



## *HT19 Piezoresistive Silicon Pressure Sensor*

### Description

HT19 is piezoresistive silicon pressure sensor, the main element is a diffused silicon with high stability. It utilizes silicon oil to transfer pressure from 316L stainless steel diaphragm to sensing element. The sensing element uses 316L stainless steel to packing and thick film circuit to do temperature compensation and zero correction. It has high reliability and stability.

### Features

- ✧ Wide measurement range:0~10KPa~100Mpa
- ✧ O-ring mount
- ✧ Piezoresistive silicon sensing element
- ✧ High Accuracy and stability
- ✧ Full316LSS,Full Titanium or Hastelloy diaphragm



### Application

- ✧ Measurement pressure of gas and liquid
- ✧ Petroleum exploitation
- ✧ Water supply、warm supply of town
- ✧ Aviation and navigation inspection
- ✧ Process control system
- ✧ Hydraulic pressure

### Electrical Data

Supply:1.5mADC Input impedance: 3KΩ~6KΩ  
 Output impedance: 2.5KΩ~6KΩ Insulation resistance: ≥100MΩ/50VDC  
 Insulation voltage: 500VAC between the housing and electrical connection will not cause damage  
 Medium compatible: liquid, gas compatible with 316L stainless steel

### Performance Specification

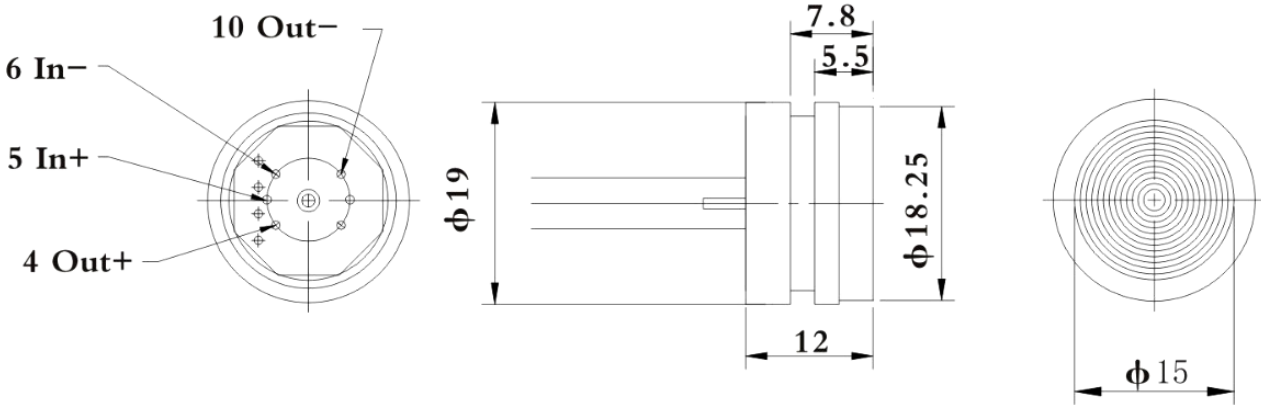
Parameters		Range: 0~10KPa、20KPa、35 KPa、70 KPa、100 KPa、200 KPa、350 KPa、700 KPa、1MPa、2MPa、3.5 MPa、7 MPa、10 MPa、20 MPa、35 MPa、60 MPa、70 MPa、80 MPa、90 MPa、100 MPa		
		Typical	Max.	Units
Pressure Non-linearity		±0.15 (0~2MPa) ±0.2 (3.5MPa ~100MPa)	±0.3	%F.S
Pressure Repeatability and Hysteresis		0.02	0.05	%F.S
Zero Output		0±1	0±2	mV
Span Output	≤20KPa	50±10	50±30	mV
	≥35 KPa	100±10	100±30	mV
Temperature Error-Zero	≤20KPa	±1	±2	%F.S
	≥35 KPa	±0.5	±1	%F.S
Temperature Error-Span	≤20KPa	±1	±2	%F.S
	≥35 KPa	±0.5	±1	%F.S
Proof Pressure		3X Rated range or 120MPa, whichever is less		-----
Operating Temperature Range		-20~80		℃
Compensated Temperature Range		0~70, 0~50(Range≤20KPa)		℃
Storage Temperature Range		-40~125		℃



