TRANSTECNO™

THE MODULAR GEARMOTOR

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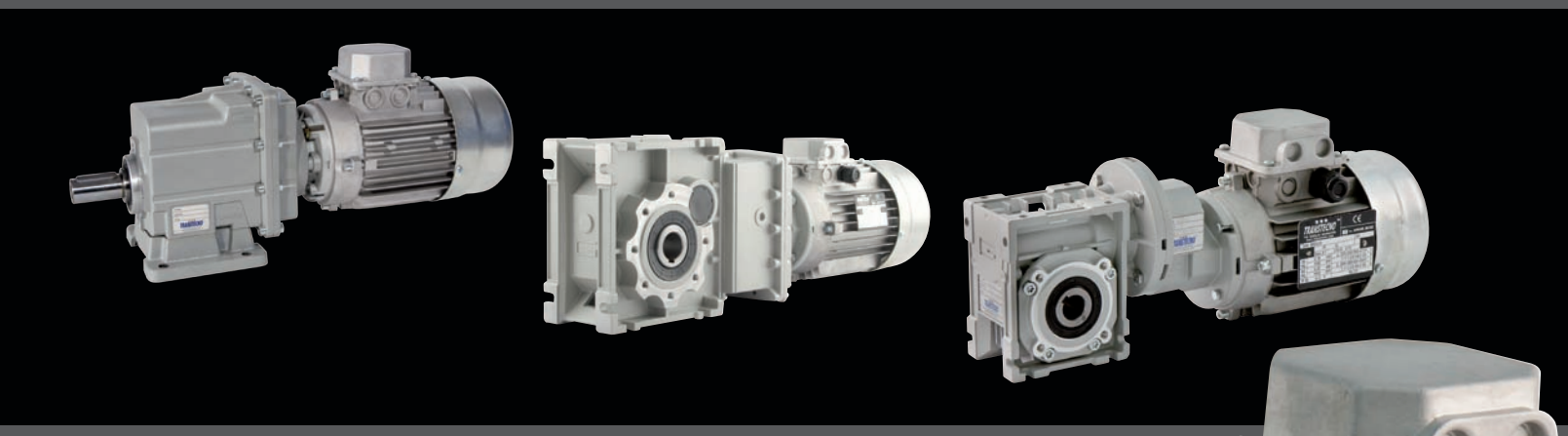

PRODUCTS · TRANSTECNO · GENUINE ·

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Questo catalogo annulla e sostituisce ogni precedente edizione o revisione. Ci riserviamo inoltre il diritto di apportare modifiche senza preavviso.

This catalogue supersedes any previous edition and revision. We reserve the right to implement modifications without notice.

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Generalità / *General information*

Per avere una migliore comprensione degli argomenti e dei dati esposti in questo catalogo proponiamo la simbologia utilizzata corredandola delle informazioni di base per giungere ad una corretta selezione dei motoriduttori e variatori.

Information in this manual is provided with symbols in order to understand the subject matter and data. These symbols are intended to aid the user in selecting the right gearmotors and variators.

Velocità entrata / *Input speed*

n_1 [min^{-1}]

Rappresenta la velocità riferita al tipo di motorizzazione prescelta ed è applicata in entrata al riduttore (o variatore).

Per selezioni a velocità diverse da quelle riportate consultare il ns. Servizio Tecnico.

This is the input speed at the gearbox (or variator) related to the type of drive unit selected.

When different speeds are required, contact our Technical Service.

Rapporto di riduzione / *Gear ratio*

i

E' una grandezza adimensionale ed è in funzione del numero dei denti degli ingranaggi interni al riduttore.
Nei riduttori a vite senza fine si ottiene dividendo il numero di denti della corona per il numero dei filetti (Z) della vite senza fine.
Dai dati di catalogo si può ottenere con la relazione:

This value is strictly related to the size and number of teeth gears inside the gearbox.
This value is obtained in wormgearboxes by dividing the number of wheel teeth by the number of starts (Z) of the worm.
From the data given in the catalogue, the value can be calculated using the following formula:

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

Velocità in uscita / *Output speed*

n_2 [min^{-1}]

E' la velocità risultante sull' asse di uscita del riduttore e viene ricavata dalla relazione precedente:

This is the gearbox output speed calculated using the formula given above:

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

Nei motovariatori essa è frutto di calcoli più complessi che richiedono la conoscenza delle caratteristiche del cinematismo, per cui a catalogo sono già riportati tutti i valori di n_2 in funzione delle velocità in entrata e del campo di variazione minimo e massimo.

In mechanical variators this value is more complicated to calculate. In fact the application data need to be known in order to calculate this value. All the n_2 values are given in this catalogue according to the input speed and allowable range.

Coppia richiesta / *Requested torque*

Mr_2 [Nm]

E' la coppia richiesta dall'applicazione ed è indispensabile per la selezione di una motorizzazione.
Essa può essere comunicata dall'utente oppure calcolata in base ai dati di applicazione (se forniti).

This is the torque needed for the application and must be known when selecting a drive system. It can either be provided by the user or calculated according to the application data (if provided).

Coppia nominale — Mn_2 [Nm] — *Nominal torque*

Rappresenta la coppia in uscita trasmissibile dal riduttore in base alla velocità in entrata n_1 e al rapporto di riduzione i.
Essa è calcolata in base ad un servizio con carico continuo uniforme corrispondente ad un fattore di servizio uguale a 1.
Questo valore non è riportato nel presente catalogo ma può essere ricavato approssimativamente con la seguente relazione fra M_2 (coppia trasmessa) e sf (fattore di servizio):

This is the output torque that can be transmitted by the gearbox according to input speed n_1 and gear ratio i. It is calculated based on service with a continuous steady load corresponding to a service factor equal to 1. This value is not given in the catalogue but can be calculated approximately with the following formula between M_2 (output torque) and sf (service factor):

$$Mn_2 = M_2 \cdot sf$$

Coppia Trasmessa — M_2 [Nm] — *Output torque*

E' la coppia trasmessa in uscita al riduttore.
Dipende dalla potenza P_1 del motore installato, dal numero di giri in uscita n_2 e dal rendimento dinamico Rd e può essere calcolata con la relazione:

This is the gearbox's output torque. It is strictly related to power P_1 of the motor installed, output rpm n_2 and dynamic efficiency Rd. It can be calculated with the following formula:

$$M_2 = \frac{9550 \cdot P_1 \cdot Rd}{n_2}$$

oppure: *or:*

$$M_2 = \frac{9550 \cdot P_2}{n_2}$$

dove: *where:*

$$P_2 = P_1 \cdot Rd$$

Rendimento — Rd; Rs — *Efficiency*

I calcoli delle prestazioni sono stati effettuati in base al rendimento dinamico Rd dei riduttori (valore ottimale che si raggiunge nel funzionamento a regime dopo rodaggio).

Nei riduttori combinati, il rendimento complessivo è dato dal prodotto dei rendimenti dei due riduttori, considerando però che nel secondo riduttore il rendimento dovrà essere valutato in base alla ridotta velocità in entrata ottenuta dividendo n_1 per il rapporto i del primo riduttore.

E' opportuno considerare che nei riduttori a vite senza fine si ha anche un valore di rendimento statico Rs, presente in fase di avviamento, che declassa sensibilmente la coppia risultante per cui influenza in modo determinante la scelta di motorizzazioni destinate ad applicazioni intermittenti (es. sollevamenti).

Il valore dei rendimenti dinamico e statico dei riduttori a vite senza fine sono riportati nella tabella a pag. D6.
Nei riduttori ad ingranaggi CMG, CMB e PU il rendimento medio è del 94%.
Nei motovariatori il rendimento assume un valore di 0.85 alla velocità massima e decresce fino a 0.7 alla velocità minima.

Efficiency is calculated based on dynamic efficiency Rd of the gearboxes (optimal value reached when running at normal speed after the break in period).

In combination gearboxes, overall efficiency is obtained from the combined efficiency of the two gearboxes. However, keep in mind that efficiency of the second gearbox should be determined according to the reduced input speed obtained by dividing n_1 by ratio i of the first gearbox.

It is important to remember that wormgearboxes also have static efficiency value Rs present at start-up. This value notably reduces the resulting torque. As a result, it must be taken into consideration when selecting drive systems for intermittent operations (e.g. lifting) as it is a determinant factor.

Dynamic and static efficiency of wormgearboxes are given in the table on page D6.
On helical gearboxes CMG, CMB and PU the average efficency is 94%.
Efficiency is 0.85 at the highest speed decreasing to 0.7 at the lowest speed in motovariators.

Reversibilità e irreversibilità

Reversibility and irreversibility

La diretta conseguenza del rendimento (statico e dinamico) è la reversibilità del riduttore a vite senza fine che consiste nella possibilità di fare ruotare l'albero entrata tramite l'applicazione di una torsione più o meno accentuata sull'albero uscita.
L'impossibilità o la difficoltà ad effettuare l'azione sopra descritta, determina il grado di reversibilità (o irreversibilità) di un riduttore.

Questa caratteristica, molto significativa nei riduttori a vite senza fine, è influenzata da molteplici fattori quali angolo d'elica (quindi rapporto di trasmissione), lubrificazione, temperatura, finitura superficiale della vite senza fine, presenza di vibrazioni, ecc.

In applicazioni dove sono presenti delle traslazioni è necessario garantire una elevata reversibilità onde evitare che le inerzie delle masse in movimento possano determinare punte di carico inammissibili sugli organi di trasmissione.

In applicazioni dove è richiesto un non ritorno del carico (es. sollevamenti o nastri trasportatori inclinati) in assenza di un freno motore è necessario scegliere un riduttore caratterizzato da un elevato grado di irreversibilità.
Desideriamo comunque evidenziare che la garanzia assoluta di non ritorno è data esclusivamente dall'installazione di un motore autofrenante o di un altro dispositivo frenante esterno.

La tabella sottostante riporta a titolo puramente indicativo i vari gradi di reversibilità/irreversibilità nei riduttori a vite senza fine in funzione del rendimento dinamico Rd e statico Rs.

Reversibility of the wormgearbox is the direct consequence of efficiency (static and dynamic). This determines whether or not the input shaft can be rotated by applying a certain torque on the output shaft.
Whether or not this can be done and how difficult it actually is to do determine the degree of reversibility (or irreversibility) of a gearbox.
This feature, quite significant in wormgearboxes, is affected by numerous factors including the helix angle (therefore drive ratio), lubrication, temperature, surface finish of the worm, vibrations, etc...

In applications that include translations, high reversibility must be guaranteed to prevent inertia of the moving parts from creating unacceptable load peaks on the drive parts.

In applications that require non-return of the load (e.g. lifting or inclined conveyor belts) a gearbox with high irreversibility must be chosen when a motor-brake unit is not present.

However, we would like to point out that non-return can be totally assured only by installing a self-braking motor or other external braking device.

The table below is provided for reference purposes only. It contains the various degrees of reversibility/irreversibility of wormgearboxes in relation to dynamic Rd and static Rs efficiency.

Rd	Reversibilità e irreversibilità dinamica	*Dynamic reversibility and irreversibility*
> 0.6	Reversibilità dinamica	*Dynamic reversibility*
0.5 - 0.6	Reversibilità dinamica incerta	*Uncertain dynamic reversibility*
0.4 - 0.5	Buona irreversibilità dinamica	*Good dynamic irreversibility*
<0.4	Irreversibilità dinamica	*Dynamic irreversibility*
Rs	**Reversibilità e irreversibilità statica**	***Static reversibility and irreversibility***
> 0.55	Reversibilità statica	*Static reversibility*
0.5 - 0.55	Reversibilità statica incerta	*Uncertain static reversibility*
<0.5	Irreversibilità statica	*Static irreversibility*

Potenza in entrata

P_1 [kW]

Input power

E' la potenza motore applicata in entrata al riduttore e riferita alla velocità n_1.
Può essere calcolata come segue:

This is the power applied by the motor at the gearbox input in reference to speed n_1.
It can be calculated with the following formula:

$$P_1 = \frac{M_2 \cdot n_2}{9550 \cdot Rd}$$

Fattore di servizio — sf — *Service factor*

E' una grandezza adimensionale che indica il sovradimensionamento da applicare ad una determinata motorizzazione per garantire la resistenza agli urti e la durata richiesta.
Le tabelle di catalogo offrono una vasta scelta di motorizzazioni con fattori di servizio differenziati che possono soddisfare la maggior parte delle applicazioni più o meno gravose.
Per una corretta interpretazione dei valori del fattore di servizio sf riportati a fianco di ogni selezione proposta, riportiamo nelle tabelle seguenti i valori indicativi attribuiti alle classi di carico A, B, C e alla durata di funzionamento giornaliero h/d e al numero di avviamenti/ora.
Definendo la classe di carico a cui riferire l'applicazione, si ricercherà nella tabella il corrispondente valore di sf da utilizzare nella scelta della motorizzazione più idonea.

This value indicates how a certain drive system is to be over-sized in order to assure the requested service and stand up to shocks. The tables given in the catalogue offer a wide range of drive systems with different service factors able to satisfy most types of applications. To correctly understand service factor values sf given for each item, approximate values for load classes A, B and C along with the number of hours of daily operation h/d and number of start-ups/hours need to be known.
Once the load class required for the application has been determined, locate corresponding value sf to be used when selecting the most suitable drive system.

Tipo di carico	**A** - Uniforme	fa ≤ 0.3
	B - Medio	fa ≤ 3
	C - Forte	fa ≤ 10

Type of load	***A*** *- Uniform*	*fa ≤ 0.3*
	B *- Moderate shocks*	*fa ≤ 3*
	C *- Heavy shocks*	*fa ≤ 10*

$$fa = \frac{Je}{Jm}$$

- Je (kgm^2) momento d'inerzia esterno ridotto all'albero motore.
- Jm (kgm^2) momento d'inerzia motore.
  Se fa > 10 interpellare il sn. Servizio Tecnico.

$$fa = \frac{Je}{Jm}$$

- *Je (kgm^2) moment of reduced external inertia at the drive-shaft*
- *Jm (kgm^2) moment of inertia of motor.*
  If fa > 10 call our Technical Service.

A — Classe di carico / *Load class*
Carico uniforme / *Uniform load*

h/d	sf								
	n. avviamenti/ora / n. start-up/hour								
	2	**4**	**8**	**16**	**32**	**63**	**125**	**250**	**500**
4	0.8	0.8	0.9	0.9	1.0	1.1	1.1	1.2	1.2
8	1.0	1.0	1.1	1.1	1.3	1.3	1.3	1.3	1.3
16	1.3	1.3	1.3	1.3	1.5	1.5	1.5	1.5	1.5
24	1.5	1.5	1.5	1.5	1.8	1.8	1.8	1.8	1.8

B — Classe di carico / *Load class*
Carico con urti moderati / *Moderate shock load*

h/d	sf								
	n. avviamenti/ora / n. start-up/hour								
	2	**4**	**8**	**16**	**32**	**63**	**125**	**250**	**500**
4	1.0	1.0	1.0	1.0	1.3	1.3	1.3	1.3	1.3
8	1.3	1.3	1.3	1.3	1.5	1.5	1.5	1.5	1.5
16	1.5	1.5	1.5	1.5	1.8	1.8	1.8	1.8	1.8
24	1.8	1.8	1.8	1.8	2.2	2.2	2.2	2.2	2.2

C — Classe di carico / *Load class*
Carico con urti forti / Heavy *shock load*

h/d	sf								
	n. avviamenti/ora / n. start-up/hour								
	2	**4**	**8**	**16**	**32**	**63**	**125**	**250**	**500**
4	1.3	1.3	1.3	1.3	1.5	1.5	1.5	1.5	1.5
8	1.5	1.5	1.5	1.5	1.8	1.8	1.8	1.8	1.8
16	1.8	1.8	1.8	1.8	2.2	2.2	2.2	2.2	2.2
24	2.2	2.2	2.2	2.2	2.5	2.5	2.5	2.5	2.5

Esempio applicazione:

Nastro trasportatore attribuibile alla classe di carico B **(carico con urti moderati)** e previsto per una durata di funzionamento giornaliero (h/d) di **16** ore e con **8** avviamenti/ora.
Dalla tabella rileviamo **sf = 1.5**

Application example:

*Conveyor belt assigned to load class B **(moderate shock load)**, to be run **16** hours a day (h/d) with **8** start-ups/hour.*
The following value is obtained from the table
sf = 1.5

Carico radiale — $R; R_2$ [N] — *Radial load*

L'applicazione sull'albero in uscita del riduttore di pignoni, pulegge, ecc. determina delle forze radiali che debbono necessariamente essere considerate per evitare sollecitazioni eccessive con il rischio di danneggiamenti del riduttore stesso.
Il calcolo del carico radiale esterno R agente sull'albero del riduttore può essere determinato come segue:

Pinions, pulleys, etc applied on the output shaft of the gearboxes create radial forces that must be taken into consideration to avoid excessive stress risking damage to the gearbox itself.

External radial load R that acts on the gearbox shaft can be calculated as follows:

$$R = \frac{2000 \cdot M_2 \cdot kr}{d} \leq R_2$$

dove:
d [mm] diametro primitivo del pignone o della puleggia
kr coefficiente riferito al tipo di trasmissione:
kr = 1.4 ruota per catena
kr = 1.1 ingranaggio
kr = 1.5 - 2.5 puleggia per cinghia a V

where:
***d** [mm] diameter of the pinion or pulley*
***kr** coefficient in relation to type of transmission:*
***kr = 1.4** sprocket wheel*
***kr = 1.1** gear*
***kr = 1.5 - 2.5** pulley for V belts*

E' opportuno evidenziare che i valori di R_2 sono riferiti a carichi agenti sulla mezzeria dell'albero lento (considerando l'albero sporgente) per cui il confronto dovrà essere effettuato nelle medesime condizioni.

Keep in mind that values R_2 refer to loads that act on the centerline of the output shaft (considering the shaft protrudes). As a result, the value should be compared under the same conditions.

Carico assiale — $A; A_2$ [N] — *Axial load*

A volte, unitamente al carico radiale, può essere presente anche una forza A che agisce assialmente sull'albero uscita; in questo caso considerare che il carico assiale ammissibile A_2 sull'albero è da considerare:

At times, along with the radial load, force A may be present that acts axially on the output shaft. In this case, keep in mind allowable axial load A_2 that can be applied on the shaft is:

$$A_2 = R_2 \cdot 0.2$$

Nel caso in cui il valore del carico assiale A agente sull'albero risultasse superiore ad A_2 contattate il ns. Servizio Tecnico.

If axial load A that acts on the shaft is greater than A_2, contact our Technical Service.

Scelta dei motoriduttori e motovariariduttori — *Selecting the gearmotors, mechanical variators and gearbox*

Per la scelta di un motoriduttore o motovariariduttore è necessario seguire la seguente procedura.

To select the required gearmotor or mechanical variator, perform the procedure below:

1. Per l'applicazione desiderata ricavare il fattore di servizio sf dalle tabelle a pag. A5 in base alla classe di carico, alle ore di funzionamento giornaliere e al numero di avviamenti orari.

   Determine the service factor sf for the desired application by referring to the charts given on page A5. This is to be done by considering the class of load, the operational hours/day and the number of start-ups/ hour.

2. Se si conosce la potenza motore P [kW] richiesta, passare al punto 3); se è nota la coppia in uscita M richiesta è necessario calcolare la potenza motore P con le formule:

   If the required motor power output P is known, go to item 3); if the required output torque M is known, determine motor output P by using the following formulas:

$$P = \frac{M \cdot n_2}{9550 \cdot Rd}$$ Motoriduttore / *Gearmotor*

$$P = \frac{M \cdot n_{2max}}{9550 \cdot Rv \cdot Rd}$$ Motovariariduttore / *Mechanical variator and Gearbox*

dove Rd è il rendimento dinamico (riportato a pag. D6) e n_2 il numero di giri richiesti in uscita al motoriduttore, Rv è il rendimento del variatore alla velocità max. (indicativamente 0.85) e n_{2max} il numero di giri massimo richiesto in uscita al motovariariduttore.

where Rd stands for the dynamic efficiency (indicated on page D6) and n_2 indicates the required output rpm of the gearmotor, Rv indicates the speed variator efficiency at maximum speed (approx. 0.85) and n_{2max} is the maximum output rpm for the speed variator and gearbox assembly.

3. Nelle tabelle dei dati tecnici ricercare la motorizzazione in cui sia P_1 maggiore o uguale a P e con riferimento a d una velocità n_2/n_{2max} prossima a quella desiderata, scegliere la motorizzazione in cui il fattore di servizio sf indicato risulti uguale o superiore a quello ricavato al punto 1).

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		
0.18						
63B4 (1400 min^{-1})	30.0	54	*2.2*	46.61	**CMG013**	**B5**
	25.3	64	*1.9*	55.36		**B5**
	22.1	73	*1.6*	63.22		**B5**
	18.6	87	*1.4*	75.08		**B5**

Esempio / *Example:*

Applicazione / *Application:*
Nastro trasportatore / *Conveyor belt*

P : 0.18 kW
sf : 1.5
n_2 : 23 min^{-1}

Motorizzazione scelta / *Power unit selected:*

CMG013 i = 22.1, P_1 = 0.18 kW, sf = 1.6

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		
0.18						
63B4 (1400 min^{-1})	**187**	8	*4.4*	7.5	**CM040**	**B5/B14**
	140	10	*3.7*	10		**B5/B14**
	93	15	*2.5*	15		**B5/B14**
	70	19	*2.1*	20		**B5/B14**
	56	22	*1.7*	25		**B5/B14**
	47	25	*1.7*	30		**B5/B14**
	35	32	*1.3*	40		**B5/B14**
	28	39	*1.0*	50		**B5/B14**

Esempio / *Example:*

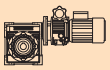
Applicazione / *Application:*
Nastro trasportatore / *Conveyor belt*

P : 0.17 kW
sf : 1.5
n_2 : 45 min^{-1}

Motorizzazione scelta / *Power unit selected:*

CMG040 i = 30, P_1 = 0.18 kW, sf = 1.7

3. *Use the specification chart to search for the power unit where P_1 is greater than or equal to P with a speed n_2/n_{2max} that approximates the desired one. Choose a power unit where the indicated service factor sf is equal to or greater than that calculated at point 1).*

	velocità massima *max speed*			velocità minima *min speed*				
P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	n_2 [min^{-1}]	M_2 [Nm]	sf	i	
0.37								
71B4 n_1=1400 [min^{-1}]	**133**	19	*3.3*	**27**	37	*1.8*	7.5	**CMV 050/037**
	100	25	*2.8*	**20**	48	*1.5*	10	
	67	35	*2.1*	**13**	68	*1.1*	15	
	50	45	*1.5*	**10**	86	*0.8*	20	
	40	53	*1.3*	**8.0**	102	*0.7*	25	
	33	60	*1.3*	**6.7**	115	*0.7*	30	
	25	77	*1.0*	**5.0**	146	*0.6*	40	

Esempio / *Example:*

Applicazione / *Application:*
Nastro trasportatore / *Conveyor belt*

M : 40 Nm
sf : 1.5
n_{2max} : 52 min^{-1}
n_{1vmax} : 1000 min^{-1} (velocità max in uscita al variatore)
(max. variator output speed)
ir : 1000/52 = 19.2 » 20 (rapporto di riduzione richiesto al riduttore)
(transmission ratio required by the gearbox)
Rv : 0.85 (rendimento indicativo del variatore alla velocità max)
(approximate efficiency of the variator at max. speed)
Rd : 0.80 (rendimento dinamico indicativo del riduttore con ir = 20)
(approximate dynamic efficiency of gearbox with ir = 20)
P : 0.32 kW da cui / *from which* **P_1 = 0.37 kW**

Motorizzazione scelta / *Power unit selected:*

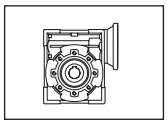
CMV050/037 i = 20, P_1 = 0.37 kW, sf = 1.5

Lubrificazione

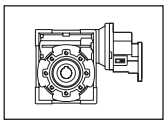
Lubrication

I riduttori della serie CM, CMM, CMP, CMG, CMB e PU sono forniti completi di lubrificante sintetico viscosità 320 a lunga durata, pertanto non necessitano di manutenzione.

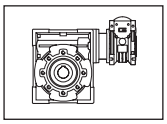
All unit sizes of CM, CMM, CMP, CMG, CMB and PU series are complete with a long life synthetic lubricant, viscosity 320 and do not require maintenance.



CM



CMP



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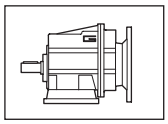
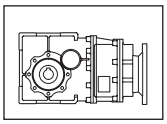
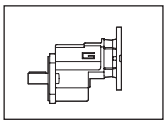


CMG



CMB

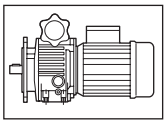


PU

SHELL	AGIP	ESSO	MOBIL	CASTROL	BP
Tivela Oil SC320	Telium VSF320	S320	Glygoyle 30	Alphasyn PG320	Energol SG-XP 320

I variatori sono riempiti di olio lubrificante in fabbrica.
Eventuali rabbocchi di olio o le successive sostituzioni dovranno essere effettuati utilizzando i lubrificanti consigliati scegliendoli fra quelli indicati nella tabella seguente.

Variators are filled with lubrication oil in the factory.
Any topping up and the subsequent changes must be done using the suggested lubrication oils, indicated in the following table.



VAM

AGIP	BP	CASTROL	CHEVRON	ESSO	FINA	MOBIL	SHELL
A.T.F. Dexron	BP Autran DX	TQ. Dexron II	A.T.F. Dexron	A.T.F. Dexron	A.T.F. Dexron	A.T.F. 200 Red	A.T.F. Dexron Fluid DIII

Nelle sezioni specifiche sono riportate le tabelle con le quantità indicative di lubrificante contenute e/o da immettere.

The tables contain the approximate amount of lubricant held and/or to be put in.

In fase di ordine è necessario specificare sempre la posizione di montaggio desiderata.

Always specify the desired installation position at the time of order.

Temperatura di lavoro / *Operating temperature*

La temperatura ambientale influisce sulle specifiche di riduttori e variatori.

The environmental temperature affects specifications of gearboxes and mechanical variators.

Campo di temperatura standard / *Standard temperature range*

CMG	-35°C / +50°C
CMB	-35°C / +50°C
CM026 - CM050	-25°C / +50°C
CM063 - CM130	-35°C / +50°C
CMP	-35°C / +50°C
PU	-35°C / +50°C
P	-50°C / +40°C
VAM	-5°C / +40°C

Campi di temperatura speciali / *Special temperature range*

	<-15°C	**-35°C/-25°C**	**<-35°C**	**>+50°C**
CMG00 - CMG04			usare paraoli in silicone (VMQ) *use silicone (VMQ) oil seals* usare lubrificante per basse *temperature use low temperature lubricant*	usare paraoli in Viton (FPM) *use Viton (FPM) oil seals* usare lubrificante per alte temperature *use high temperature lubricant*
CMG05	dimezzare i carichi radiali in uscita *halve the output radial loads*			
CMB633 - CMB903				
CMB1103	dimezzare i carichi radiali in uscita *halve the output radial loads*			
CM026 - CM050		sostituire paraolio ingresso con NBR *replace input oil seal with NBR*		
CM063 - CM110				
CM130	dimezzare i carichi radiali in uscita *halve the output radial loads*			
CMP				
PU				
P	Per temperature al di fuori dello standard contattare il nostro Servizio Tecnico *In case of temperatures out of the standard range contact our Technical Service*			
VAM				

Per temperature <0°C riferirsi alle seguenti note:
- verificare che il motore sia idoneo al funzionamento a bassa temperatura;
- assicurarsi che il motore possa fornire maggior coppia di avviamento a causa dell'aumento di viscosità del lubrificante;
- procedere con alcuni minuti di funzionamento a vuoto per garantire l'ottimale lubrificazione;

For temperature <0°C refer to the following notes:
- *check if the motor is suitable for low temperature;*
- *due to the high viscosity of the lubricant, check if the motor can supply high starting torque;*
- *let the group run for a few minutes without load to guarantee good lubrication;*

Installazione e verifiche

Installation and inspection

In fase di installazione del riduttore o motovariatore è opportuno verificare che:

- i dati riportati in targhetta corrispondano al prodotto che è stato ordinato;
- le superfici di accoppiamento e gli alberi siano accuratamente puliti e privi di ammaccature;
- le superfici su cui verrà installato il riduttore (o il motovariatore) siano perfettamente piane e sufficientemente rigide;
- l'albero macchina e quello del riduttore siano correttamente allineati;
- siano stati installati sistemi di limitazione della coppia se si prevedono urti o blocchi della macchina durante il funzionamento;
- siano state predisposte le necessarie protezioni antinfortunistiche agli organi rotanti;
- siano state create delle opportune coperture a protezione dagli agenti atmosferici se l'installazione è effettuata all'aperto ed è soggetta alle intemperie;
- l'ambiente di lavoro non sia corrosivo (a meno che tale specifica non sia stata dichiarata in fase di ordine al fine di predisporre il riduttore o il motovariatore per questo utilizzo);
- gli eventuali pignoni o pulegge montati sull'albero uscita o entrata del riduttore, siano calettati correttamente in modo tale da non generare carichi radiali e/o assiali superiori a quelli ammissibili;
- su tutti gli accoppiamenti sia stato applicato un adeguato protettivo antiossidante per prevenire eventuali ossidazioni da contatto;
- tutte le viti di fissaggio siano state serrate correttamente;
- per tutti i variatori ed i riduttori grandezza CMG 05, CMB 1103 e CM 130 verificare la corretta quantità di lubrificante in funzione della posizione di montaggio.

While installing the gearbox or the mechanical speed variator-and-gearbox assembly, always make sure that:

- *the specifications stamped on the rating plate match those indicated for the unit actually ordered;*
- *the mating surfaces and the shafts are thoroughly clean and free of dents;*
- *the surfaces where the gearbox (or the speed variator-and-gearbox assembly) are to be mounted on are flat and strong enough;*
- *the machine drive shaft and the gearbox shaft are perfectly aligned;*
- *the required torque limiters have been installed if the machine is likely to produce shocks or blockages during operation;*
- *the rotary parts have been provided with the required safety guards;*
- *adequate weatherproof covering has been provided if the machine is to be installed outdoor;*
- *the working environment is not exposed to corrosive agents (unless this has been indicated while placing the order so that the gearbox or the speed variator-and-gearbox assembly can be adequately set up);*
- *the pinions or pulleys on the gearbox input/output shafts are properly fitted in order not to produce radial and/or axial loads that exceed the maximum allowable limits;*
- *all the couplings have been treated with adequate rust preventative in order to avoid oxidation provoked by contact;*
- *all the mounting screws have been securely tightened;*
- *check the lubricant quantity depending on the mounting position on all the variators and on gearboxes CMG 05, CMB 1103 e CM 130.*

Applicazioni critiche

Critical applications

In tutti questi casi consultare il Servizio Tecnico

- utilizzo come moltiplicatore;
- utilizzo come argano di sollevamento;
- utilizzo in posizioni non previste a catalogo;
- utilizzo in ambiente con pressione diversa da quella atmosferica;
- utilizzo in ambiente con temperature <-35°C o >+50°C

In these cases please contact the Technical Service

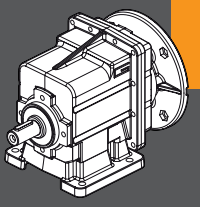
- *used to increase speed ;*
- *used as a hoist;*
- *used in mounting positions not shown in the catalogue;*
- *use in environment pressure other than atmospheric pressure;*
- *use in places with temperature <-35°C or >+50°C*

TRANSTECNO®

THE MODULAR GEARMOTOR

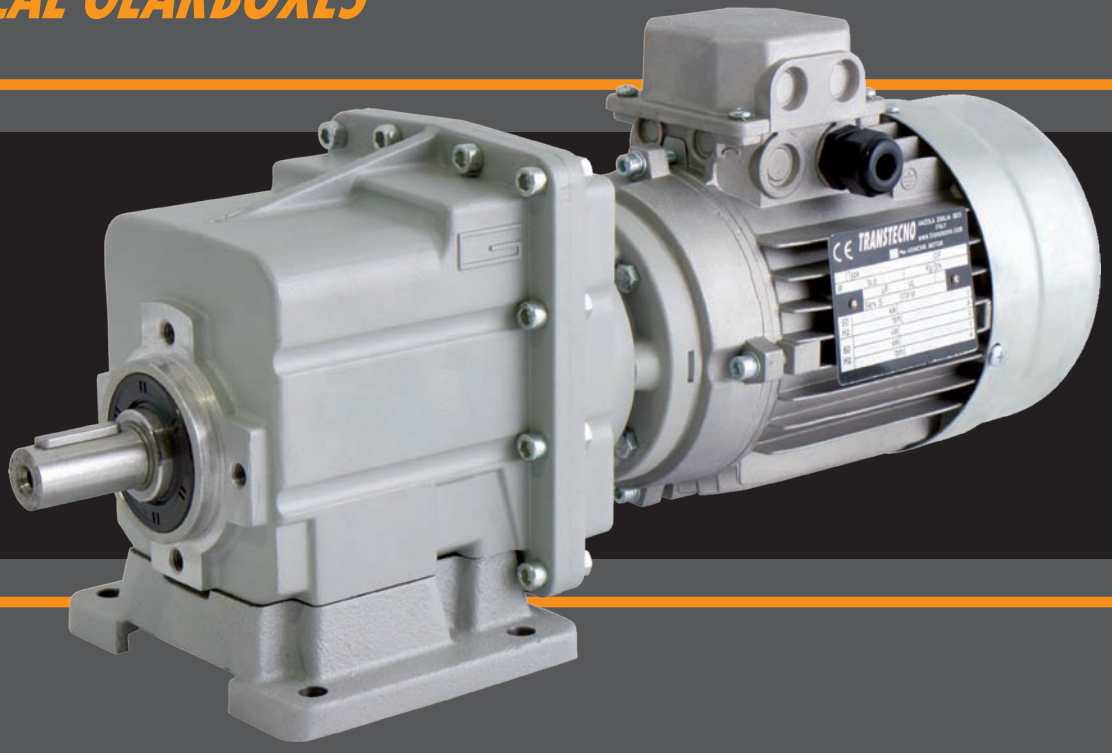
CMG

CMG



RIDUTTORI AD INGRANAGGI CILINDRICI

HELICAL GEARBOXES



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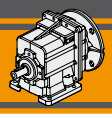

ENERGY SAVING

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Caratteristiche tecniche

Technical features

I riduttori della serie CMG sono caratterizzati da un elevato grado di modularità: partendo da un corpo di base è possibile configurarlo secondo le esigenze, con flangia o piede.

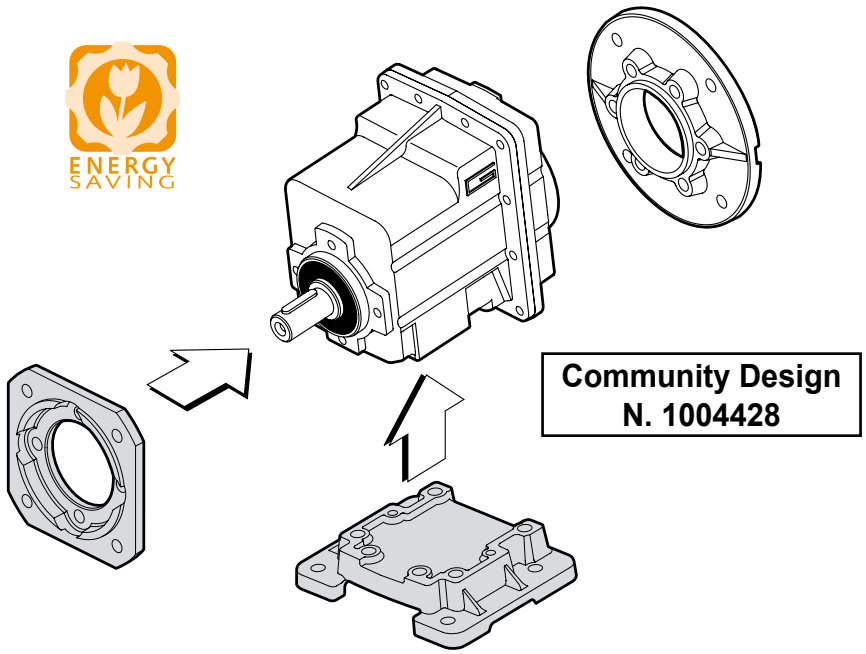
Caratteristiche comuni a tutta la serie:

- Carcassa e flangia PAM in pressofusione di alluminio per le taglie 00, 01, 02, 03 e 04. La taglia 05 è costruita in ghisa;
- Piedi e flange d'uscita in ghisa;
- Ingranaggi sempre rettificati;
- Lubrificazione permanente con olio sintetico.

The high degree of modularity is a design feature of CMG helical gearboxes range. It is possible to set up the version required using flanges or feet.

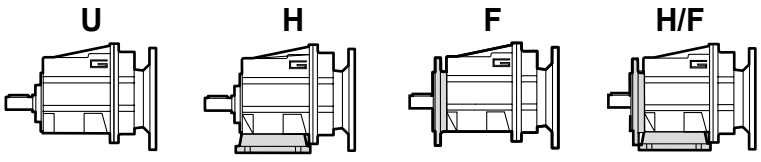
The main features of CMG range are:

- *Die-cast aluminum housings and input flanges for sizes 00, 01, 02, 03 and 04. Cast iron housing on size 05;*
- *Cast iron feet and output flanges;*
- *Ground-hardened helical gears;*
- *Permanent synthetic oil long-life lubrication.*



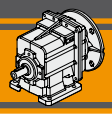
Designazione

Classification

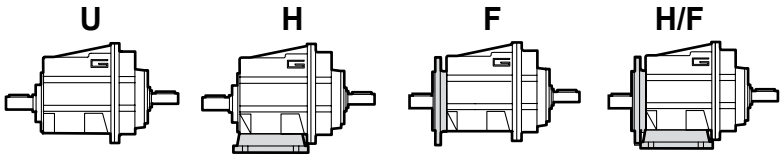


RIDUTTORE / *GEARBOX*

CMG	01	2	H65	9.81	D20	71	B14	B3
Tipo *Type*	Grandezza *Size*	Stadi *Stages*	Versione *Version*	Rapporto *Ratio*	Albero uscita *Output shaft*	IEC	Forma costruttiva *Version*	Pos. di montaggio *Mounting position*
CMG	**00** **01** **02** **03** **04** **05**	**2** **3**	**U...** **H...** **F...** **H.../F...**	vedi tabelle *see tables*	vedi tabelle *see tables*	**56..** **—** **112..**	**B5** **B14**	**B3-B5** **B8** **B6** **B7** **V5-V1** **V6-V3**



Designazione — *Classification*



RIDUTTORE / *GEARBOX*

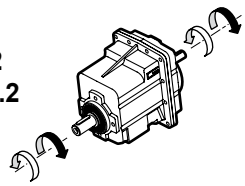
CMGIS	01	2	U	9.81	D20	B3
Tipo *Type*	Grandezza *Size*	Stadi *Stages*	Versione *Version*	Rapporto *Ratio*	Albero uscita *Output shaft*	Pos. di montaggio *Mounting position*
CMGIS	**01** **02** **03** **04** **05**	**2** **3**	**U...** **H...** **F...** **H.../F...**	vedi tabelle *see tables*	vedi tabelle *see tables*	**B3-B5** **B8** **B6** **B7** **V5-V1** **V6-V3**

MOTORE / *MOTOR*

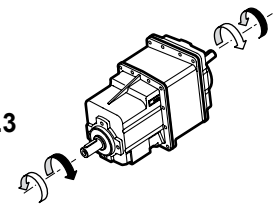
0.75kW	4p	3ph	50Hz	T1
Potenza *Power*	Poli *Poles*	Fasi *Phases*	Frequenza *Frequency*	Pos. morsettiera *Terminal box pos.*
vedi tabelle *see tables*	**2p** **4p** **6p** **8p**	**1ph** **3ph**	**50Hz** **60Hz**	**T1** (Std) **T4** **T2** **T3**

Sensi di rotazione — *Direction of rotation*

CMG...2
CMGIS..2



CMG...3
CMGIS..3



Simbologia — *Symbols*

n_1	[min^{-1}]	Velocità in ingresso / *Input speed*
n_2	[min^{-1}]	Velocità in uscita / *Output speed*
i		Rapporto di riduzione / *Ratio*
P_1	[kW]	Potenza in entrata / *Input power*
M_2	[Nm]	Coppia nominale in uscita in funzione di P_1 / *Output torque referred to* P_1
Pn_1	[kW]	Potenza nominale in entrata / Nominal *input power*
Mn_2	[Nm]	Coppia nominale in uscita in funzione di Pn_1 / Nominal *output torque referred to* Pn_1
sf		Fattore di servizio / *Service factor*
R_2	[N]	Carico radiale ammissibile in uscita / *Permitted output radial load*
A_2	[N]	Carico assiale ammissibile in uscita / *Permitted output axial load*

Lubrificazione — *Lubrication*

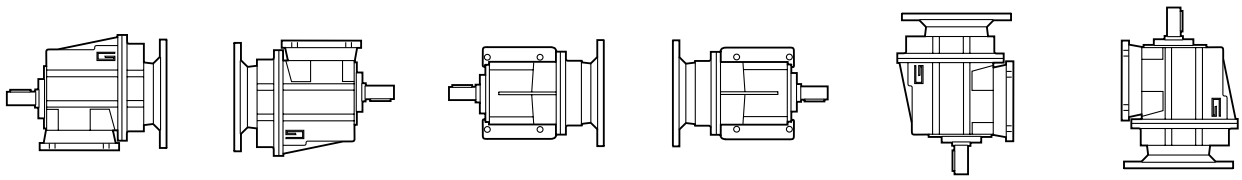
Tutti i riduttori nelle taglie 00, 01, 02, 03 e 04 sono forniti completi di lubrificante sintetico viscosità 320, pertanto possono essere installati in qualunque posizione di montaggio e non necessitano di manutenzione. Per la taglia 05 la lubrificazione dipende dalla posizione di montaggio.

Permanent synthetic oil long-life lubrication (viscosity grade 320) makes it possible to use sizes 00, 01, 02, 03 and 04 in all mounting positions; for this reason they can be installed in any assembly position and do not require maintenance. For size 05 lubrication depends on assembly position.

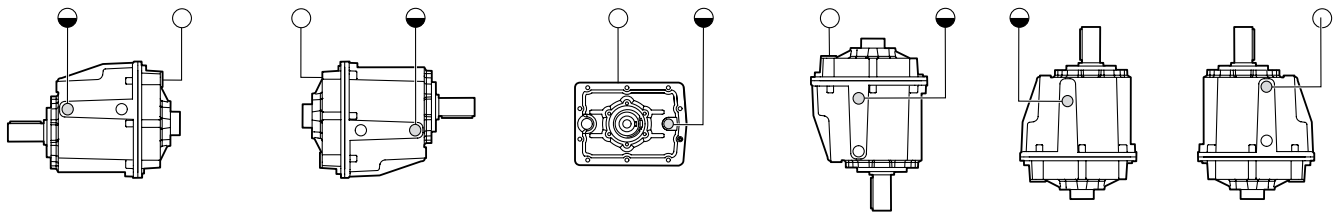
CMG CMGIS	Quantità di olio (litri) / *Oil quantity (litres)*						
	B3	B8	B6	B7	V5	V6	
002	0.18						Lubrificati a vita *Life lubrication*
012	0.32						
013	0.94						
022	0.32						
023	0.94						
032	0.7						
033	1.8						
042	0.7						
043	1.8						
052	2.6	2	2.3	2.3	2.6	3.3	
053	3.2	2.6	2.9	2.9	4.9	4.7	

Posizioni di montaggio / *Mounting positions*

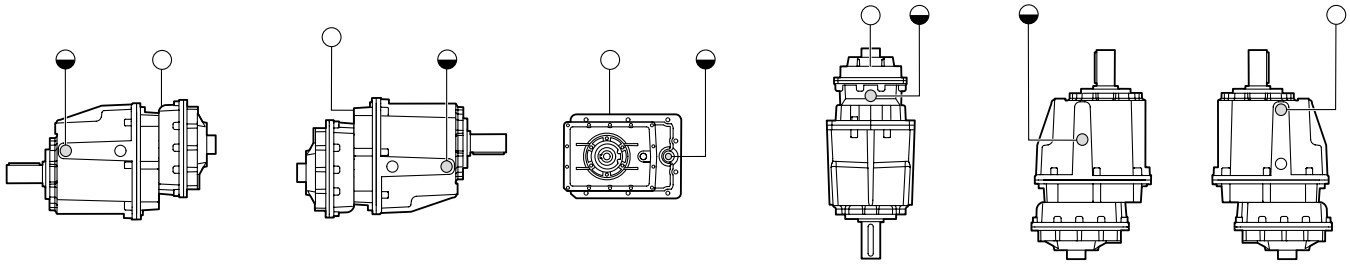
CMG 002-012-013-022-023-032-033-042-043



CMG 052



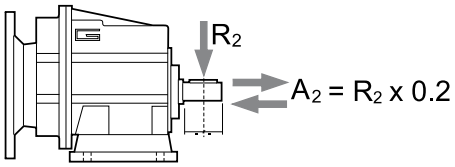
CMG 053



○ Sfiato e tappo di riempimento / *Breather and filling plug*
◒ Livello olio / *Oil level plug*

Carichi radiali

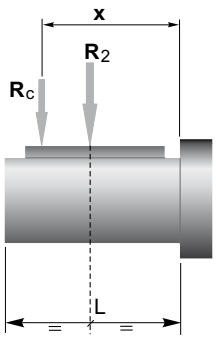
Radial loads



n_2 [min^{-1}]	R_2 [N]					
	CMG 00	CMG 01	CMG 02	CMG 03	CMG 04	CMG 05
700	416	764	1529	1987	2379	3556
600	437	805	1609	2092	2504	3744
500	465	855	1710	2223	2661	3979
400	501	921	1842	2395	2866	4286
250	586	1077	2154	2801	3353	5013
180	653	1323	2554	3321	3897	5853
150	748	1406	2714	3529	4244	6392
120	806	1631	3467	3801	4572	7388
100	958	1842	3684	4507	5234	7851
80	1032	1984	3969	5042	5991	8963
60	1136	2184	4368	5549	6594	10483
40	1300	2500	5000	6500	8000	12000
10	1300	2500	5000	6500	8000	12000

Quando il carico radiale risultante non è applicato sulla mezzeria dell'albero occorre calcolare quello effettivo con la seguente formula:

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:



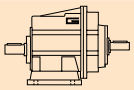
	CMG 00	CMG 01	CMG 02	CMG 03	CMG 04	CMG 05
a	73	104	117	132	150	180
b	53	84	92	102	115	140
R_{2MAX}	1300	2500	5000	6500	8000	12000

$$R_c = \frac{R_2 \cdot a}{(b+x)} \leq R_{2MAX}$$

$$R \leq R_c$$

a, b = valori riportati nella tabella
a, b = values given in the table

Dati tecnici — n_1 1400 min^{-1} — ***Technical data***



CMGIS 002

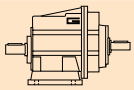
n_2 [min^{-1}]	Mn_2 [Nm]	Pn_1 [kW]	i
279	40	1.2	5.03
230	40	1.0	6.10
187	40	0.82	7.49
156	50	0.85	8.99
138	50	0.75	10.16
116	50	0.63	12.07
105	70	0.80	13.40
92.5	70	0.71	15.14
77.1	70	0.59	18.17
64.9	70	0.50	21.58
59.6	70	0.45	23.51
55.8	70	0.43	25.10
51.7	70	0.39	27.08
43.1	70	0.33	32.49
33.3	70	0.25	42.04
31.2	70	0.24	44.89
28.7	70	0.22	48.86

CMGIS 012

n_2 [min^{-1}]	Mn_2 [Nm]	Pn_1 [kW]	i
367	60	2.4	3.82
302	60	2.0	4.63
246	60	1.6	5.69
181	80	1.6	7.72
153	80	1.3	9.17
143	80	1.2	9.81
122	100	1.3	11.50
118	100	1.3	11.90
101	120	1.3	13.80
95.7	120	1.3	14.62
78.4	120	1.0	17.86
73.4	120	1.0	19.07
70.6	120	0.9	19.83
59.4	120	0.8	23.56
47.4	120	0.6	29.56
39.5	120	0.5	35.47
30.5	120	0.4	45.89
28.6	120	0.4	49.00
26.3	120	0.3	53.33

CMGIS 013

n_2 [min^{-1}]	Mn_2 [Nm]	Pn_1 [kW]	i
22.1	120	0.30	63.22
18.6	120	0.25	75.08
15.7	120	0.21	89.17
12.4	120	0.17	113.05
10.4	120	0.14	134.27
8.1	120	0.11	173.72
6.9	120	0.09	202.16
5.4	120	0.07	261.57
4.6	120	0.06	304.00
3.6	120	0.05	393.33



CMGIS 022

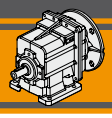
n_2 [min^{-1}]	Mn_2 [Nm]	Pn_1 [kW]	i
383	100	4.2	3.66
316	100	3.4	4.43
257	100	2.8	5.45
190	120	2.5	7.39
159	120	2.1	8.78
141	120	1.8	9.93
127	200	2.8	11.01
116	200	2.5	12.05
106	200	2.3	13.21
94.6	200	2.1	14.81
81.9	160	1.4	17.10
76.7	160	1.3	18.26
69.7	200	1.5	20.08
58.7	200	1.3	23.85
46.8	200	1.0	29.93
39.0	200	0.9	35.91
30.1	200	0.7	46.46
28.2	200	0.6	49.61
25.9	200	0.6	54.00

CMGIS 023

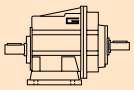
n_2 [min^{-1}]	Mn_2 [Nm]	Pn_1 [kW]	i
21.9	200	0.49	64.01
18.4	200	0.41	76.02
15.5	200	0.35	90.29
12.2	200	0.27	114.46
10.3	200	0.23	135.95
8.0	200	0.18	175.89
6.8	200	0.15	204.69
5.3	200	0.12	264.84
4.5	200	0.10	307.80
3.5	200	0.08	398. 25

CMGIS 032

n_2 [min^{-1}]	Mn_2 [Nm]	Pn_1 [kW]	i
374	150	6.1	3.74
311	150	5.1	4.50
255	150	4.2	5.48
222	180	4.4	6.31
177	180	3.5	7.93
154	180	3.0	9.08
128	180	2.5	10.93
111	250	3.0	12.60
105	250	2.9	13.30
91.5	280	2.8	15.30
76.9	280	2.3	18.21
72.8	280	2.2	19.24
66.2	280	2.0	21.15
56.0	300	1.8	24.99
45.8	300	1.5	30.57
40.9	300	1.3	34.20
36.2	300	1.2	38.63
31.7	300	1.0	44.18
27.3	300	0.9	51.30
23.0	300	0.8	60.80



Dati tecnici — n_1 1400 min^{-1} — ***Technical data***



CMGIS 033

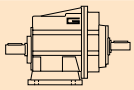
n_2 [min^{-1}]	Mn_2 [Nm]	Pn_1 [kW]	i
19.2	300	0.64	72.83
14.4	300	0.48	97.45
12.1	300	0.40	115.74
9.9	300	0.33	140.81
8.0	300	0.27	174.26
6.2	300	0.21	225.47
5.3	300	0.18	262.05
4.3	300	0.14	325.79
3.7	300	0.12	378.64

CMGIS 042

n_2 [min^{-1}]	Mn_2 [Nm]	Pn_1 [kW]	i
374	230	9.4	3.74
311	230	7.8	4.50
255	230	6.4	5.48
222	260	6.3	6.31
177	260	5.0	7.93
154	280	4.7	9.08
128	280	3.9	10.93
111	350	4.2	12.60
105	350	4.0	13.30
91.5	420	4.2	15.30
76.9	420	3.5	18.21
72.8	420	3.3	19.24
56.0	500	3.1	24.99
45.8	500	2.5	30.57
40.9	500	2.2	34.20
36.2	500	2.0	38.63
31.7	500	1.7	44.18
27.3	500	1.5	51.30
23.0	480	1.2	60.80

CMGIS 043

n_2 [min^{-1}]	Mn_2 [Nm]	Pn_1 [kW]	i
19.2	500	1.1	72.83
14.4	500	0.80	97.45
12.1	500	0.67	115.74
9.9	500	0.55	140.81
8.0	500	0.45	174.26
6.2	500	0.35	225.47
5.3	500	0.30	262.05
4.3	500	0.24	325.79
3.7	500	0.21	378.64



CMGIS 052

n_2 [min^{-1}]	Mn_2 [Nm]	Pn_1 [kW]	i
371	410	16.6	3.78
292	410	13.0	4.80
241	410	10.8	5.82
210	470	10.7	6.68
167	470	8.6	8.37
153	510	8.5	9.16
141	510	7.9	9.90
120	630	8.3	11.64
106	630	7.3	13.25
99.2	750	8.1	14.11
86.4	750	7.1	16.20
68.9	750	5.6	20.31
58.3	900	5.7	24.02
43.6	900	4.3	32.13
30.2	900	3.0	46.31
26.1	900	2.6	53.74

CMGIS 053

n_2 [min^{-1}]	Mn_2 [Nm]	Pn_1 [kW]	i
21.7	900	2.18	64.48
18.7	900	1.87	74.96
17.3	900	1.73	81.07
16.2	900	1.63	86.24
12.9	900	1.29	108.43
10.9	900	1.09	128.84
8.1	900	0.81	172.32
7.5	900	0.75	186.17
6.5	900	0.65	216.19
5.6	900	0.56	248.99
4.8	900	0.49	289.15

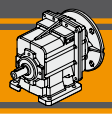
Nota:
Pn_1 è la potenza meccanica.
La potenza applicabile è ridotta del fattore termico.
Per maggiori dettagli consultare il nostro Servizio Tecnico.

Note:
Pn_1 is an input mechanical power which must be reduced by the heating factor in order to get the relevant one. For more details please contact our Technical Service.

Dati tecnici — *Technical data*

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
0.06						
56A4 (1400 min^{-1})	**279**	2	*20.3*	5.03	**CMG002**	**B5/B14**
	230	2	*16.7*	6.10		**B5/B14**
	187	3	*13.6*	7.49		**B5/B14**
	156	4	*14.2*	8.99		**B5/B14**
	138	4	*12.5*	10.16		**B5/B14**
	116	5	*10.5*	12.07		**B5/B14**
	105	5	*13.3*	13.40		**B5/B14**
	92.5	6	*11.8*	15.14		**B5/B14**
	77.1	7	*9.8*	18.17		**B5/B14**
	64.9	8	*8.3*	21.58		**B5/B14**
	59.6	9	*7.6*	23.51		**B5/B14**
	55.8	10	*7.1*	25.10		**B5/B14**
	51.7	11	*6.6*	27.08		**B5/B14**
	43.1	13	*5.5*	32.49		**B5/B14**
	33.3	17	*4.2*	42.04		**B5/B14**
	31.2	18	*4.0*	44.89		**B5/B14**
	28.7	19	*3.6*	48.86		**B5/B14**
0.09						
56B4 (1400 min^{-1})	**279**	3	*13.5*	5.03	**CMG002**	**B5/B14**
	230	4	*11.1*	6.10		**B5/B14**
	187	4	*9.1*	7.49		**B5/B14**
	156	5	*9.4*	8.99		**B5/B14**
	138	6	*8.3*	10.16		**B5/B14**
	116	7	*7.0*	12.07		**B5/B14**
	105	8	*8.9*	13.40		**B5/B14**
	92.5	9	*7.8*	15.14		**B5/B14**
	77.1	11	*6.5*	18.17		**B5/B14**
	64.9	13	*5.5*	21.58		**B5/B14**
	59.6	14	*5.1*	23.51		**B5/B14**
	55.8	15	*4.7*	25.10		**B5/B14**
	51.7	16	*4.4*	27.08		**B5/B14**
	43.1	19	*3.7*	32.49		**B5/B14**
	33.3	25	*2.8*	42.04		**B5/B14**
	31.2	26	*2.6*	44.89		**B5/B14**
	28.7	29	*2.4*	48.86		**B5/B14**
0.12						
63A4 (1400 min^{-1})	**279**	4	*10.1*	5.03	**CMG002**	**B5/B14**
	230	5	*8.3*	6.10		**B5/B14**
	187	6	*6.8*	7.49		**B5/B14**
	156	7	*7.1*	8.99		**B5/B14**
	138	8	*6.3*	10.16		**B5/B14**
	116	9	*5.3*	12.07		**B5/B14**
	105	11	*6.7*	13.40		**B5/B14**
	92.5	12	*5.9*	15.14		**B5/B14**
	77.1	14	*4.9*	18.17		**B5/B14**
	64.9	17	*4.1*	21.58		**B5/B14**
	59.6	18	*3.8*	23.51		**B5/B14**
	55.8	20	*3.5*	25.10		**B5/B14**
	51.7	21	*3.3*	27.08		**B5/B14**
	43.1	26	*2.7*	32.49		**B5/B14**
	33.3	33	*2.1*	42.04		**B5/B14**
	31.2	35	*2.0*	44.89		**B5/B14**
	28.7	38	*1.8*	48.86		**B5/B14**
	59.4	19	*6.5*	23.56	**CMG012**	**B5**
	47.4	23	*5.2*	29.56		**B5**
	39.5	28	*4.3*	35.47		**B5**
	30.5	36	*3.3*	45.89		**B5**
	28.6	39	*3.1*	49.00		**B5**
	26.3	42	*2.9*	53.33		**B5**

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
0.12						
63A4 (1400 min^{-1})	**22.1**	49	*2.5*	63.22	**CMG013**	**B5**
	18.6	58	*2.1*	75.08		**B5**
	15.7	69	*1.7*	89.17		**B5**
	12.4	87	*1.4*	113.05		**B5**
	10.4	103	*1.2*	134.27		**B5**
	8.1	134	*0.9*	173.72		**B5**
	6.9	156	*0.8*	202.16		**B5**
	5.4	201	*0.6*	261.57		**B5**
	4.6	234	*0.5*	304.00		**B5**
	3.6	303	*0.4*	393.33		**B5**
	21.9	49	*4.1*	64.01	**CMG023**	**B5**
	18.4	58	*3.4*	76.02		**B5**
	15.5	69	*2.9*	90.29		**B5**
	12.2	88	*2.3*	114.46		**B5**
	10.3	105	*1.9*	135.95		**B5**
	8.0	135	*1.5*	175.89		**B5**
	6.8	157	*1.3*	204.69		**B5**
	5.3	204	*1.0*	264.84		**B5**
	4.5	237	*0.8*	307.80		**B5**
	3.5	306	*0.7*	398.25		**B5**
	19.2	56	*5.4*	72.83	**CMG033**	**B5**
	14.4	75	*4.0*	97.45		**B5**
	12.1	89	*3.4*	115.74		**B5**
	9.9	108	*2.8*	140.81		**B5**
	8.0	134	*2.2*	174.26		**B5**
	6.2	173	*1.7*	225.47		**B5**
	5.3	202	*1.5*	262.05		**B5**
	4.3	251	*1.2*	325.79		**B5**
	3.7	291	*1.0*	378.64		**B5**
	19.2	56	*8.9*	72.83	**CMG043**	**B5**
	14.4	75	*6.7*	97.45		**B5**
	12.1	89	*5.6*	115.74		**B5**
	9.9	108	*4.6*	140.81		**B5**
	8.0	134	*3.7*	174.26		**B5**
	6.2	173	*2.9*	225.47		**B5**
	5.3	202	*2.5*	262.05		**B5**
	4.3	251	*2.0*	325.79		**B5**
	3.7	291	*1.7*	378.64		**B5**
0.18						
63B4 (1400 min^{-1})	**279**	6	*6.8*	5.03	**CMG002**	**B5/B14**
	230	7	*5.6*	6.10		**B5/B14**
	187	9	*4.5*	7.49		**B5/B14**
	156	11	*4.7*	8.99		**B5/B14**
	138	12	*4.2*	10.16		**B5/B14**
	116	14	*3.5*	12.07		**B5/B14**
	105	16	*4.4*	13.40		**B5/B14**
	92.5	18	*3.9*	15.14		**B5/B14**
	77.1	21	*3.3*	18.17		**B5/B14**
	64.9	25	*2.8*	21.58		**B5/B14**
	59.6	28	*2.5*	23.51		**B5/B14**
	55.8	30	*2.4*	25.10		**B5/B14**
	51.7	32	*2.2*	27.08		**B5/B14**
	43.1	38	*1.8*	32.49		**B5/B14**
	33.3	50	*1.4*	42.04		**B5/B14**
	31.2	53	*1.3*	44.89		**B5/B14**
	28.7	58	*1.2*	48.86		**B5/B14**



Dati tecnici

Technical data

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
0.18						
63B4 (1400 min^{-1})	**78.4**	21	*5.7*	17.86	**CMG012**	**B5**
	73.4	22	*5.3*	19.07		**B5**
	70.6	23	*5.1*	19.83		**B5**
	59.4	28	*4.3*	23.56		**B5**
	47.4	35	*3.4*	29.56		**B5**
	39.5	42	*2.9*	35.47		**B5**
	30.5	54	*2.2*	45.89		**B5**
	28.6	58	*2.1*	49.00		**B5**
	26.3	63	*1.9*	53.33		**B5**
	22.1	73	*1.6*	63.22	**CMG013**	**B5**
	18.6	87	*1.4*	75.08		**B5**
	15.7	103	*1.2*	89.17		**B5**
	12.4	130	*0.9*	113.05		**B5**
	21.9	74	*2.7*	64.01	**CMG023**	**B5**
	18.4	88	*2.3*	76.02		**B5**
	15.5	104	*1.9*	90.29		**B5**
	12.2	132	*1.5*	114.46		**B5**
	10.3	157	*1.3*	135.95		**B5**
	8.0	203	*1.0*	175.89		**B5**
	6.8	236	*0.8*	204.69		**B5**
	19.2	84	*3.6*	72.83	**CMG033**	**B5**
	14.4	112	*2.7*	97.45		**B5**
	12.1	134	*2.2*	115.74		**B5**
	9.9	163	*1.8*	140.81		**B5**
	8.0	201	*1.5*	174.26		**B5**
	6.2	260	*1.2*	225.47		**B5**
	5.3	302	*1.0*	262.05		**B5**
	19.2	84	*5.9*	72.83	**CMG043**	**B5**
	14.4	112	*4.4*	97.45		**B5**
	12.1	134	*3.7*	115.74		**B5**
	9.9	163	*3.1*	140.81		**B5**
	8.0	201	*2.5*	174.26		**B5**
	6.2	260	*1.9*	225.47		**B5**
	5.3	302	*1.7*	262.05		**B5**
	4.3	376	*1.3*	325.79		**B5**
	3.7	437	*1.1*	378.64		**B5**
0.25						
71A4 (1400 min^{-1})	**279**	8	*4.9*	5.03	**CMG002**	**B5/B14**
	230	10	*4.0*	6.10		**B5/B14**
	187	12	*3.3*	7.49		**B5/B14**
	156	15	*3.4*	8.99		**B5/B14**
	138	17	*3.0*	10.16		**B5/B14**
	116	20	*2.5*	12.07		**B5/B14**
	105	22	*3.2*	13.40		**B5/B14**
	92.5	25	*2.8*	15.14		**B5/B14**
	77.1	30	*2.4*	18.17		**B5/B14**
	64.9	35	*2.0*	21.58		**B5/B14**
	59.6	38	*1.8*	23.51		**B5/B14**
	55.8	41	*1.7*	25.10		**B5/B14**
	51.7	44	*1.6*	27.08		**B5/B14**
	43.1	53	*1.3*	32.49		**B5/B14**
	33.3	69	*1.0*	42.04		**B5/B14**
	31.2	73	*1.0*	44.89		**B5/B14**
	28.7	80	*0.9*	48.86		**B5/B14**

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
0.25						
71A4 (1400 min^{-1})	**367**	6	*9.6*	3.82	**CMG012**	**B5/B14**
	302	8	*7.9*	4.63		**B5/B14**
	246	9	*6.4*	5.69		**B5/B14**
	181	13	*6.3*	7.72		**B5/B14**
	153	15	*5.3*	9.17		**B5/B14**
	143	16	*5.0*	9.81		**B5/B14**
	122	19	*5.3*	11.50		**B5/B14**
	118	19	*5.1*	11.90		**B5/B14**
	101	23	*5.3*	13.80		**B5/B14**
	95.7	24	*5.0*	14.62		**B5/B14**
	78.4	29	*4.1*	17.86		**B5/B14**
	73.4	31	*3.8*	19.07		**B5/B14**
	70.6	32	*3.7*	19.83		**B5/B14**
	59.4	39	*3.1*	23.56		**B5/B14**
	47.4	48	*2.5*	29.56		**B5/B14**
	39.5	58	*2.1*	35.47		**B5/B14**
	30.5	75	*1.6*	45.89		**B5/B14**
	28.6	80	*1.5*	49.00		**B5/B14**
	26.3	87	*1.4*	53.33		**B5/B14**
	22.1	101	*1.2*	63.22	**CMG013**	**B5/B14**
	18.6	120	*1.0*	75.08		**B5/B14**
	15.7	143	*0.8*	89.17		**B5/B14**
	383	6	*16.7*	3.66	**CMG022**	**B5/B14**
	316	7	*13.8*	4.43		**B5/B14**
	257	9	*11.2*	5.45		**B5/B14**
	189	12	*9.9*	7.39		**B5/B14**
	160	14	*8.4*	8.78		**B5/B14**
	141	16	*7.4*	9.93		**B5/B14**
	127	18	*11.1*	11.01		**B5/B14**
	116	20	*10.1*	12.05		**B5/B14**
	106	22	*9.2*	13.21		**B5/B14**
	94.6	24	*8.3*	14.81		**B5/B14**
	81.9	28	*5.7*	17.10		**B5/B14**
	76.7	30	*5.4*	18.26		**B5/B14**
	69.7	33	*6.1*	20.08		**B5/B14**
	58.7	39	*5.1*	23.85		**B5/B14**
	46.8	49	*4.1*	29.93		**B5/B14**
	39.0	59	*3.4*	35.91		**B5/B14**
	30.1	76	*2.6*	46.46		**B5/B14**
	28.2	81	*2.5*	49.61		**B5/B14**
	25.9	88	*2.3*	54.00		**B5/B14**
	21.9	103	*1.9*	64.01	**CMG023**	**B5/B14**
	18.4	122	*1.6*	76.02		**B5/B14**
	15.5	145	*1.4*	90.29		**B5/B14**
	12.2	183	*1.1*	114.46		**B5/B14**
	10.3	218	*0.9*	135.95		**B5/B14**
	31.7	72	*4.1*	44.18	**CMG032**	**B5**
	27.3	84	*3.6*	51.30		**B5**
	19.2	117	*2.6*	72.83	**CMG033**	**B5/B14**
	14.4	156	*1.9*	97.45		**B5/B14**
	12.1	186	*1.6*	115.74		**B5/B14**
	9.9	226	*1.3*	140.81		**B5/B14**
	8.0	279	*1.1*	174.26		**B5/B14**
	6.2	361	*0.8*	225.47		**B5/B14**

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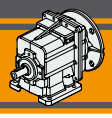
Technical data

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
0.25						
71A4 (1400 min^{-1})	**19.2**	117	*4.3*	72.83	**CMG043**	**B5/B14**
	14.4	156	*3.2*	97.45		**B5/B14**
	12.1	186	*2.7*	115.74		**B5/B14**
	9.9	226	*2.2*	140.81		**B5/B14**
	8.0	279	*1.8*	174.26		**B5/B14**
	6.2	361	*1.4*	225.47		**B5/B14**
	5.3	420	*1.2*	262.05		**B5/B14**
	4.3	522	*1.0*	325.79		**B5/B14**
	3.7	607	*0.8*	378.64		**B5/B14**
	21.7	103	*8.7*	64.48	**CMG053**	**B5**
	18.7	120	*7.5*	74.96		**B5**
	17.3	130	*6.9*	81.07		**B5**
	16.2	138	*6.5*	86.24		**B5**
	12.9	174	*5.2*	108.43		**B5**
	10.9	207	*4.4*	128.84		**B5**
	8.1	276	*3.3*	172.32		**B5**
	7.5	298	*3.0*	186.17		**B5**
	6.5	347	*2.6*	216.19		**B5**
	5.6	399	*2.3*	248.99		**B5**
	4.8	464	*1.9*	289.15		**B5**
0.37						
71B4 (1400 min^{-1})	**279**	12	*3.3*	5.03	**CMG002**	**B5/B14**
	230	15	*2.7*	6.10		**B5/B14**
	187	18	*2.2*	7.49		**B5/B14**
	156	22	*2.3*	8.99		**B5/B14**
	138	25	*2.0*	10.16		**B5/B14**
	116	29	*1.7*	12.07		**B5/B14**
	105	32	*2.2*	13.40		**B5/B14**
	92.5	37	*1.9*	15.14		**B5/B14**
	77.1	44	*1.6*	18.17		**B5/B14**
	64.9	52	*1.3*	21.58		**B5/B14**
	59.6	57	*1.2*	23.51		**B5/B14**
	55.8	61	*1.2*	25.10		**B5/B14**
	51.7	66	*1.1*	27.08		**B5/B14**
	43.1	79	*0.9*	32.49		**B5/B14**
	367	9	*6.5*	3.82	**CMG012**	**B5/B14**
	302	11	*5.3*	4.63		**B5/B14**
	246	14	*4.4*	5.69		**B5/B14**
	181	19	*4.3*	7.72		**B5/B14**
	153	22	*3.6*	9.17		**B5/B14**
	143	24	*3.4*	9.81		**B5/B14**
	122	28	*3.6*	11.50		**B5/B14**
	118	29	*3.5*	11.90		**B5/B14**
	101	33	*3.6*	13.80		**B5/B14**
	95.7	35	*3.4*	14.62		**B5/B14**
	78.4	43	*2.8*	17.86		**B5/B14**
	73.4	46	*2.6*	19.07		**B5/B14**
	70.6	48	*2.5*	19.83		**B5/B14**
	59.4	57	*2.1*	23.56		**B5/B14**
	47.4	72	*1.7*	29.56		**B5/B14**
	39.5	86	*1.4*	35.47		**B5/B14**
	30.5	111	*1.1*	45.89		**B5/B14**
	28.6	119	*1.0*	49.00		**B5/B14**
	26.3	129	*0.9*	53.33		**B5/B14**
	22.1	150	*0.8*	63.22	**CMG013**	**B5/B14**

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
0.37						
71B4 (1400 min^{-1})	**383**	9	*11.3*	3.66	**CMG022**	**B5/B14**
	316	11	*9.3*	4.43		**B5/B14**
	257	13	*7.6*	5.45		**B5/B14**
	189	18	*6.7*	7.39		**B5/B14**
	160	21	*5.6*	8.78		**B5/B14**
	141	24	*5.0*	9.93		**B5/B14**
	127	27	*7.5*	11.01		**B5/B14**
	116	29	*6.8*	12.05		**B5**
	106	32	*6.2*	13.21		**B5**
	94.6	36	*5.6*	14.81		**B5/B14**
	81.9	41	*3.9*	17.10		**B5/B14**
	76.7	44	*3.6*	18.26		**B5/B14**
	69.7	49	*4.1*	20.08		**B5/B14**
	58.7	58	*3.5*	23.85		**B5/B14**
	46.8	73	*2.8*	29.93		**B5/B14**
	39.0	87	*2.3*	35.91		**B5/B14**
	30.1	113	*1.8*	46.46		**B5/B14**
	28.2	120	*1.7*	49.61		**B5/B14**
	25.9	131	*1.5*	54.00		**B5/B14**
	21.9	152	*1.3*	64.01	**CMG023**	**B5/B14**
	18.4	180	*1.1*	76.02		**B5/B14**
	15.5	214	*0.9*	90.29		**B5/B14**
	374	9	*16.5*	3.74	**CMG032**	**B5**
	311	11	*13.7*	4.50		**B5**
	255	13	*11.3*	5.48		**B5**
	222	15	*11.8*	6.31		**B5**
	177	19	*9.4*	7.93		**B5**
	154	22	*8.2*	9.08		**B5**
	128	26	*6.8*	10.93		**B5**
	111	31	*8.2*	12.60		**B5**
	105	32	*7.8*	13.30		**B5**
	91.5	37	*7.6*	15.30		**B5**
	76.9	44	*6.3*	18.21		**B5**
	72.8	47	*6.0*	19.24		**B5**
	66.2	51	*5.5*	21.15		**B5**
	56.0	61	*5.0*	24.99		**B5**
	45.8	74	*4.0*	30.57		**B5**
	40.9	83	*3.6*	34.20		**B5**
	36.2	94	*3.2*	38.63		**B5**
	31.7	107	*2.8*	44.18		**B5**
	27.3	124	*2.4*	51.30		**B5**
	23.0	147	*2.0*	60.80		**B5**
	19.2	173	*1.7*	72.83	**CMG033**	**B5/B14**
	14.4	231	*1.3*	97.45		**B5/B14**
	12.1	275	*1.1*	115.74		**B5/B14**
	9.9	334	*0.9*	140.81		**B5/B14**
	19.2	173	*2.9*	72.83	**CMG043**	**B5/B14**
	14.4	231	*2.2*	97.45		**B5/B14**
	12.1	275	*1.8*	115.74		**B5/B14**
	9.9	334	*1.5*	140.81		**B5/B14**
	8.0	413	*1.2*	174.26		**B5/B14**
	6.2	535	*0.9*	225.47		**B5/B14**



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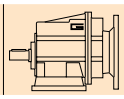
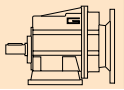
Technical data

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
0.37						
71B4 (1400 min^{-1})	**21.7**	153	*5.9*	64.48	**CMG053**	**B5**
	18.7	178	*5.1*	74.96		**B5**
	17.3	192	*4.7*	81.07		**B5**
	16.2	205	*4.4*	86.24		**B5**
	12.9	257	*3.5*	108.43		**B5**
	10.9	306	*2.9*	128.84		**B5**
	8.1	409	*2.2*	172.32		**B5**
	7.5	442	*2.0*	186.17		**B5**
	6.5	513	*1.8*	216.19		**B5**
	5.6	591	*1.5*	248.99		**B5**
	4.8	686	*1.3*	289.15		**B5**
0.55						
80A4 (1400 min^{-1})	**279**	18	*2.2*	5.03	**CMG002**	**B5/B14**
	230	22	*1.8*	6.10		**B5/B14**
	187	27	*1.5*	7.49		**B5/B14**
	156	32	*1.5*	8.99		**B5/B14**
	138	37	*1.4*	10.16		**B5/B14**
	116	43	*1.2*	12.07		**B5/B14**
	105	48	*1.5*	13.40		**B5/B14**
	92.5	55	*1.3*	15.14		**B5/B14**
	77.1	65	*1.1*	18.17		**B5/B14**
	64.9	78	*0.9*	21.58		**B5/B14**
	59.6	85	*0.8*	23.51		**B5/B14**
	367	14	*4.4*	3.82	**CMG012**	**B5/B14**
	302	17	*3.6*	4.63		**B5/B14**
	246	20	*2.9*	5.69		**B5/B14**
	181	28	*2.9*	7.72		**B5/B14**
	153	33	*2.4*	9.17		**B5/B14**
	143	35	*2.3*	9.81		**B5/B14**
	122	41	*2.4*	11.50		**B5/B14**
	118	43	*2.3*	11.90		**B5/B14**
	101	50	*2.4*	13.80		**B5/B14**
	95.7	53	*2.3*	14.62		**B5/B14**
	78.4	64	*1.9*	17.86		**B5/B14**
	73.4	69	*1.7*	19.07		**B5/B14**
	70.6	71	*1.7*	19.83		**B5/B14**
	59.4	85	*1.4*	23.56		**B5/B14**
	47.4	106	*1.1*	29.56		**B5/B14**
	39.5	128	*0.9*	35.47		**B5/B14**
	383	13	*7.6*	3.66	**CMG022**	**B5/B14**
	316	16	*6.3*	4.43		**B5/B14**
	257	20	*5.1*	5.45		**B5/B14**
	189	27	*4.5*	7.39		**B5/B14**
	160	32	*3.8*	8.78		**B5/B14**
	141	36	*3.4*	9.93		**B5/B14**
	127	40	*5.0*	11.01		**B5/B14**
	116	43	*4.6*	12.05		**B5/B14**
	106	48	*4.2*	13.21		**B5/B14**
	94.6	53	*3.8*	14.81		**B5/B14**
	81.9	62	*2.6*	17.10		**B5/B14**
	76.7	66	*2.4*	18.26		**B5/B14**
	69.7	72	*2.8*	20.08		**B5/B14**
	58.7	86	*2.3*	23.85		**B5/B14**
	46.8	108	*1.9*	29.93		**B5/B14**
	39.0	129	*1.5*	35.91		**B5/B14**
	30.1	167	*1.2*	46.46		**B5/B14**
	28.2	179	*1.1*	49.61		**B5/B14**
	25.9	194	*1.0*	54.00		**B5/B14**

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
0.55						
80A4 (1400 min^{-1})	**21.9**	226	*0.9*	64.01	**CMG023**	**B5/B14**
	374	13	*11.1*	3.74	**CMG032**	**B5/B14**
	311	16	*9.2*	4.50		**B5/B14**
	255	20	*7.6*	5.48		**B5/B14**
	222	23	*7.9*	6.31		**B5/B14**
	177	29	*6.3*	7.93		**B5/B14**
	154	33	*5.5*	9.08		**B5/B14**
	128	39	*4.6*	10.93		**B5/B14**
	111	45	*5.5*	12.60		**B5/B14**
	105	48	*5.2*	13.30		**B5/B14**
	91.5	55	*5.1*	15.30		**B5/B14**
	76.9	66	*4.3*	18.21		**B5/B14**
	72.8	69	*4.0*	19.24		**B5/B14**
	66.2	76	*3.7*	21.15		**B5/B14**
	56.0	90	*3.3*	24.99		**B5/B14**
	45.8	110	*2.7*	30.57		**B5/B14**
	40.9	123	*2.4*	34.20		**B5/B14**
	36.2	139	*2.2*	38.63		**B5/B14**
	31.7	159	*1.9*	44.18		**B5/B14**
	27.3	185	*1.6*	51.30		**B5/B14**
	23.0	219	*1.4*	60.80		**B5/B14**
	19.2	257	*1.2*	72.83	**CMG033**	**B5/B14**
	14.4	344	*0.9*	97.45		**B5/B14**
	23.0	219	*2.2*	60.80	**CMG042**	**B5/B14**
	19.2	257	*1.9*	72.83	**CMG043**	**B5/B14**
	14.4	344	*1.5*	97.45		**B5/B14**
	12.1	408	*1.2*	115.74		**B5/B14**
	9.9	497	*1.0*	140.81		**B5/B14**
	9.9	497	*1.0*	140.81		**B5/B14**
	8.0	615	*0.8*	174.26		**B5/B14**
	26.1	194	*4.6*	53.74	**CMG052**	**B5/B14**
	21.7	227	*4.0*	64.48	**CMG053**	**B5/B14**
	18.7	264	*3.4*	74.96		**B5/B14**
	17.3	286	*3.1*	81.07		**B5/B14**
	17.3	286	*3.1*	81.07		**B5/B14**
	16.2	304	*3.0*	86.24		**B5/B14**
	12.9	382	*2.4*	108.43		**B5/B14**
	10.9	454	*2.0*	128.84		**B5/B14**
	8.1	608	*1.5*	172.32		**B5/B14**
	7.5	657	*1.4*	186.17		**B5/B14**
	6.5	762	*1.2*	216.19		**B5/B14**
	5.6	878	*1.0*	248.99		**B5/B14**
	4.8	1020	*0.9*	289.15		**B5/B14**

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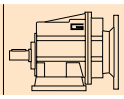
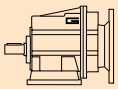
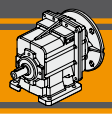
Technical data

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
0.75						
80B4 (1400 min^{-1})	**279**	25	*1.6*	5.03	**CMG002**	**B5/B14**
	230	30	*1.3*	6.10		**B5/B14**
	187	37	*1.1*	7.49		**B5/B14**
	156	44	*1.1*	8.99		**B5/B14**
	138	50	*1.0*	10.16		**B5/B14**
	116	59	*0.8*	12.07		**B5/B14**
	105	66	*1.1*	13.40		**B5/B14**
	92.5	74	*0.9*	15.14		**B5/B14**
	77.1	89	*0.8*	18.17		**B5/B14**
	367	19	*3.2*	3.82	**CMG012**	
	302	23	*2.6*	4.63		**B5/B14**
	246	28	*2.1*	5.69		**B5/B14**
	181	38	*2.1*	7.72		**B5/B14**
	153	45	*1.8*	9.17		**B5/B14**
	143	48	*1.7*	9.81		**B5/B14**
	122	56	*1.8*	11.50		**B5/B14**
	118	58	*1.7*	11.90		**B5/B14**
	101	68	*1.8*	13.80		**B5/B14**
	95.7	72	*1.7*	14.62		**B5/B14**
	78.4	88	*1.4*	17.86		**B5/B14**
	73.4	94	*1.3*	19.07		**B5/B14**
	70.6	97	*1.2*	19.83		**B5/B14**
	59.4	116	*1.0*	23.56		**B5/B14**
	383	18	*5.6*	3.66	**CMG022**	**B5/B14**
	316	22	*4.6*	4.43		**B5/B14**
	257	27	*3.7*	5.45		**B5/B14**
	189	36	*3.3*	7.39		**B5/B14**
	160	43	*2.8*	8.78		**B5/B14**
	141	49	*2.5*	9.93		**B5/B14**
	127	54	*3.7*	11.01		**B5/B14**
	116	59	*3.4*	12.05		**B5/B14**
	106	65	*3.1*	13.21		**B5/B14**
	94.6	73	*2.8*	14.81		**B5/B14**
	81.9	84	*1.9*	17.10		**B5/B14**
	76.7	90	*1.8*	18.26		**B5/B14**
	69.7	99	*2.0*	20.08		**B5/B14**
	58.7	117	*1.7*	23.85		**B5/B14**
	46.8	147	*1.4*	29.93		**B5/B14**
	39.0	176	*1.1*	35.91		**B5/B14**
	30.1	228	*0.9*	46.46		**B5/B14**
	28.2	244	*0.8*	49.61		**B5/B14**
	25.9	265	*0.8*	54.00		**B5/B14**
	374	18	*8.2*	3.74	**CMG032**	**B5/B14**
	311	22	*6.8*	4.50		**B5/B14**
	255	27	*5.6*	5.48		**B5/B14**
	222	31	*5.8*	6.31		**B5/B14**
	177	39	*4.6*	7.93		**B5/B14**
	154	45	*4.0*	9.08		**B5/B14**
	128	54	*3.4*	10.93		**B5/B14**
	111	62	*4.0*	12.60		**B5/B14**
	105	65	*3.8*	13.30		**B5/B14**
	91.5	75	*3.7*	15.30		**B5/B14**
	76.9	89	*3.1*	18.21		**B5/B14**
	72.8	94	*3.0*	19.24		**B5/B14**
	66.2	104	*2.7*	21.15		**B5/B14**
	56.0	123	*2.4*	24.99		**B5/B14**
	45.8	150	*2.0*	30.57		**B5/B14**
	40.9	168	*1.8*	34.20		**B5/B14**
	36.2	190	*1.6*	38.63		**B5/B14**
	31.7	217	*1.4*	44.18		**B5/B14**
	27.3	252	*1.2*	51.30		**B5/B14**
	23.0	299	*1.0*	60.80		**B5/B14**

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
0.75						
80B4 (1400 min^{-1})	**374**	18	*12.5*	3.74	**CMG042**	**B5/B14**
	311	22	*10.4*	4.50		**B5/B14**
	255	27	*8.5*	5.48		**B5/B14**
	222	31	*8.4*	6.31		**B5/B14**
	177	39	*6.7*	7.93		**B5/B14**
	154	45	*6.3*	9.08		**B5/B14**
	128	54	*5.2*	10.93		**B5/B14**
	111	62	*5.7*	12.60		**B5/B14**
	105	65	*5.4*	13.30		**B5/B14**
	91.5	75	*5.6*	15.30		**B5/B14**
	76.9	89	*4.7*	18.21		**B5/B14**
	72.8	94	*4.4*	19.24		**B5/B14**
	56.0	123	*4.1*	24.99		**B5/B14**
	45.8	150	*3.3*	30.57		**B5/B14**
	40.9	168	*3.0*	34.20		**B5/B14**
	36.2	190	*2.6*	38.63		**B5/B14**
	31.7	217	*2.3*	44.18		**B5/B14**
	27.3	252	*2.0*	51.30		**B5/B14**
	23.0	299	*1.6*	60.80		**B5/B14**
	19.2	350	*1.4*	72.83	**CMG043**	**B5/B14**
	14.4	469	*1.1*	97.45		**B5/B14**
	12.1	557	*0.9*	115.74		**B5/B14**
	68.9	100	*7.5*	20.31	**CMG052**	**B5**
	58.3	118	*7.6*	24.02		**B5**
	43.6	158	*5.7*	32.13		**B5**
	30.2	227	*4.0*	46.31		**B5**
	26.1	264	*3.4*	57.34		**B5**
	21.7	310	*2.9*	64.48	**CMG053**	**B5**
	18.7	361	*2.5*	74.96		**B5**
	17.3	390	*2.3*	81.07		**B5**
	16.2	415	*2.2*	86.24		**B5**
	12.9	521	*1.7*	108.43		**B5**
	10.9	620	*1.5*	128.84		**B5**
	8.1	829	*1.1*	172.32		**B5**
	7.5	895	*1.0*	186.17		**B5**
	6.5	1040	*0.9*	216.19		**B5**
1.1						
90S4 (1400 min^{-1})	**367**	28	*2.2*	3.82	**CMG012**	**B5/B14**
	302	33	*1.8*	4.63		**B5/B14**
	246	41	*1.5*	5.69		**B5/B14**
	181	56	*1.4*	7.72		**B5/B14**
	153	66	*1.2*	9.17		**B5/B14**
	143	71	*1.1*	9.81		**B5/B14**
	118	86	*1.2*	11.90		**B5/B14**
	101	99	*1.2*	13.80		**B5/B14**
	95.7	105	*1.1*	14.62		**B5/B14**
	70.6	143	*0.8*	19.83		**B5/B14**
	383	26	*3.8*	3.66	**CMG022**	**B5/B14**
	316	32	*3.1*	4.43		**B5/B14**
	257	39	*2.5*	5.45		**B5/B14**
	189	53	*2.3*	7.39		**B5/B14**
	160	63	*1.9*	8.78		**B5/B14**
	141	72	*1.7*	9.93		**B5/B14**
	116	87	*2.3*	12.05		**B5/B14**
	106	95	*2.1*	13.21		**B5/B14**
	94.6	107	*1.9*	14.81		**B5/B14**
	69.7	145	*1.4*	20.08		**B5/B14**
	58.7	172	*1.2*	23.85		**B5/B14**
	39.0	259	*0.8*	35.91		**B5/B14**



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Technical data

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
1.1						
90S4 (1400 min^{-1})	**374**	27	*5.6*	3.74	**CMG032**	**B5/B14**
	311	32	*4.6*	4.50		**B5/B14**
	255	39	*3.8*	5.48		**B5/B14**
	222	45	*4.0*	6.31		**B5/B14**
	177	57	*3.2*	7.93		**B5/B14**
	154	65	*2.8*	9.08		**B5/B14**
	128	79	*2.3*	10.93		**B5/B14**
	111	91	*2.8*	12.60		**B5/B14**
	105	96	*2.6*	13.30		**B5/B14**
	91.5	110	*2.5*	15.30		**B5/B14**
	76.9	131	*2.1*	18.21		**B5/B14**
	72.8	139	*2.0*	19.24		**B5/B14**
	66.2	152	*1.8*	21.15		**B5/B14**
	56.0	180	*1.7*	24.99		**B5/B14**
	45.8	220	*1.4*	30.57		**B5/B14**
	40.9	246	*1.2*	34.20		**B5/B14**
	36.2	278	*1.1*	38.63		**B5/B14**
	31.7	318	*0.9*	44.18		**B5/B14**
	374	27	*8.5*	3.74	**CMG042**	**B5/B14**
	311	32	*7.1*	4.50		**B5/B14**
	255	39	*5.8*	5.48		**B5/B14**
	222	45	*5.7*	6.31		**B5/B14**
	177	57	*4.6*	7.93		**B5/B14**
	154	65	*4.3*	9.08		**B5/B14**
	128	79	*3.6*	10.93		**B5/B14**
	111	91	*3.9*	12.60		**B5/B14**
	105	96	*3.7*	13.30		**B5/B14**
	91.5	110	*3.8*	15.30		**B5/B14**
	76.9	131	*3.2*	18.21		**B5/B14**
	72.8	139	*3.0*	19.24		**B5/B14**
	56.0	180	*2.8*	24.99		**B5/B14**
	45.8	220	*2.3*	30.57		**B5/B14**
	40.8	247	*2.0*	34.30		**B5/B14**
	36.2	278	*1.8*	38.63		**B5/B14**
	31.7	318	*1.6*	44.18		**B5/B14**
	27.3	370	*1.4*	51.30		**B5/B14**
	23.0	438	*1.1*	60.80		**B5/B14**
	19.2	514	*1.0*	72.83	**CMG043**	**B5/B14**
	371	27	*15.1*	3.78	**CMG052**	**B5/B14**
	292	35	*11.9*	4.80		**B5/B14**
	241	42	*9.8*	5.82		**B5/B14**
	210	48	*9.8*	6.68		**B5/B14**
	167	60	*7.8*	8.37		**B5/B14**
	153	66	*7.7*	9.16		**B5/B14**
	141	71	*7.1*	9.90		**B5/B14**
	120	84	*7.5*	11.64		**B5/B14**
	106	95	*6.6*	13.25		**B5/B14**
	99.2	102	*7.4*	14.11		**B5/B14**
	86.4	117	*6.4*	16.20		**B5/B14**
	68.9	146	*5.1*	20.31		**B5/B14**
	58.3	173	*5.2*	24.02		**B5/B14**
	43.6	231	*3.9*	32.13		**B5/B14**
	30.2	334	*2.7*	46.31		**B5/B14**
	26.1	387	*2.3*	53.74		**B5/B14**
	21.7	455	*2.0*	64.48	**CMG053**	**B5/B14**
	18.7	529	*1.7*	74.96		**B5/B14**
	17.3	572	*1.6*	81.07		**B5/B14**
	16.2	608	*1.5*	86.24		**B5/B14**
	12.9	765	*1.2*	108.43		**B5/B14**
	10.9	909	*1.0*	128.84		**B5/B14**

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
1.5						
90L4 (1400 min^{-1})	**367**	38	*1.6*	3.82	**CMG012**	**B5/B14**
	302	45	*1.3*	4.63		**B5/B14**
	246	56	*1.1*	5.69		**B5/B14**
	181	76	*1.1*	7.72		**B5/B14**
	153	90	*0.9*	9.17		**B5/B14**
	383	36	*2.8*	3.66	**CMG022**	**B5/B14**
	316	44	*2.3*	4.43		**B5/B14**
	257	54	*1.9*	5.45		**B5/B14**
	189	73	*1.7*	7.39		**B5/B14**
	160	86	*1.4*	8.78		**B5/B14**
	141	98	*1.2*	9.93		**B5/B14**
	116	118	*1.7*	12.05		**B5/B14**
	106	130	*1.5*	13.21		**B5/B14**
	94.6	145	*1.4*	14.81		**B5/B14**
	69.7	197	*1.0*	20.08		**B5/B14**
	58.7	234	*0.9*	23.85		**B5/B14**
	374	37	*4.1*	3.74	**CMG032**	**B5/B14**
	311	44	*3.4*	4.50		**B5/B14**
	255	54	*2.8*	5.48		**B5/B14**
	222	62	*2.9*	6.31		**B5/B14**
	177	78	*2.3*	7.93		**B5/B14**
	154	89	*2.0*	9.08		**B5/B14**
	128	107	*1.7*	10.93		**B5/B14**
	111	124	*2.0*	12.60		**B5/B14**
	105	131	*1.9*	13.30		**B5/B14**
	91.5	150	*1.9*	15.30		**B5/B14**
	76.9	179	*1.6*	18.21		**B5/B14**
	72.8	189	*1.5*	19.24		**B5/B14**
	66.2	208	*1.3*	21.15		**B5/B14**
	56.0	245	*1.2*	24.99		**B5/B14**
	45.8	300	*1.0*	30.57		**B5/B14**
	40.9	336	*0.9*	34.20		**B5/B14**
	36.2	379	*0.8*	38.63		**B5/B14**
	374	37	*6.3*	3.74	**CMG042**	**B5/B14**
	311	44	*5.2*	4.50		**B5/B14**
	255	54	*4.3*	5.48		**B5/B14**
	222	62	*4.2*	6.31		**B5/B14**
	177	78	*3.3*	7.93		**B5/B14**
	154	89	*3.1*	9.08		**B5/B14**
	128	107	*2.6*	10.93		**B5/B14**
	111	124	*2.8*	12.60		**B5/B14**
	105	131	*2.7*	13.30		**B5/B14**
	91.5	150	*2.8*	15.30		**B5/B14**
	76.9	179	*2.3*	18.21		**B5/B14**
	72.8	189	*2.2*	19.24		**B5/B14**
	56.0	245	*2.0*	24.99		**B5/B14**
	45.8	300	*1.7*	30.57		**B5/B14**
	40.9	336	*1.5*	34.20		**B5/B14**
	36.2	379	*1.3*	38.63		**B5/B14**
	31.7	434	*1.2*	44.18		**B5/B14**
	27.3	504	*1.0*	51.30		**B5/B14**

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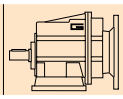
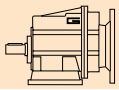
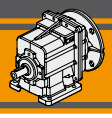
P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
1.5						
90L4 (1400 min^{-1})	**371**	37	*11.1*	3.78	**CMG052**	**B5/B14**
	292	47	*8.7*	4.80		**B5/B14**
	241	57	*7.2*	5.82		**B5/B14**
	210	66	*7.2*	6.68		**B5/B14**
	167	82	*5.7*	8.37		**B5/B14**
	153	90	*5.7*	9.16		**B5/B14**
	141	97	*5.2*	9.90		**B5/B14**
	120	114	*5.5*	11.64		**B5/B14**
	106	130	*4.8*	13.25		**B5/B14**
	99.2	139	*5.4*	14.11		**B5/B14**
	86.4	159	*4.7*	16.20		**B5/B14**
	68.9	199	*3.8*	20.31		**B5/B14**
	58.3	236	*3.8*	24.02		**B5/B14**
	43.6	316	*2.9*	32.13		**B5/B14**
	30.2	455	*2.0*	46.31		**B5/B14**
	26.1	528	*1.7*	53.74		**B5/B14**
	21.7	620	*1.5*	64.48	**CMG053**	**B5/B14**
	18.7	721	*1.2*	74.96		**B5/B14**
	17.3	780	*1.2*	81.07		**B5/B14**
	16.2	829	*1.1*	86.24		**B5/B14**
	12.9	1043	*0.9*	108.43		**B5/B14**
1.85						
90LB4 (1400 min^{-1})	**367**	46	*1.3*	3.82	**CMG012**	**B5/B14**
	302	56	*1.1*	4.63		**B5/B14**
	383	44	*2.3*	3.66	**CMG022**	**B5/B14**
	316	54	*1.9*	4.43		**B5/B14**
	257	66	*1.5*	5.45		**B5/B14**
	189	90	*1.3*	7.39		**B5/B14**
	160	106	*1.1*	8.78		**B5/B14**
	141	120	*1.0*	9.93		**B5/B14**
	116	146	*1.4*	12.05		**B5/B14**
	106	160	*1.2*	13.21		**B5/B14**
	94.6	179	*1.1*	14.81		**B5/B14**
	374	45	*3.3*	3.74	**CMG032**	**B5/B14**
	311	55	*2.7*	4.50		**B5/B14**
	255	66	*2.3*	5.48		**B5/B14**
	222	76	*2.4*	6.31		**B5/B14**
	177	96	*1.9*	7.93		**B5/B14**
	154	110	*1.6*	9.08		**B5/B14**
	128	132	*1.4*	10.93		**B5/B14**
	111	153	*1.6*	12.60		**B5/B14**
	105	161	*1.6*	13.30		**B5/B14**
	91.5	185	*1.5*	15.30		**B5/B14**
	76.9	221	*1.3*	18.21		**B5/B14**
	72.8	233	*1.2*	19.24		**B5/B14**
	66.2	256	*1.1*	21.15		**B5/B14**
	56.0	303	*1.0*	24.99		**B5/B14**
	45.8	370	*0.8*	30.57		**B5/B14**
	374	45	*5.1*	3.74	**CMG042**	**B5/B14**
	311	55	*4.2*	4.50		**B5/B14**
	255	66	*3.5*	5.48		**B5/B14**
	222	76	*3.4*	6.31		**B5/B14**
	177	96	*2.7*	7.93		**B5/B14**
	154	110	*2.5*	9.08		**B5/B14**
	128	132	*2.1*	10.93		**B5/B14**
	111	153	*2.3*	12.60		**B5/B14**
	105	161	*2.2*	13.30		**B5/B14**
	91.5	185	*2.3*	15.30		**B5/B14**
	76.9	221	*1.9*	18.21		**B5/B14**
	72.8	233	*1.8*	19.24		**B5/B14**

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
1.85						
90LB4 (1400 min^{-1})	**56.0**	303	*1.7*	24.99	**CMG042**	**B5/B14**
	45.8	370	*1.3*	30.57		**B5/B14**
	40.9	414	*1.2*	34.20		**B5/B14**
	36.2	468	*1.1*	38.63		**B5/B14**
	31.7	535	*0.9*	44.18		**B5/B14**
	27.3	621	*0.8*	51.30		**B5/B14**
	371	46	*9.0*	3.78	**CMG052**	**B5/B14**
	292	58	*7.1*	4.80		**B5/B14**
	241	70	*5.8*	5.82		**B5/B14**
	210	81	*5.8*	6.68		**B5/B14**
	167	101	*4.6*	8.37		**B5/B14**
	153	111	*4.6*	9.16		**B5/B14**
	141	120	*4.3*	9.90		**B5/B14**
	120	141	*4.5*	11.64		**B5/B14**
	106	160	*3.9*	13.25		**B5/B14**
	99.2	171	*4.4*	14.11		**B5/B14**
	86.4	196	*3.8*	16.20		**B5/B14**
	68.9	246	*3.0*	20.31		**B5/B14**
	58.3	291	*3.1*	24.02		**B5/B14**
	43.6	389	*2.3*	32.13		**B5/B14**
	30.2	561	*1.6*	46.31		**B5/B14**
	26.1	651	*1.4*	53.74		**B5/B14**
	21.7	765	*1.2*	64.48	**CMG053**	**B5/B14**
	18.7	889	*1.0*	74.96		**B5/B14**
	17.3	962	*0.9*	81.07		**B5/B14**
	16.2	1023	*0.9*	86.24		**B5/B14**
2.2						
100LA4 (1400 min^{-1})	**374**	54	*2.8*	3.74	**CMG032**	**B5/B14**
	311	65	*2.3*	4.50		**B5/B14**
	255	79	*1.9*	5.48		**B5/B14**
	222	91	*2.0*	6.31		**B5/B14**
	177	114	*1.6*	7.93		**B5/B14**
	154	131	*1.4*	9.08		**B5/B14**
	128	157	*1.1*	10.93		**B5/B14**
	111	182	*1.4*	12.60		**B5/B14**
	105	192	*1.3*	13.30		**B5/B14**
	91.5	220	*1.3*	15.30		**B5/B14**
	76.9	262	*1.1*	18.21		**B5/B14**
	72.8	277	*1.0*	19.24		**B5/B14**
	66.2	305	*0.9*	21.15		**B5/B14**
	56.0	360	*0.8*	24.99		**B5/B14**
	374	54	*4.3*	3.74	**CMG042**	**B5/B14**
	311	65	*3.5*	4.50		**B5/B14**
	255	79	*2.9*	5.48		**B5/B14**
	222	91	*2.9*	6.31		**B5/B14**
	177	114	*2.3*	7.93		**B5/B14**
	154	131	*2.1*	9.08		**B5/B14**
	128	157	*1.8*	10.93		**B5/B14**
	111	182	*1.9*	12.60		**B5/B14**
	105	192	*1.8*	13.30		**B5/B14**
	91.5	220	*1.9*	15.30		**B5/B14**
	76.9	262	*1.6*	18.21		**B5/B14**
	72.8	277	*1.5*	19.24		**B5/B14**
	56.0	360	*1.4*	24.99		**B5/B14**
	45.8	440	*1.1*	30.57		**B5/B14**
	40.8	494	*1.0*	34.30		**B5/B14**
	36.2	557	*0.9*	38.63		**B5/B14**



Dati tecnici

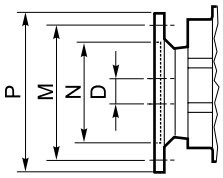
Technical data

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
2.2						
100LA4 (1400 min^{-1})	**371**	54	*7.5*	3.78	**CMG052**	**B5/B14**
	292	69	*5.9*	4.80		**B5/B14**
	241	84	*4.9*	5.82		**B5/B14**
	210	96	*4.9*	6.68		**B5/B14**
	167	121	*3.9*	8.37		**B5/B14**
	153	132	*3.9*	9.16		**B5/B14**
	141	143	*3.6*	9.90		**B5/B14**
	120	168	*3.8*	11.64		**B5/B14**
	106	191	*3.3*	13.25		**B5/B14**
	99.2	203	*3.7*	14.11		**B5/B14**
	86.4	233	*3.2*	16.20		**B5/B14**
	68.9	293	*2.6*	20.31		**B5/B14**
	58.3	346	*2.6*	24.02		**B5/B14**
	43.6	463	*1.9*	32.13		**B5/B14**
	30.2	667	*1.3*	46.31		**B5/B14**
	26.1	774	*1.2*	53.74		**B5/B14**
	21.7	910	*1.0*	64.48	**CMG053**	**B5/B14**
	18.7	1057	*0.9*	74.96		**B5/B14**
3						
100LB4 (1400 min^{-1})	**374**	74	*2.0*	3.74	**CMG032**	**B5/B14**
	311	88	*1.7*	4.50		**B5/B14**
	255	108	*1.4*	5.48		**B5/B14**
	222	124	*1.5*	6.31		**B5/B14**
	177	156	*1.2*	7.93		**B5/B14**
	154	178	*1.0*	9.08		**B5/B14**
	128	215	*0.8*	10.93		**B5/B14**
	111	248	*1.0*	12.60		**B5/B14**
	105	261	*1.0*	13.30		**B5/B14**
	91.5	301	*0.9*	15.30		**B5/B14**
	374	74	*3.1*	3.74	**CMG042**	**B5/B14**
	311	88	*2.6*	4.50		**B5/B14**
	255	108	*2.1*	5.48		**B5/B14**
	222	124	*2.1*	6.31		**B5/B14**
	177	156	*1.7*	7.93		**B5/B14**
	154	178	*1.6*	9.08		**B5/B14**
	128	215	*1.3*	10.93		**B5/B14**
	111	248	*1.4*	12.60		**B5/B14**
	105	261	*1.3*	13.30		**B5/B14**
	91.5	301	*1.4*	15.30		**B5/B14**
	76.9	358	*1.2*	18.21		**B5/B14**
	72.8	378	*1.1*	19.24		**B5/B14**
	56.0	491	*1.0*	24.99		**B5/B14**
	45.8	601	*0.8*	30.57		**B5/B14**
	371	74	*5.5*	3.78	**CMG052**	**B5/B14**
	292	94	*4.3*	4.80		**B5/B14**
	241	114	*3.6*	5.82		**B5/B14**
	210	131	*3.6*	6.68		**B5/B14**
	167	164	*2.9*	8.37		**B5/B14**
	153	180	*2.8*	9.16		**B5/B14**
	141	195	*2.6*	9.90		**B5/B14**
	120	229	*2.8*	11.64		**B5/B14**
	106	260	*2.4*	13.25		**B5/B14**
	99.2	277	*2.7*	14.11		**B5/B14**
	86.4	318	*2.4*	16.20		**B5/B14**
	68.9	399	*1.9*	20.31		**B5/B14**
	58.3	472	*1.9*	24.02		**B5/B14**
	43.6	631	*1.4*	32.13		**B5/B14**
	30.2	910	*1.0*	46.31		**B5/B14**
	26.1	1056	*0.9*	53.74		**B5/B14**

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
4						
112M4 (1400 min^{-1})	**374**	98	*1.5*	3.74	**CMG032**	**B5/B14**
	311	118	*1.3*	4.50		**B5/B14**
	255	144	*1.0*	5.48		**B5/B14**
	222	165	*1.1*	6.31		**B5/B14**
	177	208	*0.9*	7.93		**B5/B14**
	374	98	*2.3*	3.74	**CMG042**	**B5/B14**
	311	118	*1.9*	4.50		**B5/B14**
	255	144	*1.6*	5.48		**B5/B14**
	222	165	*1.6*	6.31		**B5/B14**
	177	208	*1.3*	7.93		**B5/B14**
	154	238	*1.2*	9.08		**B5/B14**
	128	286	*1.0*	10.93		**B5/B14**
	111	330	*1.1*	12.60		**B5/B14**
	105	348	*1.0*	13.30		**B5/B14**
	91.5	401	*1.0*	15.30		**B5/B14**
	76.9	477	*0.9*	18.21		**B5/B14**
	72.8	504	*0.8*	19.24		**B5/B14**
	56.0	655	*0.8*	24.99		**B5/B14**
	371	99	*4.1*	3.78	**CMG052**	**B5/B14**
	292	126	*3.3*	4.80		**B5/B14**
	241	152	*2.7*	5.82		**B5/B14**
	210	175	*2.7*	6.68		**B5/B14**
	167	219	*2.1*	8.37		**B5/B14**
	153	240	*2.1*	9.16		**B5/B14**
	141	259	*2.0*	9.90		**B5/B14**
	120	305	*2.1*	11.64		**B5/B14**
	106	347	*1.8*	13.25		**B5/B14**
	99.2	370	*2.0*	14.11		**B5/B14**
	86.4	424	*1.8*	16.20		**B5/B14**
	68.9	532	*1.4*	20.31		**B5/B14**
	58.3	629	*1.4*	24.02		**B5/B14**
	43.6	842	*1.1*	32.13		**B5/B14**
5.5						
132S4 (1400 min^{-1})	**371**	136	*3.0*	3.78	**CMG052**	**B5**
	292	173	*2.4*	4.80		**B5**
	241	210	*2.0*	5.82		**B5**
	210	241	*2.0*	6.68		**B5**
	167	302	*1.6*	8.37		**B5**
	153	330	*1.5*	9.16		**B5**
	141	357	*1.4*	9.90		**B5**
	120	419	*1.5*	11.64		**B5**
	106	477	*1.3*	13.25		**B5**
	99.2	508	*1.5*	14.11		**B5**
	86.4	583	*1.3*	16.20		**B5**
	68.9	731	*1.0*	20.31		**B5**
	58.3	865	*1.0*	24.02		**B5**
7.5						
132MA4 (1400 min^{-1})	**371**	185	*2.2*	3.78	**CMG052**	**B5**
	292	236	*1.7*	4.80		**B5**
	241	286	*1.4*	5.82		**B5**
	210	328	*1.4*	6.68		**B5**
	167	411	*1.1*	8.37		**B5**
	153	450	*1.1*	9.16		**B5**
	141	486	*1.0*	9.90		**B5**
	120	572	*1.1*	11.64		**B5**
	106	651	*1.0*	13.25		**B5**
	99.2	693	*1.1*	14.11		**B5**
	86.4	796	*0.9*	16.20		**B5**

Motori applicabili

IEC Motor adapters



	IEC	N	M	P	D	**i** (rapporto / *ratio*)															
						5.03	6.1	7.49	8.99	10.16	12.07	13.4	15.14	18.17	21.58	23.51	25.1	27.08	32.49	42.04	44.89	48.86
CMG002	**80B5**	130	165	200	19																	
	80B14	80	100	120																		
	71B5	110	130	160	14																	
	71B14	70	85	105																		
	63B5	95	115	140	11																	
	63B14	60	75	90																		
	56B5	80	100	120	9																	
	56B14	50	65	80																		

						3.82	4.63	5.69	7.72	9.17	9.81	11.50	11.90	13.80	14.62	17.86	19.07	19.83	23.56	29.56	35.47	45.89	49.00	53.33
CMG012	**90 B5**	130	165	200	24																			
	90 B14	95	115	140																				
	80 B5	130	165	200	19																			
	80 B14	80	100	120																				
	71 B5	110	130	160	14																			
	71 B14	70	85	105																				
	63 B5	95	115	140	11																			

						63.22	75.08	89.17	113.05	134.27	173.72	202.16	261.57	304.00	393.33
CMG013	**90 B5**	130	165	200	24										
	90 B14	95	115	140											
	80 B5	130	165	200	19										
	80 B14	80	100	120											
	71 B5	110	130	160	14										
	71 B14	70	85	105											
	63 B5	95	115	140	11										

						3.66	4.43	5.45	7.39	8.78	9.93	11.01	12.05	13.21	14.81	17.10	18.26	20.08	23.85	29.93	35.91	46.46	49.61	54.00
CMG022	**90 B5**	130	165	200	24																			
	90 B14	95	115	140																				
	80 B5	130	165	200	19																			
	80 B14	80	100	120																				
	71 B5	110	130	160	14																			
	71 B14	70	85	105																				
	63 B5	95	115	140	11																			

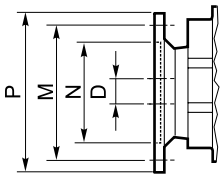
						64.01	76.02	90.29	114.46	135.95	175.89	204.69	264.84	307.80	398.25
CMG023	**90 B5**	130	165	200	24										
	90 B14	95	115	140											
	80 B5	130	165	200	19										
	80 B14	80	100	120											
	71 B5	110	130	160	14										
	71 B14	70	85	105											
	63 B5	95	115	140	11										

N.B.
Le aree evidenziate in indicano l'applicabilità della corrispondente grandezza motore.
B/BS = Boccola di riduzione in acciaio.

