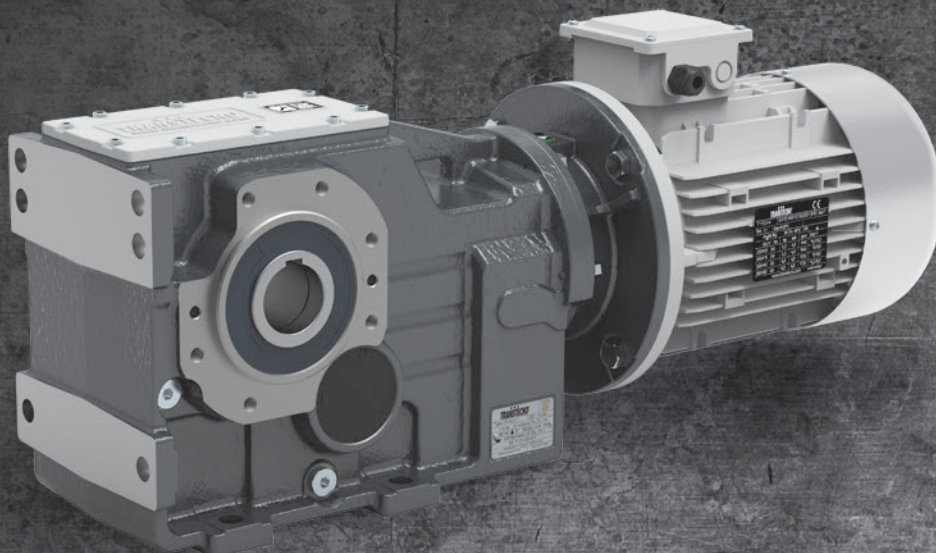
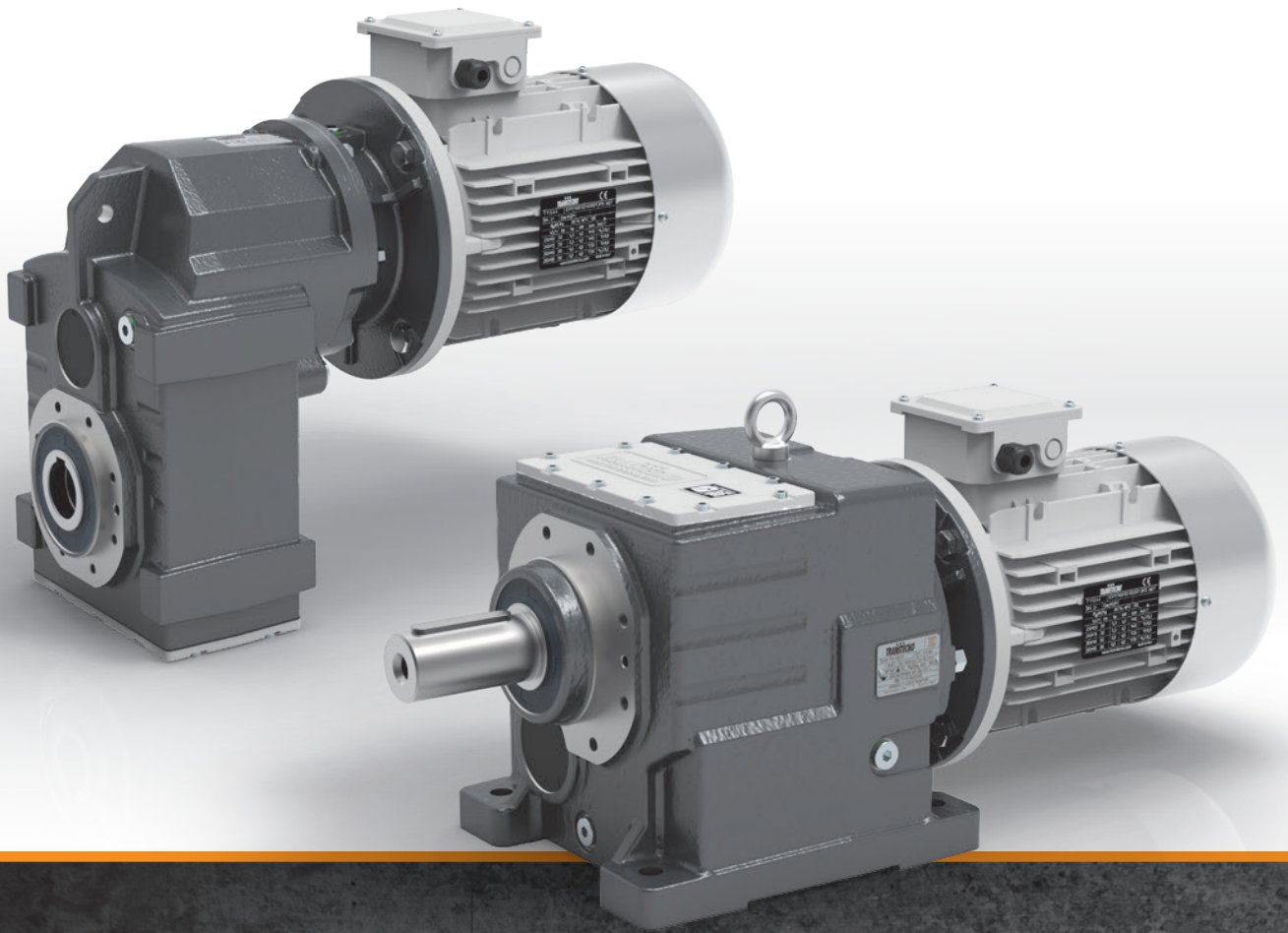

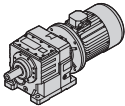

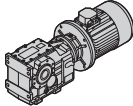

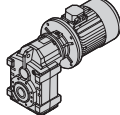


TRANSTECNO[®]
the modular gearmotor



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Questo catalogo annulla e sostituisce ogni precedente edizione o revisione.
Ci riserviamo inoltre il diritto di apportare modifiche senza preavviso.
La versione più aggiornata è disponibile sul sito
www.transtecno.com

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

This value is strictly related to the size and number of teeth gears inside the gearbox.

Dai dati di catalogo si può ottenere con la relazione:

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.

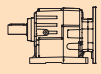

where Rd stands for the dynamic efficiency and n₂ indicates the required output rpm of the gearmotor .

Scelta dei motoriduttori

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).

Selecting the gearmotors

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]
5.5							
132s4 (1400 min ⁻¹)	23	2177	1.6	61.74	ITH143	B5	22500
	21	2353	1.5	66.73		B5	22500
	18	2801	1.2	79.43		B5	22500
	16	3028	1.2	85.85		B5	22500

Esempio / Example:

Applicazione / Application:

Nastro trasportatore / Conveyor belt

P : 5.5 kW
 sf : 1.6
 n_2 : 23 rpm

Motorizzazione scelta / Power unit selected:

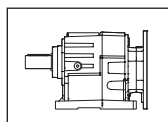
ITH143 $i = 61.74$, $P_1 = 5.5$ kW, $sf = 1.6$

Lubrificazione

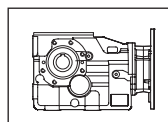
I motoriduttori della serie ITH, ITB e ITS sono forniti completi di lubrificante sintetico viscosità 320 a lunga durata.

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

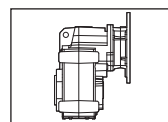
Lubrication



ITH



ITB



ITS

SHELL	AGIP	KLUBER	CASTROL	ESSO	MOBIL
Shell Omala S4 WE320	Tellium VSF320	Klubersynth GH 6 320	Alphasyn PG320	S320	Mobil Glygoyle HE 320

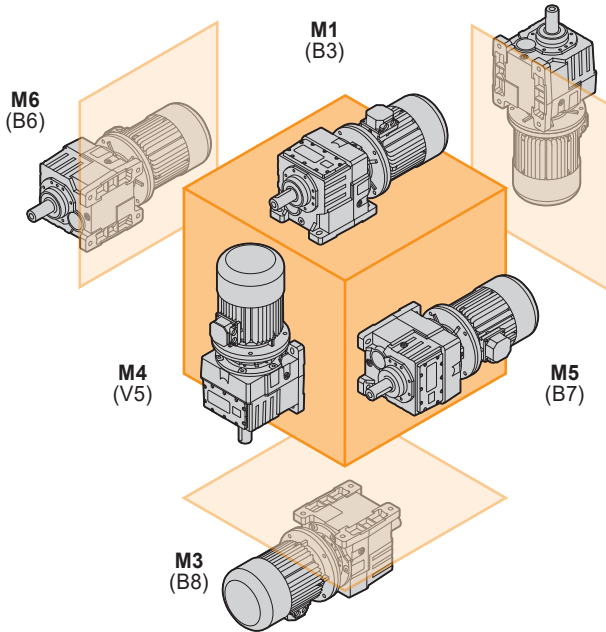
Nelle sezioni specifiche sono riportate le tabelle con le quantità indicative di lubrificante contenute e/o da immettere.

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

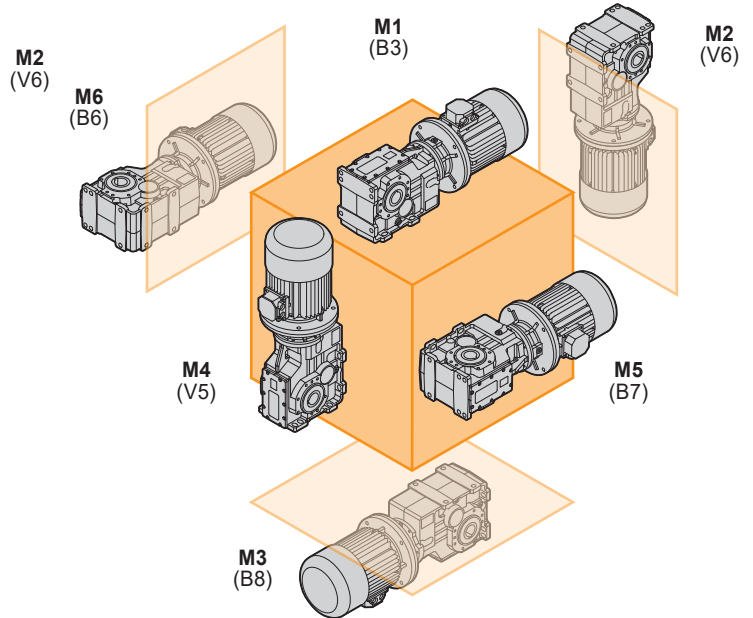
In fase di ordine è necessario specificare sempre la posizione di montaggio desiderata.

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

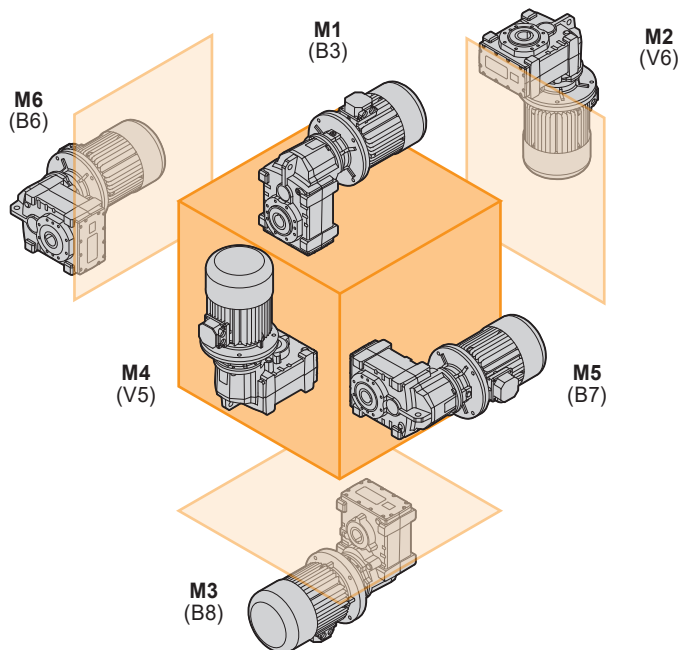
ITH



ITB

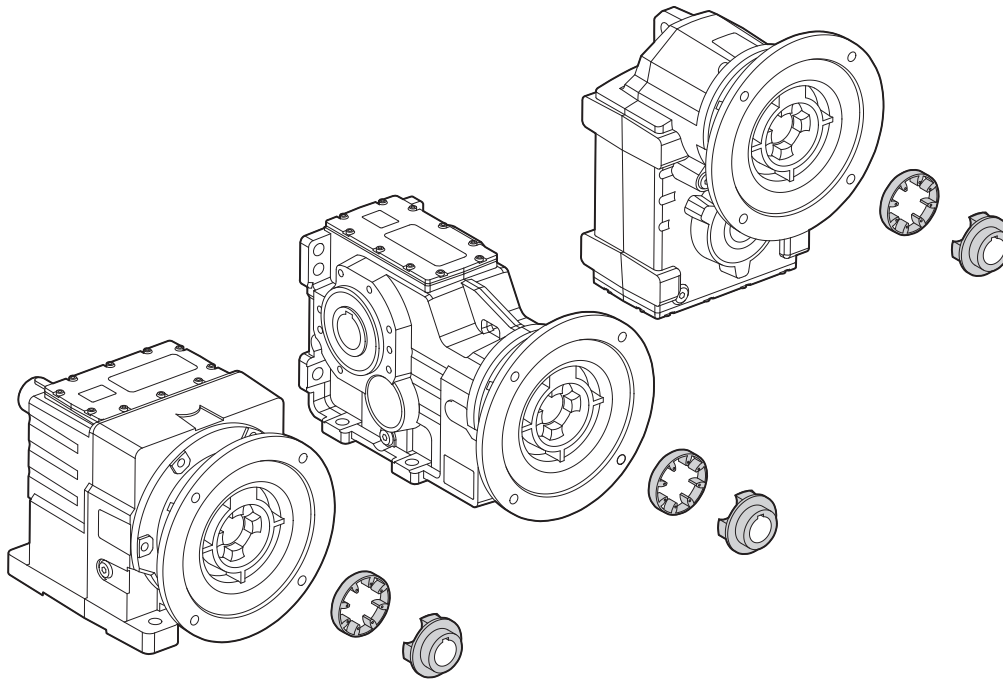


ITS



Giunto elastico

Flexible coupling



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;

Motor connection by flexible coupling allows the following benefits:

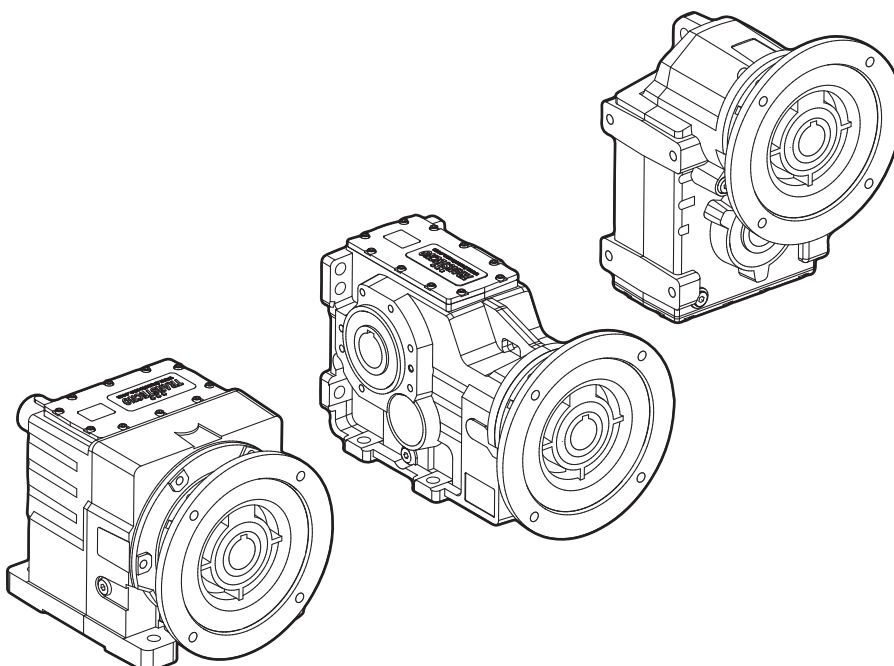
- *Increasing torsional rigidity;*
- *Reducing vibrations;*
- *Cushioning motor start up jerks;*
- *Eliminates fretting corrosion phenomenon between motor sleeve and electric motor shaft;*
- *Lowering operating temperature;*
- *Easy disassembly of the motor after long periods of use;*

Manicotto rigido

Motor sleeve

L'accoppiamento al motore può essere fatto anche in modo tradizionale utilizzando il manicotto rigido.

The motor connection is also available through the more conventional motor sleeve design.



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

ITH	-25°C / +50°C
ITB	-25°C / +50°C
ITS	-25°C / +50°C

Campi di temperatura speciali / Special temperature range

	<-15°C	>+50°C
ITH	dimezzare i carichi radiali in uscita <i>halve the output radial loads</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>	
ITS	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 antinfortunistiche agli organi rotanti;
- siano state create delle opportune coperture a protezione dagli agenti atmosferici se l'installazione è effettuata all'aperto ed è soggetta alle intemperie;
- l'ambiente di lavoro non sia corrosivo (a meno che tale specifica non sia stata dichiarata in fase di ordine al fine di predisporre il riduttore 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

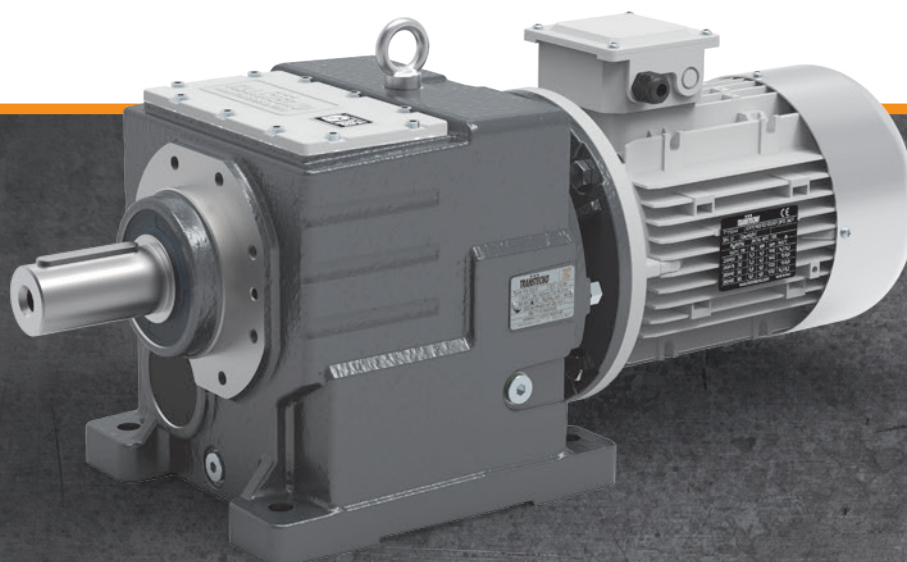
- utilizzo come moltiplicatore;
- utilizzo come argano di sollevamento;
- utilizzo in posizioni non previste a catalogo;
- utilizzo in ambiente con pressione diversa da quella atmosferica;
- utilizzo in ambiente con temperature $<-25^{\circ}\text{C}$ o $>+50^{\circ}\text{C}$

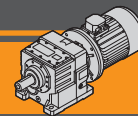
Critical applications

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 ingranaggi cilindrici
Helical in-line gearmotors

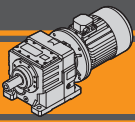




Indice	Index	Pag. Page
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Versioni	<i>Versions</i>	B2
Designazione	<i>Classification</i>	B3
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Simbologia	<i>Symbols</i>	B3
Lubrificazione	<i>Lubrication</i>	B4
Carichi radiali in entrata	<i>Input radial loads</i>	B6
Carichi radiali in uscita	<i>Output radial loads</i>	B6
Dati tecnici	<i>Technical data</i>	B7
Dimensioni	<i>Dimensions</i>	B20
Accessori	<i>Accessories</i>	B28

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ITH

Motoriduttori ad ingranaggi cilindrici Helical in-line gearmotors

Caratteristiche tecniche

Technical features

I motoriduttori della serie ITH 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.

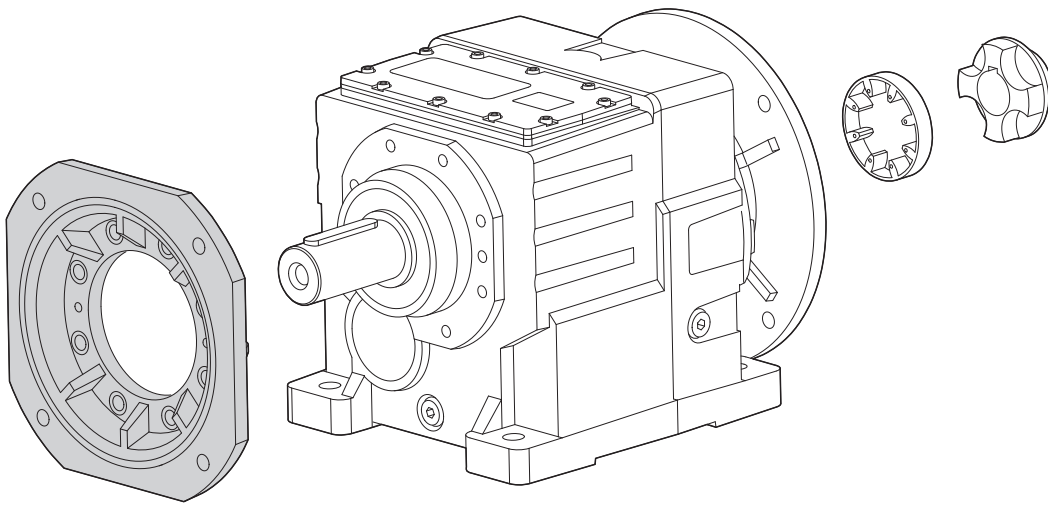
The ITH gearmotors are intended for heavy duty applications. The robust one pieces casing of the main housing and the modular design of input and output sets increase application flexibility.

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 o manicotto rigido;
- Verniciatura a polvere epossidica RAL 7016 di spessore medio 0,10 – 0,15 mm.

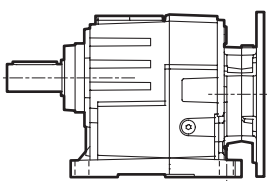
The main features of ITH range are:

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

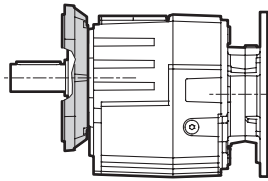


Versioni

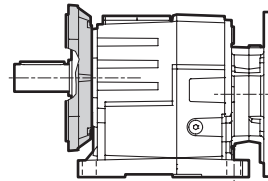
Versions



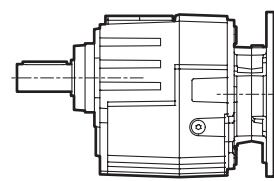
U



F...



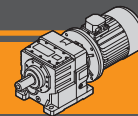
U/F...



G

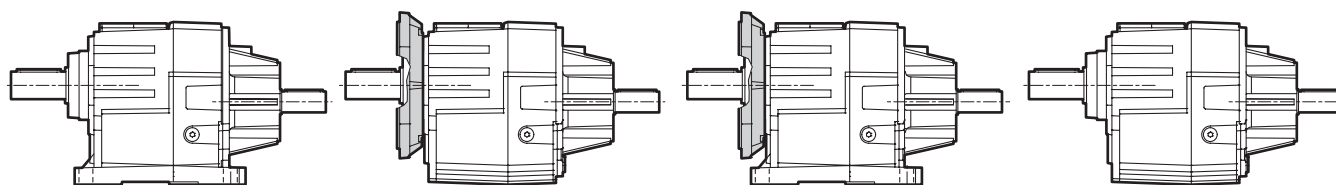
RIDUTTORE / GEARBOX

ITH	12	2	H	26.28	D40	132	B5	M1	HS	CW
Tipo Type	Grandezza Size	Stadi Stages	Versione Version	Rapporto Ratio	Albero uscita Output shaft	IEC	Forma costruttiva Version	Pos. di montaggio Mounting position	Manicotto rigido Motor sleeve	Dispositivo antiretro Backstop device
ITH	11 12 13 14	2 3	U F... U/F... G	vedi tabelle see tables	vedi tabelle see tables	71.. — 200..	B5 B14	M1 (B3) M2 (V6) M3 (B8) M4 (V5) M5 (B7) M6 (B6)	HS	CW CCW



Designazione

Classification



U

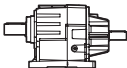
F...

U/F...

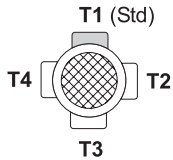
G

ITH

RIDUTTORE / GEARBOX

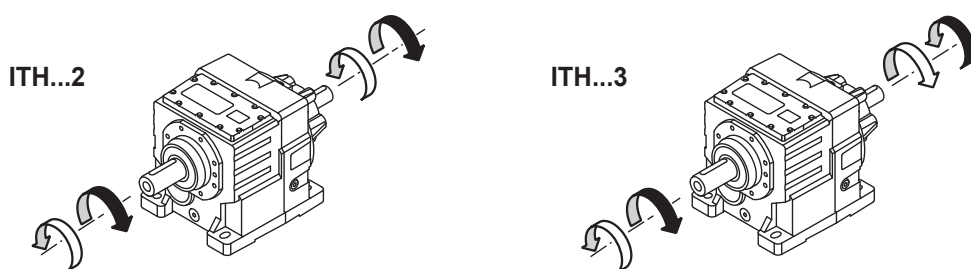
ITHIS	12	2	H	26.28	D40	M1
Tipo Type	Grandezza Size	Stadi Stages	Versione Version	Rapporto Ratio	Albero uscita Output shaft	Pos. di montaggio Mounting position
ITHIS 	11 12 13 14	2 3	U F... U/F... G	vedi tabelle see tables	vedi tabelle see tables	M1 (B3) M2 (V6) M3 (B8) M4 (V5) M5 (B7) M6 (B6)

MOTORE / MOTOR

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

Sensi di rotazione

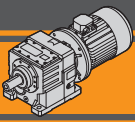
Direction of rotation



Simbologia

Symbols

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



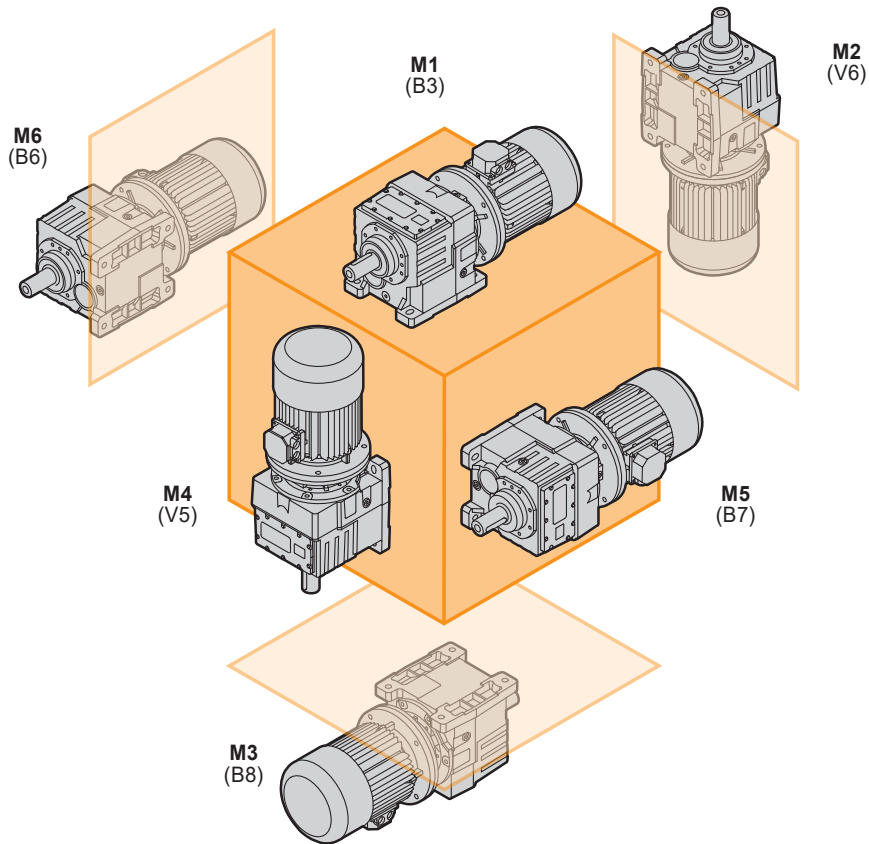
Lubrificazione

Lubrication

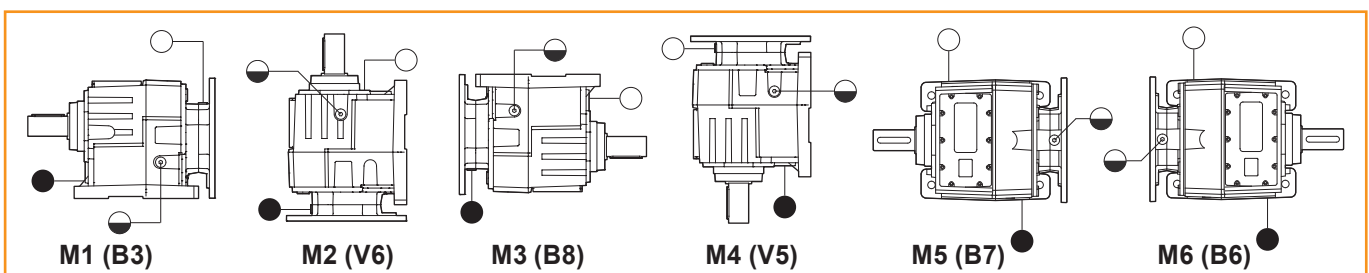
I motoriduttori della serie ITH sono forniti completi di lubrificante sintetico viscosità 320. La quantità di lubrificante dipende dalla posizione di montaggio.

ITH series gearmotors come complete with synthetic lubricant 320 viscosity. The lubricant quantity depends on mounting position.

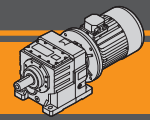
ITH..



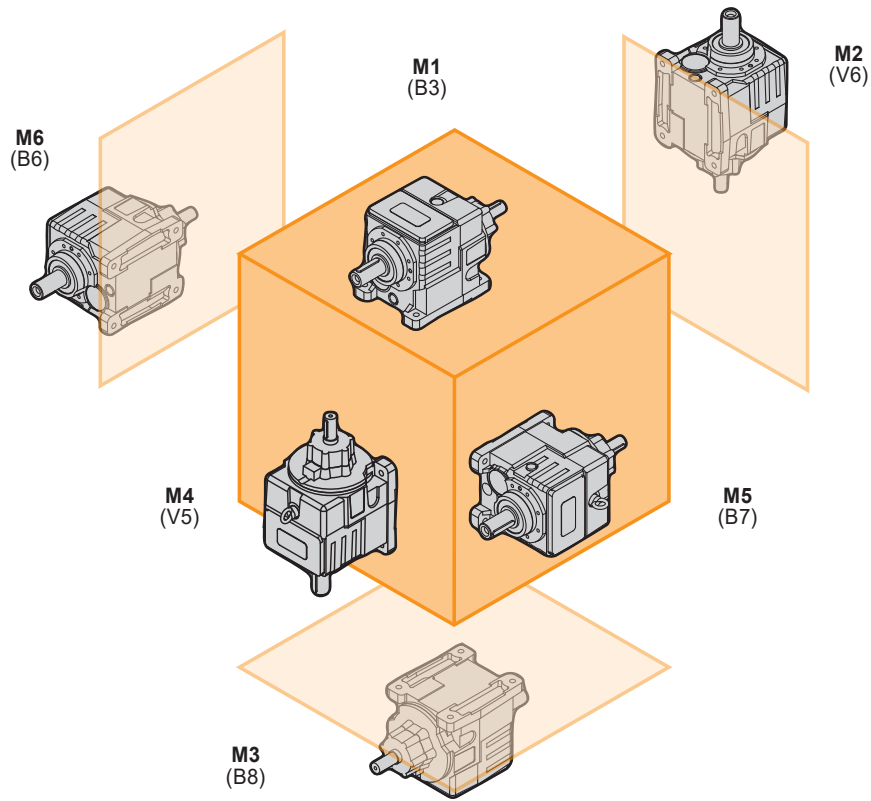
ITH	Quantità di olio (litri) / Oil quantity (litres)					
	M1 (B3)	M2 (V6)	M3 (B8)	M4 (V5)	M5 (B7)	M6 (B6)
112 113	1,1	3,9	3,7	3,4	2,4	2,4
122 123	1,7	5,0	4,3	4,3	3,1	2,9
132 133	4,5	9,5	8,3	8,6	5,9	5,7
142 143	8,1	14,5	11,5	14,4	9,4	9,0



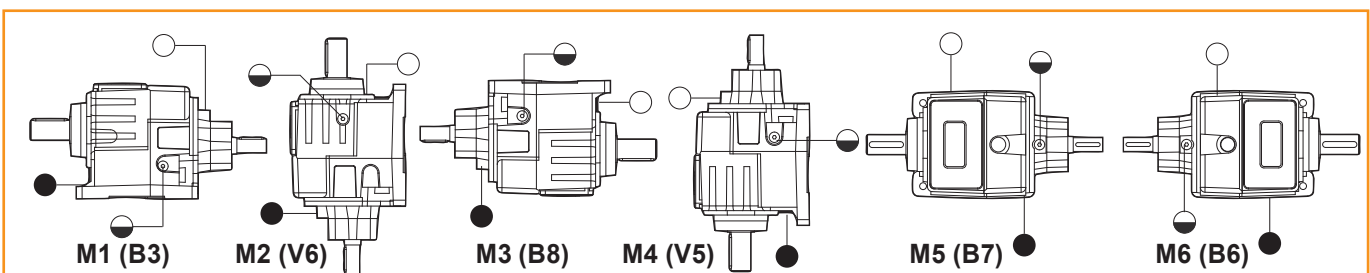
- Sfiato e tappo di riempimento / Breather and filling plug
- ◐ Livello olio / Oil level plug
- Tappo di scarico / Oil drain plug



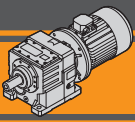
IThis..



IThis	Quantità di olio (litri) / Oil quantity (litres)					
	M1 (B3)	M2 (V6)	M3 (B8)	M4 (V5)	M5 (B7)	M6 (B6)
112 113	1,3	4,3	3,9	3,4	2,6	2,6
122 123	1,9	5,4	4,5	4,3	3,3	3,1
132	3,7	10,2	8,7	8,6	6,3	6,1
133	3,5	9,9	8,5		6,1	5,9
142	7,3	15,2	11,9	14,4	9,8	9,4
143	7,1	14,9	11,7		9,6	9,2



- 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

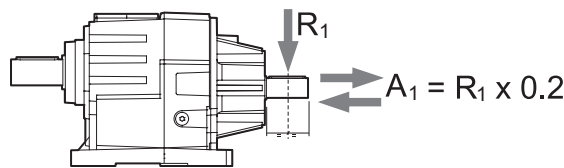
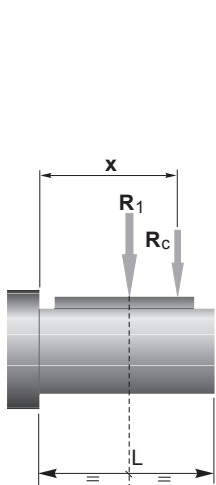
ITH 113	n_1 [min ⁻¹]	Potenza motore/ Motor Power [kW]		
		1.1	1.5	1.85
R_1 [N]	1400	1250		
	900	1500		500
	500	1750	-	-

ITH 112 ITH 122 -123 ITH 133 - 143	n_1 [min ⁻¹]	Potenza motore/ Motor Power [kW]			
		2.2	3.0	4.0	5.5
R_1 [N]	1400	1800			750
	900	2100		1200	-
	500	2500	-	-	-

ITH 132 ITH 142	n_1 [min ⁻¹]	Potenza motore/ Motor Power [kW]					
		5.5	7.5	9.2	11.0	15.0	18.5
R_1 [N]	1400	3700				2800	1200
	900	4900			3300	650	-
	500	5250	3900	1300	-	-	-

I carichi radiali uscita 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 output 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:



	ITH 112	ITH 113	ITH 122	ITH 123	ITH 132	ITH 133	ITH 142	ITH 143
a	139	134	139	157	139	157	139	139
b	110	110	110	118	110	118	110	110

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

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

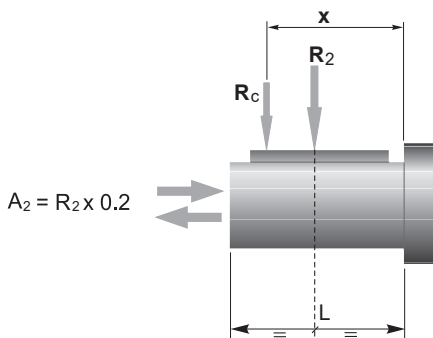
$$R \leq R_c$$

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:

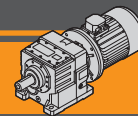


	ITH 112	ITH 113	ITH 122	ITH 123	ITH 132	ITH 133	ITH 142	ITH 143
a	184	208	247	286				
b	149	168	197	226				
R_{2MAX}	8200	12500	18500	22500				

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

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


$$R \leq R_c$$

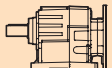


Dati tecnici

n_1 1400 min⁻¹

Technical data

	n_2 [min ⁻¹]	Mn_2 [Nm]	Pn_1 [kW]	i	R_2 [N]
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	IEC Motori applicabili IEC Motor adapters
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ITHIS 112

261	350	9.94	5.38	3437
216	350	8.26	6.47	3829
178	400	7.76	7.88	4111
164	400	7.15	8.54	4311
155	420	7.08	9.06	4381
136	420	6.24	10.28	4717
123	480	6.43	11.39	4734
112	480	5.86	12.52	5001
95	500	5.16	14.80	5408
77	530	4.47	18.10	5903
69	530	4.00	20.25	6302
60	600	3.90	23.52	6389
54	600	3.50	26.16	6798
49	650	3.45	28.77	6794
44	680	3.23	32.18	7003
39	680	2.86	36.35	7519
34	680	2.50	41.57	8130
29	600	1.90	48.27	8200
25	600	1.60	57.21	8200

ITH 112

71 B5	80 B5	90 B5/B14	100 B5/B14	112 B5/B14	132 B5/B14
					*
				*	
				*	
				*	
				*	
				*	
			*	*	
			*	*	

ITHIS 113


25	700	1.98	55.27	8200
21	700	1.61	67.61	8200
19	700	1.46	74.96	8200
15	700	1.19	91.70	8200
13	700	1.00	108.91	8200
10	700	0.80	136.65	8200
8.5	700	0.67	163.98	8200
8.1	700	0.63	173.44	8200
7.6	700	0.59	185.20	8200
6.9	700	0.54	201.58	8200
6.6	700	0.51	212.17	8200
6.2	700	0.48	226.55	8200
5.7	700	0.44	246.59	8200

ITH 113

71 B5	80 B5	90 B5/B14
		*
		*
		*
		*
		*
		*
		*
	*	*
	*	*

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

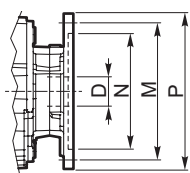
N.B.
Highlighted areas indicate motor inputs available on each size of unit.

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

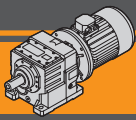
 * = The service factor (sf) has to be selected depending on application: please contact our Technical Department.

Prima di eseguire la scelta del motoriduttore riferirsi alle prestazioni elencate nelle tabelle dalla pag. B11 alla pag. B19.

Before selecting any gearbox, please read the performance values shown in the tables on page B11 to B19.




