ELLE. GI SRL

# SERIE MRDV

## Riduttori A Vite Senza Fine

***MRDV Series Worm Gearboxes***

Catalogo Tecnico

*Technical Catalogue*

ELLE. GI SRL

# SERIE MRDV

## Riduttori a Vite Senza Fine

*MRDV Series Worm Gearboxes*

Dal 1987 **Drai Milano srl** nel settore della trasmissione di potenza offre una vasta gamma di: riduttori e motoriduttori a vite senza fine, coassiali, ad assi ortogonali, pendolari, epicicloidali, variatori di velocità, motori elettrici (C.A. e C.C.), brushless, inverter, guide lineari, martinetti e rinvii angolari
Motori e riduttori di identificano con il marchio di rappresentanza **Elle. Gi srl**.

Nata in un piccolo seminterrato di 120 mq, dopo 10 anni si trasferisce in un primo tempo a Nova Milanese in un struttura di 300 mq per poi trovare la sua sede attuale in Novate Milanese, una più moderna struttura di oltre 2000 mq.

Al momento è allo studio un ulteriore ampliamento in quanto il mercato ha sempre più necessita di strutture che possano dare un servizio e una pronta consegna su un ventaglio molto ampio di prodotti atti a soddisfare le esigenze di distributori e costruttori di macchine operatrici.

In Polonia e Spagna si è affiancata a distributori con i quali ha creato un'ottima rete di vendita europea incrementando maggiormente il suo potenziale.

Nel 2005 nasce la consociata **Pmm srl** per la progettazione e produzione di martinetti e rinvii angolari che entrano a far parte della rosa di prodotti commercializzanti da **Drai Milano**.
Grazie alla sua costante crescita oggi è in grado di personalizzare accessori atti e soddisfare eventuali peculiarità dei clienti.


*From 1987 **Drai Milano srl** offers a wide range of products in the sector of power transmissions, such as worm gear boxes, motoreducers, coaxial and helical gearboxes, shaft mounted helical and planetary gears, speed variators, electric motors (C.A. and C.C.), brushless, inverters, linear guidelines, screw jacks and right-angle helical gearboxes.*
*All the main products are identified by the trademark **Elle. Gi srl**.*

*10 years later the birth in a small basement of 120 mq, **Drai Milano** moves to a warehouse of 300 mq in Nova Milanese and than to the current new structure in Novate Milanese with more than 2000 mq.*

*We're currently working on a new enlargement as the market needs more and more structures ready to offer faster services and shipments.*
*The increasing range of products is meant to satisfy the enquiries of distributors and operating machines developers.*

*Thanks to the local distributors in Poland and in Spain, **Drai Milano** built a really strong commercial network in Europe enhancing her strength.*

*The subsidiary **Pmm srl** is in 2005 set up, to design and develop screw jacks and right angles helical gearboxes to make wider the offer of products sold by **Drai Milano**.*
*Thanks to her steady growth, **Pmm** is nowadays able to custom special accessories to satisfy the particular enquiries of the users.*

**GUIDE LINEARI**
***LINEAR GUIDEWAY***

**MOTORI ELETTRICI CC**
***DC ELECTRIC MOTORS***

**COSTRUZIONE E MANUTENZIONE DI RIDUTTORI SPECIALI**
***CONSTRUCTION AND MAINTENANCE OF SPECIAL GEARBOXES***

**RIDUTTORI A VITE SENZA FINE (MRDV)**
***WORM GEARBOXES (MRDV)***

**RIDUTTORI A VITE SENZA FINE (MRDB)**
***WORM GEARBOXES (MRDB)***

**ACCESSORI PER RIDUTTORI A VITE SENZA FINE**
***ACCESSORIES FOR WORM GEARBOXES***

**RIDUTTORI EPICICLOIDALI**
***PLANETARY GEARBOXES***

**RIDUTTORI AD INGRANAGGI CON CASSA IN ALLUMINIO (DRC)**
***GEARBOXES WITH ALUMINUM CASE (DRC)***

**RIDUTTORI AD INGRANAGGI CON CASSA IN ALLUMINIO (DKM/DKB)**
***GEARBOXES WITH ALUMINUM CASE (DKM/DKB)***

**RIDUTTORI AD INGRANAGGI CON CASSA IN GHISA (FC)**
***GEARBOXES WITH CAST IRON CASE (FC)***

**RIDUTTORI AD INGRANAGGI CON CASSA IN GHISA (RC)**
***GEARBOXES WITH CAST IRON CASE (RC)***

**RIDUTTORI AD INGRANAGGI CON CASSA IN GHISA (KC)**
***GEARBOXES WITH CAST IRON CASE (KC)***

**PRECOPPIE**
***PRIMARY REDUCTION UNIT***

**VARIATORI (UDL)**
***VARIATOR (UDL)***

**MOTORI ELETTRICI**
***ELECTRIC MOTORS***

**BRUSHLESS**
***BRUSHLESS***

**KIT SERVOVENTILAZIONE**
***FORCED COOLING FAN***

**MARTINETTI**
***SCREW JACKS***

**RINVII ANGOLARI**
***RIGHT-ANGLE HELICAL GEARBOXES***

**LAVORAZIONI IN CONTO TERZI**
***THIRD PARTY WORK***

**DISTRIBUTORE AUTORIZZATO**
**(CON CENTRO MONTAGGIO)**
***OFFICIAL DISTRIBUTOR***
***(WITH ASSEMBLY CENTER)***

**STUDIO E REALIZZAZIONE DI**
**APPLICAZIONI CUSTOM**
***STUDY AND IMPLEMENTATION OF***
***CUSTOM APPLICATIONS***

# INDICE - *INDEX*

Il riduttore a vite senza fine è apprezzato per il minimo ingombro in proporzione al rapporto riduzione/coppia e per un eccellente rapporto qualità prezzo.

Il movimento viene trasmesso dall'albero veloce (ossia la vite senza fine) all'albero lento (ossia la corona dentata del riduttore)

Trovano impiego in moltissime applicazioni. Hanno il vantaggio di essere silenziosi ed irreversibili, ma per il corretto dimensionamento, occorre tenere conto di alcuni importanti fattori tra cui il più importante è il rendimento.
Sono i più diffusi sul mercato.

Caratteristiche principali:

- Carcassa in alluminio di alta qualità, leggera e che non arrugginisce;
- Ottima coppia in uscita;
- Può lavorare in ogni condizione senza intoppi e con un basso livello di rumorosità;
- Ottima capacità radiale;
- Carcassa di ottimo aspetto estetico, di lunga durata e dimensioni ridotte;
- Adatto a lavorare in molteplici installazioni diverse
- Carcasse in alluminio pressofuso dalla (025-090) e carcasse in ghisa dalla (110-150);

Caratteristiche verniciatura:

- Carcassa d'alluminio
  I. Breve getto di uno speciale trattamento antisettico sulla superficie della carcassa;
  II. Fosfatazione e verniciatura di grigio RAL.
- Carcassa in ghisa
  I. Verniciatura con antiruggine e successivamente di grigio RAL.

*The worm gear reducer is appreciated for its minimal size in proportion to the reduction ratio/torque and for an excellent value to money.*

*The motion is transmitted from the input shaft (namely the worm screw) to the output shaft (namely the gear wheel of the reducer).*

*They are employed in numerous applications, offering the advantage of being quiet and irreversible. However, for proper sizing, it is necessary to consider some important factors, with the most crucial being the efficiency.*
*They are the most widely used in the market.*

*Main features:*

- *Made of high-quality aluminum alloy, light in weight and non-rusting.*
- *Large in output torque.*
- *Smooth in running and low in noise, can work long time in dreadful conditions.*
- *High in radiating efficiency.*
- *Good-looking in appearance, durable in service life and small in volume.*
- *Suitable for omnibearing installation.*
- *Housing: die-cast aluminium alloy (frame size: 025 to 090) and cast iron (frame size: 110 to 150).*

*Main paint features:*

- *Aluminium alloy housing*
  *I. Shot blasting and special antiseptic treatment on the aluminum alloy surface.*
  *II. After phosphating, paint with Grey RAL.*
- *Cast iron housing*
  *I. First paint with red antirust paint, then paint with grey RAL.*

## Riduttore (MRDV/RDV)/*Gearbox (MRDV/RDV*

**MRDV 063 - 40 FA 71B5 B3**

| | |
|---|---|
| **MRDV** | **Codice del riduttore (MRDV/RDV)**<br>*Code of gearbox (MRDV/RDV)* |
| **063** | **Grandezza del riduttore**<br>*Centre to centre spacing of gearbox* |
| **40** | **Rapporto di riduzione**<br>*Speed ratio of gearbox* |
| **FA** | **Flangia in uscita** (se non indicato si intende senza flange in uscita)<br>*Flange output (no mark means flangeless output)* |
| **71B5** | **Flangia motore**<br>*Motor mounting facility* |
| **B3** | **Posizione di montaggio**<br>*Installation position code* |

**MRDV 025 ~ 150**

**RDV 030 ~ 150**

## Riduttore a vite con precoppia (PC-MRDV)/*Combined units gearbox and pre-stage reduction unit (PC-MRDV)*

**PC 071 MRDV 063 - 40 FA B3**

| | |
|---|---|
| **PC** | **Precoppia**<br>*Pre-stage reduction unit* |
| **071** | **Grandezza del riduttore**<br>*Centre to centre spacing of gearbox* |
| **MRDV** | **Codice del riduttore (MRDV/RDV)**<br>*Code of gearbox (MRDV/RDV)* |
| **063** | **Grandezza del riduttore**<br>*Centre to centre spacing of gearbox* |
| **40** | **Rapporto di riduzione**<br>*Speed ratio of gearbox* |
| **FA** | **Flangia in uscita** (se non indicato si intende senza flange in uscita)<br>*Flange output (no mark means flangeless output)* |
| **B3** | **Posizione di montaggio**<br>*Installation position code* |

**PC-MRDV**

## Doppio riduttore a vite (MRDV-MRDV/RDV-MRDV)/*Combined units (MRDV-MRDV/RDV-MRDV)*

**MRDV 050/110 - 900 FA 71B5 BS2**

| | |
|---|---|
| **MRDV** | **Codice del riduttore (MRDV/RDV)**<br>*Code of gearbox (MRDV/RDV)* |
| **050/110** | **Grandezza del riduttore**<br>*Centre to centre spacing of gearbox* |
| **900** | **Rapporto di riduzione**<br>*Speed ratio of gearbox* |
| **FA** | **Flangia in uscita** (se non indicato si intende senza flange in uscita)<br>*Flange output (no mark means flangeless output)* |
| **71B5** | **Flangia motore**<br>*Motor mounting facility* |
| **BS2** | **Posizione di montaggio**<br>*Installation position code* |

**MRDV 025 ~ 150**

**RDV 030 ~ 150**

## Variatori e riduttori (UDL-MRDV)/*Combined units gearbox and speed variators (UDL-MRDV)*

**UD L 0.75 MRDV 063 - 40 FA B3**

| | |
|---|---|
| **UD** | **Codice del variatore**<br>*Code of speed variator* |
| **L** | **Carcassa in ghisa** (se non indicato si intende carcassa in ghisa)<br>*Aluminium alloy housing (no mark means cast iron case)* |
| **0.75** | **Po**<br>*Speed ratio of gearbox* |
| **MRDV** | **Codice del riduttore (MRDV/RDV)**<br>*Code of gearbox (MRDV/RDV)* |
| **063** | **Grandezza del riduttore**<br>*Centre to centre spacing of gearbox* |
| **40** | **Rapporto di riduzione**<br>*Speed ratio of gearbox* |
| **FA** | **Flangia in uscita** (se non indicato si intende senza flange in uscita)<br>*Flange output (no mark means flangeless output)* |
| **B3** | **Posizione di montaggio**<br>*Installation position code* |

**UDL-MRDV**

*In fase d'ordine specificare se il variatore è completo di motore*

*When ordering you should show whether the reducers are equipped with motors*

## Come selezionare la riduzione di un riduttore/*The way to select worm-gear speed reducer*

Calcolare la coppia in uscita sull'albero lento M del riduttore: $M_2 \geq M \times f_z$

*Calculate torque on the shaft M, the output torque of the reducer: $M_2 \geq M \times f_z$*

V - velocità di trasmissione

*V- transmission speed*

$n_1$ - velocità del motore

*$n_1$ - is motor rev*

$n_2 = v/(\pi \times D)$

$i = n_1/n_2$

i - rapporto di riduzione

*i - transmission speed ratio*

$10.5 \leq i \leq 100$

UDL-MRDV

$300 \leq i \leq 5000$

RDV-MRDV

MRDV-MRDV

$75 \leq i \leq 300$

PC-MRDV

$7.5 \leq i \leq 100$

MRDV/RDV

Tipo di motore

*Motor mode*

Riduzione

*Reducer*

Acc. indiretto

*Motor hole input*

RDV

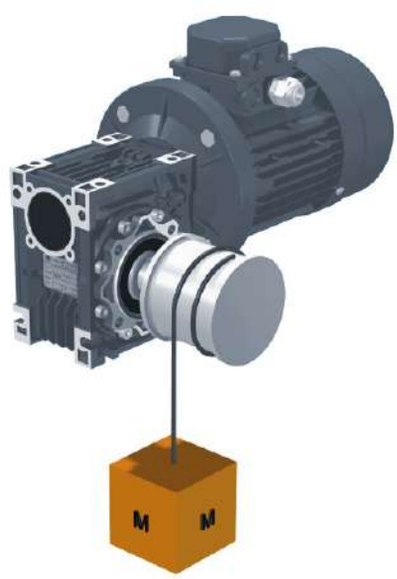
Acc. diretto

*Motor shaft input*

MRDV

Considerare che la coppia in uscita del riduttore sia più alta di quella necessaria al movimento.

*Consider that the output torque of the gearbox has to be higher has to be higher than the one necessary for moving*



## Fattore di servizio/*Service factor*

Il fattore di servizio (fs) dipende dalle condizioni in cui opera il riduttore. I parametri che influiscono sulla scelta del riduttore sono:

- Tipo di carico della macchina:
  - I. Uniforme (fa≤0.3)
  - II. Sovraccarico moderato (fa≤3)
  - III. Forti sovraccarichi (fa≤10)
- Durata giornaliera (ore)
- Frequenza degli avviamenti

fa=Je/Jm

- Je (kgm2) - momento di inerzia esterno sull'albero guida
- Jm (kgm2) - momento di inerzia del motore
- Se fa>10 - contattare il nostro ufficio tecnico

*The service factor (fs) depends on the operating conditions the reduction unit is subjected to. The parameters that need to be taken into consideration to select the most adequate service factor correctly comprise:*

- *Type of load of the operated machine:*
  - *I. Uniform, permitted mass acceleration factor (fa≤0.3)*
  - *II. Moderate shocks, permitted mass acceleration factor (fa≤3)*
  - *III. Heavy shocks, permitted mass acceleration factor (fa≤10)*
- *Length of daily operating time (hours)*
- *Start-up frequency*

*fa=Je/Jm*

- *Je (kgm2) - moment of reducer external inertia at the drive-shaft*
- *Jm (kgm2) - moment of inertia of motor*
- *If fa>10 - please call our Technical Service*

Tipo di carico della macchina:

I Alimentatori e linee per carichi leggeri, ventole, linee di assemblaggio, nastri trasportatori per materiale leggero, miscelatori per liquidi e macchine da imballaggio.

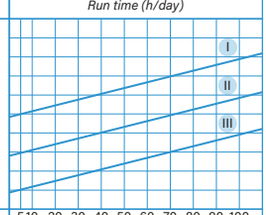
II Ascensori, trasportatori pesanti, macchine tessili, porte scorrevoli e gru trituratori

III Macchine cartotecnica, macchine per il marmo e per la ceramica.

| 24h | 16h | 8h | 2h |
|---|---|---|---|
| 2.3 | 2.0 | 1.8 | 1.6 |
| 2.2 | 1.9 | 1.7 | 1.5 |
| 2.1 | 1.8 | 1.6 | 1.4 |
| 2.0 | 1.7 | 1.5 | 1.3 |
| 1.9 | 1.6 | 1.4 | 1.2 |
| 1.8 | 1.5 | 1.3 | 1.1 |
| 1.7 | 1.4 | 1.2 | 1.0 |
| 1.6 | 1.3 | 1.1 | 0.9 |
| 1.5 | 1.2 | 1.0 | 0.8 |

**Fattore di servizio (fs)**
*Service factor (fs)*

**Durata**
*Run time (h/day)*




**Frequenza degli avviamenti**
*Start up frequency (times/h)*

*Type of load of the operated machine:*

I *Screw feeders for lights materials, turbofans, assembly lines for light materials, conveyor belts for light materials, mixers (liquid) and packing machines.*

II *Good lifts, conveyor belts for heavy materials, weave machines, sliding doors, concrete mixers, crane mechanisms.*

III *Barkers, crush machines, grinding lathes, punches, produce paper machines, stone and porcelain clay machining machines.*

Il fattore di servizio (fs) deve essere modificato in questo modo:

- Temperatura ambiente tra 30 ~ 40°C : fs x (1.1 ~ 1.2)
- Temperatura ambiente tra 40 ~ 50°C : fs x (1.3 ~ 1.4)
- Temperatura ambiente tra 50 ~ 60°C : fs x (1.5 ~ 1.6)
- Temperatura ambiente >60°C (contattare il nostro ufficio tecnico)

*Service factor (fs) should be adjusted as following:*

- *Ambient temperature is 30 ~ 40°C : fs x (1.1 ~ 1.2)*
- *Ambient temperature is 40 ~ 50°C : fs x (1.3 ~ 1.4)*
- *Ambient temperature is 50 ~ 6 0°C : fs x (1.5 ~ 1.6)*
- *Ambient temperature is >60°C (please call our Technical Service)*

## Carico radiale ammissibile sull'albero/*The admissible radial load on the shaft*

Il carico radiale sull'albero è calcolato nel seguente modo:

$$\frac{Fre = 2000 \cdot M \cdot fz \le Fr1 \cdot Fr2}{D}$$

Quando il carico non è in centro all'albero è necessario ricalcolarlo con la seguente formula (i dati a, b e x sono nella tabella seguente):

$$\frac{Fre \le Fr \cdot a \le Fr1max \cdot Fr2max}{(b+x)}$$

Fre (N) - risultato del carico radiale
M (Nm) - coppia sull'albero
D (mm) - diametro dell'oggetto montato sull'albero
Fr (N) - carico radiale ammesso (vedi tabella)
fz = 1.15 - pignone
fz = 1.4 - ruota della catena
fz = 1.75 - tiro cinghia
fz = 2.5 - tiro piattello
a & b - costante della vite
x - distanza del punto di applicazione del carico (mm)

*The allowed radial load force on the shaft is calculated with the following formula:*

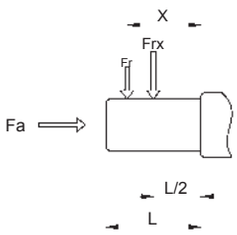
$$\frac{Fre = 2000 \cdot M \cdot fz \le Fr1 \cdot Fr2}{D}$$

*When the resulting radial load is not applied on the centre line of the shaft, it is necessary to calculate the effective load with the following formula (the values of a, b and x are given in the following tables):*

$$\frac{Fre \le Fr \cdot a \le Fr1max \cdot Fr2max}{(b+x)}$$

*Fre (N) - resulting radial load*
*M (Nm) - torque on the shaft*
*D (mm) - diameter of the transmission member mounted on the shaft*
*Fr (N) - the admitted radial load force (see relative tables)*
*fz = 1.15 - gear pinion*
*fz = 1.4 - chain wheel*
*fz = 1.75 - v-pulley*
*fz = 2.5 - flat pulley*
*a & b - worm casing constant*
*x - distance of load from shaft shoulder (mm)*

## Albero in uscita/*Output shafts*

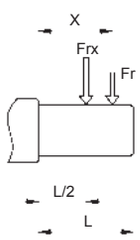



| MRDV | 025 | 030 | 040 | 050 | 063 | 075 | 090 | 110 | 130 | 150 |
|---|---|---|---|---|---|---|---|---|---|---|
| a | 50 | 65 | 84 | 101 | 120 | 131 | 162 | 176 | 188 | 215 |
| b | 38 | 50 | 64 | 76 | 95 | 101 | 122 | 136 | 148 | 174 |
| Fr2 max | 1350 | 1830 | 3490 | 4840 | 6270 | 7380 | 8180 | 12000 | 13500 | 18000 |

I valori dei carichi radiali ammissibili sono dati dalle pagine relative alle prestazioni (Fr1 , Fr2)

*The values of the admissible radial loads are given on the pages relating to performance (Fr1 , Fr2)*

## Albero in entrata/*Input shafts*




| RDV | 030 | 040 | 050 | 063 | 075 | 090 | 110 | 130 | 150 |
|---|---|---|---|---|---|---|---|---|---|
| a | 86 | 106 | 129 | 159 | 192 | 227 | 266 | 314 | 350 |
| b | 76 | 94,5 | 114 | 139 | 167 | 202 | 236 | 274 | 310 |
| Fr1 max | 210 | 350 | 490 | 700 | 980 | 1270 | 1700 | 2100 | 2800 |

I valori dei carichi radiali ammissibili sono dati dalle pagine relative alle prestazioni (Fr1 , Fr2)

*The values of the admissible radial loads are given on the pages relating to performance (Fr1 , Fr2)*

## Rendimento/*Efficiency*

Il rendimento è un parametro importante del riduttore. Lo determina l'attrito radente e volvente degli ingranaggi. La tabella di pagina 12 mostra i valori del rendimento.

*Efficiency is an important parameter of reducer, and lies on the design and friction of the worm and worm wheels drive units. The mesh data table on page 12 shows dynamic efficiency (n1=1400) and static efficiency values.*

## Irreversibilità dinamica/*Dynamic irreversibility*

L'irreversibilità dinamica si verifica al momento dello stop del riduttore. La condizione teorica perché si verifichi questa situazione è $\eta_d < 0.4$ (vedi tabella a pag. 12). La tabella mostra la classe di irreversibilità. Urti e vibrazioni influiscono sull'irreversibilità del riduttore.

*Dynamic irreversibility is achieved when the output shaft stops instantly when drive is no longer transmitted through the worm shaft. This condition requires a dynamic efficiency of $\eta_d < 0.4$ (see table on page 12). The table shows approximate irreversibility classes. Vibrations and shocks can affect a gear reducer's irreversibility.*

| $\eta_d$ | Irreversibilità dinamica - *Dynamic irreversibility* |
|---|---|
| > 0.6 | Reversibilità dinamica - *Dynamic reversibility* |
| 0.5 ~ 0.6 | Bassa reversibilità dinamica - *Low dynamic reversibility* |
| 0.4 ~ 0.5 | Buona irreversibilità dinamica - *Good dynamic irreversibility* |
| < 0.4 | Irreversibilità dinamica - *Dynamic irreversibility* |

## Irreversibilità statica/*Static irreversibility*

L'irreversibilità statica si verifica quando non è possibile far ruotare il riduttore dal lato albero lento. La condizione teorica perché si verifichi questa situazione è $\eta_s < 0.5$ (vedi tabella a pag. 12). La tabella mostra la classe di irreversibilità. Urti e vibrazioni influiscono sull'irreversibilità del riduttore.

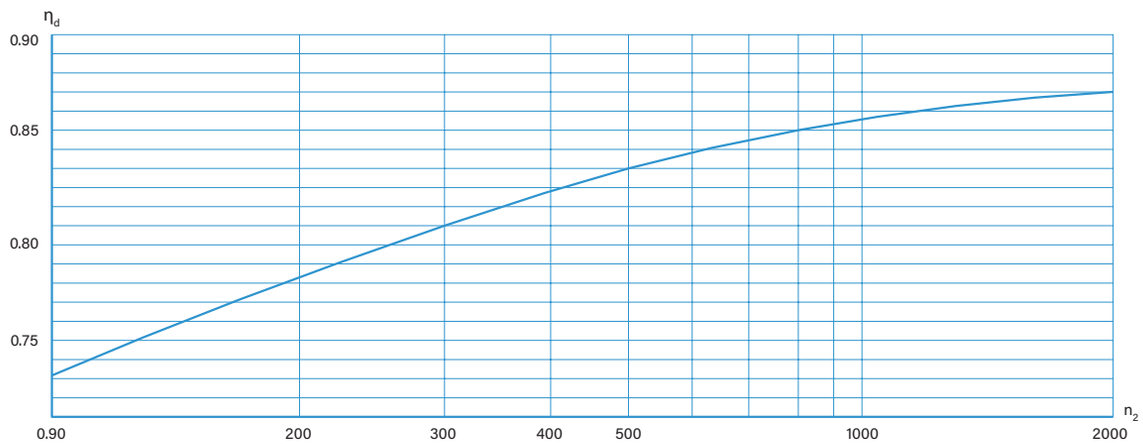
*Static irreversibility is achieved when with the gear reducer at a standstill, the application of a load to the output shaft can't drive the worm shaft. This condition requires a static efficiency of $\eta_s < 0.5$ (see table on page 12). The table shows approximate irreversibility classes. Vibrations and shocks can affect a gear reducer's irreversibility.*

| $\eta_s$ | Irreversibilità statica - *Static irreversibility* |
|---|---|
| > 0.55 | Reversibilità statica - *Static reversibility* |
| 0.5 ~ 0.55 | Bassa reversibilità statica - *Low static reversibility* |
| < 0.5 | Irreversibilità statica - *Static irreversibility* |

## Parametri/*Mesh parameter*

| | i | 7.5 | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 80 | 100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MRDV025 | $Z_1$ | 4 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | | |
| | $M_n$ | 1.3 | 1.3 | 1.3 | 0.995 | 0.8 | 1.3 | 0.995 | 0.8 | 0.67 | | |
| | γ | 25°18′ | 19°31′ | 13°18′ | 11°02′ | 9°05′ | 6°44′ | 5°34′ | 4°34′ | 3°55 | | |
| | $\eta_d$ (1400) | 0.85 | 0.83 | 0.79 | 0.75 | 0.71 | 0.67 | 0.62 | 0.58 | 0.55 | | |
| | $\eta_s$ | 0.71 | 0.68 | 0.61 | 0.56 | 0.5 | 0.46 | 0.41 | 0.36 | 0.34 | | |
| MRDV030 | $Z_1$ | 4 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | $M_n$ | 1.44 | 1.44 | 1.44 | 1.1 | 1.7 | 1.44 | 1.1 | 0.89 | 0.74 | 0.56 | |
| | γ | 18°55′ | 14°25′ | 9°44′ | 7°50′ | 5°33′ | 4°54′ | 3°55′ | 3°17′ | 2°43′ | 2°07′ | |
| | $\eta_d$ (1400) | 0.85 | 0.82 | 0.77 | 0.73 | 0.68 | 0.65 | 0.59 | 0.55 | 0.51 | 0.44 | |
| | $\eta_s$ | 0.67 | 0.63 | 0.55 | 0.5 | 0.43 | 0.39 | 0.35 | 0.31 | 0.27 | 0.23 | |
| MRDV040 | $Z_1$ | 4 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| | $M_n$ | 2.05 | 2.05 | 2.05 | 1.56 | 1.27 | 2.05 | 1.56 | 1.27 | 1.06 | 0.8 | 0.65 |
| | γ | 23°54′ | 18°23′ | 12°30′ | 10°03′ | 8°45′ | 6°19′ | 5°04′ | 4°24′ | 3°42′ | 2°52′ | 2°29′ |
| | $\eta_d$ (1400) | 0.87 | 0.85 | 0.82 | 0.78 | 0.75 | 0.7 | 0.65 | 0.62 | 0.58 | 0.52 | 0.47 |
| | $\eta_s$ | 0.71 | 0.67 | 0.6 | 0.55 | 0.51 | 0.45 | 0.4 | 0.36 | 0.32 | 0.28 | 0.24 |
| MRDV050 | $Z_1$ | 4 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| | $M_n$ | 2.56 | 2.56 | 2.56 | 1.95 | 1.58 | 2.56 | 1.95 | 1.58 | 1.32 | 1 | 0.8 |
| | γ | 23°49′ | 18°19′ | 12°27′ | 10°03′ | 8°33′ | 6°18′ | 5°04′ | 4°18′ | 3°38′ | 2°52′ | 2°17′ |
| | $\eta_d$ (1400) | 0.88 | 0.86 | 0.82 | 0.79 | 0.76 | 0.72 | 0.67 | 0.63 | 0.59 | 0.53 | 0.49 |
| | $\eta_s$ | 0.7 | 0.66 | 0.59 | 0.55 | 0.51 | 0.44 | 0.39 | 0.35 | 0.32 | 0.27 | 0.23 |
| MRDV063 | $Z_1$ | 4 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| | $M_n$ | 3.25 | 3.25 | 3.25 | 2.48 | 2 | 3.25 | 2.48 | 2 | 1.68 | 1.27 | 1.02 |
| | γ | 24°31′ | 18°53′ | 12°51′ | 10°29′ | 8°45′ | 6°30′ | 5°17′ | 4°24′ | 3°49′ | 2°59′ | 2°26′ |
| | $\eta_d$ (1400) | 0.88 | 0.87 | 0.83 | 0.81 | 0.78 | 0.74 | 0.7 | 0.66 | 0.62 | 0.57 | 0.51 |
| | $\eta_s$ | 0.71 | 0.67 | 0.6 | 0.55 | 0.51 | 0.45 | 0.4 | 0.36 | 0.33 | 0.28 | 0.24 |
| MRDV075 | $Z_1$ | 4 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| | $M_n$ | 3.95 | 3.95 | 3.95 | 3 | 2.42 | 3.95 | 3 | 2.42 | 2.03 | 1.54 | 1.24 |
| | γ | 26°38′ | 20°37′ | 14°05′ | 11°19′ | 9°29′ | 7°09′ | 5°43′ | 4°46′ | 4°01′ | 3°17′ | 2°44′ |
| | $\eta_d$ (1400) | 0.89 | 0.88 | 0.85 | 0.82 | 0.8 | 0.76 | 0.72 | 0.69 | 0.65 | 0.6 | 0.55 |
| | $\eta_s$ | 0.71 | 0.68 | 0.61 | 0.57 | 0.53 | 0.46 | 0.42 | 0.38 | 0.35 | 0.29 | 0.26 |
| MRDV090 | $Z_1$ | 4 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| | $M_n$ | 4.84 | 4.84 | 4.84 | 3.69 | 2.98 | 4.84 | 3.69 | 2.98 | 2.5 | 1.89 | 1.52 |
| | γ | 29°05′ | 22°39′ | 15°33′ | 12°50′ | 10°53′ | 7°55′ | 6°30′ | 5°29′ | 4°46′ | 3°45′ | 3°06′ |
| | $\eta_d$ (1400) | 0.9 | 0.89 | 0.86 | 0.84 | 0.82 | 0.78 | 0.75 | 0.72 | 0.69 | 0.63 | 0.59 |
| | $\eta_s$ | 0.73 | 0.7 | 0.64 | 0.6 | 0.56 | 0.49 | 0.45 | 0.41 | 0.38 | 0.32 | 0.28 |
| MRDV110 | $Z_1$ | 4 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| | $M_n$ | 5.875 | 5.875 | 5.875 | 4.62 | 3.73 | 5.875 | 4.62 | 3.37 | 3.13 | 2.37 | 1.91 |
| | γ | 28°15′ | 21°57′ | 15°02′ | 14°42′ | 12°33′ | 7°39′ | 7°29′ | 5°33′ | 4°46′ | 4°27′ | 3°46′ |
| | $\eta_d$ (1400) | 0.9 | 0.89 | 0.86 | 0.85 | 0.84 | 0.79 | 0.78 | 0.75 | 0.72 | 0.67 | 0.63 |
| | $\eta_s$ | 0.72 | 0.69 | 0.63 | 0.62 | 0.59 | 0.48 | 0.48 | 0.44 | 0.41 | 0.36 | 0.32 |
| MRDV130 | $Z_1$ | 4 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| | $M_n$ | 6.97 | 6.97 | 6.97 | 5.4 | 4.37 | 6.97 | 5.4 | 4.37 | 3.67 | 2.77 | 2.23 |
| | γ | 28°43′ | 22°20′ | 15°19′ | 13°47′ | 11°54′ | 7°48′ | 7°00′ | 6°01′ | 5°16′ | 4°07′ | 3°27′ |
| | $\eta_d$ (1400) | 0.91 | 0.89 | 0.87 | 0.86 | 0.84 | 0.8 | 0.78 | 0.75 | 0.72 | 0.68 | 0.64 |
| | $\eta_s$ | 0.72 | 0.69 | 0.63 | 0.61 | 0.58 | 0.49 | 0.46 | 0.43 | 0.39 | 0.34 | 0.3 |
| MRDV150 | $Z_1$ | 6 | 4 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 |
| | $M_n$ | 5.5 | 6.155 | 5.5 | 6.155 | 5 | 4.193 | 6.155 | 5 | 4.193 | 3.17 | 2.5 |
| | γ | 32°09′ | 24°35′ | 17°27′ | 12°53′ | 11°19′ | 9°50′ | 6°32′ | 5°43′ | 4°57′ | 3°55′ | 3°14′ |
| | $\eta_d$ (1400) | 0.91 | 0.9 | 0.88 | 0.86 | 0.84 | 0.83 | 0.78 | 0.76 | 0.73 | 0.68 | 0.64 |
| | $\eta_s$ | 0.73 | 0.71 | 0.66 | 0.6 | 0.57 | 0.54 | 0.45 | 0.42 | 0.39 | 0.33 | 0.29 |

## Rendimento dei variatori di velocità/*The efficiency of speed variator*




La curva di rendimento di ogni tipo di variatore cambia, ma le regole della tendenza sono le stesse.

*The efficiency curvy for each type of the variator isn't the same, but its trend rules are about the same.*

## Lubrificazione/*Lubrication*

Nei casi di temperature ambiente non segnate in tabella, contattare il nostro ufficio tecnico. Nel caso di temperature sotto i -30°C e sopra i 60°C è necessario usare tenute speciali. Per operatività sotto gli 0°C sono necessarie le seguenti considerazioni:

- I motori devono essere adatti a lavorare alla temperatura dell'ambiente;
- La potenza dei motori elettrici deve essere adeguata alla coppia più alta richiesta;
- In caso di riduttori con carcassa in ghisa, fare attenzione alla temperatura d'esercizio sotto i 15°C;
- Al primo avvio del riduttore potrebbero presentarsi problemi di lubrificazione dovuti all'alta viscosità dell'olio, è consigliato per lavorare il riduttore alcuni minuti senza carica.

L'olio deve essere sostituito dopo circa 10.000 ore di funzionamento ma questo periodo dipende anche dal servizio e dall'ambiente in cui lavora il riduttore.

- I riduttori grandezza 25 - 30 - 40 - 50 - 63 - 75 - 90 sono già lubrificati con olio sintetico a vita e possono essere montati in qualsiasi posizione. Per le posizioni V5/V6 occorre contattare il nostro ufficio tecnico.
- I riduttori grandezze 110 - 130 - 150 sono completi di lubrificante olio minerale Shell Tivela OIL 320.
- I variatori di velocità sono già lubrificati con olio minerale.
- Per le grandezze 110 - 130 - 150 è necessario specificare la posizione di montaggio. Normalmente sono riempiti con quantità d'olio della posizione in B3.
- I riduttori 110 - 130 - 150 hanno i tappi di carico livello e sfiato.
- Le precoppie PC sono già lubrificate con olio a vita Shell Tivela OIL 320 e possono essere montate in tutte le posizioni.

