# Neo-Dyn<sup>®</sup> Series 160P Differential Pressure Switch



#### **DESCRIPTION**

Mid-range, adjustable differential pressure switch. Efficient Nega-Rate® Belleville disc spring sensing mechanism for stable set points during system pressure changes. Hermetically sealed, explosion-proof electrical assembly well suited for hazardous or explosive environments.

Operating Pressure Data							
Adjustable Range Number	Adjustable Set Point Range		Deadband	Maximum Recommended	Proof		
	Increasing	Decreasing	(approximate)	System Pressure	Pressure		
2	1.1 to 15	.75 to 14.65	.35	300	500 Hi/Low 200 Low/Hi		
4	1.5 to 18	.3 to 16.8	1.2	500	1000 Hi/Low 400 Low/Hi		
6	5 to 60	2 to 57	3	500	1000 Hi/Low 400 Low/Hi		
7	55 to 110	49 to 104	6	500	1000 Hi/Low 400 Low/Hi		

All values given in psid.

### **Standard Specifications**

#### **Electrical**

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

#### **Electrical Connection**

1/2 NPT male conduit connection with PVC insulated 18 AWG, 18" long leads

#### **Pressure Connection**

1/4 NPT Female

### **Temperature Range\***

Ambient: -40°F to +180°F

 $(-40^{\circ}\text{C to } +82^{\circ}\text{C})$ 

Media: -40°F to +250°F

 $(-40^{\circ}\text{C to} + 121^{\circ}\text{C})$ 

\*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 3.5 pounds

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

#### **OPTIONS**

#### Wetted Material

- Aluminum port and body, Teflon coated polyimide diaphragm, Buna-N O-Rings and stainless steel
- Stainless steel, Teflon coated polyimide diaphragm and Buna-N O-Rings

Adjustable Bange

Adjustable Nalige						
2	.75 psid dec. to	15 psid inc.	(0.1 bar dec. to	1.0 bar inc.)		
4	.3 psid dec. to	18 psid inc.	(0.0 bar dec. to	1.2 bar inc.)		
6	2 psid dec. to	60 psid inc.	(0.1 bar dec. to	4.1 bar inc.)		
7	49 psid dec. to	110 psid inc.	(3.4 bar dec. to	7.6 bar inc.)		

### **Electrical Form**

- 11 amp, ¼ hp at 125 or 250 VAC; 5 amp resistive, 3 amp inductive at 28 VDC; .5 amp resistive at 125 VDC
- 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**

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

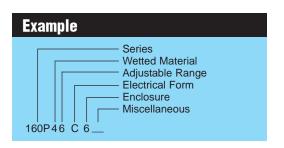
- Epoxy paint exterior extra protection for severe environments
- Viton O-Ring
- C EPR O-Ring
- 3/4 NPT conduit box with terminal strip (Groups C & D only)
- M Gold electrical contacts for extremely low current applications
- ATEX approval with CE Mark
- 72" Electrical free leads
- Stainless steel diaphragm No low over high capability (Ranges 2 & 4 and Wetted Material

- Point (Consult representative or factory)

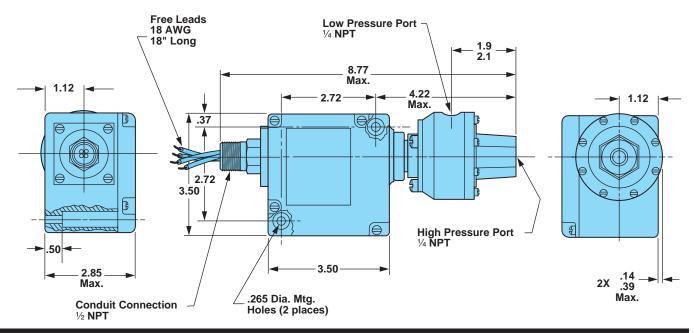
  Non-catalog adjustable range and/or set point, deadband and proof pressure
- Media temperature capability from -65°F to +350°F
- Chemical seals installed

### **Ordering Procedure**

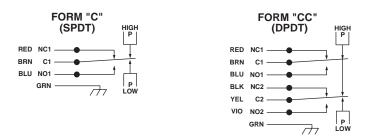
- When factory presetting is desired, stipulate set point, increasing or decreasing and system pressure
- Insert available option number or letter designation as required



## **Envelope Dimensions**



### **Electrical Form**



## **Basic Principles of Design**

