

Series 152P8 Ultra Low Differential Pressure Switch

Ultra low adjustable differential pressure switch. Unique construction using efficient Nega-Rate® Belleville disc spring for stable set points and high proof pressure. Explosion proof enclosure and wide range of wetted materials makes this switch especially 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
	Increasing			
2	2" to 100" H ₂ O Differential	1.5" H ₂ O	15 psig Simul. or Hi over Low 100" H ₂ O Low over Hi	100 PSI Simul. or Hi over Low 15 PSI Low over Hi

*Deadband 50% wider with "CC" (DPDT) Electrical Forms.

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

High — 1/2 NPT Female
Low — 1/4 NPT Female

Temperature Range*

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

Media: -50°F to +250°F
(-46°C to +121°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 4 pounds



Order Miscellaneous Option "D"



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

Ordering Sequence — Select desired option for each category

OPTIONS

Adjustable Range

2 .5" H₂O dec. (1.2 mb) to 100" H₂O inc. (249 mb)

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

A Epoxy paint exterior — extra protection for severe environments

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

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

R 72" Electrical free leads

U M20 x 1.5 Electrical Conduit Adapter

Port Material

1 316 Stainless Steel High/Aluminum Low

4 316 Stainless Steel High/Low

Diaphragm

1 Polyimide

4 316 Stainless Steel

6 Tantalum

7 Hastelloy C

O-Rings

2 Kalrez

3 Viton

5 EPR

8 Buna-N

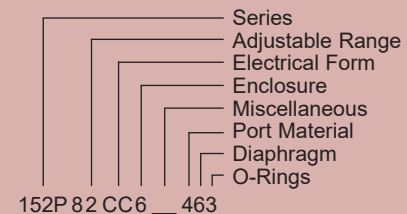
Special (Consult representative or factory)

- Non-catalog adjustable range and/or set point, deadband and proof pressure
- Media temperature capabilities from -65°F to +400°F

Ordering Procedure

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

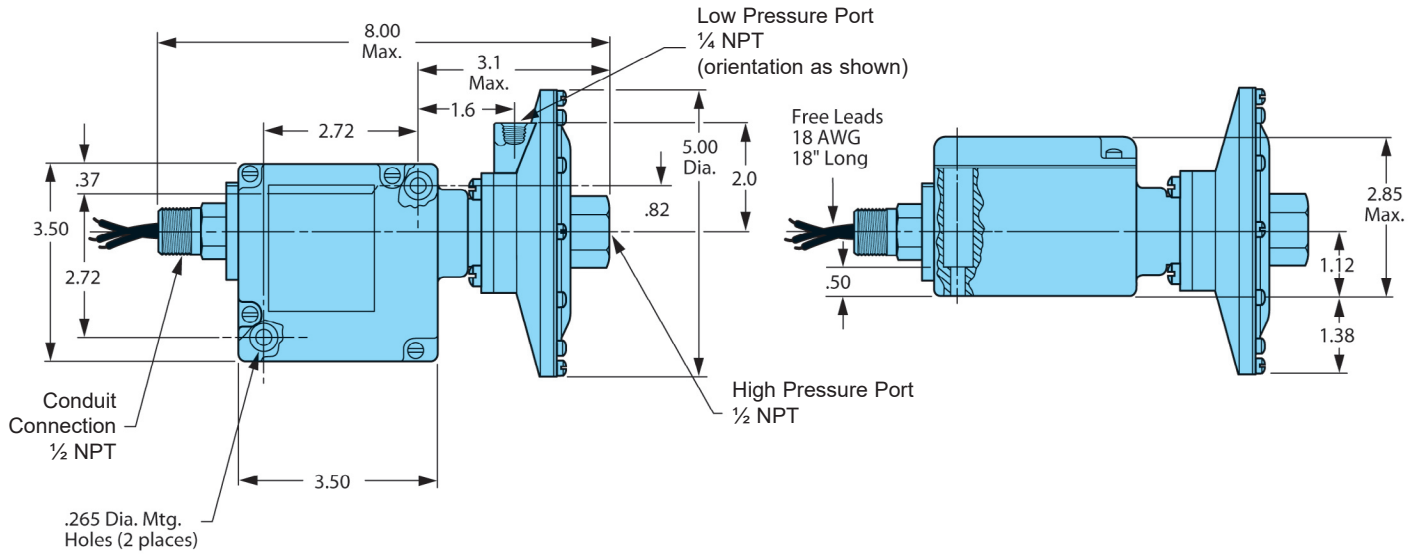
Example



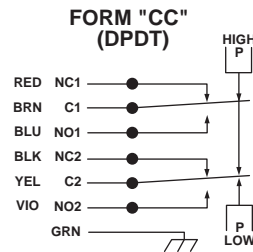
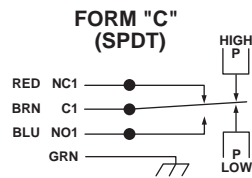
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Field Adjustable
.5" H₂O to 100" H₂O

Envelope Dimensions



Electrical Form



Basic Principles of Design

