

## Pressure Sensor

### General information about ADIP-6150W Piezoresistive Silicon Oil Filled Weldable Pressure Sensor

ADIP-6150W 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.

Every sensor was strictly temperature compensated for both zero and span before shipment to ensure measurement accuracy in complex environment. This series sensor offers two excitation power – constant current and constant voltage (for details please check technical parameters and type code ). It also matches varied-size threads so is able to meet requirements of different customers.

#### Applications:

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



## Features:

- Low cost OEM
- High stability and accuracy
- Suited for pressure of 0-40Kpa...7Mpa
- Wide compensation temperature range
- Compatible with 316L, suitable for corrosive media
- 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)	≤100Kpa	0	70
	>100Kpa	-10	70
Zero Temp.error(%FS) <sup>4</sup>	40Kpa	±0.75	±1.5
	>40Kpa	±0.75	±1.0
Span Temp.error(%FS) <sup>4</sup>	40Kpa	±0.75	±1.5
	>40Kpa	±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		

