

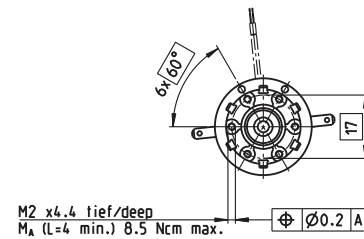
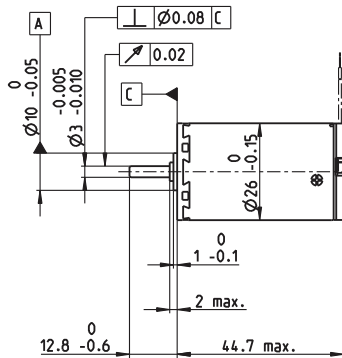
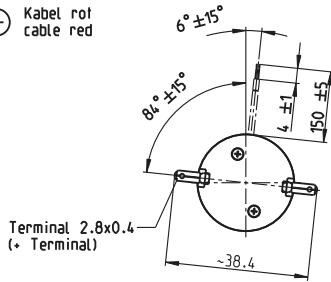
A-max 26 Ø26 mm, Graphite Brushes, 11 Watt

High Power

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)

Article Numbers

with terminals
with cables

110935	110936	110937	110938	110939	110940	110941	110942	110943	110944	110945
139852	353166	353167	353168	353169	206344	353171	314214	202893	353174	353175

Motor Data

Values at nominal voltage																	
1	Nominal voltage	V	6	7.2	12	15	18	24	30	36	42	48	48				
2	No load speed	rpm	9110	9850	8020	8320	7950	8820	7020	7250	7850	7450	6000				
3	No load current	mA	140	128	56.6	47.3	37	31.6	18.8	16.3	15.5	12.7	9.66				
4	Nominal speed	rpm	7560	8230	6030	6110	5810	6710	4900	5150	5770	5340	3860				
5	Nominal torque (max. continuous torque)	mNm	5.53	6.3	14.2	16.8	17.4	17.4	17.7	17.8	17.7	17.5	17.7				
6	Nominal current (max. continuous current)	A	1.08	1.08	1.08	1.05	0.857	0.711	0.458	0.396	0.366	0.301	0.244				
7	Stall torque	mNm	54.4	59.6	66.5	70.3	69.7	77.6	60.5	63.1	68.4	63.2	50.6				
8	Starting current	A	9.33	9.07	4.8	4.19	3.3	3.04	1.51	1.35	1.36	1.04	0.672				
9	Max. efficiency	%	64	67	75	76	77	79	78	79	79	79	77				
Characteristics																	
10	Terminal resistance	Ω	0.643	0.794	2.5	3.58	5.46	7.9	19.9	26.6	30.9	46	71.4				
11	Terminal inductance	mH	0.0402	0.0509	0.227	0.332	0.528	0.77	1.9	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	27.3	23.8	17.6	16.8	16.3	15.8	15.5	15.4	15.3	15.3	15.3				
16	Rotor inertia	gcm²	14.4	12.9	13.6	13.2	13.3	13.1	12.5	12.6	12.5	12.2	12.1				

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 473 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
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
28	Max. radial loading, 5 mm from flange 5.5 N

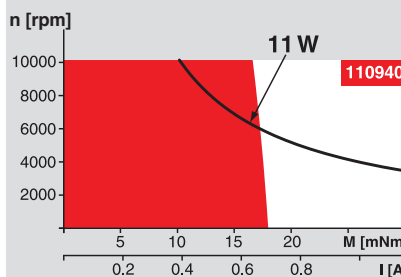
Other specifications	
29	Number of pole pairs 1
30	Number of commutator segments 13
31	Weight of motor 117 g

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

Ø26 mm
0.5 - 4.5 Nm
[Page 231/232](#)

Spur Gearhead

Ø30 mm
0.07 - 0.2 Nm
[Page 233](#)

Planetary Gearhead

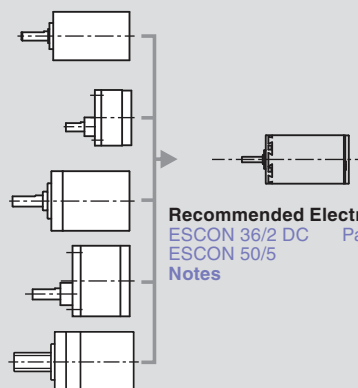
Ø32 mm
0.4 - 6.0 Nm
[Page 234/235/237](#)

Spur Gearhead

Ø38 mm
0.1 - 0.6 Nm
[Page 241](#)

Spindle Drive

Ø32 mm
[Page 255/256/257](#)



Recommended Electronics:
ESCON 36/2 DC [Page 292](#)
ESCON 50/5 [Page 292](#)
[Notes](#) [18](#)