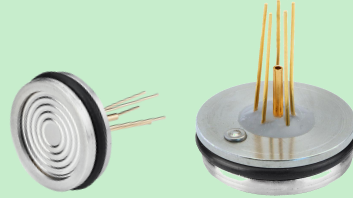


SS103 series piezoresistive pressure transducers

Features

- Standard size $\varnothing 19 \times 5.0$ mm
- High accuracy and reliability
- Stainless steel 316L diaphragm
- 1.0mA, 1.5mA constant current supply
- 5VDC, 10VDC constant voltage supply
- Non-temperature compensated(SS103)
- External temperature compensation(SS103T)
- Isolated construction, able to test various media
- Absolute, vented gauge and sealed gauge pressure



Descriptions

The SS103 series piezoresistive pressure sensors are the most economic version for pressure ranges from 1bar to 60bar(100KPa to 6.0MPa). They have a height of only 5.0 mm without compromising performance and quality, the standard version is supplied with connecting pins. Same as SS100 and SS102 series, they have 19mm diameter and follow the working principle of piezo-resistance effect. Typical applications: aviation electronics, meteorology, servo controls, robotics, sanitary, etc.

Pressure ranges (typical)

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

Range	1.0	2.5	4.0	6.0	10	16
	25					

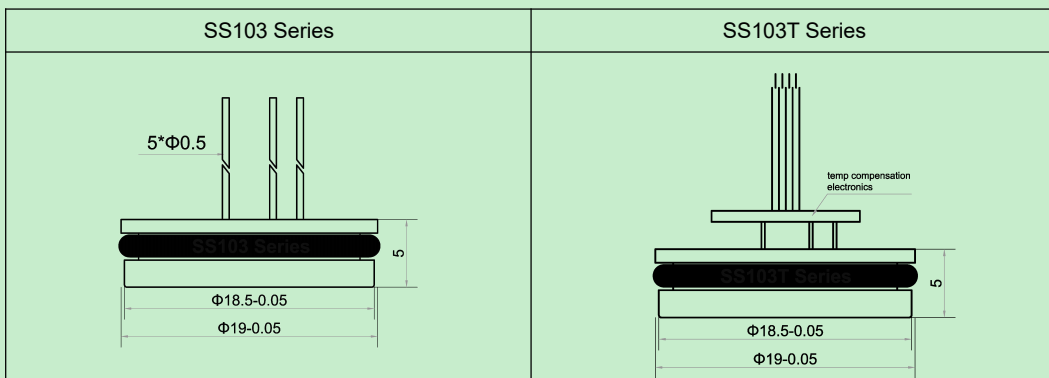
Absolute(defining absolute vacuum as zero) (Unit: Bar)

Range	1.0	2.5	4.0	6.0	10	16
	25					

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

Range	10	16	25	40	60	
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Dimensions



SS103 series piezoresistive pressure transducers

Technical data

Power supply	1.5mADC	5VDC(optional)	10VDC(optional)
Zero output	Not adjusted (SS103 series)①		0±2mV (SS103T series)②
Span output	100±20mV②		
Accuracy(0~6bar...25bar)	0.5%F.S. @25°C②		
Overload range	2.0 × F.S.		
Temperature compensation	None(SS103 series)		0 → 70°C (SS103T series)
Operating temperature	-20°C → 100°C		
Storage temperature	-40°C → 125°C		
Stability	≤0.2% F.S./Year		
Input impedance	2.3KΩ → 4KΩ		
Insulation resistance	>100 MΩ at 250 V		
Vibration	20g/(20~5000Hz)		
Endurance	>100 x 10 ⁶ F.S. cycles		

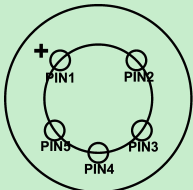
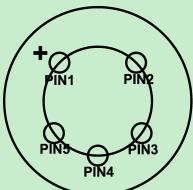
①: The zero output signal is not set by SENDO SENSOR, need to be adjusted by our clients.

②: 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.

Constructions

Diaphragm	Stainless steel 316L	More options see Page 3
Housing	Stainless steel 304	More options see Page 3
Filling liquid	Silicone oil	
O-ring	Viton(Ø16*1.7mm)	
Electrical connection	Kovar pins (SS103 series)	10cm silicone wires (SS103T series)
Diameter	Ø19mm	
Height	5.0mm	
Weight	9g (SS103 series)	15g (SS103T series)

Electrical connections

wires		Pins connection mode 1		Pins 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 -		PIN4: Supply -
Blue	Output -		PIN5: Output +		PIN5: Output -

SS103 series piezoresistive pressure transducers

Ordering information

EXAMPLE: **SS103 PF 01 A 01**

1	Pressure range(bar)	PF
	NA(-1...0) PA(1.0) PB(1.6) PC(2.5) PD(4.0) PE(6.0) PF(10) PG(16) PH(25) PI(40) PJ(60) CA(-1...0.6) CB(-1...1.5) CC(-1...3) CD(-1...5) CE(-1...9) CF(-1...15) CG(-1...24) X(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(5Pins mode 1) D(5Pins mode 2)	
4	Power supply	01
	01(1.5mADC) 02(5VDC) 03(10VDC) 04(Other supply is on request)	

③: 4Wires 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.

Optional(please contact us for more details)

1	Integrate the MCP9700 temp sensor
	A(YES) B(NO)
2	Material of diaphragm
	01(Titanium) 02(Tantalum) 03(Hastelloy-C)
3	Material of housing
	A(Titanium) B(Tantalum) C(Hastelloy-C)

Contact us

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