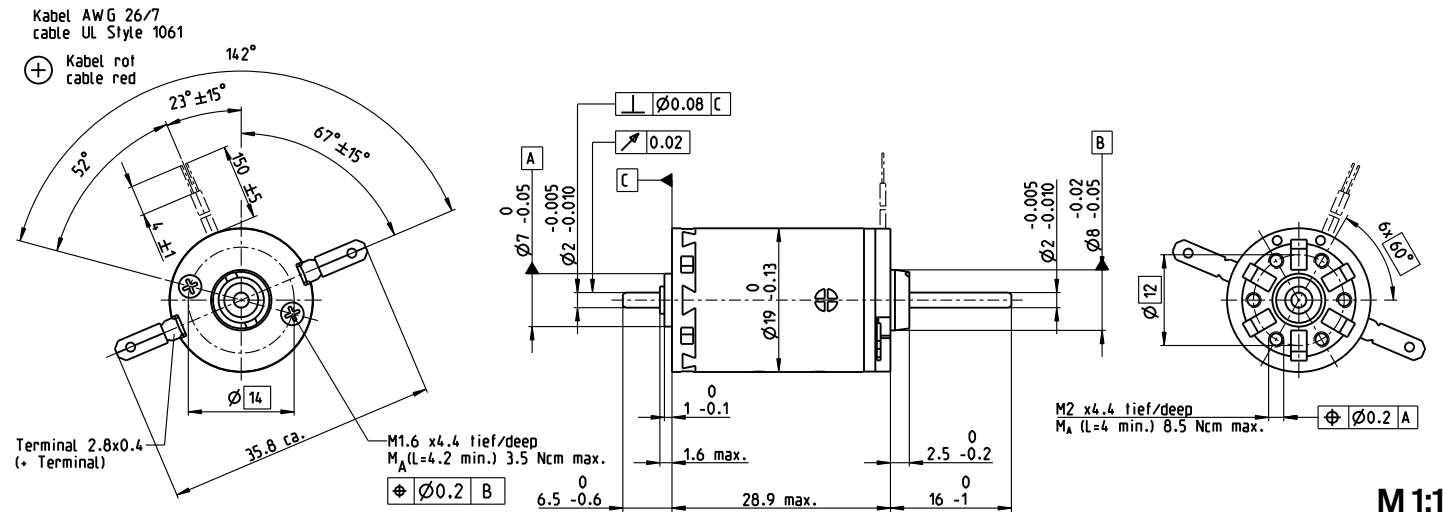


A-max 19 $\varnothing 19$ mm, precious metal brushes CLL, 1.5 watt

A-max



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

		Part Numbers								
with terminals		110090	110091	110092	110093	110094	110095	110096	110097	110098
with cables		139832	352925	352926	352927	352928	352929	352930	315468	352931

Motor Data											
Values at nominal voltage											
1 Nominal voltage	V	1.2	2.4	3	4.8	6	7.2	9	12	18	
2 No load speed	rpm	6390	7160	6230	6190	6090	6130	6130	6140	6590	
3 No load current	mA	88.3	52	34.2	21.2	16.6	14	11.2	8.41	6.19	
4 Nominal speed	rpm	5210	4410	2500	2410	2330	2290	2280	2210	2630	
5 Nominal torque (max. continuous torque)	mNm	1.33	2.49	3.62	3.57	3.59	3.51	3.51	3.43	3.38	
6 Nominal current (max. continuous current)	A	0.84	0.84	0.833	0.511	0.405	0.332	0.265	0.195	0.138	
7 Stall torque	mNm	6.23	6.28	6	5.89	5.89	5.68	5.67	5.44	5.73	
8 Stall current	A	3.55	2.01	1.34	0.816	0.642	0.52	0.415	0.3	0.226	
9 Max. efficiency	%	72	71	71	71	71	70	70	70	70	
Characteristics											
10 Terminal resistance	Ω	0.338	1.19	2.24	5.88	9.34	13.8	21.7	40	79.7	
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	1050	1170	1060	1080	1060	1110	1110	1160	1180	
15 Mechanical time constant	ms	27.9	25.4	24.3	24.2	24.1	24.3	24.3	25	24.7	
16 Rotor inertia	gcm ²	2.54	2.08	2.18	2.15	2.17	2.09	2.09	2.06	1.99	

Specifications	Operating Range	Comments
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 s 20 Thermal time constant motor 201 s 21 Ambient temperature -30...+65°C 22 Max. winding temperature +85°C Mechanical data (sleeve bearings) 23 Max. speed 10000 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 / 440 N 28 Max. radial load, 5 mm from flange 2.7 N	Operating Range 	<div style="background-color: red; width: 15px; height: 10px; display: inline-block; margin-right: 5px;"></div> 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. <div style="border: 1px solid black; width: 15px; height: 10px; display: inline-block; margin-right: 5px;"></div> Short term operation The motor may be briefly overloaded (recurring). — Assigned power rating

maxon Modular System	Details on catalog page 38
Planetary Gearhead $\varnothing 19$ mm 0.1 - 0.3 Nm Page 381 Planetary Gearhead $\varnothing 22$ mm 0.5 - 2.0 Nm Page 383/385 Spur Gearhead $\varnothing 24$ mm 0.1 Nm Page 389 Screw Drive $\varnothing 22$ mm Page 424/425	 Encoder MR 32 CPT, 2/3 channels Page 475 Encoder MR 128/256/512 CPT, 2/3 channels Page 476 Encoder Enc 22 mm 100 CPT, 2 channels Page 483 Recommended Electronics: Notes Page 38 ESCON Module 24/2 500 ESCON 36/2 DC 500 EPOS4 Micro 24/5 509 EPOS4 Mod./Comp. 24/1.5 510 EPOS4 Comp. 24/5 3-axes 511