

Model SMA(EX)

Explosion Proofed Compact Size(30X30mm) Digital Pressure Gauge

Description

The SMA(EX) model is explosion-proof (Ex nAnC IIC T6) structure, and the diaphragm is made of STS316L which can be used for fluid. It has a microprocessor built-in and LED display and analog output (1~5, 0~5, 0~10VDC) and 2-CH. NPN or PNP Open Collector output. It features a compact product with integrated pressure sensor, indicator and switch.

Features

- ▶ CE Certified
- ▶ Explosion proof to Ex nAnC IIC T6(Kcs, NEPSI)
- ▶ Explosion proof certification(NEC DIV2) in progress
- ▶ Compact design(30mm×30mm)
- ▶ ±1999 Digit LED display
- ▶ 1~5, 0~5, 0~10VDC analog output
- ▶ 2-channel NPN or PNP open collector output
- ▶ Piezoresistive silicon cell
- ▶ Stainless steel media-wetted materials

Applications

- ▶ Pressure monitoring in the hazardous areas
- ▶ Process control
- ▶ Hydraulics & Pneumatic
- ▶ Compressor Control
- ▶ Chillers
- ▶ Refrigeration Equipment



Specifications

Range

0~0.1, 1, 3.5, 7, 20, 35, 70MPa(Gauge/Absolute)
-0.1~0.1, 1, 3.5, 7, 20, 35, 70MPa(Gauge)
0~-100kPa(Gauge)

Performance

Display Accuracy ±0.5%FS (25°C)
Thermal Effect ±3%FS (0~50°C)
Operating Temperature Range -20~50°C

Electrical

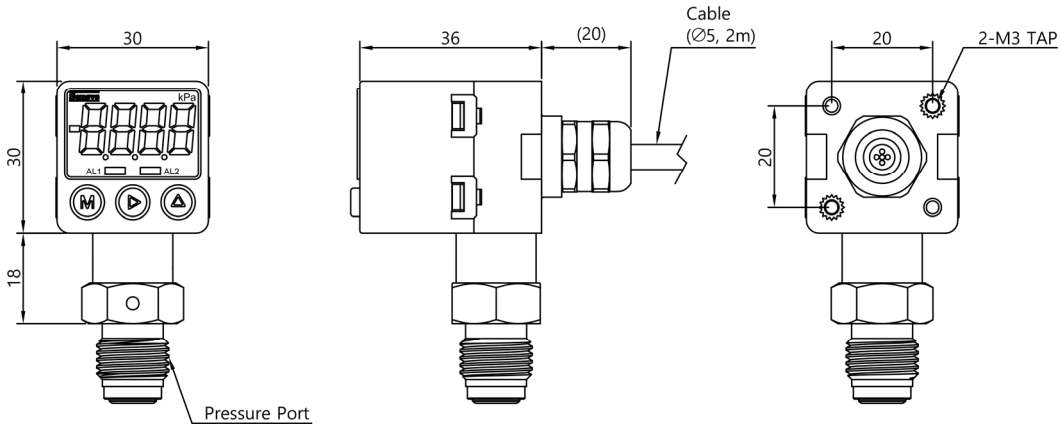
Display LED(Red Color) ±1999 Digit
Excitation 12~24VDC±10%(Ripple P-P Max. 10%)
Output
Switching Signal 2-Channel NPN or PNP open collector output
Analog Signal 1~5, 0~5, 0~10VDC(±2%FS)
Response Time 2.5, 20, 100, 500, 1000, 2000ms

Physical

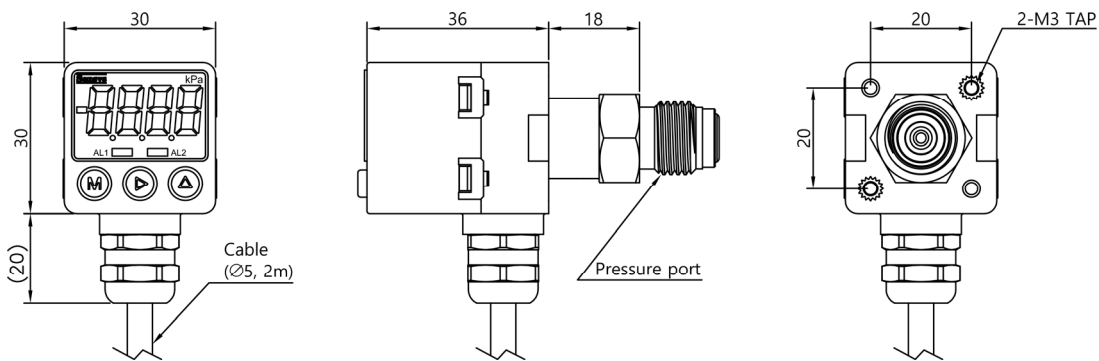
Proof Pressure 150%FS Max.
Pressure Port R(PT)1/4", G(PF)1/4", NPT1/4", 1/4" LOK Fitting, 9/16-18UNF VCR
Media Corrosive Gases/Liquids compatible with STS316L
Explosion Proof Ex nAnC IIC T6, IP54
Protection IP65

Dimension

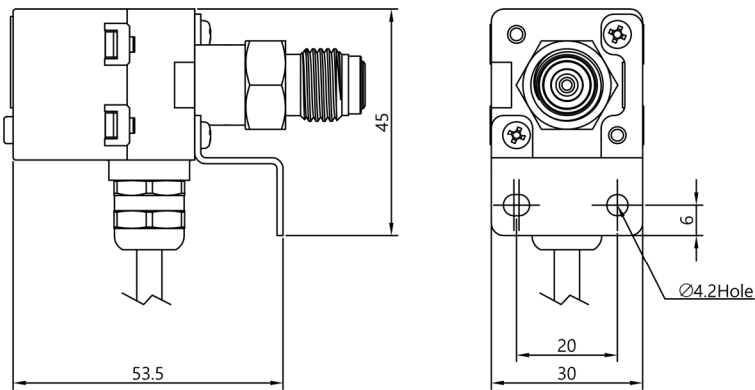
► SMAX (Explosion proof Liquid / Vertical installation Type)



