

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

Remote mount adjustable temperature switch with 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
L	+485 to +720	+445 to +714	40/6	22 / 3	900*	482

†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 recognized by Underwriters' Laboratories, Inc. and CSA International

Electrical Connection

1/2 NPT female conduit connection with terminal block

Process Connection

1/2 NPT Male
Remote mount Stainless steel 6' capillary with armor jacket, 10" minimum bendable tubing and 1/2" adjustable gland nut. Optional capillary lengths available.

Temperature Range

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

System Pressure

1500 psig maximum

Proof Pressure

2250 psig

Adjustment

Concealed wrench flat adjustment with range scale

Shipping Weight

Approximately 5 pounds



Order Miscellaneous Option "D"



Weather Proof
(NEMA 4 and 13)

Ordering Sequence — Select desired option for each category

OPTIONS

Wetted Material

5 300 series stainless steel, graphite filled non-asbestos packing

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.)
L +445°F dec. to +720°F inc. (229°C dec. to 382°C inc.)

Electrical Form

C 15 amp at 125 or 250 VAC; 1/8 hp at 125 VAC; 1/4 hp at 250 VAC;
.5 amp resistive, .04 amp inductive 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
Z 15 amp at 125 or 250 VAC; 1/4 hp at 125 VAC; 1/2 hp at 250 VAC; 1 amp resistive,
.5 amp inductive at 125 VDC

Enclosure

3 Meets or exceeds the requirements of NEMA Type 3, 3R, 3S, 4, 4X and 13

Miscellaneous

A Epoxy paint exterior — extra protection for severe environments
D SIL approval and marking, per IEC61508 (includes FMEA report)
J Annealed stainless steel port screws for H₂S environments
L Neon indicator light — 115 VAC
M Gold electrical contacts for extremely low current applications
P 5-Pin Brad Harrison connector (Reduce AC electrical rating to 8 amps)
(Not for CC3 Electrical)
W Stainless steel screws — exterior
X CSA Certified and CE Mark

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

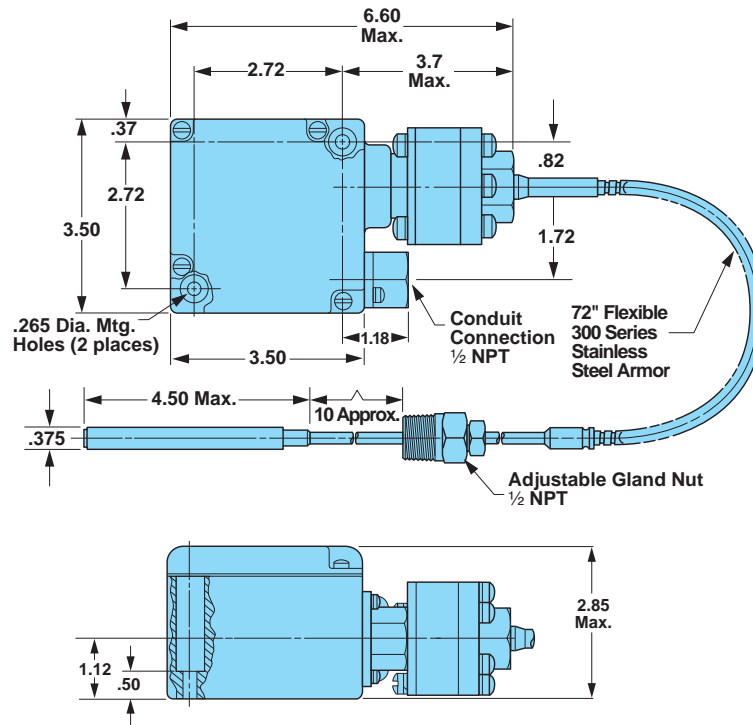
- When factory presetting is desired, stipulate set point, increasing or decreasing
- Insert available option number or letter designation as required

Example

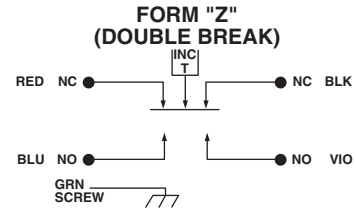
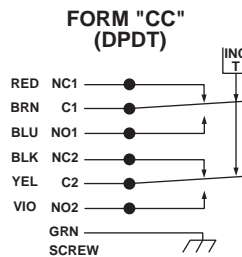
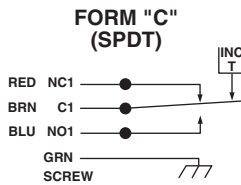
Series
Wetted Material
Adjustable Range
Electrical Form
Enclosure
Miscellaneous
Optional Capillary Length

100TC5B CC3

Envelope Dimensions



Electrical Form



Basic Principles of Design

