Pressure Sensors

Features

- Pressure range: 0~20bar
- Pressure type: Absolute
- Compensation: Compensated
- Compensated temperature range: -10~80°C
- Power supply: ≤2.0mA DC
- Zero Output: ±2.0mV DC
- Span Output: ≥70mV DC
- Linearity: ±0.15%FS(typ.), ±0.25%FS(max.)
- Working temp. range: -40~125 ℃
- Electrical connection: 100mm silicone flexible wires
- Housing material: Stainless Steel 316L
- Diaphragm material: Stainless Steel 316L
- O-ring material: FKM
- Medium: Air, water, mixed oil or other fluids that can be compatible with wetted parts

RS PRO 19 mm Pressure Sensor, 0bar Min, 20bar Max, Voltage Output, Absolute Reading

RS Stock No.: 2726945



RS PRO is the own brand of RS. The RS PRO Seal of Approval is your assurance of professional quality, a guarantee that every part is rigorously tested, inspected, and audited against demanding standards. Making RS PRO the Smart Choice for our customers.

Pressure Sensors

Product Description

The RS PRO pressure sensor is an affordable piezoresistive sensor with a compact 19mm size. It shares the same outline, mounting dimensions, and sealing methods as our other similar products, making it fully interchangeable. This sensor is widely used for measuring the pressure of media compatible with stainless steel and FKM, especially in installations with limited space.

Electrical Specifications

Power supply	≤2.0mA DC
Input impedance	2kΩ~8kΩ
Output impedance	3.5kΩ~6kΩ
Response (10%~90%)	<1ms
Insulation resistor	100MΩ@100V DC

Mechanical Specifications

Structure	Isolated construction
Housing material	Stainless steel 316L
Diaphragm material	Stainless steel 316L
Weight	~20g

Accuracy

Linearity	±0.15%FS(typ.), ±0.25%FS(max.)
Repeatability	±0.05%FS(typ.), ±0.075%FS(max.)
Hysteresis	±0.05%FS(typ.), ±0.075%FS(max.)
Zero thermal error	±0.75%FS,@35℃
Span thermal error	±0.75%FS,@35℃
Stability	±0.1%FS/Year

Environmental Conditions

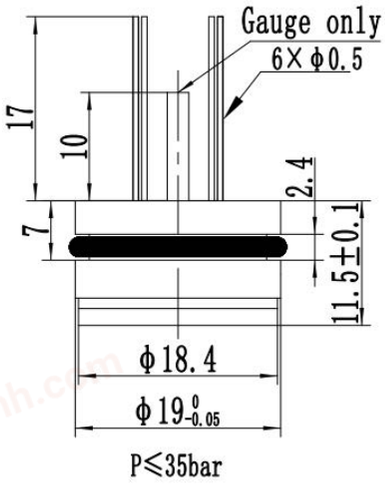
Pressure Sensors

Humidity	<60%RH
Working temperature	-40℃~125℃
Storage temperature	-40℃~125℃
Atmospheric pressure	86kPa~106kPa
Vibration environment	No change at 10gRMS, (20~2000)Hz
Shock resistance	100g,11ms

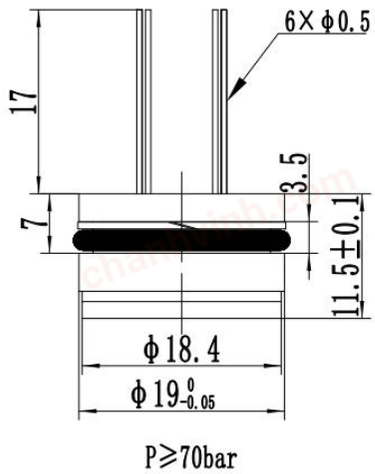
Approvals

Compliance/Certifications	RoHS

Dimensions & Wiring

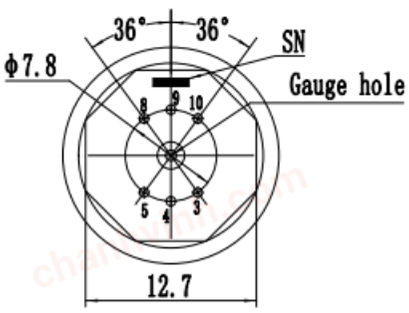


P≤35bar

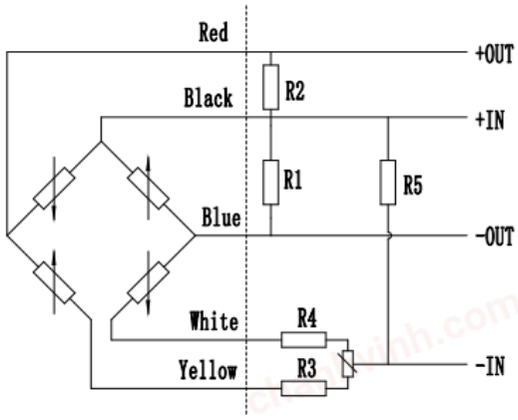


P≥70bar

The suggested installation dimension is Φ19 $^{+0.05}_{+0.02}$ mm



Constant current



Constant current

Pressure Sensors

MPM285	Pressure Sensor					
	Range code	Pressure range	Ref.	Range code	Pressure range	Ref.
	03	0bar~1bar	G.A	10	0bar~10bar	G.A
	07	0bar~2bar	G.A	12	0bar~20bar	G.A
	08	0bar~3.5bar	G.A	13	0bar~35bar	G.S.A
	09	0bar~7bar	G.A			

Code	Pressure type
G	Gauge
A	Absolute
S	Sealed gauge

Code	Pressure connection
0 or null	O-ring

Code	Compensation
L	Laser trimming

Code	Electrical connection
1	Kovar pin
2*	100mm ribbon cable with JST connector (P/N 04KR-6H-P)

MPM285	08	G	0	L	1	the whole spec

*The default code for electrical connection is "1" on the parameter card. And it is also allowed to print code "1" if the electrical connection is flexible wire (original code "2"). The wire length shall be as per customers' request on contact.