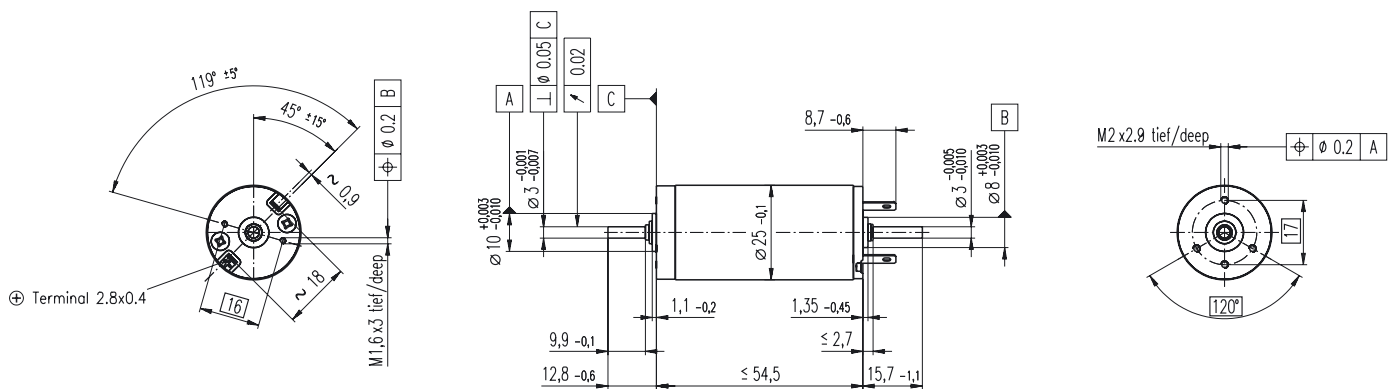


RE 25 \varnothing 25 mm, Precious Metal Brushes CLL, 10 Watt, $\text{C}\epsilon$ approved



M 1:2

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

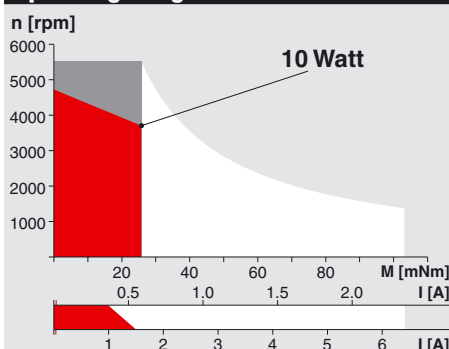
Order Number

		118740	118741	118742	118743	118744	118745	118746	118747	118748
Motor Data										
1	Assigned power rating	W	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
2	Nominal voltage	Volt	4.5	8.0	9.0	12.0	15.0	18.0	24.0	32.0
3	No load speed	rpm	5370	5330	5240	4860	4990	4790	5200	5530
4	Stall torque	mNm	131	132	119	129	131	126	136	144
5	Speed / torque gradient	rpm / mNm	41.1	40.6	44.2	37.9	38.4	38.4	38.4	38.6
6	No load current	mA	80	45	39	26	22	17	14	12
7	Starting current	mA	16500	9230	7310	5500	4570	3520	3100	2610
8	Terminal resistance	Ohm	0.273	0.867	1.23	2.18	3.28	5.11	7.73	12.3
9	Max. permissible speed	rpm	5500	5500	5500	5500	5500	5500	5500	5500
10	Max. continuous current	mA	1500	1500	1500	1250	1020	815	662	526
11	Max. continuous torque	mNm	12.0	21.4	24.5	29.3	29.1	29.1	29.0	28.9
12	Max. power output at nominal voltage	mW	18400	18300	16300	16400	17000	18500	20700	17500
13	Max. efficiency	%	87	87	86	87	87	87	87	87
14	Torque constant	mNm / A	7.97	14.3	16.3	23.4	28.5	35.7	43.8	55.0
15	Speed constant	rpm / V	1200	669	585	407	335	268	218	173
16	Mechanical time constant	ms	5	4	4	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
18	Terminal inductance	mH	0.03	0.09	0.12	0.24	0.35	0.55	0.83	1.31
19	Thermal resistance housing-ambient	K / W	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
21	Thermal time constant winding	s	13	11	10	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
 - Force for press fits (static) 270 N
- Radial play **ball bearing** 0.025 mm
- Ambient temperature range -20 ... +85°C
- Max. rotor temperature +100°C
- Number of commutator segments 11
- Weight of motor 130 g
- 2 pole permanent magnet
- 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.
- CLL = Capacitor Long Life

Operating Range



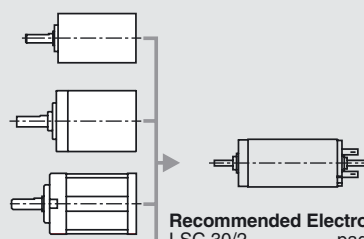
Comments

- 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).
- 118748 Motor with high resistance winding
118740 Motor with low resistance winding

Details on page 49

maxon Modular System

- Planetary Gearhead**
 \varnothing 26 mm
0.5 - 2.0 Nm
Details page 216
- Planetary Gearhead**
 \varnothing 32 mm
0.75 - 6.0 Nm
Details page 218 / 220
- Planetary Gearhead**
 \varnothing 32 mm
0.4 - 2.0 Nm
Details page 222



- Recommended Electronics:** page 257
- LSC 30/2 259
 - ADS 50/5 260
 - ADS_E 50/5 271
 - EPOS 24/5 273
 - MIP 10 17
 - Notes

Overview on page 17 - 21

- Encoder MR**
128 - 1000 CPT,
3 channels
Details page 238
- Encoder Enc**
 \varnothing 22 mm
100 CPT, 2 channels
Details page 240
- Encoder HED_ 5540**
500 CPT,
3 channels
Details page 242 / 244
- DC-Tacho DCT**
 \varnothing 22 mm
0.52 V
Details page 252