

Main Specifications

- ▼ **Size**
Φ19mm (Std.)
- ▼ **Pressure type**
Gauge pressure (G) /
Absolute pressure (A) /
Sealed gauge pressure (S)
- ▼ **Pressure range**
-100kPa ~ 0 ~ 10kPa...100MPa
For more information please
refer to pressure range table
- ▼ **Electrical connection**
4-wire connection /
5-wire connection /
6-pin connection
(Gold-plated KOVAR pin or
silicon soft wire)
- ▼ **Applicable media**
Liquid and gas that compatible
with SS316L
- ▼ **Sealing**
O-ring sealing
Material: NBR, fluororubber
- ▼ **Oil-filling**
Silicon oil
- ▼ **Operating temperature**
-40 to 125°C
- ▼ **Storage temperature**
-40 to 125°C
- ▼ **Vibration resistance**
20g (20-5000Hz)
- ▼ **Shock**
100g (ms)

Other Specifications

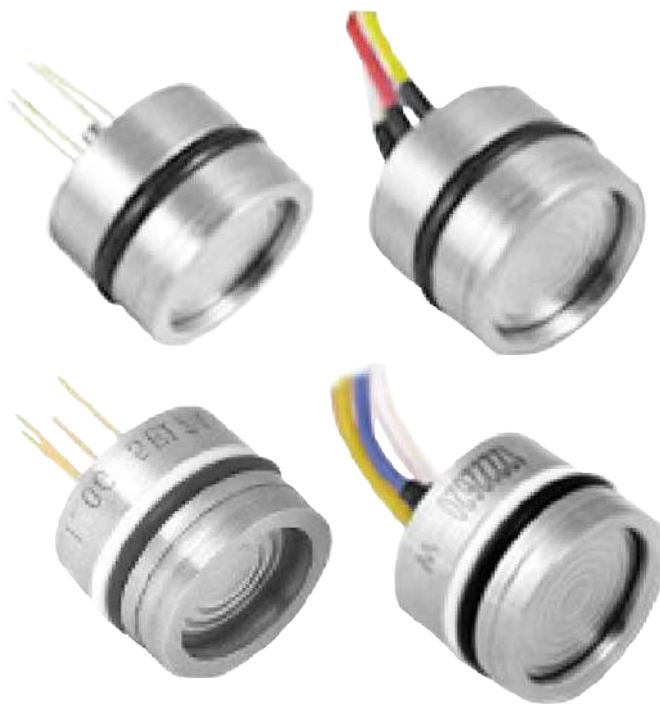
- ▼ **Diaphragm material**
SS316L
- ▼ **Housing material**
SS316L
- ▼ **Power supply**
For constant current: 1.5mA /
For constant voltage: 10VDC
- ▼ **Accuracy**
0.25%F.S.
- ▼ **Response time**
≤1ms (up to 90%F.S.)
- ▼ **Non-linearity, hysteresis,
repeatability**
Please refer to basic parameters
table
- ▼ **Zero & full scale span output**
Please refer to basic parameters
table
- ▼ **Zero & span temp. coefficient**
Please refer to basic parameters
table
- ▼ **Thermal hysteresis**
Please refer to basic parameters
table
- ▼ **Long term stability**
Please refer to basic parameters
table
- ▼ **Compensated temperature**
For constant current:
0 to 60°C (≤35kPa)
-10 to 70°C (Other range)
For constant voltage:
-20 to 85°C
- ▼ **Insulation resistance**
>200MΩ / 250VDC
- ▼ **Operating overpressure**
For more information please
refer to pressure range table
- ▼ **Burst pressure**
For more information please
refer to pressure range table
- ▼ **Service life**
10×10⁶ cycles
- ▼ **Other requests (Option)**
Third party notarized document
Inspection report
(issued by Re-Atlantis)
Tag

Industrial Pressure Sensor

Model: PS(E)-WT19

Introduction

PS (E)-WT19 industrial pressure sensor is a high performance pressure sensor which can be assembled into standard signal output transmitter. The core is sealed with O-ring for easy installation. Suitable for the industries of biomedical, marine, aviation and defense. Applications include control system, pressure calibration, refrigeration and HVAC system, hydraulic system, level measurement, and harsh corrosive medium environment.



Due to the variety of customization, the picture is only for reference, please confirm the actual item with our sales. (If there is any change on specification, please take the latest version as standard.)

