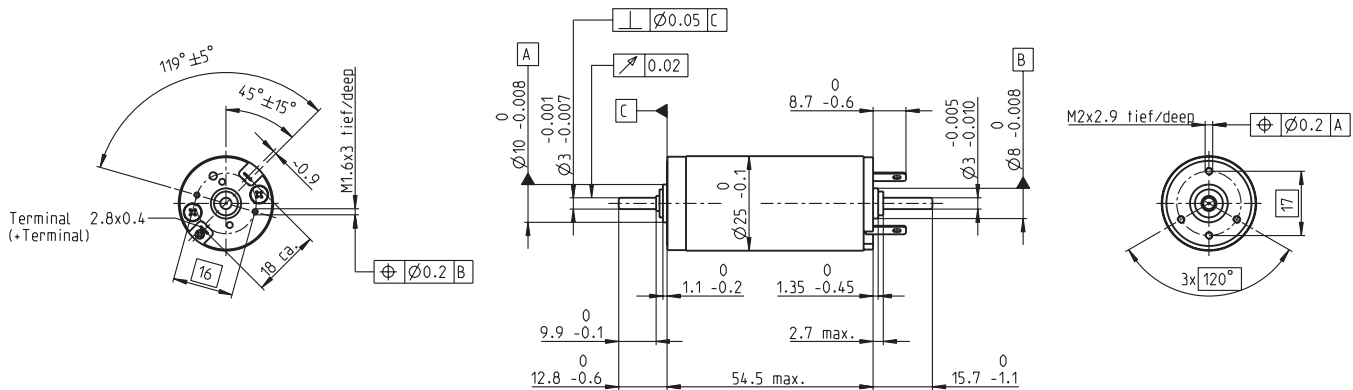


RE 25 Ø25 mm, Precious Metal Brushes CLL, 10 Watt



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			4.5	8	9	12	15	18	24	32	48
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	Starting 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			0.273	0.867	1.23	2.18	3.28	5.11	7.73	12.3	32.6
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. 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)	64 N
	(static, shaft supported)	800 N
28	Max. radial loading, 5 mm from flange	16 N

Other specifications

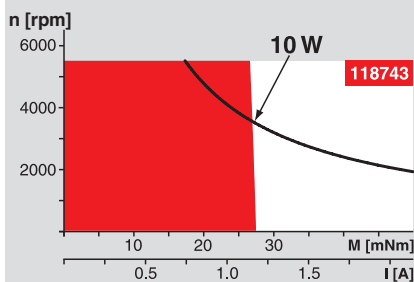
29	Number of pole pairs	1
30	Number of commutator segments	11
31	Weight of motor	130 g
	CLL = Capacitor Long Life	

Values listed in the table are nominal.
Explanation of the figures on page 71.

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

Planetary Gearhead

Ø26 mm
0.75 - 4.5 Nm
Page 257

Planetary Gearhead

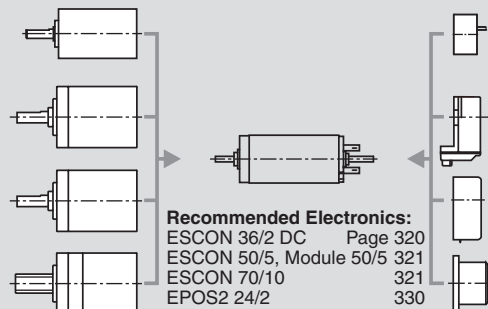
Ø32 mm
0.75 - 6.0 Nm
Page 259/260/263

Koaxdrive

Ø32 mm
1.0 - 4.5 Nm
Page 268

Spindle Drive

Ø32 mm
Page 286-288



Recommended Electronics:

ESCON 36/2 DC	Page 320
ESCON 50/5, Module 50/5	321
ESCON 70/10	321
EPOS2 24/2	330
EPOS2 Module 36/2	330
EPOS2 24/5	331
EPOS2 50/5	331
EPOS2 P 24/5	334
EPOS3 70/10 EtherCAT	337
Notes	22

Overview on page 20 - 25

Encoder MR

128 - 1000 CPT,
3 channels
Page 302

Encoder Enc

22 mm
100 CPT, 2 channels
Page 304

Encoder HED_ 5540

500 CPT,
3 channels
Page 305/307

DC-Tacho DCT

Ø22 mm
0.52 V
Page 315