



Explosion Proof Hermetically Sealed (NEMA 4X, 7, 9 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 +80 C)

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

* Temperature limits change with O-Ring selection

Adjustment

Internal, slotted adjustment wheel

Shipping Weight

Approximately 20 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" 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 • factory sealed • hermetically sealed electrical assembly P/N 057-0770 (C Form); P/N 057-0771 (CC Form). **Underwriters Laboratories, Inc.** listed (file #E56677) or **Canadian Standards Association** certified (file #34146) for Division 1 and 2; Class I, Groups A, B, C and D; Class II, Groups E, F and G hazardous locations (NEMA 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 Stainless Steel Body
- I ¾" NPT Conduit box with terminal strip
- M Gold electrical contacts for extremely low current applications
- N CE Mark; ATEX approval
- R 72" Electrical free leads
- Z Mounting bracket kit

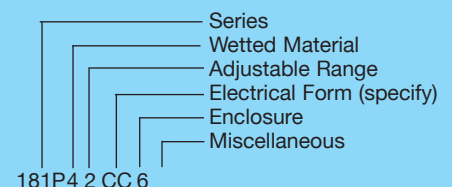
Special (Consult representative or factory)

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

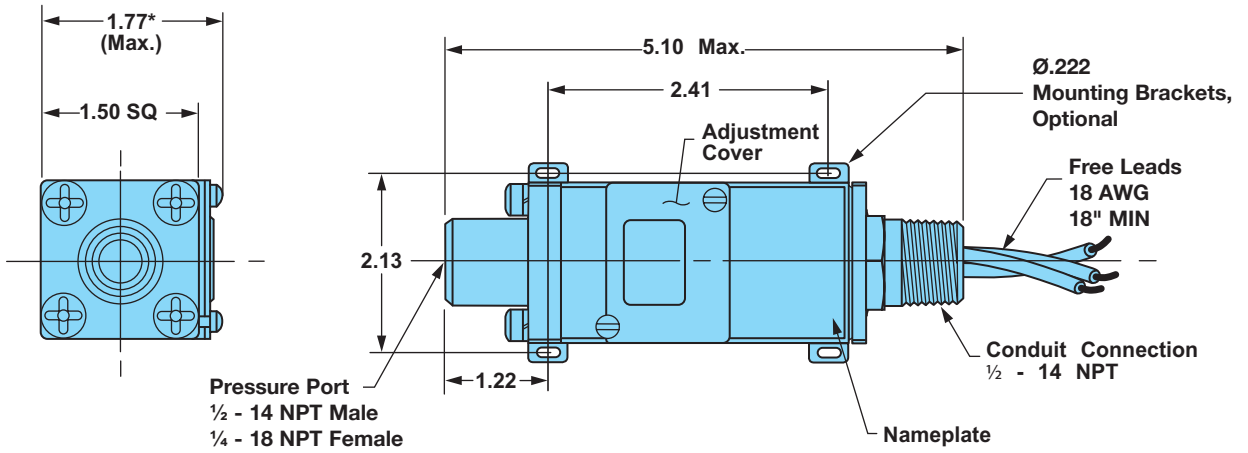
Ordering Procedure

- 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

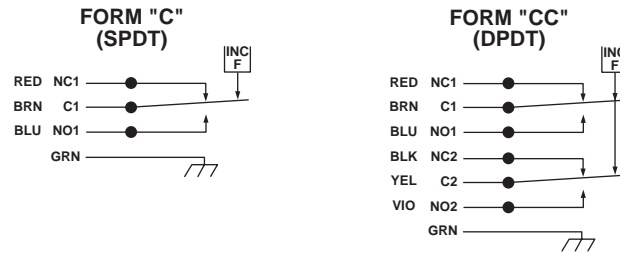
Example



Envelope Dimensions



Electrical Form



Basic Principles of Design