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	

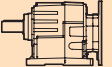


Dati tecnici

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
---	--

ITHIS 122

271	550	16.25	5.17	4751
209	550	12.56	6.69	5522
180	600	11.76	7.79	5878
159	650	11.25	8.82	6149
139	750	11.36	10.08	6278
123	750	10.09	11.35	6727
105	850	9.76	13.30	6946
88	850	8.15	15.92	7713
82	850	7.59	17.11	8045
72	850	6.66	19.50	8683
65	900	6.41	21.43	8887
58	980	6.24	24.00	9005
53	980	5.70	26.28	9494
48	980	5.09	29.40	10136
43	980	4.63	32.31	10710
40	980	4.22	35.47	11309
34	980	3.58	41.78	12500
31	980	3.27	45.73	12500
28	980	2.97	50.40	12500

ITH 122

80 B5	90 B5/B14	100 B5/B14	112 B5/B14	132 B5/B14
				*
				*
			*	
			*	

ITHIS 123


25	980	2.73	56.00	12500
23	980	2.49	61.31	12500
20	980	2.17	70.53	12500
17	980	1.89	81.00	12500
16	980	1.72	88.68	12500
13	980	1.45	105.23	12500
12	980	1.33	115.21	12500
11	980	1.19	128.73	12500
9.7	980	1.06	144.00	12500
8.9	980	0.97	157.66	12500
7.9	980	0.86	178.10	12500
6.9	980	0.75	203.65	12500
6.5	980	0.71	216.00	12500
5.9	980	0.65	236.49	12500
5.5	980	0.60	256.00	12500
5.0	980	0.55	280.29	12500

ITH 123

71 B5	80 B5	90 B5/B14	100 B5/B14	112 B5/B14
				*
				*
				*
			*	*
			*	*
			*	*
			*	*
			*	*
			*	*
			*	*
		*	*	*
		*	*	*
		*	*	*
		*	*	*
		*	*	*
		*	*	*

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

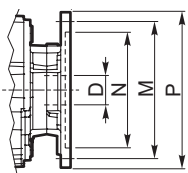
N.B.
Highlighted areas indicate motor inputs available on each size of unit.

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

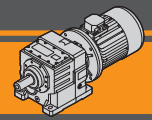
 * = The service factor (sf) has to be selected depending on application: please contact our Technical Department.

Prima di eseguire la scelta del motoriduttore riferirsi alle prestazioni elencate nelle tabelle dalla pag. B11 alla pag. B19.

Before selecting any gearbox, please read the performance values shown in the tables on page B11 to B19.



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	



Dati tecnici

n_1 1400 min⁻¹

Technical data

	n_2 [min ⁻¹]	Mn_2 [Nm]	Pn_1 [kW]	i	R_2 [N]
ITHIS 132					
	278	850	25.8	5.03	10319
	230	850	21.3	6.09	11532
	203	900	19.9	6.91	12142
	186	900	18.3	7.51	12746
	167	900	16.4	8.36	13570
	155	900	15.2	9.03	14195
	136	950	14.1	10.30	14992
	127	950	13.2	11.01	15581
	113	1200	14.8	12.39	14811
	95	1200	12.4	14.80	16426
	93	1300	13.1	15.11	15778
	75	1500	12.3	18.69	15950
	69	1600	12.0	20.31	15734
	55	1600	9.5	25.65	18031
	51	1700	9.4	27.48	17571
	46	1700	8.5	30.46	18500
	40	1900	8.4	34.61	17356
	37	1900	7.7	37.71	18247
	33	1900	6.9	41.80	18500
	31	1900	6.4	45.60	18500
	28	1900	5.8	49.88	18500

	IEC Motori applicabili IEC Motor adapters						
ITH 132							
	80 B5	90 B5/B14	100 B5/B14	112 B5/B14	132 B5/B14	160 B5	180 B5
							*
	*	*	*	*			
							*
							*
							*
							*
							*
							*
							*
						*	*
						*	*

ITHIS 133

	n_2 [min ⁻¹]	Mn_2 [Nm]	Pn_1 [kW]	i	R_2 [N]
	23	1900	4.9	60.92	18500
	22	1900	4.6	64.74	18500
	19.8	1900	4.2	70.88	18500
	17.9	1900	3.8	78.38	18500
	16.1	1900	3.4	87.14	18500
	14.6	1900	3.1	95.67	18500
	12.7	1900	2.7	109.93	18500
	11.6	1900	2.5	120.36	18500
	10.4	1900	2.2	134.66	18500
	9.5	1900	2.0	147.98	18500
	8.6	1900	1.8	162.45	18500
	7.3	1900	1.5	191.39	18500
	6.7	1900	1.4	209.48	18500
	6.1	1900	1.3	230.85	18500

ITH 133

	80 B5	90 B5/B14	100 B5/B14	112 B5/B14	132 B5/B14
					*
					*
					*
					*
				*	*
				*	*
				*	*
				*	*
			*	*	*
			*	*	*
			*	*	*
			*	*	*
			*	*	*
			*	*	*
			*	*	*
			*	*	*

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

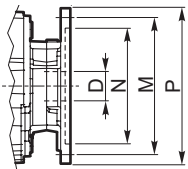
N.B.
Highlighted areas indicate motor inputs available on each size of unit.

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

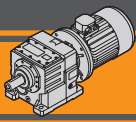
⚠ * = The service factor (sf) has to be selected depending on application: please contact our Technical Department.

Prima di eseguire la scelta del motoriduttore riferirsi alle prestazioni elencate nelle tabelle dalla pag. B11 alla pag. B19.

Before selecting any gearbox, please read the performance values shown in the tables on page B11 to B19.



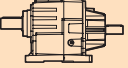
Dimensioni IEC / IEC Dimensions									
	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14	160 B5	180 B5
N	130	130	95	180	110	230	130	250	250
M	165	165	115	215	130	265	165	300	300
P	200	200	140	250	160	300	200	350	350
D	19	24		28		38		42	48

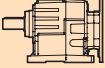


Dati tecnici

n_1 1400 min⁻¹

Technical data


	n_2 [min ⁻¹]	Mn_2 [Nm]	Pn_1 [kW]	i	R_2 [N]
ITHIS 142					
	228	1800	44.68	6.15	14955
	190	1800	37.40	7.35	16494
	158	2000	34.38	8.88	17248
	144	2000	31.34	9.75	18150
	135	2100	30.99	10.35	18181
	120	2100	27.54	11.65	19402
	110	2200	26.30	12.78	19769
	99	2300	24.95	14.08	20171
	85	2300	21.42	16.40	21936
	79	2800	24.11	17.73	19026
	69	2800	21.12	20.24	20463
	54	3200	18.80	25.99	19654
	50	3200	17.39	28.10	20514
	43	3200	15.11	32.35	22168
	38	3200	13.18	37.09	22500
	32	3200	11.22	43.57	22500
	30	3200	10.32	47.35	22500
	27	3200	9.44	51.76	22500

	IEC Motori applicabili IEC Motor adapters					
ITH 142						
	100 B5/B14	112 B5/B14	132 B5/B14	160 B5	180 B5	200 B5
	*	*				
	*	*				
						*
						*
						*
						*
						*
					*	*
					*	*
					*	*
					*	*

ITHIS 143					
	23	3500	8.84	61.74	22500
	21	3500	8.18	66.73	22500
	18	3500	6.87	79.43	22500
	16	3500	6.36	85.85	22500
	13	3500	4.90	111.40	22500
	12	3500	4.53	120.42	22500
	11	3500	4.14	131.84	22500
	9.5	3500	3.70	147.51	22500
	8.6	3500	3.37	162.10	22500
	7.9	3500	3.07	177.95	22500
	7.2	3500	2.81	193.96	22500
	6.7	3500	2.64	209.65	22500
	6.1	3500	2.38	229.46	22500
	5.5	3500	2.16	252.87	22500


ITH 143				
80 B5	90 B5/B14	100 B5/B14	112 B5/B14	132 B5/B14
				*
				*
				*
				*
				*
				*

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

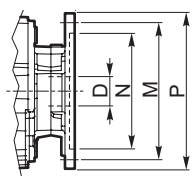
 * = Il fattore di servizio (sf) deve essere scelto in funzione dell'applicazione: si prega di contattare il nostro Servizio Tecnico.

Prima di eseguire la scelta del motoriduttore riferirsi alle prestazioni elencate nelle tabelle dalla pag. B11 alla pag. B19.

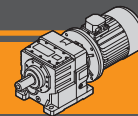
N.B.
Highlighted areas indicate motor inputs available on each size of unit.

 * = 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 B11 to B19.







Dimensioni IEC / IEC Dimensions										
	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14	160 B5	180 B5	200 B5
N	130	130	95	180	110	230	130	250	250	300
M	165	165	115	215	130	265	165	300	300	350
P	200	200	140	250	160	300	200	350	350	400
D	19	24		28		38		42	48	55

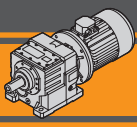


Dati tecnici

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]
0.25								0.55							
71A4 (1400 min ⁻¹)	54	43	14	26.16	ITH112	B5	8200	80A4 (1400 min ⁻¹)	260	19	18	5.38	ITH112	B5	4411
	39	60	11	36.35		B5	8200		216	23	15	6.47		B5	4901
	34	68	10	41.57		B5	8200		178	28	14	7.88		B5	5479
	29	79	7.6	48.27		B5	8200		164	31	13	8.54		B5	5736
	24	94	6.4	57.21		B5	8200		155	33	13	9.06		B5	5928
	25	89	7.9	55.27		ITH113	B5		8200	136	37	11		10.28	B5
	21	108	6.5	67.61	B5		8200		123	41	12	11.39	B5	6737	
	19	120	5.8	74.96	B5		8200		112	45	11	12.52	B5	7098	
	15	147	4.8	91.70	B5		8200		95	53	9.4	14.80	B5	7783	
	13	175	4.0	108.91	B5		8200		77	65	8.1	18.10	B5	8200	
	10	219	3.2	136.65	B5		8200		69	73	7.3	20.25	B5	8200	
	8.5	263	2.7	163.98	B5	8200	60		85	7.1	23.52	B5	8200		
	8.1	278	2.5	173.44	B5	8200	54		94	6.4	26.16	B5	8200		
	7.6	297	2.4	185.20	B5	8200	49		104	6.3	28.77	B5	8200		
	6.9	323	2.2	201.58	B5	8200	44		116	5.9	32.18	B5	8200		
	6.6	340	2.1	212.17	B5	8200	39		131	5.2	36.35	B5	8200		
	6.2	363	1.9	226.55	B5	8200	34		150	4.5	41.57	B5	8200		
	5.7	395	1.8	246.59	B5	8200	29		174	3.5	48.27	B5	8200		
	7.9	285	3.4	178.10	ITH123	B5	12500		24	206	2.9	57.21	B5	8200	
	6.9	326	3.0	203.65		B5	12500		25	195	3.6	55.27	ITH113	B5	8200
	6.5	346	2.8	216.00		B5	12500		21	238	2.9	67.61		B5	8200
	5.9	379	2.6	236.49		B5	12500		19	264	2.6	74.96		B5	8200
	5.5	410	2.4	256.00		B5	12500		15	323	2.2	91.70		B5	8200
	5.0	449	2.2	280.29		B5	12500		13	384	1.8	108.91		B5	8200
71B4 (1400 min ⁻¹)	8.5	263	2.7	163.98	B5	8200	10	482	1.5	136.65	B5	8200			
	8.1	278	2.5	173.44	B5	8200	8.5	578	1.2	163.98	B5	8200			
	7.6	297	2.4	185.20	B5	8200	8.1	612	1.1	173.44	B5	8200			
	6.9	323	2.2	201.58	B5	8200	7.6	653	1.1	185.20	B5	8200			
	6.6	340	2.1	212.17	B5	8200	6.9	711	1.0	201.58	B5	8200			
	6.2	363	1.9	226.55	B5	8200	6.6	748	0.9	212.17	B5	8200			
	5.7	395	1.8	246.59	B5	8200	53	95	10	26.28	ITH122	B5	12500		
	7.9	285	3.4	178.10	ITH113	B5	8200	48	106	9.3		29.40	B5	12500	
	6.9	326	3.0	203.65		B5	8200	43	116	8.4		32.31	B5	12500	
	6.5	346	2.8	216.00		B5	8200	39	128	7.7		35.47	B5	12500	
	5.9	379	2.6	236.49		B5	8200	34	150	6.5		41.78	B5	12500	
	5.5	410	2.4	256.00		B5	8200	31	165	5.9		45.73	B5	12500	
	5.0	449	2.2	280.29		B5	8200	28	182	5.4	50.40	B5	12500		
	8.5	263	2.7	163.98	B5	8200	25	197	5.0	56.00	ITH123	B5	12500		
	8.1	278	2.5	173.44	B5	8200	23	216	4.5	61.31		B5	12500		
	7.6	297	2.4	185.20	B5	8200	20	249	3.9	70.53		B5	12500		
	6.9	323	2.2	201.58	B5	8200	17	286	3.4	81.00		B5	12500		
	6.6	340	2.1	212.17	B5	8200	16	313	3.1	88.68		B5	12500		
	6.2	363	1.9	226.55	B5	8200	13	371	2.6	105.23		B5	12500		
	5.7	395	1.8	246.59	B5	8200	12	406	2.4	115.21	B5	12500			
	7.9	285	3.4	178.10	ITH123	B5	12500	11	454	2.2	128.73	B5	12500		
	6.9	326	3.0	203.65		B5	12500	9.7	508	1.9	144.00	B5	12500		
	6.5	346	2.8	216.00		B5	12500	8.9	556	1.8	157.66	B5	12500		
	5.9	379	2.6	236.49		B5	12500	7.9	628	1.6	178.10	B5	12500		
	5.5	410	2.4	256.00		B5	12500	6.9	718	1.4	203.65	B5	12500		
	5.0	449	2.2	280.29		B5	12500	6.5	762	1.3	216.00	B5	12500		
	8.5	263	2.7	163.98	B5	8200	5.9	834	1.2	236.49	B5	12500			
	8.1	278	2.5	173.44	B5	8200	5.5	903	1.1	256.00	B5	12500			
	7.6	297	2.4	185.20	B5	8200	5.0	988	1.0	280.29	B5	12500			

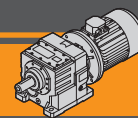




Dati tecnici





Technical data

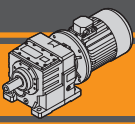
P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	sf	i			R ₂ [N]	P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	sf	i			R ₂ [N]	
0.55								0.75								
80A4 (1400 min ⁻¹)	23	215	8.8	60.92	ITH133	B5	18500	80B4 (1400 min ⁻¹)	25	269	3.6	56.00	ITH123	B5	12500	
	22	228	8.3	64.74		B5	18500		23	295	3.3	61.31		B5	12500	
	20	250	7.6	70.88		B5	18500		20	339	2.9	70.53		B5	12500	
	18	276	6.9	78.38		B5	18500		17	390	2.5	81.00		B5	12500	
	16	307	6.2	87.14		B5	18500		16	426	2.3	88.68		B5	12500	
	15	337	5.6	95.67		B5	18500		13	506	1.9	105.23		B5	12500	
	13	388	4.9	109.93		B5	18500		12	554	1.8	115.21		B5	12500	
	12	424	4.5	120.36		B5	18500		11	619	1.6	128.73		B5	12500	
	10	475	4.0	134.66		B5	18500		9.7	693	1.4	144.00		B5	12500	
	9.5	522	3.6	147.98		B5	18500		8.9	758	1.3	157.66		B5	12500	
	8.6	573	3.3	162.45		B5	18500		7.9	856	1.1	178.10		B5	12500	
	7.3	675	2.8	191.39	B5	18500	6.9		979	1.0	203.65	B5	12500			
	6.7	739	2.6	209.48	B5	18500	6.5		1039	0.9	216.00	B5	12500			
	6.1	814	2.3	230.85	B5	18500										
						ITH143	B5		22500	37	185	10	37.71	ITH132	B5	18500
	13	393	8.9	111.40	B5		22500		33	205	9.3	41.80	B5		18500	
	12	425	8.2	120.42	B5		22500		31	224	8.5	45.60	B5		18500	
	11	465	7.5	131.84	B5		22500		28	245	7.8	49.88	B5		18500	
	9.5	520	6.7	147.51	B5		22500									
	8.6	572	6.1	162.10	B5		22500		23	293	6.5	60.92	ITH133		B5	18500
	7.9	628	5.6	177.95	B5		22500		22	311	6.1	64.74			B5	18500
	7.2	684	5.1	193.96	B5		22500		20	341	5.6	70.88			B5	18500
6.1	809	4.3	229.46	B5	22500		18	377	5.0	78.38	B5	18500				
5.5	892	3.9	252.87	B5	22500		16	419	4.5	87.14	B5	18500				
							15	460	4.1	95.67	B5	18500				
						13	529	3.6	109.93	B5	18500					
						12	579	3.3	120.36	B5	18500					
						10	648	2.9	134.66	B5	18500					
						9.5	712	2.7	147.98	B5	18500					
						8.6	781	2.4	162.45	B5	18500					
						7.3	920	2.1	191.39	B5	18500					
						6.7	1007	1.9	209.48	B5	18500					
						6.1	1110	1.7	230.85	B5	18500					
0.75																
80B4 (1400 min ⁻¹)	260	26	13	5.38	ITH112	B5	4390	18	382	9.2	79.43	ITH143	B5	22500		
	216	32	11	6.47		B5	4874	16	413	8.5	85.85		B5	22500		
	178	39	10	7.88		B5	5441	13	536	6.5	111.40		B5	22500		
	164	42	9.5	8.54		B5	5693	12	579	6.0	120.42		B5	22500		
	155	44	9.4	9.06		B5	5881	11	634	5.5	131.84		B5	22500		
	136	50	8.3	10.28		B5	6305	9.5	709	4.9	147.51		B5	22500		
	123	56	8.6	11.39		B5	6669	8.6	780	4.5	162.10		B5	22500		
	112	61	7.8	12.52		B5	7019	7.9	856	4.1	177.95		B5	22500		
	95	73	6.9	14.80		B5	7680	7.2	933	3.8	193.96		B5	22500		
	77	89	6.0	18.10		B5	8200	6.7	1008	3.5	209.65		B5	22500		
	69	99	5.3	20.25		B5	8200	6.1	1103	3.2	229.46		B5	22500		
	60	116	5.2	23.52		B5	8200	5.5	1216	2.9	252.87		B5	22500		
	60	116	5.2	23.52		B5	8200									
	54	128	4.7	26.16		B5	8200									
	49	141	4.6	28.77		B5	8200									
	44	158	4.3	32.18		B5	8200									
	39	179	3.8	36.35		B5	8200									
	34	204	3.3	41.57		B5	8200									
	29	237	2.5	48.27		B5	8200									
	24	281	2.1	57.21		B5	8200									
							ITH113	B5	8200							
	25	266	2.6	55.27	B5	8200										
	21	325	2.2	67.61	B5	8200										
	19	361	1.9	74.96	B5	8200										
	15	441	1.6	91.70	B5	8200										
	13	524	1.3	108.91	B5	8200										
	10	657	1.1	136.65	B5	8200										
						ITH122	B5	11895								
	82	84	10	17.11	B5		12500									
	72	96	8.9	19.50	B5		12500									
	65	105	8.6	21.43	B5		12500									
	58	118	8.3	24.00	B5		12500									
	53	129	7.6	26.28	B5		12500									
	48	144	6.8	29.40	B5		12500									
	43	159	6.2	32.31	B5		12500									
	39	174	5.6	35.47	B5		12500									
	34	205	4.8	41.78	B5		12500									
	31	225	4.4	45.73	B5	12500										
	28	248	4.0	50.40	B5	12500										







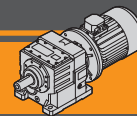
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P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	sf	i			R ₂ [N]	P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	sf	i			R ₂ [N]
1.1								1.1							
90S4 (1400 min ⁻¹)	260	39	9.0	5.38	ITH112	B5/14	4354	90S4 (1400 min ⁻¹)	23	430	4.4	60.92	ITH133	B5/14	18500
	216	47	7.5	6.47		B5/14	4825		22	457	4.2	64.74		B5/14	18500
	178	57	7.1	7.88		B5/14	5374		20	500	3.8	70.88		B5/14	18500
	164	62	6.5	8.54		B5/14	5617		18	553	3.4	78.38		B5/14	18500
	155	65	6.4	9.06		B5/14	5798		16	615	3.1	87.14		B5/14	18500
	136	74	5.7	10.28		B5/14	6204		15	675	2.8	95.67		B5/14	18500
	123	82	5.8	11.39		B5/14	6550		13	775	2.5	109.93		B5/14	18500
	112	90	5.3	12.52		B5/14	6881		12	849	2.2	120.36		B5/14	18500
	95	107	4.7	14.80		B5/14	7500		10	950	2.0	134.66		B5/14	18500
	77	130	4.1	18.10		B5/14	8200		9.5	1044	1.8	147.98		B5/14	18500
	69	146	3.6	20.25		B5/14	8200		8.6	1146	1.7	162.45		B5/14	18500
	60	169	3.5	23.52		B5/14	8200		7.3	1350	1.4	191.39		B5/14	18500
	54	188	3.2	26.16	B5/14	8200	6.7		1478	1.3	209.48	B5/14	18500		
	49	207	3.1	28.77	B5/14	8200	6.1		1628	1.2	230.85	B5/14	18500		
	44	232	2.9	32.18	B5/14	8200	ITH143		B5/14	22500					
	39	262	2.6	36.35	B5/14	8200			23	435	8.0	61.74	B5/14	22500	
	34	299	2.3	41.57	B5/14	8200			21	471	7.4	66.73	B5/14	22500	
	29	348	1.7	48.27	B5/14	8200			18	560	6.2	79.43	B5/14	22500	
	24	412	1.5	57.21	B5/14	8200			16	606	5.8	85.85	B5/14	22500	
	25	390	1.8	55.27	ITH113	B5/14			8200	13	786	4.5	111.40	B5/14	22500
	21	477	1.5	67.61	B5/14	8200			12	849	4.1	120.42	B5/14	22500	
	19	529	1.3	74.96	B5/14	8200			11	930	3.8	131.84	B5/14	22500	
	15	647	1.1	91.70	B5/14	8200			9.5	1040	3.4	147.51	B5/14	22500	
	13	768	0.9	108.91	B5/14	8200			8.6	1143	3.1	162.10	B5/14	22500	
	159	64	10	8.82	ITH122	B5/14			8152	7.9	1255	2.8	177.95	B5/14	22500
	139	73	10	10.08	B5/14	8778			7.2	1368	2.6	193.96	B5/14	22500	
	123	82	9.2	11.35	B5/14	9371	6.7		1479	2.4	209.65	B5/14	22500		
	105	96	8.9	13.30	B5/14	10218	6.1		1618	2.2	229.46	B5/14	22500		
	88	115	7.4	15.92	B5/14	11257	5.5		1784	2.0	252.87	B5/14	22500		
	82	123	6.9	17.11	B5/14	11698	ITH112		B5/14	4313					
	72	140	6.1	19.50	B5/14	12500			90L4 (1400 min ⁻¹)	260	53	6.6	5.38	B5/14	4769
	65	154	5.8	21.43	B5/14	12500			216	64	5.5	6.47	B5/14	5299	
	58	173	5.7	24.00	B5/14	12500			178	77	5.2	7.88	B5/14	5531	
	53	189	5.2	26.28	B5/14	12500			164	84	4.8	8.54	B5/14	5703	
	48	212	4.6	29.40	B5/14	12500			155	89	4.7	9.06	B5/14	6088	
	43	233	4.2	32.31	B5/14	12500			136	101	4.2	10.28	B5/14	6414	
	39	255	3.8	35.47	B5/14	12500			123	112	4.3	11.39	B5/14	6723	
	34	301	3.3	41.78	B5/14	12500			112	123	3.9	12.52	B5/14	7294	
	31	329	3.0	45.73	B5/14	12500			95	145	3.4	14.80	B5/14	8009	
	28	363	2.7	50.40	B5/14	12500			77	178	3.0	18.10	B5/14	8200	
	25	395	2.5	56.00	ITH123	B5/14			12500	69	199	2.7	20.25	B5/14	8200
	23	432	2.3	61.31	B5/14	12500	60		231	2.6	23.52	B5/14	8200		
20	497	2.0	70.53	B5/14	12500	54	257	2.3	26.16	B5/14	8200				
17	571	1.7	81.00	B5/14	12500	49	283	2.3	28.77	B5/14	8200				
16	626	1.6	88.68	B5/14	12500	44	316	2.2	32.18	B5/14	8200				
13	742	1.3	105.23	B5/14	12500	44	316	2.2	32.18	B5/14	8200				
12	813	1.2	115.21	B5/14	12500	39	357	1.9	36.35	B5/14	8200				
11	908	1.1	128.73	B5/14	12500	34	408	1.7	41.57	B5/14	8200				
9.7	1016	1.0	144.00	B5/14	12500	29	474	1.3	48.27	B5/14	8200				
8.9	1112	0.9	157.66	B5/14	12500	24	562	1.1	57.21	B5/14	8200				
55	185	8.7	25.65	ITH132	B5/14	18500	25	532	1.3	55.27	ITH113	B5/14	8200		
51	198	8.6	27.48	B5/14	18500	21	650	1.1	67.61	B5/14	8200				
46	219	7.7	30.46	B5/14	18500	19	721	1.0	74.96	B5/14	8200				
40	249	7.6	34.61	B5/14	18500										
37	272	7.0	37.71	B5/14	18500										
33	301	6.3	41.80	B5/14	18500										
31	328	5.8	45.60	B5/14	18500										
28	359	5.3	49.88	B5/14	18500										






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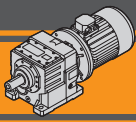
P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	sf	i			R ₂ [N]	P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	sf	i			R ₂ [N]		
1.5								1.5									
90L4 (1400 min ⁻¹)	271	50	11	5.17	ITH122	B5/14	6002	90L4	23	594	5.9	61.74	ITH143	B5/14	22500		
	209	66	8.4	6.69		B5/14	6929	(1400 min ⁻¹)	21	642	5.5	66.73		B5/14	22500		
180	77	7.8	7.79	B5/14		7541	18	764	4.6	79.43	B5/14	22500					
159	87	7.5	8.82	B5/14		8073	16	826	4.2	85.85	B5/14	22500					
139	99	7.6	10.08	B5/14		8681	13	1072	3.3	111.40	B5/14	22500					
123	111	6.7	11.35	B5/14		9253	12	1158	3.0	120.42	B5/14	22500					
105	131	6.5	13.30	B5/14		10067	11	1268	2.8	131.84	B5/14	22500					
88	156	5.4	15.92	B5/14		11056	9.5	1419	2.5	147.51	B5/14	22500					
82	168	5.1	17.11	B5/14		11473	8.6	1559	2.2	162.10	B5/14	22500					
72	192	4.4	19.50	B5/14		12254	7.9	1712	2.0	177.95	B5/14	22500					
65	210	4.3	21.43	B5/14		12500	7.2	1866	1.9	193.96	B5/14	22500					
58	236	4.2	24.00	B5/14		12500	6.7	2016	1.7	209.65	B5/14	22500					
53	258	3.8	26.28	B5/14		12500	6.1	2207	1.6	229.46	B5/14	22500					
48	289	3.4	29.40	B5/14		12500	5.5	2432	1.4	252.87	B5/14	22500					
43	317	3.1	32.31	B5/14		12500											
39	348	2.8	35.47	B5/14		12500											
34	410	2.4	41.78	B5/14	12500												
31	449	2.2	45.73	B5/14	12500												
28	495	2.0	50.40	B5/14	12500												
25	539	1.8	56.00		ITH123	B5/14	12500										
23	590	1.7	61.31			B5/14	12500										
20	678	1.4	70.53			B5/14	12500										
17	779	1.3	81.00			B5/14	12500										
16	853	1.1	88.68			B5/14	12500										
13	1012	1.0	105.23			B5/14	12500										
155	89	10	9.03			ITH132	B5/14	18500									
136	101	9.4	10.30				B5/14	18500									
127	108	8.8	11.01				B5/14	18500									
113	122	9.9	12.39		B5/14		18500										
95	145	8.3	14.80		B5/14		18500										
93	148	8.8	15.11		B5/14		18500										
75	184	8.2	18.69		B5/14		18500										
69	199	8.0	20.31		B5/14		18500										
55	252	6.4	25.65		B5/14		18500										
51	270	6.3	27.48		B5/14		18500										
46	299	5.7	30.46		B5/14		18500										
40	340	5.6	34.61		B5/14		18500										
37	370	5.1	37.71		B5/14		18500										
33	411	4.6	41.80		B5/14	18500											
31	448	4.2	45.60		B5/14	18500											
28	490	3.9	49.88		B5/14	18500											
23	586	3.2	60.92		ITH133	B5/14	18500										
22	623	3.1	64.74			B5/14	18500										
20	682	2.8	70.88			B5/14	18500										
18	754	2.5	78.38			B5/14	18500										
16	838	2.3	87.14			B5/14	18500										
15	920	2.1	95.67			B5/14	18500										
13	1057	1.8	109.93			B5/14	18500										
12	1158	1.6	120.36			B5/14	18500										
10	1295	1.5	134.66			B5/14	18500										
9.5	1423	1.3	147.98			B5/14	18500										
8.6	1562	1.2	162.45			B5/14	18500										
7.3	1841	1.0	191.39			B5/14	18500										
									90LB4	260	65	5.4	5.38	ITH112	B5/14	4276	
								(1400 min ⁻¹)	216	78	4.5	6.47	B5/14		4721		
									178	95	4.2	7.88	B5/14		5232		
									164	103	3.9	8.54	B5/14		5455		
									155	110	3.8	9.06	B5/14		5620		
									136	125	3.4	10.28	B5/14		5987		
									123	138	3.5	11.39	B5/14		6295		
									112	152	3.2	12.52	B5/14		6584		
									95	179	2.8	14.80	B5/14		7113		
									77	219	2.4	18.10	B5/14		7761		
									69	245	2.2	20.25	B5/14		8120		
									60	285	2.1	23.52	B5/14		8200		
									54	317	1.9	26.16	B5/14		8200		
									49	349	1.9	28.77	B5/14		8200		
									44	390	1.7	32.18	B5/14		8200		
									39	440	1.5	36.35	B5/14		8200		
									34	504	1.4	41.57	B5/14		8200		
									29	585	1.0	48.27	B5/14		8200		
									25	656	1.1	55.27	ITH113		B5/14	8200	
									271	61	9.0	5.17			ITH122	B5/14	5973
									209	81	6.8	6.69	B5/14			6884	
									180	94	6.4	7.79	B5/14			7485	
									159	107	6.1	8.82	B5/14			8004	
									139	122	6.1	10.08	B5/14			8595	
									123	137	5.5	11.35	B5/14			9150	
									105	161	5.3	13.30	B5/14			9935	
									88	193	4.4	15.92	B5/14			10880	
									82	207	4.1	17.11	B5/14			11276	
									72	236	3.6	19.50	B5/14			12012	
									65	260	3.5	21.43	B5/14			12500	
									58	291	3.4	24.00	B5/14			12500	
									53	318	3.1	26.28	B5/14	12500			
									48	356	2.8	29.40	B5/14	12500			
									43	391	2.5	32.31	B5/14	12500			
									39	430	2.3	35.47	B5/14	12500			
									34	506	1.9	41.78	B5/14	12500			
									31	554	1.8	45.73	B5/14	12500			
									28	611	1.6	50.40	B5/14	12500			
									25	664	1.5	56.00	ITH123	B5/14	12500		
									23	727	1.3	61.31		B5/14	12500		
									20	837	1.2	70.53		B5/14	12500		
									17	961	1.0	81.00		B5/14	12500		
									16	1052	0.9	88.68		B5/14	12500		



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



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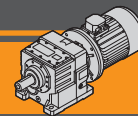
P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	sf	i			R ₂ [N]	P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	sf	i			R ₂ [N]
1.85								2.2							
90LB4 (1400 min ⁻¹)	155	109	8.2	9.03	ITH132	B5/14	18500	100LA4 (1400 min ⁻¹)	271	73	7.5	5.17	ITH122	B5/14	5944
	136	125	7.6	10.30		B5/14	18500		209	96	5.7	6.69		B5/14	6840
	127	133	7.1	11.01		B5/14	18500		180	112	5.3	7.79		B5/14	7428
	113	150	8.0	12.39		B5/14	18500		159	127	5.1	8.82		B5/14	7935
	95	179	6.7	14.80		B5/14	18500		139	145	5.2	10.08		B5/14	8510
	93	183	7.1	15.11		B5/14	18500		123	164	4.6	11.35		B5/14	9047
	75	226	6.6	18.69		B5/14	18500		105	192	4.4	13.30		B5/14	9803
	69	246	6.5	20.31		B5/14	18500		88	229	3.7	15.92		B5/14	10704
	55	311	5.1	25.65		B5/14	18500		82	247	3.4	17.11		B5/14	11079
	51	333	5.1	27.48		B5/14	18500		72	281	3.0	19.50		B5/14	11770
	46	369	4.6	30.46		B5/14	18500		65	309	2.9	21.43		B5/14	12276
	40	419	4.5	34.61		B5/14	18500		58	346	2.8	24.00		B5/14	12500
	37	457	4.2	37.71		B5/14	18500		53	379	2.6	26.28		B5/14	12500
	33	506	3.8	41.80		B5/14	18500		48	424	2.3	29.40		B5/14	12500
	31	552	3.4	45.60		B5/14	18500		43	465	2.1	32.31		B5/14	12500
	28	604	3.1	49.88	B5/14	18500	39		511	1.9	35.47	B5/14	12500		
	23	723	2.6	60.92	ITH133	B5/14	18500		34	602	1.6	41.78	B5/14	12500	
	22	768	2.5	64.74		B5/14	18500		31	659	1.5	45.73	B5/14	12500	
	20	841	2.3	70.88		B5/14	18500		28	726	1.3	50.40	B5/14	12500	
	18	930	2.0	78.38		B5/14	18500		25	790	1.2	56.00	ITH123	B5/14	12500
	16	1034	1.8	87.14		B5/14	18500		23	865	1.1	61.31		B5/14	12500
	15	1135	1.7	95.67		B5/14	18500		20	995	1.0	70.53		B5/14	12500
	13	1304	1.5	109.93		B5/14	18500		155	130	6.9	9.03	ITH132	B5/14	18500
	12	1428	1.3	120.36		B5/14	18500		136	148	6.4	10.30		B5/14	18500
	10	1597	1.2	134.66	B5/14	18500	127		159	6.0	11.01	B5/14		18500	
	9.5	1755	1.1	147.98	B5/14	18500	113		179	6.7	12.39	B5/14	18500		
	8.6	1927	1.0	162.45	B5/14	18500	95		213	5.6	14.80	B5/14	18500		
	23	732	4.8	61.74	ITH143	B5/14	22500		93	218	6.0	15.11	B5/14	18500	
	21	792	4.4	66.73		B5/14	22500		75	269	5.6	18.69	B5/14	18500	
	18	942	3.7	79.43		B5/14	22500		69	293	5.5	20.31	B5/14	18500	
	16	1018	3.4	85.85		B5/14	22500		55	370	4.3	25.65	B5/14	18500	
13	1322	2.6	111.40	B5/14		22500	51	396	4.3	27.48	B5/14	18500			
12	1428	2.5	120.42	B5/14		22500	46	439	3.9	30.46	B5/14	18500			
11	1564	2.2	131.84	B5/14		22500	40	499	3.8	34.61	B5/14	18500			
9.5	1750	2.0	147.51	B5/14		22500	37	543	3.5	37.71	B5/14	18500			
8.6	1923	1.8	162.10	B5/14		22500	33	602	3.2	41.80	B5/14	18500			
7.9	2111	1.7	177.95	B5/14		22500	31	657	2.9	45.60	B5/14	18500			
7.2	2301	1.5	193.96	B5/14		22500	28	719	2.6	49.88	B5/14	18500			
6.7	2487	1.4	209.65	B5/14		22500	23	859	2.2	60.92	ITH133	B5/14	18500		
6.1	2722	1.3	229.46	B5/14	22500	22	913	2.1	64.74	B5/14		18500			
5.5	3000	1.2	252.87	B5/14	22500	20	1000	1.9	70.88	B5/14		18500			
216	93	3.8	6.47	ITH112	B5/14	4240	18	1106	1.7	78.38		B5/14	18500		
178	113	3.5	7.88		B5/14	4672	16	1229	1.5	87.14		B5/14	18500		
164	123	3.3	8.54		B5/14	5166	15	1350	1.4	95.67		B5/14	18500		
155	131	3.2	9.06		B5/14	5379	13	1551	1.2	109.93		B5/14	18500		
136	148	2.8	10.28		B5/14	5537	12	1698	1.1	120.36		B5/14	18500		
123	164	2.9	11.39		B5/14	5886	10	1900	1.0	134.66	B5/14	18500			
112	180	2.7	12.52		B5/14	6175	85	236	9.7	16.40	ITH142	B5/14	22500		
95	213	2.3	14.80		B5/14	6446	69	292	9.6	20.24		B5/14	22500		
77	261	2.0	18.10		B5/14	6933	54	374	8.5	25.99		B5/14	22500		
69	292	1.8	20.25		B5/14	7513	43	466	6.9	32.35		B5/14	22500		
60	339	1.8	23.52		B5/14	7823	32	628	5.1	43.57		B5/14	22500		
54	377	1.6	26.16		B5/14	8200	30	682	4.7	47.35		B5/14	22500		
49	414	1.6	28.77		B5/14	8200	27	746	4.3	51.76		B5/14	22500		
44	464	1.5	32.18		B5/14	8200									
39	524	1.3	36.35		B5/14	8200									
34	599	1.1	41.57		B5/14	8200									



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



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]	
2.2								3.0								
100LA4 (1400 min ⁻¹)	23	871	4.0	61.74	ITH143	B5/14	22500	100LB4 (1400 min ⁻¹)	155	177	5.1	9.03	ITH132	B5/14	18500	
	21	941	3.7	66.73		B5/14	22500	136	202	4.7	10.30	B5/14		18500		
	18	1120	3.1	79.43		B5/14	22500	127	216	4.4	11.01	B5/14		18500		
	16	1211	2.9	85.85		B5/14	22500	113	243	4.9	12.39	B5/14		18500		
	13	1572	2.2	111.40		B5/14	22500	95	291	4.1	14.80	B5/14		18500		
	12	1699	2.1	120.42		B5/14	22500	93	297	4.4	15.11	B5/14		18500		
	11	1860	1.9	131.84		B5/14	22500	75	367	4.1	18.69	B5/14		18500		
	9.5	2081	1.7	147.51		B5/14	22500	69	399	4.0	20.31	B5/14		18500		
	8.6	2287	1.5	162.10		B5/14	22500	55	504	3.2	25.65	B5/14		18500		
	7.9	2510	1.4	177.95		B5/14	22500	51	540	3.1	27.48	B5/14		18500		
	7.2	2736	1.3	193.96		B5/14	22500	46	598	2.8	30.46	B5/14		18500		
	6.7	2957	1.2	209.65		B5/14	22500	40	680	2.8	34.61	B5/14		18500		
	6.1	3237	1.1	229.46		B5/14	22500	37	741	2.6	37.71	B5/14		18500		
	5.5	3567	1.0	252.87	B5/14	22500	33	821	2.3	41.80	B5/14	18500				
							31	896	2.1	45.60	B5/14	18500				
							28	980	1.9	49.88	B5/14	18500				
3.0								3.0								
100LB4 (1400 min ⁻¹)	260	106	3.3	5.38	ITH112	B5/14	4157		23	1172	1.6	60.92	ITH133	B5/14	18500	
	216	127	2.8	6.47		B5/14	4561	22	1245	1.5	64.74	B5/14		18500		
	178	155	2.6	7.88		B5/14	5014	20	1363	1.4	70.88	B5/14		18500		
	164	168	2.4	8.54		B5/14	5207	18	1508	1.3	78.38	B5/14		18500		
	155	178	2.4	9.06		B5/14	5348	16	1676	1.1	87.14	B5/14		18500		
	136	202	2.1	10.28		B5/14	5654	15	1840	1.0	95.67	B5/14		18500		
	123	224	2.1	11.39		B5/14	5903									
	112	246	2.0	12.52		B5/14	6130	110	251	8.8	12.78	ITH142		B5/14	22500	
	95	291	1.7	14.80		B5/14	6521	99	277	8.3	14.08			B5/14	22500	
	77	356	1.5	18.10		B5/14	6946	85	322	7.1	16.40			B5/14	22500	
	69	398	1.3	20.25		B5/14	7146	69	398	7.0	20.24			B5/14	22500	
	60	462	1.3	23.52		B5/14	7350	54	511	6.3	25.99			B5/14	22500	
	54	514	1.2	26.16		B5/14	7437	43	636	5.0	32.35			B5/14	22500	
	49	565	1.2	28.77	B5/14	7459	32	856	3.7	43.57	B5/14		22500			
	44	632	1.1	32.18	B5/14	7402	30	930	3.4	47.35	B5/14		22500			
	39	714	1.0	36.35	B5/14	7212	27	1017	3.1	51.76	B5/14		22500			
	271	99	5.5	5.17	ITH122	B5/14	5878		23	1188	2.9		61.74	ITH143	B5/14	22500
	209	131	4.2	6.69		B5/14	6738	21	1284	2.7	66.73		B5/14		22500	
	180	153	3.9	7.79		B5/14	7298	18	1528	2.3	79.43		B5/14		22500	
	159	173	3.8	8.82		B5/14	7777	16	1651	2.1	85.85		B5/14		22500	
	139	198	3.8	10.08		B5/14	8315	13	2143	1.6	111.40	B5/14	22500			
	123	223	3.4	11.35		B5/14	8812	12	2316	1.5	120.42	B5/14	22500			
	105	261	3.3	13.30		B5/14	9500	11	2536	1.4	131.84	B5/14	22500			
	88	313	2.7	15.92		B5/14	10302	9.5	2838	1.2	147.51	B5/14	22500			
	82	336	2.5	17.11		B5/14	10628	8.6	3118	1.1	162.10	B5/14	22500			
	72	383	2.2	19.50		B5/14	11215	7.9	3423	1.0	177.95	B5/14	22500			
	65	421	2.1	21.43		B5/14	11633									
	58	471	2.1	24.00		B5/14	12118									
	53	516	1.9	26.28		B5/14	12487									
	48	578	1.7	29.40	B5/14	12500										
	43	635	1.5	32.31	B5/14	12500										
	39	697	1.4	35.47	B5/14	12500										
	34	821	1.2	41.78	B5/14	12500										
	31	898	1.1	45.73	B5/14	12500										
	28	990	1.0	50.40	B5/14	12500										
	25	1077	0.9	56.00	ITH123	B5/14	12500	4.0								
								112M4 (1400 min ⁻¹)	260	141	2.5	5.38	ITH112	B5/14	4053	
								216	169	2.1	6.47	B5/14		4422		
								178	206	1.9	7.88	B5/14		4824		
								164	224	1.8	8.54	B5/14		4991		
								155	237	1.8	9.06	B5/14		5111		
								136	269	1.6	10.28	B5/14		5365		
								123	298	1.6	11.39	B5/14		5563		
								112	328	1.5	12.52	B5/14		5735		
								95	388	1.3	14.80	B5/14		6005		
								77	474	1.1	18.10	B5/14		6237		
								69	530	1.0	20.25	B5/14		6299		
								60	616	1.0	23.52	B5/14		6277		

