

Model PM300

Food and Beverage Industry



Features

- Measuring ranges from 1bar to 100bar
- Absolute, gauge and sealed gauge
- Accuracy: $\pm 0.25\%$ FSO or $\pm 0.5\%$ FSO
- Calibrated and temperature compensated
- Flush diaphragm construction
- Piezoresistive pressure sensor design
- Variety of Pressure & Electrical connections
- Output 4...20mA, 0...10V, 0...5V and others

Product Overview

PM300 is made from high-quality silicon piezoresistive chip. All process connections of the flush pressure transmitter are made of stainless steel, fully welded and isolate the process medium from the pressure measuring instrument via a positive seal. The PM300 is precision engineered to fit food, pharmaceutical and chemical liquid pressure measurement.

A wide range of process connection and electrical connection options are available to meet almost requirement.

Applications

- Process control systems
- Food and beverage
- Medical
- Papermaking

Standard Pressure Ranges

Nominal pressure	gauge	sealed gauge	absolute
0...1bar	●		●
0...1.6bar	●		●
0...2.5bar	●		●
0...4bar	●		●
0...6bar	●		●
0...10bar	●	●	●
0...16bar	●	●	●
0...25bar	●	●	
0...60bar		●	
0...100bar		●	

Other pressure ranges available. Please consult the factory.

Performance Specifications

Parameter	Value	Units	Notes
General			
Pressure Range	0-1, ..., 100	bar	1bar=14.5psi
Overpressure	1.5xFS	bar	
Environmental			
Operating Temperature Range	-20 to +85(standard), -20 to +150	°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 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 316L stainless steel
Housing	304 stainless steel
Diaphragm	316L stainless steel
Seal Ring	Viton or NBR
Oil Filling	Silicone oil
Protection	IP65(Standard)
Net Weight	Approx.285g

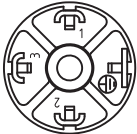
Parameter	Minimum	Typical	Maximum	Units	Notes
Performance					
Accuracy	0.1	0.25	0.5	%FSO	1,2
Temp Coeff - Zero		±1.5	±2	%FSO	3
Temp Coeff - Span		±1.5	±2	%FSO	3
Long-Term Stability		±0.2	±0.3	%FSO/year	1


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.

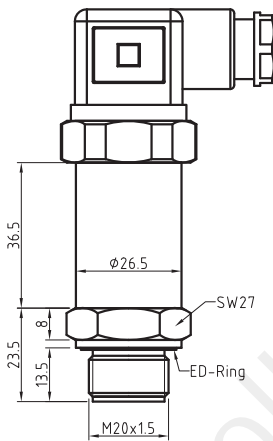
Connection Diagrams

Connector DIN43650	
	
	2-wire(current) 3-wire(voltage)
Supply+	1 1
Signal+	2 3
Gnd	- 2

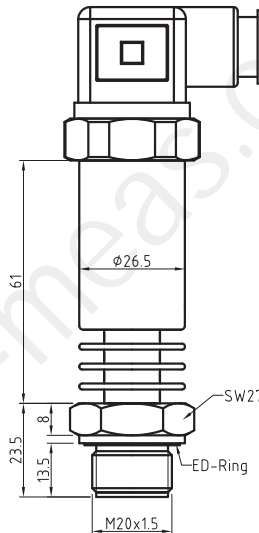
Cable outlet	
	
	2-wire(current) 3-wire(voltage)
Supply+	red red
Signal+	black green
Gnd	- black

Dimensions (in mm)

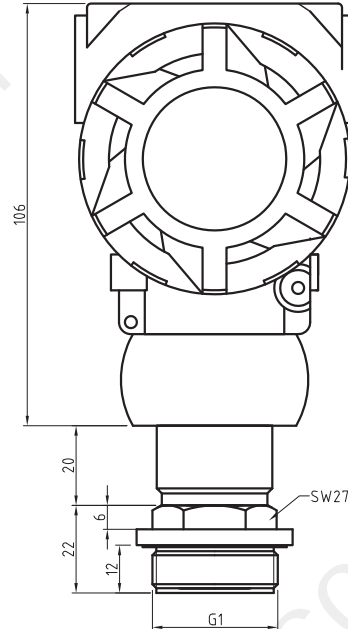
Connector DIN43650
Operating Temperature Range
-40 to +85°C



Connector DIN43650
Operating Temperature Range
-40 to +150°C



2088 housing
Operating Temperature Range
-40 to +85°C



Ordering Information

Option1: Model		PM300 Flush Diaphragm Pressure Transmitter	
Option2: Pressure Ranges		0010	0...1bar
		0250	0...25bar
		0016	0...1.6bar
		0400	0...40bar
		0025	0...2.5bar
		0600	0...60bar
		0040	0...4bar
		1000	0...100bar
		0060	0...6bar
		Cxxx	Customized range
		0100	0...10bar
		0160	0...16bar
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
		45	0.5...4.5(ratiometric)
Option5: Accuracy		02	0.25%FSO
		05	0.5%FSO
Option6: Electrical Connection		DL	Connector DIN43650, Operating Temperature Range:-40 to +85°C
		DH	Connector DIN43650, Operating Temperature Range:-40 to +150°C
		H	2088 housing, Operating Temperature Range:-40 to +85°C
		-	-
Option7: Mechanical Connection		M2	M20x1.5(male)
		N2	1/2NPT(male)
		G2	G1/2(male)
		Nx	Customized
		G10	G1(male)
PM300	0010	G	42
			02
			D
			G2
Examples of Ordering Code: PM300-0010-G-42-02-D-G2			

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