

## Model 6-30

### BEI Edcliff Instruments Division

### Industrial Pressure Transducer

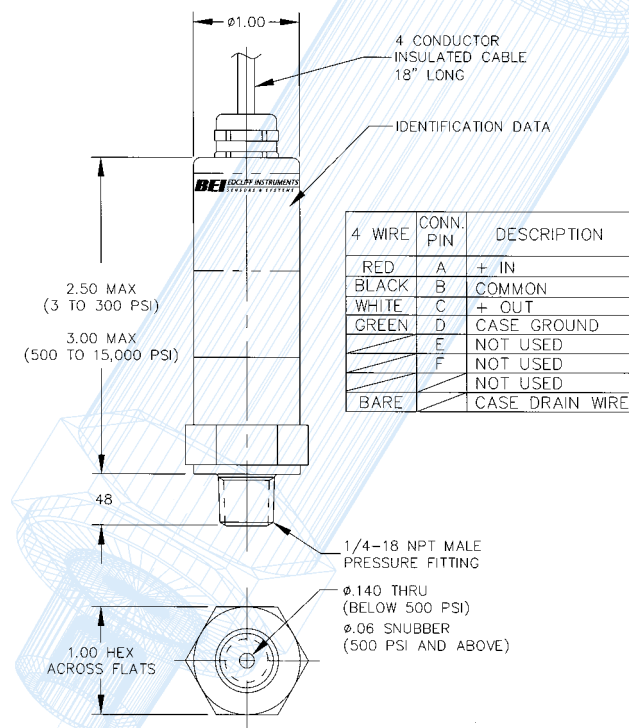
The Model 6-30 Pressure Transducer is uniquely designed for the broadest possible range of applications, including Process Control Systems, Natural Gas Production, Liquid Level Measurement, Gas Compressors, Lubrication Systems, Chemical Processing, Waste Water Treatment, Pulp & Paper Processing, Oil Production & Recovery, and others.

The Model 6-30 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  $\pm 0.5\%$  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 6-30 configurations have extremely robust EMI/RFI protection. The Model 6-30 will not shift, drift, or fail in an EMI/RFI environment of greater than 10 volts/meter up to 1.0 GHz.

The Model 6-30 is hermetically (except for vented gage configurations) sealed by welding and conforms to NEMA 4 & 4X enclosure requirements.



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



### Unique products

#### Applications

- Process Control Systems
- Liquid Level Measurement
- Gas Compressors
- Lubrication Systems
- Chemical Processing
- Waste Water Treatment
- Pulp & Paper Processing

#### 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 of  $\pm 0.5\%$  FSO

# Model 6-30 Industrial Pressure Transducer

## Product Specifications

IAW ANSI/ASA S37.1-75

### PERFORMANCE

ZERO & SPAN OFFSETS	±0.5% FSO @ 21°C
ACCURACY L & R	±0.5% of FSO @ 21°C (BFSL) ±1.00% of FSO @ 21°C (BFSL): 5000 PSI
LONG-TERM STABILITY	±0.25% FSO/Year
COMPENSATED TEMP.	-10° to +85°C (14° to +185°F)
TEMPERATURE EFFECT ON ZERO & SPAN	±1.0% FSO Over the Compensated Temperature Range

### OPERATING

INPUT POWER/OUTPUT SIGNAL	See Table Below
INSULATION RESISTANCE	100 MEGOHMS @ 50 VDC
REVERSE POLARITY	Protected
PROOF PRESSURE	150% of Rated Range
BURST PRESSURE	200% of Rated Range or 12,000 PSI, Whichever is Less
WEIGHT	0.25 Kilos (0.5 lbs)

### ENVIRONMENTAL

MAXIMUM OPERATING TEMPERATURE	-40° to +120°C (-40° 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 - CE PENDING

STD CONFIGURATION	OUTPUT SIGNAL	OPERATING INPUT POWER
-00	.5 - 5.0 VDC	8 - 36 VDC
-0A	.05 - 5.0 VDC	8 - 36 VDC
-0B	.5 - 5.5 VDC	8 - 36 VDC
-0C	1.0 - 5.0 VDC	8 - 36 VDC
-0D	1.0 - 6.0 VDC	8 - 36 VDC
-0E	.1 - 10.0 VDC	13 - 36 VDC
-0F	1.0 - 11.0 VDC	13 - 36 VDC

## Ordering Information

6 - 30 X - XX XX - XX

### INSTRUMENT FAMILY

6 = Micro-machined Silicon

### SENSOR TYPE

10 = Pressure Transducer Voltage Output Signal

### REFERENCE PRESSURE

0 = Absolute  
1 = Vented Gage  
2 = Sealed Gage

### PRESSURE RANGES\*\*

02 = 15 PSI#	11 = 250 PSI#
03 = 20 PSI#	12 = 300 PSI#
04 = 25 PSI#	13 = 500 PSI*
05 = 30 PSI#	14 = 1000 PSI*
06 = 50 PSI#	15 = 1500 PSI*
07 = 60 PSI#	16 = 2000 PSI*
08 = 100 PSI#	17 = 3000 PSI*
09 = 150 PSI#	18 = 5000 PSI*
10 = 200 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

### ELECTRICAL CONNECTIONS

0 = PT1H-10-6P  
2 = PT1H-8-4P  
3 = 4-Wire Shielded Cable  
4 = DIN 43650 Form C  
5 = Hirschmann ELST 412

### CUSTOM CONFIGURATIONS

00 = No Custom Requirements

# Available Absolute and Vented Gage

\* Available Sealed Gage Only

\*\* Calibration in bars is also available. Contact factory for details.

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