

## **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 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: 5560 N ▼

Dimensions(LxDia)	127 x 125.7 mm			IP Rating	I		IP60			
Weight	3.18 k	3.18 Kg.			Sensing elements			Strain gage bridge		
Channels	Fx, Fy	Fx, Fy, Fz, Mx, My, Mz			Amplifier			Required		
Body Material	Alum	iinum		Analog	Analog outputs			6 Channels		
Temperature range	-17.78 to 51.67°C			Digital o	Digital outputs			None		
Excitation	10V maximum ± 0.2% full scale output			Crosstall	Crosstalk Fx, Fy, Fz non-linearity			< 2% on all channels ± 0.2% full scale output		
Fx, Fy, Fz hysteresis				Fx, Fy, Fz						
Channel	Fx	Fy	Fz	Units	Mx	Му	Mz	Units		
Capacity	2780	2780	5560	Ν	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		
Stiffness (X 105) Resolution				N/m ur system, plea				N-m/rad		

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.

Published specifications subject to change without notice.

Last modified:2016-08-23

**TECHNICAL DRAWINGS** Footprint Drawing (click on image to enlarge) Electrical Drawing (click on image to enlarge) TECHNICAL DRAWING



## **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			IP Rating	IP Rating			IP60		
Weight	3.18 Kg.			Sensing	Sensing elements			Strain gage bridge		
Channels	Fx, Fy, Fz, Mx, My, Mz			Amplifie	Amplifier			Required		
Body Material	Aluminum			Analog o	Analog outputs			6 Channels		
Temperature range	-17.78 to 51.67°C			Digital o	Digital outputs			None		
Excitation	10V maximum ± 0.2% full scale output			Crosstal	Crosstalk Fx, Fy, Fz non-linearity			< 2% on all channels ± 0.2% full scale output		
Fx, Fy, Fz hysteresis				Fx, Fy, Fz						
Channel	_	<b>5</b>	r_	Units	Mx	My	Mz	Units		
Channel	Fx	Fy	Fz	UTIIS	INA		1412	01113		
Capacity	<b>Fx</b> 5561	<b>Fy</b> 5561	FZ 11122	N	407	407	282	N-m		
		-				-				
Capacity	5561	5561	11122	N	407	407	282	N-m		
Capacity Sensitivity	5561 0.45	5561	11122 0.112	N µv/v-N	407 10.18	407 10.18	282	N-m µv/v-N-m		

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.

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Last modified:2016-08-23

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Notes:



## **MC5-5000 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: 22241 N ▼

Dimensions(LxDia)	127 x 125.7 mm			IP Rating	IP Rating			IP60		
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 ± 0.2% full scale output			Crosstalk	<	< 2% on all channels ± 0.2% full scale output				
Fx, Fy, Fz hysteresis				Fx, Fy, Fz non-	±					
Channel	Fx	Fy	Fz	Units	Mx	Му	Mz	Units		
Capacity	11121	11121	22242	N	813	813	565	N-m		
Sensitivity	0.225	0.225	0.0562	μv/v-N	5.09	5.09	3.1	µv/v-N-m		
Natural frequency	-	-	-	Hz	880	880	-	Hz		
Stiffness (X 105)	842	842	4208	N/m	3.39	3.39	2.26	N-m/rad		
Resolution	To determine the resolution of your system, please use our <u>Output Calculator.</u>									

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.

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## **MC5-10000 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: 44482 N ▼

Dimensions(LxDia)	127 x 125.7 mm			IP Rating			IP60		
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				Crosstalk			< 2% on all channels		
Fx, Fy, Fz hysteresis				Fx, Fy, Fz nor	Fx, Fy, Fz non-linearity			± 0.2% full scale output	
Channel	Fx	Fy	Fz	Units	Mx	Му	Mz	Units	
			4 4 4 9 4	NI	1626	1626	1129	N-m	
Capacity	22242	22242	44484	Ν	1020	1020	1127	19-111	
Capacity Sensitivity	22242 0.112	22242 0.112	0.0281	ν μν/ν-Ν	2.55	2.55	1.55	μν/ν-N-m	
Sensitivity			0.0281	µv∕v-N	2.55	2.55		µv/v-N-m	

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:

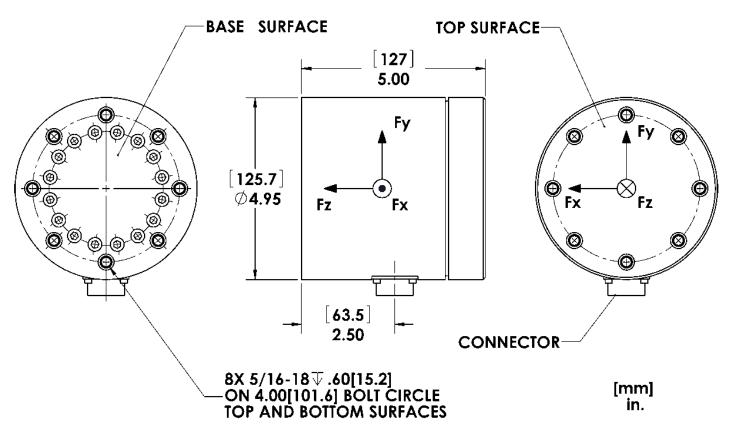
The Mx and My capacities are calculated in reference to the transducer origin located 2.37 in (6 cm) below the top surface.

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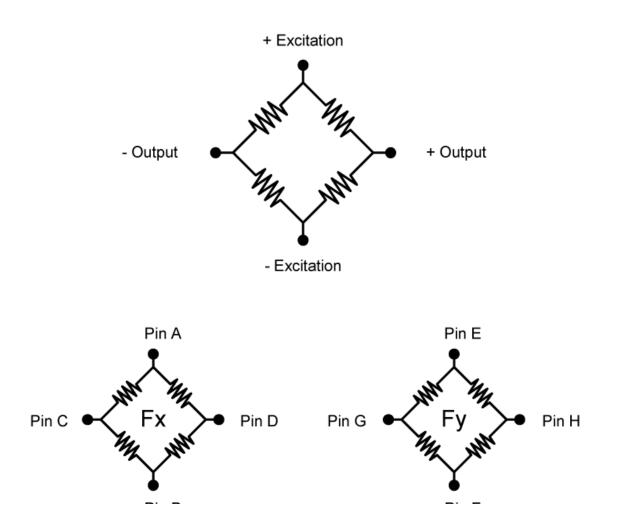
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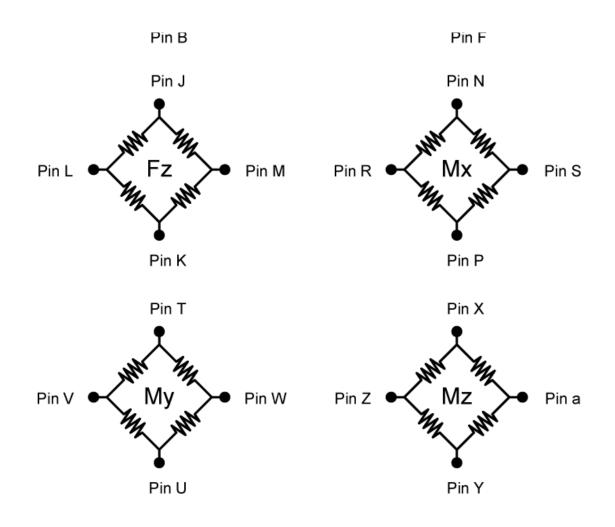
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Footprint Drawing



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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