

# Model 6-08

## BEI Edcliff Instruments Division

19mm Uncompensated Micro-Machined Pressure Sensor

The Model 6-08 is specifically designed for use in a broad variety of OEM applications where accurate, reliable, high performance pressure measurement is required. Its small size (19mm O.D.), media isolated diaphragm and rugged construction are ideal for Controls and Instrumentation, Recreational Diving, Process Control, and other applications that require a small, accurate, robust pressure sensor.

The Model 6-08 operates over a wide temperature range: -40°C to 121°C and at pressures from 5 psi to 1,000 psi.

The Model 6-08 utilizes a media isolated 6th generation micro-machined silicon pressure sensor. The process is designed to provide exceptional stability and very low noise. Each manufacturing process step is monitored and controlled to insure continuous built-in reliability.

The modular design of the Model 6-08 pressure Sensor allows customer specific product design modifications while maintaining product integrity. In customer specific applications requiring unique pressure connections, labeling, calibration, electrical connections, performance, packaging, or a combination of these elements, BEI Edcliff Instruments can provide a special product design service to meet your requirements.



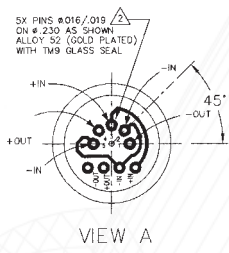
### Unique products

#### Applications

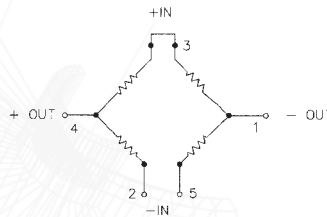
- Process Control Systems
- Natural Gas Production
- Liquid Level Measurement
- Gas Compressors
- Lubrication Systems
- Chemical Processing
- Waste Water Treatment
- Pulp & Paper Processing
- Refrigeration
- HVAC

#### Features

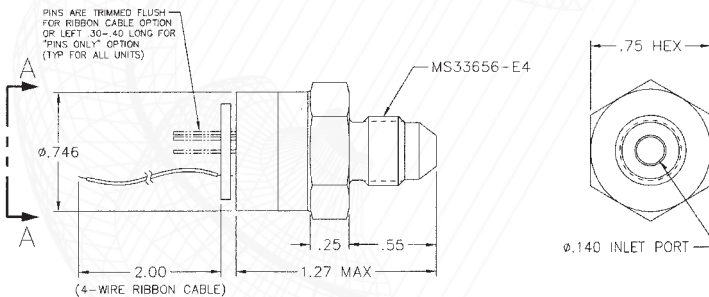
- Broad Selection of Pressure Fittings
- Broad Selection of Pressure Ranges
- All-Welded 316 Construction, NEMA 4 & 4X
- Exceptional Long-Term Stability
- Static Error Band of  $\pm 0.20\%$  FSO



PIN ARRANGEMENT TYPICAL FOR ALL OPTIONS



HEADER PIN FUNCTIONS TYPICAL FOR ALL OPTIONS



PRESSURE PORT OPTION 0

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



# Model 6-08

## 19mm Uncompensated Micro-Machined Pressure Sensor

### Product Specifications

IAW ANSI/ASA S37.1-75

#### PERFORMANCE

OUTPUT SIGNAL	10 mV/Volt
ZERO OFFSET	0±30 mVolt
ACCURACY L & R	±0.20% of FSO @ 21°C (BFSL)
LONG-TERM STABILITY	±0.15% FSO/Year
COMPENSATED TEMPERATURE	Uncompensated
TEMPERATURE EFFECT ON ZERO & SPAN	ZERO: = ±10% SPAN / 100°F SPAN: = ±20% SPAN / 100°F

#### OPERATING

INPUT POWER	5 VDC
INSULATION RESISTANCE	50 MEGOHMS @ 100 VDC
DIELECTRIC STRENGTH	500 VAC, 50-60 Hz, 5 mA MAX, 1 MIN.
PROOF PRESSURE	150% of Rated Range
BURST PRESSURE	200% of Rated Range or 2,000 PSI
WEIGHT	< 0.25 Kilos (0.5 lbs)

#### ENVIRONMENTAL

MAXIMUM OPERATING TEMPERATURE	-40° to +120°C (-40° to +250°F)
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

### Ordering Information

6 - 08 X - X X X X - XX

#### INSTRUMENT FAMILY

6 = Micro-machined  
Silicon

#### SENSOR TYPE

08 = Pressure Sensor  
100 mV Output

#### REFERENCE PRESSURE

0 = Absolute  
1 = Vented Gage  
2 = Sealed Gage

#### PRESSURE RANGES\*\*

03 = 0 to 15 PSI  
07 = 0 to 50 PSI  
09 = 0 to 100 PSI  
11 = 0 to 200 PSI  
13 = 0 to 300 PSI  
14 = 0 to 500 PSI (Avail. in Sealed Gage only)  
15 = 0 to 1,000 PSI (Avail. in Sealed Gage only)

#### PRESSURE PORTS

0 = MS33656E4  
1 = SAE 7/16-20 Straight  
2 = 1/4NPT, Male  
3 = 1/8NPT, Male  
4 = Weld Ring 19mm  
5 = Weld Ring 19mm W/O-Ring Groove  
6 = G 1/4 BRITISH STD Pipe Thread, Female  
7 = 1/8NPT, Female

#### ELECTRICAL CONNECTIONS

0 = Pins Only  
1 = 2" Ribbon Cable (4 COND.)

#### CUSTOM CONFIGURATIONS

00 = No Custom Requirements

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

**BEI** EDCLIFF INSTRUMENTS DIVISION  
SENSORS & SYSTEMS COMPANY

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