

Model PM210

For High Pressure Applications



Product Overview

The PM210 metal foil strain gauge pressure transmitter is designed for superior high pressure applications up to 6,000bar. This model provides a very high long-term stability and a very good accuracy. The transmitter is featured with no O-ring, free of leakage risks. The compact and rugged design makes these pressure transmitter suitable for applications including process control systems, hydraulic systems, valves and test equipment. A wide range of process connection and electrical connection options are available to meet almost requirement.

Applications

- Process control systems
- Hydraulic systems and valve
- Machine building
- Test equipment

Features

- Measuring ranges from 100bar to 6000bar
- Gauge type
- Accuracy: $\pm 0.25\%$ FSO, $\pm 0.5\%$ FSO
- Calibrated and temperature compensated
- Foil strain gauge pressure sensor design
- Fully welded structure, no-ring inside
- Variety of Pressure & Electrical connections
- Output 4...20mA, 0...10V, 0.5...4.5V and others

Standard Pressure Range

Nominal pressure	gauge	sealed gauge	absolute
0...100bar	●		
0...250bar	●		
0...400bar	●		
0...600bar	●		
0...1000bar	●		
0...2500bar	●		
0...4000bar	●		
0...5000bar	●		
0...6000bar	●		

other pressure ranges available. Please consult the factory.

Performance Specifications

Parameter	Value	Units	Notes
General			
Pressure Range	0-100,...,6000	bar	1bar=14.5psi
Overpressure	1.25xFS	bar	
Environmental			
Operating Temperature Range	-40 to +85	°C	-40°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 ⁵	cycles	
Electrical @25°C(77°F)			
Output Signal	4...20mA 0...5Vdc 1...5Vdc 0...10Vdc 0.5...4.5Vdc(ratiometric)		
Power Supply(Vs)	12...36Vdc 12...36Vdc 12...36Vdc 15...36Vdc 5Vdc		
Load Resistance	<(Vs-12)/0.02A (For current output), >10kΩ (For voltage output)		
Insulation Resistance	100MΩ@50Vdc		

Physical Specifications

Media Compatibility	All media compatible with stainless steel
Housing	304 stainless steel
Diaphragm	alloy steel
Seal Ring	/
Oil Filling	/
Protection	IP65
Net Weight	Approx.510g

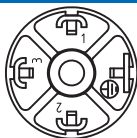
Parameter	Minimum	Typical	Maximum	Units	Notes
Performance					
Accuracy	0.1	0.25	0.5	%FSO	1,2
Temp Coeff - Zero		±0.02	±0.03	%FSO/°C	3
Temp Coeff - Span		±0.02	±0.03	%FSO/°C	3
Long-Term Stability		±0.2	±0.3	%FSO/year	1

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

Connector DIN43650



	2-wire(current)	3-wire(voltage)
Supply+	1	1
Signal+	2	3
Gnd	-	2

Connector M12x1 (4-pin)



	2-wire(current)	3-wire(voltage)
Supply+	1	1
Signal+	2	3
Gnd	-	2

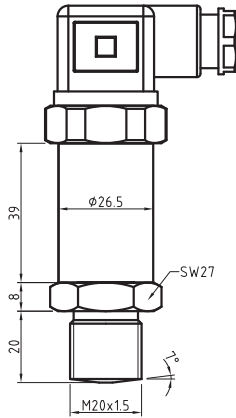
Cable outlet



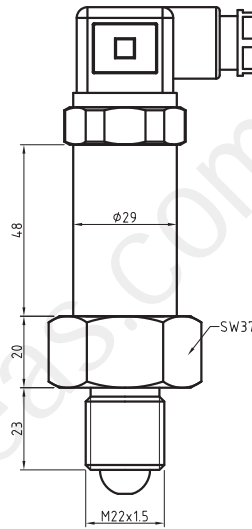
	2-wire(current)	3-wire(voltage)
Supply+	red	red
Signal+	black	green
Gnd	-	black

Dimensions (in mm)

for pressure ranges ≤ 1600bar



1600bar < pressure ranges ≤ 6000bar



Ordering Information

Option1: Model							
PM210	Foil Strain Gauge Pressure Transmitter						
Option2: Pressure Ranges							
1000	0...100bar	5000	0...5001bar				
2500	0...250bar	6000	0...6001bar				
4000	0...400bar	Cxxx	Customized range				
6000	0...600bar						
1000	0...1000bar						
2501	0...2500bar						
4001	0...4000bar						
Option3: Pressure Type							
	G	gauge					
Option4: Output Signal							
	42	4...20mA					
	05	0...5Vdc					
	15	1...5Vdc					
	10	0...10Vdc					
	45	0.5...4.5(ratiometric)					
Option5: Accuracy							
	02	0.25%FSO					
	05	0.5%FSO					
Option6: Electrical Connection							
	D	Connector DIN43650					
	C	Cable outlet with PVC-cable,length=1.5m					
	M	M12x1, 4-pin					
Option7: Mechanical Connection							
	M2	M20x1.5(male)	Nx	Customized			
	G2	G1/2(male)					
	M22	M22x1.5(male)					
PM210	4000	G	42	02	D	M2	Examples of Ordering Code: PM210-4000-G-42-02-D-M2

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