

## 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 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 can't work when the temperature is below 0°C, because the olive oil will freeze below 0°C.

### Pressure range

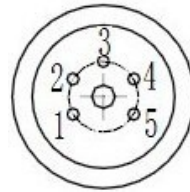
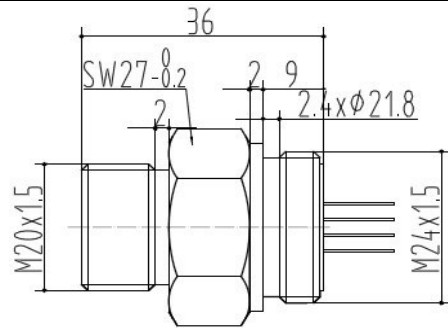
Pressure range

-100kPa, 10kPa, 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.( $\geq 25\text{MPa}$ )
<b>Output signal</b>	
Zero output	$\pm 2\text{mV}$
Span output	60-120mV   100mV(Typical)   40mV(for 10kPa)
<b>Specification</b>	
Accuracy (linearity, repeatability and hysteresis)	$\pm 0.25\%$ F.S. (Typical)
Excitation	1.5mA (Typical)   5VDC   10VDC
Compensated temp.	$-10^{\circ}\text{C}$ - $70^{\circ}\text{C}$ ( $\geq 100\text{kPa}$ )   $0^{\circ}\text{C}$ - $60^{\circ}\text{C}$ ( $< 100\text{kPa}$ )
Operating temp.	$-40^{\circ}\text{C}$ - $125^{\circ}\text{C}$
Medium temp.	$-40^{\circ}\text{C}$ - $125^{\circ}\text{C}$
Storage temp.	$-40^{\circ}\text{C}$ - $125^{\circ}\text{C}$
Zero temp. coefficient	0.02%F.S./ $^{\circ}\text{C}$ ( $\geq 100\text{kPa}$ )   0.04%F.S./ $^{\circ}\text{C}$ ( $< 100\text{kPa}$ )
Span temp. coefficient	0.02%F.S./ $^{\circ}\text{C}$ ( $\geq 100\text{kPa}$ )   0.04%F.S./ $^{\circ}\text{C}$ ( $< 100\text{kPa}$ )
Insulation resistance	$> 200\text{Mohm}/250\text{VDC}$
Input impedance	2.5k $\Omega$ -6k $\Omega$
Long term stability	$\leq 0.2\%$ F.S.S/year
Vibration	20g (20-5000HZ)
Shock	100g (11ms)
Response time	$\leq 1\text{ms}$ (up to 90%F.S.)
Lifetime	$10^*10^6$ (cycles)
Oil filling	Silicon oil   Olive oil available for sanitary application
O-ring	NBR, Viton
Housing and diaphragm	Stainless steel 316L
Medium compatibility	All the liquids and gases compatible with the diaphragm
Wire connection	4 wire (typical)   5 wire (available) 39 $\times\phi 0.015$ , Silicon shielded, $200^{\circ}\text{C}$ bearing
Pin connection	Kovar pin (0.6um Gold plated)
Weight	135g(approx)

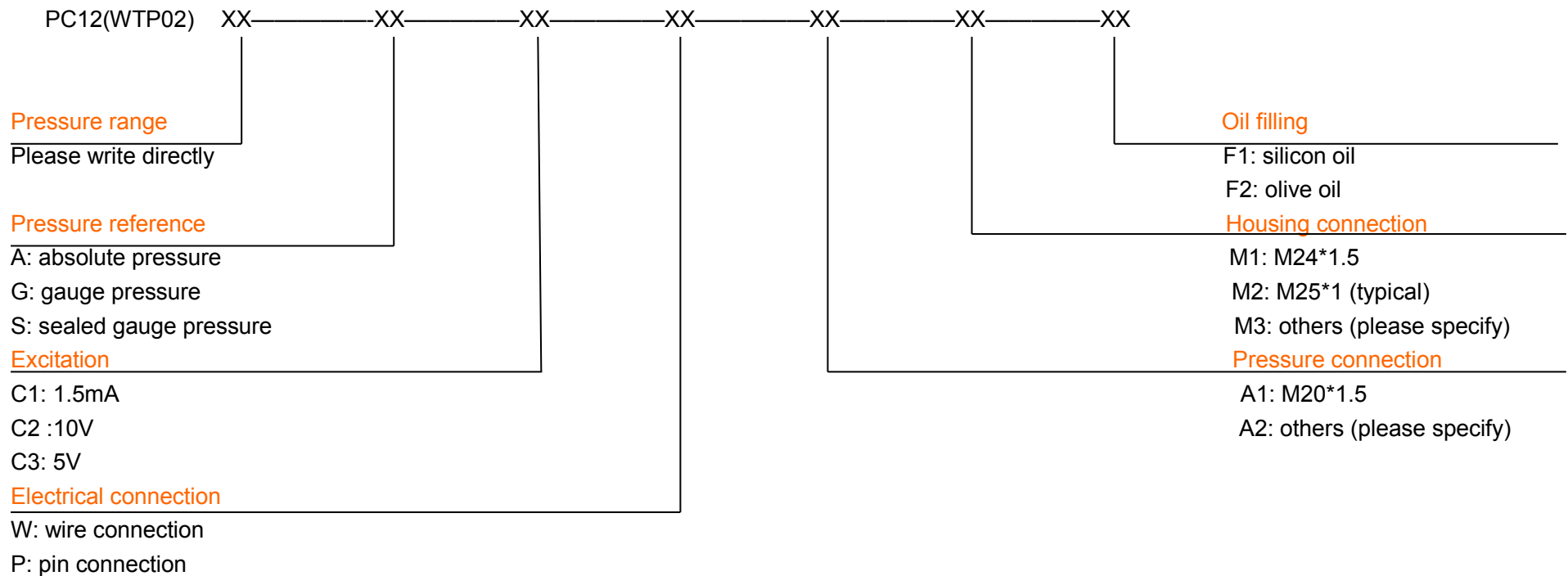
Drawing



Pin	Connection	Wire
3	excitation+	red
1,5	excitation-	blue
2	output+	yellow
4	output-	white

In mm

How to order





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