

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

Versatile Nega-Rate® Belleville disc spring pressure switch for a wide range of applications. Series 100P (diaphragm sensor) for pneumatic and low impulse hydraulics up to 3000 psig system pressure.

### Operating Pressure Data

Adjustable Range Number	Adjustable Set Point Range		Deadband (approximate)	Maximum Recommended System Pressure	Proof Pressure
	Increasing	Decreasing			
1	5 to 75	2.3 to 72.3	2.7	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 recognized by Underwriters' Laboratories, Inc. and CSA International

#### Electrical Connection

1/2 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)

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

Media temperature limits change with O-Ring selection

#### Adjustment

Concealed wrench flat adjustment with range scale

#### Shipping Weight

Approximately 3 pounds



Order Miscellaneous Option "D"



### Ordering Sequence — Select desired option for each category

#### OPTIONS

##### Wetted Material

- 1 Aluminum port, Teflon coated polyimide diaphragm and Buna-N O-Ring
- 4 316 stainless steel port, Teflon coated polyimide diaphragm and Buna-N O-Ring
- 5 316 stainless steel port and diaphragm heliarc welded
- 7 Hastelloy C port and diaphragm, heliarc welded (Except Range 1)
- 9 Monel port and inconel diaphragm heliarc welded (Except Range 1)

##### Adjustable Range

- 1 2.3 psig dec. to 75 psig inc. (0.2 bar dec. to 5.2 bar inc.)
- 2 9 psig dec. to 150 psig inc. (0.6 bar dec. to 10.3 bar inc.)
- 4 36 psig dec. to 300 psig inc. (2.5 bar dec. to 20.7 bar inc.)
- 5 100 psig dec. to 600 psig inc. (6.9 bar dec. to 41.4 bar inc.)
- 7 440 psig dec. to 1500 psig inc. (30.3 bar dec. to 103.4 bar inc.)
- 8 675 psig dec. to 2800 psig inc. (46.5 bar dec. to 193.1 bar inc.)

##### Electrical Form

- C 15 amp at 125 or 250 VAC; 1/8, hp at 125 VAC; 1/4 hp at 250 VAC; .5 amp resistive, .04 amp inductive at 125 VDC
- CC 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
- Z 15 amp at 125 or 250 VAC; 1/4 hp at 125 VAC; 1/2 hp at 250 VAC; 1 amp resistive, .5 amp inductive at 125 VDC

##### Enclosure

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

##### Miscellaneous

- A Epoxy paint exterior — extra protection for severe environments
- B Viton O-Ring
- C EPR O-Ring
- D SIL approval and marking, per IEC61508 (includes FMEA report)
- E 7/16" - 20 SAE port (Wetted Material 1 Only)
- F Fire fuse — for fire-tested equipment (Wetted Material 4 & 5 only)
- J Annealed stainless steel port screws for H2S environments (Wetted Materials 4 and 5 only) — Consult factory for reduced system and proof pressure
- L Neon indicator light — 115 VAC
- M Gold electrical contacts for extremely low current applications
- P 5-Pin Brad Harrison connector (Reduce AC electrical rating to 8 amps — (Not for CC3 Electrical)
- S Stainless steel diaphragm (Wetted Material 4 only)
- W Stainless steel screws — exterior (Standard with Wetted Materials 4, 5, 7 and 9)
- X UL and CSA Approved and CE Mark (Not available with L or P option)
- Y 2" NPT Female port for viscous medias. Port Material is carbon steel (Wetted Material "3") — Order as 100P3xxxY

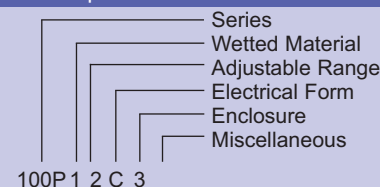
##### Special (Consult representative or factory)

- Non-catalog adjustable range and/or set point, deadband and proof pressure
- Media temperature capability from -65°F to +400°F
- Chemical seals installed
- Manual reset — decreasing only (available in C3 only)
- 10 amps 125 VDC electrical rating

