General Purpose Switch

Series TPR

Features

▶ High accuracy
▶ NEMA 4X & IP 65
▶ UL, CSA and CE approved
▶ Low cost

Applications

▶ Heat trace
▶ Water equipment
▶ Process equipment
▶ Machine tools and industrial equipment
▶ Freeze protection

General Specifications*

Accuracy:	±4°F
Switch: Type:	Single pole double throw (SPDT), prewired snap action
Rating:	22 amp @ 125/250/480 VAC
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:	Tin plated copper sensor & capillary
Electrical Connection:	1-1/8" (28mm) hole for 3/4" NPT conduit hub 12", 14 AWG stranded copper wire
Enclosure Rating:	NEMA 4X
Enclosure/Housing:	Polycarbonate (black)

* See Product Configurator for additional options.
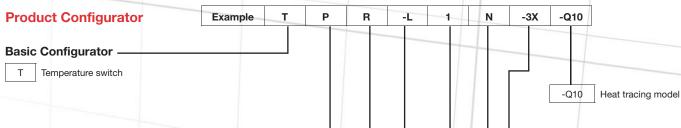
Bulb and Capillary: Bulb:	3-1/8" (79mm), 1/16" (10mm) dia.
Capillary Length:	30" (762mm) or 120" (3048mm)
System Pressure (max):	300 psi without thermowell
Fill:	Silicone oil-filled
Approvals:	UL listed, file E56247 CSA certified, file LR 58658 EN/RFi: to EN 5011
Temperature Range:	-40° to 160°F (-40° to 71°C) Fixed setpoint factory set at 40°F Contact closes on decreasing temperature
Ambient Temperature:	-30° to 140°F (-34° to 60°C)
Vibration:	10 g's 10-500 Hz, MIL-STD 202F
Shock:	50 g's, 10 mS, MIL-STD 901C
Weight:	1.1 lbs. (0.5 kg)

Wiring Code

Lead	Circuit
Normally Closed	Blue
Common	Purple
Normally Open	Red

Media Temperature Limits	Factory Preset	Differential (approximate)	Catalog Number
-40 to 160°F (-40 to 71°C)	40°F (4.4°C)	10°F (5.6°C)	TPR-L1N-3X-Q10

Barksdale
CONTROL PRODUCTS
CRANE Barksdale, Inc./Barksdale GmbH
A Subsidiary of Crane Co.

Technical Drawing

Dimensions in inches (mm)

Product Configurator

| Example | T | P | R | -L | 1 | N | -3X | -Q10 |

Basic Configurator

| T | Temperature switch |

Basic Configurator

| P | Polycarbonate plastic NEMA 4X enclosure |

Basic Configurator

| R | Remote bulb & capillary |

Limit Switch

| -L | 22 amp @ 125/250/480 VAC; standard |

Temperature Range

Range	Fixed Set-point (Decreasing)		Media Temperature Limit (Proof)				Differential (Approx.) Liquid	
	°F	°C	°F Low	High	°C Low	High	°F	°C
1	40°	4.4°	-40°	+160°	-40°	+71°	10°	5.6°

| -Q10 | Heat tracing model |

Bulb & Capillary Length

| -3X | 3 foot bulb & capillary sensor |
| -10X | 10 foot bulb & capillary sensor |

Wetted Material

| N | Tin plated copper sensor |