

# Pressure Switch



**GASTECH**<sup>®</sup>  
Natural Gas Equipment Technologies

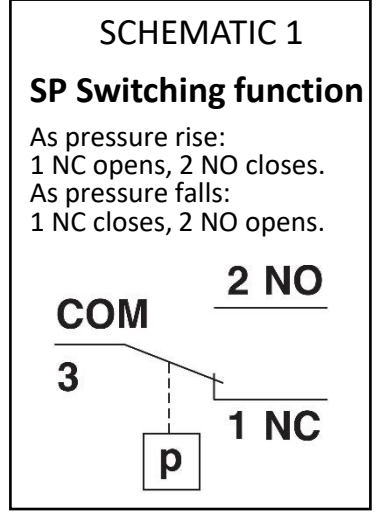
## SP Series

Gas Pressure Switches According to EN 1854 standard and Directive EU 2016/426, EU 2014/35

Gaz Basınç Presostadları EN1854 standard ve EU 2016/426, EU 2014/35 direktiflerine uygundur.

## Özellikler / Features

- Ergonomik ölçülerde üretilmiştir, kullunımda optimum alan kaplar
  - Gaz veya hava hattındaki basıncı izlemeyi sağlar.
  - İstedığınız set basıncına ayarlanabilir (skala değerinde)
  - Basınç skalası geniş bir dizayna sahiptir.
  - Benzer ürünlerin yerine kullanılabilir.
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- This switch has a function to monitor gas pressure in the pipe line.
  - This switch has a structure that user can control the setting by himself.
  - This switch has a various models of pressure setup.
  - This is compatible with the other similar products.



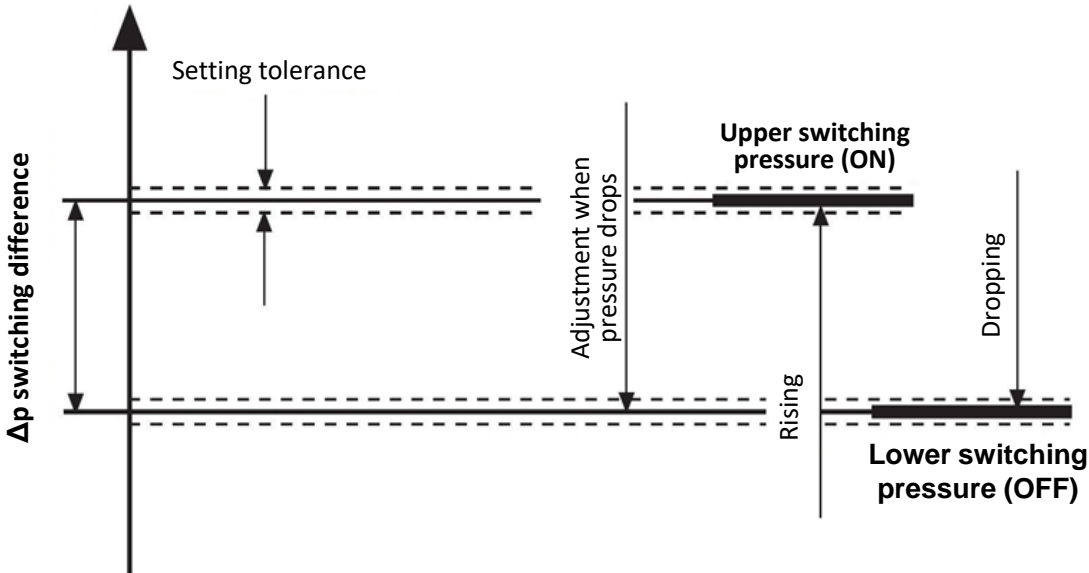
## Uygulama / Application

Yakma kontrolünde, Gazlı hatlarında ve Gaz brülörlerinde, Gaz yakıtlı su ısıtıcısı gibi sistemlerde basınç izleme anahtarı olarak kullanılır.

Pressure monitoring in combustion control system like Gas burner, Gas train and Gas boiler, Gas water heater, etc..

