = Costante del riduttore

b = Costante del riduttore

x = Distanza del carico dalla battuta dell'albero lento o veloce (mm)

$F_{r_{1-2}}$ = Maximum allowable radial load at centre of input / output shaft

a = Constant of the gear reducer

b = Constant of the gear reducer

x = Distance of the load from the shoulder of the shaft

$F_{r_{1-2}}$ = Max. zulässige Radiallast in Wellenmitte

a = Getriebekonstante

b = Getriebekonstante

x = Abstand des Angriffspunktes ab Wellenschulter

Anche in questo caso, la condizione da verificare sarà la seguente:

In this case also please check that the following applies:

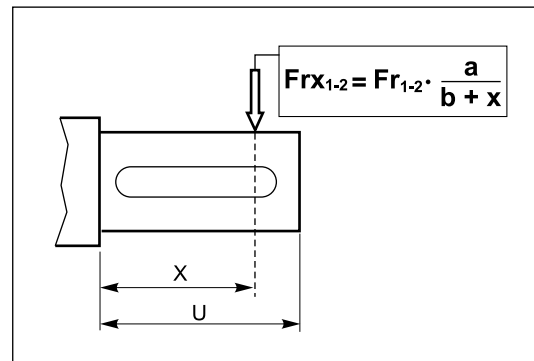
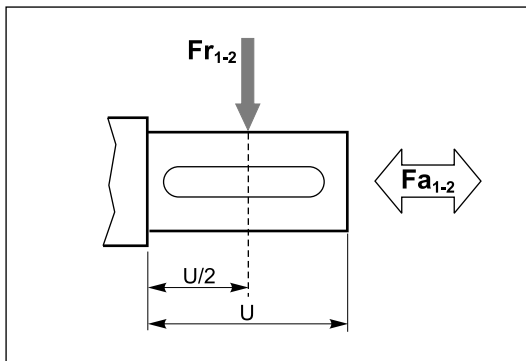
Auch hier muß folgende Bedingung gegeben sein:

$$F_{rc} \leq F_{rx_{1-2}}$$

• Se i valori di carico radiale e assiale ammissibili risultassero inferiore a quelli desiderati, vi preghiamo di consultare il nostro servizio tecnico.

• *If the values of admissible radial and axial loads are lower than desired, please consult our technical service department.*

• Sollte dies nicht der Fall sein, dann nehmen Sie bitte Rücksprache mit unserem technischen Büro.



Fr_{1-2} = Charge radiale admissible au milieu de l'arbre d'entrée ou sortie

a = Constante du réducteur

b = Constante du réducteur

x = Distance de la charge du battent de l'arbre de sortie ou d'entrée (mm)

Dans ces cas-là aussi, vérifier la condition suivante:

Fr_{1-2} = Carga radial admisible en la mitad del eje rápido (entrada) o lento (salida)

a = Constante del reductor

b = Constante del reductor

x = Distancia de la carga del rebaje del eje lento (salida) o rápido (entrada)

Aunque en este caso la condición de verificar será la siguiente:

$$Frc \leq Frx_{1-2}$$

Fr_{1-2} = Radial amissível sobre a metade do comprimento útil do eixo veloz ou lento

a = Constante do ridutor

b = Constante do ridutor

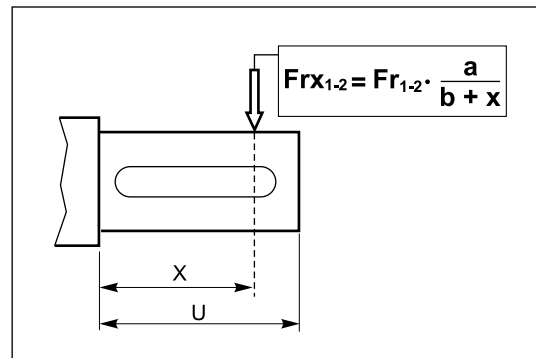
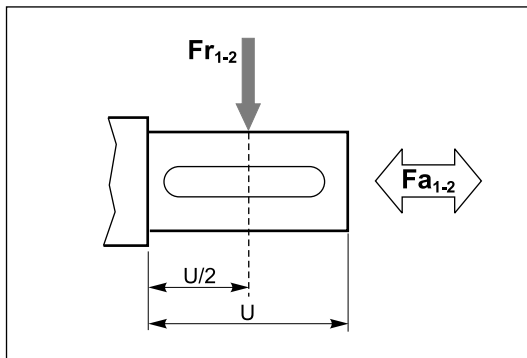
x = Distância da carga da extremidade do eixo lento ou veloz (mm)

Também neste caso, a condição de verificar será a seguinte:

• Si les valeurs de charge radiales et axiales applicables sont inférieures à celle désirées, veuillez nous consulter.

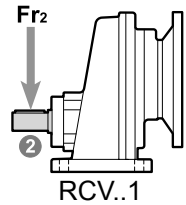
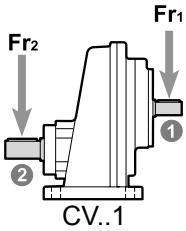
• Si los valores de la carga radial y axial admisibles resultan inferiores a los deseados consultar nuestro servicio técnico.

• Se o valor de carga radial e empuxo amissível resultará inferior a quele deseado te pedimo de consulta o nosso serviço técnico.



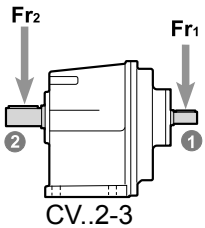
10 CARICHI RADIALI E ASSIALI / *RADIAL AND AXIAL LOADS* / RADIAL UND AXIALLASTEN
 CHARGES RADIALES ET AXIALES / *CARGAS RADIALES Y AXIALES* / CARGUE RADIAL E EMPUXO

Tab.5

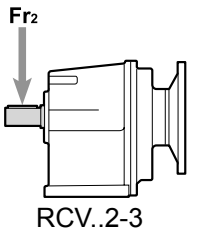


| n_1 [min ⁻¹] | Fr_1 [N] | | | | |
|-------------------------------|------------|------|------|------|-------|
| | CV | | | | |
| | 141 | 191 | 241 | 281 | 381 |
| 2800 | 200 | 300 | 300 | 400 | 700 |
| 1400 | 300 | 500 | 500 | 600 | 1050 |
| 900 | 350 | 580 | 580 | 700 | 1220 |
| 700 | 380 | 630 | 630 | 760 | 1320 |
| 500 | 430 | 700 | 700 | 850 | 1480 |
| 300 | 500 | 830 | 830 | 1000 | 1750 |
| a | 61.3 | 75.8 | 75.8 | 99 | 119.6 |
| b | 41.3 | 55.8 | 55.8 | 74 | 89.6 |

| n_2 [min ⁻¹] | Fr_2 [N] | | | | |
|-------------------------------|------------|------|------|------|-------|
| | RCV-CV | | | | |
| | 141 | 191 | 241 | 281 | 381 |
| 900 | 700 | 700 | 700 | 1450 | 2050 |
| 600 | 800 | 1000 | 1000 | 1600 | 2400 |
| 450 | 950 | 1100 | 1100 | 1750 | 2650 |
| 400 | 950 | 1150 | 1150 | 1850 | 2750 |
| 350 | 1050 | 1200 | 1200 | 1900 | 2850 |
| 300 | 1100 | 1250 | 1250 | 2000 | 3000 |
| 250 | 1150 | 1350 | 1350 | 2150 | 3200 |
| 200 | 1200 | 1450 | 1450 | 2300 | 3500 |
| 150 | 1250 | 1600 | 1600 | 2550 | 3800 |
| 100 | 1250 | 1800 | 1800 | 2900 | 4350 |
| 50 | 1300 | 2300 | 2300 | 3700 | 5500 |
| a | 88 | 73.5 | 78.5 | 98.5 | 117.5 |
| b | 73 | 53.5 | 53.5 | 68.5 | 77.5 |









| n_1 [min ⁻¹] | Fr_1 [N] | | | | | | | | | | | | | | | |
|-------------------------------|------------|------|------|------|------|------|------|------|------|-------|------|------|-------|------|------|--|
| | CV | | | | | | | | | | | | | | | |
| | 162 | 202 | 203 | 252 | 253 | 302 | 303 | 352 | 353 | 452 | 453 | 552 | 553 | 602 | 603 | |
| 2800 | 200 | 300 | 200 | 300 | 200 | 400 | 300 | 450 | 300 | 700 | 400 | 1350 | 600 | 1350 | 1350 | |
| 1400 | 300 | 500 | 300 | 500 | 300 | 600 | 500 | 700 | 500 | 1050 | 600 | 2000 | 950 | 2000 | 2000 | |
| 900 | 350 | 580 | 350 | 580 | 350 | 700 | 580 | 810 | 580 | 1220 | 700 | 2320 | 1100 | 2320 | 2320 | |
| 700 | 380 | 630 | 380 | 630 | 380 | 760 | 630 | 880 | 630 | 1320 | 760 | 2520 | 1200 | 2520 | 2520 | |
| 500 | 430 | 700 | 430 | 700 | 430 | 850 | 700 | 980 | 700 | 1480 | 850 | 2830 | 1350 | 2830 | 2830 | |
| 300 | 500 | 830 | 500 | 830 | 500 | 1000 | 830 | 1160 | 830 | 1750 | 1000 | 3350 | 1600 | 3350 | 3350 | |
| a | 61.3 | 75.8 | 61.3 | 75.8 | 61.3 | 99 | 75.8 | 99 | 75.8 | 119.6 | 99 | 161 | 119.6 | 161 | 161 | |
| b | 41.3 | 55.8 | 41.3 | 55.8 | 41.3 | 74 | 55.8 | 74 | 55.8 | 89.6 | 74 | 121 | 89.6 | 121 | 121 | |






| n_2 [min ⁻¹] | Fr_2 [N] | | | | | | | |
|-------------------------------|------------|---------|---------|---------|---------|---------|---------|---------|
| | RCV-CV | | | | | | | |
| | 162 | 202-203 | 252-253 | 302-303 | 352-353 | 452-453 | 552-553 | 602-603 |
| 400 | 700 | 950 | 1070 | 1950 | 3100 | 4110 | 4850 | 11000 |
| 300 | 800 | 1040 | 1180 | 2030 | 3200 | 4220 | 5950 | 11300 |
| 250 | 800 | 1210 | 1380 | 2370 | 3380 | 4460 | 6000 | 11900 |
| 200 | 850 | 1300 | 1490 | 2560 | 3620 | 4770 | 6500 | 12000 |
| 150 | 1000 | 1430 | 1640 | 2810 | 3940 | 5190 | 7500 | 12200 |
| 100 | 1100 | 1730 | 1870 | 3220 | 4450 | 5860 | 8500 | 14500 |
| 80 | 1200 | 1950 | 2010 | 3460 | 4740 | 6250 | 9500 | 15800 |
| 60 | 1400 | 2200 | 2220 | 3820 | 5180 | 6830 | 11000 | 18600 |
| 40 | 1700 | 2400 | 2540 | 4370 | 5850 | 7720 | 14000 | 21700 |
| 20 | 2000 | 3000 | 3200 | 5500 | 7200 | 9500 | 16000 | 23000 |
| a | 84.5 | 98 | 90 | 94.5 | 127 | 136 | 180 | 250.5 |
| b | 64.5 | 78 | 65 | 64.5 | 87 | 91 | 125 | 190.5 |

**SELEZIONE MOTORIDUTTORI / MOTOR REDUCER SELECTION / AUSWAHL DER GETRIEBEMOTOREN
 SELECTION MOTO-REDUCTEURS / SELECCION MOTORREDUCTORES / SELEÇÃO MOTORIDUTOR**




| $P_1 = 0.09$ kW 63A6 $n_1 = 900$ min ⁻¹ | | | | | | | |
|--|--------------|------|---|---|----------------|---|------|
| n_2 min ⁻¹ | Mn_2 Nm | fs |  |  | i |  | |
| 3.1 | 256 | 1.4 | | | RCV 303 | 287.90 | 63A6 |
| 3.1 | 256 | 1.7 | | | RCV 353 | 287.90 | 63A6 |
| 3.5 | 228 | 1.5 | | | RCV 303 | 256.50 | 63A6 |
| 3.5 | 228 | 1.9 | | | RCV 353 | 256.50 | 63A6 |
| 3.9 | 205 | 1.6 | | | RCV 303 | 230.30 | 63A6 |
| 3.9 | 205 | 2.0 | | | RCV 353 | 230.30 | 63A6 |
| 4.7 | 171 | 1.2 | | | RCV 253 | 192.10 | 63A6 |
| 4.8 | 168 | 1.8 | | | RCV 303 | 189.20 | 63A6 |
| 4.8 | 168 | 2.3 | | | RCV 353 | 189.20 | 63A6 |
| 5.7 | 140 | 1.4 | | | RCV 253 | 157.90 | 63A6 |
| 6.0 | 134 | 2.4 | | | RCV 303 | 151.10 | 63A6 |
| 6.2 | 128 | 1.6 | | | RCV 253 | 144.40 | 63A6 |
| 6.4 | 126 | 0.9 | | | RCV 203 | 141.30 | 63A6 |
| 6.7 | 120 | 2.6 | | | RCV 303 | 134.70 | 63A6 |
| 7.3 | 109 | 1.9 | | | RCV 253 | 122.50 | 63A6 |
| 7.4 | 107 | 2.9 | | | RCV 303 | 120.90 | 63A6 |
| 7.5 | 107 | 1.0 | | | RCV 203 | 120.10 | 63A6 |
| 8.3 | 97 | 2.0 | | | RCV 253 | 109.10 | 63A6 |
| 8.3 | 96 | 1.1 | | | RCV 203 | 108.10 | 63A6 |
| 9.2 | 87 | 1.2 | | | RCV 203 | 97.70 | 63A6 |
| 10.0 | 80 | 2.5 | | | RCV 253 | 89.70 | 63A6 |
| 11.0 | 73 | 2.8 | | | RCV 253 | 82.00 | 63A6 |
| 11.1 | 72 | 1.5 | | | RCV 203 | 81.40 | 63A6 |
| 13.0 | 62 | 1.8 | | | RCV 203 | 69.20 | 63A6 |
| 14.0 | 57 | 1.8 | | | RCV 203 | 64.30 | 63A6 |
| 15.5 | 52 | 2.1 | | | RCV 203 | 58.10 | 63A6 |
| 17.2 | 48.1 | 1.5 | | | RCV 162 | 52.48 | 63A6 |
| 18.2 | 45.4 | 2.3 | | | RCV 202 | 49.52 | 63A6 |
| 20.1 | 41.0 | 2.6 | | | RCV 202 | 44.77 | 63A6 |
| 21.1 | 39.1 | 1.8 | | | RCV 162 | 42.67 | 63A6 |
| 25.6 | 32.2 | 2.1 | | | RCV 162 | 35.14 | 63A6 |
| 31.5 | 26.2 | 2.9 | | | RCV 162 | 28.57 | 63A6 |
| 35.3 | 23.4 | 3.1 | | | RCV 162 | 25.51 | 63A6 |
| 36.6 | 22.5 | 3.4 | | | RCV 162 | 24.59 | 63A6 |
| 43.4 | 19.0 | 3.8 | | | RCV 162 | 20.74 | 63A6 |
| 55 | 15.1 | 4.7 | | | RCV 162 | 16.47 | 63A6 |
| 62 | 13.4 | 5.1 | | | RCV 162 | 14.63 | 63A6 |
| 75 | 11.0 | 6.0 | | | RCV 162 | 11.95 | 63A6 |
| 92 | 9.0 | 6.6 | | | RCV 162 | 9.80 | 63A6 |
| 118 | 7.0 | 7.4 | | | RCV 162 | 7.62 | 63A6 |
| 121 | 7.0 | 5.0 | RCV 141 | | | 7.46 | 63A6 |
| 127 | 6.5 | 8.3 | | | RCV 162 | 7.11 | 63A6 |
| 165 | 5.1 | 6.6 | RCV 141 | | | 5.47 | 63A6 |
| 176 | 4.7 | 9.8 | | | RCV 162 | 5.10 | 63A6 |
| 188 | 4.5 | 7.1 | RCV 141 | | | 4.79 | 63A6 |
| 212 | 4.0 | 8.3 | RCV 141 | | | 4.24 | 63A6 |
| 243 | 3.4 | 12.1 | | | RCV 162 | 3.70 | 63A6 |
| 265 | 3.2 | 9.4 | RCV 141 | | | 3.40 | 63A6 |
| 323 | 2.6 | 11.5 | RCV 141 | | | 2.79 | 63A6 |
| 386 | 2.2 | 12.4 | RCV 141 | | | 2.33 | 63A6 |
| 698 | 1.2 | 14.1 | RCV 141 | | | 1.29 | 63A6 |

| $P_1 = 0.12$ kW 63A4 $n_1 = 1400$ min ⁻¹ 63B6 $n_1 = 900$ min ⁻¹ | | | | | | | |
|---|--------------|------|---|---|----------------|---|------|
| n_2 min ⁻¹ | Mn_2 Nm | fs |  |  | i |  | |
| 3.1 | 341 | 1.0 | | | RCV 303 | 287.90 | 63B6 |
| 3.1 | 341 | 1.3 | | | RCV 353 | 287.90 | 63B6 |
| 3.5 | 304 | 1.1 | | | RCV 303 | 256.50 | 63B6 |
| 3.5 | 304 | 1.4 | | | RCV 353 | 256.50 | 63B6 |
| 3.9 | 273 | 1.2 | | | RCV 303 | 230.30 | 63B6 |
| 3.9 | 273 | 1.5 | | | RCV 353 | 230.30 | 63B6 |
| 4.7 | 228 | 0.9 | | | RCV 253 | 192.10 | 63B6 |
| 4.9 | 219 | 1.6 | | | RCV 303 | 287.90 | 63A4 |
| 4.9 | 219 | 2.0 | | | RCV 353 | 287.90 | 63A4 |
| 5.5 | 195 | 1.7 | | | RCV 303 | 256.50 | 63A4 |
| 5.5 | 195 | 2.2 | | | RCV 353 | 256.50 | 63A4 |
| 6.1 | 175 | 1.8 | | | RCV 303 | 230.30 | 63A4 |
| 6.1 | 175 | 2.3 | | | RCV 353 | 230.30 | 63A4 |
| 7.3 | 146 | 1.3 | | | RCV 253 | 192.10 | 63A4 |
| 7.4 | 144 | 2.1 | | | RCV 303 | 189.20 | 63A4 |
| 7.4 | 144 | 2.7 | | | RCV 353 | 189.20 | 63A4 |
| 8.9 | 120 | 1.7 | | | RCV 253 | 157.90 | 63A4 |
| 9.3 | 115 | 2.8 | | | RCV 303 | 151.10 | 63A4 |
| 9.7 | 110 | 1.9 | | | RCV 253 | 144.40 | 63A4 |
| 9.9 | 108 | 1.0 | | | RCV 203 | 141.30 | 63A4 |
| 11.4 | 93 | 2.2 | | | RCV 253 | 122.50 | 63A4 |
| 11.7 | 91 | 1.2 | | | RCV 203 | 120.10 | 63A4 |
| 12.8 | 83 | 2.3 | | | RCV 253 | 109.10 | 63A4 |
| 13.0 | 82 | 1.3 | | | RCV 203 | 108.10 | 63A4 |
| 14.3 | 74 | 1.4 | | | RCV 203 | 97.70 | 63A4 |
| 15.6 | 68 | 2.9 | | | RCV 253 | 89.70 | 63A4 |
| 17.2 | 62 | 1.7 | | | RCV 203 | 81.40 | 63A4 |
| 20.2 | 53 | 2.1 | | | RCV 203 | 69.20 | 63A4 |
| 21.8 | 49.0 | 2.1 | | | RCV 203 | 64.30 | 63A4 |
| 24.1 | 44.2 | 2.4 | | | RCV 203 | 58.10 | 63A4 |
| 26.7 | 41.2 | 1.7 | | | RCV 162 | 52.48 | 63A4 |
| 28.3 | 38.9 | 2.7 | | | RCV 202 | 49.52 | 63A4 |
| 31.3 | 35.2 | 3.0 | | | RCV 202 | 44.77 | 63A4 |
| 32.8 | 33.5 | 2.1 | | | RCV 162 | 42.67 | 63A4 |
| 39.8 | 27.6 | 2.4 | | | RCV 162 | 35.14 | 63A4 |
| 49.0 | 22.5 | 3.0 | | | RCV 162 | 28.57 | 63A4 |
| 55 | 20.0 | 3.3 | | | RCV 162 | 25.51 | 63A4 |
| 57 | 19.3 | 3.6 | | | RCV 162 | 24.59 | 63A4 |
| 68 | 16.3 | 4.1 | | | RCV 162 | 20.74 | 63A4 |
| 85 | 12.9 | 4.9 | | | RCV 162 | 16.47 | 63A4 |
| 96 | 11.5 | 5.4 | | | RCV 162 | 14.63 | 63A4 |
| 117 | 9.4 | 6.4 | | | RCV 162 | 11.95 | 63A4 |
| 143 | 7.7 | 7.0 | | | RCV 162 | 9.80 | 63A4 |
| 184 | 6.0 | 7.9 | | | RCV 162 | 7.62 | 63A4 |
| 188 | 6.0 | 5.0 | RCV 141 | | | 7.46 | 63A4 |
| 197 | 5.6 | 8.6 | | | RCV 162 | 7.11 | 63A4 |
| 256 | 4.4 | 6.6 | RCV 141 | | | 5.47 | 63A4 |
| 275 | 4.0 | 10.2 | | | RCV 162 | 5.10 | 63A4 |
| 292 | 3.8 | 7.5 | RCV 141 | | | 4.79 | 63A4 |
| 330 | 3.4 | 8.2 | RCV 141 | | | 4.24 | 63A4 |
| 412 | 2.7 | 9.9 | RCV 141 | | | 3.40 | 63A4 |
| 502 | 2.2 | 12.1 | RCV 141 | | | 2.79 | 63A4 |
| 601 | 1.9 | 12.8 | RCV 141 | | | 2.33 | 63A4 |
| 1085 | 1.0 | 14.5 | RCV 141 | | | 1.29 | 63A4 |

11 SELEZIONE MOTORIDUTTORI / MOTOR REDUCER SELECTION / AUSWAHL DER GETRIEBEMOTOREN
SELECTION MOTO-REDUCTEURS / SELECCION MOTORREDUCTORES / SELEÇÃO MOTORIDUTOR

| P1 = 0.18 kW | | | | | | 63A2 n ₁ = 2800 min ⁻¹ 63B4 n ₁ = 1400 min ⁻¹ 71A6 n ₁ = 900 min ⁻¹ |
|-------------------------------------|-----------------------|----|---|---|---|---|
| n ₂ min ⁻¹ | Mn ₂ Nm | fs |  |  | i |  |

| | | | | | | |
|------|------|-----|----------------|----------------|---------------|------|
| 3.1 | 511 | 0.9 | | RCV 353 | 287.90 | 71A6 |
| 3.5 | 456 | 0.9 | | RCV 353 | 256.50 | 71A6 |
| 3.9 | 409 | 1.0 | | RCV 353 | 230.30 | 71A6 |
| 4.8 | 336 | 0.9 | | RCV 303 | 189.20 | 71A6 |
| 4.8 | 336 | 1.1 | | RCV 353 | 189.20 | 71A6 |
| 4.9 | 329 | 1.1 | | RCV 303 | 287.90 | 63B4 |
| 4.9 | 329 | 1.3 | | RCV 353 | 287.90 | 63B4 |
| 5.5 | 293 | 1.1 | | RCV 303 | 256.50 | 63B4 |
| 5.5 | 293 | 1.5 | | RCV 353 | 256.50 | 63B4 |
| 6.1 | 263 | 1.2 | | RCV 303 | 230.30 | 63B4 |
| 6.1 | 263 | 1.6 | | RCV 353 | 230.30 | 63B4 |
| 7.3 | 219 | 0.9 | | RCV 253 | 192.10 | 63B4 |
| 7.4 | 216 | 1.4 | | RCV 303 | 189.20 | 63B4 |
| 7.4 | 216 | 1.8 | | RCV 353 | 189.20 | 63B4 |
| 8.9 | 180 | 1.1 | | RCV 253 | 157.90 | 63B4 |
| 9.3 | 173 | 1.9 | | RCV 303 | 151.10 | 63B4 |
| 9.3 | 173 | 2.4 | | RCV 353 | 151.10 | 63B4 |
| 9.7 | 165 | 1.3 | | RCV 253 | 144.40 | 63B4 |
| 10.4 | 154 | 2.0 | | RCV 303 | 134.70 | 63B4 |
| 10.4 | 154 | 2.6 | | RCV 353 | 134.70 | 63B4 |
| 11.4 | 140 | 1.5 | | RCV 253 | 122.50 | 63B4 |
| 11.6 | 138 | 2.2 | | RCV 303 | 120.90 | 63B4 |
| 11.6 | 138 | 2.8 | | RCV 353 | 120.90 | 63B4 |
| 14.1 | 113 | 2.6 | | RCV 303 | 99.30 | 63B4 |
| 14.3 | 112 | 1.0 | | RCV 203 | 97.70 | 63B4 |
| 15.6 | 102 | 2.0 | | RCV 253 | 89.70 | 63B4 |
| 17.1 | 94 | 2.2 | | RCV 253 | 82.00 | 63B4 |
| 17.2 | 93 | 1.2 | | RCV 203 | 81.40 | 63B4 |
| 20.1 | 80 | 2.6 | | RCV 253 | 69.60 | 63B4 |
| 20.2 | 79 | 1.4 | | RCV 203 | 69.20 | 63B4 |
| 21.8 | 73 | 1.4 | | RCV 203 | 64.30 | 63B4 |
| 23.3 | 69 | 2.8 | | RCV 253 | 60.10 | 63B4 |
| 24.1 | 66 | 1.6 | | RCV 203 | 58.10 | 63B4 |
| 26.7 | 62 | 1.1 | | RCV 162 | 52.48 | 63B4 |
| 28.3 | 58 | 1.8 | | RCV 202 | 49.52 | 63B4 |
| 31.3 | 53 | 2.0 | | RCV 202 | 44.77 | 63B4 |
| 32.8 | 50 | 1.4 | | RCV 162 | 42.67 | 63B4 |
| 37.5 | 44.0 | 2.4 | | RCV 202 | 37.31 | 63B4 |
| 39.8 | 41.4 | 1.6 | | RCV 162 | 35.14 | 63B4 |
| 44.2 | 37.4 | 2.9 | | RCV 202 | 31.71 | 63B4 |
| 49.0 | 33.7 | 2.0 | | RCV 162 | 28.57 | 63B4 |
| 55 | 30.1 | 2.2 | | RCV 162 | 25.51 | 63B4 |
| 57 | 29.0 | 2.4 | | RCV 162 | 24.59 | 63B4 |
| 68 | 24.4 | 2.7 | | RCV 162 | 20.74 | 63B4 |
| 85 | 19.4 | 3.3 | | RCV 162 | 16.47 | 63B4 |
| 96 | 17.2 | 3.6 | | RCV 162 | 14.63 | 63B4 |
| 117 | 14.1 | 4.3 | | RCV 162 | 11.95 | 63B4 |
| 127 | 13.0 | 4.1 | | RCV 162 | 7.11 | 71A6 |
| 143 | 11.6 | 4.7 | | RCV 162 | 9.80 | 63B4 |
| 184 | 9.0 | 5.2 | | RCV 162 | 7.62 | 63B4 |
| 188 | 9.0 | 3.3 | RCV 141 | | 7.46 | 63B4 |
| 197 | 8.4 | 5.7 | | RCV 162 | 7.11 | 63B4 |
| 256 | 6.6 | 4.4 | RCV 141 | | 5.47 | 63B4 |
| 275 | 6.0 | 6.8 | | RCV 162 | 5.10 | 63B4 |
| 292 | 5.8 | 5.0 | RCV 141 | | 4.79 | 63B4 |
| 330 | 5.1 | 5.5 | RCV 141 | | 4.24 | 63B4 |




| P1 = 0.18 kW | | | | | | 63A2 n ₁ = 2800 min ⁻¹ 63B4 n ₁ = 1400 min ⁻¹ 71A6 n ₁ = 900 min ⁻¹ |
|-------------------------------------|-----------------------|----|---|---|---|---|
| n ₂ min ⁻¹ | Mn ₂ Nm | fs |  |  | i |  |

| | | | | | | |
|------|-----|------|----------------|--|-------------|------|
| 412 | 4.1 | 6.6 | RCV 141 | | 3.40 | 63B4 |
| 502 | 3.4 | 8.0 | RCV 141 | | 2.79 | 63B4 |
| 601 | 2.8 | 8.6 | RCV 141 | | 2.33 | 63B4 |
| 824 | 2.0 | 11.2 | RCV 141 | | 3.40 | 63A2 |
| 1085 | 1.6 | 9.7 | RCV 141 | | 1.29 | 63B4 |




| | | | | | | |
|---------------------|--|--|--|--|--|---|
| P1 = 0.25 kW | | | | | | 63B2 n ₁ = 2800 min ⁻¹ 71A4 n ₁ = 1400 min ⁻¹ 71B6 n ₁ = 900 min ⁻¹ |
|---------------------|--|--|--|--|--|---|

| | | | | | | |
|------|------|-----|----------------|---------------|--|------|
| 4.0 | 562 | 1.3 | RCV 453 | 227.70 | | 71B6 |
| 4.9 | 457 | 1.0 | RCV 353 | 287.90 | | 71A4 |
| 5.5 | 407 | 1.1 | RCV 353 | 256.50 | | 71A4 |
| 6.1 | 365 | 0.9 | RCV 303 | 230.30 | | 71A4 |
| 6.1 | 365 | 1.1 | RCV 353 | 230.30 | | 71A4 |
| 6.1 | 361 | 2.1 | RCV 453 | 227.70 | | 71A4 |
| 6.9 | 321 | 2.2 | RCV 453 | 202.10 | | 71A4 |
| 7.4 | 300 | 1.0 | RCV 303 | 189.20 | | 71A4 |
| 7.4 | 300 | 1.3 | RCV 353 | 189.20 | | 71A4 |
| 7.7 | 287 | 2.5 | RCV 453 | 180.70 | | 71A4 |
| 8.6 | 258 | 2.6 | RCV 453 | 162.70 | | 71A4 |
| 9.3 | 240 | 1.3 | RCV 303 | 151.10 | | 71A4 |
| 9.3 | 240 | 1.7 | RCV 353 | 151.10 | | 71A4 |
| 9.5 | 234 | 2.8 | RCV 453 | 147.20 | | 71A4 |
| 9.7 | 229 | 0.9 | RCV 253 | 144.40 | | 71A4 |
| 10.4 | 214 | 1.5 | RCV 303 | 134.70 | | 71A4 |
| 10.4 | 214 | 1.9 | RCV 353 | 134.70 | | 71A4 |
| 11.4 | 194 | 1.1 | RCV 253 | 122.50 | | 71A4 |
| 11.6 | 192 | 1.6 | RCV 303 | 120.90 | | 71A4 |
| 11.6 | 192 | 2.1 | RCV 353 | 120.90 | | 71A4 |
| 12.8 | 173 | 1.1 | RCV 253 | 109.10 | | 71A4 |
| 14.1 | 158 | 1.9 | RCV 303 | 99.30 | | 71A4 |
| 14.1 | 158 | 2.4 | RCV 353 | 99.30 | | 71A4 |
| 15.6 | 142 | 1.4 | RCV 253 | 89.70 | | 71A4 |
| 17.0 | 130 | 2.4 | RCV 303 | 82.20 | | 71A4 |
| 17.1 | 130 | 1.6 | RCV 253 | 82.00 | | 71A4 |
| 19.1 | 117 | 2.7 | RCV 303 | 73.30 | | 71A4 |
| 20.1 | 110 | 1.9 | RCV 253 | 69.60 | | 71A4 |
| 20.2 | 110 | 1.0 | RCV 203 | 69.20 | | 71A4 |
| 21.3 | 104 | 2.9 | RCV 303 | 65.80 | | 71A4 |
| 21.8 | 102 | 1.0 | RCV 203 | 64.30 | | 71A4 |
| 23.3 | 95 | 2.0 | RCV 253 | 60.10 | | 71A4 |
| 24.1 | 92 | 1.2 | RCV 203 | 58.10 | | 71A4 |
| 28.3 | 81 | 1.3 | RCV 202 | 49.52 | | 71A4 |
| 28.5 | 80 | 2.4 | RCV 252 | 49.04 | | 71A4 |
| 31.3 | 73 | 1.5 | RCV 202 | 44.77 | | 71A4 |
| 32.8 | 70 | 1.0 | RCV 162 | 42.67 | | 71A4 |
| 34.7 | 66 | 3.0 | RCV 252 | 40.29 | | 71A4 |
| 37.5 | 61 | 1.8 | RCV 202 | 37.31 | | 71A4 |
| 39.8 | 58 | 1.1 | RCV 162 | 35.14 | | 71A4 |
| 44.2 | 52 | 2.1 | RCV 202 | 31.71 | | 71A4 |
| 49.0 | 46.8 | 1.4 | RCV 162 | 28.57 | | 71A4 |
| 49.8 | 46.1 | 2.2 | RCV 202 | 28.13 | | 71A4 |
| 55 | 41.8 | 1.6 | RCV 162 | 25.51 | | 71A4 |
| 55 | 41.6 | 2.5 | RCV 202 | 25.43 | | 71A4 |
| 57 | 40.3 | 1.7 | RCV 162 | 24.59 | | 71A4 |
| 66 | 34.7 | 2.8 | RCV 202 | 21.19 | | 71A4 |
| 68 | 34.0 | 1.9 | RCV 162 | 20.74 | | 71A4 |




**SELEZIONE MOTORIDUTTORI / MOTOR REDUCER SELECTION / AUSWAHL DER GETRIEBEMOTOREN
 SELECTION MOTO-REDUCTEURS / SELECCION MOTORREDUCTORES / SELEÇÃO MOTORIDUTOR**

| P1 = 0.25 kW | | | | | | |
|---|-----------------------|-----|---|---|--------------|---|
| 63B2 n ₁ = 2800 min ⁻¹ 71A4 n ₁ = 1400 min ⁻¹ 71B6 n ₁ = 900 min ⁻¹ | | | | | | |
| n ₂ min ⁻¹ | Mn ₂ Nm | fs |  |  | i |  |
| 85 | 27.0 | 2.4 | | RCV 162 | 16.47 | 71A4 |
| 96 | 24.0 | 2.6 | | RCV 162 | 14.63 | 71A4 |
| 110 | 20.9 | 2.6 | | RCV 162 | 25.51 | 63B2 |
| 117 | 19.6 | 3.1 | | RCV 162 | 11.95 | 71A4 |
| 121 | 19.4 | 1.8 | RCV 141 | | 7.46 | 71B6 |
| 127 | 18.1 | 3.0 | | RCV 162 | 7.11 | 71B6 |
| 143 | 16.0 | 3.4 | | RCV 162 | 9.80 | 71A4 |
| 165 | 14.2 | 2.4 | RCV 141 | | 5.47 | 71B6 |
| 184 | 12.5 | 3.8 | | RCV 162 | 7.62 | 71A4 |
| 188 | 12.5 | 2.4 | RCV 141 | | 7.46 | 71A4 |
| 197 | 11.6 | 4.1 | | RCV 162 | 7.11 | 71A4 |
| 212 | 11.0 | 3.0 | RCV 141 | | 4.24 | 71B6 |
| 256 | 9.1 | 3.2 | RCV 141 | | 5.47 | 71A4 |
| 275 | 8.4 | 4.9 | | RCV 162 | 5.10 | 71A4 |
| 292 | 8.0 | 3.6 | RCV 141 | | 4.79 | 71A4 |
| 330 | 7.1 | 4.0 | RCV 141 | | 4.24 | 71A4 |
| 378 | 6.1 | 6.1 | | RCV 162 | 3.70 | 71A4 |
| 412 | 5.7 | 4.8 | RCV 141 | | 3.40 | 71A4 |
| 502 | 4.7 | 5.8 | RCV 141 | | 2.79 | 71A4 |
| 601 | 3.9 | 6.2 | RCV 141 | | 2.33 | 71A4 |
| 698 | 3.4 | 5.1 | RCV 141 | | 1.29 | 71B6 |
| 824 | 2.8 | 8.1 | RCV 141 | | 3.40 | 63B2 |
| 1085 | 2.2 | 7.0 | RCV 141 | | 1.29 | 71A4 |




| P1 = 0.37 kW | | | | | | |
|---|------|-----|--|----------------|---------------|------|
| 71A2 n ₁ = 2800 min ⁻¹ 71B4 n ₁ = 1400 min ⁻¹ 80A6 n ₁ = 900 min ⁻¹ | | | | | | |
| 2.8 | 1160 | 1.0 | | RCV 553 | 317.67 | 80A6 |
| 3.0 | 1107 | 2.9 | | RCV 603 | 303.10 | 80A6 |
| 3.5 | 947 | 1.2 | | RCV 553 | 259.37 | 80A6 |
| 4.0 | 831 | 0.9 | | RCV 453 | 227.70 | 80A6 |
| 4.0 | 821 | 1.4 | | RCV 553 | 224.93 | 80A6 |
| 4.5 | 738 | 1.0 | | RCV 453 | 202.10 | 80A6 |
| 4.9 | 671 | 1.7 | | RCV 553 | 183.64 | 80A6 |
| 5.0 | 660 | 1.1 | | RCV 453 | 180.70 | 80A6 |
| 5.5 | 594 | 1.1 | | RCV 453 | 162.70 | 80A6 |
| 6.1 | 538 | 1.2 | | RCV 453 | 147.20 | 80A6 |
| 6.1 | 535 | 1.4 | | RCV 453 | 227.70 | 71B4 |
| 6.2 | 530 | 2.1 | | RCV 553 | 145.09 | 80A6 |
| 6.9 | 474 | 1.5 | | RCV 453 | 202.10 | 71B4 |
| 7.4 | 444 | 0.9 | | RCV 353 | 189.20 | 71B4 |
| 7.4 | 441 | 0.9 | | RCV 353 | 120.90 | 80A6 |
| 7.6 | 433 | 2.8 | | RCV 553 | 118.46 | 80A6 |
| 7.7 | 424 | 1.7 | | RCV 453 | 180.70 | 71B4 |
| 8.3 | 398 | 2.8 | | RCV 553 | 108.86 | 80A6 |
| 8.5 | 385 | 1.8 | | RCV 453 | 105.50 | 80A6 |
| 8.6 | 382 | 1.8 | | RCV 453 | 162.70 | 71B4 |
| 9.1 | 363 | 1.0 | | RCV 353 | 99.30 | 80A6 |
| 9.3 | 355 | 0.9 | | RCV 303 | 151.10 | 71B4 |
| 9.3 | 355 | 1.2 | | RCV 353 | 151.10 | 71B4 |
| 9.5 | 346 | 1.9 | | RCV 453 | 147.20 | 71B4 |
| 9.5 | 344 | 2.0 | | RCV 453 | 94.30 | 80A6 |
| 9.7 | 338 | 0.9 | | RCV 303 | 287.90 | 71A2 |
| 9.7 | 338 | 1.1 | | RCV 353 | 287.90 | 71A2 |
| 10.4 | 316 | 1.0 | | RCV 303 | 134.70 | 71B4 |
| 10.4 | 316 | 1.3 | | RCV 353 | 134.70 | 71B4 |
| 11.6 | 284 | 1.1 | | RCV 303 | 120.90 | 71B4 |

| P1 = 0.37 kW | | | | | | |
|---|-----------------------|-----|---|---|---------------|---|
| 71A2 n ₁ = 2800 min ⁻¹ 71B4 n ₁ = 1400 min ⁻¹ 80A6 n ₁ = 900 min ⁻¹ | | | | | | |
| n ₂ min ⁻¹ | Mn ₂ Nm | fs |  |  | i |  |
| 11.6 | 284 | 1.4 | | RCV 353 | 120.90 | 71B4 |
| 13.3 | 248 | 2.8 | | RCV 453 | 105.50 | 71B4 |
| 14.1 | 233 | 1.3 | | RCV 303 | 99.30 | 71B4 |
| 14.1 | 233 | 1.6 | | RCV 353 | 99.30 | 71B4 |
| 15.5 | 212 | 2.8 | | RCV 453 | 180.70 | 71A2 |
| 15.6 | 211 | 1.0 | | RCV 253 | 89.70 | 71B4 |
| 17.0 | 193 | 1.6 | | RCV 303 | 82.20 | 71B4 |
| 17.0 | 193 | 2.1 | | RCV 353 | 82.20 | 71B4 |
| 17.1 | 193 | 1.1 | | RCV 253 | 82.00 | 71B4 |
| 19.1 | 173 | 1.8 | | RCV 303 | 73.30 | 71B4 |
| 19.1 | 173 | 2.3 | | RCV 353 | 73.30 | 71B4 |
| 20.1 | 163 | 1.3 | | RCV 253 | 69.60 | 71B4 |
| 21.3 | 155 | 2.0 | | RCV 303 | 65.80 | 71B4 |
| 21.3 | 155 | 2.5 | | RCV 353 | 65.80 | 71B4 |
| 23.3 | 141 | 1.4 | | RCV 253 | 60.10 | 71B4 |
| 25.9 | 127 | 2.3 | | RCV 303 | 54.00 | 71B4 |
| 25.9 | 127 | 2.9 | | RCV 353 | 54.00 | 71B4 |
| 28.3 | 120 | 0.9 | | RCV 202 | 49.52 | 71B4 |
| 28.5 | 119 | 1.6 | | RCV 252 | 49.04 | 71B4 |
| 30.3 | 108 | 2.9 | | RCV 303 | 46.20 | 71B4 |
| 31.3 | 109 | 1.0 | | RCV 202 | 44.77 | 71B4 |
| 34.7 | 98 | 2.0 | | RCV 252 | 40.29 | 71B4 |
| 37.5 | 90 | 1.2 | | RCV 202 | 37.31 | 71B4 |
| 38.0 | 89 | 2.3 | | RCV 252 | 36.86 | 71B4 |
| 44.2 | 77 | 1.4 | | RCV 202 | 31.71 | 71B4 |
| 49.0 | 69 | 1.0 | | RCV 162 | 28.57 | 71B4 |
| 49.8 | 68 | 1.5 | | RCV 202 | 28.13 | 71B4 |
| 54 | 62 | 3.0 | | RCV 252 | 25.75 | 71B4 |
| 55 | 62 | 1.1 | | RCV 162 | 25.51 | 71B4 |
| 55 | 62 | 1.7 | | RCV 202 | 25.43 | 71B4 |
| 57 | 60 | 1.2 | | RCV 162 | 24.59 | 71B4 |
| 66 | 51 | 1.9 | | RCV 202 | 21.19 | 71B4 |
| 68 | 50 | 1.3 | | RCV 162 | 20.74 | 71B4 |
| 78 | 43.6 | 2.2 | | RCV 202 | 18.01 | 71B4 |
| 85 | 39.9 | 1.6 | | RCV 162 | 16.47 | 71B4 |
| 90 | 37.5 | 2.1 | | RCV 202 | 15.48 | 71B4 |
| 100 | 33.9 | 2.3 | | RCV 202 | 14.00 | 71B4 |
| 117 | 29.0 | 2.1 | | RCV 162 | 11.95 | 71B4 |
| 120 | 28.3 | 2.8 | | RCV 202 | 11.67 | 71B4 |
| 121 | 28.7 | 1.2 | RCV 141 | | 7.46 | 80A6 |
| 143 | 23.7 | 2.3 | | RCV 162 | 9.80 | 71B4 |
| 163 | 20.8 | 3.5 | | RCV 202 | 8.57 | 71B4 |
| 179 | 19.3 | 2.4 | RCV 191 | | 7.82 | 71B4 |
| 179 | 19.3 | 2.4 | RCV 241 | | 7.82 | 71B4 |
| 184 | 18.5 | 2.5 | | RCV 162 | 7.62 | 71B4 |
| 188 | 18.5 | 1.6 | RCV 141 | | 7.46 | 71B4 |
| 197 | 17.2 | 2.8 | | RCV 162 | 7.11 | 71B4 |
| 256 | 13.5 | 2.1 | RCV 141 | | 5.47 | 71B4 |
| 275 | 12.4 | 3.3 | | RCV 162 | 5.10 | 71B4 |
| 292 | 11.8 | 2.4 | RCV 141 | | 4.79 | 71B4 |
| 330 | 10.5 | 2.7 | RCV 141 | | 4.24 | 71B4 |
| 378 | 9.0 | 4.1 | | RCV 162 | 3.70 | 71B4 |
| 412 | 8.4 | 3.2 | RCV 141 | | 3.40 | 71B4 |
| 502 | 6.9 | 3.9 | RCV 141 | | 2.79 | 71B4 |
| 601 | 5.8 | 4.2 | RCV 141 | | 2.33 | 71B4 |
| 698 | 5.0 | 3.4 | RCV 141 | | 1.29 | 80A6 |
| 824 | 4.2 | 5.5 | RCV 141 | | 3.40 | 71A2 |




**SELEZIONE MOTORIDUTTORI / MOTOR REDUCER SELECTION / AUSWAHL DER GETRIEBEMOTOREN
SELECTION MOTO-REDUCTEURS / SELECCION MOTORREDUCTORES / SELEÇÃO MOTORIDUTOR**

| P1 = 0.37 kW | | | | | |
|--|-----------------------|----|---|---|---|
| n_2 min ⁻¹ | Mn ₂ Nm | fs |  |  |  |
| 71A2 $n_1=2800$ min ⁻¹ 71B4 $n_1=1400$ min ⁻¹ 80A6 $n_1=900$ min ⁻¹ | | | | | |




| | | | | | |
|-------------|-----|-----|----------------|-------------|------|
| 1004 | 3.5 | 6.7 | RCV 141 | 2.79 | 71A2 |
| 1085 | 3.2 | 4.7 | RCV 141 | 1.29 | 71B4 |
| 1202 | 2.9 | 7.3 | RCV 141 | 2.33 | 71A2 |
| 2171 | 1.6 | 8.1 | RCV 141 | 1.29 | 71A2 |

| P1 = 0.55 kW | | | | | |
|--|-----------------------|----|---|---|---|
| n_2 min ⁻¹ | Mn ₂ Nm | fs |  |  |  |
| 71B2 $n_1=2800$ min ⁻¹ 80A4 $n_1=1400$ min ⁻¹ 80B6 $n_1=900$ min ⁻¹ | | | | | |

| | | | | | |
|-------------|------|-----|----------------|---------------|------|
| 3.0 | 1645 | 2.0 | RCV 603 | 303.10 | 80B6 |
| 3.6 | 1344 | 2.6 | RCV 603 | 247.60 | 80B6 |
| 4.0 | 1221 | 0.9 | RCV 553 | 224.93 | 80B6 |
| 4.1 | 1179 | 2.7 | RCV 603 | 217.20 | 80B6 |
| 4.4 | 1108 | 1.1 | RCV 553 | 317.67 | 80A4 |
| 5.4 | 905 | 1.3 | RCV 553 | 259.37 | 80A4 |
| 6.1 | 795 | 0.9 | RCV 453 | 227.70 | 80A4 |
| 6.2 | 785 | 1.5 | RCV 553 | 224.93 | 80A4 |
| 6.9 | 705 | 1.0 | RCV 453 | 202.10 | 80A4 |
| 7.6 | 641 | 1.8 | RCV 553 | 183.64 | 80A4 |
| 7.7 | 631 | 1.1 | RCV 453 | 180.70 | 80A4 |
| 8.6 | 568 | 1.2 | RCV 453 | 162.70 | 80A4 |
| 9.5 | 514 | 1.3 | RCV 453 | 147.20 | 80A4 |
| 10.4 | 470 | 0.9 | RCV 353 | 134.70 | 80A4 |
| 11.8 | 413 | 2.9 | RCV 553 | 118.46 | 80A4 |
| 12.9 | 380 | 2.9 | RCV 553 | 108.86 | 80A4 |
| 13.3 | 368 | 1.9 | RCV 453 | 105.50 | 80A4 |
| 14.1 | 347 | 1.1 | RCV 353 | 99.30 | 80A4 |
| 14.8 | 329 | 2.1 | RCV 453 | 94.30 | 80A4 |
| 16.5 | 296 | 2.3 | RCV 453 | 84.90 | 80A4 |
| 17.0 | 287 | 1.1 | RCV 303 | 82.20 | 80A4 |
| 17.0 | 287 | 1.4 | RCV 353 | 82.20 | 80A4 |
| 18.2 | 268 | 2.5 | RCV 453 | 76.80 | 80A4 |
| 19.1 | 257 | 1.2 | RCV 303 | 73.30 | 80A4 |
| 19.1 | 257 | 1.6 | RCV 353 | 73.30 | 80A4 |
| 21.3 | 230 | 1.3 | RCV 303 | 65.80 | 80A4 |
| 21.3 | 230 | 1.7 | RCV 353 | 65.80 | 80A4 |
| 25.9 | 188 | 1.5 | RCV 303 | 54.00 | 80A4 |
| 25.9 | 188 | 2.0 | RCV 353 | 54.00 | 80A4 |
| 28.5 | 177 | 1.1 | RCV 252 | 49.04 | 80A4 |
| 30.3 | 161 | 2.0 | RCV 303 | 46.20 | 80A4 |
| 30.3 | 161 | 2.5 | RCV 353 | 46.20 | 80A4 |
| 34.0 | 144 | 2.2 | RCV 303 | 41.20 | 80A4 |
| 34.0 | 144 | 2.8 | RCV 353 | 41.20 | 80A4 |
| 34.7 | 145 | 1.4 | RCV 252 | 40.29 | 80A4 |
| 38.0 | 133 | 1.6 | RCV 252 | 36.86 | 80A4 |
| 38.0 | 133 | 2.4 | RCV 302 | 36.82 | 80A4 |
| 38.0 | 133 | 3.0 | RCV 352 | 36.82 | 80A4 |
| 42.7 | 118 | 2.6 | RCV 302 | 32.80 | 80A4 |
| 44.2 | 114 | 0.9 | RCV 202 | 31.71 | 80A4 |
| 44.8 | 113 | 1.8 | RCV 252 | 31.27 | 80A4 |
| 47.5 | 106 | 2.8 | RCV 302 | 29.45 | 80A4 |
| 49.8 | 101 | 1.0 | RCV 202 | 28.13 | 80A4 |
| 54 | 93 | 2.0 | RCV 252 | 25.75 | 80A4 |
| 66 | 76 | 1.3 | RCV 202 | 21.19 | 80A4 |
| 66 | 76 | 2.6 | RCV 252 | 21.16 | 80A4 |
| 68 | 75 | 0.9 | RCV 162 | 20.74 | 80A4 |
| 72 | 70 | 2.9 | RCV 252 | 19.35 | 80A4 |
| 78 | 65 | 1.5 | RCV 202 | 18.01 | 80A4 |




| P1 = 0.55 kW | | | | | |
|--|-----------------------|----|---|---|---|
| n_2 min ⁻¹ | Mn ₂ Nm | fs |  |  |  |
| 71B2 $n_1=2800$ min ⁻¹ 80A4 $n_1=1400$ min ⁻¹ 80B6 $n_1=900$ min ⁻¹ | | | | | |

| | | | | | |
|-------------|------|-----|----------------|--------------|------|
| 85 | 59 | 1.1 | RCV 162 | 16.47 | 80A4 |
| 96 | 53 | 1.2 | RCV 162 | 14.63 | 80A4 |
| 100 | 51 | 3.0 | RCV 252 | 14.01 | 80A4 |
| 100 | 51 | 1.5 | RCV 202 | 14.00 | 80A4 |
| 117 | 43.0 | 1.4 | RCV 162 | 11.95 | 80A4 |
| 120 | 42.0 | 1.9 | RCV 202 | 11.67 | 80A4 |
| 141 | 35.7 | 2.2 | RCV 202 | 9.92 | 80A4 |
| 143 | 35.3 | 1.5 | RCV 162 | 9.80 | 80A4 |
| 162 | 31.9 | 2.6 | RCV 281 | 5.57 | 80B6 |
| 179 | 28.8 | 1.6 | RCV 191 | 7.82 | 80A4 |
| 179 | 28.8 | 1.6 | RCV 241 | 7.82 | 80A4 |
| 181 | 27.9 | 2.6 | RCV 202 | 7.75 | 80A4 |
| 184 | 27.4 | 1.7 | RCV 162 | 7.62 | 80A4 |
| 188 | 27.4 | 1.1 | RCV 141 | 7.46 | 80A4 |
| 197 | 25.6 | 1.9 | RCV 162 | 7.11 | 80A4 |
| 217 | 23.3 | 3.0 | RCV 202 | 6.46 | 80A4 |
| 256 | 20.1 | 1.4 | RCV 141 | 5.47 | 80A4 |
| 256 | 20.1 | 2.2 | RCV 191 | 5.47 | 80A4 |
| 256 | 20.1 | 2.2 | RCV 241 | 5.47 | 80A4 |
| 275 | 18.4 | 2.2 | RCV 162 | 5.10 | 80A4 |
| 292 | 17.6 | 1.6 | RCV 141 | 4.79 | 80A4 |
| 297 | 17.3 | 2.5 | RCV 191 | 4.71 | 80A4 |
| 297 | 17.3 | 2.5 | RCV 241 | 4.71 | 80A4 |
| 330 | 15.6 | 1.8 | RCV 141 | 4.24 | 80A4 |
| 341 | 15.1 | 2.7 | RCV 191 | 4.11 | 80A4 |
| 341 | 15.1 | 2.7 | RCV 241 | 4.11 | 80A4 |
| 378 | 13.3 | 2.8 | RCV 162 | 3.70 | 80A4 |
| 412 | 12.5 | 2.2 | RCV 141 | 3.40 | 80A4 |
| 435 | 11.8 | 2.7 | RCV 191 | 3.22 | 80A4 |
| 435 | 11.8 | 2.7 | RCV 241 | 3.22 | 80A4 |
| 502 | 10.3 | 2.6 | RCV 141 | 2.79 | 80A4 |
| 549 | 9.2 | 3.7 | RCV 162 | 5.10 | 71B2 |
| 601 | 8.6 | 2.8 | RCV 141 | 2.33 | 80A4 |
| 698 | 7.4 | 2.3 | RCV 141 | 1.29 | 80B6 |
| 757 | 6.7 | 4.7 | RCV 162 | 3.70 | 71B2 |
| 824 | 6.3 | 3.7 | RCV 141 | 3.40 | 71B2 |
| 1004 | 5.1 | 4.5 | RCV 141 | 2.79 | 71B2 |
| 1085 | 4.7 | 3.2 | RCV 141 | 1.29 | 80A4 |
| 1202 | 4.3 | 4.9 | RCV 141 | 2.33 | 71B2 |
| 2171 | 2.4 | 5.5 | RCV 141 | 1.29 | 71B2 |




| P1 = 0.75 kW | | | | | |
|--|-----------------------|----|---|---|---|
| n_2 min ⁻¹ | Mn ₂ Nm | fs |  |  |  |
| 80A2 $n_1=2800$ min ⁻¹ 80B4 $n_1=1400$ min ⁻¹ 90S6 $n_1=900$ min ⁻¹ | | | | | |

| | | | | | |
|-------------|------|-----|----------------|---------------|------|
| 3.0 | 2243 | 1.4 | RCV 603 | 303.10 | 90S6 |
| 3.6 | 1833 | 1.9 | RCV 603 | 247.60 | 90S6 |
| 4.1 | 1608 | 2.0 | RCV 603 | 217.20 | 90S6 |
| 4.3 | 1532 | 2.3 | RCV 603 | 207.00 | 90S6 |
| 4.6 | 1442 | 2.3 | RCV 603 | 303.10 | 80B4 |
| 5.4 | 1234 | 0.9 | RCV 553 | 259.37 | 80B4 |
| 5.7 | 1178 | 2.9 | RCV 603 | 247.60 | 80B4 |
| 6.2 | 1070 | 1.1 | RCV 553 | 224.93 | 80B4 |
| 7.6 | 874 | 1.3 | RCV 553 | 183.64 | 80B4 |
| 8.6 | 774 | 0.9 | RCV 453 | 162.70 | 80B4 |
| 9.5 | 700 | 0.9 | RCV 453 | 147.20 | 80B4 |
| 9.7 | 690 | 1.6 | RCV 553 | 145.09 | 80B4 |
| 11.8 | 564 | 2.1 | RCV 553 | 118.46 | 80B4 |

