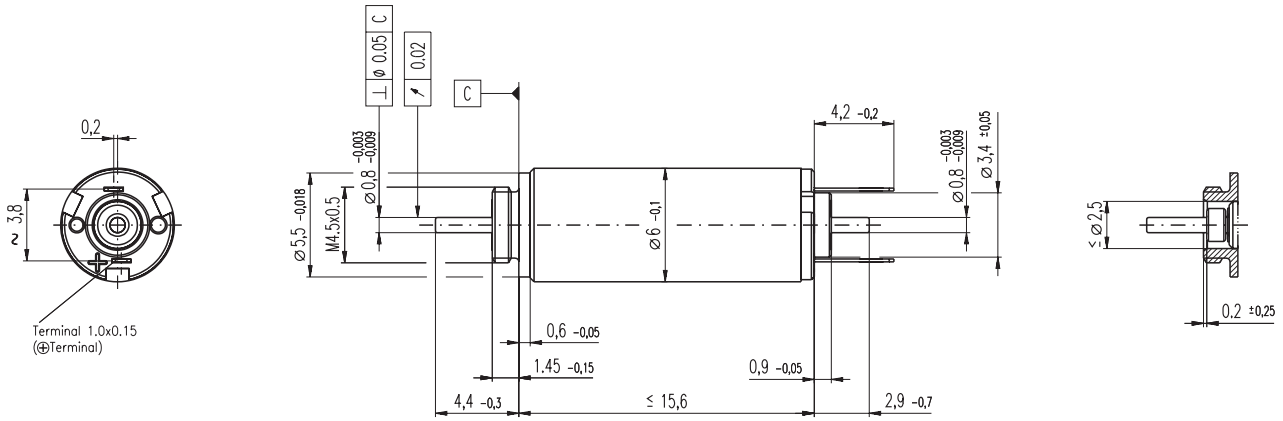


RE 6 $\varnothing 6$ mm, Precious Metal Brushes, 0.3 Watt



M 2.5:1

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

Order Number

| | | | |
|--------|--------|--------|--------|
| 349189 | 349190 | 349191 | 349192 |
|--------|--------|--------|--------|

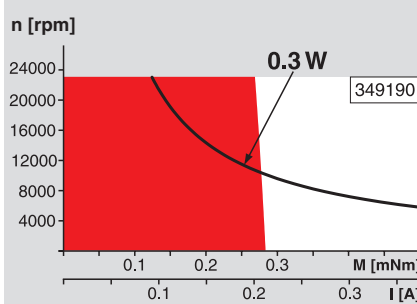
Motor Data (provisional)

| Values at nominal voltage | | 349189 | 349190 | 349191 | 349192 | |
|---------------------------|---|------------------|--------|--------|--------|--------|
| 1 | Nominal voltage | V | 1.5 | 3.0 | 4.5 | 6.0 |
| 2 | No load speed | rpm | 18200 | 18500 | 18400 | 18400 |
| 3 | No load current | mA | 48.0 | 24.2 | 16.1 | 12.1 |
| 4 | Nominal speed | rpm | 4520 | 5620 | 5370 | 5320 |
| 5 | Nominal torque (max. continuous torque) | mNm | 0.304 | 0.327 | 0.322 | 0.321 |
| 6 | Nominal current (max. continuous current) | A | 0.449 | 0.241 | 0.158 | 0.118 |
| 7 | Stall torque | mNm | 0.419 | 0.485 | 0.469 | 0.465 |
| 8 | Starting current | A | 0.581 | 0.336 | 0.217 | 0.161 |
| 9 | Max. efficiency | % | 52.4 | 55.2 | 54.5 | 54.4 |
| Characteristics | | | | | | |
| 10 | Terminal resistance | Ω | 2.58 | 8.92 | 20.8 | 37.2 |
| 11 | Terminal inductance | mH | 0.0227 | 0.0907 | 0.204 | 0.363 |
| 12 | Torque constant | mNm / A | 0.72 | 1.44 | 2.16 | 2.88 |
| 13 | Speed constant | rpm / V | 13300 | 6630 | 4420 | 3310 |
| 14 | Speed / torque gradient | rpm / mNm | 47500 | 41000 | 42400 | 42700 |
| 15 | Mechanical time constant | ms | 7.45 | 7.18 | 7.24 | 7.24 |
| 16 | Rotor inertia | gcm ² | 0.015 | 0.0167 | 0.0163 | 0.0162 |

Specifications

- Thermal data**
- 17 Thermal resistance housing-ambient 77 K / W
 - 18 Thermal resistance winding-housing 16.2 K / W
 - 19 Thermal time constant winding 1.39 s
 - 20 Thermal time constant motor 16.3 s
 - 21 Ambient temperature -20 ... +65°C
 - 22 Max. permissible winding temperature +85°C
- Mechanical data (sleeve bearings)**
- 23 Max. permissible speed 23000 rpm
 - 24 Axial play 0.02 - 0.1 mm
 - 25 Radial play 0.012 mm
 - 26 Max. axial load (dynamic) 0.15 N
 - 27 Max. force for press fits (static) 10 N
 - 28 Max. radial loading, 4 mm from flange 0.6 N

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**

Other specifications

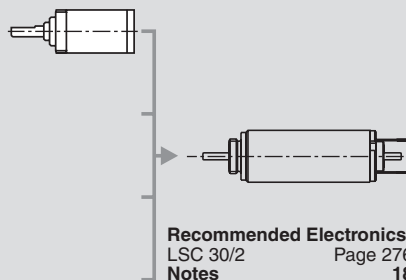
- 29 Number of pole pairs 1
- 30 Number of commutator segments 5
- 31 Weight of motor 2.3 g

Values listed in the table are nominal.
Explanation of the figures on page 49.

maxon Modular System

Overview on page 16 - 21

Planetary Gearhead
 $\varnothing 6$ mm
0.002 - 0.03 Nm
Page 211



Recommended Electronics:
LSC 30/2 Page 276
Notes 18