



Datasheet_TR3D-C-40K_pmi_EN.pdf



Datasheet_TR3D-C-16K_pmi_EN.pdf

Model

TR3D-C-*

- 10,000 lb, 16,000 lb and 40,000 lb capacities
- Measures forces in three perpendicular directions
- Environmentally protected
- Temperature compensated
- Rugged stainless steel construction
- Weatherproof connector



Description

Michigan Scientific's *TR3D-C-** Square Three Axis Load Cells are designed for applications that require force measurements in three perpendicular directions. Available in 10,000 lb, 16,000 lb and 40,000 lb capacities, these rugged transducers are ideally suited for both field data acquisition and laboratory testing. The transducers have 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 transducers ensures stable output throughout a wide temperature range.

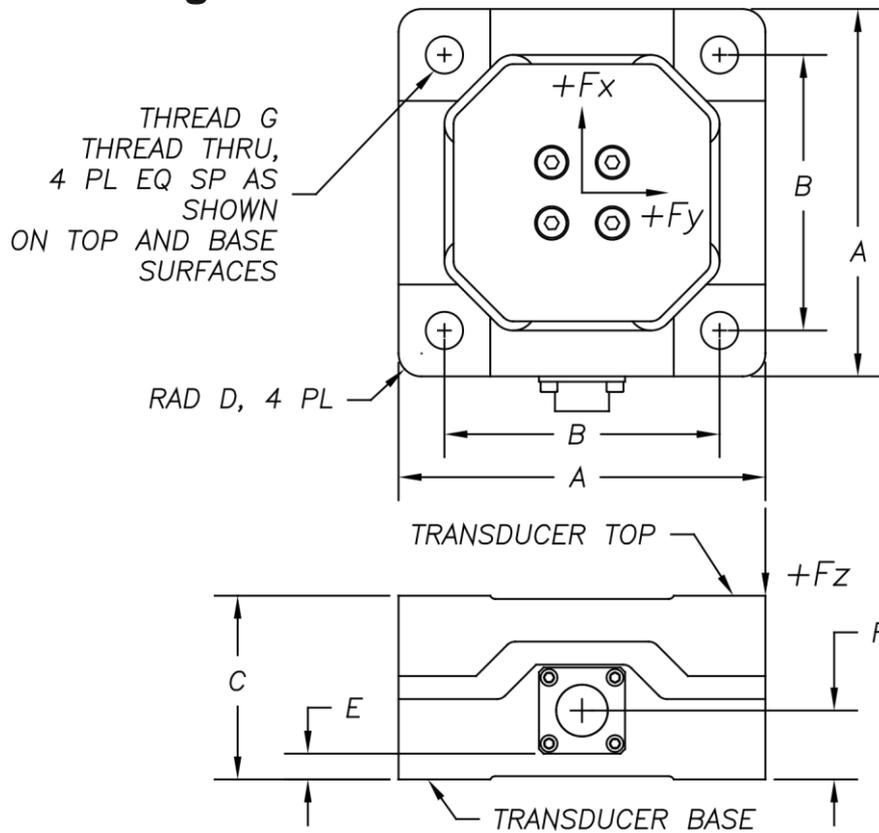
Specifications

	TR3D-C-10K	TR3D-C-16K	TR3D-C-40K
Maximum Load Capacity (per channel)	10,000 lbs (44 kN)	16,000 lbs (71 kN)	40,000 lbs (177 kN)
Maximum Moment Capacity (per channel)	500 lb-ft (675 N.m)	1,300 lb-ft (1.7 kN.m)	4,400 lb-ft (5.9 kN.m)
Weight	2.3 lbs (1.0 kg)	4.8 lbs (2.2 kg)	16.5 lbs (7.5 kg)
Full Scale Output	1.5 mV/V, nominal, all channels		
Sensor	3 Four-arm strain gage 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, Useable	-40°F to 300°F (-40°C to 149°C)
Excitation Voltage, Maximum	10V DC or AC rms
Standard Cable Length	10 ft (3.05 m) shielded, open-ended leads

PM Instrumentation | 59 rue Emile Deschanel | F-92400 Courbevoie | France
 +33(0)1 46 91 93 32 | contact@pm-instrumentation.com | www.pm-instrumentation.com

TR3D-C-* Configuration



C566015A
 TR3D-C-*
 11/13/2013

Model	A	B	C	D	E	F	THRD G
TR3D-C-10K**	3.000 in (76.20 mm)	2.250 in (57.15 mm)	1.650 in (41.91 mm)	0.1875 in (4.76 mm)	NA	0.615 in (15.62 mm)	(M10 x 1.5)
TR3D-C-16K	4.000 in (101.60 mm)	3.000 in (76.20 mm)	2.000 in (50.80 mm)	0.250 in (6.35 mm)	0.281 in (7.14 mm)	0.750 in (19.05 mm)	(M12 x 1.75)
TR3D-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.
 **TR3D-C-10K features a recessed connector
 *Thread size changed from M18x1.5 to M20x2.5 on 2-11-2011

