# **Explosion Proof Temperature Switches**

# Series T1X, T2X, L1X

#### **Features**

- Explosion-proof for hazardous locations
- High accuracy
- Remote, local or ambient sensing
- UL, CSA & ATEX approved
- ► NEMA 4, 7, 9 & IP66

### **Applications**

- Oil & gas
- Heat tracing
- Printing machinery
- Compressors
- Process equipment
- Machine tools and industrial equipment



## **General Specifications\***

Accuracy: (Repeatability)	±1% of mid-60% of full range. At constant ambient +/- 0.5% of full scale. (Knob indication is reference only)			
Switch: Single Setting:	One (1) single pole double throw (SPDT) circuit.			
Dual Setting:	Two (2) independent single pole double throw (SPDT) circuits.			
Electrical Characteristics:	All models incorporate Underwriters' Laboratories, Inc. and CSA listed single pole double throw snap-action switching elements. Switches may be wired normally open or normally closed.			
Wetted Parts:	304 stainless steel			
Electrical Connection:	Single: 3-pin terminal strip Dual: 6-pin terminal strip			
Electrical Ratings:	AC value at 75% power factor —10 amps 125, 250 volts AC, 3 amps 480 volts AC. Automatically reset by snap-action of switch.			
Enclosure/Housing:	Class I, Division 1 & 2 NEMA 4, 7, & 9 Tamper-proof external adjustment, enclosed terminal strip.			

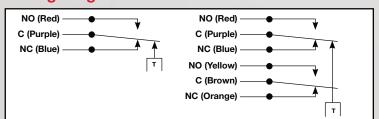
	enclosed terminal s
* See Product Configurator for a	dditional options.

W	irin	g C	od	le

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

Local Mount:	Immersion length 2-1/16 inches			
	·			
Bulb & Capillary:	6 foot length standard.			
Approvals:	Underwriters' Laboratories, Inc. and Canadian Standard Assoc. are listed under Temperature indicating and regulating equipment, for use in hazardous locations, Class I, Groups B, C and D; Class II, Groups E, F and G.			
UL (standard):	File No. E58658, Guide No. XBDV			
CSA (standard):	File No. LR34556, Guide 400-E-O.8. Class 4868.			
ATEX (optional):	EX models are ATEX marked as follows: <b>C</b> € 0081, ISSeP 08 ATEX024X			
Temperature Range:	See product configurator			
Adjustment:	Tamper resistant external adjustment. Turn knob clockwise to increase setpoint. (Knob indication is reference only)			
Standard Options/ Modifications:	For thermowels, split nuts and union connections, see accessory pages.			
Weight:	Single - approximate 4.0 lbs. Dual - approximate 4.5 lbs.			

