

Smart Electronic, Transmitter Pressure, Level, and Vacuum

SMT PT/EL CV Series



- Remote Configuration using HART® Protocol
- ± 0.25% FS Accuracy
- Ranges 5"WC 300 psig, 30"Hg Vacuum
- 4-20 mA, 2-wire output

PMC Smart Electronic Pressure Transmitters (SMT PT/EL) combine state-of-the-art temperature compensated capacitive sensor technology with microprocessor-based electronics to provide remote digital communications using a HART® protocol communicator. Using the HART communicator, the transmitter can easily and remotely be configured for specific ranges, calibrated, and tested. The transmitter provides a 2-wire 4-20mA output.

The SMT PT/EL transmitters accurately measure pressures, levels, and vacuum ranges in processes where clogging of the diaphragm face is a particular concern. The small, 1½" diameter of the transmitter allows installation flush with the inside wall of pipes 3" in diameter and larger. This feature eliminates the usual pocketing problems encountered with conventional flange-mounted and recessed-diaphragm transmitters. The high precision capacitive ceramic sensor is ideally suited for high-wear applications. The SMT PT/EL Series of transmitters offers overpressure protection of up to 10 times the full scale range. The CV configuration allows customers to specify custom lengths of cable to be supplied with the transmitter. A choice of vented Polyurethane or Teflon FEP cable is available. Teflon FEP cable offers improved chemical resistance for more demanding applications.

Pneumatically Operated Transmitters Also Available

ORDERING INFORMATION

HART® Communications

Configuration, Calibration, and Test using HART compatible communicator

Full Scale Ranges

0 - 10"WC to 0 - 300 psi gauge ± 10"WC to ± 400"WC Compound 0 - 3"Hg to 0 - 30"Hg Vacuum 0 - 15 psi to 0 - 150 psi absolute

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

Static Accuracy

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

Overpressure

10X for Full Scale Ranges up to 100 psi 4X for Full Scale Ranges over 100 psi

Compensated Temperature Range

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

Operating Temperature Range

Ambient: -40°F to 175°F (-40°C to 80°C) Process: -40°F to 250°F (-40°C to 125°C)

Temperature Effects

Ceramic Diaphragm: Thermal Zero Shift: $\pm 0.0075\%/^{\circ}$ C Thermal Span Shift: $\pm 0.005\%/^{\circ}$ C for ranges < 6 psi $\pm 0.003\%/^{\circ}$ 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 32 VDC nominal supply

Zero Setting

± 5% FS, potentiometer adjustment

Span Setting

± 15% FS, potentiometer adjustment

Cable

CV/P - 10' Polyurethane CV/T - 10' Teflon FEP

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

SMT PT/EL CV Series Smart Transmitter Pressure, Level, and Vacuum

When ordering please specify the following:

MODEL PMC - SMT PT/EL							
SAN	SAN version						
DR	Double Ring version						
	Ra	Specify psi, " WC, bar, absolute, gauge, etc.					
			Diaphragm				
			Нс		Hastelloy C		
			Та		Tantalum		
			Cer Ceramic				
					Termination		
					CV/P	Polyurethane	
					CV/T	Teflon FEP Cable	
(1) Select	(2 Sp	/	(3) Sele		(4) Select	t	

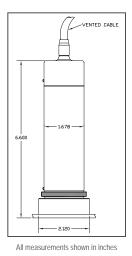
Order Code Example: PMC-SMT-PT/EL-SAN-100"WC-Hc-CV/P

- (1) Model: PMC-SMT-PT/EL-SAN
- (2) Range: 100" WC
- (3) Diaphragm Material: Havar
- (4) Electrical Termination: SS Cover with 10' Polyurethane Cable

OPTIONS

- Remote Electronics
- Termal Head
- LCD Display
- Submersible Versions
- Process Connections SAN, Flush-Mount, Tri-Clamp, Flange and Threaded Process Connections available

Contact PMC for other options and accessories



Represented By: