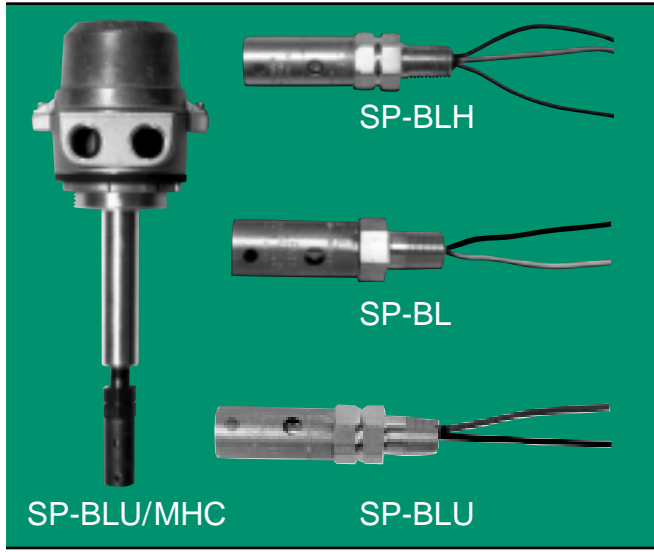


## Thermistor Sensors

### For Overfill Prevention

### Incorporating Dynacheck® – Automatic and Continuous Self-Checking Circuitry



**Scully Thermistor Sensors** are the industry standard for tank vehicle loading applications. The sensors feature:

- Dynacheck® - automatic and continuous self-checking circuitry when used with Scully Rack Control Systems.
- Proven thermistor liquid level sensing for tank trucks and rail cars.
- Self-cleaning for use in heavy viscosity products.
- Functions within a wide range of temperatures and in a variety of liquid products.
- Field adjustable for a variety of sensing levels.
- Solid state construction, no moving parts.
- Sensor and holder assemblies comply with pressure test requirements of DOT HM-183C final rule for new 400 series cargo tanks.
- FM and CSA approved.

### Description

Scully Thermistor Sensors are designed for liquid petroleum product overfill prevention and point level detection. They are used in tank trucks and rail cars during loading operations.

Three models are available for different climate/product operating conditions; the standard SP-BL, the SP-BLU for low ambient temperature operation, and the SP-BLH for heated product sensing.

The SP-BL and SP-BLU sensors are compatible with the Biclops® Rack Control Monitor. All three are compatible with the ST-15 Rack Control Monitor.

### Safety

The thermistor sensor incorporates Scully's unique and exclusive Dynacheck feature when connected to Scully monitoring equipment.

Using pulsed signals the monitor automatically and continuously checks the entire system operation: controller, wiring, connections and sensors, for faults up to 30 times per second.

If liquid comes in contact with the sensor tip, or in the unlikely event a fault occurs, the pulsed signals cease and the monitor signals for immediate shutdown of the loading operation. No operator involvement is needed!

### Sensor Holders

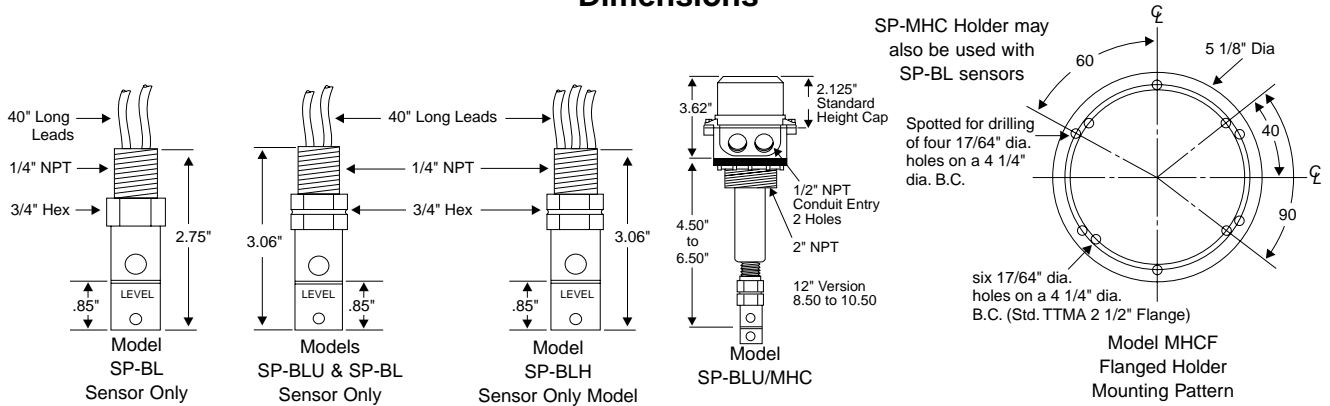
The Scully SP-MHC sensor holder is designed for mounting in a 2" NPT tapping. The SP-MHCF holder is a flanged style unit with a pre-drilled six bolt pattern on a 4<sup>1</sup>/<sub>4</sub>" diameter bolt circle to match the standard TTMA 2<sup>1</sup>/<sub>2</sub>" flange. It is also spotted for a four hole, 4<sup>1</sup>/<sub>2</sub>" diameter mounting pattern. The holders allow for convenient mounting in both tank trucks and rail cars.

