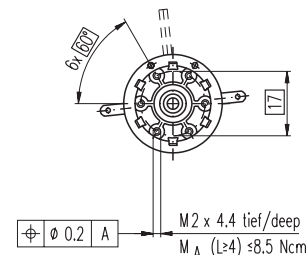
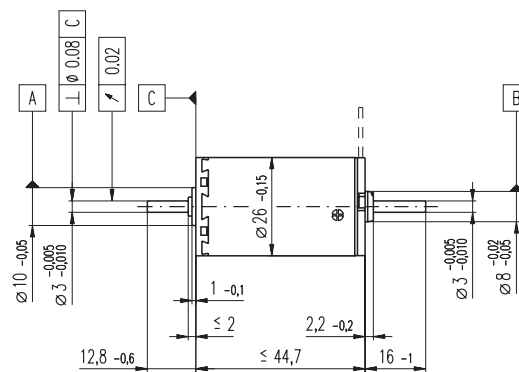
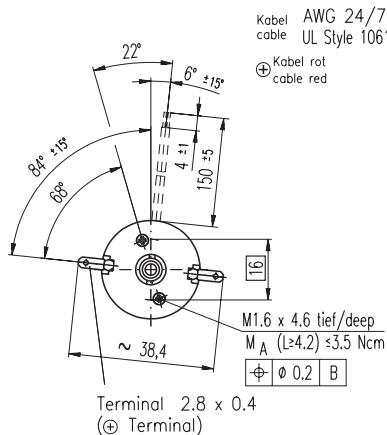


A-max 26 Ø26 mm, Graphite Brushes, 11 Watt

HighPower

maxon A-max



M 1:2

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

Order Number

with terminals	110958	110959	110960	110961	110962	110963	110964	110965	110966	110967	110968
with cables	353606	353607	353608	353609	353610	353611	353612	353613	353614	353615	353616

Motor Data

Values at nominal voltage																			
1	Nominal voltage	V	6.0	7.2	12.0	15.0	18.0	24.0	30.0	36.0	42.0	48.0	48.0						
2	No load speed	rpm	9110	9850	8010	8320	7950	8820	7020	7250	7850	7450	6000						
3	No load current	mA	140	128	56.7	47.3	37.0	31.7	18.9	16.3	15.5	12.7	9.67						
4	Nominal speed	rpm	7560	8230	6030	6150	5830	6730	4910	5160	5770	5340	3860						
5	Nominal torque (max. continuous torque)	mNm	5.53	6.30	14.2	16.5	17.2	17.2	17.6	17.7	17.6	17.5	17.7						
6	Nominal current (max. continuous current)	A	1.08	1.08	1.08	1.03	0.846	0.704	0.455	0.394	0.365	0.300	0.244						
7	Stall torque	mNm	54.4	59.6	66.6	70.3	69.8	77.6	60.5	63.1	68.4	63.2	50.6						
8	Starting current	A	9.32	9.07	4.80	4.19	3.30	3.04	1.51	1.35	1.36	1.04	0.672						
9	Max. efficiency	%	68	70	76	77	78	79	78	79	79	79	77						
Characteristics																			
10	Terminal resistance	Ω	0.644	0.794	2.50	3.58	5.46	7.90	19.9	26.6	30.9	46.0	71.4						
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	180	176	124	122	116	116	118	117	116	120	121						
15	Mechanical time constant	ms	27.1	23.6	17.6	16.7	16.2	15.8	15.4	15.3	15.2	15.2	15.2						
16	Rotor inertia	gcm ²	14.3	12.8	13.5	13.2	13.2	13.0	12.5	12.5	12.5	12.1	12.0						

Specifications

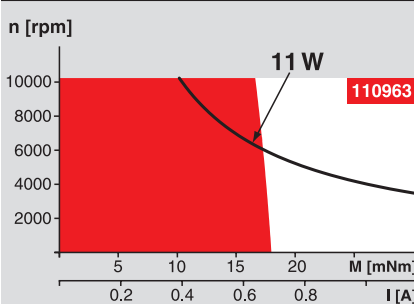
Thermal data		
17	Thermal resistance housing-ambient	13.2 K / W
18	Thermal resistance winding-housing	3.2 K / W
19	Thermal time constant winding	12.4 s
20	Thermal time constant motor	785 s
21	Ambient temperature	-30 ... +85°C
22	Max. permissible winding temperature	+125°C
Mechanical data (ball bearings)		
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	119 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

Planetary Gearhead

Ø26 mm
0.5 - 2.0 Nm
Page 235

Spur Gearhead

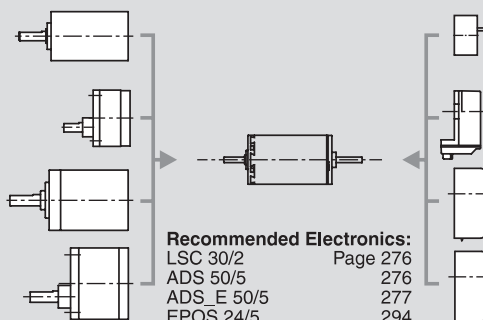
Ø30 mm
0.07 - 0.2 Nm
Page 236

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 Page 276
ADS 50/5 276
ADS_E 50/5 277
EPOS 24/5 294
EPOS2 50/5 295
EPOS P 24/5 297
Notes 18

Overview on page 16 - 21

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