# Model 6-07

# **BEI Edcliff Instruments Division**

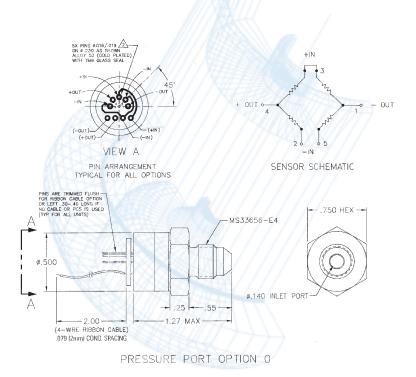
13mm Uncompensated Micro-Machined Pressure Sensor

The model 6-07 is specifically designed for use in a broad variety of OEM applications where accurate, reliable, high performance pressure measurement is required. Its small size (13mm 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 6-07 operates over a wide temperature range: -40°C to 121°C and at pressures from 200 psi to 10,000 psi.

The model 6-07 utilizes a media isolated 6<sup>th</sup> generation micromachined 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 6-07 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 ±0.20% FSO



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

## Model 6-07 13mm 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 ±0.20% of FSO @ 21°C (BFSL)

L & R

LONG-TERM ±0.15% FSO/Year **STABILITY** 

COMPENSATED Uncompensated **TEMPERATURE** 

TEMPERATURE EFFECT  $ZERO: = \pm 10\% SPAN / 100°F$ 

ON ZERO & SPAN  $SPAN: = \pm 20\% SPAN / 100°F$ 

#### **OPERATING**

**INPUT POWER** 5 VDC

**INSULATION** 50 MEGOHMS @ 100 VDC

RESISTANCE

DIELECTRIC 500 VAC, 50-60 Hz, 5 mA MAX,

STRENGTH 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  $-40^{\circ}$  to  $+120^{\circ}$ C ( $-40^{\circ}$  to  $+250^{\circ}$ F)

TEMPERATURE

WETTED PARTS 316 Cres

**ENCLOSURE NEMA 4 & 4X** 

**VIBRATION** 15 q's 10-2000 Hz

SHOCK 100 g's for 11 Milliseconds, Half-sine

#### **CERTIFICATIONS**

### **Ordering Information**

6 - 07 X - X X X X - XX

#### INSTRUMENT -**FAMILY**

6 = Micro-machined Silicon Strain Gage

#### SENSOR TYPE -

07 = Pressure Sensor 100 mV Output

#### REFERENCE PRESSURE

0 = Absolute

1 = Vented Gage

2 = Sealed Gage

#### PRESSURE RANGES\*\*

11 = 0 to 20013 = 0 to 300PSI

14 = 0 to 500PSI

15 = 0 to 1,000 PSI (Avail. in Sealed Gage only) 18 = 0 to 3,000 PSI (Avail. in Sealed Gage only)

19 = 0 to 4,000 PSI (Avail. in Sealed Gage only)

20 = 0 to 5,000 PSI (Avail. in Sealed Gage only)

#### PRESSURE PORTS -

### 0 = MS33656-E4

1 = SAE 7/16-20 Straight

2 = 1/4NPT, Male

3 = 1/8NPT, Male

4 = Weld Ring 13mm

5 = Weld Ring 13mm 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.



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