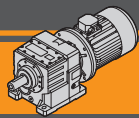


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Technical data

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]						
4.0								5.5													
112M4 (1400 min ⁻¹)	271	133	4.1	5.17	ITH122	B5/14	5795	132S4 (1400 min ⁻¹)	260	194	1.8	5.38	ITH112	B5/B14	3898						
	209	175	3.1	6.69			B5/14	6611		216	233	1.5			6.47	B5/B14	4213				
	180	204	2.9	7.79			B5/14	7136		178	284	1.4			7.88	B5/B14	4539				
	159	231	2.8	8.82			B5/14	7580		164	308	1.3			8.54	B5/B14	4667				
	139	264	2.8	10.08			B5/14	8072		155	326	1.3			9.06	B5/B14	4756				
	123	297	2.5	11.35			B5/14	8518		136	370	1.1			10.28	B5/B14	4930				
	105	348	2.4	13.30			B5/14	9122		123	410	1.2			11.39	B5/B14	5052				
	88	417	2.0	15.92			B5/14	9800		112	451	1.1			12.52	B5/B14	5142				
	82	448	1.9	17.11			B5/14	10065		271	182	3.0			5.17	ITH122	B5/B14	5671			
	72	511	1.7	19.50			B5/14	10523		209	241	2.3			6.69			B5/B14	6420		
	65	561	1.6	21.43			B5/14	10828		180	281	2.1			7.79			B5/B14	6893		
	58	629	1.6	24.00			B5/14	11156		159	318	2.0			8.82			B5/B14	7284		
	53	688	1.4	26.28			B5/14	11377		139	363	2.1			10.08			B5/B14	7706		
	48	770	1.3	29.40			B5/14	11583		123	409	1.8			11.35			B5/B14	8077		
	43	846	1.2	32.31			B5/14	11683		105	479	1.8			13.30			B5/B14	8555		
	39	929	1.1	35.47			B5/14	11701		88	573	1.5			15.92			B5/B14	9047		
	34	1095	0.9	41.78			B5/14	11474		82	616	1.4			17.11			B5/B14	9220		
	155	237	3.8	9.03			ITH132	B5/14	18353		72	702			1.2			19.50	ITH132	B5/B14	9484
	136	270	3.5	10.30	B5/14	18500				65	772	1.2	21.43	B5/B14	9622						
	127	288	3.3	11.01	B5/14	18500				58	864	1.1	24.00	B5/B14	9712						
	113	325	3.7	12.39	B5/14	18500				53	946	1.0	26.28	B5/B14	9710						
	95	388	3.1	14.80	B5/14	18500				48	1059	0.9	29.40	B5/B14	9593						
	93	396	3.3	15.11	B5/14	18500				278	178	4.8	5.03	ITH132	B5/B14			13316			
	75	490	3.1	18.69	B5/14	18500				230	219	3.9	6.09					B5/B14			14674
	69	532	3.0	20.31	B5/14	18500				203	249	3.6	6.91					B5/B14			15633
	55	672	2.4	25.65	B5/14	18500				186	270	3.3	7.51					B5/B14			16290
	51	720	2.4	27.48	B5/14	18500				167	301	3.0	8.36			B5/B14	17159				
	46	798	2.1	30.46	B5/14	18500				155	325	2.8	9.03			B5/B14	17797				
	40	907	2.1	34.61	B5/14	18500				136	371	2.6	10.30			B5/B14	18500				
	37	988	1.9	37.71	B5/14	18500				127	396	2.4	11.01			B5/B14	18500				
	33	1095	1.7	41.80	B5/14	18500				113	446	2.7	12.39			B5/B14	18500				
	31	1194	1.6	45.60	B5/14	18500				95	533	2.3	14.80			B5/B14	18500				
	28	1306	1.5	49.88	B5/14	18500				93	544	2.4	15.11			B5/B14	18500				
	23	1562	1.2	60.92	ITH133	B5/14			18500		75	673	2.2			18.69	B5/B14	18500			
	22	1660	1.1	64.74					B5/14	18500		69	731			2.2	20.31	B5/B14			18500
	20	1818	1.0	70.88			B5/14	18500		55	924	1.7	25.65			B5/B14	18500				
	18	2010	0.9	78.38			B5/14	18500		51	990	1.7	27.48			B5/B14	18500				
	110	335	6.6	12.78	ITH142	B5/14	22500		46	1097	1.5	30.46	ITH142			B5/B14	18500				
	99	369	6.2	14.08			B5/14	22500		40	1246	1.5					34.61	B5/B14	18500		
	85	429	5.4	16.40			B5/14	22500		37	1358	1.4					37.71	B5/B14	18500		
	69	530	5.3	20.24			B5/14	22500		33	1506	1.3		41.80	B5/B14		18500				
	54	681	4.7	25.99			B5/14	22500		31	1642	1.2		45.60	B5/B14		18500				
	43	847	3.8	32.35			B5/14	22500		28	1796	1.1		49.88	B5/B14		18500				
	32	1141	2.8	43.57			B5/14	22500		228	217	8.3		6.15	ITH142		B5/B14	21811			
	30	1240	2.6	47.35			B5/14	22500		190	265	6.8		7.35				B5/B14	22500		
	27	1356	2.4	51.76			B5/14	22500		158	320	6.3		8.88				B5/B14	22500		
	23	1583	2.2	61.74			ITH143	B5/14	22500		144	351		5.7				9.75	B5/B14	22500	
	21	1712	2.0	66.73	B5/14	22500				135	373	5.6	10.35	B5/B14		22500					
	18	2037	1.7	79.43	B5/14	22500				120	419	5.0	11.65	B5/B14		22500					
	16	2202	1.6	85.85	B5/14	22500				110	460	4.8	12.78	B5/B14		22500					
	13	2857	1.2	111.40	B5/14	22500				99	507	4.5	14.08	B5/B14		22500					
	12	3088	1.1	120.42	B5/14	22500				85	591	3.9	16.40	B5/B14		22500					
	11	3381	1.0	131.84	B5/14	22500				79	639	4.4	17.73	B5/B14		22500					
					B5/14	22500				69	729	3.8	20.24	B5/B14	22500						
					B5/14	22500				54	936	3.4	25.99	B5/B14	22500						
					B5/14	22500				50	1012	3.2	28.10	B5/B14	22500						
					B5/14	22500		43	1165	2.7	32.35	B5/B14	22500								
					B5/14	22500		38	1336	2.4	37.09	B5/B14	22500								
					B5/14	22500		32	1569	2.0	43.57	B5/B14	22500								
					B5/14	22500		30	1705	1.9	47.35	B5/B14	22500								
					B5/14	22500		27	1864	1.7	51.76	B5/B14	22500								

ITH







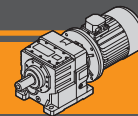
ITH

Motoriduttori ad ingranaggi cilindrici Helical in-line gearmotors

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



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								9.2								
132S4 (1400 min ⁻¹)	23	2177	1.6	61.74	ITH143	B5/B14	22500	132L4 (1400 min ⁻¹)	260	324	1.1	5.38	ITH112	B5/B14	3514	
	21	2353	1.5	66.73		B5/B14	22500		271	305	1.8	5.17		ITH122	B5/B14	5364
	18	2801	1.2	79.43		B5/B14	22500		209	403	1.4	6.69			B5/B14	5949
	16	3028	1.2	85.85		B5/B14	22500		180	469	1.3	7.79			B5/B14	6293
								159	531	1.2	8.82	B5/B14	6554			
								139	607	1.2	10.08	B5/B14	6805			
								123	684	1.1	11.35	B5/B14	6989			
								105	801	1.1	13.30	B5/B14	7157			
7.5																
132MA4 (1400 min ⁻¹)	260	264	1.3	5.38	ITH112	B5/B14	3691	ITH132	278	297	2.9	5.03	ITH132	B5/B14	12784	
	216	318	1.1	6.47		B5/B14	3935		230	367	2.3	6.09		B5/B14	13938	
	178	387	1.0	7.88		B5/B14	4160		203	416	2.2	6.91		B5/B14	14736	
	164	420	1.0	8.54		B5/B14	4235		186	452	2.0	7.51		B5/B14	15266	
	155	445	0.9	9.06	B5/B14	4282	167		504	1.8	8.36	B5/B14		15945		
	271	249	2.2	5.17	ITH122	B5/B14	5505		155	544	1.7	9.03		B5/B14	16426	
	209	328	1.7	6.69		B5/B14	6166		136	621	1.5	10.30		B5/B14	17221	
	180	383	1.6	7.79		B5/B14	6569		127	663	1.4	11.01		B5/B14	17599	
	159	433	1.5	8.82		B5/B14	6890		113	747	1.6	12.39		B5/B14	18229	
	139	495	1.5	10.08		B5/B14	7219		95	892	1.3	14.80		B5/B14	18500	
	123	557	1.3	11.35		B5/B14	7489		93	910	1.4	15.11		B5/B14	18500	
	105	653	1.3	13.30		B5/B14	7800		75	1126	1.3	18.69		B5/B14	18500	
	88	782	1.1	15.92		B5/B14	8042		69	1223	1.3	20.31		B5/B14	18500	
82	840	1.0	17.11	B5/B14		8094	55	1545	1.0	25.65	B5/B14	18500				
278	242	3.5	5.03	ITH132		B5/B14	13028	51	1656	1.0	27.48	B5/V14	18104			
230	299	2.8	6.09			B5/B14	14276	228	363	5.0	6.15	ITH142	B5/B14	21179		
203	339	2.7	6.91			B5/B14	15148	190	443	4.1	7.35		B5/B14	22500		
186	369	2.4	7.51			B5/B14	15736	158	535	3.7	8.88		B5/B14	22500		
167	411	2.2	8.36		B5/B14	16503	144	587	3.4	9.75	B5/B14		22500			
155	444	2.0	9.03		B5/B14	17056	135	623	3.4	10.35	B5/B14		22500			
136	506	1.9	10.30		B5/B14	17997	120	702	3.0	11.65	B5/B14		22500			
127	541	1.8	11.01		B5/B14	18461	110	770	2.9	12.78	B5/B14		22500			
113	609	2.0	12.39		B5/B14	18500	99	848	2.7	14.08	B5/B14		22500			
95	727	1.7	14.80		B5/B14	18500	85	988	2.3	16.40	B5/B14		22500			
93	742	1.8	15.11		B5/B14	18500	79	1068	2.6	17.73	B5/B14		22500			
75	918	1.6	18.69		B5/B14	18500	69	1219	2.3	20.24	B5/B14		22500			
69	997	1.6	20.31		B5/B14	18500	54	1566	2.0	25.99	B5/B14		22500			
55	1260	1.3	25.65	B5/B14	18500	50	1693	1.9	28.10	B5/B14	22500					
51	1350	1.3	27.48	B5/B14	18500	43	1949	1.6	32.35	B5/B14	22500					
46	1496	1.1	30.46	B5/B14	18500	38	2234	1.4	37.09	B5/B14	22500					
40	1700	1.1	34.61	B5/B14	18500	32	2625	1.2	43.57	B5/B14	22500					
37	1852	1.0	37.71	B5/B14	18500	30	2853	1.1	47.35	B5/B14	22500					
228	296	6.1	6.15	ITH142	B5/B14	21469	27	3118	1.0	51.76	B5/B14	22500				
190	361	5.0	7.35		B5/B14	22500	23	3642	1.0	61.74	ITH143	B5/B14	22500			
158	436	4.6	8.88		B5/B14	22500						B5	12525			
144	479	4.2	9.75		B5/B14	22500						B5	13580			
135	508	4.1	10.35		B5/B14	22500						B5	14299			
120	572	3.7	11.65		B5/B14	22500						B5	14768			
110	627	3.5	12.78		B5/B14	22500						B5	15355			
99	691	3.3	14.08		B5/B14	22500						B5	15759			
85	805	2.9	16.40		B5/B14	22500						B5	16398			
79	871	3.2	17.73		B5/B14	22500						B5	16686			
69	994	2.8	20.24		B5/B14	22500						B5	17128			
54	1277	2.5	25.99		B5/B14	22500						B5	17547			
50	1380	2.3	28.10		B5/B14	22500						B5	17571			
43	1589	2.0	32.35	B5/B14	22500					B5		17421				
38	1821	1.8	37.09	B5/B14	22500					B5	17114					
32	2140	1.5	43.57	B5/B14	22500											
30	2326	1.4	47.35	B5/B14	22500											
27	2542	1.3	51.76	B5/B14	22500											
23	2969	1.2	61.74	ITH143	B5/B14	22500										
21	3209	1.1	66.73		B5/B14	22500										
11.0																
								160M4 (1400 min ⁻¹)	278	355	2.4	5.03	ITH132	B5	12525	
								230	439	1.9	6.09	B5		13580		
								203	498	1.8	6.91	B5		14299		
								186	541	1.7	7.51	B5		14768		
								167	602	1.5	8.36	B5		15355		
								155	650	1.4	9.03	B5		15759		
								136	742	1.3	10.30	B5		16398		
								127	793	1.2	11.01	B5		16686		
								113	893	1.3	12.39	B5		17128		
								95	1066	1.1	14.80	B5		17547		
								93	1088	1.2	15.11	B5		17571		
								75	1346	1.1	18.69	B5		17421		
								69	1463	1.1	20.31	B5		17114		



Dati tecnici

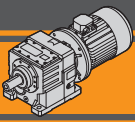
Technical data

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]			
11.0								22.0										
160M4 (1400 min ⁻¹)	228	434	4.1	6.15	ITH142	B5	20871	180L4 (1400 min ⁻¹)	278	710	1.2	5.03	ITH132	B5	10941			
	190	529	3.4	7.35			B5		22500	230	878	1.0			6.09	B5	11394	
	158	640	3.1	8.88			B5		22500	ITH142	228	868			2.1	6.15	B5	18992
	144	702	2.8	9.75			B5		22500		190	1059			1.7	7.35	B5	20034
	135	745	2.8	10.35			B5		22500		158	1280			1.6	8.88	B5	21065
	120	839	2.5	11.65			B5		22500		144	1404			1.4	9.75	B5	21474
	110	920	2.4	12.78			B5		22500		135	1491			1.4	10.35	B5	21693
	99	1014	2.3	14.08			B5		22500		120	1678			1.3	11.65	B5	22000
	85	1181	1.9	16.40			B5		22500		110	1840			1.2	12.78	B5	22097
	79	1277	2.2	17.73			B5		22500		99	2028			1.1	14.08	B5	22028
	69	1458	1.9	20.24			B5		22500		85	2362			1.0	16.40	B5	21475
	54	1872	1.7	25.99			B5		22500		79	2555			1.1	17.73	B5	20928
	50	2024	1.6	28.10			B5		22500	69	2916	1.0			20.24	B5	19494	
	43	2330	1.4	32.35			B5		22500									
	38	2671	1.2	37.09			B5		22500									
32	3139	1.0	43.57	B5	22500													

15.0										
160L4 (1400 min ⁻¹)	278	484	1.8	5.03	ITH132	B5	11949			
	230	598	1.4	6.09			B5	12785		
	203	679	1.3	6.91			B5	13329		
	186	738	1.2	7.51			B5	13661		
	167	821	1.1	8.36			B5	14043		
	155	887	1.0	9.03			B5	14276		
	228	592	3.0	6.15			ITH142	B5	20188	
	190	722	2.5	7.35					B5	21643
	158	873	2.3	8.88					B5	22500
	144	957	2.1	9.75					B5	22500
	135	1016	2.1	10.35					B5	22500
	120	1144	1.8	11.65					B5	22500
	110	1255	1.8	12.78					B5	22500
	99	1383	1.7	14.08					B5	22500
	85	1610	1.4	16.40					B5	22500
79	1742	1.6	17.73	B5	22500					
69	1988	1.4	20.24	B5	22500					
54	2553	1.3	25.99	B5	22500					
50	2760	1.2	28.10	B5	22500					
43	3178	1.0	32.35	B5	22410					

30.0								
200L4 (1400 min ⁻¹)	228	1183	1.5	6.15	ITH142	B5	17626	
	190	1444	1.2	7.35			B5	18195
	158	1745	1.1	8.88			B5	18598
	144	1915	1.0	9.75			B5	18625
	135	2033	1.0	10.35			B5	18568
	120	2288	0.9	11.65			B5	18247

18.5										
180M4 (1400 min ⁻¹)	278	597	1.4	5.03	ITH132	B5	11445			
	230	738	1.2	6.09			B5	12090		
	203	837	1.1	6.91			B5	12480		
	186	910	1.0	7.51			B5	12692		
	228	730	2.5	6.15			ITH142	B5	19590	
	190	890	2.0	7.35					B5	20839
	158	1076	1.9	8.88					B5	22145
	144	1181	1.7	9.75					B5	22500
	135	1254	1.7	10.35					B5	22500
	120	1411	1.5	11.65					B5	22500
	110	1548	1.4	12.78					B5	22500
	99	1705	1.3	14.08					B5	22500
	85	1986	1.2	16.40					B5	22500
	79	2148	1.3	17.73					B5	22500
	69	2452	1.1	20.24			B5	22500		
54	3149	1.0	25.99	B5	20141					

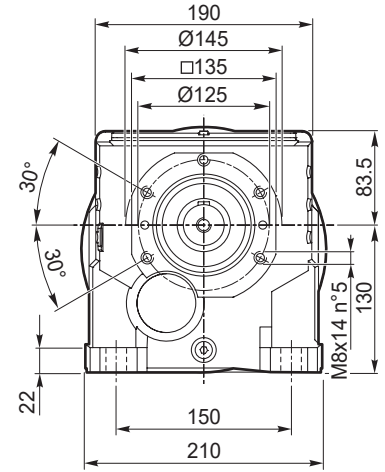
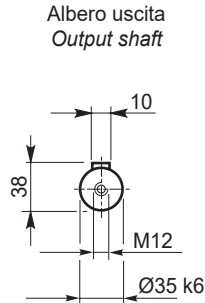
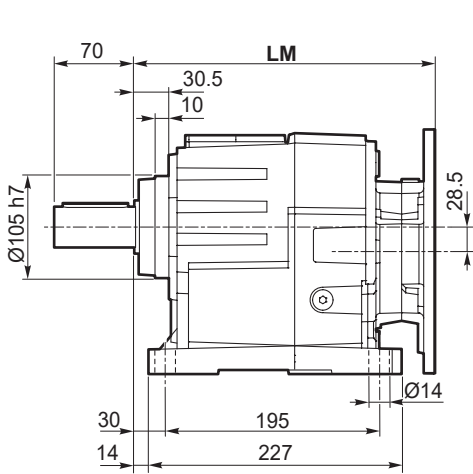


Dimensioni

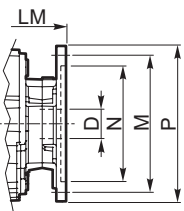
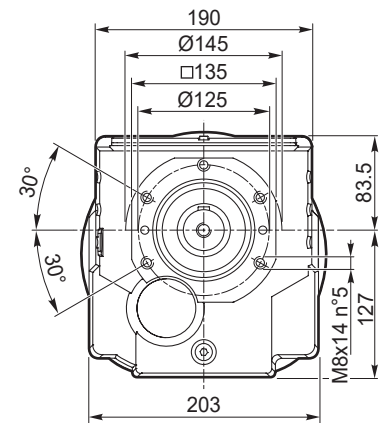
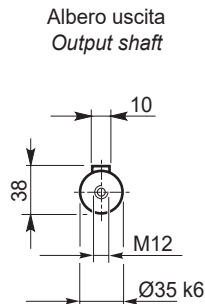
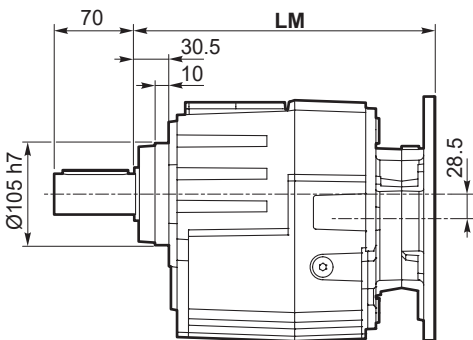
Dimensions

ITH 112 - ITH 113

ITH 112 U
ITH 113 U

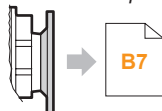


ITH 112 G
ITH 113 G

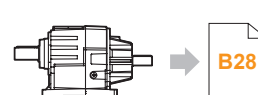


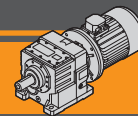
Dimensioni IEC / IEC Dimensions								
	71 B5	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14
LM	289			293,5	293	293,5	314	
N	110	130	130	95	180	110	230	130
M	130	165	165	115	215	130	265	165
P	160	200	200	140	250	160	300	200
D	14	19	24		28		38	

IEC Motori applicabili
IEC Motor adapters



ITHIS 112...
ITHIS 113...



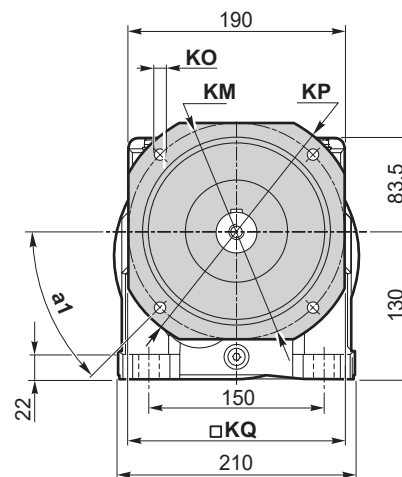
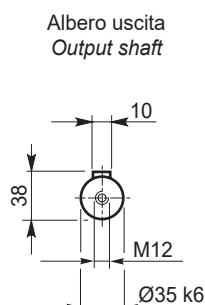
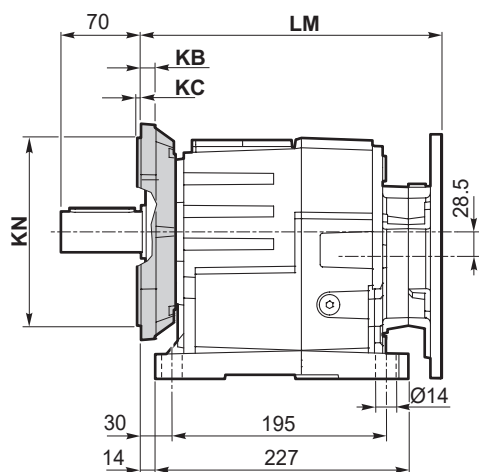


Dimensioni

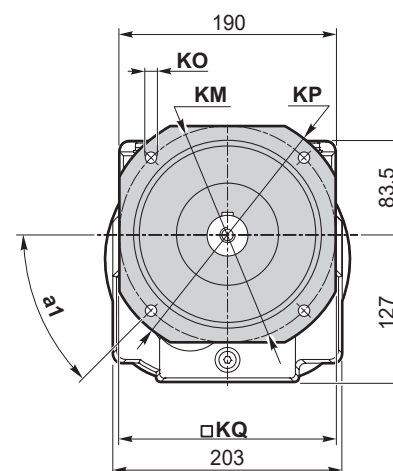
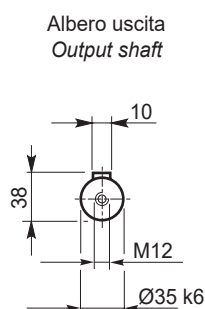
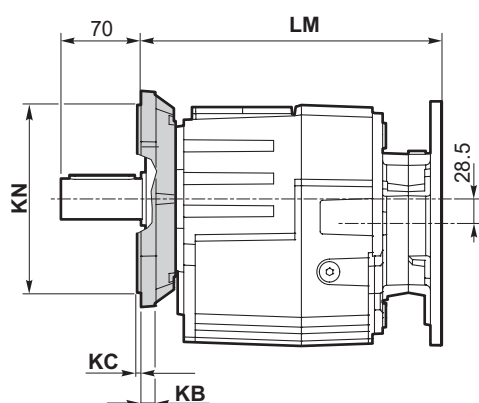
Dimensions

ITH 112 - ITH 113

ITH 112 U/F...
ITH 113 U/F...



ITH 112 F...
ITH 113 F...

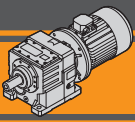


Versione F / F Version											
ITH	a ₁	KB	KC	KM	KN f7	KO	KP	KQ	Flangia / Flange		
									Tipo / Type		Peso / Weight [kg]
112 113	45°	12	4	165	130	11	200	165	F200		2.1
	45°	12	4	215	180	14	250	215	F250		3.2

Peso / Weight [kg]									
ITH	71 B5	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14	
112 U	28	29	29	28	30	28	34	31	
112 G	26	27	27	26	29	26	32	29	
113 U	28	29	29	28	-	-	-	-	
113 G	27	28	28	27	-	-	-	-	

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



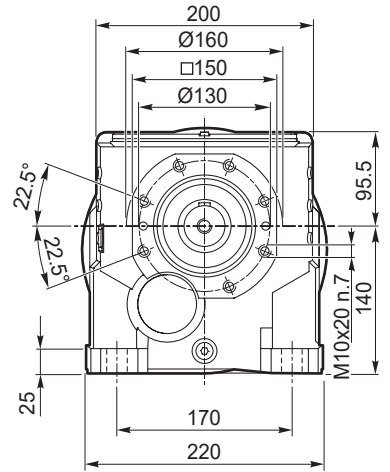
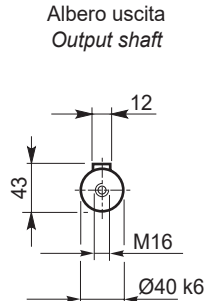
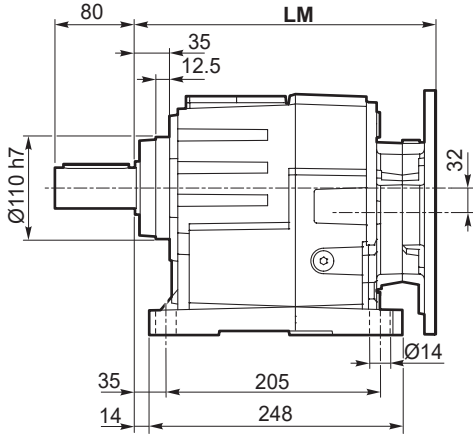


Dimensioni

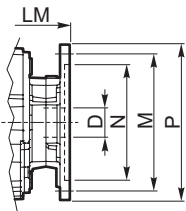
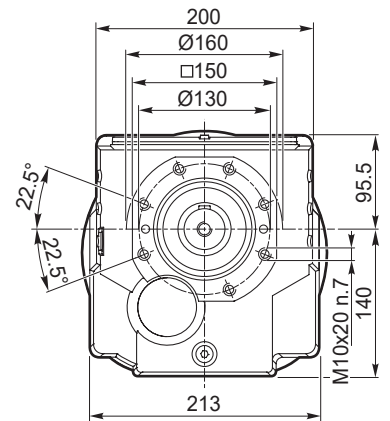
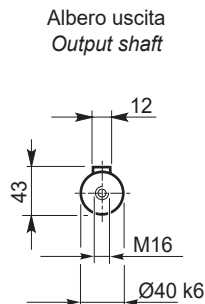
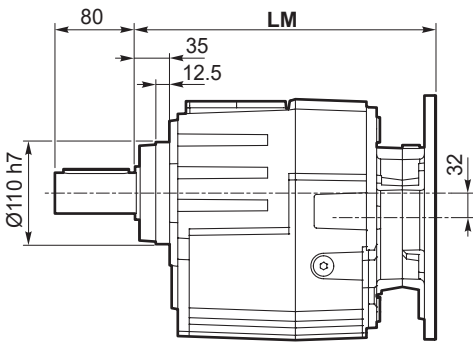
Dimensions

ITH 122 - ITH 123

ITH 122 U
ITH 123 U

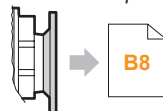


ITH 122 G
ITH 123 G

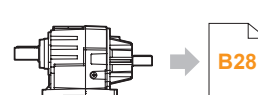


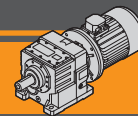
Dimensioni IEC / IEC Dimensions								
	71 B5	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14
LM	309.5			314	313.5	314	334.5	
N	110	130	130	95	180	110	230	130
M	130	165	165	115	215	130	265	165
P	160	200	200	140	250	160	300	200
D	14	19	24		28		38	

IEC Motori applicabili
IEC Motor adapters



ITHIS 122...
ITHIS 123...



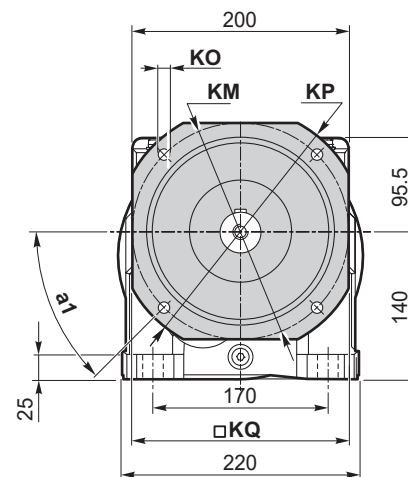
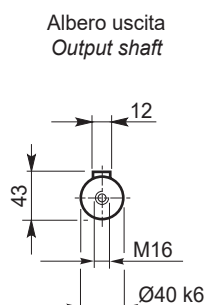
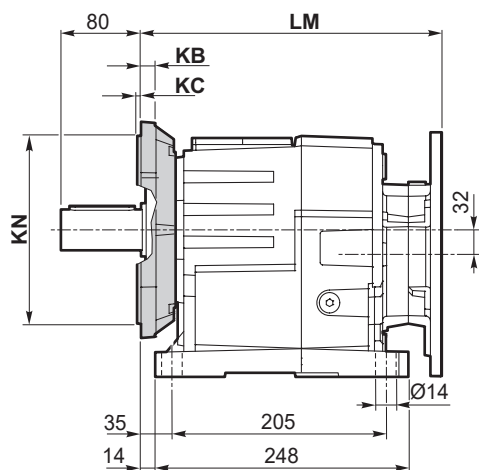


Dimensioni

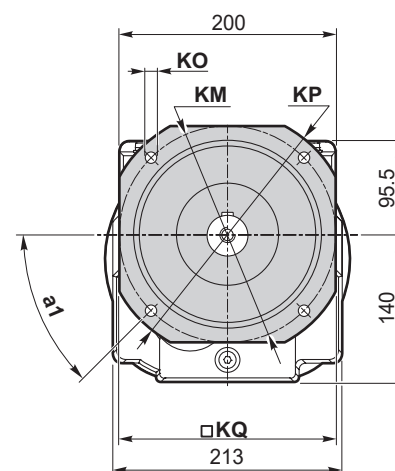
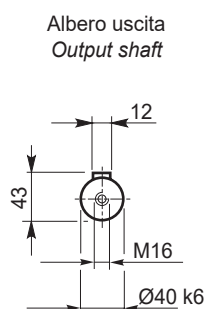
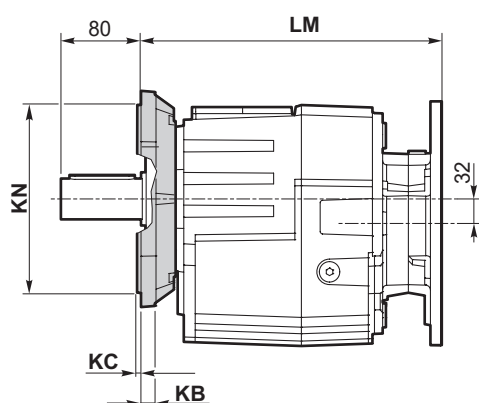
Dimensions

ITH 122- ITH 123

ITH 122 U/F...
ITH 123 U/F...



ITH 122 F...
ITH 123 F...



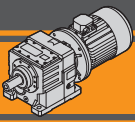
Versione F / F Version

ITH	a ₁	KB	KC	KM	KN f7	KO	KP	KQ	Flangia / Flange	Peso / Weight [kg]
									Tipo / Type	
122 123	45°	13	4	165	130	11	200	172	F200	2.6
	45°	13	4	215	180	14	250	215	F250	3.8
	45°	13	4	265	230	14	300	265	F300	5.6

Peso / Weight [kg]

ITH	71 B5	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14
122 U	-	36	36	35	38	35	41	38
122 G	-	34	34	33	36	33	39	36
123 U	36	37	37	36	39	36	-	-
123 G	34	35	35	34	37	34	-	-

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



ITH

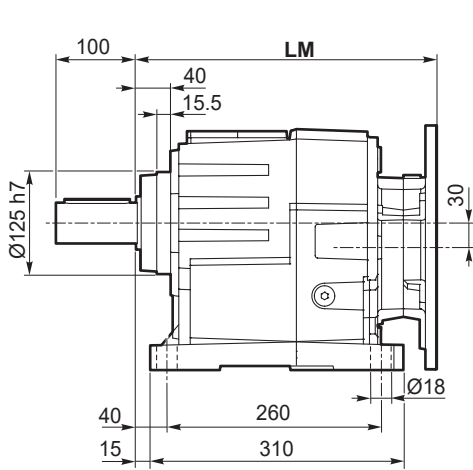
Motoriduttori ad ingranaggi cilindrici
Helical in-line gearmotors

Dimensioni

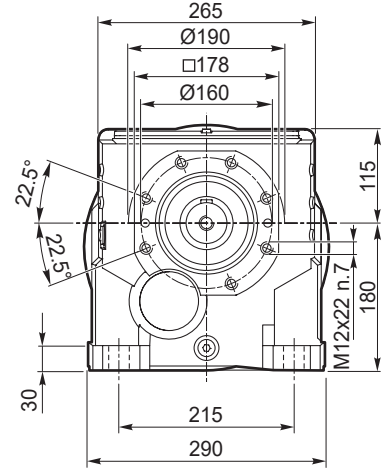
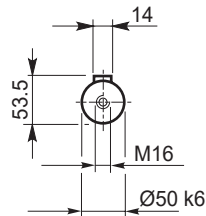
Dimensions

ITH 132 - ITH 133

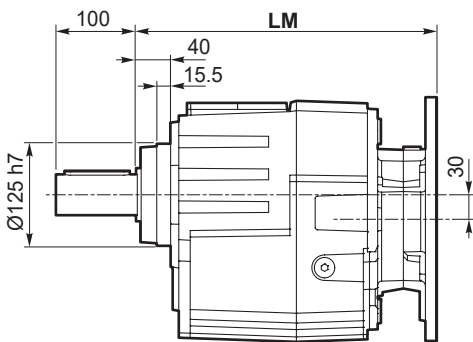
ITH 132 U
ITH 133 U



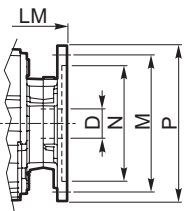
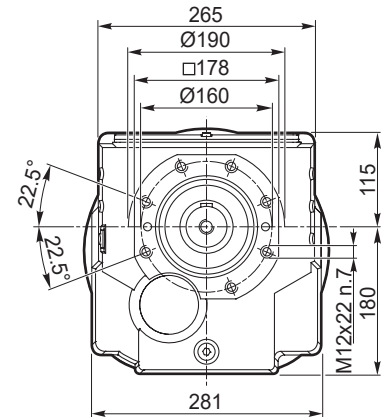
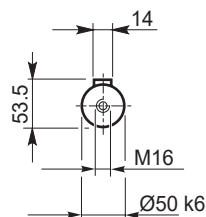
Albero uscita
Output shaft



ITH 132 G
ITH 133 G

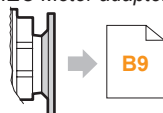


Albero uscita
Output shaft

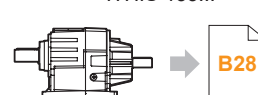


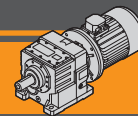
Dimensioni IEC / IEC Dimensions									
	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14	160 B5	180 B5
LM	340.5		345	344.5	345	365.5		415.5	
N	130		95	180	110	230	130	250	
M	165		115	215	130	265	165	300	
P	200		140	250	160	300	200	350	
D	19	24		28		38		42	48

IEC Motori applicabili
IEC Motor adapters



ITHIS 132...
ITHIS 133...



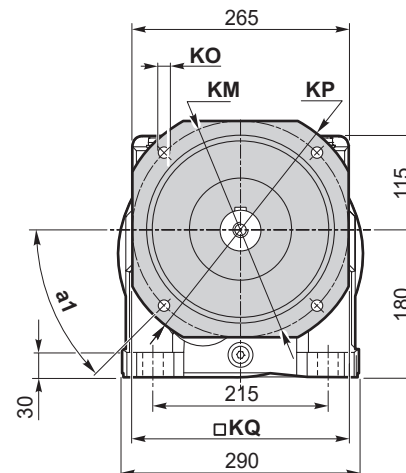
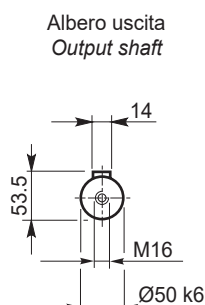
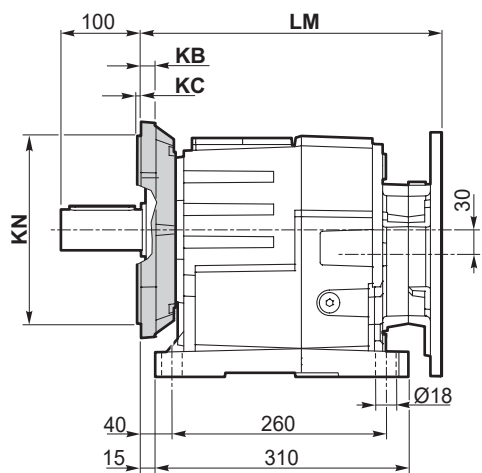


Dimensioni

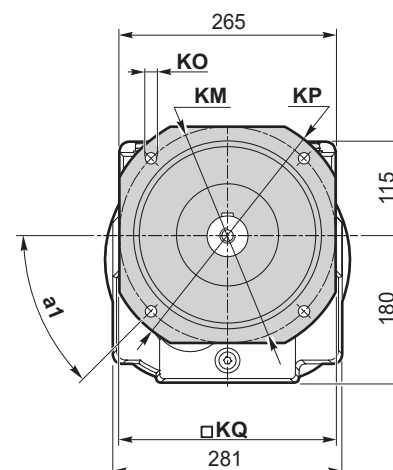
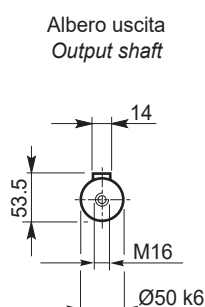
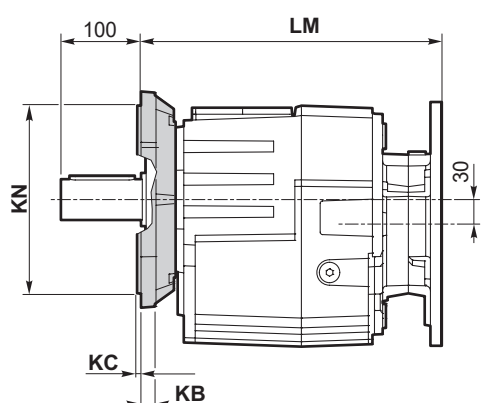
Dimensions

ITH 132- ITH 133

ITH 132 U/F...
ITH 133 U/F...



