

SCS13 High Precision Pressure Sensor



Product Introduction

SCS13 series pressure sensor adopts medium isolation type package. This series of sensors is designed based on harsh application environment. The pressure-sensitive chip is encapsulated in a cavity filled with silicone oil, and the cavity is composed of a corrugated diaphragm and a stainless steel shell seal. This series of sensors covers the pressure measurement range of 10MPa-70MPa, and can be in the form of end face sealing. It can be directly installed on the measured medium shell through threads for pressure measurement. It can provide absolute pressure (A) and sealed gauge pressure (S). Pressure measurement form. SCS13 series cores have the advantages of high repeatability, high withstand voltage, high reliability and wide operating temperature range.

Features



Dielectric Isolation
Package



Operating Temperature
Range:-55~180℃



High Reliability



**Absolute Pressure and
Seal Gauge Pressure are Optional**

Application



**Process Control
System**



**Hydraulic System
and Valves**



Oil Drilling



Engine Test



Industrial Automation

Technical Indicators

Standard Range			
Range Code	Pressure Range	Type	Notes
10M0	0~10kPa	S/A	1500psi
20M0	0~20kPa	S/A	3000psi
35M0	0~35kPa	S/A	5000psi
70M0	0~70kPa	S/A	10000psi
Max Overload Pressure	2X		Rated Pressure

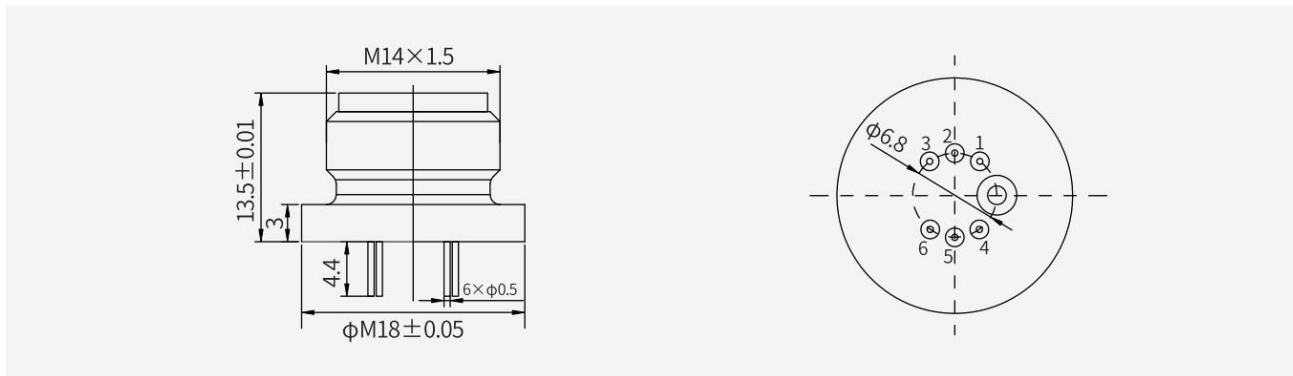
Electrical Performance		
Parameter	Numerical Value	Unit
Excitation	2~10	V
	0.2~2	mA
Bridge Resistance	3~7.5	kΩ

Performance Parameter					
Parameter	Minimum	Typical	Maximum	Unit	Notes
Repeatability	0.02	0.05	0.1	%FSO	2
Linearity	0.05	0.1	0.15	%FSO	1
Hysteresis	0.02	0.05	0.1	%FSO	2
Zero Temperature Hysteresis	0.01	0.05	0.15	%FSO	2
Full Temperature Hysteresis	0.01	0.05	0.15	%FSO	2
Full Scale Span	70	90	175	mV	2
Zero Temperature Coefficient(TCO)	20	260	600	ppm/°C	2
Sensitivity Temperature Coefficient(TCS)	-1400	-1900	-2500	ppm/°C	
Mixing Temperature Coefficient(TCS+TCR)	-400	-700	-1100	ppm/°C	2

Notes: 1. Least squares fit straight line; 2. 1.5mA power supply; 3. Reference temperature is 25°C;

4. S: sealing pressure; A: absolute pressure;

Overall Dimension



Notes:

1. All dimensions are in millimeters;
2. Pins and functions: 1-Vout-; 3-Vin+; 4-Vin-; 6-Vout+.