

Model SMA

Compact Size(30X30mm) Digital Pressure Gauge / Switch

Description

SMA model contains Microprocessor in default. Moreover, it is a Pressure Gauge / Switch with characteristics of LED Display, 0~5, 1~5, 0~10VDC or 4~20mA Analog Output, 2-Channel NPN or PNP Open Collector Output. As Pressure Sensor, Indicator and Switch are integrated in order to realize providing it at low price.

Features

- ▶ CE Certified
- ▶ Compact design(30mm×30mm)
- ▶ 4 digit LED display
- ▶ 1~5, 0~5, 0~10VDC or 4~20mA analog output
- ▶ 2-channel NPN or PNP open collector output
- ▶ Piezoresistive silicon cell
- ▶ SMAA Model
Measuring range : -100~0~100 ... 1000kPa
Use with non-corrosive, non-ionic media
- ▶ SMAV, SMAH Model
Measuring range : -100~0~100kPa ... 70MPa
Stainless steel(316L) media-wetted materials

Applications

- ▶ Process control
- ▶ Hydraulics & Pneumatic
- ▶ Compressor Control
- ▶ Chillers
- ▶ Refrigeration Equipment

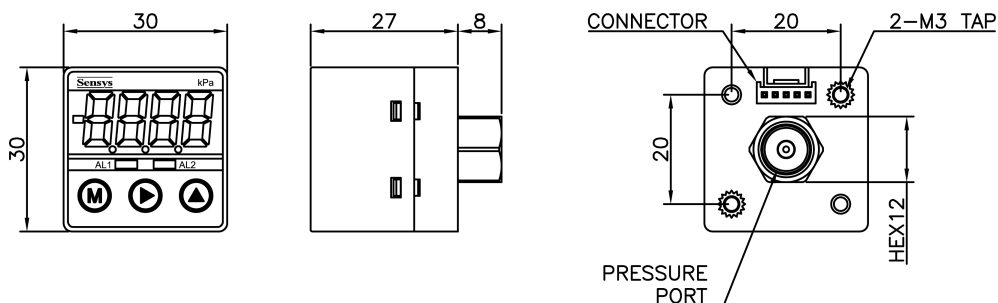


Specifications

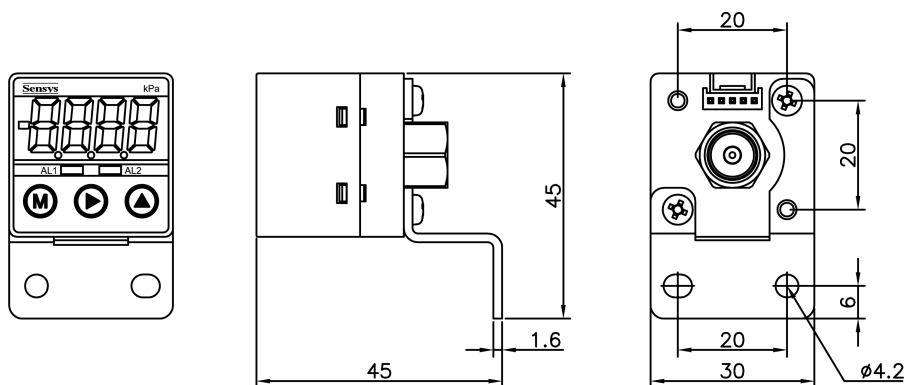
	SMA □	SMA ▣ SMA ▤
Range	0~100kPa, 1MPa(Gauge) -100kPa~100kPa, 1MPa(Gauge) 0~-100kPa(Gauge)	0~0.1, 1, 3.5, 7, 20, 35, 70MPa(Gauge/Absolute) -0.1~0.1, 1, 3.5MPa(Gauge) 0~-100kPa(Gauge)
Performance	Display Accuracy ±0.5%FS (25℃) Thermal Effect ±3%FS (0~50℃) Operating Temperature Range -10~50℃	
Electrical	Display LED(Red Color) 4Digit Excitation 12~24VDC±10%(Ripple P-P Max. 10%) Output 2-Channel NPN or PNP open collector output Switching Signal 1~5, 0~5, 0~10VDC(±2%FS) or 4~20mA(±2%FS) Analog Signal 2.5, 20, 100, 500, 1000, 2000ms	
Physical	Proof Pressure 150%FS Max. Pressure Port Rc(PT)1/8" R(PT)1/4", LOK, VCR Media Non-corrosive Gases Corrosive Gases/Liquids compatible with STS316L	

