

MDC-11

This motor was especially designed for applications where high torque to volume ratio is needed. It is a DC motor with wound rotor, rare-earth/cobalt magnets stator and Aq-C brushes. Peak torque obtained on the axis at nominal voltage of 12 V DC is 0.102 Nm. Available in different housings, or frameless. Is conform to MIL STD. Temperature range: $-40 \div +80$ [°C]. Vibration toleration: according to MIL-STD-810.

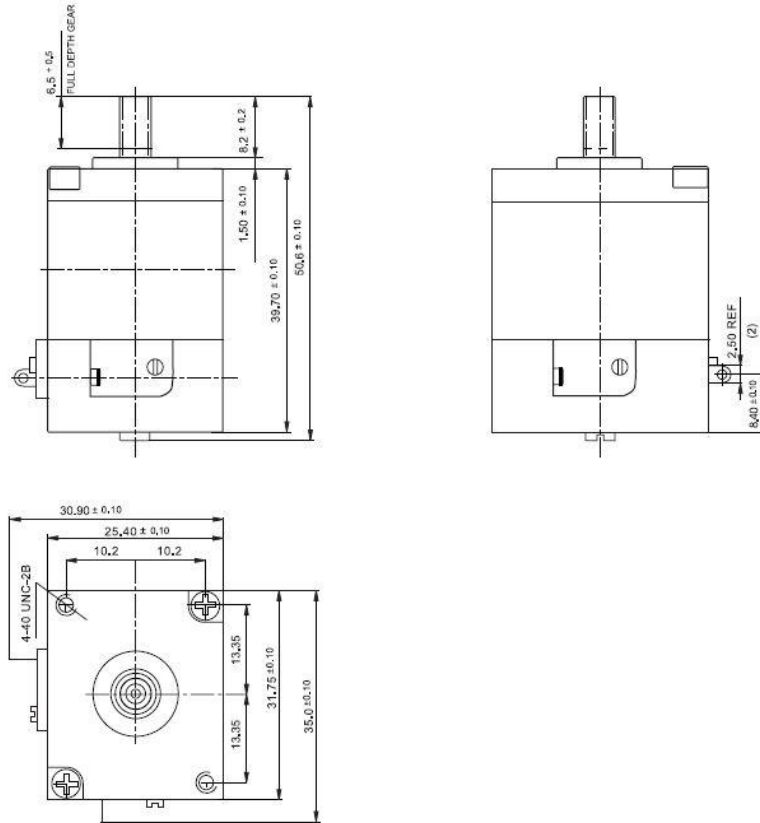


Specifications

Parameter	Unit	Value	Tolerance
Peak torque	Nm	0.102	±10%
Operating torque	Nm	0.020	±10%
Peak Current	A	4	±10%
Nominal voltage	V DC	12	nom
Friction torque	mNm	3.5	nom
Torque constant	Nm/A	0.0261	±10%
Back EMF constant	Volt/rad/sec	0.0261	±10%
DC Resistance	Ohm	3	±12%
No load speed	Rpm	4400	±10%
No load current	A	0.14	max
Winding temperature	°C	180	max
Thermal resistance	°C / W	21	max
Weight	gr	132	max
Shaft-pinion data	Dimension	Unit	Tolerance
AGMA Class 2000-A88	Q10C	-	-
No. of teeth	10	-	-
Diametrical pitch	72	1 / Inch	-
Pressure angle	20	Deg	-
Theoretical pitch dia. (std/corrected)	0.1389 / 0.1504	Inch	ref
Outside dis.	0.1766-0.003	Inch	-
Measurement over 2 pins (max/min)	0.1857 / 0.1843	Inch	ref
Max. root dia.	0.115	Inch	max
Measurement pin dia	0.0267	Inch	-
Tooth correction	0.4151	Inch	-
Max. testing radius	0.0744	Inch	max
Min. testing radius	0.0732	Inch	min
Total composite tolerance	0.0008	Inch	max
Tooth to tooth composite tolerance		Inch	max

MDC-11

Drawing



All dimensions are in mm

For Additional Information

To learn more about the MDC-11 or other MTC products, contact MTC on **+972 4 998 7772** or by email marketing@mtcind.com