



PI

Pressure Transmitter

Pressure transmitter is the most commonly used in industrial production of a sensor, It is widely used in various industrial control environment, involved in water conservancy and hydropower, railway transportation, intelligent buildings, production control, aerospace, military industry, petrochemical, oil, electric power, ships, machine tools, pipe and so on industry.

Pressure transmitter is mainly ceramic piezoresistive pressure transmitter, capacitance pressure transmitter, diffusion silicon pressure transmitter, strain type pressure transmitter, pressure transmitter, sapphire sputtering film pressure transmitter, etc.,

Product type



■ High-temp health Pressure Transmitter



■ Intelligent Static pressure



■ High-temp Intelligent



■ Flange Static pressure



■ High-temp health Pressure Transmitter



■ Economical Differential pressure



■ Differential pressure Pressure Transmitter



■ Single Flange differential pressure



■ Dual Flange Differential pressure



■ Plug-in health Pressure Transmitter

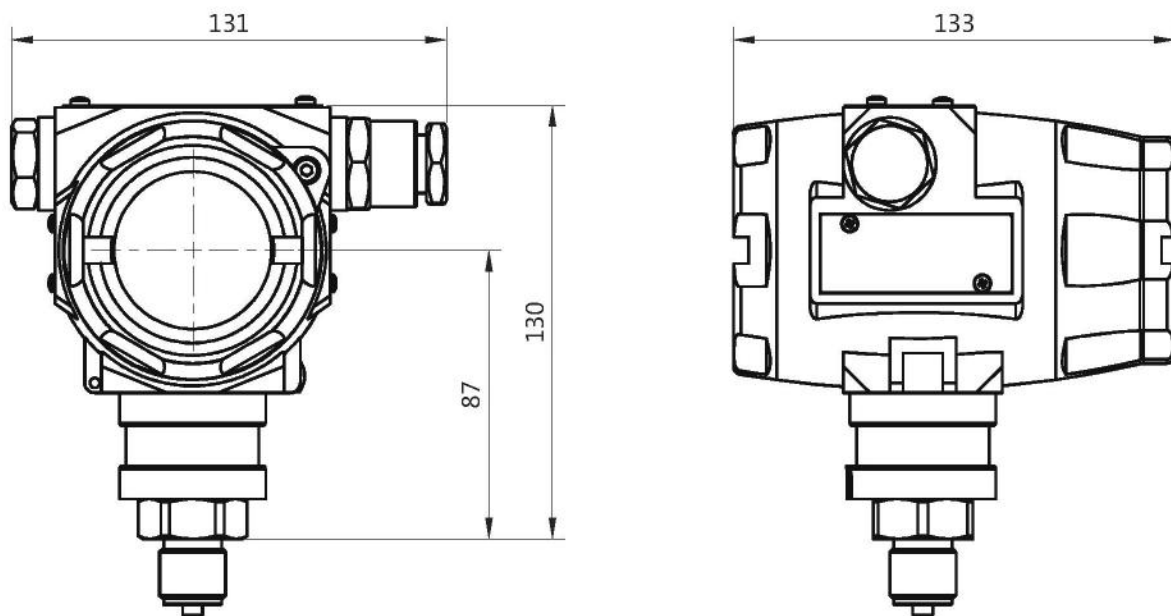


■ Throw-in Pressure Transmitter



■ Throw-in Straight line

PI 2 type Standard Pressure Transmitter



PI2088