Dimension

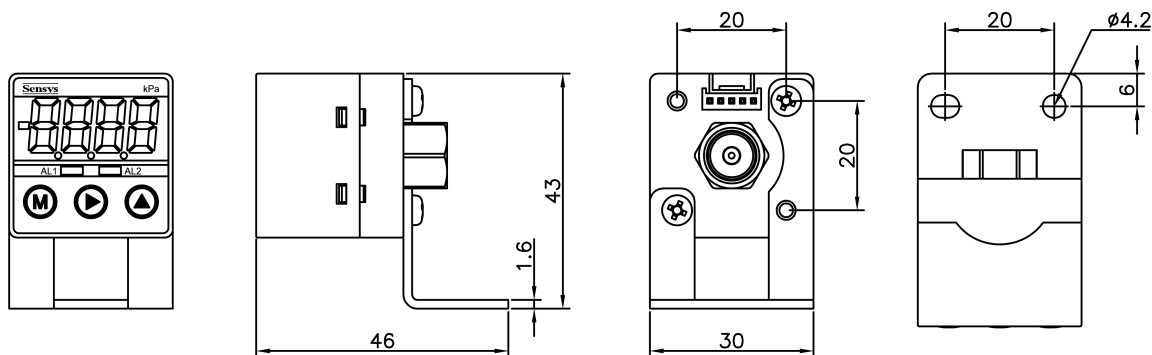
► SMAA (Only Air Type)



