AMTI FORCE AND MOTION

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MC5-2500 SPECIFICATIONS

The MC5 is a cylindrical, six-axis transducer with threaded inserts on its top and bottom surfaces. The body of the load cell is manufactured from high strength aluminum with an anodized finish. An elastomeric 0-ring seal protects the strain gages and wiring. Internal sealing of the strain gages further ensures long life and consistent, reliable performance.

Units: Metric ▼ Capacity: 11121 N ▼

Dimensions(LxDia.)	127 x 125.7 mm		
Weight	3.18 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**	**My**	**Mz**	**Units**
Capacity	5561	5561	11122	N	407	407	282	N-m
Sensitivity	0.45	0.45	0.112	µv/v-N	10.18	10.18	6.2	µv/v-N-m
Natural frequency	-	-	-	Hz	625	625	-	Hz
Stiffness (X 105)	421	421	2104	N/m	1.69	1.69	1.13	N-m/rad

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

Notes:

The Fx, Fy, and Fz capacities can be exceeded by a factor of 3 as long as the Mx, My, and Mz capacities are not exceeded.

The Mx and My capacities are calculated in reference to the transducer origin located 2.37 in (6 cm) below the top surface.

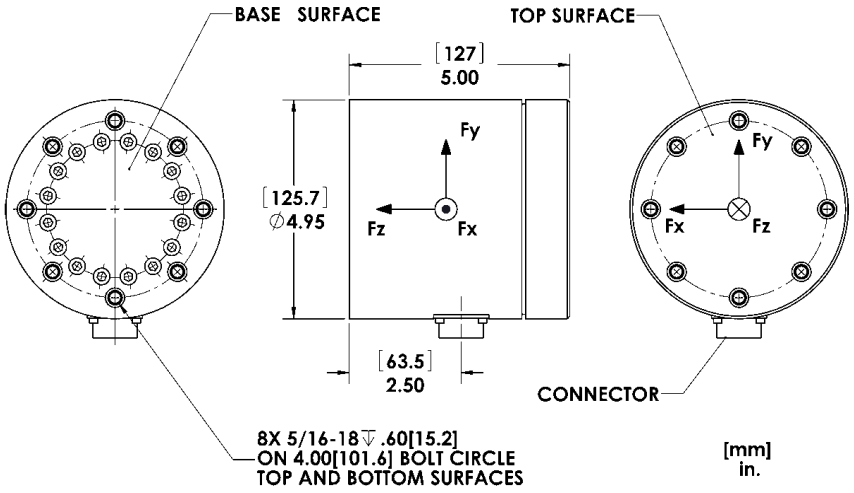
The listed natural frequency is the lowest natural frequency for the force sensor and will dominate.

Published specifications subject to change without notice.

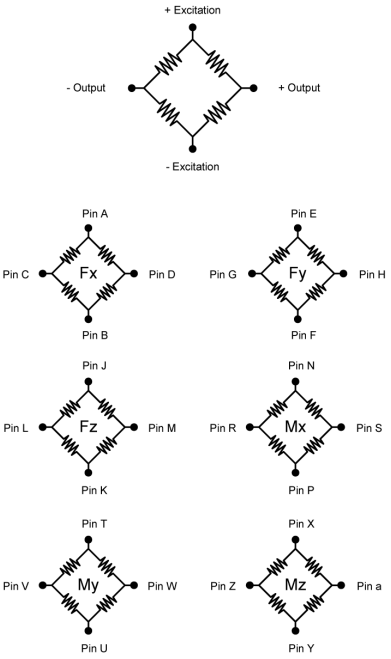
Last modified:2016-08-23

TECHNICAL DRAWINGS

Footprint Drawing



Electrical Drawing



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

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