

Model TJE

Precision Gage/Absolute Pressure Transducer



DESCRIPTION

Model TJE pressure transducers are all-welded stainless steel sensors built for rugged industrial applications that require high accuracy and measurement stability. The Model TJE is available with a variety of options for extended temperature operation, electrical terminations and high-level outputs including 5 Vdc or 10 Vdc and 4 mA to 20 mA. Most high-level output models have internal shunt calibration circuits as a standard feature to allow easy set-up of the sensor to the data system. An optional internal signature calibration chip provides calibration information for automatic set up with the Model SC four-or-twelve channel digital indicator.

FEATURES

- 0.1 % accuracy
- 0.0025 % F.S./°F temperature effect
- 1 psig/a to 60000 psig/a range
- mV/V, 4 mA to 20 mA, 0 Vdc to 5 Vdc, or 0 Vdc to 10 Vdc output
- All-welded, stainless steel construction
- Intrinsically safe available (2N option only)¹⁸
- CE¹⁹

The gage Model TJE is a strain gage based transducer and features a unique “true gage” design which utilizes a second welded stainless steel diaphragm that hermetically seals the strain gage circuitry from atmospheric contamination. This design references the primary pressure sensing diaphragm to the atmosphere, and provides a stable zero regardless of the transducer environment.

The absolute Model TJE has an all-welded vacuum reference chamber assuring long-term stability.

Model TJE

PERFORMANCE SPECIFICATIONS

Characteristic	Measure
Accuracy ¹	±0.10 % full scale
Linearity	±0.10 % full scale
Hysteresis	±0.05 % full scale
Media	All gases/liquids compatible with wetted parts
Resolution	Infinite
Calibration	5-point calibration: 0 %, 50 %, and 100 % of full scale

ENVIRONMENTAL SPECIFICATIONS

Characteristic	Measure
Temperature compensated	15 °C to 71 °C [60 °F to 160 °F]
Temperature effect, zero	0.0025 % full scale/°F
Temperature effect, span	0.0025 % reading/°F
Sealing	Hermetically sealed IP68/NEMA 6P

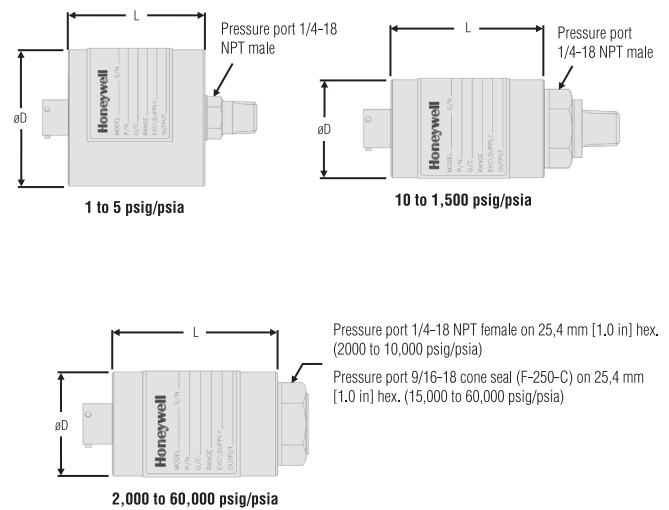
ELECTRICAL SPECIFICATIONS

Characteristic	Measure
Strain gage type	Bonded foil
Insulation resistance	5000 mOhm @ 50 Vdc
Bridge resistance	350 ohm
Shunt calibration data	Included
Electrical termination (std)	PTIH-10-6P or equiv. (hermetic stainless)
Mating connector (not incl)	PT06A-10-6S or equiv. (AA111)

MECHANICAL SPECIFICATIONS

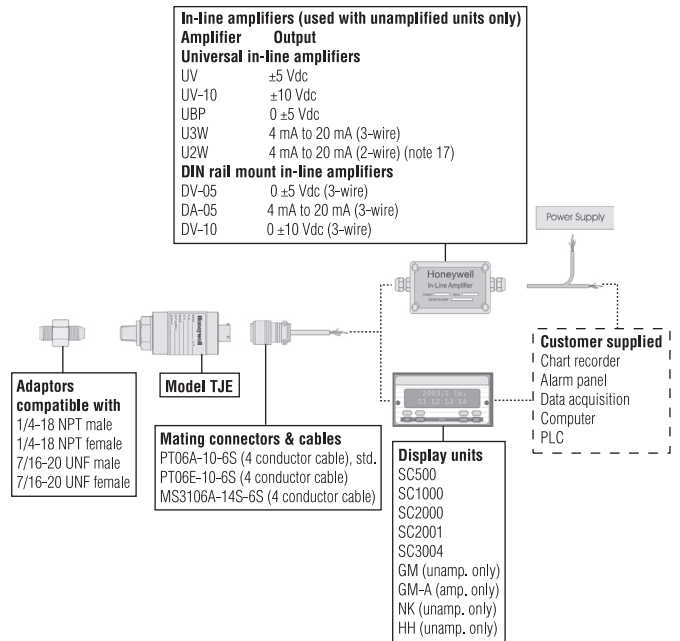
Characteristic	Measure
Wetted parts material	number here
< 2000 psig/a	17-4 PH stainless steel
> 2000 psig/a	15-5 PH stainless steel
Weight	10 oz
Case material	304 stainless steel
Marking	Permanent metal name plate MIL-STD130F 4.3; Individual sequential serial number per sensor; Country of origin and date of manufacture

MOUNTING DIAGRAM AND CHARACTERISTICS



For reference only

TYPICAL SYSTEM DIAGRAM



SPECIAL REQUIREMENTS (CONSULT FACTORY)

Have a special requirement? New case pressure, different cable lengths, electrical connectors, or materials? Consult our factory by calling +1 614-850-5000 (800-848-6564). Customization is key to our test and measurement business. Special outputs, wiring codes, and calibrations are all standard to us.