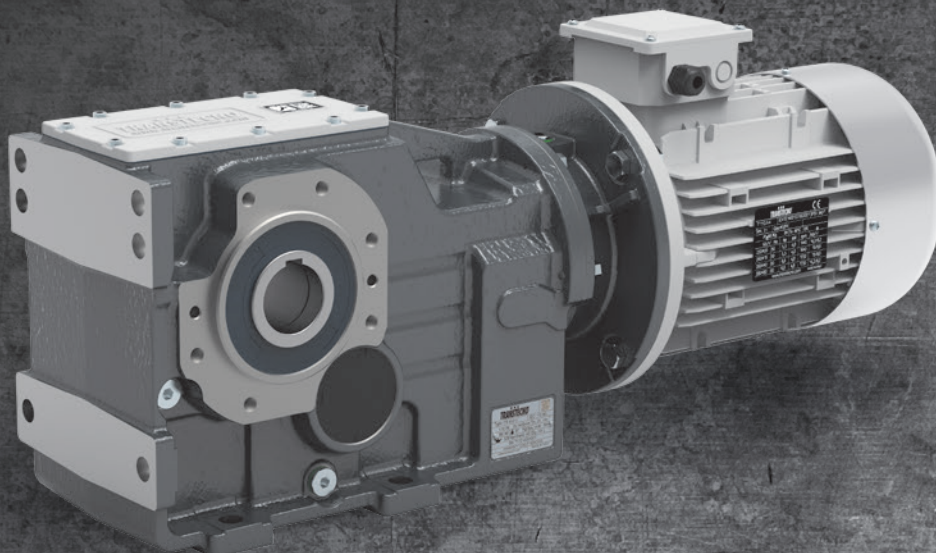
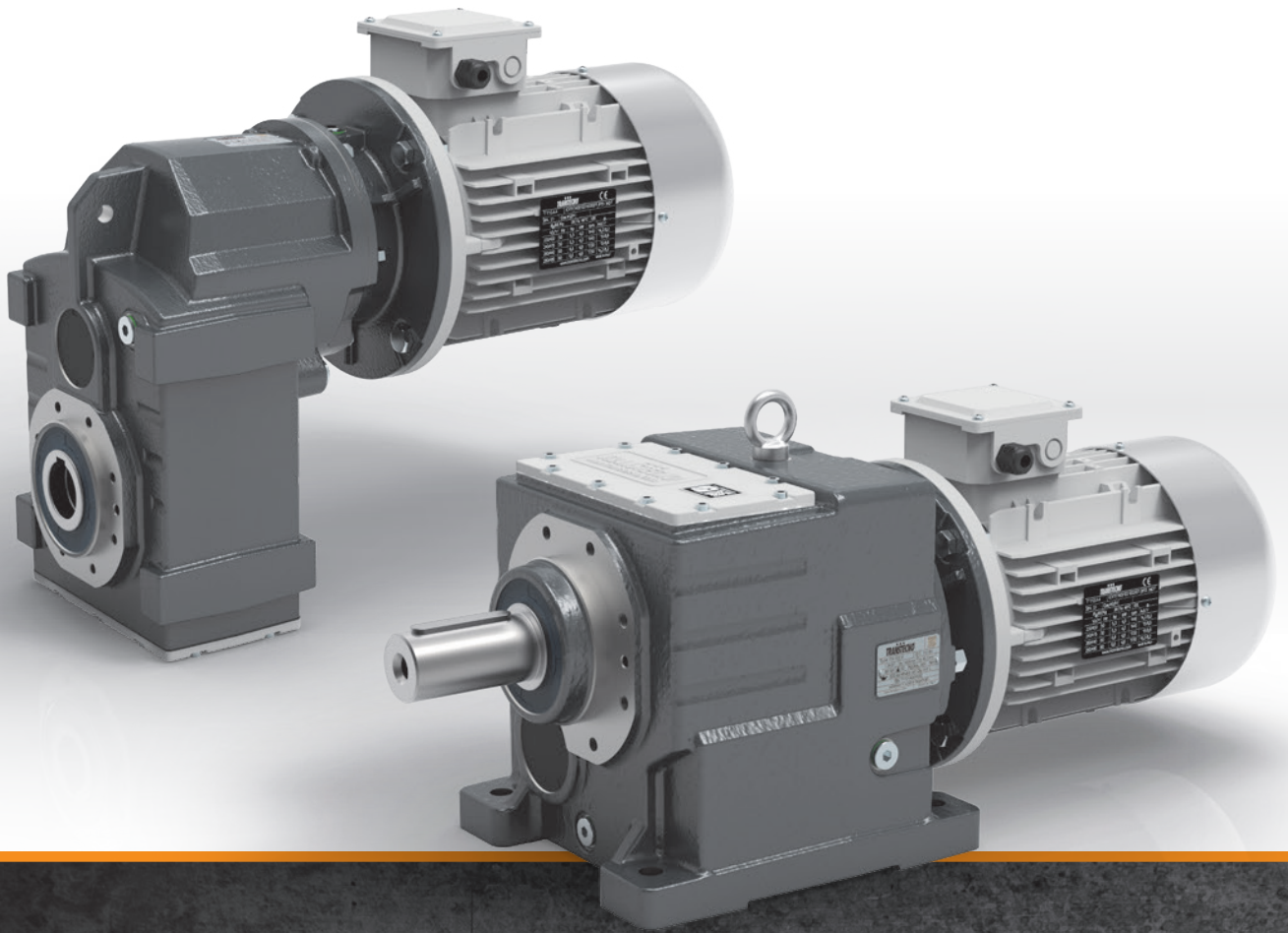

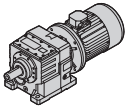

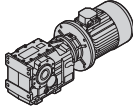

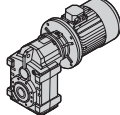


**TRANSTECNO**<sup>®</sup>  
the modular gearmotor





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Questo catalogo annulla e sostituisce ogni precedente edizione o revisione.  
Ci riserviamo inoltre il diritto di apportare modifiche senza preavviso.  
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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<sup>-1</sup>]

## Input speed

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

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

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

When different speeds are required, contact our Technical Service.

## Rapporto di riduzione

$i$

## Gear ratio

E' una grandezza adimensionale ed è in funzione del numero dei denti degli ingranaggi interni al riduttore.  
Dai dati di catalogo si può ottenere con la relazione:

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

From the data given in the catalogue, the value can be calculated using the following formula:

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

## Velocità in uscita

$n_2$  [min<sup>-1</sup>]

## 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**

**Mn<sub>2</sub> [Nm]**

**Nominal torque**

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

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

$$Mn_2 = M_2 \cdot sf$$

**Coppia Trasmessa**

**M<sub>2</sub> [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**

**P<sub>1</sub> [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.

<b>A - Uniforme</b>	$fa \leq 0.3$
<b>B - Medio</b>	$fa \leq 3$
<b>C - Forte</b>	$fa \leq 10$

<b>A - Uniform</b>	$fa \leq 0.3$
<b>B - Moderate shocks</b>	$fa \leq 3$
<b>C - Heavy shocks</b>	$fa \leq 10$

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

- Je (kgm<sup>2</sup>) momento d'inerzia esterno ridotto all'albero motore.
- Jm (kgm<sup>2</sup>) momento d'inerzia motore.

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

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

- Je (kgm<sup>2</sup>) moment of reduced external inertia at the drive-shaft
- Jm (kgm<sup>2</sup>) 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; R<sub>2</sub> [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 R<sub>2</sub> sono riferiti a carichi agenti sulla mezzeria dell'albero lento (considerando l'albero sporgente) per cui il confronto dovrà essere effettuato nelle medesime condizioni.

*Keep in mind that values R<sub>2</sub> refer to loads that act on the centerline of the output shaft (considering the shaft protrudes). As a result, the value should be compared under the same conditions.*

**Carico assiale**

**A; A<sub>2</sub> [N]**

**Axial load**

A volte, unitamente al carico radiale, può essere presente anche una forza A che agisce assialmente sull'albero uscita; in questo caso considerare che il carico assiale ammissibile A<sub>2</sub> sull'albero è da considerare:

*At times, along with the radial load, force A may be present that acts axially on the output shaft. In this case, keep in mind allowable axial load A<sub>2</sub> that can be applied on the shaft is:*

$$A_2 = R_2 \cdot 0.2$$

Nel caso in cui il valore del carico assiale A agente sull'albero risultasse superiore ad A<sub>2</sub> contattate il ns. Servizio Tecnico.

*If axial load A that acts on the shaft is greater than A<sub>2</sub>, 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 n<sub>2</sub> il numero di giri richiesti in uscita al motoriduttore.

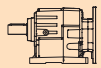

*where Rd stands for the dynamic efficiency and n<sub>2</sub> indicates the required output rpm of the gearmotor .*

## 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 <sup>-1</sup> ]	$M_2$ [Nm]	$sf$	$i$			$R_2$ [N]
<b>5.5</b>							
132s4 (1400 min <sup>-1</sup> )	<b>23</b>	2177	1.6	61.74	<b>ITH143</b>	<b>B5</b>	22500
	<b>21</b>	2353	1.5	66.73		<b>B5</b>	22500
	<b>18</b>	2801	1.2	79.43		<b>B5</b>	22500
	<b>16</b>	3028	1.2	85.85		<b>B5</b>	22500

Esempio / Example:

### Applicazione / Application:

Nastro trasportatore / Conveyor belt

$P$  : 5.5 kW  
 $sf$  : 1.6  
 $n_2$  : 23 rpm

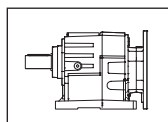
Motorizzazione scelta / Power unit selected:

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

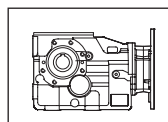
## Lubrificazione

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

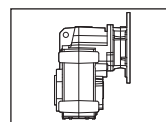
All unit sizes of ITH, ITB and ITS series are complete with a long life synthetic lubricant, viscosity 320.



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

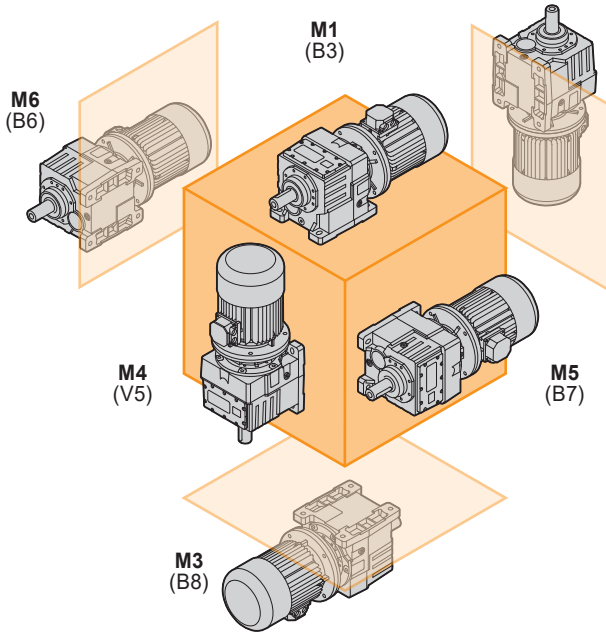
Nelle sezioni specifiche sono riportate le tabelle con le quantità indicative di lubrificante contenute e/o da immettere.

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

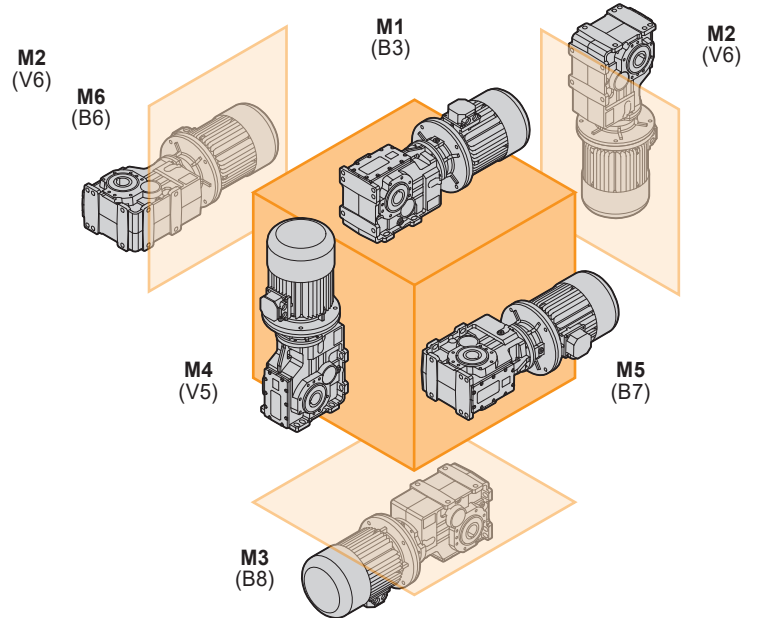
In fase di ordine è necessario specificare sempre la posizione di montaggio desiderata.

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

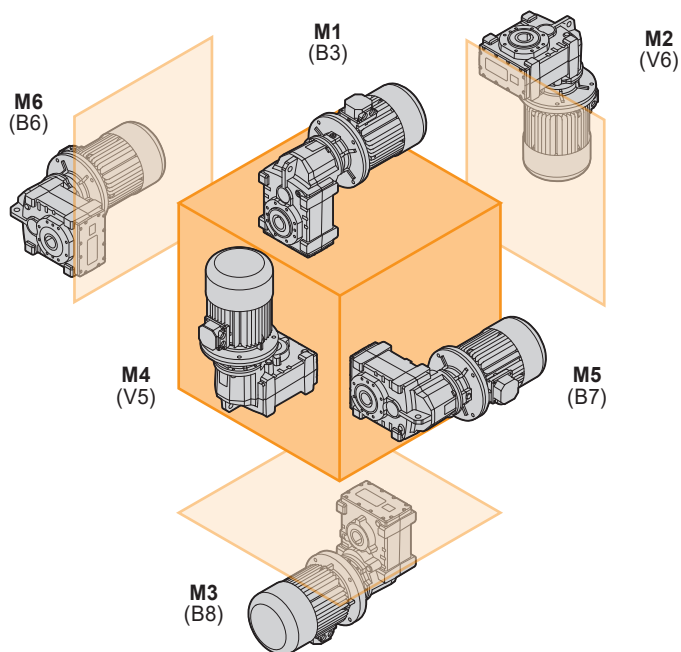
ITH



ITB

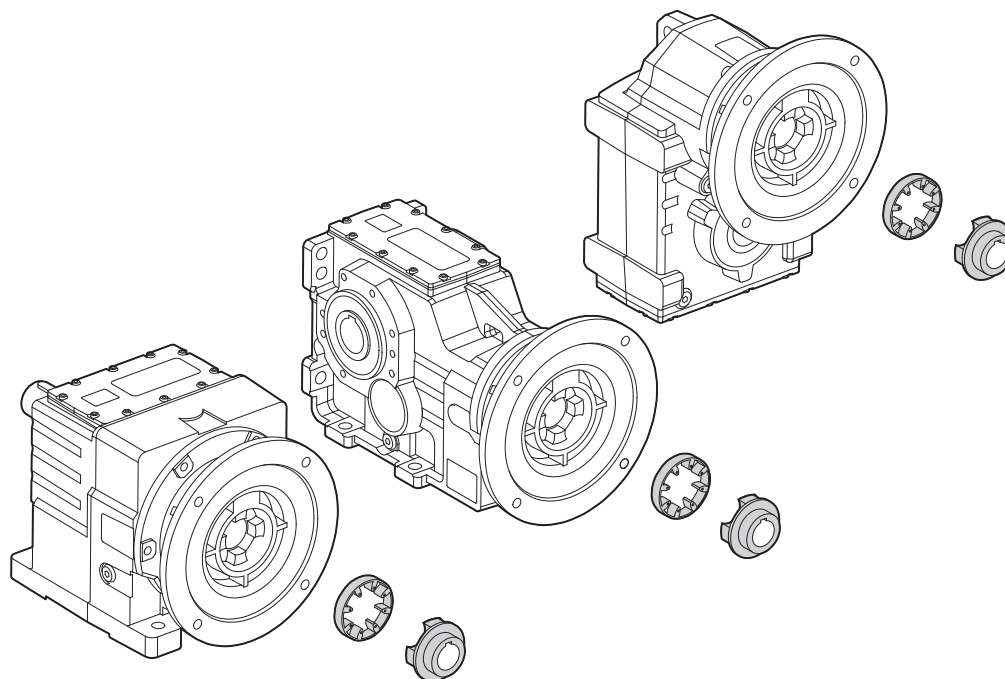


ITS



**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:*

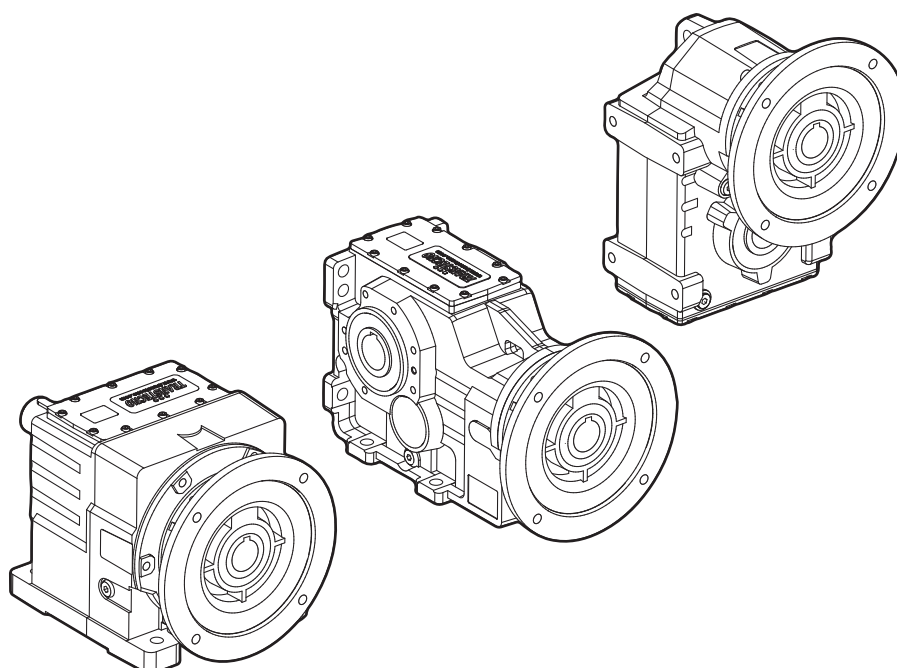
- *Increasing torsional rigidity;*
- *Reducing vibrations;*
- *Cushioning motor start up jerks;*
- *Eliminates fretting corrosion phenomenon between motor sleeve and electric motor shaft;*
- *Lowering operating temperature;*
- *Easy disassembly of the motor after long periods of use;*

**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**

<b>ITH</b>	-15°C / +50°C
<b>ITB</b>	-15°C / +50°C
<b>ITS</b>	-15°C / +50°C

**Campi di temperatura speciali / Special temperature range**

	<-15°C	>+50°C
<b>ITH</b>	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>
<b>ITB</b>	dimezzare i carichi radiali in uscita <i>halve the output radial loads</i>	
<b>ITS</b>	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

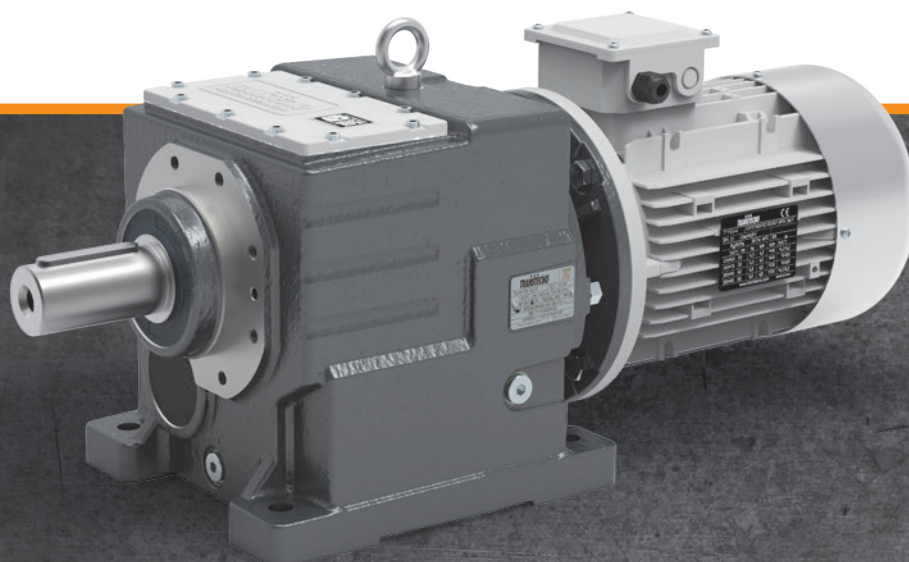
- utilizzo come moltiplicatore;
- utilizzo come argano di sollevamento;
- utilizzo in posizioni non previste a catalogo;
- utilizzo in ambiente con pressione diversa da quella atmosferica;
- utilizzo in ambiente con temperature  $<-25^{\circ}\text{C}$  o  $>+50^{\circ}\text{C}$

## Critical applications

In these cases please contact the Technical Service

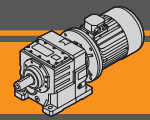
- used to increase speed ;
- used as a hoist;
- used in mounting positions not shown in the catalogue;
- use in environment pressure other than atmospheric pressure;
- use in places with temperature  $<-25^{\circ}\text{C}$  or  $>+50^{\circ}\text{C}$

Motoriduttori ad ingranaggi cilindrici  
**Helical in-line gearmotors**





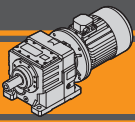




<b>Indice</b>	<b>Index</b>	Pag. Page
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# ITH

## 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.

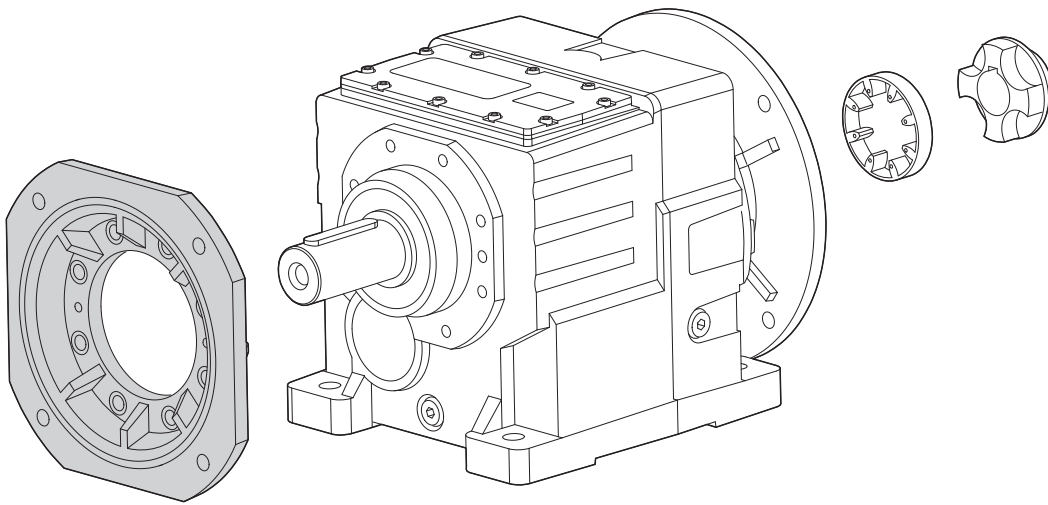
The ITH gearmotors are intended for heavy duty applications. The robust one pieces casing of the main housing and the modular design of input and output sets increase application flexibility.

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.

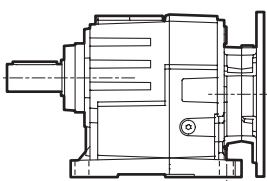
The main features of ITH range are:

- 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.

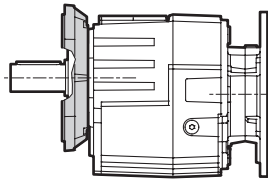


### Versioni

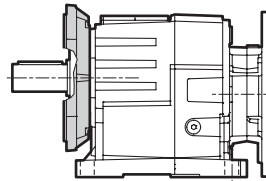
### Versions



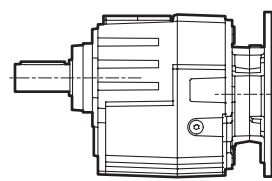
U



F...



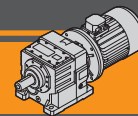
U/F...



G

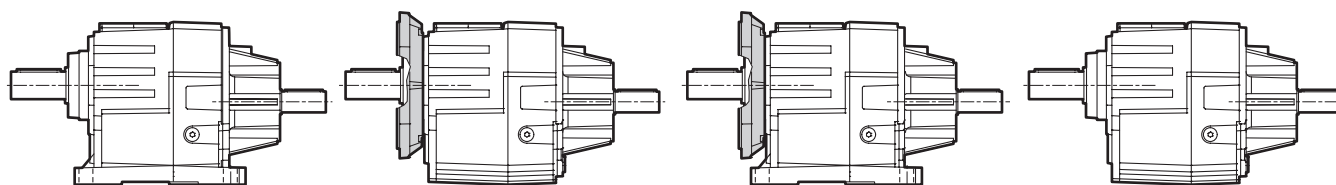
RIDUTTORE / GEARBOX

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

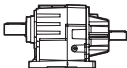
F...

U/F...

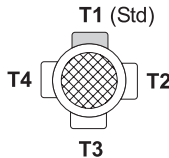
G

ITH

RIDUTTORE / GEARBOX

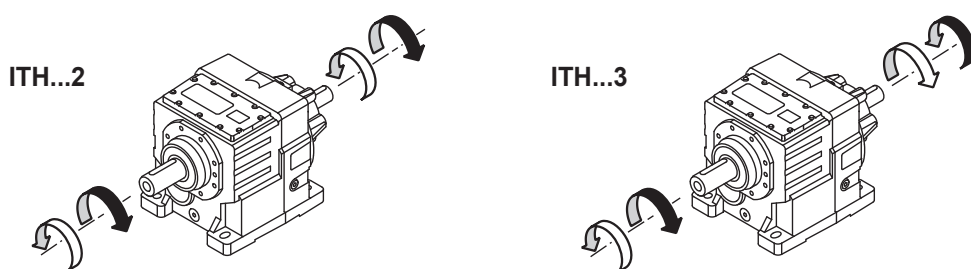
ITHIS	12	2	H	26.28	D40	M1
Tipo Type	Grandezza Size	Stadi Stages	Versione Version	Rapporto Ratio	Albero uscita Output shaft	Pos. di montaggio Mounting position
ITHIS 	11 12 13 14	2 3	U F... U/F... G	vedi tabelle see tables	vedi tabelle see tables	M1 (B3) M2 (V6) M3 (B8) M4 (V5) M5 (B7) M6 (B6)

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)  T4 T3

Sensi di rotazione

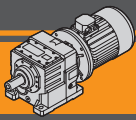
Direction of rotation



Simbologia

Symbols

$n_1$	[ $\text{min}^{-1}$ ]	Velocità in ingresso / Input speed
$n_2$	[ $\text{min}^{-1}$ ]	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



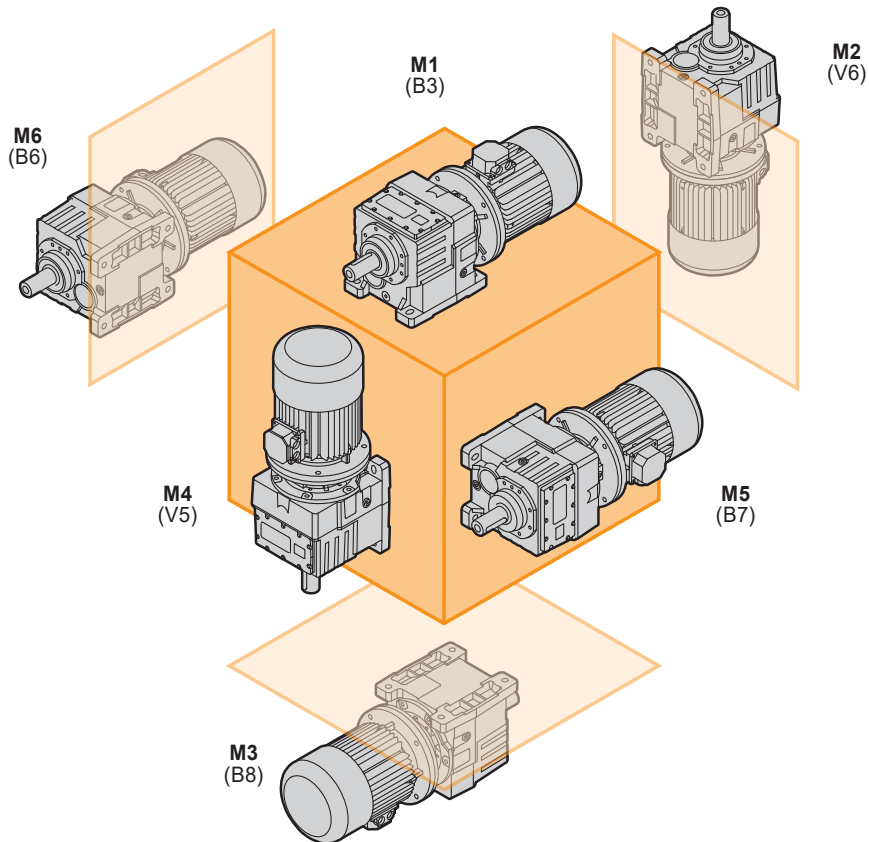
### Lubrificazione

### Lubrication

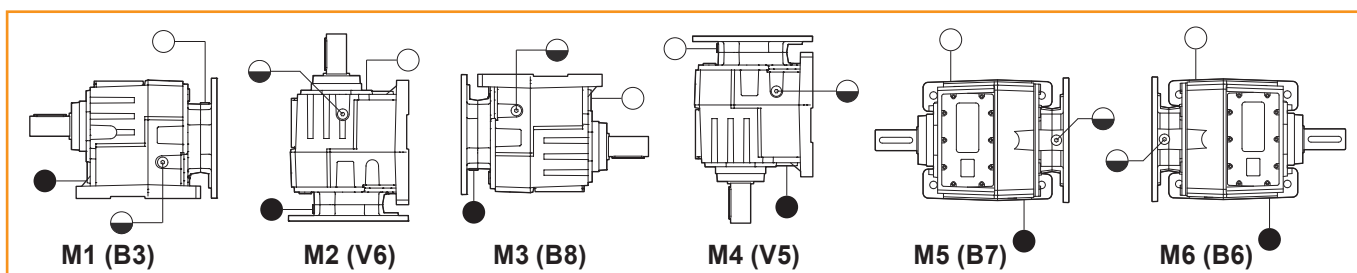
I motoriduttori della serie ITH sono forniti completi di lubrificante sintetico viscosità 320. La quantità di lubrificante dipende dalla posizione di montaggio.

