

# Neo-Dyn® Series 181P Vacuum Switch/Internal Adjustment

Compact, adjustable vacuum switch well suited to numerous applications. Our efficient Nega-Rate® Belleville disc spring offers superior set point stability and vibration resistance. The 181P series vacuum 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

Snap action electrical switch assembly listed by Underwriters Laboratories, Inc., Factory Mutual and CSA International

### Electrical Connection

½ NPT male conduit connection with PVS insulated 18 AWG, 18" long leads

### Pressure Connection

¼ NPT Female and  
½ NPT Male

### Temperature Range\*

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

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

\* Temperature limits change with O-Ring selection. See Electrical Assembly specification sheet for Temperature Class Ratings.

### Adjustment

Internal, slotted adjustment wheel

### Shipping Weight

Approximately 20 ounces



Explosion Proof  
Hermetically Sealed  
(NEMA 4X, 7, 9 and 13)

## 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" Hg 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

- 6 Explosion proof, hermetically-sealed electrical assembly, leads factory sealed, P/N 057-0770 (C Form) and P/N 057-0771 (CC Form); **Underwriters' Laboratories, Inc.** listed (File E56677), **CSA International** certified (File LR34146), and **Factory Mutual** approved (File J.I.1R5A9.AE) for Division 1 and 2; Class I, Groups A, B, C and D; Class II, Groups E, F and G Hazardous Locations; NEMA type 7 and 9.

#### Miscellaneous

- A Epoxy paint exterior for extra protection for severe environments
- B Viton O-Ring
- C EPR O-Ring
- D SAA Approval (current and temperature ratings vary)
- H 316 stainless Steel Body
- I ¾ NPT Conduit box with terminal strip (Groups C & D only, not available with N option)
- M Gold electrical contacts for extremely low current applications
- N ATEX approval with CE Mark
- R 72" Electrical free leads
- Z Mounting bracket kit

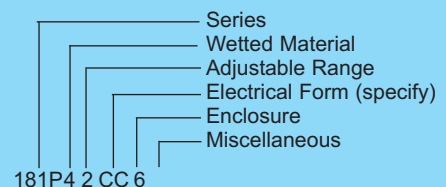
#### Special (Consult representative or factory)

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

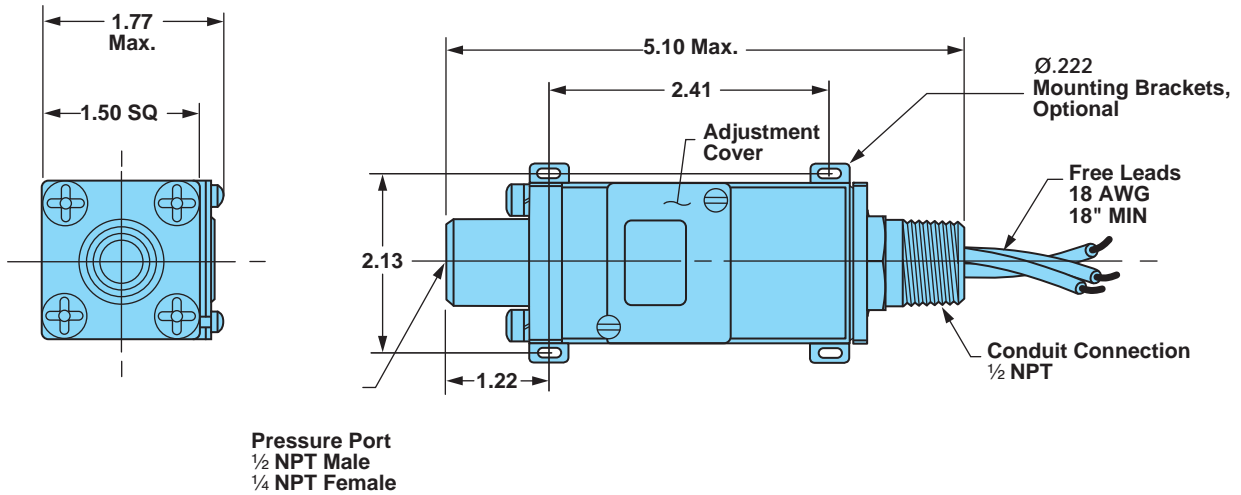
## Ordering Procedure

- 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

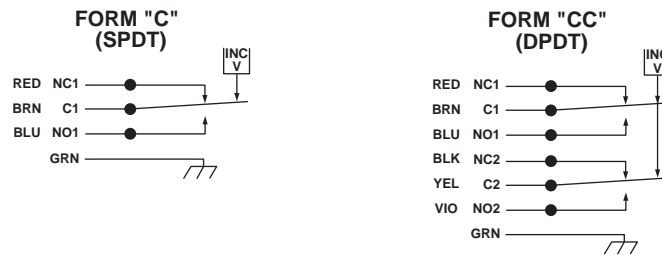
## Example



## Envelope Dimensions



## Electrical Form



## Basic Principles of Design