N.B.
Highlighted areas indicate motor inputs available on each size of unit.
***B/BS** = Metal shaft sleeve.*

Motori applicabili

IEC Motor adapters



	IEC	N	M	P	D	i (rapporto / *ratio*)																		
						3.74	4.50	5.48	6.31	7.93	9.08	10.93	12.60	13.30	15.30	18.21	19.24	21.15	24.99	30.57	34.20	38.63	44.18	51.30	60.80
CMG032	100/112B5	180	215	250	28																				
	100/112B14	110	130	160																					
	90 B5	130	165	200	24																				
	90 B14	95	115	140																					
	80 B5	130	165	200	19																				
	80 B14	80	100	120																					
	71 B5	110	130	160	14	B																			

						3.74	4.50	5.48	6.31	7.93	9.08	10.93	12.60	13.30	15.30	18.21	19.24	24.99	30.57	34.20	38.63	44.18	51.30	60.80
CMG042	100/112B5	180	215	250	28																			
	100/112B14	110	130	160																				
	90 B5	130	165	200	24																			
	90 B14	95	115	140																				
	80 B5	130	165	200	19																			
	80 B14	80	100	120																				
	71 B5	110	130	160	14	B																		

						72.83	97.45	115.74	140.81	174.26	225.47	262.05	325.79	378.64
CMG033 CMG043	90 B5	130	165	200	24									
	90 B14	95	115	140										
	80 B5	130	165	200	19									
	80 B14	80	100	120										
	71 B5	110	130	160	14									
	71 B14	70	85	105										
	63 B5	95	115	140	11									

						3.78	4.80	5.82	6.68	8.37	9.16	9.90	11.64	13.25	14.11	16.20	20.31	24.02	32.13	46.31	53.74
CMG052	132 B5	230	265	300	38																
	100/112B5	180	215	250	28																
	100/112B14	110	130	160																	
	90 B5	130	165	200	24	B															
	90 B14	95	115	140																	
	80 B5	130	165	200	19	BS															

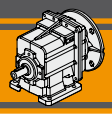
						64.48	74.96	81.07	86.24	108.43	128.84	172.32	186.17	216.19	248.99	289.15
CMG053	100/112B5	180	215	250	28											
	100/112B14	110	130	160												
	90 B5	130	165	200	24											
	90 B14	95	115	140												
	80 B5	130	165	200	19	B										
	80 B14	80	100	120												
	71 B5	110	130	160	14	BS										

Dimensioni — *Dimensions*

CMG CMGIS	A	B	I	j	LM	LR	Albero entrata / *Input shaft*					Albero uscita / *Output shaft*					Peso / *Weight* [kg]	
							D_1 h6	E_1	F_1	G_1	T_1	D_2 h6	E_2	F_2	G_2	T_2	CMG	CMGIS
002	92	81.5	0	44	143[1] 153[2]	140	14	30	5	M6	16	16 20	40	5 6	M6	18 22.5	2.9[1] 3.2[2]	3.0
012	124	93	6.5	45	195	187	16	40	5	M6	18	20	40	6	M6	22.5	5.3	5.0
013		112	43		268	260											7.8	7.5
022	124	98	11.5	45	205	197	16	40	5	M6	18	25	50	8	M8	28	6.2	5.9
023		117	48		278	270											8.7	8.4
032	156	118	5	70	237	229.5	19	40	6	M6	21.5	30	60	8	M10	33	11.3	11.2
033			41.5		303	295	16		5		18						13.6	13.3
042	156	128	15	70	250	242.5	19	40	6	M6	21.5	35	70	10	M12	38	13.2	13.1
043			51.5		316	308	16		5		18						15.5	15.2
052	190	157	20	88	307.5	286.5	28	60	8	M10	31	40	80	12	M16	43	37.5	37.8
053			68		380	373	19	40	6	M6	21.5						42.0	42.3

[1] IEC 63/71, [2] IEC 80

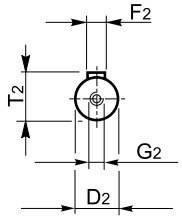
Versione **U** / ***U** Version*						
CMG CMGIS	**H**	**K**	**L**	**M**	**N** f7	**O**
002	2.5	11	78	64	50	n°5 M6x14
012 013	8.5	13.5	95	76	60	n°4 M8x15
022 023	8.5	13.5	95	76	60	n°4 M8x15
032 033	9	15	127	110	90	n°6 M8x19
042 043	9	15	127	110	90	n°6 M8x19
052 053	10	16	160	135	110	n°6 M10x22

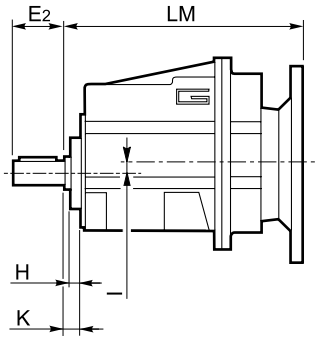


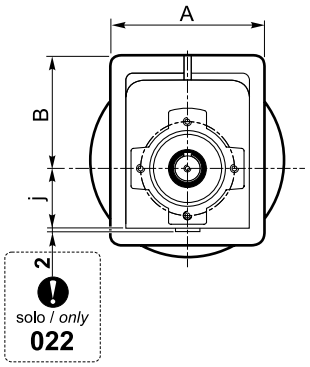
CMG..U

CMG..2 U

Albero uscita
Output shaft

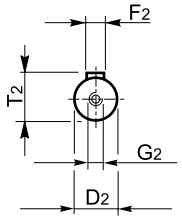


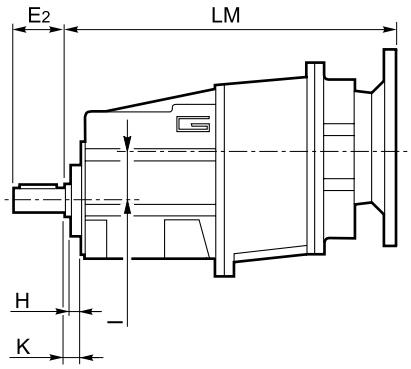




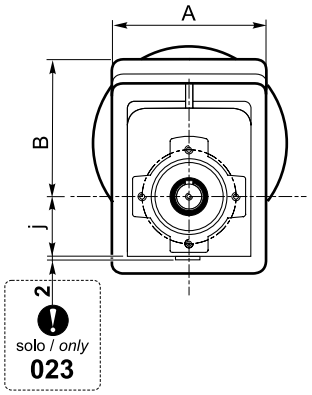
CMG..3 U

Albero uscita
Output shaft



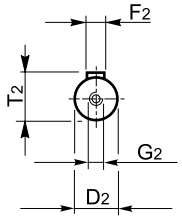


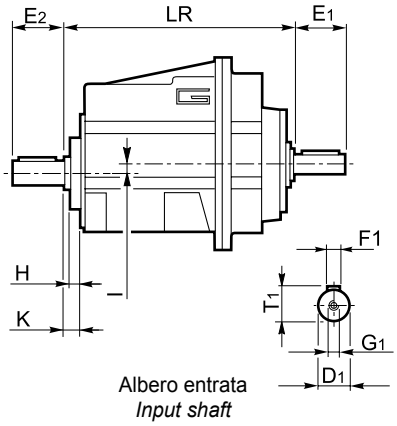
013-023



CMGIS..2 U

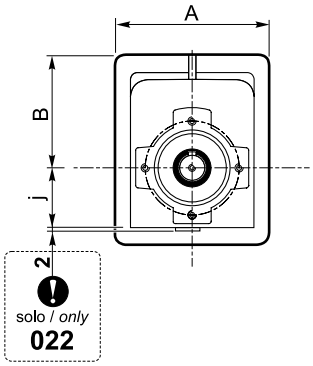
Albero uscita
Output shaft





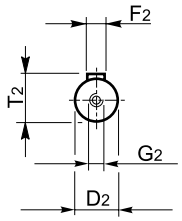
Albero entrata
Input shaft

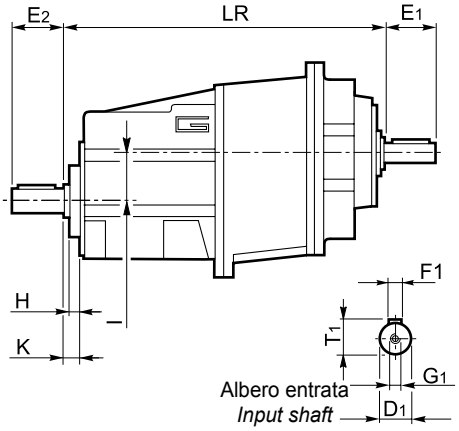
012-022



CMGIS..3 U

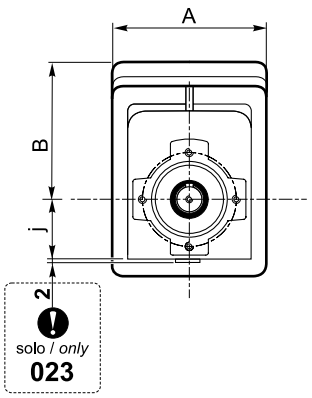
Albero uscita
Output shaft



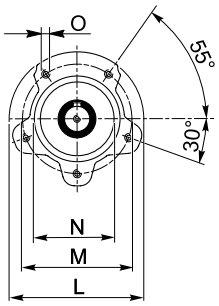


Albero entrata
Input shaft

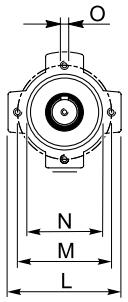
013-023



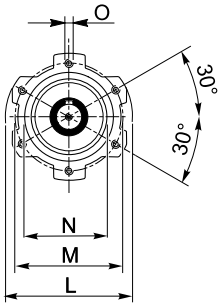
002



012 - 022
013 - 023



032-042-052
033-043-053



Dimensioni — *Dimensions*

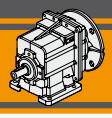
CMG CMGIS	A	B	I	LM	LR	Albero entrata / *Input shaft*					Albero uscita / *Output shaft*					*Peso / *Weight* [kg]	
						D_1 h6	E_1	F_1	G_1	T_1	D_2 h6	E_2	F_2	G_2	T_2	CMG	CMGIS
002	92	81.5	0	143[1)] 153[2)]	140	14	30	5	M6	16	16 20	40	5 6	M6	18 22.5	2.9[1)] 3.2[2)]	3.0
012	124	93	6.5	195	187	16	40	5	M6	18	20	40	6	M6	22.5	5.3	5.0
013		112	43	268	260											7.8	7.5
022	124	98	11.5	205	197	16	40	5	M6	18	25	50	8	M8	28	6.2	5.9
023		117	48	278	270											8.7	8.4
032	156	118	5	237	229.5	19	40	6	M6	21.5	30	60	8	M10	33	11.3	11.2
033			41.5	303	295	16		5		18						13.6	13.3
042	156	128	15	250	242.5	19	40	6	M6	21.5	35	70	10	M12	38	13.2	13.1
043			51.5	316	308	16		5		18						15.5	15.2
052	190	157	20	307.5	286.5	28	60	8	M10	31	40	80	12	M16	43	37.5	37.8
053			68	380	373	19	40	6	M6	21.5						42.0	42.3

[1)] IEC 63/71, [2)] IEC 80

* Versione **U** / ***U** Version*

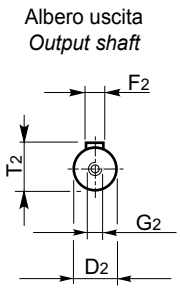
Versione **H** / ***H** Version*										
CMG CMGIS	**P**	**Q**	**R**	**S**	**U**	**V**	**X**	**Z**	**Piede / *Foot***	
									Tipo / *Type*	Peso / *Weight* [kg]
002	**18**	**60**	**80**	**9**	**100**	**10**	**60**	**120**	**H60**	**0.2**
	18	80	104	9	110 - 120	10	75	145	H75	0.3
	18	50 - 87	110	9	110	10	85	135	H85	0.4
012 013	**20**	**85**	**108**	**9**	**115**	**12**	**65**	**139**	**H65**	**0.7**
	18	80	118	9	110	12	75	140	**H75**	1.0
	25	85	120	9	120	12	80	140	**H80**	1.1
	18	50 - 87	118	9	110	12	85	130	**H85**	1.2
	25	130	154	9	110	12	90	135	**H90**	1.5
	18	60 - 107.5	135	11	130	12	100	155	**H100**	1.7
022 023	**20**	**85**	**108**	**9**	**115**	**12**	**65**	**139**	**H65**	**0.7**
	18	80	118	9	110	12	75	140	**H75**	1.0
	25	85	120	9	120	12	80	140	**H80**	1.1
	18	50 - 87	118	9	110	12	85	130	**H85**	1.2
	25	130	154	9	110	12	90	135	**H90**	1.5
	18	60 - 107.5	135	11	130	12	100	155	**H100**	1.7
032 033	**30**	**105**	**136**	**14**	**160**	**14**	**95**	**194**	**H95**	**1.5**
	30	100	150	11	150	14	110	185	**H110**	1.9
	18	70			160					
	30	165	195	14	135	14	115	170	**H115**	2.2
	35	110	160	14	170	14	120	210	**H120**	2.6
042 043	**30**	**105**	**136**	**14**	**160**	**14**	**95**	**194**	**H95**	**1.5**
	30	100	150	11	150	14	110	185	**H110**	1.9
	18	70			160					
	30	165	195	14	135	14	115	170	**H115**	2.2
	35	110	160	14	170	14	120	210	**H120**	2.6
052 053	35	145	200	18	200	22	120	239	**H120**	3.5
	35	205	244	18	170	22	140	219	**H140**	4.3
	25	110	199	18	225	22	155	264	**H155**	5.1
		156								

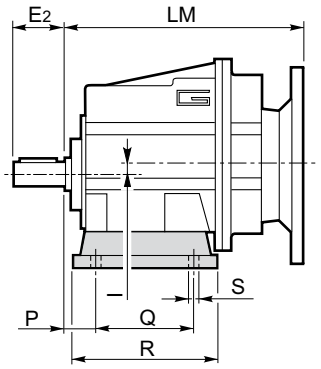
Preferenziale / *Preferred*

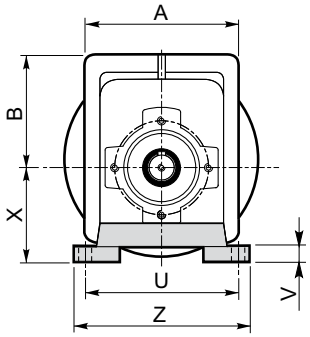


CMG..H

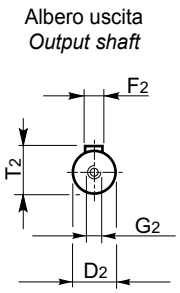
CMG..2 H..

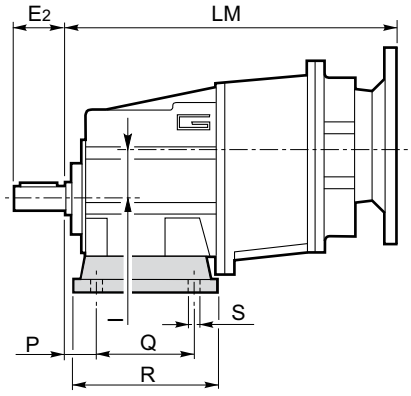


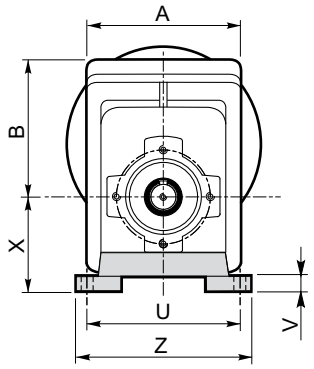




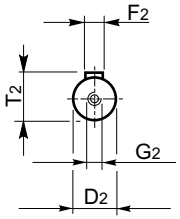
CMG..3 H..

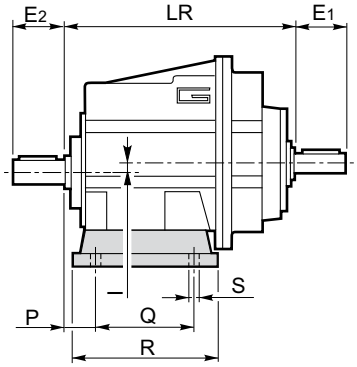


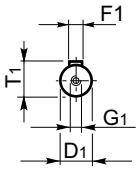


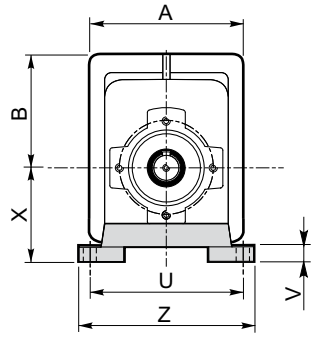


CMGIS..2 H..

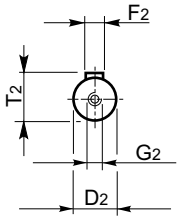


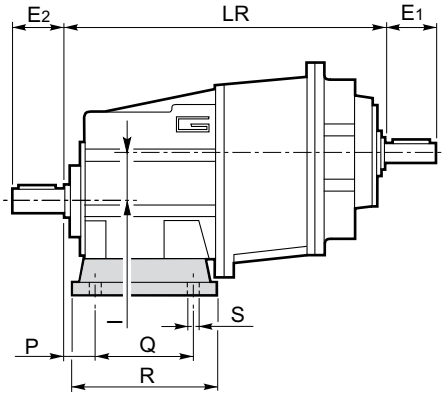


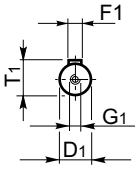


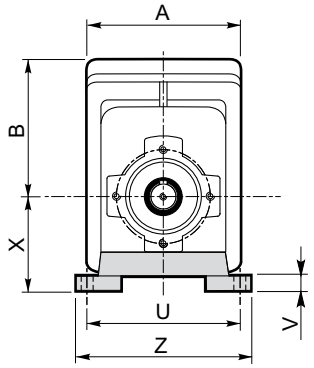


CMGIS..3 H..









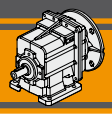
Dimensioni — *Dimensions*

CMG CMGIS	A	B	I	LM	LR	Albero entrata / *Input shaft*					Albero uscita / *Output shaft*					*Peso / *Weight* [kg]	
						D_1 h6	E_1	F_1	G_1	T_1	D_2 h6	E_2	F_2	G_2	T_2	CMG	CMGIS
002	92	81.5	0	143[1] 153[2]	140	14	30	5	M6	16	16 20	40	5 6	M6	18 22.5	2.9[1] 3.2[2]	3.0
012	124	93	6.5	195	187	16	40	5	M6	18	20	40	6	M6	22.5	5.3	5.0
013		112	43	268	260											7.8	7.5
022	124	98	11.5	205	197	16	40	5	M6	18	25	50	8	M8	28	6.2	5.9
023		117	48	278	270											8.7	8.4
032	156	118	5	237	229.5	19	40	6	M6	21.5	30	60	8	M10	33	11.3	11.2
033			41.5	303	295	16		5		18						13.6	13.3
042	156	128	15	250	242.5	19	40	6	M6	21.5	35	70	10	M12	38	13.2	13.1
043			51.5	316	308	16		5		18						15.5	15.2
052	190	157	20	307.5	286.5	28	60	8	M10	31	40	80	12	M16	43	37.5	37.8
053			68	380	373	19	40	6	M6	21.5						42.0	42.3

[1] IEC 63/71, [2] IEC 80

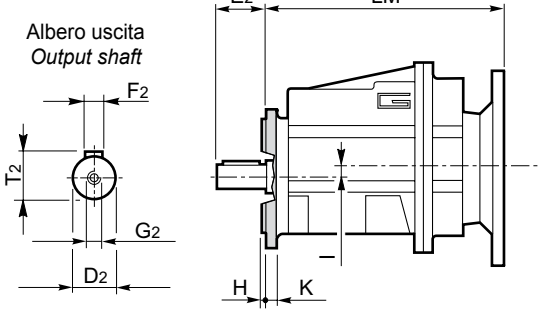
* Versione **U** / ***U** Version*

Versione **F** / ***F** Version*									
CMG CMGIS	**H**	**K**	**L**	**M**	**N** f7	**O**	**P**	**Flangia / *Flange***	
								Tipo / *Type*	Peso / *Weight* [kg]
002	3.5	7	105	85	70	6.5	90	**F105**	0.1
	3.5	8	120	100	80	7	100	**F120**	0.2
	3.5	8	140	115	95	9	115	**F140**	0.2
012 013	3	9	120	100	80	9	106	**F120**	0.5
	3.5	9	140	115	95	9	115	**F140**	0.8
	3.5	9	160	130	110	9	126	**F160**	1.1
	3.5	11	200	165	130	11	165	**F200**	1.8
022 023	3	9	120	100	80	9	106	**F120**	0.5
	3.5	9	140	115	95	9	115	**F140**	0.8
	3.5	9	160	130	110	9	126	**F160**	1.1
	3.5	11	200	165	130	11	165	**F200**	1.8
032 033	3.5	11	160	130	110	9	140	**F160**	1.0
	3.5	11	200	165	130	11	165	**F200**	1.8
	4	13	250	215	180	14	215	**F250**	2.9
042 043	3.5	11	160	130	110	9	140	**F160**	1.0
	3.5	11	200	165	130	11	165	**F200**	1.8
	4	13	250	215	180	14	215	**F250**	2.9
052 053	4	13	250	215	180	14	215	**F250**	2.9
	4	13	300	265	230	14	265	**F300**	4.4

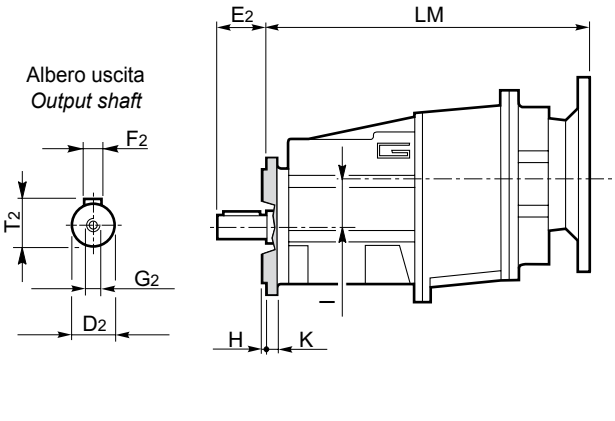


CMG..F

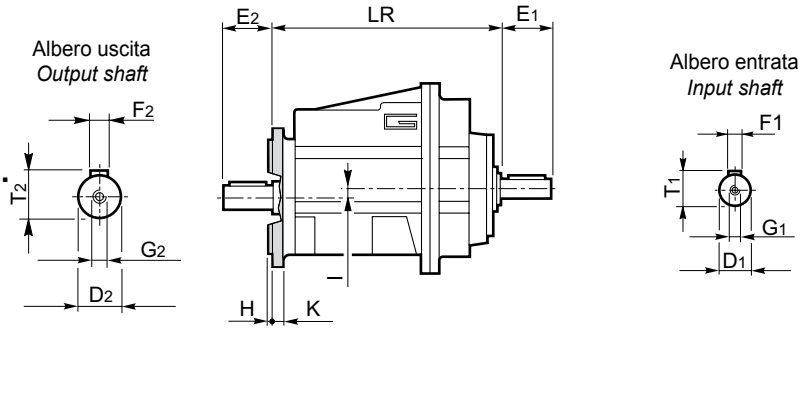
CMG..2 F..



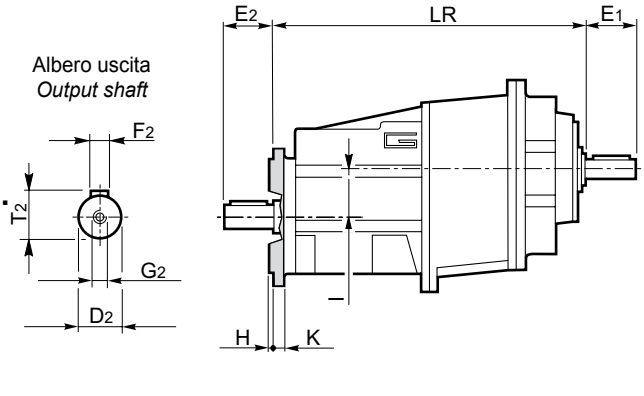
CMG..3 F..



CMGIS..2 F..



CMGIS..3 F..



Dimensioni — *Dimensions*

CMG CMGIS	A	B	I	LM	LR	Albero entrata / *Input shaft*					Albero uscita / *Output shaft*					*Peso / *Weight* [kg]	
						D_1 h6	E_1	F_1	G_1	T_1	D_2 h6	E_2	F_2	G_2	T_2	CMG	CMGIS
002	92	81.5	0	143[1] 153[2]	140	14	30	5	M6	16	16 20	40	5 6	M6	18 22.5	2.9[1] 3.2[2]	3.0
012	124	93	6.5	195	187	16	40	5	M6	18	20	40	6	M6	22.5	5.3	5.0
013		112	43	268	260											7.8	7.5
022	124	98	11.5	205	197	16	40	5	M6	18	25	50	8	M8	28	6.2	5.9
023		117	48	278	270											8.7	8.4
032	156	118	5	237	229.5	19	40	6	M6	21.5	30	60	8	M10	33	11.3	11.2
033			41.5	303	295	16		5		18						13.6	13.3
042	156	128	15	250	242.5	19	40	6	M6	21.5	35	70	10	M12	38	13.2	13.1
043			51.5	316	308	16		5		18						15.5	15.2
052	190	157	20	307.5	286.5	28	60	8	M10	31	40	80	12	M16	43	37.5	37.8
053			68	380	373	19	40	6	M6	21.5						42.0	42.3

[1] IEC 63/71, [2] IEC 80

* Versione **U** / ***U** Version*

Versione **H** / ***H*** Version

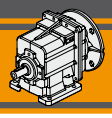
CMG CMGIS	P	Q	R	S	U	V	X	Z	Piede / *Foot* Tipo *Type*	Peso / *Weight* [kg]	Combinazioni possibili H/F *Possible combinations H/F* F105	F120	F140	F160	F200	F250	F300
002	**18**	**60**	**80**	**9**	**100**	**10**	**60**	**120**	**H60**	**0.2**	•	•	•				
	18	80	104	9	110 - 120	10	75	145	**H75**	0.3	•	•	•				
	18	50 - 87	110	9	110	10	85	135	**H85**	0.4	•	•	•				
012 013	**20**	**85**	**108**	**9**	**115**	**12**	**65**	**139**	**H65**	**0.7**		•	•				
	18	80	118	9	110	12	75	140	**H75**	1.0		•	•	•			
	25	85	120	9	120	12	80	140	**H80**	1.1		•	•	•			
	18	50 - 87	118	9	110	12	85	130	**H85**	1.2		•	•	•			
	25	130	154	9	110	12	90	135	**H90**	1.5		•	•	•	•		
	18	60 - 107.5	135	11	130	12	100	155	**H100**	1.7		•	•	•	•		
022 023	**20**	**85**	**108**	**9**	**115**	**12**	**65**	**139**	**H65**	**0.7**		•	•				
	18	80	118	9	110	12	75	140	**H75**	1.0		•	•	•			
	25	85	120	9	120	12	80	140	**H80**	1.1		•	•	•			
	18	50 - 87	118	9	110	12	85	130	**H85**	1.2		•	•	•			
	25	130	154	9	110	12	90	135	**H90**	1.5		•	•	•	•		
	18	60 - 107.5	135	11	130	12	100	155	**H100**	1.7		•	•	•	•		
032 033	**30**	**105**	**136**	**14**	**160**	**14**	**95**	**194**	**H95**	**1.5**				•	•		
	30	100	150	11	150	14	110	185	**H110**	1.9				•	•		
	18	70			160												
	30	165	195	14	135	14	115	170	**H115**	2.2				•	•	•	
	35	110	160	14	170	14	120	210	**H120**	2.6				•	•	•	
042 043	**30**	**105**	**136**	**14**	**160**	**14**	**95**	**194**	**H95**	**1.5**				•	•		
	30	100	150	11	150	14	110	185	**H110**	1.9				•	•		
	18	70			160												
	30	165	195	14	135	14	115	170	**H115**	2.2				•	•	•	
	35	110	160	14	170	14	120	210	**H120**	2.6				•	•	•	
052 053	35	145	199	18	200	22	120	239	**H120**	3.5						•	
	35	205	244	18	170	22	140	219	**H140**	4.3						•	•
	25	110	199	18	225	22	155	264	**H155**	5.1						•	•
		156															

Preferenziale / *Preferred*

• Combinazioni possibili H/F / *Possible combinations H/F*

Versione **F** / ***F*** *Version*

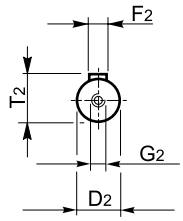
CMG CMGIS	H	K	L	M	N f7	O	P	Flangia / *Flange* Tipo / *Type*	Peso / *Weight* [kg]
002	3.5	7	105	85	70	6.5	90	**F105**	0.1
	3.5	8	120	100	80	7	100	**F120**	0.2
	3.5	8	140	115	95	9	115	**F140**	0.2
012 013	3	9	120	100	80	9	106	**F120**	0.5
	3.5	9	140	115	95	9	115	**F140**	0.8
	3.5	9	160	130	110	9	126	**F160**	1.1
	3.5	11	200	165	130	11	165	**F200**	1.8
022 023	3	9	120	100	80	9	106	**F120**	0.5
	3.5	9	140	115	95	9	115	**F140**	0.8
	3.5	9	160	130	110	9	126	**F160**	1.1
	3.5	11	200	165	130	11	165	**F200**	1.8
032 033	3.5	11	160	130	110	9	140	**F160**	1.0
	3.5	11	200	165	130	11	165	**F200**	1.8
	4	13	250	215	150	14	215	**F250**	2.9
042 043	3.5	11	160	130	110	9	140	**F160**	1.0
	3.5	11	200	165	130	11	165	**F200**	1.8
	4	13	250	215	150	14	215	**F250**	2.9
052 053	4	13	250	215	150	14	215	**F250**	2.9
	4	13	300	265	230	14	265	**F300**	4.4

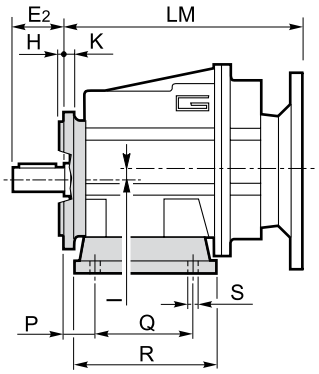


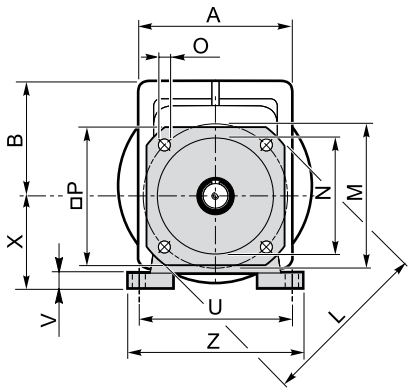
CMG..H../F..

CMG..2 H../F..

Albero uscita
Output shaft

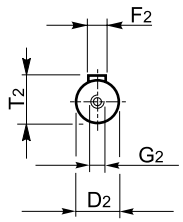


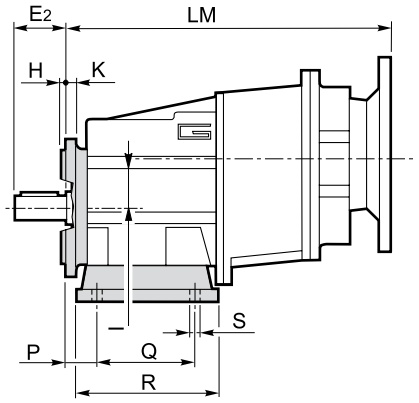


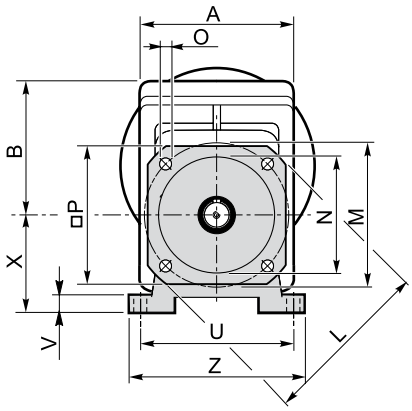


CMG..3 H../F..

Albero uscita
Output shaft

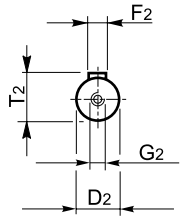


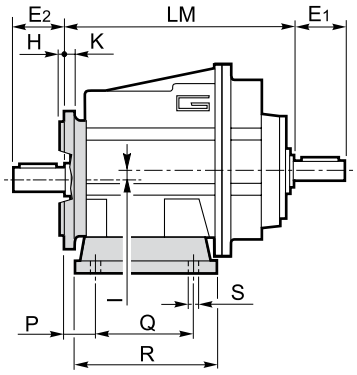




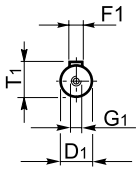
CMGIS..2 H../F..

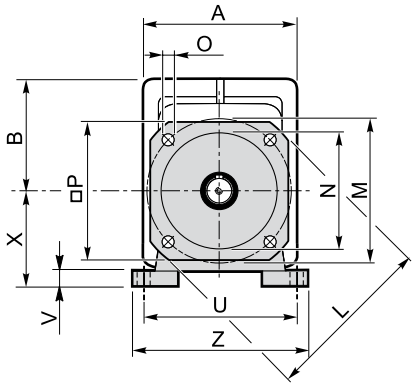
Albero uscita
Output shaft





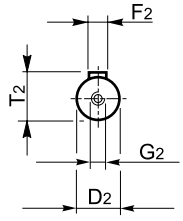
Albero entrata
Input shaft

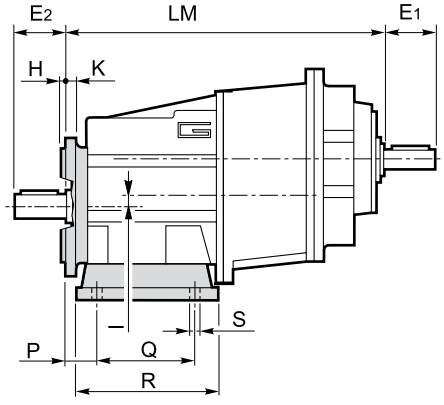




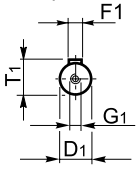
CMGIS..3 H../F..

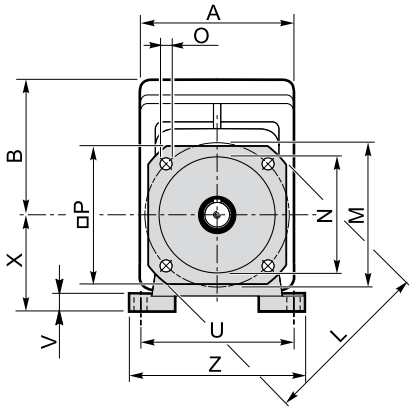
Albero uscita
Output shaft





Albero entrata
Input shaft





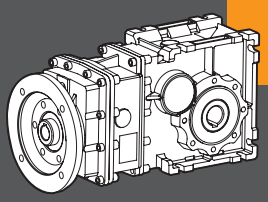
Note/*Notes*

TRANSTECNO®

THE MODULAR GEARMOTOR

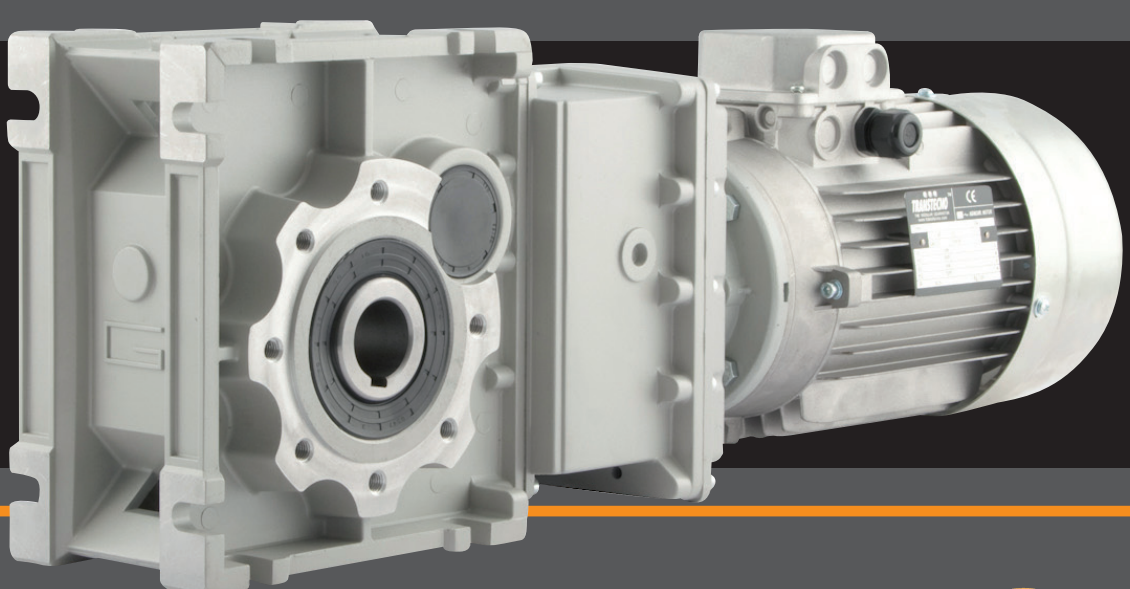
CMB

CMB



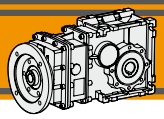
RIDUTTORI AD ASSI ORTOGONALI

BEVEL HELICAL GEARBOXES



ENERGY SAVING

TRANSTECNO · GENUINE · PRODUCTS ·



ENERGY SAVING

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Sensi di rotazione	*Direction of rotation*	**C3**
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Caratteristiche tecniche

I riduttori ad ingranaggi ad assi ortogonali della serie CMB sono caratterizzati da un elevato grado di modularità: essi infatti sono stati realizzati con una carcassa completamente intercambiabile con quella dei riduttori a vite senza fine della serie CM.
Sono pertanto configurabili secondo le esigenze dell'applicazione con flangia di uscita, albero di uscita, braccio di reazione.

Caratteristiche comuni a tutta la serie:
- Carcassa in alluminio nelle grandezze 402, 502, 633 e 903. La grandezza 1103 è costruita con carcassa in ghisa.
- Ingranaggi sempre rettificati.
- Lubrificazione permanente con olio sintetico.

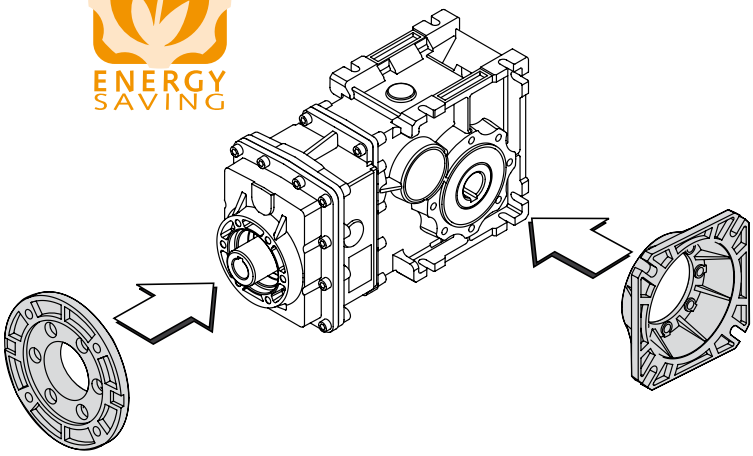
Technical features

The high degree of modularity of CMB bevel helical gearbox allows it to be completely interchangeable with CM wormgearboxes.

It is possible to set up the version required using output flanges, output shafts and optional torque arms.

Common features of all CMB range are:
- *Die-cast aluminum housing on sizes 402, 502, 633 and 903. Cast-iron housing on size 1103.*
- *Ground helical gears.*
- *Permanent synthetic oil long-life lubrication.*

ENERGY SAVING



Designazione

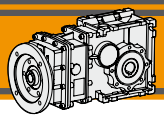
Classification

RIDUTTORE / *GEARBOX*

CMB	63	3	U	9.81	D25	90	B5	SZDX	BRSX	90	B3
Tipo *Type*	Grandezza *Size*	Stadi *Stages*	Versione *Version*	Rapporto *Ratio*	Albero uscita *Output shaft*	IEC	Forma costruttiva *Version*	Albero di uscita *Output shaft*	Braccio di reazione *Torque arm*	Angolo *Angle*	Pos. di montaggio *Mounting position*
CMB	**40** **50** **63** **90** **110**	**2** **3**	**U...** **FD...** **FS...** **FBD...** **FBS...** **FLD...** **FLS...**	vedi tabelle *see tables*	vedi tabelle *see tables*	**56..** **—** **90..**	**B5** **B14**	**SZDX** **SZSX** **DZ**	**BRDX** **BRSX**	**0°** **90°** **180°** **270°**	**B3** **B8** **B6** **B7** **V5** **V6**

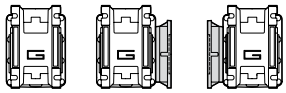
RIDUTTORE / *GEARBOX*

CMBIS	63	3	U	9.81	D25	SZDX	BRSX	90	B3
Tipo *Type*	Grandezza *Size*	Stadi *Stages*	Versione *Version*	Rapporto *Ratio*	Albero uscita *Output shaft*	Albero di uscita *Output shaft*	Braccio di reazione *Torque arm*	Angolo *Angle*	Pos. di montaggio *Mounting position*
CMBIS	**40** **50** **63** **90** **110**	**2** **3**	**U...** **FD...** **FS...** **FBD...** **FBS...** **FLD...** **FLS...**	vedi tabelle *see tables*	vedi tabelle *see tables*	**SZDX** **SZSX** **DZ**	**BRDX** **BRSX**	**0°** **90°** **180°** **270°**	**B3** **B8** **B6** **B7** **V5** **V6**



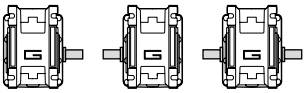
Designazione — *Classification*

Versione Riduttore
Gearbox Version



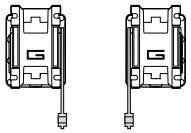
U — FD, FLD, FBD — FS, FLS, FBS

Albero di uscita
Output shaft



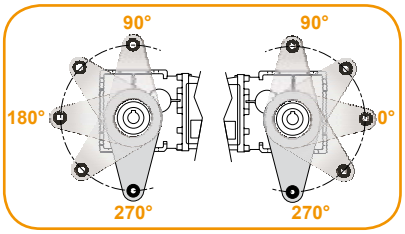
SZDX — SZSX — DZ

Braccio di reazione
Torque arm



BRDX — BRSX

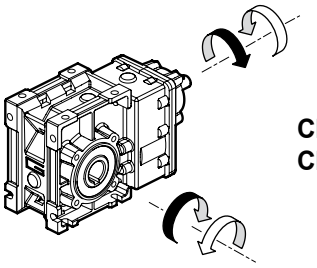
Angolo
Angle



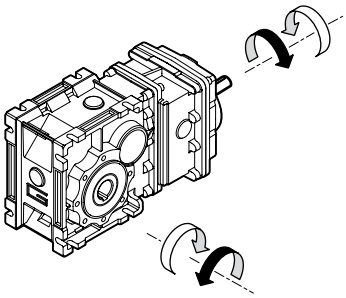
MOTORE / *MOTOR*				
1.5kW	**4p**	**3ph**	**50Hz**	**T1**
Potenza *Power* Vedi tabelle *See tables*	Poli *Poles* **2p** **4p** **6p** **8p**	Fasi *Phases* **1ph** **3ph**	Frequenza *Frequency* **50Hz** **60Hz**	Pos. morsettiera *Terminal box pos.* **T1** (Std) **T4** **T2** **T3**

Sensi di rotazione — *Direction of rotation*

CMB...2
CMBIS..2



CMB...3
CMBIS..3



Simbologia — *Symbols*

n_1	[min^{-1}]	Velocità in ingresso / *Input speed*
n_2	[min^{-1}]	Velocità in uscita / *Output speed*
i		Rapporto di riduzione / *Ratio*
P_1	[kW]	Potenza in entrata / *Input power*
M_2	[Nm]	Coppia nominale in uscita in funzione di P_1 / *Output torque referred to* P_1
Pn_1	[kW]	Potenza nominale in entrata / Nominal *input power*
Mn_2	[Nm]	Coppia nominale in uscita in funzione di Pn_1 / Nominal *output torque referred to* Pn_1
sf		Fattore di servizio / *Service factor*
R_2	[N]	Carico radiale ammissibile in uscita / *Permitted output radial load*
A_2	[N]	Carico assiale ammissibile in uscita / *Permitted output axial load*

Lubrificazione — *Lubrication*

Tutti i riduttori nelle taglie 402, 502, 633 e 903 sono forniti completi di lubrificante sintetico viscosità 320, pertanto possono essere installati in qualunque posizione di montaggio e non necessitano di manutenzione. Per la taglia 1103 la lubrificazione dipende dalla posizione di montaggio.

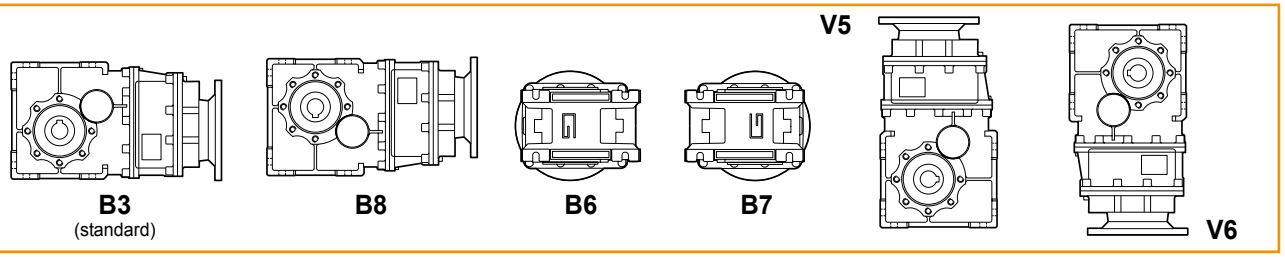
Permanent synthetic oil long-life lubrication (viscosity grade 320) makes it possible to use sizes 402, 502, 633 and 903 in all mounting positions; for this reason they can be installed in any assembly position and do not require maintenance. For size 1103 lubrication depends on assembly position.

CMB CMBIS	Quantità di olio (litri) / *Oil quantity (litres)*						
	B3	B8	B6	B7	V5	V6	
402	0.4						Lubrificati a vita *Life lubrication*
502	0.52						
633	1.3						
903	2.8						
1103	4.7	3			5	4.2	

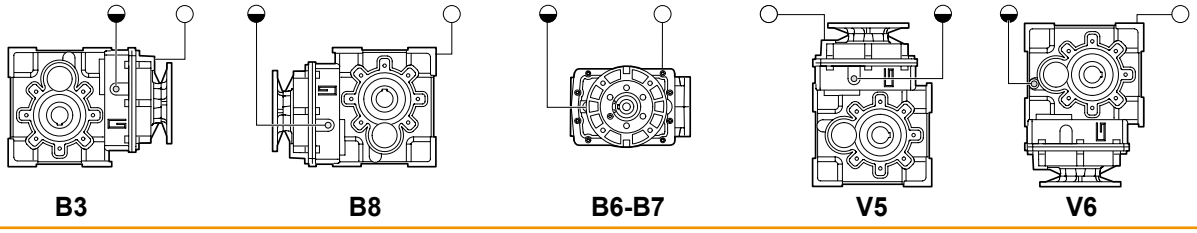
N.B.
Le quantità di lubrificante sono indipendenti dalla posizione di montaggio per le taglie 402, 502, 633 e 903.
The oil quantity does not depend on mounting position for sizes 402, 502, 633 and 903.

Posizioni di montaggio / *Mounting positions*

CMB 402-502-633-903

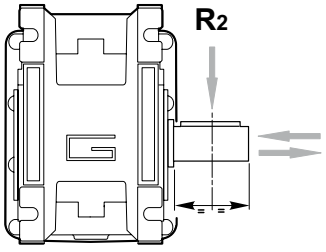


CMB 1103



Sfiato e tappo di riempimento / *Breather and filling plug*
Livello olio / *Oil level plug*

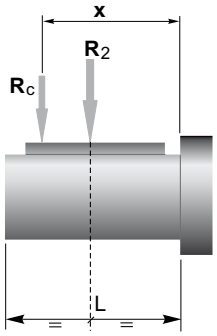
Carichi radiali — *Radial loads*



n_2 [min^{-1}]	R_2 [N]				
	CMB 402	CMB 502	CMB 633	CMB 903	CMB1103
400	905	1116	1835	2682	3409
300	996	1228	2020	2952	3752
200	1141	1406	2312	3379	4294
170	1204	1484	2441	3567	4534
140	1414	1743	2604	3806	4837
100	1582	1949	2913	4686	5411
90	1638	2019	3321	4853	5832
60	2047	2490	3801	5556	7299
40	2524	3029	4492	6614	8355
30	2778	3334	5159	7540	9524
20	3180	3816	5906	8631	10903
15	3500	4200	6500	9500	12000
10	3500	4200	6500	9500	12000

Quando il carico radiale risultante non è applicato sulla mezzeria dell'albero occorre calcolare quello effettivo con la seguente formula

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:

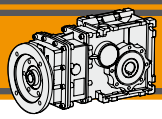


	CMB 402	CMB 502	CMB 633	CMB 903	CMB 1103
a	86	104	118	157	173
b	66	79	93	117	133
R_{2MAX}	3500	4200	6500	9500	12000

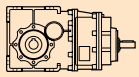
$$R_c = \frac{R_2 \cdot a}{(b+x)} \leq R_{2MAX}$$

$$R \leq R_c$$

a, b = valori riportati nella tabella
a, b = values given in the table



Dati tecnici — n_1 1400 min^{-1} — ***Technical data***



CMBIS 402

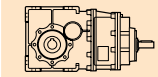
n_2 [min^{-1}]	Mn_2 [Nm]	Pn_1 [kW]	i
227	40	1.0	6.18
187	40	0.83	7.49
152	40	0.68	9.20
118	45	0.59	11.83
112	45	0.56	12.48
94.4	45	0.47	14.83
79.4	45	0.40	17.63
75.3	55	0.46	18.60
62.7	55	0.38	22.33
58.6	55	0.36	23.91
48.5	65	0.35	28.89
45.4	65	0.33	30.84
41.7	65	0.30	33.57
39.3	65	0.28	35.63
32.7	65	0.24	42.75
25.3	65	0.18	55.31
23.7	65	0.17	59.06
21.8	65	0.16	64.29

CMBIS502

n_2 [min^{-1}]	Mn_2 [Nm]	Pn_1 [kW]	i
227	70	1.8	6.18
187	70	1.5	7.49
152	70	1.2	9.20
118	90	1.2	11.83
112	90	1.1	12.48
94.4	90	0.95	14.83
79.4	90	0.80	17.63
75.3	110	0.92	18.60
62.7	110	0.77	22.33
58.6	110	0.72	23.91
48.5	125	0.67	28.89
45.4	125	0.63	30.84
41.7	125	0.58	33.57
39.3	125	0.55	35.63
32.7	125	0.46	42.75
25.3	125	0.35	55.31
23.7	125	0.33	59.06
21.8	125	0.30	64.29

CMBIS 633

n_2 [min^{-1}]	Mn_2 [Nm]	Pn_1 [kW]	i
213	150	3.6	6.58
175	150	2.9	7.99
143	150	2.4	9.81
134	150	2.2	10.44
112	150	1.9	12.53
105	150	1.8	13.31
88.6	170	1.7	15.81
78.8	220	1.9	17.77
64.9	220	1.6	21.56
52.9	220	1.3	26.48
49.7	220	1.2	28.17
41.4	220	1.0	33.81
39.0	220	0.96	35.92
36.0	250	1.00	38.88
29.7	250	0.83	47.16
24.2	250	0.67	57.93
22.7	250	0.63	61.63
18.9	250	0.53	73.96
17.8	250	0.50	78.58
15.0	250	0.42	93.33
10.0	250	0.28	140.52
7.7	250	0.21	181.81
6.6	250	0.18	211.31



CMBIS 903

n_2 [min^{-1}]	Mn_2 [Nm]	Pn_1 [kW]	i
211	280	6.57	6.65
175	280	5.46	8.00
144	280	4.48	9.74
125	280	3.90	11.21
99.3	300	3.32	14.09
78.0	450	3.91	17.95
64.8	450	3.25	21.60
53.2	450	2.67	26.30
46.3	450	2.32	30.25
35.7	500	1.99	39.26
29.6	500	1.65	47.25
24.3	500	1.36	57.52
21.2	500	1.18	66.17
16.8	500	0.94	83.20
13.0	500	0.72	108.09
10.6	500	0.59	132.23
9.5	500	0.53	147.92
8.4	500	0.47	167.09
7.3	500	0.41	191.06
6.3	500	0.35	221.88
5.3	500	0.30	262.96

CMBIS 1103

n_2 [min^{-1}]	Mn_2 [Nm]	Pn_1 [kW]	i
198	550	12.1	7.08
156	550	9.5	8.99
128	550	7.9	10.90
112	550	6.9	12.52
89.2	620	6.2	15.69
76.7	810	6.9	18.25
60.4	810	5.4	23.18
49.8	810	4.5	28.11
43.4	810	3.9	32.27
37.7	900	3.8	37.09
29.7	900	3.0	47.12
24.5	900	2.5	57.14
21.3	900	2.1	65.59
17.0	900	1.7	82.21
14.4	900	1.4	97.25
10.8	900	1.1	130.07
7.5	900	0.75	187.50
6.4	900	0.65	217.58

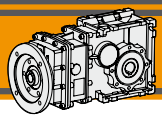
Nota:
Pn_1 è la potenza meccanica.
La potenza applicabile è ridotta del fattore termico.
Per maggiori dettagli consultare il nostro Servizio Tecnico.

Note:
Pn_1 is an input mechanical power which must be reduced by the heating factor in order to get the relevant one. For more details please contact our Technical Service.

Dati tecnici — *Technical data*

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
0.06						
56A4 (1400 min^{-1})	**39.3**	14	4.7	35.63	**CMB402**	**B5/B14**
	32.7	16	4.0	42.75		**B5/B14**
	25.3	21	3.1	55.31		**B5/B14**
	23.7	23	2.9	59.06		**B5/B14**
	21.8	25	2.6	64.29		**B5/B14**
0.09						
56B4 (1400 min^{-1})	**48.5**	17	3.9	28.89	**CMB402**	**B5/B14**
	45.4	18	3.7	30.84		**B5/B14**
	41.7	19	3.4	33.57		**B5/B14**
	39.3	21	3.2	35.63		**B5/B14**
	32.7	25	2.6	42.75		**B5/B14**
	25.3	32	2.0	55.31		**B5/B14**
	23.7	34	1.9	59.06		**B5/B14**
	21.8	37	1.8	64.29		**B5/B14**
0.12						
63A4 (1400 min^{-1})	**227**	5	8.4	6.18	**CMB402**	**B5/B14**
	187	6	6.9	7.49		**B5/B14**
	152	7	5.6	9.20		**B5/B14**
	118	9	4.9	11.83		**B5/B14**
	112	10	4.7	12.48		**B5/B14**
	94.4	11	3.9	14.83		**B5/B14**
	79.4	14	3.3	17.63		**B5/B14**
	75.3	14	3.8	18.60		**B5/B14**
	62.7	17	3.2	22.33		**B5/B14**
	58.6	18	3.0	23.91		**B5/B14**
	48.5	22	2.9	28.89		**B5/B14**
	45.4	24	2.7	30.84		**B5/B14**
	41.7	26	2.5	33.57		**B5/B14**
	39.3	27	2.4	35.63		**B5/B14**
	32.7	33	2.0	42.75		**B5/B14**
	25.3	43	1.5	55.31		**B5/B14**
	23.7	45	1.4	59.06		**B5/B14**
	21.8	49	1.3	64.29		**B5/B14**
	32.7	33	3.8	42.75	**CMB502**	**B5/B14**
	25.3	43	2.9	55.31		**B5/B14**
	23.7	45	2.8	59.06		**B5/B14**
	21.8	49	2.5	64.29		**B5/B14**
	18.9	57	4.4	73.96	**CMB633**	**B5**
	17.8	60	4.1	78.58		**B5**
	15.0	72	3.5	93.33		**B5**
	10.0	108	2.3	140.52		**B5**
	7.7	140	1.8	181.81		**B5**
	6.6	163	1.5	211.31		**B5**
0.18						
63B4 (1400 min^{-1})	**227**	7	5.6	6.18	**CMB402**	**B5/B14**
	187	9	4.6	7.49		**B5/B14**
	152	11	3.8	9.20		**B5/B14**
	118	14	3.3	11.83		**B5/B14**
	112	14	3.1	12.48		**B5/B14**
	94.4	17	2.6	14.83		**B5/B14**
	79.4	20	2.2	17.63		**B5/B14**
	75.3	21	2.6	18.60		**B5/B14**
	62.7	26	2.1	22.33		**B5/B14**
	58.6	28	2.0	23.91		**B5/B14**
	48.5	33	1.9	28.89		**B5/B14**

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
0.18						
63B4 (1400 min^{-1})	**45.4**	36	1.8	30.84	**CMB402**	**B5/B14**
	41.7	39	1.7	33.57		**B5/B14**
	39.3	41	1.6	35.63		**B5/B14**
	32.7	49	1.3	42.75		**B5/B14**
	25.3	64	1.0	55.31		**B5/B14**
	23.7	68	0.95	59.06		**B5/B14**
	21.8	74	0.88	64.29		**B5/B14**
	45.4	36	3.5	30.84	**CMB502**	**B5/B14**
	41.7	39	3.2	33.57		**B5/B14**
	39.3	41	3.0	35.63		**B5/B14**
	32.7	49	2.5	42.75		**B5/B14**
	25.3	64	2.0	55.31		**B5/B14**
	23.7	68	1.8	59.06		**B5/B14**
	21.8	74	1.7	64.29		**B5/B14**
	24.2	67	3.7	57.93	**CMB633**	**B5**
	22.7	71	3.5	61.63		**B5**
	18.9	85	2.9	73.96		**B5**
	17.8	91	2.8	78.58		**B5**
	15.0	108	2.3	93.33		**B5**
	10.0	162	1.5	140.52		**B5**
	7.7	210	1.2	181.81		**B5**
	6.6	244	1.0	211.31		**B5**
0.25						
71A4 (1400 min^{-1})	**227**	10	4.0	6.18	**CMB402**	**B5/B14**
	187	12	3.3	7.49		**B5/B14**
	152	15	2.7	9.20		**B5/B14**
	118	19	2.4	11.83		**B5/B14**
	112	20	2.2	12.48		**B5/B14**
	94.4	24	1.9	14.83		**B5/B14**
	79.4	28	1.6	17.63		**B5/B14**
	75.3	30	1.8	18.60		**B5/B14**
	62.7	36	1.5	22.33		**B5/B14**
	58.6	38	1.4	23.91		**B5/B14**
	48.5	46	1.4	28.89		**B5/B14**
	45.4	49	1.3	30.84		**B5/B14**
	41.7	54	1.2	33.57		**B5/B14**
	39.3	57	1.1	35.63		**B5/B14**
	32.7	69	0.9	42.75		**B5/B14**
	227	10	7.1	6.18	**CMB502**	**B5/B14**
	187	12	5.8	7.49		**B5/B14**
	152	15	4.7	9.20		**B5/B14**
	118	19	4.7	11.83		**B5/B14**
	112	20	4.5	12.48		**B5/B14**
	94.4	24	3.8	14.83		**B5/B14**
	79.4	28	3.2	17.63		**B5/B14**
	75.3	30	3.7	18.60		**B5/B14**
	62.7	36	3.1	22.33		**B5/B14**
	58.6	38	2.9	23.91		**B5/B14**
	48.5	46	2.7	28.89		**B5/B14**
	45.4	49	2.5	30.84		**B5/B14**
	41.7	54	2.3	33.57		**B5/B14**
	39.3	57	2.2	35.63		**B5/B14**
	32.7	69	1.8	42.75		**B5/B14**
	25.3	89	1.4	55.31		**B5/B14**
	23.7	95	1.3	59.06		**B5/B14**
	21.8	103	1.2	64.29		**B5/B14**



Dati tecnici — *Technical data*

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
0.25						
71A4 (1400 min^{-1})	**41.4**	54	4.1	33.81	**CMB633**	**B5/B14**
	39.0	58	3.8	35.92		**B5/B14**
	36.0	62	4.0	38.88		**B5/B14**
	29.7	76	3.3	47.16		**B5/B14**
	24.2	93	2.7	57.93		**B5/B14**
	22.7	99	2.5	61.63		**B5/B14**
	18.9	119	2.1	73.96		**B5/B14**
	17.8	126	2.0	78.58		**B5/B14**
	15.0	150	1.7	93.33		**B5/B14**
	10.0	225	1.1	140.52		**B5/B14**
	7.7	291	0.9	181.81		**B5/B14**
	24.3	92	5.4	57.52	**CMB903**	**B5**
	21.2	106	4.7	66.17		**B5**
	16.8	133	3.7	83.20		**B5**
	13.0	173	2.9	108.09		**B5**
	10.6	212	2.4	132.23		**B5**
	9.5	237	2.1	147.92		**B5**
	8.4	268	1.9	167.09		**B5**
	7.3	306	1.6	191.06		**B5**
	6.3	356	1.4	221.88		**B5**
	5.3	422	1.2	262.96		**B5**
0.37						
71B4 (1400 min^{-1})	**227**	15	2.7	6.18	**CMB402**	**B5/B14**
	187	18	2.3	7.49		**B5/B14**
	152	22	1.8	9.20		**B5/B14**
	118	28	1.6	11.83		**B5/B14**
	112	30	1.5	12.48		**B5/B14**
	94.4	35	1.3	14.83		**B5/B14**
	79.4	42	1.1	17.63		**B5/B14**
	75.3	44	1.2	18.60		**B5/B14**
	62.7	53	1.0	22.33		**B5/B14**
	58.6	57	1.0	23.91		**B5/B14**
	48.5	69	0.9	28.89		**B5/B14**
	45.4	73	0.9	30.84		**B5/B14**
	227	15	4.8	6.18	**CMB502**	**B5/B14**
	187	18	3.9	7.49		**B5/B14**
	152	22	3.2	9.20		**B5/B14**
	118	28	3.2	11.83		**B5/B14**
	112	30	3.0	12.48		**B5/B14**
	94.4	35	2.6	14.83		**B5/B14**
	79.4	42	2.2	17.63		**B5/B14**
	75.3	44	2.5	18.60		**B5/B14**
	62.7	53	2.1	22.33		**B5/B14**
	58.6	57	1.9	23.91		**B5/B14**
	48.5	69	1.8	28.89		**B5/B14**
	45.4	73	1.7	30.84		**B5/B14**
	41.7	80	1.6	33.57		**B5/B14**
	39.3	85	1.5	35.63		**B5/B14**
	32.7	101	1.2	42.75		**B5/B14**
	25.3	131	1.0	55.31		**B5/B14**
	23.7	140	0.9	59.06		**B5/B14**
	64.9	51	4.3	21.56	**CMB633**	**B5/B14**
	52.9	63	3.5	26.48		**B5/B14**
	49.7	67	3.3	28.17		**B5/B14**
	41.4	80	2.7	33.81		**B5/B14**
	39.0	85	2.6	35.92		**B5/B14**
	36.0	92	2.7	38.88		**B5/B14**
	29.7	112	2.2	47.16		**B5/B14**
	24.2	137	1.8	57.93		**B5/B14**
	22.7	146	1.7	61.63		**B5/B14**
	18.9	175	1.4	73.96		**B5/B14**
	17.8	186	1.3	78.58		**B5/B14**
	15.0	221	1.1	93.33		**B5/B14**

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
0.37						
71B4 (1400 min^{-1})	**29.6**	112	4.5	47.25	**CMB903**	**B5**
	24.3	136	3.7	57.52		**B5**
	21.2	157	3.2	66.17		**B5**
	16.8	197	2.5	83.20		**B5**
	13.0	256	1.9	108.09		**B5**
	10.6	314	1.6	132.23		**B5**
	9.5	351	1.4	147.92		**B5**
	8.4	396	1.3	167.09		**B5**
	7.3	453	1.1	191.06		**B5**
	6.3	526	0.9	221.88		**B5**
	5.3	624	0.8	262.96		**B5**
0.55						
80A4 (1400 min^{-1})	**227**	22	3.2	6.18	**CMB502**	**B5/B14**
	187	26	2.6	7.49		**B5/B14**
	152	32	2.2	9.20		**B5/B14**
	118	42	2.2	11.83		**B5/B14**
	112	44	2.0	12.48		**B5/B14**
	94.4	52	1.7	14.83		**B5/B14**
	79.4	62	1.4	17.63		**B5/B14**
	75.3	66	1.7	18.60		**B5/B14**
	62.7	79	1.4	22.33		**B5/B14**
	58.6	84	1.3	23.91		**B5/B14**
	48.5	102	1.2	28.89		**B5/B14**
	45.4	109	1.1	30.84		**B5/B14**
	41.7	118	1.1	33.57		**B5/B14**
	39.3	126	1.0	35.63		**B5/B14**
	213	23	6.5	6.58	**CMB633**	**B5/B14**
	175	28	5.3	7.99		**B5/B14**
	143	35	4.3	9.81		**B5/B14**
	134	37	4.1	10.44		**B5/B14**
	112	44	3.4	12.53		**B5/B14**
	105	47	3.2	13.31		**B5/B14**
	88.6	56	3.0	15.81		**B5/B14**
	78.8	63	3.5	17.77		**B5/B14**
	64.9	76	2.9	21.56		**B5/B14**
	52.9	93	2.4	26.48		**B5/B14**
	49.7	99	2.2	28.17		**B5/B14**
	41.4	119	1.8	33.81		**B5/B14**
	39.0	127	1.7	35.92		**B5/B14**
	36.0	137	1.8	38.88		**B5/B14**
	29.7	166	1.5	47.16		**B5/B14**
	24.2	204	1.2	57.93		**B5/B14**
	22.7	217	1.2	61.63		**B5/B14**
	18.9	261	1.0	73.96		**B5/B14**
	17.8	277	0.9	78.58		**B5/B14**
	46.3	107	4.2	30.25	**CMB903**	**B5/B14**
	35.7	138	3.6	39.26		**B5/B14**
	29.6	167	3.0	47.25		**B5/B14**
	24.3	203	2.5	57.52		**B5/B14**
	21.2	233	2.1	66.17		**B5/B14**
	16.8	293	1.7	83.20		**B5/B14**
	13.0	381	1.3	108.09		**B5/B14**
	10.6	466	1.1	132.23		**B5/B14**
	9.5	522	1.0	147.92		**B5/B14**
	8.4	589	0.8	167.09		**B5/B14**
	29.7	166	5.4	47.12	**CMB1103**	**B5**
	24.5	202	4.5	57.14		**B5**
	21.3	231	3.9	65.59		**B5**
	17.0	290	3.1	82.21		**B5**
	14.4	343	2.6	97.25		**B5**
	10.8	459	2.0	130.07		**B5**
	7.5	661	1.4	187.50		**B5**
	6.4	767	1.2	217.5		**B5**

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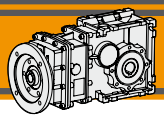
Technical data

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
0.75						
80B4 (1400 min^{-1})	**227**	30	2.4	6.18	**CMB502**	**B5/B14**
	187	36	1.9	7.49		**B5/B14**
	152	44	1.6	9.20		**B5/B14**
	118	57	1.6	11.83		**B5/B14**
	112	60	1.5	12.48		**B5/B14**
	94.4	71	1.3	14.83		**B5/B14**
	79.4	85	1.1	17.63		**B5/B14**
	75.3	89	1.2	18.60		**B5/B14**
	62.7	107	1.0	22.33		**B5/B14**
	58.6	115	1.0	23.91		**B5/B14**
	48.5	139	0.9	28.89		**B5/B14**
	213	32	4.7	6.58	**CMB633**	**B5/B14**
	175	38	3.9	7.99		**B5/B14**
	143	47	3.2	9.81		**B5/B14**
	134	50	3.0	10.44		**B5/B14**
	112	60	2.5	12.53		**B5/B14**
	105.2	64	2.3	13.31		**B5/B14**
	88.6	76	2.2	15.81		**B5/B14**
	78.8	85	2.6	17.77		**B5/B14**
	64.9	104	2.1	21.56		**B5/B14**
	52.9	127	1.7	26.48		**B5/B14**
	49.7	135	1.6	28.17		**B5/B14**
	41.4	163	1.4	33.81		**B5/B14**
	39.0	173	1.3	35.92		**B5/B14**
	36.0	187	1.3	38.88		**B5/B14**
	29.7	227	1.1	47.16		**B5/B14**
	24.2	279	0.9	57.93		**B5/B14**
	22.7	296	0.8	61.63		**B5/B14**
	64.8	104	4.3	21.60	**CMB903**	**B5/B14**
	53.2	126	3.6	26.30		**B5/B14**
	46.3	145	3.1	30.25		**B5/B14**
	35.7	189	2.6	39.26		**B5/B14**
	29.6	227	2.2	47.25		**B5/B14**
	24.3	277	1.8	57.52		**B5/B14**
	21.2	318	1.6	66.17		**B5/B14**
	16.8	400	1.2	83.20		**B5/B14**
	13.0	519.8	1.0	108.09		**B5**
	49.8	135	6.0	28.11	**CMB1103**	**B5**
	43.4	155	5.2	32.27		**B5**
	37.7	178	5.0	37.09		**B5**
	29.7	227	4.0	47.12		**B5**
	24.5	275	3.3	57.14		**B5**
	21.3	315	2.9	65.59		**B5**
	17.0	395	2.3	82.21		**B5**
	14.4	468	1.9	97.25		**B5**
	10.8	626	1.4	130.07		**B5**
	7.5	902	1.0	187.50		**B5**
	6.4	1046	0.9	217.58		**B5**
1.1						
90S4 (1400 min^{-1})	**213**	46	3.2	6.58	**CMB633**	**B5/B14**
	175	56	2.7	7.99		**B5/B14**
	143	69	2.2	9.81		**B5/B14**
	105	94	1.6	13.31		**B5/B14**
	88.6	112	1.5	15.81		**B5/B14**
	78.8	125	1.8	17.77		**B5/B14**
	64.9	152	1.4	21.56		**B5/B14**
	52.9	187	1.2	26.48		**B5/B14**
	39.0	253	0.9	35.92		**B5/B14**
	36.0	274	0.9	38.88		**B5/B14**

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
1.1						
90S4 (1400 min^{-1})	**211**	47	6.0	6.65	**CMB903**	**B5/B14**
	175	56	5.0	8.00		**B5/B14**
	144	69	4.1	9.74		**B5/B14**
	125	79	3.5	11.21		**B5/B14**
	99.3	99	3.0	14.09		**B5/B14**
	78.0	127	3.6	17.95		**B5/B14**
	64.8	152	3.0	21.60		**B5/B14**
	53.2	185	2.4	26.30		**B5/B14**
	46.3	213	2.1	30.25		**B5/B14**
	35.7	277	1.8	39.26		**B5/B14**
	29.6	333	1.5	47.25		**B5/B14**
	24.3	406	1.2	57.52		**B5/B14**
	21.2	467	1.1	66.17		**B5/B14**
	16.8	587	0.9	83.20		**B5/B14**
	60.4	164	5.0	23.18	**CMB1103**	**B5/B14**
	49.8	198	4.1	28.11		**B5/B14**
	43.4	228	3.6	32.27		**B5/B14**
	37.7	262	3.4	37.09		**B5/B14**
	29.7	332	2.7	47.12		**B5/B14**
	24.5	403	2.2	57.14		**B5/B14**
	21.3	463	1.9	65.59		**B5/B14**
	17.0	580	1.6	82.21		**B5/B14**
	14.4	686	1.3	97.25		**B5/B14**
	10.8	917	1.0	130.07		**B5/B14**
1.5						
90L4 (1400 min^{-1})	**213**	63	2.4	6.58	**CMB633**	**B5/B14**
	175	77	2.0	7.99		**B5/B14**
	143	94	1.6	9.81		**B5/B14**
	105	128	1.2	13.31		**B5/B14**
	88.6	152	1.1	15.81		**B5/B14**
	78.8	171	1.3	17.77		**B5/B14**
	64.9	207	1.1	21.56		**B5/B14**
	52.9	255	0.9	26.48		**B5/B14**
	211	64	4.4	6.65	**CMB903**	**B5/B14**
	175	77	3.6	8.00		**B5/B14**
	144	94	3.0	9.74		**B5/B14**
	125	108	2.6	11.21		**B5/B14**
	99.3	136	2.2	14.09		**B5/B14**
	78.0	173	2.6	17.95		**B5/B14**
	64.8	208	2.2	21.60		**B5/B14**
	53.2	253	1.8	26.30		**B5/B14**
	46.3	291	1.5	30.25		**B5/B14**
	35.7	378	1.3	39.26		**B5/B14**
	29.6	454	1.1	47.25		**B5/B14**
	24.3	553	0.9	57.52		**B5/B14**
	198	68	8.1	7.08	**CMB1103**	**B5/B14**
	156	86	6.4	8.99		**B5/B14**
	128	105	5.2	10.90		**B5/B14**
	112	120	4.6	12.52		**B5/B14**
	89.2	151	4.1	15.69		**B5/B14**
	76.7	176	4.6	18.25		**B5/B14**
	60.4	223	3.6	23.18		**B5/B14**
	49.8	270	3.0	28.11		**B5/B14**
	43.4	310	2.6	32.27		**B5/B14**
	37.7	357	2.5	37.09		**B5/B14**
	29.7	453	2.0	47.12		**B5/B14**
	24.5	550	1.6	57.14		**B5/B14**
	21.3	631	1.4	65.59		**B5/B14**
	17.0	791	1.1	82.21		**B5/B14**
	14.4	935	1.0	97.25		**B5/B14**



P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
1.85						
90LB4 (1400 min^{-1})	**213**	78	1.9	6.58	**CMB633**	**B5/B14**
	175	95	1.6	7.99		**B5/B14**
	143	116	1.3	9.81		**B5/B14**
	105	158	1.0	13.31		**B5/B14**
	88.6	188	0.9	15.81		**B5/B14**
	78.8	211	1.0	17.77		**B5/B14**
	211	79	3.5	6.65	**CMB903**	**B5/B14**
	175	95	2.9	8.00		**B5/B14**
	144	116	2.4	9.74		**B5/B14**
	125	133	2.1	11.21		**B5/B14**
	99.3	167	1.8	14.09		**B5/B14**
	78.0	213	2.1	17.95		**B5/B14**
	64.8	256	1.8	21.60		**B5/B14**
	53.2	312	1.4	26.30		**B5/B14**
	46.3	359	1.3	30.25		**B5/B14**
	35.7	466	1.1	39.26		**B5/B14**
	29.6	561	0.9	47.25		**B5/B14**
	198	84	6.6	7.08	**CMB1103**	**B5/B14**
	156	107	5.2	8.99		**B5/B14**
	128	129	4.3	10.90		**B5/B14**
	112	148	3.7	12.52		**B5/B14**
	89.2	186	3.3	15.69		**B5/B14**
	76.7	216	3.7	18.25		**B5/B14**
	60.4	275	2.9	23.18		**B5/B14**
	49.8	334	2.4	28.11		**B5/B14**
	43.4	383	2.1	32.27		**B5/B14**
	37.7	440	2.0	37.09		**B5/B14**
	29.7	559	1.6	47.12		**B5/B14**
	24.5	678	1.3	57.14		**B5/B14**
	21.3	778	1.2	65.59		**B5/B14**
	17.0	975	0.9	82.21		**B5/B14**
2.2						
100LA4 (1400 min^{-1})	**211**	94	3.0	6.65	**CMB903**	**B5/B14**
	175	113	2.5	8.00		**B5/B14**
	144	137	2.0	9.74		**B5/B14**
	125	158	1.8	11.21		**B5/B14**
	99.3	199	1.5	14.09		**B5/B14**
	78.0	253	1.8	17.95		**B5/B14**
	64.8	305	1.5	21.60		**B5/B14**
	53.2	371	1.2	26.30		**B5/B14**
	46.3	427	1.1	30.25		**B5/B14**
	35.7	554	0.9	39.26		**B5/B14**
	198	100	5.5	7.08	**CMB1103**	**B5/B14**
	156	127	4.3	8.99		**B5/B14**
	128	154	3.6	10.90		**B5/B14**
	112	177	3.1	12.52		**B5/B14**
	89.2	221	2.8	15.69		**B5/B14**
	76.7	257	3.1	18.25		**B5/B14**
	60.4	327	2.5	23.18		**B5/B14**
	49.8	397	2.0	28.11		**B5/B14**
	43.4	455	1.8	32.27		**B5/B14**
	37.7	523	1.7	37.09		**B5/B14**
	29.7	665	1.4	47.12		**B5/B14**
	24.5	806	1.1	57.14		**B5/B14**
	21.3	925	1.0	65.59		**B5/B14**

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
3						
100LB4 (1400 min^{-1})	**211**	128	2.2	6.65	**CMB903**	**B5/B14**
	175	154	1.8	8.00		**B5/B14**
	144	187	1.5	9.74		**B5/B14**
	125	216	1.3	11.21		**B5/B14**
	99.3	271	1.1	14.09		**B5/B14**
	78.0	345	1.3	17.95		**B5/B14**
	64.8	416	1.1	21.60		**B5/B14**
	53.2	506	0.9	26.30		**B5/B14**
	198	136	4.0	7.08	**CMB1103**	**B5/B14**
	156	173	3.2	8.99		**B5/B14**
	128	210	2.6	10.90		**B5/B14**
	112	241	2.3	12.52		**B5/B14**
	89.2	302	2.1	15.69		**B5/B14**
	76.7	351	2.3	18.25		**B5/B14**
	60.4	446	1.8	23.18		**B5/B14**
	49.8	541	1.5	28.11		**B5/B14**
	43.4	621	1.3	32.27		**B5/B14**
	37.7	713	1.3	37.09		**B5/B14**
	29.7	906	1.0	47.12		**B5/B14**
4						
112M4 (1400 min^{-1})	**211**	171	1.6	6.65	**CMB903**	**B5/B14**
	175	205	1.4	8.00		**B5/B14**
	144	250	1.1	9.74		**B5/B14**
	125	287	1.0	11.21		**B5/B14**
	99.3	361	0.8	14.09		**B5/B14**
	78.0	460	1.0	17.95		**B5/B14**
	198	182	3.0	7.08	**CMB1103**	**B5/B14**
	156	231	2.4	8.99		**B5/B14**
	128	280	2.0	10.90		**B5/B14**
	112	321	1.7	12.52		**B5/B14**
	89.2	402	1.5	15.69		**B5/B14**
	76.7	468	1.7	18.25		**B5/B14**
	60.4	595	1.4	23.18		**B5/B14**
	49.8	721	1.1	28.11		**B5/B14**
	43.4	828	1.0	32.27		**B5/B14**
	37.7	951	0.9	37.09		**B5/B14**
5.5						
132S4 (1400 min^{-1})	**198**	250	2.2	7.08	**CMB1103**	**B5**
	156	317	1.7	8.99		**B5**
	128	385	1.4	10.90		**B5**
	112	441	1.2	12.52		**B5**
	89.2	553	1.1	15.69		**B5**
	76.7	644	1.3	18.25		**B5**
	60.4	818	1.0	23.18		**B5**
7.5						
132MA4 (1400 min^{-1})	**198**	340	1.6	7.08	**CMB1103**	**B5**
	156	432	1.3	8.99		**B5**
	128	524	1.0	10.90		**B5**
	112	602	0.9	12.52		**B5**
	89.2	754	0.8	15.69		**B5**
	76.7	878	0.9	18.25		**B5**

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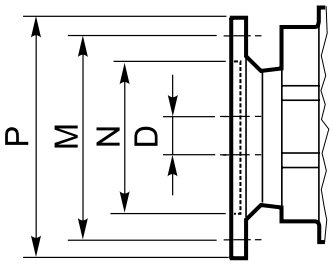
IEC Motor adapters

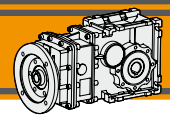


	IEC	N	M	P	D	i (rapporto / *ratio*)																
						6.18	7.49	9.2	11.83	12.48	14.83	17.63	18.6	22.33	23.91	28.89	30.84	33.57	35.63	42.75	55.31	59.06	64.29
CMB402	**71B5**	110	130	160	14																		
	71B14	70	85	105																			
	63B5	95	115	140	11																		
	63B14	60	75	90																			
	56B5	80	100	120	9																		
	56B14	50	65	80																			

	IEC	N	M	P	D	i (rapporto / *ratio*)																
						6.18	7.49	9.2	11.83	12.48	14.83	17.63	18.6	22.33	23.91	28.89	30.84	33.57	35.63	42.75	55.31	59.06	64.29
CMB502	**80B5**	130	165	200	19																		
	80B14	80	100	120																			
	71B5	110	130	160	14																		
	71B14	70	85	105																			
	63B5	95	115	140	11																		
	63B14	60	75	90																			
	56B5	80	100	120	9																		
	56B14	50	65	80																			

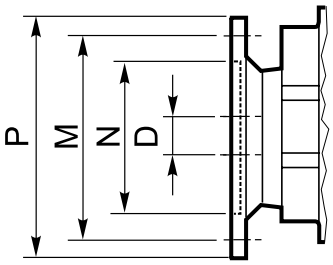
N.B.
Le aree evidenziate indicano l'applicabilità della corrispondente grandezza motore.
B/BS = Boccola di riduzione in acciaio

N.B.
Highlighted areas indicate motor inputs available on each size of unit.
***B/BS** = Metal shaft sleeve*



Motori applicabili

IEC Motor adapters



	IEC	N	M	P	D	i (rapporto / *ratio*)																									
						6.58	7.99	9.81	10.44	12.53	13.31	15.81	17.77	21.56	26.48	28.17	33.81	35.92	38.88	47.16	57.93	61.63	73.96	78.58	93.33	140.52	181.81	211.31
CMB633	**90 B5**	130	165	200	24																							
	90 B14	95	115	140																								
	80 B5	130	165	200	19																							
	80 B14	80	100	120																								
	71 B5	110	130	160	14																							
	71 B14	70	85	105																								
	63 B5	95	115	140	11																							

	IEC	N	M	P	D	i (rapporto / *ratio*)																									
						6.65	8.00	9.74	11.21	14.09	17.95	21.60	26.30	30.25	39.26	47.25	57.52	66.17	83.20	108.09	132.23	147.92	167.09	191.06	221.88	262.96						
CMB903	**100/112B5**	180	215	250	28																							
	100/112B14	110	130	160																								
	90 B5	130	165	200	24																							
	90 B14	95	115	140																								
	80 B5	130	165	200	19																							
	80 B14	80	100	120																								
	71 B5	110	130	160	14	**B**																						

	IEC	N	M	P	D	i (rapporto / *ratio*)																									
						7.08	8.99	10.90	12.52	15.69	18.25	23.18	28.11	32.27	37.09	47.12	57.14	65.59	82.21	97.25	130.07	187.50	217.58									
CMB1103	**132/B5**	230	265	300	38																							
	100/112B5	180	215	250	28																							
	100/112B14	110	130	160																								
	90 B5	130	165	200	24	**B**																						
	90 B14	95	115	140																								
	80 B5	130	165	200	19	**BS**																						

N.B.
Le aree evidenziate indicano l'applicabilità della corrispondente grandezza motore.
B/BS = Boccola di riduzione in acciaio

N.B.
Highlighted areas indicate motor inputs available on each size of unit.
***B/BS** = Metal shaft sleeve*

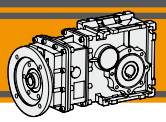
Dimensioni — *Dimensions*

CMB CMBIS	A	C	E	G	H	I	K	KE	a_2	L	M	N f7	N1	O	P	Q	R	S	U	V	CMB Peso / *Weight* [kg]	CMBIS Peso / *Weight* [kg]
402	70	100	121.5	154.5	50	24.5	60	4-M6x11	45°	73	75	60	71	6.5	87	55	71.5	6.5	151.5	35	3.4	3.5
502	80	120	144	165.5(1) 175.5(2)	60	23	70	4-M8x12	45°	87	85	70	85	8.5	98	64	84	7	162.5	40	4.7(1) 5(2)	4.8
633	100	144	174	241	72	0	85	7-M8x15	45°	106	95	80	104	8.5	110	80	102	8	233	50	9.5	9.2
903	140	206	238	287	103	0	100	7-M10x20	45°	134	130	110	130	13	160	102	135	11	279.5	70	18.4	18.1
1103	170	255	295	277.5	127.5	30	115	7-M10x19	45°	148	165	130	145	14	200	125	167.5	14	256.5	85	50	50.3

(1) IEC 56/63/71
(2) IEC 80

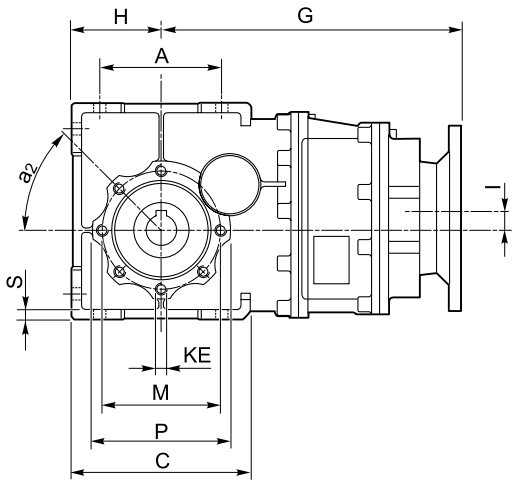
CMB CMBIS	Albero entrata *Input shaft*					Albero uscita cavo *Hollow output shaft*				
	D_1 j6	E_1	F_1	G_1	T_1	D_2 H8	F_2	G_2	b	t
402	14	30	5	M6	16	18 20	26	78	6	20.8 22.8
502	14	30	5	M6	16	25	30	92	8	28.3
633	16	40	5	M6	18	25	35	112	8	28.3
903	19	40	6	M6	21.5	35	45	140	10	38.3
1103	28	60	8	M10	31	42	50	155	12	45.3

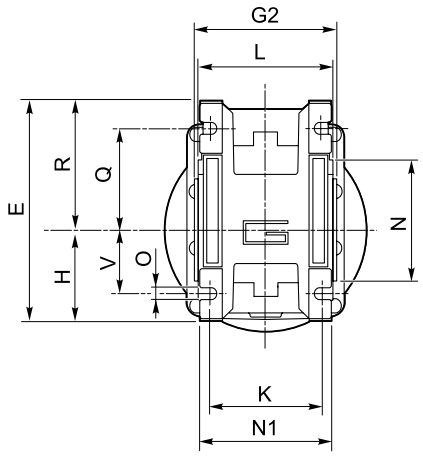
	Flange uscita / *Output flanges*																									
	F									**FL**									**FB**							
CMB CMBIS	a_1	KA	KB	KC	KM	KN H8	KO	KP	KQ	a_1	KA	KB	KC	KM	KN H8	KO	KP	KQ	a_1	KA	KB	KC	KM	KN H8	KO	KP	KQ
402	45°	67	7.5	4.5	80-95	60	9	110	95	45°	97	7.5	4.5	80-95	60	9	110	95	45°	80	8.5	5	115-125	95	9.5	140	112
502	45°	90	9	5	90-110	70	11	125	110	45°	120	9	5	90-110	70	11	125	110	45°	89	9	5	130-145	110	9.5	160	132
633	45°	82	10	6	150 - 160	115	11	180	142	45°	112	10	8	150 - 160	115	11	180	142	45°	98	11	5	165	130	11	200	160
903	45°	111	13	6	175 - 188	152	14	210	200	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1103	45°	131	15	6	230	170	14	280	260	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—



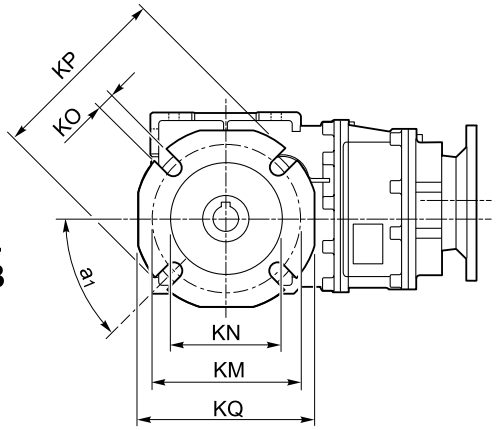
CMB.. - CMBIS..

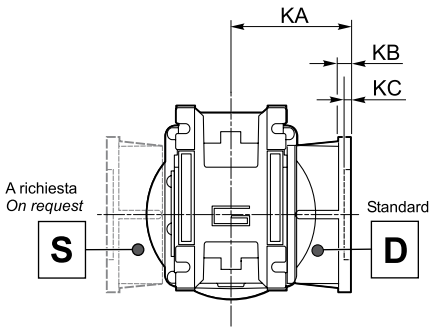
CMB..U





CMB..F
CMB..FL
CMB..FB





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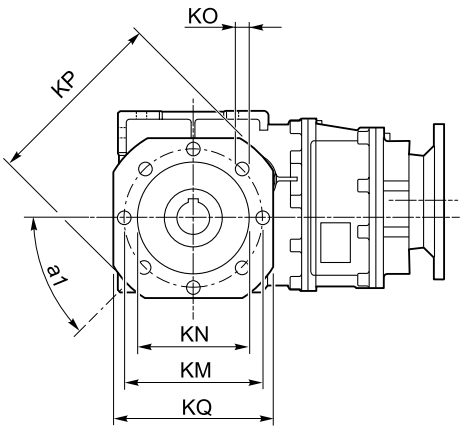

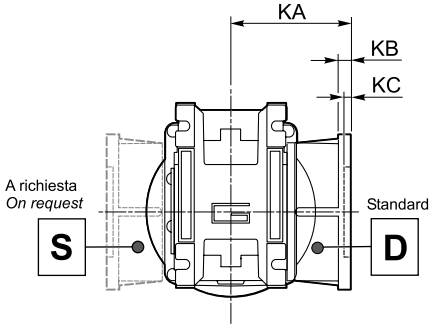

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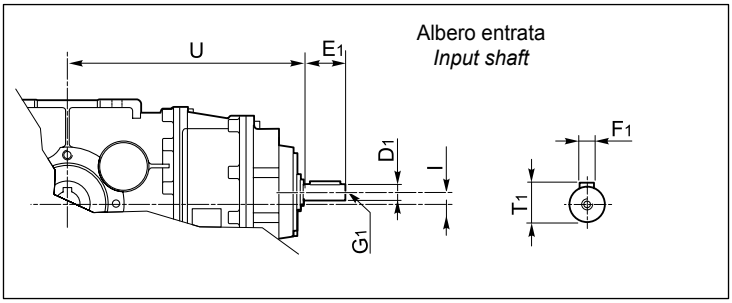
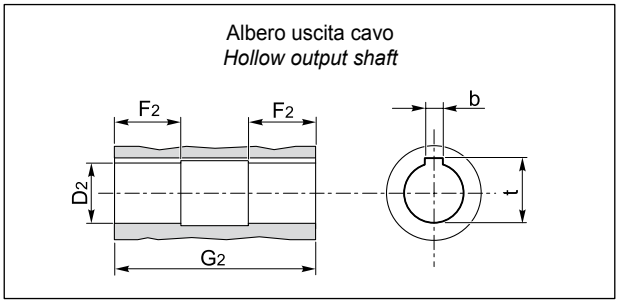
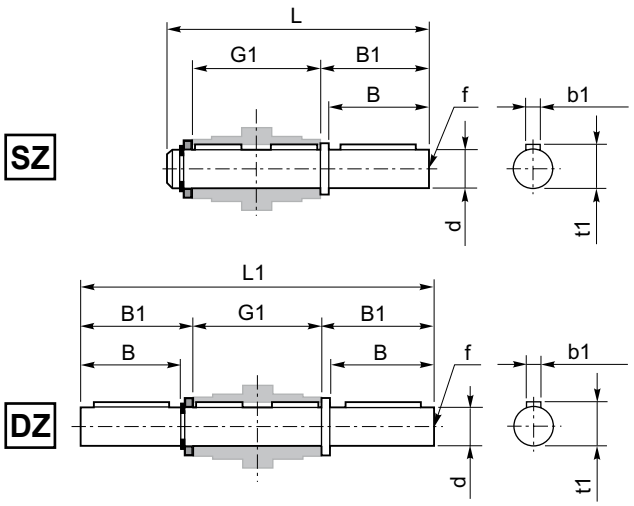
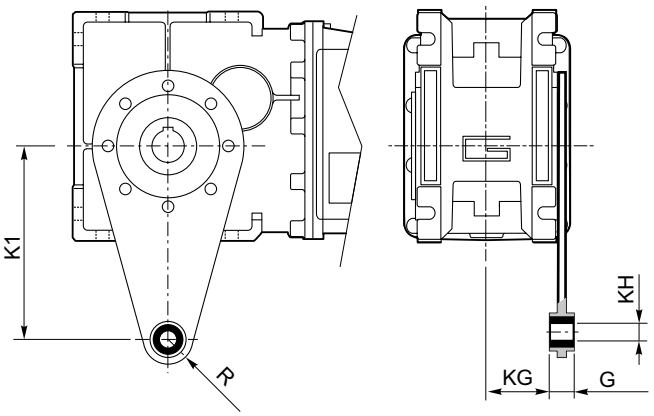




Accessori — *Accessories*





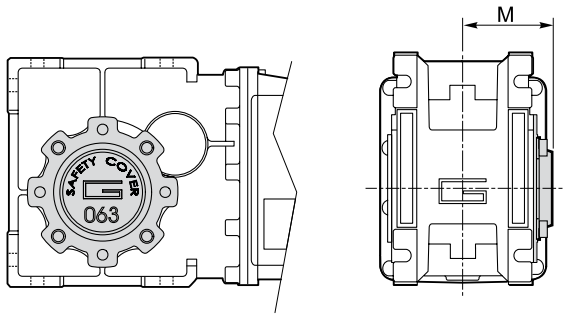
Albero lento / *Output shaft*

CMB CMBIS	d h7	B	B1	G1	L	L1	f	b1	t1
402	18	40	43	78	128	164	M6	6	20.5
502	25	50	53.5	92	153	199	M10	8	28
633	25	50	53.5	112	173	219	M10	8	28
903	35	80	84.5	140	234	309	M12	10	38
1103	42	80	84.5	155	249	324	M16	12	45

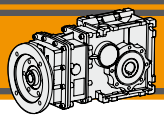
Braccio di reazione / *Torque arm*

CMB CMBIS	K1	G	KG	KH	R
402	100	14	31	10	18
502	100	14	38	10	18
633	150	14	47.5	10	18
903	200	25	56.5	20	30
1103	250	30	62	25	35

SC - *Safety cover*



CMB CMBIS	M
402	54.5
502	62.5
633	73
903	94
1103	102



Note/*Notes*

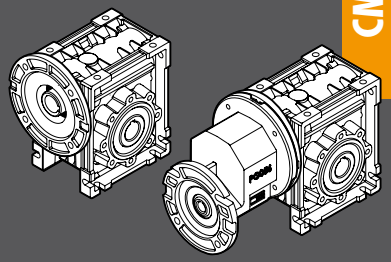
Note/*Notes*

TRANSTECNO™

THE MODULAR GEARMOTOR

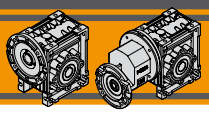
CM-CMP

CM – CMP



RIDUTTORI A VITE SENZA FINE
WORMGEARBOXES
RIDUTTORI A VITE SENZA FINE CON PRECOPPIA
PRE-STAGE WORMGEARBOXES

TRANSTECNO · GENUINE · PRODUCTS ·



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Caratteristiche tecniche — *Technical features*

L'elevata modularità contraddistingue i riduttori a vite senza fine della serie CM e CMP: i diversi kit entrata ed uscita li rendono estremamente versatili.
Le caratteristiche principali della serie CM e CMP sono:

- Carcassa in alluminio nelle grandezze 026, 030, 040, 050, 063, 075, 090 e 110. La grandezza 130 è costruita con carcassa in ghisa;
- Le grandezze 090, 110 e 130 sono fornite con cuscinetti a rulli conici sulla vite;
- Le precoppie sono costruite con carcassa in allumino;
- Lubrificazione permanente con olio sintetico.

