

# Model 6-14

## BEI Edcliff Instruments Division

## General Purpose Pressure Transmitter

The Model 6-14 Pressure Transmitter is uniquely designed for the broadest possible range of applications, including Process Control Systems, Natural Gas Production, Liquid Level Measurement, Gas Compressors, Lubrication Systems, Chemical Processing, Waste Water Treatment, Pulp & Paper Processing, Oil Production & Recovery, and others.

The Model 6-14 utilizes a Micro Machined Silicon pressure sensing die that is isolated for all media by a 316L stainless steel diaphragm. Silicon, as a material, tolerates very high bending stresses with virtually no hysteresis! This provides very high electrical outputs with very little stress which translates into excellent linearity, increased long-term stability, and reliability.

Micro Machined Silicon pressure sensors provide accuracies down to  $\pm 0.25\%$  with effectively no hysteresis and a long-term drift of less than 0.5% FSO for one year and proof pressures greater than 5x the rated pressure.

All Model 6-14 configurations have extremely robust EMI/RFI protection. The Model 6-14 will not shift, drift, or fail in an EMI/RFI environment of greater than 10 volts/meter up to 1.0 GHz.

The Model 6-14 is hermetically (except for vented gage configurations) sealed by welding and conforms to NEMA 4 & 4X enclosure requirements.

The Model 6-14 can also be the basic platform for a custom solution for your particular application.



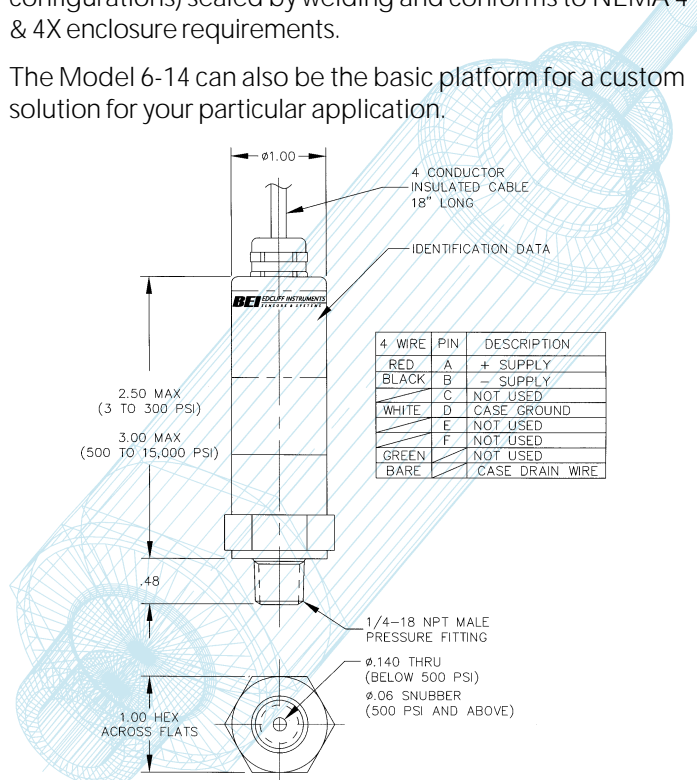
### Unique products

#### Applications

- Process Control Systems
- Natural Gas Production
- Liquid Level Measurement
- Gas Compressors
- Lubrication Systems
- Chemical Processing
- Waste Water Treatment
- Pulp & Paper Processing
- Blowout Prevention Systems
- Seafloor Control Systems

#### Features

- Broad Selection of Pressure Fittings & Electrical Connections
- Broad Selection of Pressure Ranges
- All-Welded 316 Construction, NEMA 4 & 4X
- Exceptional Long-Term Stability
- Static Error Band of  $\pm 0.25\%$  FSO



Contact factory or local sales representative for outline drawings of the various configurations and the electrical pinouts.



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## Product Specifications

IAW ANSI/ASA S37.1-75

### PERFORMANCE

OUTPUT SIGNAL	4-20 mA
ZERO & SPAN OFFSETS	±0.25% FSO @ 21°C
ACCURACY L & R	±0.25% of FSO @ 21°C (BFSL)
LONG-TERM STABILITY	±0.5% FSO/Year
COMPENSATED TEMPERATURE	-10° to +85°C (-22° to +185°F)
TEMPERATURE EFFECT ON ZERO & SPAN	±1.0% FSO Over the Compensated Temperature Range

### OPERATING

INPUT POWER	10 - 32 VDC
INSULATION RESISTANCE	100 MEGOHMS @ 50 VDC
CURRENT LIMITING	@ 25 mA
PROOF PRESSURE	150% of Rated Range
BURST PRESSURE	200% of Rated Range or 30,000 PSI, Whichever is Less
WEIGHT	0.25 Kilos (0.5 lbs)

### ENVIRONMENTAL

MAXIMUM OPERATING TEMPERATURE	-40° to +120°C (-65° to +250°F)
EMI/RFI	10 Volts/Meter up to 1.0 Ghz
WETTED PARTS	316 Cres
ENCLOSURE	NEMA 4 & 4X
VIBRATION	15 g's 10-2000 Hz
SHOCK	100 g's for 11 Milliseconds, Half-sine

### CERTIFICATIONS

FM - approved (CI1, Div1, Gr ABCD, T4)  
CE - pending

## Ordering Information

6 - 14 X - XX XX - XX

### INSTRUMENT FAMILY

6 = Micro-machined Silicon

### SENSOR TYPE

14 = Pressure Transmitter  
4-20 mA

### REFERENCE PRESSURE

0 = Absolute  
1 = Vented Gage  
2 = Sealed Gage

### PRESSURE RANGES\*\*

0 = 3 PSI#†	12 = 300 PSI#
1 = 5 PSI#†	13 = 500 PSI*
2 = 15 PSI#	14 = 1000 PSI*
3 = 20 PSI#	15 = 1500 PSI*
4 = 25 PSI#	16 = 2000 PSI*
5 = 30 PSI#	17 = 3000 PSI*
6 = 50 PSI#	18 = 5000 PSI*
7 = 60 PSI#	19 = 6000 PSI*
8 = 100 PSI#	20 = 7500 PSI*
9 = 150 PSI#	21 = 10,000 PSI*
10 = 200 PSI#	22 = 15,000 PSI*†
11 = 250 PSI#	

### PRESSURE FITTINGS

0 = MS33656E4 (SAE J514-4)	3 = 1/8NPT, Male
1 = SAE 7/16-20 Straight	4 = 1/4NPT, Female
2 = 1/4NPT, Male	5 = 1/2-14NPT, Male

### ELECTRICAL CONNECTIONS

0 = PT1H-10-6P  
1 = 1/2NPT 4-Wire Cable Conduit  
2 = PT1H-8-4P  
3 = 5-Wire Shielded Cable  
4 = DIN 43650 Form C  
5 = Hirschmann ELST 412  
6 = Seacon AWL-2P-BC

### CUSTOM CONFIGURATIONS

00 = No Custom Requirements

# Available Absolute or Vented Gage  
\* Available Sealed Gage Only  
\*\* Calibration in bars is also available. Contact factory for details.  
† Consult Factory

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