

# Mid-West<sup>®</sup> 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. Series 700 is manufactured in China. 1 Year Limited Warranty. (Standard Delivery 4 Weeks ARO.)

### 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

It is recommended to install a 3 valve manifold between point of measurement and the transmitter.

### Materials of Construction

- **Pressure Port & Housing:** 321 Stainless Steel
- **Diaphragm:** 316L Stainless Steel
- **O-ring:** Viton
- **Process Connections:** 1/4" Female BSPP (STD)
- **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 4~20mADC,  
3-Wire, 0~5VDC, 1~5VDC, 0~5VDC  
0~10VDC, 0-10mADC and 0-20m ADC
- **Electrical Connections:**  
Din Plug 43650 or 1.5m 4-pin cable
- Response Time: (10%~90%) ≤1ms
- Insulation Resistance 100MΩ, 50VDC



LCD or LED  
3-1/2 Digit Display



1/4" BSPP x 1/4" FNPT  
1/4" BSPP x 1/2" FNPT  
S.S. Adapters Available

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%	%FS / Year
	≤ 30 PSI	0.20%	
Static Pressure Effect	±0.05%	FS, ea. 15 PSI	
Compensation Temperature	0~50		
Operating Temperature	-10~80		
Storage Temperature	-40~120		
		°C	

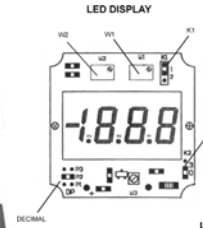
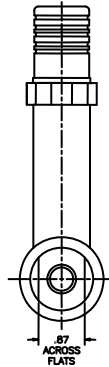
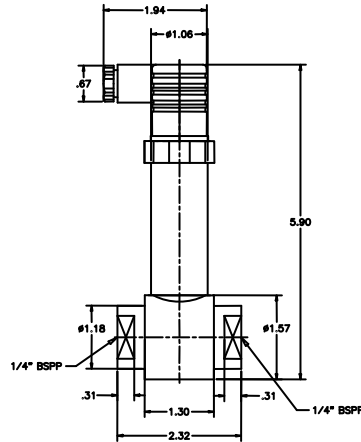
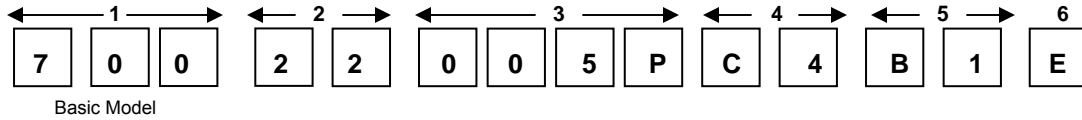
**Standard Model Specification: 700-22-005P-C4-B1-E**

321 Stainless Steel Pressure Port & Housing, 316 Stainless Steel Diaphragm  
 Viton O'Rings, 1/4" Female BSPP Connections, DIN 43650/IP65 Plug-In Type Connector  
 Electrical Input & Output: 2-wire 15~28VDC / 4~20mADC  
 Accuracy ±0.5% Full Scale



**Mid-West Instrument**  
 1-800-648-5778

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



1	Description
700	Differential Pressure Transmitter
710	Differential Pressure Transmitter W/LCD Readout (Available with DIN Connector & 4-20mA Output only)
715	Differential Pressure Transmitter W/LED Readout (Available with DIN Connector & 4-20mA Output only)
2	Materials of Construction
22	Pressure Port & Housing = 321 S.S. / Diaphragm = 316L S.S.
3	Differential Pressure Range
PSID=P	5, 10, 15, 30, 50, 100, 150, & 300 PSID
Bar=B	.35, .70, 1, 2, 3.5, 7, 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 1.5m
6	Power Supply Input / Output Signal
E	2-wire 15~28VDC / 4~20mADC / LCD Display 18-28 VDC / LED Display 20-28VDC
F	3-wire 15~28VDC / 1~5VDC
J	3-wire 15~28VDC / 0~5VDC
Q	3-wire 15~28VDC / 0~10mADC
U	3-wire 15~28VDC / 0~20mADC
V	3-wire 15~28VDC / 0~10VDC
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