Piezoresistive Pressure Transmitter

Model PM210T

For High Tempererature Applications

Features

- ¡Measuring ranges from 350mbar to 600bar
- ¡ Absolute, gauge and sealed gauge
- ¡ Accuracy: ±0.25%FSO or ±0.5%FSO
- ¡ Calibrated and temperature compensated
- ¡ Stainless steel construction
- ¡ Wider operation temperature range
- ¡ Variety of Pressure & Electrical connections
- ¡ Output 4...20mA,0...10V,0...5V and others

Product Overview

PM210T is made from high temperature silicon piezoresistive sensor chip. The piezoresistive sensor chip is packaged in a fluid-filled cylindrical cavity and isolated from measured media by a stainless steel diaphragm and housing. The measured media is transferred onto sensor throughheating cooling parts, and high accuracy amplified circuit board is in stainless steel housing, transmitting sensor signal into standard output signal.

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
- ¡Steam and heat exchange

Standard Pressure Ranges

Nominal pressure	gauge	sealed gauge	absolute
-1...0bar	•		
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,...,0-0.35,...,600	bar	1bar=14.5psi
Overpressure	1.5xFS	bar	
Environmental			
Medium Temperature Range	0 to +150(standard), 0 to +300	ºC	32°F to 302°F
Compensated Temperature Range	-10 to +70	ºC	14°F to 158°F
Environment Temperature Range	-20 to +85	ºC	-4°F to 185°F
Vibration	10	g	20 to 2000Hz
Shock	100	g	10ms
Cycles	10^6	cycles	
Electrical @25°C(77°F)			
Output Signal	4...20mA / 0...5Vdc / 1...5Vdc / 0...10Vdc		
Power Supply(Vs)	12....36Vdc / 12....36Vdc / 12....36Vdc / 15....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(Standard)		
Net Weight	Approx.755g		

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

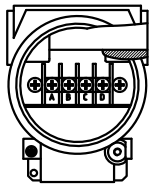
Notes

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

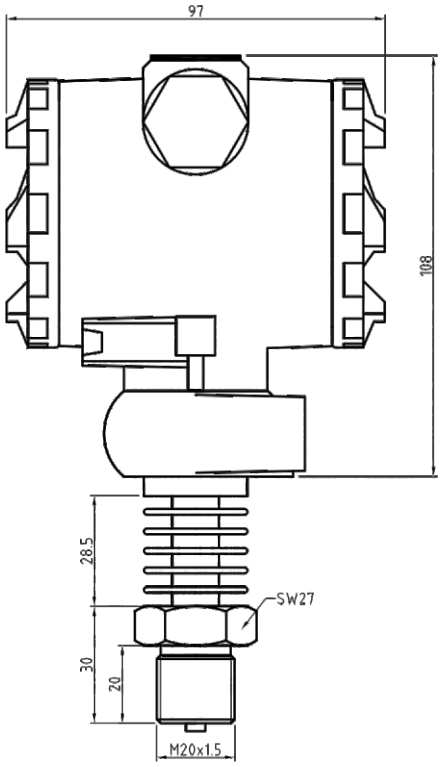
Terminal



	2-wire(current)	4-wire(voltage)
Supply+	A	A
Supply-	B	B
Signal+	-	D
Signal-	-	C

Piezoresistive Pressure Transmitter

Dimensions (in mm)



Ordering Information

Option1: Model									
PM210T	High-Temperature Pressure Transmitter								
	Option2: Pressure Ranges								
	N001	-1...0bar	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					
	0016	0...1.6bar	0600	0...60bar					
	0025	0...2.5bar	1000	0...100bar					
	0040	0...4bar	2500	0...250bar					
		Option3: Pressure Type							
		G	gauge						
		A	absolute						
		S	sealed gauge						
			Option4: Output Signal						
			42	4...20mA					
			05	0...5Vdc					
			15	1...5Vdc					
			10	0...10Vdc					
			-	-					
				Option5: Accuracy					
				02	0.25%FSO				
				05	0.5%FSO				
					Option6: Electrical Connection and Temp.				
					T	Terminal 0-150℃			
					T1	Terminal 0-300℃			
					-	-			
					-	-			
						Option7: Mechanical Connection			
						M2	M20x1.5(male)	N2	1/2NPT(male)
						G4	G1/4(male)	F4	G1/4(female)
						G2	G1/2(male)	P1	1/4PT(male)
						N1	1/4NPT(male)	P2	1/2PT(male)
						Nx	Customized		
								Option8:LCD Digital indicator	
									No
								DS	LCD Digital indicator