PS Thick-Film ceramic sensor

Feature

- Solid ceramic sensitive film
- Full-range laser calibration
- Excellent corrosion & abrasion resistance performance
- Strong shock resistance
- High accuracy & high stability
- Wide-range operating temperature
- Smart volume, easy for encapsulation

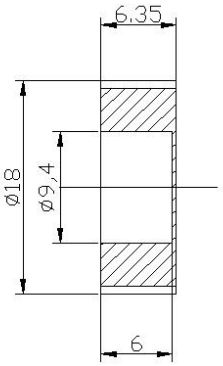
Description

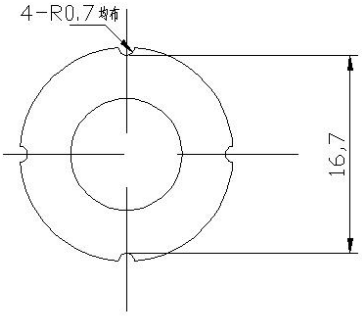
PS Series Ceramic sensor chip is a dry-type ceramic piezoresistive sensor chip by special technology. Ceramic is a recognized material of high elasticity, corrosion & abrasion resistance, strong shock and vibrant resistance. The thermal stability can make its operating temperature up to -20~80℃, It achieves high accuracy, high stability. Electrical insulation ＞2kV, strong output signal, excellent long-term stability.

Application

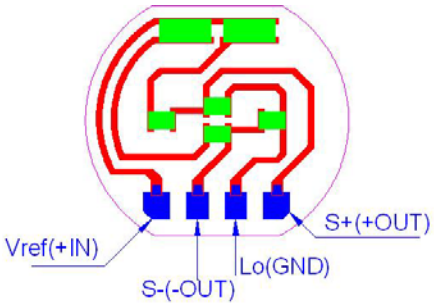
PS Series ceramic sensor chip has been widely applied in the process control, environment control, hydraulic pressure and pneumatic equipment, servo valve and drive, chemical products, chemical industry, medical instrument, and other fields. With the characteristic of small dimension, 18 mm diameter, 6.35 mm thickness, 2~200bar range, high performance-price ratio, it has been widely used in various pressure-measuring occasion.

Dimension





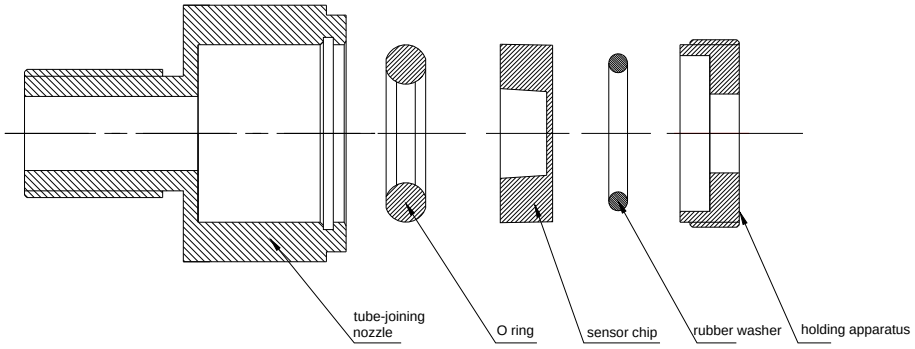
Connection code



Specification

Excitation	5 ~ 30VDC
Bridge resistance	10K±20%
Range	0～2bar- 200bar
Response time	＜1mS
Combined accuracy	0.1 ~ 0.3 FS% （Including linearity , hysteretic, repeatability）
Zero output	0±1mV/V @ 25℃
Sensitivity	1.4 ~ 4.8 mV/V
Temperature characteristic	±0.05%FS/℃
Stability	＜0.2%FSO/year
Operating temperature	-40 ~ 125℃
Insulation	＞2 KV
Dimension	18*6.35mm

Assembly of the ceramic sensor



Unit：bar

Rated range	2	5	10	20	50	100	200
Over pressure safety	4	10	20	40	100	20	400
Burst pressure	7	15	35	70	150	250	450

Ordering Guide

Model	Range(bar)	Output	Other requirement
PS-100	---	---	---
Sample：PS-100-20bar			

Notes

1. When installing, to add the Nylon gasket on the printed wiring side of the sensor chip. Thus it can make the sensor chip suffer stress equally, and avoid zero drift.
2. Before bonding the down-lead, you need to warm-up the chip to increase the weld ability of the welding spot, to avoid long-term heating to reduce the adhesive force of the welding pad.
3. Take care of the blue-diaphragm of the ceramic sensor chip, once it is injured, it will make the internal circuit damaged and make the performance unstable.