

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., 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 3 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 H₂S 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

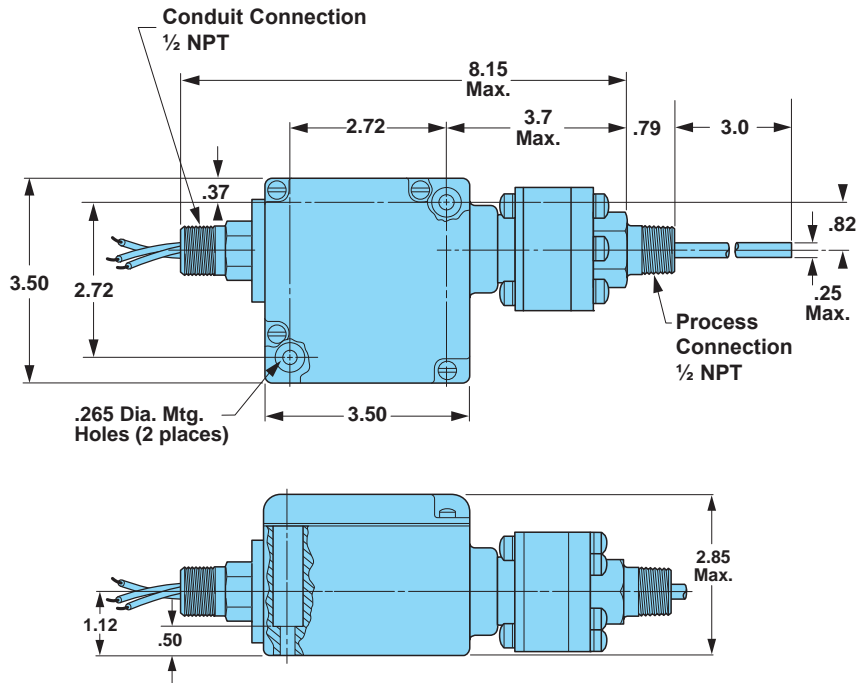
Series
Wetted Material
Adjustable Range
Electrical Form
Enclosure
Miscellaneous

100T 3B CC 6

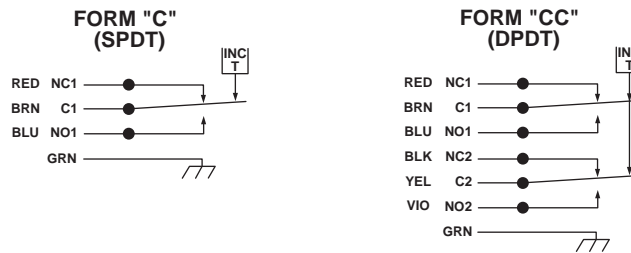
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Field Adjustable
-69°F to +500°F

Envelope Dimensions



Electrical Form



Basic Principles of Design

