

Model PM410 Smart Pressure Transmitters



Features

- Measuring ranges from 100mbar to 600bar
- Absolute, gauge and sealed gauge
- Accuracy: $\pm 0.25\%$ FSO or $\pm 0.5\%$ FSO
- Calibrated and temperature compensated
- Digits LCD indicator
- Piezoresistive pressure sensor design
- Variety of Pressure connections
- Output 4...20mA

Product Overview

PM410 is made from high-quality silicon piezoresistive sensor. The piezoresistive sensor is packaged in stainless steel housing. Equipped with an digits display, PM410 provide an easy solution for field testing applications. The compact and rugged design makes these pressure transmitter suitable for applications including process control systems, hydraulic systems and valves, refrigeration and HVAC controls, level measurement and test equipment.

A wide range of process connection options are available to meet almost requirement.

Applications

- Process control systems
- Petroleum industry
- Hydraulic systems and valve
- Machine building
- Chemical industry

Standard Pressure Ranges

| Nominal pressure | gauge | sealed gauge | absolute |
|------------------|-------|--------------|----------|
| -1...0bar | ● | | |
| -0.35...0bar | ● | | |
| -0.2...0bar | ● | | |
| 0...0.1bar | ● | | |
| 0...0.2bar | ● | | |
| 0...0.35bar | ● | | ● |
| 0...0.7bar | ● | | |
| 0...1bar | ● | | ● |
| 0...1.6bar | ● | | |
| 0...2.5bar | ● | | ● |
| 0...4bar | ● | | ● |
| 0...6bar | ● | | ● |
| 0...10bar | ● | ● | ● |
| 0...16bar | ● | ● | ● |
| 0...25bar | ● | ● | |
| 0...60bar | | ● | |
| 0...100bar | | ● | |
| 0...250bar | | ● | |
| 0...400bar | | ● | |
| 0...600bar | | ● | |

Other pressure ranges available. Please consult the factory.

Heavy Duty Pressure Transmitter

Performance Specifications

| Parameter | Value | Units | Notes |
|-------------------------------|-------------------------------------|--------------------|----------------------------|
| General | | | |
| Pressure Range | -1-0, ..., 0-0.1, ..., 600 | bar | 1bar=14.5psi |
| Overpressure | 1.5xFS | bar | |
| Environmental | | | |
| Operating Temperature Range | -20 to +85 | °C | -4°F to 185°F |
| Compensated Temperature Range | -10 to +70 | °C | 14°F to 158°F |
| Storage Temperature Range | -40 to +125 | °C | -40°F to 257°F |
| Vibration | 10 | g | 20 to 2000Hz |
| Shock | 100 | g | 10ms |
| Cycles | 10x10 ⁶ | cycles | |
| Electrical @25°C(77°F) | | | |
| Output Signal | 4...20mA | 4...20mA with HART | 4...20mA with RS485-MODBUS |
| Power Supply(Vs) | 12...36Vdc | 12...36Vdc | 12...36Vdc |
| Load Resistance | <(Vs-12)/0.02A (For current output) | | |
| Insulation Resistance | 100MΩ@50Vdc | | |

Physical Specifications

| | |
|---------------------|--|
| Media Compatibility | All media compatible with 316L stainless steel |
| Electronic Housing | Aluminum alloy |
| Diaphragm | 316L stainless steel |
| Seal Ring | Viton or NBR |
| Oil Filling | Silicone oil |
| Protection | IP65(Standard) |
| Net Weight | Approx.1.2kg |

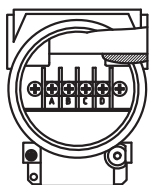
| Parameter | Minimum | Typical | Maximum | Units | Notes |
|---------------------|---------|---------|---------|-----------|-------|
| Performance | | | | | |
| Accuracy | 0.1 | 0.25 | 0.5 | %FSO | 1,2 |
| Temp Coeff - Zero | | ±0.75 | ±1.5 | %FSO | 3 |
| Temp Coeff - Span | | ±0.75 | ±1.5 | %FSO | 3 |
| Long-Term Stability | | ±0.2 | ±0.3 | %FSO/year | 1 |

Notes

1. All values measured at 25°C(77°F)
 2. Including non-linearity, hysteresis and repeatability.
 3. -10°C to 70°C(14°F to 158°F) with reference to 25°C(77°F).
- The listed specifications and dimensions are subject to change without prior notice.

