
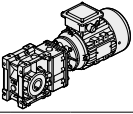

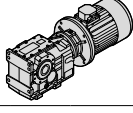


Motoriduttori ad assi ortogonali
Helical bevel gearmotors



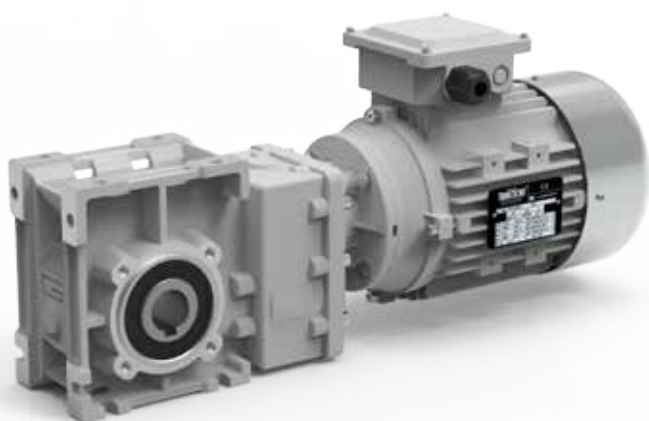
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Questo catalogo annulla e sostituisce ogni precedente edizione o revisione. Ci riserviamo inoltre il diritto di apportare modifiche senza preavviso.

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

Motoriduttori ad assi ortogonali CMB - ITB

Helical bevel gearmotors CMB - ITB



CMB

Grandezza Sizes	Coppia nominale in uscita Nominal output torque Mn ₂ [Nm]	Pag. Page
CMB402	65	B12
CMB502	125	B13
CMB633	250	B14
CMB903	500	B15



ITB

Grandezza Sizes	Coppia nominale in uscita Nominal output torque Mn ₂ [Nm]	Pag. Page
ITB423	950	C16
ITB433	1800	C18
ITB443	3500	C20

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Questa sezione annulla e sostituisce ogni precedente edizione o revisione. Qualora questa sezione non Vi sia giunta in distribuzione controllata, l'aggiornamento dei dati ivi contenuto non è assicurato. **In tal caso la versione più aggiornata è disponibile sul nostro sito internet www.transtecno.com**

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Generalità

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.

General information

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.

Velocità entrata

n_1 [min⁻¹]

Input speed

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

This is the input speed at the gearbox related to the type of drive unit selected.

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

When different speeds are required, contact our Technical Service.

Rapporto di riduzione

i

Gear ratio

E' una grandezza adimensionale ed è in funzione del numero dei denti degli ingranaggi interni al riduttore. 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.

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

n_2 [min⁻¹]

Output speed

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:

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

Coppia richiesta

Mr_2 [Nm]

Requested torque

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

Mn₂ [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

M₂ [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

Efficiency

I calcoli delle prestazioni sono stati effettuati in base al rendimento dinamico Rd dei riduttori.

Efficiency is calculated based on dynamic efficiency Rd of the gearboxes.

Nei riduttori ad ingranaggi il rendimento medio è del 94%.

On helical gearboxes the average efficiency is 94%.

Potenza in entrata

P₁ [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.

A - Uniforme	$fa \leq 0.3$
B - Medio	$fa \leq 3$
C - Forte	$fa \leq 10$

A - Uniform	$fa \leq 0.3$
B - Moderate shocks	$fa \leq 3$
C - Heavy shocks	$fa \leq 10$

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

- Je (kgm²) momento d'inerzia esterno ridotto all'albero motore.
- Jm (kgm²) momento d'inerzia motore.

Se $fa > 10$ interpellare il sn. Servizio Tecnico.

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

- Je (kgm²) moment of reduced external inertia at the drive-shaft
- Jm (kgm²) moment of inertia of motor.

If $fa > 10$ call our Technical Service.

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

		sf								
		n. avviamenti/ora / n. start-up/hour								
h/d	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

		sf								
		n. avviamenti/ora / n. start-up/hour								
h/d	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

		sf								
		n. avviamenti/ora / n. start-up/hour								
h/d	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; R₂ [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.

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.

Il calcolo del carico radiale esterno R agente sull'albero del riduttore può essere determinato come segue:

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 R₂ 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 R₂ 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; A₂ [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 A₂ 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 A₂ 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 A₂ contattate il ns. Servizio Tecnico.

If axial load A that acts on the shaft is greater than A₂, contact our Technical Service.

Scelta dei motoriduttori

Selecting the gearmotors

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

To select the required gearmotor, perform the procedure below:

1. Per l'applicazione desiderata ricavare il fattore di servizio sf dalle tabelle a pag. A4 in base alla classe di carico, alle ore di funzionamento giornaliero e al numero di avviamenti orari.

1. Determine the service factor sf for the desired application by referring to the charts given on page A4. 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:

2. 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

dove Rd è il rendimento dinamico e n₂ il numero di giri richiesti in uscita al motoriduttore.

where Rd stands for the dynamic efficiency and n₂ indicates the required output rpm of the gearmotor .

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).

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).

P_1 [kW]	n_2 [min ⁻¹]	M_2 [Nm]	sf	i			R_2 [N]	
0.75								
80B4 (1400 min ⁻¹)	191	35	14	7.34	ITB423	B5	10973	
	153	44	11	9.16			B5	12364
	118	57	11	11.85			B5	14197
	90	75	8.0	15.64			B5	16455

Esempio / Example:

Applicazione / Application:

Nastro trasportatore / Conveyor belt

P : 0.75 kW
sf : 14
n₂ : 191 rpm

Motorizzazione scelta / Power unit selected:

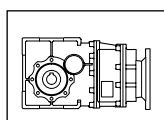
ITB423 $i = 7.34$, $P_1 = 0.75$ kW, $sf = 14$

Lubrificazione

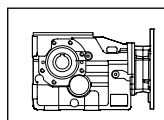
Lubrication

I motoriduttori della serie CMB e ITB sono forniti completi di lubrificante sintetico viscosità 320 a lunga durata.

All unit sizes of CMB and ITB series are complete with a long life synthetic lubricant, viscosity 320.



CMB



ITB

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

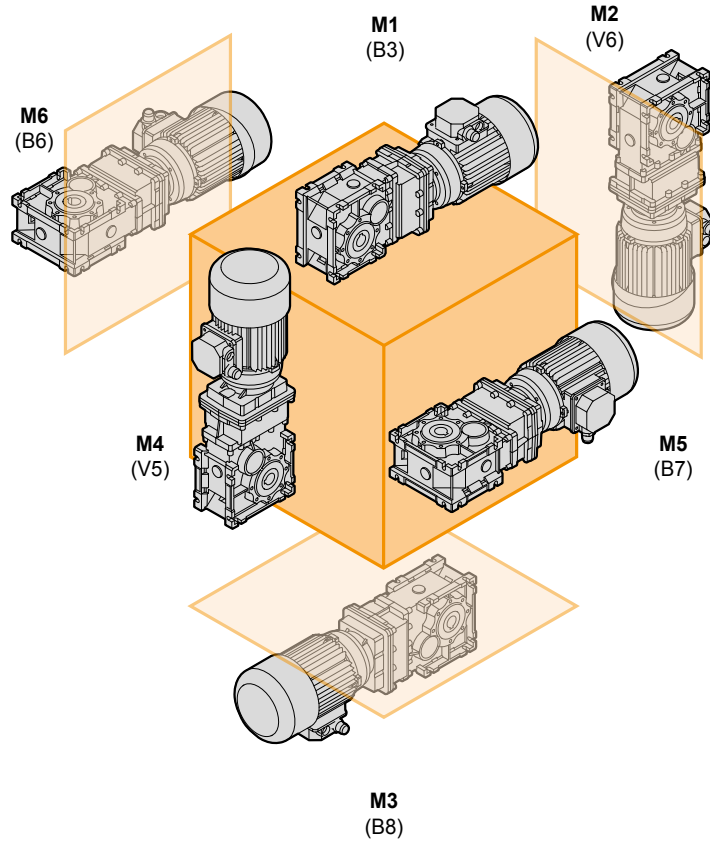
Nelle sezioni specifiche sono riportate le tabelle con le quantità indicative di lubrificante contenute e/o da immettere.

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

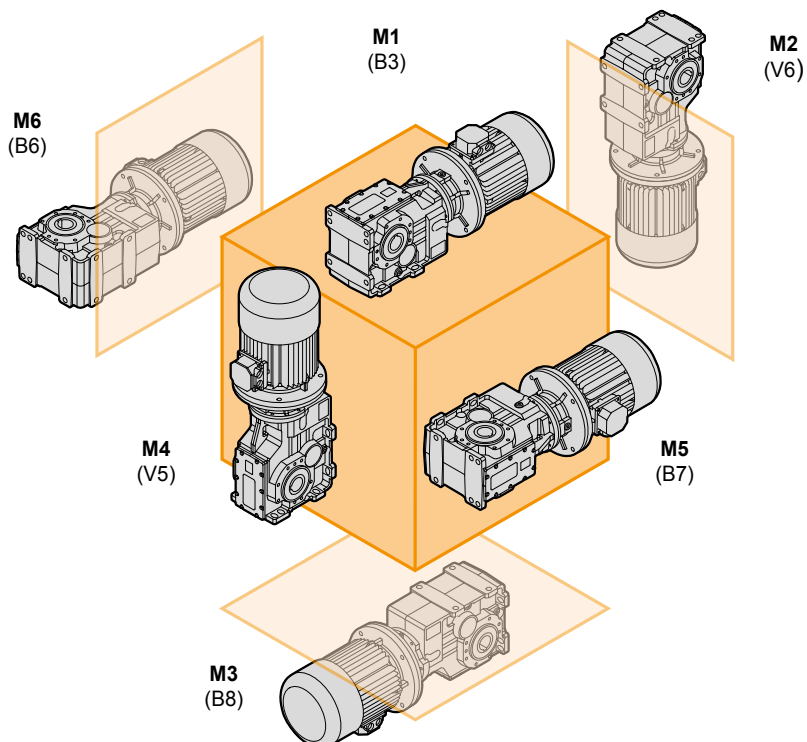
In fase di ordine è necessario specificare sempre la posizione di montaggio desiderata.

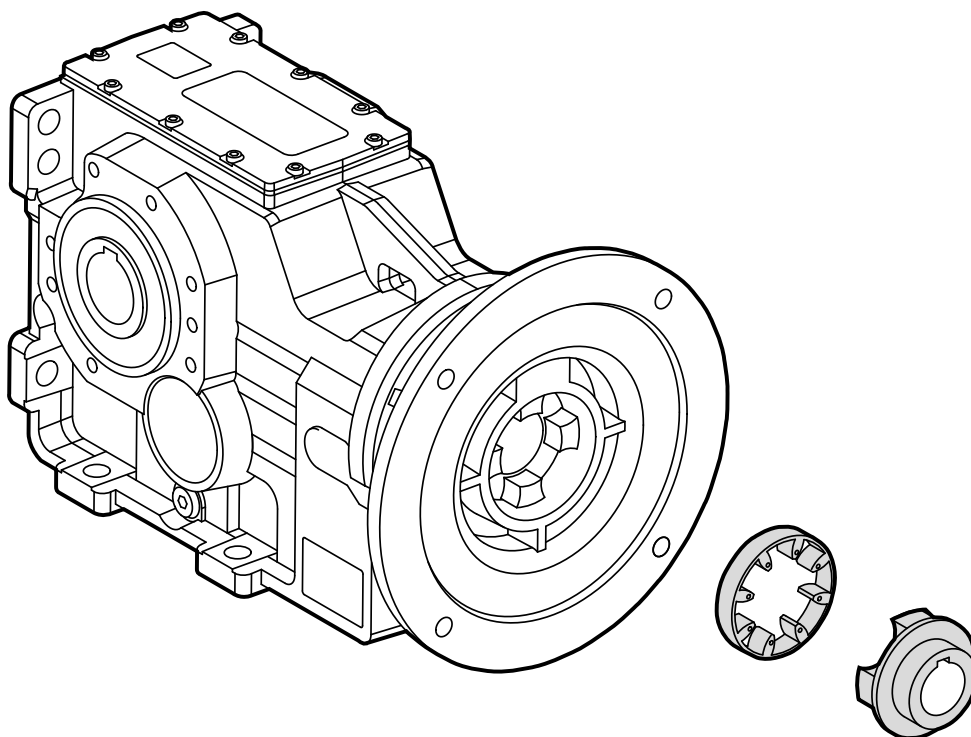
Always specify the desired installation position at the time of order.

CMB



ITB





Nella serie ITB, l'accoppiamento al motore tramite giunto elastico ha i seguenti vantaggi:

- Maggiore rigidità torsionale;
- Smorzamento delle vibrazioni;
- Smorzamento dei picchi d'inerzia del motore;
- Eliminazione dell'ossidazione tra l'albero motore ed il manicotto per tribocorrosione;
- Temperatura di funzionamento inferiore;
- Facilità di smontaggio del motore anche dopo lunghi periodi di utilizzo;

In the ITB range, the motor connection by flexible coupling allows the following benefits:

- Increasing torsional rigidity;*
- Reducing vibrations;*
- Cushioning motor start up jerks;*
- Eliminates fretting corrosion phenomenon between motor sleeve and electric motor shaft;*
- Lowering operating temperature;*
- Easy disassembly of the motor after long periods of use;*

Temperatura di lavoro

Operating temperature

La temperatura ambientale influisce sulle specifiche dei riduttori.

The environmental temperature affects specifications of gearboxes.

Campo di temperatura standard / Standard temperature range

CMB	-35°C / +50°C
ITB	-25°C / +50°C

Campi di temperatura speciali / Special temperature range

	<-35°C	<-15°C	>+50°C
CMB	usare paraoli in silicone (VMQ) <i>use silicone (VMQ) oil seals</i> usare lubrificante per basse temperature <i>use low temperature lubricant</i>		usare paraoli in Viton (FPM) <i>use Viton (FPM) oil seals</i> usare lubrificante per alte temperature <i>use high temperature lubricant</i>
ITB		dimezzare i carichi radiali in uscita <i>halve the output radial loads</i>	

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

In fase di installazione del riduttore 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 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 antinfortunisti- che 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 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 riduttori verificare la corretta quantità di lubrificante in funzione della posizione di montaggio.

Installation and inspection

While installing the gearbox 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 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 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 gearboxes.

Applicazioni critiche

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 $<-25^{\circ}\text{C}$ o $>+50^{\circ}\text{C}$

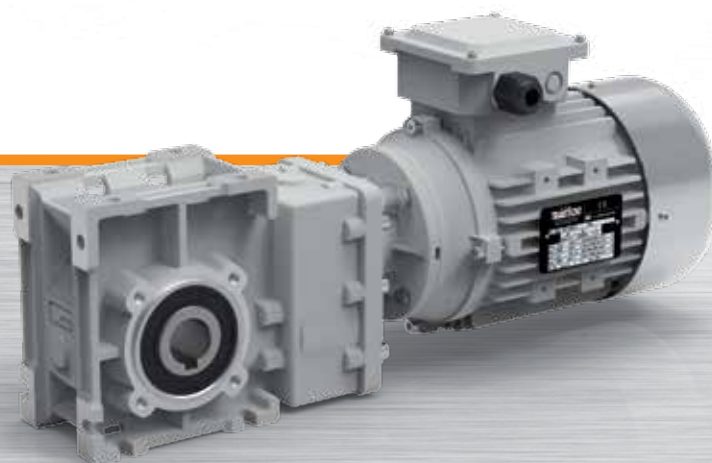
Critical applications

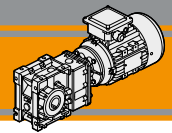
In these cases please contact the Technical Service

- 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 $<-25^{\circ}\text{C}$ or $>+50^{\circ}\text{C}$



Motoriduttori ad assi ortogonali Helical bevel gearmotors

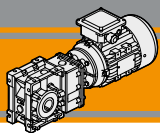




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Carichi radiali	<i>Radial loads</i>	B4
Dati tecnici	<i>Technical data</i>	B5
Dimensioni	<i>Dimensions</i>	B12
Accessori	<i>Accessories</i>	B16

Questa sezione annulla e sostituisce ogni precedente edizione o revisione. Qualora questa sezione non Vi sia giunta in distribuzione controllata, l'aggiornamento dei dati ivi contenuto non è assicurato. **In tal caso la versione più aggiornata è disponibile sul nostro sito internet www.transtecno.com**

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Caratteristiche tecniche

I motoriduttori ad assi ortogonali della serie CMB sono caratterizzati da un elevato grado di modularità: 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.
- Ingranaggi sempre rettificati.
- Lubrificazione permanente con olio sintetico.

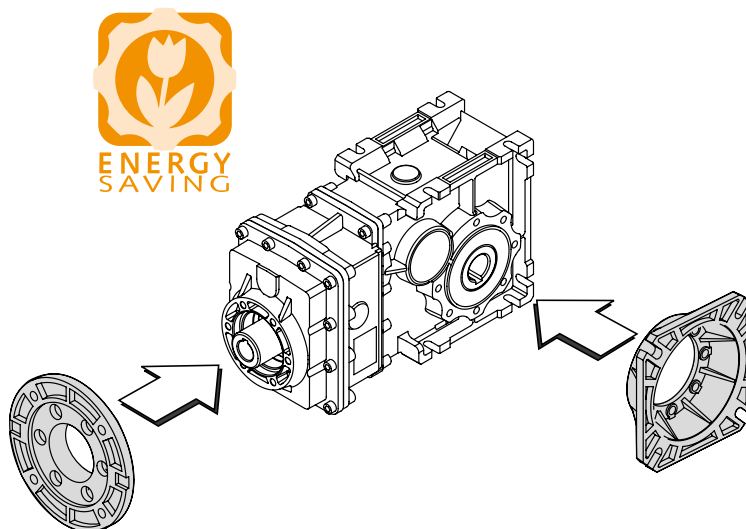
Technical features

The high degree of modularity of CMB helical bevel gearmotors 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.
- Ground helical gears.
- Permanent synthetic oil long-life lubrication.

