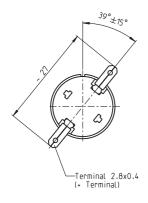
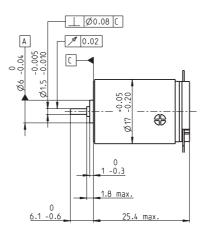
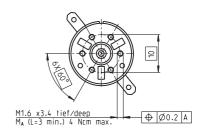
## RE-max 17 Ø17 mm, Precious Metal Brushes CLL, 4 Watt







## M 1:1

Stock program **Part Numbers** Standard program Special program (on request) 214895 **214896** 214897 214898 214899 215982 215983 215985 215986 215987 **Motor Data** Values at nominal voltage Nominal voltage 12 21 11300 10600 10700 11300 11000 No load speed rpm 9650 9830 10200 10900 3 No load current mA 40.7 21 9.2 7.5 5.81 4.91 4.06 3.47 1.94 4 Nominal speed 10500 8210 8740 rpm 7810 8110 8520 7280 7680 8290 5 Nominal torque (max. continuous torque) mNm 1.42 2.57 3.67 3.64 3.61 3.63 3.62 3.59 3.53 3.47 Nominal current (max. continuous current) 0.6 0.35 0.281 0.209 0.18 0.16 0.132 0.115 0.0744 7 Stall torque mNm 18.5 13.1 15.5 15.5 16.1 15.9 14 14.4 14.8 8 Starting current Α 7.32 2.95 1.45 1.17 0.91 0.772 0.604 0.518 0.473 0.262 9 Max. efficiency % 85 85 85 85 85 86 84 85 85 84 Characteristics 10 Terminal resistance Ω 0.41 8.3 12.8 23.1 39.7 76.2 1.52 31.1 57.9 183 11 Terminal inductance mH 0.0114 0.0349 0.206 0.314 0.558 0.759 0.956 1.38 1.75 4.04 mNm/A 2.53 4.42 10.7 13.3 20.6 23.2 47.6 12 Torque constant 17.7 27.8 31.4 13 Speed constant 2160 rpm/V 3780 889 540 463 412 344 304 201 720 705 707 716 14 Speed / torque gradient rpm/mNm 613 687 696 698 739 744 773

## 15 Mechanical time constant 6.81 6.4 6.25 6.26 6.27 6.28 6.31 6.29 6.31 6.42 ms 16 Rotor inertia 0.859 0.838 qcm<sup>2</sup> 1.06 0.82 0.868 0.849 0.859 0.852 0.816 0.793 **Specifications Operating Range** Comments Thermal data n [rpm] Thermal resistance housing-ambient 35 K/W In observation of above listed thermal resistance 4.0 W Thermal resistance winding-housing 12 K/W 20000 (lines 17 and 18) the maximum permissible winding 214897 19 Thermal time constant winding 7.75 s temperature will be reached during continuous op-343 sThermal time constant motor 15000 eration at 25°C ambient. -30...+65°C Ambient temperature = Thermal limit. 22 Max. permissible winding temperature +85°C 10000 Mechanical data (sleeve bearings) Short term operation 5000 23 Max. permissible speed 19000 rpm The motor may be briefly overloaded (recurring). 24 Axial play 0.05 - 0.15 mm Radial play 0.012 mm 2.0 3.0 4.0 5.0 Max. axial load (dynamic) 0.8 N Assigned power rating 0.3 0.4 27 Max. force for press fits (static)28 Max. radial load, 5 mm from flange 35 N 1.4 N Mechanical data (ball bearings) 23 Max. permissible speed 19000 rpm maxon Modular System Overview on page 20-25 24 Axial play 0.05 - 0.15 mm **Planetary Gearhead** 25 Radial play 0.025 mm Ø16 mm 26 Max. axial load (dynamic) 2.2 N 0.1 - 0.3 Nm Max. force for press fits (static) 30 N Page 254 28 Max. radial load, 5 mm from flange 7 8 N Other specifications 29 Number of pole pairs

26 g

Values listed in the table are nominal. Explanation of the figures on page 79.

30 Number of commutator segments

Weight of motor CLL = Capacitor Long Life

Ball bearings in place of sleeve bearings Pigtails in place of terminals Without CLL

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Notes

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