

## 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)
- ▶ ±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
- ▶ 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

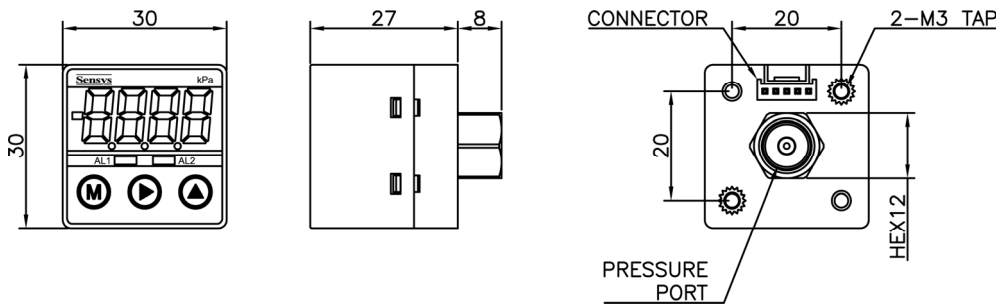


### Specifications

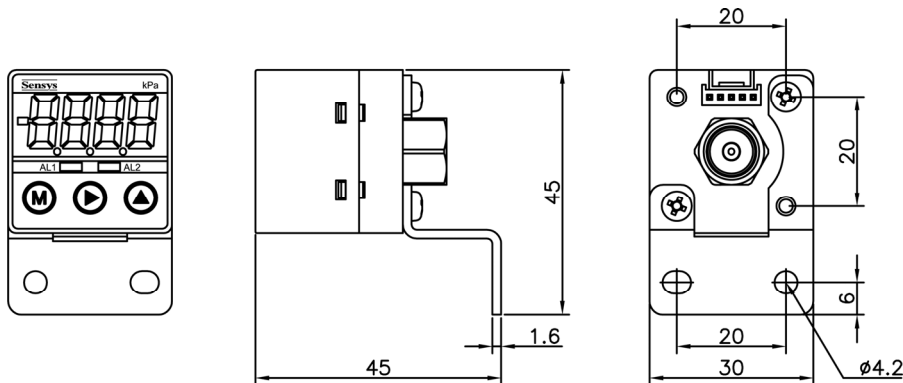
	SMA <input type="checkbox"/>	SMA <input checked="" type="checkbox"/> SMA <input checked="" type="checkbox"/>
<b>Range</b>	0~100kPa, 1MPa(Gauge) -100kPa~100kPa, 1MPa(Gauge) 0~-100kPa(Gauge)	0~0.1, 1, 3.5, 7, 20, 35, 70MPa(Gauge/Absolute) -0.1~0.1, 1, 3.5, 7, 20, 35, 70MPa(Gauge) 0~-100kPa(Gauge)
<b>Performance</b>	Display Accuracy ±0.5%FS (25°C) Thermal Effect ±3%FS (0~50°C) Operating Temperature Range -10~50°C	
<b>Electrical</b>	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) or 4~20mA(±2%FS)	
Response Time	2.5, 20, 100, 500, 1000, 2000ms	
<b>Physical</b>	Proof Pressure 150%FS Max. Pressure Port Rc(PT)1/8", M5(F) R(PT)1/4", LOK, VCR Media Non-corrosive Gases Corrosive Gases/Liquids compatible with STS316L	

