## SS117 series miniature flush diaphragm pressure transducers

#### **Features**

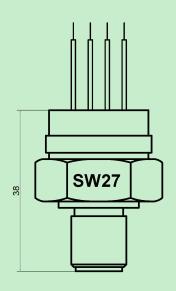
- G1/4" flush connection
- High accuracy and reliability
- Stainless steel 316L wetted parts
- 1.0mA, 1.5mA constant current supply
- 5VDC, 10VDC constant voltage supply
- 0-70°C temperature compensation range
- Isolated construction, able to test various media
- Absolute, vented gauge and sealed gauge pressure
- Piezoresistive silicon based transducer, silicone oil filled inside



## **Descriptions**

SS117 series miniature flush diaphragm pressure transducer is piezoresistive silicon developed and designed with a small size flush-mounted 316L stainless steel process connection e.g. G 1/4", G 3/8", 1/4 BSP, M10 × 1.25, 3/4-16 UNF, is available for measuring ranges from 0 to 25 bar to 0 to 600 bar, relative, absolute and differential version.

The flush diaphragm design, no dead volume, and miniature size makes the transducer is ideal for many viscous or contaminated media applications where mounting space is limited, it is highly configurable, can be customized to meet your unique requirements.



## Pressure ranges (typical)

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

Range	25	40	60	100	160	250
	400	600				

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

Range	25	40	60	100	160	250
	400	600				

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#### **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. (≤ 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	$2.3 \rightarrow 4 \text{ K}\Omega$			
Insulation resistance	> 100 MΩ at 250 V			
Vibration	20g / (20 to 5000 Hz)			
Endurance	> 100 x 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		
Wetted parts	Stainless steel 316L		
Filling liquid	Silicone oil		
O-ring	All stainless steel welding structure, no O-ring sealing used inside		
Electrical connection	10 cm silicone sheathed wires, Kovar pins		
Pressure connection	1/4" BSP, 9/16-18 UNF, M14 x 1.5	More options see Page 3	

### Electrical connections

wires		4-Pins / 5-Pins connection mode		
Color	Function		PIN1: Supply +	
Red	Supply +	+ O PIN2	PIN2: Output -	
Black	Supply -		PIN3: Supply -	
White	Output +	PIN5 PIN3	PIN4: Supply - 2	
Blue	Output -	PĬÑ4	PIN5: Output +	

<sup>2:</sup> PIN4 is not used for 4-Pins connection

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## Part number chart (How to order)

## PART NUMBER REQUIRED: SS117.PN.01.A.01.A (EXAMPLE)

1	Pressure range(bar)	PN				
	PN(025) PO(040) PP(060) PQ(0100) PR(0160) PS(0200) PT(0250)					
	PU(0300) PV(0350) PW(0400) PX(0500) PY(0600)					
	1Z(Other pressure range or unit is on request)					
2	Pressure type	01				
	01(Absolute) 02(Sealed gauge)					
3	Electrical connection ③	Α				
	A(4-Wires) B(5-Wires) C(4-Pins) D(5-Pins)					
4	Pressure connection	01				
	01(G 1/4" male) 02(M14 x 1.5 male) 03(9/16-18 UNF male)					
	4Z(Other pressure connection is on request)					
5	Power supply	Α				
	A(1.5mADC) B(2mADC) C(5VDC) D(10VDC) 5Z(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.

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