

PT418/419 Alternate Fill Pressure Sensors (Oil)

IDEAL FOR FOOD OR MEDICAL APPLICATIONS



Description

Model PT418/419, uses an oil fill that meets the requirements of the FDA and the USDA to allow accurate pressure measurements in processes where mercury is not allowed. The PT418/419 is the ideal unit for medical and food packaging, food extrusion and medical applications.

Features

- Better than $\pm 0.5\%$ accuracy
- Special fill material
- 0 - 1000 to 0 - 10,000 psi
- 3.33 mV/V FSO
- Fill material meets FDA and USDA requirements

Performance Characteristics	
Output:	3.33 mV/V $\pm$ 2.0%
Input Voltage:	10 Vdc recommended, 12 Vdc maximum
Accuracy:	$\pm$ 0.5% FSO*
Repeatability:	$\pm$ 0.2% FSO
Configuration:	Four-arm bonded foil Wheatstone bridge strain gage
Bridge Resistance:	Input: 345 Ohms minimum Output: 350 Ohms $\pm$ 10%
Over Pressure:	2 X FSO
Zero Balance:	$\pm$ 10% FSO
Internal Shunt Calibration (R-Cal):	80% FSO $\pm$ 1%
Insulation Resistance:	1000 megohms @ 50 Vdc

*The organic oil fill may be susceptible to gas generation at high temperatures for extended periods which may affect zero value (and therefore accuracy). Request the product manual for a full explanation and recommended procedure to eliminate any observed offset.

Temperature & Mechanical Characteristics	
Max Diaphragm Temperature:	527°F (275°C)
Zero Shift (Due To Temperature Change):	36 psi/100°F Typical (65 psi/100°C)
Electronics Operating Temperature:	250°F (121°C)
Zero Shift (Due to Temperature Change):	$\pm$ 0.05% FS/°F max ($\pm$ 0.1% FS/°C max)
Sensitivity Shift (Due to Temperature Change):	$\pm$ 0.02% FS/°F max ($\pm$ 0.04% FS/°C max)
Mounting Torque:	500 inch/lbs. maximum
Standard Wetted Parts:	Inconel 718

Ordering Guide for PT418/419