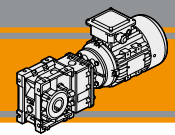


Designazione

Classification

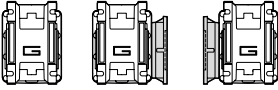
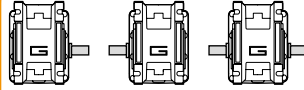
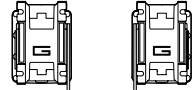
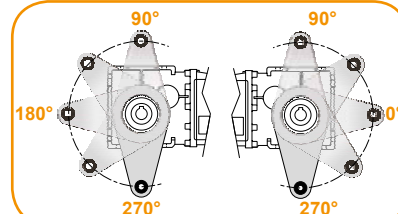
RIDUTTORE / GEARBOX										
CMB	63 3		U	9.81	D25	90	B5	SZDX	BRSX	90
Tipo Type	Grandezza Size	Stadi Stages	Versione Version	Rapporto Ratio	Albero cavo uscita Hollow output shaft	IEC 	Forma costruttiva Version	Albero di uscita Output shaft	Braccio di reazione Torque arm	Angolo Angle
 CMB	40 50 63 90	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°

RIDUTTORE / GEARBOX									
CMBIS	63 3		U	9.81	D25	SZDX	BRSX	90	
Tipo Type	Grandezza Size	Stadi Stages	Versione Version	Rapporto Ratio	Albero cavo uscita Hollow output shaft	Albero di uscita Output shaft	Braccio di reazione Torque arm	Angolo Angle	
 CMBIS	40 50 63 90	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°	

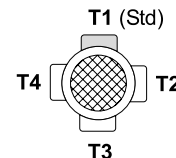


Designazione

Classification

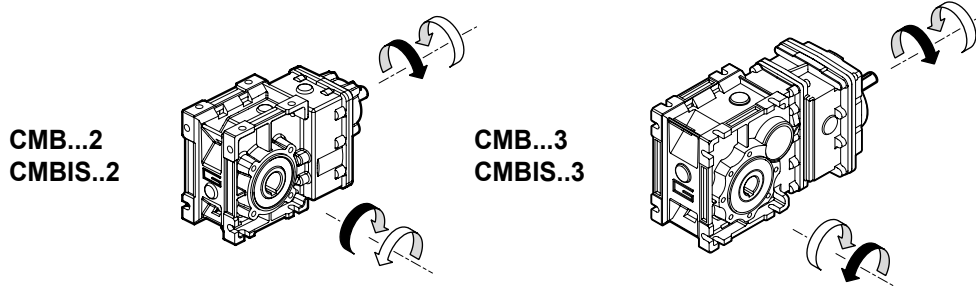
Versione Riduttore Gearbox Version	Albero di uscita Output shaft	Braccio di reazione Torque arm	Angolo Angle
 <p>U FD FS FLD FBD FLS FBS</p>	 <p>SZDX SZSX DZ</p>	 <p>BRDX BRSX</p>	 <p>90° 90° 180° 0° 270° 270°</p>

CMB

MOTORE / MOTOR					
1.5kW	4p	3ph	230/400V	50Hz	T1
Potenza Power	Poli Poles	Fasi Phases	Tensione Voltage	Frequenza Frequency	Pos. morsettiera Terminal box pos.
vedi tabelle see tables	2p 4p 6p 8p	1ph 3ph	230V 230/400V	50Hz 60Hz	 <p>T1 (Std) T4 T2 T3</p>

Sensi di rotazione

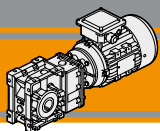
Direction of rotation



Simbologia

Symbols

n_1	[min ⁻¹]	Velocità in ingresso / <i>Input speed</i>
n_2	[min ⁻¹]	Velocità in uscita / <i>Output speed</i>
i		Rapporto di riduzione / <i>Ratio</i>
P_1	[kW]	Potenza in entrata / <i>Input power</i>
M_2	[Nm]	Coppia nominale in uscita in funzione di P_1 / <i>Output torque referred to P_1</i>
P_{n1}	[kW]	Potenza nominale in entrata / <i>Nominal input power</i>
M_{n2}	[Nm]	Coppia nominale in uscita in funzione di P_{n1} / <i>Nominal output torque referred to P_{n1}</i>
sf		Fattore di servizio / <i>Service factor</i>
R_2	[N]	Carico radiale ammissibile in uscita / <i>Permitted output radial load</i>
A_2	[N]	Carico assiale ammissibile in uscita / <i>Permitted output axial load</i>



Lubrificazione

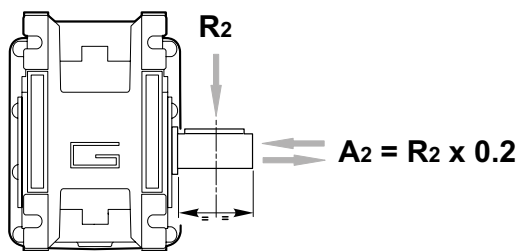
Tutti i motoriduttori CMB sono forniti completi di lubrificante sintetico viscosità 320, pertanto possono essere installati in qualunque posizione di montaggio e non necessitano di manutenzione.

Lubrication

Permanent synthetic oil long-life lubrication (viscosity grade 320) makes it possible to use CMB gearmotors in all mounting positions; for this reason they can be installed in any assembly position and do not require maintenance.

Carichi radiali

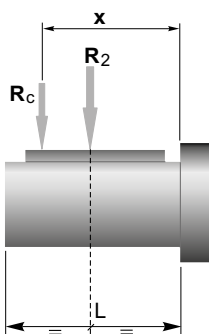
Radial loads



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

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:

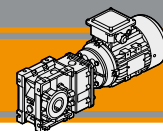


	CMB 402	CMB 502	CMB 633	CMB 903
a	86	104	118	157
b	66	79	93	117
R_{2MAX}	3500	4200	6500	9500

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

$$R \leq R_c$$

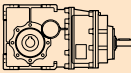
*a, b = valori riportati nella tabella
a, b = values given in the table*




Dati tecnici

n_1 1400 min⁻¹


Technical data


	n_2 [min ⁻¹]	Mn_2 [Nm]	Pn_1 [kW]	i	IEC Motori applicabili IEC Motor adapters		
					56 B5/B14	63 B5/B14	71 B5/B14
CMBIS 402							
	227	40	1.0	6.18			
	187	40	0.83	7.49			
	152	40	0.68	9.2			
	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	18.6			
	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			*
	19.3	65	0.14	72.50			*

	n_2 [min ⁻¹]	Mn_2 [Nm]	Pn_1 [kW]	i	56 B5/B14	63 B5/B14	71 B5/B14	80 B5/B14
					CMBIS 502			
	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				*
	19.3	125	0.27	72.50				*

N.B.
Le aree evidenziate indicano l'applicabilità della corrispondente grandezza motore.

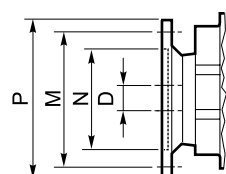
N.B.
Highlighted areas indicate motor inputs available on each size of unit.

 * = Il fattore di servizio (sf) deve essere scelto in funzione dell'applicazione: si prega di contattare il nostro Servizio Tecnico.

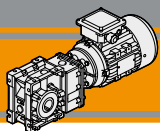
 * = The service factor (sf) has to be selected depending on application: please contact our Technical Department.

Prima di eseguire la scelta del motoriduttore riferirsi alle prestazioni elencate nelle tabelle dalla pag. B8 alla pag. B11

Before selecting any gearbox, please read the performance values shown in the tables on page B8 to B11.



Dimensioni IEC / IEC Dimensions								
	56 B5	56 B14	63 B5	63 B14	71 B5	71 B14	80 B5	80 B14
N	80	50	95	60	110	70	130	80
M	100	65	115	75	130	85	165	100
P	120	80	140	90	160	105	200	120
D	9		11		14		19	



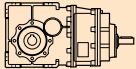
CMB

Motoriduttori ad assi ortogonali Helical bevel gearmotors

Dati tecnici

n_1 1400 min⁻¹

Technical data

 CMBIS 633	n_2 [min ⁻¹]	Mn_2 [Nm]	Pn_1 [kW]	i	IEC Motori applicabili IEC Motor adapters			
					63 B5	71 B5/B14	80 B5/B14	90 B5/B14
	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		*	*	*
	5.9	250	0.16	238.31		*	*	*

N.B.

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

N.B.

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



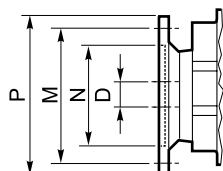
* = Il fattore di servizio (**sf**) deve essere scelto in funzione dell'applicazione: si prega di contattare il nostro Servizio Tecnico.

Prima di eseguire la scelta del motoriduttore riferirsi alle prestazioni elencate nelle tabelle dalla pag. B8 alla pag. B11



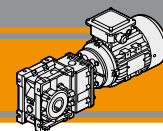
* = The service factor (**sf**) has to be selected depending on application: please contact our Technical Department.

Before selecting any gearbox, please read the performance values shown in the tables on page B8 to B11.



Dimensioni IEC / IEC Dimensions

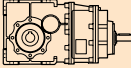
	63 B5	71 B5	71 B14	80 B5	80 B14	90 B5	90 B14
N	95	110	70	130	80	130	95
M	115	130	85	165	100	165	115
P	140	160	105	200	120	200	140
D	11	14		19		24	



Dati tecnici


n_1 1400 min⁻¹

Technical data

	n_2 [min ⁻¹]	Mn_2 [Nm]	Pn_1 [kW]	i	IEC Motori applicabili IEC Motor adapters			
					71 B5	80 B5/B14	90 B5/B14	100/112 B5/B14
CMBIS 903								
	211	280	6.57	6.65	B			
	175	280	5.46	8.00	B			
	144	280	4.48	9.74	B			
	125	280	3.90	11.21	B			
	99.3	300	3.32	14.09	B			
	78.0	450	3.91	17.95	B			
	64.8	450	3.25	21.60	B			
	53.2	450	2.67	26.30	B			
	46.3	450	2.32	30.25	B			
	35.7	500	1.99	39.26	B			
	29.6	500	1.65	47.25	B			*
	24.3	500	1.36	57.52	B			*
	21.2	500	1.18	66.17	B			*
	16.8	500	0.94	83.20	B			*
	13.0	500	0.72	108.09	B		*	*
	10.6	500	0.59	132.23	B		*	*
	9.5	500	0.53	147.92	B		*	*
	8.4	500	0.47	167.09	B		*	*
	7.3	500	0.41	191.06	B	*	*	*
	6.3	500	0.35	221.88	B	*	*	*
	5.3	500	0.30	262.96	B	*	*	*


CMB

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

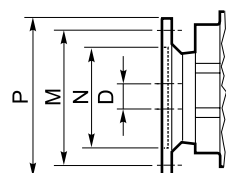
 * = Il fattore di servizio (sf) deve essere scelto in funzione dell'applicazione: si prega di contattare il nostro Servizio Tecnico.

Prima di eseguire la scelta del motoriduttore riferirsi alle prestazioni elencate nelle tabelle dalla pag. B8 alla pag. B11

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

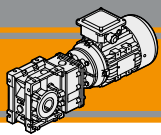
 * = The service factor (sf) has to be selected depending on application: please contact our Technical Department.

Before selecting any gearbox, please read the performance values shown in the tables on page B8 to B11.



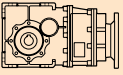

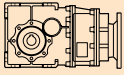

Dimensioni IEC / IEC Dimensions							
	71 B5	80 B5	80 B14	90 B5	90 B14	100/112 B5	100/112 B14
N	110	130	80	130	95	180	110
M	130	165	100	165	115	215	130
P	160	200	120	200	140	250	160
D	14	19		24		28	

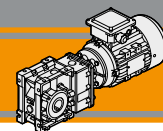




Dati tecnici

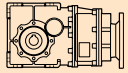

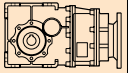

Technical data

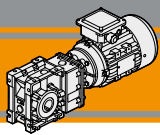
P_1 [kW]	n_2 [min ⁻¹]	M_2 [Nm]	sf	i			P_1 [kW]	n_2 [min ⁻¹]	M_2 [Nm]	sf	i			
0.06							0.18							
56A4 (1400 min ⁻¹)	39.3	14	4.7	35.63	CMB402	B5/B14	63B4 (1400 min ⁻¹)	227	7	5.6	6.18	CMB402	B5/B14	
	32.7	16	4.0	42.75			187	9	4.6	7.49				
	25.3	21	3.1	55.31			152	11	3.8	9.20				
	23.7	23	2.9	59.06			118	14	3.3	11.83				
	21.8	25	2.6	64.29			112	14	3.1	12.48				
	19.3	28	2.3	72.50			94.4	17	2.6	14.83				
0.09							0.18							
56B4 (1400 min ⁻¹)	48.5	17	3.9	28.89	CMB402	B5/B14	79.4	20	2.2	17.63	CMB402	B5/B14		
	45.4	18	3.7	30.84			75.3	21	2.6	18.60				
	41.7	19	3.4	33.57			62.7	26	2.1	22.33				
	39.3	21	3.2	35.63			58.6	28	2.0	23.91				
	32.7	25	2.6	42.75			48.5	33	1.9	28.89				
	25.3	32	2.0	55.31			45.4	36	1.8	30.84				
	23.7	34	1.9	59.06			41.7	39	1.7	33.57				
	21.8	37	1.8	64.29			39.3	41	1.6	35.63				
	19.3	42	1.6	72.50			32.7	49	1.3	42.75				
							25.3	64	1.0	55.31				
							23.7	68	0.95	59.06				
							21.8	74	0.88	64.29				
							19.3	84	0.8	72.50				
0.12							0.18							
63A4 (1400 min ⁻¹)	227	5	8.4	6.18	CMB402	B5/B14	45.4	36	3.5	30.84	CMB502	B5/B14		
	187	6	6.9	7.49			41.7	39	3.2	33.57				
	152	7	5.6	9.20			39.3	41	3.0	35.63				
	118	9	4.9	11.83			32.7	49	2.5	42.75				
	112	10	4.7	12.48			25.3	64	2.0	55.31				
	94.4	11	3.9	14.83			23.7	68	1.8	59.06				
	79.4	14	3.3	17.63			21.8	74	1.7	64.29				
	75.3	14	3.8	18.60			19.3	84	1.5	72.50				
	62.7	17	3.2	22.33										
	58.6	18	3.0	23.91			24.2	67	3.7	57.93			CMB633	B5
	48.5	22	2.9	28.89			22.7	71	3.5	61.63				
	45.4	24	2.7	30.84			18.9	85	2.9	73.96				
	41.7	26	2.5	33.57			17.8	91	2.8	78.58				
	39.3	27	2.4	35.63			15.0	108	2.3	93.33				
	32.7	33	2.0	42.75			10.0	162	1.5	140.52				
	25.3	43	1.5	55.31			7.7	210	1.2	181.81				
	23.7	45	1.4	59.06			6.6	244	1.0	211.31				
	21.8	49	1.3	64.29			5.9	275	0.9	238.31				
	19.3	56	1.2	72.50										
	32.7	33	3.8	42.75			CMB502	B5/B14						
	25.3	43	2.9	55.31										
	23.7	45	2.8	59.06										
	21.8	49	2.5	64.29										
	19.3	56	2.2	72.50										
	18.9	57	4.4	73.96	CMB633	B5								
	17.8	60	4.1	78.58										
	15.0	72	3.5	93.33										
	10.0	108	2.3	140.52										
	7.7	140	1.8	181.81										
	6.6	163	1.5	211.31										
	5.9	183	1.4	238.31										



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Technical data

P_1 [kW]	n_2 [min ⁻¹]	M_2 [Nm]	sf	i			P_1 [kW]	n_2 [min ⁻¹]	M_2 [Nm]	sf	i				
0.25						0.37									
71A4 (1400 min ⁻¹)	227	10	4.0	6.18	CMB402	B5/B14	71B4 (1400 min ⁻¹)	227	15	2.7	6.18	CMB402	B5/B14		
	187	12	3.3	7.49		B5/B14		187	18	2.3	7.49		B5/B14		
	152	15	2.7	9.20		B5/B14		152	22	1.8	9.20		B5/B14		
	118	19	2.4	11.83		B5/B14		118	28	1.6	11.83		B5/B14		
	112	20	2.2	12.48		B5/B14		112	30	1.5	12.48		B5/B14		
	94.4	24	1.9	14.83		B5/B14		94.4	35	1.3	14.83		B5/B14		
	79.4	28	1.6	17.63		B5/B14		79.4	42	1.1	17.63		B5/B14		
	75.3	30	1.8	18.60		B5/B14		75.3	44	1.2	18.60		B5/B14		
	62.7	36	1.5	22.33		B5/B14		62.7	53	1.0	22.33		B5/B14		
	58.6	38	1.4	23.91		B5/B14		58.6	57	1.0	23.91		B5/B14		
	48.5	46	1.4	28.89		B5/B14		48.5	69	0.9	28.89		B5/B14		
	45.4	49	1.3	30.84		B5/B14		45.4	73	0.9	30.84		B5/B14		
	41.7	54	1.2	33.57		B5/B14		227	15	4.8	6.18		CMB502	B5/B14	
	39.3	57	1.1	35.63		B5/B14		187	18	3.9	7.49			B5/B14	
	32.7	69	0.9	42.75		B5/B14		152	22	3.2	9.20			B5/B14	
	227	10	7.1	6.18	CMB502	B5/B14		118	28	3.2	11.83	B5/B14			
	187	12	5.8	7.49		B5/B14		112	30	3.0	12.48	B5/B14			
	152	15	4.7	9.20		B5/B14		94.4	35	2.6	14.83	B5/B14			
	118	19	4.7	11.83		B5/B14		79.4	42	2.2	17.63	B5/B14			
	112	20	4.5	12.48		B5/B14		75.3	44	2.5	18.60	B5/B14			
	94.4	24	3.8	14.83		B5/B14		62.7	53	2.1	22.33	B5/B14			
	79.4	28	3.2	17.63		B5/B14		58.6	57	1.9	23.91	B5/B14			
	75.3	30	3.7	18.60		B5/B14		48.5	69	1.8	28.89	B5/B14			
	62.7	36	3.1	22.33		B5/B14		45.4	73	1.7	30.84	B5/B14			
	58.6	38	2.9	23.91		B5/B14		41.7	80	1.6	33.57	B5/B14			
	48.5	46	2.7	28.89		B5/B14		39.3	85	1.5	35.63	B5/B14			
	45.4	49	2.5	30.84		B5/B14		32.7	101	1.2	42.75	B5/B14			
	41.7	54	2.3	33.57		B5/B14		25.3	131	1.0	55.31	B5/B14			
	39.3	57	2.2	35.63		B5/B14		23.7	140	0.9	59.06	B5/B14			
	32.7	69	1.8	42.75		B5/B14			64.9	51	4.3	21.56	CMB633	B5/B14	
	25.3	89	1.4	55.31	B5/B14			52.9	63	3.5	26.48	B5/B14			
	23.7	95	1.3	59.06	B5/B14			49.7	67	3.3	28.17	B5/B14			
	21.8	103	1.2	64.29	B5/B14			41.4	80	2.7	33.81	B5/B14			
	19.3	116	1.1	72.50	B5/B14			39.0	85	2.6	35.92	B5/B14			
	41.4	54	4.1	33.81	CMB633	B5/B14		36.0	92	2.7	38.88	B5/B14			
	39.0	58	3.8	35.92		B5/B14			29.7	112	2.2	47.16		B5/B14	
	36.0	62	4.0	38.88		B5/B14			24.2	137	1.8	57.93		B5/B14	
	29.7	76	3.3	47.16		B5/B14			22.7	146	1.7	61.63		B5/B14	
	24.2	93	2.7	57.93		B5/B14			18.9	175	1.4	73.96		B5/B14	
	22.7	99	2.5	61.63		B5/B14			17.8	186	1.3	78.58		B5/B14	
	18.9	119	2.1	73.96		B5/B14			15.0	221	1.1	93.33		B5/B14	
	17.8	126	2.0	78.58		B5/B14			29.6	112	4.5	47.25		CMB903	B5
	15.0	150	1.7	93.33		B5/B14			24.3	136	3.7	57.52			B5
	10.0	225	1.1	140.52		B5/B14			21.2	157	3.2	66.17			B5
	7.7	291	0.9	181.81		B5/B14			16.8	197	2.5	83.20	B5		
	24.3	92	5.4	57.52		CMB903	B5		13.0	256	1.9	108.09	B5		
	21.2	106	4.7	66.17			B5			10.6	314	1.6	132.23		B5
	16.8	133	3.7	83.20			B5			9.5	351	1.4	147.92		B5
	13.0	173	2.9	108.09			B5			8.4	396	1.3	167.09		B5
	10.6	212	2.4	132.23	B5				7.3	453	1.1	191.06	B5		
	9.5	237	2.1	147.92	B5				6.3	526	0.9	221.88	B5		
	8.4	268	1.9	167.09	B5				5.3	624	0.8	262.96	B5		
	7.3	306	1.6	191.06	B5								B5		
	6.3	356	1.4	221.88	B5								B5		
	5.3	422	1.2	262.96	B5								B5		

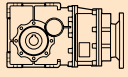

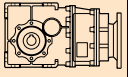



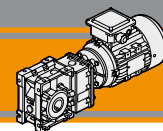
CMB

Motoriduttori ad assi ortogonali Helical bevel gearmotors

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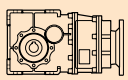

