

## MC5-1250 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 O-ring seal protects the strain gages and wiring. Internal sealing of the strain gages further ensures long life and consistent, reliable performance.



Units:  Capacity:

<b>Dimensions(LxDia.)</b>	127 x 125.7 mm		
<b>Weight</b>	3.18 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	2780	2780	5560	N	203	203	141	N-m
Sensitivity	0.899	0.899	0.225	µv/v-N	20.37	20.37	12.4	µv/v-N-m
Natural frequency	-	-	-	Hz	440	440	-	Hz
Stiffness (X 105)	210	210	1052	N/m	0.847	0.847	0.565	N-m/rad

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

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.

Notes:

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.

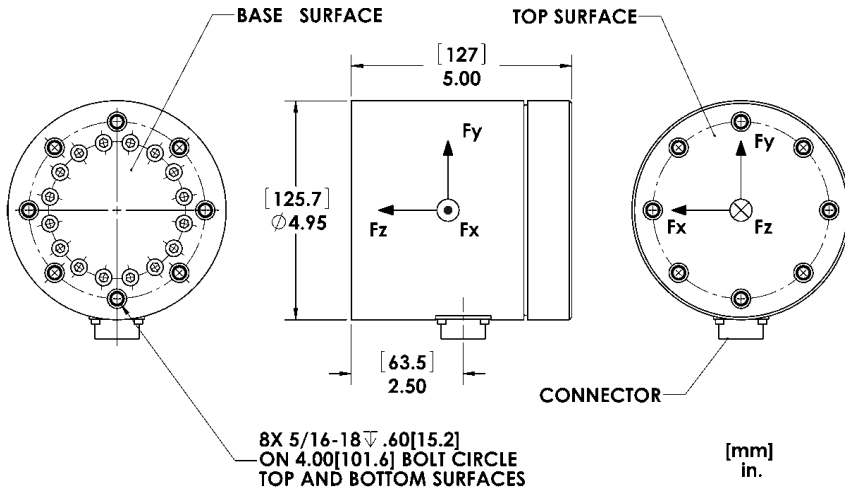
Published specifications subject to change without notice.

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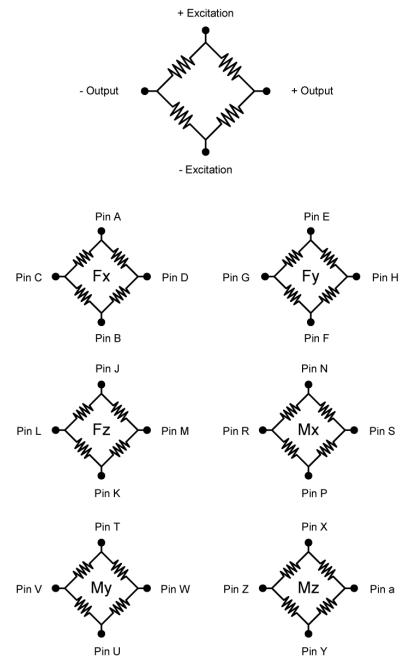


# TECHNICAL DRAWINGS

## Footprint Drawing



## Electrical Drawing



Bridges  $F_z$ ;  $M_z$  = 700 ohms  
 Bridges  $F_x$ ;  $F_y$ ;  $M_x$ ;  $M_y$ ; = 350 ohms  
**Connector Type:**  
 Souriau 851-02E16-26P50-44

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176 Waltham Street, Watertown, MA 02472-4800 USA

1-617-926-6700