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

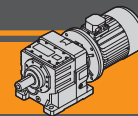
ITH..



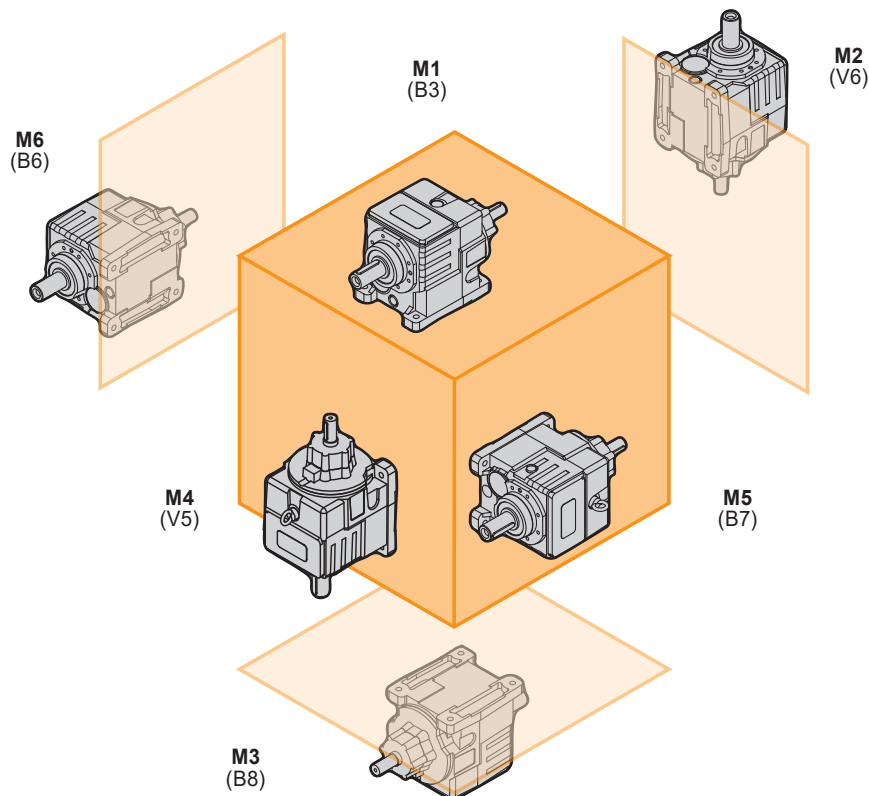
ITH	Quantità di olio (litri) / Oil quantity (litres)					
	M1 (B3)	M2 (V6)	M3 (B8)	M4 (V5)	M5 (B7)	M6 (B6)
112 113	1,1	3,9	3,7	3,4	2,4	2,4
122 123	1,7	5,0	4,3	4,3	3,1	2,9
132 133	4,5	9,5	8,3	8,6	5,9	5,7
142 143	8,1	14,5	11,5	14,4	9,4	9,0



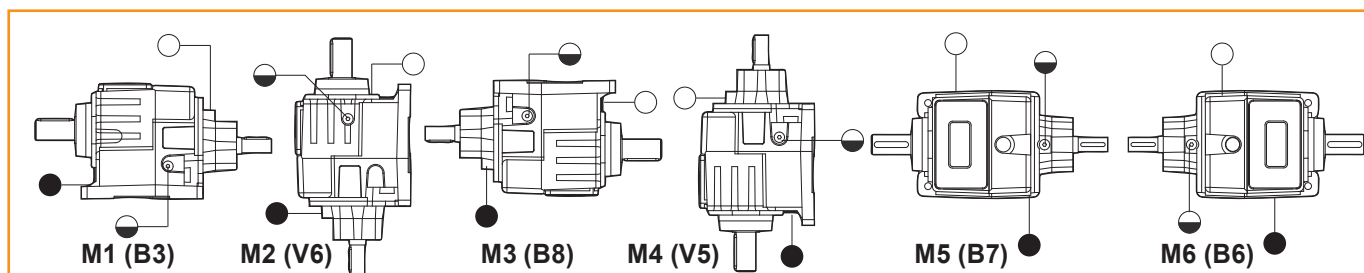
- Sfiato e tappo di riempimento / Breather and filling plug
- ◐ Livello olio / Oil level plug
- Tappo di scarico / Oil drain plug



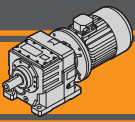
IThis..



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**

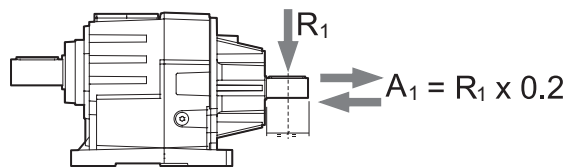
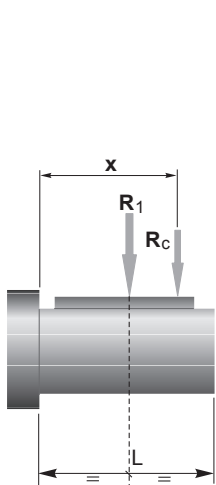
ITH 113	n <sub>1</sub> [min <sup>-1</sup> ]	Potenza motore/ Motor Power [kW]		
		1.1	1.5	1.85
R <sub>1</sub> [N]	1400	1250		
	900	1500		500
	500	1750	-	-

ITH 112 ITH 122 -123 ITH 133 - 143	n <sub>1</sub> [min <sup>-1</sup> ]	Potenza motore/ Motor Power [kW]			
		2.2	3.0	4.0	5.5
R <sub>1</sub> [N]	1400	1800			750
	900	2100		1200	-
	500	2500	-	-	-

ITH 132 ITH 142	n <sub>1</sub> [min <sup>-1</sup> ]	Potenza motore/ Motor Power [kW]					
		5.5	7.5	9.2	11.0	15.0	18.5
R <sub>1</sub> [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:



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

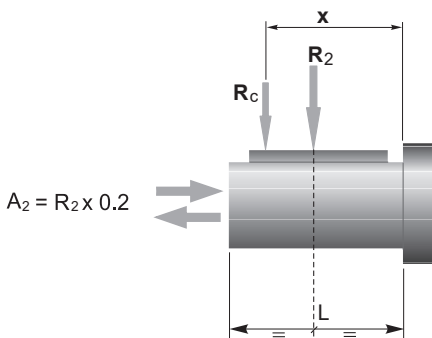
$$R \leq R_c$$

**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:

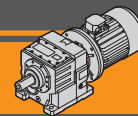


	ITH 112	ITH 113	ITH 122	ITH 123	ITH 132	ITH 133	ITH 142	ITH 143
a	184		208		247		286	
b	149		168		197		226	
R <sub>2MAX</sub>	8200		12500		18500		22500	

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

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


$$R \leq R_c$$

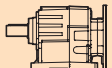


## Dati tecnici

$n_1$  1400 min<sup>-1</sup>

## Technical data

	$n_2$ [min <sup>-1</sup> ]	$Mn_2$ [Nm]	$Pn_1$ [kW]	$i$	$R_2$ [N]
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	IEC Motori applicabili IEC Motor adapters
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### ITHS 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
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	520	1.90	48.27	8200

### ITHS 112

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

### ITHS 113


31	700	2.43	44.99	8200
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

### ITHS 113

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

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

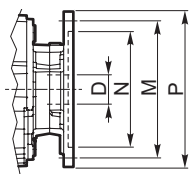
N.B.  
Highlighted areas indicate motor inputs available on each size of unit.

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

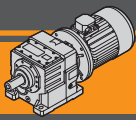
 \* = The service factor (sf) has to be selected depending on application: please contact our Technical Department.

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
<b>N</b>	110	130	130	95	180	110	230	130
<b>M</b>	130	165	165	115	215	130	265	165
<b>P</b>	160	200	200	140	250	160	300	200
<b>D</b>	14	19	24		28		38	

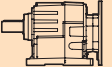


**Dati tecnici**

$n_1$  1400 min<sup>-1</sup>

**Technical data**

	$n_2$ [min <sup>-1</sup> ]	$Mn_2$ [Nm]	$Pn_1$ [kW]	$i$	$R_2$ [N]
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	IEC Motori applicabili IEC Motor adapters			
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**ITHIS 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
				*
				*
				*
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			*	*
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			*	*
			*	*
			*	*
			*	*
			*	*
		*	*	*
		*	*	*
		*	*	*
		*	*	*
		*	*	*

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

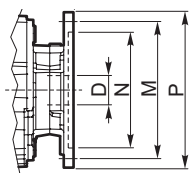
N.B.  
Highlighted areas indicate motor inputs available on each size of unit.

 \* = 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.

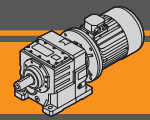
Prima di eseguire la scelta del motoriduttore riferirsi alle prestazioni elencate nelle tabelle dalla pag. B11 alla pag. B19.

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
<b>N</b>	110	130	130	95	180	110	230	130
<b>M</b>	130	165	165	115	215	130	265	165
<b>P</b>	160	200	200	140	250	160	300	200
<b>D</b>	14	19	24		28		38	


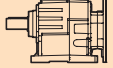




Dati tecnici

$n_1$  1400 min<sup>-1</sup>

Technical data


	$n_2$ [min <sup>-1</sup> ]	$Mn_2$ [Nm]	$Pn_1$ [kW]	$i$	$R_2$ [N]		IEC Motori applicabili IEC Motor adapters					
<b>ITHIS 132</b>						<b>ITH 132</b>						
						80 B5	90 B5/B14	100 B5/B14	112 B5/B14	132 B5/B14	160 B5	180 B5
	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							


<b>ITHIS 133</b>					
	$n_2$	$Mn_2$	$Pn_1$	$i$	$R_2$
	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

<b>ITH 133</b>					
	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.

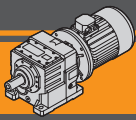
 \* = Il fattore di servizio (**sf**) deve essere scelto in funzione dell'applicazione: si prega di contattare il nostro Servizio Tecnico.

 \* = 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.

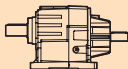
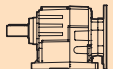
	<b>Dimensioni IEC / IEC Dimensions</b>									
	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14	160 B5	180 B5	
<b>N</b>	130	130	95	180	110	230	130	250	250	
<b>M</b>	165	165	115	215	130	265	165	300	300	
<b>P</b>	200	200	140	250	160	300	200	350	350	
<b>D</b>	19	24		28		38		42	48	



### Dati tecnici

$n_1$  1400 min<sup>-1</sup>


### Technical data


	$n_2$ [min <sup>-1</sup> ]	$Mn_2$ [Nm]	$Pn_1$ [kW]	$i$	$R_2$ [N]		IEC Motori applicabili IEC Motor adapters				
<b>ITHIS 142</b>						<b>ITH 142</b>					
						<b>100 B5/B14</b>	<b>112 B5/B14</b>	<b>132 B5/B14</b>	<b>160 B5</b>	<b>180 B5</b>	<b>200 B5</b>
	<b>228</b>	1800	44.68	6.15	14955						
	<b>190</b>	1800	37.40	7.35	16494						
	<b>158</b>	2000	34.38	8.88	17248	*	*				
	<b>144</b>	2000	31.34	9.75	18150						
	<b>135</b>	2100	30.99	10.35	18181	*	*				
	<b>120</b>	2100	27.54	11.65	19402						
	<b>110</b>	2200	26.30	12.78	19769						*
	<b>99</b>	2300	24.95	14.08	20171						*
	<b>85</b>	2300	21.42	16.40	21936						*
	<b>79</b>	2800	24.11	17.73	19026						*
	<b>69</b>	2800	21.12	20.24	20463						*
	<b>54</b>	3200	18.80	25.99	19654						*
	<b>50</b>	3200	17.39	28.10	20514					*	*
	<b>43</b>	3200	15.11	32.35	22168					*	*
	<b>38</b>	3200	13.18	37.09	22500					*	*
	<b>32</b>	3200	11.22	43.57	22500					*	*
	<b>30</b>	3200	10.32	47.35	22500						
	<b>27</b>	3200	9.44	51.76	22500						

<b>ITHIS 143</b>						<b>ITH 143</b>				
						<b>80 B5</b>	<b>90 B5/B14</b>	<b>100 B5/B14</b>	<b>112 B5/B14</b>	<b>132 B5/B14</b>
	<b>23</b>	3500	8.84	61.74	22500					
	<b>21</b>	3500	8.18	66.73	22500					
	<b>18</b>	3500	6.87	79.43	22500					
	<b>16</b>	3500	6.36	85.85	22500					
	<b>13</b>	3500	4.90	111.40	22500					*
	<b>12</b>	3500	4.53	120.42	22500					*
	<b>11</b>	3500	4.14	131.84	22500					*
	<b>9.5</b>	3500	3.70	147.51	22500					*
	<b>8.6</b>	3500	3.37	162.10	22500					*
	<b>7.9</b>	3500	3.07	177.95	22500					*
	<b>7.2</b>	3500	2.81	193.96	22500					
	<b>6.7</b>	3500	2.64	209.65	22500					
	<b>6.1</b>	3500	2.38	229.46	22500					
	<b>5.5</b>	3500	2.16	252.87	22500					

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

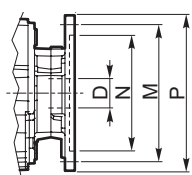
N.B.  
Highlighted areas indicate motor inputs available on each size of unit.

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

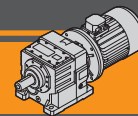
 \* = The service factor (sf) has to be selected depending on application: please contact our Technical Department.

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

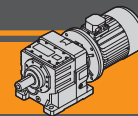


Dati tecnici

Technical data













P <sub>1</sub> [kW]	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	sf	i			R <sub>2</sub> [N]	P <sub>1</sub> [kW]	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	sf	i			R <sub>2</sub> [N]	
<b>0.25</b>								<b>0.55</b>								
71A4 (1400 min <sup>-1</sup> )	54	43	14	26.16	ITH112	B5	8200	80A4 (1400 min <sup>-1</sup> )	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	6.6	48.27		B5	8200		164	31	13	8.54		B5	5736	
	31	72	9.7	44.99	ITH113	B5	8200		155	33	13	9.06		B5	5928	
	25	89	7.9	55.27		B5	8200		136	37	11	10.28		B5	6363	
	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	49		104	6.3	28.77	B5		8200		
	7.6	297	2.4	185.20	B5	8200	44		116	5.9	32.18	B5		8200		
	6.9	323	2.2	201.58	B5	8200	39		131	5.2	36.35	B5		8200		
	6.6	340	2.1	212.17	B5	8200	34		150	4.5	41.57	B5		8200		
	6.2	363	1.9	226.55	B5	8200	29		174	3.0	48.27	B5		8200		
	5.7	395	1.8	246.59	B5	8200	31		159	4.4	44.99	ITH113		B5	8200	
	7.9	285	3.4	178.10	ITH123	B5	12500		25	195	3.6			55.27	B5	8200
	6.9	326	3.0	203.65		B5	12500		21	238	2.9			67.61	B5	8200
6.5	346	2.8	216.00	B5		12500	19	264	2.6	74.96	B5		8200			
5.9	379	2.6	236.49	B5		12500	15	323	2.2	91.70	B5		8200			
5.5	410	2.4	256.00	B5	12500	13	384	1.8	108.91	B5	8200					
5.0	449	2.2	280.29	B5	12500	10	482	1.5	136.65	B5	8200					
8.5	578	1.2	163.98	B5	8200	8.1	612	1.1	173.44	B5	8200					
8.1	612	1.1	173.44	B5	8200	7.6	653	1.1	185.20	B5	8200					
7.6	653	1.1	185.20	B5	8200	6.9	711	1.0	201.58	B5	8200					
6.9	711	1.0	201.58	B5	8200	6.6	748	0.9	212.17	B5	8200					
<b>0.37</b>								<b>0.55</b>								
71B4 (1400 min <sup>-1</sup> )	39	88	7.7	36.35	ITH112	B5	8200	53	95	10	26.28	ITH122	B5	12500		
	34	101	6.8	41.57		B5	8200	48	106	9.3	29.40		B5	12500		
	29	117	4.4	48.27		B5	8200	43	116	8.4	32.31		B5	12500		
	31	107	6.6	44.99	ITH113	B5	8200	39	128	7.7	35.47		B5	12500		
	25	131	5.3	55.27		B5	8200	34	150	6.5	41.78		B5	12500		
	21	160	4.4	67.61		B5	8200	31	165	5.9	45.73		B5	12500		
	19	178	3.9	74.96		B5	8200	28	182	5.4	50.40	B5	12500			
	15	218	3.2	91.70		B5	8200	25	197	5.0	56.00	ITH123	B5	12500		
	13	258	2.7	108.91		B5	8200	23	216	4.5	61.31		B5	12500		
	10	324	2.2	136.65		B5	8200	20	249	3.9	70.53		B5	12500		
	8.5	389	1.8	163.98		B5	8200	17	286	3.4	81.00		B5	12500		
	8.1	411	1.7	173.44	B5	8200	16	313	3.1	88.68	B5		12500			
	7.6	439	1.6	185.20	B5	8200	13	371	2.6	105.23	B5		12500			
	6.9	478	1.5	201.58	B5	8200	12	406	2.4	115.21	B5		12500			
	6.6	503	1.4	212.17	B5	8200	11	454	2.2	128.73	B5		12500			
	6.2	537	1.3	226.55	B5	8200	9.7	508	1.9	144.00	B5	12500				
	5.7	585	1.2	246.59	B5	8200	8.9	556	1.8	157.66	B5	12500				
	7.9	423	2.3	178.10	ITH123	B5	12500	7.9	628	1.6	178.10	B5	12500			
	6.9	483	2.0	203.65		B5	12500	6.9	718	1.4	203.65	B5	12500			
	6.5	512	1.9	216.00		B5	12500	6.5	762	1.3	216.00	B5	12500			
5.9	561	1.7	236.49	B5		12500	5.9	834	1.2	236.49	B5	12500				
5.5	607	1.6	256.00	B5		12500	5.5	903	1.1	256.00	B5	12500				
5.0	665	1.5	280.29	B5		12500	5.0	988	1.0	280.29	B5	12500				

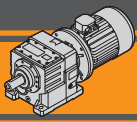








### Dati tecnici

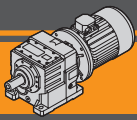
### Technical data

$P_1$ [kW]	$n_2$ [min <sup>-1</sup> ]	$M_2$ [Nm]	sf	i			$R_2$ [N]	$P_1$ [kW]	$n_2$ [min <sup>-1</sup> ]	$M_2$ [Nm]	sf	i			$R_2$ [N]						
<b>1.1</b>								<b>1.1</b>													
90S4 (1400 min <sup>-1</sup> )	<b>260</b>	39	9.0	5.38	ITH112		4354	90S4 (1400 min <sup>-1</sup> )	<b>23</b>	430	4.4	60.92	ITH133		18500						
	<b>216</b>	47	7.5	6.47			<b>B5/14</b>	4825		<b>22</b>	457	4.2			64.74	<b>B5/14</b>	18500				
	<b>178</b>	57	7.1	7.88			<b>B5/14</b>	5374		<b>20</b>	500	3.8			70.88	<b>B5/14</b>	18500				
	<b>164</b>	62	6.5	8.54			<b>B5/14</b>	5617		<b>18</b>	553	3.4			78.38	<b>B5/14</b>	18500				
	<b>155</b>	65	6.4	9.06			<b>B5/14</b>	5798		<b>16</b>	615	3.1			87.14	<b>B5/14</b>	18500				
	<b>136</b>	74	5.7	10.28			<b>B5/14</b>	6204		<b>15</b>	675	2.8			95.67	<b>B5/14</b>	18500				
	<b>123</b>	82	5.8	11.39			<b>B5/14</b>	6550		<b>13</b>	775	2.5			109.93	<b>B5/14</b>	18500				
	<b>112</b>	90	5.3	12.52			<b>B5/14</b>	6881		<b>12</b>	849	2.2			120.36	<b>B5/14</b>	18500				
	<b>95</b>	107	4.7	14.80			<b>B5/14</b>	7500		<b>10</b>	950	2.0			134.66	<b>B5/14</b>	18500				
	<b>77</b>	130	4.1	18.10			<b>B5/14</b>	8200		<b>9.5</b>	1044	1.8			147.98	<b>B5/14</b>	18500				
	<b>69</b>	146	3.6	20.25			<b>B5/14</b>	8200		<b>8.6</b>	1146	1.7			162.45	<b>B5/14</b>	18500				
	<b>60</b>	169	3.5	23.52			<b>B5/14</b>	8200		<b>7.3</b>	1350	1.4			191.39	<b>B5/14</b>	18500				
	<b>49</b>	207	3.1	28.77			<b>B5/14</b>	8200		<b>6.7</b>	1478	1.3			209.48	<b>B5/14</b>	18500				
	<b>44</b>	232	2.9	32.18			<b>B5/14</b>	8200		<b>6.1</b>	1628	1.2			230.85	<b>B5/14</b>	18500				
	<b>39</b>	262	2.6	36.35			<b>B5/14</b>	8200													
	<b>34</b>	299	2.3	41.57			<b>B5/14</b>	8200													
	<b>29</b>	348	1.5	48.27			<b>B5/14</b>	8200													
	<b>31</b>	317	2.2	44.99			ITH113		8200		<b>23</b>	435			8.0	61.74	ITH143		22500		
	<b>25</b>	390	1.8	55.27					<b>B5/14</b>	8200		<b>21</b>			471	7.4			66.73	<b>B5/14</b>	22500
	<b>21</b>	477	1.5	67.61					<b>B5/14</b>	8200		<b>18</b>			560	6.2			79.43	<b>B5/14</b>	22500
	<b>19</b>	529	1.3	74.96					<b>B5/14</b>	8200		<b>16</b>			606	5.8			85.85	<b>B5/14</b>	22500
	<b>15</b>	647	1.1	91.70					<b>B5/14</b>	8200		<b>13</b>			786	4.5			111.40	<b>B5/14</b>	22500
	<b>13</b>	768	0.9	108.91					<b>B5/14</b>	8200		<b>12</b>			849	4.1			120.42	<b>B5/14</b>	22500
									<b>B5/14</b>	8200		<b>11</b>			930	3.8			131.84	<b>B5/14</b>	22500
	<b>159</b>	64	10	8.82			ITH122		8152		<b>9.5</b>	1040			3.4	147.51			<b>B5/14</b>	22500	
	<b>139</b>	73	10	10.08					<b>B5/14</b>	8778		<b>8.6</b>			1143	3.1			162.10	<b>B5/14</b>	22500
	<b>123</b>	82	9.2	11.35					<b>B5/14</b>	9371		<b>7.9</b>			1255	2.8			177.95	<b>B5/14</b>	22500
	<b>105</b>	96	8.9	13.30					<b>B5/14</b>	10218		<b>7.2</b>			1368	2.6			193.96	<b>B5/14</b>	22500
	<b>88</b>	115	7.4	15.92					<b>B5/14</b>	11257		<b>6.7</b>			1479	2.4			209.65	<b>B5/14</b>	22500
	<b>82</b>	123	6.9	17.11					<b>B5/14</b>	11698		<b>6.1</b>			1618	2.2			229.46	<b>B5/14</b>	22500
	<b>72</b>	140	6.1	19.50					<b>B5/14</b>	12500		<b>5.5</b>			1784	2.0			252.87	<b>B5/14</b>	22500
	<b>65</b>	154	5.8	21.43					<b>B5/14</b>	12500											
	<b>58</b>	173	5.7	24.00					<b>B5/14</b>	12500											
	<b>53</b>	189	5.2	26.28					<b>B5/14</b>	12500											
	<b>48</b>	212	4.6	29.40					<b>B5/14</b>	12500											
	<b>43</b>	233	4.2	32.31	<b>B5/14</b>	12500															
	<b>39</b>	255	3.8	35.47	<b>B5/14</b>	12500															
	<b>34</b>	301	3.3	41.78	<b>B5/14</b>	12500															
	<b>31</b>	329	3.0	45.73	<b>B5/14</b>	12500															
	<b>28</b>	363	2.7	50.40	<b>B5/14</b>	12500															
	<b>25</b>	395	2.5	56.00	ITH123		12500		<b>31</b>	433	1.6	44.99	ITH113		8200						
	<b>23</b>	432	2.3	61.31			<b>B5/14</b>	12500		<b>25</b>	532	1.3			55.27	<b>B5/14</b>	8200				
	<b>20</b>	497	2.0	70.53			<b>B5/14</b>	12500		<b>21</b>	650	1.1			67.61	<b>B5/14</b>	8200				
	<b>17</b>	571	1.7	81.00			<b>B5/14</b>	12500		<b>19</b>	721	1.0			74.96	<b>B5/14</b>	8200				
	<b>16</b>	626	1.6	88.68			<b>B5/14</b>	12500													
	<b>13</b>	742	1.3	105.23			<b>B5/14</b>	12500													
	<b>12</b>	813	1.2	115.21			<b>B5/14</b>	12500													
	<b>11</b>	908	1.1	128.73			<b>B5/14</b>	12500													
	<b>9.7</b>	1016	1.0	144.00			<b>B5/14</b>	12500													
	<b>8.9</b>	1112	0.9	157.66			<b>B5/14</b>	12500													
	<b>55</b>	185	8.7	25.65			ITH132		18500												
	<b>51</b>	198	8.6	27.48	<b>B5/14</b>	18500															
	<b>46</b>	219	7.7	30.46	<b>B5/14</b>	18500															
	<b>40</b>	249	7.6	34.61	<b>B5/14</b>	18500															
	<b>37</b>	272	7.0	37.71	<b>B5/14</b>	18500															
	<b>33</b>	301	6.3	41.80	<b>B5/14</b>	18500															
	<b>31</b>	328	5.8	45.60	<b>B5/14</b>	18500															
	<b>28</b>	359	5.3	49.88	<b>B5/14</b>	18500															

**ITH****Motoriduttori ad ingranaggi cilindrici**  
**Helical in-line gearmotors****Dati tecnici****Technical data**

$P_1$ [kW]	$n_2$ [min <sup>-1</sup> ]	$M_2$ [Nm]	sf	i			$R_2$ [N]	$P_1$ [kW]	$n_2$ [min <sup>-1</sup> ]	$M_2$ [Nm]	sf	i			$R_2$ [N]			
<b>1.5</b>								<b>1.5</b>										
90L4 (1400 min <sup>-1</sup> )	271	50	11	5.17	ITH122	B5/14	6002	90L4 (1400 min <sup>-1</sup> )	23	594	5.9	61.74	ITH143	B5/14	22500			
	209	66	8.4	6.69		B5/14	6929		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		90LB4 (1400 min <sup>-1</sup> )	260	65	5.4		5.38	ITH112	B5/14	4276	
	23	590	1.7	61.31		B5/14	12500		216	78	4.5	6.47		B5/14		4721		
	20	678	1.4	70.53		B5/14	12500		178	95	4.2	7.88		B5/14		5232		
	17	779	1.3	81.00		B5/14	12500		164	103	3.9	8.54		B5/14		5455		
	16	853	1.1	88.68		B5/14	12500		155	110	3.8	9.06		B5/14		5620		
	13	1012	1.0	105.23		B5/14	12500		136	125	3.4	10.28		B5/14		5987		
	155	89	10	9.03	ITH132	B5/14	18500		123	138	3.5	11.39		B5/14		6295		
	136	101	9.4	10.30		B5/14	18500		112	152	3.2	12.52		B5/14		6584		
	127	108	8.8	11.01		B5/14	18500		95	179	2.8	14.80		B5/14		7113		
	113	122	9.9	12.39		B5/14	18500		77	219	2.4	18.10		B5/14		7761		
	95	145	8.3	14.80		B5/14	18500		69	245	2.2	20.25		B5/14		8120		
	93	148	8.8	15.11		B5/14	18500		60	285	2.1	23.52		B5/14		8200		
	75	184	8.2	18.69		B5/14	18500		49	349	1.9	28.77		B5/14		8200		
	69	199	8.0	20.31		B5/14	18500		44	390	1.7	32.18		B5/14		8200		
	55	252	6.4	25.65		B5/14	18500		39	440	1.5	36.35		B5/14		8200		
	51	270	6.3	27.48		B5/14	18500		34	504	1.4	41.57		B5/14		8200		
	46	299	5.7	30.46		B5/14	18500		31	534	1.3	44.99		ITH113		B5/14	8200	
	40	340	5.6	34.61		B5/14	18500		25	656	1.1	55.27				B5/14	8200	
	37	370	5.1	37.71	B5/14	18500	271		61	9.0	5.17	ITH122		B5/14		5973		
33	411	4.6	41.80	B5/14	18500	209	81	6.8	6.69	B5/14	6884							
31	448	4.2	45.60	B5/14	18500	180	94	6.4	7.79	B5/14	7485							
28	490	3.9	49.88	B5/14	18500	159	107	6.1	8.82	B5/14	8004							
23	586	3.2	60.92	ITH133	B5/14	18500	139	122	6.1	10.08	B5/14		8595					
22	623	3.1	64.74		B5/14	18500	123	137	5.5	11.35	B5/14		9150					
20	682	2.8	70.88		B5/14	18500	105	161	5.3	13.30	B5/14		9935					
18	754	2.5	78.38		B5/14	18500	88	193	4.4	15.92	B5/14		10880					
16	838	2.3	87.14		B5/14	18500	82	207	4.1	17.11	B5/14		11276					
15	920	2.1	95.67		B5/14	18500	72	236	3.6	19.50	B5/14		12012					
13	1057	1.8	109.93		B5/14	18500	65	260	3.5	21.43	B5/14		12500					
12	1158	1.6	120.36		B5/14	18500	58	291	3.4	24.00	B5/14		12500					
10	1295	1.5	134.66		B5/14	18500	53	318	3.1	26.28	B5/14	12500						
9.5	1423	1.3	147.98		B5/14	18500	48	356	2.8	29.40	B5/14	12500						
8.6	1562	1.2	162.45		B5/14	18500	43	391	2.5	32.31	B5/14	12500						
7.3	1841	1.0	191.39		B5/14	18500	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						
											B5/14	12500						





