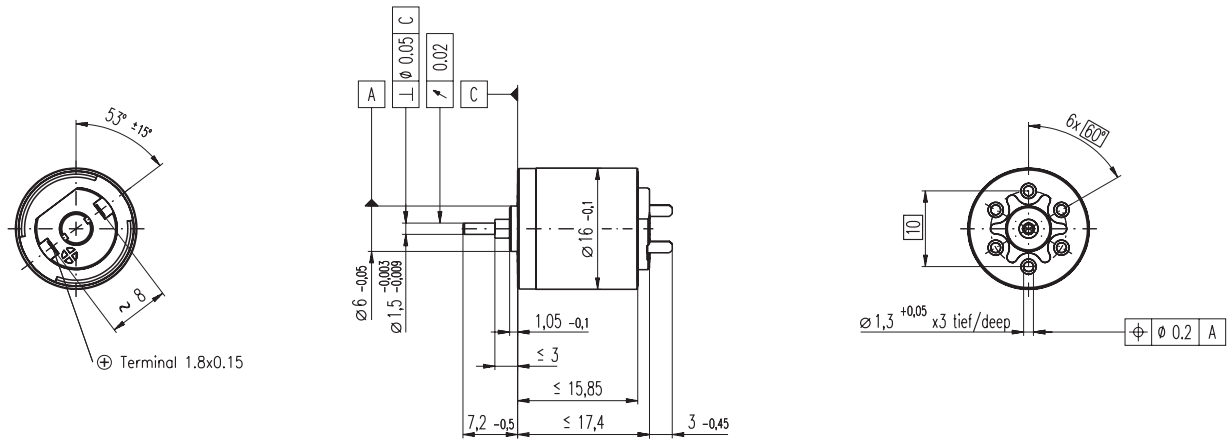
A 2516 ∅16 mm, Precious Metal Brushes, 0.8 Watt



M 1:1

Stock program
Standard program
Special program (on request)

Order Number

2516. ... -11.111-000 (Insert winding number)

			Winding number	805	800	804
Motor Data						
	Values at nominal voltage					
1	Nominal voltage	V		4.5	12.0	24.0
2	No load speed	rpm		16600	16100	18200
3	No load current	mA		31.4	11.4	7.00
4	Nominal speed	rpm		6940	4990	7400
5	Nominal torque (max. continuous torque)	mNm		0.759	0.654	0.661
6	Nominal current (max. continuous current)	A		0.329	0.105	0.0603
7	Stall torque	mNm		1.32	0.964	1.13
8	Starting current	A		0.542	0.147	0.0968
9	Max. efficiency	%		60	54	56
	Characteristics					
10	Terminal resistance	Ω		8.30	81.5	248
11	Terminal inductance	mH		0.128	0.926	2.95
12	Torque constant	mNm / A		2.43	6.55	11.7
13	Speed constant	rpm / V		3930	1460	817
14	Speed / torque gradient	rpm / mNm		13400	18200	17300
15	Mechanical time constant	ms		66.0	72.6	72.2
16	Rotor inertia	gcm²		0.470	0.382	0.398

Specifications

Thermal data

17	Thermal resistance housing-ambient	25.5 K / W
18	Thermal resistance winding-housing	28.2 K / W
19	Thermal time constant winding	5.78 s
20	Thermal time constant motor	158 s
21	Ambient temperature	-20 ... +65°C
22	Max. permissible winding temperature	+85°C

Mechanical data (sleeve bearings)

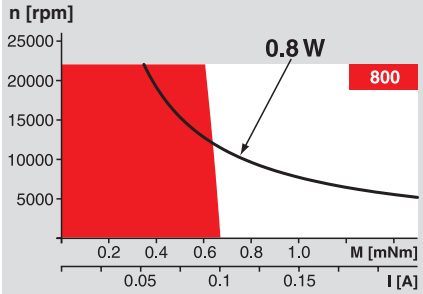
23	Max. permissible speed	22000 rpm
24	Axial play	0.05 - 0.15 mm
25	Radial play	0.012 mm
26	Max. axial load (dynamic)	0.5 N
27	Max. force for press fits (static)	40 N
28	Max. radial loading, 5 mm from flange	1.4 N

Other specifications

29	Number of pole pairs	1
30	Number of commutator segments	5
31	Weight of motor	12.4 g

Values listed in the table are nominal.
Explanation of the figures on page 49.

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

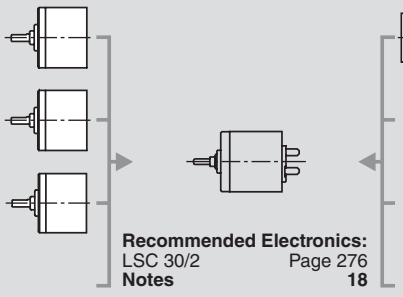
maxon Modular System

Overview on page 16 - 21

Spur Gearhead
∅16 mm
0.01 - 0.03 Nm
Page 219

Spur Gearhead
∅16 mm
0.015 - 0.04 Nm
Page 220

Spur Gearhead
∅16 mm
0.06 - 0.1 Nm
Page 221 / 222



Encoder MEnc
∅13 mm
16 CPT, 2 channels
Page 270

Recommended Electronics:
LSC 30/2 Page 276
Notes **18**