

# MC12-1000 SPECIFICATIONS

The MC12 is a six-axis transducer with threaded inserts in its top surface and a flanged base for t-slot mounting, making it an ideal sensor for the manufacturing and machining measurements. A high-strength aluminum alloy (7075-T6) is used throughout to withstand harsh manufacturing and testing environments. A durable anodized finish protects the exterior from corrosion while elastomeric O-ring seals protect the strain gages and wiring. Internal potting of the strain gages further insures long life and consistent, reliable performance.



Units:  Capacity:

<b>Dimensions(WxLxH)</b>	305 x 406 x 78.74 mm	<b>IP Rating</b>	IPnull
<b>Weight</b>	22.73 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	2224	2224	4448	N	678	678	339	N-m
Sensitivity	0.674	0.674	0.171	µv/v-N	2.48	2.48	5.84	µv/v-N-m
Natural frequency	450	450	880	Hz	-	-	-	Hz
Stiffness (X 105)	210	210	1403	N/m	-	-	-	N-m/rad

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

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

Footprint Drawing

# MC12-2000 SPECIFICATIONS

The MC12 is a six-axis transducer with threaded inserts in its top surface and a flanged base for t-slot mounting, making it an ideal sensor for the manufacturing and machining measurements. A high-strength aluminum alloy (7075-T6) is used throughout to withstand harsh manufacturing and testing environments. A durable anodized finish protects the exterior from corrosion while elastomeric O-ring seals protect the strain gages and wiring. Internal potting of the strain gages further insures long life and consistent, reliable performance.



Units:  Capacity:

<b>Dimensions(WxLxH)</b>	305 x 406 x 78.74 mm	<b>IP Rating</b>	IPnull
<b>Weight</b>	22.73 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	4448	4448	8896	N	1355	1355	678	N-m
Sensitivity	0.337	0.337	0.0854	µv/v-N	1.24	1.24	2.92	µv/v-N-m
Natural frequency	580	580	1100	Hz	-	-	-	Hz
Stiffness (X 105)	421	421	2805	N/m	-	-	-	N-m/rad

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

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

Footprint Drawing

# MC12-4000 SPECIFICATIONS

The MC12 is a six-axis transducer with threaded inserts in its top surface and a flanged base for t-slot mounting, making it an ideal sensor for the manufacturing and machining measurements. A high-strength aluminum alloy (7075-T6) is used throughout to withstand harsh manufacturing and testing environments. A durable anodized finish protects the exterior from corrosion while elastomeric O-ring seals protect the strain gages and wiring. Internal potting of the strain gages further insures long life and consistent, reliable performance.



Units:  Capacity:

<b>Dimensions(WxLxH)</b>	305 x 406 x 78.74 mm	<b>IP Rating</b>	IPnull
<b>Weight</b>	22.73 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	8897	8897	17794	N	2710	2710	1355	N-m
Sensitivity	0.169	0.169	0.0427	µv/v-N	0.62	0.62	1.46	µv/v-N-m
Natural frequency	750	750	1400	Hz	-	-	-	Hz
Stiffness (X 105)	842	842	5611	N/m	-	-	-	N-m/rad

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

Published specifications subject to change without notice.

