PC320 Industrial Pressure Sensor

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

PC320 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. PC320 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.

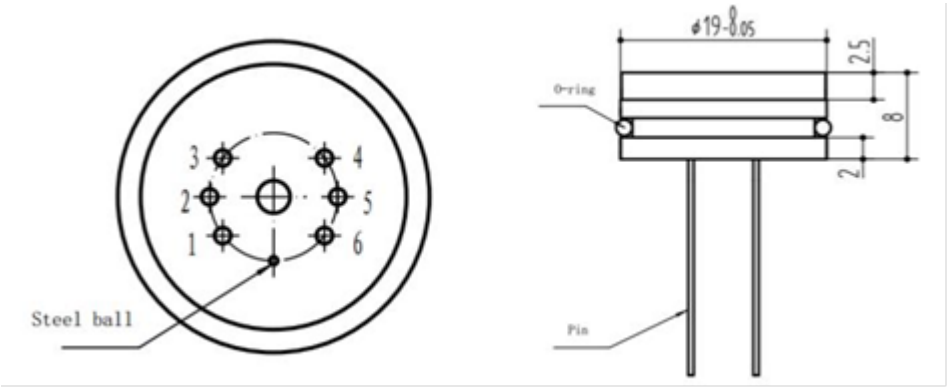
CE

Pressure range			
Pressure range	-100kPa, 10kPa, 35kPa, 70kPa, 100kPa, 250kPa, 400kPa, 600kPa, 1MPa, 1.6MPa, 2.5MPa, 4MPa, 6MPa, 10MPa(bar and psi unit available)		
Pressure reference	Gauge pressure | Absolute pressure | Sealed gauge pressure		
Overpressure	300%F.S.(≤70Kpa) | 200%F.S.(＜25Mpa) |150%F.S(≥25Mpa)		
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.	-10-70℃(Typical) | 0-60℃(<100kPa)		
Operating temp.	-40-125℃		
Storage temp.	-40-125℃		
Zero temp. coefficient	0.02%F.S./ ℃ (≥100kPa) | 0.04%F.S. / ℃(<100kPa)		
Span temp. coefficient	0.02%F.S. / ℃(≥100kPa) | 0.04%F.S. / ℃(<100kPa)		
Insulation resistance	＞200Mohm/250VDC		
Bridge resistance	Min.	Max.	Unit
	2600	5500	ohm
Long term stability	≤0.2%F.S.S/year		
Vibration	20g (20-5000HZ)		
Oil filling	Silicon oil (Typical) | Olive oil available for sanitary application		
O-ring	NBR, Viton		
Housing and diaphragm	Stainless steel 316L		
Pin connection	Kovar pin (0.6um Gold platted)		
Weight	25g(approx)		

CE

Pin connection

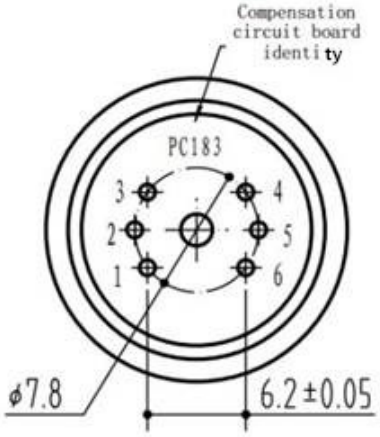
Without temperature compensation

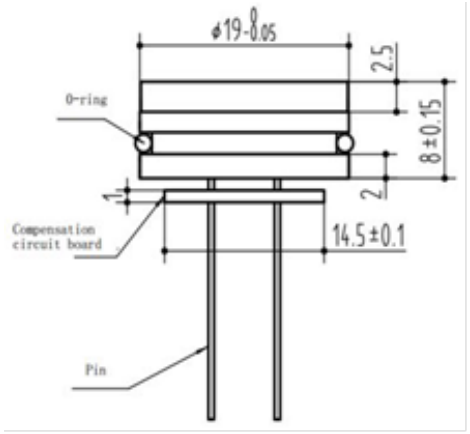


Pin	Connection
3	excitation+
1,6	excitation-
5	pending
2	output+
4	output-

In mm

1.5mA supply with temperature compensation



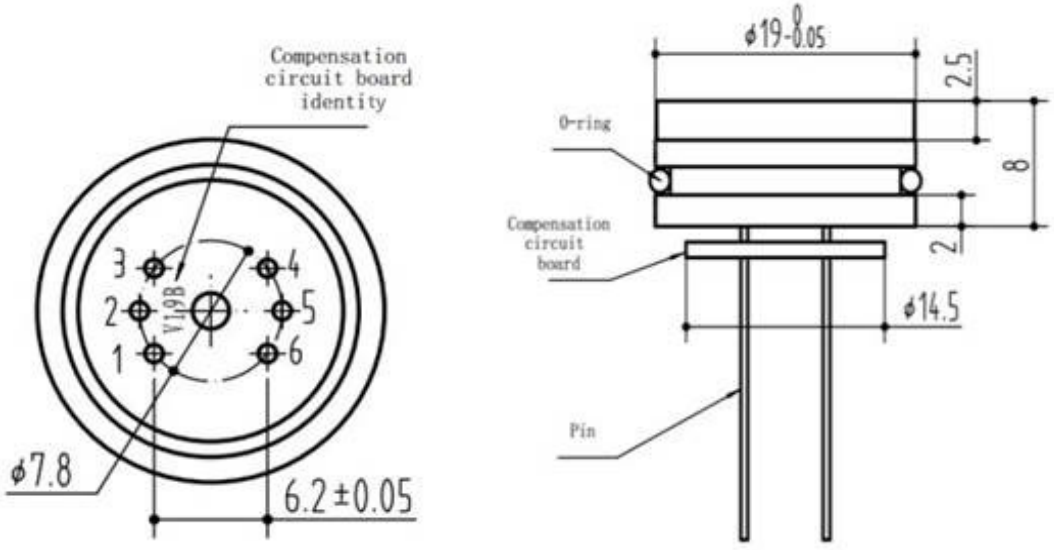


Pin	Connection
3	excitation+
5	excitation-
2	output+
4	output-

In mm

CE

5V supply with temperature compensation



In mm

Pin	Connection
5	excitation+
1 or 6	excitation-(Valid pin as an identity)
2	output+
4	output-

How to order

PC320 XX———-—XX———XX

Pressure range

Please write directly

Pressure reference

G: gauge pressure
A: absolute pressure
S: sealed gauge pressure

Excitation

C1: 1.5mA

CE