## SCHEMATIC 2

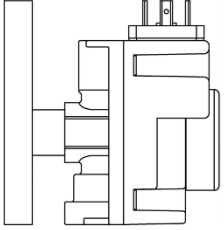
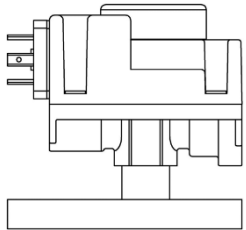
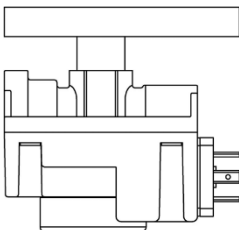
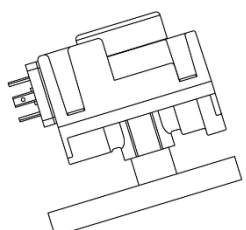
### Pressure at control unit



## Teknik Özellikler / Technical Features

Model	SP-3G	SP-10G	SP50-G	SP150-G	SP500-G
Pressure Range (mbar)	1.0 ~ 3.0	2.0 ~ 10.0	5.0 ~ 50.0	5.0 ~ 150.0	100 ~ 500
	SGPS-150V/CP can be deviate a little from setting tolerance in the range of 5.0~30mbar				
Factory setting (mbar)	1.0	2.0	5.0	5.0	100
Differential pressure ( $\Delta P$ )max	$\leq 1.0$ mbar	$\leq 1.5$ mbar	$\leq 3.0$ mbar	$\leq 6$ mbar	$\leq 20$ mbar
Permissible Pressure (mbar)	500 (50kpa)				600(60kpa)
Dielectric strength	Terminal – Terminal	: 800 VAC/1 min			
	Terminal – Earth	: 1500 VAC/1 min			
Insulation resistance	: 100 M $\Omega$ , Min. DC500V Megger				
Setting tolerance at room temperature	$\pm 15\%$ switch point deviation referred to setpoint, adjusted for dropping pressure, vertical diaphragm position. ( Optional setpoint : adjusted for rising pressure)				
Permissible Deviation	Permissible deviation of the set value $\leq \pm 15\%$ in the service life test according to EN 1854				
Electrical connection	3-pin connector for line sockets as per DIN - EN 175 301 - 803 (without ground connection).				
Measuring connection	$\phi 9$ , length 10 mm, with screw plug (Test nipple integrated in metal housing $\phi 9$ )				
Pressure connection	Standard : centrally on housing bottom, PF 1/4 inner thread, Optional design : additionally PF 1/4 inner thread (side under)				
Degree of Protection	IP 54 as per IEC 529 (EN60529)				
Leak – Tightness	Pmax X 1.5 for 1minute or Standard (EN1854 (7.2.2)				
Drift	Drift of the operating pressure shall be within $\pm 15\%$ between before and after the endurance test.				
Setting	Adjustable type				
Metarials	Body, Gövde	Aluminium die cast			
	Diaphragm	NBR			
	Switching Contact	Ag-SnO2 (Optional : Au-plated)			
	Switch Part	Polycarbonate			
Temperature	Ambient temperature : -15 ~ 60 °C, : Storage temperature : - 30 ~ 80 °C				
Electrical Rating	Switching Voltage	AC eff. min. 24V max. 250V DC min. 24V max. 48V			
	Carry Current	AC eff. max. 6A			
	Switching Current	AC eff. max. 4 A at $\cos \phi 1$ AC eff. max. 2 A at $\cos \phi 0,6$ AC eff. min. 20 mA DC min. 20 mA, DC max. 1A			
Control Fluid	Gas family 1, 2 and 3 according to EN 437+A1:2009; Air				

## Montaj Pozisyonları / Installation position

	<p>Standart montaj konumu farklı bir montaj konumu kullanılıyorsa, değişen çalışma noktalarına dikkat edin</p> <p>Standard installation position if a different installation position is used, pay attention to the changed operating points</p>
	<p>Yatay olarak monte edildiğinde, basınç şalteri daha yüksek basınçta anahtarlama yapar.</p> <p>When installed horizontally, the pressure switch switches at the higher pressure.</p>
	<p>Yatay olarak üstten monte edildiğinde, basınç şalteri düşük basınçta anahtarlama yapar.</p> <p>When installed horizontally overhead, the pressure switch switches at the lower pressure.</p>
	<p>Bir ara montaj konumuna monte edildiğinde, basınç şalteri daha yüksek basınçta anahtarlama yapar.</p> <p>When installed in an intermediate installation position, the pressure switch switches at the higher pressure.</p>

## Dikkat / Notice

Aşağıdaki durumlarda kullanmadan önce bizimle görüşmenizi öneririz.

Silikon içeren buharlar elektrik kontaklarının çalışmasını olumsuz etkileyebilir. Örneğin, 24V gibi düşük anahtarlama kapasitelerinde, 20mA'dan az olması durumunda, silikon veya yağ içeren havada RC modülü veya elektronik anahtar (temassız anahtar) kullanmanızı öneririz.