Last modified:2016-08-23

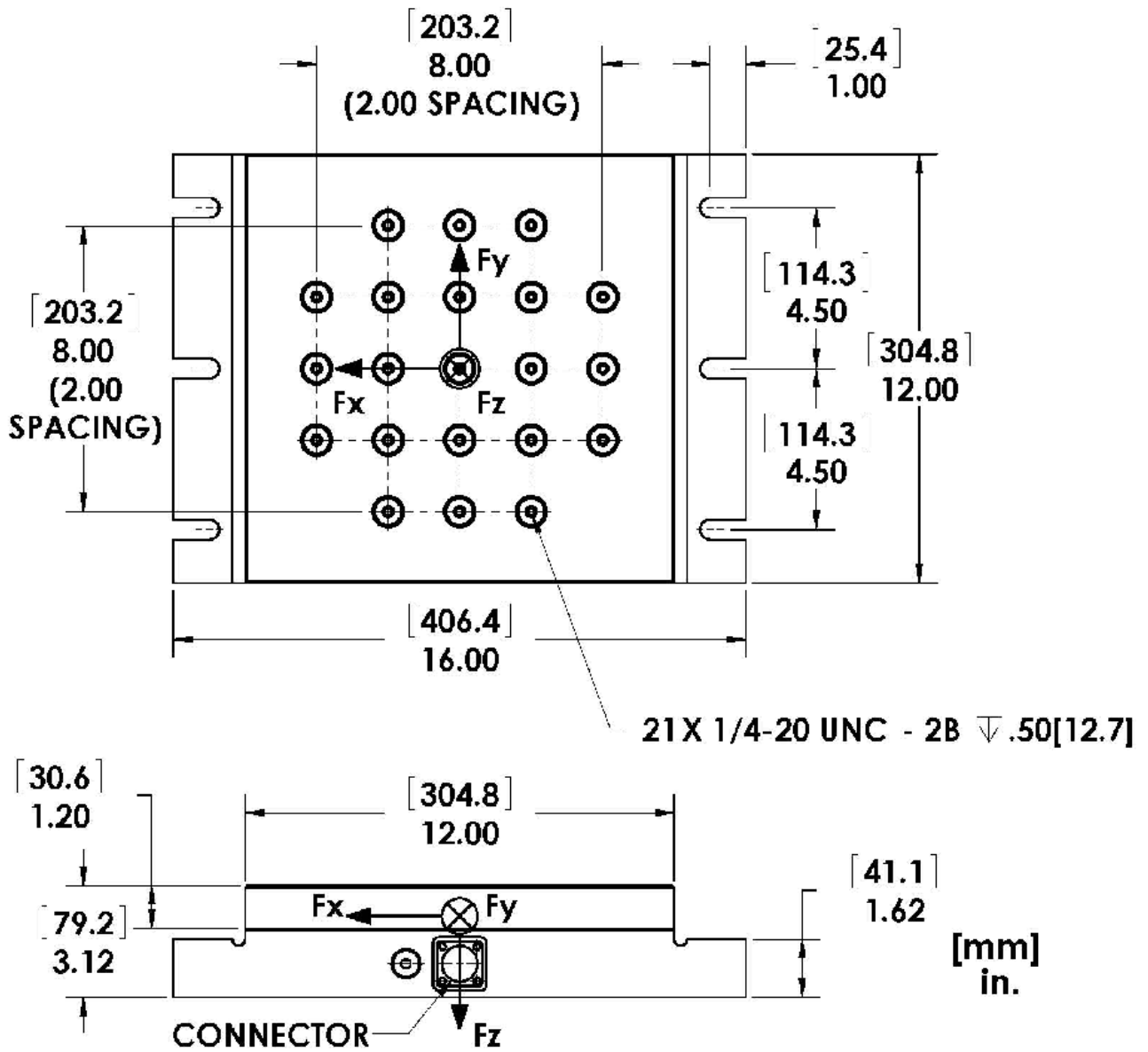
## TECHNICAL DRAWINGS

Footprint Drawing (click on image to enlarge)

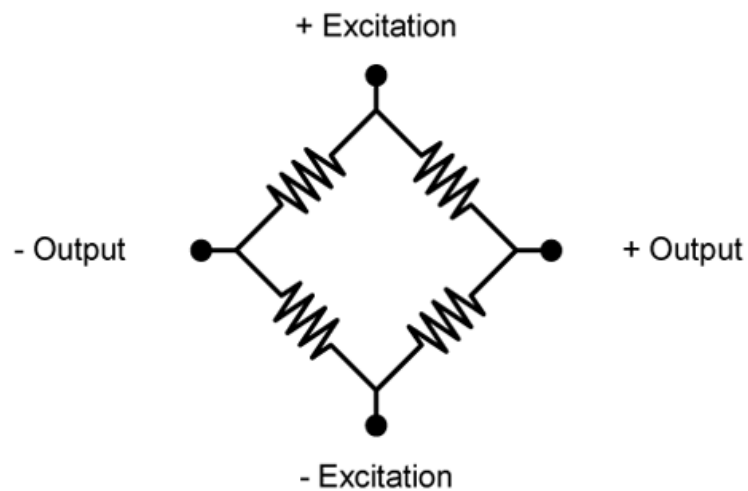
Electrical Drawing (click on image to enlarge)

