

Model PM20C

For General Industrial Applications



Features

- Measuring ranges from 1.6bar to 250bar
- Gauge type
- Accuracy: $\pm 0.5\%$ FSO
- Calibrated and temperature compensated
- Ceramic pressure sensor design
- Variety of Pressure & Electrical connections
- Output 4...20mA, 0...10V, 0.5...4.5V and others

Product Overview

The PM20C pressure transmitters offers the user the high stability of ceramic piezoresistive sensor in a low cost OEM package. The PM20C is developed for applications of processing and control operations involving aggressive media. 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
- Mechanical and plant engineering
- Pumps and compressors

Standard Pressure Range

Nominal pressure	gauge	sealed gauge	absolute
0...1.6bar	●		
0...2.5bar	●		
0...4bar	●		
0...6bar	●		
0...10bar	●		
0...16bar	●		
0...25bar	●		
0...40bar	●		
0...60bar	●		
0...100bar	●		
0...160bar	●		
0...250bar	●		

other pressure ranges available. Please consult the factory.

Performance Specifications

Parameter	Value	Units	Notes
General			
Pressure Range	0-1.6,...,250	bar	1bar=14.5psi
Overpressure	1.5xFS	bar	
Environmental			
Operating Temperature Range	-20 to +85	°C	-4°F to 185°F
Compensated Temperature Range	0 to +70	°C	32°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 ceramic
Housing	304 stainless steel
Diaphragm	Ceramic
Seal Ring	Viton or NBR
Oil Filling	/
Protection	IP65(Standard), IP66(only for cable outlet)
Net Weight	Approx.175g

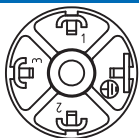
Parameter	Minimum	Typical	Maximum	Units	Notes
Performance					
Accuracy	0.25	0.5	1.0	%FSO	1,2
Temp Coeff - Zero		±1.5	±2.0	%FSO	3
Temp Coeff - Span		±1.5	±2.0	%FSO	3
Long-Term Stability		±0.2	±0.3	%FSO/year	1

Notes

1. All values measured at 25°C(77°F)
 2. Including non-linearity, hysteresis and repeatability.
 3. 0°C to 70°C(32°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



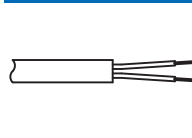
	2-wire(current)	3-wire(voltage)
Supply+	1	1
Signal+	2	3
Gnd	-	2

Connector M12x1 (4-pin)



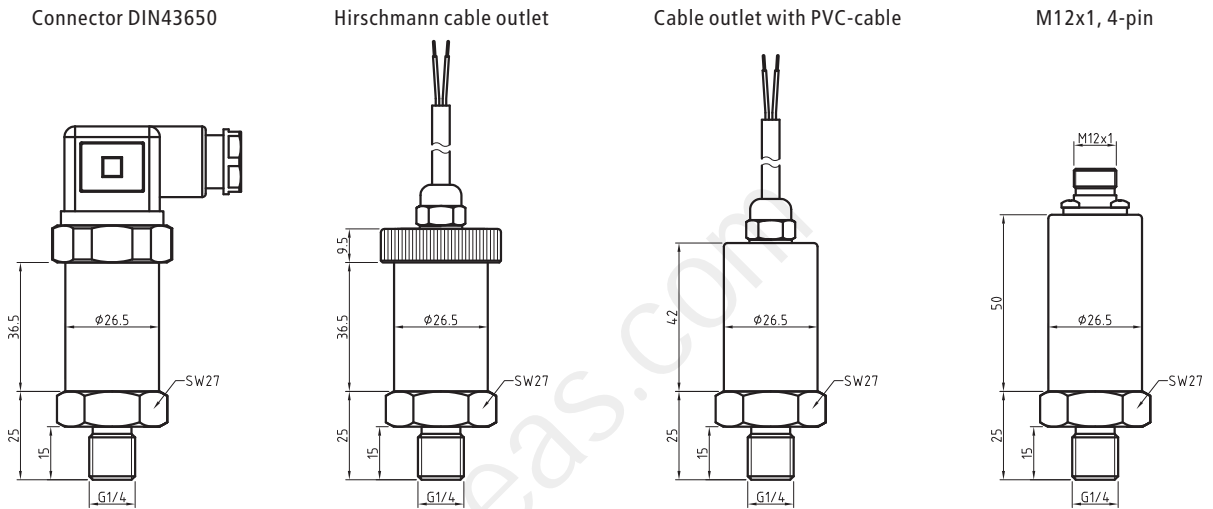
	2-wire(current)	3-wire(voltage)
Supply+	1	1
Signal+	2	3
Gnd	-	2

Cable outlet

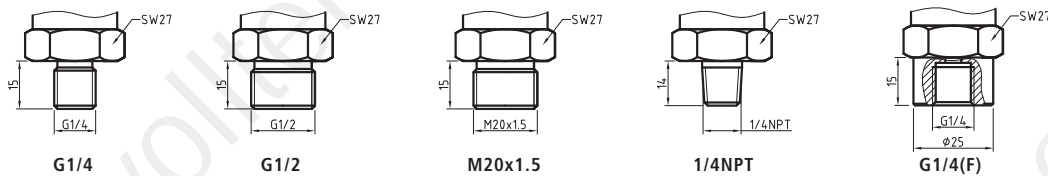


	2-wire(current)	3-wire(voltage)
Supply+	red	red
Signal+	black	green
Gnd	-	black

Dimensions (in mm)



Mechanical Connection (in mm)



Ordering Information

Option1: Model		PM20C Ceramic Pressure Transmitter					
Option2: Pressure Ranges		0016	0...1.6bar 0400 0...40bar				
		0025	0...2.5bar 0600 0...60bar				
		0040	0...4bar 1000 0...100bar				
		0060	0...6bar 1600 0...160bar				
		0100	0...10bar 2500 0...250bar				
		0160	0...16bar Cxxx Customized range				
		0250	0...25bar				
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		05	0.5%FSO				
		10	1.0%FSO				
Option6: Electrical Connection		D	Connector DIN43650				
		H	Hirschmann cable outlet,length=1.5m				
		C	Cable outlet with PVC-cable,length=1.5m				
		M	M12x1, 4-pin				
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				
PM20C	0060	G	42	05	D	G4	Examples of Ordering Code: PM20C-0060-G-42-05-D-G4