Main technical parameters

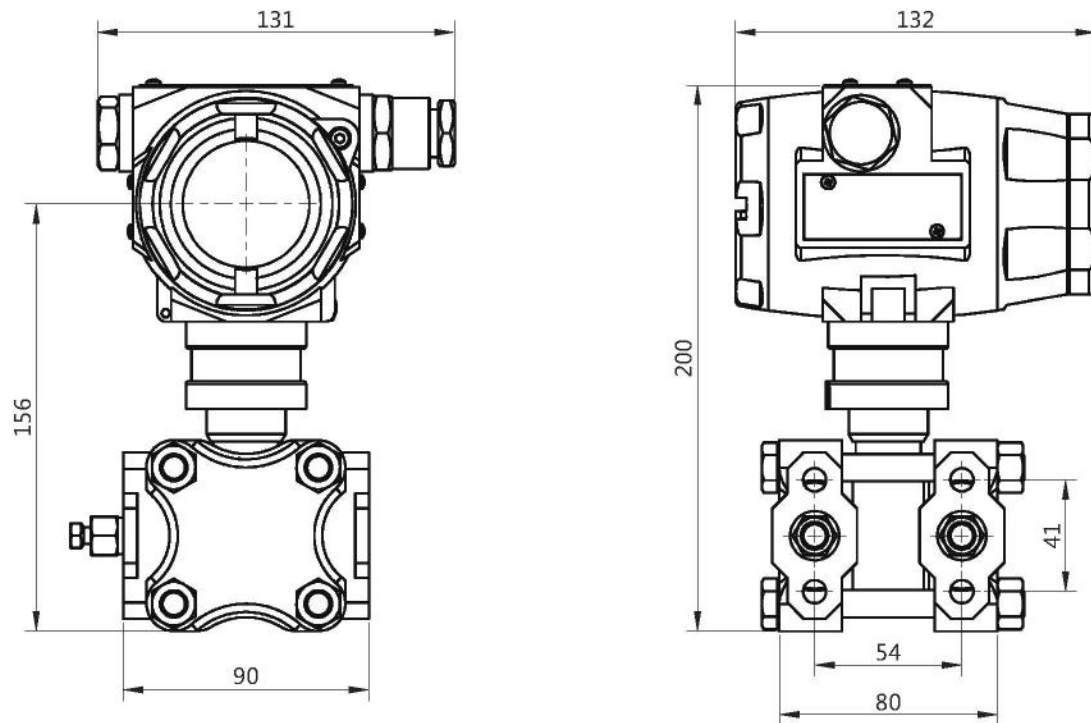
| Measurement range | Positive pressure | | Negative pressure | | Absolute pressure | |
|-----------------------|--|-----------|--------------------|-----------------------|---------------------|-----------|
| | Min range | Max range | Min range | Max range | Min range | Max range |
| | 5KPa | 70MPa | -5KPa | -100KPa | 10KPa | 3.5MPa |
| Accuracy | 0.2%F.S. , 0.5%F.S. | | | | | |
| Power supply | 12 ~ 30VDC , 24VDC | | | | | |
| Output signal | 4 ~ 20mA , 0 ~ 20mA , 1 ~ 5VDC , 0 ~ 10VDC , 0 ~ 5VDC , Customizable | | | | | |
| Temperature range | Compensation Temperature | | Medium Temperature | Operating Temperature | Storage Temperature | |
| | 0 ~ 50°C , -10 ~ 80°C , Customizable | | -25 ~ 85°C | -20 ~ 85°C | -40 ~ 125°C | |
| Temperature drift | 0.02%F.S./°C | | | | | |
| Electrical connection | Terminals , Customizable | | | | | |
| Protection class | IP67 | | | | | |
| Thread connection | M20×1.5 (M) , G1/2" (M) , G1/4" (M) , Customizable | | | | | |
| Anti-vibration | 20g , 20 ~ 5000Hz | | | | | |
| Anti-shock | 100g , 11ms | | | | | |
| Housing material | Aluminum alloy | | | | | |
| Operational life | > 1×10 ⁸ Pressure Cycling | | | | | |

