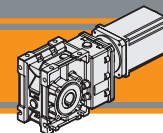




Motoriduttori brushless CC ad assi ortogonali  
**Brushless DC helical bevel gearmotors**



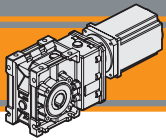




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CMB402 con motore brushless BL070.240	<i>CMB402 with BL070.240 brushless motor</i>	<b>BC5</b>
CMB402 con motore brushless BL070.480	<i>CMB402 with BL070.480 brushless motor</i>	<b>BC5</b>
CMB402 con motore brushless BL070.48.80	<i>CMB402 with BL070.48.80 brushless motor</i>	<b>BC6</b>
CMB402 con motore brushless BL140.480	<i>CMB402 with BL140.480 brushless motor</i>	<b>BC7</b>
CMB502 con motore brushless BL070.240	<i>CMB502 with BL070.240 brushless motor</i>	<b>BC8</b>
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CMB502 con motore brushless BL070.48.80	<i>CMB502 with BL070.48.80 brushless motor</i>	<b>BC9</b>
CMB502 con motore brushless BL140.480	<i>CMB502 with BL140.480 brushless motor</i>	<b>BC10</b>
CMB502 con motore brushless BL200.48.95	<i>CMB502 with BL200.48.95 brushless motor</i>	<b>BC11</b>
CMB502 con motore brushless BL210.480	<i>CMB502 with BL210.480 brushless motor</i>	<b>BC12</b>
CMB633 con motore brushless BL140.480	<i>CMB633 with BL140.480 brushless motor</i>	<b>BC13</b>
CMB633 con motore brushless BL200.48.95	<i>CMB633 with BL200.48.95 brushless motor</i>	<b>BC14</b>
CMB633 con motore brushless BL210.480	<i>CMB633 with BL210.480 brushless motor</i>	<b>BC15</b>
CMB633 con motore brushless BL400.48.120	<i>CMB633 with BL400.48.120 brushless motor</i>	<b>BC16</b>
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# Motoriduttori brushless CC ad assi ortogonali

## Brushless DC helical bevel gearmotors

### Caratteristiche tecniche

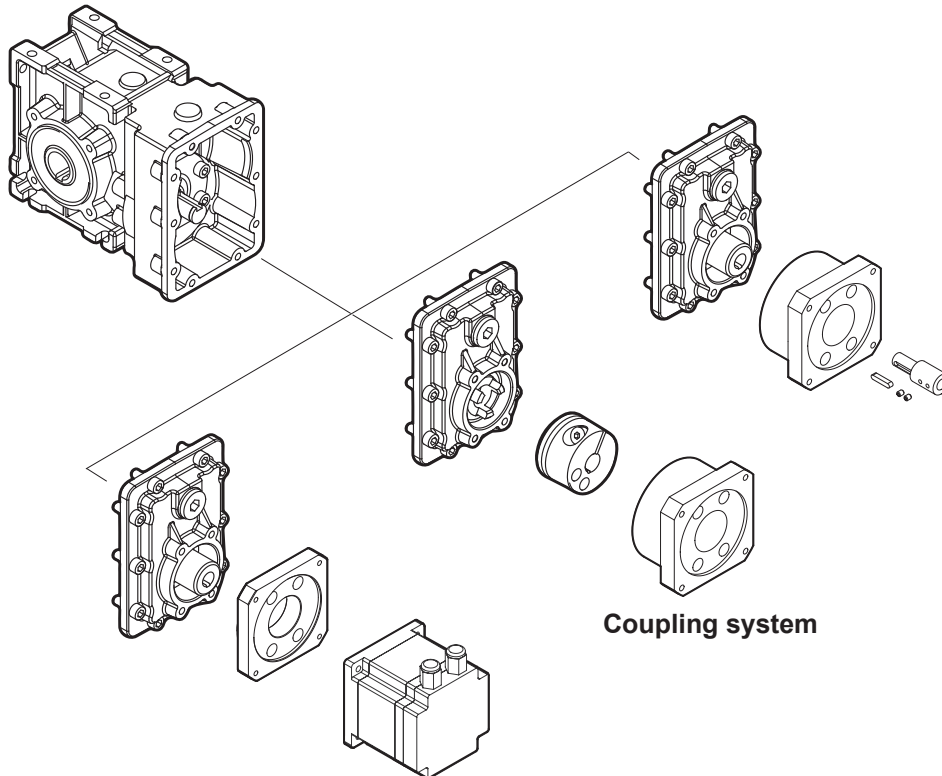
### Technical features

Le caratteristiche principali dei motoriduttori brushless CC ad assi ortogonali della serie CMB sono:

The main features of CMB brushless DC helical bevel gearmotors range are:

- Alimentazione in bassa tensione 24/36/48 Vcc
- Motore protezione IP55
- Coppie motori disponibili da 0.43 Nm a 4.2 Nm
- Lubrificazione permanente con olio sintetico
- Carcassa in pressofusione di alluminio
- Ingranaggi cilindrici a denti elicoidali, induriti e rettificati
- Disponibili per accoppiamento ingresso motore con giunto elastico

- Low voltage power supply 24/36/48 Vdc
- Motor protection IP55
- Motor torque ratings available from 0.43 Nm up to 4.2 Nm
- Permanent synthetic oil long life lubrication
- Die-cast aluminium housing
- Ground-hardened helical gears.
- Available for motor input coupling with elastic coupling



### Designazione

### Classification

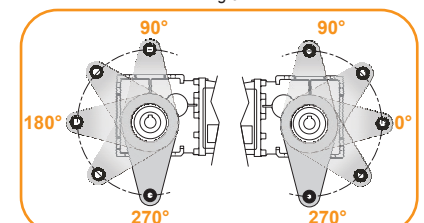
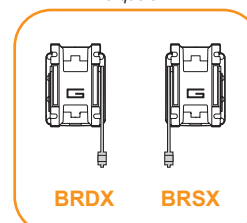
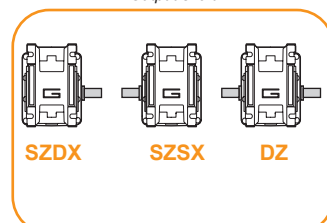
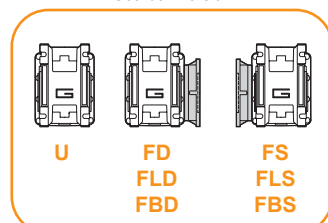
RIDUTTORE / GEARBOX						MOTORE / MOTOR		
CMB	402	U	9.2	020	FX	BL070.480	48V	BR
Tipo Type	Grandezza Size	Versione riduttore Gearbox version	Rapporto Ratio	Albero di uscita Output shaft	Giunto elastico Flexible coupling	Tipo Type	Tensione Voltage	Freno Brake
CMB	402	U	Vedere tabelle See tables	Vedere disegni See draws	FX	BLS043.240	24V-36V	24V
	502	FD				BL070.240	24V	48V
	633	FS				BL070.24B	24V	
	903	FLD				BL070.48B	48V	
		FLS				BL070.480	48V	
	FBD	BL070.48.80	24V-48V					
	FBS	BL140.480	48V					
		BL200.48.95	24V-48V					
		BL210.480	24V-48V					
		BL210.48E	48V					
		BL400.48.120	48V					

Versione Riduttore  
Gearbox Version

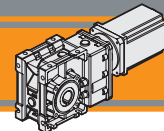
Albero di uscita  
Output shaft

Braccio di reazione  
Torque arm

Angolo  
Angle







### Simbologia

### Symbols

Ns	n° stadi / No. stages	Mn <sub>2</sub>	[Nm]	Coppia nominale in uscita in funzione di Pn1 Nominal output torque referred to Pn1
ir	rapporto reale / real ratio	n <sub>1MAX</sub>	[Rpm]	Velocità max entrata / Max input speed
M <sub>2</sub>	[Nm] coppia in uscita output torque	V	[V]	Tensione / Voltage
A <sub>2</sub>	[N] Carico assiale ammissibile in uscita Permitted output axial load	n <sub>2</sub>	[Rpm]	Velocità in uscita / Output Speed
R <sub>2</sub>	[N] Carico radiale ammissibile in uscita Permitted output radial load	IP		Grado di protezione / Enclosure protection
Pn <sub>1</sub>	[kW] Potenza nominale in entrata Nominal input power	Kg		Peso / Weight
		sf		Fattore di servizio / Service Factor

### Lubrificazione e temperatura

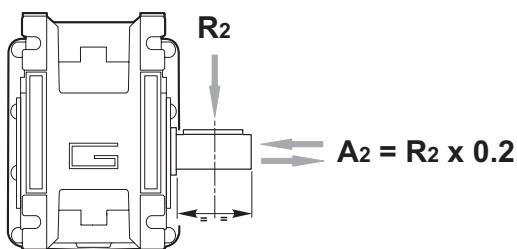
### Lubrication and temperature

I motoriduttori CMB sono forniti completi di lubrificante sintetico (viscosità 320) e non necessitano di manutenzione.  
Temperatura ambiente 0 ÷ 40 °C (in assenza di congelamento ed in assenza di condensa).  
Per temperature diverse, contattare nostro UT.

Permanent synthetic oil long life lubrication (viscosity grade 320) on CMB gearmotors.  
Ambient temperature 0 ÷ 40 °C (in the absence of freezing and condensation).  
For temperature outside this range please contact our technical dept.

### Carichi radiali

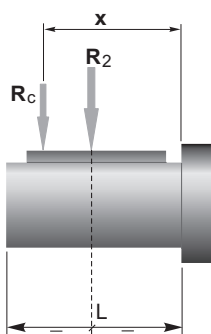
### Radial loads



n <sub>2</sub> [min <sup>-1</sup> ]	R <sub>2</sub> [N]			
	CMB 402	CMB 502	CMB 633	CMB 903
400	905	1116	1835	2682
300	996	1228	2020	2952
200	1141	1406	2312	3379
170	1204	1484	2441	3567
140	1414	1743	2604	3806
100	1582	1949	2913	4686
90	1638	2019	3321	4853
60	2047	2490	3801	5556
40	2524	3029	4492	6614
30	2778	3334	5159	7540
20	3180	3816	5906	8631
15	3500	4200	6500	9500
10	3500	4200	6500	9500

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

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

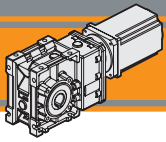


	CMB 402	CMB 502	CMB 633	CMB 903
a	86	104	118	157
b	66	79	93	117
R <sub>2MAX</sub>	3500	4200	6500	9500

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

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

$$R \leq R_c$$



# Motoriduttori brushless CC ad assi ortogonali

## Brushless DC helical bevel gearmotors

CMB402 con motore brushless CC

CMB402 with brushless DC motor

CMB402	BLS043.240													
	24V						36V							
	n <sub>2MIN</sub> [rpm]			n <sub>2MAX</sub> [rpm]			n <sub>1MAX</sub> [rpm]	n <sub>2MIN</sub> [rpm]			n <sub>2MAX</sub> [rpm]		n <sub>1MAX</sub> [rpm]	
ir	M <sub>2</sub> [Nm]	sf	M <sub>2</sub> [Nm]	sf	M <sub>2</sub> [Nm]	M <sub>2</sub> [Nm]		sf	M <sub>2</sub> [Nm]	sf				
6.18	49	2.5	18.4	486	2.5	12.5	3000	65	2.5	18.4	648	2.5	11.1	4000
7.49	40	3.0	15.2	400	3.0	10.3		53	3.0	15.2	534	3.0	9.1	
9.20	33	3.7	12.4	326	3.7	8.4		43	3.7	12.4	435	3.7	7.4	
11.83	25	4.8	10.8	254	4.8	7.3		34	4.8	10.8	338	4.8	6.5	
12.48	24	5.0	10.3	240	5.0	7.0		32	5.0	10.3	320	5.0	6.2	
14.83	20	6.0	8.6	202	6.0	5.9		27	6.0	8.6	270	6.0	5.2	
17.63	17	7.1	7.3	170	7.1	4.9		23	7.1	7.3	227	7.1	4.4	
18.60	16	7.5	8.4	161	7.5	5.7		22	7.5	8.4	215	7.5	5.0	
22.33	13	9.0	7.0	134	9.0	4.8		18	9.0	7.0	179	9.0	4.2	
23.91	13	9.7	6.5	125	9.7	4.4		17	9.7	6.5	167	9.7	3.9	
28.89	10	12	6.4	104	12	4.3		14	12	6.4	138	12	3.8	
30.84	9.7	12	6.0	97	12	4.1		13	12	6.0	130	12	3.6	
33.57	8.9	14	5.5	89	14	3.7		12	14	5.5	119	14	3.3	
35.63	8.4	14	5.2	84	14	3.5		11	14	5.2	112	14	3.1	
42.75	7.0	17	4.3	70	17	2.9		9.4	17	4.3	94	17	2.6	
55.31	5.4	22	3.3	54	22	2.3		7.2	22	3.3	72	22	2.0	
59.06	5.1	24	3.1	51	24	2.1		6.8	24	3.1	68	24	1.9	
64.29	4.7	26	2.9	47	26	2.0		6.2	26	2.9	62	26	1.7	
72.50	4.1	29	2.6	41	29	1.7		5.5	29	2.6	55	29	1.5	

NOTA: per servizio continuo o altamente intermittente, contattare il servizio tecnico

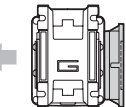
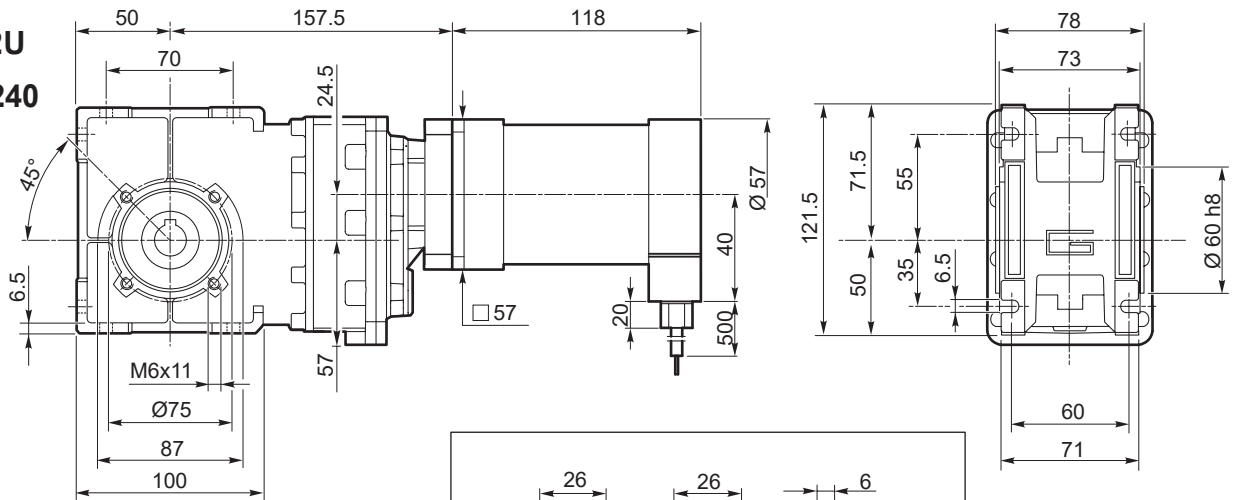
NOTE: for continuous or highly intermittent duty, please contact our technical service

Tipo Type	Numero di poli Number of poles	Numero di fasi Number of phase	Tensione Rated voltage [V]	Numero di giri Rated speed [rpm]	Coppia nominale Rated torque [Nm]	Potenza nominale Rated power [W]
BLS043.240	4	3	36	4000	0.43	180
			24	3000		130
Tipo Type	Coppia massima Peak torque [Nm]	Corrente nominale Rated current [A]	Resistenza Resistance [Ω]	Induttanza Inductance [mH]	Corrente massima Peak current [A]	Peso Weight [kg]
BLS043.240	0.86	6.8	0.35	1	13.6	1.25

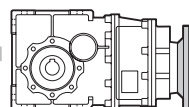
Azionamenti Drives



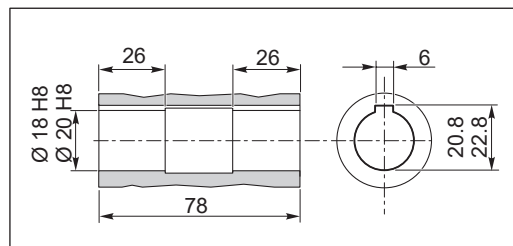
CMB402U + BLS043.240



CMB402..F  
CMB402..FL  
CMB402..FB

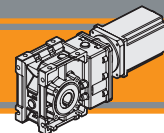


CMB402..AS...



