

Gas Pressure Switch

(SGPS-3V/PN) (SGPS-10V/PN) (SGPS-50V/PN) (SGPS-150V/PN) (SGPS-500V/PN) IP65

PRODUCT SPECIFICATION SHEET

CE



FEATURES

- The gas pressure switch is used to detect the gas.
- This switch has a function to monitor gas pressure in the pipe line of gas.
- This switch has a structure that user can control the setting by himself.
- This switch has a various models of pressure setup.

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APPLICATION

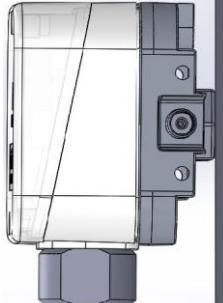
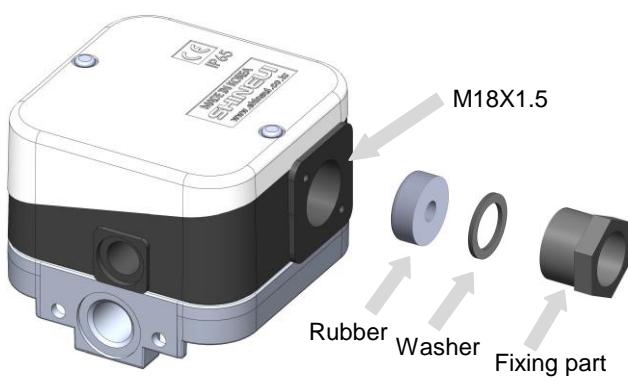
This gas pressure switch is designed to monitor gas pressure and activate switch contacts accordingly.

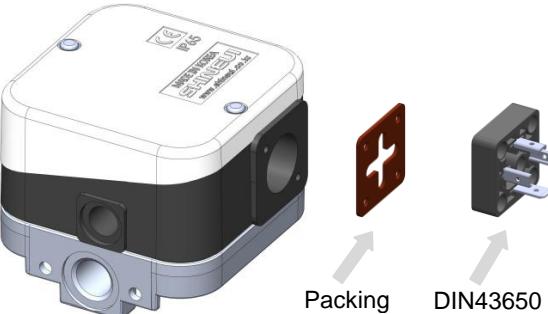
This pressure switch can be used autonomously or integrated into a multifunctional gas control.

SPECIFICATIONS

Type	: Adjustable type	
Materials	: Body	Aluminum die casting
	: Diaphragm	H-NBR
	: Switching contact	Au plated on AgSnO ₂ ,
	: Switch part	Polycarbonate
Temperature	: Ambient temperature : 0 ~ 60 °C, : Storage temperature : - 30 ~ 80 °C	
Electrical rating	: Switching Voltage	AC eff. min. 24V max. 250V DC min. 24V max. 48V
	: Nominal current	AC eff. max. 6A
	: Switching current	AC eff. max. 4 A at cos φ 1 AC eff. max. 2 A at cos φ 0,6 AC eff. min. 20 mA DC min. 20 mA, DC max. 100mA DC
Control fluid	POSITIVE : LNG, LPG, AIR NEGATIVE : AIR	

SPECIFICATIONS

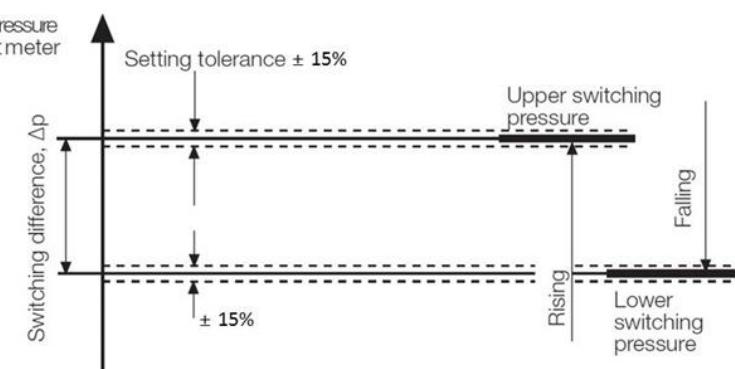
Model	SGPS 3V/PN(IP65)	SGPS 5V/PN(IP65)	SGPS 10V/PN(IP65)	SGPS 50V/PN(IP65)	SGPS 150V/PN(IP65)	SGPS 500V/PN(IP65)
Pressure range (mbar)	0.4~3.0	0.5~5.0	2~10	5~50	30~150	100~500
Pressure range (In.WC)	0.16-1.2	0.2-2.0	0.8-4	2-20	12-60	40-200
Factory Set point (mbar)	0.4	0.5	2	5	30	100
Difference (ΔP) (mbar)	≤ 0.3 mbar	≤ 0.4 mbar	≤ 4 mbar	≤ 1.5 mbar	≤ 5 mbar	≤ 13 mbar
Deviation at set point	$\pm 15\%$					
Permissible pressure (In rush pressure)	Pmax : 500 mbar					1bar
Pressure connection	POSITIVE : PF1/4" NEGATIVE : PF1/8" (See dimensions)					
Measuring connection	$\varnothing 9$, length 10 mm, with screw plug (Test nipple integrated in metal housing $\varnothing 9$)					
Installation Instructions	<p>Standard :Vertical installation(like below picture) According to the angle of the installation, the set point for the pressure move up or move down a little.</p> 					
Electrical connection (Standard)						

