



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

DESCRIPTION

Compact, adjustable pressure switch for high pressure pneumatic and low impulse hydraulic process applications. Using our Nega-Rate® Belleville disc spring, we offer superior set point stability and vibration resistance. The 131P series pressure switch also has a selectable deadband feature which can be preset to fit most any application.

Operating Pressure Data

Adjustable Range Number	Adjustable Set Point Range		Selectable Deadband	Default Deadband (approx.)	Maximum Recommended System Pressure	Proof Pressure
	Increasing	Decreasing				
2	*	1 to 24	1 to 1.5	1.4	1000	2000
3	*	17 to 42	3 to 5	4	1000	2000
4	*	1 to 50	7 to 11	9	1000	2000
5	*	45 to 100	7 to 11	9	1000	2000
6	*	90 to 150	9 to 17	13	1000	2000
7	*	140 to 200	11 to 21	16	1000	2000

All values given in psig unless otherwise noted.

* Add selected deadband to decreasing pressure range.

Standard Specifications

Electrical

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

Electrical Connection

½" - 14 NPT male conduit connection

Pressure Connection

¼" - 18 NPT Female and
½" - 14 NPT Male

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

Adjustment

Internal, slotted adjustment wheel

Shipping Weight

Approximately 20 ounces

Ordering Sequence — Select desired option for each category

OPTIONS

Wetted Material

- 1 Aluminum port, polyimide diaphragm, Buna-N O-Ring
- 4 316 stainless steel port, polyimide diaphragm, Buna-N O-Ring

Adjustable Range

- 2 1 psig dec. to 25 psig inc. (.069 bar dec. to 1.72 bar inc.)
- 3 17 psig dec. to 46 psig inc. (1.17 bar dec. to 3.17 bar inc.)
- 4 1 psig dec. to 59 psig inc. (.069 bar dec. to 4.07 bar inc.)
- 5 45 psig dec. to 109 psig inc. (3.10 bar dec. to 7.51 bar inc.)
- 6 90 psig dec. to 163 psig inc. (6.21 bar dec. to 11.2 bar inc.)
- 7 140 psig dec. to 216 psig inc. (9.65 bar dec. to 14.9 bar inc.)

Electrical Form

- C 11 amps ¼ hp 125 or 250 VAC; 5 amps resistive, 3 amps inductive 28 VDC; .5 amps resistive 125 VDC
- CC 11 amps ¼ hp 125 or 250 VAC; 5 amps resistive, 3 amps inductive 28 VDC; .5 amps resistive 125 VDC

Enclosure

- 6 Explosion proof • factory sealed • hermetically sealed electrical assembly P/N 057-0030 (C Form); P/N 057-0057 (CC Form). **Underwriters' Laboratories, Inc.** listed (file #E56677) or **Canadian Standards Association** certified (file #34146) for Division 1 and 2; Class I, Groups A, B, C and D; Class II, Groups E, F and G hazardous locations (NEMA 7 and 9)

Miscellaneous

- A Epoxy paint exterior — extra protection for severe environments
- B Viton O-Ring
- C EPR O-Ring
- D SAA Approval
- E ¼" - 20 SAE Port
- G ½" - 14 NPT Female Port
- H Stainless steel body
- I ¾" Conduit box with terminal strip
- J Annealed stainless steel port screws for H₂S environments — Consult factory for reduced system and proof pressure ratings
- M Gold electrical contacts for extremely low current applications
- N CENELEC approval
- R 72" Electrical free leads
- S Stainless steel diaphragm
- V ¼" - 18 NPT male port
- Z Mounting bracket kit

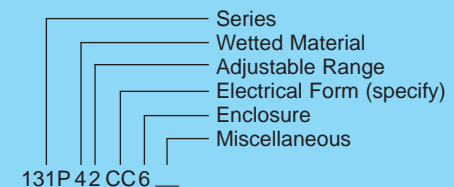
Special (Consult representative or factory)

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

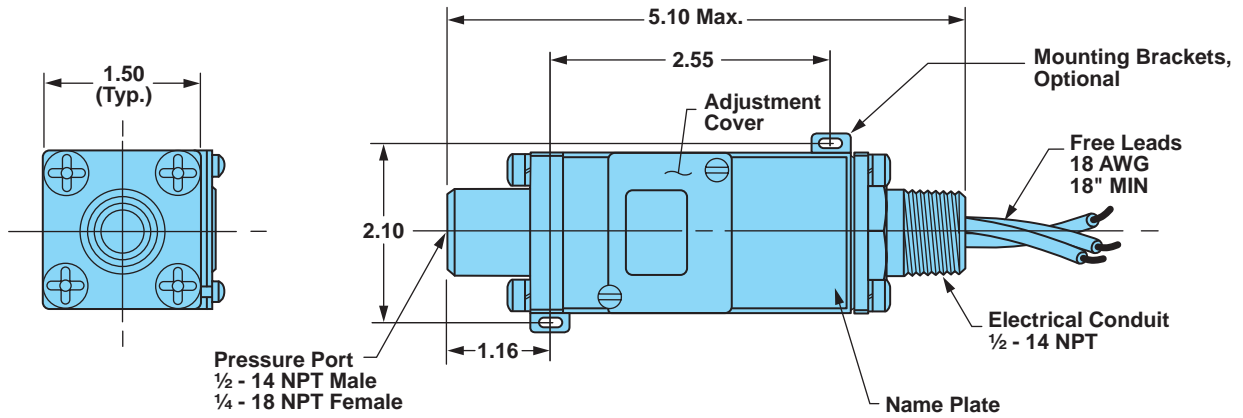
Ordering Procedure

- When factory presetting is desired, stipulate set point, increasing or decreasing
- Insert available option number or letter designation as required
- When a selectable DB is desired, stipulate DB within allowed range

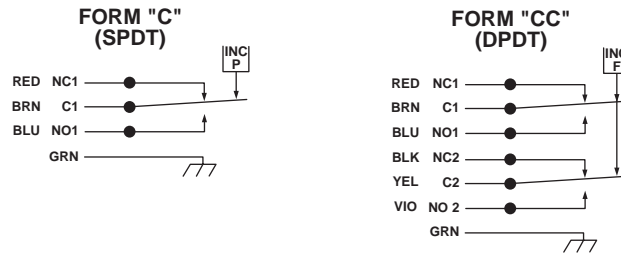
Example



Envelope Dimensions



Electrical Form



Basic Principles of Design

