



## Oil Filled Pressure Sensors



### PRODUCT DESCRIPTION:

SCL is involved in developing MEMS based Pressure sensors. Sensors are in the form of Bridge of four peizo-resistors to give differential output proportional to applied pressure. The absolute devices have an internal vacuum reference.

Pressure cell encapsulated in SS316L housing filled with silicone oil is intended for corrosive environment and media isolation.

### FEATURES:

- Operating Ranges : 1 to 30 Bar
- Measurement Mode : Absolute
- Bridge Resistance : 1.5K to 3.5K
- NL+H <0.2%
- Response Time 5 ms
- Housing & Diaphragm : Stainless Steel AISI 316 L

Product Specifications			
S.No.	Parameters		Specification
1	Operating Pressure Ranges		1 to 30 bar
2	Pressure Reference		Absolute
3	Proof Pressure		1.5 X Operating Pressure
4	Burst Pressure		3 X Operating Pressure
5	Operating Temperature		-40°C to 125°C
6	Storage Temperature		-40°C to 125°C
7	Bridge Resistance (at 25°C)		2.5 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
14	TC of Bridge Resistance (TCR)		1000±200 (ppm/°C)
15	TC of Span (TCS)	Voltage Excitation	-2000±500 (ppm/°C)
		Current Excitation	-1000±500 (ppm/°C)
16	TC of Offset (TCO)		±30 uV/°C
17	Response Time		<5 ms
18	Housing and Diaphragm		Stainless Steel AISI 316 L
19	Oil Filling		Silicone Oil
20	Weight		10g