

Oilless Pressure Sensor

General information about ADIP-616SO

Diezoresistive Oilless Pressure Sensor:

- ✓ ADIP-616SO series is MEMS technology based piezoresistive silicon sensor.
- ✓ It uses ceramic housing without isolation diaphragm and silicon oil.
- ✓ ADIP-616SO is different with traditional diffused silicon diaphragm-free sensors: pressure media touches directly with the back of pressure chip (the side without circuit), ensuring durability and long-term stability of the sensor.
- ✓ It is a kind of low cost and high performance OEM pressure measuring sensor designed for clear and non-corrosive gas and liquid.
- ✓ Every sensor was strictly temperature compensated for both zero and span before shipment to ensure measurement accuracy in complex environment.

Applications:

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



Features:

- For measuring non-corrosive gas and liquid
- Simple structure in low cost
- Suitable for small and medium pressure (0-40Kpa...2.5Mpa)
- Compensation temperature 0-70°C
- Typical output: 0-100mV
- Ventilating Gauge pressure (G)

Technical specification of the device:

Parameters		Min.	Typical	Max.
Accuracy(%FS)				
Non-Linearity ¹	40Kpa		±0.20	±0.30
	>40Kpa		±0.10	±0.20
Hysteresis			±0.05	±0.1
Repeatability			±0.05	±0.1
Output(mV)				
Zero		-5	0	5
Span(FS)		95	100	105
Temp. characters				
Operation Temp.(°C) ³		-40		125
Compensation Temp(°C)		0		70
Zero Temp.error(%FS) ⁴		-0.75	±0.5	0.75
Span Temp. error(%FS) ⁴		-0.75	±0.5	0.75
Thermal hysteresis(%FS)			0.1	
Long term Stability				
Zero (±%FS annual)			0.1	
Span (±%FS annual)			0.1	
Supply Voltage			10VDC	14VDC
Input Resistance		6kΩ	8kΩ	10kΩ
Output Resistance		2.5kΩ	3kΩ	3.7kΩ
Load Resistance ⁵		5MΩ		
Insulation Resistance(50V) ⁶		50MΩ		
Pressure Range		0-40Kpa...2.5Mpa		
Pressure Overload		2X Rated pressure or 3.5Mpa (take the smaller)		
Pressure Breakdown		1.5X Rated pressure or 4Mpa (take the smaller)		
Pressure Media		Clear gas and clear non-corrosive liquid compatible with ceramic, silicon, glass, Silica(measuring range smaller than1Mpa)/ epoxy resin adhesive (measuring range higher than 1Mpa)		