## Dimension

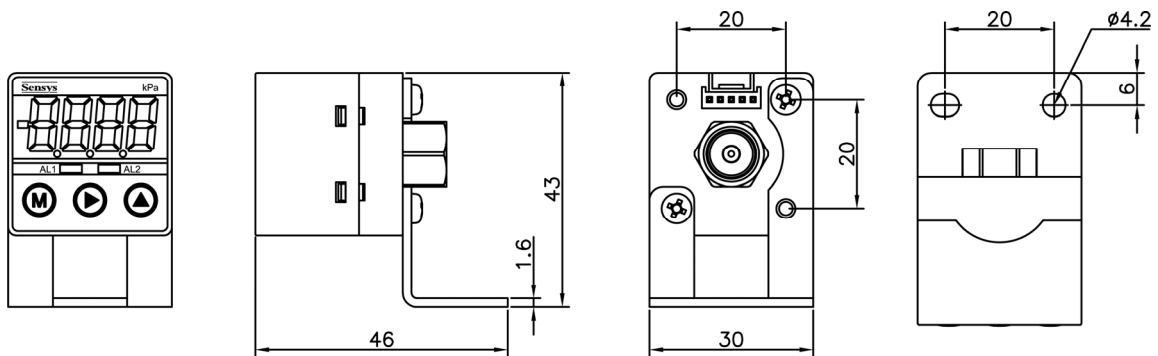
### ► SMAA (Only Air Type)