*In cases of ambient temperatures not envisaged in the table, call our Technical Service. In the case of temperatures under -30°C or over 60°C it is necessary to use oil seals with special material. For operating ranges with temperatures under 0°C it is necessary to consider the following:*

- *The motors need to be suitable for operating at the envisaged ambient temperature;*
- *The power of the electric motor needs to be adequate for exceeding the higher starting torques required;*
- *In the case of reduction units with a cast-iron, pay attention to impact loads since cart-iron may have problems of fragility at temperatures under -15°C;*
- *During the early stages of service, problems of lubrication may arise due to the high level of viscosity taken on by the oil and so it is wise to have a few minutes of rotation under no load.*

*The oil needs to be changed after approximately 10.000 hours. This period depends on the type of service and the environment where the reduction unit works.*

- *The reduction units size 025 - 030 - 040 - 050 - 063 - 075 - 090 are supplied complete with lubricant for life, synthetic oil, SHELL TEVELA OIL 320 and can therefore be mounted in any position envisaged in the catalogue. V5/V6 for which you should call our Technical Service to assess the conditions of use.*
- *The reduction units size 110 - 130 - 150 are supplied complete with lubricant, mineral oil, SHELL TEVELA OIL 320.*
- *The variator speed are supplied complete with lubricant, mineral oil.*
- *For sizes 110 - 130 - 150 it is necessary to specify the position, otherwise the reduction units are supplied with the quantity of oil relating to pos B3.*
- *Only reduction units 110 - 130 - 150 are fitted with breather, level and oil drainage plugs.*
- *PC is supplied complete with life-long lubricant, synthetic oil, SHELL TEVELA OIL 320, and can therefore be mounted in all the positions.*

## Specifiche dei lubrificanti/*Specifications of lubricants*

| | °C -50 0 +50 +100 | ISO | SHELL | AGIP | ESSO | MOBIL | CASTROL | BP | GMERI | |
|---|---|---|---|---|---|---|---|---|---|---|
| **MRDV025 ~ 090 PC063 ~ 090** | -25 +50 | VG320 | Tivela OIL S320 | Tellium VSF320 | S220 | Glygoyle 30 | Alphasyn PG320 | Energol SG-XP320 | WA460 | Synthetic oil |
| **MRDV110 ~ 150** | -5 40 | VG460 | Omala OIL460 | Blasia 460 | Spartan EP460 | Mobilgear 634 | Alpha MAX 460 | Energol GR-XP460 | WA460 | Mineral oil |
| | -1 +25 | VG220 | OmalaOIL220 | Blasia 220 | Spartan EP220 | Mobilgear 630 | Alpha MAX 220 | Energol GR-XP220 | WA460 | |
| **PC** | -1 +50 | VG320 | Tivela OIL S320 | Tellium VSF320 | S220 | Glygoyle 30 | Alphasyn PG320 | Energol SG-XP320 | CKC150 | Synthetic oil |
| **UDL** | -25 40 | VG32 | A.T.F. DXRON | A.T.F. DXRON | A.T.F. DXRON | A.T.F. 220 | TQ. DXRON II | Autran DX | Ub3 | Mineral oil |

## Quantità olio in litri/*Quantity of oil in litres*

| MRDV | 025 | 030 | 040 | 050 | 063 | 075 | 090 | 110 | 130 | 150 |
|---|---|---|---|---|---|---|---|---|---|---|
| **B3** | 0.023 | 0.05 | 0.1 | 0.15 | 0.3 | 0.5 | 1 | 3 | 4.5 | 7 |
| **B8** | 0.023 | 0.05 | 0.1 | 0.15 | 0.3 | 0.5 | 1 | 2.2 | 3.3 | 5.1 |
| **B6 - B7** | 0.023 | 0.05 | 0.1 | 0.15 | 0.3 | 0.5 | 1 | 2.5 | 3.5 | 5.4 |
| **V5** | 0.023 | 0.05 | 0.1 | 0.15 | 0.3 | 0.5 | 1 | 3 | 4.5 | 7 |
| **V6** | 0.023 | 0.05 | 0.1 | 0.15 | 0.3 | 0.5 | 1 | 2.2 | 3.3 | 5.1 |

| PC | 63 | 71 | 80 | 90 |
|---|---|---|---|---|
| **B3** | 0.05 | 0.07 | 0.15 | 0.16 |
| **B8** | 0.05 | 0.07 | 0.15 | 0.16 |
| **B6 - B7** | 0.05 | 0.07 | 0.15 | 0.16 |
| **V5** | 0.05 | 0.07 | 0.15 | 0.16 |
| **V6** | 0.05 | 0.07 | 0.15 | 0.16 |

| MRDV | UDL 0.18 | UDL 0.37 | UDL 0.55 | UDL 0.75 | UD 1.1 | UD 1.5 | UD 2.2 | UD 3.0 | UD 4.0 |
|---|---|---|---|---|---|---|---|---|---|
| **B3** | 0.13 | 0.15 | 0.33 | 0.33 | 0.8 | 0.8 | 1.2 | 1.2 | 1.2 |
| **B8** | 0.13 | 0.15 | 0.33 | 0.33 | 0.8 | 0.8 | 1.2 | 1.2 | 1.2 |
| **B6 - B7** | 0.13 | 0.15 | 0.33 | 0.33 | 0.8 | 0.8 | 1.2 | 1.2 | 1.2 |
| **V5** | 0.3 | 0.4 | 0.85 | 0.85 | 1.4 | 1.4 | 2.15 | 2.15 | 2.15 |
| **V6** | 0.2 | 0.25 | 0.45 | 0.45 | 1 | 1 | 1.2 | 1.2 | 1.2 |

## Installazione/*Installation*

Per installare un riduttore consigliamo le seguenti note:

1. Il montaggio del riduttore deve essere stabile per evitare vibrazioni;
2. Controllare la corretta direzione di rotazione dell'albero lento del riduttore;
3. In caso di periodi di immagazzinaggio lunghi (3/4 mesi) se l'anello di tenuta non è immerso nell'olio, è raccomandabile sostituirlo;
4. Se possibile proteggere il riduttore dai raggi solari e da altri eventi atmosferici;
5. Assicurarsi che il motore sia raffreddato correttamente con un buon passaggio d'aria;
6. In caso di temperature ambiente minori di 5°C o superiori a 40°C chiamare il nostro ufficio tecnico;
7. La verniciatura non deve coprire parti in gomma;
8. Alla partenza al riduttore non dovrebbe essere applicato il carico massimo.

*To install the reduction unit it is necessary to note the following recommendations:*

1. *The mounting on the machine must be stable to avoid any vibrations;*
2. *Check the direction of the rotation of the reduction unit output shaft before fitting the unit to the machine;*
3. *In the case of particularly lengthy periods of storage (3/4 months), if the oil seal is not immersed in the lubricant inside the unit, it is recommend the change it;*
4. *Whenever possible, protect the reduction unit against solar radiation and bad weather;*
5. *Ensure the motor cools correctly by assuring good passage of air from the fan side;*
6. *In the case of ambient temperatures <-5°C or >+40°C call the Technical Service;*
7. *Painting must definitely not go over rubber parts, if any;*
8. *Starting must take place gradually , without immediately applying the maximum load.*

## Applicazioni critiche/*Critical application*

Le prestazioni date nel catalogo corrispondono al montaggio B3. Per altre posizioni di montaggio o particolari velocità in ingresso, riferirsi alle tabelle per le applicazioni critiche. È necessario contattare il nostro ufficio tecnico nel caso delle seguenti applicazioni:

- Incremento di velocità;
- Uso in applicazioni pericolose per le persone nel caso il riduttore si guasti;
- Applicazione con particolare inerzia;
- Uso con forti sollevamenti;
- Applicazioni con alta dinamica;
- Applicazioni con temperature sotto i -5°C e sopra i 40°C;
- Uso in ambienti chimici aggressivi;
- Uso in ambienti salini;
- Montaggio in posizioni non descritte a catalogo;
- Uso in ambienti radioattivi;
- Uso in ambienti con particolari pressioni atmosferiche;
- Evitare applicazioni in cui il riduttore è parzialmente immerso in liquidi;
- La coppia massima che il riduttore può sopportare non deve superare il doppio della coppia normale (fs=1) indicata nelle tabelle delle prestazioni.

*The performance given in the catalogue correspond to mounting position B3. For other mounting positions and/or particular input speeds, refer to the tables that highlight different critical situations for each size of reduction unit. It is also necessary to take due consideration of and carefully assess the following applications by calling our Technical Service:*

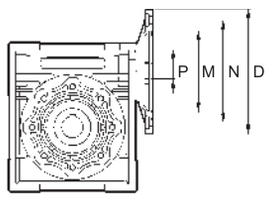
- *As a speed increasing.*
- *Use in services that could be hazardous for people if the reduction unit fails.*
- *Applications with especially high inertia.*
- *Use as a lifting winch.*
- *Applications with high dynamic strain on the case of the reduction unit.*
- *In places with T° under -5°C or over 40°C.*
- *Use in chemically aggressive environments.*
- *Use in a salty environment.*
- *Mounting positions not envisaged in the catalogue.*
- *Use in radioactive environments.*
- *Use in environments pressures other than atmospheric pressure.*
- *Avoid applications where even partial immersion of the reduction unit is required.*
- *The maximum torque that the gear reducer can support must not exceed two times the nominal torque (fs=1) stated in the performance tables.*

| MRDV | 025 | 030 | 040 | 050 | 063 | 075 | 090 | 110 | 130 | 150 |
|---|---|---|---|---|---|---|---|---|---|---|
| V5 : 1500 < $n_1$ < 3000 | - | - | - | - | - | B | B | B | B | B |
| $n_1$ > 3000 | B | B | B | B | B | A | A | A | A | A |
| V6 | B | B | B | B | B | B | B | B | B | B |

## Predisposizioni/*Predisposition*

(*) Per un ingresso con motore speciale contattare il nostro ufficio tecnico.

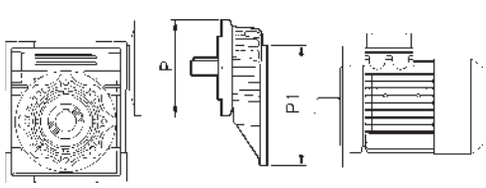
*(*) If you want special key, please call our Technical Service.*




| MRDV | PAM | N | M | P | D | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | IEC | | | | 7.5 | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 48 | 100 |
| **025** | 56 B14 | 50 | 65 | 80 | 9 | 9 | 9 | 9 | | 9 | 9 | 9 | 9 | | |
| **030** | 63 B5 | 95 | 115 | 140 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | | | |
| | 63 B14 | 60 | 75 | 90 | | | | | | | | | | | |
| | 56 B5 | 80 | 100 | 120 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | |
| | 56 B14 | 50 | 65 | 80 | | | | | | | | | | | |
| **040** | 71 B5 | 110 | 130 | 160 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | | | | |
| | 71 B14 | 70 | 85 | 105 | | | | | | | | | | | |
| | 63 B5 | 95 | 115 | 140 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| | 63 B14 | 60 | 75 | 90 | | | | | | | | | | | |
| | 56 B5 | 80 | 100 | 120 | | | | | | | | 9 | 9 | 9 | 9 |
| **050** | 80 B5 | 130 | 165 | 200 | 19 | 19 | 19 | 19 | 19 | 19 | | | | | |
| | 80 B14 | 80 | 100 | 120 | | | | | | | | | | | |
| | 71 B5 | 110 | 130 | 160 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | |
| | 71 B14 | 70 | 85 | 105 | | | | | | | | | | | |
| | 63 B5 | 95 | 115 | 140 | | | | | | | 11 | 11 | 11 | 11 | 11 |
| **063** | 80 B5 | 130 | 165 | 200 | 19 | 19 | 19 | 19 | 19 | 19 | | | | | |
| | 80 B14 | 80 | 100 | 120 | | | | | | | | | | | |
| | 71 B5 | 110 | 130 | 160 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | |
| | 71 B14 | 70 | 85 | 105 | | | | | | | | | | | |
| | 63 B5 | 95 | 115 | 140 | | | | | | | 11 | 11 | 11 | 11 | 11 |
| | 63 B5 | 95 | 115 | 140 | | | | | | | | | | | |
| **075** | 110/112 B5 | 180 | 215 | 250 | 28 | 28 | 28 | | | | | | | | |
| | 110/112 B14 | 110 | 130 | 160 | | | | | | | | | | | |
| | 90 B5 | 130 | 165 | 200 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | | | | |
| | 90 B14 | 95 | 115 | 140 | | | | | | | | | | | |
| | 80 B5 | 130 | 165 | 200 | | | | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 |
| | 80 B14 | 80 | 100 | 120 | | | | | | | | | | | |
| | 71 B5 | 110 | 130 | 160 | | | | | | | | 14 | 14 | 14 | 14 |
| **090** | 110/112 B5 | 180 | 215 | 250 | 28 | 28 | 28 | 28 | 28 | 28 | | | | | |
| | 110/112 B14 | 110 | 130 | 160 | | | | | | | | | | | |
| | 90 B5 | 130 | 165 | 200 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | | |
| | 90 B14 | 95 | 115 | 140 | | | | | | | | | | | |
| | 80 B5 | 130 | 165 | 200 | | | | | | | 19 | 19 | 19 | 19 | 19 |
| | 80 B14 | 80 | 100 | 120 | | | | | | | | | | | |
| **110** | 132 B5 | 230 | 265 | 300 | 38* | 38* | 38* | 38* | | | | | | | |
| | 110/112 B5 | 180 | 215 | 250 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | | |
| | 90 B5 | 130 | 165 | 200 | | | | | 24 | 24 | 24 | 24 | 24 | 24 | 24 |
| | 80 B5 | 130 | 165 | 200 | | | | | | | | | | 19 | 19 |
| **130** | 132 B5 | 230 | 265 | 300 | 38* | 38* | 38* | 38* | 38* | 38* | 38* | | | | |
| | 110/112 B5 | 180 | 215 | 250 | | | | | 28 | 28 | 28 | 28 | 28 | 28 | 28 |
| | 90 B5 | 130 | 165 | 200 | | | | | | | | | | 24 | 24 |
| **150** | 160 B5 | 250 | 300 | 350 | 42 | 42 | 42 | 42 | 42 | | | | | | |
| | 132 B5 | 230 | 265 | 300 | | | | 38 | 38 | 38 | 38 | 38 | 38 | | |
| | 110/112 B5 | 180 | 215 | 250 | | | | | | | | 28 | 28 | 28 | 28 |

## PC + MRDV/*PC + MRDV Combined unit*

| MRDV | i | PC 063 | | PC 071 | | PC 080 | | | PC 090 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 105/11 i=3 | 105/14 i=3 | 120/14 i=3 | 120/19 i=3 | 160/19 i=3 | 160/24 i=3 | 160/28 i=3 | 160/19 i=2.42 | 160/24 i=2.42 | 160/28 i=2.42 |
| 040 | 25 | | | | | | | | | | |
| | 30 | | | | | | | | | | |
| | 40 | | | | | | | | | | |
| | 50 | | | | | | | | | | |
| | 60 | | | | | | | | | | |
| | 80 | | | | | | | | | | |
| | 100 | | | | | | | | | | |
| 050 | 25 | | | | | | | | | | |
| | 30 | | | | | | | | | | |
| | 40 | | | | | | | | | | |
| | 50 | | | | | | | | | | |
| | 60 | | | | | | | | | | |
| | 80 | | | | | | | | | | |
| | 100 | | | | | | | | | | |
| 063 | 25 | | | | | | | | | | |
| | 30 | | | | | | | | | | |
| | 40 | | | | | | | | | | |
| | 50 | | | | | | | | | | |
| | 60 | | | | | | | | | | |
| | 80 | | | | | | | | | | |
| | 100 | | | | | | | | | | |
| 075 | 25 | | | | | | | | | | |
| | 30 | | | | | | | | | | |
| | 40 | | | | | | | | | | |
| | 50 | | | | | | | | | | |
| | 60 | | | | | | | | | | |
| | 80 | | | | | | | | | | |
| | 100 | | | | | | | | | | |
| 090 | 25 | | | | | | | | | | |
| | 30 | | | | | | | | | | |
| | 40 | | | | | | | | | | |
| | 50 | | | | | | | | | | |
| | 60 | | | | | | | | | | |
| | 80 | | | | | | | | | | |
| | 100 | | | | | | | | | | |
| 110 | 25 | | | | | | | | | | |
| | 30 | | | | | | | | | | |
| | 40 | | | | | | | | | | |
| | 50 | | | | | | | | | | |
| | 60 | | | | | | | | | | |
| | 80 | | | | | | | | | | |
| | 100 | | | | | | | | | | |
| 130 | 25 | | | | | | | | | | |
| | 30 | | | | | | | | | | |
| | 40 | | | | | | | | | | |
| | 50 | | | | | | | | | | |
| | 60 | | | | | | | | | | |
| | 80 | | | | | | | | | | |
| | 100 | | | | | | | | | | |
| 150 | 25 | | | | | | | | | | |
| | 30 | | | | | | | | | | |
| | 40 | | | | | | | | | | |
| | 50 | | | | | | | | | | |
| | 60 | | | | | | | | | | |
| | 80 | | | | | | | | | | |
| | 100 | | | | | | | | | | |




| | P1 | P | P* |
|---|---|---|---|
| **PC 063** | 63 B5 - 140/11 | 105/11 | 105/14* |
| **PC 071** | 71 B5 - 160/14 | 120/14 | 120/19* |
| **PC 080** | 80 B5 - 200/19 | 160/19 | 160/24*<br>160/28* |
| **PC 090** | 90 B5 - 200/24 | 160/24 | 160/19*<br>160/28* |

(*) Modello non standard

*(*) Non standard model*

## Caratteristiche della precoppia (PC)/*Features of pre-stage reduction unit (PC)*

La precoppia è modulare e può essere montata su qualsiasi riduttore PAM, le varie possibilità di accoppiamento si trovano a pagina 17. Le precoppie non possono essere utilizzate da sole, è necessario accoppiare ad un riduttore.

*The PC construction is modular and therefore it can be as a separate unit mounted on any type of fitted geared motor (PAM). Whose the various possibilities of flange/output shafts can be found on page 17. The pre-stage unit cannot be used by itself, but only coupled with another reduction unit.*

## Materiali/*Materials*

Carcassa in pressofusione d'alluminio.
Ingranaggi in 20CrMo

*Case in aluminium alloy.*
*Gears: 20CrMo*

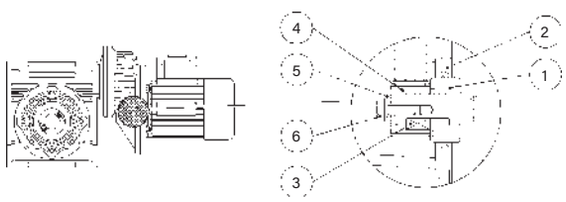
## Accoppiamento ai motori elettrici/*Coupling to electric motor*

Per il corretto montaggio del pignone sull'albero del motore, seguire le seguenti istruzioni:

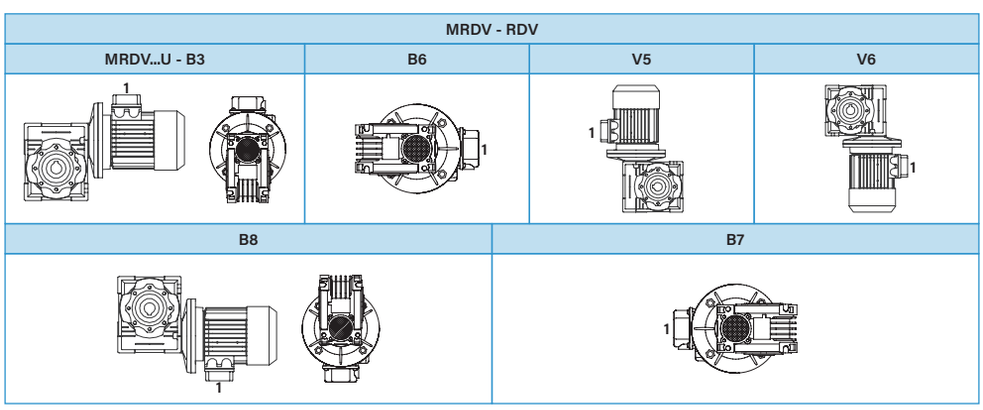
1. Pulire l'albero del motore elettrico;
2. Rimuovere la chiavetta dell'albero del motore;
3. Montare la boccola (1) sull'albero del motore secondo l'orientamento indicato dallo schema. Per semplicità di montaggio si può scaldare la boccola a 70/80°C;
4. Montare la nuova chiavetta data in dotazione (3);
5. Montare il pignone (4) con le stesse precauzioni del punto c;
6. Montare la rondella (5) e chiuderla tramite la vite (6);
7. Togliere il tappo di chiusura in gomma, accertandosi che la precoppia sia già lubrificata con l'olio;
8. Montare l'anello di tenuta (2) e il gruppo motore, assicurandosi di non danneggiare l'anello di tenuta.

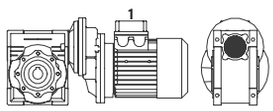
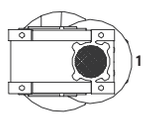
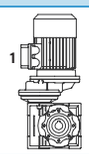
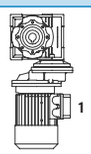
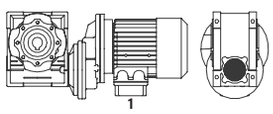
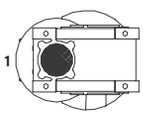
*Correctly fitting the pinion on the electric motor shaft requires you keep to the following instructions:*

1. *Thoroughly clean the electric motor shaft.*
2. *Remove the motor key from its seat.*
3. *Fit the bush (1) to the drive the shaft as shown in the diagram. To make this easier, you can heat the bush to approximately 70/80°C.*
4. *Fit the new key (3) provided in place of the one removed beforehand.*
5. *Fit the pinion (4) taking the same precautions as described in point c.*
6. *Fit the washer (5) and tighten with the screw (6).*
7. *Remove the rubber cap mounted on the seat of the oil seal, taking care since the pre-stage unit is already complete with lubricant.*
8. *Fit the oil seal (2) and then the motor assembly, taking care not to damage the lip of the oil seal.*




## Posizioni di montaggio/*Mounting positions*



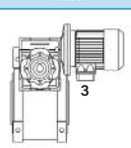
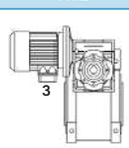
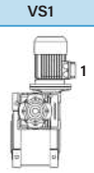
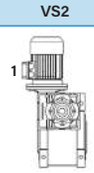
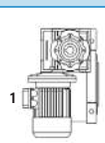
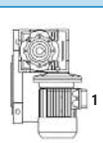
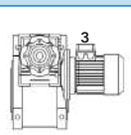
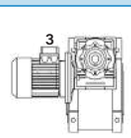
| PC - MRDV | | | |
|---|---|---|---|
| **MRDV...U - B3** | **B6** | **V5** | **V6** |
|  |  |  |  |
| **B8** | **B7** | | |
|  |  | | |

La versione "U" è relativa alla grandezza 25 sino alla 75. Per le altre grandezze non è necessario specificare la posizione di montaggio.

1. Per le posizioni verticali vedere tabella a pagina 15;
2. Se non è specificata la posizione di montaggio verrà considerata quella standard in B3;
3. Per altre posizioni consultare il nostro ufficio tecnico.

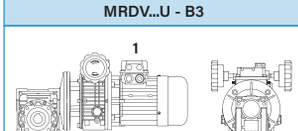
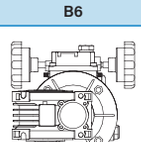
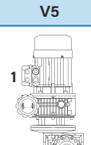
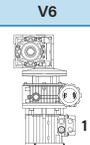
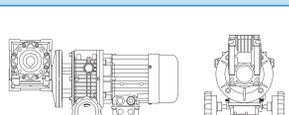
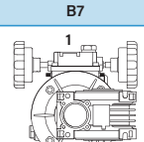
*"U" version is related to sizes from 025 to 075. For these sizes is not necessary to specify mounting position.*

1. *For vertical positions, please refer to the table on page 15.*
2. *Unless specified otherwise, the standard positions are B3.*
3. *For positions not envisaged, it necessary to call our Technical Service.*

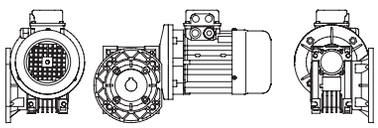
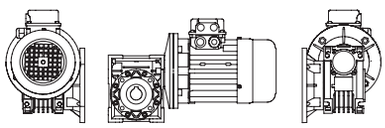
| MRDV - MRDV/RDV - MRDV | | | |
|---|---|---|---|
| **AS1** | **AS2** | **VS1** | **VS2** |
|  |  |  |  |
| **PS1** | **PS2** | **BS1** | **BS2** |
|  |  |  |  |

Nel caso non venga specificata la posizione di montaggio, viene considerata standard quella in BS2.

*Unless specified at the time of order, combination groups will be supplied in version BS2.*

| UDL - MRDV | | | |
|---|---|---|---|
| **MRDV...U - B3** | **B6** | **V5** | **V6** |
|  |  |  |  |
| **B8** | **B7** | | |
|  |  | | |

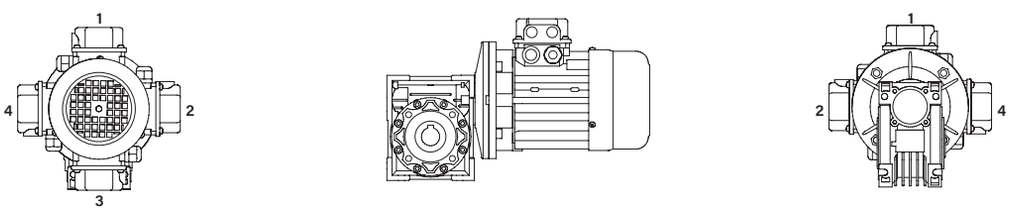
## Flange in uscita/*Output flanges*

| D | S |
|---|---|
|  |  |

Se non viene specificata, la posizione della flangia sarà in esecuzione D, in riferimento alla posizione B3.

*Unless specified otherwise, the reduction unit is supplied with the flange in pos. D referred to position B3.*

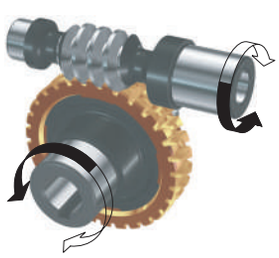
## Posizione della morsettiera/*Position of terminal box*



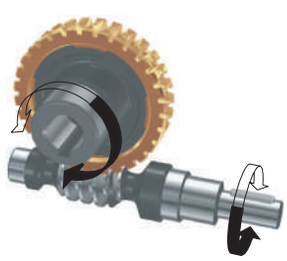

In fase d'ordine specificare la posizione della scatola morsettiera come indicato in figura.

*In the case of order specify the position of the terminal box as shown in the diagram.*

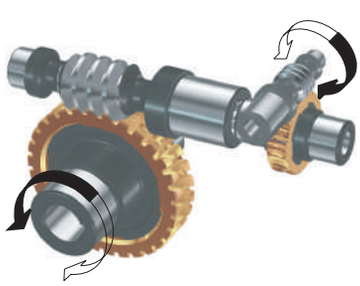
## Senso di rotazione/*Sense of rotation*



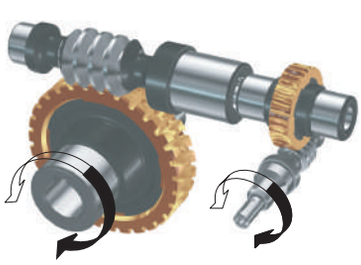
**MRDV**



**RDV**



**MRDV + MRDV**



**RDV + MRDV**

| $P_1$ (Kw) | $n_2$ ($min^{-1}$) | $M_2$ (Nm) | i | $Fr_2$ (N) | fs | MRDV | MOTORE ELETTRICO | N. PAGINA DISEGNI |
|---|---|---|---|---|---|---|---|---|
| 0.06 | 186.7 | 2.6 | 7.5 | 503 | 4.2 | MRDV025 | 5614 | 51 |
| | 140 | 3.4 | 10 | 553 | 3.5 | | | |
| | 93.3 | 4.9 | 15 | 633 | 2.5 | | | |
| | 70 | 6.1 | 20 | 697 | 2 | | | |
| | 46.7 | 8.2 | 30 | 798 | 1.6 | | | |
| | 35 | 10 | 40 | 878 | 1.3 | | | |
| | 28 | 12 | 50 | 946 | 0.9 | | | |
| | 23.3 | 14 | 60 | 1006 | 0.7 | | | |
| 0.06 | 186.7 | 2.6 | 7.5 | 683 | 6.9 | MRDV030 | 5614 | 51 |
| | 140 | 3.4 | 10 | 752 | 5.4 | | | |
| | 93.3 | 4.7 | 15 | 861 | 3.8 | | | |
| | 70 | 6 | 20 | 948 | 3 | | | |
| | 56 | 7 | 25 | 1021 | 3 | | | |
| | 46.7 | 8 | 30 | 1085 | 2.5 | | | |
| | 35 | 9.7 | 40 | 1194 | 1.9 | | | |
| | 28 | 11 | 50 | 1286 | 1.5 | | | |
| | 23.3 | 13 | 60 | 1367 | 1.3 | | | |
| | 17.5 | 14 | 80 | 1504 | 0.9 | | | |
| 0.06 | 14 | 25 | 100 | 1620 | 1.3 | MRDV025+030 | 5614 | 62 |
| | 9.3 | 32 | 150 | 1830 | 0.9 | | | |
| | 7 | 41 | 200 | 1830 | 0.7 | | | |
| | 5.6 | 44 | 250 | 1830 | 0.8 | | | |
| 0.06 | 4.7 | 59 | 300 | 3490 | 1.2 | MRDV025+040 | 5614 | 62 |
| | 3.5 | 71 | 400 | 3490 | 0.9 | | | |
| | 2.8 | 82 | 500 | 3490 | 0.7 | | | |
| | 2.3 | 101 | 600 | 3490 | 0.6 | | | |
| | 1.9 | 116 | 750 | 3490 | 0.5 | | | |
| | 1.6 | 143 | 900 | 3490 | 0.5 | | | |
| | 1.2 | 171 | 1200 | 3490 | 0.4 | | | |
| | 0.9 | 197 | 1500 | 3490 | 0.3 | | | |
| | 0.8 | 217 | 1800 | 3490 | 0.3 | | | |
| | 0.6 | 268 | 2400 | 3490 | 0.2 | | | |
| | 0.5 | 324 | 3000 | 3490 | 0.2 | | | |
| | 0.4 | 294 | 4000 | 3490 | 0.1 | | | |
| | 0.3 | 356 | 5000 | 3490 | 0.1 | | | |
| 0.06 | 4.7 | 57 | 300 | 3490 | 1.3 | MRDV030+040 | 5614 | 62 |
| | 3.5 | 70 | 400 | 3490 | 0.9 | | | |
| | 2.8 | 96 | 500 | 3490 | 0.6 | | | |
| | 2.3 | 104 | 600 | 3490 | 0.7 | | | |
| | 1.9 | 121 | 750 | 3490 | 0.6 | | | |
| | 1.6 | 139 | 900 | 3490 | 0.5 | | | |
| | 1.2 | 166 | 1200 | 3490 | 0.4 | | | |
| | 0.9 | 196 | 1500 | 3490 | 0.4 | | | |
| | 0.8 | 218 | 1800 | 3490 | 0.3 | | | |
| | 0.58 | 261 | 2400 | 3490 | 0.2 | | | |
| | 0.4 | 300 | 3200 | 3490 | 0.2 | | | |
| | 0.4 | 279 | 4000 | 3490 | 0.1 | | | |
| | 0.28 | 338 | 5000 | 3490 | 0.1 | | | |
| 0.06 | 1.6 | 141 | 900 | 4840 | 1 | MRDV030+050 | 5614 | 63 |
| | 1.2 | 169 | 1200 | 4840 | 0.7 | | | |
| | 0.93 | 199 | 1500 | 4840 | 0.7 | | | |
| | 0.78 | 222 | 1800 | 4840 | 0.7 | | | |
| | 0.6 | 266 | 2400 | 4840 | 0.5 | | | |
| | 0.5 | 307 | 3000 | 4840 | 0.4 | | | |
| | 0.35 | 288 | 4000 | 4840 | 0.3 | | | |
| | 0.29 | 311 | 4800 | 4840 | 0.3 | | | |

| $P_1$ (Kw) | $n_2$ ($min^{-1}$) | $M_2$ (Nm) | i | $Fr_2$ (N) | fs | MRDV | MOTORE ELETTRICO | N. PAGINA DISEGNI |
|---|---|---|---|---|---|---|---|---|
| 0.06 | 0.9 | 204 | 1500 | 6270 | 1.1 | MRDV030+063 | 5614 | 63 |
| | 0.78 | 225 | 1800 | 6270 | 0.9 | | | |
| | 0.58 | 276 | 2400 | 6270 | 0.8 | | | |
| | 0.47 | 319 | 3000 | 6270 | 0.7 | | | |
| | 0.35 | 306 | 4000 | 6270 | 0.6 | | | |
| | 0.28 | 360 | 5000 | 6270 | 0.4 | | | |
| 0.06 | 0.6 | 330 | 2400 | 7380 | 1.1 | MRDV040+075 | 5614 | 63 |
| | 0.47 | 377 | 3000 | 7380 | 0.8 | | | |
| | 0.35 | 355 | 4000 | 7380 | 0.7 | | | |
| | 0.28 | 419 | 5000 | 7380 | 0.5 | | | |
| 0.06 | 0.5 | 406 | 3000 | 8180 | 1.4 | MRDV040+090 | 5614 | 63 |
| | 0.35 | 365 | 4000 | 8180 | 1.3 | | | |
| | 0.28 | 431 | 5000 | 8180 | 1 | | | |
| 0.09 | 373.3 | 2 | 7.5 | 399 | 3.9 | MRDV025 | 5612 | 51 |
| | 280 | 2.6 | 10 | 439 | 3.4 | | | |
| | 186.7 | 3.8 | 15 | 503 | 2.4 | | | |
| | 140 | 4.9 | 20 | 553 | 1.9 | | | |
| | 93.3 | 6.7 | 30 | 633 | 1.3 | | | |
| | 70 | 8.3 | 40 | 697 | 1.1 | | | |
| | 56 | 10 | 50 | 751 | 0.9 | | | |
| 0.09 | 186.7 | 3.9 | 7.5 | 503 | 2.8 | MRDV025 | 5624 | 51 |
| | 140 | 5.1 | 10 | 553 | 2.4 | | | |
| | 93.3 | 7.3 | 15 | 633 | 1.6 | | | |
| | 70 | 9.2 | 20 | 697 | 1.3 | | | |
| | 46.7 | 12 | 30 | 798 | 1.1 | | | |
| | 35 | 15 | 40 | 878 | 0.9 | | | |
| 0.09 | 373.3 | 2 | 7.5 | 542 | 6.5 | MRDV030 | 5612 | 51 |
| | 280 | 2.6 | 10 | 597 | 5 | | | |
| | 186.7 | 3.7 | 15 | 683 | 3.5 | | | |
| | 140 | 4.8 | 20 | 752 | 2.5 | | | |
| | 112 | 5.7 | 25 | 810 | 2.8 | | | |
| | 93.3 | 6.5 | 30 | 861 | 2.3 | | | |
| | 70 | 8.1 | 40 | 948 | 1.7 | | | |
| | 56 | 10 | 50 | 1021 | 1.4 | | | |
| | 46.7 | 11 | 60 | 1085 | 1.1 | | | |
| | 35 | 13 | 80 | 1194 | 0.9 | | | |
| 0.09 | 186.7 | 3.9 | 7.5 | 683 | 4.6 | MRDV030 | 5624 | 51 |
| | 140 | 5 | 10 | 752 | 3.6 | | | |
| | 93.3 | 7.1 | 15 | 861 | 2.5 | | | |
| | 70 | 9 | 20 | 948 | 2 | | | |
| | 56 | 10 | 25 | 1021 | 2 | | | |
| | 46.7 | 12 | 30 | 1085 | 1.7 | | | |
| | 35 | 14 | 40 | 1194 | 1.2 | | | |
| | 28 | 17 | 50 | 1286 | 1 | | | |
| | 23.3 | 19 | 60 | 1367 | 0.9 | | | |
| 0.09 | 28 | 20 | 100 | 1286 | 1.6 | MRDV025+030 | 5612 | 62 |
| | 18.7 | 25 | 150 | 1472 | 1.1 | | | |
| | 14 | 33 | 200 | 1620 | 0.9 | | | |
| 0.09 | 14 | 38 | 100 | 1620 | 0.8 | MRDV025+030 | 5624 | 62 |
| | 9.3 | 49 | 150 | 1830 | 0.6 | | | |
| | 7 | 62 | 200 | 1830 | 0.5 | | | |
| | 5.6 | 66 | 250 | 1830 | 0.5 | | | |
| | 4.7 | 75 | 300 | 1830 | 0.4 | | | |
| | 3.5 | 107 | 400 | 1830 | 0.3 | | | |
| | 2.8 | 115 | 500 | 1830 | 0.3 | | | |
| | 2.3 | 135 | 600 | 1830 | 0.2 | | | |

