

#### www.AMTI.biz | sales@amtimail.com

# MC3A-1000 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 <u>waterproof version SF3</u> is available for use in tow tanks, ocean engineering, and other underwater applications.



Units: Metric V Capacity: 4448 N V

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		
Body Material	Aluminum	Analog outputs	6 Channels		
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	2223	2223	4446	Ν	113	113	56	N-m
Sensitivity	0.54	0.54	0.135	μv/v-N	26.58	26.58	21.26	µv/v-N-m
Natural frequency	-	-	-	Hz	1000	1000	-	Hz
Stiffness (X 105)	210	210	2979	N/m	-	-	0.226	N-m/rad

Resolution

To determine the resolution of your system, please use our Output Calculator.

Notes:

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

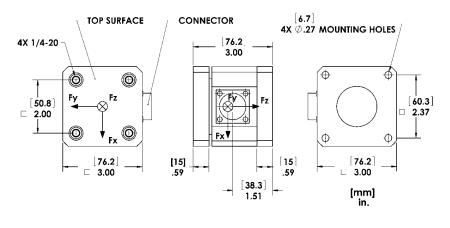
Published specifications subject to change without notice.

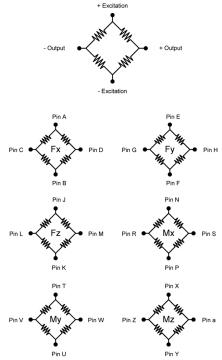
Last modified:2016-08-23

## **TECHNICAL DRAWINGS**

### Footprint Drawing

### **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