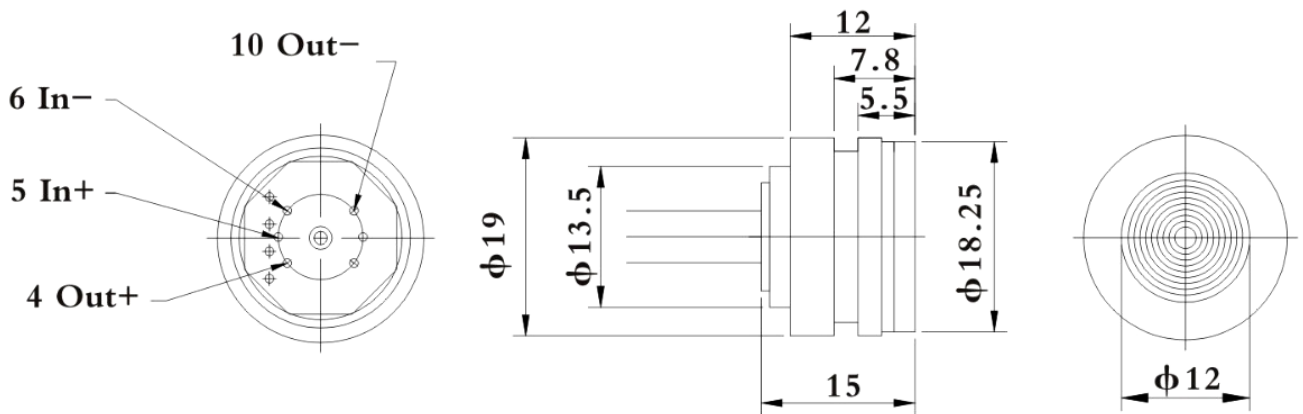
Note :Above parameter under condition: Supply: 1.5mA Temperature: 25°C

**Dimension**

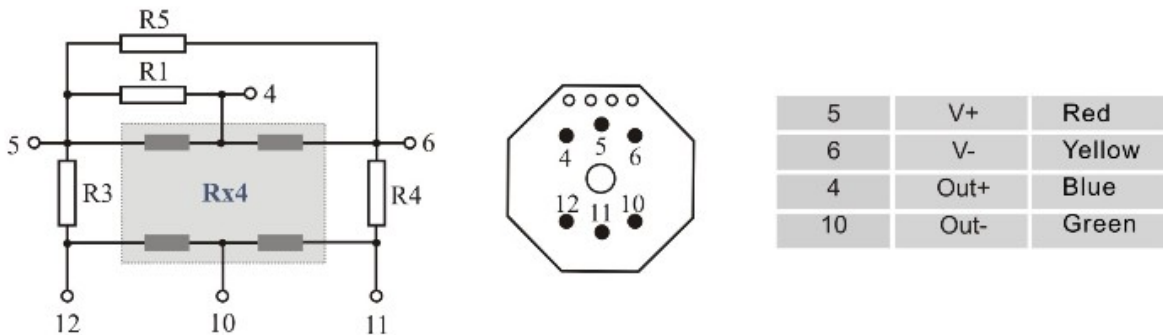
**Type I**



**Type II (60MPa ≤ range ≤ 100MPa)**



**Electrical Connection and Circuitous Philosophy**





**Ordering information**

HT19 0010 K G 1 01 L

Material: L=316L stainless steel  
T= Titanium  
H= Hastelloy diaphragm  
Electrical: 01= Gold-plated kovar 6 pin,  
02= Flexible silicon cable  
Dimention: 1=Type I 2= Type II  
Pressure type: G1=Gauge, G2=Gauge with tube, A=Absolute, S=Sealed gauge  
Unite : K=KPa, M=MPa, B=bar, P=Psi  
Pressure Range  
Model