Square Three Axis Load Cell

Model TR3D-D-100K

- 100,000 lb capacity
- Measures forces in three perpendicular directions
- Environmentally protected
- Temperature compensated
- Rugged stainless steel construction
- Weatherproof connector

Description

Michigan Scientific's *TR3D-D-100K Square Three Axis Load Cell* is designed for applications that require force measurements in three perpendicular directions. With 100,000 lb capacity, this rugged transducer is ideally suited for both field data acquisition and laboratory testing. The transducer has identical top and bottom mounting surfaces and bolt patterns, and can be easily adapted to a variety of applications.

High grade stainless steel material, in addition to weatherproof sealing, combine to provide excellent resistance to corrosion and environmental conditions. Temperature compensation of the transducer ensures stable output throughout a wide temperature range.

Specifications

	TR3D-D-100K
Maximum Load Capacity (per channel)	100,000 lb (444 kN)
Maximum Moment Capacity (per channel)	15,000 lb-ft (20.3 kN.m)
Weight	38.5 lb (17.5 kg)
Full Scale Output	1.25 mV/V, nominal, all channels
Sensor	3 four-arm strain gauge bridges
Nonlinearity	≤ 1% of full scale for X and Y axes < 2% of full scale for Z axis
Hysteresis	< 0.5% of full scale output
Temperature Range, Compensated	75°F to 200°F (24°C to 93°C)
Temperature Effect on Zero	<0.2% full scale
Temperature Range, Usable	-40°F to 300°F (-40°C to 149°C)
Excitation Voltage, Maximum	10 Vdc or Vac rms
Standard Cable Length	10 ft (3.05 m) shielded, open-ended leads

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08-10-21
Rev. A

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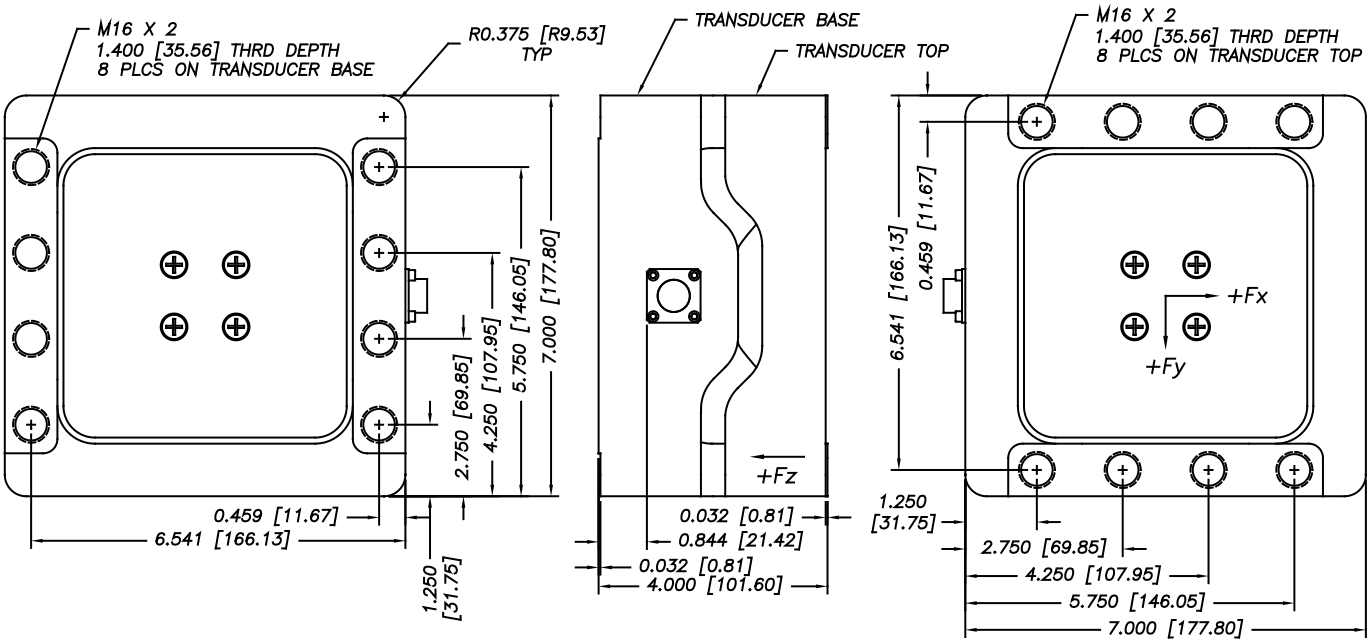
Square Three Axis Load Cell

TR3D-D-100K Configuration



NOTES:
1) FOR CLARITY, SOME HIDDEN LINES AND TRANSDUCER GEOMETRY NOT SHOWN.
2) DIMENSIONS ARE INCH [MM]; TOLERANCES ±0.005 [0.127]
3) POSITIVE OUTPUTS RESULTS WHEN THE TRANSDUCER TOP IS DISPLACED RELATIVE TO THE TRANSDUCER BASE IN THE DIRECTIONS INDIATED.

Ordering Options

Connectors and optional cable length may be specified by the customer.

Contact Michigan Scientific for information on transducer applications and mounting.

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