

SGM/SD

Double flange mounted differential pressure level transmitter
Monocrystalline silicon sensor
Mass production, automated calibration

Features

- Overload pressure up to 25MPa
- Excellent overvoltage performance
- Excellent operability & convenient use
- Five-digit LCD with backlight
- View of units (Pa, kPa, MPa, bar, mbar, %, psi, mmH₂O)
- Quickly adjusted through built-in three buttons

Application

- Be suitable to measure liquid, gas or steam flow as well
- Process control systems
- Chemical industry
- Energy industry
- Machine building



Technical data

Performance

Accuracy*	0.25%FS@25°C(Typ.)	*Linearity (best straight line) + Hysteresis + Repeatability
Ambience Temperature	-20 to 70°C	
Storage temperature	-40 to 90°C	
Temp. coeff - Zero	±(0.08%range+0.055% upper limit of range)	
Temp. coeff - Span	±(0.08%range+0.055% upper limit of range)	
Vibration	20 g RMS(20 to 2000Hz)	
Shock	100 g(10ms)	
Cycles	10x10 ⁵	
Effect of overpressure	±(0.065 %upper limit of range)/5MPa	
Long Term Stability	±0.05 %upper limit of range/year	

Electrical @25°C

Output signal / Supply	2-wire 4...20mA+HART / V _S = 10.5... 45VDC	*Intrinsic safety explosion-proof DC10.5~26V
Load resistance	250~600 DC 24V,include cable resistance	
Insulation Resistance	100 MΩ@100VDC	
Load capacity	0.55mF	
Load inductance	3.3mH	
Spacing above power line	15cm(please avoid parallel wiring)	
Saturation current	Upper limit 20.8mA, lower limit 3.8mA	
Adjustment function	The zero & full span point can be adjusted in situ through three-button from the top of the housing or be adjusted remotely through configuration software.	
EMC Test	IEC61000-6-2/IEC61000-6-3	
Effect of Power supply	±0.005 %/1V	
Damp	The time constant can be adjusted from 0 to 99.9 seconds	
Reverse polarity protection	No damage – no function	

Physical Specifications

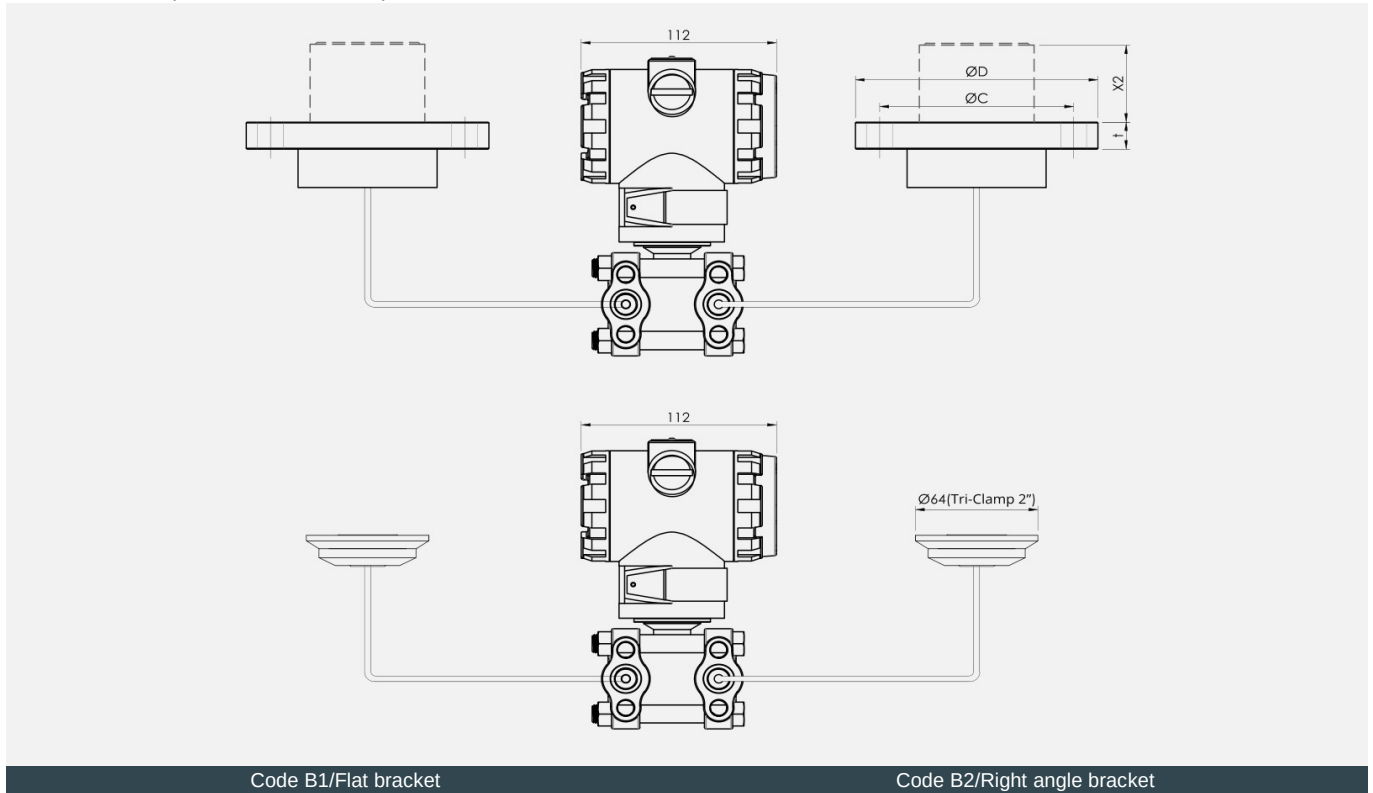
Housing	Low copper aluminum die casting + polyurethane coating
Diaphragm	SUS316LSS,Hastelloy C-276,Tantalum
Sealing	NBR or Viton O-ring
Oil Filling	Silicone oil
Protection	IP67
Weight	~4.2kg(without flange)

