

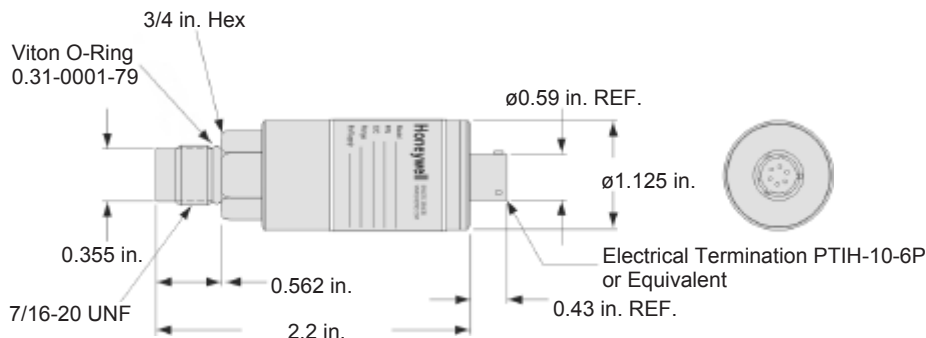
Model 355 Flush Diaphragm Pressure Transducers

Order Code BP313

- 0-500 to 0-5000 psi
- Flush Diaphragm
- High Level Output
- +/-0.25% Accuracy



Dimensions



Performance

Pressure Ranges.....	0-500 psi to 0-5000 psi
Accuracy.....	+/- 0.25% (note 7)
Non-Linearity.....	0.5%
Non-Repeatability.....	0.1%
Output.....	4-20 mA (std.)
Resolution.....	Infinite

Environmental

Temperature, Operating.....	-20° to 185°F
Temperature, Compensated.....	60° to 160°F
Temperature, Effect	
Zero.....	0.01% Full scale/ °F
Span.....	0.02% Reading/ °F

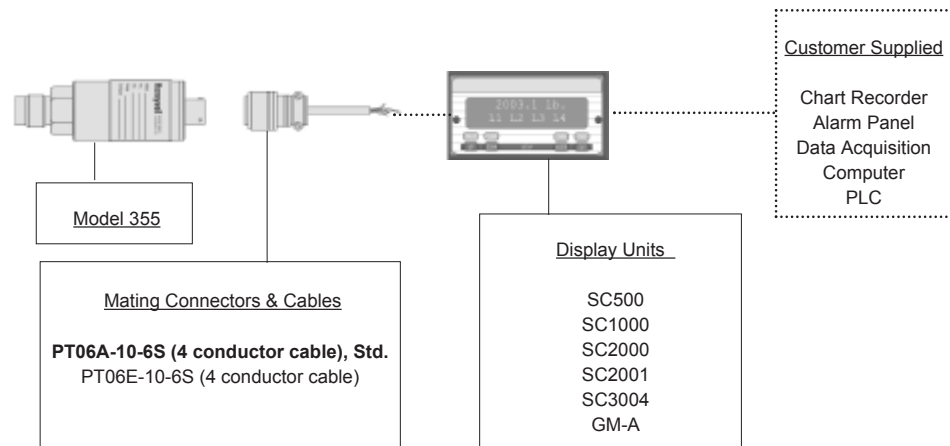
Electrical

Excitation (calibration)	
4-20 mA, 2 wire (std.).....	9-32 VDC
0-5 VDC, 3 wire (option 2c).....	9-28 VDC
Insulation Resistance.....	50 Megohms @ 50 V
Electrical Termination (std.).....	PTIH-10-6P
Mating Connector (not incl.).....	PT06A-10-6S

Mechanical

Media.....	Gas, Liquid compatible with 17-4 PH SS
Overload-Safe.....	300% over capacity
Overload-Burst.....	500% over capacity or 20,000 psi, whichever is less
Pressure Port.....	7/16-20 UNF
Wetted Parts Material.....	17-4 PH Stainless Steel
Case Material.....	Stainless Steel