| $P_1$ (Kw) | $n_2$ ($min^{-1}$) | $M_2$ (Nm) | i | $Fr_2$ (N) | fs | MRDV | MOTORE ELETTRICO | N. PAGINA DISEGNI |
|---|---|---|---|---|---|---|---|---|
| 0.09 | 1.9 | 151 | 750 | 1830 | 0.2 | MRDV025+030 | 5624 | 62 |
| | 1.6 | 178 | 900 | 1830 | 0.2 | | | |
| | 1.2 | 212 | 1200 | 1830 | 0.1 | | | |
| | 0.9 | 247 | 1500 | 1830 | 0.1 | | | |
| | 0.78 | 304 | 1800 | 1830 | 0.1 | | | |
| | 0.58 | 340 | 2400 | 1830 | 0.1 | | | |
| | 0.47 | 405 | 3000 | 1830 | 0.1 | | | |
| 0.09 | 28 | 19 | 50 | 2475 | 2 | MRDV040 | 5624 | 52 |
| | 23.3 | 21 | 60 | 2630 | 1.7 | | | |
| | 17.5 | 26 | 80 | 2895 | 1.3 | | | |
| | 14 | 29 | 100 | 3118 | 1 | | | |
| 0.09 | 9.3 | 45 | 300 | 3490 | 1.6 | MRDV025+040 | 5612 | 62 |
| | 7 | 54 | 400 | 3490 | 1.2 | | | |
| | 5.6 | 77 | 500 | 3490 | 0.8 | | | |
| 0.09 | 4.7 | 88 | 300 | 3490 | 0.8 | MRDV030+040 | 5624 | 62 |
| 0.09 | 3.5 | 107 | 400 | 4840 | 1.2 | MRDV030+050 | 5624 | 63 |
| | 2.8 | 123 | 500 | 4840 | 1 | | | |
| | 2.3 | 159 | 600 | 4840 | 0.9 | | | |
| | 1.9 | 185 | 750 | 4840 | 0.8 | | | |
| | 1.6 | 212 | 900 | 4840 | 0.7 | | | |
| 0.09 | 1.6 | 200 | 900 | 6270 | 1 | MRDV030+063 | 5624 | 63 |
| | 1.2 | 263 | 1200 | 6270 | 0.9 | | | |
| | 0.93 | 305 | 1500 | 6270 | 0.7 | | | |
| 0.09 | 0.9 | 360 | 1500 | 7380 | 1.1 | MRDV040+075 | 5624 | 63 |
| | 0.78 | 404 | 1800 | 7380 | 1 | | | |
| | 0.58 | 496 | 2400 | 7380 | 0.7 | | | |
| 0.09 | 0.5 | 609 | 3000 | 8180 | 0.9 | MRDV040+090 | 5624 | 63 |
| | 0.35 | 548 | 4000 | 8180 | 0.8 | | | |
| 0.12 | 373.3 | 2.7 | 7.5 | 399 | 3 | MRDV025 | 5622 | 51 |
| | 280 | 3.5 | 10 | 439 | 2.6 | | | |
| | 186.7 | 5 | 15 | 503 | 1.8 | | | |
| | 140 | 6.5 | 20 | 553 | 1.4 | | | |
| | 93.3 | 9 | 30 | 633 | 1 | | | |
| | 70 | 11 | 40 | 697 | 0.8 | | | |
| 0.12 | 186.7 | 5.2 | 7.5 | 683 | 3.4 | MRDV030 | 6314 | 51 |
| | 140 | 6.7 | 10 | 752 | 2.7 | | | |
| | 93.3 | 9.5 | 15 | 861 | 1.9 | | | |
| | 70 | 12 | 20 | 948 | 1.5 | | | |
| | 56 | 14 | 25 | 1021 | 1.5 | | | |
| | 46.7 | 16 | 30 | 1085 | 1.3 | | | |
| | 35 | 19 | 40 | 1194 | 0.9 | | | |
| | 28 | 23 | 50 | 1286 | 0.8 | | | |
| 0.12 | 46.7 | 17 | 30 | 2087 | 2.6 | MRDV040 | 6314 | 52 |
| | 35 | 21 | 40 | 2298 | 1.9 | | | |
| | 28 | 25 | 50 | 2475 | 1.5 | | | |
| | 23.3 | 28 | 60 | 2630 | 1.3 | | | |
| | 17.5 | 34 | 80 | 2895 | 1 | | | |
| | 14 | 38 | 100 | 3118 | 0.8 | | | |
| 0.12 | 18.7 | 42 | 75 | 2833 | 1.2 | PC063+MRDV040 | 6314 | 59 |
| | 15.6 | 46 | 90 | 3011 | 1.2 | | | |
| | 11.7 | 57 | 120 | 3314 | 0.9 | | | |
| | 9.3 | 66 | 150 | 3490 | 0.7 | | | |
| | 7.8 | 74 | 180 | 3490 | 0.6 | | | |
| 0.12 | 23.3 | 29 | 60 | 3610 | 2.3 | MRDV050 | 6314 | 53 |
| | 17.5 | 35 | 80 | 3973 | 1.9 | | | |
| | 14 | 40 | 100 | 4280 | 1.4 | | | |

| $P_1$ (Kw) | $n_2$ ($min^{-1}$) | $M_2$ (Nm) | i | $Fr_2$ (N) | fs | MRDV | MOTORE ELETTRICO | N. PAGINA DISEGNI |
|---|---|---|---|---|---|---|---|---|
| 0.12 | 9.3 | 68 | 150 | 4840 | 1.3 | PC063+MRDV050 | 6314 | 59 |
| | 7.8 | 75 | 180 | 4840 | 1.1 | | | |
| | 5.8 | 88 | 240 | 4840 | 0.8 | | | |
| | 4.7 | 98 | 300 | 4840 | 0.7 | | | |
| 0.12 | 4.7 | 119 | 300 | 4840 | 1.2 | MRDV030+050 | 6314 | 63 |
| | 3.5 | 142 | 400 | 4840 | 0.9 | | | |
| | 2.8 | 164 | 500 | 4840 | 0.7 | | | |
| 0.12 | 5.8 | 92 | 240 | 6270 | 1.5 | PC063+MRDV063 | 6314 | 59 |
| | 4.7 | 103 | 300 | 6270 | 1.2 | | | |
| 0.12 | 2.8 | 171 | 500 | 6270 | 1.3 | MRDV030+063 | 6314 | 63 |
| | 2.3 | 208 | 600 | 6270 | 1.1 | | | |
| | 1.9 | 241 | 750 | 6270 | 0.9 | | | |
| 0.12 | 1.6 | 325 | 900 | 7380 | 1.2 | MRDV040+075 | 6314 | 63 |
| | 1.2 | 399 | 1200 | 7380 | 0.9 | | | |
| 0.12 | 0.8 | 547 | 1800 | 8180 | 0.9 | MRDV040+090 | 6314 | 63 |
| | 0.58 | 695 | 2400 | 8180 | 0.9 | | | |
| 0.12 | 0.5 | 884 | 3000 | 10320 | 1.2 | MRDV050+110 | 6314 | 64 |
| | 0.35 | 784 | 4000 | 10320 | 1 | | | |
| | 0.28 | 928 | 5000 | 10320 | 0.8 | | | |
| 0.18 | 373.3 | 4 | 7.5 | 542 | 3.2 | MRDV030 | 6312 | 51 |
| | 280 | 5.2 | 10 | 597 | 2.5 | | | |
| | 186.7 | 7.5 | 15 | 683 | 1.7 | | | |
| | 140 | 10 | 20 | 752 | 1.3 | | | |
| | 112 | 11 | 25 | 810 | 1.4 | | | |
| | 93.3 | 13 | 30 | 861 | 1.1 | | | |
| | 70 | 16 | 40 | 948 | 0.9 | | | |
| 0.18 | 186.7 | 7.8 | 7.5 | 683 | 2.3 | MRDV030 | 6324 | 51 |
| | 140 | 10 | 10 | 752 | 1.8 | | | |
| | 93.3 | 14 | 15 | 861 | 1.3 | | | |
| | 70 | 18 | 20 | 948 | 1 | | | |
| | 56 | 21 | 25 | 1021 | 1 | | | |
| | 46.7 | 24 | 30 | 1085 | 0.8 | | | |
| 0.18 | 93.3 | 14 | 30 | 1657 | 2.4 | MRDV040 | 6312 | 52 |
| | 70 | 18 | 40 | 1824 | 1.8 | | | |
| | 56 | 21 | 50 | 1964 | 1.4 | | | |
| 0.18 | 70 | 19 | 20 | 1824 | 2 | MRDV040 | 6324 | 52 |
| | 56 | 23 | 25 | 1964 | 1.7 | | | |
| | 46.7 | 26 | 30 | 2087 | 1.7 | | | |
| | 35 | 32 | 40 | 2298 | 1.3 | | | |
| | 28 | 38 | 50 | 2475 | 1 | | | |
| | 23.3 | 43 | 60 | 2630 | 0.8 | | | |
| 0.18 | 45 | 29 | 20 | 2113 | 1.5 | MRDV040 | 7116 | 52 |
| | 36 | 34 | 25 | 2276 | 1.3 | | | |
| | 30 | 38 | 30 | 2419 | 1.3 | | | |
| | 22.5 | 47 | 40 | 2662 | 1 | | | |
| 0.18 | 18.7 | 64 | 75 | 2833 | 0.8 | PC063+MRDV040 | 6324 | 59 |
| | 15.6 | 70 | 90 | 3011 | 0.8 | | | |
| | 11.7 | 85 | 120 | 3314 | 0.6 | | | |
| 0.18 | 46.7 | 24 | 60 | 2865 | 2.1 | MRDV050 | 6312 | 53 |
| | 35 | 30 | 80 | 3153 | 1.5 | | | |
| | 28 | 34 | 100 | 3397 | 1.2 | | | |
| 0.18 | 35 | 33 | 40 | 3153 | 2.3 | MRDV050 | 6324 | 53 |
| | 28 | 39 | 50 | 3397 | 1.9 | | | |
| | 23.3 | 43 | 60 | 3610 | 1.6 | | | |
| | 17.5 | 52 | 80 | 3973 | 1.2 | | | |
| | 14 | 60 | 100 | 4280 | 0.9 | | | |

| $P_1$ (Kw) | $n_2$ ($min^{-1}$) | $M_2$ (Nm) | i | $Fr_2$ (N) | fs | MRDV | MOTORE ELETTRICO | N. PAGINA DISEGNI |
|---|---|---|---|---|---|---|---|---|
| 0.18 | 18 | 56 | 50 | 3936 | 1.4 | MRDV050 | 7116 | 53 |
| | 15 | 63 | 60 | 4183 | 1.1 | | | |
| | 11.3 | 75 | 80 | 4604 | 0.9 | | | |
| 0.18 | 18.7 | 64 | 75 | 3889 | 1.4 | PC063+MRDV050 | 6324 | 59 |
| | 15.6 | 71 | 90 | 4132 | 1.5 | | | |
| | 11.7 | 87 | 120 | 4548 | 1.1 | | | |
| | 9.3 | 101 | 150 | 4840 | 0.9 | | | |
| | 7.8 | 113 | 180 | 4840 | 0.7 | | | |
| | 5.8 | 133 | 240 | 4840 | 0.6 | | | |
| 0.18 | 12 | 95 | 75 | 4506 | 1.2 | PC071+MRDV050 | 7116 | 60 |
| | 10 | 105 | 90 | 4788 | 1.4 | | | |
| | 7.5 | 126 | 120 | 4840 | 1 | | | |
| 0.18 | 15 | 66 | 60 | 5467 | 2.1 | MRDV063 | 7116 | 54 |
| | 11.3 | 79 | 80 | 6018 | 1.6 | | | |
| | 9 | 90 | 100 | 6270 | 1.4 | | | |
| 0.18 | 9.3 | 103 | 150 | 6270 | 1.7 | PC063+MRDV063 | 6324 | 59 |
| | 7.8 | 117 | 180 | 6270 | 1.4 | | | |
| | 5.8 | 139 | 240 | 6270 | 1 | | | |
| | 4.7 | 155 | 300 | 6270 | 0.8 | | | |
| 0.18 | 12 | 97 | 75 | 5889 | 2.2 | PC071+MRDV063 | 7116 | 60 |
| | 10 | 107 | 90 | 6259 | 2.4 | | | |
| | 7.5 | 131 | 120 | 6270 | 1.8 | | | |
| | 6 | 152 | 150 | 6270 | 1.4 | | | |
| | 5 | 168 | 180 | 6270 | 1.2 | | | |
| | 3.8 | 197 | 240 | 6270 | 0.9 | | | |
| | 3 | 218 | 300 | 6270 | 0.7 | | | |
| 0.18 | 3.5 | 222 | 400 | 6270 | 1 | MRDV030+063 | 6324 | 63 |
| | 2.8 | 257 | 500 | 6270 | 0.8 | | | |
| 0.18 | 5 | 179 | 180 | 7380 | 1.7 | PC071+MRDV075 | 7116 | 60 |
| | 3.8 | 211 | 240 | 7380 | 1.2 | | | |
| | 3 | 235 | 300 | 7380 | 1 | | | |
| 0.18 | 2.3 | 362 | 600 | 7380 | 1.1 | MRDV040+075 | 6324 | 63 |
| | 1.9 | 435 | 750 | 7380 | 0.9 | | | |
| | 1.6 | 487 | 900 | 7380 | 0.8 | | | |
| 0.18 | 1.2 | 629 | 1200 | 8180 | 1 | MRDV040+090 | 6324 | 63 |
| | 0.93 | 735 | 1500 | 8180 | 0.8 | | | |
| 0.18 | 0.8 | 861 | 1800 | 10320 | 1.5 | MRDV050+110 | 6324 | 64 |
| | 0.58 | 1113 | 2400 | 10320 | 1.1 | | | |
| 0.25 | 373.3 | 5.6 | 7.5 | 542 | 2.3 | MRDV030 | 6322 | 51 |
| | 280 | 7.2 | 10 | 597 | 1.8 | | | |
| | 186.7 | 10 | 15 | 683 | 1.3 | | | |
| | 140 | 13 | 20 | 752 | 0.9 | | | |
| | 112 | 16 | 25 | 810 | 1 | | | |
| | 93.3 | 18 | 30 | 861 | 0.8 | | | |
| 0.25 | 186.7 | 11 | 7.5 | 1315 | 3.6 | MRDV040 | 7114 | 52 |
| | 140 | 14 | 10 | 1447 | 2.8 | | | |
| | 93.3 | 21 | 15 | 1657 | 1.9 | | | |
| | 70 | 27 | 20 | 1824 | 1.5 | | | |
| | 56 | 32 | 25 | 1964 | 1.2 | | | |
| | 46.7 | 36 | 30 | 2087 | 1.3 | | | |
| | 35 | 44 | 40 | 2298 | 0.9 | | | |
| 0.25 | 120 | 17 | 7.5 | 1524 | 2.6 | MRDV040 | 7126 | 52 |
| | 90 | 22 | 10 | 1677 | 2 | | | |
| | 60 | 31 | 15 | 1920 | 1.4 | | | |
| | 45 | 40 | 20 | 2113 | 1.1 | | | |
| | 36 | 48 | 25 | 2276 | 0.9 | | | |
| | 30 | 53 | 30 | 2419 | 0.9 | | | |

| $P_1$ (Kw) | $n_2$ ($min^{-1}$) | $M_2$ (Nm) | i | $Fr_2$ (N) | fs | MRDV | MOTORE ELETTRICO | N. PAGINA DISEGNI |
|---|---|---|---|---|---|---|---|---|
| 0.25 | 35 | 42 | 80 | 3153 | 1.1 | MRDV050 | 6322 | 53 |
| | 28 | 48 | 100 | 3397 | 0.8 | | | |
| 0.25 | 70 | 27 | 20 | 2503 | 2.7 | MRDV050 | 7114 | 53 |
| | 56 | 32 | 25 | 2696 | 2.2 | | | |
| | 46.7 | 37 | 30 | 2865 | 2.3 | | | |
| | 35 | 46 | 40 | 3153 | 1.7 | | | |
| | 28 | 54 | 50 | 3397 | 1.4 | | | |
| | 23.3 | 60 | 60 | 3610 | 1.1 | | | |
| | 17.5 | 72 | 80 | 3973 | 0.9 | | | |
| 0.25 | 45 | 40 | 20 | 2900 | 1.9 | MRDV050 | 7126 | 53 |
| | 36 | 48 | 25 | 3124 | 1.5 | | | |
| | 30 | 54 | 30 | 3320 | 1.7 | | | |
| | 22.5 | 67 | 40 | 3654 | 1.2 | | | |
| | 18 | 78 | 50 | 3936 | 1 | | | |
| | 15 | 88 | 60 | 4183 | 0.8 | | | |
| 0.25 | 18.7 | 88 | 75 | 3889 | 1 | PC071+MRDV050 | 7114 | 60 |
| | 15.6 | 98 | 90 | 4132 | 1.1 | | | |
| | 11.7 | 121 | 120 | 4548 | 0.8 | | | |
| 0.25 | 28 | 56 | 50 | 4440 | 2.4 | MRDV063 | 7114 | 54 |
| | 23.3 | 63 | 60 | 4719 | 2 | | | |
| | 17.5 | 78 | 80 | 5193 | 1.6 | | | |
| | 14 | 87 | 100 | 5595 | 1.4 | | | |
| 0.25 | 18 | 81 | 50 | 5145 | 1.8 | MRDV063 | 7126 | 54 |
| | 15 | 92 | 60 | 5467 | 1.5 | | | |
| | 11.3 | 110 | 80 | 6018 | 1.2 | | | |
| | 9 | 125 | 100 | 6270 | 1 | | | |
| 0.25 | 18.7 | 91 | 75 | 5083 | 1.8 | PC071+MRDV063 | 7114 | 60 |
| | 15.6 | 100 | 90 | 5401 | 2 | | | |
| | 11.7 | 125 | 120 | 5945 | 1.5 | | | |
| | 9.3 | 143 | 150 | 6270 | 1.2 | | | |
| | 7.8 | 163 | 180 | 6270 | 1 | | | |
| | 5.8 | 192 | 240 | 6270 | 0.7 | | | |
| | 4.7 | 215 | 300 | 6270 | 0.6 | | | |
| 0.25 | 12 | 135 | 75 | 5889 | 1.6 | PC071+MRDV063 | 7126 | 60 |
| | 10 | 148 | 90 | 6259 | 1.8 | | | |
| | 7.5 | 181 | 120 | 6270 | 1.3 | | | |
| | 6 | 211 | 150 | 6270 | 1 | | | |
| 0.25 | 7 | 159 | 400 | 6270 | 1.4 | MRDV030+063 | 6322 | 63 |
| | 5.6 | 185 | 500 | 6270 | 1.2 | | | |
| 0.25 | 17.5 | 82 | 80 | 6130 | 2.3 | MRDV075 | 7114 | 55 |
| | 14 | 94 | 100 | 6603 | 1.9 | | | |
| 0.25 | 11.3 | 117 | 80 | 7103 | 1.7 | MRDV075 | 7126 | 55 |
| | 9 | 133 | 100 | 7380 | 1.4 | | | |
| 0.25 | 9.3 | 151 | 150 | 7380 | 1.7 | PC071+MRDV075 | 7114 | 60 |
| | 7.8 | 172 | 180 | 7380 | 1.4 | | | |
| | 5.8 | 201 | 240 | 7380 | 1.1 | | | |
| | 4.7 | 230 | 300 | 7380 | 0.9 | | | |
| 0.25 | 12 | 139 | 75 | 6952 | 2.4 | PC071+MRDV075 | 7126 | 60 |
| | 10 | 155 | 90 | 7380 | 2.5 | | | |
| | 7.5 | 191 | 120 | 7380 | 1.9 | | | |
| | 6 | 219 | 150 | 7380 | 1.5 | | | |
| | 5 | 248 | 180 | 7380 | 1.2 | | | |
| 0.25 | 3.5 | 336 | 400 | 7380 | 1.1 | MRDV040+075 | 7114 | 63 |
| | 2.8 | 384 | 500 | 7380 | 0.8 | | | |
| 0.25 | 5 | 263 | 180 | 8180 | 1.9 | PC071+MRDV090 | 7126 | 60 |
| | 3.8 | 318 | 240 | 8180 | 1.4 | | | |
| | 3 | 358 | 300 | 8180 | 1.1 | | | |

| $P_1$ (Kw) | $n_2$ ($min^{-1}$) | $M_2$ (Nm) | i | $Fr_2$ (N) | fs | MRDV | MOTORE ELETTRICO | N. PAGINA DISEGNI |
|---|---|---|---|---|---|---|---|---|
| 0.25 | 2.3 | 512 | 600 | 8180 | 1.2 | MRDV040+090 | 7114 | 64 |
| | 1.9 | 598 | 750 | 8180 | 0.9 | | | |
| | 1.6 | 667 | 900 | 8180 | 0.8 | | | |
| 0.25 | 1.2 | 943 | 1200 | 10320 | 1.3 | MRDV050+110 | 7114 | 64 |
| | 0.93 | 1064 | 1500 | 10320 | 1.2 | | | |
| | 0.78 | 1195 | 1800 | 10320 | 1.1 | | | |
| 0.25 | 0.6 | 1624 | 2400 | 13500 | 1 | MRDV063+130 | 7114 | 64 |
| | 0.47 | 1935 | 3000 | 13500 | 0.8 | | | |
| | 0.35 | 2046 | 4000 | 13500 | 0.6 | | | |
| | 0.28 | 2430 | 5000 | 13500 | 0.5 | | | |
| 0.37 | 373.3 | 8.4 | 7.5 | 1044 | 3.3 | MRDV040 | 7112 | 52 |
| | 280 | 11 | 10 | 1149 | 2.6 | | | |
| | 186.7 | 16 | 15 | 1315 | 1.9 | | | |
| | 140 | 21 | 20 | 1447 | 1.4 | | | |
| | 112 | 25 | 25 | 1559 | 1.1 | | | |
| 0.37 | 186.7 | 16 | 7.5 | 1315 | 2.4 | MRDV040 | 7124 | 52 |
| | 140 | 21 | 10 | 1447 | 1.9 | | | |
| | 93.3 | 31 | 15 | 1657 | 1.3 | | | |
| | 70 | 39 | 20 | 1824 | 1 | | | |
| | 56 | 47 | 25 | 1964 | 0.8 | | | |
| | 46.7 | 53 | 30 | 2087 | 0.8 | | | |
| 0.37 | 112 | 25 | 25 | 2140 | 2 | MRDV050 | 7112 | 53 |
| | 93.3 | 29 | 30 | 2274 | 2.2 | | | |
| | 70 | 37 | 40 | 2503 | 1.6 | | | |
| | 56 | 44 | 50 | 2696 | 1.2 | | | |
| | 46.7 | 50 | 60 | 2865 | 1 | | | |
| | 35 | 62 | 80 | 3153 | 0.7 | | | |
| 0.37 | 140 | 22 | 10 | 1987 | 3.3 | MRDV050 | 7124 | 53 |
| | 93.3 | 31 | 15 | 2274 | 2.4 | | | |
| | 70 | 40 | 20 | 2503 | 1.8 | | | |
| | 56 | 48 | 25 | 2696 | 1.5 | | | |
| | 46.7 | 55 | 30 | 2865 | 1.5 | | | |
| | 35 | 68 | 40 | 3153 | 1.1 | | | |
| | 28 | 80 | 50 | 3397 | 0.9 | | | |
| | 23.3 | 89 | 60 | 3610 | 0.8 | | | |
| 0.37 | 120 | 25 | 7.5 | 2091 | 3.3 | MRDV050 | 8016 | 53 |
| | 90 | 33 | 10 | 2302 | 2.5 | | | |
| | 60 | 47 | 15 | 2635 | 1.8 | | | |
| | 45 | 60 | 20 | 2900 | 1.3 | | | |
| | 36 | 72 | 25 | 3124 | 1 | | | |
| | 30 | 80 | 30 | 3320 | 1.1 | | | |
| 0.37 | 35 | 71 | 40 | 4122 | 2.1 | MRDV063 | 7124 | 54 |
| | 28 | 83 | 50 | 4440 | 1.6 | | | |
| | 23.3 | 94 | 60 | 4719 | 1.4 | | | |
| | 17.5 | 115 | 80 | 5193 | 1.1 | | | |
| | 14 | 129 | 100 | 5595 | 0.9 | | | |
| 0.37 | 45 | 60 | 20 | 3791 | 2.4 | MRDV063 | 8016 | 54 |
| | 36 | 74 | 25 | 4084 | 1.9 | | | |
| | 30 | 82 | 30 | 4339 | 2.1 | | | |
| | 22.5 | 102 | 40 | 4776 | 1.6 | | | |
| | 18 | 120 | 50 | 5145 | 1.2 | | | |
| | 15 | 137 | 60 | 5467 | 1 | | | |
| 0.37 | 18.7 | 134 | 75 | 5083 | 1.2 | PC071+MRDV063 | 7124 | 60 |
| | 15.6 | 148 | 90 | 5401 | 1.4 | | | |
| | 11.7 | 185 | 120 | 5945 | 1 | | | |
| | 9.3 | 212 | 150 | 6270 | 0.8 | | | |

| $P_1$ (Kw) | $n_2$ ($min^{-1}$) | $M_2$ (Nm) | i | $Fr_2$ (N) | fs | MRDV | MOTORE ELETTRICO | N. PAGINA DISEGNI |
|---|---|---|---|---|---|---|---|---|
| 0.37 | 9.3 | 181 | 300 | 6270 | 1.3 | MRDV030+063 | 7112 | 63 |
| | 7 | 236 | 400 | 6270 | 1 | | | |
| 0.37 | 23.3 | 98 | 60 | 5569 | 2 | MRDV075 | 7124 | 55 |
| | 17.5 | 121 | 80 | 6130 | 1.6 | | | |
| | 14 | 139 | 100 | 6603 | 1.3 | | | |
| 0.37 | 18 | 126 | 50 | 6073 | 1.8 | MRDV075 | 8016 | 55 |
| | 15 | 144 | 60 | 6453 | 1.5 | | | |
| | 11.3 | 173 | 80 | 7103 | 1.2 | | | |
| | 9 | 196 | 100 | 7380 | 1 | | | |
| 0.37 | 18.7 | 138 | 75 | 6000 | 1.8 | PC071+MRDV075 | 7124 | 60 |
| | 15.6 | 154 | 90 | 6375 | 1.9 | | | |
| | 11.7 | 191 | 120 | 7017 | 1.5 | | | |
| | 9.3 | 223 | 150 | 7380 | 1.1 | | | |
| | 7.8 | 254 | 180 | 7380 | 0.9 | | | |
| 0.37 | 12 | 206 | 75 | 6952 | 1.6 | PC080+MRDV075 | 8016 | 61 |
| | 10 | 230 | 90 | 7380 | 1.7 | | | |
| | 7.5 | 283 | 120 | 7380 | 1.3 | | | |
| | 6 | 324 | 150 | 7380 | 1 | | | |
| 0.37 | 4.7 | 405 | 300 | 7380 | 1 | MRDV040+075 | 7124 | 63 |
| | 3.5 | 498 | 400 | 7380 | 0.7 | | | |
| 0.37 | 11.3 | 185 | 80 | 7859 | 1.7 | MRDV090 | 8016 | 56 |
| | 9 | 212 | 100 | 8180 | 1.3 | | | |
| 0.37 | 7.8 | 268 | 180 | 8180 | 1.5 | PC071+MRDV090 | 7124 | 60 |
| | 5.8 | 321 | 240 | 8180 | 1.1 | | | |
| | 4.7 | 371 | 300 | 8180 | 0.9 | | | |
| 0.37 | 6 | 347 | 150 | 8180 | 1.6 | PC080+MRDV090 | 8016 | 61 |
| | 5 | 389 | 180 | 8180 | 1.3 | | | |
| | 3.8 | 471 | 240 | 8180 | 1 | | | |
| 0.37 | 4.7 | 402 | 300 | 8180 | 1.5 | MRDV040+090 | 7124 | 63 |
| | 3.5 | 523 | 400 | 8180 | 1.2 | | | |
| | 2.8 | 611 | 500 | 8180 | 0.9 | | | |
| | 2.3 | 757 | 600 | 8180 | 0.8 | | | |
| 0.37 | 3.8 | 509 | 240 | 10320 | 1.6 | PC080+MRDV110 | 8016 | 61 |
| | 3 | 577 | 300 | 10320 | 1.3 | | | |
| 0.37 | 1.9 | 950 | 750 | 10320 | 1.3 | MRDV050+110 | 7124 | 64 |
| | 1.6 | 1079 | 900 | 10320 | 1.2 | | | |
| | 1.2 | 1396 | 1200 | 10320 | 0.8 | | | |
| 0.37 | 0.9 | 1674 | 1500 | 13500 | 1.1 | MRDV063+130 | 7124 | 64 |
| | 0.78 | 1887 | 1800 | 13500 | 0.9 | | | |
| 0.55 | 373.3 | 13 | 7.5 | 1044 | 2.2 | MRDV040 | 7122 | 52 |
| | 280 | 17 | 10 | 1149 | 1.8 | | | |
| | 186.7 | 24 | 15 | 1315 | 1.3 | | | |
| | 140 | 31 | 20 | 1447 | 0.9 | | | |
| | 112 | 37 | 25 | 1559 | 0.8 | | | |
| 0.55 | 140 | 31 | 20 | 1987 | 1.7 | MRDV050 | 7122 | 53 |
| | 112 | 38 | 25 | 2140 | 1.4 | | | |
| | 93.3 | 43 | 30 | 2274 | 1.5 | | | |
| | 70 | 55 | 40 | 2503 | 1.1 | | | |
| | 56 | 65 | 50 | 2696 | 0.8 | | | |
| | 46.7 | 74 | 60 | 2865 | 0.7 | | | |
| 0.55 | 186.7 | 25 | 7.5 | 1805 | 2.9 | MRDV050 | 8014 | 53 |
| | 140 | 32 | 10 | 1987 | 2.2 | | | |
| | 93.3 | 46 | 15 | 2274 | 1.6 | | | |
| | 70 | 59 | 20 | 2503 | 1.2 | | | |
| | 56 | 71 | 25 | 2696 | 1 | | | |
| | 46.7 | 81 | 30 | 2865 | 1 | | | |

| $P_1$ (Kw) | $n_2$ ($min^{-1}$) | $M_2$ (Nm) | i | $Fr_2$ (N) | fs | MRDV | MOTORE ELETTRICO | N. PAGINA DISEGNI |
|---|---|---|---|---|---|---|---|---|
| 0.55 | 120 | 38 | 7.5 | 2091 | 2.2 | MRDV050 | 8026 | 53 |
| | 90 | 49 | 10 | 2302 | 1.7 | | | |
| | 60 | 69 | 15 | 2635 | 1.2 | | | |
| | 45 | 89 | 20 | 2900 | 0.9 | | | |
| 0.55 | 70 | 56 | 40 | 3272 | 1.9 | MRDV063 | 7122 | 54 |
| | 56 | 67 | 50 | 3524 | 1.5 | | | |
| | 46.7 | 77 | 60 | 3745 | 1.2 | | | |
| | 35 | 95 | 80 | 4122 | 0.9 | | | |
| | 28 | 109 | 100 | 4440 | 0.7 | | | |
| 0.55 | 70 | 61 | 20 | 3272 | 2.2 | MRDV063 | 8014 | 54 |
| | 56 | 73 | 25 | 3524 | 1.8 | | | |
| | 46.7 | 83 | 30 | 3745 | 1.9 | | | |
| | 35 | 105 | 40 | 4122 | 1.4 | | | |
| | 28 | 124 | 50 | 4440 | 1.1 | | | |
| | 23.3 | 140 | 60 | 4719 | 0.9 | | | |
| 0.55 | 60 | 71 | 15 | 3444 | 2.2 | MRDV063 | 8026 | 54 |
| | 45 | 90 | 20 | 3791 | 1.6 | | | |
| | 36 | 109 | 25 | 4084 | 1.3 | | | |
| | 30 | 123 | 30 | 4339 | 1.4 | | | |
| | 22.5 | 152 | 40 | 4776 | 1.1 | | | |
| 0.55 | 35 | 99 | 80 | 4865 | 1.3 | MRDV075 | 7122 | 55 |
| | 28 | 114 | 100 | 5241 | 1 | | | |
| 0.55 | 35 | 108 | 40 | 4865 | 2 | MRDV075 | 8014 | 55 |
| | 28 | 129 | 50 | 5241 | 1.6 | | | |
| | 23.3 | 146 | 60 | 5569 | 1.4 | | | |
| | 17.5 | 180 | 80 | 6130 | 1.1 | | | |
| | 14 | 206 | 100 | 6603 | 0.9 | | | |
| 0.55 | 30 | 128 | 30 | 5122 | 2 | MRDV075 | 8026 | 55 |
| | 22.5 | 159 | 40 | 5637 | 1.5 | | | |
| | 18 | 187 | 50 | 6073 | 1.2 | | | |
| | 15 | 214 | 60 | 6453 | 1 | | | |
| 0.55 | 18.7 | 205 | 75 | 6000 | 1.2 | PC080+MRDV075 | 8014 | 61 |
| | 15.6 | 230 | 90 | 6375 | 1.3 | | | |
| | 11.7 | 284 | 120 | 7017 | 1 | | | |
| | 9.3 | 332 | 150 | 7380 | 0.8 | | | |
| 0.55 | 12 | 306 | 75 | 6952 | 1.1 | PC080+MRDV075 | 8026 | 61 |
| | 10 | 341 | 90 | 7380 | 1.1 | | | |
| 0.55 | 17.5 | 189 | 80 | 6783 | 1.5 | MRDV090 | 8014 | 56 |
| | 14 | 221 | 100 | 7306 | 1.2 | | | |
| 0.55 | 18 | 198 | 50 | 6719 | 2.3 | MRDV090 | 8026 | 56 |
| | 15 | 224 | 60 | 7140 | 1.6 | | | |
| | 11.3 | 275 | 80 | 7859 | 1.1 | | | |
| | 9 | 315 | 100 | 8180 | 0.9 | | | |
| 0.55 | 15.6 | 240 | 90 | 7054 | 2.3 | PC080+MRDV090 | 8014 | 61 |
| | 11.7 | 297 | 120 | 7764 | 1.6 | | | |
| | 9.3 | 355 | 150 | 8180 | 1.3 | | | |
| | 7.8 | 398 | 180 | 8180 | 1 | | | |
| 0.55 | 10 | 357 | 90 | 8174 | 2 | PC080+MRDV090 | 8026 | 61 |
| | 7.5 | 441 | 120 | 8180 | 1.4 | | | |
| | 6 | 516 | 150 | 8180 | 1.1 | | | |
| | 5 | 578 | 180 | 8180 | 0.9 | | | |
| 0.55 | 9.3 | 306 | 300 | 8180 | 2 | MRDV040+090 | 7122 | 63 |
| | 7 | 403 | 400 | 8180 | 1.5 | | | |
| 0.55 | 5.6 | 470 | 500 | 8180 | 1.2 | MRDV110 | 8014 | 57 |
| | 17.5 | 201 | 80 | 8571 | 2.6 | | | |
| | 14 | 236 | 100 | 9232 | 2 | | | |

