



## Industrial differential Pressure Sensor

# AV209

### OVERVIEW

AV209 industrial pressure sensor is a standard and most popular sensor applied in differential pressure measuring. A high sensitivity silicon pressure chip is employed in the sensor. The housing is filled with oil for pressure transmission. The AV209 sensor is designed for industry application with perfect long term stability.

### FEATURE

- \* Piezoresistive silicon chip employed
- \* Perfect long term stability
- \* MEMS Technology
- \* CE certificate
- \* Sensor diameter: 19mm

### APPLICATIONS

- \* Pressure Instrumentation
- \* Water Level
- \* Boiler Controls
- \* Pneumatics
- \* HVAC/R Systems
- \* Excellent low pressure application



### Performance@25°C (77°F)

Accuracy*	<±0.25% typ.
Stability (1 year)	<±0.3% typ.
Oil filling	Silicone oil (typical) fomblin oil available for sanitary application

Output	Excitation	Zero Offset	Span Tolerance
10mV/V**	1.5mA (Typical)	<±2mV	<±2mV
	5VDC		
	10VDC		

Bridge Resistance	Min	Max	Unit
	2600	5500	ohm
Insulation Resistance	>100MΩ/250VDC		

\* Accuracy includes non-linearity, hysteresis & non-repeatability  
\*\* 10VDC, Maximum

### Physical Description

Wetted Material	316L, Hastelloy (Optional)
O-ring	NBR, Viton
Wire	200mm long hook up wires
Weight	36g (approx)

### Environmental Data

#### Temperature

Operating	-40 to 125°C
Storage	-40 to 125°C

#### Thermal Limits

Compensated Range	0-60°C (typical)
TC Zero	<±0.02% of FS /°C(≥ 100kPa) <±0.03% of FS /°C(<100kPa)
TC Span	<±0.02% of FS /°C(≥ 100kPa) <±0.03% of FS /°C(<100kPa)

#### Other

Vibration	20g (20-2000HZ)
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## Ordering Method

For Example:-

AV209

A

000

D

U

L

C

H

006

1

2

3

4

5

6

7

8

9

1

Series	Code	Description
	AV209	

2

Pressure Unit	A	kPa
	P	PSI

3

Pressure Range	000	Standard Pressure Range (3-Code)	
Example	0d1	0.1	
	2d5	2.5	
	018	18	
	725	725	
	d	Decimal Place	

4

Pressure Type	D	Differential
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5

Header Thread	U	Weldable
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6

Wetted Material	L	316L-SS
	H	Hastelloy C276

7

Output	9	10mV/V**
	C	8mV/V

8

Electrical Connection	H	Hookup Wire
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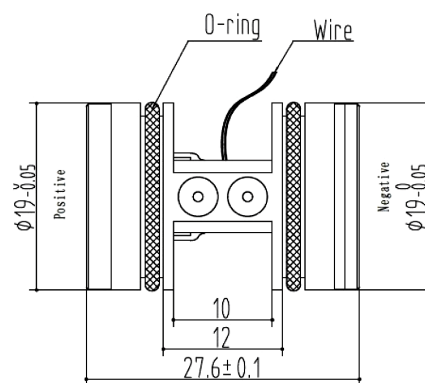
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Options Code	000	No Special Options (3-Digit Code)
	006	Fomblin oil Filled

Pressure Range			
Pressure Range	35kPa, 70kPa, 100kPa, 250kPa, 400kPa, 600kPa, 1MPa, 1.6MPa, 2.5MPa		
Over Pressure	Range	Positive Overpressure	Negative Overpressure
	35kPa	70kPa	35kPa
	70kPa	150kPa	70kPa
	100kPa	200kPa	100kPa
	250kPa	500kPa	250kPa
	400kPa	800kPa	400kPa
	600kPa	1200kPa	600kPa
	1Mpa	2Mpa	1Mpa
	1.6Mpa	3.2Mpa	1Mpa
	2.5Mpa	5Mpa	1Mpa

\*\* 10VDC, Maximum

### DIMENSIONAL DATA



In mm

Wire	Connection
red	excitation+
blue	excitation-
yellow	output+
white	output-