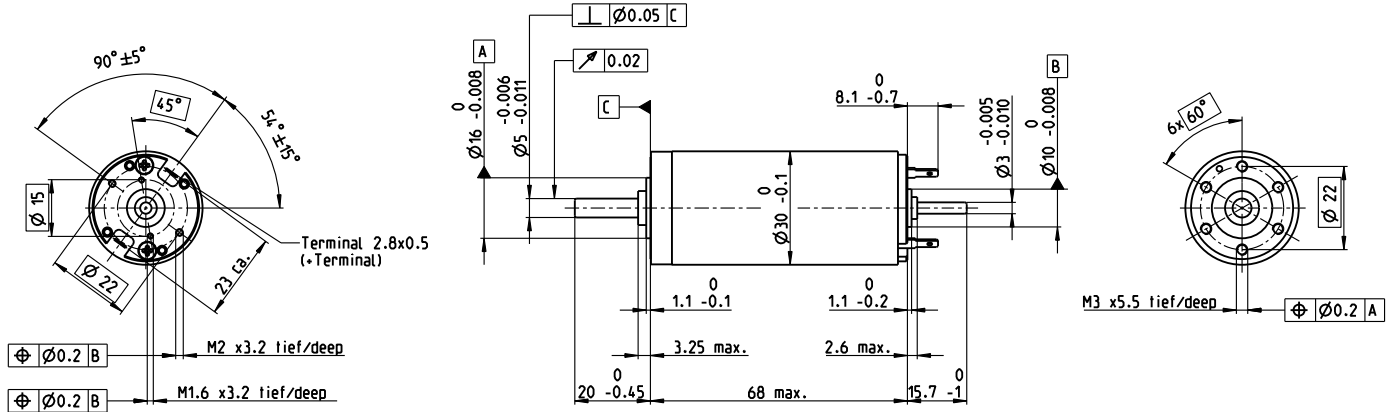


RE 30 Ø30 mm, precious metal brushes, 15 watt

RE



M 1:2

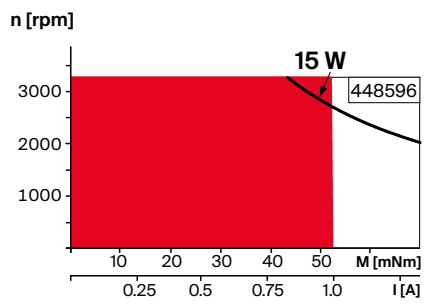
- Stock program
- Standard program
- Special program (on request)

Part Numbers

Motor Data (provisional)	448593	448594	448595	448596	
Values at nominal voltage					
1 Nominal voltage	V	6	9	12	18
2 No load speed	rpm	2870	3310	2870	3190
3 No load current	mA	41.6	33.4	20.8	15.9
4 Nominal speed	rpm	2450	2870	2420	2770
5 Nominal torque	mNm	53	53	53	53
6 Nominal current (max. continuous current)	A	2.7	2.08	1.35	1
7 Stall torque	mNm	364	402	342	401
8 Stall current	A	18.3	15.5	8.58	7.45
9 Max. efficiency	%	90	91	90	91
Characteristics					
10 Terminal resistance	Ω	0.378	0.63	1.45	2.47
11 Terminal inductance	mH	0.07	0.119	0.281	0.513
12 Torque constant	mNm/A	19.9	25.9	39.8	53.8
13 Speed constant	rpm/V	479	369	240	178
14 Speed/torque gradient	rpm/mNm	9.1	8.97	8.71	8.14
15 Mechanical time constant	ms	3.42	3.14	3.02	2.96
16 Rotor inertia	gcm ²	35.9	33.5	33.1	34.7

Specifications Operating Range Comments

- Thermal data**
- 17 Thermal resistance housing-ambient 6 K/W
 - 18 Thermal resistance winding-housing 1.7 K/W
 - 19 Thermal time constant winding 16.9 s
 - 20 Thermal time constant motor 593 s
 - 21 Ambient temperature -20...+85°C
 - 22 Max. winding temperature +100°C
- Mechanical data (ball bearings)**
- 23 Max. speed 3300 rpm
 - 24 Axial play at axial load 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) 110 N
 - (static, shaft supported) 1200 N
 - 28 Max. radial load, 5 mm from flange 28 N



- 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 Modular System Details on catalog page 44

29 Number of pole pairs	1	Gear	420_GP 32 A	Sensor	511_Encoder MR 256-1024 CPT 518_Encoder HEDS 5540 520_Encoder HEDL 5540	Motor Control	532_ESCON Module 24/2 532_ESCON 36/2 DC 533_ESCON Module 50/5 535_ESCON 50/5 541_EPOS4 Micro 24/5 542_EPOS4 Module 24/1.5 542_EPOS4 Module 50/5 543_EPOS4 Compact 24/5 3-axes 544_EPOS4 Compact 24/1.5 545_EPOS4 Compact 50/5 547_EPOS4 50/5
30 Number of commutator segments	13						
31 Weight of motor	260 g						

Values listed in the table are nominal.
Explanation of the figures on page 90.

Option
Preloaded ball bearings