



## Explosion Proof Hermetically Sealed (NEMA 7 and 9)

### DESCRIPTION

Ultra low pressure and vacuum to pressure crossover switch. Unique construction using Nega-Rate® Belleville disc spring for stable set points and high proof pressure. Explosion proof enclosure and wide range of wetted materials makes this switch especially well suited for hazardous or corrosive atmospheres.

### Operating Pressure Data

Adjustable Range Number	Adjustable Set Point Range	Deadband* (approximate)	Maximum Recommended System Pressure	Proof Pressure
	Increasing			
0	1" to 10" H <sub>2</sub> O	.75" H <sub>2</sub> O	30" H <sub>2</sub> O Vacuum to 30" H <sub>2</sub> O Pressure	30" H <sub>2</sub> O Vacuum to +5 psig
1	2" to 40" H <sub>2</sub> O	1" H <sub>2</sub> O	30" H <sub>2</sub> O Vacuum to +5 psig	30" H <sub>2</sub> O Vacuum to +15 psig
2	0" to 40" H <sub>2</sub> O Vacuum to 0" to 40" H <sub>2</sub> O Pressure	1" H <sub>2</sub> O	Full Vacuum to +15 psig	Full Vacuum to 100 psig

\*Deadband 50% wider with "CC" (DPDT) Electrical Forms.

### Standard Specifications

#### Electrical

Snap action electrical switch listed by Underwriters' Laboratories, Inc., Factory Mutual and CSA Testing Laboratories

#### Electrical Connection

½" - 14 NPT male conduit connection with PVC insulated 18 AWG leads 18" long

#### Pressure Connection

½" - 14 NPT Female

#### Temperature Range\*

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

Media: -50°F to +250°F  
(-46°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

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

#### OPTIONS

##### Adjustable Range

- 0 .25" H<sub>2</sub>O dec. to 10" H<sub>2</sub>O inc.
- 1 1" H<sub>2</sub>O dec. to 40" H<sub>2</sub>O inc.
- 2 40" H<sub>2</sub>O inc. vac. to 40" H<sub>2</sub>O inc. pressure

##### Electrical Form

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

##### Enclosure

- 6 Explosion proof • factory sealed • hermetically sealed electrical assembly P/N 057-0030 (C Form); P/N 057-0057 (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 — extra protection for severe environments
- I ¾" Conduit box with terminal strip
- M Gold electrical contacts for extremely low current applications
- N CENELEC approval
- R 72" Electrical free leads

##### Port Material

- 4 316 Stainless Steel
- 7 Hastelloy C

##### Diaphragm

- 1 Polyimide
- 4 316 Stainless Steel
- 6 Tantalum
- 7 Hastelloy C

##### O-Rings

- 2 Kalrez
- 3 Viton
- 5 EPR
- 8 Buna-N

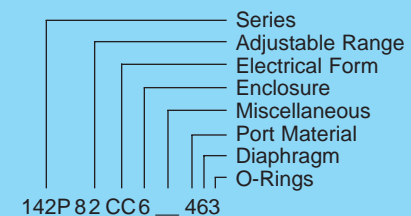
#### Special (Consult representative or factory)

- Non-catalog adjustable range and/or set point, deadband and proof pressure
- Operating temperature capabilities from -65°F to +400°F

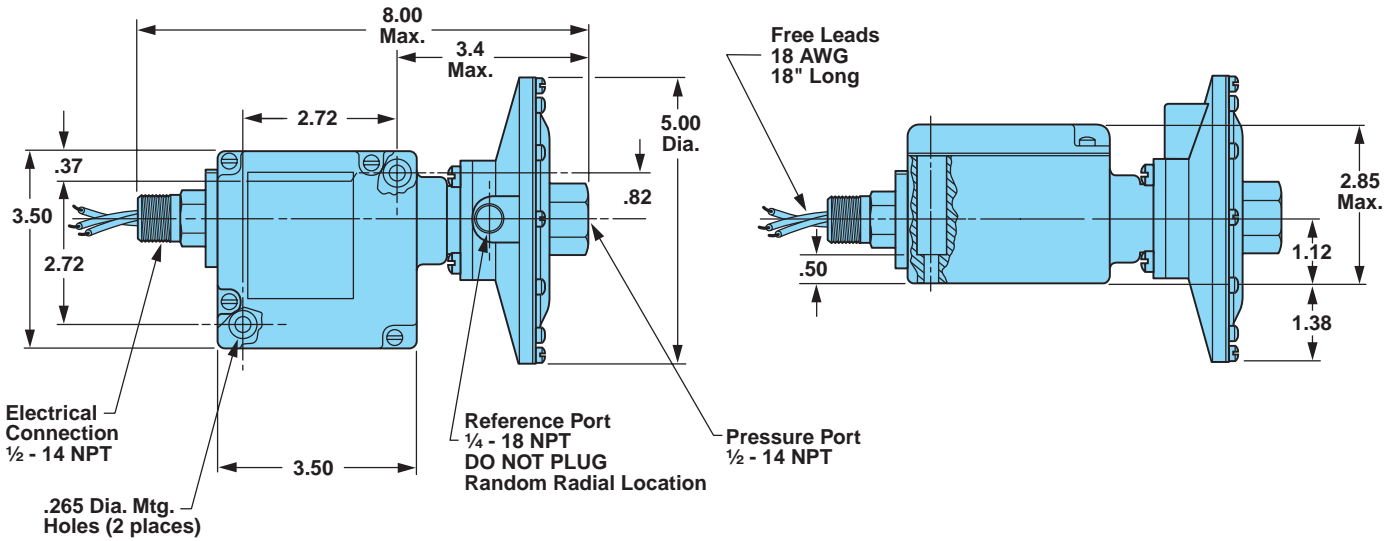
### Ordering Procedure

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

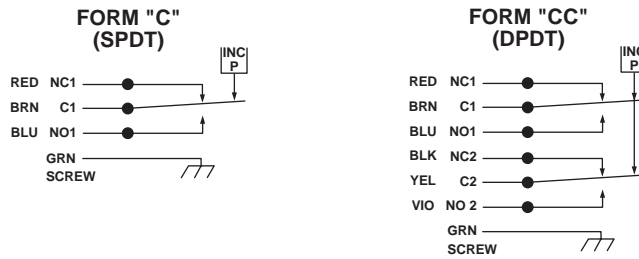
### Example



Envelope Dimensions



Electrical Form



Basic Principles of Design

