

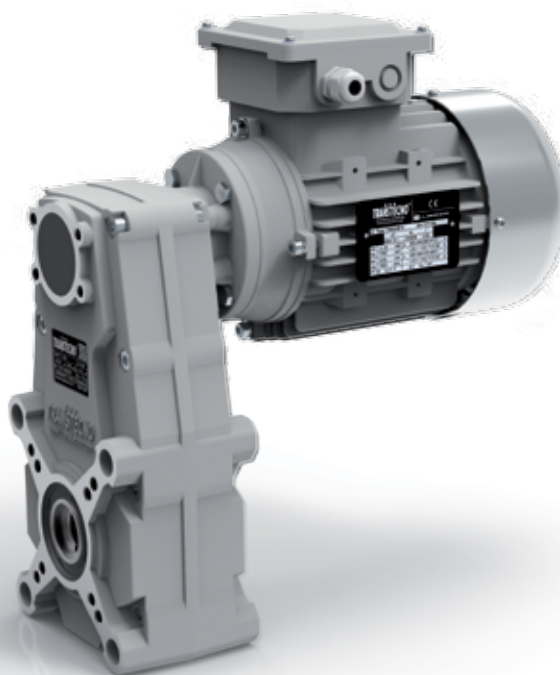
FT

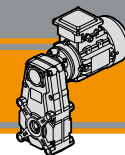
FT



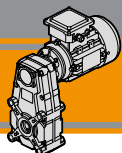
Цилиндрические мотор-редукторы с параллельными валами

Руководство по эксплуатации

**Архангельск (8182)63-90-72****Астана (7172)727-132****Белгород (4722)40-23-64****Брянск (4832)59-03-52****Владивосток (423)249-28-31****Волгоград (844)278-03-48****Вологда (8172)26-41-59****Воронеж (473)204-51-73****Екатеринбург (343)384-55-89****Иваново (4932)77-34-06****Ижевск (3412)26-03-58****Казань (843)206-01-48****Калининград (4012)72-03-81****Калуга (4842)92-23-67****Кемерово (3842)65-04-62****Киров (8332)68-02-04****Краснодар (861)203-40-90****Красноярск (391)204-63-61****Курск (4712)77-13-04****Липецк (4742)52-20-81****Магнитогорск (3519)55-03-13****Москва (495)268-04-70****Мурманск (8152)59-64-93****Набережные Челны (8552)20-53-41****Нижний Новгород (831)429-08-12****Новокузнецк (3843)20-46-81****Новосибирск (383)227-86-73****Орел (4862)44-53-42****Оренбург (3532)37-68-04****Пенза (8412)22-31-16****Пермь (342)205-81-47****Ростов-на-Дону (863)308-18-15****Рязань (4912)46-61-64****Самара (846)206-03-16****Санкт-Петербург (812)309-46-40****Саратов (845)249-38-78****Смоленск (4812)29-41-54****Сочи (862)225-72-31****Ставрополь (8652)20-65-13****Тверь (4822)63-31-35****Томск (3822)98-41-53****Тула (4872)74-02-29****Тюмень (3452)66-21-18****Ульяновск (8422)24-23-59****Уфа (347)229-48-12****Челябинск (351)202-03-61****Череповец (8202)49-02-64****Ярославль (4852)69-52-93**



Indice	Index	Pag. Page
Caratteristiche tecniche	<i>Technical features</i>	E2
Designazione	<i>Classification</i>	E2
Sensi di rotazione	<i>Direction of rotation</i>	E3
Simbologia	<i>Symbols</i>	E3
Lubrificazione	<i>Lubrication</i>	E3
Carichi radiali	<i>Radial loads</i>	E4
Dati tecnici	<i>Technical data</i>	E5
Dimensioni	<i>Dimensions</i>	E8



