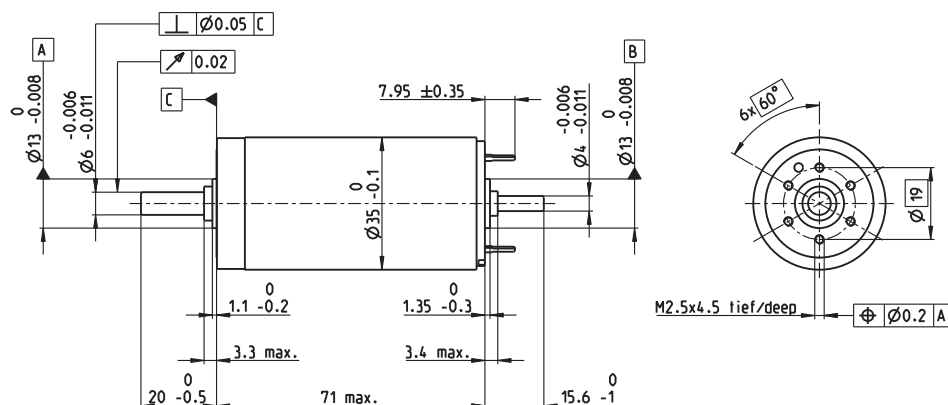
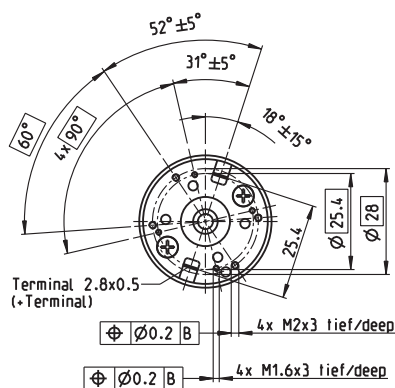


RE 35 Ø35 mm, Graphite Brushes, 90 Watt



M 1:2

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

Part Numbers

according to dimensional drawing
shaft length 15.6 shortened to 4 mm

273752	323890	273753	273754	273755	273756	273757	273758	273759	273760	273761	273762	273763
285785	323891	285786	285787	285788	285789	285790	285791	285792	285793	285794	285795	285796

Motor Data

Values at nominal voltage																	
1	Nominal voltage	V	15	24	30	42	48	48	48	48	48	48	48	48			
2	No load speed	rpm	7180	7740	7270	7560	7300	6670	5980	4760	3820	3140	2580	2110	1630		
3	No load current	mA	247	169	124	92.9	77.5	68.8	59.8	44.8	34.2	27.2	21.6	17.2	13		
4	Nominal speed	rpm	6500	7000	6490	6820	6530	5890	5180	3940	2990	2290	1720	1230	736		
5	Nominal torque (max. continuous torque)	mNm	73.1	101	97.2	101	99.4	101	101	104	106	106	106	105	105		
6	Nominal current (max. continuous current)	A	4	3.62	2.62	2.02	1.67	1.55	1.39	1.14	0.928	0.761	0.626	0.507	0.393		
7	Stall torque	mNm	929	1200	973	1080	980	890	776	620	498	398	322	255	196		
8	Stall current	A	47.8	41.1	25	20.7	15.8	13.1	10.2	6.5	4.2	2.76	1.84	1.19	0.708		
9	Max. efficiency	%	83	86	85	86	86	85	85	84	82	81	79	77	74		
Characteristics																	
10	Terminal resistance	Ω	0.314	0.583	1.2	2.03	3.05	3.67	4.69	7.38	11.4	17.4	26	40.2	67.8		
11	Terminal inductance	mH	0.085	0.191	0.34	0.62	0.87	1.04	1.29	2.04	3.16	4.65	6.89	10.3	17.1		
12	Torque constant	mNm/A	19.4	29.2	38.9	52.5	62.2	68	75.8	95.2	119	144	175	214	276		
13	Speed constant	rpm/V	491	328	246	182	154	140	126	100	80.5	66.4	54.6	44.7	34.6		
14	Speed / torque gradient	rpm/mNm	7.93	6.55	7.57	7.05	7.52	7.57	7.79	7.77	7.76	8.01	8.13	8.4	8.49		
15	Mechanical time constant	ms	5.65	5.44	5.4	5.35	5.34	5.35	5.35	5.36	5.36	5.37	5.38	5.39	5.41		
16	Rotor inertia	acm ²	68.1	79.2	68.1	72.5	67.9	67.4	65.6	65.9	65.9	64	63.2	61.2	60.8		

Specifications

Thermal data

17 Thermal resistance housing-ambient	6.2 K/W
18 Thermal resistance winding-housing	2.0 K/W
19 Thermal time constant winding	30.2 s
20 Thermal time constant motor	644 s
21 Ambient temperature	-30...+100°C
22 Max. winding temperature	+155°C

Mechanical data (ball bearings)

23	Max. speed	12000 rpm
24	Axial play	0.05 - 0.15 mm
25	Radial play	0.025 mm
26	Max. axial load (dynamic)	5.6 N
27	Max. force for press fits (static) (static, shaft supported)	110 N 1200 N
28	Max. radial load, 5 mm from flange	28 N

Other specifications

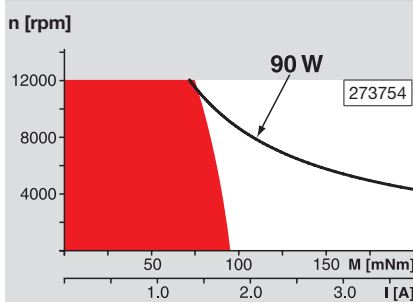
29	Number of pole pairs	1
30	Number of commutator segments	13
31	Weight of motor	340 g

Values listed in the table are nominal.
Explanation of the figures on page 151.

Option

Hollow shaft as special design
Preloaded ball bearings

Operating Range



Comments

Continuous operation

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

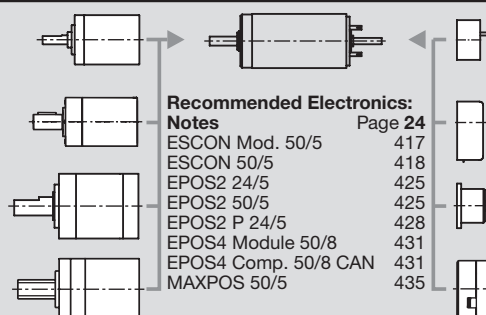
maxon Modular System

Planetary Gearhead
 Ø32 mm
 0.75 - 6.0 Nm
 Page 338-344

Planetary Gearhead
 Ø32 mm
 4.0 - 8.0 Nm
 Page 345

Planetary Gearhead
 Ø42 mm
 3 - 15 Nm
 Page 349

Spindle Drive
 Ø32 mm
 Page 370-372



Overview on page 20–27

Encoder MR
256 - 1024 CPT,
3 channels
Page 393

Encoder HED_ 5540
500 CPT,
3 channels
Page 399/401

DC-Tacho DCT
Ø22 mm
0.52 V
Page 411

Brake AB 28
24 VDC
0.4 Nm
Page 446

End cap
Page 451