Technical data

P_1 [kW]	n_2 [min ⁻¹]	M_2 [Nm]	sf	i			P_1 [kW]	n_2 [min ⁻¹]	M_2 [Nm]	sf	i						
0.55							0.75										
80A4 (1400 min ⁻¹)	227	22	3.2	6.18	CMB502	B5/B14	80B4 (1400 min ⁻¹)	227	30	2.4	6.18	CMB502	B5/B14				
	187	26	2.6	7.49						187	36			1.9	7.49		B5/B14
	152	32	2.2	9.20						152	44			1.6	9.20		B5/B14
	118	42	2.2	11.83						118	57			1.6	11.83		B5/B14
	112	44	2.0	12.48						112	60			1.5	12.48		B5/B14
	94.4	52	1.7	14.83						94.4	71			1.3	14.83		B5/B14
	79.4	62	1.4	17.63						79.4	85			1.1	17.63		B5/B14
	75.3	66	1.7	18.60						75.3	89			1.2	18.60		B5/B14
	62.7	79	1.4	22.33						62.7	107			1.0	22.33		B5/B14
	58.6	84	1.3	23.91						58.6	115			1.0	23.91		B5/B14
	48.5	102	1.2	28.89						48.5	139			0.9	28.89		B5/B14
	45.4	109	1.1	30.84													
	41.7	118	1.1	33.57													
	39.3	126	1.0	35.63													
	213	23	6.5	6.58	CMB633	B5/B14		213	32	4.7	6.58	CMB633	B5/B14				
	175	28	5.3	7.99						175	38			3.9	7.99		B5/B14
	143	35	4.3	9.81						143	47			3.2	9.81		B5/B14
	134	37	4.1	10.44						134	50			3.0	10.44		B5/B14
	112	44	3.4	12.53						112	60			2.5	12.53		B5/B14
	105	47	3.2	13.31						105.2	64			2.3	13.31		B5/B14
	88.6	56	3.0	15.81						88.6	76			2.2	15.81		B5/B14
	78.8	63	3.5	17.77						78.8	85			2.6	17.77		B5/B14
	64.9	76	2.9	21.56						64.9	104			2.1	21.56		B5/B14
	52.9	93	2.4	26.48						52.9	127			1.7	26.48		B5/B14
	49.7	99	2.2	28.17						49.7	135			1.6	28.17		B5/B14
	41.4	119	1.8	33.81						41.4	163			1.4	33.81		B5/B14
	39.0	127	1.7	35.92				39.0	173	1.3	35.92		B5/B14				
	36.0	137	1.8	38.88				36.0	187	1.3	38.88		B5/B14				
	29.7	166	1.5	47.16				29.7	227	1.1	47.16		B5/B14				
	24.2	204	1.2	57.93				24.2	279	0.9	57.93		B5/B14				
	22.7	217	1.2	61.63				22.7	296	0.8	61.63		B5/B14				
	18.9	261	1.0	73.96													
	17.8	277	0.9	78.58				64.8	104	4.3	21.60	CMB903	B5/B14				
	46.3	107	4.2	30.25	CMB903	B5/B14		53.2	126	3.6	26.30				B5/B14		
	35.7	138	3.6	39.26						46.3	145			3.1	30.25		B5/B14
	29.6	167	3.0	47.25						35.7	189			2.6	39.26		B5/B14
	24.3	203	2.5	57.52						29.6	227			2.2	47.25		B5/B14
	21.2	233	2.1	66.17						24.3	277			1.8	57.52		B5/B14
	16.8	293	1.7	83.20						21.2	318			1.6	66.17		B5/B14
	13.0	381	1.3	108.09						16.8	400			1.2	83.20		B5/B14
	10.6	466	1.1	132.23						13.0	519.8			1.0	108.09		B5
	9.5	522	1.0	147.92													
	8.4	589	0.8	167.09													

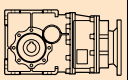



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Technical data

P_1 [kW]	n_2 [min ⁻¹]	M_2 [Nm]	sf	i			
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	
	134	74	2.0	10.44		B5/B14	
	112	88	1.7	12.53		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	
	49.7	199	1.1	28.17	B5/B14		
	41.4	238	0.9	33.81	B5/B14		
	39.0	253	0.9	35.92	B5/B14		
	36.0	274	0.9	38.88	B5/B14		
	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	

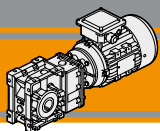
1.5							
90L4 (1400 min ⁻¹)	213	63	2.4	6.58	CMB633	B5/B14	
	175	77	2.0	7.99		B5/B14	
	143	94	1.6	9.81		B5/B14	
	134	100	1.5	10.44		B5/B14	
	112	120	1.2	12.53		B5/B14	
	105	128	1.2	13.31		B5/B14	
	88.6	152	1.1	15.81		B5/B14	
	78.8	171	1.3	17.77		B5/B14	
	64.9	207	1.1	21.56		B5/B14	
	52.9	255	0.9	26.48		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

P_1 [kW]	n_2 [min ⁻¹]	M_2 [Nm]	sf	i			
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	
	134	124	1.2	10.44		B5/B14	
	112	149	1.0	12.53		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
		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

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

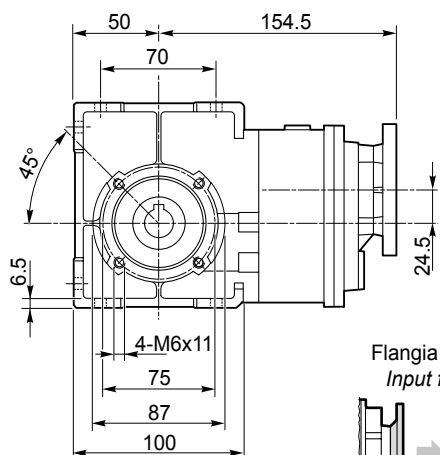
3						
100LB4 (1400 min ⁻¹)	211	128	2.2	6.65	CMB903	B5/B14
	175	154	1.8	8.00		B5/B14
	144	187	1.5	9.74		B5/B14
	125	216	1.3	11.21		B5/B14
	99.3	271	1.1	14.09		B5/B14
	78.0	345	1.3	17.95		B5/B14
	64.8	416	1.1	21.60		B5/B14
	53.2	506	0.9	26.30		B5/B14

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

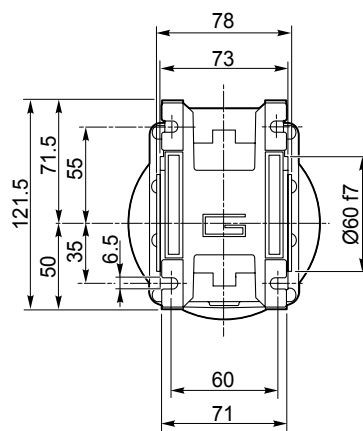
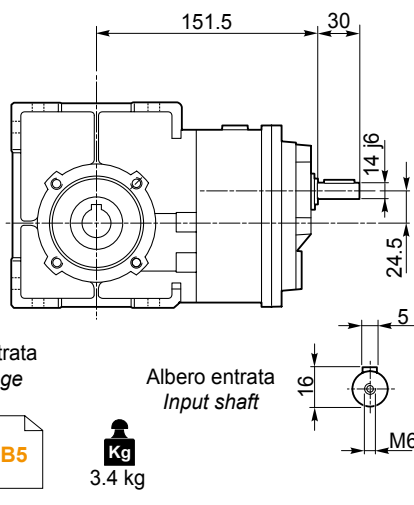


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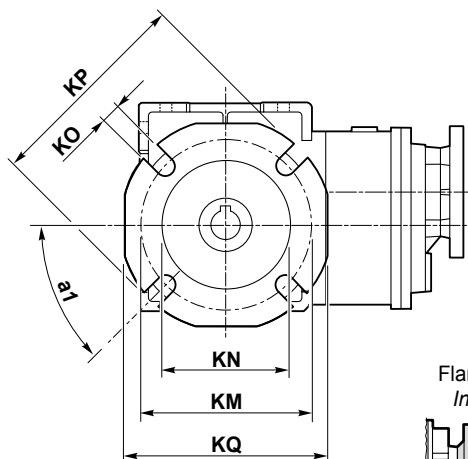
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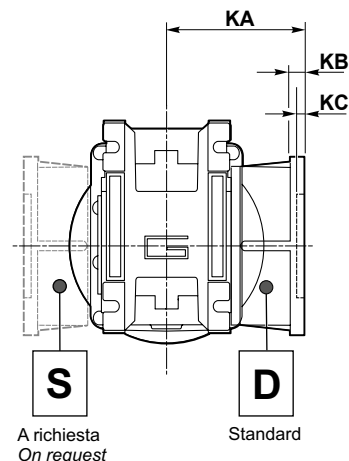
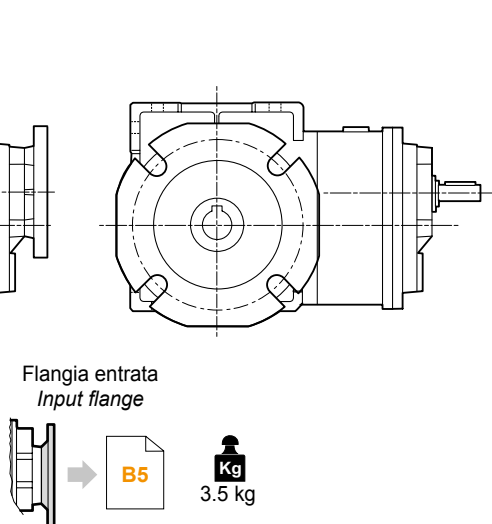
CMBIS 402 U..



CMB 402 F..

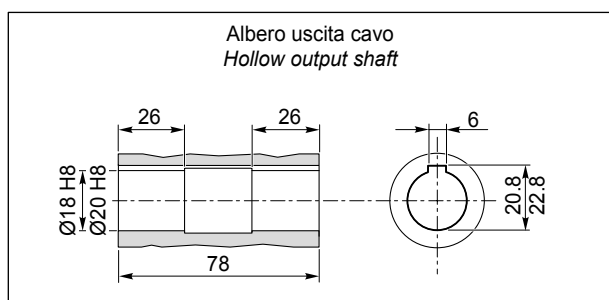


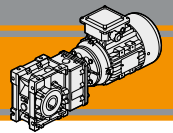
CMBIS 402 F..



Versione F / F Version										
CMB CMBIS	a ₁	KA	KB	KC	KM	KN H8	KO	KP	KQ	Flangia / Flange Tipo / Type
402	45°	67	7.5	4.5	80-95	60	9	110	95	F
	45°	97	7.5	4.5	80-95	60	9	110	95	FL
	45°	80	8.5	5	115-125	95	9.5	140	112	FB

CMB 402.. D.. - CMBIS 402.. D..





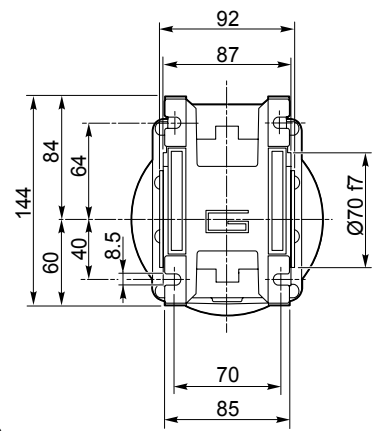
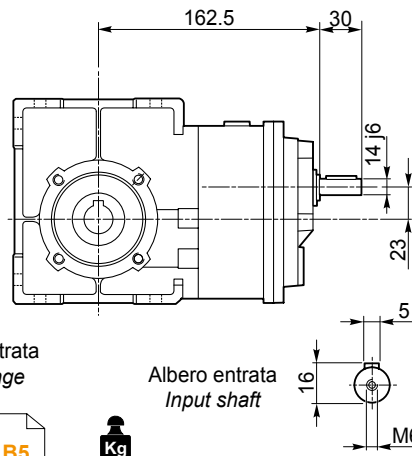
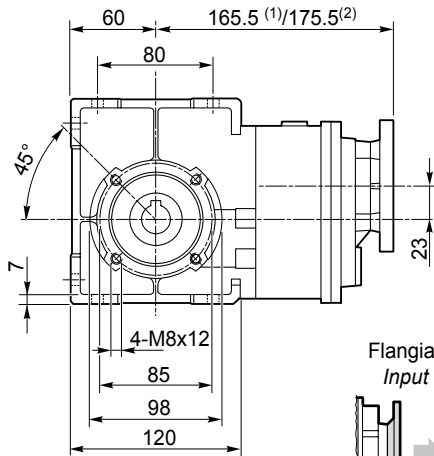
Dimensioni

Dimensions

CMB 502.. - CMBIS 502..

CMB 502 U..

CMBIS 502 U..



Flangia entrata
Input flange

Albero entrata
Input shaft

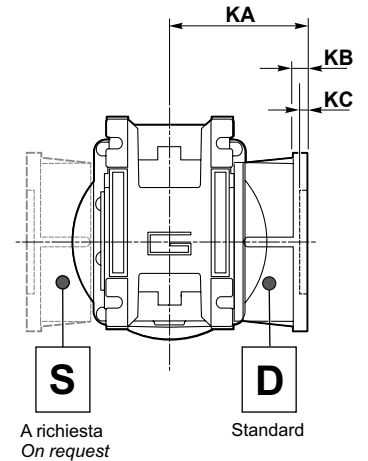
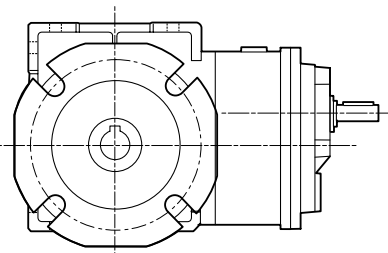
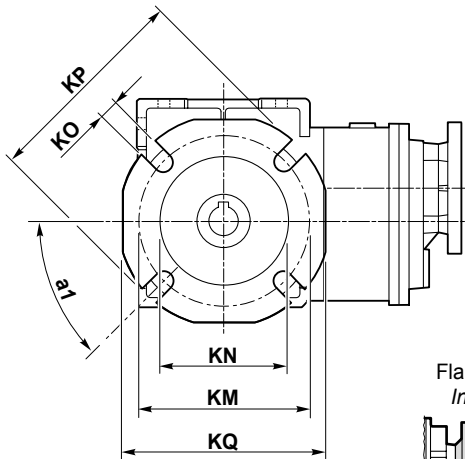


Kg
(1) 4.7 kg
(2) 5.0 kg

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

CMB 502 F..

CMBIS 502 F..



Flangia entrata
Input flange



Kg
4.8 kg

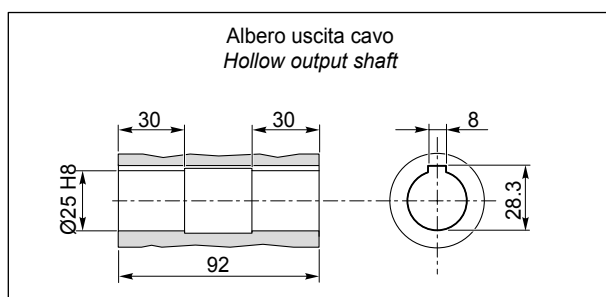
A richiesta
On request

Standard

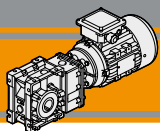
Versione F / F Version

CMB CMBIS	a ₁	KA	KB	KC	KM	KN H8	KO	KP	KQ	Flangia / Flange Tipo / Type
502	45°	90	9	5	90-110	70	11	125	110	F
	45°	120	9	5	90-110	70	11	125	110	FL
	45°	89	9	5	130-145	110	9.5	160	132	FB

CMB 502.. D.. - CMBIS 502.. D..



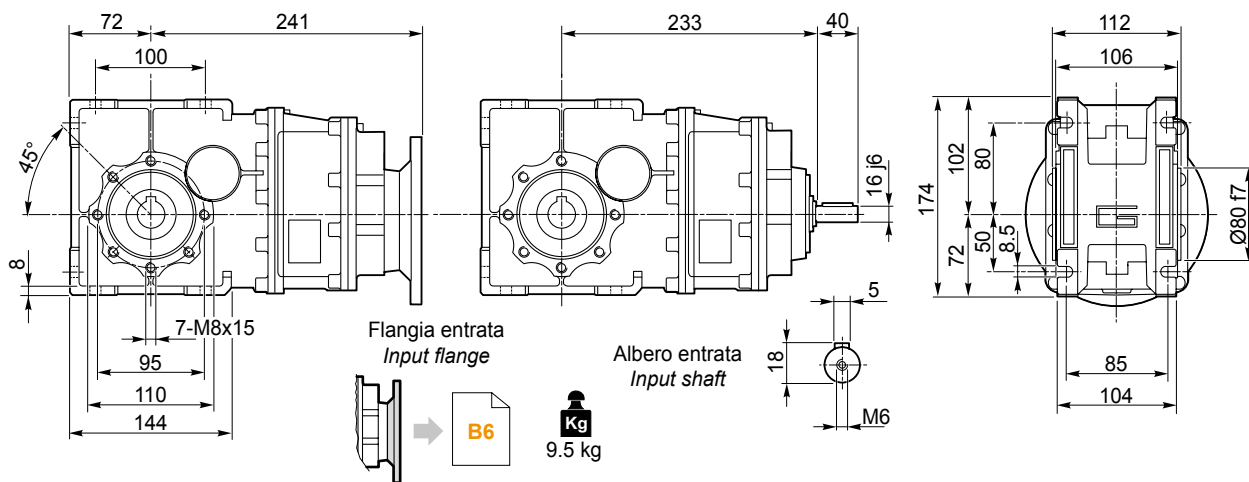
Albero uscita cavo
Hollow output shaft



CMB 633.. - CMBIS 633..

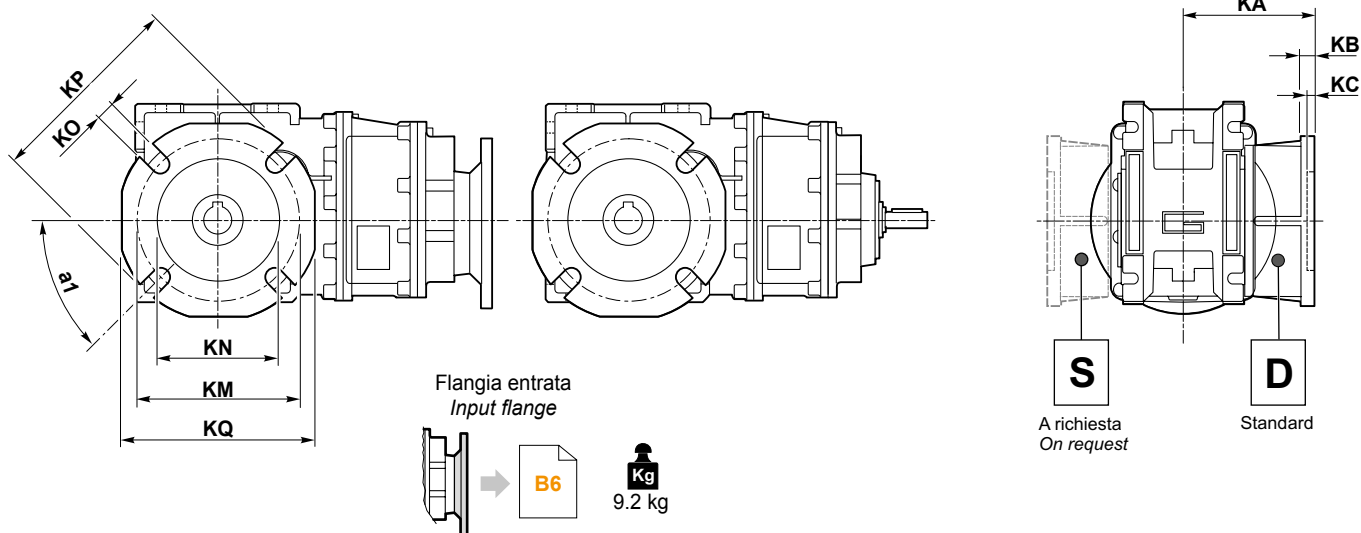
CMB 633 U..

