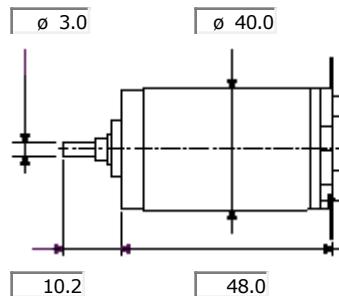


maxon motor

F 2140

Ø 40 mm, Graphite brushes , 6 Watt



Dimensions in mm.
This schematic is not drawn to scale.

Order no.

2140.937-22.116-050

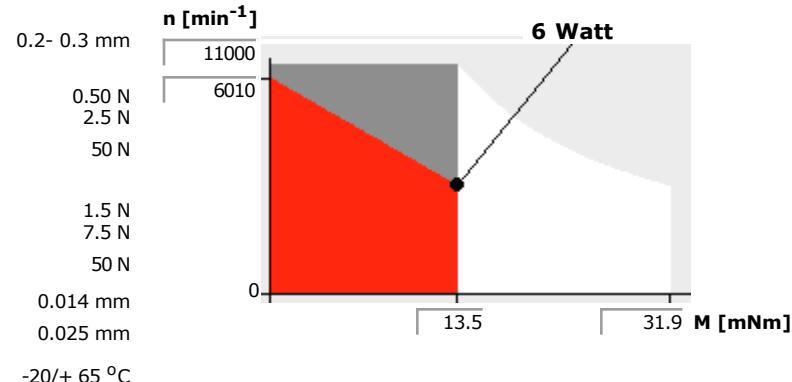
Motor data

Power rating	W	6.0
Nominal voltage	Volt	24.0
No load speed	min ⁻¹	3990
Stall torque	mNm	31.9
Speed/torque gradient	min ⁻¹ mNm ⁻¹	130
No load current	mA	15
Starting current	mA	578
Terminal resistance	Ohm	41.5
Max. permissible speed	min ⁻¹	11000
Max. continuous current	mA	244
Max. continuous torque	mNm	13.5
Max. power output at nominal voltage	mW	3250
Max. efficiency	%	70.0
Torque constant	mNm A ⁻¹	55.2
Speed constant	min ⁻¹ v ⁻¹	173
Mechanical time constant	ms	30
Rotor inertia	gcm ²	22.1
Terminal inductance	mH	5.02
Thermal resistance housing-ambient	KW ⁻¹	10
Thermal resistance rotor-housing	KW ⁻¹	8.8
Thermal time constant winding	s	42

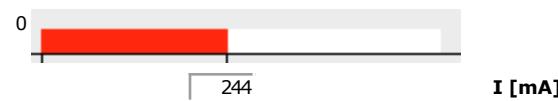
Specifications

- Axial play 0.2- 0.3 mm
- Max. load of **sleeve bearings**
axial (dynamic)
radial (5 mm from flange)
- Press-fit force (static) 50 N
- Max. load of **ball bearings**
axial (dynamic)
radial (5 mm from flange)
- Press-fit force (static) 50 N
- Radial play **sleeve bearings** 0.014 mm
- Radial play **ball bearings** 0.025 mm
- Ambient temperature range -20/+ 65 °C

Operating range



- Max. rotor temperature + 85 °C
- Number of commutator segments 7
- Weight of motor 190 g
- Values listed in the table are nominal.
- Option : ball bearings instead of sleeve bearings



Recommended operating range

Continuous operation

Short term operation

This graph is not drawn to scale.



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