

Neo-Dyn® Series 115P/115PP Pressure Switch/Tamper Proof

Compact, versatile pressure switch with built to order set points. This easy to install switch features the efficient Nega-Rate® Belleville disc spring for the set and forget application.

Operating Pressure Data

Series	Fixed Set Point Range		Maximum Recommended System Pressure	Proof Pressure
	Increasing	Decreasing		
115P	2 to 70	1.5 to 64	Up to 600	Up to 1000
115PP	71 to 250	65 to 220	Up to 600	Up to 1000

All values given in psig.

Standard Specifications

Deadband (Differential)

The deadband can be selected anywhere from 1.5 psig or 8% (whichever is greater) to 45% of the set point

Electrical

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

1/4 NPT Male

Temperature Range*

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

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

*Temperature limits change with O-Ring selection. See Electrical Assembly specification sheet for Temperature Class Ratings.

Shipping Weight

Approximately 14 ounces



Order Miscellaneous Option "D"



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

Ordering Sequence — Select desired option for each category

OPTIONS

Set Points

115P between 1.5 psig dec. and 70 psig inc. (.10 bar dec. and 4.8 bar inc.)

115PP between 65 psig dec. and 250 psig inc. (4.5 bar dec. and 17 bar inc.)

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

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

6 Explosion proof, hermetically-sealed electrical assembly, EX d IIC.

Part Numbers 057-0770 & 057-0772 (Form C) and 057-0771 & 057-0773 (Form CC).

Agency listings include **Underwriters Laboratories, Inc.**, **CSA International**, **Factory Mutual**,

and **Inmetro**. Division 1 and 2, Class I, Groups A, B, C, and D; Class II, Groups E, F, and G.

NEMA 4X, 7, and 9; IP66. Leads are factory sealed and Pressure Switches are Dual Seal Certified.

Miscellaneous

A Epoxy paint exterior — extra protection for severe environments

B Viton O-Ring — refer to Wetted Material

C EPR O-Ring — refer to Wetted Material

D SIL approval and marking, per IEC61508 (includes FMEA report)

H 316 stainless steel housing

I 3/4 NPT conduit box with terminal strip (Groups C & D only, not available with N option)

M Gold electrical contacts for extremely low current applications

N ATEX and IECEx with CE Mark

R 72" Electrical free leads

S Stainless steel diaphragm (115P, Wetted Material 4 only. Not available on 115PP)

W Stainless steel screws (automatically furnished with Miscellaneous Option A and Wetted Material 4)

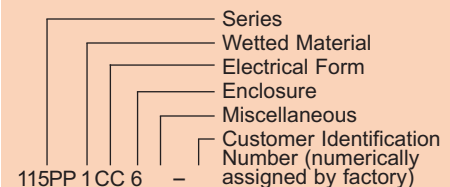
Special (Consult representative or factory)

- Pressure port per AS4395E04
- Electrical connection per MS33678-10SL-3P

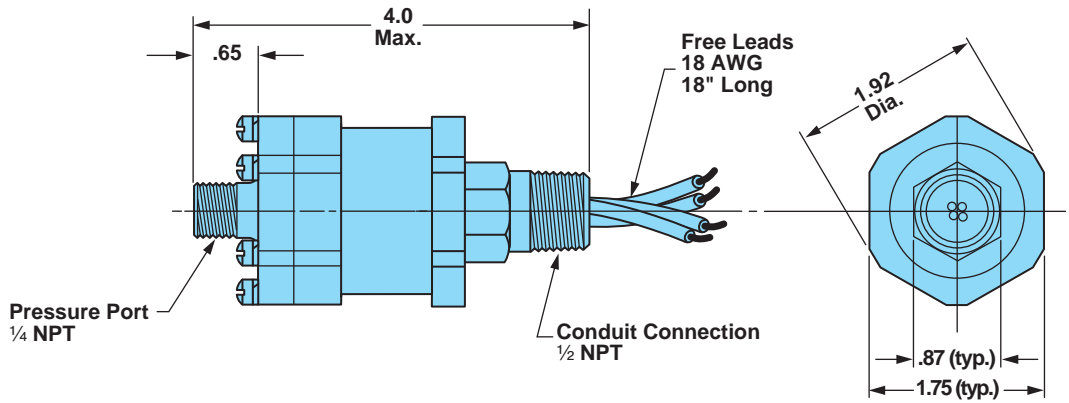
Ordering Procedure

- Specify set point, increasing or decreasing
- Specify deadband if pertinent
- Specify system pressure
- Specify proof pressure
- Specify media
- Insert available option as required

