

Model SM

Digital Pressure Gauge / Switch

Description

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

Features

- ▶ LED display
- ▶ 1~5VDC analog output
- ▶ 4-channel NPN open collector output
- ▶ Measuring range -90~900kPa(SMG),
-100~900kPa, 0~10MPa(SMS)
- ▶ Compact design(40mm×40mm)
- ▶ Low Price

Applications

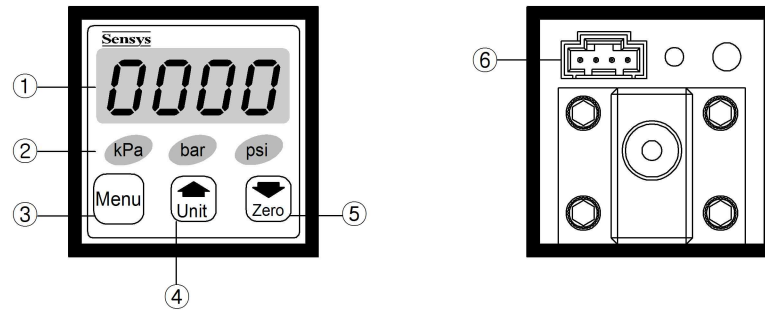
- ▶ Process control
- ▶ Hydraulics & Pneumatic
- ▶ Compressor Control
- ▶ Chillers
- ▶ Refrigeration Equipment

Specifications



	SMS	SMG
Range	-100~900kPa 0~1, 2, 5, 10MPa	-90~900kPa
Performance		
Accuracy		±0.5%FS
Thermal Effect	±0.06%FS/℃	±0.08%FS/℃
Compensated Temperature Range		0 ~ 50℃
Operating Temperature Range		-20 ~ 80℃
Electrical		
Display		LED(Red Color) 4Digit
Excitation		12 ~ 24VDC±10%(Ripple P-P Max. 10%)
Current consumption		Max 40mA(No Load)
Output		
Switching Signal		4-Channel NPN open collector output
Analog Signal		1~5VDC
Response Time		selectable(1~99step) / 1step=2.5ms
Electrical Connection		Cable
Physical		
Proof Pressure		150%FS Max.
Burst Pressure		200%FS Min.
Pressure Port	R(PT)1/4"	R(PT)1/8"
Media-Wetted Materials	STS316, Titanium, VITON	Zinc, NBR, SiO ₂

Panel identification and Function

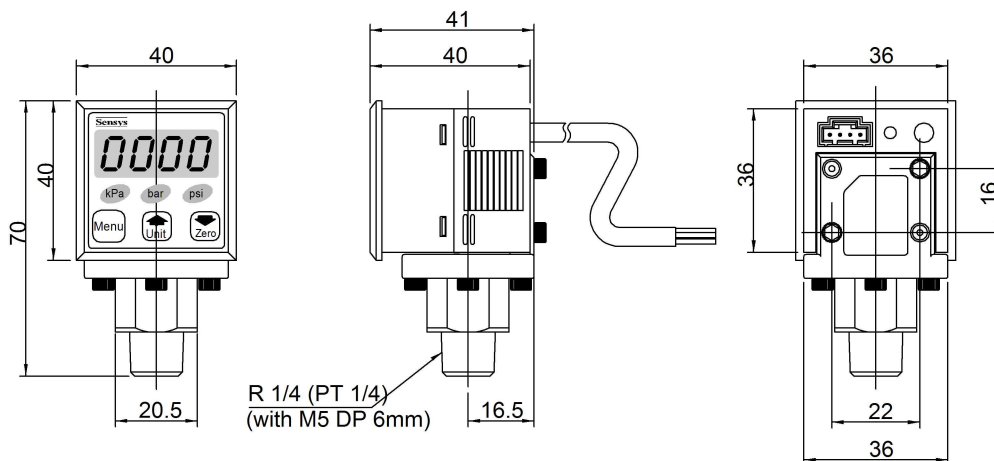


- ① Display(4 Digit LED Segment)
 - Display detected pressure, ever setting value and display error
- ② Unit indicator(green)
 - Display selected Unit.(kPa, bar, psi)
- ③ Menu key
 - Set a particular parameter(out value, out mode, delay time)
- ④ UP/Unit key
 - Operating mode : Select Unit
 - Setting mode : Set the setting value to lower step
- ⑤ Down/Zero key
 - Operating mode : Press over 3 second for automatically zero point balance
 - Setting mode : Set the setting value to lower step
- ⑥ Analog output : Cable connector
- ⑦ Power and output cable
 - Red(12~24VDC), Black(0V), Blue(Out1), Green(Out2), Yellow(Out3), White(Out4)

