

## 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 Vacuum	Decreasing Vacuum				
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 assemblies, Part Numbers 057-0770 & 057-0772 (Form C) and 057-0771 & 057-0773 (Form CC), are listed by Underwriters' Laboratories, Inc., FM Approvals, CSA International and NCC (INMETRO). See the miscellaneous option N for additional listings.

#### Electrical Connection

1/2 NPT male conduit connection with PVS insulated 18 AWG, 18" long leads

#### Pressure Connection

1/4 NPT Female and 1/2 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



Order Miscellaneous Option "D"



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 Vacuum Range

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

##### Electrical Form

- C 11 amp, 1/4 hp at 125 or 250 VAC; 5 amp resistive, 3 amp inductive at 28 VDC; .5 amp resistive at 125 VDC
- CC 11 amp, 1/4 hp at 125 or 250 VAC; 5 amp resistive, 3 amp inductive at 28 VDC; .5 amp resistive at 125 VDC

##### Enclosure

- 6 Includes an explosion proof, hermetically-sealed electrical assembly. EX d IIC. Division 1 and 2, Class I, Groups A, B, C, and D; Class II, Groups E, F, and G. NEMA 4X, 7, and 9; IP66. Leads are factory sealed and Pressure Switches are Dual Seal Certified.

##### Miscellaneous

- A Epoxy paint exterior for extra protection for severe environments
- B Viton O-Ring
- C EPR O-Ring
- D SIL approval and marking, per IEC61508 (includes FMEA report)
- H 316 stainless Steel Body
- I 3/4 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 and IECEx with CE Mark
- R 72" Electrical free leads
- Z Mounting bracket kit

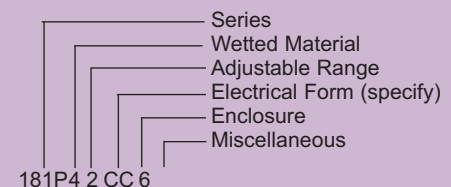
##### Special (Consult representative or factory)

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

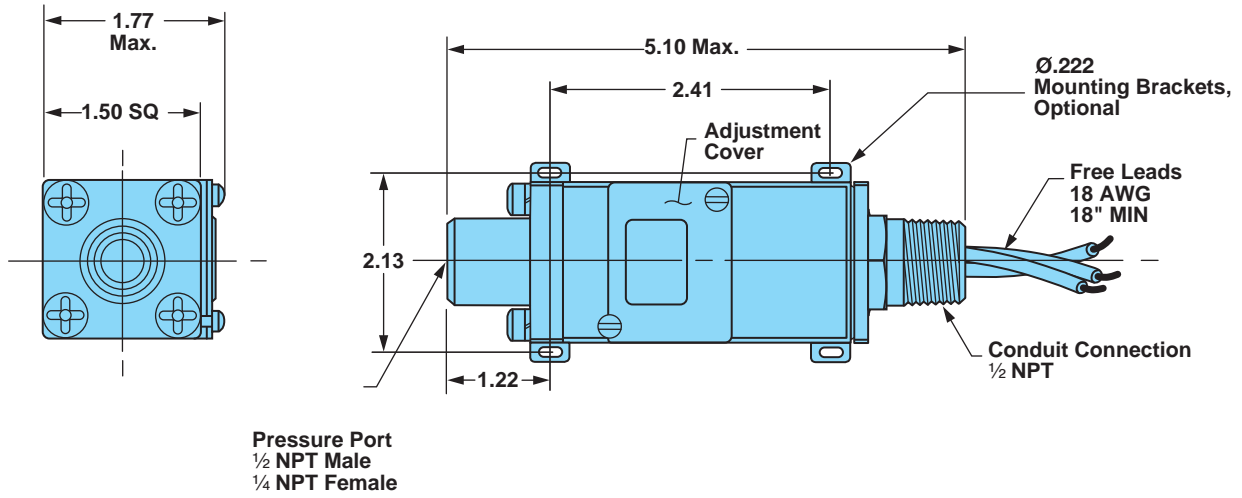
### Ordering Procedure

- 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

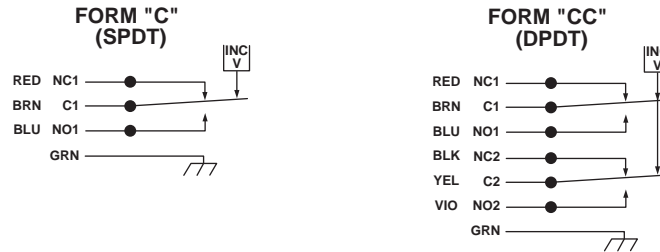
### Example



## Envelope Dimensions



## Electrical Form



## Basic Principles of Design