The high degree of modularity is a design feature of CM and CMP wormgearboxes range thanks to a wide selection of input and output kits.
Main features of CM and CMP range are:

- *Die-cast aluminum housing on sizes 026, 030, 040, 050, 063, 075, 090 and 110. Cast iron housing on size 130;*
- *Double taper roller bearing on sizes 090, 110 and 130;*
- *Die-cast aluminum housing on pre-stage units;*
- *Permanent synthetic oil long-life lubrication.*

Designazione — *Classification*

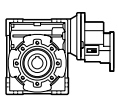
RIDUTTORI A VITE SENZA FINE / WORMGEARBOXES

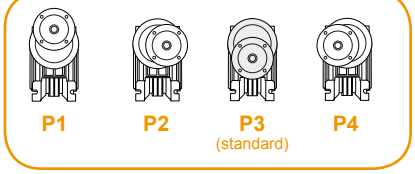
RIDUTTORE / *GEARBOX*

CM	050	U	10	71	B5	SZDX	BRSX	90	B3	VS
Tipo *Type*	Grandezza *Size*	Versione riduttore *Gearbox Version*	Rapporto *Ratio*	IEC	Forma costruttiva *Version*	Albero di uscita *Output shaft*	Braccio di reazione *Torque arm*	Angolo *Angle*	Pos. di montaggio *Mounting position*	Opzioni *Options*
CM **CMIS**	**026** **030** **040** **050** **063** **075** **090** **110** **130**	**U** **FD** **FS** **FLD** **FLS** **FBD** **FBS**	Vedere tabella *See tables*	**56..** **—** **132..**	**B5** **B14**	**SZDX** **SZSX** **DZ**	**BRDX** **BRSX**	**0°** **90°** **180°** **270°**	**B3** **B8** **B6** **B7** **V5** **V6**	**VS**

RIDUTTORI A VITE SENZA FINE CON PRECOPPIA / PRE-STAGE WORMGEARBOXES

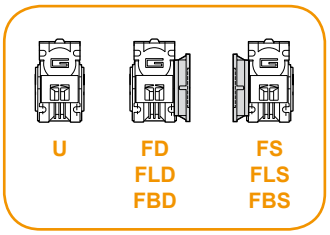
RIDUTTORE / *GEARBOX*

CMP	063/050	U	90	63	B14	SZDX	BRSX	90	P4	B3	VS
Tipo *Type*	Grandezza *Size*	Versione Riduttore *Gearbox Version*	Rapporto *Ratio*	IEC	Forma costruttiva Version	Albero di uscita *Output shaft*	Braccio di reazione *Torque arm*	Angolo *Angle*	Pos. di montaggio precoppia *Pre stage mounting position*	Pos. di montaggio *Mounting position*	Opzioni *Options*
CMP 	**056/030** **056/040** **063/040** **063/050** **063/063** **071/050** **071/063** **071/075** **071/090** **080/063** **080/075** **080/090** **080/110** **080/130** **090/075** **090/090** **090/110** **090/130**	**U** **FD** **FS** **FLD** **FLS** **FBD** **FBS**	Vedere tabella *See tables*	**56..** **—** **80..**	**B5** **B14**	**SZDX** **SZSX** **DZ**	**BRDX** **BRSX**	**0°** **90°** **180°** **270°**	**P1** **P2** **P3** (standard) **P4**	**B3** **B8** **B6** **B7** **V5** **V6**	**VS**

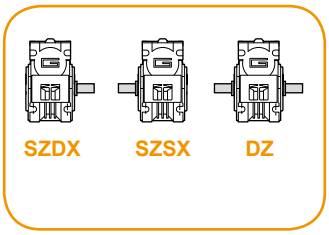


Designazione — *Classification*

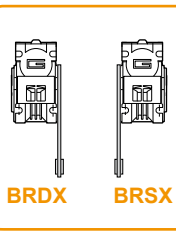
Versione Riduttore
Gearbox Version



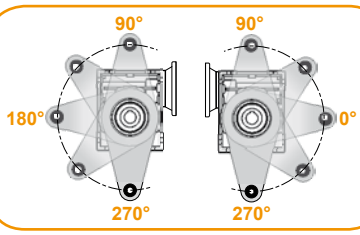
Albero di uscita
Output shaft



Braccio di reazione
Torque arm



Angolo
Angle

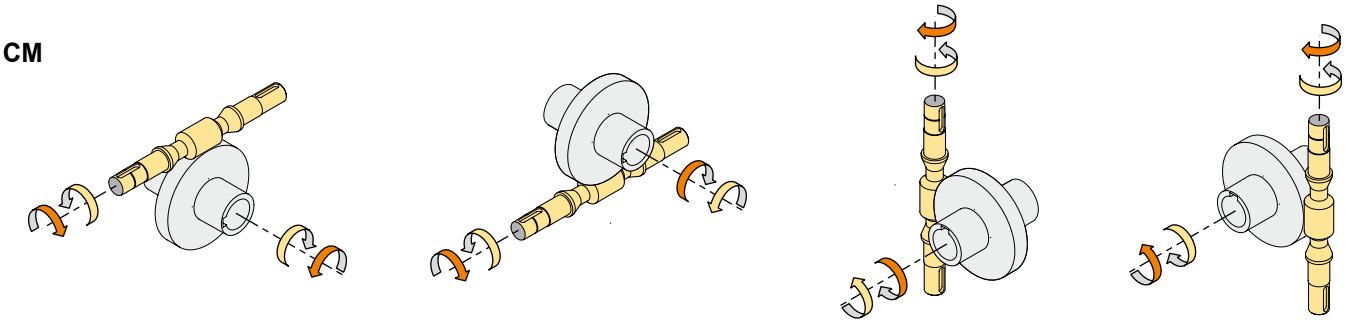


MOTORE CM / *CM MOTOR*

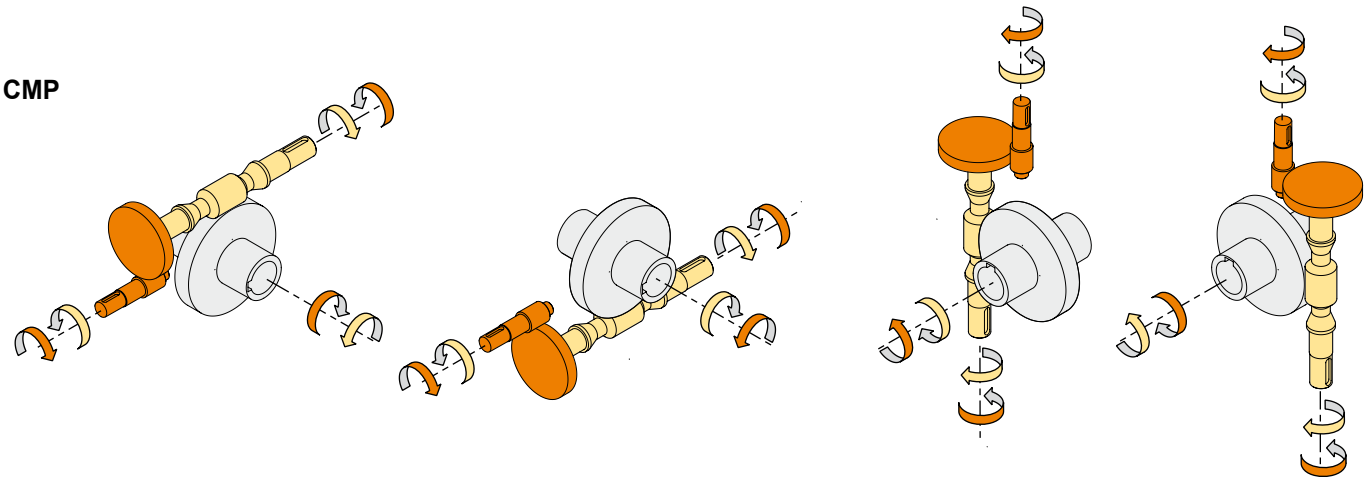
0.75kW	4p	3ph	50Hz	T1
Potenza *Power*	Poli *Poles*	Fasi *Phases*	Frequenza *Frequency*	Pos. morsettiera *Terminal box pos.*
Vedi tabelle *See tables*	**2p** **4p** **6p** **8p**	**1ph** **3ph**	**50Hz** **60Hz**	**T1** (Std) **T4** **T2** **T3**

Sensi di rotazione — *Direction of rotation*

CM



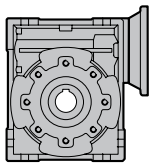
CMP



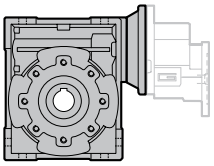
Simbologia — *Symbols*

n_1	[min^{-1}]	Velocità in ingresso / *Input speed*	sf		Fattore di servizio / *Service factor*
n_2	[min^{-1}]	Velocità in uscita / *Output speed*	Rd	%	Rendimento dinamico / *Dynamic efficiency*
i		Rapporto di riduzione / *Ratio*	Rs	%	Rendimento statico / *Static efficiency*
P_1	[kW]	Potenza in entrata / *Nominal input power*	R_2	[N]	Carico radiale ammissibile in uscita / *Permitted output radial load*
M_2	[Nm]	Coppia in uscita in funzione di P_1 / *Output torque referred to* P_1	A_2	N]	Carico assiale ammissibile in uscita / *Permitted output axial load*
Pn_1	[kW]	Potenza nominale in entrata / *Nominal input power*	Z		Numero di principi della vite / *Worm starts*
Mn_2	[Nm]	Coppia nominale in uscita in funzione di Pn_1 / *Nominal output torque referred to* Pn_1	β		Angolo d'elica / *Helix angle*

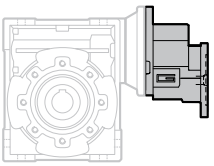
Lubrificazione — *Lubrication*



CM	Quantità di olio (litri) / *Oil quantity (litres)*						
	B3	B8	B6	B7	V5	V6	
026	0.02						Lubrificati a vita / *Life lubrication*
030	0.03						
040	0.07						
050	0.1						
063	0.25						
075	0.4						
090	0.7						
110	1.1						
130	4.5	3.3	3.5	3.5	4.5	3.3	



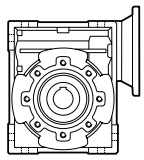
CMP	Quantità di olio (litri) / *Oil quantity (litres)*						
	B3	B8	B6	B7	V5	V6	
056/030	0.03						Lubrificati a vita / *Life lubrication*
056/040 - 063/040	0.07						
063/050 - 071/050	0.1						
063/063 - 071/063 - 080/063	0.25						
071/075 - 080/075 - 090/075	0.4						
071/090 - 080/090 - 090/090	0.7						
080/110 - 090/110	1.1						
080/130 - 090/130	4.5	3.3	3.5	3.5	4.5	3.3	



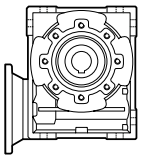
CMP				
056/030 056/040	063/040 063/050 063/063	071/050 071/063 071/075 071/090	080/063 080/075 080/090 080/110 080/130	090/075 090/090 090/110 090/130
Lubrificazione a vita *Life lubricated*				

Posizioni di montaggio / *Mounting positions*

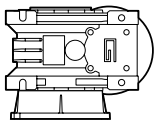
CM_CMP 026-030-040-050-063-075-090-110



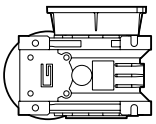
B3 (standard)



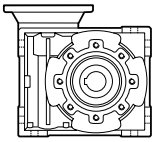
B8



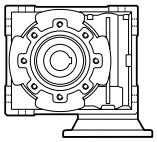
B6



B7

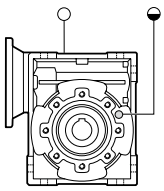


V5

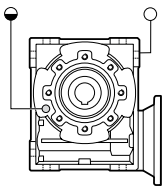


V6

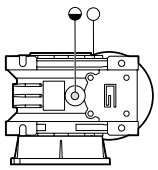
CM_CMP 130



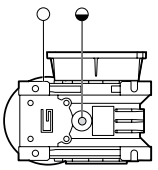
B3 (standard)



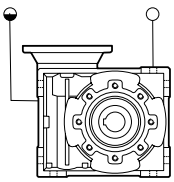
B8



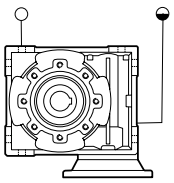
B6



B7



V5

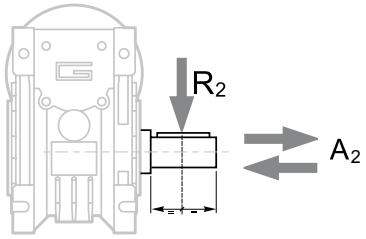


V6

○ Sfiato e tappo di riempimento / *Breather and filling plug*
◒ Livello olio / *Oil level plug*

Carichi radiali

Radial loads

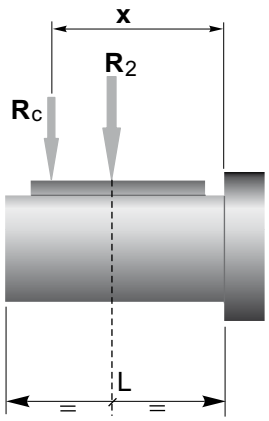


$A_2 = R_2 \times 0.2$

n_2 [min^{-1}]	R_2 [N]								
	CM026	CM030	CM040	CM050	CM063	CM075	CM090	CM110	CM130
187	400	674	1264	1770	2445	2824	3161	5058	5732
140	490	743	1392	1949	2692	3110	3481	5570	6313
93	580	851	1596	2234	3085	3564	3990	6384	7235
70	610	936	1754	2456	3392	3918	4386	7018	7953
56	610	1008	1890	2646	3654	4221	4725	7560	8567
47	610	1069	2004	2805	3874	4475	5009	8014	9083
35	610	1179	2210	3095	4273	4937	5526	8842	10021
28	610	1270	2381	3334	4603	5318	5953	9524	10794
23	610	1356	2542	3559	4915	5678	6356	10170	11526
18	610	1471	2759	3862	5334	6162	6897	11036	12507
14	610	1600	3000	4200	5800	6700	7500	12000	13600
		CMP... /030	CMP... /040	CMP... /050	CMP... /063	CMP... /075	CMP... /090	CMP... /110	CMP... /130

Quando il carico radiale risultante non è applicato sulla mezzeria dell'albero occorre calcolare quello effettivo con la seguente formula:

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:



	CM	CM / CMP							
	026	030	040	050	063	075	090	110	130
a	56	65	84	101	120	131	182	176	188
b	43	50	64	76	95	101	122	136	148
R_{2MAX}	610	1600	3000	4200	5800	6700	7500	12000	13600

$$R_c = \frac{R_2 \cdot a}{(b+x)} \leq R_{2MAX}$$

$$R \leq R_c$$

a, b = valori riportati nella tabella
a, b = values given in the table

Dati di dentatura — *Toothing data*

	Dati della coppia vite-corona *Worm wheel data*	Rapporto / *Ratio*											
		5	7.5	10	15	20	25	30	40	50	60	80	100
CM026	Z	6	4	3	2	2		1	1	1	1		
	β	34° 35'	24° 41'	19° 1'	12° 57 '	10° 30'		6° 33'	5° 17'	4° 26'	3°49'		
CM030	Z	6	4	3	2	2	2	1	1	1	1	1	1
	β	27° 4'	24° 28'	18° 50'	12° 49'	10° 23'	8° 43'	6° 29'	5° 14'	4° 23'	3° 46'	2° 57'	2° 25'
CM040	Z	6	4	3	2	2	2	1	1	1	1	1	1
	β	34° 19'	24° 28'	18° 50'	12° 49'	10° 23'	8° 43'	6° 29'	5° 14'	4° 23'	3°46'	2° 57'	2° 25'
CM050	Z	6	4	3	2	2	2	1	1	1	1	1	1
	β	33° 37'	23° 54'	18° 23'	12° 29'	10° 6'	8° 28'	6° 19'	5° 5'	4° 15'	3° 39'	2°51'	2° 20'
CM063	Z	6	4	3	2	2	2	1	1	1	1	1	1
	β	34° 23'	24° 31'	18° 53'	12° 50'	10° 24'	8° 44'	6° 30'	5° 14'	4° 23'	3° 47'	2° 57'	2° 25'
CM075	Z		4	3	2	2	2	1	1	1	1	1	1
	β		26° 17'	20° 20'	13° 52'	11° 18'	9° 32'	7° 2'	5° 42'	4° 48'	4° 8'	3° 14'	2° 40'
CM090	Z		4	3	2	2	2	1	1	1	1	1	1
	β		29° 11'	22° 43'	15° 36'	12° 50'	10° 53'	7° 56'	6° 30'	5° 29'	4° 45'	3° 45'	3° 6'
CM110	Z		4	3	2	2	2	1	1	1	1	1	1
	β		28° 14'	21° 56'	15° 1'	14° 41'	12° 34'	7° 38'	7° 28'	6° 21'	5° 32'	4° 24'	3° 39'
CM130	Z		4	3	2	2	2	1	1	1	1	1	1
	β		28°43'	22°20'	15°19'	13°47'	11°54'	7°48'	7°00'	6°01'	5°16'	4°08'	3°27'

Rendimento — *Efficiency*

	n_1 [min^{-1}]	Rendimento *Efficiency*	Rapporto / *Ratio*											
			5	7.5	10	15	20	25	30	40	50	60	80	100
CM026	2800	Rd	89	87	85	83	80		73	68	64	60		
	1400		87	84	83	78	74		66	61	57	53		
	900		84	83	80	75	71		61	57	52	48		
		Rs	72	71	68	61	56	46	41	36	34			
CM030	2800	Rd	89	88	86	84	81	78	74	70	65	62	57	52
	1400		86	85	84	79	75	72	67	62	58	55	48	43
	900		84	83	81	75	71	68	62	58	53	49	43	39
		Rs	72	67	63	55	50	43	39	35	31	27	23	21
CM040	2800	Rd	90	89	87	84	83	80	77	73	69	66	60	56
	1400		88	86	84	81	78	74	70	65	60	58	52	46
	900		86	84	82	77	74	70	66	60	57	53	46	41
		Rs	74	71	67	60	55	51	45	40	36	32	28	24
CM050	2800	Rd	91	90	88	86	84	82	78	74	71	68	62	58
	1400		89	87	85	82	79	76	72	67	63	60	54	49
	900		87	85	84	79	75	72	68	62	59	55	48	43
		Rs	73	70	66	59	55	51	44	39	35	32	27	23
CM063	2800	Rd	91	90	88	86	84	83	79	76	73	70	65	60
	1400		90	88	86	84	81	78	75	70	66	63	57	52
	900		89	86	84	81	78	75	70	65	61	58	52	47
		Rs	73	71	67	60	55	51	45	40	36	33	28	24
CM075	2800	Rd		90	89	87	85	84	81	78	75	72	68	63
	1400			89	87	84	83	80	77	73	69	66	60	56
	900			87	85	83	80	77	73	68	64	61	55	50
		Rs		71	68	61	57	53	46	42	38	35	29	26
CM090	2800	Rd		91	90	88	86	85	83	80	78	75	71	67
	1400			90	88	86	84	83	79	76	72	69	64	60
	900			88	87	84	82	80	76	72	68	65	60	55
		Rs		73	70	64	60	56	49	45	41	38	32	28
CM110	2800	Rd		90	89	88	87	86	82	81	79	77	73	70
	1400			89	88	86	85	84	80	79	76	73	68	64
	900			88	87	84	83	82	78	75	71	68	63	59
		Rs		72	69	63	62	59	48	46	44	41	36	32
CM130	2800	Rd		90	89	88	87	86	82	80	79	77	72	70
	1400			89	88	86	84	83	79	76	75	73	69	64
	900			88	87	84	82	81	77	74	73	70	64	59
		Rs		72	69	62	61	59	49	46	43	39	34	30

Rendimento teorico del riduttore dopo il rodaggio
Theoretical efficiency of the gearbox after the first running period

Dati tecnici — n_1 1400 min^{-1} — ***Technical data***

CMIS026

n_2 [min^{-1}]	Mn_2 [Nm]	Pn_1 [kW]	i
280	13	0.44	5
187	14	0.33	7,5
140	14	0.25	10
93	14	0.18	15
70	14	0.14	20
47	15	0.11	30
35	14	0.08	40
28	13	0.07	50
23	12	0.06	60

CMIS030

n_2 [min^{-1}]	Mn_2 [Nm]	Pn_1 [kW]	i
280	18	0.61	5
187	20	0.46	7.5
140	21	0.37	10
93	21	0.26	15
70	19	0.19	20
56	20	0.16	25
47	22	0.16	30
35	20	0.12	40
28	19	0.10	50
23	17	0.08	60
18	15	0.06	80
14	14	0.05	100

CMIS040

n_2 [min^{-1}]	Mn_2 [Nm]	Pn_1 [kW]	i
280	41	1.37	5
187	44	1.00	7.5
140	45	0.79	10
93	45	0.54	15
70	40	0.38	20
56	38	0.30	25
47	48	0.34	30
35	42	0.24	40
28	39	0.19	50
23	36	0.15	60
18	33	0.12	80
14	31	0.10	100

CMIS050

n_2 [min^{-1}]	Mn_2 [Nm]	Pn_1 [kW]	i
280	75	2.5	5
187	79	1.8	7.5
140	82	1.4	10
93	82	0.98	15
70	72	0.67	20
56	70	0.54	25
47	88	0.60	30
35	76	0.42	40
28	72	0.34	50
23	69	0.28	60
18	60	0.20	80
14	56	0.17	100

CMIS063

n_2 [min^{-1}]	Mn_2 [Nm]	Pn_1 [kW]	i
280	134	4.4	5
187	144	3.2	7.5
140	148	2.5	10
93	154	1.8	15
70	136	1.23	20
56	135	1.0	25
47	166	1.1	30
35	142	0.74	40
28	136	0.60	50
23	126	0.49	60
18	118	0.38	80
14	116	0.33	100

CMIS075

n_2 [min^{-1}]	Mn_2 [Nm]	Pn_1 [kW]	i
187	219	4.8	7.5
140	238	4.0	10
93	249	2.9	15
70	224	2.0	20
56	200	1.5	25
47	269	1.7	30
35	235	1.2	40
28	212	0.90	50
23	210	0.78	60
18	190	0.58	80
14	175	0.46	100

CMIS090

n_2 [min^{-1}]	Mn_2 [Nm]	Pn_1 [kW]	i
187	317	6.9	7.5
140	354	5.9	10
93	404	4.6	15
70	384	3.4	20
56	342	2.4	25
47	457	2.8	30
35	404	1.9	40
28	357	1.5	50
23	328	1.2	60
18	302	0.86	80
14	278	0.68	100

CMIS110

n_2 [min^{-1}]	Mn_2 [Nm]	Pn_1 [kW]	i
187	560	12.3	7.5
140	617	10.3	10
93	678	7.7	15
70	661	5.7	20
56	615	4.3	25
47	755	4.6	30
35	716	3.3	40
28	648	2.5	50
23	578	1.9	60
18	523	1.4	80
14	486	1.1	100

CMIS130

n_2 [min^{-1}]	Mn_2 [Nm]	Pn_1 [kW]	i
187	750	16.5	7.5
140	820	13.7	10
93	910	10.3	15
70	910	7.9	20
56	920	6.5	25
47	1050	6.5	30
35	1050	5.1	40
28	970	3.8	50
23	890	3.0	60
18	830	2.2	80
14	735	1.7	100

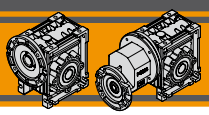
Nota:
Pn_1 è la potenza meccanica.
La potenza applicabile è ridotta del fattore termico.
Per maggiori dettagli consultare il nostro Servizio Tecnico.

Note:
Pn_1 is an input mechanical power which must be reduced by the heating factor in order to get the relevant one. For more details please contact our Technical Service.

Dati tecnici — *Technical data*

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i			IEC
0.06							
56A4 (1400 min^{-1})	**280**	2	*7.3*	5	**CM026**		B14
	187	3	*5.4*	7.5	**CM026**		B14
	140	3	*4.1*	10	**CM026**		B14
	93	5	*2.9*	15	**CM026**		B14
	70	6	*2.3*	20	**CM026**		B14
	47	8	*1.9*	30	**CM026**		B14
	35	10	*1.4*	40	**CM026**		B14
	28	12	*1.1*	50	**CM026**		B14
	23	13	*0.9*	60	**CM026**		B14
	280	2	*10.2*	5	**CM030**		B5/B14
	187	3	*7.7*	7.5	**CM030**		B5/B14
	140	3	*6.1*	10	**CM030**		B5/B14
	93	5	*4.3*	15	**CM030**		B5/B14
	70	6	*3.1*	20	**CM030**		B5/B14
	56	7	*2.7*	25	**CM030**		B5/B14
	47	8	*2.7*	30	**CM030**		B5/B14
	35	10	*2.0*	40	**CM030**		B5/B14
	28	12	*1.6*	50	**CM030**		B5/B14
	23	14	*1.3*	60	**CM030**		B5/B14
	23	16	*1.6*	60		**CMP056/030**	B14
	19	19	*1.4*	75		**CMP056/030**	B14
	18	16	*1.0*	80	**CM030**		B5/B14
	16	21	*1.5*	90		**CMP056/030**	B14
	14	18	*0.8*	100	**CM030**		B5/B14
	12	26	*1.1*	120		**CMP056/030**	B14
	9.3	29	*0.9*	150		**CMP056/030**	B14
	28	12	*3.2*	50	**CM040**		B5/B14
	23	14	*2.5*	60	**CM040**		B5/B14
	23	17	*3.4*	60		**CMP056/040**	B14
	19	20	*2.6*	75		**CMP056/040**	B14
	18	17	*1.9*	80	**CM040**		B5/B14
	16	23	*3.1*	90		**CMP056/040**	B14
	14	19	*1.6*	100	**CM040**		B5/B14
	12	28	*2.2*	120		**CMP056/040**	B14
	9.3	32	*1.8*	150		**CMP056/040**	B14
	7.8	35	*1.5*	180		**CMP056/040**	B14
	5.8	41	*1.1*	240		**CMP056/040**	B14
	4.7	46	*0.9*	300		**CMP056/040**	B14
0.09							
56A2 (2800 min^{-1})	**560**	1	*7.3*	5	**CM026**		B14
	373	2	*5.5*	7.5	**CM026**		B14
	280	3	*4.2*	10	**CM026**		B14
	187	4	*2.9*	15	**CM026**		B14
	140	5	*2.2*	20	**CM026**		B14
	93	7	*1.8*	30	**CM026**		B14
	70	8	*1.3*	40	**CM026**		B14
	56	10	*1.0*	50	**CM026**		B14
	47	11	*0.8*	60	**CM026**		B14
	140	5	*2.8*	20	**CM030**		B5/B14
	112	6	*2.5*	25	**CM030**		B5/B14
	93	7	*2.6*	30	**CM030**		B5/B14
	70	9	*1.9*	40	**CM030**		B5/B14
	56	10	*1.5*	50	**CM030**		B5/B14
	47	11	*1.2*	60	**CM030**		B5/B14
	47	13	*1.7*	60		**CMP056/030**	B14
	37	15	*1.4*	75		**CMP056/030**	B14
	35	14	*0.9*	80	**CM030**		B5/B14

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i			IEC
0.09							
56A2 (2800 min^{-1})	**31**	17	*1.6*	90		**CMP056/030**	B14
	28	16	*0.7*	100	**CM030**		B5/B14
	23	21	*1.1*	120		**CMP056/030**	B14
	19	24	*0.9*	150		**CMP056/030**	B14
	47	12	*2.4*	60	**CM040**		B5/B14
	47	13	*3.4*	60		**CMP056/040**	B14
	37	16	*2.8*	75		**CMP056/040**	B14
	31	18	*3.1*	90		**CMP056/040**	B14
	23	22	*2.2*	120		**CMP056/040**	B14
	19	26	*1.8*	150		**CMP056/040**	B14
	16	29	*1.5*	180		**CMP056/040**	B14
	12	33	*1.2*	240		**CMP056/040**	B14
	9.3	37	*1.0*	300		**CMP056/040**	B14
56B4 (1400 min^{-1})	**280**	3	*4.9*	5	**CM026**		B14
	187	4	*3.6*	7.5	**CM026**		B14
	140	5	*2.7*	10	**CM026**		B14
	93	7	*1.9*	15	**CM026**		B14
	70	9	*1.5*	20	**CM026**		B14
	47	12	*1.2*	30	**CM026**		B14
	35	15	*0.9*	40	**CM026**		B14
	28	17	*0.7*	50	**CM026**		B14
	280	3	*6.8*	5	**CM030**		B5/B14
	187	4	*5.1*	7.5	**CM030**		B5/B14
	140	5	*4.1*	10	**CM030**		B5/B14
	93	7	*2.9*	15	**CM030**		B5/B14
	70	9	*2.1*	20	**CM030**		B5/B14
	56	11	*1.8*	25	**CM030**		B5/B14
	47	12	*1.8*	30	**CM030**		B5/B14
	35	15	*1.3*	40	**CM030**		B5/B14
	28	18	*1.1*	50	**CM030**		B5/B14
	23	20	*0.8*	60	**CM030**		B5/B14
	23	24	*1.1*	60		**CMP056/030**	B14
	19	29	*0.9*	75		**CMP056/030**	B14
	18	24	*0.6*	80	**CM030**		B5/B14
	16	32	*1.0*	90		**CMP056/030**	B14
	12	38	*0.8*	120		**CMP056/030**	B14
	35	16	*2.6*	40	**CM040**		B5/B14
	28	18	*2.1*	50	**CM040**		B5/B14
	23	21	*1.7*	60	**CM040**		B5/B14
	23	25	*2.3*	60		**CMP056/040**	B14
	19	30	*1.7*	75		**CMP056/040**	B14
	18	26	*1.3*	80	**CM040**		B5/B14
	16	34	*2.1*	90		**CMP056/040**	B14
	14	28	*1.1*	100	**CM040**		B5/B14
	12	42	*1.5*	120		**CMP056/040**	B14
	9.3	48	*1.2*	150		**CMP056/040**	B14
	7.8	53	*1.0*	180		**CMP056/040**	B14
	5.8	62	*0.8*	240		**CMP056/040**	B14
63A6 (900 min^{-1})	**180**	4	*5.2*	5	**CM030**		B5/B14
	120	6	*4.0*	7.5	**CM030**		B5/B14
	90	8	*3.1*	10	**CM030**		B5/B14
	60	11	*2.3*	15	**CM030**		B5/B14
	45	14	*1.6*	20	**CM030**		B5/B14
	36	16	*1.4*	25	**CM030**		B5/B14
	30	18	*1.5*	30	**CM030**		B5/B14
	23	22	*1.0*	40	**CM030**		B5/B14
	18	25	*0.9*	50	**CM030**		B5/B14



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Technical data

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i			IEC
0.09							
63A6 (900 min^{-1})	**45**	14	*3.2*	20	**CM040**		B5/B14
	36	17	*2.6*	25	**CM040**		B5/B14
	30	19	*3.0*	30	**CM040**		B5/B14
	23	23	*2.1*	40	**CM040**		B5/B14
	18	27	*1.7*	50	**CM040**		B5/B14
	15	30	*1.4*	60	**CM040**		B5/B14
	15	38	*1.8*	60		**CMP063/040**	B14
	12	45	*1.3*	75		**CMP063/040**	B14
	11	35	*1.1*	80	**CM040**		B5/B14
	10	48	*1.7*	90		**CMP063/040**	B14
	9	39	*0.9*	100	**CM040**		B5/B14
	7.5	58	*1.1*	120		**CMP063/040**	B14
	15	32	*2.4*	60	**CM050**		B5/B14
	15	38	*3.2*	60		**CMP063/050**	B14
	12	45	*2.5*	75		**CMP063/050**	B14
	11	37	*1.9*	80	**CM050**		B5/B14
	10	49	*3.0*	90		**CMP063/050**	B14
	9	41	*1.6*	100	**CM050**		B5/B14
	7.5	60	*2.0*	120		**CMP063/050**	B14
	6.0	67	*1.7*	150		**CMP063/050**	B14
	5.0	74	*1.4*	180		**CMP063/050**	B14
	3.8	85	*1.0*	240		**CMP063/050**	B14
	6.0	70	*3.0*	150		**CMP063/063**	B14
	5.0	77	*2.5*	180		**CMP063/063**	B14
	3.8	90	*1.9*	240		**CMP063/063**	B14
	3.0	98	*1.5*	300		**CMP063/063**	B14
0.12							
56B2 (2800 min^{-1})	**560**	2	*5.5*	5	**CM026**		B14
	373	3	*4.1*	7.5	**CM026**		B14
	280	3	*3.2*	10	**CM026**		B14
	187	5	*2.2*	15	**CM026**		B14
	140	7	*1.7*	20	**CM026**		B14
	93	9	*1.3*	30	**CM026**		B14
	70	11	*1.0*	40	**CM026**		B14
	56	13	*0.8*	50	**CM026**		B14
	560	2	*7.1*	5	**CM030**		B5/B14
	373	3	*5.6*	7.5	**CM030**		B5/B14
	280	4	*4.5*	10	**CM030**		B5/B14
	187	5	*3.1*	15	**CM030**		B5/B14
	140	7	*2.1*	20	**CM030**		B5/B14
	112	8	*1.9*	25	**CM030**		B5/B14
	93	9	*2.0*	30	**CM030**		B5/B14
	70	11	*1.4*	40	**CM030**		B5/B14
	56	13	*1.1*	50	**CM030**		B5/B14
	47	15	*0.9*	60	**CM030**		B5/B14
	47	17	*1.3*	60		**CMP056/030**	B14
	37	20	*1.1*	75		**CMP056/030**	B14
	31	22	*1.2*	90		**CMP056/030**	B14
	23	28	*0.8*	120		**CMP056/030**	B14
	93	9	*4.0*	30	**CM040**		B5/B14
	70	12	*2.8*	40	**CM040**		B5/B14
	56	14	*2.3*	50	**CM040**		B5/B14
	47	16	*1.8*	60	**CM040**		B5/B14
	47	18	*2.5*	60		**CMP056/040**	B5/B14
	37	21	*2.1*	75		**CMP056/040**	B14

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i			IEC
0.12							
56B2 (2800 min^{-1})	**35**	20	*1.4*	80	**CM040**		B5/B14
	31	24	*2.4*	90		**CMP056/040**	B14
	28	23	*1.0*	100	**CM040**		B5/B14
	23	29	*1.7*	120		**CMP056/040**	B14
	19	34	*1.3*	150		**CMP056/040**	B14
	16	38	*1.1*	180		**CMP056/040**	B14
	12	44	*0.9*	240		**CMP056/040**	B14
63A4 (1400 min^{-1})	**280**	4	*5.1*	5	**CM030**		B5/B14
	187	5	*3.8*	7.5	**CM030**		B5/B14
	140	7	*3.1*	10	**CM030**		B5/B14
	93	10	*2.2*	15	**CM030**		B5/B14
	70	12	*1.5*	20	**CM030**		B5/B14
	56	15	*1.4*	25	**CM030**		B5/B14
	47	16	*1.3*	30	**CM030**		B5/B14
	35	20	*1.0*	40	**CM030**		B5/B14
	28	24	*0.8*	50	**CM030**		
	280	4	*11.4*	5	**CM040**		B5/B14
	187	5	*8.3*	7.5	**CM040**		B5/B14
	140	7	*6.5*	10	**CM040**		B5/B14
	93	10	*4.5*	15	**CM040**		B5/B14
	70	13	*3.1*	20	**CM040**		B5/B14
	56	15	*2.5*	25	**CM040**		B5/B14
	47	17	*2.8*	30	**CM040**		B5/B14
	35	21	*2.0*	40	**CM040**		B5/B14
	28	25	*1.6*	50	**CM040**		B5/B14
	23	28	*1.3*	60	**CM040**		B5/B14
	23	34	*1.7*	60		**CMP063/040**	B14
	19	40	*1.3*	75		**CMP063/040**	B14
	18	34	*1.0*	80	**CM040**		B5/B14
	16	45	*1.6*	90		**CMP063/040**	B14
	14	38	*0.8*	100	**CM040**		B5/B14
	12	56	*1.1*	120		**CMP063/040**	B14
	35	22	*3.5*	40	**CM050**		B5/B14
	28	26	*2.8*	50	**CM050**		B5/B14
	23	29	*2.3*	60	**CM050**		B5/B14
	23	34	*3.0*	60		**CMP063/050**	B14
	19	40	*2.3*	75		**CMP063/050**	B14
	18	35	*1.7*	80	**CM050**		B5/B14
	16	47	*2.7*	90		**CMP063/050**	B14
	14	40	*1.4*	100	**CM050**		B5/B14
	12	57	*1.9*	120		**CMP063/050**	B14
	9.3	66	*1.6*	150		**CMP063/050**	B14
	7.8	74	*1.3*	180		**CMP063/050**	B14
	5.8	85	*1.0*	240		**CMP063/050**	B14
	14.0	43	*2.7*	100	**CM063**		B5
	9.3	69	*2.8*	150		**CMP063/063**	B14
	7.8	77	*2.3*	180		**CMP063/063**	B14
	5.8	90	*1.7*	240		**CMP063/063**	B14
	4.7	101	*1.4*	300		**CMP063/063**	B14
63B6 (900 min^{-1})	**180**	5	*3.9*	5	**CM030**		B5/B14
	120	8	*3.0*	7.5	**CM030**		B5/B14
	90	10	*2.3*	10	**CM030**		B5/B14
	60	14	*1.7*	15	**CM030**		B5/B14
	45	18	*1.2*	20	**CM030**		B5/B14
	36	22	*1.0*	25	**CM030**		B5/B14
	30	24	*1.1*	30	**CM030**		B5/B14
	23	30	*0.8*	40	**CM030**		B5/B14

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Technical data

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i			IEC
0.12							
63B6 (900 min^{-1})	**60**	15	*3.7*	15	**CM040**		B5/B14
	45	19	*2.4*	20	**CM040**		B5/B14
	36	22	*2.0*	25	**CM040**		B5/B14
	30	25	*2.2*	30	**CM040**		B5/B14
	23	31	*1.6*	40	**CM040**		B5/B14
	18	36	*1.3*	50	**CM040**		B5/B14
	15	40	*1.1*	60	**CM040**		B5/B14
	15	50	*1.3*	60		**CMP063/040**	B14
	12	60	*1.0*	75		**CMP063/040**	B14
	11	47	*0.9*	80	**CM040**		B5/B14
	10	64	*1.3*	90		**CMP063/040**	B14
	7.5	78	*0.9*	120		**CMP063/040**	B14
	30	26	*3.8*	30	**CM050**		B5/B14
	23	32	*2.7*	40	**CM050**		B5/B14
	18	38	*2.2*	50	**CM050**		B5/B14
	15	42	*1.8*	60	**CM050**		B5/B14
	15	51	*2.4*	60		**CMP063/050**	B14
	12	60	*1.9*	75		**CMP063/050**	B14
	11	49	*1.4*	80	**CM050**		B5/B14
	10	65	*2.2*	90		**CMP063/050**	B14
	9	55	*1.2*	100	**CM050**		B5/B14
	7.5	79	*1.5*	120		**CMP063/050**	B14
	6.0	90	*1.3*	150		**CMP063/050**	B14
	5.0	99	*1.0*	180		**CMP063/050**	B14
	3.8	114	*0.8*	240		**CMP063/050**	B14
	11,3	53	*2.4*	80	**CM063**		B5
	9,0	60	*2.0*	100	**CM063**		B5
	7.5	81	*2.9*	120		**CMP063/063**	B14
	6.0	94	*2.2*	150		**CMP063/063**	B14
	5.0	103	*1.9*	180		**CMP063/063**	B14
	3.8	120	*1.4*	240		**CMP063/063**	B14
	3.0	131	*1.1*	300		**CMP063/063**	B14
0.18							
63A2 (2800 min^{-1})	**560**	3	*4.8*	5	**CM030**		B5/B14
	373	4	*3.7*	7.5	**CM030**		B5/B14
	280	5	*3.0*	10	**CM030**		B5/B14
	187	8	*2.1*	15	**CM030**		B5/B14
	140	10	*1.4*	20	**CM030**		B5/B14
	112	12	*1.3*	25	**CM030**		B5/B14
	93	14	*1.3*	30	**CM030**		B5/B14
	70	17	*0.9*	40	**CM030**		B5/B14
	56	20	*0.8*	50	**CM030**		B5/B14
	140	10	*3.0*	20	**CM040**		B5/B14
	112	12	*2.3*	25	**CM040**		B5/B14
	93	14	*2.7*	30	**CM040**		B5/B14
	70	18	*1.9*	40	**CM040**		B5/B14
	56	21	*1.5*	50	**CM040**		B5/B14
	47	24	*1.2*	60	**CM040**		B5/B14
	47	27	*1.7*	60		**CMP063/040**	B14
	37	32	*1.4*	75		**CMP063/040**	B14
	35	29	*0.9*	80	**CM040**		B5/B14
	31	36	*1.6*	90		**CMP063/040**	B14
	23	43	*1.1*	120		**CMP063/040**	B14
	56	22	*2.6*	50	**CM050**		B5/B14
	47	25	*2.1*	60	**CM050**		B5/B14
	47	27	*3.0*	60		**CMP063/050**	B14
	37	32	*2.3*	75		**CMP063/050**	B14

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i			IEC
0.18							
63A2 (2800 min^{-1})	**35**	30	*1.5*	80	**CM050**		B5/B14
	31	37	*2.7*	90		**CMP063/050**	B14
	28	36	*1.2*	100	**CM050**		B5/B14
	23	45	*1.9*	120		**CMP063/050**	B14
	19	53	*1.5*	150		**CMP063/050**	B14
	16	60	*1.3*	180		**CMP063/050**	B14
	12	69	*1.0*	240		**CMP063/050**	B14
	35	32	*2.7*	80	**CM063**		B5
	28	37	*2.2*	100	**CM063**		B5
	19	55	*2.7*	150		**CMP063/063**	B14
	16	63	*2.3*	180		**CMP063/063**	B14
	12	75	*1.7*	240		**CMP063/063**	B14
	9.3	85	*1.4*	300		**CMP063/063**	B14
63B4 (1400 min^{-1})	**280**	5	*3.4*	5	**CM030**		B5/B14
	187	8	*2.6*	7.5	**CM030**		B5/B14
	140	10	*2.0*	10	**CM030**		B5/B14
	93	15	*1.4*	15	**CM030**		B5/B14
	70	18	*1.0*	20	**CM030**		B5/B14
	56	22	*0.9*	25	**CM030**		B5/B14
	47	25	*0.9*	30	**CM030**		
	280	5	*7.6*	5	**CM040**		B5/B14
	187	8	*5.6*	7.5	**CM040**		B5/B14
	140	10	*4.4*	10	**CM040**		B5/B14
	93	15	*3.0*	15	**CM040**		B5/B14
	70	19	*2.1*	20	**CM040**		B5/B14
	56	23	*1.7*	25	**CM040**		B5/B14
	47	26	*1.9*	30	**CM040**		B5/B14
	35	32	*1.3*	40	**CM040**		B5/B14
	28	37	*1.1*	50	**CM040**		B5/B14
	23	43	*0.8*	60	**CM040**		B5/B14
	23	51	*1.1*	60		**CMP063/040**	B14
	19	60	*0.9*	75		**CMP063/040**	B14
	16	68	*1.0*	90		**CMP063/040**	B14
	35	33	*2.3*	40	**CM050**		B5/B14
	28	39	*1.9*	50	**CM050**		B5/B14
	23	44	*1.6*	60	**CM050**		B5/B14
	23	51	*2.0*	60		**CMP063/050**	B14
	19	60	*1.5*	75		**CMP063/050**	B14
	18	53	*1.1*	80	**CM050**		B5/B14
	16	70	*1.8*	90		**CMP063/050**	B14
	14	60	*0.9*	100	**CM050**		B5/B14
	12	85	*1.3*	120		**CMP063/050**	B14
	9.3	99	*1.0*	150		**CMP063/050**	B14
	7.8	110	*0.9*	180		**CMP063/050**	B14
	23	46	*2.7*	60	**CM063**		B5
	23	53	*3.6*	60		**CMP063/063**	B14
	19	63	*2.7*	75		**CMP063/063**	B14
	18	56	*2.1*	80	**CM063**		B5
	16	69	*3.4*	90		**CMP063/063**	B14
	14	64	*1.8*	100	**CM063**		B5
	12	87	*2.4*	120		**CMP063/063**	B14
	9.3	103	*1.9*	150		**CMP063/063**	B14
	7.8	115	*1.6*	180		**CMP063/063**	B14
	5.8	136	*1.1*	240		**CMP063/063**	B14
	4.7	152	*0.9*	300		**CMP063/063**	B14

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Technical data

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i			IEC
0.18							
71A6 (900 min^{-1})	**180**	8	*5.7*	5	**CM040**		B5/B14
	120	12	*4.2*	7.5	**CM040**		B5/B14
	90	16	*3.3*	10	**CM040**		B5/B14
	60	22	*2.4*	15	**CM040**		B5/B14
	45	28	*1.6*	20	**CM040**		B5/B14
	36	33	*1.3*	25	**CM040**		B5/B14
	30	38	*1.5*	30	**CM040**		B5/B14
	23	46	*1.0*	40	**CM040**		B5/B14
	36	34	*2.2*	25	**CM050**		B5/B14
	30	39	*2.5*	30	**CM050**		B5/B14
	23	47	*1.8*	40	**CM050**		B5/B14
	18	56	*1.4*	50	**CM050**		B5/B14
	15	63	*1.2*	60	**CM050**		B5/B14
	15	76	*1.6*	60		**CMP071/050**	B14
	12	90	*1.2*	75		**CMP071/050**	B14
	11	73	*0.9*	80	**CM050**		B5/B14
	10	98	*1.5*	90		**CMP071/050**	B14
	18	58	*2.6*	50	**CM063**		B5/B14
	15	66	*2.1*	60	**CM063**		B5/B14
	15	75	*3.1*	60		**CMP071/063**	B14
	12	88	*2.3*	75		**CMP071/063**	B14
	11	79	*1.6*	80	**CM063**		B5/B14
	10	101	*2.8*	90		**CMP071/063**	B14
	9	90	*1.4*	100	**CM063**		B5/B14
	7.5	121	*1.9*	120		**CMP071/063**	B14
	6.0	140	*1.5*	150		**CMP071/063**	B14
	5.0	155	*1.3*	180		**CMP071/063**	B14
	11	84	*2.5*	80	**CM075**		B5
	9	96	*2.0*	100	**CM075**		B5
	7.5	128	*3.0*	120		**CMP071/075**	B14
	6.0	149	*2.3*	150		**CMP071/075**	B14
	5.0	165	*1.9*	180		**CMP071/075**	B14
	3.8	193	*1.4*	240		**CMP071/075**	B14
	3.0	213	*1.1*	300		**CMP071/075**	B14
	5.0	179	*2.9*	180		**CMP071/090**	B14
	3.8	211	*2.1*	240		**CMP071/090**	B14
	3.0	236	*1.7*	300		**CMP071/090**	B14
0.22							
63C4 (1400 min^{-1})	**280**	6	*2.8*	5	**CM030**		B5/B14
	187	10	*2.1*	7.5	**CM030**		B5/B14
	140	13	*1.7*	10	**CM030**		B5/B14
	93	18	*1.2*	15	**CM030**		B5/B14
	70	23	*0.8*	20	**CM030**		B5/B14
	280	7	*6.2*	5	**CM040**		B5/B14
	187	10	*4.5*	7.5	**CM040**		B5/B14
	140	13	*3.6*	10	**CM040**		B5/B14
	93	18	*2.5*	15	**CM040**		B5/B14
	70	23	*1.7*	20	**CM040**		B5/B14
	56	28	*1.4*	25	**CM040**		B5/B14
	47	32	*1.5*	30	**CM040**		B5/B14
	35	39	*1.1*	40	**CM040**		B5/B14
	28	45	*0.9*	50	**CM040**		B5/B14
	23	62	*0.9*	60		**CMP063/040**	B14
	19	73	*0.7*	75		**CMP063/040**	B14
	16	83	*0.9*	90		**CMP063/040**	B14

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i			IEC
0.22							
63C4 (1400 min^{-1})	**56**	29	*2,5*	25	**CM050**		B5/B14
	47	32	*2,7*	30	**CM050**		B5/B14
	35	40	*1.9*	40	**CM050**		B5/B14
	28	47	*1.5*	50	**CM050**		B5/B14
	23	54	*1.3*	60	**CM050**		B5/B14
	23	63	*1.6*	60		**CMP063/050**	B14
	19	74	*1.2*	75		**CMP063/050**	B14
	18	65	*0.9*	80	**CM050**		B5/B14
	16	86	*1.5*	90		**CMP063/050**	B14
	14	74	*0.8*	100	**CM050**		B5/B14
	12	104	*1.1*	120		**CMP063/050**	B14
	9.3	121	*0.9*	150		**CMP063/050**	B14
	23	57	*2.2*	60	**CM063**		B5
	23	64	*2.9*	60		**CMP063/063**	B14
	19	77	*2.2*	75		**CMP063/063**	B14
	18	68	*1.7*	80	**CM063**		B5
	16	85	*2.8*	90		**CMP063/063**	B14
	14	78	*1.5*	100	**CM063**		B5
	12	106	*1.9*	120		**CMP063/063**	B14
	9.3	126	*1.5*	150		**CMP063/063**	B14
	7.8	140	*1.3*	180		**CMP063/063**	B14
	5.8	166	*0.9*	240		**CMP063/063**	B14
	4.7	185	*0.8*	300		**CMP063/063**	B14
0.25							
63B2 (2800 min^{-1})	**560**	4	*3.4*	5	**CM030**		B5/B14
	373	6	*2.7*	7.5	**CM030**		B5/B14
	280	7	*2.2*	10	**CM030**		B5/B14
	187	11	*1.5*	15	**CM030**		B5/B14
	140	14	*1.0*	20	**CM030**		B5/B14
	112	17	*0.9*	25	**CM030**		B5/B14
	93	19	*1.0*	30	**CM030**		B5/B14
	140	14	*2.2*	20	**CM040**		B5/B14
	112	17	*1.6*	25	**CM040**		B5/B14
	93	20	*1.9*	30	**CM040**		B5/B14
	70	25	*1.4*	40	**CM040**		B5/B14
	56	29	*1.1*	50	**CM040**		B5/B14
	47	34	*0.9*	60	**CM040**		B5/B14
	47	37	*1.2*	60		**CMP063/040**	B14
	37	44	*1.0*	75		**CMP063/040**	B14
	31	50	*1.1*	90		**CMP063/040**	B14
	23	60	*0.8*	120		**CMP063/040**	B14
	70	25	*2.3*	40	**CM050**		B5/B14
	56	30	*1.9*	50	**CM050**		B5/B14
	47	35	*1.5*	60	**CM050**		B5/B14
	47	38	*2.1*	60		**CMP063/050**	B14
	37	45	*1.7*	75		**CMP063/050**	B14
	35	42	*1.1*	80	**CM050**		B5/B14
	31	51	*1.9*	90		**CMP063/050**	B14
	28	49	*0.9*	100	**CM050**		B5/B14
	23	62	*1.4*	120		**CMP063/050**	B14
	19	74	*1.1*	150		**CMP063/050**	B14
	16	83	*0.9*	180		**CMP063/050**	B14
	35	44	*2.0*	80	**CM063**		B5
	31	53	*3.5*	90		**CMP063/063**	B14
	28	51	*1.6*	100	**CM063**		B5

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Technical data

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i			IEC
0.25							
63B2 (2800 min^{-1})	**23**	65	*2.5*	120		**CMP063/063**	B14
	19	76	*2.0*	150		**CMP063/063**	B14
	16	87	*1.6*	180		**CMP063/063**	B14
	12	104	*1.2*	240		**CMP063/063**	B14
	9.3	118	*1.0*	300		**CMP063/063**	B14
71A4 (1400 min^{-1})	**280**	8	*5.5*	5	**CM040**		B5/B14
	187	11	*4.0*	7.5	**CM040**		B5/B14
	140	14	*3.1*	10	**CM040**		B5/B14
	93	21	*2.2*	15	**CM040**		B5/B14
	70	27	*1.5*	20	**CM040**		B5/B14
	56	32	*1.2*	25	**CM040**		B5/B14
	47	36	*1.3*	30	**CM040**		B5/B14
	35	44	*0.9*	40	**CM040**		B5/B14
	70	27	*2.7*	20	**CM050**		B5/B14
	56	32	*2.2*	25	**CM050**		B5/B14
	47	37	*2.4*	30	**CM050**		B5/B14
	35	46	*1.7*	40	**CM050**		B5/B14
	28	54	*1.3*	50	**CM050**		B5/B14
	23	61	*1.1*	60	**CM050**		B5/B14
	23	71	*1.4*	60		**CMP071/050**	B14
	19	84	*1.1*	75		**CMP071/050**	B14
	18	74	*0.8*	80	**CM050**		B5/B14
	16	98	*1.3*	90		**CMP071/050**	B14
	28	56	*2.4*	50	**CM063**		B5/B14
	23	64	*2.0*	60	**CM063**		B5/B14
	23	73	*2.6*	60		**CMP071/063**	B14
	19	88	*2.0*	75		**CMP071/063**	B14
	18	78	*1.5*	80	**CM063**		B5/B14
	16	96	*2.4*	90		**CMP071/063**	B14
	14	89	*1.3*	100	**CM063**		B5/B14
	12	120	*1.7*	120		**CMP071/063**	B14
	9.3	143	*1.3*	150		**CMP071/063**	B14
	7.8	159	*1.1*	180		**CMP071/063**	B14
	18	82	*2.3*	80	**CM075**		B5
	16	105	*3.6*	90		**CMP071/075**	B14
	14	96	*1.8*	100	**CM075**		B5
	12	130	*2.6*	120		**CMP071/075**	B14
	9.3	153	*2.0*	150		**CMP071/075**	B14
	7.8	171	*1.7*	180		**CMP071/075**	B14
	5.8	201	*1.2*	240		**CMP071/075**	B14
	4.7	226	*1.0*	300		**CMP071/075**	B14
	7.8	177	*2.6*	180		**CMP071/090**	B14
	5.8	213	*2.0*	240		**CMP071/090**	B14
	4.7	241	*1.5*	300		**CMP071/090**	B14
71B6 (900 min^{-1})	**180**	11	*4.1*	5	**CM040**		B5/B14
	120	17	*3.1*	7.5	**CM040**		B5/B14
	90	22	*2.4*	10	**CM040**		B5/B14
	60	31	*1.8*	15	**CM040**		B5/B14
	45	39	*1.1*	20	**CM040**		B5/B14
	36	46	*0.9*	25	**CM040**		B5/B14
	30	53	*1.1*	30	**CM040**		B5/B14
	23	64	*0.8*	40	**CM040**		B5/B14

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i			IEC
0.25							
71B6 (900 min^{-1})	**45**	40	*2.0*	20	**CM050**		B5/B14
	36	48	*1.6*	25	**CM050**		B5/B14
	30	54	*1.8*	30	**CM050**		B5/B14
	23	66	*1.3*	40	**CM050**		B5/B14
	18	78	*1.0*	50	**CM050**		B5/B14
	15	88	*0.9*	60	**CM050**		B5/B14
	15	106	*1.2*	60		**CMP071/050**	B14
	12	125	*0.9*	75		**CMP071/050**	B14
	10	136	*1.1*	90		**CMP071/050**	B14
	23	69	*2.3*	40	**CM063**		B5/B14
	18	81	*1.9*	50	**CM063**		B5/B14
	15	92	*1.5*	60	**CM063**		B5/B14
	15	105	*2.2*	60		**CMP071/063**	B14
	12	123	*1.7*	75		**CMP071/063**	B14
	11	110	*1.2*	80	**CM063**		B5/B14
	10	140	*2.0*	90		**CMP071/063**	B14
	9	125	*1.0*	100	**CM063**		B5/B14
	7.5	168	*1.4*	120		**CMP071/063**	B14
	6.0	195	*1.1*	150		**CMP071/063**	B14
	5.0	215	*0.9*	180		**CMP071/063**	B14
	11	117	*1.8*	80	**CM075**		B5
	10	147	*3.1*	90		**CMP071/075**	B14
	9	133	*1.5*	100	**CM075**		B5
	7.5	178	*2.2*	120		**CMP071/075**	B14
	6.0	207	*1.6*	150		**CMP071/075**	B14
	5.0	229	*1.4*	180		**CMP071/075**	B14
	3.8	268	*1.0*	240		**CMP071/075**	B14
	3.0	296	*0.8*	300		**CMP071/075**	B14
	6.0	222	*2.6*	150		**CMP071/090**	B14
	5.0	248	*2.1*	180		**CMP071/090**	B14
	3.8	293	*1.5*	240		**CMP071/090**	B14
	3.0	328	*1.2*	300		**CMP071/090**	B14
0.37							
71A2 (2800 min^{-1})	**560**	6	*5.1*	5	**CM040**		B5/B14
	373	8	*3.7*	7.5	**CM040**		B5/B14
	280	11	*3.0*	10	**CM040**		B5/B14
	187	16	*2.2*	15	**CM040**		B5/B14
	140	21	*1.5*	20	**CM040**		B5/B14
	112	25	*1.1*	25	**CM040**		B5/B14
	93	29	*1.3*	30	**CM040**		B5/B14
	70	37	*0.9*	40	**CM040**		B5/B14
	112	26	*2.0*	25	**CM050**		B5/B14
	93	30	*2.3*	30	**CM050**		B5/B14
	70	37	*1.6*	40	**CM050**		B5/B14
	56	45	*1.3*	50	**CM050**		B5/B14
	47	51	*1.0*	60	**CM050**		B5/B14
	47	56	*1.4*	60		**CMP071/050**	B14
	37	67	*1.1*	75		**CMP071/050**	B14
	31	76	*1.3*	90		**CMP071/050**	B14
	56	46	*2.2*	50	**CM063**		B5/B14
	47	53	*1.8*	60	**CM063**		B5/B14
	47	58	*2.7*	60		**CMP071/063**	B14
	37	70	*2.0*	75		**CMP071/063**	B14
	35	66	*1.3*	80	**CM063**		B5/B14

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P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i			IEC
0.37							
71A2 (2800 min^{-1})	**31**	78	*2.4*	90		**CMP071/063**	B14
	28	76	*1.1*	100	**CM063**		B5/B14
	23	96	*1.7*	120		**CMP071/063**	B14
	19	113	*1.3*	150		**CMP071/063**	B14
	16	129	*1.1*	180		**CMP071/063**	B14
	35	69	*2.0*	80	**CM075**		B5
	28	80	*1.6*	100	**CM075**		B5
	23	101	*2.6*	120		**CMP071/075**	B14
	19	119	*2.0*	150		**CMP071/075**	B14
	16	136	*1.7*	180		**CMP071/075**	B14
	12	163	*1.3*	240		**CMP071/075**	B14
	9.3	186	*1.0*	300		**CMP071/075**	B14
	16	145	*2.6*	180		**CMP071/090**	B14
	12	178	*2.0*	240		**CMP071/090**	B14
	9.3	204	*1.6*	300		**CMP071/090**	B14
71B4 (1400 min^{-1})	**280**	11	*3.7*	5	**CM040**		B5/B14
	187	16	*2.7*	7.5	**CM040**		B5/B14
	140	21	*2.1*	10	**CM040**		B5/B14
	93	31	*1.5*	15	**CM040**		B5/B14
	70	39	*1.0*	20	**CM040**		B5/B14
	56	47	*0.8*	25	**CM040**		B5/B14
	47	53	*0.9*	30	**CM040**		B5/B14
	93	31	*2.6*	15	**CM050**		B5/B14
	70	40	*1.8*	20	**CM050**		B5/B14
	56	48	*1.5*	25	**CM050**		B5/B14
	47	55	*1.6*	30	**CM050**		B5/B14
	35	68	*1.1*	40	**CM050**		B5/B14
	28	80	*0.9*	50	**CM050**		B5/B14
	23	91	*0.8*	60	**CM050**		B5/B14
	23	105	*1.0*	60		**CMP071/050**	B14
	19	124	*0.7*	75		**CMP071/050**	B14
	16	145	*0.9*	90		**CMP071/050**	B14
	35	71	*2.0*	40	**CM063**		B5/B14
	28	83	*1.6*	50	**CM063**		B5/B14
	23	95	*1.3*	60	**CM063**		B5/B14
	23	108	*1.7*	60		**CMP071/063**	B14
	19	130	*1.3*	75		**CMP071/063**	B14
	18	115	*1.0*	80	**CM063**		B5/B14
	16	142	*1.6*	90		**CMP071/063**	B14
	14	131	*0.9*	100	**CM063**		B5/B14
	12	178	*1.2*	120		**CMP071/063**	B14
	9.3	211	*0.9*	150		**CMP071/063**	B14
	7.8	236	*0.8*	180		**CMP071/063**	B14
	28	87	*2.4*	50	**CM075**		B5
	23	100	*2.1*	60	**CM075**		B5
	23	111	*2.8*	60		**CMP071/075**	B14
	19	134	*2.1*	75		**CMP071/075**	B14
	18	121	*1.6*	80	**CM075**		B5
	16	156	*2.4*	90		**CMP071/075**	B14
	14	141	*1.2*	100	**CM075**		B5
	12	193	*1.7*	120		**CMP071/075**	B14
	9.3	226	*1.4*	150		**CMP071/075**	B14
	7.8	254	*1.2*	180		**CMP071/075**	B14
	5.8	297	*0.8*	240		**CMP071/075**	B14
	4.7	334	*0.7*	300		**CMP071/075**	B14

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i			IEC
0.37							
71B4 (1400 min^{-1})	**18**	129	*2.3*	80	**CM090**		B5
	14	151	*1.8*	100	**CM090**		B5
	12	196	*2.9*	120		**CMP071/090**	B14
	9.3	226	*2.3*	150		**CMP071/090**	B14
	7.8	263	*1.8*	180		**CMP071/090**	B14
	5.8	315	*1.3*	240		**CMP071/090**	B14
	4.7	356	*1.0*	300		**CMP071/090**	B14
80A6 (900 min^{-1})	**180**	17	*5.2*	5	**CM050**		B5/B14
	120	25	*3.7*	7.5	**CM050**		B5/B14
	90	33	*2.9*	10	**CM050**		B5/B14
	60	47	*2.0*	15	**CM050**		B5/B14
	45	59	*1.4*	20	**CM050**		B5/B14
	36	71	*1.1*	25	**CM050**		B5/B14
	30	80	*1.2*	30	**CM050**		B5/B14
	45	61	*2.5*	20	**CM063**		B5/B14
	36	74	*1.9*	25	**CM063**		B5/B14
	30	82	*2.3*	30	**CM063**		B5/B14
	23	102	*1.6*	40	**CM063**		B5/B14
	18	120	*1.3*	50	**CM063**		B5/B14
	15	137	*1.0*	60	**CM063**		B5/B14
	15	155	*1.5*	60		**CMP080/063**	B14
	12	182	*1.1*	75		**CMP080/063**	B14
	10	208	*1.3*	90		**CMP080/063**	B14
	18	126	*1.9*	50	**CM075**		B5/B14
	15	144	*1.6*	60	**CM075**		B5/B14
	15	159	*2.5*	60		**CMP080/075**	B14
	12	190	*1.8*	75		**CMP080/075**	B14
	11	173	*1.2*	80	**CM075**		B5/B14
	10	218	*2.1*	90		**CMP080/075**	B14
	9	196	*1.0*	100	**CM075**		B5/B14
	7.5	263	*1.5*	120		**CMP080/075**	B14
	11	188	*1.9*	80	**CM090**		B5/B14
	10	229	*3.5*	90		**CMP080/090**	B14
	9	216	*1.5*	100	**CM090**		B5/B14
	7.5	235	*2.9*	120		**CMP080/090**	B14
	6.0	329	*1.7*	150		**CMP080/090**	B14
	5.0	367	*1.4*	180		**CMP080/090**	B14
	6.0	352	*3.0*	150		**CMP080/110**	B14
	5.0	395	*2.3*	180		**CMP080/110**	B14
	3.8	471	*1.7*	240		**CMP080/110**	B14
	3.0	531	*1.3*	300		**CMP080/110**	B14
	3.8	471	*2.4*	240		**CMP080/130**	B14
	3.0	554	*1.8*	300		**CMP080/130**	B14
0.55							
71B2 (2800 min^{-1})	**560**	8	*3.4*	5	**CM040**		B5/B14
	373	13	*2.5*	7.5	**CM040**		B5/B14
	280	16	*2.0*	10	**CM040**		B5/B14
	187	24	*1.5*	15	**CM040**		B5/B14
	140	31	*1.0*	20	**CM040**		B5/B14

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P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i			IEC
0.55							
71B2 (2800 min^{-1})	**140**	32	*1.7*	20	**CM050**		B5/B14
	112	38	*1.3*	25	**CM050**		B5/B14
	93	44	*1.5*	30	**CM050**		B5/B14
	70	56	*1.1*	40	**CM050**		B5/B14
	56	67	*0.9*	50	**CM050**		B5/B14
	47	83	*1.0*	60		**CMP071/050**	B14
	37	99	*0.8*	75		**CMP071/050**	B14
	31	113	*0.9*	90		**CMP071/050**	B14
	70	57	*2.0*	40	**CM063**		B5/B14
	56	68	*1.5*	50	**CM063**		B5/B14
	47	79	*1.2*	60	**CM063**		B5/B14
	47	86	*1.8*	60		**CMP071/063**	B14
	37	103	*1.3*	75		**CMP071/063**	B14
	35	98	*0.9*	80	**CM063**		B5/B14
	31	116	*1.6*	90		**CMP071/063**	B14
	23	143	*1.1*	120		**CMP071/063**	B14
	19	168	*0.9*	150		**CMP071/063**	B14
	47	79	*1.8*	60	**CM075**		B5
	47	88	*2.9*	60		**CMP071/075**	B14
	37	106	*2.2*	75		**CMP071/075**	B14
	35	96	*1.3*	80	**CM075**		B5
	31	121	*2.5*	90		**CMP071/075**	B14
	28	113	*1.0*	100	**CM075**		B5
	23	150	*1.8*	120		**CMP071/075**	B14
	19	176	*1.4*	150		**CMP071/075**	B14
	16	202	*1.2*	180		**CMP071/075**	B14
	12	243	*0.9*	240		**CMP071/075**	B14
	35	107	*2.2*	80	**CM090**		B5
	28	126	*1.7*	100	**CM090**		B5
	23	159	*2.9*	120		**CMP071/090**	B14
	19	188	*2.2*	150		**CMP071/090**	B14
	16	215	*1.8*	180		**CMP071/090**	B14
	12	265	*1.3*	240		**CMP071/090**	B14
	9.3	303	*1.0*	300		**CMP071/090**	B14
71C4 (1400 min^{-1})	**280**	17	*2.5*	5	**CM040**		B5/B14
	187	24	*1.8*	7.5	**CM040**		B5/B14
	140	32	*1.4*	10	**CM040**		B5/B14
	93	46	*1.0*	15	**CM040**		B5/B14
	140	32	*2.6*	10	**CM050**		B5/B14
	93	46	*1.8*	15	**CM050**		B5/B14
	70	59	*1.2*	20	**CM050**		B5/B14
	56	71	*1.0*	25	**CM050**		B5/B14
	47	81	*1.1*	30	**CM050**		B5/B14
	35	101	*0.8*	40	**CM050**		B5/B14
	70	61	*2.2*	20	**CM063**		B5/B14
	56	73	*1.8*	25	**CM063**		B5/B14
	47	84	*2.0*	30	**CM063**		B5/B14
	35	105	*1.4*	40	**CM063**		B5/B14
	28	124	*1.1*	50	**CM063**		B5/B14
	23	142	*0.9*	60	**CM063**		B5/B14
	23	161	*1.2*	60		**CMP071/063**	B14
	19	193	*0.9*	75		**CMP071/063**	B14
	16	212	*1.1*	90		**CMP071/063**	B14
	12	265	*0.8*	120		**CMP071/063**	B14

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i			IEC
0.55							
71C4 (1400 min^{-1})	**35**	110	*2.1*	40	**CM075**		B5
	28	129	*1.6*	50	**CM075**		B5
	23	149	*1.4*	60	**CM075**		B5
	23	165	*1.9*	60		**CMP071/075**	B14
	19	199	*1.4*	75		**CMP071/075**	B14
	18	180	*1.1*	80	**CM075**		B5
	16	232	*1.6*	90		**CMP071/075**	B14
	14	210	*0.8*	100	**CM075**		B5
	12	287	*1.2*	120		**CMP071/075**	B14
	9.3	336	*0.9*	150		**CMP071/075**	B14
	7.8	377	*0.8*	180		**CMP071/075**	B14
	18	192	*1.6*	80	**CM090**		B5
	16	232	*2.7*	90		**CMP071/090**	B14
	14	225	*1.2*	100	**CM090**		B5
	12	291	*2.0*	120		**CMP071/090**	B14
	9.3	336	*1.5*	150		**CMP071/090**	B14
	7.8	390	*1.2*	180		**CMP071/090**	B14
	5.8	468	*0.9*	240		**CMP071/090**	B14
80A4 (1400 min^{-1})	**280**	17	*4.5*	5	**CM050**		B5/B14
	187	24	*3.2*	7.5	**CM050**		B5/B14
	140	32	*2.6*	10	**CM050**		B5/B14
	93	46	*1.8*	15	**CM050**		B5/B14
	70	59	*1.2*	20	**CM050**		B5/B14
	56	71	*1.0*	25	**CM050**		B5/B14
	47	81	*1.1*	30	**CM050**		B5/B14
	70	61	*2.2*	20	**CM063**		B5/B14
	56	73	*1.8*	25	**CM063**		B5/B14
	47	84	*2.0*	30	**CM063**		B5/B14
	35	105	*1.4*	40	**CM063**		B5/B14
	28	124	*1.1*	50	**CM063**		B5/B14
	23	142	*0.9*	60	**CM063**		B5/B14
	23	161	*1.2*	60		**CMP080/063**	B14
	19	193	*0.9*	75		**CMP080/063**	B14
	16	212	*1.1*	90		**CMP080/063**	B14
	35	110	*2.1*	40	**CM075**		B5/B14
	28	129	*1.6*	50	**CM075**		B5/B14
	23	149	*1.4*	60	**CM075**		B5/B14
	23	165	*1.9*	60		**CMP080/075**	B14
	19	199	*1.4*	75		**CMP080/075**	B14
	18	180	*1.1*	80	**CM075**		B5/B14
	16	232	*1.6*	90		**CMP080/075**	B14
	14	210	*0.8*	100	**CM075**		B5/B14
	12	287	*1.2*	120		**CMP080/075**	B14
	18	192	*1.6*	80	**CM090**		B5/B14
	16	232	*2.7*	90		**CMP080/090**	B14
	14	225	*1.2*	100	**CM090**		B5/B14
	12	291	*2.0*	120		**CMP080/090**	B14
	9.3	336	*1.5*	150		**CMP080/090**	B14
	7.8	390	*1.2*	180		**CMP080/090**	B14

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P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i			IEC
0.55							
80A4 (1400 min^{-1})	**18**	204	*2.6*	80	**CM110**		B5
	14	240	*2.0*	100	**CM110**		B5
	9.3	358	*2.5*	150		**CMP080/110**	B14
	7.8	410	*2.0*	180		**CMP080/110**	B14
	5.8	503	*1.4*	240		**CMP080/110**	B14
	4.7	574	*1.1*	300		**CMP080/110**	B14
	7.8	424	*2.6*	180		**CMP080/130**	B14
	5.8	512	*1.9*	240		**CMP080/130**	B14
	4.7	585	*1.5*	300		**CMP080/130**	B14
80B6 (900 min^{-1})	**180**	26	*3.4*	5	**CM050**		B5/B14
	120	37	*2.5*	7.5	**CM050**		B5/B14
	90	49	*1.9*	10	**CM050**		B5/B14
	60	69	*1.4*	15	**CM050**		B5/B14
	45	88	*0.9*	20	**CM050**		B5/B14
	60	71	*2.5*	15	**CM063**		B5/B14
	45	91	*1.7*	20	**CM063**		B5/B14
	36	109	*1.3*	25	**CM063**		B5/B14
	30	123	*1.5*	30	**CM063**		B5/B14
	23	152	*1.1*	40	**CM063**		B5/B14
	18	178	*0.8*	50	**CM063**		
	15	230	*1.0*	60		**CMP080/063**	B14
	12	270	*0.8*	75		**CMP080/063**	B14
	10	309	*0.9*	90		**CMP080/063**	B14
	36	112	*2.0*	25	**CM075**		B5/B14
	30	128	*2.4*	30	**CM075**		B5/B14
	23	159	*1.7*	40	**CM075**		B5/B14
	18	187	*1.3*	50	**CM075**		B5/B14
	15	214	*1.1*	60	**CM075**		B5/B14
	15	237	*1.7*	60		**CMP080/075**	B14
	12	283	*1.2*	75		**CMP080/075**	B14
	11	257	*0.8*	80	**CM075**		B5/B14
	10	324	*1.4*	90		**CMP080/075**	B14
	7.5	391	*1.0*	120		**CMP080/075**	B14
	15	228	*1.7*	60	**CM090**		B5/B14
	15	247	*2.7*	60		**CMP080/090**	B14
	12	296	*2.0*	75		**CMP080/090**	B14
	11	280	*1.2*	80	**CM090**		B5/B14
	10	340	*2.3*	90		**CMP080/090**	B14
	9	321	*1.0*	100	**CM090**		B5/B14
	7.5	350	*1.9*	120		**CMP080/090**	B14
	6.0	489	*1.2*	150		**CMP080/090**	B14
	5.0	546	*0.9*	180		**CMP080/090**	B14
	11	294	*2.1*	80	**CM110**		B5
	9	344	*1.6*	100	**CM110**		B5
	7.5	446	*2.7*	120		**CMP080/110**	B14
	6.0	523	*2.0*	150		**CMP080/110**	B14
	5.0	587	*1.6*	180		**CMP080/110**	B14
	3.8	700	*1.1*	240		**CMP080/110**	B14
	3.0	789	*0.9*	300		**CMP080/110**	B14
	5.0	587	*2.2*	180		**CMP080/130**	B14
	3.8	700	*1.6*	240		**CMP080/130**	B14
	3.0	824	*1.2*	300		**CMP080/130**	B14

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i			IEC
0.75							
80A2 (2800 min^{-1})	**560**	12	*4.6*	5	**CM050**		B5/B14
	373	17	*3.3*	7.5	**CM050**		B5/B14
	280	23	*2.7*	10	**CM050**		B5/B14
	187	33	*1.9*	15	**CM050**		B5/B14
	140	43	*1.3*	20	**CM050**		B5/B14
	112	52	*1.0*	25	**CM050**		B5/B14
	93	60	*1.1*	30	**CM050**		B5/B14
	140	43	*2.4*	20	**CM063**		B5/B14
	112	53	*1.8*	25	**CM063**		B5/B14
	93	61	*2.1*	30	**CM063**		B5/B14
	70	78	*1.4*	40	**CM063**		B5/B14
	56	93	*1.1*	50	**CM063**		B5/B14
	47	107	*0.9*	60	**CM063**		B5/B14
	47	117	*1.3*	60		**CMP080/063**	B14
	37	141	*1.0*	75		**CMP080/063**	B14
	31	158	*1.2*	90		**CMP080/063**	B14
	70	80	*2.3*	40	**CM075**		B5/B14
	56	96	*1.7*	50	**CM075**		B5/B14
	47	111	*1.4*	60	**CM075**		B5/B14
	47	120	*2.1*	60		**CMP080/075**	B14
	37	145	*1.6*	75		**CMP080/075**	B14
	35	139	*1.0*	80	**CM075**		B5/B14
	31	165	*1.9*	90		**CMP080/075**	B14
	28	161	*0.8*	100	**CM075**		B5/B14
	23	205	*1.3*	120		**CMP080/075**	B14
	35	145	*1.6*	80	**CM090**		B5/B14
	31	171	*3.1*	90		**CMP080/090**	B14
	28	171	*1.2*	100	**CM090**		B5/B14
	23	217	*2.1*	120		**CMP080/090**	B5/B14
	19	256	*1.6*	150		**CMP080/090**	B14
	16	293	*1.3*	180		**CMP080/090**	B14
	28	179	*2.0*	100	**CM110**		B5
	19	267	*2.8*	150		**CMP080/110**	B14
	16	307	*2.2*	180		**CMP080/110**	B14
	12	379	*1.6*	240		**CMP080/110**	B14
	9.3	444	*1.2*	300		**CMP080/110**	B14
	16	316	*2.9*	180		**CMP080/130**	B14
	12	385	*2.2*	240		**CMP080/130**	B14
	9.3	444	*1.7*	300		**CMP080/130**	B14
80B4 (1400 min^{-1})	**280**	23	*3.3*	5	**CM050**		B5/B14
	187	33	*2.4*	7.5	**CM050**		B5/B14
	140	43	*1.9*	10	**CM050**		B5/B14
	93	63	*1.3*	15	**CM050**		B5/B14
	70	81	*0.9*	20	**CM050**		B5/B14
	56	97	*0.7*	25	**CM050**		B5/B14
	47	111	*0.8*	30	**CM050**		B5/B14

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P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i			IEC
0.75							
80B4 (1400 min^{-1})	**93**	64	*2.4*	15	**CM063**		B5/B14
	70	83	*1.6*	20	**CM063**		B5/B14
	56	100	*1.4*	25	**CM063**		B5/B14
	47	115	*1.4*	30	**CM063**		B5/B14
	35	143	*1.0*	40	**CM063**		B5/B14
	28	169	*0.8*	50	**CM063**		B5/B14
	23	220	*0.9*	60		**CMP080/063**	B14
	19	263	*0.7*	75		**CMP080/063**	B14
	16	289	*0.8*	90		**CMP080/063**	B14
	70	85	*2.6*	20	**CM075**		B5/B14
	56	102	*2.0*	25	**CM075**		B5/B14
	47	118	*2.3*	30	**CM075**		B5/B14
	35	149	*1.6*	40	**CM075**		B5/B14
	28	177	*1.2*	50	**CM075**		B5/B14
	23	203	*1.0*	60	**CM075**		B5/B14
	23	226	*1.4*	60		**CMP080/075**	B14
	19	271	*1.0*	75		**CMP080/075**	B14
	18	246	*0.8*	80	**CM075**		B5/B14
	16	316	*1.2*	90		**CMP080/075**	B14
	12	391	*0.9*	120		**CMP080/075**	B14
	35	156	*2.6*	40	**CM090**		B5/B14
	28	184	*1.9*	50	**CM090**		B5/B14
	23	212	*1.5*	60	**CM090**		B5/B14
	23	235	*2.2*	60		**CMP080/090**	B14
	19	282	*1.6*	75		**CMP080/090**	B14
	18	262	*1.2*	80	**CM090**		B5/B14
	16	316	*2.0*	90		**CMP080/090**	B14
	14	307	*0.9*	100	**CM090**		B5/B14
	12	397	*1.5*	120		**CMP080/090**	B14
	9.3	459	*1.1*	150		**CMP080/090**	B14
	7.8	532	*0.9*	180		**CMP080/090**	B14
	23	224	*2.6*	60	**CM110**		B5
	19	290	*2.9*	75		**CMP080/110**	B14
	18	278	*1.9*	80	**CM110**		B5
	16	325	*3.2*	90		**CMP080/110**	B14
	14	327	*1.5*	100	**CM110**		B5
	12	415	*2.4*	120		**CMP080/110**	B14
	9.3	489	*1.9*	150		**CMP080/110**	B14
	7.8	560	*1.5*	180		**CMP080/110**	B14
	5.8	686	*1.1*	240		**CMP080/110**	B14
	4.7	782	*0.8*	300		**CMP080/110**	B14
	14	327	*2.2*	100	**CM130**		B5
	9.3	504	*2.4*	150		**CMP080/130**	B14
	7.8	578	*1.9*	180		**CMP080/130**	B14
	5.8	698	*1.4*	240		**CMP080/130**	B14
	4.7	797	*1.1*	300		**CMP080/130**	B14

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i			IEC
0.75							
90S6 (900 min^{-1})	**180**	35	*4.6*	5	**CM063**		B5/B14
	120	51	*3.3*	7.5	**CM063**		B5/B14
	90	67	*2.6*	10	**CM063**		B5/B14
	60	97	*1.8*	15	**CM063**		B5/B14
	45	124	*1.2*	20	**CM063**		B5/B14
	36	149	*0.9*	25	**CM063**		B5/B14
	30	167	*1.1*	30	**CM063**		B5/B14
	45	127	*2.0*	20	**CM075**		B5/B14
	36	153	*1.5*	25	**CM075**		B5/B14
	30	174	*1.8*	30	**CM075**		B5/B14
	23	216	*1.2*	40	**CM075**		B5/B14
	15	323	*1.3*	60		**CMP090/075**	B5/B14
	12	386	*1.0*	75		**CMP090/075**	B5/B14
	10	442	*1.2*	90		**CMP090/075**	B5/B14
	8	533	*0.8*	120		**CMP090/075**	B5/B14
	23	229	*2.0*	40	**CM090**		B5/B14
	18	271	*1.5*	50	**CM090**		B5/B14
	15	310	*1.2*	60	**CM090**		B5/B14
	15	337	*2.2*	60		**CMP090/090**	B5/B14
	12	404	*1.6*	75		**CMP090/090**	B5/B14
	10	463	*1.9*	90		**CMP090/090**	B5/B14
	8	571	*1.3*	120		**CMP090/090**	B5/B14
	6	667	*1.0*	150		**CMP090/090**	B5/B14
	5	744	*0.8*	180		**CMP090/090**	B5/B14
	18	283	*2.7*	50	**CM110**		B5/B14
	15	325	*2.1*	60	**CM110**		B5/B14
	15	351	*3.7*	60		**CMP090/110**	B5/B14
	12	421	*2.9*	75		**CMP090/110**	B5/B14
	11	401	*1.5*	80	**CM110**		B5/B14
	10	470	*3.1*	90		**CMP090/110**	B5/B14
	9	470	*1.2*	100	**CM110**		B5/B14
	8	608	*2.2*	120		**CMP090/110**	B5/B14
	6	714	*1.6*	150		**CMP090/110**	B5/B14
	5	800	*1.3*	180		**CMP090/110**	B5/B14
	4	955	*0.9*	240		**CMP090/110**	B5/B14
	3	1076	*0.7*	300		**CMP090/110**	B5/B14
	6	714	*2.1*	150		**CMP090/130**	B5/B14
	5	800	*1.7*	180		**CMP090/130**	B5/B14
	4	955	*1.3*	240		**CMP090/130**	B5/B14
	3	1123	*1.0*	300		**CMP090/130**	B5/B14
1.1							
80B2 (2800 min^{-1})	**560**	17	*3.2*	5	**CM050**		B5/B14
	373	25	*2.3*	7.5	**CM050**		B5/B14
	280	33	*1.8*	10	**CM050**		B5/B14
	187	48	*1.3*	15	**CM050**		B5/B14
	140	63	*0.9*	20	**CM050**		B5/B14
	187	48	*2.4*	15	**CM063**		B5/B14
	140	63	*1.6*	20	**CM063**		B5/B14
	112	78	*1.2*	25	**CM063**		B5/B14
	93	89	*1.4*	30	**CM063**		B5/B14
	70	114	*1.0*	40	**CM063**		B5/B14
	47	172	*0.9*	60		**CMP080/063**	B14
	37	207	*0.7*	75		**CMP080/063**	B14
	31	232	*0.8*	90		**CMP080/063**	B14

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Technical data

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i			IEC
1.1							
80B2	**93**	91	*2.3*	30	**CM075**		B5/B14
(2800 min^{-1})	**70**	117	*1.6*	40	**CM075**		B5/B14
	56	141	*1.2*	50	**CM075**		B5/B14
	47	162	*1.0*	60	**CM075**		B5/B14
	47	176	*1.4*	60		**CMP080/075**	B14
	37	212	*1.1*	75		**CMP080/075**	B14
	31	242	*1.3*	90		**CMP080/075**	B14
	23	300	*0.9*	120		**CMP080/075**	B14
	56	146	*1.9*	50	**CM090**		B5/B14
	47	169	*1.5*	60	**CM090**		B5/B14
	47	181	*2.4*	60		**CMP080/090**	B14
	37	221	*1.8*	75		**CMP080/090**	B14
	35	213	*1.1*	80	**CM090**		B5/B14
	31	251	*2.1*	90		**CMP080/090**	B14
	28	251	*0.9*	100	**CM090**		B5/B14
	23	318	*1.4*	120		**CMP080/090**	B14
	19	375	*1.1*	150		**CMP080/090**	B14
	16	430	*0.9*	180		**CMP080/090**	B14
	35	219	*1.8*	80	**CM110**		B5
	28	263	*1.4*	100	**CM110**		B5
	23	331	*2.5*	120		**CMP080/110**	B14
	19	392	*1.9*	150		**CMP080/110**	B14
	16	450	*1.5*	180		**CMP080/110**	B14
	12	556	*1.1*	240		**CMP080/110**	B14
	9.3	651	*0.9*	300		**CMP080/110**	B14
	19	403	*2.5*	150		**CMP080/130**	B14
	16	463	*2.0*	180		**CMP080/130**	B14
	12	565	*1.5*	240		**CMP080/130**	B14
	9.3	651	*1.2*	300		**CMP080/130**	B14
80C4	**280**	33	*2.2*	5	**CM050**		B5/B14
(1400 min^{-1})	**187**	49	*1.6*	7.5	**CM050**		B5/B14
	140	64	*1.3*	10	**CM050**		B5/B14
	93	92	*0.9*	15	**CM050**		B5/B14
	280	34	*4.0*	5	**CM063**		B5/B14
	187	50	*2.9*	7.5	**CM063**		B5/B14
	140	65	*2.3*	10	**CM063**		B5/B14
	93	95	*1.6*	15	**CM063**		B5/B14
	70	122	*1.1*	20	**CM063**		B5/B14
	56	146	*0.9*	25	**CM063**		B5/B14
	47	169	*1.0*	30	**CM063**		B5/B14
	70	125	*1.8*	20	**CM075**		B5/B14
	56	150	*1.3*	25	**CM075**		B5/B14
	47	173	*1.6*	30	**CM075**		B5/B14
	35	219	*1.1*	40	**CM075**		B5/B14
	28	259	*0.8*	50	**CM075**		B5/B14
	23	331	*0.9*	60		**CMP080/075**	B14
	19	397	*0.7*	75		**CMP080/075**	B14
	16	463	*0.8*	90		**CMP080/075**	B14

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i			IEC
1.1							
80C4	**35**	228	*1.8*	40	**CM090**		B5/B14
(1400 min^{-1})	**28**	270	*1.3*	50	**CM090**		B5/B14
	23	311	*1.1*	60	**CM090**		B5/B14
	23	344	*1.5*	60		**CMP080/090**	B14
	19	414	*1.1*	75		**CMP080/090**	B14
	18	384	*0.8*	80	**CM090**		B5/B14
	16	463	*1.4*	90		**CMP080/090**	B14
	12	582	*1.0*	120		**CMP080/090**	B14
	9.3	673	*0.8*	150		**CMP080/090**	B14
	28	285	*2.3*	50	**CM110**		B5
	23	329	*1.8*	60	**CM110**		B5
	23	353	*2.5*	60		**CMP080/110**	B14
	19	425	*2.0*	75		**CMP080/110**	B14
	18	408	*1.3*	80	**CM110**		B5
	16	477	*2.2*	90		**CMP080/110**	B14
	14	480	*1.0*	100	**CM110**		B5
	12	609	*1.6*	120		**CMP080/110**	B14
	9.3	717	*1.3*	150		**CMP080/110**	B14
	7.8	821	*1.0*	180		**CMP080/110**	B14
	18	414	*2.0*	80	**CM130**		B5
	16	477	*3.1*	90		**CMP080/130**	B14
	14	480	*1.5*	100	**CM130**		B5
	12	600	*2.3*	120		**CMP080/130**	B14
	9.3	739	*1.7*	150		**CMP080/130**	B14
	7.8	847	*1.3*	180		**CMP080/130**	B14
	5.8	1024	*0.9*	240		**CMP080/130**	B14
90S4	**280**	34	*4.0*	5	**CM063**		B5/B14
(1400 min^{-1})	**187**	50	*2.9*	7.5	**CM063**		B5/B14
	140	65	*2.3*	10	**CM063**		B5/B14
	93	95	*1.6*	15	**CM063**		B5/B14
	70	122	*1.1*	20	**CM063**		B5/B14
	56	146	*0.9*	25	**CM063**		B5/B14
	47	169	*1.0*	30	**CM063**		B5/B14
	93	95	*2.6*	15	**CM075**		B5/B14
	70	125	*1.8*	20	**CM075**		B5/B14
	56	150	*1.3*	25	**CM075**		B5/B14
	47	173	*1.6*	30	**CM075**		B5/B14
	35	219	*1.1*	40	**CM075**		B5/B14
	23	331	*0.9*	60		**CMP090/075**	B5/B14
	19	397	*0.7*	75		**CMP090/075**	B5/B14
	16	463	*0.8*	90		**CMP090/075**	B5/B14
	56	156	*2.2*	25	**CM090**		B5/B14
	47	178	*2.6*	30	**CM090**		B5/B14
	35	228	*1.8*	40	**CM090**		B5/B14
	28	270	*1.3*	50	**CM090**		B5/B14
	23	311	*1.1*	60	**CM090**		B5/B14
	23	344	*1.5*	60		**CMP090/090**	B5/B14
	19	414	*1.1*	75		**CMP090/090**	B5/B14
	18	384	*0.8*	80	**CM090**		B5/B14
	16	463	*1.4*	90		**CMP090/090**	B5/B14
	12	582	*1.0*	120		**CMP090/090**	B5/B14
	9	673	*0.8*	150		**CMP090/090**	B5/B14

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P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i			IEC
1.1							
90S4 (1400 min^{-1})	**35**	237	*3.0*	40	**CM110**		B5/B14
	28	285	*2.3*	50	**CM110**		B5/B14
	23	329	*1.8*	60	**CM110**		B5/B14
	23	353	*2.5*	60		**CMP090/110**	B5/B14
	19	425	*2.0*	75		**CMP090/110**	B5/B14
	18	408	*1.3*	80	**CM110**		B5/B14
	16	477	*2.2*	90		**CMP090/110**	B5/B14
	14	480	*1.0*	100	**CM110**		B5/B14
	12	609	*1.6*	120		**CMP090/110**	B5/B14
	9	717	*1.3*	150		**CMP090/110**	B5/B14
	8	821	*1.0*	180		**CMP090/110**	B5/B14
	6	1006	*0.7*	240		**CMP090/110**	B5/B14
	18	414	*2.0*	80	**CM130**		B5
	14	480	*1.5*	100	**CM130**		B5
	12	600	*2.1*	120		**CMP090/130**	B5/B14
	9	739	*1.7*	150		**CMP090/130**	B5/B14
	8	847	*1.3*	180		**CMP090/130**	B5/B14
	6	1024	*1.0*	240		**CMP090/130**	B5/B14
	5	1169	*0.7*	300		**CMP090/130**	B5/B14
90L6 (900 min^{-1})	**180**	52	*3.1*	5	**CM063**		B5/B14
	120	75	*2.2*	7.5	**CM063**		B5/B14
	90	98	*1.8*	10	**CM063**		B5/B14
	60	142	*1.3*	15	**CM063**		B5/B14
	45	182	*0.8*	20	**CM063**		B5/B14
	60	145	*2.0*	15	**CM075**		B5/B14
	45	187	*1.4*	20	**CM075**		B5/B14
	36	225	*1.0*	25	**CM075**		B5/B14
	30	256	*1.2*	30	**CM075**		B5/B14
	23	317	*0.8*	40	**CM075**		B5/B14
	15	474	*0.9*	60		**CMP090/075**	B5/B14
	12	566	*0.7*	75		**CMP090/075**	B5/B14
	10	649	*0.8*	90		**CMP090/075**	B5/B14
	45	191	2.3	20	**CM090**		B5/B14
	36	233	1.7	25	**CM090**		B5/B14
	30	266	2.0	30	**CM090**		B5/B14
	23	336	*1.4*	40	**CM090**		B5/B14
	18	397	*1.0*	50	**CM090**		B5/B14
	15	455	*0.8*	60	**CM090**		B5/B14
	15	494	*1.5*	60		**CMP090/090**	B5/B14
	12	592	*1.1*	75		**CMP090/090**	B5/B14
	10	679	*1.3*	90		**CMP090/090**	B5/B14
	8	837	*0.9*	120		**CMP090/090**	B5/B14
	18	414	*1.8*	50	**CM110**		B5/B14
	15	476	*1.4*	60	**CM110**		B5/B14
	15	515	*2.5*	60		**CMP090/110**	B5/B14
	12	618	*1.9*	75		**CMP090/110**	B5/B14
	11	588	*1.0*	80	**CM110**		B5/B14
	10	690	*2.1*	90		**CMP090/110**	B5/B14
	9	689	*0.8*	100	**CM110**		B5/B14
	8	892	*1.5*	120		**CMP090/110**	B5/B14
	6	1047	*1.1*	150		**CMP090/110**	B5/B14
	5	1174	*0.9*	180		**CMP090/110**	B5/B14

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i			IEC
1.1							
90L6 (900 min^{-1})	**11**	598	*1.5*	80	**CM130**		B5
	9	689	*1.1*	100	**CM130**		B5
	8	865	*1.9*	120		**CMP090/130**	B5/B14
	6	1047	*1.4*	150		**CMP090/130**	B5/B14
	5	1174	*1.2*	180		**CMP090/130**	B5/B14
	4	1400	*0.9*	240		**CMP090/130**	B5/B14
1.5							
90S2 (2800 min^{-1})	**560**	23	*4.2*	5	**CM063**		B5/B14
	373	35	*3.0*	7.5	**CM063**		B5/B14
	280	45	*2.4*	10	**CM063**		B5/B14
	187	66	*1.7*	15	**CM063**		B5/B14
	140	86	*1.2*	20	**CM063**		B5/B14
	112	106	*0.9*	25	**CM063**		B5/B14
	93	121	*1.0*	30	**CM063**		B5/B14
	140	87	*2.0*	20	**CM075**		B5/B14
	112	107	*1.4*	25	**CM075**		B5/B14
	93	124	*1.7*	30	**CM075**		B5/B14
	70	160	*1.1*	40	**CM075**		B5/B14
	47	241	*1.1*	60		**CMP090/075**	B5/B14
	37	290	*0.8*	75		**CMP090/075**	B5/B14
	31	329	*0.9*	90		**CMP090/075**	B5/B14
	70	164	*1.9*	40	**CM090**		B5/B14
	56	200	*1.4*	50	**CM090**		B5/B14
	47	230	*1.1*	60	**CM090**		B5/B14
	47	247	*1.8*	60		**CMP090/090**	B5/B14
	37	301	*1.3*	75		**CMP090/090**	B5/B14
	31	343	*1.5*	90		**CMP090/090**	B5/B14
	23	433	*1.1*	120		**CMP090/090**	B5/B14
	19	511	*0.8*	150		**CMP090/090**	B5/B14
	56	202	*2.5*	50	**CM110**		B5/B14
	47	236	*1.9*	60	**CM110**		B5/B14
	37	308	*2.3*	75		**CMP090/110**	B5/B14
	35	299	*1.3*	80	**CM110**		B5/B14
	31	352	*2.5*	90		**CMP090/110**	B5/B14
	28	358	*1.0*	100	**CM110**		B5/B14
	23	451	*1.8*	120		**CMP090/110**	B5/B14
	19	534	*1.4*	150		**CMP090/110**	B5/B14
	16	614	*1.1*	180		**CMP090/110**	B5/B14
	12	758	*0.8*	240		**CMP090/110**	B5/B14
	35	295	*2.0*	80	**CM130**		B5
	28	358	*1.5*	100	**CM130**		B5
	23	445	*2.5*	120		**CMP090/130**	B5/B14
	19	549	*1.9*	150		**CMP090/130**	B5/B14
	16	632	*1.5*	180		**CMP090/130**	B5/B14
	12	770	*1.1*	240		**CMP090/130**	B5/B14
	9	887	*0.9*	300		**CMP090/130**	B5/B14
90L4 (1400 min^{-1})	**280**	46	*2.9*	5	**CM063**		B5/B14
	187	68	*2.1*	7.5	**CM063**		B5/B14
	140	88	*1.7*	10	**CM063**		B5/B14
	93	129	*1.2*	15	**CM063**		B5/B14
	70	166	*0.8*	20	**CM063**		B5/B14

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Technical data

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i			IEC
1.5							
90L4 (1400 min^{-1})	**93**	129	*1.9*	15	**CM075**		B5/B14
	70	170	*1.3*	20	**CM075**		B5/B14
	56	205	*1.0*	25	**CM075**		B5/B14
	47	236	*1.1*	30	**CM075**		B5/B14
	35	299	*0.8*	40	**CM075**		B5/B14
	70	172	*2.2*	20	**CM090**		B5/B14
	56	212	*1.6*	25	**CM090**		B5/B14
	47	243	*1.9*	30	**CM090**		B5/B14
	35	311	*1.3*	40	**CM090**		B5/B14
	28	368	*1.0*	50	**CM090**		B5/B14
	23	424	*0.8*	60	**CM090**		B5/B14
	23	469	*1.1*	60		**CMP090/090**	B5/B14
	19	564	*0.8*	75		**CMP090/090**	B5/B14
	16	632	*1.0*	90		**CMP090/090**	B5/B14
	12	794	*0.7*	120		**CMP090/090**	B5/B14
	35	323	*2.2*	40	**CM110**		B5/B14
	28	389	*1.7*	50	**CM110**		B5/B14
	23	448	*1.3*	60	**CM110**		B5/B14
	23	481	*1.8*	60		**CMP090/110**	B5/B14
	19	579	*1.5*	75		**CMP090/110**	B5/B14
	18	557	*0.9*	80	**CM110**		B5/B14
	16	650	*1.6*	90		**CMP090/110**	B5/B14
	12	830	*1.2*	120		**CMP090/110**	B5/B14
	9	978	*0.9*	150		**CMP090/110**	B5/B14
	8	1119	*0.7*	180		**CMP090/110**	B5/B14
	23	448	*2.0*	60	**CM130**		B5
	19	579	*2.1*	75		**CMP090/130**	B5/B14
	18	565	*1.5*	80	**CM130**		B5
	16	650	*2.2*	90		**CMP090/130**	B5/B14
	14	655	*1.1*	100	**CM130**		B5
	12	818	*1.5*	120		**CMP090/130**	B5/B14
	9	1008	*1.2*	150		**CMP090/130**	B5/B14
	8	1155	*0.9*	180		**CMP090/130**	B5/B14
	6	1396	*0.7*	240		**CMP090/130**	B5/B14
100LA6 (900 min^{-1})	**120**	104	*2.5*	7.5	**CM075**		B5/B14
	90	135	*2.0*	10	**CM075**		B5/B14
	60	198	*1.5*	15	**CM075**		B5/B14
	60	201	*2.4*	15	**CM090**		B5/B14
	45	261	*1.7*	20	**CM090**		B5/B14
	36	318	*1.2*	25	**CM090**		B5/B14
	30	363	*1.5*	30	**CM090**		B5/B14
	36	326	*2.1*	25	**CM110**		B5/B14
	30	372	*2.3*	30	**CM110**		B5/B14
	23	478	*1.7*	40	**CM110**		B5/B14
	18	565	*1.3*	50	**CM110**		B5/B14
	15	649	*1.1*	60	**CM110**		B5/B14
	18	581	*1.8*	50	**CM130**		B5
	15	669	*1.5*	60	**CM130**		B5
	11	815	*1.1*	80	**CM130**		B5
	9	939	*0.8*	100	**CM130**		B5

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i			IEC
2.2							
90L2 (2800 min^{-1})	**560**	34	*2.8*	5	**CM063**		B5/B14
	373	51	*2.0*	7.5	**CM063**		B5/B14
	280	66	*1.7*	10	**CM063**		B5/B14
	187	97	*1.2*	15	**CM063**		B5/B14
	140	126	*0.8*	20	**CM063**		B5/B14
	187	98	*1.9*	15	**CM075**		B5/B14
	140	128	*1.3*	20	**CM075**		B5/B14
	112	158	*1.0*	25	**CM075**		B5/B14
	93	182	*1.1*	30	**CM075**		B5/B14
	140	129	*2.2*	20	**CM090**		B5/B14
	112	159	*1.6*	25	**CM090**		B5/B14
	93	187	*1.9*	30	**CM090**		B5/B14
	70	240	*1.3*	40	**CM090**		B5/B14
	56	293	*1.0*	50	**CM090**		B5/B14
	47	362	*1.2*	60		**CMP090/090**	B5/B14
	37	441	*0.9*	75		**CMP090/090**	B5/B14
	31	503	*1.0*	90		**CMP090/090**	B5/B14
	23	635	*0.7*	120		**CMP090/090**	B5/B14
	70	243	*2.3*	40	**CM110**		B5/B14
	56	296	*1.7*	50	**CM110**		B5/B14
	47	347	*1.3*	60	**CM110**		B5/B14
	47	366	*2.1*	60		**CMP090/110**	B5/B14
	37	452	*1.5*	75		**CMP090/110**	B5/B14
	35	438	*0.9*	80	**CM110**		B5/B14
	31	516	*1.7*	90		**CMP090/110**	B5/B14
	23	662	*1.3*	120		**CMP090/110**	B5/B14
	19	783	*1.0*	150		**CMP090/110**	B5/B14
	16	900	*0.8*	180		**CMP090/110**	B5/B14
	47	347	*1.8*	60	**CM130**		B5
	35	432	*1.3*	80	**CM130**		B5
	28	525	*1.0*	100	**CM130**		B5
	23	653	*1.7*	120		**CMP090/130**	B5/B14
	19	805	*1.3*	150		**CMP090/130**	B5/B14
	16	927	*1.0*	180		**CMP090/130**	B5/B14
	12	1129	*0.8*	240		**CMP090/130**	B5/B14
100LA4 (1400 min^{-1})	**187**	100	*2.2*	7.5	**CM075**		B5/B14
	140	131	*1.8*	10	**CM075**		B5/B14
	93	189	*1.3*	15	**CM075**		B5/B14
	140	132	*2.7*	10	**CM090**		B5/B14
	93	194	*2.1*	15	**CM090**		B5/B14
	70	252	*1.5*	20	**CM090**		B5/B14
	56	311	*1.1*	25	**CM090**		B5/B14
	47	356	*1.3*	30	**CM090**		B5/B14
	70	255	*2.6*	20	**CM110**		B5/B14
	56	315	*2.0*	25	**CM110**		B5/B14
	47	360	*2.1*	30	**CM110**		B5/B14
	35	474	*1.5*	40	**CM110**		B5/B14
	28	570	*1.1*	50	**CM110**		B5/B14
	23	657	*0.9*	60	**CM110**		B5/B14
	35	456	*2.3*	40	**CM130**		B5
	28	563	*1.7*	50	**CM130**		B5
	23	657	*1.4*	60	**CM130**		B5
	18	828	*1.0*	80	**CM130**		B5
	14	960	*0.8*	100	**CM130**		B5

Dati tecnici

Technical data

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i			IEC
2.2							
112M6 (900 min^{-1})	**120**	154	*2.5*	7.5	**CM090**		B5/B14
	90	203	*2.0*	10	**CM090**		B5/B14
	60	294	*1.6*	15	**CM090**		B5/B14
	45	383	*1.2*	20	**CM090**		B5/B14
	36	467	*0.8*	25	**CM090**		B5/B14
	30	532	*1.0*	30	**CM090**		B5/B14
	45	388	*2,0*	20	**CM110**		B5/B14
	36	479	*1.5*	25	**CM110**		B5/B14
	30	546	*1.6*	30	**CM110**		B5/B14
	23	700	*1.2*	40	**CM110**		B5/B14
	18	829	*0.9*	50	**CM110**		B5/B14
	23	691	*1.6*	40	**CM130**		B5
	18	852	*1.2*	50	**CM130**		B5
	15	980	*1.0*	60	**CM130**		B5
3.0							
100LA2 (2800 min^{-1})	**373**	69	*2.3*	7.5	**CM075**		B5/B14
	280	91	*1.9*	10	**CM075**		B5/B14
	187	134	*1.4*	15	**CM075**		B5/B14
	187	135	*2.2*	15	**CM090**		B5/B14
	140	176	*1.6*	20	**CM090**		B5/B14
	112	217	*1.2*	25	**CM090**		B5/B14
	93	255	*1.4*	30	**CM090**		B5/B14
	112	220	*2.2*	25	**CM110**		B5/B14
	93	252	*2.3*	30	**CM110**		B5/B14
	70	332	*1.7*	40	**CM110**		B5/B14
	56	404	*1.3*	50	**CM110**		B5/B14
	47	473	*0.9*	60	**CM110**		B5/B14
	56	404	*1.7*	50	**CM130**		B5
	47	473	*1.3*	60	**CM130**		B5
	35	589	*0.9*	80	**CM130**		B5
100LB4 (1400 min^{-1})	**187**	137	*1.6*	7.5	**CM075**		B5/B14
	140	178	*1.3*	10	**CM075**		B5/B14
	93	258	*1.0*	15	**CM075**		B5/B14
	187	138	*2.3*	7.5	**CM090**		B5/B14
	140	180	*2.0*	10	**CM090**		B5/B14
	93	264	*1.5*	15	**CM090**		B5/B14
	70	344	*1.1*	20	**CM090**		B5/B14
	56	425	*0.8*	25	**CM090**		B5/B14
	47	485	*0.9*	30	**CM090**		B5/B14
	93	264	*2.6*	15	**CM110**		B5/B14
	70	348	*1.9*	20	**CM110**		B5/B14
	56	430	*1.4*	25	**CM110**		B5/B14
	47	491	*1.5*	30	**CM110**		B5/B14
	35	647	*1.1*	40	**CM110**		B5/B14
	28	778	*0.8*	50	**CM110**		B5/B14
	47	485	*2.2*	30	**CM130**		B5
	35	622	*1.7*	40	**CM130**		B5
	28	767	*1.3*	50	**CM130**		B5
	23	896	*1.0*	60	**CM130**		B5

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i			IEC
3.0							
132S6 (900 min^{-1})	**120**	210	*3.2*	7.5	**CM110**		B5/B14
	90	277	*2.6*	10	**CM110**		B5/B14
	60	401	*2.0*	15	**CM110**		B5/B14
	45	528	*1.4*	20	**CM110**		B5/B14
	36	653	*1.1*	25	**CM110**		B5/B14
	45	522	*2.0*	20	**CM130**		
	36	645	*1.6*	25	**CM130**		B5/B14
	30	735	*1.6*	30	**CM130**		B5/B14
	23	942	*1.2*	40	**CM130**		B5/B14
4.0							
112M2 (2800 min^{-1})	**373**	92	*1.7*	7.5	**CM075**		B5/B14
	280	121	*1.4*	10	**CM075**		B5/B14
	187	178	*1.0*	15	**CM075**		B5/B14
	280	123	*2.1*	10	**CM090**		B5/B14
	187	180	*1.7*	15	**CM090**		B5/B14
	140	235	*1.2*	20	**CM090**		B5/B14
	140	237	*2.1*	20	**CM110**		B5/B14
	112	293	*1.6*	25	**CM110**		B5/B14
	93	336	*1.8*	30	**CM110**		B5/B14
	70	442	*1.3*	40	**CM110**		B5/B14
	56	539	*0.9*	50	**CM110**		B5/B14
112M4 (1400 min^{-1})	**187**	182	*1.2*	7.5	**CM075**		B5/B14
	140	237	*1.0*	10	**CM075**		B5/B14
	187	184	*1.7*	7.5	**CM090**		B5/B14
	140	240	*1.5*	10	**CM090**		B5/B14
	93	352	*1.1*	15	**CM090**		B5/B14
	70	458	*0.8*	20	**CM090**		B5/B14
	140	240	*2.6*	10	**CM110**		B5/B14
	93	352	*1.9*	15	**CM110**		B5/B14
	70	464	*1.4*	20	**CM110**		B5/B14
	56	573	*1.1*	25	**CM110**		B5/B14
	47	655	*1.2*	30	**CM110**		B5/B14
	35	862	*0.8*	40	**CM110**		B5/B14
	70	458	*2.0*	20	**CM130**		B5
	56	566	*1.6*	25	**CM130**		B5
	47	647	*1.6*	30	**CM130**		B5
	35	829	*1.3*	40	**CM130**		B5
	28	1023	*0.9*	50	**CM130**		B5
132L6 (900 min^{-1})	**120**	280	*2.4*	7.5	**CM110**		B5/B14
	90	369	*2.0*	10	**CM110**		B5/B14
	60	535	*1.5*	15	**CM110**		B5/B14
	45	705	*1.1*	20	**CM110**		B5/B14
	45	696	*1.5*	20	**CM130**		B5/B14
	36	860	*1.2*	25	**CM130**		B5/B14
	30	980	*1.2*	30	**CM130**		B5/B14

Dati tecnici

Technical data

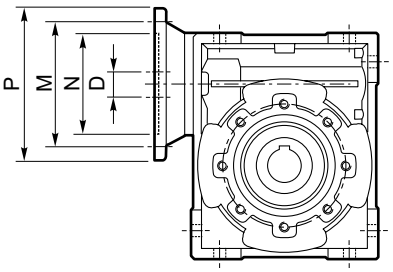
P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i			IEC
5.5							
132SA2	**373**	127	*3.2*	7.5	**CM110**		B5/B14
(2800 min^{-1})	**280**	167	*2.7*	10	**CM110**		B5/B14
	187	248	*2.0*	15	**CM110**		B5/B14
	140	326	*1.5*	20	**CM110**		B5/B14
	112	403	*1.2*	25	**CM110**		B5/B14
	140	326	*2.1*	20	**CM130**		B5/B14
	112	403	*1.6*	25	**CM130**		B5/B14
	93	461	*1.7*	30	**CM130**		B5/B14
	70	600	*1.3*	40	**CM130**		B5/B14
132S4	**187**	250	*2.2*	7.5	**CM110**		B5/B14
(1400 min^{-1})	**140**	330	*1.9*	10	**CM110**		B5/B14
	93	484	*1.4*	15	**CM110**		B5/B14
	70	638	*1.0*	20	**CM110**		B5/B14
	56	788	*0.8*	25	**CM110**		B5/B14
	187	250	*3.0*	7.5	**CM130**		B5/B14
	140	330	*2.5*	10	**CM130**		B5/B14
	93	484	*1.9*	15	**CM130**		B5/B14
	70	630	*1.4*	20	**CM130**		B5/B14
	56	778	*1.2*	25	**CM130**		B5/B14
	47	889	*1.2*	30	**CM130**		B5/B14
	35	1141	*0.9*	40	**CM130**		B5/B14

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i			IEC
7.5							
132SB2	**373**	173	*2.4*	7.5	**CM110**		B5/B14
(2800 min^{-1})	**280**	228	*2.0*	10	**CM110**		B5/B14
	187	338	*1.5*	15	**CM110**		B5/B14
	140	445	*1.1*	20	**CM110**		B5/B14
	112	550	*0.9*	25	**CM110**		B5/B14
	187	338	*2.1*	15	**CM130**		B5/B14
	140	445	*1.5*	20	**CM130**		B5/B14
	112	550	*1.2*	25	**CM130**		B5/B14
	93	629	*1.3*	30	**CM130**		B5/B14
	70	819	*0.9*	40	**CM130**		B5/B14
132MA4	**187**	341	*1.6*	7.5	**CM110**		B5/B14
(1400 min^{-1})	**140**	450	*1.4*	10	**CM110**		B5/B14
	93	660	*1.0*	15	**CM110**		B5/B14
	70	870	*0.8*	20	**CM110**		B5/B14
	187	341	*2.2*	7.5	**CM130**		B5/B14
	140	450	*1.8*	10	**CM130**		B5/B14
	93	660	*1.4*	15	**CM130**		B5/B14
	70	860	*1.1*	20	**CM130**		B5/B14
	56	1062	*0.9*	25	**CM130**		B5/B14
	47	1213	*0.9*	30	**CM130**		B5/B14

Motori applicabili

IEC Motor adapters

	IEC	N	M	P	D	i											
						5	7.5	10	15	20	25	30	40	50	60	80	100
CM026	**56B14**	50	65	80	9												
CM030	**63B5**	95	115	140	11												
	63B14	60	75	90													
	56B5	80	100	120	9	**B**	**B**	**B**	**B**	**B**	**B**	**B**	**B**	**B**			
	56B14	50	65	80													
CM040	**71B5**	110	130	160	14												
	71B14	70	85	105													
	63B5	95	115	140	11	**B**	**B**	**B**	**B**	**B**	**B**	**B**	**B**				
	63B14	60	75	90													
	56B5	80	100	120	9	**BS**	**BS**	**BS**	**BS**	**BS**	**BS**	**BS**	**BS**	**B**	**B**	**B**	**B**
	56B14	50	65	80													
CM050	**80B5**	130	165	200	19												
	80B14	80	100	120													
	71B5	110	130	160	14	**B**	**B**	**B**	**B**	**B**	**B**	**B**					
	71B14	70	85	105													
	63B5	95	115	140	11	**BS**	**BS**	**BS**	**BS**	**BS**	**BS**	**BS**	**B**	**B**	**B**	**B**	
	63B14	60	75	90													
CM063	**90B5**	130	165	200	24												
	90B14	95	115	140													
	80B5	130	165	200	19	**B**	**B**	**B**	**B**	**B**	**B**	**B**					
	80B14	80	100	120													
	71B5	110	130	160	14	**BS**	**BS**	**BS**	**BS**	**BS**	**BS**	**BS**	**B**	**B**	**B**		
	71B14	70	85	105													
	63B5	95	115	140	11								**BS**	**BS**	**BS**	**B**	**B**
CM075	**100/112B5**	180	215	250	28												
	100/112B14	110	130	160													
	90B5	130	165	200	24		**B**	**B**	**B**								
	90B14	95	115	140													
	80B5	130	165	200	19		**BS**	**BS**	**BS**	**B**	**B**	**B**	**B**				
	80B14	80	100	120													
	71B5	110	130	160	14					**BS**	**BS**	**BS**	**BS**	**B**	**B**	**B**	**B**
CM090	**100/112B5**	180	215	250	28												
	100/112B14	110	130	160													
	90B5	130	165	200	24		**B**	**B**	**B**	**B**	**B**	**B**					
	90B14	95	115	140													
	80B5	130	165	200	19		**BS**	**BS**	**BS**	**BS**	**BS**	**BS**	**B**	**B**	**B**		
	80B14	80	100	120													
	71B5	110	130	160	14								**BS**	**BS**	**BS**	**B**	**B**
CM110	**132B5**	230	265	300	38												
	132B14	130	165	200													
	100/112B5	180	215	250	28		**B**	**B**	**B**	**B**	**B**						
	100/112B14	110	130	160													
	90B5	130	165	200	24		**BS**	**BS**	**BS**	**BS**	**BS**	**B**	**B**	**B**	**B**		
	90B14	95	115	140													
	80B5	130	165	200	19							**BS**	**BS**	**BS**	**BS**	**B**	**B**
CM130	**132B5**	230	265	300	38												
	132B14	130	165	200													
	100/112B5	180	215	250	28		**B**	**B**	**B**	**B**	**B**	**B**	**B**				
	90B5	130	165	200	24		**BS**	**BS**	**BS**	**BS**	**BS**	**BS**	**BS**	**B**	**B**	**B**	**B**
	80B5	130	165	200	19									**BS**	**BS**	**BS**	**BS**



N.B.

