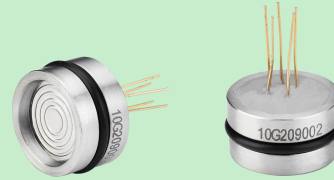


# SS102 series piezoresistive pressure transducers

## Features

- Standard size Ø19 × 10mm
- High accuracy and reliability
- Stainless steel 304 housing
- Stainless steel 316L diaphragm
- 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

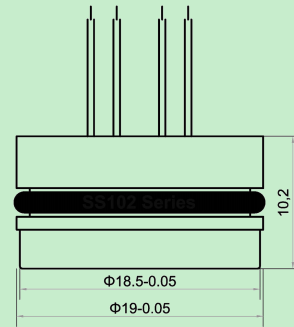


## Descriptions

The SS102 Series isolate pressure transducers cover the pressure ranges from 350 mbar to 100bar (35KPa to 10MPa).

It use a high-stability silicon chip which is protected by 316L stainless steel diaphragm and silicone oil as the sensing part. The applied pressure acts on the stainless steel diaphragm, then is passed to the silicon chip through silicone oil. The output signal has a linear relation with the applied pressure.

Typically applications: gas pressure, level measurement, industrial process control, and other media compatible with stainless steel 316L.



## Pressure ranges (typical)

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

Range	-0.35	0.35	0.7	1.0	2.5	4.0
	6.0	10	16	25		

Absolute (defining absolute vacuum as zero) (Unit: bar)

Range	1.0	2.5	4.0	6.0	10	16
	25	40	60	100		

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

Range	10	16	25	40	60	100
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# SS102 series piezoresistive pressure transducers

## Technical data

Performance (EN 60770)

Power supply	1.5 mADC (typical)	5 VDC (optional)	10 VDC (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.		
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	More options see Page 3
Housing	Stainless steel 304	
Filling liquid	Silicone oil	
O-ring	FKM / Viton (typical) (Ø16 × 1.7 mm)	EPDM (optional)
Electrical connection	10 cm silicone sheathed wires	Kovar pins (optional)
Diameter	Ø19 mm	
Height	10.2 mm	
Weight	15 g	

Electrical connections

wires		4-Pins / 5-Pins connection mode	
Color	Function		PIN1: Supply +
Red	Supply +		PIN2: Output -
Black	Supply -		PIN3: Supply -
White	Output +		PIN4: Supply - ②
Blue	Output -		PIN5: Output +

②: PIN4 is not used for 4-Pins connection

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## Part number chart (How to order)

PART NUMBER REQUIRED: **SS102.PL.01.A.01 (EXAMPLE)**

1	Pressure range(bar)	PL
	ND(-0.35...0) PC(0...0.35) PD(0...0.5) PE(0...0.7) PF(0...1) PG(0...1.6) PH(0...2) PI(0...2.5) PJ(0...4) PK(0...6) PL(0...10) PM(0...16) PN(0...25) PO(0...40) PP(0...60) PQ(0...100) CA(-1...0.6) CB(-1...1.5) CC(-1...3) CD(-1...5) 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(4-Wires) B(5-Wires) C(4-Pins) D(5-Pins)	
4	Power supply	01
	01(1.5mADC) 02(2mADC) 03(5VDC) 04(10VDC) 4Z(Other supply is on request)	

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

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

NON- REQUIRED: **SS102.PL.01.A.01 - V4E (EXAMPLE)**

1	Material of diaphragm	V4E
	V4D(Titanium) V4E(Tantalum) V4F(Hastelloy-C)	

## Contact us

Company	Ningbo Sendo Electronic Technology CO., LTD	
Email	sales@sendo-sensor.com	
Email	cain.chen@sendo-sensor.com	
Factory	No 15, Yongxing 2nd Rd, Chengbei Industrial Park, Huizhou District, 245900 China	
Office	Building. 1#1108, Wante business center, Hi-Tech, 315040 China	
Website	http://www.pressuresensorsuppliers.com	http://www.sendo-sensor.com
Skype: sendosensor	WeChat: chenjie4884	WhatsApp: +8613616574884
Tel: 0086-0574-27725960	Fax: 0086-0574-27725970	Phone: 0086-13616574884

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