

HAZARDOUS LOCATIONS



ASHCROFT INTRINSICALLY SAFE DIFFERENTIAL PRESSURE TRANSMITTER IXLDP

ASHCROFT



DESCRIPTION

The Ashcroft Model IXLdp (XFM option) is an intrinsically safe, industrial-quality, differential pressure transmitter for use on air and other noncorrosive gases. The Model IXLdp is available with accuracies of 0.25% and 0.50% in pressure ranges of 0.1 "W.C. to 200 "W.C. uni-directional or bi-directional.

FEATURES

- 100 psig static line pressure
- 0.25% or 0.5% accuracy down to 0.05 "W.C."
- Uni-directional or bidirectional ranges
- 300 Series cast stainless steel body
- NEMA 4X
- NIST certificate included



IXLdp

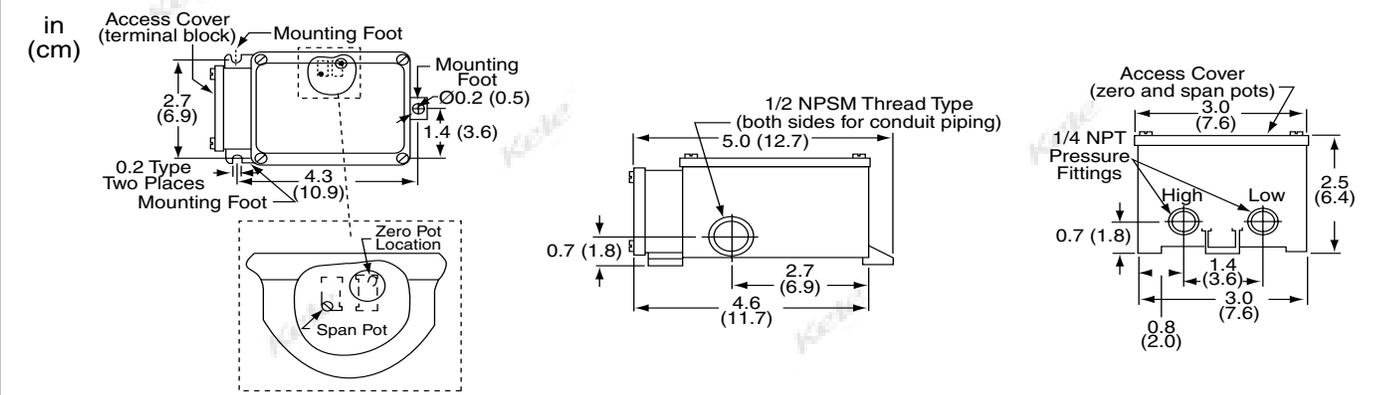
SPECIFICATIONS

Supply Voltage	12-36 VDC	Operating Temperature	-20° to 185°F (-29° to 85°C)
Accuracy	0.25% or 0.5%	Conduit Connection	Two 1/2" female
Signal Output	4-20 mA @ 545Ω	Process Connection	Two 1/4" NPT female
Area	Intrinsically Safe Class I, II, III; Div 1 and 2, Groups A through G Non-incendive Class I, Div 2, Groups A through D; Class II, Div 2, Groups F, G, Class III	Enclosure Rating	NEMA 4X
Entity Parameters	V _{max} =30V, I _{max} =100mA, P _o =1 W, C _i =50nf, L _i =0μh	Static Pressure	100 psig max.
Response Time	250 ms	Media	Clean, dry, noncorrosive gas
		Proof Pressure	20 psid
		Burst pressure	50 psid
		Weight	2 lb (0.9 Kg)
		Approvals	FM - US only
		Warranty	1 year

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DIMENSIONS



INSTALLATION

The transducer should be used with clean, dry air or other dry, noncorrosive gases. The unit should be mounted with #8 or #10 screws using the three mounting feet provided. The transducer can be mounted in any orientation with virtually no effect on calibration. Any minor zero pressure offsets that are encountered can be adjusted using the zero-adjust potentiometer. The high- and low-pressure connection ports are plugged to avoid debris entering the unit. The plugs should be left in place until the tubing and fittings are connected. The two 1/4" NPT pressure connections should be sealed to the transducer housing using Teflon® tape. Do not use dope-type sealant.