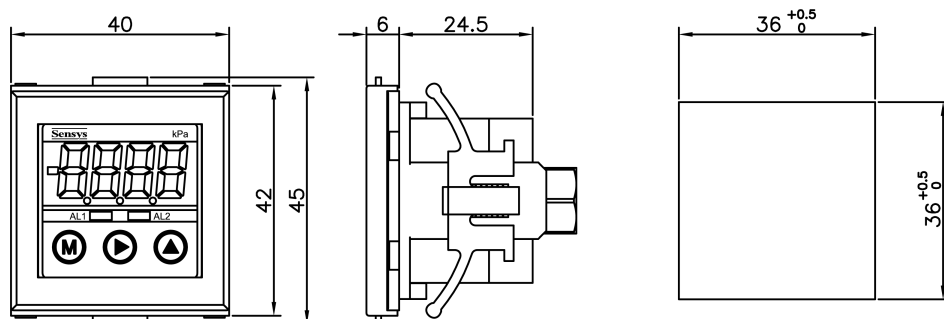
– Bracket A



– Bracket B

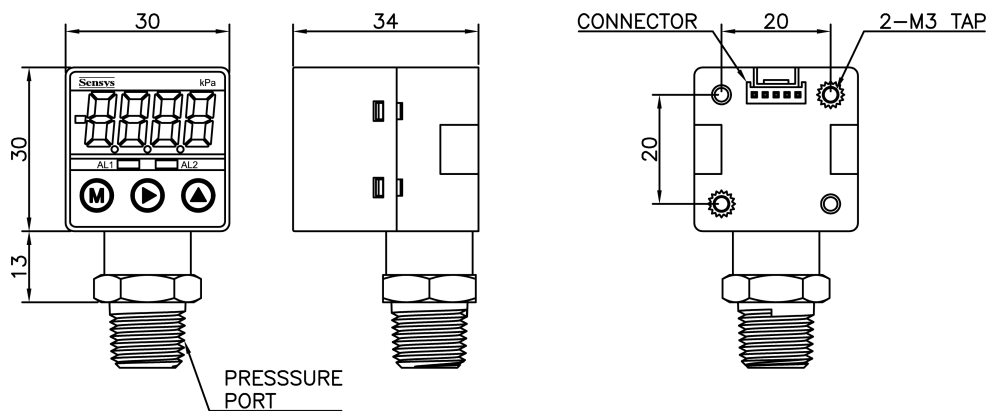


– Panel Mounting Bracket

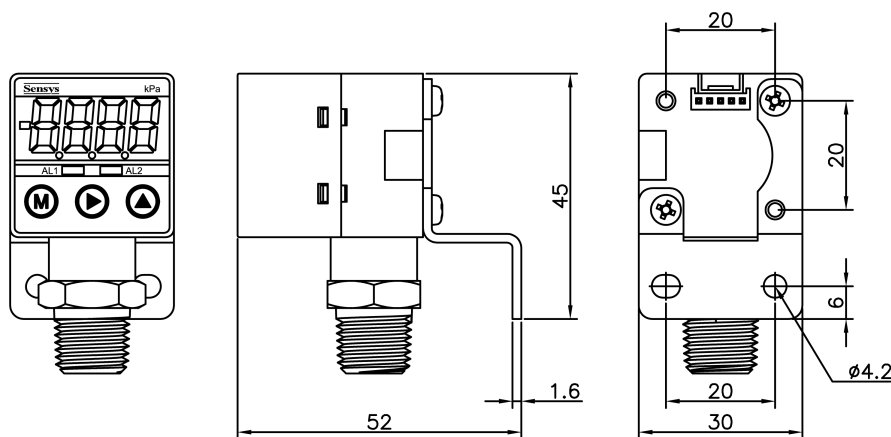


Panel Cut Size
(Panel Thickness 1~8mm)

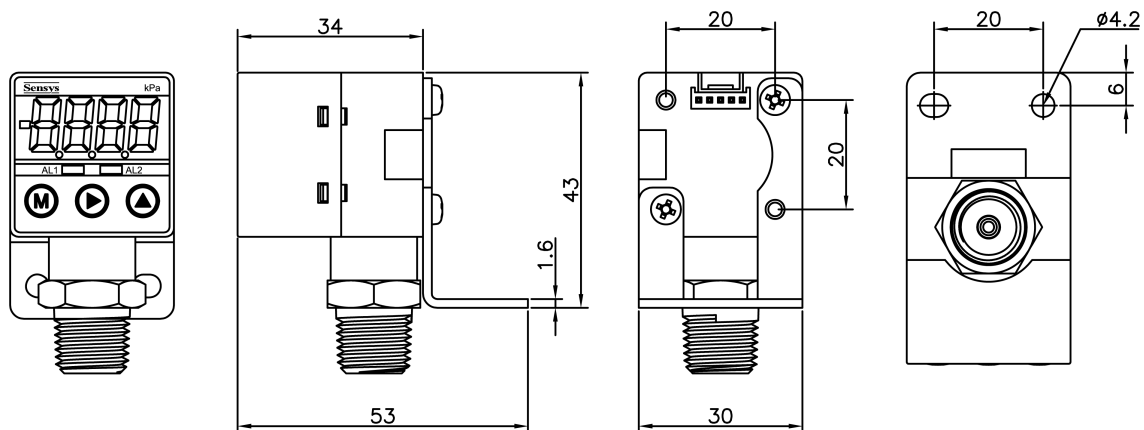
► SMAV (Liquid / Vertical installation Type)



