

# Model PM21T

## For High Temperature Applications



### Features

- Measuring ranges from 350mbar to 600bar
- Absolute, gauge and sealed gauge
- Accuracy:  $\pm 0.25\%$  FSO or  $\pm 0.5\%$  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

PM21T 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 through heating 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
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**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	°C	32°F to 302°F
Compensated Temperature Range	-10 to +70	°C	14°F to 158°F
Environment Temperature Range	-20 to +85	°C	-4°F to 185°F
Vibration	10	g	20 to 2000Hz
Shock	100	g	10ms
Cycles	10 <sup>6</sup>	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
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**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

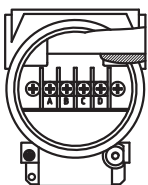
**Notes**

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.

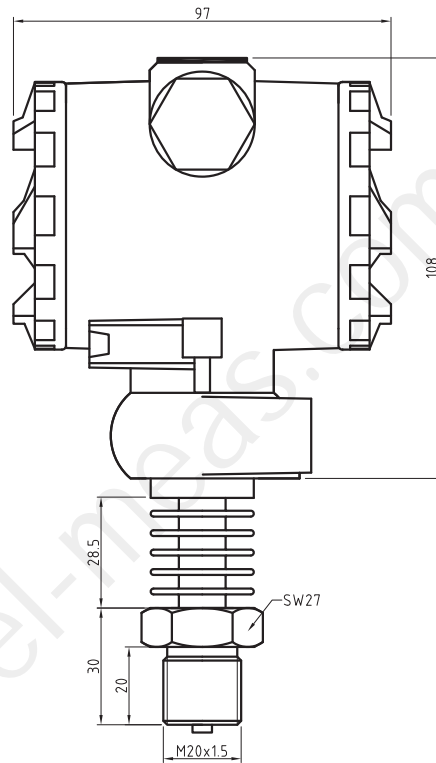
Connection Diagrams

**Terminal**



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

**Dimensions (in mm)**



**Ordering Information**

<b>Option1: Model</b>							
PM21T	High-Temperature Pressure Transmitter						
<b>Option2: Pressure Ranges</b>							
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				
<b>Option3: Pressure Type</b>							
G	gauge						
A	absolute						
S	sealed gauge						
<b>Option4: Output Signal</b>							
42	4...20mA						
05	0...5Vdc						
15	1...5Vdc						
10	0...10Vdc						
-	-						
<b>Option5: Accuracy</b>							
02	0.25%FSO						
05	0.5%FSO						
<b>Option6: Electrical Connection</b>							
T	Terminal						
-	-						
-	-						
-	-						
<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				
PM21T	0010	G	42	02	T	G4	Examples of Ordering Code: PM21T-0010-G-42-02-T-G4

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