

Compact Explosion Proof Temperature Switch

T9692X

Features

- ▶ IECEx & ATEX approved
- ▶ Compact design
- ▶ Convenient field adjustability
- ▶ NEMA 4X, 7 & 9
- ▶ SPDT and DPDT switch
- ▶ Class I Div I
- ▶ Direct or remote mount
- ▶ Panel mount capability
- ▶ 316 stainless steel
- ▶ NACE compliant
- ▶ Armored capillary

Applications

- ▶ Offshore platforms
- ▶ Safety panels
- ▶ Chemical plants & refineries
- ▶ Compressor skids
- ▶ Instrument panels
- ▶ Hazardous location applications



General Specifications*

Accuracy:	63% of full scale
Typical Life:	1 million cycles
Switch:	SPDT, snap action, Class EE, simulated DPDT (optional)
Electrical Ratings:	11 amps @ 125/250 VAC 5 amps @ 30 VDC (EE class)
Materials: Bulb, Capillary & Armor:	316 stainless steel
Enclosure:	316 stainless steel
Local Mount Element:	300 series stainless steel
Electrical Connection:	1/2 inch NPT male conduit connection 18 AWG, 18" (300 mm) free leads
Enclosure Ratings:	NEMA 4X, 7 & 9

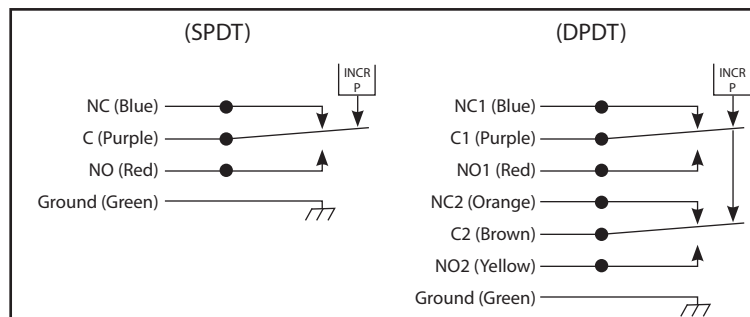
* See Product Configurator for additional options.

Approvals: ATEX/IECEx:	CE 0081, LCIE 08 ATEX 6074X Ex II 2 G, Ex d IIC T6 Gb IECEx LCIE 17.0001X, -40°C < Tamb < 60°C
UL:	Listed 366S, Class: I, Groups: A, B, C, D, -25°C < Tamb < 60°C
CSA:	Class: I, Groups: B, C, D -40°C < Tamb < 60°C
Ambient Operating Temperature: CSA & ATEX:	-40°F to 140°F (-40°C to 60°C)
UL:	-13°F to 140°F (-25°C to 60°C)
EMI/RFI:	EN55011
Vibration:	10g's 10-500 Hz, MIL-STD 202°F
Shock:	50g's, 11 ms, MIL-S-901C
Adjustment:	Internal locking adjustment wheel, 1/16 hex set screw
Weight:	3 lbs. maximum

Wiring Code

Lead	Circuit #1	Circuit #2
Normally Closed	Blue	Orange
Common	Purple	Brown
Normally Open	Red	Yellow
Ground	Green	

Wiring Diagram



T9692X

Technical drawings of the Bortec 1/2 NPT temperature sensor, showing front, side, and detail views with dimensions in inches and millimeters.

Dimensions in inches [mm]

Front View (Left):

- Overall height: 5.9 [150]
- Top section height: 1.5 [38]
- Main body height: 4.6 [118]
- Bottom section height: 3.7 [97] MAX
- Bottom section width: 1.1 [29]
- Bottom section diameter: $\phi .32$ [8]
- Bottom section length: 2 [5]
- Bottom section diameter: $\phi .2$ [5] (ARMOR DIA.)
- Bottom section diameter: $\phi .06$ [1.6] (NON-ARMOR)
- Bottom section length: 1.5 [38]
- Bottom section diameter: $\phi .5$ [13]
- Bottom section length: 3.7 MAX [94 MAX]
- Bottom section diameter: $\phi .2$ [5] (ARMOR DIA.)
- Bottom section diameter: $\phi .06$ [1.6] (NON-ARMOR)