Albero lento cavo / Hollow output shaft

**Kg**  
4.7



CMB402 con motore brushless CC

CMB402 with brushless DC motor

CMB402	BL070.240 / BL070.24B / BL070.480 / BL070.48B					
	24V / 48V					
	ir	n <sub>2MIN</sub> [ rpm ]			n <sub>2MAX</sub> [ rpm ]	
M <sub>2</sub> [Nm]		sf		M <sub>2</sub> [Nm]	sf	n <sub>1MAX</sub> [ rpm ]
6.18	49	4.1	11.3	486	4.1	7.7
7.49	40	4.9	9.3	400	4.9	6.3
9.20	33	6.1	7.6	326	6.1	5.2
11.83	25	7.8	6.6	254	7.8	4.5
12.48	24	8.2	6.3	240	8.2	4.3
14.83	20	9.8	5.3	202	9.8	3.6
17.63	17	12	4.5	170	12	3.0
18.60	16	12	5.2	161	12	3.5
22.33	13	15	4.3	134	15	2.9
23.91	13	16	4.0	125	16	2.7
28.89	10	19	3.9	104	19	2.7
30.84	9.7	20	3.7	97	20	2.5
33.57	8.9	22	3.4	89	22	2.3
35.63	8.4	23	3.2	84	23	2.2
42.75	7.0	28	2.7	70	28	1.8
55.31	5.4	36	2.1	54	36	1.4
59.06	5.1	39	1.9	51	39	1.3
64.29	4.7	42	1.8	47	42	1.2
72.50	4.1	48	1.6	41	48	1.1

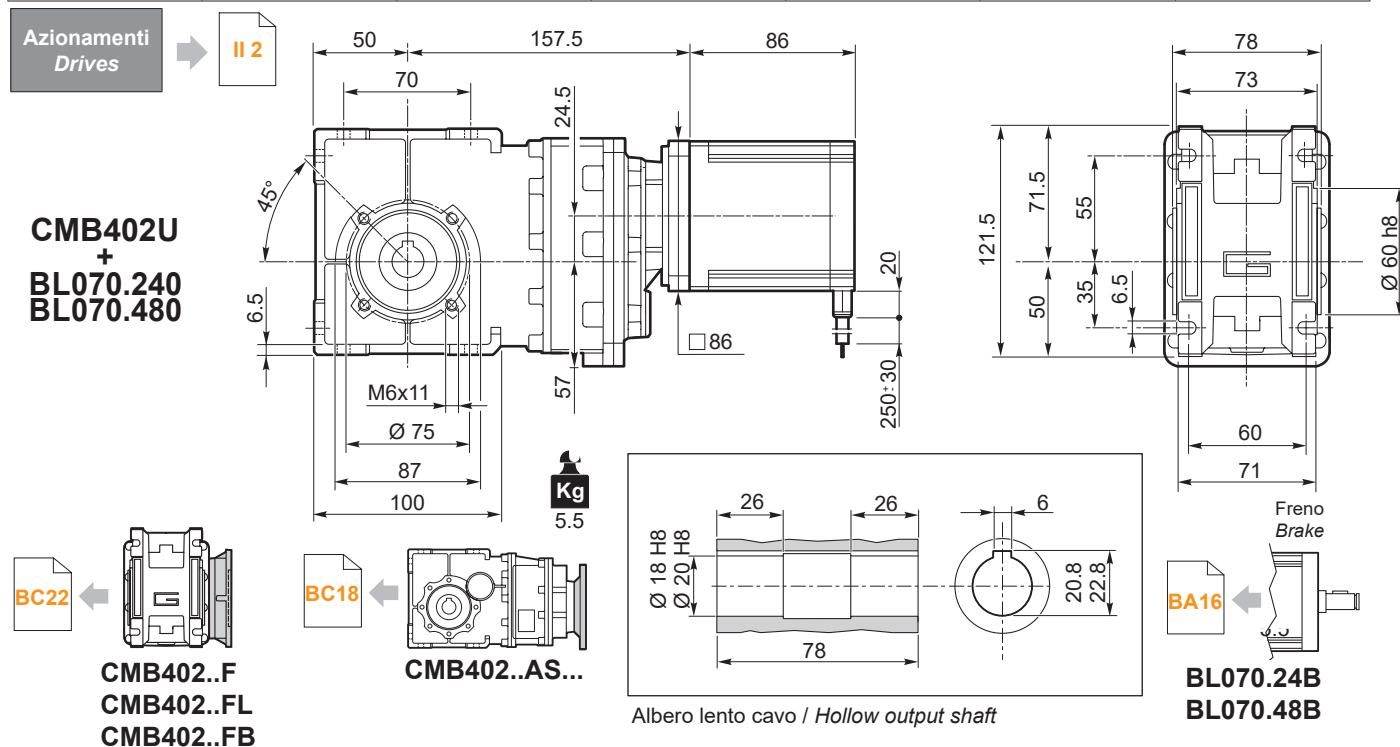
NOTA: per servizio continuo o altamente intermittente, contattare il servizio tecnico

NOTE: for continuous or highly intermittent duty, please contact our technical service

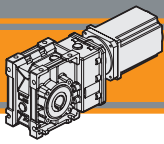
Tipo Type	Numero di poli Number of poles	Numero di fasi Number of phase	Tensione Rated voltage [V]	Numero di giri Rated speed [rpm]	Coppia nominale Rated torque [Nm]	Potenza nominale Rated power [W]
BL070.240 BL070.24B	8	3	24	3000	0.7	220
BL070.480 BL070.48B	8	3	48	3000	0.7	220

Tipo Type	Coppia massima Peak torque [Nm]	Corrente nominale Rated current [A]	Resistenza Resistance [Ω]	Induttanza Inductance [mH]	Corrente massima Peak current [A]	Peso Weight [kg]
BL070.240 BL070.24B	1.4	13	0.091	0.23	26	2.1
BL070.480 BL070.48B	1.4	6.5	0.34	1.0	13	2.1



CMB IP 55



# Motoriduttori brushless CC ad assi ortogonali

## Brushless DC helical bevel gearmotors

CMB402 con motore brushless CC

CMB402 with brushless DC motor

CMB402	BL070.48.80													
	24V						48V							
	n <sub>2MIN</sub> [rpm]			n <sub>2MAX</sub> [rpm]			n <sub>1MAX</sub> [rpm]	n <sub>2MIN</sub> [rpm]			n <sub>2MAX</sub> [rpm]			n <sub>1MAX</sub> [rpm]
M <sub>2</sub> [Nm]	sf		M <sub>2</sub> [Nm]	sf		M <sub>2</sub> [Nm]		sf		M <sub>2</sub> [Nm]	sf			
6.18	40	4.1	11.3	405	4.1	7.7	2500	65	4.1	11.3	648	4.1	6.8	4000
7.49	33	4.9	9.3	334	4.9	6.3		53	4.9	9.3	534	4.9	5.6	
9.20	27	6.1	7.6	272	6.1	5.2		43	6.1	7.6	435	6.1	4.6	
11.83	21	7.8	6.6	211	7.8	4.5		34	7.8	6.6	338	7.8	4.0	
12.48	20	8.2	6.3	200	8.2	4.3		32	8.2	6.3	320	8.2	3.8	
14.83	17	10	5.3	169	10	3.6		27	10	5.3	270	10	3.2	
17.63	14	12	4.5	142	12	3.0		23	12	4.5	227	12	2.7	
18.60	13	12	5.2	134	12	3.5		22	12	5.2	215	12	3.1	
22.33	11	15	4.3	112	15	2.9		18	15	4.3	179	15	2.6	
23.91	10	16	4.0	105	16	2.7		17	16	4.0	167	16	2.4	
28.89	8.7	19	3.9	87	19	2.7		14	19	3.9	138	19	2.4	
30.84	8.1	20	3.7	81	20	2.5		13	20	3.7	130	20	2.2	
33.57	7.4	22	3.4	74	22	2.3		12	22	3.4	119	22	2.0	
35.63	7.0	23	3.2	70	23	2.2		11	23	3.2	112	23	1.9	
42.75	5.8	28	2.7	58	28	1.8		9.4	28	2.7	94	28	1.6	
55.31	4.5	36	2.1	45	36	1.4		7.2	36	2.1	72	36	1.2	
59.06	4.2	39	1.9	42	39	1.3		6.8	39	1.9	68	39	1.2	
64.29	3.9	42	1.8	39	42	1.2		6.2	42	1.8	62	42	1.1	
72.50	3.4	48	1.6	34	48	1.1		5.5	48	1.6	55	48	0.9	

**NOTA:** per servizio continuo o altamente intermittente, contattare il servizio tecnico

**NOTE:** for continuous or highly intermittent duty, please contact our technical service

**Attenzione: superamento della coppia nominale supportata dal riduttore per servizio S1. Contattare il ns. servizio tecnico**  
**Attention: rated torque withstood by gear reducer for service in S1 is exceeded. Please, contact our technical office.**

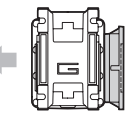
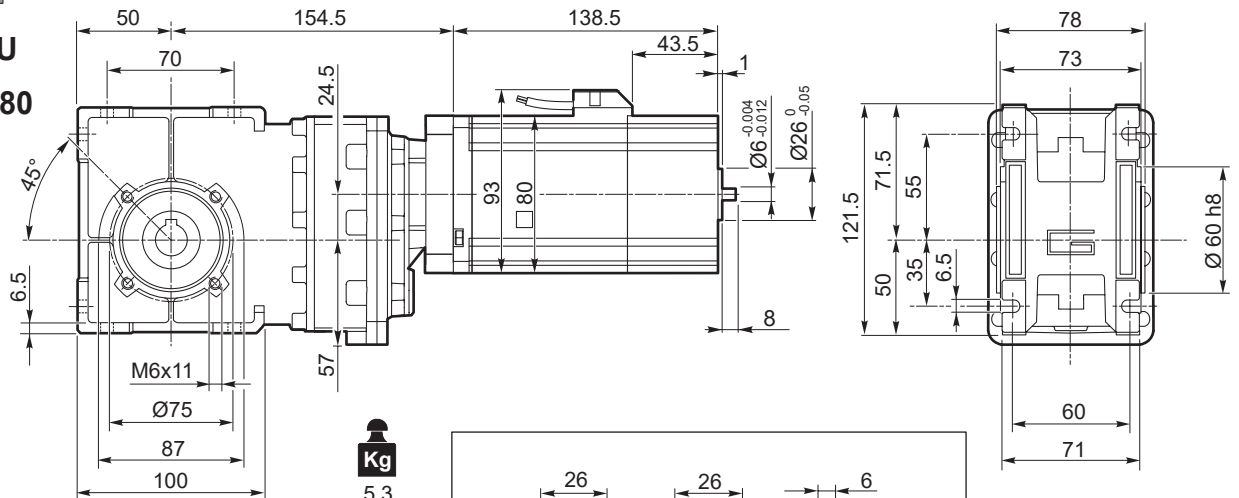
Tipo Type	Numero di poli Number of poles	Numero di fasi Number of phase	Tensione nominale Rated voltage [V]	Velocità nominale Rated speed [rpm]	Coppia nominale Rated torque [Nm]	Potenza nominale Rated power [W]	Coppia di picco Peak torque [Nm]
BL070.48.80	8	3	48	4350	0.7	320	1.4
			24	2500		185	

Tipo Type	Corrente nominale Rated current [A]	Corrente di picco Peak current [A]	Resistenza fase-fase Line to line resistance [Ω]	Induttanza fase-fase Line to line inductance [mH]	Costante di coppia Torque constant [Nm/A]	Costante FCEM Back EMF [V/kRPM]	Inerzia rotore Rotor inertia [gcm <sup>2</sup> ]	Peso Weight [kg]
BL070.48.80	12	36	0.072	0.304	0.1	6.15	1000	1.8

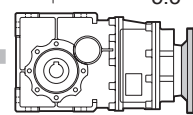
Azionamenti Drives



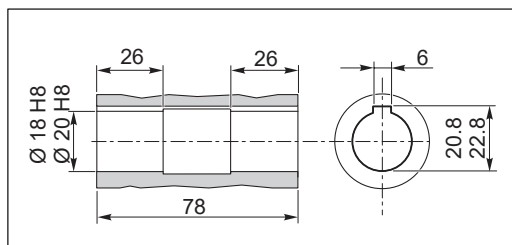
CMB402U + BL070.48.80



CMB402..F  
CMB402..FL  
CMB402..FB



CMB402..AS...

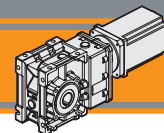


Albero lento cavo / Hollow output shaft



B-C6

0724A



CMB402 con motore brushless CC

CMB402 with brushless DC motor

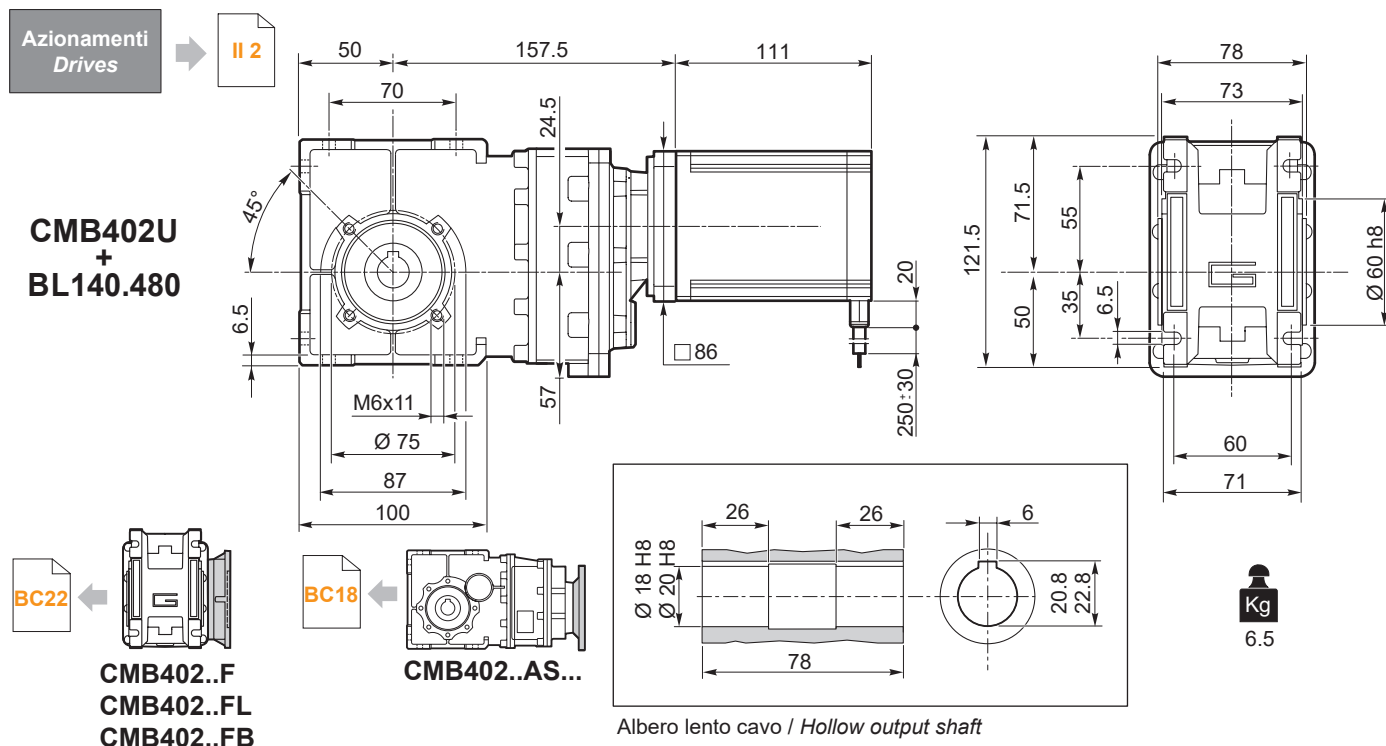
CMB402	BL140.480						3000
	48V						
	ir	n <sub>2</sub> MIN [rpm]			n <sub>2</sub> MAX [rpm]		
M <sub>2</sub> [Nm]		sf		M <sub>2</sub> [Nm]	sf	n <sub>1</sub> MAX [rpm]	
6.18	49	8.1	5.7	486	8.1	3.8	3000
7.49	40	9.9	4.7	400	9.9	3.2	
9.20	33	12	3.8	326	12	2.6	
11.83	25	15	3.3	254	15	2.3	
12.48	24	16	3.1	240	16	2.1	
14.83	20	19	2.7	202	19	1.8	
17.63	17	23	2.2	170	23	1.5	
18.60	16	24	2.6	161	24	1.8	
22.33	13	29	2.2	134	29	1.5	
23.91	13	31	2.0	125	31	1.4	
28.89	10	38	2.0	104	38	1.3	
30.84	9.7	41	1.8	97	41	1.2	
33.57	8.9	44	1.7	89	44	1.1	
35.63	8.4	47	1.6	84	47	1.1	
42.75	7.0	56	1.3	70	56	0.9	
55.31	5.4	73	1.0	54	72	0.7	
59.06	5.1	78	1.0	51	72	0.7	
64.29	4.7	85	0.9	47	72	0.7	
72.50	4.1	95	0.8	41	72	0.7	

NOTA: per servizio continuo o altamente intermittente, contattare il servizio tecnico

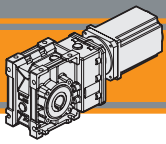
NOTE: for continuous or highly intermittent duty, please contact our technical service

Attenzione: superamento della coppia nominale supportata dal riduttore per servizio S1. Contattare il ns. servizio tecnico  
Attention: rated torque withstood by gear reducer for service S1 is exceeded. Please, contact our technical office.

