

Neo-Dyn® Series 100TC Temperature Switch/Internal Adjustment



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

DESCRIPTION

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

Operating Temperature Data

Adjustable Range Number	Adjustable Set Point Range		Deadband† (approximate) °F	Proof Temperature °F
	Increasing °F	Decreasing °F		
B	-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
H	+175 to +360	+145 to +355	30/5	500
J	+335 to +500	+305 to +495	30/5	600*
L	+485 to +720	+445 to +714	40/6	900*
N	+645 to +925	+600 to +919	45/6	1200*

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

*Thermowell required for temperatures above 500°F.

Standard Specifications

Electrical

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

Electrical Connection

½ NPT male conduit connection with PVC insulated 18 AWG, 18" long leads

Process Connection

½ NPT Male
Remote mount. Stainless steel 6' capillary with armor jacket, 10" minimum bendable tubing and ½" adjustable gland nut. Optional capillary lengths available.

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 5 pounds

Ordering Sequence — Select desired option for each category

OPTIONS

Wetted Material

5 316 stainless steel, graphite filled non-asbestos packing

Adjustable Range

B -69°F dec. to +65°F inc.
D +7°F dec. to +175°F inc.
F +70°F dec. to +250°F inc.
H +145°F dec. to +360°F inc.
J +305°F dec. to +500°F inc.
L +445°F dec. to +720°F inc.
N +600°F dec. to +925°F inc.

Electrical Form

C 11 amp, ¼ hp at 125 or 250 VAC; 5 amp resistive, 3 amp inductive at 28 VDC; .5 amp resistive at 125 VDC
CC 11 amp, ¼ hp at 125 or 250 VAC; 5 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 ¾ NPT conduit box with terminal strip (Groups C & D only)
J Annealed stainless steel port screws for H₂S environments
M Gold electrical contacts for extremely low current applications
N ATEX approval with CE Mark
R 72" Electrical free leads
W Stainless steel screws — exterior

Optional Capillary Lengths

10', 15', 20' and 25' lengths available
(insert appropriate number at end of model number — see Example)

Special (Consult representative or factory)

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

Ordering Procedure

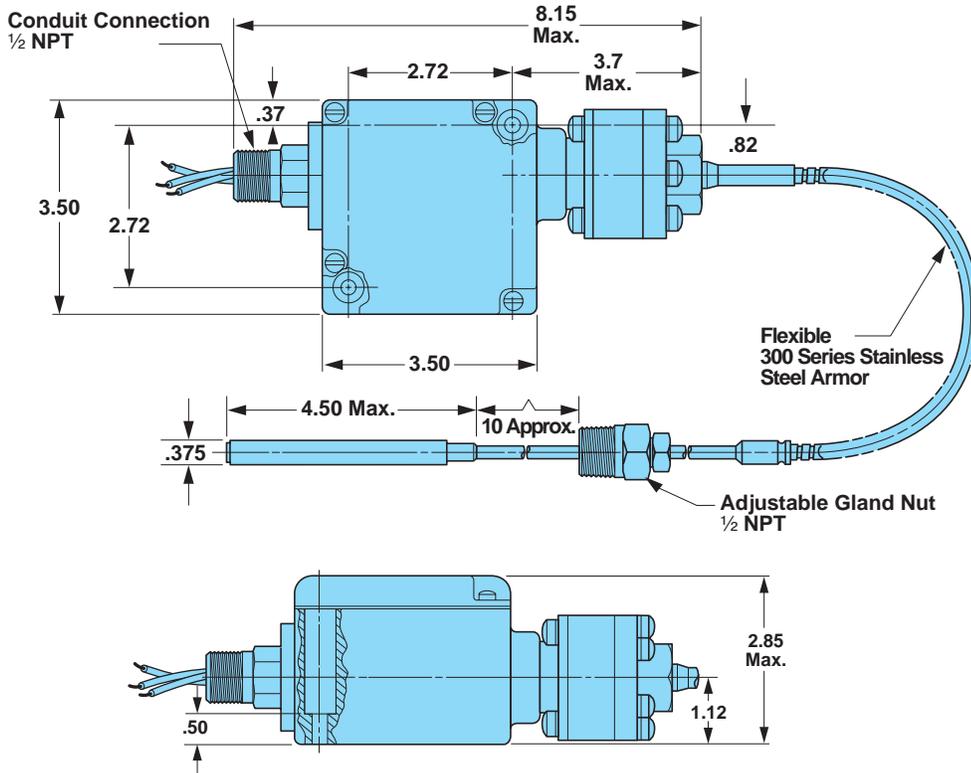
- When factory presetting is desired, stipulate set point, increasing or decreasing
- Insert available option number or letter designation as required

Example

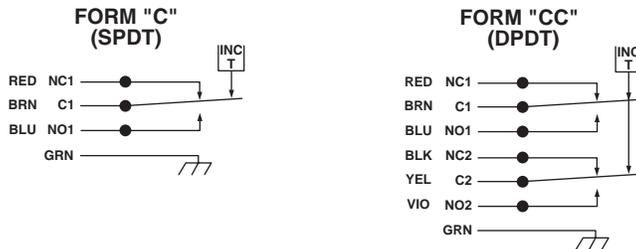
100TC5B CC6 _ _ _

Series
Wetted Material
Adjustable Range
Electrical Form
Enclosure
Miscellaneous
Optional Capillary Length

Envelope Dimensions



Electrical Form



Basic Principles of Design

