

HAZARDOUS LOCATIONS



INTRINSICALLY SAFE LOW DIFFERENTIAL PRESSURE TRANSMITTER 157S SERIES

DESCRIPTION

The **157S Series Intrinsic Safe Low Differential Pressure Transmitter** monitors differential gas or liquid pressure in a hazardous environment. The **157S Series** has a 4-20 mA output proportional to the transmitter range and is housed in a NEMA 4 enclosure. The unit has an intrinsically safe rating for Class I, Division 1, Groups A, B, C, D. The optional Model A-602 pressure probe kit allows the **157S Series** to monitor duct static differential pressures.



FEATURES

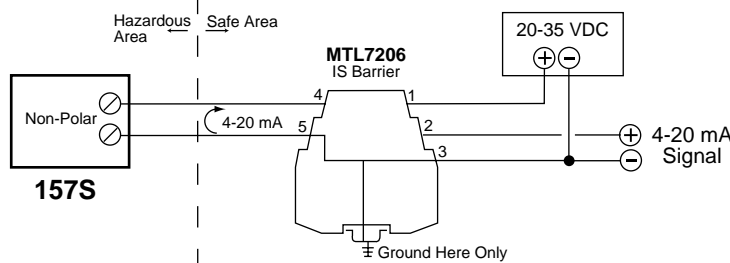
- **Class I, Division 1, Groups A, B, C, D**
- **Ranges from 0.25" to 15" W.C. (62.2 to 3736 Pa)**
- **4-20 mA loop powered**
- **Zero and span adjustments**
- **Polarity reversal protection**

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 manufacturers' instructions. When the Model 157S transmitter is combined with the Model MTL7206 intrinsic safety barrier, total cable capacitance between the two must be limited to 0.12 µF, and total cable inductance must be limited to 4.0 mH (equivalent to 5000'/1520m maximum Belden® #8760 18/2 shielded twisted pair cable).

SPECIFICATIONS

Accuracy	±0.5% of full scale	Voltage	12-38 VDC, 24V nominal
Signal	4-20 mA @ 600Ω max impedance	Classifications	Class I, Div 1, Groups A, B, C, D
Ranges	See Ordering Information	Agency	FM
Differential pressure	See Ordering Information	Weight	2.0 lb (0.9 kg)
Burst pressure	100" W.C. on both ports	Dimensions	5.4"W x 5.4"D x 4.75"H (13.9 x 13.9 x 12 cm)
Medium	Noncorrosive gases and liquids	Electrical	Screw terminals, non-polar
Ambient	-40° to 176°F (-40 to 80°C)	Conduit entry	1/2" FNPT
Entity parameters	V _{max} = 40V, I _{max} = 267 mA C _i =0, L _i = 0	Sensing connections	1/8" FNPT
		Zero/Span adjust	±5% of full scale

WIRING



ORDERING INFORMATION

MODEL	DESCRIPTION	RANGE "W.C. (Pa)	MAX DIFF PRESSURE "W.C. (Pa)
157S-W002N	4-20 mA Differential Pressure Transmitter	0-0.25 (62)	20 (4981)
157S-W005N	4-20 mA Differential Pressure Transmitter	0-0.5 (125)	20 (4981)
157S-W010N	4-20 mA Differential Pressure Transmitter	0-1.0 (249)	25 (6227)
157S-W020N	4-20 mA Differential Pressure Transmitter	0-2.0 (498)	25 (6227)
157S-W050N	4-20 mA Differential Pressure Transmitter	0-5.0 (1245)	25 (6227)
157S-W110N	4-20 mA Differential Pressure Transmitter	0-10.0 (2490)	25 (6227)
157S-W115N	4-20 mA Differential Pressure Transmitter	0-15.0 (3736)	60 (14945)

Related Products

MTL7206	Intrinsic safety barrier
A-602	Dual probe duct pressure sample kit