Tipo Type	Numero di poli Number of poles	Numero di fasi Number of phase	Tensione Rated voltage [V]	Numero di giri Rated speed [rpm]	Coppia nominale Rated torque [Nm]	Potenza nominale Rated power [W]
BL140.480	8	3	48	3000	1.4	440
Tipo Type	Coppia massima Peak torque [Nm]	Corrente nominale Rated current [A]	Resistenza Resistance [Ω]	Induttanza Inductance [mH]	Corrente massima Peak current [A]	Peso Weight [kg]
BL140.480	2.8	13	0.16	0.5	26	3.15



CMB IP 55



# Motoriduttori brushless CC ad assi ortogonali

## Brushless DC helical bevel gearmotors

CMB502 con motore brushless CC

CMB502 with brushless DC motor

CMB502	BL070.240 / BL070.24B / BL070.480 / BL070.48B					
	24V / 48V					
	ir	n <sub>2MIN</sub> [ rpm ]			n <sub>2MAX</sub> [ rpm ]	
M <sub>2</sub> [Nm]		sf		M <sub>2</sub> [Nm]	sf	n <sub>1MAX</sub> [ rpm ]
6.18	49	4.1	19.8	486	4.1	13.4
7.49	40	4.9	16.3	400	4.9	11.1
9.20	33	6.1	13.3	326	6.1	9.0
11.83	25	7.8	13.3	254	7.8	9.0
12.48	24	8.2	12.6	240	8.2	8.5
14.83	20	9.8	10.6	202	9.8	7.2
17.63	17	12	8.9	170	12	6.1
18.60	16	12	10.3	161	12	7.0
22.33	13	15	8.6	134	15	5.8
23.91	13	16	8.0	125	16	5.5
28.89	10	19	7.6	104	19	5.1
30.84	9.7	20	7.1	97	20	4.8
33.57	8.9	22	6.5	89	22	4.4
35.63	8.4	23	6.1	84	23	4.2
42.75	7.0	28	5.1	70	28	3.5
55.31	5.4	36	3.9	54	36	2.7
59.06	5.1	39	3.7	51	39	2.5
64.29	4.7	42	3.4	47	42	2.3
72.50	4.1	48	3.0	41	48	2.0

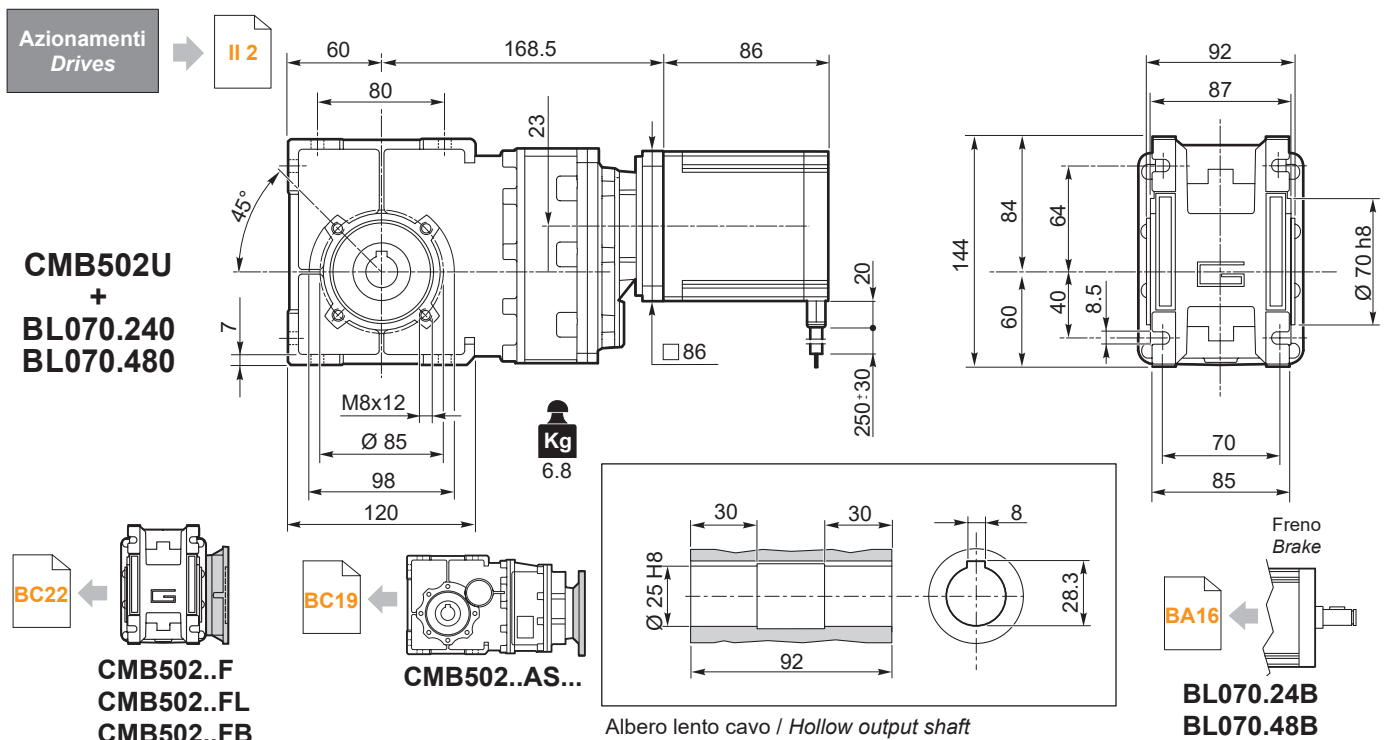
NOTA: per servizio continuo o altamente intermittente, contattare il servizio tecnico

NOTE: for continuous or highly intermittent duty, please contact our technical service

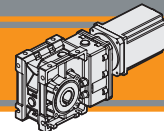
Tipo Type	Numero di poli Number of poles	Numero di fasi Number of phase	Tensione Rated voltage [V]	Numero di giri Rated speed [rpm]	Coppia nominale Rated torque [Nm]	Potenza nominale Rated power [W]
BL070.240 BL070.24B	8	3	24	3000	0.7	220
BL070.480 BL070.48B	8	3	48	3000	0.7	220

Tipo Type	Coppia massima Peak torque [Nm]	Corrente nominale Rated current [A]	Resistenza Resistance [Ω]	Induttanza Inductance [mH]	Corrente massima Peak current [A]	Peso Weight [kg]
BL070.240 BL070.24B	1.4	13	0.091	0.23	26	2.1
BL070.480 BL070.48B	1.4	6.5	0.34	1.0	13	2.1







CMB502 con motore brushless CC

CMB502 with brushless DC motor

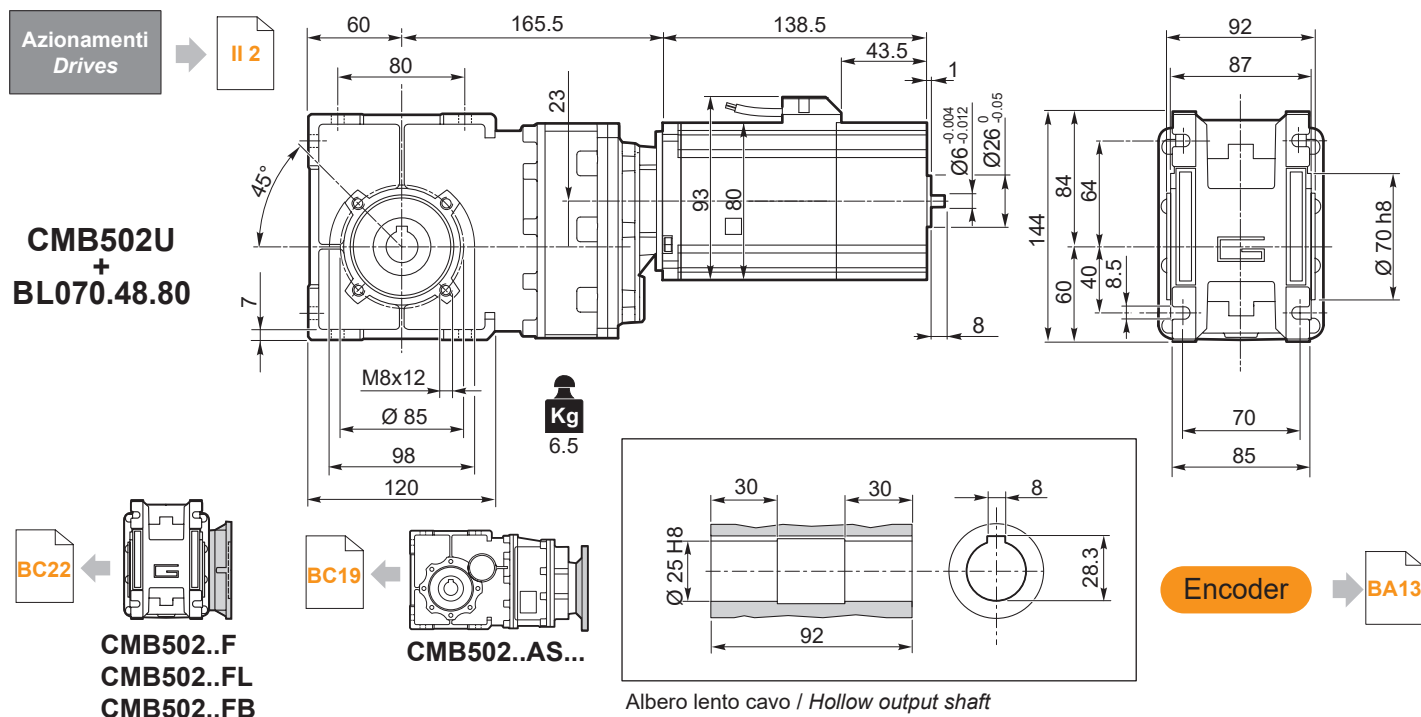
CMB502	BL070.48.80													
	24V						48V							
	ir	n <sub>2MIN</sub> [rpm]			n <sub>2MAX</sub> [rpm]			n <sub>1MAX</sub> [rpm]	n <sub>2MIN</sub> [rpm]			n <sub>2MAX</sub> [rpm]		n <sub>1MAX</sub> [rpm]
M <sub>2</sub> [Nm]		sf		M <sub>2</sub> [Nm]	sf		M <sub>2</sub> [Nm]		sf		M <sub>2</sub> [Nm]	sf		
6.18	40	4.1	19.8	405	4.1	13.4	2500	65	4.1	19.8	648	4.1	11.9	4000
7.49	33	4.9	16.3	334	4.9	11.1		53	4.9	16.3	534	4.9	9.8	
9.20	27	6.1	13.3	272	6.1	9.0		43	6.1	13.3	435	6.1	8.0	
11.83	21	7.8	13.3	211	7.8	9.0		34	7.8	13.3	338	7.8	8.0	
12.48	20	8.2	12.6	200	8.2	8.5		32	8.2	12.6	320	8.2	7.6	
14.83	17	10	10.6	169	10	7.2		27	10	10.6	270	10	6.4	
17.63	14.2	12	8.9	142	12	6.1		23	12	8.9	227	12	5.4	
18.60	13.4	12	10.3	134	12	7.0		22	12	10.3	215	12	6.2	
22.33	11.2	15	8.6	112	15	5.8		18	15	8.6	179	15	5.2	
23.91	10.5	16	8.0	105	16	5.5		17	16	8.0	167	16	4.8	
28.89	8.7	19	7.6	87	19	5.1		14	19	7.6	138	19	4.5	
30.84	8.1	20	7.1	81	20	4.8		13.0	20	7.1	130	20	4.2	
33.57	7.4	22	6.5	74	22	4.4		11.9	22	6.5	119	22	3.9	
35.63	7.0	23	6.1	70	23	4.2		11.2	23	6.1	112	23	3.7	
42.75	5.8	28	5.1	58	28	3.5		9.4	28	5.1	94	28	3.1	
55.31	4.5	36	3.9	45	36	2.7		7.2	36	3.9	72	36	2.4	
59.06	4.2	39	3.7	42	39	2.5		6.8	39	3.7	68	39	2.2	
64.29	3.9	42	3.4	39	42	2.3		6.2	42	3.4	62	42	2.0	
72.50	3.4	48	3.0	34	48	2.0		5.5	48	3.0	55	48	1.8	

NOTA: per servizio continuo o altamente intermittente, contattare il servizio tecnico

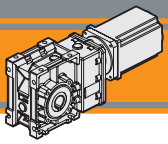
NOTE: for continuous or highly intermittent duty, please contact our technical service

Tipo Type	Numero di poli Number of poles	Numero di fasi Number of phase	Tensione nominale Rated voltage [V]	Velocità nominale Rated speed [rpm]	Coppia nominale Rated torque [Nm]	Potenza nominale Rated power [W]	Coppia di picco Peak torque [Nm]
BL070.48.80	8	3	48	4350	0.7	320	1.4
			24	2500		185	

Tipo Type	Corrente nominale Rated current [A]	Corrente di picco Peak current [A]	Resistenza fase-fase Line to line resistance [Ω]	Induttanza fase-fase Line to line inductance [mH]	Costante di coppia Torque constant [Nm/A]	Costante FCEM Back EMF [V/kRPM]	Inerzia rotore Rotor inertia [gcm <sup>2</sup> ]	Peso Weight [kg]
BL070.48.80	12	36	0.072	0.304	0.1	6.15	1000	1.8