Connection Diagrams

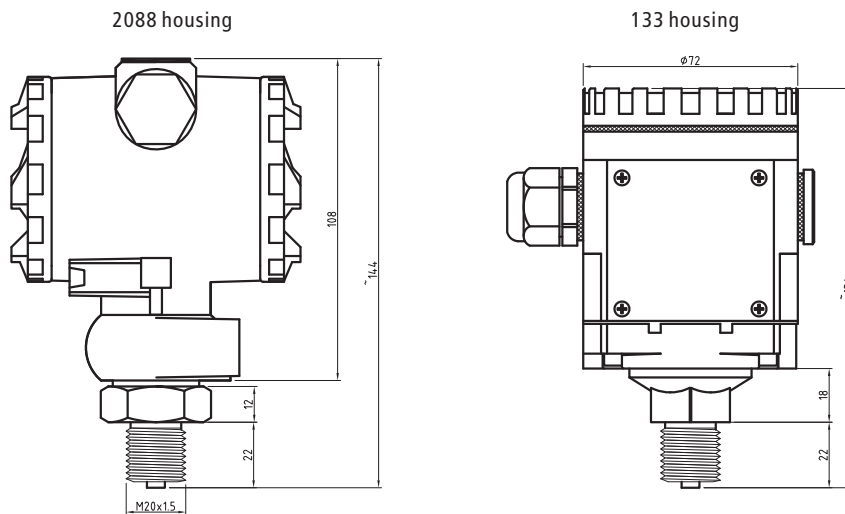
Terminal



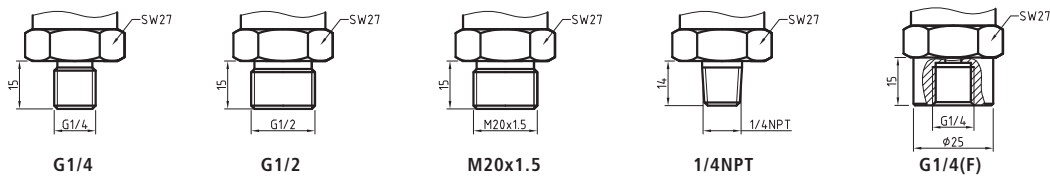
| | |
|---------|-----------------|
| | 2-wire(current) |
| Supply+ | A |
| Signal+ | B |
| - | - |
| - | - |

Heavy Duty Pressure Transmitter

Dimensions (in mm)



Mechanical Connection (in mm)



Ordering Information

| Option1: Model | |
|---------------------------------------|--|
| PM410 | Piezoresistive Pressure Transmitter |
| Option2: Pressure Ranges | |
| N001 | -1...0bar 0016 0...1.6bar 0600 0...60bar |
| N002 | -0.35...0bar 0025 0...2.5bar 1000 0...100bar |
| N003 | -0.2...0bar 0040 0...4bar 2500 0...250bar |
| 0001 | 0...0.1bar 0060 0...6bar 4000 0...400bar |
| 0003 | 0...0.35bar 0100 0...10bar 6000 0...600bar |
| 0007 | 0...0.7bar 0160 0...16bar Cxxx Customized range |
| 0010 | 0...1bar 0250 0...25bar |
| Option3: Pressure Type | |
| G | gauge |
| A | absolute |
| S | sealed gauge |
| Option4: Output Signal | |
| 42 | 4...20mA |
| 42H | 4...20mA with HART |
| 42R | 4...20mA with RS485-MODBUS |
| Option5: Accuracy | |
| 02 | 0.25%FSO |
| 05 | 0.5%FSO |
| Option6: Electrical Housing | |
| 2088 | 2088 housing |
| 133 | 133 housing |
| - | - |
| Option7: Mechanical Connection | |
| M2 | M20x1.5(male) N1 1/4NPT(male) |
| G4 | G1/4(male) F4 G1/4(female) |
| G2 | G1/2(male) Nx Customized |
| PM410 | 0010 G 42 02 2088 G4 Examples of Ordering Code: PM410-0010-G-42-02-2088-G4 |