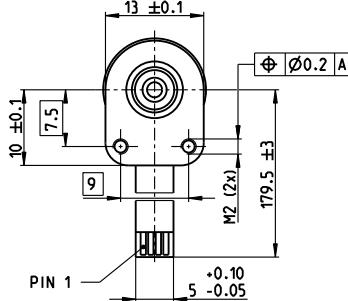
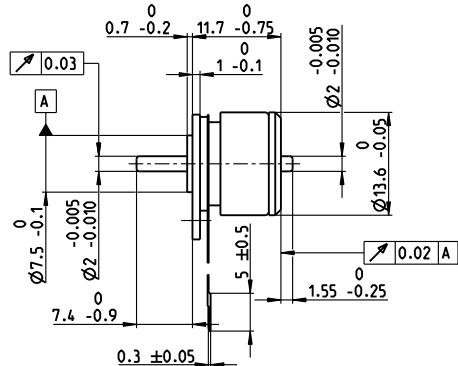
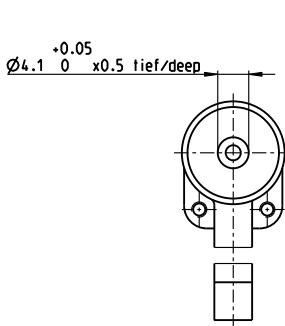


EC 14 flat Ø13.6 mm, brushless, 1.5 watt

EC flat



M 1:1

- █ Stock program
- Standard program
- Special program (on request)

Part numbers

	sensorless	339251	339252	236679	339253			
Motor data								
Values at nominal voltage								
1 Nominal voltage	V	6	12	18	24			
2 No load speed	rpm	20000	20100	19900	20000			
3 No load current	mA	156	78.1	51.7	38.9			
4 Nominal speed	rpm	9600	9680	9390	9590			
5 Nominal torque	mNm	1.8	1.83	1.74	1.81			
6 Nominal current (max. continuous current)	A	0.794	0.402	0.256	0.199			
7 Stall torque ¹	mNm	3.79	3.87	3.6	3.8			
8 Stall current	A	1.5	0.764	0.474	0.374			
9 Max. efficiency	%	49	49	48	49			
Characteristics								
10 Terminal resistance phase to phase	Ω	4.01	15.7	38	64.1			
11 Terminal inductance phase to phase	mH	0.107	0.428	0.962	1.71			
12 Torque constant	mNm/A	2.53	5.06	7.6	10.1			
13 Speed constant	rpm/V	3770	1890	1260	942			
14 Speed/torque gradient	rpm/mNm	5980	5860	6270	5960			
15 Mechanical time constant	ms	68.9	67.5	72.3	68.6			
16 Rotor inertia	gcm ²	1.1	1.1	1.1	1.1			
Specifications								
Operating range								
Comments								
Thermal data 17 Thermal resistance housing-ambient 18 Thermal resistance winding-housing 19 Thermal time constant winding 20 Thermal time constant motor 21 Ambient temperature 22 Max. winding temperature								
11.6 K/W 11.3 K/W 1.37 s 49.2 s -40...+100°C +125°C								
Mechanical data (preloaded ball bearings) 23 Max. speed 24 Axial play at axial load < 1.5 N > 1.5 N 25 Radial play 26 Max. axial load (dynamic) 27 Max. force for press fits (static) (static, shaft supported) 28 Max. radial load, 5 mm from flange								
22000 rpm 0 mm 0.14 mm preloaded 1.3 N 18 N 200 N 3.4 N								
Other specifications 29 Number of pole pairs 30 Number of phases 31 Weight of motor								
4 3 8 g								

Values listed in the table are nominal.

Connection

Pin 1	Motor winding 1
Pin 2	Motor winding 2
Pin 3	Motor winding 3
Pin 4	Neutral point
Adapter see p. 581	Part number 220310
Connector TE	Part number 84953-4
Molex	52207-0433

¹Calculation does not include saturation effect
(p. 83/190)

Modular system

Details on catalog page 56

Motor Control
551_ESCON Module 50/4 EC-S