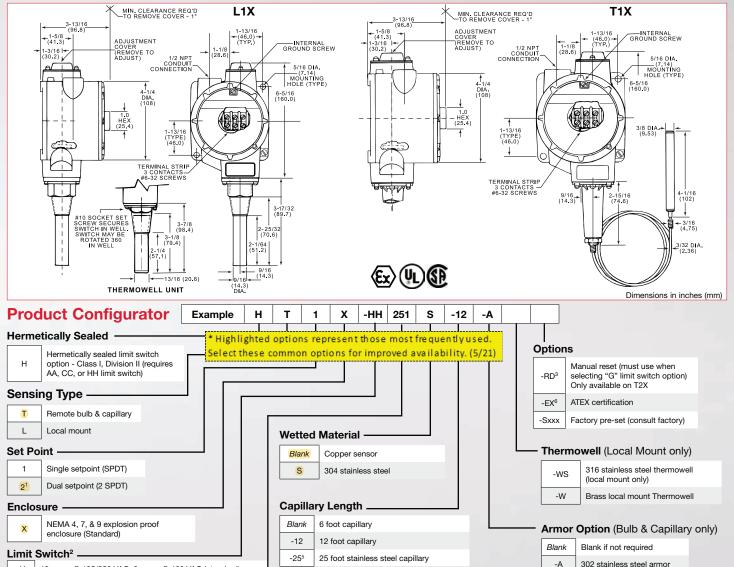
### **Wiring Diagram**





## Explosion Proof Temperature Switches Series T1X, T2X, L1X





- 10 amps @ 125/250 VAC; 3 amps @ 480 VAC (standard)
- 10 amps @ 125/250/480 VAC; 2 amps @ 600 VAC; -В 0.05 amps @ 125 VDC; 0.03 amps @ 250 VDC
- 10 amps @ 125/250/480 VAC: 2 amps @ 600 VAC: -G<sup>3</sup> 0.4 amps @ 125 VDC; MANUAL RESET (only available for T2X)
- 10 amps @ 125/250 VAC; 3 amps @ 480 VAC (with elastomer -J
- 15 amps @ 125/250/480 VAC; 0.03 amps @ 125 VDC; -L 0.02 amps @ 250 VDC
- 10 amps @ 125/250 VAC; 3 amp @ 480 VAC; -M 0.5 amps @ 125 VDC; 0.25 amps @ 250 VDC
- 15 amps @ 125/250/480 VAC; 0.05 amps @ 125 VDC; -S adjustable differential
- -GH 1 amp @ 125VAC; gold contacts
- Hermetically sealed; 4 amps @ 125/250 VAC
- -CC Hermetically sealed; 10 amps @ 125/250 VAC -HH Hermetically sealed; 5 amps @ 125/250 VAC
- Changing limit switch will effect deadband; See sales drawing
- $^{3}$  When selecting the manual reset option on dual setting switches (T2X), the manual rese limit switch will be on the high circuit. The low circuit limit switch must be specified by the 5 Add 'S' wetted material adder and 'A' armor adder to this. Capillary length '25'

4 When selecting the 'S' adjustable differential limit switch option on a dual setting switch 6 ATEX certification is only available with 'S' stainless steel wetted material (T2X), a standard 'H' switch will be paired with an 'S' switch. Dual 'S' pricing will apply

#### Temperature Range

Remote sensor ranges						
Range	Adjustable Range		Media Tempera	ature Limit (Proof)	Differential (Approx.) 2	
nange	Low High	Low High	Low High	Low High	°F	°C
154	-50°F +150°F	-45°C +66°C	-100°F +200°F	-73°C +93°C	1° to 2°	.5° to 1.1°
251	+50°F +250°F	+10°C +121°C	-100°F +300°F	-73°C +149°C	1° to 2°	.5° to 1.1°
351	+150°F +350°F	+66°C +177°C	-100°F +400°F	-73°C +205°C	1° to 2°	.5° to 1.1°
601	+300°F +440°F	+149°C +227°C	0°F +650°F	-18°C +343°C	2° to 4°	1.1° to 2.2°
603	+320°F +600°F	+160°C +316°C	0°F +650°F	-18°C +343°C	2° to 4°	1.1° to 2.2°

Local mount sensor ranges						
Denne	Adjustable Range		Media Temperature Limit (Proof)		Differential (Approx.) 2	
Range	Low High	Low High	Low High	Low High	°F	°C
201	-50°F +75°F	-45°C +24°C	-100°F +250°F	-73°C +121°C	1° to 3°	.5° to 1.6°
202	+15°F +140°F	+9°C +60°C	-100°F +250°F	-73°C +121°C	1° to 3°	.5° to 1.6°
203	+75°F +200°F	+24°C +93°C	-100°F +250°F	-73°C +121°C	1° to 3°	.5° to 1.6°
351	+100°F +225°F	+38°C +107°C	-100°F +400°F	-73°C +205°C	6° to 9°	3.3° to 5.0°
204	-50°F +200°F	-45°C +93°C	-100°F +250°F	-73°C +121°C	1° to 3°	.5° to 1.6°
354	+100°F +350°F	+38°C +177°C	-100°F +400°F	-73°C +205°C	6° to 9°	3.3° to 5.0°
454	+150°F +450°F	+66°C +232°C	0°F +500°F	-18°C +260°C	3° to 6°	1.6° to 3.3°

requires stainless steel capillary and armor.