| $P_1$ (Kw) | $n_2$ ($min^{-1}$) | $M_2$ (Nm) | i | $Fr_2$ (N) | fs | MRDV | MOTORE ELETTRICO | N. PAGINA DISEGNI |
|---|---|---|---|---|---|---|---|---|
| 0.55 | 11.3 | 294 | 80 | 9931 | 1.9 | MRDV110 | 8026 | 57 |
| | 9 | 338 | 100 | 10320 | 1.5 | | | |
| 0.55 | 7.8 | 425 | 180 | 10320 | 1.8 | PC080+MRDV110 | 8014 | 61 |
| | 5.8 | 513 | 240 | 10320 | 1.3 | | | |
| | 4.7 | 597 | 300 | 10320 | 1 | | | |
| 0.55 | 7.5 | 462 | 120 | 10320 | 2.6 | PC080+MRDV110 | 8026 | 61 |
| | 6 | 552 | 150 | 10320 | 2 | | | |
| | 5 | 620 | 180 | 10320 | 1.6 | | | |
| | 3.8 | 756 | 240 | 10320 | 1.1 | | | |
| 0.55 | 4.7 | 639 | 300 | 10320 | 2 | MRDV050+110 | 8014 | 64 |
| | 3.5 | 826 | 400 | 10320 | 1.4 | | | |
| | 2.8 | 984 | 500 | 10320 | 1.1 | | | |
| | 2.3 | 1181 | 600 | 10320 | 1 | | | |
| | 1.9 | 1411 | 750 | 10320 | 0.9 | | | |
| 0.55 | 3.8 | 756 | 240 | 13500 | 1.6 | PC080+MRDV130 | 8026 | 61 |
| | 3 | 858 | 300 | 13500 | 1.3 | | | |
| 0.55 | 2.8 | 996 | 500 | 13500 | 1.6 | MRDV063+130 | 8014 | 64 |
| | 1.9 | 1471 | 750 | 13500 | 1.2 | | | |
| | 1.2 | 2132 | 1200 | 13500 | 0.8 | | | |
| 0.75 | 373.3 | 17 | 7.5 | 1433 | 3 | MRDV050 | 8012 | 53 |
| | 280 | 23 | 10 | 1577 | 2.4 | | | |
| | 186.7 | 33 | 15 | 1805 | 1.7 | | | |
| | 140 | 42 | 20 | 1987 | 1.3 | | | |
| | 112 | 51 | 25 | 2140 | 1 | | | |
| | 93.3 | 58 | 30 | 2274 | 1.1 | | | |
| 0.75 | 186.7 | 34 | 7.5 | 1805 | 2.1 | MRDV050 | 8024 | 53 |
| | 140 | 44 | 10 | 1987 | 1.6 | | | |
| | 93.3 | 63 | 15 | 2274 | 1.2 | | | |
| | 70 | 81 | 20 | 2503 | 0.9 | | | |
| 0.75 | 140 | 43 | 20 | 2597 | 2.3 | MRDV063 | 8012 | 54 |
| | 112 | 52 | 25 | 2797 | 1.8 | | | |
| | 93.3 | 60 | 30 | 2973 | 2 | | | |
| | 70 | 77 | 40 | 3272 | 1.4 | | | |
| | 56 | 91 | 50 | 3524 | 1.1 | | | |
| | 46.7 | 104 | 60 | 3745 | 0.9 | | | |
| 0.75 | 93.3 | 64 | 15 | 2973 | 2.2 | MRDV063 | 8024 | 54 |
| | 70 | 83 | 20 | 3272 | 1.6 | | | |
| | 56 | 100 | 25 | 3524 | 1.3 | | | |
| | 46.7 | 114 | 30 | 3745 | 1.4 | | | |
| | 35 | 143 | 40 | 4122 | 1 | | | |
| 0.75 | 120 | 52 | 7.5 | 2734 | 2.9 | MRDV063 | 90S6 | 54 |
| | 90 | 68 | 10 | 3009 | 2.3 | | | |
| | 60 | 97 | 15 | 3444 | 1.6 | | | |
| | 45 | 123 | 20 | 3791 | 1.2 | | | |
| | 36 | 149 | 25 | 4084 | 0.9 | | | |
| | 30 | 167 | 30 | 4339 | 1 | | | |
| 0.75 | 46.7 | 109 | 60 | 4421 | 1.3 | MRDV075 | 8012 | 55 |
| | 28 | 156 | 100 | 5241 | 0.8 | | | |
| 0.75 | 56 | 102 | 25 | 4160 | 2 | MRDV075 | 8024 | 55 |
| | 46.7 | 117 | 30 | 4421 | 2 | | | |
| | 35 | 147 | 40 | 4865 | 1.5 | | | |
| | 28 | 177 | 50 | 5241 | 1.2 | | | |
| | 23.3 | 200 | 60 | 5569 | 1 | | | |
| 0.75 | 60 | 98 | 15 | 4065 | 2.4 | MRDV075 | 90S6 | 55 |
| | 45 | 126 | 20 | 4474 | 1.9 | | | |
| | 36 | 153 | 25 | 4820 | 1.4 | | | |

| $P_1$ (Kw) | $n_2$ ($min^{-1}$) | $M_2$ (Nm) | i | $Fr_2$ (N) | fs | MRDV | MOTORE ELETTRICO | N. PAGINA DISEGNI |
|---|---|---|---|---|---|---|---|---|
| 0.75 | 30 | 174 | 30 | 5122 | 1.5 | MRDV075 | 90S6 | 55 |
| | 22.5 | 216 | 40 | 5637 | 1.1 | | | |
| 0.75 | 18.7 | 280 | 75 | 6000 | 0.9 | PC080+MRDV075 | 8024 | 61 |
| | 15.6 | 313 | 90 | 6375 | 1 | | | |
| 0.75 | 35 | 141 | 80 | 5383 | 1.6 | MRDV090 | 8012 | 56 |
| | 28 | 166 | 100 | 5799 | 1.2 | | | |
| 0.75 | 28 | 184 | 50 | 5799 | 1.8 | MRDV090 | 8024 | 56 |
| | 23.3 | 212 | 60 | 6163 | 1.5 | | | |
| | 17.5 | 258 | 80 | 6783 | 1.1 | | | |
| | 14 | 302 | 100 | 7306 | 0.9 | | | |
| 0.75 | 30 | 179 | 30 | 5667 | 2.6 | MRDV090 | 90S6 | 56 |
| | 22.5 | 226 | 40 | 6238 | 1.8 | | | |
| | 18 | 271 | 50 | 6719 | 1.4 | | | |
| | 15 | 306 | 60 | 7140 | 1.1 | | | |
| 0.75 | 15.6 | 327 | 90 | 7054 | 1.7 | PC080+MRDV090 | 8024 | 61 |
| | 11.7 | 405 | 120 | 7764 | 1.2 | | | |
| | 9.3 | 483 | 150 | 8180 | 0.9 | | | |
| | 7.8 | 543 | 180 | 8180 | 0.7 | | | |
| 0.75 | 7 | 549 | 400 | 8180 | 1.1 | MRDV040+090 | 8012 | 63 |
| | 5.6 | 642 | 500 | 8180 | 0.9 | | | |
| 0.75 | 17.5 | 274 | 80 | 8571 | 1.9 | MRDV110 | 8024 | 57 |
| | 14 | 322 | 100 | 9232 | 1.5 | | | |
| 0.75 | 15 | 325 | 60 | 9023 | 2.1 | MRDV110 | 90S6 | 57 |
| | 11.3 | 401 | 80 | 9931 | 1.4 | | | |
| | 9 | 462 | 100 | 10320 | 1.1 | | | |
| 0.75 | 11.7 | 430 | 120 | 9811 | 2.2 | PC080+MRDV110 | 8024 | 61 |
| | 9.3 | 506 | 150 | 10320 | 1.7 | | | |
| | 7.8 | 580 | 180 | 10320 | 1.3 | | | |
| | 5.8 | 700 | 240 | 10320 | 0.9 | | | |
| 0.75 | 12.4 | 393 | 73 | 9614 | 3.2 | PC090+MRDV110 | 90S6 | 61 |
| | 9.3 | 508 | 96.8 | 10320 | 2.3 | | | |
| | 7.4 | 607 | 121 | 10320 | 1.8 | | | |
| | 6.2 | 682 | 145.2 | 10320 | 1.5 | | | |
| | 4.6 | 832 | 193.6 | 10320 | 1 | | | |
| 0.75 | 9.3 | 446 | 300 | 10320 | 2.8 | MRDV050+110 | 8012 | 64 |
| | 7 | 563 | 400 | 10320 | 2.1 | | | |
| | 5.6 | 687 | 500 | 10320 | 1.6 | | | |
| 0.75 | 4.7 | 871 | 300 | 10320 | 1.5 | MRDV050+110 | 8024 | 64 |
| | 3.5 | 1126 | 400 | 10320 | 1.1 | | | |
| 0.75 | 11.3 | 407 | 80 | 12989 | 2.1 | MRDV130 | 90S6 | 58 |
| | 9 | 470 | 100 | 13500 | 1.7 | | | |
| 0.75 | 5.8 | 712 | 240 | 13500 | 1.4 | PC080+MRDV130 | 8024 | 61 |
| | 4.7 | 813 | 300 | 13500 | 1.1 | | | |
| 0.75 | 12.4 | 399 | 73 | 12575 | 4.4 | PC090+MRDV130 | 90S6 | 61 |
| | 9.3 | 508 | 96.8 | 13500 | 3.2 | | | |
| | 7.4 | 607 | 121 | 13500 | 2.6 | | | |
| | 6.2 | 682 | 145.2 | 13500 | 2.1 | | | |
| | 4.6 | 832 | 193.6 | 13500 | 1.5 | | | |
| | 3.7 | 944 | 242 | 13500 | 1.2 | | | |
| 0.75 | 2.8 | 1358 | 500 | 13500 | 1.1 | MRDV063+130 | 8024 | 64 |
| | 2.3 | 1631 | 600 | 13500 | 1 | | | |
| | 1.9 | 2005 | 750 | 13500 | 0.9 | | | |
| | 1.6 | 2283 | 900 | 13500 | 0.8 | | | |
| 1.1 | 373.3 | 35 | 7.5 | 1433 | 2.1 | MRDV050 | 8022 | 53 |
| | 280 | 33 | 10 | 1577 | 1.6 | | | |
| | 186.7 | 48 | 15 | 1805 | 1.2 | | | |
| | 140 | 62 | 20 | 1987 | 0.9 | | | |

| $P_1$ (Kw) | $n_2$ ($min^{-1}$) | $M_2$ (Nm) | i | $Fr_2$ (N) | fs | MRDV | MOTORE ELETTRICO | N. PAGINA DISEGNI |
|---|---|---|---|---|---|---|---|---|
| 1.1 | 186.7 | 48 | 15 | 2359 | 2.1 | MRDV063 | 8022 | 54 |
| | 140 | 63 | 20 | 2597 | 1.6 | | | |
| | 112 | 77 | 25 | 2797 | 1.2 | | | |
| | 93.3 | 88 | 30 | 2973 | 1.4 | | | |
| | 70 | 113 | 40 | 3272 | 1 | | | |
| 1.1 | 120 | 76 | 7.5 | 2734 | 2 | MRDV063 | 90L6 | 54 |
| | 90 | 99 | 10 | 3009 | 1.5 | | | |
| | 60 | 142 | 15 | 3444 | 1.1 | | | |
| | 45 | 180 | 20 | 3791 | 0.8 | | | |
| 1.1 | 186.7 | 50 | 7.5 | 2359 | 2.6 | MRDV063 | 90S4 | 54 |
| | 140 | 65 | 10 | 2597 | 2 | | | |
| | 93.3 | 93 | 15 | 2973 | 1.5 | | | |
| | 70 | 122 | 20 | 3272 | 1.1 | | | |
| | 56 | 146 | 25 | 3524 | 0.9 | | | |
| | 46.7 | 167 | 30 | 3745 | 1 | | | |
| 1.1 | 112 | 78 | 25 | 3302 | 1.9 | MRDV075 | 8022 | 55 |
| | 93.3 | 90 | 30 | 3509 | 1.9 | | | |
| | 70 | 116 | 40 | 3862 | 1.4 | | | |
| | 56 | 139 | 50 | 4160 | 1.1 | | | |
| | 46.7 | 160 | 60 | 4421 | 0.9 | | | |
| 1.1 | 90 | 100 | 10 | 3551 | 2.3 | MRDV075 | 90L6 | 55 |
| | 60 | 144 | 15 | 4065 | 1.6 | | | |
| | 45 | 184 | 20 | 4474 | 1.3 | | | |
| | 36 | 225 | 25 | 4820 | 1 | | | |
| | 30 | 256 | 30 | 5122 | 1 | | | |
| 1.1 | 93.3 | 96 | 15 | 3509 | 2.1 | MRDV075 | 90S4 | 55 |
| | 70 | 123 | 20 | 3862 | 1.7 | | | |
| | 56 | 150 | 25 | 4160 | 1.3 | | | |
| | 46.7 | 171 | 30 | 4421 | 1.3 | | | |
| | 35 | 216 | 40 | 4865 | 1 | | | |
| 1.1 | 35 | 207 | 80 | 5383 | 1.1 | MRDV090 | 8022 | 56 |
| | 28 | 244 | 100 | 5799 | 0.8 | | | |
| 1.1 | 36 | 231 | 25 | 5333 | 1.6 | MRDV090 | 90L6 | 56 |
| | 30 | 263 | 30 | 5667 | 1.8 | | | |
| | 22.5 | 331 | 40 | 6238 | 1.2 | | | |
| | 18 | 397 | 50 | 6719 | 1 | | | |
| | 15 | 448 | 60 | 7140 | 0.8 | | | |
| 1.1 | 35 | 225 | 40 | 5383 | 1.6 | MRDV090 | 90S4 | 56 |
| | 28 | 270 | 50 | 5799 | 1.3 | | | |
| | 23.3 | 311 | 60 | 6163 | 1 | | | |
| 1.1 | 22.5 | 345 | 40 | 7882 | 2.3 | MRDV110 | 90L6 | 57 |
| | 18 | 414 | 50 | 8491 | 1.8 | | | |
| | 15 | 476 | 60 | 9023 | 1.4 | | | |
| | 11.3 | 588 | 80 | 9931 | 1 | | | |
| 1.1 | 28 | 281 | 50 | 7328 | 2.3 | MRDV110 | 90S4 | 57 |
| | 23.3 | 324 | 60 | 7787 | 1.9 | | | |
| | 17.5 | 402 | 80 | 8571 | 1.3 | | | |
| | 14 | 473 | 100 | 9232 | 1 | | | |
| 1.1 | 12.4 | 576 | 73 | 9614 | 2.2 | PC090+MRDV110 | 90L6 | 61 |
| | 9.3 | 746 | 96.8 | 10320 | 1.6 | | | |
| | 7.4 | 890 | 121 | 10320 | 1.2 | | | |
| | 6.2 | 1000 | 145.2 | 10320 | 1 | | | |
| 1.1 | 19.3 | 392 | 73 | 8298 | 2.5 | PC090+MRDV110 | 90S4 | 61 |
| | 14.5 | 508 | 96.8 | 9133 | 1.8 | | | |
| | 11.6 | 599 | 121 | 9838 | 1.5 | | | |
| | 9.6 | 686 | 145.2 | 10320 | 1.1 | | | |
| | 7.2 | 828 | 193.6 | 10320 | 0.8 | | | |

| $P_1$ (Kw) | $n_2$ ($min^{-1}$) | $M_2$ (Nm) | i | $Fr_2$ (N) | fs | MRDV | MOTORE ELETTRICO | N. PAGINA DISEGNI |
|---|---|---|---|---|---|---|---|---|
| 1.1 | 9.3 | 654 | 300 | 10320 | 1.9 | MRDV050+110 | 8022 | 64 |
| | 7 | 845 | 400 | 10320 | 1.4 | | | |
| | 5.6 | 1007 | 500 | 10320 | 1.1 | | | |
| 1.1 | 11.3 | 598 | 80 | 12989 | 1.4 | MRDV130 | 90L6 | 58 |
| | 9 | 689 | 100 | 13500 | 1.1 | | | |
| 1.1 | 17.5 | 408 | 80 | 11210 | 2.1 | MRDV130 | 90S4 | 58 |
| | 14 | 480 | 100 | 12076 | 1.5 | | | |
| 1.1 | 12.4 | 585 | 73 | 12575 | 3 | PC090+MRDV130 | 90L6 | 61 |
| | 9.3 | 746 | 96.8 | 13500 | 2.2 | | | |
| | 7.4 | 890 | 121 | 13500 | 1.7 | | | |
| | 6.2 | 1000 | 145.2 | 13500 | 1.4 | | | |
| | 4.6 | 1220 | 193.6 | 13500 | 1 | | | |
| 1.1 | 19.3 | 398 | 73 | 10853 | 3.5 | PC090+MRDV130 | 90S4 | 61 |
| | 14.5 | 508 | 96.8 | 11945 | 2.6 | | | |
| | 11.6 | 608 | 121 | 12868 | 2 | | | |
| | 9.6 | 686 | 145.2 | 13500 | 1.6 | | | |
| | 7.2 | 843 | 193.6 | 13500 | 1.2 | | | |
| | 5.8 | 962 | 242 | 13500 | 0.9 | | | |
| 1.1 | 4.7 | 1312 | 300 | 13500 | 1.3 | MRDV063+130 | 90S4 | 64 |
| | 3.5 | 1671 | 400 | 13500 | 1 | | | |
| | 2.8 | 1991 | 500 | 13500 | 0.8 | | | |
| 1.5 | 373.3 | 35 | 7.5 | 1433 | 1.5 | MRDV050 | 80C2 | 53 |
| | 280 | 45 | 10 | 1577 | 1.2 | | | |
| | 186.7 | 65 | 15 | 1805 | 0.9 | | | |
| 1.5 | 186.7 | 68 | 7.5 | 2359 | 1.9 | MRDV063 | 90L4 | 54 |
| | 140 | 89 | 10 | 2597 | 1.5 | | | |
| | 93.3 | 127 | 15 | 2973 | 1.1 | | | |
| | 70 | 166 | 20 | 3272 | 0.8 | | | |
| 1.5 | 373.3 | 35 | 7.5 | 1873 | 2.7 | MRDV063 | 90S2 | 54 |
| | 280 | 46 | 10 | 2061 | 2.1 | | | |
| | 186.7 | 66 | 15 | 2359 | 1.6 | | | |
| | 140 | 86 | 20 | 2597 | 1.2 | | | |
| | 112 | 105 | 25 | 2797 | 0.9 | | | |
| | 93.3 | 120 | 30 | 2973 | 1 | | | |
| 1.5 | 120 | 105 | 7.5 | 3227 | 2 | MRDV075 | 100L6 | 55 |
| | 90 | 137 | 10 | 3551 | 1.7 | | | |
| | 60 | 196 | 15 | 4065 | 1.2 | | | |
| 1.5 | 56 | 189 | 50 | 4160 | 0.8 | MRDV075 | 90S2 | 55 |
| | 46.7 | 218 | 60 | 4421 | 0.7 | | | |
| | 280 | 46 | 10 | 2433 | 3.1 | | | |
| | 186.7 | 67 | 15 | 2785 | 2.2 | | | |
| | 140 | 87 | 20 | 3065 | 1.8 | | | |
| | 112 | 106 | 25 | 3302 | 1.4 | | | |
| | 93.3 | 123 | 30 | 3509 | 1.4 | | | |
| | 70 | 158 | 40 | 3862 | 1 | | | |
| 1.5 | 140 | 90 | 10 | 3065 | 2.2 | MRDV075 | 90L4 | 55 |
| | 93.3 | 130 | 15 | 3509 | 1.5 | | | |
| | 70 | 168 | 20 | 3862 | 1.3 | | | |
| | 56 | 205 | 25 | 4160 | 1 | | | |
| | 46.7 | 233 | 30 | 4421 | 1 | | | |
| 1.5 | 90 | 138 | 10 | 3929 | 2.7 | MRDV090 | 100L6 | 56 |
| | 60 | 201 | 15 | 4498 | 2.1 | | | |
| | 45 | 258 | 20 | 4951 | 1.5 | | | |
| | 36 | 314 | 25 | 5333 | 1.2 | | | |
| | 30 | 358 | 30 | 5667 | 1.3 | | | |

| $P_1$ (Kw) | $n_2$ ($min^{-1}$) | $M_2$ (Nm) | i | $Fr_2$ (N) | fs | MRDV | MOTORE ELETTRICO | N. PAGINA DISEGNI |
|---|---|---|---|---|---|---|---|---|
| 1.5 | 70 | 172 | 20 | 4273 | 2.1 | MRDV090 | 90L4 | 56 |
| | 56 | 210 | 25 | 4603 | 1.6 | | | |
| | 46.7 | 239 | 30 | 4891 | 1.7 | | | |
| | 35 | 307 | 40 | 5383 | 1.2 | | | |
| | 28 | 368 | 50 | 5799 | 0.9 | | | |
| | 23.3 | 424 | 60 | 6163 | 0.8 | | | |
| 1.5 | 56 | 194 | 50 | 4603 | 1.4 | MRDV090 | 90S2 | 56 |
| | 46.7 | 227 | 60 | 4891 | 1.1 | | | |
| 1.5 | 45 | 264 | 20 | 6256 | 2.7 | MRDV110 | 100L6 | 57 |
| | 36 | 322 | 25 | 6739 | 2.4 | | | |
| | 30 | 363 | 30 | 7161 | 2.3 | | | |
| | 22.5 | 471 | 40 | 7882 | 1.7 | | | |
| | 18 | 565 | 50 | 8491 | 1.3 | | | |
| | 15 | 649 | 60 | 9023 | 1.1 | | | |
| 1.5 | 35 | 319 | 40 | 6803 | 2.2 | MRDV110 | 90L4 | 57 |
| | 28 | 384 | 50 | 7328 | 1.7 | | | |
| | 23.3 | 442 | 60 | 7787 | 1.4 | | | |
| | 17.5 | 548 | 80 | 8571 | 0.9 | | | |
| 1.5 | 46.7 | 236 | 60 | 6181 | 2 | MRDV110 | 90S2 | 57 |
| | 35 | 299 | 80 | 6803 | 1.3 | | | |
| | 28 | 353 | 100 | 7328 | 1 | | | |
| 1.5 | 19.3 | 535 | 73 | 8298 | 1.9 | PC090+MRDV110 | 90L4 | 61 |
| | 14.5 | 693 | 96.8 | 9133 | 1.3 | | | |
| | 11.6 | 817 | 121 | 9838 | 1.1 | | | |
| | 9.6 | 936 | 145.2 | 10320 | 0.8 | | | |
| 1.5 | 9.3 | 891 | 300 | 10320 | 1.4 | MRDV050+110 | 90S2 | 64 |
| | 7 | 1153 | 400 | 10320 | 1 | | | |
| | 5.6 | 1373 | 500 | 10320 | 0.8 | | | |
| 1.5 | 22.5 | 478 | 40 | 10309 | 2.3 | MRDV130 | 100L6 | 58 |
| | 18 | 573 | 50 | 11105 | 1.8 | | | |
| | 15 | 659 | 60 | 11801 | 1.4 | | | |
| | 11.3 | 815 | 80 | 12989 | 1.1 | | | |
| 1.5 | 17.5 | 557 | 80 | 11210 | 1.5 | MRDV130 | 90L4 | 58 |
| | 14 | 655 | 100 | 12076 | 1.1 | | | |
| 1.5 | 19.3 | 542 | 73 | 10853 | 2.6 | PC090+MRDV130 | 90L4 | 61 |
| | 14.5 | 693 | 96.8 | 11945 | 1.9 | | | |
| | 11.6 | 830 | 121 | 12868 | 1.5 | | | |
| | 9.6 | 936 | 145.2 | 13500 | 1.1 | | | |
| | 7.2 | 1149 | 194 | 13500 | 0.8 | | | |
| 1.5 | 9.3 | 915 | 300 | 13500 | 1.9 | MRDV063+130 | 90S2 | 64 |
| | 7 | 1166 | 400 | 13500 | 1.4 | | | |
| | 5.6 | 1389 | 500 | 13500 | 1.1 | | | |
| 1.5 | 4.7 | 1789 | 300 | 13500 | 1 | MRDV063+130 | 90L4 | 64 |
| | 3.5 | 2279 | 400 | 13500 | 0.7 | | | |
| 2.2 | 373.3 | 51 | 7.5 | 1873 | 1.8 | MRDV063 | 90L2 | 54 |
| | 280 | 67 | 10 | 2061 | 1.5 | | | |
| | 186.7 | 97 | 15 | 2359 | 1.1 | | | |
| 2.2 | 186.7 | 100 | 7.5 | 2785 | 1.8 | MRDV075 | 100L4 | 55 |
| | 140 | 132 | 10 | 3065 | 1.5 | | | |
| | 93.3 | 191 | 15 | 3509 | 1 | | | |
| 2.2 | 373.3 | 51 | 7.5 | 2210 | 2.5 | MRDV075 | 90L2 | 55 |
| | 280 | 68 | 10 | 2433 | 2.1 | | | |
| | 186.7 | 98 | 15 | 2785 | 1.5 | | | |
| | 140 | 128 | 20 | 3065 | 1.3 | | | |
| | 112 | 156 | 25 | 3302 | 1 | | | |
| | 93.3 | 180 | 30 | 3509 | 0.9 | | | |

| $P_1$ (Kw) | $n_2$ ($min^{-1}$) | $M_2$ (Nm) | i | $Fr_2$ (N) | fs | MRDV | MOTORE ELETTRICO | N. PAGINA DISEGNI |
|---|---|---|---|---|---|---|---|---|
| 2.2 | 186.7 | 101 | 7.5 | 3081 | 2.9 | MRDV090 | 100LA4 | 56 |
| | 140 | 134 | 10 | 3391 | 2.3 | | | |
| | 93.3 | 194 | 15 | 3882 | 1.9 | | | |
| | 70 | 252 | 20 | 4273 | 1.4 | | | |
| | 56 | 308 | 25 | 4603 | 1.1 | | | |
| | 46.7 | 351 | 30 | 4891 | 1.2 | | | |
| 2.2 | 120 | 156 | 7.5 | 3570 | 2.2 | MRDV090 | 112M6 | 56 |
| | 90 | 203 | 10 | 3929 | 1.8 | | | |
| | 60 | 294 | 15 | 4498 | 1.4 | | | |
| | 45 | 378 | 20 | 4951 | 1 | | | |
| 2.2 | 140 | 131 | 20 | 3391 | 2 | MRDV090 | 90L2 | 56 |
| | 112 | 159 | 25 | 3653 | 1.6 | | | |
| | 93.3 | 185 | 30 | 3882 | 1.7 | | | |
| | 70 | 237 | 40 | 4273 | 1.2 | | | |
| | 56 | 285 | 50 | 4603 | 0.9 | | | |
| 2.2 | 70 | 255 | 20 | 5399 | 2.5 | MRDV110 | 100LA4 | 57 |
| | 56 | 315 | 25 | 5816 | 2.2 | | | |
| | 46.7 | 356 | 30 | 6181 | 2 | | | |
| | 35 | 468 | 40 | 6803 | 1.5 | | | |
| | 28 | 563 | 50 | 7328 | 1.2 | | | |
| | 23.3 | 648 | 60 | 7787 | 1 | | | |
| 2.2 | 90 | 205 | 10 | 4965 | 3.5 | MRDV110 | 112M6 | 57 |
| | 60 | 298 | 15 | 5684 | 2.6 | | | |
| | 45 | 388 | 20 | 6256 | 1.9 | | | |
| | 36 | 473 | 25 | 6739 | 1.6 | | | |
| | 30 | 532 | 30 | 7161 | 1.6 | | | |
| 2.2 | 112 | 163 | 25 | 4616 | 3.1 | MRDV110 | 90L2 | 57 |
| | 93.3 | 187 | 30 | 4905 | 3 | | | |
| | 70 | 246 | 40 | 5399 | 2.1 | | | |
| | 56 | 296 | 50 | 5816 | 1.7 | | | |
| | 46.7 | 347 | 60 | 6181 | 1.4 | | | |
| 2.2 | 38.6 | 398 | 73 | 6586 | 2.1 | PC090+MRDV110 | 90L2 | 61 |
| | 28.9 | 516 | 96.8 | 7249 | 1.5 | | | |
| | 23.1 | 617 | 121 | 7809 | 1.2 | | | |
| 2.2 | 35 | 468 | 40 | 8897 | 2.2 | MRDV130 | 100LA4 | 58 |
| | 28 | 563 | 50 | 9584 | 1.7 | | | |
| | 23.3 | 648 | 60 | 10185 | 1.4 | | | |
| | 17.5 | 816 | 80 | 11210 | 1 | | | |
| 2.2 | 36 | 479 | 25 | 8814 | 2.2 | MRDV130 | 112M6 | 58 |
| | 30 | 546 | 30 | 9366 | 2.1 | | | |
| | 22.5 | 700 | 40 | 10309 | 1.6 | | | |
| | 18 | 840 | 50 | 11105 | 1.2 | | | |
| | 15 | 966 | 60 | 11801 | 1 | | | |
| 2.2 | 35 | 438 | 80 | 8897 | 1.3 | MRDV130 | 90L2 | 58 |
| | 28 | 525 | 100 | 9584 | 1 | | | |
| 2.2 | 38.6 | 409 | 73 | 8614 | 2.9 | PC090+MRDV130 | 90L2 | 61 |
| | 28.9 | 545 | 96.8 | 9481 | 2 | | | |
| | 23.1 | 654 | 121 | 10213 | 1.6 | | | |
| | 19.3 | 752 | 145.2 | 10853 | 1.3 | | | |
| 3 | 373.3 | 70 | 7.5 | 2210 | 1.9 | MRDV075 | 100L2 | 55 |
| | 280 | 92 | 10 | 2433 | 1.6 | | | |
| 3 | 186.7 | 137 | 7.5 | 2785 | 1.4 | MRDV075 | 100LB4 | 55 |
| | 140 | 180 | 10 | 3065 | 1.1 | | | |
| | 93.3 | 261 | 15 | 3509 | 0.8 | | | |
| 3 | 373.3 | 71 | 7.5 | 2446 | 3 | MRDV090 | 100L2 | 56 |
| | 280 | 92 | 10 | 2692 | 2.6 | | | |

| $P_1$ (Kw) | $n_2$ ($min^{-1}$) | $M_2$ (Nm) | i | $Fr_2$ (N) | fs | MRDV | MOTORE ELETTRICO | N. PAGINA DISEGNI |
|---|---|---|---|---|---|---|---|---|
| 3 | 186.7 | 138 | 7.5 | 3081 | 2.1 | MRDV090 | 100BL4 | 56 |
| | 140 | 182 | 10 | 3391 | 1.7 | | | |
| | 93.3 | 264 | 15 | 3882 | 1.4 | | | |
| | 70 | 344 | 20 | 4273 | 1 | | | |
| | 56 | 420 | 25 | 4603 | 0.8 | | | |
| | 46.7 | 479 | 30 | 4891 | 0.9 | | | |
| 3 | 93.3 | 264 | 15 | 4905 | 2.5 | MRDV110 | 100LB4 | 57 |
| | 70 | 348 | 20 | 5399 | 1.9 | | | |
| | 56 | 430 | 25 | 5816 | 1.6 | | | |
| | 46.7 | 485 | 30 | 6181 | 1.5 | | | |
| | 35 | 638 | 40 | 6803 | 1.1 | | | |
| | 28 | 767 | 50 | 7328 | 0.9 | | | |
| 3 | 120 | 212 | 7.5 | 4511 | 3.1 | MRDV110 | 132S6 | 57 |
| | 90 | 280 | 10 | 4965 | 2.5 | | | |
| | 60 | 406 | 15 | 5684 | 1.9 | | | |
| | 45 | 528 | 20 | 6256 | 1.4 | | | |
| 3 | 56 | 430 | 25 | 7607 | 2.2 | MRDV130 | 100LB4 | 58 |
| | 46.7 | 491 | 30 | 8084 | 2.1 | | | |
| | 35 | 638 | 40 | 8897 | 1.6 | | | |
| | 28 | 767 | 50 | 9584 | 1.3 | | | |
| | 23.3 | 884 | 60 | 10185 | 1 | | | |
| | 17.5 | 1113 | 80 | 11210 | 0.8 | | | |
| 3 | 90 | 280 | 10 | 6494 | 3.4 | MRDV130 | 132S6 | 58 |
| | 60 | 406 | 15 | 7434 | 2.6 | | | |
| | 45 | 535 | 20 | 8182 | 1.9 | | | |
| | 36 | 653 | 25 | 8814 | 1.6 | | | |
| | 30 | 745 | 30 | 9366 | 1.6 | | | |
| | 22.5 | 955 | 40 | 10309 | 1.2 | | | |
| 4 | 373.3 | 93 | 7.5 | 2210 | 1.4 | MRDV075 | 112M2 | 55 |
| | 280 | 123 | 10 | 2433 | 1.2 | | | |
| 4 | 186.7 | 182 | 7.5 | 2785 | 1 | MRDV075 | 112M4 | 55 |
| | 140 | 240 | 10 | 3065 | 0.8 | | | |
| 4 | 373.3 | 94 | 7.5 | 2446 | 2.2 | MRDV090 | 112M2 | 56 |
| | 280 | 123 | 10 | 2692 | 1.9 | | | |
| 4 | 186.7 | 184 | 7.5 | 3081 | 1.6 | MRDV090 | 112M4 | 56 |
| | 140 | 243 | 10 | 3391 | 1.3 | | | |
| | 93.3 | 352 | 15 | 3882 | 1 | | | |
| | 70 | 458 | 20 | 4273 | 0.8 | | | |
| 4 | 140 | 243 | 10 | 4285 | 2.5 | MRDV110 | 112M4 | 57 |
| | 93.3 | 352 | 15 | 4905 | 1.9 | | | |
| | 70 | 464 | 20 | 5399 | 1.4 | | | |
| | 56 | 573 | 25 | 5816 | 1.2 | | | |
| | 46.7 | 647 | 30 | 6181 | 1.1 | | | |
| 4 | 120 | 283 | 7.5 | 4511 | 2.3 | MRDV110 | 132MA6 | 57 |
| | 90 | 374 | 10 | 4965 | 1.9 | | | |
| | 60 | 541 | 15 | 5684 | 1.4 | | | |
| 4 | 56 | 573 | 25 | 7607 | 1.6 | MRDV130 | 112M4 | 58 |
| | 46.7 | 655 | 30 | 8084 | 1.6 | | | |
| | 35 | 851 | 40 | 8897 | 1.2 | | | |
| | 28 | 1023 | 50 | 9584 | 1 | | | |
| | 23.3 | 1179 | 60 | 10185 | 0.8 | | | |
| 4 | 120 | 287 | 7.5 | 5901 | 3.1 | MRDV130 | 132MA6 | 58 |
| | 90 | 374 | 10 | 6494 | 2.6 | | | |
| | 60 | 541 | 15 | 7434 | 2 | | | |
| | 45 | 713 | 20 | 8182 | 1.5 | | | |
| | 36 | 870 | 25 | 8814 | 1.2 | | | |