### Dati tecnici

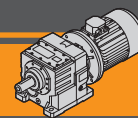
### Technical data

$P_1$ [kW]	$n_2$ [min <sup>-1</sup> ]	$M_2$ [Nm]	sf	i			$R_2$ [N]	$P_1$ [kW]	$n_2$ [min <sup>-1</sup> ]	$M_2$ [Nm]	sf	i			$R_2$ [N]	
<b>2.2</b>								<b>3.0</b>								
100LA4 (1400 min <sup>-1</sup> )	23	871	4.0	61.74	ITH143	B5/14	22500	100LB4 (1400 min <sup>-1</sup> )	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			
<b>3.0</b>								<b>4.0</b>								
100LB4 (1400 min <sup>-1</sup> )	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
	49	565	1.2	28.77		B5/14	7459		43	636	5.0	32.35			B5/14	22500
	44	632	1.1	32.18		B5/14	7402		32	856	3.7	43.57			B5/14	22500
									30	930	3.4	47.35			B5/14	22500
									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
	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	112M4 (1400 min <sup>-1</sup> )	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	
									60	616	1.0	23.52		B5/14	6277	













Dati tecnici

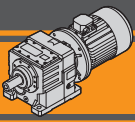
Technical data

P <sub>1</sub> [kW]	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	sf	i			R <sub>2</sub> [N]	P <sub>1</sub> [kW]	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	sf	i			R <sub>2</sub> [N]			
<b>11.0</b>								<b>22.0</b>										
160M4 (1400 min <sup>-1</sup> )	<b>228</b>	434	4.1	6.15	ITH142	B5	20871	180L4 (1400 min <sup>-1</sup> )	<b>278</b>	710	1.2	5.03	ITH132	B5	10941			
	<b>190</b>	529	3.4	7.35			<b>B5</b>		22500	<b>230</b>	878	1.0			6.09	<b>B5</b>	11394	
	<b>158</b>	640	3.1	8.88			<b>B5</b>		22500	ITH142	<b>228</b>	868			2.1	6.15	<b>B5</b>	18992
	<b>144</b>	702	2.8	9.75			<b>B5</b>		22500		<b>190</b>	1059			1.7	7.35	<b>B5</b>	20034
	<b>135</b>	745	2.8	10.35			<b>B5</b>		22500		<b>158</b>	1280			1.6	8.88	<b>B5</b>	21065
	<b>120</b>	839	2.5	11.65			<b>B5</b>		22500		<b>144</b>	1404			1.4	9.75	<b>B5</b>	21474
	<b>110</b>	920	2.4	12.78			<b>B5</b>		22500		<b>135</b>	1491			1.4	10.35	<b>B5</b>	21693
	<b>99</b>	1014	2.3	14.08			<b>B5</b>		22500		<b>120</b>	1678			1.3	11.65	<b>B5</b>	22000
	<b>85</b>	1181	1.9	16.40			<b>B5</b>		22500		<b>110</b>	1840			1.2	12.78	<b>B5</b>	22097
	<b>79</b>	1277	2.2	17.73			<b>B5</b>		22500		<b>99</b>	2028			1.1	14.08	<b>B5</b>	22028
	<b>69</b>	1458	1.9	20.24			<b>B5</b>		22500		<b>85</b>	2362			1.0	16.40	<b>B5</b>	21475
	<b>54</b>	1872	1.7	25.99			<b>B5</b>		22500		<b>79</b>	2555			1.1	17.73	<b>B5</b>	20928
	<b>50</b>	2024	1.6	28.10			<b>B5</b>		22500	<b>69</b>	2916	1.0			20.24	<b>B5</b>	19494	
	<b>43</b>	2330	1.4	32.35			<b>B5</b>		22500									
<b>38</b>	2671	1.2	37.09	<b>B5</b>	22500													
<b>32</b>	3139	1.0	43.57	<b>B5</b>	22500													

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

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

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



**ITH**

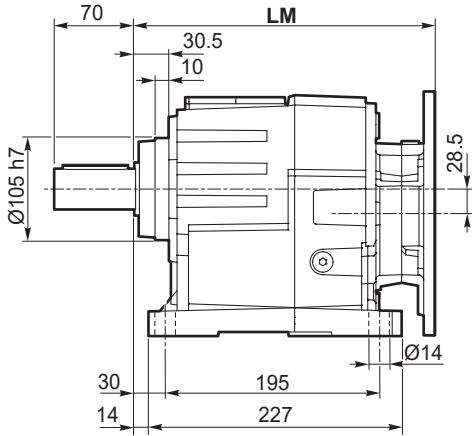
Motoriduttori ad ingranaggi cilindrici  
Helical in-line gearmotors

Dimensioni

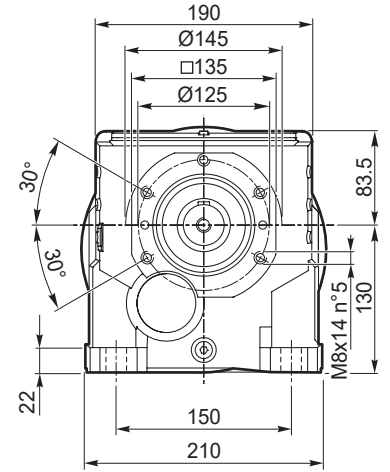
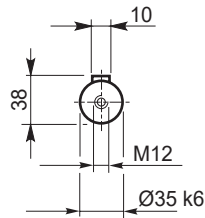
Dimensions

**ITH 112 - ITH 113**

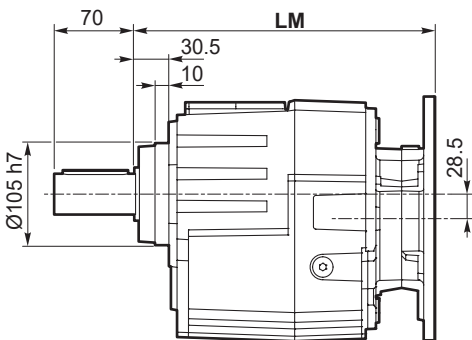
**ITH 112 U**  
**ITH 113 U**



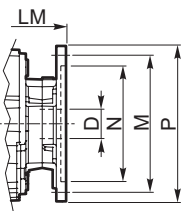
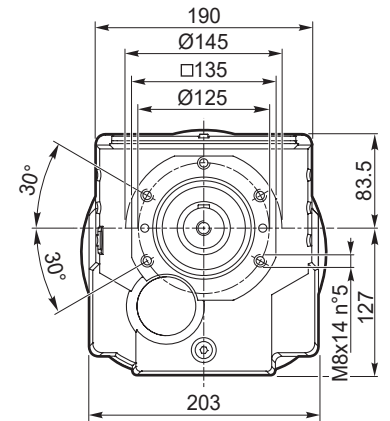
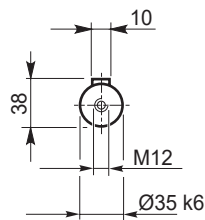
Albero uscita  
Output shaft



**ITH 112 G**  
**ITH 113 G**

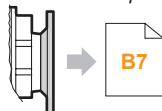


Albero uscita  
Output shaft

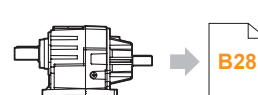


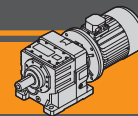
Dimensioni IEC / IEC Dimensions								
	71 B5	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14
<b>LM</b>	289			293,5	293	293,5	314	
<b>N</b>	110	130	130	95	180	110	230	130
<b>M</b>	130	165	165	115	215	130	265	165
<b>P</b>	160	200	200	140	250	160	300	200
<b>D</b>	14	19	24		28		38	

IEC Motori applicabili  
IEC Motor adapters



ITHIS 112...  
ITHIS 113...



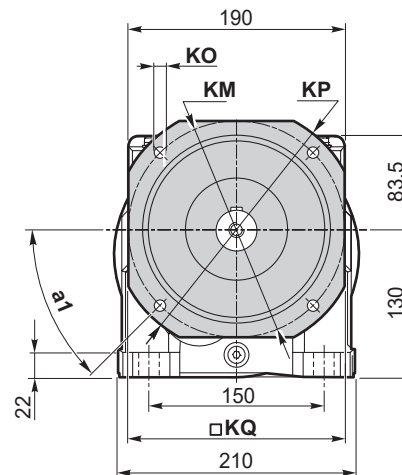
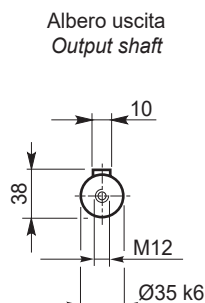
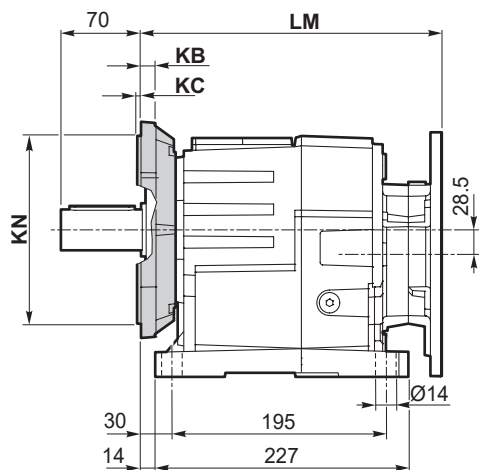


Dimensioni

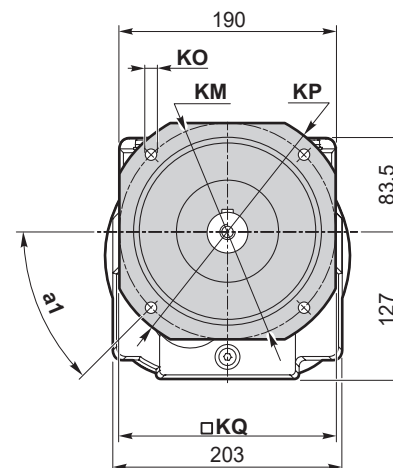
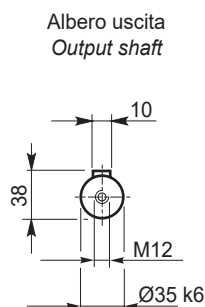
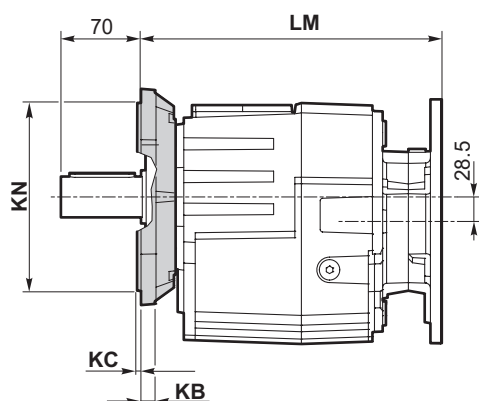
Dimensions

ITH 112 - ITH 113

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



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

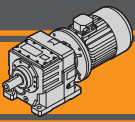


Versione F / F Version										
ITH	a <sub>1</sub>	KB	KC	KM	KN f7	KO	KP	KQ	Flangia / Flange	
									Tipo / Type	
112 113	45°	12	4	165	130	11	200	165	F200	
	45°	12	4	215	180	14	250	215	F250	

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



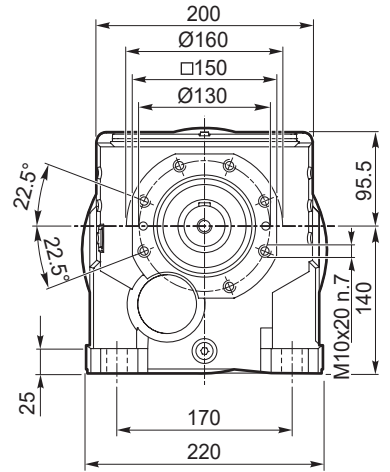
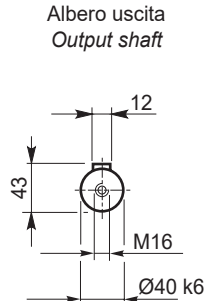
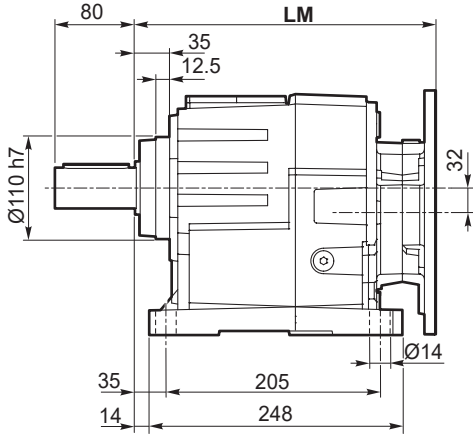


**Dimensioni**

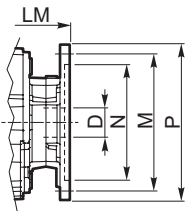
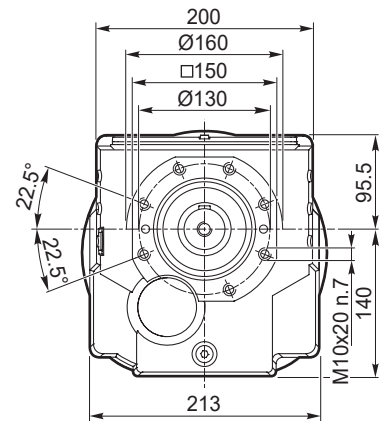
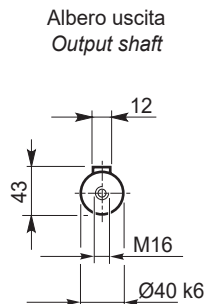
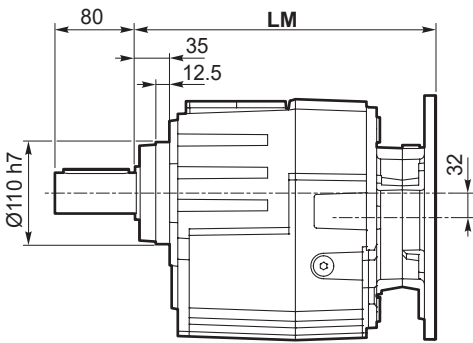
**Dimensions**

**ITH 122 - ITH 123**

**ITH 122 U  
ITH 123 U**

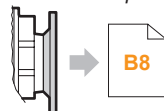


**ITH 122 G  
ITH 123 G**

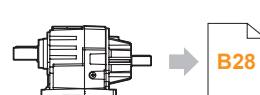


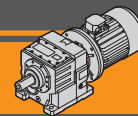
Dimensioni IEC / IEC Dimensions								
	71 B5	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14
<b>LM</b>	309.5			314	313.5	314	334.5	
<b>N</b>	110	130	130	95	180	110	230	130
<b>M</b>	130	165	165	115	215	130	265	165
<b>P</b>	160	200	200	140	250	160	300	200
<b>D</b>	14	19	24		28		38	

IEC Motori applicabili  
IEC Motor adapters



ITHIS 122...  
ITHIS 123...



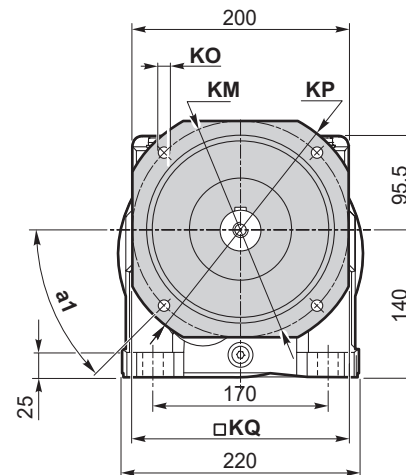
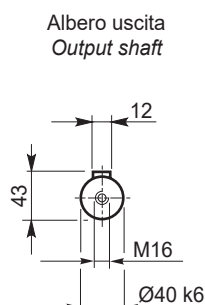
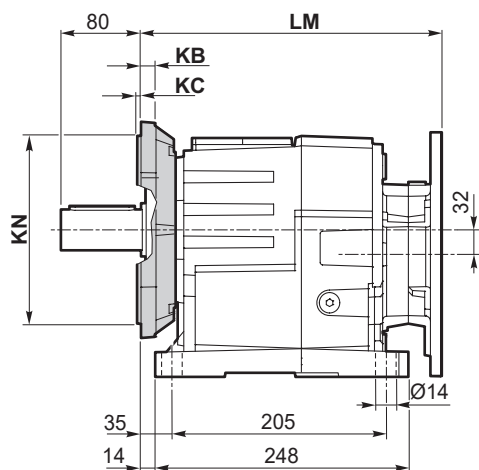


Dimensioni

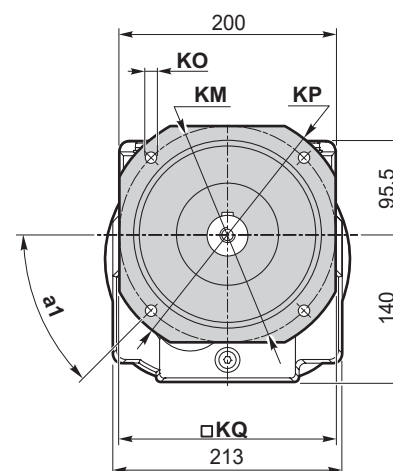
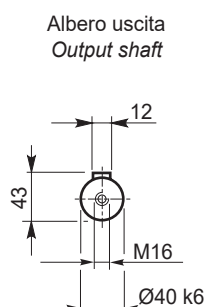
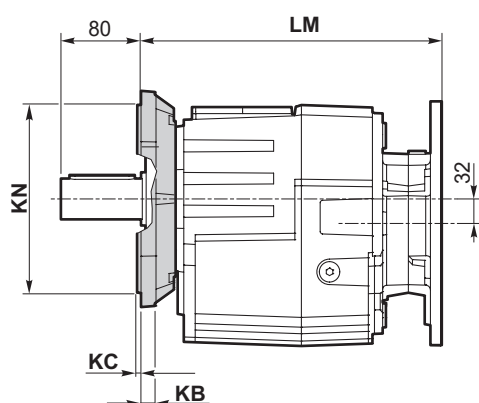
Dimensions

ITH 122- ITH 123

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



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



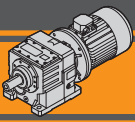
Versione F / F Version

ITH	a <sub>1</sub>	KB	KC	KM	KN f7	KO	KP	KQ	Flangia / Flange	
									Tipo / Type	Peso / Weight [kg]
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**

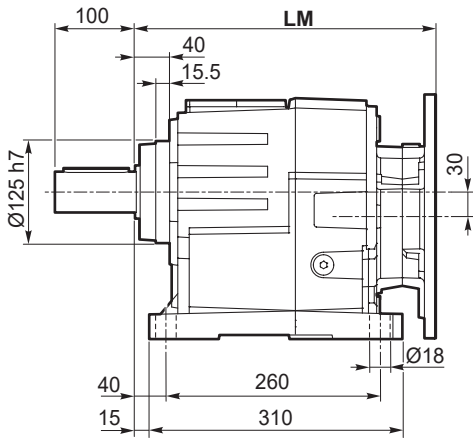
Motoriduttori ad ingranaggi cilindrici  
Helical in-line gearmotors

Dimensioni

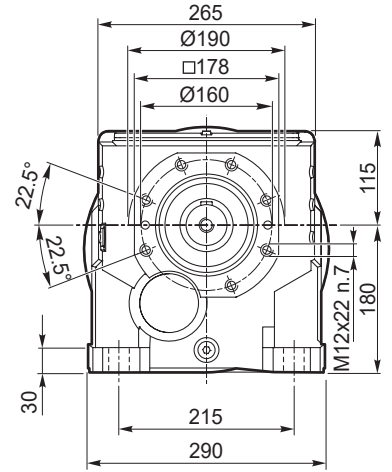
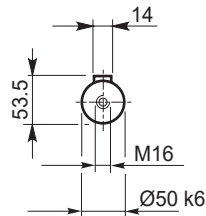
Dimensions

**ITH 132 - ITH 133**

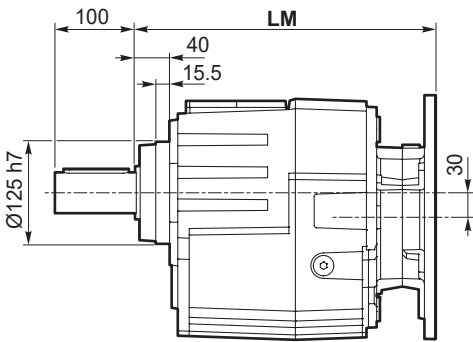
**ITH 132 U**  
**ITH 133 U**



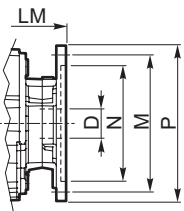
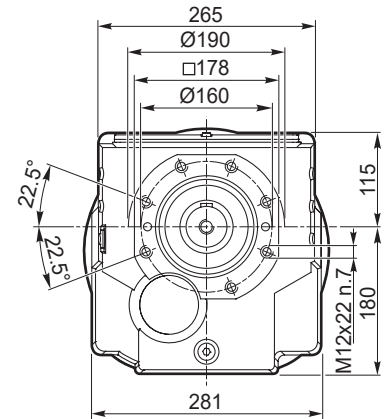
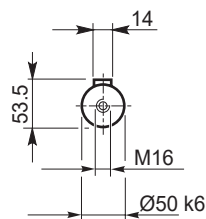
Albero uscita  
Output shaft



**ITH 132 G**  
**ITH 133 G**

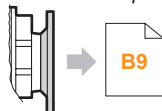


Albero uscita  
Output shaft

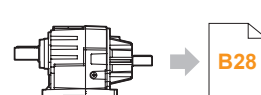


Dimensioni IEC / IEC Dimensions									
	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14	160 B5	180 B5
<b>LM</b>	340.5		345	344.5	345	365.5		415.5	
<b>N</b>	130		95	180	110	230	130	250	
<b>M</b>	165		115	215	130	265	165	300	
<b>P</b>	200		140	250	160	300	200	350	
<b>D</b>	19	24		28		38		42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

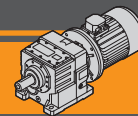
IEC Motori applicabili  
IEC Motor adapters



ITHIS 132...  
ITHIS 133...





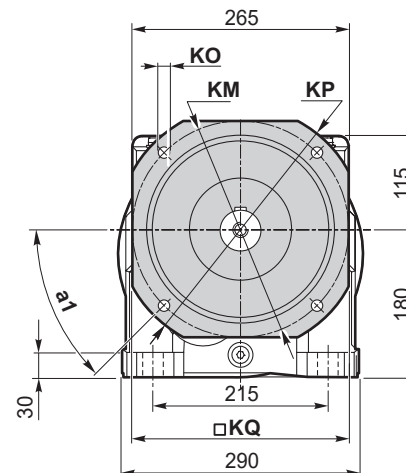
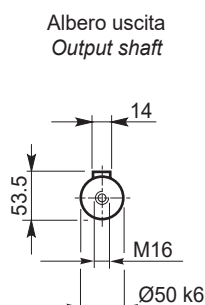
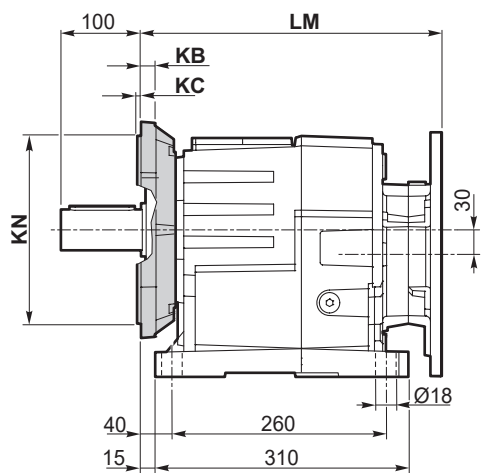


Dimensioni

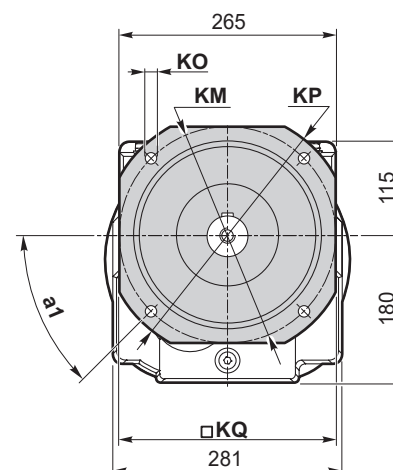
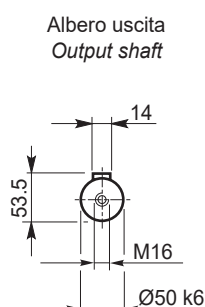
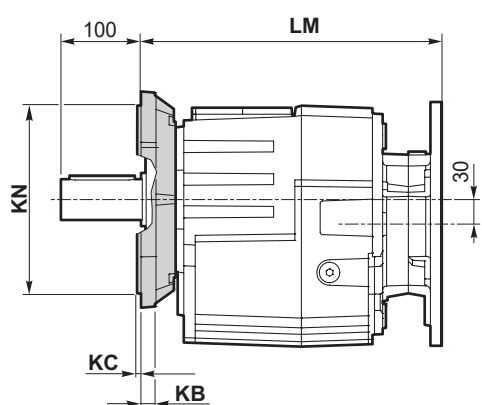
Dimensions

ITH 132- ITH 133

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



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



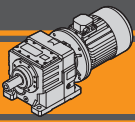
Versione F / F Version

ITH	a <sub>1</sub>	KB	KC	KM	KN f7	KO	KP	KQ	Flangia / Flange	
									Tipo / Type	Peso / Weight [kg]
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

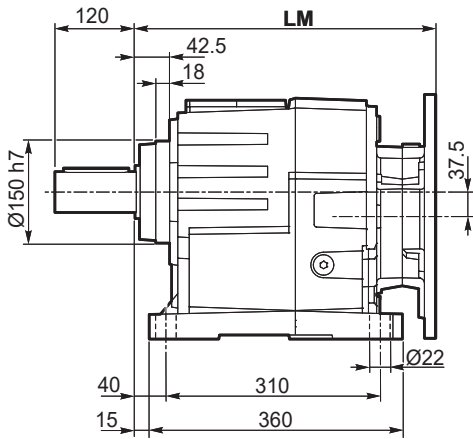


**Dimensioni**

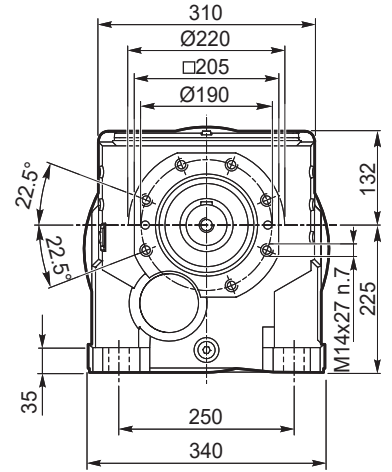
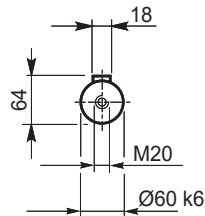
**Dimensions**

**ITH 142 - ITH 143**

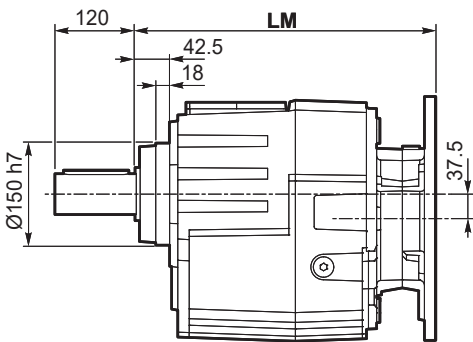
**ITH 142 U**  
**ITH 143 U**



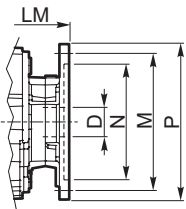
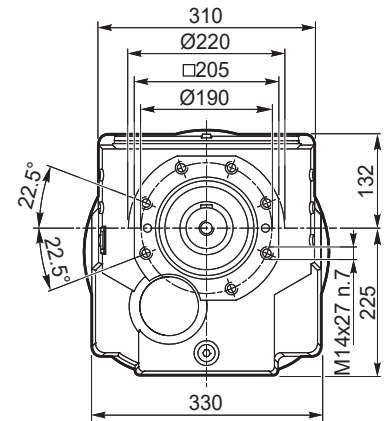
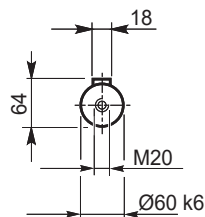
Albero uscita  
Output shaft



**ITH 142 G**  
**ITH 143 G**

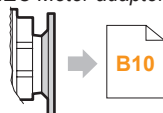


Albero uscita  
Output shaft

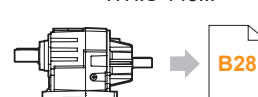


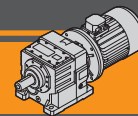
Dimensioni IEC / IEC Dimensions										
	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14	160 B5	180 B5	200 B5
<b>LM</b>	373.5	378	377.5	378	398.5	448.5	460.5			
<b>N</b>	130	95	180	110	230	130	250	300		
<b>M</b>	165	115	215	130	265	165	300	350		
<b>P</b>	200	140	250	160	300	200	350	400		
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

IEC Motori applicabili  
IEC Motor adapters



ITHIS 142...  
ITHIS 143...



