



**Explosion Proof
(NEMA 4X, 7, 9 and 13)**

DESCRIPTION

Versatile Nega-Rate® Belleville disc spring pressure switch for use in hazardous areas. Applications include pneumatic and low impulse hydraulics up to 3000 psig system pressures. Various wetted material selections make this switch ideal for your specific requirement.

Operating Pressure Data

| Adjustable Range Number | Adjustable Set Point Range | | Deadband (approximate) | Maximum Recommended System Pressure | Proof Pressure |
|-------------------------|----------------------------|-------------|------------------------|-------------------------------------|----------------|
| | Increasing | Decreasing | | | |
| 1 | 5 to 75 | 2.3 to 72.3 | 2.7 | 600 | 1000 |
| 2 | 15 to 150 | 9 to 144 | 6 | 3000 | 5000 |
| 4 | 50 to 300 | 36 to 286 | 14 | 3000 | 5000 |
| 5 | 125 to 600 | 100 to 575 | 25 | 3000 | 5000 |
| 7 | 500 to 1500 | 440 to 1440 | 60 | 3000 | 5000 |
| 8 | 800 to 2800 | 675 to 2675 | 125 | 3000 | 5000 |

All values given in psig.

Standard Specifications

Electrical

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

Electrical Connection

¾ NPT female conduit connection with terminal block

Pressure Connection

Wetted Material 1

¼ NPT Female

Wetted Material 4, 5, 7 and 9

½ NPT Female

Temperature Range

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

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

Adjustment

Tool free internal adjustment with range scale

Shipping Weight

Approximately 6 pounds

Ordering Sequence — Select desired option for each category

OPTIONS

Wetted Material

- 1 Aluminum port, Teflon coated polyimide diaphragm, Buna-N O-Ring
- 4 316 stainless steel port, Teflon coated polyimide diaphragm, Buna-N O-Ring
- 5 316 stainless steel port and diaphragm, heliarc welded
- 7 Hastelloy C port and diaphragm, heliarc welded (Except Range 1)
- 9 Monel port and inconel diaphragm, heliarc welded (Except Range 1)

Adjustable Range

- 1 2.3 psig dec. to 75 psig inc. (0.2 bar dec. to 5.2 bar inc.)
- 2 9 psig dec. to 150 psig inc. (0.6 bar dec. to 10.3 bar inc.)
- 4 36 psig dec. to 300 psig inc. (2.5 bar dec. to 20.7 bar inc.)
- 5 100 psig dec. to 600 psig inc. (6.9 bar dec. to 41.4 bar inc.)
- 7 440 psig dec. to 1500 psig inc. (30.3 bar dec. to 103.4 bar inc.)
- 8 675 psig dec. to 2800 psig inc. (46.5 bar dec. to 193.1 bar inc.)

Electrical Form

C 15 amp 125, 250 or 480 VAC; 2 amp 600 VAC; ⅛ hp 125 VAC; ¼ hp 250 VAC; .5 amp resistive, .04 amp inductive 125 VDC

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

Z 15 amp 125, 250 or 480 VAC; ¼ hp 125 VAC; ½ hp 250 VAC; 1 amp resistive, .5 amp inductive 125 VDC

Enclosure

7 Explosion proof, **CE MARK Underwriters Laboratories, Inc.** listed (File E56677), **CSA International** certified (File LR34146), **Factory Mutual** approved (File J.I.1R5A9.AE) and **DEMKO** approved (File 00ATEX124734X) for Division 1 and 2; Class I, Groups C and D; Class II, Groups E, F and G Hazardous Locations; NEMA type 7 and 9.

