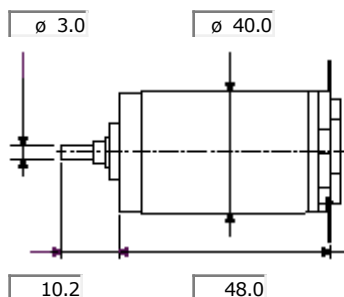




# F 2140

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 <sup>-1</sup>	3990
Stall torque	mNm	31.9
Speed/torque gradient	min <sup>-1</sup> mNm <sup>-1</sup>	130
No load current	mA	15
Starting current	mA	578
Terminal resistance	Ohm	41.5
Max. permissible speed	min <sup>-1</sup>	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 <sup>-1</sup>	55.2
Speed constant	min <sup>-1</sup> V <sup>-1</sup>	173
Mechanical time constant	ms	30
Rotor inertia	gcm <sup>2</sup>	22.1
Terminal inductance	mH	5.02
Thermal resistance housing-ambient	KW <sup>-1</sup>	10
Thermal resistance rotor-housing	KW <sup>-1</sup>	8.8
Thermal time constant winding	s	42

**Specifications**

- Axial play 0.2- 0.3 mm
- Max. load of **sleeve bearings**
  - axial (dynamic) 0.50 N
  - radial ( 5 mm from flange ) 2.5 N
  - Press-fit force (static) 50 N
- Max. load of **ball bearings**
  - axial (dynamic) 1.5 N
  - radial ( 5 mm from flange ) 7.5 N
  - 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
- Max. rotor temperature + 85° C
- Number of commutator segments 7
- Weight of motor 190 g

**Operating range**