CMB IP 55



# Motoriduttori brushless CC ad assi ortogonali

## Brushless DC helical bevel gearmotors

CMB502 con motore brushless CC

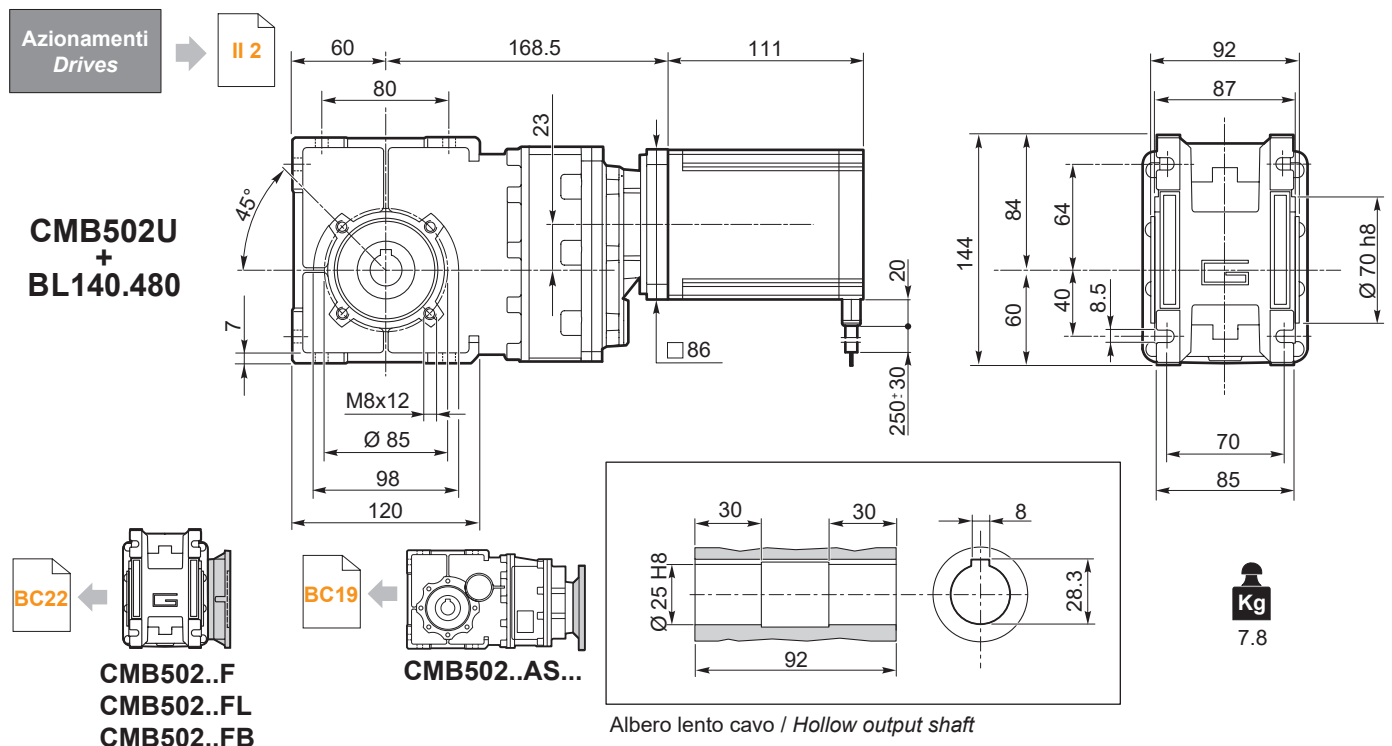
CMB502 with brushless DC motor

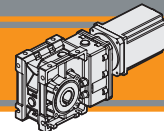
CMB502	BL140.480					
	48V					
	ir	n <sub>2MIN</sub> [ rpm ]			n <sub>2MAX</sub> [ rpm ]	
M <sub>2</sub> [Nm]		sf		M <sub>2</sub> [Nm]	sf	n <sub>1MAX</sub> [ rpm ]
6.18	49	8.1	9.9	486	8.1	6.7
7.49	40	9.9	8.2	400	9.9	5.5
9.20	33	12	6.6	326	12	4.5
11.83	25	15	6.6	254	15	4.5
12.48	24	16	6.3	240	16	4.3
14.83	20	19	5.3	202	19	3.6
17.63	17	23	4.5	170	23	3.0
18.60	16	24	5.2	161	24	3.5
22.33	13	29	4.3	134	29	2.9
23.91	13	31	4.0	125	31	2.7
28.89	10	38	3.8	104	38	2.6
30.84	9.7	41	3.5	97	41	2.4
33.57	8.9	44	3.3	89	44	2.2
35.63	8.4	47	3.1	84	47	2.1
42.75	7.0	56	2.6	70	56	1.7
55.31	5.4	73	2.0	54	73	1.3
59.06	5.1	78	1.8	51	78	1.3
64.29	4.7	85	1.7	47	85	1.2
72.50	4.1	95	1.5	41	95	1.0

NOTA: per servizio continuo o altamente intermittente, contattare il servizio tecnico

NOTE: for continuous or highly intermittent duty, please contact our technical service

Tipo Type	Numero di poli Number of poles	Numero di fasi Number of phase	Tensione Rated voltage [V]	Numero di giri Rated speed [rpm]	Coppia nominale Rated torque [Nm]	Potenza nominale Rated power [W]
BL140.480	8	3	48	3000	1.4	440
Tipo Type	Coppia massima Peak torque [Nm]	Corrente nominale Rated current [A]	Resistenza Resistance [Ω]	Induttanza Inductance [mH]	Corrente massima Peak current [A]	Peso Weight [kg]
BL140.480	2.8	13	0.16	0.5	26	3.15





CMB502 con motore brushless CC

CMB502 with brushless DC motor

CMB502	BL200.48.95													
	24V						48V							
	n <sub>2MIN</sub> [rpm]			n <sub>2MAX</sub> [rpm]			n <sub>1MAX</sub> [rpm]	n <sub>2MIN</sub> [rpm]			n <sub>2MAX</sub> [rpm]			n <sub>1MAX</sub> [rpm]
M <sub>2</sub> [Nm]	sf		M <sub>2</sub> [Nm]	sf		M <sub>2</sub> [Nm]		sf		M <sub>2</sub> [Nm]	sf			
6.18	24	12	6.9	243	12	6.0	1500	49	12	6.9	486	12	4.7	3000
7.49	20	14	5.7	200	14	5.0		40	14	5.7	400	14	3.9	
9.20	16	17	4.7	163	17	4.0		33	17	4.7	326	17	3.2	
11.83	13	22	4.7	127	22	4.0		25	22	4.7	254	22	3.2	
12.48	12	23	4.4	120	23	3.8		24	23	4.4	240	23	3.0	
14.83	10	28	3.7	101	28	3.2		20	28	3.7	202	28	2.5	
17.63	8.5	33	3.1	85	33	2.7		17	33	3.1	170	33	2.1	
18.60	8.1	35	3.6	81	35	3.1		16	35	3.6	161	35	2.5	
22.33	6.7	42	3.0	67	42	2.6		13	42	3.0	134	42	2.0	
23.91	6.3	45	2.8	63	45	2.4		13	45	2.8	125	45	1.9	
28.89	5.2	54	2.6	52	54	2.3		10	54	2.6	104	54	1.8	
30.84	4.9	58	2.5	49	58	2.2		9.7	58	2.5	97	58	1.7	
33.57	4.5	63	2.3	45	63	2.0		8.9	63	2.3	89	63	1.5	
35.63	4.2	67	2.1	42	67	1.9		8.4	67	2.1	84	67	1.5	
42.75	3.5	80	1.8	35	80	1.6		7.0	80	1.8	70	80	1.2	
55.31	2.7	104	1.4	27	104	1.2		5.4	104	1.4	54	104	0.9	
59.06	2.5	111	1.3	25	111	1.1		5.1	111	1.3	51	111	0.9	
64.29	2.3	121	1.2	23	121	1.0		4.7	121	1.2	47	121	0.8	
72.50	2.1	136	1.1	21	136	0.9		4.1	136	1.1	41	136	0.7	

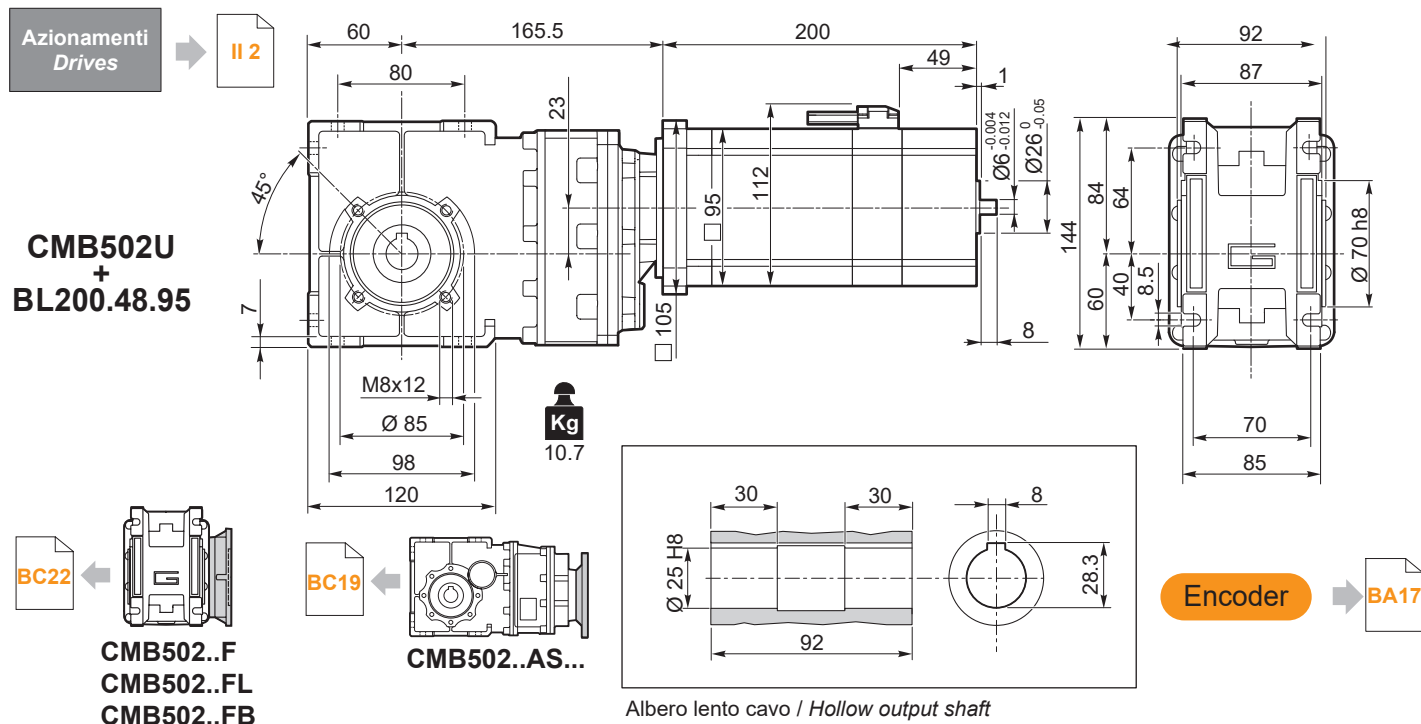
**NOTA:** per servizio continuo o altamente intermittente, contattare il servizio tecnico

**NOTE:** for continuous or highly intermittent duty, please contact our technical service

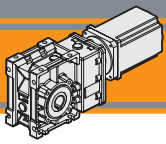
**Attenzione: superamento della coppia nominale supportata dal riduttore per servizio S1. Contattare il ns. servizio tecnico**  
**Attention: rated torque withstood by gear reducer for service in S1 is exceeded. Please, contact our technical office.**

Tipo Type	Numero di poli Number of poles	Numero di fasi Number of phase	Servizio Service	Tensione nominale Rated voltage [V]	Velocità nominale Rated speed [rpm]	Coppia nominale Rated torque [Nm]	Potenza nominale Rated power [W]	Coppia di picco Peak torque [Nm]
BL200.48.95	8	3	S1	48	3000	2.0	650	4.0
				24	1500		300	

Tipo Type	Corrente nominale Rated current [A]	Corrente di picco Peak current [A]	Resistenza fase-fase Line to line resistance [Ω]	Induttanza fase-fase Line to line inductance [mH]	Costante di coppia Torque constant [Nm/A]	Costante FCEM Back EMF [V/kRPM]	Inerzia rotore Rotor inertia [gcm <sup>2</sup> ]	Peso Weight [kg]
BL200.48.95	16.5	49.5	0.068 +/- 15%	0.25	0.091	6.7 +/- 10%	2820	6



CMB IP 55



# Motoriduttori brushless CC ad assi ortogonali

## Brushless DC helical bevel gearmotors

CMB502 con motore brushless CC

CMB502 with brushless DC motor

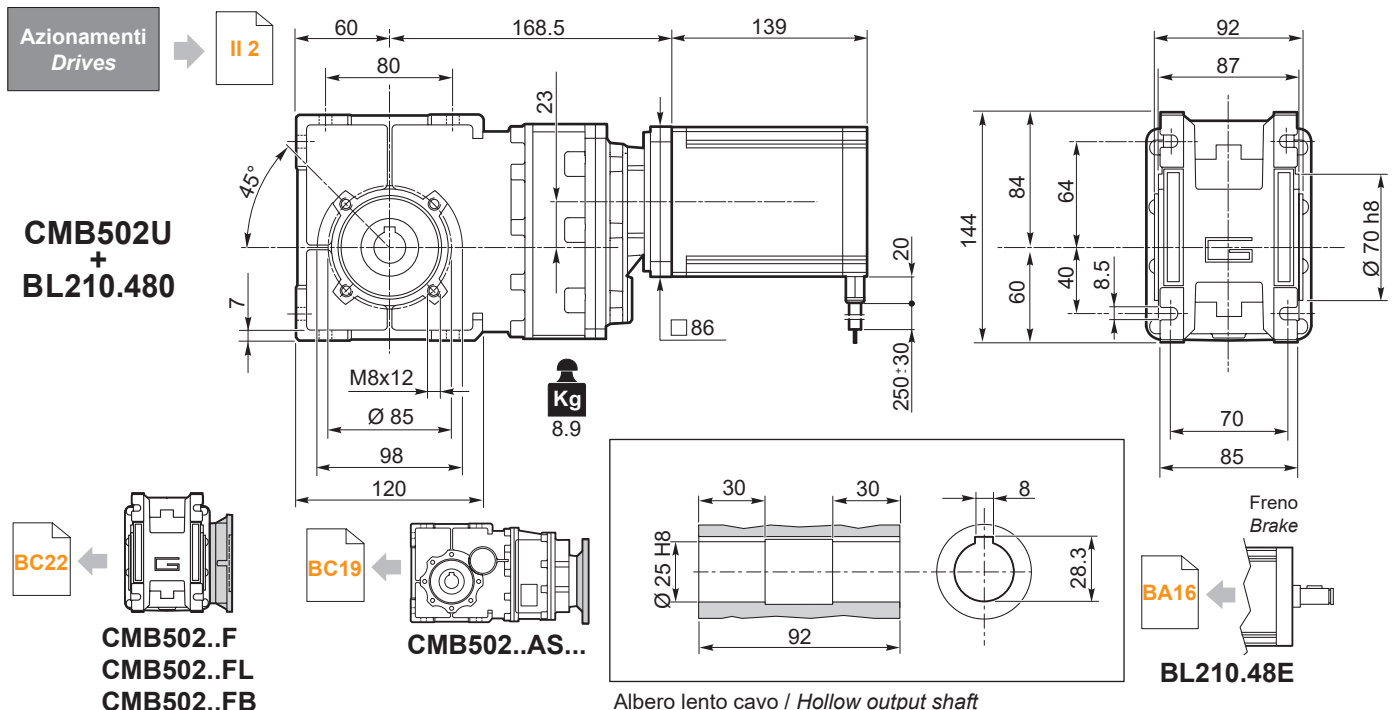
CMB502	BL210.480 / BL210.48E					
	48V					
	ir	n <sub>2MIN</sub> [ rpm ]			n <sub>2MAX</sub> [ rpm ]	
M <sub>2</sub> [Nm]		sf		M <sub>2</sub> [Nm]	sf	n <sub>1MAX</sub> [ rpm ]
6.18	49	12	6.6	486	12	4.5
7.49	40	15	5.4	400	15	3.7
9.20	33	18	4.4	326	18	3.0
11.83	25	23	4.4	254	23	3.0
12.48	24	25	4.2	240	25	2.8
14.83	20	29	3.5	202	29	2.4
17.63	17	35	3.0	170	35	2.0
18.60	16	37	3.4	161	37	2.3
22.33	13	44	2.9	134	44	1.9
23.91	13	47	2.7	125	47	1.8
28.89	10	57	2.5	104	57	1.7
30.84	9.7	61	2.4	97	61	1.6
33.57	8.9	66	2.2	89	66	1.5
35.63	8.4	70	2.0	84	70	1.4
42.75	7.0	84	1.7	70	84	1.2
55.31	5.4	109	1.3	54	109	0.9
59.06	5.1	117	1.2	51	117	0.8
64.29	4.7	127	1.1	47	127	0.8
72.50	4.1	143	1.0	41	139	0.7

NOTA: per servizio continuo o altamente intermittente, contattare il servizio tecnico

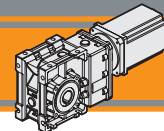
NOTE: for continuous or highly intermittent duty, please contact our technical service

Attenzione: superamento della coppia nominale supportata dal riduttore per servizio S1. Contattare il ns. servizio tecnico  
 Attention: rated torque withstood by gear reducer for service in S1 is exceeded. Please, contact our technical office.