Le aree evidenziate in grigio indicano l'applicabilità della corrispondente grandezza motore.

N.B. Grey areas indicate motor inputs available on each size of unit.

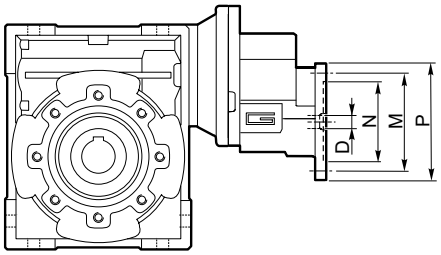
B/BS = Boccola di riduzione in acciaio

B/BS = Metal shaft sleeve

Nota: flange Nema disponibili a richiesta
Note: Nema flange available on demand

Motori applicabili

IEC Motor adapters



CMP	IEC	N	M	P	D	i (i_1 x i_2)							
						60 (3x20)	**75** (3x25)	**90** (3x30)	**120** (3x40)	**150** (3x50)	**180** (3x60)	**240** (3x80)	**300** (3x100)
056/030	56 B14	50	65	80	9								
056/040						**B**	**B**	**B**	**B**				
063/040	63 B14	60	75	90	11								
063/050						**B**	**B**	**B**					
063/063						**BS**	**BS**	**BS**	**B**	**B**	**B**		
071/050	71 B14	70	85	105	14								
071/063						**B**	**B**	**B**					
071/075						**B**	**B**	**B**	**B**				
071/090						**BS**	**BS**	**BS**	**B**	**B**	**B**		
080/063	80 B14	80	100	120	19								
080/075													
080/090						**B**	**B**	**B**					
080/110						**BS**	**BS**	**B**	**B**	**B**	**B**		
080/130						**BS**	**BS**	**BS**	**BS**	**B**	**B**	**B**	**B**
090/075	90 B14 90 B5	95 130	115 165	140 200	24								
090/090						**B**	**B**	**B**					
090/110						**BS**	**BS**	**B**	**B**	**B**	**B**		
090/130						**BS**	**BS**	**BS**	**BS**	**B**	**B**	**B**	**B**

N.B.

Le aree evidenziate in grigio indicano l'applicabilità della corrispondente grandezza motore.

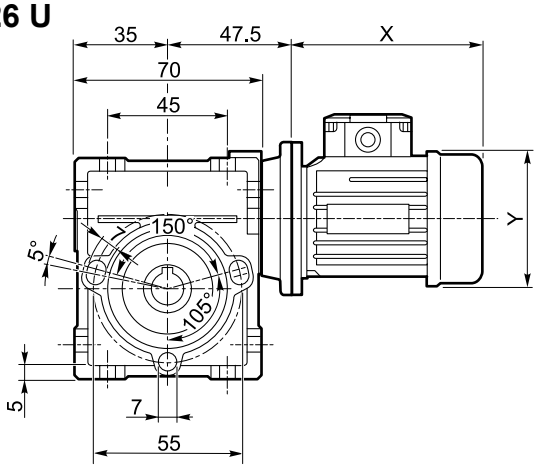
N.B. *Grey areas indicate motor inputs available on each size of unit.*

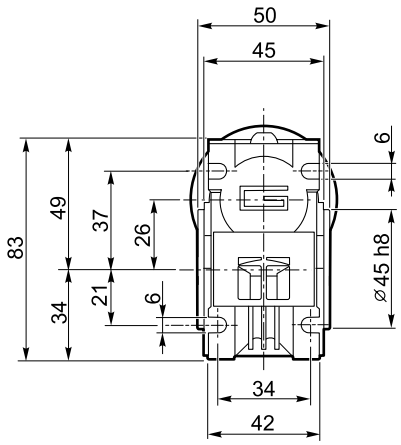
B/BS = Boccola di riduzione in acciaio

B/BS = Metal shaft sleeve

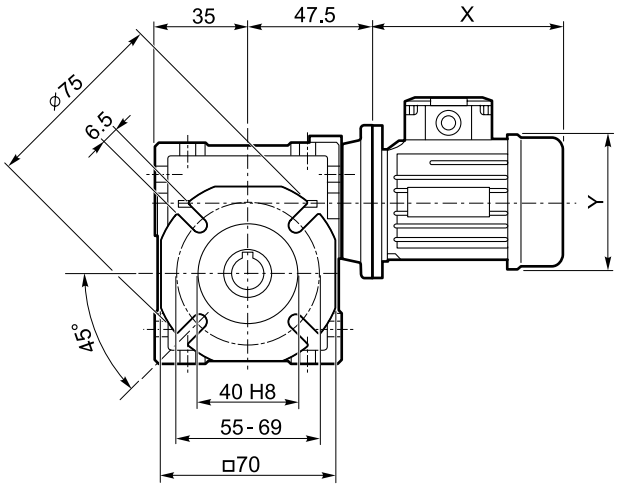
Dimensioni *Dimensions*

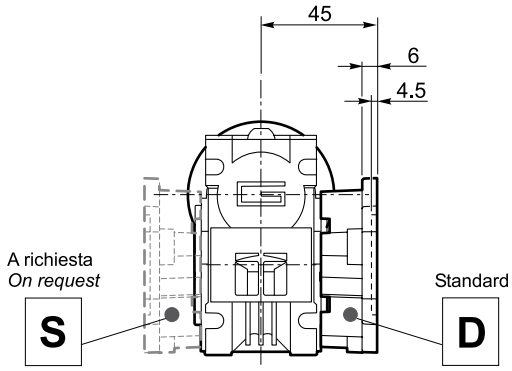
CM 026 U





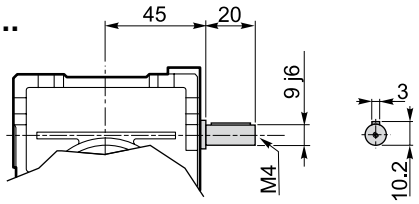
CM 026 F

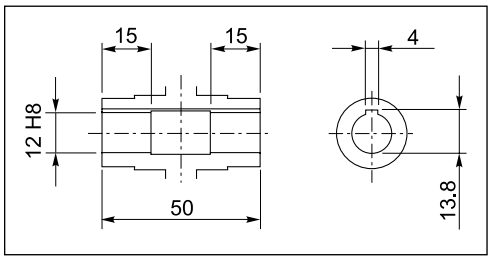




Kg
0.8

CMIS 026 ..

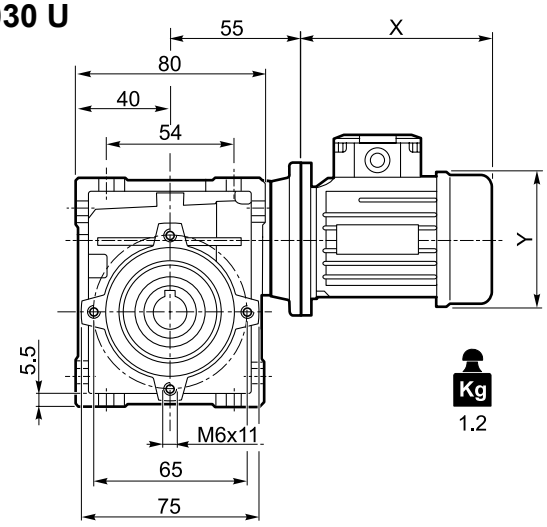


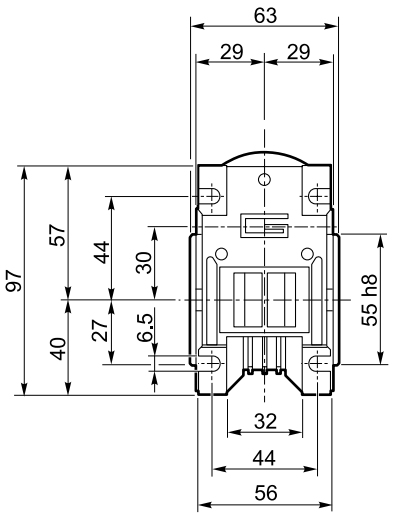


Albero lento cavo / *Hollow output shaft*

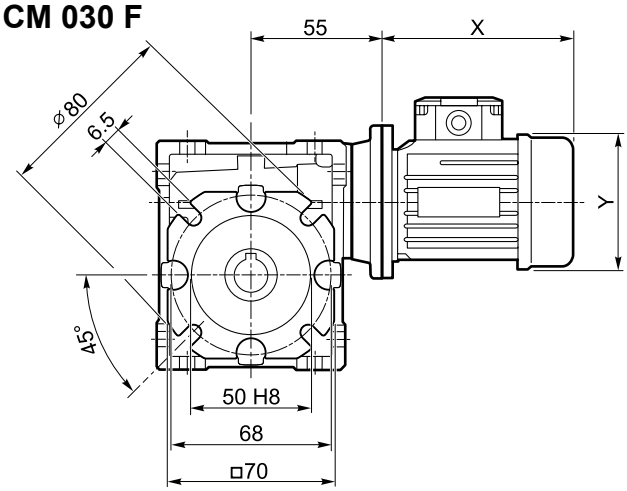
Dimensioni — *Dimensions*

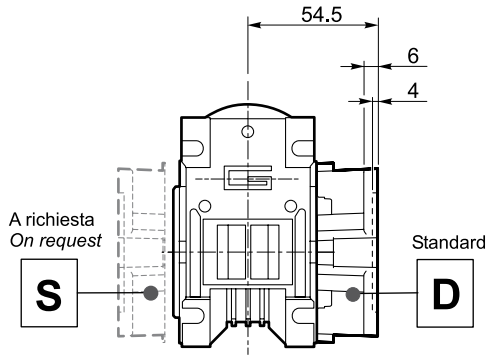
CM 030 U

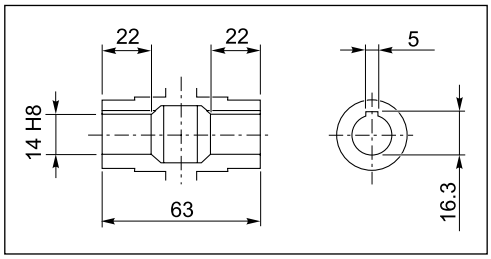




CM 030 F

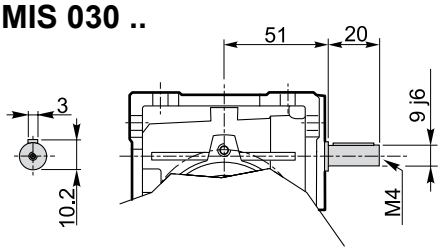




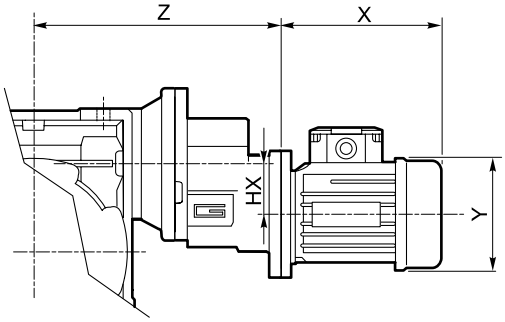


Albero lento cavo / *Hollow output shaft*

CMIS 030 ..



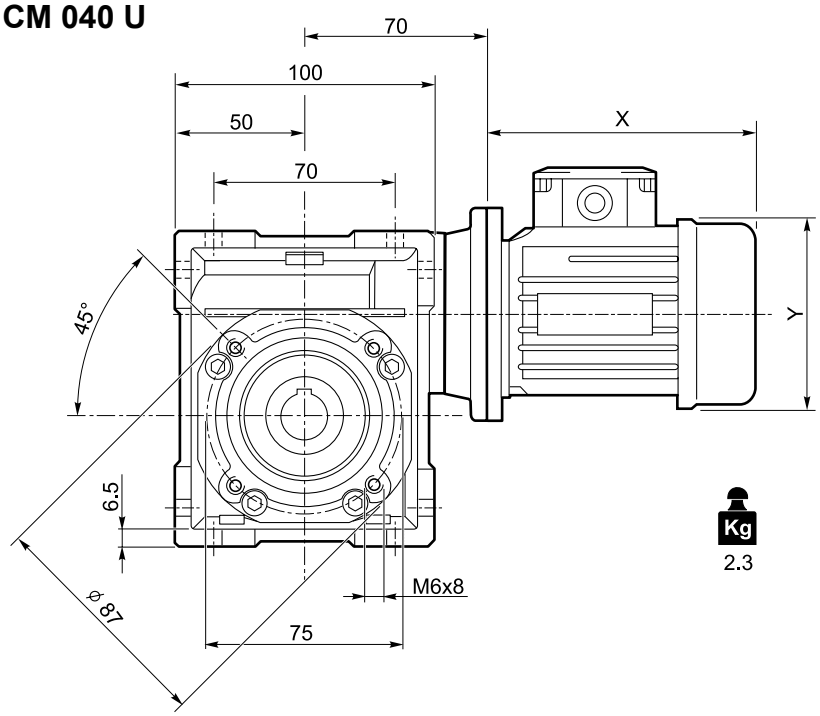
CMP ..

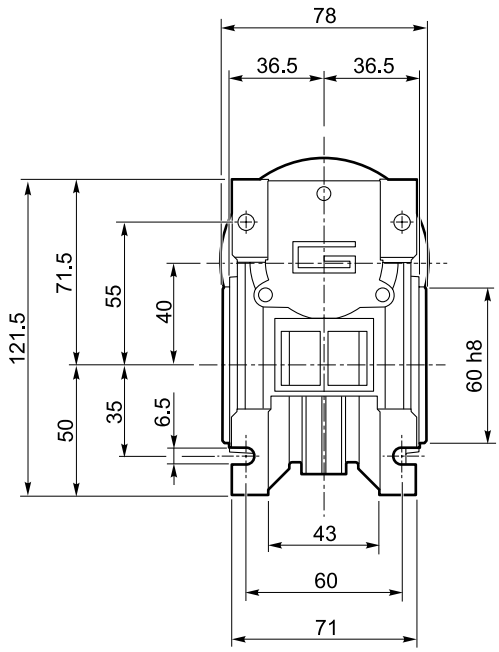


	HX	Z	Kg
056/030	30.5	124	2.1

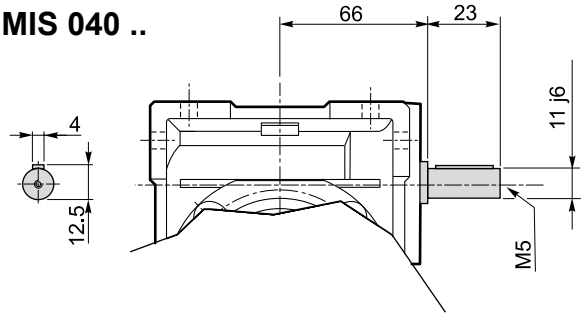
Dimensioni ***Dimensions***

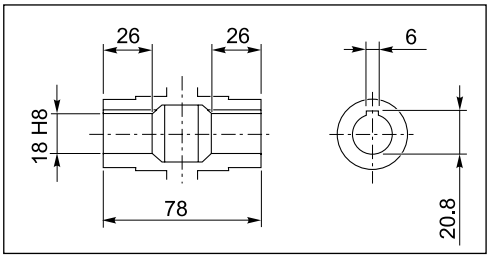
CM 040 U





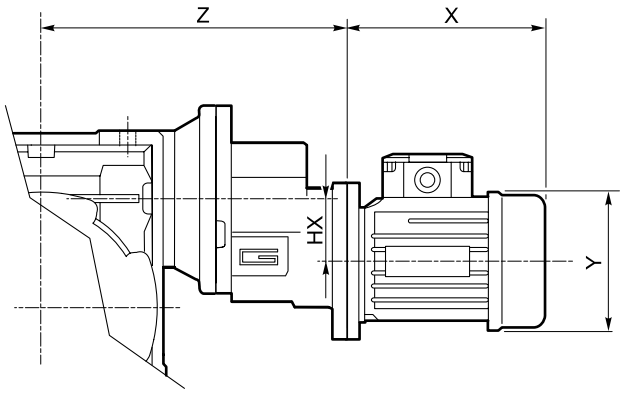
CMIS 040 ..





Albero lento cavo / *Hollow output shaft*

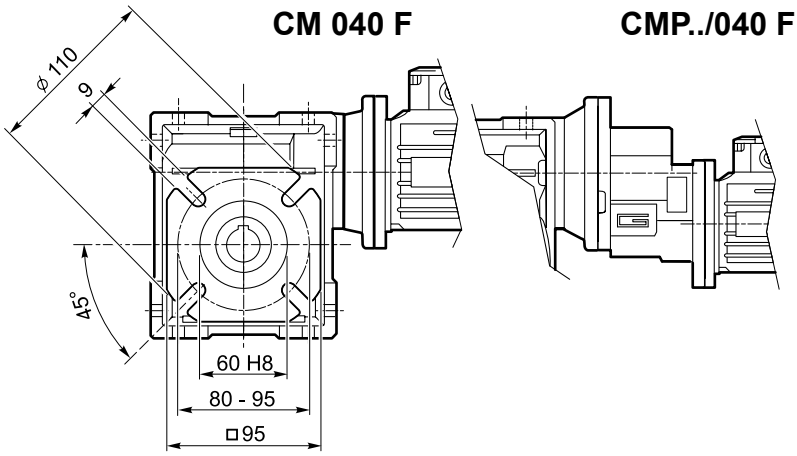
CMP ..

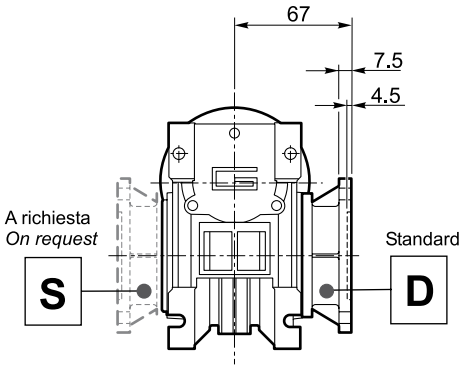


	HX	Z	Kg
056/040	30.5	139	3.2
063/040	30.5	142	3.3

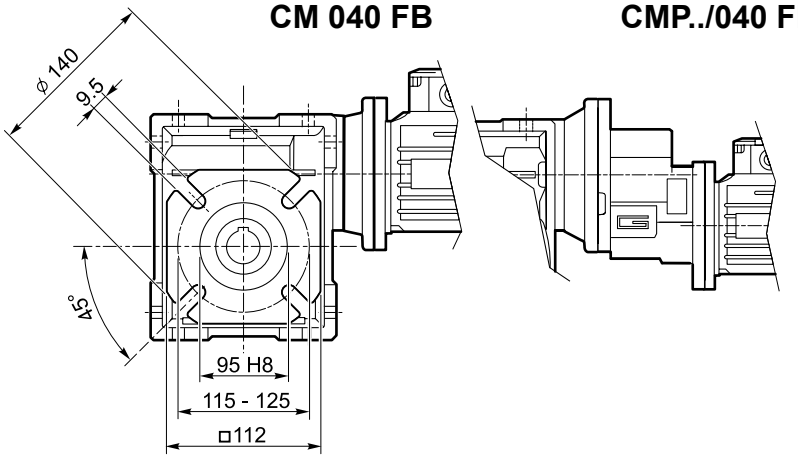
Dimensioni — *Dimensions*

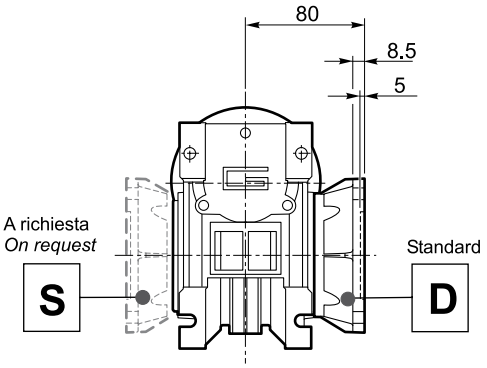
CM 040 F — CMP../040 F



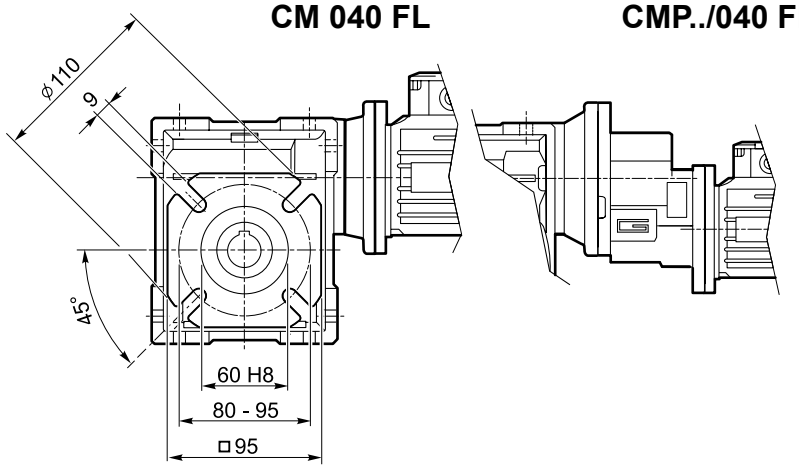


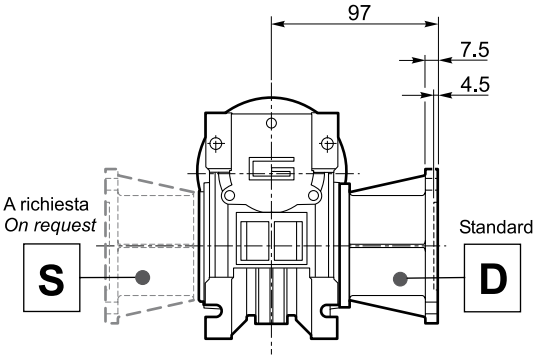
CM 040 FB — CMP../040 FB





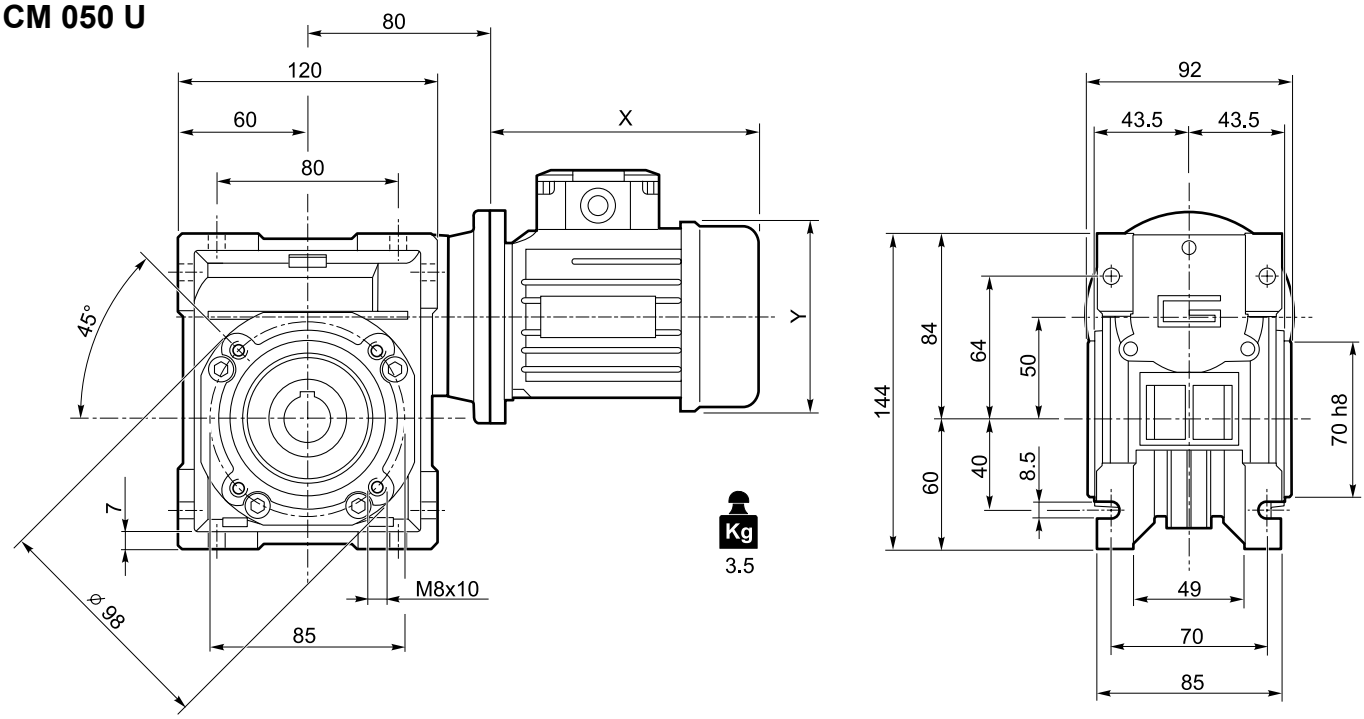
CM 040 FL — CMP../040 FL



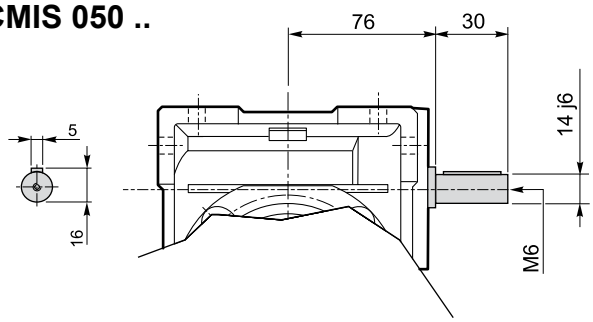


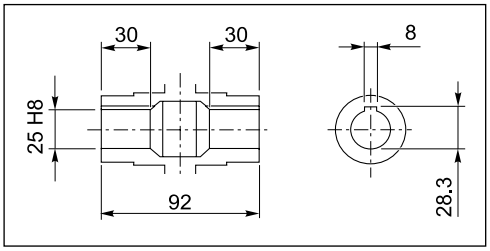
Dimensioni *Dimensions*

CM 050 U



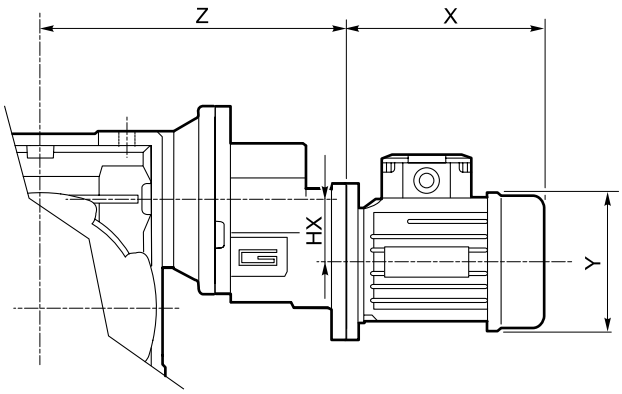
CMIS 050 ..





Albero lento cavo / *Hollow output shaft*

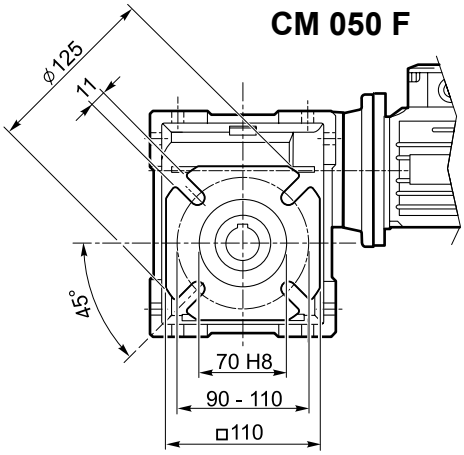
CMP ..



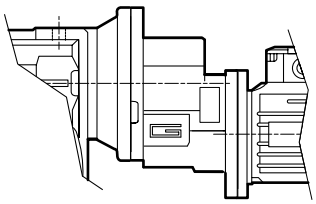
	HX	Z	Kg
063/050	30.5	152	4.5
071/050	41	169	5.5

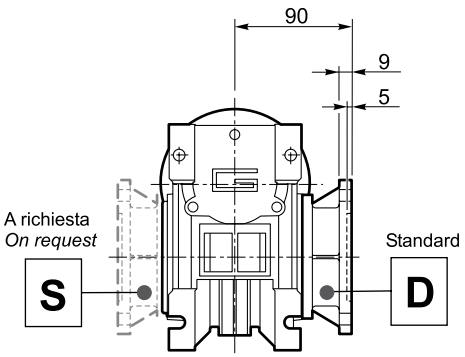
Dimensioni *Dimensions*

CM 050 F

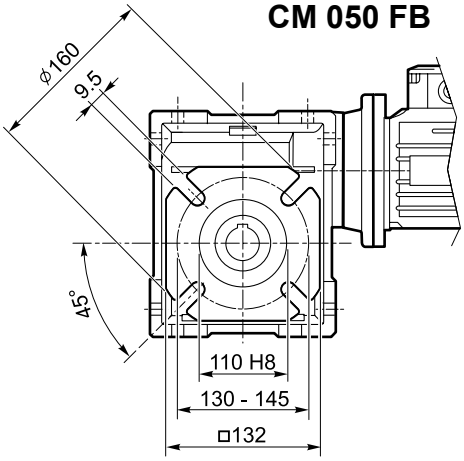


CMP../050 F

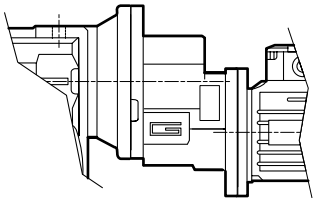


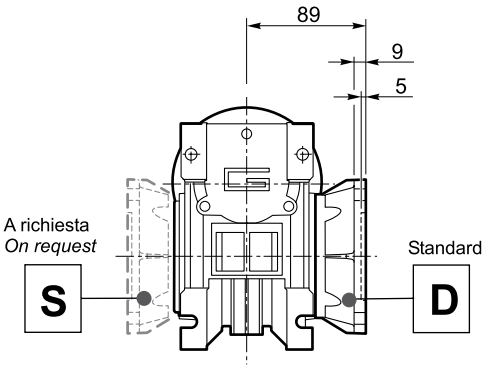


CM 050 FB

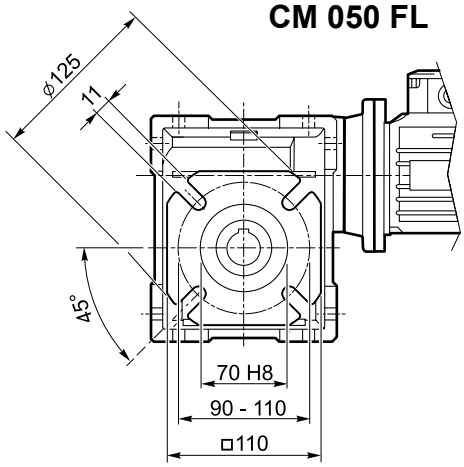


CMP../050 FB

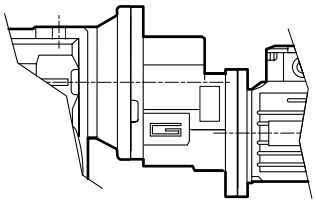


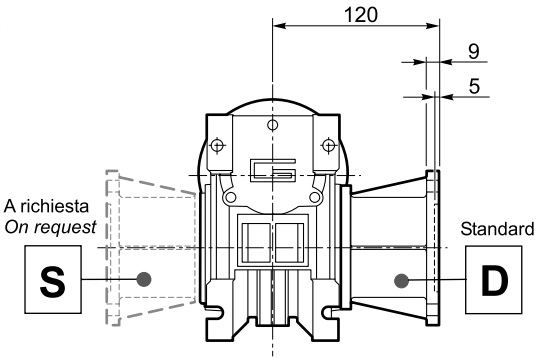


CM 050 FL



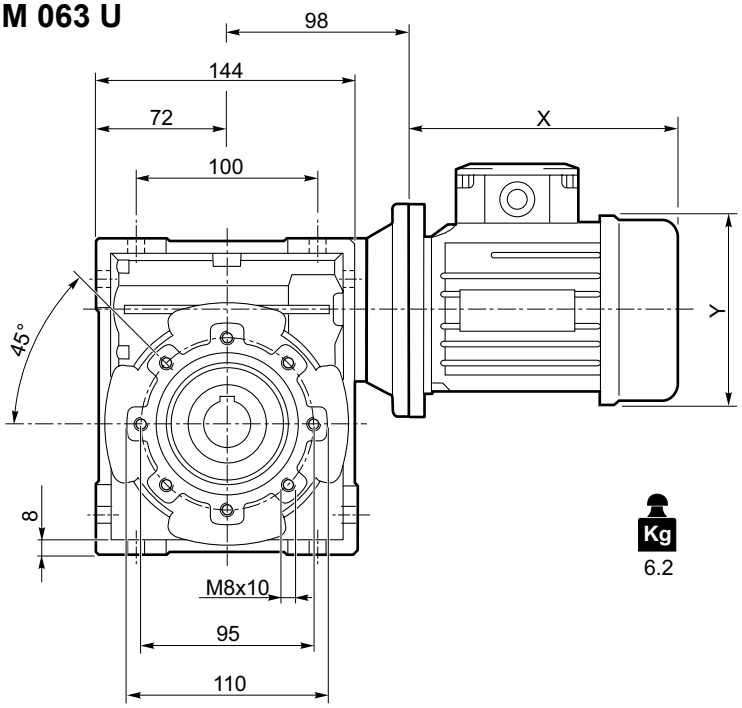
CMP../050 FL

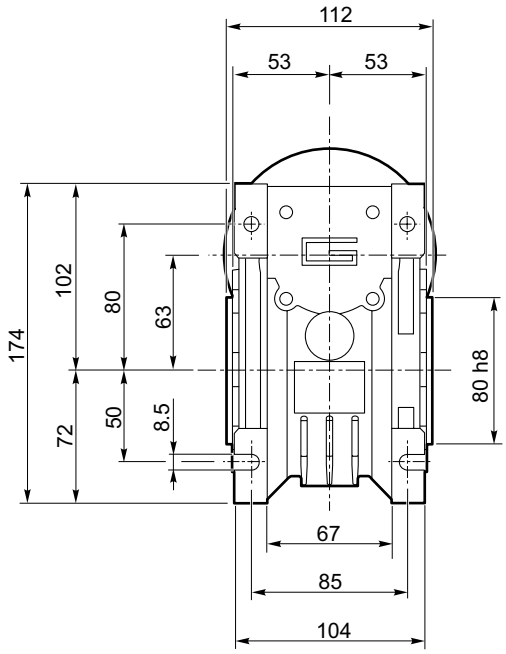




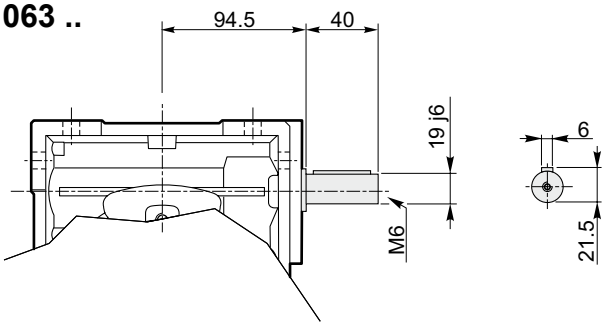
Dimensioni ***Dimensions***

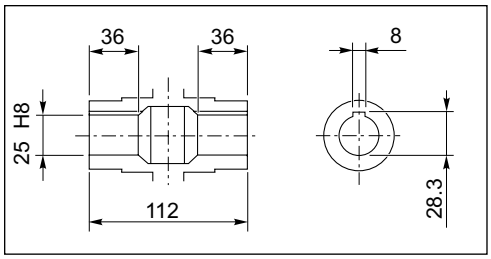
CM 063 U





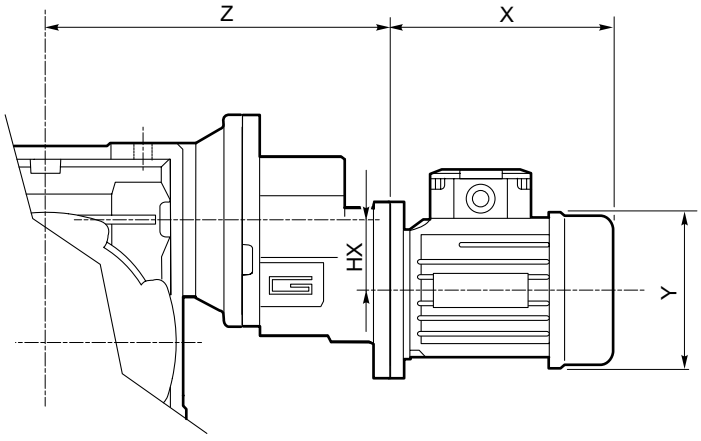
CMIS 063 ..





Albero lento cavo / *Hollow output shaft*

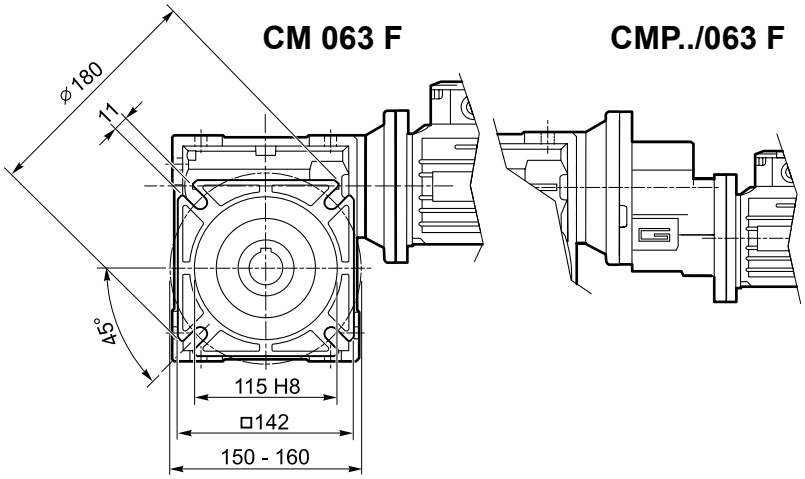
CMP ..

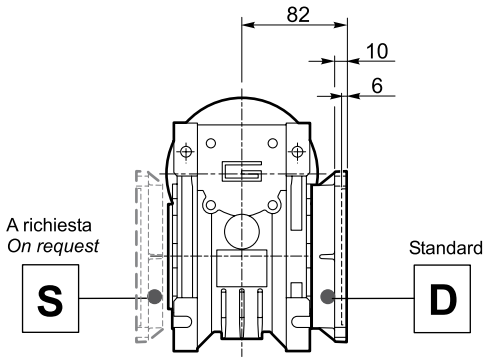


	HX	Z	Kg
063/063	30.5	170	7.2
071/063	41	187	8.2
080/063	41	198	9.0

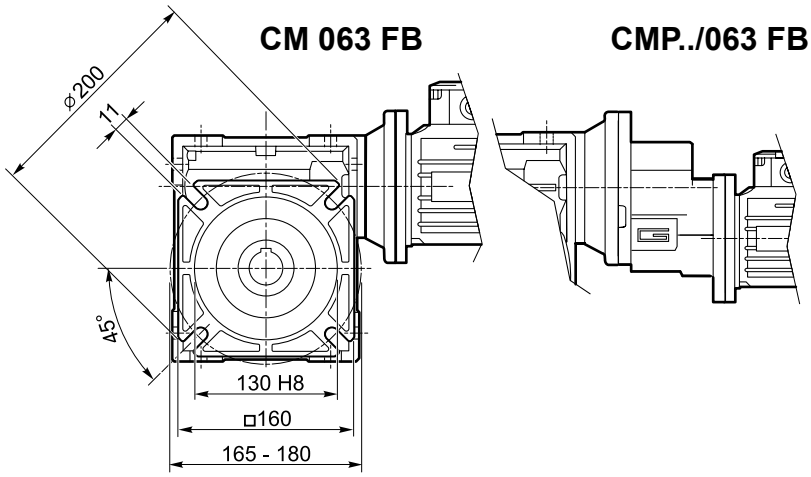
Dimensioni — *Dimensions*

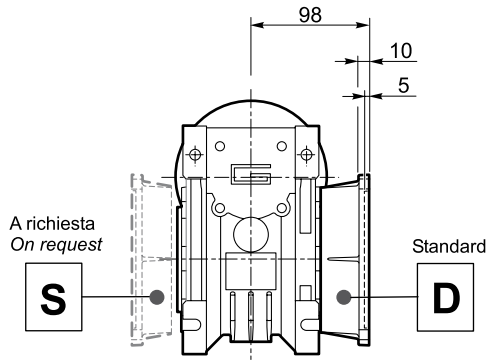
CM 063 F — CMP../063 F



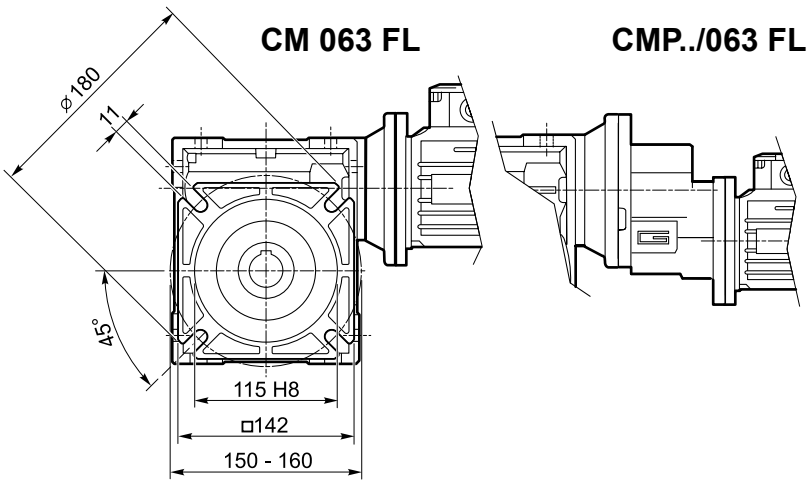


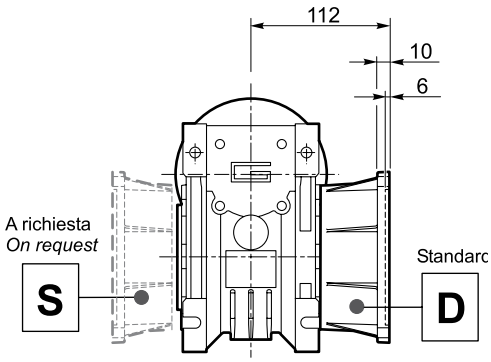
CM 063 FB — CMP../063 FB





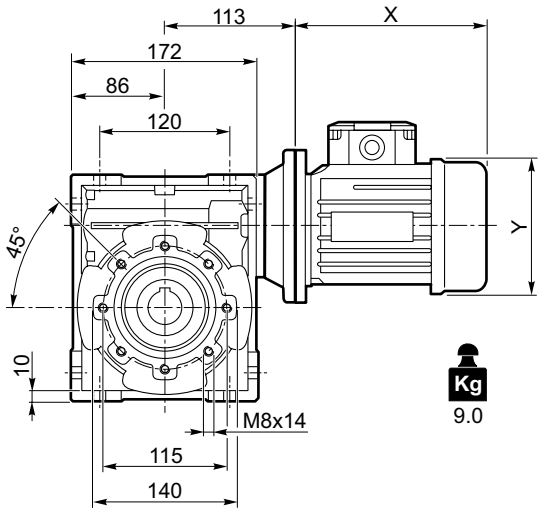
CM 063 FL — CMP../063 FL

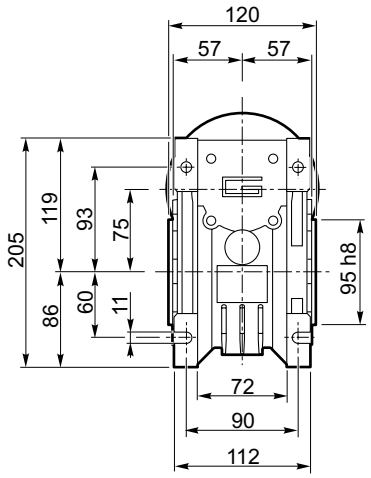




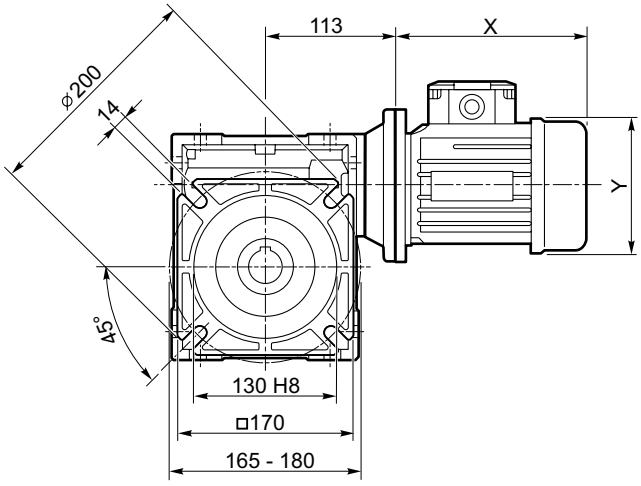
Dimensioni *Dimensions*

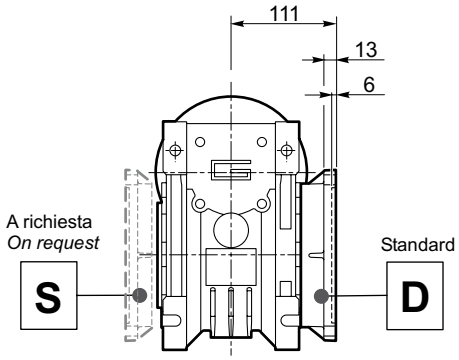
CM 075 U



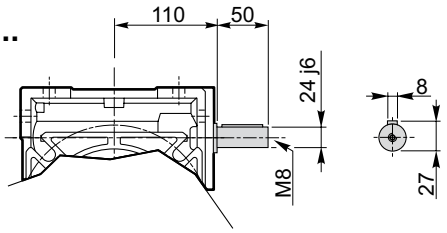


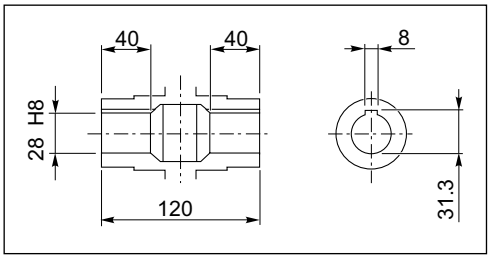
CM 075 F





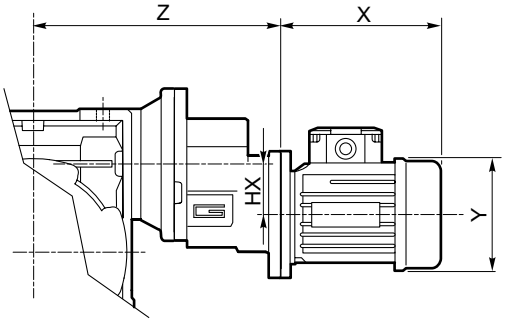
CMIS 075 ..





Albero lento cavo / *Hollow output shaft*

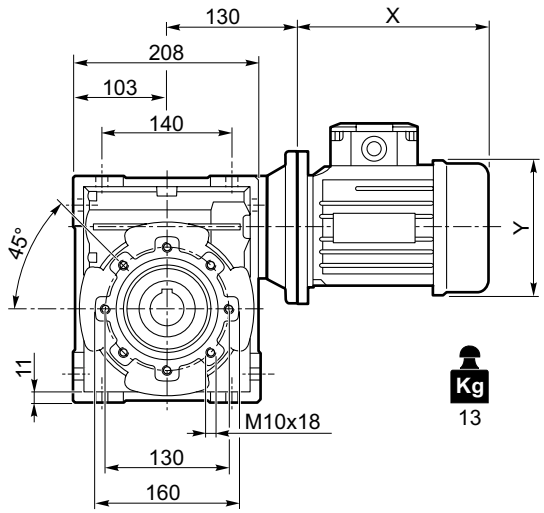
CMP ..

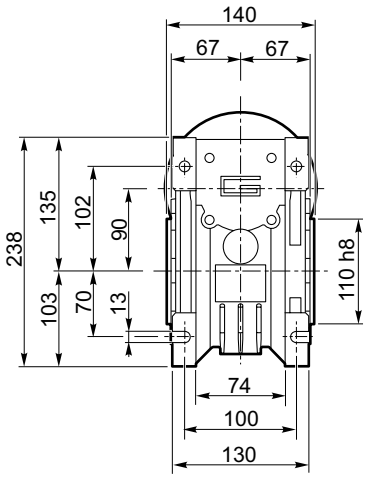


	HX	Z	Kg
071/075	41	202	11.0
080/075	41	213	11.8
090/075	36.5	267	12.5

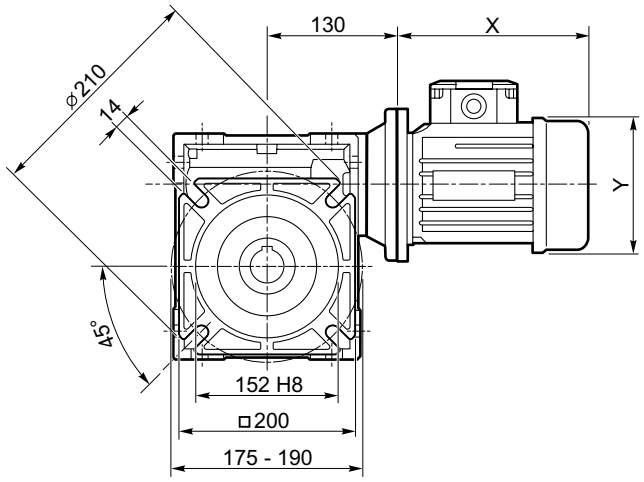
Dimensioni *Dimensions*

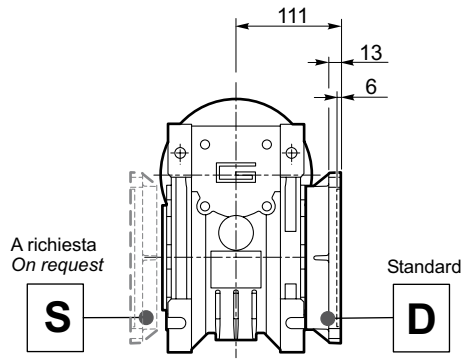
CM 090 U



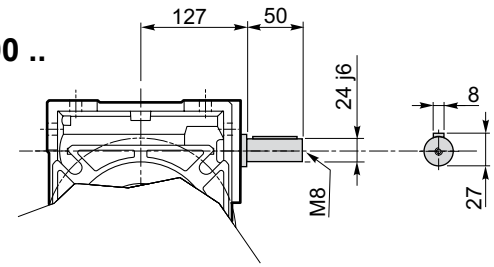


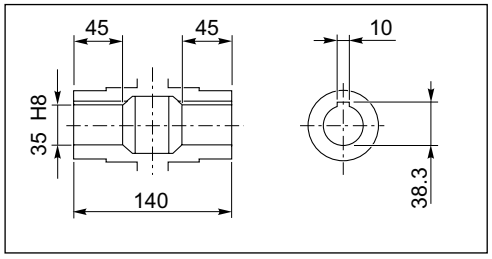
CM 090 F





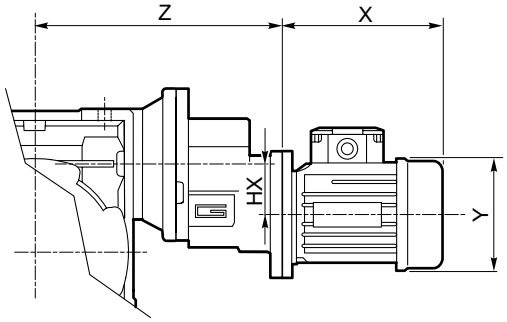
CMIS 090 ..





Albero lento cavo / *Hollow output shaft*

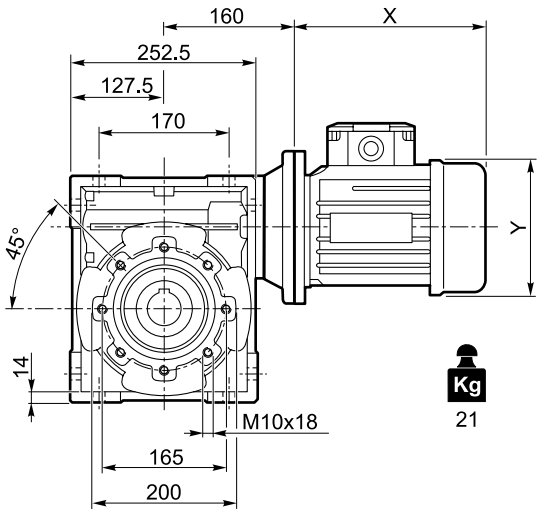
CMP ..

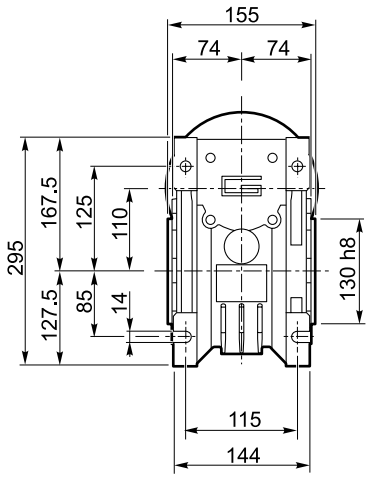


	HX	Z	Kg
071/090	41	219	15.0
080/090	41	230	15.8
090/090	36.5	284	16.5

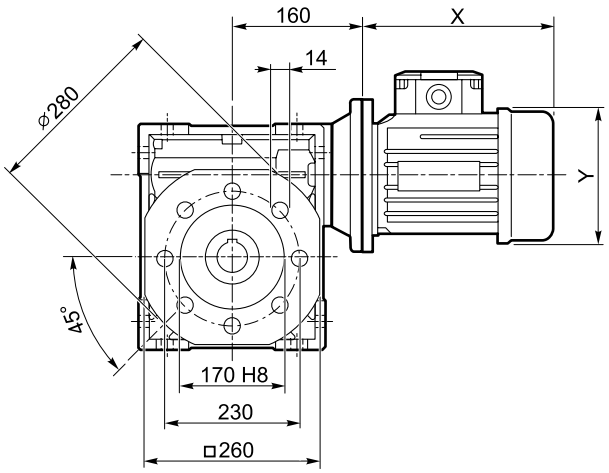
Dimensioni ***Dimensions***

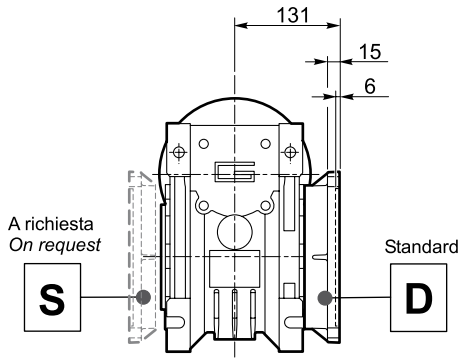
CM 110 U



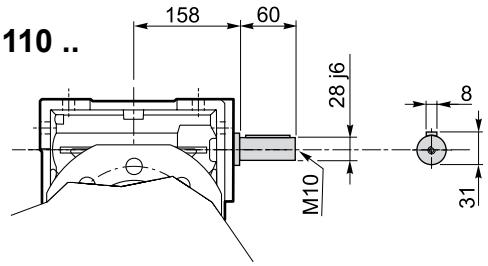


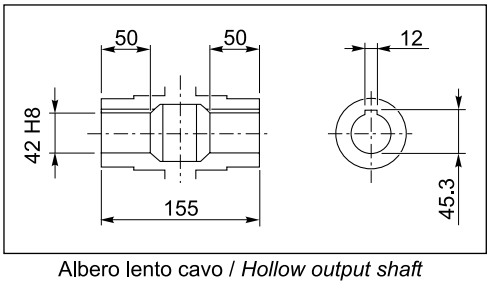
CM 110 F





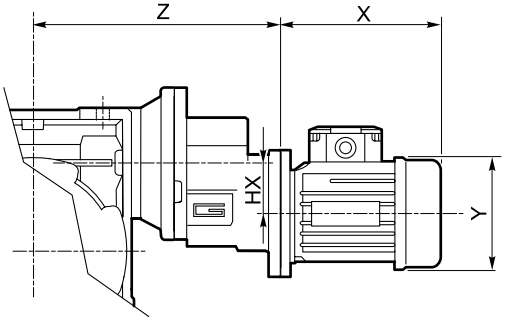
CMIS 110 ..





Albero lento cavo / *Hollow output shaft*

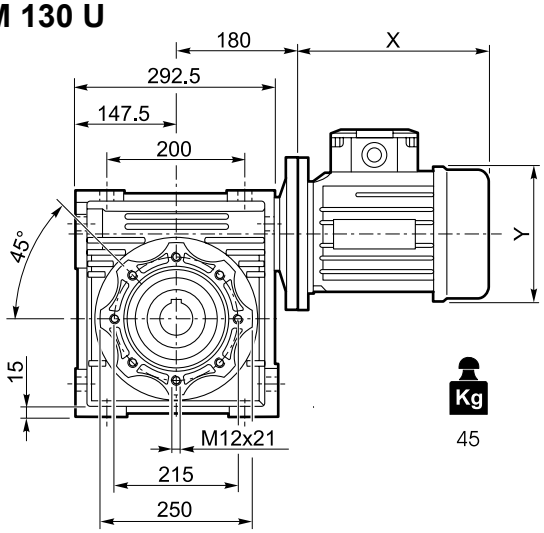
CMP ..

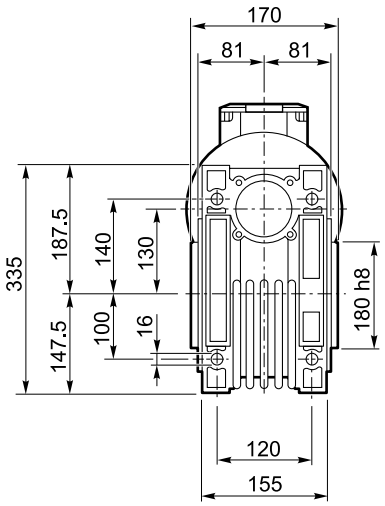


	HX	Z	Kg
080/110	41	260	23.8
090/110	36.5	314	24.5

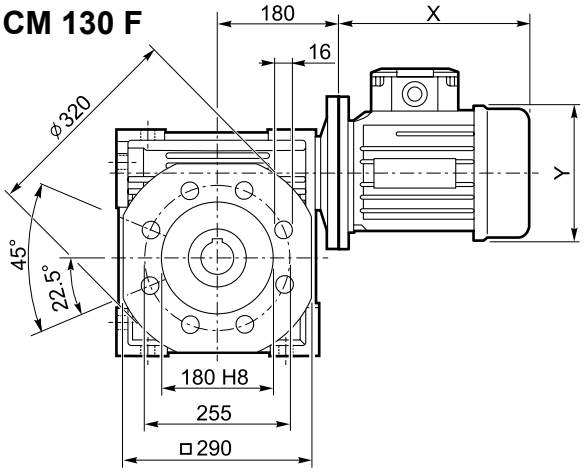
Dimensioni | ***Dimensions***

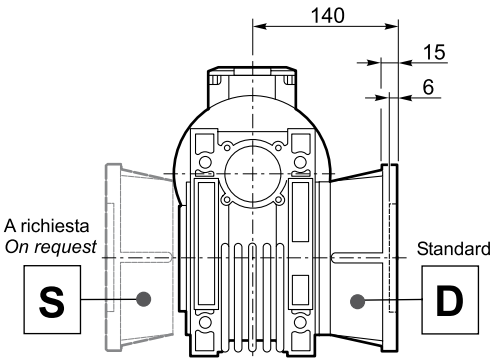
CM 130 U

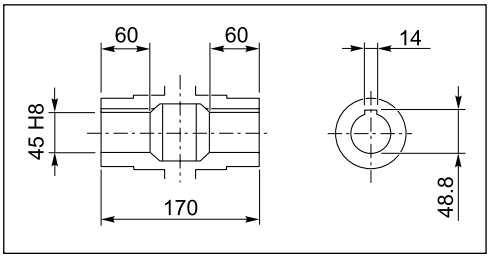




CM 130 F

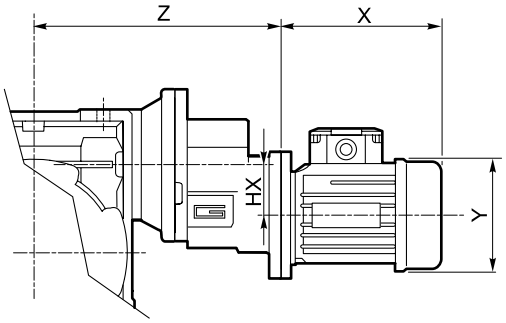






Albero lento cavo / *Hollow output shaft*

CMP ..

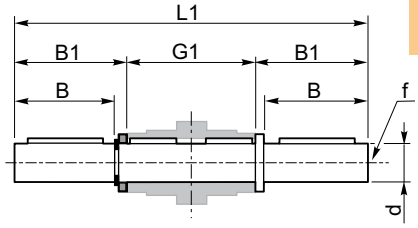


	HX	Z	Kg
080/130	41	280	47.8
090/130	36.5	334	48.5

Accessori — *Accessories*

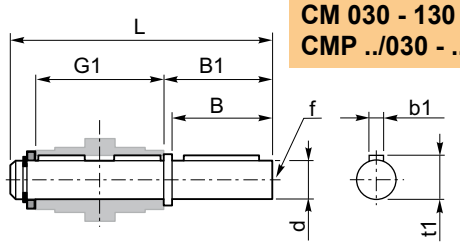
Albero lento semplice e doppio — *Single and double output shaft*

DZ



CM 030 - 130
CMP ../030 - ../130

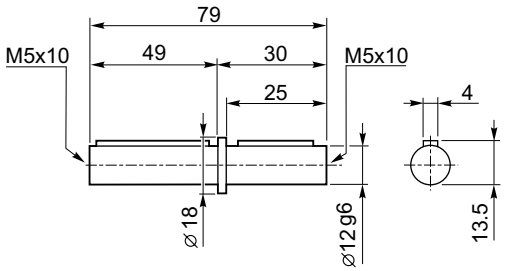
SZ



CM 030 - 130
CMP ../030 - ../130

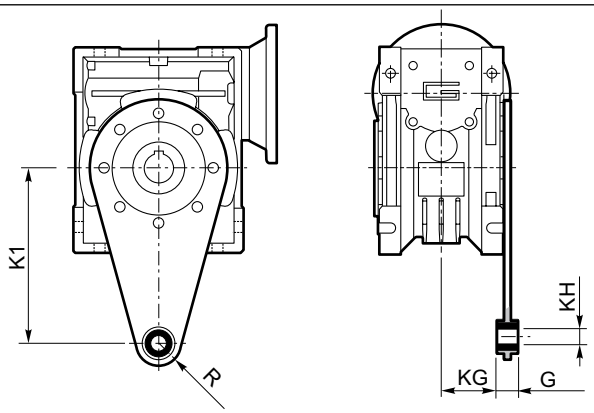
CM	CMP	d h7	B	B1	G1	L	L1	f	b1	t1
030	056/030	14	30	32.5	63	102	128	M6	5	16
040	056/040 063/040	18	40	43	78	128	164	M6	6	20.5
050	063/050 071/050	25	50	53.5	92	153	199	M10	8	28
063	063/063 071/063 080/063	25	50	53.5	112	173	219	M10	8	28
075	071/075 080/075 090/075	28	60	63.5	120	192	247	M10	8	31
090	071/090 080/090 090/090	35	80	84.5	140	234	309	M12	10	38
110	080/110 090/110	42	80	84.5	155	249	324	M16	12	45
130	080/130 090/130	45	80	85	170	265	340	M16	14	48.5

CM 026



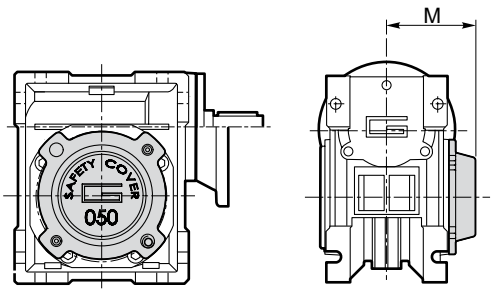
Braccio di reazione — *Torque arm*

CM	CMP	K1	G	KG	KH	R
030	056/030	85	14	23	8	15
040	056/040 063/040	100	14	31	10	18
050	063/050 071/050	100	14	38	10	18
063	063/063 071/063 080/063	150	14	47.5	10	18
075	071/075 080/075 090/075	200	25	46.5	20	30
090	071/090 080/090 090/090	200	25	56.5	20	30
110	080/110 090/110	250	30	62	25	35
130	080/130 090/130	250	30	69	25	35



SC - *Safety Cover*

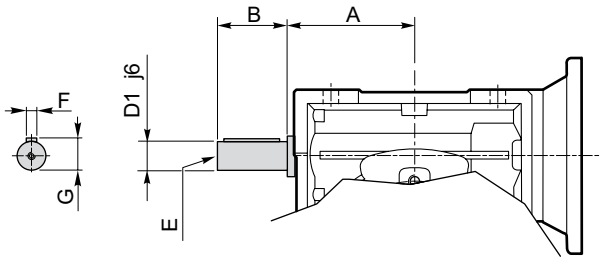
CM	CMP	M
030	056/030	47
040	056/040 063/040	54.5
050	063/050 071/050	62.5
063	063/063 071/063 080/063	73
075	071/075 080/075 090/075	79
090	071/090 080/090 090/090	94
110	080/110 090/110	102
130	080/130 090/130	117



Opzioni — *Options*

VS - Vite sporgente / *Extended input shaft*

CM	CMP	A	B	D_1 j6	E	F	G
030	056/030	45	20	9	M4	3	10.2
040	056/040 063/040	53	23	11	M5	4	12.5
050	063/050 071/050	64	30	14	M6	5	16
063	063/063 071/063 080/063	75	40	19	M6	6	21.5
075	071/075 080/075 090/075	90	50	24	M8	8	27
090	071/090 080/090 090/090	108	50	24	M8	8	27
110	080/110 090/110	135	60	28	M10	8	31
130	080/130 090/130	—	—	—	—	—	—



Note/*Notes*

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CMM

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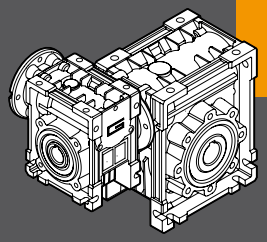
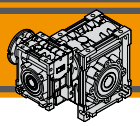


RIDUTTORI COMBINATI A VITE SENZA FINE

COMBINATION WORMGEARBOXES

TRANSTECNO · GENUINE · PRODUCTS ·



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Simbologia	*Symbols*	**E2**
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Dati tecnici	*Technical data*	**E4**
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Caratteristiche tecniche — *Technical features*

I riduttori combinati a vite senza fine della serie CMM hanno le seguenti caratteristiche principali :

- Carcassa in alluminio nelle grandezze 026, 030, 040, 050, 063, 075, 090 e 110. La grandezza 130 è costruita con carcassa in ghisa;
- Le grandezze 090, 110 e 130 sono fornite con cuscinetti a rulli conici sulla vite;
- Lubrificazione permanente con olio sintetico.

CMM range combination gearboxes have the following main features:

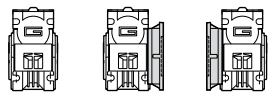
- Die-cast aluminum housing on sizes 026, 030, 040, 050, 063, 075, 090 and 110. Cast iron housing on size 130;
- Double taper roller bearing on sizes 090, 110 and 130;
- Permanent synthetic oil long-life lubrication.

Designazione — *Classification*

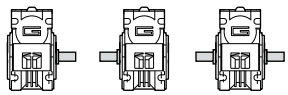
RIDUTTORE / *GEARBOX*

CMM	030/063	FD	20	71	B5	SZDX	BRSX	90	B3	US1	VS
Tipo *Type*	Grandezza *Size*	Versione *Version*	Rapporto *Ratio*	IEC	Forma costruttiva Version	Albero di uscita *Output shaft*	Braccio di reazione *Torque arm*	Angolo *Angle*	Pos. di montaggio Mounting position	*Esecuzione di montaggio Mounting execution*	Opzioni *Options*
CMM **CMMIS**	**026/026** **026/030** **026/040** **026/050** **030/040** **030/050** **030/063** **040/075** **040/090** **050/110** **063/130**	**U** **FD** **FS** **FBD** **FBS** **FLD** **FLS**	vedi tabelle-*see tables*	**56..** **—** **90..**	**B5** **B14**	**SZDX** **SZSX** **DZ**	**BRDX** **BRSX**	**0°** **90°** **180°** **270°**	**B3** **B8** **B6** **B7** **V5** **V6**	**UB1** **UB2** **US1** **US2** **UV1** **UV2** **UC1** **UC2**	**VS1** **VS2**

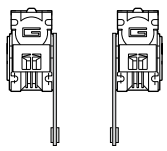
Versione Riduttore *Gearbox Version*



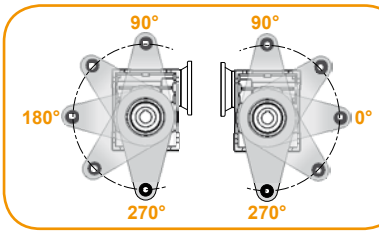
Albero di uscita *Output shaft*



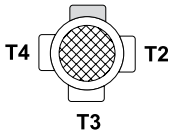
Braccio di reazione *Torque arm*



Angolo *Angle*

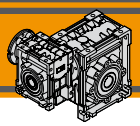


MOTORE CM / *CM MOTOR*

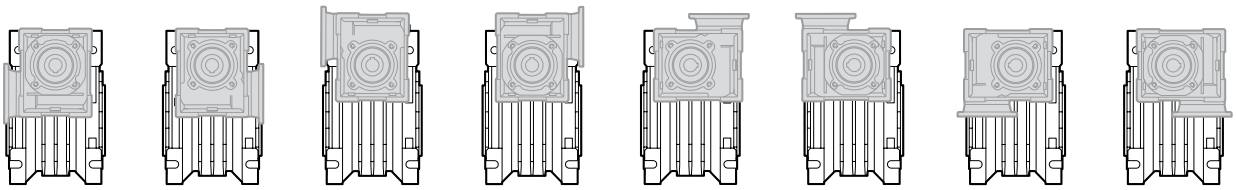
0.25kW	4p	3ph	50Hz	T1
Potenza *Power* Vedi tabelle *See tables*	Poli *Poles*	Fasi *Phases*	Frequenza *Frequency*	Pos. morsettiera *Terminal box pos.*
	2p **4p** **6p** **8p**	**1ph** **3ph**	**50Hz** **60Hz**	**T1** (Std) 

Simbologia — *Symbols*

n_1	[min^{-1}]	Velocità in ingresso / *Input speed*	M_2	[Nm]	Coppia in uscita in funzione di P_1 / *Output torque referred to* P_1
n_2	[min^{-1}]	Velocità in uscita / *Output speed*	sf		Fattore di servizio / *Service factor*
i		Rapporto di riduzione / *Ratio*	R_2	[N]	Carico radiale ammissibile in uscita / *Permitted output radial load*
P_1	[kW]	Potenza in entrata / *Input power*	A_2	N]	Carico assiale ammissibile in uscita / *Permitted output axial load*



Esecuzioni di montaggio — *Mounting executions*



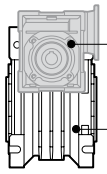
UB1 UB2 US1 US2 UV1 UV2 UC1 UC2

Combinazioni rapporti — *Combination ratio*

CMM 026/026 - CMM 026/030 - CMM 026/040 - CMM 026/050												
	i (i_1 x i_2)											
	150	**225**	**300**	**450**	**600**	**900**	**1200**	**1500**	**1800**	**2400**	**3000**	**3600**
i_1	10	15	10	15	20	30	40	50	60	60	60	60
i_2	15	15	30	30	30	30	30	30	30	40	50	60

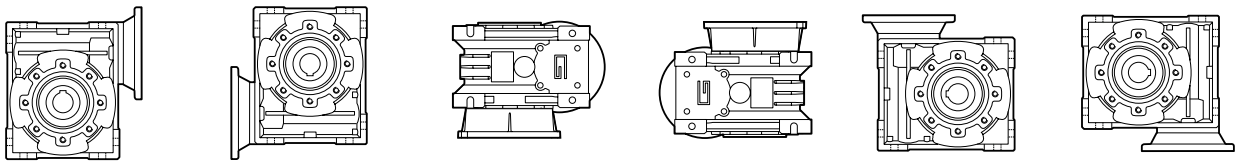
CMM 030/040 - CMM 030/050 - CMM 030/063 - CMM 040/075 - CMM 040/090 - CMM 050/110 - CMM 063/130															
	i (i_1 x i_2)														
	75	**100**	**150**	**200**	**250**	**300**	**400**	**500**	**600**	**750**	**900**	**1200**	**1500**	**1800**	**2400**	**3000**
i_1	7.5	10	10	10	10	10	10	10	20	25	30	40	50	60	60	60
i_2	10	10	15	20	25	30	40	50	30	30	30	30	30	30	40	50

Lubrificazione — *Lubrication*



	CMM										
	026/026	**026/030**	**026/040**	**026/050**	**030/040**	**030/050**	**030/063**	**040/075**	**040/090**	**050/110**	**063/130**
1	026				030			040		050	063
	Lubrificazione a vita *Life lubricated*										
2	026	030	040	050	040	050	063	075	090	110	130
	Lubrificazione a vita *Life lubricated*										

Posizioni di montaggio / *Mounting positions*



B3 (standard) **B8** **B6** **B7** **V5** **V6**

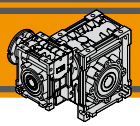
	Quantità di olio (litri) / ***Oil quantity*** *(litres)*						
	B3	**B8**	**B6**	**B7**	**V5**	**V6**	
CM026	0.02						Lubrificati a vita *Life lubrication*
CM030	0.03						
CM040	0.07						
CM050	0.1						
CM063	0.25						
CM075	0.4						
CM090	0.85						
CM110	1.5						
CM130	4.5	3.3	3.5	3.5	4.5	3.3	

Dati tecnici

Technical data

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
0.06						
56A4 (1400 min^{-1})	**9.3**	26	*1.0*	150	**CMM**	B14
	6.2	26	*1.0*	225	**026/026**	B14
	4.7	27	*1.0*	300		B14
	3.1	27	*1.0*	450		B14
	2.3	27	*1.0*	600		B14
	1.6	27	*1.0*	900		B14
	1.2	27	*1.0*	1200		B14
	0.9	27	*1.0*	1500		B14
	0.8	27	*1.0*	1800		B14
	0.6	22	*1.0*	2400		B14
	0.5	20	*1.0*	3000		B14
	0.4	18	*1.0*	3600		B14
	9.3	34	*1.1*	150	**CMM**	B14
	6.2	48	*0.8*	225	**026/030**	B14
	4.7	40	*1.0*	300		B14
	3.1	40	*1.0*	450		B14
	2.3	40	*1.0*	600		B14
	1.6	40	*1.0*	900		B14
	1.2	40	*1.0*	1200		B14
	0.93	40	*1.0*	1500		B14
	0.78	40	*1.0*	1800		B14
	0.58	34	*1.0*	2400		B14
	0.47	30	*1.0*	3000		B14
	0.39	27	*1.0*	3600		B14
	9.3	35	*2.5*	150	**CMM**	B14
	6.2	50	*1.8*	225	**026/040**	B14
	4.7	58	*1.5*	300		B14
	3.1	82	*1.1*	450		B14
	2.3	104	*0.9*	600		B14
	1.6	90	*1.0*	900		B14
	1.2	90	*1.0*	1200		B14
	0.93	90	*1.0*	1500		B14
	0.78	90	*1.0*	1800		B14
	0.58	74	*1.0*	2400		B14
	0.47	68	*1.0*	3000		B14
	0.39	62	*1.0*	3600		B14
	9.3	37	*4.4*	150	**CMM**	B14
	6.2	52	*3.1*	225	**026/050**	B14
	4.7	59	*2.7*	300		B14
	3.1	83	*1.9*	450		B14
	2.3	105	*1.5*	600		B14
	1.6	141	*1.1*	900		B14
	1.2	162	*1.0*	1200		B14
	0.93	162	*1.0*	1500		B14
	0.78	162	*1.0*	1800		B14
	0.58	135	*1.0*	2400		B14
	0.47	125	*1.0*	3000		B14
	0.39	113	*1.0*	3600		B14
	18.7	20	*4.3*	75	**CMM**	B5/B14
	14.0	26	*3.3*	100	**030/040**	B5/B14
	9.3	36	*2.4*	150		B5/B14
	7.0	46	*1.6*	200		B5/B14
	5.6	55	*1.2*	250		B5/B14
	4.7	59	*1.5*	300		B5/B14
	3.5	72	*1.0*	400		B5/B14
	2.8	68	*1.0*	500		B5/B14
	2.3	90	*1.0*	600		B5/B14
	1.9	90	*1.0*	750		B5/B14
	1.6	90	*1.0*	900		B5/B14
	1.2	74	*1.0*	1200		B5/B14
	0.93	90	*1.0*	1500		B5/B14
	0.78	90	*1.0*	1800		B5/B14
	0.58	74	*1.0*	2400		B5/B14
	0.47	68	*1.0*	3000		B5/B14

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
0.06						
56A4 (1400 min^{-1})	**18.7**	20	*7.8*	75	**CMM**	B5/B14
	14.0	26	*5.9*	100	**030/050**	B5/B14
	9.3	37	*4.3*	150		B5/B14
	7.0	47	*2.9*	200		B5/B14
	5.6	55	*2.2*	250		B5/B14
	4.7	60	*2.7*	300		B5/B14
	3.5	73	*1.9*	400		B5/B14
	2.8	83	*1.5*	500		B5/B14
	2.3	107	*1.5*	600		B5/B14
	1.9	128	*1.3*	750		B5/B14
	1.6	143	*1.1*	900		B5/B14
	1.2	174	*0.8*	1200		B5/B14
	0.93	207	*0.8*	1500		B5/B14
	0.78	162	*1.0*	1800		B5/B14
	0.58	135	*1.0*	2400		B5/B14
	0.47	125	*1.0*	3000		B5/B14
	2.8	86	*2.7*	500	**CMM**	B5/B14
	2.3	111	*2.8*	600	**030/063**	B5/B14
	1.9	133	*2.3*	750		B5/B14
	1.6	148	*2.1*	900		B5/B14
	1.2	178	*1.5*	1200		B5/B14
	0.93	214	*1.5*	1500		B5/B14
	0.78	243	*1.3*	1800		B5/B14
	0.58	292	*0.9*	2400		B5/B14
	0.47	338	*0.7*	3000		B5/B14
	0.93	232	*2.2*	1500	**CMM**	B5/B14
	0.78	269	*1.9*	1800	**040/075**	B5/B14
	0.58	325	*1.3*	2400		B5/B14
	0.47	377	*1.0*	3000		B5/B14
	0.58	348	*2.2*	2400	**CMM**	B5/B14
	0.47	406	*1.6*	3000	**040/090**	B5/B14
0.09						
56B4 (1400 min^{-1})	**9.3**	53	*1.6*	150	**CMM**	B14
	6.2	74	*1.2*	225	**026/040**	B14
	4.7	87	*1.0*	300		
	9.3	55	*2.9*	150	**CMM**	B14
	6.2	78	*2.1*	225	**026/050**	B14
	4.7	89	*1.8*	300		
	3.1	125	*1.3*	450		
	2.3	158	*1.0*	600		
	18.7	29	*2.9*	75	**CMM**	B5/B14
	14.0	39	*2.2*	100	**030/040**	B5/B14
	9.3	53	*1.6*	150		B5/B14
	7.0	69	*1.1*	200		B5/B14
	5.6	83	*0.8*	250		B5/B14
	4.7	88	*1.0*	300		B5/B14
	18.7	30	*5.2*	75	**CMM**	B5/B14
	14.0	39	*4.0*	100	**030/050**	B5/B14
	9.3	56	*2.9*	150		B5/B14
	7.0	70	*2.0*	200		B5/B14
	5.6	83	*1.5*	250		B5/B14
	4.7	90	*1.8*	300		B5/B14
	3.5	109	*1.2*	400		B5/B14
	2.8	124	*1.0*	500		B5/B14
	2.3	160	1.0	600		B5/B14
	1.9	192	0.8	750		B5/B14
	1.6	215	0.8	900		B5/B14



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Technical data

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
0.09						
56B4 (1400 min^{-1})	**7.0**	69	*3.8*	200	**CMM**	B5/B14
	5.6	81	*2.8*	250	**030/063**	B5/B14
	4.7	93	*3.3*	300		B5/B14
	3.5	111	*2.3*	400		B5/B14
	2.8	129	*1.8*	500		B5/B14
	2.3	166	*1.9*	600		B5/B14
	1.9	199	*1.6*	750		B5/B14
	1.6	222	*1.4*	900		B5/B14
	1.2	267	*1.0*	1200		B5/B14
	0.93	320	*1.0*	1500		B5/B14
	0.78	365	*0.9*	1800		B5/B14
	0.93	348	*1.5*	1500	**CMM**	B5/B14
	0.78	404	*1.3*	1800	**040/075**	B5/B14
	0.58	487	*0.9*	2400		B5/B14
	0.47	378	*1.0*	3000		B5/B14
	0.8	423	*2.1*	1800	**CMM**	B5/B14
	0.58	521	*1.4*	2400	**040/090**	B5/B14
	0.47	609	*1.0*	3000		B5/B14
0.12						
63A4 (1400 min^{-1})	**18.7**	39	*2.1*	75	**CMM**	B5/B14
	14.0	52	*1.6*	100	**030/040**	B5/B14
	9.3	71	*1.2*	150		B5/B14
	7.0	92	*0.8*	200		B5/B14
	5.6	67	*1.0*	250		B5/B14
	4.7	118	*0.8*	300		B5/B14
	18.7	40	*3.9*	75	**CMM**	B5/B14
	14.0	52	*3.0*	100	**030/050**	B5/B14
	9.3	74	*2.2*	150		B5/B14
	7.0	94	*1.5*	200		B5/B14
	5.6	110	*1.1*	250		B5/B14
	4.7	120	*1.4*	300		B5/B14
	3.5	146	*0.9*	400		B5/B14
	2.8	165	*0.8*	500		B5/B14
	2.3	214	*0.8*	600		B5/B14
	18.7	40	*7.1*	75	**CMM**	B5/B14
	14.0	53	*5.4*	100	**030/063**	B5/B14
	9.3	73	*4.1*	150		B5/B14
	7.0	92	*2.8*	200		B5/B14
	5.6	108	*2.1*	250		B5/B14
	4.7	124	*2.5*	300		B5/B14
	3.5	149	*1.8*	400		B5/B14
	2.8	172	*1.3*	500		B5/B14
	2.3	221	*1.4*	600		B5/B14
	1.9	265	*1.2*	750		B5/B14
	1.6	296	*1.0*	900		B5/B14
	1.2	260	*1.0*	1200		B5/B14
	0.93	310	1.0	1500		B5/B14
	4.7	130	*3.9*	300	**CMM**	B5/B14
	3.5	157	*2.8*	400	**040/075**	B5/B14
	2.8	182	*2.1*	500		B5/B14
	2.3	241	*2.1*	600		B5/B14
	1.9	286	*1.8*	750		B5/B14
	1.6	325	*1.6*	900		B5/B14
	1.2	392	*1.1*	1200		B5/B14
	0.93	464	*1.1*	1500		B5/B14
	0.78	538	*0.9*	1800		B5/B14
	2.8	196	*3.2*	500	**CMM**	B5/B14
	2.3	253	*3.5*	600	**040/090**	B5/B14
	1.9	300	*2.9*	750		B5/B14
	1.6	340	*2.6*	900		B5/B14

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
0.12						
	1.2	419	*1.8*	1200	**CMM**	B5/B14
	0.9	486	*1.8*	1500	**040/090**	B5/B14
	0.8	564	*1.6*	1800		B5/B14
	0.58	695	*1.1*	2400		B5/B14
	0.47	812	*0.8*	3000		B5/B14
	0.9	518	*2.9*	1500	**CMM**	B5/B14
	0.8	592	*2.5*	1800	**050/110**	B5/B14
	0.6	766	*1.7*	2400		B5/B14
	0.5	899	*1.3*	3000		B5/B14
0.18						
63B4 (1400 min^{-1})	**18.7**	59	*1.4*	75	**CMM**	B5/B14
	14.0	77	*1.1*	100	**030/040**	B5/B14
	9.3	107	*0.8*	150		B5/B14
	18.7	59	*2.6*	75	**CMM**	B5/B14
	14.0	78	*2.0*	100	**030/050**	B5/B14
	9.3	111	*1.4*	150		B5/B14
	7.0	140	*1.0*	200		B5/B14
	5.6	165	*0.7*	250		B5/B14
	4.7	179	*0.9*	300		B5/B14
	18.7	60	*4.8*	75	**CMM**	B5/B14
	14.0	79	*3.6*	100	**030/063**	B5/B14
	9.3	110	*2.8*	150		B5/B14
	7.0	138	*1.9*	200		B5/B14
	5.6	162	*1.4*	250		B5/B14
	4.7	186	*1.7*	300		B5/B14
	3.5	223	*1.2*	400		B5/B14
	2.8	258	*0.9*	500		B5/B14
	2.3	332	*0.9*	600		B5/B14
	1.9	398	*0.8*	750		B5/B14
	18.7	62	*7.6*	75	**CMM**	B5/B14
	14.0	80	*5.8*	100	**040/075**	B5/B14
	9.3	113	*4.3*	150		B5/B14
	7.0	142	*3.0*	200		B5/B14
	5.6	170	*2.3*	250		B5/B14
	4.7	195	*2.6*	300		B5/B14
	3.5	235	*1.8*	400		B5/B14
	2.8	273	*1.4*	500		B5/B14
	2.3	362	*1.4*	600		B5/B14
	1.9	429	*1.2*	750		B5/B14
	1.6	487	*1.0*	900		B5/B14
	2.8	294	*2.2*	500	**CMM**	B5/B14
	2.3	379	*2.3*	600	**040/090**	B5/B14
	1.9	450	*2.0*	750		B5/B14
	1.6	511	*1.7*	900		B5/B14
	1.2	629	*1.2*	1200		B5/B14
	0.9	729	*1.2*	1500		B5/B14
	0.8	846	*1.0*	1800		B5/B14
	1.2	690	*1.9*	1200	**CMM**	B5/B14
	0.9	777	*1.9*	1500	**050/110**	B5/B14
	0.8	888	*1.7*	1800		B5/B14
	0.6	1149	*1.1*	2400		B5/B14
	0.5	1348	*0.9*	3000		B5/B14
0.22						
63C4 (1400 min^{-1})	**18.7**	72	*1.2*	75	**CMM**	B5/B14
	14.0	95	*0.9*	100	**030/040**	B5/B14
	18.7	73	*2.1*	75	**CMM**	B5/B14
	14.0	96	*1.6*	100	**030/050**	B5/B14
	9.3	136	*1.2*	150		B5/B14
	7.0	171	*0.8*	200		B5/B14

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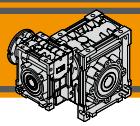
Technical data

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
0.22						
63C4 (1400 min^{-1})	**18.7**	74	*3.9*	75	**CMM**	B5/B14
	14.0	97	*3.0*	100	**030/063**	B5/B14
	9.3	134	*2.3*	150		B5/B14
	7.0	169	*1.5*	200		B5/B14
	5.6	199	*1.2*	250		B5/B14
	4.7	227	*1.4*	300		B5/B14
	3.5	272	*1.0*	400		B5/B14
	2.8	315	*0.7*	500		B5/B14
	2.3	405	*0.8*	600		B5/B14
	18.7	76	*6.2*	75	**CMM**	B5/B14
	14.0	98	*4.8*	100	**040/075**	B5/B14
	9.3	138	*3.5*	150		B5/B14
	7.0	174	*2.5*	200		B5/B14
	5.6	208	*1.8*	250		B5/B14
	4.7	238	*2.1*	300		B5/B14
	3.5	287	*1.5*	400		B5/B14
	2.8	334	*1.1*	500		B5/B14
	2.3	442	*1.2*	600		B5/B14
	1.9	525	*1.0*	750		B5/B14
	1.6	596	*0.9*	900		B5/B14
	2.8	359	*1.8*	500	**CMM**	B5/B14
	2.3	464	*1.9*	600	**040/090**	B5/B14
	1.9	550	*1.6*	750		B5/B14
	1.6	624	*1.4*	900		B5/B14
	1.2	769	*1.0*	1200		B5/B14
	0.9	891	*1.0*	1500		B5/B14
	0.8	1034	*0.8*	1800		B5/B14
	1.2	843	*1.6*	1200	**CMM**	B5/B14
	0.9	950	*1.6*	1500	**050/110**	B5/B14
	0.8	1086	*1.4*	1800		B5/B14
	0.6	1405	*0.9*	2400		B5/B14
0.25						
71A4 (1400 min^{-1})	**18.7**	86	*5.5*	75	**CMM**	B5/B14
	14.0	112	*4.2*	100	**040/075**	B5/B14
	9.3	157	*3.1*	150		B5/B14
	7.0	198	*2.2*	200		B5/B14
	5.6	236	*1.6*	250		B5/B14
	4.7	271	*1.9*	300		B5/B14
	3.5	327	*1.3*	400		B5/B14
	2.8	380	*1.0*	500		B5/B14
	2.3	503	*1.0*	600		B5/B14
	1.9	596	*0.9*	750		B5/B14
	1.6	677	*0.8*	900		B5/B14
	5.6	247	*2.7*	250	**CMM**	B5/B14
	4.7	284	*3.1*	300	**040/090**	B5/B14
	3.5	350	*2.2*	400		B5/B14
	2.8	408	*1.6*	500		B5/B14
	2.3	527	*1.7*	600		B5/B14
	1.9	625	*1.4*	750		B5/B14
	1.6	709	*1.2*	900		B5/B14
	1.2	874	*0.9*	1200		B5/B14
	0.9	1013	*0.9*	1500		B5/B14
	3.5	377	*3.5*	400	**CMM**	B5/B14
	2.8	442	*2.6*	500	**050/110**	B5/B14
	2.3	542	*2.7*	600		B5/B14
	1.9	651	*2.3*	750		B5/B14
	1.6	740	*2.0*	900		B5/B14
	1.2	958	*1.4*	1200		B5/B14
	0.9	1080	*1.4*	1500		B5/B14

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
0.25						
71A4 (1400 min^{-1})	**0.8**	1234	*1.2*	1800	**CMM**	B5/B14
	0.6	1596	*0.8*	2400	**050/110**	B5/B14
	1.2	967	*1.9*	1200	**CMM**	B5/B14
	0.9	1114	*1.9*	1500	**063/130**	B5/B14
	0.8	1276	*1.6*	1800		B5/B14
	0.6	1624	*1.1*	2400		B5/B14
	0.5	1966	*0.8*	3000		B5/B14
0.37						
71B4 (1400 min^{-1})	**18.7**	127	*3.7*	75	**CMM**	B5/B14
	14.0	165	*2.8*	100	**040/075**	B5/B14
	9.3	232	*2.1*	150		B5/B14
	7.0	293	*1.5*	200		B5/B14
	5.6	350	*1.1*	250		B5/B14
	4.7	401	*1.3*	300		B5/B14
	3.5	483	*0.9*	400		B5/B14
	18.7	130	*5.4*	75	**CMM**	B5/B14
	14.0	170	*4.1*	100	**040/090**	B5/B14
	9.3	239	*3.4*	150		B5/B14
	7.0	305	*2.5*	200		B5/B14
	5.6	366	*1.8*	250		B5/B14
	4.7	420	*2.1*	300		B5/B14
	3.5	517	*1.5*	400		B5/B14
	2.8	604	*1.1*	500		B5/B14
	2.3	780	*1.1*	600		B5/B14
	1.9	925	*0.9*	750		B5/B14
	1.6	1049	*0.8*	900		B5/B14
	5.6	386	*3.1*	250	**CMM**	B5/B14
	4.7	431	*3.4*	300	**050/110**	B5/B14
	3.5	558	*2.4*	400		B5/B14
	2.8	654	*1.8*	500		B5/B14
	2.3	802	*1.8*	600		B5/B14
	1.9	964	*1.5*	750		B5/B14
	1.6	1096	*1.4*	900		B5/B14
	1.2	1417	*0.9*	1200		B5/B14
	0.9	1598	*0.9*	1500		B5/B14
	0.8	1826	*0.8*	1800		B5/B14
	1.2	1431	*1.3*	1200	**CMM**	B5/B14
	0.9	1649	*1.3*	1500	**063/130**	B5/B14
	0.8	1889	*1.1*	1800		B5/B14
	0.6	2404	*0.8*	2400		B5/B14
0.55						
71C4 (1400 min^{-1})	**18.7**	189	*2.5*	75	**CMM**	B5/B14
	14.0	246	*1.9*	100	**040/075**	B5/B14
	9.3	345	*1.4*	150		B5/B14
	7.0	435	*1.0*	200		B5/B14
	5.6	520	*0.7*	250		B5/B14
	4.7	596	*0.9*	300		B5/B14
	18.7	194	*3.6*	75	**CMM**	B5/B14
	14.0	252	*2.8*	100	**040/090**	B5/B14
	9.3	355	*2.3*	150		B5/B14
	7.0	454	*1.7*	200		B5/B14
	5.6	544	*1.2*	250		B5/B14
	4.7	624	*1.4*	300		B5/B14
	3.5	769	*1.0*	400		B5/B14
	2.8	898	*0.7*	500		B5/B14
	2.3	1159	*0.8*	600		B5/B14
	5.6	574	*2.1*	250	**CMM**	B5/B14
	4.7	641	*2.3*	300	**050/110**	B5/B14
	3.5	829	*1.6*	400		B5/B14



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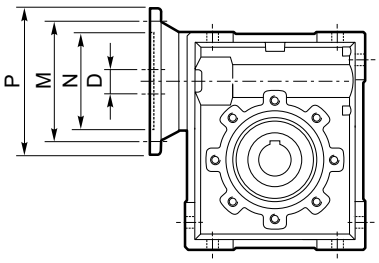
Technical data

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
0.55						
71C4 (1400 min^{-1})	**2.8**	973	*1.2*	500	**CMM**	B5/B14
	2.3	1191	*1.2*	600	**050/110**	B5/B14
	1.9	1433	*1.0*	750		B5/B14
	1.6	1629	*0.9*	900		B5/B14
	1.2	2127	*0.9*	1200	**CMM**	B5/B14
	0.9	2451	*0.8*	1500	**063/130**	B5/B14
80A4 (1400 min^{-1})	**18.7**	198	*6.3*	75	**CMM**	B5/B14
	14.0	258	*4.8*	100	**050/110**	B5/B14
	9.3	364	*3.7*	150		B5/B14
	7.0	478	*2.7*	200		B5/B14
	5.6	574	*2.1*	250		B5/B14
	4.7	641	*2.3*	300		B5/B14
	3.5	829	*1.6*	400		B5/B14
	2.8	973	*1.2*	500		B5/B14
	2.3	1191	*1.2*	600		B5/B14
	1.9	1433	*1.0*	750		B5/B14
	1.6	1629	*0.9*	900		B5/B14
	5.6	589	*2.8*	250	**CMM**	B5/B14
	4.7	639	*3.2*	300	**063/130**	B5/B14
	3.5	813	*2.2*	400		B5/B14
	2.8	984	*1.6*	500		B5/B14
	2.3	1203	*1.7*	600		B5/B14
	1.9	1449	*1.4*	750		B5/B14
	1.6	1671	*1.2*	900		B5/B14
	1.2	2127	*0.9*	1200		B5/B14
	0.9	2451	*0.8*	1500		B5/B14
0.75						
80B4 (1400 min^{-1})	**18.7**	270	*4.6*	75	**CMM**	B5/B14
	14.0	352	*3.5*	100	**050/110**	B5/B14
	9.3	496	*2.7*	150		B5/B14
	7.0	652	*2.0*	200		B5/B14
	5.6	783	*1.5*	250		B5/B14
	4.7	874	*1.7*	300		B5/B14
	3.5	1131	*1.2*	400		B5/B14
	2.8	1326	*0.9*	500		B5/B14
	2.3	1625	*0.9*	600		B5/B14
	1.9	1954	*0.8*	750		B5/B14
	7.0	660	*2.7*	200	**CMM**	B5/B14
	5.6	803	*2.0*	250	**063/130**	B5/B14
	4.7	871	*2.4*	300		B5/B14
	3.5	1109	*1.6*	400		B5/B14
	2.8	1342	*1.2*	500		B5/B14
	2.3	1641	*1.3*	600		B5/B14
	1.9	1975	*1.0*	750		B5/B14
	1.6	2279	*0.9*	900		B5/B14
1.1						
80C4 (1400 min^{-1})	**18.7**	397	*3.1*	75	**CMM**	B5/B14
	14.0	517	*2.4*	100	**050/110**	B5/B14
	9.3	727	*1.9*	150		B5/B14
	7.0	957	*1.4*	200		B5/B14
	5.6	1148	*1.0*	250		B5/B14
	4.7	1282	*1.2*	300		B5/B14
	3.5	1658	*0.8*	400		B5/B14
	7.0	968	*1.9*	200	**CMM**	B5/B14
	5.6	1178	*1.4*	250	**063/130**	B5/B14
	4.7	1278	*1.6*	300		B5/B14
	3.5	1626	*1.1*	400		B5/B14
	2.8	1968	*0.8*	500		B5/B14
	2.3	2407	*0.9*	600		B5/B14

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
1.1						
90S4 (1400 min^{-1})	**18.7**	406	*4.1*	75	**CMM**	B5/B14
	14.0	529	*3.2*	100	**063/130**	B5/B14
	9.3	745	*2.6*	150		B5/B14
	7.0	968	*1.9*	200		B5/B14
	5.6	1178	*1.4*	250		B5/B14
	4.7	1278	*1.6*	300		B5/B14
	3.5	1626	*1.1*	400		B5/B14
	2.8	1968	*0.8*	500		B5/B14
	2.3	2407	*0.9*	600		B5/B14
1.5						
90L4 (1400 min^{-1})	**18.7**	554	*3.0*	75	**CMM**	B5/B14
	14.0	722	*2.3*	100	**063/130**	B5/B14
	9.3	1016	*1.9*	150		B5/B14
	7.0	1320	*1.4*	200		B5/B14
	5.6	1606	*1.0*	250		B5/B14
	4.7	1742	*1.2*	300		B5/B14
	3.5	2218	*0.8*	400		B5/B14
1.85						
90LB4 (1400 min^{-1})	**18.7**	683	*2.5*	75	**CMM**	B5/B14
	14.0	890	*1.9*	100	**063/130**	B5/B14
	9.3	1254	*1.5*	150		B5/B14
	7.0	1628	*1.1*	200		B5/B14
	5.6	1981	*0.8*	250		B5/B14
	4.7	2149	*1.0*	300		B5/B14

Motori applicabili

IEC Motor adapters



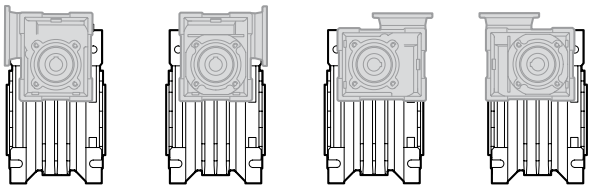
N.B.

Le aree evidenziate in grigio indicano l'applicabilità della corrispondente grandezza motore.

Grey areas indicate motor inputs available on each size of unit.

