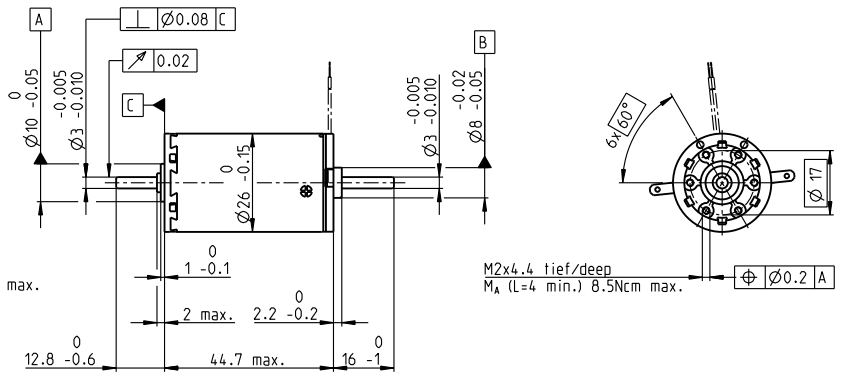
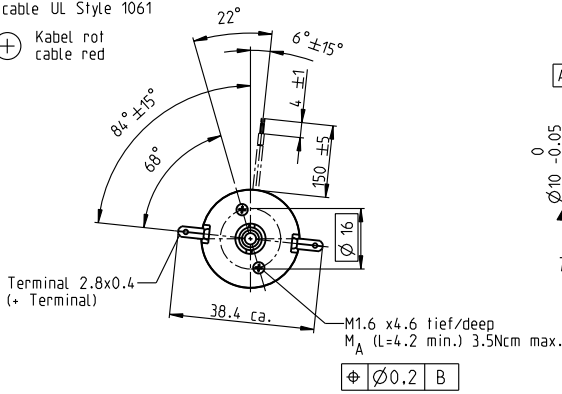


# A-max 26 Ø26 mm, Graphite Brushes, 6 Watt

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		110946	110947	110948	110949	110950	110951	110952	110953	110954	110955	110956	110957
with cables		353143	353144	353145	353146	353147	353148	353149	353150	353151	353152	353153	353154

Motor Data													
<b>Values at nominal voltage</b>													
1 Nominal voltage	V	7.2	9	12	12	18	18	24	24	30	36	42	48
2 No load speed	rpm	9790	10500	10300	8510	8380	7510	8680	7950	8890	8500	8230	6280
3 No load current	mA	121	106	77.7	60.2	39.4	34.2	31	27.7	25.5	20.1	16.5	10.3
4 Nominal speed	rpm	8580	8840	8510	6210	5890	5000	6050	5250	6350	5950	5630	3590
5 Nominal torque (max. continuous torque)	mNm	6.67	7.91	11	13.6	14.5	14.6	13.7	13.4	14.1	14.1	13.9	13.8
6 Nominal current (max. continuous current)	A	1.08	1.08	1.08	1.08	0.755	0.679	0.554	0.498	0.467	0.373	0.305	0.203
7 Stall torque	mNm	54.6	51.4	63.4	50.9	49.4	44	45.7	39.8	49.8	47.6	44.6	32.9
8 Stall current	A	7.89	6.36	5.79	3.84	2.45	1.96	1.76	1.41	1.57	1.2	0.931	0.461
9 Max. efficiency	%	77	76	78	77	76	76	76	74	76	76	76	73
<b>Characteristics</b>													
10 Terminal resistance	Ω	0.912	1.41	2.07	3.13	7.36	9.19	13.6	17	19.1	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	182	207	165	170	173	174	193	204	181	181	188	195
15 Mechanical time constant	ms	23.5	23.7	23.4	23.5	23.6	23.6	23.8	24	23.8	23.8	23.9	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...+85°C
22 Max. winding temperature	+125°C

Mechanical data (ball bearings)	
23 Max. speed	10400 rpm
24 Axial play	0.1 - 0.2 mm
25 Radial play	0.025 mm
26 Max. axial load (dynamic)	5 N
27 Max. force for press fits (static) (static, shaft supported)	75 N
28 Max. radial load, 5 mm from flange	1200 N

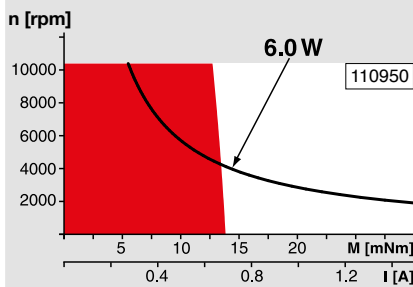
Mechanical data (sleeve bearings)	
23 Max. speed	10400 rpm
24 Axial play	0.1 - 0.2 mm
25 Radial play	0.012 mm
26 Max. axial load (dynamic)	1.7 N
27 Max. force for press fits (static) (static, shaft supported)	80 N
28 Max. radial load, 5 mm from flange	1200 N

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 64.

**Option**  
Sleeve bearings in place of ball bearings

## 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

Ø26 mm  
0.75 - 4.5 Nm  
Page 340

### Spur Gearhead

Ø30 mm  
0.07 - 0.2 Nm  
Page 341

### Planetary Gearhead

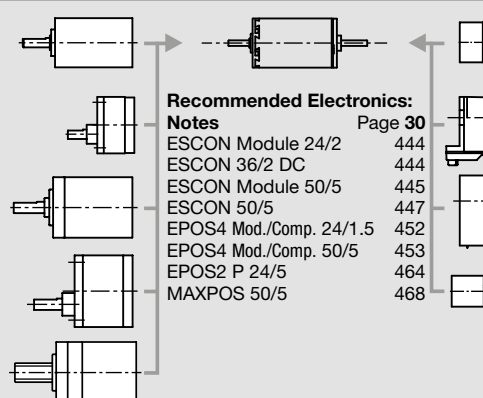
Ø32 mm  
0.75 - 6.0 Nm  
Page 342/343/346

### Spur Gearhead

Ø38 mm  
0.1 - 0.6 Nm  
Page 353

### Screw Drive

Ø32 mm  
Page 374–379



### Recommended Electronics:

Notes	Page 30
ESCON Module 24/2	444
ESCON 36/2 DC	444
ESCON Module 50/5	445
ESCON 50/5	447
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

Ø13 mm  
16 CPT, 2 channels  
Page 408