

# 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>IP Rating</b>	IP60
<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.

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 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>IP Rating</b>	IP60
<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	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](#).*

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.

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

# MC5-5000 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 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>IP Rating</b>	IP60
<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	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 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.

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Last modified:2016-08-23

## TECHNICAL DRAWINGS

Footprint Drawing (click on image to enlarge)

Electrical Drawing (click on image to enlarge)

TECHNICAL DRAWING

# 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 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>IP Rating</b>	IP60
<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	22242	22242	44484	N	1626	1626	1129	N-m
Sensitivity	0.112	0.112	0.0281	µv/v-N	2.55	2.55	1.55	µv/v-N-m
Natural frequency	-	-	-	Hz	1250	1250	-	Hz
Stiffness (X 105)	1683	1683	8416	N/m	6.78	6.78	4.52	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.

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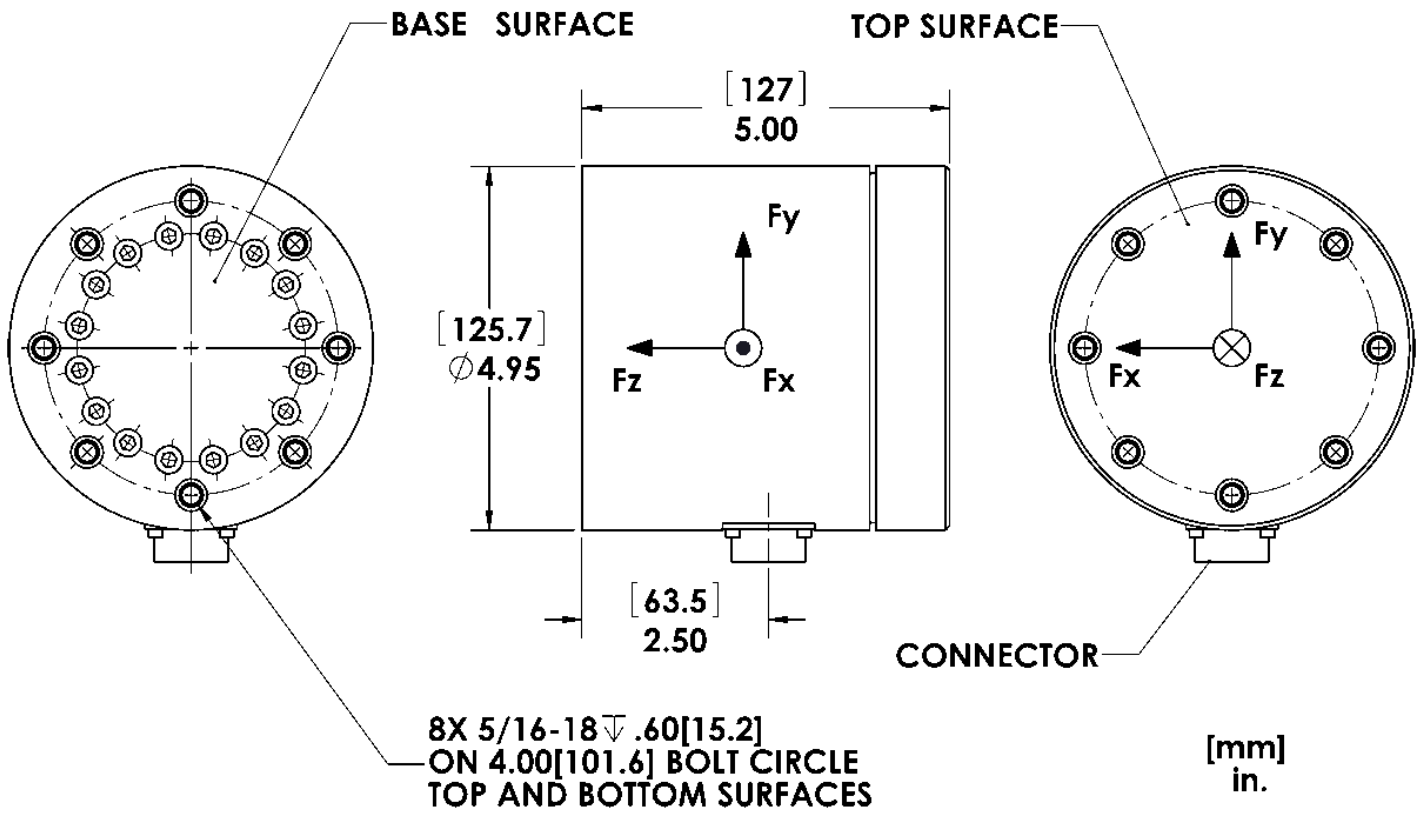
## TECHNICAL DRAWINGS

Footprint Drawing (click on image to enlarge)

