

# Neo-Dyn® Series 152P8 Ultra Low Differential Pressure Switch

Ultra low adjustable differential pressure switch. Unique construction using efficient 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			
2	2" to 100" H <sub>2</sub> O Differential	1.5" H <sub>2</sub> O	15 psig Simul. or Hi over Low 100" H <sub>2</sub> O Low over Hi	100 PSI Simul. or Hi over Low 15 PSI Low over Hi

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

## Standard Specifications

### Electrical

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

### Electrical Connection

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

### Pressure Connection

High — ½ NPT Female  
Low — ¼ 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)

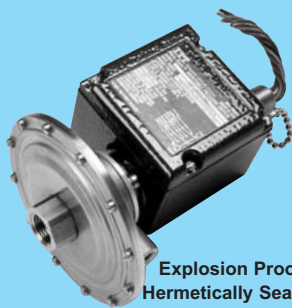
\*Temperature limits change with O-Ring selection. See Electrical Assembly specification sheet for Temperature Class Ratings.

### Adjustment

Concealed wrench flat adjustment with range scale

### Shipping Weight

Approximately 4 pounds



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

## Ordering Sequence — Select desired option for each category

### OPTIONS

#### Adjustable Range

2.5" H<sub>2</sub>O dec. (1.2 mb) to 100" H<sub>2</sub>O inc. (2.49 mb)

#### 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, hermetically-sealed electrical assembly, leads factory sealed, P/N 057-0770 (C Form) and P/N 057-0771 (CC Form); **Underwriters' Laboratories, Inc.** listed (File E56677), **CSA International** certified (File LR34146), and **Factory Mutual** approved (File J.I.1R5A9.AE) for Division 1 and 2; Class I, Groups A, B, 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

**I** ¾ NPT conduit box with terminal strip (Groups C & D only, not available with N option)

**M** Gold electrical contacts for extremely low current applications

**N** ATEX approval with CE Mark

**R** 72" Electrical free leads

#### Port Material

**1** 316 Stainless Steel High/Aluminum Low

**4** 316 Stainless Steel High/Low

#### 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

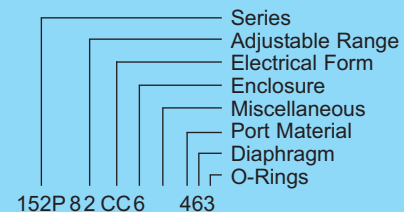
■ Media temperature capabilities from -65°F to +400°F

## Ordering Procedure

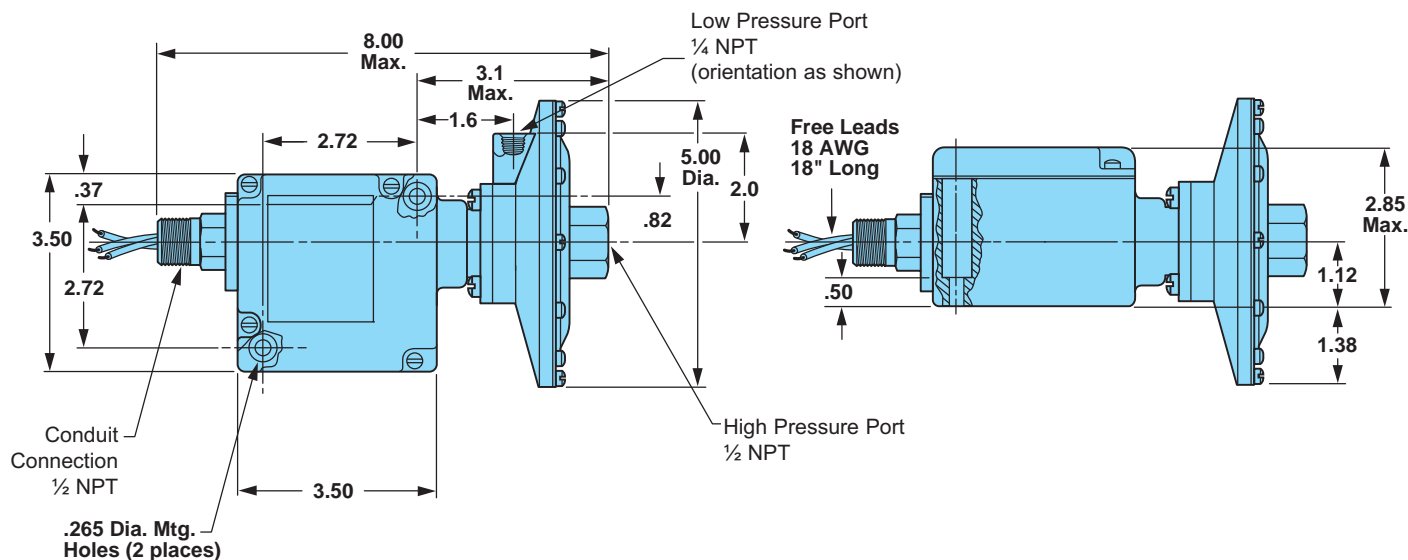
■ When factory presetting is desired, stipulate set point, increasing or decreasing and system pressure

■ Insert available option number or letter designation as required

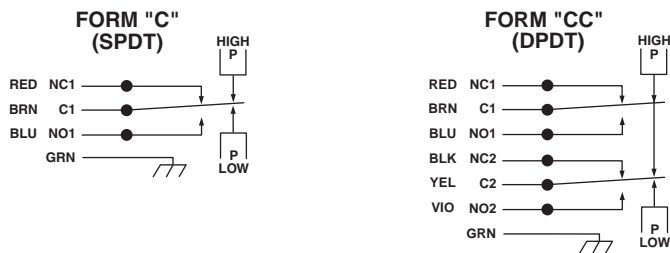
## Example



## Envelope Dimensions



## Electrical Form



## Basic Principles of Design