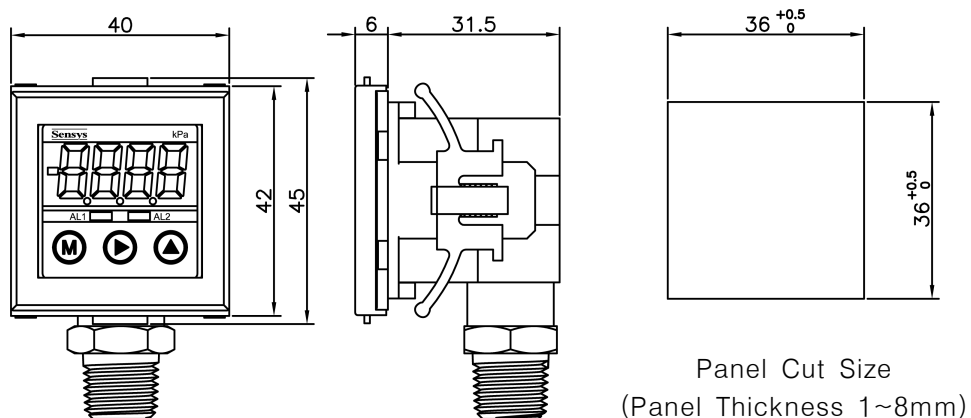
– Bracket A



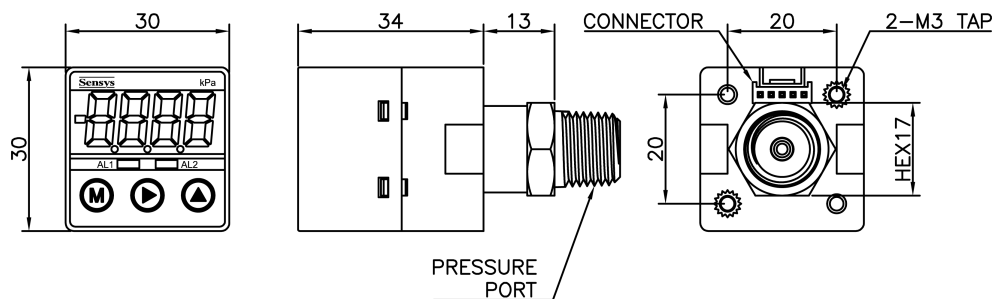
– Bracket B



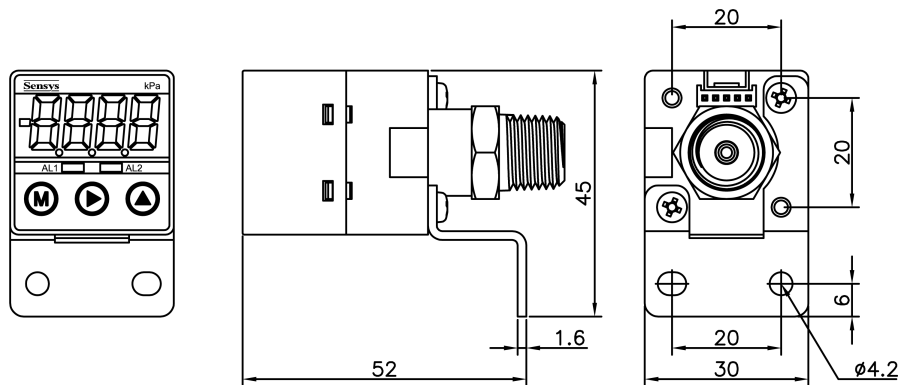
– Panel Mounting Bracket



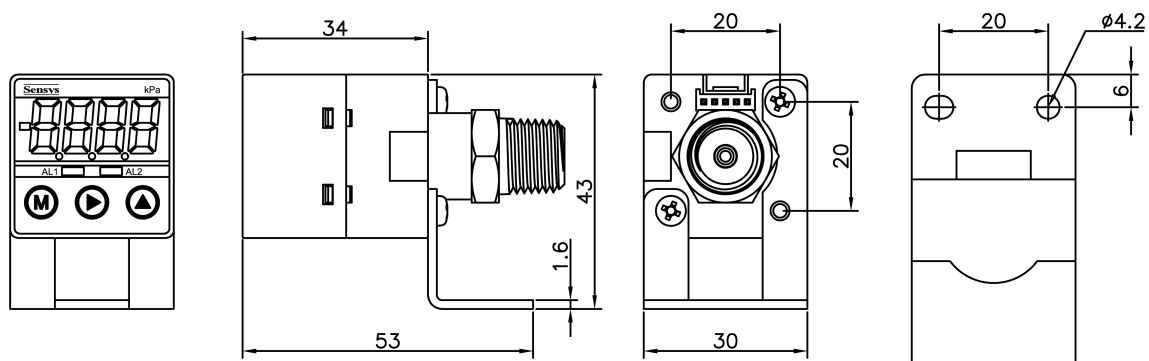
► SMAH (Liquid / Horizontal installation Type)