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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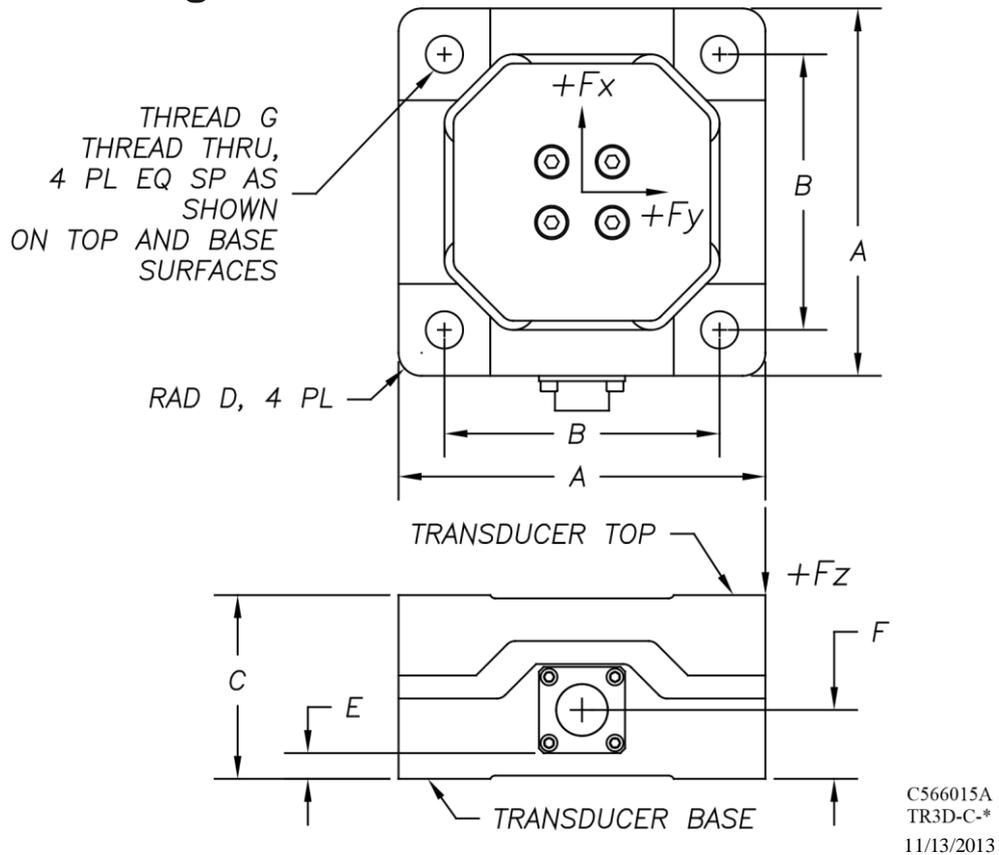
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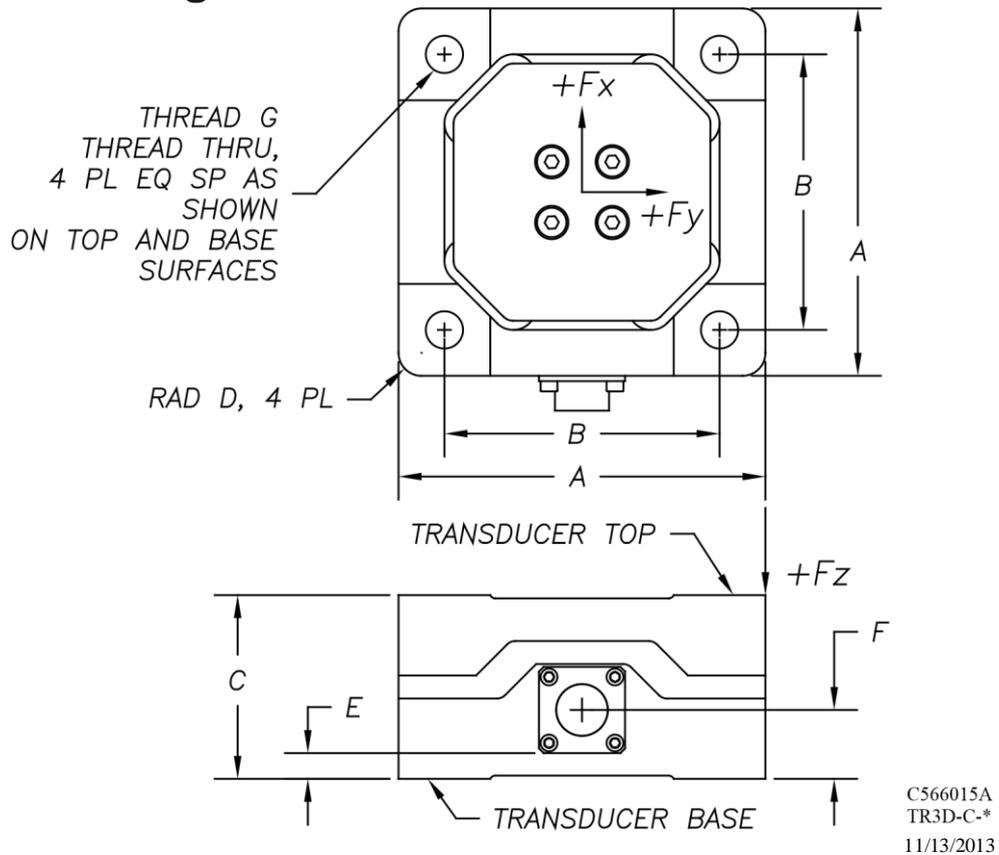
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