

Series 131P Pressure Switch/Internal Adjustment

Compact, adjustable pressure switch for pneumatic or 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 Deadband at a	Default	Maximum Recommended	Proof
	Increasing	Decreasing	Specified Set Point	Deadband (approx.)	System Pressure	Pressure
2	*	1 to 24	1.5 to 2	1.9	1000	2000
3	*	17 to 42	3 to 6	4.5	1000	2000
4	*	1 to 50	6 to 11	8	1000	2000
5	*	45 to 100	7 to 11	8	1000	2000
6	*	90 to 150	7 to 17	12	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 recognized by Underwriters' Laboratories, Inc. 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)

-40°F to +300°F Media:

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

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

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

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

Adjustable Range

1 psig dec. to 26 psig inc. (.069 bar dec. to 1.79 bar inc.) 17 psig dec. to 46 psig inc. (1.17 bar dec. to 3.17 bar inc.) (.069 bar dec. to 4.00 bar inc.) (3.10 bar dec. to 7.44 bar inc.) 1 psig dec. to 58 psig inc. 45 psig dec. to 108 psig inc. 90 psig dec. to 162 psig inc. 140 psig dec. to 216 psig inc. (6.21 bar dec. to 11.1 bar inc.) (9.65 bar dec. to 14.9 bar inc.)

Electrical Form C 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

Meets or exceeds the requirements of NEMA Type 3, 3R, 3S, 4, 4X and 13, IP65

Miscellaneous

Epoxy paint exterior — extra protection for severe environments Viton O-Ring

EPR O-Ring
SIL approval and marking, per IEC61508 (includes FMEA report)
7/16" - 20 SAE Female Port

1/2 NPT Female Port

1/2 NPT Conduit box with terminal strip

Annealed stainless steel port screws for H₂S environments — Consult factory for reduced system and proof pressure ratings (Not available with X or Z option) Gold electrical contacts for extremely low current applications

М

72" Electrical free leads

Stainless steel diaphragm

M20 x 1.5 Electrical Conduit Adapter

1/4 NPT male port

UL and CSA Approval and CE Mark (Not available with J option)

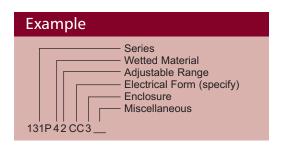
Mounting bracket kit (Not available with J option)

Special (Consult representative or factory)

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

Ordering Procedure

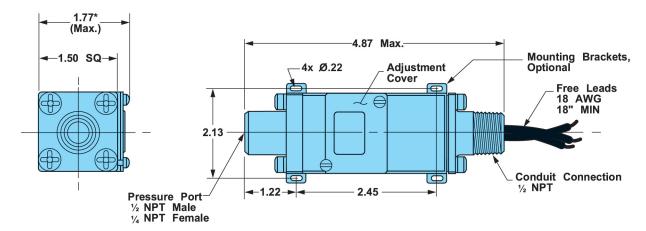
- When factory presetting is desired, stipulate set point, increasing or decreasing
- Insert available option number or letter designation as required
- When a selectable DB is desired, stipulate DB within allowed range



Add selected deadband to decreasing pressure range.

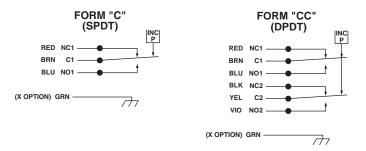
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Envelope Dimensions



*1.90 Max. with Mounting Bracket

Electrical Form



Basic Principles of Design

