

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

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°C to +82°C)

-40°F to +250°F Media:  $(-40^{\circ}C \text{ to } + 121^{\circ}C)$ 

\*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 Range

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

#### **Electrical Form**

- 11 amp, 1/4 hp at 125 or 250 VAC; 5 amp resistive, 3 amp inductive at 28 VDC; .5 amp resistive at 125 VDC
- 11 amp, 1/4 hp at 125 or 250 VAC; 5 amp resistive, 3 amp inductive at 28 VDC; .5 amp resistive at 125 VDC

Explosion proof, hermetically-sealed electrical assembly, EX d IIC. Part Numbers 057-0770 & 057-0772 (Form C) and 057-0771 & 057-0773 (Form CC). Agency listings include Underwriters Laboratories, Inc., CSA International, Factory Mutual, and Inmetro. Division 1 and 2, Class I, Groups A, B, C, and D; Class II, Groups E, F, and G. NEMA 4X, 7, and 9; IP66. Leads are factory sealed and Pressure Switches are Dual Seal Certified.

#### Miscellaneous

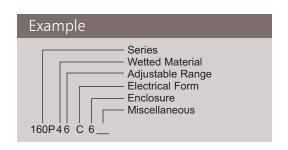
- Epoxy paint exterior extra protection for severe environments
- Viton O-Ring
- EPR O-Ring
- SIL approval and marking, per IEC61508 (includes FMEA report) D
- 3/4 NPT conduit box with terminal strip (Groups C & D only, not available with N option)
- Gold electrical contacts for extremely low current applications
- ATEX and IECEx with CE Mark
- 72" Electrical free leads
- Stainless steel diaphragm No low over high capability (Ranges 2 & 4 and Wetted Material 4 only)

Special (Consult representative or factory)

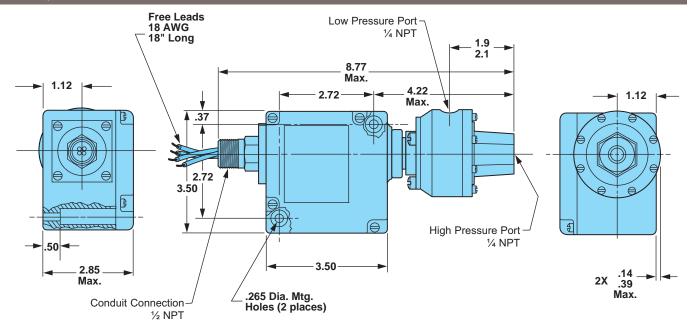
- Non-catalog adjustable range and/or set point, deadband and proof pressure Media temperature capability from -65°F to +350°F
- Chemical seals installed
- Optional orientation of Low Pressure Port

### Ordering Procedure

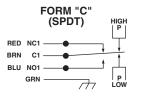
- When factory presetting is desired, stipulate set point, increasing or decreasing and system pressure
- Insert available option number or letter designation as required

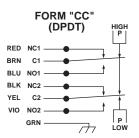


## **Envelope Dimensions**



### Electrical Form





### Basic Principles of Design