Side View (Middle):

- Overall height: 5.9 [150]
- Top section height: 1.5 [38]
- Main body height: 4.6 [118]
- Bottom section height: 3.7 [97] MAX
- Bottom section width: 1.1 [29]
- Bottom section diameter: $\phi .32$ [8]
- Bottom section length: 2 [5]
- Bottom section diameter: $\phi .2$ [5] (ARMOR DIA.)
- Bottom section diameter: $\phi .06$ [1.6] (NON-ARMOR)
- Bottom section length: 1.5 [38]
- Bottom section diameter: $\phi .5$ [13]
- Bottom section length: 3.7 MAX [94 MAX]
- Bottom section diameter: $\phi .2$ [5] (ARMOR DIA.)
- Bottom section diameter: $\phi .06$ [1.6] (NON-ARMOR)

Detail View (Right):

- Overall height: 5.9 [150]
- Top section height: 1.5 [38]
- Main body height: 4.6 [118]
- Bottom section height: 3.7 [97] MAX
- Bottom section width: 1.1 [29]
- Bottom section diameter: $\phi .32$ [8]
- Bottom section length: 2 [5]
- Bottom section diameter: $\phi .2$ [5] (ARMOR DIA.)
- Bottom section diameter: $\phi .06$ [1.6] (NON-ARMOR)
- Bottom section length: 1.5 [38]
- Bottom section diameter: $\phi .5$ [13]
- Bottom section length: 3.7 MAX [94 MAX]
- Bottom section diameter: $\phi .2$ [5] (ARMOR DIA.)
- Bottom section diameter: $\phi .06$ [1.6] (NON-ARMOR)

Labels:

- 18" FREE LEADS SEE WIRE COLOR CODE CHART FOR FURTHER DETAILS
- 1/2 NPT CONDUIT CONNECTOR
- 1/2 NPT
- 8-32 GRD SCREW
- 1" HEX TOOL REQUIRED
- 1/2 NPT
- 1.5 [38]
- 4.6 [118]
- 5.9 [150]
- 3.7 [97] MAX
- 1.1 [29]
- 2 [5]
- $\phi .32$ [8]
- $\phi .2$ [5] (ARMOR DIA.)
- $\phi .06$ [1.6] (NON-ARMOR)
- 1.5 [38]
- $\phi .5$ [13]
- 3.7 MAX [94 MAX]
- 1.50 [38.1]
- .88 [22.2] HEX WRENCH FLATS
- 1 23/32 [45.2]
- 1" HEX TOOL REQUIRED
- 1/2 NPT
- 5.3 [135]
- 3.7 MAX [94 MAX]
- $\phi .5$ [13]
- LOCAL MOUNT OPTION

ARMOR VERSION SHOWN

CE

UL

SP

EX

Base Configurator

T9692X

Temperature switch

Number of Circuits

-1

SPDT switch

-2

Simulated DPDT switch
(2 SPDTs)

Limit Switch

EE

Silver contacts
11 amps @ 125V/250 VAC;
5 amps @ 30 VDC

GH

Gold contacts
1 amp @ 125/250 VAC

Temperature Ranges

-1

-10°F to 110°F (-23°C to 43°C)

-2

95°F to 220°F (35°C to 104°C)

-3

180°F to 330°F (82°C to 165°C)

Options

Blank

Standard

-A¹

Stainless steel armor

-SXXX

Factory preset

-WXXX

Extra wire length
(XXX=inches)

Capillary Length

-072

6 ft (1.8 meters)

-108

9 ft (2.7 meters)

-144

12 ft (3.7 meters)

-001

Local mount

Footnotes

¹ Not available in local mount

² Deadband values indicated when used with the "EE" limit switch