

Model SMA(Differential pressure for Air)/디지털 차압계

Compact Size(30X30mm) Digital Differential Pressure Gauge / Switch

Description

SMA(DA) model contains Microprocessor in default. Moreover, it is a Differential 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)
- ▶ ±1999 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
- ▶ Measuring range : ±500Pa ... ±100kPa
Use with non-corrosive, non-ionic media

Applications

- ▶ Airflow Measurement
- ▶ Room Static Pressure
- ▶ VAV Box
- ▶ Lab/Fume Hood Control
- ▶ Clean Room Control



Specifications

Range

±500Pa, ±1, ±2, ±4, ±10, ±35, ±100kPa

Performance

Accuracy

±1%FS(Total)

Operating Temperature Range

-5~65°C(No freezing or condensation)

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, 4~20mA

Response Time

5, 20, 100, 500, 1000, 2000ms

Physical

Proof Pressure

300%FS Max.

Burst Pressure

500%FS Min.

Pressure Port

M5(F)

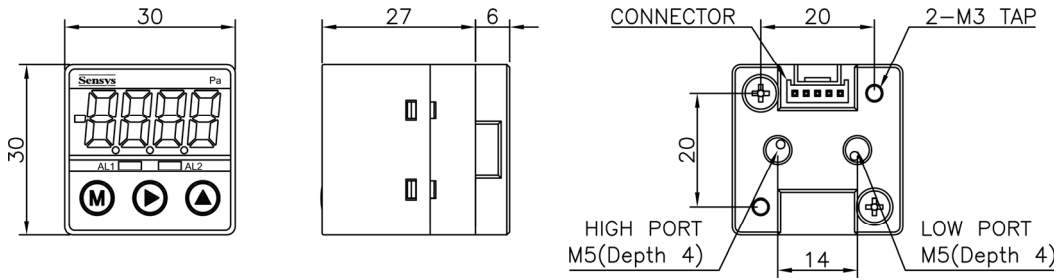
Ø4.8 (Ø4.4 in the end) resin piping (Applicable to I.D. Ø4 air tubing) : Only ≤ ±10kPa

