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



### **DESCRIPTION**

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

Operating Temperature Data				
Adjustable Range	Adjustable Set Point Range			
Number	Increasing °F	Decreasing °F	Deadband <sup>†</sup> (approximate) °F	Proof Temperature °F
В	-50 to +65	-69 to +62	19/3	250
D	+30 to +175	+7 to +172	23/3	400
F	+95 to +250	+70 to +247	25/3	450
Н	+175 to +360	+145 to +355	30/5	500
J	+335 to +500	+305 to +495	30/5	600

<sup>&</sup>lt;sup>†</sup>Deadband decreases as the adjustable set point is increased.

## **Standard Specifications**

#### **Electrical**

Snap action electrical switch listed by Underwriters' Laboratories, Inc., Factory Mutual and CSA Testing Laboratories

#### **Electrical Connection**

1/2" - 14 NPT male conduit connection with PVC insulated 18 AWG leads 18" long

### **Pressure Connection**

1/2" - 14 NPT Male Direct mount

#### **Temperature Range**

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

### **System Pressure**

1500 psig maximum

#### **Proof Pressure**

2250 psig

#### **Adjustment**

Concealed wrench flat adjustment with range scale

#### **Shipping Weight**

Approximately 3 pounds

### Ordering Sequence — Select desired option for each category

#### **OPTIONS**

#### **Wetted Material**

300 series stainless steel port and probe assembly. Viton seal NOTE: Range "J" uses Teflon seal

#### Adjustable Range

-69°F dec. to +7°F dec. to +65°F inc. D +175°F inc. +250°F inc. +70°F dec. to +145°F dec. to +360°F inc. н +500°F inc. +305°F dec. to

- 11 amps and 1/4 hp 125 or 250 VAC; 5 amps resistive, 3 amps inductive 28 VDC; .5 amps resistive 125 VDC
- 11 amps and 1/4 hp 125 or 250 VAC; 5 amps resistive, 3 amps inductive 28 VDC; .5 amps resistive 125 VDC

#### **Enclosure**

Explosion proof • factory sealed • hermetically sealed electrical assembly P/N 057-0030 (C Form); P/N 057-0057 (CC Form). Underwriters' Laboratories, Inc. listed (file #E56677) or Canadian Standards Association certified (file #34146) for Division 1 and 2; Class I, Groups A, B, C and D; Class II, Groups E, F and G hazardous locations (NEMA 7 and 9)

#### Miscellaneous

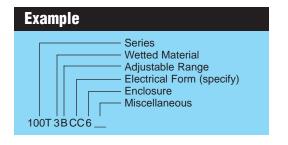
- Epoxy paint exterior extra protection for severe environments 3/4" Conduit box with terminal strip
- Annealed stainless steel port screws for H<sub>2</sub>S environments
- Gold electrical contacts for extremely low current applications
- CENELEC approval Ν
- 72" Electrical free leads R
- W Stainless steel screws — exterior

### Special (Consult representative or factory)

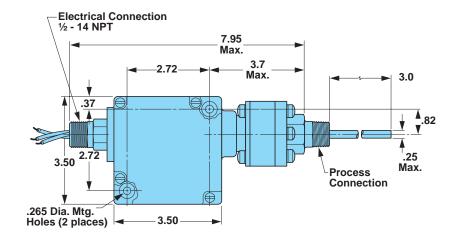
- Thermowells
- Non-catalog adjustable range and/or set point and deadband

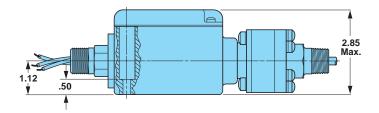
### Ordering Procedure

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

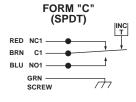


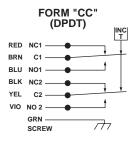
# **Envelope Dimensions**





### **Electrical Form**





# **Basic Principles of Design**