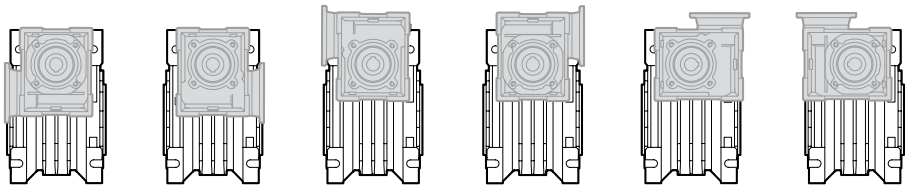
B/BS = Boccola di riduzione in acciaio

B/BS = Metal shaft sleeve



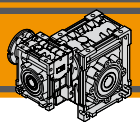
US1 **US2** **UV1** **UV2**

CMM	IEC	N	M	P	D	i_1						
						10	15	20	30	40	50	60
026/026	**56B14**	50	65	80	9							



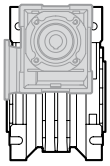
UB1 **UB2** **US1** **US2** **UV1** **UV2**

CMM	IEC	N	M	P	D	i_1						
						10	15	20	30	40	50	60
026/030 **026/040** **026/050**	**56B14**	50	65	80	9							

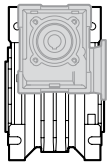


Motori applicabili

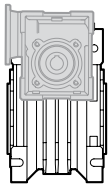
IEC Motor adapters



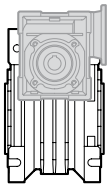
UB1



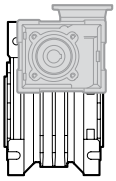
UB2



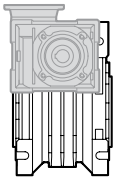
US1



US2

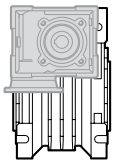


UV1

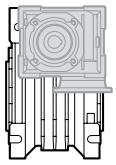


UV2

CMM	IEC	N	M	P	D	i_1								
						7.5	10	15	20	25	30	40	50	60
030/040 030/050 030/063	63B5	95	115	140	11									
	63B14	60	75	90										
	56B5	80	100	120	9	B	B	B	B	B	B	B	B	
	56B14	50	65	80										
040/075 040/090	71B5	110	130	160	14									
	71B14	70	85	105										
	63B5	95	115	140	11	B	B	B	B	B	B	B		
	63B14	60	75	90										
	56B5	80	100	120	9	BS	BS	BS	BS	BS	BS	BS	B	B
	56B14	50	65	80										
050/110	80B5	130	165	200	19									
	80B14	80	100	120										
	71B5	110	130	160	14	B	B	B	B	B	B			
	71B14	70	85	105										
	63B5	95	115	140	11	BS	BS	BS	BS	BS	BS	B	B	B
	63B14	60	75	90										
063/130	90B5	130	165	200	24									
	90B14	95	115	140										
	80B5	130	165	200	19	B	B	B	B	B	B			
	80B14	80	100	120										
	71B5	110	130	160	14	BS	BS	BS	BS	BS	BS	B	B	B
	71B14	70	85	105										
	63B5	95	115	140	11							BS	BS	BS



UC1



UC2

CMM	IEC	N	M	P	D	i_1								
						7.5	10	15	20	25	30	40	50	60
030/040 030/050	63B14	60	75	90	11									
	56B5	80	100	120	9	B	B	B	B	B	B	B	B	
	56B14	50	65	80										
030/063	63B5	95	115	140	11									
	63B14	60	75	90										
	56B5	80	100	120	9	B	B	B	B	B	B	B	B	
	56B14	50	65	80										
040/075 040/090	71B14	70	85	105	14									
	63B5	95	115	140	11	B	B	B	B	B	B			
	63B14	60	75	90										
	56B5	80	100	120	9	BS	BS	BS	BS	BS	BS	BS	B	B
	56B14	50	65	80										
050/110	80B14	80	100	120	19									
	71B5	110	130	160	14	B	B	B	B	B	B			
	71B14	70	85	105										
	63B5	95	115	140	11	BS	BS	BS	BS	BS	BS	B	B	B
	63B14	60	75	90										
063/130	90B14	95	115	140	24									
	80B14	80	100	120	19	B	B	B	B	B	B			
	71B5	110	130	160	14	BS	BS	BS	BS	BS	BS	B	B	B
	71B14	70	85	105										
	63B5	95	115	140	11							BS	BS	BS

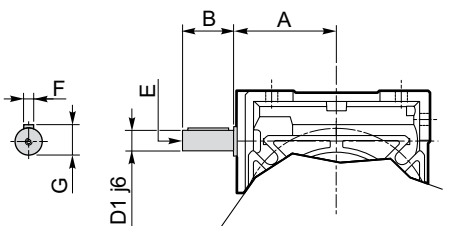
Dimensioni — *Dimensions*

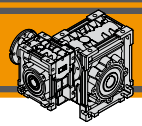
	CMM..U - CMM..F - CMM..FB - CMM..FL																
	A	C	D H8	E	F	G	G1	H	H1	I	I1	K	L	M	N h8	N1	N2
026/026	45	70	12	83	22	47.5	50	35	34	26	26	34	42	55	45	22.5	21
026/030	54	80	14	97	32	47.5	63	40	34	30	26	44	56	65	55	29	21
026/040	70	100	18	121.5	43	47.5	78	50	34	40	26	60	71	75	60	36.5	21
026/050	80	120	25	144	49	47.5	92	60	34	50	26	70	85	85	70	43.5	21

	CMM..U - CMM..F - CMM..FB - CMM..FL													
	O	P	Q	R	R1	S	T	V	Z	KE	a	b	t	Kg
026/026	6	—	37	49	49	5	15	21	76	7	—	4	13.8	1.6
026/030	6.5	75	44	57	49	5.5	22	27	81	M6x11(n.4)	90°	5	16.3	2.4
026/040	6.5	87	55	71.5	49	6.5	26	35	91.5	M6x8(n.4)	45°	6	20.8	3.5
026/050	8.5	98	64	84	49	7	30	40	100.5	M8x10(n.4)	45°	8	28.3	5.0

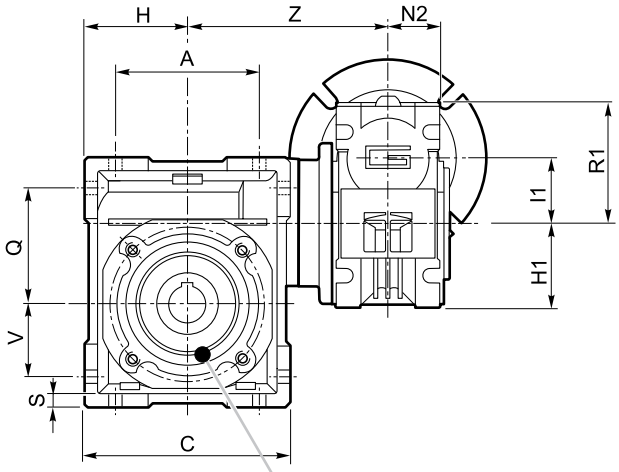
		CMM..F								CMM..FB								CMM..FL							
	a1	KA	KB	KC	KM	KN H8	KO	KP	KQ	KA	KB	KC	KM	KN H8	KO	KP	KQ	KA	KB	KC	KM	KN H8	KO	KP	KQ
026/026	45°	45	6	4.5	55-69	40	6.5(n.4)	75	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
026/030	45°	54.5	6	4	68	50	6.5(n.4)	80	70								—								
026/040	45°	67	7.5	4.5	80-95	60	9(n.4)	110	95	80	8.5	5	115-125	95	9.5(n.4)	140	112	97	7.5	4.5	80-95	60	9(n.4)	110	95
026/050	45°	90	9	5	90-110	70	11(n.4)	125	110	89	9	5	130-145	110	9.5(n.4)	160	132	120	9	5	90-110	70	11(n.4)	125	110

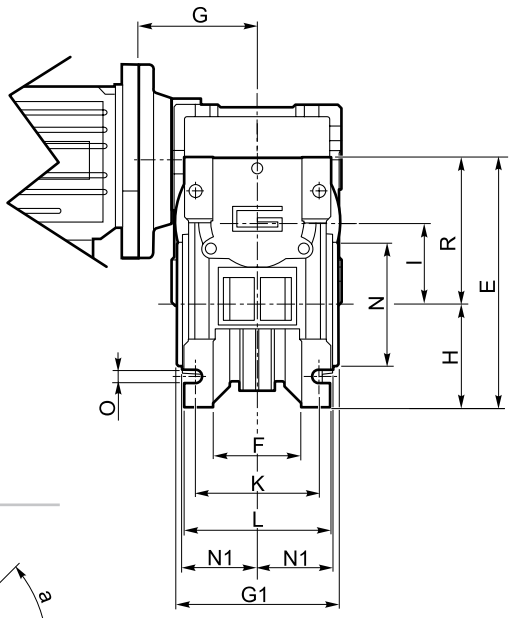
	CMMIS					
	A	B	D1 j6	E	F	M
026/026 026/030 026/040 026/050	45	20	9	M4	3	10.2

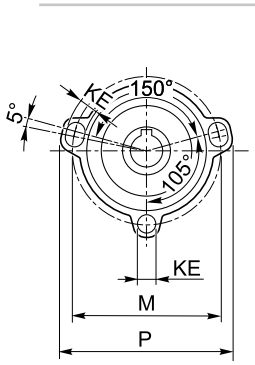




CMM026/..U







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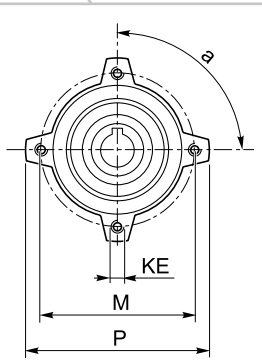

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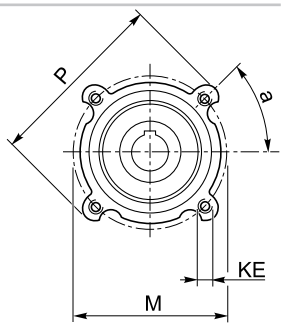
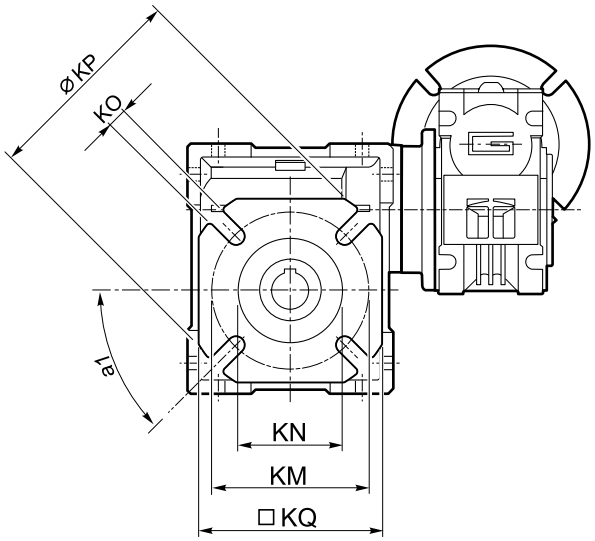
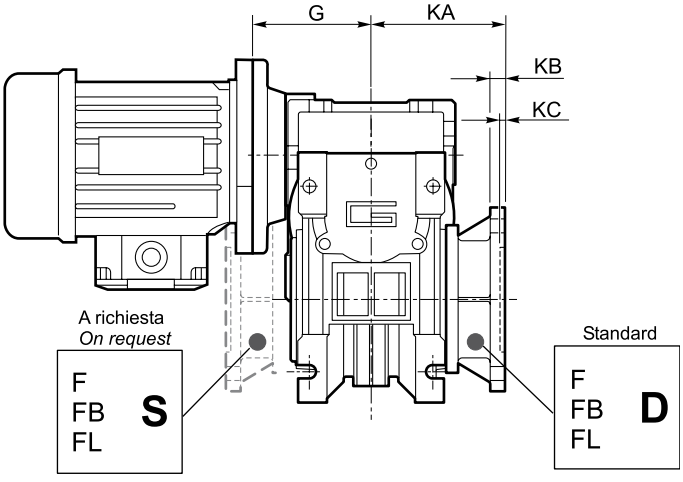
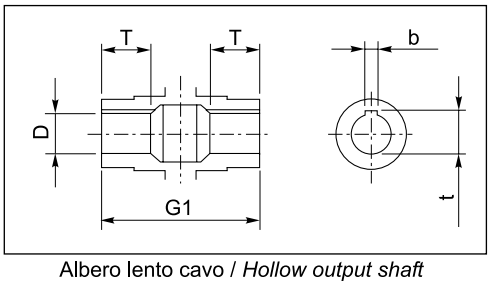


..026/040
..026/050







Albero lento cavo / *Hollow output shaft*

CMM026/..F
CMM026/..FB
CMM026/..FL

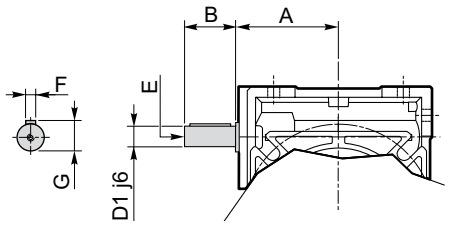
Dimensioni — *Dimensions*

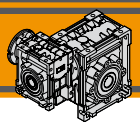
	CMM.. - CMM..F - CMM..FB - CMM..FL																
	A	C	D H8	E	F	G	G1	H	H1	I	I1	K	L	M	N h8	N1	N2
030/040	70	100	18	121.5	43	55	78	50	40	40	30	60	71	75	60	36.5	29
030/050	80	120	25	144	49	55	92	60	40	50	30	70	85	85	70	43.5	29
030/063	100	144	25	174	67	55	112	72	40	63	30	85	104	95	80	53	29
040/075	120	172	28	205	72	70	120	86	50	75	40	90	112	115	95	57	36.5
040/090	140	208	35	238	74	70	140	103	50	90	40	100	130	130	110	67	36.5
050/110	170	252.5	42	295	—	80	155	127.5	60	110	50	115	144	165	130	74	43.5
063/130	200	292.5	45	335	—	95	170	147.5	72	130	63	120	155	215	180	81	53

	CMM.. - CMM..F - CMM..FB - CMM..FL												
	O	P	Q	R	R1	S	T	V	Z	KE	a	b	t	Kg
030/040	6.5	87	55	71.5	57	6.5	26	35	122	M6x8(n.4)	45°	6	20.8 (21.8)	3.9
030/050	8.5	98	64	84	57	7	30	40	132	M8x10(n.4)	45°	8	28.3 (27.3)	5.0
030/063	8.5	110	80	102	57	8	36	50	145	M8x10(n.8)	45°	8	28.3	7.0
040/075	11	140	93	119	71.5	10	40	60	165	M8x14(n.8)	45°	8	31.3	12.0
040/090	13	160	102	135	71.5	11	45	70	182	M10x18(n.8)	45°	10	38.3	15.6
050/110	14	200	125	167.5	84	14	50	85	225	M10x18(n.8)	45°	12	45.3	30.2
063/130	16	250	140	187.5	102	15	60	100	245	M12x21(n.8)	45°	14	48.8	55.0

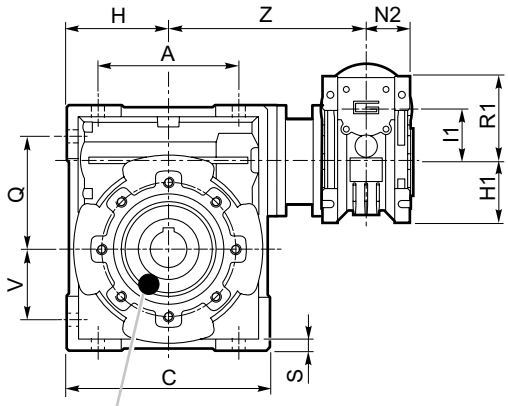
		CMP..F								CMP..FB							CMP..FL							
	a1	KA	KB	KC	KM	KN H8	KO	KP	KQ	KA	KB	KC	KM	KN H8	KO	KP	KA	KB	KC	KM	KN H8	KO	KP	KQ
030/040	45°	67	7.5	4	80-95	60	9(n.4)	110	95	80	8.5	5	115-125	95	9.5(n.4)	140	97	7.5	4.5	80-95	60	9(n.4)	110	95
030/050	45°	90	9	5	90-110	70	11(n.4)	125	110	89	9	5	130-145	110	9.5(n.4)	160	120	9	5	90-110	70	11(n.4)	125	110
030/063	45°	82	10	6	150-160	115	11(n.4)	180	142	98	10	5	165-180	130	11(n.4)	200	112	10	6	150-160	115	11(n.4)	180	142
040/075	45°	111	13	6	165-180	130	14(n.4)	200	170	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
040/090	45°	111	13	6	175-190	152	14(n.4)	210	200	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
050/110	45°	131	15	6	230	170	14(n.8)	280	260	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
063/130	22.5°	140	15	6	255	180	16(n.8)	320	290	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

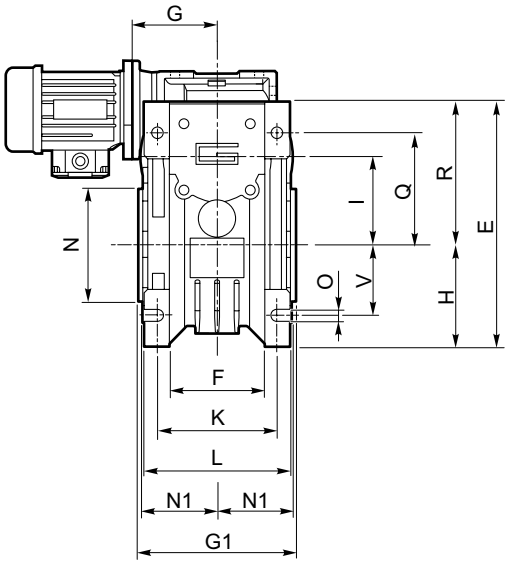
	CMMIS					
	A	B	D1 j6	E	F	M
030/040 030/050 030/063	51	20	9	M4	3	10.2
040/075 040/090	66	23	11	M5	4	12.5
050/110	76	30	14	M6	5	16
063/130	94.5	40	19	M6	6	21.5

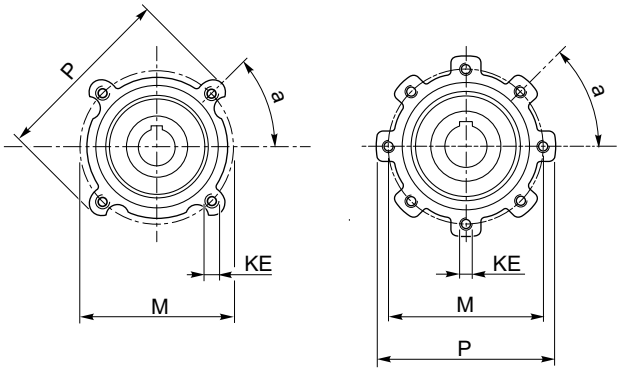




CMM..U

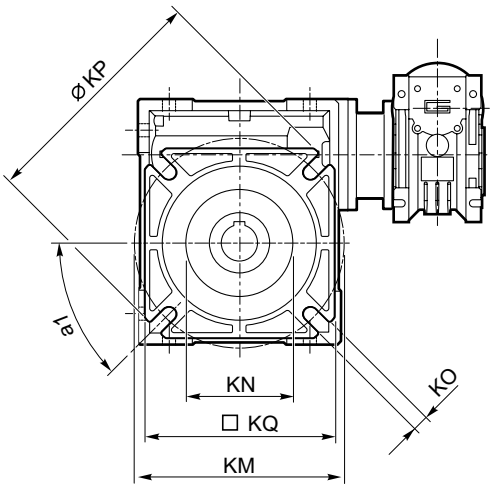


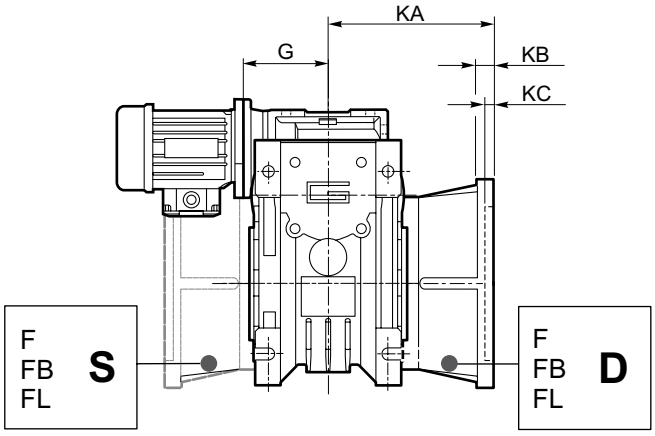




..030/040
..030/050

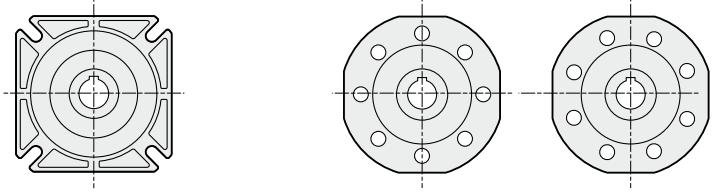
..030/063 ..040/075
..040/090 ..050/110
..063/130

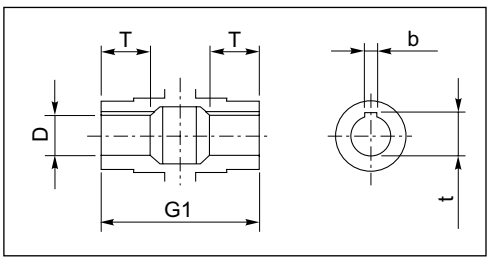




CMM..F (../030 - ../090)
CMM..FB (../040 - ../063)
CMM..FL (../040 - ../063)

CMM..F
(../110 ../130)





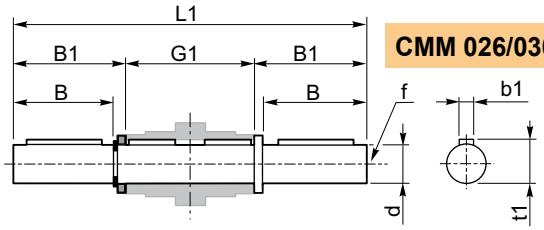
Albero lento cavo / *Hollow output shaft*

Accessori — *Accessories*

Albero lento semplice e doppio

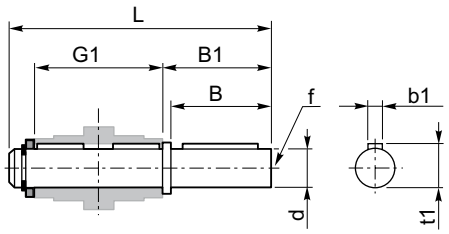
Single and double output shaft

DZ

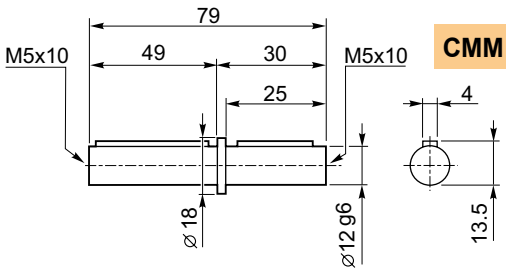


CMM 026/030 - CMM 063/130

SZ



CMM	d h7	B	B1	G1	L	L1	f	b1	t1
026/030	14	30	32.5	63	102	128	M6	5	16
026/040 030/040	18	40	43	78	128	164	M6	6	20.5
026/050 030/050	25	50	53.5	92	153	199	M10	8	28
030/063	25	50	53.5	112	173	219	M10	8	28
040/075	28	60	63.5	120	192	247	M10	8	31
040/090	35	80	84.5	140	234	309	M12	10	38
050/110	42	80	84.5	155	249	324	M16	12	45
063/130	45	80	85	170	265	340	M16	14	48.5

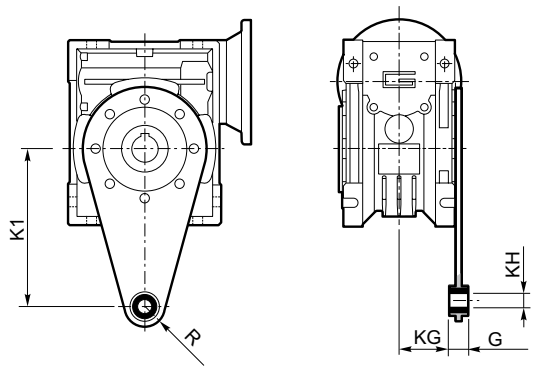


CMM 026/026

Braccio di reazione

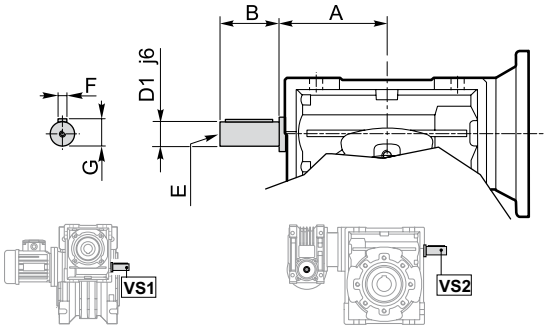
Torque arm

CMM	K1	G	KG	KH	R
026/030	85	14	23	8	15
026/040 030/040	100	14	31	10	18
026/050 030/050	100	14	38	10	18
030/063	150	14	47.5	10	18
040/075	200	25	46.5	20	30
040/090	200	25	56.5	20	30
050/110	250	30	62	25	35
063/130	250	30	69	25	35



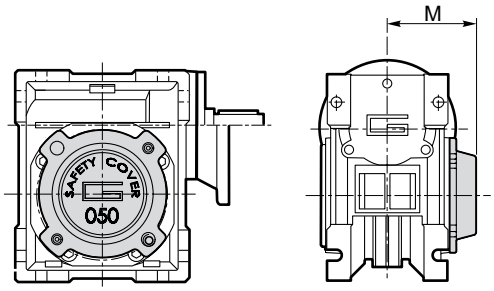
Opzioni — *Options*

VS1 - VS2 - Vite sporgente / *Extended input shaft*



CMM	VS1						VS2					
	A	B	D_1 j6	E	F	G	A	B	D_1 j6	E	F	G
026/030	—	—	—	—	—	—	45	20	9	M4	3	10.2
026/040	—	—	—	—	—	—	53	23	11	M5	4	12.5
026/050	—	—	—	—	—	—	64	30	14	M6	5	16
030/040	45	20	9	M4	3	10.2	53	23	11	M5	4	12.5
030/050	45	20	9	M4	3	10.2	64	30	14	M6	5	16
030/063	45	20	9	M4	3	10.2	75	40	19	M6	6	21.5
040/075	53	23	11	M5	4	12.5	90	50	24	M8	8	27
040/090	53	23	11	M5	4	12.5	108	50	24	M8	8	27
050/110	64	30	14	M6	5	16	135	60	28	M10	8	31
063/130	75	40	19	M6	6	21.5	—	—	—	—	—	—

SC - *Safety cover*



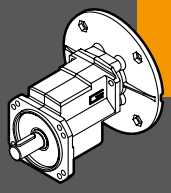
	CM							
	30	40	50	63	75	90	110	130
M	47	54.5	62.5	73	79	94	102	117

TRANSTECNO™

THE MODULAR GEARMOTOR

PU

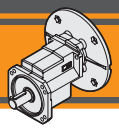
PU



RIDUTTORI AD INGRANAGGI MONOSTADIO

SINGLE STAGE HELICAL GEARBOXES

PRODUCTS • TRANSTECNO • GENUINE •



ENERGY SAVING

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Carichi radiali	*Radial loads*	**F3**
Simbologia	*Symbols*	**F3**
Dati tecnici	*Technical data*	**F3**
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Caratteristiche tecniche

I riduttori monostadio ad ingranaggi cilindrici della serie PU hanno le seguenti caratteristiche principali:

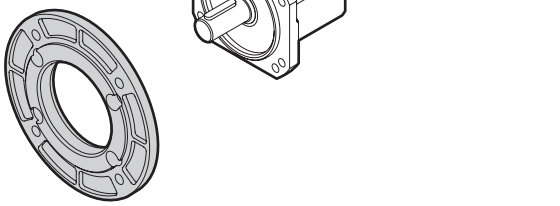
- Carcassa, flangia entrata e flangia uscita in pressofusione di alluminio;
- Ingranaggi rettificati;
- Lubrificazione permanente con olio sintetico.

Technical features

PU range single stage helical gearbox has the following main features:

- *Die-cast aluminum housings, input and output flanges;*
- *Ground-hardened helical gears;*
- *Permanent synthetic oil long-life lubrication.*

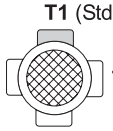
ENERGY SAVING

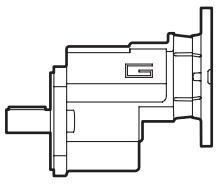


Designazione

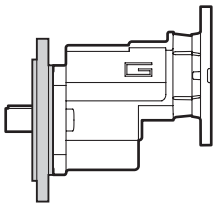
Classification

RIDUTTORE / *GEARBOX*						
PU	**01**	**FT1**	**5.70**	**71**	**B5**	**O3**
Tipo *Type*	Grandezza *Size*	Versione *Version*	Rapporto *Ratio*	IEC	Forma costruttiva *Version*	Diam. Albero uscita *Output shaft diam.*
PU	**01**	**U** **FT1** **FT2** **FT3**	**5.70** **8.57**	**63** **71** **80**	**B5** **B14**	vedi tabelle *see tables*

MOTORE / *MOTOR*				
0.25kW	**4p**	**3ph**	**50Hz**	**T1**
Potenza *Power*	Poli *Poles*	Fasi *Phases*	Frequenza *Frequency*	Pos. morsettiera *Terminal box pos.*
Vedi tabelle *See tables*	**2p** **4p** **6p** **8p**	**1ph** **3ph**	**50Hz** **60Hz**	**T1** (Std) **T4**  **T2** **T3**



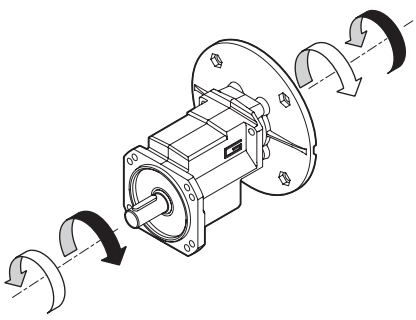
U



FT..

Sensi di rotazione

Direction of rotation

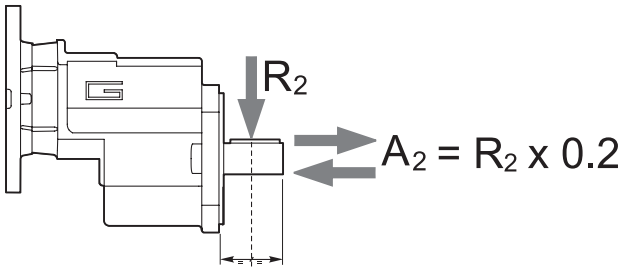


Lubrificazione — *Lubrication*

Tutti i riduttori della serie PU sono forniti completi di lubrificante sintetico viscosità 320, pertanto possono essere installati in qualunque posizione di montaggio e non necessitano di manutenzione.

Permanent synthetic oil long-life lubrication (viscosity grade 320) makes it possible to use PU range in all mounting positions.

Carichi radiali — *Radial loads*



n_2 [min^{-1}]	R_2 [N]
	PU 01
500	643
400	693
300	763
250	810
200	873
150	961
100	1100

Simbologia — *Symbols*

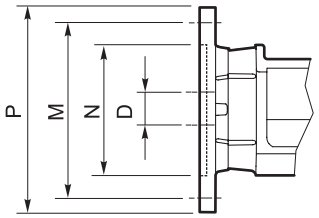
n_1	[min^{-1}]	Velocità in ingresso / *Input speed*
n_2	[min^{-1}]	Velocità in uscita / *Output speed*
i		Rapporto di riduzione / *Ratio*
P_1	[kW]	Potenza in entrata / *Input power*
M_2	[Nm]	Coppia nominale in uscita in funzione di P_1 / *Output torque referred to P_1*
sf		Fattore di servizio / *Service factor*
R_2	[N]	Carico radiale ammissibile in uscita / *Permitted output radial load*
A_2	[N]	Carico assiale ammissibile in uscita / *Permitted output axial load*

Dati tecnici — *Technical data*

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
0.18						
63A4 (1400 min^{-1})	246	6.7	*7.5*	5.70	**PU01**	**B5/B14**
	163	10.0	*5.0*	8.57	**PU01**	**B5/B14**
0.22						
63B4 (1400 min^{-1})	246	8.2	*6.1*	5.70	**PU01**	**B5/B14**
	163	12.3	*4.1*	8.57	**PU01**	**B5/B14**
0.25						
71A4 (1400 min^{-1})	246	9.4	*5.3*	5.70	**PU01**	**B5/B14**
	163	14	*2.8*	8.57	**PU01**	**B5/B14**
0.37						
71B4 (1400 min^{-1})	246	14	*3.6*	5.70	**PU01**	**B5/B14**
	163	21	*1.9*	8.57	**PU01**	**B5/B14**

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
0.55						
71C4 (1400 min^{-1})	246	21	*2.4*	5.70	**PU01**	**B5/B14**
	163	31	*1.3*	8.57	**PU01**	**B5/B14**
80A4 (1400 min^{-1})	246	21	*2.4*	5.70	**PU01**	**B5/B14**
	163	31	*1.3*	8.57	**PU01**	**B5/B14**
0.75						
80B4 (1400 min^{-1})	246	28	*2.4*	5.70	**PU01**	**B5/B14**
	163	42	*0.9*	8.57	**PU01**	**B5/B14**
1.1						
80B4 (1400 min^{-1})	246	41	*1.2*	5.7	**PU01**	**B5/B14**

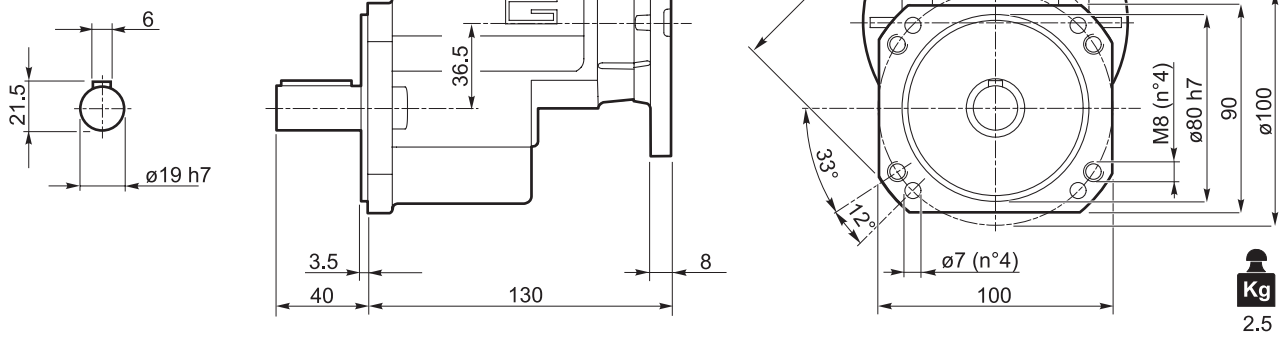
Motori applicabili — *IEC Motor adapters*



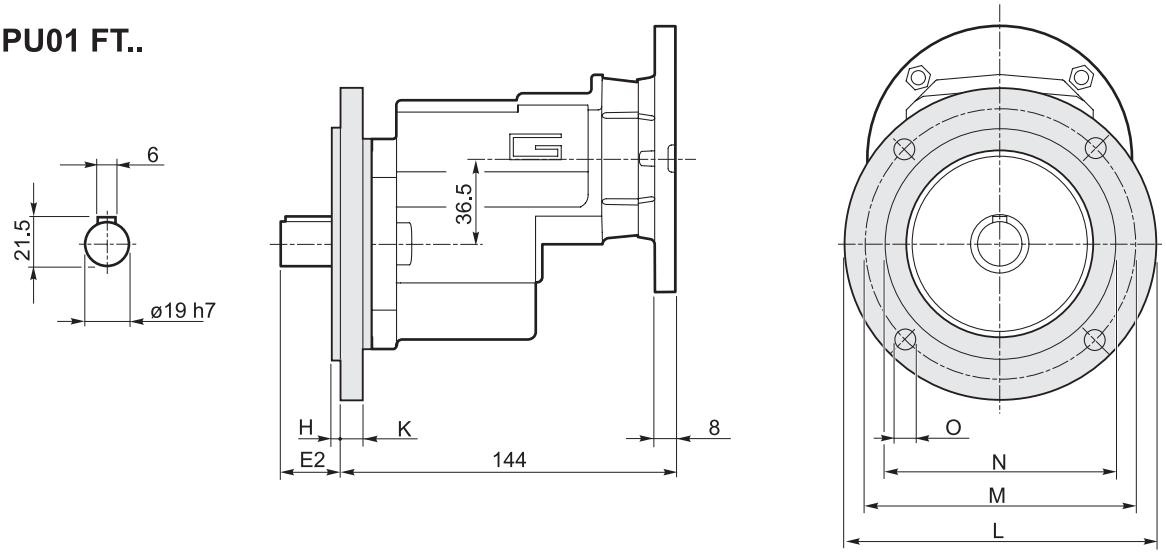
	IEC	N	M	P	D	i (rapporto / *ratio*)	
						5.70	8.57
PU01	80 B5	130	165	200	19		
	80 B14	80	100	120			
	71 B5	110	130	160	14	B	
	71 B14	70	85	105			
	63 B5	95	115	140	11	BS	
	63 B14	60	75	90			

Dimensioni — *Dimensions*

PU01 U



PU01 FT..



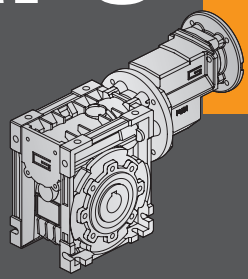
		Versione / *Version*							
		E_2	H	K	L	M	N f7	O	Peso / *Weight* [kg]
PU01	FT1	26	3	10	140	115	95	M8	0.3
	FT2	26	3.5	10	160	130	110	9	0.4
	FT3	26	3.5	10	200	165	130	11	0.5

TRANSTECNO™

THE MODULAR GEARMOTOR

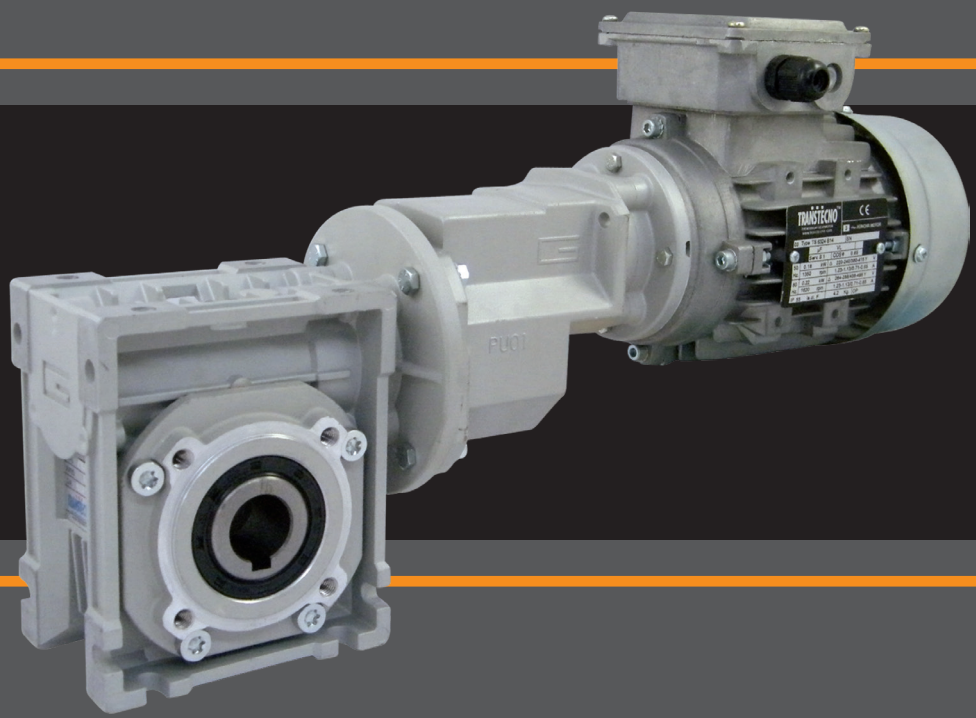
CMPU

CMPU



RIDUTTORI A VITE SENZA FINE CON PRECOPPIA PU

PU PRE-STAGE WORMGEARBOXES



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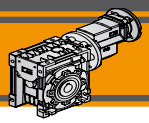

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Caratteristiche tecniche — *Technical features*

L'elevata modularità contraddistingue i riduttori a vite senza fine della serie CMPU: i diversi kit entrata ed uscita li rendono estremamente versatili.
Le caratteristiche principali della serie CMPU sono:

- Carcassa in alluminio pressofuso
- Le grandezze 090 e 110 sono fornite con cuscinetti a rulli conici sulla vite
- Lubrificazione permanente con olio sintetico

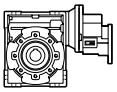
The high degree of modularity is a design feature of CMPU wormgearboxes range thanks to a wide selection of input and output kits. Main features of CMPU range are:

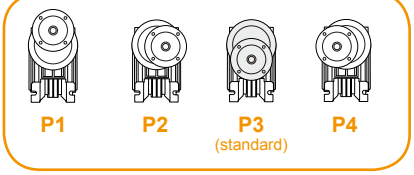
- *Die cast aluminium housing*
- *Double taper roller bearing on sizes 090 and 110*
- *Permanent synthetic oil long life lubrication*

Designazione — *Classification*

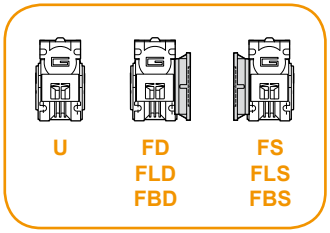
RIDUTTORE A VITE SENZA FINE CON PRECOPPIA / *PRE-STAGE WORMGEARBOX*

CMPU	01/050	U	57	71	B14	SZDX	BRSX	90	P4	B3	VS
Tipo *Type*	Grandezza *Size*	Versione riduttore *Gearbox Version*	Rapporto *Ratio*	IEC	Forma costruttiva *Version*	Albero di uscita *Output shaft*	Braccio di reazione *Torque arm*	Angolo *Angle*	*Pos. di montaggio precoppia Pre stage mounting position*	Pos. di montaggio *Mounting position*	Opzioni *Options*
CMPU	**01/050** **01/063** **01/075** **01/090**	**U** **FD** **FS** **FLD** **FLS** **FBD** **FBS**	Vedere tabella *See tables*	**63** **71** **80**	**B5** **B14**	**SZDX** **SZSX** **DZ**	**BRDX** **BRSX**	**0°** **90°** **180°** **270°**	**P1** **P2** **P3** (standard) **P4**	**B3** **B8** **B6** **B7** **V5** **V6**	**VS**

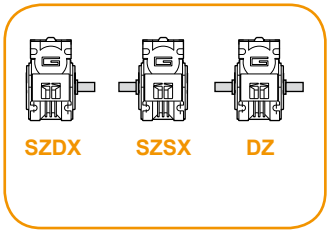




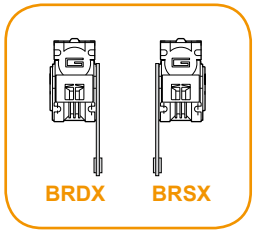
Versione Riduttore *Gearbox Version*



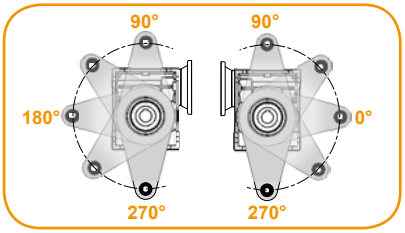
Albero di uscita *Output shaft*

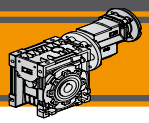


Braccio di reazione *Torque arm*



Angolo *Angle*



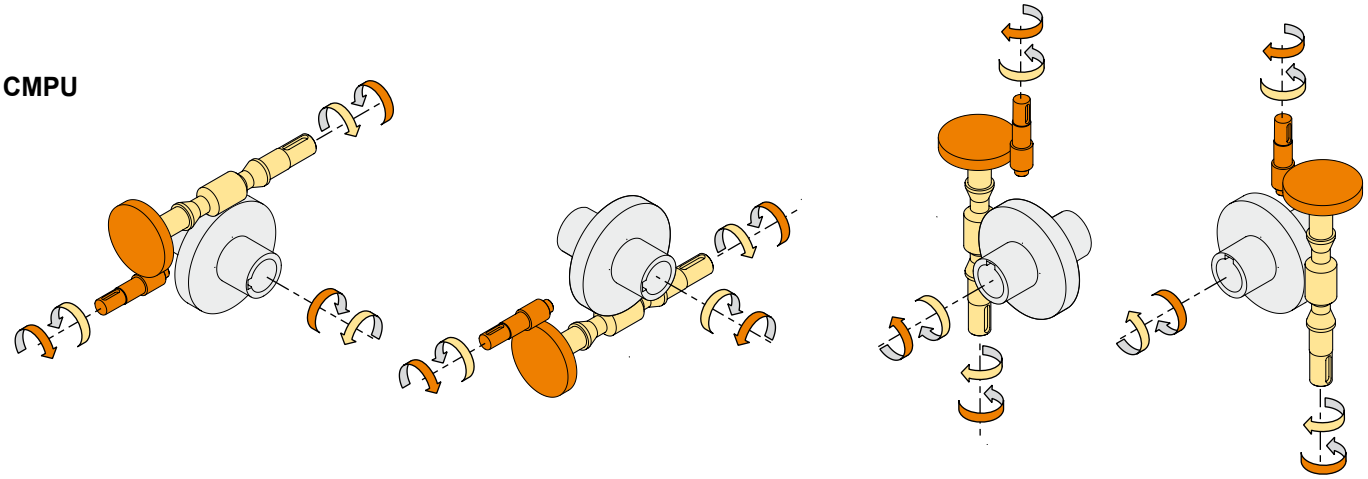


Designazione — *Classification*

MOTORE CM / *CM MOTOR*				
0.75kW	**4p**	**3ph**	**50Hz**	**T1**
Potenza *Power*	Poli *Poles*	Fasi *Phases*	Frequenza *Frequency*	Pos. morsettiera *Terminal box pos.*
Vedi tabelle *See tables*	**2p** **4p** **6p** **8p**	**1ph** **3ph**	**50Hz** **60Hz**	**T1** (Std) **T4** **T2** **T3**

Sensi di rotazione — *Direction of rotation*

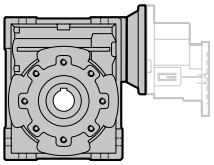
CMPU



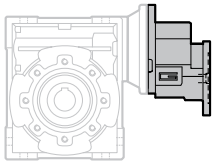
Simbologia — *Symbols*

n_1	[min^{-1}]	Velocità in ingresso / *Input speed*	M_2	[Nm]	Coppia in uscita in funzione di P_1 / *Output torque referred to P_1*
n_2	[min^{-1}]	Velocità in uscita / *Output speed*	sf		Fattore di servizio / *Service factor*
i		Rapporto di riduzione / *Ratio*	R_2	[N]	Carico radiale ammissibile in uscita / *Permitted output radial load*
P_1	[kW]	Potenza in entrata / *Nominal input power*	A_2	N]	Carico assiale ammissibile in uscita / *Permitted output axial load*

Lubrificazione — *Lubrication*



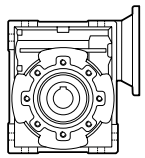
CMPU	Quantità di olio (litri) / *Oil quantity (litres)*					
	B3	B8	B6	B7	V5	V6
01/050	0.1					
01/063	0.25					
01/075	0.4					
01/090	0.7					
Lubrificazione a vita *Life lubrication*						



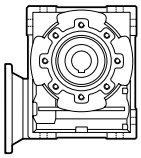
CMPU
01/050 01/063 01/075 01/090
Lubrificazione a vita *Life lubrication*

Posizioni di montaggio / *Mounting positions*

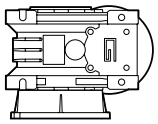
CM 050-063-075-090



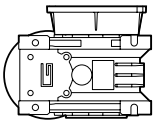
B3 (standard)



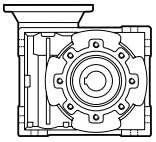
B8



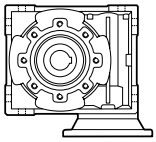
B6



B7

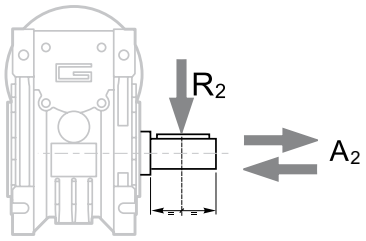


V5



V6

Carichi radiali — *Radial loads*

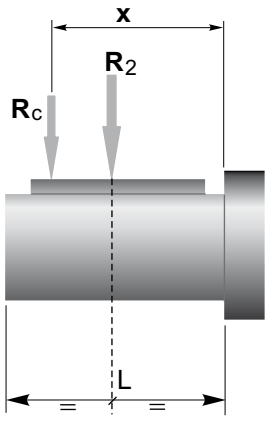


$A_2 = R_2 \times 0.2$

n_2 [min^{-1}]	R_2 [N]			
	CMPU 01/050	CMPU 01/063	CMPU 01/075	CMPU 01/090
47	2805	3874	4475	5009
35	3095	4273	4937	5526
28	3334	4603	5318	5953
23	3559	4915	5678	6356
18	3862	5334	6162	6897
14	4200	5800	6700	7500

Quando il carico radiale risultante non è applicato sulla mezzeria dell'albero occorre calcolare quello effettivo con la seguente formula:

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:



	CMPU			
	01/050	01/063	01/075	01/090
a	101	120	131	182
b	76	95	101	122
R_{2MAX}	4200	5800	6700	7500

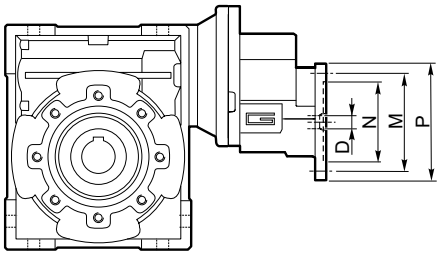
$$R_c = \frac{R_2 \cdot a}{(b+x)} \leq R_{2MAX}$$

$$R \leq R_c$$

a, b = valori riportati nella tabella
a, b = values given in the table

Motori applicabili

IEC Motor adapters



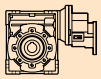
CMPU	IEC	N	M	P	D	i (i_1 x i_2)										
						28.5 (5,7x5)	**42.75** (5,7x7,5)	**57** (5,7x10)	**64.28** (8,57x7,5)	**85.5** (5,7x15)	**85.7** (8,57x10)	**114** (5,7x20)	**128.55** (8,57x15)	**142.5** (5,7x25)	**171** (5,7x30)	**214.25** (8,57x25)
01/050	63B5	95	115	140	11	**BS**	BS	BS	BS	**BS**	**BS**	**BS**	**BS**	**BS**	**BS**	**BS**
	63B14	60	75	90												
	71B5	110	130	160	14	**B**	B	B	B	**B**	**B**	**B**	**B**	**B**	**B**	**B**
	71B14	70	85	105												
	80B5	130	165	200	19											
	80B14	80	100	120												
01/063	63B5	95	115	140	11	**BS**	BS	BS	BS	**BS**	**BS**	**BS**	**BS**	**BS**	**BS**	**BS**
	63B14	60	75	90												
	71B5	110	130	160	14	**B**	**B**	**B**	**B**	**B**	**B**	**B**	**B**	**B**	**B**	**B**
	71B14	70	85	105												
	80B5	130	165	200	19											
	80B14	80	100	120												
01/075	63B5	95	115	140	11	**BS**	BS	BS	BS	**BS**	**BS**	**BS**	**BS**	**BS**	**BS**	**BS**
	63B14	60	75	90												
	71B5	110	130	160	14	**B**	**B**	**B**	**B**	**B**	**B**	**B**	**B**	**B**	**B**	**B**
	71B14	70	85	105												
	80B5	130	165	200	19											
	80B14	80	100	120												
01/090	63B5	95	115	140	11	**BS**	BS	BS	BS	**BS**	**BS**	**BS**	**BS**	**BS**	**BS**	**BS**
	63B14	60	75	90												
	71B5	110	130	160	14	**B**	**B**	**B**	**B**	**B**	**B**	**B**	**B**	**B**	**B**	**B**
	71B14	70	85	105												
	80B5	130	165	200	19											
	80B14	80	100	120												

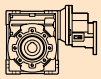
CMPU	IEC	N	M	P	D	i (i_1 x i_2)									
						228 (5,7x40)	**257.1** (8,57x30)	**285** (5,7x50)	**342.8** (8,57x40)	**428.5** (8,57x50)	**456** (5,7x80)	**514.2** (8,57x60)	**570** (5,7x100)	**685.6** (8,57x80)	**857** (8,57x100)
01/050	63B5	95	115	140	11		**BS**								
	63B14	60	75	90											
	71B5	110	130	160	14		**B**								
	71B14	70	85	105											
	80B5	130	165	200	19										
	80B14	80	100	120											
01/063	63B5	95	115	140	11	**BS**	**BS**	**BS**	**BS**	**BS**		**BS**			
	63B14	60	75	90											
	71B5	110	130	160	14	**B**	**B**	**B**	**B**	**B**		**B**			
	71B14	70	85	105											
	80B5	130	165	200	19										
	80B14	80	100	120											
01/075	63B5	95	115	140	11	**BS**	**BS**	**BS**	**BS**	**BS**	**BS**	**BS**	**BS**	**BS**	**BS**
	63B14	60	75	90											
	71B5	110	130	160	14	**B**	**B**	**B**	**B**	**B**	**B**	**B**	**B**	**B**	**B**
	71B14	70	85	105											
	80B5	130	165	200	19										
	80B14	80	100	120											
01/090	63B5	95	115	140	11	**BS**	**BS**	**BS**	**BS**	**BS**	**BS**	**BS**	**BS**	**BS**	**BS**
	63B14	60	75	90											
	71B5	110	130	160	14	**B**	**B**	**B**	**B**	**B**	**B**	**B**	**B**	**B**	**B**
	71B14	70	85	105											
	80B5	130	165	200	19										
	80B14	80	100	120											

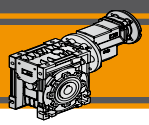
N.B.
Le aree evidenziate in grigio indicano l'applicabilità della corrispondente grandezza motore.
N.B. *Grey areas indicate motor inputs available on each size of unit.*

B/BS = Boccola di riduzione in acciaio
B/BS = Metal shaft sleeve

Dati tecnici / *Technical data*

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
0.18						
63B4	**49**	31	*4.9*	28.50	**CMPU01/050**	B5/B14
(1400 min^{-1})	**33**	45	*3.5*	42.75		B5/B14
	25	58	*2.7*	57.00		B5/B14
	22	67	*2.3*	64.28		B5/B14
	16	88	*1.8*	85.70		B5/B14
	12	109	*1.3*	114.00		B5/B14
	11	127	*1.3*	128.55		B5/B14
	9.8	131	*0.9*	142.50		B5/B14
	8.2	148	*1.1*	171.00		B5/B14
	22	62	*4.7*	64.28	**CMPU01/063**	B5/B14
	16	80	*3.6*	85.70		B5/B14
	12	92	*2.8*	114.00		B5/B14
	11	110	*2.8*	128.55		B5/B14
	9.8	108	*2.1*	142.50		B5/B14
	8.2	124	*2.5*	171.00		B5/B14
	6.5	163	*1.4*	214.25		B5/B14
	6.1	148	*1.8*	228.00		B5/B14
	5.4	186	*1.7*	257.10		B5/B14
	4.9	172	*1.4*	285.00		B5/B14
	4.1	223	*1.2*	342.80		B5/B14
	3.3	258	*0.9*	428.50		B5/B14
	12	95	*4.6*	114.00	**CMPU01/075**	B5/B14
	11	113	*4.3*	128.55		B5/B14
	9.8	113	*3.4*	142.50		B5/B14
	8.2	130	*3.9*	171.00		B5/B14
	6.5	170	*2.3*	214.25		B5/B14
	6.1	157	*2.8*	228.00		B5/B14
	5.4	195	*2.6*	257.10		B5/B14
	4.9	182	*2.1*	285.00		B5/B14
	4.1	236	*1.8*	342.80		B5/B14
	3.3	274	*1.4*	428.50		B5/B14
	3.1	236	*1.3*	456.00		B5/B14
	2.7	304	*1.2*	514.20		B5/B14
	2.5	261	*1.0*	570.00		B5/B14
	2.0	355	*0.8*	685.60		B5/B14
	1.6	393	*0.7*	857.00		B5/B14
	6.5	178	*3.7*	214.25	**CMPU01/090**	B5/B14
	6.1	168	*4.5*	228.00		B5/B14
	5.4	205	*4.3*	257.10		B5/B14
	4.9	196	*3.2*	285.00		B5/B14
	4.1	252	*3.0*	342.80		B5/B14
	3.3	294	*2.2*	428.50		B5/B14
	3.1	258	*1.9*	456.00		B5/B14
	2.7	329	*1.8*	514.20		B5/B14
	2.5	289	*1.5*	570.00		B5/B14
	2.0	388	*1.3*	685.60		B5/B14
	1.6	434	*1.0*	857.00		B5/B14

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
0.22						
63C4	**49**	37	*4.0*	28.50	**CMPU01/050**	B5/B14
(1400 min^{-1})	**33**	55	*2.9*	42.75		B5/B14
	25	71	*2.2*	57.00		B5/B14
	22	82	*1.9*	64.28		B5/B14
	16	107	*1.4*	85.70		B5/B14
	12	132	*1.0*	114.00		B5/B14
	11	155	*1.0*	128.55		B5/B14
	9.8	159	*0.8*	142.50		B5/B14
	8.2	181	*0.9*	171.00		B5/B14
	25	65	*4.4*	57.00	**CMPU01/063**	B5/B14
	22	76	*3.9*	64.28		B5/B14
	16	97	*3.0*	85.70		B5/B14
	12	112	*2.3*	114.00		B5/B14
	11	134	*2.3*	128.55		B5/B14
	9.8	132	*1.7*	142.50		B5/B14
	8.2	151	*2.1*	171.00		B5/B14
	6.5	198	*1.2*	214.25		B5/B14
	6.1	181	*1.4*	228.00		B5/B14
	5.4	227	*1.4*	257.10		B5/B14
	4.9	209	*1.1*	285.00		B5/B14
	4.1	272	*1.0*	342.80		B5/B14
	16	98	*4.8*	85.70	**CMPU01/075**	B5/B14
	12	116	*3.8*	114.00		B5/B14
	11	138	*3.6*	128.55		B5/B14
	9.8	138	*2.8*	142.50		B5/B14
	8.2	158	*3.2*	171.00		B5/B14
	6.5	208	*1.8*	214.25		B5/B14
	6.1	191	*2.3*	228.00		B5/B14
	5.4	238	*2.1*	257.10		B5/B14
	4.9	222	*1.7*	285.00		B5/B14
	4.1	287	*1.5*	342.80		B5/B14
	3.3	334	*1.1*	428.5		B5/B14
	3.1	288	*1.0*	456.00		B5/B14
	2.7	370	*1.0*	514.20		B5/B14
	2.5	318	*0.8*	570.00		B5/B14
	2.0	433	*0.7*	685.60		B5/B14
	9.8	145	*4.6*	142.50	**CMPU01/090**	B5/B14
	6.5	217	*3.0*	214.25		B5/B14
	6.1	204	*3.7*	228.00		B5/B14
	5.4	249	*3.5*	257.10		B5/B14
	4.9	239	*2.7*	285.00		B5/B14
	4.1	307	*2.5*	342.80		B5/B14
	3.3	359	*1.8*	428.50		B5/B14
	3.1	315	*1.6*	456.00		B5/B14
	2.7	401	*1.4*	514.20		B5/B14
	2.5	352	*1.3*	570.00		B5/B14
	2.0	474	*1.1*	685.60		B5/B14
	1.6	529	*0.8*	857.00		B5/B14



Dati tecnici / *Technical data*

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
0.25						
71A4	**49**	42	*3.5*	28.5	**CMPU01/050**	B5/B14
(1400 min^{-1})	**33**	62	*2.5*	42.75		B5/B14
	25	81	*1.9*	57.00		B5/B14
	22	93	*1.7*	64.28		B5/B14
	16	121	*1.3*	85.70		B5/B14
	12	150	*0.9*	114.00		B5/B14
	11	176	*0.9*	128.55		B5/B14
	9.8	180	*0.7*	142.50		B5/B14
	8.2	205	*0.8*	171.00		B5/B14
	25	73	*3.9*	57.00	**CMPU01/063**	B5/B14
	22	86	*3.4*	64.28		B5/B14
	16	110	*2.6*	85.70		B5/B14
	12	127	*2.0*	114.00		B5/B14
	11	152	*2.0*	128.55		B5/B14
	9.8	150	*1.5*	142.50		B5/B14
	8.2	171	*1.8*	171.00		B5/B14
	6.5	225	*1.0*	214.25		B5/B14
	6.1	205	*1.3*	228.00		B5/B14
	5.4	257	*1.2*	257.10		B5/B14
	4.9	237	*1.0*	285.00		B5/B14
	4.1	308	*0.8*	342.80		B5/B14
	16	111	*4.2*	85.70	**CMPU01/075**	B5/B14
	12	131	*3.3*	114.00		B5/B14
	11	156	*3.1*	128.55		B5/B14
	9.8	157	*2.5*	142.50		B5/B14
	8.2	179	*2.8*	171.00		B5/B14
	6.5	236	*1.6*	214.25		B5/B14
	5.4	270	*1.9*	257.10		B5/B14
	6.1	217	*2.0*	228.00		B5/B14
	4.9	252	*1.5*	285.00		B5/B14
	4.1	326	*1.3*	342.80		B5/B14
	3.3	378	*1.0*	428.50		B5/B14
	3.1	327	*0.9*	456.00		B5/B14
	2.7	420	*0.9*	514.20		B5/B14
	2.5	361	*0.7*	570.00		B5/B14
	9.8	164	*4.0*	142.50	**CMPU01/090**	B5/B14
	8.2	188	*4.7*	171.00		B5/B14
	6.5	246	*2.7*	214.25		B5/B14
	6.1	232	*3.3*	228.00		B5/B14
	5.4	283	*3.1*	257.10		B5/B14
	4.9	271	*2.3*	285.00		B5/B14
	4.1	348	*2.2*	342.80		B5/B14
	3.3	407	*1.6*	428.50		B5/B14
	3.1	357	*1.4*	456.00		B5/B14
	2.7	454	*1.3*	514.20		B5/B14
	2.5	399	*1.1*	570.00		B5/B14
	2.0	537	*0.9*	685.60		B5/B14
	1.6	600	*0.7*	857.00		B5/B14

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
0.37						
71B4	**49**	63	*2.4*	28.50	**CMPU01/050**	B5/B14
(1400 min^{-1})	**33**	92	*1.7*	42.75		B5/B14
	25	120	*1.3*	57.00		B5/B14
	22	138	*1.1*	64.28		B5/B14
	16	180	*0.9*	85.70		B5/B14
	49	58	*4.8*	28.50	**CMPU01/063**	B5/B14
	33	84	*3.5*	42.75		B5/B14
	25	108	*2.6*	57.00		B5/B14
	22	127	*2.3*	64.28		B5/B14
	16	163	*1.8*	85.70		B5/B14
	12	189	*1.4*	114.00		B5/B14
	11	225	*1.3*	128.55		B5/B14
	9.8	222	*1.0*	142.50		B5/B14
	8.2	253	*1.2*	171.00		B5/B14
	6.5	333	*0.7*	214.25		B5/B14
	6.1	304	*0.9*	228.00		B5/B14
	5.4	381	*0.8*	257.10		B5/B14
	4.9	352	*0.7*	285.00		B5/B14
	25	110	*4.3*	57.00	**CMPU01/075**	B5/B14
	22	129	*3.5*	64.28		B5/B14
	16	165	*2.8*	85.70		B5/B14
	12	194	*2.2*	114.00		B5/B14
	11	232	*2.1*	128.55		B5/B14
	9.8	232	*1.7*	142.50		B5/B14
	8.2	266	*1.9*	171.00		B5/B14
	6.5	349	*1.1*	214.25		B5/B14
	6.1	321	*1.3*	228.00		B5/B14
	5.4	400	*1.3*	257.10		B5/B14
	4.9	373	*1.0*	285.00		B5/B14
	4.1	483	*0.9*	342.80		B5/B14
	3.3	561	*0.7*	428.50		B5/B14
	16	169	*4.1*	85.70	**CMPU01/090**	B5/B14
	12	203	*3.7*	114.00		B5/B14
	11	238	*3.4*	128.55		B5/B14
	9.8	243	*2.7*	142.50		B5/B14
	8.2	279	*3.2*	171.00		B5/B14
	6.5	365	*1.8*	214.25		B5/B14
	6.1	343	*2.2*	228.00		B5/B14
	5.4	419	*2.1*	257.10		B5/B14
	4.9	401	*1.6*	285.00		B5/B14
	4.1	516	*1.5*	342.80		B5/B14
	3.3	603	*1.1*	428.50		B5/B14
	3.1	529	*0.9*	456.00		B5/B14
	2.7	673	*0.9*	514.20		B5/B14
	2.5	591	*0.7*	570.00		B5/B14

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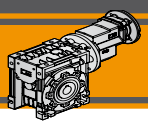
P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
0.55						
71C4	**49**	93	*1.6*	28.50	**CMPU01/050**	B5/B14
(1400 min^{-1})	**33**	137	*1.1*	42.75		B5/B14
	25	178	*0.9*	57.00		B5/B14
	22	206	*0.8*	64.28		B5/B14
	49	86	*3.2*	28.5	**CMPU01/063**	B5/B14
	33	126	*2.3*	42.75		B5/B14
	25	161	*1.8*	57.00		B5/B14
	22	189	*1.5*	64.28		B5/B14
	16	243	*1.2*	85.70		B5/B14
	12	281	*0.9*	114.00		B5/B14
	11	335	*0.9*	128.55		B5/B14
	9.8	330	*0.7*	142.50		B5/B14
	8.2	377	*0.8*	171.00		B5/B14
	33	127	*3.5*	42.75	**CMPU01/075**	B5/B14
	25	163	*2.9*	57.00		B5/B14
	22	191	*2.3*	64.28		B5/B14
	16	246	*1.9*	85.70		B5/B14
	12	289	*1.5*	114.00		B5/B14
	11	345	*1.4*	128.55		B5/B14
	9.8	346	*1.1*	142.50		B5/B14
	8.2	396	*1.3*	171.00		B5/B14
	6.5	520	*0.7*	214.25		B5/B14
	6.1	478	*0.9*	228.00		B5/B14
	5.4	595	*0.9*	257.10		B5/B14
	4.9	555	*0.7*	285.00		B5/B14
	25	168	*4.2*	57.00	**CMPU01/090**	B5/B14
	22	196	*3.4*	64.28		B5/B14
	16	252	*2.8*	85.70		B5/B14
	12	302	*2.5*	114.00		B5/B14
	11	354	*2.3*	128.55		B5/B14
	9.8	361	*1.8*	142.50		B5/B14
	8.2	415	*2.1*	171.00		B5/B14
	6.5	543	*1.2*	214.25		B5/B14
	6.1	511	*1.5*	228.00		B5/B14
	5.4	624	*1.4*	257.10		B5/B14
	4.9	597	*1.1*	285.00		B5/B14
	4.1	768	*1.0*	342.80		B5/B14
	3.3	898	*0.7*	428.50		B5/B14

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
0.55						
80A4	**49**	93	*1.6*	28.5	**CMPU01/050**	B5/B14
(1400 min^{-1})	**33**	137	*1.1*	42.75		B5/B14
	25	178	*0.9*	57.00		B5/B14
	22	206	*0.8*	64.28		B5/B14
	49	86	*3.2*	28.50	**CMPU01/063**	B5/B14
	33	126	*2.3*	42.75		B5/B14
	25	161	*1.8*	57.00		B5/B14
	22	189	*1.5*	64.28		B5/B14
	16	243	*1.2*	85.70		B5/B14
	12	281	*0.9*	114.00		B5/B14
	11	335	*0.9*	128.55		B5/B14
	9.8	330	*0.7*	142.50		B5/B14
	8.2	377	*0.8*	171.00		B5/B14
	33	127	*3.5*	42.75	**CMPU01/075**	B5/B14
	25	163	*2.9*	57.00		B5/B14
	22	191	*2.3*	64.28		B5/B14
	16	246	*1.9*	85.70		B5/B14
	12	289	*1.5*	114.00		B5/B14
	11	345	*1.4*	128.55		B5/B14
	9.8	346	*1.1*	142.50		B5/B14
	8.2	396	*1.3*	171.00		B5/B14
	6.5	520	*0.7*	214.25		B5/B14
	6.1	478	*0.9*	228.00		B5/B14
	5.4	595	*0.9*	257.10		B5/B14
	4.9	555	*0.7*	285.00		B5/B14
	25	168	*4.2*	57.00	**CMPU01/090**	B5/B14
	22	196	*3.4*	64.28		B5/B14
	16	252	*2.8*	85.70		B5/B14
	12	302	*2.5*	114.00		B5/B14
	11	354	*2.3*	128.55		B5/B14
	9.8	361	*1.8*	142.50		B5/B14
	8.2	415	*2.1*	171.00		B5/B14
	6.5	543	*1.2*	214.25		B5/B14
	6.1	511	*1.5*	228.00		B5/B14
	5.4	624	*1.4*	257.10		B5/B14
	4.9	597	*1.1*	285.00		B5/B14
	4.1	768	*1.0*	342.80		B5/B14
	3.3	898	*0.7*	428.50		B5/B14



Dati tecnici

Technical data

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
0.75						
80B4 (1400 min^{-1})	**49**	127	*1.2*	28.50	**CMPU01/050**	B5/B14
	33	187	*0.8*	42.75		B5/B14
	49	117	*2.4*	28.50	**CMPU01/063**	B5/B14
	33	172	*1.7*	42.75		B5/B14
	25	220	*1.3*	57.00		B5/B14
	22	258	*1.1*	64.28		B5/B14
	16	331	*0.9*	85.70		B5/B14
	12	383	*0.7*	114.00		B5/B14
	11	458	*0.7*	128.60		B5/B14
	33	174	*2.6*	42.75	**CMPU01/075**	B5/B14
	25	223	*2.1*	57.00		B5/B14
	22	261	*1.7*	64.28		B5/B14
	16	335	*1.4*	85.70		B5/B14
	12	395	*1.1*	114.00		B5/B14
	11	471	*1.0*	128.60		B5/B14
	9.8	472	*0.8*	142.50		B5/B14
	8.2	541	*0.9*	171.00		B5/B14
	6.1	652	*0.7*	228.00		B5/B14
	33	178	*3.7*	42.75	**CMPU01/090**	B5/B14
	25	229	*3.0*	57.00		B5/B14
	22	268	*2.5*	64.28		B5/B14
	16	344	*2.0*	85.70		B5/B14
	12	412	*1.8*	114.00		B5/B14
	11	484	*1.7*	128.55		B5/B14
	9.8	493	*1.3*	142.50		B5/B14
	8.2	566	*1.6*	171.00		B5/B14
	6.5	742	*0.9*	214.25		B5/B14
	6.1	698	*1.1*	228.00		B5/B14
	5.4	851	*1.0*	257.10		B5/B14
	4.9	815	*0.8*	285.00		B5/B14
	4.1	1049	*0.7*	342.80		B5/B14

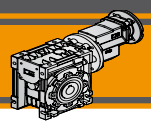
P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
1.1						
80C4 (1400 min^{-1})	**49**	186	*0.8*	28.50	**CMPU01/050**	B5/B14
	49	172	*1.6*	28.50	**CMPU01/063**	B5/B14
	33	251	*1.2*	42.75		B5/B14
	25	323	*0.9*	57.00		B5/B14
	16	446	*0.7*	85.50		B5/B14
	33	255	*1.7*	42.75	**CMPU01/075**	B5/B14
	25	327	*1.4*	57.00		B5/B14
	16	459	*1.1*	85.50		B5/B14
	12	578	*0.8*	114.00		B5/B14
	33	261	*2.5*	42.75	**CMPU01/090**	B5/B14
	25	335	*2.1*	57.00		B5/B14
	16	471	*1.7*	85.50		B5/B14
	12	603	*1.2*	114.00		B5/B14
	9.8	723	*0.9*	142.50		B5/B14
	8.2	830	*1.1*	171.00		B5/B14
	6.1	1022	*0.7*	228.00		B5/B14

Dimensioni — *Dimensions*

	CMPU.. - CMPU..F - CMPU..FB - CMPU..FL														
	A	C	D H8	E	F	G1	H	H1	HX	I	K	L	M	N h8	N1
01/050	80	120	25	144	49	92	60	40	36.5	50	70	85	85	70	43.5
01/063	100	144	25	174	67	112	72	40	36.5	63	85	104	95	80	53
01/075	120	172	28	205	72	120	86	50	36.5	75	90	112	115	95	57
01/090	140	208	35	238	74	140	103	50	36.5	90	100	130	130	110	67

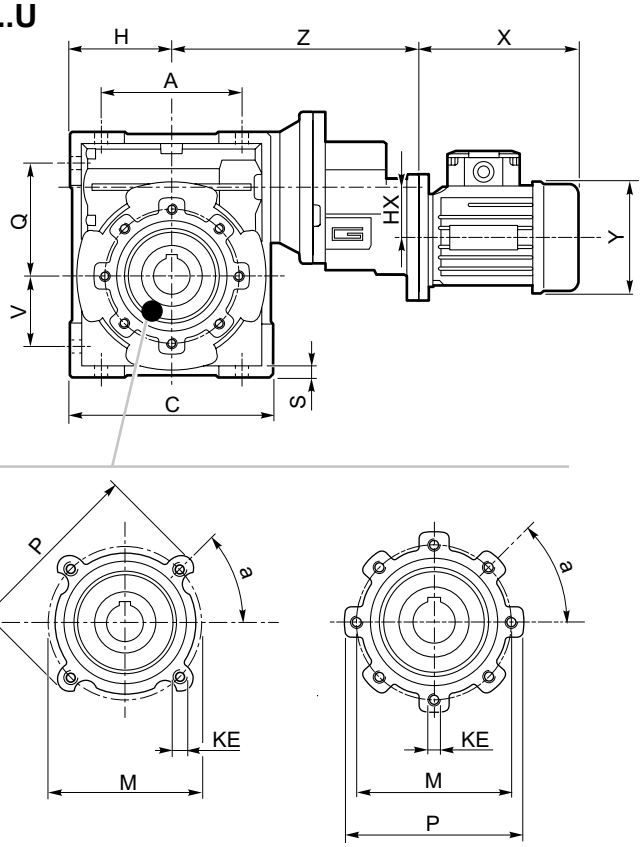
	CMPU.. - CMPU..F - CMPU..FB - CMPU..FL												
	O	P	Q	R	S	T	V	Z	KE	a	b	t	Kg
01/050	8.5	98	64	84	7	30	40	210	M8x10(n.4)	45°	8	28.3 (27.3)	6.0
01/063	8.5	110	80	102	8	36	50	228	M8x10(n.8)	45°	8	28.3	8.7
01/075	11	140	93	119	10	40	60	243	M8x14(n.8)	45°	8	31.3	11.5
01/090	13	160	102	135	11	45	70	260	M10x18(n.8)	45°	10	38.3	15.5

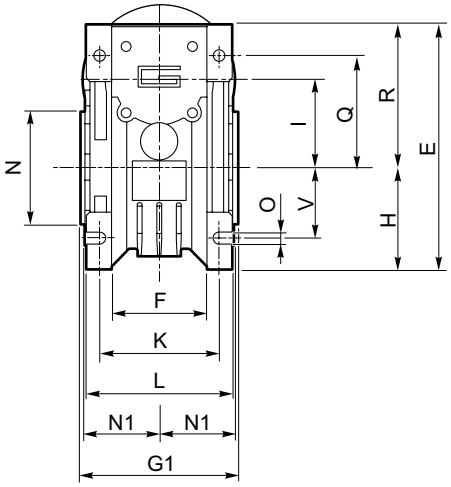
		CMPU..F								CMPU..FB							CMPU..FL							
	a1	KA	KB	KC	KM	KN H8	KO	KP	KQ	KA	KB	KC	KM	KN H8	KO	KP	KA	KB	KC	KM	KN H8	KO	KP	KQ
01/050	45°	90	9	5	90-110	70	11(n.4)	125	110	89	9	5	130-145	110	9.5(n.4)	160	120	9	5	90-110	70	11(n.4)	125	110
01/063	45°	82	10	6	150-160	115	11(n.4)	180	142	98	10	5	165-180	130	11(n.4)	200	112	10	6	150-160	115	11(n.4)	180	142
01/075	45°	111	13	6	165-180	130	14(n.4)	200	170	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
01/090	45°	111	13	6	175-190	152	14(n.4)	210	200	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—



Dimensioni *Dimensions*

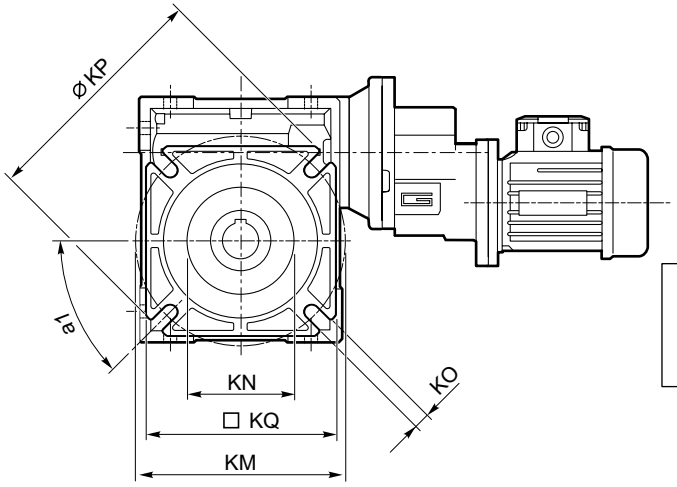
CMPU..U

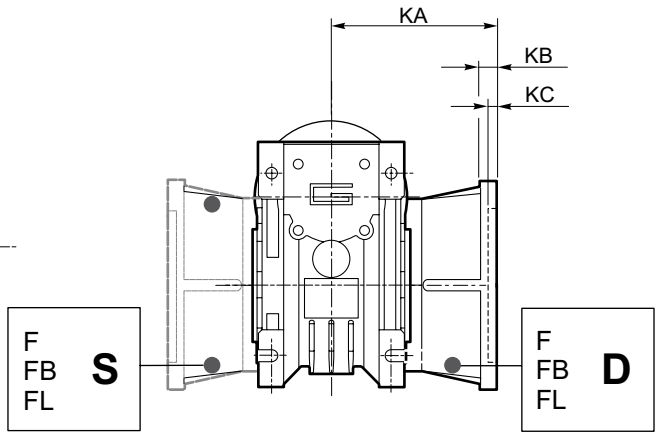




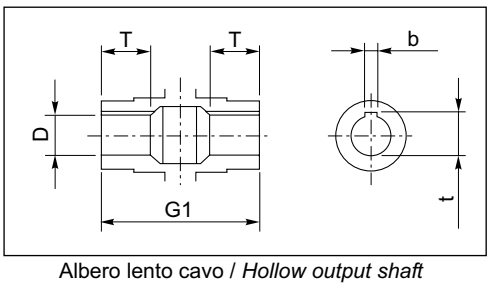
..01/050

..01/063
..01/075
..01/090





CMPU..F **(..01/050 - .. 01/090)**
CMPU..FB **(.. 01/050 - .. 01/063)**
CMPU..FL **(.. 01/050 - .. 01/063)**

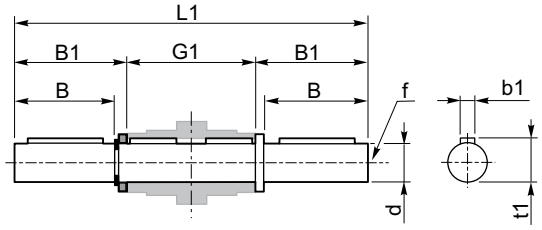


Albero lento cavo / *Hollow output shaft*

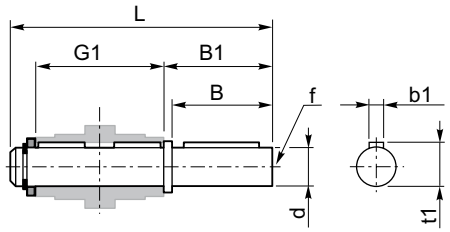
Accessori / *Accessories*

Albero lento semplice e doppio / ***Single and double output shaft***

DZ



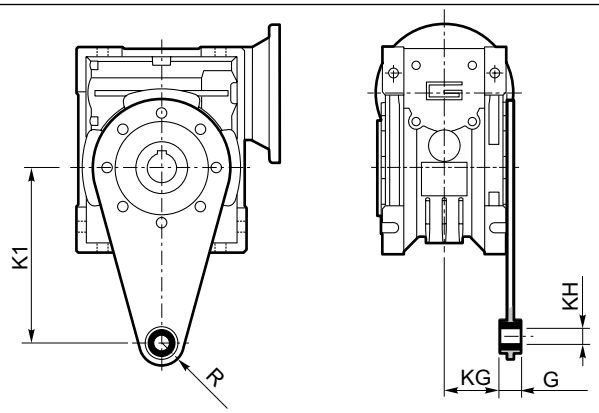
SZ



CMPU	d h7	B	B1	G1	L	L1	f	b1	t1
01/050	25	50	53.5	92	153	199	M10	8	28
01/063	25	50	53.5	112	173	219	M10	8	28
01/075	28	60	63.5	120	192	247	M10	8	31
01/090	35	80	84.5	140	234	309	M12	10	38

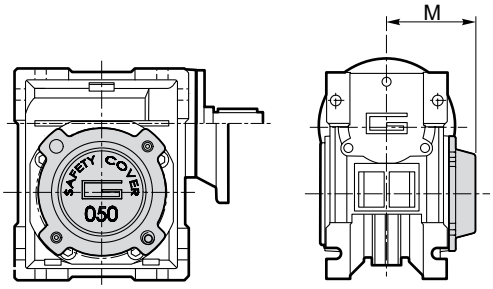
Braccio di reazione / ***Torque arm***

CMPU	K1	G	KG	KH	R
01/050	100	14	38	10	18
01/063	150	14	47.5	10	18
01/075	200	25	46.5	20	30
01/090	200	25	56.5	20	30



SC - *Safety Cover*

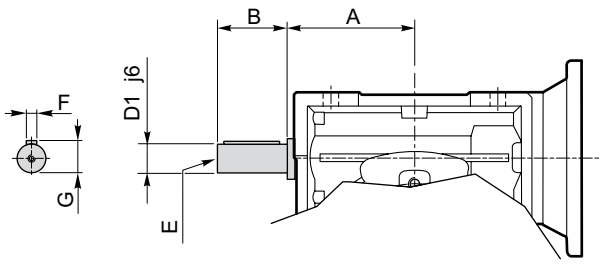
CMPU	M
01/050	62.5
01/063	73
01/075	79
01/090	94



Opzioni / *Options*

VS - Vite sporgente / *Extended input shaft*

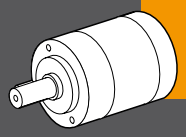
CMPU	A	B	D_1 j6	E	F	G
01/050	64	30	14	M6	5	16
01/063	75	40	19	M6	6	21.5
01/075	90	50	24	M8	8	27
01/090	108	50	24	M8	8	27



TRANSTECNO™

THE MODULAR GEARMOTOR

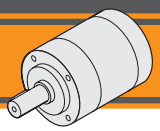
P



RIDUTTORI EPICICLOIDALI

PLANETARY GEARBOXES

TRANSTECNO · GENUINE · PRODUCTS ·



ENERGY SAVING

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Caratteristiche tecniche — *Technical features*

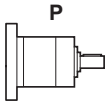
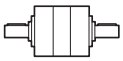
I riduttori epicicloidali della serie P hanno le seguenti caratteristiche principali:

- Ingresso ed uscita coassiali
- Senso di rotazione concorde ingresso/uscita
- Alte coppie in ingombri ridotti
- Adatti per servizio continuo ed intermittente

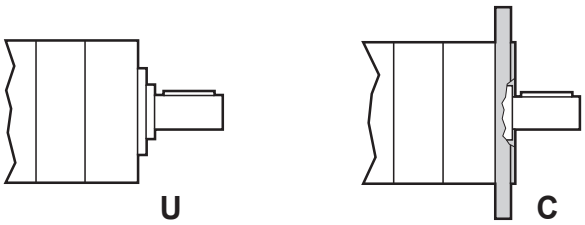
P planetary gearboxes have the following features:

- *Coaxial arrangement of the input and output*
- *Same rotation input/output*
- *Advantageous torque with minimum space requirements*
- *Suitable for continuous, reversing and intermittent operation*

Designazione — *Classification*

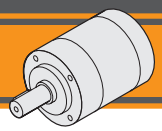
RIDUTTORE / *GEARBOX*				
P	**52**	**2**	**C**	**34.97**
Tipo *Type*	Grandezza *Size*	Stadi riduttore *Gearbox stages*	Versione riduttore *Gearbox Version*	Rapporto *Ratio*
P 	**42** **52** **62** **72** **81** **105** **120**	**1** **2** **3**	**U** **C80** **C90** **C105** **C120** **C140** **C160**	Vedere tabella *See tables*
PIS 				

Versioni — *Versions*



Simbologia — *Symbols*

Ns		Stadi / *Stages*	Mn_2	[Nm]	Coppia nominale in uscita / Nominal *output torque*
n_1	[min^{-1}]	Velocità in ingresso / *Input speed*	Rd	%	Rendimento dinamico / *Dynamic efficiency*
n_2	[min^{-1}]	Velocità in uscita / *Output speed*	A_2	[N]	Carico assiale ammissibile in uscita / *Permitted output axial load*
i		Rapporto di riduzione / *Ratio*	R_2	[N]	Carico radiale ammissibile in uscita / *Permitted output radial load*



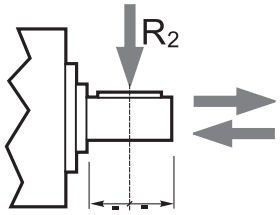
Lubrificazione — *Lubrication*

Tutti i riduttori P sono forniti completi di lubrificante, pertanto possono essere installati in qualunque posizione di montaggio e non necessitano di manutenzione.

Permanent grease long-life lubrication makes it possible to use P in all mounting positions.

Temperatura ambiente di funzionamento consentita / *Operating environmental temperature range*	-50 / +40 °C

Carichi radiali e assiali — *Radial and axial loads*



n_1 = 3000 min^{-1}

Grandezza *Size*	Albero uscita / *Output shaft*						Albero entrata / *Input shaft*	
	1 stadio / *stage*		**2** stadi / *stages*		**3** stadi / *stages*		**1 - 2 - 3** stadi / *stages*	
	R_2 [N]	A_2 [N]	R_2 [N]	A_2 [N]	R_2 [N]	A_2 [N]	R_2 [N]	A_2 [N]
P42	160	50	230	80	300	110	70	40
P52	200	60	320	100	450	150	110	50
P62	240	70	360	100	520	150	120	60
P72	320	70	480	100	760	160	160	80
P81	400	80	600	120	1000	200	200	100
P105	600	120	900	180	1500	300	240	125
P120	600	120	900	180	1500	300	300	150

Rendimento — *Efficiency*

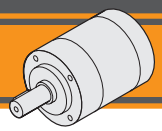
Stadi / *Stage* (Ns)	**1**	**2**	**3**
Rendimento / *Efficiency* (Rd)	0.80	0.75	0.70

Dati tecnici 3000 rpm ***Technical data***

Ns	i	Mn_2 [Nm]						
		P42	P52	P62	P72	P81	P105	P120
1	3.70	3	4	8	14	20	35	50
	4.28							—
	5.18							—
	6.75							50
2	13.73	7.5	12	25	42	60	105	150
	15.88							—
	18.36							—
	19.20							—
	22.20							—
	25.01							150
	26.85							—
	28.93							—
	34.97							—
	45.56							150
3	50.89	15	25	50	84	120	195	300
	58.85							—
	68.06							—
	71.16							—
	78.71							—
	92.70							300
	95.17							—
	99.50							—
	107.20							—
	115.07							—
	123.97							—
	129.62							—
	139.13							—
	149.90							—
	168.84							300
	181.24							—
	195.26							—
	236.09							—
	307.54							300

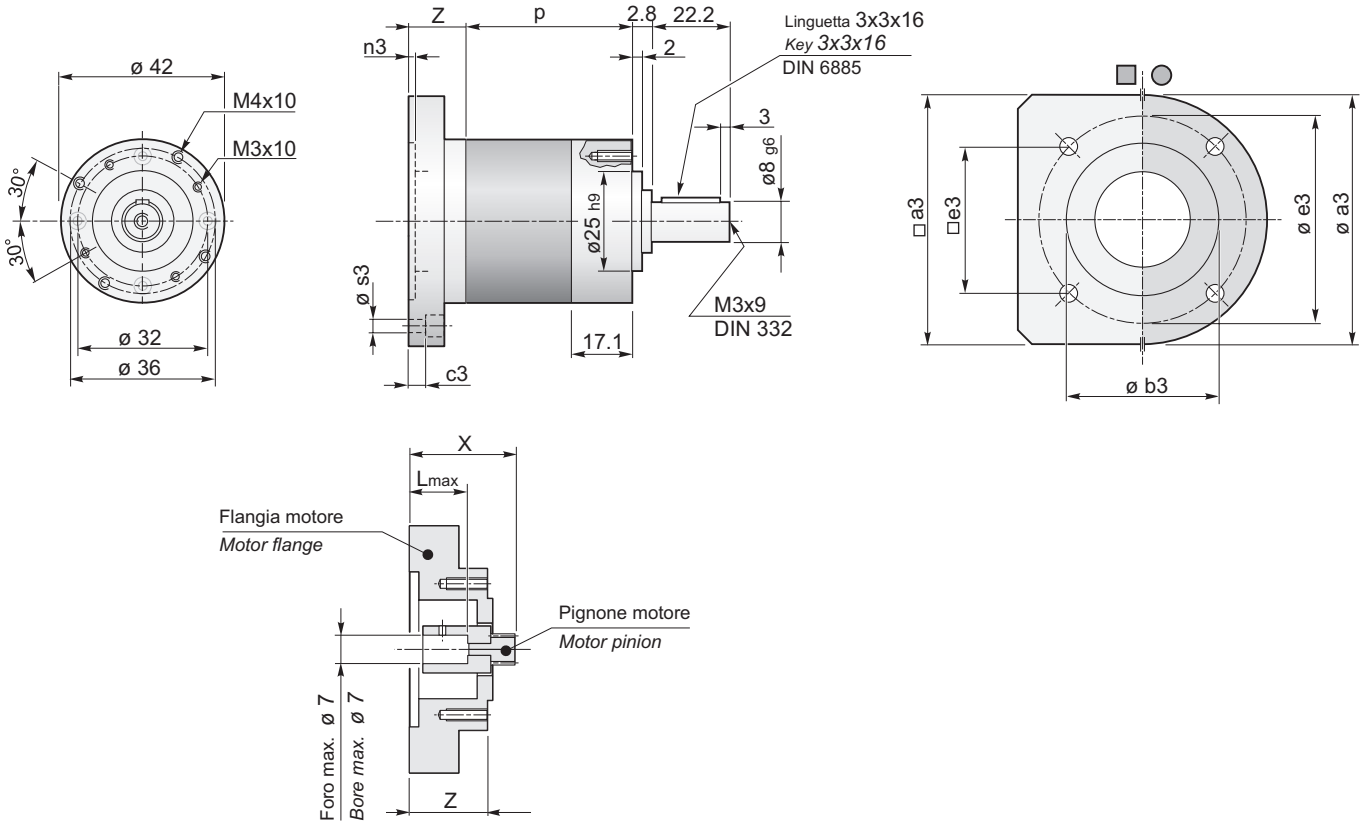
Rapporti preferenziali / *Preferred ratios*

Disponibili 4 stadi con rapporti fino a 2076 / *Available 4 stages with ratio up to 2076*



Dimensioni — *Dimensions*

P42 U

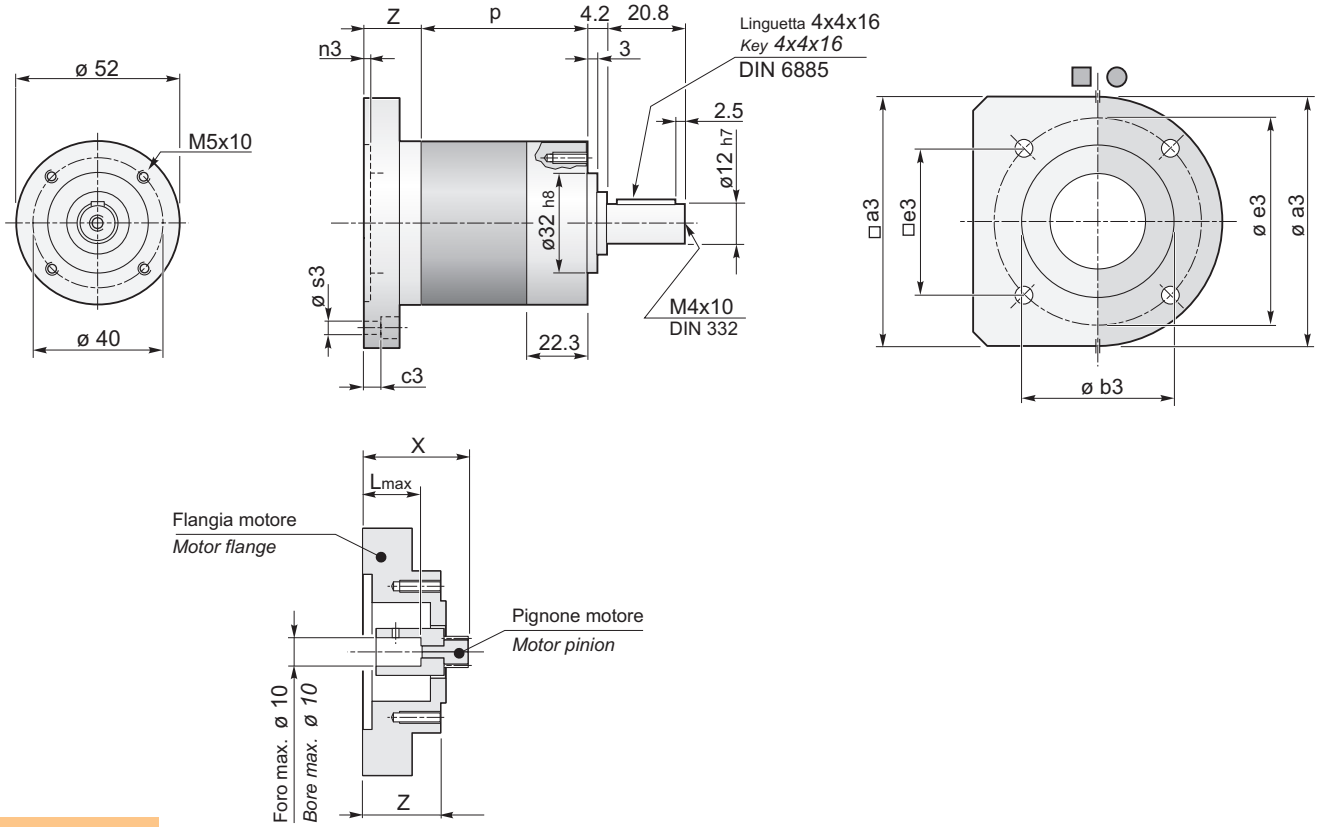


		Lunghezza riduttore *Gearbox length* P
P42...	1	39
	2	52
	3	65

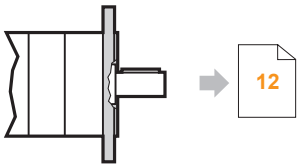
	Flange entrata / *Input flanges*									
	Flangia *Flange*	a3	b3	c3	e3	n3	s3	Z	L max	X
P42	AS05	□ 42	22	17	□ 31	3	4 - Ø 3.5	32	25	42.7
	AS11	□ 56	38.1	/	□ 47.14	3	4 - M4	27	21	37.5
	AS32	Ø 42	22	13	Ø 32	3	4 - Ø 3.5	21	15	31.5
	AS33	Ø 42	16	16	Ø 25.5	3	4 - Ø 3.5	21	15	31.5
	AS47	Ø 64	28	5	Ø 50	3	3 - Ø 4.5	26.5	25	37
	AS58	□ 52	36	/	□ 41	2	4 - M4	27	21	37.5
	AS63	Ø 44	16	24	Ø 22	2	6 - Ø 3.3	31	25	39
	AS70	Ø 80	50	8.2	Ø 65	3	4 - Ø 5.5	26	20	36.5
	AS117	□ 56	22	3	Ø 40	3	4 - Ø 5.5	19	13	29.7
				/	□ 47		4 - M4			
	AS130	Ø 52	25	15	Ø 40	3	4 - Ø 5.5	21	15	31.5
	AS134	Ø 77	50	8.2	Ø 65	3	4 - Ø 5.5	21	15	31.5
				/	Ø 65		4 - M5			
	AS213	□ 60	36	/	□ 50	2.5	4 - M4	28.9	23	39.4

Dimensioni — *Dimensions*

P52 U

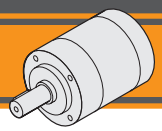


P52 C..



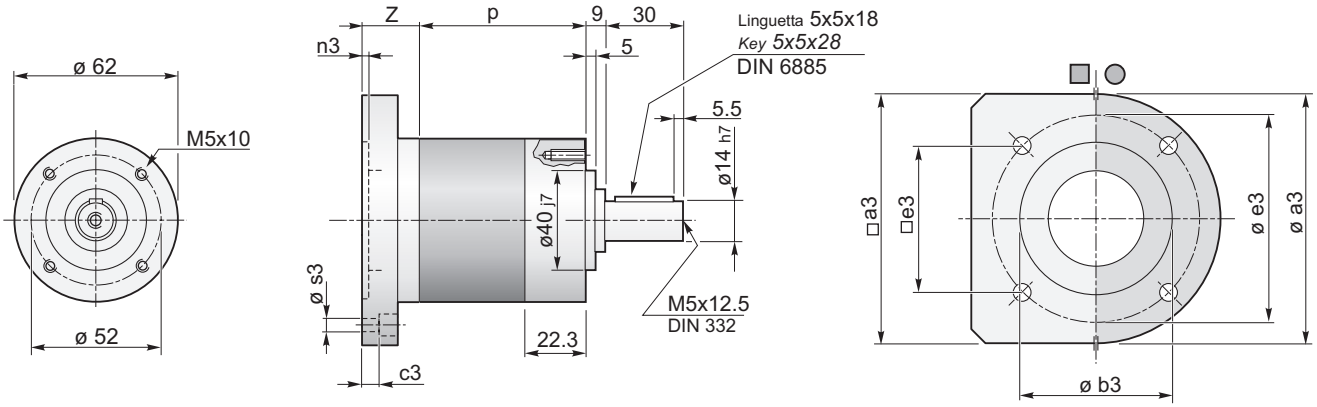
		Lunghezza riduttore *Gearbox length*
		P
P52...	1	46
	2	60
	3	74

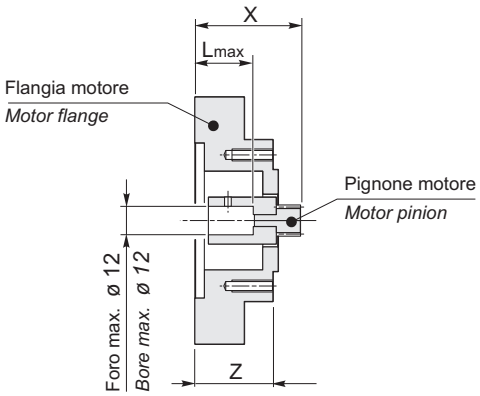
	Flange entrata / *Input flanges*									
	Flangia *Flange*	a3	b3	c3	e3	n3	s3	Z	L max	X
P52	AS09	□ 60	36	/	□ 50	2	4 - M4	27	20.6	37.5
	AS23	Ø 60	26	17.5	Ø 39	3	4 - Ø 5.5	26.5	20	37
	AS36	Ø 60	28	15	Ø 42	3	4 - Ø 5.5	21	15	31.5
	AS38	Ø 65	32	18	Ø 46	3	4 - Ø 4.5	29	22.5	39.5
	AS50	Ø 79	45	14.5	Ø 65.5	3.5	4 - Ø 5.5	32	24	42.5
	AS51	Ø 68	28	21.5	Ø 50	3	3 - Ø 4.5	31.5	24	42
	AS60	Ø 80	50	10.2	Ø 65	3	4 - Ø 5.5	28	20	38.5
	AS68	Ø 52	22	13	Ø 30	3	4 - Ø 4.5	28	20	38.5
	AS86	Ø 52	30	/	Ø 46	3	4 - M4	33.5	25	44
	AS109	Ø 80	55	10	Ø 65	3	4 - Ø 6.5	24	16	34.5
	AS115	Ø 52	25	17.5	Ø 40	3	4 - Ø 5.5	26.5	20	37
	AS140	Ø 80	50	10.2	Ø 65	3	4 - Ø 5.5	28	20	38.5



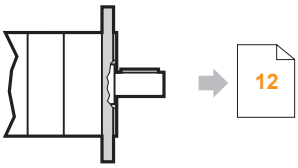
Dimensioni — *Dimensions*

P62 U





P62 C..

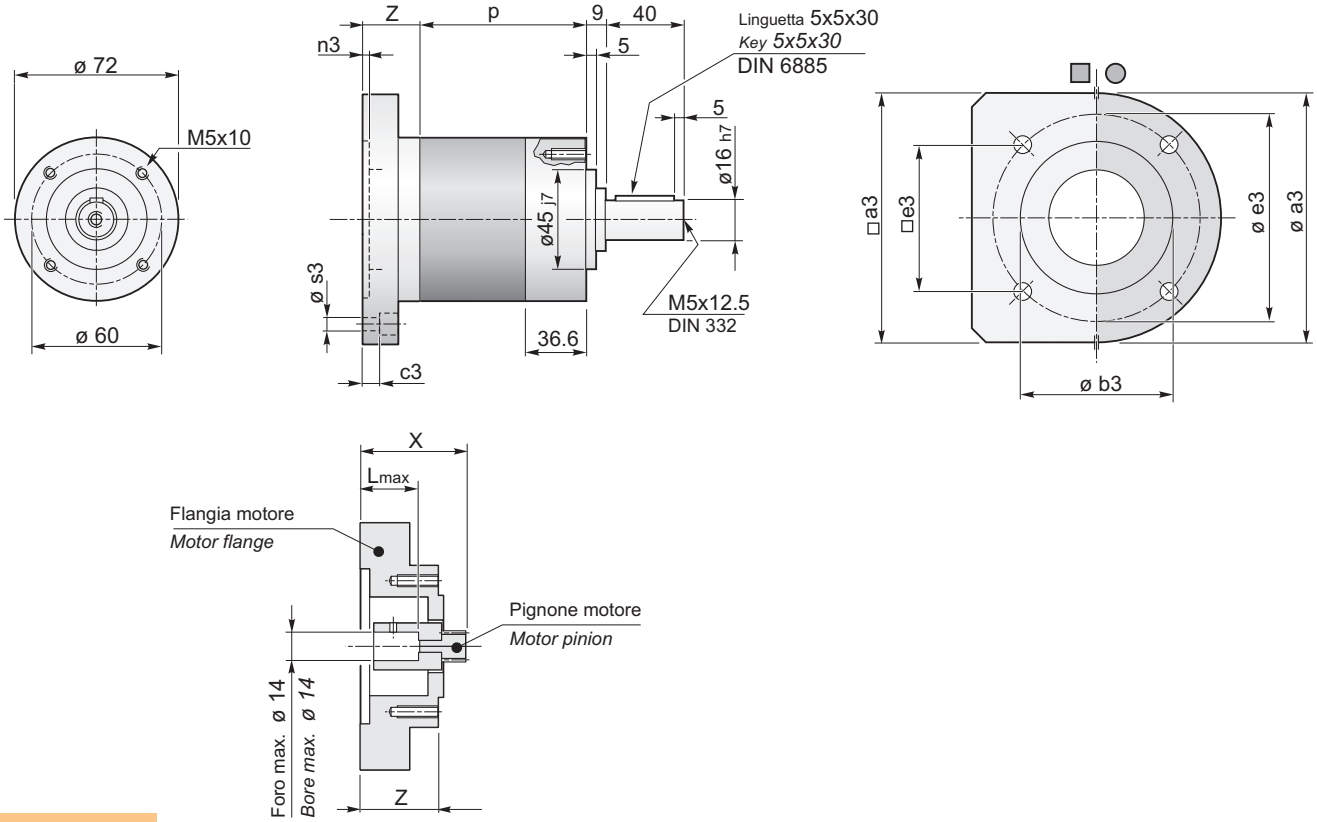


		Lunghezza riduttore *Gearbox length*
		P
P62...	1	46
	2	62
	3	78

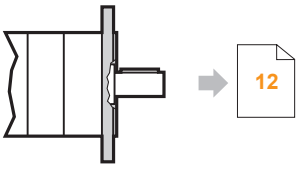
P62	Flange entrata / *Input flanges*									
	Flangia *Flange*	a3	b3	c3	e3	n3	s3	Z	L max	X
	AS08	□ 60	50	/	□ 49.5	4	4 - M4	37	30	49.8
	AS12	□ 84.5	73.02	/	□ 69.6	2	4 - M5	40	30	52.8
	AS15	□ 58	38.1	/	□ 47.14	2	4 - M4	30	20.6	42.8
	AS61	Ø 90	60	7	Ø 75	3	4 - Ø 5.5	30	23	42.8
	AS244	Ø 80	50	5	Ø 65	3.5	4 - Ø 5.5	28	20	40.8

Dimensioni *Dimensions*

P72 U

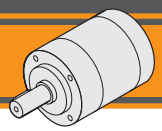


P72 C..



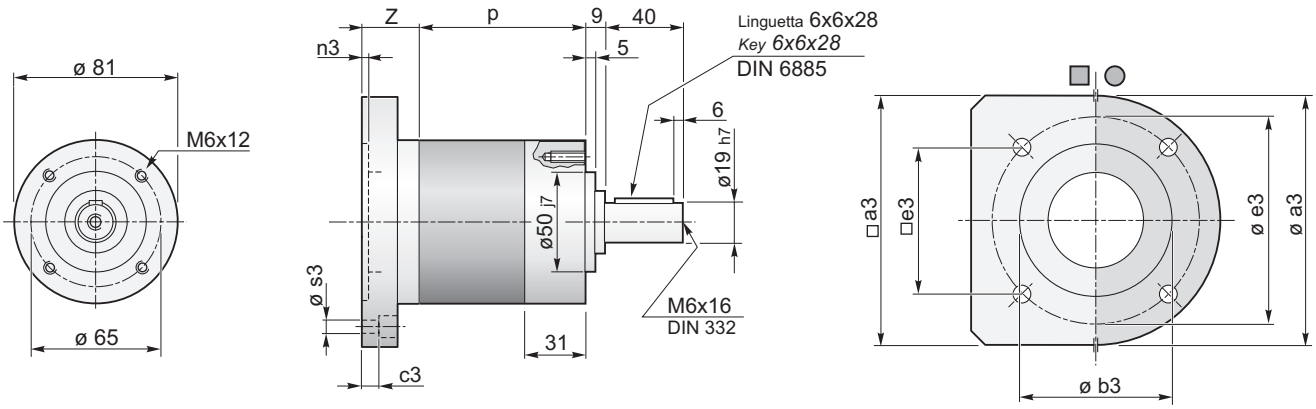
		Lunghezza riduttore *Gearbox length*
		P
P72...	1	56.9
	2	76.5
	3	96.1

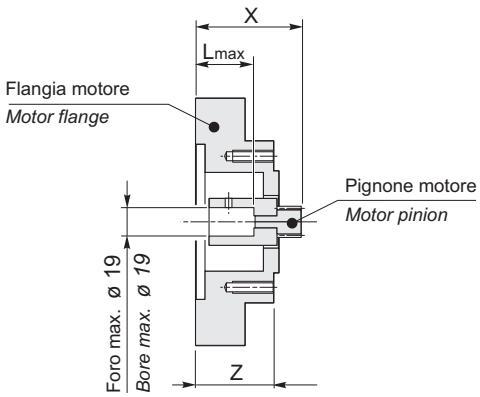
P72	Flange entrata / *Input flanges*									
	Flangia *Flange*	a3	b3	c3	e3	n3	s3	Z	L max	X
	AS245	Ø 80	50	5	Ø 65	4.5	4 - Ø 5.5	25	20	38.9
	AS246	Ø 90	60	5	Ø 75	3.5	4 - Ø 5.5	28	23	41.9
	AS247	Ø 105	70	6	Ø 85	4	4 - Ø 6.5	35	30	48.9



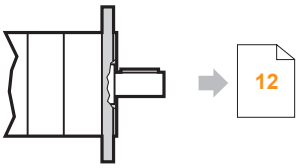
Dimensioni — *Dimensions*

P81 U





P81 C..

