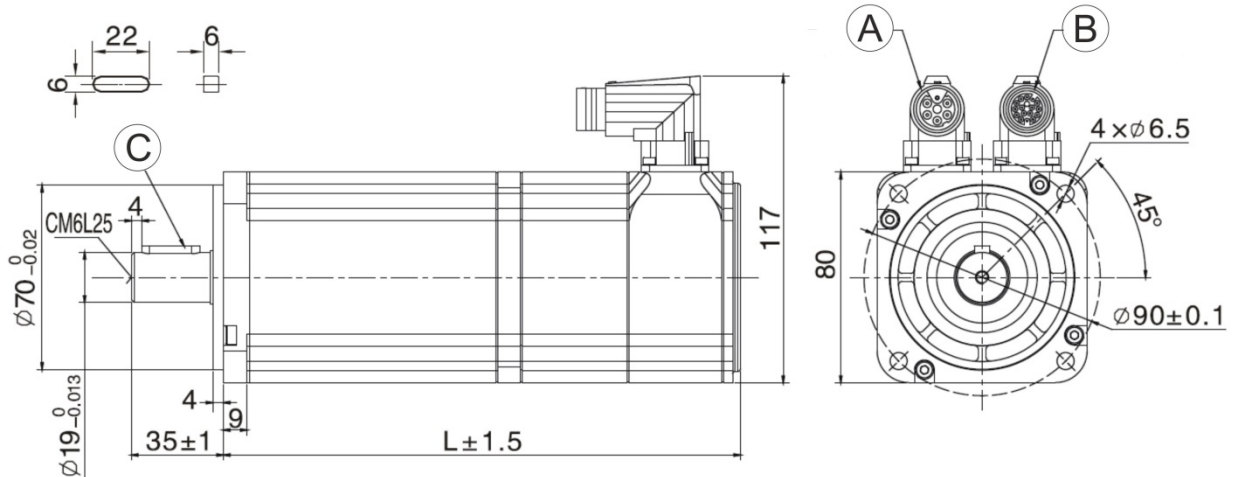




E°MOTORS – E°SC3-040...

Dimensions



All dimensions indicated in mm

A: Power connection
 B: Encoder connection
 C: Key

Type of motor	Length (L) without brake	Length (L) with brake
E°SC3-040-F6-30-21...	147 mm	197 mm
E°SC3-040-03-30-21...	167 mm	217 mm
E°SC3-040-03-30-22...	178	-



Technical Data

Type of motor		E°SC3-040-F6-30...	E°SC3-040-03-30...
Recommended servo drive		E°Darc K10	E°Darc K10

Motor

T_0	Stall torque	N m	2.63	3.3
T_{max}	Peak torque	N m	7.17	9.48
T_N	Rated torque	N m	2.39	3.18
n_N	Rated speed	rpm	3000	3000
n_k	Cutoff speed (at operating temperature)	rpm	3000	3000
J	Rotor moment of inertia	kgcm ²	1.36	1.9
F_r	Maximum radial force	N	335	335
F_a	Maximum axial force	N	167.5	167.5
m	Weight (without brake)	kg	3.3	3.9
p	Number of pole pairs		3	3
k_T	Torque constant	N m/A _{RMS}	0.662	0.56
k_E	Voltage constant	V/krpm	40	34
I_0	Stall current	A _{RMS}	4.4	6.93
I_N	Rated current	A _{RMS}	3.9	6.3
P_N	Rated power	kW	0.75	1.0
R_W	Phase resistance	Ohm	0.7	0.43
L_W	Phase inductance	mH	3.75	2.25
U	Supply voltage	V DC	300	300

Brake

T	Holding torque at 100 °C	N m	3.2	3.2
J	Moment of inertia	kgcm ²	0.025	0.025
m	Weight	kg	0.7	0.7
U	Voltage DC +/- 10 %	V DC	24	24
I_b	Power consumption	A DC	0.48	0.48
R	Resistance	Ohm	50	50

Cable

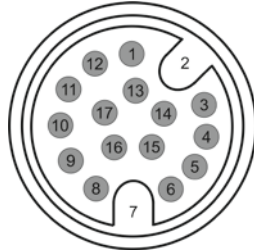
Q	Cross section (at < 50 m length)	mm ²	1	1
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Encoder connection

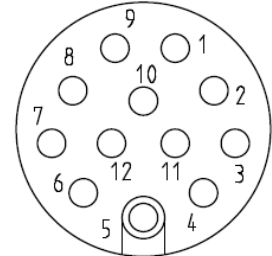
Incremental encoder

Pin	Assignment
1	DC + 5 V
2	GND
3	A
4	/A
5	B
6	/B
7	KTY +
8	KTY -
9	U
10	/U
11	V
12	/V
13	NC
14	Z
15	/Z
16	W
17	/W



Absolute encoder

Pin	Assignment
1	DC + 5 V
2	GND_5V
3	SD
4	/SD
5	NC
6	NC
7	KTY +
8	KTY -
9	V_batt
10	GND_batt
11	NC
12	NC



Power connection

Pin	Assignment
1	Phase U
2	Phase V
3	Phase W
4	Brake (+)
5	Brake (-)
6	NC
	Motor PE





Speed/torque curves

E°SC3-040-F6-30-21-NK0:

