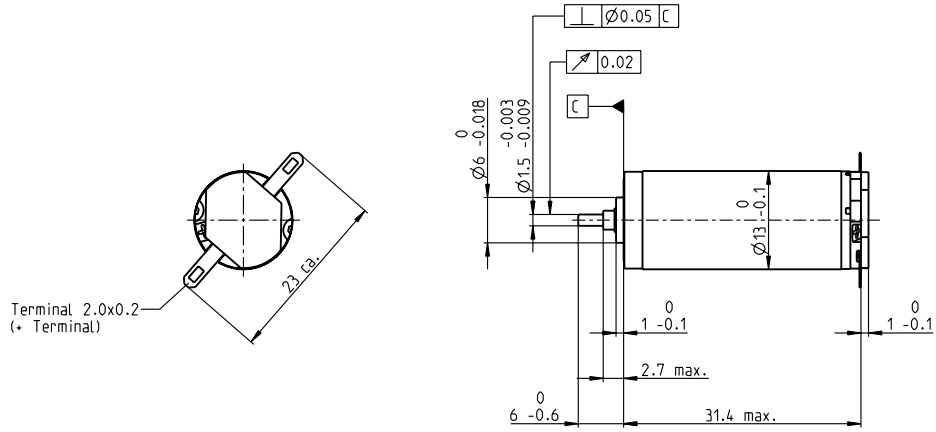


RE 13 \varnothing 13 mm, precious metal brushes, 2.5 watt

RE



M 1:1

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

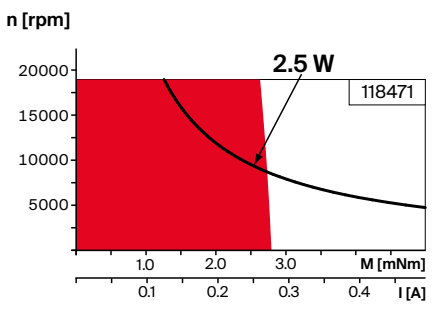
Part Numbers

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Motor Data		118461	118462	118463	118464	118465	118466	118467	118468	118469	118470	118471	118472	118473	118474	118475	
Values at nominal voltage																	
1 Nominal voltage	V	2.4	3	3	3.6	4.8	4.8	6	7.2	8	10	12	15	15	18	24	
2 No load speed	rpm	10600	12200	10700	10800	11400	10100	11400	11400	10900	11400	11000	11100	10300	10600	11500	
3 No load current	mA	51.5	50.8	42	35.5	28.8	24.4	23	19.2	16.1	13.8	11	8.87	7.98	6.9	5.82	
4 Nominal speed	rpm	9160	10500	8490	8050	7890	6430	7660	7730	7320	7790	7390	7470	6620	6920	7800	
5 Nominal torque	mNm	1.44	1.56	1.8	2.16	2.76	2.87	2.81	2.86	2.98	2.9	2.89	2.9	2.88	2.9	2.84	
6 Nominal current (max. continuous current)	A	0.72	0.72	0.72	0.72	0.72	0.664	0.586	0.497	0.443	0.363	0.291	0.235	0.217	0.187	0.149	
7 Stall torque	mNm	9.95	10.2	8.34	8.25	8.81	7.78	8.51	8.84	9.1	9.15	8.77	8.9	8.13	8.44	8.87	
8 Stall current	A	4.63	4.42	3.15	2.63	2.22	1.74	1.72	1.48	1.31	1.11	0.856	0.699	0.592	0.526	0.451	
9 Max. efficiency	%	80	80	79	78	79	78	79	79	79	79	79	79	78	79	79	
Characteristics																	
10 Terminal resistance	Ω	0.519	0.679	0.951	1.37	2.16	2.75	3.5	4.85	6.11	9.03	14	21.5	25.3	34.2	53.2	
11 Terminal inductance	mH	0.021	0.025	0.032	0.046	0.073	0.092	0.114	0.164	0.223	0.316	0.485	0.749	0.87	1.19	1.79	
12 Torque constant	mNm/A	2.15	2.31	2.65	3.14	3.97	4.46	4.96	5.95	6.94	8.27	10.2	12.7	13.7	16	19.7	
13 Speed constant	rpm/V	4440	4130	3610	3040	2410	2140	1930	1600	1380	1160	932	750	696	595	485	
14 Speed / torque gradient	rpm/mNm	1070	1210	1300	1330	1310	1320	1360	1310	1210	1260	1270	1260	1280	1270	1310	
15 Mechanical time constant	ms	7.65	7.55	7.45	7.37	7.28	7.27	7.28	7.23	7.16	7.2	7.21	7.21	7.21	7.22	7.27	
16 Rotor inertia	gcm ²	0.681	0.596	0.548	0.53	0.53	0.526	0.512	0.528	0.565	0.545	0.541	0.544	0.536	0.543	0.529	

Specifications Operating Range Comments

- Thermal data**
- 17 Thermal resistance housing-ambient 33 K/W
 - 18 Thermal resistance winding-housing 7.0 K/W
 - 19 Thermal time constant winding 4.88 s
 - 20 Thermal time constant motor 229 s
 - 21 Ambient temperature -20...+65°C
 - 22 Max. winding temperature +85°C
- Mechanical data (sleeve bearings)**
- 23 Max. speed 19 000 rpm
 - 24 Axial play 0.05 - 0.15 mm
 - 25 Radial play 0.014 mm
 - 26 Max. axial load (dynamic) 0.8 N
 - 27 Max. force for press fits (static) 15 N
 - 28 Max. radial load, 5 mm from flange 1.4 N



- 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 21 g

Modular System Details on catalog page 44

- Motor Control**
- 532_ESCON Module 24/2
 - 532_ESCON 36/2 DC
 - 533_ESCON Module 50/5
 - 535_ESCON 50/5

Values listed in the table are nominal.
Explanation of the figures on page 90.