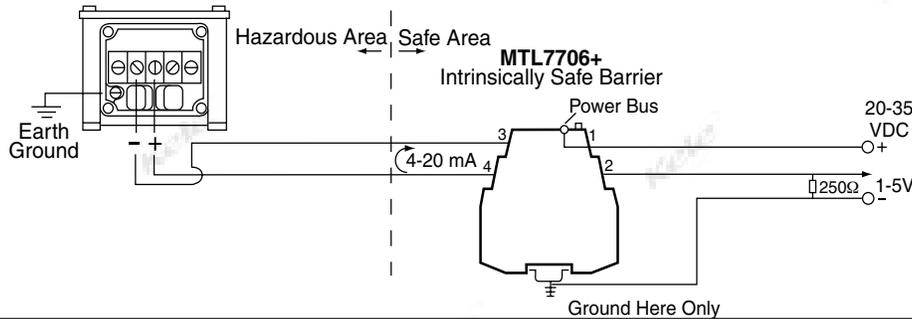


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CAUTION: Intrinsically safe devices require the use of an intrinsic safety barrier when applied in hazardous locations. Provide wiring and grounding strictly in accordance with manufacturer's instructions. When the Model IXLdp transmitter is combined with the Model MTL7706+ 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 2700'/823m maximum Belden® #8760 18/2 shielded twisted pair cable 0.18 $\mu\text{H}/\text{FT}$, 44 pF/FT).

WIRING



ORDERING INFORMATION

MODEL	DESCRIPTION
IX	Differential pressure transmitter
ACCURACY	
3	0.25% accuracy
5	0.5% accuracy
PRESSURE CONNECTION	
F	1/4" NPT female pressure connection
OUTPUT SIGNAL	
4	4-20 mA output signal
ELECTRICAL CONNECTION	
S	Screw terminals
PRESSURE RANGE	
Differential or Gauge	
P1IW	0.10" W.C. (24.9 Pa)
P25IW	0.25" W.C. (62.24 Pa)
P5IW	0.50" W.C. (124.6 Pa)
1IW	1.00" W.C. (249.1 Pa)
2IW	2.00" W.C. (498.2 Pa)
2P5IW	2.50" W.C. (622.4 Pa)
3IW	3.00" W.C. (747.3 Pa)
5IW	5.00" W.C. (1245.5 Pa)
10IW	10.00" W.C. (2491.0 Pa)
15IW	15.00" W.C. (3734.5 Pa)
20IW	20.00" W.C. (4979.3 Pa)
25IW	25.00" W.C. (6224.1 Pa)
50IW	50.00" W.C. (12.4 kPa)
100IW	100.00" W.C. (24.9 kPa)
150IW	150.00" W.C. (37.3 kPa)
200IW	200.00" W.C. (49.8 kPa)
Compound	
P05IWL	±0.05" W.C. (12.4 Pa)
P1IWL	±0.10" W.C. (24.9 Pa)
P2IWL	±0.20" W.C. (49.8 Pa)
P25IWL	±0.25" W.C. (62.24 Pa)
P5IWL	±0.50" W.C. (124.6 Pa)
1IWL	±1.00" W.C. (249.1 Pa)
2IWL	±2.00" W.C. (498.2 Pa)
2P5IWL	±2.50" W.C. (622.4 Pa)
3IWL	±3.00" W.C. (747.3 Pa)
5IWL	±5.00" W.C. (1245.5 Pa)
10IWL	±10.00" W.C. (2491.0 Pa)
15IWL	±15.00" W.C. (3734.5 Pa)
20IWL	±20.00" W.C. (4979.3 Pa)
25IWL	±25.00" W.C. (6224.1 Pa)
50IWL	±50.00" W.C. (12.4 kPa)
100IWL	±100.00" W.C. (24.9 kPa)
OPTIONS	
XFM	Factory mutual approval (required for intrinsically safe)

IX 3 FO2 42 ST 10IW XFM **Example:** IX3FO242ST10IW XFMX41 Intrinsically safe differential pressure transducer with 0.25% accuracy, 4-20 mA output, and 10" W.C. range.

RELATED PRODUCTS

250R-3-1
A-602

250 OHM 3 WATT 1% Resistor Long Leads
Mounting kit for air filter applications. Includes two pressure tips, two 5-foot lengths of aluminum tubing and two adapters.

DCP-1.5-W
MTL7706+

Power supply, 24 VAC IN to 24 VDC OUT
Intrinsic safety barrier, 4-20 mA two-wire transmitters