

## Series 100T Temperature Switch/Internal Adjustment

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

### Operating Temperature Data

Adjustable Range Number	Adjustable Set Point Range		Deadband† (approx) Bottom/Top		Proof Temperature	
	Increasing °F	Decreasing °F	°F	°C	°F	°C
B	-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
H	+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

†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 assemblies, Part Numbers 057-0770 & 057-0772 (Form C) and 057-0771 & 057-0773 (Form CC), are listed by Underwriters' Laboratories, Inc., FM Approvals, 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

1/2 NPT Male  
Direct mount

#### Temperature Range

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



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

### 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

**B** -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.)  
**H** +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

**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)  
**J** Annealed stainless steel port screws for H<sub>2</sub>S environments  
**M** Gold electrical contacts for extremely low current applications (1 Amp at 125 VAC; 1 Amp Res, 0.5 Amp Ind. at 28 VDC) - (Not with Z Form)  
**N** ATEX and IECEx with CE Mark  
**R** 72" Electrical free leads  
**U** M20 x 1.5 Electrical Conduit Adapter  
**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

### Example

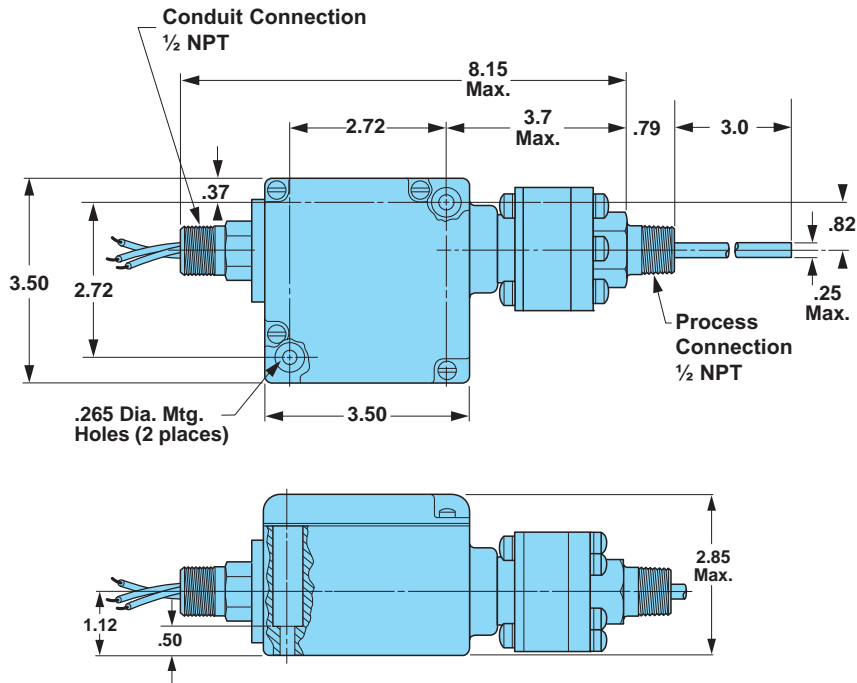
Series  
Wetted Material  
Adjustable Range  
Electrical Form  
Enclosure  
Miscellaneous

100T 3B CC6 \_

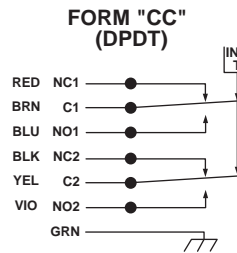
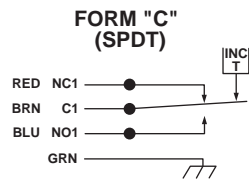
# Series 100T Temperature Switch/Internal Adjustment

Field Adjustable  
-69°F to +500°F

## Envelope Dimensions



## Electrical Form



## Basic Principles of Design

