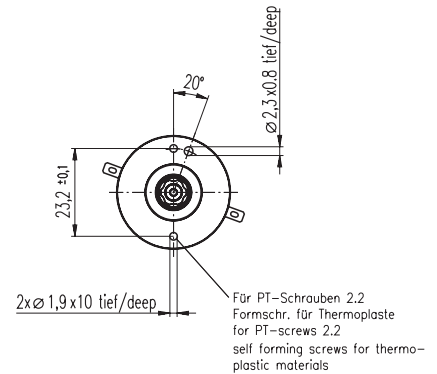
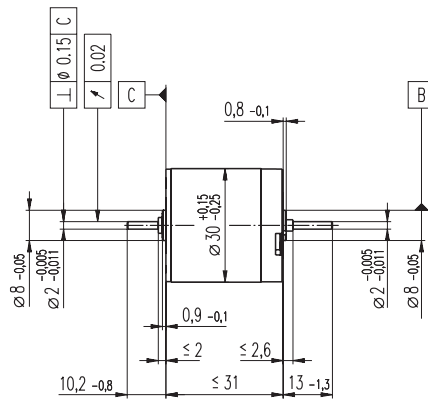
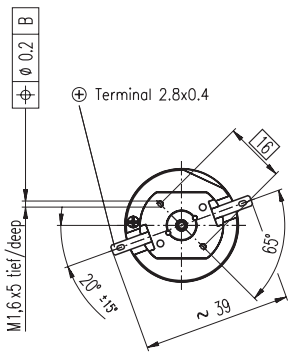


F 2130 Ø30 mm, Graphite Brushes, 3 Watt, CE approved



M 1:2

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

Order Number

2130. ... -57.236-050 (Insert winding number)

Motor Data	Winding number	Order Number									
		900	903	904	905	906	907	908	910		
Values at nominal voltage											
1 Nominal voltage	V	3.0	6.0	6.0	9.0	12.0	12.0	15.0	24.0		
2 No load speed	rpm	4060	5150	4080	5380	5970	4830	4910	5050		
3 No load current	mA	72.2	38.7	30.2	25.7	21.1	16.9	13.6	8.65		
4 Nominal speed	rpm	987	2030	929	2210	2790	1610	1650	1770		
5 Nominal torque (max. continuous torque)	mNm	2.31	2.73	2.87	2.87	2.89	2.96	2.98	3.00		
6 Nominal current (max. continuous current)	A	0.544	0.331	0.276	0.230	0.188	0.157	0.127	0.0808		
7 Stall torque	mNm	3.52	5.01	4.10	5.31	5.87	4.81	4.85	4.96		
8 Starting current	A	0.725	0.540	0.353	0.380	0.341	0.228	0.185	0.120		
9 Max. efficiency	%	32	46	44	50	53	50	51	52		
Characteristics											
10 Terminal resistance	Ω	4.14	11.1	17.0	23.7	35.2	52.5	80.9	200		
11 Terminal inductance	mH	0.136	0.496	0.780	1.13	1.71	2.56	3.96	9.87		
12 Torque constant	mNm / A	4.85	9.27	11.6	14.0	17.2	21.0	26.2	41.3		
13 Speed constant	rpm / V	1970	1030	822	683	555	454	365	231		
14 Speed / torque gradient	rpm / mNm	1680	1230	1200	1160	1130	1130	1130	1120		
15 Mechanical time constant	ms	72.6	50.6	49.2	46.1	44.5	44.1	43.3	42.1		
16 Rotor inertia	gcm ²	4.13	3.91	3.91	3.80	3.75	3.71	3.67	3.60		

Specifications

- Thermal data**
- 17 Thermal resistance housing-ambient 23.1 K / W
 - 18 Thermal resistance winding-housing 13.3 K / W
 - 19 Thermal time constant winding 22.1 s
 - 20 Thermal time constant motor 728 s
 - 21 Ambient temperature -20 ... +65°C
 - 22 Max. permissible winding temperature +85°C
- Mechanical data (ball bearings)**
- 23 Max. permissible speed 13600 rpm
 - 24 Axial play 0.05 - 0.15 mm
 - 25 Radial play 0.025 mm
 - 26 Max. axial load (dynamic) 1.0 N
 - 27 Max. force for press fits (static) (static, shaft supported) 24 N
 - 28 Max. radial loading, 5 mm from flange 5 N

Other specifications

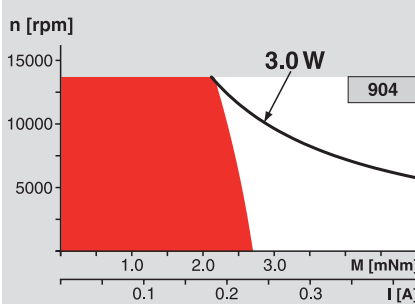
- 29 Number of pole pairs 1
- 30 Number of commutator segments 7
- 31 Weight of motor 63 g

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

Option

Preloaded ball bearings

Operating Range



Comments

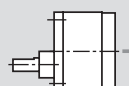
■ **Continuous operation**
In observation of above listed thermal resistance (lines 17 and 18) the maximum permissible winding temperature will be reached during continuous operation at 25°C ambient.
= Thermal limit.

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

— **Assigned power rating**

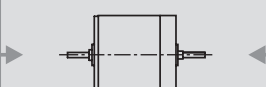
maxon Modular System

Spur Gearhead
Ø30 mm
0.07 - 0.2 Nm
Page 236



Overview on page 16 - 21

Encoder Enc
22 mm
100 CPT, 2 channels
Page 261



Recommended Electronics:
LSC 30/2 Page 276
Notes 18