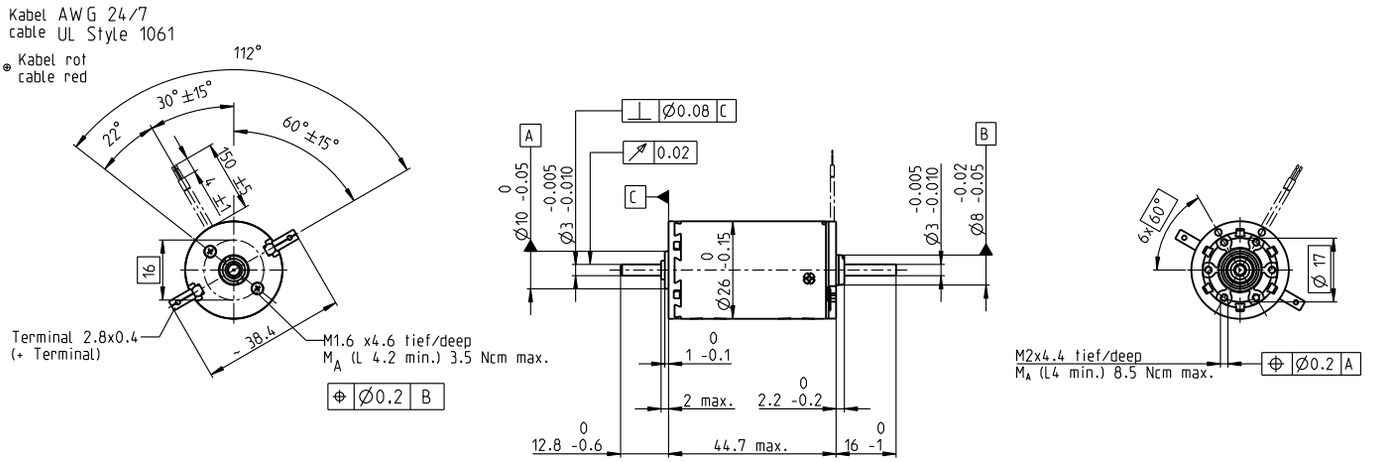
A-max 26 ∅26 mm, Precious Metal Brushes CLL, 4 Watt



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													
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	gcm²	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

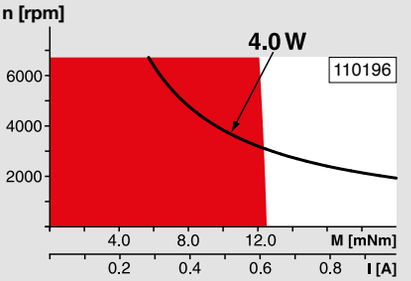
29	Number of pole pairs	1
30	Number of commutator segments	13
31	Weight of motor	100 g

CLL = Capacitor Long Life

Values listed in the table are nominal.
Explanation of the figures on page 64.

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 28–36

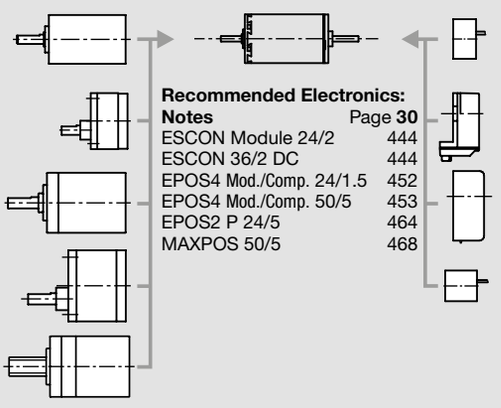
Planetary Gearhead
∅26 mm
0.75 - 4.5 Nm
Page 340

Spur Gearhead
∅30 mm
0.07 - 0.2 Nm
Page 341

Planetary Gearhead
∅32 mm
0.75 - 6.0 Nm
Page 342/343/346

Spur Gearhead
∅38 mm
0.1 - 0.6 Nm
Page 353

Screw Drive
∅32 mm
Page 374–379



Recommended Electronics:

Notes	Page 30
ESCON Module 24/2	444
ESCON 36/2 DC	444
EPOS4 Mod./Comp. 24/1.5	452
EPOS4 Mod./Comp. 50/5	453
EPOS2 P 24/5	464
MAXPOS 50/5	468

Encoder MR
128 - 1000 CPT,
3 channels
Page 419

Encoder Enc
22 mm
100 CPT, 2 channels
Page 426

Encoder HED_ 5540
500 CPT,
3 channels
Page 430/432

Encoder MEnc
∅13 mm
16 CPT, 2 channels
Page 408