

# SS108 series piezoresistive pressure transducers

## Features

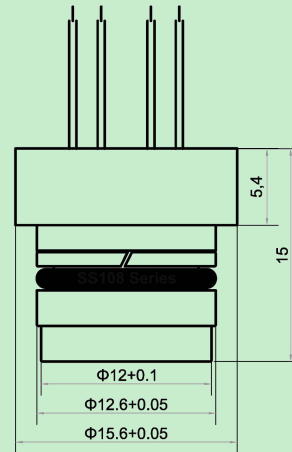
- Standard size Ø13 × 15mm
- High accuracy and reliability
- Stainless steel 316L housing
- Stainless steel 316L diaphragm
- 1.0mA, 1.5mA constant current supply
- 0-70°C temperature compensation range
- Isolated construction, able to test various media
- Absolute, vented gauge and sealed gauge pressure



## Descriptions

SS108 series isolated piezoresistive pressure transducers are extremely durable, even when exposed to fast pressure peaks. They have been developed especially for the measurement of high pressures such as 100bar, 600bar, covered a wide pressure range from 1Mpa to 100Mpa (10bar to 1000bar), gauge, sealed gauge and absolute pressure is optional.

SS108 series are designed by the piezoresistive technology, silicone oil filled with stainless steel isolated structure. They have been widely used in the world for various of applications: air/gas, liquid, level, air conditioner and cooling equipment, aviation and navigation inspection, etc.



## Pressure ranges (typical)

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

Range	10	16	25			
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Absolute (defining absolute vacuum as zero) (Unit: bar)

Range	10	16	25	40	60	100
	160	250	400	600	1000	

Sealed gauge (defining standard atmospheric pressure as zero) (Unit: bar)

Range	10	16	25	40	60	100
	160	250	400	600	1000	

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## Technical data

Performance (EN 60770)

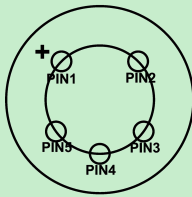
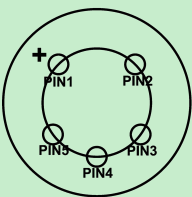
Power supply	1.5 mADC (typical)	1 mADC (optional)
Zero output	0 ± 2 mV ①	
Span output	100 ± 20 mV ①	
Accuracy	0.25% F.S. ①	
Overload range	2.0 × F.S. (≤ 250 bar)	
	1.5 × F.S. (> 250 bar), 1.2 × F.S. (1000bar)	
Compensated temp range	0 → 70 °C	
Operating temp range	-20 → 100 °C	
Storage temp range	-40 → 125 °C	
Zero thermal error	≤ 0.02% F.S./°C	
Sensitivity thermal error	≤ 0.02% F.S./°C	
Stability	≤ 0.2% F.S./Year	
Input impedance	2.3 → 4 KΩ	
Insulation resistance	> 100 MΩ at 250 V	
Vibration	20g / (20 to 5000 Hz)	
Endurance	> 100 × 10 <sup>6</sup> F.S. cycles	

①: The zero output, span output and accuracy may different if the supply power, measuring range and pressure type is different, please contact us if you need more details.

Mechanical characteristics

Diaphragm	Stainless steel 316L	
Housing	Stainless steel 316L	
Filling liquid	Silicone oil	
O-ring	FKM / Viton (Ø10 × 1.5 mm)	
Electrical connection	10 cm silicone sheathed wires	Kovar pins (optional)
Diameter	Ø13 mm	
Height	15 mm	
Weight	15 g	

Electrical connections

wires		5Pins connection mode 1		5Pins connection mode 2	
Color	Function		PIN1: Supply +		PIN1: Supply +
Red	Supply +		PIN2: Output -		PIN2: Output +
Black	Supply -		PIN3: Supply -		PIN3: Supply -
White	Output +		PIN4: Supply - ②		PIN4: Supply - ②
Blue	Output -		PIN5: Output +		PIN5: Output -

②: PIN4 is not used for 4Pins connection

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## Part number chart (How to order)

PART NUMBER REQUIRED: **SS108.PL.01.A.01 (EXAMPLE)**

1	Pressure range(bar)	PL
	PL(0...10) PM(0...16) PN(0...25) PO(0...40) PP(0...60) PQ(0...100) PR(0...160) PS(0...200) PT(0...250) PU(0...300) PV(0...350) PW(0...400) PX(0...500) PY(0...600) PZ(0...1000) CE(-1...9) CF(-1...15) CG(-1...24) 1Z(Other pressure range or unit is on request)	
2	Pressure type	01
	01(Vented gauge) 02(Absolute) 03(Sealed gauge)	
3	Electrical connection ③	A
	A(4Wires) B(5Wires) C(4Pins mode 1) D(4Pins mode 2) E(5Pins mode 1) F(5Pins mode 2)	
4	Power supply	01
	01(1.5mADC) 02(2mADC)	

③: 4Wires and 4Pins connection: the zero signal is set by SENDO SENSOR before leave factory.

③: 5Wires and 5Pins connection: the zero signal can be set by clients.

③: Pins mode1 and mode2: please see the details in the Electrical connection in page 2.

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