

SS107 series piezoresistive pressure transducers

- Standard size Ø15*10mm
- High accuracy and reliability
- Stainless steel 316L wetted parts
- 1.0mA, 1.5mA constant current supply
- 5VDC, 10VDC constant voltage supply
- 0-70°C temperature compensation range
- Isolated construction, able to test various media
- Absolute, vented gauge and sealed gauge pressure

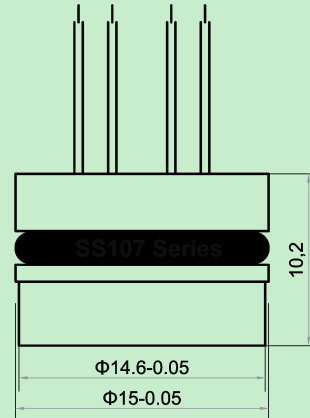


Descriptions

SS107 series OEM pressure transducers cover the pressure range from 4 to 25bar(400KPa to 2.5MPa), have compact size Ø15*10mm, a high performance piezoresistive silicon chip is built inside as the pressure-sensing element. When the pressure act on the 316L stainless steel diaphragm, it is transmitted by the silicone oil inside to the chip. The transducer works following the principle of piezoresistive effect, the signal is linear to the pressure.

SS107 series use constant current excitation 1.5mA or constant voltage excitation 5VDC, the typical full signal output for the measuring ranges is about 100 mV, zero output signal adjusted and 0-70degC wider temperature compensated.

Typical applications: Industrial automation, process control, chemical industry, liquid pressure system and switch, etc.



Pressure ranges (typical)

Vented gauge(defining atmospheric pressure as zero) (Unit: Bar)

Range	4.0	6.0	10	16	25	
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Absolute(defining absolute vacuum as zero) (Unit: Bar)

Range	4.0	6.0	10	16	25	
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Sealed gauge(defining standard atmospheric pressure as zero) (Unit: Bar)

Range	10	16	25			
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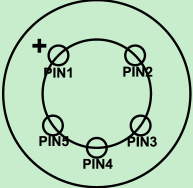
Technical data

Power supply	1.5mADC (typical)	5VDC, 10VDC is on request
Zero output	±2mV	
Span output	100±20mV (typical)	
Accuracy	0.25%F.S. (typical)	
Overload	2.0*F.S.	
Temperature compensation	0~70°C	
Operating temperature	-20~100°C	
Storage temperature	-40~125°C	
Zero thermal error	≤0.02 %F.S./°C	
Sensitivity thermal error	≤0.02 %F.S./°C	
Bridge resistance	2.3KΩ~4KΩ	
Insulation	100MΩ/250VDC	
Vibration	20g/(20~5000Hz)	
Endurance	>100 x 10 ⁶ F.S. cycles	
Stability	≤0.2% F.S./Year	

Constructions

O-ring	Viton(Ø12*1.5mm)	
Wetted parts	Stainless steel 316L	
Housing	Stainless steel 304	
Filling liquid	Silicone oil	
Electrical connection	10cm silicone sheathed wires	Kovar pins is on request
Diameter	Ø15mm	
Height	10.2mm	
Weight	8g	

Electrical connections

wires			pins	
Color	Function			
Red	Supply +		PIN1: Supply +	
Black	Supply -		PIN2: Output -	
White	Output +		PIN3: Supply -	
Blue	Output -		PIN4: Supply -	
			PIN5: Output +	

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Ordering information

EXAMPLE: [SS107 C 01 B 01](#)

1	Pressure range(Bar)	C
	A(4.0) B(6.0) C(10) D(16) E(25) F(Other range or unit is on request)	
2	Pressure type	01
	01 Vented gauge 02 Absolute 03 Sealed gauge	
3	Electrical connection	B
	A 4Kovar pins B 4Wires C 5Kovar pins D 5Wires	
4	Power supply	01
	01 1.5mADC 02 5VDC 03 10VDC 04 Other supply is on request	

Contact us

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*Specifications subject to change without notice, the latest date sheet please contact: sales@sendo-sensor.com