**SELEZIONE MOTORIDUTTORI / MOTOR REDUCER SELECTION / AUSWAHL DER GETRIEBEMOTOREN
 SELECTION MOTO-REDUCTEURS / SELECCION MOTORREDUCTORES / SELEÇÃO MOTORIDUTOR**

| P1 = 0.75 kW | | | | | |
|---|-----------------------|----|---|---|---|
| 80A2 n ₁ = 2800 min ⁻¹ 80B4 n ₁ = 1400 min ⁻¹ 90S6 n ₁ = 900 min ⁻¹ | | | | | |
| n ₂ min ⁻¹ | Mn ₂ Nm | fs |  |  |  |

| | | | | | | |
|------|------|-----|----------------|----------------|---------------|------|
| 12.9 | 518 | 2.1 | | RCV 553 | 108.86 | 80B4 |
| 13.3 | 502 | 1.4 | | RCV 453 | 105.50 | 80B4 |
| 14.8 | 449 | 1.6 | | RCV 453 | 94.30 | 80B4 |
| 15.8 | 423 | 2.8 | | RCV 553 | 88.88 | 80B4 |
| 16.5 | 404 | 1.7 | | RCV 453 | 84.90 | 80B4 |
| 17.0 | 391 | 1.0 | | RCV 353 | 82.20 | 80B4 |
| 18.2 | 365 | 1.8 | | RCV 453 | 76.80 | 80B4 |
| 19.1 | 350 | 0.9 | | RCV 303 | 73.30 | 80B4 |
| 19.1 | 350 | 1.1 | | RCV 353 | 73.30 | 80B4 |
| 21.3 | 313 | 1.0 | | RCV 303 | 65.80 | 80B4 |
| 21.3 | 313 | 1.2 | | RCV 353 | 65.80 | 80B4 |
| 25.9 | 257 | 1.1 | | RCV 303 | 54.00 | 80B4 |
| 25.9 | 257 | 1.4 | | RCV 353 | 54.00 | 80B4 |
| 27.7 | 240 | 2.8 | | RCV 453 | 50.50 | 80B4 |
| 30.3 | 220 | 1.4 | | RCV 303 | 46.20 | 80B4 |
| 30.3 | 220 | 1.8 | | RCV 353 | 46.20 | 80B4 |
| 30.6 | 217 | 3.0 | | RCV 453 | 45.70 | 80B4 |
| 34.0 | 196 | 1.6 | | RCV 303 | 41.20 | 80B4 |
| 34.0 | 196 | 2.0 | | RCV 353 | 41.20 | 80B4 |
| 34.7 | 198 | 1.0 | | RCV 252 | 40.29 | 80B4 |
| 36.1 | 190 | 2.9 | | RCV 452 | 38.76 | 80B4 |
| 38.0 | 181 | 1.1 | | RCV 252 | 36.86 | 80B4 |
| 38.0 | 181 | 1.7 | | RCV 302 | 36.82 | 80B4 |
| 38.0 | 181 | 2.2 | | RCV 352 | 36.82 | 80B4 |
| 42.7 | 161 | 1.9 | | RCV 302 | 32.80 | 80B4 |
| 42.7 | 161 | 2.5 | | RCV 352 | 32.80 | 80B4 |
| 44.8 | 154 | 1.3 | | RCV 252 | 31.27 | 80B4 |
| 46.5 | 148 | 1.4 | | RCV 252 | 19.35 | 90S6 |
| 46.9 | 147 | 2.1 | | RCV 302 | 19.21 | 90S6 |
| 46.9 | 147 | 2.7 | | RCV 352 | 19.21 | 90S6 |
| 47.5 | 145 | 2.1 | | RCV 302 | 29.45 | 80B4 |
| 47.5 | 145 | 2.7 | | RCV 352 | 29.45 | 80B4 |
| 54 | 127 | 1.5 | | RCV 252 | 25.75 | 80B4 |
| 58 | 119 | 2.4 | | RCV 302 | 24.19 | 80B4 |
| 66 | 104 | 0.9 | | RCV 202 | 21.19 | 80B4 |
| 66 | 104 | 1.9 | | RCV 252 | 21.16 | 80B4 |
| 72 | 95 | 2.1 | | RCV 252 | 19.35 | 80B4 |
| 78 | 89 | 1.1 | | RCV 202 | 18.01 | 80B4 |
| 85 | 81 | 2.4 | | RCV 252 | 16.42 | 80B4 |
| 90 | 76 | 1.0 | | RCV 202 | 15.48 | 80B4 |
| 96 | 72 | 0.9 | | RCV 162 | 14.63 | 80B4 |
| 100 | 69 | 2.2 | | RCV 252 | 14.01 | 80B4 |
| 100 | 69 | 1.1 | | RCV 202 | 14.00 | 80B4 |
| 117 | 59 | 1.0 | | RCV 162 | 11.95 | 80B4 |
| 120 | 57 | 1.4 | | RCV 202 | 11.67 | 80B4 |
| 122 | 57 | 2.7 | | RCV 252 | 11.51 | 80B4 |
| 133 | 52 | 3.0 | | RCV 252 | 10.53 | 80B4 |
| 135 | 52 | 2.6 | RCV 381 | | 10.40 | 80B4 |
| 141 | 48.7 | 1.6 | | RCV 202 | 9.92 | 80B4 |
| 143 | 48.1 | 1.1 | | RCV 162 | 9.80 | 80B4 |
| 163 | 42.1 | 1.7 | | RCV 202 | 8.57 | 80B4 |
| 179 | 39.2 | 1.2 | RCV 191 | | 7.82 | 80B4 |
| 179 | 39.2 | 1.2 | RCV 241 | | 7.82 | 80B4 |
| 181 | 38.1 | 1.9 | | RCV 202 | 7.75 | 80B4 |
| 184 | 37.4 | 1.3 | | RCV 162 | 7.62 | 80B4 |
| 190 | 36.9 | 2.9 | RCV 281 | | 7.36 | 80B4 |
| 197 | 34.9 | 1.4 | | RCV 162 | 7.11 | 80B4 |




| P1 = 0.75 kW | | | | | |
|---|-----------------------|----|---|---|---|
| 80A2 n ₁ = 2800 min ⁻¹ 80B4 n ₁ = 1400 min ⁻¹ 90S6 n ₁ = 900 min ⁻¹ | | | | | |
| n ₂ min ⁻¹ | Mn ₂ Nm | fs |  |  |  |

| | | | | | | |
|------|------|-----|--|----------------|-------------|------|
| 217 | 31.7 | 2.2 | | RCV 202 | 6.46 | 80B4 |
| 251 | 27.9 | 2.9 | | RCV 281 | 5.57 | 80B4 |
| 255 | 27.0 | 2.7 | | RCV 202 | 5.49 | 80B4 |
| 256 | 27.4 | 1.1 | | RCV 141 | 5.47 | 80B4 |
| 256 | 27.4 | 1.6 | | RCV 191 | 5.47 | 80B4 |
| 256 | 27.4 | 1.6 | | RCV 241 | 5.47 | 80B4 |
| 275 | 25.0 | 1.6 | | RCV 162 | 5.10 | 80B4 |
| 292 | 24.0 | 1.2 | | RCV 141 | 4.79 | 80B4 |
| 297 | 23.6 | 1.9 | | RCV 191 | 4.71 | 80B4 |
| 297 | 23.6 | 1.9 | | RCV 241 | 4.71 | 80B4 |
| 330 | 21.3 | 1.3 | | RCV 141 | 4.24 | 80B4 |
| 341 | 20.6 | 2.0 | | RCV 191 | 4.11 | 80B4 |
| 341 | 20.6 | 2.0 | | RCV 241 | 4.11 | 80B4 |
| 378 | 18.2 | 2.0 | | RCV 162 | 3.70 | 80B4 |
| 412 | 17.0 | 1.6 | | RCV 141 | 3.40 | 80B4 |
| 435 | 16.1 | 2.0 | | RCV 191 | 3.22 | 80B4 |
| 435 | 16.1 | 2.0 | | RCV 241 | 3.22 | 80B4 |
| 502 | 14.0 | 1.9 | | RCV 141 | 2.79 | 80B4 |
| 513 | 13.7 | 2.3 | | RCV 191 | 2.73 | 80B4 |
| 513 | 13.7 | 2.3 | | RCV 241 | 2.73 | 80B4 |
| 601 | 11.7 | 2.1 | | RCV 141 | 2.33 | 80B4 |
| 628 | 11.2 | 2.7 | | RCV 191 | 2.23 | 80B4 |
| 628 | 11.2 | 2.7 | | RCV 241 | 2.23 | 80B4 |
| 714 | 9.8 | 2.0 | | RCV 191 | 1.26 | 90S6 |
| 714 | 9.8 | 2.0 | | RCV 241 | 1.26 | 90S6 |
| 824 | 8.5 | 2.7 | | RCV 141 | 3.40 | 80A2 |
| 1004 | 7.0 | 3.3 | | RCV 141 | 2.79 | 80A2 |
| 1085 | 6.5 | 2.3 | | RCV 141 | 1.29 | 80B4 |
| 1202 | 5.8 | 3.6 | | RCV 141 | 2.33 | 80A2 |
| 2171 | 3.2 | 4.0 | | RCV 141 | 1.29 | 80A2 |

| P1 = 1.1 kW | | | | | |
|---|--|--|--|--|--|
| 80B2 n ₁ = 2800 min ⁻¹ 90S4 n ₁ = 1400 min ⁻¹ 90L6 n ₁ = 900 min ⁻¹ | | | | | |




| | | | | | | |
|------|------|-----|--|----------------|---------------|------|
| 3.0 | 3290 | 1.0 | | RCV 603 | 303.10 | 90L6 |
| 3.6 | 2688 | 1.3 | | RCV 603 | 247.60 | 90L6 |
| 4.1 | 2358 | 1.4 | | RCV 603 | 217.20 | 90L6 |
| 4.3 | 2247 | 1.5 | | RCV 603 | 207.00 | 90L6 |
| 4.6 | 2115 | 1.5 | | RCV 603 | 303.10 | 90S4 |
| 5.7 | 1728 | 2.0 | | RCV 603 | 247.60 | 90S4 |
| 6.4 | 1516 | 2.1 | | RCV 603 | 217.20 | 90S4 |
| 6.8 | 1445 | 2.4 | | RCV 603 | 207.00 | 90S4 |
| 7.4 | 1329 | 2.5 | | RCV 603 | 190.40 | 90S4 |
| 7.6 | 1282 | 0.9 | | RCV 553 | 183.64 | 90S4 |
| 7.9 | 1239 | 2.7 | | RCV 603 | 177.50 | 90S4 |
| 9.7 | 1013 | 1.1 | | RCV 553 | 145.09 | 90S4 |
| 11.8 | 827 | 1.5 | | RCV 553 | 118.46 | 90S4 |
| 12.9 | 760 | 1.5 | | RCV 553 | 108.86 | 90S4 |
| 15.8 | 620 | 1.9 | | RCV 553 | 88.88 | 90S4 |
| 16.5 | 593 | 1.1 | | RCV 453 | 84.90 | 90S4 |
| 18.2 | 536 | 1.2 | | RCV 453 | 76.80 | 90S4 |
| 21.3 | 459 | 0.9 | | RCV 353 | 65.80 | 90S4 |
| 21.4 | 472 | 2.0 | | RCV 552 | 65.48 | 90S4 |
| 22.3 | 438 | 1.6 | | RCV 453 | 62.70 | 90S4 |
| 25.0 | 392 | 1.8 | | RCV 453 | 56.10 | 90S4 |
| 25.9 | 377 | 1.0 | | RCV 353 | 54.00 | 90S4 |
| 26.2 | 385 | 2.6 | | RCV 552 | 53.46 | 90S4 |

**SELEZIONE MOTORIDUTTORI / MOTOR REDUCER SELECTION / AUSWAHL DER GETRIEBEMOTOREN
SELECTION MOTO-REDUCTEURS / SELECCION MOTORREDUCTORES / SELEÇÃO MOTORIDUTOR**

| P1 = 1.1 kW | | | | | |
|----------------------------|-----------------------|----|---|---|---|
| n_2 min ⁻¹ | Mn ₂ Nm | fs |  |  |  |




 80B2 $n_1=2800$ min⁻¹
 90S4 $n_1=1400$ min⁻¹
 90L6 $n_1=900$ min⁻¹

| | | | | | |
|------|------|-----|----------------|--------------|------|
| 27.7 | 352 | 1.9 | RCV 453 | 50.50 | 90S4 |
| 30.3 | 322 | 1.0 | RCV 303 | 46.20 | 90S4 |
| 30.3 | 322 | 1.3 | RCV 353 | 46.20 | 90S4 |
| 30.6 | 319 | 2.1 | RCV 453 | 45.70 | 90S4 |
| 32.1 | 315 | 2.0 | RCV 452 | 43.68 | 90S4 |
| 34.0 | 288 | 1.1 | RCV 303 | 41.20 | 90S4 |
| 34.0 | 288 | 1.4 | RCV 353 | 41.20 | 90S4 |
| 36.1 | 279 | 2.0 | RCV 452 | 38.76 | 90S4 |
| 36.7 | 267 | 2.6 | RCV 453 | 38.20 | 90S4 |
| 38.0 | 265 | 1.2 | RCV 302 | 36.82 | 90S4 |
| 38.0 | 265 | 1.5 | RCV 352 | 36.82 | 90S4 |
| 40.4 | 250 | 2.7 | RCV 452 | 34.67 | 90S4 |
| 40.7 | 240 | 2.8 | RCV 453 | 34.40 | 90S4 |
| 42.7 | 236 | 1.3 | RCV 302 | 32.80 | 90S4 |
| 42.7 | 236 | 1.7 | RCV 352 | 32.80 | 90S4 |
| 44.8 | 225 | 0.9 | RCV 252 | 31.27 | 90S4 |
| 44.9 | 225 | 2.7 | RCV 452 | 31.20 | 90S4 |
| 45.0 | 217 | 3.0 | RCV 453 | 31.10 | 90S4 |
| 47.5 | 212 | 1.4 | RCV 302 | 29.45 | 90S4 |
| 47.5 | 212 | 1.8 | RCV 352 | 29.45 | 90S4 |
| 54 | 186 | 1.0 | RCV 252 | 25.75 | 90S4 |
| 58 | 174 | 1.6 | RCV 302 | 24.19 | 90S4 |
| 58 | 174 | 2.1 | RCV 352 | 24.19 | 90S4 |
| 66 | 152 | 1.3 | RCV 252 | 21.16 | 90S4 |
| 72 | 139 | 1.5 | RCV 252 | 19.35 | 90S4 |
| 73 | 138 | 2.2 | RCV 302 | 19.21 | 90S4 |
| 73 | 138 | 2.9 | RCV 352 | 19.21 | 90S4 |
| 85 | 118 | 1.6 | RCV 252 | 16.42 | 90S4 |
| 91 | 111 | 2.7 | RCV 302 | 15.37 | 90S4 |
| 100 | 101 | 1.5 | RCV 252 | 14.01 | 90S4 |
| 120 | 84 | 0.9 | RCV 202 | 11.67 | 90S4 |
| 122 | 83 | 1.8 | RCV 252 | 11.51 | 90S4 |
| 133 | 76 | 2.1 | RCV 252 | 10.53 | 90S4 |
| 135 | 77 | 1.8 | RCV 381 | 10.40 | 90S4 |
| 141 | 72 | 1.1 | RCV 202 | 9.92 | 90S4 |
| 163 | 62 | 1.2 | RCV 202 | 8.57 | 90S4 |
| 178 | 57 | 2.6 | RCV 252 | 7.88 | 90S4 |
| 181 | 56 | 1.3 | RCV 202 | 7.75 | 90S4 |
| 190 | 54 | 2.0 | RCV 281 | 7.36 | 90S4 |
| 190 | 54 | 2.4 | RCV 381 | 7.36 | 90S4 |
| 219 | 47.0 | 0.9 | RCV 191 | 4.11 | 90L6 |
| 219 | 47.0 | 0.9 | RCV 241 | 4.11 | 90L6 |
| 251 | 41.0 | 2.0 | RCV 281 | 5.57 | 90S4 |
| 255 | 39.5 | 1.8 | RCV 202 | 5.49 | 90S4 |
| 256 | 40.2 | 1.1 | RCV 191 | 5.47 | 90S4 |
| 256 | 40.2 | 1.1 | RCV 241 | 5.47 | 90S4 |
| 297 | 34.6 | 1.3 | RCV 191 | 4.71 | 90S4 |
| 297 | 34.6 | 1.3 | RCV 241 | 4.71 | 90S4 |
| 317 | 32.4 | 2.3 | RCV 281 | 4.41 | 90S4 |
| 341 | 30.2 | 1.4 | RCV 191 | 4.11 | 90S4 |
| 341 | 30.2 | 1.4 | RCV 241 | 4.11 | 90S4 |
| 365 | 28.2 | 2.6 | RCV 281 | 3.84 | 90S4 |
| 435 | 23.7 | 1.4 | RCV 191 | 3.22 | 90S4 |
| 435 | 23.7 | 1.4 | RCV 241 | 3.22 | 90S4 |
| 513 | 20.1 | 1.5 | RCV 191 | 2.73 | 90S4 |
| 513 | 20.1 | 1.5 | RCV 241 | 2.73 | 90S4 |
| 628 | 16.4 | 1.8 | RCV 191 | 2.23 | 90S4 |

| P1 = 1.1 kW | | | | | |
|----------------------------|-----------------------|----|---|---|---|
| n_2 min ⁻¹ | Mn ₂ Nm | fs |  |  |  |

 80B2 $n_1=2800$ min⁻¹
 90S4 $n_1=1400$ min⁻¹
 90L6 $n_1=900$ min⁻¹




| | | | | | |
|------|------|-----|----------------|-------------|------|
| 628 | 16.4 | 1.8 | RCV 241 | 2.23 | 90S4 |
| 714 | 14.4 | 1.4 | RCV 191 | 1.26 | 90L6 |
| 714 | 14.4 | 1.4 | RCV 241 | 1.26 | 90L6 |
| 824 | 12.5 | 1.8 | RCV 141 | 3.40 | 80B2 |
| 1111 | 9.3 | 2.2 | RCV 191 | 1.26 | 90S4 |
| 1111 | 9.3 | 2.2 | RCV 241 | 1.26 | 90S4 |
| 1256 | 8.2 | 3.1 | RCV 191 | 2.23 | 80B2 |
| 1256 | 8.2 | 3.1 | RCV 241 | 2.23 | 80B2 |
| 2171 | 4.7 | 2.7 | RCV 141 | 1.29 | 80B2 |




| P1 = 1.5 kW | | | | | |
|----------------------------|-----------------------|----|---|---|---|
| n_2 min ⁻¹ | Mn ₂ Nm | fs |  |  |  |

 90SA2 $n_1=2800$ min⁻¹
 90LA4 $n_1=1400$ min⁻¹
 100LA6 $n_1=900$ min⁻¹




| | | | | | |
|------|------|-----|----------------|---------------|--------|
| 3.6 | 3665 | 0.9 | RCV 603 | 247.60 | 100LA6 |
| 4.1 | 3215 | 1.0 | RCV 603 | 217.20 | 100LA6 |
| 4.3 | 3064 | 1.1 | RCV 603 | 207.00 | 100LA6 |
| 4.6 | 2884 | 1.1 | RCV 603 | 303.10 | 90LA4 |
| 5.7 | 2356 | 1.5 | RCV 603 | 247.60 | 90LA4 |
| 6.4 | 2067 | 1.5 | RCV 603 | 217.20 | 90LA4 |
| 6.8 | 1970 | 1.8 | RCV 603 | 207.00 | 90LA4 |
| 7.4 | 1812 | 1.9 | RCV 603 | 190.40 | 90LA4 |
| 7.9 | 1689 | 2.0 | RCV 603 | 177.50 | 90LA4 |
| 9.4 | 1411 | 2.4 | RCV 603 | 148.30 | 90LA4 |
| 10.3 | 1299 | 2.6 | RCV 603 | 136.50 | 90LA4 |
| 11.8 | 1127 | 1.1 | RCV 553 | 118.46 | 90LA4 |
| 12.2 | 1096 | 3.0 | RCV 603 | 115.20 | 90LA4 |
| 12.9 | 1036 | 1.1 | RCV 553 | 108.86 | 90LA4 |
| 15.8 | 846 | 1.4 | RCV 553 | 88.88 | 90LA4 |
| 18.2 | 731 | 0.9 | RCV 453 | 76.80 | 90LA4 |
| 19.9 | 668 | 1.7 | RCV 553 | 70.22 | 90LA4 |
| 21.4 | 643 | 1.5 | RCV 552 | 65.48 | 90LA4 |
| 22.3 | 597 | 1.2 | RCV 453 | 62.70 | 90LA4 |
| 25.0 | 534 | 1.3 | RCV 453 | 56.10 | 90LA4 |
| 26.2 | 525 | 1.9 | RCV 552 | 53.46 | 90LA4 |
| 27.7 | 481 | 1.4 | RCV 453 | 50.50 | 90LA4 |
| 29.8 | 462 | 2.4 | RCV 552 | 47.03 | 90LA4 |
| 30.3 | 440 | 0.9 | RCV 353 | 46.20 | 90LA4 |
| 30.6 | 435 | 1.5 | RCV 453 | 45.70 | 90LA4 |
| 32.1 | 429 | 1.5 | RCV 452 | 43.68 | 90LA4 |
| 32.8 | 406 | 1.7 | RCV 453 | 42.70 | 90LA4 |
| 34.0 | 392 | 1.0 | RCV 353 | 41.20 | 90LA4 |
| 36.7 | 364 | 1.9 | RCV 453 | 38.20 | 90LA4 |
| 38.0 | 362 | 0.9 | RCV 302 | 36.82 | 90LA4 |
| 38.0 | 362 | 1.1 | RCV 352 | 36.82 | 90LA4 |
| 40.4 | 341 | 2.0 | RCV 452 | 34.67 | 90LA4 |
| 40.7 | 327 | 2.0 | RCV 453 | 34.40 | 90LA4 |
| 42.7 | 322 | 1.0 | RCV 302 | 32.80 | 90LA4 |
| 42.7 | 322 | 1.2 | RCV 352 | 32.80 | 90LA4 |
| 44.9 | 307 | 2.0 | RCV 452 | 31.20 | 90LA4 |
| 45.0 | 296 | 2.2 | RCV 453 | 31.10 | 90LA4 |
| 45.3 | 304 | 2.3 | RCV 452 | 30.93 | 90LA4 |
| 47.5 | 289 | 1.0 | RCV 302 | 29.45 | 90LA4 |
| 47.5 | 289 | 1.3 | RCV 352 | 29.45 | 90LA4 |
| 51 | 270 | 2.5 | RCV 452 | 27.45 | 90LA4 |
| 57 | 241 | 2.8 | RCV 452 | 24.55 | 90LA4 |
| 58 | 238 | 1.2 | RCV 302 | 24.19 | 90LA4 |
| 58 | 238 | 1.6 | RCV 352 | 24.19 | 90LA4 |




**SELEZIONE MOTORIDUTTORI / MOTOR REDUCER SELECTION / AUSWAHL DER GETRIEBEMOTOREN
 SELECTION MOTO-REDUCTEURS / SELECCION MOTORREDUCTORES / SELEÇÃO MOTORIDUTOR**




| P1 = 1.5 kW | | | 90SA2 n ₁ = 2800 min ⁻¹ 90LA4 n ₁ = 1400 min ⁻¹ 100LA6 n ₁ = 900 min ⁻¹ | | | |
|-------------------------------------|-----------------------|-----|---|---|--------------|---|
| n ₂ min ⁻¹ | Mn ₂ Nm | fs |  |  | i |  |
| 66 | 208 | 0.9 | | RCV 252 | 21.16 | 90LA4 |
| 72 | 190 | 1.1 | | RCV 252 | 19.35 | 90LA4 |
| 73 | 189 | 1.6 | | RCV 302 | 19.21 | 90LA4 |
| 73 | 189 | 2.1 | | RCV 352 | 19.21 | 90LA4 |
| 82 | 168 | 1.8 | | RCV 302 | 17.11 | 90LA4 |
| 82 | 168 | 2.3 | | RCV 352 | 17.11 | 90LA4 |
| 85 | 161 | 1.2 | | RCV 252 | 16.42 | 90LA4 |
| 91 | 151 | 2.0 | | RCV 302 | 15.37 | 90LA4 |
| 91 | 151 | 2.5 | | RCV 352 | 15.37 | 90LA4 |
| 100 | 138 | 1.1 | | RCV 252 | 14.01 | 90LA4 |
| 111 | 124 | 2.3 | | RCV 302 | 12.62 | 90LA4 |
| 111 | 124 | 2.9 | | RCV 352 | 12.62 | 90LA4 |
| 122 | 112 | 2.7 | | RCV 302 | 11.43 | 90LA4 |
| 133 | 103 | 1.5 | | RCV 252 | 10.53 | 90LA4 |
| 135 | 104 | 1.3 | RCV 381 | | 10.40 | 90LA4 |
| 138 | 100 | 3.0 | | RCV 302 | 10.18 | 90LA4 |
| 163 | 84 | 0.9 | | RCV 202 | 8.57 | 90LA4 |
| 178 | 77 | 1.9 | | RCV 252 | 7.88 | 90LA4 |
| 181 | 76 | 0.9 | | RCV 202 | 7.75 | 90LA4 |
| 190 | 74 | 1.5 | RCV 281 | | 7.36 | 90LA4 |
| 190 | 74 | 1.8 | RCV 381 | | 7.36 | 90LA4 |
| 216 | 64 | 2.3 | | RCV 252 | 6.47 | 90LA4 |
| 217 | 64 | 1.1 | | RCV 202 | 6.46 | 90LA4 |
| 236 | 58 | 2.5 | | RCV 252 | 5.92 | 90LA4 |
| 251 | 56 | 1.5 | RCV 281 | | 5.57 | 90LA4 |
| 251 | 56 | 2.3 | RCV 381 | | 5.57 | 90LA4 |
| 255 | 54 | 1.4 | | RCV 202 | 5.49 | 90LA4 |
| 279 | 49.3 | 2.7 | | RCV 252 | 5.02 | 90LA4 |
| 295 | 47.6 | 2.6 | RCV 381 | | 4.75 | 90LA4 |
| 297 | 47.2 | 0.9 | RCV 191 | | 4.71 | 90LA4 |
| 297 | 47.2 | 0.9 | RCV 241 | | 4.71 | 90LA4 |
| 317 | 44.2 | 1.7 | RCV 281 | | 4.41 | 90LA4 |
| 341 | 41.2 | 1.0 | RCV 191 | | 4.11 | 90LA4 |
| 341 | 41.2 | 1.0 | RCV 241 | | 4.11 | 90LA4 |
| 341 | 41.2 | 2.8 | RCV 381 | | 4.11 | 90LA4 |
| 365 | 38.5 | 1.9 | RCV 281 | | 3.84 | 90LA4 |
| 414 | 33.9 | 2.1 | RCV 281 | | 3.38 | 90LA4 |
| 435 | 32.3 | 1.0 | RCV 191 | | 3.22 | 90LA4 |
| 435 | 32.3 | 1.0 | RCV 241 | | 3.22 | 90LA4 |
| 495 | 28.4 | 2.5 | RCV 281 | | 2.83 | 90LA4 |
| 513 | 27.4 | 1.1 | RCV 191 | | 2.73 | 90LA4 |
| 513 | 27.4 | 1.1 | RCV 241 | | 2.73 | 90LA4 |
| 611 | 23.0 | 2.7 | RCV 281 | | 2.29 | 90LA4 |
| 628 | 22.4 | 1.3 | RCV 191 | | 2.23 | 90LA4 |
| 628 | 22.4 | 1.3 | RCV 241 | | 2.23 | 90LA4 |
| 714 | 19.7 | 1.0 | RCV 191 | | 1.26 | 100LA6 |
| 714 | 19.7 | 1.0 | RCV 241 | | 1.26 | 100LA6 |
| 870 | 16.1 | 1.7 | RCV 191 | | 3.22 | 90SA2 |
| 870 | 16.1 | 1.7 | RCV 241 | | 3.22 | 90SA2 |
| 897 | 15.6 | 3.0 | RCV 281 | | 1.56 | 90LA4 |
| 1111 | 12.6 | 1.6 | RCV 191 | | 1.26 | 90LA4 |
| 1111 | 12.6 | 1.6 | RCV 241 | | 1.26 | 90LA4 |
| 1256 | 11.2 | 2.2 | RCV 191 | | 2.23 | 90SA2 |
| 1256 | 11.2 | 2.2 | RCV 241 | | 2.23 | 90SA2 |
| 2222 | 6.3 | 2.7 | RCV 191 | | 1.26 | 90SA2 |
| 2222 | 6.3 | 2.7 | RCV 241 | | 1.26 | 90SA2 |

| P1 = 1.85 kW | | | 90SB2 n ₁ = 2800 min ⁻¹ 90LB4 n ₁ = 1400 min ⁻¹ 100LB6 n ₁ = 900 min ⁻¹ | | | |
|-------------------------------------|-----------------------|-----|---|---|---------------|---|
| n ₂ min ⁻¹ | Mn ₂ Nm | fs |  |  | i |  |
| 4.6 | 3557 | 0.9 | | RCV 603 | 303.10 | 90LB4 |
| 5.7 | 2906 | 1.2 | | RCV 603 | 247.60 | 90LB4 |
| 6.4 | 2549 | 1.3 | | RCV 603 | 217.20 | 90LB4 |
| 6.8 | 2429 | 1.4 | | RCV 603 | 207.00 | 90LB4 |
| 7.4 | 2235 | 1.5 | | RCV 603 | 190.40 | 90LB4 |
| 7.9 | 2083 | 1.6 | | RCV 603 | 177.50 | 90LB4 |
| 9.4 | 1741 | 1.9 | | RCV 603 | 148.30 | 90LB4 |
| 10.3 | 1602 | 2.1 | | RCV 603 | 136.50 | 90LB4 |
| 11.8 | 1390 | 0.9 | | RCV 553 | 118.46 | 90LB4 |
| 12.2 | 1352 | 2.4 | | RCV 603 | 115.20 | 90LB4 |
| 12.9 | 1278 | 0.9 | | RCV 553 | 108.86 | 90LB4 |
| 14.5 | 1130 | 3.0 | | RCV 603 | 96.30 | 90LB4 |
| 15.8 | 1043 | 1.1 | | RCV 553 | 88.88 | 90LB4 |
| 15.9 | 1033 | 3.0 | | RCV 603 | 88.00 | 90LB4 |
| 19.9 | 824 | 1.3 | | RCV 553 | 70.22 | 90LB4 |
| 21.4 | 793 | 1.2 | | RCV 552 | 65.48 | 90LB4 |
| 22.3 | 736 | 0.9 | | RCV 453 | 62.70 | 90LB4 |
| 25.0 | 658 | 1.1 | | RCV 453 | 56.10 | 90LB4 |
| 26.2 | 648 | 1.6 | | RCV 552 | 53.46 | 90LB4 |
| 27.7 | 593 | 1.1 | | RCV 453 | 50.50 | 90LB4 |
| 29.8 | 570 | 2.0 | | RCV 552 | 47.03 | 90LB4 |
| 30.6 | 536 | 1.2 | | RCV 453 | 45.70 | 90LB4 |
| 32.1 | 529 | 1.2 | | RCV 452 | 43.68 | 90LB4 |
| 32.8 | 501 | 1.4 | | RCV 453 | 42.70 | 90LB4 |
| 36.1 | 470 | 1.2 | | RCV 452 | 38.76 | 90LB4 |
| 36.5 | 465 | 2.6 | | RCV 552 | 38.40 | 90LB4 |
| 36.7 | 448 | 1.5 | | RCV 453 | 38.20 | 90LB4 |
| 38.0 | 446 | 0.9 | | RCV 352 | 36.82 | 90LB4 |
| 40.4 | 420 | 1.6 | | RCV 452 | 34.67 | 90LB4 |
| 40.7 | 404 | 1.7 | | RCV 453 | 34.40 | 90LB4 |
| 42.7 | 397 | 1.0 | | RCV 352 | 32.80 | 90LB4 |
| 44.9 | 378 | 1.6 | | RCV 452 | 31.20 | 90LB4 |
| 45.0 | 365 | 1.8 | | RCV 453 | 31.10 | 90LB4 |
| 45.3 | 375 | 1.9 | | RCV 452 | 30.93 | 90LB4 |
| 47.5 | 357 | 1.1 | | RCV 352 | 29.45 | 90LB4 |
| 51 | 333 | 2.1 | | RCV 452 | 27.45 | 90LB4 |
| 57 | 297 | 2.3 | | RCV 452 | 24.55 | 90LB4 |
| 58 | 293 | 1.0 | | RCV 302 | 24.19 | 90LB4 |
| 58 | 293 | 1.3 | | RCV 352 | 24.19 | 90LB4 |
| 63 | 268 | 2.5 | | RCV 452 | 22.09 | 90LB4 |
| 70 | 242 | 2.7 | | RCV 452 | 19.99 | 90LB4 |
| 72 | 234 | 0.9 | | RCV 252 | 19.35 | 90LB4 |
| 73 | 233 | 1.3 | | RCV 302 | 19.21 | 90LB4 |
| 73 | 233 | 1.7 | | RCV 352 | 19.21 | 90LB4 |
| 82 | 207 | 1.5 | | RCV 302 | 17.11 | 90LB4 |
| 82 | 207 | 1.9 | | RCV 352 | 17.11 | 90LB4 |
| 85 | 199 | 1.0 | | RCV 252 | 16.42 | 90LB4 |
| 91 | 186 | 1.6 | | RCV 302 | 15.37 | 90LB4 |
| 91 | 186 | 2.0 | | RCV 352 | 15.37 | 90LB4 |
| 100 | 170 | 0.9 | | RCV 252 | 14.01 | 90LB4 |
| 111 | 153 | 1.8 | | RCV 302 | 12.62 | 90LB4 |
| 111 | 153 | 2.4 | | RCV 352 | 12.62 | 90LB4 |
| 122 | 139 | 1.1 | | RCV 252 | 11.51 | 90LB4 |
| 122 | 139 | 2.2 | | RCV 302 | 11.43 | 90LB4 |
| 122 | 139 | 2.8 | | RCV 352 | 11.43 | 90LB4 |
| 133 | 128 | 1.2 | | RCV 252 | 10.53 | 90LB4 |




**SELEZIONE MOTORIDUTTORI / MOTOR REDUCER SELECTION / AUSWAHL DER GETRIEBEMOTOREN
 SELECTION MOTO-REDUCTEURS / SELECCION MOTORREDUCTORES / SELEÇÃO MOTORIDUTOR**

| P1 = 1.85 kW | | 90SB2 n ₁ = 2800 min ⁻¹ 90LB4 n ₁ = 1400 min ⁻¹ 100LB6 n ₁ = 900 min ⁻¹ | | | | | |
|-------------------------------------|-----------------------|---|---|---|--------------|---|--|
| n ₂ min ⁻¹ | Mn ₂ Nm | fs |  |  | i |  | |
| 135 | 129 | 1.1 | RCV 381 | | 10.40 | 90LB4 | |
| 138 | 123 | 2.4 | | RCV 302 | 10.18 | 90LB4 | |
| 153 | 111 | 2.6 | | RCV 302 | 9.14 | 90LB4 | |
| 157 | 108 | 1.4 | | RCV 252 | 8.93 | 90LB4 | |
| 180 | 94 | 2.8 | | RCV 302 | 7.78 | 90LB4 | |
| 186 | 91 | 2.7 | | RCV 302 | 7.51 | 90LB4 | |
| 190 | 91 | 1.2 | RCV 281 | | 7.36 | 90LB4 | |
| 190 | 91 | 1.5 | RCV 381 | | 7.36 | 90LB4 | |
| 202 | 84 | 3.0 | | RCV 302 | 6.93 | 90LB4 | |
| 216 | 78 | 1.9 | | RCV 252 | 6.47 | 90LB4 | |
| 217 | 78 | 0.9 | | RCV 202 | 6.46 | 90LB4 | |
| 236 | 72 | 2.0 | | RCV 252 | 5.92 | 90LB4 | |
| 251 | 69 | 1.2 | RCV 281 | | 5.57 | 90LB4 | |
| 251 | 69 | 1.9 | RCV 381 | | 5.57 | 90LB4 | |
| 255 | 67 | 1.1 | | RCV 202 | 5.49 | 90LB4 | |
| 279 | 61 | 2.2 | | RCV 252 | 5.02 | 90LB4 | |
| 295 | 59 | 2.1 | RCV 381 | | 4.75 | 90LB4 | |
| 317 | 55 | 1.3 | RCV 281 | | 4.41 | 90LB4 | |
| 341 | 51 | 2.3 | RCV 381 | | 4.11 | 90LB4 | |
| 365 | 47.5 | 1.5 | RCV 281 | | 3.84 | 90LB4 | |
| 414 | 41.8 | 1.7 | RCV 281 | | 3.38 | 90LB4 | |
| 414 | 41.8 | 2.6 | RCV 381 | | 3.38 | 90LB4 | |
| 467 | 37.1 | 3.0 | RCV 381 | | 3.00 | 90LB4 | |
| 495 | 35.0 | 2.1 | RCV 281 | | 2.83 | 90LB4 | |
| 513 | 33.8 | 0.9 | RCV 191 | | 2.73 | 90LB4 | |
| 513 | 33.8 | 0.9 | RCV 241 | | 2.73 | 90LB4 | |
| 611 | 28.3 | 2.2 | RCV 281 | | 2.29 | 90LB4 | |
| 628 | 27.6 | 1.1 | RCV 191 | | 2.23 | 90LB4 | |
| 628 | 27.6 | 1.1 | RCV 241 | | 2.23 | 90LB4 | |
| 789 | 21.9 | 1.8 | RCV 281 | | 1.14 | 100LB6 | |
| 897 | 19.3 | 2.4 | RCV 281 | | 1.56 | 90LB4 | |
| 1111 | 15.6 | 1.3 | RCV 191 | | 1.26 | 90LB4 | |
| 1111 | 15.6 | 1.3 | RCV 241 | | 1.26 | 90LB4 | |
| 1228 | 14.1 | 2.8 | RCV 281 | | 1.14 | 90LB4 | |
| 1256 | 13.8 | 1.8 | RCV 191 | | 2.23 | 90SB2 | |
| 1256 | 13.8 | 1.8 | RCV 241 | | 2.23 | 90SB2 | |
| 2222 | 7.8 | 2.2 | RCV 191 | | 1.26 | 90SB2 | |
| 2222 | 7.8 | 2.2 | RCV 241 | | 1.26 | 90SB2 | |

| P1 = 2.2 kW | | 90L2 n ₁ = 2800 min ⁻¹ 100LA4 n ₁ = 1400 min ⁻¹ | | | | | |
|-------------------------------------|-----------------------|--|---|---|---------------|---|--|
| n ₂ min ⁻¹ | Mn ₂ Nm | fs |  |  | i |  | |
| 5.7 | 3456 | 1.0 | | RCV 603 | 247.60 | 100LA4 | |
| 6.4 | 3031 | 1.1 | | RCV 603 | 217.20 | 100LA4 | |
| 6.8 | 2889 | 1.2 | | RCV 603 | 207.00 | 100LA4 | |
| 7.4 | 2657 | 1.3 | | RCV 603 | 190.40 | 100LA4 | |
| 7.9 | 2477 | 1.3 | | RCV 603 | 177.50 | 100LA4 | |
| 9.4 | 2070 | 1.6 | | RCV 603 | 148.30 | 100LA4 | |
| 10.3 | 1905 | 1.8 | | RCV 603 | 136.50 | 100LA4 | |
| 12.2 | 1608 | 2.0 | | RCV 603 | 115.20 | 100LA4 | |
| 14.5 | 1344 | 2.5 | | RCV 603 | 96.30 | 100LA4 | |
| 15.8 | 1241 | 1.0 | | RCV 553 | 88.88 | 100LA4 | |
| 15.9 | 1228 | 2.5 | | RCV 603 | 88.00 | 100LA4 | |
| 19.5 | 1004 | 3.2 | | RCV 603 | 71.90 | 100LA4 | |
| 19.9 | 980 | 1.1 | | RCV 553 | 70.22 | 100LA4 | |
| 21.4 | 943 | 1.0 | | RCV 552 | 65.48 | 100LA4 | |
| 25.0 | 783 | 0.9 | | RCV 453 | 56.10 | 100LA4 | |

| P1 = 2.2 kW | | 90L2 n ₁ = 2800 min ⁻¹ 100LA4 n ₁ = 1400 min ⁻¹ | | | | | |
|-------------------------------------|-----------------------|--|---|---|--------------|---|--|
| n ₂ min ⁻¹ | Mn ₂ Nm | fs |  |  | i |  | |
| 26.2 | 770 | 1.3 | | RCV 552 | 53.46 | 100LA4 | |
| 27.7 | 705 | 1.0 | | RCV 453 | 50.50 | 100LA4 | |
| 29.8 | 678 | 1.7 | | RCV 552 | 47.03 | 100LA4 | |
| 30.6 | 638 | 1.0 | | RCV 453 | 45.70 | 100LA4 | |
| 32.1 | 629 | 1.0 | | RCV 452 | 43.68 | 100LA4 | |
| 36.1 | 558 | 1.0 | | RCV 452 | 38.76 | 100LA4 | |
| 36.5 | 553 | 2.2 | | RCV 552 | 38.40 | 100LA4 | |
| 36.7 | 533 | 1.3 | | RCV 453 | 38.20 | 100LA4 | |
| 40.4 | 500 | 1.4 | | RCV 452 | 34.67 | 100LA4 | |
| 40.7 | 480 | 1.4 | | RCV 453 | 34.40 | 100LA4 | |
| 44.9 | 450 | 1.4 | | RCV 452 | 31.20 | 100LA4 | |
| 45.0 | 434 | 1.5 | | RCV 453 | 31.10 | 100LA4 | |
| 45.3 | 446 | 1.6 | | RCV 452 | 30.93 | 100LA4 | |
| 45.8 | 440 | 2.7 | | RCV 552 | 30.55 | 100LA4 | |
| 47.5 | 424 | 0.9 | | RCV 352 | 29.45 | 100LA4 | |
| 51 | 396 | 1.7 | | RCV 452 | 27.45 | 100LA4 | |
| 57 | 354 | 1.9 | | RCV 452 | 24.55 | 100LA4 | |
| 58 | 349 | 1.1 | | RCV 352 | 24.19 | 100LA4 | |
| 63 | 318 | 2.1 | | RCV 452 | 22.09 | 100LA4 | |
| 70 | 288 | 2.2 | | RCV 452 | 19.99 | 100LA4 | |
| 73 | 277 | 1.1 | | RCV 302 | 19.21 | 100LA4 | |
| 73 | 277 | 1.4 | | RCV 352 | 19.21 | 100LA4 | |
| 79 | 255 | 2.6 | | RCV 452 | 17.70 | 100LA4 | |
| 82 | 247 | 1.2 | | RCV 302 | 17.11 | 100LA4 | |
| 82 | 247 | 1.6 | | RCV 352 | 17.11 | 100LA4 | |
| 88 | 228 | 2.9 | | RCV 452 | 15.83 | 100LA4 | |
| 91 | 221 | 1.3 | | RCV 302 | 15.37 | 100LA4 | |
| 91 | 221 | 1.7 | | RCV 352 | 15.37 | 100LA4 | |
| 111 | 182 | 1.5 | | RCV 302 | 12.62 | 100LA4 | |
| 111 | 182 | 2.0 | | RCV 352 | 12.62 | 100LA4 | |
| 122 | 166 | 0.9 | | RCV 252 | 11.51 | 100LA4 | |
| 122 | 165 | 1.9 | | RCV 302 | 11.43 | 100LA4 | |
| 122 | 165 | 2.4 | | RCV 352 | 11.43 | 100LA4 | |
| 133 | 152 | 1.0 | | RCV 252 | 10.53 | 100LA4 | |
| 135 | 153 | 0.9 | RCV 381 | | 10.40 | 100LA4 | |
| 138 | 147 | 2.0 | | RCV 302 | 10.18 | 100LA4 | |
| 138 | 147 | 2.6 | | RCV 352 | 10.18 | 100LA4 | |
| 153 | 132 | 2.2 | | RCV 302 | 9.14 | 100LA4 | |
| 153 | 132 | 2.8 | | RCV 352 | 9.14 | 100LA4 | |
| 157 | 129 | 1.2 | | RCV 252 | 8.93 | 100LA4 | |
| 180 | 112 | 2.3 | | RCV 302 | 7.78 | 100LA4 | |
| 186 | 108 | 2.3 | | RCV 302 | 7.51 | 100LA4 | |
| 190 | 108 | 1.0 | RCV 281 | | 7.36 | 100LA4 | |
| 190 | 108 | 1.2 | RCV 381 | | 7.36 | 100LA4 | |
| 202 | 100 | 2.5 | | RCV 302 | 6.93 | 100LA4 | |
| 225 | 90 | 2.8 | | RCV 302 | 6.22 | 100LA4 | |
| 236 | 85 | 1.7 | | RCV 252 | 5.92 | 100LA4 | |
| 251 | 82 | 1.0 | RCV 281 | | 5.57 | 100LA4 | |
| 251 | 82 | 1.6 | RCV 381 | | 5.57 | 100LA4 | |
| 279 | 72 | 1.8 | | RCV 252 | 5.02 | 100LA4 | |
| 295 | 70 | 1.8 | RCV 381 | | 4.75 | 100LA4 | |
| 317 | 65 | 1.1 | RCV 281 | | 4.41 | 100LA4 | |
| 341 | 60 | 1.9 | RCV 381 | | 4.11 | 100LA4 | |
| 365 | 57 | 1.3 | RCV 281 | | 3.84 | 100LA4 | |
| 414 | 50 | 1.4 | RCV 281 | | 3.38 | 100LA4 | |
| 414 | 50 | 2.2 | RCV 381 | | 3.38 | 100LA4 | |
| 467 | 44.1 | 2.5 | RCV 381 | | 3.00 | 100LA4 | |




SELEZIONE MOTORIDUTTORI / MOTOR REDUCER SELECTION / AUSWAHL DER GETRIEBEMOTOREN
 SELECTION MOTO-REDUCTEURS / SELECCION MOTORREDUCTORES / SELEÇÃO MOTORIDUTOR

| P1 = 2.2 kW | | | | | | |
|-------------------------------------|-----------------------|-----|---|---|------|---|
| n ₂ min ⁻¹ | Mn ₂ Nm | fs |  |  | i |  |
| 495 | 41.6 | 1.7 | RCV 281 | | 2.83 | 100LA4 |
| 611 | 33.7 | 1.8 | RCV 281 | | 2.29 | 100LA4 |
| 611 | 33.7 | 2.8 | RCV 381 | | 2.29 | 100LA4 |
| 628 | 32.8 | 0.9 | RCV 191 | | 2.23 | 100LA4 |
| 628 | 32.8 | 0.9 | RCV 241 | | 2.23 | 100LA4 |
| 681 | 30.2 | 1.1 | RCV 191 | | 4.11 | 90L2 |
| 681 | 30.2 | 1.1 | RCV 241 | | 4.11 | 90L2 |
| 729 | 28.2 | 2.1 | RCV 281 | | 3.84 | 90L2 |
| 870 | 23.7 | 1.1 | RCV 191 | | 3.22 | 90L2 |
| 870 | 23.7 | 1.1 | RCV 241 | | 3.22 | 90L2 |
| 897 | 22.9 | 2.0 | RCV 281 | | 1.56 | 100LA4 |
| 1111 | 18.5 | 1.1 | RCV 191 | | 1.26 | 100LA4 |
| 1111 | 18.5 | 1.1 | RCV 241 | | 1.26 | 100LA4 |
| 1228 | 16.8 | 2.4 | RCV 281 | | 1.14 | 100LA4 |
| 1256 | 16.4 | 1.5 | RCV 191 | | 2.23 | 90L2 |
| 1256 | 16.4 | 1.5 | RCV 241 | | 2.23 | 90L2 |
| 2222 | 9.3 | 1.8 | RCV 191 | | 1.26 | 90L2 |
| 2222 | 9.3 | 1.8 | RCV 241 | | 1.26 | 90L2 |

P1 = **3.0** kW

100L2 n₁= 2800 min⁻¹
 100LB4 n₁= 1400 min⁻¹
 132S6 n₁= 900 min⁻¹

| | | | | | |
|------|------|-----|----------------|---------------|--------|
| 6.8 | 3940 | 0.9 | RCV 603 | 207.00 | 100LB4 |
| 7.4 | 3624 | 0.9 | RCV 603 | 190.40 | 100LB4 |
| 7.9 | 3378 | 1.0 | RCV 603 | 177.50 | 100LB4 |
| 9.4 | 2822 | 1.2 | RCV 603 | 148.30 | 100LB4 |
| 10.3 | 2598 | 1.3 | RCV 603 | 136.50 | 100LB4 |
| 12.2 | 2193 | 1.5 | RCV 603 | 115.20 | 100LB4 |
| 14.5 | 1833 | 1.8 | RCV 603 | 96.30 | 100LB4 |
| 15.9 | 1675 | 1.8 | RCV 603 | 88.00 | 100LB4 |
| 19.5 | 1368 | 2.4 | RCV 603 | 71.90 | 100LB4 |
| 23.3 | 1144 | 2.9 | RCV 603 | 60.10 | 100LB4 |
| 26.2 | 1050 | 1.0 | RCV 552 | 53.46 | 100LB4 |
| 29.8 | 924 | 1.2 | RCV 552 | 47.03 | 100LB4 |
| 36.5 | 754 | 1.6 | RCV 552 | 38.40 | 100LB4 |
| 36.7 | 727 | 0.9 | RCV 453 | 38.20 | 100LB4 |
| 40.4 | 681 | 1.0 | RCV 452 | 34.67 | 100LB4 |
| 40.7 | 655 | 1.0 | RCV 453 | 34.40 | 100LB4 |
| 44.9 | 613 | 1.0 | RCV 452 | 31.20 | 100LB4 |
| 45.0 | 592 | 1.1 | RCV 453 | 31.10 | 100LB4 |
| 45.3 | 608 | 1.2 | RCV 452 | 30.93 | 100LB4 |
| 45.8 | 600 | 2.0 | RCV 552 | 30.55 | 100LB4 |
| 51 | 539 | 1.3 | RCV 452 | 27.45 | 100LB4 |
| 56 | 490 | 2.4 | RCV 552 | 24.94 | 100LB4 |
| 57 | 482 | 1.4 | RCV 452 | 24.55 | 100LB4 |
| 63 | 434 | 1.5 | RCV 452 | 22.09 | 100LB4 |
| 70 | 393 | 1.6 | RCV 452 | 19.99 | 100LB4 |
| 73 | 377 | 1.1 | RCV 352 | 19.21 | 100LB4 |
| 79 | 348 | 1.9 | RCV 452 | 17.70 | 100LB4 |
| 82 | 336 | 0.9 | RCV 302 | 17.11 | 100LB4 |
| 82 | 336 | 1.2 | RCV 352 | 17.11 | 100LB4 |
| 88 | 311 | 2.2 | RCV 452 | 15.83 | 100LB4 |
| 91 | 302 | 1.0 | RCV 302 | 15.37 | 100LB4 |
| 91 | 302 | 1.3 | RCV 352 | 15.37 | 100LB4 |
| 98 | 280 | 2.3 | RCV 452 | 14.25 | 100LB4 |
| 109 | 253 | 2.5 | RCV 452 | 12.89 | 100LB4 |
| 111 | 248 | 1.1 | RCV 302 | 12.62 | 100LB4 |




| P1 = 3.0 kW | | | | | | |
|-------------------------------------|-----------------------|-----|---|---|--------|---|
| n ₂ min ⁻¹ | Mn ₂ Nm | fs |  |  | i |  |
| 111 | 248 | 1.5 | RCV 352 | 12.62 | 100LB4 | |
| 122 | 225 | 1.4 | RCV 302 | 11.43 | 100LB4 | |
| 122 | 225 | 1.7 | RCV 352 | 11.43 | 100LB4 | |
| 125 | 220 | 3.0 | RCV 452 | 11.18 | 100LB4 | |
| 138 | 200 | 1.5 | RCV 302 | 10.18 | 100LB4 | |
| 138 | 200 | 1.9 | RCV 352 | 10.18 | 100LB4 | |
| 153 | 180 | 1.6 | RCV 302 | 9.14 | 100LB4 | |
| 153 | 180 | 2.1 | RCV 352 | 9.14 | 100LB4 | |
| 157 | 175 | 0.9 | RCV 252 | 8.93 | 100LB4 | |
| 178 | 155 | 1.0 | RCV 252 | 7.88 | 100LB4 | |
| 180 | 153 | 1.7 | RCV 302 | 7.78 | 100LB4 | |
| 180 | 153 | 2.5 | RCV 352 | 7.78 | 100LB4 | |
| 186 | 148 | 1.7 | RCV 302 | 7.51 | 100LB4 | |
| 186 | 148 | 2.4 | RCV 352 | 7.51 | 100LB4 | |
| 190 | 148 | 0.9 | RCV 381 | 7.36 | 100LB4 | |
| 202 | 136 | 1.9 | RCV 302 | 6.93 | 100LB4 | |
| 202 | 136 | 2.7 | RCV 352 | 6.93 | 100LB4 | |
| 216 | 127 | 1.1 | RCV 252 | 6.47 | 100LB4 | |
| 225 | 122 | 2.1 | RCV 302 | 6.22 | 100LB4 | |
| 225 | 122 | 3.0 | RCV 352 | 6.22 | 100LB4 | |
| 236 | 116 | 1.2 | RCV 252 | 5.92 | 100LB4 | |
| 251 | 112 | 1.2 | RCV 381 | 5.57 | 100LB4 | |
| 274 | 100 | 2.5 | RCV 302 | 5.11 | 100LB4 | |
| 279 | 99 | 1.3 | RCV 252 | 5.02 | 100LB4 | |
| 295 | 95 | 1.3 | RCV 381 | 4.75 | 100LB4 | |
| 307 | 90 | 2.9 | RCV 302 | 4.56 | 100LB4 | |
| 341 | 82 | 1.4 | RCV 381 | 4.11 | 100LB4 | |
| 365 | 77 | 0.9 | RCV 281 | 3.84 | 100LB4 | |
| 414 | 68 | 1.1 | RCV 281 | 3.38 | 100LB4 | |
| 414 | 68 | 1.6 | RCV 381 | 3.38 | 100LB4 | |
| 467 | 60 | 1.8 | RCV 381 | 3.00 | 100LB4 | |
| 611 | 45.9 | 1.3 | RCV 281 | 2.29 | 100LB4 | |
| 611 | 45.9 | 2.0 | RCV 381 | 2.29 | 100LB4 | |
| 729 | 38.5 | 1.6 | RCV 281 | 3.84 | 100L2 | |
| 789 | 35.6 | 1.1 | RCV 281 | 1.14 | 132S6 | |
| 859 | 32.7 | 2.8 | RCV 381 | 1.63 | 100LB4 | |
| 897 | 31.3 | 1.5 | RCV 281 | 1.56 | 100LB4 | |
| 989 | 28.4 | 2.1 | RCV 281 | 2.83 | 100L2 | |
| 1026 | 27.4 | 1.0 | RCV 191 | 2.73 | 100L2 | |
| 1026 | 27.4 | 1.0 | RCV 241 | 2.73 | 100L2 | |
| 1223 | 23.0 | 2.2 | RCV 281 | 2.29 | 100L2 | |
| 1228 | 22.9 | 1.8 | RCV 281 | 1.14 | 100LB4 | |
| 1256 | 22.4 | 1.1 | RCV 191 | 2.23 | 100L2 | |
| 1256 | 22.4 | 1.1 | RCV 241 | 2.23 | 100L2 | |
| 1795 | 15.6 | 2.5 | RCV 281 | 1.56 | 100L2 | |
| 2222 | 12.6 | 1.3 | RCV 191 | 1.26 | 100L2 | |
| 2222 | 12.6 | 1.3 | RCV 241 | 1.26 | 100L2 | |
| 2456 | 11.4 | 2.9 | RCV 281 | 1.14 | 100L2 | |