ITH 132 F...
ITH 133 F...



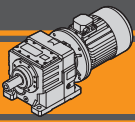
Versione F / F Version

ITH	a ₁	KB	KC	KM	KN f7	KO	KP	KQ	Flangia / Flange	Peso / Weight [kg]
									Tipo / Type	
132 133	45°	16	4	215	180	14	250	215	F250	4.8
	45°	16	4	265	230	14	300	260	F300	7.1
	45°	16	4	300	250	18	350	300	F350	9.1

Peso / Weight [kg]

ITH	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14	160 B5	180 B5
132 U		67	66	68	66	72	69	83	
132 G		63	62	64	62	68	65	79	
133 U		69	68	70	68	74	71	-	-
133 G		65	64	66	64	70	67	-	-

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



ITH

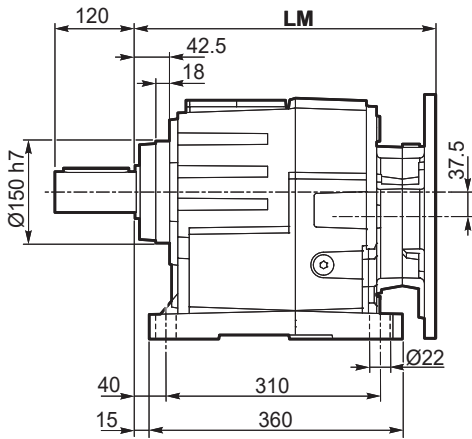
Motoriduttori ad ingranaggi cilindrici
Helical in-line gearmotors

Dimensioni

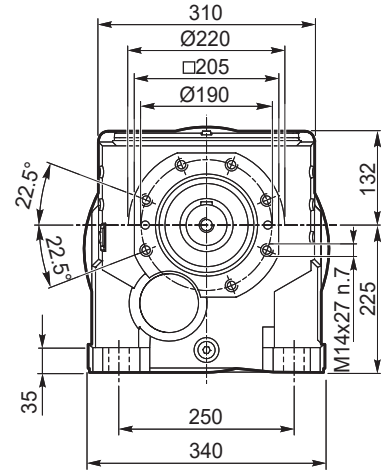
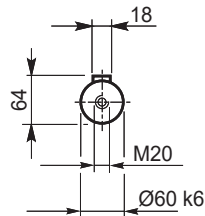
Dimensions

ITH 142 - ITH 143

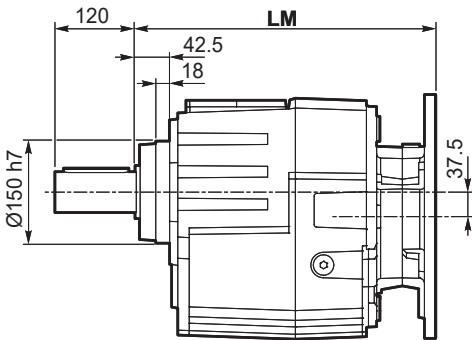
ITH 142 U
ITH 143 U



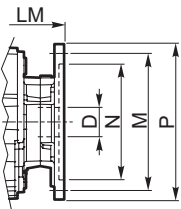
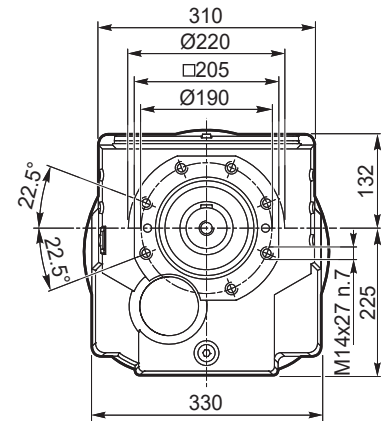
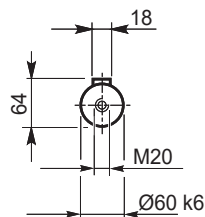
Albero uscita
Output shaft



ITH 142 G
ITH 143 G

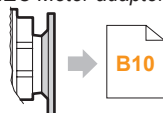


Albero uscita
Output shaft

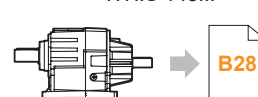


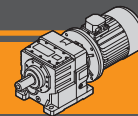
Dimensioni IEC / IEC Dimensions										
	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14	160 B5	180 B5	200 B5
LM	373.5	378	377.5	378	398.5	448.5	460.5			
N	130	95	180	110	230	130	250	300		
M	165	115	215	130	265	165	300	350		
P	200	140	250	160	300	200	350	400		
D	19	24	28	38	42	48	55			

IEC Motori applicabili
IEC Motor adapters



ITHIS 142...
ITHIS 143...



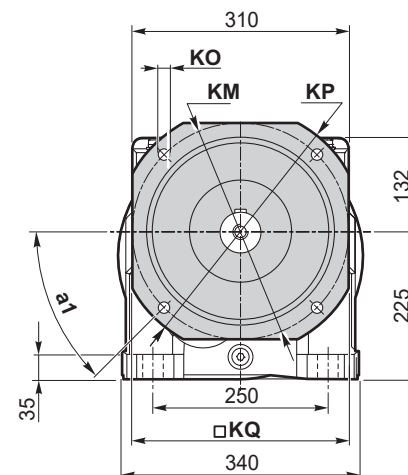
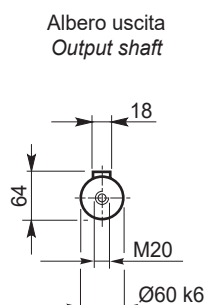
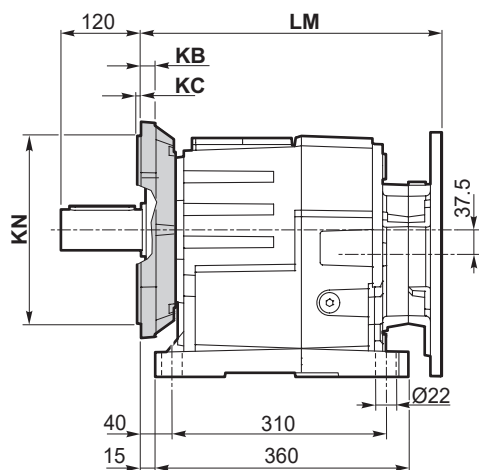


Dimensioni

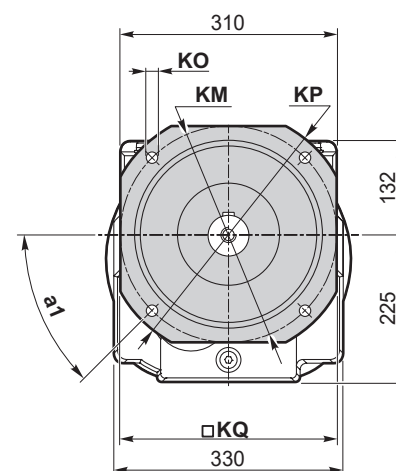
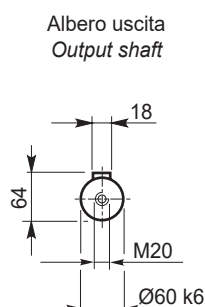
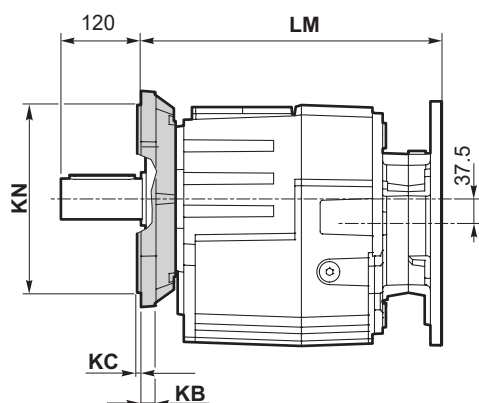
Dimensions

ITH 142- ITH 143

ITH 142 U/F...
ITH 143 U/F...



ITH 142 F...
ITH 143 F...



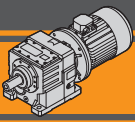
Versione F / F Version

ITH	a ₁	KB	KC	KM	KN f7	KO	KP	KQ	Flangia / Flange Tipo / Type	Peso / Weight [kg]
142 143	45°	18	4	265	230	14	300	265	F300	7.4
	45°	18	5	300	250	18	350	300	F350	10.2
	45°	18	5	400	350	18	450	400	F450	16.9

Peso / Weight [kg]

ITH	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14	160 B5	180 B5	200 B5
142 U	-	-	-	105	102	108	105	119		129
142 G	-	-	-	99	96	102	99	113		123
143 U		106		105	108	105	111	108	-	-
143 G		100		99	102	99	105	102	-	-

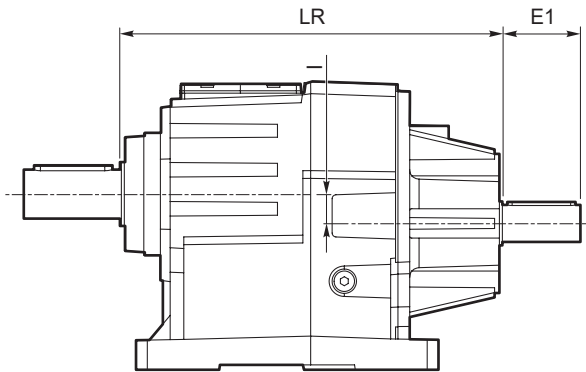
Nota: peso del riduttore complessivo di olio per la posizione M1 (B3)
Note: weight of the gearbox filled with oil for M1 (B3) assembly position



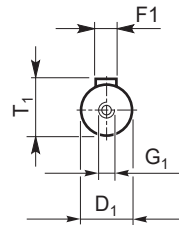
Dimensioni

Dimensions

ITHIS...



Albero entrata
Input shaft



ITHIS	Peso / Weight [kg]
112 U	29
112 G	28
113 U	30
113 G	28
122 U	37
122 G	35
123 U	38
123 G	36
132 U	73
132 G	69
133 U	69
133 G	65
142 U	110
142 G	104
143 U	107
143 G	101

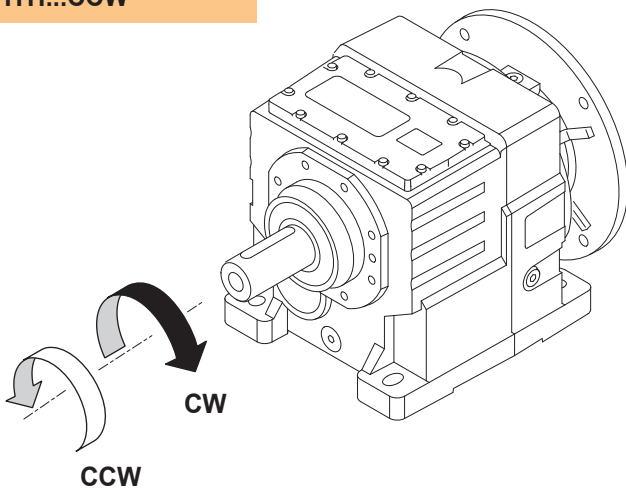
ITHIS	Versione Version	LR	D1	E1	I	T1	F1	G1
112	U G U/F... F...	321.5	28	60	28.5	31	8	M10
113		321.5	24	50	28.5	27	8	M8
122		342	28	60	32	31	8	M10
123		342	28	60	32	31	8	M10
132		390.5	38	80	30	41	10	M12
133		373	28	60	30	31	8	M10
142		423.5	38	80	37.5	41	10	M12
143		406	28	60	37.5	31	8	M10

Accessori

Accessories

Dispositivo antiretro / Backstop device

**ITH...CW
ITH...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.

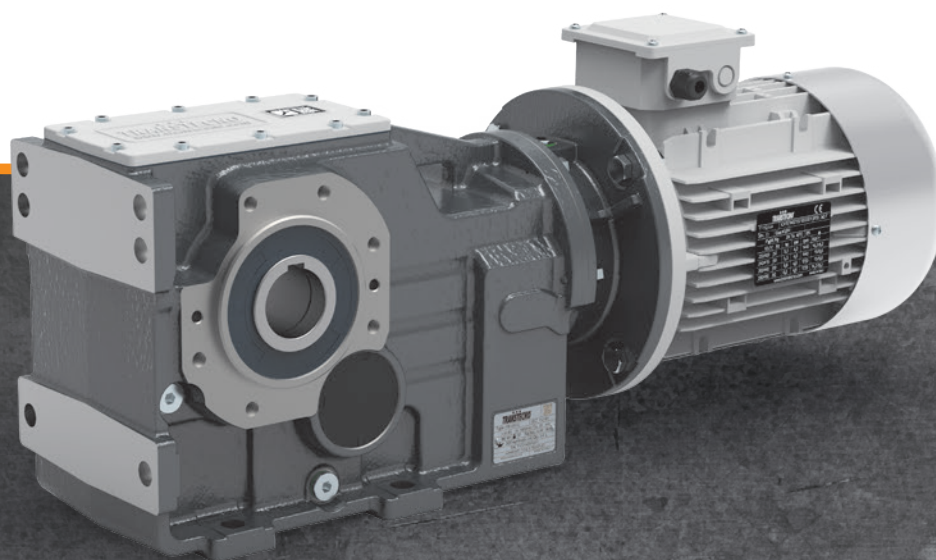
TRANSTECNO[®]
the modular gearmotor

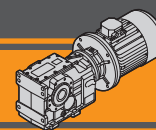
ITB

ITB



Motoriduttori ad assi ortogonali Helical bevel gearmotors

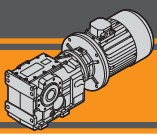




Indice	Index	Pag. Page
Caratteristiche tecniche	<i>Technical features</i>	C2
Versioni	<i>Versions</i>	C2
Designazione	<i>Classification</i>	C3
Sensi di rotazione	<i>Direction of rotation</i>	C3
Simbologia	<i>Symbols</i>	C4
Lubrificazione	<i>Lubrication</i>	C4
Carichi radiali in entrata	<i>Input radial 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:

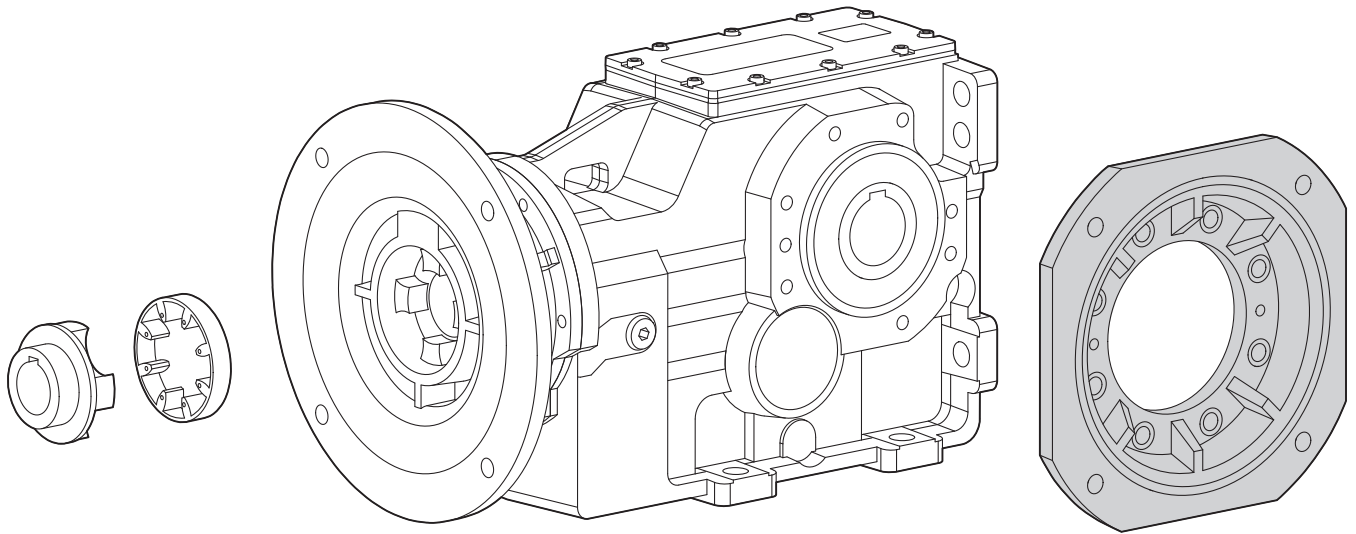
- Costruzione robusta con carcassa in ghisa
- Elevata modularità
- Lubrificazione con olio sintetico
- Accoppiamento al motore tramite giunto elastico o manicotto rigido
- Verniciatura a polvere epossidica RAL 7016 di spessore medio 0,10 – 0,15 mm.

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 or motor sleeve
- Epoxy powder coating RAL 7016 average thickness 0,10 – 0,15 mm.

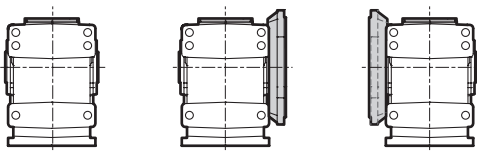


Versioni

Versions

Versione Riduttore
Gearbox Version

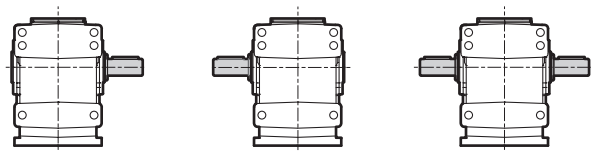
Albero di uscita
Output shaft



U

F... D

F... S



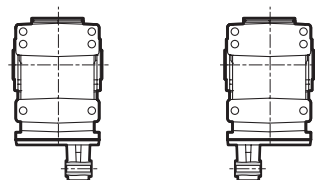
SZDX

SZSX

DZ

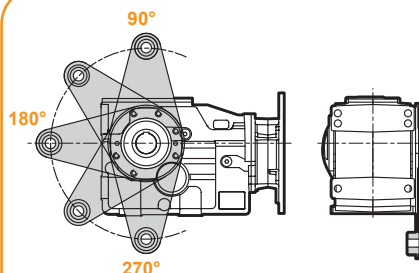
Braccio di reazione
Torque arm

Braccio di reazione
Torque arm *

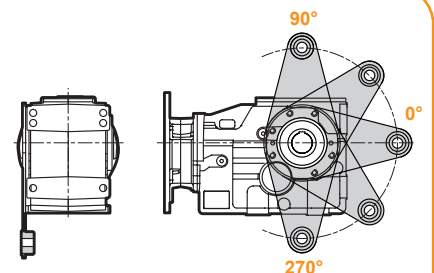


TADX

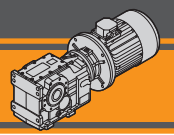
TASX



BRDX



BRSX



Designazione

Classification

RIDUTTORE / GEARBOX												
ITB	42	3	U	20.12	D40	132	B5	SZDX	BRSX	M1	HS	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	Manicotto rigido Motor sleeve	Dispositivo antiretro Backstop device
	42 43 44	3	U F...D F...S	vedi tabelle see tables	D... standard G... calettatore shrink disc	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)	HS	CW CCW

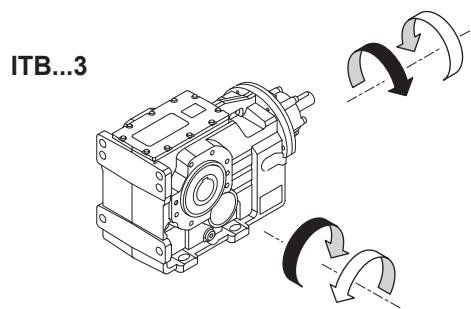
RIDUTTORE / GEARBOX								
ITBIS	42	3	U	20.12	D40	SZDX	BRSX	M1
Tipo Type	Grandezza Size	Stadi Stages	Versione Version	Rapporto Ratio	Albero uscita Output shaft	Albero di uscita Output shaft	Braccio di reaz. Torque arm *	Pos. di montaggio Mounting position
	42 43 44	3	U F...D F...S	vedi tabelle see tables	D... standard G... calettatore shrink disc	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. morsettiere Terminal box pos.	
vedi tabelle see tables	2p 4p 6p 8p	1ph 3ph	230/400V 220/380V ... 230V	50Hz 60Hz		

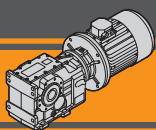
* NOTA: il braccio di reazione viene fornito smontato.
NOTE: the torque arm will be supplied not assembled.

Sensi di rotazione

Direction of rotation



Rotazione inversa disponibile a richiesta.
Inverse rotation on request



Simbologia

Symbols

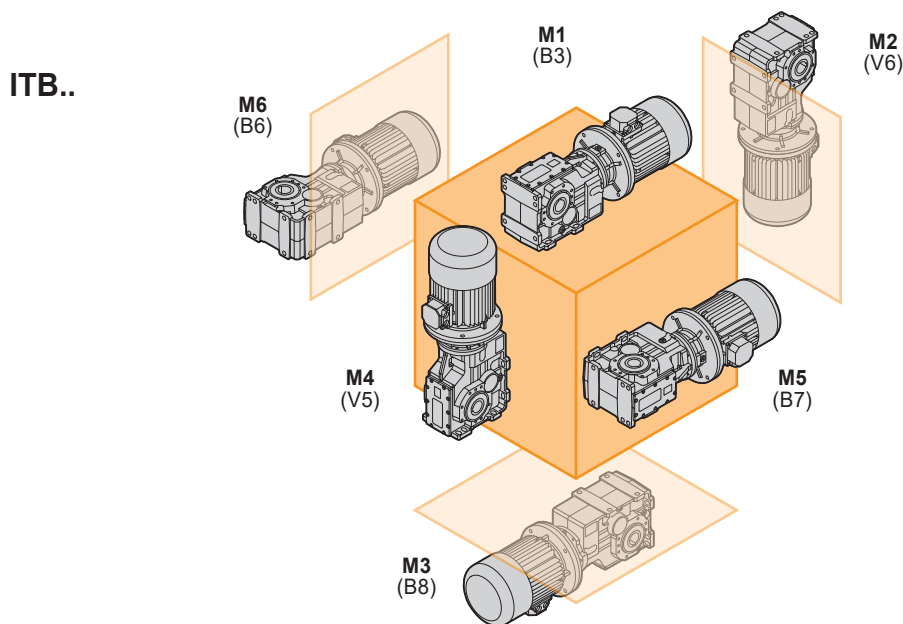
n_1	[min^{-1}]	Velocità in ingresso / <i>Input speed</i>
n_2	[min^{-1}]	Velocità in uscita / <i>Output speed</i>
i		Rapporto di riduzione / <i>Ratio</i>
P_1	[kW]	Potenza in entrata / <i>Input power</i>
M_2	[Nm]	Coppia nominale in uscita in funzione di P_1 / <i>Output torque referred to P_1</i>
P_{n1}	[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

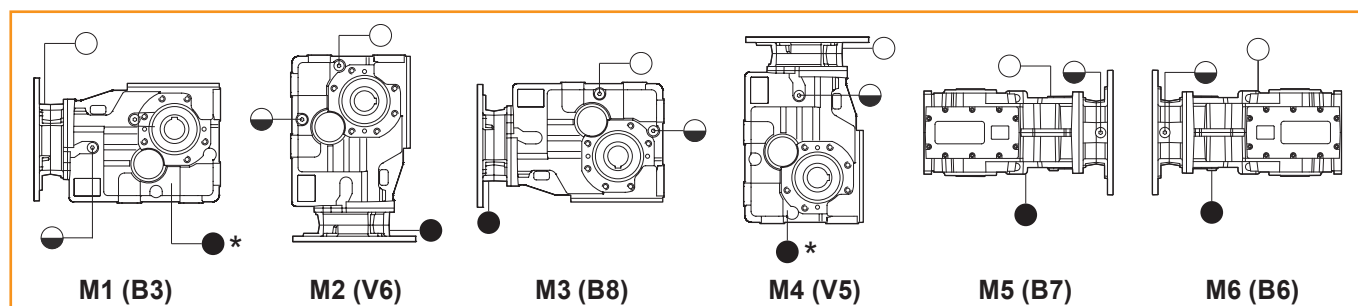
Lubrication

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.



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



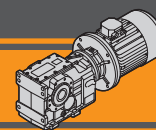
* Tappo di scarico in posizione posteriore

* Oil draining plug in backside position.

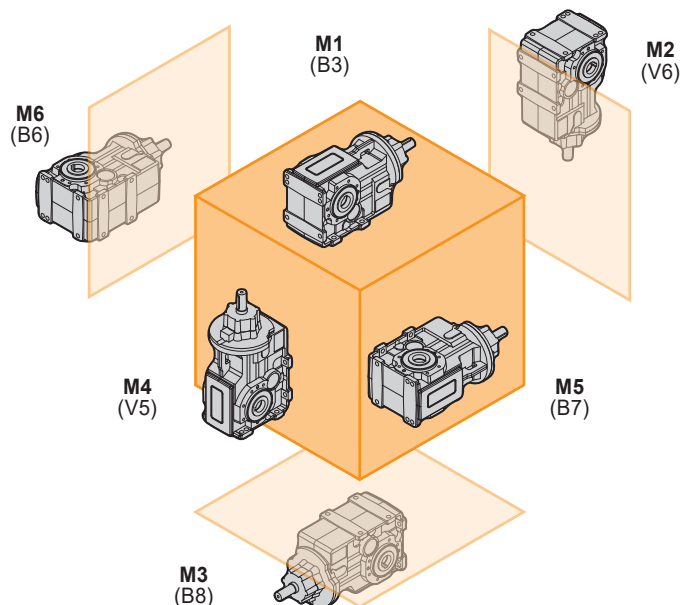
○ Sfiato e tappo di riempimento / *Breather and filling plug*

◐ Livello olio / *Oil level plug*

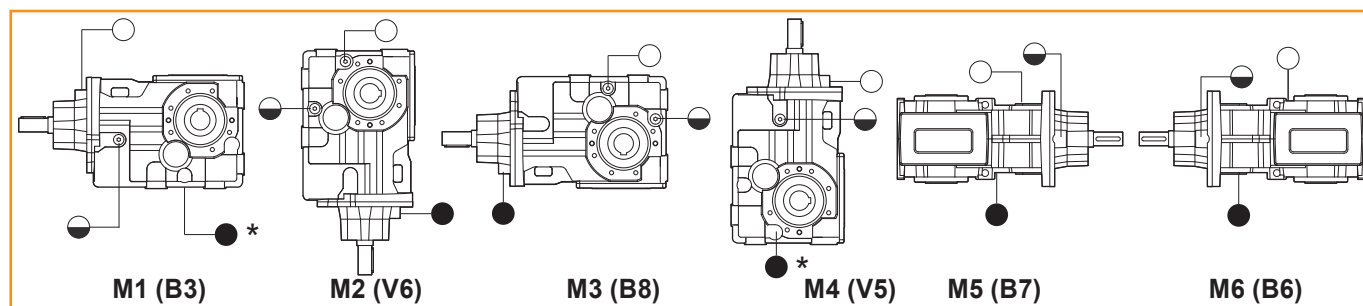
● Tappo di scarico / *Oil drain plug*



ITBIS..



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



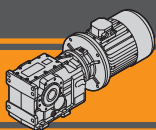
* Tappo di scarico in posizione posteriore

* 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	-	-	-

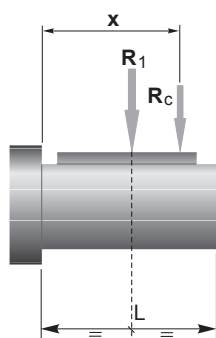
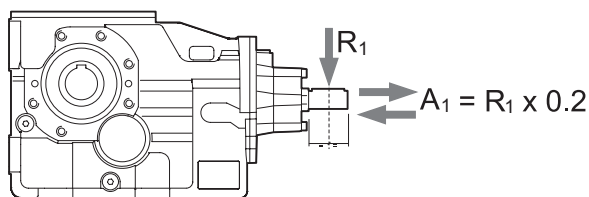
ITB443	n ₁ [min ⁻¹]	Potenza motore/ Motor Power [kW]					
		5.5	7.5	9.2	11.0	15.0	18.5
R1 [N]	1400	3700				2800	1200
	900	4900			3300	650	-
	500	5250	3900	1300	-	-	-

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

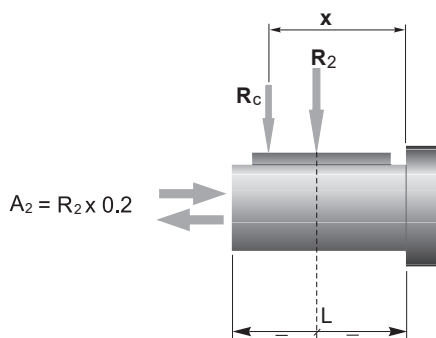
Output radial loads

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:

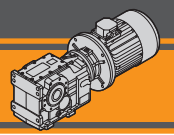


	ITB 423	ITB 433	ITB 443
a	182	218	252
b	142	168	192
R _{2MAX}	18500	23000	31000

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

$$R \leq R_c$$

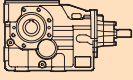
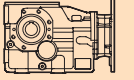
a, b = valori riportati nella tabella
a, b = values given in the table



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 evidenziate indicano l'applicabilità della corrispondente grandezza motore.

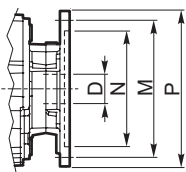
N.B.
Highlighted areas indicate motor inputs available on each size of unit.

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

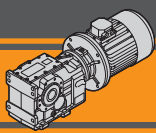
 * = The service factor (sf) has to be selected depending on application: please contact our Technical Department.

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								
	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
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ITBIS 433

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

ITB 433

80B5	90B5/B14	100B5/B14	112B5/B14	132B5/B14	160B5
					*
					*
					*
					*
				*	*
			*		
			*	*	*
			*	*	
			*	*	
			*	*	
			*	*	
		*	*		
		*	*		
		*	*		

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.



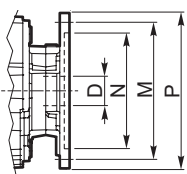
* = Il fattore di servizio (**sf**) deve essere scelto in funzione dell'applicazione: si prega di contattare il nostro Servizio Tecnico.

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

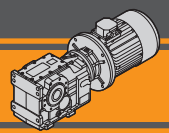


* = The service factor (**sf**) has to be selected depending on application: please contact our Technical Department.

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



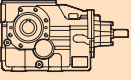
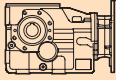
Dimensioni IEC / IEC Dimensions								
	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14	160 B5
N	130	130	95	180	110	230	130	250
M	165	165	115	215	130	265	165	300
P	200	200	140	250	160	300	200	350
D	19	24		28		38		42



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.

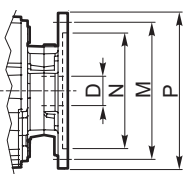
N.B.
Highlighted areas indicate motor inputs available on each size of unit.

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

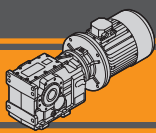
 * = The service factor (**sf**) has to be selected depending on application: please contact our Technical Department.

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

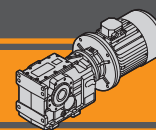


ITB Motoriduttori ad assi ortogonali Helical bevel gearmotors

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				

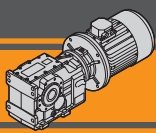


Dati tecnici

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]	
1.1								1.5								
90S4 (1400 min ⁻¹)	191	52	9.7	7.34	ITB423	B5/B14	10925	90L4 (1400 min ⁻¹)	191	71	7.1	7.34	ITB423	B5/B14	10870	
	153	65	7.7	9.16		B5/B14	12295		153	88	5.7	9.16		B5/B14	12218	
	118	84	7.2	11.85		B5/B14	14095		118	114	5.3	11.85		B5/B14	13979	
	90	110	5.4	15.64		B5/B14	16299		90	150	4.0	15.64		B5/B14	16120	
	76	129	5.4	18.32		B5/B14	17692		76	176	4.0	18.32		B5/B14	17463	
	70	142	4.9	20.12		B5/B14	18500		70	194	3.6	20.12		B5/B14	18298	
	61	161	5.0	22.85		B5/B14	18500		61	220	3.6	22.85		B5/B14	18500	
	50	199	4.0	28.22		B5/B14	18500		50	271	2.9	28.22		B5/B14	18500	
	47	209	4.1	29.57		B5/B14	18500		47	284	3.0	29.57		B5/B14	18500	
	45	218	3.9	30.90		B5/B14	18500		45	297	2.9	30.90		B5/B14	18500	
	40	244	3.5	34.57		B5/B14	18500		40	332	2.6	34.57		B5/B14	18500	
	37	268	3.2	37.99		B5/B14	18500		37	365	2.3	37.99		B5/B14	18500	
	36	275	3.3	39.01		B5/B14	18500		36	375	2.4	39.01		B5/B14	18500	
	34	294	3.1	41.70		B5/B14	18500		34	401	2.2	41.70		B5/B14	18500	
	29	347	2.6	49.13		B5/B14	18500		29	473	1.9	49.13		B5/B14	18500	
	28	354	2.5	50.19		B5/B14	18500		28	483	1.9	50.19		B5/B14	18500	
	26	379	2.4	53.77		B5/B14	18500		26	517	1.7	53.77		B5/B14	18500	
	24	418	2.2	59.26		B5/B14	18500		24	570	1.6	59.26		B5/B14	18500	
	20	497	1.8	70.40		B5/B14	18500		20	677	1.3	70.40		B5/B14	18500	
	18	544	1.7	77.08		B5/B14	18500		18	741	1.3	77.08		B5/B14	18500	
	16	608	1.6	86.24		B5/B14	18500		16	829	1.1	86.24		B5/B14	18500	
	15	668	1.4	94.77		B5/B14	18500		15	912	1.0	94.77		B5/B14	18500	
	13	734	1.3	104.04		B5/B14	18500		13	1001	0.9	104.04		B5/B14	18500	
	11	865	1.1	122.57		B5/B14	18500		106	127	10	13.25		ITB433	B5/B14	18711
	10	946	1.0	134.15		B5/B14	18500		80	168	8.3	17.49			B5/B14	21650
	9.5	1043	0.9	147.84		B5/B14	18500		69	197	8.1	20.44			B5/B14	23000
	55	180	9.5	25.49	ITB433	B5/B14	23000		62	216	7.9	22.50	B5/B14		23000	
	44	223	7.6	31.56		B5/B14	23000		55	245	6.9	25.49	B5/B14		23000	
	42	233	7.3	32.98		B5/B14	23000		44	304	5.6	31.56	B5/B14		23000	
	41	244	7.0	34.55		B5/B14	23000		42	317	5.4	32.98	B5/B14		23000	
	36	273	6.2	38.66		B5/B14	23000		41	332	5.1	34.55	B5/B14		23000	
	33	300	5.7	42.48		B5/B14	23000		36	372	4.6	38.66	B5/B14		23000	
	32	307	5.9	43.51		B5/B14	23000		33	409	4.2	42.48	B5/B14		23000	
	30	329	5.5	46.64		B5/B14	23000		32	419	4.3	43.51	B5/B14		23000	
	25	395	4.6	55.98		B5/B14	23000		30	449	4.0	46.64	B5/B14		23000	
	23	424	3.8	60.14		B5/B14	23000		25	538	3.3	55.98	B5/B14		23000	
	21	467	3.4	66.27		B5/B14	23000		23	578	2.8	60.14	B5/B14		23000	
	18	554	3.3	78.52		B5/B14	23000		21	637	2.5	66.27	B5/B14		23000	
	16	606	3.0	85.97		B5/B14	23000		18	755	2.4	78.52	B5/B14		23000	
	15	678	2.7	96.19		B5/B14	23000		16	827	2.2	85.97	B5/B14		23000	
	13	746	2.4	105.70		B5/B14	23000		15	925	1.9	96.19	B5/B14	23000		
	12	818	2.2	116.04		B5/B14	23000		13	1017	1.8	105.70	B5/B14	23000		
	10	964	1.9	136.71		B5/B14	23000		12	1116	1.6	116.04	B5/B14	23000		
	9.4	1055	1.7	149.63	B5/B14	23000		10	1315	1.4	136.71	B5/B14	23000			
	8.5	1163	1.5	164.89	B5/B14	23000		9.4	1439	1.3	149.63	B5/B14	23000			
	35	278	10	39.46	ITB443	B5/B14	31000		8.5	1586	1.1	164.89	B5/B14	23000		
	31	314	10	44.51		B5/B14	31000		38	356	8.4	37.01	ITB443	B5/B14	31000	
	29	336	8.3	47.67		B5/B14	31000		35	380	7.4	39.46		B5/B14	31000	
	26	383	8.4	54.26		B5/B14	31000		31	428	7.5	44.51		B5/B14	31000	
	19	515	6.8	72.94		B5/B14	31000		29	458	6.1	47.67		B5/B14	31000	
	15	650	5.4	92.14		B5/B14	31000		26	522	6.1	54.26		B5/B14	31000	
	11	877	4.0	124.32		B5/B14	31000		19	702	5.0	72.94		B5/B14	31000	
	10	955	3.7	135.45		B5/B14	31000		15	886	3.9	92.14		B5/B14	31000	
	9.3	1059	3.3	150.15		B5/B14	31000		11	1196	2.9	124.32		B5/B14	31000	
	8.5	1155	3.0	163.80		B5/B14	31000		10	1303	2.7	135.45		B5/B14	31000	
	7.8	1264	2.8	179.16		B5/B14	31000		9.3	1444	2.4	150.15		B5/B14	31000	
									8.5	1576	2.2	163.80		B5/B14	31000	
									7.8	1723	2.0	179.16		B5/B14	31000	