CMBIS 633 U..



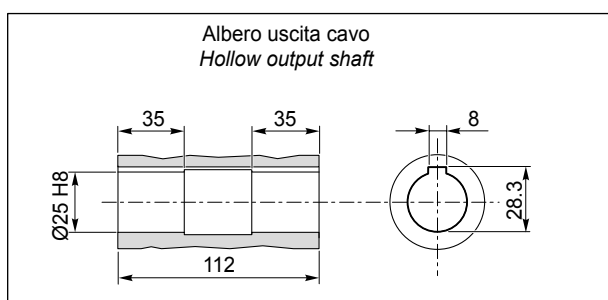
CMB 633 F..

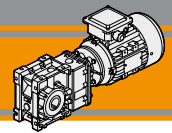
CMBIS 633 F..



Versione F / F Version										
CMB CMBIS	a ₁	KA	KB	KC	KM	KN H8	KO	KP	KQ	Flangia / Flange Tipo / Type
633	45°	82	10	6	150-160	115	11	180	142	F
	45°	112	10	8	150-160	115	11	180	142	FL
	45°	98	11	5	165	130	11	200	160	FB

CMB 633.. D.. - CMBIS 633.. D..





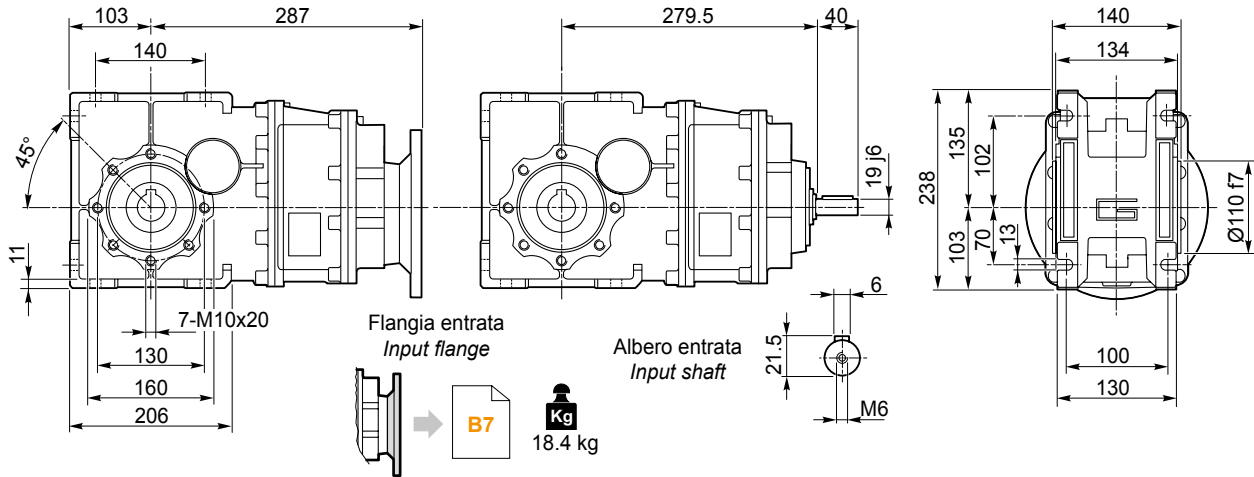
Dimensioni

Dimensions

CMB 903.. - CMBIS 903..

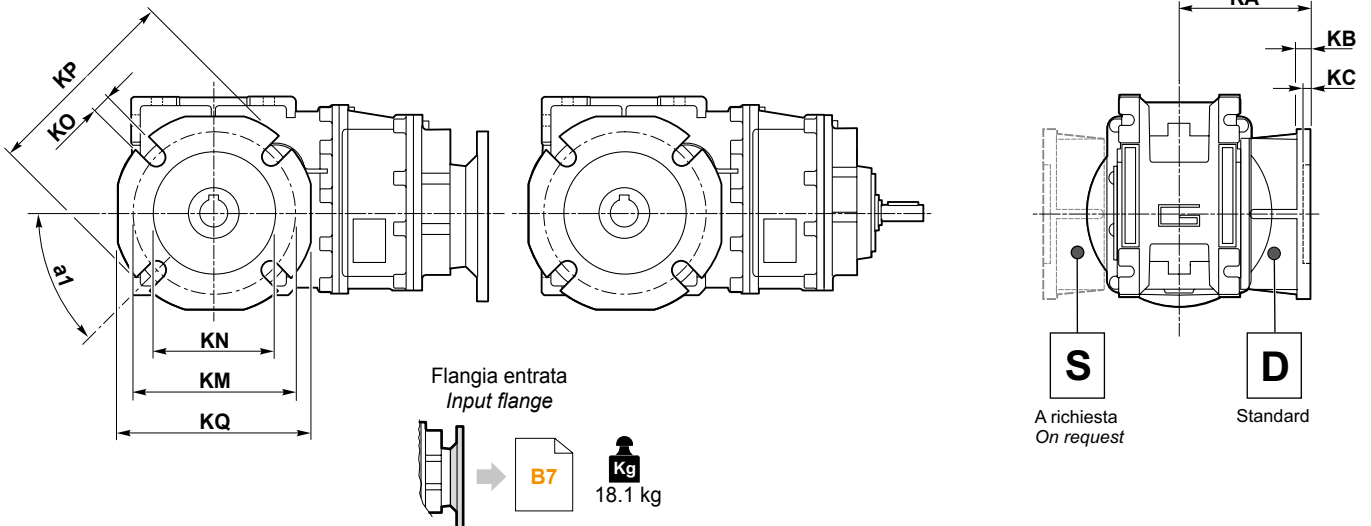
CMB 903 U..

CMBIS 903 U..



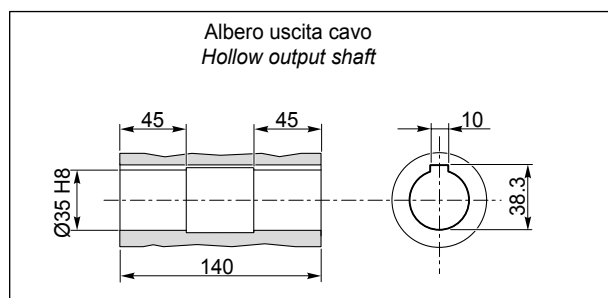
CMB 903 F..

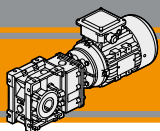
CMBIS 903 F..



Versione F / F Version										
CMB CMBIS	a ₁	KA	KB	KC	KM	KN H8	KO	KP	KQ	Flangia / Flange Tipo / Type
903	45°	111	13	6	175-188	152	14	210	200	F

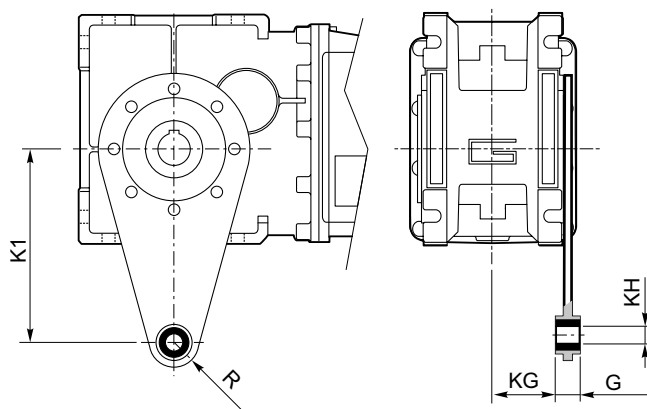
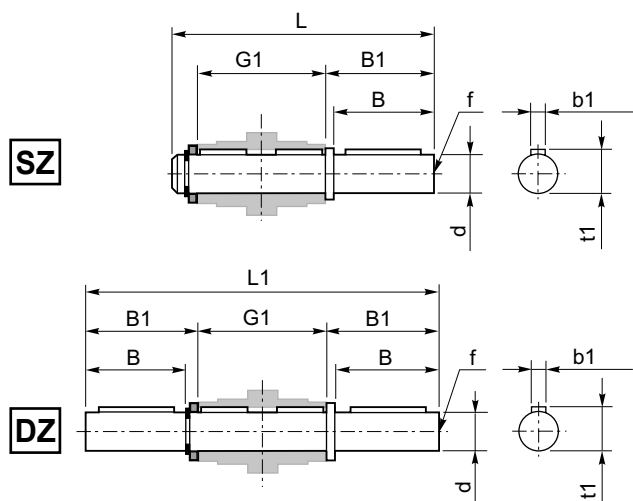
CMB 903.. D.. - CMBIS 903.. D..





Accessori

Accessories



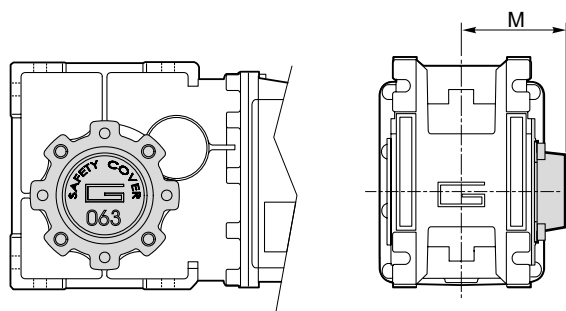
Albero lento / Output shaft

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

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

SC - Safety cover



CMB CMBIS	M
402	54.5
502	62.5
633	73
903	94

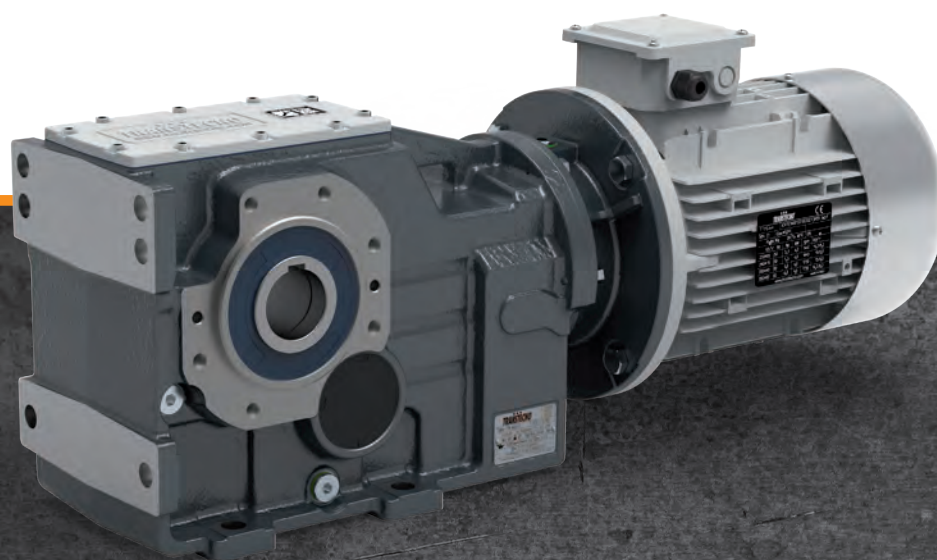
TRANSTECNO[®]
the modular gearmotor

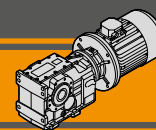
ITB

ITB



Motoriduttori ad assi ortogonali Helical bevel gearmotors

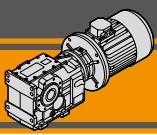




Indice	Index	Pag. Page
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Designazione	<i>Classification</i>	C3
Sensi di rotazione	<i>Direction of rotation</i>	C3
Simbologia	<i>Symbols</i>	C4
Lubrificazione	<i>Lubrication</i>	C4
Carichi radiali in entrata	<i>Input radial loads</i>	C6
Carichi radiali in uscita	<i>Output radial loads</i>	C6
Dati tecnici	<i>Technical data</i>	C7
Dimensioni	<i>Dimensions</i>	C16
Accessori	<i>Accessories</i>	C22

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ITB Motoriduttori ad assi ortogonali Helical bevel gearmotors

Caratteristiche tecniche

I motoriduttori della serie ITB sono dedicati ad applicazioni industriali che presentano carichi particolarmente gravosi. La costruzione robusta con carcassa in ghisa e l'elevata modularità dei diversi kit di entrata e di uscita li rendono adatti ad ogni tipo di applicazione.

Caratteristiche comuni a tutta la serie sono:

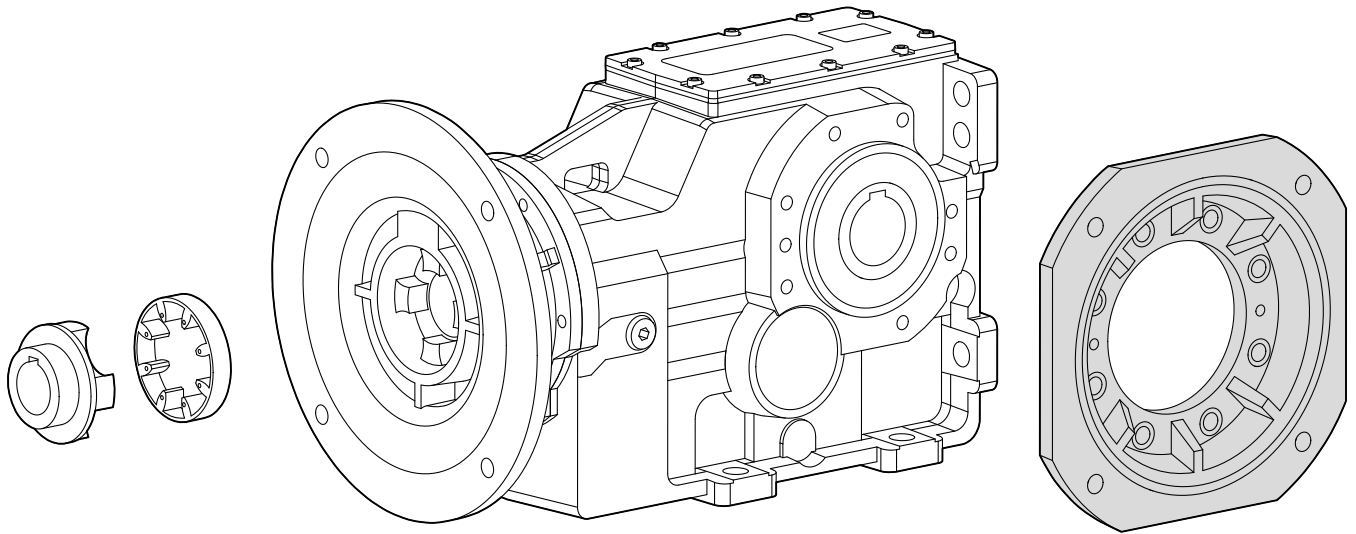
- Costruzione robusta con carcassa in ghisa
- Elevata modularità
- Lubrificazione con olio sintetico
- Accoppiamento al motore tramite giunto elastico
- Verniciatura a polvere epossidica RAL 7016 di spessore medio 0,10 – 0,15 mm.

Technical features

The ITB gearmotors are intended for heavy duty applications. The robust one pieces casing of the main housing and the modular design of input and output sets increase application flexibility.

The main features of ITB range are:

- Robust cast iron housings
- High degree of modularity
- Lubrication with synthetic oil
- Coupled to motor with flexible coupling
- Epoxy powder coating RAL 7016 average thickness 0,10 – 0,15 mm.

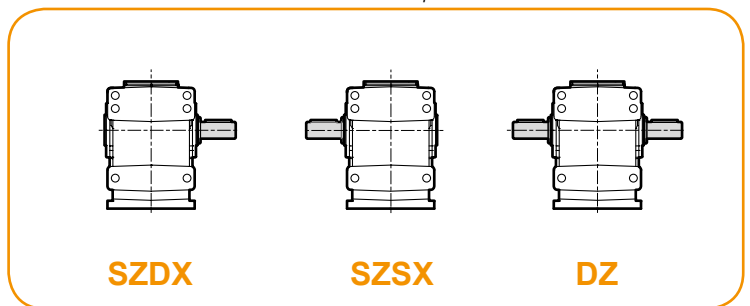
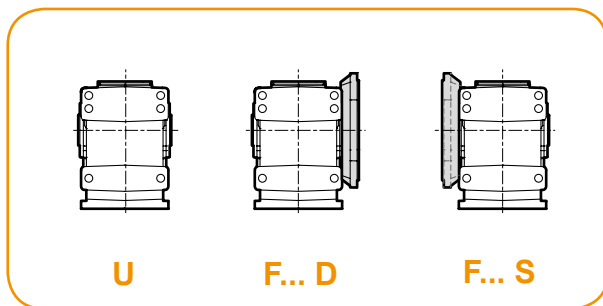


Versioni

Versions

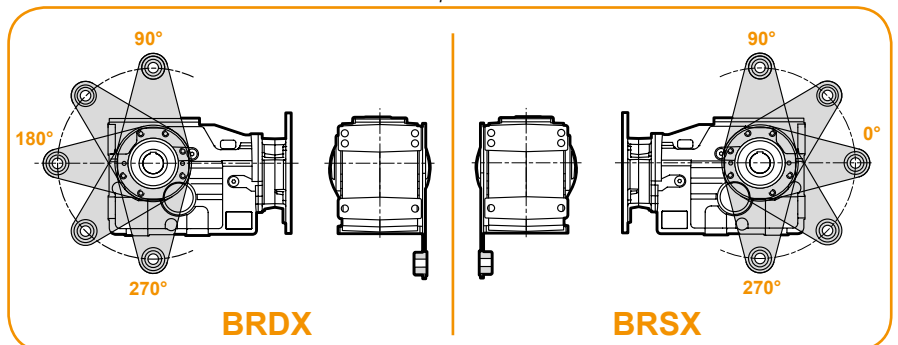
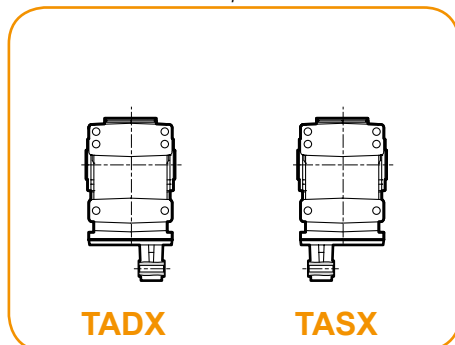
Versione Riduttore
Gearbox Version

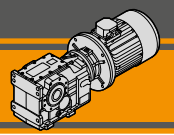
Albero di uscita
Output shaft



Braccio di reazione
Torque arm


Braccio di reazione
Torque arm

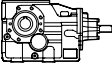


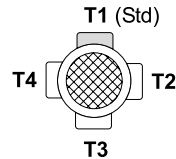


Designazione

Classification

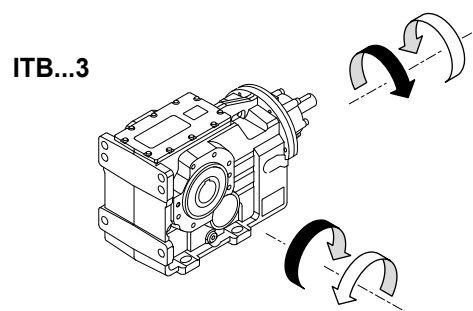
RIDUTTORE / GEARBOX											
ITB	42	3	U	20.12	D40	132	B5	SZDX	BRSX	M1	CW
Tipo Type	Grandezza Size	Stadi Stages	Versione Version	Rapporto Ratio	Albero uscita Output shaft	IEC	Forma costruttiva Version	Albero di uscita Output shaft	Braccio di reaz. Torque arm	Pos. di montaggio Mounting position	Dispositivo antiretro Backstop device
	42 43 44	3	U F...D F...S	vedi tabelle see tables	vedi tabelle see tables	80.. — 180..	B5 B14	SZDX SZSX DZ	TADX TASX BRDX 90°...270° BRSX 0°...270°	M1 (B3) M2 (V6) M3 (B8) M4 (V5) M5 (B7) M6 (B6)	CW CCW