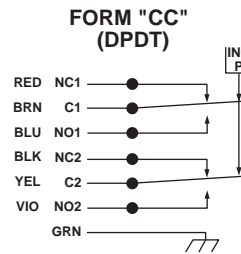
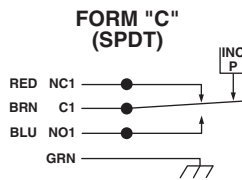
Example



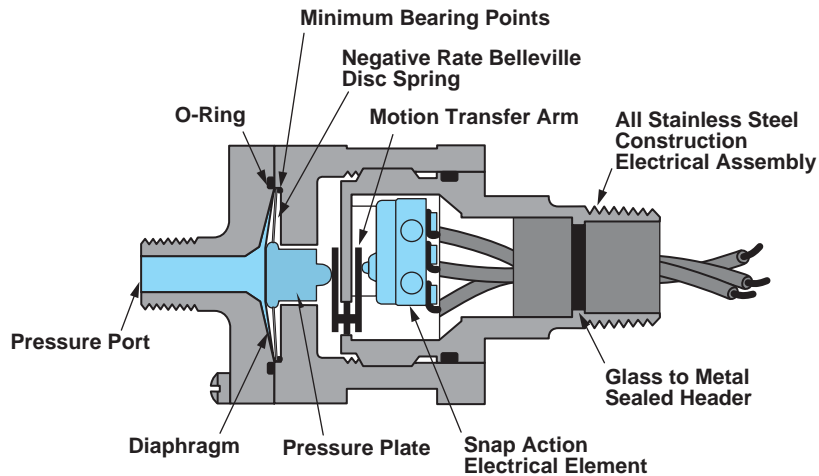
Envelope Dimensions



Electrical Form



Basic Principles of Design



Specifications and dimensions subject to change.





Neo-Dyn



INSTALLATION AND OPERATING INSTRUCTIONS
SERIES 115P PRESSURE SWITCHES
ENCLOSURE 6 (NEMA TYPE 3, 3R, 3S, 4, 4X, 7, 9, 13 AND IP66)

SUITABLE FOR USE IN FLAMMABLE/COMBUSTIBLE ATMOSPHERES

CLASS I: GROUPS A, B, C, AND D
CLASS II: GROUPS E, F AND G
AS DEFINED BY THE NATIONAL ELECTRICAL CODE

NOTICE

1. For industrial use only, not a consumer product.
2. This item should be installed, operated, and maintained by technical personnel knowledgeable in local and national electrical and mechanical codes.
3. Always use wrench flats provided.
4. Avoid excessive torque on any threaded connection.
5. The user must evaluate the appropriate useful life of these products for their application. An appropriate periodic system check and replacement plan should be made for sensitive or hazardous systems. Life can be affected by many factors including the amount of power applied, system pressure, surges in power or pressure, cycle frequency, temperature, and corrosiveness of the media.



WARNING: Before proceeding, read and understand the following:

1. Hazardous electrical power may cause severe personal injury or death.
 - A. Do not make electrical connections while electrical power is on.
 - B. Do not exceed voltage and current ratings.
 - C. Do not remove conduit connections or make wiring repairs while electrical power is on. Check for multiple circuits.
 - D. Provide adequate electrical grounding.
2. Excessive pressure may rupture the pressure switch; severe injury, death, or property damage may result. Do not subject this item to pressures in excess of nameplate listed proof pressure.
 - A. Mounting:
 1. Units may be port mounted in any position directly to pressure connection. See "Pressure Connection".
 - B. Pressure Connection (See Warning 2):
 1. Units are supplied with a ¼ -18 male NPT port suitable for connection to NPT taper threaded pipe.
 - a. Pipe joint sealing compound is preferred over Teflon tape. However, either method of sealing is acceptable with proper care to avoid introducing sealing material into pressure switch or plumbing.
 - C. Electrical Connections (See Warning 1):
 1. Units are supplied with 18 AWG free leads exiting from a ½ -14 NPT male conduit connection. The leads are color coded and marked for proper electrical circuitry.
 - a. Splices to main wiring should be accomplished in accordance with "National Electrical Code" (NEC) and local code instructions.
 - b. Grounding: Proper grounding must be accomplished by use of green ground wire or by connection to grounded metal conduit.
 - c. Conduit Connections: Install conduit. If surface mounting is used, it is recommended that flexible conduit be used for the final connection.
 - d. Flammable/Combustible Locations: Since the unit is "factory sealed", a sealing fitting is not required.

REVISION DATE: 7/22/2008