



## D05 Series

Piston, Pressure Switch

# Piston, Differential Pressure Switch

## Description

The D05 series Differential Pressure Switch uses a piston design where small migration of the process media is permissible. It is recommended for high differential and high static pressures, up to 5000 psi (static pressure over 3000psi in stainless steel only). Body case is available in Aluminum, Brass and Stainless Steel, with Buna-N, Viton or EPDM seals.



## Specification

|                                |  |
|--------------------------------|--|
| <b>Accuracy</b>                | ±5%  |
| <b>Repeatability</b>           | ±2% of standard calibration point  |
| <b>Action Point Ranges:</b>    | 2 psid to 150 psid, Factory set  |
| <b>Maximum Static Pressure</b> | 3000 psi (5000 psi for SS)   |
| <b>Dead Band</b>               | 5-20% full scale   |
| <b>Actuator</b>                | Piston   |
| <b>Case Material</b>           | Aluminum, Brass, Stainless steel   |
| <b>Maximum Process Temp</b>    | 230°F/110°C  |
| <b>Minimum Process Temp</b>    | -4°F/-20°C   |
| <b>O-Rings/Diaphragm:</b>      | Buna-N, Viton, EPDM  |
| <b>Connection Size</b>         | Basic model: 1/8" NPT female bottom or side port<br>In-line model: 1/4" or 1/8" NPT male side port |
| <b>Switches Type</b>           | Basic model: 1 SPST, 1 SPDT<br>In-line model: 1 SPST, 1 SPDT, 2 SPST, 2 SPDT                       |

## Feature

- Piston actuator
- Low cost, best choice for OEM customer
- Suitable for liquid, water and air application
- Aluminum, brass, Stainless steel body case available
- Ranges from 2-150 psid
- Static pressures up to 5000 psi
- Buna-N, Viton or EPDM O-rings
- Standard SPST, SPDT switches available

## Application

- Power generator
- Construction machine
- Industrial air compressor
- HVAC

## Electrical Rating

|                          | SPST                         | SPDT                       |
|--------------------------|------------------------------|----------------------------|
| <b>Contact Rating</b>    | 10 VA ac (rms) or dc (max)   | 3 VA ac (rms) or dc (max)  |
| <b>Switching Current</b> | 0.5 Amp ac (rms) or dc (max) | 3 Amp ac (rms) or dc (max) |
| <b>Switch Voltage</b>    | 100 Vac/Vdc (max)            | 30 Vac/Vdc (max)           |

## General Information

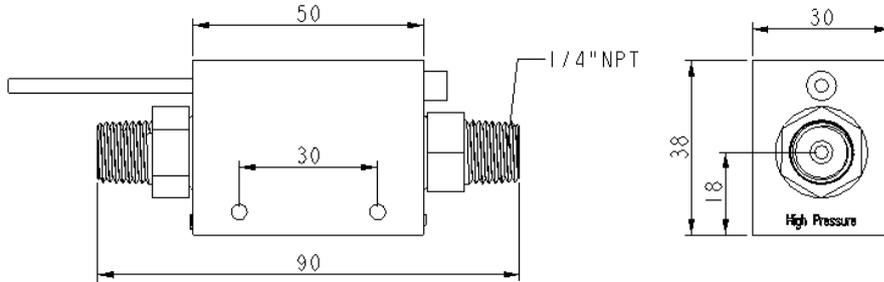
|                             |                            |
|-----------------------------|----------------------------|
| Ambient storage temperature | -40..+110°C                |
| Mass                        | About 200 g.               |
| Package                     | 1 piece /box, 80pcs/carton |



**D05 Series**  
Piston, Pressure Switch

**Mechanical dimensions in mm:**

**Basic Model:**



**Basic Model:**

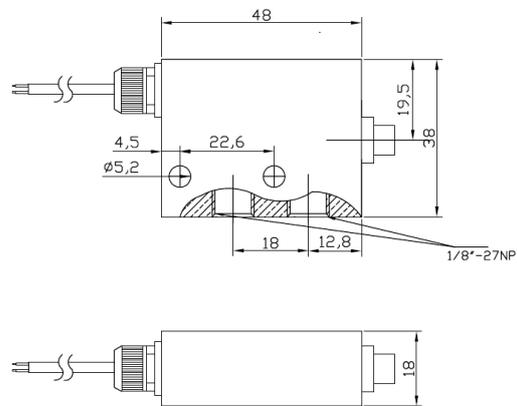
- Only 1 pressure set-point;
- 1/8" NPT pressure port, could be side or bottom

**In-line Model:**

- 1 or 2 pressure set-points are available;
- 1/8" NPT or 1/4" NPT side pressure port;

**Customized is acceptable.**

**In-line Model:**



**D series Nomenclature:**

**D 05**

- Structure**  
05: Piston  
09: Diaphragm

**A 03 A**

- Pressure Port**  
A: 1/8"NPT female, Side  
B: 1/8"NPT female, Bottom  
C: 1/4"NPT mail, Side

- First Set Point**  
01: 0...5 psid  
02: 0...10 psid  
03: 0...25 psid  
04: 0...35 psid  
05: 0...50 psid  
06: 0...80 psid  
07: 0...100 psid  
08: 0...150 psid  
09: 0... 15KPa

- Case Material**  
A: Aluminum  
B: Bronze  
C: Stainless Steel  
D: PVC

**01 A G**

- Customize No.**  
G: indicator  
XX: Cable Length

- Piston Material**  
A: Buna-N  
B: Viton  
C: EPDM

- Second Set Point**  
01: 0...5 psid  
02: 0...10 psid  
03: 0...25 psid  
04: 0...35 psid  
05: 0...50 psid  
06: 0...80 psid  
07: 0...100 psid  
08: 0...150 psid  
09: 0... 15Kpa



This transducer must be used in electric/electronic equipment with respect to applicable standards and safety requirements in accordance with the manufacturer's operating instructions.



Caution, risk of electrical shock

When operating the transducer, certain parts of the module can carry hazardous voltage. Ignoring this warning can lead to injury and/or cause serious damage. This transducer is a build-in device, whose conducting parts must be inaccessible after installation. A protective housing or additional shield could be used. Main supply must be able to be disconnected.