Typical System Diagram



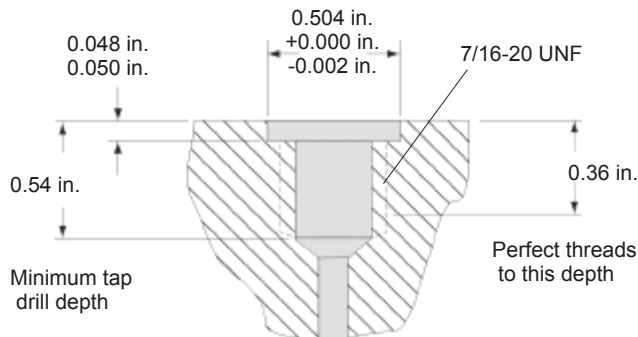
Internal Amplifiers

Amplifier Specifications	Vehicle Voltage Output Option 2c	Current 2 Wire Option 2k	Intrinsically Safe Amp Option 2N (2n)
Output Signal	0-5VDC@ 45mA	4-20 mA	4-20 mA
Input Power (Voltage)	11-28 VDC	9-28 VDC (note 3)	9-28 VDC (note 3)
Input Power (Current)	40 mA	4-28 mA	4-24 mA
Frequency Response	3000 Hz	300 Hz	2000 Hz
Power Supply Rejection	60 db	60 db	60 db
Operating Temperature	-20° to 185° F	0° to 185° F	-20° to 185° F
Reverse Voltage Protection	Yes	Yes	Yes
Short Circuit Protection	Momentary	Yes	Yes
Wiring Code: Connector (Std.) (note 3)	A (+) Supply B** Output Common/ C** Supply Return D (+) Output E No Connection F No Connection	A (+) Supply B No Connection C No Connection D (+) Output E Case Ground F No Connection	A (+) Supply B No Connection C No Connection D (+) Output E Case Ground F No Connection
Wiring Code: Cable (note 3) (note 5) (note 6)	R (+) Supply Bl* Output Common/ G* Supply Return W (+) Output B No Connection Br No Connection	R (+) Supply Bl (+) Output W Case Ground	R (+) Supply Bl (+) Output W Case Ground

* Black and Green wires are internally connected.

** Pins B and C are internally connected.

Installation



MOUNTING: The Model 355 has straight threads and uses a #12 O-ring for pressure sealing. To get the best seal with the O-ring on the transducer, the tapped hole should have the dimensions shown here. For normal operating temperatures (-65° to +250°F) use the BUNA-N (black) O-rings. For high temperatures (250° to 425°F) use silicone rubber (red). Maximum torque is 50 in.-lb., 17-4 PH Stainless Steel only.

Options

	Build to Order
Pressure Ranges	500; 1000; 2000; 3000; 5000 psi
Temperature Compensation	1a. 60° to 160° F
	1b. 30° to 130° F
	1c. 0° to 185° F
	1d. -20° to 130° F
	1j. 0° to 50° C
	1k. -20° to 85° C
Internal Amplifiers	2k. 4-20ma (2 wire) output
	2c. 0-5VDC
	2n(2N). 4-20ma (2 wire) output intrinsically safe
Pressure Ports	5p. M12 x 15 Male
	5d. 7/16" - 20 UNF Male (per MS33656E4)
Electrical Termination	6a. Bendix PTIH-10-6P (or equivalent) 6 pin (max. 250°F)
	6e. Integral cable: Teflon (-54° to 245° C)
	6f. Integral cable: PVC (-30° to 70° C)
	6h. Integral cable: Silicone (-54 to 150° C)
	6i. Integral underwater cable (8m) (max 80° C)
	6n. DIN 40050
	6q. Molded Integral Cable: Polyurethane
6v. Phoenix connector on end of cable	
Special Calibration	9e. CE mark
	9a. 10 point (5 up/5 down) 20% increments @ 20° C
	9b. 20 point (10 up/10 down) 10% increments @ 20° C
Interfaces	53e. Signature Calibration
	53t. T.E.D.S. IEEE 1451.4 Module (note 8)

Supplied as standard

Range Codes

Range	Range Code
500 psi	CR
750 psi	CT
1,000 psi	CV
1,500 psi	DJ
2,000 psi	DL
2,500 psi	DM
3,000 psi	DN
5,000 psi	DR

Notes

- Gage pressure units greater than 500 psi are sealed at atmospheric pressure
- Input power (voltage) for internal amplifier options 2j, 2k, 2n,N depends on load resistance.
- Interconnecting shunt cal. 1 with shunt cal. 2 terminal provides 50% (unamplified units), 75% (4-20 mA 3 wire units), or 80% (voltage amp. units) of full scale output for quick calibration. Shunt Calibration comes standard with internal amplifier options 2a, 2b, 2c, 2t and 2j.
- Not available with temperatures below -20°F or above 185°F.
- G=Green; B=Blue; W=White; Bl=Black; Br=Brown; Y=Yellow; R=Red; O=Orange. Color specifying cable and number or letter specifying connector
- No mating connector necessary with cable option.
- Accuracies stated are expected for Best Fit Straight Line for all errors including linearity, hysteresis & non-repeatability thru zero.
- Consult factory for TEDS availability with amplified models.

Special Customer Requirements (Consult Factory)

Different cable lengths
 Different electrical connectors
 Different materials
 Fatigue rating
 O₂ Clean
 Special electrical output
 Special ports
 Special wiring codes
 Special pressure ranges
 Temperature & pressure calibration

How to Order

Combine the order code, the range code and the options code.

Sample Code: **BP313** **CS** **2c**
 Order Code Range Code Options Code