ITB

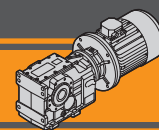


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



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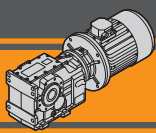
P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	sf	i			R ₂ [N]	P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	sf	i			R ₂ [N]		
1.85								2.2									
90LB4 (1400 min ⁻¹)	191	87	5.7	7.34	ITB423	B5/B14	10821	100LA4 (1400 min ⁻¹)	191	104	4.8	7.34	ITB423	B5/B14	10773		
	153	109	4.6	9.16		B5/B14	12149		153	129	3.9	9.16		B5/B14	12081		
	118	141	4.3	11.85		B5/B14	13877		118	167	3.6	11.85		B5/B14	13776		
	90	186	3.2	15.64		B5/B14	15964		90	221	2.7	15.64		B5/B14	15808		
	76	217	3.2	18.32		B5/B14	17264		76	258	2.7	18.32		B5/B14	17064		
	70	239	2.9	20.12		B5/B14	18067		70	284	2.5	20.12		B5/B14	17836		
	61	271	3.0	22.85		B5/B14	18500		61	322	2.5	22.85		B5/B14	18500		
	50	335	2.4	28.22		B5/B14	18500		50	398	2.0	28.22		B5/B14	18500		
	47	351	2.4	29.57		B5/B14	18500		47	417	2.0	29.57		B5/B14	18500		
	45	367	2.3	30.90		B5/B14	18500		45	436	2.0	30.90		B5/B14	18500		
	40	410	2.1	34.57		B5/B14	18500		40	488	1.7	34.57		B5/B14	18500		
	37	451	1.9	37.99		B5/B14	18500		37	536	1.6	37.99		B5/B14	18500		
	36	463	1.9	39.01		B5/B14	18500		36	550	1.6	39.01		B5/B14	18500		
	34	495	1.8	41.70		B5/B14	18500		34	588	1.5	41.70		B5/B14	18500		
	29	583	1.5	49.13		B5/B14	18500		29	693	1.3	49.13		B5/B14	18500		
	28	595	1.5	50.19		B5/B14	18500		28	708	1.3	50.19		B5/B14	18500		
	26	638	1.4	53.77		B5/B14	18500		26	759	1.2	53.77		B5/B14	18500		
	24	703	1.3	59.26		B5/B14	18500		24	836	1.1	59.26		B5/B14	18500		
	20	835	1.1	70.40		B5/B14	18500										
	18	914	1.0	77.08		B5/B14	18500		170	116	8.6	8.21		ITB433	B5/B14	14406	
	16	1023	0.9	86.24		B5/B14	18500		137	145	6.9	10.25			B5/B14	16193	
	170	97	10	8.21		ITB433	B5/B14	14449	106	187	7.0	13.25			B5/B14	18530	
	137	122	8.2	10.25			B5/B14	16254		80	247	5.7			17.49	B5/B14	21372
	106	157	8.3	13.25			B5/B14	18620		69	288	5.6			20.44	B5/B14	23000
	80	207	6.7	17.49			B5/B14	21511		62	317	5.4			22.50	B5/B14	23000
	69	242	6.6	20.44			B5/B14	23000		55	360	4.7			25.49	B5/B14	23000
	62	267	6.4	22.50			B5/B14	23000		44	445	3.8			31.56	B5/B14	23000
	55	302	5.6	25.49			B5/B14	23000		42	465	3.7			32.98	B5/B14	23000
	44	374	4.5	31.56	B5/B14		23000		41	487	3.5	34.55	B5/B14		23000		
	42	391	4.3	32.98	B5/B14		23000		36	545	3.1	38.66	B5/B14		23000		
	41	410	4.1	34.55	B5/B14		23000		33	599	2.8	42.48	B5/B14		23000		
	36	459	3.7	38.66	B5/B14		23000		32	614	2.9	43.51	B5/B14		23000		
	33	504	3.4	42.48	B5/B14		23000		30	658	2.7	46.64	B5/B14		23000		
	32	516	3.5	43.51	B5/B14		23000		25	790	2.3	55.98	B5/B14		23000		
	30	553	3.3	46.64	B5/B14		23000		23	848	1.9	60.14	B5/B14		23000		
	25	664	2.7	55.98	B5/B14		23000		21	935	1.7	66.27	B5/B14	23000			
	23	713	2.2	60.14	B5/B14		23000		18	1108	1.6	78.52	B5/B14	23000			
	21	786	2.0	66.27	B5/B14	23000		16	1213	1.5	85.97	B5/B14	23000				
	18	931	1.9	78.52	B5/B14	23000		15	1357	1.3	96.19	B5/B14	23000				
	16	1020	1.8	85.97	B5/B14	23000		13	1491	1.2	105.70	B5/B14	23000				
	15	1141	1.6	96.19	B5/B14	23000		12	1637	1.1	116.04	B5/B14	23000				
	13	1254	1.4	105.70	B5/B14	23000						ITB443	B5/B14	31000			
	12	1376	1.3	116.04	B5/B14	23000		38	522	5.7	37.01		B5/B14	31000			
	10	1622	1.1	136.71	B5/B14	23000		35	557	5.0	39.46		B5/B14	31000			
	9.4	1775	1.0	149.63	B5/B14	23000		31	628	5.1	44.51		B5/B14	31000			
	38	439	6.8	37.01	ITB443	B5/B14	31000	29	672	4.2	47.67		B5/B14	31000			
	35	468	6.0	39.46		B5/B14	31000		26	765	4.2		54.26	B5/B14	31000		
	31	528	6.1	44.51		B5/B14	31000		19	1029	3.4		72.94	B5/B14	31000		
	29	565	5.0	47.67		B5/B14	31000		15	1300	2.7		92.14	B5/B14	31000		
	26	644	5.0	54.26		B5/B14	31000		11	1754	2.0		124.32	B5/B14	31000		
	19	865	4.0	72.94		B5/B14	31000		10	1911	1.8		135.45	B5/B14	31000		
	15	1093	3.2	92.14		B5/B14	31000		9.3	2118	1.7		150.15	B5/B14	31000		
	11	1475	2.4	124.32		B5/B14	31000		8.5	2311	1.5	163.80	B5/B14	31000			
	10	1607	2.2	135.45		B5/B14	31000		7.8	2527	1.4	179.16	B5/B14	31000			
	9.3	1781	2.0	150.15		B5/B14	31000										
	8.5	1943	1.8	163.80		B5/B14	31000										
	7.8	2125	1.6	179.16	B5/B14	31000											



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



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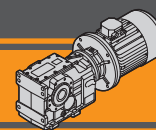
P_1 [kW]	n_2 [min ⁻¹]	M_2 [Nm]	sf	i			R_2 [N]	P_1 [kW]	n_2 [min ⁻¹]	M_2 [Nm]	sf	i			R_2 [N]		
3								4									
100LB4 (1400 min ⁻¹)	191	141	3.5	7.34	ITB423	B5/B14	10662	112M4 (1400 min ⁻¹)	191	188	2.7	7.34	ITB423	B5/B14	10524		
	153	176	2.8	9.16		B5/B14	11925		153	235	2.1	9.16		B5/B14	11730		
	118	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		170	395	2.5	8.21		ITB433	B5/B14	13753
	76	646	1.1	18.32		B5/B14	15181		137	493	2.0	10.25			B5/B14	15274
	70	710	1.0	20.12	B5/B14	15659		106	637	2.0	13.25	B5/B14	17159			
	61	806	1.0	22.85	B5/B14	16268		80	841	1.7	17.49	B5/B14	19266			
	170	290	3.5	8.21	ITB433	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		178	379	4.5	7.88	ITB443	B5/B14	19836	
	44	1113	1.5	31.56		B5/B14	23000		147	458	3.7	9.53		B5/B14	21860	
	42	1163	1.5	32.98		B5/B14	23000		119	565	3.2	11.75		B5/B14	24271	
	41	1219	1.4	34.55		B5/B14	23000		99	680	2.9	14.13		B5/B14	26562	
	36	1363	1.2	38.66		B5/B14	23000		81	828	2.8	17.23		B5/B14	29182	
	33	1498	1.1	42.48		B5/B14	23000		60	1114	2.5	23.16		B5/B14	31000	
	32	1535	1.2	43.51		B5/B14	23000		56	1194	2.5	24.82		B5/B14	31000	
	30	1645	1.1	46.64		B5/B14	23000		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																
132L4 (1400 min ⁻¹)	191	433	1.2	7.34	ITB423	B5/B14	9805						ITB433	B5/B14	13544	
	170	485	2.1	8.21		B5/B14	11499							B5/B14	14979	
	137	604	1.7	10.25		B5/B14	12817							B5/B14	16720	
	106	782	1.7	13.25		B5/B14	14335							B5/B14	18590	
	80	1032	1.4	17.49		B5/B14	15181							B5/B14	19582	
	69	1206	1.3	20.44	B5/B14	15659						B5/B14	20152			
	62	1327	1.3	22.50	B5/B14	16268						B5/B14	20815			
	55	1504	1.1	25.49	B5/B14	17676						B5/B14	21860			
	178	465	3.7	7.88	ITB443	B5/B14	19671						ITB443	B5/B14	19671	
	147	562	3.0	9.53		B5/B14	21639							B5/B14	21639	
	119	693	2.6	11.75		B5/B14	23966							B5/B14	23966	
	99	834	2.4	14.13		B5/B14	26156							B5/B14	26156	
	81	1016	2.3	17.23		B5/B14	28629							B5/B14	28629	
	60	1366	2.0	23.16		B5/B14	31000							B5/B14	31000	
	56	1464	2.0	24.82		B5/B14	31000							B5/B14	31000	
	47	1772	1.7	30.03		B5/B14	31000							B5/B14	31000	
	38	2183	1.4	37.01		B5/B14	31000							B5/B14	31000	
	35	2328	1.2	39.46		B5/B14	31000							B5/B14	31000	
	31	2626	1.2	44.51	B5/B14	31000						B5/B14	31000			
	29	2812	1.0	47.67	B5/B14	31000						B5/B14	31000			
	26	3201	1.0	54.26	B5/B14	31000						B5/B14	31000			





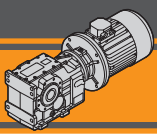
Dati tecnici

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

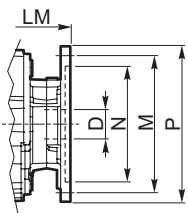
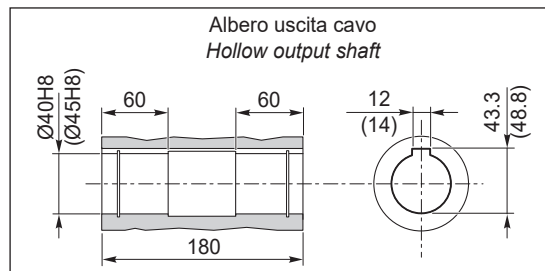
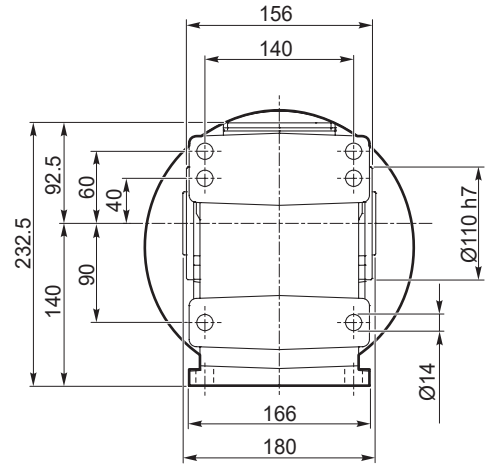
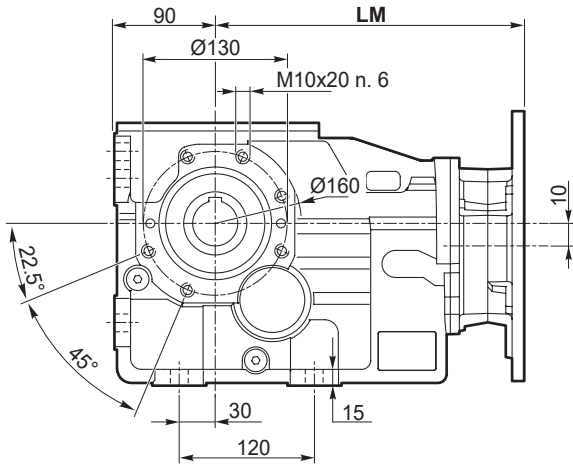


Dimensioni

Dimensions

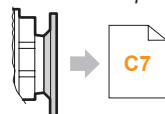
ITB 423 U

ITB 423 U

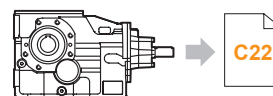


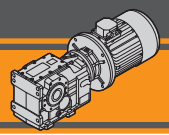
Dimensioni IEC / IEC Dimensions							
	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14
LM	279.5	279.5	284	283.5	284	304.5	
N	130	130	95	180	110	230	130
M	165	165	115	215	130	265	165
P	200	200	140	250	160	300	200
D	19	24		28		38	

IEC Motori applicabili
IEC Motor adapters



ITBIS 423..



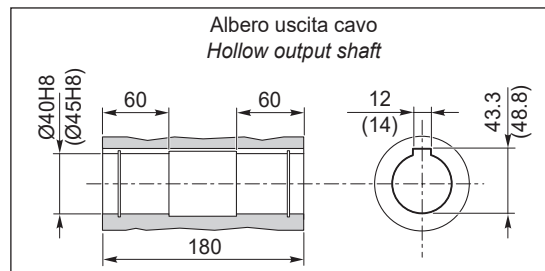
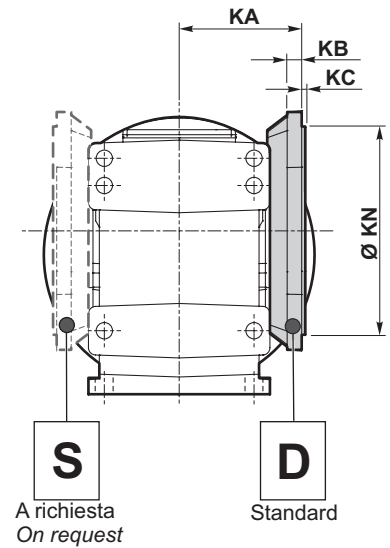
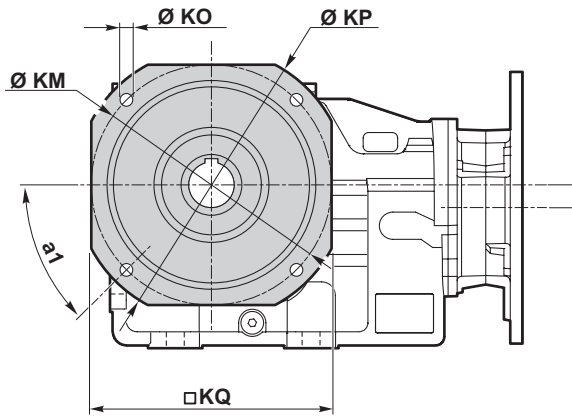


Dimensioni

Dimensions

ITB 423 F...

ITB 423 F...

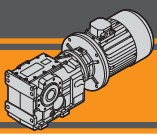


Versione F / F Version											
ITB	a ₁	KA	KB	KC	KM	KN f7	KO	KP	KQ	Flangia / Flange	Peso / Weight
										Tipo / Type	[kg]
423	45°	113	13	4	165	130	11	200	172	F200	2.6
	45°	113	13	4	215	180	14	250	215	F250	3.8
	45°	113	13	4	265	230	14	300	265	F300	5.6

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

ITB

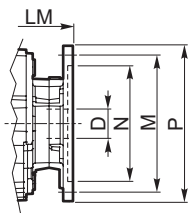
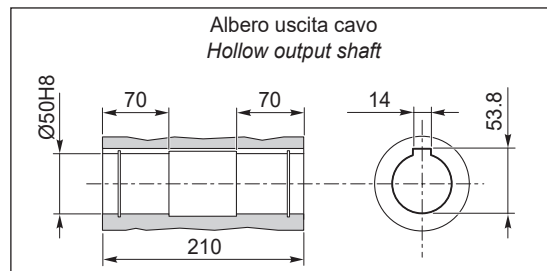
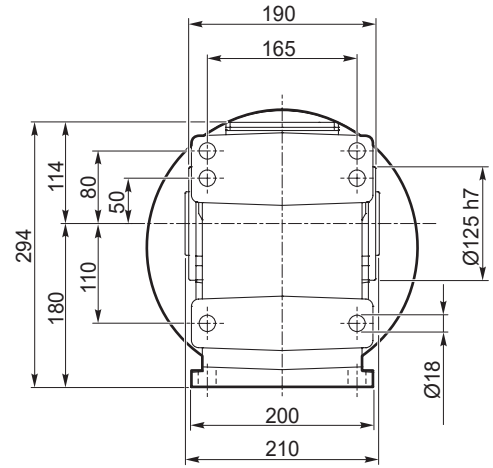
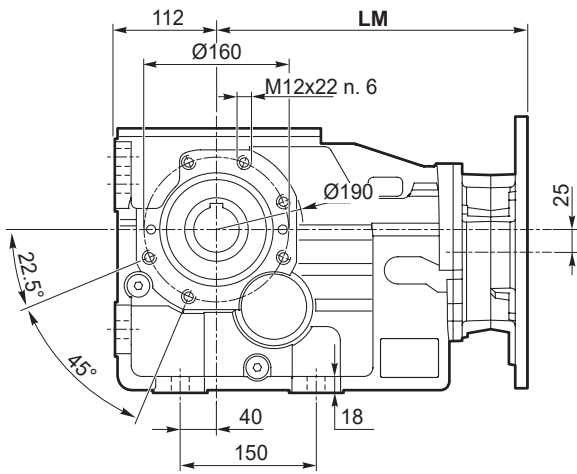


Dimensioni

Dimensions

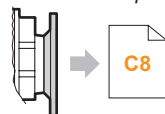
ITB 433 U

ITB 433 U

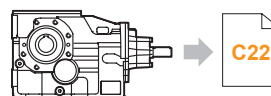


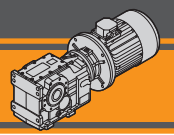
Dimensioni IEC / IEC Dimensions								
	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14	160 B5
LM	330	330	334.5	334	334.5	355		405
N	130	130	95	180	110	230	130	250
M	165	165	115	215	130	265	165	300
P	200	200	140	250	160	300	200	350
D	19	24		28		38		42

IEC Motori applicabili
IEC Motor adapters



ITBIS 433..



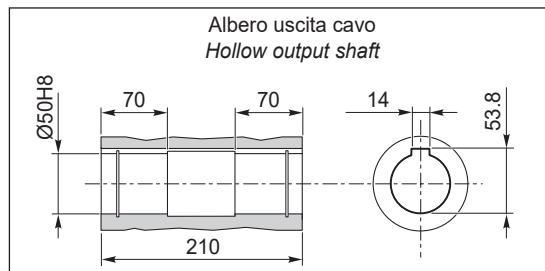
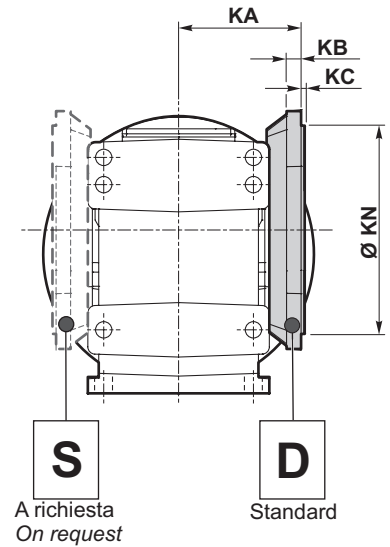
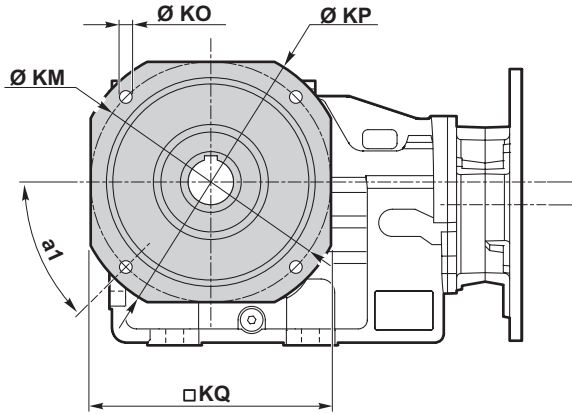


Dimensioni

Dimensions

ITB 433 F...

ITB 433 F...

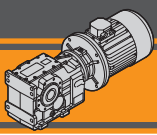


Versione F / F Version											
ITB	a ₁	KA	KB	KC	KM	KN f7	KO	KP	KQ	Flangia / Flange	Peso / Weight
										Tipo / Type	[kg]
433	45°	135	16	4	215	180	14	250	215	F250	4.8
	45°	135	16	4	265	230	14	300	260	F300	7.1
	45°	135	16	4	300	250	18	350	300	F350	9.1

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

ITB

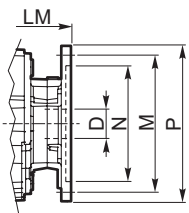
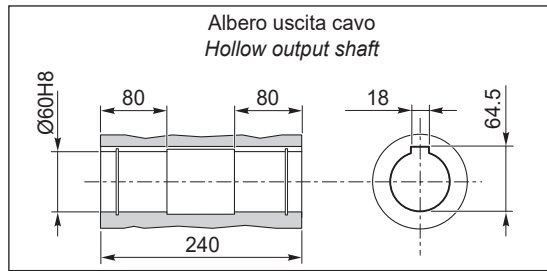
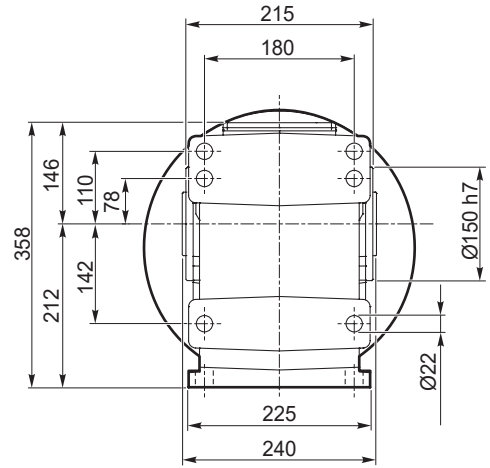
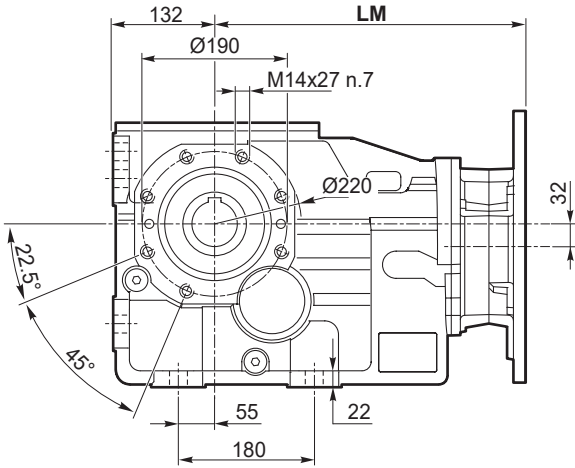


Dimensioni

Dimensions

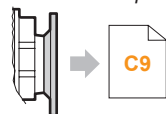
ITB 443 U

ITB 443 U

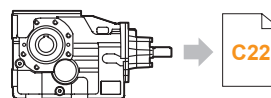


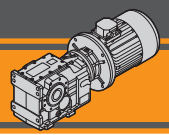
Dimensioni IEC / IEC Dimensions									
	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14	160 B5	180 B5
LM	375.5	375.5	380	379.5	383	400.5		450.5	450.5
N	130	130	95	180	110	230	130	250	250
M	165	165	115	215	130	265	165	300	300
P	200	200	140	250	160	300	200	350	350
D	19	24		28		38		42	48

IEC Motori applicabili
IEC Motor adapters



ITBIS 443..



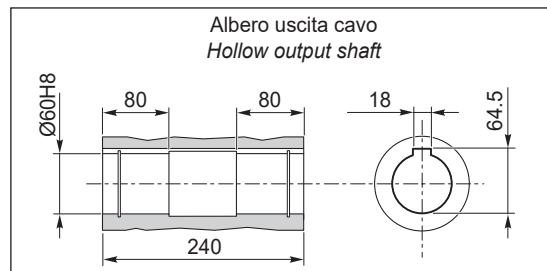
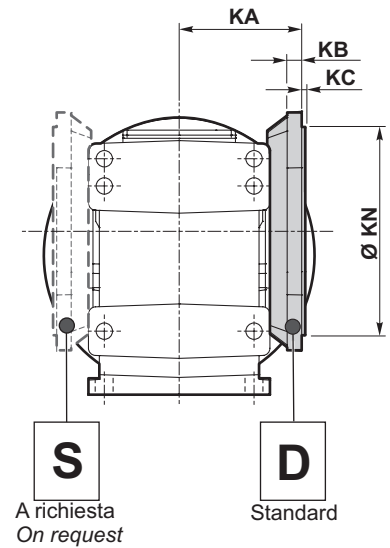
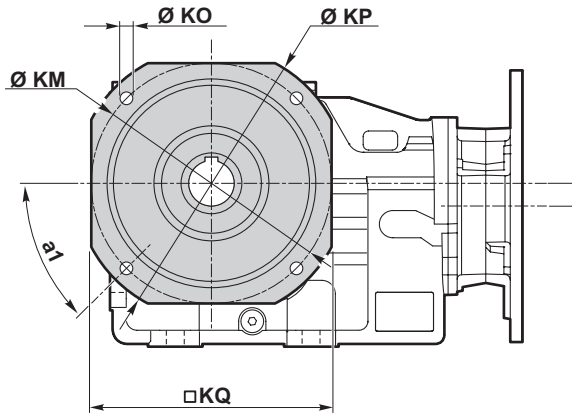


Dimensioni

Dimensions

ITB 443 F...

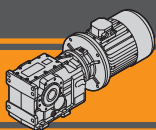
ITB 443 F...



Versione F / F Version											
ITB	a ₁	KA	KB	KC	KM	KN f7	KO	KP	KQ	Flangia / Flange Tipo / Type	Peso / Weight [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	

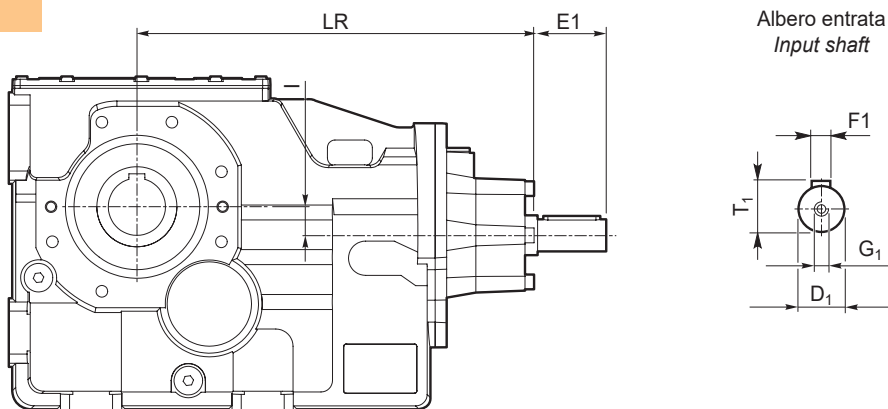
Nota: peso del riduttore complessivo di olio per la posizione M1 (B3)
Note: weight of the gearbox filled with oil for M1 (B3) assembly position



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

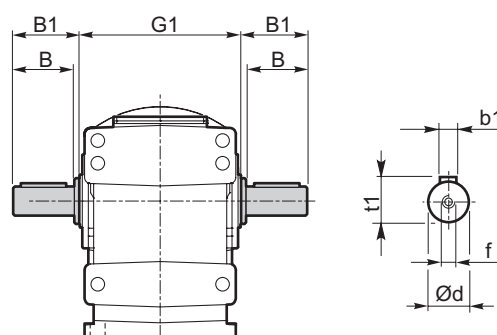
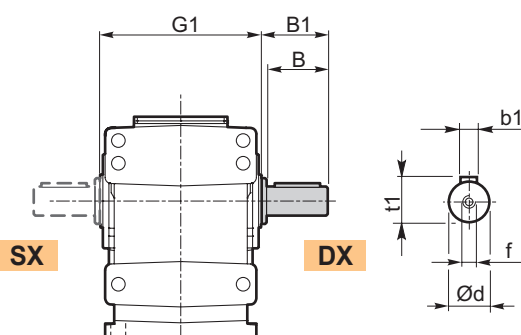
Accessori

Accessories

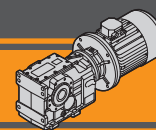
Albero lento / Output shaft

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

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

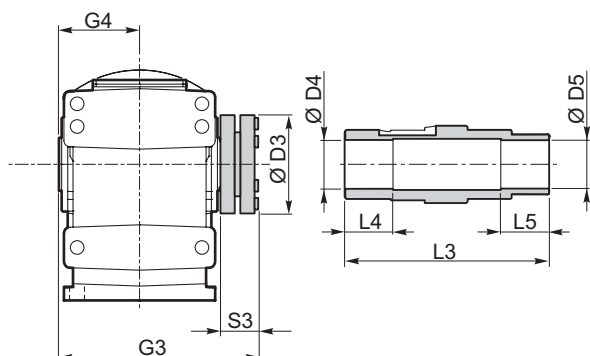


ITB	d h7	B	B1	G1	f	b1	t1	Peso / Weight [kg]	
								SZ	DZ
423	40	80	84	180	M16	12	43	2.2	3.2
433	50	100	105	210	M16	14	53.5	4.3	6.2
443	60	120	125	240	M20	18	64	7.1	10.3



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

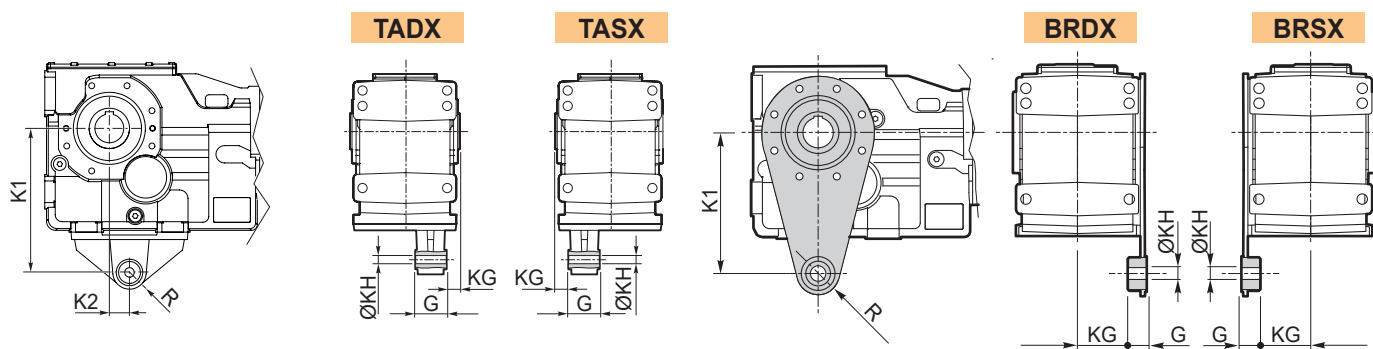
Kit albero uscita con calettatore disponibile a richiesta:
per le istruzioni di montaggio riferirsi al nostro Servizio Tecnico.

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..

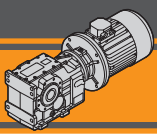


Braccio di reazione / Torque arm

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

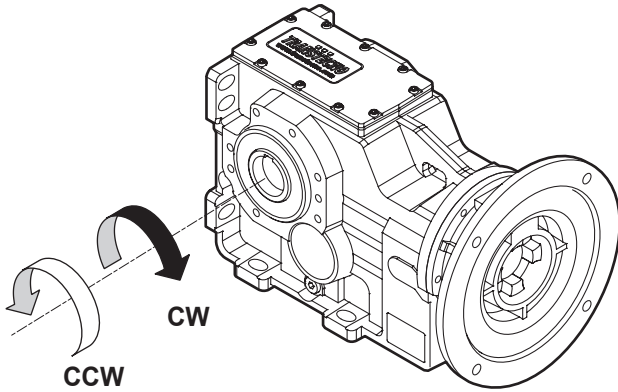
Braccio di reazione / Torque arm

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

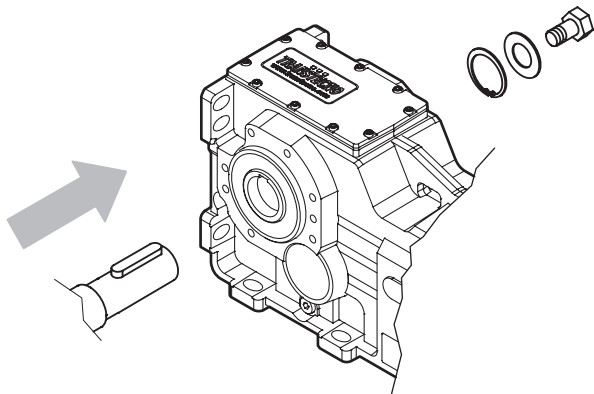
ITB...CW
ITB...CCW



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

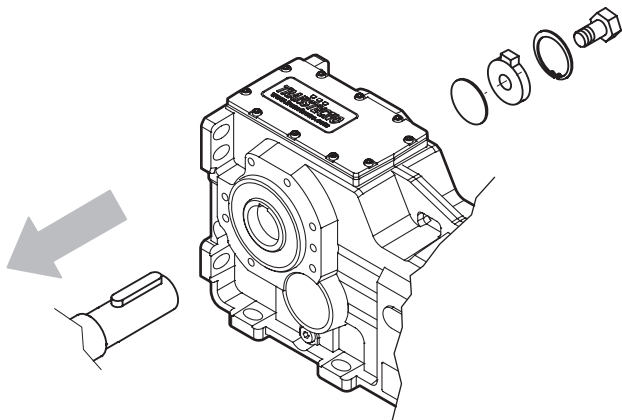


Kit di montaggio albero uscita disponibile a richiesta: per le istruzioni di montaggio riferirsi al nostro Servizio Tecnico.

Viti escluse dalla fornitura

Output shaft assembly kit available upon request: for assembly instructions please contact our Technical Assistance
Screws not provided

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.

Viti escluse dalla fornitura

Output shaft disassembly kit available upon request: for assembly instructions please contact our Technical Assistance
Screws not provided

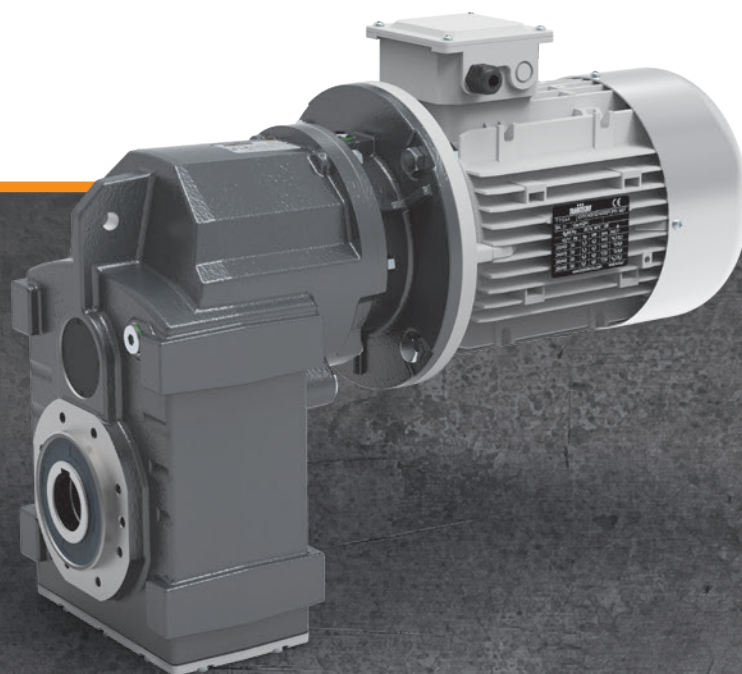
TRANSTECNO[®]
the modular gearmotor

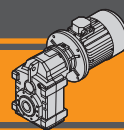
ITS

ITS



Motoriduttori pendolari
Helical parallel gearmotors

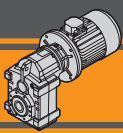




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Dati tecnici	<i>Technical data</i>	D8
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ITS Motoriduttori pendolari Helical parallel gearmotors

Caratteristiche tecniche

I motoriduttori della serie ITS 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:

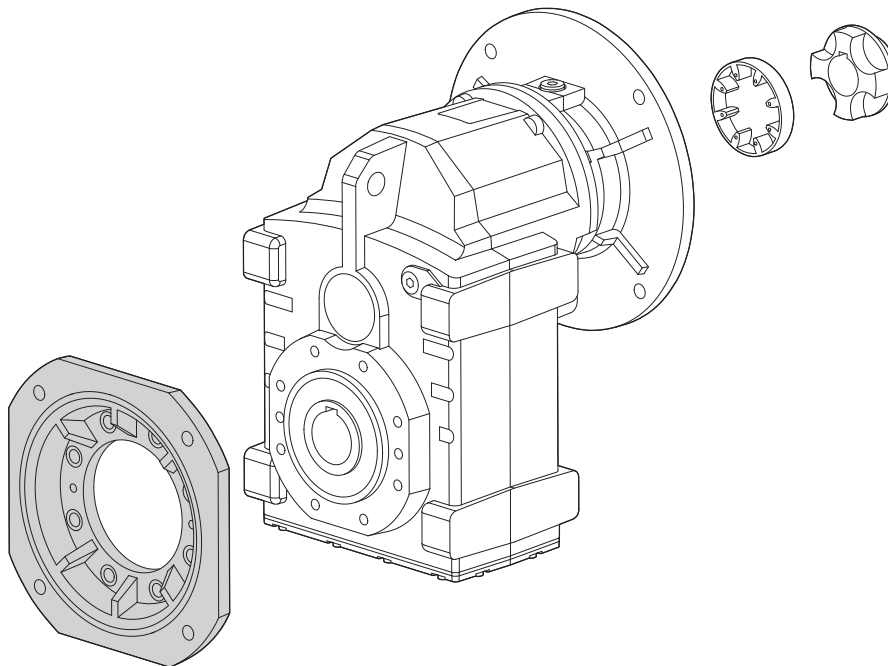
- Costruzione robusta con carcassa in ghisa
- Elevata modularità
- Lubrificazione con olio sintetico
- Accoppiamento al motore tramite giunto elastico o manicotto rigido
- Verniciatura a polvere epossidica RAL 7016 di spessore medio 0,10 – 0,15 mm

Technical features

The ITS 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 ITS range are:

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



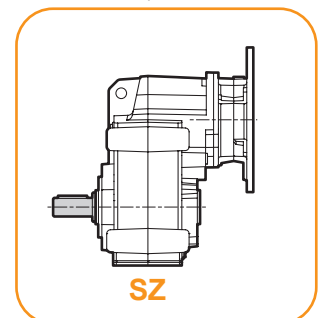
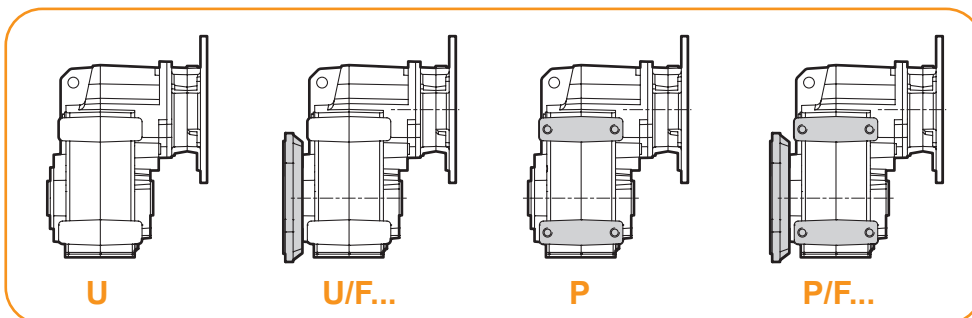
Versioni

Versions

ITS...

Versione Riduttore
Gearbox Version

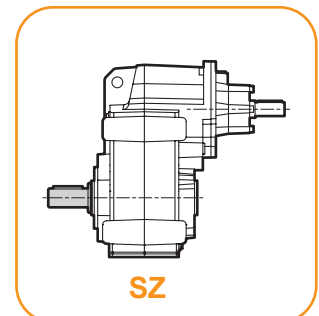
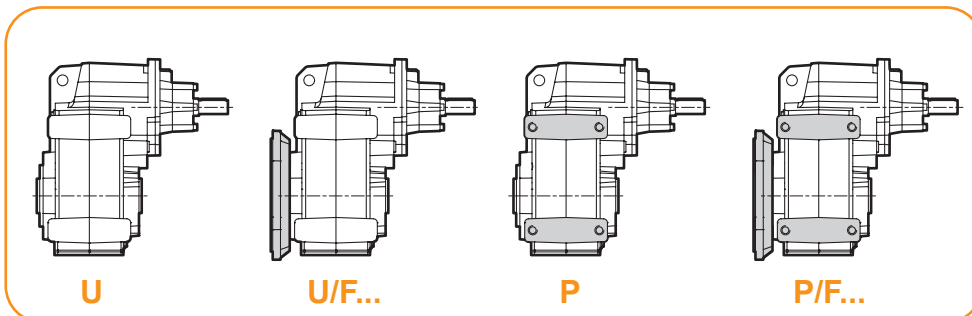
Albero di uscita
Output shaft

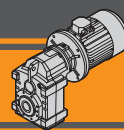


ITSIS...

