

OEM Piezoresistive Differential Pressure Sensor

Model: PT124G-3200



Description

PT124G-3200 is OEM differential pressure sensor with stainless steel isolated diaphragm. It has integrated construction, high static pressure, high stability and good reliability. The high and low pressure sides are protected by isolated diaphragm. It can be used for measuring corrosive and conductive fluid media. The measured differential pressure is transmitted onto the die through the diaphragm and filling silicon oil so that the sensor could measure differential pressure precisely. The pressure sensor is tested automatically and compensated zero and temperature performance with provided resistors. The installation dimension is consistent with general products which makes the sensor has a good interchangeability. It is widely used for industrial process control and differential pressure measure fields, etc.

Features

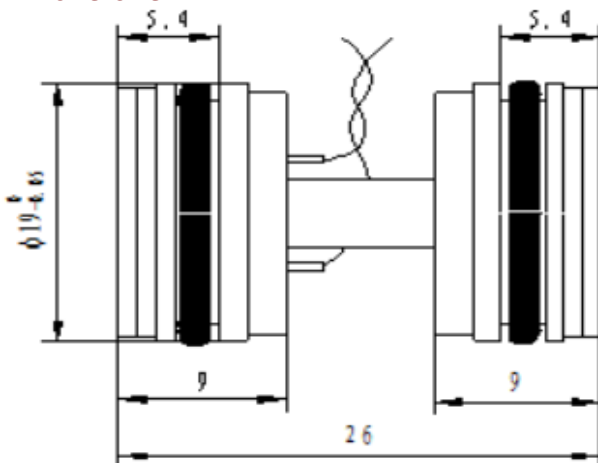
- Pressure range: Typically 10KPa, 35KPa, 100KPa, 250KPa
- Constant current/ Constant Voltage power supply
- Isolated construction, possible to various fluid media
- OEM differential pressure sensor
- 316L stainless steel
- High static pressure 20MPa
- 1.5 times overpressure

Application

- Industrial process control
- Differential pressure measurement
- Gas, liquid pressure measure
- Pressure checking meter
- Pressure calibrator
- Eddy-current flow meter



Dimensions



The suggested installation dimension is $\phi 19 \pm 0.02 \text{mm}$

Wire Lead Color

PIN	Electric Connection	Wire color
1	V+	Red
2	V-	Yellow
3	S+	Blue
4	S-	White

Note: The actual out profile and electric connection method, please check the parameter label enclosed with products.

Basic Specification:

Item	Min.	Typ.	Max.	Units
Linearity		±0.15	±0.25	%FS,BFSL
Repeatability		±0.05	±0.075	%FS
Hysteresis		±0.05	±0.075	%FS
Zero output			±3	mV DC
FS output	40			mV DC
Zero thermal error		±0.75	±1.0	%FS, @25°C
Span thermal error		±0.75	±1.0	%FS, @25°C
Compensated temp. range	0~50			°C
Working temp. range	-40~125			°C
Storage temp. range	-40~125			°C
Long-term stability		±0.3	±0.5	%FS/year
testing at basic condition				

Electric Performance

Power supply: ≤1.5mA or ≤5V DC

Electric connection: 80mm silicon rubber flexible wires

Common mode voltage input: 50% of input (typ.)

Input impedance: 3kΩ~8kΩ

Output impedance: 3.2kΩ~6kΩ

Response (10%~90%): <1ms

Insulation resistor: 100MΩ, 100VDC

Overpressure: refer to Order Guide

Max. Static pressure: 20MPa

Zero drift/static pressure: ≤0.5mV/MPa

Construction Performance

Diaphragm: stainless steel 316L

Housing: stainless steel 316L

Pin: silicon rubber flexible wire

O-ring: Viton

Net weight: Approx.36g

Environment Condition

Shock: no change at 10gRMS,(20~2000)Hz

Impact: 100g, 11ms

Media compatibility: the gas or liquid which is compatible with stainless steel and Viton

Basic Condition

Media temperature: (25±1)°C
 Environment temperature: (25±1)°C
 Shock: 0.1g (1m/s/s) Max.
 Humidity: (50%±10%)RH
 Local air pressure: (86~106)KPa
 Power supply: (1.5±0.0015)mA

Order Guide

PT124G-3200 OEM Piezoresistive Differential Pressure Sensor				
	Range Code	Pressure range	Range code	Pressure range
	01	0kPa~10KPa	03	0kPa~100KPa
	02	0kPa~35KPa	04	0kPa~250KPa
		Code	Compensation	
		L	With compensated circuit board	
		Code	Electric connection	
		2	80mm silicon rubber flexible wires	

For example: PT124G-3200-02L2

Order Note:

1. Please notice that one side of the leading wire is High Pressure Side, the other is Low Pressure Side. Or identify High Pressure Side by mark "+", and identify Low Pressure Side by mark "-" carefully;
2. During application, please pay attention that the pressure of high pressure side should be higher than that of low pressure side;
3. Please pay attention to protect the diaphragm, prevent it from damaging;
4. Please do not pull or drag the 6 leading wires;
5. Temperature resistant range of standard Viton O-ring of sensor is -20°C~250°C. When working temperature is lower than -20°C, or sensor is applied in critical environment, please contact us.

Shanghai Zhaohui Pressure Apparatus Co., Ltd

5-6F No.8 Building No.115 ,Lane 1276 Nanle Road
 Songjiang District Shanghai 201600 China
 Tel:+86-21-51691919 67755189 Fax:+86-21-67755185
 E-mail: info@zhyqsensor.com
 www.zhyqsensor.com