Tipo Type	Numero di poli Number of poles	Numero di fasi Number of phase	Tensione Rated voltage [V]	Numero di giri Rated speed [rpm]	Coppia nominale Rated torque [Nm]	Potenza nominale Rated power [W]
BL210.480 BL210.48E	8	3	48	3000	2.1	660
Tipo Type	Coppia massima Peak torque [Nm]	Corrente nominale Rated current [A]	Resistenza Resistance [Ω]	Induttanza Inductance [mH]	Corrente massima Peak current [A]	Peso Weight [kg]
BL210.480 BL210.48E	4.2	18.7	0.115	0.31	37	4.2



Albero lento cavo / Hollow output shaft



CMB633 con motore brushless CC

CMB633 with brushless DC motor

CMB633	BL140.480						3000
	48V						
	ir	n <sub>2</sub> MIN [ rpm ]			n <sub>2</sub> MAX [ rpm ]		
M <sub>2</sub> [Nm]		sf		M <sub>2</sub> [Nm]	sf	n <sub>1</sub> MAX [ rpm ]	
6.58	46	8.5	20.3	456	8.5	13.8	
7.99	38	10.3	16.8	376	10.3	11.4	
9.81	31	12.6	13.6	306	12.6	9.3	
10.44	29	13.4	12.8	287	13.4	8.7	
12.53	24	16.1	10.7	239	16.1	7.3	
13.31	23	17.1	10.1	225	17.1	6.8	
15.81	19	20.4	9.6	190	20.4	6.5	
17.77	17	23	11.1	169	23	7.5	
21.56	14	28	9.1	139	28	6.2	
26.48	11	34	7.4	113	34	5.0	
28.17	11	36	7.0	106	36	4.7	
33.81	9	44	5.8	89	44	3.9	
35.92	8.4	46	5.5	84	46	3.7	
38.88	7.7	50	5.7	77	50	3.9	
47.16	6.4	61	4.7	64	61	3.2	
57.93	5.2	75	3.9	52	75	2.6	
61.63	4.9	79	3.6	49	79	2.5	
73.96	4.1	95	3.0	41	95	2.0	
78.58	3.8	101	2.8	38	101	1.9	
93.33	3.2	120	2.4	32	120	1.6	
140.52	2.1	181	1.6	21	181	1.1	
181.81	1.7	234	1.2	17	234	0.8	
211.31	1.4	272	1.1	14	272	0.7	
238.31	1.3	307	0.9	13	272	0.7	

NOTA: per servizio continuo o altamente intermittente, contattare il servizio tecnico

NOTE: for continuous or highly intermittent duty, please contact our technical service

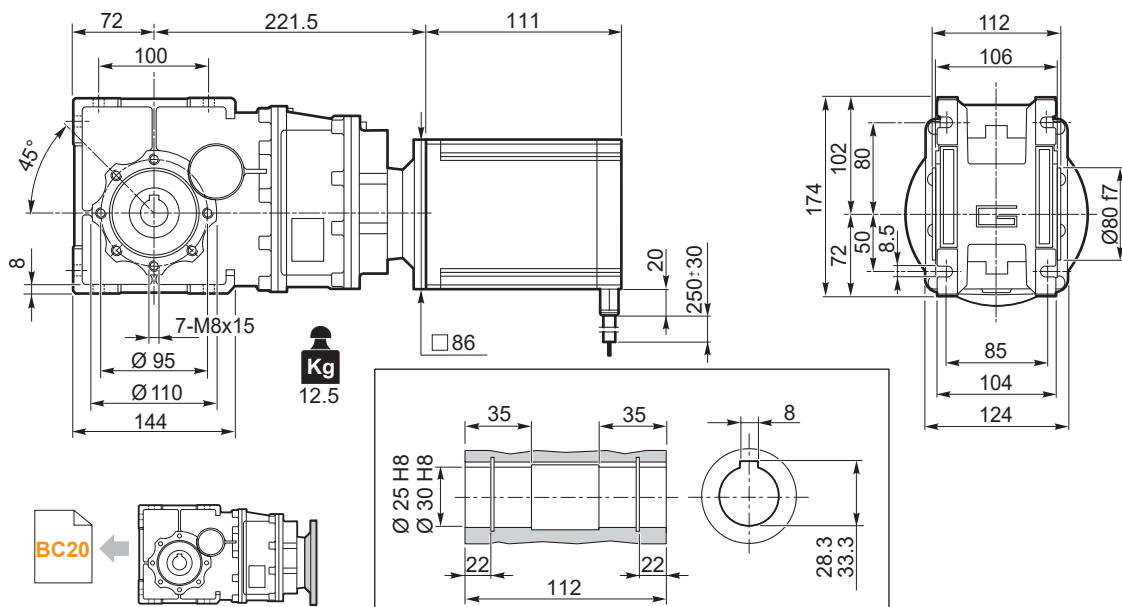
Attenzione: superamento della coppia nominale supportata dal riduttore per servizio S1. Contattare il ns. servizio tecnico  
Attention: rated torque withstood by gear reducer for service in S1 is exceeded. Please, contact our technical office.

Tipo Type	Numero di poli Number of poles	Numero di fasi Number of phase	Tensione Rated voltage [V]	Numero di giri Rated speed [rpm]	Coppia nominale Rated torque [Nm]	Potenza nominale Rated power [W]
BL140.480	8	3	48	3000	1.4	440
Tipo Type	Coppia massima Peak torque [Nm]	Corrente nominale Rated current [A]	Resistenza Resistance [Ω]	Induttanza Inductance [mH]	Corrente massima Peak current [A]	Peso Weight [kg]
BL140.480	2.8	13	0.16	0.5	26	3.15

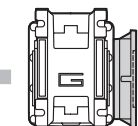
Azionamenti Drives

II 2

CMB633U + BL140.480

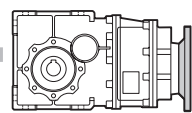


BC22



CMB633..F  
CMB633..FL  
CMB633..FB

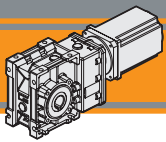
BC20



CMB633..AS...

Albero lento cavo / Hollow output shaft

CMB IP 55



# Motoriduttori brushless CC ad assi ortogonali Brushless DC helical bevel gearmotors

CMB633 con motore brushless CC

CMB633 with brushless DC motor

CMB633	BL200.48.95													
	24V						48V							
	$n_{2MIN}$ [rpm]			$n_{2MAX}$ [rpm]			$n_{1MAX}$ [rpm]	$n_{2MIN}$ [rpm]			$n_{2MAX}$ [rpm]			$n_{1MAX}$ [rpm]
$M_2$ [Nm]	sf		$M_2$ [Nm]	sf		$M_2$ [Nm]		sf		$M_2$ [Nm]	sf			
6.58	23	12.1	14.2	228	12.1	12.4	1500	46	12.1	14.2	456	12.1	9.7	3000
7.99	19	14.7	11.7	188	14.7	10.2		38	14.7	11.7	376	14.7	8.0	
9.81	15	18.1	9.6	153	18.1	8.3		31	18.1	9.6	306	18.1	6.5	
10.44	14	19.2	9.0	144	19.2	7.8		29	19.2	9.0	287	19.2	6.1	
12.53	12	23.1	7.5	120	23.1	6.5		24	23.1	7.5	239	23.1	5.1	
13.31	11	24.5	7.0	113	24.5	6.1		23	24.5	7.0	225	24.5	4.8	
15.81	9	29.1	6.7	95	29.1	5.8		19	29.1	6.7	190	29.1	4.6	
17.77	8	33	7.7	84	33	6.7		17	33	7.7	169	33	5.2	
21.56	7	40	6.4	70	40	5.5		14	40	6.4	139	40	4.3	
26.48	6	49	5.2	57	49	4.5		11	49	5.2	113	49	3.5	
28.17	5	52	4.9	53	52	4.2		11	52	4.9	106	52	3.3	
33.81	4	62	4.1	44	62	3.5		9	62	4.1	89	62	2.8	
35.92	4.2	66	3.8	42	66	3.3		8.4	66	3.8	84	66	2.6	
38.88	3.9	72	4.0	39	72	3.5		7.7	72	4.0	77	72	2.7	
47.16	3.2	87	3.3	32	87	2.9		6.4	87	3.3	64	87	2.2	
57.93	2.6	107	2.7	26	107	2.3		5.2	107	2.7	52	107	1.8	
61.63	2.4	113	2.5	24	113	2.2		4.9	113	2.5	49	113	1.7	
73.96	2.0	136	2.1	20	136	1.8		4.1	136	2.1	41	136	1.4	
78.58	1.9	145	2.0	19	145	1.7		3.8	145	2.0	38	145	1.3	
93.33	1.6	172	1.7	16	172	1.5		3.2	172	1.7	32	172	1.1	
140.52	1.1	259	1.1	11	259	1.0		2.1	259	1.1	21	259	0.8	
181.81	0.8	335	0.9	8	335	0.7		1.7	335	0.9	17	275	0.7	
211.31	0.7	389	0.7	7	335	0.7		1.4	389	0.7	14	275	0.7	
238.31	0.6	389	0.7	6	335	0.7		1.3	389	0.7	13	275	0.7	

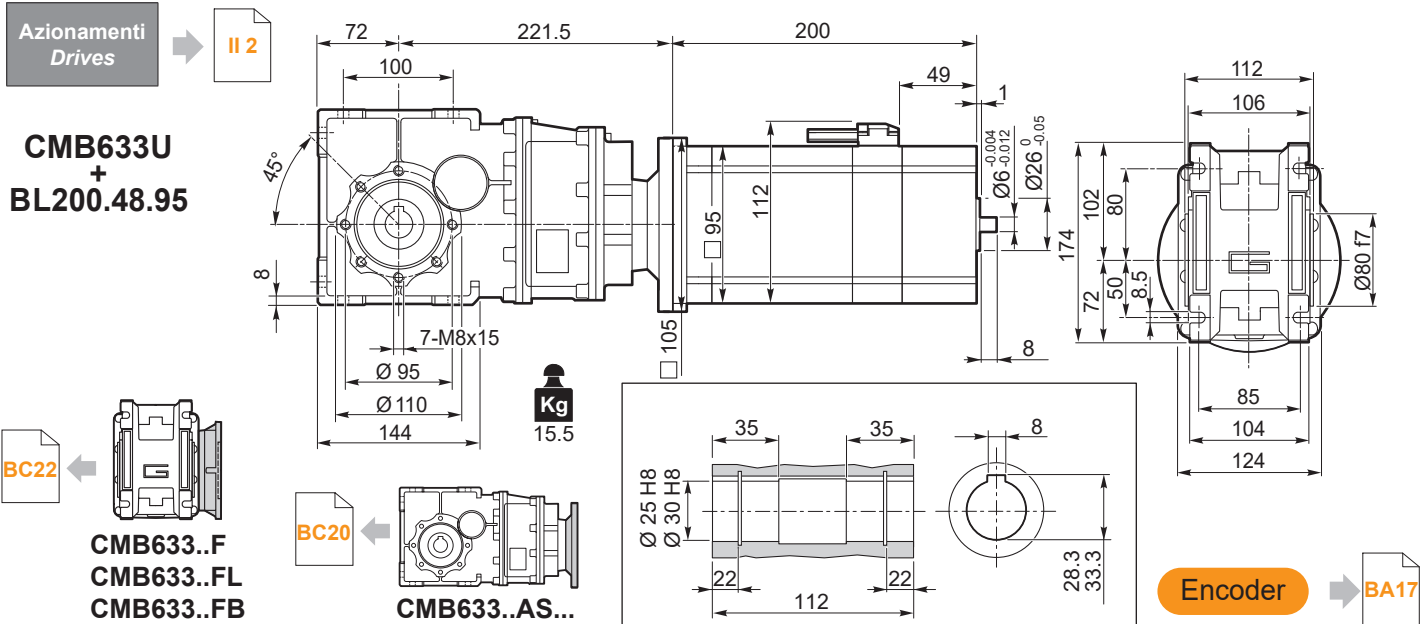
NOTA: per servizio continuo o altamente intermittente, contattare il servizio tecnico

NOTE: for continuous or highly intermittent duty, please contact our technical service

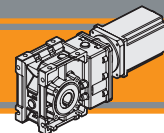
Attenzione: superamento della coppia nominale supportata dal riduttore per servizio S1. Contattare il ns. servizio tecnico  
Attention: rated torque withstood by gear reducer for service in S1 is exceeded. Please, contact our technical office.

Tipo Type	Numero di poli Number of poles	Numero di fasi Number of phase	Servizio Service	Tensione nominale Rated voltage [V]	Velocità nominale Rated speed [rpm]	Coppia nominale Rated torque [Nm]	Potenza nominale Rated power [W]	Coppia di picco Peak torque [Nm]
BL200.48.95	8	3	S1	48	3000	2.0	650	4.0
				24	1500		300	

Tipo Type	Corrente nominale Rated current [A]	Corrente di picco Peak current [A]	Resistenza fase-fase Line to line resistance [Ω]	Induttanza fase-fase Line to line inductance [mH]	Costante di coppia Torque constant [Nm/A]	Costante FCEM Back EMF [V/kRPM]	Inerzia rotore Rotor inertia [gcm <sup>2</sup> ]	Peso Weight [kg]
BL200.48.95	16.5	49.5	0.068 +/- 15%	0.25	0.091	6.7 +/- 10%	2820	6







CMB633 con motore brushless CC

CMB633 with brushless DC motor

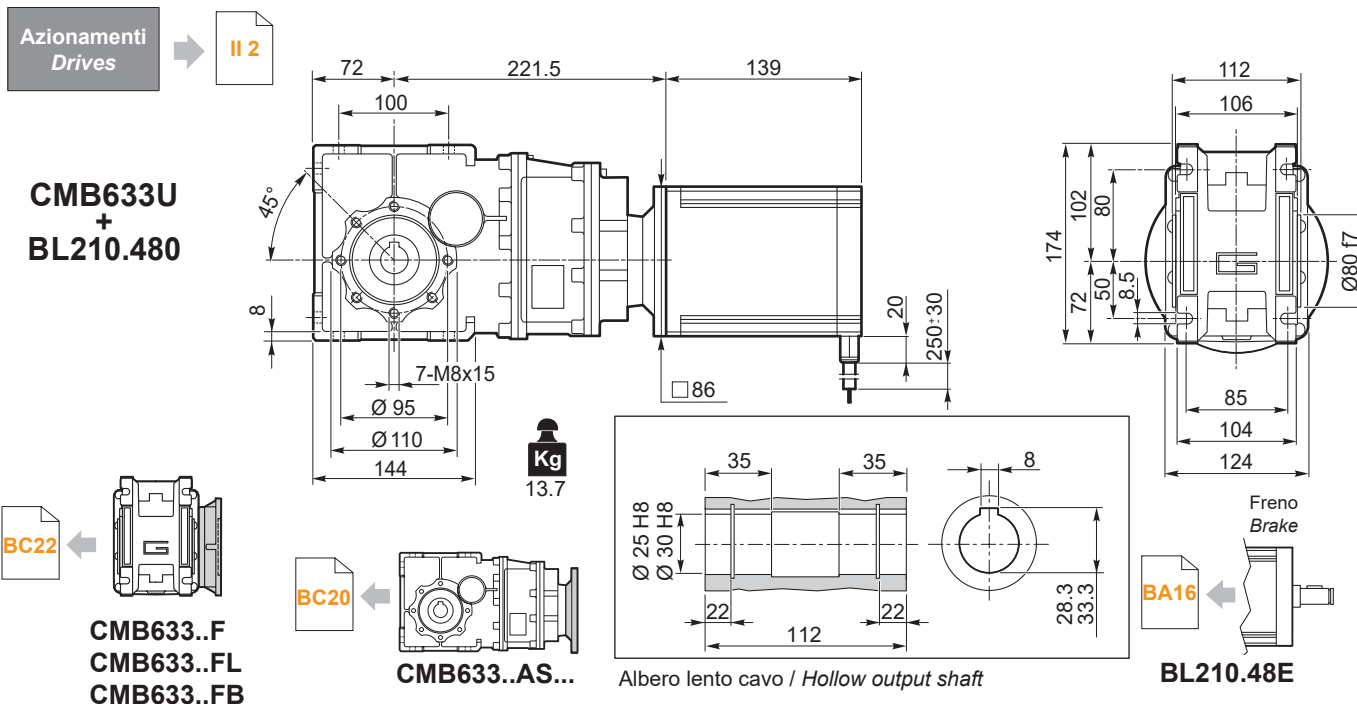
CMB633	BL210.480						n <sub>1MAX</sub> [ rpm ]
	48V						
	ir	n <sub>2MIN</sub> [ rpm ]			n <sub>2MAX</sub> [ rpm ]		
M <sub>2</sub> [Nm]		sf		M <sub>2</sub> [Nm]	sf		
6.58	46	12.7	13.6	456	12.7	9.2	3000
7.99	38	15.4	11.2	376	15.4	7.6	
9.81	31	19.0	9.1	306	19.0	6.2	
10.44	29	20.2	8.6	287	20.2	5.8	
12.53	24	24.2	7.1	239	24.2	4.8	
13.31	23	25.7	6.7	225	25.7	4.5	
15.81	19	30.5	6.4	190	30.5	4.3	
17.77	17	34	7.4	169	34	5.0	
21.56	14	42	6.1	139	42	4.1	
26.48	11	51	4.9	113	51	3.4	
28.17	11	54	4.6	106	54	3.2	
33.81	9	65	3.9	89	65	2.6	
35.92	8.4	69	3.6	84	69	2.5	
38.88	7.7	75	3.8	77	75	2.6	
47.16	6.4	91	3.2	64	91	2.1	
57.93	5.2	112	2.6	52	112	1.7	
61.63	4.9	119	2.4	49	119	1.6	
73.96	4.1	143	2.0	41	143	1.4	
78.58	3.8	152	1.9	38	152	1.3	
93.33	3.2	180	1.6	32	180	1.1	
140.52	2.1	271	1.1	21	271	0.7	
181.81	1.7	351	0.8	17	275	0.7	
211.31	1.4	389	0.7	14	275	0.7	
238.31	1.3	389	0.7	13	275	0.7	

NOTA: per servizio continuo o altamente intermittente, contattare il servizio tecnico

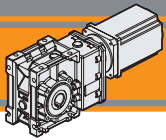
NOTE: for continuous or highly intermittent duty, please contact our technical service

Attenzione: superamento della coppia nominale supportata dal riduttore per servizio S1. Contattare il ns. servizio tecnico  
Attention: rated torque withstood by gear reducer for service in S1 is exceeded. Please, contact our technical office.

