

BL21 Brushless DC motor

1.5 Watt



Features:

- Long life (20.000 hours)
- Low EMI
- Low acoustical noise
- Compact, low mounting profile

Options:

- Suitable for gearbox combination



Motor data

Motor order number	4322 016 21001
Nominal voltage	10 V
No load speed	10000 rpm
Torque constant	7.9 mNm/A
Nominal speed	6000 rpm
Nominal torque	2 mNm
Stator resistance between 2 phases	10?
Stator inductance between 2 phases	1.0 mH
Mechanical time constant	95 ms
Max. winding temperature	90 °C
Thermal resistance from winding to ambient	62 K/W
Thermal resistance from winding to ambient with cooling plate (aluminium, 100x100x2)	32 K/W
Operating temperature range	0/+50 °C
Insulation resistance at 500V	Min.1 M?

Rotor inertia (kgm ²)	0.53x10 ⁻⁶
Mass of motor	16 g
Maximum radial load 8mm from mounting front at 6000 rpm (no axial load towards flange)	3.0 N
Maximum axial load at 6000 rpm	
- towards flange (no radial load)	2.0 N
- from flange	1.0 N

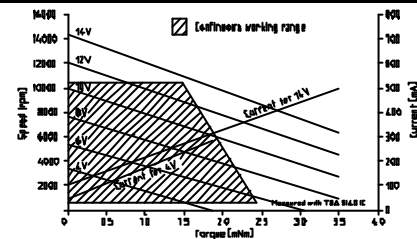
Brushless DC Motor with laminated 9 coil stator and 12 pole rotor fitted with 4 wire flat cable and connector. Motor using sensorless drive technology, to be used in combination with back-EMF commutation motor-IC
Coil configuration : 3 phases, Y connected

For thermal reasons it is advised to mount the motor on a heat conducting frame if high output is desired

Electrical connection

Pin no.	Description
1	Centre tap
2	Phase lead
3	Phase lead
4	Phase lead

Performance curve



Dimensional drawing

