

SGM/HC

Food and Beverage Industry



Features

- Measuring ranges from 0.1 bar to 10 bar
- Absolute, gauge
- Accuracy: $\pm 0.25\%$ FSO or $\pm 0.5\%$ FSO
- Calibrated and temperature compensated
- Flush diaphragm construction
- capacitive ceramic sensor element
- Variety of Pressure & Electrical connections
- Output 4...20mA, 0...10V and others

Product Overview

SGM/HC is made from high-quality ceramic capacitive sensor. All process connections of the flush pressure transmitter are made of stainless steel. The SGM/HC 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

Standard Pressure Ranges

Nominal pressure	gauge	sealed gauge	absolute
0...0.1bar	•		
0...0.16bar	•		
0...0.25bar	•		
0...0.4bar	•		
0...0.6bar	•		•
0...1bar	•		•
0...1.6bar	•		•
0...2.5bar	•		•
0...6bar	•		•
0...10bar	•		•

Other pressure ranges available. Please consult the factory.

Applications

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

Flush Diaphragm Pressure Transmitter

Performance Specifications

Parameter	Value	Units	Notes
General			
Pressure Range	0-0.1,...,10	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 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 and 304 stainless steel		
Housing	304 stainless steel		
Diaphragm	ceramic Al ₂ O ₃ 96%		
Seal Ring	Viton or NBR		
Oil Filling	no		
Protection	IP65(Standard)		
Net Weight	Approx.300g		

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

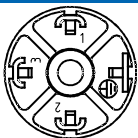
Notes

- All values measured at 25°C(77°F)
- Including non-linearity, hysteresis and repeatability.
- 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

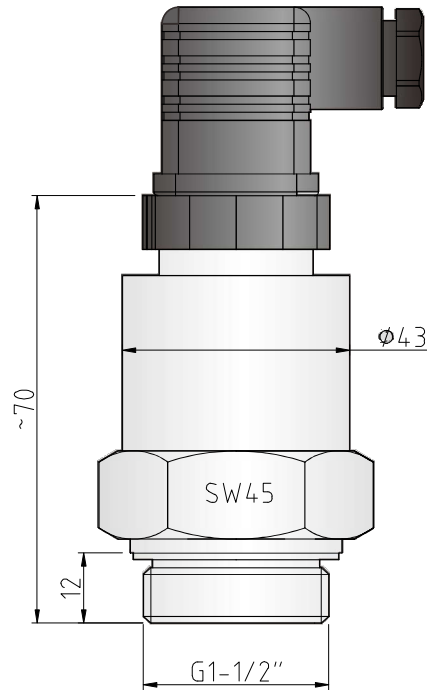


Cable outlet		
	2-wire(current)	3-wire(voltage)
Supply+	red	red
Signal+	black	green
Gnd	-	black



Flush Diaphragm Pressure Transmitter

Dimensions (in mm)



Ordering Information

Option1: Model			
SGM/HC	Flush Diaphragm Pressure Transmitter		
Option2: Pressure Ranges			
0010	0...0.1bar	0250	0...2.5bar
0016	0...0.16bar	0400	0...4bar
0025	0...0.25bar	0600	0...6bar
0040	0...0.4bar	1000	0...10bar
0060	0...0.6bar	Cxxx	Customized range
0100	0...1.0bar		
0160	0...1.6bar		
Option3: Pressure Type			
G	gauge		
A	absolute		
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			
D	Connector DIN43650		
M	M12x1, 4-pin		
C	Cable outlet with PVC-cable,length=1.5m		
Option7: Mechanical Connection			
G15	G1-1/2(male)	Nx	Customized