AT Series Load Cell Simulator

Features:
- True Wheatstone bridge circuitry
- Independent model AT-350 for 350 Ω
- Simulates quarter, half, and full-bridge
- 12 preset position range
- Full or Half bridge transducer range: ± 0.25 mV/V to ± 7.5 mV/V
- Reversing switch for plus and minus calibration
- High precision resistors used throughout to ensure excellent stability
- Accuracy 0.05%

Applications:

- Load Cell Signal Simulator
- Load Cell Instrument Calibrator
- Load Cell Signal Conditioning Calibrator
- Bridge Sensor Signal Simulator
- Bridge Sensor Indicator Calibrator
- Strain Indicator Calibrator
- Stress Indicator Calibrator
- Material elasticity Indicator Calibrator
- Micro-Resistance Indicator Calibrator
- Foil Strain Gage Signal Conditioning Calibrator
- Semiconductor Strain Gage Signal Conditioning Calibrator

Description:

The Model AT calibrator is a Wheatstone bridge and generates a true change of resistance in one arms of the bridge.

It simulates the actual behavior of mV/V calibrator based on the Wheatstone bridge principle that requires stable components.

Multiple ultra-stable and hi-stable precision resistors are used in the Model AT calibrator to provide the stability, repeatability and accuracy required in a laboratory transducer instrument calibration.

- AT-350 for 350Ω Model
  - Model: AT-350 standard connector, D-sub 9 pin Female
  - Model: AT-350-C2 Optional connector, Bendix PT06A-12-10S Receptacle 10 pin
  - Model: AT-350-C3 Optional KYOWA connector, Tamjimi PRC03-21A10-7F Receptable 7pin
  - Model: AT-350-Cx Optional customer connector, part number supply by user, Connector Diameter < 37 mm

- Optional Connector Plug
  - Plug-AT-350-P Standard connector, D-sub 9 pin Male
  - Plug-AT-350-C2 Optional plug, Bendix PT06A-12-10P(SR) Plug 10 pin
  - Plug-AT-350-C3 Optional KYOWA plug, Tajimi PRC03-12A10-7M5 Plug 7pin
  - Plug-AT-350-Cx Optional customer plug, part number supply by user

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Specification:

- Accuracy
  - 0.05% of setting ± 0.0005 mV/V , maximum
- Repeatability
  - (± 0.0005 mV/V), maximum
- Stability
  - (0.005% of setting ± 0.0005 mV/V) /° C, maximum
- Thermal EMF
  - 1.0 μ V/V of excitation, maximum
- Bridge Resistances
  - Model AT-350 for 350 Ω
- Output Resistance
  - ± 0.05%, maximum, from nominal at “0” mV/V ε
- Circuit
  - True - Δ R in one adjacent arms , plus three fixed arms for bridge completion
- Range
  - Half and Full bridge: transducer ε
    0, ± 0.25, ± 0.50, ± 0.75, ± 1,00 ± 1.50, ± 2.00, ± 2.50, ± 3,00, ± 4,00, ± 5,00, ± 7.50 mV/V
- Excitation
  - To Meet Accuracy and Repeatability Specifications
    - 350 Ω : up to 10 VDC
    - Maximum Permissible
    - 350 Ω : 17V AC or DC
- Output @ 0
  - 0.025 mV/V , maximum in full-bridge mode
- Environmen
  - Temperature
    - +10° C to +38° C (+50° F to +100° F)
  - Humidity
    - Up to 70% RH, non-condensing
- Dimension
  - Aluminum case (separable lid)
  - 202 x 87 x 60 mm (8 L x 3.5 W x 2.4 H in)
- Weight
  - <1.3 kg (< 2.9 LB)
  - All specifications are nominal or typical at +23° C unless noted.