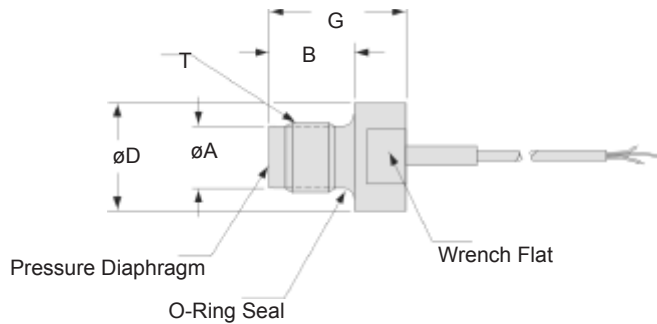


Model S Subminiature, Flush Diaphragm Pressure Transducers

Order Code BP357; BP358 (note 1)



- 100 to 15,000 psi Range
- Flush Mount Design
- High Frequency
- mV/V Output
- 1% Accuracy



Wiring Code

Cable/ Unamplified

Red	(+) Excitation
Black	(-) Excitation
Green	(-) Output
White	(+) Output

Dimensions

Order Code	T (thread)	ø A (in.)	ø D (in.)	B (in.)	G (in.)	Diaphragm
BP357	3/8-24 UNF	0.310	0.50	0.45	0.69	Welded
BP358	7/16-20 UNF	0.375	0.56	0.50	0.75	Welded

Performance

Pressure Ranges	..
3/8-24 UNF Thread	100; 150; 200; 300; 500; 750; 1000; 1500; 2000; 3000; 5000; 7500; 10,000; 15,000 psig
7/16-20 UNF Thread	150; 300; 750; 1500; 7500; 15,000 psig
Accuracy (note 2)	1.0% Full Scale (note 6)
Non-Linearity and Hysteresis	1.0% Full Scale (note 2)
Non-Repeatability	+/-0.15% Full Scale
Output	2 mV/V (note 6)
Resolution	Infinite

Environmental

Temperature, Operating	-65° to 300°F
Temperature, Compensated	60° to 160°F
Temperature, Effect	
Zero	0.01% Full scale/ °F (note 6)
Span	0.02% Reading/ °F (note 6)

Electrical

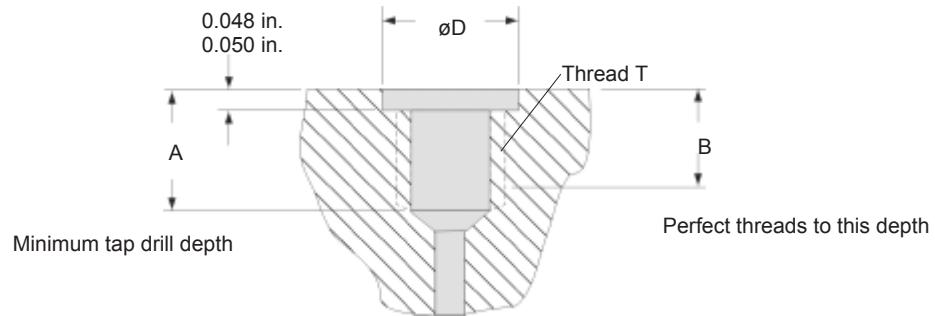
Strain Gage Type	Bonded Foil
Excitation (calibration)	5 VDC
Excitation (acceptable)	Up to 5VDC (or AC)
Insulation Resistance	5000 Megohm @ 50 VDC
Bridge Resistance	350 Ohms
Shunt Calibration Data	Included
Electrical Termination (std)	4 twisted leads (5 ft.) with external balance board

Mechanical

Media	Gases, Liquids compatible with wetted parts
Overload-Safe	50% over capacity
Overload-Burst	400% Full Scale
Dead Volume	Flush
Wetted Parts Material	17-4 PH Stainless Steel
Weight	2 oz.
Case Material	Stainless Steel