| $P_1$ (Kw) | $n_2$ ($min^{-1}$) | $M_2$ (Nm) | i | $Fr_2$ (N) | fs | MRDV | MOTORE ELETTRICO | N. PAGINA DISEGNI |
|---|---|---|---|---|---|---|---|---|
| 5.5 | 186.7 | 253 | 7.5 | 3893 | 2.2 | MRDV110 | 132S4 | 57 |
| | 140 | 334 | 10 | 4285 | 1.8 | | | |
| | 93.3 | 484 | 15 | 4905 | 1.4 | | | |
| | 70 | 638 | 20 | 5399 | 1 | | | |
| 5.5 | 140 | 334 | 10 | 5605 | 2.5 | MRDV130 | 132S4 | 58 |
| | 93.3 | 490 | 15 | 6416 | 1.9 | | | |
| | 70 | 645 | 20 | 7062 | 1.4 | | | |
| | 56 | 788 | 25 | 7607 | 1.2 | | | |
| | 46.7 | 900 | 30 | 8084 | 1.2 | | | |
| | 35 | 1171 | 40 | 8897 | 0.9 | | | |
| 7.5 | 186.7 | 345 | 7.5 | 3893 | 1.6 | MRDV110 | 132M4 | 57 |
| | 140 | 455 | 10 | 4285 | 1.3 | | | |
| | 93.3 | 660 | 15 | 4905 | 1 | | | |
| 7.5 | 186.7 | 349 | 7.5 | 5092 | 2.1 | MRDV130 | 132M4 | 58 |
| | 140 | 455 | 10 | 5605 | 1.8 | | | |
| | 93.3 | 668 | 15 | 6416 | 1.4 | | | |
| | 70 | 880 | 20 | 7062 | 1 | | | |
| | 56 | 1074 | 25 | 7607 | 0.9 | | | |
| | 46.7 | 1228 | 30 | 8084 | 0.8 | | | |
| | 35 | 1596 | 40 | 8897 | 0.7 | | | |

| $M_2$ (Nm) | i | $P_1$ (Kw) | $n_2$ ($min^{-1}$) | $Fr_2$ (N) | $Fr_1$ (N) | RDV ($n_1$ = 2800) | N. PAGINA DISEGNI |
|---|---|---|---|---|---|---|---|
| 13 | 7.5 | 0.58 | 373.3 | 542 | 125 | RDV030 | 51 |
| 13 | 10 | 0.45 | 280 | 597 | 140 | | |
| 13 | 15 | 0.31 | 186.7 | 683 | 140 | | |
| 12 | 20 | 0.23 | 140 | 752 | 146 | | |
| 16 | 25 | 0.25 | 112 | 810 | 210 | | |
| 15 | 30 | 0.21 | 93.3 | 861 | 210 | | |
| 14 | 40 | 0.16 | 70 | 948 | 127 | | |
| 13 | 50 | 0.12 | 56 | 1021 | 128 | | |
| 12 | 60 | 0.1 | 46.7 | 1085 | 126 | | |
| 11 | 80 | 0.08 | 35 | 1194 | 130 | | |
| 28 | 7.5 | 1.2 | 373.3 | 1044 | 233 | RDV040 | 52 |
| 29 | 10 | 1 | 280 | 1149 | 272 | | |
| 31 | 15 | 0.72 | 186.7 | 1315 | 291 | | |
| 29 | 20 | 0.52 | 140 | 1447 | 204 | | |
| 28 | 25 | 0.42 | 112 | 1559 | 236 | | |
| 34 | 30 | 0.44 | 93.3 | 1657 | 350 | | |
| 31 | 40 | 0.32 | 70 | 1824 | 350 | | |
| 30 | 50 | 0.26 | 56 | 1964 | 350 | | |
| 28 | 60 | 0.21 | 46.7 | 2087 | 350 | | |
| 25 | 80 | 0.16 | 35 | 2298 | 350 | | |
| 23 | 100 | 0.12 | 28 | 2475 | 350 | | |
| 52 | 7.5 | 2.3 | 373.3 | 1433 | 324 | RDV050 | 53 |
| 54 | 10 | 1.8 | 280 | 1577 | 378 | | |
| 57 | 15 | 1.3 | 186.7 | 1805 | 399 | | |
| 53 | 20 | 0.95 | 140 | 1987 | 417 | | |
| 51 | 25 | 0.75 | 112 | 2140 | 482 | | |
| 64 | 30 | 0.82 | 93.3 | 2274 | 490 | | |
| 59 | 40 | 0.59 | 70 | 2503 | 490 | | |
| 53 | 50 | 0.45 | 56 | 2696 | 490 | | |
| 50 | 60 | 0.37 | 46.7 | 2865 | 490 | | |
| 45 | 80 | 0.27 | 35 | 3153 | 490 | | |
| 40 | 100 | 0.21 | 28 | 3397 | 490 | | |
| 93 | 7.5 | 4 | 373.3 | 1873 | 395 | RDV063 | 54 |
| 97 | 10 | 3.2 | 280 | 2061 | 463 | | |
| 103 | 15 | 2.3 | 186.7 | 2359 | 492 | | |
| 100 | 20 | 1.7 | 140 | 2597 | 538 | | |
| 92 | 25 | 1.3 | 112 | 2797 | 593 | | |
| 120 | 30 | 1.5 | 93.3 | 2973 | 700 | | |
| 108 | 40 | 1.1 | 70 | 3272 | 700 | | |
| 100 | 50 | 0.83 | 56 | 3524 | 700 | | |
| 95 | 60 | 0.68 | 46.7 | 3745 | 700 | | |
| 85 | 80 | 0.49 | 35 | 4122 | 700 | | |
| 74 | 100 | 0.37 | 28 | 4440 | 700 | | |
| 130 | 7.5 | 5.6 | 373.3 | 2210 | 560 | RDV075 | 55 |
| 145 | 10 | 4.7 | 280 | 2433 | 703 | | |
| 150 | 15 | 3.4 | 186.7 | 2785 | 727 | | |
| 160 | 20 | 2.8 | 140 | 3065 | 872 | | |
| 150 | 25 | 2.1 | 112 | 3302 | 980 | | |
| 170 | 30 | 2.1 | 93.3 | 3509 | 980 | | |
| 165 | 40 | 1.6 | 70 | 3862 | 980 | | |
| 150 | 50 | 1.2 | 56 | 4160 | 980 | | |
| 145 | 60 | 1 | 46.7 | 4421 | 980 | | |
| 130 | 80 | 0.72 | 35 | 4865 | 980 | | |
| 120 | 100 | 0.58 | 28 | 5241 | 980 | | |

| $M_2$ (Nm) | i | $P_1$ (Kw) | $n_2$ ($min^{-1}$) | $Fr_2$ (N) | $Fr_1$ (N) | RDV ($n_1$ = 2800) | N. PAGINA DISEGNI |
|---|---|---|---|---|---|---|---|
| 210 | 7.5 | 8.9 | 373.3 | 2446 | 715 | | |
| 235 | 10 | 7.7 | 280 | 2692 | 900 | | |
| 270 | 15 | 6 | 186.7 | 3081 | 1034 | | |
| 260 | 20 | 4.4 | 140 | 3391 | 1120 | | |
| 250 | 25 | 3.4 | 112 | 3653 | 1270 | | |
| 310 | 30 | 3.7 | 93.3 | 3882 | 1270 | **RDV090** | **56** |
| 275 | 40 | 2.6 | 70 | 4273 | 1270 | | |
| 265 | 50 | 2 | 56 | 4603 | 1270 | | |
| 245 | 60 | 1.6 | 46.7 | 4891 | 1270 | | |
| 225 | 80 | 1.2 | 35 | 5383 | 1270 | | |
| 200 | 100 | 0.9 | 28 | 5799 | 1270 | | |
| 391 | 7.5 | 16.6 | 373.3 | 3090 | 950 | | |
| 437 | 10 | 14.1 | 280 | 3401 | 1194 | | |
| 489 | 15 | 10.7 | 186.7 | 3893 | 1337 | | |
| 483 | 20 | 8 | 140 | 4285 | 1485 | | |
| 506 | 25 | 6.8 | 112 | 4616 | 1700 | | |
| 552 | 30 | 6.5 | 93.3 | 4905 | 1700 | **RDV110** | **57** |
| 529 | 40 | 4.7 | 70 | 5399 | 1700 | | |
| 495 | 50 | 3.7 | 56 | 5816 | 1700 | | |
| 473 | 60 | 3 | 46.7 | 6181 | 1700 | | |
| 399 | 80 | 2 | 35 | 6803 | 1700 | | |
| 368 | 100 | 1.6 | 28 | 7328 | 1700 | | |
| 520 | 7.5 | 22.1 | 373.3 | 4042 | 1190 | | |
| 580 | 10 | 18.7 | 280 | 4449 | 1493 | | |
| 670 | 15 | 14.7 | 186.7 | 5092 | 1725 | | |
| 660 | 20 | 11 | 140 | 5605 | 1912 | | |
| 670 | 25 | 9 | 112 | 6038 | 2100 | | |
| 770 | 30 | 9 | 93.3 | 6416 | 2100 | **RDV130** | **58** |
| 730 | 40 | 6.5 | 70 | 7062 | 2100 | | |
| 700 | 50 | 5.1 | 56 | 7607 | 2100 | | |
| 640 | 60 | 4 | 46.7 | 8084 | 2100 | | |
| 590 | 80 | 3 | 35 | 8897 | 2100 | | |
| 520 | 100 | 2.2 | 28 | 9584 | 2100 | | |
| 840 | 7.5 | 35.7 | 373.3 | 5526 | 1550 | | |
| 890 | 10 | 28.4 | 280 | 6082 | 1848 | | |
| 910 | 15 | 19.8 | 186.7 | 6962 | 1889 | | |
| 980 | 20 | 16.1 | 140 | 7663 | 2289 | | |
| 890 | 25 | 12 | 112 | 8254 | 2494 | | |
| 920 | 30 | 10.5 | 93.3 | 8771 | 2800 | **RDV150** | **58** |
| 1200 | 40 | 10.6 | 70 | 9654 | 2800 | | |
| 1100 | 50 | 8.1 | 56 | 10400 | 2800 | | |
| 990 | 60 | 6.2 | 46.7 | 11051 | 2800 | | |
| 920 | 80 | 4.6 | 35 | 12163 | 2800 | | |
| 810 | 100 | 3.3 | 28 | 13103 | 2800 | | |

| $M_2$ (Nm) | i | $P_1$ (Kw) | $n_2$ ($min^{-1}$) | $Fr_2$ (N) | $Fr_1$ (N) | RDV ($n_1$ = 1400) | N. PAGINA DISEGNI |
|---|---|---|---|---|---|---|---|
| 18 | 7.5 | 0.41 | 186.7 | 683 | 150 | RDV030 | 51 |
| 18 | 10 | 0.32 | 140 | 752 | 169 | | |
| 18 | 15 | 0.23 | 93.3 | 861 | 169 | | |
| 18 | 20 | 0.18 | 70 | 948 | 190 | | |
| 21 | 25 | 0.18 | 56 | 1021 | 210 | | |
| 20 | 30 | 0.15 | 46.7 | 1085 | 210 | | |
| 18 | 40 | 0.11 | 35 | 1194 | 210 | | |
| 17 | 50 | 0.09 | 28 | 1286 | 210 | | |
| 16 | 60 | 0.08 | 23.3 | 1367 | 210 | | |
| 13 | 80 | 0.05 | 17.5 | 1504 | 210 | | |
| 40 | 7.5 | 0.9 | 186.7 | 1315 | 294 | RDV040 | 52 |
| 40 | 10 | 0.69 | 140 | 1447 | 331 | | |
| 40 | 15 | 0.48 | 93.3 | 1657 | 331 | | |
| 39 | 20 | 0.37 | 70 | 1824 | 350 | | |
| 38 | 25 | 0.3 | 56 | 1964 | 350 | | |
| 45 | 30 | 0.31 | 46.7 | 2087 | 350 | | |
| 41 | 40 | 0.23 | 35 | 2298 | 350 | | |
| 39 | 50 | 0.18 | 28 | 2475 | 350 | | |
| 36 | 60 | 0.15 | 23.3 | 2630 | 350 | | |
| 33 | 80 | 0.12 | 17.5 | 2895 | 350 | | |
| 29 | 100 | 0.09 | 14 | 3118 | 350 | | |
| 71 | 7.5 | 1.6 | 186.7 | 1805 | 401 | RDV050 | 53 |
| 72 | 10 | 1.2 | 140 | 1987 | 490 | | |
| 74 | 15 | 0.88 | 93.3 | 2274 | 490 | | |
| 73 | 20 | 0.68 | 70 | 2503 | 490 | | |
| 70 | 25 | 0.54 | 56 | 2696 | 490 | | |
| 84 | 30 | 0.57 | 46.7 | 2865 | 490 | | |
| 76 | 40 | 0.42 | 35 | 3153 | 490 | | |
| 73 | 50 | 0.34 | 28 | 3397 | 490 | | |
| 68 | 60 | 0.28 | 23.3 | 3610 | 490 | | |
| 65 | 80 | 0.22 | 17.5 | 3973 | 490 | | |
| 55 | 100 | 0.16 | 14 | 4280 | 490 | | |
| 128 | 7.5 | 2.8 | 186.7 | 2359 | 500 | RDV063 | 54 |
| 130 | 10 | 2.2 | 140 | 2597 | 571 | | |
| 140 | 15 | 1.6 | 93.3 | 2973 | 615 | | |
| 135 | 20 | 1.2 | 70 | 3272 | 667 | | |
| 130 | 25 | 1 | 56 | 3524 | 700 | | |
| 160 | 30 | 1.1 | 46.7 | 3745 | 700 | | |
| 145 | 40 | 0.76 | 35 | 4122 | 700 | | |
| 135 | 50 | 0.6 | 28 | 4440 | 700 | | |
| 130 | 60 | 0.51 | 23.3 | 4719 | 700 | | |
| 122 | 80 | 0.39 | 17.5 | 5193 | 700 | | |
| 118 | 100 | 0.34 | 14 | 5595 | 700 | | |
| 185 | 7.5 | 4.1 | 186.7 | 2785 | 700 | RDV075 | 55 |
| 195 | 10 | 3.2 | 140 | 3065 | 830 | | |
| 200 | 15 | 2.3 | 93.3 | 3509 | 851 | | |
| 210 | 20 | 1.9 | 70 | 3862 | 980 | | |
| 200 | 25 | 1.5 | 56 | 4160 | 980 | | |
| 230 | 30 | 1.5 | 46.7 | 4421 | 980 | | |
| 220 | 40 | 1.1 | 35 | 4865 | 980 | | |
| 210 | 50 | 0.89 | 28 | 5241 | 980 | | |
| 200 | 60 | 0.75 | 23.3 | 5569 | 980 | | |
| 190 | 80 | 0.58 | 17.5 | 6130 | 980 | | |
| 180 | 100 | 0.48 | 14 | 6603 | 980 | | |

| $M_2$ (Nm) | i | $P_1$ (Kw) | $n_2$ ($min^{-1}$) | $Fr_2$ (N) | $Fr_1$ (N) | RDV ($n_1$ = 1400) | N. PAGINA DISEGNI |
|---|---|---|---|---|---|---|---|
| 290 | 7.5 | 6.3 | 186.7 | 3081 | 900 | | |
| 310 | 10 | 5.1 | 140 | 3391 | 1082 | | |
| 360 | 15 | 4.1 | 93.3 | 3882 | 1257 | | |
| 355 | 20 | 3.1 | 70 | 4273 | 1270 | | |
| 340 | 25 | 2.4 | 56 | 4603 | 1270 | | |
| 410 | 30 | 2.6 | 46.7 | 4891 | 1270 | **RDV090** | **56** |
| 360 | 40 | 1.8 | 35 | 5383 | 1270 | | |
| 340 | 50 | 1.4 | 28 | 5799 | 1270 | | |
| 320 | 60 | 1.1 | 23.3 | 6163 | 1270 | | |
| 285 | 80 | 0.83 | 17.5 | 6783 | 1270 | | |
| 270 | 100 | 0.67 | 14 | 7306 | 1270 | | |
| 552 | 7.5 | 12 | 186.7 | 3893 | 1200 | | |
| 598 | 10 | 9.8 | 140 | 4285 | 1463 | | |
| 656 | 15 | 7.5 | 93.3 | 4905 | 1604 | | |
| 644 | 20 | 5.6 | 70 | 5399 | 1700 | | |
| 679 | 25 | 4.7 | 56 | 5816 | 1700 | | |
| 725 | 30 | 4.5 | 46.7 | 6181 | 1700 | **RDV110** | **57** |
| 702 | 40 | 3.3 | 35 | 6803 | 1700 | | |
| 660 | 50 | 2.6 | 28 | 7328 | 1700 | | |
| 616 | 60 | 2.1 | 23.3 | 7787 | 1700 | | |
| 515 | 80 | 1.4 | 17.5 | 8571 | 1700 | | |
| 483 | 100 | 1.1 | 14 | 9232 | 1700 | | |
| 750 | 7.5 | 16.1 | 186.7 | 5092 | 1500 | | |
| 820 | 10 | 13.5 | 140 | 5605 | 1845 | | |
| 920 | 15 | 10.3 | 93.3 | 6416 | 2070 | | |
| 910 | 20 | 7.8 | 70 | 7062 | 2100 | | |
| 930 | 25 | 6.5 | 56 | 7607 | 2100 | | |
| 1040 | 30 | 6.4 | 46.7 | 8084 | 2100 | **RDV130** | **58** |
| 1050 | 40 | 4.9 | 35 | 8897 | 2100 | | |
| 980 | 50 | 3.8 | 28 | 9584 | 2100 | | |
| 900 | 60 | 3.1 | 23.3 | 10185 | 2100 | | |
| 840 | 80 | 2.3 | 17.5 | 11210 | 2100 | | |
| 740 | 100 | 1.7 | 14 | 12076 | 2100 | | |
| 1200 | 7.5 | 25.8 | 186.7 | 6962 | 1950 | | |
| 1240 | 10 | 20.2 | 140 | 7663 | 2267 | | |
| 1250 | 15 | 13.9 | 93.3 | 8771 | 2285 | | |
| 1300 | 20 | 11.1 | 70 | 9654 | 2674 | | |
| 1200 | 25 | 8.4 | 56 | 10400 | 2800 | | |
| 1200 | 30 | 7.1 | 46.7 | 11051 | 2800 | **RDV150** | **58** |
| 1550 | 40 | 7.3 | 35 | 12163 | 2800 | | |
| 1400 | 50 | 5.4 | 28 | 13103 | 2800 | | |
| 1260 | 60 | 4.2 | 23.3 | 13924 | 2800 | | |
| 1150 | 80 | 3.1 | 17.5 | 15326 | 2800 | | |
| 1000 | 100 | 2.3 | 14 | 16508 | 2800 | | |

| $M_2$ (Nm) | i | $P_1$ (Kw) | $n_2$ ($min^{-1}$) | $Fr_2$ (N) | $Fr_1$ (N) | RDV ($n_1$ = 900) | N. PAGINA DISEGNI |
|---|---|---|---|---|---|---|---|
| 20 | 7.5 | 0.3 | 120 | 792 | 175 | RDV030 | 51 |
| 20 | 10 | 0.24 | 90 | 871 | 197 | | |
| 20 | 15 | 0.17 | 60 | 997 | 197 | | |
| 20 | 20 | 0.13 | 45 | 1098 | 210 | | |
| 23 | 25 | 0.14 | 36 | 1183 | 210 | | |
| 21 | 30 | 0.11 | 30 | 1257 | 210 | | |
| 20 | 40 | 0.09 | 22.5 | 1383 | 210 | | |
| 18 | 50 | 0.07 | 18 | 1490 | 210 | | |
| 17 | 60 | 0.06 | 15 | 1583 | 210 | | |
| 15 | 80 | 0.04 | 11.3 | 1743 | 210 | | |
| 44 | 7.5 | 0.65 | 120 | 1524 | 319 | RDV040 | 52 |
| 44 | 10 | 0.5 | 90 | 1677 | 350 | | |
| 45 | 15 | 0.36 | 60 | 1920 | 350 | | |
| 44 | 20 | 0.28 | 45 | 2113 | 350 | | |
| 43 | 25 | 0.23 | 36 | 2276 | 350 | | |
| 49 | 30 | 0.23 | 30 | 2419 | 350 | | |
| 45 | 40 | 0.17 | 22.5 | 2662 | 350 | | |
| 42 | 50 | 0.14 | 18 | 2868 | 350 | | |
| 39 | 60 | 0.11 | 15 | 3047 | 350 | | |
| 35 | 80 | 0.09 | 11.3 | 3354 | 350 | | |
| 32 | 100 | 0.07 | 9 | 3490 | 350 | | |
| 84 | 7.5 | 1.2 | 120 | 2091 | 448 | RDV050 | 53 |
| 84 | 10 | 0.94 | 90 | 2302 | 490 | | |
| 84 | 15 | 0.67 | 60 | 2635 | 490 | | |
| 77 | 20 | 0.48 | 45 | 2900 | 490 | | |
| 75 | 25 | 0.39 | 36 | 3124 | 490 | | |
| 90 | 30 | 0.42 | 30 | 3320 | 490 | | |
| 82 | 40 | 0.31 | 22.5 | 3654 | 490 | | |
| 77 | 50 | 0.25 | 18 | 3936 | 490 | | |
| 72 | 60 | 0.21 | 15 | 4183 | 490 | | |
| 68 | 80 | 0.16 | 11.3 | 4604 | 490 | | |
| 56 | 100 | 0.12 | 9 | 4840 | 490 | | |
| 151 | 7.5 | 2.2 | 120 | 2734 | 580 | RDV063 | 54 |
| 153 | 10 | 1.7 | 90 | 3009 | 661 | | |
| 155 | 15 | 1.2 | 60 | 3444 | 670 | | |
| 148 | 20 | 0.91 | 45 | 3791 | 700 | | |
| 137 | 25 | 0.69 | 36 | 4084 | 700 | | |
| 175 | 30 | 0.79 | 30 | 4339 | 700 | | |
| 160 | 40 | 0.58 | 22.5 | 4776 | 700 | | |
| 145 | 50 | 0.45 | 18 | 5145 | 700 | | |
| 138 | 60 | 0.37 | 15 | 5467 | 700 | | |
| 128 | 80 | 0.29 | 11.3 | 6018 | 700 | | |
| 124 | 100 | 0.25 | 9 | 6270 | 700 | | |
| 215 | 7.5 | 3.1 | 120 | 3227 | 810 | RDV075 | 55 |
| 230 | 10 | 2.5 | 90 | 3551 | 975 | | |
| 235 | 15 | 1.8 | 60 | 4065 | 980 | | |
| 235 | 20 | 1.4 | 45 | 4474 | 980 | | |
| 215 | 25 | 1.1 | 36 | 4820 | 980 | | |
| 260 | 30 | 1.1 | 30 | 5122 | 980 | | |
| 240 | 40 | 0.83 | 22.5 | 5637 | 980 | | |
| 220 | 50 | 0.65 | 18 | 6073 | 980 | | |
| 210 | 60 | 0.54 | 15 | 6453 | 980 | | |
| 200 | 80 | 0.43 | 11.3 | 7103 | 980 | | |
| 190 | 100 | 0.36 | 9 | 7380 | 980 | | |

| $M_2$ (Nm) | i | $P_1$ (Kw) | $n_2$ ($min^{-1}$) | $Fr_2$ (N) | $Fr_1$ (N) | RDV ($n_1$ = 900) | N. PAGINA DISEGNI |
|---|---|---|---|---|---|---|---|
| 340 | 7.5 | 4.8 | 120 | 3570 | 1040 | | |
| 370 | 10 | 4 | 90 | 3929 | 1270 | | |
| 420 | 15 | 3.1 | 60 | 4498 | 1270 | | |
| 390 | 20 | 2.3 | 45 | 4951 | 1270 | | |
| 370 | 25 | 1.8 | 36 | 5333 | 1270 | | |
| 460 | 30 | 1.9 | 30 | 5667 | 1270 | **RDV090** | **56** |
| 410 | 40 | 1.4 | 22.5 | 6238 | 1270 | | |
| 390 | 50 | 1.1 | 18 | 6719 | 1270 | | |
| 350 | 60 | 0.86 | 15 | 7140 | 1270 | | |
| 315 | 80 | 0.63 | 11.3 | 7859 | 1270 | | |
| 280 | 100 | 0.49 | 9 | 8180 | 1270 | | |
| 650 | 7.5 | 9.2 | 120 | 4511 | 1390 | | |
| 713 | 10 | 7.6 | 90 | 4965 | 1700 | | |
| 759 | 15 | 5.6 | 60 | 5684 | 1700 | | |
| 725 | 20 | 4.1 | 45 | 6256 | 1700 | | |
| 759 | 25 | 3.5 | 36 | 6739 | 1700 | | |
| 840 | 30 | 3.5 | 30 | 7161 | 1700 | **RDV110** | **57** |
| 794 | 40 | 2.5 | 22.5 | 7882 | 1700 | | |
| 748 | 50 | 2 | 18 | 8491 | 1700 | | |
| 682 | 60 | 1.6 | 15 | 9023 | 1700 | | |
| 567 | 80 | 1.1 | 11.3 | 9931 | 1700 | | |
| 515 | 100 | 0.84 | 9 | 10320 | 1700 | | |
| 880 | 7.5 | 12.3 | 120 | 5901 | 1740 | | |
| 960 | 10 | 10.3 | 90 | 6494 | 2100 | | |
| 1060 | 15 | 7.8 | 60 | 7434 | 2100 | | |
| 1040 | 20 | 5.8 | 45 | 8182 | 2100 | | |
| 1050 | 25 | 4.8 | 36 | 8814 | 2100 | | |
| 1170 | 30 | 4.7 | 30 | 9366 | 2100 | **RDV130** | **58** |
| 1100 | 40 | 3.5 | 22.5 | 10309 | 2100 | | |
| 1050 | 50 | 2.7 | 18 | 11105 | 2100 | | |
| 940 | 60 | 2.1 | 15 | 11801 | 2100 | | |
| 860 | 80 | 1.6 | 11.3 | 12989 | 2100 | | |
| 780 | 100 | 1.2 | 9 | 13500 | 2100 | | |
| 1400 | 7.5 | 19.5 | 120 | 8067 | 2270 | | |
| 1480 | 10 | 15.7 | 90 | 8878 | 2700 | | |
| 1450 | 15 | 10.5 | 60 | 10163 | 2645 | | |
| 1500 | 20 | 8.4 | 45 | 11186 | 2800 | | |
| 1380 | 25 | 6.3 | 36 | 12050 | 2800 | | |
| 1400 | 30 | 5.4 | 30 | 12805 | 2800 | **RDV150** | **58** |
| 1800 | 40 | 5.7 | 22.5 | 14094 | 2800 | | |
| 1600 | 50 | 4.1 | 18 | 15182 | 2800 | | |
| 1440 | 60 | 3.2 | 15 | 16133 | 2800 | | |
| 1300 | 80 | 2.4 | 11.3 | 17757 | 2800 | | |
| 1150 | 100 | 1.8 | 9 | 18000 | 2800 | | |

| $M_2$ (Nm) | i | $P_1$ (Kw) | $n_2$ ($min^{-1}$) | $Fr_2$ (N) | $Fr_1$ (N) | RDV ($n_1$ = 500) | N. PAGINA DISEGNI |
|---|---|---|---|---|---|---|---|
| 24 | 7.5 | 0.21 | 66.7 | 963 | 210 | RDV030 | 51 |
| 24 | 10 | 0.16 | 50 | 1060 | 210 | | |
| 24 | 15 | 0.12 | 33.3 | 1213 | 210 | | |
| 23 | 20 | 0.09 | 25 | 1336 | 210 | | |
| 29 | 25 | 0.1 | 20 | 1439 | 210 | | |
| 26 | 30 | 0.08 | 16.7 | 1529 | 210 | | |
| 23 | 40 | 0.06 | 12.5 | 1683 | 210 | | |
| 21 | 50 | 0.05 | 10 | 1813 | 210 | | |
| 19 | 60 | 0.04 | 8.3 | 1830 | 210 | | |
| 17 | 80 | 0.03 | 6.3 | 1830 | 210 | | |
| 54 | 7.5 | 0.45 | 66.7 | 1853 | 350 | RDV040 | 52 |
| 54 | 10 | 0.35 | 50 | 2040 | 350 | | |
| 55 | 15 | 0.26 | 33.3 | 2335 | 350 | | |
| 52 | 20 | 0.19 | 25 | 2570 | 350 | | |
| 49 | 25 | 0.15 | 20 | 2769 | 350 | | |
| 58 | 30 | 0.16 | 16.7 | 2942 | 350 | | |
| 53 | 40 | 0.12 | 12.5 | 3238 | 350 | | |
| 49 | 50 | 0.1 | 10 | 3488 | 350 | | |
| 46 | 60 | 0.08 | 8.3 | 3490 | 350 | | |
| 40 | 80 | 0.06 | 6.3 | 3490 | 350 | | |
| 36 | 100 | 0.05 | 5 | 3490 | 350 | | |
| 103 | 7.5 | 0.86 | 66.7 | 2544 | 490 | RDV050 | 53 |
| 103 | 10 | 0.67 | 50 | 2800 | 490 | | |
| 103 | 15 | 0.47 | 33.3 | 3205 | 490 | | |
| 93 | 20 | 0.33 | 25 | 3528 | 490 | | |
| 91 | 25 | 0.28 | 20 | 3800 | 490 | | |
| 108 | 30 | 0.29 | 16.7 | 4038 | 490 | | |
| 98 | 40 | 0.22 | 12.5 | 4445 | 490 | | |
| 91 | 50 | 0.17 | 10 | 4788 | 490 | | |
| 83 | 60 | 0.14 | 8.3 | 4840 | 490 | | |
| 75 | 80 | 0.11 | 6.3 | 4840 | 490 | | |
| 65 | 100 | 0.09 | 5 | 4840 | 490 | | |
| 184 | 7.5 | 1.5 | 66.7 | 3325 | 700 | RDV063 | 54 |
| 185 | 10 | 1.2 | 50 | 3660 | 700 | | |
| 187 | 15 | 0.85 | 33.3 | 4190 | 700 | | |
| 178 | 20 | 0.63 | 25 | 4611 | 700 | | |
| 164 | 25 | 0.48 | 20 | 4967 | 700 | | |
| 200 | 30 | 0.54 | 16.7 | 5279 | 700 | | |
| 185 | 40 | 0.4 | 12.5 | 5810 | 700 | | |
| 173 | 50 | 0.32 | 10 | 6259 | 700 | | |
| 160 | 60 | 0.26 | 8.3 | 6270 | 700 | | |
| 137 | 80 | 0.19 | 6.3 | 6270 | 700 | | |
| 128 | 100 | 0.16 | 5 | 6270 | 700 | | |
| 260 | 7.5 | 2.1 | 66.7 | 3925 | 980 | RDV075 | 55 |
| 270 | 10 | 1.7 | 50 | 4320 | 980 | | |
| 280 | 15 | 1.2 | 33.3 | 4945 | 980 | | |
| 285 | 20 | 0.98 | 25 | 5443 | 980 | | |
| 255 | 25 | 0.73 | 20 | 5863 | 980 | | |
| 300 | 30 | 0.77 | 16.7 | 6231 | 980 | | |
| 280 | 40 | 0.58 | 12.5 | 6858 | 980 | | |
| 250 | 50 | 0.44 | 10 | 7380 | 980 | | |
| 240 | 60 | 0.37 | 8.3 | 7380 | 980 | | |
| 215 | 80 | 0.29 | 6.3 | 7380 | 980 | | |
| 210 | 100 | 0.24 | 5 | 7380 | 980 | | |

| $M_2$ (Nm) | i | $P_1$ (Kw) | $n_2$ ($min^{-1}$) | $Fr_2$ (N) | $Fr_1$ (N) | RDV ($n_1$ = 500) | N. PAGINA DISEGNI |
|---|---|---|---|---|---|---|---|
| 410 | 7.5 | 3.3 | 66.7 | 4343 | 1270 | | |
| 435 | 10 | 2.7 | 50 | 4780 | 1270 | | |
| 490 | 15 | 2.1 | 33.3 | 5472 | 1270 | | |
| 470 | 20 | 1.6 | 25 | 6022 | 1270 | | |
| 440 | 25 | 1.2 | 20 | 6487 | 1270 | | |
| 550 | 30 | 1.4 | 16.7 | 6894 | 1270 | **RDV090** | **56** |
| 480 | 40 | 0.95 | 12.5 | 7588 | 1270 | | |
| 450 | 50 | 0.75 | 10 | 8174 | 1270 | | |
| 400 | 60 | 0.59 | 8.3 | 8180 | 1270 | | |
| 365 | 80 | 0.45 | 6.3 | 8180 | 1270 | | |
| 330 | 100 | 0.35 | 5 | 8180 | 1270 | | |
| 794 | 7.5 | 6.4 | 66.7 | 5488 | 1700 | | |
| 851 | 10 | 5.2 | 50 | 6040 | 1700 | | |
| 909 | 15 | 3.9 | 33.3 | 6914 | 1700 | | |
| 863 | 20 | 2.8 | 25 | 7610 | 1700 | | |
| 909 | 25 | 2.4 | 20 | 8198 | 1700 | | |
| 1000 | 30 | 2.4 | 16.7 | 8711 | 1700 | **RDV110** | **57** |
| 932 | 40 | 1.7 | 12.5 | 9588 | 1700 | | |
| 880 | 50 | 1.4 | 10 | 10320 | 1700 | | |
| 781 | 60 | 1.1 | 8.3 | 10320 | 1700 | | |
| 662 | 80 | 0.76 | 6.3 | 10320 | 1700 | | |
| 599 | 100 | 0.59 | 5 | 10320 | 1700 | | |
| 1080 | 7.5 | 8.6 | 66.7 | 7178 | 2100 | | |
| 1160 | 10 | 7.1 | 50 | 7900 | 2100 | | |
| 1300 | 15 | 5.5 | 33.3 | 9043 | 2100 | | |
| 1230 | 20 | 4 | 25 | 9953 | 2100 | | |
| 1200 | 25 | 3.2 | 20 | 10722 | 2100 | | |
| 1400 | 30 | 3.3 | 16.7 | 11394 | 2100 | **RDV130** | **58** |
| 1300 | 40 | 2.4 | 12.5 | 12540 | 2100 | | |
| 1220 | 50 | 1.9 | 10 | 13500 | 2100 | | |
| 1070 | 60 | 1.5 | 8.3 | 13500 | 2100 | | |
| 970 | 80 | 1.1 | 6.3 | 13500 | 2100 | | |
| 860 | 100 | 0.85 | 5 | 13500 | 2100 | | |
| 1700 | 7.5 | 13.5 | 66.7 | 9812 | 2800 | | |
| 1780 | 10 | 10.7 | 50 | 10800 | 2800 | | |
| 1730 | 15 | 7.2 | 33.3 | 12363 | 2800 | | |
| 1820 | 20 | 5.9 | 25 | 13607 | 2800 | | |
| 1630 | 25 | 4.3 | 20 | 14658 | 2800 | | |
| 1670 | 30 | 3.8 | 16.7 | 15576 | 2800 | **RDV150** | **58** |
| 2120 | 40 | 3.9 | 12.5 | 17144 | 2800 | | |
| 1870 | 50 | 2.9 | 10 | 18000 | 2800 | | |
| 1680 | 60 | 2.3 | 8.3 | 18000 | 2800 | | |
| 1530 | 80 | 1.7 | 6.3 | 18000 | 2800 | | |
| 1350 | 100 | 1.3 | 5 | 18000 | 2800 | | |

| $M_2$ (Nm) | i | $P_1$ (Kw) | $n_2$ ($min^{-1}$) | $Fr_2$ (N) | $Fr_1$ (N) | RDV + MRDV ($n_1$ = 1400) | N. PAGINA DISEGNI |
|---|---|---|---|---|---|---|---|
| 73 | 300 | 0.08 | 4.7 | 3490 | 210 | | |
| 65 | 400 | 0.06 | 3.5 | 3490 | 210 | | |
| 61 | 500 | 0.04 | 2.8 | 3490 | 210 | | |
| 73 | 600 | 0.04 | 2.3 | 3490 | 210 | | |
| 73 | 750 | 0.04 | 1.9 | 3490 | 210 | | |
| 73 | 900 | 0.03 | 1.6 | 3490 | 210 | | |
| 65 | 1200 | 0.02 | 1.2 | 3490 | 210 | **RDV030+040** | **62** |
| 73 | 1500 | 0.02 | 0.9 | 3490 | 210 | | |
| 73 | 1800 | 0.02 | 0.8 | 3490 | 210 | | |
| 65 | 2400 | 0.01 | 0.58 | 3490 | 210 | | |
| 65 | 3200 | 0.01 | 0.4 | 3490 | 210 | | |
| 33 | 4000 | 0.01 | 0.4 | 3490 | 210 | | |
| 29 | 5000 | 0.01 | 0.28 | 3490 | 210 | | |
| 145 | 300 | 0.15 | 4.7 | 4840 | 210 | | |
| 124 | 400 | 0.1 | 3.5 | 4840 | 210 | | |
| 120 | 500 | 0.09 | 2.8 | 4840 | 210 | | |
| 145 | 600 | 0.08 | 2.3 | 4840 | 210 | | |
| 145 | 750 | 0.07 | 1.9 | 4840 | 210 | | |
| 145 | 900 | 0.06 | 1.6 | 4840 | 210 | | |
| 124 | 1200 | 0.04 | 1.2 | 4840 | 210 | **RDV030+050** | **63** |
| 145 | 1500 | 0.04 | 0.93 | 4840 | 210 | | |
| 145 | 1800 | 0.04 | 0.78 | 4840 | 210 | | |
| 124 | 2400 | 0.03 | 0.6 | 4840 | 210 | | |
| 120 | 3000 | 0.02 | 0.5 | 4840 | 210 | | |
| 82 | 4000 | 0.02 | 0.35 | 4840 | 210 | | |
| 82 | 4800 | 0.02 | 0.29 | 4840 | 210 | | |
| 230 | 300 | 0.24 | 4.7 | 6270 | 210 | | |
| 230 | 400 | 0.19 | 3.5 | 6270 | 210 | | |
| 216 | 500 | 0.15 | 2.8 | 6270 | 210 | | |
| 230 | 600 | 0.13 | 2.3 | 6270 | 210 | | |
| 216 | 750 | 0.11 | 1.9 | 6270 | 210 | | |
| 198 | 900 | 0.09 | 1.6 | 6270 | 210 | | |
| 230 | 1200 | 0.08 | 1.2 | 6270 | 210 | **RDV030+063** | **63** |
| 216 | 1500 | 0.06 | 0.93 | 6270 | 210 | | |
| 198 | 1800 | 0.05 | 0.78 | 6270 | 210 | | |
| 230 | 2400 | 0.05 | 0.58 | 6270 | 210 | | |
| 216 | 3000 | 0.04 | 0.47 | 6270 | 210 | | |
| 172 | 4000 | 0.03 | 0.35 | 6270 | 210 | | |
| 150 | 5000 | 0.02 | 0.28 | 6270 | 210 | | |
| 390 | 300 | 0.36 | 4.7 | 7380 | 350 | | |
| 360 | 400 | 0.27 | 3.5 | 7380 | 350 | | |
| 320 | 500 | 0.21 | 2.8 | 7380 | 350 | | |
| 390 | 600 | 0.19 | 2.3 | 7380 | 350 | | |
| 390 | 750 | 0.16 | 1.9 | 7380 | 350 | | |
| 390 | 900 | 0.14 | 1.6 | 7380 | 350 | | |
| 360 | 1200 | 0.11 | 1.2 | 7380 | 350 | **RDV040+075** | **63** |
| 390 | 1500 | 0.1 | 0.93 | 7380 | 350 | | |
| 390 | 1800 | 0.09 | 0.78 | 7380 | 350 | | |
| 360 | 2400 | 0.07 | 0.58 | 7380 | 350 | | |
| 320 | 3000 | 0.05 | 0.47 | 7380 | 350 | | |
| 250 | 4000 | 0.04 | 0.35 | 7380 | 350 | | |
| 230 | 5000 | 0.03 | 0.28 | 7380 | 350 | | |

| $M_2$ (Nm) | i | $P_1$ (Kw) | $n_2$ ($min^{-1}$) | $Fr_2$ (N) | $Fr_1$ (N) | RDV + MRDV ($n_1$ = 1400) | N. PAGINA DISEGNI |
|---|---|---|---|---|---|---|---|
| 610 | 300 | 0.56 | 4.7 | 8180 | 350 | | |
| 610 | 400 | 0.43 | 3.5 | 8180 | 350 | | |
| 560 | 500 | 0.34 | 2.8 | 8180 | 350 | | |
| 610 | 600 | 0.3 | 2.3 | 8180 | 350 | | |
| 560 | 750 | 0.23 | 1.9 | 8180 | 350 | | |
| 505 | 900 | 0.19 | 1.6 | 8180 | 350 | | |
| 610 | 1200 | 0.17 | 1.2 | 8180 | 350 | **RDV040+090** | **63** |
| 560 | 1500 | 0.14 | 0.93 | 8180 | 350 | | |
| 505 | 1800 | 0.11 | 0.78 | 8180 | 350 | | |
| 610 | 2400 | 0.11 | 0.58 | 8180 | 350 | | |
| 560 | 3000 | 0.08 | 0.47 | 8180 | 350 | | |
| 460 | 4000 | 0.08 | 0.35 | 8180 | 350 | | |
| 410 | 5000 | 0.06 | 0.28 | 8180 | 350 | | |
| 1265 | 300 | 1.1 | 4.7 | 10320 | 490 | | |
| 1185 | 400 | 0.79 | 3.5 | 10320 | 490 | | |
| 1100 | 500 | 0.61 | 2.8 | 10320 | 490 | | |
| 1185 | 600 | 0.55 | 2.3 | 10320 | 490 | | |
| 1265 | 750 | 0.49 | 1.9 | 10320 | 490 | | |
| 1265 | 900 | 0.43 | 1.6 | 10320 | 490 | | |
| 1185 | 1200 | 0.31 | 1.2 | 10320 | 490 | **RDV050+110** | **64** |
| 1265 | 1500 | 0.3 | 0.93 | 10320 | 490 | | |
| 1265 | 1800 | 0.26 | 0.78 | 10320 | 490 | | |
| 1185 | 2400 | 0.19 | 0.58 | 10320 | 490 | | |
| 1100 | 3000 | 0.15 | 0.47 | 10320 | 490 | | |
| 819 | 4000 | 0.13 | 0.35 | 10320 | 490 | | |
| 746 | 4800 | 0.1 | 0.28 | 10320 | 490 | | |
| 1760 | 300 | 1.5 | 4.7 | 13500 | 700 | | |
| 1650 | 400 | 1.1 | 3.5 | 13500 | 700 | | |
| 1550 | 500 | 0.86 | 2.8 | 13500 | 700 | | |
| 1650 | 600 | 0.76 | 2.3 | 13500 | 700 | | |
| 1760 | 750 | 0.66 | 1.9 | 13500 | 700 | | |
| 1760 | 900 | 0.58 | 1.6 | 13500 | 700 | | |
| 1650 | 1200 | 0.43 | 1.2 | 13500 | 700 | **RDV063+130** | **64** |
| 1760 | 1500 | 0.39 | 0.93 | 13500 | 700 | | |
| 1760 | 1800 | 0.35 | 0.78 | 13500 | 700 | | |
| 1650 | 2400 | 0.25 | 0.58 | 13500 | 700 | | |
| 1550 | 3000 | 0.2 | 0.47 | 13500 | 700 | | |
| 1220 | 4000 | 0.15 | 0.35 | 13500 | 700 | | |
| 1100 | 5000 | 0.11 | 0.28 | 13500 | 700 | | |
| 2340 | 150 | 3.4 | 9.3 | 18000 | 700 | | |
| 2340 | 200 | 2.7 | 7 | 18000 | 700 | | |
| 2050 | 250 | 1.9 | 5.6 | 18000 | 700 | | |
| 2340 | 300 | 1.9 | 4.7 | 18000 | 700 | | |
| 2670 | 400 | 1.8 | 3.5 | 18000 | 700 | | |
| 2330 | 500 | 1.4 | 2.8 | 18000 | 700 | | |
| 2670 | 600 | 1.3 | 2.3 | 18000 | 700 | | |
| 2330 | 750 | 1 | 1.9 | 18000 | 700 | **RDV063+150** | **64** |
| 2100 | 900 | 0.7 | 1.6 | 18000 | 700 | | |
| 2670 | 1200 | 0.7 | 1.2 | 18000 | 700 | | |
| 2100 | 1800 | 0.4 | 0.8 | 18000 | 700 | | |
| 2670 | 2400 | 0.5 | 0.6 | 18000 | 700 | | |
| 2330 | 3000 | 0.3 | 0.5 | 18000 | 700 | | |
| 1880 | 4000 | 0.2 | 0.4 | 18000 | 700 | | |
| 1650 | 5000 | 0.2 | 0.3 | 18000 | 700 | | |

| $P_1$ (Kw) | $n_2$ ($min^{-1}$) | $M_2$ (Nm) | i | UDL + MRDV | MOTORE ELETTRICO | N. PAGINA DISEGNI |
|---|---|---|---|---|---|---|
| 0.18 | 117 ~ 22.5 | 9 ~ 18 | 12 ~ 61.5 | UDL0.18-MRDV040 | 6324 | UDL pag. 65 MRDV pag. 52 |
| | 88 ~ 17 | 12 ~ 23 | 16 ~ 82 | | | |
| | 58.7 ~ 11.3 | 17 ~ 32 | 24 ~ 123 | | | |
| | 44 ~ 8.5 | 22 ~ 40 | 32 ~ 164 | | | |
| | 35.2 ~ 6.8 | 27 ~ 47 | 40 ~ 205 | | | |
| | 29.3 ~ 5.7 | 30 ~ 51 | 48 ~ 246 | | | |
| | 22 ~ 4.3 | 37 ~ 62 | 64 ~ 328 | | | |
| | 17.6 ~ 3.4 | 43 ~ 60 | 80 ~ 410 | | | |
| 0.18 | 22 ~ 4.3 | 38 ~ 63 | 64 ~ 328 | UDL0.18-MRDV050 | 6324 | UDL pag. 65 MRDV pag. 53 |
| | 17.6 ~ 3.4 | 44 ~ 73 | 80 ~ 410 | | | |
| | 14.7 ~ 2.8 | 50 ~ 80 | 96 ~ 492 | | | |
| | 11 ~ 2.1 | 59 ~ 82 | 128 ~ 656 | | | |
| | 8.8 ~ 1.7 | 66 ~ 79 | 160 ~ 820 | | | |
| 0.37 | 133 ~ 26.7 | 19 ~ 36 | 10.5 ~ 52.5 | UDL0.37-MRDV050 | 7124 | UDL pag. 65 MRDV pag. 53 |
| | 100 ~ 20 | 25 ~ 47 | 14 ~ 70 | | | |
| | 66.7 ~ 13.3 | 36 ~ 65 | 21 ~ 105 | | | |
| | 50 ~ 10 | 46 ~ 82 | 28 ~ 140 | | | |
| | 40 ~ 8 | 55 ~ 97 | 35 ~ 175 | | | |
| | 33.3 ~ 6.7 | 61 ~ 107 | 42 ~ 210 | | | |
| | 25 ~ 5 | 76 ~ 124 | 56 ~ 280 | | | |
| | 20 ~ 4 | 89 ~ 120 | 70 ~ 350 | | | |
| 0.37 | 25 ~ 5 | 79 ~ 134 | 56 ~ 280 | UDL0.37-MRDV063 | 7124 | UDL pag. 65 MRDV pag. 54 |
| | 20 ~ 4 | 92 ~ 155 | 70 ~ 350 | | | |
| | 16.7 ~ 3.3 | 104 ~ 173 | 84 ~ 420 | | | |
| | 12.5 ~ 2.5 | 125 ~ 173 | 112 ~ 560 | | | |
| | 10 ~ 2 | 139 ~ 150 | 140 ~ 700 | | | |
| 0.55 | 133 ~ 26.7 | 26 ~ 49 | 10.5 ~ 52.5 | UDL0.55-MRDV063 | 8014 | UDL pag. 65 MRDV pag. 54 |
| | 100 ~ 20 | 34 ~ 63 | 14 ~ 70 | | | |
| | 66.7 ~ 13.3 | 48 ~ 88 | 21 ~ 105 | | | |
| | 50 ~ 10 | 62 ~ 112 | 28 ~ 140 | | | |
| | 40 ~ 8 | 75 ~ 133 | 35 ~ 175 | | | |
| | 33.3 ~ 6.7 | 81 ~ 146 | 42 ~ 210 | | | |
| | 25 ~ 5 | 105 ~ 179 | 56 ~ 280 | | | |
| | 20 ~ 4 | 123 ~ 207 | 70 ~ 350 | | | |
| 0.55 | 20 ~ 4 | 129 ~ 216 | 70 ~ 350 | UDL0.55-MRDV075 | 8014 | UDL pag. 65 MRDV pag. 55 |
| | 16.7 ~ 3.3 | 146 ~ 242 | 84 ~ 420 | | | |
| | 12.5 ~ 2.5 | 176 ~ 250 | 112 ~ 560 | | | |
| 0.55 | 12.5 ~ 2.5 | 189 ~ 309 | 112 ~ 560 | UDL0.55-MRDV090 | 8014 | UDL pag. 65 MRDV pag. 56 |
| | 10 ~ 2 | 218 ~ 350 | 140 ~ 700 | | | |
| 0.75 | 133 ~ 26.7 | 39 ~ 73 | 10.5 ~ 52.5 | UDL0.75-MRDV063 | 8024 | UDL pag. 65 MRDV pag. 54 |
| | 100 ~ 20 | 51 ~ 94 | 14 ~ 70 | | | |
| | 66.7 ~ 13.3 | 72 ~ 132 | 21 ~ 105 | | | |
| | 50 ~ 10 | 92 ~ 168 | 28 ~ 140 | | | |
| | 40 ~ 8 | 112 ~ 199 | 35 ~ 175 | | | |
| | 33.3 ~ 6.7 | 126 ~ 219 | 42 ~ 210 | | | |
| | 25 ~ 5 | 156 ~ 232 | 56 ~ 280 | | | |
| | 20 ~ 4 | 185 ~ 310 | 70 ~ 350 | | | |
| 0.75 | 20 ~ 4 | 192 ~ 320 | 70 ~ 350 | UDL0.75-MRDV075 | 8024 | UDL pag. 65 MRDV pag. 55 |
| | 16.7 ~ 3.3 | 219 ~ 300 | 84 ~ 420 | | | |
| 0.75 | 16.7 ~ 3.3 | 230 ~ 389 | 84 ~ 420 | UDL0.75-MRDV090 | 8024 | UDL pag. 65 MRDV pag. 56 |
| | 12.5 ~ 2.5 | 265 ~ 428 | 112 ~ 560 | | | |
| | 10 ~ 2 | 303 ~ 410 | 140 ~ 700 | | | |
| 0.75 | 12.5 ~ 2.5 | 302 ~ 503 | 112 ~ 560 | UDL0.75-MRDV110 | 8024 | UDL pag. 65 MRDV pag. 57 |
| | 10 ~ 2 | 348 ~ 575 | 140 ~ 700 | | | |

| $P_1$ (Kw) | $n_2$ ($min^{-1}$) | $M_2$ (Nm) | i | UDL + MRDV | MOTORE ELETTRICO | N. PAGINA DISEGNI |
|---|---|---|---|---|---|---|
| 1.1 | 133 ~ 26.7 | 59 ~ 111 | 10.5 ~ 52.5 | UD1.1-MRDV075 | 90S4 | UDL pag. 65 MRDV pag. 55 |
| | 100 ~ 20 | 77 ~ 144 | 14 ~ 70 | | | |
| | 66.7 ~ 13.3 | 110 ~ 203 | 21 ~ 105 | | | |
| | 50 ~ 10 | 142 ~ 258 | 28 ~ 140 | | | |
| | 40 ~ 8 | 172 ~ 308 | 35 ~ 175 | | | |
| | 33.3 ~ 6.7 | 195 ~ 340 | 42 ~ 210 | | | |
| | 25 ~ 5 | 245 ~ 360 | 56 ~ 280 | | | |
| 1.1 | 100 ~ 20 | 78 ~ 146 | 14 ~ 70 | UD1.1-MRDV090 | 90S4 | UDL pag. 65 MRDV pag. 56 |
| | 66.7 ~ 13.3 | 113 ~ 208 | 21 ~ 105 | | | |
| | 50 ~ 10 | 146 ~ 266 | 28 ~ 140 | | | |
| | 40 ~ 8 | 177 ~ 320 | 35 ~ 175 | | | |
| | 33.3 ~ 6.7 | 202 ~ 356 | 42 ~ 210 | | | |
| | 25 ~ 5 | 256 ~ 442 | 56 ~ 280 | | | |
| | 20 ~ 4 | 304 ~ 517 | 70 ~ 350 | | | |
| 1.1 | 20 ~ 4 | 320 ~ 550 | 70 ~ 350 | UD1.1-MRDV110 | 90S4 | UDL pag. 65 MRDV pag. 57 |
| | 16.7 ~ 3.3 | 368 ~ 625 | 84 ~ 420 | | | |
| | 12.5 ~ 2.5 | 455 ~ 754 | 112 ~ 560 | | | |
| | 10 ~ 2 | 522 ~ 710 | 140 ~ 700 | | | |
| 1.1 | 16.7 ~ 3.3 | 373 ~ 623 | 84 ~ 420 | UD1.1-MRDV130 | 90S4 | UDL pag. 65 MRDV pag. 58 |
| | 12.5 ~ 2.5 | 460 ~ 749 | 112 ~ 560 | | | |
| | 10 ~ 2 | 531 ~ 868 | 140 ~ 700 | | | |
| 1.5 | 133 ~ 26.7 | 78 ~ 148 | 10.5 ~ 52.5 | UD1.5-MRDV075 | 90L4 | UDL pag. 65 MRDV pag. 55 |
| | 100 ~ 20 | 102 ~ 192 | 14 ~ 70 | | | |
| | 66.7 ~ 13.3 | 147 ~ 270 | 21 ~ 105 | | | |
| | 50 ~ 10 | 190 ~ 344 | 28 ~ 140 | | | |
| | 40 ~ 8 | 229 ~ 330 | 35 ~ 175 | | | |
| | 33.3 ~ 6.7 | 260 ~ 390 | 42 ~ 210 | | | |
| | 25 ~ 5 | 327 ~ 360 | 56 ~ 280 | | | |
| 1.5 | 133 ~ 26.7 | 77 ~ 150 | 10.5 ~ 52.5 | UD1.5-MRDV090 | 90L4 | UDL pag. 65 MRDV pag. 56 |
| | 100 ~ 20 | 104 ~ 195 | 14 ~ 70 | | | |
| | 66.7 ~ 13.3 | 150 ~ 277 | 21 ~ 105 | | | |
| | 50 ~ 10 | 194 ~ 355 | 28 ~ 140 | | | |
| | 40 ~ 8 | 236 ~ 427 | 35 ~ 175 | | | |
| | 33.3 ~ 6.7 | 270 ~ 474 | 42 ~ 210 | | | |
| | 25 ~ 5 | 341 ~ 589 | 56 ~ 280 | | | |
| | 20 ~ 4 | 406 ~ 560 | 70 ~ 350 | | | |
| 1.5 | 20 ~ 4 | 426 ~ 733 | 70 ~ 350 | UD1.5-MRDV110 | 90L4 | UDL pag. 65 MRDV pag. 57 |
| | 16.7 ~ 3.3 | 490 ~ 833 | 84 ~ 420 | | | |
| 1.5 | 16.7 ~ 3.3 | 498 ~ 831 | 84 ~ 420 | UD1.5-MRDV130 | 90L4 | UDL pag. 65 MRDV pag. 58 |
| | 12.5 ~ 2.5 | 614 ~ 999 | 112 ~ 560 | | | |
| | 10 ~ 2 | 696 ~ 1100 | 140 ~ 700 | | | |
| 2.2 | 133 ~ 26.7 | 120 ~ 226 | 10.5 ~ 52.5 | UD2.2-MRDV110 | 100LA4 | UDL pag. 65 MRDV pag. 57 |
| | 100 ~ 20 | 157 ~ 294 | 14 ~ 70 | | | |
| | 66.7 ~ 13.3 | 228 ~ 418 | 21 ~ 105 | | | |
| | 50 ~ 10 | 298 ~ 549 | 28 ~ 140 | | | |
| | 40 ~ 8 | 364 ~ 664 | 35 ~ 175 | | | |
| | 33.3 ~ 6.7 | 413 ~ 717 | 42 ~ 210 | | | |
| | 25 ~ 5 | 533 ~ 931 | 56 ~ 280 | | | |
| 2.2 | 25 ~ 5 | 542 ~ 932 | 56 ~ 280 | UD2.2-MRDV130 | 100LA4 | UDL pag. 65 MRDV pag. 58 |
| | 20 ~ 4 | 648 ~ 1097 | 70 ~ 350 | | | |
| | 16.7 ~ 3.3 | 746 ~ 1246 | 84 ~ 420 | | | |
| | 12.5 ~ 2.5 | 921 ~ 1499 | 112 ~ 560 | | | |
| | 10 ~ 2 | 1040 ~ 1690 | 140 ~ 700 | | | |

| $P_1$ (Kw) | $n_2$ ($min^{-1}$) | $M_2$ (Nm) | i | UDL + MRDV | MOTORE ELETTRICO | N. PAGINA DISEGNI |
|---|---|---|---|---|---|---|
| 3 | 133 ~ 26.7 | 160 ~ 302 | 10.5 ~ 52.5 | UD3.0-MRDV110 | 100LB4 | UDL pag. 65<br>MRDV pag. 57 |
| | 100 ~ 20 | 210 ~ 392 | 14 ~ 70 | | | |
| | 66.7 ~ 13.3 | 304 ~ 558 | 21 ~ 105 | | | |
| | 50 ~ 10 | 398 ~ 732 | 28 ~ 140 | | | |
| | 40 ~ 8 | 485 ~ 885 | 35 ~ 175 | | | |
| | 33.3 ~ 6.7 | 547 ~ 956 | 42 ~ 210 | | | |
| | 25 ~ 5 | 711 ~ 1030 | 56 ~ 280 | | | |
| 3 | 133 ~ 26.7 | 160 ~ 301 | 10.5 ~ 52.5 | UD3.0-MRDV130 | 100LB4 | UDL pag. 65<br>MRDV pag. 58 |
| | 100 ~ 20 | 211 ~ 395 | 14 ~ 70 | | | |
| | 66.7 ~ 13.3 | 307 ~ 563 | 21 ~ 105 | | | |
| | 50 ~ 10 | 402 ~ 733 | 28 ~ 140 | | | |
| | 40 ~ 8 | 490 ~ 885 | 35 ~ 175 | | | |
| | 33.3 ~ 6.7 | 562 ~ 973 | 42 ~ 210 | | | |
| | 25 ~ 5 | 720 ~ 1242 | 56 ~ 280 | | | |
| | 20 ~ 4 | 864 ~ 1463 | 70 ~ 350 | | | |
| 4 | 133 ~ 26.7 | 213 ~ 402 | 10.5 ~ 52.5 | UD4.0-MRDV110 | 112M4 | UDL pag. 65<br>MRDV pag. 57 |
| | 100 ~ 20 | 279 ~ 523 | 14 ~ 70 | | | |
| | 66.7 ~ 13.3 | 405 ~ 744 | 21 ~ 105 | | | |
| | 50 ~ 10 | 530 ~ 975 | 28 ~ 140 | | | |
| | 40 ~ 8 | 647 ~ 1020 | 35 ~ 175 | | | |
| 4 | 133 ~ 26.7 | 214 ~ 401 | 10.5 ~ 52.5 | UD4.0-MRDV130 | 112M4 | UDL pag. 65<br>MRDV pag. 58 |
| | 100 ~ 20 | 281 ~ 527 | 14 ~ 70 | | | |
| | 66.7 ~ 13.3 | 410 ~ 751 | 21 ~ 105 | | | |
| | 50 ~ 10 | 536 ~ 978 | 28 ~ 140 | | | |
| | 40 ~ 8 | 653 ~ 1180 | 35 ~ 175 | | | |
| | 33.3 ~ 6.7 | 749 ~ 1298 | 42 ~ 210 | | | |
| | 25 ~ 5 | 960 ~ 1650 | 56 ~ 280 | | | |

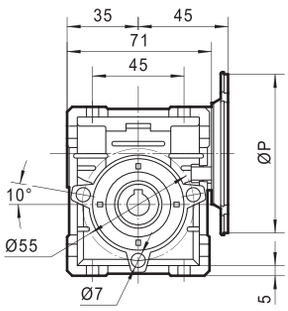
## MRDV025

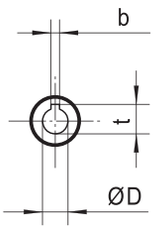
Peso senza motore ≈ 0.7 kg

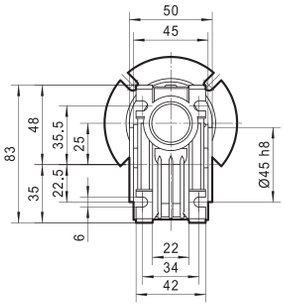
Per i dati di attacco ai motori (P, D, b, t) consultare la tabella a pagina 67.

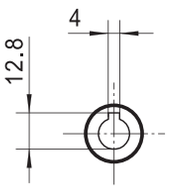
*Weight without motor ≈ 0.7 kg*

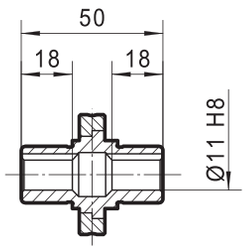
*For the dimensions concerning the motor connection area (P, D, b, t) please refer to the table shown at page 67.*

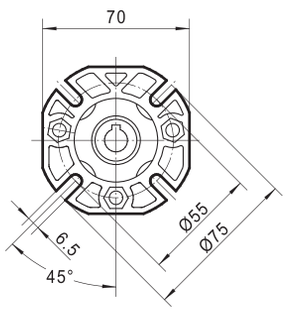


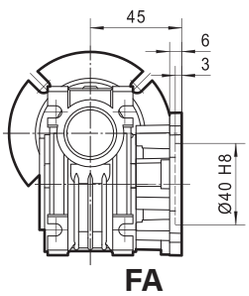




**FA**

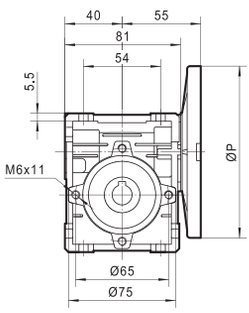
## MRDV030

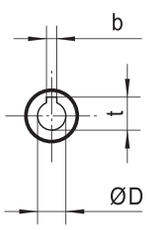
Peso senza motore ≈ 1.2 kg

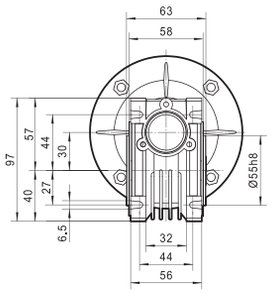
Per i dati di attacco ai motori (P, D, b, t) consultare la tabella a pagina 67.

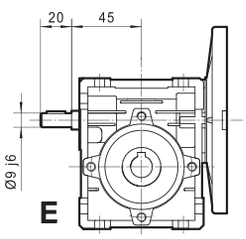
*Weight without motor ≈ 1.2 kg*

*For the dimensions concerning the motor connection area (P, D, b, t) please refer to the table shown at page 67.*

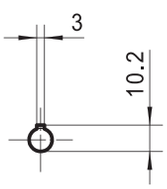


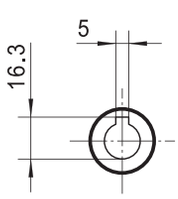



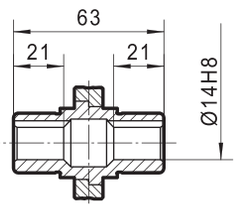



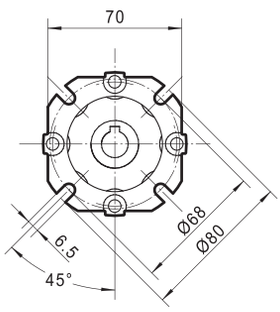



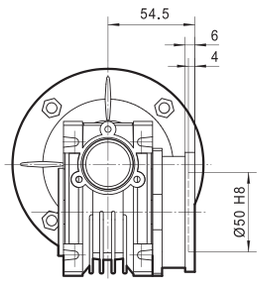

**E**




**FA**

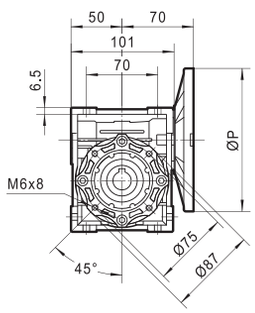
## MRDV040

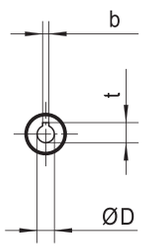
Peso senza motore ≈ 2.3 kg

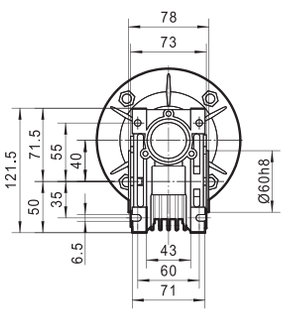
Per i dati di attacco ai motori (P, D, b, t) consultare la tabella a pagina 67.

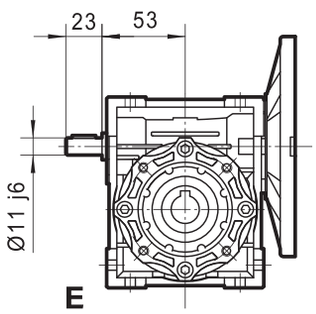
*Weight without motor ≈ 2.3 kg*

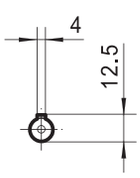
*For the dimensions concerning the motor connection area (P, D, b, t) please refer to the table shown at page 67.*

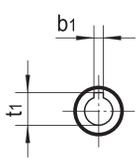


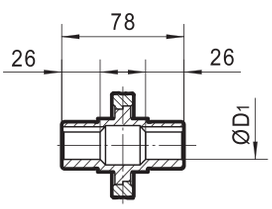



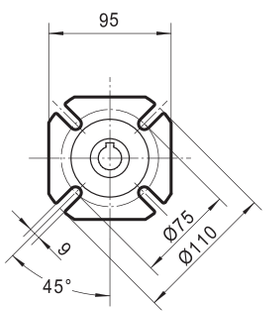



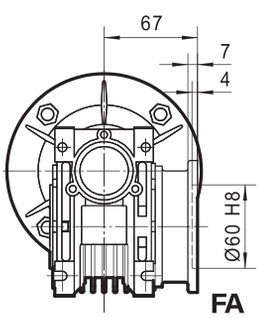



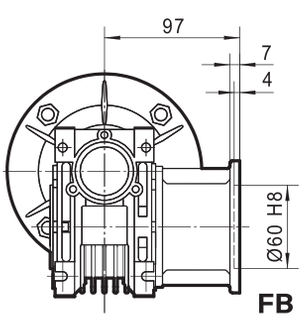



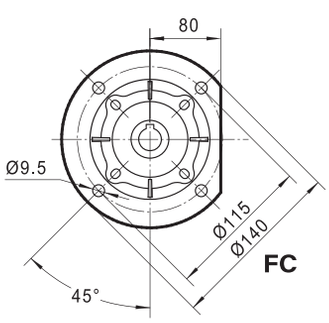



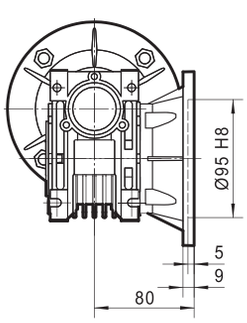



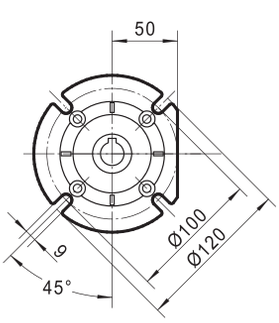



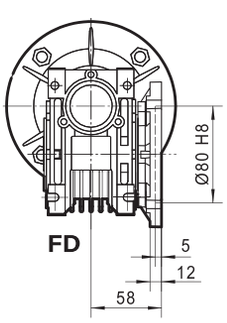




| Albero in uscita/*Ouput size* | | |
|---|---|---|
| $ØD_1$ H8 | $b_1$ | $t_1$ |
| Ø18 | 6 | 20.8 |
| Ø19* | 6* | 21.8* |

(*) Modello non standard

*(*) Non standard model*

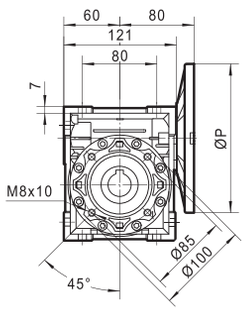
## MRDV050

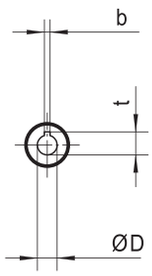
Peso senza motore ≈ 3.5 kg

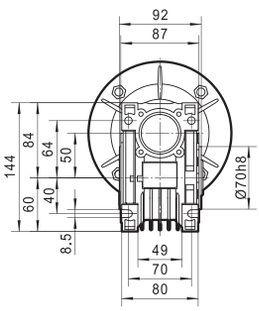
Per i dati di attacco ai motori (P, D, b, t) consultare la tabella a pagina 67.