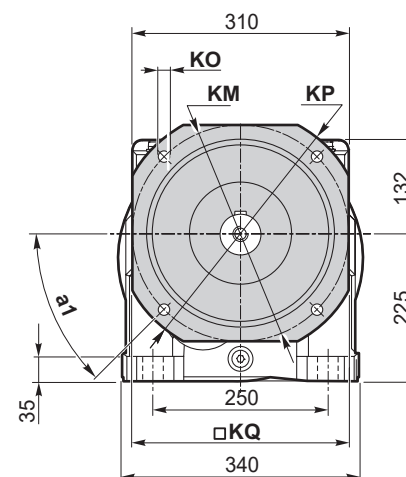
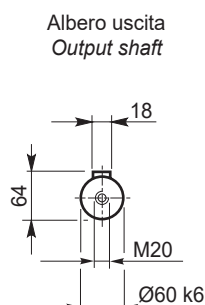
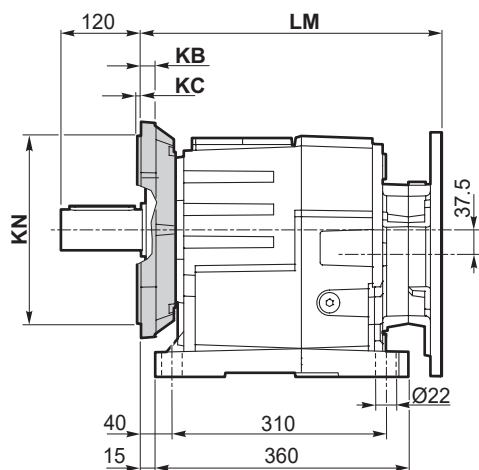


Dimensioni

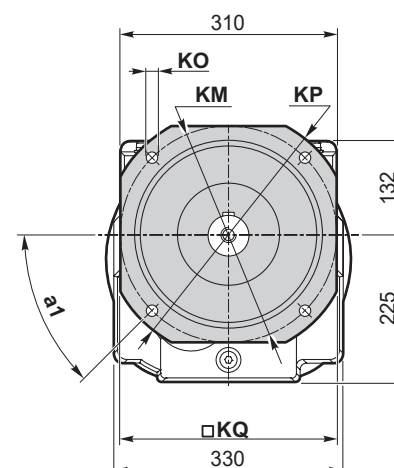
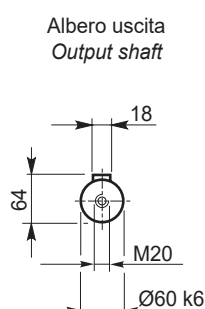
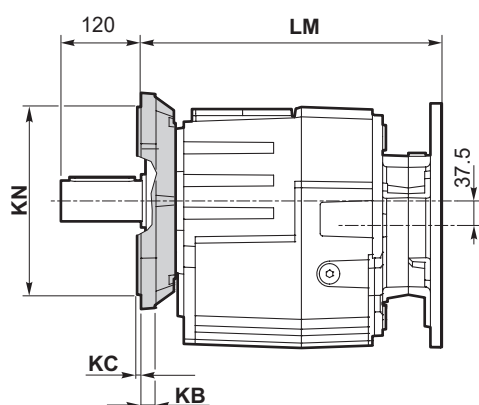
Dimensions

ITH 142- ITH 143

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



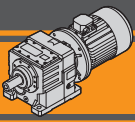
ITH 142 F...  
ITH 143 F...



Versione F / F Version										
ITH	a <sub>1</sub>	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	-	-	-

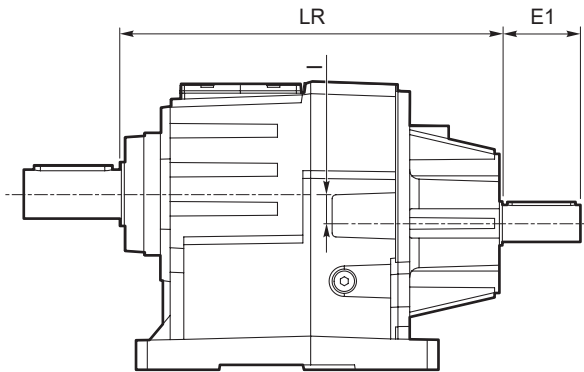
Nota: peso del riduttore complessivo di olio per la posizione M1 (B3)  
Note: weight of the gearbox filled with oil for M1 (B3) assembly position



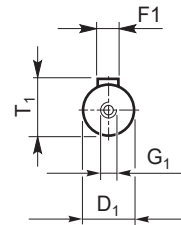
**Dimensioni**

**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

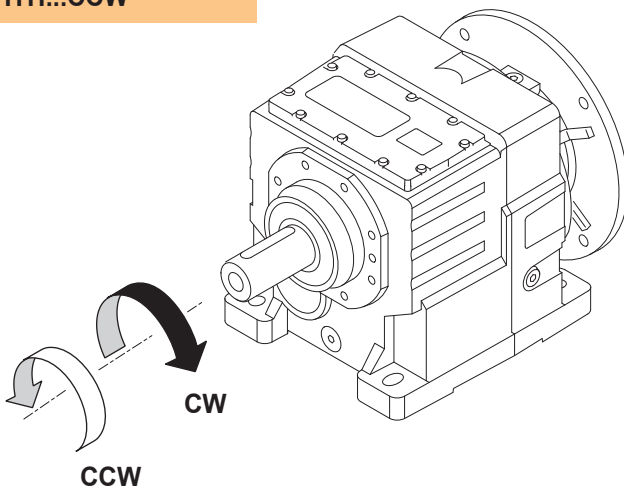
ITHIS	Versione Version	LR	D1	E1	I	T1	F1	G1
112	U G U/F... F...	321.5	28	60	28.5	31	8	M10
113		321.5	24	50	28.5	27	8	M8
122		342	28	60	32	31	8	M10
123		342	28	60	32	31	8	M10
132		390.5	38	80	30	41	10	M12
133		373	28	60	30	31	8	M10
142		423.5	38	80	37.5	41	10	M12
143		406	28	60	37.5	31	8	M10

**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.*

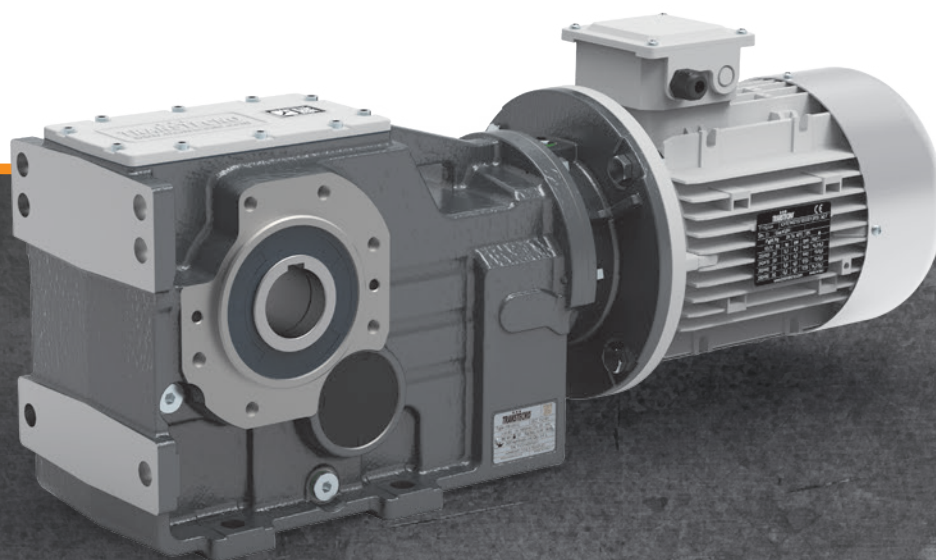
**TRANSTECNO**<sup>®</sup>  
the modular gearmotor

**ITB**

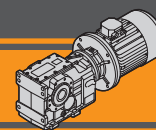
ITB



## Motoriduttori ad assi ortogonali Helical bevel gearmotors



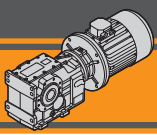




<b>Indice</b>	<b>Index</b>	Pag. Page
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Versioni	<i>Versions</i>	<b>C2</b>
Designazione	<i>Classification</i>	<b>C3</b>
Sensi di rotazione	<i>Direction of rotation</i>	<b>C3</b>
Simbologia	<i>Symbols</i>	<b>C4</b>
Lubrificazione	<i>Lubrication</i>	<b>C4</b>
Carichi radiali in entrata	<i>Input radial loads</i>	<b>C6</b>
Carichi radiali in uscita	<i>Output radial loads</i>	<b>C6</b>
Dati tecnici	<i>Technical data</i>	<b>C7</b>
Dimensioni	<i>Dimensions</i>	<b>C16</b>
Accessori	<i>Accessories</i>	<b>C22</b>

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

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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:

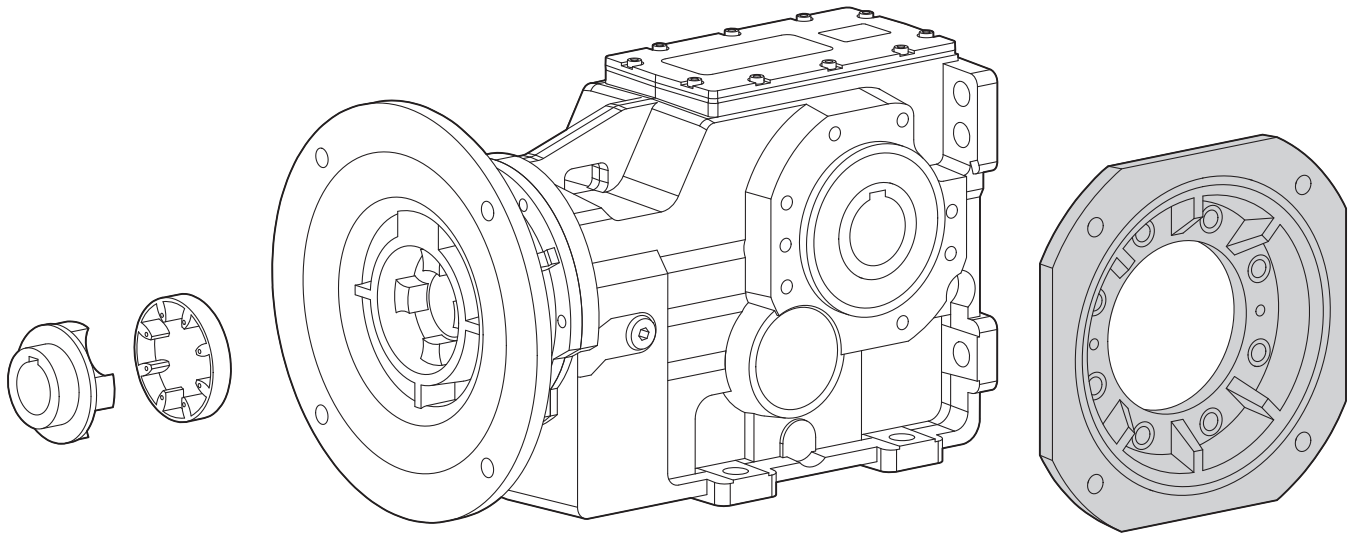
- Costruzione robusta con carcassa in ghisa
- Elevata modularità
- Lubrificazione con olio sintetico
- Accoppiamento al motore tramite giunto elastico o manicotto rigido
- Verniciatura a polvere epossidica RAL 7016 di spessore medio 0,10 – 0,15 mm.

## 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.

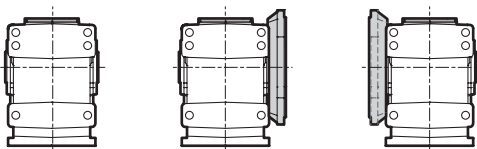


## Versioni

## Versions

Versione Riduttore  
Gearbox Version

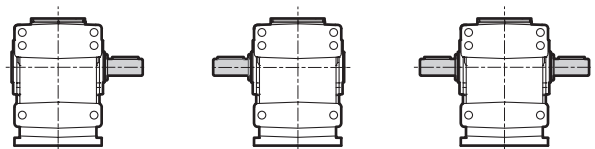
Albero di uscita  
Output shaft



U

F.. D

F.. S



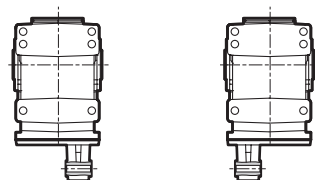
SZDX

SZSX

DZ

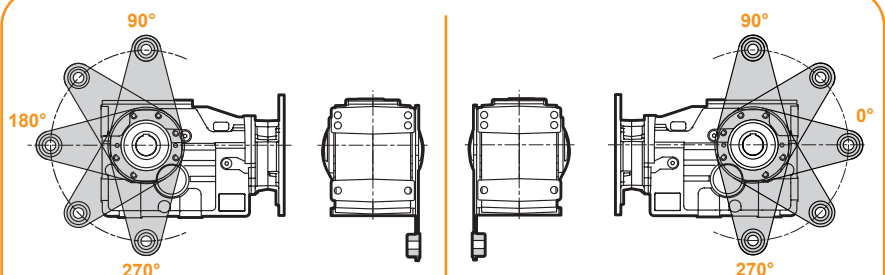
Braccio di reazione  
Torque arm

Braccio di reazione  
Torque arm \*



TADX

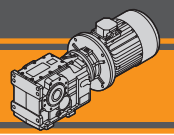
TASX



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

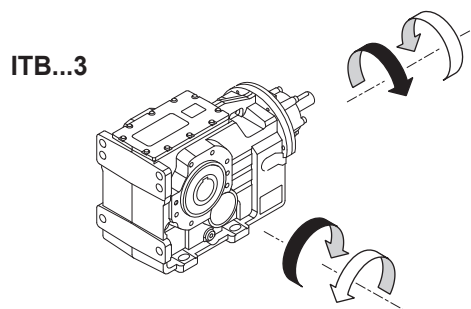
RIDUTTORE / GEARBOX								
ITBIS	42	3	U	20.12	D40	SZDX	BRSX	M1
Tipo Type	Grandezza Size	Stadi Stages	Versione Version	Rapporto Ratio	Albero uscita Output shaft	Albero di uscita Output shaft	Braccio di reaz. Torque arm *	Pos. di montaggio Mounting position
	42 43 44	3	U F...D F...S	vedi tabelle see tables	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		

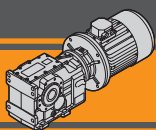
\* NOTA: il braccio di reazione viene fornito smontato.  
NOTE: the torque arm will be supplied not assembled.

Sensi di rotazione

Direction of rotation



Rotazione inversa disponibile a richiesta.  
Inverse rotation on request



## Simbologia

## Symbols

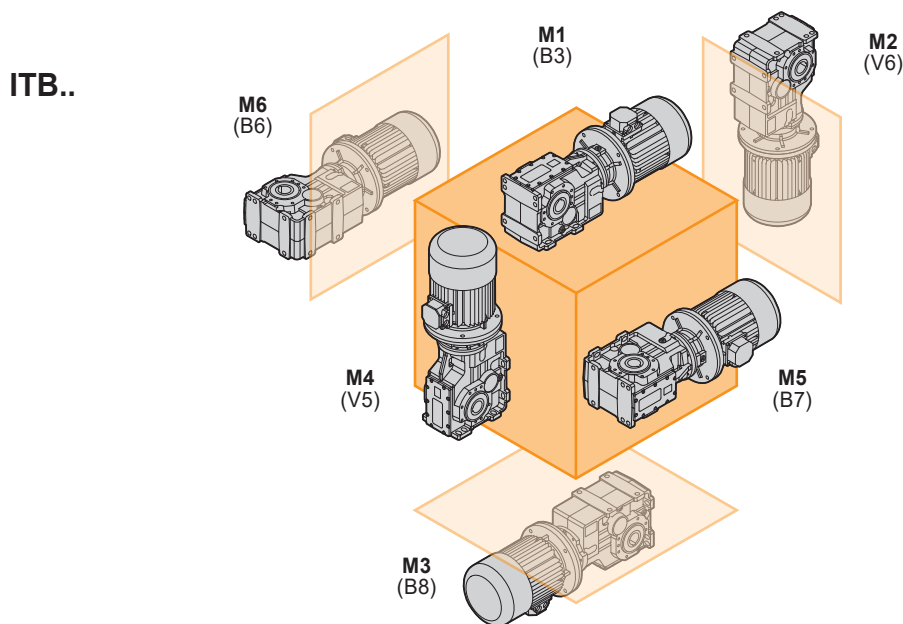
$n_1$	[ $\text{min}^{-1}$ ]	Velocità in ingresso / <i>Input speed</i>
$n_2$	[ $\text{min}^{-1}$ ]	Velocità in uscita / <i>Output speed</i>
$i$		Rapporto di riduzione / <i>Ratio</i>
$P_1$	[kW]	Potenza in entrata / <i>Input power</i>
$M_2$	[Nm]	Coppia nominale in uscita in funzione di $P_1$ / <i>Output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

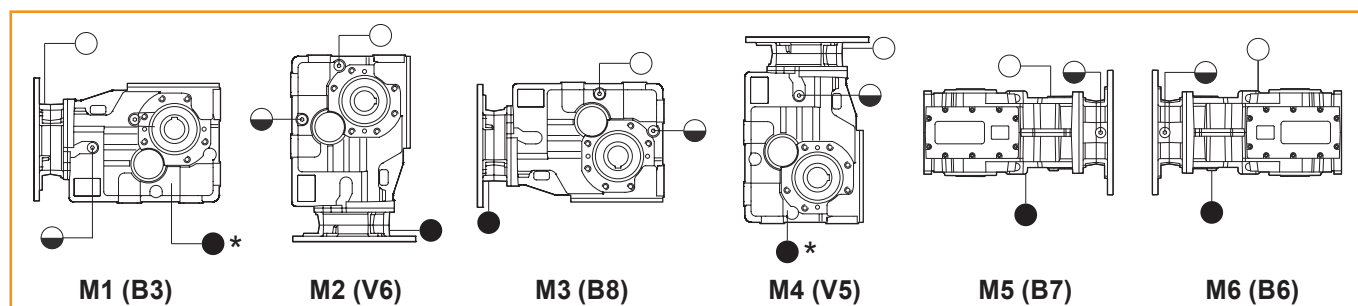
## Lubrication

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



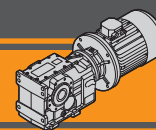
\* Tappo di scarico in posizione posteriore

\* Oil draining plug in backside position.

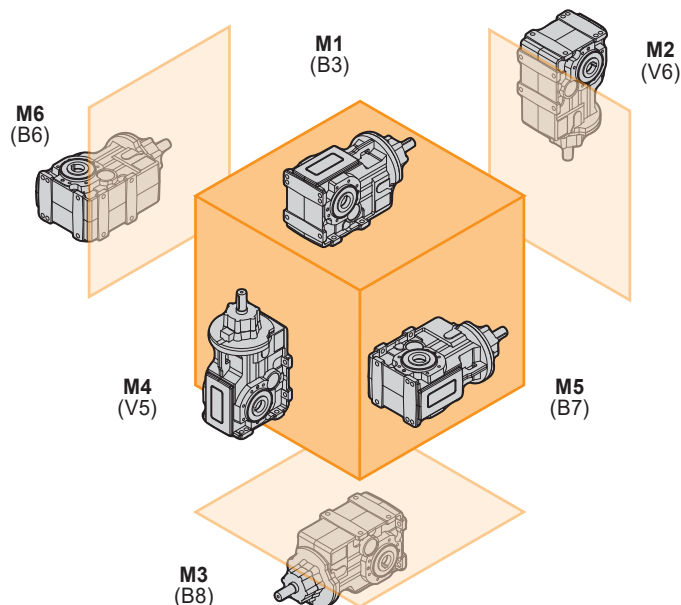
○ Sfiato e tappo di riempimento / *Breather and filling plug*

◐ Livello olio / *Oil level plug*

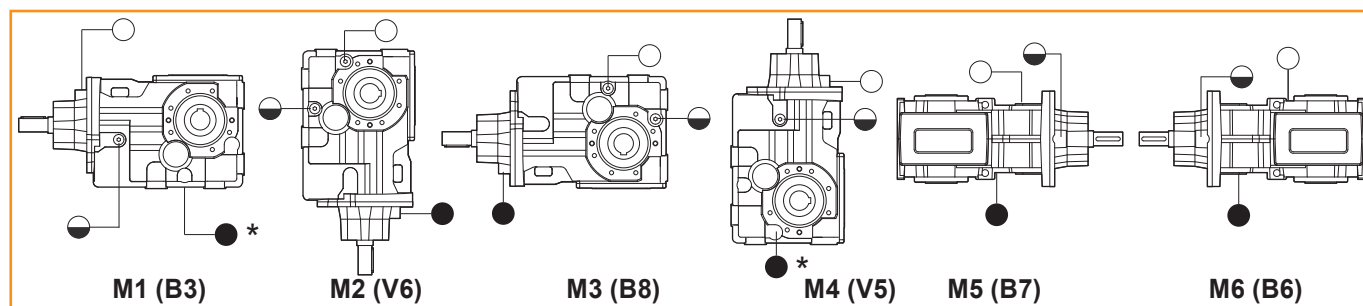
● Tappo di scarico / *Oil drain plug*



ITBIS..



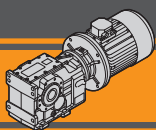
ITBIS	Quantità di olio (litri) / Oil quantity (litres)					
	M1 (B3)	M2 (V6)	M3 (B8)	M4 (V5)	M5 (B7)	M6 (B6)
423	2.3	3.5	3.2	3.9	3.4	2.5
433	4.5	5.5	5.1	7.2	5.5	4.2
443	6.9	9.6	9.4	12.2	9.2	7.1



\* 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 <sub>1</sub> [min <sup>-1</sup> ]	Potenza motore/ Motor Power [kW]			
		2.2	3.0	4.0	5.5
R1 [N]	1400	1800			750
	900	2100		1200	-
	500	2500	-	-	-

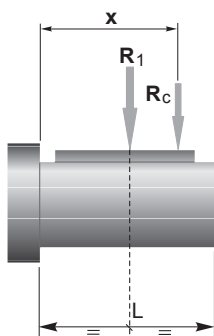
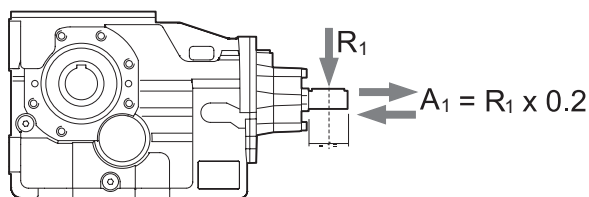
ITB443	n <sub>1</sub> [min <sup>-1</sup> ]	Potenza motore/ Motor Power [kW]					
		5.5	7.5	9.2	11.0	15.0	18.5
R1 [N]	1400	3700				2800	1200
	900	4900			3300	650	-
	500	5250	3900	1300	-	-	-

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

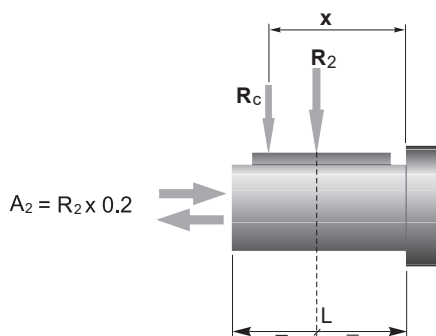
## Output radial loads

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:

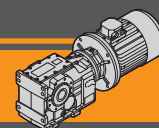


	ITB 423	ITB 433	ITB 443
a	182	218	252
b	142	168	192
R <sub>2MAX</sub>	18500	23000	31000

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

$$R \leq R_c$$

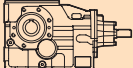
a, b = valori riportati nella tabella  
a, b = values given in the table

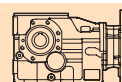


**Dati tecnici**

$n_1$  1400 min<sup>-1</sup>

*Technical data*

	$n_2$ [min <sup>-1</sup> ]	$Mn_2$ [Nm]	$Pn_1$ [kW]	i	$R_2$ [N]
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IEC Motori applicabili  
IEC Motor adapters

**ITBIS 423**


<b>191</b>	500	10.62	7.34	9609
<b>153</b>	500	8.51	9.16	10851
<b>118</b>	600	7.90	11.85	12122
<b>90</b>	600	5.98	15.64	14119
<b>76</b>	700	5.96	18.32	14920
<b>70</b>	700	5.43	20.12	15708
<b>61</b>	800	5.46	22.85	16301
<b>50</b>	800	4.42	28.22	18306
<b>47</b>	850	4.48	29.57	18500
<b>45</b>	850	4.29	30.90	18500
<b>41</b>	850	3.83	34.57	18500
<b>37</b>	850	3.49	37.99	18500
<b>36</b>	900	3.60	39.01	18500
<b>34</b>	900	3.37	41.70	18500
<b>29</b>	900	2.86	49.13	18500
<b>28</b>	900	2.80	50.19	18500
<b>26</b>	900	2.61	53.77	18500
<b>24</b>	900	2.37	59.26	18500
<b>20</b>	900	1.99	70.40	18500
<b>18</b>	950	1.92	77.08	18500
<b>16</b>	950	1.72	86.24	18500
<b>15</b>	950	1.56	94.77	18500
<b>14</b>	950	1.42	104.04	18500
<b>11</b>	950	1.21	122.57	18500
<b>10</b>	950	1.10	134.15	18500
<b>9.5</b>	950	1.00	147.84	18500

**ITB 423**

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

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

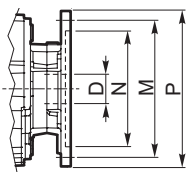
N.B.  
Highlighted areas indicate motor inputs available on each size of unit.

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

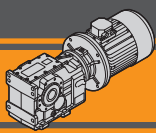
 \* = The service factor (sf) has to be selected depending on application: please contact our Technical Department.

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
<b>N</b>	110	130	130	95	180	110	230	130
<b>M</b>	130	165	165	115	215	130	265	165
<b>P</b>	160	200	200	140	250	160	300	200
<b>D</b>	14	19	24		28		38	



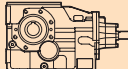
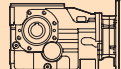
# ITB Motoriduttori ad assi ortogonali

## Helical bevel gearmotors

### Dati tecnici

$n_1$  1400 min<sup>-1</sup>

### Technical data

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

N.B.

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

N.B.

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



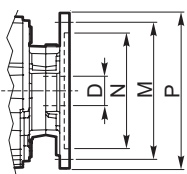
\* = Il fattore di servizio (**sf**) deve essere scelto in funzione dell'applicazione: si prega di contattare il nostro Servizio Tecnico.

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

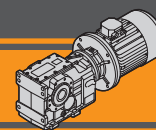


\* = The service factor (**sf**) has to be selected depending on application: please contact our Technical Department.

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



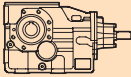
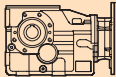
Dimensioni IEC / IEC Dimensions								
	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14	160 B5
<b>N</b>	130	130	95	180	110	230	130	250
<b>M</b>	165	165	115	215	130	265	165	300
<b>P</b>	200	200	140	250	160	300	200	350
<b>D</b>	19	24		28		38		42



Dati tecnici

$n_1$  1400 min<sup>-1</sup>


Technical data

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

ITB

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

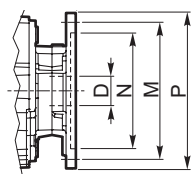
N.B.  
Highlighted areas indicate motor inputs available on each size of unit.

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

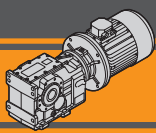
 \* = The service factor (**sf**) has to be selected depending on application: please contact our Technical Department.