P1 = **4.0** kW




112M2 n₁= 2800 min⁻¹
 112M4 n₁= 1400 min⁻¹

| | | | | | |
|------|------|-----|----------------|---------------|-------|
| 9.4 | 3763 | 0.9 | RCV 603 | 148.30 | 112M4 |
| 10.3 | 3464 | 1.0 | RCV 603 | 136.50 | 112M4 |
| 12.2 | 2923 | 1.1 | RCV 603 | 115.20 | 112M4 |
| 14.5 | 2444 | 1.4 | RCV 603 | 96.30 | 112M4 |
| 15.9 | 2233 | 1.4 | RCV 603 | 88.00 | 112M4 |




**SELEZIONE MOTORIDUTTORI / MOTOR REDUCER SELECTION / AUSWAHL DER GETRIEBEMOTOREN
SELECTION MOTO-REDUCTEURS / SELECCION MOTORREDUCTORES / SELEÇÃO MOTORIDUTOR**

| P1 = 4.0 kW | | | | | | |
|--|-----------------------|-----|---|---|--------------|---|
| 112M2 n ₁ = 2800 min ⁻¹ 112M4 n ₁ = 1400 min ⁻¹ | | | | | | |
| n ₂ min ⁻¹ | Mn ₂ Nm | fs |  |  | i |  |
| 19.5 | 1825 | 1.8 | | RCV 603 | 71.90 | 112M4 |
| 23.3 | 1525 | 2.2 | | RCV 603 | 60.10 | 112M4 |
| 25.1 | 1416 | 2.3 | | RCV 603 | 55.80 | 112M4 |
| 29.8 | 1232 | 0.9 | | RCV 552 | 47.03 | 112M4 |
| 30.0 | 1183 | 2.8 | | RCV 603 | 46.60 | 112M4 |
| 31.6 | 1160 | 2.5 | | RCV 602 | 44.29 | 112M4 |
| 35.2 | 1042 | 2.8 | | RCV 602 | 39.79 | 112M4 |
| 36.5 | 1006 | 1.2 | | RCV 552 | 38.40 | 112M4 |
| 45.3 | 810 | 0.9 | | RCV 452 | 30.93 | 112M4 |
| 45.8 | 800 | 1.5 | | RCV 552 | 30.55 | 112M4 |
| 51 | 719 | 1.0 | | RCV 452 | 27.45 | 112M4 |
| 56 | 653 | 1.8 | | RCV 552 | 24.94 | 112M4 |
| 57 | 643 | 1.1 | | RCV 452 | 24.55 | 112M4 |
| 63 | 579 | 1.2 | | RCV 452 | 22.09 | 112M4 |
| 70 | 524 | 1.2 | | RCV 452 | 19.99 | 112M4 |
| 73 | 499 | 2.3 | | RCV 552 | 19.06 | 112M4 |
| 79 | 464 | 1.5 | | RCV 452 | 17.70 | 112M4 |
| 82 | 448 | 0.9 | | RCV 352 | 17.11 | 112M4 |
| 88 | 415 | 1.6 | | RCV 452 | 15.83 | 112M4 |
| 90 | 408 | 2.7 | | RCV 552 | 15.56 | 112M4 |
| 91 | 403 | 0.9 | | RCV 352 | 15.37 | 112M4 |
| 98 | 373 | 1.7 | | RCV 452 | 14.25 | 112M4 |
| 109 | 338 | 1.9 | | RCV 452 | 12.89 | 112M4 |
| 111 | 331 | 1.1 | | RCV 352 | 12.62 | 112M4 |
| 122 | 299 | 1.0 | | RCV 302 | 11.43 | 112M4 |
| 122 | 299 | 1.3 | | RCV 352 | 11.43 | 112M4 |
| 125 | 293 | 2.3 | | RCV 452 | 11.18 | 112M4 |
| 138 | 267 | 1.1 | | RCV 302 | 10.18 | 112M4 |
| 138 | 267 | 1.4 | | RCV 352 | 10.18 | 112M4 |
| 140 | 262 | 2.5 | | RCV 452 | 10.00 | 112M4 |
| 153 | 239 | 1.2 | | RCV 302 | 9.14 | 112M4 |
| 153 | 239 | 1.5 | | RCV 352 | 9.14 | 112M4 |
| 156 | 236 | 2.7 | | RCV 452 | 9.00 | 112M4 |
| 172 | 213 | 2.9 | | RCV 452 | 8.14 | 112M4 |
| 180 | 204 | 1.3 | | RCV 302 | 7.78 | 112M4 |
| 180 | 204 | 1.9 | | RCV 352 | 7.78 | 112M4 |
| 186 | 197 | 1.3 | | RCV 302 | 7.51 | 112M4 |
| 186 | 197 | 1.8 | | RCV 352 | 7.51 | 112M4 |
| 202 | 182 | 1.4 | | RCV 302 | 6.93 | 112M4 |
| 202 | 182 | 2.1 | | RCV 352 | 6.93 | 112M4 |
| 225 | 163 | 1.6 | | RCV 302 | 6.22 | 112M4 |
| 225 | 163 | 2.2 | | RCV 352 | 6.22 | 112M4 |
| 236 | 155 | 0.9 | | RCV 252 | 5.92 | 112M4 |
| 251 | 149 | 0.9 | RCV 381 | | 5.57 | 112M4 |
| 274 | 134 | 1.9 | | RCV 302 | 5.11 | 112M4 |
| 274 | 134 | 2.6 | | RCV 352 | 5.11 | 112M4 |
| 279 | 132 | 1.0 | | RCV 252 | 5.02 | 112M4 |
| 295 | 127 | 1.0 | RCV 381 | | 4.75 | 112M4 |
| 307 | 119 | 2.2 | | RCV 302 | 4.56 | 112M4 |
| 307 | 119 | 2.8 | | RCV 352 | 4.56 | 112M4 |
| 341 | 110 | 1.0 | RCV 381 | | 4.11 | 112M4 |
| 374 | 98 | 2.5 | | RCV 302 | 3.74 | 112M4 |
| 414 | 90 | 1.2 | RCV 381 | | 3.38 | 112M4 |
| 467 | 80 | 1.4 | RCV 381 | | 3.00 | 112M4 |
| 495 | 76 | 1.0 | RCV 281 | | 2.83 | 112M4 |
| 611 | 61 | 1.0 | RCV 281 | | 2.29 | 112M4 |
| 611 | 61 | 1.5 | RCV 381 | | 2.29 | 112M4 |




| P1 = 4.0 kW | | | | | | |
|--|-----------------------|-----|---|---|-------------|---|
| 112M2 n ₁ = 2800 min ⁻¹ 112M4 n ₁ = 1400 min ⁻¹ | | | | | | |
| n ₂ min ⁻¹ | Mn ₂ Nm | fs |  |  | i |  |
| 681 | 55 | 1.7 | RCV 381 | | 4.11 | 112M2 |
| 729 | 51 | 1.2 | RCV 281 | | 3.84 | 112M2 |
| 828 | 45.2 | 1.3 | RCV 281 | | 3.38 | 112M2 |
| 859 | 43.6 | 2.1 | RCV 381 | | 1.63 | 112M4 |
| 897 | 41.7 | 1.1 | RCV 281 | | 1.56 | 112M4 |
| 933 | 40.1 | 2.3 | RCV 381 | | 3.00 | 112M2 |
| 989 | 37.8 | 1.6 | RCV 281 | | 2.83 | 112M2 |
| 1223 | 30.6 | 1.7 | RCV 281 | | 2.29 | 112M2 |
| 1223 | 30.6 | 2.6 | RCV 381 | | 2.29 | 112M2 |
| 1228 | 30.5 | 1.3 | RCV 281 | | 1.14 | 112M4 |
| 1795 | 20.9 | 1.9 | RCV 281 | | 1.56 | 112M2 |
| 2222 | 16.8 | 1.0 | RCV 191 | | 1.26 | 112M2 |
| 2222 | 16.8 | 1.0 | RCV 241 | | 1.26 | 112M2 |
| 2456 | 15.2 | 2.2 | RCV 281 | | 1.14 | 112M2 |

| P1 = 5.5 kW | | | | | | |
|--|-----------------------|-----|---|---|--------------|---|
| 132SA2 n ₁ = 2800 min ⁻¹ 132S4 n ₁ = 1400 min ⁻¹ 132MB6 n ₁ = 900 min ⁻¹ | | | | | | |
| n ₂ min ⁻¹ | Mn ₂ Nm | fs |  |  | i |  |
| 14.5 | 3360 | 1.0 | | RCV 603 | 96.30 | 132S4 |
| 15.9 | 3071 | 1.0 | | RCV 603 | 88.00 | 132S4 |
| 19.5 | 2509 | 1.3 | | RCV 603 | 71.90 | 132S4 |
| 23.3 | 2097 | 1.6 | | RCV 603 | 60.10 | 132S4 |
| 25.1 | 1947 | 1.7 | | RCV 603 | 55.80 | 132S4 |
| 30.0 | 1626 | 2.1 | | RCV 603 | 46.60 | 132S4 |
| 31.6 | 1595 | 1.8 | | RCV 602 | 44.29 | 132S4 |
| 35.2 | 1433 | 2.0 | | RCV 602 | 39.79 | 132S4 |
| 36.5 | 1383 | 0.9 | | RCV 552 | 38.40 | 132S4 |
| 38.7 | 1303 | 2.3 | | RCV 602 | 36.18 | 132S4 |
| 43.1 | 1171 | 2.6 | | RCV 602 | 32.50 | 132S4 |
| 45.8 | 1100 | 1.1 | | RCV 552 | 30.55 | 132S4 |
| 46.3 | 1089 | 2.3 | | RCV 602 | 30.24 | 132S4 |
| 52 | 978 | 2.6 | | RCV 602 | 27.16 | 132S4 |
| 56 | 900 | 2.6 | | RCV 602 | 24.99 | 132S4 |
| 56 | 898 | 1.3 | | RCV 552 | 24.94 | 132S4 |
| 70 | 720 | 0.9 | | RCV 452 | 19.99 | 132S4 |
| 73 | 687 | 1.7 | | RCV 552 | 19.06 | 132S4 |
| 79 | 638 | 1.1 | | RCV 452 | 17.70 | 132S4 |
| 88 | 570 | 1.2 | | RCV 452 | 15.83 | 132S4 |
| 90 | 560 | 1.9 | | RCV 552 | 15.56 | 132S4 |
| 98 | 513 | 1.3 | | RCV 452 | 14.25 | 132S4 |
| 109 | 464 | 1.4 | | RCV 452 | 12.89 | 132S4 |
| 116 | 435 | 2.3 | | RCV 552 | 12.07 | 132S4 |
| 122 | 412 | 1.0 | | RCV 352 | 11.43 | 132S4 |
| 125 | 403 | 1.6 | | RCV 452 | 11.18 | 132S4 |
| 138 | 367 | 1.0 | | RCV 352 | 10.18 | 132S4 |
| 140 | 360 | 1.8 | | RCV 452 | 10.00 | 132S4 |
| 148 | 342 | 2.8 | | RCV 552 | 9.49 | 132S4 |
| 153 | 329 | 0.9 | | RCV 302 | 9.14 | 132S4 |
| 153 | 329 | 1.1 | | RCV 352 | 9.14 | 132S4 |
| 156 | 324 | 2.0 | | RCV 452 | 9.00 | 132S4 |
| 172 | 293 | 2.1 | | RCV 452 | 8.14 | 132S4 |
| 180 | 280 | 0.9 | | RCV 302 | 7.78 | 132S4 |
| 180 | 280 | 1.4 | | RCV 352 | 7.78 | 132S4 |
| 186 | 271 | 0.9 | | RCV 302 | 7.51 | 132S4 |
| 186 | 271 | 1.3 | | RCV 352 | 7.51 | 132S4 |
| 202 | 250 | 1.0 | | RCV 302 | 6.93 | 132S4 |
| 202 | 250 | 1.5 | | RCV 352 | 6.93 | 132S4 |

**SELEZIONE MOTORIDUTTORI / MOTOR REDUCER SELECTION / AUSWAHL DER GETRIEBEMOTOREN
 SELECTION MOTO-REDUCTEURS / SELECCION MOTORREDUCTORES / SELEÇÃO MOTORIDUTOR**




| P1 = 5.5 kW | | | 132SA2 n ₁ = 2800 min ⁻¹ 132S4 n ₁ = 1400 min ⁻¹ 132MB6 n ₁ = 900 min ⁻¹ | | | |
|-------------------------------------|-----------------------|-----|--|---|-------------|---|
| n ₂ min ⁻¹ | Mn ₂ Nm | fs |  |  | i |  |
| 225 | 224 | 1.1 | | RCV 302 | 6.22 | 132S4 |
| 225 | 224 | 1.6 | | RCV 352 | 6.22 | 132S4 |
| 231 | 219 | 2.6 | | RCV 452 | 6.07 | 132S4 |
| 258 | 196 | 2.9 | | RCV 452 | 5.43 | 132S4 |
| 274 | 184 | 1.4 | | RCV 302 | 5.11 | 132S4 |
| 274 | 184 | 1.9 | | RCV 352 | 5.11 | 132S4 |
| 307 | 164 | 1.6 | | RCV 302 | 4.56 | 132S4 |
| 307 | 164 | 2.0 | | RCV 352 | 4.56 | 132S4 |
| 374 | 135 | 1.8 | | RCV 302 | 3.74 | 132S4 |
| 374 | 135 | 2.3 | | RCV 352 | 3.74 | 132S4 |
| 414 | 124 | 0.9 | RCV 381 | | 3.38 | 132S4 |
| 467 | 110 | 1.0 | RCV 381 | | 3.00 | 132S4 |
| 548 | 92 | 2.3 | | RCV 302 | 5.11 | 132SA2 |
| 552 | 93 | 1.0 | RCV 381 | | 1.63 | 132MB6 |
| 611 | 84 | 1.1 | RCV 381 | | 2.29 | 132S4 |
| 614 | 82 | 2.6 | | RCV 302 | 4.56 | 132SA2 |
| 681 | 76 | 1.3 | RCV 381 | | 4.11 | 132SA2 |
| 749 | 67 | 3.0 | | RCV 302 | 3.74 | 132SA2 |
| 828 | 62 | 1.5 | RCV 381 | | 3.38 | 132SA2 |
| 859 | 60 | 1.5 | RCV 381 | | 1.63 | 132S4 |
| 933 | 55 | 1.7 | RCV 381 | | 3.00 | 132SA2 |
| 1223 | 42.1 | 1.9 | RCV 381 | | 2.29 | 132SA2 |
| 1228 | 41.9 | 1.0 | RCV 281 | | 1.14 | 132S4 |
| 1718 | 30.0 | 2.6 | RCV 381 | | 1.63 | 132SA2 |
| 1795 | 28.7 | 1.4 | RCV 281 | | 1.56 | 132SA2 |
| 2456 | 21.0 | 1.6 | RCV 281 | | 1.14 | 132SA2 |




| P1 = 7.5 kW | | | 132SB2 n ₁ = 2800 min ⁻¹ 132MA4 n ₁ = 1400 min ⁻¹ | | | |
|--------------------|------|-----|--|----------------|--------------|--------|
| 19.5 | 3421 | 1.0 | | RCV 603 | 71.90 | 132MA4 |
| 23.3 | 2860 | 1.2 | | RCV 603 | 60.10 | 132MA4 |
| 25.1 | 2655 | 1.2 | | RCV 603 | 55.80 | 132MA4 |
| 30.0 | 2217 | 1.5 | | RCV 603 | 46.60 | 132MA4 |
| 31.6 | 2175 | 1.4 | | RCV 602 | 44.29 | 132MA4 |
| 35.2 | 1954 | 1.5 | | RCV 602 | 39.79 | 132MA4 |
| 38.7 | 1777 | 1.7 | | RCV 602 | 36.18 | 132MA4 |
| 43.1 | 1596 | 1.9 | | RCV 602 | 32.50 | 132MA4 |
| 46.3 | 1485 | 1.7 | | RCV 602 | 30.24 | 132MA4 |
| 52 | 1334 | 1.9 | | RCV 602 | 27.16 | 132MA4 |
| 56 | 1227 | 1.9 | | RCV 602 | 24.99 | 132MA4 |
| 56 | 1225 | 1.0 | | RCV 552 | 24.94 | 132MA4 |
| 59 | 1175 | 2.4 | | RCV 602 | 23.93 | 132MA4 |
| 73 | 936 | 1.2 | | RCV 552 | 19.06 | 132MA4 |
| 88 | 778 | 0.9 | | RCV 452 | 15.83 | 132MA4 |
| 90 | 764 | 1.4 | | RCV 552 | 15.56 | 132MA4 |
| 98 | 700 | 0.9 | | RCV 452 | 14.25 | 132MA4 |
| 109 | 633 | 1.0 | | RCV 452 | 12.89 | 132MA4 |
| 116 | 593 | 1.7 | | RCV 552 | 12.07 | 132MA4 |
| 125 | 549 | 1.2 | | RCV 452 | 11.18 | 132MA4 |
| 148 | 466 | 2.0 | | RCV 552 | 9.49 | 132MA4 |
| 156 | 442 | 1.4 | | RCV 452 | 9.00 | 132MA4 |
| 172 | 400 | 1.6 | | RCV 452 | 8.14 | 132MA4 |
| 180 | 382 | 1.0 | | RCV 352 | 7.78 | 132MA4 |
| 186 | 369 | 1.0 | | RCV 352 | 7.51 | 132MA4 |
| 189 | 363 | 2.4 | | RCV 552 | 7.39 | 132MA4 |
| 202 | 340 | 1.1 | | RCV 352 | 6.93 | 132MA4 |




| P1 = 7.5 kW | | | 132SB2 n ₁ = 2800 min ⁻¹ 132MA4 n ₁ = 1400 min ⁻¹ | | | |
|-------------------------------------|-----------------------|-----|--|---|-------------|---|
| n ₂ min ⁻¹ | Mn ₂ Nm | fs |  |  | i |  |
| 225 | 306 | 1.2 | | RCV 352 | 6.22 | 132MA4 |
| 231 | 298 | 1.9 | | RCV 452 | 6.07 | 132MA4 |
| 232 | 296 | 2.7 | | RCV 552 | 6.03 | 132MA4 |
| 258 | 267 | 2.1 | | RCV 452 | 5.43 | 132MA4 |
| 274 | 251 | 1.0 | | RCV 302 | 5.11 | 132MA4 |
| 274 | 251 | 1.4 | | RCV 352 | 5.11 | 132MA4 |
| 286 | 240 | 2.4 | | RCV 452 | 4.89 | 132MA4 |
| 307 | 224 | 1.2 | | RCV 302 | 4.56 | 132MA4 |
| 307 | 224 | 1.5 | | RCV 352 | 4.56 | 132MA4 |
| 317 | 217 | 2.6 | | RCV 452 | 4.42 | 132MA4 |
| 374 | 184 | 1.3 | | RCV 302 | 3.74 | 132MA4 |
| 374 | 184 | 1.7 | | RCV 352 | 3.74 | 132MA4 |
| 404 | 170 | 1.2 | | RCV 302 | 6.93 | 132SB2 |
| 404 | 170 | 1.8 | | RCV 352 | 6.93 | 132SB2 |
| 450 | 153 | 1.4 | | RCV 302 | 6.22 | 132SB2 |
| 450 | 153 | 2.0 | | RCV 352 | 6.22 | 132SB2 |
| 548 | 126 | 1.7 | | RCV 302 | 5.11 | 132SB2 |
| 548 | 126 | 2.3 | | RCV 352 | 5.11 | 132SB2 |
| 589 | 119 | 0.9 | RCV 381 | | 4.75 | 132SB2 |
| 614 | 112 | 1.9 | | RCV 302 | 4.56 | 132SB2 |
| 614 | 112 | 2.5 | | RCV 352 | 4.56 | 132SB2 |
| 681 | 103 | 0.9 | RCV 381 | | 4.11 | 132SB2 |
| 749 | 92 | 2.2 | | RCV 302 | 3.74 | 132SB2 |
| 749 | 92 | 2.9 | | RCV 352 | 3.74 | 132SB2 |
| 859 | 82 | 1.1 | RCV 381 | | 1.63 | 132MA4 |
| 933 | 75 | 1.2 | RCV 381 | | 3.00 | 132SB2 |
| 1223 | 57 | 1.4 | RCV 381 | | 2.29 | 132SB2 |
| 1718 | 41 | 1.9 | RCV 381 | | 1.63 | 132SB2 |
| 1795 | 39 | 1.0 | RCV 281 | | 1.56 | 132SB2 |
| 2456 | 29 | 1.2 | RCV 281 | | 1.14 | 132SB2 |




| P1 = 9.2 kW | | | 132SM2 n ₁ = 2800 min ⁻¹ 132MB4 n ₁ = 1400 min ⁻¹ | | | |
|--------------------|------|-----|--|----------------|--------------|--------|
| 23.3 | 3508 | 1.0 | | RCV 603 | 60.10 | 132MB4 |
| 25.1 | 3257 | 1.0 | | RCV 603 | 55.80 | 132MB4 |
| 30.0 | 2720 | 1.2 | | RCV 603 | 46.60 | 132MB4 |
| 31.6 | 2668 | 1.1 | | RCV 602 | 44.29 | 132MB4 |
| 35.2 | 2397 | 1.2 | | RCV 602 | 39.79 | 132MB4 |
| 38.7 | 2180 | 1.4 | | RCV 602 | 36.18 | 132MB4 |
| 43.1 | 1958 | 1.6 | | RCV 602 | 32.50 | 132MB4 |
| 46.3 | 1822 | 1.4 | | RCV 602 | 30.24 | 132MB4 |
| 52 | 1636 | 1.6 | | RCV 602 | 27.16 | 132MB4 |
| 56 | 1506 | 1.6 | | RCV 602 | 24.99 | 132MB4 |
| 59 | 1442 | 2.0 | | RCV 602 | 23.93 | 132MB4 |
| 72 | 1178 | 2.6 | | RCV 602 | 19.55 | 132MB4 |
| 73 | 1148 | 1.0 | | RCV 552 | 19.06 | 132MB4 |
| 90 | 937 | 1.2 | | RCV 552 | 15.56 | 132MB4 |
| 116 | 727 | 1.4 | | RCV 552 | 12.07 | 132MB4 |
| 125 | 674 | 1.0 | | RCV 452 | 11.18 | 132MB4 |
| 140 | 603 | 1.1 | | RCV 452 | 10.00 | 132MB4 |
| 148 | 572 | 1.6 | | RCV 552 | 9.49 | 132MB4 |
| 156 | 542 | 1.2 | | RCV 452 | 9.00 | 132MB4 |
| 172 | 490 | 1.3 | | RCV 452 | 8.14 | 132MB4 |
| 189 | 445 | 2.0 | | RCV 552 | 7.39 | 132MB4 |
| 202 | 418 | 0.9 | | RCV 352 | 6.93 | 132MB4 |
| 225 | 375 | 1.0 | | RCV 352 | 6.22 | 132MB4 |




**SELEZIONE MOTORIDUTTORI / MOTOR REDUCER SELECTION / AUSWAHL DER GETRIEBEMOTOREN
SELECTION MOTO-REDUCTEURS / SELECCION MOTORREDUCTORES / SELEÇÃO MOTORIDUTOR**

| P1 = 9.2 kW | | | | | |
|--|-----------------------|-----|---|---|---|
| n_2 min ⁻¹ | Mn ₂ Nm | fs |  |  |  |
| 132SM2 $n_1=2800$ min ⁻¹ 132MB4 $n_1=1400$ min ⁻¹ | | | | | |
| 231 | 366 | 1.6 | | RCV 452 | 6.07 132MB4 |
| 232 | 363 | 2.2 | | RCV 552 | 6.03 132MB4 |
| 258 | 327 | 1.8 | | RCV 452 | 5.43 132MB4 |
| 274 | 308 | 1.1 | | RCV 352 | 5.11 132MB4 |
| 286 | 295 | 1.9 | | RCV 452 | 4.89 132MB4 |
| 306 | 275 | 2.7 | | RCV 552 | 4.57 132MB4 |
| 307 | 275 | 0.9 | | RCV 302 | 4.56 132MB4 |
| 307 | 275 | 1.2 | | RCV 352 | 4.56 132MB4 |
| 317 | 266 | 2.2 | | RCV 452 | 4.42 132MB4 |
| 374 | 225 | 1.1 | | RCV 302 | 3.74 132MB4 |
| 374 | 225 | 1.4 | | RCV 352 | 3.74 132MB4 |
| 380 | 222 | 2.7 | | RCV 552 | 3.68 132MB4 |
| 404 | 209 | 1.0 | | RCV 302 | 6.93 132M2 |
| 404 | 209 | 1.5 | | RCV 352 | 6.93 132M2 |
| 450 | 187 | 1.1 | | RCV 302 | 6.22 132M2 |
| 450 | 187 | 1.6 | | RCV 352 | 6.22 132M2 |
| 461 | 183 | 2.6 | | RCV 452 | 6.07 132M2 |
| 516 | 164 | 2.9 | | RCV 452 | 5.43 132M2 |
| 548 | 154 | 1.4 | | RCV 302 | 5.11 132M2 |
| 548 | 154 | 1.9 | | RCV 352 | 5.11 132M2 |
| 614 | 137 | 1.6 | | RCV 302 | 4.56 132M2 |
| 614 | 137 | 2.0 | | RCV 352 | 4.56 132M2 |
| 749 | 113 | 1.8 | | RCV 302 | 3.74 132M2 |
| 749 | 113 | 2.3 | | RCV 352 | 3.74 132M2 |
| 828 | 104 | 0.9 | RCV 381 | | 3.38 132M2 |
| 859 | 100 | 0.9 | RCV 381 | | 1.63 132MB4 |
| 933 | 92 | 1.0 | RCV 381 | | 3.00 132M2 |
| 1223 | 70 | 1.1 | RCV 381 | | 2.29 132M2 |
| 1718 | 50 | 1.5 | RCV 381 | | 1.63 132M2 |
| 2456 | 35.1 | 0.9 | RCV 281 | | 1.14 132M2 |




| P1 = 11 kW | | | | | |
|---|-----------------------|-----|---|---|---|
| n_2 min ⁻¹ | Mn ₂ Nm | fs |  |  |  |
| 160MR2 $n_1=2800$ min ⁻¹ 160MR4 $n_1=1400$ min ⁻¹ 160L6 $n_1=900$ min ⁻¹ | | | | | |
| 30.0 | 3252 | 1.0 | | RCV 603 | 46.60 160MR4 |
| 31.6 | 3190 | 0.9 | | RCV 602 | 44.29 160MR4 |
| 35.2 | 2866 | 1.0 | | RCV 602 | 39.79 160MR4 |
| 38.7 | 2606 | 1.1 | | RCV 602 | 36.18 160MR4 |
| 43.1 | 2341 | 1.3 | | RCV 602 | 32.50 160MR4 |
| 46.3 | 2178 | 1.1 | | RCV 602 | 30.24 160MR4 |
| 52 | 1957 | 1.3 | | RCV 602 | 27.16 160MR4 |
| 56 | 1800 | 1.3 | | RCV 602 | 24.99 160MR4 |
| 59 | 1724 | 1.6 | | RCV 602 | 23.93 160MR4 |
| 72 | 1408 | 2.2 | | RCV 602 | 19.55 160MR4 |
| 86 | 1177 | 2.7 | | RCV 602 | 16.34 160MR4 |
| 90 | 1121 | 1.0 | | RCV 552 | 15.56 160MR4 |
| 93 | 1083 | 2.8 | | RCV 602 | 15.03 160MR4 |
| 102 | 988 | 2.8 | | RCV 602 | 13.71 160MR4 |
| 116 | 870 | 1.2 | | RCV 552 | 12.07 160MR4 |
| 117 | 862 | 2.7 | | RCV 602 | 23.93 160MR2 |
| 148 | 684 | 1.4 | | RCV 552 | 9.49 160MR4 |
| 149 | 676 | 2.9 | | RCV 602 | 6.03 160L6 |
| 179 | 565 | 3.0 | | RCV 602 | 5.04 160L6 |
| 189 | 532 | 1.6 | | RCV 552 | 7.39 160MR4 |
| 197 | 512 | 1.4 | | RCV 552 | 4.57 160L6 |
| 232 | 434 | 1.9 | | RCV 552 | 6.03 160MR4 |
| 245 | 412 | 1.5 | | RCV 552 | 3.68 160L6 |

| P1 = 11 kW | | | | | |
|---|-----------------------|-----|---|---|---|
| n_2 min ⁻¹ | Mn ₂ Nm | fs |  |  |  |
| 160MR2 $n_1=2800$ min ⁻¹ 160MR4 $n_1=1400$ min ⁻¹ 160L6 $n_1=900$ min ⁻¹ | | | | | |
| 295 | 342 | 2.3 | | RCV 552 | 9.49 160MR2 |
| 306 | 329 | 2.2 | | RCV 552 | 4.57 160MR4 |
| 324 | 312 | 1.8 | | RCV 552 | 2.78 160L6 |
| 379 | 266 | 2.7 | | RCV 552 | 7.39 160MR2 |
| 380 | 265 | 2.3 | | RCV 552 | 3.68 160MR4 |
| 504 | 200 | 2.7 | | RCV 552 | 2.78 160MR4 |

| P1 = 15 kW | | | | | |
|--|-----------------------|-----|---|---|---|
| n_2 min ⁻¹ | Mn ₂ Nm | fs |  |  |  |
| 160MB2 $n_1=2800$ min ⁻¹ 160L4 $n_1=1400$ min ⁻¹ 180L6 $n_1=900$ min ⁻¹ | | | | | |
| 43.1 | 3192 | 1.0 | | RCV 602 | 32.50 160L4 |
| 52 | 2668 | 1.0 | | RCV 602 | 27.16 160L4 |
| 56 | 2455 | 1.0 | | RCV 602 | 24.99 160L4 |
| 59 | 2351 | 1.2 | | RCV 602 | 23.93 160L4 |
| 72 | 1920 | 1.6 | | RCV 602 | 19.55 160L4 |
| 86 | 1605 | 2.0 | | RCV 602 | 16.34 160L4 |
| 93 | 1476 | 2.0 | | RCV 602 | 15.03 160L4 |
| 102 | 1347 | 2.0 | | RCV 602 | 13.71 160L4 |
| 125 | 1100 | 2.7 | | RCV 602 | 11.20 160L4 |
| 148 | 932 | 1.0 | | RCV 552 | 9.49 160L4 |
| 150 | 919 | 2.8 | | RCV 602 | 9.36 160L4 |
| 163 | 846 | 3.0 | | RCV 602 | 8.61 160L4 |
| 189 | 726 | 1.2 | | RCV 552 | 7.39 160L4 |
| 232 | 592 | 1.4 | | RCV 552 | 6.03 160L4 |
| 306 | 449 | 1.6 | | RCV 552 | 4.57 160L4 |
| 324 | 425 | 1.3 | | RCV 552 | 2.78 180L6 |
| 379 | 363 | 2.0 | | RCV 552 | 7.39 160MB2 |
| 380 | 362 | 1.7 | | RCV 552 | 3.68 160L4 |
| 464 | 296 | 2.3 | | RCV 552 | 6.03 160MB2 |
| 504 | 273 | 2.0 | | RCV 552 | 2.78 160L4 |
| 613 | 225 | 2.7 | | RCV 552 | 4.57 160MB2 |
| 761 | 181 | 2.8 | | RCV 552 | 3.68 160MB2 |


| P1 = 18.5 kW | | | | | |
|--|-----------------------|-----|---|---|---|
| n_2 min ⁻¹ | Mn ₂ Nm | fs |  |  |  |
| 160L2 $n_1=2800$ min ⁻¹ 180M4 $n_1=1400$ min ⁻¹ | | | | | |
| 59 | 2899 | 1.0 | | RCV 602 | 23.93 180M4 |
| 72 | 2369 | 1.3 | | RCV 602 | 19.55 180M4 |
| 86 | 1980 | 1.6 | | RCV 602 | 16.34 180M4 |
| 93 | 1821 | 1.7 | | RCV 602 | 15.03 180M4 |
| 102 | 1661 | 1.7 | | RCV 602 | 13.71 180M4 |
| 125 | 1357 | 2.2 | | RCV 602 | 11.20 180M4 |
| 150 | 1134 | 2.3 | | RCV 602 | 9.36 180M4 |
| 163 | 1043 | 2.5 | | RCV 602 | 8.61 180M4 |
| 189 | 895 | 1.0 | | RCV 552 | 7.39 180M4 |
| 190 | 894 | 2.6 | | RCV 602 | 7.38 180M4 |
| 232 | 731 | 1.1 | | RCV 552 | 6.03 180M4 |
| 232 | 731 | 2.7 | | RCV 602 | 6.03 180M4 |
| 278 | 611 | 2.8 | | RCV 602 | 5.04 180M4 |
| 302 | 562 | 2.9 | | RCV 602 | 4.64 180M4 |
| 306 | 554 | 1.3 | | RCV 552 | 4.57 180M4 |
| 380 | 446 | 1.4 | | RCV 552 | 3.68 180M4 |
| 464 | 365 | 1.8 | | RCV 552 | 6.03 160L2 |
| 504 | 337 | 1.6 | | RCV 552 | 2.78 180M4 |
| 613 | 277 | 2.2 | | RCV 552 | 4.57 160L2 |
| 761 | 223 | 2.3 | | RCV 552 | 3.68 160L2 |
| 1007 | 168 | 2.7 | | RCV 552 | 2.78 160L2 |

**SELEZIONE MOTORIDUTTORI / MOTOR REDUCER SELECTION / AUSWAHL DER GETRIEBEMOTOREN
 SELECTION MOTO-REDUCTEURS / SELECCION MOTORREDUCTORES / SELEÇÃO MOTORIDUTOR**

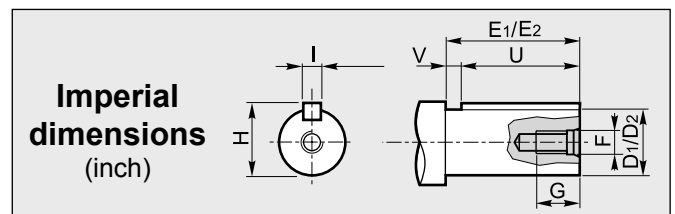
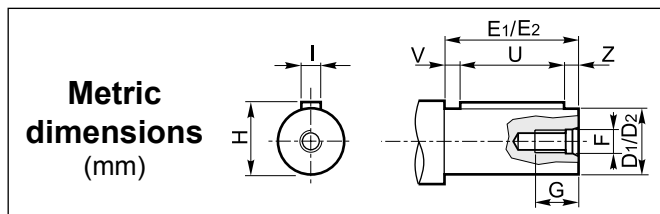
| P1 = 22 kW | | | | | | |
|--|-----------------------|-----|---|---|--------------|---|
| 180M2 n ₁ = 2800 min ⁻¹ 180L4 n ₁ = 1400 min ⁻¹ | | | | | | |
| n ₂ min ⁻¹ | Mn ₂ Nm | fs |  |  | i |  |
| 72 | 2817 | 1.1 | | RCV 602 | 19.55 | 180L4 |
| 86 | 2354 | 1.3 | | RCV 602 | 16.34 | 180L4 |
| 93 | 2165 | 1.4 | | RCV 602 | 15.03 | 180L4 |
| 102 | 1975 | 1.4 | | RCV 602 | 13.71 | 180L4 |
| 125 | 1614 | 1.8 | | RCV 602 | 11.20 | 180L4 |
| 150 | 1349 | 1.9 | | RCV 602 | 9.36 | 180L4 |
| 163 | 1240 | 2.1 | | RCV 602 | 8.61 | 180L4 |
| 190 | 1063 | 2.2 | | RCV 602 | 7.38 | 180L4 |
| 232 | 869 | 0.9 | | RCV 552 | 6.03 | 180L4 |
| 232 | 869 | 2.3 | | RCV 602 | 6.03 | 180L4 |
| 278 | 7261 | 2.3 | | RCV 602 | 5.04 | 180L4 |
| 302 | 669 | 2.5 | | RCV 602 | 4.64 | 180L4 |
| 306 | 658 | 1.1 | | RCV 552 | 4.57 | 180L4 |
| 380 | 530 | 1.1 | | RCV 552 | 3.68 | 180L4 |
| 464 | 434 | 1.6 | | RCV 552 | 6.03 | 180M2 |
| 504 | 401 | 1.4 | | RCV 552 | 2.78 | 180L4 |
| 613 | 329 | 1.9 | | RCV 552 | 4.57 | 180M2 |
| 761 | 265 | 1.9 | | RCV 552 | 3.68 | 180M2 |
| 1007 | 200 | 2.3 | | RCV 552 | 2.78 | 180M2 |

| P1 = 30 kW | | | | | | |
|---|------|-----|--|----------------|--------------|--------|
| 200LA2 n ₁ = 2800 min ⁻¹ 200L4 n ₁ = 1400 min ⁻¹ | | | | | | |
| 102 | 2693 | 1.0 | | RCV 602 | 13.71 | 200L4 |
| 125 | 2200 | 1.3 | | RCV 602 | 11.20 | 200L4 |
| 150 | 1839 | 1.4 | | RCV 602 | 9.36 | 200L4 |
| 163 | 1692 | 1.5 | | RCV 602 | 8.61 | 200L4 |
| 190 | 1450 | 1.6 | | RCV 602 | 7.38 | 200L4 |
| 232 | 1185 | 1.7 | | RCV 602 | 6.03 | 200L4 |
| 278 | 990 | 1.7 | | RCV 602 | 5.04 | 200L4 |
| 302 | 912 | 1.8 | | RCV 602 | 4.64 | 200L4 |
| 325 | 846 | 2.5 | | RCV 602 | 8.61 | 200LA2 |
| 379 | 725 | 2.7 | | RCV 602 | 7.38 | 200LA2 |
| 464 | 592 | 2.8 | | RCV 602 | 6.03 | 200LA2 |
| 556 | 495 | 2.9 | | RCV 602 | 5.04 | 200LA2 |
| 603 | 456 | 3.0 | | RCV 602 | 4.64 | 200LA2 |

DATI TECNICI / TECHNICAL DATA / TECHNISCHE DATEN
 CARACTÉRISTIQUES TECHNIQUES / DATOS TÉCNICOS / CARACTERÍSTICAS TÉCNICAS

| CV RCV | i | n ₁ = 2800 min ⁻¹ | | | n ₁ = 1400 min ⁻¹ | | | n ₁ = 900 min ⁻¹ | | |  | | |
|-----------|------|---|-----------------------|----------------------|---|-----------------------|----------------------|--|-----------------------|----------------------|---|----------|------|
| | | n ₂ min ⁻¹ | Mn ₂ Nm | P ₁ kW | n ₂ min ⁻¹ | Mn ₂ Nm | P ₁ kW | n ₂ min ⁻¹ | Mn ₂ Nm | P ₁ kW | IEC B5 | IEC B14 | NEMA |
| 141 | 1.29 | 2171 | 13 | 3.0 | 1085 | 15 | 1.7 | 698 | 17 | 1.3 | 63-71-80 | 63-71-80 | 56 |
| | 2.33 | 1202 | 21 | 2.7 | 601 | 24 | 1.5 | 386 | 27 | 1.1 | 63-71-80 | 63-71-80 | 56 |
| | 2.79 | 1004 | 23 | 2.5 | 502 | 27 | 1.4 | 323 | 30 | 1.03 | 63-71-80 | 63-71-80 | 56 |
| | 3.40 | 824 | 23 | 2.0 | 412 | 27 | 1.2 | 265 | 30 | 0.85 | 63-71-80 | 63-71-80 | 56 |
| | 4.24 | 660 | 24 | 1.7 | 330 | 28 | 0.99 | 212 | 33 | 0.75 | 63-71-80 | 63-71-80 | 56 |
| | 4.79 | 585 | 25 | 1.6 | 292 | 29 | 0.91 | 188 | 32 | 0.64 | 63-71-80 | 63-71-80 | 56 |
| | 5.47 | 512 | 25 | 1.4 | 256 | 29 | 0.79 | 165 | 34 | 0.60 | 63-71-80 | 63-71-80 | 56 |
| | 7.46 | 375 | 25 | 1.0 | 188 | 30 | 0.60 | 121 | 35 | 0.45 | 63-71-80 | 63-71-80 | 56 |

DIMENSIONI / DIMENSIONS / ABMESSUNGEN / DIMENSIONS / DIMENSIONES / DIMENSÕES



① **Albero entrata / Input shaft / Antriebswelle
Arbre d'entrée / Eje de entrada / Eixo de entrada**

| D ₁ | E ₁ | F | G | H | I | U | V | Z |
|----------------|----------------|----|----|----|---|----|---|---|
| 16 | 40 | M6 | 15 | 18 | 5 | 25 | 5 | 5 |

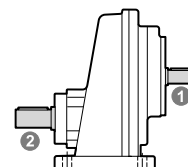
② **Albero uscita / Output shaft / Abtriebswelle
Arbre de sortie / Eje de salida / Eixo de saída**

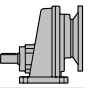
| D ₂ | E | F | G | H | I | U | V |
|------------------|---------------|--------|---------------|------------------|-----------------|------------------|------------------|
| 15.88 (0.625) | 40 (1.575) | 1/4-20 | 16 (0.630) | 17.89 (0.704) | 4.76 (0.188) | 25.40 (1.000) | 14.60 (0.575) |

② **Albero uscita / Output shaft / Abtriebswelle
Arbre de sortie / Eje de salida / Eixo de saída**

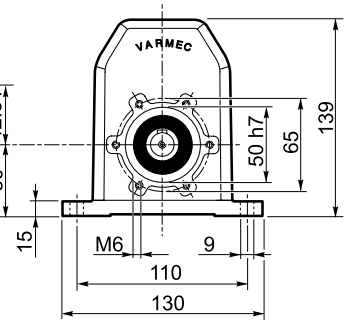
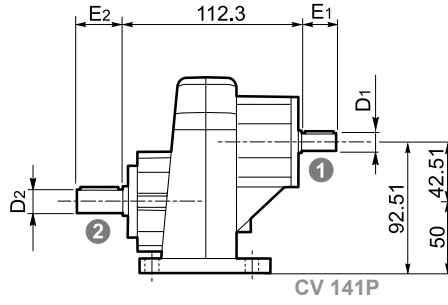
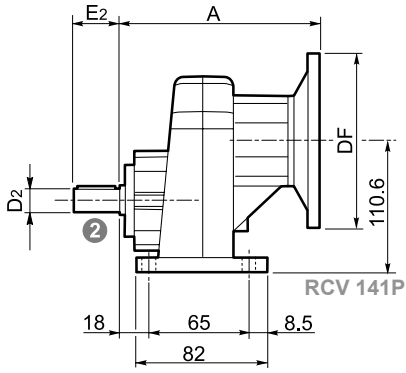
| D ₂ | E | F | G | H | I | U | V | Z |
|----------------|----|----|----|------|---|----|---|---|
| 14 | 30 | M5 | 12 | 16 | 5 | 20 | 5 | 5 |
| 16 | 40 | M6 | 16 | 18 | 5 | 30 | 5 | 5 |
| 19 | 40 | M6 | 15 | 21.5 | 6 | 30 | 5 | 5 |
| 20 | 40 | M8 | 19 | 22.5 | 6 | 30 | 5 | 5 |

(Inch)

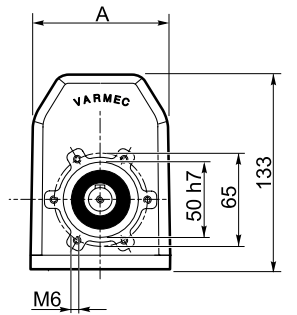
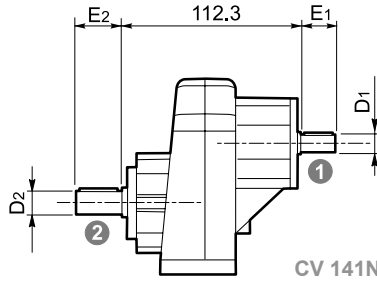
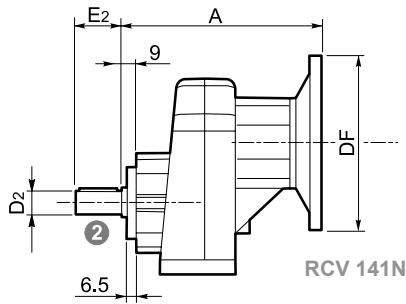




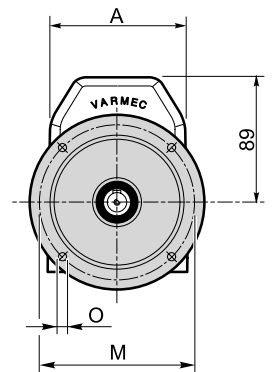
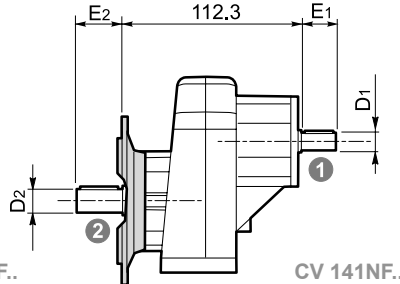
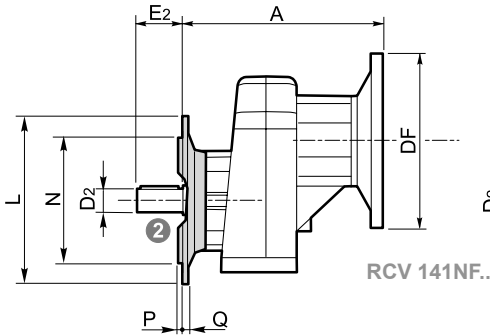
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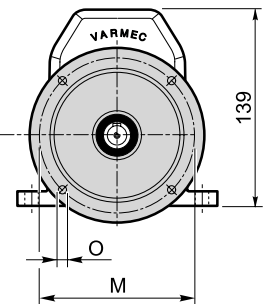
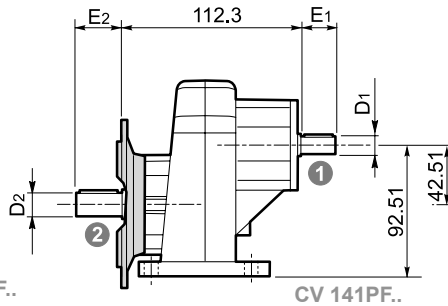
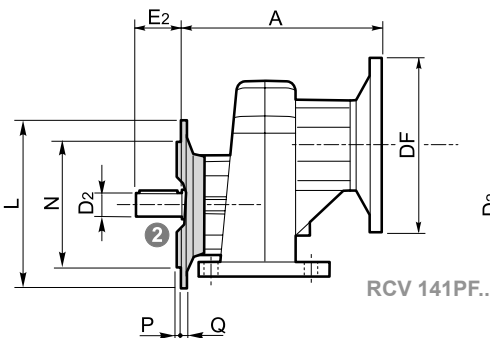
N



NF..




PF..