Caratteristiche tecniche

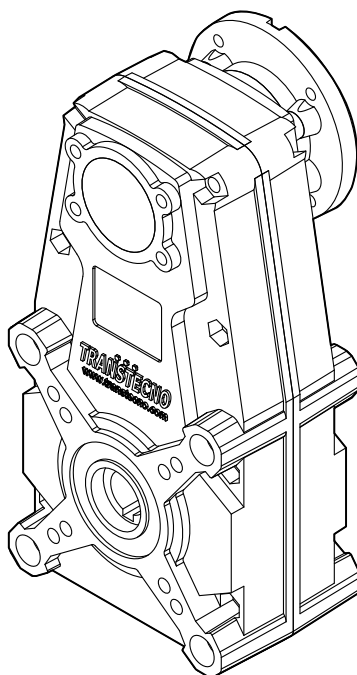
Technical features

I motoriduttori pendolari della serie FT hanno le seguenti caratteristiche principali:

- Carcassa in pressofusione di alluminio
- Lubrificazione permanente con olio sintetico.
- Ingranaggi cilindrici a denti elicoidali.

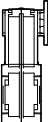

FT helical parallel gearmotors range has the following main features:

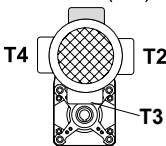
- Die-cast aluminum housings
- Permanent synthetic oil long-life lubrication.
- helical gears.

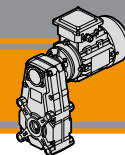


Designazione

Classification

RIDUTTORE / GEARBOX						
FT	146	U	60.63	O20	56	B5
Tipo Type	Grandezza Size	Versione Version	Rapporto Ratio	Albero cavo uscita Hollow output shaft	IEC	Forma costruttiva Version
	105/3 105/4 146 196	U...	vedi tabelle see tables	vedi tabelle see tables	 56 63 71 80 90	B5 B14

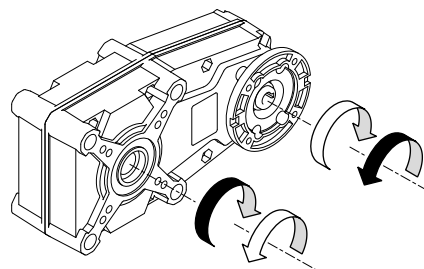
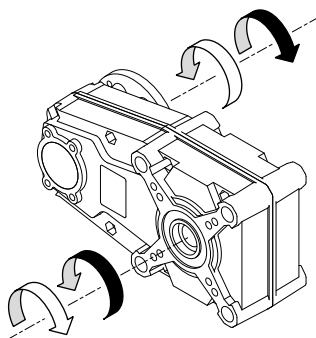
MOTORE / MOTOR						
0.09kW	4p	3ph	230/400V	50Hz	T1	
Potenza Power	Poli Poles	Fasi Phases	Tensione Voltage	Frequenza Frequency	Pos. morsetteria Terminal box pos.	
vedi tabelle see tables	2p 4p 6p 8p	1ph 3ph	230V 230/400V	50Hz 60Hz		



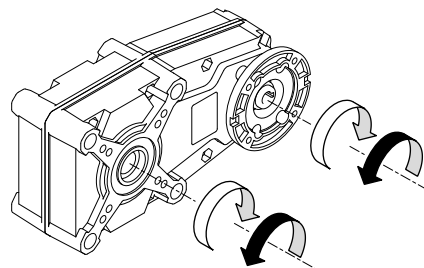
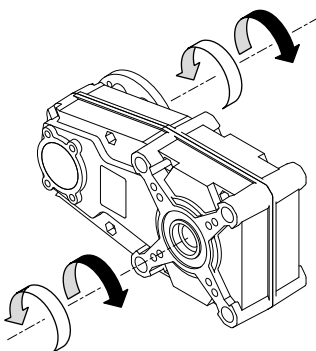
Sensi di rotazione

