

P201 Series General Purpose Pressure Transmitter



Feature

- General purpose pressure transmitter for industrial applications
- Measuring ranges from 0~0.01 to 100 MPa, including vacuum & compound
- Advanced Piezoresistive or SOS measuring cell
- All welded structure(Except < 1 bar)
- Excellent accuracy and long term stability

Applications

Wide range of applications such as process control and below.

- Hydraulic system and pneumatic equipments
- Freon and ammonia refrigerator
- Machine tools and automatic machinery flow control
- On and off-shore industry
- Chemical and petrochemical industry
- Engine monitoring and control
- Fire fighting equipments and braking system for railway

Input

Technology	Piezoresistive silicon pressure sensor, thin film or strain gauge
Pressure range	0 ~ 0.01 to 100 MPa Gauge, Vacuum or Compound pressure 0 ~ 0.1 to 3.5 MPa Absolute pressure
Pressure reference	Gauge, including vacuum, compound and absolute
Overload pressure	1.5 times of F.S. (Max, 100 MPa)

Output

	Current output		Voltage output	
Electrical connection type	2Wire technique		3 or 4 Wire technique	
Full scale output signal	20 mA	± 0.05 %	5 V	± 0.05 %
Zero measured output	4 mA	± 0.03 %	1 V	± 0.03 %
	Other signals available on request			

Electrical Specifications

Power supply	12 ~ 36 V DC (It is not free voltage)
Load resistance max@24 V	500 Ω at 24 V
Power ripple	≤ 500 mV P-P
Insulation resistor	≥ 20 MΩ, 25 V DC

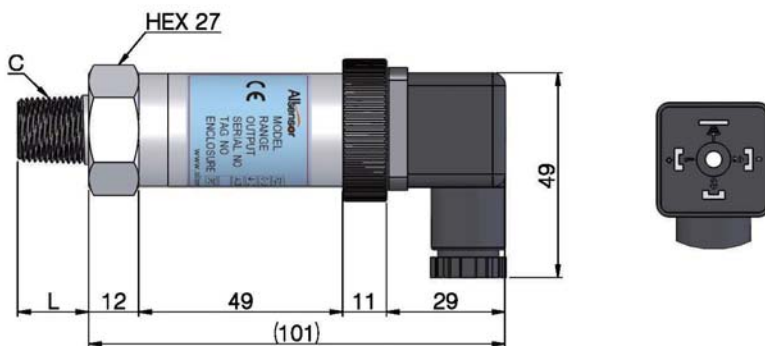
Performance Specifications

Accuracy	≤ ± 0.25 % F.S.
Non-linearity	± 0.100 % F.S. typical
Repeatability	± 0.03 % F.S. typical
Pressure hysteresis	± 0.03 % F.S. typical
Long term stability	± 0.1 % F.S. over 1 year
Response time (10 % to 90 %)	≤ 20 ms
Reference temperature	25 °C
Working temperature range (Process)	-40 ~ 120 °C
Compensated temperature range(Process)	-10 ~ 80 °C
Ambient temperature range	-20 ~ 60 °C
Thermal sensitivity shift	≤ ± 0.1 % F.S. in reference to 35 °C typical
Thermal zero shift	≤ ± 0.1 % F.S. in reference to 35 °C typical

Physical Specifications

Process connection	Rc(PT) 3/8" (M) standard
	Female thread & other connections are available on request.
Electrical connection	DIN 43650, Cable or M12 X 1.0 connector
Process media (fluid)	Gases and liquids compatible with STS 316L
Materials wetted by process	STS 316
	Stainless steel (housing – non wetted part)
Enclosure rating	IP65
Influence of mounting position	Not critical
Weight	Approx. 250g
Option	Remote or Flush Diaphragm Seal

Dimension(mm)



Process Connection		Output Wire	mV 4 Wire	V, mA 4 Wire	V, mA 3 Wire	mA 2Wire
C	L	①, Red	Excitation +	Power +	Power +	Power +
PT 1/4"	14	②, Black	Excitation -	Power -	Common	Return -
PT 3/8"	17	③, Green	Signal +	Signal +	Signal +	
PF 1/2"	18	④, White	Signal -	Signal -		
UNF7/16"	14	Power	V		12~33 V DC	

Ordering Information

P 2 0 1 G H

Model Name
P201 :
General Pressure Transmitter

Pressure Type
A : Absolute
G : Gauge

Out Put
H : 2Wire 4~20 mA F : 4Wire 4~20 mA
A : 4Wire mV J : 3Wire 0~10 V DC
C : 3Wire 0~5 V K : 4Wire 0~10 V DC
E : 3Wire 1~5 V