Media

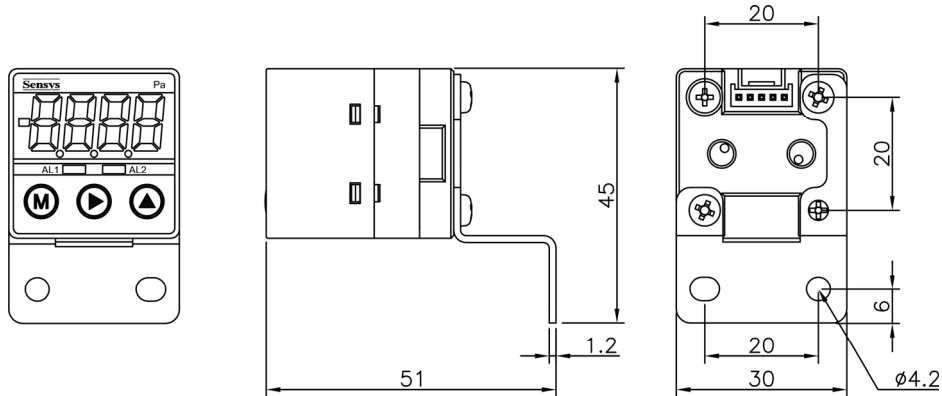
Non-corrosive Gases

Dimension

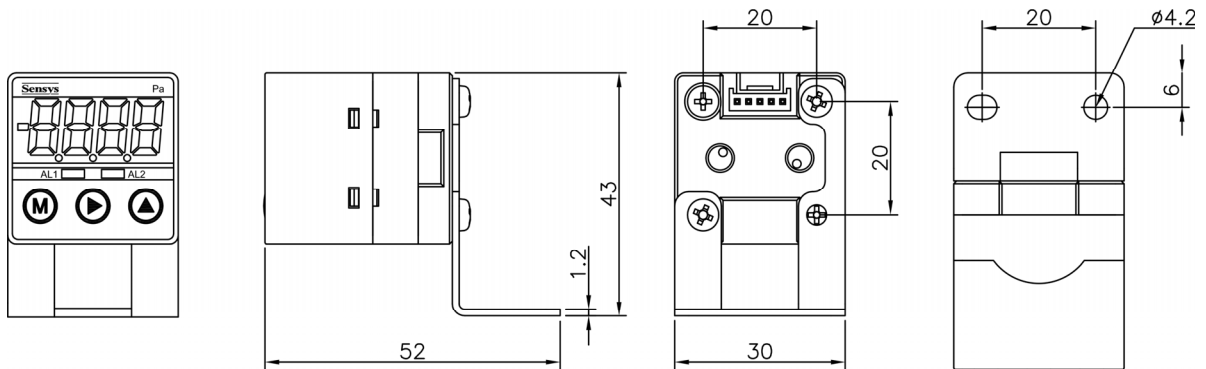
► Pressure Port (M5 Female Type)



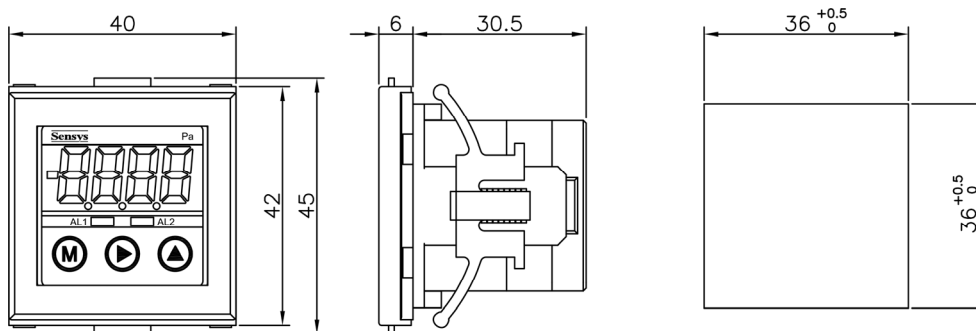
- Bracket A



- Bracket B

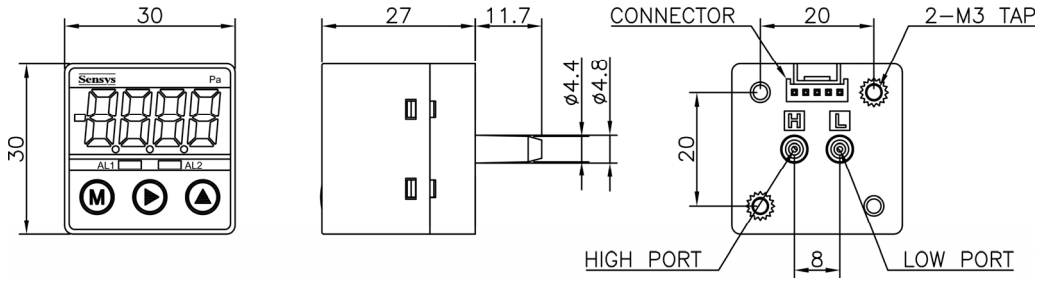


- Panel Mounting Bracket

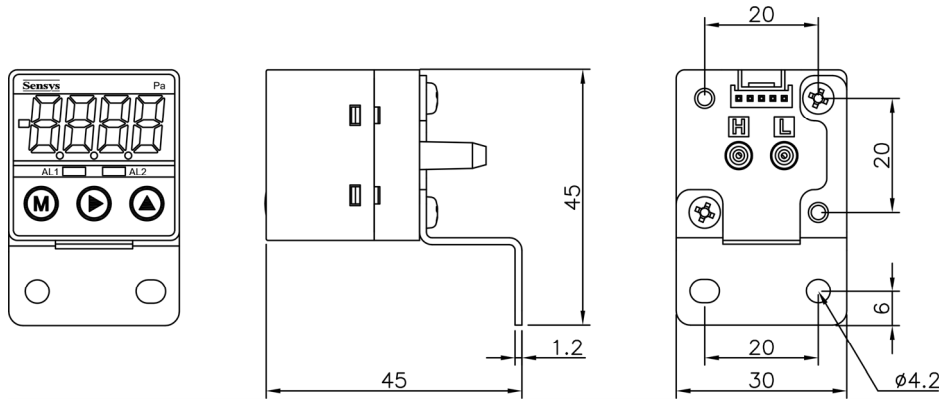


Panel Cut Size
(Panel Thickness 1~8mm)

