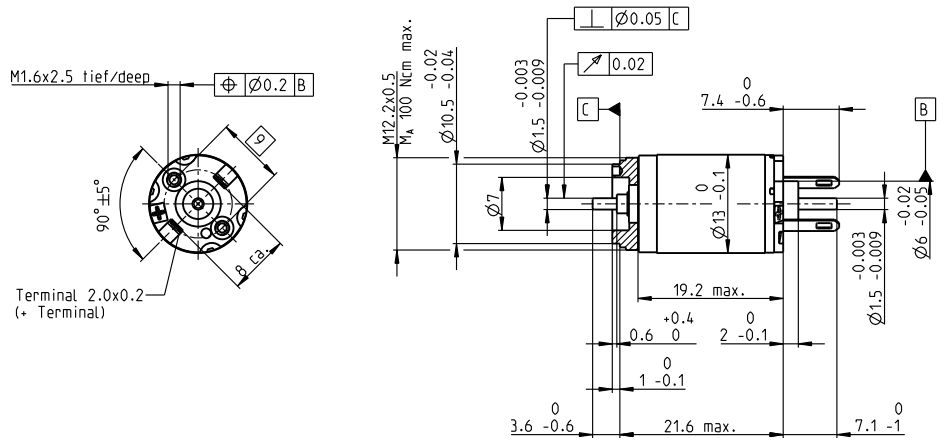


RE 13 Ø13 mm, precious metal brushes, 0.75 watt



M 1:1

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

Part numbers

118446 118447 118448 118449 118450 118451 118452 118453 118454 118455 118456 118457 118458 118459 118460

Motor data		118446	118447	118448	118449	118450	118451	118452	118453	118454	118455	118456	118457	118458	118459	118460
Values at nominal voltage																
1 Nominal voltage	V	0.6	0.7	0.9	1.2	1.5	1.8	1.8	2.4	3	3.6	4.8	6	6	7.2	10
2 No load speed	rpm	6900	6520	6590	7250	6990	6850	5950	6490	6700	6480	6950	7000	6530	6650	7030
3 No load current	mA	88.2	71.2	56.1	47.3	36.2	29.4	24.7	20.6	17.1	13.7	11.2	9.06	8.33	7.09	5.46
4 Nominal speed	rpm	5170	3730	3070	2740	1430	1430	682	1350	1300	1090	1520	1510	990	1140	1480
5 Nominal torque	mNm	0.511	0.643	0.837	1.03	1.26	1.3	1.34	1.28	1.3	1.3	1.29	1.28	1.26	1.27	1.26
6 Nominal current (max. continuous current)	A	0.72	0.72	0.72	0.72	0.671	0.562	0.504	0.396	0.331	0.268	0.213	0.17	0.158	0.134	0.101
7 Stall torque	mNm	1.71	1.4	1.51	1.63	1.59	1.66	1.54	1.66	1.66	1.61	1.7	1.68	1.54	1.59	1.65
8 Stall current	A	2.14	1.43	1.21	1.08	0.812	0.69	0.557	0.489	0.404	0.318	0.269	0.214	0.184	0.161	0.127
9 Max. efficiency	%	64	61	62	63	63	63	63	64	64	63	64	64	62	63	63
Characteristics																
10 Terminal resistance	Ω	0.281	0.491	0.742	1.11	1.85	2.61	3.23	4.9	7.42	11.3	17.8	28	32.6	44.9	78.8
11 Terminal inductance	mH	0.006	0.009	0.015	0.022	0.036	0.054	0.072	0.108	0.158	0.243	0.377	0.579	0.661	0.921	1.59
12 Torque constant	mNm/A	0.802	0.98	1.25	1.51	1.96	2.41	2.76	3.39	4.1	5.08	6.32	7.84	8.37	9.89	13
13 Speed constant	rpm/V	11900	9740	7660	6310	4870	3970	3460	2820	2330	1880	1510	1220	1140	966	734
14 Speed/torque gradient	rpm/mNm	4170	4880	4560	4640	4600	4310	4040	4090	4220	4190	4250	4350	4440	4380	4450
15 Mechanical time constant	ms	15.6	14.9	14.3	14.1	13.9	13.7	13.5	13.5	13.5	13.5	13.6	13.7	13.6	13.6	13.7
16 Rotor inertia	gcm ²	0.358	0.291	0.299	0.29	0.288	0.303	0.318	0.315	0.306	0.308	0.304	0.3	0.293	0.297	0.294

Specifications	Operating range	Comments
Thermal data		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.
17 Thermal resistance housing-ambient		
18 Thermal resistance winding-housing		
19 Thermal time constant winding		
20 Thermal time constant motor		
21 Ambient temperature		
22 Max. winding temperature		
Mechanical data (sleeve bearings)		Short term operation The motor may be briefly overloaded (recurring).
23 Max. speed		Assigned power rating
24 Axial play		
25 Radial play		
26 Max. axial load (dynamic)		
27 Max. force for press fits (static) (static, shaft supported)		
28 Max. radial load, 5 mm from flange		

Other specifications	Modular system			Details on catalog page 48	
29 Number of pole pairs	1	Gear	Sensor	Motor Control	
30 Number of commutator segments	7				
31 Weight of motor	15 g				
		415_GP 13 A	498_ENX 13 GAMA	550_ESCON Module 24/2	
			501_ENX 13 IMR	550_ESCON 36/2 DC	
			532_Encoder MR 16 CPT	557_ESCON2 Nano 24/2	
				563_EPOS4 Micro 24/5	
				564_EPOS4 Module 24/1.5	
				565_EPOS4 Compact 24/5 3-axes	
				566_EPOS4 Compact 24/1.5	

Values listed in the table are nominal.
Explanation of the figures on page 94.