

---

## PC10D(WTD19) Industrial Pressure Sensor



- Piezoresistive silicon chip employed
- Perfect long term stability
- MEMS technology
- CE certificate
- Sensor diameter: 19mm

PC10D(WTD19) industrial pressure sensor is a standard and most popular sensor applied in air and liquid pressure measuring. A high sensitivity silicon pressure chip is employed in the sensor. The housing is filled with oil for pressure transmission. The most important specification for industry application is long term stability. PC10D(WTD19) sensor is designed for industry application with perfect long term stability.

### **Diaphragm and pressure range**

The diaphragm diameter has tight relation with pressure measured. Low pressure requires large diameter and high pressure needs small diameter. This is caused by oil expansion during temperature changing. It creates internal pressure due to the resistance of the diaphragm. The smaller diaphragm will create large internal pressure, and it is difficult to make zero compensation.

### **Caution**

Please do not touch the diaphragm by finger and other hard objects, or it may be damaged.

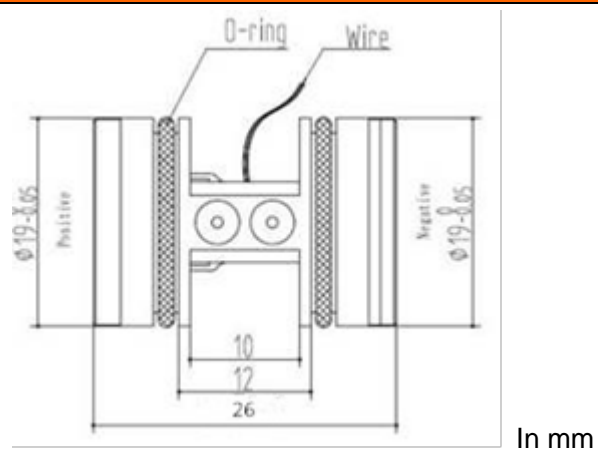
Pressure range			
Pressure range	10kPa, 35kPa, 70kPa, 100kPa, 250kPa, 400kPa, 600kPa, 1MPa, 1.6MPa, 2.5MPa(bar and psi unit available)		
Pressure reference	Differential pressure		
Overpressure	Range	Positive Overpressure	Negative Overpressure
	35kPa	70kPa	35kPa
	70kPa	150kPa	70kPa
	100kPa	200kPa	100kPa
	250kPa	500kPa	250kPa
	400kPa	800kPa	400kPa
	600kPa	1200kPa	600kPa
	1MPa	2MPa	1MPa
	1.6MPa	3.2MPa	1MPa
2.5MPa	5MPa	1MPa	
Output signal			
Zero output	±2mV		
Span output	100mV(Typical)   60mV(<100kPa)		
Specification			
Accuracy (linearity, repeatability and hysteresis)	±0.25%F.S. (Typical)		
Excitation	1.5mA (Typical)		
Compensated temp.	0--60°C(Typical)		
Operating temp.	-40-125°C		
Storage temp.	-40-125°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		
Bridge resistance	Min.	Max.	Unit
	2600	5500	ohm
Long term stability	≤0.3%F.S.S/year		
Vibration	20g (20-5000HZ)		
Wire connection	4 wire (typical)   5 wire (available) 39×φ0.015, Silicon shielded, 200°C bearing		



Weight

40g(approx)

### Wire connection



Wire	Connection
red	excitation+
blue	excitation-
yellow	output+
white	output-

### How to order

PC10D(WTD19) XX—XX—XX

#### Pressure range

Please write directly

#### Pressure reference

D: differential pressure

#### Excitation

C1: 1.5mA

C2: others (please specify)