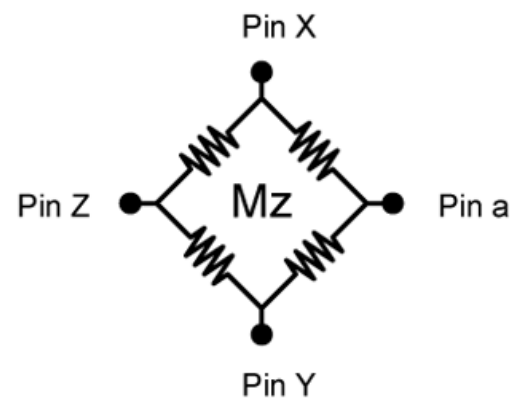
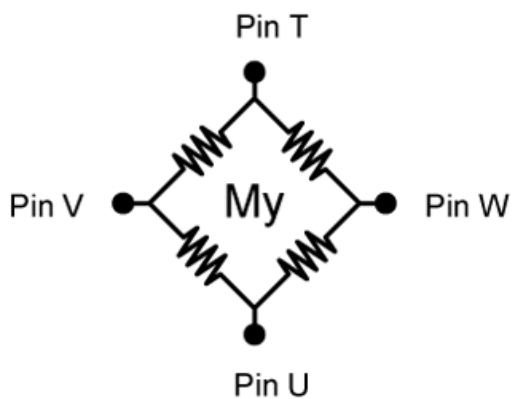
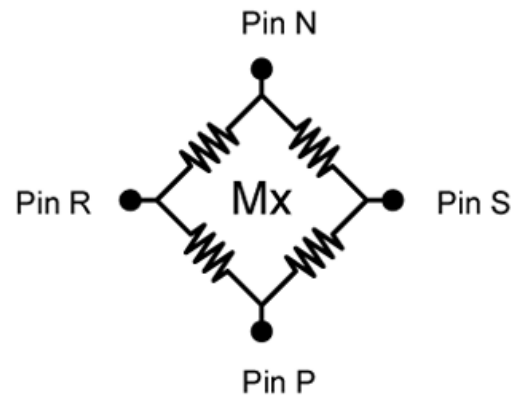
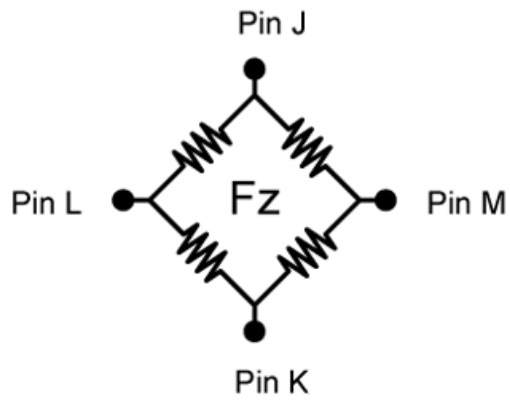
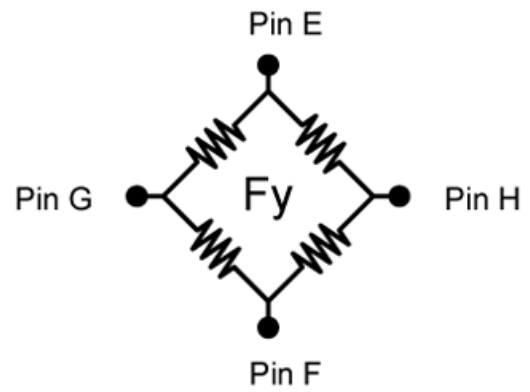
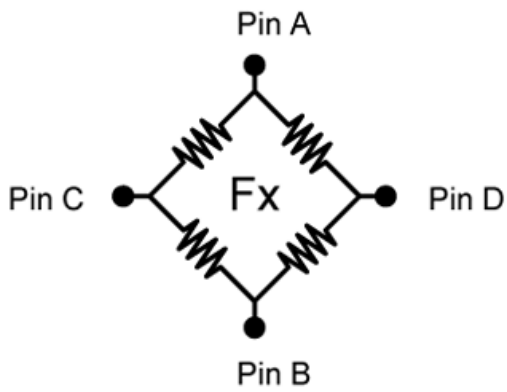
## TECHNICAL DRAWING

Footprint Drawing



Electrical Drawing





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