Versione Riduttore
Gearbox Version



Albero di uscita
Output shaft




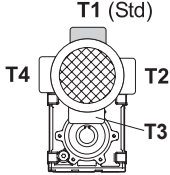


Designazione

Classification

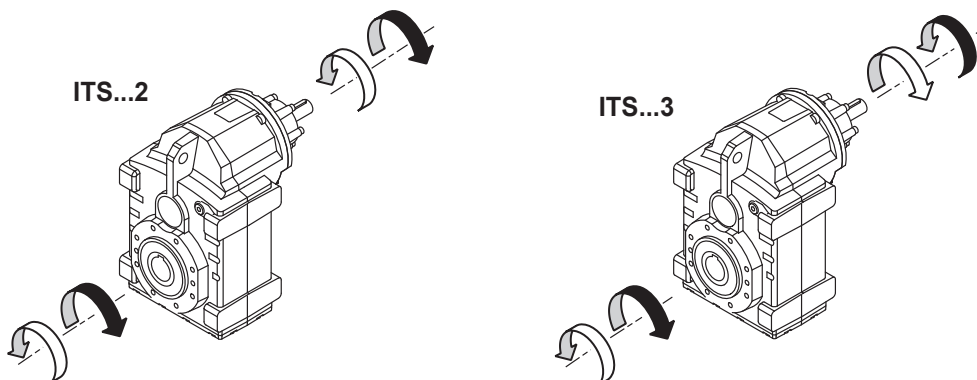
RIDUTTORE / GEARBOX											
ITS	92	2	U	22.92	D40	132	B5	SZ	M1	HS	CW
Tipo Type	Grandezza Size	Stadi Stages	Versione Version	Rapporto Ratio	Albero uscita Output shaft	IEC	Forma costruttiva Version	Albero uscita maschio Solid output shaft	Posizione di montaggio Mounting position	Manicotto rigido Motor sleeve	Dispositivo antiretro Backstop device
ITS 	92 93 94	2 3	U... U/F... P... P/F...	vedi tabelle see tables	D... standard G... calettatore shrink disc	80.. — 180..	 B5 B14	SZ	M1 (B3) M2 (V6) M3 (B8) M4 (V5) M5 (B7) M6 (B6)	HS	CW CCW

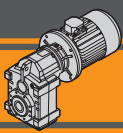
RIDUTTORE / GEARBOX							
ITSIS	92	2	U	22.92	D40	SZ	M1
Tipo Type	Grandezza Size	Stadi Stages	Versione Version	Rapporto Ratio	Albero uscita Output shaft	Albero uscita maschio Solid output shaft	Posizione di montaggio Mounting position
ITSIS 	92 93 94	2 3	U... U/F... P... P/F...	vedi tabelle see tables	D... standard G... calettatore shrink disc	SZ	M1 (B3) M2 (V6) M3 (B8) M4 (V5) M5 (B7) M6 (B6)

MOTORE / MOTOR						
5,5 kW	4p	3ph	230/400V	50Hz	T1	
Potenza Power	Poli Poles	Fasi Phases	Tensione Voltage	Frequenza Frequency	Pos. morsetteria Terminal box pos.	
vedi tabelle see tables	2p 4p 6p 8p	1ph 3ph	230/400V 220/380V ... 230V	50Hz 60Hz		

Sensi di rotazione

Direction of rotation





Simbologia

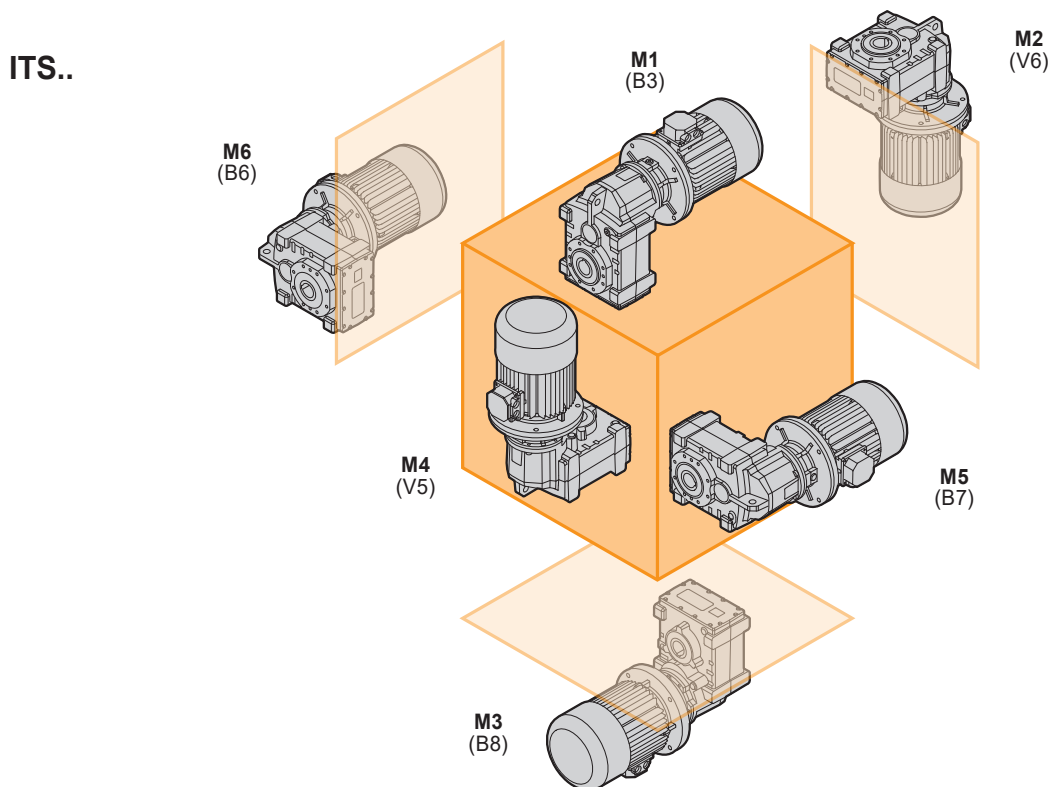
Symbols

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_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_{2U}	[N]	Carico radiale ammissibile in uscita per la versione "U..." / <i>Permitted output radial load for "U..." version</i>
R_{2P}	[N]	Carico radiale ammissibile in uscita per la versione "P..." / <i>Permitted output radial load for "P..." version</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>

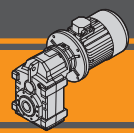
Lubrificazione

Lubrication

I motoriduttori della serie ITS sono forniti completi di lubrificante sintetico viscosità 320. La quantità di lubrificante dipende dalla posizione di montaggio. *ITS series gearmotors come complete with synthetic lubricant 320 viscosity. The lubricant quantity depends on assembly position.*

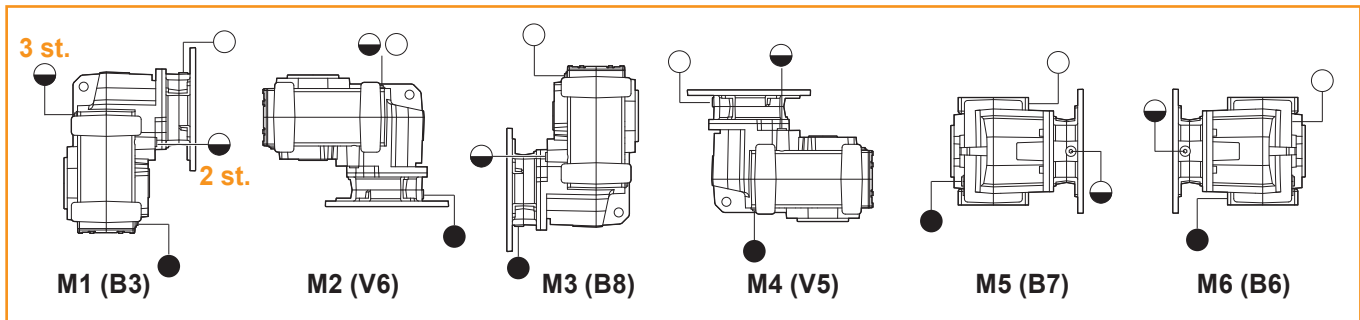


ITS	Quantità di olio (litri) / <i>Oil quantity (litres)</i>					
	M1 (B3)	M2 (V6)	M3 (B8)	M4 (V5)	M5 (B7)	M6 (B6)
922	3,4	5,2	4,2	6,1	3,7	3,6
923	4,9					
932	4,7	7,0	4,3	7,7	4,5	4,4
933	6,7					
942	9,1	14,4	9,1	15,4	9,1	8,9
943	12,0					



Lubrificazione

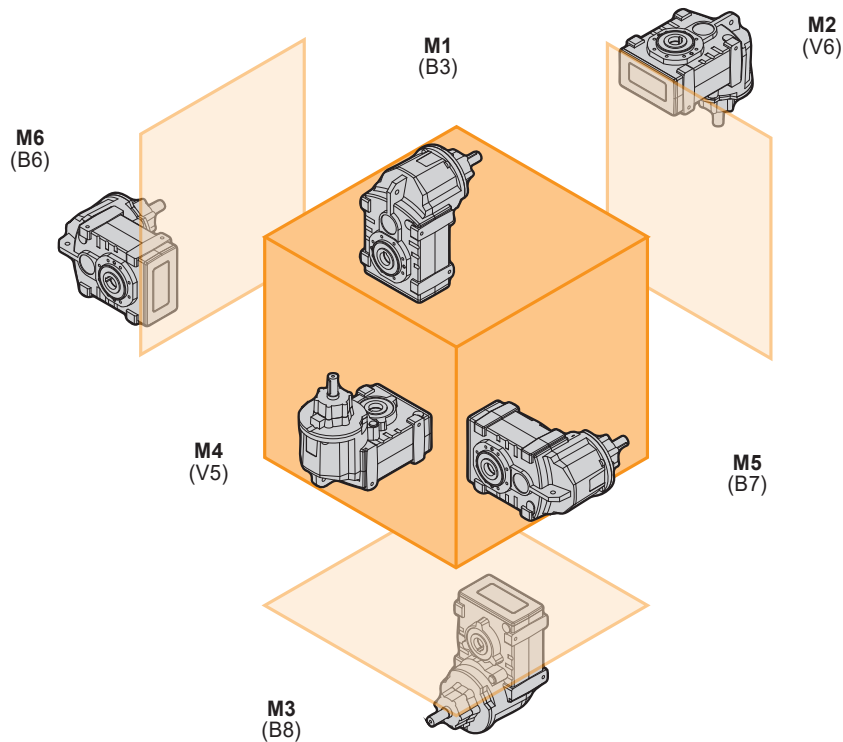
Lubrication



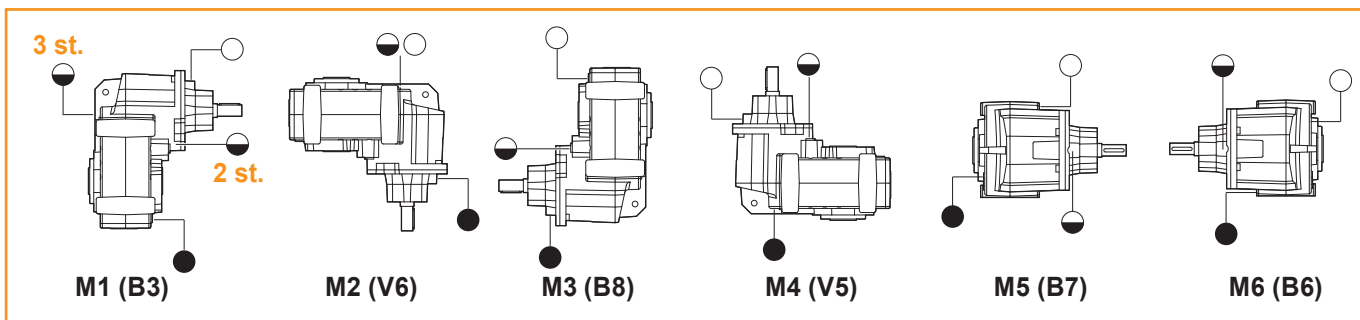
○ Sfiato e tappo di riempimento / Breather and filling plug
● Livello olio / Oil level plug

● Tappo di scarico / Oil drain plug

ITSIS..



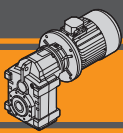
ITSIS	Quantità di olio (litri) / Oil quantity (litres)					
	M1 (B3)	M2 (V6)	M3 (B8)	M4 (V5)	M5 (B7)	M6 (B6)
922	3,6	5,6	4,4	6,1	3,9	3,8
923	5,1					
932	4,9	7,4	4,7	7,7	4,7	4,6
933	6,9					
942	9,3	15,1	9,8	15,4	9,5	9,3
943	12,2	14,8	9,5	15,4	9,3	9,1



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

● Tappo di scarico / Oil drain plug

ITS



Carichi radiali in entrata

Input Radial loads

ITS 922 ITS 923 - 932 ITS 933 - 943	n_1 [min ⁻¹]	Potenza motore/ Motor Power [kW]			
		2.2	3.0	4.0	5.5
R_1 [N]	1400	1800			750
	900	2100		1200	-
	500	2500	-	-	-

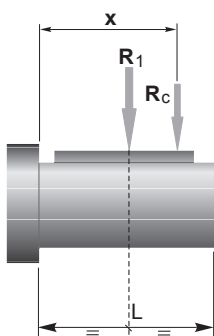
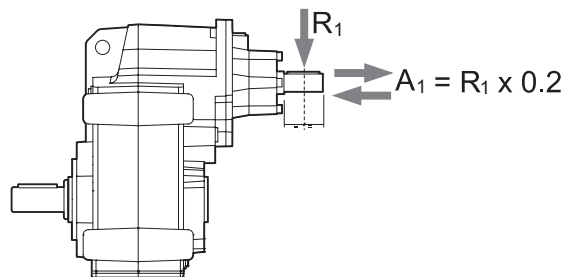
ITS 942	n_1 [min ⁻¹]	Potenza motore/ Motor Power [kW]					
		5.5	7.5	9.2	11.0	15.0	18.5
R_1 [N]	1400	3700				2800	1200
	900	4900			3300	650	-
	500	5250	3900	1300	-	-	-

I carichi radiali uscita 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 output 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:

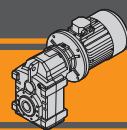


	ITS922	ITS923	ITS932	ITS933	ITS942	ITS943
a	139				157	139
b	110				118	110

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

$$R \leq R_c$$

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



Carichi radiali in uscita

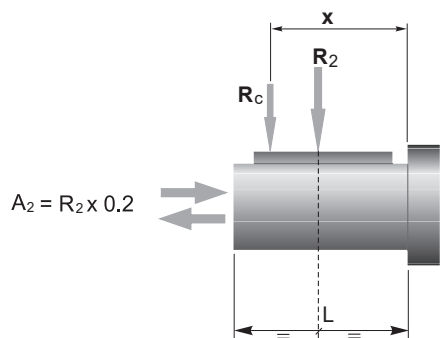
Output radial loads

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:



ITS	922 U... 923 U...	922 P... 923 P...	932 U... 933 U...	932 P... 933 P...	942 U... 943 U...	942 P... 943 P...
a	190	182	224	216	262	252
b	150	142	174	166	202	192
R_{2MAX}	9500	18000	12000	23000	15000	31000

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

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

$$R \leq R_c$$

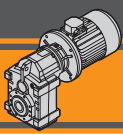
La versione U utilizza cuscinetti a sfere sull'asse di uscita mentre la versione P utilizza cuscinetti a rulli conici.

E' possibile utilizzare cuscinetti a rulli conici anche sulla versione U a richiesta.

U version has ball bearings on the output side.

P version uses taper roller bearings.

It's possible to have taper roller bearings for U version upon request.





ITS Motoriduttori pendolari Helical parallel gearmotors

Dati tecnici

n_1 1400 min⁻¹


Technical data

	n_2 [min ⁻¹]	Mn_2 [Nm]	Pn_1 [kW]	i	$R_2 U$ [N]	$R_2 P$ [N]		IEC Motori applicabili IEC Motor adapters			
ITSIS 922							ITS 922				
							80B5	90B5/B14	100B5/B14	112B5/B14	132B5/B14
248	500	13.50	5.66	2492	9368						
198	500	10.82	7.06	2835	10580						
167	500	9.13	8.37	3131	11619						
153	650	10.87	9.13	3078	11708						
134	650	9.51	10.43	3327	12602						
116	650	8.24	12.04	3618	13638						
104	750	8.48	13.50	3685	14122						
90	750	7.39	15.50	3994	15236						
79	900	7.72	17.81	4012	15753						
64	900	6.32	21.73	4506	17576						
61	900	6.00	22.92	4648	18095						
59	900	5.78	23.80	4751	18500						
53	900	5.16	26.63	5073	18500						*
48	900	4.70	29.26	5360	18500						*
44	1000	4.75	32.14	5361	18500						*
40	1000	4.43	35.19	5652	18500						*
36	1000	3.96	39.38	6035	18500						*
32	1000	3.60	43.27	6376	18500						*
30	1000	3.28	47.50	6733	18500				*	*	
25	1100	3.07	55.96	6992	18500				*	*	
23	1100	2.80	61.25	7371	18500				*	*	
21	1100	2.54	67.50	7800	18500				*	*	

ITSIS 923						
19	1100	2.29	75.00	8295	18500	
16	1100	1.99	86.28	9001	18500	
15	1100	1.82	94.46	9500	18500	
13	1100	1.58	108.48	9500	18500	
12	1100	1.44	118.77	9500	18500	
9.9	1100	1.22	140.93	9500	18500	
9.1	1100	1.11	154.30	9500	18500	
8.1	1100	1.00	172.40	9500	18500	
7.4	1100	0.91	188.76	9500	18500	
6.6	1100	0.81	211.15	9500	18500	
5.9	1100	0.72	238.53	9500	18500	
5.1	1100	0.63	272.74	9500	18500	
4.8	1100	0.59	289.29	9500	18500	
4.4	1100	0.54	316.73	9500	18500	
4.1	1100	0.50	342.86	9500	18500	
3.7	1100	0.46	375.38	9500	18500	

ITS 923				
71B5	80B5	90B5/B14	100B5/B14	112B5/B14
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N.B.
Le aree evidenziate indicano l'applicabilità della corrispondente grandezza motore.

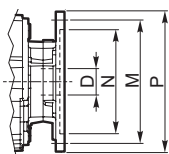
 * = Il fattore di servizio (sf) deve essere scelto in funzione dell'applicazione: si prega di contattare il nostro Servizio Tecnico.

Prima di eseguire la scelta del motoriduttore riferirsi alle prestazioni elencate nelle tabelle dalla pag. D11 alla pag. D17.

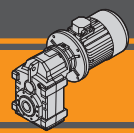
N.B.
Highlighted areas indicate motor inputs available on each size of unit.

 * = 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 D11 to D17.





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	



Dati tecnici

n_1 1400 min⁻¹


Technical data

	n_2 [min ⁻¹]	Mn_2 [Nm]	Pn_1 [kW]	i	$R_2 U$ [N]	$R_2 P$ [N]		IEC Motori applicabili IEC Motor adapters
ITSIS 932							ITS 932	
								80B5 90B5/B14 100B5/B14 112B5/B14 132B5/B14 160B5
228	850	21.16	6.13	2770	11626			
183	850	16.96	7.65	3152	13130			
155	850	14.37	9.03	3472	14386			
141	900	13.88	9.90	3606	14984			
124	900	12.20	11.27	3889	16091			
107	900	10.52	13.06	4238	17453			
96	900	9.43	14.58	4519	18541			*
83	1000	9.09	16.81	4754	19661			*
73	1000	7.94	19.24	5144	21179			*
59	1200	7.77	23.57	5412	22749			*
57	1200	7.40	24.75	5568	23000			*
54	1400	8.28	25.81	5306	23000			
49	1400	7.40	28.88	5665	23000			
40	1650	7.26	34.71	5714	23000			*
37	1650	6.63	38.01	6024	23000			
33	1650	6.05	42.53	6432	23000			
30	1650	5.51	46.73	6796	23000			
27	1650	5.02	51.30	7176	23000			
23	1650	4.26	60.44	7896	23000			
21	1650	3.89	66.15	8323	23000			
19	1500	3.21	72.90	9358	23000		*	

ITSIS 933						
17	1700	3.27	81.00	9172	23000	
15	1700	2.85	93.18	9953	23000	
14	1700	2.60	102.02	10493	23000	
12	1700	2.26	117.16	11376	23000	
11	1700	2.07	128.28	12000	23000	
9.2	1700	1.74	152.21	12000	23000	
8.4	1700	1.59	166.65	12000	23000	
7.5	1700	1.42	186.19	12000	23000	
6.9	1700	1.30	203.86	12000	23000	
6.1	1700	1.16	228.05	12000	23000	
5.4	1700	1.03	257.61	12000	23000	
4.8	1700	0.90	294.56	12000	23000	
4.5	1700	0.85	312.43	12000	23000	
4.1	1700	0.78	342.07	12000	23000	
3.8	1700	0.72	370.29	12000	23000	
3.5	1700	0.65	405.42	12000	23000	

ITS 933				
71B5	80B5	90B5/B14	100B5/B14	112B5/B14
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N.B.
Le aree evidenziate indicano l'applicabilità della corrispondente grandezza motore.

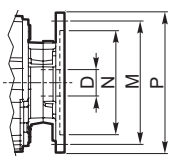
 * = Il fattore di servizio (sf) deve essere scelto in funzione dell'applicazione: si prega di contattare il nostro Servizio Tecnico.

Prima di eseguire la scelta del motoriduttore riferirsi alle prestazioni elencate nelle tabelle dalla pag. D11 alla pag. D17.

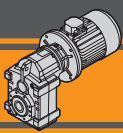
N.B.
Highlighted areas indicate motor inputs available on each size of unit.

 * = 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 D11 to D17.





Dimensioni IEC / IEC Dimensions									
	71 B5	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14	160 B5
N	110	130	130	95	180	110	230	130	250
M	130	165	165	115	215	130	265	165	300
P	160	200	200	140	250	160	300	200	350
D	14	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	$R_2 U$ [N]	$R_2 P$ [N]		IEC Motori applicabili IEC Motor adapters
ITSIS 942							ITS 942	
								90B5/B14 100B5/B14 112B5/B14 132B5/B14 160B5 180B5
	177	1500	28.90	7.93	4206	17268		
	146	1500	23.89	9.59	4701	19178		
	131	1700	24.34	10.67	4816	19916		
	118	1700	21.96	11.82	5113	21074	*	*
	109	2000	23.66	12.91	5070	21422		
	99	2000	21.49	14.21	5364	22590		
	88	2400	23.04	15.91	5258	22990		
	81	2400	21.15	17.33	5527	24097		
	73	2500	19.96	19.13	5725	25158		
	60	2500	16.37	23.32	6426	28055		*
	48	2700	14.01	29.42	7022	31000		*
	45	3000	14.61	31.35	6763	31000		*
	35	3000	11.57	39.60	7751	31000		*
	32	2700	9.53	43.25	8792	31000		
	29	2700	8.60	47.95	9337	31000		
	26	3200	9.34	53.43	8754	31000		
	24	3200	8.57	58.22	9203	31000		
	22	3200	7.73	64.53	9773	31000		
	20	3000	6.65	70.40	10842	31000		
	18	3000	6.08	77.00	11424	31000		

ITSIS 943

	15	3200	5.31	94.05	12175	31000
	14	3200	4.99	99.94	12614	31000
	13	3200	4.56	109.42	13299	31000
	12	3200	4.12	121.00	14102	31000
	10	3200	3.71	134.54	15000	31000
	9.5	3200	3.38	147.69	15000	31000
	8.2	3200	2.94	169.71	15000	31000
	7.5	3200	2.69	185.82	15000	31000
	6.7	3200	2.40	207.90	15000	31000
	6.1	3200	2.18	228.46	15000	31000
	5.6	3200	1.99	250.80	15000	31000
	4.7	3200	1.69	295.48	15000	31000
	4.3	3200	1.54	323.40	15000	31000
	3.9	3200	1.40	356.40	15000	31000

ITS 943

80B5	90B5/B14	100B5/B14	112B5/B14	132B5/B14
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		*	*	
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N.B.

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



* = 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. D11 alla pag. D17.

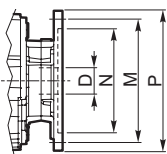
N.B.

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

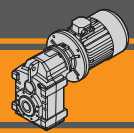


* = The service factor (sf) has to be selected depending on application: please contact our Technical Department.

Before selecting any gearbox, please read the performance values shown in the tables on page D11 to D17.













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

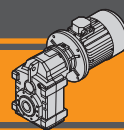
Technical data

P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	sf	i			R _{2 U} [N]	R _{2 P} [N]	
0.25									
71A4 (1400 min ⁻¹)	5.9	382	2.9	238.53	ITS923		9500	18500	
	5.1	437	2.5	272.74			B5	9500	18500
	4.8	464	2.4	289.29			B5	9500	18500
	4.4	508	2.2	316.73			B5	9500	18500
	4.1	550	2.0	342.86			B5	9500	18500
	3.7	602	1.8	375.38	B5	9500	18500		
	5.4	413	4.1	257.61	ITS933		12000	23000	
	4.8	472	3.6	294.56			B5	12000	23000
	4.5	501	3.4	312.43			B5	12000	23000
	4.1	548	3.1	342.07			B5	12000	23000
3.8	594	2.9	370.29	B5			12000	23000	
3.5	650	2.6	405.42	B5	12000	23000			

P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	sf	i			R _{2 U} [N]	R _{2 P} [N]		
0.55										
80A4 (1400 min ⁻¹)	19	265	4.2	75.00	ITS923		9500	18500		
	16	304	3.6	86.28			B5	9500	18500	
	15	333	3.3	94.46			B5	9500	18500	
	13	383	2.9	108.48			B5	9500	18500	
	12	419	2.6	118.77			B5	9500	18500	
	9.9	497	2.2	140.93			B5	9500	18500	
	9.1	544	2.0	154.30			B5	9500	18500	
	8.1	608	1.8	172.40			B5	9500	18500	
	7.4	666	1.7	188.76			B5	9500	18500	
	6.6	745	1.5	211.15			B5	9500	18500	
	5.9	841	1.3	238.53	B5	9500	18500			
	5.1	962	1.1	272.74	B5	9500	18500			
	4.8	1020	1.1	289.29	B5	9500	18500			
	4.4	1117	1.0	316.73	B5	9500	18500			
	30	165	10.0	46.73	ITS932		10992	23000		
	27	181	9.1	51.30			B5	11559	23000	
	23	213	7.7	60.44			B5	12000	23000	
	21	233	7.1	66.15			B5	12000	23000	
	19	257	5.8	72.90			B5	12000	23000	
	17	286	6.0	81.00			ITS933		12000	23000
15	329	5.2	93.18	B5					12000	23000
14	360	4.7	102.02	B5					12000	23000
12	413	4.1	117.16	B5					12000	23000
11	452	3.8	128.28	B5					12000	23000
9.2	537	3.2	152.21	B5	12000	23000				
8.4	588	2.9	166.65	B5	12000	23000				
7.5	657	2.6	186.19	B5	12000	23000				
6.9	719	2.4	203.86	B5	12000	23000				
6.1	804	2.1	228.05	B5	12000	23000				
5.4	908	1.9	257.61	B5	12000	23000				
4.8	1039	1.6	294.56	B5	12000	23000				
4.5	1102	1.5	312.43	B5	12000	23000				
4.1	1206	1.4	342.07	B5	12000	23000				
3.8	1306	1.3	370.29	B5	12000	23000				
3.5	1430	1.2	405.42	B5	12000	23000				
15	332	9.6	94.05	ITS943		15000	31000			
14	352	9.1	99.94			B5	15000	31000		
13	386	8.3	109.42			B5	15000	31000		
12	427	7.5	121.00			B5	15000	31000		
10	474	6.7	134.54			B5	15000	31000		
9.5	521	6.1	147.69			B5	15000	31000		
8.2	599	5.3	169.71			B5	15000	31000		
7.5	655	4.9	185.82			B5	15000	31000		
6.7	733	4.4	207.90			B5	15000	31000		
6.1	806	4.0	228.46			B5	15000	31000		
5.6	884	3.6	250.80	B5	15000	31000				
4.7	1042	3.1	295.48	B5	15000	31000				
4.3	1141	2.8	323.40	B5	15000	31000				
3.9	1257	2.5	356.40	B5	15000	31000				

P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	sf	i			R _{2 U} [N]	R _{2 P} [N]	
0.37									
71B4 (1400 min ⁻¹)	5.9	566	1.9	238.53	ITS923		9500	18500	
	5.1	647	1.7	272.74			B5	9500	18500
	4.8	686	1.6	289.29			B5	9500	18500
	4.4	751	1.5	316.73			B5	9500	18500
	4.1	813	1.4	342.86			B5	9500	18500
	3.7	891	1.2	375.38	B5	9500	18500		
	5.4	611	2.8	257.61	ITS933		12000	23000	
	4.8	699	2.4	294.56			B5	12000	23000
	4.5	741	2.3	312.43			B5	12000	23000
	4.1	812	2.1	342.07			B5	12000	23000
3.8	879	1.9	370.29	B5			12000	23000	
3.5	962	1.8	405.42	B5	12000	23000			

P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	sf	i			R _{2 U} [N]	R _{2 P} [N]	
0.55									
80A4 (1400 min ⁻¹)	247	20	25	5.66	ITS922		3016	10554	
	198	25	20	7.06			B5	3424	11905
	167	30	17	8.37			B5	3775	13059
	153	33	20	9.13			B5	3969	13693
	134	38	17	10.43			B5	4283	14723
	116	43	15	12.04			B5	4647	15910
	104	49	15	13.50			B5	4958	16920
	90	56	13	15.50			B5	5359	18223
	79	64	14	17.81			B5	5795	18500
	64	78	11	21.73			B5	6474	18500
	61	83	11	22.92			B5	6667	18500
	59	86	11	23.80			B5	6807	18500
	53	96	9.4	26.63			B5	7240	18500
	48	105	8.5	29.26			B5	7623	18500
	44	116	8.6	32.14			B5	8021	18500
	40	124	8.1	35.19			B5	8430	18500
	36	139	7.2	39.38			B5	8951	18500
	32	153	6.6	43.27			B5	9408	18500
	29	168	6.0	47.50			B5	9500	18500
	25	197	5.6	55.96			B5	9500	18500
	23	216	5.1	61.25			B5	9500	18500
	21	238	4.6	67.50			B5	9500	18500



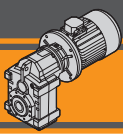
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Technical data

P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	sf	i			R _{2 U} [N]	R _{2 P} [N]
1.1								
90S4 (1400 min ⁻¹)	17	571	3.0	81.00	ITS933	B5/B14	12000	23000
	15	657	2.6	93.18		B5/B14	12000	23000
	14	720	2.4	102.02		B5/B14	12000	23000
	12	826	2.1	117.16		B5/B14	12000	23000
	11	905	1.9	128.28		B5/B14	12000	23000
	9.2	1074	1.6	152.21		B5/B14	12000	23000
	8.4	1175	1.4	166.65		B5/B14	12000	23000
	7.5	1313	1.3	186.19		B5/B14	12000	23000
	6.9	1438	1.2	203.86		B5/B14	12000	23000
	6.1	1608	1.1	228.05	B5/B14	12000	23000	
	5.4	1817	0.9	257.61	B5/B14	12000	23000	
	32	312	8.7	43.25	ITS942	B5/B14	13823	31000
	29	345	7.8	47.95		B5/B14	14603	31000
	26	377	8.5	53.43		B5/B14	15000	31000
	24	411	7.8	58.22		B5/B14	15000	31000
	22	455	7.0	64.53		B5/B14	15000	31000
	20	497	6.0	70.40		B5/B14	15000	31000
	18	543	5.5	77.00	B5/B14	15000	31000	
	15	663	4.8	94.05	ITS943	B5/B14	15000	31000
14	705	4.5	99.94	B5/B14		15000	31000	
13	772	4.1	109.42	B5/B14		15000	31000	
12	853	3.7	121.00	B5/B14		15000	31000	
10	949	3.4	134.54	B5/B14		15000	31000	
9.5	1042	3.1	147.69	B5/B14		15000	31000	
8.2	1197	2.7	169.71	B5/B14		15000	31000	
7.5	1311	2.4	185.82	B5/B14		15000	31000	
6.7	1466	2.2	207.90	B5/B14		15000	31000	
6.1	1611	2.0	228.46	B5/B14		15000	31000	
5.6	1769	1.8	250.80	B5/B14	15000	31000		
4.7	2084	1.5	295.48	B5/B14	15000	31000		
4.3	2281	1.4	323.40	B5/B14	15000	31000		
3.9	2514	1.3	356.40	B5/B14	15000	31000		

P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	sf	i			R _{2 U} [N]	R _{2 P} [N]	
1.5									
90L4 (1400 min ⁻¹)	247	56	9.0	5.66	ITS922	B5/B14	2977	10467	
	198	69	7.2	7.06		B5/B14	3370	11782	
	167	82	6.1	8.37		B5/B14	3704	12900	
	153	90	7.2	9.13		B5/B14	3887	13510	
	134	102	6.3	10.43		B5/B14	4182	14498	
	116	118	5.5	12.04		B5/B14	4520	15630	
	104	133	5.7	13.50		B5/B14	4805	16585	
	90	152	4.9	15.50		B5/B14	5169	17808	
	79	175	5.1	17.81		B5/B14	5558	18500	
	64	213	4.2	21.73		B5/B14	6150	18500	
	61	225	4.0	22.92		B5/B14	6315	18500	
	59	234	3.9	23.80		B5/B14	6433	18500	
	53	262	3.4	26.63		B5/B14	6794	18500	
	48	287	3.1	29.26		B5/B14	7104	18500	
	44	316	3.2	32.14		B5/B14	7420	18500	
	40	338	3.0	35.19		B5/B14	7750	18500	
	36	379	2.6	39.38		B5/B14	8139	18500	
	32	416	2.4	43.27		B5/B14	8465	18500	
	29	457	2.2	47.50		B5/B14	8785	18500	
	25	538	2.0	55.96		B5/B14	9328	18500	
	23	589	1.9	61.25		B5/B14	9500	18500	
	21	649	1.7	67.50		B5/B14	9500	18500	
	19	721	1.5	75.00		ITS923	B5/B14	9500	18500
	16	830	1.3	86.28			B5/B14	9500	18500
	15	909	1.2	94.46	B5/B14		9500	18500	
	13	1043	1.1	108.48	B5/B14		9500	18500	
	12	1142	1.0	118.77	B5/B14		9500	18500	



P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	sf	i			R _{2 U} [N]	R _{2 P} [N]	
1.5									
90L4 (1400 min ⁻¹)	155	89	9.6	9.03	ITS932	B5/B14	4297	16485	
	141	97	9.3	9.90		B5/B14	4523	17311	
	124	111	8.1	11.27		B5/B14	4861	18549	
	107	128	7.0	13.06		B5/B14	5275	20059	
	96	143	6.3	14.58		B5/B14	5603	21257	
	83	165	6.1	16.81		B5/B14	6053	22900	
	73	189	5.3	19.24		B5/B14	6509	23000	
	59	232	5.2	23.57		B5/B14	7248	23000	
	57	243	4.9	24.75		B5/B14	7434	23000	
	54	254	5.5	25.81		B5/B14	7597	23000	
	48	284	4.9	28.88		B5/B14	8047	23000	
	40	341	4.8	34.71		B5/B14	8824	23000	
	37	373	4.4	38.01		B5/B14	9222	23000	
	33	409	4.0	42.53		B5/B14	9751	23000	
	30	449	3.7	46.73		B5/B14	10188	23000	
	27	493	3.3	51.30		B5/B14	10626	23000	
	23	581	2.8	60.44		B5/B14	11404	23000	
	21	636	2.6	66.15		B5/B14	11831	23000	
	19	701	2.1	72.90		B5/B14	12000	23000	
	17	779	2.2	81.00	ITS933	B5/B14	12000	23000	
	15	896	1.9	93.18		B5/B14	12000	23000	
	14	981	1.7	102.02		B5/B14	12000	23000	
	12	1127	1.5	117.16		B5/B14	12000	23000	
	11	1234	1.4	128.28		B5/B14	12000	23000	
	9.2	1464	1.2	152.21		B5/B14	12000	23000	
	8.4	1603	1.1	166.65		B5/B14	12000	23000	
	7.5	1791	0.9	186.19		B5/B14	12000	23000	
	48	289	9.3	29.42		ITS942	B5/B14	11078	31000
	45	308	9.7	31.35			B5/B14	11463	31000
	35	389	7.7	39.60	B5/B14		12974	31000	
	32	425	6.4	43.25	B5/B14		13584	31000	
	29	471	5.7	47.95	B5/B14		14322	31000	
	26	514	6.2	53.43	B5/B14		15000	31000	
	24	560	5.7	58.22	B5/B14		15000	31000	
22	621	5.2	64.53	B5/B14	15000	31000			
20	677	4.4	70.40	ITS943	B5/B14	15000	31000		
18	741	4.1	77.00		B5/B14	15000	31000		
15	905	3.5	94.05		B5/B14	15000	31000		
14	961	3.3	99.94		B5/B14	15000	31000		
13	1052	3.0	109.42		B5/B14	15000	31000		
12	1164	2.7	121.00		B5/B14	15000	31000		
10	1294	2.5	134.54		B5/B14	15000	31000		
9.5	1421	2.3	147.69		B5/B14	15000	31000		
8.2	1632	2.0	169.71		B5/B14	15000	31000		
7.5	1787	1.8	185.82		B5/B14	15000	31000		
6.7	2000	1.6	207.90	B5/B14	15000	31000			
6.1	2197	1.5	228.46	B5/B14	15000	31000			
5.6	2412	1.3	250.80	B5/B14	15000	31000			
4.7	2842	1.1	295.48	B5/B14	15000	31000			
4.3	3111	1.0	323.40	B5/B14	15000	31000			





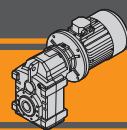
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



P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	sf	i			R _{2 U} [N]	R _{2 P} [N]		
1.85										
90LB4 (1400 min ⁻¹)	247	69	7.3	5.66	ITS922	B5/B14	2963	10435		
	198	85	5.8	7.06		B5/B14	3350	11737		
167	101	4.9	8.37	B5/B14		3678	12841			
153	111	5.9	9.13	B5/B14		3856	13443			
134	126	5.1	10.43	B5/B14		4145	14415			
116	146	4.5	12.04	B5/B14		4473	15526			
104	164	4.6	13.50	B5/B14		4749	16462			
90	188	4.0	15.50	B5/B14		5099	17656			
79	216	4.2	17.81	B5/B14		5471	18500			
64	263	3.4	21.73	B5/B14		6031	18500			
61	278	3.2	22.92	B5/B14		6185	18500			
59	288	3.1	23.80	B5/B14		6295	18500			
53	323	2.8	26.63	B5/B14		6629	18500			
48	354	2.5	29.26	B5/B14		6913	18500			
44	389	2.6	32.14	B5/B14		7198	18500			
40	417	2.4	35.19	B5/B14		7500	18500			
36	467	2.1	39.38	B5/B14		7840	18500			
32	513	1.9	43.27	B5/B14		8118	18500			
29	563	1.8	47.50	B5/B14		8382	18500			
25	664	1.7	55.96	B5/B14		8806	18500			
23	727	1.5	61.25	B5/B14		9007	18500			
21	801	1.4	67.50	B5/B14	9189	18500				
19	890	1.2	75.00	ITS923	B5/B14	9332	18500			
16	1023	1.1	86.28		B5/B14	9411	18500			
15	1121	1.0	94.46		B5/B14	9374	18500			
ITS932	183	93	9.2	7.65	ITS932	B5/B14	3896	15035		
	155	109	7.8	9.03		B5/B14	4275	16428		
	141	120	7.5	9.90		B5/B14	4497	17246		
	124	137	6.6	11.27		B5/B14	4830	18469		
	107	158	5.7	13.06		B5/B14	5235	19958		
	96	177	5.1	14.58		B5/B14	5555	21137		
	83	204	4.9	16.81		B5/B14	5993	22751		
	73	233	4.3	19.24		B5/B14	6435	23000		
	59	286	4.2	23.57		B5/B14	7145	23000		
	57	300	4.0	24.75		B5/B14	7324	23000		
	54	313	4.5	25.81		B5/B14	7479	23000		
	48	350	4.0	28.88		B5/B14	7906	23000		
	40	421	3.9	34.71		B5/B14	8635	23000		
	37	460	3.6	38.01		B5/B14	9004	23000		
	33	504	3.3	42.53		B5/B14	9495	23000		
	30	554	3.0	46.73		B5/B14	9891	23000		
	27	609	2.7	51.30		B5/B14	10283	23000		
	23	717	2.3	60.44		B5/B14	10959	23000		
	21	785	2.1	66.15		B5/B14	11317	23000		
19	865	1.7	72.90	B5/B14	11684	23000				
ITS933	17	961	1.8	81.00	ITS933	B5/B14	12000	23000		
	15	1105	1.5	93.18		B5/B14	12000	23000		
	14	1210	1.4	102.02		B5/B14	12000	23000		
	12	1390	1.2	117.16		B5/B14	12000	23000		
	11	1522	1.1	128.28		B5/B14	12000	23000		
	9.2	1806	0.9	152.21		B5/B14	12000	23000		
	ITS942	60	283	8.8		23.32	ITS942	B5/B14	9683	31000
		48	356	7.6		29.42		B5/B14	10965	31000
45		380	7.9	31.35	B5/B14	11337		31000		
35		480	6.3	39.60	B5/B14	12793		31000		
32		524	5.2	43.25	B5/B14	13375		31000		
29		581	4.6	47.95	B5/B14	14077		31000		
26		634	5.0	53.43	B5/B14	14868		31000		
24		691	4.6	58.22	B5/B14	15000		31000		
22		766	4.2	64.53	B5/B14	15000		31000		
20		835	3.6	70.40	B5/B14	15000		31000		
18		913	3.3	77.00	B5/B14	15000		31000		