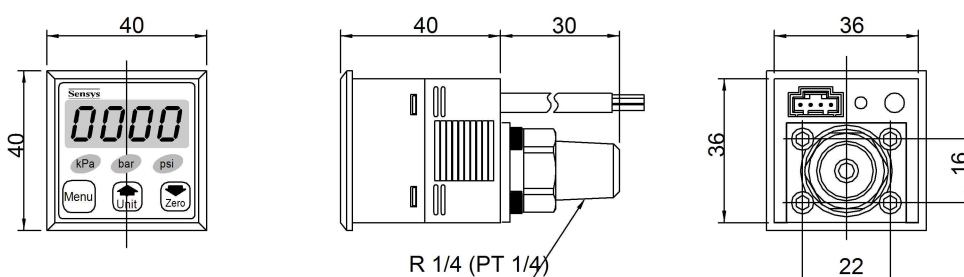
Dimension

► SMS

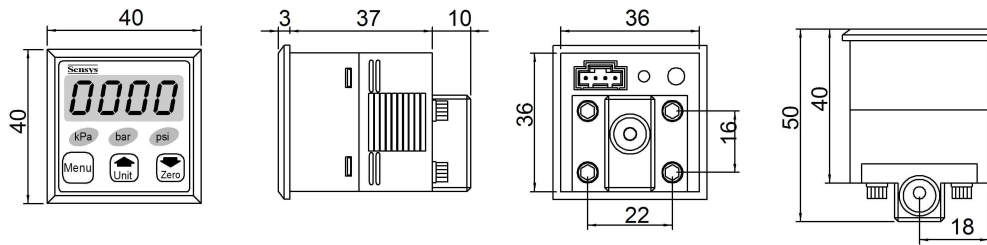
— Standard Type



— Panel Mounting Type

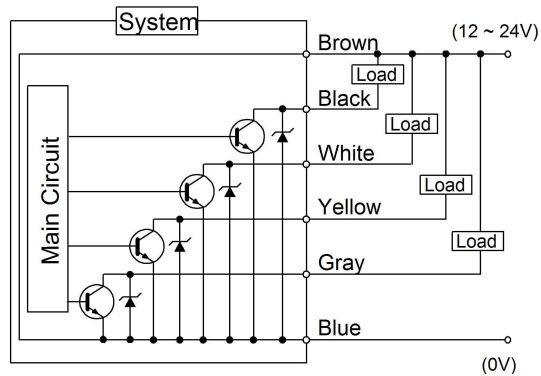


► SMG



Internal Circuit Diagram

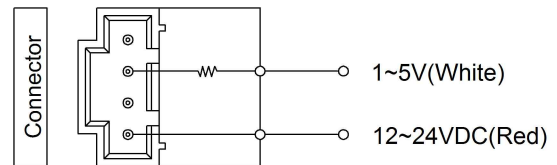
► Switch Output



● Wire Output Type

- Black : Switch output 1(P-HI)
- White : Switch output 2(P-LOW)
- Yellow : Setting Pressure output 3(SET HIGH)
- Gray : Setting Pressure output 4(SET LOW)

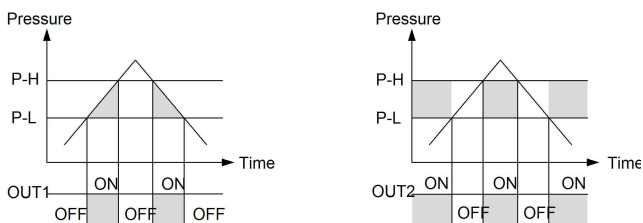
► Analog Output



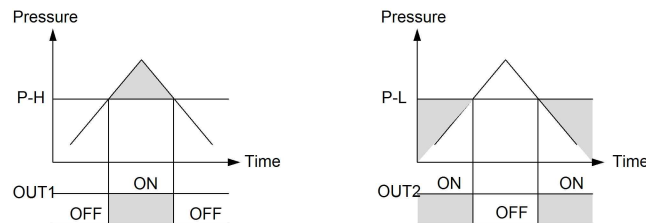
Pressure Output Mode

- Pressure output mode
 - No output
 - Using pressure gauge

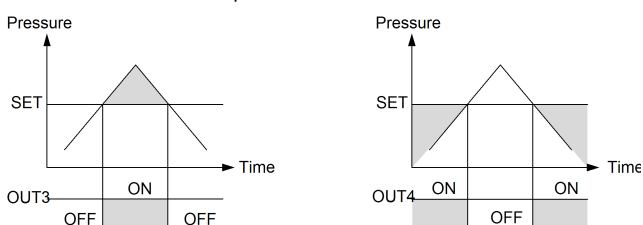
► Pressure output mode 1



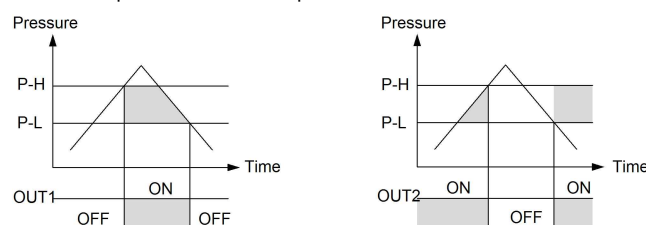
► Pressure output mode 2



► Pressure output mode 3



► Set pressure output mode



Ordering Information

		S	M	S	A	0001	M	G	A		
Model Name										Option	
SMS										A : Normal	
SMG(Only Air)										B : Model SMS Panel Mounting Type	
Output										Pressure port	
A : 1~5V, 4ch NPN open collector output										SMS	
										SMG	
										C : R(PT)1/4"	
										G : R(PT)1/8"(Female)	
Pressure Range											
SMS											
C900R : -100~900kPa											
0001M : 0~1MPa											
0002M : 0~2MPa											
0005M : 0~5MPa											
0010M : 0~10MPa											