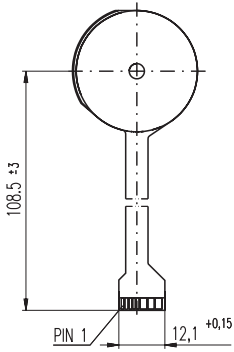
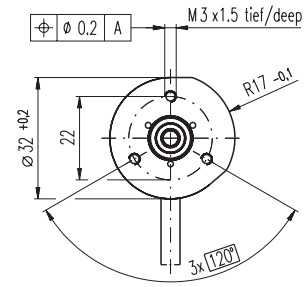
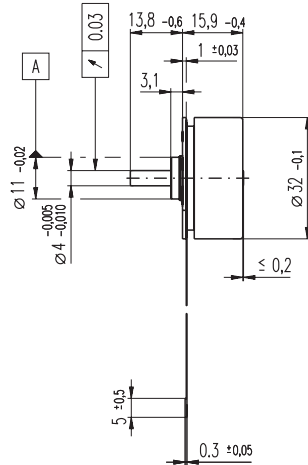
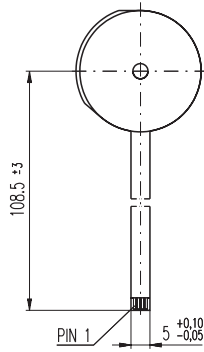


EC 32 flat Ø32 mm, brushless, 15 Watt

A with hall sensors



B sensorless



M 1:2

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

Order Number

	A with hall sensors	B sensorless		
	339267	339268	267121	339269
	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

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
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

Other specifications

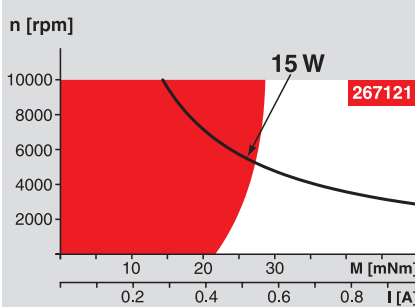
29	Number of pole pairs	4
30	Number of phases	3
31	Weight of motor	46 g

Values listed in the table are nominal.

Connection	with hall sensors	sensorless
Pin 1	3.5 ... 24 VDC	Motor winding 1
Pin 2	Hall sensor 3	Motor winding 2
Pin 3	Hall sensor 1	Motor winding 3
Pin 4	Hall sensor 2	neutral point
Pin 5	GND	
Pin 6	Motor winding 3	
Pin 7	Motor winding 2	
Pin 8	Motor winding 1	
Adapter	Order number	Order number
see p. 299	220300	220310
Connector	Article number	Article number
AMP	1-487951-1	487951-4
MOLEX	52207-1190	52207-0490
MOLEX	52089-1110	52089-0410

Pin for design with Hall sensors:
FPC, 11 pole, pitch 1.0 mm, top contact style
Wiring diagram for Hall sensors see page 29

Operating Range



Comments

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.

Short term operation
The motor may be briefly overloaded (recurring).

— **Assigned power rating**

maxon Modular System

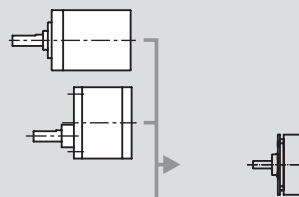
Overview on page 16 - 21

Planetary Gearhead

Ø32 mm
0.75 - 4.5 Nm
Page 239

Spur Gearhead

Ø38 mm
0.1 - 0.6 Nm
Page 243



Recommended Electronics:

DECS 50/5	Page 284
DEC 24/1	284
DEC 24/3	285
DEC 50/5	285
DECV 50/5	286
EPOS 24/1	294
Notes	20