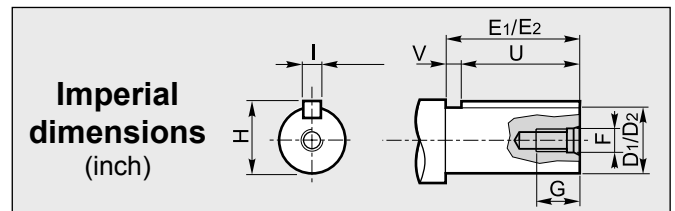
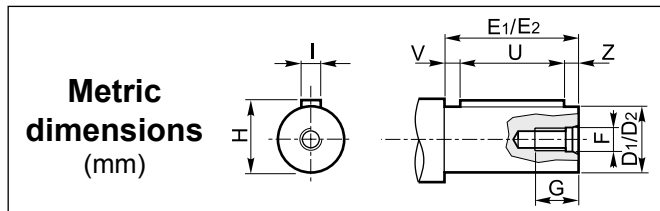
| IEC | DF | | A | NEMA | DF | A |
|-----|------|-------|-------|------|-------|-------|
| | (B5) | (B14) | | | | |
| 63 | 140 | 90 | 115.5 | 56 | 165.1 | 134.5 |
| 71 | 160 | 105 | | | | |
| 80 | 200 | 120 | 125.5 | | | |

| | L | M | N | O | P | Q |
|---------------|-----|-----|-----|-----|-----|---|
| NF120 - PF120 | 120 | 100 | 80 | 9 | 3 | 9 |
| NF140 - PF140 | 140 | 115 | 95 | 9.5 | 3 | 9 |
| NF160 - PF160 | 160 | 130 | 110 | 9.5 | 3.5 | 9 |

DATI TECNICI / TECHNICAL DATA / TECHNISCHE DATEN
 CARACTÉRISTIQUES TECHNIQUES / DATOS TÉCNICOS / CARACTERÍSTICAS TÉCNICAS

| CV RCV | i | n ₁ = 2800 min ⁻¹ | | | n ₁ = 1400 min ⁻¹ | | | n ₁ = 900 min ⁻¹ | | |  | | |
|------------|------|---|-----------------------|----------------------|---|-----------------------|----------------------|--|-----------------------|----------------------|---|------------|--------|
| | | n ₂ min ⁻¹ | Mn ₂ Nm | P ₁ kW | n ₂ min ⁻¹ | Mn ₂ Nm | P ₁ kW | n ₂ min ⁻¹ | Mn ₂ Nm | P ₁ kW | IEC B5 | IEC B14 | NEMA |
| 191 241 | 1.26 | 2222 | 17 | 4.0 | 1111 | 20 | 2.4 | 714 | 20 | 1.5 | 63-71-80-90-100-112 | 90-100-112 | 56-140 |
| | 2.23 | 1256 | 25 | 3.4 | 628 | 30 | 2.0 | 404 | 30 | 1.3 | 63-71-80-90-100-112 | 90-100-112 | 56-140 |
| | 2.73 | 1026 | 26 | 2.9 | 513 | 31 | 1.7 | 330 | 31 | 1.1 | 63-71-80-90-100-112 | 90-100-112 | 56-140 |
| | 3.22 | 870 | 27 | 2.5 | 435 | 32 | 1.5 | 280 | 32 | 0.96 | 63-71-80-90 | 90 | 56-140 |
| | 4.11 | 681 | 34 | 2.5 | 341 | 41 | 1.5 | 219 | 41 | 0.96 | 63-71-80-90 | 90 | 56-140 |
| | 4.71 | 594 | 37 | 2.4 | 297 | 44 | 1.4 | 191 | 44 | 0.90 | 63-71-80-90 | 90 | 56-140 |
| | 5.47 | 512 | 36 | 2.0 | 256 | 44 | 1.2 | 165 | 44 | 0.77 | 63-71-80-90 | 90 | 56-140 |
| | 7.82 | 358 | 39 | 1.5 | 179 | 47 | 0.90 | 115 | 47 | 0.58 | 63-71-80-90 | 90 | 56-140 |

DIMENSIONI / DIMENSIONS / ABMESSUNGEN / DIMENSIONS / DIMENSIONES / DIMENSÕES



1 **Albero entrata / Input shaft / Antriebswelle**
Arbre d'entrée / Eje de entrada / Eixo de entrada

| D ₁ | E ₁ | F | G | H | I | U | V | Z |
|----------------|----------------|----|----|------|---|----|---|---|
| 19 | 40 | M6 | 15 | 21.5 | 6 | 30 | 5 | 5 |

2 **Albero uscita / Output shaft / Abtriebswelle**
Arbre de sortie / Eje de salida / Eixo de saída

CV-RCV 191

| D ₂ | E ₂ | F | G | H | I | U | V | Z |
|----------------|----------------|----|----|------|---|----|---|---|
| 14 | 30 | M5 | 12 | 16 | 5 | 20 | 5 | 5 |
| 19 | 40 | M6 | 16 | 21.5 | 6 | 30 | 5 | 5 |
| 20 | 40 | M8 | 18 | 22.5 | 6 | 30 | 5 | 5 |
| 24 | 50 | M8 | 18 | 27 | 8 | 40 | 5 | 5 |
| 25 | 40 | M8 | 18 | 28 | 8 | 30 | 5 | 5 |

2 **Albero uscita / Output shaft / Abtriebswelle**
Arbre de sortie / Eje de salida / Eixo de saída

| D ₂ | E | F | G | H | I | U | V |
|---------------------------------|---------------|---------|---------------|------------------|-----------------|-----------------|-----------------|
| 19.05 ⁽¹⁾ (0.750) | 40 (1.575) | 5/16-18 | 18 (0.709) | 21.14 (0.832) | 4.76 (0.188) | 25.4 (1.000) | 14.6 (0.575) |

(Inch)

2 **Albero uscita / Output shaft / Abtriebswelle**
Arbre de sortie / Eje de salida / Eixo de saída

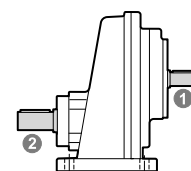
CV-RCV 241

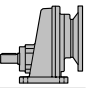
| D ₂ | E ₂ | F | G | H | I | U | V | Z |
|----------------|----------------|----|----|------|---|----|---|---|
| 14 | 30 | M5 | 12 | 16 | 5 | 20 | 5 | 5 |
| 19 | 40 | M6 | 16 | 21.5 | 6 | 30 | 5 | 5 |
| 20 | 40 | M8 | 18 | 22.5 | 6 | 30 | 5 | 5 |
| 24 | 50 | M8 | 18 | 27 | 8 | 40 | 5 | 5 |
| 25 | 40 | M8 | 18 | 28 | 8 | 30 | 5 | 5 |

2 **Albero uscita / Output shaft / Abtriebswelle**
Arbre de sortie / Eje de salida / Eixo de saída

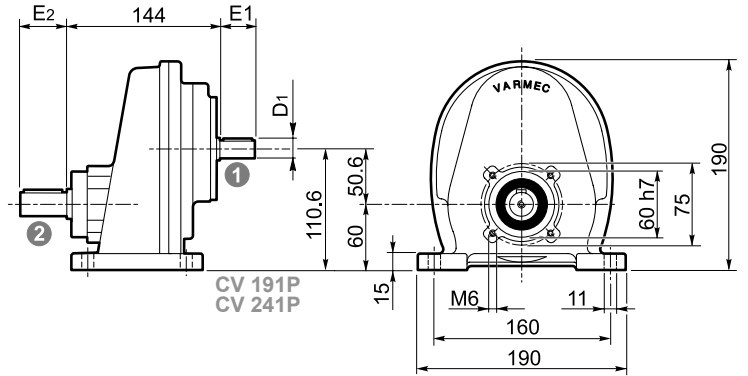
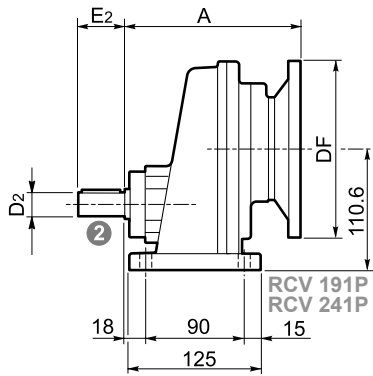
| D ₂ | E | F | G | H | I | U | V |
|---------------------------------|---------------|---------|---------------|------------------|-----------------|------------------|-----------------|
| 25.40 ⁽²⁾ (1.000) | 50 (1.969) | 5/16-18 | 18 (0.709) | 28.17 (1.109) | 6.35 (0.250) | 38.10 (1.500) | 11.9 (0.469) |

(Inch)

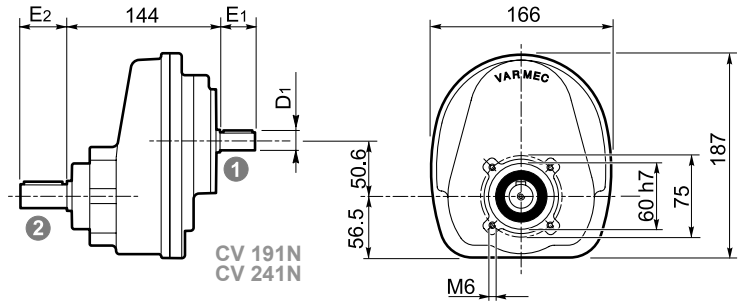
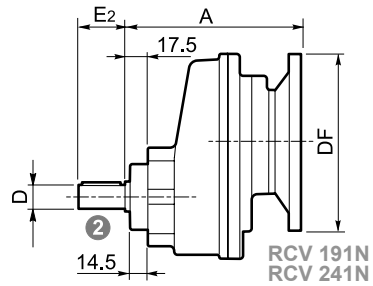




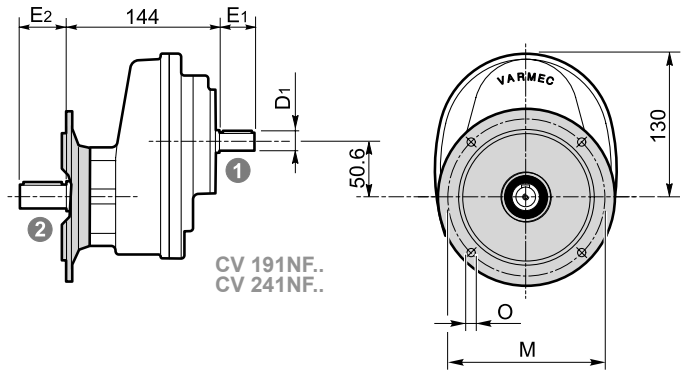
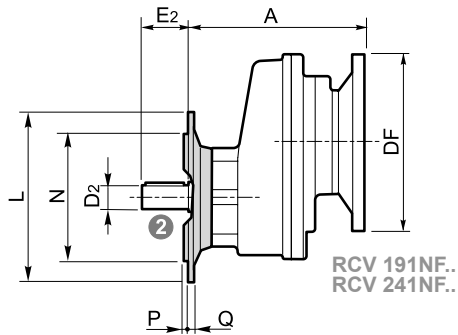
P



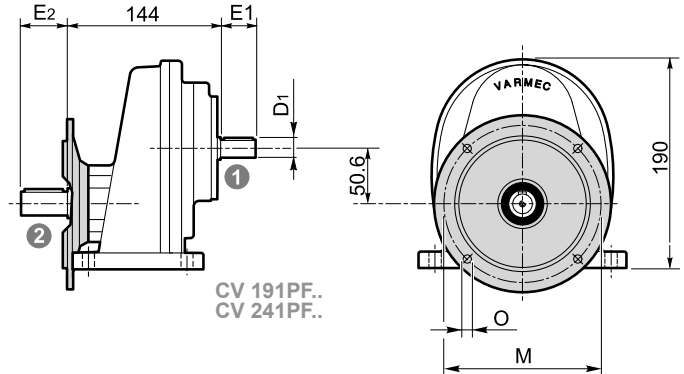
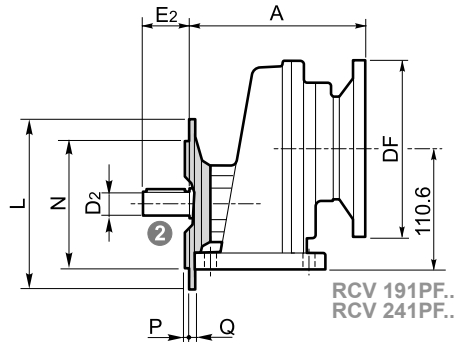
N



NF..




PF..



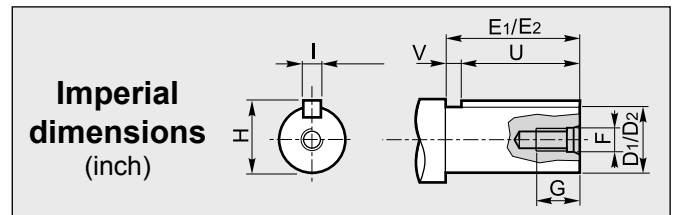
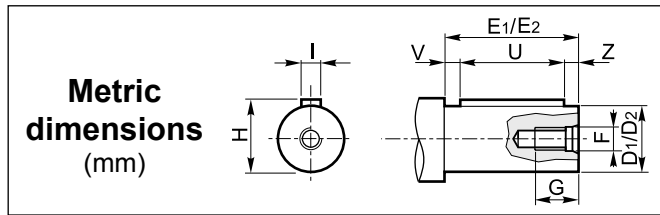
| IEC | DF | | A | NEMA | DF | A |
|-----|------|-------|-------|------|-------|-----|
| | (B5) | (B14) | | | | |
| 63 | 140 | | 150 | 56 | 165.1 | 158 |
| 71 | 160 | | | 140 | 165.1 | 158 |
| 80 | 200 | | | | | |
| 90 | 200 | 140 | | | | |
| 100 | 250 | 160 | 167.5 | | | |
| 112 | 250 | 160 | | | | |

| | L | M | N | O | P | Q |
|---------------|-----|-----|-----|----|-----|----|
| NF120 - PF120 | 120 | 100 | 80 | 7 | 2.5 | 10 |
| NF140 - PF140 | 140 | 115 | 95 | 9 | 3 | 10 |
| NF160 | 160 | 130 | 110 | 11 | 3 | 10 |
| NF200 | 200 | 165 | 130 | 11 | 3 | 10 |

DATI TECNICI / TECHNICAL DATA / TECHNISCHE DATEN
 CARACTÉRISTIQUES TECHNIQUES / DATOS TÉCNICOS / CARACTERÍSTICAS TÉCNICAS

| CV RCV | i | n ₁ = 2800 min ⁻¹ | | | n ₁ = 1400 min ⁻¹ | | | n ₁ = 900 min ⁻¹ | | |  | | |
|-----------|------|---|-----------------------|----------------------|---|-----------------------|----------------------|--|-----------------------|----------------------|---|-------------|---------|
| | | n ₂ min ⁻¹ | Mn ₂ Nm | P ₁ kW | n ₂ min ⁻¹ | Mn ₂ Nm | P ₁ kW | n ₂ min ⁻¹ | Mn ₂ Nm | P ₁ kW | IEC B5 | IEC B14 | NEMA |
| 281 | 1.14 | 2456 | 33 | 8.7 | 1228 | 40 | 5.2 | 789 | 40 | 3.4 | 71-80-90-100-112-132 | 100-112-132 | 140-180 |
| | 1.56 | 1795 | 39 | 7.5 | 897 | 47 | 4.5 | 577 | 47 | 2.9 | 71-80-90-100-112-132 | 100-112-132 | 140-180 |
| | 2.29 | 1223 | 51 | 6.7 | 611 | 61 | 4.0 | 393 | 61 | 2.6 | 71-80-90-100-112 | 100-112 | 140-180 |
| | 2.83 | 989 | 60 | 6.3 | 495 | 72 | 3.8 | 318 | 72 | 2.4 | 71-80-90-100-112 | 100-112 | 140-180 |
| | 3.38 | 828 | 60 | 5.3 | 414 | 72 | 3.2 | 266 | 72 | 2.0 | 71-80-90-100-112 | 100-112 | 140-180 |
| | 3.84 | 729 | 60 | 4.7 | 365 | 72 | 2.8 | 234 | 72 | 1.8 | 71-80-90-100-112 | 100-112 | 140-180 |
| | 4.41 | 635 | 61 | 4.1 | 317 | 73 | 2.5 | 204 | 73 | 1.6 | 71-80-90-100-112 | 100-112 | 140-180 |
| | 5.57 | 503 | 68 | 3.7 | 251 | 82 | 2.2 | 162 | 82 | 1.4 | 71-80-90-100-112 | 100-112 | 140-180 |
| | 7.36 | 380 | 90 | 3.7 | 190 | 108 | 2.2 | 122 | 108 | 1.4 | 71-80-90-100-112 | 100-112 | 140-180 |

DIMENSIONI / DIMENSIONS / ABMESSUNGEN / DIMENSIONS / DIMENSIONES / DIMENSÕES



1 **Albero entrata / Input shaft / Antriebswelle**
Arbre d'entrée / Eje de entrada / Eixo de entrada

| D ₁ | E ₁ | F | G | H | I | U | V | Z |
|----------------|----------------|----|----|----|---|----|---|---|
| 24 | 50 | M8 | 18 | 27 | 8 | 40 | 5 | 5 |

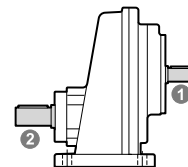
2 **Albero uscita / Output shaft / Abtriebswelle**
Arbre de sortie / Eje de salida / Eixo de saída

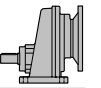
| D ₂ | E | F | G | H | I | U | V |
|------------------|---------------|--------|---------------|------------------|-----------------|------------------|------------------|
| 28.57 (1.125) | 60 (2.362) | 3/8-16 | 23 (0.906) | 31.40 (1.236) | 6.35 (0.250) | 44.45 (1.750) | 15.55 (0.612) |

(Inch)

2 **Albero uscita / Output shaft / Abtriebswelle**
Arbre de sortie / Eje de salida / Eixo de saída

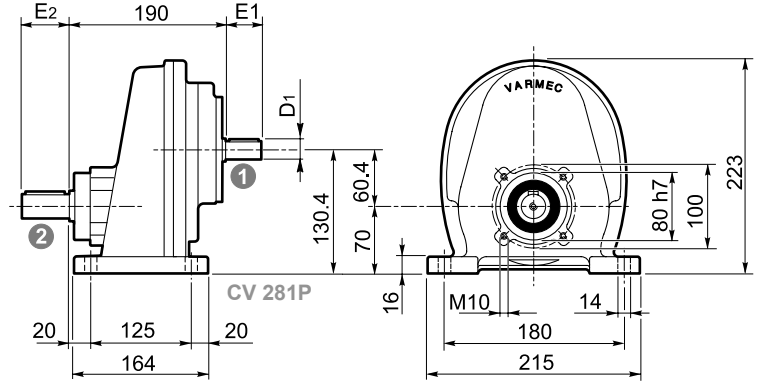
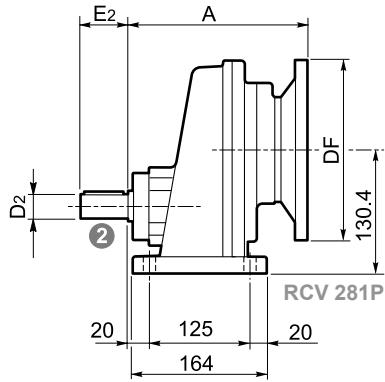
| D ₂ | E | F | G | H | I | U | V | Z |
|----------------|----|-----|----|----|----|----|---|---|
| 24 | 50 | M8 | 18 | 27 | 8 | 40 | 5 | 5 |
| 28 | 60 | M8 | 18 | 31 | 8 | 50 | 5 | 5 |
| 30 | 60 | M10 | 22 | 33 | 8 | 50 | 5 | 5 |
| 32 | 80 | M10 | 22 | 35 | 10 | 70 | 5 | 5 |



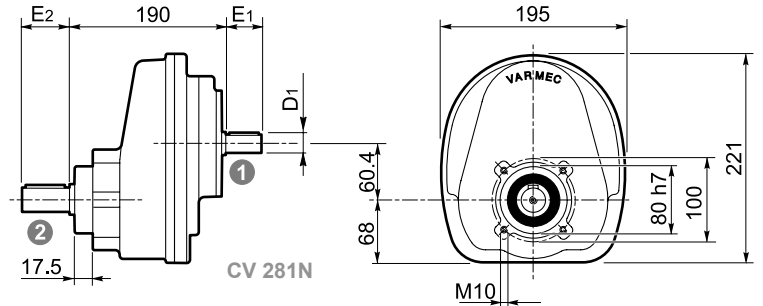
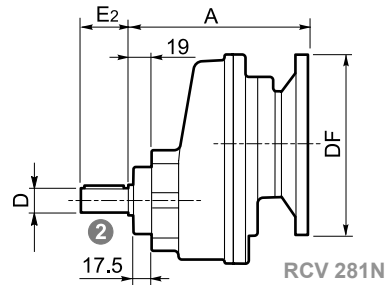


DIMENSIONI / DIMENSIONS / ABMESSUNGEN / DIMENSIONS / DIMENSIONES / DIMENSÕES

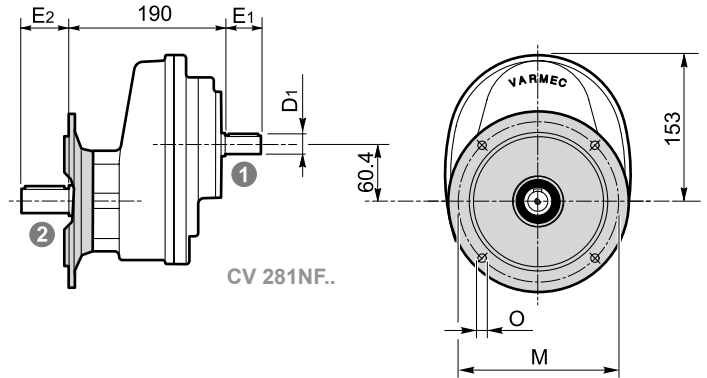
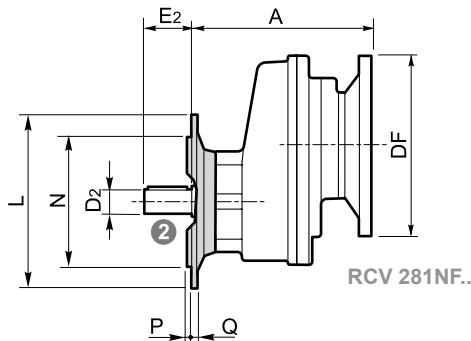
P



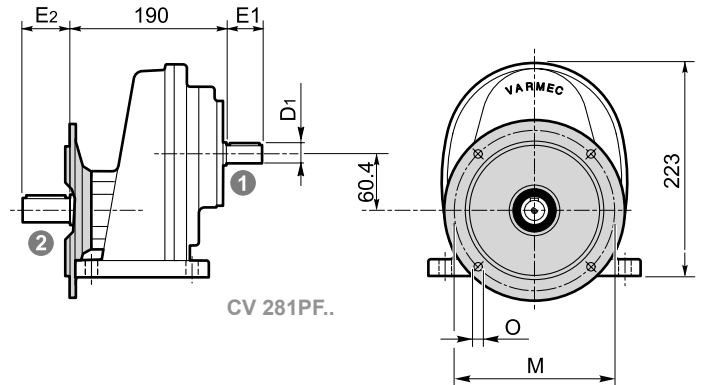
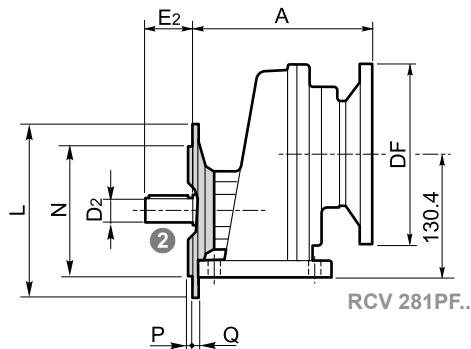
N



NF




PF



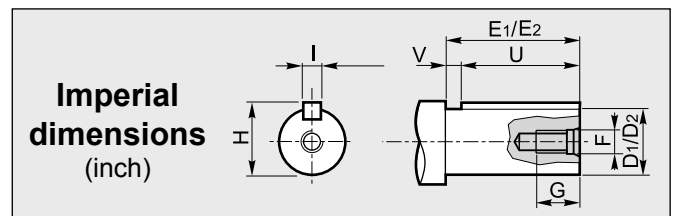
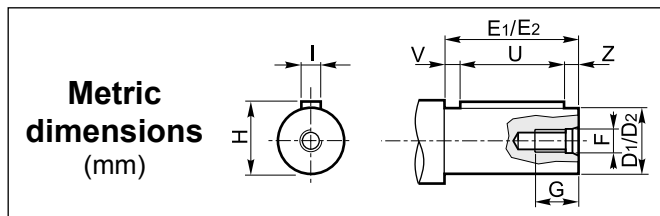
| IEC | DF | | A | NEMA | DF | A |
|-----|------|-------|-----|------|-------|-----|
| | (B5) | (B14) | | | | |
| 71 | 160 | | 195 | 140 | 165.1 | 205 |
| 80 | 200 | | | 180 | 228.6 | 211 |
| 90 | 200 | | | | | |
| 100 | 250 | 160 | | | | |
| 112 | 250 | 160 | | | | |
| 132 | 300 | 200 | 224 | | | |

| | L | M | N | O | P | Q |
|---------------|-----|-----|-----|----|-----|----|
| NF160 - PF160 | 160 | 130 | 110 | 11 | 3.5 | 11 |
| NF200 | 200 | 165 | 130 | 13 | 3.5 | 11 |
| NF250 | 250 | 215 | 180 | 14 | 4 | 13 |

DATI TECNICI / TECHNICAL DATA / TECHNISCHE DATEN
 CARACTÉRISTIQUES TECHNIQUES / DATOS TÉCNICOS / CARACTERÍSTICAS TÉCNICAS

| CV RCV | i | n ₁ = 2800 min ⁻¹ | | | n ₁ = 1400 min ⁻¹ | | | n ₁ = 900 min ⁻¹ | | |  | | |
|-----------|------|---|-----------------------|----------------------|---|-----------------------|----------------------|--|-----------------------|----------------------|---|---------|-------------------|
| | | n ₂ min ⁻¹ | Mn ₂ Nm | P ₁ kW | n ₂ min ⁻¹ | Mn ₂ Nm | P ₁ kW | n ₂ min ⁻¹ | Mn ₂ Nm | P ₁ kW | IEC B5 | IEC B14 | NEMA |
| | | 381 | 1.63 | 1718 | 77 | 14.1 | 859 | 92 | 8.4 | 552 | 92 | 5.4 | 80-90-100/112-132 |
| 2.29 | 1223 | | 79 | 10.3 | 611 | 94 | 6.1 | 393 | 95 | 4.0 | 80-90-100/112-132 | 132 | 140-180-210 |
| 3.00 | 933 | | 92 | 9.2 | 467 | 110 | 5.5 | 300 | 110 | 3.5 | 80-90-100/112-132 | 132 | 140-180-210 |
| 3.38 | 828 | | 92 | 8.1 | 414 | 110 | 4.9 | 266 | 111 | 3.2 | 80-90-100/112-132 | 132 | 140-180-210 |
| 4.11 | 681 | | 96 | 7.0 | 341 | 115 | 4.2 | 219 | 115 | 2.7 | 80-90-100/112-132 | 132 | 140-180-210 |
| 4.75 | 589 | | 106 | 6.7 | 295 | 126 | 4.0 | 189 | 127 | 2.6 | 80-90-100/112-132 | 132 | 140-180-210 |
| 5.57 | 503 | | 108 | 5.8 | 251 | 130 | 3.5 | 162 | 130 | 2.2 | 80-90-100/112-132 | 132 | 140-180-210 |
| 7.36 | 380 | | 110 | 4.5 | 190 | 132 | 2.7 | 122 | 133 | 1.7 | 80-90-100/112-132 | 132 | 140-180-210 |
| 10.40 | 269 | | 116 | 3.3 | 135 | 138 | 2.0 | 87 | 139 | 1.3 | 80-90-100/112 | 132 | 140-180-210 |

DIMENSIONI / DIMENSIONS / ABMESSUNGEN / DIMENSIONS / DIMENSIONES / DIMENSÕES



1 **Albero entrata / Input shaft / Antriebswelle**
Arbre d'entrée / Eje de entrada / Eixo de entrada

| D ₁ | E ₁ | F | G | H | I | U | V | Z |
|----------------|----------------|-----|----|----|---|----|---|---|
| 28 | 60 | M10 | 20 | 31 | 8 | 50 | 5 | 5 |

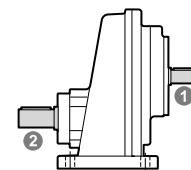
2 **Albero uscita / Output shaft / Abtriebswelle**
Arbre de sortie / Eje de salida / Eixo de saída

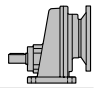
| D ₂ | E | F | G | H | I | U | V |
|------------------|---------------|--------|---------------|------------------|-----------------|------------------|------------------|
| 41.27 (1.625) | 80 (3.150) | 1/2-13 | 33 (1.299) | 45.52 (1.792) | 9.53 (0.375) | 63.50 (2.500) | 16.50 (0.650) |

(Inch)

2 **Albero uscita / Output shaft / Abtriebswelle**
Arbre de sortie / Eje de salida / Eixo de saída

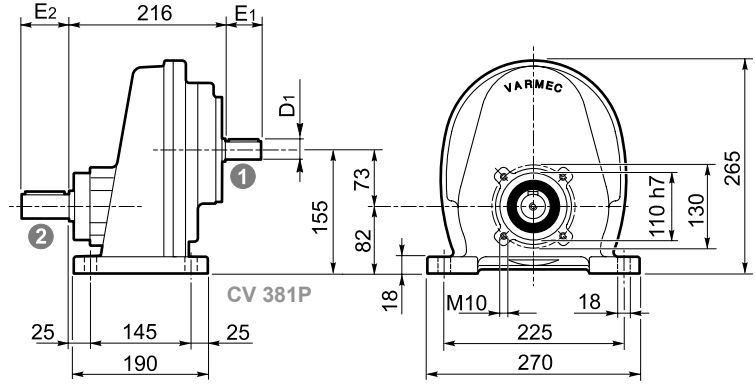
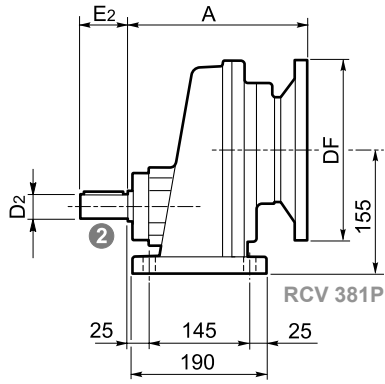
| D ₂ | E | F | G | H | I | U | V | Z |
|----------------|----|-----|----|----|----|----|---|---|
| 38 | 80 | M12 | 28 | 41 | 10 | 70 | 5 | 5 |
| 40 | 80 | M12 | 28 | 43 | 12 | 70 | 5 | 5 |



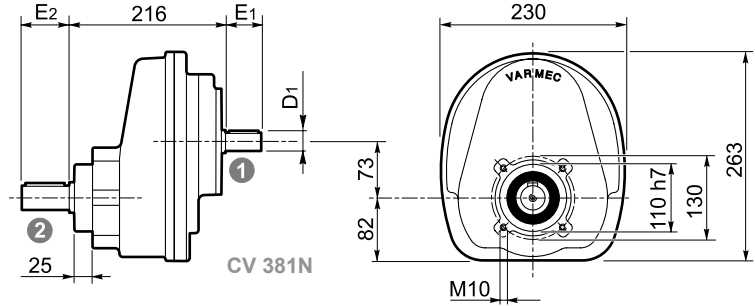
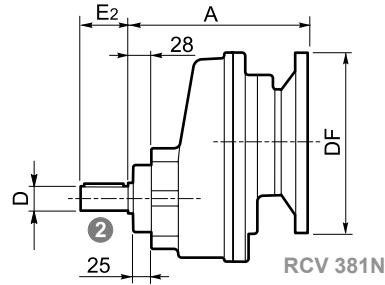


DIMENSIONI / DIMENSIONS / ABMESSUNGEN / DIMENSIONS / DIMENSIONES / DIMENSÕES

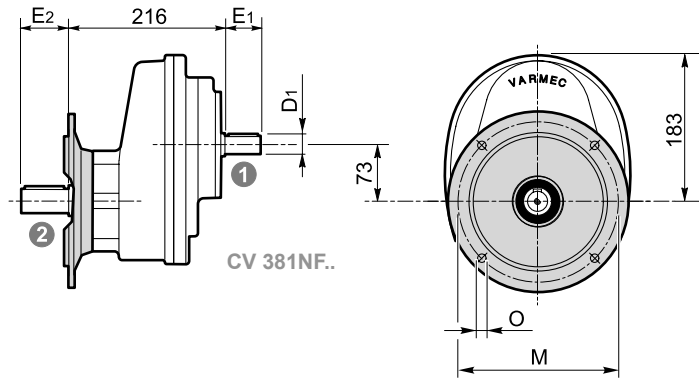
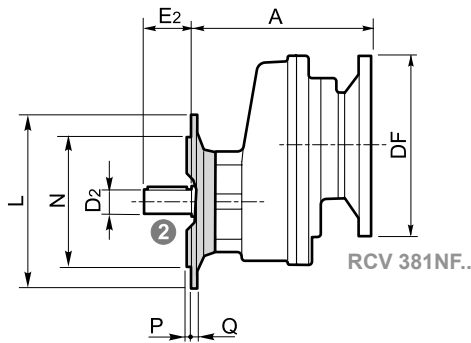
P



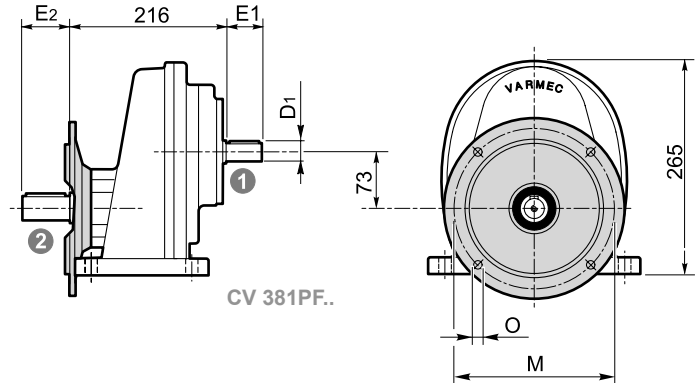
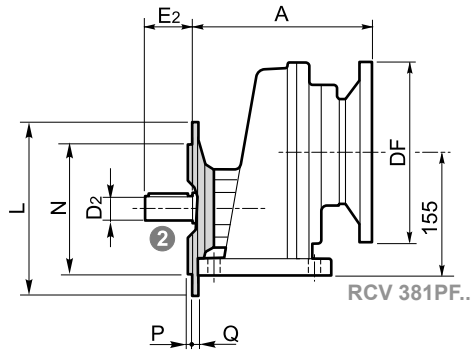
N



NF




PF



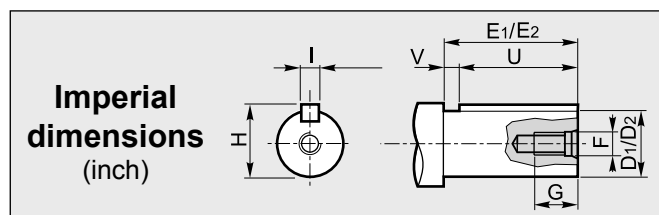
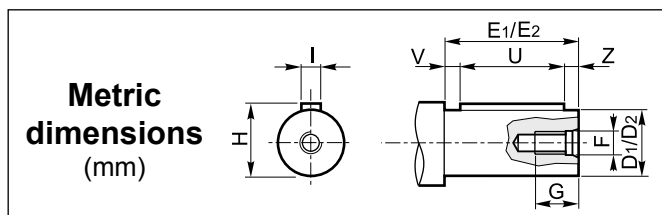
| IEC | DF | | A | NEMA | DF | A |
|-----|------|-------|-----|------|-------|-----|
| | (B5) | (B14) | | | | |
| 80 | 200 | | 221 | 140 | 165.1 | 237 |
| 90 | 200 | | | 180 | 228.6 | 243 |
| 100 | 250 | | | 210 | 228.6 | 243 |
| 112 | 250 | | | | | |
| 132 | 300 | 200 | 236 | | | |

| | L | M | N | O | P | Q |
|---------------|-----|-----|-----|----|---|----|
| NF200 - PF200 | 200 | 165 | 130 | 14 | 4 | 14 |
| NF250 | 250 | 215 | 180 | 14 | 4 | 14 |
| NF300 | 300 | 265 | 230 | 14 | 4 | 14 |

DATI TECNICI / TECHNICAL DATA / TECHNISCHE DATEN
 CARACTÉRISTIQUES TECHNIQUES / DATOS TÉCNICOS / CARACTERÍSTICAS TÉCNICAS

| CV RCV | i | n ₁ = 2800 min ⁻¹ | | | n ₁ = 1400 min ⁻¹ | | | n ₁ = 900 min ⁻¹ | | |  | | |
|-----------|-------|---|-----------------------|----------------------|---|-----------------------|----------------------|--|-----------------------|----------------------|---|----------|------|
| | | n ₂ min ⁻¹ | Mn ₂ Nm | P ₁ kW | n ₂ min ⁻¹ | Mn ₂ Nm | P ₁ kW | n ₂ min ⁻¹ | Mn ₂ Nm | P ₁ kW | IEC B5 | IEC B14 | NEMA |
| 162 | 3.70 | 757 | 31 | 2.6 | 378 | 37 | 1.5 | 243 | 41 | 1.1 | 63-71-80 | 63-71-80 | 56 |
| | 5.10 | 549 | 34 | 2.0 | 275 | 41 | 1.2 | 176 | 46 | 0.89 | 63-71-80 | 63-71-80 | 56 |
| | 7.11 | 394 | 40 | 1.7 | 197 | 48 | 1.0 | 127 | 54 | 0.75 | 63-71-80 | 63-71-80 | 56 |
| | 7.62 | 367 | 39 | 1.6 | 184 | 47 | 0.94 | 118 | 52 | 0.67 | 63-71-80 | 63-71-80 | 56 |
| | 9.80 | 286 | 45 | 1.4 | 143 | 54 | 0.84 | 92 | 59 | 0.59 | 63-71-80 | 63-71-80 | 56 |
| | 11.95 | 234 | 50 | 1.3 | 117 | 60 | 0.77 | 75 | 66 | 0.54 | 63-71-80 | 63-71-80 | 56 |
| | 14.63 | 191 | 51 | 1.1 | 96 | 62 | 0.65 | 62 | 68 | 0.46 | 63-71-80 | 63-71-80 | 56 |
| | 16.47 | 170 | 53 | 0.98 | 85 | 64 | 0.59 | 55 | 71 | 0.42 | 63-71-80 | 63-71-80 | 56 |
| | 20.74 | 135 | 54 | 0.80 | 68 | 66 | 0.49 | 43.4 | 73 | 0.35 | 63-71-80 | 63-71-80 | 56 |
| | 24.59 | 114 | 57 | 0.71 | 57 | 69 | 0.43 | 36.6 | 77 | 0.31 | 63-71-80 | 63-71-80 | 56 |
| | 25.51 | 110 | 55 | 0.66 | 55 | 66 | 0.40 | 35.3 | 72 | 0.28 | 63-71-80 | 63-71-80 | 56 |
| | 28.57 | 98 | 56 | 0.60 | 49.0 | 67 | 0.36 | 31.5 | 75 | 0.26 | 63-71-80 | 63-71-80 | 56 |
| | 35.14 | 80 | 55 | 0.48 | 39.8 | 66 | 0.29 | 25.6 | 67 | 0.19 | 63-71-80 | 63-71-80 | 56 |
| | 42.67 | 66 | 58 | 0.42 | 32.8 | 69 | 0.25 | 21.1 | 69 | 0.16 | 63-71-80 | 63-71-80 | 56 |
| | 52.48 | 53 | 68 | 0.40 | 26.7 | 71 | 0.21 | 17.2 | 74 | 0.14 | 63-71-80 | 63-71-80 | 56 |

DIMENSIONI / DIMENSIONS / ABMESSUNGEN / DIMENSIONS / DIMENSIONES / DIMENSÕES



1 **Albero entrata / Input shaft / Antriebswelle**
Arbre d'entrée / Eje de entrada / Eixo de entrada

| D ₁ | E ₁ | F | G | H | I | U | V | Z |
|----------------|----------------|----|----|----|---|----|---|---|
| 16 | 40 | M6 | 15 | 18 | 5 | 25 | 5 | 5 |

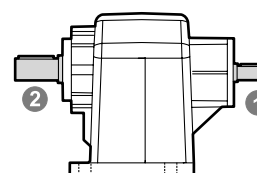
2 **Albero uscita / Output shaft / Abtriebswelle**
Arbre de sortie / Eje de salida / Eixo de saída

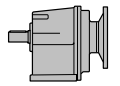
| D ₂ | E | F | G | H | I | U | V |
|------------------|---------------|--------|---------------|------------------|-----------------|------------------|------------------|
| 15.88 (0.625) | 40 (1.575) | 1/4-20 | 16 (0.630) | 17.89 (0.704) | 4.76 (0.188) | 25.40 (1.000) | 14.60 (0.575) |

(Inch)

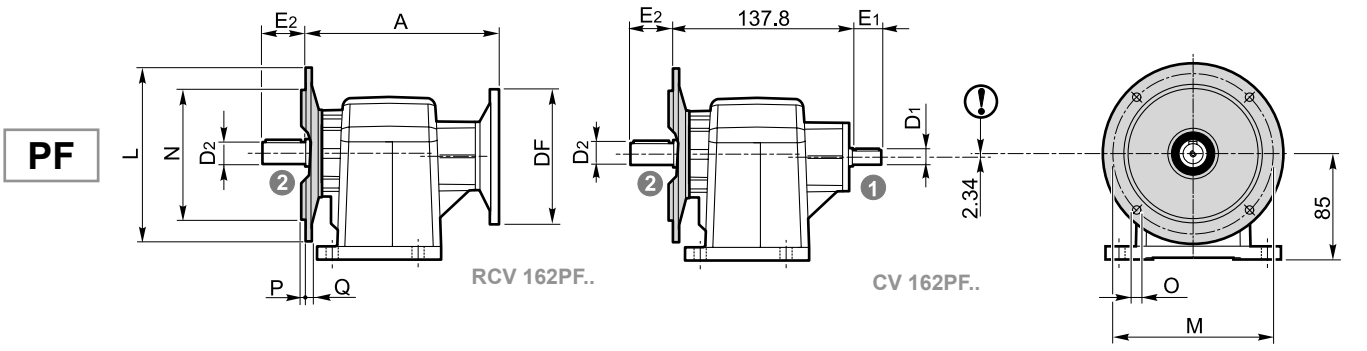
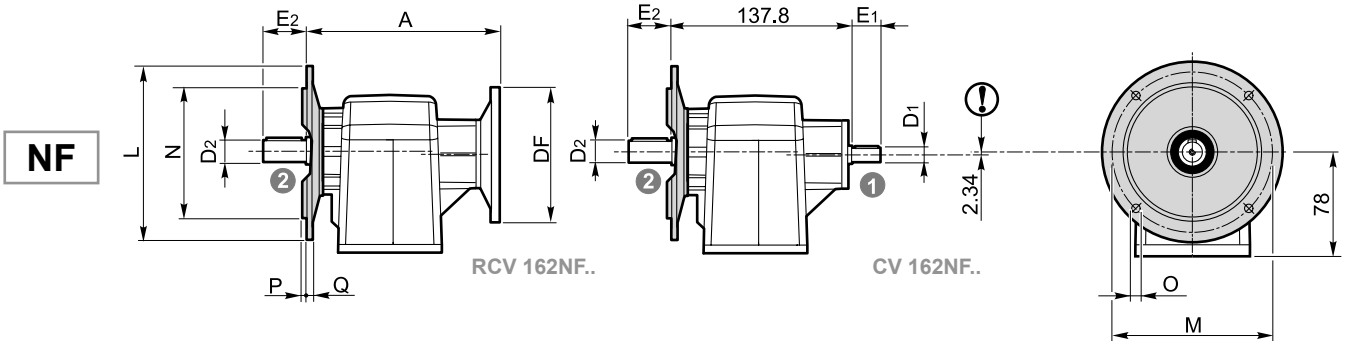
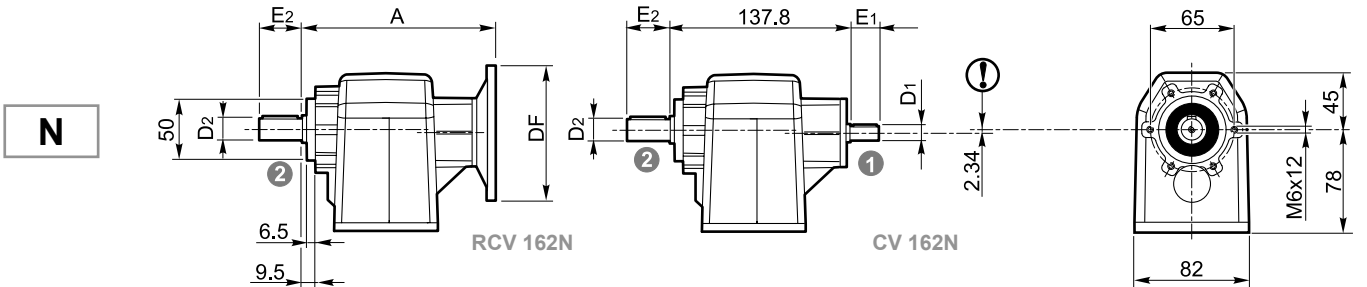
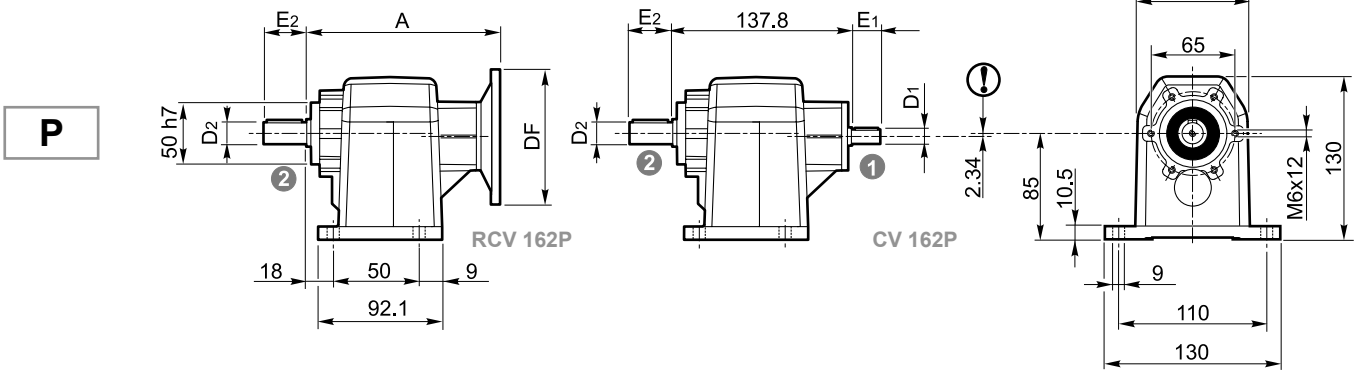
2 **Albero uscita / Output shaft / Abtriebswelle**
Arbre de sortie / Eje de salida / Eixo de saída

| D ₂ | E | F | G | H | I | U | V | Z |
|----------------|----|----|----|------|---|----|---|---|
| 14 | 30 | M5 | 12 | 16 | 5 | 20 | 5 | 5 |
| 16 | 40 | M6 | 16 | 18 | 5 | 30 | 5 | 5 |
| 19 | 40 | M6 | 16 | 21.5 | 6 | 30 | 5 | 5 |
| 20 | 40 | M8 | 19 | 22.5 | 6 | 30 | 5 | 5 |






DIMENSIONI / DIMENSIONS / ABMESSUNGEN / DIMENSIONS / DIMENSIONES / DIMENSÕES



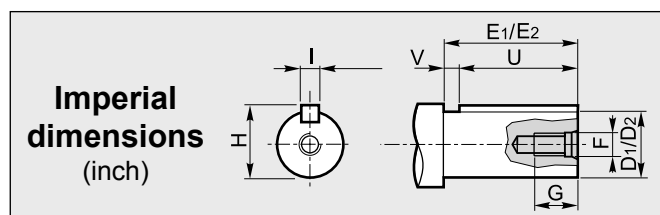
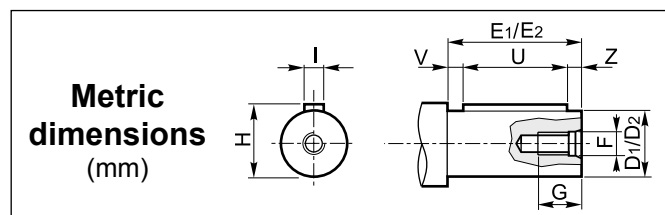
| RCV CV | RCV | | | | | | |
|-----------|-----|------|-------|-----|------|-------|-----|
| | IEC | DF | | A | NEMA | DF | A |
| | | (B5) | (B14) | | | | |
| 162 | 63 | 140 | 90 | 141 | 56 | 165.1 | 160 |
| | 71 | 160 | 105 | | | | |
| | 80 | 200 | 120 | | | | |

| | L | M | N | O | P | Q |
|---------------|-----|-----|-----|-----|-----|---|
| NF120 - PF120 | 120 | 100 | 80 | 9 | 3 | 9 |
| NF140 - PF140 | 140 | 115 | 95 | 9.5 | 3 | 9 |
| NF160 - PF160 | 160 | 130 | 110 | 9.5 | 3.5 | 9 |

DATI TECNICI / TECHNICAL DATA / TECHNISCHE DATEN
 CARACTÉRISTIQUES TECHNIQUES / DATOS TÉCNICOS / CARACTERÍSTICAS TÉCNICAS

| CV RCV | i | n ₁ = 2800 min ⁻¹ | | | n ₁ = 1400 min ⁻¹ | | | n ₁ = 900 min ⁻¹ | | |  | | |
|-----------|--------|---|-----------------------|----------------------|---|-----------------------|----------------------|--|-----------------------|----------------------|---|---------|--------|
| | | n ₂ min ⁻¹ | Mn ₂ Nm | P ₁ kW | n ₂ min ⁻¹ | Mn ₂ Nm | P ₁ kW | n ₂ min ⁻¹ | Mn ₂ Nm | P ₁ kW | IEC B5 | IEC B14 | NEMA |
| 202 | 5.49 | 510 | 61 | 3.4 | 255 | 73 | 2.0 | 164 | 73 | 1.3 | 63-71-80-90 | 90 | 56-140 |
| | 6.46 | 433 | 59 | 2.8 | 217 | 70 | 1.7 | 139 | 70 | 1.1 | 63-71-80-90 | 90 | 56-140 |
| | 7.75 | 361 | 60 | 2.4 | 181 | 72 | 1.4 | 116 | 73 | 0.92 | 63-71-80-90 | 90 | 56-140 |
| | 8.57 | 327 | 61 | 2.2 | 163 | 73 | 1.3 | 105 | 73 | 0.84 | 63-71-80-90 | 90 | 56-140 |
| | 9.92 | 282 | 64 | 2.0 | 141 | 77 | 1.2 | 91 | 77 | 0.76 | 63-71-80-90 | 90 | 56-140 |
| | 11.67 | 240 | 65 | 1.7 | 120 | 78 | 1.0 | 77 | 78 | 0.66 | 63-71-80-90 | 90 | 56-140 |
| | 14.00 | 200 | 65 | 1.4 | 100 | 78 | 0.85 | 64 | 78 | 0.55 | 63-71-80-90 | 90 | 56-140 |
| | 15.48 | 181 | 65 | 1.3 | 90 | 78 | 0.77 | 58 | 78 | 0.49 | 63-71-80-90 | 90 | 56-140 |
| | 18.01 | 155 | 81 | 1.4 | 78 | 97 | 0.82 | 50 | 97 | 0.53 | 63-71-80-90 | 90 | 56-140 |
| | 21.19 | 132 | 80 | 1.2 | 66 | 96 | 0.69 | 42.5 | 96 | 0.44 | 63-71-80-90 | 90 | 56-140 |
| | 25.43 | 110 | 88 | 1.1 | 55 | 106 | 0.64 | 35.4 | 106 | 0.41 | 63-71-80-90 | 90 | 56-140 |
| | 28.13 | 100 | 86 | 0.93 | 50 | 103 | 0.56 | 32.0 | 103 | 0.36 | 63-71-80-90 | 90 | 56-140 |
| | 31.71 | 88 | 89 | 0.86 | 44.2 | 108 | 0.52 | 28.4 | 107 | 0.33 | 63-71-80-90 | 90 | 56-140 |
| | 37.31 | 75 | 90 | 0.74 | 37.5 | 107 | 0.44 | 24.1 | 107 | 0.28 | 63-71-80-90 | 90 | 56-140 |
| | 44.77 | 63 | 89 | 0.61 | 31.3 | 107 | 0.37 | 20.1 | 107 | 0.23 | 63-71-80-90 | 90 | 56-140 |
| 49.52 | 57 | 87 | 0.54 | 28.3 | 104 | 0.32 | 18.2 | 104 | 0.21 | 63-71-80-90 | 90 | 56-140 | |
| 203 | 58.10 | 48.2 | 89 | 0.48 | 24.1 | 107 | 0.29 | 15.5 | 107 | 0.19 | 63-71 | 63-71 | 56 |
| | 64.30 | 43.5 | 87 | 0.43 | 21.8 | 104 | 0.26 | 14.0 | 104 | 0.16 | 63-71 | 63-71 | 56 |
| | 69.20 | 40.5 | 91 | 0.41 | 20.2 | 109 | 0.25 | 13.0 | 108 | 0.16 | 63-71 | 63-71 | 56 |
| | 81.40 | 34.4 | 90 | 0.35 | 17.2 | 108 | 0.21 | 11.1 | 108 | 0.13 | 63-71 | 63-71 | 56 |
| | 97.70 | 28.7 | 90 | 0.29 | 14.3 | 107 | 0.17 | 9.2 | 108 | 0.11 | 63-71 | 63-71 | 56 |
| | 108.10 | 25.9 | 87 | 0.25 | 13.0 | 105 | 0.15 | 8.3 | 104 | 0.10 | 63-71 | 63-71 | 56 |
| | 120.10 | 23.3 | 91 | 0.24 | 11.7 | 109 | 0.14 | 7.5 | 109 | 0.09 | 63-71 | 63-71 | 56 |
| | 141.30 | 19.8 | 91 | 0.20 | 9.9 | 108 | 0.12 | 6.4 | 108 | 0.08 | 63-71 | 63-71 | 56 |
| | 169.50 | 16.5 | 91 | 0.17 | 8.3 | 108 | 0.10 | 5.3 | 108 | 0.06 | 63-71 | 63-71 | 56 |
| | 187.50 | 14.9 | 89 | 0.15 | 7.5 | 107 | 0.09 | 4.8 | 107 | 0.06 | 63-71 | 63-71 | 56 |

DIMENSIONI / DIMENSIONS / ABMESSUNGEN / DIMENSIONS / DIMENSIONES / DIMENSÕES



1 **Albero entrata / Input shaft / Antriebswelle**
Arbre d'entrée / Eje de entrada / Eixo de entrada

| CV | D ₁ | E ₁ | F | G | H | I | U | V | Z |
|-----|----------------|----------------|----|----|------|---|----|----|---|
| 202 | 19 | 40 | M6 | 15 | 21.5 | 6 | 30 | 5 | 5 |
| 203 | 16 | 40 | M6 | 15 | 18 | 5 | 25 | 10 | 5 |

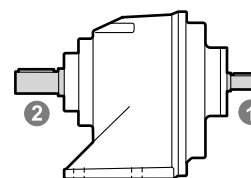
2 **Albero uscita / Output shaft / Abtriebswelle**
Arbre de sortie / Eje de salida / Eixo de saída

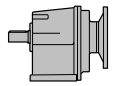
| CV RCV | D ₂ | E | F | G | H | I | U | V |
|-----------|----------------|---------|---------|---------|---------|---------|---------|---------|
| 202 | 19.05 | 40 | 5/16-18 | 18 | 21.14 | 4.76 | 25.4 | 14.6 |
| 203 | (0.750) | (1.575) | | (0.709) | (0.832) | (0.188) | (1.000) | (0.575) |

(Inch)

2 **Albero uscita / Output shaft / Abtriebswelle**
Arbre de sortie / Eje de salida / Eixo de saída

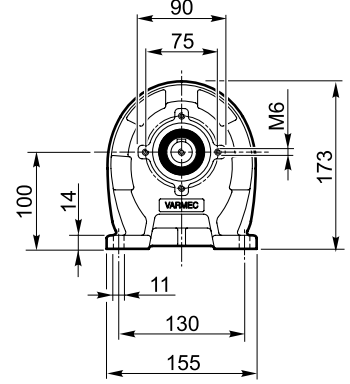
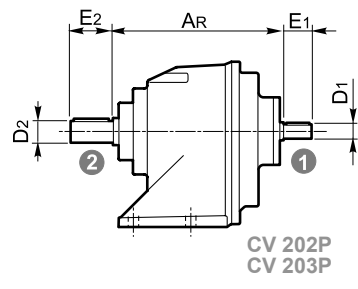
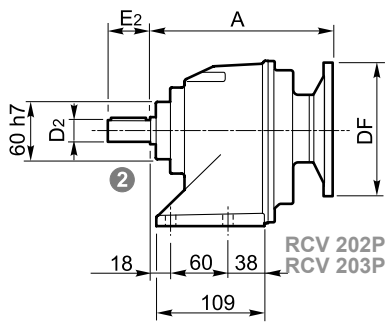
| CV RCV | D ₂ | E | F | G | H | I | U | V | Z |
|------------|----------------|-----|----|----|------|----|----|---|---|
| 202 203 | 14 | 30 | M5 | 12 | 16 | 5 | 20 | 5 | 5 |
| | 16 | 40 | M6 | 16 | 18 | 5 | 30 | 5 | 5 |
| | 19 | 40 | M6 | 16 | 21.5 | 6 | 30 | 5 | 5 |
| | 20 | 40 | M8 | 18 | 22.5 | 6 | 30 | 5 | 5 |
| | 24 | 40 | M8 | 18 | 27 | 8 | 30 | 5 | 5 |
| | 25 | 40 | M8 | 18 | 28 | 8 | 30 | 5 | 5 |
| | 28 | 60 | M8 | 18 | 31 | 8 | 50 | 5 | 5 |
| 30 | 60 | M10 | 22 | 33 | 8 | 50 | 5 | 5 | |