Direction of rotation

FT105/3
FT146
FT196



FT105/4



Simbologia

Symbols

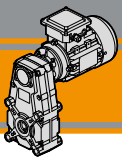
n_1	[min ⁻¹]	Velocità in ingresso / <i>Input speed</i>
n_2	[min ⁻¹]	Velocità in uscita / <i>Output speed</i>
i		Rapporto di riduzione / <i>Ratio</i>
P_1	[kW]	Potenza in entrata / <i>Input power</i>
M_2	[Nm]	Coppia nominale in uscita in funzione di P_1 / <i>Output torque referred to P_1</i>
P_{n1}	[kW]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

Lubrificazione

Lubrication

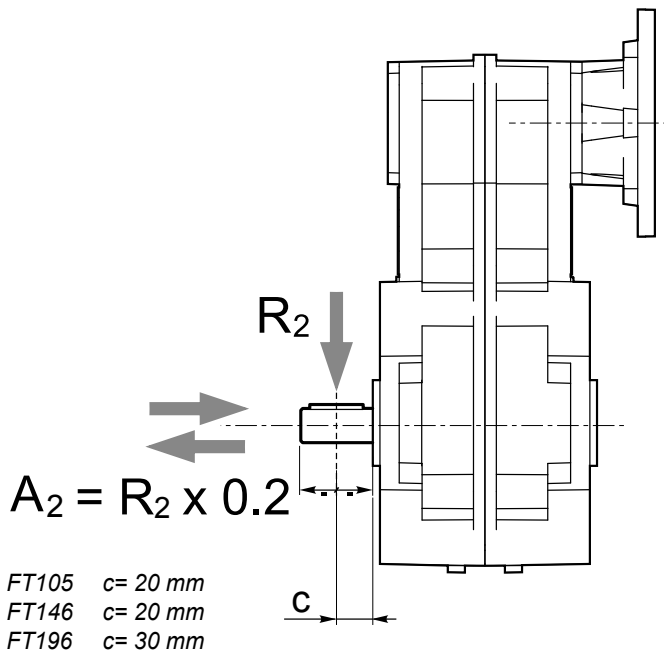
Tutti i motoriduttori sono forniti completi di lubrificante sintetico viscosità 320, pertanto possono essere installati in qualunque posizione di montaggio e non necessitano di manutenzione.

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



Carichi radiali

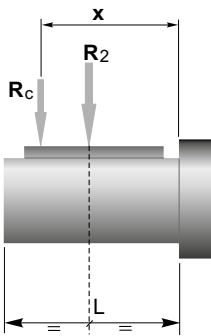
Radial loads



n_2 [min ⁻¹]	R_2 [N]		
	FT105	FT146	FT196
70	1500	2500	3500
40	1700	2700	4000
30	1850	2850	4600
20	2000	3000	5500
10	2000	3000	7000
5	2000	3000	7000

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

When the resulting radial load is not applied on the centre line
of the shaft it is necessary to calculate the effective load with the
following formula:

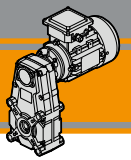


	FT105	FT146	FT196
a	82	82,5	132
b	62	62,5	102
R_{2MAX}	2000	3000	7000

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





$$R \leq R_c$$

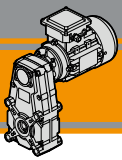
a, b = valori riportati nella tabella
a, b = values given in the table