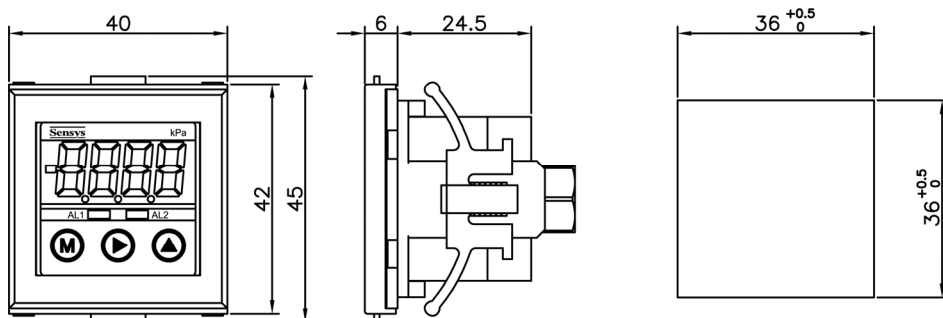
### - Bracket A



### - Bracket B

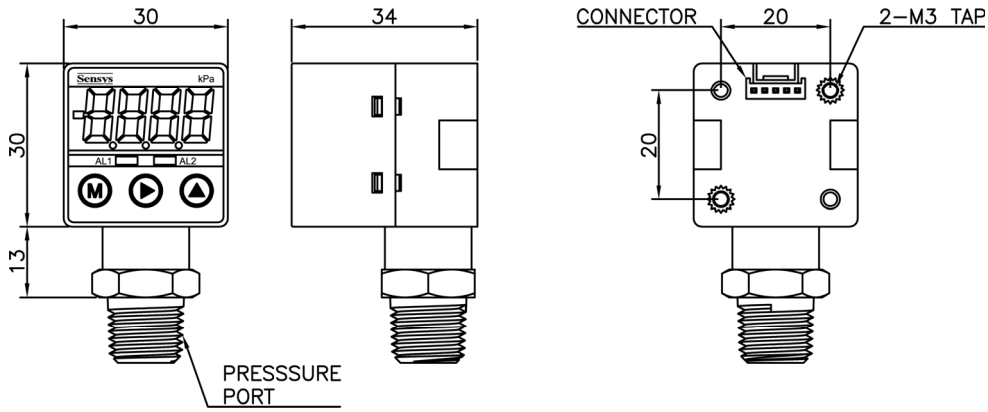


### - Panel Mounting Bracket

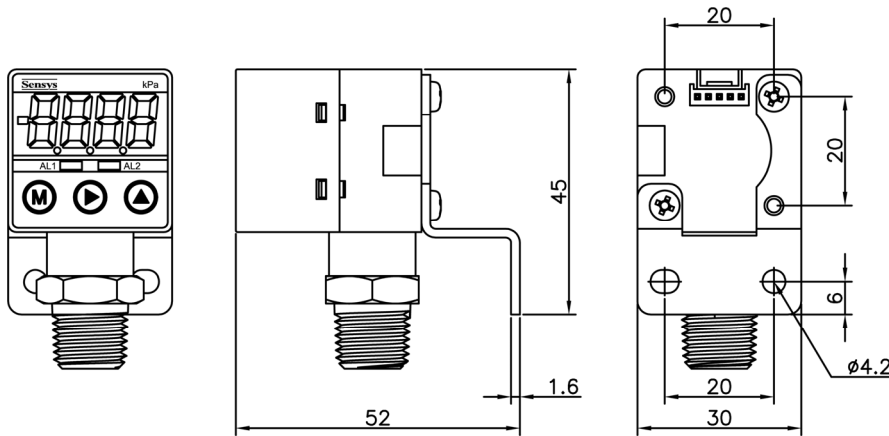


Panel Cut Size  
(Panel Thickness 1~8mm)

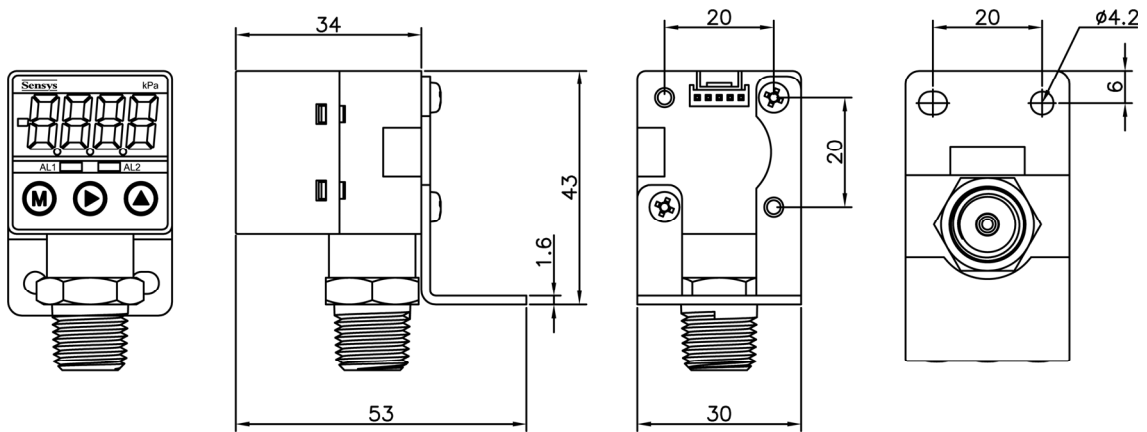
► SMAV (Liquid / Vertical installation Type)



