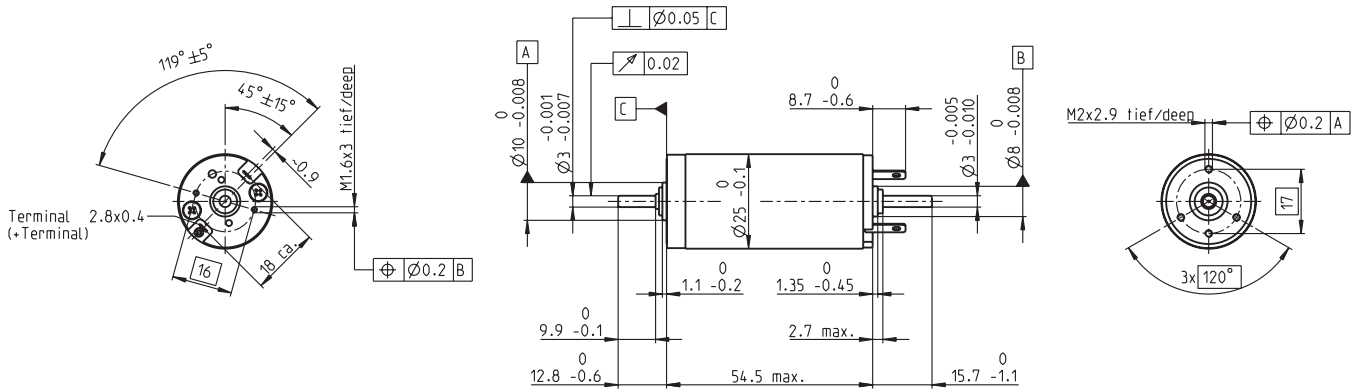


# RE 25 Ø25 mm, Precious Metal Brushes CLL, 10 Watt, CE approved



## M 1:2

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

### Order Number

118740 118741 **118742** 118743 118744 118745 **118746** 118747 118748

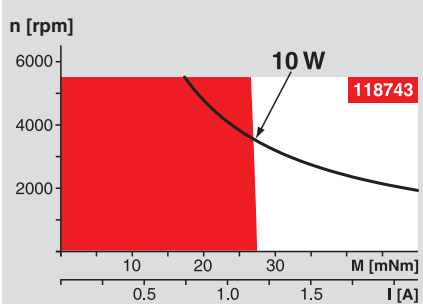
### Motor Data

Values at nominal voltage											
1	Nominal voltage	V	4.5	8.0	9.0	12.0	15.0	18.0	24.0	32.0	48.0
2	No load speed	rpm	5350	5310	5230	4850	4980	4780	5190	5510	5070
3	No load current	mA	79.6	44.3	38.6	26.2	21.7	17.2	14.3	11.6	6.95
4	Nominal speed	rpm	4910	4510	4230	3820	3940	3740	4150	4470	4030
5	Nominal torque (max. continuous torque)	mNm	11.4	20.9	24.0	29.1	28.8	28.9	28.8	28.6	28.7
6	Nominal current (max. continuous current)	A	1.50	1.50	1.50	1.26	1.03	0.823	0.668	0.529	0.325
7	Stall torque	mNm	138	139	126	137	138	133	144	152	140
8	Starting current	A	17.2	9.73	7.72	5.82	4.83	3.72	3.28	2.76	1.56
9	Max. efficiency	%	87	87	86	87	87	87	87	88	87
Characteristics											
10	Terminal resistance	Ω	0.261	0.822	1.17	2.06	3.10	4.84	7.31	11.6	30.9
11	Terminal inductance	mH	0.0275	0.0882	0.115	0.238	0.353	0.551	0.832	1.31	3.48
12	Torque constant	mNm / A	8.00	14.3	16.4	23.5	28.6	35.8	44.0	55.2	90.0
13	Speed constant	rpm / V	1190	667	584	406	333	267	217	173	106
14	Speed / torque gradient	rpm / mNm	39.0	38.3	41.6	35.6	36.1	36.0	36.1	36.3	36.4
15	Mechanical time constant	ms	4.74	4.15	4.12	4.00	3.98	3.97	3.97	3.97	3.97
16	Rotor inertia	gcm <sup>2</sup>	11.6	10.3	9.45	10.7	10.5	10.5	10.5	10.4	10.4

### Specifications

- Thermal data**
- 17 Thermal resistance housing-ambient 14 K / W
  - 18 Thermal resistance winding-housing 3.1 K / W
  - 19 Thermal time constant winding 12.4 s
  - 20 Thermal time constant motor 910 s
  - 21 Ambient temperature -20 ... +85°C
  - 22 Max. permissible winding temperature +100°C
- Mechanical data (ball bearings)**
- 23 Max. permissible speed 5500 rpm
  - 24 Axial play 0.05 - 0.15 mm
  - 25 Radial play 0.025 mm
  - 26 Max. axial load (dynamic) 3.2 N
  - 27 Max. force for press fits (static) (static, shaft supported) 64 N / 270 N
  - 28 Max. radial loading, 5 mm from flange 16 N

### Operating Range



### Comments

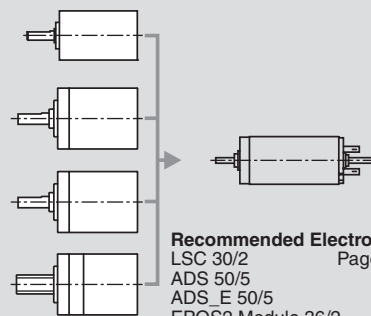
- Continuous operation**  
In observation of above listed thermal resistance (lines 17 and 18) the maximum permissible winding temperature will be reached during continuous operation at 25°C ambient.  
= Thermal limit.
- Short term operation**  
The motor may be briefly overloaded (recurring).
- Assigned power rating**

### Other specifications

- 29 Number of pole pairs 1
  - 30 Number of commutator segments 11
  - 31 Weight of motor 130 g
- CLL = Capacitor Long Life
- Values listed in the table are nominal.  
Explanation of the figures on page 49.
- Option**  
Preloaded ball bearings

### maxon Modular System

- Planetary Gearhead**  
Ø26 mm  
0.5 - 2.0 Nm  
Page 228
- Planetary Gearhead**  
Ø32 mm  
0.75 - 6.0 Nm  
Page 230 / 231 / 233
- Koaxdrive**  
Ø32 mm  
1.0 - 4.5 Nm  
Page 236
- Spindle Drive**  
Ø32 mm  
Page 249 / 250 / 251



- Recommended Electronics:**
- LSC 30/2 Page 282
  - ADS 50/5 282
  - ADS\_E 50/5 283
  - EPOS2 Module 36/2 304
  - EPOS2 24/5 305
  - EPOS2 50/5 305
  - EPOS2P 24/5 308
  - Notes 18

### Overview on page 16 - 21

- Encoder MR**  
128 - 1000 Imp.,  
3 channels  
Page 262
- Encoder Enc**  
22 mm  
100 Imp., 2 channels  
Page 264
- Encoder HED\_5540**  
500 Imp.,  
3 channels  
Page 266 / 268
- DC-Tacho DCT**  
Ø22 mm  
0.52 V  
Page 276