Dati tecnici

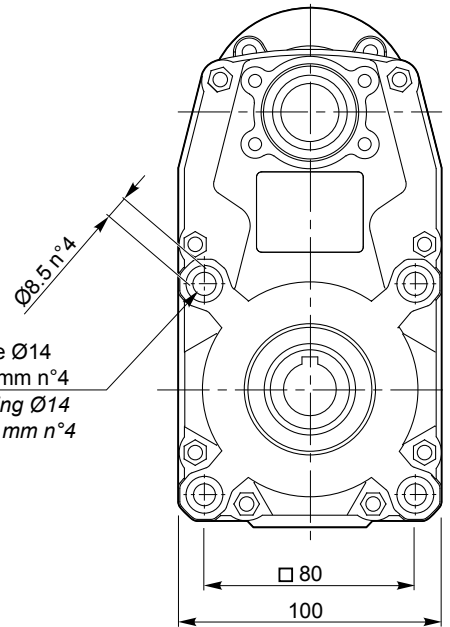
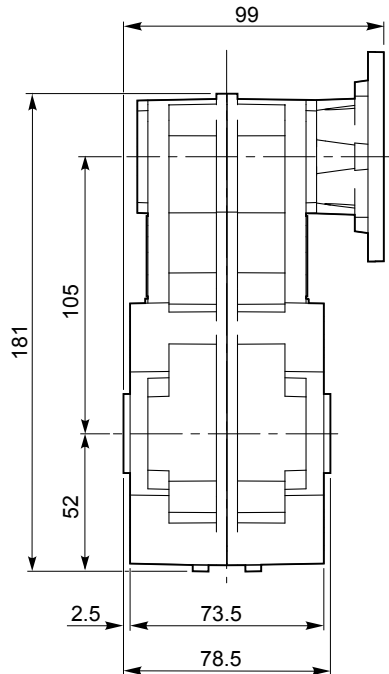
Technical data

P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	sf	i			P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	sf	i					
0.25							0.75									
71A4 (1400 min ⁻¹)	75	30	2.7	18.75	FT146	B5/B14	80B4 (1400 min ⁻¹)	69	98	3.6	20.41	FT196	B5/B14			
	53	42	1.9	26.17		B5/B14		40	167	2.4	34.81		B5/B14			
	50	45	1.8	28.26		B5/B14		33	205	2.2	42.61		B5/B14			
	40	56	1.8	35.07		B5/B14		24	285	1.8	59.36		B5/B14			
	35	64	1.6	40.23		B5/B14		19	350	1.6	72.68		B5/B14			
	30	74	1.3	46.44		B5/B14		15	446	1.2	92.82		B5/B14			
	26	85	1.2	52.86		B5/B14		11	596	0.92	123.95		B5/B14			
	25	90	1.1	56.15		B5/B14										
	23	97	1.1	60.63		B5/B14										
	20	112	0.98	70.00		B5/B14										
	19	121	0.91	75.24		B5/B14										
	17	136	0.81	84.63		B5/B14										
	15	153	0.72	95.61		B5/B14										
	69	33	10.7	20.41		FT196		B5/B14	1.1							
	40	56	7.2	34.81				B5/B14	90S4 (1400 min ⁻¹)	69	144		2.4	20.41	FT196	B5/B14
33	68	6.6	42.61	B5/B14	40		246	1.6		34.81	B5/B14					
24	95	5.3	59.36	B5/B14	33		301	1.5		42.61	B5/B14					
19	117	4.7	72.68	B5/B14	24		419	1.2		59.36	B5/B14					
15	149	3.7	92.82	B5/B14	19		513	1.1		72.68	B5/B14					
11	199	2.8	123.95	B5/B14	15		655	0.84		92.82	B5/B14					
8.9	253	2.2	158.02	B5/B14												
6.9	323	1.7	201.80	B5/B14												
5.2	432	1.3	269.47	B5/B14												
0.37							1.5									
71B4 (1400 min ⁻¹)	75	44	1.8	18.75	FT146	B5/B14	90L4 (1400 min ⁻¹)	69	196	1.8	20.41	FT196	B5/B14			
	53	62	1.3	26.17		B5/B14		40	335	1.2	34.81		B5/B14			
	50	67	1.2	28.26		B5/B14		33	410	1.1	42.61		B5/B14			
	40	83	1.2	35.07		B5/B14		24	571	0.88	59.36		B5/B14			
	35	95	1.1	40.23		B5/B14		19	699	0.79	72.68		B5/B14			
	30	110	0.91	46.44		B5/B14										
	26	125	0.80	52.86		B5/B14										
	25	133	0.75	56.15		B5/B14										
	23	144	0.76	60.63		B5/B14										
	69	48	7.2	20.41		FT196		B5/B14								
	40	83	4.8	34.81				B5/B14								
	33	101	4.5	42.61				B5/B14								
	24	141	3.6	59.36				B5/B14								
	19	172	3.2	72.68				B5/B14								
	15	220	2.5	92.82				B5/B14								
11	294	1.9	123.95	B5/B14												
8.9	375	1.5	158.02	B5/B14												
6.9	479	1.1	201.80	B5/B14												
5.2	639	0.86	269.47	B5/B14												
0.55																
80A4 (1400 min ⁻¹)	69	72	4.9	20.41	FT196	B5/B14										
	40	123	3.2	34.81		B5/B14										
	33	150	3.0	42.61		B5/B14										
	24	209	2.4	59.36		B5/B14										
	19	255	2.1	72.68		B5/B14										
	15	327	1.7	92.82		B5/B14										
	11	437	1.3	123.95		B5/B14										
	8.9	557	1.0	158.02		B5/B14										
	6.9	712	0.77	201.80		B5/B14										



