

# Model PM410

## Smart Pressure Transmitters



### Product Overview

PM410 is made from high-quality silicon piezoresistive sensor. The piezoresistive sensor is packaged in stainless steel housing. Equipped with an LCD 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

### 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

### 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.

**Performance Specifications**

Parameter	Value	Units	Notes
<b>General</b>			
Pressure Range	-1-0, ..., 0-0.1, ..., 600	bar	1bar=14.5psi
Overpressure	1.5xFS	bar	
<b>Environmental</b>			
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 <sup>6</sup>	cycles	
<b>Electrical @25°C(77°F)</b>			
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		
<b>Physical Specifications</b>			
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		

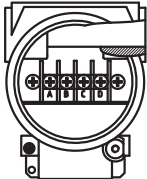
Parameter	Minimum	Typical	Maximum	Units	Notes
<b>Performance</b>					
Accuracy	0.1	0.25	0.5	%FSO	1,2
Temp Coeff - Zero		±0.75	±1.5	%FSO	3
Temp Coeff - Span		±0.75	±1.5	%FSO	3
Long-Term Stability		±0.2	±0.3	%FSO/year	1

**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.

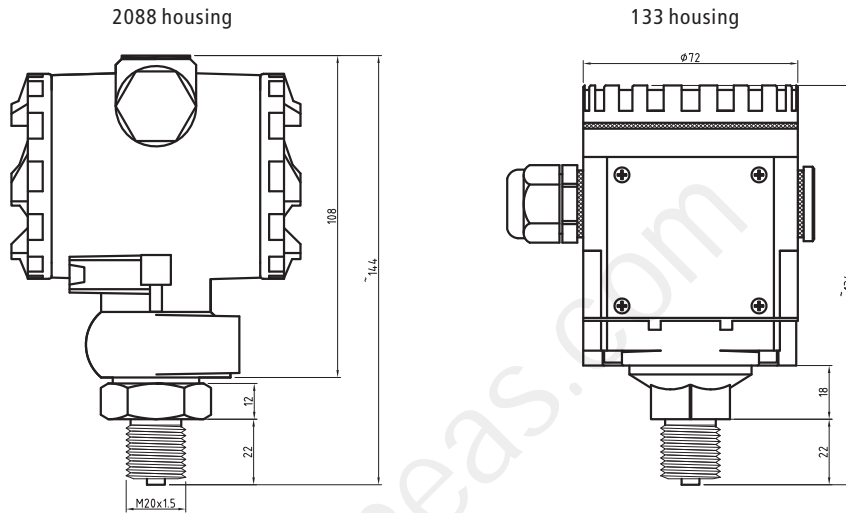
**Connection Diagrams**

**Terminal**

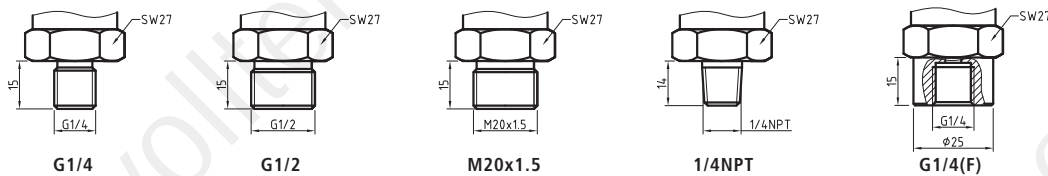


2-wire(current)	
Supply+	A
Signal+	B
-	-
-	-

**Dimensions (in mm)**



**Mechanical Connection (in mm)**



**Ordering Information**

<b>Option1: Model</b>							
PM410	Piezoresistive Pressure Transmitter						
<b>Option2: Pressure Ranges</b>							
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				
<b>Option3: Pressure Type</b>							
G	gauge						
A	absolute						
S	sealed gauge						
<b>Option4: Output Signal</b>							
42	4...20mA						
42H	4...20mA with HART						
42R	4...20mA with RS485-MODBUS						
<b>Option5: Accuracy</b>							
02	0.25%FSO						
05	0.5%FSO						
<b>Option6: Electrical Housing</b>							
2088	2088 housing						
133	133 housing						
-	-						
<b>Option7: Mechanical Connection</b>							
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

This data sheet contains product specification, properties are not guaranteed. Subject to change without notice.