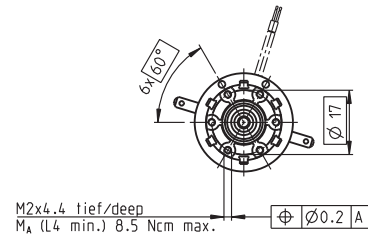
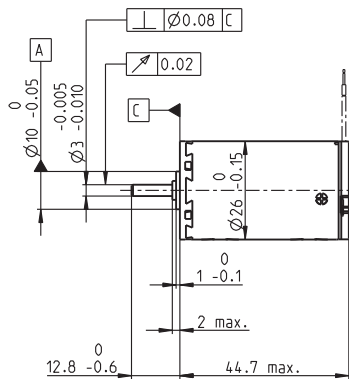
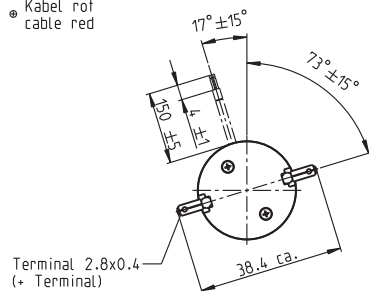


A-max 26 Ø26 mm, Precious Metal Brushes CLL, 7 Watt

High Power

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	110181	110182	110183	110184	110185	110186	110187	110188	110189	110190	110191
with cables	353078	353079	353080	353081	329757	353082	332818	353083	353084	353085	353086

Motor Data

Values at nominal voltage		4.5	6	9	12	15	18	24	30	36	42	48
1 Nominal voltage	V	4.5	6	9	12	15	18	24	30	36	42	48
2 No load speed	rpm	7320	8670	6160	6780	6720	6690	5670	6090	6780	6570	6050
3 No load current	mA	78.9	77.7	30.2	26.3	20.7	17.1	9.97	8.9	8.76	7.15	5.5
4 Nominal speed	rpm	6900	8130	5000	5340	5060	5010	3940	4370	5060	4820	4280
5 Nominal torque (max. continuous torque)	mNm	4.46	5.02	11.3	13.7	15.8	15.6	15.3	15.3	15.2	15	15
6 Nominal current (max. continuous current)	A	0.84	0.84	0.84	0.84	0.766	0.627	0.391	0.336	0.31	0.254	0.204
7 Stall torque	mNm	67.3	73.5	58.8	63.5	63.6	62.1	50.3	54.2	60.2	56.4	51.4
8 Stall current	A	11.5	11.2	4.25	3.78	3.01	2.43	1.25	1.16	1.2	0.93	0.683
9 Max. efficiency	%	84	84	84	84	84	84	83	84	84	84	83
Characteristics												
10 Terminal resistance	Ω	0.39	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	0.333	0.529	0.77	1.9	2.58	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	16.5	16	15	14.9	14.8	14.8	14.9	14.9	14.9	15	15
16 Rotor inertia	gcm ²	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	13.8 s
20 Thermal time constant motor	473 s
21 Ambient temperature	-30...+65°C
22 Max. winding temperature	+85°C

Mechanical data (sleeve bearings)	
23 Max. speed	11 000 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 load, 5 mm from flange	5.5 N

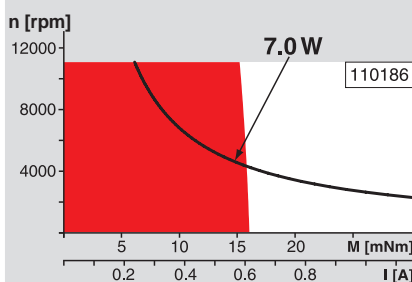
Mechanical data (ball bearings)	
23 Max. speed	11 000 rpm
24 Axial play	0.1 - 0.2 mm
25 Radial play	0.025 mm
26 Max. axial load (dynamic)	5 N
27 Max. force for press fits (static)	75 N
28 Max. radial load, 5 mm from flange	20.5 N

Other specifications	
29 Number of pole pairs	1
30 Number of commutator segments	13
31 Weight of motor	117 g
CLL = Capacitor Long Life	

Values listed in the table are nominal.
Explanation of the figures on page 107.

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 20–25

Planetary Gearhead

Ø26 mm
0.75 - 4.5 Nm
Page 301

Spur Gearhead

Ø30 mm
0.07 - 0.2 Nm
Page 302

Planetary Gearhead

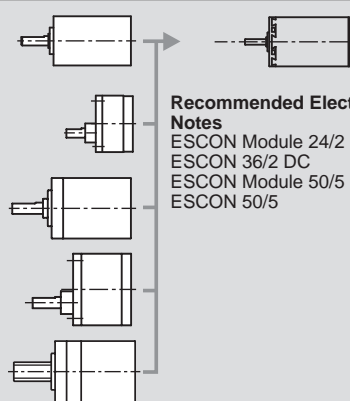
Ø32 mm
0.75 - 6.0 Nm
Page 303/304/307

Spur Gearhead

Ø38 mm
0.1 - 0.6 Nm
Page 313

Spindle Drive

Ø32 mm
Page 334–336



Recommended Electronics:
Notes Page 22
ESCON Module 24/2 378
ESCON 36/2 DC 378
ESCON Module 50/5 379
ESCON 50/5 380