# TempTron By scale-TRON

### THE TOUGH AND RELIABLE TEMPERATURE SENSOR

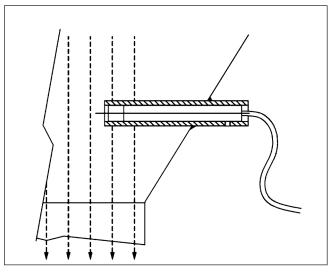
**TempTron** meets the need for temperature monitoring in concrete, asphalt and similar plants where normal sensors just do not last. **TempTron** has built-in electronics, allowing it to transmit temperature readings for long distances with its 2-wire analog connection. Its standard process-control output matches PLC and computer inputs to allow simple setup of both indicators and temperature control systems.

- Rugged Stainless steel construction
- Thermally conductive cap allows fast response
- Mounting options to suit bins, silos, conveyors and mixers
- Indication in either Celsius or Fahrenheit
- 0 100°C sensing range (32 212°F)
- Analog 4-20mA output compatible with most PLC & PC controllers
- Complete kits including both panel-mount and wall-mount or custom multi-indicator displays
- Sensing cap is replaceable
- Meets UL and CE requirements
- North American made, with same-day shipping and local service.

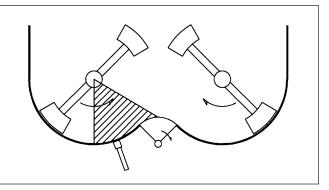
#### Mounting in bins and silos



#### **Mounting in mixers**



To monitor correctly and with fast response, the sensing cap needs to be in the flow region where material is drawn from the vessel. The optional extension tube allows the sensor to be positioned correctly and gives extra protection against wear.



Two options are available for monitoring the temperature of material inside a mixer:

**LOWEST WEAR** – the sensor is mounted via the optional mixer mount so that the sensing cap is in contact with the underside of a liner plate. Heat conducted through the liner is passed to the sensing cap through heat conductive paste to give accurate temperature indication.

**FASTEST RESPONSE** – a hole can be cut through the liner plate, allowing the sensing cap to protrude to just below the surface of the liner. This gives the fastest response time but creates some wear of the cap.

## **Specifications**

#### Sensor

Dimensions: 22.5mm x 165mm long with 3.65m cable  $(7/8" \times 6-1/2")$  long with 12' cable).

Probe Material: Stainless Steel body with brass sensor head.

Cable Material: PVC, 4-conductor.

Protection: IP68 (NEMA 6P), hermetically sealed.

Temp. Range:  $0^{\circ}C - 100^{\circ}C (32^{\circ}F - 212^{\circ}F)$ .

Power: 9 - 32VDC.

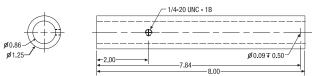
Output: 4-20 mA for specified temperature range.

Accuracy:  $\pm (0.25\% / °C + 0.40\% \text{ of span})$  with 1-point calibration.

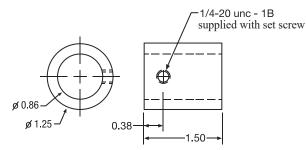
 $\pm$  (0.10% / °C + 0.10% of calibrated span) with 2-point calibration.

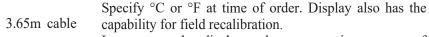
Long term Drift:  $\leq 0.1\%$  FS

#### **BIN / SILO MOUNT**



#### **MIXER MOUNT**





digits.

Loop powered – display and sensor require a source of DC power.

**Digital Display Only for panel mounting** 3 <sup>1</sup>/<sub>2</sub> digit (0-100.0°C or 0-199.9°F), 15mm (0.6") LCD

#### Digital Display in wallmount enclosure

Panel Mount, enclosed in 102 x 102 x 51mm (4" x 4" x 2") IP52 (NEMA-12) ABS enclosure.

#### **Multiple Display Cabinets**

Any number of the panel mount displays are supplied in dust proof enclosures. Waterproof enclosures are available on special order.

#### **Infra-Red temperature sensing**

When response time is critical, infra-red sensing is the way to go. We can supply sensors for concrete mixers and conveyors that measure and average, giving you the ability to measure temperature on the fly.

#### **Temperature control**

Scale-Tron designs installs and cooling and heating control systems for aggregates and cements. The PLC and touch screen aggregate refill controls maintain a supply of materials in batching and continuous mixing plants. Controls include variable speed drives for wet belts to maintain temperatures of materials at an appropriate level to produce concrete and other products within specified temperature ranges. Experience includes plants with production up to 600 cu. yd. per hour.

#### **Aggregate refill controls**

In partnership with our associated companies we can supply complete aggregate refill systems including holding hoppers, conveyors, wet belts, re-screening and sand cooling.

## Aggregate, sand and cement cooling systems

Cooling control systems used to cool the water in the wet belts, plus forced-air cooling of cements and sand.



Automation, sensors and weighing systems

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