

# TPR Temperature Switch

Temperature Switch for General Applications  
Series TPR

- ✦ High Accuracy
- ✦ Nema 4X & IP 65
- ✦ UL, CSA and CE Approved
- ✦ Compact, Economical Design



Model TPR for remote sensing shown.

**B**arksdale's **TPR Series** Temperature Switch adds flexibility to Barksdale's solid reputation for quality & reliability, and offers versatility for your temperature sensing needs. This switch is ideal for applications where freeze protection or low temperature control is critical. The **TPR** is available in either field adjustable, NEMA 1, or factory set and locked NEMA 4X configurations. The tin-plated sensor comes in 3 or 10 foot lengths. The **TPR Series** feature limit switches with 10 amps @ 125/250 VAC and 3 amps @ 480 VAC electrical ratings. Optional 22 amp limit switches allow them to be used for higher current, heat tracing applications. The **TPR Series** is UL listed and CSA approved.



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# TPR Temperature Switch

## When Temperature Matters, Call Barksdale

For many years, Barksdale temperature switches have been switching, measuring and controlling critical processes throughout the world.

### Protect Your Equipment with Barksdale

Barksdale temperature switches prevent damage to heavy industrial equipment by monitoring the temperature of engine fluids and protecting against them a over bads. Hydraulic power units are protected by controlling the temperature of fluids in systems in reservoirs.

In cold climates, Barksdale temperature switches control heating devices that prevent pipes, valves and fittings from freezing preventing expensive loss and downtime. Barksdale thermostats also control the temperature in process piping to maintain the proper flow of media.

### Barksdale temperature switches can be used in a variety of applications:

- Hydraulic Power Units
- Combustion Engines
- Tanks and Reservoirs
- Gearboxes
- Pumps
- Compressors
- Machine Tools and Industrial Equipment
- Farm & Construction Machinery
- Process Equipment



### Need Something Special?

If you have special product requirements, we can help. Barksdale specializes in custom design solutions to meet your needs. We have design engineers and technical specialists who are experts in solving your unique temperature problems. Our technology and resources are at your disposal.

# TPR Temperature Switch

**Performance Characteristics**

**Accuracy** ±1% of full scale

**Switch Type** SPDT, Prewired Snap Action

**Rating** 10 amp @ 125/250 VAC  
3 amp @ 480 VAC

**Adjustable Range** 15°F to 140°F  
(-9°C ± 60°C)

For Q10 Models only:  
Factory set range of 40°F  
Close on decreasing temperature

Media Temperature Limits	Adjustable Range	Differential (approximate)	Catalog Number
-40 to 160°F (-40 to 71°C)	15 to 140°F (-9 to 60°C)	10°F (5.6°C)	TPR-H1N-3
-40 to 160°F (-40 to 71°C)	40°F (4.4°C)	10°F (5.6°C)	TPR-L1N-3X-Q10

