

E-PSTxxxIS

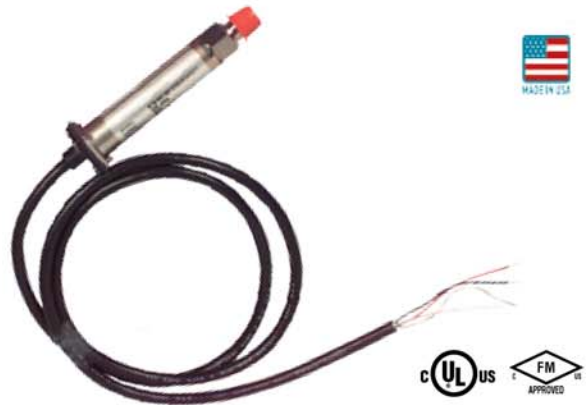
Intrinsically Safe Pressure Sensor Transmitter

DESCRIPTION

The E-PSTxxxIS **intrinsically safe pressure transmitter** is exceptionally stable and is virtually unaffected by shock, vibration, or orientation. Performance is directly traceable to NIST standards, and a calibration certificate* is available for each unit upon request. These intrinsically safe (IS) transmitters are ideal for monitoring pressures in explosive atmospheres with barrier.

FEATURES

- Class I, Division 1, Groups C, D; Class II, Division 1, Group G; Class III
- Nonincendive for Class I, Division 2, Groups A, B, C, and D
- 0.5% accuracy, all ranges
- 4-20 mA, loop powered
- Ranges from 100-3000 psig (690-20,685 kPa)

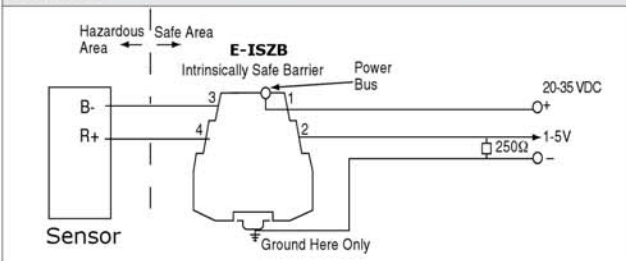


SPECIFICATIONS

Supply Voltage	10-36 VDC
Accuracy	±0.5% full scale
Output Signal	4-20 mA @ 650Ω
Entity Parameters	Vmax=30V, Imax=100mA, Po=1 W, Ci=50nf, Li=0μh
Thermal Effect	±0.03 full scale/°F zero and span
Overpressure Limits (F.S.)	
15-2000:	200% (proof), 800% (burst)
3000-5000:	150% (proof), 300% (burst)
7500-20,000:	120% (proof), 150% (burst)
Temperature Compensation	
Operating Temperature	-20° to 160°F (-29° to 71°C)
	-20° to 180°F (-29° to 82°C)

Response Time	5 ms
Construction	304 stainless steel case
Process Connection	1/8" BNPT male 316 stainless steel
Diaphragm Material	17-4 PH stainless steel
Zero Span Adjust	Field adjustable ±10%
Dimensions	4" L x 5/8" dia (10.2 x 1.6 cm)
Area	Intrinsically safe Class I, Division 1, Groups C, D; Class II, Division 1, Groups G; Class III
Weight	0.65 lb (0.29 Kg)
Approvals	UL, FM

WIRING



CAUTION: Intrinsically safe devices require the use of an intrinsic safety barrier when applied in hazardous locations. Provide wiring and grounding strictly in accordance with manufacturer's instructions. When a transmitter is combined with the E-ISZB intrinsic safety barrier, total cable capacitance between the two must be limited to 0.12 μF. Total cable inductance must be limited to 4.0 mH (equivalent to 2700'/823m maximum Belden™ #8760 18/2 shielded twisted pair cable 0.18 μH/FT, 44 pF/FT).

ORDERING INFORMATION

MODEL	DESCRIPTION
E-PST100IS	4-20 mA intrinsically safe pressure transmitter 0-100 psig (690 kPa)
E-PST200IS	4-20 mA intrinsically safe pressure transmitter 0-200 psig (1379 kPa)
E-PST500IS	4-20 mA intrinsically safe pressure transmitter 0-500 psig (3448 kPa)
E-PST1000IS	4-20 mA intrinsically safe pressure transmitter 0-1000 psig (6895 kPa)
E-PST3000IS	4-20 mA intrinsically safe pressure transmitter 0-3000 psig (20,685 kPa)

Note: The E-PSTxxxIS must be used in conjunction with an E-S420MA-24V (sold separately) to connect it to an E-xD for monitoring pressure.

* Calibration Certificate must be requested at the time the sensor is ordered. Additional processing charges may be incurred.