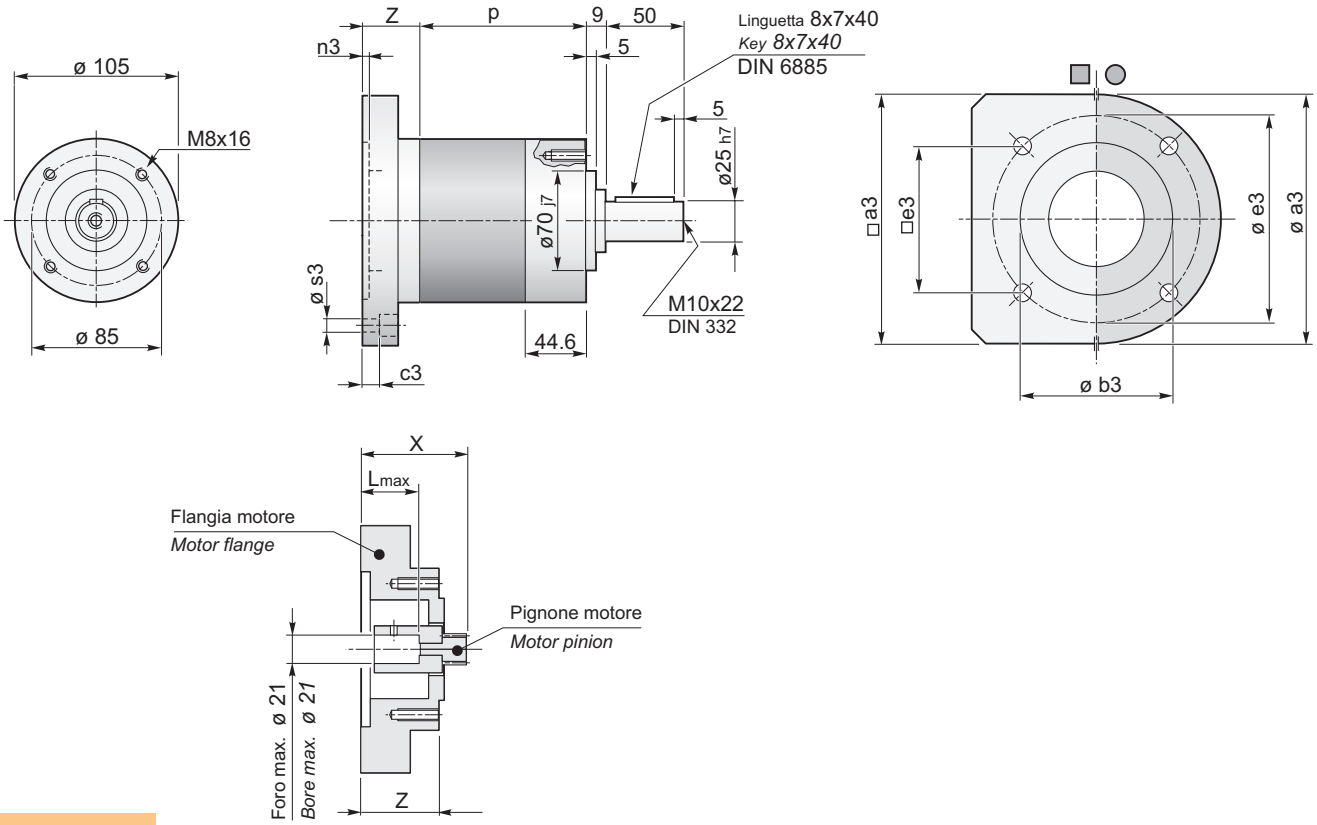


		Lunghezza riduttore *Gearbox length*
		P
P81...	1	59
	2	81
	3	103

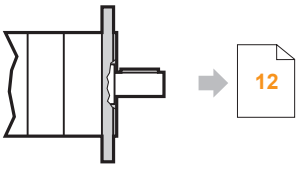
	Flange entrata / *Input flanges*									
	Flangia *Flange*	a3	b3	c3	e3	n3	s3	Z	L max	X
P81	AS04	□ 100	95	25	Ø 115	3.5	4 - Ø 9	43	30	59.3
	AS12B	□ 85	73.02	—	□ 69.6	2	4 - M5	43	30	59.3
	AS18	Ø 114	80	26	Ø 100	4	4 - Ø 6.5	53	40	69.3
	AS30	Ø 80	50	35.5	Ø 70	3.5	4 - Ø 5.5	42.5	28	58.8
	AS40	□ 80	70	26.5	Ø 90	4	4 - Ø 6.5	52.5	40	68.8
	AS73	□ 110	55.524	49.8	□ 88.9	2	4 - Ø 8.5	67.8	55.63	84.1
	AS92	□ 85	35	—	□ 69.6	10.5	4 - M5	53	40.2	69.3
	AS248	Ø 80	50	5	Ø 65	3.5	4 - Ø 5.5	32	20	48.3
	AS249	Ø 90	60	5	Ø 75	3.5	4 - Ø 5.5	35	23	51.3
	AS254	Ø 105	70	6	Ø 85	4	4 - Ø 6.5	42	30	58.3
	AS280	Ø 120	80	8	Ø 100	4	4 - Ø 6.5	52	40	68.3

Dimensioni *Dimensions*

P105 U

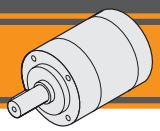


P105 C..



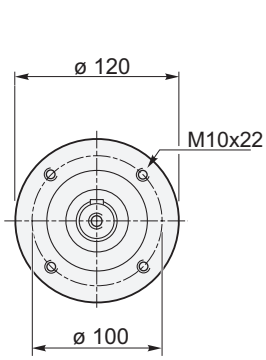
		Lunghezza riduttore *Gearbox length*
		P
P105...	1	76.4
	2	107.5
	3	138.5

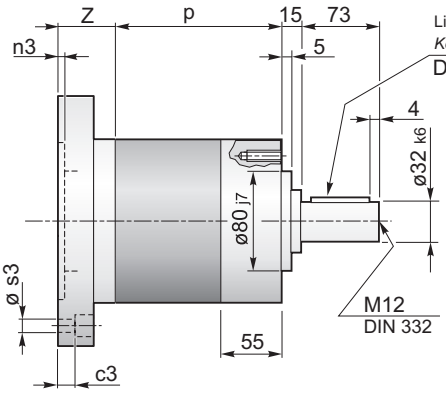
P105	Flange entrata / *Input flanges*									
	Flangia *Flange*	a3	b3	c3	e3	n3	s3	Z	L max	X
	AS250	Ø 105	50	5	Ø 65	3.5	4 - Ø 5.5	36.5	20	52.3
	AS251	Ø 105	60	5	Ø 75	3.5	4 - Ø 5.5	36.5	23	55.3
	AS252	Ø 105	70	6	Ø 85	4	4 - Ø 6.5	43.5	30	62.3
	AS281	Ø 120	80	8	Ø 100	4	4 - Ø 6.5	54	40	72.3

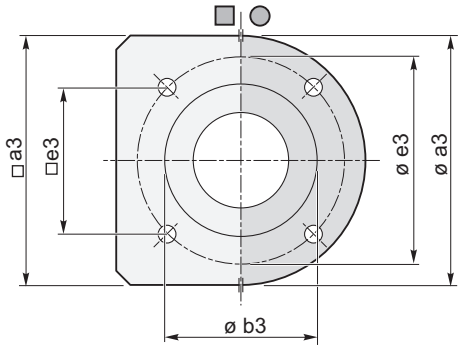


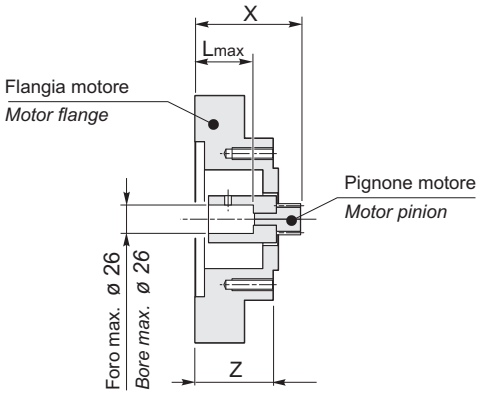
Dimensioni — *Dimensions*

P120 U

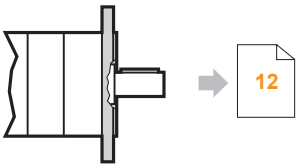








P120 C..

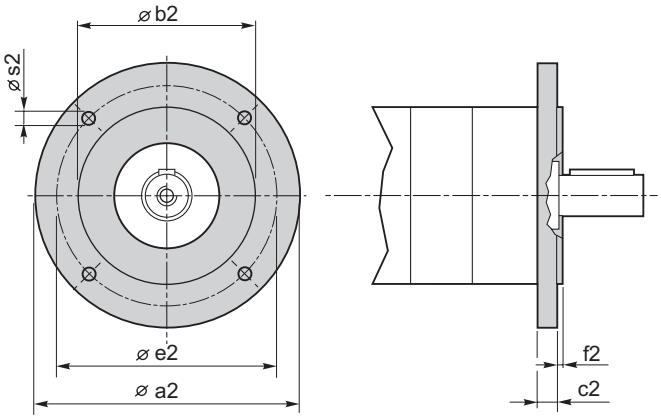


		Lunghezza riduttore *Gearbox length*
		P
P120...	1	89.7
	2	123.9
	3	158.1

P120	Flange entrata / *Input flanges*									
	Flangia *Flange*	a3	b3	c3	e3	n3	s3	Z	L max	X
	AS255	Ø 120	50	5	Ø 65	3.5	4 - Ø 5.5	41.4	20	60.2
	AS256	Ø 120	60	5	Ø 75	3.5	4 - Ø 5.5	41.4	23	63.2
	AS257	Ø 120	70	6	Ø 85	4	4 - Ø 6.5	43.5	30	70.2
	AS282	Ø 120	80	8	Ø 100	4	4 - Ø 6.5	53.5	40	80.2
	AS283	Ø 140	95	10	Ø 115	4.5	4 - Ø 8.5	63.5	50	90.2

Dimensioni — *Dimensions*

P.. C..

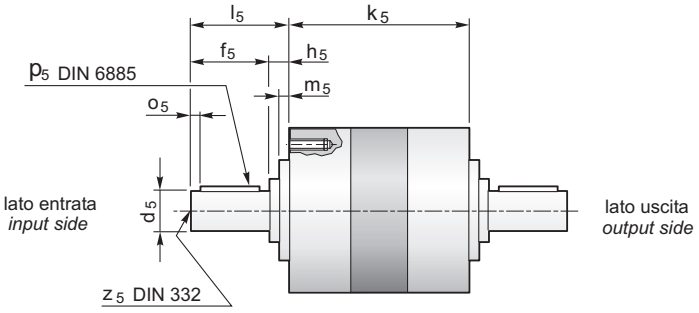


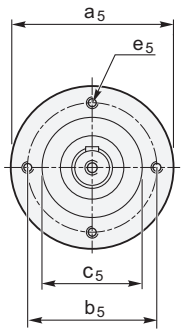
P	Flange uscita / *Output flanges*						
	a2	b2	c2	e2	f2	s2	Flangia *Flange*
52	80	50 j7	9	65	2.5	M5	**C80**
	90	60 j7	9	75	2.5	5.5	**C90**
	105	70 j7	9	85	2.5	6.5	**C105**
	120	80 j7	9	100	3.0	6.5	**C120**
62	80	50 j7	9	65	2.5	M5	**C80**
	90	60 j7	9	75	2.5	5.5	**C90**
	105	70 j7	9	85	2.5	6.5	**C105**
	120	80 j7	9	100	3.0	6.5	**C120**
72	80	50 j7	9	65	2.5	M5	**C80**
	90	60 j7	9	75	2.5	M5	**C90**
	105	70 j7	9	85	2.5	6.5	**C105**
	120	80 j7	9	100	3.0	6.5	**C120**
81	90	60 j7	9	75	2.5	M5	**C90**
	105	70 j7	9	85	2.5	M6	**C105**
	120	80 j7	9	100	3.0	6.5	**C120**
105	120	80 j7	12	100	3	M6	**C120**
	140	95 j7	12	115	3.5	M8	**C140**
	160	110 j7	12	130	3.5	M8	**C160**
120	140	95 j7	15	115	3	M8	**C140**
	160	110 j7	15	130	3.5	M8	**C160**

Opzioni — *Options*

PIS

Albero in ingresso / *Input shaft*





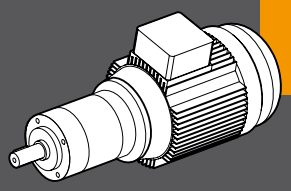
	P 42			P 52			P 62			P 72			P81			P 105			P 120		
stadi / *stages*	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
k5	61	74	87	71	85	99	69	86	103	83	102	122	90	112	134	106	137	169	132	166	200
a5	42			52			62			72			81			105			120		
b5	36			40			52			60			65			85			100		
c5	25 h9			32 h8			40 j7			45 j7			50 j7			70 j7			80 j7		
d5	6 h7			10 h7			12 h7			14 h7			16 h7			19 h7			28 h7		
e5	M4 x 10 (4 x 90°)			M5 x 10 (4 x 90°)			M5 x 10 (4 x 90°)			M5 x 10 (4 x 90°)			M6 x 12 (4 x 90°)			M8 x 16 (4 x 90°)			M10 x 22 (4 x 90°)		
f5	22.2			20			30			30			40			40			58		
h5	2.8			5			9			9			9			9			15		
l5	25			25			39			39			49			49			73		
m5	2			3			5			5			5			5			5		
o5	3			2			5			5.5			5			6			4		
p5	A 2 x 2 x 16			A 3 x 3 x 16			A 4 x 4 x 20			A5x5x22			A 5 x 5 x 30			A 6 x 6 x 28			A 10 x 8 x 50		
z5	—			M3 x 9			M4 x 10			M5x12.5			M5 x 12.5			M6 x 16			M10 x 22		

TRANSTECNO™

THE MODULAR GEARMOTOR

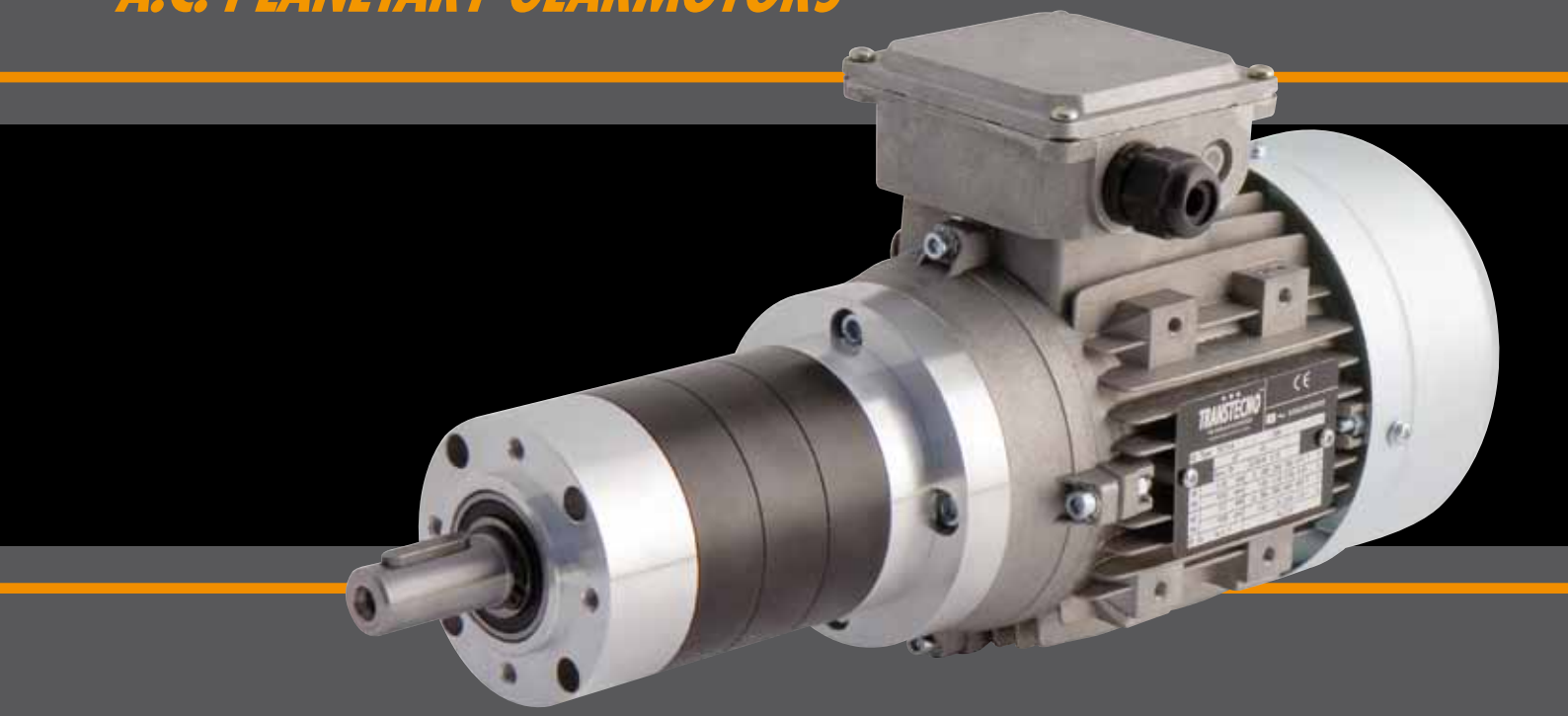
ACP

ACP

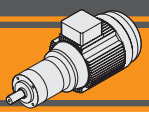


MOTORIDUTTORI C.A. EPICICLOIDALI

A.C. PLANETARY GEARMOTORS



TRANSTECNO · GENUINE · PRODUCTS ·



ENERGY SAVING

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Caratteristiche tecniche / *Technical features*

Le caratteristiche principali dei riduttori epicicloidali della serie ACP sono:

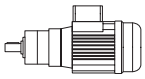
- Alimentazione in corrente alternata trifase;
- Ingresso ed uscita coassiali;
- Design compatto;
- Lubrificazione permanente a grasso;
- Possono essere installati in qualunque posizione di mon-montaggio

The main features of ACP planetary gearbox range are:

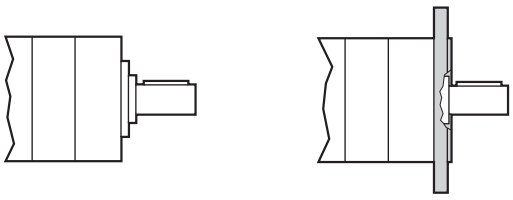
- *Threephase power supply;*
- *Coaxial arrangement of the input and output;*
- *Compact design;*
- *Permanent grease long life lubrication;*
- *Can be installed in all mounting positions.*

Designazione / *Classification*

MOTORIDUTTORE / *GEARMOTOR*

ACP	712/81						2	C	34.97
Tipo *Type*	Grandezza *Size*						Stadi riduttore *Gearbox stages*	Versione riduttore *Gearbox Version*	Rapporto *Ratio*
ACP 	**56.../52** **56.../62** **56.../72** **56.../81** **56.../105** **56.../120**	**63.../62** **63.../72** **63.../81** **63.../105** **63.../120**	**71.../72** **71.../81** **71.../105** **71.../120**	**80.../81** **80.../105** **80.../120**	**90/52** **100/62** **100/72** **100/81**	**180/120**	**1** **2** **3**	**U** **C80** **C90** **C105** **C120** **C140** **C160**	Vedere tabella *See tables*

Versioni / *Versions*



U **C**

Simbologia / *Symbols*

n_1	[min^{-1}]	Velocità in ingresso / *Input speed*	sf		Fattore di servizio / *Service factor*
n_2	[min^{-1}]	Velocità in uscita / *Output speed*	Rd	%	Rendimento dinamico / *Dynamic efficiency*
i		Rapporto di riduzione / *Ratio*	A_2	[N]	Carico assiale ammissibile in uscita / *Permitted output axial load*
P_1	[kW]	Potenza in entrata / *Input power*	R_2	[N]	Carico radiale ammissibile in uscita / *Permitted output radial load*
M_2	[Nm]	Coppia in uscita in funzione di P_1 / *Output torque referred to P_1*			

Lubrificazione

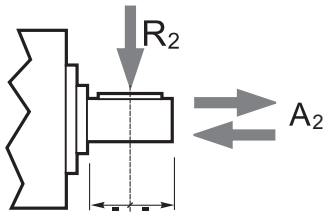
I riduttori epicicloidali sono lubrificati in modo permanente, non richiedono quindi ulteriore manutenzione.
Questo gli consente di essere installati praticamente ovunque.
La temperatura ambiente di funzionamento consentita va da -50°C a + 40 °C; per applicazioni particolari, possono essere adottate misure per raggiungere livelli di temperatura maggiori.

Lubrication

Planetary gearboxes are life-time lubricated with grease, therefore they are maintenance free.
They can be installed in any location.
The environmental temperature range is from -50 °C up to +40°C; *for special applications, measures can be taken for higher temperature range.*

Carichi radiali

Radial loads



Numero di stadi *N° of stages*	Carichi Radiali R_2 [N] / *Radial Load R_2 [N]*					
	P52	P62	P72	P81	P105	P120
1	200	240	320	400	600	600
2	320	360	480	600	900	900
3	450	520	760	1000	1500	1500

Numero di stadi *N° of stages*	Carichi Assiali A_2 [N] / *Axial Load A_2 [N]*					
	P52	P62	P72	P81	P105	P120
1	60	70	70	80	120	120
2	100	100	100	120	180	180
3	150	150	160	200	300	300

Rapporti — *Ratios*

Rapporti preferenziali
Preferred ratios

Numero di stadi *N° of stages*	Per tutte le grandezze di riduttori della serie P *For all gearbox sizes of P range* Rapporti / *Ratios*
1	**3.70**
	4.28*
	5.18*
	6.75
2	**13.73**
	15.88*
	18.36*
	19.20*
	22.20*
	25.01
	26.85*
	28.93*
	34.97*
	45.56
3	**50.89**
	58.85*
	68.06*
	71.16*
	78.71*
	92.70
	95.17*
	99.50*
	107.20*
	115.07*
	123.97*
	129.62*
	139.13*
	149.90*
	168.84
	181.24*
	195.26*
	236.09*
	307.54

Rapporti preferenziali / *Preferred ratios*

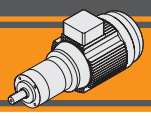
*** Rapporto non disponibile su grandezza P120 / *Ratio not available on size P120***

Disponibile a 4 stadi con rapporti fino a 2076 / *Available 4 stages with ratio up to 2076*

Rendimento — *Efficiency*

Rendimento *Efficiency*	Per tutte le grandezze di riduttori della serie P *For all gearbox sizes of P range*		
	Numero di stadi / *N° of stages*		
	1	2	3
Rd %	80	75	70

Rendimento medio per velocità nominale in ingresso 3000 rpm
Average efficiency with input rated speed 3000 rpm



Dati tecnici

Technical data

P_1 [W]	n_2 [min^{-1}]	M_2 [Nm]	sf	i	
0.06					
(1400 min^{-1})	**378**	1.2	4.2	3.70	**5614/521**
	327	1.4	3.6	4.28	
	270	1.7	3.0	5.18	
	207	2.2	2.3	6.75	
	102	4.2	3.6	13.73	**5614/522**
	88.2	4.9	3.1	15.88	
	76.3	5.6	2.7	18.36	
	72.9	5.9	2.6	19.20	
	63.1	6.8	2.2	22.20	
	56.0	7.7	2.0	25.01	
	52.1	8.3	1.8	26.85	
	48.4	8.9	1.7	28.93	
	40.0	11	1.4	34.97	
	30.7	14	1.1	45.56	
	27.5	15	2.2	50.89	**5614/523**
	23.8	17	1.9	58.85	
	20.6	20	1.6	68.06	
	19.7	20	1.5	71.16	
	17.8	23	1.4	78.71	
	15.1	27	1.2	92.70	
	14.7	27	1.2	95.17	
	14.1	29	1.1	99.50	
	13.1	31	1.0	107.20	
	12.2	33	1.0	115.07	
	11.3	36	0.9	123.97	
	10.8	37	0.9	129.62	
	10.1	40	0.8	139.13	
	9.3	43	0.7	149.90	
	8.3	48	0.7	168.84	
	48.4	8.9	3.6	28.93	**5614/622**
	40.0	11	2.9	34.97	
	30.7	14	2.3	45.56	
	27.5	15	4.3	50.89	**5614/623**
	23.8	17	3.7	58.85	
	20.6	20	3.2	68.06	
	19.7	20	3.1	71.16	
	17.8	23	2.8	78.71	
	15.1	27	2.4	92.70	
	14.7	27	2.3	95.17	
	14.1	29	2.2	99.50	
	13.1	31	2.1	107.20	
	12.2	33	1.9	115.07	
	11.3	36	1.8	123.97	
	10.8	37	1.7	129.62	
	10.1	40	1.6	139.13	
	9.3	43	1.5	149.90	
	8.3	48	1.3	168.84	
	7.7	52	1.2	181.24	
	7.2	56	1.1	195.26	
	5.9	68	0.9	236.09	
	4.6	88	0.7	307.54	
	8.3	48	2.2	168.84	**5614/723**
	7.7	52	2.0	181.24	
	7.2	56	1.9	195.26	
	5.9	68	1.6	236.09	
	4.6	88	1.2	307.54	

P_1 [W]	n_2 [min^{-1}]	M_2 [Nm]	sf	i	
0.09					
(1400 min^{-1})	**378**	1.8	2.8	3.70	**5624/521**
	327	2.1	2.4	4.28	
	270	2.5	2.0	5.18	
	207	3.3	1.5	6.75	
	102	6.3	2.4	13.73	**5624/522**
	88.2	7.3	2.1	15.88	
	76.3	8.4	1.8	18.36	
	72.9	8.8	1.7	19.20	
	63.1	10	1.5	22.20	
	56.0	11	1.3	25.01	
	52.1	12	1.2	26.85	
	48.4	13	1.1	28.93	
	40.0	16	0.9	34.97	
	30.7	21	0.7	45.56	
	27.5	22	1.5	50.89	**5624/523**
	23.8	25	1.3	58.85	
	20.6	29	1.1	68.06	
	19.7	30	1.0	71.16	
	17.8	34	0.9	78.71	
	15.1	40	0.8	92.70	
	14.7	41	0.8	95.17	
	14.1	42	0.7	99.50	
	13.1	46	0.7	107.20	
	72.9	8.8	3.6	19.20	**5624/622**
	63.1	10	3.1	22.20	
	56.0	11	2.8	25.01	
	52.1	12	2.6	26.85	
	48.4	13	2.4	28.93	
	40.0	16	2.0	34.97	
	30.7	21	1.5	45.56	
	27.5	22	2.9	50.89	**5624/623**
	23.8	25	2.5	58.85	
	20.6	29	2.2	68.06	
	19.7	30	2.1	71.16	
	17.8	34	1.9	78.71	
	15.1	40	1.6	92.70	
	14.7	41	1.6	95.17	
	14.1	42	1.5	99.50	
	13.1	46	1.4	107.20	
	12.2	49	1.3	115.07	
	11.3	53	1.2	123.97	
	10.8	55	1.1	129.62	
	10.1	59	1.1	139.13	
	9.3	64	1.0	149.90	
	8.3	72	0.9	168.84	
	7.7	77	0.8	181.24	
	7.2	83	0.8	195.26	
	15.1	40	2.7	92.70	**5624/723**
	14.7	41	2.6	95.17	
	14.1	42	2.5	99.50	
	13.1	46	2.3	107.20	
	12.2	49	2.2	115.07	
	11.3	53	2.0	123.97	
	10.8	55	1.9	129.62	

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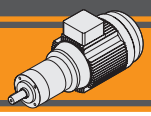
Technical data

P_1 [W]	n_2 [min^{-1}]	M_2 [Nm]	sf	i	
0.09					
(1400 min^{-1})	**10.1**	59	1.8	139.13	**5624/723**
	9.3	64	1.7	149.90	
	8.3	72	1.5	168.84	
	7.7	77	1.4	181.24	
	7.2	83	1.3	195.26	
	5.9	101	1.1	236.09	
	4.6	131	0.8	307.54	
	8.3	72	2.1	168.84	**5624/813**
	7.7	77	2.0	181.24	
	7.2	83	1.8	195.26	
	5.9	101	1.5	236.09	
	4.6	131	1.2	307.54	
0.12					
(1400 min^{-1})	**378**	2.4	4.2	3.70	**6314/621**
	327	2.8	3.7	4.28	
	270	3.4	3.0	5.18	
	207	4.4	2.3	6.75	
	102	8.3	3.8	13.73	**6314/622**
	88.2	9.6	3.3	15.88	
	76.3	11	2.8	18.36	
	72.9	12	2.7	19.20	
	63.1	13	2.3	22.20	
	56.0	15	2.1	25.01	
	52.1	16	1.9	26.85	
	48.4	18	1.8	28.93	
	40.0	21	1.5	34.97	
	30.7	28	1.1	45.56	
	27.5	29	2.2	50.89	**6314/623**
	23.8	33	1.9	58.85	
	20.6	39	1.6	68.06	
	19.7	40	1.6	71.16	
	17.8	45	1.4	78.71	
	15.1	53	1.2	92.70	
	14.7	54	1.2	95.17	
	14.1	56	1.1	99.50	
	13.1	61	1.0	107.20	
	12.2	65	1.0	115.07	
	11.3	70	0.9	123.97	
	10.8	73	0.9	129.62	
	10.1	79	0.8	139.13	
	9.3	85	0.7	149.90	
	8.3	96	0.7	168.84	
	27.5	29	3.7	50.89	**6314/723**
	23.8	33	3.2	58.85	
	20.6	39	2.8	68.06	
	19.7	40	2.6	71.16	
	17.8	45	2.4	78.71	
	15.1	53	2.0	92.70	
	14.7	54	2.0	95.17	
	14.1	56	1.9	99.50	
	13.1	61	1.7	107.20	
	12.2	65	1.6	115.07	
	11.3	70	1.5	123.97	
	10.8	73	1.4	129.62	

P_1 [W]	n_2 [min^{-1}]	M_2 [Nm]	sf	i	
0.12					
(1400 min^{-1})	**10.1**	79	1.3	139.13	**6314/723**
	9.3	85	1.3	149.90	
	8.3	96	1.1	168.84	
	7.7	103	1.0	181.24	
	7.2	111	1.0	195.26	
	5.9	134	0.8	236.09	
	4.6	152*	0.7	307.54	
	15.1	53	2.9	92.70	**6314/813**
	14.7	54	2.8	95.17	
	14.1	56	2.7	99.50	
	13.1	61	2.5	107.20	
	12.2	65	2.3	115.07	
	11.3	70	2.2	123.97	
	10.8	73	2.1	129.62	
	10.1	79	1.9	139.13	
	9.3	85	1.8	149.90	
	8.3	96	1.6	168.84	
	7.7	103	1.5	181.24	
	7.2	111	1.4	195.26	
	5.9	134	1.1	236.09	
	4.6	174	0.9	307.54	
	8.3	96	2.6	168.84	**6314/1053**
	7.7	103	2.4	181.24	
	7.2	111	2.2	195.26	
	5.9	134	1.8	236.09	
	4.6	174	1.4	307.54	
0.18					
(1400 min^{-1})	**378**	3.7	2.7	3.70	**6324/621**
	327	4.3	2.3	4.28	
	270	5.2	1.9	5.18	
	207	6.8	1.5	6.75	
	102	13	2.4	13.73	**6324/622**
	88.2	15	2.1	15.88	
	76.3	17	1.8	18.36	
	72.9	18	1.7	19.20	
	63.1	21	1.5	22.20	
	56.0	24	1.3	25.01	
	52.1	25	1.2	26.85	
	48.4	27	1.2	28.93	
	40.0	33	1.0	34.97	
	30.7	43	0.7	45.56	
	27.5	45	1.4	50.89	**6324/623**
	23.8	52	1.2	58.85	
	20.6	60	1.1	68.06	
	19.7	63	1.0	71.16	
	17.8	69	0.9	78.71	
	15.1	82	0.8	92.70	
	14.7	84	0.8	95.17	
	14.1	88	0.7	99.50	
	13.1	95	0.7	107.20	

* Coppia limitata / *Limited torque*



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Technical data

P_1 [W]	n_2 [min^{-1}]	M_2 [Nm]	sf	i	
0.18					
(1400 min^{-1})	**72.9**	18	2.9	19.20	**6324/722**
	63.1	21	2.5	22.20	
	56.0	24	2.2	25.01	
	52.1	25	2.1	26.85	
	48.4	27	1.9	28.93	
	40.0	33	1.6	34.97	
	30.7	43	1.2	45.56	
	27.5	45	2.4	50.89	**6324/723**
	23.8	52	2.0	58.85	
	20.6	60	1.8	68.06	
	19.7	63	1.7	71.16	
	17.8	69	1.5	78.71	
	15.1	82	1.3	92.70	
	14.7	84	1.3	95.17	
	14.1	88	1.2	99.50	
	13.1	95	1.1	107.20	
	12.2	101	1.0	115.07	
	11.3	109	1.0	123.97	
	10.8	114	0.9	129.62	
	10.1	123	0.9	139.13	
	9.3	132	0.8	149.90	
	8.3	149	0.7	168.84	
	20.6	60	2.5	68.06	**6324/813**
	19.7	63	2.4	71.16	
	17.8	69	2.2	78.71	
	15.1	82	1.9	92.70	
	14.7	84	1.8	95.17	
	14.1	88	1.7	99.50	
	13.1	95	1.6	107.20	
	12.2	101	1.5	115.07	
	11.3	109	1.4	123.97	
	10.8	114	1.3	129.62	
	10.1	123	1.2	139.13	
	9.3	132	1.1	149.90	
	8.3	149	1.0	168.84	
	7.7	160	1.0	181.24	
	7.2	172	0.9	195.26	
	5.9	208	0.7	236.09	
	4.6	217*	0.7	307.54	
	15.1	82	3.0	92.70	**6324/1053**
	14.7	84	2.9	95.17	
	14.1	88	2.8	99.50	
	13.1	95	2.6	107.20	
	12.2	101	2.4	115.07	
	11.3	109	2.3	123.97	
	10.8	114	2.2	129.62	
	10.1	123	2.0	139.13	
	9.3	132	1.9	149.90	
	8.3	149	1.7	168.84	
	7.7	160	1.5	181.24	
	7.2	172	1.4	195.26	
	5.9	208	1.2	236.09	
	4.6	271	0.9	307.54	
	8.3	149	2.6	168.84	**6324/1203**
	4.6	271	1.4	307.54	

P_1 [W]	n_2 [min^{-1}]	M_2 [Nm]	sf	i	
0.25					
(1400 min^{-1})	**378**	5.0	2.0	3.70	**6334/621**
	327	5.8	1.7	4.28	
	270	7.0	1.4	5.18	
	207	9.2	1.1	6.75	
	102	18	1.8	13.73	**6334/622**
	88.2	20	1.6	15.88	
	76.3	23	1.4	18.36	
	72.9	24	1.3	19.20	
	63.1	28	1.1	22.20	
	56.0	32	1.0	25.01	
	52.1	34	0.9	26.85	
	48.4	37	0.9	28.93	
	40.0	45	0.7	34.97	
	27.5	61	1.0	50.89	**6334/623**
	23.8	70	0.9	58.85	
	20.6	81	0.8	68.06	
	19.7	85	0.7	71.16	
	17.8	90*	0.7	78.71	
	15.1	90*	0.7	92.70	
	378	5.0	3.5	3.70	**6334/721**
	327	5.8	3.0	4.28	
	270	7.0	2.5	5.18	
	207	9.2	1.9	6.75	
	102	18	3.0	13.73	**6334/722**
	88.2	20	2.6	15.88	
	76.3	23	2.3	18.36	
	72.9	24	2.2	19.20	
	63.1	28	1.9	22.20	
	56.0	32	1.7	25.01	
	52.1	34	1.6	26.85	
	48.4	37	1.4	28.93	
	40.0	45	1.2	34.97	
	30.7	58	0.9	45.56	
	27.5	61	1.8	50.89	**6334/723**
	23.8	70	1.5	58.85	
	20.6	81	1.3	68.06	
	19.7	85	1.3	71.16	
	17.8	94	1.1	78.71	
	15.1	110	1.0	92.70	
	14.7	113	0.9	95.17	
	14.1	118	0.9	99.50	
	13.1	128	0.8	107.20	
	12.2	137	0.8	115.07	
	11.3	148	0.7	123.97	
	10.8	154	0.7	129.62	
	56.0	32	2.4	25.01	**6334/812**
	52.1	34	2.2	26.85	
	48.4	37	2.1	28.93	
	40.0	45	1.7	34.97	
	30.7	58	1.3	45.56	

* Coppia limitata / *Limited torque*

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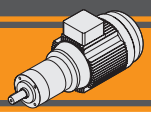
Technical data

P_1 [W]	n_2 [min^{-1}]	M_2 [Nm]	sf	i	
0.25					
(1400 min^{-1})	**27.5**	61	2.5	50.89	**6334/813**
	23.8	70	2.2	58.85	
	20.6	81	1.9	68.06	
	19.7	85	1.8	71.16	
	17.8	94	1.6	78.71	
	15.1	110	1.4	92.70	
	14.7	113	1.3	95.17	
	14.1	118	1.3	99.50	
	13.1	128	1.2	107.20	
	12.2	137	1.1	115.07	
	11.3	148	1.0	123.97	
	10.8	154	1.0	129.62	
	10.1	166	0.9	139.13	
	9.3	178	0.9	149.90	
	8.3	201	0.8	168.84	
	7.7	216	0.7	181.24	
	7.2	232	0.7	195.26	
	20.6	81	3.0	68.06	**6334/1053**
	19.7	85	2.9	71.16	
	17.8	94	2.6	78.71	
	15.1	110	2.2	92.70	
	14.7	113	2.2	95.17	
	14.1	118	2.1	99.50	
	13.1	128	1.9	107.20	
	12.2	137	1.8	115.07	
	11.3	148	1.7	123.97	
	10.8	154	1.6	129.62	
	10.1	166	1.5	139.13	
	9.3	178	1.4	149.90	
	8.3	201	1.2	168.84	
	7.7	216	1.1	181.24	
	7.2	232	1.1	195.26	
	5.9	281	0.9	236.09	
	4.6	366	0.7	307.54	
	15.1	110	3.4	92.70	**6334/1203**
	8.3	201	1.9	168.84	
	4.6	366	1.0	307.54	
	378	5.0	3.5	3.70	**7114/721**
	327	5.8	3.0	4.28	
	270	7.0	2.5	5.18	
	207	9.2	1.9	6.75	
	102	18	3.0	13.73	**7114/722**
	88.2	20	2.6	15.88	
	76.3	23	2.3	18.36	
	72.9	24	2.2	19.20	
	63.1	28	1.9	22.20	
	56.0	32	1.7	25.01	
	52.1	34	1.6	26.85	
	48.4	37	1.4	28.93	
	40.0	45	1.2	34.97	
	30.7	58	0.9	45.56	

P_1 [W]	n_2 [min^{-1}]	M_2 [Nm]	sf	i	
0.25					
(1400 min^{-1})	**27.5**	61	1.8	50.89	**7114/723**
	23.8	70	1.5	58.85	
	20.6	81	1.3	68.06	
	19.7	85	1.3	71.16	
	17.8	94	1.1	78.71	
	15.1	110	1.0	92.70	
	14.7	113	0.9	95.17	
	14.1	118	0.9	99.50	
	13.1	128	0.8	107.20	
	12.2	137	0.8	115.07	
	11.3	148	0.7	123.97	
	10.8	154	0.7	129.62	
	56.0	32	2.4	25.01	**7114/812**
	52.1	34	2.2	26.85	
	48.4	37	2.1	28.93	
	40.0	45	1.7	34.97	
	30.7	58	1.3	45.56	
	27.5	61	2.5	50.89	**7114/813**
	23.8	70	2.2	58.85	
	20.6	81	1.9	68.06	
	19.7	85	1.8	71.16	
	17.8	94	1.6	78.71	
	15.1	110	1.4	92.70	
	14.7	113	1.3	95.17	
	14.1	118	1.3	99.50	
	13.1	128	1.2	107.20	
	12.2	137	1.1	115.07	
	11.3	148	1.0	123.97	
	10.8	154	1.0	129.62	
	10.1	166	0.9	139.13	
	9.3	178	0.9	149.90	
	8.3	201	0.8	168.84	
	7.7	216	0.7	181.24	
	7.2	232	0.7	195.26	
	20.6	81	3.0	68.06	**7114/1053**
	19.7	85	2.9	71.16	
	17.8	94	2.6	78.71	
	15.1	110	2.2	92.70	
	14.7	113	2.2	95.17	
	14.1	118	2.1	99.50	
	13.1	128	1.9	107.20	
	12.2	137	1.8	115.07	
	11.3	148	1.7	123.97	
	10.8	154	1.6	129.62	
	10.1	166	1.5	139.13	
	9.3	178	1.4	149.90	
	8.3	201	1.2	168.84	
	7.7	216	1.1	181.24	
	7.2	232	1.1	195.26	
	5.9	281	0.9	236.09	
	4.6	366	0.7	307.54	



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Technical data

P_1 [W]	n_2 [min^{-1}]	M_2 [Nm]	sf	i	
0.25					
(1400 min^{-1})	**15.1**	110	3.4	92.70	**7114/1203**
	8.3	201	1.9	168.84	
	4.6	366	1.0	307.54	
0.37					
(1400 min^{-1})	**378**	7.5	2.4	3.70	**7124/721**
	327	8.6	2.1	4.28	
	270	10	1.7	5.18	
	207	14	1.3	6.75	
	102	26	2.0	13.73	**7124/722**
	88.2	30	1.8	15.88	
	76.3	35	1.5	18.36	
	72.9	36	1.5	19.20	
	63.1	42	1.3	22.20	
	56.0	47	1.1	25.01	
	52.1	51	1.0	26.85	
	48.4	55	1.0	28.93	
	40.0	66	0.8	34.97	
	30.7	86	0.6	45.56	
	27.5	90	1.2	50.89	**7124/723**
	23.8	104	1.0	58.85	
	20.6	120	0.9	68.06	
	19.7	126	0.8	71.16	
	17.8	139	0.8	78.71	
	15.1	164	0.7	92.70	
	102	26	2.9	13.73	**7124/812**
	88.2	30	2.5	15.88	
	76.3	35	2.2	18.36	
	72.9	36	2.1	19.20	
	63.1	42	1.8	22.20	
	56.0	47	1.6	25.01	
	52.1	51	1.5	26.85	
	48.4	55	1.4	28.93	
	40.0	66	1.1	34.97	
	30.7	86	0.9	45.56	
	27.5	90	1.7	50.89	**7124/813**
	23.8	104	1.5	58.85	
	20.6	120	1.3	68.06	
	19.7	126	1.2	71.16	
	17.8	139	1.1	78.71	
	15.1	164	0.9	92.70	
	14.7	168	0.9	95.17	
	14.1	176	0.9	99.50	
	13.1	189	0.8	107.20	
	12.2	203	0.7	115.07	
	11.3	219	0.7	123.97	
	10.8	229	0.7	129.62	

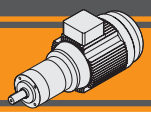
P_1 [W]	n_2 [min^{-1}]	M_2 [Nm]	sf	i	
0.37					
(1400 min^{-1})	**56.0**	47	2.8	25.01	**7124/1052**
	52.1	51	2.6	26.85	
	48.4	55	2.4	28.93	
	40.0	66	2.0	34.97	
	30.7	86	1.5	45.56	
	27.5	90	2.7	50.89	**7124/1053**
	23.8	104	2.4	58.85	
	20.6	120	2.1	68.06	
	19.7	126	2.0	71.16	
	17.8	139	1.8	78.71	
	15.1	164	1.5	92.70	
	14.7	168	1.5	95.17	
	14.1	176	1.4	99.50	
	13.1	189	1.3	107.20	
	12.2	203	1.2	115.07	
	11.3	219	1.1	123.97	
	10.8	229	1.1	129.62	
	10.1	245	1.0	139.13	
	9.3	264	0.9	149.90	
	8.3	298	0.8	168.84	
	7.7	320	0.8	181.24	
	7.2	344	0.7	195.26	
	15.1	164	2.3	92.70	**7124/1203**
	8.3	298	1.3	168.84	
	4.6	543	0.7	307.54	
0.55					
(1400 min^{-1})	**378**	11	1.6	3.70	**7134/721**
	327	13	1.4	4.28	
	270	16	1.1	5.18	
	207	20	0.9	6.75	
	102	39	1.4	13.73	**7134/722**
	88.2	45	1.2	15.88	
	76.3	52	1.0	18.36	
	72.9	54	1.0	19.20	
	63.1	62	0.9	22.20	
	56.0	70	0.8	25.01	
	52.1	76	0.7	26.85	
	48.4	81	0.7	28.93	
	378	11	2.3	3.70	**7134/811**
	327	13	2.0	4.28	
	270	16	1.6	5.18	
	207	20	1.3	6.75	

Dati tecnici — *Technical data*

P_1 [W]	n_2 [min^{-1}]	M_2 [Nm]	sf	i	
0.55					
(1400 min^{-1})	**102**	39	2.0	13.73	**7134/812**
	88.2	45	1.7	15.88	
	76.3	52	1.5	18.36	
	72.9	54	1.4	19.20	
	63.1	62	1.2	22.20	
	56.0	70	1.1	25.01	
	52.1	76	1.0	26.85	
	48.4	81	0.9	28.93	
	40.0	98	0.8	34.97	
	30.7	128	0.6	45.56	
	27.5	134	1.1	50.89	**7134/813**
	23.8	154	1.0	58.85	
	20.6	179	0.9	68.06	
	19.7	187	0.8	71.16	
	17.8	207	0.7	78.71	
	15.1	217*	0.7	92.70	
	72.9	54	2.5	19.20	**7134/1052**
	63.1	62	2.1	22.20	
	56.0	70	1.9	25.01	
	52.1	76	1.8	26.85	
	48.4	81	1.6	28.93	
	40.0	98	1.4	34.97	
	30.7	128	1.0	45.56	
	27.5	134	1.8	50.89	**7134/1053**
	23.8	154	1.6	58.85	
	20.6	179	1.4	68.06	
	19.7	187	1.3	71.16	
	17.8	207	1.2	78.71	
	15.1	243	1.0	92.70	
	14.7	250	1.0	95.17	
	14.1	261	0.9	99.50	
	13.1	281	0.9	107.20	
	12.2	302	0.8	115.07	
	11.3	325	0.8	123.97	
	10.8	340	0.7	129.62	
	10.1	365	0.7	139.13	
	9.3	353*	0.7	149.90	
	8.3	353*	0.7	168.84	
	30.7	120	1.6	45.56	**7134/1202**
	27.5	134	2.8	50.89	**7134/1203**
	15.1	243	1.6	92.70	
	8.3	443	0.9	168.84	
	378	11	2.3	3.70	**8014/811**
	327	13	2.0	4.28	
	270	16	1.6	5.18	
	207	20	1.3	6.75	

P_1 [W]	n_2 [min^{-1}]	M_2 [Nm]	sf	i	
0.55					
(1400 min^{-1})	**102**	39	2.0	13.73	**8014/812**
	88.2	45	1.7	15.88	
	76.3	52	1.5	18.36	
	72.9	54	1.4	19.20	
	63.1	62	1.2	22.20	
	56.0	70	1.1	25.01	
	52.1	76	1.0	26.85	
	48.4	81	0.9	28.93	
	40.0	98	0.8	34.97	
	30.7	108*	0.7	45.56	
	27.5	134	1.1	50.89	**8014/813**
	23.8	154	1.0	58.85	
	20.6	179	0.9	68.06	
	19.7	187	0.8	71.16	
	17.8	207	0.7	78.71	
	15.1	217*	0.7	92.70	
	72.9	54	2.5	19.20	**8014/1052**
	63.1	62	2.1	22.20	
	56.0	70	1.9	25.01	
	52.1	76	1.8	26.85	
	48.4	81	1.6	28.93	
	40.0	98	1.4	34.97	
	30.7	128	1.0	45.56	
	27.5	134	1.8	50.89	**8014/1053**
	23.8	154	1.6	58.85	
	20.6	179	1.4	68.06	
	19.7	187	1.3	71.16	
	17.8	207	1.2	78.71	
	15.1	243	1.0	92.70	
	14.7	250	1.0	95.17	
	14.1	261	0.9	99.50	
	13.1	281	0.9	107.20	
	12.2	302	0.8	115.07	
	11.3	325	0.8	123.97	
	10.8	340	0.7	129.62	
	10.1	353*	0.7	139.13	
	9.3	353*	0.7	149.90	
	8.3	353*	0.7	168.84	
	30.7	120	1.6	45.56	**8014/1202**
	27.5	134	2.8	50.89	**8014/1203**
	15.1	243	1.6	92.70	
	8.3	443	0.9	168.84	

* Coppia limitata / *Limited torque*



Dati tecnici

Technical data

P_1 [W]	n_2 [min^{-1}]	M_2 [Nm]	sf	i	
0.75					
(1400 min^{-1})	**378**	15	1.7	3.70	**8024/811**
	327	18	1.4	4.28	
	270	21	1.2	5.18	
	207	28	0.9	6.75	
	102	53	1.4	13.73	**8024/812**
	88.2	61	1.2	15.88	
	76.3	71	1.1	18.36	
	72.9	74	1.0	19.20	
	63.1	85	0.9	22.20	
	56.0	96	0.8	25.01	
	52.1	103	0.7	26.85	
	48.4	111	0.7	28.93	
	27.5	182	0.8	50.89	**8024/813**
	23.8	211	0.7	58.85	
	20.6	217*	0.7	68.06	
	378	15	2.9	3.70	**8024/1051**
	327	18	2.5	4.28	
	270	21	2.1	5.18	
	207	28	1.6	6.75	
	102	53	2.5	13.73	**8024/1052**
	88.2	61	2.2	15.88	
	76.3	71	1.9	18.36	
	72.9	74	1.8	19.20	
	63.1	85	1.6	22.20	
	56.0	96	1.4	25.01	
	52.1	103	1.3	26.85	
	48.4	111	1.2	28.93	
	40.0	134	1.0	34.97	
	30.7	175	0.8	45.56	
	27.5	182	1.4	50.89	**8024/1053**
	23.8	211	1.2	58.85	
	20.6	244	1.0	68.06	
	19.7	255	1.0	71.16	
	17.8	282	0.9	78.71	
	15.1	332	0.7	92.70	
	207	24	2.6	6.75	**8024/1201**
	102	49	3.9	13.73	**8024/1202**
	56.0	90	2.1	25.01	
	30.7	163	1.2	45.56	
	27.5	182	2.1	50.89	**8024/1203**
	15.1	332	1.1	92.70	
	8.3	542*	0.7	168.84	

P_1 [W]	n_2 [min^{-1}]	M_2 [Nm]	sf	i	
1.1					
(1400 min^{-1})	**378**	22	1.1	3.70	**8034/811**
	327	26	1.0	4.28	
	270	31	0.8	5.18	
	207	36*	0.7	6.75	
	102	77	1.0	13.73	**8034/812**
	88.2	89	0.9	15.88	
	76.3	103	0.7	18.36	
	72.9	108	0.7	19.20	
	378	22	2.0	3.70	**8034/1051**
	327	26	1.7	4.28	
	270	31	1.4	5.18	
	207	41	1.1	6.75	
	102	77	1.7	13.73	**8034/1052**
	88.2	89	1.5	15.88	
	76.3	103	1.3	18.36	
	72.9	108	1.2	19.20	
	63.1	125	1.1	22.20	
	56.0	141	0.9	25.01	
	52.1	151	0.9	26.85	
	48.4	163	0.8	28.93	
	40.0	197	0.7	34.97	
	30.7	256	0.5	45.56	
	27.5	267	0.9	50.89	**8034/1053**
	23.8	309	0.8	58.85	
	20.6	357	0.7	68.06	
	207	35	1.8	6.75	**8034/1201**
	102	72	2.6	13.73	**8034/1202**
	56.0	131	1.4	25.01	
	30.7	239	0.8	45.56	
	27.5	267	1.4	50.89	**8034/1203**
	15.1	487	0.8	92.70	
	207	35	1.8	6.75	**90S4/1201**
	102	72	2.6	13.73	**90S4/1202**
	56.0	131	1.4	25.01	
	30.7	239	0.8	45.56	
	27.5	267	1.4	50.89	**90S4/1203**
	15.1	487	0.8	92.70	

* Coppia limitata / *Limited torque*

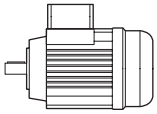
Dati tecnici / *Technical data*

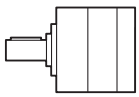
P_1 [W]	n_2 [min^{-1}]	M_2 [Nm]	sf	i	
1.5					
(1400 min^{-1})	**378**	26	2.4	3.70	**90L14/1201**
	207	48	1.3	6.75	
	102	98	1.9	13.73	**90L14/1202**
	56.0	179	1.1	25.01	
	30.7	271*	0.7	45.56	
	27.5	364	1.0	50.89	**90L14/1203**
	15.1	543*	0.7	92.70	

P_1 [W]	n_2 [min^{-1}]	M_2 [Nm]	sf	i	
2.2					
(1400 min^{-1})	**378**	39	1.6	3.70	**90L24/1201**
	207	71	0.9	6.75	
	102	144	1.3	13.73	**90L24/1202**
	56.0	263	0.7	25.01	
	27.5	535	0.7	50.89	**90L24/1203**

* Coppia limitata / *Limited torque*

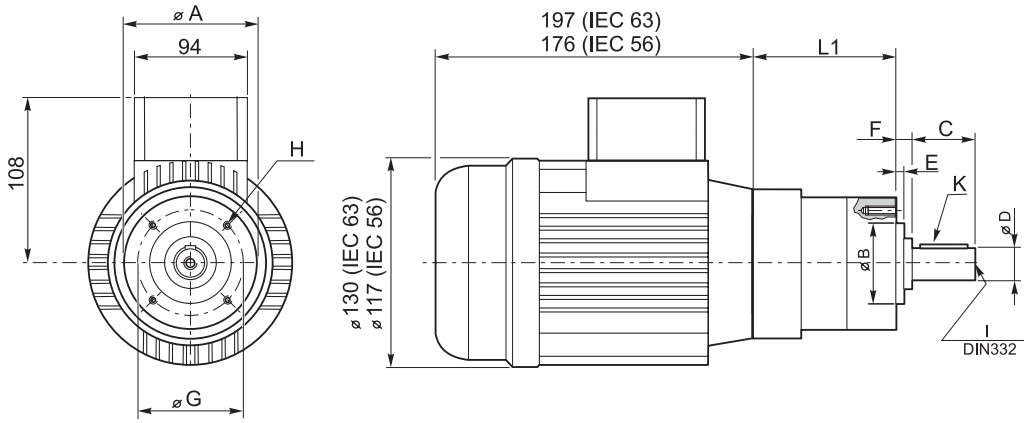
Motori applicabili / *IEC Motor adapters*





		TS				
		56...	**63...**	**71...**	**80...**	**90...**
P	**52...**					
	62...					
	72...					
	81...					
	105...					
	120...					

Dimensioni — *Dimensions*



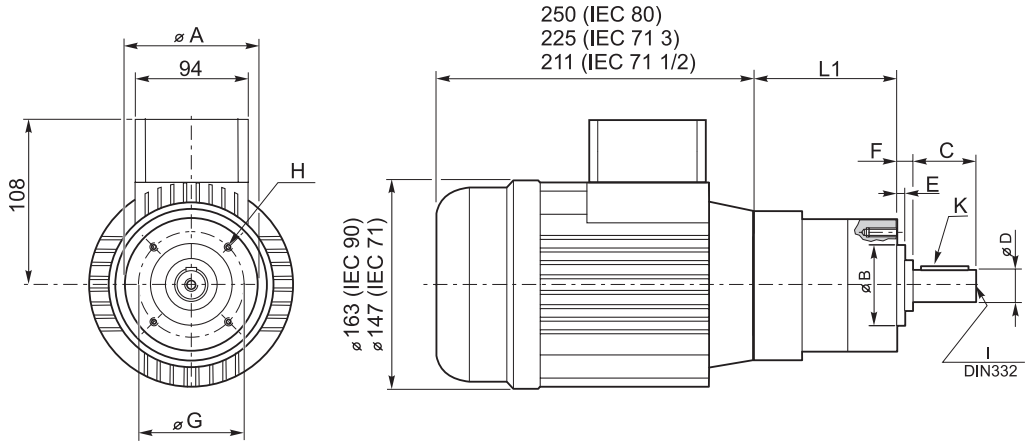
ACP56.../... U

Tipo *Type*	Numero di stadi *N° of stages*	Dimensioni / *Dimensions*										
		L1	A	B	C	D	E	F	G	H	I	K
ACP56../52...	1	74	52	32 h8	20.8	12 h7	3	4.2	40	M5x10	M4x10	4x4x16
	2	88										
	3	102										
ACP56../62...	1	74	62	40 j7	30	14 h7	5	9	52	M5x10	M5x12	5x5x18
	2	90										
	3	106										
ACP56../72...	1	82	72	45 j7	40	16 h7	5	9	60	M5x10	M5x12	5x5x30
	2	101.5										
	3	121										
ACP56../81...	1	91	81	50 j7	40	19 h7	5	9	65	M6x12	M6x16	6x6x28
	2	113										
	3	135										
ACP56../105...	1	113	105	70 j7	50	25 h7	5	9	85	M8x16	M10x22	8x7x40
	2	144										
	3	175										
ACP56../120...	1	131	120	80 j7	73	32 k6	5	15	100	M10x22	M12	10x8x50
	2	165										
	3	199.5										

ACP 63.../... U

Tipo *Type*	Numero di stadi *N° of stages*	Dimensioni / *Dimensions*										
		L1	A	B	C	D	E	F	G	H	I	K
ACP63../62...	1	76	62	40 j7	30	14 h7	5	9	52	M5x10	M5x12	5x5x18
	2	92										
	3	108										
ACP63../72...	1	88.4	72	45 j7	40	16 h7	5	9	60	M5x10	M5x12	5x5x30
	2	108										
	3	127.6										
ACP63../81...	1	94	81	50 j7	40	19 h7	5	9	65	M6x12	M6x16	6x6x28
	2	116										
	3	138										
ACP63../105...	1	116.6	105	70 j7	50	25 h7	5	9	85	M8x16	M10x22	8x7x40
	2	147.5										
	3	178.5										
ACP63../120...	1	134.4	120	80 j7	73	32 k6	5	15	100	M10x22	M12	10x8x50
	2	168.6										
	3	202.8										

Dimensioni — *Dimensions*



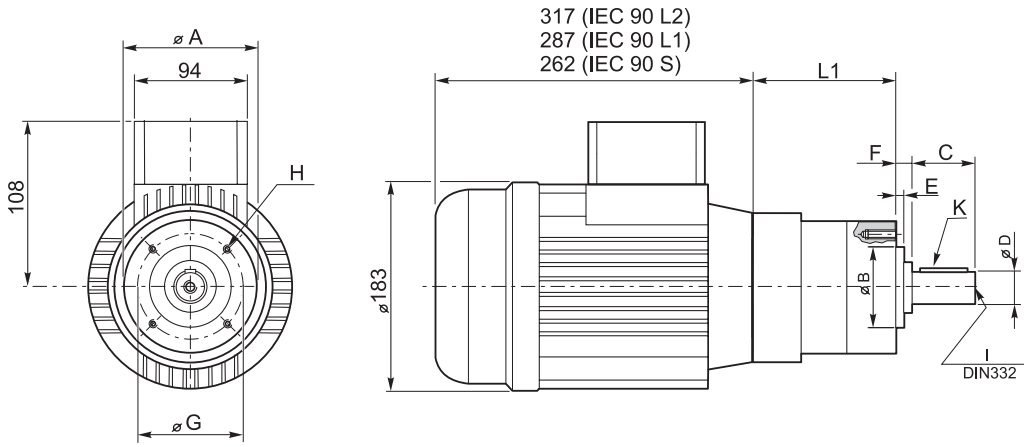
ACP 71.../... U

Tipo *Type*	Numero di stadi *N° of stages*	Dimensioni / *Dimensions*										
		L1	A	B	C	D	E	F	G	H	I	K
ACP71../72...	1	95.4	72	45 j7	40	16 h7	5	9	60	M5x10	M5x12	5x5x30
	2	115										
	3	134.6										
ACP71../81...	1	101	81	50 j7	40	19 h7	5	9	65	M6x12	M6x16	6x6x28
	2	123										
	3	145										
ACP71../105...	1	123.4	105	70 j7	50	25 h7	5	9	85	M8x16	M10x22	8x7x40
	2	154.5										
	3	185.5										
ACP71../120...	1	136.5	120	80 j7	73	32 k6	5	15	100	M10x22	M12	10x8x50
	2	170.7										
	3	204.9										

ACP 80.../... U

Tipo *Type*	Numero di stadi *N° of stages*	Dimensioni / *Dimensions*										
		L1	A	B	C	D	E	F	G	H	I	K
ACP80../81...	1	111	81	50 j7	40	19 h7	5	9	65	M6x12	M6x16	6x6x28
	2	133										
	3	155										
ACP80../105...	1	130.4	105	70 j7	50	25 h7	5	9	85	M8x16	M10x22	8x7x40
	2	161.5										
	3	192.6										
ACP80../120...	1	143.5	120	80 j7	73	32 k6	5	15	100	M10x22	M12	10x8x50
	2	178										
	3	212										

Dimensioni — *Dimensions*

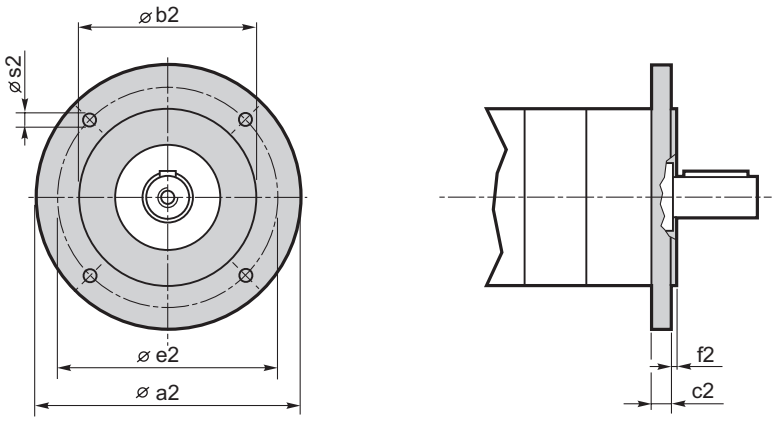


ACP 90.../... U

Tipo *Type*	Numero di stadi *N° of stages*	Dimensioni / *Dimensions*										
		L1	A	B	C	D	E	F	G	H	I	K
ACP90../120...	1	153.5	120	80 j7	73	32 k6	5	15	100	M10x22	M12	10x8x50
	2	188										
	3	222										

Dimensioni — *Dimensions*

ACP.../... C... Flange uscita / *Output flanges*



	Dimensioni / *Dimensions*						
P	**a2**	**b2**	**c2**	**e2**	**f2**	**s2**	**Flangia uscita** *Output flange*
52	80	50 j7	9	65	2.5	M5	**C80**
	90	60 j7	9	75	2.5	5.5	**C90**
	105	70 j7	9	85	2.5	6.5	**C105**
	120	80 j7	9	100	3.0	6.5	**C120**
62	80	50 j7	9	65	2.5	M5	**C80**
	90	60 j7	9	75	2.5	5.5	**C90**
	105	70 j7	9	85	2.5	6.5	**C105**
	120	80 j7	9	100	3.0	6.5	**C120**
72	80	50 j7	9	65	2.5	M5	**C80**
	90	60 j7	9	75	2.5	M5	**C90**
	105	70 j7	9	85	2.5	6.5	**C105**
	120	80 j7	9	100	3.0	6.5	**C120**
81	90	60 j7	9	75	2.5	M5	**C90**
	105	70 j7	9	85	2.5	M6	**C105**
	120	80 j7	9	100	3.0	6.5	**C120**
105	120	80 j7	12	100	3	M6	**C120**
	140	95 j7	12	115	3.5	M8	**C140**
	160	110 j7	12	130	3.5	M8	**C160**
120	140	95 j7	15	115	3	M8	**C140**
	160	110 j7	15	130	3.5	M8	**C160**

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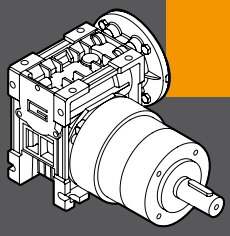
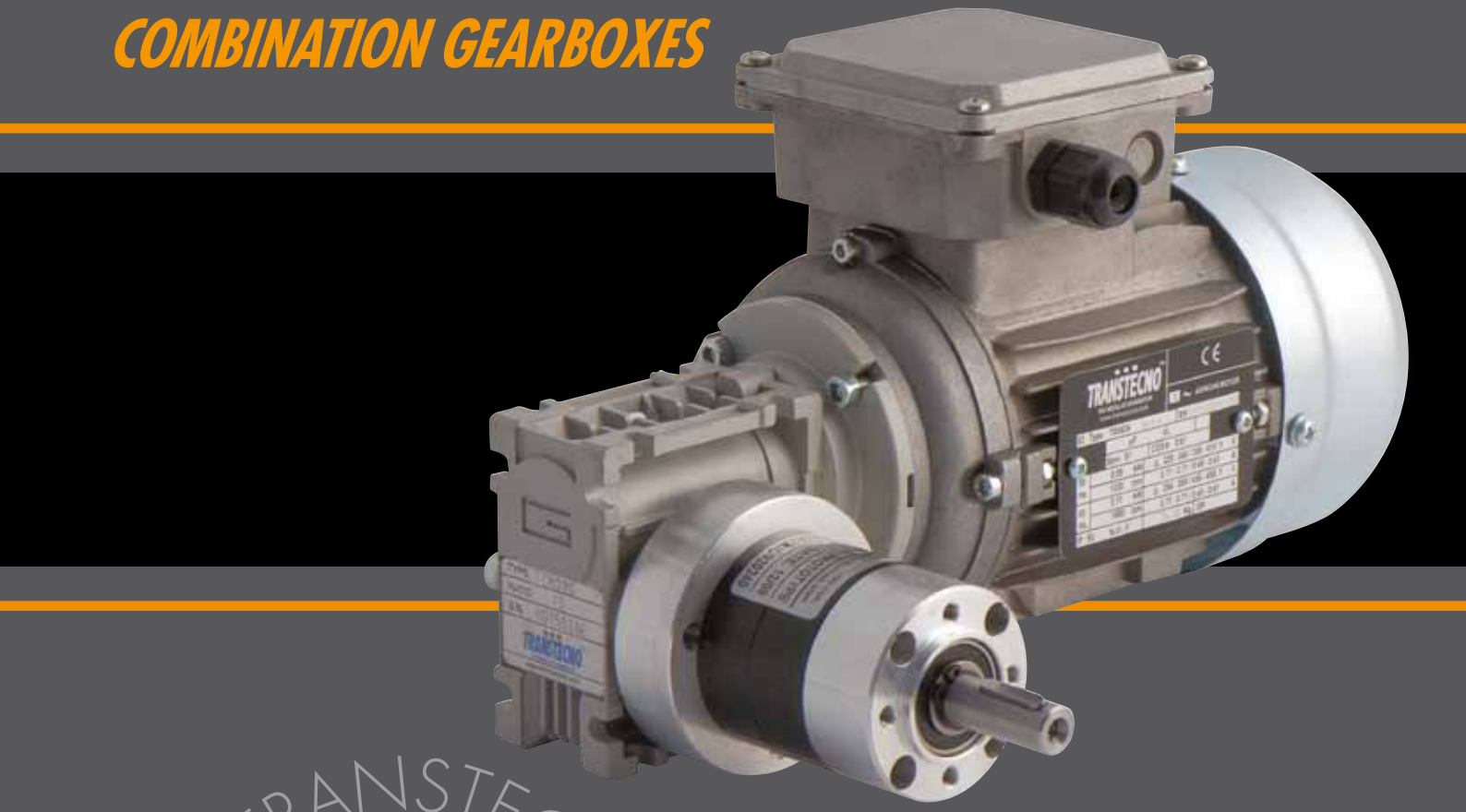
WMP

WMP



RIDUTTORI COMBINATI

COMBINATION GEARBOXES



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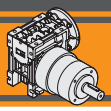

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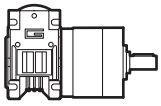
Caratteristiche tecniche — *Technical features*

L'accoppiamento di un riduttore a vite senza fine con un riduttore epicicloidale consente di ottenere elevati rapporti di riduzione (i_{max} = 1/18452) e di disporre di un gruppo autolubrificato compatto, silenzioso e con un'elevata affidabilità.

The coupling of a wormgearbox to a planetary gearbox allows to obtain high reduction ratios (i_{max} = 1/18452) and to get a compact, silent, self lubricated with high reliability group.

Designazione — *Classification*

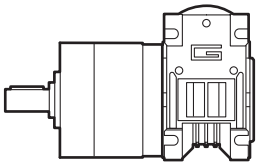
MOTORIDUTTORE / *GEARMOTOR*

WMP	026/52	1	CS90	202.5	56B14	VS
Tipo *Type*	Grandezza *Size*	Numero stadi epicicloidale *N° of planetary stages*	Versione *Version*	Rapporto *Ratio*	IEC	Opzioni *Options*
	**026/52** **026/62** **030/81**	**1** **2** **3**	**US** **UD** **CS80…120** **CD80…120**	Vedere tabella *See tables*	**56B14** **63B14** **63B5**	**VS**

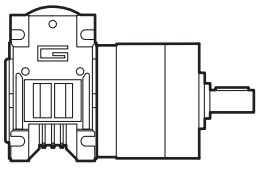
MOTORE CM / *CM MOTOR*

0.09kW	4p	3ph	50Hz	T1
Potenza *Power*	Poli *Poles*	Fasi *Phases*	Frequenza *Frequency*	Pos. morsettiera *Terminal box pos.*
Vedi tabelle *See tables*	**2p** **4p** **6p** **8p**	**1ph** **3ph**	**50Hz** **60Hz**	**T1** (Std) **T4** **T2** **T3**

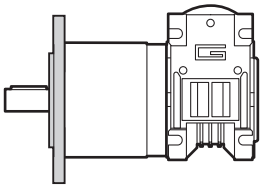
Versioni — *Versions*



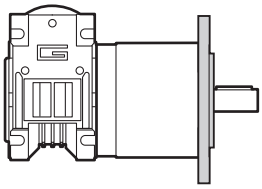
US



UD



CS



CD

Simbologia — *Symbols*

n_1	[min^{-1}]	Velocità in ingresso / *Input speed*
n_2	[min^{-1}]	Velocità in uscita / *Output speed*
i		Rapporto di riduzione / *Ratio*
P_1	[kW]	Potenza in entrata / *Input power*
M_n	[Nm]	Coppia nominale in uscita del riduttore / *Maximum output torque of the gearbox*
M_2	[Nm]	Coppia in uscita in funzione di P_1 / *Output torque referred to P_1*
sf		Fattore di servizio / *Service factor*
Rd	%	Rendimento dinamico / *Dynamic efficiency*
A_2	N]	Carico assiale ammissibile in uscita / *Permitted output axial load*
R_2	[N]	Carico radiale ammissibile in uscita / *Permitted output radial load*

Lubrificazione — *Lubrication*

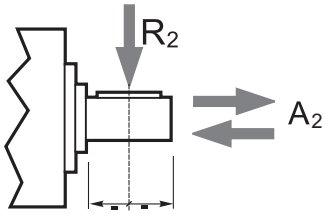
I riduttori a vite senza fine della serie CM sono lubrificati a vita con olio sintetico di viscosità 320 e possono essere installati in qualunque posizione di montaggio.

Permanent synthetic oil long-life lubrication allow to use CM wormgearbox range in all mounting position.

I riduttori epicicloidali sono lubrificati in modo permanente, non richiedono quindi ulteriore manutenzione.
Questo gli consente di essere installati praticamente ovunque.
La temperatura ambiente di funzionamento consentita va da -50°C a + 40°C; per applicazioni particolari possone essere adottate misure per raggiungere livelli di temperatura maggiori.

Planetary gearboxes are life-time lubricated with grease, therefore they are maintenancie free.
They can be installed in any location.
The environmental temperature range is from -50°C up to +40°C; for special applications, measures can be taken for higher temperature range.

Carichi radiali — *Radial loads*



Numero di stadi *N° of stages*	Carichi Radiali R_2 [N] *Radial Load R_2 [N]*		
	P52	P62	P81
1	200	240	400
2	320	360	600
3	450	520	1000

Numero di stadi *N° of stages*	Carichi Assiali A_2 [N] *Axial Load A_2 [N]*		
	P52	P62	P81
1	60	70	80
2	100	100	120
3	150	150	200

Rapporti — *Ratios*

Motoriduttore *Gearmotor*	Numero stadi epicicloidale *N° of planetary stages*	Rapporto epicicloidale *Planetary ratio*	Rapporto vite senza fine *Wormgearbox ratio*	Rapporto finale *Total ratio*
WMP 026/052 WMP 026/062 WMP 030/081	1	6.75	10	**67.5**
			15	**101.3**
			20	**135**
			30	**202.5**
			40	**270**
			50	**337.5**
			60	**405**
	2	28.93	10	**289.3**
			15	**434.0**
			20	**578.6**
			30	**867.9**
			40	**1157**
			50	**1447**
			60	**1736**
		34.97	60	**2098**
		45.56	60	**2734**

Rendimento — *Efficiency*

Motoriduttore *Gearmotor*	n_1 [min^{-1}]	Rendimento *Efficiency*	Rapporto / *Ratio*														
			67.5	101.3	135	202.5	270	337.5	405	289.3	434	578.6	867.9	1157	1447	1736	2098	2734
WMP026/52...	1400	Rd %	66.4	62.4	59.2	52.8	48.8	45.6	42.4	62.3	58.5	55.5	49.5	45.8	42.8	39.8	39.8	39.8
WMP026/62...			66.4	62.4	59.2	52.8	48.8	45.6	42.4	62.3	58.5	55.5	49.5	45.8	42.8	39.8	39.8	39.8
WMP030/81...			67.2	63.2	60	53.6	49.6	46.4	44	63	59.3	56.3	50.3	46.5	43.5	41.3	41.3	41.3

Rendimento teorico del riduttore dopo il rodaggio
Theoretical efficiency of the gearbox after the first running period

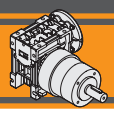
Dati tecnici — *Technical data*

P_1 [W]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
0.09						
56B (1400 min^{-1})	**20.7**	25	1.0	67.5	**026/521**	B14
	13.8	25	1.0	101.3		B14
	10.4	25	1.0	135		B14
	6.9	25	1.0	202.5		B14
	5.2	25	1.0	270		B14
	4.8	25	1.0	289.3	**026/522**	B14
	4.1	25	1.0	337.5	**026/521**	B14
	3.5	25	1.0	405		B14
	3.2	25	1.0	434	**026/522**	B14
	2.4	25	1.0	578.6		B14
	1.6	25	1.0	867.9		B14
	1.2	25	1.0	1157		B14
	1.0	25	1.0	1447		B14
	0.8	25	1.0	1736		B14
	0.7	25	1.0	2098		B14
	0.5	25	1.0	2734		B14
	20.7	27	1.5	67.5	**026/621**	B14
	13.8	39	1.0	101.3		B14
	10.4	40	1.0	135		B14
	6.9	40	1.0	202.5		B14
	5.2	40	1.0	270		B14
	4.8	50	1.0	289.3	**026/622**	B14
	4.1	40	1.0	337.5	**026/621**	B14
	3.5	40	1.0	405		B14
	3.2	50	1.0	434	**026/622**	B14
	2.4	50	1.0	578.6		B14
	1.6	50	1.0	867.9		B14
	1.2	50	1.0	1157		B14
	1.0	50	1.0	1447		B14
	0.8	50	1.0	1736		B14
	0.7	50	1.0	2098		B14
	0.5	50	1.0	2734		B14
	20.7	28	2.9	67.5	**030/811**	B5/B14
	13.8	39	2.0	101.3		B5/B14
	10.4	49	1.6	135		B5/B14
	6.9	66	1.2	202.5		B5/B14
	5.2	80	1.0	270		B5/B14
	4.8	111	1.1	289.3	**030/812**	B5/B14
	4.1	80	1.0	337.5	**030/811**	B5/B14
	3.5	80	1.0	405		B5/B14
	3.2	120	1.0	434	**030/812**	B5/B14
	2.4	120	1.0	578.6		B5/B14
	1.6	120	1.0	867.9		B5/B14
	1.2	120	1.0	1157		B5/B14
	1.0	120	1.0	1447		B5/B14
	0.8	120	1.0	1736		B5/B14
	0.7	120	1.0	2098		B5/B14
	0.5	120	1.0	2734		B5/B14

P_1 [W]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
0.12						
63A (1400 min^{-1})	**20.7**	37	2.2	67.5	**030/811**	63B5/B14
	13.8	52	1.5	101.3		63B5/B14
	10.4	66	1.2	135		63B5/B14
	6.9	80	1.0	202.5		63B5/B14
	5.2	80	1.0	270		63B5/B14
	4.8	120	1.0	289.3	**030/812**	63B5/B14
0.18						
63B (1400 min^{-1})	**20.7**	56	1.4	67.5	**030/811**	63B5/B14
	13.8	79	1.0	101.3		63B5/B14
	10.4	80	1.0	135		63B5/B14

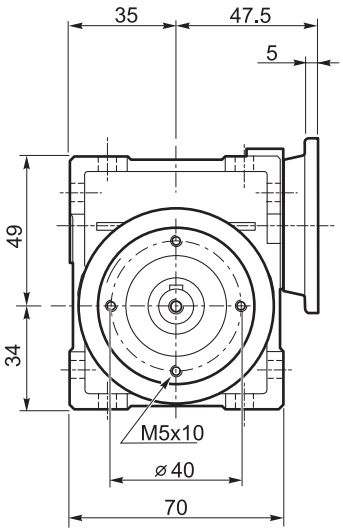
Nota: Verificare sempre che la coppia M2 utilizzata non ecceda il valore indicato nelle caselle in grigio

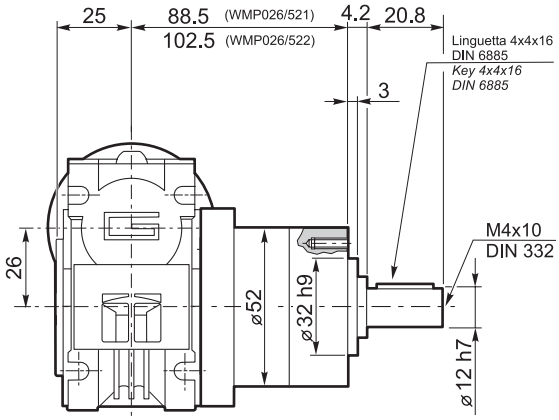
Note: *Please check that the output torque M2 does not exceed the value into the grey areas*



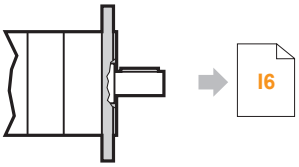
Dimensioni *Dimensions*

WMP026/52...U



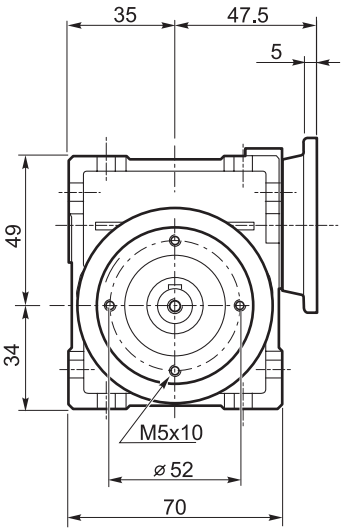


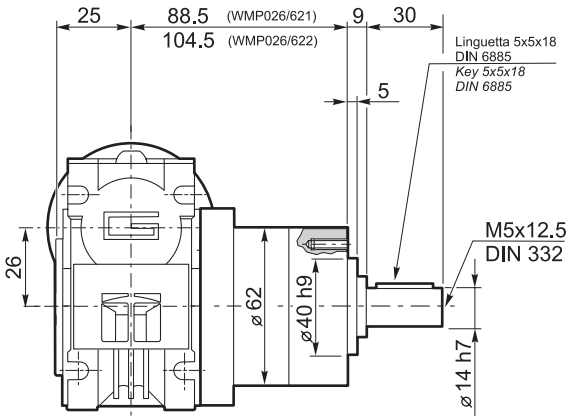
	Kg
WMP026/521	1.6
WMP026/522	1.8



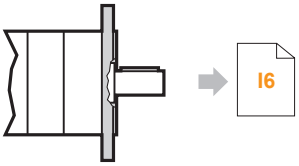
WMP026/52...C

WMP026/62...U





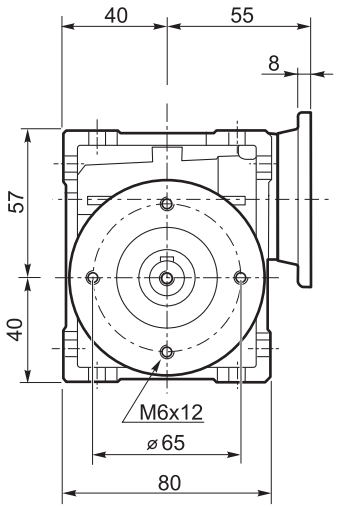
	Kg
WMP026/621	1.7
WMP026/622	2.1

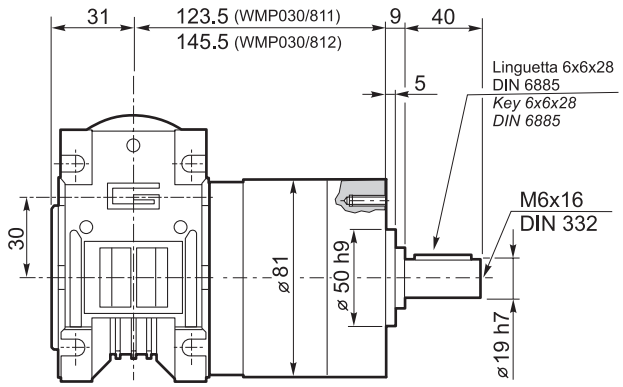


WMP026/62...C

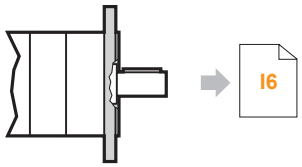
Dimensioni — *Dimensions*

WMP030/81...U



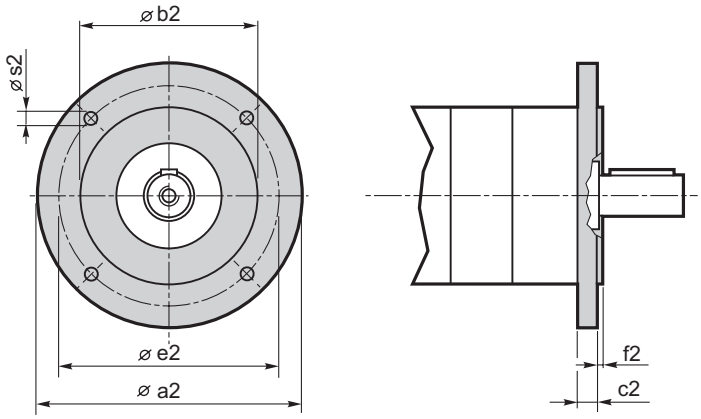


	Kg
WMP030/811	3.1
WMP030/812	3.8



WMP030/81...C

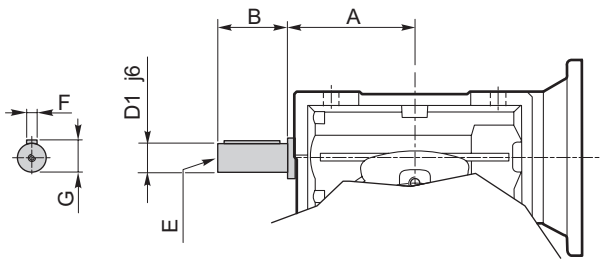
WMP.../.../... C... Flange uscita / *Output flanges*



	Dimensioni / *Dimensions*						
P	**a2**	**b2**	**c2**	**e2**	**f2**	**s2**	**Flangia uscita** *Output flange*
52	80	50 j7	9	65	2.5	M5	**C80**
	90	60 j7	9	75	2.5	5.5	**C90**
	105	70 j7	9	85	2.5	6.5	**C105**
	120	80 j7	9	100	3.0	6.5	**C120**
62	80	50 j7	9	65	2.5	M5	**C80**
	90	60 j7	9	75	2.5	5.5	**C90**
	105	70 j7	9	85	2.5	6.5	**C105**
	120	80 j7	9	100	3.0	6.5	**C120**
81	90	60 j7	9	75	2.5	M5	**C90**
	105	70 j7	9	85	2.5	M6	**C105**
	120	80 j7	9	100	3.0	6.5	**C120**

Opzioni — *Options*

VS - Vite sporgente / *Extended input shaft*



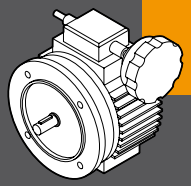
	A	B	D_1 j6	E	F	G
CM 030	45	20	9	M4	3	10.2

TRANSTECNO™

THE MODULAR GEARMOTOR

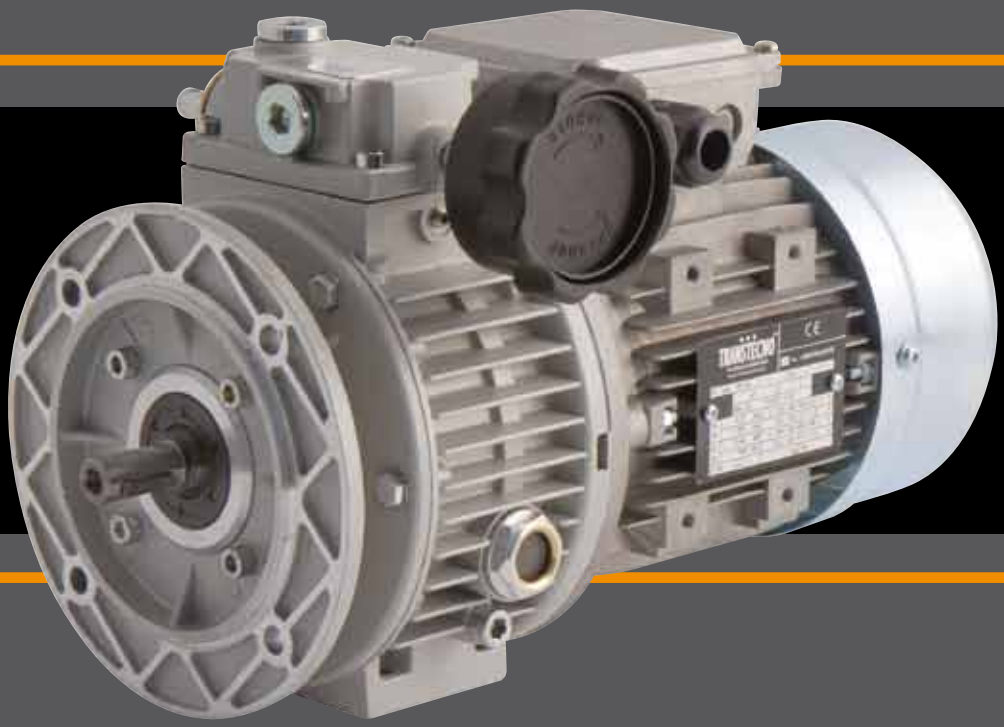
VAM

VAM



MOTOVARIATORI

MECHANICAL VARIATORS



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Caratteristiche tecniche

Technical features

I variatori epicicloidali a satelliti conici VAM hanno le seguenti caratteristiche principali:

- Precisione nella regolazione della velocità, contenuta in ± 0.5/1%.
- Campo di regolazione continuo 1:5.
- Funzionamento continuo in entrambi i sensi di rotazione, con entrata ed uscita concordi.
- Flangia di attacco motore in standard IEC B5.
- Le grandezze 018, 037 e 075 sono costruite con carcassa in alluminio, le altre grandezze in ghisa.

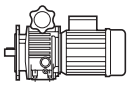
VAM mechanical variator range has the following main features:

- *Precise speed setting : ± 0.5/1%*
- *Continuous setting within 1:5 range*
- *Continuous CW and CCW rotation, synchronous input and output movement.*
- *B5 IEC standards*
- *Die-cast aluminum housing on sizes 018, 037 and 075; cast iron housing on sizes 15, 22 and 40.*

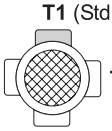
Designazione

Classification

MOTOVARIATORI / *MECHANICAL VARIATORS*

VAM	037	B5	PF
Tipo *Type*	Grandezza *Size*	Posizione di montaggio *Mounting position*	Opzioni *Options*
VAM 	**018** **037** **075** **15** **22** **40**	**B5** **V1** **V3**	**PF**

MOTORE / *MOTOR*

0.75kW	4p	3ph	50Hz	T1
Potenza *Power*	Poli *Poles*	Fasi *Phases*	Frequenza *Frequency*	Pos. morsettiera *Terminal box pos.*
Vedi tabelle *See tables*	**2p** **4p** **6p** **8p**	**1ph** **3ph**	**50Hz** **60Hz**	**T1** (Std) **T4**  **T2** **T3**

Principio di funzionamento

Operating principle

L'albero motore mette in rotazione i satelliti (7) tramite le le 2 piste interne del solare: una fissa (10) e l'altra mobile (11).

Esternamente i satelliti ruotano su altre 2 piste: una fissa (9) e l'altra mobile (6).

I satelliti sono collegati all'albero di uscita tramite il porta satelliti (2).

Azionando il volantino di comando si apre o si chiude (in senso assiale) la pista esterna mobile.

Grazie alle superfici coniche di piste e satelliti, aprendo la pista esterna mobile i satelliti si spostano verso l'esterno, diminuendo la velocità.

Al contrario, chiudendo la pista esterna, i satelliti traslano verso l'interno aumentando la velocità dell'albero in uscita.

La regolazione di velocità non deve mai essere effettuata a variatore fermo.

Motor shaft spins the planet wheels (7) by the solar rings: a fixed inferior planetary orbit (10) and a moving inferior planetary orbit (11).

Planet wheels rotate onto two other external rings: a fixed outer planetary orbit (9) and a moving outer planetary orbit (6).

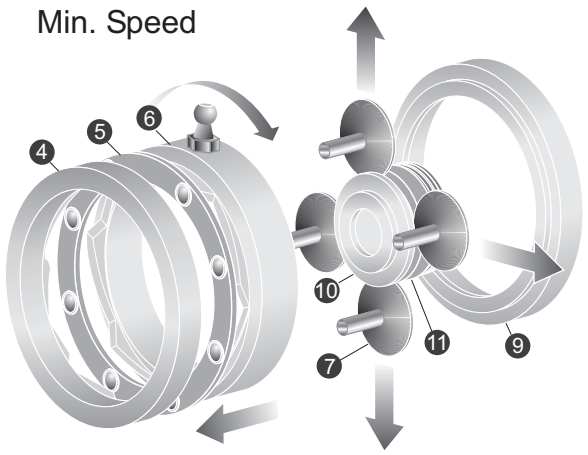
Planet wheels are connected to the output shaft by the planet support (2).

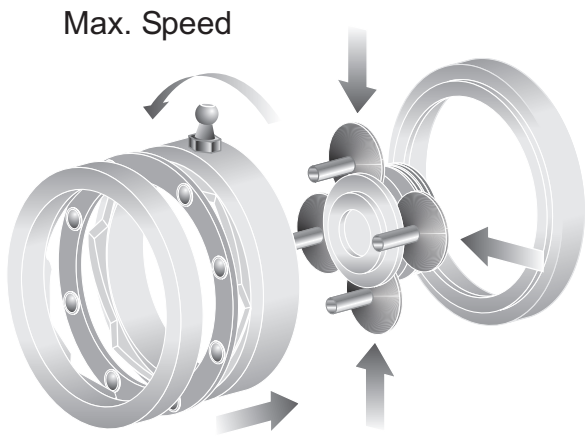
Rotating the control handwheel the moving outer planetary orbit moves axially.

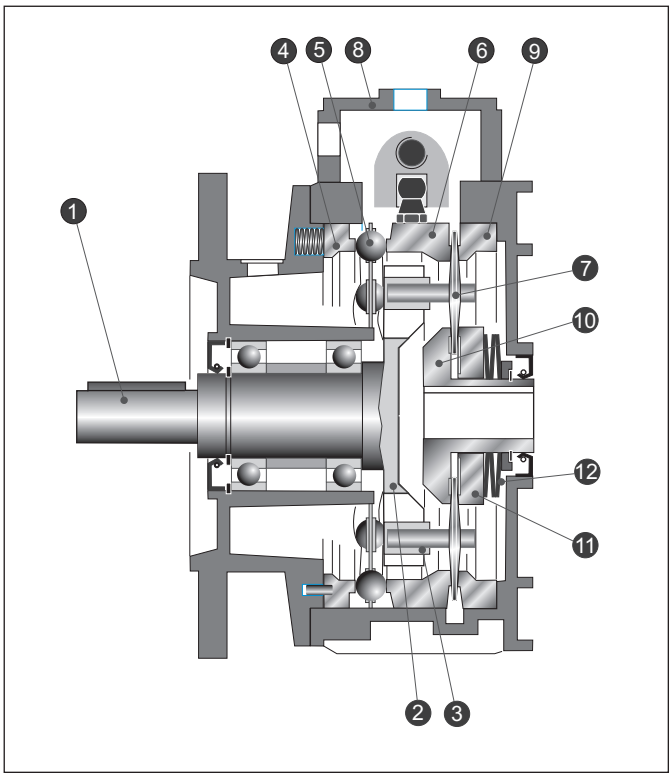
Thanks to the conical surfaces of rings and planet wheels, opening the moving outer planetary orbit the planet wheels move to the outer side, decreasing speed.

Differently, closing the moving outer planetary orbit the planet wheels move to the internal side, increasing speed.

Speed adjustment is possible only when variator is running.





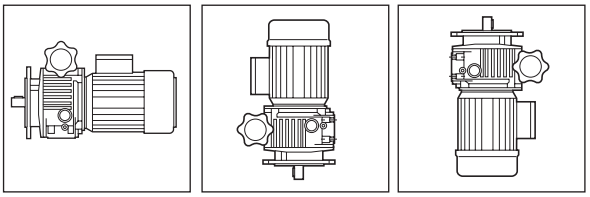


1	Albero uscita	*Output shaft*
2	Portasatelliti	*Planet support*
3	Boccola scorrevole	*Slide block*
4	Pista di regolazione	*Regulating orbit*
5	Anello portasfere	*Ball ring*
6	Pista mobile esterna	*Moving outer planetary orbit*
7	Satellite	*Planet wheel*
8	Scatola di comando	*Operating box*
9	Pista fissa esterna	*Fixed outer planetary orbit*
10	Pista fissa interna	*Fixed inferior planetary orbit*
11	Pista mobile interna	*Moving inferior planetary orbit*
12	Molle a tazza	*Belleville spring*

Lubrificazione — *Lubrication*

	Quantità di olio (litri) / **Oil quantity** *(litres)*					
	VAM					
	018	**037**	**075**	**15**	**22**	**40**
B5	0.13	0.15	0.33	0.80	1.20	1.20
V1	0.30	0.40	0.85	1.40	2.15	2.15
V3	0.13	0.15	0.33	0.80	1.20	1.20

Posizioni di montaggio / *Mounting positions*



B5 **V1** **V3**

N.B. In fase di ordine specificare sempre la posizione di montaggio desiderata.

NOTE: Always specify the desired installation position at the time of order.

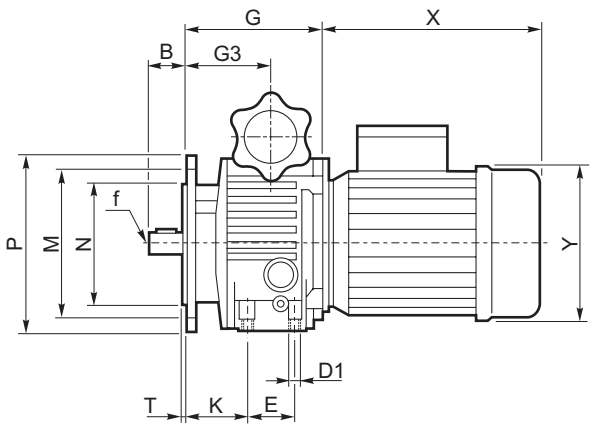
Dati tecnici — *Technical data*

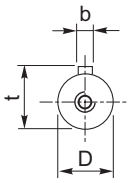
Variatore *Variator*	**Motore** *Motor*	**P_1** [kW]	**n1** [min^{-1}]	**n_2** [min^{-1}] max - min	**M_2** [Nm]
VAM 018	63C4	**0.22**	1400	880 - 170	1.9 - 3.8
	63C2	**0.37**	2800	1760-340	1.7 - 3.8
VAM 037	71B4	**0.37**	1400	1000 - 200	3 - 6
	71B2	**0.55**	2800	2000 - 400	2.2 - 6
VAM 075	80B4	**0.75**	1400	1000 - 200	6 - 12
	80B2	**1.1**	2800	2000 - 400	4.4 - 12
VAM 15	90S4	**1.1**	1400	1000 - 200	9 - 18
	90L4	**1.5**	1400	1000 - 200	12 - 24
	90L2	**2.2**	2800	2000 - 400	9 - 24
VAM 22	100LA4	**2.2**	1400	1000 - 200	18 - 36
VAM 40	100LB4	**3.0**	1400	1000 - 200	24 - 48
	112M4	**4.0**	1400	1000 - 200	32 - 64

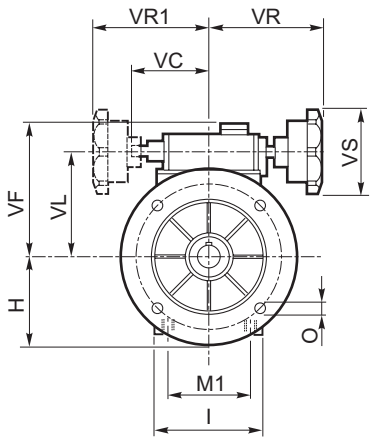
Simbologia — *Symbols*

n_1	[min^{-1}]	Velocità in ingresso / *Input speed*
n_2	[min^{-1}]	Velocità in uscita / *Output speed*
P_1	[kW]	Potenza in entrata / *Input power*
M_2	[Nm]	Coppia in uscita in funzione di P_1 / *Output torque referred to P1*

Dimensioni — *Dimensions*







VAM	B	D	E	G	G3	H	I	M	M1	N	O	D1	P	T	K	VC	VF	VL	VR	VR1	VS	b	f	t	X	Y	kG
018	23	11	50	112.5	64.5	70	72	115	60	95	9	M6	140	3.5	46	71	111	78	110	110	85	4	M5	12.5	200	120	3.4
037	30	14	40	110	74	80	90	130	77	110	9	M8	160	3.5	53	71	123	90	110	110	85	5	M6	16	227	141	4.7
075	40	19	58	139	85.5	100	98	165	84	130	11	M8	200	3.5	60	79	140	107	120	120	85	6	M6	21.5	268	160	7.8
15	50	24	—	188	115	126	241	165	—	130	11	—	200	3.5	—	—	144	122	120	120	85	8	M8	27	290	195	31
22	60	28	—	208	131	150	270	215	—	180	15	—	250	4	—	—	188	150	160	—	110	8	M10	33	320	215	55
40	60	28	—	208	131	150	270	215	—	180	15	—	250	4	—	—	188	150	160	—	110	8	M10	33	340	240	57

Accessori — *Accessories*

Indicatore gravitazionale

Un utile accessorio da applicare sul volantino di comando è l'indicatore gravitazionale.

Esso consente di visualizzare, su una scala graduata, un riferimento numerico relativo alla velocità in uscita.

Non è utilizzabile nelle posizioni C e D (con asse volantino verticale).

Indicator

The indicator is an extremely useful accessory, mounted on the handwheel.

It shows the output speed on a graduated scale.

It cannot be used in positions C and D (with vertical handwheel axis).

Taratura dell'indicatore gravitazionale

Sull' indicatore smontato fare coincidere le due lancette con lo zero, regolare la velocità del variatore al minimo e rimontare l'indicatore nell'apposito alloggiamento nel volantino di comando.

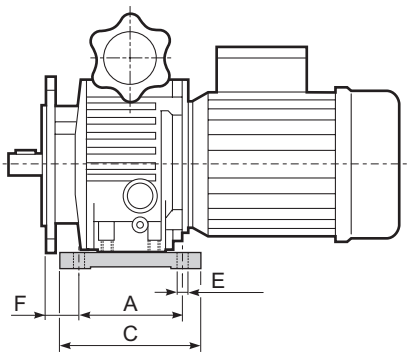
Setting the indicator

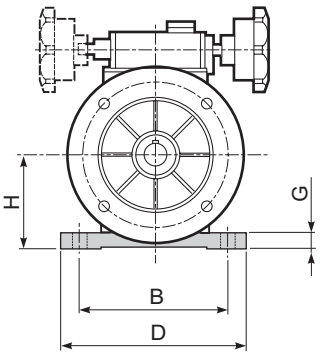
Move the two hands to zero, set the variator's speed to minimum and then put the indicator back in place on the handwheel.

Opzioni — *Options*

PF - Piedi di fissaggio / *Fixing feet*

VAM	A	B	C	D	E	F	G	H
018	105	110	121	147	6.5	17.5	10	76.5
037	105	120	124	149	8.5	20.5	11	94
075	125	160	150	190	11	26.5	12	111





Uso e manutenzione

Use and maintenance

La regolazione della velocità deve essere effettuata durante il funzionamento. Non azionare il volantino di regolazione a motore fermo.

The speed regulation must be done whilst the variator is working. Do not adjust handwheel when motor is off.

Le due viti a brugola montate al di sotto del volantino di regolazione sono tarate in fabbrica. Si prega di non toccarle.

The 2 socket head screws assembled under the control handwheel are calibrated in the factory, please do not adjust them.

I variatori sono riempiti di olio lubrificante in fabbrica. Dopo un rodaggio di circa 100 ore è necessario sostituire l'olio; cambi successivi potranno essere effettuati ad intervalli di circa 1000 ore di funzionamento.

The variators are filled with lubrication oil in the factory. After a running-in of approximately 100 hours, the oil must be changed; The subsequent changes can be done with intervals of roughly 1000-functioning hours.

Il livello dell'olio deve essere a 2/3 della spia di livello. Controllare periodicamente tale livello; in caso di livello insufficiente non usare il variatore.

The oil level must be at 2/3 of the sight glass plug. Check periodically this level and top up as required.

La temperatura di funzionamento normale può raggiungere i 50-55 °C oltre la temperatura ambiente con valori massimi di 85-95 °C.

The temperature of normal functioning can reach 50-55 degrees C over the environment temperature, with maximum peaks of 85-95 degrees C.

Per montare o smontare giunti, pulegge o pignoni sull'albero del variatore utilizzare appositi tiranti ed estrattori; eventuali urti possono danneggiare i cuscinetti.

To assemble and disassemble couplings, pulleys and pinions on the variator shaft use the stay bolt and strippers provided. Any impacts can damage the bearings.

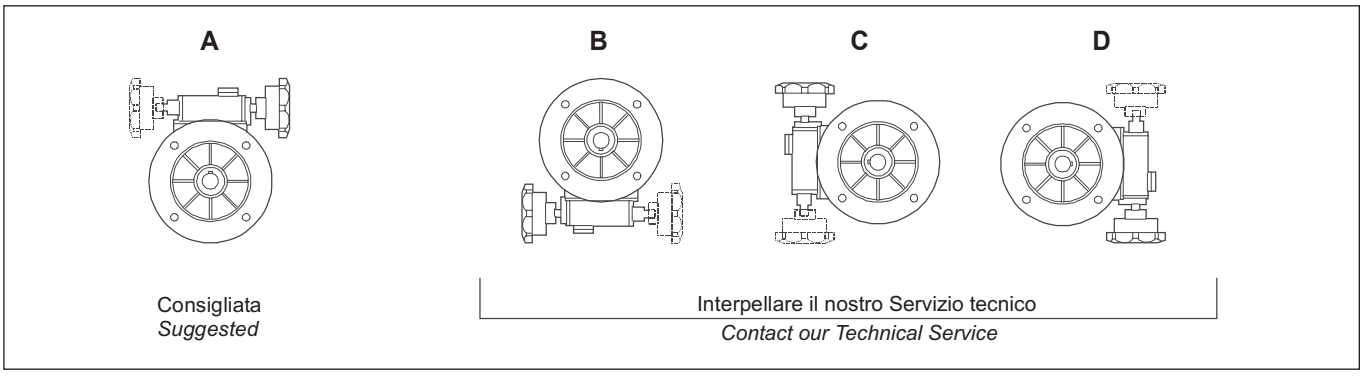
Si sconsiglia l'uso del variatore in applicazioni dove possono verificarsi bloccaggi improvvisi della macchina azionata.

The variator should not be used in applications where unexpected overloads may occur.

L'utilizzo di motori autofrenanti è sconsigliato. Per esigenze particolari consultare il nostro Servizio Tecnico.

We recommend to don't use brake motors. For particular requirements please contact our Technical Service.

POSIZIONE SCATOLA DI MONTAGGIO ***SPEED CONTROL BOX POSITION***

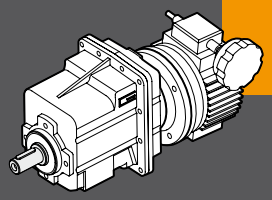


TRANSTECNO™

THE MODULAR GEARMOTOR

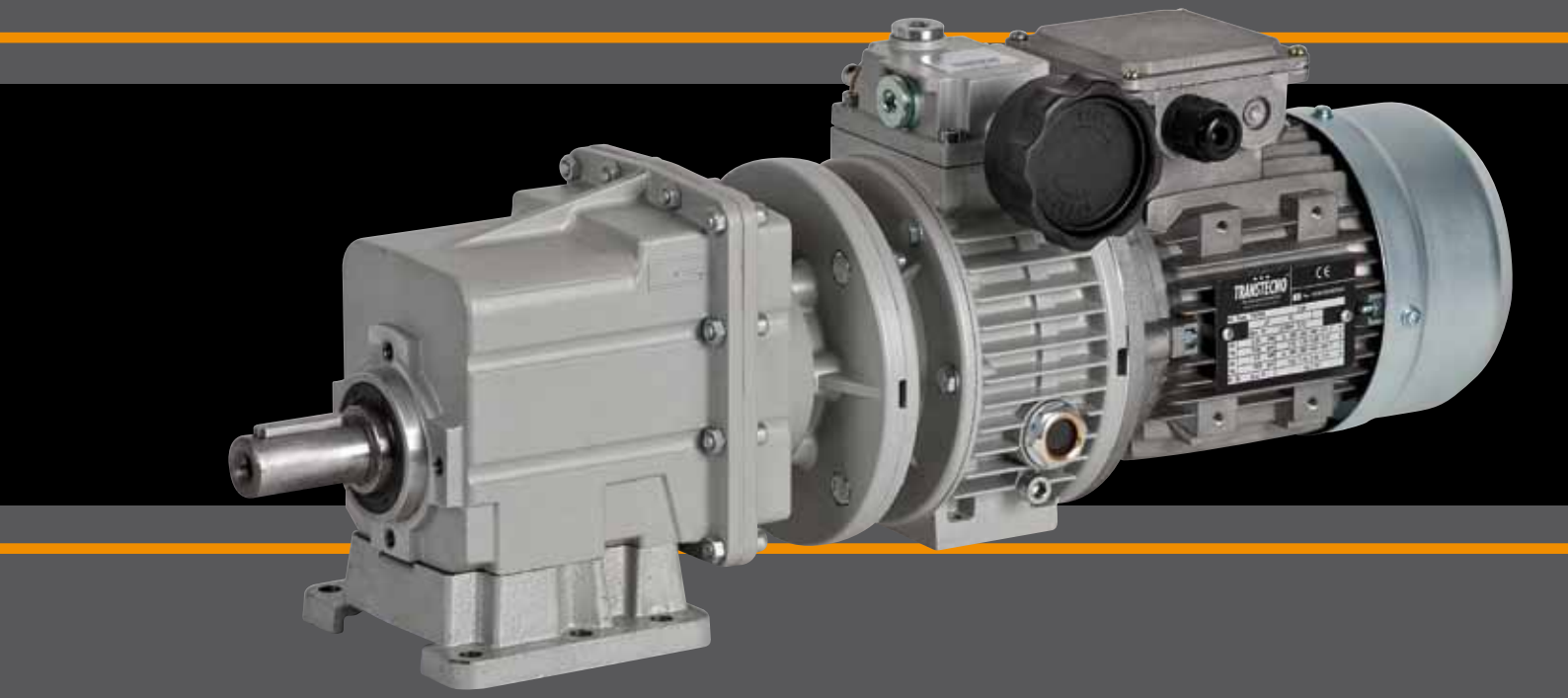
CMGV

CMGV



MOTOVARIARIDUTTORI AD INGRANAGGI CILINDRICI

MECHANICAL VARIATORS AND HELICAL GEARBOXES



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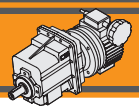

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Dati tecnici	*Technical data*	**L5**
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Caratteristiche tecniche

Tecnical features

I motovariariduttori della serie CMGV hanno le seguenti caratteristiche principali:

- Precisione nella regolazione della velocità, contenuta in ± 0.5/1%.
- Campo di regolazione continuo 1:5.
- Le grandezze CMG 00, 01, 02, 03, 04 sono costruite con carcassa in Alluminio. La grandezza 05 è costruita con carcassa in ghisa.
- Le grandezze VAM018, 037, e 075 sono costruite con carcassa in Alluminio, le altre grandezze in ghisa.

CMGV mechanical variators and helical gearboxes main features:

- *Precision in speed regulation: ± 0.5/1%*
- *Speed range 1:5*
- *Die-cast aluminum housing on CMG 00, 01, 02, 03 and 04. Cast iron housing on CMG05.*
- *Die-cast aluminum housing on VAM018, 037 and 075. Cast iron housing on the other sizes.*

Designazione

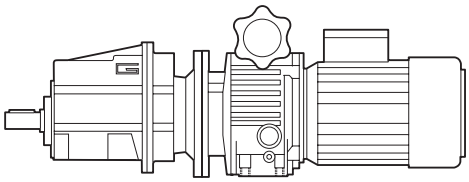
Classification

RIDUTTORE / *GEARBOX*					MOTORE / *MOTOR*				
CMGV	**043/040**	**H75**	**9.81**	**B3/1**	**0.37kW**	**4p**	**3ph**	**50Hz**	**T1**
Tipo *Type*	Grandezza *Size*	Versione *Version*	Rapporto *Ratio*	Posizione di montaggio *Mounting position*	Potenza *Power*	Poli *Poles*	Fasi *Phases*	Frequenza *Frequency*	Pos. morsettiera *Terminal box pos.*
CMGV	**002/018** **—** **043/040**	**U...** **H...** **F...** **H.../F...**	vedi tabella *see tables*	Vedi pag. K3 *See page K3*	Vedi tabelle *See tables*	**2p** **4p**	**1ph** **3ph**	**50Hz** **60Hz**	Vedi pag. K3 *See page K3*

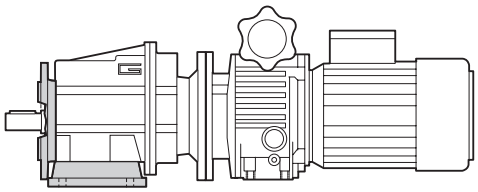
Versioni

Versions

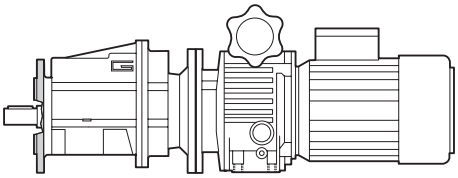
U



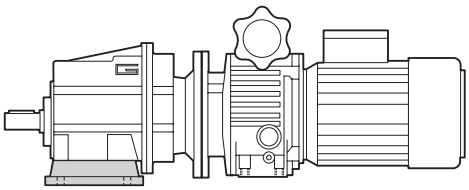
H/F



F



H

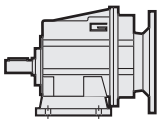
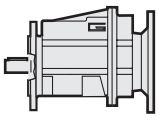


Simbologia

Symbols

n_1	[min^{-1}]	Velocità in ingresso / *Input speed*
n_2	[min^{-1}]	Velocità in uscita / *Output speed*
i		Rapporto di riduzione / *Ratio*
P_1	[kW]	Potenza in entrata / *Input power*
M_2	[Nm]	Coppia nominale in uscita in funzione di P_1 / *Output torque referred to P_1*
sf		Fattore di servizio / *Service factor*
R_2	[N]	Carico radiale ammissibile in uscita / *Permitted output radial load*
A_2	[N]	Carico assiale ammissibile in uscita / *Permitted output axial load*

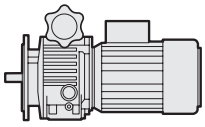
Lubrificazione — *Lubrication*

CMG

I riduttori CMG 00, 01, 02 03, 04 sono forniti completi di lubrificante, pertanto possono essere installati in qualunque posizione di montaggio e non necessitano di manutenzione. La grandezza CMG 05 è fornita completa di lubrificante per posizione B3. I variatori VAM sono forniti completi di lubrificante per posizione B3.

All CMG gear units are supplied complete with lubricant. For this reason they can be installed in any assembly position and do not require maintenance. CMG 05 is supplied filled with lubricant for B3 position. VAM are supplied filled with lubricant for B3 position.

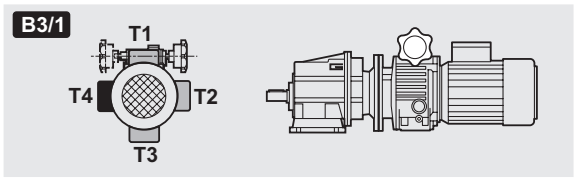


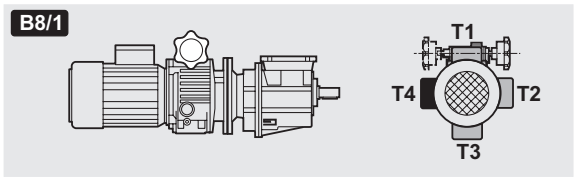
VAM

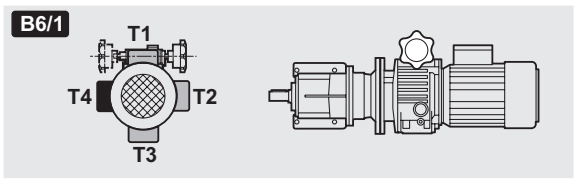
Pos. mont. Mount. pos.	**Quantità di olio** (litri) / **Oil quantity** (litres)					
	VAM					
	018	**037**	**075**	**15**	**22**	**40**
B3 - B5 - B6 - B7 - B8	0.13	0.15	0.33	0.80	1.20	1.20
V1 - V5	0.30	0.40	0.85	1.40	2.15	2.15
V3 - V6	0.13	0.15	0.33	0.80	1.20	1.20

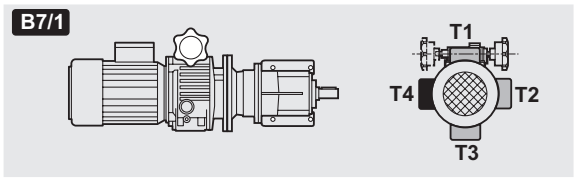
Posizioni di montaggio — *Mounting positions*

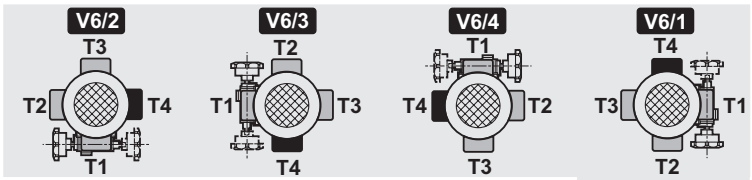
Versione / *Version* **H.. - H../F..**

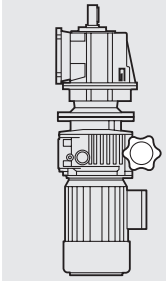


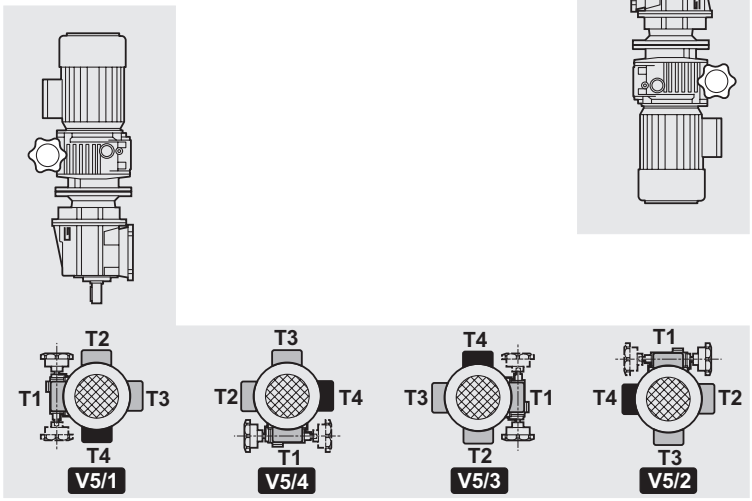




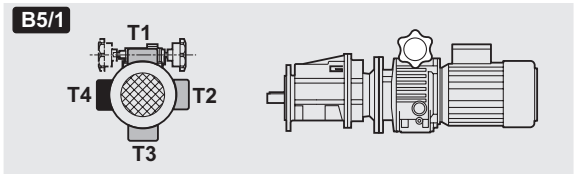


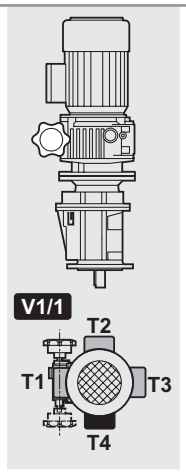


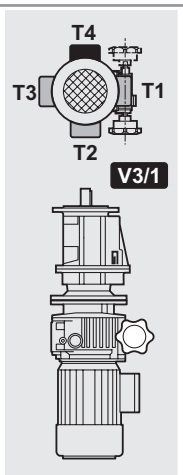




Versione / *Version* **U.. - F..**

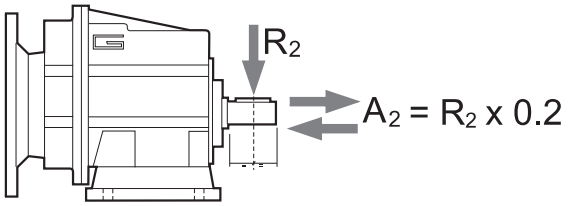






Carichi radiali

Radial loads



n_2 [min^{-1}]	R_2 [N]					
	CMG 00	CMG 01	CMG 02	CMG 03	CMG 04	CMG 05
700	416	764	1529	1987	2379	3556
600	437	805	1609	2092	2504	3744
500	465	855	1710	2223	2661	3979
400	501	921	1842	2395	2866	4286
250	586	1077	2154	2801	3353	5013
180	653	1323	2554	3321	3897	5853
150	748	1406	2714	3529	4244	6392
120	806	1631	3467	3801	4572	7388
100	958	1842	3684	4507	5234	7851
80	1032	1984	3969	5042	5991	8963
60	1136	2184	4368	5549	6594	10483
40	1300	2500	5000	6500	8000	12000
10	1300	2500	5000	6500	8000	12000

Dati tecnici — *Technical data*

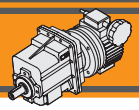
P_1 [kW]	velocità massima *max speed* n_2 [min^{-1}]	M_2 [Nm]	sf	velocità minima *min speed* n_2 [min^{-1}]	M_2 [Nm]	sf	i	
0.22								
63C4 n_1=1400 [min^{-1}]	**175**	9	*4.9*	**33.8**	18	*2.5*	5.03	**CMGV 002/018**
	144	11	*4.0*	**27.9**	22	*2.1*	6.1	
	117	14	*3.3*	**22.7**	27	*1.7*	7.49	
	97.9	16	*3.4*	**18.9**	33	*1.8*	8.99	
	86.6	19	*3.0*	**16.7**	37	*1.6*	10.16	
	72.9	22	*2.5*	**14.1**	44	*1.3*	12.07	
	65.7	24	*3.2*	**12.7**	49	*1.6*	13.4	
	58.1	28	*2.8*	**11.2**	55	*1.5*	15.14	
	48.4	33	*2.4*	**9.4**	66	*1.2*	18.17	
	40.8	39	*2.0*	**7.9**	79	*1.0*	21.58	
	37.4	43	*1.8*	**7.2**	86	*0.9*	23.51	
	35.1	46	*1.7*	**6.8**	92	*0.9*	25.1	
	32.5	49	*1.6*	**6.3**	99	*0.8*	27.08	
	27.1	59	*1.3*	**5.2**	119	*0.7*	32.49	
	230	7	*9.7*	**44.5**	14	*5.0*	3.82	**CMGV 012/018**
	190	8	*8.0*	**36.7**	17	*4.1*	4.63	
	155	10	*6.5*	**29.9**	21	*3.3*	5.69	
	114	14	*6.4*	**22.0**	28	*3.3*	7.72	
	96.0	17	*5.4*	**18.5**	33	*2.8*	9.17	
	89.7	18	*5.0*	**17.3**	36	*2.6*	9.81	
	76.5	21	*5.3*	**14.8**	42	*2.7*	11.50	
	73.9	22	*5.2*	**14.3**	43	*2.6*	11.90	
	63.8	25	*5.3*	**12.3**	50	*2.7*	13.80	
	60.2	27	*5.0*	**11.6**	53	*2.6*	14.62	
	49.3	33	*4.1*	**9.5**	65	*2.1*	17.86	
	46.1	35	*3.9*	**8.9**	70	*2.0*	19.07	
	44.4	36	*3.7*	**8.6**	72	*1.9*	19.83	
	37.4	43	*3.1*	**7.2**	86	*1.6*	23.56	
	29.8	54	*2.5*	**5.8**	108	*1.3*	29.56	
	24.8	65	*2.1*	**4.8**	129	*1.1*	35.47	
	19.2	84	*1.6*	**3.7**	167	*0.8*	45.89	
	18.0	89	*1.5*	**3.5**	179	*0.8*	49.00	
	16.5	97	*1.4*	**3.2**	195	*0.7*	53.33	
	18.9	83	*1.6*	**3.6**	166	*0.8*	46.61	**CMGV 013/018**
	15.9	99	*1.4*	**3.1**	198	*0.7*	55.36	
	13.9	113	*1.2*	**2.7**	226	*0.6*	63.22	
	18.6	84	*2.7*	**3.6**	169	*1.4*	47.19	**CMGV 023/018**
	15.7	100	*2.2*	**3.0**	200	*1.1*	56.05	
	13.7	114	*2.0*	**2.7**	229	*1.0*	64.01	
	11.6	136	*1.6*	**2.2**	272	*0.8*	76.02	
	9.7	161	*1.4*	**1.9**	323	*0.7*	90.29	
	7.7	204	*1.1*	**1.5**	409	*0.6*	114.46	
	19.5	81	*4.2*	**3.8**	161	*2.1*	45.21	**CMGV 033/018**
	14.4	110	*3.1*	**2.8**	219	*1.6*	61.32	
	12.1	130	*2.6*	**2.3**	260	*1.3*	72.83	
	9.0	174	*1.9*	**1.7**	348	*1.0*	97.45	
	7.6	207	*1.6*	**1.5**	413	*0.8*	115.74	
	6.2	251	*1.3*	**1.2**	503	*0.7*	140.81	
	5.0	311	*1.1*	**1.0**	622	*0.6*	174.26	

P_1 [kW]	velocità massima *max speed* n_2 [min^{-1}]	M_2 [Nm]	sf	velocità minima *min speed* n_2 [min^{-1}]	M_2 [Nm]	sf	i	
0.22								
63C4 n_1=1400 [min^{-1}]	**9.0**	174	*3.2*	**1.7**	348	*1.7*	97.45	**CMGV 043/018**
	7.6	207	*2.7*	**1.5**	413	*1.4*	115.74	
	6.2	251	*2.2*	**1.2**	503	*1.1*	140.81	
	5.0	311	*1.8*	**1.0**	622	*0.9*	174.26	
	3.9	403	*1.4*	**0.8**	805	*0.7*	225.47	
	3.4	468	*1.2*	**0.6**	936	*0.6*	262.05	
0.37								
63C2 n_1=2800 [min^{-1}]	**350**	8	*4.3*	**67.6**	18	*2.5*	5.03	**CMGV 002/018**
	289	10	*3.6*	**55.7**	22	*2.1*	6.1	
	235	12	*2.9*	**45.4**	27	*1.7*	7.49	
	196	15	*3.0*	**37.8**	33	*1.8*	8.99	
	173	17	*2.7*	**33.5**	37	*1.6*	10.16	
	146	20	*2.3*	**28.2**	44	*1.3*	12.07	
	131	22	*2.8*	**25.4**	49	*1.6*	13.4	
	116	25	*2.5*	**22.5**	55	*1.5*	15.14	
	96.9	30	*2.1*	**18.7**	66	*1.2*	18.17	
	81.6	35	*1.8*	**15.8**	79	*1.0*	21.58	
	74.9	38	*1.6*	**14.5**	86	*0.9*	23.51	
	70.1	41	*1.5*	**13.5**	92	*0.9*	25.1	
	65.0	44	*1.4*	**12.6**	99	*0.8*	27.08	
	54.2	53	*1.2*	**10.5**	119	*0.7*	32.49	
	461	6	*8.6*	**89.0**	14	*5.0*	3.82	**CMGV 012/018**
	380	8	*7.1*	**73.4**	17	*4.1*	4.63	
	309	9	*5.8*	**59.8**	21	*3.3*	5.69	
	228	13	*5.7*	**44.0**	28	*3.3*	7.72	
	192	15	*4.8*	**37.1**	33	*2.8*	9.17	
	179	16	*4.4*	**34.7**	36	*2.6*	9.81	
	153	19	*4.7*	**29.6**	42	*2.7*	11.50	
	148	19	*4.6*	**28.6**	43	*2.6*	11.90	
	128	23	*4.7*	**24.6**	50	*2.7*	13.80	
	120	24	*4.5*	**23.3**	53	*2.6*	14.62	
	98.5	29	*3.7*	**19.0**	65	*2.1*	17.86	
	92.3	31	*3.4*	**17.8**	70	*2.0*	19.07	
	88.8	32	*3.3*	**17.1**	72	*1.9*	19.83	
	74.7	38	*2.8*	**14.4**	86	*1.6*	23.56	
	59.5	48	*2.2*	**11.5**	108	*1.3*	29.56	
	49.6	58	*1.8*	**9.6**	129	*1.1*	35.47	
	38.4	75	*1.4*	**7.4**	167	*0.8*	45.89	
	35.9	80	*1.3*	**6.9**	179	*0.8*	49.00	
	33.0	87	*1.2*	**6.4**	195	*0.7*	53.33	
	37.8	74	*1.4*	**7.3**	166	*0.8*	46.61	**CMGV 013/018**
	31.8	88	*1.2*	**6.1**	198	*0.7*	55.36	
	27.8	101	*1.1*	**5.4**	226	*0.6*	63.22	
	37.3	75	*2.4*	**7.2**	169	*1.4*	47.19	**CMGV 023/018**
	31.4	90	*2.0*	**6.1**	200	*1.1*	56.05	
	27.5	102	*1.7*	**5.3**	229	*1.0*	64.01	
	23.2	121	*1.5*	**4.5**	272	*0.8*	76.02	
	19.5	144	*1.2*	**3.8**	323	*0.7*	90.29	
	15.4	183	*1.0*	**3.0**	409	*0.6*	114.46	

Dati tecnici — *Technical data*

P_1 [kW]	velocità massima *max speed* n_2 [min^{-1}]	M_2 [Nm]	sf	velocità minima *min speed* n_2 [min^{-1}]	M_2 [Nm]	sf	i	
0.37								
63C2 n_1=2800 [min^{-1}]	**38.9**	72	*3.7*	**7.5**	161	*2.1*	45.21	**CMGV 033/018**
	28.7	98	*2.7*	**5.5**	219	*1.6*	61.32	
	24.2	116	*2.3*	**4.7**	260	*1.3*	72.83	
	18.1	156	*1.7*	**3.5**	348	*1.0*	97.45	
	15.2	185	*1.4*	**2.9**	413	*0.8*	115.74	
	12.5	225	*1.2*	**2.4**	503	*0.7*	140.81	
	10.1	278	*1.0*	**2.0**	622	*0.6*	174.26	
71B4 n_1=1400 [min^{-1}]	**199**	14	*3.1*	**39.8**	29	*1.6*	5.03	**CMGV 002/037**
	164	18	*2.6*	**32.8**	35	*1.3*	6.1	
	134	22	*2.1*	**26.7**	43	*1.1*	7.49	
	111	26	*2.2*	**22.2**	52	*1.1*	8.99	
	98	29	*1.9*	**19.7**	59	*1.0*	10.16	
	83	35	*1.6*	**16.6**	70	*0.8*	12.07	
	75	39	*2.0*	**14.9**	77	*1.0*	13.4	
	66	44	*1.8*	**13.2**	87	*0.9*	15.14	
	55	52	*1.5*	**11.0**	105	*0.8*	18.17	
	46	62	*1.3*	**9.3**	124	*0.6*	21.58	
	43	68	*1.2*	**8.5**	135	*0.6*	23.51	
	40	72	*1.1*	**8.0**	145	*0.6*	25.1	
	262	11	*6.1*	**52.4**	22	*3.1*	3.82	**CMGV 012/037**
	216	13	*5.0*	**43.2**	27	*2.6*	4.63	
	176	16	*4.1*	**35.1**	33	*2.1*	5.69	
	130	22	*4.0*	**25.9**	44	*2.1*	7.72	
	109	26	*3.4*	**21.8**	53	*1.7*	9.17	
	102	28	*3.2*	**20.4**	57	*1.6*	9.81	
	87.0	33	*3.4*	**17.4**	66	*1.7*	11.50	
	84.0	34	*3.3*	**16.8**	69	*1.7*	11.90	
	72.5	40	*3.4*	**14.5**	79	*1.7*	13.80	
	68.4	42	*3.2*	**13.7**	84	*1.6*	14.62	
	56.0	51	*2.6*	**11.2**	103	*1.3*	17.86	
	52.4	55	*2.4*	**10.5**	110	*1.3*	19.07	
	50.4	57	*2.4*	**10.1**	114	*1.2*	19.83	
	42.4	68	*2.0*	**8.5**	136	*1.0*	23.56	
	33.8	85	*1.6*	**6.8**	170	*0.8*	29.56	
	28.2	102	*1.3*	**5.6**	204	*0.7*	35.47	
	41.9	69	*3.3*	**8.4**	137	*1.7*	23.85	**CMGV 022/037**
	33.4	86	*2.6*	**6.7**	172	*1.3*	29.93	
	27.8	103	*2.2*	**5.6**	207	*1.1*	35.91	
	21.5	134	*1.7*	**4.3**	268	*0.9*	46.46	
	20.2	143	*1.6*	**4.0**	286	*0.8*	49.61	
	18.5	156	*1.4*	**3.7**	311	*0.7*	54.00	
	22.1	127	*2.6*	**4.4**	255	*1.4*	45.21	**CMGV 033/037**
	16.3	173	*1.9*	**3.3**	346	*1.0*	61.32	
	13.7	205	*1.6*	**2.7**	411	*0.8*	72.83	
	10.3	275	*1.2*	**2.1**	550	*0.6*	97.45	

P_1 [kW]	velocità massima *max speed* n_2 [min^{-1}]	M_2 [Nm]	sf	velocità minima *min speed* n_2 [min^{-1}]	M_2 [Nm]	sf	i	
0.37								
71B4 n_1=1400 [min^{-1}]	**13.7**	205	*2.7*	**2.7**	411	*1.4*	72.83	**CMGV 043/037**
	10.3	275	*2.0*	**2.1**	550	*1.0*	97.45	
	8.6	326	*1.7*	**1.7**	653	*0.9*	115.74	
	7.1	397	*1.4*	**1.4**	794	*0.7*	140.81	
	5.7	491	*1.1*	**1.1**	983	*0.6*	174.26	
	7.8	363	*2.8*	**1.6**	727	*1.4*	128.84	**CMGV 053/037**
	5.8	486	*2.1*	**1.2**	972	*1.1*	172.32	
	5.4	525	*1.9*	**1.1**	1050	*1.0*	186.17	
	4.6	610	*1.7*	**0.9**	1219	*0.8*	216.19	
	4.0	702	*1.4*	**0.8**	1404	*0.7*	248.99	
	3.5	815	*1.2*	**0.7**	1631	*0.6*	289.15	
0.55								
71B2 n_1=2800 [min^{-1}]	**398**	11	*3.4*	**79.5**	29	*1.6*	5.03	**CMGV 002/037**
	328	13	*2.8*	**65.6**	35	*1.3*	6.1	
	267	16	*2.3*	**53.4**	43	*1.1*	7.49	
	222	19	*2.3*	**44.5**	52	*1.1*	8.99	
	197	21	*2.1*	**39.4**	59	*1.0*	10.16	
	166	25	*1.7*	**33.1**	70	*0.8*	12.07	
	149	28	*2.2*	**29.9**	77	*1.0*	13.4	
	132	32	*1.9*	**26.4**	87	*0.9*	15.14	
	110	38	*1.6*	**22.0**	105	*0.8*	18.17	
	92.7	46	*1.4*	**18.5**	124	*0.6*	21.58	
	85.1	50	*1.3*	**17.0**	135	*0.6*	23.51	
	79.7	53	*1.2*	**15.9**	145	*0.6*	25.1	
	524	8	*6.6*	**105**	22	*3.1*	3.82	**CMGV 012/037**
	432	10	*5.5*	**86.4**	27	*2.6*	4.63	
	352	12	*4.4*	**70.3**	33	*2.1*	5.69	
	259	16	*4.4*	**51.8**	44	*2.1*	7.72	
	218	19	*3.7*	**43.6**	53	*1.7*	9.17	
	204	21	*3.4*	**40.8**	57	*1.6*	9.81	
	174	24	*3.7*	**34.8**	66	*1.7*	11.50	
	168	25	*3.5*	**33.6**	69	*1.7*	11.90	
	145	29	*3.7*	**29.0**	79	*1.7*	13.80	
	137	31	*3.5*	**27.4**	84	*1.6*	14.62	
	112	38	*2.8*	**22.4**	103	*1.3*	17.86	
	105	40	*2.7*	**21.0**	110	*1.3*	19.07	
	101	42	*2.5*	**20.2**	114	*1.2*	19.83	
	84.9	50	*2.1*	**17.0**	136	*1.0*	23.56	
	67.7	62	*1.7*	**13.5**	170	*0.8*	29.56	
	56.4	75	*1.4*	**11.3**	204	*0.7*	35.47	
	83.9	50	*3.5*	**16.8**	137	*1.7*	23.85	**CMGV 022/037**
	66.8	63	*2.8*	**13.4**	172	*1.3*	29.93	
	55.7	76	*2.3*	**11.1**	207	*1.1*	35.91	
	43.0	98	*1.8*	**8.6**	268	*0.9*	46.46	
	40.3	105	*1.7*	**8.1**	286	*0.8*	49.61	
	37.0	114	*1.6*	**7.4**	311	*0.7*	54.00	



Dati tecnici — *Technical data*

P_1 [kW]	velocità massima *max speed* n_2 [min^{-1}]	M_2 [Nm]	sf	velocità minima *min speed* n_2 [min^{-1}]	M_2 [Nm]	sf	i	
0.55								
71B2 n_1=2800 [min^{-1}]	**44.2**	93	*2.9*	**8.8**	255	*1.4*	45.21	**CMGV 033/037**
	32.6	127	*2.1*	**6.5**	346	*1.0*	61.32	
	27.5	151	*1.8*	**5.5**	411	*0.8*	72.83	
	20.5	202	*1.3*	**4.1**	550	*0.6*	97.45	
	32.6	127	*3.5*	**6.5**	346	*1.7*	61.32	**CMGV 043/037**
	27.5	151	*3.0*	**5.5**	411	*1.4*	72.83	
	20.5	202	*2.2*	**4.1**	550	*1.0*	97.45	
	17.3	239	*1.9*	**3.5**	653	*0.9*	115.74	
	14.2	291	*1.5*	**2.8**	794	*0.7*	140.81	
	11.5	360	*1.2*	**2.3**	983	*0.6*	174.26	
	18.4	224	3.6	**3.7**	612	1.7	108.43	**CMGV 053/037**
	15.5	266	3.0	**3.1**	727	1.4	128.84	
	11.6	356	2.2	**2.3**	972	1.1	172.32	
	10.7	385	2.1	**2.1**	1050	1.0	186.17	
	9.3	447	1.8	**1.9**	1219	0.8	216.19	
	8.0	515	1.6	**1.6**	1404	0.7	248.99	
	6.9	598	1.3	**1.4**	1631	0.6	289.15	
0.75								
80B4 n_1=1400 [min^{-1}]	**274**	21	*5.3*	**54.6**	42	*2.7*	3.66	**CMGV 022/075**
	225	26	*4.4*	**45.1**	51	*2.3*	4.43	
	184	31	*3.6*	**36.7**	63	*1.8*	5.45	
	135	43	*3.2*	**27.1**	85	*1.6*	7.39	
	114	51	*2.7*	**22.8**	101	*1.4*	8.78	
	101	57	*2.3*	**20.1**	114	*1.2*	9.93	
	90.8	63	*3.5*	**18.2**	127	*1.8*	11.01	
	83.0	69	*3.2*	**16.6**	139	*1.7*	12.05	
	75.7	76	*2.9*	**15.1**	152	*1.5*	13.21	
	67.5	85	*2.6*	**13.5**	171	*1.3*	14.81	
	58.5	98	*1.8*	**11.7**	197	*0.9*	17.10	
	54.8	105	*1.7*	**11.0**	210	*0.9*	18.26	
	49.8	116	*1.9*	**10.0**	231	*1.0*	20.08	
	41.9	137	*1.6*	**8.4**	275	*0.8*	23.85	
	33.4	172	*1.3*	**6.7**	345	*0.7*	29.93	
	27.8	207	*1.1*	**5.6**	414	*0.6*	35.91	
	91.5	63	*3.2*	**18.3**	126	*1.6*	10.93	**CMGV 032/075**
	79.3	73	*3.9*	**15.9**	145	*2.0*	12.60	
	75.2	77	*3.7*	**15.0**	153	*1.9*	13.30	
	65.4	88	*3.6*	**13.1**	176	*1.8*	15.30	
	54.9	105	*3.0*	**11.0**	210	*1.5*	18.21	
	52.0	111	*2.8*	**10.4**	222	*1.5*	19.24	
	47.3	122	*2.6*	**9.5**	244	*1.3*	21.15	
	32.7	176	*1.9*	**6.5**	352	*1.0*	30.57	
	22.6	254	*1.3*	**4.5**	509	*0.7*	44.18	
	19.5	295	*1.1*	**3.9**	591	*0.6*	51.30	

P_1 [kW]	velocità massima *max speed* n_2 [min^{-1}]	M_2 [Nm]	sf	velocità minima *min speed* n_2 [min^{-1}]	M_2 [Nm]	sf	i	
0.75								
80B4 n_1=1400 [min^{-1}]	**22.1**	255	*2.2*	**4.4**	510	*1.1*	45.21	**CMGV 043/075**
	16.3	346	*1.6*	**3.3**	692	*0.8*	61.32	
	13.7	411	*1.4*	**2.7**	821	*0.7*	72.83	
	17.8	316	3.2	**3.6**	632	1.6	56.05	**CMGV 053/075**
	15.5	364	2.8	**3.1**	727	1.4	64.48	
	13.3	423	2.4	**2.7**	846	1.2	74.96	
	12.3	457	2.2	**2.5**	914	1.1	81.07	
	11.6	486	2.1	**2.3**	973	1.1	86.24	
	9.2	612	1.6	**1.8**	1223	0.8	108.43	
	7.8	727	1.4	**1.6**	1453	0.7	128.84	
1.1								
80B2 n_1=2800 [min^{-1}]	**547**	15	*5.8*	**109**	42	*2.7*	3.66	**CMGV 022/075**
	451	19	*4.8*	**90.3**	51	*2.3*	4.43	
	367	23	*3.9*	**73.4**	63	*1.8*	5.45	
	271	31	*3.4*	**54.1**	85	*1.6*	7.39	
	228	37	*2.9*	**45.6**	101	*1.4*	8.78	
	201	42	*2.5*	**40.3**	114	*1.2*	9.93	
	182	47	*3.8*	**36.3**	127	*1.8*	11.01	
	166	51	*3.5*	**33.2**	139	*1.7*	12.05	
	151	56	*3.2*	**30.3**	152	*1.5*	13.21	
	135	63	*2.8*	**27.0**	171	*1.3*	14.81	
	117	72	*2.0*	**23.4**	197	*0.9*	17.10	
	110	77	*1.8*	**21.9**	210	*0.9*	18.26	
	99.6	85	*2.1*	**19.9**	231	*1.0*	20.08	
	83.9	101	*1.8*	**16.8**	275	*0.8*	23.85	
	66.8	126	*1.4*	**13.4**	345	*0.7*	29.93	
	55.7	152	*1.2*	**11.1**	414	*0.6*	35.91	
	131	65	*3.9*	**26.1**	176	*1.8*	15.30	**CMGV 032/075**
	110	77	*3.2*	**22.0**	210	*1.5*	18.21	
	104	81	*3.1*	**20.8**	222	*1.5*	19.24	
	94.6	89	*2.8*	**18.9**	244	*1.3*	21.15	
	65.4	129	*2.1*	**13.1**	352	*1.0*	30.57	
	45.3	187	*1.4*	**9.1**	509	*0.7*	44.18	
	39.0	217	*1.2*	**7.8**	591	*0.6*	51.30	
	44.2	187	*2.4*	**8.8**	510	*1.1*	45.21	**CMGV 043/075**
	32.6	254	*1.8*	**6.5**	692	*0.8*	61.32	
	27.5	301	*1.5*	**5.5**	821	*0.7*	72.83	
	31.0	267	*3.0*	**6.2**	727	*1.4*	64.48	**CMGV 053/075**
	26.7	310	*2.6*	**5.3**	846	*1.2*	74.96	
	24.7	335	*2.4*	**4.9**	914	*1.1*	81.07	
	23.2	357	*2.2*	**4.6**	973	*1.1*	86.24	
	18.4	448	*1.8*	**3.7**	1223	*0.8*	108.43	
	15.5	533	*1.5*	**3.1**	1453	*0.7*	128.84	

Dati tecnici — *Technical data*

P_1 [kW]	velocità massima *max speed* n_2 [min^{-1}]	M_2 [Nm]	sf	velocità minima *min speed* n_2 [min^{-1}]	M_2 [Nm]	sf	i	
1.1								
90S4 n_1=1400 [min^{-1}]	**267**	32	*5.2*	**53.4**	65	*2.7*	3.74	**CMGV 032/15**
	222	39	*4.3*	**44.4**	78	*2.2*	4.50	
	182	47	*3.5*	**36.5**	95	*1.8*	5.48	
	159	55	*3.7*	**31.7**	109	*1.9*	6.31	
	126	69	*2.9*	**25.2**	137	*1.5*	7.93	
	110	78	*2.6*	**22.0**	157	*1.3*	9.08	
	91.5	94	*2.1*	**18.3**	189	*1.1*	10.93	
	79.3	109	*2.6*	**15.9**	218	*1.3*	12.60	
	75.2	115	*2.4*	**15.0**	230	*1.3*	13.30	
	65.4	132	*2.4*	**13.1**	264	*1.2*	15.30	
	54.9	157	*2.0*	**11.0**	315	*1.0*	18.21	
	52.0	166	*1.9*	**10.4**	332	*1.0*	19.24	
	47.3	183	*1.7*	**9.5**	365	*0.9*	21.15	
	32.7	264	*1.3*	**6.5**	528	*0.7*	30.57	
	91.5	94	*3.3*	**18.3**	189	*1.7*	10.93	**CMGV 042/15**
	79.3	109	*3.6*	**15.9**	218	*1.8*	12.60	
	75.2	115	*3.4*	**15.0**	230	*1.8*	13.30	
	65.4	132	*3.6*	**13.1**	264	*1.8*	15.30	
	54.9	157	*3.0*	**11.0**	315	*1.5*	18.21	
	52.0	166	*2.8*	**10.4**	332	*1.5*	19.24	
	32.7	264	*2.1*	**6.5**	528	*1.1*	30.57	
	22.6	382	*1.5*	**4.5**	763	*0.8*	44.18	
	19.5	443	*1.3*	**3.9**	886	*0.6*	51.30	
	31.1	278	*3.6*	**6.2**	555	*1.9*	32.13	**CMGV 052/15**
	21.6	400	*2.5*	**4.3**	800	*1.3*	46.31	
	22.1	382	*1.5*	**4.4**	765	*0.8*	45.21	**CMGV 043/15**
	16.3	519	*1.1*	**3.3**	1038	*0.6*	61.32	
	17.8	474	*2.1*	**3.6**	948	*1.1*	56.05	**CMGV 053/15**
	15.5	545	*1.8*	**3.1**	1091	*0.9*	64.48	
	13.3	634	*1.6*	**2.7**	1268	*0.8*	74.96	
	12.3	686	*1.5*	**2.5**	1372	*0.8*	81.07	
	11.6	730	*1.4*	**2.3**	1459	*0.7*	86.24	
	9.2	917	*1.1*	**1.8**	1835	*0.6*	108.43	
1.5								
90L4 n_1=1400 [min^{-1}]	**267**	43	*3.9*	**53.4**	86	*2.0*	3.74	**CMGV 032/15**
	222	52	*3.2*	**44.4**	104	*1.7*	4.50	
	182	63	*2.7*	**36.5**	126	*1.4*	5.48	
	159	73	*2.8*	**31.7**	145	*1.4*	6.31	
	126	91	*2.2*	**25.2**	183	*1.1*	7.93	
	110	105	*1.9*	**22.0**	209	*1.0*	9.08	
	91.5	126	*1.6*	**18.3**	252	*0.8*	10.93	
	79.3	145	*1.9*	**15.9**	290	*1.0*	12.60	
	75.2	153	*1.8*	**15.0**	306	*0.9*	13.30	
	65.4	176	*1.8*	**13.1**	353	*0.9*	15.30	
	54.9	210	*1.5*	**11.0**	420	*0.8*	18.21	
	52.0	222	*1.4*	**10.4**	443	*0.7*	19.24	
	47.3	244	*1.3*	**9.5**	487	*0.7*	21.15	

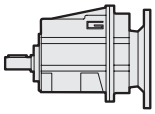
P_1 [kW]	velocità massima *max speed* n_2 [min^{-1}]	M_2 [Nm]	sf	velocità minima *min speed* n_2 [min^{-1}]	M_2 [Nm]	sf	i	
1.5								
90L4 n_1=1400 [min^{-1}]	**126**	91	*3.2*	**25.2**	183	*1.6*	7.93	**CMGV 042/15**
	110	105	*3.0*	**22.0**	209	*1.5*	9.08	
	91.5	126	*2.5*	**18.3**	252	*1.3*	10.93	
	79.3	145	*2.7*	**15.9**	290	*1.4*	12.60	
	75.2	153	*2.6*	**15.0**	306	*1.3*	13.30	
	65.4	176	*2.7*	**13.1**	353	*1.4*	15.30	
	54.9	210	*2.2*	**11.0**	420	*1.2*	18.21	
	52.0	222	*2.1*	**10.4**	443	*1.1*	19.24	
	32.7	352	*1.6*	**6.5**	704	*0.8*	30.57	
	22.6	509	*1.1*	**4.5**	1018	*0.6*	44.18	
	31.1	370	2.7	**6.2**	740	1.4	32.13	**CMGV 052/15**
	21.6	534	1.9	**4.3**	1067	1.0	46.31	
	17.8	632	1.6	**3.6**	1264	0.8	56.05	**CMGV 053/15**
	15.5	727	1.4	**3.1**	1455	0.7	64.48	
	13.3	846	1.2	**2.7**	1691	0.6	74.96	
	12.3	914	1.1	**2.5**	1829	0.6	81.07	
2.2								
90L2 n_1=2800 [min^{-1}]	**534**	32	*4.1*	**107**	86	*2.0*	3.74	**CMGV 032/15**
	444	39	*3.4*	**88.8**	104	*1.7*	4.50	
	365	47	*2.8*	**72.9**	126	*1.4*	5.48	
	317	55	*2.9*	**63.4**	145	*1.4*	6.31	
	252	69	*2.3*	**50.4**	183	*1.1*	7.93	
	220	78	*2.0*	**44.1**	209	*1.0*	9.08	
	183	94	*1.7*	**36.6**	252	*0.8*	10.93	
	159	109	*2.0*	**31.7**	290	*1.0*	12.60	
	150	115	*1.9*	**30.1**	306	*0.9*	13.30	
	131	132	*1.9*	**26.1**	353	*0.9*	15.30	
	110	157	*1.6*	**22.0**	420	*0.8*	18.21	
	104	166	*1.5*	**20.8**	443	*0.7*	19.24	
	94.6	183	*1.4*	**18.9**	487	*0.7*	21.15	
	252	69	*3.4*	**50.4**	183	*1.6*	7.93	**CMGV 042/15**
	220	78	*3.2*	**44.1**	209	*1.5*	9.08	
	183	94	*2.6*	**36.6**	252	*1.3*	10.93	
	159	109	*2.9*	**31.7**	290	*1.4*	12.60	
	150	115	*2.7*	**30.1**	306	*1.3*	13.30	
	131	132	*2.8*	**26.1**	353	*1.4*	15.30	
	110	157	*2.4*	**22.0**	420	*1.2*	18.21	
	104	166	*2.2*	**20.8**	443	*1.1*	19.24	
	65.4	264	*1.7*	**13.1**	704	*0.8*	30.57	
	45.3	382	*1.2*	**9.1**	1018	*0.6*	44.18	

Dati tecnici — *Technical data*

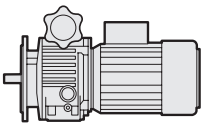
P_1 [kW]	velocità massima *max speed* n_2 [min^{-1}]	M_2 [Nm]	sf	velocità minima *min speed* n_2 [min^{-1}]	M_2 [Nm]	sf	i	
2.2								
90L2 n_1=2800 [min^{-1}]	**62.2**	278	*2.9*	**12.4**	740	*1.4*	32.13	**CMGV 052/15**
	43.2	400	*2.0*	**8.6**	1067	*1.0*	46.31	
	35.7	474	*1.7*	**7.1**	1264	*0.8*	56.05	**CMGV 053/15**
	31.0	545	*1.5*	**6.2**	1455	*0.7*	64.48	
	26.7	634	*1.3*	**5.3**	1691	*0.6*	74.96	
	24.7	686	*1.2*	**4.9**	1829	*0.6*	81.07	
100LA4 n_1=1400 [min^{-1}]	**267**	65	*4.0*	**53.4**	129	*2.0*	3.74	**CMGV 042/22**
	222	78	*3.3*	**44.4**	156	*1.7*	4.50	
	182	95	*2.7*	**36.5**	190	*1.4*	5.48	
	159	109	*2.7*	**31.7**	218	*1.4*	6.31	
	126	137	*2.1*	**25.2**	274	*1.1*	7.93	
	110	157	*2.0*	**22.0**	314	*1.0*	9.08	
	91.5	189	*1.7*	**18.3**	378	*0.9*	10.93	
	79.3	218	*1.8*	**15.9**	436	*0.9*	12.60	
	75.2	230	*1.7*	**15.0**	460	*0.9*	13.30	
	65.4	264	*1.8*	**13.1**	529	*0.9*	15.30	
	54.9	315	*1.5*	**11.0**	629	*0.8*	18.21	
	52.0	332	*1.4*	**10.4**	665	*0.7*	19.24	
	109.2	158	3.6	**21.8**	317	1.9	9.16	**CMGV 052/22**
	101.0	171	3.3	**20.2**	342	1.7	9.90	
	85.9	201	3.5	**17.2**	402	1.8	11.64	
	75.5	229	3.1	**15.1**	458	1.6	13.25	
	70.9	244	3.4	**14.2**	488	1.8	14.11	
	61.7	280	3.0	**12.3**	560	1.5	16.20	
	49.2	351	2.4	**9.8**	702	1.2	20.31	
	41.6	415	2.4	**8.3**	830	1.2	24.02	
	31.1	555	1.8	**6.2**	1110	0.9	32.13	
	21.6	800	1.3	**4.3**	1601	0.6	46.31	
3								
100LB4 n_1=1400 [min^{-1}]	**267**	86	*3.0*	**53.4**	172	*1.5*	3.74	**CMGV 042/40**
	222	104	*2.5*	**44.4**	208	*1.3*	4.50	
	182	126	*2.0*	**36.5**	253	*1.0*	5.48	
	159	145	*2.0*	**31.7**	291	*1.0*	6.31	
	126	183	*1.6*	**25.2**	365	*0.8*	7.93	
	110	209	*1.5*	**22.0**	418	*0.8*	9.08	
	91.5	252	*1.2*	**18.3**	503	*0.6*	10.93	
	79.3	290	*1.3*	**15.9**	581	*0.7*	12.60	
	75.2	306	*1.3*	**15.0**	613	*0.7*	13.30	
	65.4	353	*1.3*	**13.1**	705	*0.7*	15.30	
	54.9	420	*1.1*	**11.0**	839	*0.6*	18.21	

P_1 [kW]	velocità massima *max speed* n_2 [min^{-1}]	M_2 [Nm]	sf	velocità minima *min speed* n_2 [min^{-1}]	M_2 [Nm]	sf	i	
3								
100LB4 n_1=1400 [min^{-1}]	**265**	87	5.3	**52.9**	174	2.7	3.78	**CMGV 052/40**
	208	111	4.2	**41.7**	221	2.1	4.80	
	172	134	3.4	**34.4**	268	1.8	5.82	
	150	154	3.4	**29.9**	308	1.8	6.68	
	119	193	2.7	**23.9**	386	1.4	8.37	
	109	211	2.7	**21.8**	422	1.4	9.16	
	101	228	2.5	**20.2**	456	1.3	9.90	
	85.9	268	2.6	**17.2**	536	1.4	11.64	
	75.5	305	2.3	**15.1**	610	1.2	13.25	
	70.9	325	2.6	**14.2**	650	1.3	14.11	
	61.7	373	2.3	**12.3**	746	1.2	16.20	
	49.2	468	1.8	**9.8**	936	0.9	20.31	
	41.6	553	1.8	**8.3**	1107	0.9	24.02	
	31.1	740	1.4	**6.2**	1480	0.7	32.13	
4								
112M4 n_1=1400 [min^{-1}]	**267**	115	*2.2*	**53.4**	230	*1.2*	3.74	**CMGV 042/40**
	222	138	*1.9*	**44.4**	277	*1.0*	4.50	
	182	168	*1.5*	**36.5**	337	*0.8*	5.48	
	159	194	*1.5*	**31.7**	388	*0.8*	6.31	
	126	244	*1.2*	**25.2**	487	*0.6*	7.93	
	110	279	*1.1*	**22.0**	558	*0.6*	9.08	
	265	116	*4.0*	**52.9**	232	*2.0*	3.78	**CMGV 052/40**
	208	147	*3.1*	**41.7**	295	*1.6*	4.80	
	172	179	*2.6*	**34.4**	358	*1.3*	5.82	
	150	205	*2.6*	**29.9**	410	*1.3*	6.68	
	119	257	*2.0*	**23.9**	514	*1.1*	8.37	
	109	281	*2.0*	**21.8**	563	*1.0*	9.16	
	101	304	*1.9*	**20.2**	608	*1.0*	9.90	
	85.9	358	*2.0*	**17.2**	715	*1.0*	11.64	
	75.5	407	*1.7*	**15.1**	814	*0.9*	13.25	
	70.9	434	*1.9*	**14.2**	867	*1.0*	14.11	
	61.7	498	*1.7*	**12.3**	995	*0.9*	16.20	
	49.2	624	*1.3*	**9.8**	1248	*0.7*	20.31	
	41.6	738	*1.4*	**8.3**	1476	*0.7*	24.02	

Dimensioni — *Dimensions*



CMG



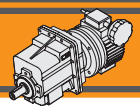
VAM

CMG	A	B	I	j1	LM	Albero uscita / *Output shaft*				
						D_2 h6	E_2	F_2	G_2	T_2
002	92	81.5	0	44	143[1] 153[2]	16 20	40	5 6	M6	18 22.5
012	124	93	6.5	45	195	20	40	6	M6	22.5
013		112	43		268					
022	124	98	11.5	45	205	25	50	8	M8	28
023		117	48		278					
032	156	118	5	70	237	30	60	8	M10	33
033			41.5		303					
042	156	128	15	70	250	35	70	10	M12	38
043			51.5		316					
052	190	157	20	88	307.5	40	80	12	M16	43
053			68		380					

[1] IEC 63/71, [2] IEC 80

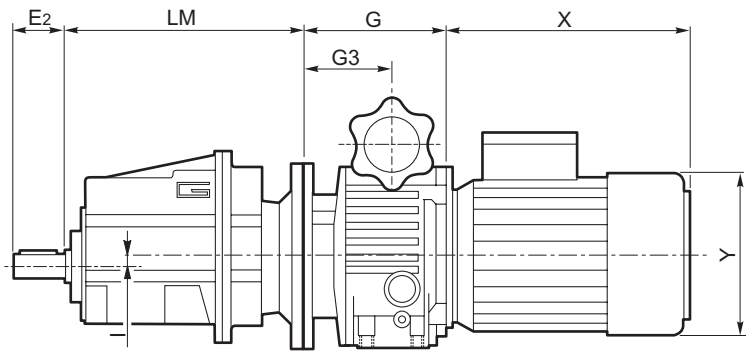
VAM	G	G3	VC	VF	VL	VR	VR1	VS
018	112.5	64.5	71	111	78	110	110	85
037	110	74	71	123	90	110	110	85
075	139	85.5	79	140	107	120	120	85
15	188	115	—	144	122	120	120	85
22	208	131	—	188	150	160	—	110
40	208	131	—	188	150	160	—	110

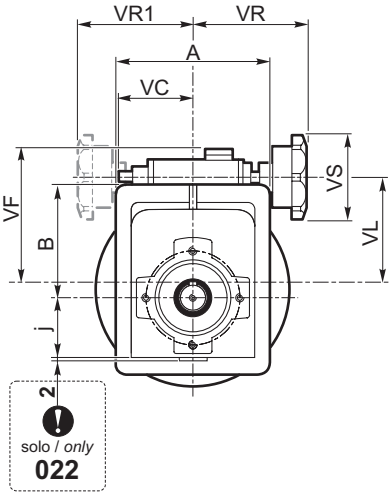
Versione **U** / ***U** Version*						
CMG	H	K	L	M	N f7	O
002	2.5	11	78	64	50	n°5 M6x14
012 013	8.5	13.5	95	76	60	n°4 M8x15
022 023	8.5	13.5	95	76	60	n°4 M8x15
032 033	9	15	127	110	90	n°6 M8x19
042 043	9	15	127	110	90	n°6 M8x19
052 053	10	16	160	135	110	n°6 M10x22



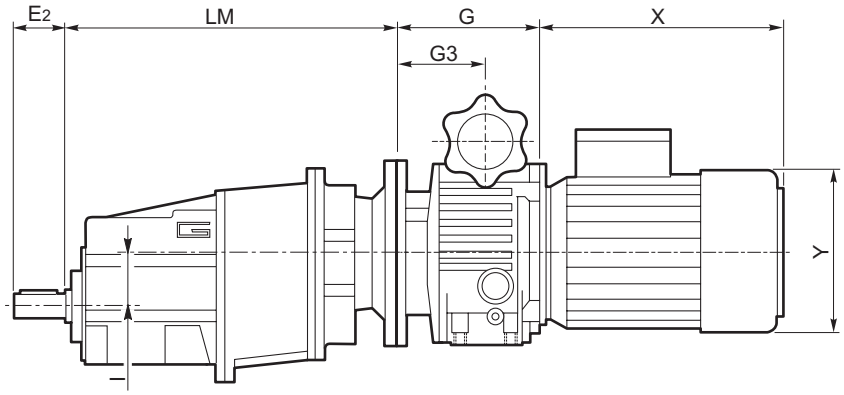
CMGV..U

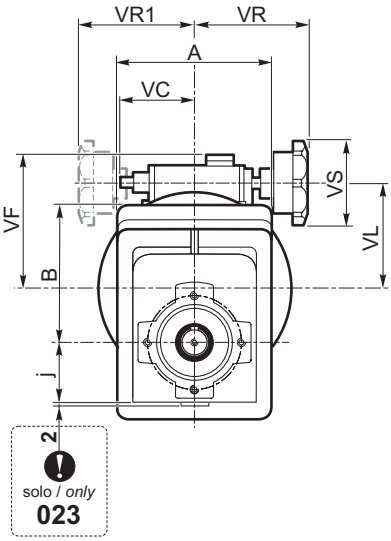
CMGV..2 U

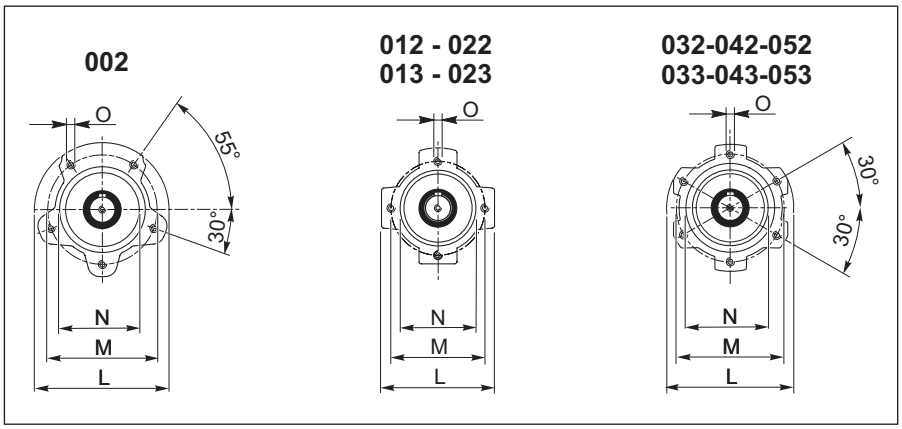




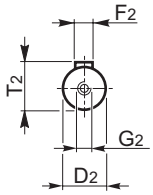
CMGV..3 U



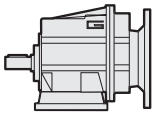




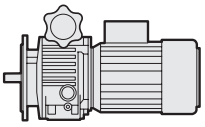
Albero uscita / *Output shaft*



Dimensioni — *Dimensions*



CMG



VAM

CMG	A	B	I	LM	Albero uscita / *Output shaft*				
					D_2 h6	E_2	F_2	G_2	T_2
002	92	81.5	0	143[1] 153[2]	16 20	40	5 6	M6	18 22.5
012	124	93	6.5	195	20	40	6	M6	22.5
013		112	43	268					
022	124	98	11.5	205	25	50	8	M8	28
023		117	48	278					
032	156	118	5	237	30	60	8	M10	33
033			41.5	303					
042	156	128	15	250	35	70	10	M12	38
043			51.5	316					
052	190	157	20	307.5	40	80	12	M16	43
053			68	380					

[1] IEC 63/71, [2] IEC 80

	VAM							
	G	G3	VC	VF	VL	VR	VR1	VS
018	112.5	64.5	71	111	78	110	110	85
037	110	74	71	123	90	110	110	85
075	139	85.5	79	140	107	120	120	85
15	188	115		144	122	120	120	85
22	208	131		188	150	160		110
40	208	131		188	150	160		110

Versione **H** / ***H** Version*

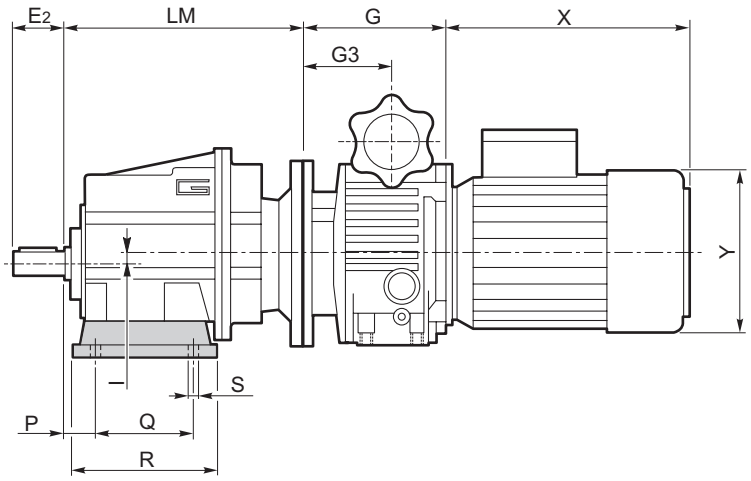
CMG	P	Q	R	S	U	V	X	Z	Piede / *Foot*	
									Tipo / *Type*	Peso / *Weight* [kg]
002	**18**	**60**	**80**	**9**	**100**	**10**	**60**	**120**	**H60**	**0.2**
	18	80	104	9	110 - 120	10	75	145	H75	0.3
	18	50 - 87	110	9	110	10	85	135	H85	0.4
012 013	**20**	**85**	**108**	**9**	**115**	**12**	**65**	**139**	**H65**	**0.7**
	18	80	118	9	110	12	75	140	**H75**	1.0
	25	85	120	9	120	12	80	140	**H80**	1.1
	18	50 - 87	118	9	110	12	85	130	**H85**	1.2
	25	130	154	9	110	12	90	135	**H90**	1.5
	18	60 - 107.5	135	11	130	12	100	155	**H100**	1.7
022 023	**20**	**85**	**108**	**9**	**115**	**12**	**65**	**139**	**H65**	**0.7**
	18	80	118	9	110	12	75	140	**H75**	1.0
	25	85	120	9	120	12	80	140	**H80**	1.1
	18	50 - 87	118	9	110	12	85	130	**H85**	1.2
	25	130	154	9	110	12	90	135	**H90**	1.5
	18	60 - 107.5	135	11	130	12	100	155	**H100**	1.7
032 033	**30**	**105**	**136**	**14**	**160**	**14**	**95**	**194**	**H95**	**1.5**
	30	100	150	11	150	14	110	185	**H110**	1.9
	18	70			160					
	30	165	195	14	135	14	115	170	**H115**	2.2
	35	110	160	14	170	14	120	210	**H120**	2.6
042 043	**30**	**105**	**136**	**14**	**160**	**14**	**95**	**194**	**H95**	**1.5**
	30	100	150	11	150	14	110	185	**H110**	1.9
	18	70			160					
	30	165	195	14	135	14	115	170	**H115**	2.2
	35	110	160	14	170	14	120	210	**H120**	2.6
052 053	35	145	200	18	200	22	120	239	**H120**	3.5
	35	205	244	18	170	22	140	219	**H140**	4.3
	25	110	199	18	225	22	155	264	**H155**	5.1
		156								

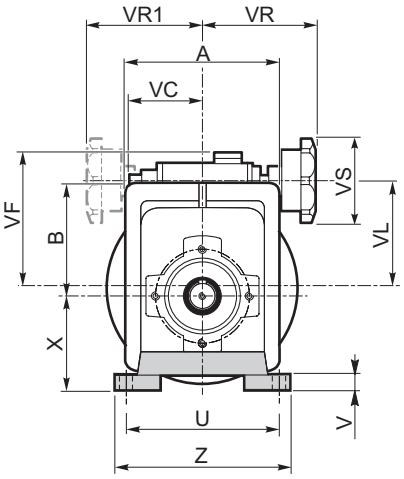
Preferenziale / *Preferred*

Dimensioni | *Dimensions*

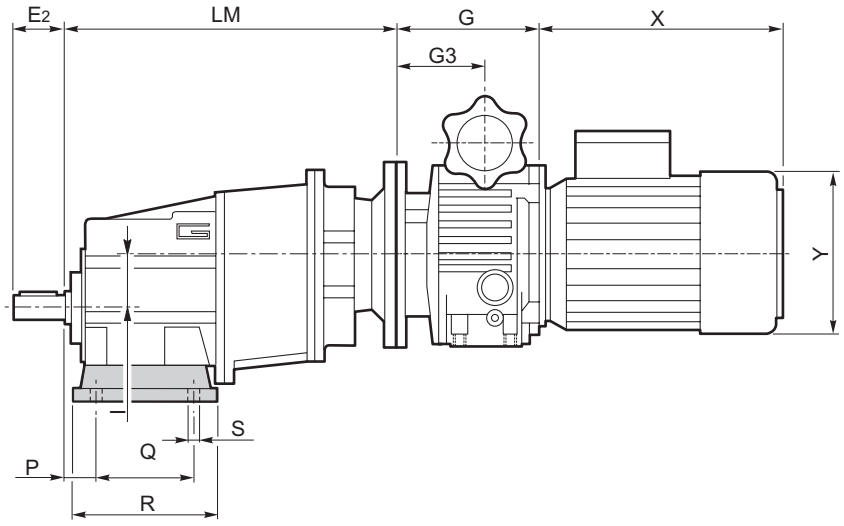
CMGV..H

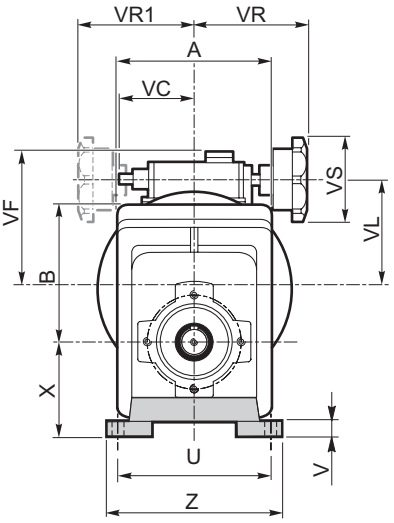
CMGV..2 H..



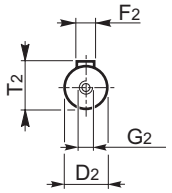


CMGV..3 H..

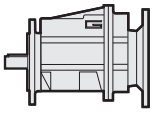




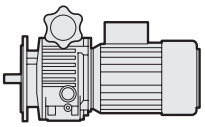
Albero uscita / *Output shaft*



Dimensioni — *Dimensions*



CMG



VAM

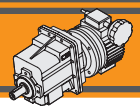
CMG	A	B	I	LM	Albero uscita / *Output shaft*				
					D_2 h6	E_2	F_2	G_2	T_2
002	92	81.5	0	143[1] 153[2]	16 20	40	5 6	M6	18 22.5
012	124	93	6.5	195	20	40	6	M6	22.5
013		112	43	268					
022	124	98	11.5	205	25	50	8	M8	28
023		117	48	278					
032	156	118	5	237	30	60	8	M10	33
033			41.5	303					
042	156	128	15	250	35	70	10	M12	38
043			51.5	316					
052	190	157	20	307.5	40	80	12	M16	43
053			68	380					

[1] IEC 63/71, [2] IEC 80

	VAM							
	G	G3	VC	VF	VL	VR	VR1	VS
018	112.5	64.5	71	111	78	110	110	85
037	110	74	71	123	90	110	110	85
075	139	85.5	79	140	107	120	120	85
15	188	115		144	122	120	120	85
22	208	131		188	150	160		110
40	208	131		188	150	160		110

Versione **F** / ***F** Version*

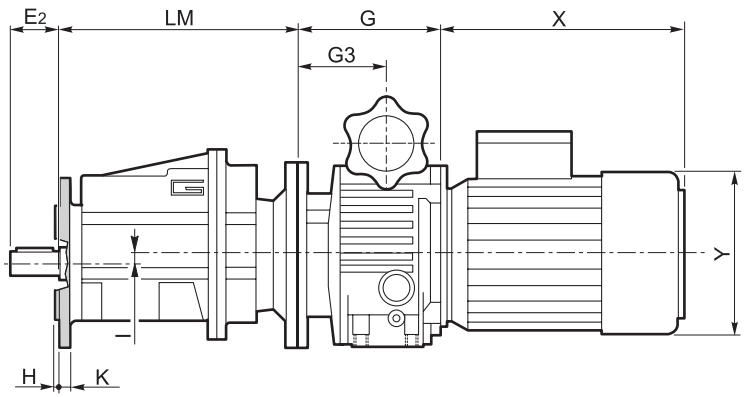
CMG	H	K	L	M	N f7	O	P	Flangia / *Flange*	
								Tipo / *Type*	Peso / *Weight* [kg]
002	3.5	7	105	85	70	6.5	90	**F105**	0.1
	3.5	8	120	100	80	7	100	**F120**	0.2
	3.5	8	140	115	95	9	115	**F140**	0.2
012 013	3	9	120	100	80	9	106	**F120**	0.5
	3.5	9	140	115	95	9	115	**F140**	0.8
	3.5	9	160	130	110	9	126	**F160**	1.1
	3.5	11	200	165	130	11	165	**F200**	1.8
022 023	3	9	120	100	80	9	106	**F120**	0.5
	3.5	9	140	115	95	9	115	**F140**	0.8
	3.5	9	160	130	110	9	126	**F160**	1.1
	3.5	11	200	165	130	11	165	**F200**	1.8
032 033	3.5	11	160	130	110	9	140	**F160**	1.0
	3.5	11	200	165	130	11	165	**F200**	1.8
	4	13	250	215	180	14	215	**F250**	2.9
042 043	3.5	11	160	130	110	9	140	**F160**	1.0
	3.5	11	200	165	130	11	165	**F200**	1.8
	4	13	250	215	180	14	215	**F250**	2.9
052 053	4	13	250	215	180	14	215	**F250**	2.9
	4	13	300	265	230	14	265	**F300**	4.4

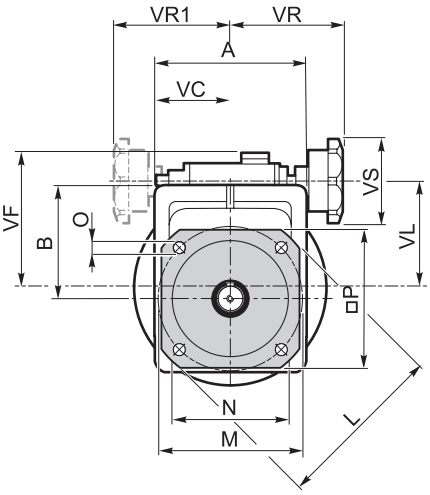


Dimensioni | *Dimensions*

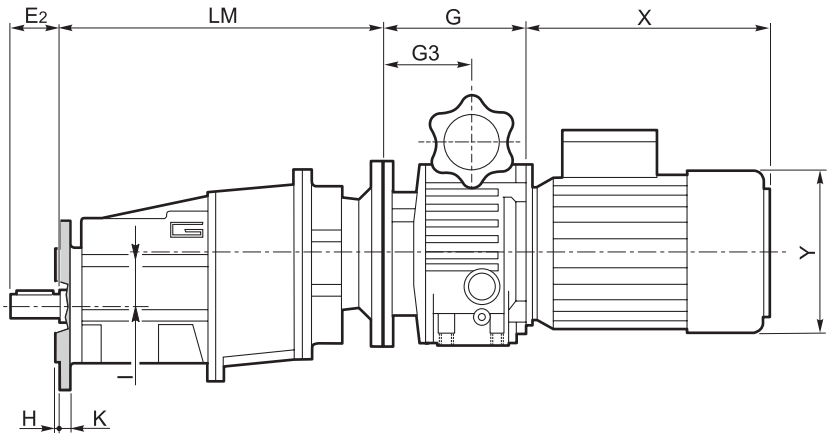
CMGV..F

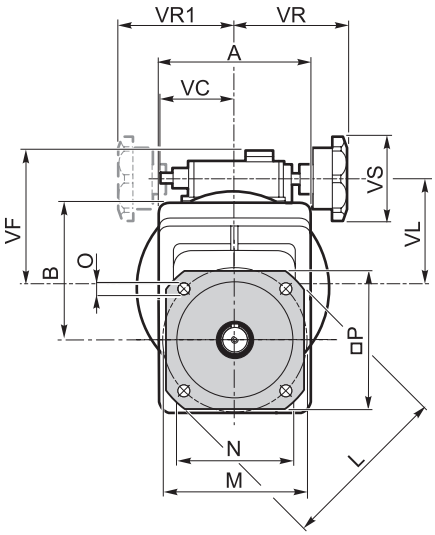
CMGV..2 F..



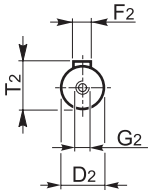


CMGV..3 F..

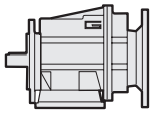




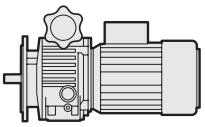
Albero uscita / *Output shaft*



Dimensioni — *Dimensions*



CMG



VAM

CMG	A	B	I	LM	Albero uscita / *Output shaft*				
					D_2 h6	E_2	F_2	G_2	T_2
002	92	81.5	0	143[1] 153[2]	16 20	40	5 6	M6	18 22.5
012	124	93	6.5	195	20	40	6	M6	22.5
013		112	43	268					
022	124	98	11.5	205	25	50	8	M8	28
023		117	48	278					
032	156	118	5	237	30	60	8	M10	33
033			41.5	303					
042	156	128	15	250	35	70	10	M12	38
043			51.5	316					
052	190	157	20	307.5	40	80	12	M16	43
053			68	380					

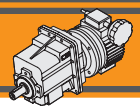
[1] IEC 63/71, [2] IEC 80

VAM	G	G3	VC	VF	VL	VR	VR1	VS
018	112.5	64.5	71	111	78	110	110	85
037	110	74	71	123	90	110	110	85
075	139	85.5	79	140	107	120	120	85
15	188	115		144	122	120	120	85
22	208	131		188	150	160		110
40	208	131		188	150	160		110

CMG	Versione **H** / ***H*** Version								Piede / *Foot*		Combinazioni possibili H/F *Possible combinations H/F*						
	P	Q	R	S	U	V	X	Z	Tipo *Type*	Peso [kg] *Weight [kg]*	F105	F120	F140	F160	F200	F250	F300
002	**18**	**60**	**80**	**9**	**100**	**10**	**60**	**120**	**H60**	**0.2**	•	•	•				
	18	80	104	9	110-120	10	75	145	H75	0.3	•	•	•				
	18	50 - 87	110	9	110	10	85	135	H85	0.4	•	•	•				
012 013	**20**	**85**	**108**	**9**	**115**	**12**	**65**	**139**	**H65**	**0.7**		•	•				
	18	80	118	9	110	12	75	140	**H75**	1.0		•	•	•			
	25	85	120	9	120	12	80	140	**H80**	1.1		•	•	•			
	18	50 - 87	118	9	110	12	85	130	**H85**	1.2		•	•	•			
	25	130	154	9	110	12	90	135	**H90**	1.5		•	•	•	•		
	18	60 - 107.5	135	11	130	12	100	155	**H100**	1.7		•	•	•	•		
022 023	**20**	**85**	**108**	**9**	**115**	**12**	**65**	**139**	**H65**	**0.7**		•	•				
	18	80	118	9	110	12	75	140	**H75**	1.0		•	•	•			
	25	85	120	9	120	12	80	140	**H80**	1.1		•	•	•			
	18	50 - 87	118	9	110	12	85	130	**H85**	1.2		•	•	•			
	25	130	154	9	110	12	90	135	**H90**	1.5		•	•	•	•		
	18	60 - 107.5	135	11	130	12	100	155	**H100**	1.7		•	•	•	•		
032 033	**30**	**105**	**136**	**14**	**160**	**14**	**95**	**194**	**H95**	**1.5**				•	•		
	30	100	150	11	150	14	110	185	**H110**	1.9				•	•		
	18	70			160												
	30	165	195	14	135	14	115	170	**H115**	2.2				•	•	•	
	35	110	160	14	170	14	120	210	**H120**	2.6				•	•	•	
042 043	**30**	**105**	**136**	**14**	**160**	**14**	**95**	**194**	**H95**	**1.5**				•	•		
	30	100	150	11	150	14	110	185	**H110**	1.9				•	•		
	18	70			160												
	30	165	195	14	135	14	115	170	**H115**	2.2				•	•	•	
	35	110	160	14	170	14	120	210	**H120**	2.6				•	•	•	
052 053	35	145	199	18	200	22	120	239	**H120**	3.5						•	
	35	205	244	18	170	22	140	219	**H140**	4.3						•	•
	25	110	199	18	225	22	155	264	**H155**	5.1						•	•
		156															

Preferenziale / *Preferred*

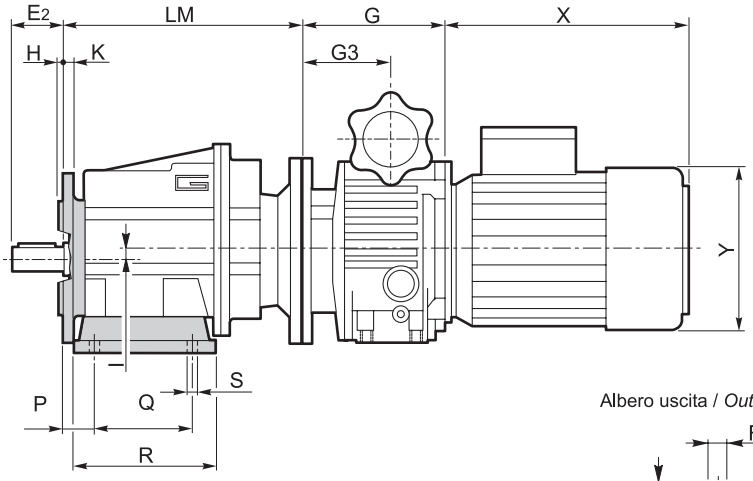
• Combinazioni possibili H/F / *Possible combinations H/F*

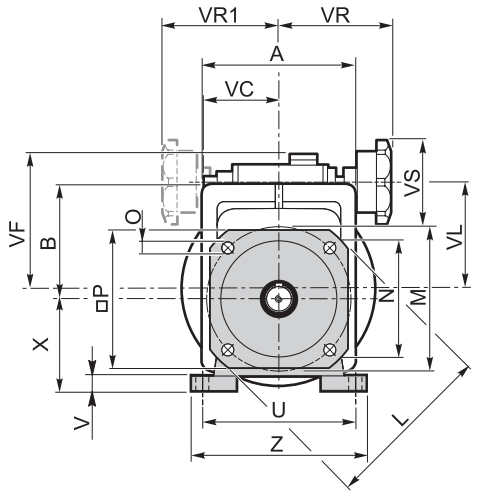


Dimensioni | *Dimensions*

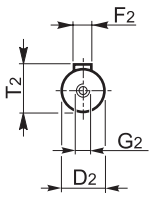
CMGV..H/F

CMGV..2 H../F..

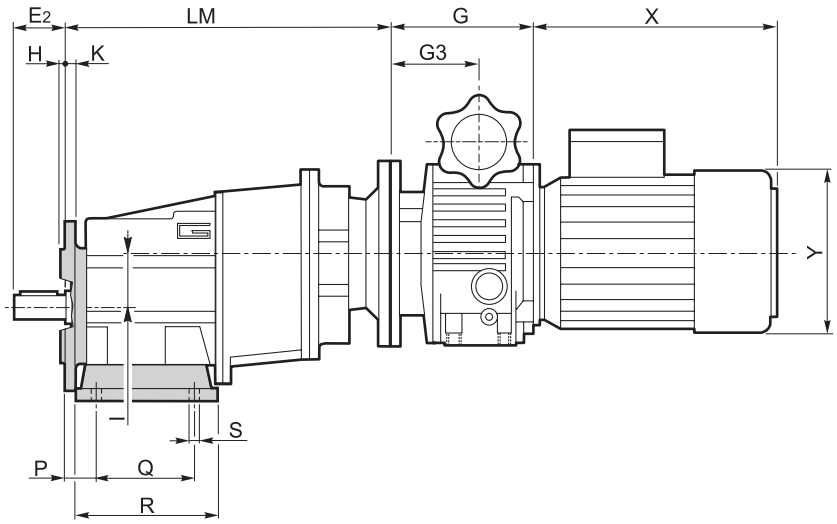


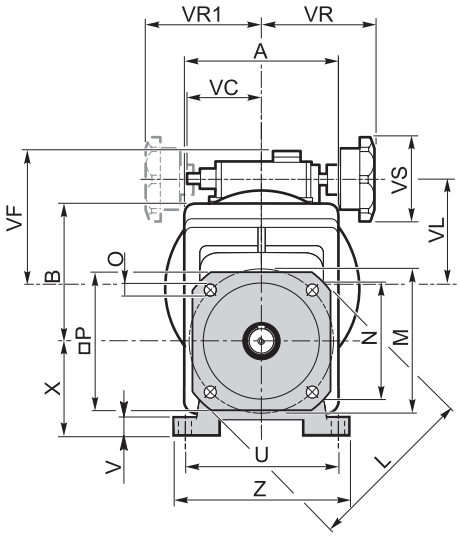


Albero uscita / *Output shaft*



CMGV..3 H../F..





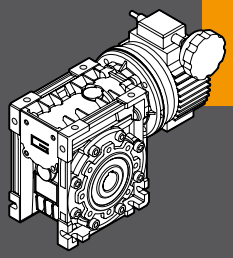
Versione **F** / ***F** Version*									
CMG	**H**	**K**	**L**	**M**	**N** f7	**O**	**P**	**Flangia / *Flange***	
								Tipo / *Type*	Peso / *Weight* [kg]
002	3.5	7	105	85	70	6.5	90	**F105**	0.1
	3.5	8	120	100	80	7	100	**F120**	0.2
	3.5	8	140	115	95	9	115	**F140**	0.2
012 013	3	9	120	100	80	9	106	**F120**	0.5
	3.5	9	140	115	95	9	115	**F140**	0.8
	3.5	9	160	130	110	9	126	**F160**	1.1
	3.5	11	200	165	130	11	165	**F200**	1.8
022 023	3	9	120	100	80	9	106	**F120**	0.5
	3.5	9	140	115	95	9	115	**F140**	0.8
	3.5	9	160	130	110	9	126	**F160**	1.1
	3.5	11	200	165	130	11	165	**F200**	1.8
032 033	3.5	11	160	130	110	9	140	**F160**	1.0
	3.5	11	200	165	130	11	165	**F200**	1.8
	4	13	250	215	150	14	215	**F250**	2.9
042 043	3.5	11	160	130	110	9	140	**F160**	1.0
	3.5	11	200	165	130	11	165	**F200**	1.8
	4	13	250	215	150	14	215	**F250**	2.9
052 053	4	13	250	215	150	14	215	**F250**	2.9
	4	13	300	265	230	14	265	**F300**	4.4

Note

TRANSTECNO™

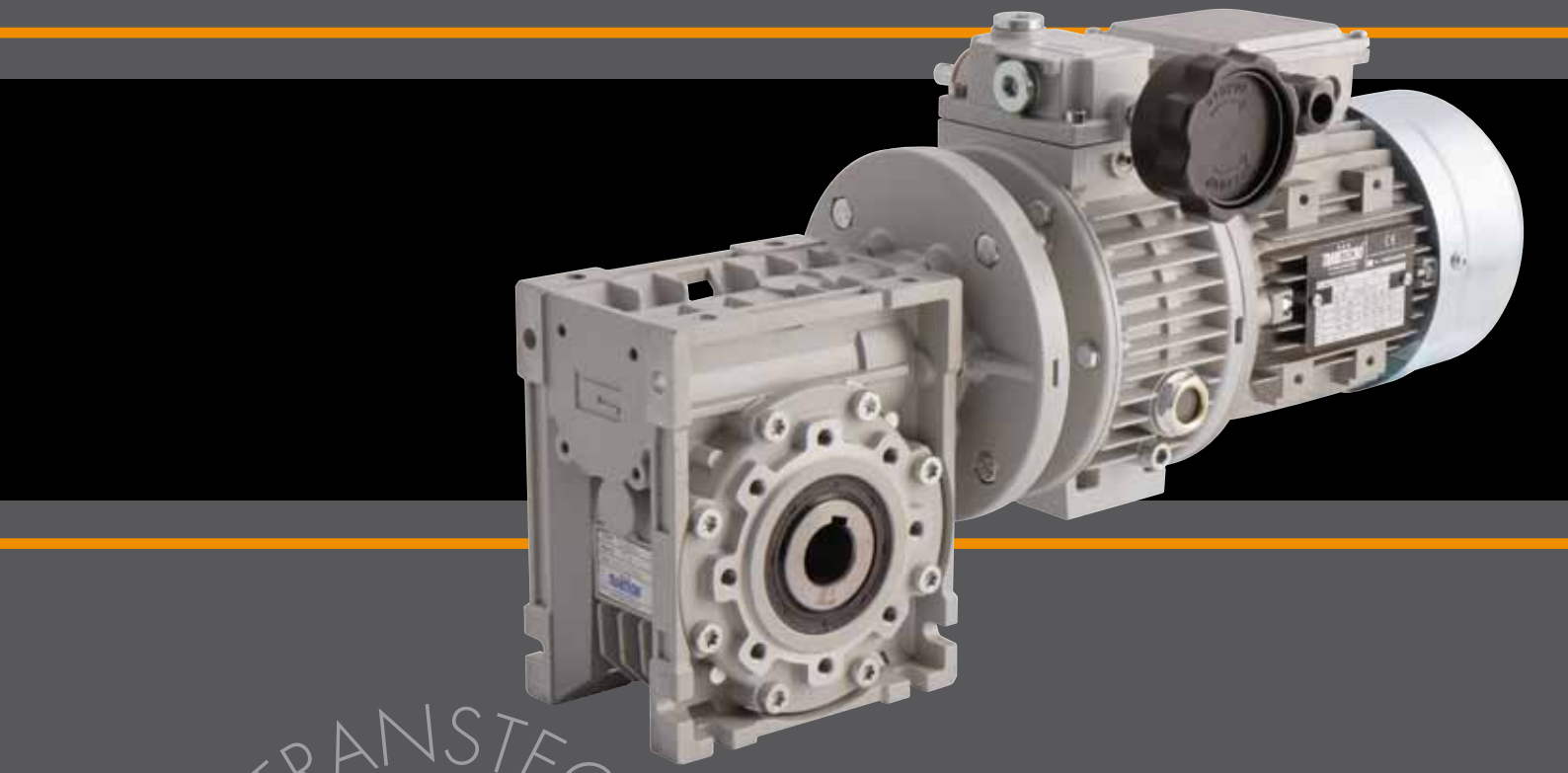
THE MODULAR GEARMOTOR

CMV



MOTOVARIARIDUTTORI A VITE SENZA FINE

MECHANICAL VARIATORS AND WORMGEARBOXES



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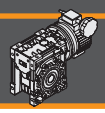

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Caratteristiche tecniche — *Technical features*

I motovariariduttori della serie CMV hanno le seguenti caratteristiche principali:

- Precisione nella regolazione della velocità, contenuta in ± 0.5/1%.
- Campo di regolazione continuo 1:5.
- Le grandezze CM040, 050, 063, 075, 090 e 110 sono costruite con carcassa in alluminio, la grandezza 130 ha la carcassa in ghisa.
- Le grandezze VAM018, 037 e 075 sono costruite con carcassa in alluminio, le altre grandezze in ghisa

CMV mechanical variators and wormgearboxes main features:

- *Precision in speed regulation: ± 0.5/1%*
- *Speed range 1:5*
- *Die-cast aluminum housing on CM040, 050, 063, 075, 090 and 110. Cast iron housing on CM130.*
- *Die-cast aluminum housing on VAM018, 037 and 075. Cast iron housing on the other sizes.*

Designazione — *Classification*

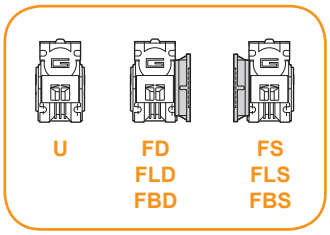
MOTOVARIARIDUTTORE / *MECHANICAL VARIATOR AND GEARBOX*

CMV	040/037	FD	20	SZDX	BRSX	90	B3/1	VS
Tipo *Type*	Grandezza *Size*	Versione *Version*	Rapporto *Ratio*	Albero di uscita *Output shaft*	Braccio di reazione *Torque arm*	Angolo *Angle*	Pos. di montaggio *Mounting position*	Opzioni *Options*
CMV	**040/018 — 130/40**	**U FD FS FBD FBS FLD FLS**	vedi tabelle *see tables*	**SZDX SZSX DZ**	**BRDX BRSX**	**0° 90° 180° 270°**	Vedi pag. L3 *See page L3*	**VS**

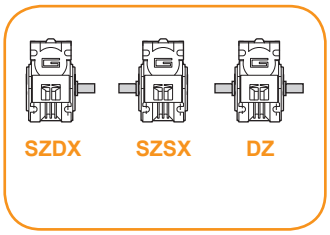
MOTORE / *MOTOR*

0.37kW	4p	3ph	50Hz	T1
Potenza *Power*	Poli *Poles*	Fasi *Phases*	Frequenza *Frequency*	Pos. morsettiera *Terminal box pos.*
Vedi tabelle *See tables*	**2p 4p**	**1ph 3ph**	**50Hz 60Hz**	Vedi pag. L3 *See page L3*

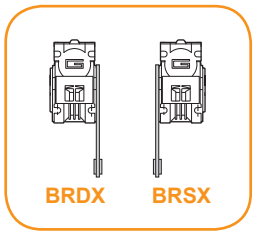
Versione Riduttore *Gearbox Version*



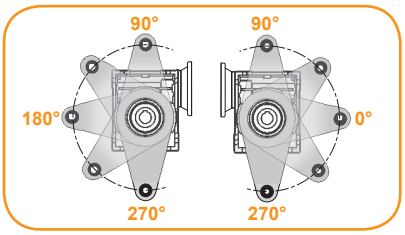
Albero di uscita *Output shaft*



Braccio di reazione *Torque arm*



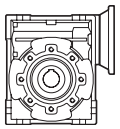
Angolo *Angle*



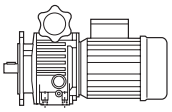
Simbologia — *Symbols*

n_1	[min^{-1}]	Velocità in ingresso / *Input speed*
n_2	[min^{-1}]	Velocità in uscita / *Output speed*
i		Rapporto di riduzione / *Ratio*
P_1	[kW]	Potenza in entrata / *Input power*
M_2	[Nm]	Coppia in uscita in funzione di P_1 / *Output torque referred to P_1*
sf		Fattore di servizio / *Service factor*
R_2	[N]	Carico radiale ammissibile in uscita / *Permitted output radial load*
A_2	N]	Carico assiale ammissibile in uscita / *Permitted output axial load*

Lubrificazione — *Lubrification*



CM

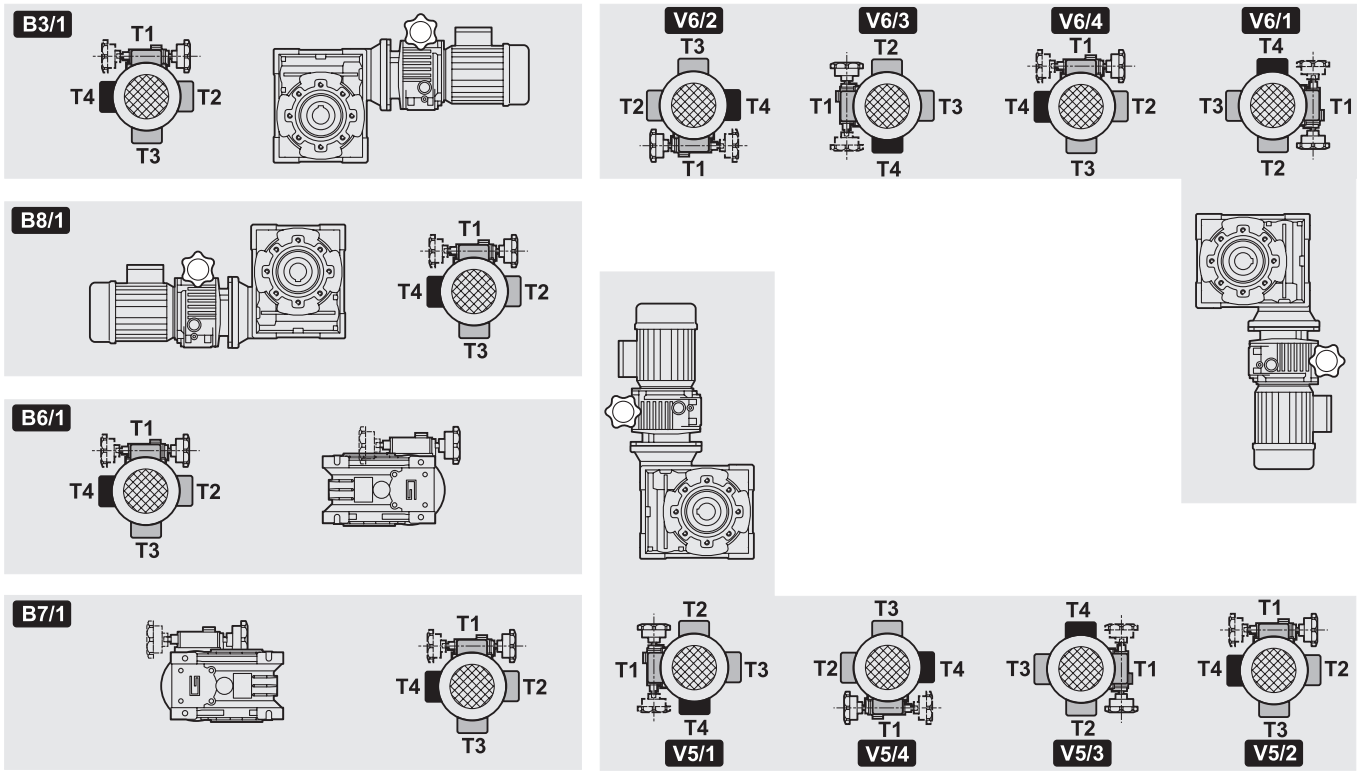


VAM

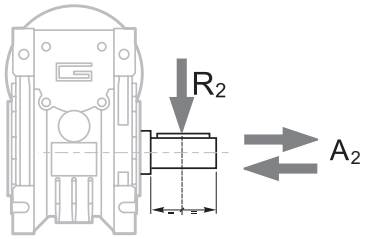
	Quantità di olio (litri) / *Oil quantity (litres)*						
	B3	B8	B6	B7	V5	V6	
CM040	0.07						Lubrificati a vita *Life lubricated*
CM050	0.1						
CM063	0.25						
CM075	0.4						
CM090	0.85						
CM110	1.5						
CM130	4.5	3.3	3.5	3.5	4.5	3.3	

	Quantità di olio (litri) / Oil quantity *(litres)*					
	VAM					
	018	037	075	15	22	40
B5	0.13	0.15	0.33	0.80	1.20	1.20
V1	0.30	0.40	0.85	1.40	2.15	2.15
V3	0.13	0.15	0.33	0.80	1.20	1.20

Posizioni di montaggio — *Mounting positions*



Carichi radiali — *Radial loads*

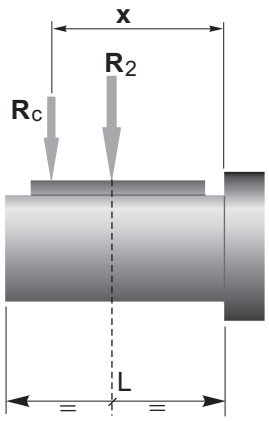


$A_2 = R_2 \times 0.2$

n_2 [min^{-1}]	R_2 [N]						
	CM040	CM050	CM063	CM075	CM090	CM110	CM130
187	1264	1770	2445	2824	3161	5058	5732
140	1392	1949	2692	3110	3481	5570	6313
93	1596	2234	3085	3564	3990	6384	7235
70	1754	2456	3392	3918	4386	7018	7953
56	1890	2646	3654	4221	4725	7560	8567
47	2004	2805	3874	4475	5009	8014	9083
35	2210	3095	4273	4937	5526	8842	10021
28	2381	3334	4603	5318	5953	9524	10794
23	2542	3559	4915	5678	6356	10170	11526
18	2759	3862	5334	6162	6897	11036	12507
14	3000	4200	5800	6700	7500	12000	13600

Quando il carico radiale risultante non è applicato sulla mezzeria dell'albero occorre calcolare quello effettivo con la seguente formula:

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:



	CM						
	040	050	063	075	090	110	130
a	84	101	120	131	182	176	188
b	64	76	95	101	122	136	148
R_{2MAX}	3000	4200	5800	6700	7500	12000	13600

$$R_c = \frac{R_2 \cdot a}{(b+x)} \leq R_{2MAX}$$

$$R \leq R_c$$

a, b = valori riportati nella tabella
a, b = values given in the table

Dati tecnici — *Technical data*

P_1 [kW]	velocità massima *max speed* n_2 [min^{-1}]	M_2 [Nm]	sf	velocità minima *min speed* n_2 [min^{-1}]	M_2 [Nm]	sf	i	
0.22								
63C4 n_1=1400 [min^{-1}]	**176**	8	*5.6*	**34.0**	15	*5.2*	5	**CMV 040/018**
	117	12	*4.3*	**22.7**	22	*3.8*	7.5	
	88.0	16	*3.3*	**17.0**	29	*2.9*	10	
	58.7	22	*2.5*	**11.3**	39	*2.2*	15	
	44.0	28	*1.6*	**8.5**	51	*1.5*	20	
	35.2	33	*1.3*	**6.8**	61	*1.1*	25	
	29.3	38	*1.5*	**5.7**	65	*1.4*	30	
	22.0	46	*1.1*	**4.3**	79	*0.9*	40	
	17.6	54	*0.8*	**3.4**	89	*0.8*	50	
	22.0	47	*1.8*	**4.3**	81	*1.7*	40	**CMV 050/018**
	17.6	56	*1.4*	**3.4**	91	*1.4*	50	
	14.7	63	*1.2*	**2.8**	100	*1.1*	60	
	11.0	73	*0.9*	**2.1**	116	*0.8*	80	
	8.8	82	*0.8*	**1.7**	129	*0.7*	100	
	14.7	66	*2.1*	**2.8**	105	*2.0*	60	**CMV 063/018**
	11.0	79	*1.6*	**2.1**	122	*1.5*	80	
	8.8	89	*1.4*	**1.7**	133	*1.2*	100	
0.37								
63C2 n_1=2800 [min^{-1}]	**352**	7	*5.5*	**68.0**	16	*3.8*	5	**CMV 040/018**
	235	11	*4.0*	**45.3**	23	*2.8*	7.5	
	176	14	*3.2*	**34.0**	30	*2.2*	10	
	117	21	*2.2*	**22.7**	42	*1.6*	15	
	88.0	27	*1.5*	**17.0**	53	*1.1*	20	
	70.4	31	*1.2*	**13.6**	63	*0.8*	25	
	58.7	36	*1.3*	**11.3**	72	*1.0*	30	
	44.0	44	*1.0*	**8.5**	88	*0.7*	40	
	88.0	27	*2.7*	**17.0**	54	*1.9*	20	**CMV 050/018**
	70.4	32	*2.2*	**13.6**	64	*1.4*	25	
	58.7	37	*2.4*	**11.3**	74	*1.7*	30	
	44.0	46	*1.7*	**8.5**	90	*1.2*	40	
	35.2	54	*1.3*	**6.8**	105	*1.0*	50	
	29.3	61	*1.1*	**5.7**	116	*0.8*	60	
	35.2	56	*2.4*	**6.8**	108	*1.8*	50	**CMV 063/018**
	29.3	64	*2.0*	**5.7**	121	*1.5*	60	
	22.0	78	*1.5*	**4.3**	143	*1.1*	80	
	17.6	88	*1.3*	**3.4**	160	*0.9*	100	
71B4 n_1=1400 [min^{-1}]	**200**	13	*3.6*	**40.0**	24	*3.3*	5	**CMV 040/037**
	133	19	*2.7*	**26.7**	35	*2.4*	7.5	
	100	25	*2.1*	**20.0**	45	*1.9*	10	
	66.7	35	*1.6*	**13.3**	62	*1.4*	15	
	50.0	44	*1.0*	**10.0**	80	*0.9*	20	
	40.0	53	*0.8*	**8.0**	96	*0.7*	25	
	33.3	59	*0.9*	**6.7**	103	*0.9*	30	

P_1 [kW]	velocità massima *max speed* n_2 [min^{-1}]	M_2 [Nm]	sf	velocità minima *min speed* n_2 [min^{-1}]	M_2 [Nm]	sf	i	
0.37								
71B4 n_1=1400 [min^{-1}]	**66.7**	36	*2.7*	**13.3**	65	*2.5*	15	**CMV 050/037**
	50.0	45	*1.8*	**10.0**	82	*1.7*	20	
	40.0	54	*1.4*	**8.0**	96	*1.3*	25	
	33.3	61	*1.6*	**6.7**	104	*1.6*	30	
	25.0	74	*1.1*	**5.0**	127	*1.1*	40	
	20.0	89	*0.9*	**4.0**	144	*0.9*	50	
	16.7	99	*0.8*	**3.3**	158	*0.7*	60	
	25.0	78	*2.1*	**5.0**	130	*2.0*	40	**CMV 063/037**
	20.0	92	*1.6*	**4.0**	150	*1.5*	50	
	16.7	104	*1.4*	**3.3**	166	*1.3*	60	
	12.5	125	*1.0*	**2.5**	192	*1.0*	80	
	10.0	141	*0.9*	**2.0**	210	*0.8*	100	
	16.7	110	*2.1*	**3.3**	176	*2.0*	60	**CMV 075/037**
	12.5	132	*1.6*	**2.5**	206	*1.5*	80	
	10.0	150	*1.3*	**2.0**	228	*1.2*	100	
	10.0	165	*1.9*	**2.0**	252	*1.7*	100	**CMV 090/037**
0.55								
71B2 n_1=2800 [min^{-1}]	**400**	10	*3.6*	**80.0**	25	*2.4*	5	**CMV 040/037**
	267	14	*2.6*	**53.3**	37	*1.8*	7.5	
	200	19	*2.1*	**40.0**	47	*1.4*	10	
	133	27	*1.5*	**26.7**	66	*1.0*	15	
	100	35	*1.0*	**20.0**	84	*0.7*	20	
	400	65	*6.6*	**80**	26	*4.4*	5	**CMV 050/037**
	267	15	*4.7*	**53.3**	37	*3.2*	7.5	
	200	19	*3.8*	**40.0**	48	*2.5*	10	
	133	28	*2.6*	**26.7**	68	*1.7*	15	
	100	36	*1.8*	**20.0**	85	*1.2*	20	
	80.0	43	*1.4*	**16.0**	101	*0.9*	25	
	66.7	49	*1.6*	**13.3**	117	*1.1*	30	
	50.0	62	*1.1*	**10.0**	142	*0.8*	40	
	100	36	*3.3*	**20.0**	88	*2.1*	20	**CMV 063/037**
	80.0	44	*2.6*	**16.0**	105	*1.6*	25	
	66.7	51	*2.9*	**13.3**	115	*2.0*	30	
	50.0	64	*2.0*	**10.0**	144	*1.4*	40	
	40.0	76	*1.6*	**8.0**	171	*1.1*	50	
	33.3	87	*1.3*	**6.7**	191	*0.9*	60	
	25.0	107	*1.0*	**5.0**	226	*0.7*	80	
	50.0	66	*3.2*	**10.0**	156	*2.2*	40	**CMV 075/037**
	40.0	78	*2.4*	**8.0**	183	*1.7*	50	
	33.3	91	*2.0*	**6.7**	205	*1.4*	60	
	25.0	113	*1.5*	**5.0**	240	*1.0*	80	
	20.0	130	*1.2*	**4.0**	270	*0.8*	100	
	33.3	95	*3.1*	**6.7**	212	*2.2*	60	**CMV 090/037**
	25.0	118	*2.3*	**5.0**	254	*1.6*	80	
	20.0	139	*1.8*	**4.0**	288	*1.3*	100	

Dati tecnici — *Technical data*

P_1 [kW]	velocità massima *max speed* n_2 [min^{-1}]	M_2 [Nm]	sf	velocità minima *min speed* n_2 [min^{-1}]	M_2 [Nm]	sf	i	
0.75								
80B4 n_1=1400 [min^{-1}]	**200**	26	*3.4*	**40**	49	*3.0*	5	**CMV 050/075**
	133	38	*2.4*	**26.7**	71	*2.2*	7.5	
	100	50	*1.9*	**20.0**	91	*1.7*	10	
	66.7	71	*1.3*	**13.3**	130	*1.2*	15	
	50.0	90	*0.9*	**10.0**	163	*0.8*	20	
	40.0	108	*0.7*	**8.0**	192	*0.6*	25	
	33.3	122	*0.8*	**6.7**	209	*0.8*	30	
	66.7	73	*2.4*	**13.3**	128	*2.4*	15	**CMV 063/075**
	50.0	94	*1.6*	**10.0**	161	*1.6*	20	
	40.0	113	*1.2*	**8.0**	189	*1.2*	25	
	33.3	126	*1.5*	**6.7**	216	*1.4*	30	
	25.0	156	*1.0*	**5.0**	259	*1.0*	40	
	20.0	183	*0.8*	**4.0**	300	*0.8*	50	
	40.0	110	*2.1*	**8.0**	198	*1.9*	25	**CMV 075/075**
	33.3	122	*2.5*	**6.7**	227	*2.3*	30	
	25.0	154	*1.7*	**5.0**	274	*1.6*	40	
	20.0	192	*1.3*	**4.0**	318	*1.2*	50	
	16.7	220	*1.1*	**3.3**	353	*1.0*	60	
	12.5	264	*0.8*	**2.5**	413	*0.7*	80	
	25.0	173	*2.7*	**5.0**	293	*2.6*	40	**CMV 090/075**
	20.0	204	*2.0*	**4.0**	342	*1.9*	50	
	16.7	234	*1.6*	**3.3**	382	*1.5*	60	
	12.5	288	*1.2*	**2.5**	451	*1.1*	80	
	10.0	330	*1.0*	**2.0**	504	*0.9*	100	
	12.5	302	*2.0*	**2.5**	490	*1.8*	80	**CMV 110/075**
	10.0	354	*1.6*	**2.0**	552	*1.4*	100	
1.1								
80B2 n_1=2800 [min^{-1}]	**400**	20	*3.2*	**80**	51	*2.2*	5	**CMV 050/075**
	267	29	*2.3*	**53.3**	75	*1.6*	7.5	
	200	38	*1.9*	**40.0**	96	*1.3*	10	
	133	55	*1.3*	**26.7**	135	*0.9*	15	
	400	20	*5.8*	**80**	53	*3.7*	5	**CMV 063/075**
	267	29	*4.2*	**53.3**	76	*2.8*	7.5	
	200	38	*3.4*	**40.0**	98	*2.2*	10	
	133	56	*2.4*	**26.7**	139	*1.6*	15	
	100	72	*1.6*	**20.0**	175	*1.1*	20	
	80.0	88	*1.3*	**16.0**	210	*0.8*	25	
	66.7	102	*1.4*	**13.3**	230	*1.0*	30	
	50.0	128	*1.0*	**10.0**	288	*0.7*	40	
	100	74	*2.7*	**20.0**	180	*1.7*	20	**CMV 075/075**
	80.0	90	*2.0*	**16.0**	216	*1.3*	25	
	66.7	104	*2.3*	**13.3**	252	*1.5*	30	
	50.0	132	*1.6*	**10.0**	312	*1.1*	40	
	40.0	158	*1.2*	**8.0**	366	*0.8*	50	
	33.3	182	*1.0*	**6.7**	410	*0.7*	60	
	66.7	107	*3.8*	**13.3**	252	*2.5*	30	**CMV 090/075**
	50.0	137	*2.6*	**10.0**	317	*1.8*	40	
	40.0	165	*1.9*	**8.0**	366	*1.4*	50	
	33.3	190	*1.5*	**6.7**	425	*1.1*	60	
	25.0	236	*1.1*	**5.0**	509	*0.8*	80	
	20.0	277	*0.9*	**4.0**	576	*0.6*	100	