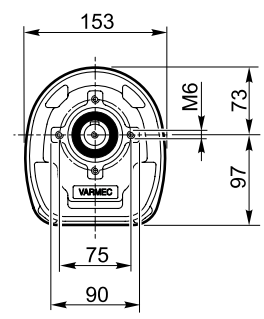
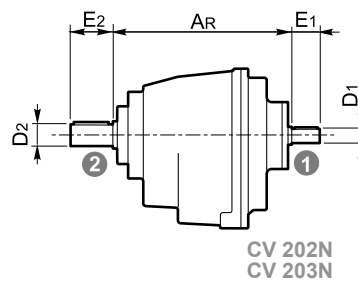
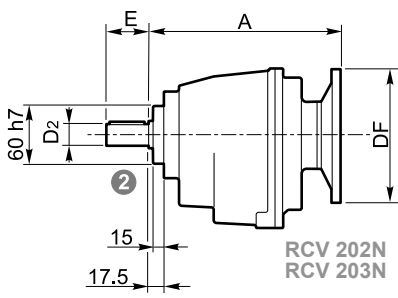


DIMENSIONI / DIMENSIONS / ABMESSUNGEN / DIMENSIONS / DIMENSIONES / DIMENSÕES

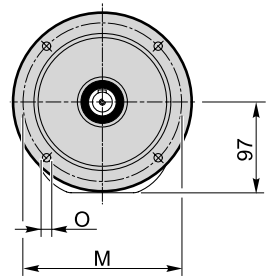
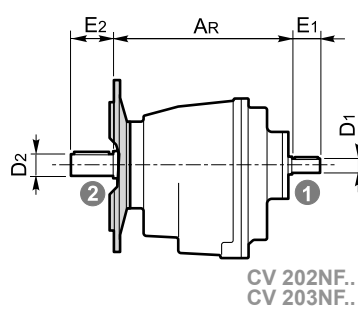
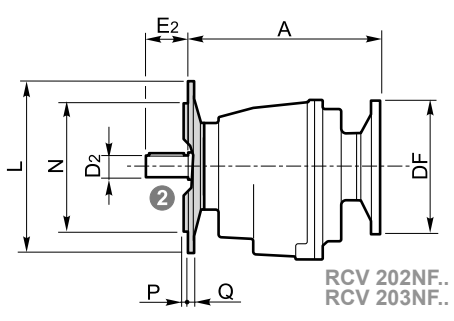
P



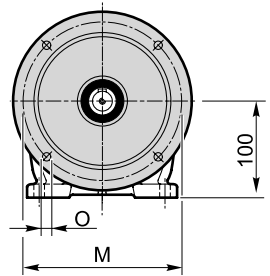
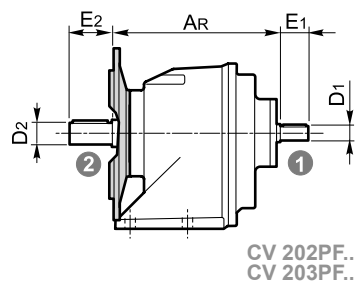
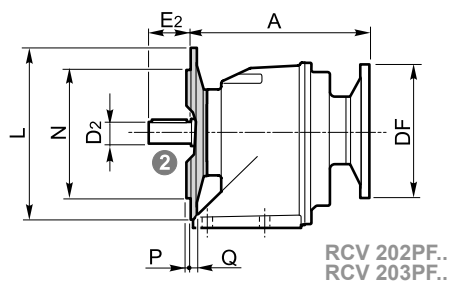
N



NF




PF



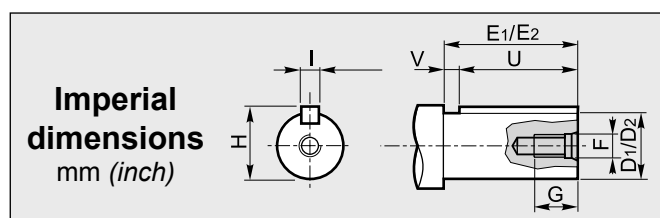
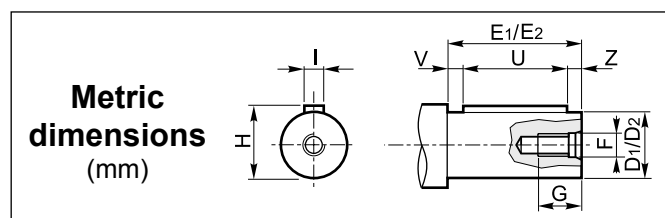
| RCV CV | RCV | | | | | | | CV | |
|-----------|-----|------|-------|-------|------|-------|-------|-----|--|
| | IEC | DF | | A | NEMA | DF | A | | |
| | | (B5) | (B14) | | | | | | |
| 202 | 63 | 140 | | 180 | 56 | 165.1 | 188 | 173 | |
| | 71 | 160 | | | 140 | 165.1 | 188 | | |
| | 80 | 200 | | | | | | | |
| | 90 | 200 | 140 | | | | | | |
| 203 | 63 | 140 | 90 | 173.2 | 56 | 165.1 | 192.2 | 170 | |
| | 71 | 160 | 105 | | | | | | |

| | L | M | N | O | P | Q |
|---------------|-----|-----|-----|----|-----|----|
| NF120 - PF120 | 120 | 100 | 80 | 7 | 2.5 | 10 |
| NF140 - PF140 | 140 | 115 | 95 | 9 | 3 | 10 |
| NF160 - PF160 | 160 | 130 | 110 | 11 | 3 | 10 |
| NF200 | 200 | 165 | 130 | 11 | 3 | 10 |

DATI TECNICI / TECHNICAL DATA / TECHNISCHE DATEN
 CARACTÉRISTIQUES TECHNIQUES / DATOS TÉCNICOS / CARACTERÍSTICAS TÉCNICAS

| CV RCV | i | n ₁ = 2800 min ⁻¹ | | | n ₁ = 1400 min ⁻¹ | | | n ₁ = 900 min ⁻¹ | | |  | | |
|-----------|--------|---|-----------------------|----------------------|---|-----------------------|----------------------|--|-----------------------|----------------------|---|------------|--------|
| | | n ₂ min ⁻¹ | Mn ₂ Nm | P ₁ kW | n ₂ min ⁻¹ | Mn ₂ Nm | P ₁ kW | n ₂ min ⁻¹ | Mn ₂ Nm | P ₁ kW | IEC B5 | IEC B14 | NEMA |
| 252 | 5.02 | 558 | 111 | 6.8 | 279 | 132 | 4.0 | 179 | 133 | 2.6 | 63-71-80-90-100-112 | 90-100-112 | 56-140 |
| | 5.92 | 473 | 119 | 6.1 | 236 | 143 | 3.7 | 152 | 143 | 2.4 | 63-71-80-90-100-112 | 90-100-112 | 56-140 |
| | 6.47 | 433 | 122 | 5.8 | 216 | 146 | 3.4 | 139 | 146 | 2.2 | 63-71-80-90-100-112 | 90-100-112 | 56-140 |
| | 7.88 | 355 | 123 | 4.8 | 178 | 147 | 2.8 | 114 | 147 | 1.8 | 63-71-80-90-100-112 | 90-100-112 | 56-140 |
| | 8.93 | 314 | 128 | 4.4 | 157 | 153 | 2.6 | 101 | 153 | 1.7 | 63-71-80-90-100-112 | 90-100-112 | 56-140 |
| | 10.53 | 266 | 130 | 3.8 | 133 | 156 | 2.3 | 85 | 156 | 1.5 | 63-71-80-90-100-112 | 90-100-112 | 56-140 |
| | 11.51 | 243 | 127 | 3.4 | 122 | 152 | 2.0 | 78 | 152 | 1.3 | 63-71-80-90-100-112 | 90-100-112 | 56-140 |
| | 14.01 | 200 | 127 | 2.8 | 100 | 153 | 1.7 | 64 | 153 | 1.1 | 63-71-80-90-100-112 | 90-100-112 | 56-140 |
| | 16.42 | 171 | 160 | 3.0 | 85 | 192 | 1.8 | 55 | 192 | 1.1 | 63-71-80-90 | 90 | 56-140 |
| | 19.35 | 145 | 169 | 2.7 | 72 | 202 | 1.6 | 46.5 | 203 | 1.0 | 63-71-80-90 | 90 | 56-140 |
| | 21.16 | 132 | 164 | 2.4 | 66 | 196 | 1.4 | 42.5 | 196 | 0.91 | 63-71-80-90 | 90 | 56-140 |
| | 25.75 | 109 | 158 | 1.9 | 54 | 189 | 1.1 | 35.0 | 190 | 0.72 | 63-71-80-90 | 90 | 56-140 |
| | 31.27 | 90 | 170 | 1.7 | 44.8 | 203 | 0.99 | 28.8 | 204 | 0.64 | 63-71-80-90 | 90 | 56-140 |
| | 36.86 | 76 | 171 | 1.4 | 38.0 | 206 | 0.85 | 24.4 | 204 | 0.54 | 63-71-80-90 | 90 | 56-140 |
| | 40.29 | 69 | 166 | 1.3 | 34.7 | 199 | 0.75 | 22.3 | 199 | 0.48 | 63-71-80-90 | 90 | 56-140 |
| 49.04 | 57 | 160 | 1.0 | 28.5 | 191 | 0.59 | 18.4 | 191 | 0.38 | 63-71-80-90 | 90 | 56-140 | |
| 253 | 60.10 | 46.6 | 160 | 0.84 | 23.3 | 191 | 0.50 | 15.0 | 191 | 0.32 | 63-71 | 63-71 | 56 |
| | 69.60 | 40.2 | 172 | 0.78 | 20.1 | 205 | 0.46 | 12.9 | 205 | 0.30 | 63-71 | 63-71 | 56 |
| | 82.00 | 34.1 | 174 | 0.67 | 17.1 | 207 | 0.40 | 11.0 | 207 | 0.26 | 63-71 | 63-71 | 56 |
| | 89.70 | 31.2 | 167 | 0.59 | 15.6 | 201 | 0.35 | 10.0 | 201 | 0.23 | 63-71 | 63-71 | 56 |
| | 109.10 | 25.7 | 161 | 0.47 | 12.8 | 193 | 0.28 | 8.3 | 192 | 0.18 | 63-71 | 63-71 | 56 |
| | 122.50 | 22.9 | 172 | 0.44 | 11.4 | 206 | 0.27 | 7.3 | 206 | 0.17 | 63-71 | 63-71 | 56 |
| | 144.40 | 19.4 | 173 | 0.38 | 9.7 | 208 | 0.23 | 6.2 | 207 | 0.15 | 63-71 | 63-71 | 56 |
| | 157.90 | 17.7 | 168 | 0.34 | 8.9 | 202 | 0.20 | 5.7 | 202 | 0.13 | 63-71 | 63-71 | 56 |
| | 192.10 | 14.6 | 164 | 0.27 | 7.3 | 197 | 0.16 | 4.7 | 197 | 0.10 | 63-71 | 63-71 | 56 |

DIMENSIONI / DIMENSIONS / ABMESSUNGEN / DIMENSIONS / DIMENSIONES / DIMENSÕES



1 **Albero entrata / Input shaft / Antriebswelle**
Arbre d'entrée / Eje de entrada / Eixo de entrada

| CV | D ₁ | E ₁ | F | G | H | I | U | V | Z |
|-----|----------------|----------------|----|----|------|---|----|----|---|
| 252 | 19 | 40 | M6 | 15 | 21.5 | 6 | 30 | 5 | 5 |
| 253 | 16 | 40 | M6 | 15 | 18 | 5 | 25 | 10 | 5 |

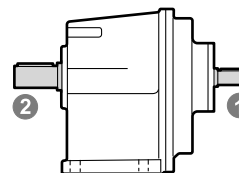
2 **Albero uscita / Output shaft / Abtriebswelle**
Arbre de sortie / Eje de salida / Eixo de saída

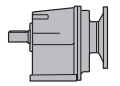
| CV RCV | D ₂ | E | F | G | H | I | U | V |
|-----------|-----------------|---------------|---------|---------------|------------------|-----------------|------------------|-----------------|
| 252 | 25.4 (1.000) | 50 (1.969) | 5/16-18 | 18 (0.709) | 28.17 (1.109) | 6.35 (0.250) | 38.10 (1.500) | 11.9 (0.469) |
| 253 | | | | | | | | |

(Inch)

2 **Albero uscita / Output shaft / Abtriebswelle**
Arbre de sortie / Eje de salida / Eixo de saída

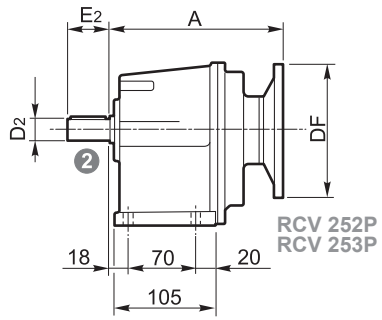
| CV RCV | D ₂ | E | F | G | H | I | U | V | Z |
|------------|----------------|----|-----|----|------|---|----|---|---|
| 252 253 | 19 | 40 | M6 | 16 | 21.5 | 6 | 30 | 5 | 5 |
| | 24 | 50 | M8 | 18 | 27 | 8 | 40 | 5 | 5 |
| | 25 | 50 | M8 | 18 | 28 | 8 | 40 | 5 | 5 |
| | 28 | 60 | M8 | 18 | 31 | 8 | 50 | 5 | 5 |
| | 30 | 60 | M10 | 22 | 33 | 8 | 50 | 5 | 5 |



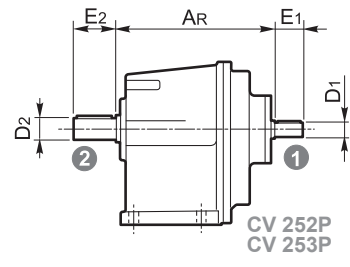


DIMENSIONI / DIMENSIONS / ABMESSUNGEN / DIMENSIONS / DIMENSIONES / DIMENSÕES

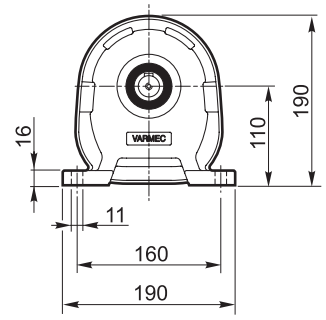
P



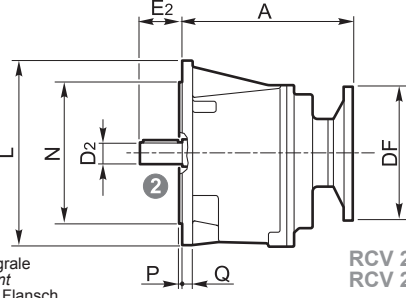
RCV 252P
RCV 253P



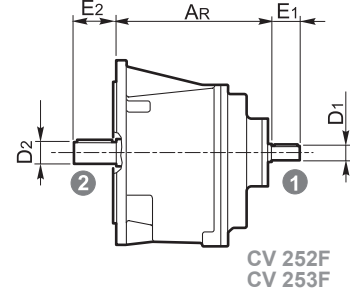
CV 252P
CV 253P



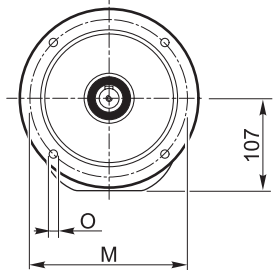
F



RCV 252F
RCV 253F

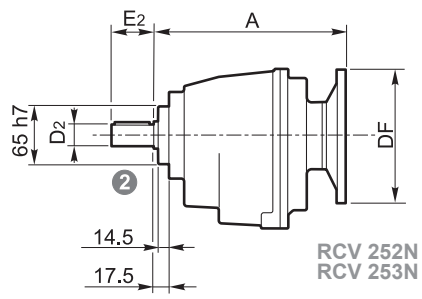


CV 252F
CV 253F

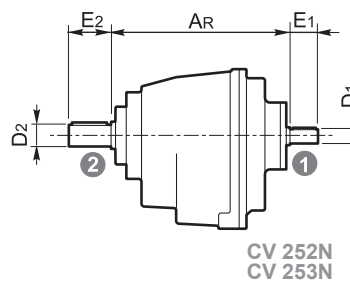


N.B.
F = Flangia integrale
F = Flange mount
F = Integriertem Flansch
F = Bride monobloc
F = Brida integral
F = Brida integral

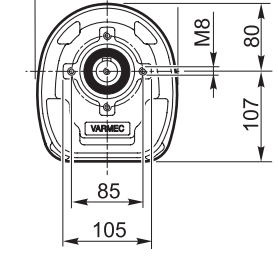
N



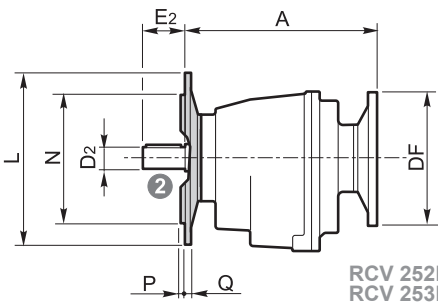
RCV 252N
RCV 253N



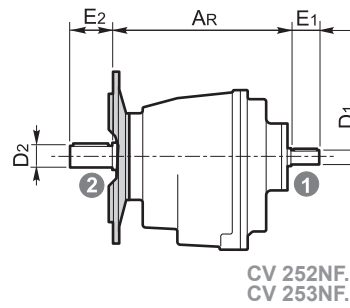
CV 252N
CV 253N



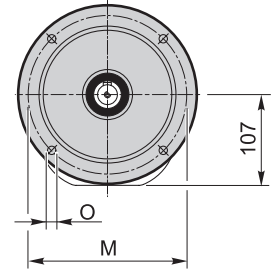
NF



RCV 252NF..
RCV 253NF..



CV 252NF..
CV 253NF..



| | L | M | N | O | P | Q |
|--------------|-----|-----|-----|------|-----|----|
| NF140 | 140 | 115 | 95 | 9 | 3 | 10 |
| NF160 | 160 | 130 | 110 | 11 | 3 | 10 |
| NF200 | 200 | 165 | 130 | 11.5 | 3.5 | 10 |
| F200 | 200 | 165 | 130 | 11.5 | 3.5 | 10 |


P - F

N - NF

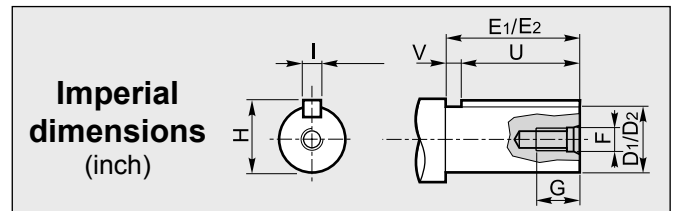
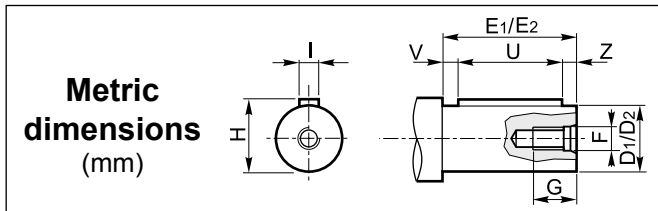
| RCV CV | RCV | | | | | | CV | |
|-----------|-----|------|-------|-------|------|-------|-------|---|
| | IEC | DF | | A | NEMA | DF | | A |
| | | (B5) | (B14) | | | | | |
| 252 | 63 | 140 | | 169 | 56 | 165.1 | 177 | |
| | 71 | 160 | | | 140 | 165.1 | 177 | |
| | 80 | 200 | | | | | | |
| | 90 | 200 | 140 | | | | | |
| | 100 | 250 | 160 | | | | | |
| | 112 | 250 | 160 | | | | | |
| 253 | 63 | 140 | 90 | 162.7 | 56 | 165.1 | 181.7 | |
| | 71 | 160 | 105 | | | | | |

| RCV CV | RCV | | | | | | CV | |
|-----------|-----|------|-------|-------|------|-------|-------|---|
| | IEC | DF | | A | NEMA | DF | | A |
| | | (B5) | (B14) | | | | | |
| 252 | 63 | 140 | | 194 | 56 | 165.1 | 202 | |
| | 71 | 160 | | | 140 | 165.1 | 202 | |
| | 80 | 200 | | | | | | |
| | 90 | 200 | 140 | | | | | |
| | 100 | 250 | 160 | | | | | |
| | 112 | 250 | 160 | | | | | |
| 253 | 63 | 140 | 90 | 187.7 | 56 | 165.1 | 206.7 | |
| | 71 | 160 | 105 | | | | | |

DATI TECNICI / TECHNICAL DATA / TECHNISCHE DATEN
 CARACTÉRISTIQUES TECHNIQUES / DATOS TÉCNICOS / CARACTERÍSTICAS TÉCNICAS

| CV RCV | i | n ₁ = 2800 min ⁻¹ | | | n ₁ = 1400 min ⁻¹ | | | n ₁ = 900 min ⁻¹ | | |  | | |
|-----------|--------|---|-----------------------|----------------------|---|-----------------------|----------------------|--|-----------------------|----------------------|---|-------------|---------|
| | | n ₂ min ⁻¹ | Mn ₂ Nm | P ₁ kW | n ₂ min ⁻¹ | Mn ₂ Nm | P ₁ kW | n ₂ min ⁻¹ | Mn ₂ Nm | P ₁ kW | IEC B5 | IEC B14 | NEMA |
| 302 | 3.74 | 749 | 203 | 16.6 | 374 | 243 | 9.9 | 241 | 243 | 6.4 | 71-80-90-100/112-132 | 100-112-132 | 140-180 |
| | 4.56 | 614 | 215 | 14.4 | 307 | 258 | 8.6 | 197 | 258 | 5.6 | 71-80-90-100/112-132 | 100-112-132 | 140-180 |
| | 5.11 | 548 | 210 | 12.6 | 274 | 251 | 7.5 | 176 | 252 | 4.8 | 71-80-90-100/112-132 | 100-112-132 | 140-180 |
| | 6.22 | 450 | 211 | 10.4 | 225 | 253 | 6.2 | 145 | 253 | 4.0 | 71-80-90-100/112-132 | 100-112-132 | 140-180 |
| | 6.93 | 404 | 211 | 9.3 | 202 | 252 | 5.6 | 130 | 252 | 3.6 | 71-80-90-100/112-132 | 100-112-132 | 140-180 |
| | 7.78 | 360 | 218 | 8.6 | 180 | 261 | 5.1 | 116 | 261 | 3.3 | 71-80-90-100/112-132 | 100-112-132 | 140-180 |
| | 7.51 | 373 | 206 | 8.4 | 186 | 246 | 5.0 | 120 | 246 | 3.2 | 71-80-90-100/112-132 | 100-112-132 | 140-180 |
| | 9.14 | 306 | 241 | 8.1 | 153 | 288 | 4.8 | 98 | 289 | 3.1 | 71-80-90-100/112-132 | 100-112-132 | 140-180 |
| | 10.18 | 275 | 247 | 7.4 | 138 | 296 | 4.4 | 88 | 297 | 2.9 | 71-80-90-100/112-132 | 100-112-132 | 140-180 |
| | 11.43 | 245 | 254 | 6.8 | 122 | 305 | 4.1 | 79 | 304 | 2.6 | 71-80-90-100/112-132 | 100-112-132 | 140-180 |
| | 12.62 | 222 | 233 | 5.6 | 111 | 279 | 3.4 | 71 | 279 | 2.2 | 71-80-90-100/112 | 100-112 | 140-180 |
| | 15.37 | 182 | 246 | 4.9 | 91 | 295 | 2.9 | 59 | 295 | 1.9 | 71-80-90-100/112 | 100-112 | 140-180 |
| | 17.11 | 164 | 253 | 4.5 | 82 | 303 | 2.7 | 53 | 302 | 1.7 | 71-80-90-100/112 | 100-112 | 140-180 |
| | 19.21 | 146 | 259 | 4.1 | 73 | 310 | 2.5 | 46.9 | 310 | 1.6 | 71-80-90-100/112 | 100-112 | 140-180 |
| | 24.19 | 116 | 239 | 3.0 | 58 | 285 | 1.8 | 37.2 | 285 | 1.2 | 71-80-90-100/112 | 100-112 | 140-180 |
| | 29.45 | 95 | 251 | 2.6 | 47.5 | 300 | 1.6 | 30.6 | 300 | 1.0 | 71-80-90-100/112 | 100-112 | 140-180 |
| 32.80 | 85 | 257 | 2.4 | 42.7 | 308 | 1.4 | 27.4 | 308 | 0.92 | 71-80-90-100/112 | 100-112 | 140-180 | |
| 36.82 | 76 | 263 | 2.2 | 38.0 | 315 | 1.3 | 24.4 | 316 | 0.84 | 71-80-90-100/112 | 100-112 | 140-180 | |
| 303 | 41.20 | 68 | 258 | 2.0 | 34.0 | 310 | 1.2 | 21.8 | 308 | 0.76 | 63-71-80-90 | 90 | 56-140 |
| | 46.20 | 61 | 264 | 1.8 | 30.3 | 316 | 1.1 | 19.5 | 316 | 0.69 | 63-71-80-90 | 90 | 56-140 |
| | 54.00 | 52 | 242 | 1.4 | 25.9 | 290 | 0.85 | 16.7 | 290 | 0.54 | 63-71-80-90 | 90 | 56-140 |
| | 65.80 | 42.6 | 253 | 1.2 | 21.3 | 304 | 0.73 | 13.7 | 304 | 0.47 | 63-71-80-90 | 90 | 56-140 |
| | 73.30 | 38.2 | 260 | 1.1 | 19.1 | 310 | 0.67 | 12.3 | 310 | 0.43 | 63-71-80-90 | 90 | 56-140 |
| | 82.20 | 34.1 | 265 | 1.0 | 17.0 | 317 | 0.61 | 10.9 | 318 | 0.39 | 63-71-80-90 | 90 | 56-140 |
| | 99.30 | 28.2 | 243 | 0.77 | 14.1 | 292 | 0.46 | 9.1 | 291 | 0.30 | 63-71-80-90 | 90 | 56-140 |
| | 120.90 | 23.2 | 256 | 0.67 | 11.6 | 306 | 0.40 | 7.4 | 306 | 0.26 | 63-71-80-90 | 90 | 56-140 |
| | 134.70 | 20.8 | 261 | 0.61 | 10.4 | 314 | 0.37 | 6.7 | 313 | 0.24 | 63-71-80-90 | 90 | 56-140 |
| | 151.10 | 18.5 | 268 | 0.56 | 9.3 | 320 | 0.33 | 6.0 | 320 | 0.21 | 63-71-80-90 | 90 | 56-140 |
| | 189.20 | 14.8 | 249 | 0.42 | 7.4 | 299 | 0.25 | 4.8 | 298 | 0.16 | 63-71-80-90 | 90 | 56-140 |
| | 230.30 | 12.2 | 267 | 0.37 | 6.1 | 320 | 0.22 | 3.9 | 319 | 0.14 | 63-71-80-90 | 90 | 56-140 |
| 256.50 | 10.9 | 279 | 0.34 | 5.5 | 334 | 0.21 | 3.5 | 335 | 0.13 | 63-71-80-90 | 90 | 56-140 | |
| 287.90 | 9.7 | 288 | 0.32 | 4.9 | 346 | 0.19 | 3.1 | 345 | 0.12 | 63-71-80-90 | 90 | 56-140 | |

DIMENSIONI / DIMENSIONS / ABMESSUNGEN / DIMENSIONS / DIMENSIONES / DIMENSÕES



① **Albero entrata / Input shaft / Antriebswelle**
Arbre d'entrée / Eje de entrada / Eixo de entrada

| CV | D ₁ | E ₁ | F | G | H | I | U | V | Z |
|-----|----------------|----------------|----|----|------|---|----|---|---|
| 302 | 24 | 50 | M8 | 18 | 27 | 8 | 40 | 5 | 5 |
| 303 | 19 | 40 | M6 | 15 | 21.5 | 6 | 30 | 5 | 5 |

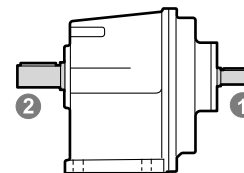
② **Albero uscita / Output shaft / Abtriebswelle**
Arbre de sortie / Eje de salida / Eixo de saída

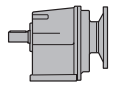
| CV RCV | D ₂ | E | F | G | H | I | U | V |
|------------|------------------|---------------|--------|---------------|------------------|-----------------|------------------|------------------|
| 302 303 | 30.16 (1.187) | 60 (2.362) | 3/8-16 | 23 (0.906) | 32.99 (1.299) | 6.35 (0.250) | 44.45 (1.750) | 15.55 (0.612) |

(Inch)

② **Albero uscita / Output shaft / Abtriebswelle**
Arbre de sortie / Eje de salida / Eixo de saída

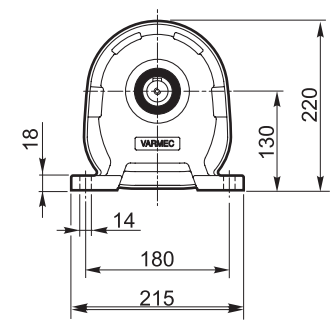
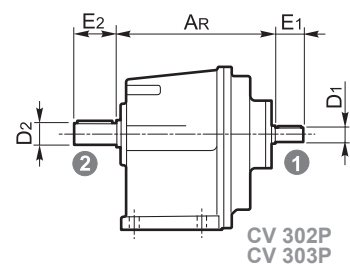
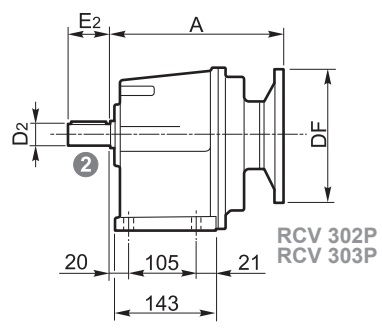
| CV RCV | D ₂ | E | F | G | H | I | U | V | Z |
|------------|----------------|-----|-----|----|----|----|----|-----|-----|
| 302 303 | 28 | 60 | M8 | 18 | 31 | 8 | 50 | 5 | 5 |
| | 30 | 60 | M10 | 22 | 33 | 8 | 50 | 5 | 5 |
| | 32 | 75 | M10 | 22 | 35 | 10 | 60 | 7.5 | 7.5 |
| | 35 | 80 | M10 | 22 | 38 | 10 | 70 | 5 | 5 |
| | 38 | 80 | M10 | 22 | 41 | 10 | 70 | 5 | 5 |
| 40 | 80 | M12 | 28 | 43 | 12 | 70 | 5 | 5 | |



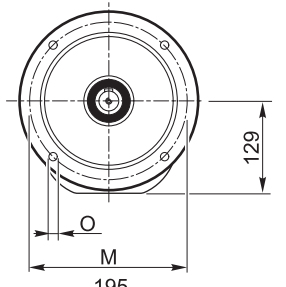
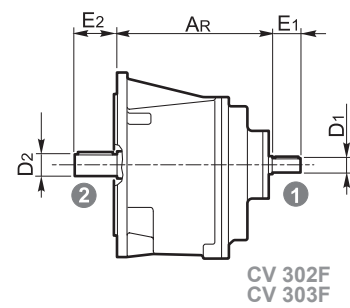
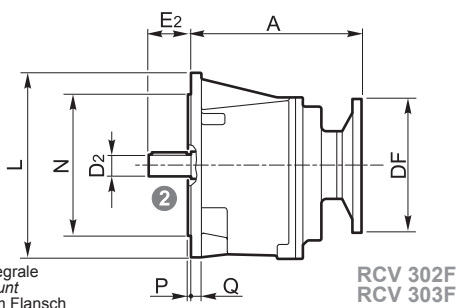


DIMENSIONI / DIMENSIONS / ABMESSUNGEN / DIMENSIONS / DIMENSIONES / DIMENSÕES

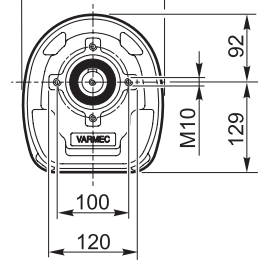
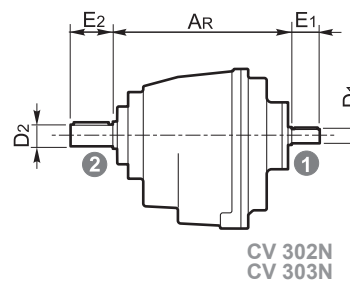
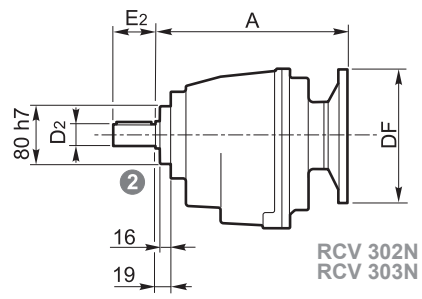
P



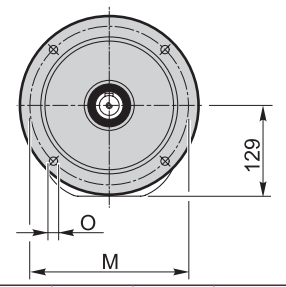
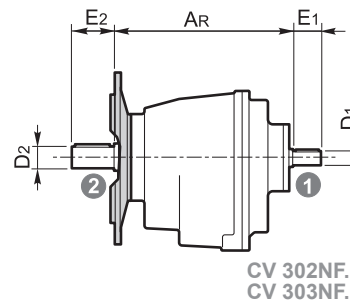
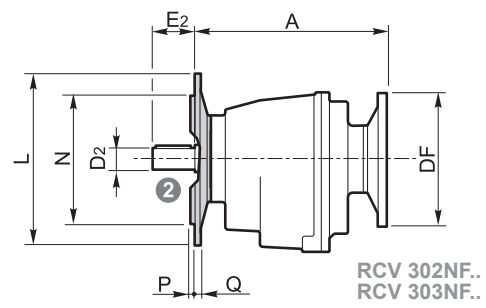
F



N



NF



N.B.
 F = Flangia integrale
 F = Flange mount
 F = Integriertem Flansch
 F = Bride monobloc
 F = Brida integral
 F = Brida integral

| | L | M | N | O | P | Q |
|--------------|-----|-----|-----|----|-----|----|
| NF160 | 160 | 130 | 110 | 11 | 3.5 | 11 |
| NF200 | 200 | 165 | 130 | 13 | 3.5 | 11 |
| NF250 | 250 | 215 | 180 | 14 | 4 | 11 |
| F250 | 250 | 215 | 180 | 14 | 4 | 13 |


P - F

N - NF

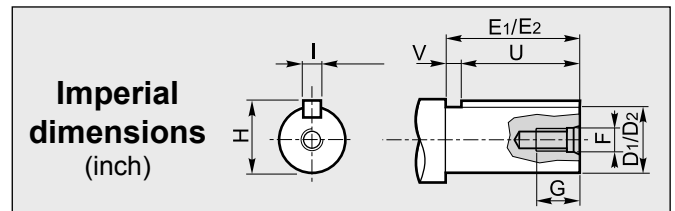
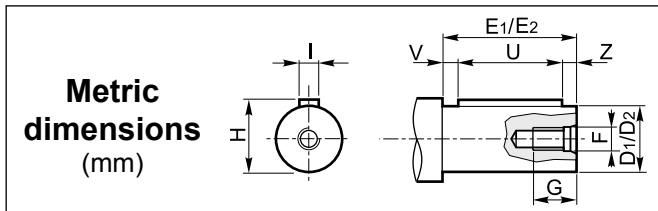
| RCV CV | RCV | | | | | | CV | |
|-----------|-----|------|-------|-----|------|-------|-----|-----|
| | IEC | DF | | A | NEMA | DF | A | AR |
| | | (B5) | (B14) | | | | | |
| 302 | 71 | 160 | | 249 | 140 | 165.1 | 259 | 244 |
| | 80 | 200 | | | 180 | 228.6 | 265 | |
| | 90 | 200 | | | | | | |
| | 100 | 250 | 160 | | | | | |
| | 112 | 250 | 160 | | | | | |
| | 132 | 300 | 200 | 278 | | | | |
| 303 | 63 | 140 | | 246 | 56 | 165.1 | 254 | 239 |
| | 71 | 160 | | | 140 | 228.6 | 254 | |
| | 80 | 200 | | | | | | |
| | 90 | 200 | 140 | | | | | |

| RCV CV | RCV | | | | | | CV | |
|-----------|-----|------|-------|-----|------|-------|-----|-----|
| | IEC | DF | | A | NEMA | DF | A | AR |
| | | (B5) | (B14) | | | | | |
| 302 | 71 | 160 | | 274 | 140 | 165.1 | 284 | 269 |
| | 80 | 200 | | | 180 | 228.6 | 290 | |
| | 90 | 200 | | | | | | |
| | 100 | 250 | 160 | | | | | |
| | 112 | 250 | 160 | | | | | |
| | 132 | 300 | 200 | 303 | | | | |
| 303 | 63 | 140 | | 271 | 56 | 165.1 | 279 | 264 |
| | 71 | 160 | | | 140 | 228.6 | 279 | |
| | 80 | 200 | | | | | | |
| | 90 | 200 | 140 | | | | | |

DATI TECNICI / TECHNICAL DATA / TECHNISCHE DATEN
 CARACTÉRISTIQUES TECHNIQUES / DATOS TÉCNICOS / CARACTERÍSTICAS TÉCNICAS

| CV RCV | i | n ₁ = 2800 min ⁻¹ | | | n ₁ = 1400 min ⁻¹ | | | n ₁ = 900 min ⁻¹ | | |  | | |
|-----------|--------|---|-----------------------|----------------------|---|-----------------------|----------------------|--|-----------------------|----------------------|---|-------------|---------|
| | | n ₂ min ⁻¹ | Mn ₂ Nm | P ₁ kW | n ₂ min ⁻¹ | Mn ₂ Nm | P ₁ kW | n ₂ min ⁻¹ | Mn ₂ Nm | P ₁ kW | IEC B5 | IEC B14 | NEMA |
| 352 | 3.74 | 749 | 262 | 21 | 374 | 314 | 12.8 | 241 | 313 | 8.2 | 71-80-90-100-112-132 | 100-112-132 | 140-180 |
| | 4.56 | 614 | 277 | 18.6 | 307 | 332 | 11.1 | 197 | 332 | 7.1 | 71-80-90-100-112-132 | 100-112-132 | 140-180 |
| | 5.11 | 548 | 289 | 17.3 | 274 | 346 | 10.3 | 176 | 345 | 6.6 | 71-80-90-100-112-132 | 100-112-132 | 140-180 |
| | 6.22 | 450 | 304 | 14.9 | 225 | 364 | 8.9 | 145 | 364 | 5.7 | 71-80-90-100-112-132 | 100-112-132 | 140-180 |
| | 6.93 | 404 | 312 | 13.8 | 202 | 374 | 8.2 | 130 | 374 | 5.3 | 71-80-90-100-112-132 | 100-112-132 | 140-180 |
| | 7.78 | 360 | 321 | 12.6 | 180 | 384 | 7.5 | 116 | 384 | 4.8 | 71-80-90-100-112-132 | 100-112-132 | 140-180 |
| | 7.51 | 373 | 294 | 12.0 | 186 | 352 | 7.2 | 120 | 352 | 4.6 | 71-80-90-100-112-132 | 100-112-132 | 140-180 |
| | 9.14 | 306 | 310 | 10.4 | 153 | 370 | 6.2 | 98 | 371 | 4.0 | 71-80-90-100-112-132 | 100-112-132 | 140-180 |
| | 10.18 | 275 | 318 | 9.5 | 138 | 381 | 5.7 | 88 | 381 | 3.7 | 71-80-90-100-112-132 | 100-112-132 | 140-180 |
| | 11.43 | 245 | 326 | 8.7 | 122 | 391 | 5.2 | 79 | 391 | 3.4 | 71-80-90-100-112-132 | 100-112-132 | 140-180 |
| | 12.62 | 222 | 300 | 7.3 | 111 | 360 | 4.4 | 71 | 360 | 2.8 | 71-80-90-100-112 | 100-112-132 | 140-180 |
| | 15.37 | 182 | 316 | 6.3 | 91 | 379 | 3.8 | 59 | 378 | 2.4 | 71-80-90-100-112 | 100-112-132 | 140-180 |
| | 17.11 | 164 | 324 | 5.8 | 82 | 388 | 3.5 | 53 | 388 | 2.2 | 71-80-90-100-112 | 100-112-132 | 140-180 |
| | 19.21 | 146 | 333 | 5.3 | 73 | 399 | 3.2 | 46.9 | 399 | 2.0 | 71-80-90-100-112 | 100-112-132 | 140-180 |
| | 24.19 | 116 | 308 | 3.9 | 58 | 369 | 2.3 | 37.2 | 368 | 1.5 | 71-80-90-100-112 | 100-112-132 | 140-180 |
| | 29.45 | 95 | 325 | 3.4 | 47.5 | 390 | 2.0 | 30.6 | 389 | 1.3 | 71-80-90-100-112 | 100-112-132 | 140-180 |
| 32.80 | 85 | 330 | 3.1 | 42.7 | 396 | 1.8 | 27.4 | 397 | 1.2 | 71-80-90-100-112 | 100-112-132 | 140-180 | |
| 36.82 | 76 | 338 | 2.8 | 38.0 | 403 | 1.7 | 24.4 | 405 | 1.1 | 71-80-90-100-112 | 100-112-132 | 140-180 | |
| 353 | 41.20 | 68 | 332 | 2.5 | 34.0 | 396 | 1.5 | 21.8 | 397 | 0.98 | 63-71-80-90 | 90 | 56-140 |
| | 46.20 | 61 | 339 | 2.3 | 30.3 | 406 | 1.4 | 19.5 | 405 | 0.89 | 63-71-80-90 | 90 | 56-140 |
| | 54.00 | 52 | 311 | 1.8 | 25.9 | 372 | 1.1 | 16.7 | 372 | 0.70 | 63-71-80-90 | 90 | 56-140 |
| | 65.80 | 42.6 | 326 | 1.6 | 21.3 | 391 | 0.94 | 13.7 | 391 | 0.60 | 63-71-80-90 | 90 | 56-140 |
| | 73.30 | 38.2 | 333 | 1.4 | 19.1 | 398 | 0.86 | 12.3 | 400 | 0.55 | 63-71-80-90 | 90 | 56-140 |
| | 82.20 | 34.1 | 341 | 1.3 | 17.0 | 408 | 0.78 | 10.9 | 408 | 0.50 | 63-71-80-90 | 90 | 56-140 |
| | 99.30 | 28.2 | 314 | 1.0 | 14.1 | 377 | 0.60 | 9.1 | 375 | 0.38 | 63-71-80-90 | 90 | 56-140 |
| | 120.90 | 23.2 | 329 | 0.86 | 11.6 | 393 | 0.51 | 7.4 | 392 | 0.33 | 63-71-80-90 | 90 | 56-140 |
| | 134.70 | 20.8 | 336 | 0.79 | 10.4 | 400 | 0.47 | 6.7 | 401 | 0.30 | 63-71-80-90 | 90 | 56-140 |
| | 151.10 | 18.5 | 344 | 0.72 | 9.3 | 411 | 0.43 | 6.0 | 410 | 0.28 | 63-71-80-90 | 90 | 56-140 |
| | 189.20 | 14.8 | 317 | 0.53 | 7.4 | 383 | 0.32 | 4.8 | 381 | 0.20 | 63-71-80-90 | 90 | 56-140 |
| | 230.30 | 12.2 | 342 | 0.47 | 6.1 | 408 | 0.28 | 3.9 | 408 | 0.18 | 63-71-80-90 | 90 | 56-140 |
| | 256.50 | 10.9 | 357 | 0.44 | 5.5 | 428 | 0.26 | 3.5 | 429 | 0.17 | 63-71-80-90 | 90 | 56-140 |
| | 287.90 | 9.7 | 369 | 0.40 | 4.9 | 440 | 0.24 | 3.1 | 442 | 0.16 | 63-71-80-90 | 90 | 56-140 |

DIMENSIONI / DIMENSIONS / ABMESSUNGEN / DIMENSIONS / DIMENSIONES / DIMENSÕES



1 **Albero entrata / Input shaft / Antriebswelle**
Arbre d'entrée / Eje de entrada / Eixo de entrada

| CV RCV | D ₁ | E ₁ | F | G | H | I | U | V | Z |
|-----------|----------------|----------------|----|----|------|---|----|---|---|
| 352 | 24 | 50 | M8 | 18 | 27 | 8 | 40 | 5 | 5 |
| 353 | 19 | 40 | M6 | 15 | 21.5 | 6 | 30 | 5 | 5 |

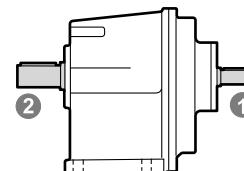
2 **Albero uscita / Output shaft / Abtriebswelle**
Arbre de sortie / Eje de salida / Eixo de saída

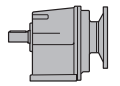
| CV RCV | D ₂ | E | F | G | H | I | U | V |
|-----------|----------------|---------|--------|---------|---------|---------|---------|---------|
| 352 | 34.92 | 80 | 3/8-16 | 23 | 38.42 | 7.92 | 63.50 | 16.50 |
| 353 | (1.375) | (3.150) | | (0.906) | (1.513) | (0.312) | (2.500) | (0.650) |

(Inch)

2 **Albero uscita / Output shaft / Abtriebswelle**
Arbre de sortie / Eje de salida / Eixo de saída

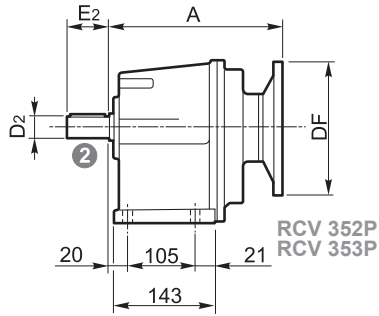
| CV RCV | D ₂ | E | F | G | H | I | U | V | Z |
|------------|----------------|----|-----|----|----|----|----|---|---|
| 352 353 | 28 | 60 | M8 | 18 | 31 | 8 | 50 | 5 | 5 |
| | 30 | 60 | M10 | 22 | 33 | 8 | 50 | 5 | 5 |
| | 32 | 80 | M10 | 22 | 35 | 10 | 70 | 5 | 5 |
| | 35 | 80 | M10 | 22 | 38 | 10 | 70 | 5 | 5 |
| | 38 | 80 | M10 | 22 | 41 | 10 | 70 | 5 | 5 |
| | 40 | 80 | M12 | 28 | 43 | 12 | 70 | 5 | 5 |



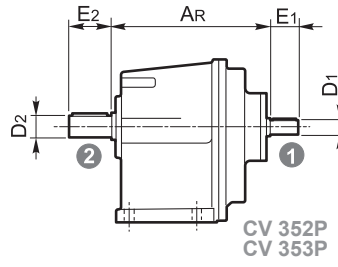


DIMENSIONI / DIMENSIONS / ABMESSUNGEN / DIMENSIONS / DIMENSIONES / DIMENSÕES

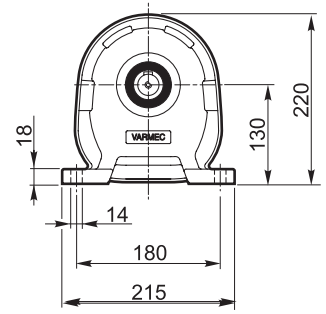
P



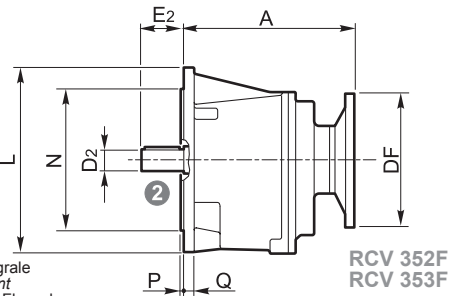
RCV 352P
RCV 353P



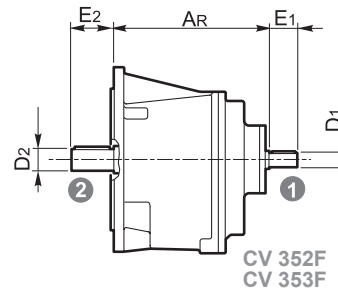
CV 352P
CV 353P



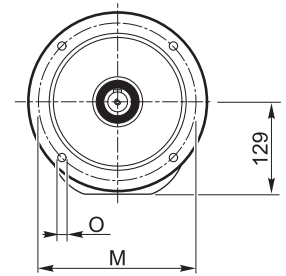
F



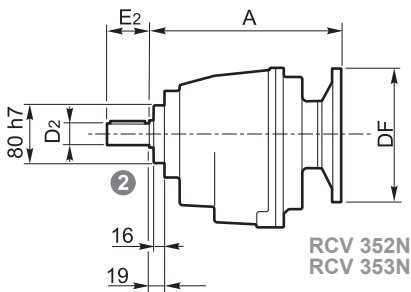
RCV 352F
RCV 353F



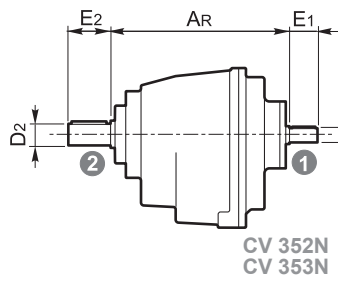
CV 352F
CV 353F



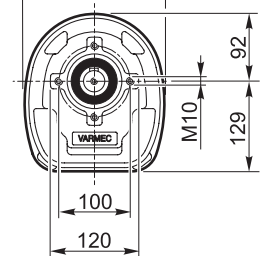
N



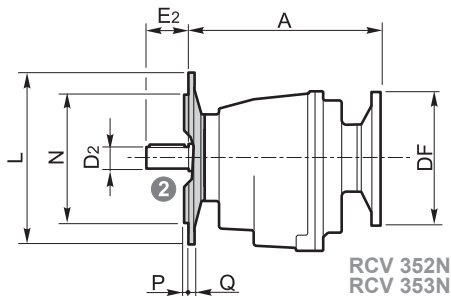
RCV 352N
RCV 353N



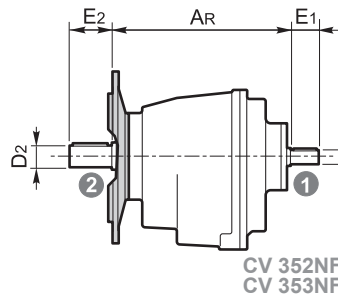
CV 352N
CV 353N



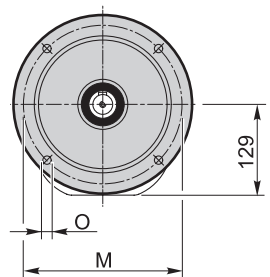
NF



RCV 352NF..
RCV 353NF..