RIDUTTORE / GEARBOX								
ITBIS	42	3	U	20.12	D40	SZDX	BRSX	M1
Tipo Type	Grandezza Size	Stadi Stages	Versione Version	Rapporto Ratio	Albero uscita Output shaft	Albero di uscita Output shaft	Braccio di reaz. Torque arm	Pos. di montaggio Mounting position
	42 43 44	3	U F...D F...S	vedi tabelle see tables	vedi tabelle see tables	SZDX SZSX DZ	TADX TASX BRDX 90°...270° BRSX 0°...270°	M1 (B3) M2 (V6) M3 (B8) M4 (V5) M5 (B7) M6 (B6)

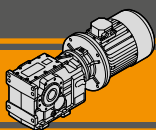
MOTORE / MOTOR					
5.5kW	4p	3ph	230/400V	50Hz	T1
Potenza Power	Poli Poles	Fasi Phases	Tensione Voltage	Frequenza Frequency	Pos. morsetiera Terminal box pos.
vedi tabelle see tables	2p 4p 6p 8p	1ph 3ph	230/400V 220/380V ... 230V	50Hz 60Hz	T1 (Std)  T4 T3

Sensi di rotazione

Direction of rotation



Rotazione inversa disponibile a richiesta.
Inverse rotation on request



Simbologia

Symbols

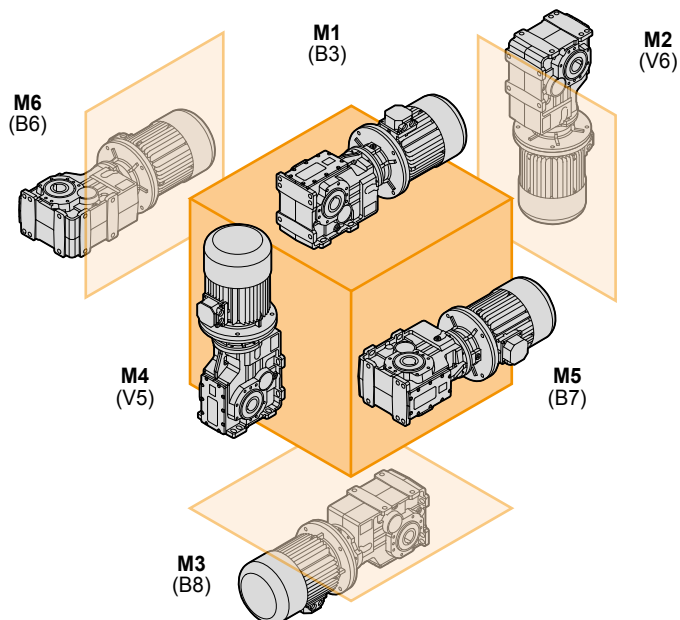
n_1	[min^{-1}]	Velocità in ingresso / <i>Input speed</i>
n_2	[min^{-1}]	Velocità in uscita / <i>Output speed</i>
i		Rapporto di riduzione / <i>Ratio</i>
P_1	[kW]	Potenza in entrata / <i>Input power</i>
M_2	[Nm]	Coppia nominale in uscita in funzione di P_1 / <i>Output torque referred to P_1</i>
P_{n1}	[kW]	Potenza nominale in entrata / <i>Nominal input power</i>
M_{n2}	[Nm]	Coppia nominale in uscita in funzione di P_{n1} / <i>Nominal output torque referred to P_{n1}</i>
sf		Fattore di servizio / <i>Service factor</i>
R_1	[N]	Carico radiale ammissibile in entrata / <i>Permitted input radial load</i>
A_1	[N]	Carico assiale ammissibile in entrata / <i>Permitted input axial load</i>
R_2	[N]	Carico radiale ammissibile in uscita / <i>Permitted output radial load</i>
A_2	[N]	Carico assiale ammissibile in uscita / <i>Permitted output axial load</i>

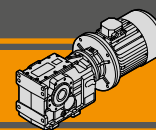
Lubrificazione

Lubrication

I motoriduttori della serie ITB sono forniti completi di lubrificante sintetico viscosità 320. La quantità di lubrificante dipende dalla posizione di montaggio.

ITB series gearmotors come complete with synthetic lubricant 320 viscosity. The lubricant quantity depends on assembly position.



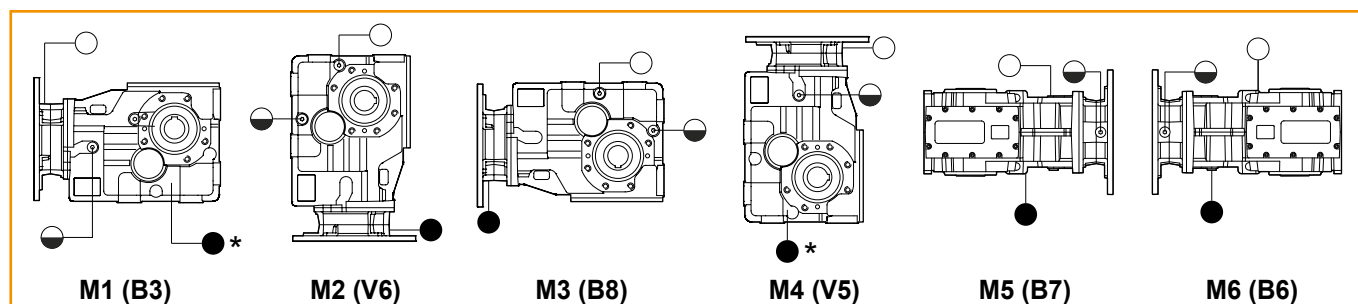


Lubrificazione

Lubrication

ITB	Quantità di olio (litri) / Oil quantity (litres)					
	M1 (B3)	M2 (V6)	M3 (B8)	M4 (V5)	M5 (B7)	M6 (B6)
423	2.1	3.1	3.0	3.9	3.2	2.3
433	4.3	5.1	4.9	7.2	5.3	4.0
443	6.5	8.9	9.0	12.2	8.8	6.7

ITBIS	Quantità di olio (litri) / Oil quantity (litres)					
	M1 (B3)	M2 (V6)	M3 (B8)	M4 (V5)	M5 (B7)	M6 (B6)
423	2.3	3.5	3.2	3.9	3.4	2.5
433	4.5	5.5	5.1	7.2	5.5	4.2
443	6.9	9.6	9.4	12.2	9.2	7.1



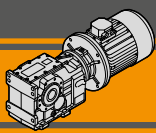
* Tappo di scarico in posizione posteriore

* Oil draining plug in backside position.

○ Sfiato e tappo di riempimento / Breather and filling plug

◐ Livello olio / Oil level plug

● Tappo di scarico / Oil drain plug



Carichi radiali in entrata

Input radial loads

ITB423 ITB433	n ₁ [min ⁻¹]	Potenza motore/ Motor Power [kW]			
		2.2	3.0	4.0	5.5
R1 [N]	1400	1800			750
	900	2100		1200	-
	500	2500	-	-	-

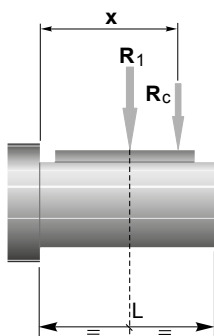
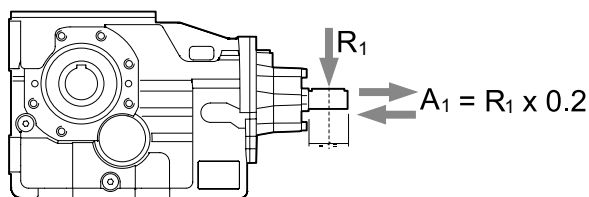
ITB443	n ₁ [min ⁻¹]	Potenza motore/ Motor Power [kW]					
		5.5	7.5	9.2	11.0	15.0	18.5
R1 [N]	1400	3700				2800	1200
	900	4900			3300	650	-
	500	5250	3900	1300	-	-	-

I carichi radiali entrata massimi applicabili sono riportati nelle tabelle precedenti.

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

The radial loads maximum input applicable are indicated in the previous tables.

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:



	ITB 423	ITB 433	ITB 443
a	139		157
b	110		118

$$R_c = \frac{R_1 \cdot a}{(b+x)} \leq R_1$$

$$R \leq R_c$$

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

Carichi radiali in uscita

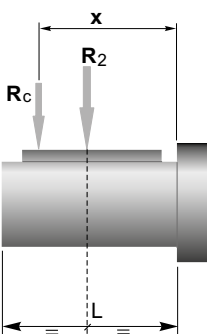
Output radial loads

I carichi radiali uscita massimi applicabili sono riportati nelle tabelle dati tecnici.

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

The radial loads maximum output applicable are indicated in the technical data table.

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:

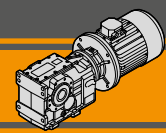


	ITB 423	ITB 433	ITB 443
a	182	218	252
b	142	168	192
R _{2MAX}	18500	23000	31000

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

$$R \leq R_c$$

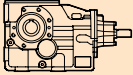
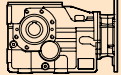
a, b = valori riportati nella tabella
a, b = values given in the table



Dati tecnici

n_1 1400 min⁻¹


Technical data


	n_2 [min ⁻¹]	Mn_2 [Nm]	Pn_1 [kW]	i	R_2 [N]		IEC Motori applicabili IEC Motor adapters			
ITBIS 423						ITB 423				
						80B5	90B5/B14	100B5/B14	112B5/B14	132B5/B14
191	500	10.62	7.34	9609						
153	500	8.51	9.16	10851						
118	600	7.90	11.85	12122						
90	600	5.98	15.64	14119						
76	700	5.96	18.32	14920						
70	700	5.43	20.12	15708						
61	800	5.46	22.85	16301						
50	800	4.42	28.22	18306						*
47	850	4.48	29.57	18500						*
45	850	4.29	30.90	18500						*
41	850	3.83	34.57	18500						*
37	850	3.49	37.99	18500					*	*
36	900	3.60	39.01	18500					*	*
34	900	3.37	41.70	18500					*	*
29	900	2.86	49.13	18500					*	
28	900	2.80	50.19	18500					*	*
26	900	2.61	53.77	18500					*	
24	900	2.37	59.26	18500					*	
20	900	1.99	70.40	18500					*	
18	950	1.92	77.08	18500			*	*	*	*
16	950	1.72	86.24	18500			*	*	*	*
15	950	1.56	94.77	18500			*	*	*	*
14	950	1.42	104.04	18500			*	*	*	*
11	950	1.21	122.57	18500			*	*		
10	950	1.10	134.15	18500			*	*		
9.5	950	1.00	147.84	18500			*	*		

ITB

N.B.
Le aree evidenziato indicano l'applicabilità della corrispondente grandezza motore.

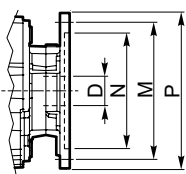
N.B.
Highlighted areas indicate motor inputs available on each size of unit.

 * = Il fattore di servizio (sf) deve essere scelto in funzione dell'applicazione: si prega di contattare il nostro Servizio Tecnico.

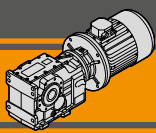
 * = The service factor (sf) has to be selected depending on application: please contact our Technical Department.

Prima di eseguire la scelta del motoriduttore riferirsi alle prestazioni elencate nelle tabelle dalla pag. C10 alla pag. C15.

Before selecting any gearbox, please read the performance values shown in the tables on page C10 to C15.



Dimensioni IEC / IEC Dimensions								
	71 B5	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14
N	110	130	130	95	180	110	230	130
M	130	165	165	115	215	130	265	165
P	160	200	200	140	250	160	300	200
D	14	19	24		28		38	

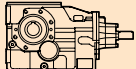
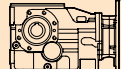


ITB Motoriduttori ad assi ortogonali Helical bevel gearmotors

Dati tecnici

n_1 1400 min⁻¹

Technical data

	n_2 [min ⁻¹]	Mn_2 [Nm]	Pn_1 [kW]	i	R_2 [N]		IEC Motori applicabili IEC Motor adapters				
ITBIS 433						ITB 433					
						80B5	90B5/B14	100B5/B14	112B5/B14	132B5/B14	160B5
171	1000	18.99	8.21	12339							
137	1000	15.22	10.25	13935							
106	1300	15.30	13.25	15144							
80	1400	12.48	17.49	17285							
69	1600	12.21	20.44	18060							
62	1700	11.78	22.50	18635							
55	1700	10.40	25.49	19960							*
44	1700	8.40	31.56	22448							*
43	1700	8.04	32.98	23000							*
41	1700	7.67	34.55	23000							
36	1700	6.86	38.66	23000							
33	1700	6.24	42.48	23000							
32	1800	6.45	43.51	23000							*
30	1800	6.02	46.64	23000							
25	1800	5.01	55.98	23000						*	*
23	1600	4.15	60.14	23000							
21	1600	3.77	66.27	23000							
18	1800	3.58	78.52	23000					*	*	*
16	1800	3.27	85.97	23000					*	*	
15	1800	2.92	96.19	23000					*	*	
13	1800	2.66	105.70	23000					*	*	
12	1800	2.42	116.04	23000					*	*	
10	1800	2.05	136.71	23000				*	*		
9.4	1800	1.88	149.63	23000				*	*		
8.5	1800	1.70	164.89	23000				*	*		

N.B.

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

N.B.

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



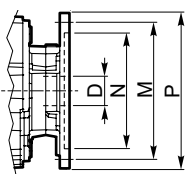
* = Il fattore di servizio (**sf**) deve essere scelto in funzione dell'applicazione: si prega di contattare il nostro Servizio Tecnico.

Prima di eseguire la scelta del motoriduttore riferirsi alle prestazioni elencate nelle tabelle dalla pag. C10 alla pag. C15.

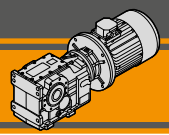


* = The service factor (**sf**) has to be selected depending on application: please contact our Technical Department.

Before selecting any gearbox, please read the performance values shown in the tables on page C10 to C15.



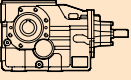
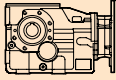
Dimensioni IEC / IEC Dimensions								
	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14	160 B5
N	130	130	95	180	110	230	130	250
M	165	165	115	215	130	265	165	300
P	200	200	140	250	160	300	200	350
D	19	24		28		38		42



Dati tecnici

n_1 1400 min⁻¹


Technical data


	n_2 [min ⁻¹]	Mn_2 [Nm]	Pn_1 [kW]	i	R_2 [N]		IEC Motori applicabili IEC Motor adapters					
ITBIS 443						ITB 443						
						80B5	90B5/B14	100B5/B14	112B5/B14	132B5/B14	160B5	180B5
178	1700	33.65	7.88	17306								
147	1700	27.81	9.53	19220								
119	1800	23.89	11.75	21325								
99	2000	22.07	14.13	23076								
81	2300	20.82	17.23	24849								
61	2800	18.86	23.16	27511								
56	3000	18.85	24.82	27861								
47	3000	15.58	30.03	31000								*
38	3000	12.64	37.01	31000								*
36	2800	11.06	39.46	31000								*
32	3200	11.21	44.51	31000								*
29	2800	9.16	47.67	31000								
26	3200	9.20	54.26	31000							*	*
19	3500	7.48	72.94	31000							*	*
15	3500	5.92	92.14	31000							*	*
11	3500	4.39	124.32	31000						*	*	*
10	3500	4.03	135.45	31000						*		
9.3	3500	3.64	150.15	31000					*	*		
8.5	3500	3.33	163.80	31000					*	*		
7.8	3500	3.05	179.16	31000					*	*		

ITB

N.B.
Le aree evidenziate indicano l'applicabilità della corrispondente grandezza motore.

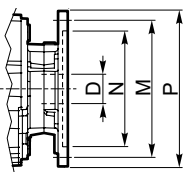
N.B.
Highlighted areas indicate motor inputs available on each size of unit.

 * = Il fattore di servizio (**sf**) deve essere scelto in funzione dell'applicazione: si prega di contattare il nostro Servizio Tecnico.

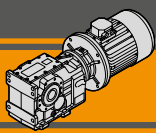
 * = The service factor (**sf**) has to be selected depending on application: please contact our Technical Department.

Prima di eseguire la scelta del motoriduttore riferirsi alle prestazioni elencate nelle tabelle dalla pag. C10 alla pag. C15.

Before selecting any gearbox, please read the performance values shown in the tables on page C10 to C15.







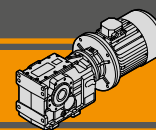
Dimensioni IEC / IEC Dimensions									
	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14	160 B5	180 B5
N	130	130	95	180	110	230	130	250	250
M	165	165	115	215	130	265	165	300	300
P	200	200	140	250	160	300	200	350	350
D	19	24		28		38		42	48



Dati tecnici





Technical data

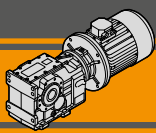
P_1 [kW]	n_2 [min ⁻¹]	M_2 [Nm]	sf	i			R_2 [N]	P_1 [kW]	n_2 [min ⁻¹]	M_2 [Nm]	sf	i			R_2 [N]
0.55								0.75							
80A4 (1400 min ⁻¹)	191	26	19	7.34	ITB423	B5	11001	80B4 (1400 min ⁻¹)	191	35	14	7.34	ITB423	B5	10973
	153	32	15	9.16		B5	12403		153	44	11	9.16		B5	12364
	118	42	14	11.85		B5	14255		118	57	11	11.85		B5	14197
	90	55	11	15.64		B5	16545		90	75	8.0	15.64		B5	16455
	76	65	11	18.32		B5	18005		76	88	7.9	18.32		B5	17891
	70	71	9.9	20.12		B5	18500		70	97	7.2	20.12		B5	18500
	61	81	9.9	22.85		B5	18500		61	110	7.3	22.85		B5	18500
	50	100	8.0	28.22		B5	18500		50	136	5.9	28.22		B5	18500
	47	104	8.2	29.57		B5	18500		47	142	6.0	29.57		B5	18500
	45	109	7.8	30.90		B5	18500		45	149	5.7	30.90		B5	18500
	40	122	7.0	34.57		B5	18500		40	166	5.1	34.57		B5	18500
	37	134	6.3	37.99		B5	18500		37	183	4.7	37.99		B5	18500
	36	138	6.5	39.01		B5	18500		36	188	4.8	39.01		B5	18500
	34	147	6.1	41.70		B5	18500		34	201	4.5	41.70		B5	18500
	29	173	5.2	49.13		B5	18500		29	236	3.8	49.13		B5	18500
	28	177	5.1	50.19		B5	18500		28	241	3.7	50.19		B5	18500
	26	190	4.7	53.77		B5	18500		26	259	3.5	53.77		B5	18500
	24	209	4.3	59.26		B5	18500		24	285	3.2	59.26		B5	18500
	20	248	3.6	70.40		B5	18500		20	339	2.7	70.40		B5	18500
	18	272	3.5	77.08		B5	18500		18	371	2.6	77.08		B5	18500
	16	304	3.1	86.24	B5	18500		16	415	2.3	86.24	B5	18500		
	15	334	2.8	94.77	B5	18500		15	456	2.1	94.77	B5	18500		
	13	367	2.6	104.04	B5	18500		13	500	1.9	104.04	B5	18500		
	11	432	2.2	122.57	B5	18500		11	589	1.6	122.57	B5	18500		
	10	473	2.0	134.15	B5	18500		10	645	1.5	134.15	B5	18500		
	9.5	521	1.8	147.84	B5	18500		9.5	711	1.3	147.84	B5	18500		
	25	197	9.1	55.98	ITB433	B5	23000		41	166	10	34.55	ITB433	B5	23000
	23	212	7.5	60.14		B5	23000		36	186	9.1	38.66		B5	23000
	21	234	6.8	66.27		B5	23000		33	204	8.3	42.48		B5	23000
	18	277	6.5	78.52		B5	23000		32	209	8.6	43.51		B5	23000
	16	303	5.9	85.97		B5	23000		30	224	8.0	46.64		B5	23000
	15	339	5.3	96.19		B5	23000		25	269	6.7	55.98		B5	23000
	13	373	4.8	105.70		B5	23000		23	289	5.5	60.14		B5	23000
	12	409	4.4	116.04		B5	23000		21	319	5.0	66.27		B5	23000
	10	482	3.7	136.71		B5	23000		18	378	4.8	78.52		B5	23000
	9.4	528	3.4	149.63		B5	23000		16	413	4.4	85.97		B5	23000
	8.5	582	3.1	164.89	B5	23000		15	463	3.9	96.19	B5	23000		
	11	438	8.0	124.32	ITB443	B5	31000		13	508	3.5	105.70	ITB443	B5	31000
	10	478	7.3	135.45		B5	31000		12	558	3.2	116.04		B5	31000
	9.3	530	6.6	150.15		B5	31000		10	657	2.7	136.71		B5	31000
	8.5	578	6.1	163.80		B5	31000		9.4	720	2.5	149.63		B5	31000
	7.8	632	5.5	179.16		B5	31000		8.5	793	2.3	164.89		B5	31000
									19	351	10	72.94		B5	31000
									15	443	7.9	92.14		B5	31000
								11	598	5.9	124.32	B5	31000		
								10	651	5.4	135.45	B5	31000		
								9.3	722	4.8	150.15	B5	31000		
								8.5	788	4.4	163.80	B5	31000		
								7.8	862	4.1	179.16	B5	31000		