FT 105

FT 105...U



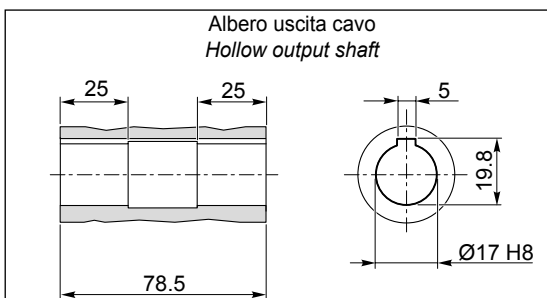
Kg 4.2

NOTA: Stessi fissaggi da entrambi i lati
NOTE: Same fixing points in both sides

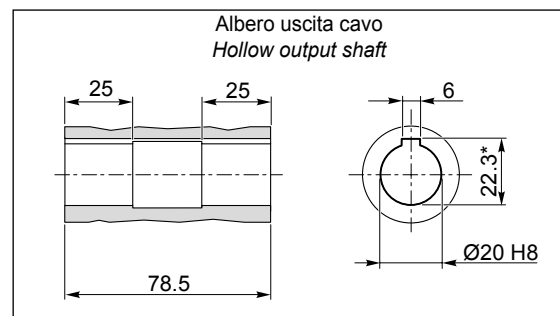
IEC Motori applicabili
IEC Motor adapters



