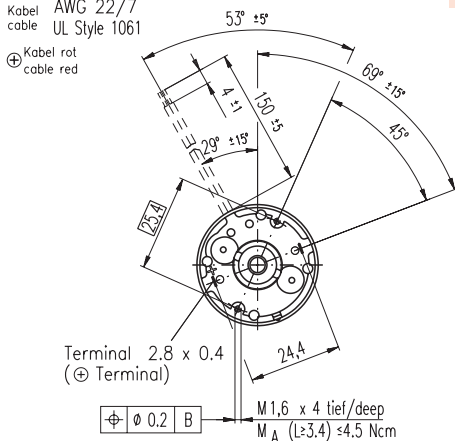


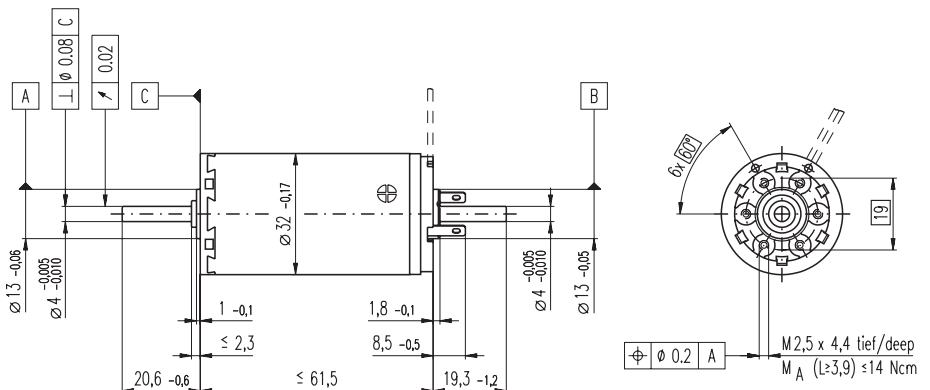
A-max 32 Ø32 mm, Graphite Brushes, 20 Watt

HighPower

Kabel AWG 22/7
cable UL Style 1061
⊕ Kabel rot
cable red



Verlegung der Kabel im
Bürstendeckel nicht dargestellt



M 1:2

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

Order Number

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

Motor Data

Values at nominal voltage									
1	Nominal voltage	V	6.0	9.0	12.0	24.0	30.0	36.0	42.0
2	No load speed	rpm	4850	4980	4660	6460	6160	5850	5650
3	No load current	mA	122	83.8	58.0	42.7	32.2	25.2	20.7
4	Nominal speed	rpm	3140	3350	3100	5020	4710	4420	4200
5	Nominal torque (max. continuous torque)	mNm	38.4	40.0	42.1	44.4	44.4	45.0	44.7
6	Nominal current (max. continuous current)	A	3.43	2.43	1.79	1.30	0.994	0.796	0.655
7	Stall torque	mNm	120	129	131	205	193	186	177
8	Starting current	A	10.4	7.62	5.39	5.81	4.18	3.19	2.51
9	Max. efficiency	%	77	79	80	83	83	83	83
Characteristics									
10	Terminal resistance	Ω	0.577	1.18	2.23	4.13	7.17	11.3	16.7
11	Terminal inductance	mH	0.0601	0.129	0.264	0.555	0.953	1.52	2.22
12	Torque constant	mNm / A	11.6	17.0	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	41.1	39.1	36.1	31.9	32.2	31.8	32.3
15	Mechanical time constant	ms	18.9	16.6	15.7	15.0	14.8	14.8	14.7
16	Rotor inertia	gcm ²	43.9	40.6	41.4	45.0	44.0	44.4	43.6

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	17.7 s
20	Thermal time constant motor	900 s
21	Ambient temperature	-20 ... +85°C
22	Max. permissible winding temperature	+125°C

Mechanical data (ball bearings)		
23	Max. permissible 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 / 2000 N
28	Max. radial loading, 5 mm from flange	32 N

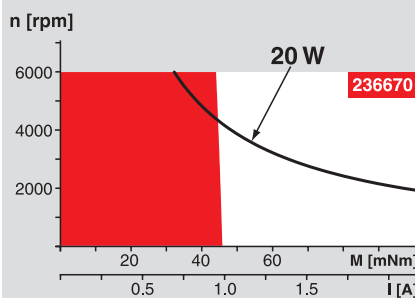
Mechanical data (sleeve bearings)		
23	Max. permissible speed	6000 rpm
24	Axial play	0.12 - 0.22 mm
25	Radial play	0.012 mm
26	Max. axial load (dynamic)	5.0 N
27	Max. force for press fits (static) (static, shaft supported)	110 N / 2000 N
28	Max. radial loading, 5 mm from flange	10.5 N

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 49.

Option
Sleeve bearings in place of ball bearings

Operating Range



Comments

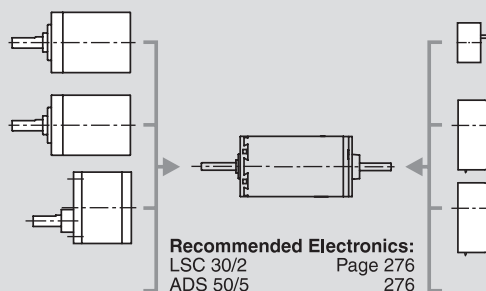
Continuous operation
In observation of above listed thermal resistance (lines 17 and 18) the maximum permissible winding temperature will be reached during continuous operation at 25°C ambient.
= Thermal limit.

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

— Assigned power rating

maxon Modular System

- Planetary Gearhead**
Ø32 mm
0.75 - 4.5 Nm
Page 239
- Planetary Gearhead**
Ø32 mm
1.0 - 6.0 Nm
Page 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**
256 - 1024 CPT,
3 channels
Page 259
- Encoder HEDS 5540**
500 CPT,
3 channels
Page 263
- Encoder HEDL 5540**
500 CPT,
3 channels
Page 265