

# Neo-Dyn® Series 231P Pressure Switch/Internal Adjustment



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

## DESCRIPTION

Compact, adjustable pressure switch for high pressure hydraulic process applications. Our combined piston sensor and efficient Nega-Rate® Belleville disc spring offers superior set point stability and vibration resistance.

## Operating Pressure Data

Adjustable Range Number	Adjustable Set Point Range		Deadband (approximate)	Maximum Recommended System Pressure	Proof Pressure
	Increasing	Decreasing			
3	*	250 to 710	90	4000	5000
4	*	600 to 1050	140	4000	5000
5	*	700 to 2700	300	6000	8000
6	*	2400 to 4400	450	6000	8000
7	*	4100 to 6500	500	8000	10000
8	*	5500 to 9000	1000	12,500	15,000

All values given in psig unless otherwise noted.

\* Add selected deadband to decreasing pressure range.

## Standard Specifications

### Electrical Listings

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

¼ NPT Female and  
½ NPT Male (N/A Range 8)

### Temperature Range\*

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

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

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

### Adjustment

Internal, slotted adjustment nut

### Shipping Weight

Approximately 20 ounces

## Ordering Sequence — Select desired option for each category

### OPTIONS

#### Wetted Material

- 1 Aluminum port and piston, teflon seal, and Buna-N O-Ring (Not available for range 8)
- 4 316 Stainless Steel port and piston, teflon seal, and Buna-N O-Ring

#### Adjustable Range

- 3 250 psig dec. to 800 psig inc. (17.3 bar dec. to 55.1 bar inc.)
- 4 600 psig dec. to 1190 psig inc. (41.4 bar dec. to 82.0 bar inc.)
- 5 700 psig dec. to 3000 psig inc. (48.3 bar dec. to 207 bar inc.)
- 6 2400 psig dec. to 4850 psig inc. (165 bar dec. to 334 bar inc.)
- 7 4100 psig dec. to 7000 psig inc. (283 bar dec. to 483 bar inc.)
- 8 5500 psig dec. to 10,000 psig inc. (379 bar dec. to 689 bar inc.)

#### 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
- B Viton O-Ring
- C EPR O-Ring
- D SAA Approval
- H Stainless steel body (Wetted Material 4 only)
- I ¾ NPT Conduit box with terminal strip (Groups C & D only)
- J Annealed stainless steel port screws for H<sub>2</sub>S environments — Consult factory for reduced system and proof pressure ratings
- M Gold electrical contacts for extremely low current applications
- N ATEX approval with CE Mark
- R 72" Electrical free leads
- Z Mounting bracket kit

#### Special (Consult representative or factory)

- Non-catalog adjustable range and/or set point, deadband and proof pressure

## Ordering Procedure

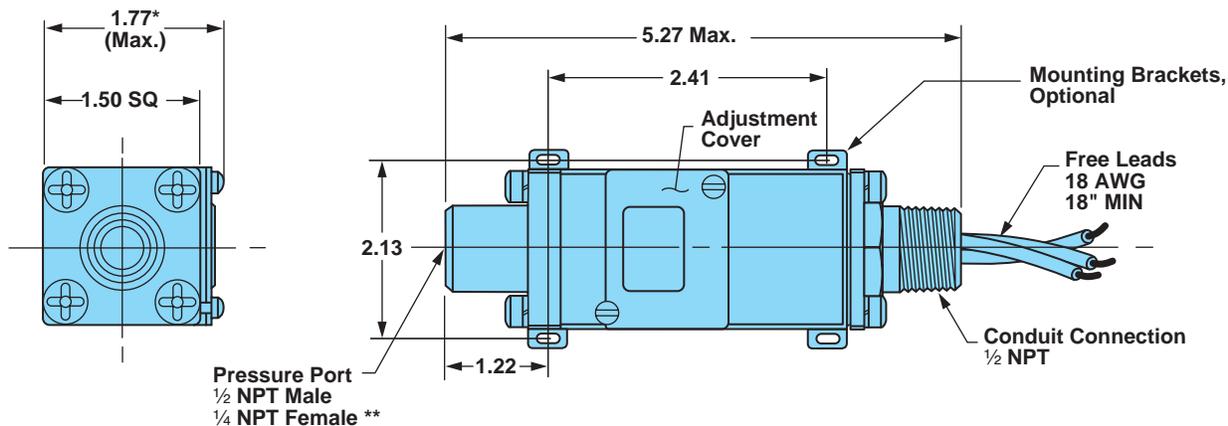
- When factory presetting is desired, stipulate set point, increasing or decreasing
- Insert available option number or letter designation as required

## Example

Series  
Wetted Material  
Adjustable Range  
Electrical Form (specify)  
Enclosure  
Miscellaneous

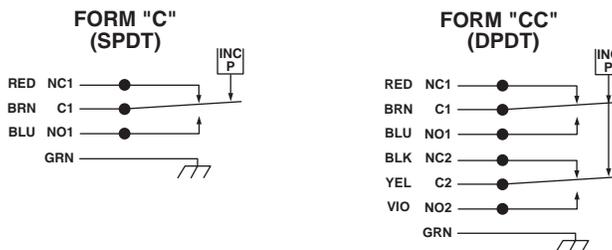
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**Envelope Dimensions**



\* 1.90 Max. with Mounting Bracket  
\*\* No 1/4 NPT for Range 8

**Electrical Form**



**Basic Principles of Design**

