

MCL6-1000 SPECIFICATIONS

The MCL6 is designed to measure cutting tool forces during turning operations, such as in a lathe, and features a tool holder mounting fixture.



Units: Metric Capacity: 1000

Dimensions (WxLxH)	165 x 165 x 104.9 mm		
Weight	18.18 Kg.	Sensing elements	Strain gage bridge
Channels	Fx, Fy, Fz, Mx, My, Mz	Amplifier	Required
Top plate material	Aluminum	Analog outputs	6 Channels
Temperature range	-17.78 to 51.67°C	Digital outputs	null
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	2224	2224	4448	N	339	339	169	N-m
Sensitivity	0.674	0.674	0.171	µv/v-lb	7.53	7.53	13.28	µv/v-in-lb
Natural frequency	550	550	620	Hz	-	-	-	Hz
Stiffness (X 10 ⁵)	210	210	1403	N/m	-	-	-	N-m/rad

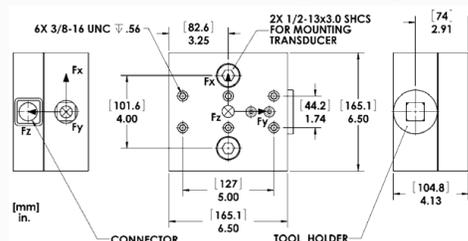
Resolution *To determine the resolution of your system, please use our [Output Calculator](#).*

Published specifications subject to change without notice.

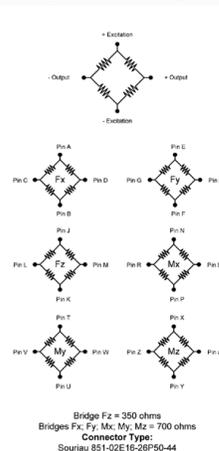
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TECHNICAL DRAWINGS

Footprint Drawing (click on image to enlarge)



Electrical Drawing (click on image to enlarge)



MCL6-2000 SPECIFICATIONS

The MCL6 is designed to measure cutting tool forces during turning operations, such as in a lathe, and features a tool holder mounting fixture.



Units: Metric Capacity: 2000

Dimensions (WxLxH)	165 x 165 x 104.9 mm		
Weight	18.18 Kg.	Sensing elements	Strain gage bridge
Channels	Fx, Fy, Fz, Mx, My, Mz	Amplifier	Required
Top plate material	Aluminum	Analog outputs	6 Channels
Temperature range	-17.78 to 51.67°C	Digital outputs	null
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	4448	4448	8896	N	678	678	339	N-m
Sensitivity	0.337	0.337	0.0854	µv/v-lb	3.76	3.76	6.64	µv/v-in-lb
Natural frequency	800	800	875	Hz	-	-	-	Hz
Stiffness (X 10 ⁵)	421	421	2805	N/m	-	-	-	N-m/rad

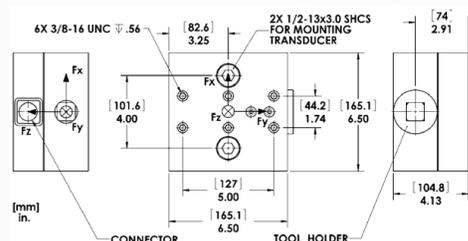
Resolution *To determine the resolution of your system, please use our [Output Calculator](#).*

Published specifications subject to change without notice.

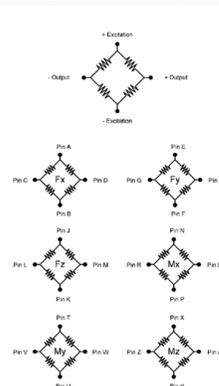
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TECHNICAL DRAWINGS

Footprint Drawing (click on image to enlarge)



Electrical Drawing (click on image to enlarge)



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

MCL6-4000 SPECIFICATIONS

The MCL6 is designed to measure cutting tool forces during turning operations, such as in a lathe, and features a tool holder mounting fixture.



Units: Metric Capacity: 4000

Dimensions (WxLxH)	165 x 165 x 104.9 mm		
Weight	18.18 Kg.	Sensing elements	Strain gage bridge
Channels	Fx, Fy, Fz, Mx, My, Mz	Amplifier	Required
Top plate material	Aluminum	Analog outputs	6 Channels
Temperature range	-17.78 to 51.67°C	Digital outputs	null
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	8896	8896	17793	N	1355	1355	678	N-m
Sensitivity	0.169	0.169	0.0427	µv/v-lb	1.88	1.88	3.32	µv/v-in-lb
Natural frequency	1000	1000	1200	Hz	-	-	-	Hz
Stiffness (X 10 ⁵)	842	842	5611	N/m	-	-	-	N-m/rad

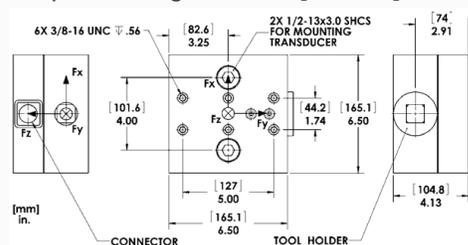
Resolution *To determine the resolution of your system, please use our [Output Calculator](#).*

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TECHNICAL DRAWINGS

Footprint Drawing (click on image to enlarge)



Electrical Drawing (click on image to enlarge)