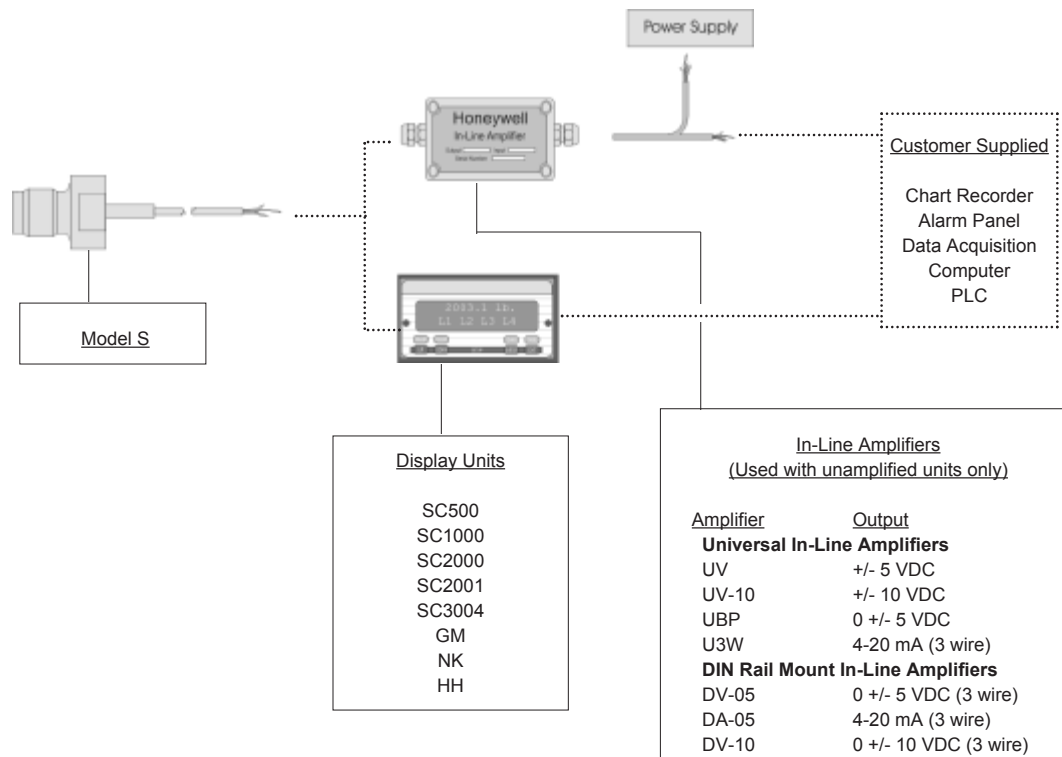
Model S

Installation (note 3)



T	A (in.) (note 5)	B (in.)	D (in.) +.000/-0.002"	O-Ring	Max. Torque (for 17-4 PH only)
3/8-24 UNF	0.47	0.30	0.445	#11	300 in.-lb.
7/16-20 UNF	0.54	0.36	0.504	#12	500 in.-lb.

Typical System Diagram



Model S

Options

	Same Day Ship (BP357 only)	Fast Track Manufacture	Built to Order	Built from Scratch
Pressure Ranges	200; 500; 1000; 2000; 3000; 5000; 10,000 psig	100; 150; 300; 750; 1500; 7500 psig		15,000 psig
Temperature Compensation	1a. 60° to 160° F	1b. 30° to 130° F 1c. 0° to 185° F 1d. -20° to 130° F 1e. -20° to 200° F 1i. -65° to 250° F	1g. 70° to 325° F 1h. 70° to 400° F	
Internal Amplifiers	2u. Unamplified, mV/V output			
Pressure Ports	3/8-24 UNF		7/16 -20 UNF (BP358)	
Electrical Termination	4 Twisted Leads (5 ft.)	6d. Microtec DR-4S-4H 4 pin (max. 250° F) (note 4) 6i. Integral underwater cable (max. 180° F) (note 4)	6e. Integral cable: Teflon 6h. Integral cable: Silicone	
Special Calibration		9a. 10 point (5 up/ 5 down) 20% increments @ 70°F 9b. 20 point (10 up/ 10 down) 10% increments @ 70°F		
Wetted Diaphragm				10c. Hastelloy C 10e. Inconel X-750
Shock & Vibration		44a. Shock and Vibration Resistance		

Supplied as standard

Range Codes

Range	Range Code	Range	Range Code
100 psig	BR	1,500 psig	DJ
150 psig	CJ	2,000 psig	DL
200 psig	CL	3,000 psig	DN
300 psig	CP	5,000 psig	DR
500 psig	CR	7,500 psig	DT
750 psig	CT	10,000 psig	DV
1,000 psig	CV	15,000 psig	EJ

Notes

- Order Code subject to change with varying thread, range and electrical termination
- Accuracies stated are expected for Best Fit Straight Line for all errors, including linearity, hysteresis & non-repeatability thru zero.
- Standard "S" type transducers have straight threads and use an 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 on previous page. For normal operating temperatures (-65° to 250° F) use BUNA-N (black) O-rings. For high temperatures (250° to 400° F) use silicone (red).
- Only available on certain models, consult factory.
- "A" dimension changes with different thread options. Consult factory for specifications for different thread options.
- Consult factory for specifications for ranges less than 100 psi.

Special Customer Requirements (Consult Factory)

Different electrical termination
 Different materials
 Different threads
 O ring material
 O₂ Clean
 Radiation proof
 Special temperature compensation
 Temperature and pressure calibration

How to Order

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

Sample Code: **BP357** **DN** **1c**
 Order Code Range Code Options Code