Electrical connection (DIN TYPE)	 Packing DIN43650 connector
Degree of protection	IP65
Label	Indelible
Leak - Tightness	Non - leakage (Pmax X1.5 for 1minute) or Standard (EN1854 (7.2.2))
Endurance	50,000 Cycles (ON : 5sec / OFF : 5sec) Test pressure : Pmax X1.2 Standard : EN1854 (7.4.3)
Warranty	1 year
Weight	235.9g

SCHEMATIC 1

Definition of switching difference Δp

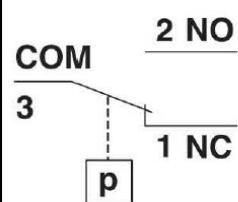
The switching difference Δp is the pressure difference between the upper and lower switching pressures.



SCHEMATIC 2

Switching function

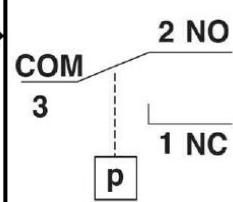
Normal:
1 NC closes
2 NO opens



PIC 1

Switching function (Upper switching pressure)

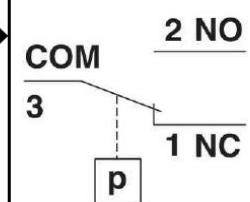
As pressure rises:
1 NC opens
2 NO closes



PIC 2

Switching function (Lower switching pressure)

As pressure falls:
1 NC closes
2 NO opens



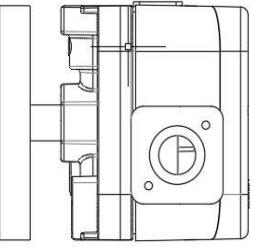
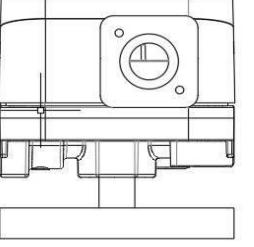
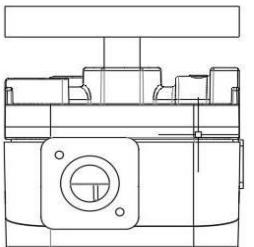
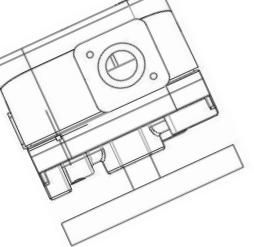
PIC 3

Notice

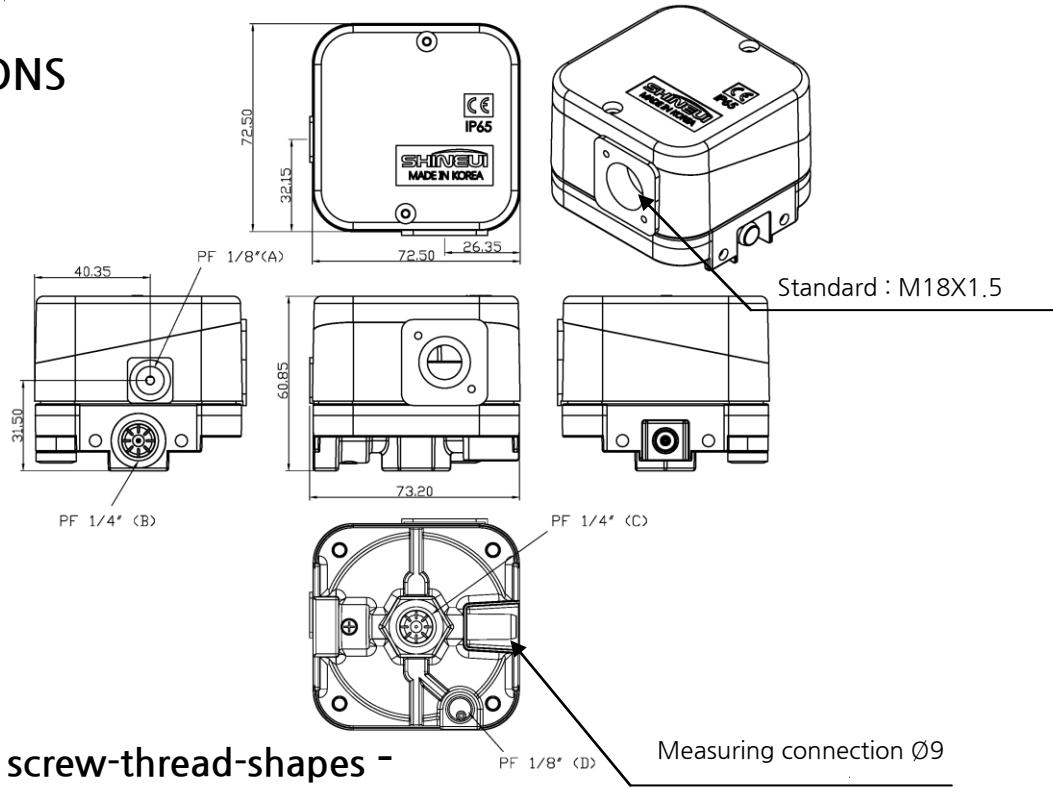
In case of following circumstance, we recommend to discuss with us before using.

