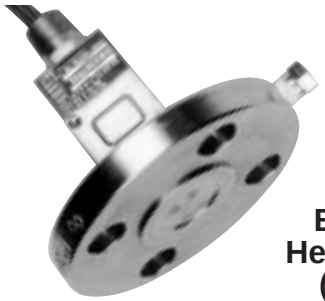
Neo-Dyn® Series 112P Flanged Pressure Switch/Diaphragm Sensor



Explosion Proof Hermetically Sealed (NEMA 7 and 9)

DESCRIPTION

Flanged pressure switch for installations that formerly required a chemical seal due to exposure to corrosive or viscous media. Reliable Nega-Rate® Belleville disc spring sensing mechanism eliminates the need for fill fluids. 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 (approximate)	Maximum Recommended System Pressure*		Proof Pressure 150# Flange		Proof Pressure 300# Flange	
	Increasing	Decreasing		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	125 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.
*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.

Standard Specifications

Electrical

Snap action electrical switch listed by Underwriters' Laboratories, Inc., Factory Mutual and CSA Testing Laboratories

Electrical Connection

½" - 14 NPT male conduit connection with PVC insulated 18 AWG leads 18" long

Pressure Connection

1 inch, 1/16 raised face flange per ANSI B 16.5 - 1981
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: -50°F to +250°F
(-46°C to +121°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.	*(0.1 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	125 psig dec.	to	240 psig inc.	*(8.6 bar dec.*	*to*	*16.5 bar inc.)*
7	190 psig dec.	to	325 psig inc.	*(13.1 bar dec.*	*to*	*22.4 bar inc.)* (300# Flange only)

Electrical Form

C 11 amps and ¼ hp 125 or 250 VAC; 5 amps resistive, 3 amps inductive 28 VDC; .5 amps resistive 125 VDC

CC 11 amps and ¼ hp 125 or 250 VAC; 5 amps resistive, 3 amps inductive 28 VDC; .5 amps resistive 125 VDC

Enclosure

6 Explosion proof • factory sealed • hermetically sealed electrical assembly P/N 057-0030 (C Form); P/N 057-0057 (CC Form). **Underwriters' Laboratories, Inc.** listed (file #E56677) or **Canadian Standards Association** certified (file #34146) for Division 1 and 2; Class I, Groups A, B, C and D; Class II, Groups E, F and G hazardous locations (NEMA 7 and 9)

Miscellaneous

A Epoxy paint exterior — extra protection for severe environments
I ¾" Conduit box with terminal strip
M Gold electrical contacts for extremely low current applications
N CENELEC approval
R 72" Electrical free leads

Flange Size/Material

1 150# Steel
2 300# Steel
3 150# Stainless Steel
4 300# Stainless Steel

Diaphragm

4 316 Stainless Steel
6 Tantalum
7 Hastelloy C
9 Inconel

Internal O-Rings

2 Kalrez
3 Viton
5 EPR
8 Buna-N

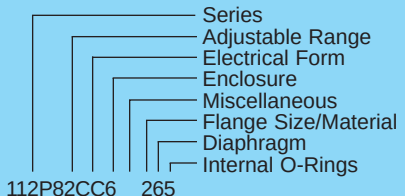
Special (Consult representative or factory)

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

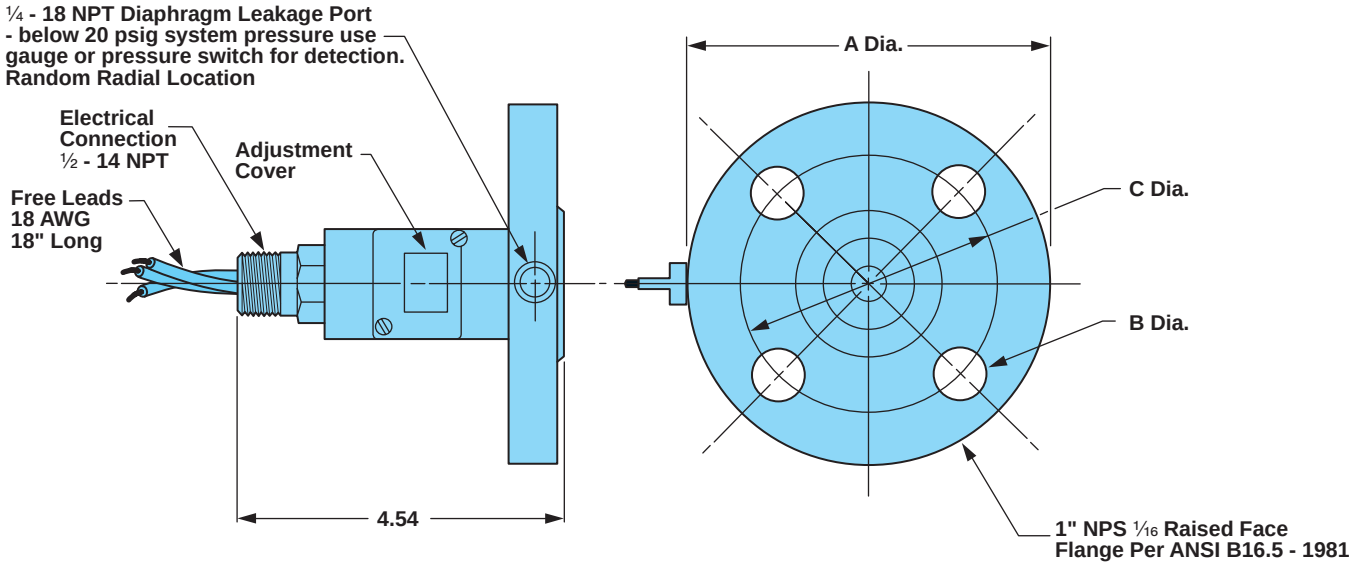
Ordering Procedure

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

Example

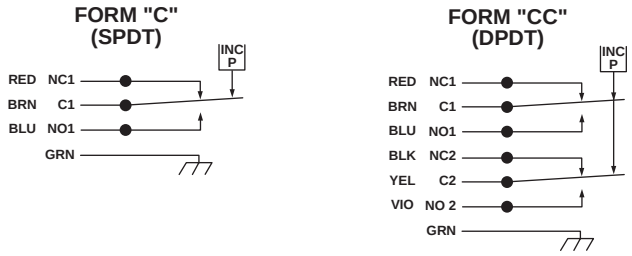


Envelope Dimensions



FLANGE	A	B	C
CLASS 150	4.25	.62	3.12
CLASS 300	4.88	.75	3.50

Electrical Form



Basic Principles of Design