

MDC-27

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 N*m. 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

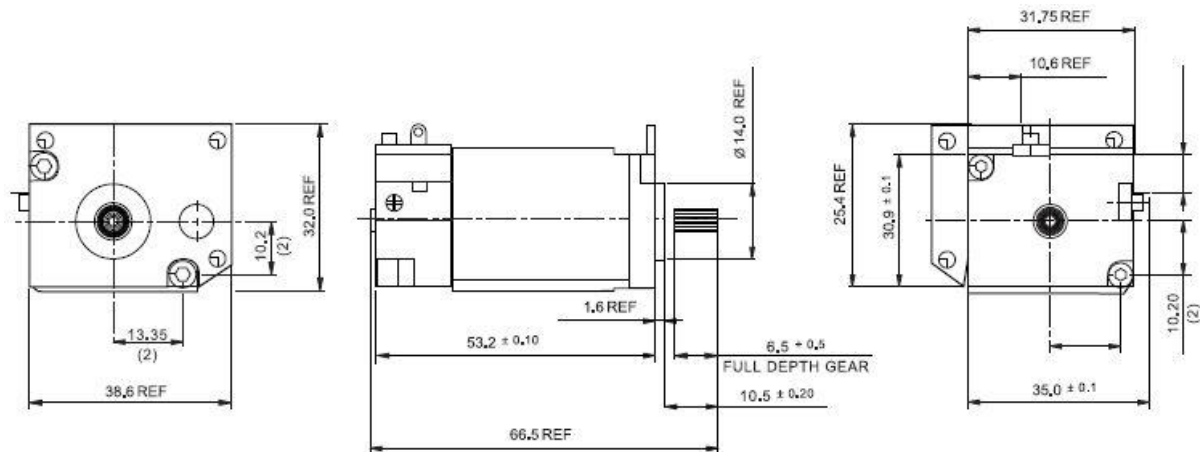
Parameter	Unit	Value	Tolerance
Peak torque	Nm	0.377	±10%
Operating torque	Nm	0.039	±10%
Peak Current	A	7.05	±10%
Nominal voltage	V DC	26	nom
Friction torque	mNm	7	nom
Torque constant	Nm/A	0.0534	±10%
Back EMF constant	Volt/rad/sec	0.0534	±10%
DC Resistance	Ohm	3.68	±12%
No load speed	Rpm	4560	±10%
No load current	A	0.14	max
Winding temperature	°C	180	max
Thermal resistance	°C / W	13.11	max
Weight	gr	218	-

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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	0.0006	Inch	max

Drawing



All dimensions are in mm

For Additional Information

To learn more about the MDC-27 or other MTC products,
contact MTC on **+972 4 998 7772** or email
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Doc. # 301376 Rev. A (04/2014)

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