



**Weather Proof  
(NEMA 4X and 13)**

## DESCRIPTION

Compact, adjustable vacuum switch for pneumatic and low impulse hydraulic process applications. Our Nega-Rate® Belleville disc spring offers superior set point stability and vibration resistance. The 181P series pressure switch also has a selectable deadband feature which can be preset.

## Operating Pressure Data

Adjustable Range Number	Adjustable Set Point Range		Selectable Deadband	Default Deadband (approx.)	Maximum Recommended System Pressure	Proof Pressure
	Increasing	Decreasing				
2	4 to 28" Hg	2 to 26" Hg	1.5 to 2.5" Hg	2" Hg	150	250

All values given in psig unless otherwise noted.

## Standard Specifications

### Electrical Listings

Switch listed by Underwriters Laboratories, Inc., CSA International and Factory Mutual

### Electrical Connection

½" - 14 NPT male conduit connection, 18" free leads

### Pressure Connection

¼" - 18 NPT Female and  
½" - 14 NPT Male

### Temperature Range\*

Ambient: -40F to +176 F  
(-40C to +80C)

Media: -40F to +300 F  
(-40C to +149C)

\* Temperature limits change with O-Ring selection

### Adjustment

Internal, slotted adjustment wheel

### Shipping Weight

Approximately 13 ounces

## Ordering Sequence — Select desired option for each category

### OPTIONS

#### Wetted Material

- 1 Aluminum port, polyimide diaphragm, Buna-N O-Ring
- 4 316 stainless steel port, polyimide diaphragm, Buna-N O-Ring

#### Adjustable Range

- 2 2" dec. to 28" Hg inc.

#### Electrical Form

- C 11 amp, ¼ hp at 125 or 250 VAC; 5 amp resistive, 3 amp inductive at 28 VDC; .5 amp resistive at 125 VDC
- CC 11 amp, ¼ hp at 125 or 250 VAC; 5 amp resistive, 3 amp inductive at 28 VDC; .5 amp resistive at 125 VDC

#### Enclosure

- 3 Meets or exceeds the requirements of NEMA Type 3, 3R, 3S, 4, 4X and 13

#### Miscellaneous

- A Epoxy paint exterior for extra protection for severe environments
- B Viton O-Ring
- C EPR O-Ring
- I ¾" NPT Conduit box with terminal block
- M Gold electrical contacts for extremely low current applications
- R 72" Electrical free leads
- X CE Mark
- Z Mounting bracket kit

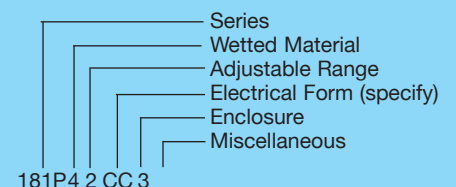
#### Special (Consult representative or factory)

- Non-catalog adjustable range and/or set point, deadband and proof pressure

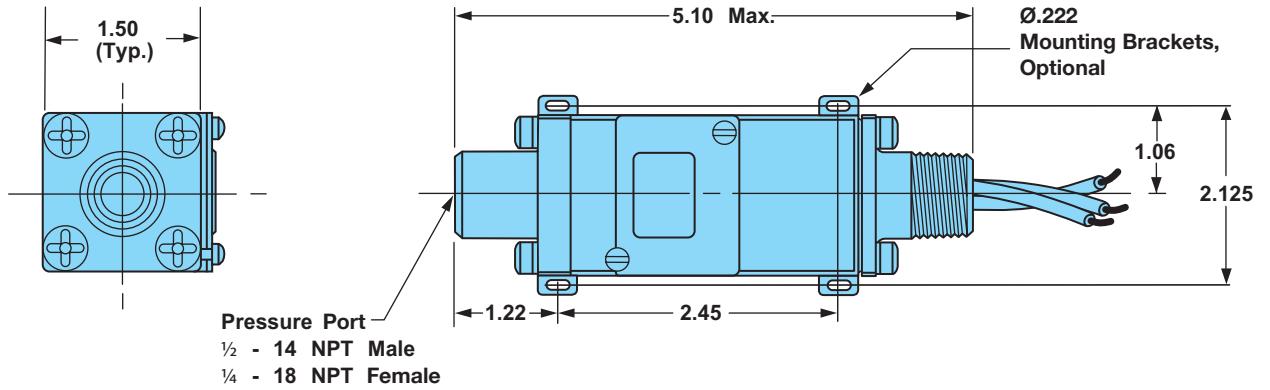
## Ordering Procedure

- When factory presetting is desired, stipulate set point, increasing or decreasing
- Insert available option number or letter designation as required
- When a selectable deadband is desired, stipulate deadband within allowed range

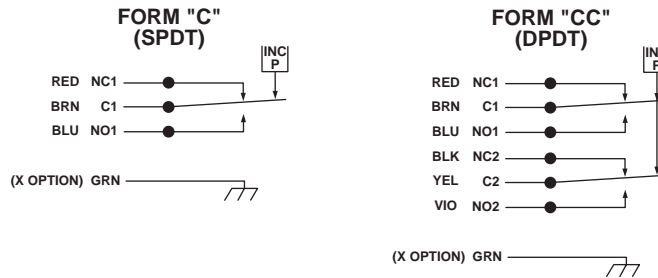
## Example



**Envelope Dimensions**



**Electrical Form**



**Basic Principles of Design**

