

## PC12(WTP02) Pressure Sensor



- Piezoresistive silicon chip employed
- Perfect long term stability
- MEMS Technology
- CE certificate

PC12(WTP02) Pressure Sensor is a flush diaphragm sensor. A high sensitivity silicon pressure chip is employed in the transducer. The sensor is welded within the housing, and no leakage will happen. It is more reliable compared with O-ring sealing for leakage.

It can be used in sanitary industry with olive oil/M20 filling, or silicon oil filling in non-clogging application.

### Caution

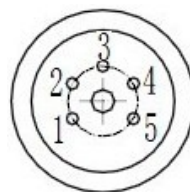
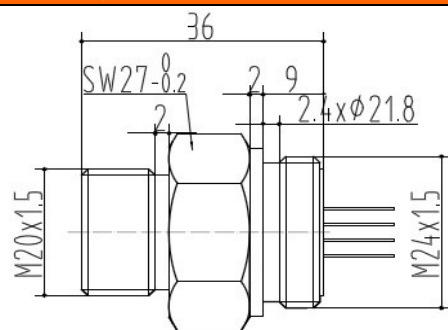
1. Please do not touch the diaphragm by finger and other hard objects, or it may be damaged
2. The sensor filled with olive oil is for sanitary application. It cannot work when the temperature is below 0°C, because the olive oil will freeze below 0°C.

### Pressure range

Pressure range	-100kPa, 35kPa, 70kPa, 100kPa, 250kPa, 400kPa, 600kPa, 1MPa, 1.6MPa, 2.5MPa, 4MPa, 6MPa, 10MPa
Pressure reference	Gauge pressure   Absolute pressure   Sealed gauge pressure
Overpressure	300%F.S.( $\leq 70\text{kPa}$ )   200%F.S.( $< 25\text{MPa}$ )   150%F.S.( $\geq 25\text{MPa}$ )

Output signal	
Zero output	±2mV
Span output	1.5mA excitation: ≥40mV (≤35kPa); ≥60mV (Other ranges) 10V excitation: ≥60mV (≤35kPa); 80-120mV (Other ranges)
Specification	
Accuracy (linearity, repeatability and hysteresis)	±0.25%F.S. (Typical)
Excitation	1.5mA   10VDC
Compensated temp.	0°C-60°C (≤35kPa)   -10°C-70°C (Other ranges)
Operating temp.	-40°C-125°C
Medium temp.	-40°C-125°C
Storage temp.	-40°C-125°C
Zero temp. coefficient	0.02%F.S. /°C (≥100kPa)   0.04%F.S. /°C (<100kPa)
Span temp. coefficient	0.02%F.S. /°C (≥100kPa)   0.04%F.S. /°C (<100kPa)
Insulation resistance	> 200Mohm/250VDC
Input impedance	2kΩ-5kΩ
Long term stability	≤0.2%F.S.S./year
Vibration	20g (20-5000HZ)
Shock	100g (11ms)
Response time	≤1ms (up to 90%F.S.)
Lifetime	10*10 <sup>6</sup> (cycles)
Oil filling	M20
O-ring	NBR, Viton
Housing material	Stainless steel 304
Diaphragm material	Stainless steel 316L
Medium compatibility	All the liquids and gases compatible with the diaphragm
Wire connection	4 wire (typical)   5 wire (available) 39×φ0.015, Silicon shielded, 200°C bearing
Pin connection	Kovar pin (0.6um Gold plated)
Weight	135g(approx.)

## Drawing



Pin	Connection	Wire
3	Excitation+	Red
1,5	Excitation-	Blue
2	Output+	Yellow
4	Output-	White

In mm

## How to order

PC12	XX	XX	XX	XX	XX	XX	XX
Pressure range Please write directly							Number of cooling fans T1: 3 (Omit if not required.)
Pressure reference A: absolute pressure G: gauge pressure S: sealed gauge pressure							Housing connection I1: M25*1 (typical) I3: M24*1
Excitation U1: 1.5mA U5: 10V							Pressure connection C1: M20*1.5 C2: G1/2 C7: NPT1/2
Electrical connection 4w: 4 wire 5w: 5 wire 5p: 5 pin							



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Wotian reserves the right to make any change in this publication without notice. The information provided is believed to be accurate and reliable as of this product sheet.

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