

Neo-Dyn[®] Series 100P Pressure Switch/Internal Adjustment

Versatile Nega-Rate® Belleville disc spring pressure switch for use in hazardous areas. Applications include pneumatic and low impulse hydraulics up to 3000 psig system pressures. Various wetted material selections make this switch ideal for your specific requirement.

Operating Pressure Data								
Adjustable Range Number	Adjustable Set Point Range		Deadband	Maximum Recommended	Proof			
	Increasing	Decreasing	(approximate)	System Pressure	Pressure			
1	5 to 75	2 to 72	3	600	1000			
2	15 to 150	9 to 144	6	3000	5000			
4	50 to 300	36 to 286	14	3000	5000			
5	125 to 600	100 to 575	25	3000	5000			
7	500 to 1500	440 to 1440	60	3000	5000			
8	800 to 2800	675 to 2675	125	3000	5000			

All values given in psig.

Standard Specifications

Electrical

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

Electrical Connection 3/4 NPT female conduit connection with terminal block

Pressure Connection

Wetted Material 1 1/4 NPT Female

Wetted Material 4, 5, 7 and 9 1/2 NPT Female

Temperature Range

Ambient: -40°F to +180°F (-40°C to +82°C) -40°F to +300°F Media: (-40°C to +149°C)

Adjustment

Tool free internal adjustment with range scale

Shipping Weight

Approximately 6 pounds



Order Miscellaneous Option "D"

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

Ordering Sequence — Select desired option for each category

OPTIONS

2 4

5

7

Wetted Material

- Aluminum port, Teflon coated polyimide diaphragm, Buna-N O-Ring 316 stainless steel port, Teflon coated polyimide diaphragm, Buna-N O-Ring
- Δ
- 5 316 stainless steel port and diaphragm, heliarc welded
- Hastelloy C port and diaphragm, heliarc welded (Except Range 1) 9
- Monel port and inconel diaphragm, heliarc welded (Except Range 1)

Adjustable Range

2 psig dec.	to	75 psig inc.	(0.2 bar dec. to	5.2 bar inc.)
9 psig dec.	to	150 psig inc.	(0.6 bar dec. to	10.3 bar inc.)
36 psig dec.	to	300 psig inc.	(2.5 bar dec. to	20.7 bar inc.́)
100 nsig dec	to	600 psig inc	69 bar dec to	41 4 har inc.)

- 440 psig dec. to 1500 psig inc. (*30.3 bar dec. to 103.4 bar inc.*) 675 psig dec. to 2800 psig inc. (*46.5 bar dec. to 193.1 bar inc.*) 8

Electrical Form

- 15 amp 125, 250 or 480 VAC; 2 amp 600 VAC; 1/8 hp 125 VAC; 1/4 hp 250 VAC; С .5 amp resistive, .04 amp inductive 125 VDC
- 11 amp and 1/4 hp 125 or 250 VAC; 5 amp resistive, 3 amp inductive 28 VDC; CC .5 amp resistive 125 VDC
- Ζ 15 amp 125, 250 or 480 VAC; 1/4 hp 125 VAC; 1/2 hp 250 VAC; 1 amp resistive, .5 amp inductive 125 VDC

Enclosure

Explosion proof, CE MARK, Underwriters Laboratories, Inc. listed (File E56677) CSA International certified (File LR34146), and SIRA approved (File 10ATEX1018X) for Division 1

and 2; Class I, Groups C and D; Class II, Groups E, F and G; Ex d IIB Hazardous Locations:

NEMA type 7 and 9, and IP65.

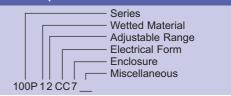
Miscellaneous

- Epoxy paint exterior extra protection for severe environments Viton O-Ring
- в
- EPR O-Ring С
- SIL approval and marking, per IEC61508 (includes FMEA report) 7/16" 20 SAE Female Port (wetted material 1 only) D
- Ε
- F Fire fuse — for fire-tested equipment (wetted material 4 & 5 only)
- Gold electrical contacts for extremely low current applications (1 Amp at 125 VAC; 1 Amp Res, 0.5 Amp Ind. at 28 VDC) Μ
- S
- Stainless steel diaphragm (wetted material 4 only) Stainless steel screws exterior (Standard with Wetted Materials 4, 5, 7 and 9) Ŵ

Ordering Procedure

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

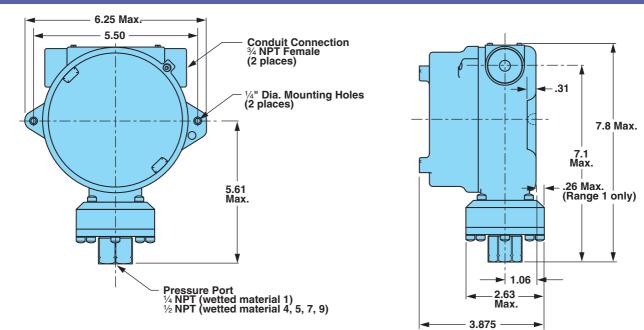
Example



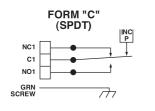
Field Adjustable 2.3 to 2800 psig

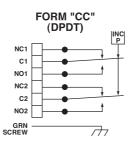
Series 100P

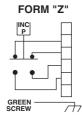
Envelope Dimensions



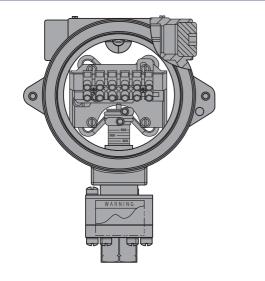
Electrical Form







Basic Principles of Design



Snap Action Electrical Element Adjustment Diaphragm Actuator Minimum Bearing Points O-Ring Diaphragm O-Ring Pressure Plate Negative Rate Belleville Disc Spring

Neo-Dyn®

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AER0935_3 7/13 Specifications and dimensions subject to change.