

GS19

Description

GS19 piezoresistive pressure sensor is standard and common OEM pressure sensor, which has good sensitivity, linearity and hysteresis for industry and many other hostile environments. Silicon Oil-filled and isolated from measured media by a stainless steel diaphragm and body. It uses Laser trimming technics or outer resistors to do temperature compensation and zero correction. The whole product has high reliability, high endurance and long stability. The sensor is widely used for chemi-industry, process control. Liquid pressure system, etc.

Features

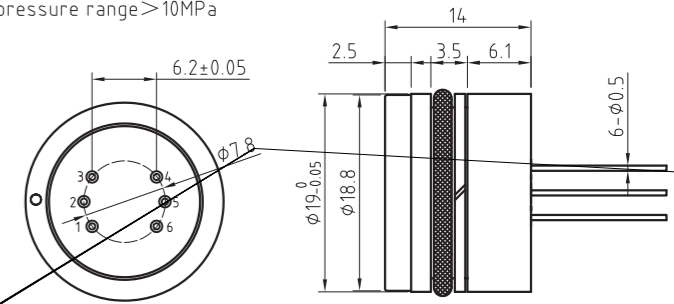
- piezoresistive pressure sensor
- MEMS technology
- $\Phi 19$ mm diameter
- pressure range: -100~0kPa, 0~20kPa...100MPa
- gas or dilute liquid compatible with 316LSS

Technical Specifications

test condition of data: 25°C (77°F)

pressure range	-100~0kPa, 0~20kPa...100MPa	
pressure type	gauge (G), absolute (A), sealed gauge (S)	
overpressure	150%FS	
zero output	± 2 mV	
output signal	≥ 60 mV@1.5 mA	
excitation	1.5mA	10Vdc(option)
accuracy	0.25%FS(typ.)	0.3%FS(max.)
long-term stability	≤ 0.2 %FS/year	
temp. coefficient of zero	± 0.02 %FS/°C(typ.)	± 0.03 %FS/°C(max.)
temp. coefficient of span	± 0.02 %FS/°C(typ.)	± 0.03 %FS/°C(max.)
compensated temperature range	-10~+70 °C	
operating temperature range	-40~+125 °C	
storage temperature range	-40~+125 °C	
Insulating resistance	≥ 100 M Ω @100Vdc	
input resistance	3000~6000 Ω	
output resistance	2500~6000 Ω	
electrical interface	(4F)4-color silicon rubber wires, option (6P)gold-plated kovar pins	
material of pressure membrane	316L stainless steel(standard), option:Hastelloy C, Titanium	
response time(10%~90%)	≤ 1 ms	
shock	20gRMS, (20~5000)Hz	
impact	100g, 11ms	
net weight	~18g	

pressure range > 10MPa



Pressure range
-100...0kPa(G)
0...20kPa(G)
0...35kPa(G,A)
0...70kPa(G)
0...100kPa(G,A)
0...250kPa(G,A)
0...400kPa(G,A)
0...600kPa(G,A)
0...1MPa(G,A,S)
0...1.6MPa(G,A,S)
0...2.5MPa(G,S)
0...6MPa(S)
0...10MPa(S)
0...16MPa(S)
0...25MPa(S)
0...40MPa(S)
0...60MPa(S)
0...100MPa(S)
Pressure type
gauge
sealed gauge
absolute
Excitaion
1.5mA
10Vdc
Electrical interface
4-color silicon rubber wires
6 gold-plated kovar pins(only for 1.5mA)
Complete specification