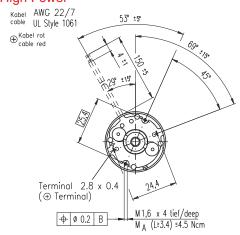
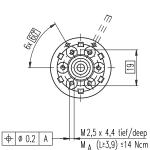
A-max 32 ∅32 mm, Graphite Brushes, 20 Watt

High Power



■ 0.08 Λ В Ш П Ø 13 -0,06 0000 -0,05 000 9 1 -0,1 1,8 -0,1 ≤ 2,3 8,5 -0,5 19,3 -1,2 20.6 -0.6 ≤ 61.5



M 1:2

Verlegung der Kabel im Bürsténdéckel nicht dargestellt

Stock program
Standard program
Special program (on request)

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

Order Number

	with	n 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)	Α	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	Α	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 n	nNm / 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	n / 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	acm ²	43.9	40.6	41.4	45.0	44.0	44.4	43.6				

Thermal data 75K/W Thermal resistance housing-ambient Thermal resistance winding-housing 2.1 K/W 18 17.7 s Thermal time constant winding Thermal time constant motor 900 s

Ambient temperature ... +85°C 22 Max. permissible winding temperature +125°C

Mechanical data (ball bearings)

Max. permissible speed 6000 rpm 0.12 - 0.22 mm Axial play Radial play 0.025 mm Max. axial load (dynamic) 7.6 N Max. force for press fits (static) 110 N (static, shaft supported) 2000 N Max. radial loading, 5 mm from flange 32 N

Mechanical data (sleeve bearings)									
23	Max. permissible speed	6000 rpm							
24	Axial play 0.1	2 - 0.22 mm							
25	Radial play	0.012 mm							
26	Max. axial load (dynamic)	5.0 N							
27	Max. force for press fits (static)	110 N							
	(static, shaft supported)	2000 N							
28	Max. radial loading, 5 mm from flange	10.5 N							

Other specifications

Number of pole pairs Number of commutator segments 13 Weight of motor 240 g

Values listed in the table are nominal. Explanation of the figures on page 49.

Sleeve bearings in place of ball bearings

Operating Range n [rpm] 20 W 6000 4000 2000 20 60 M [mNm] 10 İTA1

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

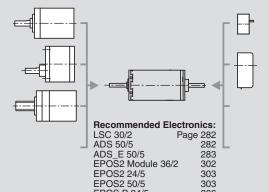
302 303 303

18

maxon Modular System

Planetary Gearhead Ø32 mm 0.75 - 6.0 Nm Page 232 / 234 / 235 Spur Gearhead Ø38 mm 0.1 - 0.6 Nm Page 239 **Spindle Drive** 32 mm

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EPOS P 24/5 Notes

Encoder MR 256 - 1024 CPT, 3 channels Page 265 Encoder HED_5540

Overview on page 16 - 21

500 CPT, 3 channels Page 269 / 271