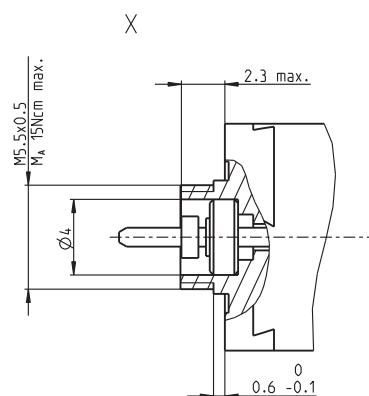
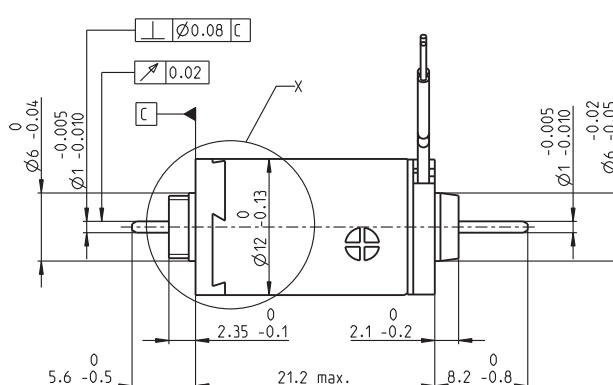
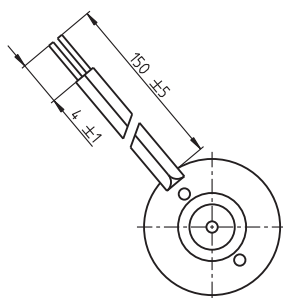


A-max 12 Ø12 mm, Precious Metal Brushes CLL, 0.5 Watt

Kabel AWG 28/7
cable UL Style 1061

⊕ Kabel rot
cable red



M 3:2

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

Part Numbers

200938 265389 265390 265391 265392 265393

Motor Data

Values at nominal voltage			3	4.5	6	9	12	15
1	Nominal voltage	V	3	4.5	6	9	12	15
2	No load speed	rpm	13700	11700	12600	11900	12100	13500
3	No load current	mA	34.5	18.8	15.5	9.63	7.38	6.88
4	Nominal speed	rpm	6000	4390	5280	4480	4620	5050
5	Nominal torque (max. continuous torque)	mNm	0.872	0.937	0.923	0.918	0.908	0.78
6	Nominal current (max. continuous current)	A	0.464	0.282	0.225	0.141	0.106	0.0835
7	Stall torque	mNm	1.58	1.55	1.63	1.52	1.52	1.29
8	Stall current	A	0.789	0.438	0.374	0.22	0.168	0.129
9	Max. efficiency	%	63	63	64	63	63	60
Characteristics								
10	Terminal resistance	Ω	3.8	10.3	16	40.9	71.6	116
11	Terminal inductance	mH	0.085	0.264	0.403	1.01	1.74	2.13
12	Torque constant	mNm/A	2.01	3.53	4.36	6.92	9.06	10
13	Speed constant	rpm/V	4760	2710	2190	1380	1050	952
14	Speed / torque gradient	rpm/mNm	9030	7880	8060	8170	8330	11000
15	Mechanical time constant	ms	20.6	20.3	20.4	20.4	20.5	21.1
16	Rotor inertia	gcm ²	0.218	0.246	0.241	0.238	0.235	0.183

Specifications

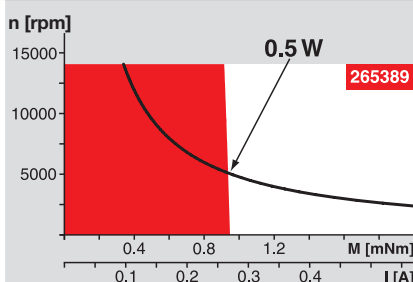
Thermal data		
17	Thermal resistance housing-ambient	44.5 K/W
18	Thermal resistance winding-housing	15 K/W
19	Thermal time constant winding	5.03 s
20	Thermal time constant motor	267 s
21	Ambient temperature	-30...+65°C
22	Max. winding temperature	+85°C

Mechanical data (sleeve bearings)		
23	Max. speed	14000 rpm
24	Axial play	0.05 - 0.15 mm
25	Radial play	0.012 mm
26	Max. axial load (dynamic)	0.15 N
27	Max. force for press fits (static)	15 N
	(static, shaft supported)	70 N
28	Max. radial load, 4 mm from flange	0.4 N

Other specifications		
29	Number of pole pairs	1
30	Number of commutator segments	7
31	Weight of motor	12 g
CLL = Capacitor Long Life		
Alignment of the electronic connections not specified.		

Values listed in the table are nominal.
Explanation of the figures on page 151.

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 20-27

Planetary Gearhead

Ø10 mm
0.01 - 0.15 Nm
Page 314

Spur Gearhead

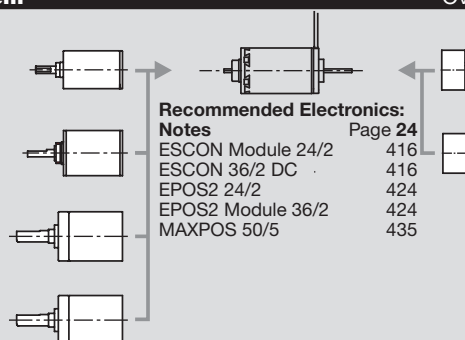
Ø12 mm
0.01 - 0.03 Nm
Page 315

Planetary Gearhead

Ø13 mm
0.05 - 0.15 Nm
Page 316

Planetary Gearhead

Ø13 mm
0.2 - 0.35 Nm
Page 317



Recommended Electronics:

Notes	Page 24
ESCON Module 24/2	416
ESCON 36/2 DC	416
EPOS2 24/2	424
EPOS2 Module 36/2	424
MAXPOS 50/5	435

Encoder MR

16 CPT,
2 channels
Page 385

Encoder MR

64 - 256 CPT,
2 channels
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