

26BC 3C

Electronically Commutated Sensorless Motor

dimensions in mm
mass: 72 g

26BC 3C ☉☉ • 101

Color	Designation
violet	phase 1
grey	phase 2
white	phase 3

Winding Type	☉☉	-109P
Coil Dependent Parameters		
Phase resistance	ohm	5
Phase inductance	mH	3.8
Back-EMF constant	V/1000 rpm	0.73
Torque constant	mNm/A	7 (0.99)
Dynamic Parameters		
Rated voltage	V	12
No-load current	mA	180
No-load speed	rpm	14800
Max. continuous stall torque	mNm (oz-in)	7
Max. continuous stall torque	A	1
Max. continuous torque up to 10 krpm	mNm (oz-in)	5.4 (0.76)
Max. continuous current up to 10 krpm	A	0.78
Max. continuous power up to 10 krpm	W	5.7
Intrinsic Parameters		
Motor Constant	mNm/W ^{1/2} (oz-in/ W ^{1/2})	3.1
Rotor inertia	kgm ² 10 ⁻⁷	9.4
Mechanical time constant	ms	95
Electrical time constant	ms	0.76
Thermal resistance coil-ambient	°C/W	14

- Axial play*: 10 µm
* with axial load > 2.5N, max. axial play is 130µm
- Radial play (2.5N rad.load) 10 µm
- Axial load (static) 25N
- Radial load (static) 25N
- Max. permissible coil temp. 125°C (257°F)
- Recommended ambient temperature range 0 to 70°C (32 to 158°F)

The 26BC-3C is a sensorless motor with a delta-connected winding. It is intended to use with a sensorless driver. If the winding center-point is needed, it can be generated by using three external resistors attached to the motor phases and Y-connected together.