Tipo Type	Numero di poli Number of poles	Numero di fasi Number of phase	Tensione Rated voltage [V]	Numero di giri Rated speed [rpm]	Coppia nominale Rated torque [Nm]	Potenza nominale Rated power [W]
BL210.480 BL210.48E	8	3	48	3000	2.1	660
Tipo Type	Coppia massima Peak torque [Nm]	Corrente nominale Rated current [A]	Resistenza Resistance [Ω]	Induttanza Inductance [mH]	Corrente massima Peak current [A]	Peso Weight [kg]
BL210.480 BL210.48E	4.2	18.7	0.115	0.31	37	4.2



CMB IP 55



# Motoriduttori brushless CC ad assi ortogonali

## Brushless DC helical bevel gearmotors

CMB633 con motore brushless CC

CMB633 with brushless DC motor

CMB633	BL400.48.120													
	24V						48V							
	n <sub>2MIN</sub> [rpm]			n <sub>2MAX</sub> [rpm]			n <sub>1MAX</sub> [rpm]	n <sub>2MIN</sub> [rpm]			n <sub>2MAX</sub> [rpm]			n <sub>1MAX</sub> [rpm]
M <sub>2</sub> [Nm]	sf		M <sub>2</sub> [Nm]	sf		M <sub>2</sub> [Nm]		sf		M <sub>2</sub> [Nm]	sf			
6.58	21	21	8.1	213	21	7.1	1400	46	21	8.1	456	21	5.5	3000
7.99	18	26	6.7	175	26	5.8		38	26	6.7	376	26	4.5	
9.81	14	32	5.5	143	32	4.7		31	32	5.5	306	32	3.7	
10.44	13	34	5.1	134	34	4.5		29	34	5.1	287	34	3.5	
12.53	11	40	4.3	112	40	3.7		24	40	4.3	239	40	2.9	
13.31	10.5	43	4.0	105	43	3.5		23	43	4.0	225	43	2.7	
15.81	8.9	51	3.8	89	51	3.3		19	51	3.8	190	51	2.6	
17.77	7.9	57	4.4	79	57	3.8		17	57	4.4	169	57	3.0	
21.56	6.5	69	3.6	65	69	3.2		14	69	3.6	139	69	2.5	
26.48	5.3	85	3.0	53	85	2.6		11	85	3.0	113	85	2.0	
28.17	5.0	91	2.8	50	91	2.4		10.6	91	2.8	106	91	1.9	
33.81	4.1	109	2.3	41	109	2.0		8.9	109	2.3	89	109	1.6	
35.92	3.9	116	2.2	39	116	1.9		8.4	116	2.2	84	116	1.5	
38.88	3.6	125	2.3	36	125	2.0		7.7	125	2.3	77	125	1.6	
47.16	3.0	152	1.9	30	152	1.6		6.4	152	1.9	64	152	1.3	
57.93	2.4	187	1.5	24	187	1.3		5.2	187	1.5	52	187	1.0	
61.63	2.3	198	1.4	23	198	1.3		4.9	198	1.4	49	198	1.0	
73.96	1.9	238	1.2	19	238	1.0		4.1	238	1.2	41	238	0.8	
78.58	1.8	253	1.1	18	253	1.0		3.8	253	1.1	38	253	0.8	
93.33	1.5	301	1.0	15	301	0.8		3.2	301	1.0	32	275	0.7	
140.52	1.0	400	0.7	10	350	0.7	2.1	400	0.7	21	275	0.7		
181.81	0.8	400	0.7	7.7	350	0.7	1.7	400	0.7	17	275	0.7		
211.31	0.7	400	0.7	6.6	350	0.7	1.4	400	0.7	14	275	0.7		
238.31	0.6	400	0.7	5.9	350	0.7	1.3	400	0.7	13	275	0.7		

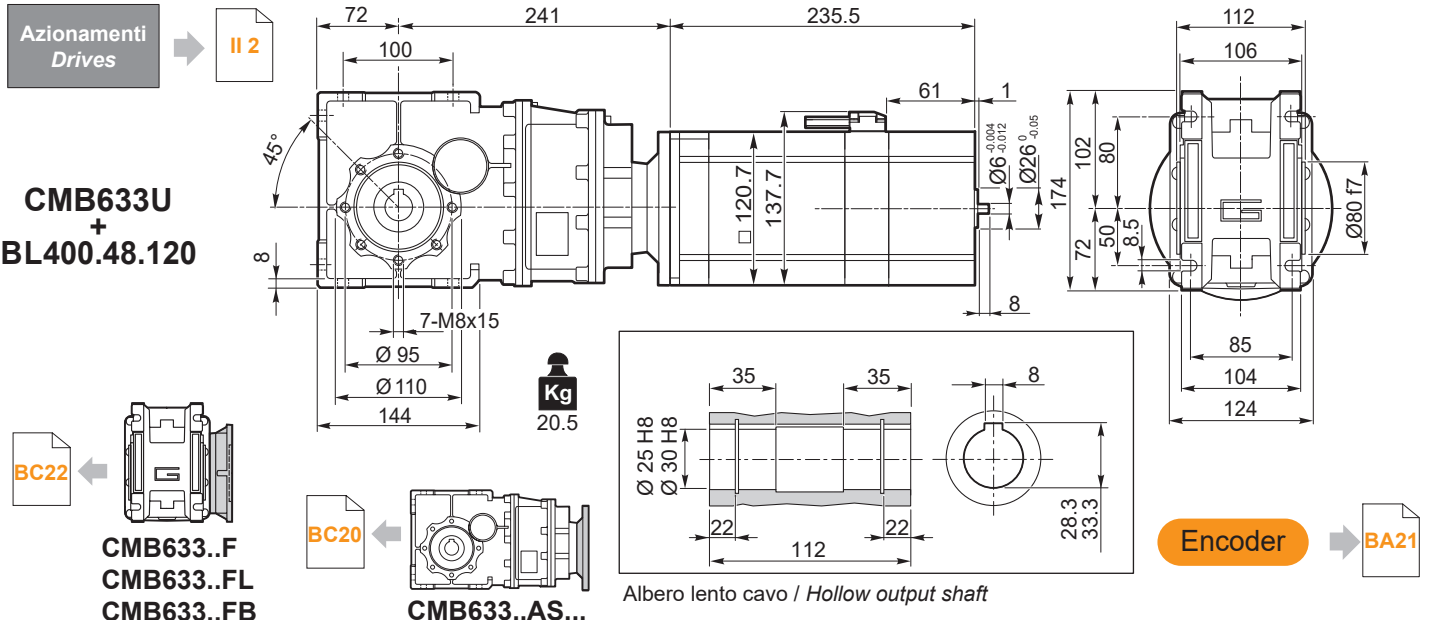
NOTA: per servizio continuo o altamente intermittente, contattare il servizio tecnico

NOTE: for continuous or highly intermittent duty, please contact our technical service

Attenzione: superamento della coppia nominale supportata dal riduttore per servizio S1. Contattare il ns. servizio tecnico  
 Attention: rated torque withstood by gear reducer for service in S1 is exceeded. Please, contact our technical office.

Tipo Type	Numero di poli Number of poles	Numero di fasi Number of phase	Servizio Service	Tensione nominale Rated voltage [V]	Velocità nominale Rated speed [rpm]	Coppia nominale Rated torque [Nm]	Potenza nominale Rated power [W]	Coppia di picco Peak torque [Nm]	Corrente nominale Rated current [A]	Corrente di picco Peak current [A]
BL400.48.120	8	3	S3	48	3000	4.2	1320	8.4	33	99
			S1			3.5	1100	7.0	28	84
			S3	24	1400	4.2	615	8.4	33	99
			S1			3.5	515	7.0	28	84

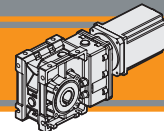
Tipo Type	Resistenza fase-fase Line to line resistance [Ω]	Induttanza fase-fase Line to line inductance [mH]	Costante di coppia Torque constant [Nm/A]	Costante FCEM Back EMF [V/kRPM]	Inerzia rotore Rotor inertia [gcm <sup>2</sup> ]	Peso Weight [kg]
BL400.48.120	0.064	0.31	0.120	12.6	21380	11



CMB633U + BL400.48.120

CMB633..F  
CMB633..FL  
CMB633..FB

CMB633..AS...



CMB903 con motore brushless CC

CMB903 with brushless DC motor

CMB903	BL400.48.120											
	24V						48V					
	n <sub>2MIN</sub> [rpm]		n <sub>2MAX</sub> [rpm]		n <sub>1MAX</sub> [rpm]	n <sub>2MIN</sub> [rpm]		n <sub>2MAX</sub> [rpm]		n <sub>1MAX</sub> [rpm]		
M <sub>2</sub> [Nm]	sf	M <sub>2</sub> [Nm]	sf	M <sub>2</sub> [Nm]		sf	M <sub>2</sub> [Nm]	sf				
6.65	21	21	15.0	211	21	13.1	45	21	15.0	451	21	10.2
8.00	17	26	12.5	175	26	10.9	37	26	12.5	375	26	8.5
9.74	14	31	10.3	144	31	8.9	31	31	10.3	308	31	7.0
11.21	12	36	8.9	125	36	7.8	27	36	8.9	268	36	6.1
14.09	10	45	7.6	99	45	6.6	21	45	7.6	213	45	5.2
17.95	7.8	58	9.0	78	58	7.8	17	58	9.0	167	58	6.1
21.60	6.5	70	7.4	65	70	6.5	14	70	7.4	139	70	5.0
26.30	5.3	85	6.1	53	85	5.3	11	85	6.1	114	85	4.1
30.25	4.6	97	5.3	46	97	4.6	10	97	5.3	99	97	3.6
39.26	3.6	126	4.5	36	126	4.0	8	126	4.5	76	126	3.1
47.25	3.0	152	3.8	30	152	3.3	6.3	152	3.8	63	152	2.6
57.52	2.4	185	3.1	24	185	2.7	5.2	185	3.1	52	185	2.1
66.17	2.1	213	2.7	21	213	2.3	4.5	213	2.7	45	213	1.8
83.20	1.7	268	2.1	17	268	1.9	3.6	268	2.1	36	268	1.5
108.09	1.3	348	1.7	13	348	1.4	2.8	348	1.7	28	348	1.1
132.23	1.1	426	1.4	11	426	1.2	2.3	426	1.4	23	426	0.9
147.92	0.9	476	1.2	9.5	476	1.0	2.0	476	1.2	20	476	0.8
167.09	0.8	538	1.1	8.4	538	0.9	1.8	538	1.1	18	538	0.7
191.06	0.7	615	0.9	7.3	615	0.8	1.6	615	0.9	16	550	0.7
221.88	0.6	714	0.8	6.3	714	0.7	1.4	714	0.8	14	550	0.7
262.96	0.5	820	0.7	5.3	714	0.7	1.1	820	0.7	11	550	0.7

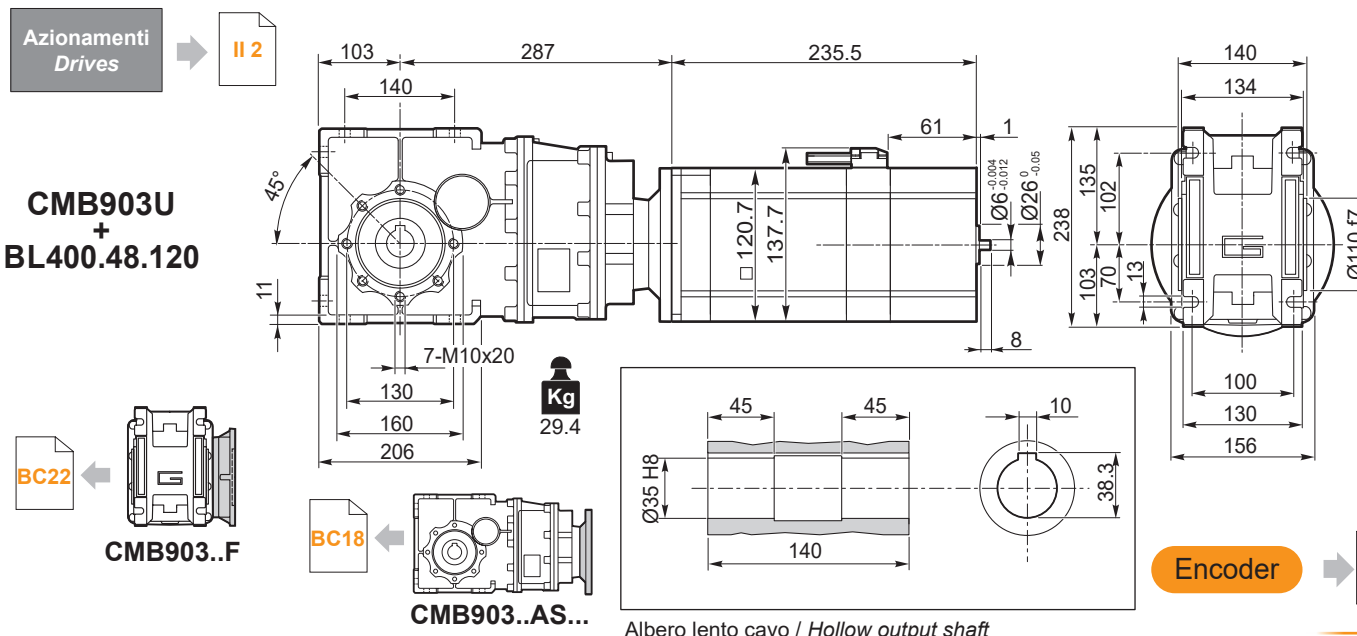
NOTA: per servizio continuo o altamente intermittente, contattare il servizio tecnico

NOTE: for continuous or highly intermittent duty, please contact our technical service

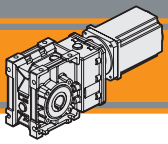
Attenzione: superamento della coppia nominale supportata dal riduttore per servizio S1. Contattare il ns. servizio tecnico  
 Attention: rated torque withstood by gear reducer for service in S1 is exceeded. Please, contact our technical office.

