

# PF21/PF31

# Differential Pressure Switches

### PRODUCT DATA



# **GENERAL**

The PF21differential pressure switches have been designed for most industrial pressure measurement applications where considering the quality performance, reliability and low cost. The separated diaphragm design and brass connection can be used for gas and liquid applications.

The precision snap-acting switches provide a narrow dead band and repeatability. A convenient, externally accessible adjustment screw is multi-turn to provide easy set point adjustability.

## **FEATURES**

- Fluid and Gas applications
- · Adjustable Switch Setting Point
- Differential Pressure 0.5 to 3.5 Bar
- 5A@125/250 VAC SPDT Switch
- Compact construction
- Shock and vibration resistance
- · Terminal block wiring

# **SPECIFICATIONS**

#### Performance characteristics:

Set Point Repeatability: ≦±1.0% F.S

Typical Dead Band ≤ 0.1 Bar

Thermal Effect: ±0.3% F.S for 12°C

#### **Environment characteristics:**

Media temperature range: -25...+100°C

Ambient temperature range: 0... +70°C

Storage temperature range: -25... +85°C

Weatherproof rating: IP54

Unit: BAR

Model	Adjustable Range	Foctory Switch Setting	Typical Deadband	Max. Working Pressure (HP>LP)	Wt.(kg)
PF21	0.5Bar2.5Bar	1 Bar	0.2 Bar	7 Bar	0.46 to 0.63
PF31	2.5Bar3.5Bar	3 Bar	0.3 Bar	10 Bar	

P1 PF21/PF31

## Physical characteristics:

Material: Brass

Connection: 1/8"PT-F

Diaphragm Seal: Buna N

Mounting: Surface mount

Fitting: Tongren 1/4" Tube

Electrical

Connector: Cable Gland

Proof Pressure 10Bar

**Note:** The wetted parts including fitting, diaphragm and sealing gasket will be contacted with the media directly. Before installation, please check the wetted parts selected for compatibility to the process media.

#### **Electrical Data:**

Switch Output: SPDT precision snap-

action micro-switch

Rating: Rated to 5 A resistive

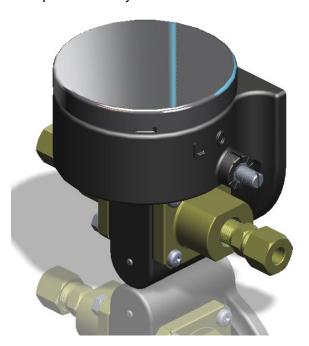
and 5 A inductive (75% PF) at 125 VAC

and 250 VAC

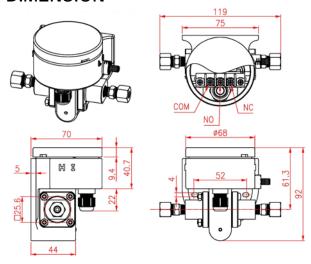
## **APPLICATIONS**

- Pressure differential between bottom and top of pressurized tank for liquid level measurement.
- Differential pressure on venture, orifice or other primary flow elements for flow rate measurement.
- Pump monitoring for hydronic heating and cooling systems in buildings.

- Improve efficiency by alerting operator of problem conditions for heat exchangers.
- Valve backflow prevention to ensure the safety of public water supply.
- Filter/Strainer monitoring in water purification systems.



## **DIMENSION**



P2 PF21/PF31