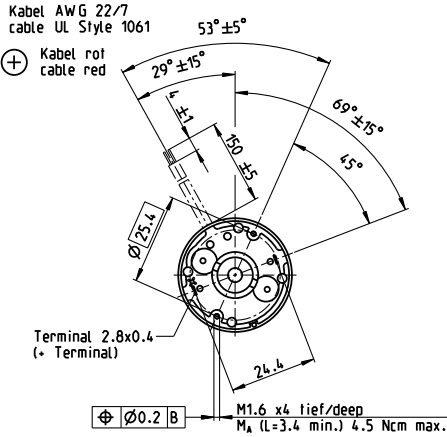


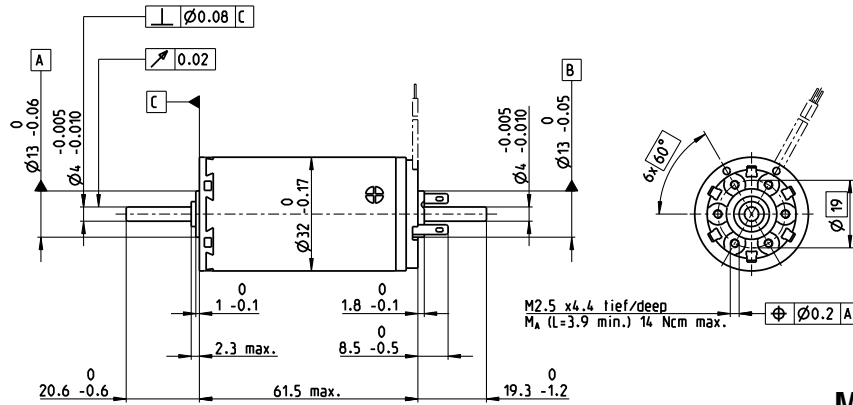
A-max 32 Ø32 mm, Graphite Brushes, 20 Watt

@ Work stations # 1, 5, 6, 7

High Power



Verlegung der Kabel im Buerstendeckel nicht dargestellt!
Cable routing not shown inside brush cover!



M 1:2

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

Part Numbers

with terminals	236666	236667	236668	236669	236670	236671	236672
with cables	353236	353237	301030	353239	353240	353241	353242

Motor Data								
Values at nominal voltage								
		6	9	12	24	30	36	42
1 Nominal voltage	V	6	9	12	24	30	36	42
2 No load speed	rpm	4880	5000	4670	6460	6160	5860	5650
3 No load current	mA	123	84.2	58.2	42.8	32.3	25.3	20.8
4 Nominal speed	rpm	3400	3480	3170	5060	4740	4430	4210
5 Nominal torque (max. continuous torque)	mNm	44.5	43.1	44	45.5	45.1	45.4	45
6 Nominal current (max. continuous current)	A	3.96	2.62	1.87	1.33	1.01	0.804	0.659
7 Stall torque	mNm	153	146	140	212	197	189	178
8 Stall current	A	13.2	8.57	5.77	6.02	4.27	3.24	2.54
9 Max. efficiency	%	80	81	81	84	83	83	83
Characteristics								
10 Terminal resistance	Ω	0.454	1.05	2.08	3.99	7.02	11.1	16.6
11 Terminal inductance	mH	0.0601	0.13	0.264	0.556	0.954	1.52	2.22
12 Torque constant	mNm/A	11.6	17	24.3	35.2	46.1	58.2	70.4
13 Speed constant	rpm/V	825	562	394	271	207	164	136
14 Speed / torque gradient	rpm/mNm	32.4	34.8	33.8	30.8	31.6	31.3	31.9
15 Mechanical time constant	ms	15	14.9	14.7	14.6	14.6	14.6	14.7
16 Rotor inertia	gcm ²	44.2	40.8	41.7	45.3	44.2	44.6	43.8

Specifications

Thermal data	
17 Thermal resistance housing-ambient	7.5 K/W
18 Thermal resistance winding-housing	2.1 K/W
19 Thermal time constant winding	17.8 s
20 Thermal time constant motor	521 s
21 Ambient temperature	-20...+85°C
22 Max. winding temperature	+125°C

Mechanical data (ball bearings)	
23 Max. speed	6000 rpm
24 Axial play	0.12 - 0.22 mm
25 Radial play	0.025 mm
26 Max. axial load (dynamic)	7.6 N
27 Max. force for press fits (static) (static, shaft supported)	110 N
28 Max. radial load, 5 mm from flange	2000 N

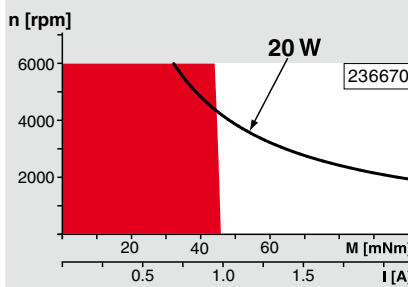
Mechanical data (sleeve bearings)	
23 Max. speed	6000 rpm
24 Axial play	0.12 - 0.22 mm
25 Radial play	0.012 mm
26 Max. axial load (dynamic)	5.0 N
27 Max. force for press fits (static) (static, shaft supported)	110 N
28 Max. radial load, 5 mm from flange	2000 N

Other specifications	
29 Number of pole pairs	1
30 Number of commutator segments	13
31 Weight of motor	240 g

Values listed in the table are nominal.
Explanation of the figures on page 79.

Option
Sleeve bearings in place of ball bearings

Operating Range



Comments

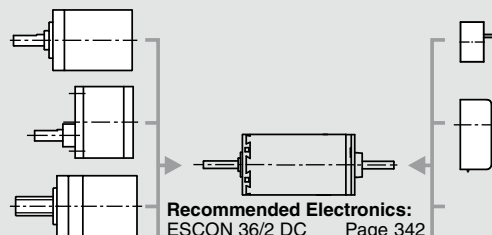
Continuous operation
In observation of above listed thermal resistance (lines 17 and 18) the maximum permissible winding temperature will be reached during continuous operation at 25°C ambient.
= Thermal limit.

Short term operation
The motor may be briefly overloaded (recurring).

— Assigned power rating

maxon Modular System

- Planetary Gearhead**
Ø32 mm
0.75 - 6.0 Nm
Page 272-277
- Spur Gearhead**
Ø38 mm
0.1 - 0.6 Nm
Page 282
- Spindle Drive**
Ø32 mm
Page 301-303



Overview on page 20-25

- Encoder MR**
256 - 1024 CPT,
3 channels
Page 320
- Encoder HED_ 5540**
500 CPT,
3 channels
Page 326/327

- Recommended Electronics:**
- ESCON 36/2 DC Page 342
 - ESCON Module 50/5 343
 - ESCON 50/5 344
 - ESCON 70/10 344
 - EPOS2 24/2 350
 - EPOS2 Module 36/2 350
 - EPOS2 24/5, EPOS2 50/5 351
 - EPOS2 P 24/5 354
 - EPOS3 70/10 EtherCAT 357
 - MAXPOS 50/5 360

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