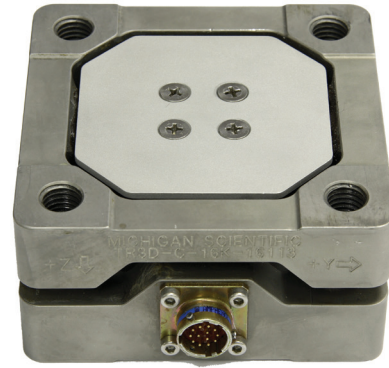


Square Six Axis Load Cell

Model TR6D-C-40K

- 40,000 lb force capacity
- 7,000 lb-ft moment capacity
- Measures three perpendicular forces and three moments
- Environmentally protected
- Temperature compensated
- Rugged stainless steel construction
- Weatherproof connectors



Description

Michigan Scientific's *TR6D-C-40K Square Six Axis Load Cell* is designed for applications that require both force and moment measurements. With 40,000 lb force and 7,000 lb-ft moment capacities, 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 an unlimited 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

| | TR6D-C-40K |
|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Maximum Load Force Capacity Fx, Fy, Fz | 40,000 lbs (178 kN) |
| Maximum Moment Capacity Mx, My, Mz | 7,000 lb-ft (9.5 kN.m) |
| Overload Moment Capacity Mx, My, Mz | 8,000 lb-ft (10.8 kN-m) |
| Weight | 16.5 lbs (7.5 kg) |
| Full Scale Output | 1.5 mV/V nominal, Fx, Fy, Fz, 5.0 mV/V nominal, Mx, My, 1.75 mV/V nominal, Mz |
| Sensor | 6 four-arm strain gage bridges |
| Nonlinearity | Forces $\leq 0.5\%$ of full scale for X and Y axes; $\leq 1.5\%$ of full scale for Z axis Moments $\leq 0.5\%$ of full scale for all channels |
| Hysteresis | $\leq 0.5\%$ of full scale output |
| Temperature Range, Compensated | 75°F to 200°F (24°C to 93°C) |
| Temperature Effect on Zero | $\leq 0.2\%$ full scale |
| Temperature Range, Useable | -40°F to 300°F (-40°C to 149°C) |
| Excitation Voltage, Maximum | 10V DC or AC rms |

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Charlevoix, MI 49720
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10-17-19
Rev. A

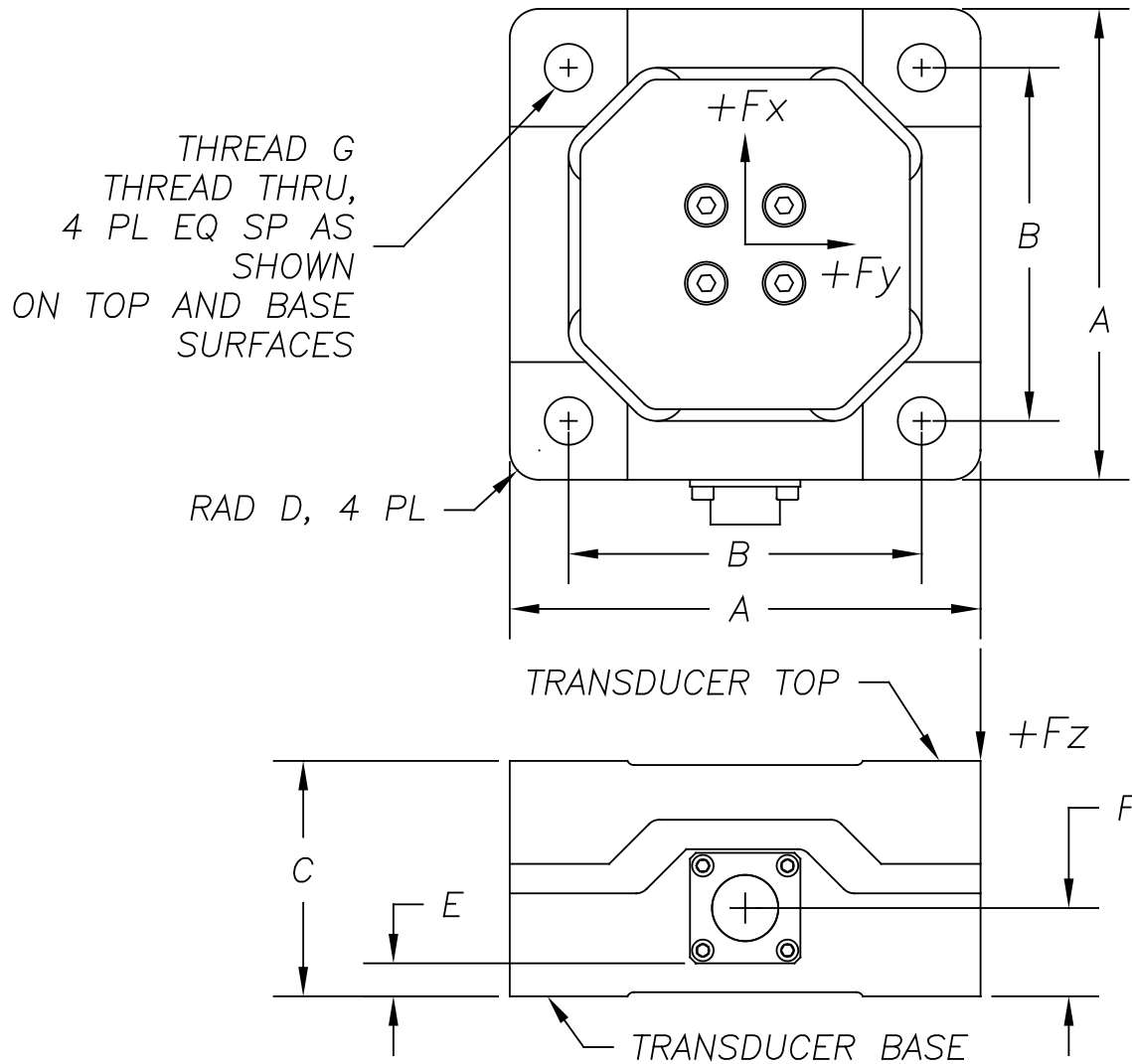
MICHIGAN SCIENTIFIC
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Square Six Axis Load Cell

TR6D-C-40K Configuration



| Model | A | B | C | D | E | F | THRD G |
|------------|-------------------------|-------------------------|------------------------|-----------------------|------------------------|------------------------|-------------|
| TR6D-C-40K | 6.000 in (152.40 mm) | 4.500 in (114.30 mm) | 3.000 in (76.20 mm) | 0.375 in (9.53 mm) | 0.656 in (16.66 mm) | 1.125 in (28.58 mm) | (M20 x 2.5) |

Dimensions are inch (mm); all tolerances are ± 0.005 in [± 0.13 mm], unless specified otherwise.
Positive outputs result when the transducer top is displaced relative to the transducer base, in the directions indicated.

Ordering Options

Individual bridge 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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