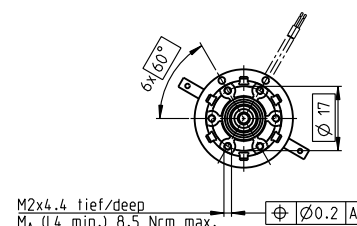
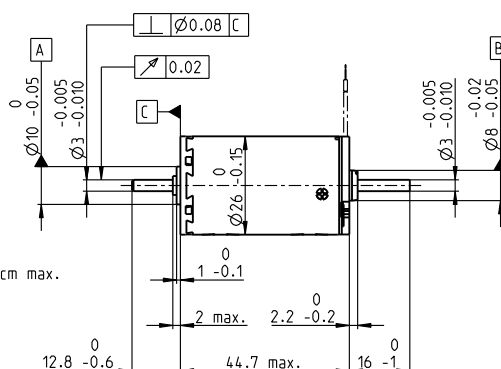
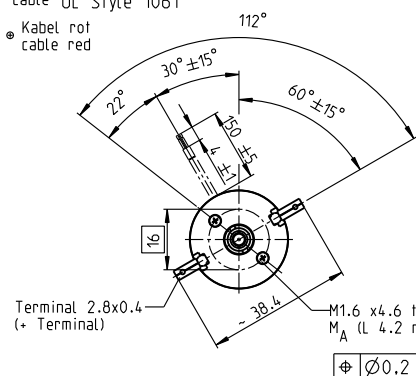


# A-max 26 Ø26 mm, Precious Metal Brushes CLL, 4 Watt

Kabel AWG 24/7  
cable UL Style 1061

• Kabel rot  
cable red



M 1:2

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

## Part Numbers

with terminals	110192	110193	110194	110195	110196	110197	110198	110199	110200	110201	110202	110203
with cables	353064	353065	353066	353067	205635	353068	353069	353070	353071	353072	353073	353074

## Motor Data

Values at nominal voltage			3.6	4.5	6	7.2	9	9	12	15	18	21	24	30
1 Nominal voltage	V		3.6	4.5	6	7.2	9	9	12	15	18	21	24	30
2 No load speed	rpm		4890	5230	5160	5110	4190	3750	4340	4980	5340	4960	4700	3930
3 No load current	mA		64.2	57.1	41.7	34.3	20.3	17.3	16.1	15.9	14.7	11.2	9.08	5.57
4 Nominal speed	rpm		3920	3920	3710	3300	2060	1610	2090	2680	3170	2790	2490	1670
5 Nominal torque (max. continuous torque)	mNm		5.42	6.38	8.82	10.8	12.5	12.5	11.8	11.4	12	12.1	11.9	11.7
6 Nominal current (max. continuous current)	A		0.84	0.84	0.84	0.84	0.633	0.567	0.465	0.415	0.391	0.312	0.255	0.168
7 Stall torque	mNm		26	24.9	31	30.1	24.5	21.9	22.8	24.8	29.8	27.7	25.5	20.6
8 Stall current	A		3.76	3.08	2.83	2.27	1.22	0.974	0.878	0.879	0.94	0.697	0.532	0.288
9 Max. efficiency	%		76	75	78	78	76	76	75	76	77	77	76	75
Characteristics														
10 Terminal resistance	Ω		0.958	1.46	2.12	3.17	7.41	9.24	13.7	17.1	19.2	30.1	45.1	104
11 Terminal inductance	mH		0.101	0.138	0.254	0.372	0.861	1.07	1.42	1.69	2.13	3.35	4.85	10.8
12 Torque constant	mNm/A		6.92	8.07	11	13.3	20.2	22.5	25.9	28.3	31.7	39.8	47.9	71.4
13 Speed constant	rpm/V		1380	1180	872	720	473	425	368	338	301	240	199	134
14 Speed / torque gradient	rpm/mNm		191	214	169	172	174	174	194	204	182	182	188	195
15 Mechanical time constant	ms		24.7	24.5	23.9	23.8	23.7	23.7	23.9	24	23.9	23.8	24	24.1
16 Rotor inertia	gcm <sup>2</sup>		12.3	10.9	13.6	13.2	13.1	13	11.8	11.2	12.5	12.5	12.2	11.8

## Specifications

Thermal data		
17 Thermal resistance housing-ambient	13.2 K/W	
18 Thermal resistance winding-housing	3.2 K/W	
19 Thermal time constant winding	12.5 s	
20 Thermal time constant motor	660 s	
21 Ambient temperature	-30...+65°C	
22 Max. winding temperature	+85°C	

Mechanical data (sleeve bearings)		
23 Max. speed	6700 rpm	
24 Axial play	0.1 - 0.2 mm	
25 Radial play	0.012 mm	
26 Max. axial load (dynamic)	1.7 N	
27 Max. force for press fits (static)	80 N	
(static, shaft supported)	1200 N	
28 Max. radial load, 5 mm from flange	5.5 N	

Mechanical data (ball bearings)		
23 Max. speed	6700 rpm	
24 Axial play	0.1 - 0.2 mm	
25 Radial play	0.025 mm	
26 Max. axial load (dynamic)	5.0 N	
27 Max. force for press fits (static)	75 N	
(static, shaft supported)	1200 N	
28 Max. radial load, 5 mm from flange	20.5 N	

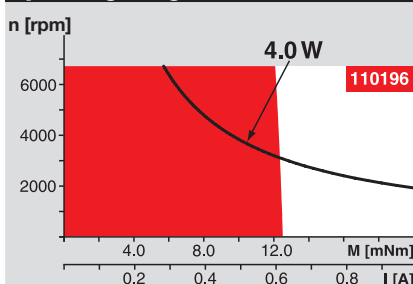
Other specifications		
29 Number of pole pairs	1	
30 Number of commutator segments	13	
31 Weight of motor	100 g	

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

### Option

Ball bearings in place of sleeve bearings  
Without CLL

## 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

## maxon Modular System

Planetary Gearhead		Overview on page 20-27	
Ø26 mm	0.75 - 4.5 Nm	Encoder MR	128 - 1000 CPT, 3 channels
Page 336		Encoder Enc	22 mm, 100 CPT, 2 channels
Spur Gearhead		Encoder HED_ 5540	500 CPT, 3 channels
Ø30 mm	0.07 - 0.2 Nm	Encoder MEenc	Ø13 mm, 16 CPT, 2 channels
Page 337			Page 400/402
Planetary Gearhead		Recommended Electronics:	
Ø32 mm	0.75 - 6.0 Nm	Notes	Page 24
Page 338/339/342		ESCON Module 24/2	416
Spur Gearhead		ESCON 36/2 DC	416
Ø38 mm	0.1 - 0.6 Nm	EPOS2 24/2	424
Page 348		EPOS2 Module 36/2	424
Spindle Drive		EPOS2 24/5, EPOS2 50/5	425
Ø32 mm		EPOS2 P 24/5	428
Page 370-372		MAXPOS 50/5	435