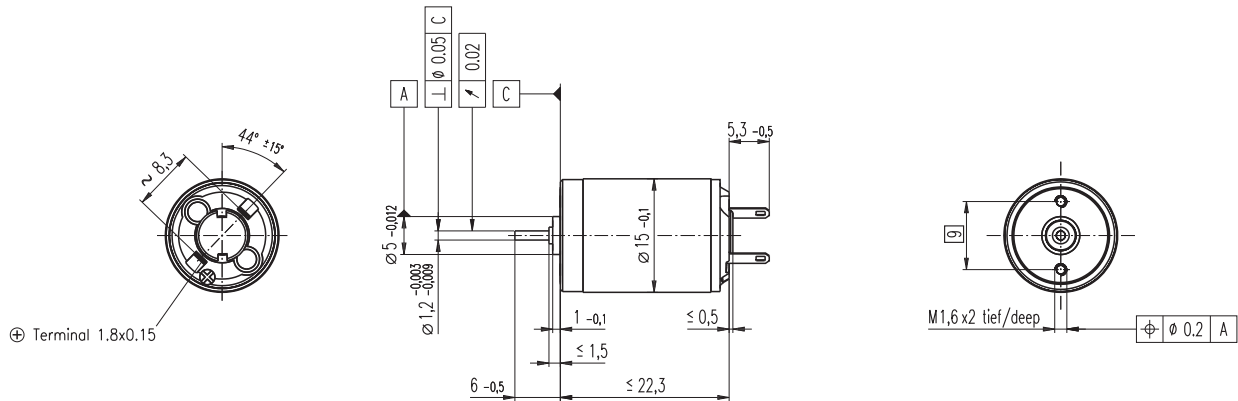


RE 15 Ø15 mm, Precious Metal Brushes CLL, 1.6 Watt

NRND See page 13
Not recommended for New Design



M 1:1

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

Part Numbers									
118643	118644	118645	118646	118647	118648	118649	118650		

Motor Data									
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	7780	7450	7990	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	Operating Range	Comments
Thermal data 17 Thermal resistance housing-ambient 35 K/W 18 Thermal resistance winding-housing 8.2 K/W 19 Thermal time constant winding 4.18 s 20 Thermal time constant motor 214 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 71.		<p>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.</p> <p>Short term operation The motor may be briefly overloaded (recurring).</p> <p>Assigned power rating</p>

maxon Modular System		Overview on page 20 - 25
Spur Gearhead Ø16 mm 0.015 - 0.04 Nm Page 239 Planetary Gearhead Ø16 mm 0.06 - 0.18 Nm Page 242 Planetary Gearhead Ø16 mm 0.1 - 0.3 Nm Page 243		Recommended Electronics: ESCON 36/2 DC Page 320 ESCON 50/5 321 Notes 22