## DESCRIPTION

Flanged pressure switch for installations that formerly required a chemical seal with fill fluids. Reliable Nega-Rate ${ }^{\oplus}$ Belleville disc spring sensing mechanism. 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 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 | 115 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 $250^{\circ} \mathrm{F}$. Consult ANSI B 16.5 for increased ratings at lower temperatures.

## Standard Specifications

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 inch, $1 / 16$ raised face flange per
ANSI B 16.5-1998
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: $-40^{\circ} \mathrm{F}$ to $+180^{\circ} \mathrm{F}$
$\left(-40^{\circ} \mathrm{C}\right.$ to $\left.+82^{\circ} \mathrm{C}\right)$
Media: $\quad-40^{\circ} \mathrm{F}$ to $+250^{\circ} \mathrm{F}$
$\left(-40^{\circ} \mathrm{C}\right.$ to $\left.+121^{\circ} \mathrm{C}\right)$
*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

| $\mathbf{2}$ | 1.5 psig dec. to | 30 psig inc. | (0.1 bar dec. to | 2.1 bar inc.) |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| $\mathbf{4}$ | 15 psig dec. to | 80 psig inc. | (1.0 bar dec. to | 5.5 bar inc.) |  |
| $\mathbf{5}$ | 60 psig dec. to | 180 psig inc. | (4.1 bar dec. to | 12.4 bar inc.) |  |
| $\mathbf{6}$ | 115 psig dec. to | 240 psig inc. | (7.9 bar dec. to | 16.5 bar inc.) |  |
| $\mathbf{7}$ | 190 psig dec. to | 325 psig inc. | (13.1 bar dec. to | 22.4 bar inc.) | (300\# Flange only) |

## Electrical Form

C $11 \mathrm{amp}, 1 / 4 \mathrm{hp}$ at 125 or $250 \mathrm{VAC} ; 5 \mathrm{amp}$ resistive, 3 amp inductive at 28 VDC ;
5 amp resistive at 125 VDC
CC $11 \mathrm{amp}, 1 / 4 \mathrm{hp}$ at 125 or $250 \mathrm{VAC} ; 5 \mathrm{amp}$ resistive, 3 amp inductive at 28 VDC ; .5 amp resistive at 125 VDC

## Enclosure

6 Explosion proof, hermetically-sealed electrical assembly, leads factory sealed, P/N 057-0770 (C Form) and P/N 057-0771 (CC Form); Underwriters' Laboratories, Inc. listed (File E56677), CSA International certified (File LR34146), and Factory Mutual approved (File J.I.1R5A9.AE) for Division 1 and 2; Class I, Groups A, B, C and D; Class II, Groups E, F and G Hazardous Locations; NEMA Type 7 and 9.

## Miscellaneous

A Epoxy paint exterior - extra protection for severe environments
I $3 / 4 \mathrm{NPT}$ conduit box with terminal strip (Groups C \& D only)
M Gold electrical contacts for extremely low current applications
N ATEX Approval
R 72" Electrical free leads

## Flange Size/Material

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

## Diaphragm

4316 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
$\square$ Insert available option number or letter designation as required


## Envelope Dimensions

Diaphragm Leakage Port with indicator

- below 20 psig system pressure use - . gauge or pressure switch for dete
Random radial location. $1 / 4$ NPT


1" NPS; ${ }^{1 / 16}$ Raised Face
Flange Per ANSI B16.5-1998

| FLANGE | A | B | C |
| :---: | :---: | :---: | :---: |
| CLASS <br> 150 | 4.25 | .62 | 3.12 |
| CLASS <br> 300 | 4.88 | .75 | 3.50 |

## Electrical Form



Basic Principles of Design