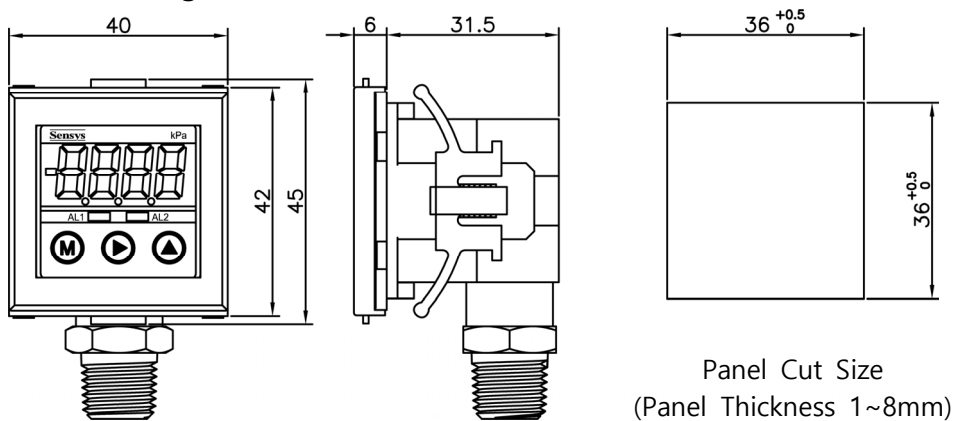
- Bracket A



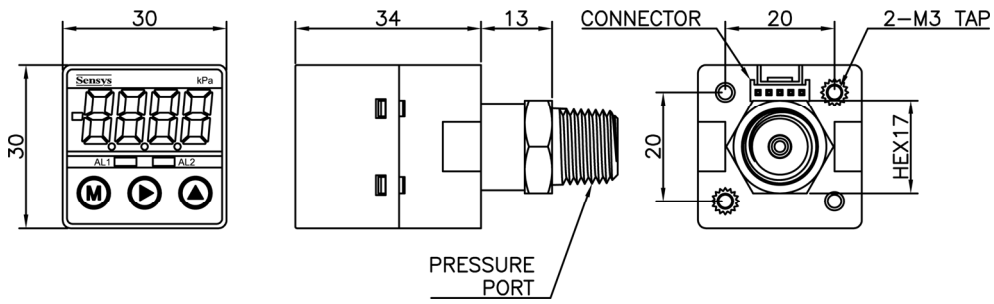
- Bracket B



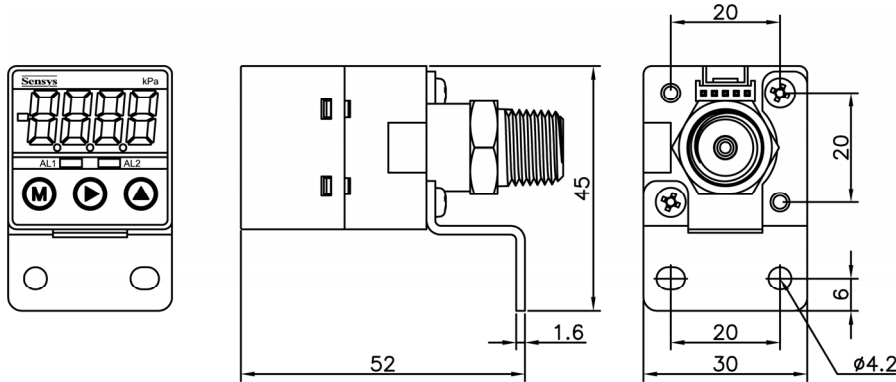
- Panel Mounting Bracket



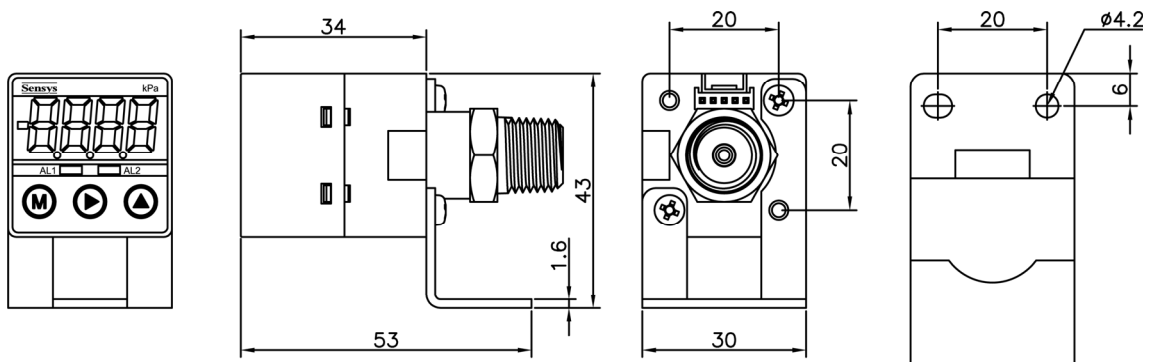
► SMAH (Liquid / Horizontal installation Type)



