



# MC3A-500 SPECIFICATIONS

The MC3A is a compact, six-axis transducer with threaded inserts on its top surface and through 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 O-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:  Capacity:

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

Channel	Fx	Fy	Fz	Units	Mx	My	Mz	Units
Capacity	1112	1112	2223	N	56	56	28	N-m
Sensitivity	1.08	1.08	0.27	µv/v-N	53.16	53.16	42.53	µv/v-N-m
Natural frequency	-	-	-	Hz	700	700	-	Hz
Stiffness (X 105)	105.2	105.2	1490	N/m	-	-	0.113	N-m/rad

Resolution *To determine the resolution of your system, please use our [Output Calculator](#).*

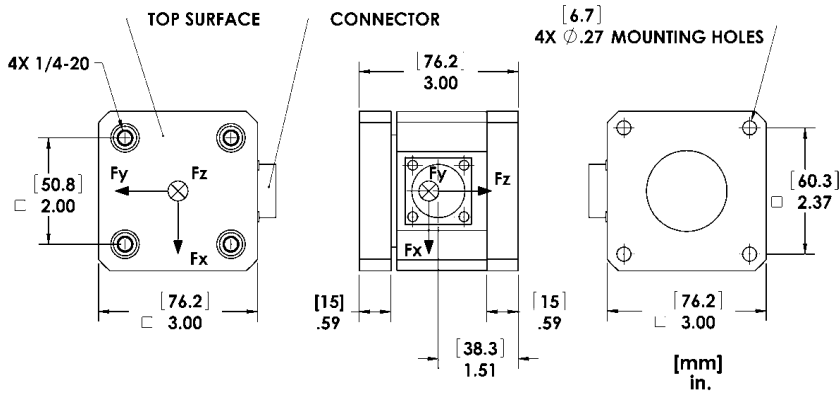
Notes: The listed natural frequency is the lowest natural frequency for the force sensor and will dominate.

Published specifications subject to change without notice.

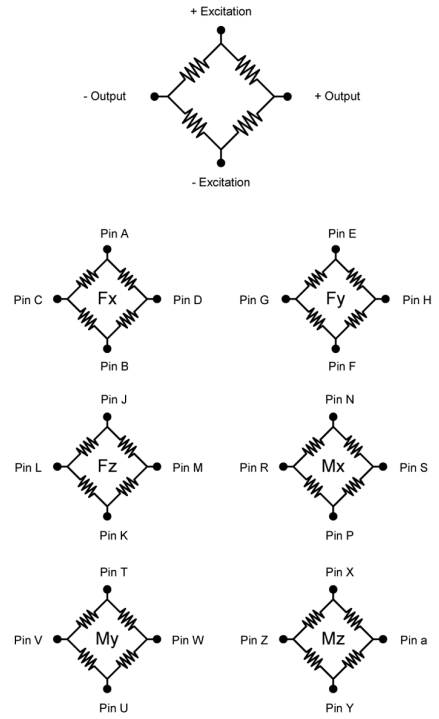
Last modified:2016-08-23

# 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

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