



GAUGE PRESSURE TRANSMITTER (WET OR DRY)

MEDIUM PRESSURE RANGES: 0/-30" Hg to 0/1500 PSIG

SERIES P-46 (4-20mA, 2-Wire; 4-Wire Current or Voltage Output)

DESCRIPTION:

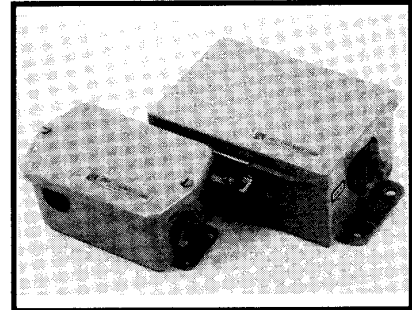
The BEC P-46 Pressure Transducer introduces the benefits of polysilicon thin film performance at affordable prices. Modern low pressure chemical vapor deposition methods provide simple, stable molecular bonds between a proven metal diaphragm and a polysilicon strain gauge bridge. There are no epoxies or bonding agents to contribute to signal instability or drift.

The polysilicon strain resistors combine very low noise levels with very high signal outputs. There are no semiconductor junctions to change with temperature, time or use. The integral metal diaphragm and polysilicon bridge are virtually unaffected by shock, vibration or mounting.

Pressure sensing wetted surface is 17-4PH stainless steel. Pressure port fittings are also available in 316 stainless steel allowing for expanded media compatibility.

The low level output voltage of the sensing element is amplified, temperature compensated and conditioned to supply current of DC voltage analog signal output, which are linear with the specified pressure span, with micro-processor compatibility.

Zero and Span thermal effect are maintained at minimum values over typical industrial operating temperature ambients.



APPLICATIONS:

BEC P-46 Pressure Transducers provide an accurate, reliable and economical means for monitoring gauge pressures in HVAC automation, pneumatic systems and process control. The output can be easily interfaced with chart recorders, data loggers, computerized monitoring and control systems.

- Liquid flow rates across an orifice plate or venturi.
- Differential liquid level head pressure.
- Pressure difference between two gaseous or liquid lines.
- Variable speed drives controlling chilled water flow.
- Absolute vacuum differential pressure sensing.
- Automotive and Industrial mounting.

FEATURES:

STANDARD

- * 100% Solid State
- * Ranges: 0/-30" HgD to 0/1500 PSID
- * Temp. Compensated Linear Analog Output
- * Reverse Polarity Protected
- * 24 Vdc

AVAILABLE OPTIONS

- * 24 Vac
- * 115 Vac Power
- * SPDT Form C Alarm Contacts
- * Explosion-proof Enclosure
- * Integral LCD Read-Out

SPECIFICATIONS:

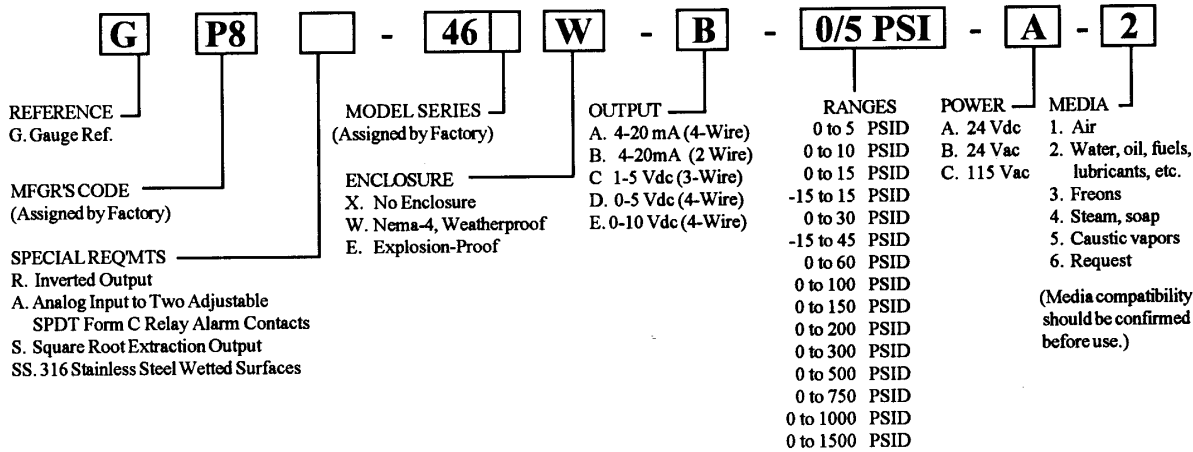
Proof Pressure	90 PSI or 2X FS	Thermal Stability Zero	+/-0.02%/Deg C
		Span	+/-0.02%/Deg C
Temp. Range Sensing Module		Response Time	100 milliseconds
Operating	-40 Deg C/120 Deg C	Humidity Effects	5-99% RH Non-Condensing
Compensated	-30 Deg C/80 Deg C	Media Compatibility	Consult Factory
Transmitter	0 Deg C/50 Deg C	Shock	+/-0.05% FS for 100 g's, 20 milliseconds
Accuracy	+/-0.75% FS	Vibration	+/-0.1% FS for 0-2000 Hz, 20g's
Zero & Span Adjustment	+/-10%	Stability 1 Year (With Existing Zero/Span Potentiometers)	+/-0.3% Span/Year





SERIES P-46 GAUGE PRESSURE TRANSDUCER (WET OR DRY)

ORDERING INFORMATION:



MOUNTING NOMENCLATURE
CONSULT FACTORY FOR CRITICAL MOUNTING DIMENSIONS

ENCLOSURE, STYLE "W" (Nema-4, -12, -13)
(Transducer - No Special Requirements)

ENCLOSURES, STYLE "W1" thru "W3" (Nema-4, -12, -13)
(Transmitters requiring any of the following):

- * 115 VAC Power
- * SPDT Form C Relay Alarm Contacts
- * Integral LCD Read-out

2 Clamps used when A = 8 or more.

2 Clamps Used When "A" = 8" or More

ENCLOSURE STYLE "E", EXPLOSION-PROOF
Class 1, Group D, Class 11, Groups E, F & G
(External dimensions vary with transducer options.)

Enclosure Style	Gauge	Box Size A+B+C	Mounting 5/16 Dia., 4 Holes Center Line Dim.	Over-All Dimensions Length/Width	P
W1	16	6x4x3	6-3/4 x 2	7-1/2 x 4-15/16	2-3/8
W2	16	6x6x4	6-3/4 x 4	7-1/2 x 6-15/16	2-3/8
W3	16	8x6x4	8-3/4 x 4	9-1/2 x 6-15/16	1