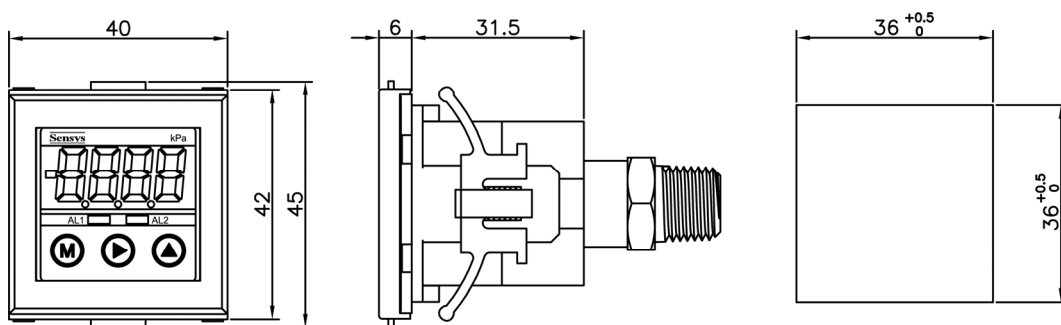
- Bracket A



- Bracket B

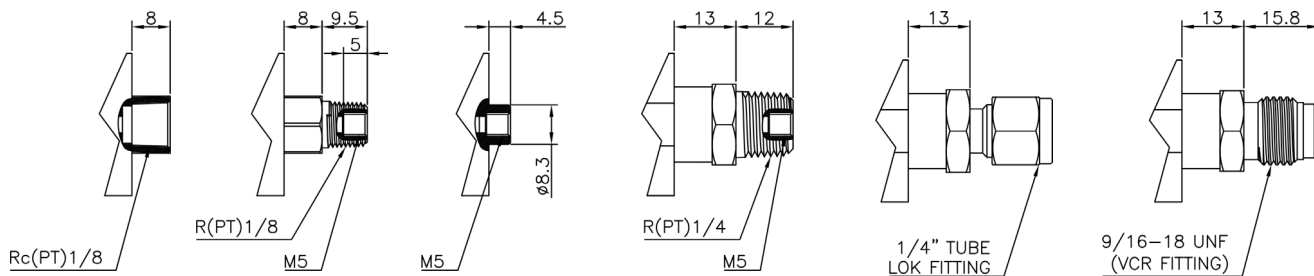


- Panel Mounting Bracket



Panel Cut Size  
(Panel Thickness 1~8mm)

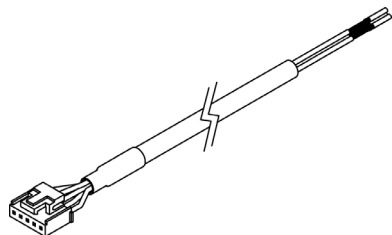
► Pressure Port



O/C: SMAA□□□□8□ SMAA□□□□G□ SMAA□□□□9□ SMA<sub>H</sub><sup>V</sup>□□□□C□ SMA<sub>H</sub><sup>V</sup>□□□□V□-A04 SMA<sub>H</sub><sup>V</sup>□□□□V□-A05

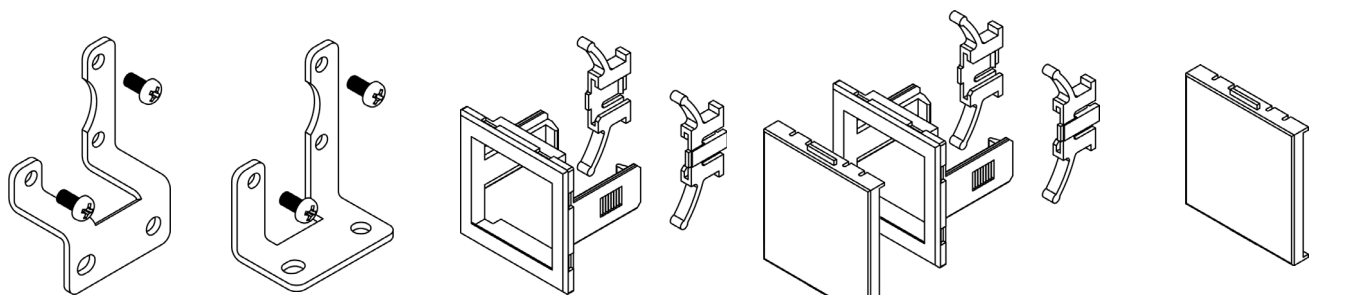
\*. O/C : Ordering Code

► Accessory



Connector Ass'y (Length : 2m)