### Ordering Procedure

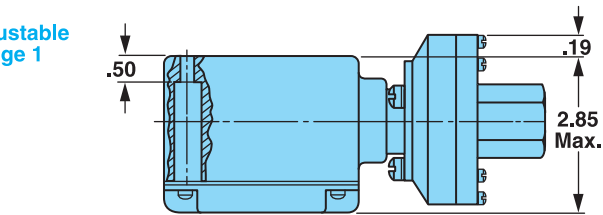
- When factory presetting is desired, stipulate set point, increasing or decreasing
- Insert available option number or letter designation as required

### Example

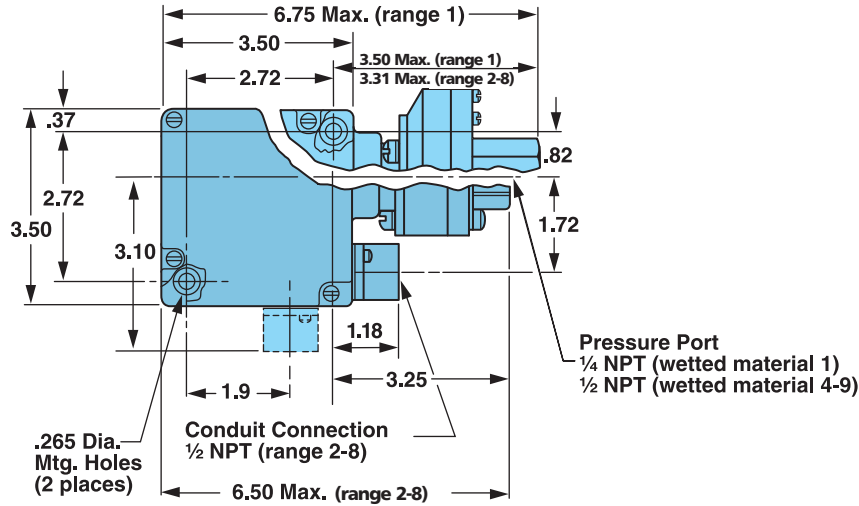
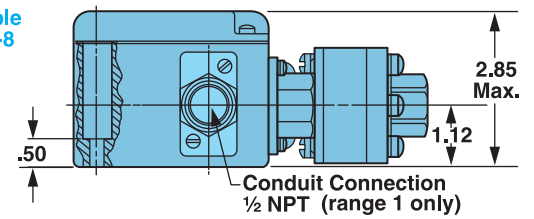


## Envelope Dimensions

Adjustable  
Range 1

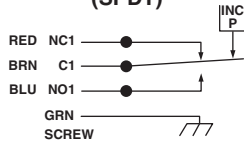


Adjustable  
Range 2-8

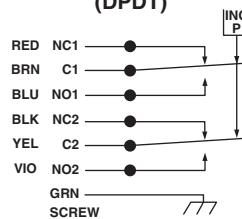


## Electrical Form

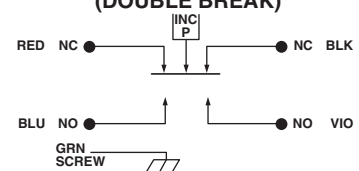
FORM "C"  
(SPDT)



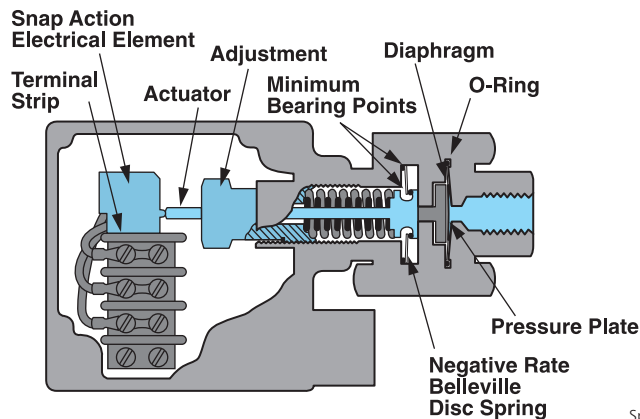
FORM "CC"  
(DPDT)



FORM "Z"  
(DOUBLE BREAK)



## Basic Principles of Design



AER0935\_1 7/13

Specifications and dimensions subject to change.