CV 352NF..
CV 353NF..



| | L | M | N | O | P | Q |
|--------------|-----|-----|-----|----|-----|----|
| NF160 | 160 | 130 | 110 | 11 | 3.5 | 11 |
| NF200 | 200 | 165 | 130 | 13 | 3.5 | 11 |
| NF250 | 250 | 215 | 180 | 14 | 4 | 11 |
| F250 | 250 | 215 | 180 | 14 | 4 | 13 |


P - F

N - NF

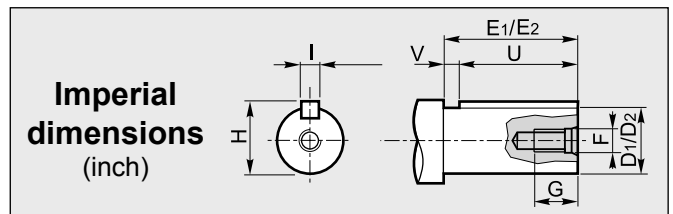
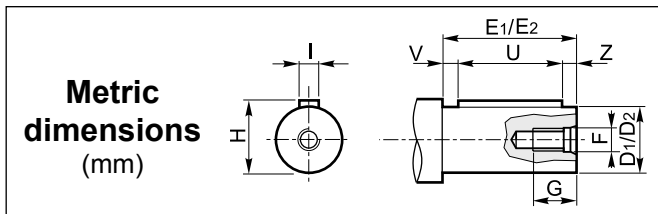
| RCV CV | RCV | | | | | | CV | |
|-----------|-----|------|-------|-----|------|-------|-----|-----|
| | IEC | DF | | A | NEMA | DF | | A |
| | | (B5) | (B14) | | | | | |
| 352 | 71 | 160 | | 249 | 140 | 165.1 | 259 | 244 |
| | 80 | 200 | | | 180 | 228.6 | 265 | |
| | 90 | 200 | | | | | | |
| | 100 | 250 | 160 | | | | | |
| | 112 | 250 | 160 | | | | | |
| | 132 | 300 | 200 | | 278 | | | |
| 353 | 63 | 140 | | 246 | 56 | 165.1 | 254 | 239 |
| | 71 | 160 | | | 140 | 228.6 | 254 | |
| | 80 | 200 | | | | | | |
| | 90 | 200 | 140 | | | | | |

| RCV CV | RCV | | | | | | CV | |
|-----------|-----|------|-------|-----|------|-------|-----|-----|
| | IEC | DF | | A | NEMA | DF | | A |
| | | (B5) | (B14) | | | | | |
| 352 | 71 | 160 | | 274 | 140 | 165.1 | 284 | 269 |
| | 80 | 200 | | | 180 | 228.6 | 290 | |
| | 90 | 200 | | | | | | |
| | 100 | 250 | 160 | | | | | |
| | 112 | 250 | 160 | | | | | |
| | 132 | 300 | 200 | | 303 | | | |
| 353 | 63 | 140 | | 271 | 56 | 165.1 | 279 | 264 |
| | 71 | 160 | | | 140 | 228.6 | 279 | |
| | 80 | 200 | | | | | | |
| | 90 | 200 | 140 | | | | | |

DATI TECNICI / TECHNICAL DATA / TECHNISCHE DATEN
 CARACTÉRISTQUES TECHNIQUES / DATOS TÉCNICOS / CARACTERÍSTICAS TÉCNICAS

| CV RCV | i | n ₁ = 2800 min ⁻¹ | | | n ₁ = 1400 min ⁻¹ | | | n ₁ = 900 min ⁻¹ | | |  | | |
|-----------|--------|---|-----------------------|----------------------|---|-----------------------|----------------------|--|-----------------------|----------------------|---|-------------|-------------|
| | | n ₂ min ⁻¹ | Mn ₂ Nm | P ₁ kW | n ₂ min ⁻¹ | Mn ₂ Nm | P ₁ kW | n ₂ min ⁻¹ | Mn ₂ Nm | P ₁ kW | IEC B5 | IEC B14 | NEMA |
| 452 | 4.42 | 633 | 479 | 33 | 317 | 574 | 19.8 | 204 | 574 | 12.7 | 80-90-100-112-132 | 132 | 140-180-210 |
| | 4.89 | 573 | 478 | 30 | 286 | 572 | 17.9 | 184 | 572 | 11.5 | 80-90-100-112-132 | 132 | 140-180-210 |
| | 5.43 | 516 | 479 | 27 | 258 | 573 | 16.1 | 166 | 573 | 10.4 | 80-90-100-112-132 | 132 | 140-180-210 |
| | 6.07 | 461 | 477 | 24 | 231 | 571 | 14.4 | 148 | 571 | 9.2 | 80-90-100-112-132 | 132 | 140-180-210 |
| | 8.14 | 344 | 519 | 19.5 | 172 | 621 | 11.7 | 111 | 622 | 7.5 | 80-90-100-112-132 | 132 | 140-180-210 |
| | 9.00 | 311 | 534 | 18.1 | 156 | 640 | 10.9 | 100 | 640 | 7.0 | 80-90-100-112-132 | 132 | 140-180-210 |
| | 10.00 | 280 | 550 | 16.8 | 140 | 659 | 10.1 | 90 | 659 | 6.5 | 80-90-100-112-132 | 132 | 140-180-210 |
| | 11.18 | 250 | 552 | 15.1 | 125 | 662 | 9.0 | 81 | 662 | 5.8 | 80-90-100-112-132 | 132 | 140-180-210 |
| | 12.89 | 217 | 529 | 12.5 | 109 | 634 | 7.5 | 70 | 633 | 4.8 | 80-90-100-112-132 | 132 | 140-180-210 |
| | 14.25 | 196 | 545 | 11.7 | 98 | 652 | 7.0 | 63 | 653 | 4.5 | 80-90-100-112-132 | 132 | 140-180-210 |
| | 15.83 | 177 | 560 | 10.8 | 88 | 671 | 6.5 | 57 | 671 | 4.2 | 80-90-100-112-132 | 132 | 140-180-210 |
| | 17.70 | 158 | 563 | 9.7 | 79 | 674 | 5.8 | 51 | 673 | 3.7 | 80-90-100-112-132 | 132 | 140-180-210 |
| | 19.99 | 140 | 539 | 8.2 | 70 | 646 | 4.9 | 45.0 | 645 | 3.2 | 80-90-100-112-132 | 132 | 140-180-210 |
| | 22.09 | 127 | 557 | 7.7 | 63 | 667 | 4.6 | 40.7 | 666 | 3.0 | 80-90-100-112-132 | 132 | 140-180-210 |
| | 24.55 | 114 | 570 | 7.1 | 57 | 683 | 4.2 | 36.7 | 683 | 2.7 | 80-90-100-112-132 | 132 | 140-180-210 |
| | 27.45 | 102 | 571 | 6.4 | 51 | 683 | 3.8 | 32.8 | 684 | 2.4 | 80-90-100-112-132 | 132 | 140-180-210 |
| | 30.93 | 91 | 587 | 5.8 | 45.3 | 702 | 3.5 | 29.1 | 702 | 2.2 | 80-90-100-112-132 | 132 | 140-180-210 |
| | 31.20 | 90 | 507 | 5.0 | 44.9 | 607 | 3.0 | 28.8 | 607 | 1.9 | 80-90-100-112 | — | 140-180-210 |
| 34.67 | 81 | 563 | 5.0 | 40.4 | 674 | 3.0 | 26.0 | 675 | 1.9 | 80-90-100-112 | — | 140-180-210 | |
| 38.76 | 72 | 461 | 3.6 | 36.1 | 553 | 2.2 | 23.2 | 551 | 1.4 | 80-90-100-112 | — | 140-180-210 | |
| 43.68 | 64 | 520 | 3.6 | 32.1 | 623 | 2.2 | 20.6 | 621 | 1.4 | 80-90-100-112 | — | 140-180-210 | |
| 453 | 31.10 | 90 | 544 | 5.5 | 45.0 | 653 | 3.3 | 28.9 | 651 | 2.1 | 71-80-90-100-112 | 100-112 | 140-180 |
| | 34.40 | 81 | 559 | 5.1 | 40.7 | 669 | 3.1 | 26.2 | 669 | 2.0 | 71-80-90-100-112 | 100-112 | 140-180 |
| | 38.20 | 73 | 575 | 4.7 | 36.7 | 688 | 2.8 | 23.6 | 687 | 1.8 | 71-80-90-100-112 | 100-112 | 140-180 |
| | 42.70 | 66 | 575 | 4.2 | 32.8 | 688 | 2.5 | 21.1 | 689 | 1.6 | 71-80-90-100-112 | 100-112 | 140-180 |
| | 45.70 | 61 | 547 | 3.8 | 30.6 | 656 | 2.3 | 19.7 | 656 | 1.5 | 71-80-90-100-112 | 100-112 | 140-180 |
| | 50.50 | 55 | 562 | 3.5 | 27.7 | 674 | 2.1 | 17.8 | 675 | 1.4 | 71-80-90-100-112 | 100-112 | 140-180 |
| | 56.10 | 49.9 | 576 | 3.2 | 25.0 | 692 | 1.9 | 16.0 | 690 | 1.2 | 71-80-90-100-112 | 100-112 | 140-180 |
| | 62.70 | 44.7 | 577 | 2.9 | 22.3 | 694 | 1.7 | 14.4 | 691 | 1.1 | 71-80-90-100-112 | 100-112 | 140-180 |
| | 76.80 | 36.5 | 551 | 2.3 | 18.2 | 660 | 1.4 | 11.7 | 657 | 0.87 | 71-80-90-100-112 | 100-112 | 140-180 |
| | 84.90 | 33.0 | 566 | 2.1 | 16.5 | 676 | 1.3 | 10.6 | 676 | 0.81 | 71-80-90-100-112 | 100-112 | 140-180 |
| | 94.30 | 29.7 | 581 | 1.9 | 14.8 | 698 | 1.2 | 9.5 | 696 | 0.75 | 71-80-90-100-112 | 100-112 | 140-180 |
| | 105.50 | 26.5 | 580 | 1.7 | 13.3 | 693 | 1.0 | 8.5 | 695 | 0.67 | 71-80-90-100-112 | 100-112 | 140-180 |
| | 147.20 | 19.0 | 554 | 1.2 | 9.5 | 661 | 0.71 | 6.1 | 666 | 0.46 | 71-80-90-100-112 | 100-112 | 140-180 |
| | 162.70 | 17.2 | 571 | 1.1 | 8.6 | 679 | 0.66 | 5.5 | 681 | 0.42 | 71-80-90-100-112 | 100-112 | 140-180 |
| | 180.70 | 15.5 | 594 | 1.0 | 7.7 | 708 | 0.62 | 5.0 | 711 | 0.40 | 71-80-90-100-112 | 100-112 | 140-180 |
| | 202.10 | 13.9 | 601 | 0.94 | 6.9 | 716 | 0.56 | 4.5 | 716 | 0.36 | 71-80-90-100-112 | 100-112 | 140-180 |
| | 227.70 | 12.3 | 626 | 0.87 | 6.1 | 749 | 0.52 | 4.0 | 750 | 0.33 | 71-80-90-100-112 | 100-112 | 140-180 |

DIMENSIONI / DIMENSIONS / ABMESSUNGEN / DIMENSIONS / DIMENSIONES / DIMENSÕES



1 Albergo entrata / Input shaft / Antriebswelle
 Arbre d'entrée / Eje de entrada / Eixo de entrada

| CV RCV | D ₁ | E ₁ | F | G | H | I | U | V | Z |
|-----------|----------------|----------------|-----|----|----|---|----|---|---|
| 452 | 28 | 60 | M10 | 20 | 31 | 8 | 50 | 5 | 5 |
| 453 | 24 | 50 | M8 | 18 | 27 | 8 | 40 | 5 | 5 |

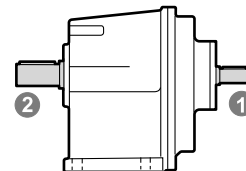
2 Albergo uscita / Output shaft / Abtriebswelle
 Arbre de sortie / Eje de salida / Eixo de saída

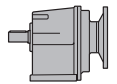
| CV RCV | D ₂ | E | F | G | H | I | U | V |
|-----------|------------------|---------------|--------|---------------|------------------|-----------------|------------------|------------------|
| 452 | 44.45 (1.750) | 90 (3.543) | 1/2-13 | 33 (1.299) | 48.70 (1.917) | 9.53 (0.375) | 76.20 (3.000) | 13.80 (0.543) |
| 453 | | | | | | | | |

(Inch)

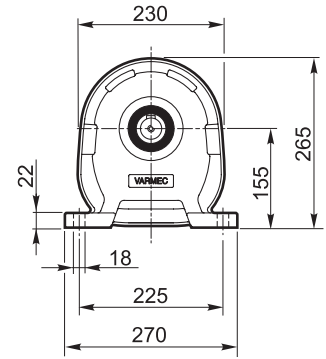
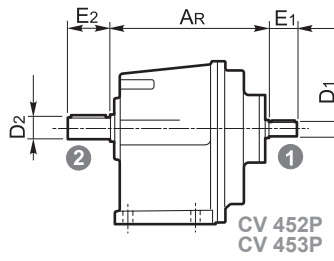
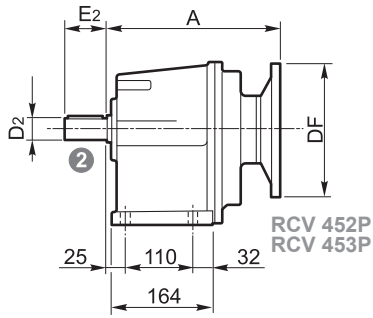
2 Albergo uscita / Output shaft / Abtriebswelle
 Arbre de sortie / Eje de salida / Eixo de saída

| CV RCV | D ₂ | E | F | G | H | I | U | V | Z |
|-----------|----------------|----|-----|----|------|----|----|----|----|
| 452 | 40 | 90 | M12 | 33 | 43 | 12 | 80 | 5 | 5 |
| | 42 | 90 | M12 | 33 | 45 | 12 | 80 | 5 | 5 |
| 453 | 45 | 90 | M12 | 33 | 48.5 | 14 | 70 | 10 | 10 |
| | 48 | 90 | M12 | 33 | 51.5 | 14 | 70 | 10 | 10 |

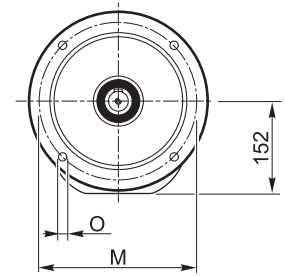
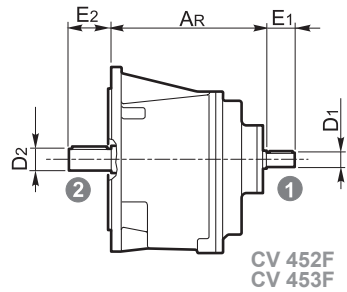
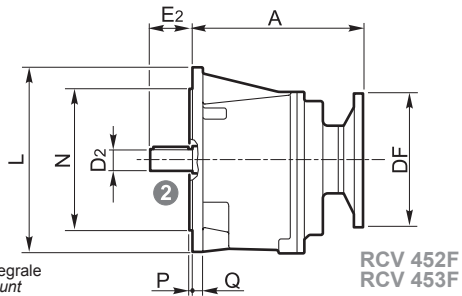




P



F




N.B.
 F = Flangia integrale
 F = Flange mount
 F = Integriertem Flansch
 F = Bride monobloc
 F = Brida integral
 F = Brida integral

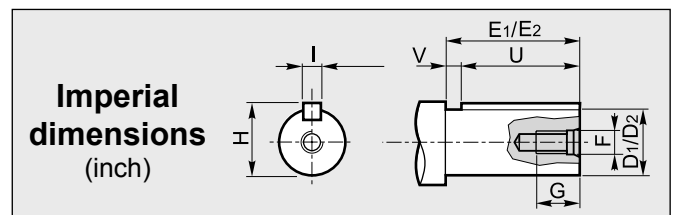
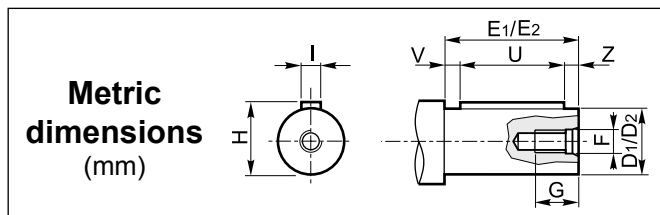
| RCV CV | RCV | | | | | | | CV |
|-----------|-----|-------|-----|-----|------|-------|-----|-----|
| | IEC | DF | | A | NEMA | DF | A | AR |
| (B5) | | (B14) | | | | | | |
| 452 | 80 | 200 | | 250 | 140 | 165.1 | 266 | 245 |
| | 90 | 200 | | | 180 | 228.6 | 272 | |
| | 100 | 250 | | | 210 | 228.6 | 272 | |
| | 112 | 250 | | | | | | |
| | 132 | 300 | 200 | 265 | | | | |
| 453 | 71 | 160 | | 260 | 140 | 165.1 | 270 | 255 |
| | 80 | 200 | | | 180 | 228.6 | 276 | |
| | 90 | 200 | | | | | | |
| | 100 | 250 | 160 | | | | | |
| | 112 | 250 | 160 | | | | | |

| | L | M | N | O | P | Q |
|------|-----|-----|-----|----|---|----|
| F300 | 300 | 265 | 230 | 14 | 5 | 17 |

DATI TECNICI / TECHNICAL DATA / TECHNISCHE DATEN
 CARACTÉRISTIKES TECHNIQUES / DATOS TÉCNICOS / CARACTERÍSTICAS TÉCNICAS

| CV RCV | i | n ₁ = 2800 min ⁻¹ | | | n ₁ = 1400 min ⁻¹ | | | n ₁ = 900 min ⁻¹ | | |  | | |
|-----------|--------|---|-----------------------|----------------------|---|-----------------------|----------------------|--|-----------------------|----------------------|---|---------|-----------------|
| | | n ₂ min ⁻¹ | Mn ₂ Nm | P ₁ kW | n ₂ min ⁻¹ | Mn ₂ Nm | P ₁ kW | n ₂ min ⁻¹ | Mn ₂ Nm | P ₁ kW | IEC B5 | IEC B14 | NEMA |
| 552 | 2.78 | 1007 | 459 | 50 | 504 | 550 | 30 | 324 | 550 | 19.4 | 90-100-112-132-160-180 | 132 | 180-210-250-280 |
| | 3.68 | 761 | 508 | 42 | 380 | 608 | 25 | 245 | 608 | 16.2 | 90-100-112-132-160-180 | 132 | 180-210-250-280 |
| | 4.57 | 613 | 611 | 41 | 306 | 732 | 24 | 197 | 732 | 15.7 | 90-100-112-132-160-180 | 132 | 180-210-250-280 |
| | 6.03 | 464 | 673 | 34 | 232 | 805 | 20 | 149 | 805 | 13.1 | 90-100-112-132-160-180 | 132 | 180-210-250-280 |
| | 7.39 | 379 | 728 | 30 | 189 | 872 | 18.0 | 122 | 872 | 11.6 | 90-100-112-132-160-180 | 132 | 180-210-250-280 |
| | 9.49 | 295 | 786 | 25 | 148 | 941 | 15.1 | 95 | 942 | 9.7 | 90-100-112-132-160-180 | 132 | 180-210-250 |
| | 12.07 | 232 | 837 | 21 | 116 | 1002 | 12.7 | 75 | 1002 | 8.2 | 90-100-112-132-160-180 | 132 | 180-210-250 |
| | 15.56 | 180 | 901 | 17.7 | 90 | 1080 | 10.6 | 58 | 1080 | 6.8 | 90-100-112-132-160-180 | 132 | 180-210-250 |
| | 19.06 | 147 | 960 | 15.4 | 73 | 1149 | 9.2 | 47.2 | 1150 | 5.9 | 90-100-112-132-160-180 | 132 | 180-210-250 |
| | 24.94 | 112 | 999 | 12.2 | 56 | 1197 | 7.3 | 36.1 | 1197 | 4.7 | 90-100-112-132-160 | 132 | 180-210 |
| | 30.55 | 92 | 1009 | 10.1 | 45.8 | 1208 | 6.0 | 29.5 | 1208 | 3.9 | 90-100-112-132-160 | 132 | 180-210 |
| | 38.40 | 73 | 998 | 7.9 | 36.5 | 1195 | 4.8 | 23.4 | 1197 | 3.1 | 90-100-112-132-160 | 132 | 180-210 |
| | 47.03 | 60 | 942 | 6.1 | 29.8 | 1128 | 3.7 | 19.1 | 1129 | 2.4 | 90-100-112-132-160 | 132 | 180-210 |
| | 53.46 | 52 | 839 | 4.8 | 26.2 | 1005 | 2.9 | 16.8 | 1003 | 1.8 | 90-100-112 | — | 180-210 |
| 65.48 | 42.8 | 779 | 3.6 | 21.4 | 934 | 2.2 | 13.7 | 931 | 1.4 | 90-100-112 | — | 180-210 | |
| 553 | 70.22 | 39.9 | 926 | 4.2 | 19.9 | 1110 | 2.5 | 12.8 | 1112 | 1.6 | 80-90-100-112-132 | 132 | 140-180 |
| | 88.88 | 31.5 | 986 | 3.5 | 15.8 | 1180 | 2.1 | 10.1 | 1180 | 1.3 | 80-90-100-112-132 | 132 | 140-180 |
| | 108.86 | 25.7 | 919 | 2.7 | 12.9 | 1101 | 1.6 | 8.3 | 1103 | 1.0 | 80-90-100-112-132 | 132 | 140-180 |
| | 118.46 | 23.6 | 1000 | 2.7 | 11.8 | 1198 | 1.6 | 7.6 | 1200 | 1.0 | 80-90-100-112-132 | 132 | 140-180 |
| | 145.09 | 19.3 | 917 | 2.0 | 9.7 | 1101 | 1.2 | 6.2 | 1099 | 0.77 | 80-90-100-112-132 | 132 | 140-180 |
| | 183.64 | 15.2 | 969 | 1.7 | 7.6 | 1161 | 1.00 | 4.9 | 1156 | 0.64 | 80-90-100-112-132 | 132 | 140-180 |
| | 224.93 | 12.4 | 953 | 1.3 | 6.2 | 1138 | 0.80 | 4.0 | 1139 | 0.51 | 80-90-100-112-132 | 132 | 140-180 |
| | 259.37 | 10.8 | 959 | 1.2 | 5.4 | 1148 | 0.70 | 3.5 | 1148 | 0.45 | 80-90-100-112 | — | 140-180 |
| | 317.7 | 8.8 | 1004 | 1.0 | 4.4 | 1205 | 0.60 | 2.8 | 1203 | 0.38 | 80-90-100-112 | — | 140-180 |

DIMENSIONI / DIMENSIONS / ABMESSUNGEN / DIMENSIONS / DIMENSIONES / DIMENSÕES



1 **Albero entrata / Input shaft / Antriebswelle**
Arbre d'entrée / Eje de entrada / Eixo de entrada

| CV RCV | D ₁ | E ₁ | F | G | H | I | U | V | Z |
|-----------|----------------|----------------|-----|----|----|----|----|---|---|
| 552 | 38 | 80 | M12 | 25 | 41 | 10 | 70 | 5 | 5 |
| 553 | 28 | 60 | M10 | 20 | 31 | 8 | 50 | 5 | 5 |

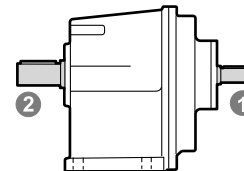
2 **Albero uscita / Output shaft / Abtriebswelle**
Arbre de sortie / Eje de salida / Eixo de saída

| CV RCV | D ₂ | E | F | G | H | I | U | V |
|-----------|----------------|---------|---------|---------|---------|---------|---------|-------|
| 552 | 55.56 | 110 | 5/8-11 | 45 | 61.19 | 12.7 | 82.55 | 27.45 |
| 553 | (2.187) | (4.331) | (1.772) | (2.409) | (0.500) | (3.250) | (1.081) | |

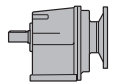
(Inch)

2 **Albero uscita / Output shaft / Abtriebswelle**
Arbre de sortie / Eje de salida / Eixo de saída

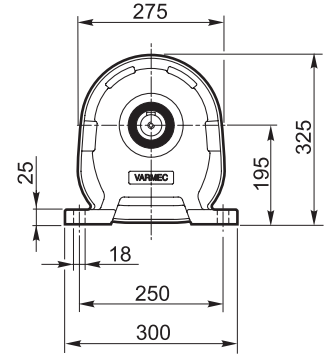
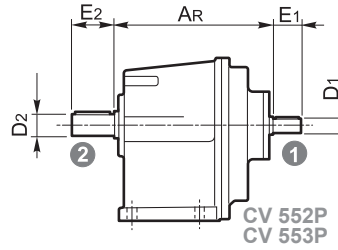
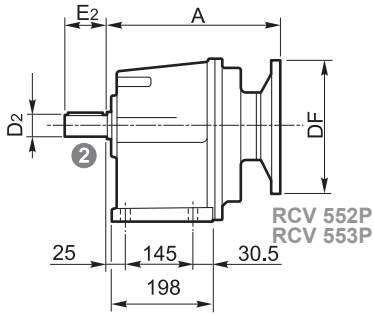
| CV RCV | D ₂ | E | F | G | H | I | U | V | Z |
|------------|----------------|-----|-----|----|------|----|-----|----|----|
| 552 553 | 40 | 80 | M12 | 33 | 43 | 12 | 70 | 5 | 5 |
| | 45 | 90 | M12 | 33 | 48.5 | 14 | 70 | 10 | 10 |
| | 48 | 100 | M12 | 33 | 51.5 | 14 | 90 | 5 | 5 |
| | 50 | 100 | M16 | 45 | 53.5 | 14 | 90 | 5 | 5 |
| | 55 | 110 | M16 | 45 | 59 | 16 | 90 | 10 | 10 |
| | 60 | 120 | M20 | 50 | 64 | 18 | 100 | 10 | 10 |



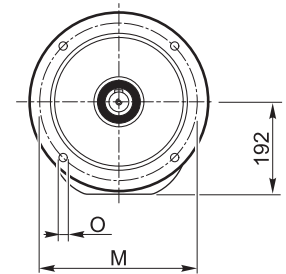
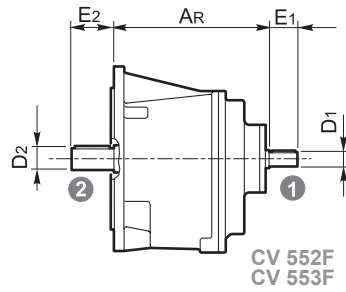
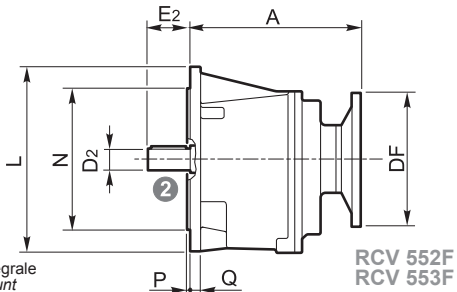
A richiesta / On request / Auf Anfrage / Sur demande /



P



F



N.B.
F = Flangia integrale
F = Flange mount
F = Integriertem Flansch
F = Bride monobloc
F = Brida integral
F = Brida integral

| RCV CV | RCV | | | | | | CV | |
|-----------|-----|------|-------|-----|------|-------|-----|-----|
| | IEC | DF | | A | NEMA | DF | A | AR |
| | | (B5) | (B14) | | | | | |
| 552 | 90 | 200 | | 283 | 180 | 228.6 | 305 | 315 |
| | 100 | 200 | | | 210 | 228.6 | 305 | |
| | 112 | 250 | | | 250 | 228.6 | 331 | |
| | 132 | 300 | 200 | 298 | 280 | 285.8 | 347 | |
| | 160 | 350 | | 340 | | | | |
| | 180 | 350 | | | | | | |
| 553 | 80 | 200 | | 309 | 140 | 165.1 | 325 | 305 |
| | 90 | 200 | | | 180 | 228.6 | 331 | |
| | 100 | 250 | | | | | | |
| | 112 | 250 | | | | | | |
| | 132 | 300 | 200 | 324 | | | | |

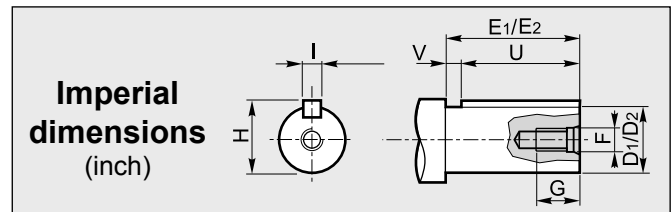
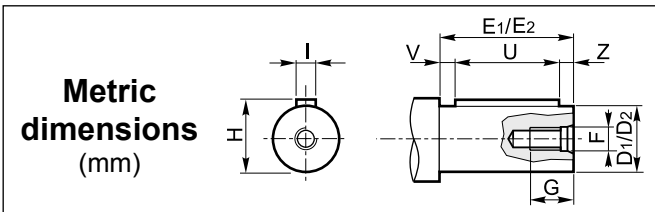
| | L | M | N | O | P | Q |
|------|-----|-----|-----|----|---|----|
| F300 | 300 | 265 | 230 | 14 | 5 | 18 |

DATI TECNICI / TECHNICAL DATA / TECHNISCHE DATEN
 CARACTÉRISTIQUES TECHNIQUES / DATOS TÉCNICOS / CARACTERÍSTICAS TÉCNICAS



| CV RCV | i | n ₁ = 2800 min ⁻¹ | | | n ₁ = 1400 min ⁻¹ | | | n ₁ = 900 min ⁻¹ | | | IEC B5 | | | IEC B14 | NEMA |
|--------|--------|---|--------------------|-------------------|---|--------------------|-------------------|--|--------------------|--------------------|----------------------------|--|-----|-------------|-----------------|
| | | n ₂ min ⁻¹ | Mn ₂ Nm | P ₁ kW | n ₂ min ⁻¹ | Mn ₂ Nm | P ₁ kW | n ₂ min ⁻¹ | Mn ₂ Nm | P ₁ kW | | | | | |
| 602 | 4.64 | 603 | 1382 | 91 | 302 | 1654 | 54 | 194 | 1654 | 35 | 90-100-112-132-160-180-200 | | | 132 | 180-210-250-280 |
| | 5.04 | 556 | 1418 | 86 | 278 | 1699 | 51 | 179 | 1699 | 33 | 90-100-112-132-160-180-200 | | | 132 | 180-210-250-280 |
| | 6.03 | 464 | 1633 | 83 | 232 | 1955 | 50 | 149 | 1955 | 32 | 90-100-112-132-160-180-200 | | | 132 | 180-210-250-280 |
| | 7.38 | 379 | 1958 | 81 | 190 | 2345 | 49 | 122 | 2345 | 31 | 90-100-112-132-160-180-200 | | | 132 | 180-210-250-280 |
| | 8.61 | 325 | 2144 | 76 | 163 | 2569 | 46 | 105 | 2569 | 29 | 90-100-112-132-160-180-200 | | | 132 | 180-210-250-280 |
| | 9.36 | 299 | 2179 | 71 | 150 | 2610 | 43 | 96 | 2609 | 27 | 90-100-112-132-160-180-200 | | | 132 | 180-210-250-280 |
| | 11.20 | 250 | 2447 | 67 | 125 | 2933 | 40 | 80 | 2933 | 26 | 90-100-112-132-160-180-200 | | | 132 | 180-210-250-280 |
| | 13.71 | 204 | 2289 | 51 | 102 | 2742 | 31 | 66 | 2742 | 19.6 | 90-100-112-132-160-180-200 | | | 132 | 180-210-250-280 |
| | 15.03 | 186 | 2510 | 51 | 93 | 3005 | 31 | 60 | 3005 | 19.6 | 90-100-112-132-160-180 | | | 132 | 180-210-250-280 |
| | 16.34 | 171 | 2617 | 49 | 86 | 3135 | 29 | 55 | 3134 | 18.8 | 90-100-112-132-160-180 | | | 132 | 180-210-250-280 |
| | 19.55 | 143 | 2535 | 40 | 72 | 3037 | 24 | 46.0 | 3037 | 15.3 | 90-100-112-132-160-180 | | | 132 | 180-210-250-280 |
| | 23.93 | 117 | 2366 | 30 | 59 | 2836 | 18.1 | 37.6 | 2836 | 11.6 | 90-100-112-132-160-180 | | | 132 | 180-210-250-280 |
| | 24.99 | 112 | 1985 | 24 | 56 | 2381 | 14.6 | 36.0 | 2380 | 9.4 | 90-100-112-132-160 | | | 132 | 180-210-250 |
| | 27.16 | 103 | 2158 | 24 | 52 | 2587 | 14.5 | 33.1 | 2586 | 9.3 | 90-100-112-132-160 | | | 132 | 180-210-250 |
| | 30.24 | 93 | 2059 | 21 | 46.3 | 2463 | 12.4 | 29.8 | 2461 | 8.0 | 90-100-112-132-160 | | | 132 | 180-210-250 |
| | 32.50 | 86 | 2582 | 24 | 43.1 | 3096 | 14.5 | 27.7 | 3095 | 9.3 | 90-100-112-132-160 | | | 132 | 180-210-250 |
| | 36.18 | 77 | 2464 | 21 | 38.7 | 2947 | 12.4 | 24.9 | 2945 | 8.0 | 90-100-112-132-160 | | | 132 | 180-210-250 |
| | 39.79 | 70 | 2438 | 18.7 | 35.2 | 2920 | 11.2 | 22.6 | 2921 | 7.2 | 90-100-112-132-160 | | | 132 | 180-210-250 |
| 44.29 | 63 | 2455 | 16.9 | 31.6 | 2941 | 10.1 | 20.3 | 2944 | 6.5 | 90-100-112-132-160 | | | 132 | 180-210-250 | |
| 603 | 46.60 | 60 | 2785 | 18.8 | 30.0 | 3333 | 11.3 | 19.3 | 3333 | 7.2 | 80-90-100-112-132-160 | | | 132 | 180-210-250 |
| | 55.80 | 50 | 2715 | 15.3 | 25.1 | 3244 | 9.2 | 16.1 | 3247 | 5.9 | 80-90-100-112-132-160 | | | 132 | 180-210-250 |
| | 60.10 | 46.6 | 2793 | 14.7 | 23.3 | 3340 | 8.8 | 15.0 | 3340 | 5.6 | 80-90-100-112-132-160 | | | 132 | 180-210-250 |
| | 71.90 | 38.9 | 2705 | 11.9 | 19.5 | 3251 | 7.1 | 12.5 | 3253 | 4.6 | 80-90-100-112-132-160 | | | 132 | 180-210-250 |
| | 88.00 | 31.8 | 2560 | 9.2 | 15.9 | 3055 | 5.5 | 10.2 | 3056 | 3.5 | 80-90-100-112-132-160 | | | 132 | 180-210-250 |
| | 96.30 | 29.1 | 2801 | 9.2 | 14.5 | 3355 | 5.5 | 9.3 | 3353 | 3.5 | 80-90-100-112-132-160 | | | 132 | 180-210-250 |
| | 115.20 | 24.3 | 2732 | 7.5 | 12.2 | 3264 | 4.5 | 7.8 | 3264 | 2.9 | 80-90-100-112-132-160 | | | 132 | 180-210-250 |
| | 136.50 | 20.5 | 2787 | 6.4 | 10.3 | 3339 | 3.9 | 6.6 | 3342 | 2.5 | 80-90-100-112-132-160 | | | 132 | 180-210-250 |
| | 148.30 | 18.9 | 2813 | 6.0 | 9.4 | 3366 | 3.6 | 6.1 | 3369 | 2.3 | 80-90-100-112-132-160 | | | 132 | 180-210-250 |
| | 177.50 | 15.8 | 2760 | 4.9 | 7.9 | 3310 | 2.9 | 5.1 | 3316 | 1.9 | 80-90-100-112-132-160 | | | 132 | 180-210-250 |
| | 190.40 | 14.7 | 2805 | 4.6 | 7.4 | 3359 | 2.8 | 4.7 | 3371 | 1.8 | 80-90-100-112 | | | — | 180 |
| | 207.00 | 13.5 | 2898 | 4.4 | 6.8 | 3467 | 2.6 | 4.3 | 3460 | 1.7 | 80-90-100-112 | | | — | 180 |
| | 217.20 | 12.9 | 2678 | 3.9 | 6.4 | 3200 | 2.3 | 4.1 | 3204 | 1.5 | 80-90-100-112 | | | — | 180 |
| | 247.60 | 11.3 | 2881 | 3.7 | 5.7 | 3444 | 2.2 | 3.6 | 3458 | 1.4 | 80-90-100-112 | | | — | 180 |
| | 303.10 | 9.2 | 2721 | 2.8 | 4.6 | 3258 | 1.7 | 3.0 | 3249 | 1.1 | 80-90-100-112 | | | — | 180 |

DIMENSIONI / DIMENSIONS / ABMESSUNGEN / DIMENSIONS / DIMENSIONES / DIMENSÕES



1 **Albero entrata / Input shaft / Antriebswelle**
Arbre d'entrée / Eje de entrada / Eixo de entrada

| CV RCV | D ₁ | E ₁ | F | G | H | I | U | V | Z |
|------------|----------------|----------------|-----|----|----|----|----|---|---|
| 602 603 | 38 | 80 | M12 | 25 | 41 | 10 | 70 | 5 | 5 |

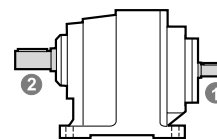
2 **Albero uscita / Output shaft / Abtriebswelle**
Arbre de sortie / Eje de salida / Eixo de saída

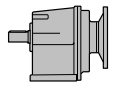
| CV RCV | D ₂ | E | F | G | H | I | U | V |
|------------|------------------|----------------|--------|---------------|------------------|------------------|------------------|------------------|
| 602 603 | 60.32 (2.375) | 120 (4.724) | 3/4-10 | 50 (1.969) | 67.20 (2.647) | 15.87 (0.625) | 88.90 (3.500) | 31.10 (1.224) |

(Inch)

2 **Albero uscita / Output shaft / Abtriebswelle**
Arbre de sortie / Eje de salida / Eixo de saída

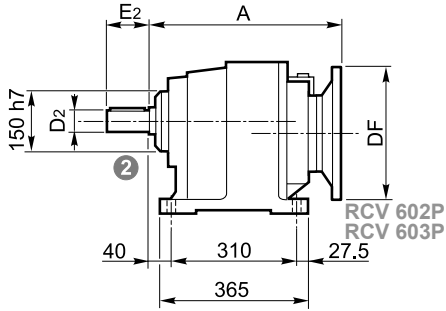
| CV RCV | D ₂ | E | F | G | H | I | U | V | Z |
|--------|----------------|-----|-----|----|------|----|-----|----|----|
| 602 | 60 | 120 | M20 | 50 | 64 | 18 | 100 | 10 | 10 |
| 603 | 65 | 120 | M20 | 50 | 69 | 18 | 100 | 10 | 10 |
| | 70 | 140 | M20 | 50 | 74.5 | 20 | 120 | 10 | 10 |



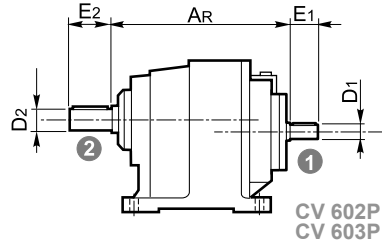


DIMENSIONI / DIMENSIONS / ABMESSUNGEN / DIMENSIONS / DIMENSIONES / DIMENSÕES

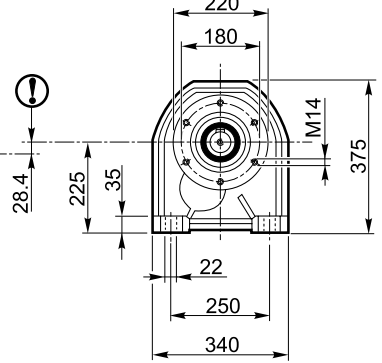
P



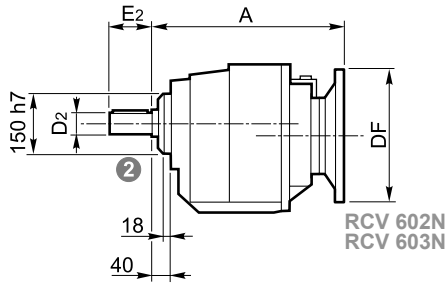
RCV 602P
RCV 603P



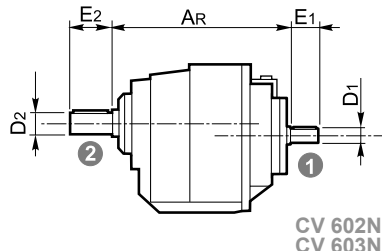
CV 602P
CV 603P



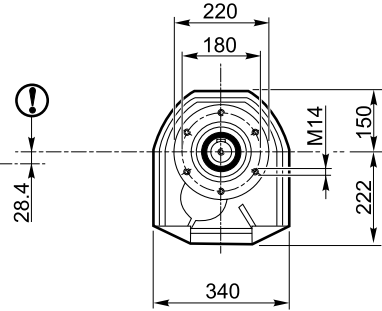
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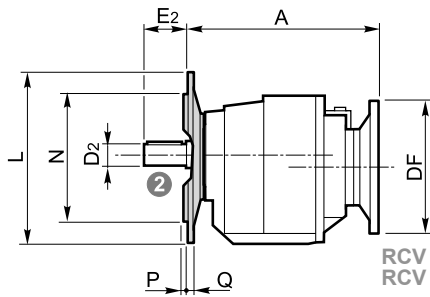
RCV 602N
RCV 603N



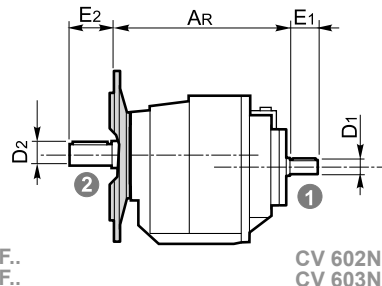
CV 602N
CV 603N



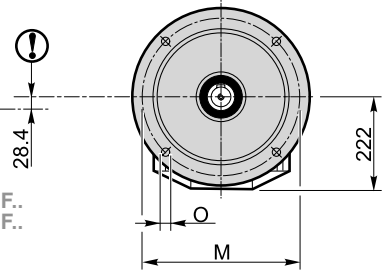
NF



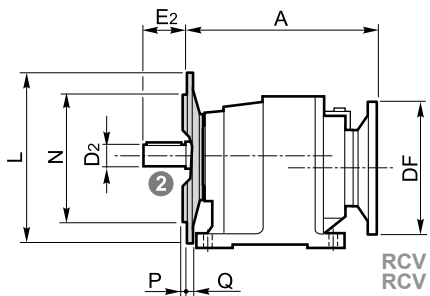
RCV 602NF..
RCV 603NF..



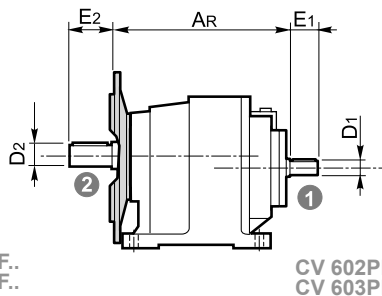
CV 602NF..
CV 603NF..



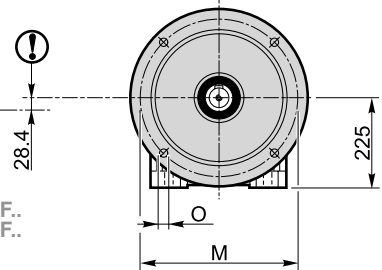
PF



RCV 602PF..
RCV 603PF..



CV 602PF..
CV 603PF..



| RCV CV | RCV | | | | | | CV | |
|-----------|-----|------|-------|-----|------|-------|-----|-----|
| | IEC | DF | | A | NEMA | DF | A | AR |
| | | (B5) | (B14) | | | | | |
| 602 | 90 | 200 | | 410 | 180 | 228.6 | 421 | 405 |
| | 100 | 250 | | | 210 | 228.6 | 421 | |
| | 112 | 250 | | | 250 | 228.6 | 421 | |
| | 132 | 300 | 200 | 430 | 280 | 285.8 | 437 | |
| | 160 | 350 | | | | | | |
| | 180 | 350 | | | | | | |
| 603 | 200 | 400 | | 445 | | | | 425 |
| | 80 | 200 | | 430 | 180 | 228.6 | 441 | |
| | 90 | 200 | | | 210 | 228.6 | 441 | |
| | 100 | 250 | | | 250 | 228.6 | 441 | |
| | 112 | 250 | | 450 | | | | |
| | 132 | 300 | 200 | | | | | |
| 160 | 350 | | | | | | | |

| | L | M | N | O | P | Q |
|---------------|-----|-----|-----|----|---|----|
| NF350 - PF350 | 350 | 250 | 300 | 18 | 5 | 17 |

**MOMENTI D'INERZIA / MOMENTS OF INERTIA / TRÄGHEITSMOMENT
MOMENTS D'INERTIE / MOMENTOS DE INERCIA / MOMENTO DE INERCIA**

Il momento d'inerzia J_r [Kgcm²] indicato nelle tabelle è riferito all'albero veloce del riduttore.

Le moment d'inertie J_r [Kgcm²] indiquée dans les tableaux se réfère à l'arbre d'entrée du reducteur.

The moment of inertia J_r [Kgcm²] shown in these tables refers to the gear reducer's input shaft.

El momento de inercia J_r [Kgcm²] indicado en las tablas se refiere al eje rápido (entrada) del reductor.

Das in den Tabellen angegebene Trägheitsmoment J_r [Kgcm²] ist abhängig von der Antriebswelle.

O momento de inercia J_r [Kgcm²] indicada na tabela é referido ao eixo veloz do ridutor.

J_r [Kgcm²]



RCV



CV

| 141 | i | IEC 63 | IEC 71 | IEC 80 | | | |
|------|-------|--------|--------|--------|--|--|-------|
| | 1.29 | 1.172 | 1.164 | 1.290 | | | |
| 2.33 | 1.041 | 1.032 | 1.159 | | | | 0.859 |
| 2.79 | 0.995 | 0.986 | 1.113 | | | | 0.812 |
| 3.40 | 0.961 | 0.952 | 1.079 | | | | 0.779 |
| 4.24 | 0.928 | 0.919 | 1.046 | | | | 0.745 |
| 4.79 | 0.890 | 0.882 | 1.009 | | | | 0.708 |
| 5.47 | 1.035 | 1.026 | 1.153 | | | | 0.852 |
| 7.46 | 0.790 | 0.781 | 0.908 | | | | 0.608 |

| 191 | i | IEC 63 | IEC 71 | IEC 80 | IEC 90 | IEC 100-112 | |
|------|-------|--------|--------|--------|--------|-------------|-------|
| | 1.26 | 2.608 | 2.604 | 2.554 | 2.436 | 4.350 | |
| 2.23 | 2.393 | 2.390 | 2.339 | 2.221 | 4.135 | | 2.078 |
| 2.73 | 2.339 | 2.336 | 2.286 | 2.167 | 4.081 | | 2.024 |
| 3.22 | 2.188 | 2.180 | 2.128 | 2.016 | | | 1.872 |
| 4.11 | 2.228 | 2.221 | 2.168 | 2.032 | | | 1.879 |
| 4.71 | 2.146 | 2.137 | 2.086 | 1.974 | | | 1.829 |
| 5.47 | 2.080 | 2.071 | 2.020 | 1.908 | | | 1.763 |
| 7.82 | 1.914 | 1.906 | 1.854 | 1.742 | | | 1.598 |

| 241 | i | IEC 63 | IEC 71 | IEC 80 | IEC 90 | IEC 100-112 | |
|------|-------|--------|--------|--------|--------|-------------|-------|
| | 1.26 | 2.608 | 2.604 | 2.554 | 2.436 | 4.350 | |
| 2.23 | 2.393 | 2.390 | 2.339 | 2.221 | 4.135 | | 2.078 |
| 2.73 | 2.339 | 2.336 | 2.286 | 2.167 | 4.081 | | 2.024 |
| 3.22 | 2.188 | 2.180 | 2.128 | 2.016 | | | 1.872 |
| 4.11 | 2.228 | 2.221 | 2.168 | 2.032 | | | 1.879 |
| 4.71 | 2.146 | 2.137 | 2.086 | 1.974 | | | 1.829 |
| 5.47 | 2.080 | 2.071 | 2.020 | 1.908 | | | 1.763 |
| 7.82 | 1.914 | 1.906 | 1.854 | 1.742 | | | 1.598 |

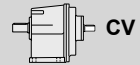
| 281 | i | IEC 71 | IEC 80 | IEC 90 | IEC 100-112 | IEC 132 | |
|------|-------|--------|--------|--------|-------------|---------|-------|
| | 1.14 | 9.472 | 9.578 | 9.433 | 9.206 | 14.063 | |
| 1.56 | 8.533 | 8.639 | 8.494 | 8.267 | 13.124 | | 7.124 |
| 2.29 | 7.920 | 8.026 | 7.881 | 7.654 | 12.511 | | 6.511 |
| 2.83 | 7.360 | 7.438 | 7.286 | 7.094 | | | 5.968 |
| 3.38 | 7.126 | 7.204 | 7.052 | 6.860 | | | 5.697 |
| 3.84 | 6.948 | 7.026 | 6.874 | 6.682 | | | 5.519 |
| 4.41 | 6.747 | 6.825 | 6.673 | 6.481 | | | 5.318 |
| 5.57 | 6.388 | 6.466 | 6.314 | 6.121 | | | 4.959 |
| 7.36 | 5.948 | 6.026 | 5.873 | 5.681 | | | 4.519 |

| 381 | i | IEC 80 | IEC 90 | IEC 100-112 | IEC 132 | |
|-------|--------|--------|--------|-------------|---------|--------|
| | 1.63 | 21.938 | 22.706 | 21.714 | 21.625 | |
| 2.29 | 20.339 | 21.140 | 20.117 | 20.102 | | 16.679 |
| 3.00 | 19.312 | 20.114 | 19.091 | 19.076 | | 15.652 |
| 3.38 | 18.857 | 19.659 | 18.636 | 18.621 | | 15.197 |
| 4.11 | 18.084 | 18.886 | 17.863 | 17.847 | | 14.424 |
| 4.75 | 18.336 | 18.319 | 18.115 | 18.099 | | 14.685 |
| 5.57 | 16.796 | 16.780 | 16.575 | 16.560 | | 13.146 |
| 7.36 | 15.577 | 15.560 | 15.356 | 15.340 | | 11.927 |
| 10.40 | 14.201 | 14.174 | 13.979 | | | 10.544 |

Jr [Kgc^m²]



RCV



CV

| 162 | i | IEC 63 | IEC 71 | IEC 80 | | | |
|-------|-------|--------|--------|--------|--|--|-------|
| | 3.70 | 1.313 | 1.187 | 1.195 | | | |
| 5.10 | 1.255 | 1.129 | 1.138 | | | | 0.956 |
| 7.11 | 0.975 | 0.848 | 0.857 | | | | 0.675 |
| 7.62 | 1.171 | 1.045 | 1.053 | | | | 0.871 |
| 9.80 | 0.945 | 0.818 | 0.827 | | | | 0.645 |
| 11.95 | 0.844 | 0.622 | 0.630 | | | | 0.542 |
| 14.63 | 0.901 | 0.774 | 0.783 | | | | 0.601 |
| 16.47 | 0.827 | 0.605 | 0.613 | | | | 0.524 |
| 20.74 | 0.735 | 0.513 | 0.521 | | | | 0.432 |
| 24.59 | 0.800 | 0.578 | 0.586 | | | | 0.498 |
| 25.51 | 0.711 | 0.489 | 0.497 | | | | 0.408 |
| 28.57 | 0.725 | 0.502 | 0.511 | | | | 0.422 |
| 35.14 | 0.703 | 0.481 | 0.489 | | | | 0.400 |
| 42.67 | 0.709 | 0.487 | 0.495 | | | | 0.407 |
| 52.48 | 0.691 | 0.468 | 0.477 | | | | 0.388 |

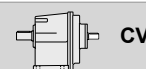
| 202 | i | IEC 63 | IEC 71 | IEC 80 | IEC 90 | | |
|-------|-------|--------|--------|--------|--------|--|-------|
| | 5.49 | 2.573 | 2.569 | 2.519 | 2.401 | | |
| 6.46 | 2.526 | 2.523 | 2.473 | 2.354 | | | 2.212 |
| 7.75 | 2.471 | 2.468 | 2.418 | 2.299 | | | 2.156 |
| 8.57 | 2.437 | 2.433 | 2.383 | 2.265 | | | 2.122 |
| 9.92 | 2.157 | 2.154 | 2.103 | 1.985 | | | 1.842 |
| 11.67 | 2.131 | 2.128 | 2.078 | 1.959 | | | 1.816 |
| 14.00 | 2.101 | 2.097 | 2.047 | 1.929 | | | 1.786 |
| 15.48 | 2.082 | 2.078 | 2.028 | 1.910 | | | 1.767 |
| 18.01 | 1.885 | 1.876 | 1.825 | 1.713 | | | 1.568 |
| 21.19 | 1.871 | 1.862 | 1.810 | 1.699 | | | 1.554 |
| 25.43 | 1.854 | 1.845 | 1.794 | 1.682 | | | 1.537 |
| 28.13 | 1.843 | 1.835 | 1.783 | 1.671 | | | 1.527 |
| 31.71 | 1.663 | 1.655 | 1.603 | 1.491 | | | 1.347 |
| 37.31 | 1.655 | 1.647 | 1.595 | 1.483 | | | 1.339 |
| 44.77 | 1.646 | 1.637 | 1.586 | 1.474 | | | 1.329 |
| 49.52 | 1.640 | 1.631 | 1.580 | 1.468 | | | 1.323 |

| 203 | i | IEC 63 | IEC 71 | | | | |
|-------|-------|--------|--------|--|--|--|-------|
| | 58.1 | 0.815 | 0.807 | | | | |
| 64.3 | 0.811 | 0.802 | | | | | 0.712 |
| 69.2 | 0.668 | 0.660 | | | | | 0.569 |
| 81.4 | 0.664 | 0.656 | | | | | 0.566 |
| 97.7 | 0.660 | 0.652 | | | | | 0.561 |
| 108.1 | 0.657 | 0.649 | | | | | 0.559 |
| 120.1 | 0.542 | 0.534 | | | | | 0.444 |
| 141.3 | 0.540 | 0.532 | | | | | 0.442 |
| 169.5 | 0.538 | 0.530 | | | | | 0.439 |
| 187.5 | 0.536 | 0.528 | | | | | 0.438 |

MOMENTI D'INERZIA / MOMENTS OF INERTIA / TRÄGHEITSMOMENT
MOMENTS D'INERTIE / MOMENTOS DE INERCIA / MOMENTO DE INERCIA

Jr [Kgc^m²]