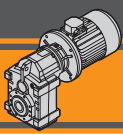
P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	sf	i			R _{2 U} [N]	R _{2 P} [N]		
1.85										
90LB4 (1400 min ⁻¹)	15	1116	2.9	94.05	ITS943	B5/B14	15000	31000		
	14	1186	2.7	99.94		B5/B14	15000	31000		
	13	1298	2.5	109.42		B5/B14	15000	31000		
	12	1435	2.2	121.00		B5/B14	15000	31000		
	10	1596	2.0	134.54		B5/B14	15000	31000		
	9.5	1752	1.8	147.69		B5/B14	15000	31000		
	8.2	2013	1.6	169.71		B5/B14	15000	31000		
	7.5	2204	1.5	185.82		B5/B14	15000	31000		
	6.7	2466	1.3	207.90		B5/B14	15000	31000		
	6.1	2710	1.2	228.46		B5/B14	15000	31000		
	5.6	2975	1.1	250.80		B5/B14	15000	31000		
2.2										
100LA4 (1400 min ⁻¹)	247	81	6.1	5.66	ITS922	B5/B14	2949	10402		
	198	102	4.9	7.06		B5/B14	3330	11692		
	167	121	4.1	8.37		B5/B14	3651	12782		
	153	132	4.9	9.13		B5/B14	3826	13376		
	134	150	4.3	10.43		B5/B14	4107	14332		
	116	174	3.7	12.04		B5/B14	4427	15423		
	104	194	3.9	13.50		B5/B14	4693	16338		
	90	223	3.4	15.50		B5/B14	5030	17503		
	79	257	3.5	17.81		B5/B14	5384	18500		
	64	313	2.9	21.73		B5/B14	5912	18500		
	61	330	2.7	22.92		B5/B14	6055	18500		
	59	343	2.6	23.80		B5/B14	6158	18500		
	53	384	2.3	26.63		B5/B14	6465	18500		
	48	422	2.1	29.26		B5/B14	6722	18500		
	44	463	2.2	32.14		B5/B14	6976	18500		
	40	496	2.0	35.19		B5/B14	7249	18500		
	36	555	1.8	39.38		B5/B14	7540	18500		
	32	610	1.6	43.27		B5/B14	7770	18500		
	29	670	1.5	47.50		B5/B14	7979	18500		
	25	789	1.4	55.96		B5/B14	8284	18500		
	23	864	1.3	61.25		B5/B14	8405	18500		
	21	952	1.2	67.50		B5/B14	8486	18500		
	19	1058	1.0	75.00		ITS923	B5/B14	8502	18500	
	ITS932	228	88	9.6		6.13	ITS932	B5/B14	3429	13323
		183	110	7.7		7.65		B5/B14	3879	14991
		155	130	6.5		9.03		B5/B14	4252	16371
		141	143	6.3		9.90		B5/B14	4471	17180
124		162	5.5	11.27	B5/B14	4798		18388		
107		188	4.8	13.06	B5/B14	5194		19857		
96		210	4.3	14.58	B5/B14	5507		21017		
83		242	4.1	16.81	B5/B14	5933		22601		
73		277	3.6	19.24	B5/B14	6361		23000		
59		340	3.5	23.57	B5/B14	7043		23000		
57		357	3.4	24.75	B5/B14	7213		23000		
54		372	3.8	25.81	B5/B14	7361		23000		
48		416	3.4	28.88	B5/B14	7765		23000		
40		500	3.3	34.71	B5/B14	8446		23000		
37		548	3.0	38.01	B5/B14	8785		23000		
33	600	2.8	42.53	B5/B14	9240	23000				
30	659	2.5	46.73	B5/B14	9595	23000				
27	724	2.3	51.30	B5/B14	9939	23000				
23	853	1.9	60.44	B5/B14	10514	23000				
21	933	1.8	66.15	B5/B14	10804	23000				
19	1028	1.5	72.90	B5/B14	11085	23000				
ITS933	17	1143	1.5	81.00	ITS933	B5/B14	11343	23000		
	15	1314	1.3	93.18		B5/B14	11582	23000		
	14	1439	1.2	102.02		B5/B14	11655	23000		
	12	1653	1.0	117.16		B5/B14	11604	23000		
	11	1810	0.9	128.28		B5/B14	11435	23000		



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Technical data





P_1 [kW]	n_2 [min ⁻¹]	M_2 [Nm]	sf	i			$R_2 U$ [N]	$R_2 P$ [N]	P_1 [kW]	n_2 [min ⁻¹]	M_2 [Nm]	sf	i			$R_2 U$ [N]	$R_2 P$ [N]	
2.2									3.0									
100LA4 (1400 min ⁻¹)	98	205	9.8	14.21	ITS942	B5/B14	7340	26991	100LB4 (1400 min ⁻¹)	228	121	7.1	6.13	ITS932	B5/B14	3401	13251	
	88	229	10	15.91		B5/B14	7809	28652		183	150	5.7	7.65		B5/B14	3840	14890	
	81	250	9.6	17.33		B5/B14	8183	29976		155	177	4.8	9.03		B5/B14	4201	16240	
	73	276	9.1	19.13		B5/B14	8636	31000		141	194	4.6	9.90		B5/B14	4412	17029	
	60	336	7.4	23.32		B5/B14	9604	31000		124	221	4.1	11.27		B5/B14	4725	18204	
	48	424	6.4	29.42		B5/B14	10851	31000		107	257	3.5	13.06		B5/B14	5103	19626	
	45	452	6.6	31.35		B5/B14	11212	31000		96	286	3.1	14.58		B5/B14	5398	20743	
	35	571	5.3	39.60		B5/B14	12611	31000		83	330	3.0	16.81		B5/B14	5796	22260	
	32	623	4.3	43.25		B5/B14	13167	31000		73	378	2.6	19.24		B5/B14	6191	23000	
	29	691	3.9	47.95		B5/B14	13831	31000		59	463	2.6	23.57		B5/B14	6809	23000	
	26	754	4.2	53.43		B5/B14	14582	31000		57	486	2.5	24.75		B5/B14	6960	23000	
	24	821	3.9	58.22		B5/B14	15000	31000		54	507	2.8	25.81		B5/B14	7091	23000	
	22	910	3.5	64.53		B5/B14	15000	31000		48	567	2.5	28.88		B5/B14	7442	23000	
	20	993	3.0	70.40		B5/B14	15000	31000		40	682	2.4	34.71		B5/B14	8014	23000	
	18	1086	2.8	77.00		B5/B14	15000	31000		37	747	2.2	38.01		B5/B14	8287	23000	
						ITS943	B5/B14	15000	31000		33	818	2.0		42.53	B5/B14	8657	23000
	15	1327	2.4	94.05			B5/B14	15000	31000		30	899	1.8		46.73	B5/B14	8918	23000
	14	1410	2.3	99.94			B5/B14	15000	31000		27	987	1.7		51.30	B5/B14	9154	23000
	13	1544	2.1	109.42	B5/B14		15000	31000		23	1163	1.4	60.44	B5/B14	9496	23000		
	12	1707	1.9	121.00	B5/B14		15000	31000		21	1272	1.3	66.15	B5/B14	9629	23000		
	10	1898	1.7	134.54	B5/B14		15000	31000		19	1402	1.1	72.90	B5/B14	9715	23000		
	9.5	2083	1.5	147.69	B5/B14		15000	31000										
	8.2	2394	1.3	169.71	B5/B14		15000	31000		17	1558	1.1	81.00	ITS933	B5/B14	9724	23000	
	7.5	2621	1.2	185.82	B5/B14		15000	31000		15	1792	0.9	93.18		B5/B14	9562	23000	
	6.7	2933	1.1	207.90	B5/B14		15000	31000										
	6.1	3223	1.0	228.46	B5/B14		15000	31000		98	279	7.2	14.21	ITS942	B5/B14	7258	26808	
					B5/B14		2916	10329		88	313	7.7	15.91		B5/B14	7711	28435	
					B5/B14	3284	11589		81	340	7.1	17.33	B5/B14		8071	29728		
					B5/B14	3591	12648		73	376	6.7	19.13	B5/B14		8504	31000		
					B5/B14	3757	13222		60	458	5.5	23.32	B5/B14		9425	31000		
					B5/B14	4022	14143		48	578	4.7	29.42	B5/B14		10592	31000		
					B5/B14	4319	15186		45	616	4.9	31.35	B5/B14		10925	31000		
					B5/B14	4565	16056		35	778	3.9	39.60	B5/B14		12196	31000		
					B5/B14	4870	17153		32	850	3.2	43.25	B5/B14		12689	31000		
					B5/B14	5185	18309		29	942	2.9	47.95	B5/B14		13269	31000		
					B5/B14	5639	18500		26	1028	3.1	53.43	B5/B14		13929	31000		
					B5/B14	5759	18500		24	1120	2.9	58.22	B5/B14		14413	31000		
					B5/B14	5843	18500		22	1241	2.6	64.53	B5/B14	14983	31000			
					B5/B14	6089	18500		20	1354	2.2	70.40	B5/B14	15000	31000			
					B5/B14	6286	18500		18	1481	2.0	77.00	B5/B14	15000	31000			
					B5/B14	6470	18500											
					B5/B14	6677	18500		15	1809	1.8	94.05	ITS943	B5/B14	15000	31000		
					B5/B14	6777	18500		14	1923	1.7	99.94		B5/B14	15000	31000		
					B5/B14	6856	18500		13	2105	1.5	109.42		B5/B14	15000	31000		
					B5/B14	6976	18500		12	2328	1.4	121.00		B5/B14	15000	31000		
					B5/B14	7059	18500		10	2588	1.2	134.54		B5/B14	15000	31000		
					B5/B14	7090	18500		9.5	2841	1.1	147.69		B5/B14	15000	31000		
									8.2	3265	1.0	169.71		B5/B14	15000	31000		

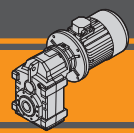


ITS Motoriduttori pendolari Helical parallel gearmotors

Dati tecnici



Technical data



P_1 [kW]	n_2 [min ⁻¹]	M_2 [Nm]	sf	i			$R_2 U$ [N]	$R_2 P$ [N]	P_1 [kW]	n_2 [min ⁻¹]	M_2 [Nm]	sf	i			$R_2 U$ [N]	$R_2 P$ [N]		
4.0									5.5										
112M4 (1400 min ⁻¹)	247	148	3.4	5.66	ITS922	B5/B14	2876	10238	132S4 (1400 min ⁻¹)	247	204	2.5	5.66	ITS922	B5/B14	2815	10100		
	198	185	2.7	7.06		B5/B14	3226	11460		198	254	2.0	7.06		B5/B14	B5/B14	3140	11266	
	167	219	2.3	8.37		B5/B14	3516	12480		167	301	1.7	8.37		B5/B14	B5/B14	3403	12228	
	153	239	2.7	9.13		B5/B14	3671	13030		153	329	2.0	9.13		B5/B14	B5/B14	3541	12741	
	134	273	2.4	10.43		B5/B14	3915	13906		134	376	1.7	10.43		B5/B14	B5/B14	3755	13552	
	116	316	2.1	12.04		B5/B14	4186	14891		116	434	1.5	12.04		B5/B14	B5/B14	3985	14448	
	104	354	2.1	13.50		B5/B14	4404	15704		104	486	1.5	13.50		B5/B14	B5/B14	4164	15174	
	90	406	1.8	15.50		B5/B14	4671	16717		90	558	1.3	15.50		B5/B14	B5/B14	4371	16061	
	79	467	1.9	17.81		B5/B14	4937	17767		79	642	1.4	17.81		B5/B14	B5/B14	4564	16953	
	64	569	1.6	21.73		B5/B14	5298	18500		64	783	1.1	21.73		B5/B14	B5/B14	4787	18183	
	61	600	1.5	22.92		B5/B14	5388	18500		61	825	1.1	22.92		B5/B14	B5/B14	4832	18494	
	59	623	1.4	23.80		B5/B14	5450	18500		59	857	1.1	23.80		B5/B14	B5/B14	4859	18500	
	53	697	1.3	26.63		B5/B14	5619	18500							ITS932	B5/B14	3314	13027	
	48	766	1.2	29.26		B5/B14	5740	18500		228	221	3.8	6.13			B5/B14	3717	14575	
	44	842	1.2	32.14		B5/B14	5836	18500		183	276	3.1	7.65			B5/B14	4041	15833	
	40	903	1.1	35.19		B5/B14	5961	18500		155	325	2.6	9.03			B5/B14	4226	16559	
	36	1010	1.0	39.38		B5/B14	6001	18500		141	357	2.5	9.90			B5/B14	4498	17630	
	32	1110	0.9	43.27		B5/B14	5983	18500		124	406	2.2	11.27			B5/B14	4815	18904	
						B5/B14	3366	13162		107	470	1.9	13.06			B5/B14	5056	19886	
	228	161	5.3	6.13		ITS932	B5/B14	3790	14764		96	525	1.7			14.58	B5/B14	5368	21192
	183	200	4.2	7.65		B5/B14	4137	16077		83	605	1.7	16.81			B5/B14	5661	22462	
	155	237	3.6	9.03		B5/B14	4338	16841		73	693	1.4	19.24			B5/B14	6077	23000	
	141	259	3.5	9.90		B5/B14	4634	17974		59	849	1.4	23.57			B5/B14	6170	23000	
	124	295	3.0	11.27		B5/B14	4988	19337		57	891	1.3	24.75			B5/B14	6246	23000	
	107	342	2.6	13.06		B5/B14	5261	20400		54	930	1.5	25.81			B5/B14	6433	23000	
	96	382	2.4	14.58		B5/B14	5625	21833		48	1040	1.3	28.88		B5/B14	6663	23000		
	83	440	2.3	16.81		B5/B14	5979	23000		40	1250	1.3	34.71		B5/B14	6728	23000		
	73	504	2.0	19.24		B5/B14	6516	23000		37	1369	1.2	38.01		B5/B14	6834	23000		
	59	617	1.9	23.57		B5/B14	6644	23000		33	1500	1.1	42.53		B5/B14	6801	23000		
	57	648	1.9	24.75		B5/B14	6753	23000		30	1648	1.0	46.73		B5/B14	6701	23000		
	54	676	2.1	25.81		B5/B14	7039	23000		27	1809	0.9	51.30		B5/B14				
	48	756	1.9	28.88		B5/B14	7474	23000							ITS942	B5/B14	5157	19427	
	40	909	1.8	34.71		B5/B14	7663	23000		177	285	5.3	7.93			B5/B14	5711	21458	
	37	996	1.7	38.01		B5/B14	7928	23000		146	345	4.3	9.59			B5/B14	6041	22671	
	33	1091	1.5	42.53		B5/B14	8071	23000		131	384	4.4	10.67			B5/B14	6372	23896	
	30	1199	1.4	46.73		B5/B14	8173	23000		118	426	4.0	11.82			B5/B14	6667	24990	
	27	1316	1.3	51.30		B5/B14	8224	23000		108	465	4.3	12.91			B5/B14	7002	26238	
	23	1550	1.1	60.44	B5/B14	8162	23000		98	512	3.9	14.21	B5/B14	7405		27755			
	21	1697	1.0	66.15	B5/B14	7155	26580		88	573	4.2	15.91	B5/B14	7720		28952			
					ITS942	B5/B14	7589	28163		81	624	3.8	17.33	B5/B14		8095	30386		
	98	372	5.4	14.21	B5/B14	7931	29417		73	689	3.6	19.13	B5/B14	8864		31000			
	88	417	5.8	15.91	B5/B14	8340	30929		60	840	3.0	23.32	B5/B14	9782		31000			
	81	454	5.3	17.33	B5/B14	9201	31000		48	1060	2.5	29.42	B5/B14	10029		31000			
	73	501	5.0	19.13	B5/B14	10268	31000		45	1129	2.7	31.35	B5/B14	10899		31000			
	60	611	4.1	23.32	B5/B14	10567	31000		35	1426	2.1	39.60	B5/B14	11198	31000				
	48	771	3.5	29.42	B5/B14	11677	31000		32	1558	1.7	43.25	B5/B14	11513	31000				
	45	821	3.7	31.35	B5/B14	12093	31000		29	1727	1.6	47.95	B5/B14	12076	31000				
	35	1037	2.9	39.60	B5/B14	12567	31000		26	1884	1.7	53.43	B5/B14	12231	31000				
	32	1133	2.4	43.25	B5/B14	13113	31000		24	2053	1.6	58.22	B5/B14	12289	31000				
	29	1256	2.1	47.95	B5/B14	13478	31000		22	2276	1.4	64.53	B5/B14	12262	31000				
	26	1370	2.3	53.43	B5/B14	13882	31000		20	2483	1.2	70.40	B5/B14						
	24	1493	2.1	58.22	B5/B14	14184	31000		18	2716	1.1	77.00	B5/B14						
	22	1655	1.9	64.53	B5/B14	14446	31000						ITS943	B5/B14	11787	31000			
	20	1806	1.7	70.40	B5/B14	14785	31000		15	3317	1.0	94.05		B5/B14					
	18	1975	1.5	77.00	B5/B14	14800	31000												
	15	2412	1.3	94.05	B5/B14	14723	31000												
	14	2563	1.2	99.94	B5/B14	14473	31000												
	13	2807	1.1	109.42															
	12	3103	1.0	121.00															
7.5									7.5										
					ITS922	B5/B14	2734	9917	132MA4 (1400 min ⁻¹)	247	278	1.8	5.66	ITS922	B5/B14	2734	9917		
						B5/B14	3025	11008		198	347	1.4	7.06		B5/B14	3025	11008		
						B5/B14	3253	11892		167	411	1.2	8.37		B5/B14	3253	11892		
						B5/B14	3369	12357		153	448	1.4	9.13		B5/B14	3369	12357		
						B5/B14	3542	13078		134	512	1.3	10.43		B5/B14	3542	13078		
						B5/B14	3717	13857		116	592	1.1	12.04		B5/B14	3717	13857		
						B5/B14	3843	14469		104	663	1.1	13.50		B5/B14	3843	14469		
						B5/B14	3972	15188		90	761	1.0	15.50		B5/B14	3972	15188		
						B5/B14	4066	15869		79	875	1.0	17.81		B5/B14	4066	15869		







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

Technical data



P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	sf	i			R _{2 U} [N]	R _{2 P} [N]
7.5								
132MA4 (1400 min ⁻¹)	228	301	2.8	6.13	ITS932	B5/B14	3245	12848
	183	376	2.3	7.65			B5/B14	3618
155	444	1.9	9.03	B5/B14			3912	15506
141	486	1.9	9.90	B5/B14			4078	16183
124	553	1.6	11.27	B5/B14			4316	17170
107	642	1.4	13.06	B5/B14			4585	18326
96	716	1.3	14.58	B5/B14			4782	19201
83	825	1.2	16.81	B5/B14			5025	20338
73	945	1.1	19.24	B5/B14			5237	21409
59	1158	1.0	23.57	B5/B14			5492	22947
57	1216	1.0	24.75	B5/B14	5538	23000		
54	1268	1.1	25.81	B5/B14	5571	23000		
48	1418	1.0	28.88	B5/B14	5627	23000		
40	1705	1.0	34.71	B5/B14	5583	23000		
177	389	3.9	7.93	ITS942	B5/B14	5076	19243	
146	471	3.2	9.59			B5/B14	5601	21210
131	524	3.2	10.67			B5/B14	5911	22378
118	581	2.9	11.82			B5/B14	6220	23553
108	634	3.2	12.91			B5/B14	6492	24597
98	698	2.9	14.21			B5/B14	6797	25781
88	781	3.1	15.91			B5/B14	7160	27212
81	851	2.8	17.33			B5/B14	7440	28332
73	940	2.7	19.13			B5/B14	7767	29663
60	1145	2.2	23.32			B5/B14	8415	31000
48	1445	1.9	29.42	B5/B14	9133	31000		
45	1540	1.9	31.35	B5/B14	9312	31000		
35	1945	1.5	39.60	B5/B14	9861	31000		
32	2124	1.3	43.25	B5/B14	10004	31000		
29	2355	1.1	47.95	B5/B14	10108	31000		
26	2569	1.2	53.43	B5/B14	10256	31000		
24	2800	1.1	58.22	B5/B14	10206	31000		
22	3103	1.0	64.53	B5/B14	10030	31000		

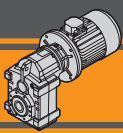
9.2									
P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	sf	i			R _{2 U} [N]	R _{2 P} [N]	
132L4 (1400 min ⁻¹)	247	341	1.5	5.66	ITS922	B5/B14	2666	9762	
	198	425	1.2	7.06			B5/B14	2928	10789
	167	504	1.0	8.37			B5/B14	3125	11607
	153	550	1.2	9.13			B5/B14	3222	12030
	134	629	1.0	10.43	B5/B14	3361	12676		
	228	370	2.3	6.13	ITS932	B5/B14	3186	12696	
	183	461	1.8	7.65			B5/B14	3534	14108
	155	544	1.6	9.03			B5/B14	3804	15229
	141	596	1.5	9.90			B5/B14	3952	15864
	124	679	1.3	11.27			B5/B14	4161	16779
107	787	1.1	13.06	B5/B14			4390	17835	
96	878	1.0	14.58	B5/B14			4550	18619	
83	1012	1.0	16.81	B5/B14			4734	19612	
177	477	3.1	7.93	ITS942			B5/B14	5007	19086
146	578	2.6	9.59					B5/B14	5508
131	643	2.6	10.67		B5/B14	5800		22130	
118	712	2.4	11.82		B5/B14	6089		23262	
108	778	2.6	12.91		B5/B14	6342		24263	
98	856	2.3	14.21		B5/B14	6623		25394	
88	958	2.5	15.91		B5/B14	6952		26750	
81	1044	2.3	17.33		B5/B14	7202		27805	
73	1153	2.2	19.13		B5/B14	7488		29048	
60	1405	1.8	23.32		B5/B14	8034		31000	
48	1773	1.5	29.42	B5/B14	8582	31000			
45	1889	1.6	31.35	B5/B14	8703	31000			
35	2386	1.3	39.60	B5/B14	8979	31000			
32	2606	1.0	43.25	B5/B14	8990	31000			
29	2889	0.9	47.95	B5/B14	8914	31000			
26	3152	1.0	53.43	B5/B14	8869	31000			

P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	sf	i			R _{2 U} [N]	R _{2 P} [N]			
11.0											
160M4 (1400 min ⁻¹)	228	442	1.9	6.13	ITS932	B5	3123	12535			
	183	551	1.5	7.65			B5	3446	13881		
	155	651	1.3	9.03			B5	3688	14935		
	141	713	1.3	9.90			B5	3819	15526		
	124	812	1.1	11.27			B5	3997	16366		
	107	941	1.0	13.06			B5	4183	17315		
	177	571	2.6	7.93			ITS942	B5	4934	18920	
	146	691	2.2	9.59					B5	5409	20776
	131	768	2.2	10.67					B5	5683	21867
	118	851	2.0	11.82					B5	5952	22953
108	930	2.2	12.91	B5	6184	23910					
98	1024	2.0	14.21	B5	6438	24983					
88	1146	2.1	15.91	B5	6732	26261					
81	1248	1.9	17.33	B5	6950	27246					
73	1378	1.8	19.13	B5	7193	28397					
60	1680	1.5	23.32	B5	7630	30695					
48	2119	1.3	29.42	B5	7999	31000					
45	2258	1.3	31.35	B5	8058	31000					
35	2853	1.1	39.60	B5	8046	31000					

15.0									
P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	sf	i			R _{2 U} [N]	R _{2 P} [N]	
160L4 (1400 min ⁻¹)	228	603	1.4	6.13	ITS932	B5	2984	12177	
	183	752	1.1	7.65			B5	3248	13377
	155	887	1.0	9.03			B5	3432	14283
	177	779	1.9	7.93	ITS942	B5	4771	18551	
	146	942	1.6	9.59			B5	5189	20280
	131	1048	1.6	10.67			B5	5423	21282
	118	1161	1.5	11.82			B5	5646	22267
	108	1268	1.6	12.91			B5	5832	23124
	98	1396	1.4	14.21			B5	6028	24070
	88	1563	1.5	15.91			B5	6242	25174
81	1702	1.4	17.33	B5	6389	26006			
73	1879	1.3	19.13	B5	6537	26950			
60	2291	1.1	23.32	B5	6733	28729			

18.5									
P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	sf	i			R _{2 U} [N]	R _{2 P} [N]	
180M4 (1400 min ⁻¹)	177	960	1.6	7.93	ITS942	B5	4629	18228	
	146	1162	1.3	9.59			B5	4997	19846
	131	1292	1.3	10.67			B5	5196	20770
	118	1432	1.2	11.82			B5	5378	21667
	108	1564	1.3	12.91			B5	5524	22436
	98	1722	1.2	14.21			B5	5670	23271
	88	1927	1.2	15.91			B5	5814	24224
	81	2099	1.1	17.33			B5	5898	24920
	73	2318	1.1	19.13			B5	5963	25685

22.0									
P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	sf	i			R _{2 U} [N]	R _{2 P} [N]	
180L4 (1400 min ⁻¹)	177	1142	1.3	7.93	ITS942	B5	4487	17905	
	146	1382	1.1	9.59			B5	4805	19412
	131	1537	1.1	10.67			B5	4968	20258
	118	1703	1.0	11.82			B5	5110	21067
	108	1859	1.1	12.91			B5	5217	21749
	98	2048	1.0	14.21			B5	5311	22473
	88	2292	1.0	15.91			B5	5385	23273

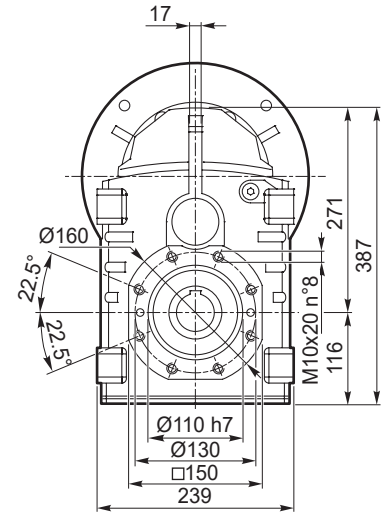
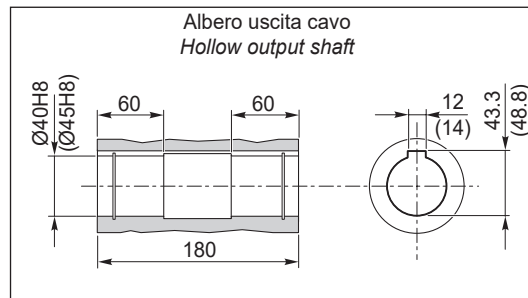
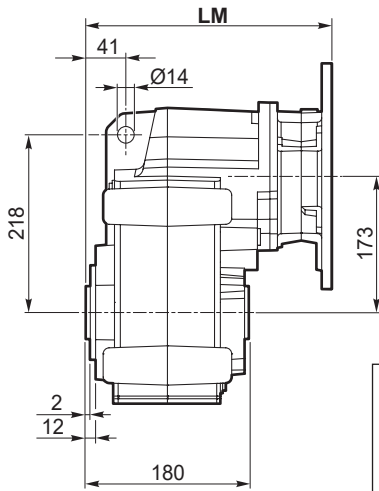


Dimensioni

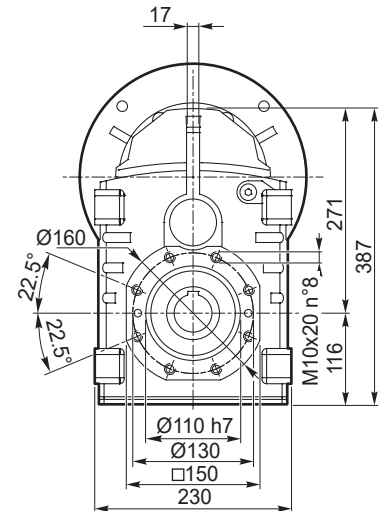
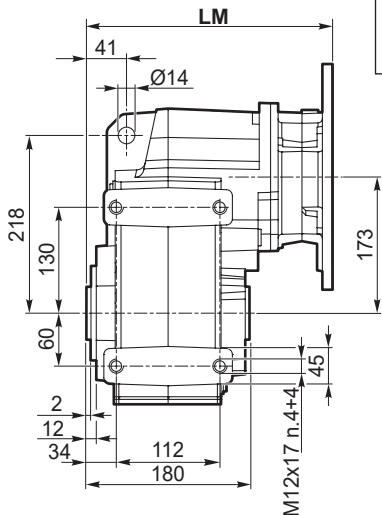
Dimensions

ITS 922 - ITS 923

**ITS 922 U
ITS 923 U**

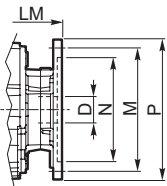


**ITS 922 P
ITS 923 P**

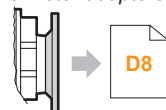


Dimensioni IEC / IEC Dimensions

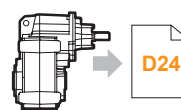
	71 B5	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14
LM	282.5	282.5	282.5	287	286.5	287	307.5	
N	110	130	130	95	180	110	230	130
M	130	165	165	115	215	130	265	165
P	160	200	200	140	250	160	300	200
D	14	19	24		28		38	

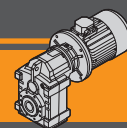


IEC Motori applicabili
IEC Motor adapters



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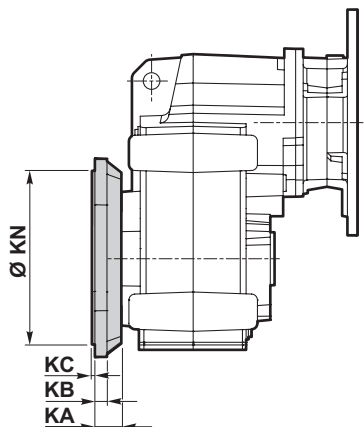
Dimensioni

Dimensions

ITS 922 - ITS 923

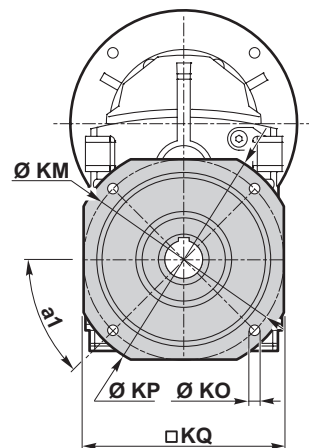
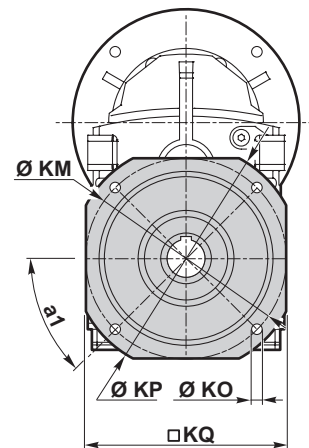
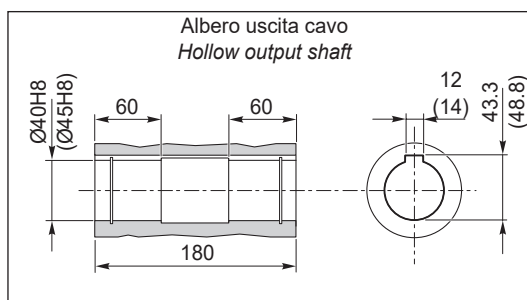
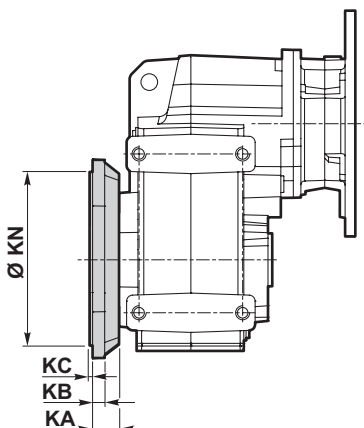
ITS 922 U/F...

ITS 923 U/F...



ITS 922 P/F...

ITS 923 P/F...

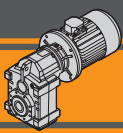


ITS

Versione F / F Version											
ITS	KA	a ₁	KB	KC	Ø KM	KN f7	KO	KP □	KQ	Flangia / Flange	
										Tipo / Type	Peso / Weight [kg]
922 923	35	45°	13	4	165	130	11	200	172	F200	2.6
	35	45°	13	4	215	180	14	250	215	F250	3.8
	35	45°	13	4	265	230	14	300	265	F300	5.6

Peso / Weight [kg]									
ITS	71 B5	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14	
922 U	-	42	42	41	44	42	47	44	
922 P	-	42	42	41	44	41	47	44	
923 U	44	45	45	44	47	44			-
923 P	44	44	44	43	46	44			-

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

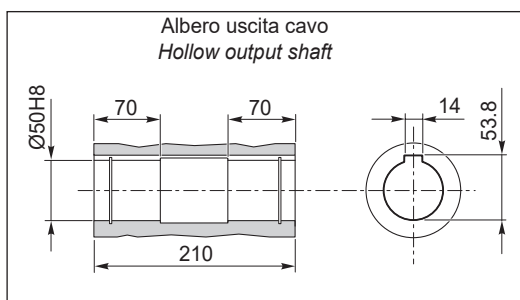
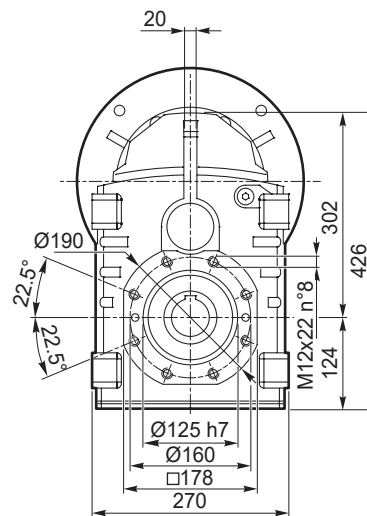
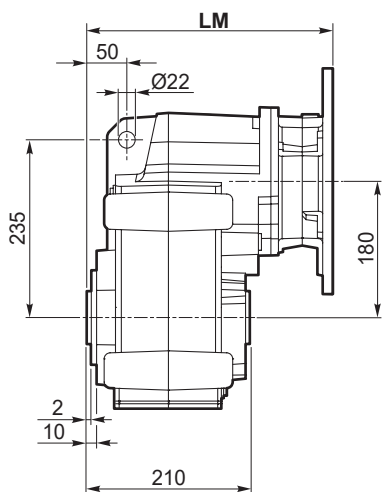


Dimensioni

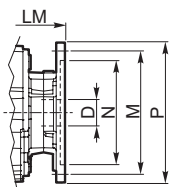
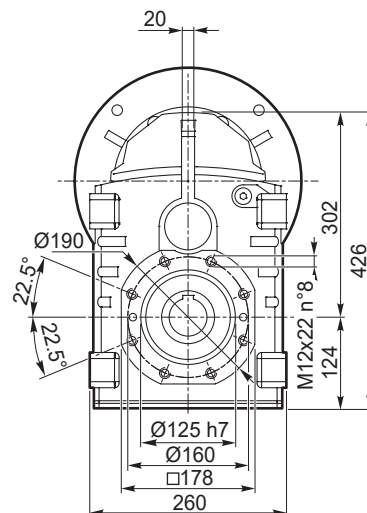
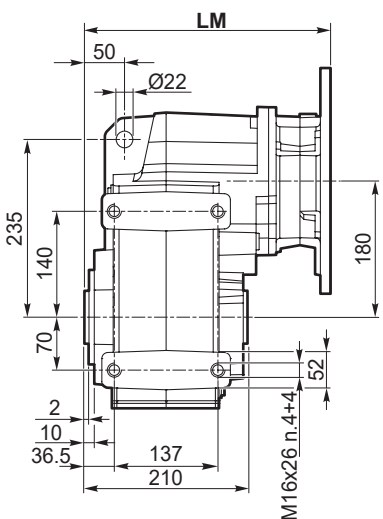
Dimensions

ITS 932 - ITS 933

**ITS 932 U
ITS 933 U**

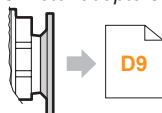


**ITS 932 P
ITS 933 P**

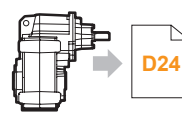


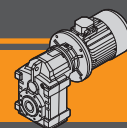
Dimensioni IEC / IEC Dimensions									
	71 B5	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14	160 B5
LM	297.5	297.5	297.5	302	301.5	302	322.5		372.5
N	110	130	130	95	180	110	230	130	250
M	130	165	165	115	215	130	265	165	300
P	160	200	200	140	250	160	300	200	350
D	14	19	24		28		38		42

IEC Motori applicabili
IEC Motor adapters



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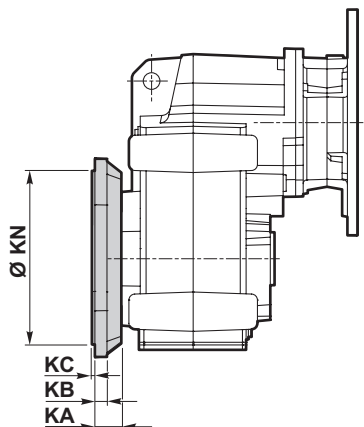
Dimensioni

Dimensions

ITS 932 - ITS 933

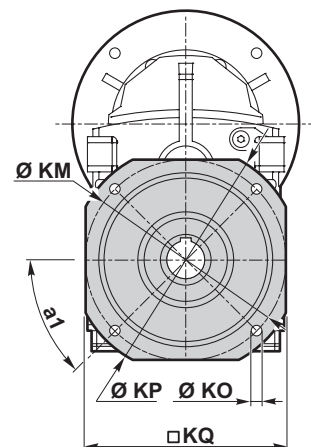
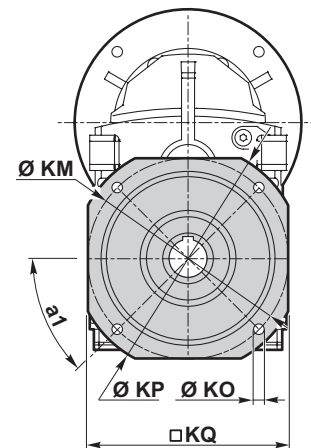
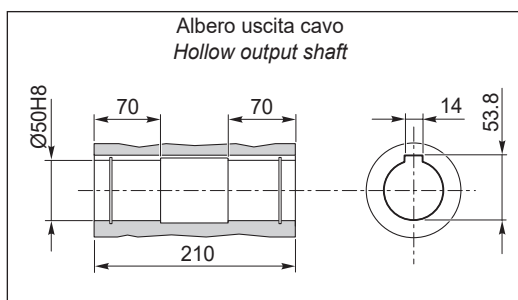
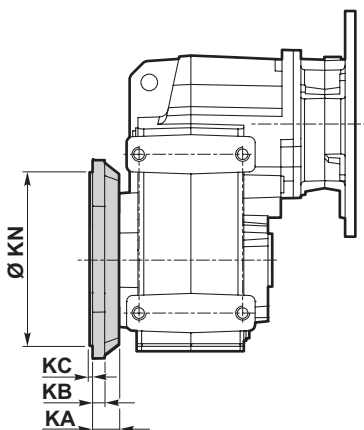
ITS 932 U/F...

