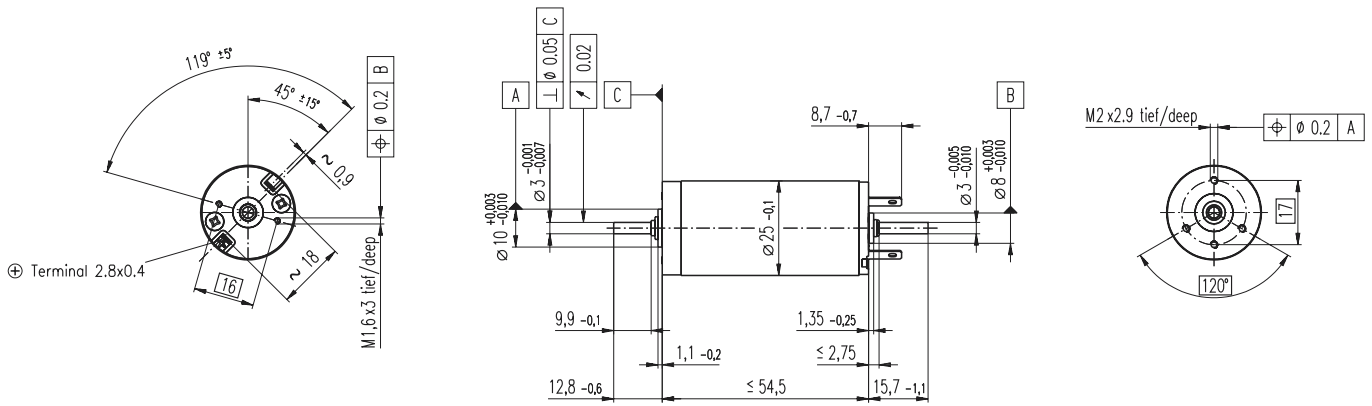


RE 25 Ø25 mm, Graphite Brushes, 20 Watt



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

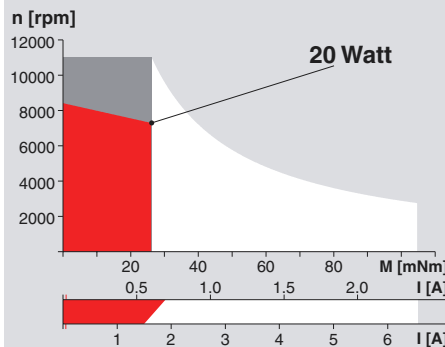
Order Number

Motor Data		118749	118750	118751	118752	118753	118754	118755	118756	118757
1 Assigned power rating	W	20	20	20	20	20	20	20	20	20
2 Nominal voltage	Volt	9.0	15.0	18.0	24.0	30.0	42.0	48.0	48.0	48.0
3 No load speed	rpm	10100	9760	10300	9660	9970	11200	10500	8320	5100
4 Stall torque	mNm	229	222	218	240	246	280	261	207	127
5 Speed / torque gradient	rpm / mNm	47.6	45.7	49.0	41.2	41.3	40.6	40.5	40.6	40.6
6 No load current	mA	111	62	55	37	31	26	20	15	9
7 Starting current	mA	29100	15700	13500	10300	8720	7940	6030	3810	1440
8 Terminal resistance	Ohm	0.309	0.953	1.33	2.32	3.44	5.29	7.96	12.6	33.4
9 Max. permissible speed	rpm	11000	11000	11000	11000	11000	11000	11000	11000	11000
10 Max. continuous current	mA	1500	1500	1500	1230	1030	841	695	560	350
11 Max. continuous torque	mNm	11.8	21.2	24.2	28.4	29.0	29.7	30.1	30.5	31.0
12 Max. power output at nominal voltage	mW	52800	52900	55600	58400	62200	80400	70200	44400	16800
13 Max. efficiency	%	77	82	83	85	86	87	87	87	84
14 Torque constant	mNm / A	7.88	14.1	16.1	23.2	28.2	35.3	43.3	54.4	88.7
15 Speed constant	rpm / V	1210	677	592	412	338	271	220	175	108
16 Mechanical time constant	ms	6	5	5	5	4	4	4	4	4
17 Rotor inertia	gcm ²	11.3	10.00	9.11	10.3	10.1	10.1	10.00	9.96	9.91
18 Terminal inductance	mH	0.03	0.09	0.12	0.24	0.35	0.55	0.83	1.31	3.48
19 Thermal resistance housing-ambient	K / W	14	14	14	14	14	14	14	14	14
20 Thermal resistance rotor-housing	K / W	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
21 Thermal time constant winding	s	13	11	10	12	12	12	12	11	11

Specifications

- Axial play 0.05 - 0.15 mm
- Max. **ball bearing** loads
 - axial (dynamic) 3.2 N
 - not preloaded 3.2 N
 - preloaded 16 N
 - radial (5 mm from flange) 64 N
 - Press-fit force (static, shaft supported) 270 N
- Radial play **ball bearing** 0.025 mm
- Ambient temperature range -20 / +100°C
- Max. rotor temperature +125°C
- Number of commutator segments 11
- Weight of motor 130 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



- 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).
- 118755 Motor with high resistance winding
- 118751 Motor with low resistance winding

maxon Modular System

Planetary Gearhead
Ø26 mm
0.2 - 1.8 Nm
Details page 180

Planetary Gearhead
Ø26 mm
0.5 - 2.0 Nm
Details page 181

Planetary Gearhead
Ø32 mm
0.75 - 6.0 Nm
Details page 183 / 186

Planetary Gearhead
Ø32 mm
0.4 - 2.0 Nm
Details page 189

Digital MR Encoder
128 - 1000 CPT,
3 channels
Details page 201

Digital Encoder
22 mm
100 CPT, 2 channels
Details page 203

Digital Encoder
HP HED_55
500 CPT, 3 channels
Details page 205 / 207

DC-Tacho
Ø22 mm
0.52 V
Details page 213

Brake
Ø40 mm
24 VDC, 0.4 Nm
Details page 236