

P401 Series

Explosion Proof Pressure Transmitter



Feature

- Compact designed terminal head
- Excellent corrosion and abrasion resistances
- Measuring ranges from 0~0.01 to 200MPa gauge pressure
- Piezo resistive silicon or thin film sensor.
- High accuracy and low temperature drift
- Shock and vibration resistance
- Competitive price

Applications

- Hydraulic and pneumatic equipments
- Process control and monitoring
- Machine tools and automatic machinery
- Construction equipments and automotive industries
- Metrology and hydrometry
- Servo valves and drives
- Chemical and petrochemical industries
- Air and gas compressors
- Loading devices and brake systems
- Water resource management
- Flow detection
- Liquid level measurement

Input

Technology	Piezo resistive silicon or Thin Film pressure sensor.
Pressure range	0~0.01 to 200MPa relative pressure
	0~0.1 to 100MPa absolute pressure
Pressure reference	Gauge, absolute, vacuum and compound
Overload	2×full scale without damage

Output

	Current output
Electrical connection type	2-wire technique
Full scale output signal	20mA ±0.05%
Zero measured output	4mA ±0.03%
	Other signals available on request

Electrical Specifications

Power supply	12~36V DC
Load resistance max@24V	500 Ω at 24 V
Influence of excitation	0.01% FSO/V
Power ripple	≤500mV P-P Excitation voltage

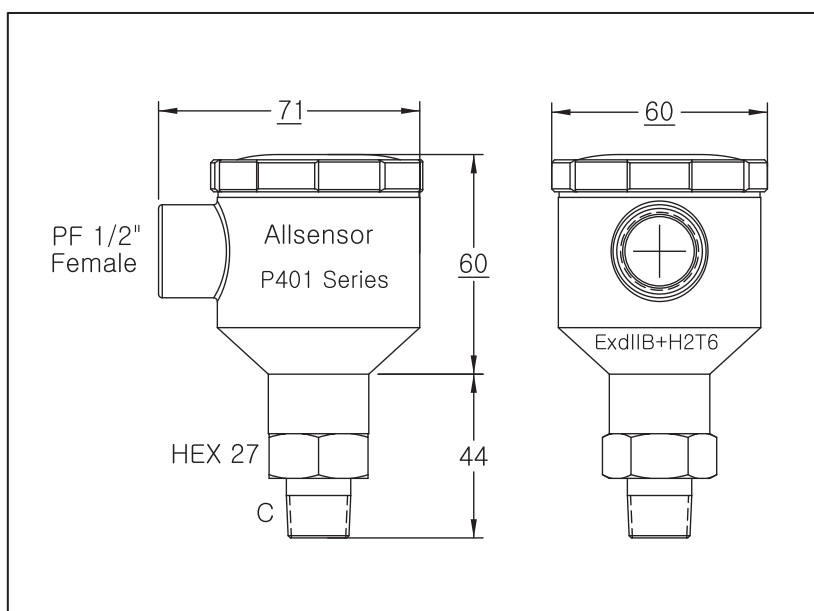
Performance Specifications

Accuracy	≤±0.25% FSO, ±0.5% FSO
Non-linearity	±0.100% FSO typical
Repeatability	±0.015% FSO typical
Pressure hysteresis	±0.010% FSO typical
Long term stability	±0.3% FSO over 6 month
Cutoff frequency(-3dB)	≤2kHz
Reference temperature	25℃
Operating temperature range	-20 ~100 ℃
Compensated temperature range	-20 ~ 60 ℃
Thermal sensitivity shift	≤±0.2% FSO in reference to 35℃ typical
Thermal zero shift	≤±0.2% FSO in reference to 35℃ typical
Thermal hysteresis	≤±0.1% FSO in reference to 35℃ typical

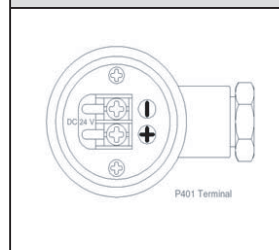
Physical Specifications

Process connection	PT1/4", PT3/8", PT1/2" male thread STANDARD PT 3/8"
	Female thread & other connections available on request
Process media	Gases and liquids compatible with
Materials wetted by process	Diaphragm : Stainless steel 316
	Housing : stainless steel
Enclosure rating	IP67
Explosion protection	Ex d IIB+H2 T6 (05-1-602-Q1)
Influence of mounting position	Not critical
Weight	Approx. 800 g

Dimension(mm)



Electric Connection



Process Connection

C	L
PT 1/4"	14
PT 3/8"	17
PF 1/2"	18
UNF7/16"	14

Ordering Information

P	4	0	1	H	0	1	0	M	G	A	T
Model Name P401 : High accuracy ($\pm 0.25\%$)					Pressure Range Refer to pressure range code page 5			Pressure Unit M:MPa B:bar P:psi K:kgf/cm ² H:mmH ₂ O G:mmHg T:torr		Process Connection A:PT3/8" B:PF3/8" C:PT1/4" D:PF1/4" E:PT1/2" F:PF1/2" O:Others	
Out Put H:2wire 4~20mA								Pressure Type G:Gauge C:Compound V:Vacuum A:Absolute		Electric Connection T : Terminal	