Yüksek nem veya agresif gaz bileşenleri (H<sub>2</sub>S) olması durumunda, altın temaslı bir basınç anahtarı kullanmanızı öneririz.

Zorlu çalışma koşullarında kapalı devre akım izleme önerilir.

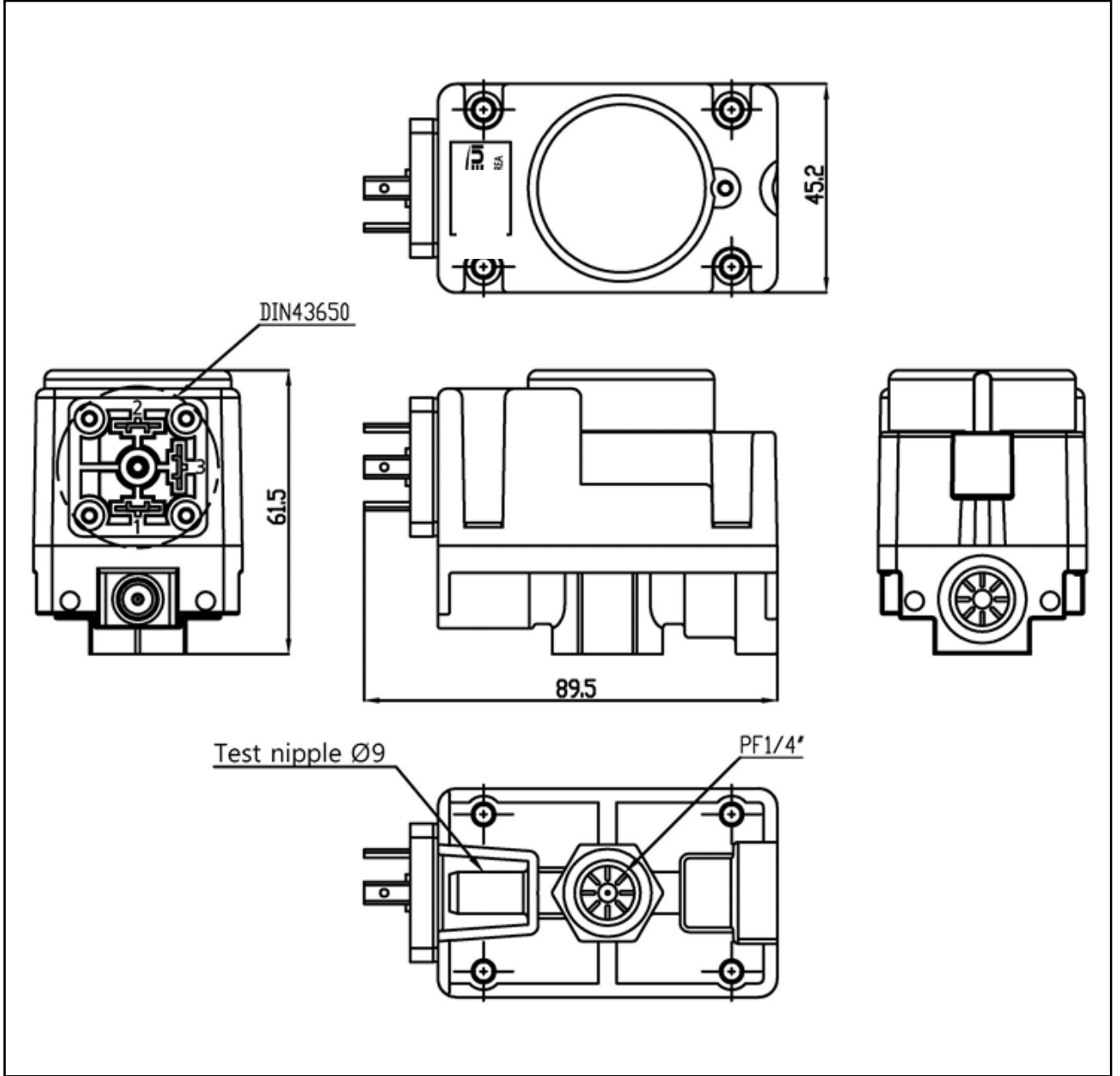
In case of following circumstance, we recommend to discuss with us before using.

Vapours 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.

In case of high humidity or aggressive gas components (H<sub>2</sub>S), we recommend using a pressure switch with gold contact.

Closed-circuit current monitoring is recommended under difficult operating conditions.

## ÖLÇÜLER / DIMENSIONS



The specifications and dimensions can be changed without warning. Warning: Before using the gas pressure switch read the instruction