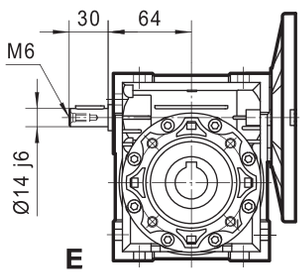
*Weight without motor ≈ 3.5 kg*

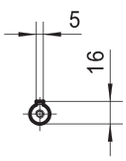
*For the dimensions concerning the motor connection area (P, D, b, t) please refer to the table shown at page 67.*

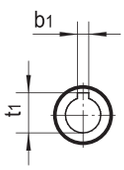


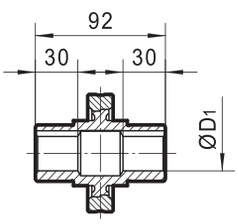



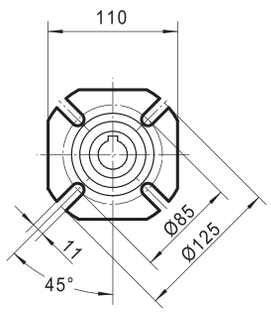



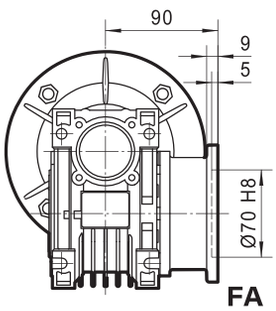



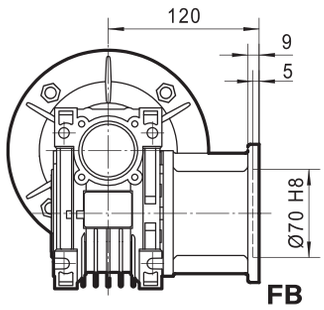



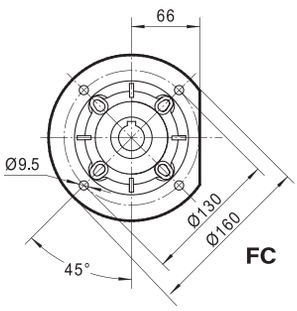



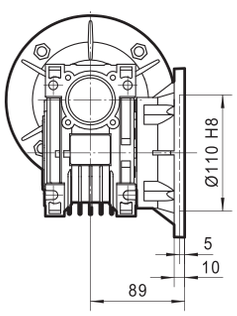



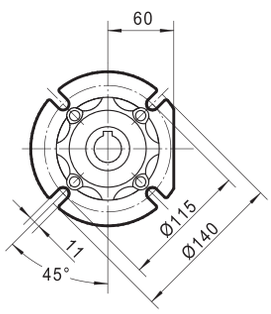



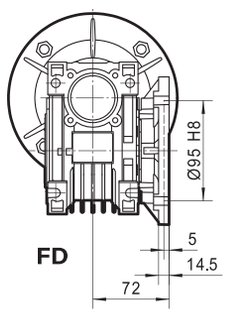




| Albero in uscita/*Ouput size* | | |
|---|---|---|
| $ØD_1$ H8 | $b_1$ | $t_1$ |
| Ø25 | 8 | 28.3 |
| Ø24* | 8* | 27.3* |

(*) Modello non standard

*(*) Non standard model*

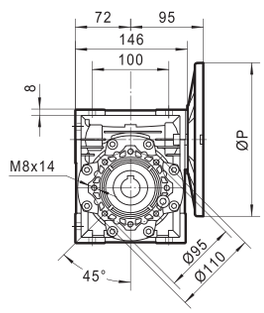
## MRDV063

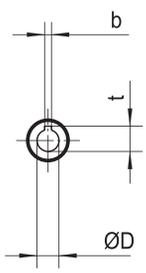
Peso senza motore ≈ 6.2 kg

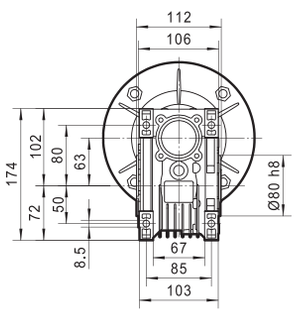
Per i dati di attacco ai motori (P, D, b, t) consultare la tabella a pagina 67.

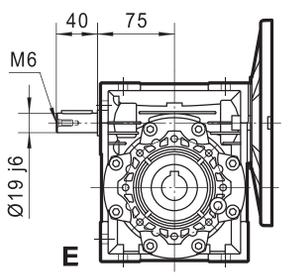
*Weight without motor ≈ 6.2 kg*

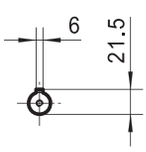
*For the dimensions concerning the motor connection area (P, D, b, t) please refer to the table shown at page 67.*

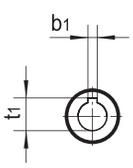


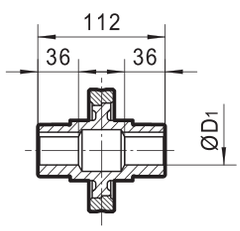



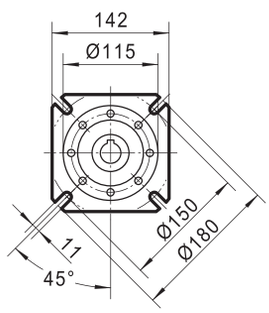



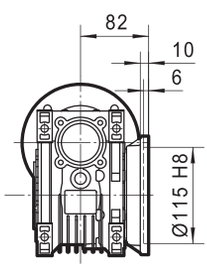



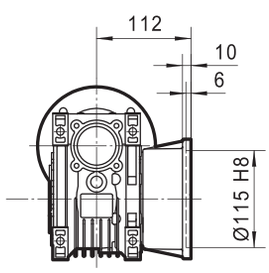



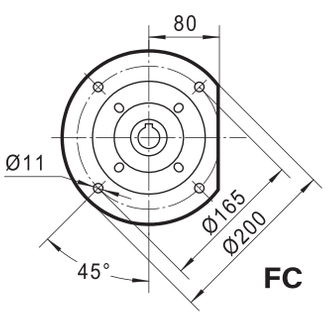



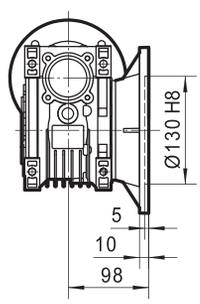

FA

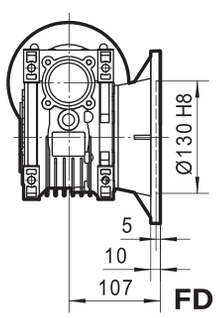



FB

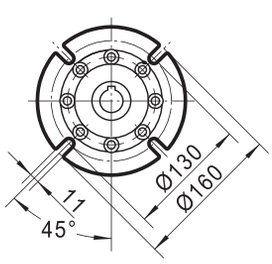


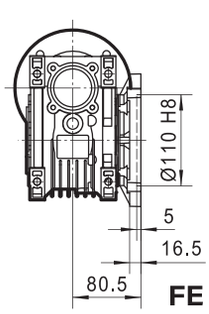

FC




FD




FE

| Albero in uscita/*Ouput size* | | |
|---|---|---|
| ØD1 H8 | b1 | t1 |
| Ø25 | 8 | 28.3 |
| Ø28* | 8* | 31.3* |

(*) Modello non standard

*(*) Non standard model*

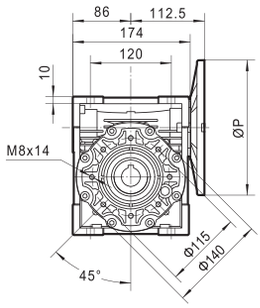
## MRDV075

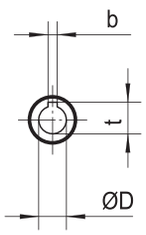
Peso senza motore ≈ 9 kg

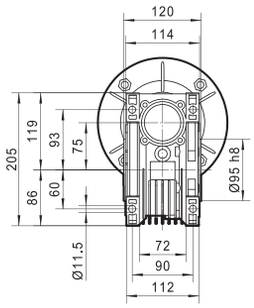
Per i dati di attacco ai motori (P, D, b, t) consultare la tabella a pagina 67.

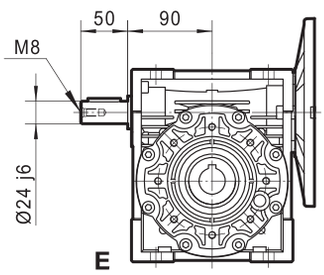
*Weight without motor ≈ 9 kg*

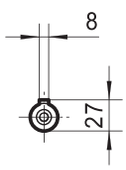
*For the dimensions concerning the motor connection area (P, D, b, t) please refer to the table shown at page 67.*

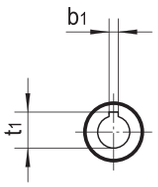


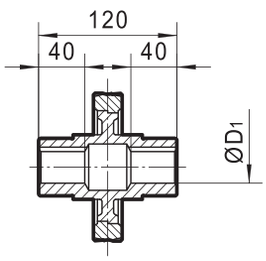



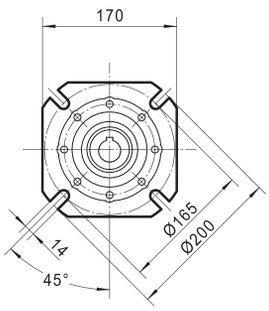



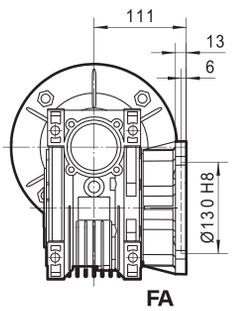



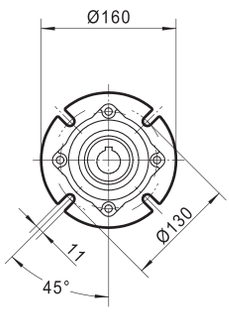



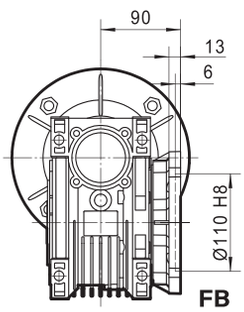




| Albero in uscita/*Ouput size* | | |
|---|---|---|
| $ØD_1$ H8 | $b_1$ | $t_1$ |
| Ø28 | 8 | 31.3 |
| Ø35* | 10* | 38.3* |

(*) Modello non standard

*(*) Non standard model*

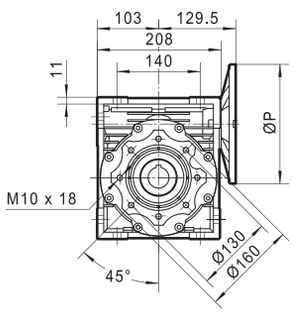
## MRDV090

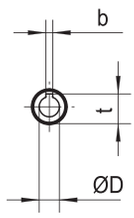
Peso senza motore ≈ 13 kg

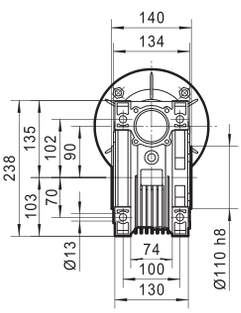
Per i dati di attacco ai motori (P, D, b, t) consultare la tabella a pagina 67.

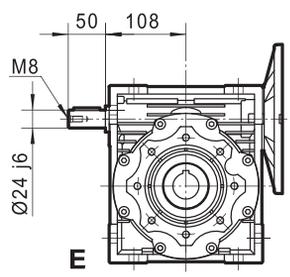
*Weight without motor ≈ 13 kg*

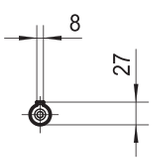
*For the dimensions concerning the motor connection area (P, D, b, t) please refer to the table shown at page 67.*

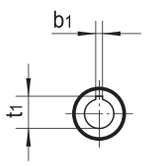


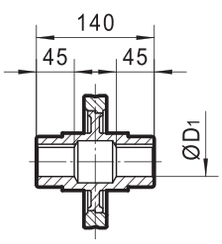



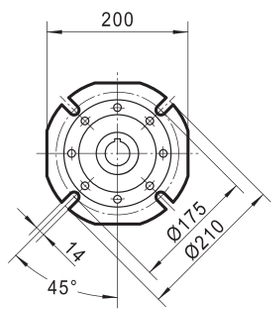



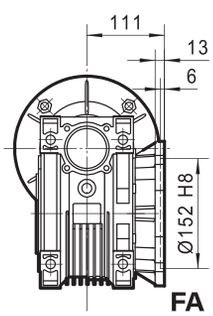



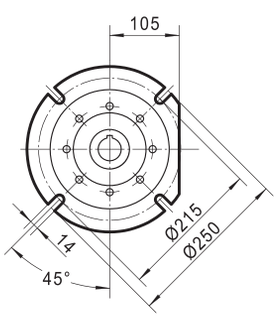



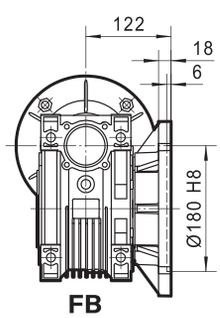



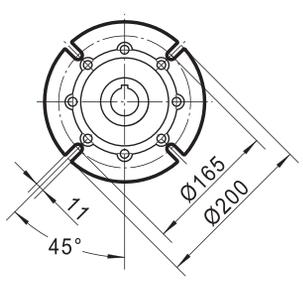



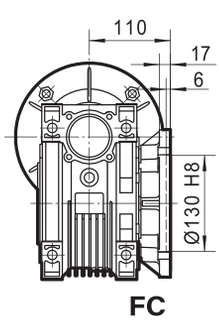



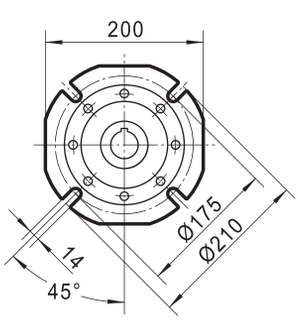



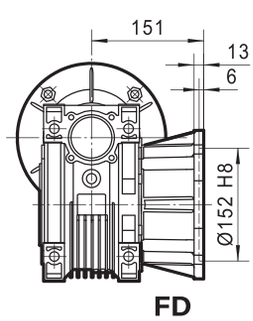




| Albero in uscita/*Ouput size* | | |
|---|---|---|
| ØD1 H8 | b1 | t1 |
| Ø35 | 10 | 38.3 |
| Ø38* | 10* | 41.3* |

(*) Modello non standard

*(*) Non standard model*

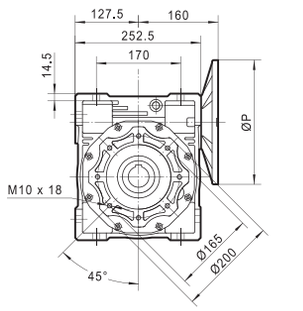
## MRDV110

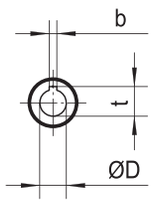
Peso senza motore ≈ 35 kg

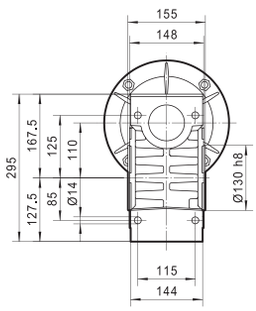
Per i dati di attacco ai motori (P, D, b, t) consultare la tabella a pagina 67.

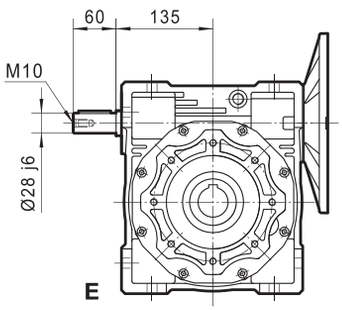
*Weight without motor ≈ 35 kg*

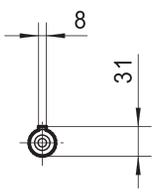
*For the dimensions concerning the motor connection area (P, D, b, t) please refer to the table shown at page 67.*

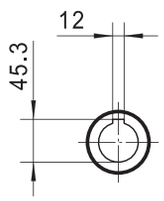


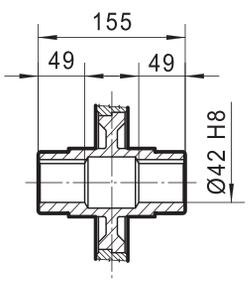



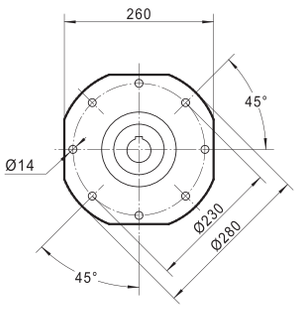



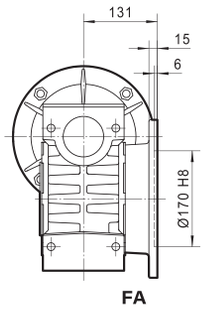



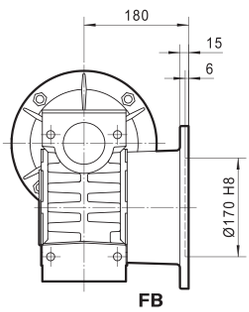



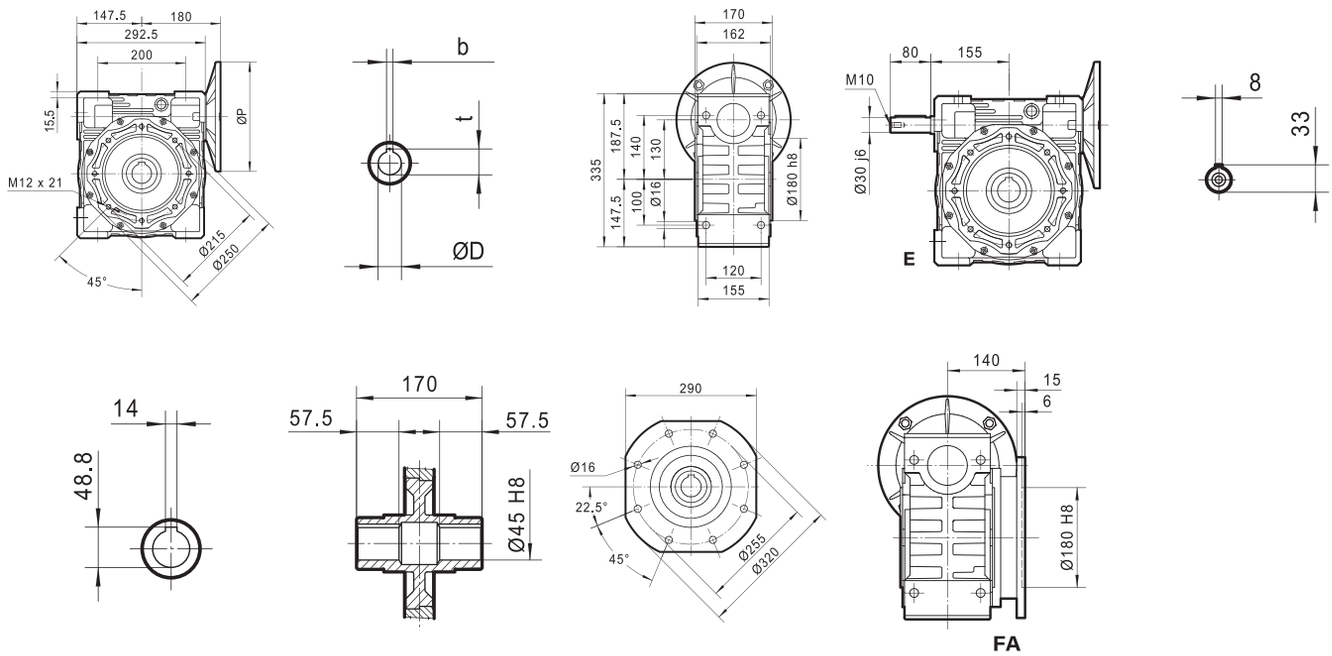
## MRDV130

Peso senza motore ≈ 48 kg

Per i dati di attacco ai motori (P, D, b, t) consultare la tabella a pagina 67.

*Weight without motor ≈ 48 kg*

*For the dimensions concerning the motor connection area (P, D, b, t) please refer to the table shown at page 67.*



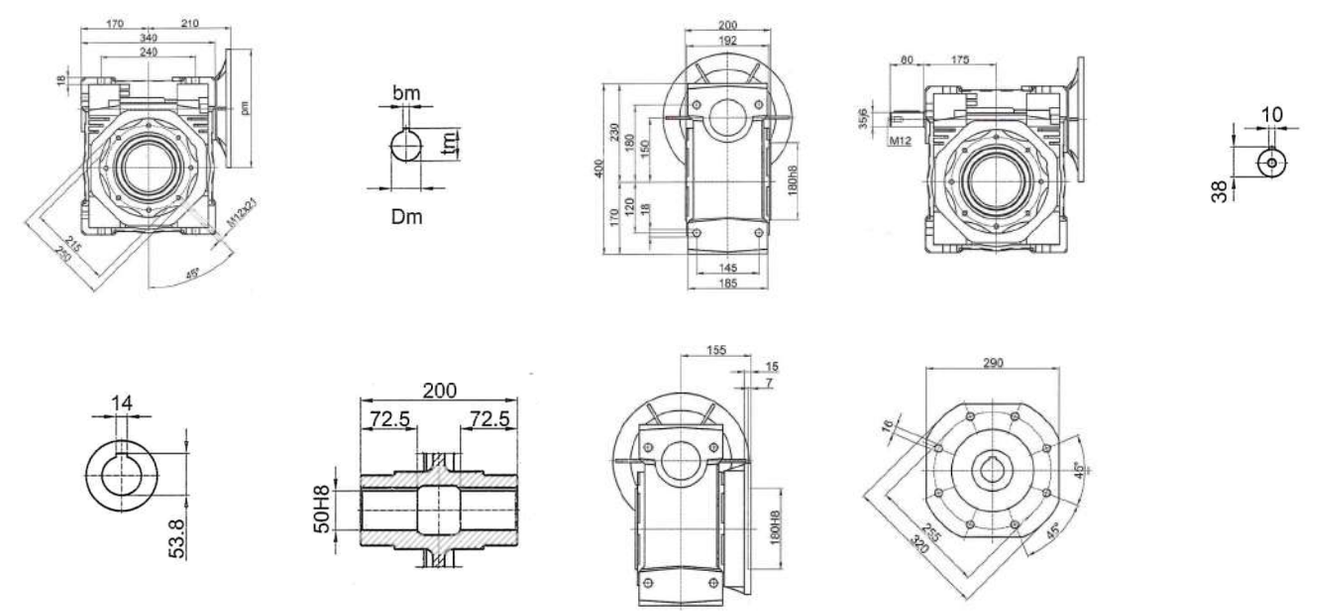

## MRDV150

Peso senza motore ≈ 84 kg

Per i dati di attacco ai motori (P, D, b, t) consultare la tabella a pagina 67.

*Weight without motor ≈ 84 kg*

*For the dimensions concerning the motor connection area (P, D, b, t) please refer to the table shown at page 67.*



Per le dimensioni delle flange in uscita riferirsi ai disegni da pag. 51 a 58

Per le dimensioni degli alberi riferirsi ai disegni da pag. 51 a 58

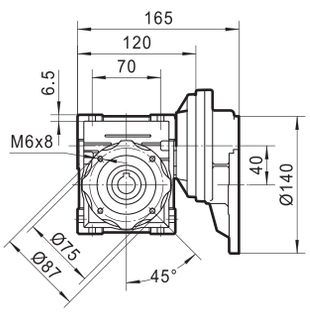
Per le dimensioni degli alberi doppi consultare la tabella a pag. 66

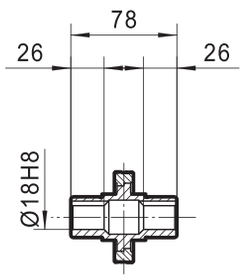
*For the dimensions of the output flanges, please refer to pages 51 - 58*

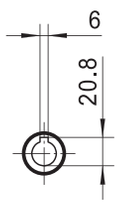
*For the dimensions of hollow shafts, please refer to pages 51 - 58*

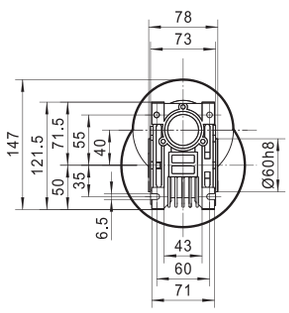
*For the dimensions of the double extention warm shafts, please refer to pages 66*

## PC063+MRDV040

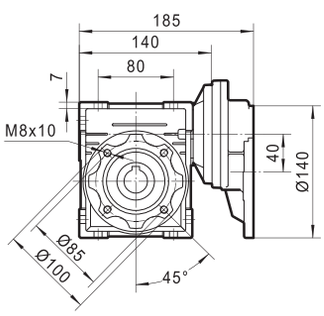


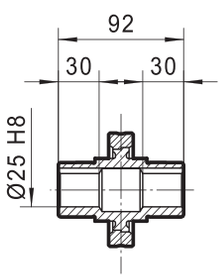



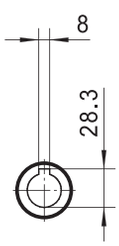



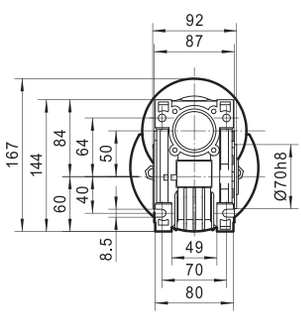




## PC063+MRDV050

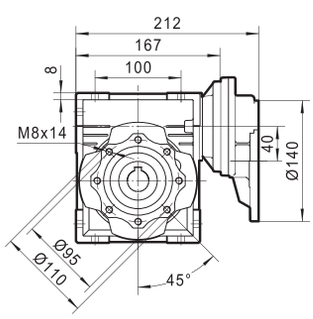


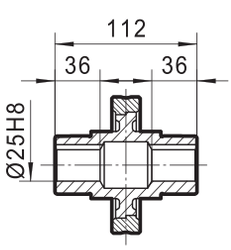



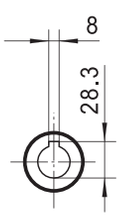



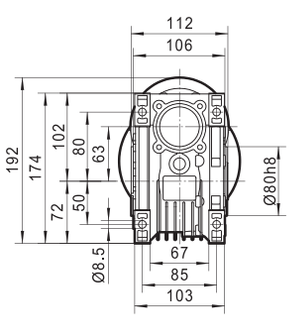




## PC063+MRDV063

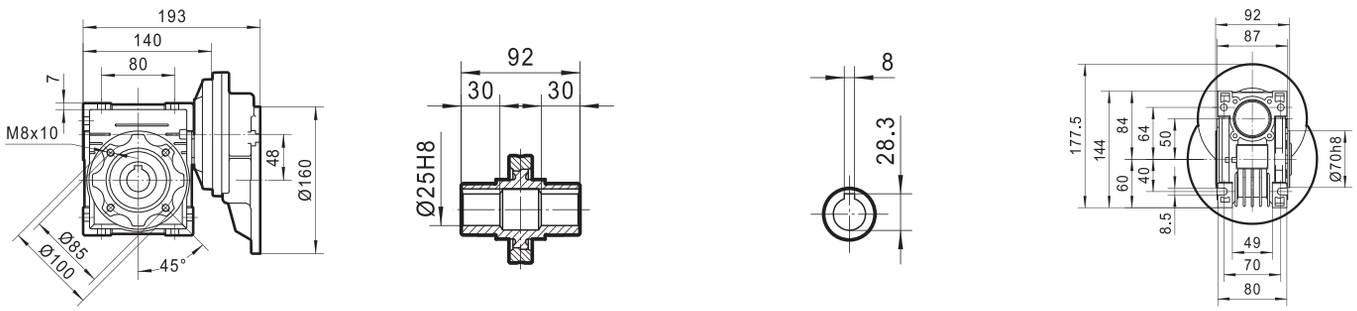


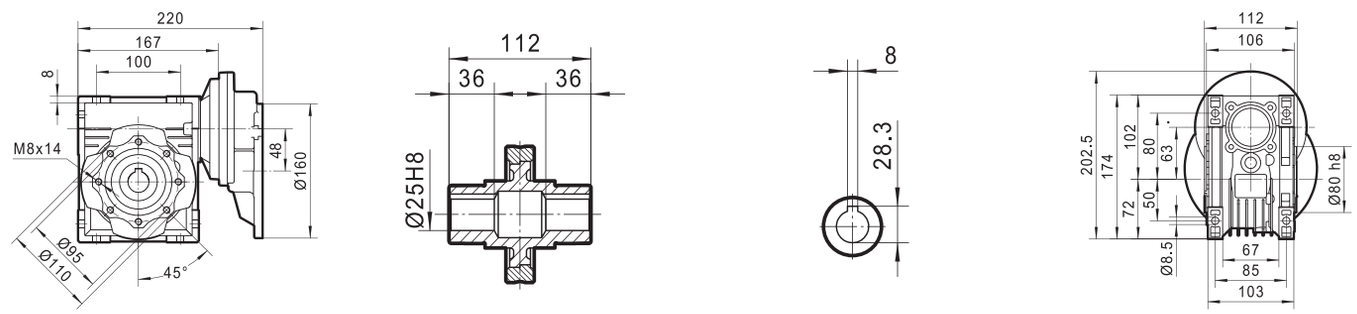



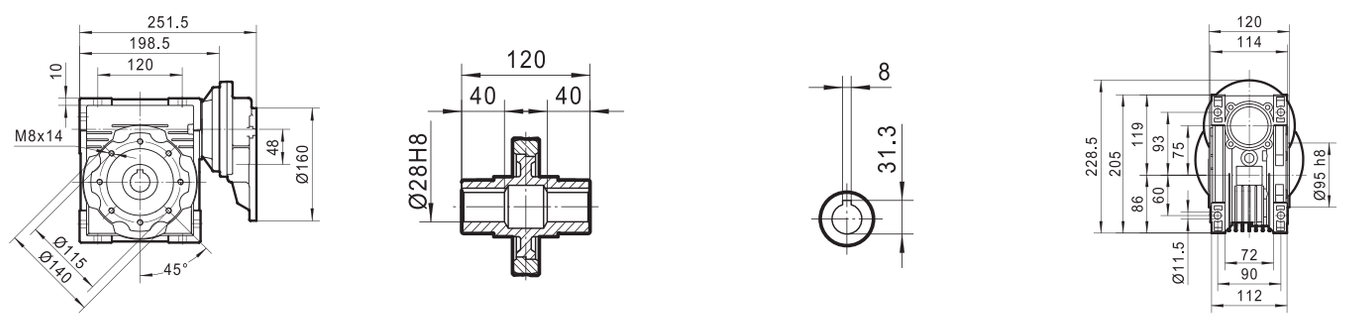
## PC071+MRDV050



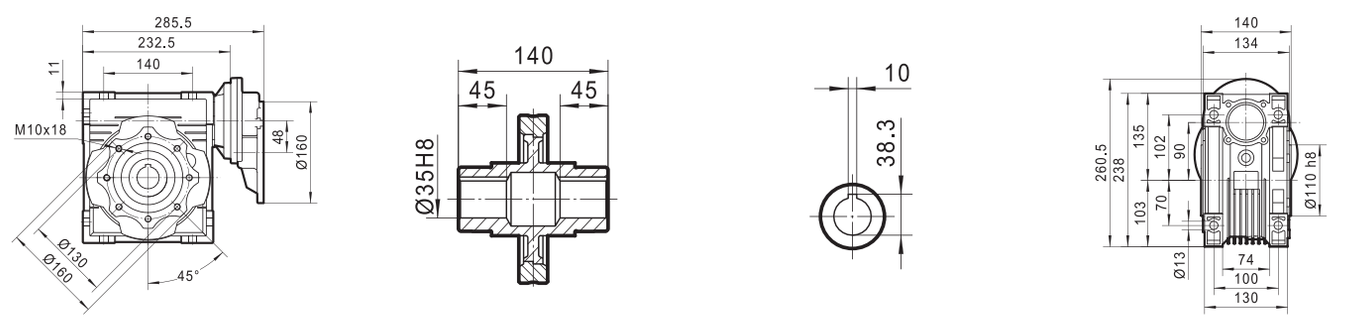

## PC071+MRDV063



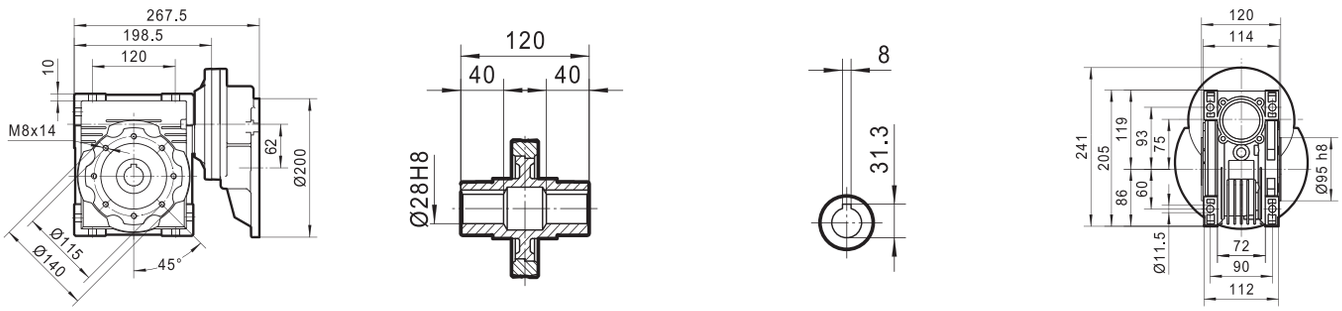

## PC071+MRDV075



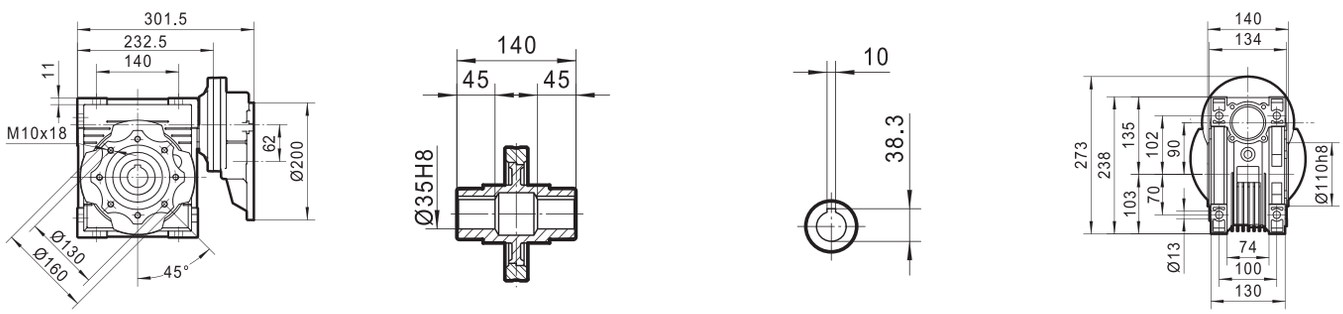

## PC071+MRDV090



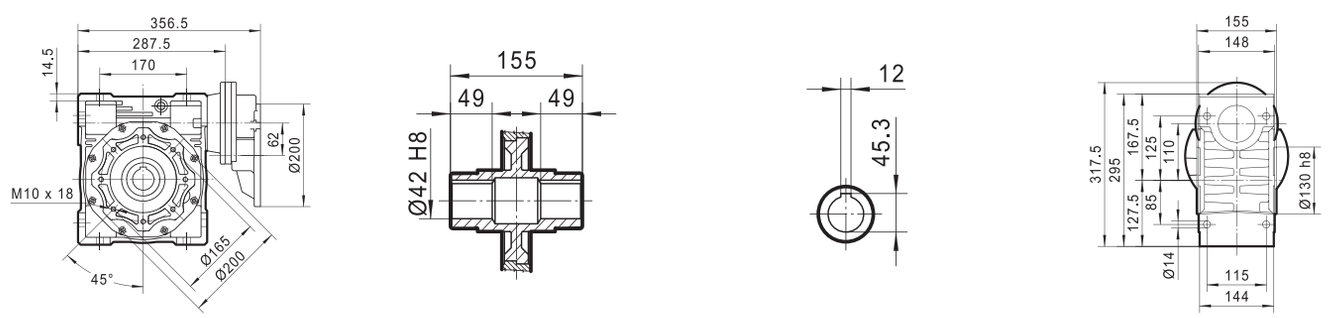
## PC080+MRDV075



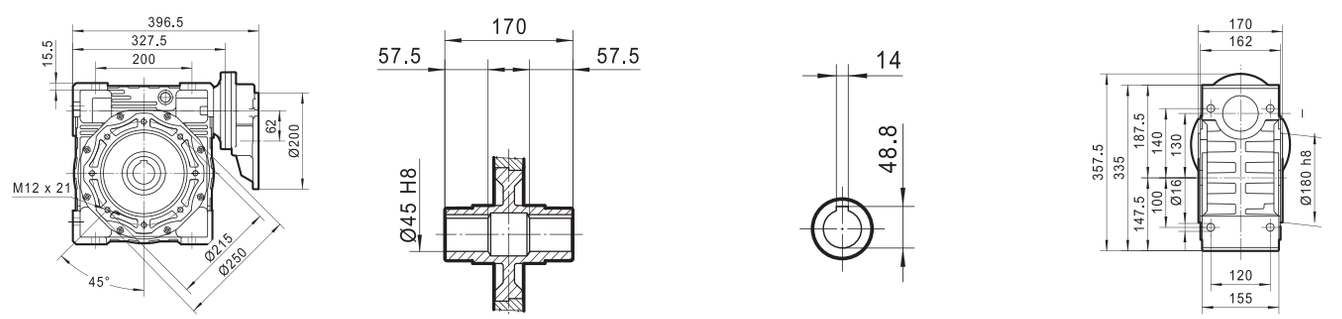

## PC080+MRDV090




## PC080+MRDV110 e PC090+MRDV110




## PC080+MRDV130 e PC090+MRDV130



Per le dimensioni delle flange in uscita riferirsi ai disegni da pag. 51 a 58

Per le dimensioni degli alberi riferirsi ai disegni da pag. 51 a 58

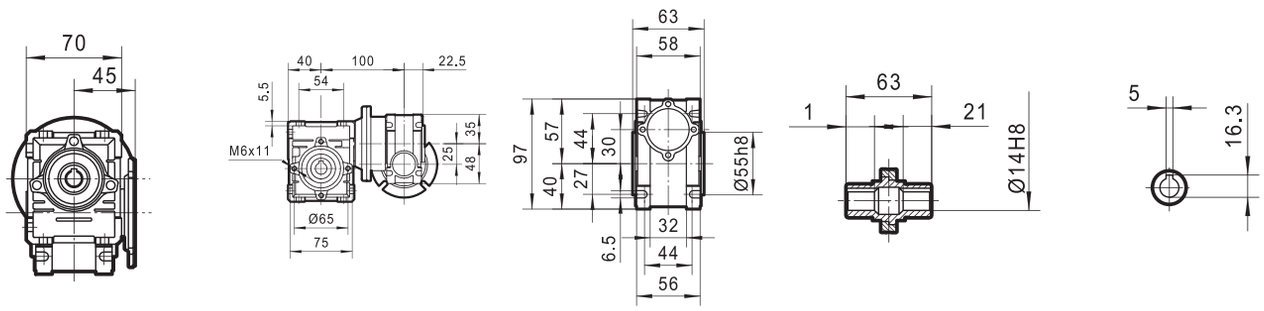
Per le dimensioni degli alberi doppi consultare la tabella a pag. 66

