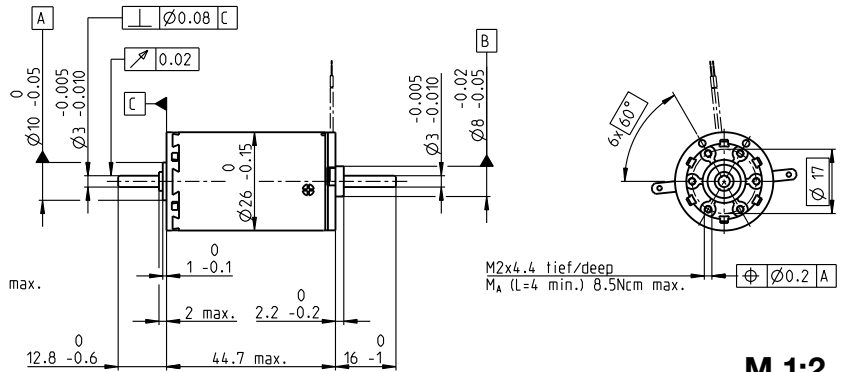
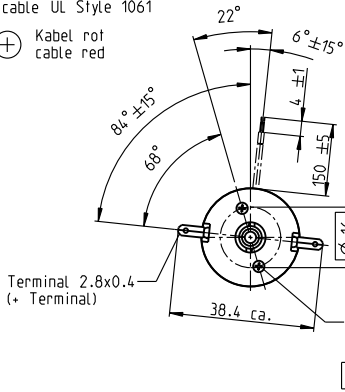


A-max 26 Ø26 mm, Graphite Brushes, 11 Watt

High Power

Kabel AWG 24/7
cable UL Style 1061

⊕ Kabel rot
cable red



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

Part Numbers

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		6	7.2	12	15	18	24	30	36	42	48	48
1 Nominal voltage	V	6	7.2	12	15	18	24	30	36	42	48	48
2 No load speed	rpm	9740	10400	8190	8450	8040	8890	7050	7280	7880	7470	6010
3 No load current	mA	143	130	57	47.5	37.1	31.7	18.9	16.4	15.5	12.7	9.66
4 Nominal speed	rpm	9210	9700	6720	6620	6080	6910	5000	5230	5840	5390	3900
5 Nominal torque (max. continuous torque)	mNm	5.48	6.26	14.2	17.4	18.7	18.4	18.2	18.2	18.1	17.8	17.9
6 Nominal current (max. continuous current)	A	1.08	1.08	1.08	1.08	0.919	0.749	0.47	0.404	0.373	0.305	0.247
7 Stall torque	mNm	102	96.4	80.2	80.5	77.1	83.3	63	65.2	70.3	64.5	51.4
8 Stall current	A	17.4	14.7	5.79	4.8	3.64	3.26	1.57	1.4	1.4	1.06	0.684
9 Max. efficiency	%	83	82	81	81	81	82	80	80	80	80	78
Characteristics												
10 Terminal resistance	Ω	0.345	0.49	2.07	3.13	4.94	7.36	19.1	25.8	30.1	45.1	70.2
11 Terminal inductance	mH	0.04	0.051	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	96.6	109	103	106	105	108	113	113	113	117	119
15 Mechanical time constant	ms	14.6	14.7	14.6	14.7	14.7	14.7	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	12.5 s
20 Thermal time constant motor	473 s
21 Ambient temperature	-30...+85°C
22 Max. winding temperature	+125°C

Mechanical data (ball bearings)	
23 Max. 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) (static, shaft supported)	75 N
28 Max. radial load, 5 mm from flange	1200 N

Mechanical data (sleeve bearings)	
23 Max. 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) (static, shaft supported)	80 N
28 Max. radial load, 5 mm from flange	1200 N

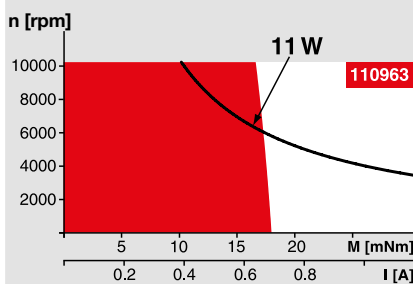
Other specifications	
29 Number of pole pairs	1
30 Number of commutator segments	13
31 Weight of motor	119 g

Values listed in the table are nominal.
Explanation of the figures on page 64.

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 28–36

Planetary Gearhead

Ø26 mm
0.75 - 4.5 Nm
Page 332

Spur Gearhead

Ø30 mm
0.07 - 0.2 Nm
Page 333

Planetary Gearhead

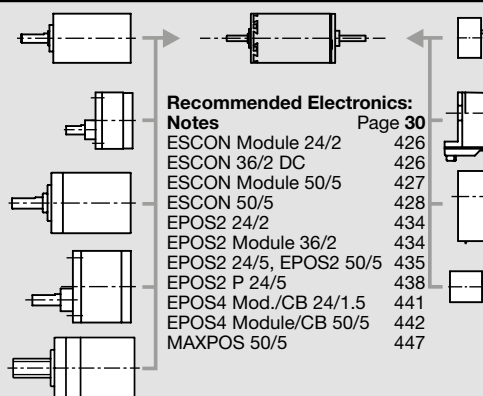
Ø32 mm
0.75 - 6.0 Nm
Page 334/335/338

Spur Gearhead

Ø38 mm
0.1 - 0.6 Nm
Page 344

Spindle Drive

Ø32 mm
Page 366–368



Recommended Electronics:

Notes	Page 30
ESCON Module 24/2	426
ESCON 36/2 DC	426
ESCON Module 50/5	427
ESCON 50/5	428
EPOS2 24/2	434
EPOS2 Module 36/2	434
EPOS2 24/5, EPOS2 50/5	435
EPOS2 P 24/5	438
EPOS4 Mod./CB 24/1.5	441
EPOS4 Module/CB 50/5	442
MAXPOS 50/5	447

Encoder MR

128 - 1000 CPT,
3 channels
Page 404

Encoder Enc

22 mm
100 CPT, 2 channels
Page 411

Encoder HED_ 5540

500 CPT,
3 channels
Page 414/416

Encoder MEnc

Ø13 mm
16 CPT, 2 channels
Page 394