0 0 1 0

Pressure Range
Refer to pressure range code

M

Pressure Unit
M : MPa H : mmH₂O
B : bar G : mmHg
P : psi T : torr
K : kgf/cm²

Pressure Sensor
P : Piezo-Resistive
H : SOS
T : Tantalum Diaphragm

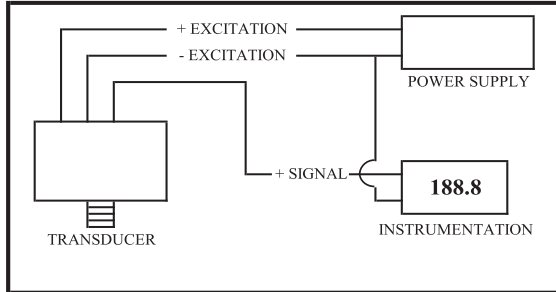
P A D

Process Connection
A : PT3/8" G : M20 x 1.5P
B : PF3/8" L : NPT 1/4"
C : PT1/4" M : NPT 3/8"
D : PF1/4" N : NPT 1/2"
E : PT1/2" V : VCR 1/4"
F : PF1/2" W : VCR 1/2"
O : Others

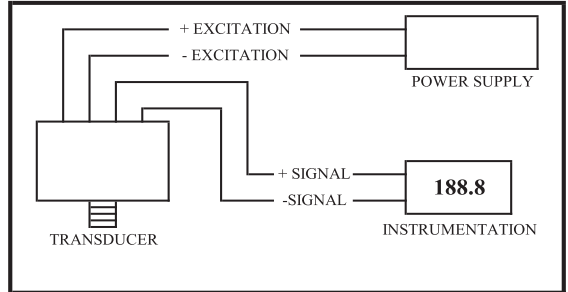
Electric Connection
D : DIN 43650
C : Cable
M : M12 Connector

Pressure Transducer & Transmitter

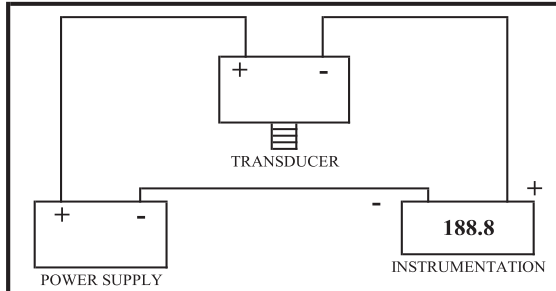
Installation and Wiring



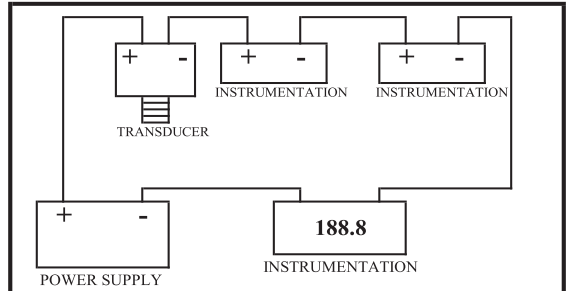
3Wire Configuration for voltage output Transducer
 ("-Excitation and "-Signal Are Common)



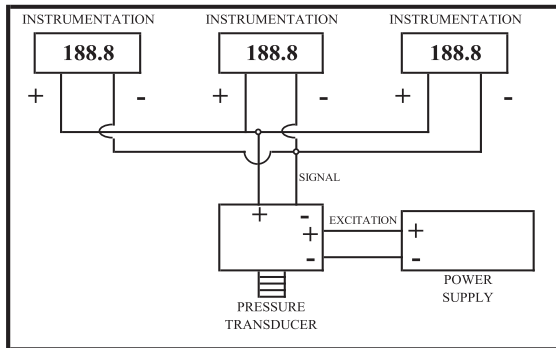
4Wire Configuration Millivolt Output Transducer



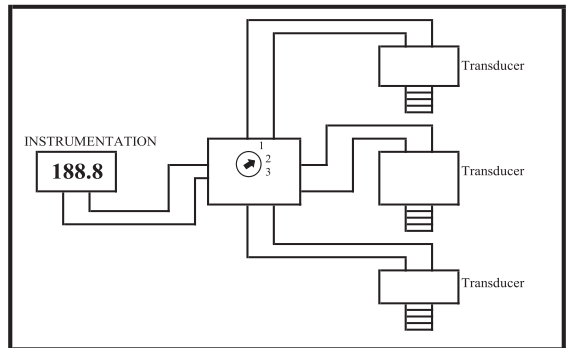
2Wire Configuration for Current output Transducer



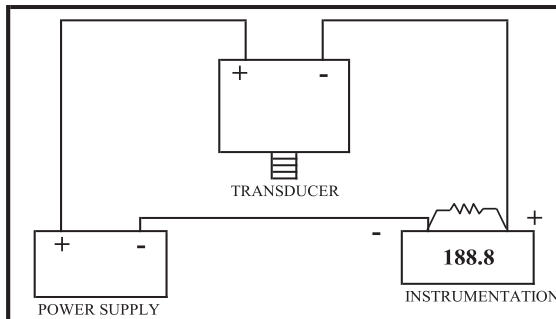
Multi-instrument 4-20mA Current Loop
 (Panel Meters, Chart Recorder, Computers, etc)



Multiple Instruments Wired In Parallel to a Voltage Output



Multiple Transducer Wired to One Meter and One Switch
 (Transducer With Built-in Zero & Span Adjustments, Same outputs & Same Pressure Range)



Converting Current Into Voltage For Instrumentation Set Up For Voltage