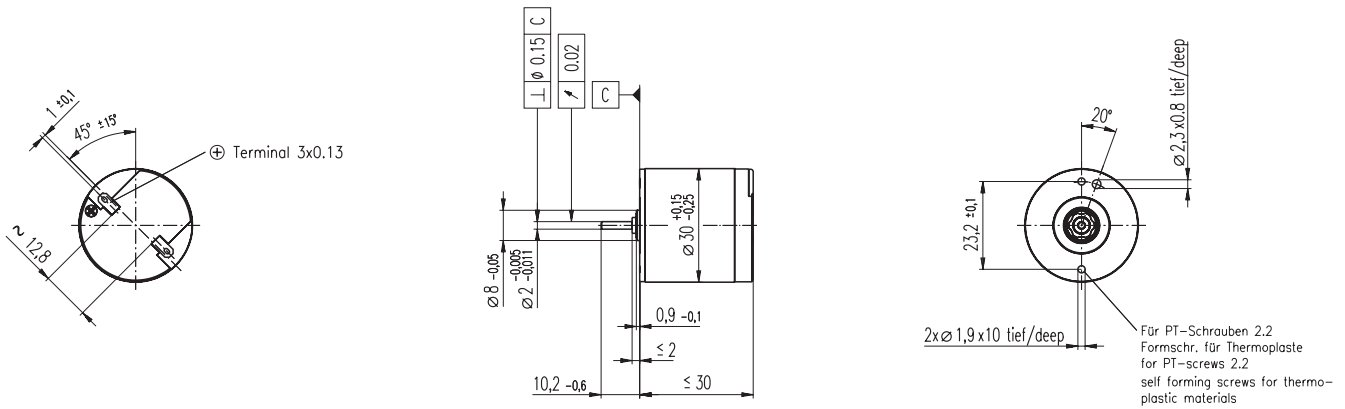


# F 2130 Ø30 mm, Precious Metal Brushes CLL, 2.5 Watt, CE approved



## M 1:2

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

### Order Number

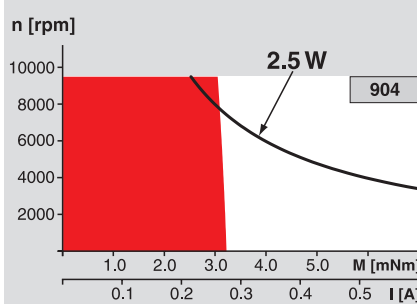
2130. ... -22.112-050 (Insert winding number)

Motor Data	Winding number	Order Number														
		917	900	903	904	905	906	907	908	910						
<b>Values at nominal voltage</b>																
1	Nominal voltage	V	2.0	3.0	6.0	6.0	9.0	12.0	12.0	15.0	24.0					
2	No load speed	rpm	5250	5750	6020	4790	5980	6480	5290	5310	5380					
3	No load current	mA	43.7	33.7	18.2	12.6	12.0	10.3	7.37	5.94	3.79					
4	Nominal speed	rpm	1780	2470	2660	1410	2570	3050	1820	1810	1850					
5	Nominal torque (max. continuous torque)	mNm	3.41	3.59	3.49	3.52	3.44	3.39	3.41	3.38	3.34					
6	Nominal current (max. continuous current)	A	0.992	0.761	0.388	0.311	0.253	0.204	0.166	0.133	0.0831					
7	Stall torque	mNm	5.23	6.35	6.32	5.05	6.09	6.48	5.25	5.19	5.15					
8	Starting current	A	1.48	1.31	0.682	0.435	0.436	0.376	0.25	0.198	0.125					
9	Max. efficiency	%	70	71	71	70	71	71	70	69	69					
<b>Characteristics</b>																
10	Terminal resistance	Ω	1.35	2.29	8.79	13.8	20.6	31.9	48.1	75.7	193					
11	Terminal inductance	mH	0.0720	0.136	0.496	0.780	1.13	1.71	2.56	3.96	9.87					
12	Torque constant	mNm / A	3.53	4.85	9.27	11.6	14.0	17.2	21.0	26.2	41.3					
13	Speed constant	rpm / V	2700	1970	1030	822	683	555	454	365	231					
14	Speed / torque gradient	rpm / mNm	1040	930	978	976	1010	1030	1040	1050	1080					
15	Mechanical time constant	ms	43.9	42.9	42.9	42.7	43.0	43.2	43.3	43.5	43.6					
16	Rotor inertia	gcm <sup>2</sup>	4.05	4.40	4.19	4.18	4.07	4.02	3.99	3.94	3.87					

### 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 705 s
  - 21 Ambient temperature -20 ... +65°C
  - 22 Max. permissible winding temperature +85°C
- Mechanical data (sleeve bearings)**
- 23 Max. permissible speed 9500 rpm
  - 24 Axial play 0.15 - 0.25 mm
  - 25 Radial play 0.014 mm
  - 26 Max. axial load (dynamic) 0.4 N
  - 27 Max. force for press fits (static) 50 N
  - 28 Max. radial loading, 5 mm from flange 2.0 N

### 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**

### Other specifications

- 29 Number of pole pairs 1
- 30 Number of commutator segments 7
- 31 Weight of motor 61 g
- CLL = Capacitor Long Life

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

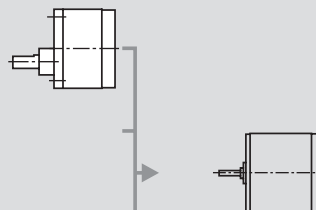
### Option

- Ball bearings in place of sleeve bearings

### maxon Modular System

Overview on page 16 - 21

**Spur Gearhead**  
Ø30 mm  
0.07 - 0.2 Nm  
Page 236



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