Features

- OEM service
- Adopts diaphragm as pressure sensor
- Wide pressure range and electrical connection available
- Power supply with options: 1.5mA or 10VDC
- Wide temperature compensation range
- All SS316L material design

Pressure range table

Code	Pressure type	Pressure range	Overpressure	Burst pressure	O-ring material		
P1	G	0~10kPa	300%F.S.	600%F.S.	NBR		
P2		0~20kPa					
P3	G, A	0~35kPa					
P4	G	0~70kPa					
P5	G, A	0~100kPa	200%F.S.	500%F.S.	NBR		
P6		0~160kPa					
P7		0~250kPa					
P8		0~400kPa					
P9		0~600kPa					
P10		0~1MPa					
P11	G, A, S	0~1.6MPa	200%F.S.	500%F.S.	NBR		
P12		0~2.5MPa					
P13	S	0~4MPa	200%F.S.	400%F.S.	Fluororubber		
P14		0~6MPa	200%F.S.	400%F.S.			
P15		0~10MPa					
P16		0~16MPa					
P17		0~25MPa	150%F.S.	400%F.S.			
P18		0~40MPa	150%F.S.	300%F.S.			
P19		0~60MPa					
P20		0~100MPa					
P21		NA	-100~0kPa	300kPa		600kPa	NBR
P22			0~-100kPa				
P23	±100kPa						
P24	-100~160kPa		480kPa	900kPa			
P25	-100~250kPa		750kPa	1.25MPa			
P26	-100~400kPa		800kPa	2MPa			
P27	-100~600kPa		1.2MPa	3MPa			
P28	-0.1~1MPa		2MPa	5MPa			
P29	-0.1~1.6MPa		3MPa	9MPa			
P30	-0.1~2.5MPa		5MPa	12.5MPa			

Basic parameters

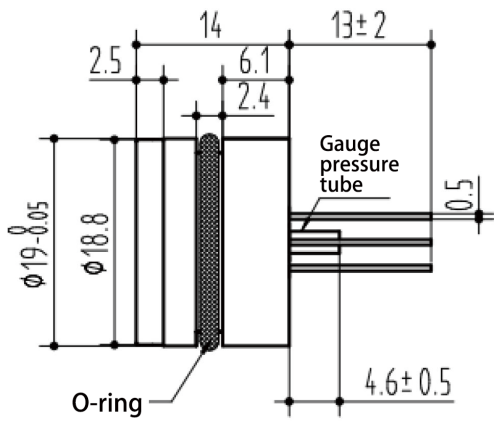
Item	Condition	Min	Nominal	Max	Unit	Note
Non-linearity	NA	-0.3	±0.2	0.3	%F.S.	(*1)
Hysteresis		-0.05	±0.03	0.05	%F.S.	NA
Repeatability						
Zero output	NA	-2	±1	2	mV	NA
Full scale span output	1.5mA, ≤35kPa	40	NA	NA	mV	NA
	1.5mA, other ranges	60	90	150		
	10V, ≤35kPa		NA	NA		
	10V, other ranges	80	100	120		
Zero temp. coefficient	10kPa	-2	±1.5	2	%F.S.	(*2)
	Other ranges	-1.5	±0.75	1.5		
Span temp. coefficient	NA	-1.5	±0.75	1.5	%F.S.	(*2)
Thermal hysteresis		-0.075	±0.05	0.075		(*3)
Long term stability		NA	-0.3	±0.2		0.3

(*1) Calculated according to BFSL least squares method.

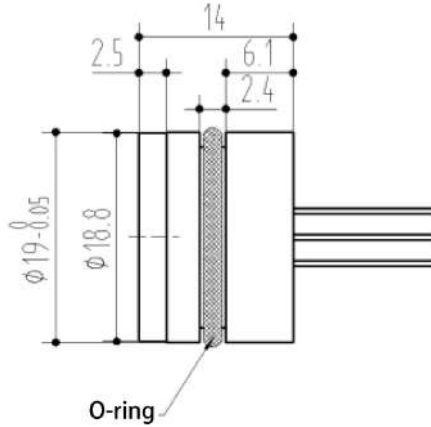
(*2) In the compensation temperature range, 0 ~ 60°C, -10 ~ 70°C reference 30°C; -20 ~ 85°C reference 32.5°C.

(*3) After passing high and low temperatures, return to the reference temperature.