P_1 [kW]	velocità massima *max speed* n_2 [min^{-1}]	M_2 [Nm]	sf	velocità minima *min speed* n_2 [min^{-1}]	M_2 [Nm]	sf	i	
1.1								
80B2 n_1=2800 [min^{-1}]	**40.0**	169	*3.4*	**8.0**	390	*2.3*	50	**CMV 110/075**
	33.3	198	*2.6*	**6.7**	446	*1.8*	60	
	25.0	246	*1.9*	**5.0**	547	*1.3*	80	
	20.0	290	*1.5*	**4.0**	624	*1.0*	100	
90S4 n_1=1400 [min^{-1}]	**200**	40	*4.0*	**40**	74	*3.8*	5	**CMV 063/15**
	133	58	*2.9*	**26.7**	108	*2.7*	7.5	
	100	76	*2.3*	**20.0**	139	*2.1*	10	
	66.7	109	*1.6*	**13.3**	192	*1.6*	15	
	50.0	140	*1.1*	**10.0**	241	*1.1*	20	
	40.0	169	*0.8*	**8.0**	284	*0.8*	25	
	33.3	189	*1.0*	**6.7**	324	*1.0*	30	
	50.0	144	*1.8*	**10.0**	248	*1.7*	20	**CMV 075/15**
	40.0	173	*1.3*	**8.0**	297	*1.3*	25	
	33.3	197	*1.6*	**6.7**	340	*1.5*	30	
	25.0	245	*1.1*	**5.0**	410	*1.1*	40	
	25.0	259	*1.8*	**5.0**	439	*1.7*	40	**CMV 090/15**
	20.0	306	*1.4*	**4.0**	513	*1.2*	50	
	16.7	351	*1.1*	**3.3**	572	*1.0*	60	
	16.7	367	*1.9*	**3.3**	616	*1.6*	60	**CMV 110/15**
	12.5	454	*1.3*	**2.5**	734	*1.2*	80	
	10.0	531	*1.0*	**2.0**	828	*0.9*	100	
1.5								
90L4 n_1=1400 [min^{-1}]	**200**	53	*3.0*	**40**	98	*2.8*	5	**CMV 063/15**
	133	77	*2.2*	**26.7**	144	*2.0*	7.5	
	100	101	*1.7*	**20.0**	185	*1.6*	10	
	66.7	146	*1.2*	**13.3**	256	*1.2*	15	
	50.0	187	*0.8*	**10.0**	322	*0.8*	20	
	133	78	*3.3*	**26.7**	146	*3.1*	7.5	**CMV 075/15**
	100	102	*2.7*	**20.0**	187	*2.5*	10	
	66.7	149	*2.0*	**13.3**	263	*1.9*	15	
	50.0	192	*1.3*	**10.0**	331	*1.3*	20	
	40.0	231	*1.0*	**8.0**	396	*1.0*	25	
	33.3	263	*1.2*	**6.7**	454	*1.1*	30	
	25.0	326	*0.8*	**5.0**	547	*0.8*	40	
	133	79	*4.9*	**26.7**	149	*4.4*	7.5	**CMV 090/15**
	100	104	*4.0*	**20.0**	192	*3.6*	10	
	66.7	151	*3.1*	**13.3**	270	*3.0*	15	
	50.0	197	*2.2*	**10.0**	346	*2.2*	20	
	40.0	240	*1.6*	**8.0**	414	*1.6*	25	
	33.3	274	*1.9*	**6.7**	475	*1.8*	30	
	25.0	346	*1.3*	**5.0**	586	*1.3*	40	
	20.0	408	*1.0*	**4.0**	684	*0.9*	50	
	16.7	468	*0.8*	**3.3**	763	*0.8*	60	
	40.0	243	*2.9*	**8.0**	432	*2.8*	25	**CMV 110/15**
	33.3	270	*3.2*	**6.7**	482	*3.1*	30	
	25.0	350	*2.4*	**5.0**	624	*2.1*	40	
	20.0	426	*1.8*	**4.0**	732	*1.6*	50	
	16.7	490	*1.4*	**3.3**	821	*1.2*	60	
	12.5	586	*1.0*	**2.5**	979	*0.9*	80	
	10.0	710	*0.8*	**2.0**	1104	*0.7*	100	

Dati tecnici — *Technical data*

P_1 [kW]	velocità massima *max speed* n_2 [min^{-1}]	M_2 [Nm]	sf	velocità minima *min speed* n_2 [min^{-1}]	M_2 [Nm]	sf	i	
1.5								
90L4 n_1=1400 [min^{-1}]	**20.0**	438	*2.4*	**4.0**	732	*2.0*	50	**CMV 130/15**
	16.7	504	*1.9*	**3.3**	821	*1.7*	60	
	12.5	614	*1.4*	**2.5**	979	*1.2*	80	
	10.0	708	*1.1*	**2.0**	1152	*1.0*	100	
2.2								
90L2 n_1=2800 [min^{-1}]	**400**	41	*2.8*	**80.0**	105.6	*1.9*	5	**CMV 063/15**
	267	60	*2.0*	**53.3**	151	*1.4*	7.5	
	200	78	*1.6*	**40.0**	197	*1.1*	10	
	133	115	*1.2*	**26.7**	277	*0.8*	15	
	267	60	*3.1*	**53.3**	151	*2.1*	7.5	**CMV 075/15**
	200	79	*2.6*	**40.0**	199	*1.7*	10	
	133	115	*1.9*	**26.7**	284	*1.2*	15	
	100	151	*1.3*	**20.0**	360	*0.9*	20	
	80.0	185	*1.0*	**16.0**	432	*0.6*	25	
	66.7	213	*1.1*	**13.3**	504	*0.7*	30	
	267	61	*4.5*	**53.3**	153	*3.1*	7.5	**CMV 090/15**
	200	80	*3.8*	**40.0**	202	*2.5*	10	
	133	117	*3.0*	**26.7**	292	*1.9*	15	
	100	153	*2.2*	**20.0**	374	*1.4*	20	
	80.0	189	*1.6*	**16.0**	450	*1.0*	25	
	66.7	219	*1.8*	**13.3**	504	*1.3*	30	
	50.0	281	*1.3*	**10.0**	634	*0.9*	40	
	40.0	338	*0.9*	**8.0**	732	*0.7*	50	
	80.0	191	*2.8*	**16.0**	462	*1.8*	25	**CMV 110/15**
	66.7	219	*3.1*	**13.3**	518	*2.0*	30	
	50.0	288	*2.2*	**10.0**	662	*1.5*	40	
	40.0	347	*1.7*	**8.0**	780	*1.2*	50	
	33.3	405	*1.3*	**6.7**	893	*0.9*	60	
	25.0	504	*0.9*	**5.0**	1094	*0.7*	80	
	50.0	281	*3.1*	**10.0**	653	*1.9*	40	**CMV 130/15**
	40.0	347	*2.4*	**8.0**	804	*1.5*	50	
	33.3	405	*1.9*	**6.7**	922	*1.2*	60	
	25.0	504	*1.4*	**5.0**	1114	*0.9*	80	
	20.0	603	*1.0*	**4.0**	1272	*0.7*	100	
100LA4 n_1=1400 [min^{-1}]	**133**	117	*2.2*	**26.7**	219	*2.0*	7.5	**CMV 075/22**
	100	153	*1.8*	**20.0**	281	*1.7*	10	
	66.7	224	*1.3*	**13.3**	394	*1.2*	15	
	133	119	*3.2*	**26.7**	224	*2.9*	7.5	**CMV 090/22**
	100	157	*2.7*	**20.0**	288	*2.4*	10	
	66.7	227	*2.1*	**13.3**	405	*2.0*	15	
	50.0	295	*1.5*	**10.0**	518	*1.4*	20	
	40.0	360	*1.1*	**8.0**	621	*1.1*	25	
	33.3	410	*1.3*	**6.7**	713	*1.2*	30	
	133	119	*5.7*	**26.7**	224	*5.1*	7.5	**CMV 110/22**
	100	157	*4.7*	**20.0**	292	*4.3*	10	
	66.7	227	*3.5*	**13.3**	410	*3.3*	15	
	50.0	299	*2.5*	**10.0**	540	*2.4*	20	
	40.0	369	*1.9*	**8.0**	648	*1.9*	25	
	33.3	421	*2.1*	**6.7**	724	*2.0*	30	
	25.0	540	*1.5*	**5.0**	936	*1.4*	40	
	20.0	639	*1.2*	**4.0**	1098	*1.1*	50	
	16.7	734	*0.9*	**3.3**	1231	*0.8*	60	

P_1 [kW]	velocità massima *max speed* n_2 [min^{-1}]	M_2 [Nm]	sf	velocità minima *min speed* n_2 [min^{-1}]	M_2 [Nm]	sf	i	
2.2								
100LA4 n_1=1400 [min^{-1}]	**33.3**	416	*2.8*	**6.7**	713	*2.4*	30	**CMV 130/22**
	25.0	533	*2.1*	**5.0**	907	*1.8*	40	
	20.0	657	*1.6*	**4.0**	1098	*1.4*	50	
	16.7	756	*1.3*	**3.3**	1231	*1.1*	60	
	12.5	922	*1.0*	**2.5**	1469	*0.8*	80	
3								
100LB4 n_1=1400 [min^{-1}]	**133**	157	*1.7*	**26.7**	292	*1.5*	7.5	**CMV 075/40**
	100	204	*1.3*	**20.0**	374	*1.3*	10	
	66.7	299	*1.0*	**13.3**	526	*0.9*	15	
	133	158	*2.4*	**26.7**	299	*2.2*	7.5	**CMV 090/40**
	100	209	*2.0*	**20.0**	384	*1.8*	10	
	66.7	302	*1.6*	**13.3**	540	*1.5*	15	
	50.0	394	*1.1*	**10.0**	691	*1.1*	20	
	40.0	480	*0.8*	**8.0**	828	*0.8*	25	
	33.3	547	*1.0*	**6.7**	950	*0.9*	30	
	66.7	317	*2.5*	**13.3**	598	*1.9*	15	**CMV 110/40**
	50.0	418	*1.8*	**10.0**	778	*1.6*	20	
	40.0	504	*1.4*	**8.0**	912	*1.5*	25	
	33.3	598	*1.5*	**6.7**	1080	*1.2*	30	
	25.0	787	*1.1*	**5.0**	1382	*0.9*	40	
	20.0	936	*0.8*	**4.0**	1608	*0.9*	50	
	16.7	1080	*0.6*	**3.3**	1872	*0.7*	60	
	40.0	486	*2.2*	**8.0**	876	*1.7*	25	**CMV 130/40**
	33.3	554	*2.1*	**6.7**	950	*1.8*	30	
	25.0	710	*1.5*	**5.0**	1210	*1.3*	40	
	20.0	876	*1.2*	**4.0**	1464	*1.0*	50	
	16.7	1008	*1.0*	**3.3**	1642	*0.9*	60	
	12.5	1229	*0.7*	**2.5**	1958	*0.6*	80	
4								
112M4 n_1=1400 [min^{-1}]	**133**	211	*1.8*	**26.7**	398	*1.7*	7.5	**CMV 090/40**
	100	278	*1.5*	**20.0**	512	*1.4*	10	
	66.7	403	*1.2*	**13.3**	720	*1.1*	15	
	50.0	525	*0.8*	**10.0**	922	*0.8*	20	
	100	275	*2.7*	**20.0**	518	*2.4*	10	**CMV 110/40**
	66.7	398	*2.0*	**13.3**	739	*1.8*	15	
	50.0	525	*1.4*	**10.0**	973	*1.3*	20	
	40.0	648	*1.1*	**8.0**	1184	*1.0*	25	
	33.3	720	*1.2*	**6.7**	1248	*1.2*	30	
	25.0	960	*0.9*	**5.0**	1664	*0.8*	40	
	40.0	648	*1.6*	**8.0**	1168	*1.3*	25	**CMV 130/40**
	33.3	739	*1.6*	**6.7**	1267	*1.3*	30	
	25.0	947	*1.2*	**5.0**	1613	*1.0*	40	
	20.0	1168	*0.9*	**4.0**	1952	*0.8*	50	
	16.7	1344	*0.7*	**3.3**	2189	*0.6*	60	

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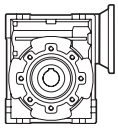
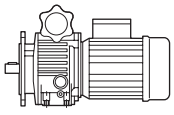
Dimensioni — *Dimensions*



CM

	CM.. - CM..F - CM..FB - CM..FL																							
	A	C	D H8	E	F	G	G1	H	I	L	M	N h8	N1	O	P	Q	R	S	T	V	K	KE	a	b	t
040	70	100	18	121.5	43	70	78	50	40	71	75	60	36.5	6.5	87	55	71.5	6.5	26	35	60	M6x8 (n.4)	45°	6	20.8
050	80	120	25	144	49	80	92	60	50	85	85	70	43.5	8.5	100	64	84	7	30	40	70	M8x10 (n.4)	45°	8	28.3
063	100	144	25	174	67	95	112	72	63	103	95	80	53	8.5	110	80	102	8	36	50	85	M8x10 (n.8)	45°	8	28.3
075	120	172	28	205	72	112.5	120	86	75	112	115	95	57	11	140	93	119	10	40	60	90	M8x14 (n.8)	45°	8	31.3
090	140	205	35	238	74	129.5	140	102.5	90	130	130	110	67	13	160	102	135	11	45	70	100	M10x18 (n.8)	45°	10	38.3
110	170	252.5	42	295	—	160	155	127.5	110	144	165	130	74	14	200	125	167.5	14	50	85	115	M10x18 (n.8)	45°	12	45.3
130	200	292.5	45	335	—	180	170	147.5	130	155	215	180	81	16	250	140	187.5	15	60	100	120	M12x21 (n.8)	45°	14	48.8

		CM..F								CM..FB							CM..FL							
	a1	KA	KB	KC	KM	KN H8	KO	KP	KQ	KA	KB	KC	KM	KN H8	KO	KP	KA	KB	KC	KM	KN H8	KO	KP	KQ
040	45°	67	7.5	4	80-95	60	9(n.4)	110	95	80	8.5	5	115-125	95	9.5(n.4)	140	97	7.5	4.5	80-95	60	9(n.4)	110	95
050	45°	90	9	5	90-110	70	11(n.4)	125	110	89	9	5	130-145	110	9.5(n.4)	160	120	9	5	90-110	70	11(n.4)	125	110
063	45°	82	10	6	150-160	115	11(n.4)	180	142	98	10	5	165-180	130	11(n.4)	200	112	10	6	150-160	115	11(n.4)	180	142
075	45°	111	13	6	165-180	130	14(n.4)	200	170	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
090	45°	111	13	6	175-190	152	14(n.4)	210	200	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
110	45°	131	15	6	230	170	14(n.8)	280	260	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
130	45°	140	15	6	255	180	16(n.8)	320	290	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—



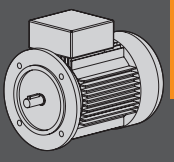
VAM

	VAM							
	V2	V3	VC	VF	VL	VR	VR1	VS
018	112.5	64.5	71	111	78	110	110	85
037	110	74	71	123	90	110	110	85
075	139	85.5	79	140	107	120	120	85
15	188	115	—	144	122	120	120	85
22	208	131	—	188	150	160	—	110
40	208	131	—	188	150	160	—	110

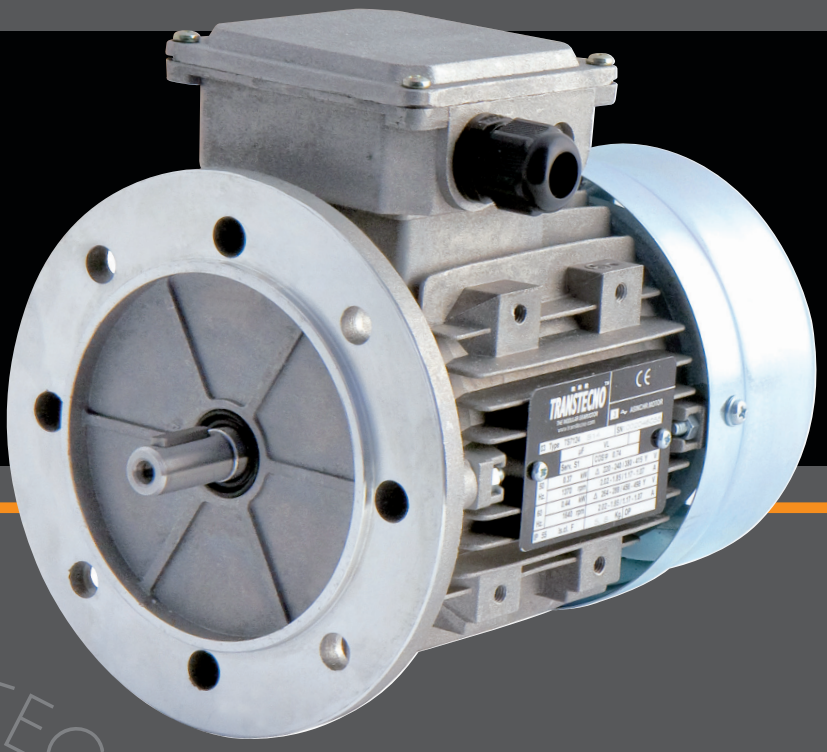
TRANSTECNO®
THE MODULAR GEARMOTOR

TS-MY

TS-MY



MOTORI ELETTRICI C.A. ASINCRONI
A.C. ASYNCHRONOUS ELECTRIC MOTORS



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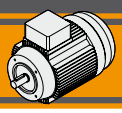

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Caratteristiche tecniche

I motori della serie TS e MY sono chiusi e dotati di ventola di raffreddamento.
La serie TS comprende motori ad induzione trifase 230/400 Vca a 50 Hz e 275/480 Vca a 60 Hz, 4 poli, per potenze da 0.09 kW fino a 3.0 kW: silenziosi e dinamicamente ben bilanciati
uniscono qualità robustezza e convenienza.

La serie MY comprende motori ad induzione monofase 230 Vca 50 Hz, per potenze da 0.09 kW fino a 0.75 kW, adatti per uso con macchine che necessitano di potenze ridotte.
Anch'essi uniscono qualità e convenienza.

Entrambe le serie sono costruite in alluminio e sono disponibili in configurazione B5 oppure B14.

Altre caratteristiche standard dei motori TS - MY sono:

- Isolamento termico di classe F
- Grado di protezione IP55
- Sonda bimetallica PTO per protezione da sovratemperatura (solo MY)
- Rumorosità e vibrazioni contenute
- Temperatura ambiente: -20 °C ÷ +40 °C.
- I motori della serie MY si caratterizzano per l' ampia coprimorsettiera dove il condensatore di marcia trova alloggiamento e protezione.
- Per uso industriale (industria leggera e pesante) e commerciale.

Technical characteristics

TS and MY series motors are closed and fan cooled.

TS range includes induction threephase 4 poles motors 230/400 Vac at 50 Hz and 275/480 Vac at 60 Hz, it covers power sizes from 0.09 kW up to 3.0 kW. These motors run quietly, they are dynamically well balanced, robust and are an economic solution.

MY range includes induction singlephase motors 230 Vac at 50 Hz and covers power sizes from 0.09 kW up to 0.75 kW. They are particularly suitable for low powered applications. Similar to TS motors, they are robust and are a low cost solution.

Both ranges are made with an aluminum frame and are available with B5 or B14 flange mountings.

Standard features are:

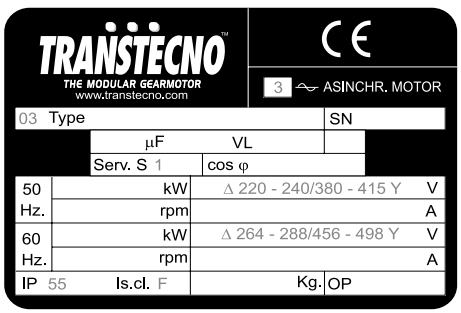
- *Class F thermal insulation*
- *IP55 enclosure protection*
- *PTO thermostat for overheating protection (only MY)*
- *Low noise and vibrations*
- *Ambient temperature: -20 °C ÷ +40 °C.*
- *MY series motors have a large terminal box, which includes the run capacitor, protecting it from the external environment.*
- *Suitable for heavy and light industrial applications and also for commercial use.*

Designazione

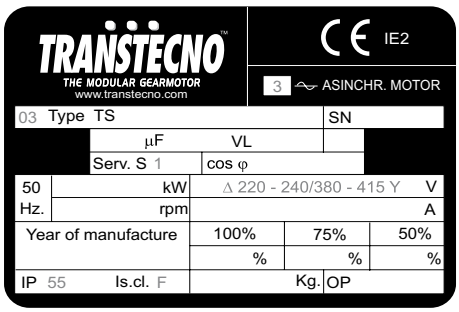
Classification

TS	63	2	4	B5	230-400	50 Hz
Tipo *Type*	Grandezza *Size*	Indicativo potenza *Power coefficient*	Poli *Poles*	Forma costruttiva *Version*	Tensione *Voltage*	Frequenza *Frequency*
TS trifase *threephase*	vedi tabelle *see tables*	**1-2-3-S** **L1-L2**	**4**	**B5** **B14**	**230-400**	**50Hz** **60Hz**

MY	63	2	4	B5	230	50 Hz
Tipo *Type*	Grandezza *Size*	Indicativo potenza *Power coefficient*	Poli *Poles*	Forma costruttiva *Version*	Tensione *Voltage*	Frequenza *Frequency*
MY monofase *singlephase*	vedi tabelle *see tables*	**2**	**4**	**B5** **B14**	**230**	**50Hz**



TS 0.09 - 0.55 kW



TS 0.75 - 3.0 kW

Diagramma famiglia TS-MY

TS-MY series

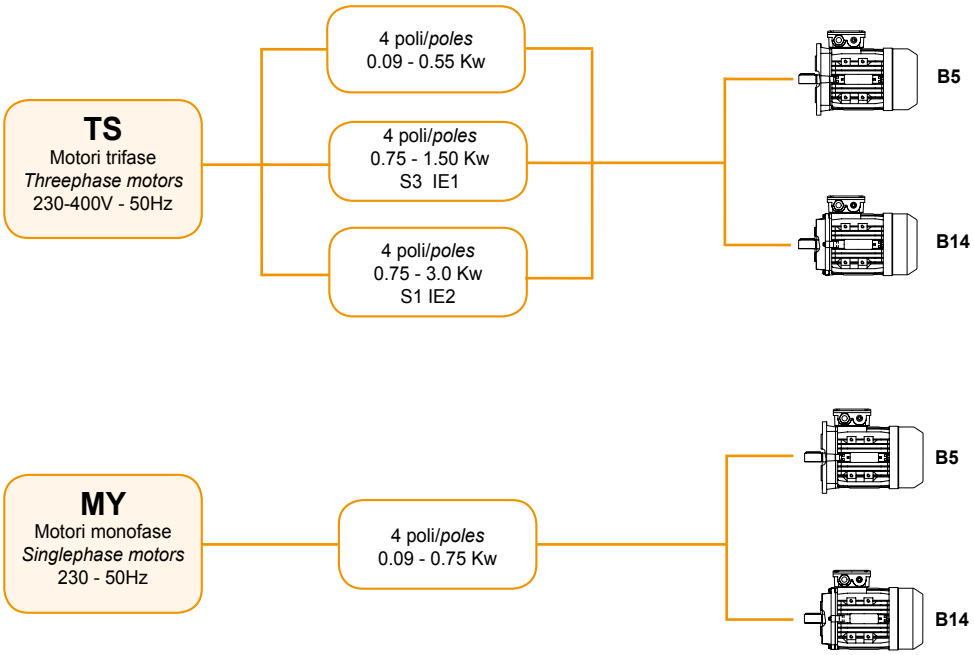
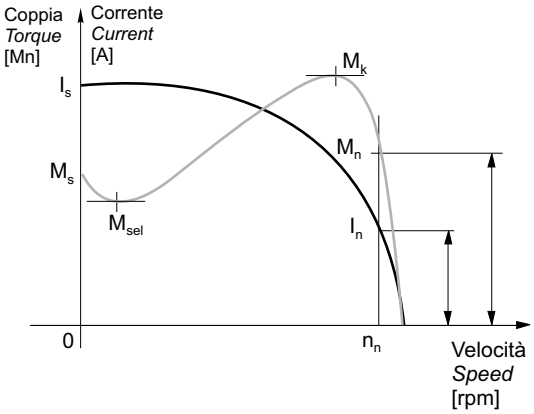


Grafico generale coppia-corrente-velocità

Torque-current-speed general diagram



Il grafico evidenzia la caratteristica coppia/corrente – giri per un generico motore asincrono. Si noti che talvolta Msel e MS coincidono.

Torque/Current vs speed diagram of an asynchronous motor. Note: sometimes Msel and Ms are the same.

Simbologia e formule

Symbols and formulas

P_n	[kW]	Potenza nominale	*Rated power*
I_n	[A]	Corrente nominale (a 400V)	*Rated current (at 400V)*
M_n	[Nm]	Coppia nominale	*Rated torque*
n_n	[rpm]	Velocità nominale	*Rated speed*
LR	[dB]	Livello di rumorosità	*Noise Level*
M_s / M_n		Rapporto coppia spunto / coppia nominale	*Ratio start torque / rated torque*
M_k / M_n		Rapporto coppia massima / coppia nominale	*Ratio max torque / rated torque*
M_{sel} / M_n		Rapporto coppia di sella (minima) / coppia nominale	*Ratio saddle torque / rated torque*
I_s / I_n		Rapporto corrente di spunto / corrente nominale	*Ratio start current / rated current*
cosφ		Fattore di potenza al carico nominale	*Power factor at rated torque load*
η		Rendimento al carico nominale	*Efficiency at rated torque load*
Potenza *Power*	[HP]	Potenza [kW] x 1.34 circa	*Power [kW] x 1.34 (about)*
Potenza resa P_n *P_n output power*	[kW]	Potenza assorbita x η	*Absorbed power x η*
Pot. assorbita *Absorbed power*	[kW]	$\frac{V \times I \times PF}{1000}$ (monofase) $\frac{V \times I \times \sqrt{3} \times PF}{1000}$ (trifase)	$\frac{V \times I \times PF}{1000}$ *(singlephase)* $\frac{V \times I \times \sqrt{3} \times PF}{1000}$ *(threephase)*
I_n (230 V)		In (400 V) x √3	*In (400 V) x √3*

Dati tecnici — *Technical data*

Motori trifase serie TS / *TS Series three phase motors* (230-400 V - 50 Hz - 1500 min^{-1}) S1 — **poli / *poles* 4**

TS	P_n [kW]	M_n [Nm]	n_n [min^{-1}]	I_n (400V) [A]	η %	cosφ	M_s/M_n	I_s/I_n	M_k/M_n	M_{sel}/M_n	LR [dB]	Massa *Mass* [Kg]
562-4	0.09	0.63	1360	0.45	52	0.59	2.3	4	2.4	2	50	3.2
632-4	0.18	1.31	1310	0.70	57	0.65	2.2	4	2.4	2	52	4.2
633-4	0.25	1.78	1340	0.91	60	0.66	2.2	4	2.2	2	54	5.0
711-4	0.25	1.77	1350	0.84	60	0.72	2.2	6	2.4	1.7	55	5.0
712-4	0.37	2.58	1370	1.11	65	0.74	2.2	6	2.4	1.7	55	5.8
713-4	0.55	3.80	1380	1.60	66	0.75	2.2	6	2.4	1.7	57	6.5

Motori trifase serie TS / *TS Series three phase motors* (230-400 V - 50 Hz - 1500 min^{-1}) S1 IE2 — **poli / *poles* 4**

TS*	P_n [kW]	M_n [Nm]	n_n [min^{-1}]	I_n (400V) [A]	η %	cosφ	M_s/M_n	I_s/I_n	M_k/M_n	LR [dB]	Massa *Mass* [Kg]
802-4 IE2	0.75	5.08	1410	1.79	79.6	0.76	2.8	5.3	3	58	11.2
90S-4 IE2	1.1	7.4	1420	2.50	81.4	0.78	3.8	6.7	2.6	61	13.9
90L1-4 IE2	1.5	10.1	1420	3.31	82.8	0.79	4	7.2	2.7	61	16.0
100L1-4 IE2	2.2	14.6	1440	4.83	84.3	0.78	3.6	7.4	3.6	64	22.7
100L2-4 IE2	3	19.9	1440	6.33	85.5	0.80	3.5	7.8	3.5	64	26.5

* Motori ad efficienza IE2 / IE2 efficiency electric motors

Motori trifase serie TS / *TS Series three phase motors* (230-400 V - 50 Hz - 1500 min^{-1}) S3 IE1 — **poli / *poles* 4**

TS	P_n [kW]	M_n [Nm]	n_n [min^{-1}]	I_n (400V) [A]	η %	cosφ	M_s/M_n	I_s/I_n	M_k/M_n	M_{sel}/M_n	LR [dB]	Massa *Mass* [Kg]
802-4	0.75	5.19	1380	1.93	72	0.78	2.2	6	2.4	1.6	58	9.1
803-4	1.1	7.55	1390	2.67	76.2	0.78	2.2	6	2.4	1.6	60	11.0
90S-4	1.1	7.50	1400	2.64	76.2	0.79	2.2	6	2.4	1.6	61	11.7
90L1-4	1.5	10.2	1400	3.45	78.5	0.8	2.2	6	2.4	1.6	61	14.4

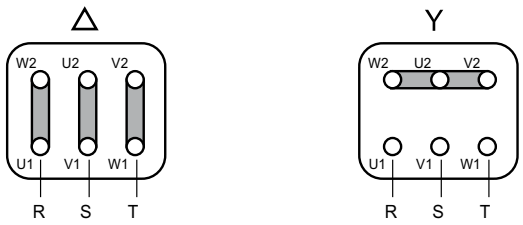
Motore monofase serie MY / MY *Series single phase motors* (230 V - 50 Hz - 1500 min^{-1}) S1 — **poli / *poles* 4**

MY	P_n [kW]	M_n [Nm]	n_n [min^{-1}]	I_n (230V) [A]	η %	cosφ	M_s/M_n	I_s/I_n [A]	M_k/M_n	M_{sel}/M_n	C [μF]	Massa *Mass* [Kg]
5624	0.09	0.64	1340	0.87	55	0.9	0.65	2.0	1.6	0.60	6	3.4
6324	0.18	1.26	1360	1.54	60	0.9	0.55	2.7	1.7	0.50	8	3.4
7124	0.37	2.58	1370	3	68	0.92	0.50	3.2	1.6	0.45	16	7.0
8024	0.75	5.20	1380	5.5	73	0.92	0.55	3.2	1.6	0.50	30	11.5

Legenda: vedere pagina 3
Key: read page 3

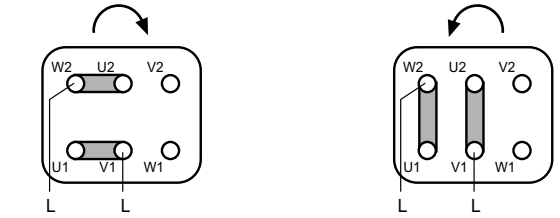
Connessioni e collegamenti — *Connection diagram*

TS - 230 V - 50 Hz (275 V 60Hz) / **400 V - 50 Hz** (480 V 60Hz)



Nota: per invertire il senso di rotazione spostare tra loro 2 cavi
Note: swap the 2 leads to reverse rotation

MY - 230 V - 50 Hz



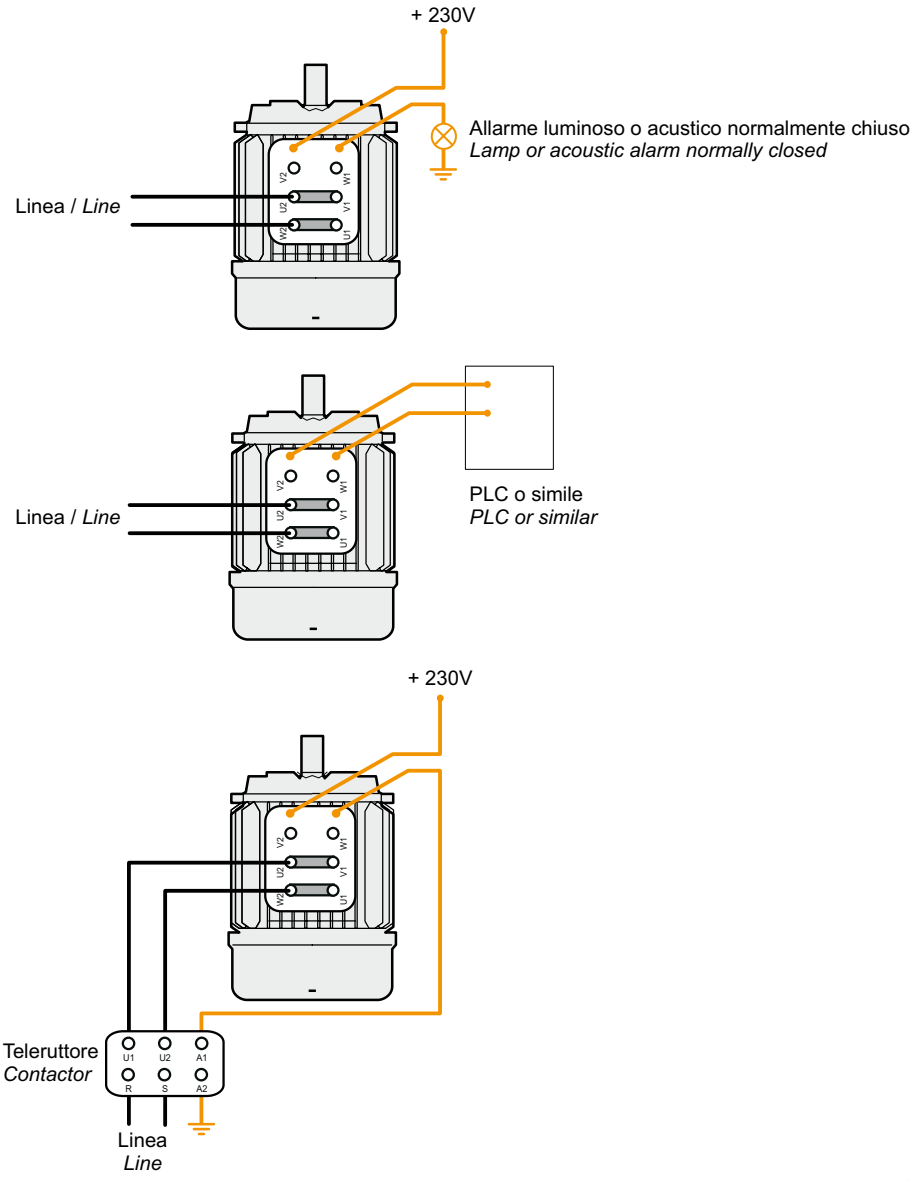
Senso di rotazione orario
(vs ventola)
Clockwise rotation (vs fan)

Senso di rotazione antiorario
(vs ventola)
Counterclockwise rotation (vs fan)

Protezione termica bimetallica (PTO) - solo MY — *Thermal bimetallic protector (PTO) - only MY*

La serie MY è dotata di pastiglia termica bimetallica (PTO) per il monitoraggio del superamento della soglia termica (135°C ± 5°C). Utile per uso tale da raggiungere temperature elevate. Sotto alcuni esempi dell'utilizzo.
La pastiglia termica in dotazione standard è un contatto normalmente chiuso: si apre al superamento della temperatura di soglia.
Attenzione: si tratta solo di esempi, affidarsi a personale esperto.

MY range is provided with a standard bimetallic thermal protector (PTO) which monitors over-temperature (135°C ± 5°C). This is useful for motor applications that reach high temperatures. See below for some examples.
The built-in thermal protector is a normally closed contact. It opens only when the temperature exceeds the threshold.
Please consult qualified personnel, below are only some examples.



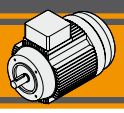
Dati tecnici: dimensioni motori — *Technical data : motor dimensions*

Dimensioni motori trifase serie TS — B5 — *TS Series three phase motor dimensions*

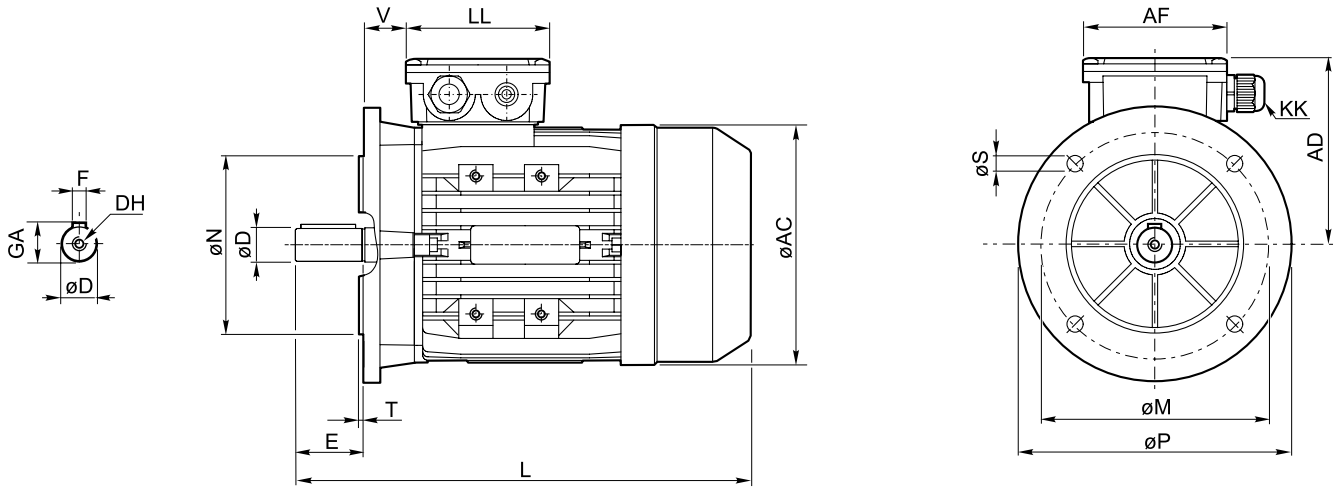
TS	Albero / *Shaft*					B5											
	D	E	DH	GA	F	P	M	N	S	T	AC	AD	AF	KK	L	LL	V
56	9	20	M3	10.2	3	120	100	80	7	3	117	100	88	1-M16x1.5	196	88	14
63	11	23	M4	12.5	4	140	115	95	10	3	130	108	94	1-M16x1.5	220	94	14
71 1/2 (3)	14	30	M5	16	5	160	130	110	10	3.5	147	115	94	1-M20x1.5	241 (255)	94	20
80	19	40	M6	21.5	6	200	165	130	12	3.5	163	133	105	1-M20x1.5	290	105	27
90S	24	50	M8	27	8	200	165	130	12	3.5	183	139	105	1-M20x1.5	312	105	30
90L1	24	50	M8	27	8	200	165	130	12	3.5	183	139	105	1-M20x1.5	337	105	30
100L 1/2	28	60	M10	31	8	250	215	180	15	4	205	152	105	2-M20x1.5	369	105	26

Dimensioni motori trifase serie TS — B14 — *TS Series three phase motor dimensions*

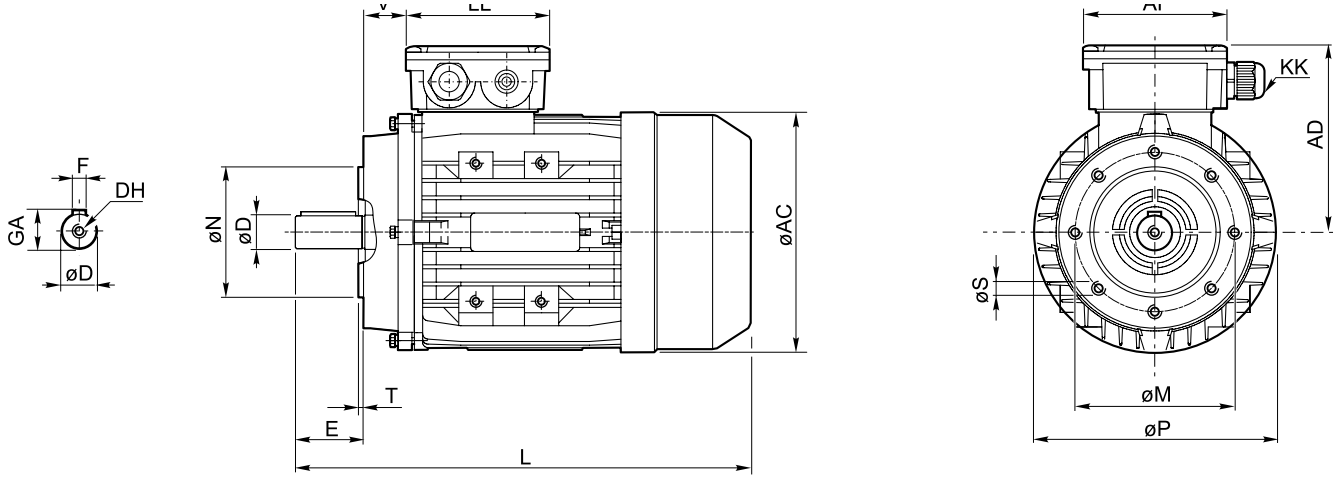
TS	Albero / *Shaft*					B14											
	D	E	DH	GA	F	P	M	N	S	T	AC	AD	AF	KK	L	LL	V
56	9	20	M3	10.2	3	80	65	50	M5	2.5	117	100	88	1-M16x1.5	196	88	14
63	11	23	M4	12.5	4	90	75	60	M5	2.5	130	108	94	1-M16x1.5	220	94	14
71 1/2 (3)	14	30	M5	16	5	105	85	70	M6	2.5	147	115	94	1-M20x1.5	241 (255)	94	20
80	19	40	M6	21.5	6	120	100	80	M6	3	163	133	105	1-M20x1.5	290	105	27
90S	24	50	M8	27	8	140	115	95	M8	3	183	139	105	1-M20x1.5	312	105	30
90L1	24	50	M8	27	8	140	115	95	M8	3	183	139	105	1-M20x1.5	337	105	30
100L 1/2	28	60	M10	31	8	160	130	110	M8	3.5	205	152	105	2-M20x1.5	369	105	26



Dimensioni motori trifase serie TS B5 *TS Series three phase motor dimensions*



Dimensioni motori trifase serie TS B14 *TS Series three phase motor dimensions*



Dati tecnici: dimensioni motori — *Technical data: motor dimensions*

Dimensioni motori monofase serie MY — B5 — *MY Series single phase motor dimensions*

MY	AC	AD	AF	AF1	D j6	DH	E	F
56	110	90	124	84	9	M4x12	20	3
63	121	90	124	84	11	M4x12	23	4
71	138	110	128	84	14	M5x12	30	5
80	159	152	128	60	19	M6x16	40	6

MY	KK	L	M	N j6	P	S	T	GA
56	2-M18x1.5	192	100	80	120	7	3	10.2
63	2-M18x1.5	214	115	95	140	9	3	12.5
71	2-M18x1.5	250	130	110	160	9	3.5	16
80	2-M20x1.5	284	165	130	200	12	3.5	21.5

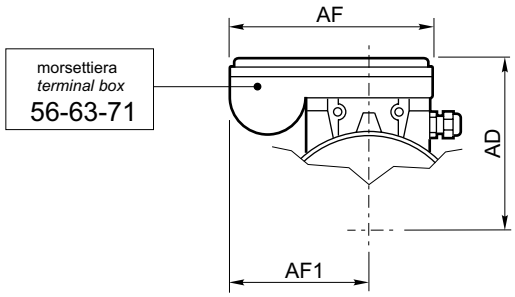
Dimensioni motori monofase serie MY — B14 — *MY Series single phase motor dimensions*

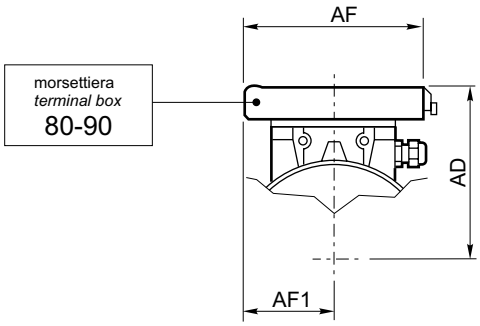
MY	AC	AD	AF	AF1	D j6	DH	E	F
56	110	90	124	84	9	M4x12	20	3
63	121	90	124	84	11	M4x12	23	4
71	138	110	128	84	14	M5x12	30	5
80	159	152	128	60	19	M6x16	40	6

	KK	L	M	N j6	P	S	T	GA
56	2-M18x1.5	192	65	50	80	M5	3	10.2
63	2-M18x1.5	214	75	60	90	M5	3	12.5
71	2-M18x1.5	250	85	70	105	M6	3.5	16
80	2-M20x1.5	284	100	80	120	M6	3.5	21.5

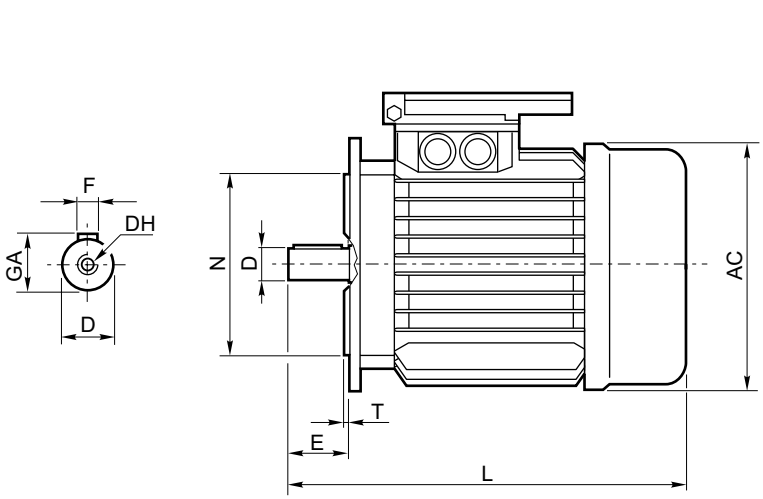
Dati tecnici: dimensioni motori — *Technical data: motor dimensions*

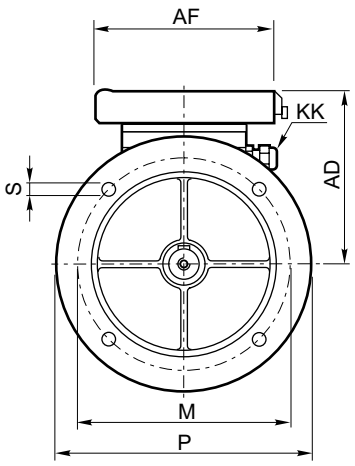
Dimensioni motori monofase serie MY — *MY Series single phase motor dimensions*



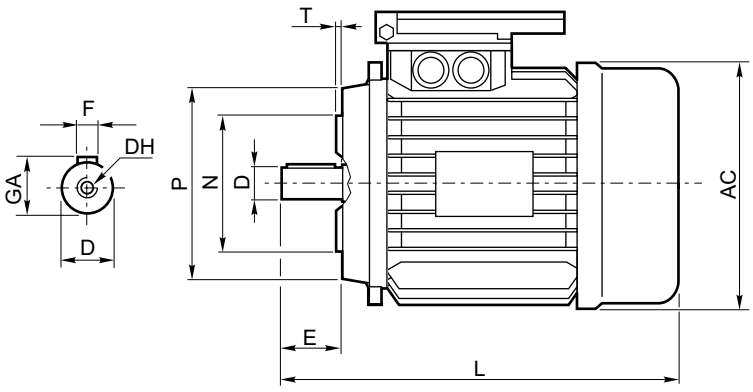


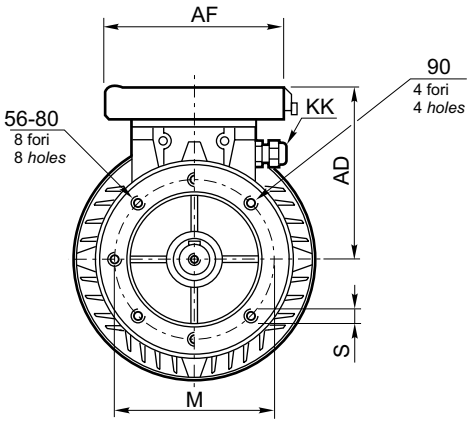
Dimensioni motori monofase serie MY B5 — *MY Series single phase motor dimensions*





Dimensioni motori monofase serie MY B14 — *MY Series single phase motor dimensions*





Informazioni generali — General information

Caratteristiche generali — *General characteristics*

- Ventilazione: ventola a pale radiali in materiale plastico.
- Copriventola: in lamiera stampata consente ottima canalizzazione del flusso e protezione alla ventola.
- Rotore: del tipo a gabbia di scoiattolo, equilibrato dinamicamente.
- Carcassa: lega di alluminio di elevata resistenza.
- Avvolgimento: isolamento termico di classe F.
- Protezione: IP55
- Temperatura ambiente: -20 °C ÷ +40 °C, senza condensa
- Massima altitudine: 1000 m sul livello del mare

- *Cooling: fan with plastic blades..*
- *Fan cover: sheet metal, for optimum circulation and also provides fan protection.*
- *Rotor: squirrel cage type. Dynamically balanced.*
- *Housing: highly resistant aluminium alloy*
- *Windings: class F thermal insulation*
- *IP55 protection degree*
- *Ambient temperature: -20 °C ÷ +40 °C, without condensing*
- *Maximum altitude: 1000 m above sea level*

Dati cuscinetto, paraoli, pressacavi — *Ball bearing, oil seal, cable glands data*

TS	Cuscinetto anteriore *Front bearings*	Cuscinetto posteriore *Rear bearings*	Paraoli *Oilseals* ø	Pressacavi *Cable glands*
56	6201 2RZ	6201 2RZ	12x22x5	1-M16x1.5
63	6201 2RZ	6201 2RZ	12x24x5	1-M16x1.5
71	6202 2RZ	6202 2RZ	15x25x7	1-M20x1.5
80	6204 2RZ	6204 2RZ	20x34x7	1-M20x1.5
90	6205 2RZ	6205 2RZ	25x37x7	1-M20x1.5
100	6206 2RZ	6206 2RZ	30x44x7	2-M20x1.5

MY	Cuscinetto anteriore *Front bearings*	Cuscinetto posteriore *Rear bearings*	Paraoli *Oilseals* ø	Pressacavi *Cable glands*
56	6201ZZ-C3	6201ZZ-C3	12x22x5	2-M18x1.5
63	6201ZZ-C3	6201ZZ-C3	12x22x7	2-M18x1.5
71	6202ZZ-C3	6202ZZ-C3	15x25x7	2-M18x1.5
80	6204ZZ-C3	6204ZZ-C3	20x30x7	2-M20x1.5

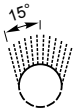
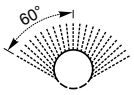
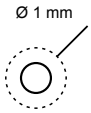
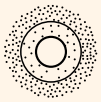
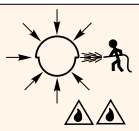
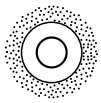
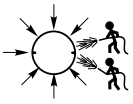
Grado di protezione IP

IP protection rating

Indica il grado di isolamento meccanico del corpo motore.
1ª cifra protezione alla penetrazione di corpi solidi.

2ª cifra protezione contro la penetrazione d'acqua.

IP protection rating indicates the degree of mechanical insulation of the motor casing.
The 1st figure indicates the level of protection against the intrusion of solid matter.
The 2nd figure indicates to which degree the motor is waterproof.

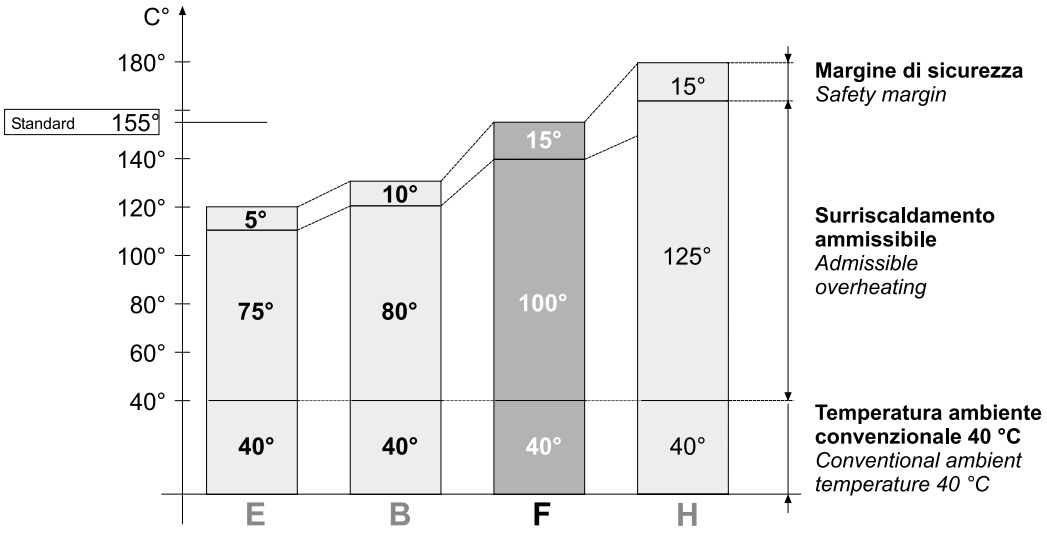
IP		Definizione / *Description*	IP		Definizione / *Description*
0		Non protetto / *No protection*	0		Non protetto / *No protection*
1		Protetto da corpi solidi superiori a Ø 50 mm. *Protected against solid matter (over Ø 50 mm).*	1		Protetto contro la caduta verticale di gocce d'acqua. *Protected against drops of water falling vertically.*
2		Protetto da corpi solidi superiori a Ø 12 mm. *Protected against solid matter (over Ø 12 mm).*	2		Protetto contro la caduta verticale di gocce d'acqua con inclinazione max di 15°. *Protected against drops of water falling up to 15°.*
3		Protetto da corpi solidi superiori a Ø 2.5 mm. *Protected against solid matter (over Ø 2.5 mm).*	3		Protetto contro la pioggia. *Rain proof.*
4		Protetto da corpi solidi superiori a Ø1 mm. *Protected against solid matter (over Ø1 mm).*	4		Protetto contro gli spruzzi. *Splash proof.*
5		Protetto contro la polvere. *Dust protected.*	5		Protetto contro getti d'acqua. *Water jet proof.*
6		Totalmente protetto contro la polvere. *Fully dust tight.*	6		Protetto dalle ondate. *Waveproof.*
7		N.A.	7		Protetto contro immersione. *Immersion up to 1 metre.*
8		N.A.	8		Protetto contro immersione/sommersione prolungata. *Immersion beyond 1 metre.*

Classe di isolamento termico — *Insulation class*

La classe termica indica il grado di resistenza alla temperatura interna, nel punto più caldo (avvolgimenti). Maggiore il carico e migliore deve essere il livello di protezione.
Attiene alle resine e in generale a tutti i materiali interni di isolamento.

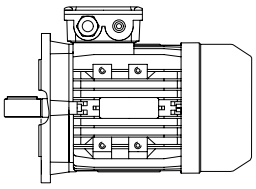
Thermal insulation class indicates the level of thermal protection measured at the hottest point inside the motor (windings). The bigger the load,the more thermal insulation is required. This is related to resin and all the internal insulation materials.

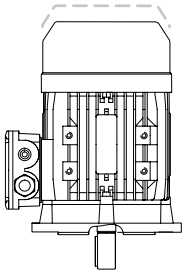
Classe ***Class***	Massima temperatura interna Max. *windings temp.*
E	120°C
B	130°C
F	155°C
H	180°C

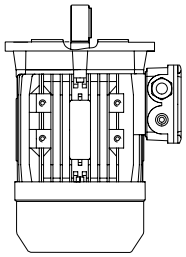


Forme costruttive e posizioni — *Mounting type and position*

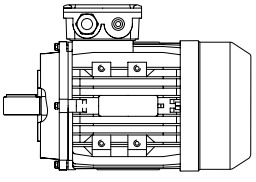
B5

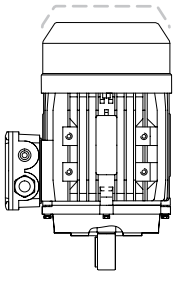

IM 3001 (B5)

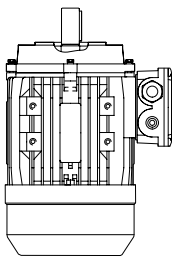

IM 3011 (V1)


IM 3031 (V3)

B14


IM 3601 (B14)


IM 3611 (V18)


IM 3631 (V19)

Serie TS - Funzionamento in ambiente 60 Hz

Series TS - 60 Hz line power supply

In via teorica il motore 400 V 50 Hz può essere alimentato a 60 Hz con le seguenti conseguenze:

- La velocità aumenta del 20 % perché dipendente direttamente dalla frequenza.
- La coppia modifica in funzione della tensione (infatti il rapporto tensione/frequenza è proporzionale al flusso magnetico ammesso).
  A 400 V la coppia cala di circa il 20% mentre la potenza rimane invariata.
  A 480 V la coppia rimane invariata e la potenza aumenta del 20% circa.
  Valori intermedi di tensione producono effetti intermedi.

Theoretically a 400 V 50 Hz motor can run under 60 Hz however with the following consequences:

- *20% speed increase as it depends on the frequency.*
- *Varied torque as it depends on the voltage (ratio Volt/Hertz is proportional to the available magnetic flux).*

  With 400 Vac, torque decreases about 20% but the power remains the same.

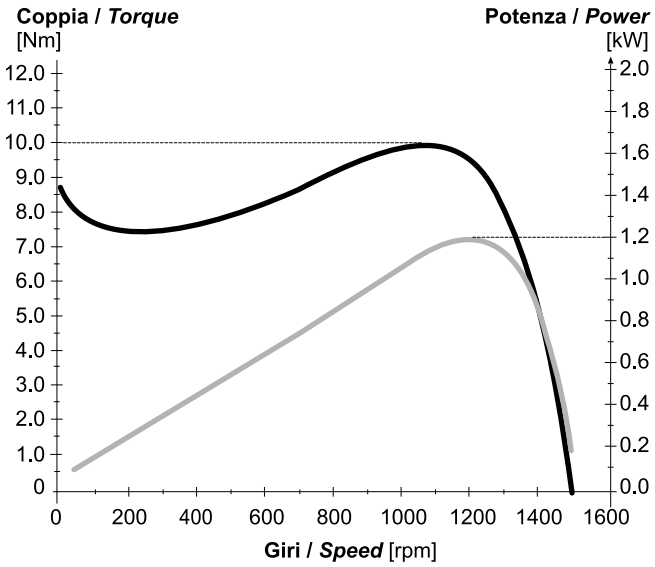
  With 480 Vac, torque remains the same and the power increases 20%.
  Mean voltage gives mean results.

	50 Hz	60 Hz
400 V	standard	Velocità / *speed* ≈ + 20% Coppia / *torque* ≈ -20% Potenza / *power* ≈ invariata / *the same*
480 V	Velocità / *speed* ≈ invariata / *the same* Coppia / *torque* - potenza / *power* ≈ +20% **Attenzione, perdite e surriscaldamento** ***Take care of losses and overheating***	Velocità / *speed* ≈ + 20% Coppia / *torque* ≈ invariata / *the same* Potenza / *power* ≈ + 20%

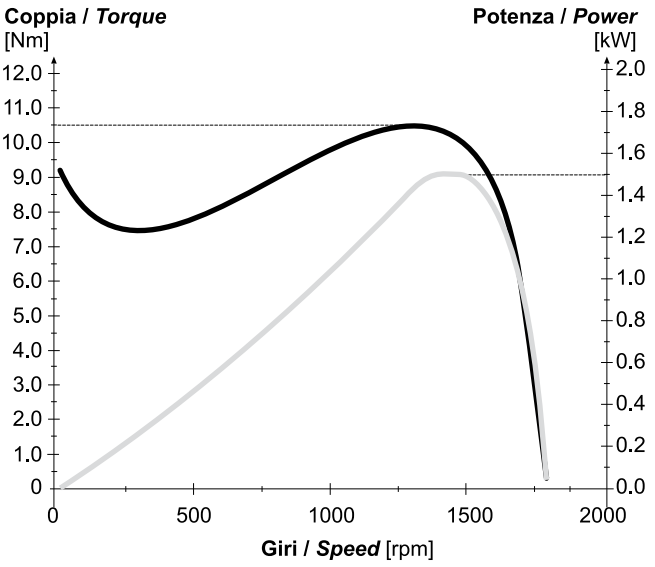
In realtà fenomeni quali la saturazione del flusso magnetico nel ferro, perdite per rotolamento, non linearità, ecc, modificano l'efficienza complessiva e si possono ottenere scostamenti del dato teorico che quindi è da intendersi come indicazione. Per valori precisi, si prega di contattare Transtecno s.r.l.

In practice, the magnetic flux of iron saturation, rotational losses, non linearity etc. can change the efficiency, altering the theoretical data therefore this data should only be considered as an indication. Please contact Transtecno for further information.

Grafico motore TS 8024 (S3) nelle 2 configurazioni 400 V 50 Hz / 480 V 60 Hz



Motor TS 8024 (S3) performance diagram, both configurations 400 V 50 Hz / 480 V 60 Hz



Tipi di servizio IEC — *IEC duty cycles*

Il servizio di un motore indica il tipo di utilizzo e la gravosità del ciclo di lavoro. Lo stesso motore può funzionare in tutti i servizi, purché si moduli la potenza nominale al fine di consentire il corretto equilibrio termico.
Lo stesso motore è dichiarato per potenze diverse se è diverso il servizio.

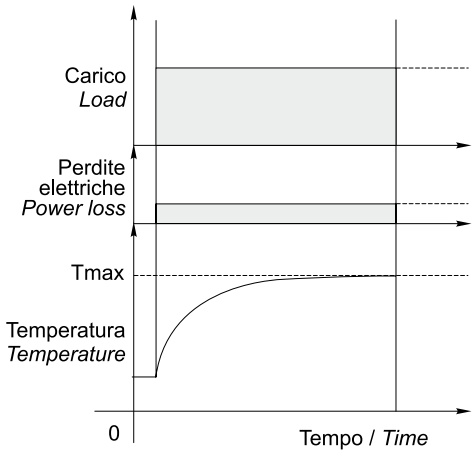
The duty cycle of a motor indicates its use and running cycle. The same motor can work under all these conditions by adjusting the rated power in order to maintain the correct temperature balance.
The same motor can be declared as having a different power if it has a different duty cycle.

S1	**Servizio continuo.** Funzionamento a carico costante per una durata sufficiente al raggiungimento dell'equilibrio termico.	***Continuous duty.*** *The motor works at a constant load for enough time to reach temperature equilibrium*
S2	**Servizio di durata limitata.** Funzionamento a carico costante per una durata inferiore a quella necessaria al raggiungimento dell'equilibrio termico, seguito da un periodo di riposo tale da riportare il motore alla temperatura ambiente.	***Short time duty****. The motor works at a constant load, but not long enough to reach temperature equilibrium, and the rest periods are long enough for the motor to reach ambient temperature.*
S3	**Servizio periodico intermittente.** Sequenze di cicli identici di marcia e di riposo a carico costante, senza raggiungimento dell'equilibrio termico. La corrente di spunto ha effetti trascurabili sul surriscaldamento del motore.	***Intermittent periodic duty.*** *Sequential, identical run and rest cycles with constant load. Temperature equilibrium is never reached. Starting current has little effect on temperature rise.*
S4	**Servizio periodico intermittente con avviamento.** Sequenza di cicli di funzionamento identici di avviamento, marcia e riposo a carico costante, senza raggiungimento dell'equilibrio termico. La corrente di spunto ha effetti sul riscaldamento del motore.	***Intermittent periodic duty with starting.*** *Sequential identical start, run and rest cycles with constant load. Temperature equilibrium is not reached, but starting current affects temperature rise.*
S5	**Servizio periodico intermittente con frenatura elettrica.** Sequenza di cicli di funzionamento identici di avviamento, marcia a carico costante, frenatura elettrica e riposo, senza raggiungimento dell'equilibrio termico.	***Intermittent periodic duty with electric braking.*** *Sequential, identical cycles of starting, running at constant load, electric braking and rest. Temperature equilibrium is not reached.*
S6	**Servizio periodico ininterrotto con carico intermittente.** Sequenza di cicli di lavoro identici con carico costante e senza carico. Non ci sono periodi di riposo.	***Continuous operation with intermittent load.*** *Sequential, identical cycles of running with constant load and running with no load. No rest periods.*
S7	**Servizio periodico ininterrotto con frenatura elettrica.** Sequenza di cicli di funzionamento identici di avviamento, marcia a carico costante e frenatura elettrica, senza periodi di riposo.	***Continuous operation with electric braking.*** *Sequential, identical cycles of starting, running at constant load and electric braking. No rest periods.*
S8	**Servizio periodico ininterrotto con variazioni di carico e di velocità.** Sequenza di cicli identici di avviamento, marcia a carico costante e velocità definita, seguiti da marcia a carico costante differente e velocità differente dalla precedente. Non ci sono periodi di riposo.	***Continuous operation with periodic changes in load and speed.*** *Sequential, identical, duty cycles of start, run at constant load and given speed, then run at other constant loads and speeds. No rest periods.*
S9	**Servizio con variazioni di carico e velocità non periodiche**	***Load and speed non periodic variations***

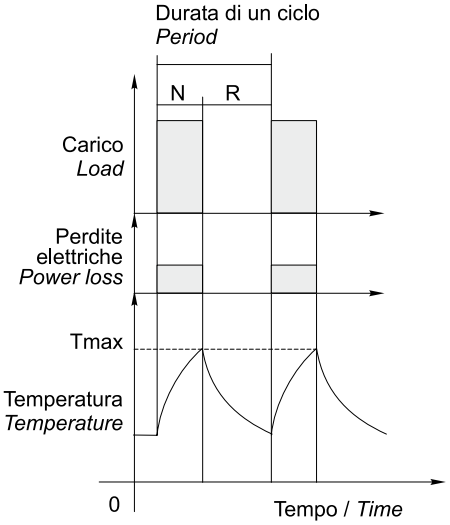
Grafico servizi più comuni — *Most common services diagram*

N = funzionamento / *run*
R = riposo / *rest*

S1



S2/S3



NOTA: Lo stesso motore può essere usato per cicli e servizi diversi, con l'unica limitazione che la temperatura interna non superi mai la Tmax stabilita dalla classe di isolamento termico del motore.

NOTE: The same motor can run under all duty services, limitation is due to internal temperature that must not override Tmax stated by motor thermal class.

Linee guida di montaggio

Assembly guidelines

Avvertenze per il corretto e sicuro uso dei motori
Si consiglia di affidare l'installazione, uso e manutenzione del motore elettrico a personale esperto e qualificato.

I consigli di seguito riportati non annullano la necessità al buon senso e alla prudenza in ogni applicazione e comunque non sostituiscono le imposizioni delle normative vigenti nei campi di applicazione.

Warnings for the correct and safe use of AC motors
Installation and maintenance should be carried out by qualified personnel.

The following suggestions do not replace standard rules and regulations in specific fields or applications.

Alla ricezione
verificare eventuali danni all'albero, copri ventola e carcassa prima della installazione. Controllare i valori di targa del motore. Non utilizzare se i dati non sono conformi alle esigenze (tensione, frequenze, coppia, grado di protezione IP, velocità, servizio termico).
Se necessario immagazzinare, tenere il motore in ambiente asciutto e pulito.

On receipt of goods
Before installation, check that the fan cover, frame and shaft have not been damaged in transit.
Check the data on the nameplate and do not use the motor if it is not suitable for the application (voltage, frequency, torque, IP protection, speed, temperature, service).
Store the electric motor in a dry and clean room.

Avviamento
Fissare in maniera sicura ed adeguata il motore.
La parti meccaniche esposte e soprattutto gli organi rotanti vanno adeguatamente protette dal contatto con persone, animali e cose.
Collegare il contatto di terra del motore alla linea di terra o al sistema di protezione.

Non alimentare il motore con la chiavetta non fissata: potrebbe sfuggire e colpire persone ed oggetti.
Segnalare adeguatamente il senso di rotazione laddove possa arrecare danni.

E' consigliata protezione adeguata sulla sovracorrente, ad esempio tramite un relé termico che comandi un sezionatore di potenza
I fusibili e i dispositivi di protezione devono essere tarati per un valore inferiore alla corrente di rotore bloccato.

La serie MY è fornita con PTO standard per la protezione termica, utile per fornire allarme o, tramite opportuno collegamento, interrompere l'erogazione di corrente.
Si dovranno inserire tutte le protezioni richieste dall'applicazione (ad esempio, sovra velocità dovuta a trascinamento del carico, bassa tensione, ecc).
Dimensionare la sezione dei cavi in funzione dello loro lunghezza e della corrente secondo le normative vigenti.
Non tentare il riavvio automatico del motore dopo interruzione di una protezione, possibili condizioni di pericolo. Affidarsi a personale esperto.

Il motore si scalda durante il funzionamento: non toccare e attendere il tempo necessario al raffreddamento dopo averlo spento.
Mantenere pulita la superficie alettata del motore per favorire lo scambio termico e in efficienza la ventola. Non rimuovere il copri ventola.
Prima di operare alcun intervento sul motore, togliere alimentazione (possibilmente sezionare fisicamente dalla rete elettrica) attendere l'arresto delle parti in movimento e verificare che non possano essere trascinate da altre parti della macchina collegate.

Running
Fit the electric motor securely in its working position.
The exposed mechanical and transmission parts must be protected from contact with people, animals and properties.
Connect the earth wire to the outside protection system.

Never start the motor without the key being fixed beforehand as it could be thrown out by the centrifugal force and could damage anything in its immediate surroundings.
Indicate clearly the rotational direction of the motor.

Overcurrent protection is advised, for example a thermal relay that automatically drives a knife switch.
Fuses and current protection devices must be set under the current value.

MY motors are available with a standard PTO which will signal a problem in the connection or will switch off the current.

All protections necessary for the application must be applied, for example : overspeed due to load drag, low voltage, etc.

Select the correct cable according to regulations concerning the length and current.

Do not attempt to reset automatically the motor after tripping as it can be dangerous! Please consult qualified personnel to reset it manually.
Do not touch the motor surface, it could be hot.
Allow the external housing to cool down when the motor has stopped.

Keep the surface of the motor clean. Do not remove the fan cover.

Before doing any work on the motor or in the surrounding area, make sure it has been disconnected from the power source. Wait for the motor to stop.

Manutenzione
Prima di operare alcun intervento sul motore, togliere alimentazione (possibilmente sezionare fisicamente la rete di alimentazione) attendere l'arresto delle parti in movimento e verificare che non possano essere trascinate da altre parti della macchina collegate.
Controllare usura meccanica albero, stato dei cavi di alimentazione, stato ventola e quant'altro l'uso suggerisca.

Maintenance
Before doing any work on the motor or in the surrounding area, make sure it has been disconnected from the power source. Wait for the motor to stop. Ensure that it is not connected to the machine.
Check if the shaft is worn and check the condition of the power lead and any other necessary parts.

Motori ad efficienza superiore

High efficiency motors

ENERGY SAVING

La convenzione di Kyoto ha posto l'attenzione di tutti sulla drammatica situazione ecologica del riscaldamento globale causato dall'emissione di grandi quantità di gas serra.

Unitamente alla congiuntura economica e alla maggior difficoltà di reperire fonti di approvvigionamento energetico, la commissione europea ha imposto l'adozione di misure concrete per il risparmio energetico. Dato il considerevole uso di motori elettrici CA nell'industria mondiale, norme più rigide stanno entrando in vigore nella CE. In particolare miranti ad aumentare l'efficienza dei motori, classificati in classi crescenti da IE1, IE2, IE3 e così via. L'efficienza è la misura espressa in percentuale dell'efficacia di un motore di convertire energia elettrica in meccanica, quindi aumentare l'efficienza significa ottenere lo stesso lavoro a minor consumo energetico. Con benefici per tutti, natura compresa.

Dal giugno del 2011 sono stati banditi i motori con la classe più bassa di efficienza (gli IE1) spingendo a ridisegnare gli stessi e a scegliere materiali più adatti.

Più in dettaglio il testo cita:
il REGOLAMENTO (CE) N. 640/2009 DELLA COMMISSIONE EUROPEA del 22 luglio 2009 recante modalità di applicazione della direttiva 2005/32/CE del Parlamento europeo e del Consiglio in merito alle specifiche per la progettazione ecocompatibile dei motori elettrici … si intendono applicati a:
un motore elettrico a induzione a gabbia, mono velocità e trifase, con una frequenza di 50 Hz o 50-60 Hz che abbia: da 2 a 6 poli, una tensione nominale massima di 1000V, una potenza nominale compresa tra 0,75 kW e 375 kW, caratteristiche basate su un funzionamento in continuo; … a partire dal 16 giugno 2011 i motori devono avere come minimo un livello di efficienza IE2.

Negli anni successivi si porranno in obbligo livelli ancora superiori di efficienza.
Disponibili anche motori IE3 e MEPS2 (Australia).
Prego contattare Transtecno per offerte e informazioni tecniche.

The Kyoto Convention has drawn the world's attention to the dramatic ecological problem of Global Warming, caused by emissions of greenhouse gases.

As a result of the current economic situation and the increasing difficulty to find energy resources, the European Commission has adopted concrete measures in order to save energy.
Due to the increasing use of AC motors in industry, stricter laws are being brought in to the EU. They are aimed specifically to increase the efficiency of motors classified as IE1, IE2, IE3 etc.
Efficiency is expressed as a percentage of the effectiveness of a motor to convert electrical energy into mechanical work, therefore increasing the efficiency means getting the same outcome with less power, with benefits for everyone, including nature.

Since June 2011, low efficiency motors (IE1) have been banned, forcing motors to be redesigned with more suitable materials.

For further information:
The COMMISSION REGULATION (EC) No 640/2009 of 22 July 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for electric motor applies to:

Single speed electric motors, three phase 5oHz or 50/60Hz, squirrel cage induction motors, that have 2 to 6 poles, a rated voltage up to 1000V and a rated output between 0,75kW and 375kW which are rated on the basis of continuous duty operation...from 16th June 2011 motors must have a minimum efficiency of IE2.

In the next few years higher efficiency levels will come into force.

IE3 and MEPS2 (Australian) motors are also available.
Please contact Transtecno for further information.

IE2 Motore *Motor*	**2 - 4 - 6 poli / *poles*** **< 1000 V 50, 60, 50/60 Hz** **0.75 kW ≤ Motor ≤ 375 kW S1**

Motori ad efficienza superiore

High efficiency motors

ENERGY SAVING

Esclusioni

Secondo il regolamento n° 640/2009 della Commissione Europea sono esclusi i motori:

- Costruiti per un servizio intermittente (ad esempio S3).
- Autofrenanti.
- Per ambienti esplosivi.
- Immersi in un liquido.
- Integrati completamente in un prodotto.
- Per uso oltre 1000 metri sul livello del mare.
- In ambienti con temperature fuori standard.

(Per conoscenza della lista completa si invita a consultare il citato regolamento europeo).

Exceptions

According to the Directive n°640/2009 of the European Commission, the following motors are an exception to the rule :

- *Motors constructed for an intermittent service (for ex. S3).*
- *Brake motors.*
- *Motors used in explosive environments.*
- *Motors immersed in liquid.*
- *Motors integrated in a product/machine.*
- *Motors used over 1000 metres above sea level.*
- *Motors used in extreme temperatures.*

(Please consult the Directive above for more information)

Calendario di validità delle norme

Per i motori che rientrano nel dominio di applicabilità della norma:

- Dal 16 giugno 2011 tutti i motori elettrici devono avere livello di efficienza IE2 minimo
- Dal 1 gennaio 2015 i motori elettrici compresi tra 7.5 kW e 375 kW devono avere come minimo livello di efficienza IE3 oppure IE2 ma solo se applicati assieme ad un variatore di velocità (convertitore di frequenza).
- Dal 1 gennaio 2017 tutti i motori elettrici compresi tra 0,75 e 375 kW devono avere come minimo livello di efficienza IE3 oppure IE2 ma solo se applicati assieme ad un variatore di velocità (convertitore di frequenza).

Calendar dates of regulations

The following dates apply to all motors under the Directive:

- *From 16th June 2011, all electric motors should have at least IE2 efficiency.*
- *From 1st January 2015, electric motors from 7.5kW to 375kW must have an efficiency of at least IE3 or IE2 if they are used together with a speed variator (frequency convertor).*
- *From 1st January 2017, all electric motors from 0.75kW to 375kW must have a minimum efficiency of IE3 or IE2 if they are used together with a speed variator (frequency convertor).*

Informazioni di prodotto per i motori elettrici IE2

- Costruttore: Transtecno srl, www.transtecno.com
- Anno di fabbricazione: dal 2011 (v. targhetta motore per i dettagli).

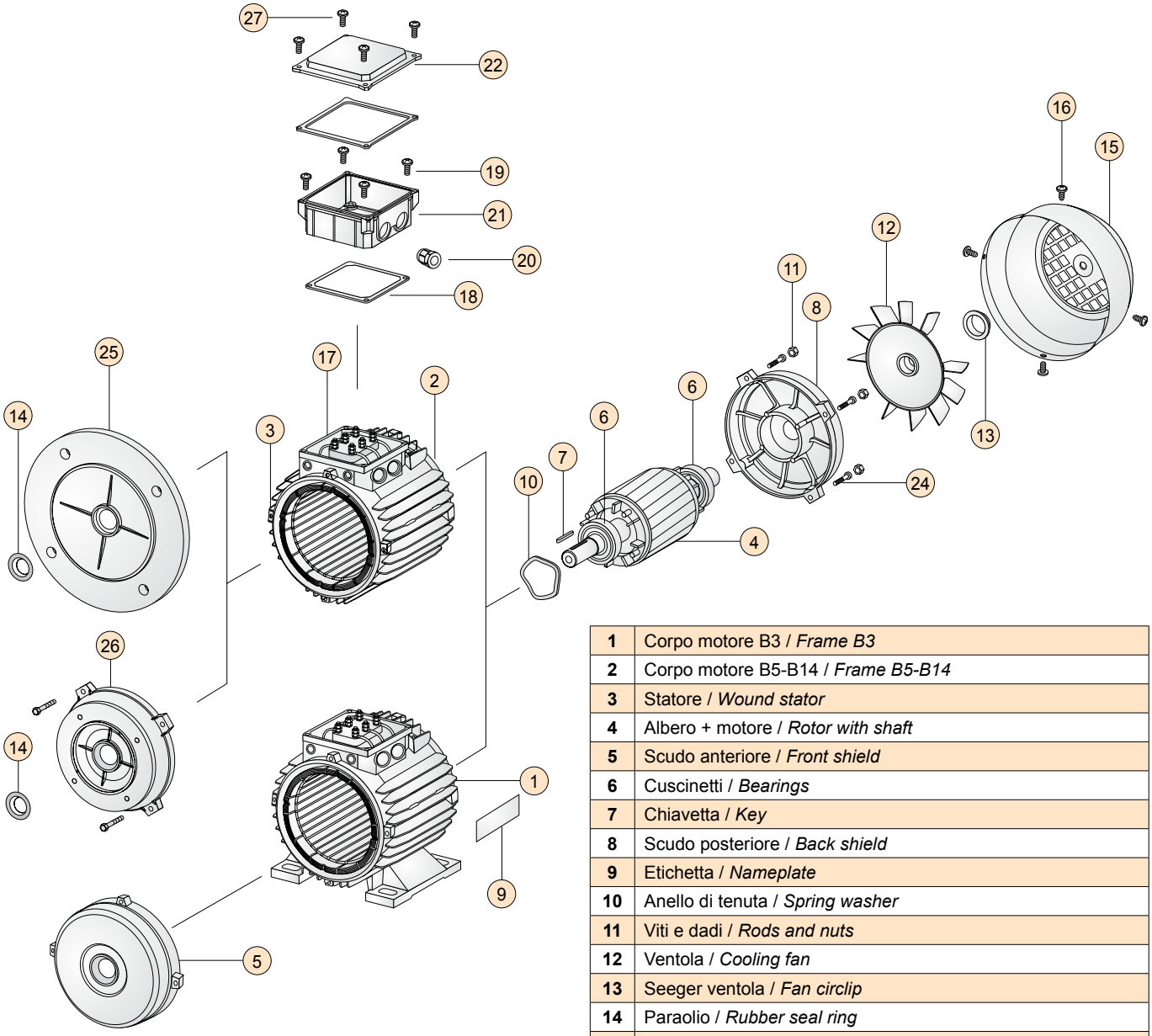
IE2 electric motor information

- Manufacturer: Transtecno srl, www.transtecno.com
- Year of manufacturing: since 2011 (see the motor's nameplate for details)

Modello/ Type	Eff. 100% [%]	Eff. 75% [%]	Eff. 50% [%]	Eff. Livello *Level eff.*	N° Poli *Poles nr.* [#]	Potenza *Power* [kW]	Frequenza *Frequency* [Hz]	Tensione nominale *Rated Voltage* [V]	Velocità nominale *Rated Speed* [rpm]
TS8024	79.6	80.2	78.3	IE2	4	0.75	50	230/400	1410
TS90S4	81.54	82.2	80.2	IE2	4	1.1	50	230/400	1420
TS90L14	82.8	83.4	81.8	IE2	4	1.5	50	230/400	1420
TS100L14	84.3	84.4	82.5	IE2	4	2.2	50	230/400	1440
TS100L24	85.5	86.0	84.3	IE2	4	3.0	50	230/400	1440

Lista dei componenti TS

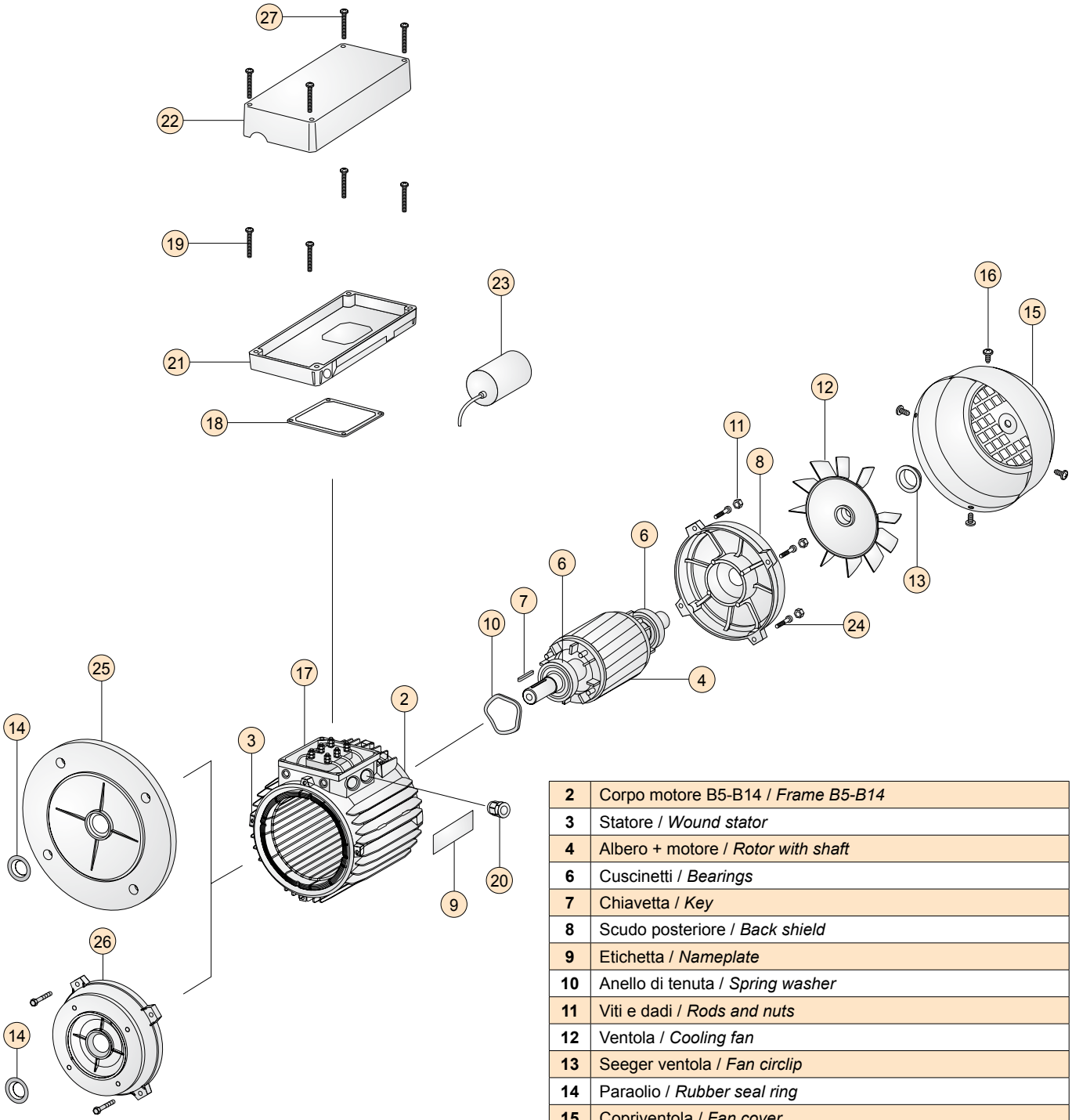
TS spare parts list



1	Corpo motore B3 / *Frame B3*
2	Corpo motore B5-B14 / *Frame B5-B14*
3	Statore / *Wound stator*
4	Albero + motore / *Rotor with shaft*
5	Scudo anteriore / *Front shield*
6	Cuscinetti / *Bearings*
7	Chiavetta / *Key*
8	Scudo posteriore / *Back shield*
9	Etichetta / *Nameplate*
10	Anello di tenuta / *Spring washer*
11	Viti e dadi / *Rods and nuts*
12	Ventola / *Cooling fan*
13	Seeger ventola / *Fan circlip*
14	Paraolio / *Rubber seal ring*
15	Copriventola / *Fan cover*
16	Viti copriventola / *Self-threading screws for fan cover fixing*
17	Porta terminali completo / *Terminal board complete*
18	Guarnizione / *Terminal seal*
19	Viti scatola morsettiera / *Screws for terminal box fixing*
20	Pressacavo / *Cable gland*
21	Scatola morsettiera / *Terminal box* (base)
22	Coperchio scatola morsettiera / *Terminal box* (cover)
24	Viti scudi / *Mounting studs screws*
25	Flangia B5 / *Flange B5*
26	Flangia B14 / *Flange B14*
27	Viti coperchio / *Screws for terminal box fixing*

Lista dei componenti MY

MY spare parts list

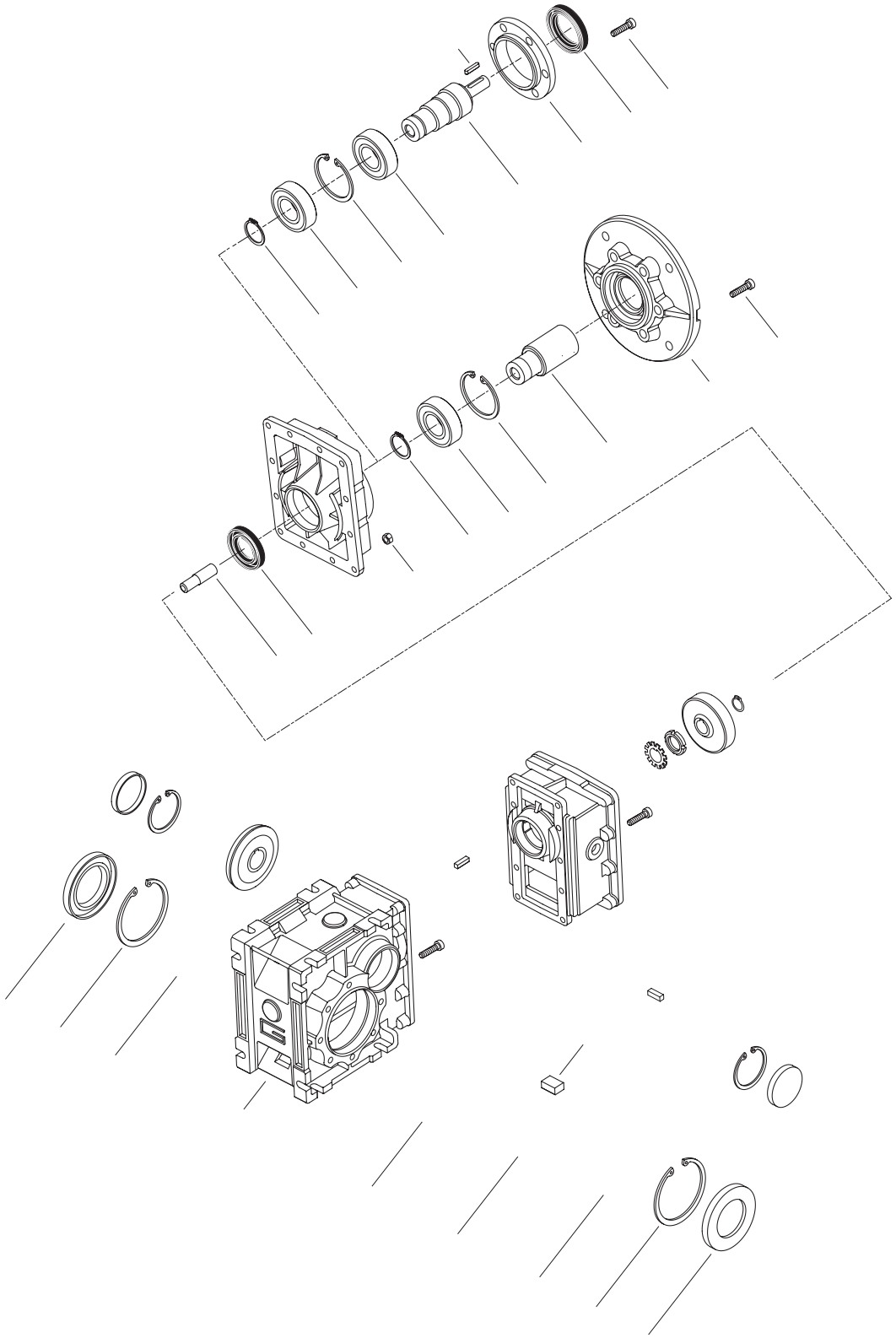


2	Corpo motore B5-B14 / *Frame B5-B14*
3	Statore / *Wound stator*
4	Albero + motore / *Rotor with shaft*
6	Cuscinetti / *Bearings*
7	Chiavetta / *Key*
8	Scudo posteriore / *Back shield*
9	Etichetta / *Nameplate*
10	Anello di tenuta / *Spring washer*
11	Viti e dadi / *Rods and nuts*
12	Ventola / *Cooling fan*
13	Seeger ventola / *Fan circlip*
14	Paraolio / *Rubber seal ring*
15	Copriventola / *Fan cover*
16	Viti copriventola / *Self-threading screws for fan cover fixing*
17	Porta terminali completo / *Terminal board complete*
18	Guarnizione / *Terminal seal*
19	Viti scatola morsettiera / *Screws for terminal box fixing*
20	Pressacavo / *Cable gland*
21	Scatola morsettiera / *Terminal box* (base)
22	Coperchio scatola morsettiera / *Terminal box* (cover)
23	Condensatore / *Run capacitor*
24	Viti scudi / *Mounting studs screws*
25	Flangia B5 / *Flange B5*
26	Flangia B14 / *Flange B14*
27	Viti coperchio / *Screws for terminal box fixing*

Note/*Notes*

Lista parti di ricambio | *Spare parts list*

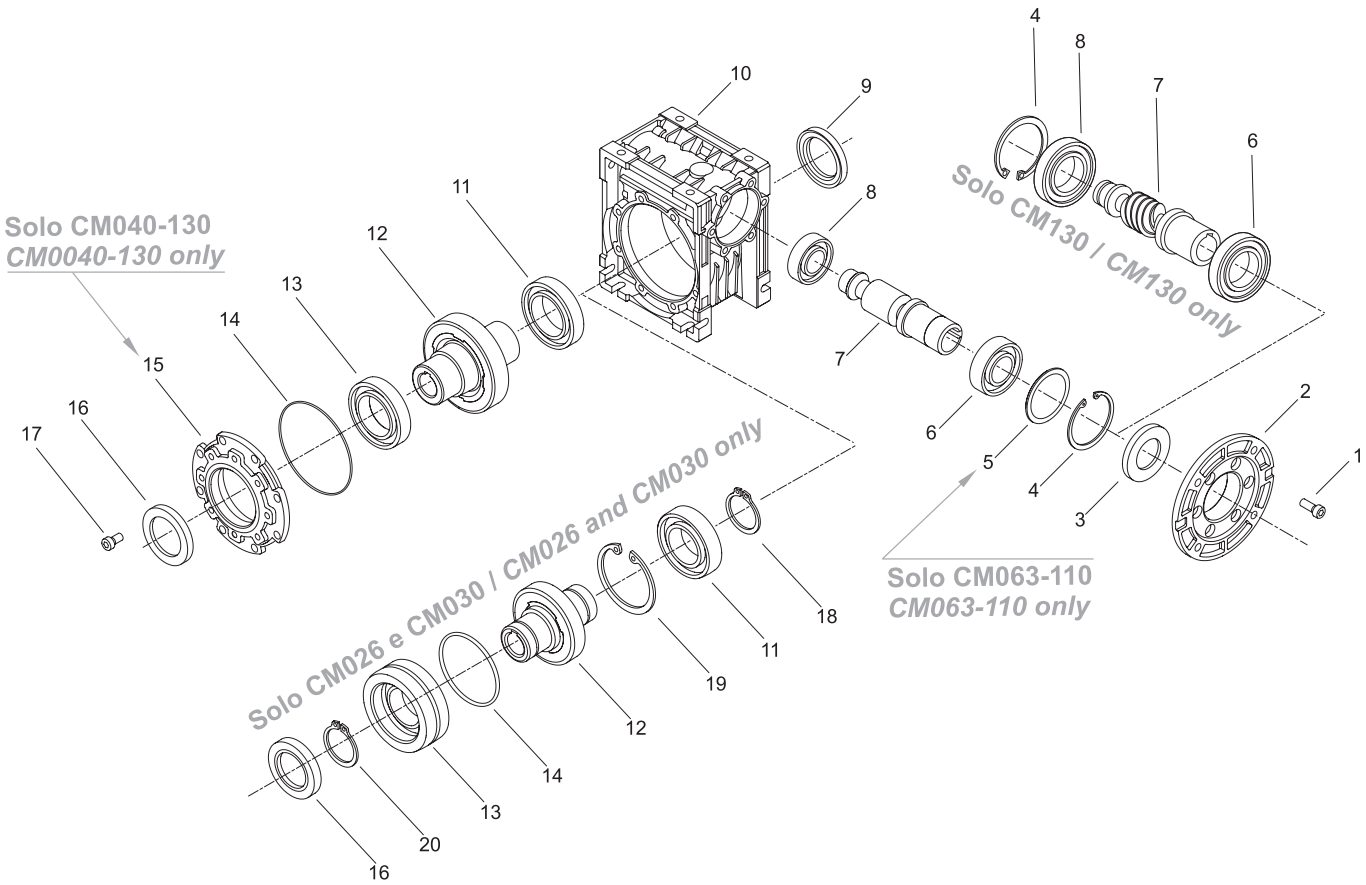
CMB ..3



CMB	Cuscinetti / *Bearings*					Anelli di tenuta / *Oil seals*			RCA
	2	13	23	33	41	8	30	37	11
633	**6009** 75x45x16	**6303 2RS** 47x17x14	**30203** 17x40x13	**6205 2RS** 25x52x15	**6006 2RS** 30x55x13	45/75/8	25/47/7	35/52/7	47/7
903	**6011** 90x55x18	**6304 2RS** 52x20x15	**30204** 47x20x15	**6206 2RS** 30x62x16	**6007 2RS** 62x35x14	55/90/10	30/52/7	40/60/7	52/7
1103	**6013** 100x65x18	**6305 2RS** 62x25x17	**30206** 62x30x27	**6207 2RS** 72x35x17	**6307 2RS** 80x35x21	65/100/10	35/62/7	35/80/8	62/7

Lista parti di ricambio ***Spare parts list***

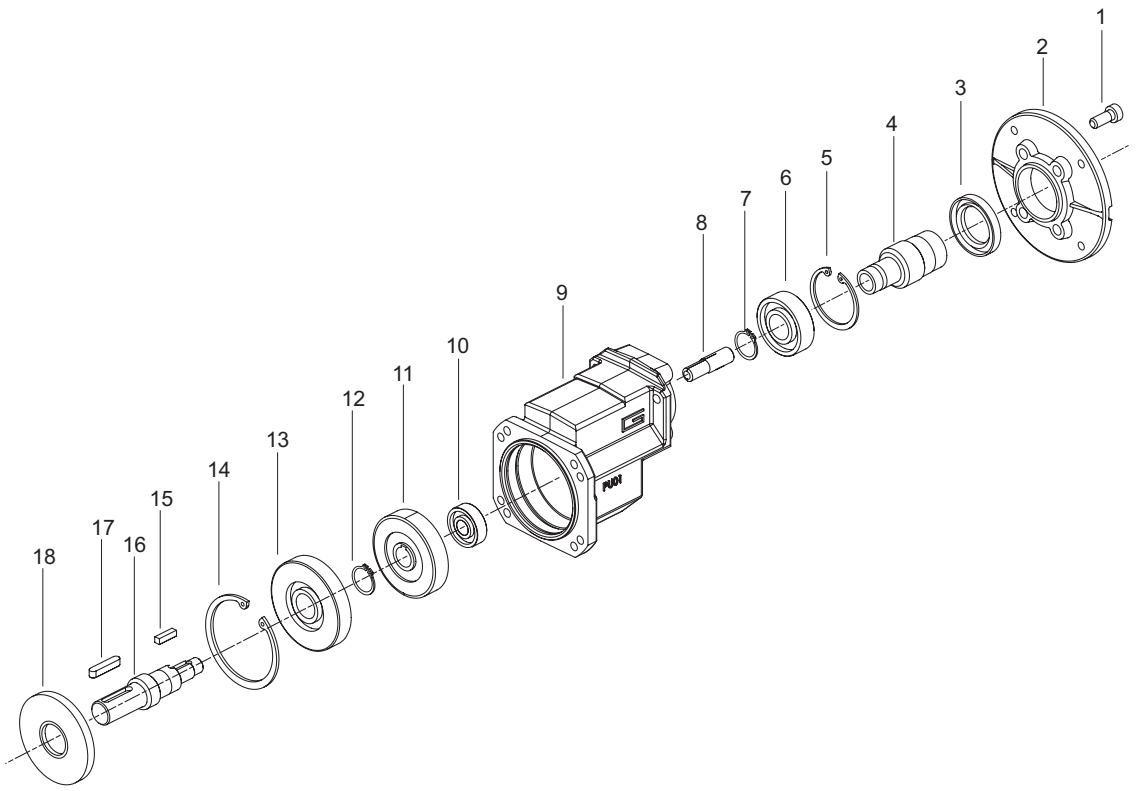
CM026..CM130



CM	Anelli di tenuta / *Oil seals*		
	3	**9**	**16**
026	15/28/7	20/32/5	20/32/5
030	20/37/7	25/40/7	25/40/7
040	25/42/7	30/47/7	30/47/7
050	30/47/7	40/55/7	40/55/7
063	35/62/7	45/65/8	45/65/8
075	40/68/7	50/72/8	50/72/8
090	40/68/7	60/85/8	60/85/8
110	50/80/8	65/85/10	65/85/10
130	50/68/8	70/90/10	70/90/10

Lista parti di ricambio *Spare parts list*

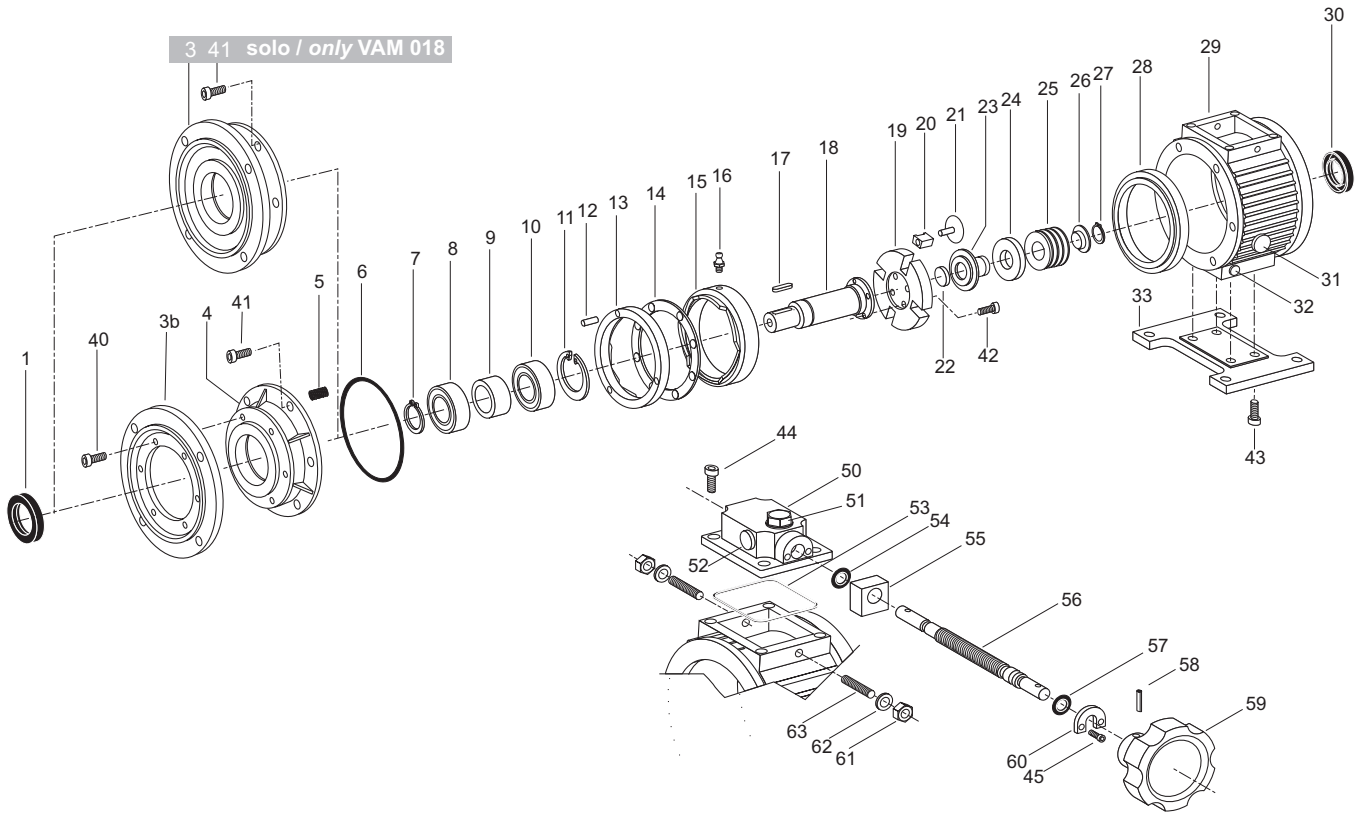
PU



PU	Cuscinetti / *Bearings*			Anelli di tenuta / *Oil seals*	
	6	**10**	**13**	**3**	**18**
01	**6204** 20x47x14	**6201** 12x32x10	**6204 sp** 20x72x14	30/47/7	25/72/7

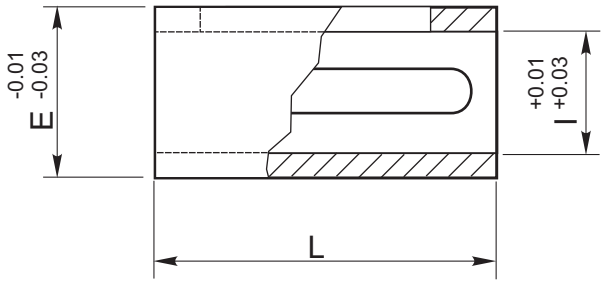
Lista parti di ricambio *Spare parts list*

VAM018..VAM040



Grandezza *Size*	Anelli di tenuta / *Oil seals*	
	1	**30**
VAM 018	15/32/7	18/30/7
VAM 037	20/42/7	25/47/7
VAM 075	25/52/7	30/52/7
VAM 15	30/52/7	40/62/7
VAM 22	48/72/10	55/80/8
VAM 40	48/72/10	55/80/8

Boccole di riduzione in acciaio — *Metal shaft sleeves*



Quantità per scatola *Quantity each box*	*Tipo / Type*	*Dimensioni mm. / Dimensions mm.*		
		E	**I**	**L**
50	**B 0911**	11	9	22
50	**B 1114**	14	11	28
50	**B 1419**	19	14	40
30	**B 1924**	24	19	50
20	**B 2428**	28	24	60
15	**B 2838**	38	28	70
25	**BS 0914**	14	9	26
25	**BS 1119**	19	11	35
30	**BS 1424**	24	14	40
20	**BS 1928**	28	19	40
15	**BS 2438**	38	24	70

Nota: Le boccole in acciaio sono fornite complete di linguette.
Note: The metal shaft sleeves are supplied complete with keys.

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