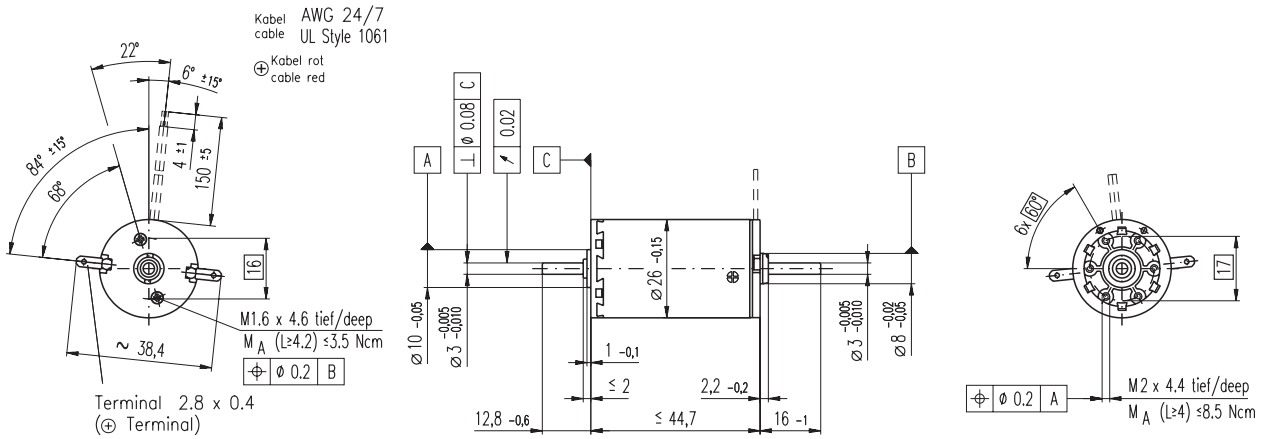
A-max 26 ∅26 mm, Graphite Brushes, 6 Watt



M 1:2

Stock program
Standard program
Special program (on request)

			Order Number														
			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																	
	Values at nominal voltage																
1	Nominal voltage		V	7.2	9.0	12.0	12.0	18.0	18.0	24.0	24.0	30.0	36.0	42.0	48.0		
2	No load speed		rpm	9270	10000	10000	8300	8260	7410	8590	7870	8810	8440	8170	6240		
3	No load current		mA	118	104	76.8	59.7	39.2	34.0	30.8	27.6	25.4	20.0	16.4	10.3		
4	Nominal speed		rpm	7160	7620	7600	5590	5640	4790	5880	5100	6210	5850	5550	3550		
5	Nominal torque (max. continuous torque)		mNm	6.73	7.97	11.1	13.0	13.6	13.8	13.1	12.9	13.7	13.8	13.7	13.7		
6	Nominal current (max. continuous current)		A	1.08	1.08	1.08	1.03	0.708	0.642	0.532	0.481	0.452	0.365	0.300	0.201		
7	Stall torque		mNm	38.2	39.7	52.7	43.8	45.6	41.0	43.5	38.1	47.9	46.4	43.7	32.6		
8	Starting current		A	5.50	4.90	4.80	3.29	2.25	1.82	1.67	1.34	1.51	1.16	0.911	0.455		
9	Max. efficiency		%	67	69	73	72	74	73	74	73	75	75	75	72		
	Characteristics																
10	Terminal resistance		Ω	1.31	1.84	2.50	3.65	8.00	9.91	14.4	17.9	19.9	31.0	46.1	106		
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	260	268	198	197	186	186	203	213	188	186	191	197		
15	Mechanical time constant		ms	33.4	30.5	27.9	27.1	25.4	25.2	24.9	24.9	24.5	24.3	24.2	24.2		
16	Rotor inertia		gcm²	12.3	10.9	13.5	13.2	13.0	12.9	11.7	11.2	12.5	12.5	12.1	11.7		

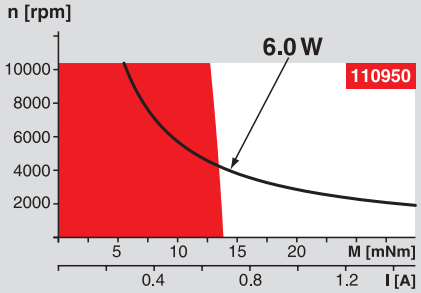
Specifications

	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 ... +85°C
22	Max. permissible winding temperature	+125°C
	Mechanical data (ball bearings)	
23	Max. permissible 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)	75 N
	(static, shaft supported)	1200 N
28	Max. radial loading, 5 mm from flange	20.5 N
	Mechanical data (sleeve bearings)	
23	Max. permissible 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)	80 N
	(static, shaft supported)	1200 N
28	Max. radial loading, 5 mm from flange	5.5 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 49.

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

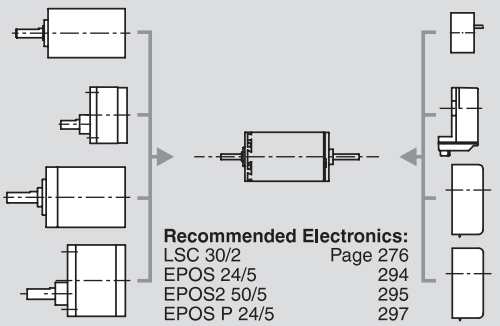
Overview on page 16 - 21

Planetary Gearhead
∅26 mm
0.5 - 2.0 Nm
Page 235

Spur Gearhead
∅30 mm
0.07 - 0.2 Nm
Page 236

Planetary Gearhead
∅32 mm
0.4 - 6.0 Nm
Page 237 / 238 / 241

Spur Gearhead
∅38 mm
0.1 - 0.6 Nm
Page 243



Recommended Electronics:

LSC 30/2	Page 276
EPOS 24/5	294
EPOS2 50/5	295
EPOS P 24/5	297
Notes	**18**

Encoder MR
128 - 1000 CPT,
3 channels
Page 258

Encoder Enc
22 mm
100 CPT, 2 channels
Page 261

Encoder HEDS 5540
500 CPT,
3 channels
Page 263

Encoder HEDL 5540
500 CPT,
3 channels
Page 265