Mid-West® Instrument

Differential Pressure Transmitter

Range 0-5 PSID (0- 0.35 bar) thru 0-300 PSID (0-20 bar)

Mid-West Instrument wet/wet differential pressure transmitter utilizes a piezoresistive differential pressure sensor sensing element with stainless steel isolated diaphragm. Silicon oil is filled in between die and two diaphragms. The measured differential pressure is transmitted onto the die through the diaphragm and silicon oil. The signal output generated by the piezoresistive bridge sensor is amplified into a useable voltage or 4-20 mA output as specified by customer. 1 Year Limited Warranty.

Product Features

Use with Liquid or Gas media compatible with material of construction
Full stainless steel construction, compact size, easy installation
Laser welded, fully-sealed construction: NEMA 4X (IP65)
Utilizes Piezoresistive Differential Pressure Sensor Isolated Diaphragm
Zero and Span Adjustable
CE Certified to EMI / EMC Directive
LCD or LED display available upon request
(Available with DIN Connector & 4-20mA Output Only)
Maximum Overpressure (+) Hi-Side equals 2 times specified DP range
Maximum Overpressure (-) Low-Side is equal to specified DP range
Maximum Static Pressure 2,900 PSI

LCD **or** LED 3 1/2 Digit Display

¼" BSPP x ¼" FNPT
¼" BSPP x ½" FNPT
S.S. Adapters Available

Materials of Construction

- **Pressure Port & Housing:** 321 SS
- **Diaphragm:** 316L Stainless Steel
- **O-ring:** Viton
- **Process Connections:** ¼" Female BSPP
- **Fill liquid:** Silicon Oil

Available Electrical Specifications:

- **Power Supply:** 2-Wire 15-28 VDC
  2-Wire 18~28 VDC, 2-Wire 20-28 VDC,
  3-Wire 15-28 VDC
- **Output Signals:** 2-Wire 4-20 mA
  3-Wire, 0-5 VDC, 1-5 VDC, 0-5 VDC
  0-10 VDC, 0-10 mA DC and 0-20 mA DC
- **Electrical Connections:**
  Din Plug 43650 or 1.5m 4-pin cable
- Response Time: (10%-90%) ≤1ms
- Insulation Resistance 100 MΩ, 50 VDC

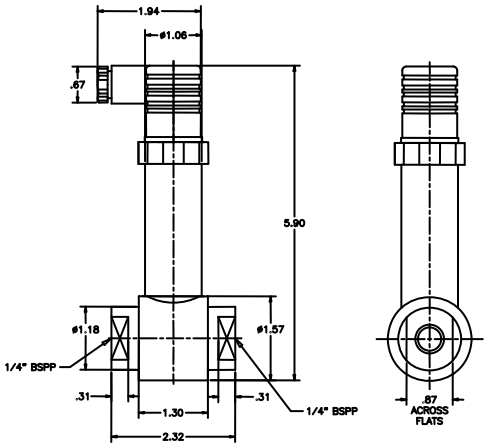
Description	Range	% / Unit	
Accuracy (LIN, HYS, & REP.)	5-300 PSID	0.50% Full Scale	
Zero Thermal Drift	0-15 PSID	±.03% Full Scale / °C Typ.	
	30-300 PSID	±.02% Full Scale / °C Typ.	
FS Thermal Drift	0-15 PSID	±.03% Full Scale / °C Typ.	
	30-300 PSID	±.02% Full Scale / °C Typ.	
Stability	≤ 30 PSI	0.50%	% Full Scale / Year
	≤ 30 PSI	0.20%	
Static Pressure Effect	±0.05%		Full Scale ea. 15 PSI
Compensation Temperature	0 - 50°C		°C
Operating Temperature	-10 - 80°C		
Storage Temperature	-40 - 120°C		

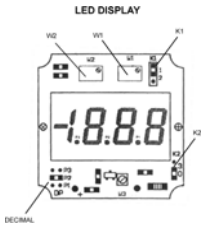
Standard Model Specification: 700-22-005P-C4-B1-E
321 Stainless Steel Pressure Port & Housing, 316 Stainless Steel Diaphragm
Viton O'Rings, ¼" Female BSPP Connections, DIN 43650/IP65 Plug-In Type Connector
Electrical Input & Output: 2-wire 15~28VDC / 4~20mADC
Accuracy ±0.5% Full Scale

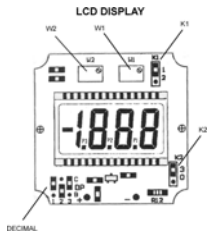
Range: 0-5 PSID (0-0.35 bar) to 0-300 PSID (0-20 bar)

1			2		3				4		5		6
7	0	0	2	2	0	0	5	P	C	4	B	1	E

Basic Model







1	Description
700	Differential Pressure Transmitter
710	Differential Pressure Transmitter with LCD Readout **Available with DIN Connector & 4-20mA Output only)**
715	Differential Pressure Transmitter with LED Readout **Available with DIN Connector & 4-20mA Output only)**
2	**Materials of Construction**
22	Pressure Port & Housing = 321 S.S. / Diaphragm = 316L Stainless Steel.
3	**Differential Pressure Range**
PSID=**P**	5, 10, 15, 30, 50, 100, 150, & 300 PSID
Bar=**B**	0.35, 0.70, 1.0, 2.0, 3.5, 7.0, 10, 20
kPa=**K**	35, 70, 100, 200, 350, 700
4	**Process Connection**
C4	1/4" Female BSPP (STD)
5	**Electrical Connection**
B1	DIN 43650/IP65 Plug-In Type
B2	Cable Connection / Standard Length 1.5 meter
6	**Power Supply Input / Output Signal**
E	2-wire 15-28 VDC / 4-20 mA / LCD Display 18-28 VDC / LED Display 20-28 VDC
F	3-wire 15-28 VDC / 1-5 VDC
J	3-wire 15-28 VDC / 0-5 VDC
Q	3-wire 15-28 VDC / 0-10 mA
U	3-wire 15-28VDC / 0-20 mA
V	3-wire 15-28 VDC / 0-10 VDC
	316 S.S. Adapters (includes Viton O'ring)
113319	1/4" MALE BSPP to 1/4" FNPT 316 S.S. Adapter
113320	1/4" MALE BSPP to 1/2" FNPT 316 S.S. Adapter

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