

Series 110P Pressure Switch/Internal Adjustment

Sensitive Nega-Rate® Belleville spring adjustable pressure switch for low pressure applications.

Operating Pressure Data

Adjustable Range Number	Adjustable Set Point Range		Deadband (approximate)	Maximum Recommended System Pressure (PSI)	Proof Pressure (PSI)
	Increasing	Decreasing			
2	10" H ₂ O to 100" H ₂ O	7" H ₂ O to 97" H ₂ O	3" H ₂ O	300	500
4	3 to 15	2.75 to 14.75	.25*	300	500

All values given in psig.

*Deadband increases to .4 psi (approx.) in "CC6" configuration.

Standard Specifications

Electrical

Snap action electrical switch assemblies, Part Numbers 057-0770 & 057-0772 (Form C) and 057-0771 & 057-0773 (Form CC), are listed by Underwriters' Laboratories, Inc., FM Approvals, CSA International and NCC (INMETRO). See the miscellaneous option N for additional listings.

Electrical Connection

1/2 NPT male conduit connection with PVC insulated 18 AWG, 18" long leads

Pressure Connection

Wetted Material 1
1/4 NPT Female

Wetted Material 4
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)

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

Adjustment

Concealed wrench flat adjustment with range scale

Shipping Weight

Approximately 3 pounds



Order Miscellaneous Option "D"



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

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

Adjustable Range

- 2 7" H₂O dec. to 100" H₂O inc. (17 millibar dec. to 249 millibar inc.)
- 4 2.75 psig dec. to 15 psig inc. (0.2 bar dec. to 1.0 bar inc.)

Electrical Form

- C 11 amp, 1/4 hp at 125 or 250 VAC; 5 amp resistive, 3 amp inductive 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 28 VDC; .5 amp resistive at 125 VDC

Enclosure

- 6 Includes an explosion proof, hermetically-sealed electrical assembly, EX d IIC. 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
- C EPR O-Ring
- D SIL approval and marking, per IEC61508 (includes FMEA report)
- F Fire fuse — for fire-tested equipment (wetted material 4 only; not available with option G)
- G 1/2 NPT male port (wetted material 4 only)
- 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 (1 Amp at 125 VAC; 1 Amp Res, 0.5 Amp Ind. at 28 VDC)
- N ATEX and IECEx with CE Mark
- R 72" Electrical free leads
- S Stainless steel diaphragm (wetted material 4 only)
- U M20 x 1.5 Electrical Conduit Adapter
- W Stainless steel screws — exterior (standard with wetted material 4)

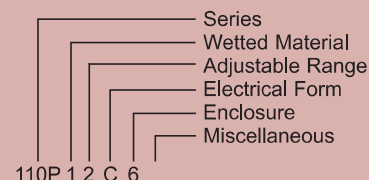
Special (Consult representative or factory)

- Non-catalog adjustable range and/or set point, deadband and proof pressure
- Chemical seals installed

Ordering Procedure

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

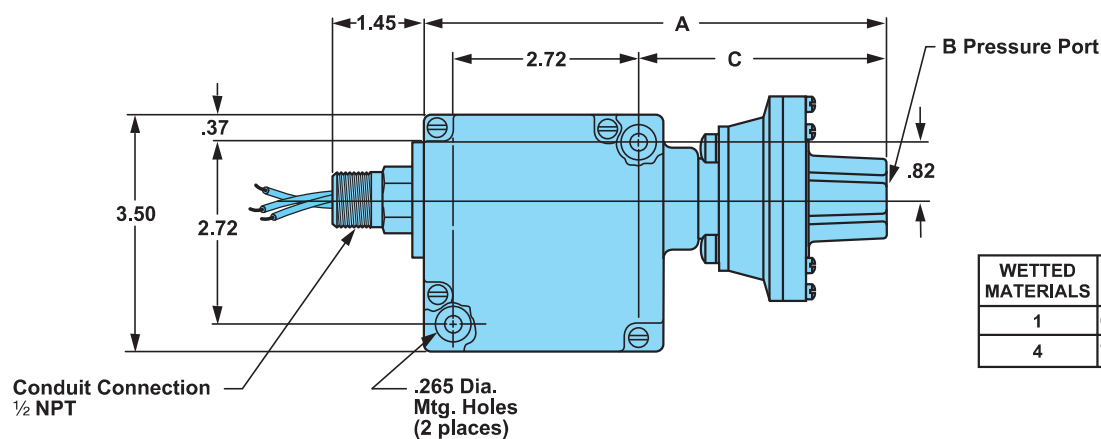
Example



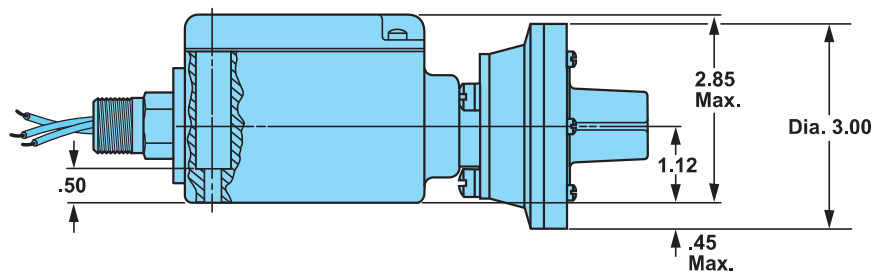
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Field Adjustable
7" H₂O to 15 psig

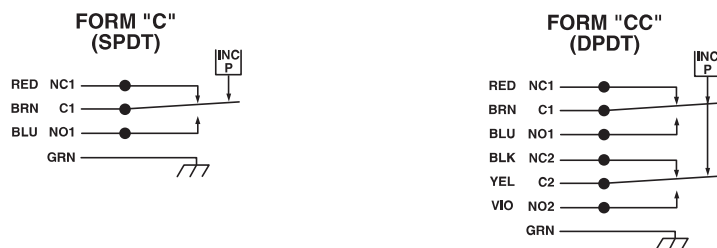
Envelope Dimensions



WETTED MATERIALS	A	B	C
1	6.75 Max.	1/4 NPT	3.7 Max.
4	7.15 Max.	1/2 NPT	4.1 Max.



Electrical Form



Basic Principles of Design