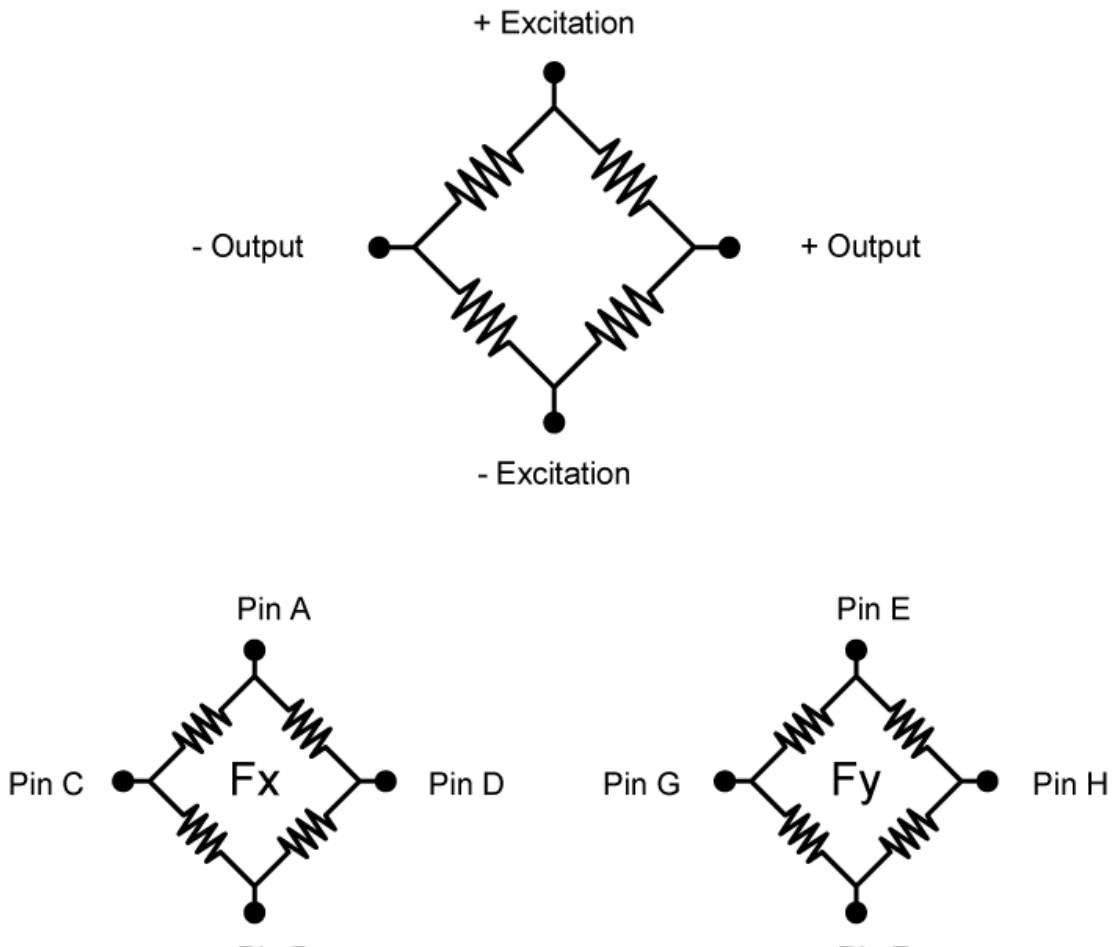
Electrical Drawing (click on image to enlarge)

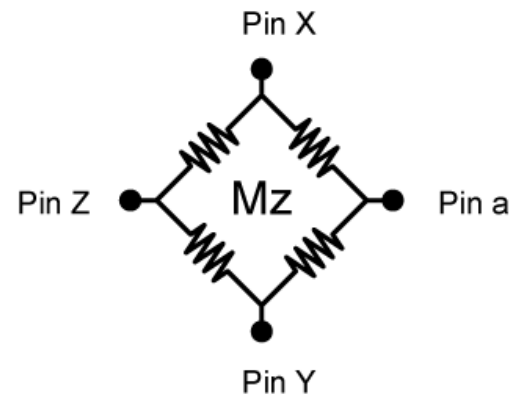
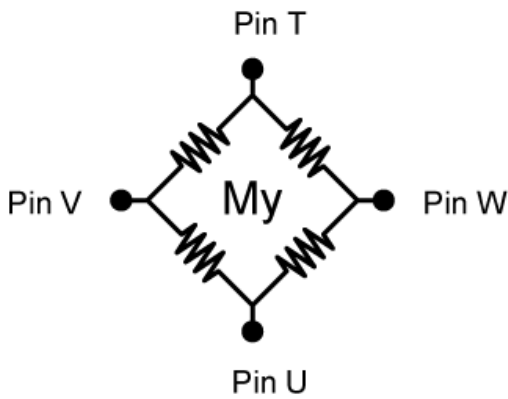
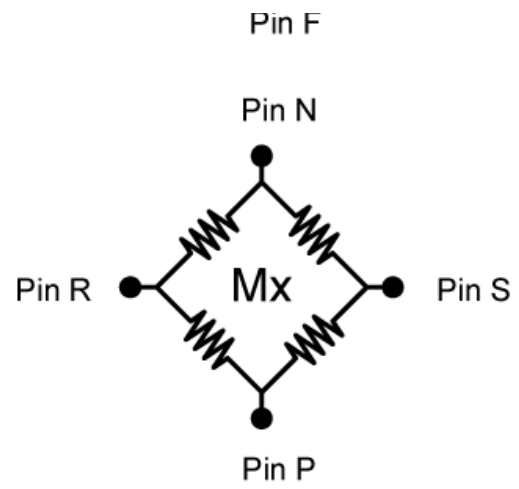
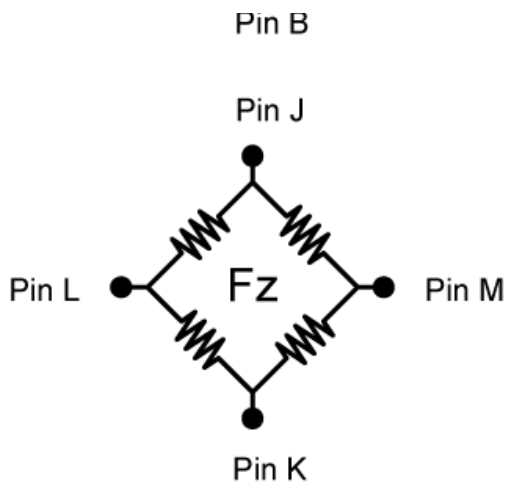
TECHNICAL DRAWING

Footprint Drawing



Electrical Drawing





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