RCV



CV

| 252 | i | IEC 63 | IEC 71 | IEC 80 | IEC 90 | IEC 100-112 | |
|-------|-------|--------|--------|--------|--------|-------------|-------|
| | 5.02 | 4.068 | 4.065 | 4.014 | 3.896 | 3.896 | 5.810 |
| 5.92 | 3.981 | 3.977 | 3.927 | 3.808 | 3.808 | 5.722 | 3.666 |
| 6.47 | 3.909 | 3.905 | 3.855 | 3.737 | 3.737 | 5.651 | 3.594 |
| 7.88 | 3.768 | 3.764 | 3.714 | 3.596 | 3.596 | 5.510 | 3.453 |
| 8.93 | 3.214 | 3.211 | 3.161 | 3.042 | 3.042 | 4.956 | 2.899 |
| 10.53 | 3.165 | 3.162 | 3.111 | 2.993 | 2.993 | 4.907 | 2.850 |
| 11.51 | 3.125 | 3.121 | 3.071 | 2.953 | 2.953 | 4.867 | 2.810 |
| 14.01 | 3.046 | 3.042 | 2.992 | 2.873 | 2.873 | 4.787 | 2.731 |
| 16.42 | 2.675 | 2.667 | 2.614 | 2.479 | 2.479 | | 2.326 |
| 19.35 | 2.648 | 2.641 | 2.588 | 2.452 | 2.452 | | 2.299 |
| 21.16 | 2.626 | 2.619 | 2.566 | 2.430 | 2.430 | | 2.277 |
| 25.75 | 2.583 | 2.576 | 2.523 | 2.387 | 2.387 | | 2.234 |
| 31.27 | 2.149 | 2.140 | 2.089 | 1.977 | 1.977 | | 1.832 |
| 36.86 | 2.135 | 2.126 | 2.075 | 1.963 | 1.963 | | 1.818 |
| 40.29 | 2.123 | 2.115 | 2.063 | 1.951 | 1.951 | | 1.807 |
| 49.04 | 2.101 | 2.092 | 2.040 | 1.928 | 1.928 | | 1.784 |

| 253 | i | IEC 63 | IEC 71 | | | | |
|-------|-------|--------|--------|--|--|--|-------|
| | 60.1 | 1.388 | 1.379 | | | | |
| 69.6 | 1.158 | 1.149 | | | | | 1.059 |
| 82.0 | 1.151 | 1.143 | | | | | 1.052 |
| 89.7 | 1.146 | 1.138 | | | | | 1.047 |
| 109.1 | 1.136 | 1.128 | | | | | 1.037 |
| 122.5 | 0.881 | 0.872 | | | | | 0.782 |
| 144.4 | 0.877 | 0.869 | | | | | 0.778 |
| 157.9 | 0.874 | 0.866 | | | | | 0.775 |
| 192.1 | 0.868 | 0.860 | | | | | 0.770 |

| 302 | i | IEC 71 | IEC 80 | IEC 90 | IEC 100-112 | IEC 132 | |
|-------|--------|--------|--------|--------|-------------|---------|--------|
| | 3.74 | 12.858 | 12.964 | 12.819 | 12.592 | 12.592 | 17.449 |
| 4.56 | 12.538 | 12.643 | 12.499 | 12.272 | 12.272 | 17.129 | 11.129 |
| 5.11 | 11.014 | 11.119 | 10.975 | 10.747 | 10.747 | 15.604 | 9.605 |
| 6.22 | 10.779 | 10.885 | 10.740 | 10.513 | 10.513 | 15.370 | 9.370 |
| 6.93 | 10.641 | 10.747 | 10.602 | 10.375 | 10.375 | 15.232 | 9.232 |
| 7.78 | 10.486 | 10.592 | 10.447 | 10.220 | 10.220 | 15.077 | 9.077 |
| 7.51 | 9.609 | 9.714 | 9.570 | 9.342 | 9.342 | 14.199 | 8.200 |
| 9.14 | 9.449 | 9.554 | 9.410 | 9.182 | 9.182 | 14.040 | 8.040 |
| 10.18 | 9.355 | 9.460 | 9.316 | 9.089 | 9.089 | 13.946 | 7.946 |
| 11.43 | 9.249 | 9.355 | 9.211 | 8.983 | 8.983 | 13.840 | 7.841 |
| 12.62 | 7.964 | 8.042 | 7.890 | 7.698 | 7.698 | | 6.535 |
| 15.37 | 7.869 | 7.947 | 7.795 | 7.603 | 7.603 | | 6.440 |
| 17.11 | 7.813 | 7.891 | 7.739 | 7.547 | 7.547 | | 6.384 |
| 19.21 | 7.751 | 7.829 | 7.676 | 7.484 | 7.484 | | 6.322 |
| 24.19 | 6.472 | 6.550 | 6.397 | 6.205 | 6.205 | | 5.043 |
| 29.45 | 6.422 | 6.500 | 6.348 | 6.156 | 6.156 | | 4.993 |
| 32.80 | 6.393 | 6.471 | 6.319 | 6.127 | 6.127 | | 4.964 |
| 36.82 | 6.360 | 6.438 | 6.286 | 6.094 | 6.094 | | 4.931 |

Jr [Kgc^m²]

RCV



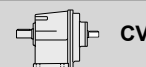
CV

| | | | | | | | |
|--------------|--------------|---------------|---------------|---------------|--------------------|----------------|--------|
| 303 | i | IEC 63 | IEC 71 | IEC 80 | IEC 90 | | |
| | 41.2 | 4.785 | 4.781 | 4.731 | 4.612 | | 4.470 |
| | 46.2 | 4.758 | 4.755 | 4.705 | 4.586 | | 4.443 |
| | 54.0 | 3.398 | 3.395 | 3.344 | 3.226 | | 3.083 |
| | 65.8 | 3.376 | 3.372 | 3.322 | 3.204 | | 3.061 |
| | 73.3 | 3.363 | 3.359 | 3.309 | 3.191 | | 3.048 |
| | 82.2 | 3.348 | 3.345 | 3.294 | 3.176 | | 3.033 |
| | 99.3 | 2.913 | 2.906 | 2.853 | 2.717 | | 2.564 |
| | 120.9 | 2.901 | 2.894 | 2.841 | 2.705 | | 2.552 |
| | 134.7 | 2.894 | 2.887 | 2.834 | 2.698 | | 2.545 |
| | 151.1 | 2.886 | 2.879 | 2.826 | 2.690 | | 2.537 |
| | 189.2 | 2.274 | 2.265 | 2.214 | 2.102 | | 1.957 |
| | 230.3 | 2.268 | 2.259 | 2.207 | 2.095 | | 1.951 |
| | 256.5 | 2.264 | 2.255 | 2.204 | 2.092 | | 1.947 |
| 287.9 | 2.260 | 2.251 | 2.200 | 2.088 | | 1.943 | |
| 352 | i | IEC 71 | IEC 80 | IEC 90 | IEC 100-112 | IEC 132 | |
| | 3.74 | 14.202 | 14.307 | 14.163 | 13.935 | 18.793 | 12.793 |
| | 4.56 | 13.817 | 13.923 | 13.778 | 13.551 | 18.408 | 12.408 |
| | 5.11 | 11.998 | 12.103 | 11.959 | 11.732 | 16.589 | 10.589 |
| | 6.22 | 11.716 | 11.822 | 11.677 | 11.450 | 16.307 | 10.307 |
| | 6.93 | 11.546 | 11.652 | 11.507 | 11.280 | 16.137 | 10.137 |
| | 7.78 | 11.353 | 11.458 | 11.314 | 11.086 | 15.943 | 9.944 |
| | 7.51 | 10.278 | 10.384 | 10.239 | 10.012 | 14.869 | 8.869 |
| | 9.14 | 10.087 | 10.192 | 10.048 | 9.820 | 14.677 | 8.678 |
| | 10.18 | 9.971 | 10.076 | 9.932 | 9.704 | 14.562 | 8.562 |
| | 11.43 | 9.839 | 9.945 | 9.800 | 9.573 | 14.430 | 8.430 |
| | 12.62 | 8.363 | 8.441 | 8.288 | 8.096 | | 6.934 |
| | 15.37 | 8.249 | 8.327 | 8.174 | 7.982 | | 6.820 |
| | 17.11 | 8.180 | 8.258 | 8.106 | 7.913 | | 6.751 |
| | 19.21 | 8.102 | 8.179 | 8.027 | 7.835 | | 6.672 |
| | 24.19 | 6.680 | 6.758 | 6.605 | 6.413 | | 5.251 |
| 29.45 | 6.620 | 6.698 | 6.546 | 6.354 | | 5.191 | |
| 32.80 | 6.584 | 6.662 | 6.510 | 6.318 | | 5.155 | |
| 36.82 | 6.543 | 6.621 | 6.469 | 6.277 | | 5.114 | |
| 353 | i | IEC 63 | IEC 71 | IEC 80 | IEC 90 | | |
| | 41.2 | 4.937 | 4.933 | 4.883 | 4.764 | | 4.622 |
| | 46.2 | 4.904 | 4.901 | 4.850 | 4.732 | | 4.589 |
| | 54.0 | 3.491 | 3.488 | 3.437 | 3.319 | | 3.176 |
| | 65.8 | 3.465 | 3.461 | 3.411 | 3.292 | | 3.150 |
| | 73.3 | 3.449 | 3.445 | 3.395 | 3.276 | | 3.134 |
| | 82.2 | 3.430 | 3.427 | 3.376 | 3.258 | | 3.115 |
| | 99.3 | 2.964 | 2.956 | 2.903 | 2.768 | | 2.615 |
| | 120.9 | 2.949 | 2.942 | 2.889 | 2.754 | | 2.601 |
| | 134.7 | 2.940 | 2.933 | 2.880 | 2.745 | | 2.592 |
| | 151.1 | 2.930 | 2.923 | 2.870 | 2.735 | | 2.582 |
| | 189.2 | 2.301 | 2.292 | 2.240 | 2.128 | | 1.984 |
| | 230.3 | 2.293 | 2.284 | 2.233 | 2.121 | | 1.976 |
| | 256.5 | 2.288 | 2.280 | 2.228 | 2.116 | | 1.972 |
| 287.9 | 2.283 | 2.274 | 2.223 | 2.111 | | 1.966 | |

**MOMENTI D'INERZIA / MOMENTS OF INERTIA / TRÄGHEITSMOMENT
MOMENTS D'INERTIE / MOMENTOS DE INERCIA / MOMENTO DE INERCIA**

Jr [Kgc^m²]

RCV



CV

| 452 | i | IEC 80 | IEC 90 | IEC 100-112 | IEC 132 | | |
|-------|--------|--------|--------|-------------|---------|--|--------|
| | 4.42 | 29.150 | 29.918 | 28.926 | 28.837 | | |
| 4.89 | 28.827 | 29.594 | 28.603 | 28.513 | | | 25.187 |
| 5.43 | 28.479 | 29.247 | 28.255 | 28.166 | | | 24.840 |
| 6.07 | 27.949 | 28.717 | 27.725 | 27.636 | | | 24.310 |
| 8.14 | 23.227 | 24.029 | 23.006 | 22.991 | | | 19.567 |
| 9.00 | 23.052 | 23.854 | 22.830 | 22.815 | | | 19.392 |
| 10.00 | 22.863 | 23.665 | 22.642 | 22.626 | | | 19.203 |
| 11.18 | 22.575 | 23.377 | 22.354 | 22.339 | | | 18.915 |
| 12.89 | 20.808 | 20.792 | 20.587 | 20.572 | | | 17.158 |
| 14.25 | 20.698 | 20.681 | 20.476 | 20.461 | | | 17.047 |
| 15.83 | 20.578 | 20.562 | 20.357 | 20.342 | | | 16.928 |
| 17.70 | 20.397 | 20.380 | 20.175 | 20.160 | | | 16.746 |
| 19.99 | 17.172 | 17.155 | 16.951 | 16.935 | | | 13.521 |
| 22.09 | 17.100 | 17.084 | 16.879 | 16.864 | | | 13.450 |
| 24.55 | 17.023 | 17.007 | 16.802 | 16.787 | | | 13.373 |
| 27.45 | 16.906 | 16.890 | 16.685 | 16.670 | | | 13.256 |
| 30.93 | 16.810 | 16.794 | 16.589 | 16.574 | | | 13.160 |
| 31.20 | 15.279 | 15.252 | 15.058 | | | | 11.622 |
| 34.67 | 15.225 | 15.198 | 15.004 | | | | 11.568 |
| 38.76 | 15.142 | 15.115 | 14.921 | | | | 11.485 |
| 43.68 | 15.074 | 15.047 | 14.853 | | | | 11.417 |

| 453 | i | IEC 71 | IEC 80 | IEC 90 | IEC 100-112 | | |
|-------|--------|--------|--------|--------|-------------|--|--------|
| | 31.1 | 12.697 | 12.803 | 12.658 | 12.431 | | |
| 34.4 | 12.651 | 12.757 | 12.612 | 12.385 | | | 11.242 |
| 38.2 | 12.602 | 12.707 | 12.563 | 12.335 | | | 11.193 |
| 42.7 | 12.526 | 12.632 | 12.487 | 12.260 | | | 11.117 |
| 45.7 | 10.754 | 10.860 | 10.715 | 10.488 | | | 9.345 |
| 50.5 | 10.723 | 10.828 | 10.684 | 10.456 | | | 9.314 |
| 56.1 | 10.689 | 10.795 | 10.650 | 10.423 | | | 9.280 |
| 62.7 | 10.638 | 10.743 | 10.599 | 10.371 | | | 9.229 |
| 76.8 | 8.634 | 8.712 | 8.560 | 8.368 | | | 7.205 |
| 84.9 | 8.615 | 8.693 | 8.541 | 8.349 | | | 7.186 |
| 94.3 | 8.595 | 8.673 | 8.521 | 8.329 | | | 7.166 |
| 105.5 | 8.565 | 8.643 | 8.491 | 8.299 | | | 7.136 |
| 147.2 | 6.827 | 6.905 | 6.753 | 6.561 | | | 5.398 |
| 162.7 | 6.818 | 6.896 | 6.743 | 6.551 | | | 5.389 |
| 180.7 | 6.807 | 6.885 | 6.733 | 6.541 | | | 5.378 |
| 202.1 | 6.791 | 6.869 | 6.717 | 6.525 | | | 5.362 |
| 227.7 | 6.778 | 6.856 | 6.704 | 6.512 | | | 5.349 |

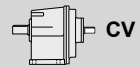
| 552 | i | IEC 90 | IEC 100-112 | IEC 132 | IEC 160 | IEC 180 | |
|-------|--------|--------|-------------|---------|---------|---------|--------|
| | 2.78 | 73.087 | 70.212 | 70.196 | 93.935 | 91.858 | |
| 3.68 | 60.304 | 57.430 | 57.414 | 81.152 | 79.075 | | 67.145 |
| 4.57 | 65.323 | 62.449 | 62.433 | 86.171 | 84.094 | | 72.164 |
| 6.03 | 54.427 | 51.553 | 51.537 | 75.275 | 73.199 | | 61.268 |
| 7.39 | 52.301 | 49.426 | 49.410 | 73.149 | 71.072 | | 59.142 |
| 9.49 | 37.431 | 36.409 | 36.393 | 58.279 | 56.175 | | 44.206 |
| 12.07 | 38.970 | 37.948 | 37.933 | 59.818 | 57.715 | | 45.746 |
| 15.56 | 35.153 | 34.131 | 34.115 | 56.001 | 53.897 | | 41.928 |
| 19.06 | 34.328 | 33.306 | 33.291 | 55.176 | 53.073 | | 41.104 |
| 24.94 | 27.986 | 27.781 | 27.766 | 49.669 | | | 35.611 |
| 30.55 | 27.472 | 27.267 | 27.252 | 49.155 | | | 35.097 |
| 38.40 | 22.948 | 22.743 | 22.728 | 44.631 | | | 30.573 |
| 47.04 | 22.614 | 22.409 | 22.394 | 44.297 | | | 30.239 |
| 53.46 | 19.793 | 19.599 | | | | | 27.434 |
| 65.48 | 19.553 | 19.359 | | | | | 27.194 |

MOMENTI D'INERZIA / MOMENTS OF INERTIA / TRÄGHEITSMOMENT
MOMENTS D'INERTIE / MOMENTOS DE INERCIA / MOMENTO DE INERCIA

Jr [Kgc^m²]



RCV



CV

| 553 | i | IEC 80 | IEC 90 | IEC 100-112 | IEC 132 | | | |
|--------|--------|--------|--------|-------------|---------|--|--------|--------|
| | 70.22 | 22.898 | 22.882 | 22.677 | 22.662 | | | 19.248 |
| | 88.88 | 18.664 | 18.648 | 18.443 | 18.428 | | | 15.014 |
| | 108.86 | 18.520 | 18.503 | 18.299 | 18.283 | | | 14.870 |
| | 118.46 | 20.921 | 20.905 | 20.700 | 20.685 | | | 17.271 |
| | 145.09 | 20.813 | 20.796 | 20.591 | 20.576 | | | 17.162 |
| | 183.64 | 17.245 | 17.228 | 17.023 | 17.008 | | | 13.594 |
| | 224.93 | 17.175 | 17.158 | 16.953 | 16.938 | | | 13.524 |
| | 259.37 | 15.381 | 15.355 | 15.160 | | | | 11.724 |
| 317.67 | 15.332 | 15.305 | 15.111 | | | | 11.675 | |

| 602 | i | IEC 90 | IEC 100-112 | IEC 132 | IEC 160 | IEC 180 | IEC 200 | |
|-------|--------|---------|-------------|---------|---------|---------|---------|---------|
| | 4.64 | 222.791 | 222.868 | 221.764 | 224.086 | 221.982 | 262.970 | 210.049 |
| | 5.04 | 218.763 | 218.840 | 217.736 | 220.058 | 217.955 | 258.942 | 206.021 |
| | 6.03 | 208.572 | 208.649 | 207.545 | 209.867 | 207.763 | 248.751 | 195.829 |
| | 7.38 | 197.351 | 197.428 | 196.324 | 198.646 | 196.543 | 237.530 | 184.609 |
| | 8.61 | 150.314 | 150.391 | 149.287 | 151.609 | 149.506 | 190.493 | 137.572 |
| | 9.36 | 148.145 | 148.222 | 147.118 | 149.440 | 147.337 | 188.324 | 135.403 |
| | 11.20 | 142.658 | 142.735 | 141.631 | 143.952 | 141.849 | 182.837 | 129.915 |
| | 13.71 | 136.616 | 136.693 | 135.589 | 137.911 | 135.807 | 176.795 | 123.873 |
| | 15.03 | 111.036 | 111.113 | 109.978 | 112.330 | 110.227 | | 98.258 |
| | 16.34 | 109.793 | 109.870 | 108.735 | 111.088 | 108.985 | | 97.015 |
| | 19.55 | 106.650 | 106.726 | 105.591 | 107.944 | 105.841 | | 93.872 |
| | 23.93 | 103.188 | 103.265 | 102.130 | 104.483 | 102.380 | | 90.410 |
| | 24.99 | 85.453 | 85.530 | 84.395 | 86.748 | | | 72.690 |
| | 27.16 | 84.706 | 84.783 | 83.648 | 86.001 | | | 71.943 |
| | 30.24 | 80.205 | 80.282 | 79.147 | 81.500 | | | 67.442 |
| 32.50 | 82.815 | 82.892 | 81.757 | 84.110 | | | 70.052 | |
| 36.18 | 78.507 | 78.584 | 77.449 | 79.801 | | | 65.744 | |
| 39.79 | 80.733 | 80.810 | 79.675 | 82.028 | | | 67.970 | |
| 44.29 | 76.637 | 76.713 | 75.579 | 77.931 | | | 63.874 | |

| 603 | i | IEC 80 | IEC 90 | IEC 100-112 | IEC 132 | IEC 160 | | |
|-------|--------|--------|--------|-------------|---------|---------|--------|--------|
| | 46.6 | 73.530 | 73.229 | 73.306 | 72.171 | 74.524 | | 60.451 |
| | 55.8 | 72.428 | 72.127 | 72.204 | 71.069 | 73.422 | | 59.349 |
| | 60.1 | 66.412 | 66.111 | 66.188 | 65.053 | 67.406 | | 53.333 |
| | 71.9 | 65.557 | 65.256 | 65.333 | 64.198 | 66.551 | | 52.478 |
| | 88.0 | 64.616 | 64.315 | 64.392 | 63.257 | 65.610 | | 51.537 |
| | 96.3 | 55.792 | 55.491 | 55.568 | 54.434 | 56.786 | | 42.729 |
| | 115.2 | 55.259 | 54.958 | 55.035 | 53.900 | 56.253 | | 42.195 |
| | 136.5 | 48.396 | 48.095 | 48.172 | 47.037 | 49.390 | | 35.332 |
| | 148.3 | 48.259 | 47.958 | 48.035 | 46.900 | 49.253 | | 35.195 |
| | 177.5 | 47.913 | 47.612 | 47.689 | 46.554 | 48.906 | | 34.849 |
| | 190.4 | 43.819 | 43.894 | 43.595 | | | | 30.818 |
| | 207.0 | 43.721 | 43.796 | 43.497 | | | | 30.720 |
| | 217.2 | 47.531 | 47.230 | 47.307 | | | | 34.468 |
| | 247.6 | 43.473 | 43.548 | 43.249 | | | | 30.471 |
| 303.1 | 43.199 | 43.275 | 42.975 | | | | 30.198 | |

15 ATEX

I riduttori coassiali Varmec possono essere forniti per consentire l'utilizzo in zone con atmosfere potenzialmente esplosive, conformi alla direttiva europea ATEX 94/9/CE e, secondo i criteri di classificazione forniti dalla direttiva stessa, sono dichiarati come di categoria 2G e 2D.

In conseguenza della loro classificazione nelle categorie II2G e II2D, ed in conformità a quanto specificato dalla direttiva, i riduttori sono installabili rispettivamente nelle aree con presenza di miscele gassose esplosive - zone 1 e 2, e nelle aree con presenza di polveri combustibili - zone 21 e 22, con temperatura superficiale del riduttore di 140°C (T3).

Le specifiche tecniche adottate per i riduttori in esecuzione ATEX sono:

- Anelli di tenuta in Viton
- Tappo di sfiato con valvola anti-intrusione
- Dotazione di tappi d'ispezione olio per tutti i riduttori
- Assenza di particolari in plastica
- Targa di identificazione con marcatura ATEX e dati dei limiti applicativi
- Massima velocità in entrata n_1 1500 min⁻¹

Il manuale di installazione uso e manutenzione è parte integrante della fornitura di ogni riduttore ATEX; ogni indicazione in esso contenuta deve essere scrupolosamente applicata. Per la determinazione della grandezza riduttore procedere come indicato nel paragrafo relativo alla Scelta (vedi pag. 12), e selezionare il riduttore con fattore di servizio \geq dei valori indicati nella tabella 6.

Tab. 6

| CV-RCV | 191 | 241 | 281 | 381 | 202 | 252 | 302 | 352 | 452 | 552 | 602 |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| FS | 1.1 | 1.1 | 1.2 | 1.2 | 1.1 | 1.1 | 1.1 | 1.1 | 1.2 | 1.2 | 1.3 |

Per i riduttori con tre stadi di riduzione il fattore di servizio FS \geq 1.

Verificare che la Potenza richiesta sia \leq della potenza termica (vedi pag. 10).

Per maggiori indicazioni sulle normative ATEX, consultare il manuale di installazione uso e manutenzione, scaricabile dal nostro sito internet oppure interpellatici.

ATEX

In compliance with the European Directive ATEX 94/9/EC, Varmec helical gear units can be supplied to permit usage in areas with a potentially explosive atmosphere. Based on the classification criteria of this same directive they have been declared as belonging to category 2G and 2D.

In conformity to the directive specifications and following their classification in categories II2G and II2D, the gear reducers can be respectively installed in areas with a presence of mixed explosive gasses – zones 1 and 2 and also in areas with a presence of combustible dust/powder – zones 21 and 22, with a gear reducer surface temperature of 140 °C (T3).

The technical specifications used in manufacturing ATEX gear reducers are as follows:

- Viton oil seals
- Breather plug with an anti-intrusion valve
- Oil inspection plugs on all gear reducers
- No plastic components
- Identification plate stamped with the ATEX mark and data on applicable limits
- Max entrance speed n_1 1500 min⁻¹

The installation, operation and maintenance manual is an integral part of each ATEX gear reducer and each indication given in said manual must be scrupulously followed. In order to determine the size of the gear reducer proceed as indicated in the selection chapter (see pg. 12) and choose a gear reducer with a service factor fs \geq the values given in the following table 6.

The service factor fs for gear reducers with three reduction stages is FS \geq 1.

Please check that the required power is \leq than the thermic power (see pg. 10).

For more information on ATEX norms consult the installation, operation and maintenance manual that can be downloaded from our Internet site or contact us directly.

ATEX

VARMEC Stirnradgetriebe für explosionsgefährdete Bereiche sind gemäß den Vorschriften der europäischen Richtlinie ATEX 94/9/C lieferbar.

Entsprechend der Klassifikation sind die Getriebe den Kategorien 2G und 2D zugeordnet. Danach sind die Getriebe sowohl in Zonen mit explosiven Gasgemischen (Zone 1 und 2) als auch in Zonen mit brennbarem Staub (Zone 21 und 22) einer Getriebeoberflächentemperatur von 140°C (T3) einsetzbar.

Die technischen Besonderheiten der Getriebe gemäß ATEX- Richtlinie sind folgende:

- Dichtungsringe in Viton
- Druckventil mit Anti-Intrusionsventil
- Ausstattung mit Ölkontrollschrauben für alle Getriebe
- Keinerlei Verwendung von Plastikteilen
- Auszeichnung mit dem ATEX-Kennzeichen und den Daten der Anwendungsgrenzen
- Die Geschwindigkeit des mit dem Getriebe verbundenen Motors darf nicht über n_1 1500 min⁻¹ liegen.

Das Installations- und Wartungshandbuch ist im Lieferumfang von jedem ATEX-Getriebe enthalten, die Anleitung muß jedoch genauestens befolgt werden.

Die Auswahl der Getriebegröße ist im Abschnitt zur Getriebeauswahl beschrieben (s. Seite.12) und sollte beachtet werden. Es ist das Getriebe mit dem Betriebsfaktor auszuwählen, welcher \geq dem in der Tabelle 6 angegebenen Wert ist.

Für Getriebe mit drei Untersetzungen ist der Betriebsfaktor FS \geq 1.

Es ist zu überprüfen, dass die benötigte Leistung \leq der thermischen Leistung ist (siehe Seite.10).

Weitere Details zur ATEX- Norm können Sie im Installations- und Wartungshandbuch nachschlagen. Dieses finden im Internet, auch zum herunterladen, unter www.varmec.de.

Für weitere Informationen wenden Sie sich bitte direkt an uns.

ATEX

Les réducteurs coaxiaux Varmec peuvent être fournis pour l'utilisation dans des lieux avec atmosphères potentiellement explosives, conformes à la directive européenne ATEX 94/9/CE et, conformément aux critères de classification donnés par la directive même, ils sont déclarés de catégorie 2G e 2D.

Par leur classification dans les catégories II2G et II2D, et en conformité avec la directive, les réducteurs peuvent être installés dans des lieux avec une présence de mélanges gazeux explosifs -zones 1 et 2, et dans des lieux avec une présence de poudres combustibles - zones 21 et 22, avec température superficielle du réducteur de 140 °C (T3).

Les spécifications technique adoptées pour les réducteurs en execution Atex, sont:

- Bagues d'étanchéité en Viton
- Bouchon d'évent avec soupape anti-intrusion
- Dotation de bouchon d'inspection huile pour tous les réducteurs
- Absence de pièce en plastique
- Plaque d'identification avec marquage Atex données des limites d'application
- Vitesse maximale en entrée n_1 1500 min⁻¹

Le manuel d'installation, d'utilisation et de maintenance fait partie intégrante de la fourniture de chaque réducteur Atex ; chaque indication doit être scrupuleusement appliquée.

Pour déterminer la taille du réducteur procéder comme indiqué dans le paragraphe relatif à la sélection (pag.13), et sélectionner le réducteur avec facteur de service \geq des valeurs indiquées dans le tableau 6.

Tab. 6

| CV-RCV | 191 | 241 | 281 | 381 | 202 | 252 | 302 | 352 | 452 | 552 | 602 |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| FS | 1.1 | 1.1 | 1.2 | 1.2 | 1.1 | 1.1 | 1.1 | 1.1 | 1.2 | 1.2 | 1.3 |

Pour les réducteurs avec 3 stades de réduction le facteur de service $fs \geq 1$.

Vérifier que la puissance demandée soit \leq de la puissance thermique (pag. 11).

Pour plus d'indications sur les normes Atex, consulter le manuel d'installation, utilisation et maintenance disponible sur notre site web.

ATEX

Los reductores coaxiales VARMEC pueden ser provistos para permitir el uso en zonas con atmósferas potencialmente explosivas conforme a la directiva europea Atex 94/9/CE y según los criterios de clasificación previstos de la misma directiva son declarados como de categoría 2G y 2D.

Los reductores son establecidos respectivamente en las áreas con presencias de mezclas gaseosas explosivas en zonas 1 y 2, y en las áreas con presencias de polvos combustibles zonas 21 y 22 con temperaturas superficiales del reductor de 140° C (T3) en consecuencia de su clasificación en las categorías II2G y II2D y conforme a lo especificado en la directiva.

La especificación de requisitos técnicos adoptados para los reductores en ejecución Atex son:

- Retenes herméticos en VITON
- Tapón respiradero con válvula hermética
- Provisión de tapones para control del aceite en todos los reductores
- Ausencia de detalles plásticos
- Placa de identificación marcada Atex y datos de los límites aplicables
- Máxima velocidad de entrada n_1 1500 min⁻¹

El manual de instalación, uso y mantenimiento forma parte de los accesorios de cada reductor Atex, las indicaciones en este contenidas deben ser respetadas rigurosamente en su aplicación. Para la determinación de la grandezza de la reducción proceder como indica el párrafo relativo a la selección y elegir el reductor con el factor de servicio \geq de los valores indicados en la tabla 6.

A los reductores con tres estados de reducción, corresponde el factor de servicio $fs \geq 1$.

Verificar que la potencia requerida sea $<$ de la potencia térmica (ver pag. 11).

Para mayor información sobre la norma Atex, consultar el manual de instalación, uso y mantenimiento o visitar nuestro sitio en Internet.

ATEX

O ridutor coaxial Varmec pode ser fornido para consentire o utilizo em zona com atmosfera potencialmente explosiva, conforme a lei europea Atex 94/9/66 CE e, segundo o critério de classificação fornido da mesma lei europea, são declarado como categoria 2G e 2D. Em consequência da sua classificação na categoria II2G e II2D, em conforme a quanto especificado da lei, o ridutor são instalavel respetivamente na área com presença de gasolina, bomba explosiva-zona 1e 2, e na área com presença de polvera combustivel- zona 21e 22, com temperatura superficial do ridutor de 140 c° (t3).

A especifica técnico adotado para o ridutor em execução Atex são:

- Anel de segurança em viton
- Tampão de respração com válvula anti-instrução
- Dotação de tampa de olio para todo o ridutor
- Assensa de particular em plástica
- Etiqueta de identificação com marcatura Atex e dados do limite aplicavel
- Máxima velocidade em entrada n_1 1500 min⁻¹

O manual de instalação uso e manutenção é parte integrante da forniture de cada ridutor Atex. Cada indicação que contém deve ser escrupolosamente aplicada

Para a determinação da grandezza ridutor continua como indicado no paragrafo relativo a escolha (ver pag. 13), e selecionar o ridutor com fatore de serviço \geq do valor indicado na tabela 6.

Para os reductores com três estágios de redução, o fator de serviço $fs \geq 1$.

verifique se a potência exigida é $<$ do que a potência térmica (veja a página 11).

Para maiores indicações sobre as normas ATEX, consulte o manual de instalação, uso e manutenção, que pode ser descarregado do nosso site internet, ou entre em contato conosco.

16 CONDIZIONI DI FORNITURA

I riduttori Varmec vengono forniti come segue:

Già predisposti per essere installati nella posizione di montaggio come definito in fase di ordine

Collaudati secondo specifiche interne

Le superfici di accoppiamento non sono verniciate

Sprovvisti di dadi e bulloni per il montaggio motori per la versione IEC

Provisti di golfare di sollevamento per i tipi RCV-CV 55-60

Appositamente imballati per la spedizione

17 INSTALLAZIONE

Per l'installazione del riduttore è consigliabile attenersi alle seguenti indicazioni:

- Verificare che non vi siano stati danni durante lo stoccaggio o il trasporto
- Pulire accuratamente il riduttore dai residui dell'imballaggio e da eventuali prodotti protettivi
- Verificare che i dati riportati nella targhetta di identificazione corrispondano a quelli specificati in fase di ordinativo
- Verificare che la struttura della macchina sulla quale si installa il riduttore abbia caratteristiche di rigidità e di robustezza sufficienti a supportarne il peso proprio e le forze generate nel funzionamento; accertarsi che la macchina sia spenta e che ne sia impedito il riavvio accidentale
- Il fissaggio sulla macchina deve essere stabile per evitare qualsiasi vibrazione; verificare che le superfici di accoppiamento siano piane e ben pulite. Prima del montaggio lubrificare le superfici di contatto onde evitare grippaggi o ossidazioni
- Assicurare l'allineamento tra motore - riduttore e tra riduttore - macchina operatrice
- Gli organi che vanno calettati sugli alberi di uscita del riduttore devono essere lavorati con tolleranza ISO H7 per evitare accoppiamenti troppo bloccati che potrebbero danneggiare il riduttore stesso. Per il montaggio e lo smontaggio di tali organi si consiglia l'utilizzo di adeguati tiranti ed estrattori usufruendo dell'apposito foro filettato posto in testa alle estremità degli alberi d'uscita. Non servirsi di martelli o altri strumenti impropri per non danneggiare gli alberi o i supporti dei riduttori
- L'accoppiamento dell'albero di entrata cavo del riduttore, viene normalmente eseguito con perni aventi tolleranze ISO h6; in ogni caso il montaggio deve avvenire senza forzature

SUPPLIED TERMS

All Varmec gear reducers are supplied as follows:

Ready made to be installed in the assembly position previously stated during ordering

Tried and tested to our internal specifications

Coupling surfaces are not varnished

Nuts and bolts are not supplied for the assembly of motors for IEC versions

Types RCV-CV 55-60 come supplied with lifting eye-bolt.

Appropriately and adequately packaged for transport

INSTALLATION

Please read this chapter carefully and follow all instructions before installing the gear reducer:

- *Check that nothing has been damaged during transport or storage*
- *Make sure that the gear reducer is free from all packaging and any eventual protective products*
- *Check that the information printed on the identification plate correspond to those specified on the order*
- *After making sure that the machine on which the gear reducer is to be installed is completely switched off and cannot be accidentally turned on, check that it is sturdy and rigid enough to withstand the weight and the forces generated by the gear reducer when running*
- *Make sure that the gear reducer is correctly secured to avoid any kind of vibrations and that the coupling parts are flat and clean. Before assembly lubricate the contact parts to avoid seizures or oxidation*
- *Check that the alignment between the motor and the gear reducer and between the gear reducer and operational machine is perfect*
- *Parts that connect to the gear reducer's output shaft must be machined to ISO H7 tolerance to avoid any tightly blocked couplings that could damage the gear reducer. For the assembly and removal of these parts use suitable pullers or extractors using the specifically designed threaded hole at the end of the output shaft. Do not use hammers or other improper tools that may damage the shafts or the supporting stand*
- *Coupling the gear reducer's input hollow shaft is normally done with shafts with ISO h6 tolerance In all cases assembly must never be forced*

LIEFERBEDINGUNGEN

Die Varmec Getriebe werden wie folgt ausgeliefert:

Vorbereitet zum Einbau in die bestellte Einbaulage (die beigefügten Ventile und Entlüftungen müssen ggf. noch eingebaut werden)

Nach internen Vorgaben überprüft

Keine Lackierung der Oberflächenverbindungen

Die Version IEC enthält keine Schrauben und Muttern für die Montage des Motors

Die Typen RCV-CV-55-60 sind mit Hebevorrichtungen (Ösen) ausgestattet

INSTALLATION

Die folgenden Einbauanleitungen sollten beachtet werden:

- Stellen Sie sicher, daß während des Transports keinerlei Schäden verursacht wurden
- Entfernen Sie sorgfältig alle Reste der (Schutz-)Verpackung
- Stellen Sie sicher, daß die Angaben auf dem Typenschild mit Ihren Angaben in der Bestellung übereinstimmen
- Stellen Sie sicher, daß die Maschine, in die das Getriebe eingebaut werden soll, ausreichend robust und stabil ist, um dem Eigengewicht des Getriebes und den während der Inbetriebnahme auftretenden Kräften standzuhalten
- Stellen Sie sicher, daß das Getriebe gegen dauerhafte Vibrationseinflüsse geschützt ist
- Stellen Sie sicher, daß die Oberflächenverbindungen gereinigt und eben sind. Vor der Montage müssen die Oberflächenkontakte geschmiert werden, um Oxidation und ein Heißlaufen zu vermeiden
- Stellen Sie sicher, daß Motor und Getriebe miteinander verbunden sind und ebenso Maschine und Getriebe
- Alle Anbauteile, die an die Abtriebswellen angebaut werden, müssen mit der Passung nach ISO H7 gefertigt sein, da es sonst durch Schwingungen zu einem frühzeitigen Getriebeausfall kommen kann. Für Montage und Demontage der Anbauteile wird der Gebrauch von geeigneten Zugstangen und Ausziehern empfohlen. Benutzen Sie hierfür die eigens dafür bestimmte Gewindebohrung an den Enden der Abtriebswellen. Gebrauchen Sie keine Hämmer oder andere ungeeignete Werkzeuge, da sonst die Wellen oder die Halter der Getriebe beschädigt werden könnten
- Die Verbindung der Getriebeantriebswelle wird normalerweise mit Stiften der Toleranz ISO h6 hergestellt. Eine Montage unter erhöhter Kraftaufwendung sollte auf jeden Fall vermieden werden

CONDITION DE FOURNITURE

Les réducteurs Varmec sont fournis comme suit:

Déjà prêts à l'installation dans la position de montage comme indiqué dans la commande

Eprouvés suivant spécifications internes
Les surfaces d'accouplement ne sont pas vernies

Dépourvus d'écrous et boulons pour le montage moteurs pour la version IEC

Pourvus de crochets pour le soulèvement pour le types RCV-CV 55-60

Emballage express pour la livraison

INSTALLATION

Observer la procédure d'installation suivante:

- Vérifier l'absence de dommages éventuellement subis pendant le stockage ou le transport
- Nettoyer le réducteur des résidus de l'emballage et d'autres produits de protection
- Vérifier que les données sur la plaque d'identification correspondent à celles de la commande
- Vérifier que la structure de la machine sur laquelle on installe le réducteur ait les caractéristiques de rigidité et robustesse aptes à en supporter le poids et les forces générées par son fonctionnement; la machine doit être éteinte
- L'ancrage sur la machine doit être stable pour éviter des vibrations; vérifier que les surfaces d'accouplement soient plat et propres. Avant le montage, lubrifier les surfaces de contact afin d'éviter grippages et oxydation
- Vérifier que l'alignement entre le moteur et le réducteur ainsi qu'entre le réducteur et le système qu'il commande, soit correct
- Les éléments devant être montés sur l'arbre de sortie du réducteur doivent être usinés avec une tolérance ISO H7, afin d'éviter de provoquer des altérations des éléments du réducteur. Pour monter ou démonter les éléments employer des systèmes de poussée ou d'extraction utilisant le trou taraudé situé en bout d'arbre de sortie ne pas utiliser de marteaux ou d'autres instruments impropres pour ne pas endommager les arbres ou les supports des réducteurs
- La tolérance d'usinage d'un arbre devant être inséré dans l'arbre d'entrée creux du réducteur, est ISO h6; en aucun cas un arbre ne doit être inséré sans être vérifié

CONDICIONES DE EQUIPAMIENTO

Los reductores VARMEC vienen equipados de la siguiente manera:

Listos para ser instalados en la posición de montaje descrita en el pedido

Aprobados según normas internas

La superficie de los acoples no son barnizadas

Desprovistos de tuercas y tornillos para el montaje del motor IEC

Provistos de canchamo de elevación para los tipos RCV-CV 55-60

Adecuadamente embalados para la expedición

INSTALACIÓN

Para la instalación del reductor se aconseja seguir las siguientes indicaciones:

- Verificar que no se hayan producidos daños durante el almacenamiento y el transporte
- Limpiar el reductor de los residuos del embalaje y de eventuales productos protectores
- Verificar que los datos reportados en la placa de identificación correspondan a los especificados en la orden
- Verificar que la estructura de la máquina sobre la cual se instala el reductor sea rígida y robusta para soportar el propio peso y la fuerza generada del funcionamiento; asegurarse que la máquina este apagada y que no se produzca un encendido accidental
- La fijación de la máquina debe ser estable para evitar cualquier vibración
- Verificar que las superficies del acoplamiento sean planas y estén limpias. Antes del montaje lubricar las superficies de contacto para evitar gripaje y oxidación
- Asegurar el alineamiento entre motor-reductor y entre reductor-máquina operadora. Los órganos que van sobre el eje de salida del reductor deben ser trabajados con tolerancia ISO H7 para evitar acoplamientos demasiado bloqueados que puedan dañar el reductor. Para el montaje y desmontaje de tales órganos se aconseja la utilización de adecuados tirantes y extractores aprovechando el correspondiente orificio roscado dispuesto en las cabezas de las extremidades de los ejes de salida. No usar martillos u otros instrumentos inadecuados para no dañar los ejes o los soportes del reductor
- El acoplamiento del eje de entrada con cavidad del reductor, es normalmente seguido con pernos a juego mínimo ISO H6. En cada caso el montaje no tiene que ser forzado

CONDIÇÃO DE FORNITURA

O ridutor Varmec vem fornido com o seguinte:

É predisposto para ser instalado

Laudo segundo especificado interno

A superfície de acoplamento não são vernizado

Não tem parafuso e porca para a montagem do motor, para a versão IEC

Tem de golfare de levantamento para o tipo RCV-CV 55-60

Apositamente embalado para a expedição

INSTALAÇÃO

Para a instalação do ridutor e conselho ter as seguintes indicações:

- Verificar que não tene parte danificada durante a armazenagem e o transporte
- Limpar perfeitamente o ridutor do resto da embalagem e da eventuale produto protetivo
- Verificar que os dados reportados na etiqueta de identificação corresponde aquele especificado em fase de ordem
- Verificar que a estrutura da máquina sobre qual se instala o ridutor haja característica de rigidez e de segurança suficiente a suportar o proprio peso, e a força geral no funcionamento: observar se a máquina seja desligada e que seja impedida de perigo acidental
- A fixagem sobre a máquina deve ser estavel, para evitar qualquer vibração Verificar que a superfície de acoplamento são direitas e bem limpos. Antes da montagem lubrificar a superfície de contato onde evitar estraga e envelhencer
- Segurança no aliamento no motor- ridutor pra ridutor- máquina de operação
- Os órgãos que vão caletati sobre eixo de saída do ridutor devem ser trabalhada com tolerância ISO H7 para evitar acoplamento muito bloqueado que pode quebrar o ridutor para a montagem e desmontagem de tal organi se aconselha o utilizo de adequado tirante e estrator usufruindo do buraco filetado posicionado em cabeça a extremitar eixo saída
- Não usar martelo ou outro tipo de instrumento para não quebrar o eixo ou suporte do ridutor
- O acoplamento do eixo de entrada, cavo do ridutor, vem normalmente fato. Com perni avendo tolerância ISO h6; em cada caso a montagem deve chegar sem esforço

- Accertarsi che il montaggio di pignoni o pulegge a sbalzo sugli alberi dei riduttori, sia conforme alle verifiche di ammissibilità dei carichi risultanti
- Accertarsi, per i riduttori con indicatore di livello olio, che la posizione di quest'ultimo sia conforme alla posizione di montaggio del riduttore; per i riduttori forniti completi di lubrificante si raccomanda, effettuata l'installazione, di sostituire il tappo chiuso utilizzato per il trasporto, con il tappo di sfiato fornito a corredo
- Eseguire il primo riempimento, o l'eventuale rabbocco dell'olio facendo sempre riferimento alla mezzeria del tappo del livello
- I riduttori forniti con lubrificazione permanente non necessitano di questa procedura
- Verificare che il valore della tensione di alimentazione stampigliata sulla targhetta del motore elettrico coincida con la tensione di rete
- La verniciatura non deve assolutamente interessare i piani lavorati, il bordo esterno degli anelli di tenuta, fori esistenti sui tappi di sfiato, quando presenti e la targhetta di identificazione
- Se il funzionamento prevede urti o sovraccarichi, si devono adottare salvamotori, limitatori di coppia, giunti di sicurezza, ecc.
- Per i riduttori installati all'esterno prevedere opportune protezioni contro l'esposizione diretta agli agenti atmosferici e alla radiazione solare. Per installazioni in ambienti umidi, adottare adeguati protettivi sulle superfici lavorate del riduttore
- L'utilizzo dei motori a 2 poli è consigliato per servizi intermittenti, a causa dell'elevata temperatura che si può registrare durante il funzionamento
- Nel caso di temperature ambiente non comprese tra -15°C e +50°C contattare il nostro servizio tecnico.

- *Make sure that the assembly of any pinions or jump pulleys on the shafts conforms to the admissibility checks of the resulting loads*
- *If the gear reducer has an oil level indicator make sure that it conforms with the mounting position of the gear reducer. For gear reducers supplied with lubricant, we recommend that once installation is complete customers should substitute the closed plug used only during transport with the oil breather supplied*
- *Always use the middle mark of the oil level as a reference when filling the reducer for the first time or for any topping up*
- *Gear reducers supplied with life-long oil do not require this procedure*
- *Check that the voltage printed on the information plate coincides with the mains power supply*
- *Varnishing should not in any way touch worked parts: the edges of oil seals, existent holes on the breather plug (if present) and also the identification plate*
- *If when running, shocks or overloads are expected then safety motors, clutches and coupling limitators must be installed*
- *If gear reducers are installed externally there must be suitable protection against the exposure to atmospheric agents and solar radiation. If installed in humid areas use adequate protective on the reducer's working surfaces.*
- *It is advisable to use motors with 2 poles for intermittent running due to the elevated temperature that can register during running times*
- *In the case of ambient temperatures not within -15°C and + 50°C please contact our technical service department.*

- Versichern Sie sich, daß die Getriebewelle durch Schläge und Stöße bei der Montage von Kettenrädern und anderen Abtriebelementen nicht beschädigt wird
- Versichern Sie sich, daß die Ölstandanzeige richtig eingestellt ist (falls das Getriebe mit einer solchen Anzeige ausgestattet ist); Bei Getrieben, die bereits mit einer vollständigen Schmierung versehen sind, muss wir nach dem Einbau der Dichtungs-verschluss durch das im Lieferumfang enthaltene Entlüftungsventil ersetzt werden
- Sollte vorausszusehen sein, dass am Antrieb Schläge, längere Überlastungen oder Blockierungen auftreten können, dann Drehmomentbegrenzer, usw. einbauen
- Bei der ersten Füllung bzw. einer eventuellen Nachfüllung sollte sich der Meßpegel immer auf der Mittellinie bewegen
- Bei Getrieben mit permanenter Schmierung sind die oben beschriebenen Maßnahmen nicht notwendig
- Versichern Sie sich, daß die Amperewerte, die auf dem Typenschild des Motors angegeben sind, nicht über denen Ihres Stromnetzes liegen
- Es darf auf keinen Fall Lack auf die Arbeitsflächen, die Außenseiten der Dichtungsringe, die Öffnung der Entlüftungskappe oder auf das Typenschild gelangen
- Bei Getrieben die im Freien verwendet werden, muß darauf geachtet werden, daß sie weder direkter Sonnenstrahlung noch zu starken Witterungseinflüssen ausgesetzt werden. Bei einem Gebrauch in feuchter Umgebung sollten sie angemessene Schutzmaßnahmen für die Arbeitsoberflächen treffen
- Beim Einsatz von 2-poligen Motoren ($n_1=2800 \text{ min}^{-1}$) wird intermittierender Betrieb empfohlen, da während des Gebrauchs eine erhöhte Temperatur auftreten kann
- Bei einer Durchschnittstemperatur unter -15C bzw. über +50C kontaktieren Sie bitte unser technisches Büro

18 MANUTENZIONE

I riduttori forniti con lubrificazione permanente non necessitano di alcuna manutenzione. Per gli altri tipi si consiglia di effettuare una prima sostituzione del lubrificante dopo le prime 300-500 ore di funzionamento, provvedendo ad un lavaggio interno prima del ripristino. Evitare di miscelare oli sintetici con oli a base minerale. Controllare periodicamente il livello del lubrificante effettuando la sostituzione indicativamente agli intervalli riportati nella tabella.

MAINTENANCE

Gear reducers supplied with life long lubrication do not require any maintenance. For other types of gear reducers the first oil change must take place after 300 to 500 hours of operation. Make sure that the inside has been thoroughly washed out before filling up with fresh oil. Do not mix synthetic oils with mineral oils. Check the oil level regularly and change oil at the intervals shown in the table.

WARTUNG

Die Getriebe bis zu Größe 35 sind mit langlebigem synthetischem Öl gefüllt. Eine Wartung ist normalerweise nicht erforderlich. Für die größeren Getriebe empfehlen wir eine erste Überprüfung des Ölstandes und die Überprüfung der Ölbeschaffenheit nach ca. 300-500 Stunden, um eventuelle Einlaufrückstände durch einen Ölwechsel zu beseitigen. Niemals sind synthetisches und Mineralöl zu mischen! Der Ölstand sollte regelmäßig überprüft werden. Ein Ölwechsel ist auf jeden Fall bei folgenden, in der Tabelle angegebenen, Messwerten notwendig.

| Temperatura olio Oil temperature Temperatur [C°] | Intervallo di lubrificazione / Oil change intervals / Ölwechsel nach Betriebsstunden [h] | |
|--|--|--|
| | Olio minerale / Mineral oil / Mineralöl | Olio sintetico / Sintetic oil / synthetisches Öl |
| < 60 | 8000 | 25000 |
| 60 - 80 | 4000 | 15000 |
| 80 - 95 | 2000 | 12500 |

- Vérifier que le montage des pignons ou poulies en saillie des arbres des réducteurs soit conforme aux vérifications d'admissibilité des charges résultantes
- Vérifier, pour les réducteurs avec indicateur de niveau d'huile, que la position de celui-ci soit conforme à la position de montage du réducteur; pour les réducteurs fournis avec lubrifiant, il est recommandé, une fois installés, de remplacer le bouchon utilisé pour le transport avec le bouchon d'évent
- Effectuer le premier remplissage, ou la mise à niveau, toujours tenant compte de la ligne médiane du bouchon de niveau
- Les réducteurs fournis avec lubrification permanente, sont exemptés de cette procédure
- Vérifier que le positionnement de l'alimentation électrique sur le moteur correspond bien au voltage de l'alimentation générale, avant que celui-ci ne soit connecté
- Les surfaces usinées, le bord extérieur des bagues d'étanchéité, les trous sur le bouchon d'évent et la plaque d'identification, ne doivent absolument pas être vernis
- Si des chocs ou surcharges sont prévus, prévoir des disjoncteurs, des limiteurs de couple, des joints de sécurité, etc...
- Pour les réducteurs installés à l'extérieur, prévoir des protections contre l'exposition directe aux agents atmosphériques et le soleil. Pour l'installations dans des milieux humides, protéger les surfaces usinées du réducteur
- L'utilisation des moteurs à deux pôles est conseillée pour des services intermittents, à cause de la température élevée pendant le fonctionnement
- Dans le cas d'utilisation avec des températures ambiantes inférieures à -15°C ou supérieures à $+50^{\circ}\text{C}$, consulter nos services techniques.
- *Asegurarse que el montaje de piñones o poleas acopladas en los ejes de los reductores esté conforme a las verificaciones de admisibilidad de las cargas resultantes*
- *Asegurarse, para los reductores con indicador de nivel de aceite que la posición del indicador sea conforme a la posición de montaje del reductor, para los reductores provistos con lubricante se recomienda, después de la instalación, sustituir el tapón cerrado utilizado para el transporte, con el tapón respiradero en conjunto*
- *Seguir el primer llenado y la recarga del aceite teniendo siempre como referencia la línea medianera del tapón de nivel*
- *Los reductores equipados con lubricante permanente no necesitan de este procedimiento*
- *Verificar que el valor de la tensión marcada sobre la placa del motor eléctrico sea la misma que la tensión de la red*
- *El barnizado no debe absolutamente tapar las superficies laboradas, la faldilla exterior de los retenes de retención, foros existentes sobre los tapones respiraderos cuando estos sean presentes y la placa de identificación*
- *Si la utilización prevee choques o sobrecargas, se tienen que adoptar salvamotors, limitadores de par motor, uniones de seguridad. etc...*
- *Para los reductores instalados al exterior preveer adecuadas protecciones contra la exposición directa a los agentes atmosféricos y a la radiación solar. Para instalaciones en ambientes húmedos adoptar adecuadas protecciones sobre las superficies del reductor*
- *La utilización de motores a de 2 polos es aconsejada para servicios intermitentes, a causa de las elevadas temperaturas que se pueden lograr durante el funcionamiento.*
- *En el caso de temperaturas ambientales no comprendidas entre -15°C y $+50^{\circ}\text{C}$, contactar con nuestro servicio técnico.*
- Acerta se que a montagem de pignone, pólia, esbalo sobre o eixo do ridutor, seja conforme a verificação de admissibilidade da carga resultante.
- Acerta se para o ridutor com indicatore de linha olio, que a posição de este último seja conforme a posição de montagem do ridutor; para o ridutor fornito completo de lubrificante recomendada, efetuada instalação de subistruir o tampão fechado utilizado para o trasporto com o tampão de respração fornido juntos
- Seguir o primeiro riempimento, o eventua cheio de olio, fazendo sempre riferimento a metade do comprimento da válvula da linha
- O ridutor fornido com lubrificação permanente não necessita desta procedura
- Verificar que o valor da tensão de alimentação estampada sobre etiqueta do motor elétrico conhecida com a tensão de corente
- A vernizatura não deve absolutamente interessare a parte trabalhada, o bordo externo do anel de segurança, fora esistente sobre válvula de alívio, quando apresenta etiqueta de identificação
- Se o funcionamento prevee choque ou tanta carga, se deve adotar salva-motor, limite de cópia, pegas de segurança etc.....
- Para o ridutor instalado ao externo prevee oportune proteção contra a exposição direta ao agente atmosférico e a radiação solare. Para a instanção em ambiente umido, adotare adequado protetivo sobre a superfície trabalhada do ridutor
- O utilizzo do motor a 2 pólo è aconselhado para serviço intermitente, a causa da elevada temperatura que se pode registrar durante o funcionamento
- No caso de temperatura ambiental não meté-lo da -15°C e $+50^{\circ}\text{C}$ confira o nosso serviço tecnico.

ENTRETIEN

Les réducteurs fournis avec lubrification permanente, ne nécessitent pas aucun entretien.

Pour les autres séries de réducteurs, la première vidange doit être effectuée après 300 à 500 heures de service, complètement nettoyer l'intérieur du réducteur avec un détergent approprié avant de procéder à un nouveau remplissage. Ne pas mélanger d'huile minérale et synthétique.

Vérifier régulièrement le niveau d'huile et effectuer les vidanges à la périodicité indiquée dans le tableau.

MANTENIMIENTO

Los reductores provistos con lubricación permanente no necesitan de ningún mantenimiento.

Para los otros tipos aconsejamos efectuar una primera sustitución del lubricante después de 300-500 horas de funcionamiento, y proveendo a un lavado interno antes del restablecimiento.

Evitar de mezclar aceites sintéticos con aceites minerales controlar periódicamente el nivel de lubricante efectuando la sustitución indicadamente en los intervalos reportados en la tabla.