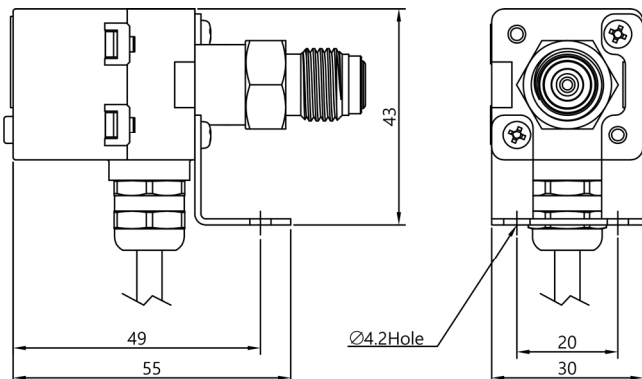
► SMAY (Explosion proof Liquid / Horizontal installation Type)



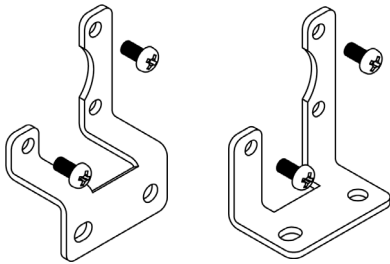
► Bracket A Mounting



► Bracket B Mounting



► Option



Bracket A

Bracket B

(O/C : SMA-O-A)

(O/C : SMA-O-B)

*. O/C : Ordering Code

Connection

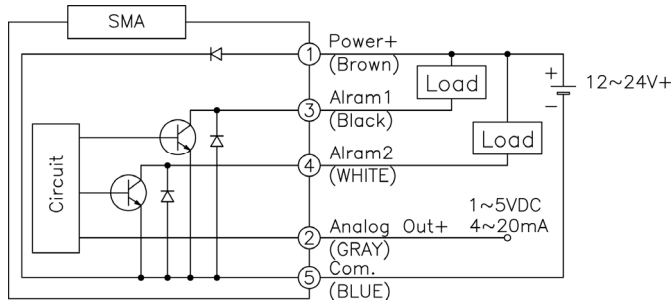
Wire Color	Connections
Brown	Power+(12~24VDC)
Gray	Analog output+
Black	Alram 1
White	Alram 2
Blue	Com.

Function

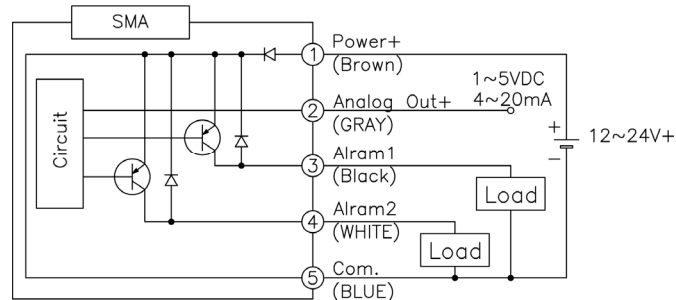
- Zero Adjustment
- 2channel Alarm(NPN or PNP), Alarm mode(High, Low, A, B)
- Anti-chattering(Alarm, Analog Output)
- Unit Conversion
- Analog Output Scale Adjustment
- Key Lock

Internal Circuit Diagram

► NPN Type

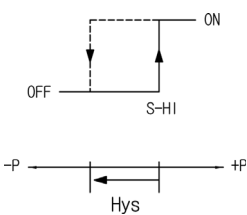


► PNP Type

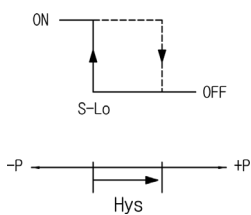


Alarm Mode

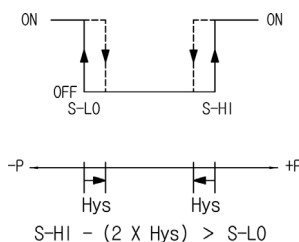
► Hi Mode



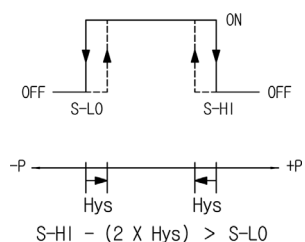
► Low Mode



► A Mode



► B Mode



Ordering Information

SMA X E N 0001 M V G-A04-A

Model Name

Type

X : for Explosion proof Liquid /
Vertical installation
Y : for Explosion proof Liquid /
Horizontal installation

Analog Output

C : 0~5V J : 0~10V
E : 1~5V

Switch Output

N : NPN Open Collector
P : PNP Open Collector

Pressure Range

XXXX : Pressure
CXXX : Compound Pressure
-XXX : Vacuum Pressure

Option

0 : None
A : Bracket A
B : Bracket B

Port Option

A04 : 1/4" LOK Fitting
A05 : 9/16-18UNF VCR

Type of Pressure Measurement

G : Gauge(Type A, V, H)
J : Absolute(Type V, H)

Pressure port

C : R1/4" L : NPT1/4"
D : G1/4" V : Port Option

Pressure Unit

R : kPa M : MPa



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. Specifications are subject to change without notice.