

## HIGH PERFORMANCE PRESSURE SENSOR MODEL 6-13

The **Model 6-13** is uniquely designed for use in a broad variety of applications where accurate, reliable, high performance pressure measurement is required.

The **Model 6-13** utilizes a micro-machined silicon pressure sensor that is isolated for all media by a 316L stainless steel diaphragm and high performance digital temperature compensation ASIC. This translates into excellent linearity, increased long-term stability & reliability.

Micro-machined silicon pressure sensors provide accuracies down to  $\pm 0.20\%$  with effectively no hysteresis and a long-term drift of less than 0.15% FSO for one (1) year & proof pressures greater than 3X the rated pressure.

All **Model 6-13** configurations have extremely robust EMI/RFI protection. The **Model 6-13** will not shift, drift, or fail in an EMI/RFI environment of greater than 10 volts/meter up to 1.0GHz.

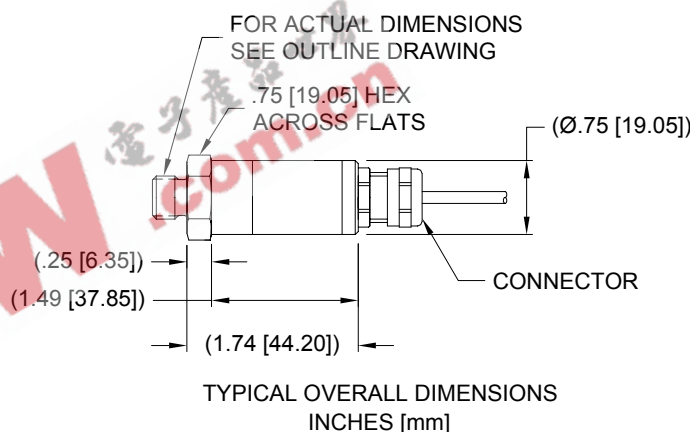
The **Model 6-13** is hermetically sealed by welding & conforms to NEMA 4 & 4X enclosure requirements. (Except for vented gage configurations.)



*Wide Choice of  
Pressure Ranges & Fittings*

*Highly  
Corrosion Resistant*

*Exceptional  
Long-term Stability*



| COLOR | FUNCTION | PIN  | DESCRIPTION |
|-------|----------|------|-------------|
| RED   | V+       | A(1) | VOLTAGE IN  |
| BLK   | V-       | B(2) | SIGNAL OUT  |
| WHT   | V0       | C(3) | NOT USED    |
| GRN   | CG       | D(4) | CASE GND    |
|       |          | E    | NOT USED    |
|       |          | F    | NOT USED    |

- *Process Control Systems*
- *Natural Gas Production*
- *Liquid Level Measurement*
- *Gas Compressors*
- *Chemical Processing Systems*
- *Wastewater Treatment*
- *Chemical Processing Systems*
- *Pulp & Paper Processing*

-- An Electromotive Solutions Company --

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## MODEL 6-13

## HIGH PERFORMANCE PRESSURE TRANSDUCER

### Product Specifications

#### Performance

|                         |                                    |
|-------------------------|------------------------------------|
| Output Signal           | 4 - 20mADC                         |
| Accuracy L, R & H       | ±0.35%FSO (BFSL)                   |
| Zero Offset             | ±1.0%FSO                           |
| Long-term Stability     | ±0.50%FSO/Year                     |
| Compensated Temperature | 0°C to 85°C<br>(32°F to 185°F)     |
| Temperature Effect      | Zero: ±2.0% FSO<br>Span: ±2.0% FSO |

#### Operating

|                       |                         |
|-----------------------|-------------------------|
| Input Power           | 8 - 30 VDC (@ 25mA Max) |
| Insulation Resistance | 100 megohms @ 50 VDC    |
| Reverse Polarity      | Protected               |
| Proof Pressure        | 150% of Rated Range     |
| Burst Pressure        | 200% of Rated Range     |
| Weight                | 72g (2.5oz)             |

#### Environmental

|                           |                                    |
|---------------------------|------------------------------------|
| Max Operating Temperature | -40°C to 125°C<br>(-40°F to 257°F) |
| EMI/RFI                   | 10volts/meter up to 1.0GHz         |
| Wetted Parts              | 316L SST                           |
| Vibration                 | 15 G's, 10-2000Hz                  |
| Shock                     | 100 G's for 11ms, Half-sine        |
| Enclosure                 | NEMA 4 & 4X                        |
| Life                      | 100 MM Full Scale Cycles           |

### Ordering Information

**6 - 13 X - XX X X - XX**

#### Instrument Family

6 = Micro-machined Silicon

#### Sensor Type

13 = Pressure Transmitter

#### Reference Pressure

0 = Absolute 1 = Vented Gage 2 = Sealed Gage

#### Pressure Ranges \*\*

|               |                 |                    |
|---------------|-----------------|--------------------|
| 00 = 3 PSI #  | 08 = 100 PSI #  | 16 = 2000 PSI *    |
| 01 = 5 PSI #  | 09 = 150 PSI #  | 17 = 3000 PSI *    |
| 02 = 15 PSI # | 10 = 200 PSI #  | 18 = 5000 PSI *    |
| 03 = 20 PSI # | 11 = 250 PSI #  | 19 = 6000 PSI *    |
| 04 = 25 PSI # | 12 = 300 PSI #  | 20 = 7500 PSI *    |
| 05 = 30 PSI # | 13 = 500 PSI *  | 21 = 10, 000 PSI * |
| 06 = 50 PSI # | 14 = 1000 PSI * |                    |
| 07 = 60 PSI # | 15 = 1500 PSI * |                    |

# Absolute & Vented Gage

\* Sealed Gage Only

\*\* Calibration in bars available, consult factory for details

#### Pressure Fittings

|                            |                            |
|----------------------------|----------------------------|
| 0 = MS33656-E4 Male        | 4 = 1/4-18 NPT, Female     |
| 1 = 7/16-20 Straight, Male | 5 = 9/16-18 Straight, Male |
| 2 = 1/4-18 NPT, Male       | Flush Diaphragm            |
| 3 = 1/8-27 NPT, Male       |                            |

#### Electrical Connections

|                  |                         |
|------------------|-------------------------|
| 0 = PT1H-10-6P   | 3 = 5-Wire Shielded     |
| 1 = 3-Wire Cable | 4 = DIN43650 Form C     |
| 2 = PT1H-8-4P    | 5 = Hirschmann ELST 412 |

#### Custom Configurations

00 = No Custom Requirements



*An Electromotive Solutions Company*

**ISO 9001:2000 & AS9100:2004 Certified**

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