

## S180 SERIES

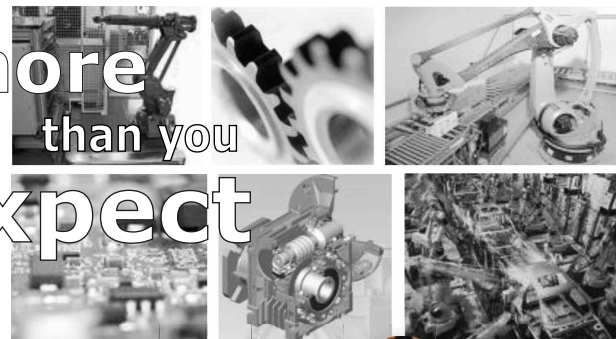
### BRUSHLESS SERVOMOTORS

Serie **S180 100% Made in Italy**, servomotori a magneti permanenti in NdFeB 6 poli con elevate prestazioni dinamiche e valori d'inerzia ridotti. Dimensioni meccaniche ridotte con quadro 80mm e coppia 1,40 / 2,50Nm. Sono disponibili vari tipi di avvolgimenti da 230 a 400VAC, possibilità d'abbinare riduttori epicicloidali di precisione e/o freni di stazionamento.

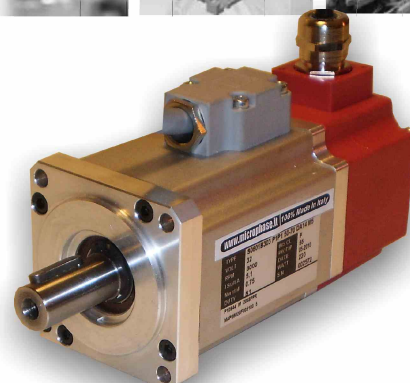
**S180 series**, sinusoidal brushless servomotor with permanent rare earth magnets (NdFeB), three different nominal voltage from 230 to 400Vac, torque range 1,4 / 2,5Nm, precision planetary gearboxes and / or brakes available.

#### ► Caratteristiche standard - Standard features

- B.E.M.F. Sinusoidale - Sinusoidal B.E.M.F.
- Magneti in terre rare (NdFeB) - Rare earth magnets (NdFeB)
- Flange di montaggio personalizzabili - Special flanges and shafts
- Facoder 2048PPR 5V LD or absolute encoder
- Connettori d'uscita fissi/estraibili - Flying screw connectors
- Momento d'inerzia ridotti - Low rotor inertia