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
<b>N</b>	130	130	95	180	110	230	130	250	250
<b>M</b>	165	165	115	215	130	265	165	300	300
<b>P</b>	200	200	140	250	160	300	200	350	350
<b>D</b>	19	24		28		38		42	48

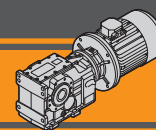


### Dati tecnici

### Technical data





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

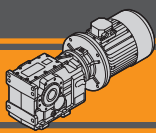




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Technical data

P <sub>1</sub> [kW]	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	sf	i			R <sub>2</sub> [N]	P <sub>1</sub> [kW]	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	sf	i			R <sub>2</sub> [N]
<b>1.1</b>								<b>1.5</b>							
90S4 (1400 min <sup>-1</sup> )	<b>191</b>	52	9.7	7.34	<b>ITB423</b>	<b>B5/B14</b>	10925	90L4 (1400 min <sup>-1</sup> )	<b>191</b>	71	7.1	7.34	<b>ITB423</b>	<b>B5/B14</b>	10870
	<b>153</b>	65	7.7	9.16		<b>B5/B14</b>	12295		<b>153</b>	88	5.7	9.16		<b>B5/B14</b>	12218
	<b>118</b>	84	7.2	11.85		<b>B5/B14</b>	14095		<b>118</b>	114	5.3	11.85		<b>B5/B14</b>	13979
	<b>90</b>	110	5.4	15.64		<b>B5/B14</b>	16299		<b>90</b>	150	4.0	15.64		<b>B5/B14</b>	16120
	<b>76</b>	129	5.4	18.32		<b>B5/B14</b>	17692		<b>76</b>	176	4.0	18.32		<b>B5/B14</b>	17463
	<b>70</b>	142	4.9	20.12		<b>B5/B14</b>	18500		<b>70</b>	194	3.6	20.12		<b>B5/B14</b>	18298
	<b>61</b>	161	5.0	22.85		<b>B5/B14</b>	18500		<b>61</b>	220	3.6	22.85		<b>B5/B14</b>	18500
	<b>50</b>	199	4.0	28.22		<b>B5/B14</b>	18500		<b>50</b>	271	2.9	28.22		<b>B5/B14</b>	18500
	<b>47</b>	209	4.1	29.57		<b>B5/B14</b>	18500		<b>47</b>	284	3.0	29.57		<b>B5/B14</b>	18500
	<b>45</b>	218	3.9	30.90		<b>B5/B14</b>	18500		<b>45</b>	297	2.9	30.90		<b>B5/B14</b>	18500
	<b>40</b>	244	3.5	34.57		<b>B5/B14</b>	18500		<b>40</b>	332	2.6	34.57		<b>B5/B14</b>	18500
	<b>37</b>	268	3.2	37.99		<b>B5/B14</b>	18500		<b>37</b>	365	2.3	37.99		<b>B5/B14</b>	18500
	<b>36</b>	275	3.3	39.01		<b>B5/B14</b>	18500		<b>36</b>	375	2.4	39.01		<b>B5/B14</b>	18500
	<b>34</b>	294	3.1	41.70		<b>B5/B14</b>	18500		<b>34</b>	401	2.2	41.70		<b>B5/B14</b>	18500
	<b>29</b>	347	2.6	49.13		<b>B5/B14</b>	18500		<b>29</b>	473	1.9	49.13		<b>B5/B14</b>	18500
	<b>28</b>	354	2.5	50.19		<b>B5/B14</b>	18500		<b>28</b>	483	1.9	50.19		<b>B5/B14</b>	18500
	<b>26</b>	379	2.4	53.77		<b>B5/B14</b>	18500		<b>26</b>	517	1.7	53.77		<b>B5/B14</b>	18500
	<b>24</b>	418	2.2	59.26		<b>B5/B14</b>	18500		<b>24</b>	570	1.6	59.26		<b>B5/B14</b>	18500
	<b>20</b>	497	1.8	70.40		<b>B5/B14</b>	18500		<b>20</b>	677	1.3	70.40		<b>B5/B14</b>	18500
	<b>18</b>	544	1.7	77.08		<b>B5/B14</b>	18500		<b>18</b>	741	1.3	77.08		<b>B5/B14</b>	18500
	<b>16</b>	608	1.6	86.24	<b>B5/B14</b>	18500		<b>16</b>	829	1.1	86.24	<b>B5/B14</b>	18500		
	<b>15</b>	668	1.4	94.77	<b>B5/B14</b>	18500		<b>15</b>	912	1.0	94.77	<b>B5/B14</b>	18500		
	<b>13</b>	734	1.3	104.04	<b>B5/B14</b>	18500		<b>13</b>	1001	0.9	104.04	<b>B5/B14</b>	18500		
	<b>11</b>	865	1.1	122.57	<b>B5/B14</b>	18500		<b>106</b>	127	10	13.25	<b>ITB433</b>	<b>B5/B14</b>	18711	
	<b>10</b>	946	1.0	134.15	<b>B5/B14</b>	18500		<b>80</b>	168	8.3	17.49		<b>B5/B14</b>	21650	
	<b>9.5</b>	1043	0.9	147.84	<b>B5/B14</b>	18500		<b>69</b>	197	8.1	20.44		<b>B5/B14</b>	23000	
	<b>55</b>	180	9.5	25.49	<b>ITB433</b>	<b>B5/B14</b>	23000		<b>62</b>	216	7.9		22.50	<b>B5/B14</b>	23000
	<b>44</b>	223	7.6	31.56		<b>B5/B14</b>	23000		<b>55</b>	245	6.9		25.49	<b>B5/B14</b>	23000
	<b>42</b>	233	7.3	32.98		<b>B5/B14</b>	23000		<b>44</b>	304	5.6		31.56	<b>B5/B14</b>	23000
	<b>41</b>	244	7.0	34.55		<b>B5/B14</b>	23000		<b>42</b>	317	5.4		32.98	<b>B5/B14</b>	23000
	<b>36</b>	273	6.2	38.66		<b>B5/B14</b>	23000		<b>41</b>	332	5.1		34.55	<b>B5/B14</b>	23000
	<b>33</b>	300	5.7	42.48		<b>B5/B14</b>	23000		<b>36</b>	372	4.6		38.66	<b>B5/B14</b>	23000
	<b>32</b>	307	5.9	43.51		<b>B5/B14</b>	23000		<b>33</b>	409	4.2		42.48	<b>B5/B14</b>	23000
	<b>30</b>	329	5.5	46.64		<b>B5/B14</b>	23000		<b>32</b>	419	4.3	43.51	<b>B5/B14</b>	23000	
	<b>25</b>	395	4.6	55.98		<b>B5/B14</b>	23000		<b>30</b>	449	4.0	46.64	<b>B5/B14</b>	23000	
	<b>23</b>	424	3.8	60.14		<b>B5/B14</b>	23000		<b>25</b>	538	3.3	55.98	<b>B5/B14</b>	23000	
	<b>21</b>	467	3.4	66.27	<b>B5/B14</b>	23000		<b>23</b>	578	2.8	60.14	<b>B5/B14</b>	23000		
	<b>18</b>	554	3.3	78.52	<b>B5/B14</b>	23000		<b>21</b>	637	2.5	66.27	<b>B5/B14</b>	23000		
	<b>16</b>	606	3.0	85.97	<b>B5/B14</b>	23000		<b>18</b>	755	2.4	78.52	<b>B5/B14</b>	23000		
	<b>15</b>	678	2.7	96.19	<b>B5/B14</b>	23000		<b>16</b>	827	2.2	85.97	<b>B5/B14</b>	23000		
	<b>13</b>	746	2.4	105.70	<b>B5/B14</b>	23000		<b>15</b>	925	1.9	96.19	<b>B5/B14</b>	23000		
	<b>12</b>	818	2.2	116.04	<b>B5/B14</b>	23000		<b>13</b>	1017	1.8	105.70	<b>B5/B14</b>	23000		
	<b>10</b>	964	1.9	136.71	<b>B5/B14</b>	23000		<b>12</b>	1116	1.6	116.04	<b>B5/B14</b>	23000		
	<b>9.4</b>	1055	1.7	149.63	<b>B5/B14</b>	23000		<b>10</b>	1315	1.4	136.71	<b>B5/B14</b>	23000		
	<b>8.5</b>	1163	1.5	164.89	<b>B5/B14</b>	23000		<b>9.4</b>	1439	1.3	149.63	<b>B5/B14</b>	23000		
	<b>35</b>	278	10	39.46	<b>ITB443</b>	<b>B5/B14</b>	31000		<b>8.5</b>	1586	1.1	164.89	<b>B5/B14</b>	23000	
	<b>31</b>	314	10	44.51		<b>B5/B14</b>	31000		<b>38</b>	356	8.4	37.01	<b>ITB443</b>	<b>B5/B14</b>	31000
	<b>29</b>	336	8.3	47.67		<b>B5/B14</b>	31000		<b>35</b>	380	7.4	39.46		<b>B5/B14</b>	31000
	<b>26</b>	383	8.4	54.26		<b>B5/B14</b>	31000		<b>31</b>	428	7.5	44.51		<b>B5/B14</b>	31000
	<b>19</b>	515	6.8	72.94		<b>B5/B14</b>	31000		<b>29</b>	458	6.1	47.67		<b>B5/B14</b>	31000
	<b>15</b>	650	5.4	92.14		<b>B5/B14</b>	31000		<b>26</b>	522	6.1	54.26		<b>B5/B14</b>	31000
	<b>11</b>	877	4.0	124.32		<b>B5/B14</b>	31000		<b>19</b>	702	5.0	72.94		<b>B5/B14</b>	31000
	<b>10</b>	955	3.7	135.45		<b>B5/B14</b>	31000		<b>15</b>	886	3.9	92.14		<b>B5/B14</b>	31000
	<b>9.3</b>	1059	3.3	150.15		<b>B5/B14</b>	31000		<b>11</b>	1196	2.9	124.32		<b>B5/B14</b>	31000
	<b>8.5</b>	1155	3.0	163.80		<b>B5/B14</b>	31000		<b>10</b>	1303	2.7	135.45		<b>B5/B14</b>	31000
	<b>7.8</b>	1264	2.8	179.16	<b>B5/B14</b>	31000		<b>9.3</b>	1444	2.4	150.15	<b>B5/B14</b>		31000	
								<b>8.5</b>	1576	2.2	163.80	<b>B5/B14</b>	31000		
								<b>7.8</b>	1723	2.0	179.16	<b>B5/B14</b>	31000		







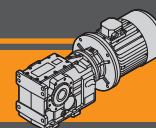
# ITB Motoriduttori ad assi ortogonali

## Helical bevel gearmotors

### Dati tecnici





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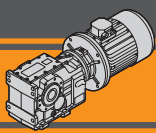
P <sub>1</sub> [kW]	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	sf	i			R <sub>2</sub> [N]	P <sub>1</sub> [kW]	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	sf	i			R <sub>2</sub> [N]	
<b>1.85</b>								<b>2.2</b>								
90LB4 (1400 min <sup>-1</sup> )	<b>191</b>	87	5.7	7.34	<b>ITB423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



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



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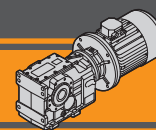
$P_1$ [kW]	$n_2$ [min <sup>-1</sup> ]	$M_2$ [Nm]	sf	i			$R_2$ [N]	$P_1$ [kW]	$n_2$ [min <sup>-1</sup> ]	$M_2$ [Nm]	sf	i			$R_2$ [N]	
<b>3</b>								<b>4</b>								
100LB4 (1400 min <sup>-1</sup> )	<b>191</b>	141	3.5	7.34	<b>ITB423</b>	<b>B5/B14</b>	10662	112M4 (1400 min <sup>-1</sup> )	<b>191</b>	188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



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

### Technical data

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





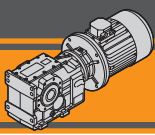
Dati tecnici

Technical data

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

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

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

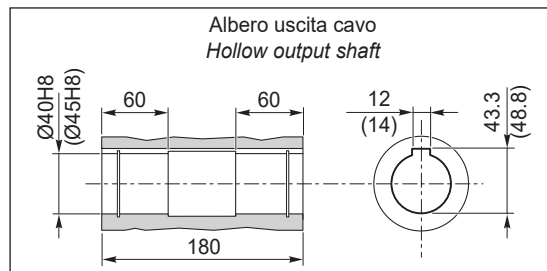
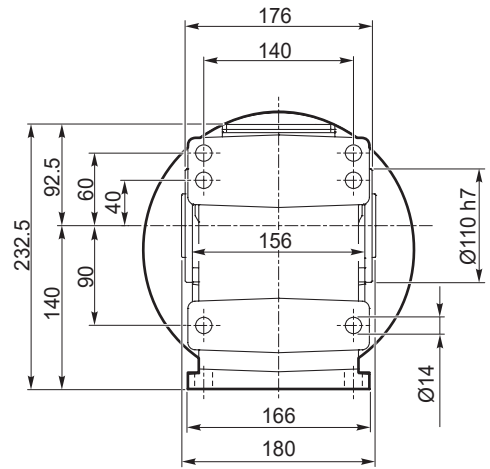
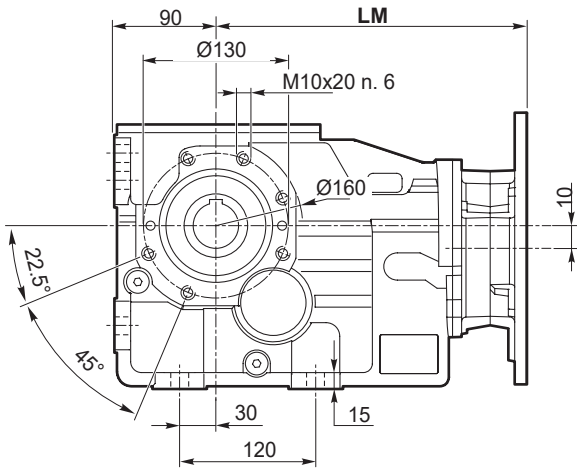


**Dimensioni**

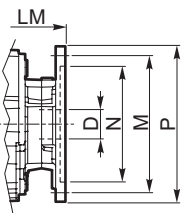
**Dimensions**

**ITB 423 U**

**ITB 423 U**

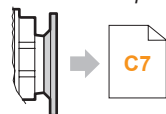


Albero uscita cavo  
Hollow output shaft

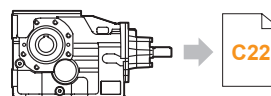


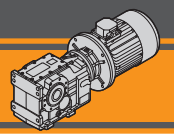
Dimensioni IEC / IEC Dimensions							
	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14
<b>LM</b>	279.5	279.5	284	283.5	284	304.5	
<b>N</b>	130	130	95	180	110	230	130
<b>M</b>	165	165	115	215	130	265	165
<b>P</b>	200	200	140	250	160	300	200
<b>D</b>	19	24		28		38	

IEC Motori applicabili  
IEC Motor adapters



ITBIS 423..



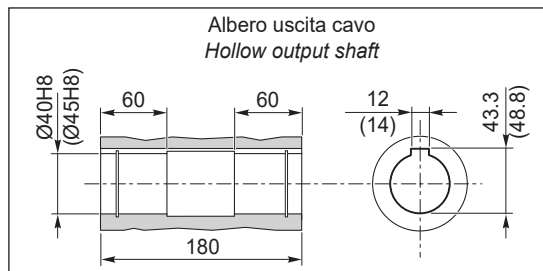
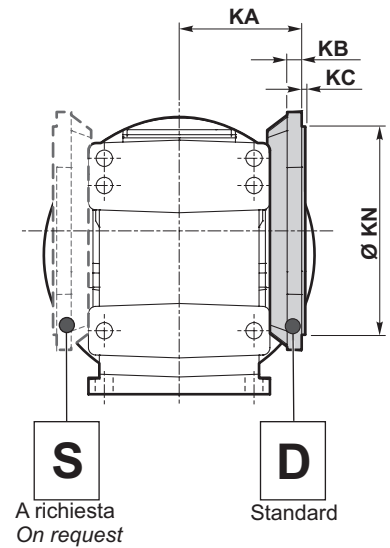
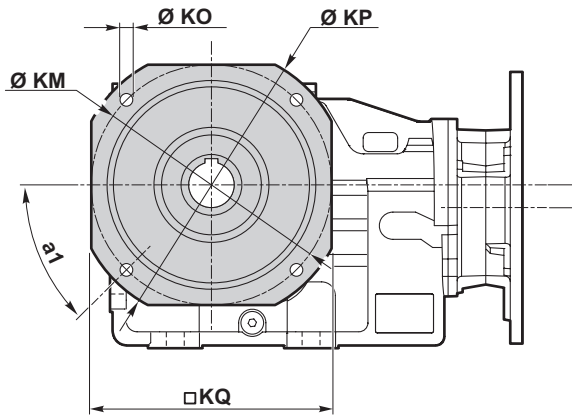


Dimensioni

Dimensions

ITB 423 F...

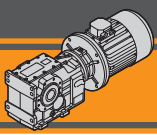
ITB 423 F...



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

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

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

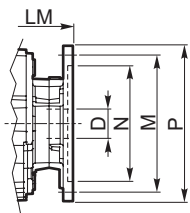
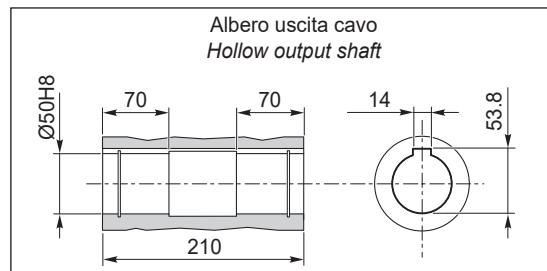
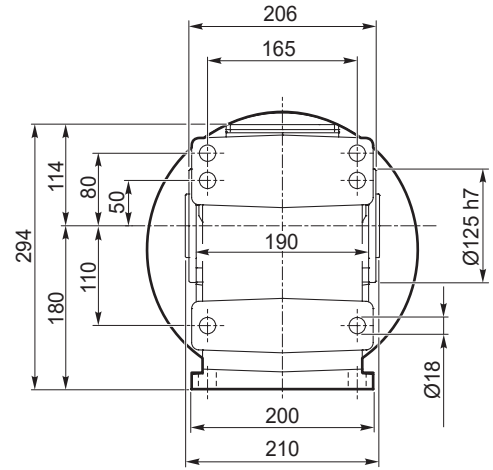
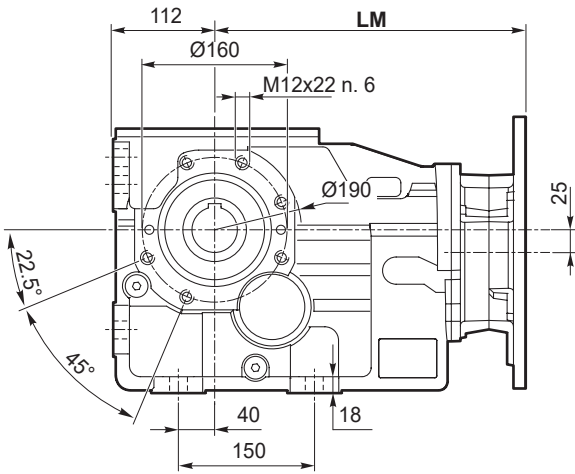


Dimensioni

Dimensions

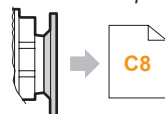
**ITB 433 U**

**ITB 433 U**

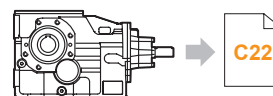


Dimensioni IEC / IEC Dimensions								
	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14	160 B5
<b>LM</b>	330	330	334.5	334	334.5	355		405
<b>N</b>	130	130	95	180	110	230	130	250
<b>M</b>	165	165	115	215	130	265	165	300
<b>P</b>	200	200	140	250	160	300	200	350
<b>D</b>	19	24		28		38		42

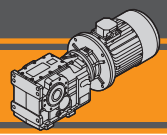
IEC Motori applicabili  
IEC Motor adapters



ITBIS 433..





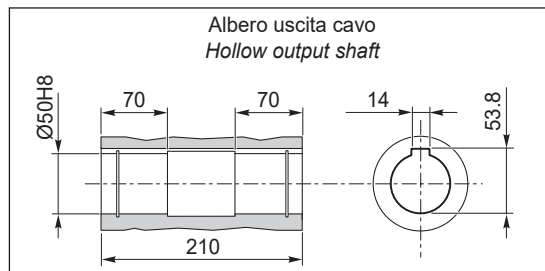
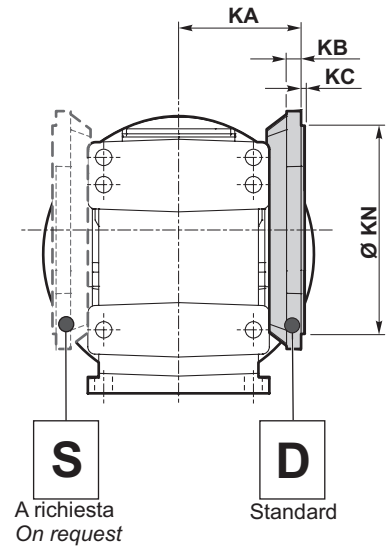
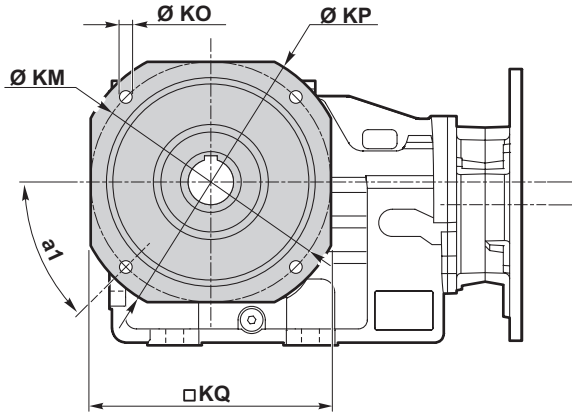


Dimensioni

Dimensions

ITB 433 F...

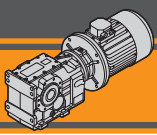
ITB 433 F...



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

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

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

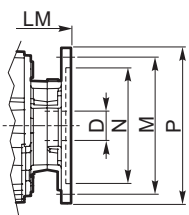
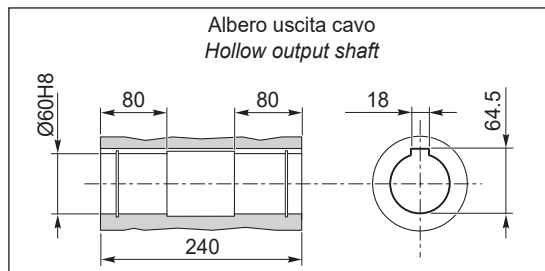
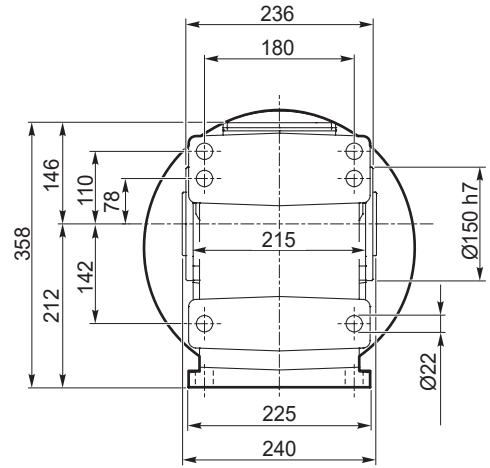
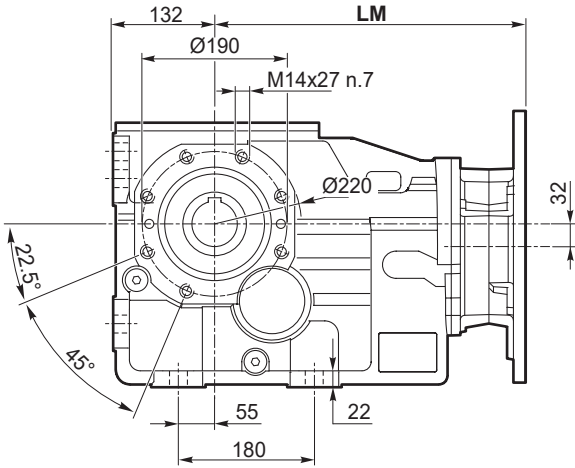


**Dimensioni**

**Dimensions**

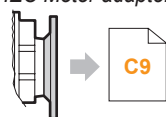
**ITB 443 U**

**ITB 443 U**

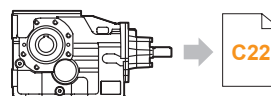


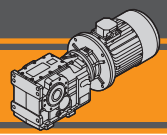
Dimensioni IEC / IEC Dimensions									
	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14	160 B5	180 B5
<b>LM</b>	375.5	375.5	380	379.5	383	400.5		450.5	450.5
<b>N</b>	130	130	95	180	110	230	130	250	250
<b>M</b>	165	165	115	215	130	265	165	300	300
<b>P</b>	200	200	140	250	160	300	200	350	350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

IEC Motori applicabili  
IEC Motor adapters



ITBIS 443..



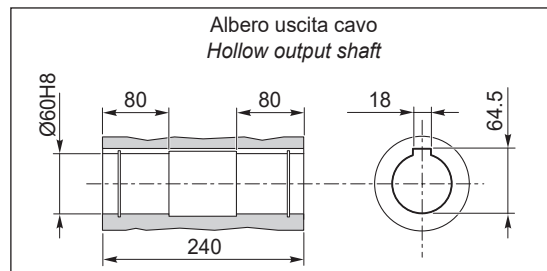
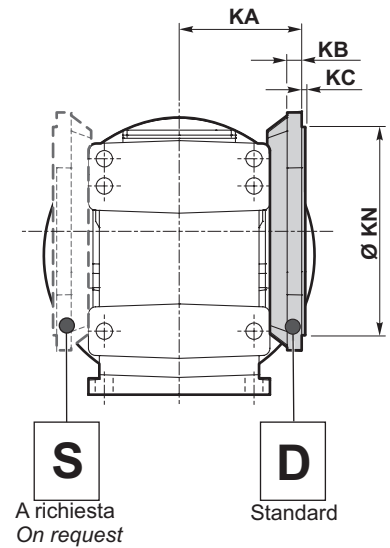
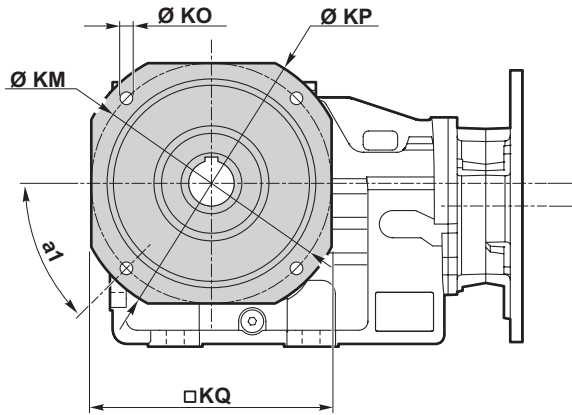


Dimensioni

Dimensions

ITB 443 F...

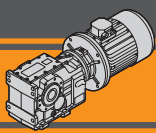
ITB 443 F...



