

## MDC-11L

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 24 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	А	2	±10%
Nominal voltage	V DC	24	nom
Friction torque	mNm	3.5	nom
Torque constant	Nm/A	0.0515	±10%
Back EMF constant	Volt/rad/sec	0.0515	±10%
DC Resistance	Ohm	12	±12%
No load speed	Rpm	4400	±10%
No load current	А	0.09	max
Winding temperature	°C	180	max
Thermal resistance	ºC / W	23	max
Weight	gr	113	-

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## MDC-11L

### **Specifications**

Parameter	Unit	Value	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	0.0006	Inch	max

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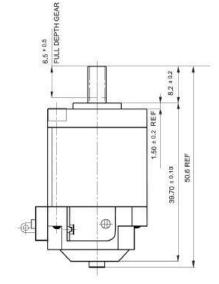
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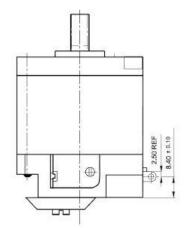


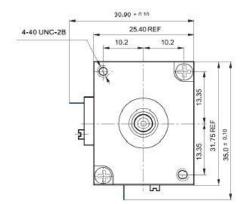
# **DC Torque Motor**

# MDC-11L

Drawing







All dimensions are in mm

#### **For Additional Information**

To learn more about the MDC-11L or other MTC products, Contact MTC on +972 4 998 7772 or email

#### marketing@mtcind.com

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