

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

Versatile Nega-Rate® Belleville spring pressure switch for use in division 2 hazardous areas. Applications include pneumatic and low impulse hydraulics up to 3000 psig system pressures. Various wetted material selections make this switch ideal for any type of process application.

## Operating Pressure Data

Adjustable Range Number	Adjustable Set Point Range		Deadband (approximate)	Maximum 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 Connection

3/4 NPT female conduit connection with terminal block and ground screw

### Pressure Connection

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

### \*Temperature Range (Ambient)

11 amp T4 -40°F to +165°F  
(-40°C to +74°C)  
5 amp T5 -40°F to +180°F  
(-40°C to +82°C)  
5 amp T6 -40°F to +172°F  
(-40°C to +78°C)

M Option:

1 amp T6 -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

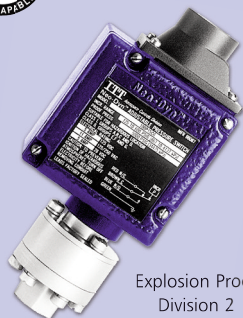
Concealed wrench flat adjustment with range scale

### Shipping Weight

Approximately 3 pounds



Order Miscellaneous Option "D"



Explosion Proof  
Division 2  
(NEMA 4X, 7, 9 and 13)

## Ordering Sequence — Select desired option for each category

### OPTIONS

#### Wetted Material

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

#### Enclosure

- 5 Explosion proof, hermetically-sealed electrical assembly for Division 2 Hazardous Locations, Underwriters Laboratories, Inc. listed (File E56677), CSA International certified (File LR34146)

#### 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)
- B 7/16" - 20 SAE Female Port (wetted material 1 only)
- F Fire fuse — for fire-tested equipment (wetted material 4 & 5 only)
- M Gold electrical contacts for extremely low current applications  
(1 Amp at 125 VAC; 1 Amp Res, 0.5 Amp Ind. at 28 VDC)
- O Oxygen clean
- S Stainless steel diaphragm (wetted material 4 only)
- W Stainless steel screws — exterior (Standard with Wetted Materials 4, 5, 7 and 9)
- Y 2" NPT Female port for viscous medias. Port Material is carbon steel (Wetted Material "3")  
— Order as 100P3xxxxY

## Ordering Procedure

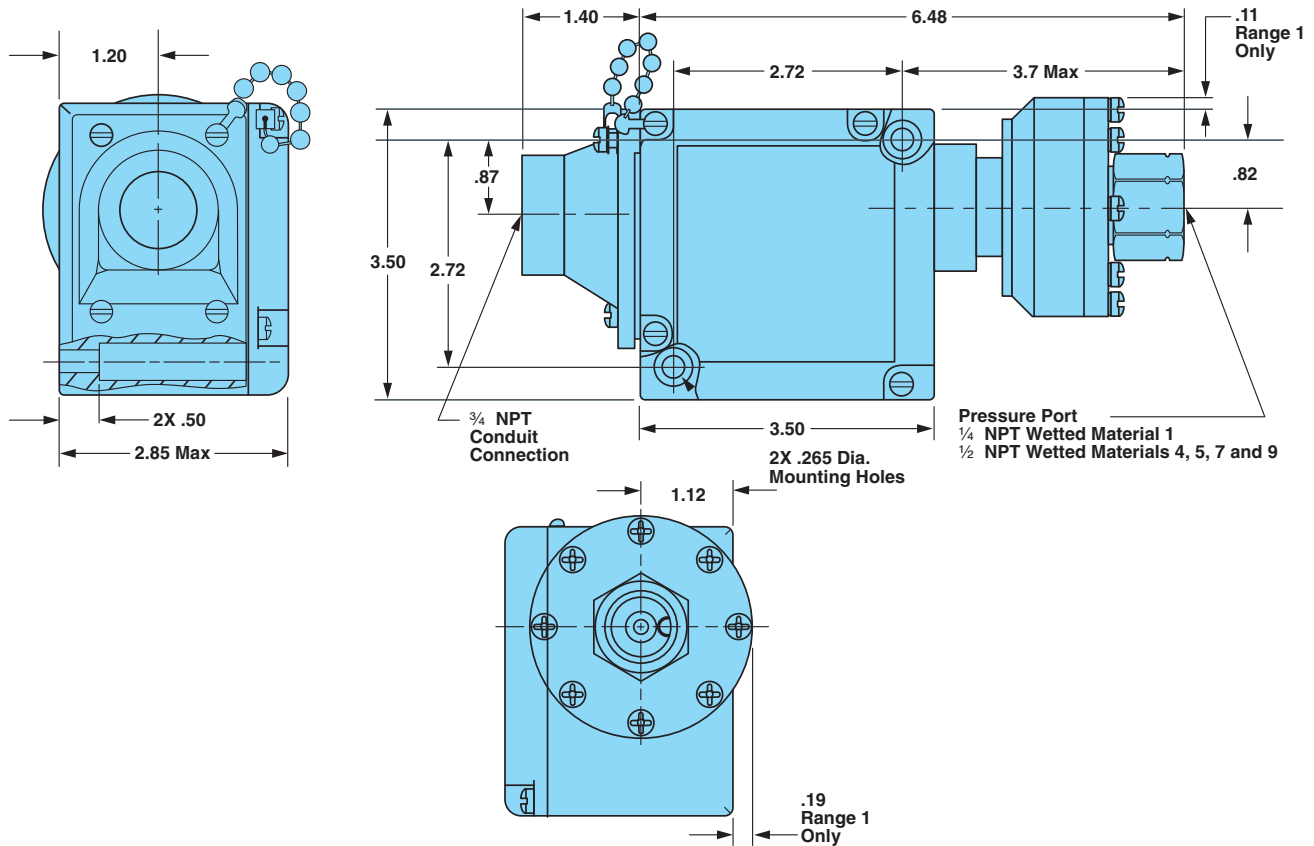
- When factory presetting is desired, stipulate set point, increasing or decreasing
- Insert available option number or letter designation as required

## Example

Series  
Wetted Material  
Adjustable Range  
Electrical Form  
Enclosure  
Miscellaneous

100P 12 C 5 \_ \_

## Envelope Dimensions



## Electrical Form



## Basic Principles of Design

