

# 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**

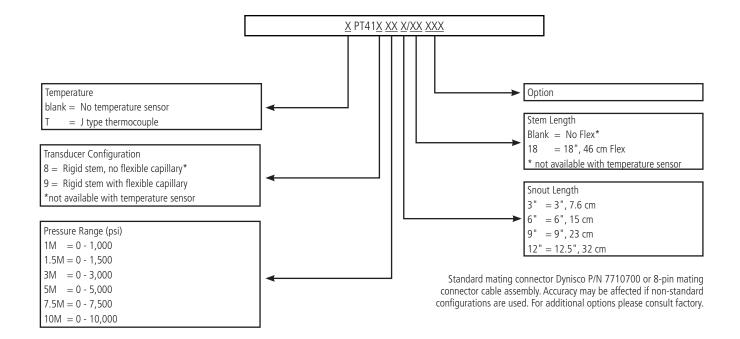
- Better than ±0.5% accuracy
- Special fill material
- 0 1000 to 0 10,000 psi
- 3.33 mV/V FSO
- Fill material meets FDA and USDA requirements

Performance Characteristics	
Output:	$3.33 \text{ mV/V} \pm 2.0\%$
Input Voltage:	10 Vdc recommended, 12 Vdc maximum
Accuracy:	± 0.5% FS0*
Repeatability:	± 0.2% FS0
Configuration:	Four-arm bonded foil Wheatstone bridge strain gage
Bridge Resistance:	Input: 345 Ohms minimum Output: 350 Ohms ± 10%
Over Pressure:	2 X FS0
Zero Balance:	± 10% FS0
Internal Shunt Calibration (R-Cal):	80% FSO ± 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	36 psi/100°F Typical
(Due To Temperature Change):	(65 psi/100°C)
Electronics Operating Temperature:	250°F (121°C)
Zero Shift	± 0.05% FS/°F max
(Due to Temperature Change):	(± 0.1% FS/°C max)
Sensitivity Shift	± 0.02% FS/°F max
(Due to Temperature Change):	(± 0.04% FS/°C max)
Mounting Torque:	500 inch/lbs. maximum
Standard Wetted Parts:	Inconel 718

# **Ordering Guide for PT418/419**



## **Dimensions**