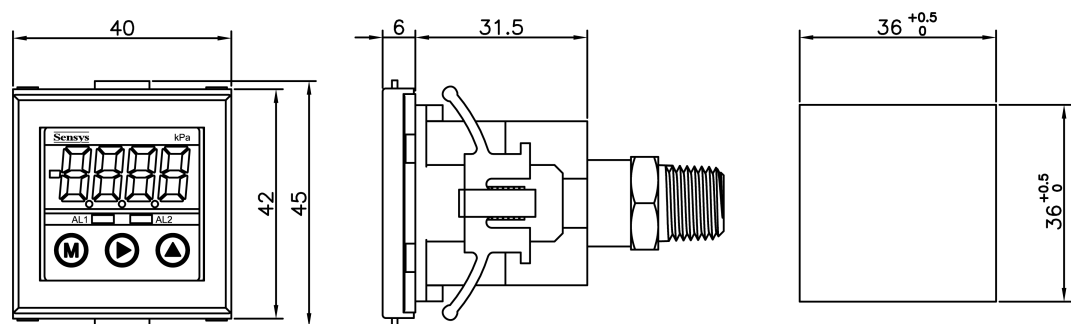
– Bracket A



– Bracket B

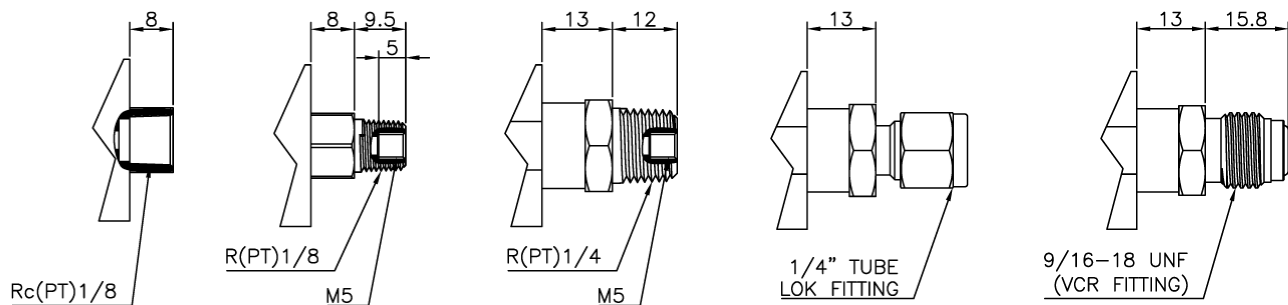


– Panel Mounting Bracket



Panel Cut Size
(Panel Thickness 1~8mm)

► Pressure Port



O/C: SMAA□□□□8□

SMAA□□□□G□

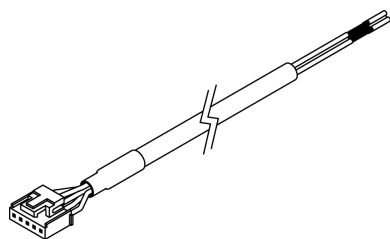
SMA_H^V□□□□C□

SMA_H^V□□□□V□-A04

SMA_H^V□□□□V□-A05

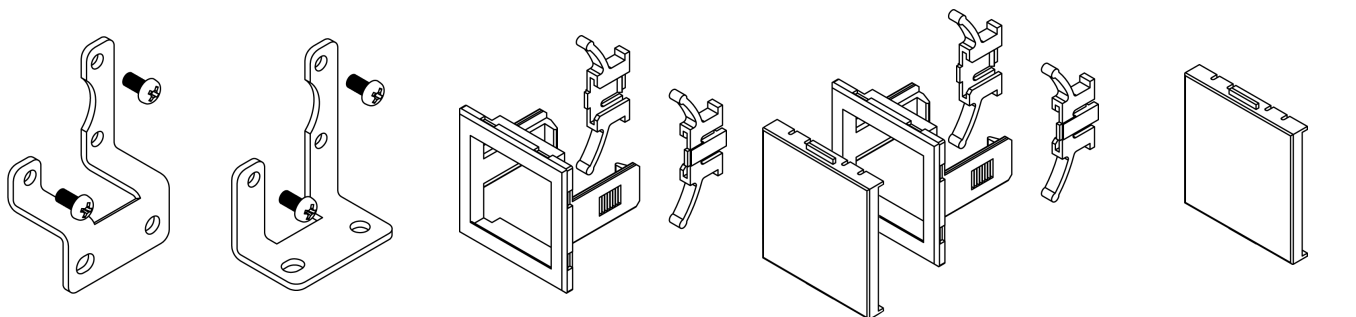
*, O/C : Ordering Code

► Accessory



Connector Ass'y (Length : 2m)

