

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

### DESCRIPTION

Compact, adjustable pressure switch for low to mid-range process applications. Efficient Nega-Rate® Belleville disc spring for set point stability and vibration resistance. Wide selection of wetted materials with stainless steel body and interior plus hermetically sealed, explosion-proof electrical make this switch ideal for chemical process applications.

### Operating Pressure Data

| Adjustable Range Number | Adjustable Set Point Range |              | Deadband (approximate) | Maximum Recommended System Pressure | Proof Pressure |
|-------------------------|----------------------------|--------------|------------------------|-------------------------------------|----------------|
|                         | Increasing                 | Decreasing   |                        |                                     |                |
| 2                       | 3 to 30                    | 1 to 28      | 2                      | 1350                                | 2000           |
| 4                       | 20 to 80                   | 15 to 75     | 5                      | 1350                                | 2000           |
| 5                       | 50 to 250                  | 30 to 230    | 20                     | 5000                                | 7500           |
| 6                       | 200 to 400                 | 175 to 375   | 25                     | 5000                                | 7500           |
| 7                       | 375 to 725                 | 330 to 680   | 45                     | 5000                                | 7500           |
| 8                       | 700 to 1500                | 620 to 1420  | 80                     | 6500                                | 7500           |
| 9                       | 1500 to 2300               | 1400 to 2200 | 100                    | 6500                                | 7500           |

All values given in psig.

### 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: -40°F to +250°F  
(-40°C to +121°C)

\*Temperature limits change with O-Ring selection

#### Adjustment

Internal, slotted adjustment nut with range scale

#### Shipping Weight

Approximately 2 pounds

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

#### OPTIONS

##### Adjustable Range

|   |                                  |                                   |
|---|----------------------------------|-----------------------------------|
| 2 | 1 psig dec. to 30 psig inc.      | (0.1 bar dec. to 2.1 bar inc.)    |
| 4 | 15 psig dec. to 80 psig inc.     | (1.0 bar dec. to 5.5 bar inc.)    |
| 5 | 30 psig dec. to 250 psig inc.    | (2.1 bar dec. to 17.2 bar inc.)   |
| 6 | 175 psig dec. to 400 psig inc.   | (12.1 bar dec. to 27.6 bar inc.)  |
| 7 | 330 psig dec. to 725 psig inc.   | (22.8 bar dec. to 50.0 bar inc.)  |
| 8 | 620 psig dec. to 1500 psig inc.  | (42.7 bar dec. to 103.4 bar inc.) |
| 9 | 1400 psig dec. to 2300 psig inc. | (96.5 bar dec. to 158.6 bar inc.) |

##### 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

|   |   |
|---|---|
| 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                               | 8 | Monel                                     |
| 5 | 316 Stainless Steel — welded diaphragm (add 40)   | 9 | Monel — welded Inconel diaphragm (add 90) |
| 7 | Hastelloy C — welded Hastelloy diaphragm (add 70) |   |   |

##### Diaphragm

|   |                     |   |             |
|---|---------------------|---|-------------|
| 1 | Polyimide           | 7 | Hastelloy C |
| 4 | 316 Stainless Steel | 9 | Inconel     |
| 6 | Tantalum            |   |             |

##### Internal O-Rings

|   |               |   |        |
|---|---------------|---|--------|
| 0 | None Required | 5 | EPR    |
| 2 | Kalrez        | 8 | Buna-N |
| 3 | Viton         |   |        |

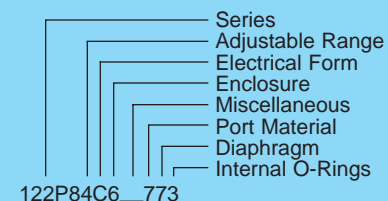
#### Special (Consult representative or factory)

- Non-catalog adjustable range and/or set point and deadband

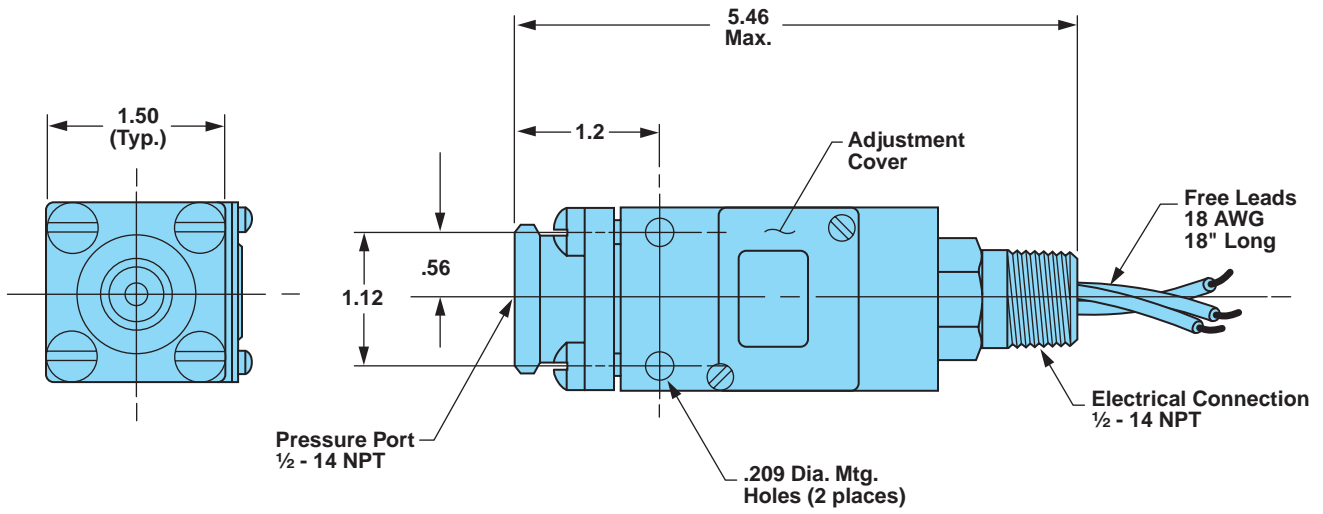
### Ordering Procedure

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

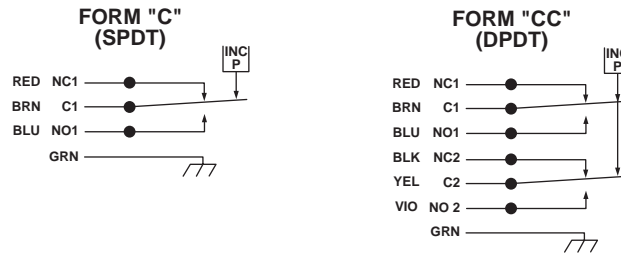
### Example



Envelope Dimensions



Electrical Form



Basic Principles of Design

