

## Series 180P Vacuum Pressure Switch/Internal Adjustment

Adjustable vacuum switch with efficient Nega-Rate® Belleville disc spring sensing mechanism. Weather proof enclosure and stable set points makes this switch ideal for a wide variety of applications.

### Operating Pressure Data

Adjustable Range Number	Adjustable Set Point Range		Deadband (approximate)	Maximum Recommended System Pressure	Proof Pressure
	Increasing Vacuum	Decreasing Vacuum			
4	3" to 28" Hg	1" to 26" Hg	2" Hg	225	350

All values given in psig.

### Standard Specifications

#### Electrical

Snap action electrical switch recognized by Underwriters' Laboratories, Inc. and CSA International

#### Electrical Connection

1/2 NPT female conduit connection with terminal block

#### Pressure Connection

1/4 NPT Female

#### Temperature Range\*

Ambient: -40°F to +180°F  
(-40°C to +82°C)  
Media: -40°F to +250°F  
(-40°C to +121°C)

\*Temperature limits change with O-Ring selection

#### Adjustment

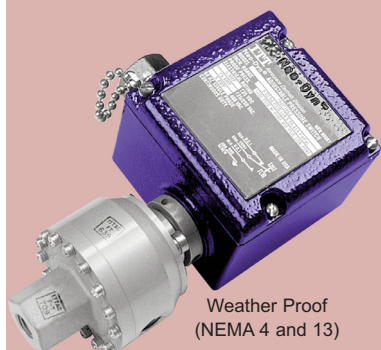
Concealed wrench flat adjustment with range scale

#### Shipping Weight

Approximately 3.5 pounds



Order Miscellaneous Option "D"



Weather Proof  
(NEMA 4 and 13)

### Ordering Sequence — Select desired option for each category

#### OPTIONS

##### Wetted Material

- 1 Aluminum port and body, Teflon coated polyimide diaphragm, Buna-N O-Rings and stainless steel
- 4 Stainless steel, Teflon coated polyimide diaphragm and Buna-N O-Rings

##### Adjustable Vacuum Range

- 4 1" Hg dec. to 28" Hg inc. (0.0 bar dec. to 0.9 bar inc.)

##### Electrical Form

- C 15 amp at 125 or 250 VAC; 1/8 hp at 125 VAC; 1/4 hp at 250 VAC; .5 amp resistive, .04 amp inductive 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

- 3 Meets or exceeds the requirements of NEMA Type 3, 3R, 3S, 4, 4X and 13, IP65

##### Miscellaneous

- A Epoxy paint exterior — extra protection for severe environments
- B Viton O-Ring
- C EPR O-Ring
- D SIL approval and marking, per IEC61508 (includes FMEA report)
- L Neon indicator light — 115 VAC
- M Gold electrical contacts for extremely low current applications
- U M20 x 1.5 Electrical Conduit Adapter
- X CE Mark

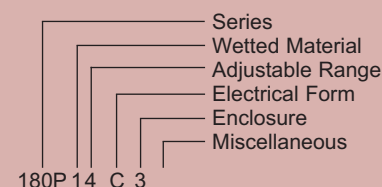
##### Special (Consult representative or factory)

- Non-catalog adjustable range and/or set point, deadband and proof pressure
- Media temperature capability from -65°F to +350°F
- 10 amps 125 VDC electrical rating
- Chemical seals installed
- Optional orientation of Low Pressure Port

### Ordering Procedure

- When factory presetting is desired, stipulate set point, increasing or decreasing
- Insert available option number or letter designation as required

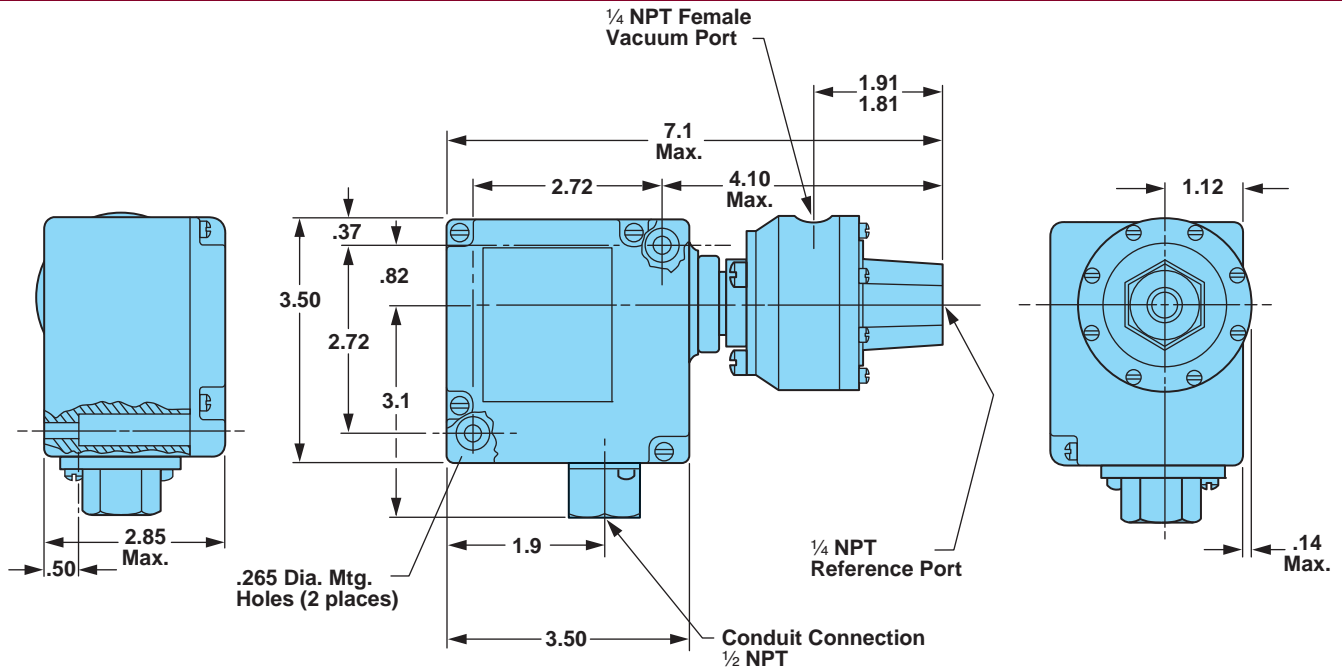
### Example



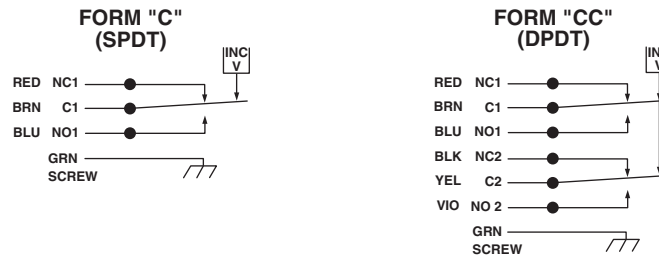
# Series 180P Vacuum Pressure Switch/Internal Adjustment

Field Adjustable  
1" to 28" Hg vac.

## Envelope Dimensions



## Electrical Form



## Basic Principles of Design