Dati tecnici





Technical data

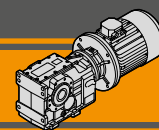
P_1 [kW]	n_2 [min ⁻¹]	M_2 [Nm]	sf	i			R_2 [N]	P_1 [kW]	n_2 [min ⁻¹]	M_2 [Nm]	sf	i			R_2 [N]	
3								4								
100LB4 (1400 min ⁻¹)	191	141	3.5	7.34	ITB423	B5/B14	10662	112M4 (1400 min ⁻¹)	191	188	2.7	7.34	ITB423	B5/B14	10524	
	153	176	2.8	9.16		B5/B14	11925		153	235	2.1	9.16		B5/B14	11730	
	118	228	2.6	11.85		B5/B14	13543		118	304	2.0	11.85		B5/B14	13253	
	90	301	2.0	15.64		B5/B14	15451		90	401	1.5	15.64		B5/B14	15005	
	76	352	2.0	18.32		B5/B14	16608		76	470	1.5	18.32		B5/B14	16037	
	70	387	1.8	20.12		B5/B14	17308		70	516	1.4	20.12		B5/B14	16649	
	61	440	1.8	22.85		B5/B14	18277		61	586	1.4	22.85		B5/B14	17474	
	50	543	1.5	28.22		B5/B14	18500		50	724	1.1	28.22		B5/B14	18500	
	47	569	1.5	29.57		B5/B14	18500		47	758	1.1	29.57		B5/B14	18500	
	45	594	1.4	30.90		B5/B14	18500		45	792	1.1	30.90		B5/B14	18500	
	40	665	1.3	34.57		B5/B14	18500		40	887	1.0	34.57		B5/B14	18500	
	37	731	1.2	37.99		B5/B14	18500									
	36	750	1.2	39.01		B5/B14	18500		170	211	4.7	8.21		ITB433	B5/B14	14184
	34	802	1.1	41.70		B5/B14	18500		137	263	3.8	10.25			B5/B14	15881
	29	945	1.0	49.13	B5/B14	18500		106	340	3.8	13.25	B5/B14	18064			
	170	158	6.3	8.21	ITB433	B5/B14	14307	80	449	3.1	17.49	B5/B14	20656			
	137	197	5.1	10.25		B5/B14	16054		69	524	3.1	20.44	B5/B14		22213	
	106	255	5.1	13.25		B5/B14	18323		62	577	2.9	22.50	B5/B14		23000	
	80	336	4.2	17.49		B5/B14	21054		55	654	2.6	25.49	B5/B14		23000	
	69	393	4.1	20.44		B5/B14	22719		44	809	2.1	31.56	B5/B14		23000	
	62	433	3.9	22.50		B5/B14	23000		42	846	2.0	32.98	B5/B14		23000	
	55	490	3.5	25.49		B5/B14	23000		41	886	1.9	34.55	B5/B14		23000	
	44	607	2.8	31.56		B5/B14	23000		36	992	1.7	38.66	B5/B14		23000	
	42	634	2.7	32.98		B5/B14	23000		33	1090	1.6	42.48	B5/B14		23000	
	41	665	2.6	34.55		B5/B14	23000		32	1116	1.6	43.51	B5/B14		23000	
	36	744	2.3	38.66		B5/B14	23000		30	1196	1.5	46.64	B5/B14		23000	
	33	817	2.1	42.48		B5/B14	23000		25	1436	1.3	55.98	B5/B14	23000		
	32	837	2.2	43.51		B5/B14	23000		23	1542	1.0	60.14	B5/B14	23000		
	30	897	2.0	46.64		B5/B14	23000									
	25	1077	1.7	55.98	B5/B14	23000		38	949	3.2	37.01	ITB443	B5/B14	31000		
	23	1157	1.4	60.14	B5/B14	23000		35	1012	2.8	39.46		B5/B14	31000		
	21	1275	1.3	66.27	B5/B14	23000		31	1142	2.8	44.51		B5/B14	31000		
	18	1510	1.2	78.52	B5/B14	23000		29	1223	2.3	47.67		B5/B14	31000		
	16	1654	1.1	85.97	B5/B14	23000		26	1392	2.3	54.26		B5/B14	31000		
	15	1850	1.0	96.19	B5/B14	23000		19	1871	1.9	72.94		B5/B14	31000		
	38	712	4.2	37.01	ITB443	B5/B14	31000	15	2363	1.5	92.14		B5/B14	31000		
	35	759	3.7	39.46		B5/B14	31000		11	3189	1.1		124.32	B5/B14	31000	
	31	856	3.7	44.51		B5/B14	31000		10	3474	1.0		135.45	B5/B14	31000	
	29	917	3.1	47.67		B5/B14	31000									
	26	1044	3.1	54.26		B5/B14	31000									
	19	1403	2.5	72.94		B5/B14	31000									
	15	1772	2.0	92.14		B5/B14	31000									
	11	2391	1.5	124.32		B5/B14	31000									
	10	2606	1.3	135.45		B5/B14	31000									
	9.3	2888	1.2	150.15		B5/B14	31000									
	8.5	3151	1.1	163.80		B5/B14	31000									
	7.8	3446	1.0	179.16		B5/B14	31000									



Dati tecnici



Technical data

P_1 [kW]	n_2 [min ⁻¹]	M_2 [Nm]	sf	i			R_2 [N]	P_1 [kW]	n_2 [min ⁻¹]	M_2 [Nm]	sf	i			R_2 [N]	
5.5								7.5								
132S4 (1400 min ⁻¹)	191	259	1.9	7.34	ITB423	B5/B14	10316	132MA4 (1400 min ⁻¹)	191	353	1.4	7.34	ITB423	B5/B14	10040	
	153	323	1.5	9.16		B5/B14	11438		153	441	1.1	9.16		B5/B14	11049	
	118	418	1.4	11.85		B5/B14	12817		118	570	1.1	11.85		B5/B14	12236	
	90	552	1.1	15.64		B5/B14	14335									
	76	646	1.1	18.32	ITB433	B5/B14	15181		170	395	2.5	8.21	ITB433	B5/B14	13753	
	70	710	1.0	20.12		B5/B14	15659		137	493	2.0	10.25		B5/B14	15274	
	61	806	1.0	22.85		B5/B14	16268		106	637	2.0	13.25		B5/B14	17159	
						B5/B14			80	841	1.7	17.49		B5/B14	19266	
	170	290	3.5	8.21		B5/B14	13999		69	983	1.6	20.44		B5/B14	20442	
	137	361	2.8	10.25		B5/B14	15621		62	1082	1.6	22.50		B5/B14	21150	
	106	467	2.8	13.25		B5/B14	17676		55	1226	1.4	25.49		B5/B14	22027	
	80	617	2.3	17.49		B5/B14	20060		44	1518	1.1	31.56		B5/B14	23000	
	69	721	2.2	20.44		B5/B14	21454		42	1586	1.1	32.98		B5/B14	23000	
	62	794	2.1	22.50		B5/B14	22325		41	1662	1.0	34.55		B5/B14	23000	
	55	899	1.9	25.49		B5/B14	23000									
	44	1113	1.5	31.56		B5/B14	23000		178	379	4.5	7.88		ITB443	B5/B14	19836
	42	1163	1.5	32.98	B5/B14	23000		147	458	3.7	9.53	B5/B14	21860			
	41	1219	1.4	34.55	B5/B14	23000		119	565	3.2	11.75	B5/B14	24271			
	36	1363	1.2	38.66	B5/B14	23000		99	680	2.9	14.13	B5/B14	26562			
	33	1498	1.1	42.48	B5/B14	23000		81	828	2.8	17.23	B5/B14	29182			
	32	1535	1.2	43.51	B5/B14	23000		60	1114	2.5	23.16	B5/B14	31000			
	30	1645	1.1	46.64	B5/B14	23000		56	1194	2.5	24.82	B5/B14	31000			
								47	1444	2.1	30.03	B5/B14	31000			
	178	278	6.1	7.88	ITB443	B5/B14	20029		38	1780	1.7	37.01	B5/B14		31000	
	147	336	5.1	9.53		B5/B14	22120		35	1898	1.5	39.46	B5/B14		31000	
	119	414	4.3	11.75		B5/B14	24631		31	2141	1.5	44.51	B5/B14		31000	
	99	498	4.0	14.13		B5/B14	27041		29	2292	1.2	47.67	B5/B14		31000	
	81	607	3.8	17.23		B5/B14	29833		26	2609	1.2	54.26	B5/B14	31000		
	60	817	3.4	23.16		B5/B14	31000		19	3508	1.0	72.94	B5/B14	31000		
	56	875	3.4	24.82		B5/B14	31000									
	47	1059	2.8	30.03		B5/B14	31000									
	38	1305	2.3	37.01		B5/B14	31000									
	35	1392	2.0	39.46		B5/B14	31000									
	31	1570	2.0	44.51		B5/B14	31000									
	29	1681	1.7	47.67		B5/B14	31000									
	26	1914	1.7	54.26	B5/B14	31000										
	19	2573	1.4	72.94	B5/B14	31000										
	15	3249	1.1	92.14	B5/B14	31000										
9.2								9.2								
								132L4 (1400 min ⁻¹)	191	433	1.2	7.34	ITB423	B5/B14	9805	
									170	485	2.1	8.21		ITB433	B5/B14	13544
									137	604	1.7	10.25			B5/B14	14979
									106	782	1.7	13.25			B5/B14	16720
									80	1032	1.4	17.49	B5/B14		18590	
									69	1206	1.3	20.44	B5/B14	19582		
									62	1327	1.3	22.50	B5/B14	20152		
									55	1504	1.1	25.49	B5/B14	20815		
									178	465	3.7	7.88	ITB443	B5/B14	19671	
									147	562	3.0	9.53		B5/B14	21639	
									119	693	2.6	11.75		B5/B14	23966	
									99	834	2.4	14.13		B5/B14	26156	
									81	1016	2.3	17.23		B5/B14	28629	
									60	1366	2.0	23.16		B5/B14	31000	
									56	1464	2.0	24.82		B5/B14	31000	
									47	1772	1.7	30.03		B5/B14	31000	
									38	2183	1.4	37.01		B5/B14	31000	
									35	2328	1.2	39.46		B5/B14	31000	
									31	2626	1.2	44.51		B5/B14	31000	
									29	2812	1.0	47.67		B5/B14	31000	
									26	3201	1.0	54.26	B5/B14	31000		





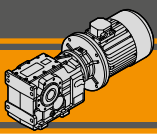
Dati tecnici

Technical data

P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	sf	i			R ₂ [N]	
11								
160M4 (1400 min ⁻¹)	170	579	1.7	8.21	ITB433	B5	13322	
	137	723	1.4	10.25		B5	14667	
	106	935	1.4	13.25		B5	16254	
	80	1234	1.1	17.49		B5	17875	
	69	1441	1.1	20.44		B5	18672	
	62	1587	1.1	22.50		B5	19095	
		178	556	3.1	7.88	ITB443	B5	19497
		147	672	2.5	9.53		B5	21405
		119	829	2.2	11.75		B5	23642
		99	997	2.0	14.13		B5	25725
		81	1215	1.9	17.23		B5	28044
		60	1633	1.7	23.16		B5	31000
		56	1751	1.7	24.82		B5	31000
47		2118	1.4	30.03	B5		31000	
38		2611	1.1	37.01	B5		31000	
35		2784	1.0	39.46	B5		31000	
31	3140	1.0	44.51	B5	31000			

15							
160L4 (1400 min ⁻¹)	170	790	1.3	8.21	ITB433	B5	12830
	137	985	1.0	10.25		B5	13973
	106	1275	1.0	13.25		B5	15220
	178	758	2.2	7.88	ITB443	B5	19110
	147	917	1.9	9.53		B5	20885
	119	1130	1.6	11.75		B5	22923
	99	1359	1.5	14.13		B5	24768
	81	1657	1.4	17.23		B5	26743
	60	2227	1.3	23.16		B5	29496
	56	2387	1.3	24.82		B5	30067
	47	2888	1.0	30.03		B5	31000

P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	sf	i			R ₂ [N]
18.5							
180M4 (1400 min ⁻¹)	178	935	1.8	7.88	ITB443	B5	18772
	147	1131	1.5	9.53		B5	20430
	119	1394	1.3	11.75		B5	22294
	99	1676	1.2	14.13		B5	23931
	81	2043	1.1	17.23		B5	25605
	60	2747	1.0	23.16		B5	27695
56	2944	1.0	24.82	B5	28062		
22							
180L4 (1400 min ⁻¹)	178	1111	1.5	7.88	ITB443	B5	18433
	147	1345	1.3	9.53		B5	19975
	119	1658	1.1	11.75		B5	21665
	99	1993	1.0	14.13		B5	23093
	81	2430	0.9	17.23		B5	24467

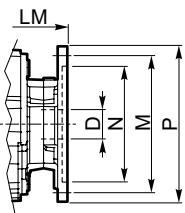
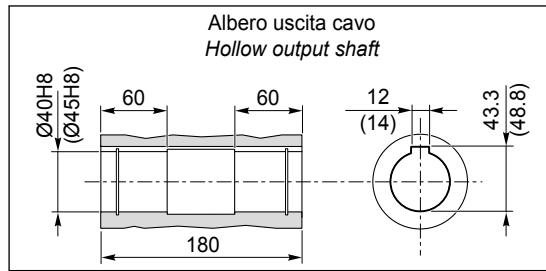
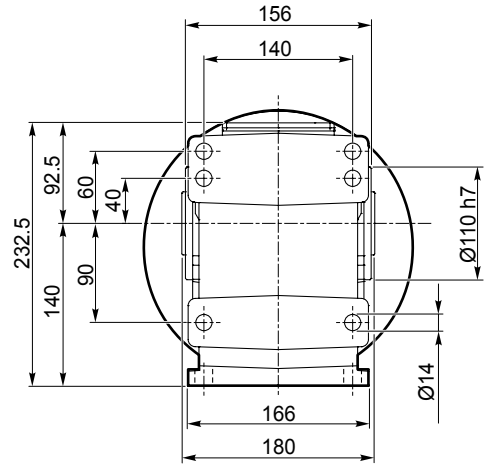
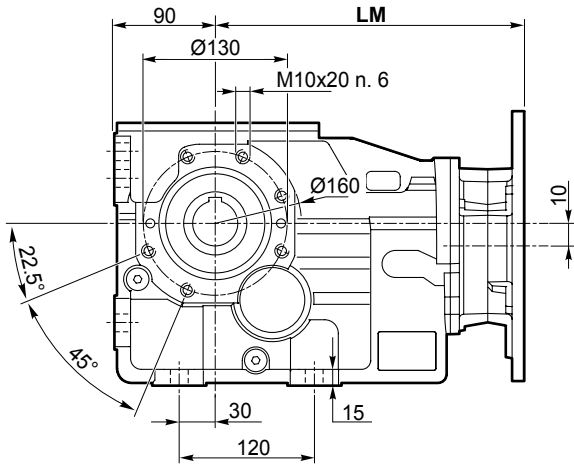


Dimensioni

Dimensions

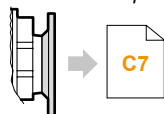
ITB 423 U

ITB 423 U

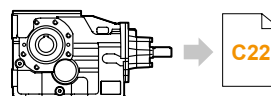


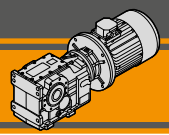
Dimensioni IEC / IEC Dimensions							
	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14
LM	279.5	279.5	284	283.5	284	304.5	
N	130	130	95	180	110	230	130
M	165	165	115	215	130	265	165
P	200	200	140	250	160	300	200
D	19	24		28		38	

IEC Motori applicabili
IEC Motor adapters



ITBIS 423..



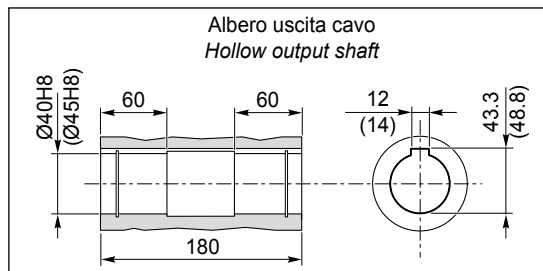
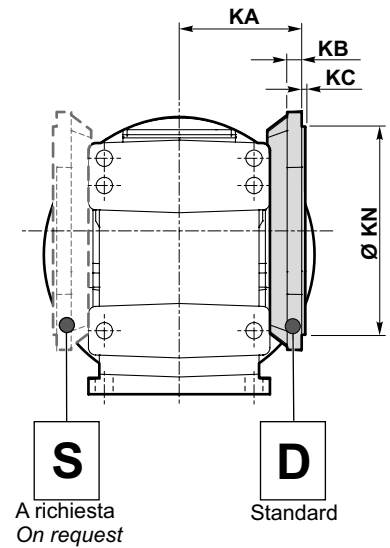
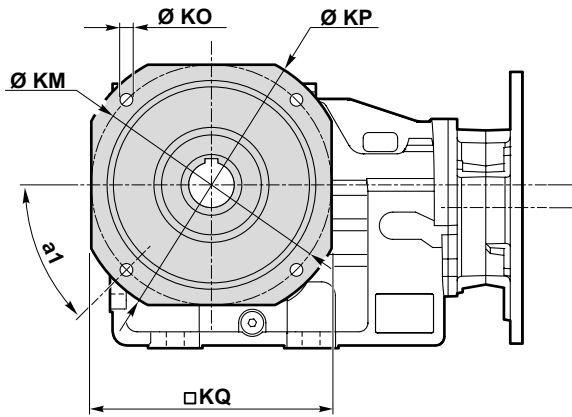


Dimensioni

Dimensions

ITB 423 F...

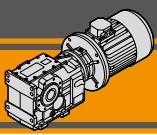
ITB 423 F...



