

Model PM230

For General Industrial Applications



Product Overview

Pm230 is made from high-quality silicon piezoresistive sensor. The piezoresistive sensor is packaged in stainless steel housing. The PM230 is precision engineered to fit most industrial pressure measurement. 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 and electrical connection options are available to meet almost requirement.

Applications

- Process control systems
- Refrigeration and HVAC controls
- Hydraulic systems and valve
- Machine building
- Pumps and compressors

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
- Stainless steel construction
- Piezoresistive pressure sensor design
- Variety of Pressure & Electrical connections
- Output 4...20mA, 0...10V, 0...5V and others

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
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		
Power Supply(Vs)	12...36Vdc		
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 316L stainless steel		
Electronic Housing	Aluminum alloy		
Diaphragm	316L stainless steel		
Seal Ring	Viton or NBR		
Oil Filling	Silicone oil		
Protection	IP65		
Net Weight	Approx.425g		

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

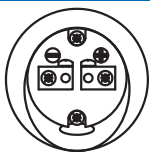
Notes

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.

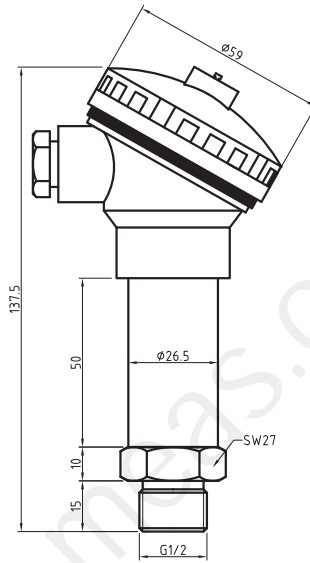
Connection Diagrams

C Terminal

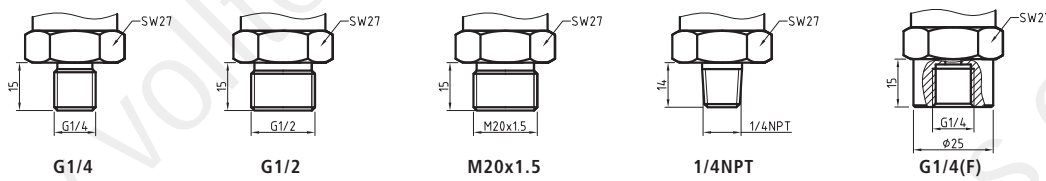


2-wire(current)	
Supply+	⊖
Supply-	⊕
Signal+	-

Dimensions (in mm)



Mechanical Connection (in mm)



Ordering Information

Option1: Model		PM230 Piezoresistive Pressure Transmitter					
Option2: Pressure Ranges							
N001	-1...0bar	0016	0...1.6bar				
N002	-0.35...0bar	0025	0...2.5bar				
N003	-0.2...0bar	0040	0...4bar				
0001	0...0.1bar	0060	0...6bar				
0003	0...0.35bar	0100	0...10bar				
0007	0...0.7bar	0160	0...16bar				
0010	0...1bar	0250	0...25bar				
Option3: Pressure Type							
G	gauge						
A	absolute						
S	sealed gauge						
Option4: Output Signal							
42	4...20mA						
-	-						
Option5: Accuracy							
02	0.25%FSO						
05	0.5%FSO						
Option6: Electrical Connection							
T	Terminal						
-	-						
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				
PM230	0010	G	42	02	T	G4	Examples of Ordering Code: PM230-0010-G-42-02-T-G4