

DESCRIPTION

Compact, adjustable pressure switch for pneumatic and low impulse hydraulic process applications. Using our efficient 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	Default	Maximum Recommended	Proof				
	Increasing	Decreasing	Deadband	Deadband (approx.)	System Pressure	Pressure				
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.

Standard Specifications

Electrical Listings

Snap action electrical switch 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 and 1/2 NPT Male

Temperature Range*

Ambient: -40°F to +180°F

(-40°C to +82°C)

Media: -40°F to +300°F

 $(-40^{\circ}\text{C to} + 149^{\circ}\text{C})$

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

Adjustment

Internal, slotted adjustment wheel

Shipping Weight

Approximately 20 ounces

Ordering Sequence — Select desired option for each category

OPTIONS

Aluminum port, polyimide diaphragm, Buna-N O-Ring

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

Adjustable Range

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

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

EPR O-Ring

SAA Approval
7/16" - 20 SAE Female Port

1/2 NPT Female Port

Stainless steel body (Wetted Material 4 only)

¾ NPT conduit box with terminal strip (Groups C & D only) Annealed stainless steel port screws for H₂S environments Consult factory

for reduced system and proof pressure ratings Gold electrical contacts for extremely low current applications ATEX approval with CE Mark

72" Electrical free leads

Stainless steel diaphragm

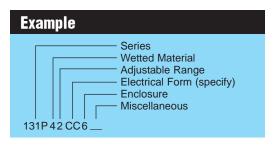
1/4 NPT male port Mounting bracket kit

cial (Consult representative or factory)

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

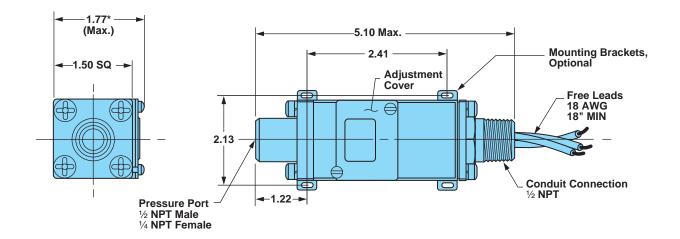
Ordering Procedure

- 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



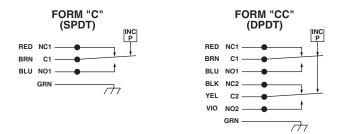
^{*} Add selected deadband to decreasing pressure range.

Envelope Dimensions



*1.90 Max. with Mounting Bracket

Electrical Form



Basic Principles of Design