Miscellaneous

- A Epoxy paint exterior — extra protection for severe environments
- B Viton O-Ring
- C EPR O-Ring
- E ⅞" - 20 SAE Female Port (wetted material 1 only)
- F Fire fuse — for fire-tested equipment (wetted material 4 & 5 only)
- M Gold electrical contacts for extremely low current applications
- S Stainless steel diaphragm (wetted material 4 only)
- W Stainless steel screws — exterior (Standard with Wetted Materials 4, 5, 7 and 9)

Ordering Procedure

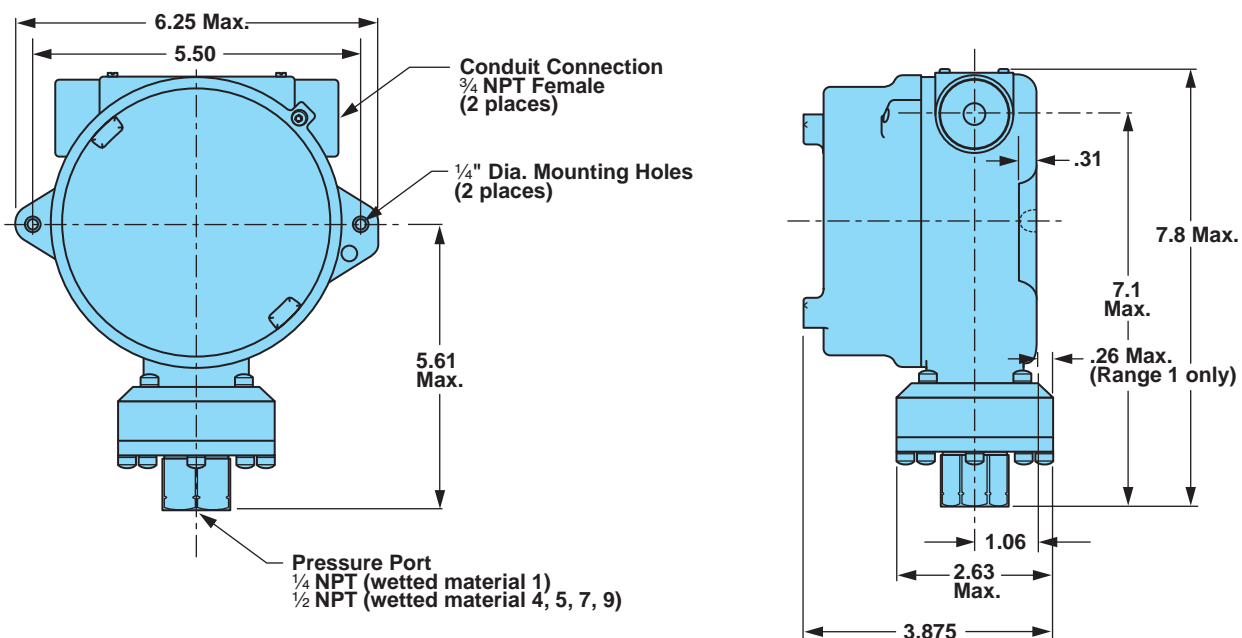
- When factory presetting is desired, stipulate set point, increasing or decreasing
- Insert available option number or letter designation as required

Example

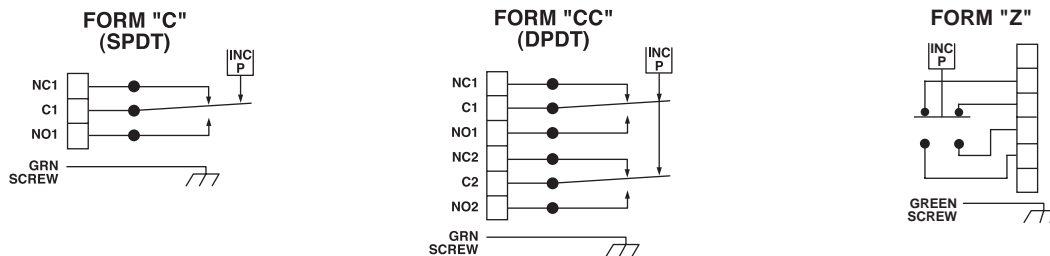
Series
Wetted Material
Adjustable Range
Electrical Form
Enclosure
Miscellaneous

100P 12 CC 7 —

Envelope Dimensions



Electrical Form



Basic Principles of Design

