

# Analog Pressure Sensor

## General information about ADIP-6140A Piezoresistive Silicon Oil Filled Analog Pressure Sensor

- ✓ ADIP-6140A series are MEMS technology based piezoresistive silicon sensor.
- ✓ It is a kind of high stable and high accuracy OEM pressure measurement sensor.
- ✓ This series are sealed with pressure diaphragm of international well-known manufacturers.
- ✓ The external pressure is passed to sensitive elements through 316L stainless steel diaphragm and internal silicon oil.
- ✓ Thus it can be used to measure all pressure media compatible with 316L stainless steel.
- ✓ Each sensor was strictly temperature compensated for both zero and span before shipment to ensure measurement accuracy in complex environment.
- ✓ There are two options of excitation power -- current and voltage.

### Applications :

- Automation control
- Pressure instruments
- Level measurement
- Pressure transmitters



## Features:

- High stability and high accuracy
- Pressure range:0-40Kpa...7Mpa
- Wide temperature compensation range
- Measuring corrosive media ( media compatible with 316L)
- Standard mounting size
- Typical output: 0-100mV

## Technical specification of the device:

Parameters		Min.	Typical	Max.
Accuracy(%FS)				
Non-Linearity <sup>1</sup>	40Kpa		±0.20	±0.30
	>40Kpa		±0.10	±0.20
Hysteresis <sup>2</sup>			±0.05	±0.1
Repeatability <sup>3</sup>			±0.05	±0.1
Output(mV)				
Zero		-2	±1	2
Span(FS)		70		
Temp. characters				
Operation Temp.(°C)		-40		125
Compensation Temp(°C)	40Kpa	0		50
	100Kpa	0		70
	>100Kpa	-10		70
Zero Temp.error(%FS) <sup>4</sup>			±0.75	±1.0
Span Temp. error(%FS) <sup>4</sup>			±0.75	±1.0
Thermal hysteresis(%FS) <sup>5</sup>			0.1	
Long term Stability				
Zero (±%FS annual)			0.1	
Span (±%FS annual)			0.1	
Supply Current		0.5mA	1.5mA	2mA
Input Resistance		2kΩ	2.5kΩ	3kΩ
Output Resistance		2.5kΩ	3kΩ	3.7kΩ
Load Resistance <sup>6</sup>		5MΩ		
Insulation Resistance(50V) <sup>7</sup>		50MΩ		