**Bulb and Capillary**

**Material** Copper, tin plated

**Bulb** 3.12" (79mm), 0.39" (10mm) dia.

**Capillary Length** 30" (762mm)

**System Pressure (max)** 300 psi without thermowell

**Fill** Silicone oil-filled

**Physical**

**Weight** 1.1 pound (0.5 kg)

**Enclosure** Polycarbonate, black

**Ratings** NEMA 1 standard  
NEMA 4X optional

**Electrical Connection**

1-1/8" (28mm) hole for 3/4" NPT conduit hub

12", 14 AWG stranded copper wire, PVC jacketed

UL, CSA

**Approvals**

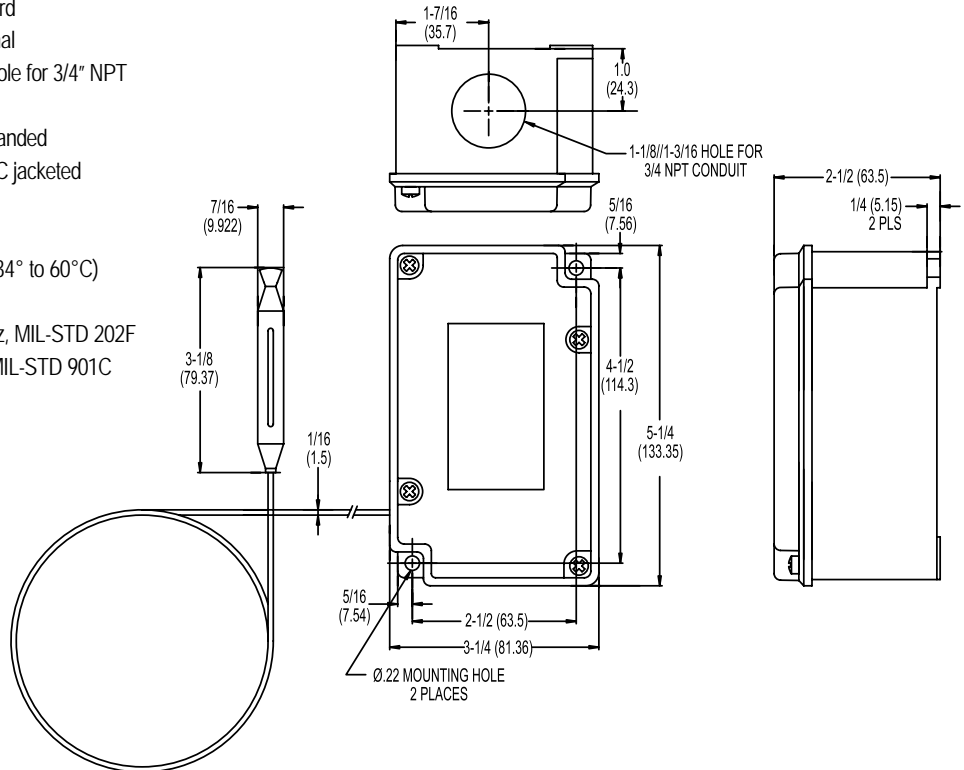
**Environmental**

**Ambient Temperature** -30° to 140°F (-34° to 60°C)

**ENI/RFI** to EN 5011

**Vibration** 10 g's 10-500 Hz, MIL-STD 202F

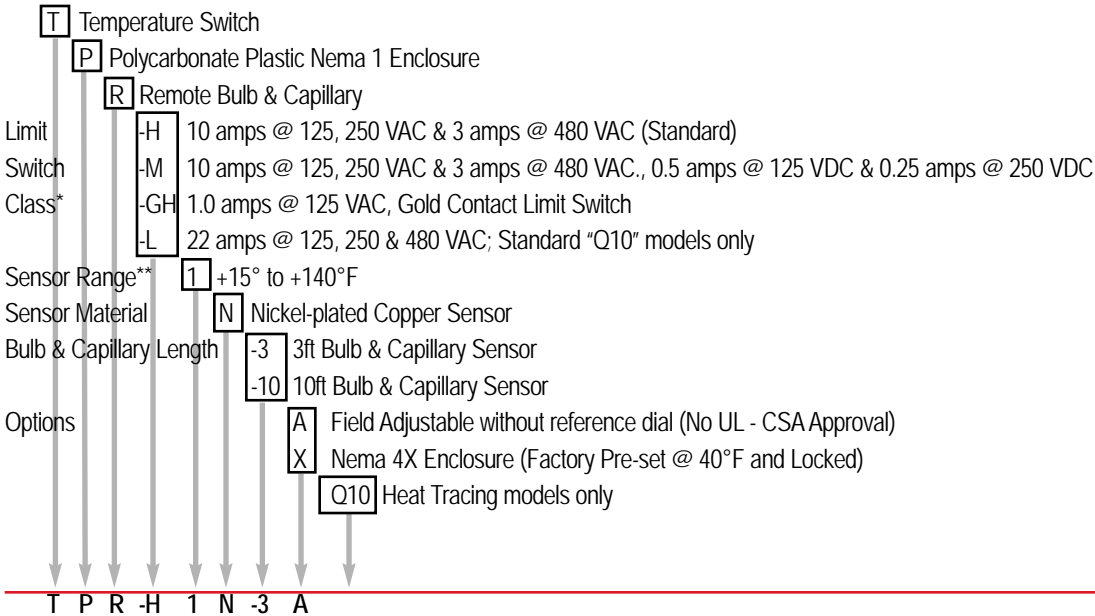
**Shock** 50 g's, 10 mS, MIL-STD 901C



# TPR Temperature Switch

## Temperature Switch for General Applications - Configurator

### Series TPR



Example: TPR-H1N-3A

Operating Characteristics

Range	Adjustable Range				Media Temperature Limit (Proof)				Differential (Approx.) Liquid	
	°F		°C		°F		°C		°F	°C
	Low	High	Low	High	Low	High	Low	High		
1	+15	+140	-0	+60	-40	+160	-40	+71	10	5.6

NOTE:

\* Changing Limit Switch will affect Deadband.  
See Sales Drawing.

\*\* See Operating Characteristics.



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