The sensing level may be adjusted up or down during installation within a range of 4<sup>5</sup>/<sub>8</sub>" and 7".

**Note:** Model SP-BLU thermistor sensors manufactured after September 1992 are no longer anodized green.

*Setting New Standards In Safety*

## Dimensions



## Technical Specifications

<p><b>Temperature Range:</b> BL; 0° to +130° F (-18° to +55° C). BLU; -40° to +120° F (-40° to +48° C). BLH; -18° to +200° F (-28° to +93° C).</p> <p><b>Detection Level:</b> Adjustable, refer to diagram. Should be set slightly above each compartment's maximum capacity level weights and measure marker.</p> <p><b>Wetted Materials:</b> Aluminum, glass, and Viton seals.</p> <p><b>Level Repeatability:</b> +/- 1/16".</p>	<p><b>Electrical Leads:</b> SP-BL &amp; BLU one black and one white, 40" long leads. SP-BLH one black, white and green, 40" long leads.</p> <p><b>Size:</b> Refer to diagrams.</p> <p><b>Weight:</b> Sensor Tips; .13 lbs. (.06 kgs.). SP-MHC Holder; 2.0 lbs. (.91 kgs.). SP-MHCF Holder; 2.4 lbs. (1.1 kgs.).</p> <p><b>Product Range:</b> SP-BL &amp; SP-BLU; gasoline through #4 oil. SP-BLH; gasoline through #6 oil.</p> <p><b>Control Monitors:</b> Refer to Technical Data Sheets #60659, #60633, #60634 and #67097.</p>
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## Ordering Information

Description	Part #
SP-BLU Thermistor Sensor, Low Temperature, Mounting Shaft, SP-MHC Holder	07730
SP-BLU Thermistor Sensor, Mounting Shaft, Low Temperature SP-MHCF Flanged Holder	07898
SP-BLU Thermistor Sensor, Low Temperature, Sensor Only, No Holder	07558
SP-BL Thermistor Sensor, Standard Temperature, Mounting Shaft, SP-MHC Holder	07729
SP-BL Thermistor Sensor, Standard Temperature, Sensor Only, No Holder	07619
SP-BLH Thermistor Sensor, Heated Product, Mounting Shaft, SP-MHC Holder	07731
SP-BLH Thermistor Sensor, Heated Product, Sensor Only, No Holder	07594
SP-MHC Holder Only, Mounting Shaft, Less Sensor	07728
SP-MHCF Flanged Holder Only, Less Sensor And Mounting Shaft	08265

## Replacement Parts

Description	Part #
Standard Height Cap, 2 1/8", SP-MHC & SP-MHCF Holders	20888
Optional Lower Cap, 1 3/8", SP-MHC & SP-MHCF Holders	21583
Sensor Mounting Shaft	20891
Shaft O-Ring Replacement Kit	08577
SP-MHC Holder Mounting Gasket	20893
SP-MHCF Holder Mounting Gasket	21451
Holder Mounting Nut, 2" NPT	57044
Cover O-Ring	20766

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