► Option



Bracket A

(O/C : SMA-O-A)

Bracket B

(O/C : SMA-O-B)

Panel Mounting Bracket Set

(O/C : SMA-O-C)

Panel Mounting Bracket Set
+ Front Protection Cover

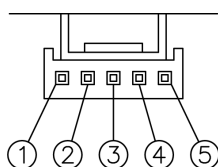
(O/C : SMA-O-D)

Front Protection Cover

(O/C : SMA-O-E)

*, O/C : Ordering Code

Connection



Connector

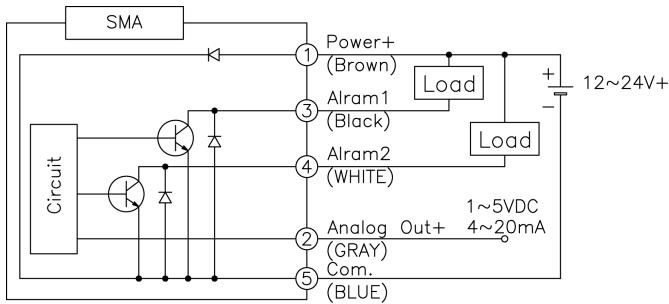
Pin No.	Wire Color	Connections
1	Brown	Power+ (12~24VDC)
2	Gray	Analog output+
3	Black	Alarm 1
4	White	Alarm 2
5	Blue	Com.

Function

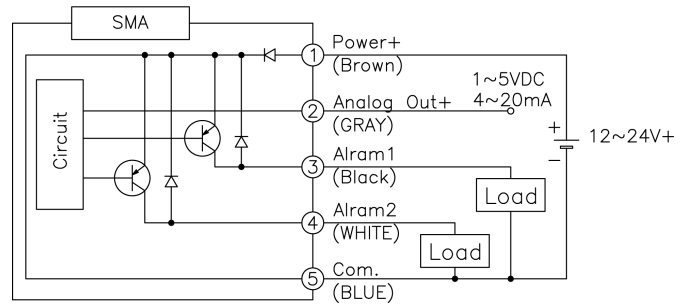
- Zero Adjustment
- 2channel Alarm(NPN or PNP), Alarm mode(High, Low, A, B)
- Anti-chattering(Alarm, Analog Output)
- Unit Conversion
- Analog Output Scale Adjustment
- Key Lock

Internal Circuit Diagram

► NPN Type

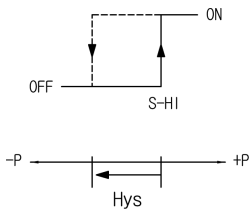


► PNP Type

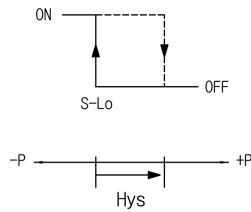


Alarm Mode

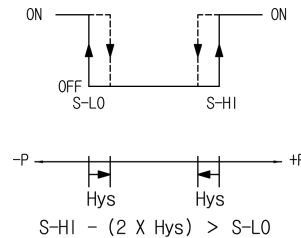
► Hi Mode



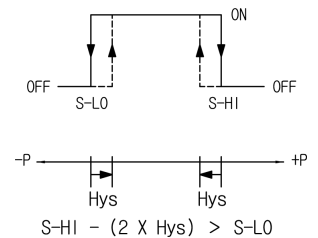
► Low Mode



► A Mode



► B Mode



Ordering Information

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

Model Name

Type

A : for Air
V : for Liquid / Vertical installation
H : for Liquid / Horizontal installation

Analog Output

C : 0~5V J : 0~10V
E : 1~5V G : 4~20mA

Switch Output

N : NPN Open Collector
P : PNP Open Collector

Pressure Range

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

Option

A : Bracket A
B : Bracket B
C : Panel Mounting Bracket Set
D : Panel Mounting Bracket Set
+ Front Protection Cover

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

Type A	Type V, H
8 : Rc1/8"	C : R1/4"
G : R1/8"	V : Port Option

Pressure Unit

R : kPa M : MPa