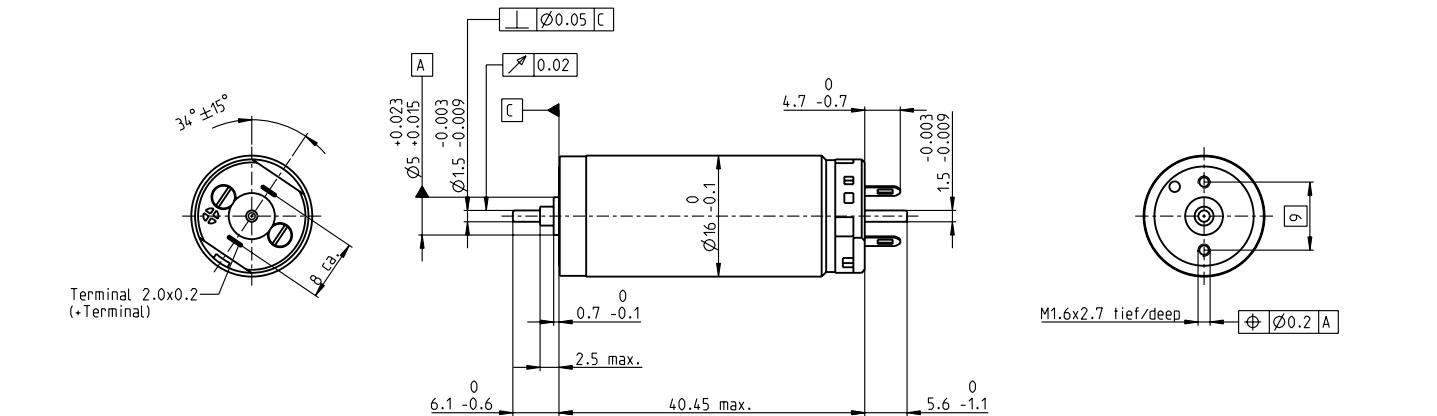


RE 16 Ø16 mm, precious metal brushes CLL, 3.2 watt

RE



M 1:1

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

Part numbers

Motor data		118693	118694	118695	118696	118697	118698	118699	118700	118701	118702	118703	118704	118705	118706	118707
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	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

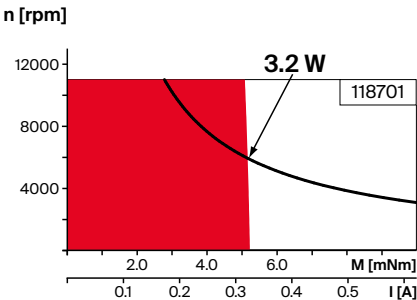
- Thermal data**
- 17 Thermal resistance housing-ambient 30 K/W
 - 18 Thermal resistance winding-housing 8.5 K/W
 - 19 Thermal time constant winding 10.6 s
 - 20 Thermal time constant motor 436 s
 - 21 Ambient temperature -20...+65°C
 - 22 Max. winding temperature +85°C

- Mechanical data (sleeve bearings)**
- 23 Max. speed 11000 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) 15 N
 - 27 Max. force for press fits (static) 70 N
 - 28 Max. radial load, 5 mm from flange 1.5 N

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 94.

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**

Modular system

- | | |
|-----------------|-----------------------|
| Gear | Sensor |
| 416_GP 16 A | 498_ENX 13 GAMA |
| 417_GP 16 C | 502_ENX 16 IMR |
| 469-471_GP 16 S | 533_Encoder MR 32 CPT |

Details on catalog page 48

- Motor Control**
- 550_ESCON Module 24/2
 - 550_ESCON 36/2 DC
 - 551_ESCON Module 50/5
 - 553_ESCON 50/5
 - 557_ESCON2 Nano 24/2
 - 557_ESCON2 Micro 60/5
 - 563_EPOS4 Micro 24/5
 - 564_EPOS4 Module 24/1.5
 - 564_EPOS4 Module 50/5
 - 565_EPOS4 Compact 24/5 3-axes
 - 566_EPOS4 Compact 24/1.5
 - 567_EPOS4 Compact 50/5
 - 569_EPOS4 50/5