Versione F / F Version											
ITB	a ₁	KA	KB	KC	KM	KN f7	KO	KP	KQ	Flangia / Flange	Peso / Weight
										Tipo / Type	[kg]
423	45°	113	13	4	165	130	11	200	172	F200	2.6
	45°	113	13	4	215	180	14	250	215	F250	3.8
	45°	113	13	4	265	230	14	300	265	F300	5.6

Peso / Weight [kg]							
ITB	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14
423 U	39	39	38	41	38	44	41

Nota: peso del riduttore complessivo di olio per la posizione M1 (B3)
Note: weight of the gearbox filled with oil for M1 (B3) assembly position

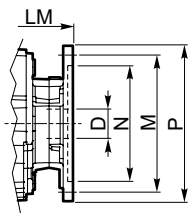
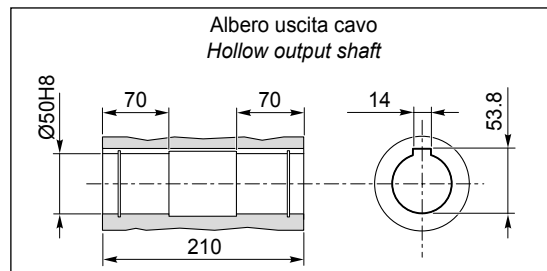
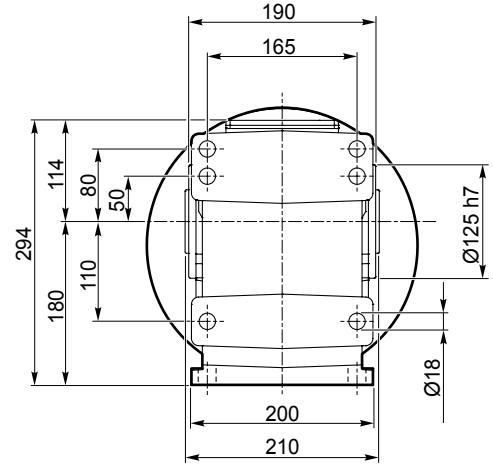
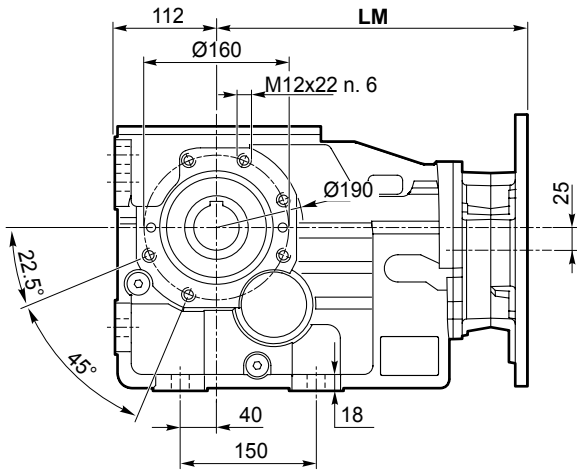


Dimensioni

Dimensions

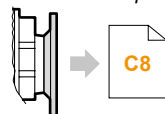
ITB 433 U

ITB 433 U

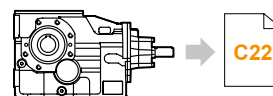


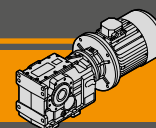
Dimensioni IEC / IEC Dimensions								
	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14	160 B5
LM	330	330	334.5	334	334.5	355		405
N	130	130	95	180	110	230	130	250
M	165	165	115	215	130	265	165	300
P	200	200	140	250	160	300	200	350
D	19	24		28		38		42

IEC Motori applicabili
IEC Motor adapters



ITBIS 433..



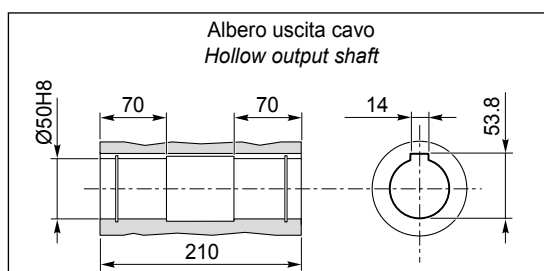
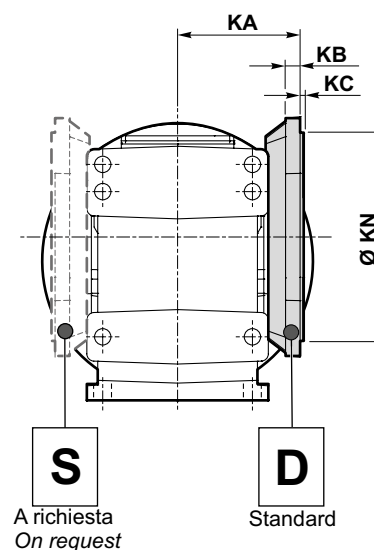
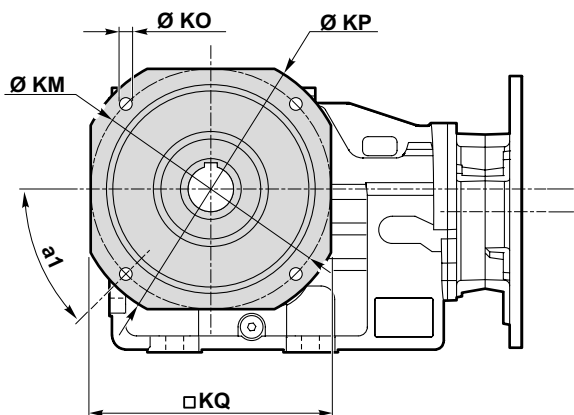


Dimensioni

Dimensions

ITB 433 F...

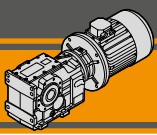
ITB 433 F...



Versione F / F Version											
ITB	a ₁	KA	KB	KC	KM	KN f7	KO	KP	KQ	Flangia / Flange	Peso / Weight
										Tipo / Type	[kg]
433	45°	135	16	4	215	180	14	250	215	F250	4.8
	45°	135	16	4	265	230	14	300	260	F300	7.1
	45°	135	16	4	300	250	18	350	300	F350	9.1

Peso / Weight [kg]									
ITB	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14	160 B5	
433 U	65	65	64	67	64	70	67	78	

Nota: peso del riduttore complessivo di olio per la posizione M1 (B3)
Note: weight of the gearbox filled with oil for M1 (B3) assembly position

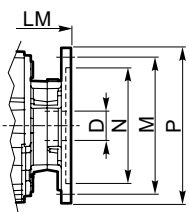
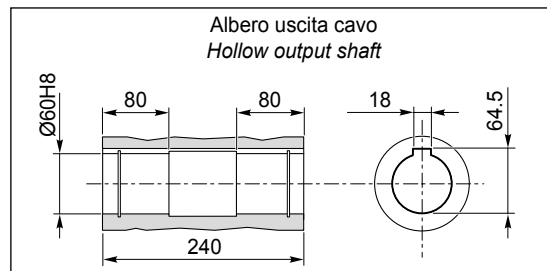
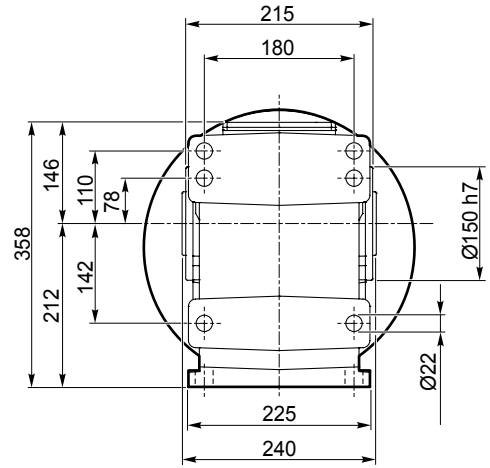
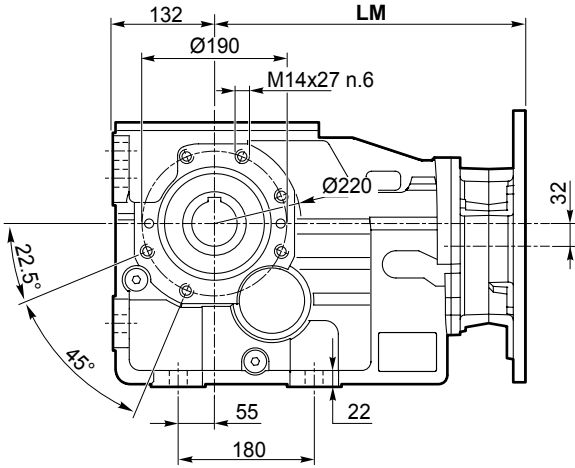


Dimensioni

Dimensions

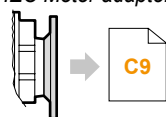
ITB 443 U

ITB 443 U

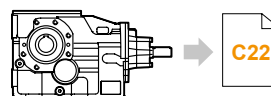


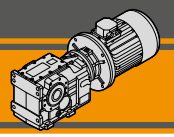
Dimensioni IEC / IEC Dimensions									
	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14	160 B5	180 B5
LM	375.5	375.5	380	379.5	383	400.5		450.5	450.5
N	130	130	95	180	110	230	130	250	250
M	165	165	115	215	130	265	165	300	300
P	200	200	140	250	160	300	200	350	350
D	19	24		28		38		42	48

IEC Motori applicabili
IEC Motor adapters



ITBIS 443..



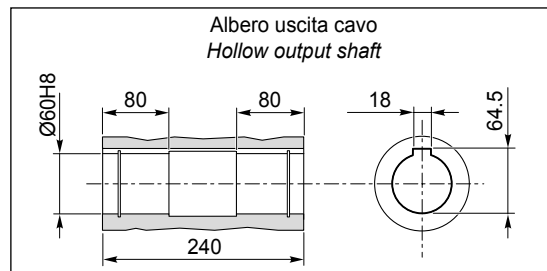
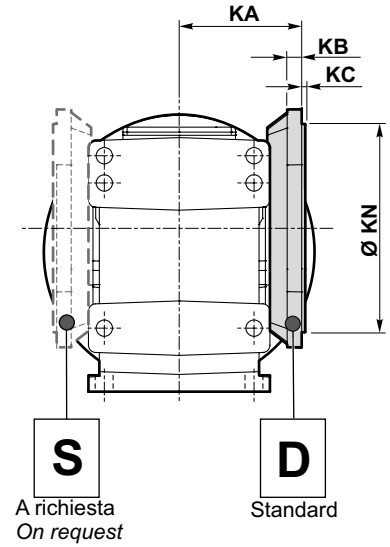
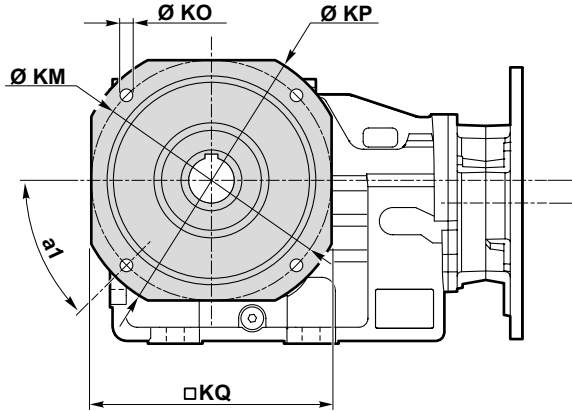


Dimensioni

Dimensions

ITB 443 F...

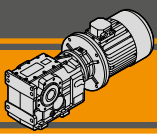
ITB 443 F...



Versione F / F Version											
ITB	a ₁	KA	KB	KC	KM	KN f7	KO	KP	KQ	Flangia / Flange	Peso / Weight
										Tipo / Type	[kg]
443	45°	150	18	4	265	230	14	300	265	F300	7.4
	45°	150	18	5	300	250	18	350	300	F350	10.2
	45°	150	18	5	400	350	18	450	400	F450	16.9

Peso / Weight [kg]										
ITB	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14	160 B5	180 B5	
443 U	108	108	107	109	107	113	111	124	124	

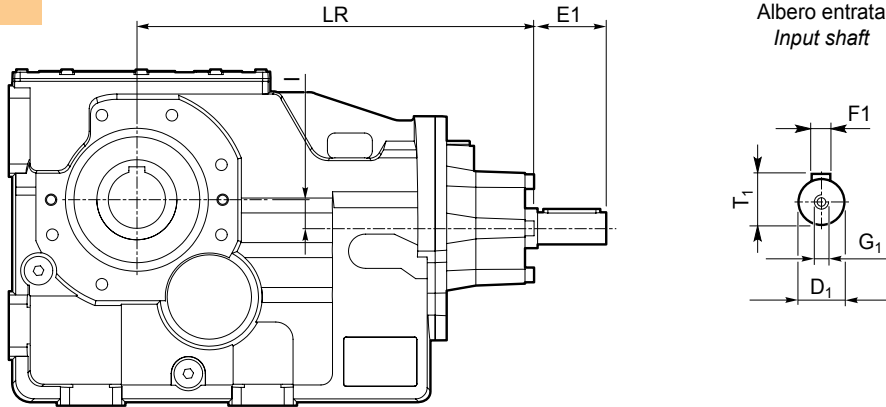
Nota: peso del riduttore complessivo di olio per la posizione M1 (B3)
Note: weight of the gearbox filled with oil for M1 (B3) assembly position



Dimensioni

Dimensions

ITBIS..



ITBIS	Versione Version	LR	D1	E1	I	T1	F1	G1
423	U F	312	28	60	10	31	8	M10
433		362.5	28	60	25	31	8	M10
443		425.5	38	80	32	41	10	M12

ITBIS	Peso / Weight [kg]
423 U	40
433 U	60
443 U	114

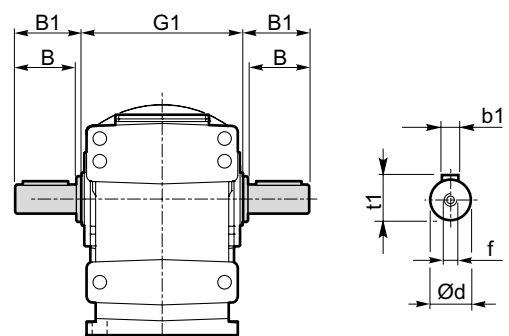
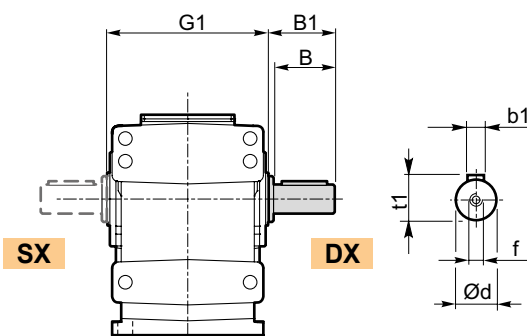
Accessori

Accessories

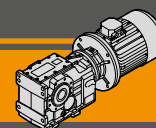
Albero lento / Output shaft

**ITB.. SZ..
ITBIS..SZ..**

**ITB... DZ
ITBIS..DZ**

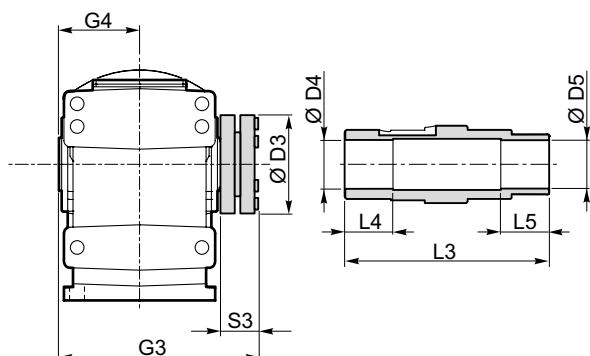


ITB	d h7	B	B1	G1	f	b1	t1	Peso / Weight [kg]	
								SZ	DZ
423	40	80	84	180	M16	12	43	2.2	3.2
433	50	100	105	210	M16	14	53.5	4.3	6.2
443	60	120	125	240	M20	18	64	7.1	10.3



Albero lento con calettatore / Output shaft with shrink disk

ITB...G..
ITBIS..G..



ITB		D3	D4 H8	D5 H8	G3	L3	L4	L5	S3	G4
423	G40	100	41	40	217.5	215	45	45	34.5	90
	G45	100	46	45	217.5	215	45	45	34.5	90
433	G50	110	51	50	247.5	245	50	50	34.5	105
443	G60	138	61	60	280.5	279	60	60	37.5	120

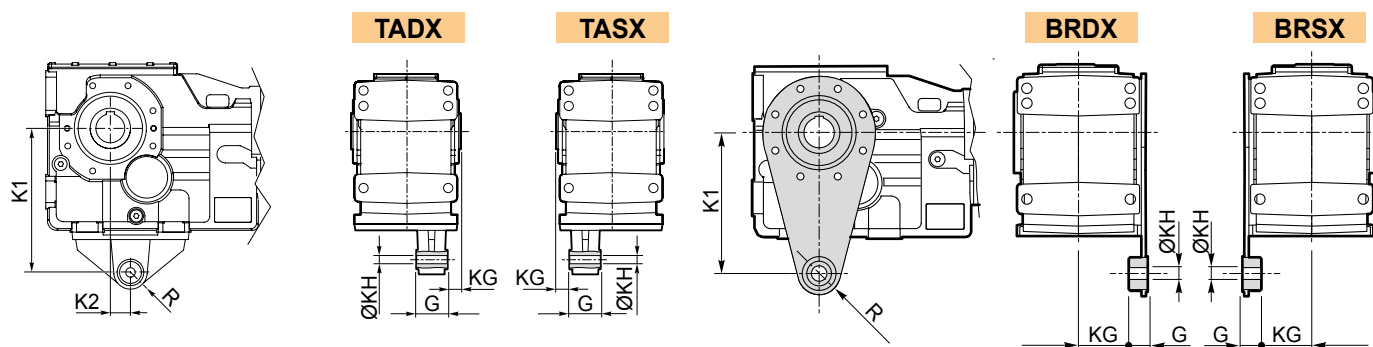
Kit albero uscita con calettatore disponibile a richiesta:
per le istruzioni di montaggio riferirsi al nostro Servizio Tecnico.

Output shaft kit with shrink disk available on request:
for assembly instructions please contact our Technical Service

Kit braccio di reazione

Torque arm kit

ITB..
ITBIS..

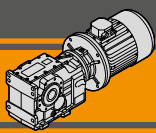


Braccio di reazione / Torque arm

ITB ITBIS	K1	K2	KG	KH	G	R	Peso / Weight [kg]
423	200	30	25	16.5	60	29	2.9
433	250	35	25	16.5	60	29	4.4
443	300	35	30	25	80	40	8.1

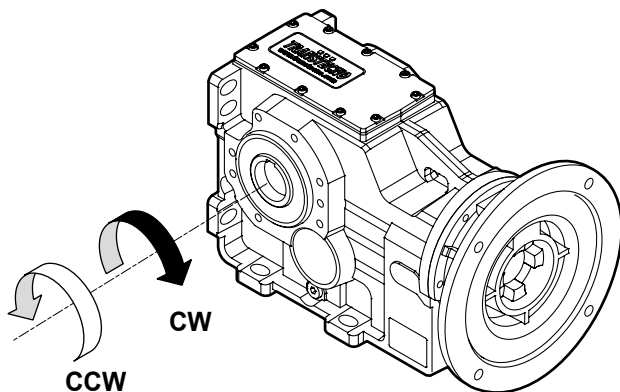
Braccio di reazione / Torque arm

ITB ITBIS	K1	KG	KH	G	R	Peso / Weight [kg]
423	200	68.5	20	25	30	1.6
433	250	83	25	30	35	2.7



Dispositivo antiretro / Backstop device

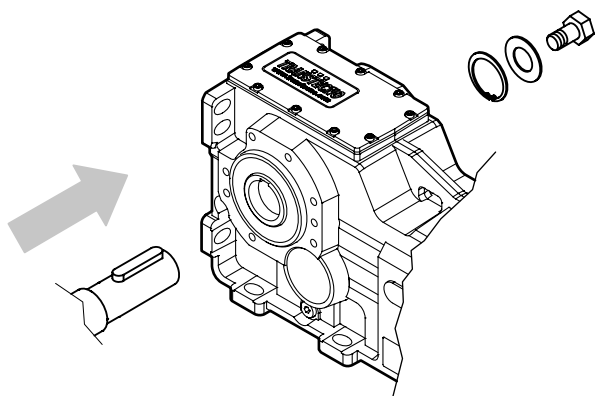
ITB...CW
ITB...CCW



Il dispositivo antiretro permette la rotazione dell'albero in un solo senso senza creare ingombri aggiuntivi. Prima di utilizzarlo è necessario specificare il senso di rotazione dell'albero di uscita come mostrato in figura.

