

Technical Specifications

TC1-S Tension Cells

Delivers a high-accuracy weighing system for suspended in-process vessels

The TC1-S Tension Load Cell utilizes the latest technology in full-bridge metal foil gauges to deliver a high-accuracy weighing system for suspended in-process vessels. The TC1-S has no moving parts to wear out or fall out of adjustment. It is also waterproof making it ideal for outdoor as well as indoor applications.

The TC1-S tension cell is designed for industrial scale measurement of inventory and process applications. Construction is alloy steel with nickel plate for high accuracy and corrosion resistance and is fully sealed to IP67 rating.

Mounting kits and accessories are available. See Mounting Kit and Accessories specifications.



Features & Benefits

Alloy Tool Steel Construction

Provides high accuracy weighing of suspended vessels.

Electroless Nickel Plated Alloy Steel

For corrosion resistance.

Fully Sealed to IP67

Waterproof for outdoor and indoor applications.

NTEP Certified



Specifications

Mechanical

Functional Integrity: ±150% of rated capacity

Mechanical Integrity: ±300% of rated capacity

Electrical

Excitation Voltage - Standard: 10 VDC **Excitation Voltage - Maximum:** 15 VDC

Input Resistance: 350 ± 3.5 ohms

Insulation Resistance: > 2000 megohms

Output

Non-linearity: ≤ 0.03% of rated output **Hysteresis:** ≤ 0.03% of rated output

Non-repeatability: \leq 0.02% of rated output

Creep (after 20 minutes): $\leq 0.03\%$ of rated output (determined at rated capacity; performance at reduced

loads proportional to applied load)

Nominal Output: 3mV/V ± 0.5%

Zero Balance: ≤ 1% of rated output

Output Resistance: 350 ± 5 ohms

Environmental

Temperature Range - Operational:

-65° to 200°F (-20° to 80°C)

Temperature Range - Compensated:

0° to 150°F (-10° to 70°C)

Temperature Effects - Rated Output:

 \leq 0.1% of rated output/ 10°C

Temperature Effects - Zero Shift:

< 0.05% of rated output/ 10°C

Physical

Construction: Electroless nickel-plated steel

Cable: 4-connector shielded cable (AWG22);10 ft (3m)

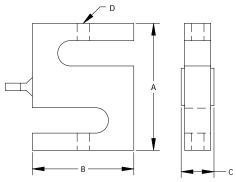
long

Environmental Protection Rating: IP67

Shipping Weight: 1 to 4 lbs.

Approvals:





Capacity/Dimensions

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Model	Rated Capacity	А	В	С	D	
TC1-0.11K	110lbs/ 50kg	2.5 in. (63.5mm)	2.0 in. (50.8mm)	.50 in. (12.7mm)	M6 X 1P	
TC1-0.22K	220lbs/ 100kg					
TC1-0.44K	440lbs/ 200kg	3.0 in. (76.2mm)	2.0 in. (50.8mm)	.75 in. (19.0mm)	M12 X 1.75P	
TC1-01.1K	1100bs/ 500kg					
TC1-02.2K	2200lbs/ 1T	3.0 in. (76.2mm)	2.0 in. (50.8mm)	1.0 in. (25.4mm)	M12 X 1.75P	
TC1-04.4K	4400lbs/ 2T	4.25 in. (108mm)	3.0 in. (76.2mm)	1.25 in. (32.0mm)	M20 X 1.5P	

WIRING INFORMATION

RED	:EXC.(+)	WHITE	:EXC.(-)				
GREEN	:SIG.(+)	BLUE	:SIG.(-)				
BARE	:GND						

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