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

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

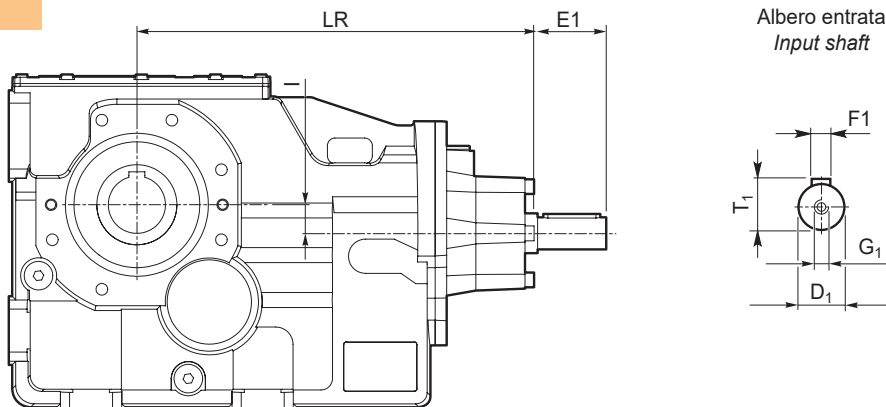
Nota: peso del riduttore complessivo di olio per la posizione M1 (B3)  
Note: weight of the gearbox filled with oil for M1 (B3) assembly position



**Dimensioni**

**Dimensions**

**ITBIS..**



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

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

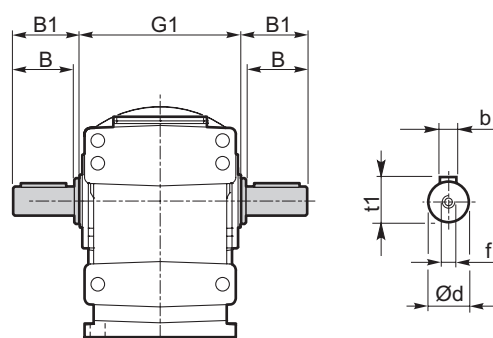
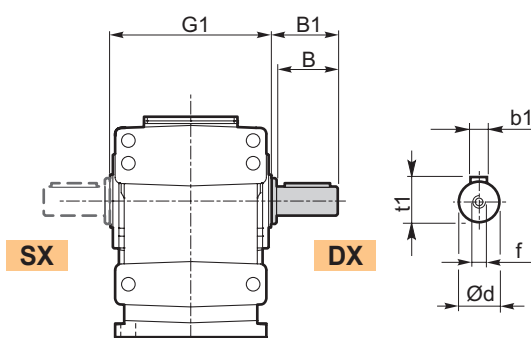
**Accessori**

**Accessories**

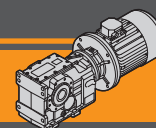
**Albero lento / Output shaft**

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

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

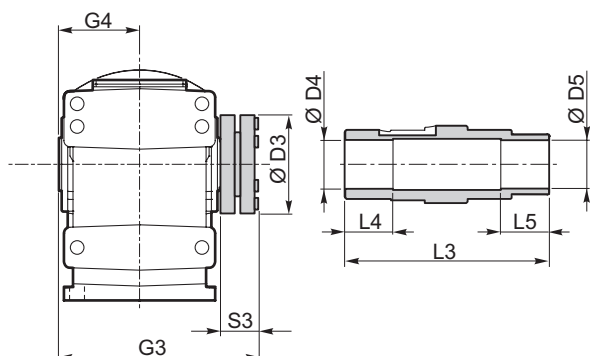


ITB	d h7	B	B1	G1	f	b1	t1	Peso / Weight [kg]	
								SZ	DZ
<b>423</b>	40	80	84	180	M16	12	43	2.2	3.2
<b>433</b>	50	100	105	210	M16	14	53.5	4.3	6.2
<b>443</b>	60	120	125	240	M20	18	64	7.1	10.3



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

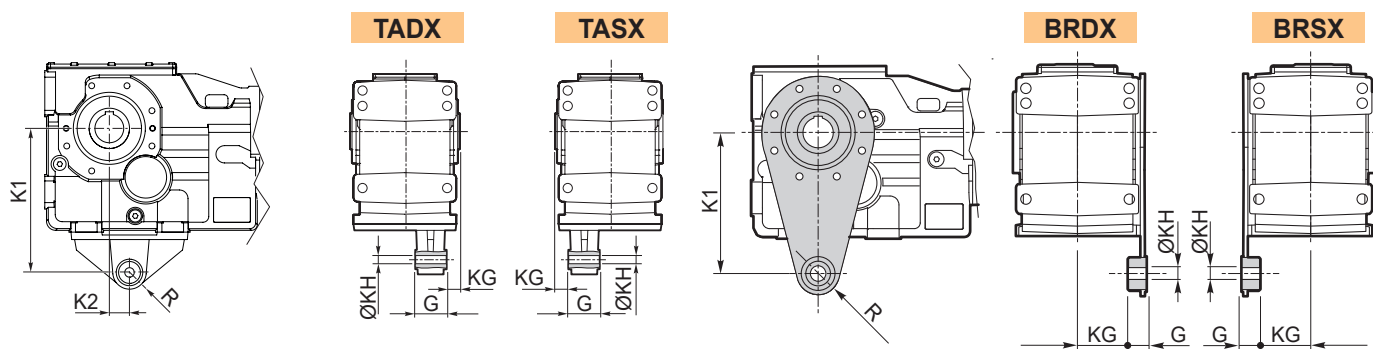
Kit albero uscita con calettatore disponibile a richiesta:  
per le istruzioni di montaggio riferirsi al nostro Servizio Tecnico.

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..

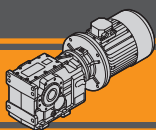


Braccio di reazione / Torque arm

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

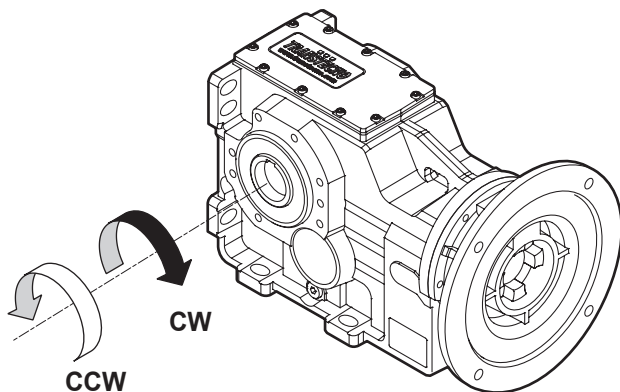
Braccio di reazione / Torque arm

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

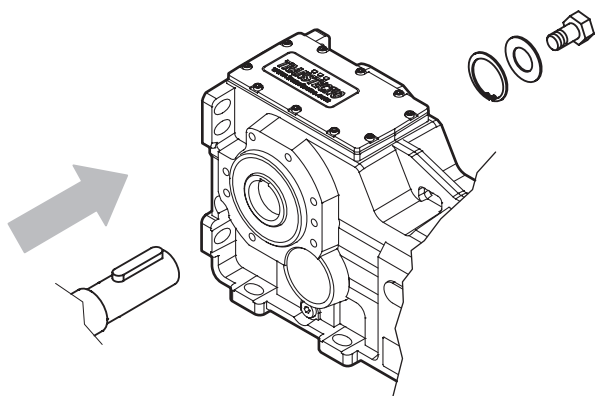
ITB...CW  
ITB...CCW



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

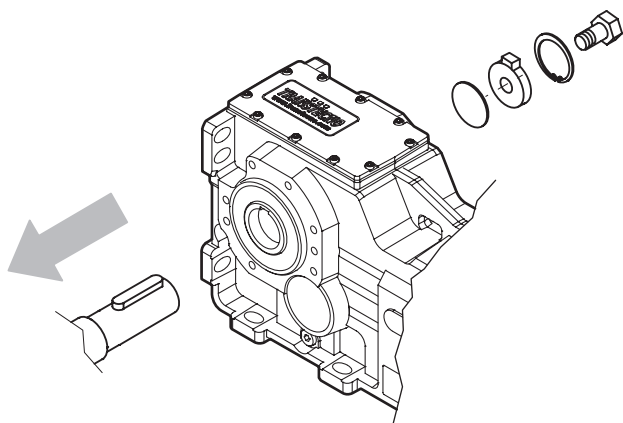


Kit di montaggio albero uscita disponibile a richiesta: per le istruzioni di montaggio riferirsi al nostro Servizio Tecnico.

**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**

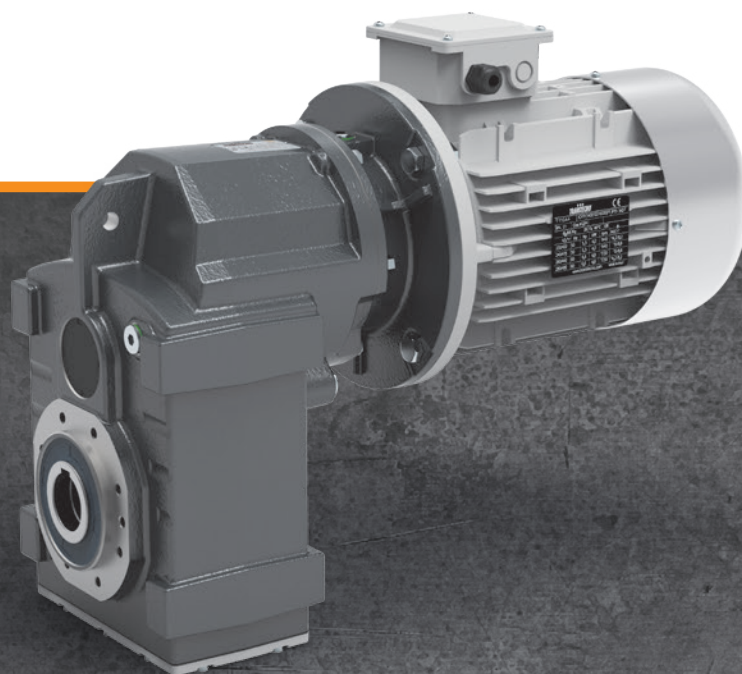
**TRANSTECNO**<sup>®</sup>  
the modular gearmotor

**ITS**

ITS

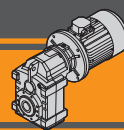


Motoriduttori pendolari  
**Helical parallel gearmotors**





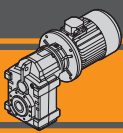




<b>Indice</b>	<b>Index</b>	Pag. Page
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Questa sezione annulla e sostituisce ogni precedente edizione o revisione. Qualora questa sezione non Vi sia giunta in distribuzione controllata, l'aggiornamento dei dati ivi contenuto non è assicurato. **In tal caso la versione più aggiornata è disponibile sul nostro sito internet [www.transtecno.com](http://www.transtecno.com)**

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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:

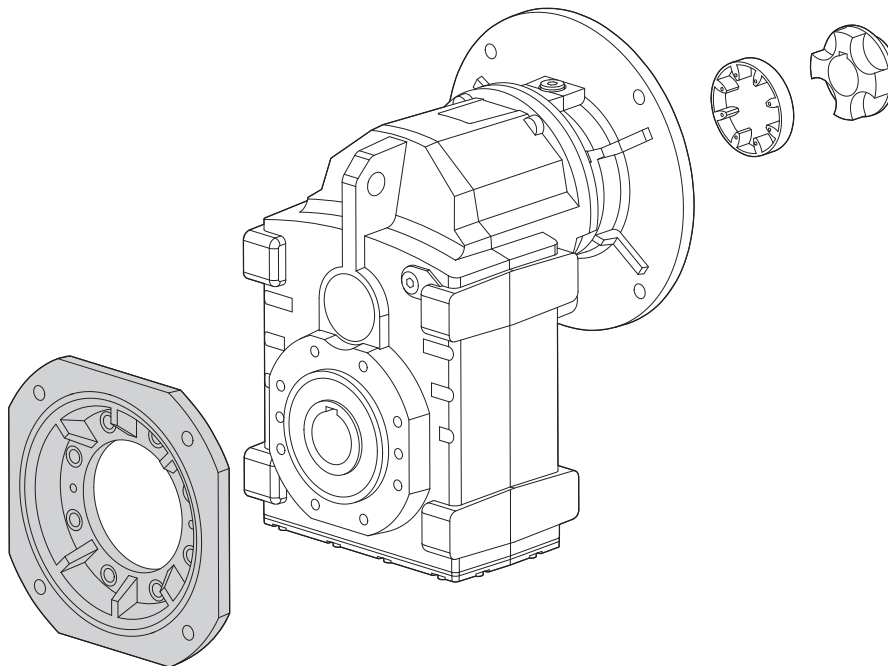
- Costruzione robusta con carcassa in ghisa
- Elevata modularità
- Lubrificazione con olio sintetico
- Accoppiamento al motore tramite giunto elastico o manicotto rigido
- Verniciatura a polvere epossidica RAL 7016 di spessore medio 0,10 – 0,15 mm

## 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.



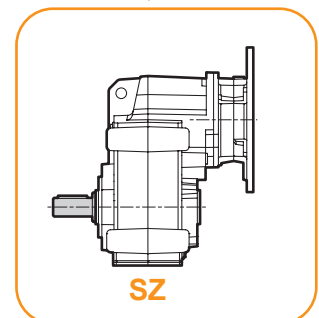
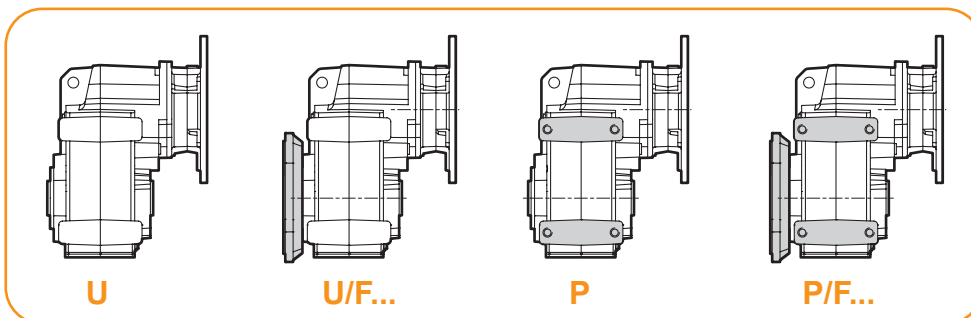
## Versioni

## Versions

### ITS...

Versione Riduttore  
Gearbox Version

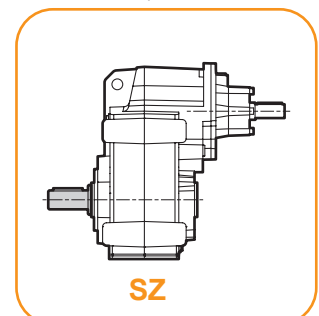
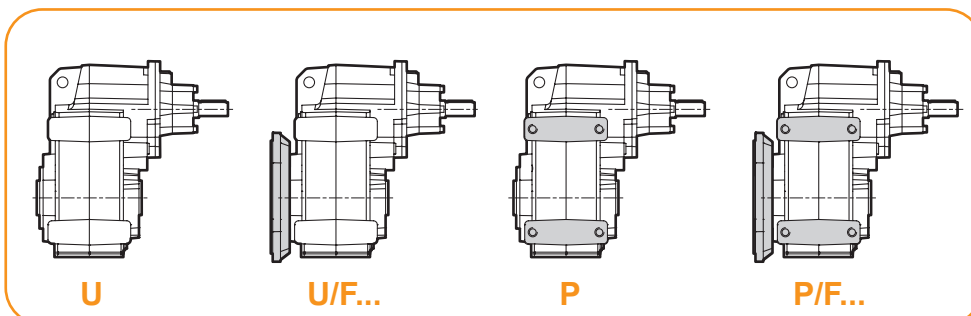
Albero di uscita  
Output shaft

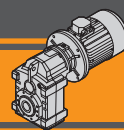


### ITSIS...

Versione Riduttore  
Gearbox Version



Albero di uscita  
Output shaft




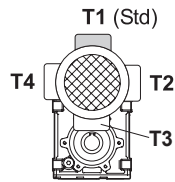


## Designazione

## Classification

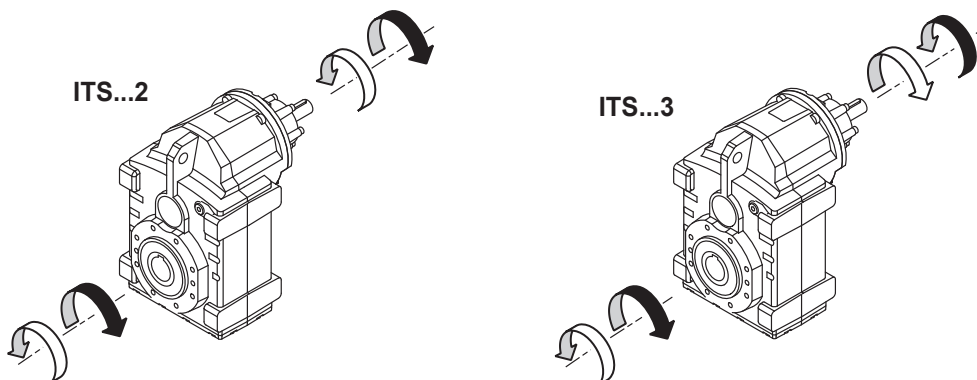
RIDUTTORE / GEARBOX											
ITS	92	2	U	22.92	D40	132	B5	SZ	M1	HS	CW
Tipo Type	Grandezza Size	Stadi Stages	Versione Version	Rapporto Ratio	Albero uscita Output shaft	IEC	Forma costruttiva Version	Albero uscita maschio Solid output shaft	Posizione di montaggio Mounting position	Manicotto rigido Motor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

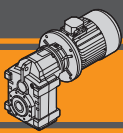
RIDUTTORE / GEARBOX							
ITSIS	92	2	U	22.92	D40	SZ	M1
Tipo Type	Grandezza Size	Stadi Stages	Versione Version	Rapporto Ratio	Albero uscita Output shaft	Albero uscita maschio Solid output shaft	Posizione di montaggio Mounting position
<b>ITSIS</b> 	<b>92</b> <b>93</b> <b>94</b>	<b>2</b> <b>3</b>	<b>U...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

MOTORE / MOTOR						
5,5 kW	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	<b>2p</b> <b>4p</b> <b>6p</b> <b>8p</b>	<b>1ph</b> <b>3ph</b>	<b>230/400V</b> <b>220/380V</b> ... <b>230V</b>	<b>50Hz</b> <b>60Hz</b>		

## Sensi di rotazione

## Direction of rotation





## Simbologia

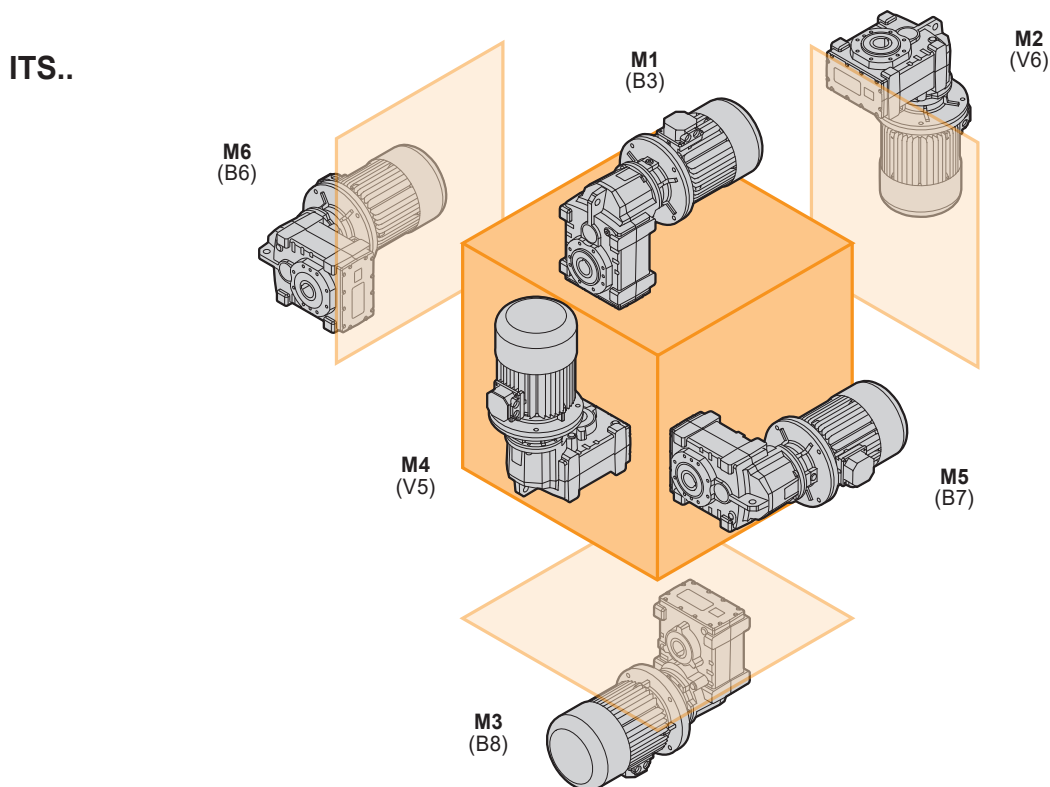
## Symbols

$n_1$	[min <sup>-1</sup> ]	Velocità in ingresso / <i>Input speed</i>
$n_2$	[min <sup>-1</sup> ]	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 <math>P_1</math></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 <math>P_{n1}</math></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>

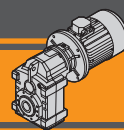
## Lubrificazione

## 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.*

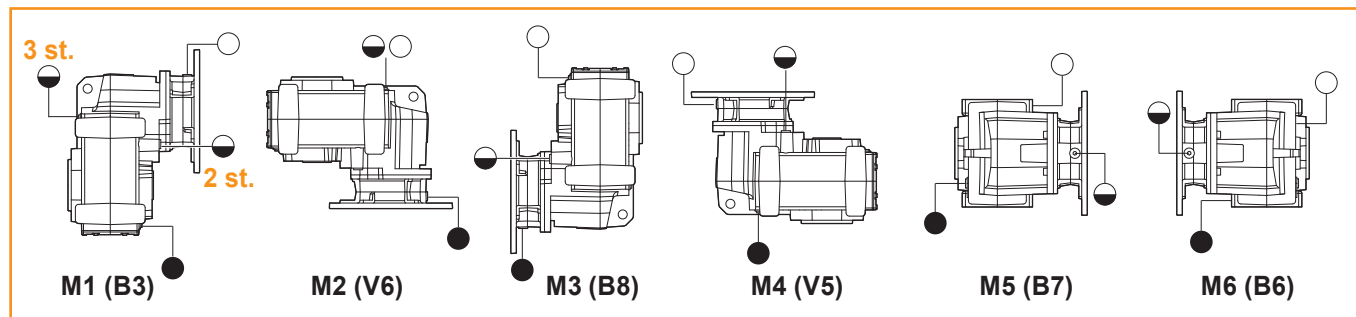


ITS	Quantità di olio (litri) / <i>Oil quantity (litres)</i>					
	M1 (B3)	M2 (V6)	M3 (B8)	M4 (V5)	M5 (B7)	M6 (B6)
922	3,4	5,2	4,2	6,1	3,7	3,6
923	4,9			5,9		
932	4,7	7,0	4,3	7,7	4,5	4,4
933	6,7			7,5		
942	9,1	14,4	9,1	15,4	9,1	8,9
943	12,0			15,1		



## Lubrificazione

## Lubrication

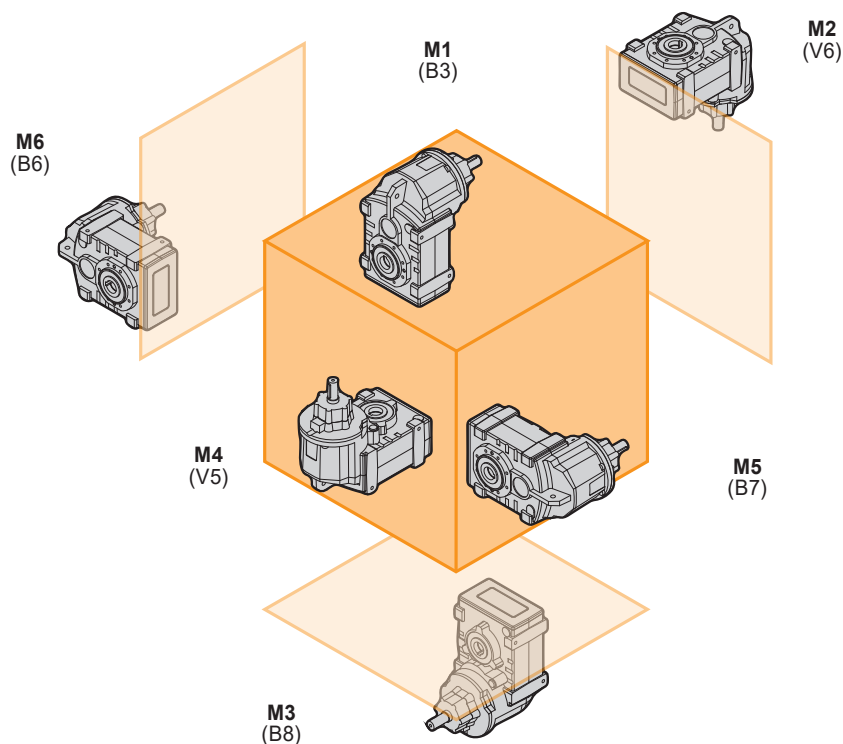


○ Sfiato e tappo di riempimento / Breather and filling plug

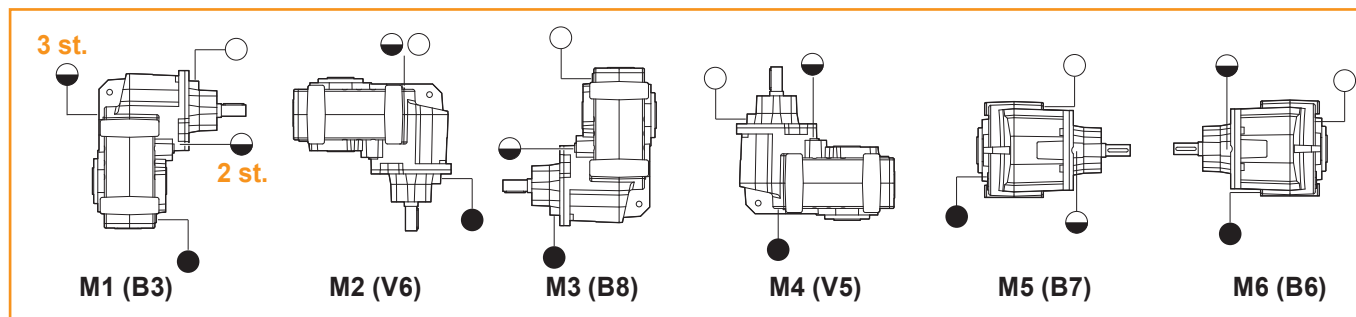
● Tappo di scarico / Oil drain plug

● Livello olio / Oil level plug

ITSIS..



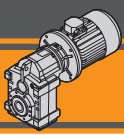
ITSIS	Quantità di olio (litri) / Oil quantity (litres)					
	M1 (B3)	M2 (V6)	M3 (B8)	M4 (V5)	M5 (B7)	M6 (B6)
922	3,6	5,6	4,4	6,1	3,9	3,8
923	5,1			5,9		
932	4,9	7,4	4,7	7,7	4,7	4,6
933	6,9			7,5		
942	9,3	15,1	9,8	15,4	9,5	9,3
943	12,2	14,8	9,5	15,1	9,3	9,1



○ Sfiato e tappo di riempimento / Breather and filling plug

● Tappo di scarico / Oil drain plug

● Livello olio / Oil level plug



## Carichi radiali in entrata

## Input Radial loads

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

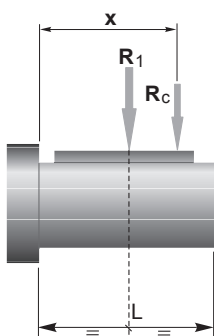
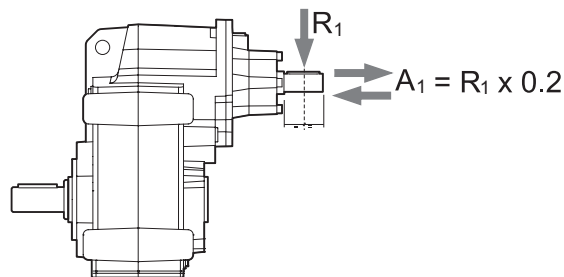
ITS 942	$n_1$ [min <sup>-1</sup> ]	Potenza motore/ Motor Power [kW]					
		5.5	7.5	9.2	11.0	15.0	18.5
$R_1$ [N]	1400	3700				2800	1200
	900	4900			3300	650	-
	500	5250	3900	1300	-	-	-

I carichi radiali 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:

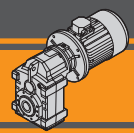


	ITS922	ITS923	ITS932	ITS933	ITS942	ITS943
a	139				157	139
b	110				118	110

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

$$R \leq R_c$$

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



## Carichi radiali in uscita

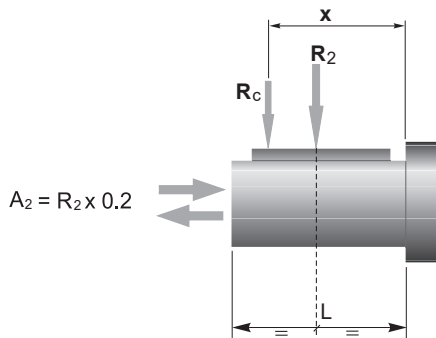
## Output radial loads

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

$$R \leq R_c$$

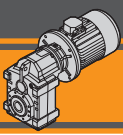
La versione U utilizza cuscinetti a sfere sull'asse di uscita mentre la versione P utilizza cuscinetti a rulli conici.

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<sup>-1</sup>


## Technical data

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

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


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

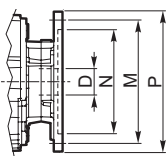
 \* = Il fattore di servizio (sf) deve essere scelto in funzione dell'applicazione: si prega di contattare il nostro Servizio Tecnico.

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.

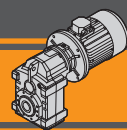
 \* = The service factor (sf) has to be selected depending on application: please contact our Technical Department.

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



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







Dati tecnici

$n_1$  1400 min<sup>-1</sup>

Technical data


	$n_2$ [min <sup>-1</sup> ]	$Mn_2$ [Nm]	$Pn_1$ [kW]	$i$	$R_2 U$ [N]	$R_2 P$ [N]
<b>ITSIS 932</b>						
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	

	IEC Motori applicabili IEC Motor adapters					
<b>ITS 932</b>						
	80B5	90B5/B14	100B5/B14	112B5/B14	132B5/B14	160B5
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				*		

<b>ITSIS 933</b>						
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	

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

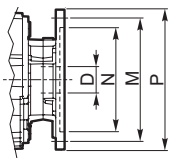
 \* = Il fattore di servizio (sf) deve essere scelto in funzione dell'applicazione: si prega di contattare il nostro Servizio Tecnico.

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

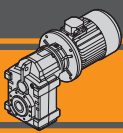
N.B.  
Highlighted areas indicate motor inputs available on each size of unit.

 \* = 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
<b>N</b>	110	130	130	95	180	110	230	130	250
<b>M</b>	130	165	165	115	215	130	265	165	300
<b>P</b>	160	200	200	140	250	160	300	200	350
<b>D</b>	14	19	24		28		38		42



## Dati tecnici

$n_1$  1400 min<sup>-1</sup>

## Technical data

	$n_2$ [min <sup>-1</sup> ]	$Mn_2$ [Nm]	$Pn_1$ [kW]	$i$	$R_2 U$ [N]	$R_2 P$ [N]		IEC Motori applicabili IEC Motor adapters
<b>ITSIS 942</b>							<b>ITS 942</b>	
								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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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.