Tipo Type	Numero di poli Number of poles	Numero di fasi Number of phase	Servizio Service	Tensione nominale Rated voltage [V]	Velocità nominale Rated speed [rpm]	Coppia nominale Rated torque [Nm]	Potenza nominale Rated power [W]	Coppia di picco Peak torque [Nm]	Corrente nominale Rated current [A]	Corrente di picco Peak current [A]
BL400.48.120	8	3	S3	48	3000	4.2	1320	8.4	33	99
			S1			3.5	1100	7.0	28	84
			S3	24	1400	4.2	615	8.4	33	99
			S1			3.5	515	7.0	28	84

Tipo Type	Resistenza fase-fase Line to line resistance [Ω]	Induttanza fase-fase Line to line inductance [mH]	Costante di coppia Torque constant [Nm/A]	Costante FCEM Back EMF [V/kRPM]	Inerzia rotore Rotor inertia [gcm <sup>2</sup> ]	Peso Weight [kg]
BL400.48.120	0.064	0.31	0.120	12.6	21380	11



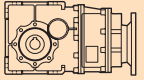
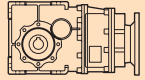
CMB IP 55



# Motoriduttori brushless CC ad assi ortogonali Brushless DC helical bevel gearmotors

## Dati tecnici

## Technical data

	$n_2$ [min <sup>-1</sup> ]	$Mn_2$ [Nm]	$Pn_1$ [kW]	$i$		$n_2$ [min <sup>-1</sup> ]	$Mn_2$ [Nm]	$Pn_1$ [kW]	$i$
<b>CMB 402</b>					<b>CMB 402</b>				
$n_1 = 1400 \text{ rpm}$	<b>227</b>	40	1.0	6.18	$n_1 = 3000 \text{ rpm}$	<b>486</b>	31.2	1.65	6.18
	<b>187</b>	40	0.83	7.49		<b>400</b>	31.2	1.36	7.49
	<b>152</b>	40	0.68	9.2		<b>326</b>	31.2	1.11	9.20
	<b>118</b>	45	0.59	11.83		<b>254</b>	35.1	0.97	11.83
	<b>112</b>	45	0.56	12.48		<b>240</b>	35.1	0.92	12.48
	<b>94.4</b>	45	0.47	14.83		<b>202</b>	35.1	0.77	14.83
	<b>79.4</b>	45	0.40	17.63		<b>170</b>	35.1	0.65	17.63
	<b>75.3</b>	55	0.46	18.6		<b>161</b>	42.9	0.75	18.60
	<b>62.7</b>	55	0.38	22.33		<b>134</b>	42.9	0.63	22.33
	<b>58.6</b>	55	0.36	23.91		<b>126</b>	42.9	0.59	23.91
	<b>48.5</b>	65	0.35	28.89		<b>104</b>	50.7	0.57	28.89
	<b>45.4</b>	65	0.33	30.84		<b>97.3</b>	50.7	0.54	30.84
	<b>41.7</b>	65	0.30	33.57		<b>89.4</b>	50.7	0.49	33.57
	<b>39.3</b>	65	0.28	35.63		<b>84.2</b>	50.7	0.47	35.63
	<b>32.7</b>	65	0.24	42.75		<b>70.2</b>	50.7	0.39	42.75
	<b>25.3</b>	65	0.18	55.31		<b>54.2</b>	50.7	0.30	55.31
	<b>23.7</b>	65	0.17	59.06		<b>50.8</b>	50.7	0.28	59.06
	<b>21.8</b>	65	0.16	64.29		<b>46.7</b>	50.7	0.26	64.29
	<b>19.3</b>	65	0.14	72.50		<b>41.4</b>	50.7	0.23	72.50

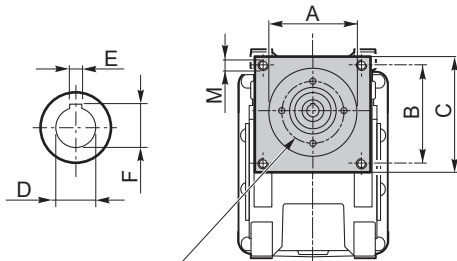
**NOTA:** per servizio continuo o altamente intermittente, contattare il servizio tecnico

**NOTE:** for continuous or highly intermittent duty, please contact our technical service

## Dimensioni CMB con flange motore AS

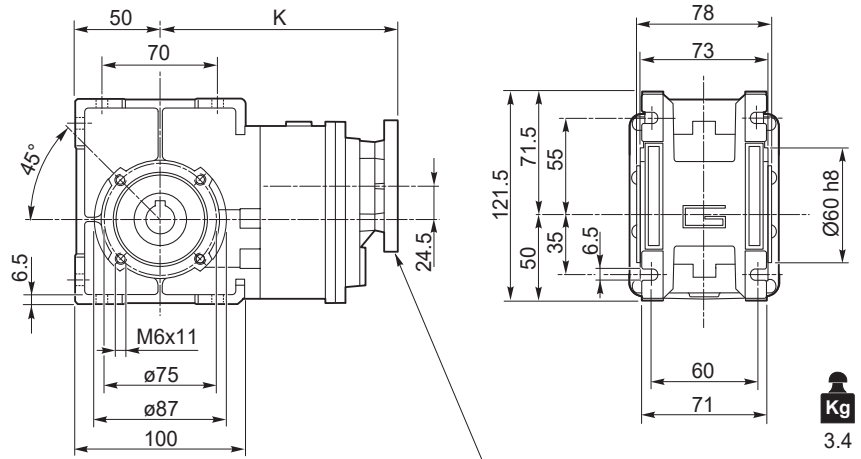
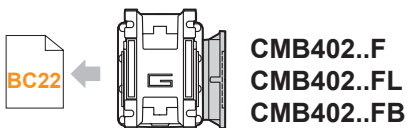
## CMB dimensions with motor flanges AS

### CMB402 - U - AS...



Connessione con boccola o giunto in funzione del diametro dell'albero motore.

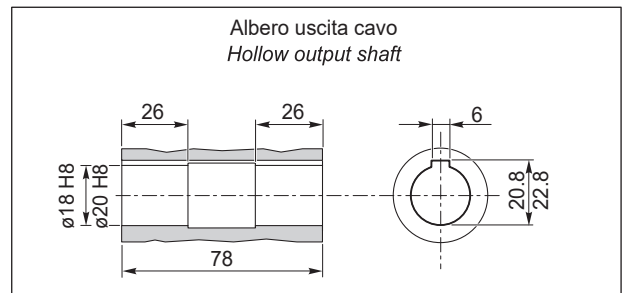
Connection with sleeve or coupling depending on motorshaft's diameter.

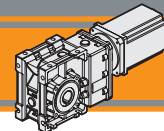


Lo spessore della flangia è variabile in funzione delle diverse lunghezze dell'albero motore.

Flange's thickness may vary depending on motorshaft's length.

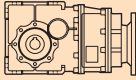
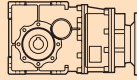
Dimensioni / Dimensions								
AS	A	B	C	M	K	D	E	F
<b>AS392FX</b>	38.1	47.1	64	M5	157.5	9	3	10.5
						11	4	12.8
						14	5	16.3
<b>AS384FX</b>	73	69.6	86	M5	157.5	9	3	10.5
						11	4	12.8
						14	5	16.3
...	...	...	...	...	...	...	...	...





### Dati tecnici

### Technical data

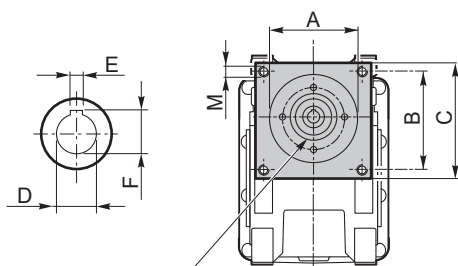
	$n_2$ [min <sup>-1</sup> ]	$Mn_2$ [Nm]	$Pn_1$ [kW]	$i$		$n_2$ [min <sup>-1</sup> ]	$Mn_2$ [Nm]	$Pn_1$ [kW]	$i$
<b>CMB 502</b>					<b>CMB 502</b>				
$n_1 = 1400$ rpm	<b>227</b>	70	1.8	6.18	$n_1 = 3000$ rpm	<b>486</b>	54.6	2.89	6.18
	<b>187</b>	70	1.5	7.49		<b>400</b>	54.6	2.38	7.49
	<b>152</b>	70	1.2	9.20		<b>326</b>	54.6	1.94	9.20
	<b>118</b>	90	1.2	11.83		<b>254</b>	70.2	1.94	11.83
	<b>112</b>	90	1.1	12.48		<b>240</b>	70.2	1.84	12.48
	<b>94.4</b>	90	0.95	14.83		<b>202</b>	70.2	1.55	14.83
	<b>79.4</b>	90	0.80	17.63		<b>170</b>	70.2	1.30	17.63
	<b>75.3</b>	110	0.92	18.60		<b>161</b>	85.8	1.51	18.60
	<b>62.7</b>	110	0.77	22.33		<b>134</b>	85.8	1.26	22.33
	<b>58.6</b>	110	0.72	23.91		<b>126</b>	85.8	1.17	23.91
	<b>48.5</b>	125	0.67	28.89		<b>104</b>	97.5	1.10	28.89
	<b>45.4</b>	125	0.63	30.84		<b>97.3</b>	97.5	1.03	30.84
	<b>41.7</b>	125	0.58	33.57		<b>89.4</b>	97.5	0.95	33.57
	<b>39.3</b>	125	0.55	35.63		<b>84.2</b>	97.5	0.90	35.63
	<b>32.7</b>	125	0.46	42.75		<b>70.2</b>	97.5	0.75	42.75
	<b>25.3</b>	125	0.35	55.31		<b>54.2</b>	97.5	0.58	55.31
	<b>23.7</b>	125	0.33	59.06		<b>50.8</b>	97.5	0.54	59.06
	<b>21.8</b>	125	0.30	64.29		<b>46.7</b>	97.5	0.50	64.29
	<b>19.3</b>	125	0.27	72.50		<b>41.4</b>	97.5	0.44	72.50

CMB IP 55

### Dimensioni CMB con flange motore AS

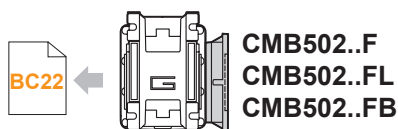
### CMB dimensions with motor flanges AS

#### CMB502 - U - AS...

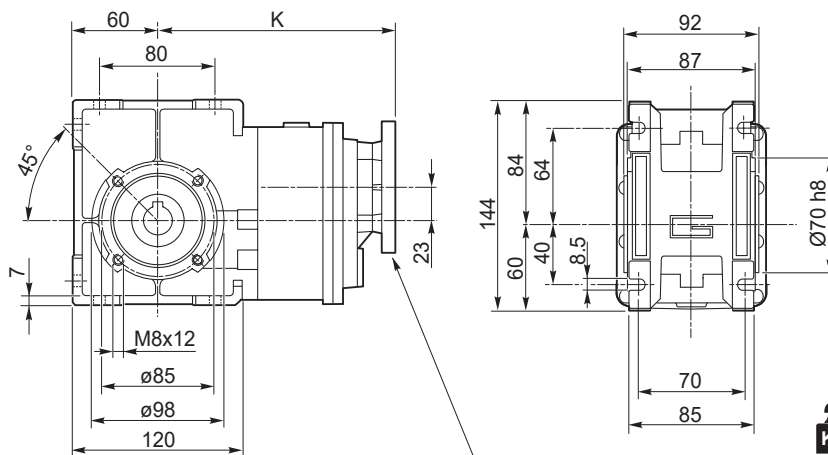


Connessione con boccola o giunto in funzione del diametro dell'albero motore.

Connection with sleeve or coupling depending on motorshaft's diameter.



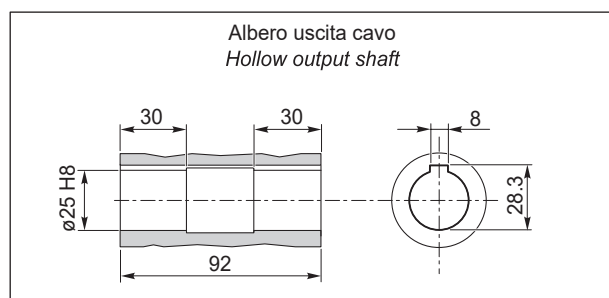
**CMB502..F**  
**CMB502..FL**  
**CMB502..FB**

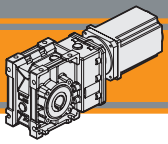


Lo spessore della flangia è variabile in funzione delle diverse lunghezze dell'albero motore.

Flange's thickness may vary depending on motorshaft's length.

Dimensioni / Dimensions								
AS	A	B	C	M	K	D	E	F
AS384FX	73	69.6	86	M5	168.5	9	3	10.5
						11	4	12.8
						14	5	16.3
...	...	...	...	...	...	...	...	...



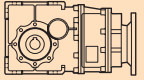
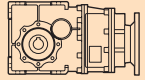


# Motoriduttori brushless CC ad assi ortogonali

## Brushless DC helical bevel gearmotors

### Dati tecnici

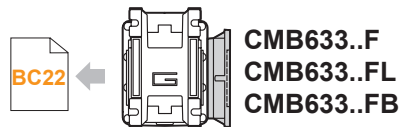
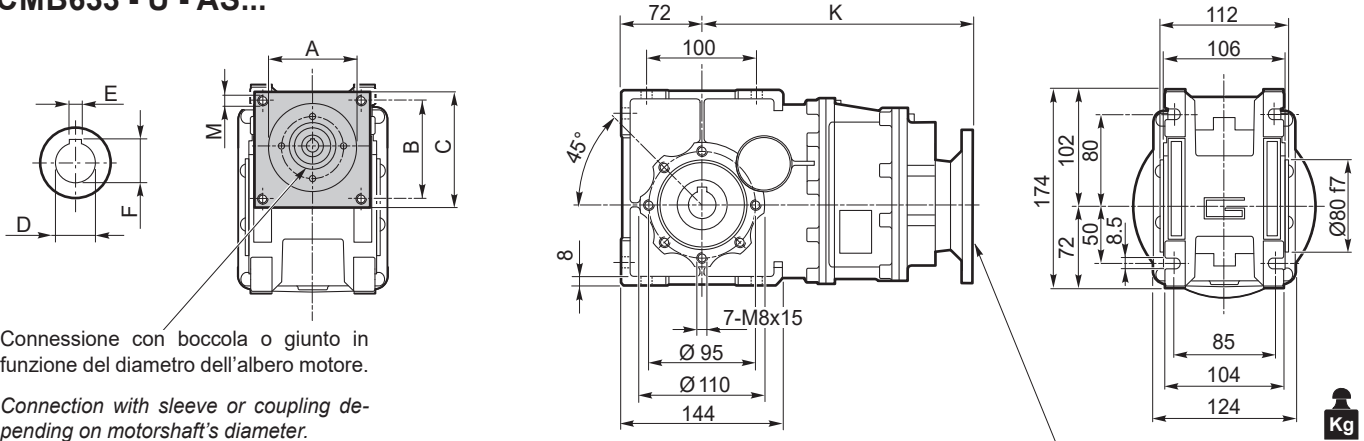
### Technical data

	$n_2$ [min <sup>-1</sup> ]	$Mn_2$ [Nm]	$Pn_1$ [kW]	$i$		$n_2$ [min <sup>-1</sup> ]	$Mn_2$ [Nm]	$Pn_1$ [kW]	$i$
									
<b>CMB 633</b>					<b>CMB 633</b>				
$n_1 = 1400 \text{ rpm}$	<b>213</b>	150	3.6	6.58	$n_1 = 3000 \text{ rpm}$	<b>456</b>	117	5.6	6.58
	<b>175</b>	150	2.9	7.99		<b>376</b>	117	4.6	7.99
	<b>143</b>	150	2.4	9.81		<b>306</b>	117	3.7	9.81
	<b>134</b>	150	2.2	10.44		<b>287</b>	117	3.5	10.44
	<b>112</b>	150	1.9	12.53		<b>239</b>	117	2.9	12.53
	<b>105</b>	150	1.8	13.31		<b>225</b>	117	2.8	13.31
	<b>89</b>	170	1.7	15.81		<b>190</b>	133	2.6	15.81
	<b>79</b>	220	1.9	17.77		<b>169</b>	172	3.0	17.77
	<b>65</b>	220	1.6	21.56		<b>139</b>	172	2.5	21.56
	<b>53</b>	220	1.3	26.48		<b>113</b>	172	2.0	26.48
	<b>50</b>	220	1.2	28.17		<b>106</b>	172	1.9	28.17
	<b>41</b>	220	1.0	33.81		<b>89</b>	172	1.6	33.81
	<b>39</b>	220	0.96	35.92		<b>84</b>	172	1.5	35.92
	<b>36</b>	250	1.00	38.88		<b>77</b>	195	1.6	38.88
	<b>30</b>	250	0.83	47.16		<b>64</b>	195	1.3	47.16
	<b>24</b>	250	0.67	57.93		<b>52</b>	195	1.1	57.93
	<b>23</b>	250	0.63	61.63		<b>49</b>	195	0.99	61.63
	<b>19</b>	250	0.53	73.96		<b>41</b>	195	0.83	73.96
	<b>18</b>	250	0.50	78.58		<b>38</b>	195	0.78	78.58
	<b>15</b>	250	0.42	93.33		<b>32</b>	195	0.66	93.33
	<b>10</b>	250	0.28	140.52		<b>21</b>	195	0.44	140.52
	<b>7.7</b>	250	0.21	181.81		<b>17</b>	195	0.34	181.81
	<b>6.6</b>	250	0.18	211.31		<b>14</b>	195	0.29	211.31
	<b>5.9</b>	250	0.16	238.31		<b>13</b>	195	0.26	238.31

### Dimensioni CMB con flange motore AS

### CMB dimensions with motor flanges AS

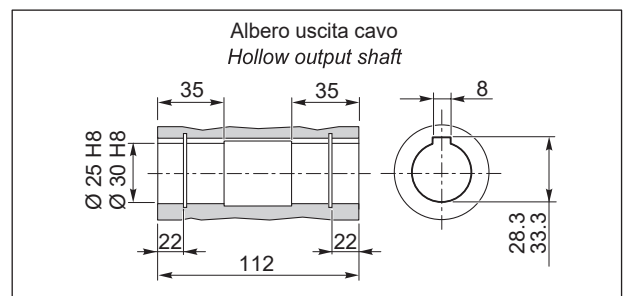
#### CMB633 - U - AS...



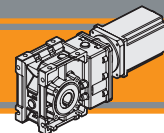
Lo spessore della flangia è variabile in funzione delle diverse lunghezze dell'albero motore.

Flange's thickness may vary depending on motorshaft's length.