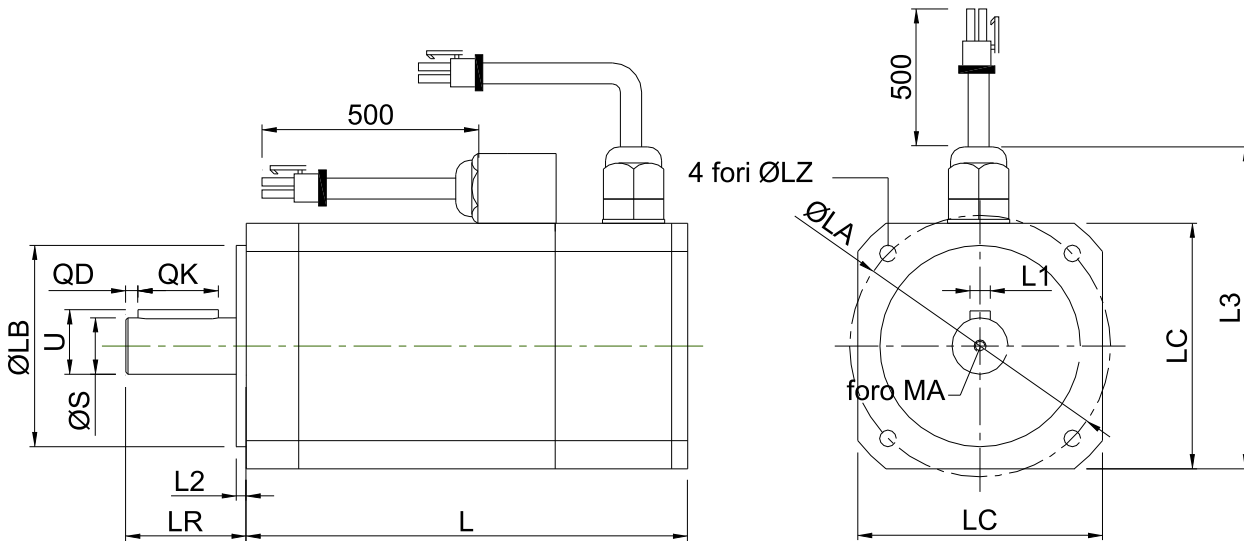
more  
than you  
expect



#### Dati tecnici / Technical specifications

Alimentazione <i>Drives voltage</i>		230 Vac	230 Vac	400 Vac
Modello <i>Type</i>		<b>S180-1B373</b>	<b>S180-2B375</b>	<b>S180-2B377</b>
dt max avvolgimenti <i>dt max winding</i>	C	105	105	
Coppia di stallo <i>Stall torque</i>	M <sub>0</sub> (Nm)	1,40	2,5	
Coppia di picco <i>Peak torque</i>	M <sub>pk</sub> (Nm)	4,20	7,50	
Corrente di stallo <i>Stall current</i>	I <sub>0</sub> (ARMS)	1,75	2,9	1,65
Corrente nominale <i>Nominal torque</i>	I <sub>N</sub> (A)	1,65	2,75	1,3
Coppia nominale <i>Rated torque</i>	M <sub>N</sub> (Nm)	1,27	2,4	
Potenza nominale <i>Rated power</i>	P <sub>N</sub> (w)	400	750	
Giri nominali <i>Rated speed</i>	N <sub>N</sub> (rpm)	3000		
Giri massimi <i>Max. speed</i>	N <sub>MAX</sub> (rpm)	4000		
Corrente di picco <i>Peak current</i>	I <sub>MAX</sub> (ARMS)	5,2	8,7	5
Costante di tensione <i>Voltage constant</i>	K <sub>E</sub> (VRMS / KRPM)	49,50	52,7	91,2
Costante di coppia <i>Torque constant</i>	K <sub>T</sub> (Nm/A)	0,81	0,87	1,5
Inerzia di rotore <i>Rotor inertia</i>	J <sub>R</sub> (Kg cm <sup>2</sup> )	0,365	0,61	
Resistenza @ 20 C <i>Winding resistance</i>	R <sub>U-V</sub> (ohm)	8,7	3,95	12,2
Induttanza @ 1 KHz <i>Winding inductance</i>	L <sub>U-V</sub> (mH)	47	29,5	89
Peso <i>Weight</i>	M (Kg)	2,1	3,1	
Massimo carico radiale <i>Max. radial load</i>	N	420		
Massimo carico assiale <i>Max. axial load</i>	N	150		
Temperatura ambiente <i>Ambient temperature</i>		0 / +40 C		
Servizio <i>Time rating</i>		Continuo - <i>Continuos</i>		
Grado di protezione <i>Level of protection</i>		IP55		
Classe di isolamento <i>Insulation class</i>		Classe F <i>F Class</i>		

## ► Dimensioni e tolleranze - Dimension and tolerance

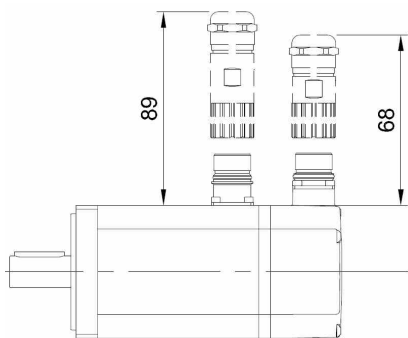


Motor	L	L+	LR	LC	LA	LZ	S h6	LB h7	QK	U	L1	L2	L3	MA	
S180-1	130	179	40	80	90	7	16	70	30	18	5	3	107	2	M6
S180-2	160	209	40	80	90	7	19	70	30	21.5	6	3	107	2	M6

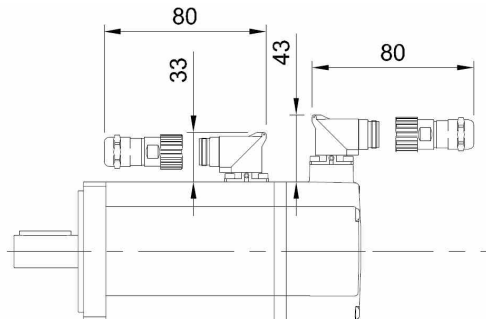
(L+) Quote motore con freno - (L+) Dimensions motor with brake

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## ► Conessioni - Pinout Connections



### Connettori estraibili / Flying connector



### Uscite connettori - Connector pinout

#### Power connector M16 Right angle

A	U
B	V
C	W
D	GND
1	Brake +
2	Brake -

#### Signal connector M16 Right angle

1	+5V
2	CHA -
3	OV
4	
5	
6	HALL V
7	HALL W
8	HALL U
9	
10	
11	CHZ -
12	CHB
13	CHB -
14	CHA
15	CHZ

#### Signal connector M23 Straight angle

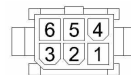
1	+5V
2	CHA -
3	OV
4	
5	
6	HALL V
7	HALL W
8	HALL U
9	
10	
11	CHZ -
12	CHB
13	CHB -
14	CHA
15	CHZ
16	
17	

#### Power connector M23 Straight angle

1	U
2	V
3	GND
4	W
5	Brake +
6	Brake -

### Uscite cavo - Cable Wiring

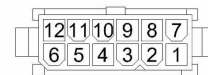
#### Power connector type Molex 55559-06p-210



1	U	Green / 1
2	V	White / 2
3	Brake +	Red
4	W	Brown / 3
5	GND	Green / Yellow
6	Brake -	Black

Motore senza freno (brake+/-) non connessi - Motor without brake not connected

#### Signal connector type Molex 55559-12p-210



1	+5V	Red
2	CHA-	Blue
3	OV	Black
4	HALL V	Grey
5	HALL W	White
6	HALL U	Brown
7	CHZ-	Yellow / Black
8	CHB+	Green
9	CHB-	Green / Black
10	CHA	Blue / Black
11	CHZ	Yellow
12	Shield	Shield

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