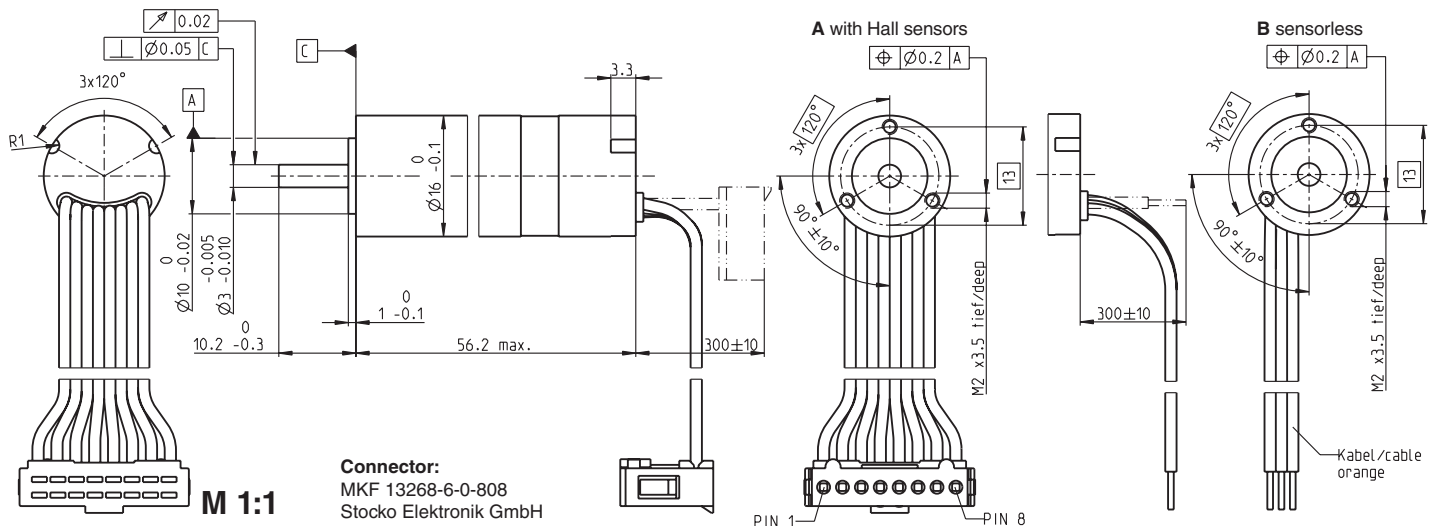


EC 16 Ø16 mm, brushless, 40 Watt

NRND See page 13
Not recommended for New Design



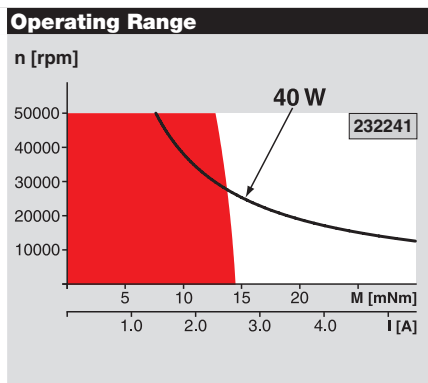
Connector:
MKF 13268-6-0-808
Stocko Elektronik GmbH

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

		Part Numbers			
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	18	24	32
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	10 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} 3...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. 35

maxon Modular System Overview on page 20 - 25

Planetary Gearhead
Ø22 mm
0.5 - 2.0 Nm
Page 252

Spindle Drive
Ø22 mm
Page 284/285

for type A: Encoder MR
128/256/512 CPT,
Page 301

Recommended Electronics:

ESCON 50/5	Page 321
DECS 50/5	324
EPOS2 24/2, Module 36/2	330
EPOS2 24/5, EPOS2 50/5	331
EPOS2 P 24/5	334
Notes	24