The listed specifications and dimensions are subject to change without prior notice

SGM/SD

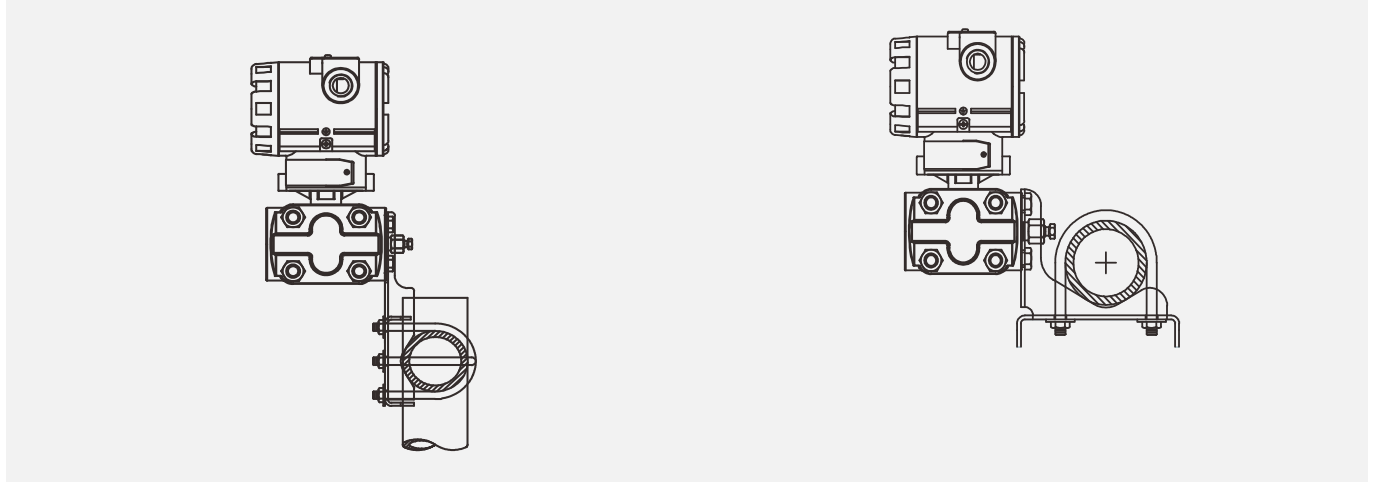
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Dimensions (All dimensions in mm)



Code B1/Flat bracket

Code B2/Right angle bracket



Standard pressure range & URL

Code	Nominal pressure [bar]	Overpressure [bar]	Static pressure [bar]
S1	0...0.1	100	250
S2	0...0.6	100	250
S3	0...1	160	250
S4	0...5	250	250
S5	0...10	250	250

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Ordering code

Model	
SGM/SD	
Code	Pressure range
S1	0.1 bar
S2	0.6 bar
S3	1 bar
S4	5 bar
99	Customized range
Code	Pressure Type
D	Differential
G	Gauge
A	Absolute
Code	Output signal
A	4...20mA+HART Protocol
Code	Accuracy
01	0.25%FS
02	0.5%FS
Code	Membrane materials
22	316LSS
23	Hastelloy-C
24	Tantalum
25	316LSS gold plating
26	316LSS+PTFE coating
Code	Filled liquid
S	Silicone oil Wetted temperature: -10~+250 °C
L	Silicone oil Wetted temperature: -30~+180 °C
H	Silicone oil Wetted temperature: 10~+300 °C
Code	Flange size
0	2 inch-150Lb
1	3 inch-150Lb
2	4 inch-150Lb
3	2 inch-300Lb
4	3 inch-300Lb
5	4 inch-300Lb
6	DN50 PN10-PN40
7	DN80 PN10
8	DN100 PN10
9	2" Tri-Clamp For pressure=0.3~10bar
X	Customized
Code	Flange materials
A	SUS304
B	SUS316
Code	Extension length (X2)
L1	0 mm
L2	50 mm
L3	100 mm
L4	150 mm
Code	Capillary length
<input type="checkbox"/> <input type="checkbox"/>	Specified capillary length from 0 ~ 15m, represented by <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> (ex:2m=02)
Code	Process connection
D42	1/2 -18NPT Female
D43	1/2 -14NPT Female
D44	Customized
Code	Electrical connection
E1	M20x1.5
E2	1/2 "NPT
Code	Meters
M1	LCD display
Code	Sealing materials
01	Fluororubber
02	NBR
Code	Mounting bracket
B1	Flat bracket
B2	Right angle bracket
Code	Exlosion-proof
N	No
IA	Intrinsic safety and dust explosion-proof approval
D	Flame-proof and dust explosion-proof approval
Code	Label
S	Standard
N	Neutral packing
C	Custom label