

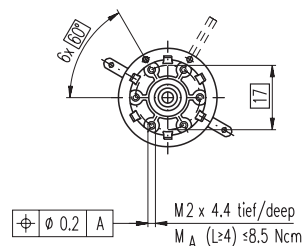
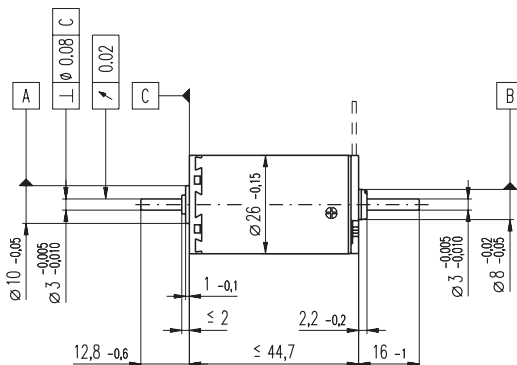
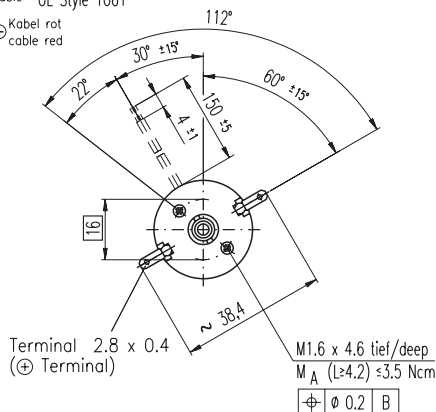
A-max 26 Ø26 mm, Precious Metal Brushes CLL, 4.5 Watt, CE approved

HighPower

maxon A-max

Kabel AWG 24/7
cable UL Style 1061

⊕ Kabel rot
cable red



M 1:2

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

Order Number

with terminals	110204	110205	110206	110207	110208	110209	110210	110211	110212	110213	110214
with cables	353109	353110	353111	353112	353113	353114	353115	353116	353117	353118	353119

Motor Data

Values at nominal voltage																	
1	Nominal voltage	V	2.4	3.6	6.0	7.2	9.0	12.0	15.0	18.0	24.0	30.0	36.0				
2	No load speed	rpm	3880	5180	4090	4050	4020	4440	3530	3640	4510	4680	4520				
3	No load current	mA	67.6	69.8	29.2	24.0	19.0	16.5	9.4	8.2	8.44	7.15	5.66				
4	Nominal speed	rpm	3390	4580	2910	2580	2340	2750	1780	1900	2770	2920	2750				
5	Nominal torque (max. continuous torque)	mNm	4.53	5.09	11.3	13.8	15.9	15.7	15.4	15.5	15.4	15.1	15.0				
6	Nominal current (max. continuous current)	A	0.840	0.840	0.840	0.840	0.768	0.629	0.392	0.338	0.312	0.255	0.204				
7	Stall torque	mNm	35.9	44.1	39.2	38.1	38.2	41.4	31.4	32.5	40.1	40.3	38.5				
8	Starting current	A	6.15	6.71	2.83	2.27	1.80	1.62	0.783	0.697	0.797	0.665	0.513				
9	Max. efficiency	%	80	81	81	81	81	81	80	80	81	81	80				
Characteristics																	
10	Terminal resistance	Ω	0.390	0.536	2.12	3.17	4.99	7.41	19.2	25.8	30.1	45.1	70.2				
11	Terminal inductance	mH	0.0402	0.0509	0.227	0.332	0.528	0.770	1.90	2.57	2.99	4.34	6.68				
12	Torque constant	mNm / A	5.84	6.57	13.9	16.8	21.2	25.5	40.1	46.7	50.3	60.6	75.2				
13	Speed constant	rpm / V	1640	1450	689	569	451	374	238	205	190	158	127				
14	Speed / torque gradient	rpm / mNm	109	119	105	108	106	108	114	113	114	117	119				
15	Mechanical time constant	ms	16.4	16.0	14.9	14.8	14.8	14.8	14.8	14.8	14.8	14.9	15.0				
16	Rotor inertia	gcm ²	14.3	12.8	13.5	13.2	13.3	13.0	12.5	12.5	12.5	12.1	12.0				

Specifications

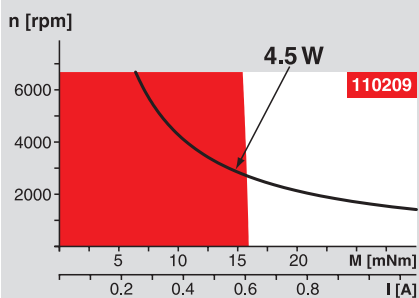
Thermal data		
17	Thermal resistance housing-ambient	13.2 K / W
18	Thermal resistance winding-housing	3.2 K / W
19	Thermal time constant winding	12.4 s
20	Thermal time constant motor	785 s
21	Ambient temperature	-30 ... +65°C
22	Max. permissible winding temperature	+85°C
Mechanical data (sleeve bearings)		
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) (static, shaft supported)	80 N
28	Max. radial loading, 5 mm from flange	1200 N
		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) (static, shaft supported)	75 N
28	Max. radial loading, 5 mm from flange	1200 N
		20.5 N
Other specifications		
29	Number of pole pairs	1
30	Number of commutator segments	13
31	Weight of motor	119 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 235

Spur Gearhead

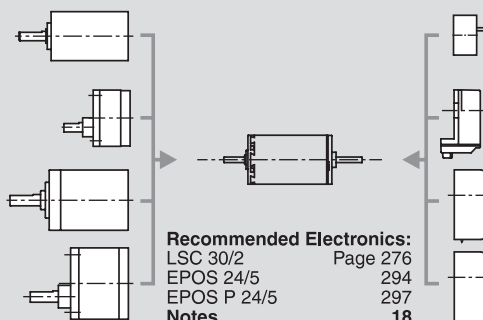
Ø30 mm
0.07 - 0.2 Nm
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Planetary Gearhead

Ø32 mm
0.4 - 6.0 Nm
Page 237 / 238 / 241

Spur Gearhead

Ø38 mm
0.1 - 0.6 Nm
Page 243



Recommended Electronics:

LSC 30/2
EPOS 24/5
EPOS P 24/5
Notes

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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 HDL 5540

500 CPT,
3 channels
Page 265