

Series 117P Sanitary Pressure Switch/Internal Adjustment

This field adjustable, compact pressure switch is intended for low- to mid-range process applications. The Tri-Clamp® compatible, polished, process connection makes this switch ideal for food, beverage and other sanitary services. Set point stability and vibration resistance are a function of the Nega-Rate® Belleville disc spring. This unit features 316 stainless steel construction, an explosion-proof/hermetically sealed electrical assembly, 18" standard free leads and SPDT or DPDT electrical forms and a wetted material surface polish of 9 - 11 micro inch Ra (0.23 - 0.28 micron Ra).†

Operating Pressure Data

Adjustable Range Number	Adjustable Set Point Range		Deadband (approximate)	*Maximum Recommended System Pressure	*Proof Pressure
	Increasing	Decreasing			
2	3 to 30	1 to 28	2	1000	1500
4	20 to 80	15 to 75	5	1000	1500
5	50 to 250	30 to 230	20	1000	1500
6	200 to 400	175 to 375	25	1000	1500
7	375 to 725	330 to 680	45	1000	1500

All values given in psig.

*Note: Pressures are switch ratings. Check clamp manufacturer for clamp rating.

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., 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

1 1/2" sanitary fitting mates with Tri-Clamp® fitting†

Temperature Range

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

Media: -40°F to +250°F
(-40°C to +121°C)

Adjustment

Internal, slotted adjustment with range scale

Shipping Weight

Approximately 2 pounds



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

Ordering Sequence — Select desired option for each category

OPTIONS

Wetted Material

5 316 stainless steel port and diaphragm, heliarc welded

Adjustable Range

2 1 psig dec. to 30 psig inc. (.07 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 30 psig dec. to 250 psig inc. (2.1 bar dec. to 17.2 bar inc.)
6 175 psig dec. to 400 psig inc. (12.1 bar dec. to 27.6 bar inc.)
7 330 psig dec. to 725 psig inc. (22.8 bar dec. to 50.0 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

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

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 approval and IECEx
R 72" Electrical free leads
U M20 x 1.5 Electrical Conduit Adapter

Special (Consult representative or factory)

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

†Tri-Clamp® is a Registered Trademark of Tri-Clover Inc.

Ordering Procedure

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

Example

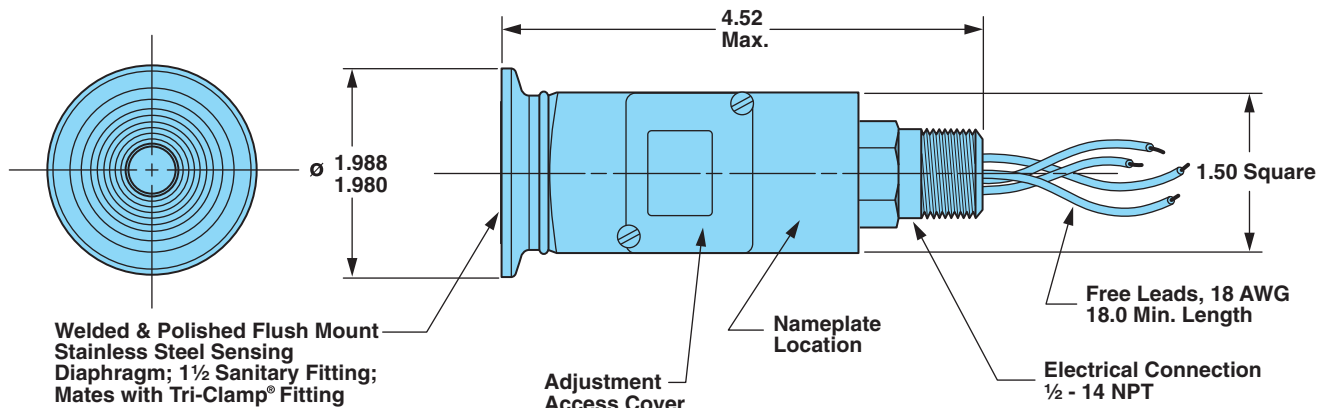
Series
Wetted Material
Adjustable Range
Electrical Form (specify)
Enclosure
Miscellaneous

117P 52 C 6 _

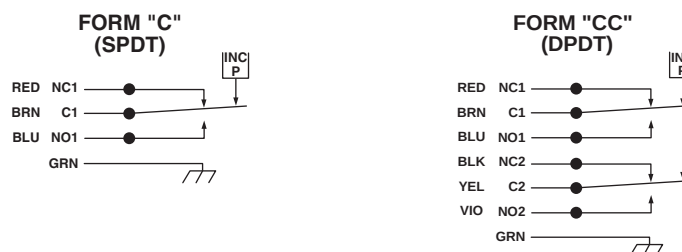
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Field Adjustable
1 to 725 psig

Envelope Dimensions



Electrical Form



Basic Principles of Design

