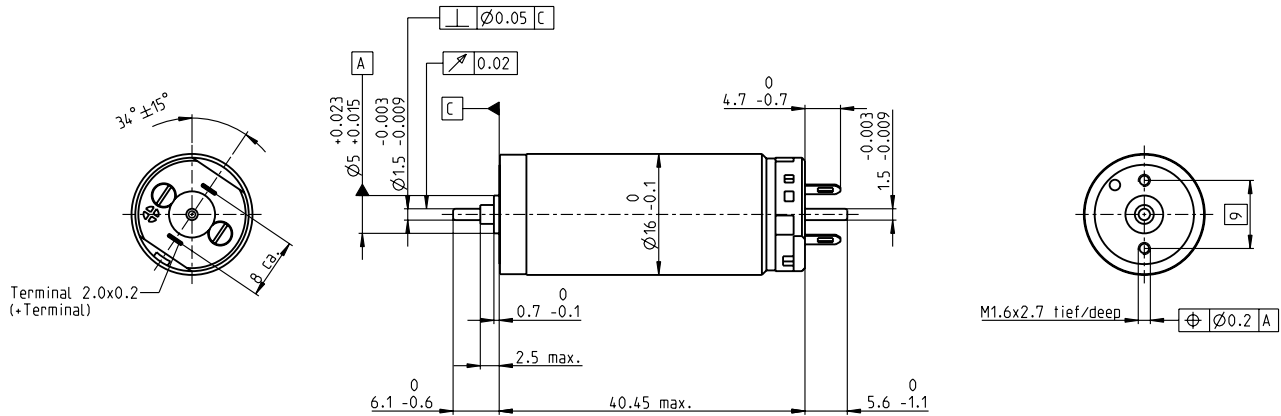


RE 16 Ø16 mm, Precious Metal Brushes CLL, 3.2 Watt



M 1:1

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

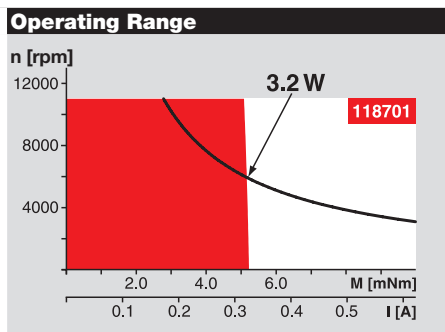
Part Numbers

118693	118694	118695	118696	118697	118698	118699	118700	118701	118702	118703	118704	118705	118706	118707
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Motor Data																	
Values at nominal voltage																	
1	Nominal voltage	V	1.8	2.4	3	3.2	4.5	4.8	7.2	9	12	12	15	18	24	30	48
2	No load speed	rpm	4990	6360	6890	6270	6740	5700	6890	6740	7130	5990	6010	5900	7250	6460	5500
3	No load current	mA	23.5	25.4	23	18.6	14.8	10.8	9.57	7.4	6.05	4.63	3.72	3.02	3.11	2.08	1.02
4	Nominal speed	rpm	4320	5510	5820	4930	5050	3630	4810	4630	5030	3830	3840	3730	5070	4220	3180
5	Nominal torque (max. continuous torque)	mNm	2.39	2.5	2.89	3.41	4.48	5.61	5.54	5.48	5.48	5.38	5.36	5.33	5.29	5.18	5.01
6	Nominal current (max. continuous current)	A	0.72	0.72	0.72	0.72	0.72	0.711	0.566	0.438	0.348	0.287	0.229	0.187	0.171	0.119	0.0614
7	Stall torque	mNm	15.5	16.9	17.3	15.2	17.4	15.2	18.1	17.4	18.6	14.9	14.9	14.5	17.6	15	11.9
8	Stall current	A	4.53	4.71	4.19	3.13	2.74	1.9	1.82	1.37	1.16	0.784	0.628	0.5	0.561	0.341	0.144
9	Max. efficiency	%	86	86	86	85	86	86	86	86	86	86	85	85	86	85	84
Characteristics																	
10	Terminal resistance	Ω	0.397	0.51	0.715	1.02	1.64	2.53	3.95	6.56	10.3	15.3	23.9	36	42.8	88	333
11	Terminal inductance	mH	0.021	0.023	0.03	0.042	0.071	0.113	0.174	0.284	0.452	0.639	0.993	1.48	1.75	3.44	12.1
12	Torque constant	mNm/A	3.43	3.58	4.13	4.84	6.34	7.99	9.92	12.7	16	19	23.7	28.9	31.4	44.1	82.7
13	Speed constant	rpm/V	2790	2660	2310	1970	1510	1190	962	753	597	502	403	330	304	217	115
14	Speed / torque gradient	rpm/mNm	323	379	400	415	391	378	383	389	386	404	406	410	414	432	465
15	Mechanical time constant	ms	5.84	5.71	5.56	5.46	5.36	5.31	5.29	5.29	5.27	5.29	5.3	5.31	5.31	5.36	5.42
16	Rotor inertia	gcm ²	1.73	1.44	1.33	1.26	1.31	1.34	1.32	1.3	1.3	1.25	1.25	1.24	1.23	1.18	1.11

Specifications

Thermal data		
17	Thermal resistance housing-ambient	30 K/W
18	Thermal resistance winding-housing	8.5 K/W
19	Thermal time constant winding	10.6 s
20	Thermal time constant motor	436 s
21	Ambient temperature	-20...+65°C
22	Max. winding temperature	+85°C
Mechanical data (sleeve bearings)		
23	Max. speed	11 000 rpm
24	Axial play	0.05 - 0.15 mm
25	Radial play	0.014 mm
26	Max. axial load (dynamic)	0.8 N
27	Max. force for press fits (static) (static, shaft supported)	15 N / 70 N
28	Max. radial load, 5 mm from flange	1.5 N



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**

Other specifications

29	Number of pole pairs	1
30	Number of commutator segments	7
31	Weight of motor	38 g

CLL = Capacitor Long Life

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

maxon Modular System

<p>Planetary Gearhead Ø16 mm 0.1 - 0.3 Nm Page 323</p> <p>Planetary Gearhead Ø16 mm 0.2 - 0.6 Nm Page 324</p> <p>Spindle Drive Ø16 mm Page 365-367</p>		<p>Encoder MR 32 CPT, 2 / 3 channels Page 388</p> <p>Encoder MR 128 / 256 / 512 CPT, 2 / 3 channels Page 390</p> <p>Encoder MEnc Ø13 mm 16 CPT, 2 channels Page 409</p>
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Recommended Electronics: Page 24

ESCON Module 24/2	416
ESCON 36/2 DC	416
ESCON Module 50/5	417
ESCON 50/5	418
EPOS2 24/2	424
EPOS2 Module 36/2	424
EPOS2 50/5	425
MAXPOS 50/5	435