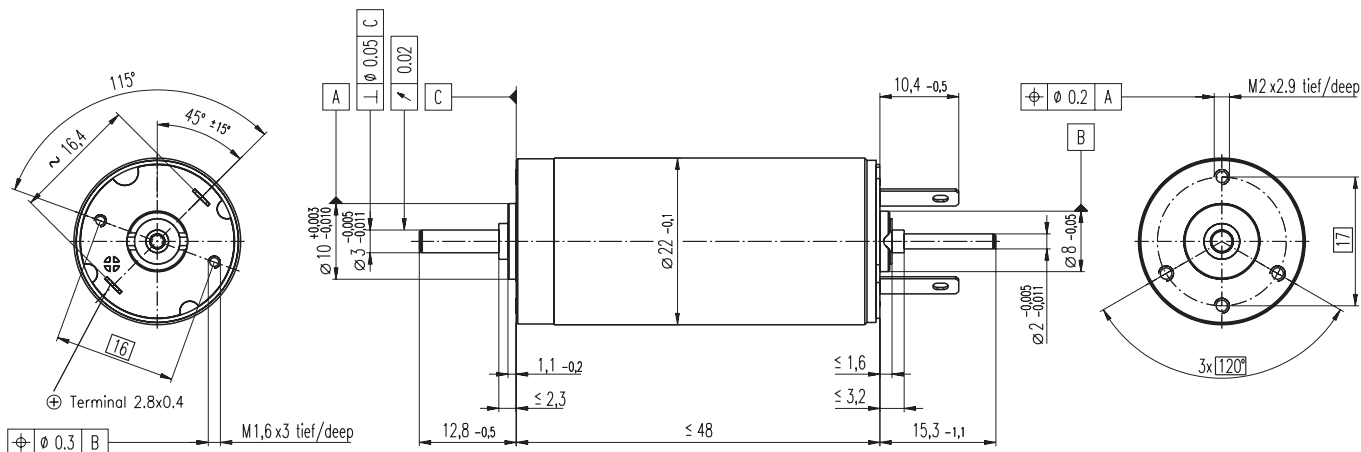


# S 2322 Ø22 mm, Graphite Brushes, 6 Watt, C€ approved



M 1:1

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

### Order Number

2322. ... -52.235-200 (Insert winding number)

Winding number

980	981	990	982	983	985	987
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### Motor Data

Values at nominal voltage			980	981	990	982	983	985	987
1	Nominal voltage	Volt	12.0	15.0	18.0	18.0	24.0	36.0	48.0
2	No load speed	rpm	7010	7000	7530	6690	7190	7240	6370
3	No load current	mA	42.2	33.3	30.6	25.8	21.3	14.3	8.88
4	Nominal speed	rpm	4300	4310	4840	3970	4490	4500	3580
5	Nominal torque (max. continuous torque)	mNm	11.8	12.2	12.2	12.3	12.4	12.3	12.4
6	Nominal current (max. continuous current)	A	0.807	0.654	0.583	0.520	0.420	0.279	0.184
7	Stall torque	mNm	32.9	33.5	35.9	31.4	34.1	33.4	28.8
8	Starting current	A	2.14	1.72	1.64	1.28	1.11	0.724	0.411
9	Max. efficiency	%	70	71	72	71	73	73	73
Characteristics			980	981	990	982	983	985	987
10	Terminal resistance	Ω	5.61	8.71	10.9	14.1	21.6	49.7	117
11	Terminal inductance	mH	0.492	0.790	0.995	1.26	1.97	4.43	10.2
12	Torque constant	mNm / A	15.4	19.4	21.8	24.6	30.7	46.1	69.9
13	Speed constant	rpm / V	622	491	437	389	311	207	137
14	Speed / torque gradient	rpm / mNm	227	220	219	223	219	224	228
15	Mechanical time constant	ms	13.9	13.5	13.3	13.3	13.0	12.9	12.8
16	Rotor inertia	gcm <sup>2</sup>	5.84	5.86	5.79	5.70	5.68	5.50	5.37

### Specifications

Thermal data		
17	Thermal resistance housing-ambient	14.1 K / W
18	Thermal resistance winding-housing	3.6 K / W
19	Thermal time constant winding	8.91 s
20	Thermal time constant motor	649 s
21	Ambient temperature	-20 ... +100°C
22	Max. permissible winding temperature	+125°C
Mechanical data (ball bearings)		
23	Max permissible speed	9500 rpm
24	Axial play	0.05 - 0.15 mm
25	Radial play	0.025 mm
26	Max. axial load (dynamic)	2.8 N
27	Max. force for press fits (static) (static, shaft supported)	64 N / 240 N
28	Max. radial loading, 5 mm from flange	14 N

### Other specifications

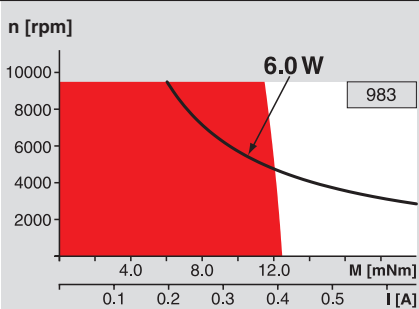
29	Number of pole pairs	1
30	Number of commutator segments	7
31	Weight of motor	92 g

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

### Option

Sleeve bearings in place of ball bearings

### Operating Range



### Comments

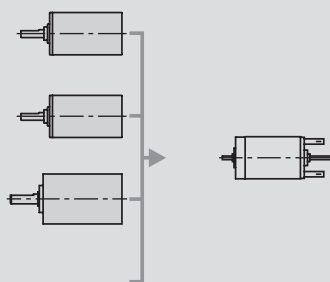
- **Continuous operation**  
In observation of above listed thermal resistance (lines 17 and 18) the maximum permissible winding temperature will be reached during continuous operation at 25°C ambient. = Thermal limit.
- Short term operation**  
The motor may be briefly overloaded (recurring).
- **Assigned power rating**

### maxon Modular System

**Planetary Gearhead**  
Ø22 mm  
0.5 - 1.0 Nm  
Page 230

**Planetary Gearhead**  
Ø22 mm  
0.5 - 2.0 Nm  
Page 231

**Planetary Gearhead**  
Ø26 mm  
0.5 - 2.0 Nm  
Page 235



### Overview on page 16 - 21

**Encoder Enc**  
22 mm  
100 CPT, 2 channels  
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