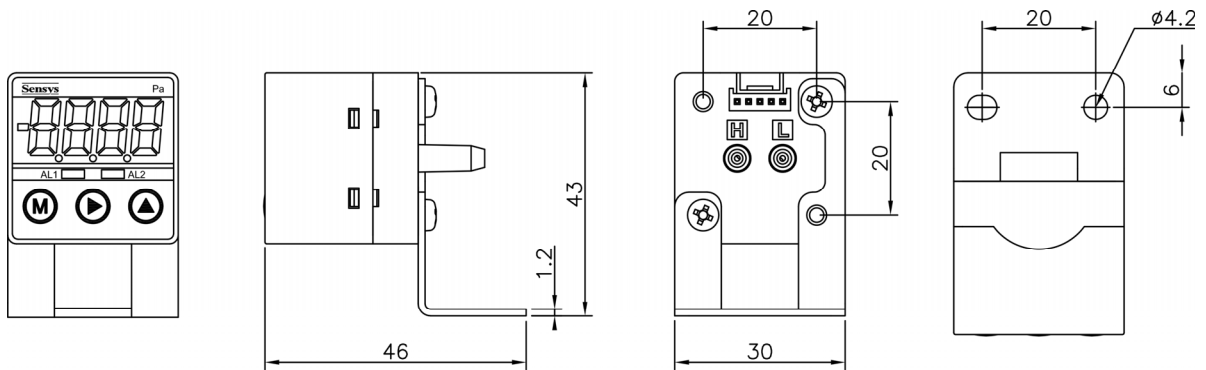
► Pressure Port (Ø4.8 Resin Piping Type - Applicable to I.D. ø4 air tubing)



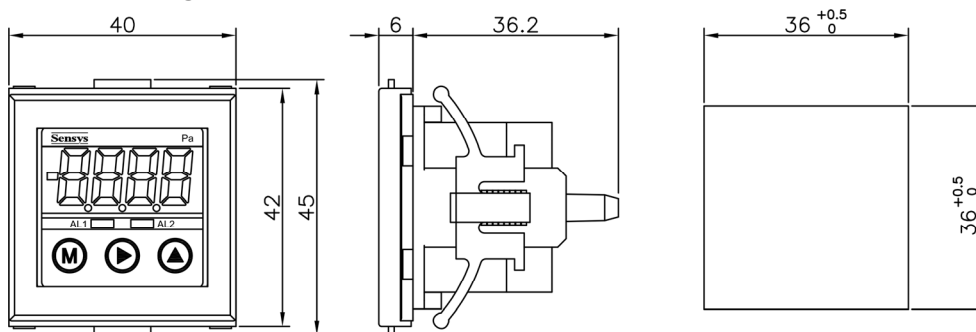
- Bracket A



- Bracket B

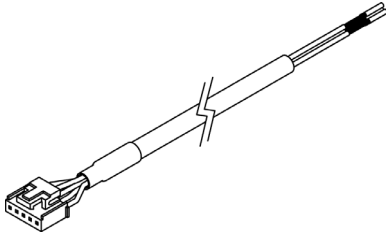


- Panel Mounting Bracket



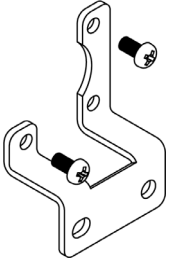
Panel Cut Size
(Panel Thickness 1~8mm)

▶ Accessory



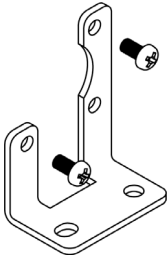
Connector Ass'y (Length : 2m)

▶ Option



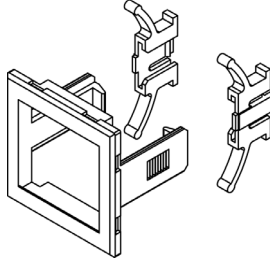
Bracket A

(O/C : SMA-O-A)



