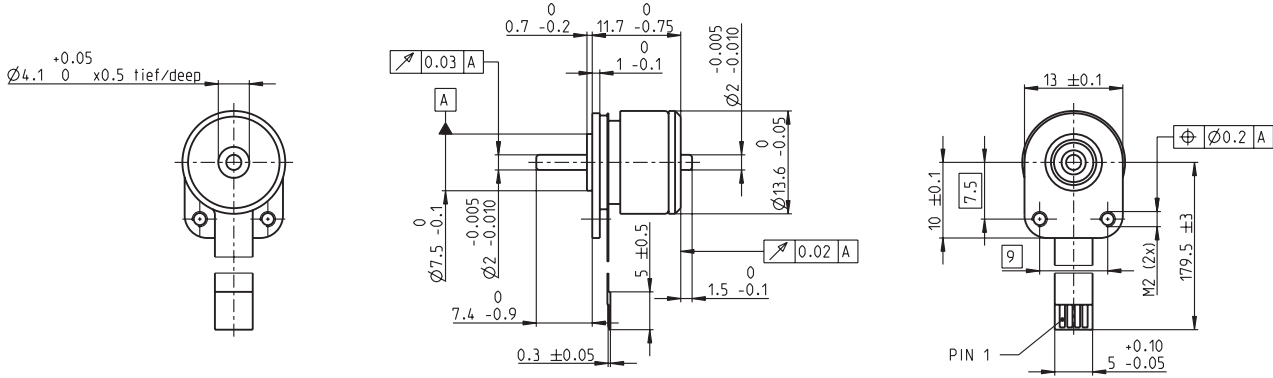


EC 14 flat $\varnothing 13.6$ mm, brushless, 1.5 Watt



M 1:1

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

Order Number

	sensorless	339251	339252	236679	339253
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Motor Data (provisional)					
Values at nominal voltage					
1 Nominal voltage	V	6.0	12.0	18.0	24.0
2 No load speed	rpm	21200	22100	21000	21200
3 No load current	mA	173	93.8	57.4	43.2
4 Nominal speed	rpm	10200	10700	9960	10200
5 Nominal torque (max. continuous torque)	mNm	1.67	1.59	1.61	1.67
6 Nominal current (max. continuous current)	A	0.796	0.404	0.257	0.199
7 Stall torque	mNm	3.54	3.42	3.36	3.54
8 Starting current	A	1.50	0.764	0.474	0.374
9 Max. efficiency	%	45	44	44	45
Characteristics					
10 Terminal resistance phase to phase	Ω	4.01	15.7	38.0	64.1
11 Terminal inductance phase to phase	mH	0.107	0.428	0.962	1.71
12 Torque constant	mNm / A	2.36	4.47	7.08	9.45
13 Speed constant	rpm / V	4040	2130	1350	1010
14 Speed / torque gradient	rpm / mNm	6860	7500	7230	6860
15 Mechanical time constant	ms	79.1	86.3	83.3	79.1
16 Rotor inertia	gcm ²	1.10	1.10	1.10	1.10

Specifications	Operating Range	Comments
<p>Thermal data</p> <p>17 Thermal resistance housing-ambient 7.92 K / W</p> <p>18 Thermal resistance winding-housing 11 K / W</p> <p>19 Thermal time constant winding 1.33 s</p> <p>20 Thermal time constant motor 33.6 s</p> <p>21 Ambient temperature -40 ... +100°C</p> <p>22 Max. permissible winding temperature +125°C</p> <p>Mechanical data (preloaded ball bearings)</p> <p>23 Max. permissible speed 22000 rpm</p> <p>24 Axial play at axial load < 1.5 N 0 mm</p> <p style="padding-left: 20px;">> 1.5 N 0.14 mm</p> <p>25 Radial play preloaded</p> <p>26 Max. axial load (dynamic) 1.3 N</p> <p>27 Max. force for press fits (static) 10 N</p> <p style="padding-left: 20px;">(static, shaft supported) 200 N</p> <p>28 Max. radial loading, 5 mm from flange 1.8 N</p>	<p>n [rpm]</p> <p>M [mNm]</p> <p>I [A]</p>	<p> Continuous operation In observation of above listed thermal resistance (lines 17 and 18) the maximum permissible winding temperature will be reached during continuous operation at 25°C ambient. = Thermal limit.</p> <p> Short term operation The motor may be briefly overloaded (recurring).</p> <p>Assigned power rating</p>

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Other specifications	
29 Number of pole pairs	4
30 Number of phases	3
31 Weight of motor	8.5 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 \curvearrowright neutral point

Adapter **Order number**
see p. 310 220310

Connector **Article number**
TYCO 84953-4
MOLEX 52207-0485
MOLEX 52089-0419

Recommended Electronics:
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