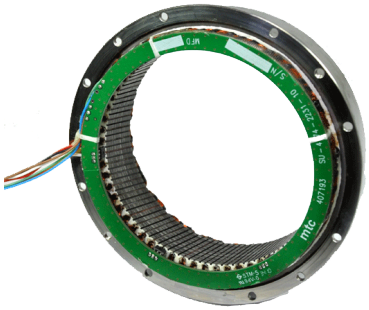
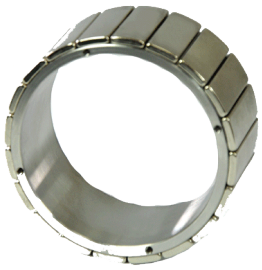
Brushless DC Motor

MDC-BL-95

The MDC-BL-95, especially designed for applications where high torque to volume ratio is needed, is a brushless DC motor, with rare-earth/cobalt magnets rotor and Hall effect rotor position sensor. Peak torque obtained on the axis at nominal voltage of 28 VDC is 5 Nm. An important feature is its low cogging torque, allowing smooth motion across the whole range of speeds. MDC-BL-95 conforms to MIL-STD. Operating temperature range : -40 to +80 °C. Vibration toleration according to MIL-STD-810.





Specifications

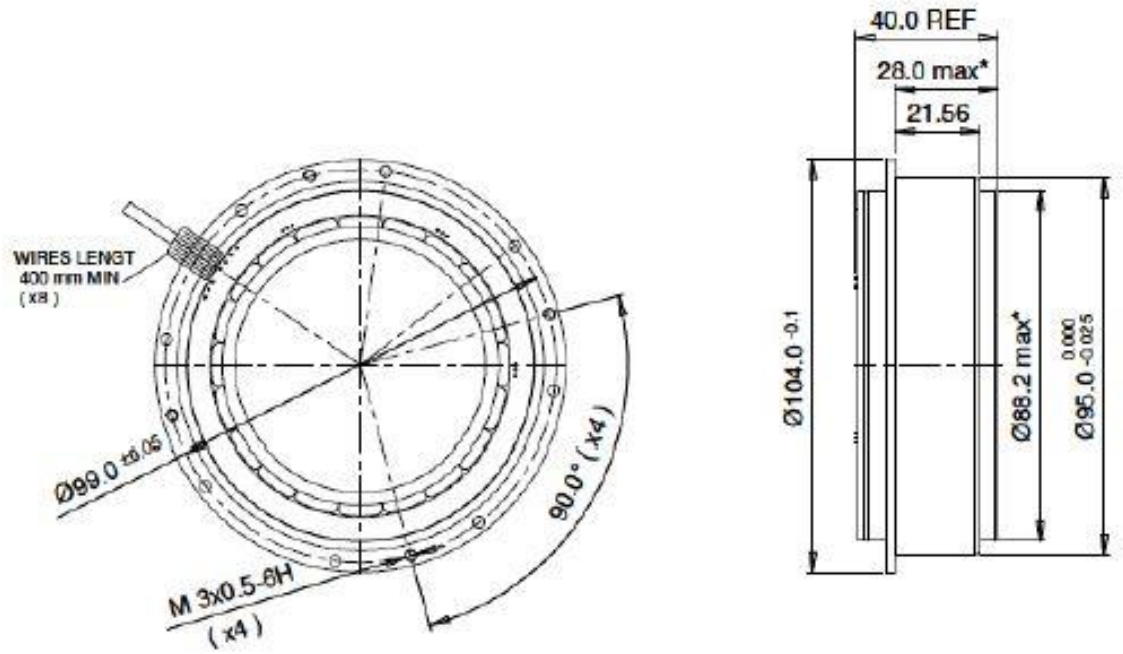
Parameter	Unit	Value	Tolerance
Operating voltage	VDC	28	±0.5
Operating torque	Nm	2.0	min.
Winding resistance	Ohm	2.5	±10%
Winding inductance	mH	0.9	±30%
No load current	A	0.5	max.
No load speed	rpm	550	±10%
BEMF constant	V/rad/s	0.45	min.
Cogging torque	mNm	200	max.
Peak torque	Nm	5	max.
Torque constant	Nm / A	0.45	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 - +80	
Weight	gm	700	±10
Dimensions, in mm, as in above drawing.			

Doc. # 301185 Rev. A (04/2014)

MTC Industries & Research Carmiel Ltd
PO Box 232, Karmiel 2161102, Israel
Tel: +972 4 998 7772
www.mtcind.com

MDC-BL-95

Drawing



All dimensions are in mm

For Additional Information

To learn more about the MDC-BL-95 or other MTC products, contact MTC on **+972 4 998 7772** or email **marketing@mtcind.com**

Doc. # 301185 Rev. A (04/2014)

MTC Industries & Research Carmiel Ltd
PO Box 232, Karmiel 2161102, Israel
Tel: +972 4 998 7772
www.mtcind.com