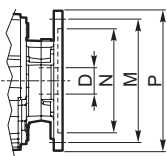
N.B.

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.



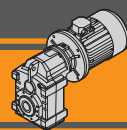
Dimensioni IEC / IEC Dimensions									
	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14	160 B5	180 B5
<b>N</b>	130	130	95	180	110	230	130	250	250
<b>M</b>	165	165	115	215	130	265	165	300	300
<b>P</b>	200	200	140	250	160	300	200	350	350
<b>D</b>	19	24		28		38		42	48

















### Dati tecnici

### Technical data

P <sub>1</sub> [kW]	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	sf	i			R <sub>2 U</sub> [N]	R <sub>2 P</sub> [N]
<b>2.2</b>								
100LA4 (1400 min <sup>-1</sup> )	98	205	9.8	14.21	ITS942	B5/B14	7340	26991
	88	229	10	15.91		B5/B14	7809	28652
	81	250	9.6	17.33		B5/B14	8183	29976
	73	276	9.1	19.13		B5/B14	8636	31000
	60	336	7.4	23.32		B5/B14	9604	31000
	48	424	6.4	29.42		B5/B14	10851	31000
	45	452	6.6	31.35		B5/B14	11212	31000
	35	571	5.3	39.60		B5/B14	12611	31000
	32	623	4.3	43.25		B5/B14	13167	31000
	29	691	3.9	47.95		B5/B14	13831	31000
	26	754	4.2	53.43		B5/B14	14582	31000
	24	821	3.9	58.22		B5/B14	15000	31000
	22	910	3.5	64.53		B5/B14	15000	31000
	20	993	3.0	70.40		B5/B14	15000	31000
	18	1086	2.8	77.00	B5/B14	15000	31000	
	15	1327	2.4	94.05	ITS943	B5/B14	15000	31000
	14	1410	2.3	99.94		B5/B14	15000	31000
	13	1544	2.1	109.42		B5/B14	15000	31000
	12	1707	1.9	121.00		B5/B14	15000	31000
	10	1898	1.7	134.54		B5/B14	15000	31000
9.5	2083	1.5	147.69	B5/B14		15000	31000	
8.2	2394	1.3	169.71	B5/B14		15000	31000	
7.5	2621	1.2	185.82	B5/B14		15000	31000	
6.7	2933	1.1	207.90	B5/B14		15000	31000	
6.1	3223	1.0	228.46	B5/B14		15000	31000	

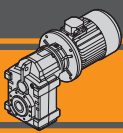
P <sub>1</sub> [kW]	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	sf	i			R <sub>2 U</sub> [N]	R <sub>2 P</sub> [N]
<b>3.0</b>								
100LB4 (1400 min <sup>-1</sup> )	247	111	4.5	5.66	ITS922	B5/B14	2916	10329
	198	139	3.6	7.06		B5/B14	3284	11589
	167	164	3.0	8.37		B5/B14	3591	12648
	153	179	3.6	9.13		B5/B14	3757	13222
	134	205	3.2	10.43		B5/B14	4022	14143
	116	237	2.7	12.04		B5/B14	4319	15186
	104	265	2.8	13.50		B5/B14	4565	16056
	90	304	2.5	15.50		B5/B14	4870	17153
	79	350	2.6	17.81		B5/B14	5185	18309
	64	427	2.1	21.73		B5/B14	5639	18500
	61	450	2.0	22.92		B5/B14	5759	18500
	59	468	1.9	23.80		B5/B14	5843	18500
	53	523	1.7	26.63		B5/B14	6089	18500
	48	575	1.6	29.26		B5/B14	6286	18500
	44	631	1.6	32.14		B5/B14	6470	18500
	40	677	1.5	35.19		B5/B14	6677	18500
	36	757	1.3	39.38		B5/B14	6856	18500
	32	832	1.2	43.27		B5/B14	6976	18500
	29	914	1.1	47.50		B5/B14	7059	18500
	25	1077	1.0	55.96		B5/B14	7090	18500

P <sub>1</sub> [kW]	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	sf	i			R <sub>2 U</sub> [N]	R <sub>2 P</sub> [N]
<b>3.0</b>								
100LB4 (1400 min <sup>-1</sup> )	228	121	7.1	6.13	ITS932	B5/B14	3401	13251
	183	150	5.7	7.65		B5/B14	3840	14890
	155	177	4.8	9.03		B5/B14	4201	16240
	141	194	4.6	9.90		B5/B14	4412	17029
	124	221	4.1	11.27		B5/B14	4725	18204
	107	257	3.5	13.06		B5/B14	5103	19626
	96	286	3.1	14.58		B5/B14	5398	20743
	83	330	3.0	16.81		B5/B14	5796	22260
	73	378	2.6	19.24		B5/B14	6191	23000
	59	463	2.6	23.57		B5/B14	6809	23000
	57	486	2.5	24.75		B5/B14	6960	23000
	54	507	2.8	25.81		B5/B14	7091	23000
	48	567	2.5	28.88		B5/B14	7442	23000
	40	682	2.4	34.71		B5/B14	8014	23000
	37	747	2.2	38.01		B5/B14	8287	23000
	33	818	2.0	42.53		B5/B14	8657	23000
	30	899	1.8	46.73		B5/B14	8918	23000
	27	987	1.7	51.30		B5/B14	9154	23000
	23	1163	1.4	60.44		B5/B14	9496	23000
	21	1272	1.3	66.15		B5/B14	9629	23000
	19	1402	1.1	72.90	B5/B14	9715	23000	
	17	1558	1.1	81.00	ITS933	B5/B14	9724	23000
	15	1792	0.9	93.18		B5/B14	9562	23000
	98	279	7.2	14.21	ITS942	B5/B14	7258	26808
	88	313	7.7	15.91		B5/B14	7711	28435
	81	340	7.1	17.33		B5/B14	8071	29728
	73	376	6.7	19.13		B5/B14	8504	31000
	60	458	5.5	23.32		B5/B14	9425	31000
	48	578	4.7	29.42		B5/B14	10592	31000
	45	616	4.9	31.35		B5/B14	10925	31000
	35	778	3.9	39.60		B5/B14	12196	31000
	32	850	3.2	43.25		B5/B14	12689	31000
	29	942	2.9	47.95		B5/B14	13269	31000
	26	1028	3.1	53.43		B5/B14	13929	31000
	24	1120	2.9	58.22		B5/B14	14413	31000
	22	1241	2.6	64.53	B5/B14	14983	31000	
	20	1354	2.2	70.40	B5/B14	15000	31000	
	18	1481	2.0	77.00	B5/B14	15000	31000	
	15	1809	1.8	94.05	ITS943	B5/B14	15000	31000
	14	1923	1.7	99.94		B5/B14	15000	31000
13	2105	1.5	109.42	B5/B14		15000	31000	
12	2328	1.4	121.00	B5/B14		15000	31000	
10	2588	1.2	134.54	B5/B14		15000	31000	
9.5	2841	1.1	147.69	B5/B14		15000	31000	
8.2	3265	1.0	169.71	B5/B14		15000	31000	







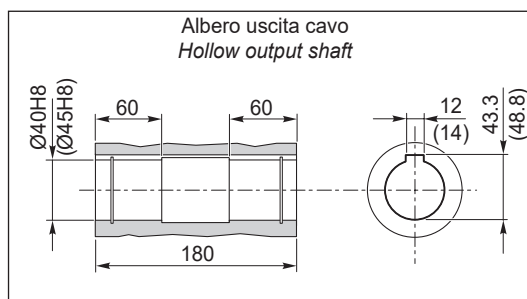
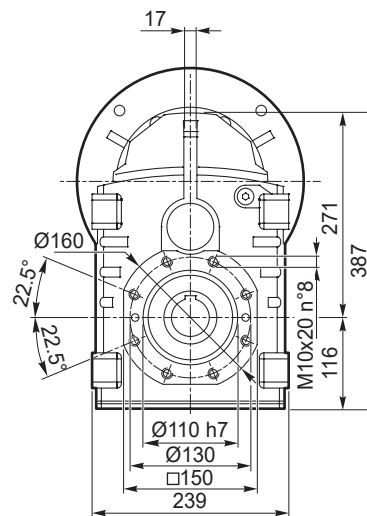
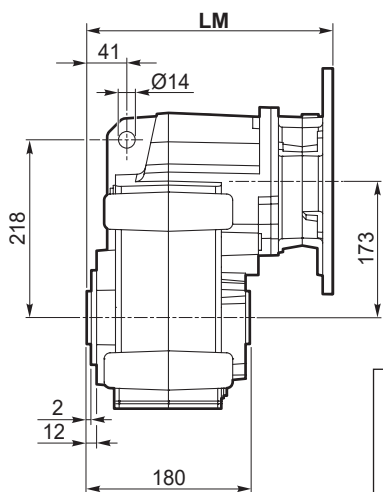


**Dimensioni**

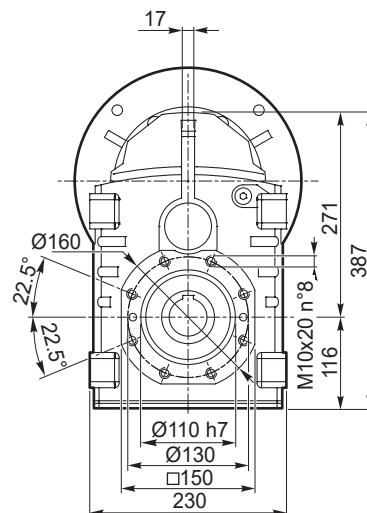
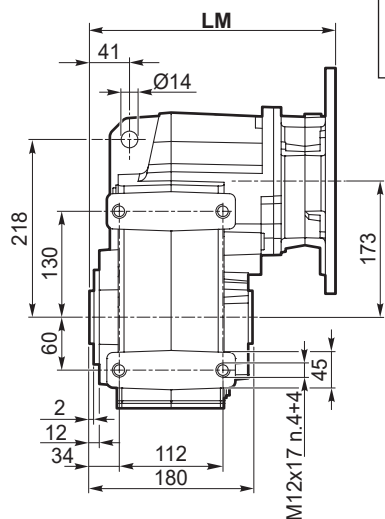
**Dimensions**

**ITS 922 - ITS 923**

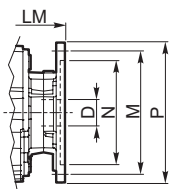
**ITS 922 U  
ITS 923 U**



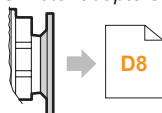
**ITS 922 P  
ITS 923 P**



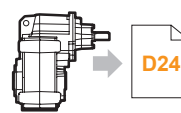
Dimensioni IEC / IEC Dimensions								
	71 B5	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14
<b>LM</b>	282.5	282.5	282.5	287	286.5	287	307.5	
<b>N</b>	110	130	130	95	180	110	230	130
<b>M</b>	130	165	165	115	215	130	265	165
<b>P</b>	160	200	200	140	250	160	300	200
<b>D</b>	14	19	24		28		38	

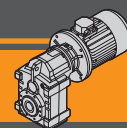


IEC Motori applicabili  
IEC Motor adapters



ITSIS..



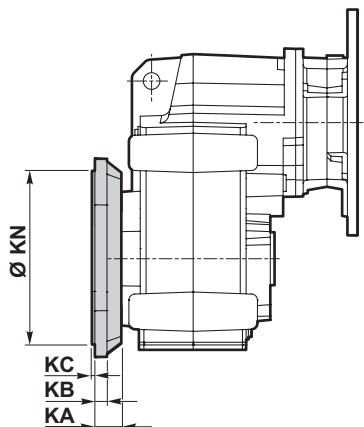


Dimensioni

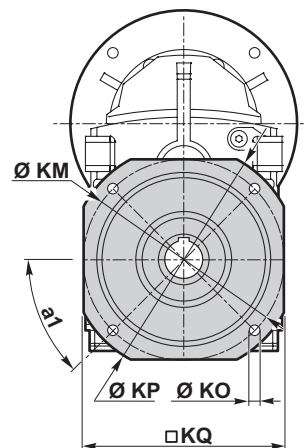
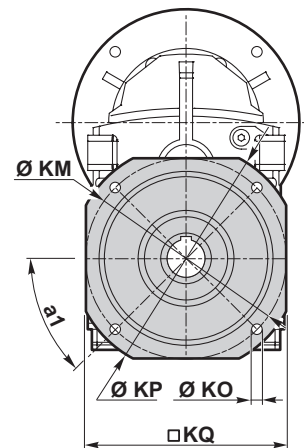
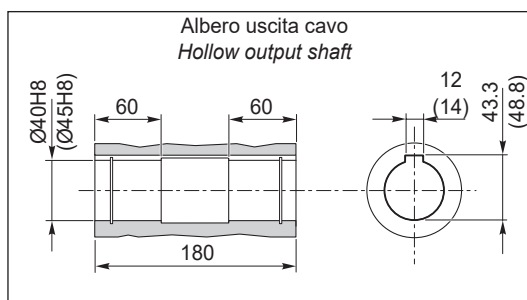
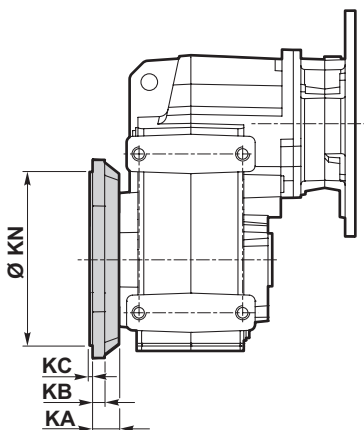
Dimensions

ITS 922 - ITS 923

ITS 922 U/F...  
ITS 923 U/F...



ITS 922 P/F...  
ITS 923 P/F...

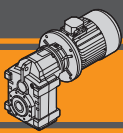


ITS

Versione F / F Version											
ITS	KA	a <sub>1</sub>	KB	KC	Ø KM	KN f7	KO	KP □	KQ	Flangia / Flange	Peso / Weight [kg]
										Tipo / Type	
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

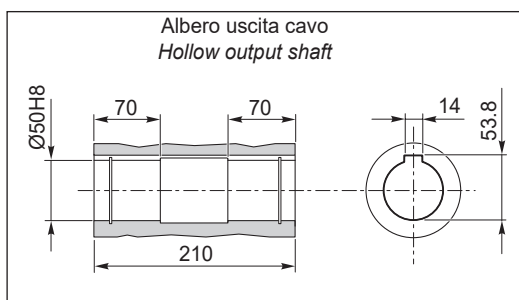
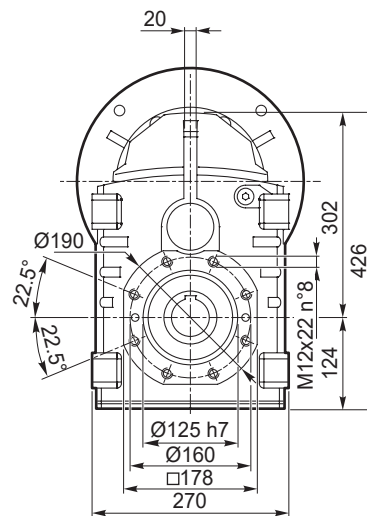
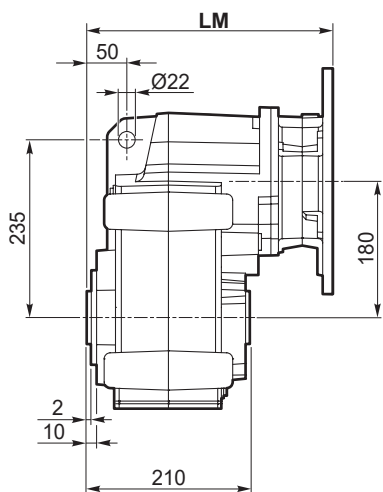


**Dimensioni**

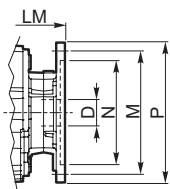
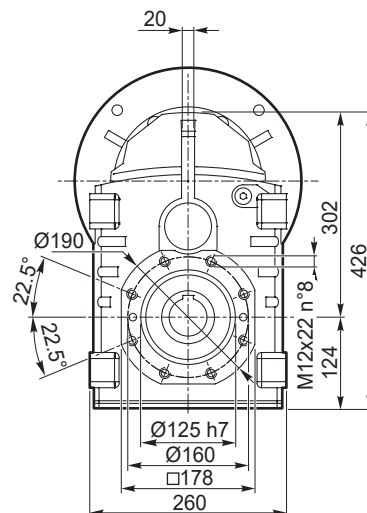
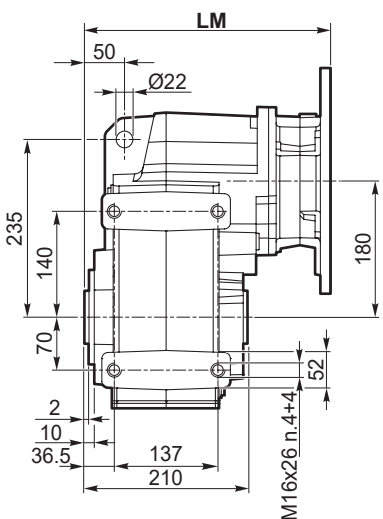
**Dimensions**

**ITS 932 - ITS 933**

**ITS 932 U  
ITS 933 U**

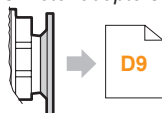


**ITS 932 P  
ITS 933 P**

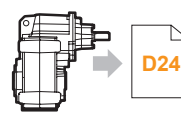


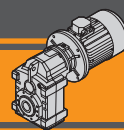
Dimensioni IEC / IEC Dimensions									
	71 B5	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14	160 B5
<b>LM</b>	297.5	297.5	297.5	302	301.5	302	322.5		372.5
<b>N</b>	110	130	130	95	180	110	230	130	250
<b>M</b>	130	165	165	115	215	130	265	165	300
<b>P</b>	160	200	200	140	250	160	300	200	350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

IEC Motori applicabili  
IEC Motor adapters



ITSIS..





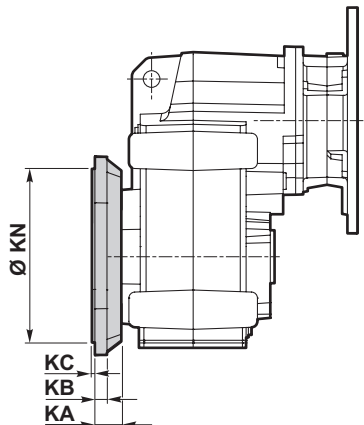
Dimensioni

Dimensions

ITS 932 - ITS 933

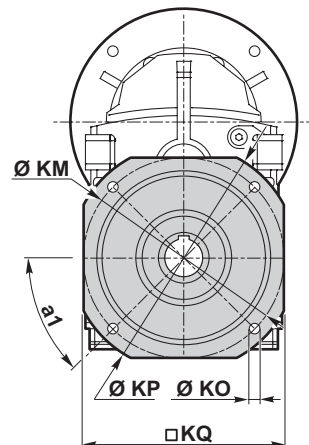
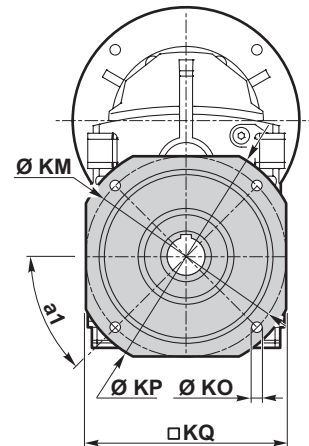
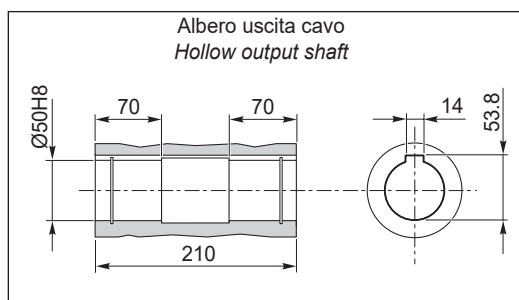
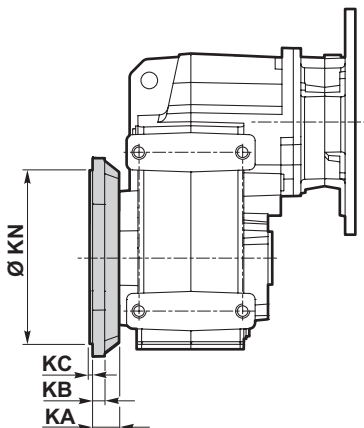
ITS 932 U/F...

ITS 933 U/F...



ITS 932 P/F...

ITS 933 P/F...

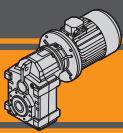


ITS

Versione F / F Version											
ITS	KA	a <sub>1</sub>	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

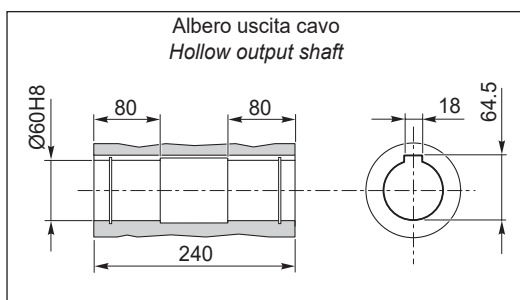
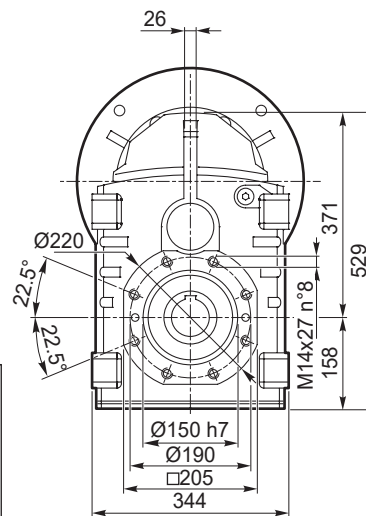
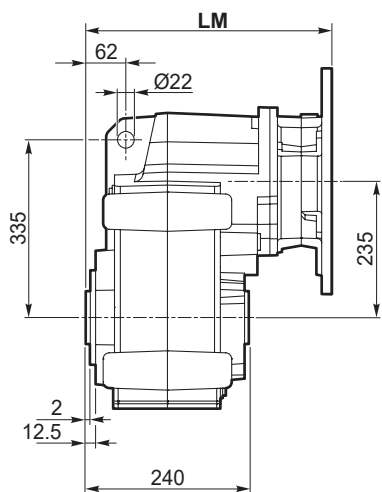


**Dimensioni**

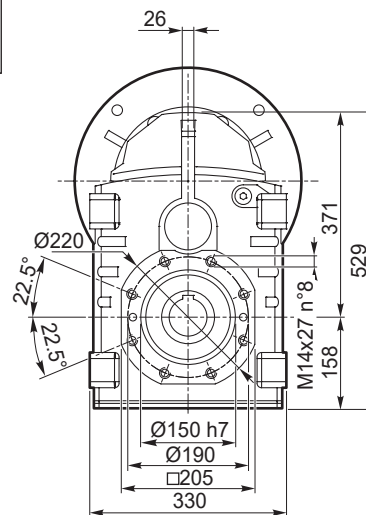
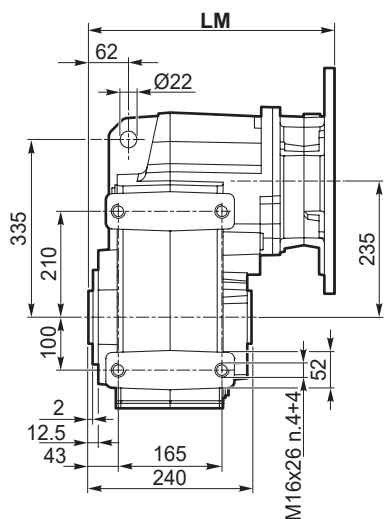
**Dimensions**

**ITS 942 - ITS 943**

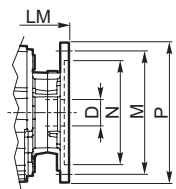
**ITS 942 U  
ITS 943 U**



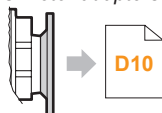
**ITS 942 P  
ITS 943 P**



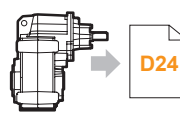
Dimensioni IEC / IEC Dimensions									
	80 B5	90 B5	90 B14	100/112 B5	100/112 B14	132 B5	132 B14	160 B5	180 B5
<b>LM</b>	325.5	325.5	330	329.5	330	350.5		400.5	400.5
<b>N</b>	130	130	95	180	110	230	130	250	250
<b>M</b>	165	165	115	215	130	265	165	300	300
<b>P</b>	200	200	140	250	160	300	200	350	350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

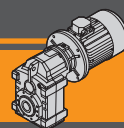


IEC Motori applicabili  
IEC Motor adapters



ITSIS..



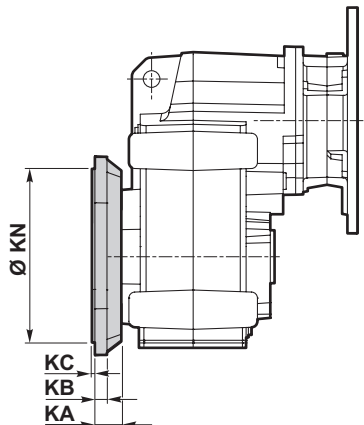


Dimensioni

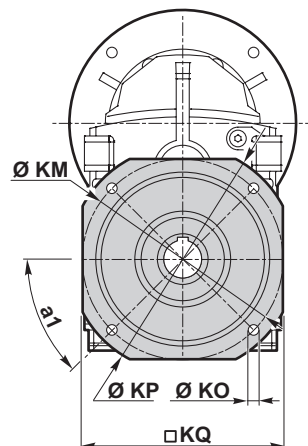
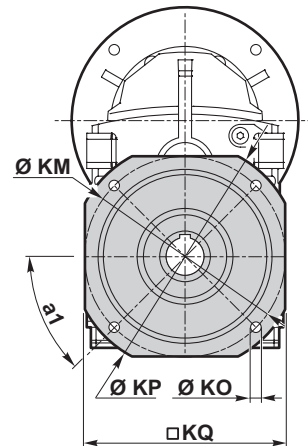
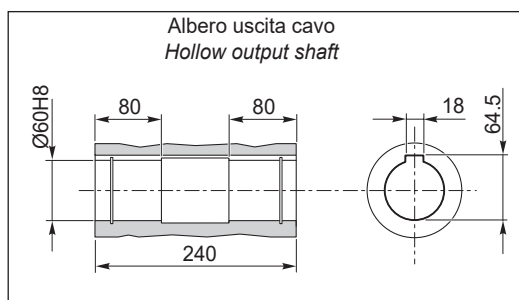
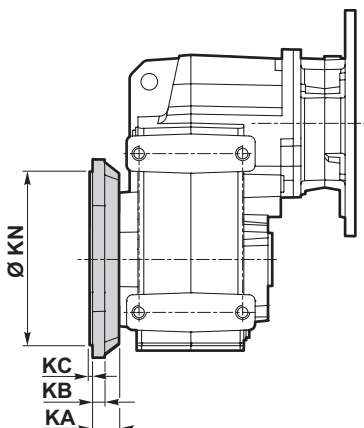
Dimensions

ITS 942 - ITS 943

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



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

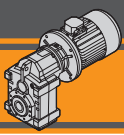


ITS

Versione F / F Version											
ITS	KA	a <sub>1</sub>	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	-	-	

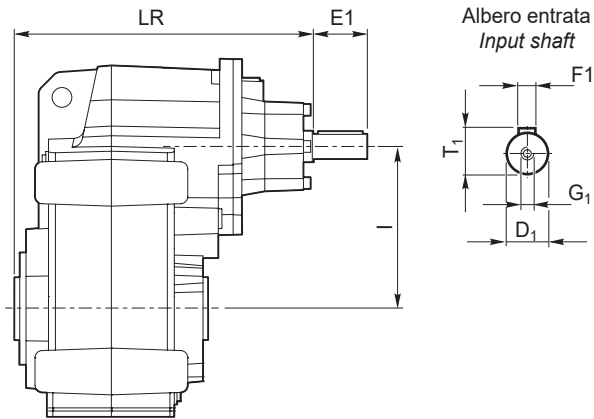
Nota: peso del riduttore complessivo di olio per la posizione M1 (B3)  
Note: weight of the gearbox filled with oil for M1 (B3) assembly position



**Dimensioni**

**Dimensions**

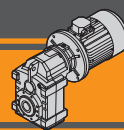
ITSIS...



