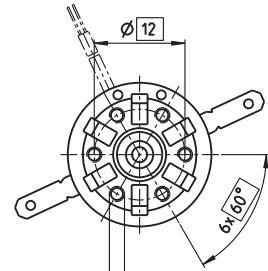
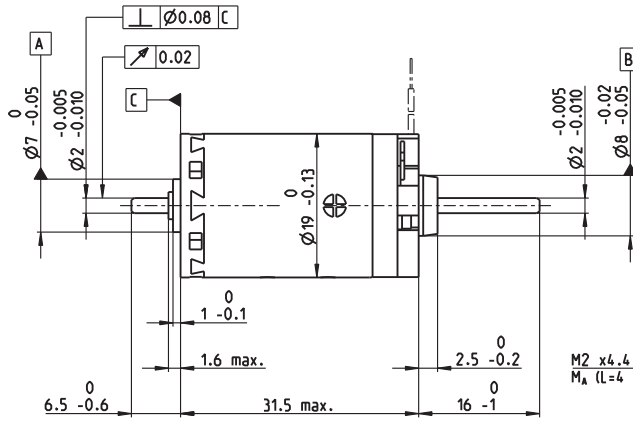
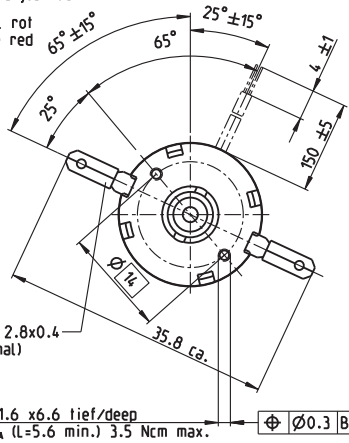


A-max 19 Ø19 mm, Graphite Brushes, 2.5 Watt

Kabel AWG 26/7
cable UL Style 1061



Kabel rot
cable red



M 1:1

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

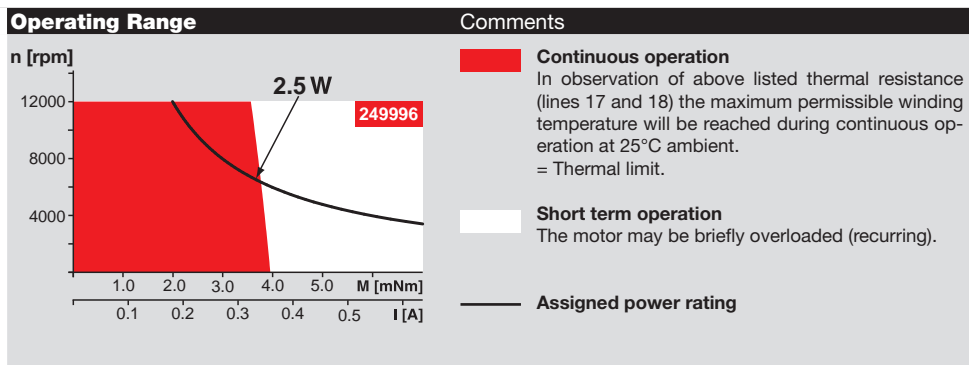
Part Numbers										
with terminals	249991	249992	249993	249994	249995	249996	249997	249998	249999	
with cables	240035	352971	353590	352972	352973	344596	352974	352975	352976	

Motor Data											
Values at nominal voltage											
1 Nominal voltage	V	2.4	3.6	6	7.2	9	12	15	18	24	
2 No load speed	rpm	12400	10400	12200	8980	8850	9930	9930	8910	8470	
3 No load current	mA	292	158	114	66.1	51.9	44.6	35.7	26.3	18.6	
4 Nominal speed	rpm	11700	8350	9310	4750	4630	5670	5670	4520	4020	
5 Nominal torque (max. continuous torque)	mNm	0.759	1.78	2.75	3.98	4.02	3.89	3.89	3.83	3.8	
6 Nominal current (max. continuous current)	A	0.72	0.72	0.72	0.612	0.485	0.397	0.317	0.235	0.167	
7 Stall torque	mNm	14.1	9.66	12.1	8.84	8.83	9.47	9.44	8.16	7.63	
8 Stall current	A	8.04	3.09	2.71	1.23	0.963	0.867	0.691	0.45	0.301	
9 Max. efficiency	%	64	59	63	59	59	60	60	58	57	
Characteristics											
10 Terminal resistance	Ω	0.299	1.16	2.22	5.88	9.35	13.8	21.7	40	79.8	
11 Terminal inductance	mH	0.019	0.059	0.121	0.314	0.506	0.719	1.12	1.98	3.87	
12 Torque constant	mNm/A	1.76	3.12	4.49	7.22	9.17	10.9	13.7	18.1	25.4	
13 Speed constant	rpm/V	5440	3060	2130	1320	1040	874	699	526	377	
14 Speed / torque gradient	rpm/mNm	925	1140	1050	1080	1060	1110	1110	1160	1180	
15 Mechanical time constant	ms	24.6	24.8	24	24.2	24.1	24.2	24.3	25	24.6	
16 Rotor inertia	gcm ²	2.54	2.07	2.18	2.14	2.16	2.09	2.09	2.06	1.99	

Specifications		
Thermal data		
17 Thermal resistance housing-ambient		21.3 K/W
18 Thermal resistance winding-housing		10.5 K/W
19 Thermal time constant winding		11.0 s
20 Thermal time constant motor		201 s
21 Ambient temperature		-30...+85°C
22 Max. winding temperature		+125°C
Mechanical data (sleeve bearings)		
23 Max. speed		12000 rpm
24 Axial play		0.05 - 0.15 mm
25 Radial play		0.012 mm
26 Max. axial load (dynamic)		1 N
27 Max. force for press fits (static) (static, shaft supported)		80 N / 480 N
28 Max. radial load, 5 mm from flange		2.7 N
Mechanical data (ball bearings)		
23 Max. speed		12000 rpm
24 Axial play		0.05 - 0.15 mm
25 Radial play		0.025 mm
26 Max. axial load (dynamic)		3.3 N
27 Max. force for press fits (static) (static, shaft supported)		45 N / 240 N
28 Max. radial load, 5 mm from flange		11.9 N
Other specifications		
29 Number of pole pairs		1
30 Number of commutator segments		9
31 Weight of motor		34 g

Values listed in the table are nominal.
Explanation of the figures on page 151.

Option
Ball bearings in place of sleeve bearings



maxon Modular System		Overview on page 20-27	
Planetary Gearhead Ø19 mm 0.1 - 0.3 Nm Page 325		Encoder MR 32 CPT, 2 / 3 channels Page 388	
Planetary Gearhead Ø22 mm 0.5 - 2.0 Nm Page 329/331		Encoder MR 128 / 256 / 512 CPT, 2 / 3 channels Page 390	
Spur Gearhead Ø24 mm 0.1 Nm Page 335		Encoder Enc 22 mm 100 CPT, 2 channels Page 398	
Spindle Drive Ø22 mm Page 368/369		Encoder MEnc Ø13 mm 16 CPT, 2 channels Page 409	