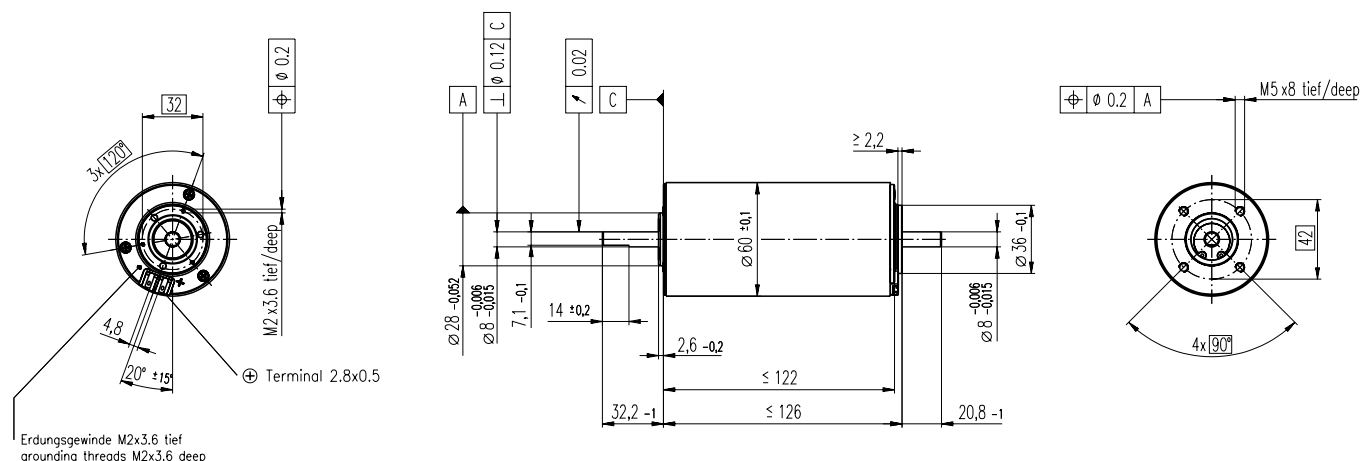


F 2260 Ø60 mm, Graphite Brushes, 80 Watt



M 1:4

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

Order Number

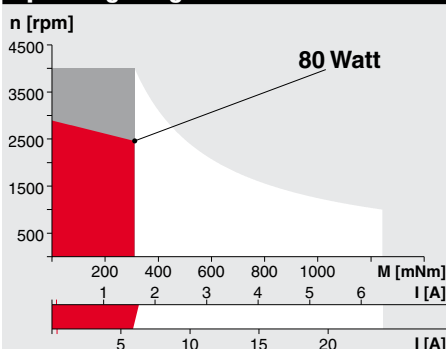
2260. ... -51.216-200 (Insert winding number)

Winding number		880	881	882	883	884	885	886	887	888	889	890				
Motor Data																
1 Assigned power rating	W	80	80	80	80	80	80	80	80	80	80	80				
2 Nominal voltage	Volt	15.0	15.0	18.0	24.0	24.0	24.0	36.0	36.0	48.0	48.0	48.0				
3 No load speed	rpm	3980	2740	2650	2850	2640	2230	2690	2200	2670	2360	1800				
4 Stall torque	Nm	2.88	1.97	1.91	2.06	1.87	1.67	2.01	1.59	1.94	1.69	1.35				
5 Speed / torque gradient	rpm / mNm	1.44	1.45	1.43	1.42	1.45	1.37	1.36	1.41	1.40	1.42	1.35				
6 No load current	mA	563	351	278	226	206	168	140	109	103	89	65				
7 Starting current	A	83.8	39.4	30.6	26.3	22.2	16.7	16.1	10.4	11.5	8.87	5.41				
8 Terminal resistance	Ohm	0.179	0.381	0.589	0.911	1.08	1.44	2.24	3.47	4.18	5.41	8.88				
9 Max. permissible speed	rpm	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000				
10 Max. continuous current	A	7.50	5.87	4.84	3.95	3.66	3.21	2.59	2.10	1.91	1.69	1.33				
11 Max. continuous torque	mNm	258	294	303	309	309	321	324	322	324	323	332				
12 Max. power output at nominal voltage	W	283	135	128	149	126	94.8	139	89.7	133	103	62.6				
13 Max. efficiency	%	79	78	79	80	79	79	81	79	81	80	79				
14 Torque constant	mNm / A	34.4	50.1	62.6	78.3	84.5	100.0	125	153	169	191	250				
15 Speed constant	rpm / V	277	191	153	122	113	95.3	76.3	62.3	56.5	50.0	38.1				
16 Mechanical time constant	ms	20	20	19	19	19	19	18	18	18	18	18				
17 Rotor inertia	gcm ²	1330	1290	1270	1250	1230	1290	1270	1230	1230	1210	1260				
18 Terminal inductance	mH	0.07	0.14	0.22	0.34	0.40	0.56	0.88	1.31	1.59	2.03	3.50				
19 Thermal resistance housing-ambient	K / W	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4				
20 Thermal resistance rotor-housing	K / W	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1				
21 Thermal time constant winding	s	72	70	69	68	67	70	69	67	67	66	69				

Specifications

- Axial play at axial load < 15 N ≤ 0.1 mm
> 15 N 0.1 - 0.5 mm
Axial play for motor combinations with encoder is limited to max. 0.15 mm
- Preloaded **ball bearing**
Preload strength min. 15 N
- Max. **ball bearing** loads
axial (dynamic) 15 N
radial (5 mm from flange) 100 N
Force for press fits (static) 400 N
(static, shaft supported) 10 000 N
- Radial play **ball bearing** 0.05 mm
- Ambient temperature range -20 ... +100°C
- Max. rotor temperature +125°C
- Number of commutator segments 26
- Weight of motor 1300 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

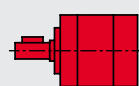
The motor may be briefly overloaded (recurring).

889 Motor with high resistance winding

881 Motor with low resistance winding

maxon Modular System

Planetary Gearhead
Ø62 mm
8 - 50 Nm
Details page 203



Recommended Electronics:
ADS 50/5 page 233
ADS 50/10 233
ADS_E 50/5 ... 10 234
PCU 2000 243
MIP 10 / MIP 100 245
Notes 17

Overview on page 17 - 21

Digital Encoder

HP HEDS 5540
500 CPT, 3 channels
Details page 217

Digital Encoder

HP HEDL 5540
500 CPT, 3 channels
Details page 219

Digital Encoder

HP HEDS 6540
1000 CPT, 3 channels
Details page 221

Brake

Ø40 mm
24 VDC, 0.4 Nm
Details page 248