

# **Uncompensated Pressure Sensor**



## **Product Description:**

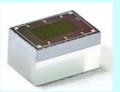
SCL's MEMS based pressure sensors are in the form of Bridge of four piezo-resistors to give differential output proportional to applied pressure. The absolute sensors have an internal vacuum reference.

These are intended for use with Non-corrosive, Non-ionic working fluids; such as air and dry gases.

### **Features:**

- Operating Ranges : Upto 30 bar
- Package : TO headers, PCB (COB)
- Custom Package option available
- Sensor dies are available

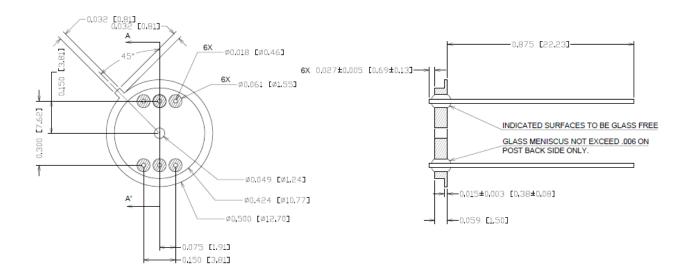




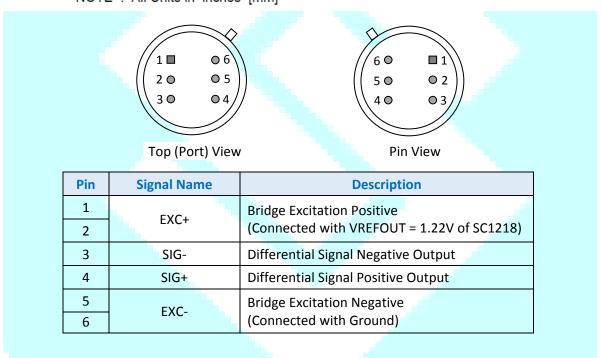
Product Specifications           S.No.         Parameters         Specification           1         Operating Pressure Range         Upto 5 bar           2         Pressure Reference         Absolute           3         Proof Pressure         > 1.5 Times Operating Pressure           4         Burst Pressure         >3 Times Operating Pressure           5         Operating Temperature         -40°C to 125°C           6         Storage Temperature         -40°C to 125°C           7         Bridge Resistance (at 25°C)         3.0 KΩ ± 1 KΩ           8         Non-Linearity         <0.2 % FSR           9         Hysteresis         <0.1%FSR           10         Repeatability         <0.1%FSR           11         Bridge Voltage         3V (Typ.), 1V – 5V           12         Full Scale Range (FSR)         75 ± 25 mV (at 3Vexc)           13         Offset         ±10 mV/V           14         TC of Bridge Resistance (TCR)         1000±250 (ppm/°C)           15         TC of Span (TCS)         Voltage Excitation         -2000±500 (ppm/°C)           16         TC of Offset (TCO)         ±25 uV/V/°C           17         Response Time         < 5ms						
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9 Hysteresis < 0.1%FSR  10 Repeatability < 0.1%FSR  11 Bridge Voltage 3V (Typ.), 1V − 5V  12 Full Scale Range (FSR) 75 ± 25 mV (at 3Vexc)  13 Offset ±10 mV/V  14 TC of Bridge Resistance (TCR) 1000±250 (ppm/°C)  15 TC of Span (TCS) Voltage Excitation -2000±500 (ppm/°C)  16 TC of Offset (TCO) ±25 uV/V/°C	7	Bridge Resistance (at 25°C)		3.0 KΩ ± 1 KΩ		
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11       Bridge Voltage       3V (Typ.), 1V – 5V         12       Full Scale Range (FSR)       75 ± 25 mV (at 3Vexc)         13       Offset       ±10 mV/V         14       TC of Bridge Resistance (TCR)       1000±250 (ppm/°C)         2000±250 (ppm/°C)       2000±250 (ppm/°C)         15       TC of Span (TCS)       Voltage Excitation       -2000±500 (ppm/°C)         16       TC of Offset (TCO)       ±25 uV/V/°C	9	Hysteresis		<0.1%FSR		
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16 TC of Offset (TCO) ±25 uV/V/°C				2000±250 (ppm/°C)		
	15	TC of Span (TCS)	Voltage Excitation	-2000±500 (ppm/°C)		
17 Response Time < 5ms	16	TC of Offset (TCO)		±25 uV/V/°C		
	17	Response Time		< 5ms		



#### **HEADER**



NOTE: All Units in inches [mm]



## **Important Notice**

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