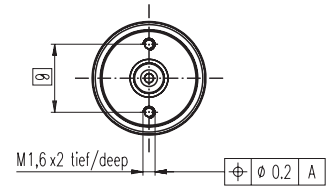
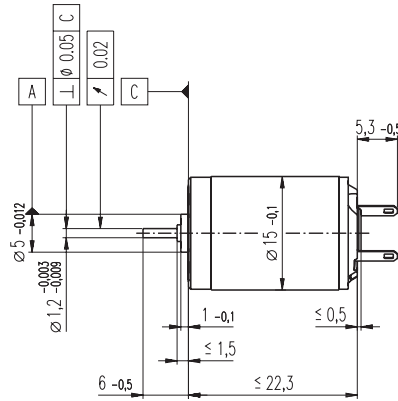
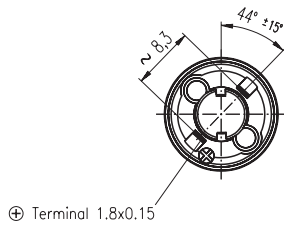


RE 15 \varnothing 15 mm, Precious Metal Brushes CLL, 1.6 Watt, $\text{C}\epsilon$ approved



M 1:1

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

Order Number

118643 118644 **118645** 118646 118647 118648 118649 118650

Motor Data		118643	118644	118645	118646	118647	118648	118649	118650	
Values at nominal voltage										
1	Nominal voltage	V	3.0	4.5	6.0	7.2	9.0	12.0	15.0	24.0
2	No load speed	rpm	7770	7450	7980	7740	7710	8370	8110	9890
3	No load current	mA	27.2	17.2	14.1	11.3	8.97	7.45	5.73	4.59
4	Nominal speed	rpm	4420	3080	3610	3370	3320	3930	3700	5480
5	Nominal torque (max. continuous torque)	mNm	1.71	2.25	2.25	2.25	2.24	2.20	2.22	2.19
6	Nominal current (max. continuous current)	A	0.500	0.416	0.333	0.270	0.214	0.171	0.134	0.101
7	Stall torque	mNm	4.03	3.92	4.17	4.06	4.02	4.22	4.16	4.98
8	Starting current	A	1.12	0.697	0.596	0.469	0.370	0.316	0.241	0.220
9	Max. efficiency	%	72	71	72	72	72	72	72	74
Characteristics										
10	Terminal resistance	Ω	2.67	6.46	10.1	15.3	24.4	38.0	62.2	109
11	Terminal inductance	mH	0.0500	0.122	0.190	0.291	0.458	0.692	1.15	1.99
12	Torque constant	mNm / A	3.60	5.62	7.01	8.67	10.9	13.4	17.2	22.7
13	Speed constant	rpm / V	2660	1700	1360	1100	878	714	554	421
14	Speed / torque gradient	rpm / mNm	1970	1950	1960	1950	1970	2030	2000	2030
15	Mechanical time constant	ms	10.9	10.8	10.8	10.8	10.9	10.9	10.9	10.9
16	Rotor inertia	gcm ²	0.528	0.530	0.528	0.530	0.527	0.514	0.519	0.514

Specifications

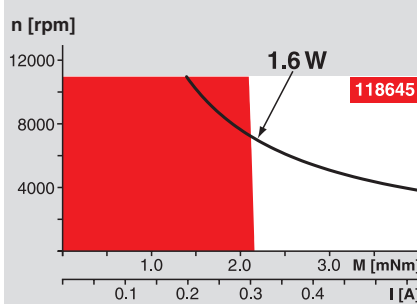
Thermal data		
17	Thermal resistance housing-ambient	35 K / W
18	Thermal resistance winding-housing	8.2 K / W
19	Thermal time constant winding	4.16 s
20	Thermal time constant motor	350 s
21	Ambient temperature	-20 ... +65°C
22	Max. permissible winding temperature	+85°C
Mechanical data (sleeve bearings)		
23	Max. permissible speed	11000 rpm
24	Axial play	0.05 - 0.15 mm
25	Radial play	0.014 mm
26	Max. axial load (dynamic)	0.2 N
27	Max. force for press fits (static)	20 N
28	Max. radial loading, 5 mm from flange	0.5 N

Other specifications

29	Number of pole pairs	1
30	Number of commutator segments	5
31	Weight of motor	20 g
CLL = Capacitor Long Life		

Values listed in the table are nominal.
Explanation of the figures on page 47.

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**

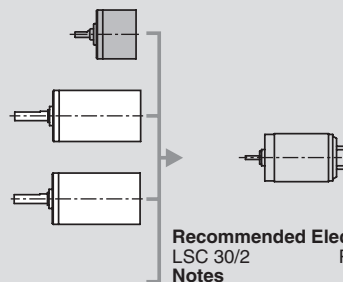
maxon Modular System

Overview on page 16 - 21

Spur Gearhead
 \varnothing 16 mm
0.015 - 0.04 Nm
Page 212

Planetary Gearhead
 \varnothing 16 mm
0.06 - 0.18 Nm
Page 214

Planetary Gearhead
 \varnothing 16 mm
0.1 - 0.3 Nm
Page 215



Recommended Electronics:
LSC 30/2 Page 268
Notes 18