1. Only use silicone tube which have been sufficiently cured
2. Vapors containing silicone can adversely affect the functioning of electrical contacts. In the case of low switching capacities such as 24V, less than 20mA, for example, we recommend using RC module or electronic switch(no-contact switch) in air containing silicone or oil.
3. Fall or shock can adversely affect the safety functions. Such products must not be put into operation, even if they do not exhibit any damage.
4. In case of high humidity or aggressive gas components (H2S), we recommend using a pressure switch with gold contact.
5. Closed-circuit current monitoring is recommended under difficult operating conditions.
6. Do not use at the lower than the minimum setting pressure.

Installation position

	<p>Standard installation position</p> <p>if a different installation position is used, pay attention to the changed operating points</p>
	<p>When installed horizontally overhead, the pressure switch switches at the lower pressure.</p>
	<p>Do not use this position.</p>
	<p>When installed in an intermediate installation position, the pressure switch switches at the higher pressure.</p>

DIMENSIONS



※ NOTICE

- Holes and screw-thread-shapes -

A,C : Always opened and shaped

B,D : Depend on Customer's request

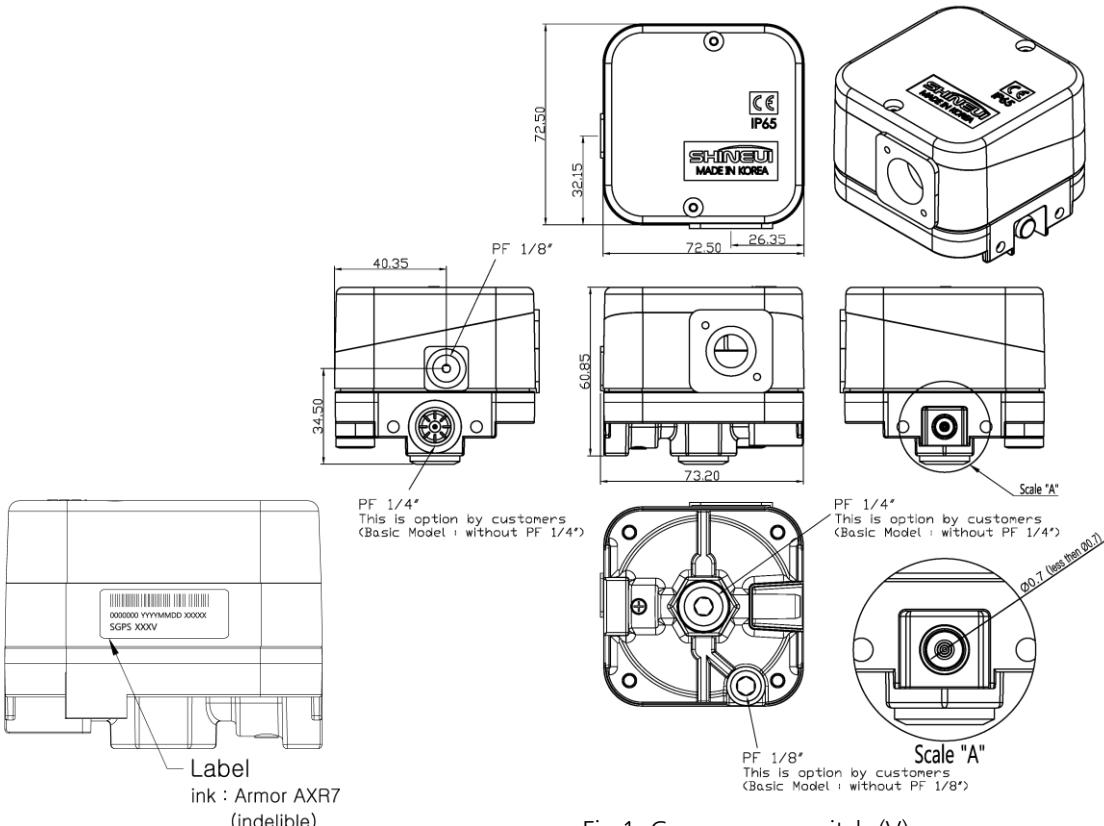


Fig 1. Gas pressure switch (V)