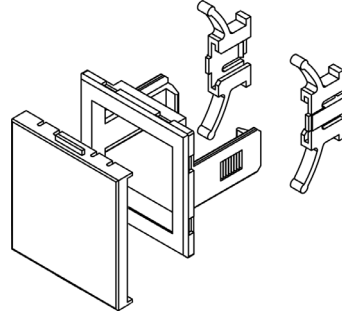
Bracket B

(O/C : SMA-O-B)



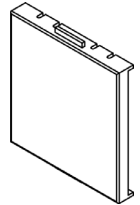
Panel Mounting Bracket Set

(O/C : SMA-O-C)



Panel Mounting Bracket Set
+ Front Protection Cover

(O/C : SMA-O-D)

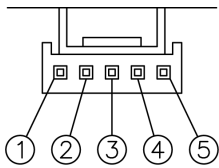


Front Protection Cover

(O/C : SMA-O-E)

*. O/C : Ordering Code

Connection



Connector

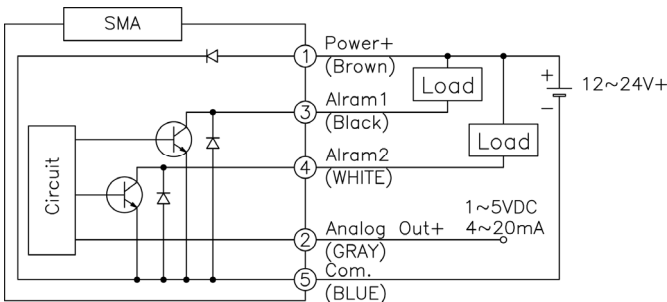
Pin No.	Wire Color	Connections
1	Brown	Power+(12~24VDC)
2	Gray	Analog output+
3	Black	Alram 1
4	White	Alram 2
5	Blue	Com.

Function

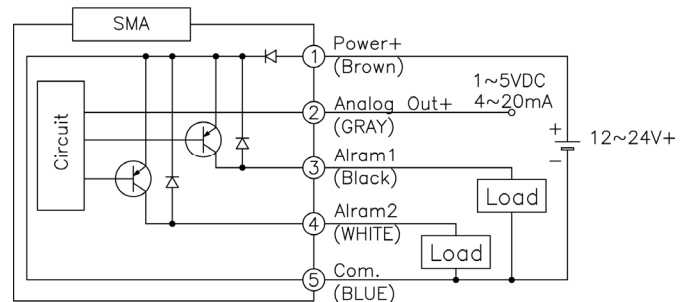
- ▶ Zero Adjustment
- ▶ 2channel Alarm(NPN or PNP), Alarm mode(High, Low, A, B)
- ▶ Anti-chattering(Alarm, Analog Output)
- ▶ Unit Conversion
- ▶ Analog Output Scale Adjustment
- ▶ Key Lock

Internal Circuit Diagram

▶ NPN Type

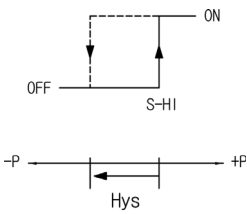


▶ PNP Type

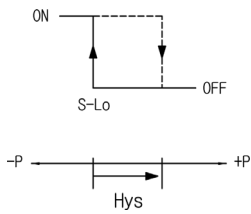


Alarm Mode

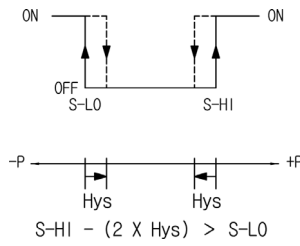
▶ Hi Mode



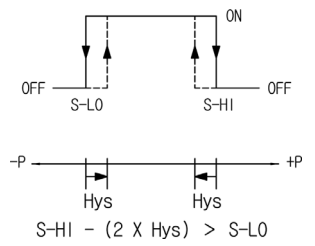
▶ Low Mode



▶ A Mode



▶ B Mode



Ordering Information

SMA D E N ±001 R 9 D - XXX - A

Model Name

Type

D : for Air / Differential Pressure

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

Option

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

Port Option

Type of Pressure Measurement

- D : Differential

Pressure port

- 9 : M5(F) V : Port Option
- 0 : Ø4.8 Resin Piping

Pressure Unit

- A : Pa R : kPa