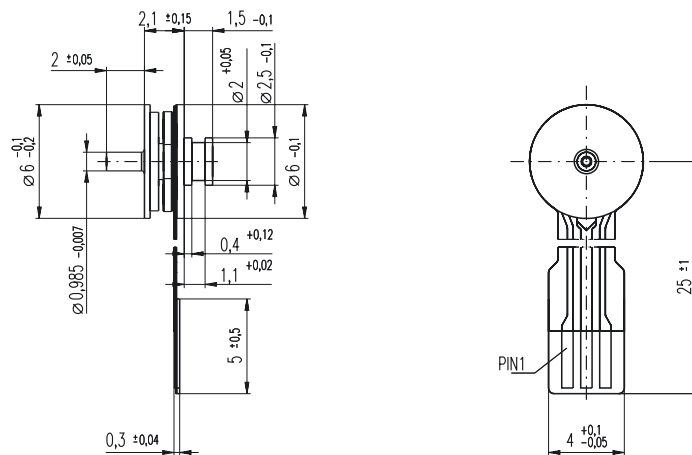


# EC 6 Flat motor $\varnothing 6$ mm, brushless, 0.03 Watt



M 2.5:1

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

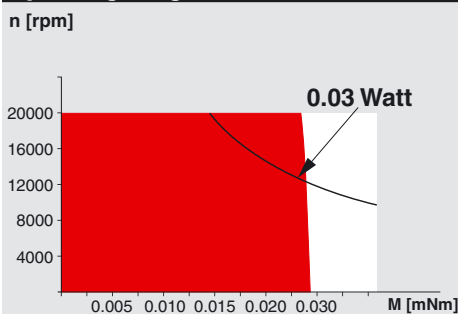
**Order Number**

sensorless 263800

Motor Data (provisional)		
1	Assigned power rating	W 0.03
2	Nominal voltage	Volt 1.0
3	No load speed	rpm 15900
4	Stall torque	mNm 0.0049
5	Speed / torque gradient	rpm / mNm 5960000
6	No load current	mA 6.6
7	Terminal resistance phase to phase	Ohm 68
8	Max. permissible speed	rpm 20000
9	Max. continuous current at 6 000 rpm	A 0.074
10	Max. continuous torque at 6 000 rpm	mNm 0.024
11	Max. efficiency	% 22.5
12	Torque constant	mNm / A 0.33
13	Speed constant	rpm / V 28900
14	Mechanical time constant	ms 393
15	Rotor inertia	gcm <sup>2</sup> 0.0063
16	Terminal inductance phase to phase	mH 0.121
17	Thermal resistance housing-ambient	K / W 80
18	Thermal resistance winding-housing	K / W 75
19	Thermal time constant windings	s 1.01
20	Thermal time constant stator	s n.v.

Specifications	Operating Range	Comments	Details on page 149
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- Axial preload > 0.03 N defined through magnetic force between rotor and stator
- **Ruby bearing** with axial pivot bearing
- Ambient temperature range -40 ... +85°C
- Max. permissible winding temperature +100°C
- Weight of motor 0.35 g
- 8 pole permanent magnet
- 3 phased coil stator with 2 pole shoes each
- Values listed in the table are nominal.
- **Connection sensorless**
  - Pin 1 Motor winding 3
  - Pin 2 Motor winding 2
  - Pin 3 Motor winding 1
- **Connector Article number**
  - MOLEX 52207-0390



- Curve of constant assigned power rating
- Continuous operation**  
In observation of above listed thermal resistances (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).