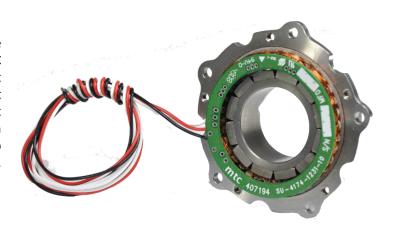


## MDC-BL-43

The MDC-BL-43, especially designed for applications where high torque to volume ratio is needed, is a brushless DC motor with rare-earth/cobalt magnet rotor and Hall effect rotor position sensor. Peak torque obtained on the axis at nominal voltage of 28 VDC is 350 mNm. An important feature is its low cogging torque, allowing smooth motion across the whole range of speeds. MDC-BL-43 conforms to MIL-STD. Operating temperature range: -40 to +80 °C. Vibration toleration: according to MIL-STD-810.



### **Specifications**

Parameter	Unit	Value	Tolerance
Operating voltage	VDC	28	±0.5
Operating torque	mNm	140	max.
Winding resistance	Ohm	6	max.
Winding inductance	mHy	1.2	±30%
No load current	А	0.5	max.
No load speed	rpm	3500	±10%
BEMF constant	V/rad/s	0.07	min.
Cogging torque	mNm	20	max.
Peak torque	mNm	350	max.
Torque constant	Nm / A	0.07	min.
Winding to case dielectric resistance, @ 250 VDC	MOhm	100	min.
Hall effect sensor circuits to case dielectric resistance, @ 100 VDC	MOhm	50	min.
Operating temperature range	°C	-40 to +80	
Weight	gm	100	±5
Dimensions, in mm, as in above drawing			

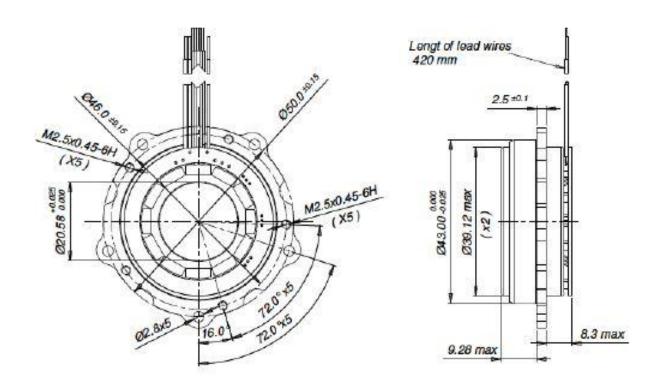
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# MDC-BL-43

### **Drawing**



All dimensions are in mm

#### **For Additional Information**

To learn more about the MDC-BL-43 or other MTC products, contact MTC on +972 4 998 7772 or email marketing@mtcind.com