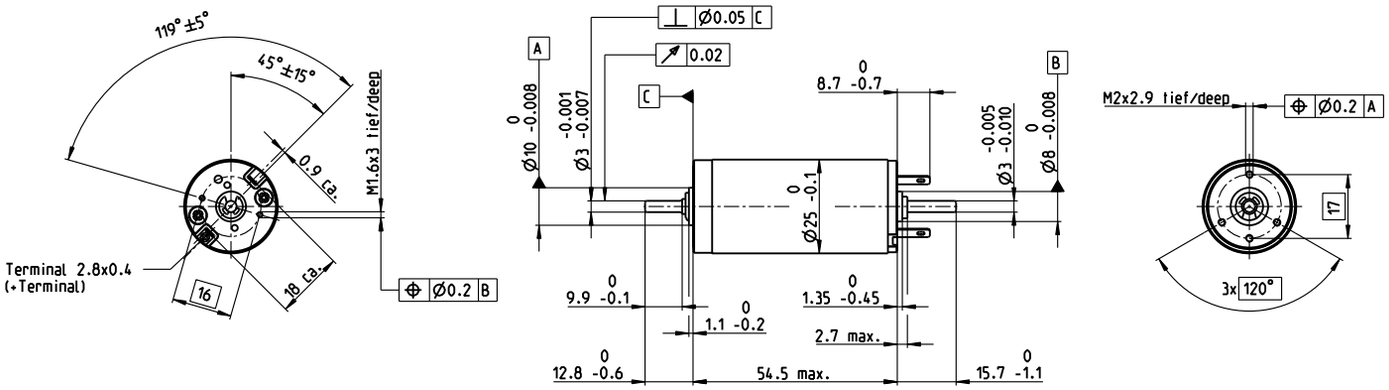
RE 25 ∅25 mm, Precious Metal Brushes CLL, 10 Watt



M 1:2

Stock program
Standard program
Special program (on request)

Part Numbers

			118740	118741	118742	118743	118744	118745	118746	118747	118748
Motor Data											
	Values at nominal voltage										
1	Nominal voltage	V	4.5	8	9	12	15	18	24	32	48
2	No load speed	rpm	5360	5320	5230	4850	4980	4790	5190	5510	5070
3	No load current	mA	79.7	44.4	38.7	26.3	21.8	9.88	14.4	11.7	6.96
4	Nominal speed	rpm	4980	4520	4220	3800	3920	3710	4130	4450	4000
5	Nominal torque (max. continuous torque)	mNm	11.4	20.9	23.9	28.6	28.2	28.7	28	27.9	27.9
6	Nominal current (max. continuous current)	A	1.5	1.5	1.5	1.24	1.01	0.811	0.652	0.516	0.317
7	Stall torque	mNm	131	132	119	129	131	126	136	144	132
8	Stall current	A	16.5	9.23	7.31	5.5	4.57	3.52	3.1	2.61	1.47
9	Max. efficiency	%	87	87	86	87	87	90	87	87	87
	Characteristics										
10	Terminal resistance	Ω	0.273	0.867	1.23	2.18	3.28	5.11	7.73	12.3	32.6
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	7.99	14.3	16.3	23.5	28.6	35.8	43.9	55.2	89.9
13	Speed constant	rpm/V	1200	668	584	406	334	267	217	173	106
14	Speed / torque gradient	rpm/mNm	40.9	40.5	44	37.7	38.3	38.2	38.3	38.5	38.6
15	Mechanical time constant	ms	4.99	4.4	4.37	4.25	4.23	4.22	4.22	4.22	4.23
16	Rotor inertia	gcm^2	11.7	10.4	9.49	10.8	10.6	10.6	10.5	10.5	10.5

Specifications

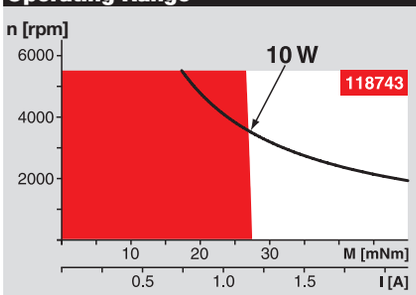
	Thermal data	
17	Thermal resistance housing-ambient	14 K/W
18	Thermal resistance winding-housing	3.1 K/W
19	Thermal time constant winding	12.5 s
20	Thermal time constant motor	612 s
21	Ambient temperature	-20…+85°C
22	Max. winding temperature	+100°C
	Mechanical data (ball bearings)	
23	Max. speed	5500 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)	64 N
	(static, shaft supported)	800 N
28	Max. radial load, 5 mm from flange	16 N
	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 151.

Option
Preloaded ball bearings

Operating Range



Comments

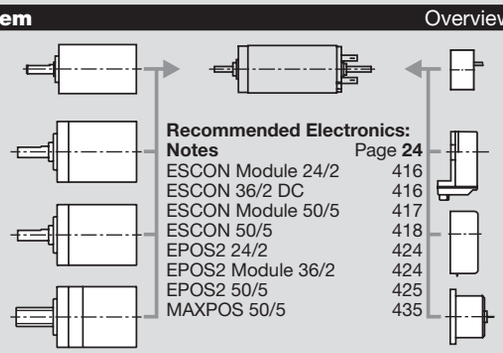
Continuous operation
In observation of above listed thermal resistance (lines 17 and 18) the maximum permissible winding temperature will be reached during continuous operation at 25°C ambient.
= Thermal limit.

Short term operation
The motor may be briefly overloaded (recurring).

Assigned power rating

maxon Modular System

Overview on page 20–27



Planetary Gearhead
∅26 mm
0.75 - 4.5 Nm
Page 336

Planetary Gearhead
∅32 mm
0.75 - 6.0 Nm
Page 338/339/342

Koaxdrive
∅32 mm
1.0 - 4.5 Nm
Page 347

Spindle Drive
∅32 mm
Page 370–372

Recommended Electronics:

Notes	Page 24
ESCON Module 24/2	416
ESCON 36/2 DC	416
ESCON Module 50/5	417
ESCON 50/5	418
EPOS2 24/2	424
EPOS2 Module 36/2	424
EPOS2 50/5	425
MAXPOS 50/5	435

Encoder MR
128 - 1000 CPT,
3 channels
Page 392

Encoder Enc
22 mm
100 CPT, 2 channels
Page 398

Encoder HED_ 5540
500 CPT,
3 channels
Page 399/401

DC-Tacho DCT
∅22 mm
0.52 V
Page 411