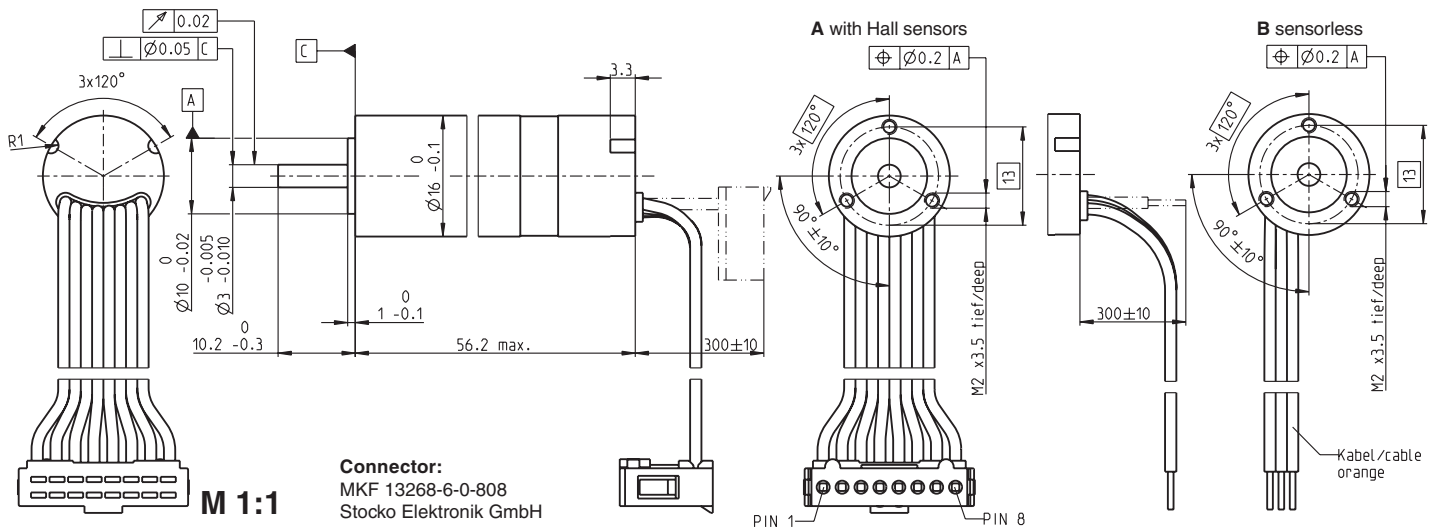


EC 16 Ø16 mm, brushless, 40 Watt



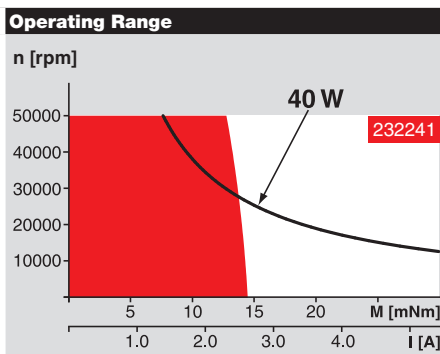
Connector:
MKF 13268-6-0-808
Stocko Elektronik GmbH

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

	Order Number			
A with Hall sensors	232242	262860	232241	262862
B sensorless	235689	262864	235686	262866

Motor Data					
Values at nominal voltage					
1 Nominal voltage	V	12.0	18.0	24.0	32.0
2 No load speed	rpm	35800	40300	41400	41400
3 No load current	mA	358	284	222	166
4 Nominal speed	rpm	32100	36700	37900	37900
5 Nominal torque (max. continuous torque)	mNm	13.3	13.4	13.9	13.8
6 Nominal current (max. continuous current)	A	4.51	3.41	2.71	2.03
7 Stall torque	mNm	141	166	184	183
8 Starting current	A	44.5	39.3	33.5	24.9
9 Max. efficiency	%	83	84	85	85
Characteristics					
10 Terminal resistance phase to phase	Ω	0.269	0.458	0.716	1.28
11 Terminal inductance phase to phase	mH	0.0140	0.0249	0.0420	0.0746
12 Torque constant	mNm / A	3.18	4.23	5.50	7.33
13 Speed constant	rpm / V	3010	2260	1740	1300
14 Speed / torque gradient	rpm / mNm	255	244	226	228
15 Mechanical time constant	ms	3.39	3.25	3.01	3.03
16 Rotor inertia	gcm ²	1.27	1.27	1.27	1.27

Specifications	
Thermal data	
17 Thermal resistance housing-ambient	10.3 K / W
18 Thermal resistance winding-housing	1.2 K / W
19 Thermal time constant winding	2.08 s
20 Thermal time constant motor	299 s
21 Ambient temperature	-20 ... +100°C
22 Max. permissible winding temperature	+125°C
Mechanical data (preloaded ball bearings)	
23 Max. permissible speed	50000 rpm
24 Axial play at axial load < 3.5 N	0 mm
	> 3.5 N max.0.14 mm
25 Radial play	preloaded
26 Max. axial load (dynamic)	3 N
27 Max. force for press fits (static) (static, shaft supported)	35 N
28 Max. radial loading, 5 mm from flange	250 N



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**

Other specifications	
29 Number of pole pairs	1
30 Number of phases	3
31 Weight of motor	58 g

Values listed in the table are nominal.

Connection A

brown	Motor winding 1	Pin 1
red	Motor winding 2	Pin 2
orange	Motor winding 3	Pin 3
yellow	V _{Hall} 4.5 ... 24 VDC	Pin 4
green	GND	Pin 5
blue	Hall sensor 1	Pin 6
violet	Hall sensor 2	Pin 7
grey	Hall sensor 3	Pin 8

Connection B (Cable AWG 24)

brown	Motor winding 1
red	Motor winding 2
orange	Motor winding 3

Wiring diagram for Hall sensors see p. 27

maxon Modular System Overview on page 16 - 21

Planetary Gearhead
Ø22 mm
0.5 - 2.0 Nm
Page 224

Spindle Drive
Ø22 mm
Page 247 / 248

**for type A:
Encoder MR**
128 / 256 / 512 Imp.,
Page 261

Recommended Electronics:

DECS 50/5	Page 289
DEC 24/3	290
DEC 50/5	291
DECV 50/5	297
DES 50/5	298
EPOS2 Module 36/2	304
EPOS 24/1	304
EPOS2 24/5, EPOS2 50/5	305
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