PI2 type Standard Pressure Transmitter Selection table

Standard type Pressure Transmitter

| | G: Gauge Pressure; N: Composite gauge pressure (positive & negative pressure) A: Absolute pressure | | | | | | | | | | | |
|--------|--|---------------|-----------------|---------------|-----------------------------|--------------------|-------------------|---------------------|----------|--------------|-----------------------|--|
| | digit & unit, eg: 0~2.0MPa | | | | | | | | | | | |
| | F: 4~20mA two wire H: 4~20mA/Hart; S: RS485/Modbus RTU; V: 1~5VDC three wire Y1: Customized | | | | | | | | | | | |
| | 4: SUS304, 6: SUS316, Y2: Customized | | | | | | | | | | | |
| | M: Male thread M20x1.5 (inner hole Φ3); G: Male thread G1/2" (inner hole Φ3); Y3: Customized | | | | | | | | | | | |
| | C: ATM within 80°C ; T: high-temp 200°C ; Y4: Customized | | | | | | | | | | | |
| | A: Standard type B: Flush type C: Half-flush type; | | | | | | | | | | | |
| | 2: 0.2% F.S; 5: 0.5% F.S; Y5: Customized | | | | | | | | | | | |
| | A: without local display Y6: Customized C: LCD digital range display | | | | | | | | | | | |
| | S: Standard type (Non-Ex-proof) I: Intrinsically safe type Exia IIC T6 D: Explosion proof Exd IIC T6 Y7: Customized | | | | | | | | | | | |
| | Product Series | Pressure type | Measuring range | Signal output | Process connection material | Process connection | Temperature range | Pressure taking way | Accuracy | Display type | Explosion proof Grade | |
| PI2088 | - | () | | | | | - | | | | | |

P13 type Standard Differential pressure Transmitter



PI3051

Main technical parameters

| Measurement range | Positive pressure | | Negative pressure | | Absolute pressure | |
|-----------------------|--|-----------|--------------------|-----------------------|---------------------|-----------|
| | Min range | Max range | Min range | Max range | Min range | Max range |
| | 200Pa | 10MPa | -200Pa | -10MPa | 20KPa | 6.8MPa |
| Accuracy | 0.075%F.S. , 0.2%F.S. , 0.5%F.S. | | | | | |
| Power supply | 13 ~ 45VDC , 24VDC | | | | | |
| Output signal | 4 ~ 20mA , 4 ~ 20mA/HART , Customizable | | | | | |
| Temperature range | Compensation Temperature | | Medium Temperature | Operating Temperature | Storage Temperature | |
| | 0 ~ 50°C , -10 ~ 80°C , Customizable | | -25 ~ 85°C | -20 ~ 85°C | -40 ~ 125°C | |
| Temperature drift | 0.02%F.S./°C | | | | | |
| Electrical connection | Terminals | | | | | |
| Protection class | IP67 | | | | | |
| Thread connection | M20×1.5 (M) , 1/2"NPT (F) , 1/4"NPT (F) , Customizable | | | | | |
| Anti-vibration | 20g , 20 ~ 5000Hz | | | | | |
| Anti-shock | 100g , 11ms | | | | | |
| Housing material | Aluminum alloy | | | | | |
| Operational life | > 1×10 ⁸ Pressure Cycling | | | | | |