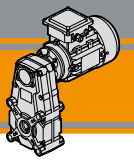
O17



O20

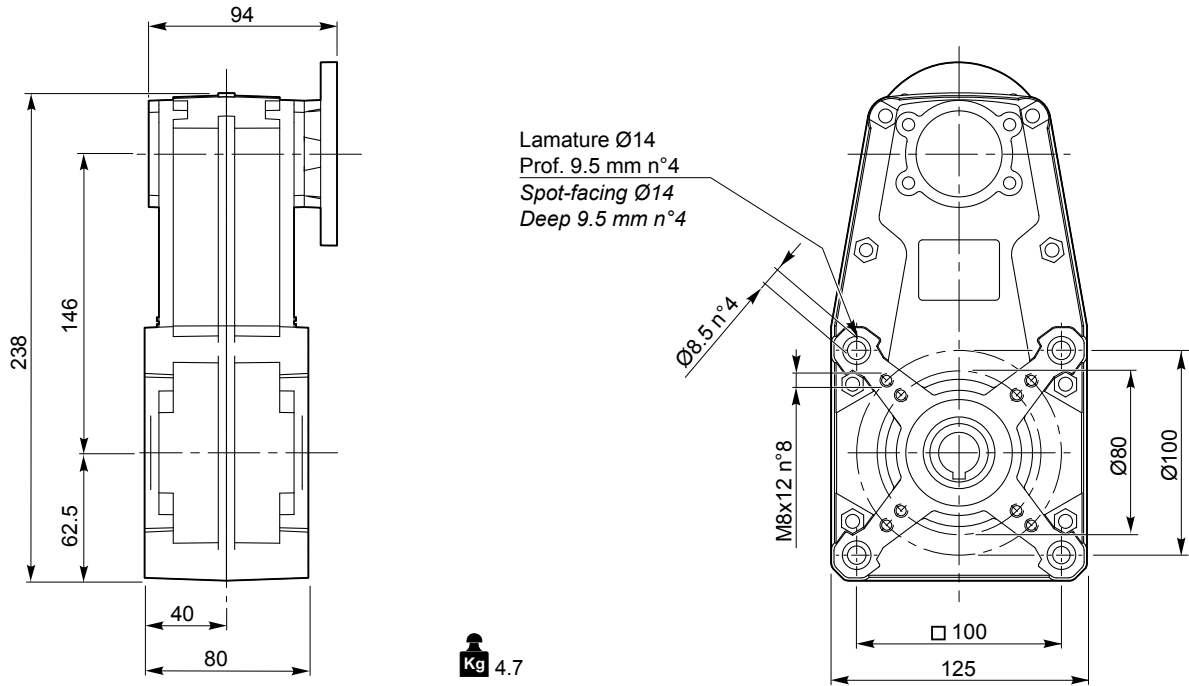


*: Sede linguetta ribassata / Special keyway



FT 146

FT 146 U

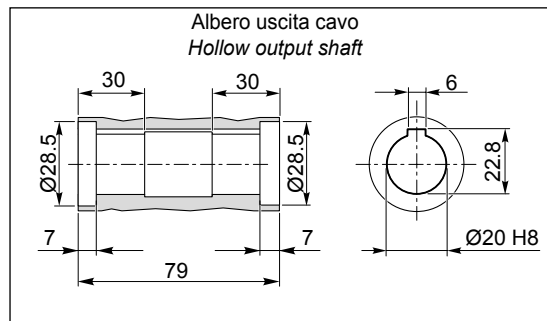


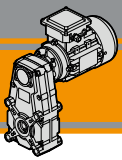
NOTA: Stessi fissaggi da entrambi i lati
NOTE: Same fixing points in both sides

