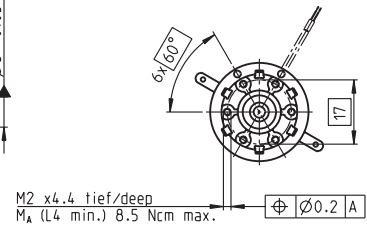
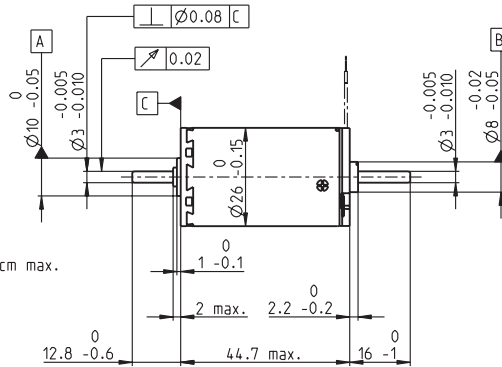
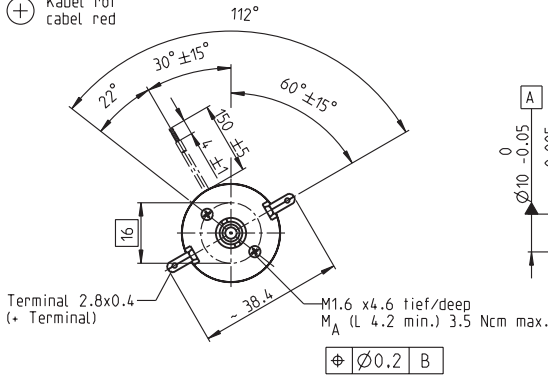


A-max 26 Ø26 mm, Precious Metal Brushes CLL, 4 Watt, CE approved

Kabel AWG 24/7
cabel UL Style 1061

(+) Kabel rot
cabel red



M 1:2

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

Order Number

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														
1	Nominal voltage	V	3.6	4.5	6.0	7.2	9.0	9.0	12.0	15.0	18.0	21.0	24.0	30.0
2	No load speed	rpm	4870	5210	5140	5090	4180	3740	4320	4960	5320	4950	4690	3920
3	No load current	mA	63.8	56.8	41.5	34.1	20.2	17.2	16.0	15.8	14.6	11.2	9.04	5.54
4	Nominal speed	rpm	3850	3860	3670	3260	2040	1600	2080	2670	3160	2780	2480	1660
5	Nominal torque (max. continuous torque)	mNm	5.44	6.41	8.84	10.8	12.5	12.5	11.8	11.4	12.1	12.1	11.9	11.8
6	Nominal current (max. continuous current)	A	0.840	0.840	0.840	0.840	0.630	0.565	0.464	0.415	0.391	0.312	0.255	0.168
7	Stall torque	mNm	26.1	24.9	31.1	30.2	24.6	22.0	22.8	24.9	29.9	27.8	25.5	20.6
8	Starting current	A	3.76	3.08	2.83	2.27	1.22	0.974	0.878	0.879	0.940	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	0.862	1.07	1.42	1.69	2.13	3.35	4.85	10.8
12	Torque constant	mNm / A	6.94	8.09	11.0	13.3	20.2	22.5	26.0	28.3	31.8	39.9	48.0	71.6
13	Speed constant	rpm / V	1380	1180	869	718	472	423	367	337	300	239	199	133
14	Speed / torque gradient	rpm / mNm	190	213	168	171	173	173	193	203	181	181	187	194
15	Mechanical time constant	ms	24.5	24.3	23.7	23.6	23.5	23.5	23.7	23.8	23.6	23.6	23.7	23.9
16	Rotor inertia	gcm ²	12.3	10.9	13.5	13.2	13.0	12.9	11.7	11.2	12.5	12.5	12.1	11.7

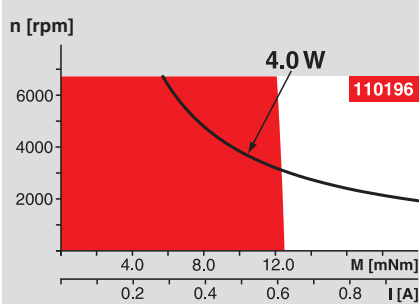
Specifications

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	12.4 s
20	Thermal time constant motor	660 s
21	Ambient temperature	-30 ... +65°C
22	Max. permissible winding temperature	+85°C
Mechanical data (sleeve bearings)		
23	Max. permissible 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 loading, 5 mm from flange	5.5 N
Mechanical data (ball bearings)		
23	Max. permissible 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 loading, 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
	CLL = Capacitor Long Life	

Values listed in the table are nominal.
Explanation of the figures on page 49.

Option
Ball bearings in place of sleeve bearings
Without CLL

Operating Range



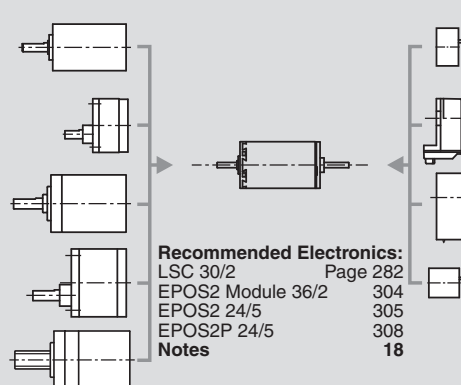
Comments

- 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

Overview on page 16 - 21

- Planetary Gearhead**
Ø26 mm
0.5 - 2.0 Nm
Page 228
- Spur Gearhead**
Ø30 mm
0.07 - 0.2 Nm
Page 229
- Planetary Gearhead**
Ø32 mm
0.75 - 6.0 Nm
Page 230 / 231 / 233
- Spur Gearhead**
Ø38 mm
0.1 - 0.6 Nm
Page 237
- Spindle Drive**
Ø32 mm
Page 249 / 250 / 251



- Encoder MR**
128 - 1000 Imp.,
3 channels
Page 262
- Encoder Enc**
22 mm
100 Imp., 2 channels
Page 265
- Encoder HED_ 5540**
500 Imp.,
3 channels
Page 267 / 269
- Encoder MEnc**
Ø13 mm
16 Imp., 2 channels
Page 275