MANUTENÇÃO

O ridutor fornido com lubrificação permanente não necessita de alguma manutenção; para um outro tipo se aconselha de afetar uma primeira substituição do lubrificante depois a primeira 300-500 hora de funcionamento precisa lava-lo interno antes do outro funcionamento. Evitar de misturar olio sintético com olio a base mineral

Controla periodicamente a marca do lubrificante efetuado a substituição indicativamente ao intervalo reportado na tabela.

| Température de l'huile Aceite Temperatura olio [C°] | Intervalle de lubrification / Intervalo de lubricación / Intervalo de lubrificação [h] | |
|---|--|---|
| | Huile mineral / Aceite mineral / Olio minerale | Huile synthétique / Aceite sintético / Olio sintético |
| < 60 | 8000 | 25000 |
| 60 - 80 | 4000 | 15000 |
| 80 - 95 | 2000 | 12500 |

STOCCAGGIO

Per un corretto stoccaggio dei riduttori ricevuti consigliamo di eseguire le seguenti raccomandazioni:

- Escludere aree all'aperto, zone esposte alle intemperie o con eccessiva umidità.
- L'ambiente deve essere sufficientemente pulito, esente da vibrazioni eccessive per non danneggiare i cuscinetti (tale necessità di contenere le vibrazioni deve essere soddisfatta anche durante il trasporto)
- Interporre sempre tra il pavimento e il riduttore, uno strato di isolante che impedisca il diretto contatto
- Disporre il riduttore in modo che abbia una base d'appoggio stabile ed accertarsi che non sussistano rischi di spostamenti imprevisti
- Ruotare semestralmente gli alberi di qualche giro per prevenire danneggiamenti a cuscinetti e anelli di tenuta
- Per periodi di stoccaggio superiori ai 60 giorni, le superfici interessate agli accoppiamenti devono essere protette con prodotti antiossidanti
- Per periodi di stoccaggio superiori ai 6 mesi, i riduttori dovranno avere le parti lavorate esterne e quelle di accoppiamento ricoperte di grasso per evitare ossidazioni, inoltre per i riduttori forniti privi di lubrificante dovranno essere riempiti di olio, posizionando il tappo di sfiato nella posizione più alta, e prima dell'utilizzo, riempiti con la corretta quantità e tipo di lubrificante previsto.

STORAGE

To ensure correct storage of the received gear reducer(s), please take note of the following recommendations:

- *Do not store outside, in areas exposed to bad weather or with excessive humidity.*
- *The ambient must be sufficiently clean and absent of any excessive vibrations that could damage the bearings – this is also true for transportation*
- *Always place some kind of isolating material between the floor and the gear reducer so that there is no direct contact.*
- *Make sure that the gear reducer is on a stable base and cannot be accidentally knocked or moved*
- *Give the shafts a few turns every six months to prevent damage to bearings and oil seals*
- *For storage periods of over 60 days coupling surfaces must be protected with an anti-oxidant*
- *For storage periods of longer than 6 months all external working parts and coupling parts must be greased to avoid oxidation. Take note that reducers supplied without lubricant should be filled up with oil and the breather plug should be in its highest position. Before first use the gear reducer must be filled with the correct type and quantity of required lubricant.*

LAGERUNG

Beachten Sie bitte folgendes, um die gelieferten Getriebe richtig zu lagern:

- Nicht im Freien lagern.
- Die Umgebung muß ausreichend sauber sein
- Keine zu starken Vibrationen, damit die Lager nicht beschädigt werden (dies gilt auch für den Transport)
- Um direkten Bodenkontakt zu vermeiden, sollte die Lagerung immer auf einer isolierenden Unterlage erfolgen
- Stellen Sie sicher, daß das Getriebe auf einer stabilen und sicheren Unterlage gelagert ist und keinen unvorhergesehenen Stößen bzw. Bewegungen ausgesetzt ist
- Mindestens alle 6 Wochen sollten die Wellen bewegt werden, damit die Lager und die Dichtungsringe nicht einrosten
- Bei Lagerzeiten über 60 Tagen sollten alle bearbeiteten Flächen mit einem Rostschutzmittel behandelt werden
- Bei Lagerzeiten über 6 Monaten sollten alle bearbeiteten Flächen eingefettet werden, um Rostbildung zu vermeiden
- Zudem muß bei den Getrieben, die ohne Schmieröl geliefert werden, das Öl wieder aufgefüllt werden. Hierzu wird das Entlüftungsventil auf die höchste Position eingestellt. Vor dem ersten Gebrauch sollte das Schmieröl nochmals auf die korrekte Menge und die richtige Typenart überprüft werden

STOCKAGE

Observer les instructions suivantes afin de conserver en l'état la livraison des matériels:

- Ne pas stocker à l'extérieur, des locaux exposés au mauvais temps ou avec une humidité excessive
- Le milieu doit être suffisamment propre, sans vibrations excessive pour ne pas endommager les roulements (la nécessité de limiter les vibrations doit être satisfaite pendant le transport aussi)
- Interposer toujours entre le sol et le réducteur une couche isolante
- Le réducteur doit avoir une base d'appui stable et vérifier l'absence de risques de déplacement inprevus
- Tourner tous les 6 mois les arbres pour prévenir des dommages aux roulements et aux bagues d'étanchéité
- Pour un stockage d'une période supérieure à 60 jours, toutes les surfaces d'accouplement doivent être protégées avec un produit anti-oxydation
- Pour un stockage d'une période supérieure à 6 mois, toutes les parties externes et les surfaces d'accouplement doivent être graissées afin d'éviter l'oxydation. De plus, les réducteurs fournis sans lubrifiant doivent être entièrement remplis, et le bouchon d'évent positionné en haut. Lors de la mise en utilisation des réducteurs, vider ceux-ci jusqu'à la quantité recommandée.

ALMACENAMIENTO

Para un correcto almacenamiento de los reductores aconsejamos seguir las siguientes recomendaciones:

- *Excluir áreas abiertas, zonas expuestas a la interperie o con excesiva humedad*
- *El ambiente debe ser suficientemente limpio, ausente de vibraciones excesivas para no dañar los cojinetes (tal necesidad de contener las vibraciones debe ser presente durante el transporte)*
- *Interponer siempre entre el piso y el reductor un estrato de pintura aislante que impida el contacto directo*
- *Disponer el reductor de manera que tenga una base de apoyo estable y asegurarse que no existan riesgos de imprevistos improvisos*
- *Rotar semestralmente los ejes de cualquier giro para prevenir daños a cojinetes y retenes herméticos*
- *Para periodos de almacenamientos superiores a los 60 días, las superficies interesadas en los acoplamientos deben ser protegidas con productos antioxidantes*
- *Para periodos de almacenamiento superiores a 6 meses , los reductores tendrán que tener las partes laboradas externas y las de acoplamiento cubiertas de grasa para prevenir oxidaciones y los reductores sin lubricante tendrán que ser llenados de aceite poniendo el tapón respiradero en la posición más alta, y antes de la utilización deben ser llenados con la correcta cantidad y tipo de lubricante previsto*

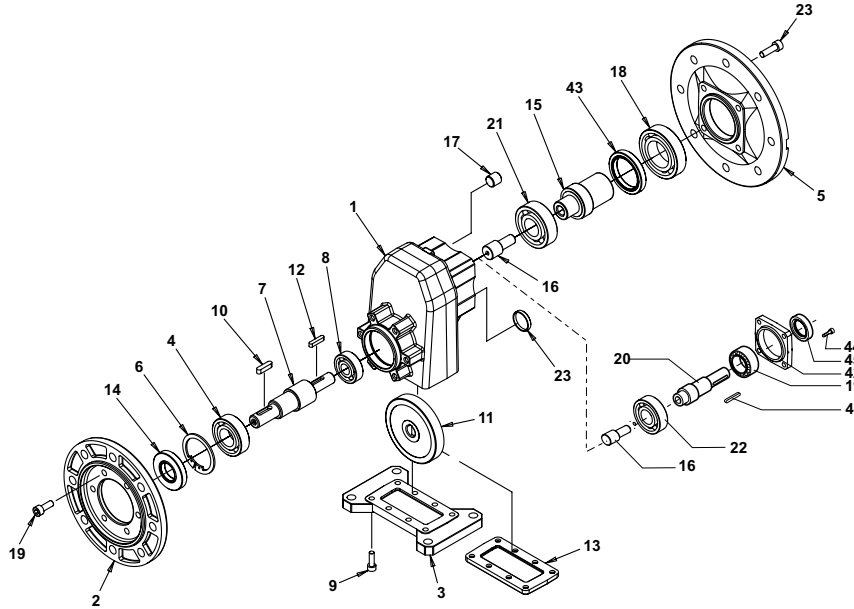
STOCCAGGIO

Para uma correta armazenagem de redução recebida, aconselhamo de seguir a seguinte recomendação:

- Não estar em aréa aberta, e nem em lugar úmido.
- O ambiente deve ser suficientemente limpo. Não deve ter vibração para não quebrara o custinete (tal necessidade de conter a vibração deve ser satisfeita também durante o transporte)
- Colocar sempre no chão o ridutor, uma estrato de isolante que impedi o direto contato.
- Coloque a redução em modo que haja uma base de apoio estavel e tenha certeza que não aconteça risco de afastamento imprevisto
- Girando semestralmente o eixo de qualquer giro para prevenir estragos no parafusos e anel de segurança
- Para o período de armazenagem superior ao 60 dia, a superficie interessado ao acoplamento devem ser protegido com produto anti-ossidante
- Para período de armazenagem superior a 6 meses o ridutor devem ter a parte trabalhada externa e aquele de acoplamento coberto de graxa para evitar ossidação, o ridutor não contém olio lubrificante e deve ser cheio de olio. Posicionando o tampão de respração na posição mais alta, e antes do utilizo encher com a correta quantidade e tipo de lubrificante previsto.

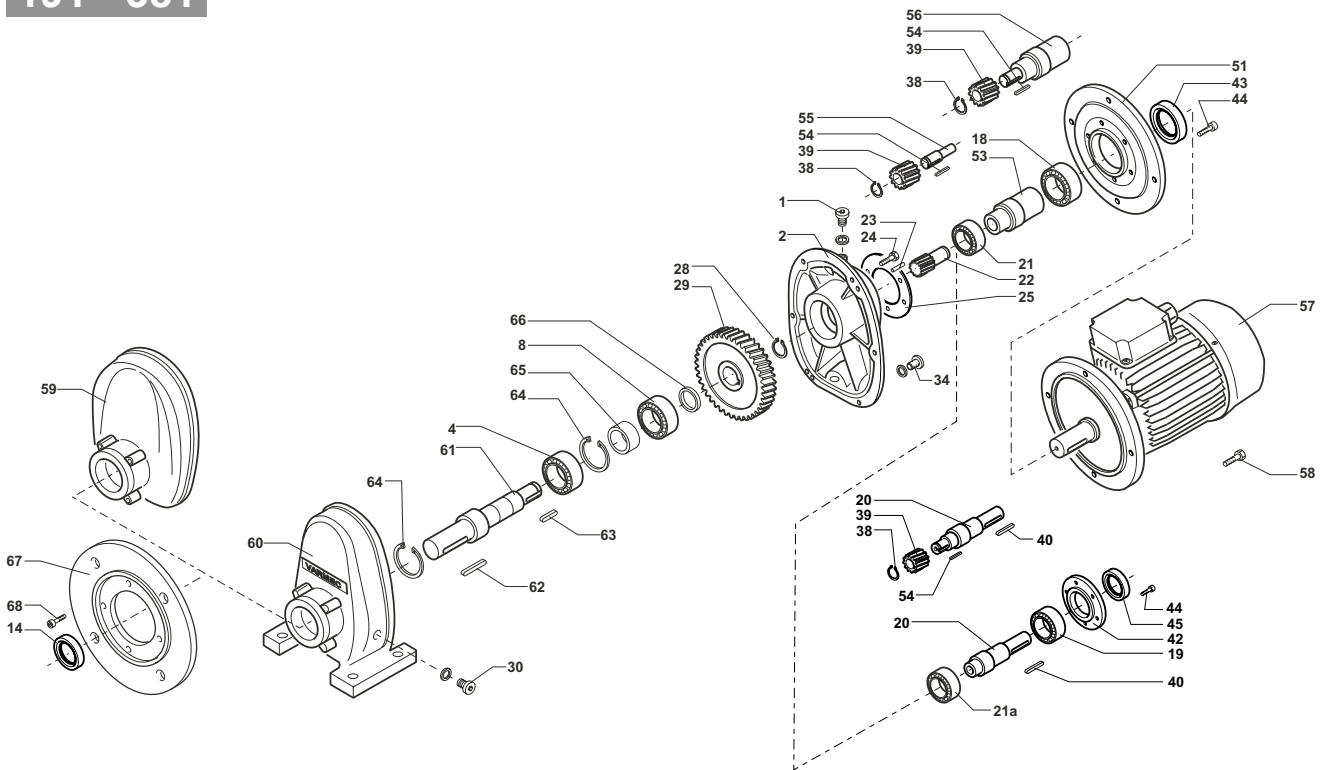
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 LISTE DES PIÈCES DÉTACHÉES / LISTA DE RECAMBIOS / PEÇAS SOBRESSALENTES

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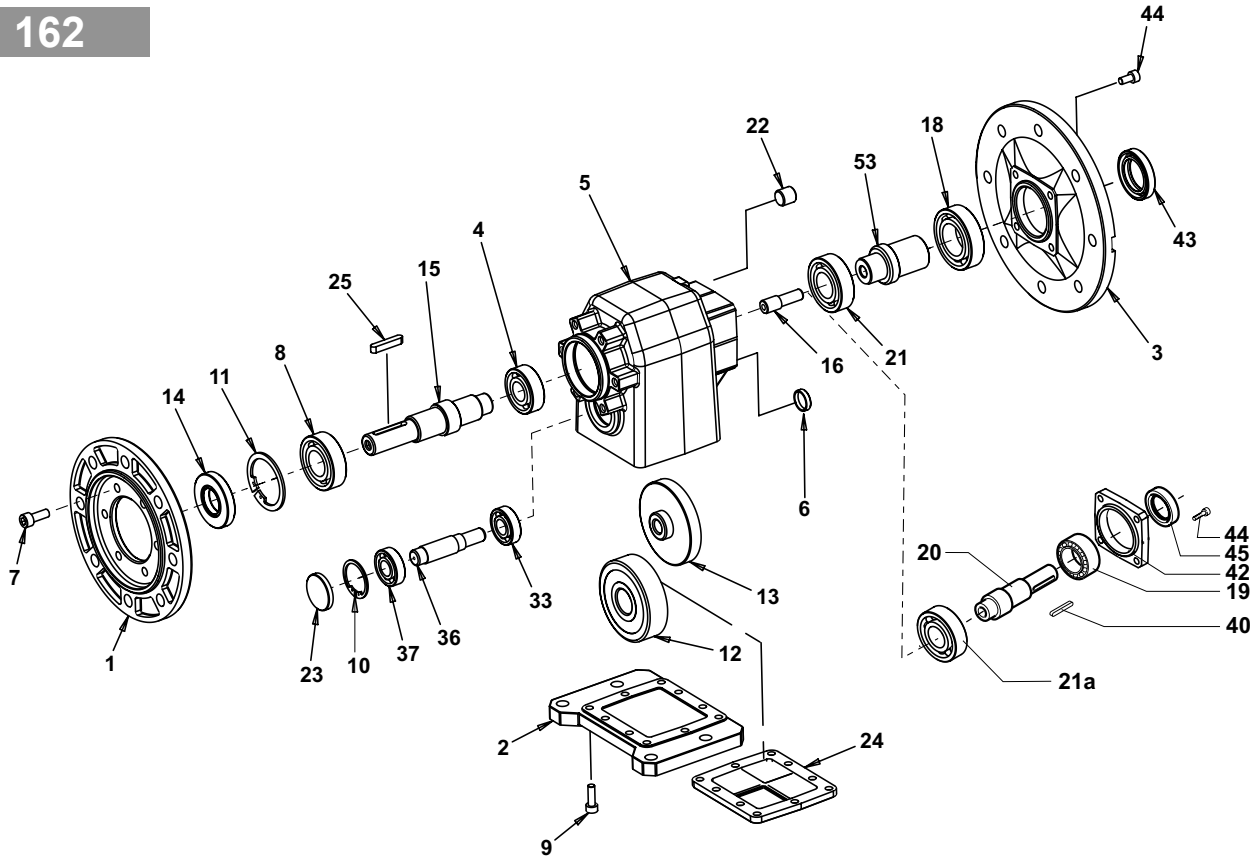
| CV - RCV | | Cuscinetti / Bearings / Lager Roulements / Rodamientos / Rolamentos | | | | | | Anelli di tenuta / Oilseals / Öldichtungen Bagues d'étanchéité / Retenes / Retenores | | |
|------------|-----------|--|------|---------|------|------|------|---|---------|---------|
| | | 4 | 8 | 18 | 19 | 21 | 22 | 14 | 43 | 45 |
| 141 | IEC 80 | 6004 | 6201 | 6006 ZZ | 6204 | 6204 | 6004 | 20/42/7 | 35/47/7 | 20/35/7 |
| | IEC 63-71 | | | 6005 | | 6004 | | | 25/40/7 | |

191 - 381



| CV - RCV | | Cuscinetti / Bearings / Lager Roulements / Rodamientos / Rolamentos | | | | | | Anelli di tenuta / Oilseals / Öldichtungen Bagues d'étanchéité / Retenes / Retenores | | |
|------------|----|--|------|------|------|------|-------|---|---------|---------|
| | | 4 | 8 | 18 | 19 | 21 | 21a | 14 | 43 | 45 |
| 191 | NF | 6304 | 6304 | 6007 | 6206 | 6205 | 6205 | 25/52/7 | 35/52/7 | 30/40/7 |
| | P | | | | | | | 25/47/7 | | |
| 241 | NF | 6304 | 6304 | 6007 | 6206 | 6205 | 6205 | 30/52/7 | 35/52/7 | 30/47/7 |
| | P | | | | | | | 30/47/7 | | |
| 281 | | 6306 | 6306 | 6009 | 6207 | 6206 | 6206 | 40/62/7 | 45/62/7 | 35/52/7 |
| 381 | | 6308 | 6308 | 6011 | 6308 | 6207 | NJ207 | 50/90/10 | 55/80/8 | 40/52/7 |

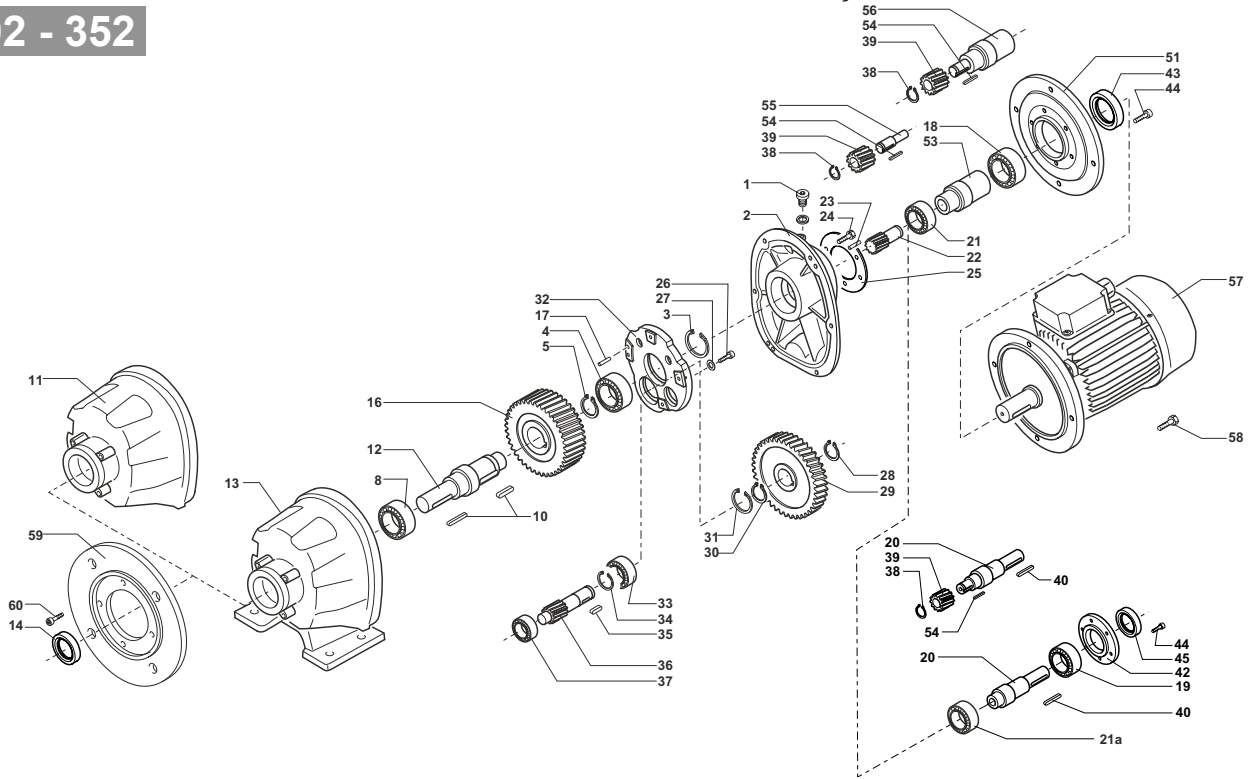
162



| CV - RCV | Cuscinetti / Bearings / Lager Roulements / Rodamientos / Rolamentos | | | | | | | | Anelli di tenuta / Oilseals / Öldichtungen Bagues d'étanchéité / Retenes / Retentores | | | |
|------------|--|------|------|---------|------|------|------|------|--|---------|---------|---------|
| | 4 | 8 | 18 | 19 | 21 | 21a | 33 | 37 | 14 | 43 | 45 | |
| 162 | IEC 80 | 6202 | 6004 | 6006 ZZ | 6204 | 6204 | 6004 | 6001 | 6001 | 20/42/7 | 35/47/7 | 20/35/7 |
| | IEC 63-71 | | | 6005 | | 6004 | | | | | 25/40/7 | |

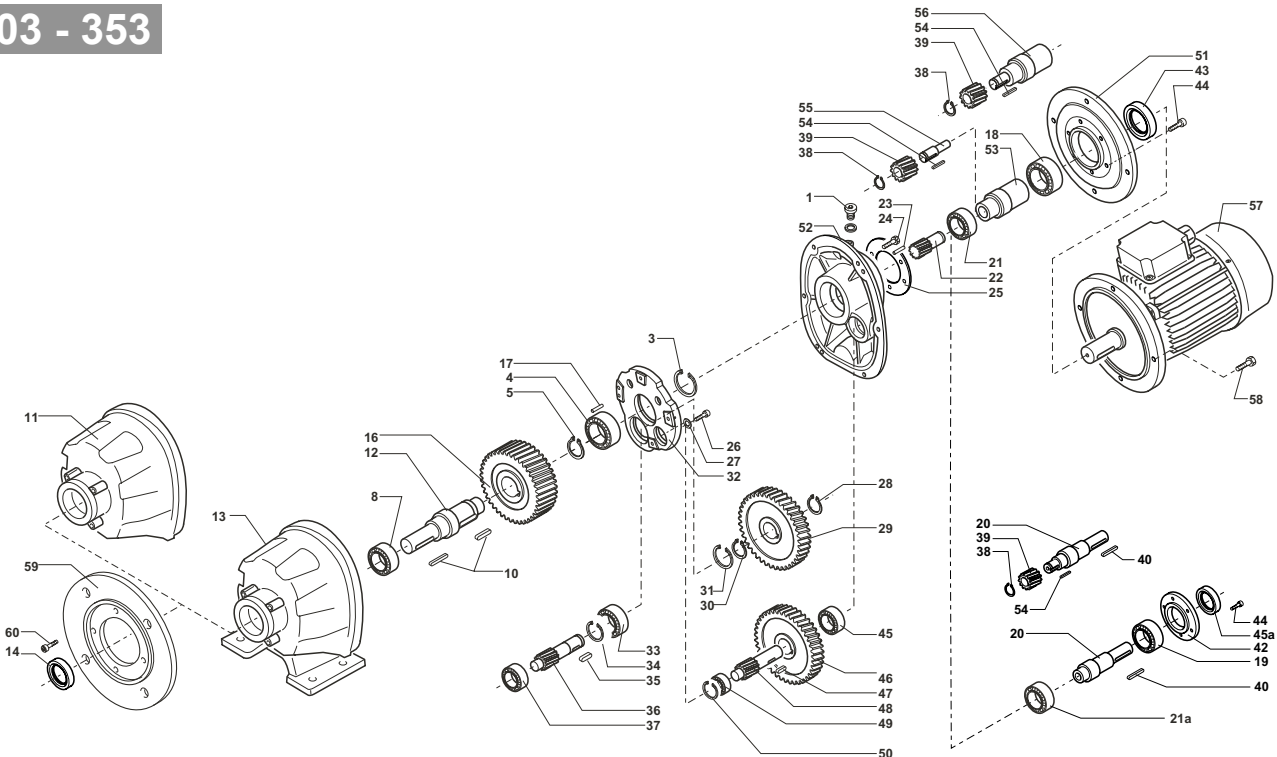
PARTI DI RICAMBIO / SPARE PARTS LIST / ERSATZTEILLISTE
 LISTE DES PIÈCES DÉTACHÉES / LISTA DE RECAMBIOS / PEÇAS SOBRESSALENTES

302 - 352



| CV - RCV | | Cuscinetti / Bearings / Lager Roulements / Rodamientos / Rolamentos | | | | | | | | Anelli di tenuta / Oilseals / Öldichtungen Bagues d'étanchéité / Retenes / Retentores | | |
|------------|-----|--|-------|------|------|------|--------|-------|-------|--|---------|---------|
| | | 4 | 8 | 18 | 19 | 21 | 21a | 33 | 37 | 14 | 43 | 45 |
| 302 | NF | 6006 | 6008 | 6009 | 6207 | 6206 | 6206 | 6205 | 6204 | 40/68/8 | 45/62/7 | 35/52/7 |
| | P-F | | | | | | | | | 40/52/7 | | |
| 352 | NF | 32006 | 32008 | 6009 | 6207 | 6206 | NJ 206 | 30205 | 30204 | 40/68/8 | 45/62/7 | 35/52/7 |
| | P-F | | | | | | | | | 40/52/7 | | |

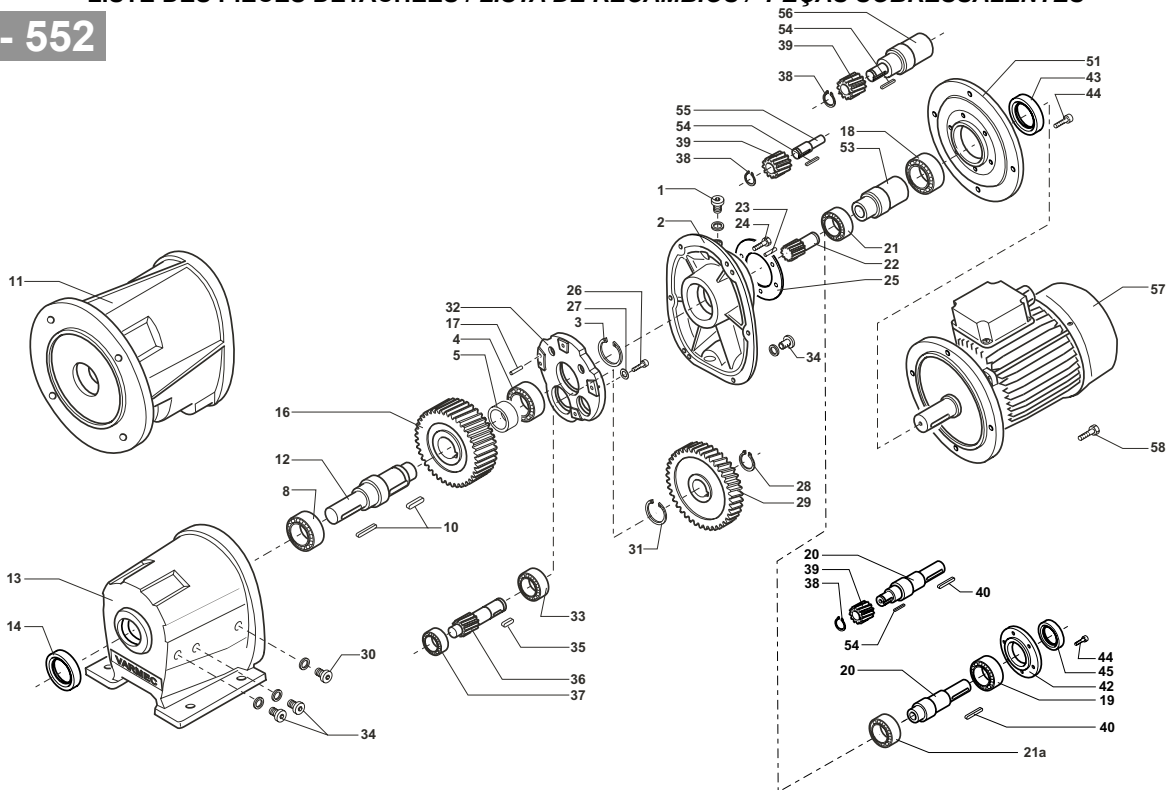
303 - 353



| CV - RCV | | Cuscinetti / Bearings / Lager Roulements / Rodamientos / Rolamentos | | | | | | | | | | Anelli di tenuta / Oilseals / Öldichtungen Bagues d'étanchéité / Retenes / Retentores | | |
|------------|-----|--|-------|------|------|------|------|-------|-------|------|------|--|---------|---------|
| | | 4 | 8 | 18 | 19 | 21 | 21a | 33 | 37 | 45 | 49 | 14 | 43 | 45a |
| 303 | NF | 6006 | 6008 | 6007 | 6206 | 6205 | 6205 | 6205 | 6204 | 6202 | 6202 | 40/68/8 | 35/52/7 | 30/47/7 |
| | P-F | | | | | | | | | | | 40/52/7 | | |
| 353 | NF | 32006 | 32008 | 6007 | 6206 | 6205 | 6205 | 30205 | 30204 | 6202 | 6202 | 40/68/8 | 35/52/7 | 30/47/7 |
| | P-F | | | | | | | | | | | 40/52/7 | | |

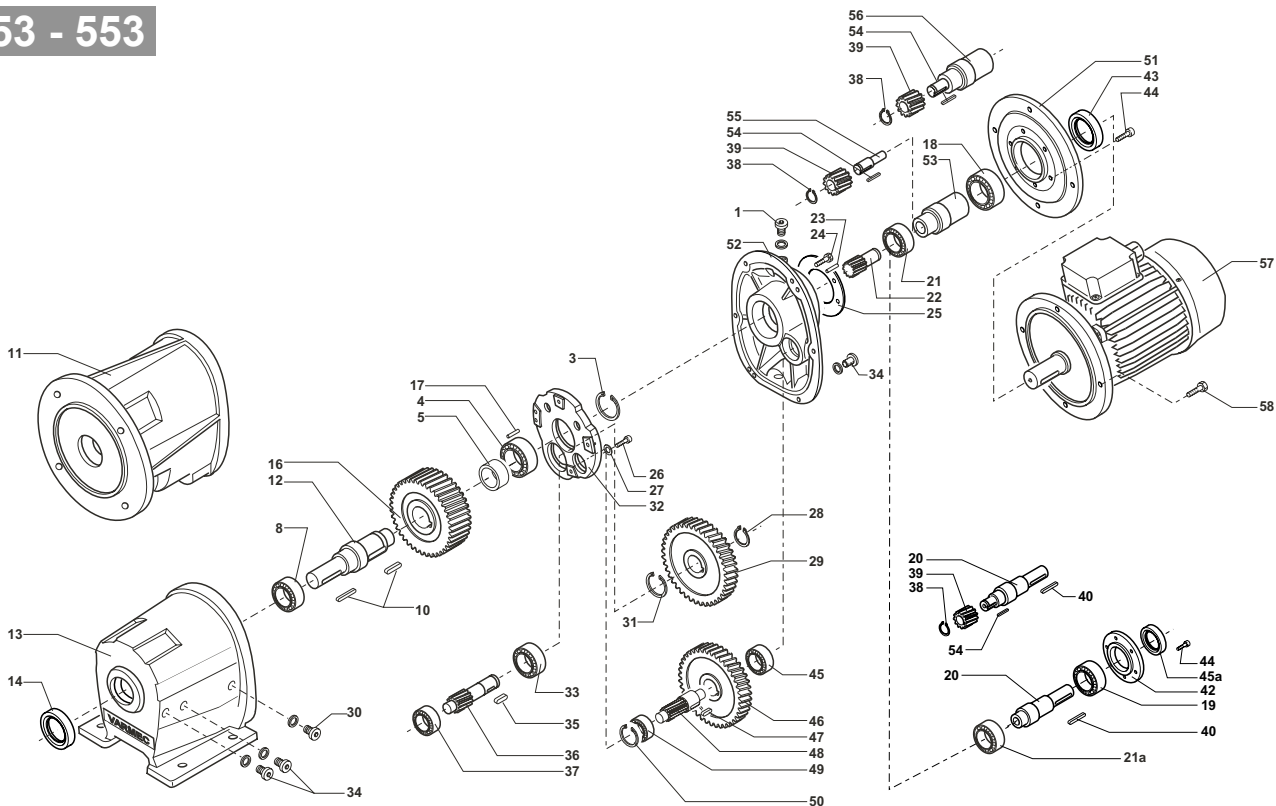
PARTI DI RICAMBIO / SPARE PARTS LIST / ERSATZTEILLISTE
 LISTE DES PIÉCES DÉTACHÉES / LISTA DE RECAMBIOS / PEÇAS SOBRESSALENTES

452 - 552



| CV - RCV | Cuscinetti / Bearings / Lager Roulements / Rodamientos / Rolamentos | | | | | | | | Anelli di tenuta / Oilseals / Öldichtungen Bagues d'étanchéité / Retenes / Retentores | | | | |
|------------|--|-------|-------|------|------|------|--------|-------|--|---------|----------|----------|--|
| | 4 | 8 | 18 | 19 | 21 | 21a | 33 | 37 | 14 | 43 | 45 | | |
| 452 | | 32008 | 32010 | 6011 | 6308 | 6207 | NJ 207 | 32006 | 32006 | 50/72/8 | 55/80/8 | 40/52/7 | |
| 552 | IEC 160-180 | 32011 | 32012 | 6014 | 6310 | 6309 | NJ 309 | 32206 | 32206 | 60/85/8 | 70/90/10 | 50/90/10 | |
| | IEC 90/100/112/132 | | | 6011 | | 6207 | | | | | 55/80/8 | | |

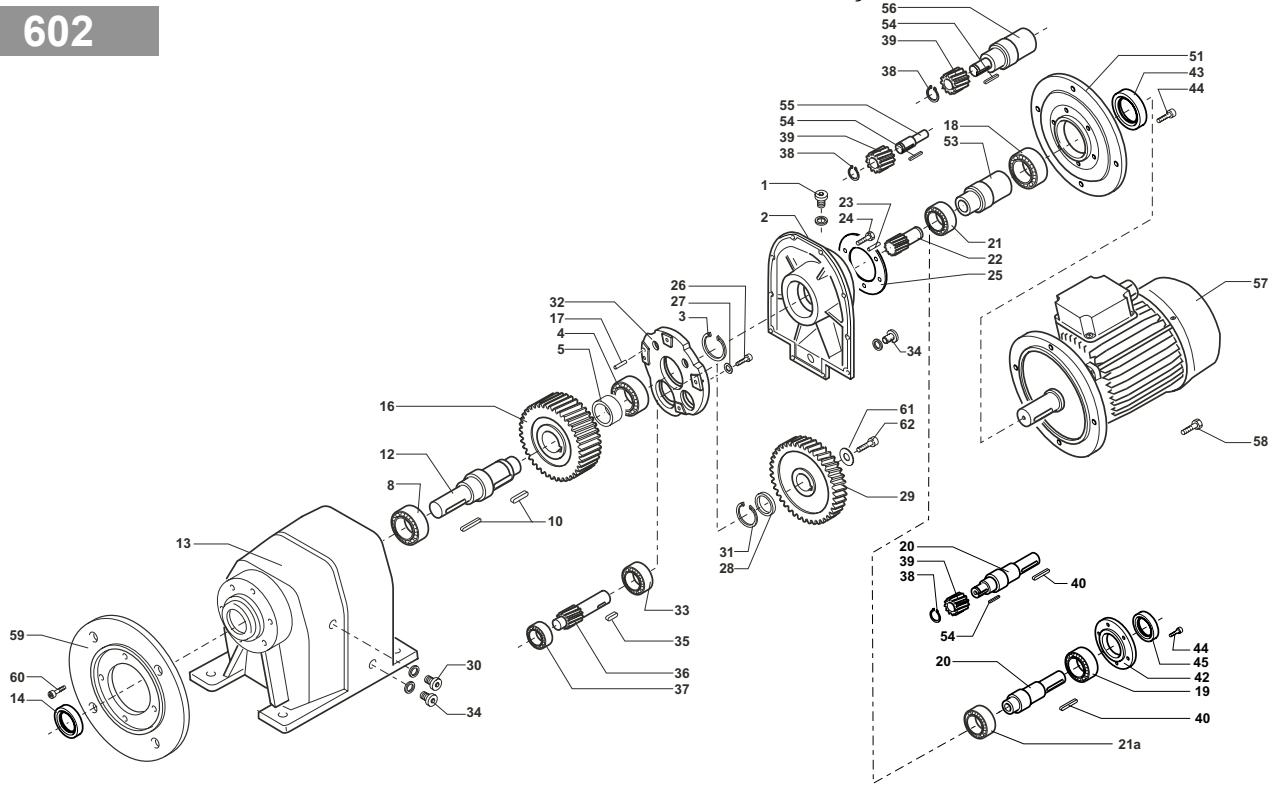
453 - 553



| CV - RCV | Cuscinetti / Bearings / Lager Roulements / Rodamientos / Rolamentos | | | | | | | | | | Anelli di tenuta / Oilseals / Öldichtungen Bagues d'étanchéité / Retenes / Retentores | | |
|------------|--|-------|------|------|------|------|-------|-------|------|------|--|---------|---------|
| | 4 | 8 | 18 | 19 | 21 | 21a | 33 | 37 | 45 | 49 | 14 | 43 | 45a |
| 453 | 32008 | 32010 | 6009 | 6207 | 6206 | 6206 | 32006 | 32006 | 6303 | 6303 | 50/72/8 | 45/62/7 | 35/52/7 |
| 553 | 32011 | 32012 | 6011 | 6308 | 6207 | 6207 | 32206 | 32206 | 6304 | 6304 | 60/85/8 | 55/80/8 | 40/52/7 |

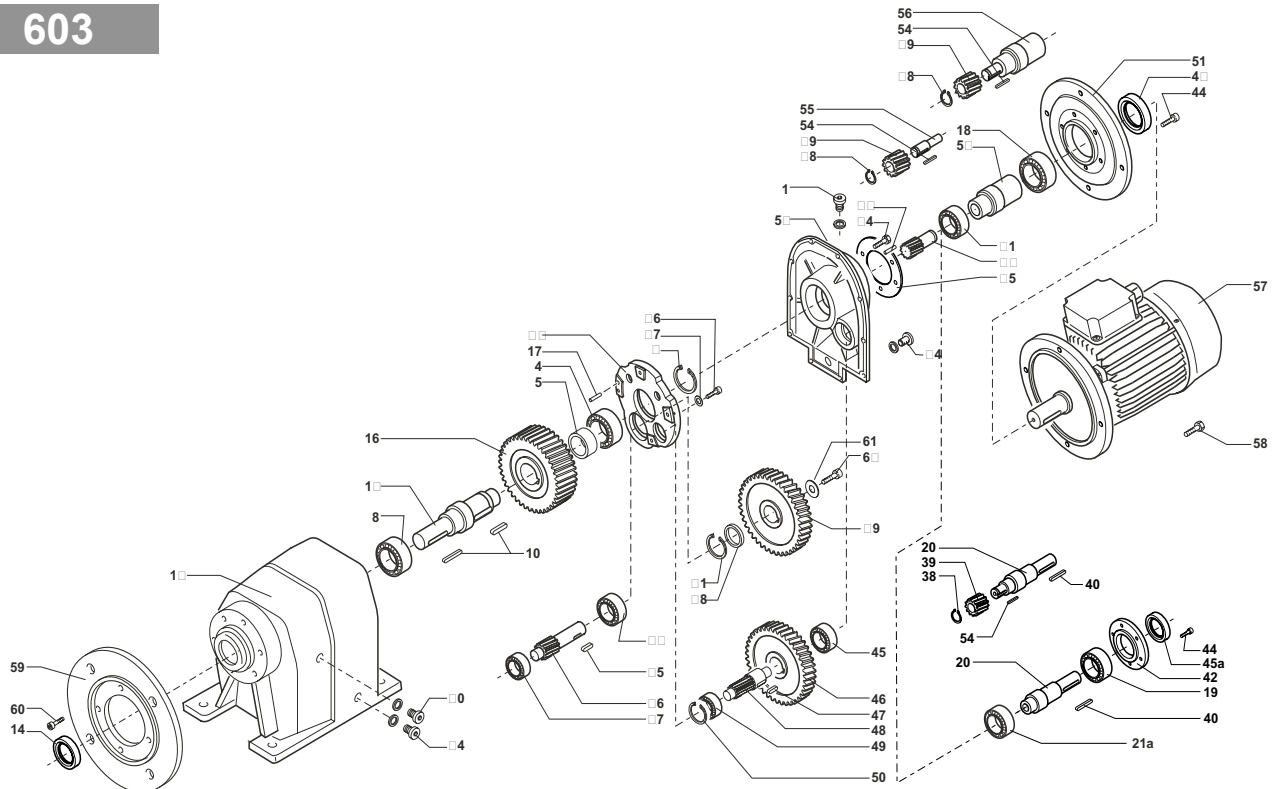
PARTI DI RICAMBIO / SPARE PARTS LIST / ERSATZTEILLISTE
 LISTE DES PIÈCES DÉTACHÉES / LISTA DE RECAMBIOS / PEÇAS SOBRESSALENTES

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| CV - RCV | Cuscinetti / Bearings / Lager Roulements / Rodamientos / Rolamentos | | | | | | | | Anelli di tenuta / Oilseals / Öldichtungen Bagues d'étanchéité / Retenes / Retentores | | |
|------------|--|-------|--------|------|------|------|--------|-------|--|-----------|----------|
| | 4 | 8 | 18 | 19 | 21 | 21a | 33 | 37 | 14 | 43 | 45 |
| 602 | IEC 200 | | NJ 211 | | 6216 | | | | | 80/100/8 | |
| | IEC 160-180 | 32212 | 32214 | 6014 | 6310 | 6309 | NJ 309 | 30308 | 32308 | 70/100/10 | 50/90/10 |
| | IEC 90/100/112/132 | | | | | | | | | 70/90/10 | |

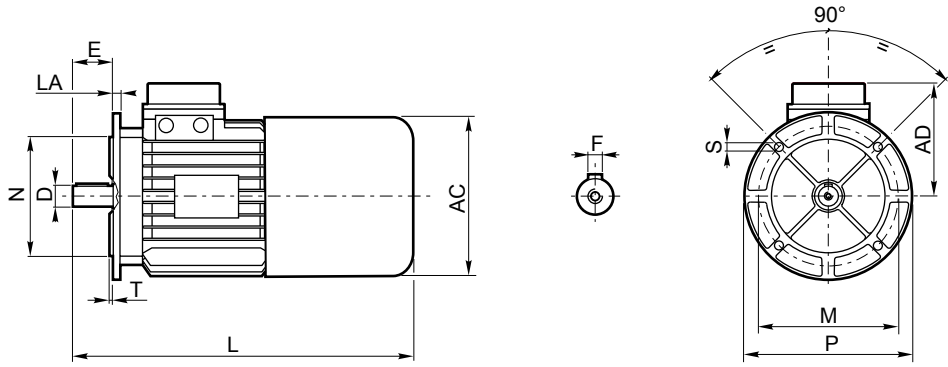
603



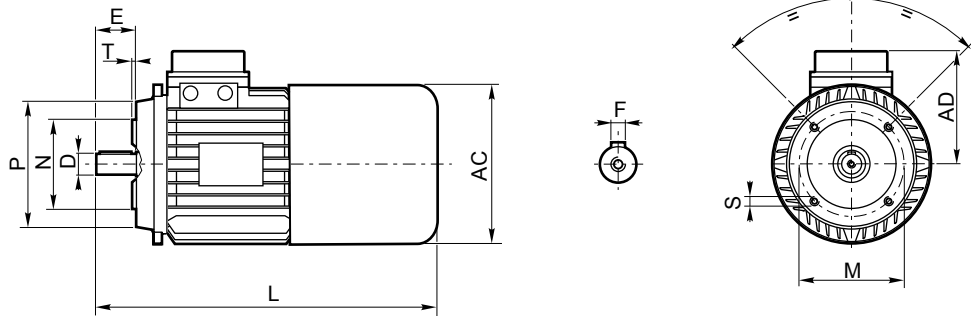
| CV - RCV | Cuscinetti / Bearings / Lager Roulements / Rodamientos / Rolamentos | | | | | | | | | | Anelli di tenuta / Oilseals / Öldichtungen Bagues d'étanchéité / Retenes / Retentores | | |
|------------|--|-------|------|------|------|--------|-------|-------|-------|-------|--|----------|----------|
| | 4 | 8 | 18 | 19 | 21 | 21a | 33 | 37 | 45 | 49 | 14 | 43 | 45a |
| 603 | 32212 | 32214 | 6014 | 6310 | 6309 | NJ 309 | 30308 | 32308 | 32206 | 32206 | 70/100/10 | 70/90/10 | 50/90/10 |

Motore elettrico trifase autofrenante / *Threephase electric motor with brake* / Drehstrommotor
 Moteur électrique triphasé frein / Motor eléctrico trifásico autofrenante / motor eléctrico trifásico autofrenante

B5



B14



| n° poli / poles n. | | | | | | Grandezza Size | B5 - B14 | | | | | | B5 | | | | | B14 | | | | | |
|--------------------|------|--------------|-------|-------|------|-------------------|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|-----|-----|-----|-----|-----|
| 2 | | 4 | | 6 | | | D | E | F | L | AD | AC | P | N | M | T | S | LA | P | N | M | T | S |
| 0.185 | 5.1 | 0.135 | 5 | — | — | 63 | 11 | 23 | 4 | 256 | 113 | 123 | 140 | 95 | 115 | 3 | 10 | 10 | 90 | 60 | 75 | 2.5 | M5 |
| 0.25 | 5.4 | 0.185 | 5.7 | 0.12 | 6.5 | | 14 | 30 | 5 | 286 | 125 | 147 | 160 | 110 | 130 | 3 | 9 | 9.5 | 105 | 70 | 85 | 2.5 | M6 |
| 0.37 | 7.1 | 0.25 | 7.5 | 0.185 | 7.7 | 71 | 19 | 40 | 6 | 332 | 133 | 165 | 200 | 130 | 165 | 3.5 | 12 | 10.5 | 120 | 80 | 100 | 3 | M6 |
| 0.55 | 7.8 | 0.37 | 8 | 0.25 | 9.2 | | 24 | 50 | 8 | 357 | 148 | 181 | 200 | 130 | 165 | 3 | 11.5 | 11 | 140 | 95 | 115 | 3 | M8 |
| 0.75 | 10.6 | 0.55 | 10.5 | 0.37 | 10.5 | 80 | 28 | 60 | 8 | 442 | 156 | 198 | 250 | 180 | 215 | 2.5 | 14 | 15 | 160 | 110 | 130 | 3.5 | M8 |
| 1.1 | 11.7 | 0.75 | 12 | 0.55 | 12.2 | | 38 | 80 | 10 | 534 | 191 | 264 | 300 | 230 | 265 | 4 | 14 | 15 | 200 | 130 | 165 | 4 | M10 |
| 1.5 | 14.5 | 1.1 | 14.5 | 0.75 | 14 | 90S | 42 | 110 | 12 | 770 | 235 | 317 | 350 | 250 | 300 | 5 | 18 | 15 | 250 | 180 | 215 | 5 | M12 |
| 1.85 | 15 | — | — | — | — | | 90L | 48 | 110 | 14 | 805 | 235 | 352 | 350 | 250 | 300 | 5 | 19 | 17 | | | | |
| 2.2 | 17.3 | 1.5 | 16.9 | 1.1 | 16.7 | 100 | 48 | 110 | 14 | 870 | 235 | 352 | 350 | 250 | 300 | 5 | 19 | 17 | | | | | |
| — | — | 1.85 | 18.5 | — | — | | 112 | 48 | 110 | 14 | 870 | 235 | 352 | 350 | 250 | 300 | 5 | 19 | 17 | | | | |
| 3 | 23 | 2.2 | 21.5 | 1.5 | 22.5 | 132S | 48 | 110 | 14 | 870 | 235 | 352 | 350 | 250 | 300 | 5 | 19 | 17 | | | | | |
| 4 | 27.5 | 3 | 24.9 | — | — | | 132 | 48 | 110 | 14 | 870 | 235 | 352 | 350 | 250 | 300 | 5 | 19 | 17 | | | | |
| 5.5 | 35.5 | 4 | 34.6 | 2.2 | 33.7 | 160 | 48 | 110 | 14 | 870 | 235 | 352 | 350 | 250 | 300 | 5 | 19 | 17 | | | | | |
| 7.5 | 50 | 5.5 | 49.5 | 3 | 44.5 | | 160L | 48 | 110 | 14 | 870 | 235 | 352 | 350 | 250 | 300 | 5 | 19 | 17 | | | | |
| — | — | 7.5 | 60 | 4 | 54.2 | 180 | 48 | 110 | 14 | 870 | 235 | 352 | 350 | 250 | 300 | 5 | 19 | 17 | | | | | |
| — | — | 9.2 | 63.9 | 5.5 | 60 | | | 48 | 110 | 14 | 870 | 235 | 352 | 350 | 250 | 300 | 5 | 19 | 17 | | | | |
| 11 | 79 | 11 | 86.2 | 7.5 | 85 | | 48 | 110 | 14 | 870 | 235 | 352 | 350 | 250 | 300 | 5 | 19 | 17 | | | | | |
| 15 | 93 | — | — | — | — | | 48 | 110 | 14 | 870 | 235 | 352 | 350 | 250 | 300 | 5 | 19 | 17 | | | | | |
| — | — | 15 | 104.5 | 11 | 117 | | 48 | 110 | 14 | 870 | 235 | 352 | 350 | 250 | 300 | 5 | 19 | 17 | | | | | |
| 22 | 120 | — | — | — | — | | 48 | 110 | 14 | 870 | 235 | 352 | 350 | 250 | 300 | 5 | 19 | 17 | | | | | |
| — | — | 18.5 | 154 | 15 | 140 | | 48 | 110 | 14 | 870 | 235 | 352 | 350 | 250 | 300 | 5 | 19 | 17 | | | | | |
| — | — | 22 | 160 | — | — | | 48 | 110 | 14 | 870 | 235 | 352 | 350 | 250 | 300 | 5 | 19 | 17 | | | | | |

Condizioni generali di garanzia

La garanzia relativa a difetti di costruzione ha la durata di un anno dalla data di fatturazione delle merci. Tale garanzia comporta per la TRAMEC l'onere della sostituzione o riparazione delle parti difettose ma non ammette ulteriore addebiti per eventuali danni diretti o indiretti di qualsiasi natura. La garanzia decade nel caso in cui non siano state osservate le disposizioni riportate nel manuale di uso e manutenzione e/o siano state eseguite riparazioni o apportate modifiche senza nostro consenso scritto. La merce di ritorno sarà da noi accettata solo se spedita franco di ogni spesa.

Conditions générales de Garantie

La garantie concernant les défauts de construction dure un an à partir de la date de facturation de la marchandise. Varmec s'engage à substituer ou à réparer les parties défectueuses mais ne répondra pas des dommages directs ou indirects de n'importe quelle nature. Varmec ne répondra non plus des réparations ou modifications apportées sans permission écrite de sa part. La marchandise de retour ne sera acceptée par Varmec qu'en case d'expédition port franc.

General coditional of warranty

Warranty for manufacturing defects will expire one-year the invoicing date. TRAMEC will replace or repair defective parts but will not accept any further charges for direct or indirect damages of any kind. The warranty will become null and void if the instructions given in the use and maintenance manual are not complied with or if repairs or changes are carried out without our prior written authorization. Returned goods will be accepted only if delivered free of any charge.

Condiciones generales de garantía

La garantía relativa a defectos de construcción tiene una duración de un año de la fecha de facturación de la mercadería. Tal garantía comporta para Varmec la obligación de sustituir o reparar la parte defectuosa pero no admite otros cargos por eventuales daños directos o indirectos de cualquier naturaleza. Queda fuera de toda garantía en el momento que no se hayan cumplido todas las instrucciones del manual de uso y mantenimiento o se haya hecho alguna reparación o modificación sin nuestro consentimiento escrito. La mercadería que se ha devuelta solo se aceptara enviada puerto franco.

Allgemeine garantieberingungen

Die Garantie auf Herstellungsfehler dauert ein Jahr ab Rechnungsdatum der Ware. Aufgrund Garantie unterliegt der TRAMEC die Pflicht der Ersetzung oder Reparatur der defekten Teile, jedoch nicht die Übernahme weiterer Belastungen für direkte oder indirekte Schäden egal welcher Natur. Die Garantie verfällt bei Nichtbeachtung der in der betreffenden "Betriebs- und Instandhaltungsanleitung" angeführten Anweisungen und/oder falls ohne unsere vorausgehende schriftliche Genehmigung Reparaturen oder Änderungen vorgenommen wurden. Die an uns zurückgesendete Ware akzeptieren wir nur wenn gebuehrenfrei geliefert.

Condições gerais de garantia

A garantia que cobre os defeitos de fabricação tem a validade de um ano a partir da data de faturamento da mercadoria. Esta garantia comporta para a Varmec o ônus da substituição ou reparo das peças defeituosas, mas não inclui outras coberturas para eventuais danos diretos ou indiretos de qualquer natureza. A garantia perde a sua validade se não forem respeitadas as disposições indicadas no manual de uso e manutenção e/ou se forem feitos reparos ou realizadas modificações sem a nossa autorização por escrito. A mercadoria devolvida só será aceita por nós se os custos de expedição forem pagos pelo remetente.

CT-CV IT/EN/DE/FR/ES/PT P00W00**10/06**

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