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

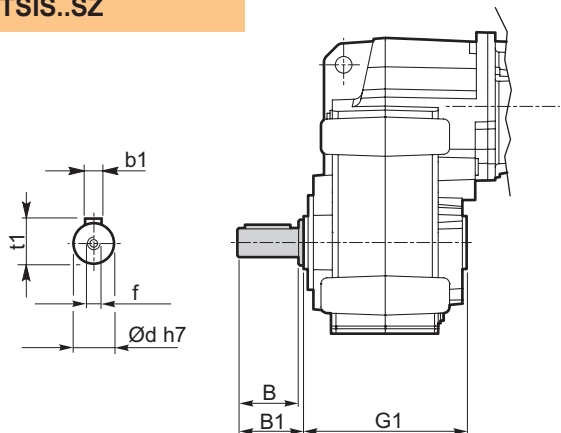
ITSIS	Peso / Weight [kg]
922 U	43
922 P	43
923 U	46
923 P	45
932 U	56
932 P	55
933 U	60
933 P	59
942 U	99
942 P	98
943 U	100
943 P	99





Albero lento / Output shaft

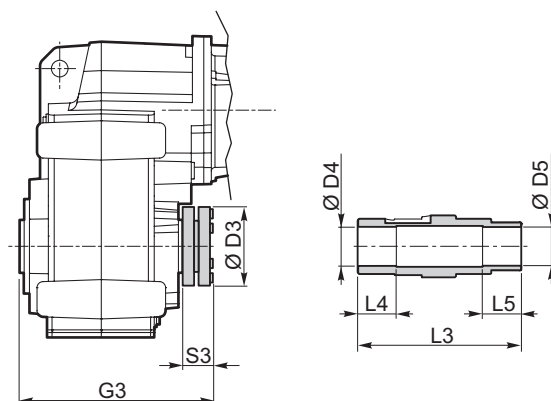
ITS...SZ  
ITSIS..SZ



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..

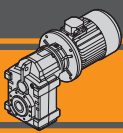


Albero lento con calettatore / Output shaft with shrink disk

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

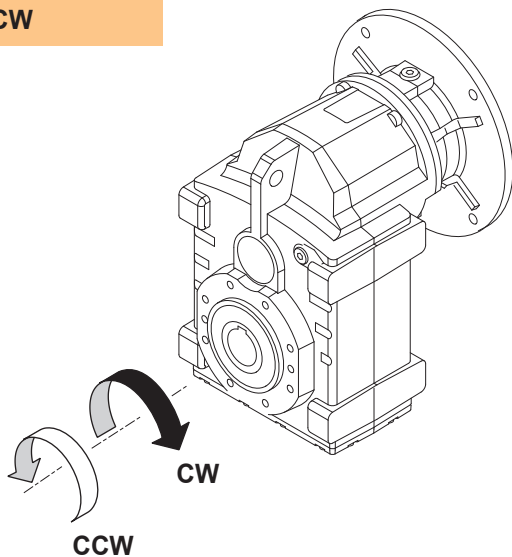
Kit albero uscita con calettatore disponibile a richiesta:  
per le istruzioni di montaggio riferirsi al nostro Servizio Tecnico.

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



## Dispositivo antiretro / Backstop device

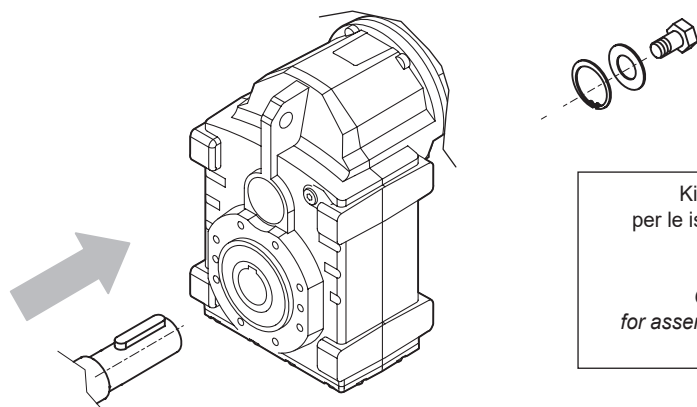
ITS...CW  
ITS...CCW



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.*

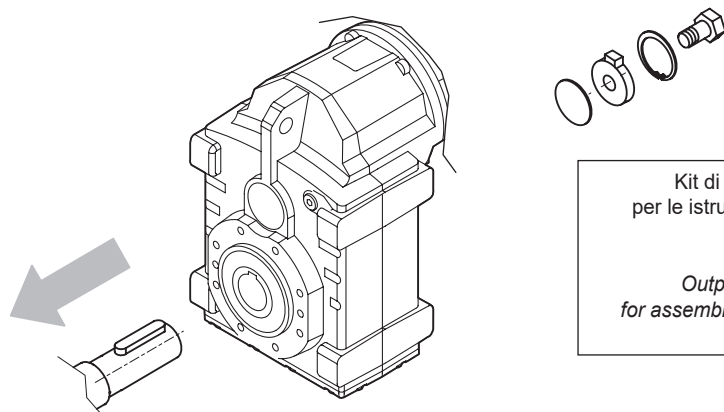
## Kit di montaggio albero uscita / Output shaft assembly kit



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

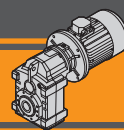
*Output shaft assembly kit available upon request: for assembly instructions please contact our Technical Assistance*  
**Screws not provided**

## 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**

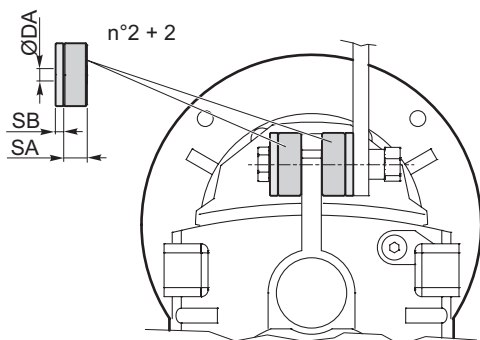
*Output shaft disassembly kit available upon request: for assembly instructions please contact our Technical Assistance*  
**Screws not provided**



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
<b>922</b> <b>923</b>	13	15	5
<b>932</b> <b>933</b>	21	30	10
<b>942</b> <b>943</b>	21	30	10





Appendice  
**Appendix**



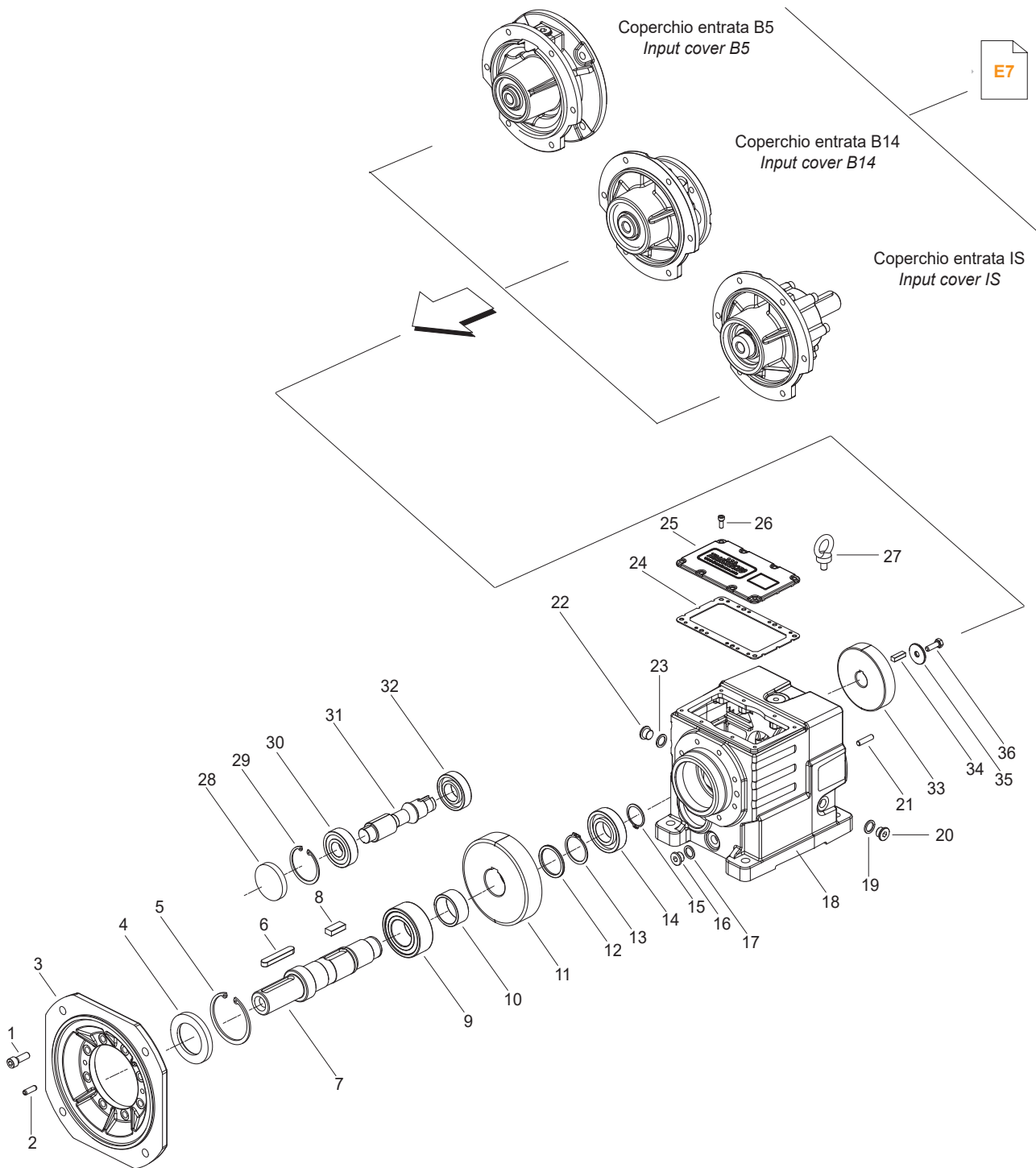


<b>Indice</b>	<b>Index</b>	Pag. Page
Liste parti di ricambio	<i>Spare parts list</i>	
ITH..2	<i>ITH..2</i>	<b>E2</b>
ITH..3	<i>ITH..3</i>	<b>E3</b>
ITB..	<i>ITB..</i>	<b>E4</b>
ITS..2	<i>ITS..2</i>	<b>E5</b>
ITS..3	<i>ITS..3</i>	<b>E6</b>
Coperchio entrata	<i>Input cover</i>	<b>E7</b>

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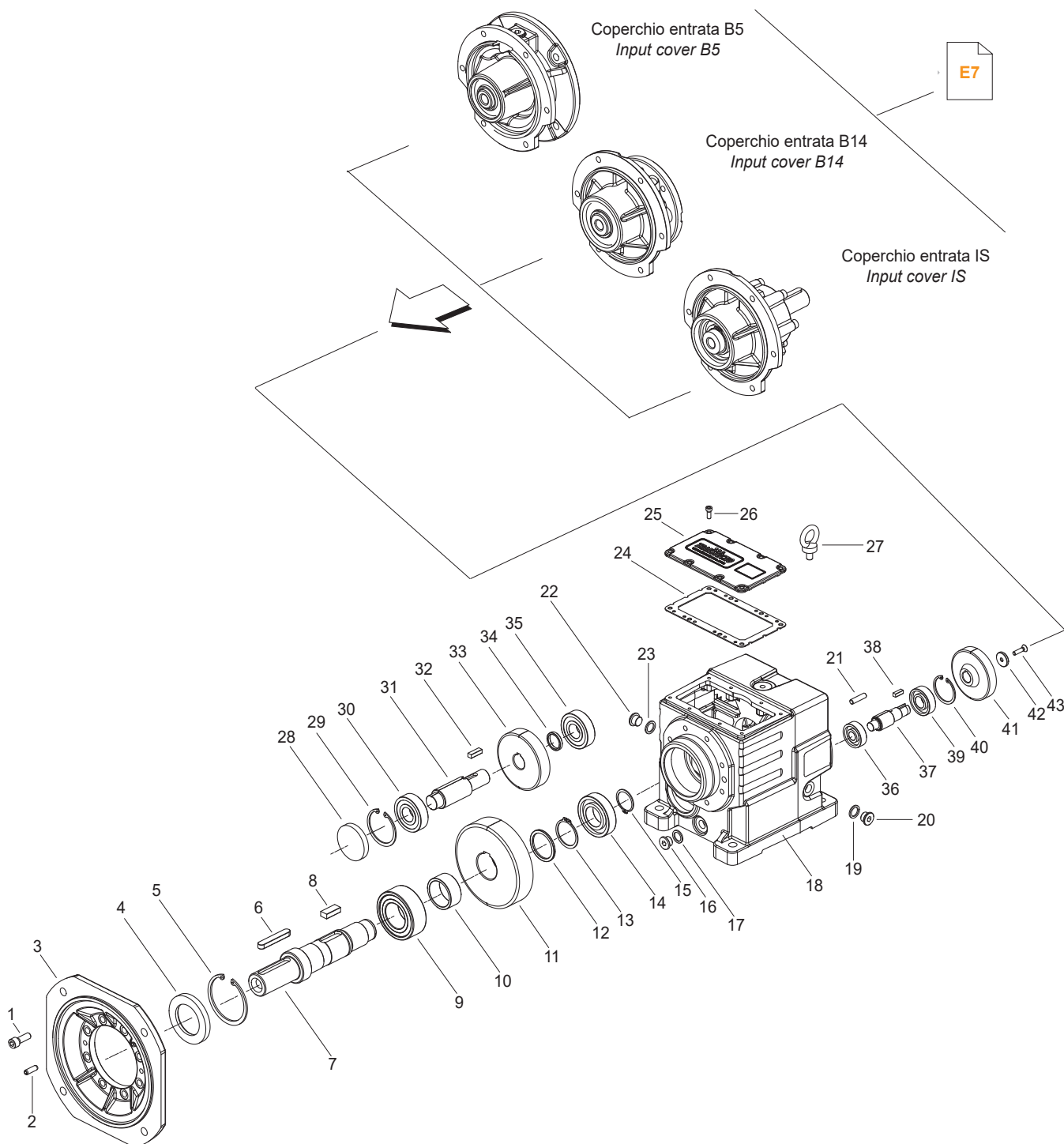
ITH..2



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

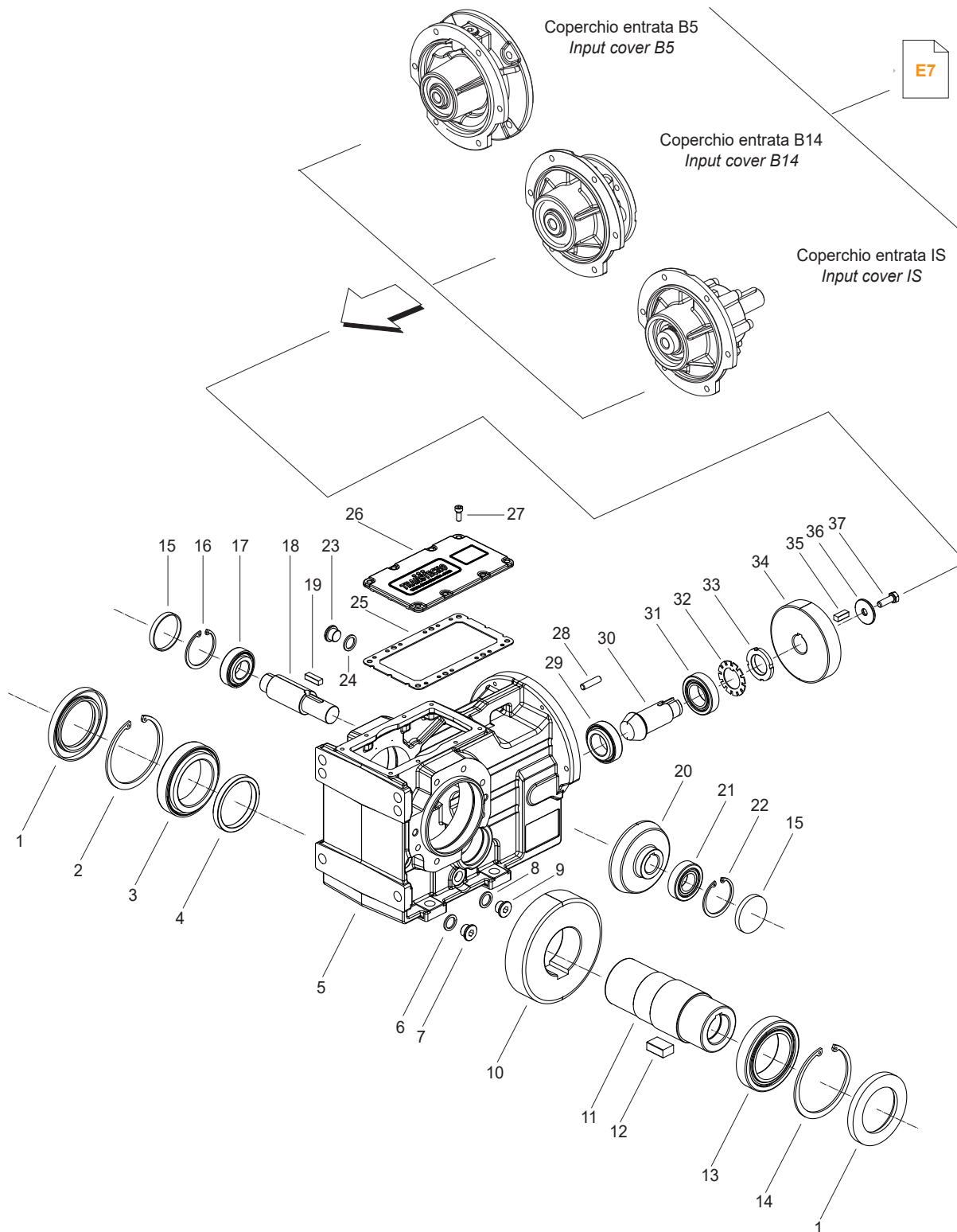


ITH..3



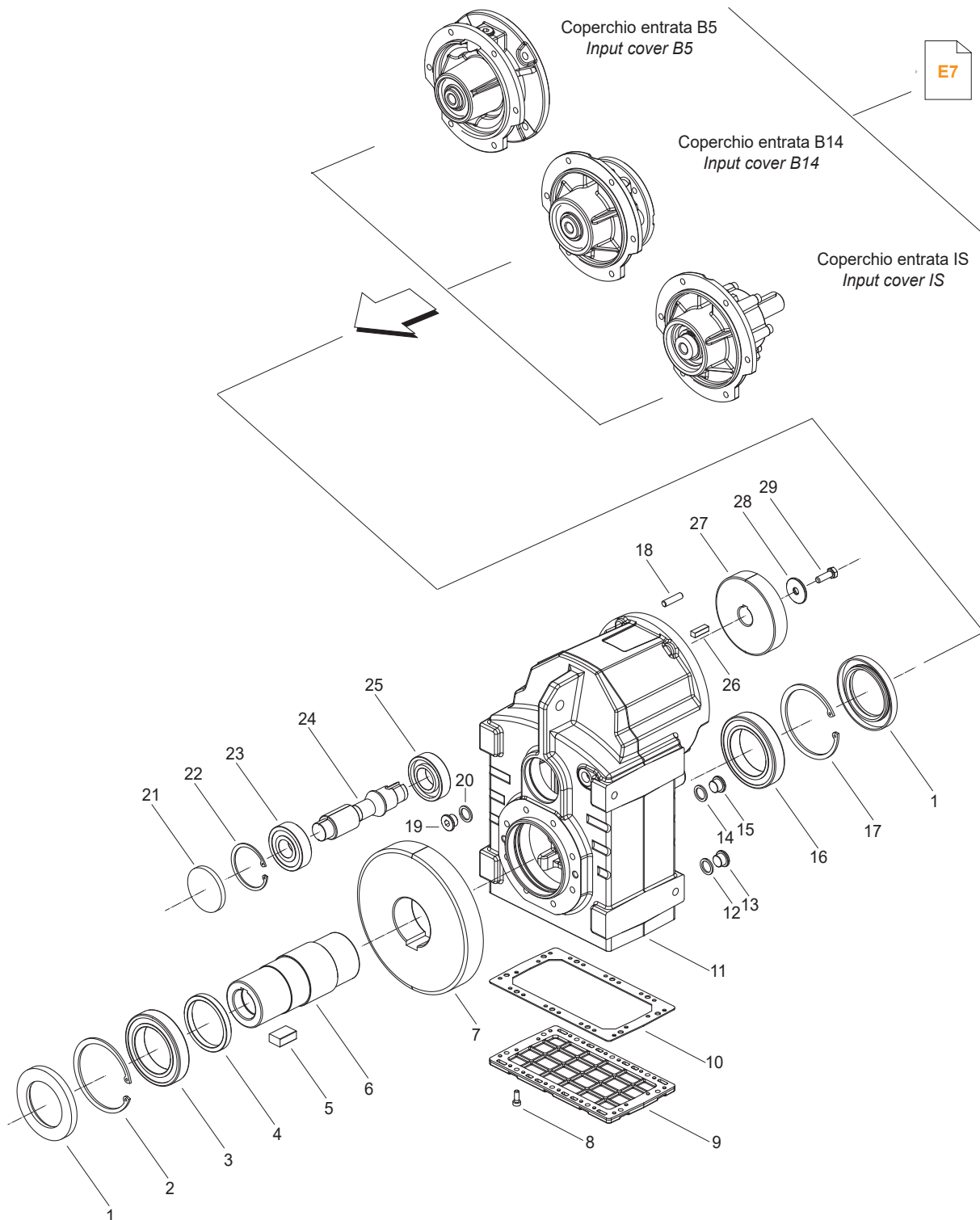
ITH	Anelli di tenuta / Oil seals	
	4	28
113	45/80/10	52x10
123	55/85/10	62x10
133	65/100/10	72x10
143	75/120/10	80x10

ITB ..



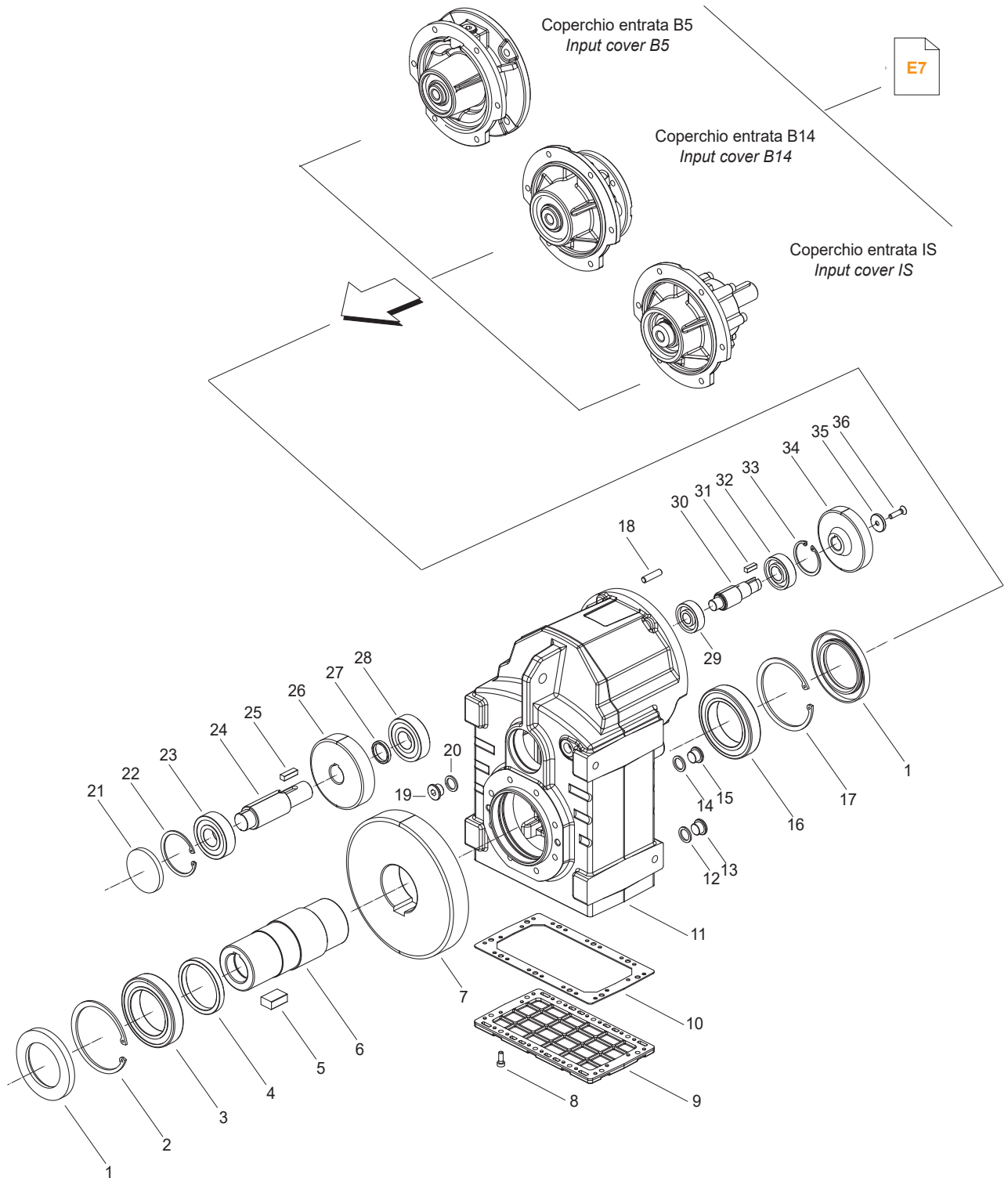
ITB	Anelli di tenuta / Oil seals	
		RCA
	<b>1</b>	<b>15</b>
<b>423</b>	65/100/10	52x7
<b>433</b>	70/110/12	72x10
<b>443</b>	85/130/10	80x10

ITS ..2



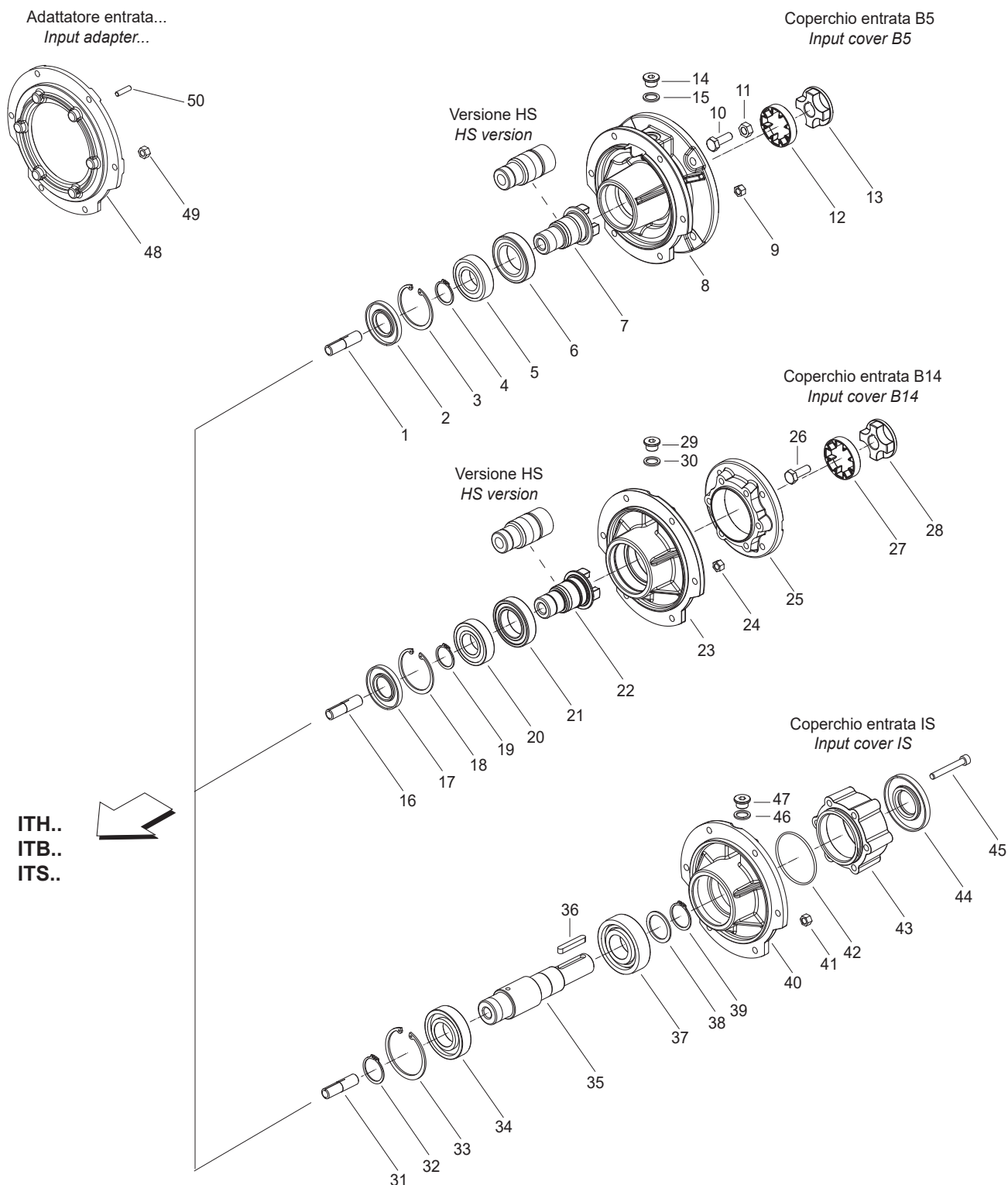
ITS	Anelli di tenuta / Oil seals	
		RCA
	<b>1</b>	<b>21</b>
<b>922</b>	65/100/10	62x7
<b>932</b>	70/110/12	62x7
<b>942</b>	85/130/10	72x10

ITS ..3



ITS	Anelli di tenuta / Oil seals	
		RCA
	<b>1</b>	<b>21</b>
<b>923</b>	65/100/10	62x10
<b>933</b>	70/110/12	62x10
<b>943</b>	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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