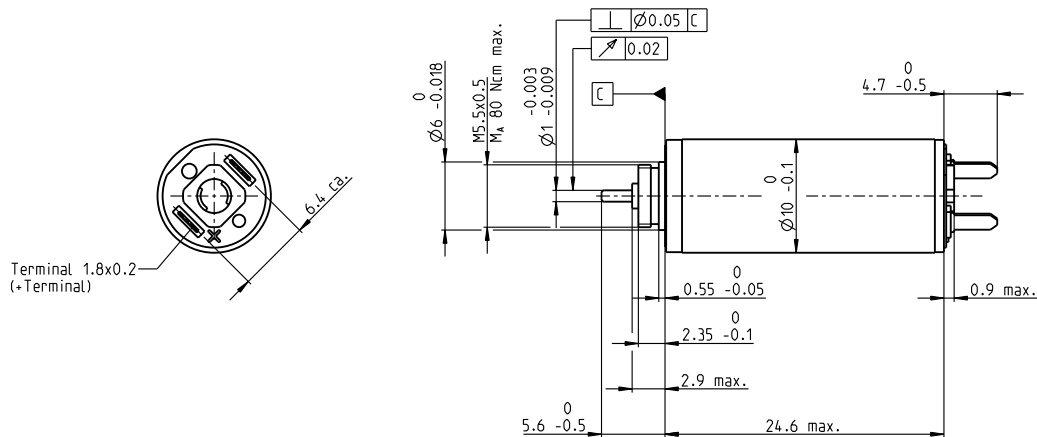


RE 10 Ø10 mm, Precious Metal Brushes, 1.5 Watt



M 3:2

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

Part Numbers

118392 118393 118394 118395 **118396** 118397 118398 118399 118400

Motor Data		118392	118393	118394	118395	118396	118397	118398	118399	118400										
Values at nominal voltage																				
1 Nominal voltage	V	3	3	4.5	4.5	6	6	9	9	12										
2 No load speed	rpm	13000	10700	12800	10600	12400	9880	12200	11100	12500										
3 No load current	mA	23.9	18.5	15.5	12.1	11.1	8.33	7.27	6.42	5.67										
4 Nominal speed	rpm	6840	4430	6530	4210	6160	3880	6080	4990	6510										
5 Nominal torque (max. continuous torque)	mNm	1.5	1.49	1.48	1.47	1.5	1.57	1.53	1.54	1.54										
6 Nominal current (max. continuous current)	A	0.713	0.582	0.462	0.379	0.338	0.282	0.226	0.207	0.176										
7 Stall torque	mNm	3.12	2.52	3.04	2.47	3.01	2.61	3.08	2.83	3.24										
8 Stall current	A	1.44	0.963	0.919	0.619	0.66	0.458	0.444	0.371	0.36										
9 Max. efficiency	%	76	74	76	74	76	75	76	76	77										
Characteristics																				
10 Terminal resistance	Ω	2.08	3.11	4.9	7.27	9.09	13.1	20.3	24.3	33.3										
11 Terminal inductance	mH	0.017	0.025	0.04	0.059	0.077	0.12	0.178	0.215	0.299										
12 Torque constant	mNm/A	2.16	2.62	3.3	3.99	4.56	5.7	6.95	7.63	9										
13 Speed constant	rpm/V	4410	3640	2890	2400	2100	1680	1370	1250	1060										
14 Speed / torque gradient	rpm/mNm	4240	4330	4280	4370	4180	3860	4010	3980	3930										
15 Mechanical time constant	ms	4.62	4.61	4.6	4.59	4.58	4.56	4.59	4.56	4.56										
16 Rotor inertia	gcm ²	0.104	0.102	0.102	0.1	0.105	0.113	0.109	0.11	0.111										

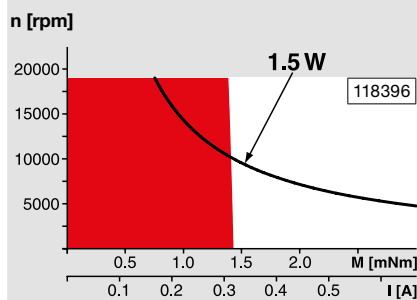
Specifications

Thermal data		
17 Thermal resistance housing-ambient	37.5 K/W	
18 Thermal resistance winding-housing	9.0 K/W	
19 Thermal time constant winding	2.22 s	
20 Thermal time constant motor	135 s	
21 Ambient temperature	-20...+65°C	
22 Max. winding temperature	+85°C	
Mechanical data (sleeve bearings)		
23 Max. speed	19000 rpm	
24 Axial play	0.05 - 0.15 mm	
25 Radial play	0.012 mm	
26 Max. axial load (dynamic)	0.15 N	
27 Max. force for press fits (static)	15 N	
28 Max. radial load, 4 mm from flange	0.4 N	

Other specifications		
29 Number of pole pairs	1	
30 Number of commutator segments	7	
31 Weight of motor	10 g	

Values listed in the table are nominal.
Explanation of the figures on page 64.

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

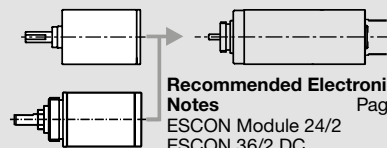
Overview on page 28–36

Planetary Gearhead

Ø10 mm
0.005 - 0.1 Nm
Page 311

Planetary Gearhead

Ø10 mm
0.01 - 0.15 Nm
Page 312



Recommended Electronics:
Notes
ESCON Module 24/2 426
ESCON 36/2 DC 426