The backstop device allows the output shaft to rotate in just one direction. Before using it, please specify output shaft rotation direction as shown in the figure.

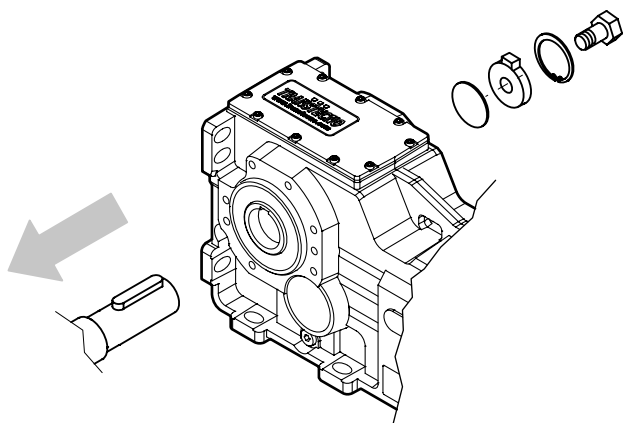
Kit di montaggio albero uscita / Output shaft assembly kit



Kit di montaggio albero uscita disponibile a richiesta: per le istruzioni di montaggio riferirsi al nostro Servizio Tecnico.

Output shaft assembly kit available upon request: for assembly instructions please contact our Technical Assistance

Kit di smontaggio albero uscita / Output shaft disassembly kit



Kit di smontaggio albero uscita disponibile a richiesta: per le istruzioni di montaggio riferirsi al nostro Servizio Tecnico.

Output shaft disassembly kit available upon request: for assembly instructions please contact our Technical Assistance

Appendice
Appendix

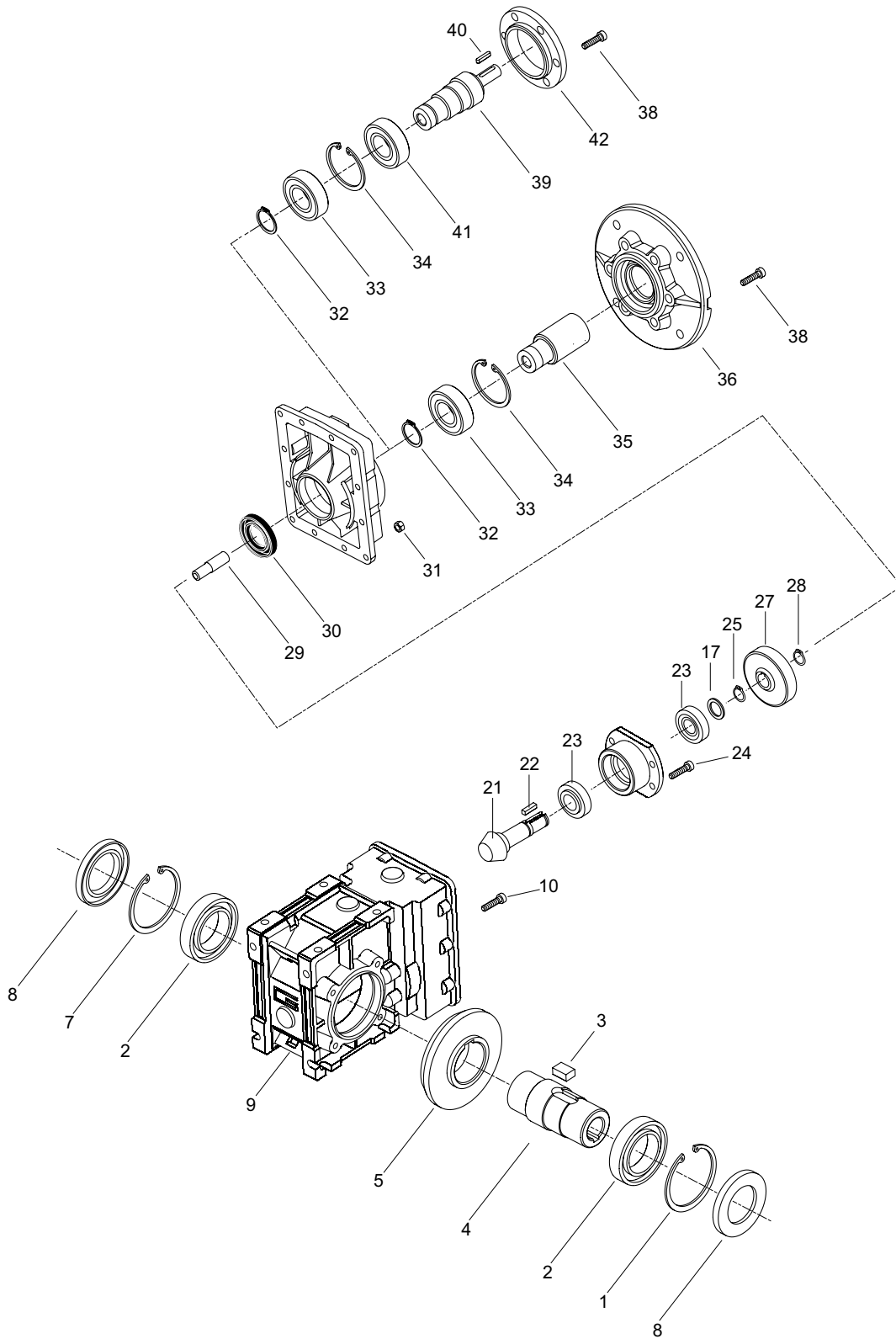


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CMB..2	<i>CMB..2</i>	D2
CMB..3	<i>CMB..3</i>	D3
ITB..	<i>ITB..</i>	D4
Coperchio entrata	<i>Input cover</i>	D5

Questa sezione annulla e sostituisce ogni precedente edizione o revisione. Qualora questa sezione non Vi sia giunta in distribuzione controllata, l'aggiornamento dei dati ivi contenuto non è assicurato. **In tal caso la versione più aggiornata è disponibile sul nostro sito internet www.transtecno.com**

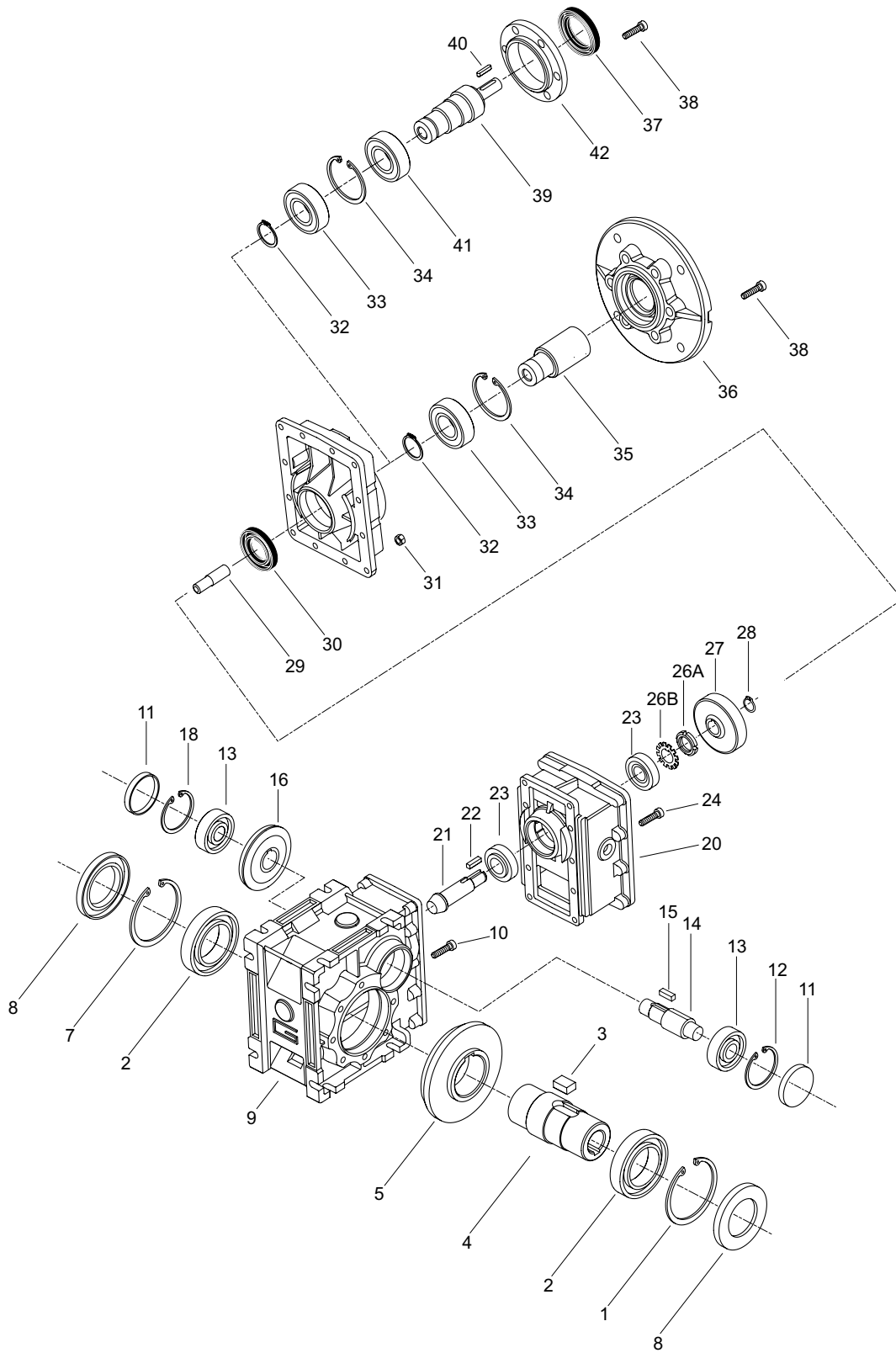
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CMB ..2



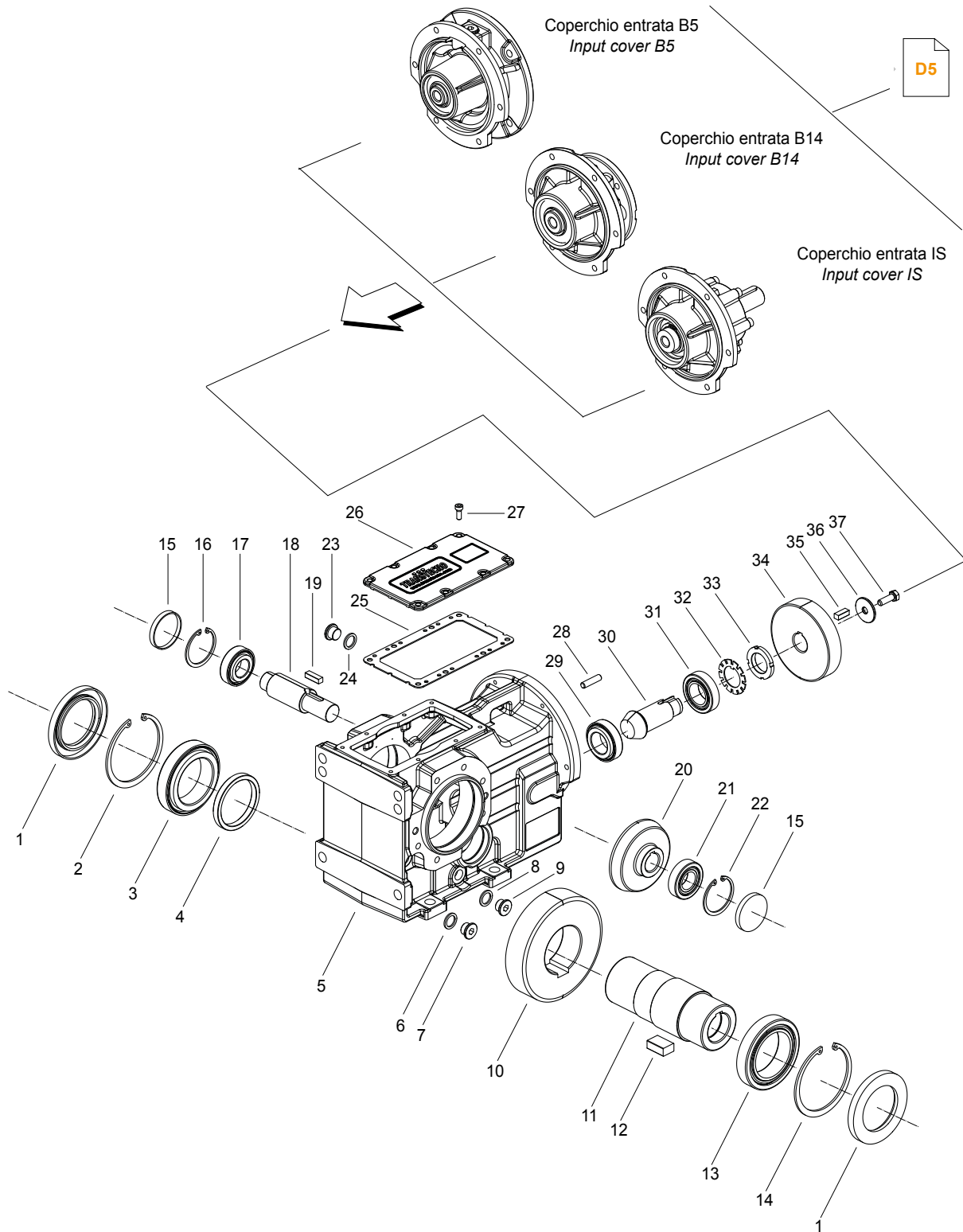
CMB	Anelli di tenuta / Oil seals	
	8	30
402	30/55/7	20/37/7
502	40/62/7	20/37/7

CMB ..3



CMB	Anelli di tenuta / Oil seals			RCA
	8	30	37	11
633	45/75/8	25/47/7	35/52/7	47/7
903	55/90/10	30/52/7	40/60/7	52/7

ITB ..

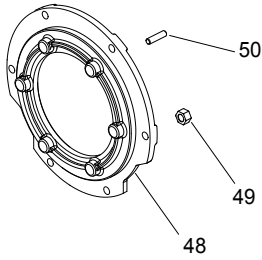


D5

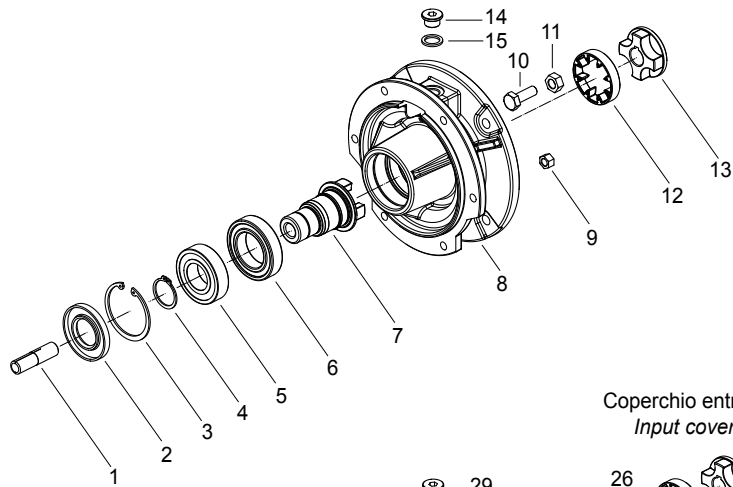
ITB	Anelli di tenuta / Oil seals	RCA
	1	15
423	65/100/10	52x7
433	70/110/12	72x10
443	85/130/10	80x10

COPERCHIO ENTRATA - INPUT COVER

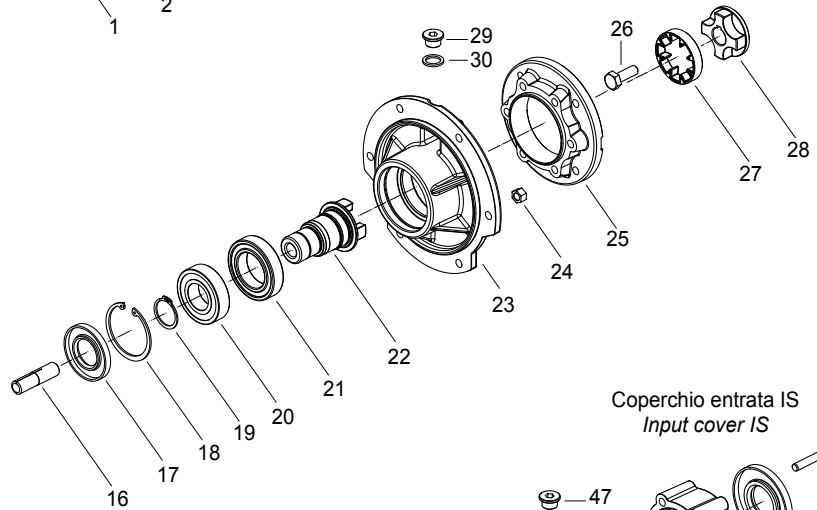
Adattatore entrata...
Input adapter...



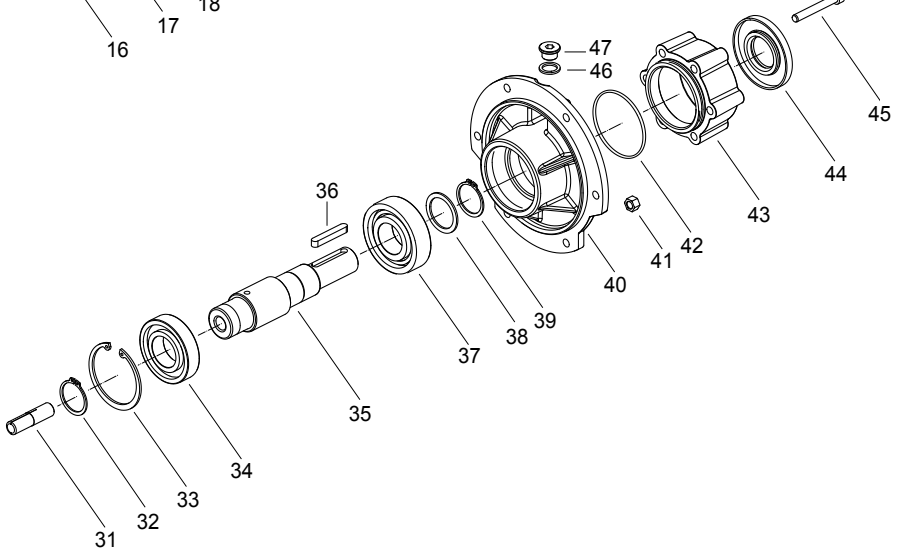
Coperchio entrata B5
Input cover B5



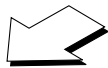
Coperchio entrata B14
Input cover B14



Coperchio entrata IS
Input cover IS



ITB..



IEC B5	Anelli di tenuta / Oil seals
	2
71	30/62/7
80/90	30/62/7
100/112	35/72/7
132	40/80/10
160/180	50/110/12
200	60/130/12

IEC B14	Anelli di tenuta / Oil seals
	17
90	35/72/7
100/112	35/72/7

IS	Anelli di tenuta / Oil seals
	44
24	35/80/8
28	35/80/8
38	45/100/10



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