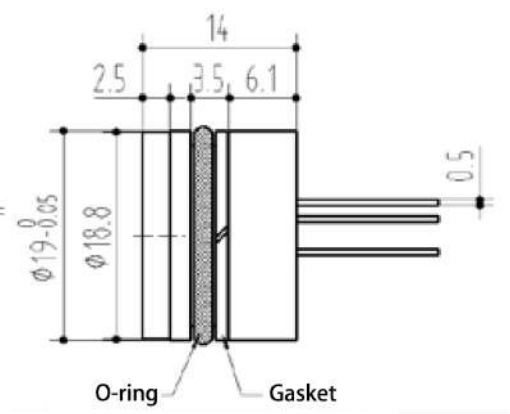
Dimension (unit: mm)



Gauge pressure 10kPa~4MPa

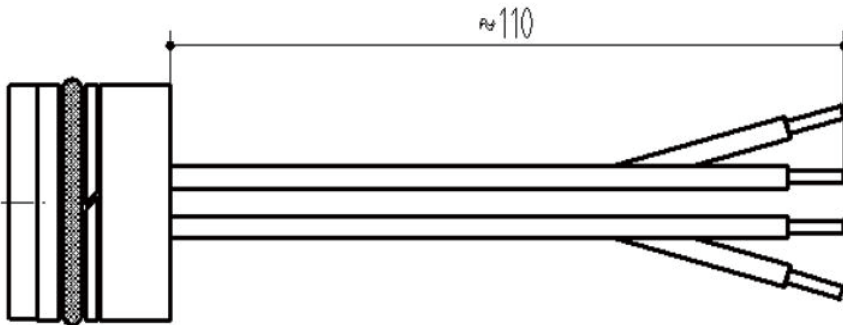


Sealed gauge pressure or absolute pressure <25MPa



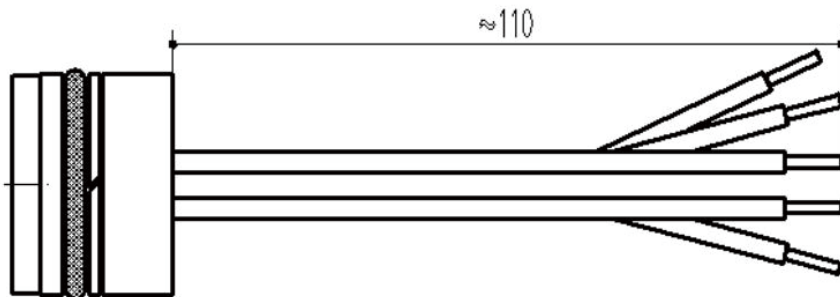
Sealed gauge pressure ≥ 25MPa

Electrical connection



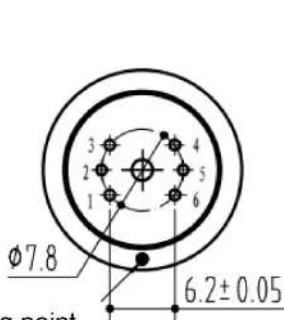
4-wire

Wire	Definition
Red	Power+ (IN+)
Blue	Power- (IN-)
Yellow	Output+ (OUT+)
White	Output- (OUT-)



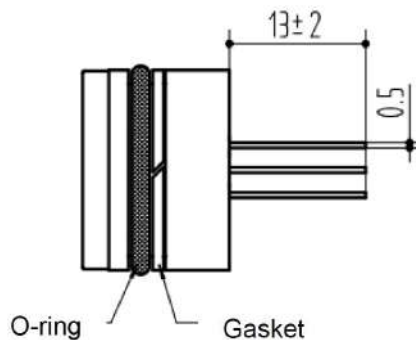
5-wire

Wire	Connection
Red	Power+ (IN+)
Blue	Power- (IN-)
Blue	Power- (IN-)
Yellow	Output+ (OUT+)
White	Output- (OUT-)



Marking point

Mark the point when filling glue



6-pin

Pin	Definition
3	Power+ (IN+)
5	Power- (IN-)
2	Output+ (OUT+)
4	Output- (OUT-)
1	Die-
6	Die-

How to order

PS (E)-WT19		Industrial Pressure Sensor			
Code		Pressure type			
G		Gauge pressure			
A		Absolute pressure			
S		Sealed gauge pressure			
Code		Pressure range			
P1		Please refer to pressure range table and select corresponding code			
Code		Electrical connection			
4W		4-wire connection			
5W		5-wire connection			
6P		6-pin connection			
Code		Power supply			
15MA		1.5mA			
10V		10VDC			
PS (E)-WT19	G	P1	4W	15MA	Order example: PS (E)-WT19-G-P1-4W-15MA