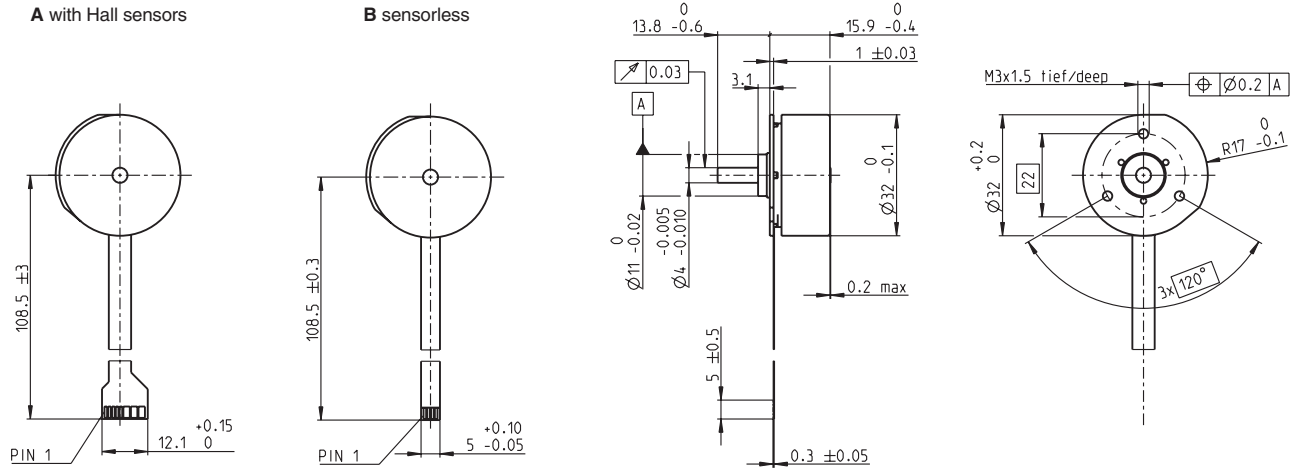


EC 32 flat $\varnothing 32$ mm, brushless, 15 Watt



M 1:2

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

		Order Number			
A with Hall sensors		339267	339268	267121	339269
B sensorless		339271	339272	226006	339273

Motor Data						
Values at nominal voltage						
1	Nominal voltage	V	9.0	12.0	24.0	48.0
2	No load speed	rpm	3590	4460	4390	4630
3	No load current	mA	152	150	73.4	39.4
4	Nominal speed	rpm	2120	2850	2800	2980
5	Nominal torque (max. continuous torque)	mNm	22.5	22.8	23.3	22.4
6	Nominal current (max. continuous current)	A	1.05	0.981	0.490	0.251
7	Stall torque	mNm	70.0	84.1	85.8	84.1
8	Starting current	A	3.13	3.49	1.75	0.906
9	Max. efficiency	%	61	63	64	63
Characteristics						
10	Terminal resistance phase to phase	Ω	2.87	3.43	13.7	53.0
11	Terminal inductance phase to phase	mH	1.61	1.87	7.73	27.8
12	Torque constant	mNm / A	22.4	24.1	49.0	92.8
13	Speed constant	rpm / V	427	397	195	103
14	Speed / torque gradient	rpm / mNm	54.9	56.6	54.5	58.7
15	Mechanical time constant	ms	20.1	20.7	20.0	21.5
16	Rotor inertia	gcm ²	35.0	35.0	35.0	35.0

Specifications	Operating Range	Comments
Thermal data 17 Thermal resistance housing-ambient 9.74 K / W 18 Thermal resistance winding-housing 4.63 K / W 19 Thermal time constant winding 8.1 s 20 Thermal time constant motor 108 s 21 Ambient temperature -40 ... +100°C 22 Max. permissible winding temperature +125°C Mechanical data (preloaded ball bearings) 23 Max. permissible speed 10000 rpm 24 Axial play at axial load < 5.0 N 0 mm > 5.0 N typ. 0.6 mm preloaded 25 Radial play preloaded 26 Max. axial load (dynamic) 4.8 N 27 Max. force for press fits (static) 50 N (static, shaft supported) 1000 N 28 Max. radial loading, 7.5 mm from flange 5.5 N		<div style="background-color: red; width: 20px; height: 10px; display: inline-block; margin-right: 5px;"></div> 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. <div style="background-color: white; width: 20px; height: 10px; border: 1px solid black; display: inline-block; margin-right: 5px;"></div> Short term operation The motor may be briefly overloaded (recurring). — Assigned power rating

maxon Modular System			Overview on page 16 - 21
29 Number of pole pairs 4 30 Number of phases 3 31 Weight of motor 46 g Values listed in the table are nominal. Connection with Hall sensors Pin 1 3.5 ... 24 VDC Pin 2 Hall sensor 3 Pin 3 Hall sensor 1 Pin 4 Hall sensor 2 Pin 5 GND Pin 6 Motor winding 3 Pin 7 Motor winding 2 Pin 8 Motor winding 1 Adapter see p. 310 Connector TYCO 1-84953-1 MOLEX 52207-1185 MOLEX 52089-1119 Pin for design with Hall sensors: FPC, 11-pol, Pitch 1.0 mm, top contact style Wiring diagram for Hall sensors see p. 29	Planetary Gearhead $\varnothing 32$ mm 0.75 - 6 Nm Page 232 / 234 Spur Gearhead $\varnothing 38$ mm 0.1 - 0.6 Nm Page 237		Recommended Electronics: DECS 50/5 Page 289 DEC 24/1 289 DEC 24/3 290 DEC Module 24/2 290 DEC 50/5 291 DEC Module 50/5 291 DECV 50/5 297 EPOS2 Module 36/2 304 EPOS 24/1 304 Notes 20