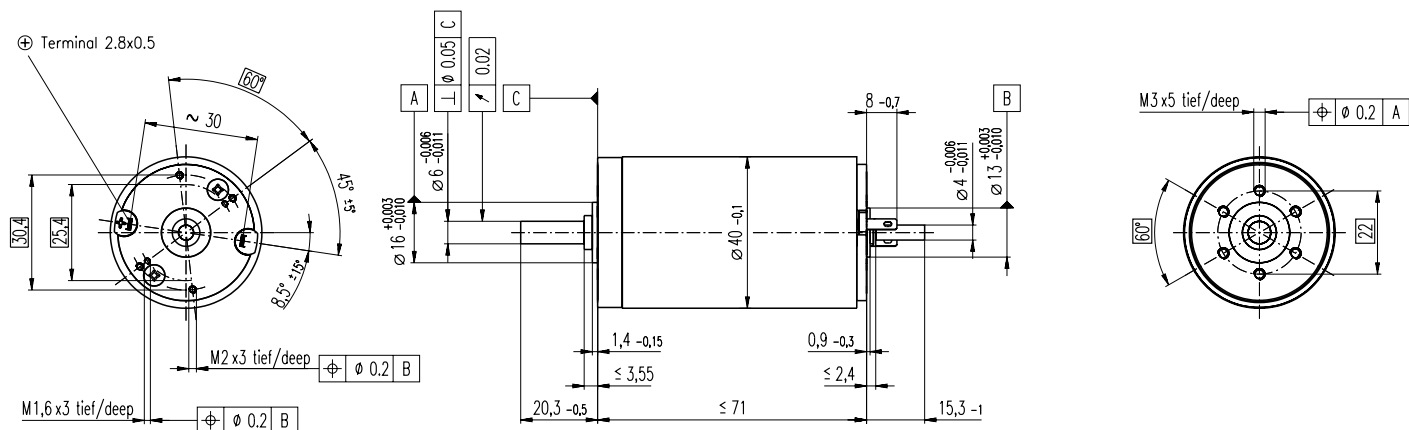


RE 40 Ø40 mm, Graphite Brushes, 150 Watt

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

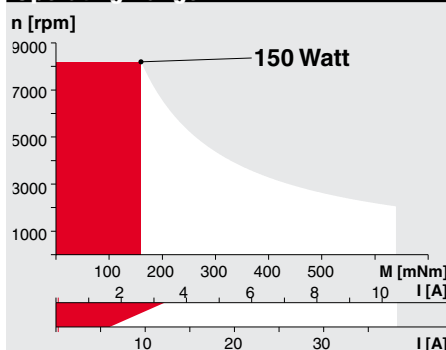
Order Number

148866 148867 148877 218008 218009 218010 218011 218012 218013 218014 218015

Motor Data		148866	148867	148877	218008	218009	218010	218011	218012	218013	218014	218015						
1	Assigned power rating	W	150	150	150	150	150	150	150	150	150	150						
2	Nominal voltage	Volt	12.0	24.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0						
3	No load speed	rpm	6920	7580	7580	6420	5560	3330	2690	2130	1710	1420	987					
4	Stall torque	mNm	1690	2290	2500	1990	1760	996	796	641	512	415	289					
5	Speed/torque gradient	rpm/mNm	4.11	3.32	3.04	3.23	3.17	3.36	3.39	3.35	3.37	3.44	3.45					
6	No load current	mA	241	137	69	54	44	22	17	13	10	8	5					
7	Starting current	A	103	75.9	41.4	28.0	21.4	7.26	4.69	3.00	1.92	1.29	0.627					
8	Terminal resistance	Ohm	0.117	0.316	1.16	1.72	2.24	6.61	10.2	16.0	24.9	37.1	76.6					
9	Max. permissible speed	rpm	8200	8200	8200	8200	8200	8200	8200	8200	8200	8200	8200					
10	Max. continuous current	A	6.00	6.00	3.33	2.75	2.41	1.41	1.13	0.904	0.725	0.594	0.414					
11	Max. continuous torque	mNm	98.7	181	201	196	198	193	192	193	193	191	190					
12	Max. power output at nominal voltage	W	285	440	491	332	255	86.5	55.7	35.6	22.9	15.3	7.40					
13	Max. efficiency	%	88	91	92	91	91	89	88	87	86	85	83					
14	Torque constant	mNm/A	16.4	30.2	60.3	71.3	82.2	137	170	214	266	321	461					
15	Speed constant	rpm/V	581	317	158	134	116	69.7	56.2	44.7	35.9	29.8	20.7					
16	Mechanical time constant	ms	6	5	4	4	4	4	4	4	4	4	4					
17	Rotor inertia	gcm ²	135	134	134	125	127	118	117	118	117	114	114					
18	Terminal inductance	mH	0.02	0.08	0.33	0.46	0.61	1.70	2.62	4.14	6.40	9.31	19.20					
19	Thermal resistance housing-ambient	K/W	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7					
20	Thermal resistance rotor-housing	K/W	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9					
21	Thermal time constant winding	s	41	40	40	38	38	36	35	35	35	34	34					

Specifications

- Axial play 0.05 - 0.15 mm
 - Max. **ball bearing** loads
 - axial (dynamic) 5.6 N
 - not preloaded 2.4 N
 - preloaded 28 N
 - radial (5 mm from flange) 110 N
 - Press-fit force (static, shaft supported) 1200 N
 - Radial play **ball bearings** 0.025 mm
 - Ambient temperature range -20/+100°C
 - Max. rotor temperature +155°C
 - Number of commutator segments 13
 - Weight of motor 480 g
 - Values listed in the table are nominal.
- For applicable tolerances (see page 43) and additional details please request out of the maxon selection program on the settled CD-Rom.

Operating Range**Comments**

Details on page 49

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

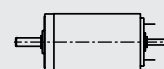
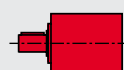
The motor may be briefly overloaded (recurring).

148877 Motor with high resistance winding

148866 Motor with low resistance winding

maxon Modular System

Planetary Gearhead
 Ø42 mm
 3-15 Nm
 Details page 195



Digital Encoder
HP HED_55
 500 CPT, 3 channels
 Details page 204/206

Brake
 Ø40 mm
 24 VDC, 0.4 Nm
 Details page 232

Industrial version
Encoder
 Details page 208
Brake
 Details page 233