

www.AMTI.biz | sales@amtimail.com

MC3A-100 SPECIFICATIONS

The MC3A is a compact, six-axis transducer with threaded inserts on its top surface and thorugh holes on its bottom surface that act as attachment points. The body of the load cell is manufactured from a high-strength aluminum alloy with an anodized finish to protect the exterior from corrosion. Elastomeric 0-ring seals provide internal protection of the strain gages and wiring from industrial environments and moisture exposure. A waterproof version SF3 is available for use in tow tanks, ocean engineering, and other underwater applications.



Units: Metric ▼ Capacity: 445 N ▼

Dimensions (WxLxH)	76 x 76 x 76.2 mm							
Weight	0.909 Kg.	Sensing elements	Strain gage bridge					
Channels	Fx, Fy, Fz, Mx, My, Mz	Amplifier	Required 6 Channels					
Body Material	Aluminum	Analog outputs	5 6.1G. 11.10.10					
Temperature range	-17.78 to 51.67°C	Digital outputs	None					
Excitation	10V maximum	Crosstalk	< 2% on all channels					
Fx, Fy, Fz hysteresis	± 0.2% full scale output	Fx, Fy, Fz non-linearity	± 0.2% full scale output					

Channel	Fx	Fy	Fz	Units	Mx	Му	Mz	Units	
Capacity	222	222	445	Ν	11	11	5.6	N-m	
Sensitivity	5.4	5.4	1.35	μv/v-N	266	266	213	μv/v-N-m	
Natural frequency	-	-	-	Hz	300	300	-	Hz	
Stiffness (X 105)	21.04	21.04	298	N/m	-	-	0.0226	N-m/rad	

Resolution To determine the resolution of your system, please use our <u>Output Calculator</u>.

The listed natural frequency is the lowest natural frequency for the force sensor and will dominate. Notes:

Published specifications subject to change without notice.

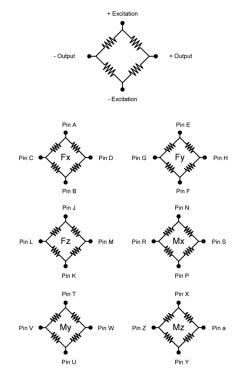
Last modified:2016-08-23

TECHNICAL DRAWINGS

Footprint Drawing

[6.7] 4X \emptyset .27 MOUNTING HOLES TOP SURFACE CONNECTOR 76.2 4X 1/4-20 3.00 Φ ф ٨ (Fy [60.3] □ 2.37 [50.8] 2.00 0 0 Ф Φ [15] .59 76.2 [15] □ 3.00 .59 3.00 [38.3] 1.51 [mm] in.

Electrical Drawing



Bridge Fz = 700 ohms Bridges Fx; Fy; Mx; My; Mz = 350 ohms Connector Type: Souriau 851-02E16-26P50-44

© Advanced Mechanical Technology, Inc.

176 Waltham Street, Watertown, MA 02472-4800 USA

1-617-926-6700