IEC Motori applicabili
IEC Motor adapters



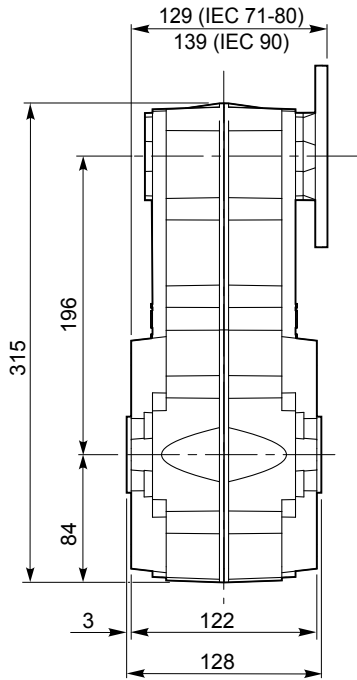
O20



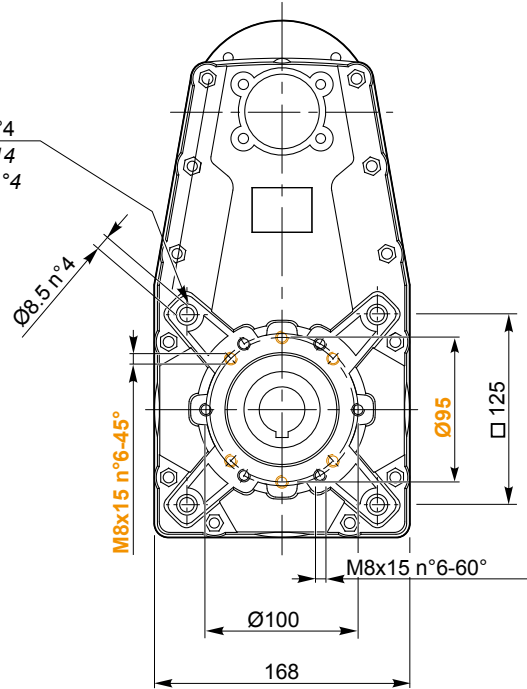


FT 196

FT 196 U

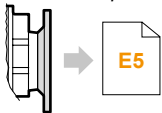


Lamature Ø14
Prof. 11 mm n°4
Spot-facing Ø14
Deep 11 mm n°4



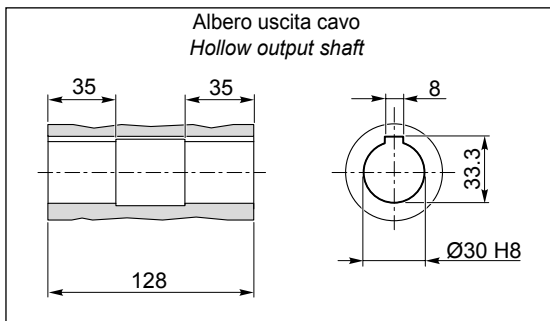
Kg 12.1

IEC Motori applicabili
IEC Motor adapters

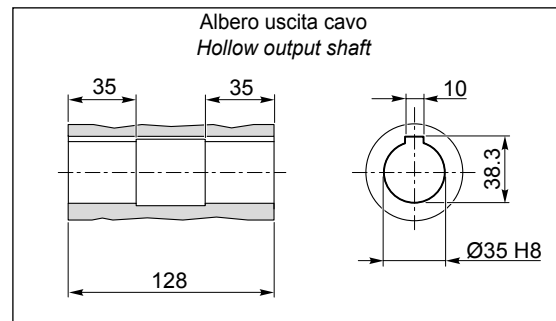


NOTA: Stessi fissaggi da entrambi i lati
NOTE: Same fixing points in both sides

O30



O35



Архангельск (8182)63-90-72	Калининград (4012)72-03-81	Нижний Новгород (831)429-08-12	Смоленск (4812)29-41-54
Астана (7172)727-132	Калуга (4842)92-23-67	Новокузнецк (3843)20-46-81	Сочи (862)225-72-31
Белгород (4722)40-23-64	Кемерово (3842)65-04-62	Новосибирск (383)227-86-73	Ставрополь (8652)20-65-13
Брянск (4832)59-03-52	Киров (8332)68-02-04	Орел (4862)44-53-42	Тверь (4822)63-31-35
Владивосток (423)249-28-31	Краснодар (861)203-40-90	Оренбург (3532)37-68-04	Томск (3822)98-41-53
Волгоград (844)278-03-48	Красноярск (391)204-63-61	Пенза (8412)22-31-16	Тула (4872)74-02-29
Вологда (8172)26-41-59	Курск (4712)77-13-04	Пермь (342)205-81-47	Тюмень (3452)66-21-18
Воронеж (473)204-51-73	Липецк (4742)52-20-81	Ростов-на-Дону (863)308-18-15	Ульяновск (8422)24-23-59
Екатеринбург (343)384-55-89	Магнитогорск (3519)55-03-13	Рязань (4912)46-61-64	Уфа (347)229-48-12
Иваново (4932)77-34-06	Москва (495)268-04-70	Самара (846)206-03-16	Челябинск (351)202-03-61
Ижевск (3412)26-03-58	Мурманск (8152)59-64-93	Санкт-Петербург (812)309-46-40	Череповец (8202)49-02-64
Казань (843)206-01-48	Набережные Челны (8552)20-53-41	Саратов (845)249-38-78	Ярославль (4852)69-52-93

Единый адрес для всех регионов: ton@nt-rt.ru || www.transtecno.nt-rt.ru