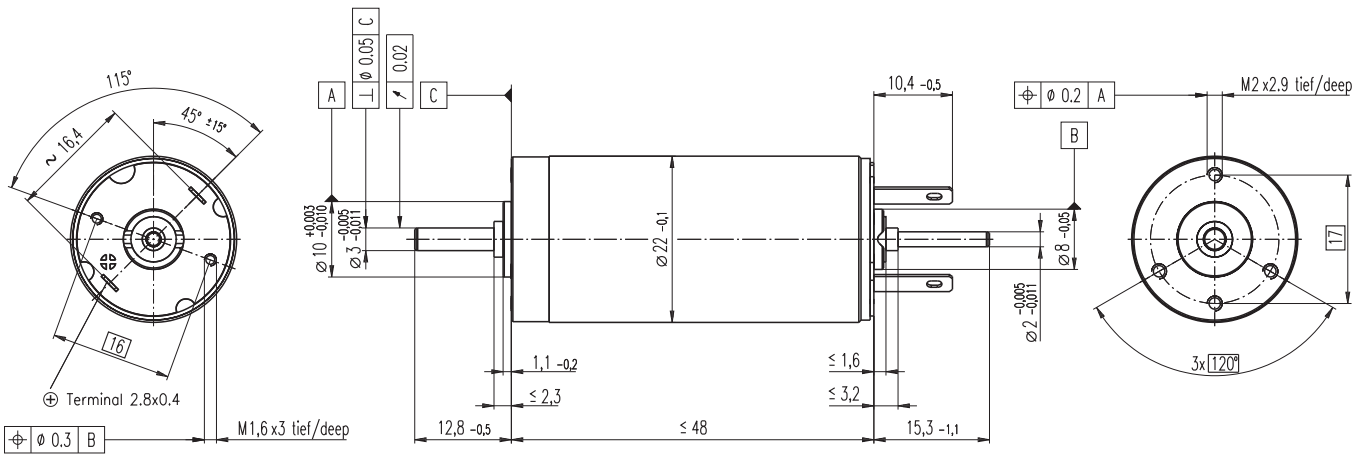


S 2322 Ø22 mm, Graphite Brushes, 6 Watt

NRND See page 13
Not recommended for New Design

maxon special program



M 1:1

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

Part Numbers

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

Winding number 980 981 990 982 983 985 987

Motor Data		980	981	990	982	983	985	987
Values at nominal voltage								
1 Nominal voltage	V	12	15	18	18	24	36	48
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								
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 ²	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

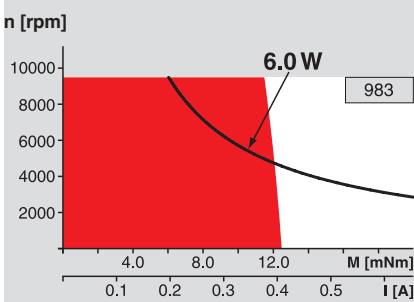
Mechanical data (ball bearings)	
23 Max. permissible speed	9500 rpm
24 Axial play	0.05 - 0.15 mm
25 Radial play	0.025 mm
26 Max. axial load (dynamic)	2.8 N
27 Max. force for press fits (static) (static, shaft supported)	64 N
28 Max. radial loading, 5 mm from flange	14 N

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 71.

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.

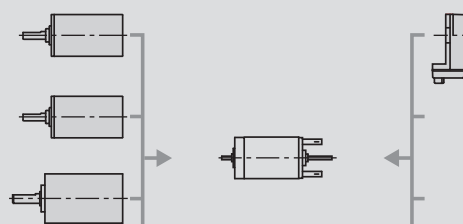
Short term operation
The motor may be briefly overloaded (recurring).

Assigned power rating

maxon Modular System

Overview on page 20 - 25

- Planetary Gearhead**
Ø22 mm
0.5 - 1.0 Nm
Page 250
- Planetary Gearhead**
Ø22 mm
0.5 - 2.0 Nm
Page 251
- Planetary Gearhead**
Ø26 mm
0.5 - 2.0 Nm
Page 382



Encoder Enc
22 mm
100 CPT, 2 channels
Page 304

Recommended Electronics:
ESCON 36/2 DC Page 320
ESCON 50/5 321
Notes 22