ITS 933 U/F...



ITS 932 P/F...

ITS 933 P/F...

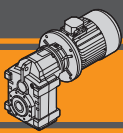


ITS

Versione F / F Version											
ITS	KA	a ₁	KB	KC	Ø KM	KN f7	KO	KP □	KQ	Flangia / Flange	Peso / Weight [kg]
										Tipo / Type	
932 933	40	45°	16	4	215	180	14	250	215	F250	4.8
	40	45°	16	4	265	230	14	300	265	F300	7.1
	40	45°	16	4	300	250	18	350	300	F350	9.1

Peso / Weight [kg]										
ITS	71 B5	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14	160 B5	
932 U	-	55	55	54	57	54	60	57	68	
932 P	-	54	54	53	56	54	59	56	68	
933 U	58	59	59	58	61	58	-	-	-	
933 P	58	58	58	57	60	58	-	-	-	

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

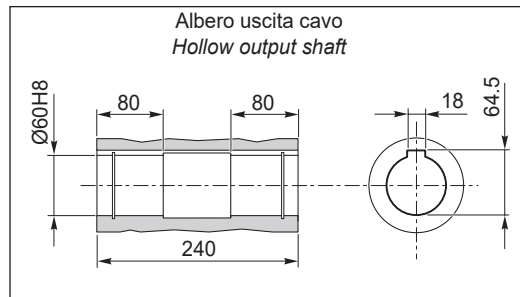
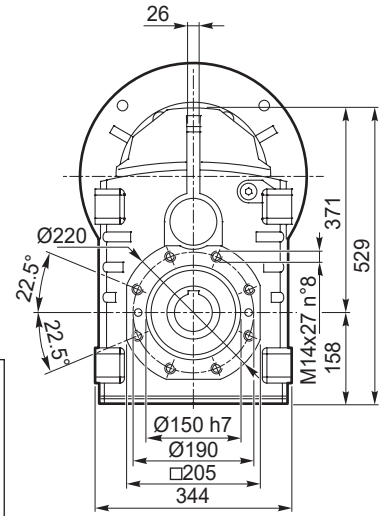
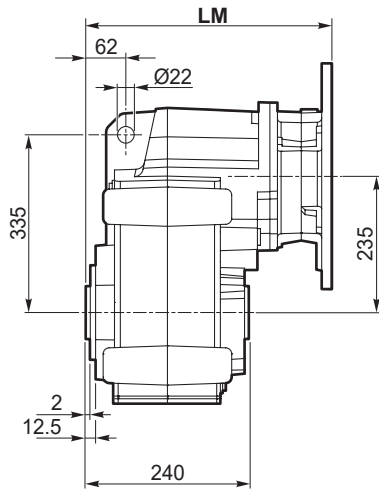


Dimensioni

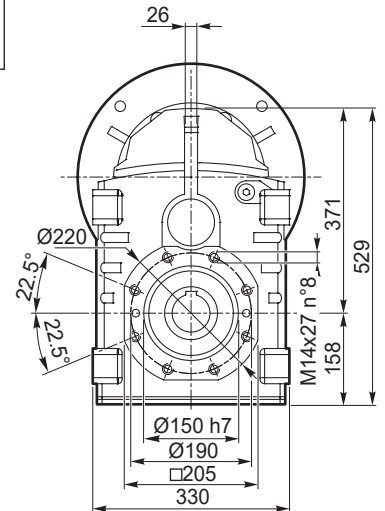
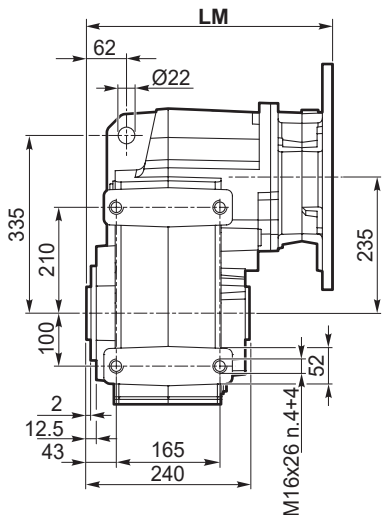
Dimensions

ITS 942 - ITS 943

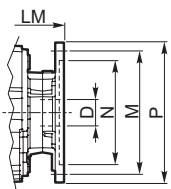
ITS 942 U
ITS 943 U



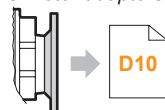
ITS 942 P
ITS 943 P



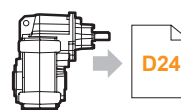
Dimensioni IEC / IEC Dimensions									
	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14	160 B5	180 B5
LM	325.5	325.5	330	329.5	330	350.5		400.5	400.5
N	130	130	95	180	110	230	130	250	250
M	165	165	115	215	130	265	165	300	300
P	200	200	140	250	160	300	200	350	350
D	19	24		28		38		42	48

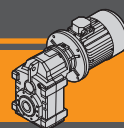


IEC Motori applicabili
IEC Motor adapters



ITSIS..



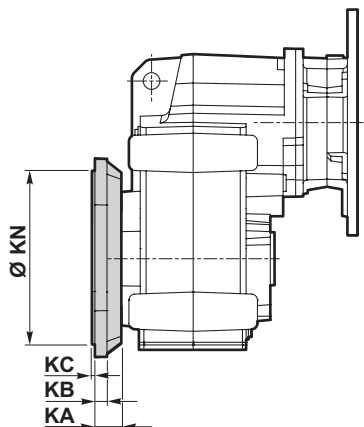


Dimensioni

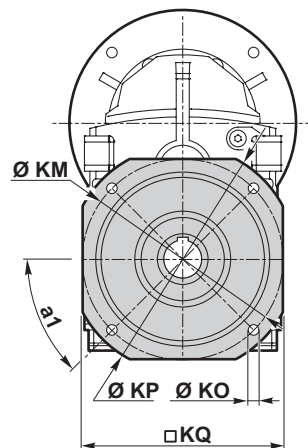
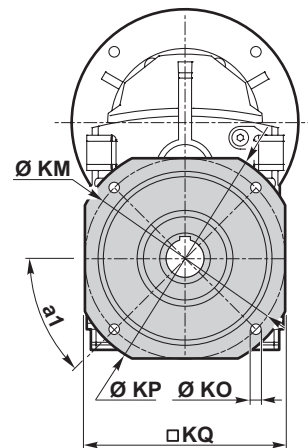
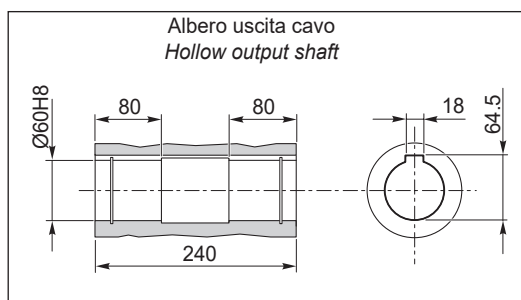
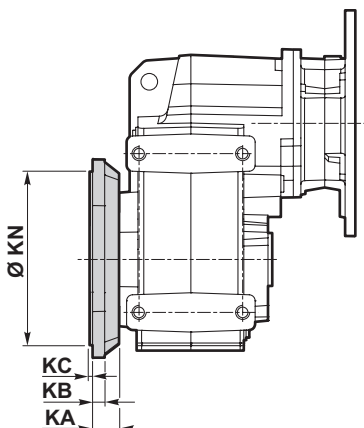
Dimensions

ITS 942 - ITS 943

ITS 942 U/F...
ITS 943 U/F...



ITS 942 P/F...
ITS 943 P/F...

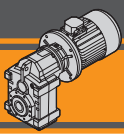


ITS

Versione F / F Version											
ITS	KA	a ₁	KB	KC	Ø KM	KN f7	KO	KP □	KQ	Flangia / Flange	Peso / Weight [kg]
										Tipo / Type	
942 943	42.5	45°	18	4	265	230	14	300	265	F300	7.4
	42.5	45°	18	5	300	250	18	350	300	F350	10.2
	42.5	45°	18	5	400	350	18	450	400	F450	16.9

Peso / Weight [kg]										
ITS	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14	160 B5	180 B5	
942 U	-	93	92	95	92	98	95	109	109	
942 P	-	92	91	94	91	97	94	108	108	
943 U	99	99	98	101	98	104	101	-	-	
943 P	98	98	97	100	97	103	100	-	-	

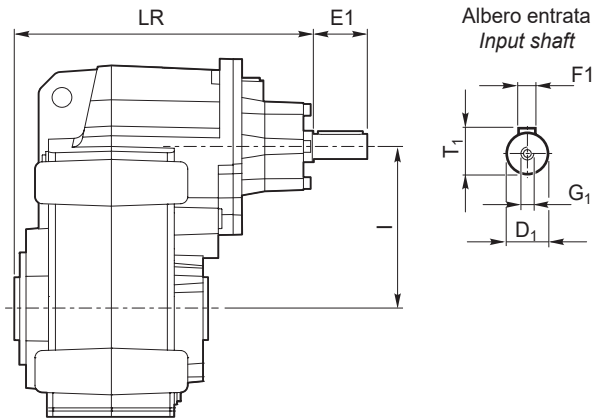
Nota: peso del riduttore complessivo di olio per la posizione M1 (B3)
Note: weight of the gearbox filled with oil for M1 (B3) assembly position



Dimensioni

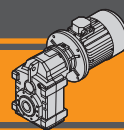
Dimensions

ITSIS...



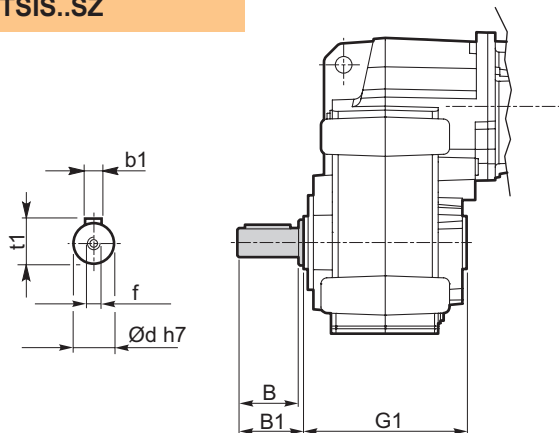
ITSIS	Versione Version	LR	D1	E1	I	T1	F1	G1
922	U P U/F... P/F...	315	28	60	173	31	8	M10
923		315	28	60	173	31	8	M10
932		330	28	60	180	31	8	M10
933		330	28	60	180	31	8	M10
942		375.5	38	80	235	41	10	M12
943		358	28	60	235	31	8	M10

ITSIS	Peso / Weight [kg]
922 U	43
922 P	43
923 U	46
923 P	45
932 U	56
932 P	55
933 U	60
933 P	59
942 U	99
942 P	98
943 U	100
943 P	99



Albero lento / Output shaft

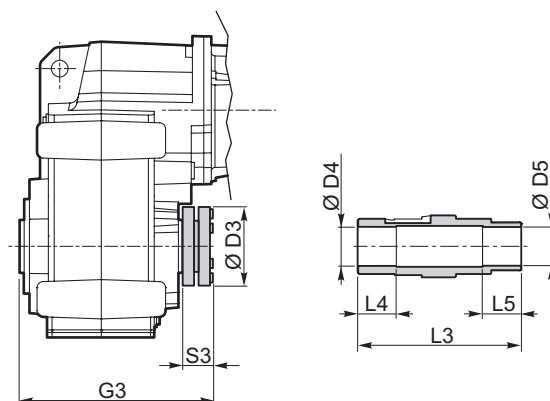
ITS...SZ
ITSIS..SZ



ITS	d h7	B	B1	G1	f	b1	t1	Peso / Weight [kg]
922 923	40	80	84	180	M16	12	43	2.2
932 933	50	100	105	210	M16	14	53.5	4.3
942 943	60	120	125	240	M20	18	64	7.1

Albero lento con calettatore / Output shaft with shrink disk

ITS...G...
ITSIS..G..

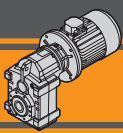


Albero lento con calettatore / Output shaft with shrink disk

ITS	D3	D4 H8	D5 H8	G3	L3	L4	L5	S3	G4	
922/3	G40	100	41	40	217.5	215	45	45	34.5	90
	G45	100	46	45	217.5	215	45	45	34.5	90
932/3	G50	110	51	50	247.5	245	50	50	34.5	105
942/3	G60	138	61	60	280.5	279	60	60	37.5	120

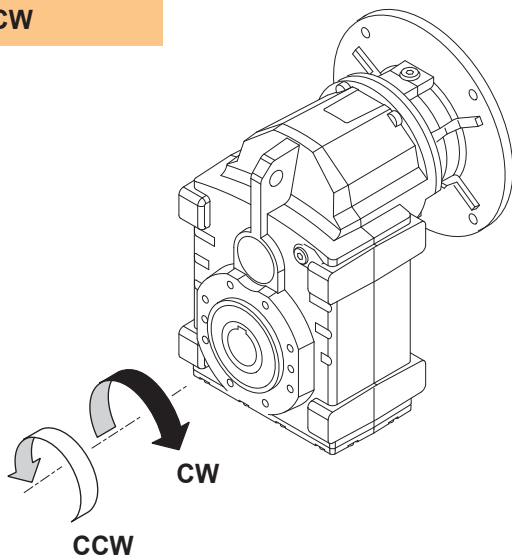
Kit albero uscita con calettatore disponibile a richiesta:
per le istruzioni di montaggio riferirsi al nostro Servizio Tecnico.

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



Dispositivo antiretro / Backstop device

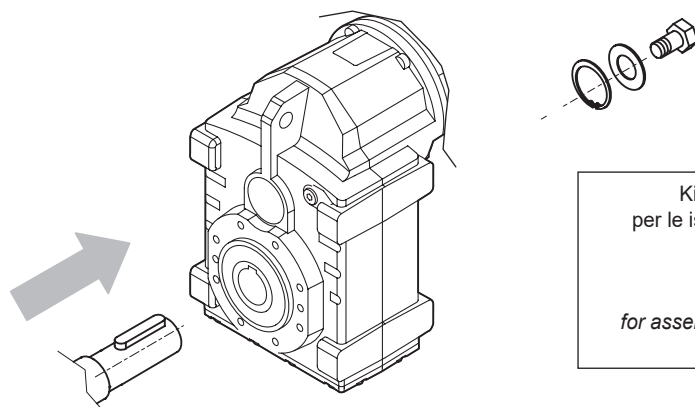
ITS...CW
ITS...CCW



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.

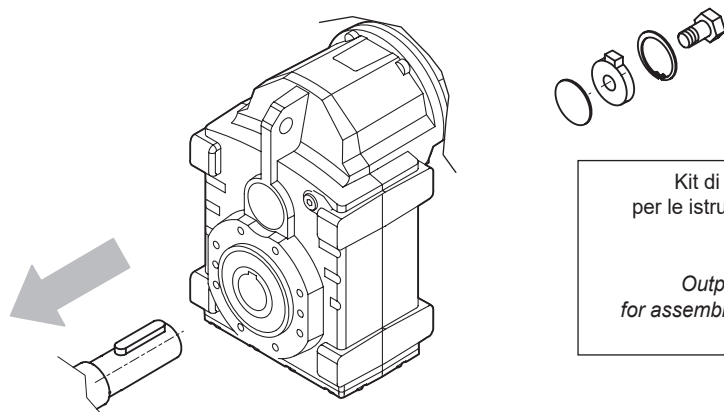
Kit di montaggio albero uscita / Output shaft assembly kit



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

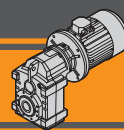
Output shaft assembly kit available upon request: for assembly instructions please contact our Technical Assistance
Screws not provided

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.
Viti escluse dalla fornitura

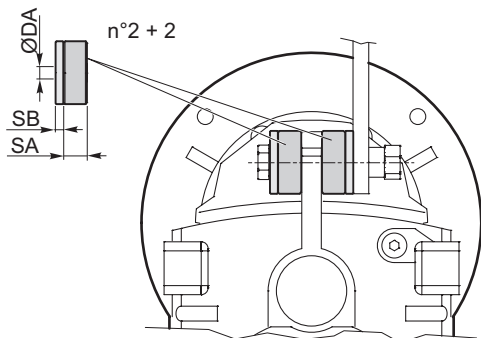
Output shaft disassembly kit available upon request: for assembly instructions please contact our Technical Assistance
Screws not provided



Kit braccio di reazione / Torque arm kit

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

Torque arm kit available upon request:
for assembly instructions please contact our Technical Assistance



Braccio di reazione / Torque arm

ITS	ØDA	SA	SB
922 923	13	15	5
932 933	21	30	10
942 943	21	30	10



Appendice
Appendix

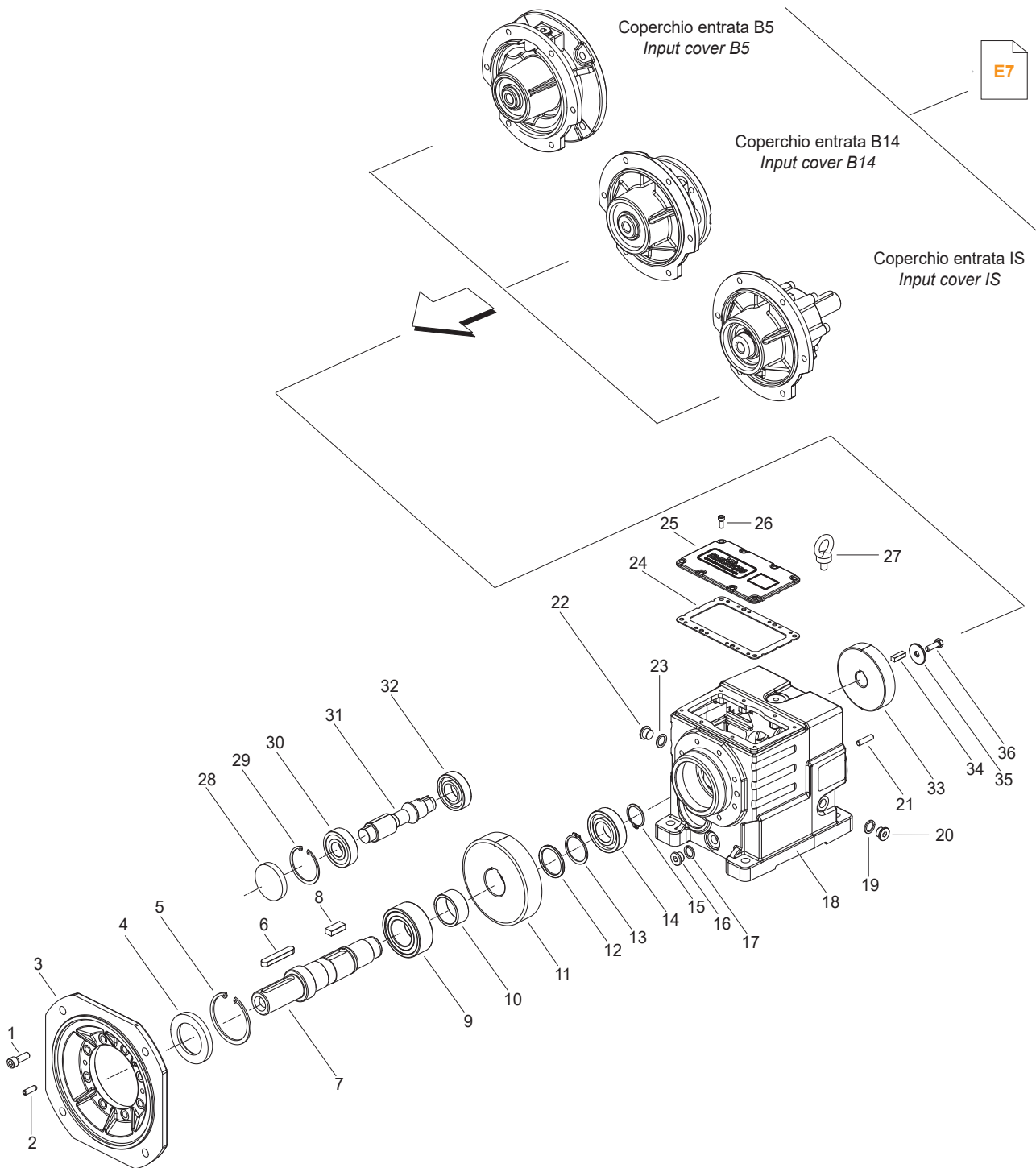


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ITB..	<i>ITB..</i>	E4
ITS..2	<i>ITS..2</i>	E5
ITS..3	<i>ITS..3</i>	E6
Coperchio entrata	<i>Input cover</i>	E7

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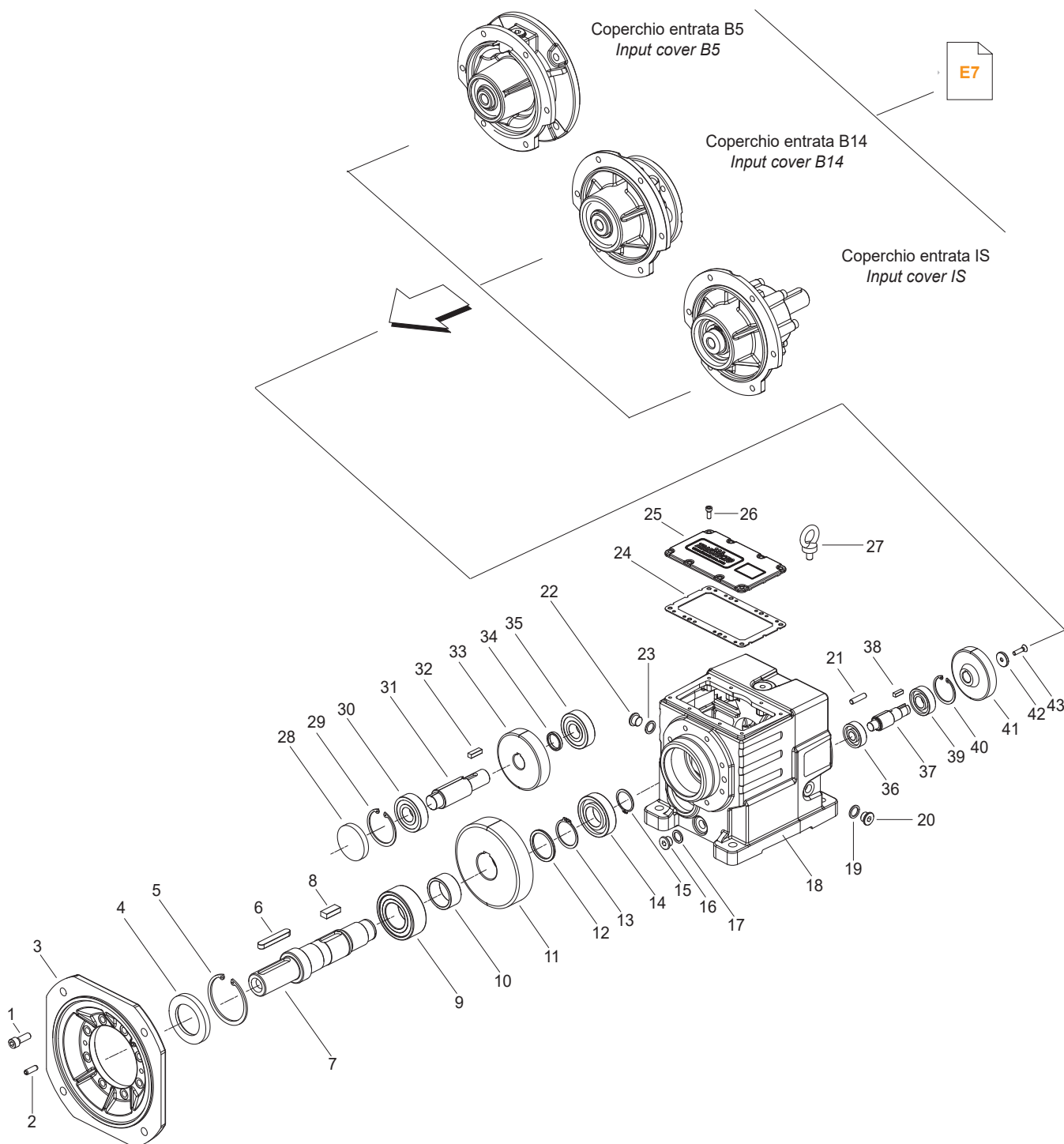
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ITH..2



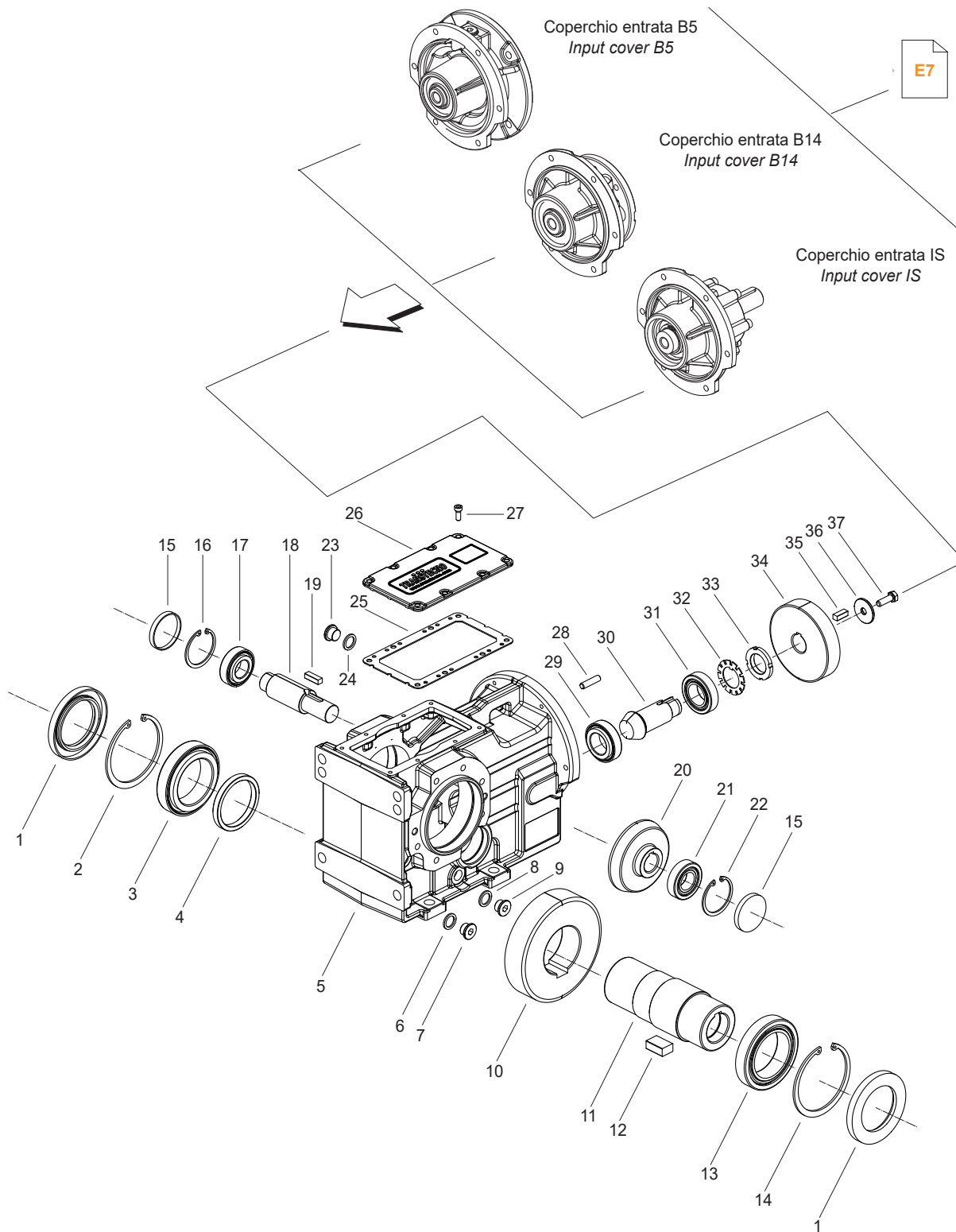
ITH	Anelli di tenuta / Oil seals	
	4	28
112	45/80/10	52x10
122	55/85/10	62x10
132	65/100/10	72x10
142	75/120/10	80x10

ITH..3



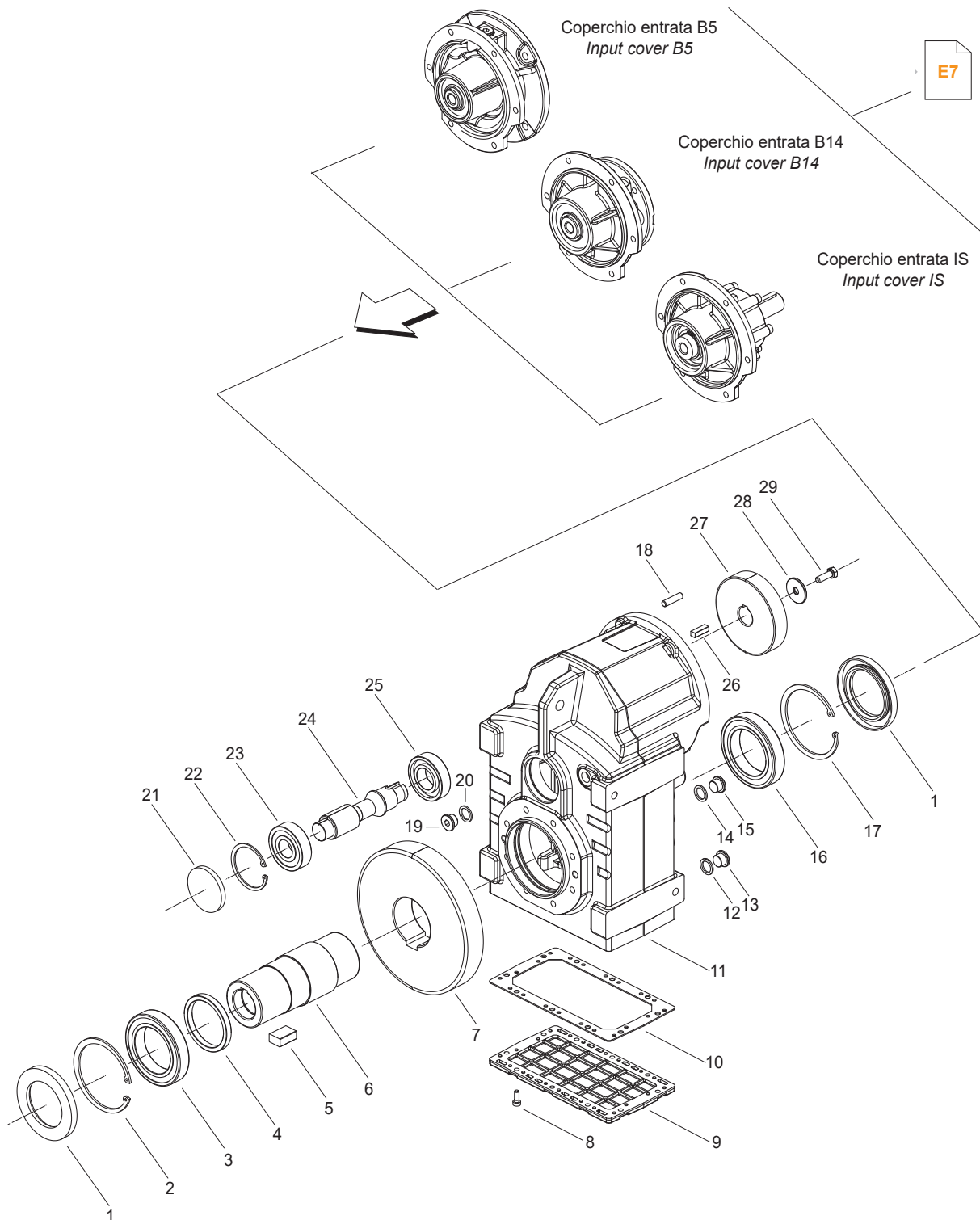
ITH	Anelli di tenuta / Oil seals	
	4	28
113	45/80/10	52x10
123	55/85/10	62x10
133	65/100/10	72x10
143	75/120/10	80x10

ITB ..



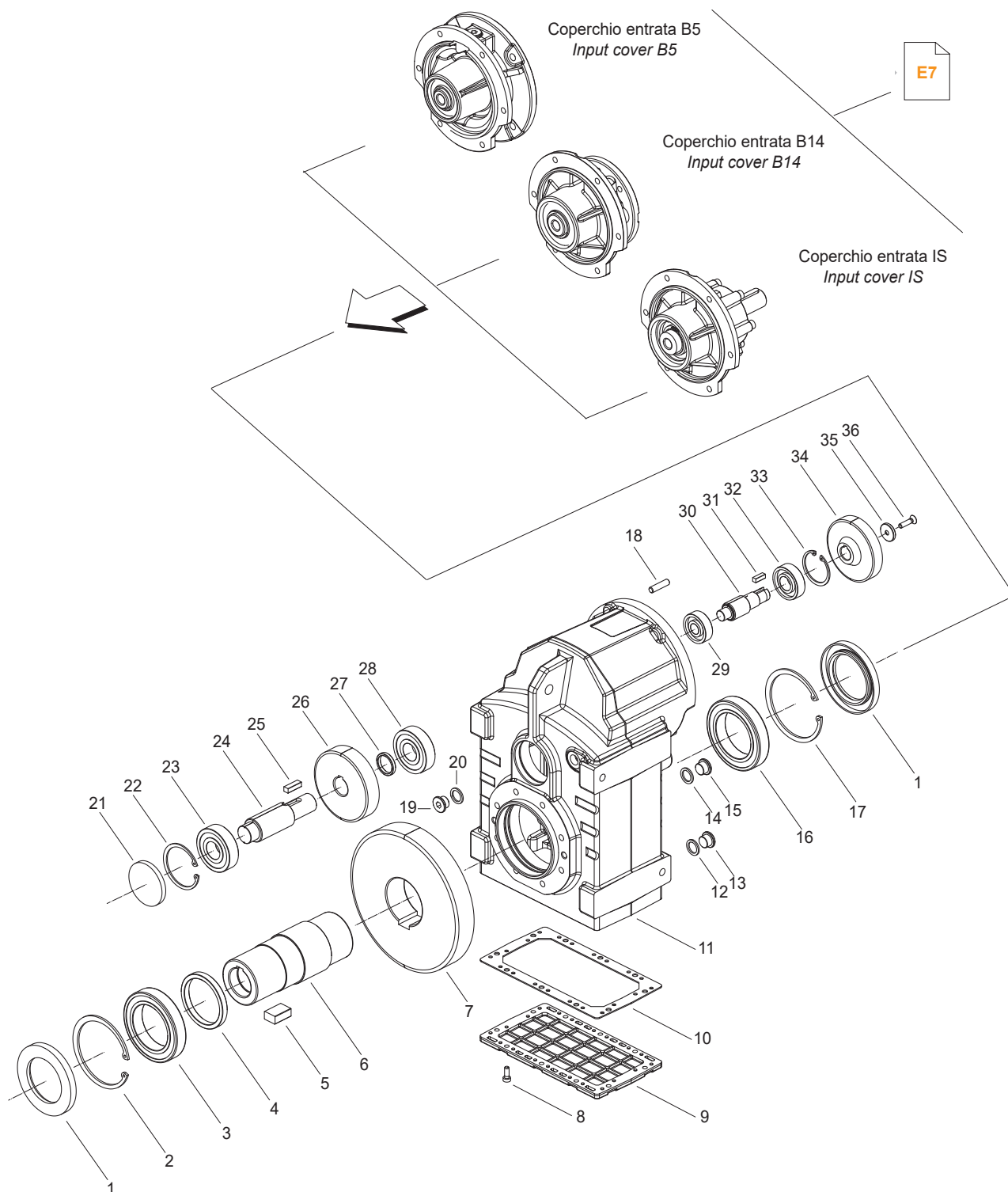
ITB	Anelli di tenuta / Oil seals	
		RCA
	1	15
423	65/100/10	52x7
433	70/110/12	72x10
443	85/130/10	80x10

ITS ..2



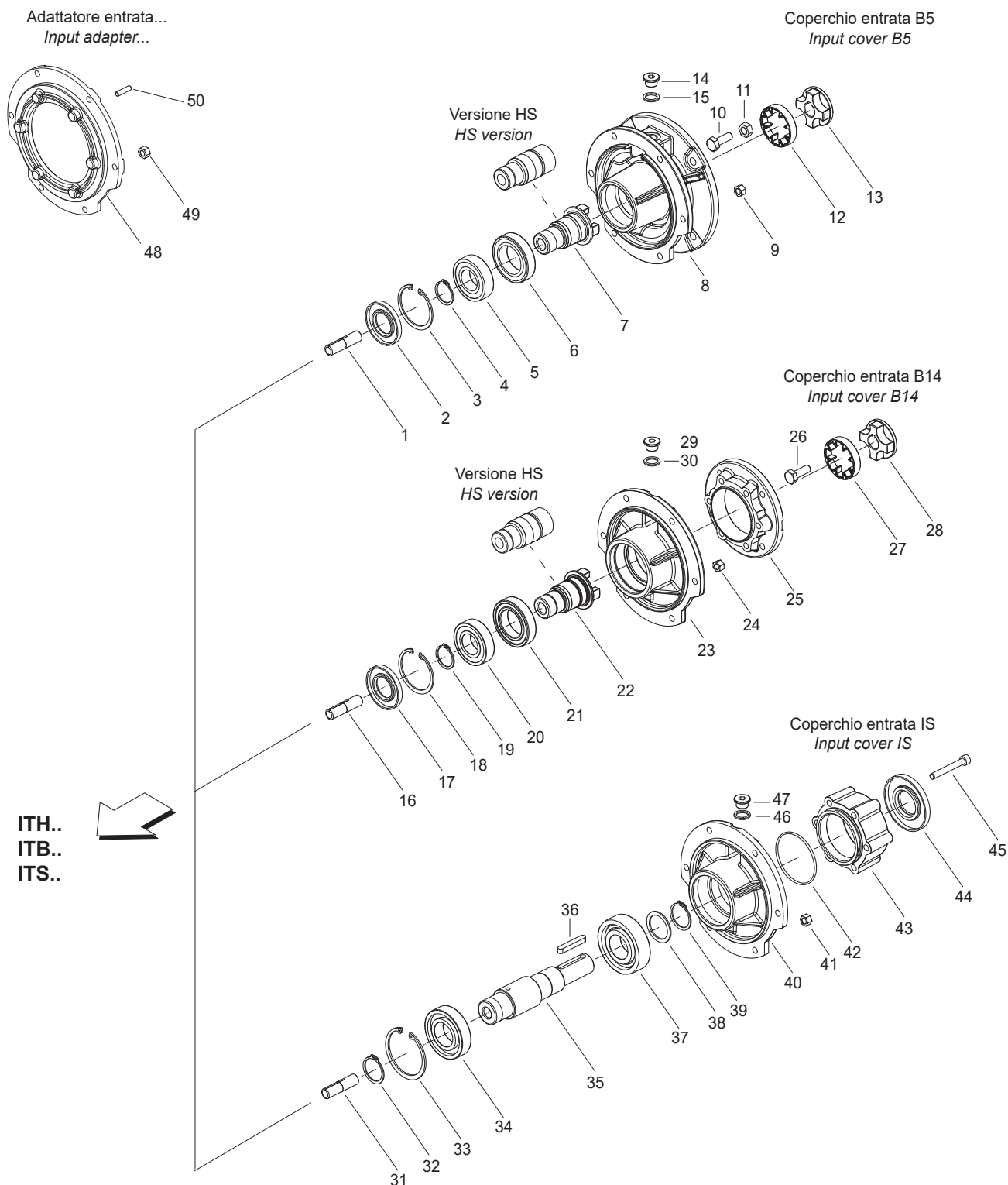
ITS	Anelli di tenuta / Oil seals	
		RCA
	1	21
922	65/100/10	62x7
932	70/110/12	62x7
942	85/130/10	72x10

ITS ..3



ITS	Anelli di tenuta / Oil seals	RCA
	1	21
923	65/100/10	62x10
933	70/110/12	62x10
943	85/130/10	72x10

COPERCHIO ENTRATA - INPUT COVER



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
132	40/80/10

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

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