

# Neo-Dyn<sup>®</sup> Series 100T Temperature Switch/Internal Adjustment

Direct mount adjustable temperature switch for use in hazardous areas. Utilizes efficient Nega-Rate<sup>®</sup> Belleville spring mechanism and saturated vapor sensor for quick response and narrow deadband.

Operating Temperature Data											
Adjustable Range	Adjustable Set Point Range		Deadband <sup>†</sup> (approx) Bottom/Top		Proof Temperature						
Number	Increasing °F	Decreasing °F	۰F	∘C	۰F	∘C					
В	-50 to +65	-69 to +62	19/3	11 / 2	250	121					
D	+30 to +175	+7 to +172	23/3	13 / 2	400	204					
F	+95 to +250	+70 to +247	25/3	14 / 2	450	232					
Н	+175 to +360	+145 to +355	30/5	17 / 3	500	260					
J	+335 to +500	+305 to +495	30/5	17 / 3	600	315					

<sup>†</sup>Deadband decreases as the adjustable set point is increased. For narrow deadband select set point in upper half of adjustable range.

# 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**

1/2 NPT Male Direct mount

### **Temperature Range**

Ambient:  $-40^{\circ}$ F to  $+180^{\circ}$ F  $(-40^{\circ}$ C to  $+82^{\circ}$ C)

See Electrical Assembly specification sheet for Temperature Class Ratings.

### **System Pressure**

1500 psig maximum

### **Proof Pressure**

2250 psig

## Adjustment

Concealed wrench flat adjustment with range scale

# **Shipping Weight**

Approximately 3 pounds



Order Miscellaneous Option "D"



# Ordering Sequence — Select desired option for each category

#### **OPTIONS**

#### Wetted Material

3 Steel port with stainless steel probe, Viton seal NOTE: Range "J" uses Teflon seal

#### Adjustable Range

В	-69°F dec.	to	+65°F inc.	(-56°C dec. to	18°C inc.)
D	+7°F dec.	to	+175°F inc.	(-14°C dec. to	79°C inc. )
F	+70°F dec.	to	+250°F inc.	(21°C dec. to	121°C inc.)
Н	+145°F dec.	to	+360°F inc.	(63°C dec. to	182°C inc.)
J	+305°F dec.	to	+500°F inc.	(152°C dec. to	260°C 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

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

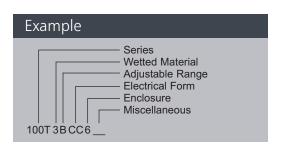
- A Epoxy paint exterior extra protection for severe environments
- D SIL approval and marking, per IEC61508 (includes FMEA report)
- 3/4 NPT conduit box with terminal strip (Groups C & D only, not available with N option)
- J Annealed stainless steel port screws for H<sub>2</sub>S environments
- M Gold electrical contacts for extremely low current applications
- N ATEX and IECEx with CE Mark
- R 72" Electrical free leads
- W Stainless steel screws exterior

#### Special (Consult representative or factory)

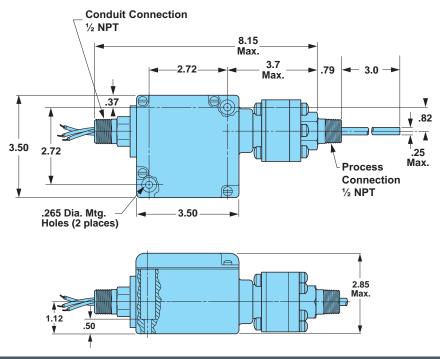
- · Thermowells
- Non-catalog adjustable range and/or set point and deadband

# Ordering Procedure

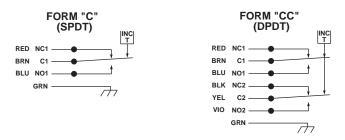
- When factory presetting is desired, stipulate set point, increasing or decreasing
- Insert available option letter designation as required



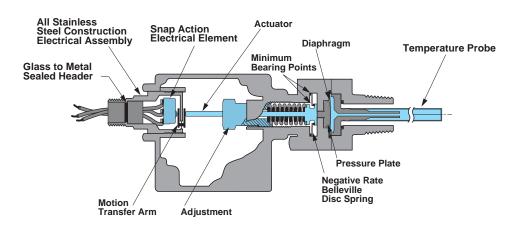
# **Envelope Dimensions**



# **Electrical Form**



# Basic Principles of Design



Specifications and dimensions subject to change.

