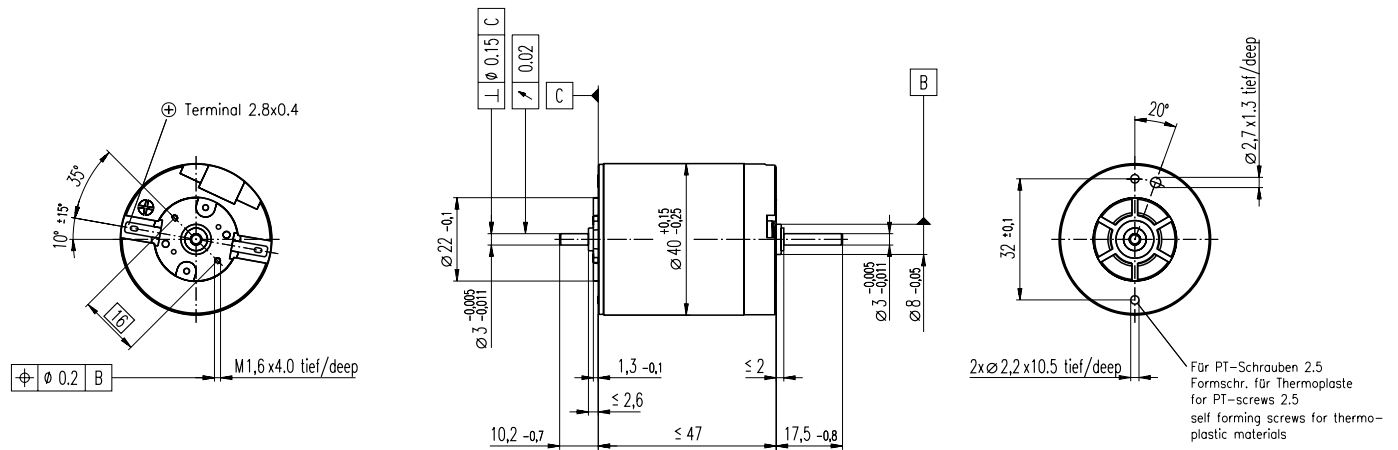


F 2140 Ø40 mm, Graphite Brushes, 6 Watt, CE approved



M 1:2

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

Order Number

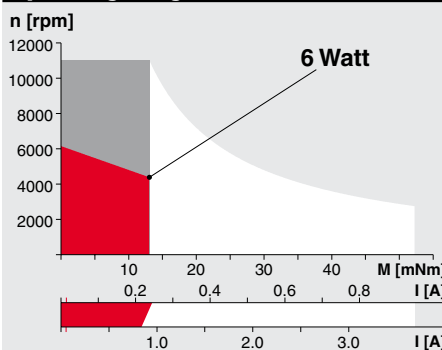
2140. ... -58.236-050 (Insert winding number)

Motor Data	Winding number	Order Number							
		931	932	933	934	935	936	937	939
1 Assigned power rating	W	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
2 Nominal voltage	Volt	6.0	9.0	9.0	12.0	15.0	18.0	24.0	36.0
3 No load speed	rpm	3540	4310	3490	3880	3900	3710	3980	4030
4 Stall torque	mNm	26.3	34.4	27.9	31.2	31.6	29.5	31.9	31.1
5 Speed / torque gradient	rpm / mNm	152	136	136	132	130	132	130	134
6 No load current	mA	56	47	35	30	24	18	15	10
7 Starting current	mA	1830	1870	1230	1130	909	669	578	378
8 Terminal resistance	Ohm	3.28	4.81	7.35	10.7	16.5	26.9	41.5	95.2
9 Max. permissible speed	rpm	11000	11000	11000	11000	11000	11000	11000	11000
10 Max. continuous current	mA	839	691	572	475	384	303	244	162
11 Max. continuous torque	mNm	12.1	12.7	13.0	13.2	13.4	13.4	13.5	13.3
12 Max. power output at nominal voltage	mW	2240	3660	2400	3030	3110	2770	3230	3200
13 Max. efficiency	%	61	66	65	67	68	68	69	70
14 Torque constant	mNm / A	14.4	18.4	22.7	27.8	34.8	44.1	55.2	82.3
15 Speed constant	rpm / V	664	519	420	344	275	216	173	116
16 Mechanical time constant	ms	36	33	33	32	31	31	30	30
17 Rotor inertia	gcm ²	22.9	23.5	23.2	23.0	22.7	22.1	22.1	21.1
18 Terminal inductance	mH	0.34	0.56	0.85	1.27	1.99	3.21	5.02	11.20
19 Thermal resistance housing-ambient	K / W	10	10	10	10	10	10	10	10
20 Thermal resistance rotor-housing	K / W	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8
21 Thermal time constant winding	s	43	44	44	43	43	42	42	40

Specifications

- Axial play 0.2 - 0.3 mm
 - Max. **ball bearing** loads
 - axial (dynamic) 1.5 N
 - not preloaded 1.5 N
 - preloaded 7.5 N
 - radial (5 mm from flange) 50 N
 - Force for press fits (static) 700 N
 - Radial play **ball bearing** 0.025 mm
 - Ambient temperature range -20 ... +65°C
 - Max. rotor temperature +85°C
 - Number of commutator segments 7
 - Weight of motor 190 g
- Values listed in the table are nominal.
For applicable tolerances see page 43.
For additional details please use the maxon selection program on the enclosed CD-Rom.

Operating Range



Comments

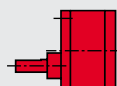
- Recommended operating range**
 - Continuous operation**
In observation of above listed thermal resistances (lines 19 and 20) the maximum permissible rotor temperature will be reached during continuous operation at 25°C ambient.
= Thermal limit
 - Short term operation**
The motor may be briefly overloaded (recurring).
- 937** Motor with high resistance winding
- 931** Motor with low resistance winding

Details on page 49

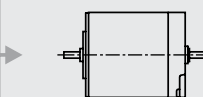
maxon Modular System

Overview on page 17 - 21

Spur Gearhead
Ø38 mm
0.1 - 0.6 Nm
Details page 200



Digital Encoder
22 mm
100 CPT, 2 channels
Details page 215



Recommended Electronics:
LSC 30/2 page 231
MIP 10 245
Notes 17