P13 type Standard Differential pressure Transmitter Selection table

Standard Differential Pressure Transmitter

| | | | | | | | | | | | | |
|----------------|--|---------------|--------------------------|-----------------|-----------------------|--------------------|-----------------------------|-------------------|----------|--------------|-----------------------|--|
| | digit & unit, eg: (-0.1~0.1kPa) | | | | | | | | | | | |
| | F: 4~20mA two wire H: 4~20mA/Hart; S: RS485/Modbus RTU; V: 1~5VDC three wire Y1: Customized | | | | | | | | | | | |
| | D0: relief valve at the rear end of the flange D1: relief valve is on the upper side of the flange D2: relief valve is on the upper side of the flange D3: without relief valve | | | | | | | | | | | |
| | S0: Without Diaphragm Seals S1: Single-ended connection seals S2: double-ended connection seal | | | | | | | | | | | |
| | S: SUS316L ; T: Tantalum M: Monel H: Hastelloy C P: SUS316L coated PTFE | | | | | | | | | | | |
| | P: female thread(1/4-18NPT body); F: flange Y2: Customized Eg: P(1/4NPT), F(DN25 PN0.6MPa HG20592-97) | | | | | | | | | | | |
| | 4: SUS304, 6: SUS316, Y3: Customized | | | | | | | | | | | |
| | C: ATM within 80°C T: high-temp 200°C Y4: Customized | | | | | | | | | | | |
| | 2: 0.2% F.S; 5: 0.5% F.S; 7: 0.075% F.S; | | | | | | | | | | | |
| | A: without local display; C: LCD digital range display | | | | | | | | | | | |
| | S: Standard type(Non-Ex-proof); I: Intrinsically safe type ExiallCT6 D: Explosion proof ExdIICT6; Y5: Customized | | | | | | | | | | | |
| Product Series | Measuring range | Signal output | Discharge valve position | Diaphragm Seals | Wetted parts material | Process connection | Process connection material | Temperature range | Accuracy | Display type | Explosion proof Grade | |
| PI3051 | - () | □ | □□ | □□ | □ | □ () | □ | □ | □ | □ | □ | |

Note: diaphragm type, size, choice of parameters in turn.

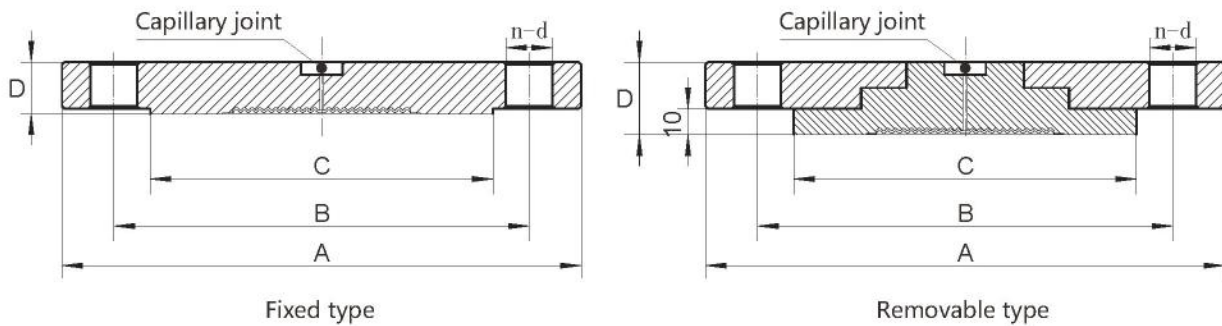
RFW Diaphragm Seal with flange Connection

Description & Features :

- Connected with pressure and differential pressure transmitter, made up of diaphragm measurement systems.
- Flange with a flush welded diaphragm with contoured diaphragm bed.
- Available for all common standards and nominal diameters
- Suitable for aggressive, highly viscous, crystallizing or hot media
- Used for pressure, differential pressure, level, flow, interface and density measurement



Structural drawing



The flange size

| Nominal diameter (DN) | Nominal pressure (MPa) | Raised face diameter C | Outer diameter A | Thickness D | Drill holes center distance B | Number of drill hole n | Drill holes diameter d | Description |
|-------------------------|--------------------------|------------------------|------------------|-------------|-------------------------------|------------------------|------------------------|--|
| DN25 | 1 | 65 | 115 | 16 | 85 | 4 | 14 | the thickness of removable flange is D+8mm |
| | 2 | 65 | 115 | 16 | 85 | 4 | 14 | |
| DN40 | 1 | 84 | 150 | 18 | 110 | 4 | 14 | |
| | 2 | 84 | 150 | 18 | 110 | 4 | 14 | |
| DN50 | 1 | 99 | 165 | 20 | 125 | 4 | 14 | |
| | 2 | 99 | 165 | 20 | 125 | 4 | 14 | |
| DN80 | 1 | 132 | 200 | 20 | 160 | 8 | 18 | |
| | 2 | 132 | 200 | 24 | 160 | 8 | 18 | |