

## S140 SERIES

### BRUSHLESS SERVOMOTORS

Serie **S140 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 40mm e coppia 0,35Nm. Sono disponibili vari tipi di avvolgimenti da 17 a 230VAC, possibilità d'abbinare riduttori epicicloidali di precisione e/o freni di stazionamento.

**S140 series**, sinusoidal brushless servomotor with permanent rare earth magnets (NdFeB), three different nominal voltage from 17 to 230Vac, torque range 0,35Nm, 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



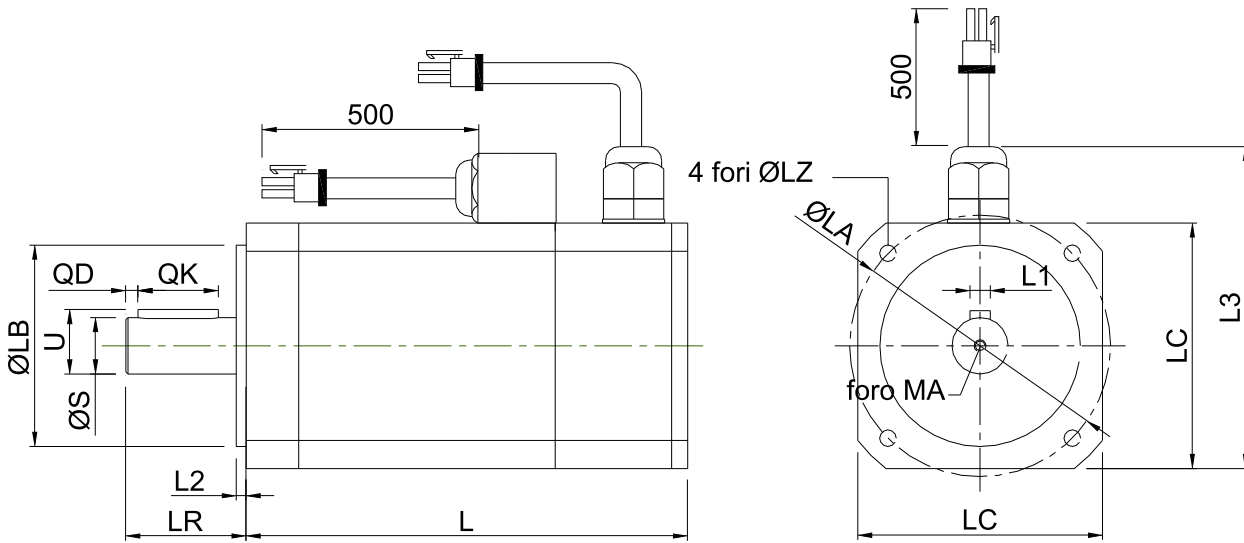
more  
than you  
expect



#### Dati tecnici / Technical specifications

Alimentazione <i>Drives voltage</i>		17 Vac	32 Vac	230 Vac
Modello <i>Type</i>		<b>S140-2B353</b>	<b>S140-2B354</b>	<b>S140-2B351</b>
Coppia di stallo <i>Stall torque</i>	$M_0$ (Nm)	0,35		
Coppia di picco <i>Peak torque</i>	$M_{pk}$ (Nm)	0,96		
dt max avvolgimenti <i>dt max winding</i>	C	105	105	105
Corrente di stallo <i>Stall current</i>	$I_0$ (ARMS)	6,7	3,3	0,52
Corrente nominale <i>Nominal torque</i>	$I_N$ (A)	6,6	3,2	0,50
Coppia nominale <i>Rated torque</i>	$M_N$ (Nm)	0,32		
Potenza nominale <i>Rated power</i>	$P_N$ (w)	100		
Giri nominali <i>Rated speed</i>	$N_N$ (rpm)	3.000		
Giri massimi <i>Max. speed</i>	$N_{MAX}$ (rpm)	5.000	5.000	5.000
Corrente di picco <i>Peak current</i>	$I_{MAX}$ (ARMS)	18	10	1,6
Costante di tensione <i>Voltage constant</i>	$K_E$ (VRMS / KRPM)	3,15	6,35	39,9
Costante di coppia <i>Torque constant</i>	$K_T$ (Nm/A)	0,05	0,1	0,66
Inerzia di rotore <i>Rotor inertia</i>	$J_R$ (Kg cm <sup>2</sup> )	0,06		
Resistenza @ 20 C <i>Winding resistance</i>	$R_{U-V}$ (ohm)	0,5	1,75	69
Induttanza @ 1 KHz <i>Winding inductance</i>	$L_{U-V}$ (mH)	0,53	2,2	88
Peso <i>Weight</i>	M (Kg)	0,65		
Massimo carico radiale <i>Max. radial load</i>	N	120		
Massimo carico assiale <i>Max. axial load</i>	N	80		
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



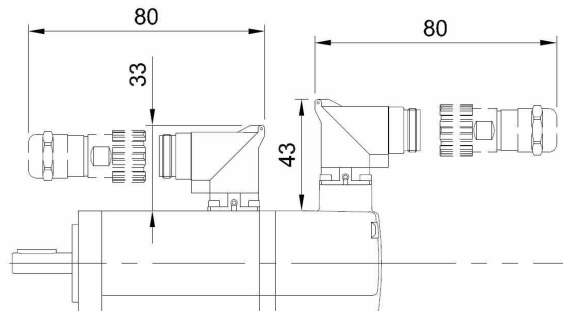
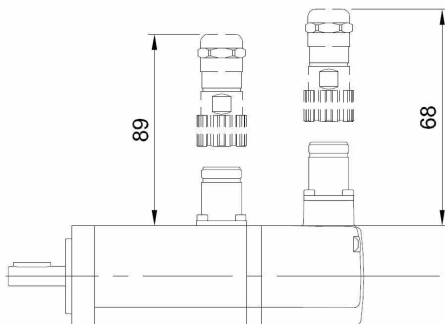
Motor	L	L+	LR	LC	LA	LZ	S h6	LB h7	QK	U	L1	L2	L3	MA	
S140	119	159	25.5	40	46	4.3	8	30	15	9.2	3	2.5	67	2	M3

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

[ Datasheet S140 - 2 of 2 ]

## ► Conessioni - Pinout Connections

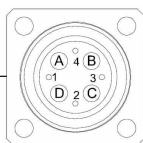
### Connettori estraibili / Flying connector



### Uscite connettori - Connector pinout

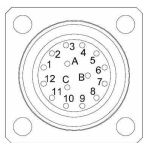
#### Power connector

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



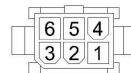
#### Signal connector

1	+5V
2	CHA -
3	0V
4	
5	
6	HALL V
7	HALL W
8	HALL U
9	
10	
11	CHZ -
12	CHB
13	CHB -
14	CHA
15	CHZ



### Uscite cavo - Cable Wiring

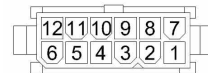
#### Power connector type Molex 55559-06p-210



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	0V	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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