

# Miniature Electronic Transmitter Pressure, Level, and Vacuum

## **MIN PT/EL TH Series**



- Nema 4X Anodized Aluminum Terminal Head
- ± 0.25% FS Accuracy
- Ranges 10"WC-300 psig, Vacuum & Absolute
- Small 1" Sensing Area
- FMc Approved\*

**PMC Miniature Electronic Pressure Transmitters** accurately measure pressure, level, and vacuum in processes where clogging of the diaphragm face is a particular concern. The small, 1" diameter of the transmitter allows installation flush with the inside wall of pipes 2" in diameter and larger. This feature eliminates the usual pocketing problems encountered with conventional flange-mounted and recessed-diaphragm transmitters. PMC incorporates a high-precision ceramic capacitive pressure sensor to ensure accuracy and durability. This type of sensor is ideally suited for high-wear applications. The process pressure is converted to a standard 2-wire 4-20mA output. **The MIN PT/EL Series** of transmitters provides overpressure protection of up to 10 times the full scale range. The Nema 4X rated, Anodized Aluminum Terminal Junction Head provides a flexible solution for connection to the transmitter and can be configured with a Local LCD Display. Access to the terminal strip is provided through a convenient latched, flip-up top. Cables enter the Terminal Junction Head via a 1/2" NPT threaded port. The optional 1/2" Nylon Gland Nut provides a liquid-tight cord connection.

\*FMc approved for use in hazardous locations, Class I,II,III, Division1, Groups A,B,C,D,E,F, & G rated.

Pneumatically Operated Transmitters Also Available

#### **ORDERING INFORMATION**

# MIN PT/EL TH Series Miniature Electronic Transmitter Pressure, Level, and Vacuum

Full Scale Ranges

0 - 10"WC to 0 - 300 psi gauge  $\pm$  10"WC to  $\pm$  400"WC Compound

- $\pm$  10 wc to  $\pm$  400 wc compo
- 0 3 Hg to 0 30 Hg Vacuulli
- 0 15 psi to 0 150 psi absolute

Ranges below 40"WC, absolute ranges, and/or compound ranges available with ceramic diaphragm only

#### Static Accuracy

± 0.25% of Full Scale Combined non-linearity, hysteresis, and repeatability

#### Overpressure

10X for Full Scale Ranges up to 15 psi 4X for Full Scale Ranges from 15 to 150 psi 2X for Full Scale Ranges over 150 psi

#### Compensated Temperature Range

Ceramic Diaphragm: -4°F to 175°F (-20°C to 80°C) Other Diaghragms: 14°F to 175°F (-10°C to 80°C)

#### Operating Temperature Range

Ambient: -4°F to 175°F (-20°C to 80°C) Process: -4°F to 250°F (-20°C to 125°C)

#### Temperature Effects

Ceramic Diaphragm: Thermal Zero Shift:  $\pm 0.010\%$ °C Thermal Span Shift:  $\pm 0.005\%$ /°C for ranges < 6 psi  $\pm 0.003\%$ /°C for ranges 6 psi and above Other Diaphragm Materials: Temperature Error Band for 14°F to 175°F (-10°C to 80°C) is typically better than  $\pm 1.5\%$  (TEB) for ranges

greater than 6 psi and  $\pm 3.0\%$  for ranges < 6 psi Refer to Factory for more information

#### Electrical

Output: 2-wire, 4-20 mA Supply Voltage: 10 to 35 VDC nominal supply

#### Zero Setting

± 5% FS, potentiometer adjustment

#### Span Setting

 $\pm$  15% FS, potentiometer adjustment

#### Housing

Nema 4X, EMI / RFI protected, Anodized Aluminum Construction

PMC adopts a continuous development program which sometimes necessitates specification changes without notice.

# HEAD OFFICE

### **PMC Engineering LLC**

11 Old Sugar Hollow Road Danbury, CT 06810 U.S.A. Tel: 203-792-8686 Fax: 203-743-2051 Email: sales@pmc1.com www.pmc1.com When ordering please specify the following:

MODEL PMC - MIN PT/EL						
S/	٩N	SAN version				
	Standard version					
	Rang		inge	Specify psi, " WC, bar, absolute, gauge, etc.		
				Diaphragm		
				Нс	Hastelloy C	
				Та	Tantalum	
				Cer	Ceramic	
					Termination	
					TH	Terminal Head
					TH/D	Adds LCD Display
(1) (2) (3) (4) Select Specify Select Select						

#### Order Code Example: PMC-MIN-PT/EL-30"WC-Cer-TH/D

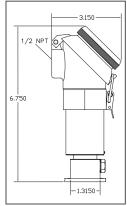
(1) Model: PMC-MIN-PT/EL-SAN

- (2) Range: 30" WC
- (3) Diaphragm Material: Ceramic
- (4) Electrical Termination: Anodized Aluminum Terminal Head

# OPTIONS

- Remote Electronics
- Gland Nut Cable Connections
- LCD Display
- Submersible Versions
- Process Connections SAN, Flush-Mount, Tri-Clamp, Flange and Threaded Process Connections available

Contact PMC for other options and accessories



All measurements shown in inches

Represented By: