

PC33 Monocrystalline Silicon Pressure Sensor

Features

- Imported MEMS monocrystalline silicon pressure die
- High accuracy and excellent overpressure resistance
- High performance, all solid state, high reliability
- 316L stainless steel all welded integrated structure
- Gauge pressure type applicable to negative pressure measurement

Applications

- Provide OEM for industrial transmitter manufacturers

Notes:

- 1 Do not touch the diaphragm with hard objects, which may cause damage to the diaphragm.
- 2 Please read the Instruction Manual of the product carefully before installation and check the relevant information of the product.
- 3 Strictly follow the wiring method for wiring; otherwise it may cause product damage or other potential faults.
- 4 Misuse of the product may cause danger or personal injury.



Overview

PC33 High-Stability Pressure Sensor adopts monocrystalline silicon sensor die with advanced MEMS technology, achieves international leading overpressure performance and ensures the excellent stability of signal. It is assembled in all-welded seal structure and filled with silicon oil in high vacuum. Diaphragm of different materials isolates measuring medium and pressure die, meanwhile, the sensor performs long-term reliable measurement of differential pressure signals of various strong corrosive media. PC33 High-Stability Pressure Sensor allows measured pressure to act directly on the diaphragm of sensor. Then the diaphragm produces a micro displacement proportional to the pressure, which can be detected with the integrated electronic circuit and be converted to output a standard measurement signal of the corresponding pressure.

Notes:

- 1 Do not misuse documentation.
- 2 The information presented in this product sheet is for reference only. Do not use this document as a product installation guide.
- 3 Complete installation, operation, and maintenance information is provided in the instructions of the product.
- 4 Misuse of the product may cause danger or personal injury.

Performance parameters

Supply	Constant voltage 5V
Operating temp.	-40~85℃
Storage temp.	-50~125℃
Output voltage	60~140mV
Zero temp. coefficient	±0.3%FS/℃
Temp. hysteresis	±0.1%FS(Range≥10kPa); ±0.5%FS(Range<10kPa)
Pressure hysteresis	±0.05%FS
Long-term drift	±0.05%FS / Year
Nonlinearity	±0.3%FS(Range≥10kPa); ±3.5%FS(Range<10kPa)
Max. overpressure	See "Pressure range selection" below.
Diaphragm material	Stainless steel 316L, Hastelloy C



Example: PC33-250kG-M1-6w

Refer to product model PC33, with pressure range 250kPa, pressure reference gauge pressure, and diaphragm material Hastelloy C, 6 wires.

Ordering tips

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.

Contact us

Nanjing Wotian Technology Co.,Ltd.

website: www.wtsensor.com

Add: 5 Wenying Road, Binjiang Development Zone, Nanjing, 211161, China