*For the dimensions of the output flanges, please refer to pages 51 - 58*

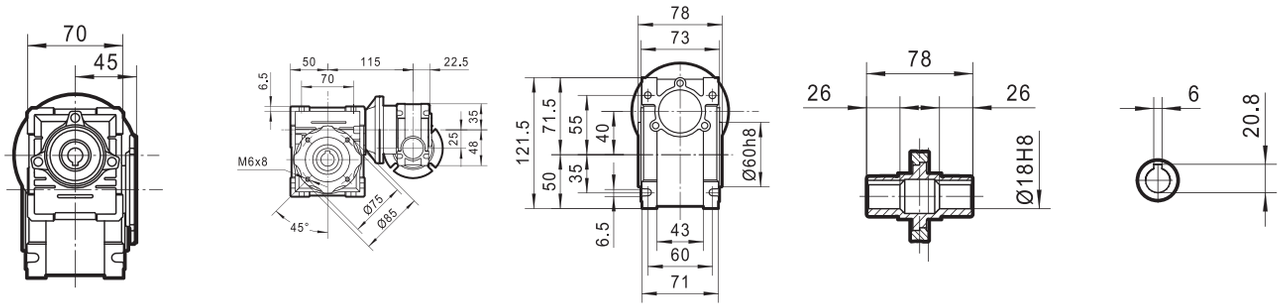
*For the dimensions of hollow shafts, please refer to pages 51 - 58*

*For the dimensions of the double extention warm shafts, please refer to pages 66*

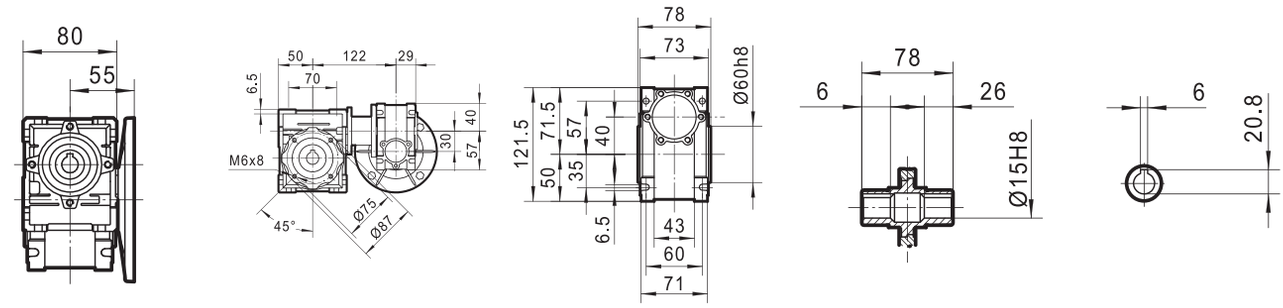
## MRDV025+030



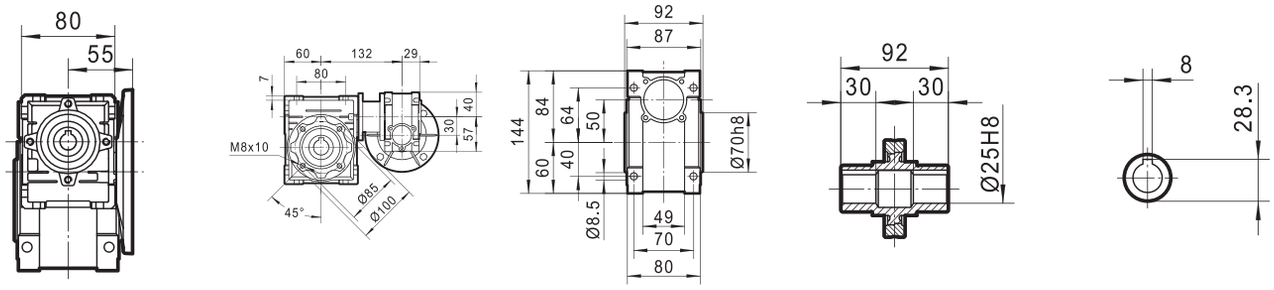

## MRDV025+040



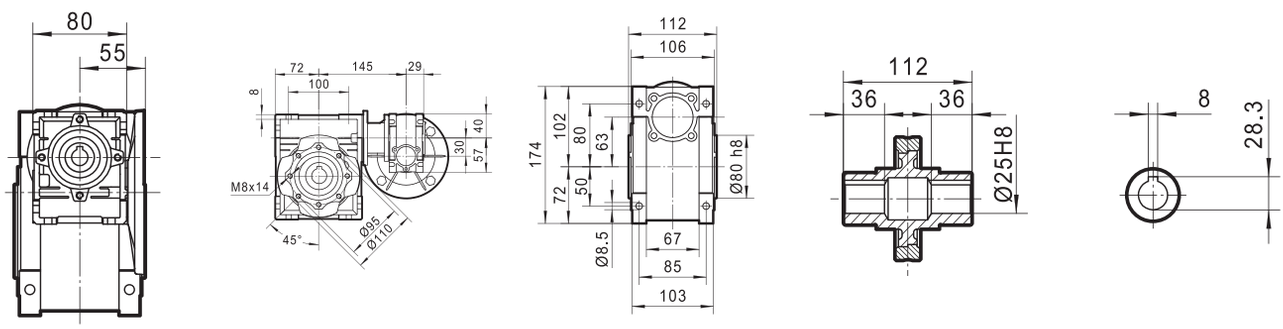

## MRDV030+040



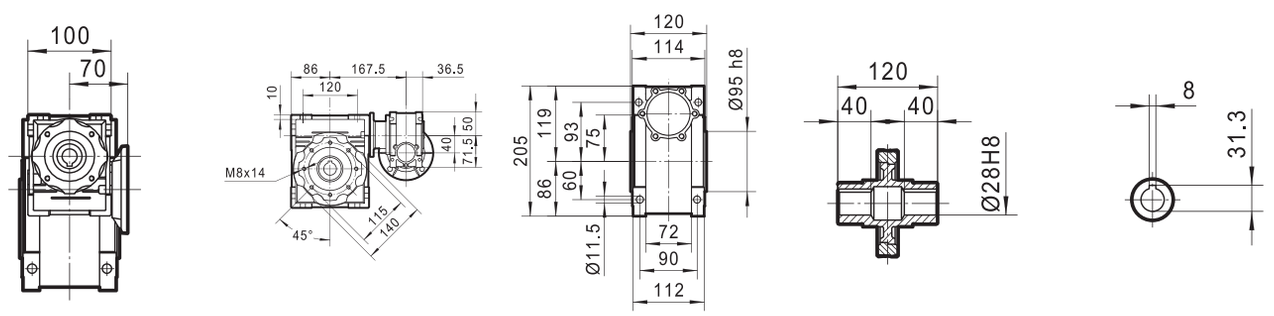
## MRDV030+050



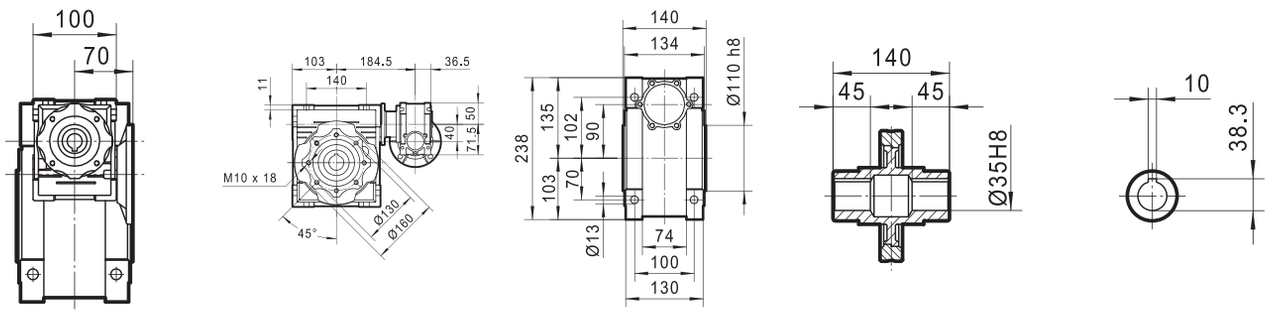

## MRDV030+063



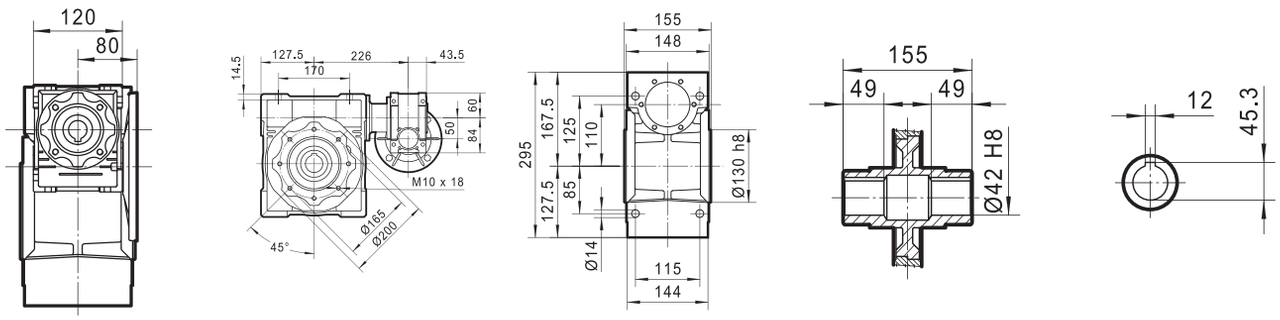

## MRDV040+075



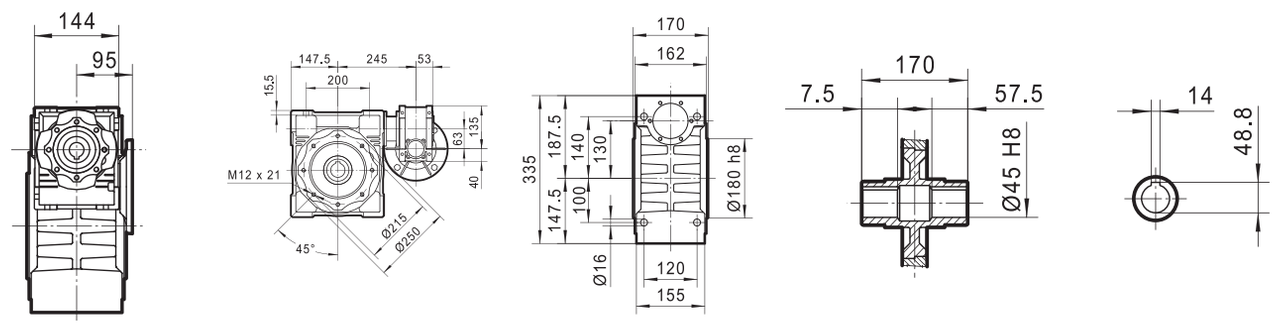

## MRDV040+090



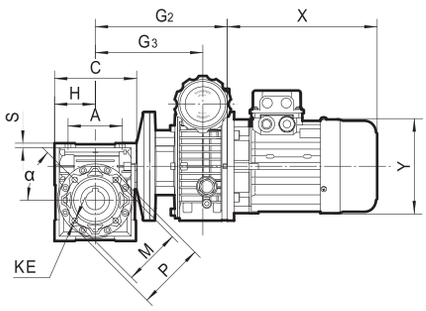
## MRDV050+110

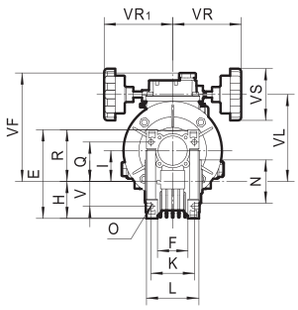


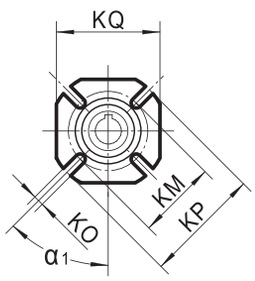

## MRDV063+130

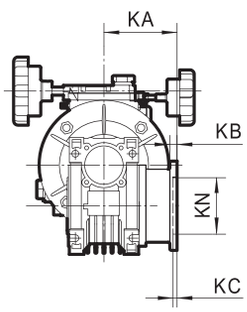


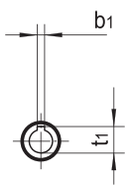

## MRDV063+150

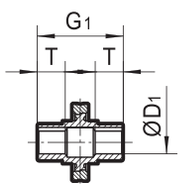



$n_1$ = 1400 r/min

| MODELLO *Model* | $G_2$ | $G_3$ | VF | VL | VS | VR | $VR_1$ | BASE NO. | X | Y |
|---|---|---|---|---|---|---|---|---|---|---|
| UDL0.18 - MRDV040 | 181.5 | 134 | 145.5 | 117.5 | 70 | 107 | 107 | 63 | 200 | 130 |
| UDL0.18 - MRDV050 | 191.5 | 144 | 155.5 | 127.5 | 70 | 107 | 107 | | | |
| UDL0.37 - MRDV050 | 189 | 152.5 | 168.5 | 140.5 | 70 | 107 | 107 | 71 | 215 | 140 |
| UDL0.37 - MRDV063 | 204 | 167.5 | 181.5 | 153.5 | 70 | 107 | 107 | | | |
| UDL0.75 - MRDV063 | 237.5 | 182.5 | 205 | 169.5 | 84 | 112.5 | 118.5 | 80 | 268 | 160 |
| UDL0.37 - MRDV075 | 221.5 | 185 | 193.5 | 165.5 | 70 | 107 | 107 | 71 | 215 | 140 |
| UDL0.75 - MRDV075 | 225 | 200 | 217 | 181.5 | 84 | 112.5 | 118.5 | 80 | 255 | 160 |
| UDL1.5 - MRDV075 | 286.5 | 219 | 241 | 202 | 84 | 154 | 129 | 90L | 290 | 180 |
| UDL0.7 - MRDV090 | 272 | 217 | 232 | 196.5 | 84 | 112.5 | 118.5 | 80 | 255 | 160 |
| UDL1.5 - MRDV090 | 303.5 | 236 | 256 | 217 | 84 | 154 | 129 | 90L | 290 | 180 |
| UDL1.5 - MRDV110 | 334 | 266.5 | 276 | 237 | 84 | 154 | 129 | 90L | 290 | 180 |
| UDL2.2 - MRDV110 | 382 | 291 | 311 | 268 | 123 | 147 | 149 | 100L | 325 | 200 |
| UDL4 - MRDV110 | 382 | 291 | 311 | 268 | 123 | 147 | 149 | 112M | 340 | 225 |
| UDL1.5 - MRDV130 | 353 | 285.5 | 296 | 257 | 84 | 154 | 129 | 90L | 290 | 180 |
| UDL2.2 - MRDV130 | 401 | 310 | 331 | 288 | 123 | 147 | 149 | 100L | 325 | 200 |
| UDL4 - MRDV130 | 401 | 310 | 331 | 288 | 123 | 147 | 149 | 112M | 340 | 225 |
| UDL2.2 - MRDV150 | 432 | 341 | 350 | 308 | 123 | 147 | 149 | 100L | 325 | 200 |
| UDL4 - MRDV150 | 432 | 341 | 350 | 308 | 123 | 147 | 149 | 112M | 340 | 225 |

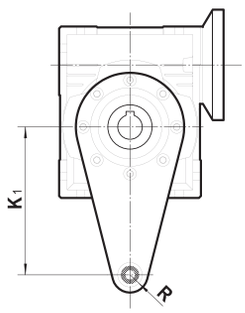
Colonna X e Y può cambiare in funzione della tipologia di motore montato/scelto

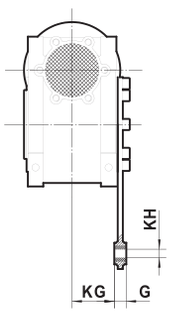
*Column X and Y can change depending on the type of engine mounted/chosen*

Per le altre dimensioni degli MRDV consultare i disegni da pag. 51 a 58

*For other dimensions refer to MRDV series dimension (pages 51 - 58)*

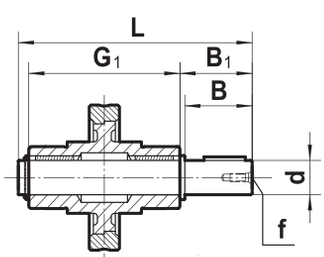
## Braccio di reazione/*Torque arm*



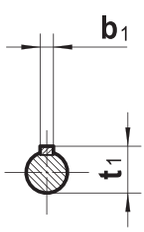



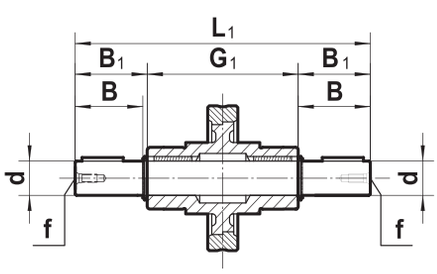

| MRDV | $K_1$ | G | KG | KH | R |
|---|---|---|---|---|---|
| 025 | 70 | 14 | 17.5 | 8 | 15 |
| 030 | 85 | 14 | 24 | 8 | 15 |
| 040 | 100 | 14 | 31.5 | 10 | 18 |
| 050 | 100 | 14 | 38.5 | 10 | 18 |
| 063 | 150 | 14 | 49 | 10 | 18 |
| 075 | 200 | 25 | 47.5 | 20 | 30 |
| 090 | 200 | 25 | 57.5 | 20 | 30 |
| 110 | 250 | 30 | 62 | 25 | 35 |
| 130 | 250 | 30 | 69 | 25 | 35 |
| 150 | 250 | 30 | 84 | 25 | 35 |

## Albero in uscita/*Output shafts*




**AS**



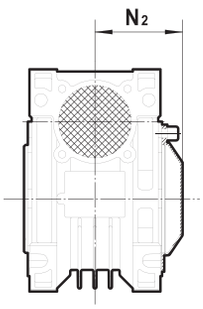

**AB**

| MRDV | d | B | $B_1$ | $G_1$ | L | $L_1$ | f | $b_1$ | $t_1$ |
|---|---|---|---|---|---|---|---|---|---|
| 025 | 11 g6<br>9* | 23<br>25* | 25.5<br>30* | 50 | 81<br>85.5* | 101 | - | 4<br>3* | 12.5<br>10.2* |
| 030 | 14 h6 | 30 | 32.5 | 63 | 102 | 128 | M6 | 5 | 16 |
| 040 | 18 h6 | 40 | 43 | 78 | 128 | 164 | M6 | 6 | 20.5 |
| 050 | 25 h6 | 50 | 53.5 | 92 | 153 | 199 | M10 | 8 | 28 |
| 063 | 25 h6 | 50 | 53.5 | 112 | 173 | 219 | M10 | 8 | 28 |
| 075 | 28 h6 | 60 | 63.5 | 120 | 192 | 247 | M10 | 8 | 31 |
| 090 | 35 h6 | 80 | 84.5 | 140 | 234 | 309 | M12 | 10 | 38 |
| 110 | 42 h6 | 80 | 84.5 | 155 | 249 | 324 | M16 | 12 | 45 |
| 130 | 45 h6 | 80 | 85 | 170 | 265 | 340 | M16 | 14 | 48.5 |
| 150 | 50 h6 | 82 | 87 | 200 | 297 | 374 | M16 | 14 | 53.5 |

(*) Modello non standard

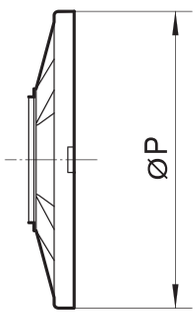
*(*) Non standard model*

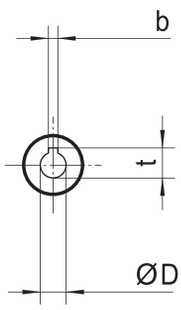
## Dimensioni protezione albero lento/*Cover in output dimension*




| MRDV | $N_2$ |
|---|---|
| 030 | 47 |
| 040 | 55 |
| 050 | 62.5 |
| 063 | 73.5 |
| 075 | 78.5 |
| 090 | 90.5 |
| 110 | 99 |
| 130 | 107 |
| 150 | 113 |

## Flange in ingresso B5/*Input flange B5*

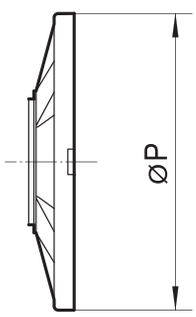


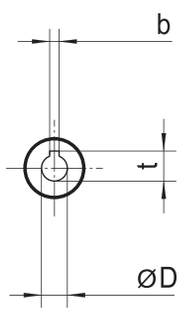




| B5 | IEC | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 056 | 063 | 071 | 080 | 090 | 110 | 112 | 132 |
| ØP | Ø120 | Ø140 | Ø160 | Ø200 | Ø200 | Ø250 | Ø250 | Ø300 |
| ØD | Ø9 E8 | Ø11 E8 | Ø14 E8 | Ø19 E8 | Ø24 E8 | Ø28 E8 | Ø28 E8 | Ø38 E8 |
| b | 3 | 4 | 5 | 6 | 8 | 8 | 8 | 10 |
| t | 10.4 | 12.8 | 16.3 | 21.8 | 27.3 | 31.3 | 31.3 | 41.3 |

MRDV (110, 130) t = 40.3 (IEC 132)

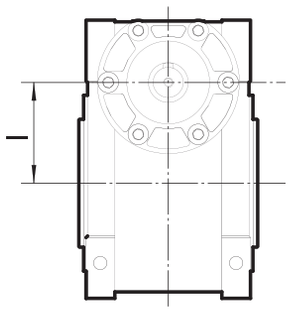
## Flange in ingresso B14/*Input flange B14*

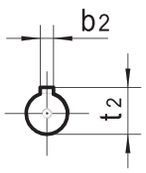


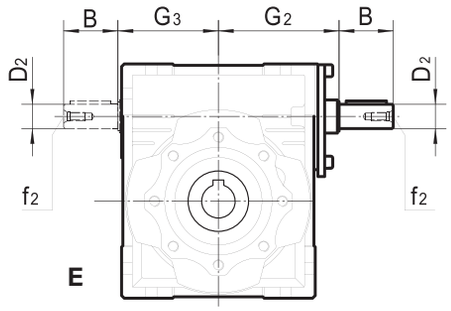




| B14 | IEC | | | | | | |
|---|---|---|---|---|---|---|---|
| | 056 | 063 | 071 | 080 | 090 | 110 | 112 |
| ØP | Ø80 | Ø90 | Ø105 | Ø120 | Ø140 | Ø160 | Ø160 |
| ØD | Ø9 E8 | Ø11 E8 | Ø14 E8 | Ø19 E8 | Ø24 E8 | Ø28 E8 | Ø28 E8 |
| b | 3 | 4 | 5 | 6 | 8 | 8 | 8 |
| t | 10.4 | 12.8 | 16.3 | 21.8 | 27.3 | 31.3 | 31.3 |

## Riduttore albero maschio in ingresso/*Input shaft gearbox*

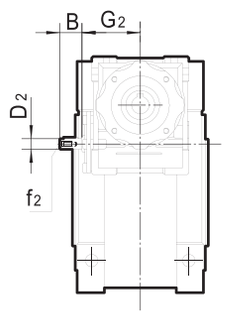


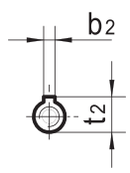



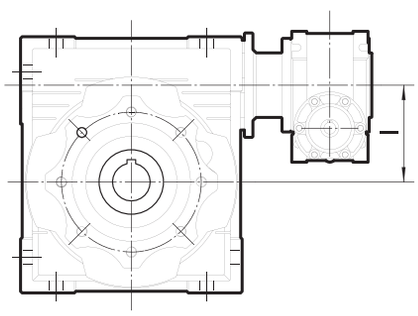




| RDV | B | $D_2$ | $G_2$ | $G_3$ | l | $b_2$ | $f_2$ | $t_2$ |
|---|---|---|---|---|---|---|---|---|
| 30 | 20 | Ø9 j6 | 51 | 45 | 30 | 3 | - | 10.2 |
| 40 | 23 | Ø11 j6 | 60 | 53 | 40 | 4 | - | 12.5 |
| 50 | 30 | Ø14 j6 | 74 | 64 | 50 | 5 | M6 | 16 |
| 63 | 40 | Ø19 j6 | 90 | 75 | 63 | 6 | M6 | 21.5 |
| 75 | 50 | Ø24 j6 | 105 | 90 | 75 | 8 | M8 | 27 |
| 90 | 50 | Ø24 j6 | 125 | 108 | 90 | 8 | M8 | 27 |
| 110 | 60 | Ø28 j6 | 142 | 135 | 110 | 8 | M10 | 31 |
| 130 | 80 | Ø30 j6 | 162 | 155 | 130 | 8 | M10 | 33 |
| 150 | 80 | Ø35 j6 | 195 | 175 | 150 | 10 | M12 | 38 |

## Combinati/*Combination unit*



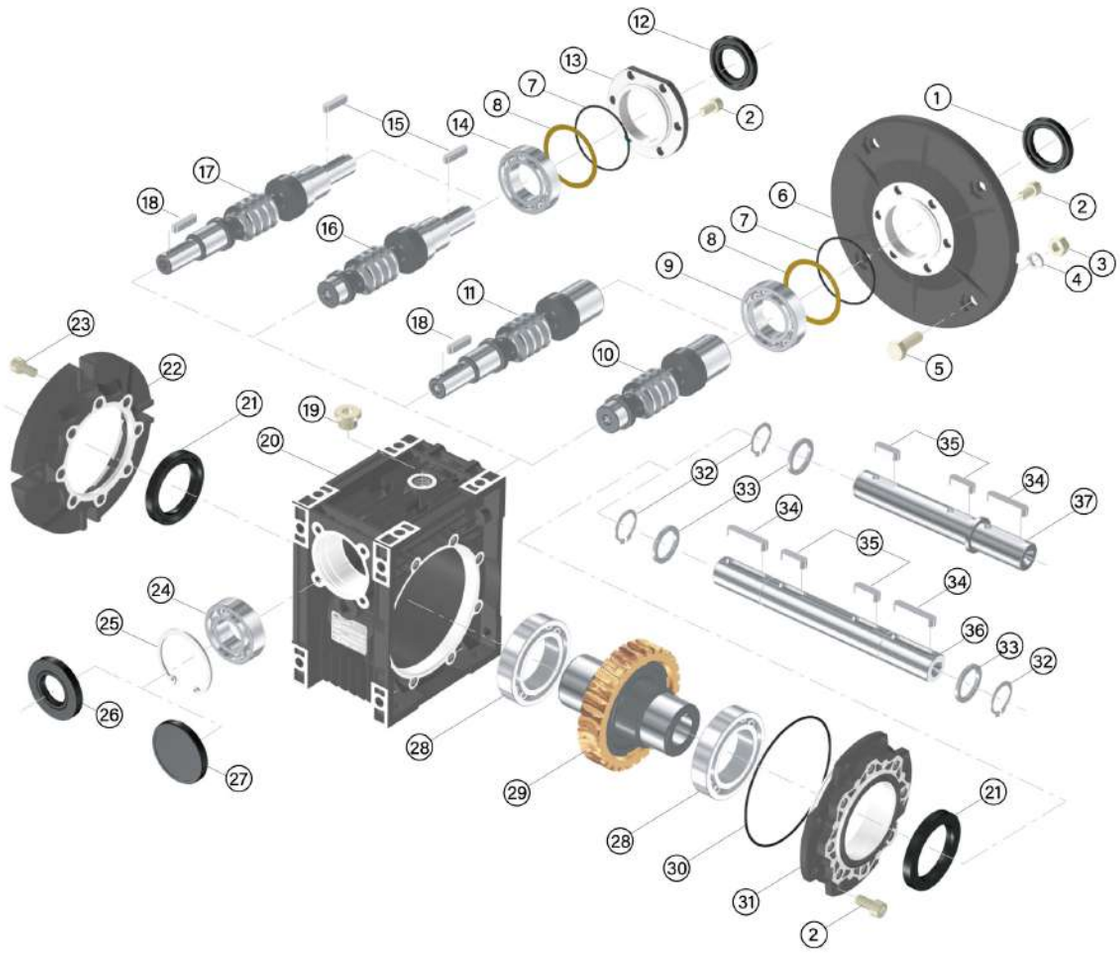




| RDV-MRDV | B | $D_2$ | $G_2$ | l | $b_2$ | $f_2$ | $t_2$ |
|---|---|---|---|---|---|---|---|
| 030-040 | 20 | Ø9 j6 | 51 | 10 | 3 | - | 10.2 |
| 030-050 | 20 | Ø9 j6 | 51 | 20 | 3 | - | 10.2 |
| 030-063 | 20 | Ø9 j6 | 51 | 33 | 3 | - | 10.2 |
| 040-075 | 23 | Ø11 j6 | 60 | 35 | 4 | - | 12.5 |
| 040-090 | 23 | Ø11 j6 | 60 | 50 | 4 | - | 12.5 |
| 050-110 | 30 | Ø14 j6 | 74 | 60 | 5 | M6 | 16 |
| 063-130 | 40 | Ø19 j6 | 90 | 67 | 6 | M6 | 21.5 |
| 063-150 | 40 | Ø19 j6 | 90 | 87 | 6 | M6 | 21.5 |

Per le dimensioni mancanti consultare le pagine da 51 a 58

*For the missing dimensions, please refer to page 51 - 58*



1 Anello di tenuta/*Oil seal*
2 Vite/*Inner hex screw*
3 Dado/*Nut*
4 Rondella/*Spring washer*
5 Bullone/*Hex screw*
6 Flangia in ingresso/*Input flange*
7 O-ring/*O-ring*
8 Distanziale/*Adjust spacer*
9 Cuscinetto/*Bearing*
10 Vite forata in ingresso/*Hole input worm*
11 Vite cilindrica in ingresso e albero maschio/*Hole input and shaft & output worm*
12 Anello di tenuta/*Oil seal*
13 Coperchio in ingresso/*Input cover*
14 Cuscinetto/*Bearing*
15 Chiavetta/*Key*
16 Albero in ingresso/*Shaft input worm*
17 Albero in ingresso e vite in uscita/*Shaft input and shaft output worm*
18 Chiavetta/*Key*
19 Tappo per olio/*Oil plug*
20 Carcassa/*Case*
21 Anello di tenuta/*Oil seal*
22 Flangia in uscita/*Output flange*
23 Bullone/*Hex screw*
24 Cuscinetto/*Bearing*
25 Seeger/*Hole-circlip*
26 Anello di tenuta/*Oil seal*
27 Coperchio/*Cover*
28 Cuscinetto/*Bearing*
29 Corona/*Worm wheel*
30 O-ring/*O-ring*
31 Coperchio in uscita/*Output cover*
32 Seeger albero/*Shaft-circlip*
33 Distanziale/*Spacer*
34 Chiavetta/*Key*
35 Chiavetta/*Key*
36 Coperchio in ingresso/*Input cover*
37 Albero bisporgente in uscita/*Double output shaft*
38 Albero sporgente in uscita/*Single output shaft*

IMAGINERS
GRAPHIC STUDIO

Progettato e realizzato da:
Imaginers Graphic Studio

**2024**

ELLE. GI SRL

# Catalogo Tecnico

## Riduttori A Vite Senza Fine Elle. Gi serie MRDV
## Elle. Gi Worm Gearboxes MRDV series

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