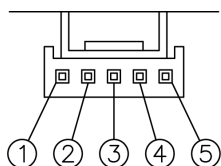
► Option



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

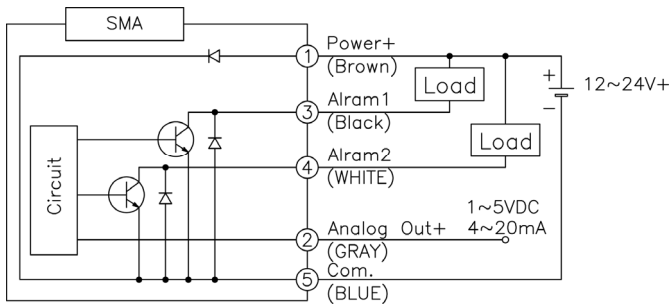
Pin No.	Wire Color	Connections
1	Brown	Power+(12~24VDC)
2	Gray	Analog output+
3	Black	Alarm 1
4	White	Alarm 2
5	Blue	Com.

**Function**

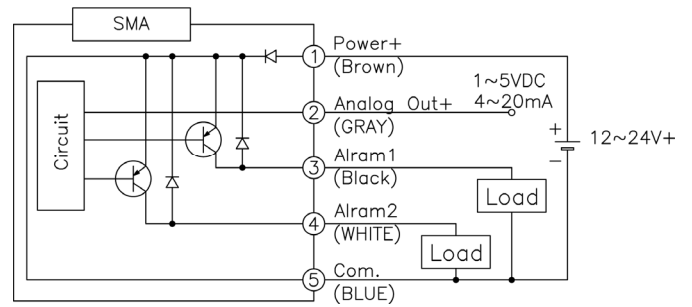
- Zero Adjustment
- 2channel Alarm(NPN or PNP), Alarm mode(High, Low, A, B)
- Anti-chattering(Alarm, Analog Output)
- Unit Conversion
- Analog Output Scale Adjustment
- Key Lock

## Internal Circuit Diagram

### ▶ NPN Type

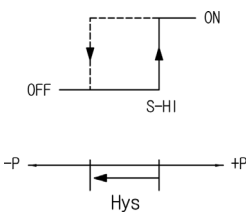


### ▶ PNP Type

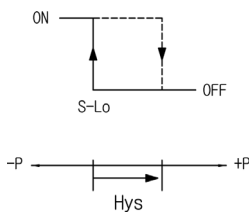


## Alarm Mode

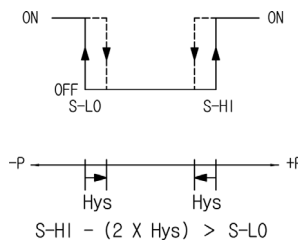
### ▶ Hi Mode



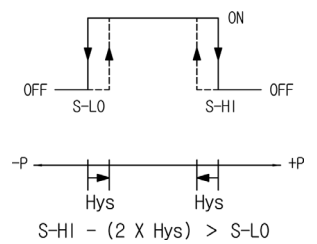
### ▶ Low Mode



### ▶ 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"
9 : M5(F)	V : Port Option
G : R1/8"	

#### Pressure Unit

R : kPa      M : MPa

## Sensys SENSOR SYSTEM TECHNOLOGY CO., LTD.

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e-mail : master@sensys.co.kr

· Specifications are subject to change without notice.