# Neo-Dyn<sup>®</sup> Series 112P Flanged Pressure Switch/Diaphragm Sensor



### **DESCRIPTION**

Flanged pressure switch for installations that formerly required a chemical seal with fill fluids. Reliable Nega-Rate® Belleville disc spring sensing mechanism. Redundant seals with venting between seals for alarm or indication. Hermetically sealed, explosion-proof electrical assembly well suited for hazardous or corrosive atmospheres.

	Operating Pressure Data												
	Adjustable Range Number	Adjustable Set Point Range		Deadband	Maximum Recommended System Pressure*		Proof Pressure 150# Flange 300# Flange						
		Increasing	Decreasing	(approximate)	150# Flange	300# Flange	Steel	Stainless	Steel	Stainless			
	2	3 to 30	1.5 to 28.5	2	210	555	375	425	950	1100			
	4	20 to 80	15 to 75	5	210	555	375	425	950	1100			
	5	80 to 180	60 to 160	20	210	555	375	425	950	1100			
	6	140 to 240	115 to 225	25	210	555	375	425	950	1100			
	7	225 to 325	190 to 290	35	_	555	_	_	950	1100			

All values given in psig.

# Standard Specifications

### **Flectrical**

Snap action electrical switch assembly 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 inch, 1/16 raised face flange per ANSI B 16.5 - 1998 Class 150 (150#) Class 300 (300#)

Note: Customer responsible for gasket selection and installation. (Refer to Installation and Operating Instructions supplied with switch)

### Temperature Range\*

Ambient: -40°F to +180°F

(-40°C to +82°C)

Media: -40°F to +250°F

 $(-40^{\circ}\text{C to} + 121^{\circ}\text{C})$ 

\*Limited by gasket material selected

### **Adjustment**

Internal, slotted adjustment with range scale

### **Shipping Weight**

Approximately 4.5 pounds

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

### **OPTIONS**

### Adjustable Range

2	1.5 psig dec. to	30 psig inc.	(U.1 bar dec. to	2.1 bar inc.)	
4	15 psig dec. to	80 psig inc.	(1.0 bar dec. to	5.5 bar inc.)	
5	60 psig dec. to	180 psig inc.	(4.1 bar dec. to	12.4 bar inc.()	
6	115 psig dec. to	240 psig inc.	7.9 bar dec. to	16.5 bar inc.()	
7			(13.1 bar dec. to		(300# Flange only)

11 amp, ¼ hp at 125 or 250 VAC; 5 amp resistive, 3 amp inductive at 28 VDC; .5 amp resistive at 125 VDC

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### **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

3/4 NPT conduit box with terminal strip (Groups C & D only)

Gold electrical contacts for extremely low current applications

ATEX Approval

72" Electrical free leads

### Flange Size/Material

150# Steel

300# Steel

150# Stainless Steel

300# Stainless Steel

### Diaphragm

316 Stainless Steel

6 Tantalum

Hastelloy C

9 Inconel

### Internal O-Rings

Kalrez

Viton **EPR** 

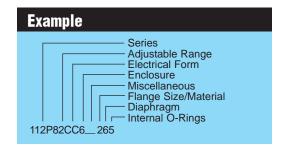
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### ecial (Consult representative or factory)

Non-catalog adjustable range and/or set point and deadband

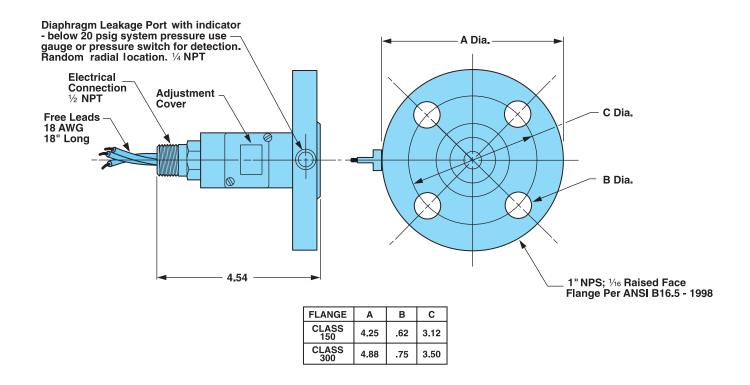
## **Ordering Procedure**

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

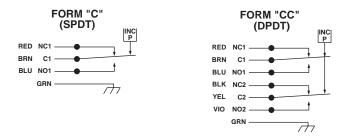


<sup>\*</sup>System pressure ratings are based on flanges of the lowest strength steel and 316 stainless at 250°F. Consult ANSI B 16.5 for increased ratings at lower temperatures.

# **Envelope Dimensions**



# **Electrical Form**



# **Basic Principles of Design**

