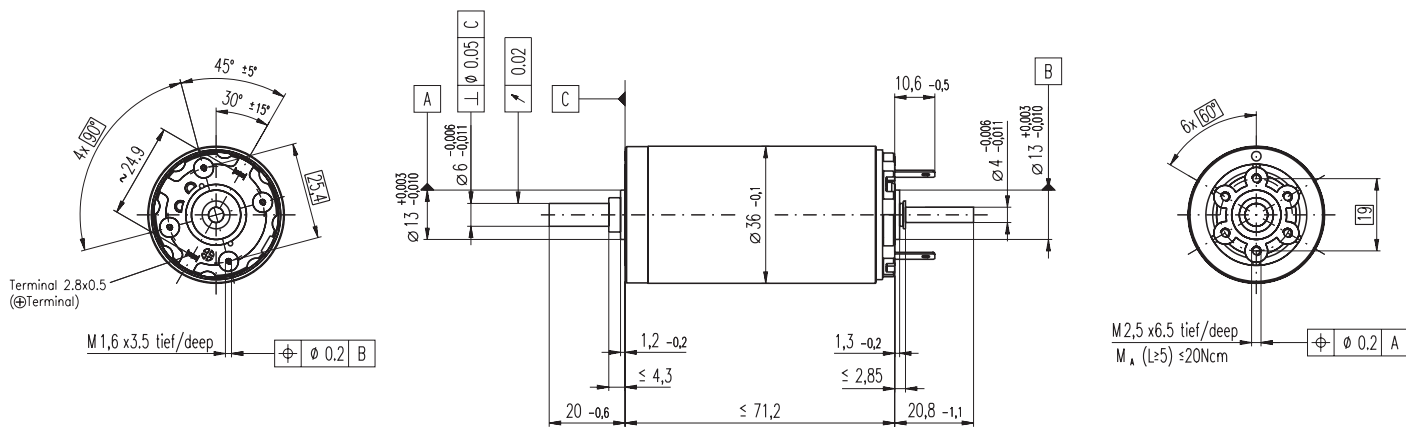


RE 36 \varnothing 36 mm, Graphite Brushes, 70 Watt



M 1:2

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

Order Number

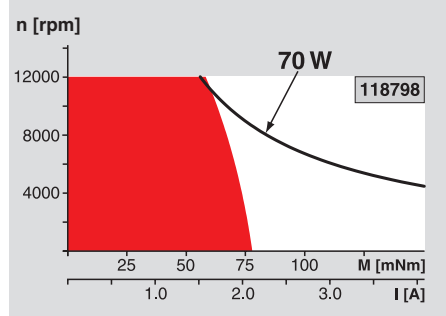
Motor Data	118797	118798	118799	118800	118801	118802	118803	118804	118805	118806	118807	118808	118809	118810
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Values at nominal voltage															
1 Nominal voltage	V	18.0	24.0	32.0	42.0	42.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	
2 No load speed	rpm	6610	6210	6790	7020	6340	6420	5220	4320	3450	2830	2280	1780	1420	
3 No load current	mA	153	105	88.6	70.4	61.4	54.6	41.6	32.6	24.7	19.5	15.2	11.5	8.97	
4 Nominal speed	rpm	5880	5530	6120	6350	5660	5740	4520	3600	2720	2090	1530	1010	651	
5 Nominal torque (max. continuous torque)	mNm	70.2	78.2	77.1	77.9	79.9	79.5	81.5	82.2	83.6	84.1	84.1	83.8	84.1	
6 Nominal current (max. continuous current)	A	2.90	2.25	1.82	1.45	1.33	1.18	0.978	0.813	0.660	0.545	0.439	0.343	0.275	
7 Stall torque	mNm	730	783	832	866	786	785	627	504	403	326	258	198	158	
8 Starting current	A	28.6	21.5	18.7	15.3	12.6	11.1	7.22	4.80	3.06	2.04	1.30	0.784	0.501	
9 Max. efficiency	%	84	85	86	86	86	86	85	84	82	81	79	77	75	
Characteristics															
10 Terminal resistance	Ω	0.628	1.11	1.71	2.74	3.35	4.32	6.65	10.0	15.7	23.5	36.8	61.3	95.8	
11 Terminal inductance	mH	0.0988	0.201	0.300	0.487	0.597	0.760	1.15	1.68	2.62	3.87	5.96	9.70	15.1	
12 Torque constant	mNm / A	25.5	36.4	44.5	56.6	62.6	70.7	86.9	105	131	160	198	253	315	
13 Speed constant	rpm / V	375	263	215	169	152	135	110	90.9	72.7	59.8	48.2	37.8	30.3	
14 Speed / torque gradient	rpm / mNm	9.23	8.05	8.27	8.18	8.14	8.25	8.41	8.65	8.67	8.80	8.96	9.17	9.21	
15 Mechanical time constant	ms	6.00	5.89	5.84	5.81	5.81	5.80	5.81	5.81	5.82	5.83	5.84	5.86	5.85	
16 Rotor inertia	gcm ²	62.0	69.9	67.5	67.8	68.1	67.2	66.0	64.2	64.1	63.3	62.2	61.1	60.7	

Specifications

- Thermal data**
- 17 Thermal resistance housing-ambient 6.4 K / W
 - 18 Thermal resistance winding-housing 3.4 K / W
 - 19 Thermal time constant winding 44.2 s
 - 20 Thermal time constant motor 1120 s
 - 21 Ambient temperature -30 ... +100°C
 - 22 Max. permissible winding temperature +125°C
- Mechanical data (ball bearings)**
- 23 Max. permissible 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) 5.6 N
 - 28 Max. radial loading, 5 mm from flange 1200 N
- Other specifications**
- 29 Number of pole pairs 1
 - 30 Number of commutator segments 13
 - 31 Weight of motor 350 g
- Values listed in the table are nominal. Explanation of the figures on page 49.
- ⚠ Tolerances may vary from the standard specification.
- Option**
- Preloaded 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 16 - 21

<p>Planetary Gearhead \varnothing32 mm 0.4 - 2.0 Nm Page 237</p> <p>Planetary Gearhead \varnothing32 mm 0.75 - 4.5 Nm Page 239</p> <p>Planetary Gearhead \varnothing32 mm 1.0 - 6.0 Nm Page 240</p> <p>Planetary Gearhead \varnothing42 mm 3 - 15 Nm Page 244</p>		<p>Encoder MR 256 - 1024 CPT, 3 channels Page 259</p> <p>Encoder HEDS 5540 500 CPT, 3 channels Page 262</p> <p>Encoder HEDL 5540 500 CPT, 3 channels Page 264</p> <p>DC-Tacho DCT \varnothing22 mm 0.52 V Page 271</p>	<p>Recommended Electronics:</p> <ul style="list-style-type: none"> ADS 50/5 Page 276 ADS 50/10 277 ADS_E 50/5 277 ADS_E 50/10 277 EPOS 24/5 294 EPOS2 50/5 295 EPOS P 24/5 297 <p>Notes 18</p>
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