

# **BS12D Piezoresistive OEM Differential Pressure Sensor**

#### Features

- Pressure range 0~35Mpa;
- Constant current power supply;
- 316L Stainless steel;
- Isolated construction to measure various media;
- Differential pressure sensor.

### Application



Industrial process control
Differential pressure measure
Gas, liquid pressure measurement
Pressure calibrator
Liquid pressure system and switch
Ventura and eddy-current flow meter
Refrigeration equipment and air conditioner

### Introduction

BS12D piezoresistive differential pressure transducer is OEM pressure transducer applied in differential pressure measuring, typically of gases, vapor or liquids. Two high-sensitivity piezoresistive silicon pressure chips are employed inside the transducer. The stainless steel housing protects the chips against ambient influences. The measured differential pressure is transmitted onto the die through the diaphragm and filling silicon oil, finally it is converted into an electrical signal. Widely used for industrial process control and differential pressure measure fields, etc.

#### **Specification**

Pressure Range	0~350Bar
Overpressure	To see the "Order Guide"
Zero Output	±2mV
Span Output	100mV(typ.)/60mV(for 10kpa)
Accuracy	±0. 5% F.S.(Typical)
Long term stability	<0.2%F.S./year
Power supply	1.5mA(typ.)
Shock	20g (205000HZ)
Media Measuring	The gas or liquid which is compatible with construction material and Viton
Media temp.	(25±1) ℃
Environment temp.	( <b>25±1</b> ) ℃
Working ambient temp.	(0~125)℃
Oil filling	Silicon oil(typ.)/(fluorin oil, olive oil available)
O-ring	Viton
Net weight	~36g

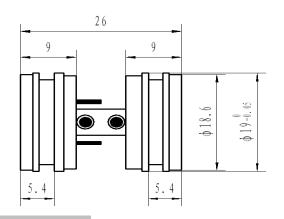
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	Diaphragm	stainless steel 316L		
	Housing	stainless steel 316L		
	Wire	$39^{*}$ ¢ 0.015,silicon shielded,200 $^{\circ}$ C bearing,4wire(typical)/5wire(available)		

## **Outline Structure**



## **Electric Connection**

Pin	Connection			
Red	IN+			
Yellow	OUT+			
Black	IN-			
White	OUT-			

## Order Guide

BS12	Piezoresistive differential pressure transducer								
	Code	Code Pressure reference							
	D	Differential pressure							
		Code	Pressure range	Positive pressure		Э	Negative pressure		
	0.03		35kPa	70kpa			35kpa		
		0.07 70kPa 150kpa 0.1 100kPa 200kpa			70kpa				
					100kpa				
		0.2	200kPa	400kpa			200kpa		
		0.35	350kPa 700kpa			350kpa			
		0.7	700kPa	1400kpa			700kpa		
			Code	Code Excitation					
			С	1.5mA					
		V others (please specify)							
				Code	Tempe	rature cor	mpensated type		
				R compensated by		nsated by	resistors		
					Code	Electric	connection		
					1	silicon r	ubber flexible wires		
BS12	D	0.035	С	R	1				



## Notes

- 1. It is recommended that the sensor should be installed as Suspended Mode to avoid face tight press and avoid affecting sensor stability.
- 2. Please pay attention to protect the diaphragm to prevent any damage or bad performance.
- 3. Please notice that one side of the leading wire is High Pressure Side marked with "+", the other is Low Pressure Side marked with"-".
- 4. During application, please pay attention that the pressure of high pressure side should be higher than that of low pressure side.
- 5. If the working temperature of Viton rubber exceeds the temperature of the rubber specification or be applied in critical environment, please contact us.