

# GENERAL PURPOSE PRESSURE SENSOR MODEL 6-14

The **Model 6-14** is uniquely designed for use in a broad variety of applications where accurate, reliable, high performance pressure measurement is required.

The **Model 6-14** utilizes a micro-machined silicon pressure sensor 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 allows high electrical outputs with very little stress, which translates into excellent linearity, increased long-term stability & 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 0.25% FSO for one (1) year & 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 1.0GHz.

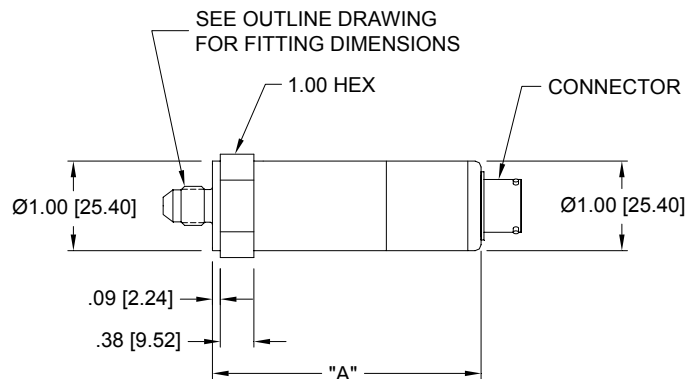
The **Model 6-14** is hermetically sealed by welding & conforms to NEMA 4 & 4X enclosure requirements. (Except for vented gage configurations.)



*Wide Choice of  
Pressure Ranges & Fittings*

*Highly  
Corrosion Resistant*

*Exceptional  
Long-term Stability*



TABULATION		4 WIRE	PIN	DESCRIPTION
RANGE	"A"	RED	A	+ SUPPLY
3 TO 300 PSI	2.50 MAX [63.5]	BLACK	B	- SUPPLY
500 TO 15K PSI	3.00 MAX [76.25]		C	NOT USED
		WHITE	D	CASE GROUND
			E	NOT USED
			F	NOT USED
		GREEN		NOT USED
		BARE		CASE DRAIN WIRE

OVERALL DIMENSIONS  
INCHES [mm]

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

# MODEL 6-14

# GENERAL PURPOSE PRESSURE TRANSDUCER

## Product Specifications

### Performance

Output Signal	4-20mADC
Accuracy L & R	±0.25%FSO (BFSL)
Zero & Span Offset	±0.25%FSO @ 21°C
Long-term Stability	±0.5%FSO/Year
Compensated Temperature	-10°C to 85°C (14°F to 185°F)
Temperature Effect	±1.0% Over the Compensated Temperature Range

### Operating

Input Power	10-32 VDC
Insulation Resistance	100 megohms @ 50 VDC
Current Limiting	@ 25mA
Proof Pressure	150% of Rated Range
Burst Pressure	200% of Rated Range or 30KSPI, whichever is less
Weight	0.25Kg (0.5lbs)

### Environmental

Max Operating Temperature	-40°C to 120°C (-40°F to 250°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 (Except Vented Gage)

### Certifications

FM - Approved (CI 1, Div 1, Gr ABCD, T4)  
 CSA - Ex ia (CI 1, Div 1, Gr ABCD, T3A)  
 Cenelec - EEx ia IIC T4



## Ordering Information

**6 - 14 X - XX X X - XX**

### Instrument Family

6 = Micro-machined Silicon

### Sensor Type

14 = Pressure Transmitter (4-20mADC)

### 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 *	22 = 15,000 PSI * †
07 = 60 PSI #	15 = 1500 PSI *	

# Absolute & Vented Gage \* Sealed Gage Only

\*\* Calibration in bars available † Consult Factory

### Pressure Fittings

0 = MS33656-E4 Male (SAE J514-4)	3 = 1/8-27 NPT, Male
1 = 7/16-20 Straight, Male	4 = 1/4-18 NPT, Female
2 = 1/4-18 NPT, Male	5 = 1/2-14 NPT, Male

### Electrical Connections

0 = PT1H-10-6P	4 = DIN43650 Form C
1 = 1/2NPT 4-Wire Cable Conduit	5 = Hirschmann ELST 412
2 = PT1H-8-4P	6 = Seacon AWL-2P-BC
3 = 4-Wire Shielded Cable	

### Custom Configurations

00 = No Custom Requirements



*An Electromotive Solutions Company*  
**ISO 9001:2000 & AS9100:2004 Certified**  
 2800 ANVIL STREET NORTH ST. PETERSBURG, FL 33710 USA  
 PHONE: (727) 347-2181 Fax: (727) 347-7520 Email: sales@vsensors.com