Dimensioni / Dimensions								
AS	A	B	C	M	K	D	E	F
AS392FX	38.1	47.1	64	M5	221.5	9	3	10.5
						11	4	12.8
						14	5	16.3
AS384FX	73	69.6	86	M5	221.5	9	3	10.5
						11	4	12.8
						14	5	16.3
AS302	73	69.6	86	M5	241	19	6	21.8
						24	8	27.3
...	...	...	...	...	...	...	...	...







Dati tecnici

Technical data

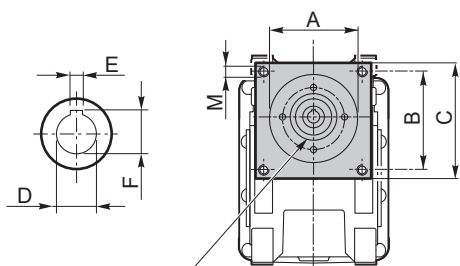
	$n_2$ [min <sup>-1</sup> ]	$Mn_2$ [Nm]	$Pn_1$ [kW]	$i$		$n_2$ [min <sup>-1</sup> ]	$Mn_2$ [Nm]	$Pn_1$ [kW]	$i$
<b>CMB 903</b>					<b>CMB 903</b>				
$n_1 = 1400$ rpm	<b>211</b>	280	6.6	6.65	$n_1 = 3000$ rpm	<b>451</b>	218	10.3	6.65
	<b>175</b>	280	5.5	8.00		<b>375</b>	218	8.6	8.00
	<b>144</b>	280	4.5	9.74		<b>308</b>	218	7.0	9.74
	<b>125</b>	280	3.9	11.21		<b>268</b>	218	6.1	11.21
	<b>99</b>	300	3.3	14.09		<b>213</b>	234	5.2	14.09
	<b>78</b>	450	3.9	17.95		<b>167</b>	351	6.1	17.95
	<b>65</b>	450	3.2	21.60		<b>139</b>	351	5.1	21.60
	<b>53</b>	450	2.7	26.30		<b>114</b>	351	4.2	26.30
	<b>46</b>	450	2.3	30.25		<b>99</b>	351	3.6	30.25
	<b>36</b>	500	2.0	39.26		<b>76</b>	390	3.1	39.26
	<b>30</b>	500	1.7	47.25		<b>63</b>	390	2.6	47.25
	<b>24</b>	500	1.4	57.52		<b>52</b>	390	2.1	57.52
	<b>21</b>	500	1.2	66.17		<b>45</b>	390	1.9	66.17
	<b>17</b>	500	0.94	83.20		<b>36</b>	390	1.5	83.20
	<b>13</b>	500	0.72	108.09		<b>28</b>	390	1.1	108.09
	<b>11</b>	500	0.59	132.23		<b>23</b>	390	0.93	132.23
	<b>9.5</b>	500	0.53	147.92		<b>20</b>	390	0.83	147.92
	<b>8.4</b>	500	0.47	167.09		<b>18</b>	390	0.73	167.09
	<b>7.3</b>	500	0.41	191.06		<b>16</b>	390	0.64	191.06
	<b>6.3</b>	500	0.35	221.88		<b>14</b>	390	0.55	221.88
	<b>5.3</b>	500	0.30	262.96		<b>11</b>	390	0.47	262.96

CMB IP 55

Dimensioni CMB con flange motore AS

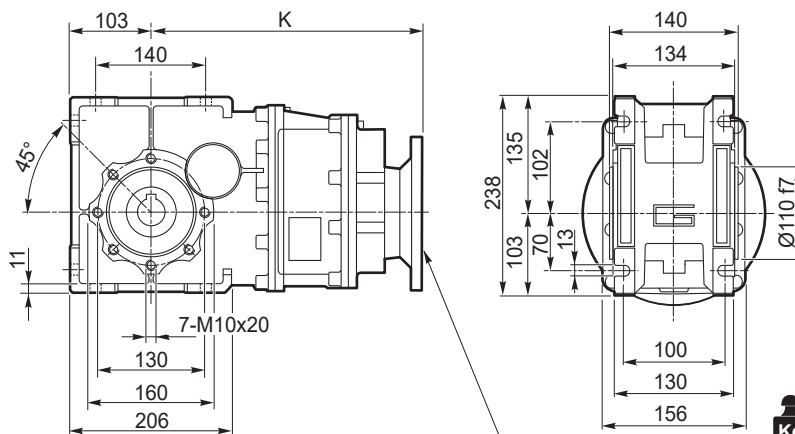
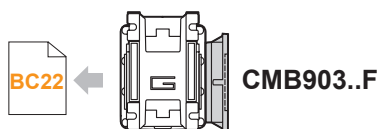
CMB dimensions with motor flanges AS

CMB903 - U - AS...



Connessione con boccola o giunto in funzione del diametro dell'albero motore.

Connection with sleeve or coupling depending on motorshaft's diameter.

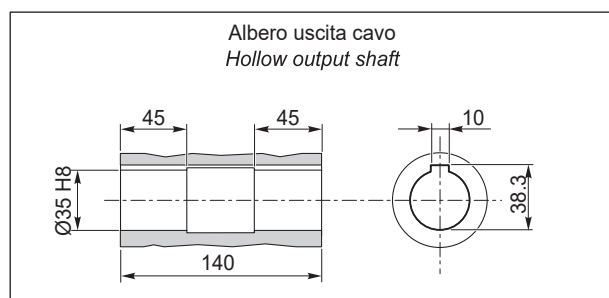


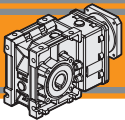
Kg  
18.4

Lo spessore della flangia è variabile in funzione delle diverse lunghezze dell'albero motore.

Flange's thickness may vary depending on motorshaft's length.

Dimensioni / Dimensions								
AS	A	B	C	M	K	D	E	F
...	...	...	...	...	...	...	...	...





**CMB**

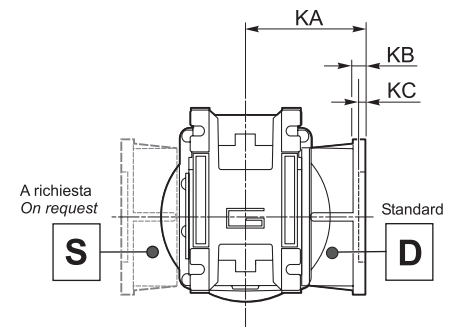
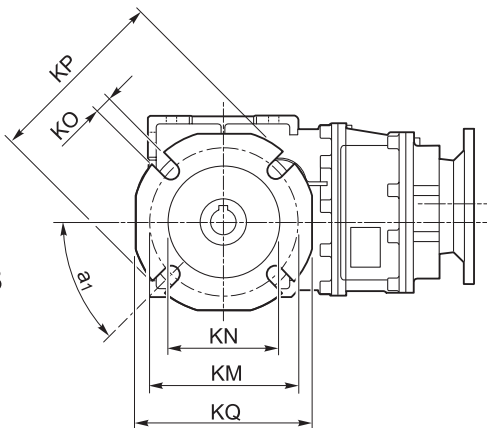
Riduttori ad assi ortogonali  
Helical bevel gearboxes

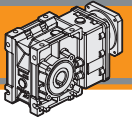
Flange uscita

Output flange

CMB	Flange uscita / Output flanges																										
	F									FL									FB								
	a <sub>1</sub>	KA	KB	KC	KM	KN H8	KO	KP	KQ	a <sub>1</sub>	KA	KB	KC	KM	KN H8	KO	KP	KQ	a <sub>1</sub>	KA	KB	KC	KM	KN H8	KO	KP	KQ
402	45°	67	7.5	4.5	80-95	60	9	110	95	45°	97	7.5	4.5	80-95	60	9	110	95	45°	80	8.5	5	115-125	95	9.5	140	112
502	45°	90	9	5	90-110	70	11	125	110	45°	120	9	5	90-110	70	11	125	110	45°	89	9	5	130-145	110	9.5	160	132
633	45°	82	10	6	150 - 160	115	11	180	142	45°	112	10	8	150 - 160	115	11	180	142	45°	98	11	5	165	130	11	200	160
933	45°	111	13	6	175-188	152	14	210	200	-									-								

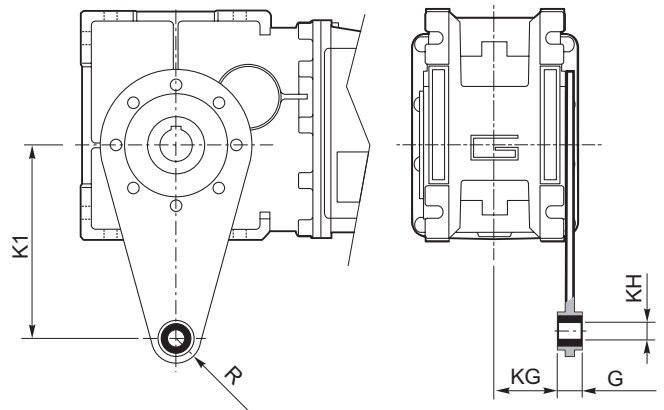
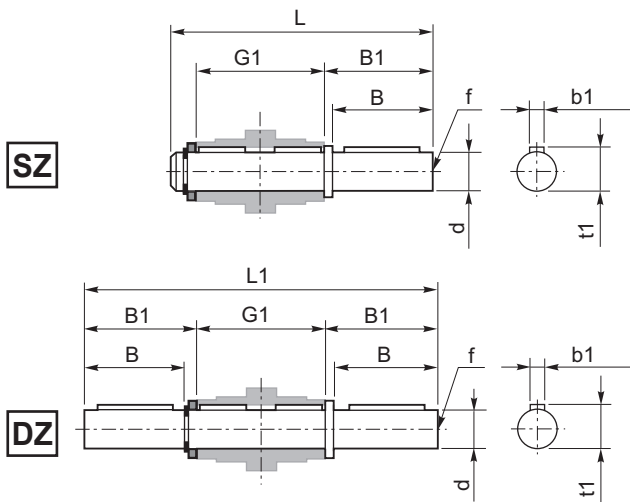
CMB..F  
CMB..FL  
CMB..FB





Accessori

Accessories



Albero lento / Output shaft

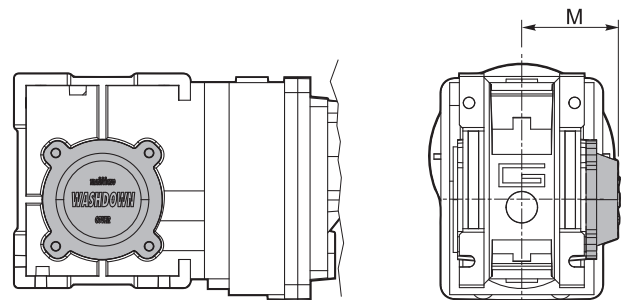
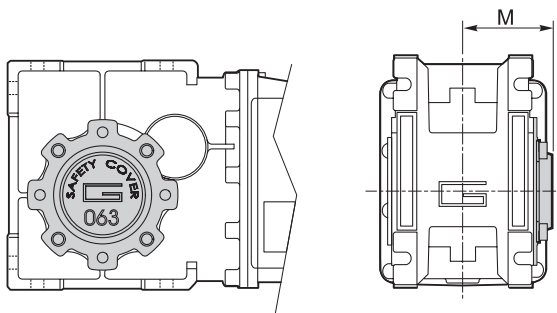
CMB CMBIS	d h7	B	B1	G1	L	L1	f	b1	t1
402	18	40	43	78	128	164	M6	6	20.5
502	25	50	53.5	92	153	199	M10	8	28
633	25	50	53.5	112	173	219	M10	8	28
903	35	80	84.5	140	234	309	M12	10	38

Braccio di reazione / Torque arm

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

**SC** - Safety cover

**WD** - Washdown cover



CMB CMBIS	M
402	54.5
502	62.5
633	73
903	94

CMB CMBIS	M
402	55.5
502	63.5
633	71.5
903	95

CMB IP 55

 **TRANSTECNO SRL**  
**HEADQUARTERS**

Company subject to the management  
and coordination of INTERPUMP GROUP SPA  
Via Caduti di Sabbiano, 11/D-E  
40011 Anzola dell'Emilia (BO)  
ITALY  
T+39 051 64 25 811  
F +39 051 73 49 43  
sales@transtecno.com  
[www.transtecno.com](http://www.transtecno.com)

  
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the modular gearmotor  
MEMBER OF INTERPUMP GROUP




 **HANGZHOU INTERPUMP  
POWER TRANSMISSIONS CO LTD**  
No.4 Xiuyan Road Fengdu Industry Zone  
Pingyao Town Yuhang District  
Hangzhou City, Zhejiang Province  
311115 – CHINA  
T +86 571 86 92 02 60  
info-china@transtecno.cn  
[www.transtecno.cn](http://www.transtecno.cn)

 **TRANSTECNO IBÉRICA  
THE MODULAR GEARMOTOR, S.A.**  
Carrer de la Ciència, 45  
08840 Viladecans (Barcelona) - SPAIN  
T +34 931 598 950  
info@transtecno.es  
[www.transtecno.es](http://www.transtecno.es)

 **TRANSTECNO B.V.**  
Siliciumweg 32  
3812 SX Amersfoort - NETHERLANDS  
T +31(0) 33 45 19 505  
info@transtecno.nl  
[www.transtecno.nl](http://www.transtecno.nl)

 **TRANSTECNO AANDRIJFTECHNIEK B.V.**  
Siliciumweg 32  
3812 SX Amersfoort - NETHERLANDS  
T +31 (0) 33 20 47 006  
info@transtecnoaandrijftechniek.nl  
[www.transtecnoaandrijftechniek.nl](http://www.transtecnoaandrijftechniek.nl)

 **MA TRANSTECNO S.A.P.I. DE C.V.**  
Julián Sepúlveda Dávila #107,  
Parque Industrial SG  
Apodaca, Nuevo León, CP. 66640  
MÉXICO  
T +52 8113340920  
info@transtecno.com.mx  
[www.transtecno.com.mx](http://www.transtecno.com.mx)


 **TRANSTECNO USA**  
8 Creek Parkway,  
Boothwyn PA 19061-8136 - UNITED STATES  
T + 1 (610) 4970154

**TRANSTECNO USA – WEST COAST BRANCH**  
14561 Frylendals Blvd SE  
Monroe, WA 98272 - UNITED STATES  
T +1 360-863-1300  
usaoffice@transtecno.com  
[www.transtecno.com](http://www.transtecno.com)

 **TRANSTECNO CANADA**  
51 B Caldari Road Unit 10  
Vaughan, ON L4K 4G3 - CANADA  
T +1 905 761 0762  
canadaoffice@transtecno.com  
[www.transtecno.com](http://www.transtecno.com)

 **TRANSTECNO INDIA**  
#6A, Sipcot Industrial complex, Phase-1,Elasagiri Road  
Hosur – 635126 Tamilnadu - INDIA  
T +91 4344 274434  
M +91 81443 88800

**TRANSTECNO INDIA – NORTH BRANCH**  
Plot No: 3 A, Sector 2, IIE, Sidcul, Pantnagar  
U.S. Nagar, Uttarakhand – 263153 - INDIA  
indiaoffice@transtecno.com  
[www.transtecno.com](http://www.transtecno.com)

 **TRANSTECNO BRAZIL**  
Rua Gilberto de Zorzi, 525 Forqueta - CEP. 95115-730  
CX Postal 3544 Caxias do Sul RS – BRAZIL

**TRANSTECNO BRAZIL – SÃO PAULO BRANCH**  
R. Mafalda Barnabe Soliane, 314 – CEP. 13347-610  
Indaiatuba, São Paulo - BRAZIL  
T +55 19 3437 2520

**TRANSTECNO BRAZIL – PORTO ALEGRE BRANCH**  
Rua Dr. Freire Alemão 155 / 402 - CEP. 90450-060  
Auxiliadora Porto Alegre RS - BRAZIL  
T +55 51 4042 0916  
M +55 51 811 45 962  
braziloffice@transtecno.com  
[www.transtecno.com.br](http://www.transtecno.com.br)

 **INTERPUMP ANTRIEBSTECHNIK GMBH**  
Büro Stuttgart - GERMANY  
T +49 (0)171 4781909  
germanoffice@transtecno.com  
[www.transtecno.com](http://www.transtecno.com)

 **SALES OFFICE OCEANIA**  
Unit 5, 12 Nyholt Drive, Yatala 4207  
Queensland - AUSTRALIA  
T +61 07 3800 0103  
M +61 04 38060997

UNIT 9, 94 Boundary Rd, Sunshine West 3020  
Victoria - AUSTRALIA  
T +61 9312 4722  
oceaniaoffice@transtecno.com  
[www.transtecno.com.au](http://www.transtecno.com.au)