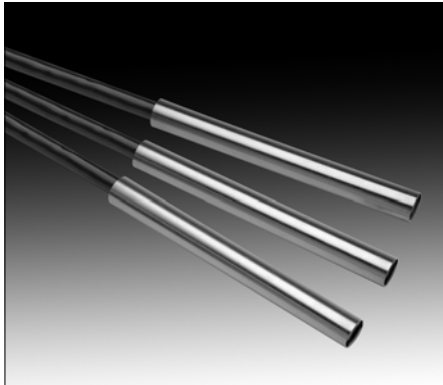
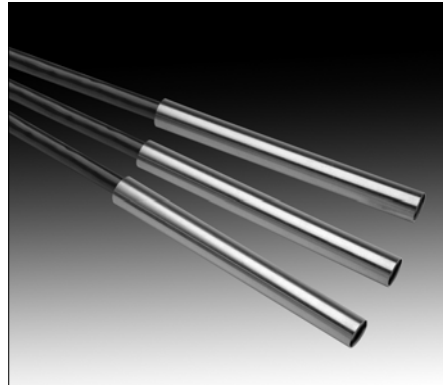


Temperature Sensors



Thermistor sensors



RTD Sensors



VW Sensors

Applications

Temperature sensors are used to monitor the heat of hydration in mass concrete.

Slope Indicator can provide VW, Thermistor, or RTD sensors.

Operation

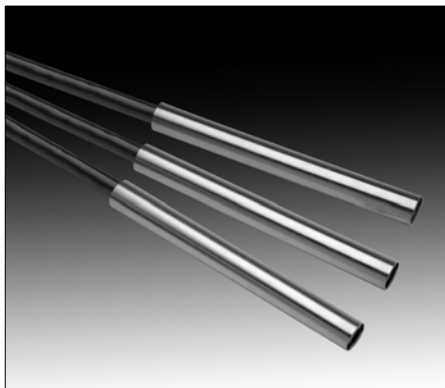
The thermistor and RTD sensors are resistance devices that return a voltage. The voltage must be converted to temperature values by the readout or logger. This is normally done automatically.

The VW temperature sensor consists of a stainless steel vibrating wire sensor and signal cable. It returns a frequency signal that must be converted to temperature values by application of calibration factors.

Advantages

Accurate: Temperature sensors are accurate to ± 0.5 °C

Compatible: The themistor and RTD versions can be read by almost all readouts and loggers. The VW version can be read by most devices that can read other vibrating wire sensors.



VW TEMPERATURE SENSOR

VW Temperature Sensor52631510

Sensor Type: Pluck type vibrating wire sensor with built-in thermistor or RTD and transient protection device.

Range: -20 to 80°C (100° Span). Other ranges available on special order.

Resolution: 0.025% FS.

Calibration Accuracy: ±0.5% FS.

Response Time: 2.5 minutes for 60% of full thermal equilibrium.

Full Thermal Equilibrium: 15 minutes.

Dimensions: 19 x 115 mm (0.75 x 4.5").

Materials: Brass body.

Weight: 145 g (0.32 lb.).

SIGNAL CABLE FOR VW SENSOR

Signal Cable50613524

Shielded cable with four copper conductors and cable jacket rated to 80°C. Specify cable length required for each sensor.

RTD AND THERMISTOR SENSORS

RTD Temperature Sensor 92600056

Thermistor Temperature Sensor. . 92600057

These economical temperature sensors employ resistance temperature devices rather than vibrating wire transducers. When read by standard VW readouts, they return a reading in degrees C. Otherwise, they return a voltage reading that can be converted to units of temperature by applying calibration factors.

Sensor Type: RTD (2K ohm) or Thermistor (3 k ohm).

Range: -20 to 80°C. Other ranges available.

Resolution: 0.2°C with VW Data Recorder.

Accuracy: ±0.5°C FS

Dimensions: 9.5 x 101 mm (0.375 x 4").

Materials: Brass body.

Weight: 50g (0.11 lb.).

Signal Cable: Same as VW temperature sensor.

Readout and Data Loggers: VW Data Recorder and most types of data loggers.

SIGNAL CABLE

Signal Cable50613524

Shielded cable with four copper conductors and cable jacket rated to 80°C. Specify cable length required for each sensor. Can be used with VW, RTD, or Thermistors

High-Temperature Signal Cable . .52602320

For use only with RTDs or thermistors. Shielded cable with two copper conductors and thermal rubber jacket rated to 115°C.

READOUTS

VW Data Recorder.52613500

Jumper to Terminal Box52613557

VW Data Recorder reads VW sensors and returns a reading in volts. It also reads RTDs and Thermistors and returns a reading in degrees C.

TERMINAL BOXES

Terminal Box for 6 sensors57711606

Terminal Box for 12 Sensors57711600

Terminal Box for 24 Sensors97711624

Provides terminals for signal cable from 6, 12, or 24 sensors. Sensors are selected by rotary switch. Small 6-sensor box is 240 x 190 x 120 mm (9.5 x 7.5 x 4.75"). Larger 12 and 24-sensor box measures 290 x 345 x 135 mm (11.5 x 13.5 x 5.25").

DATA LOGGERS

VW Temperature Sensors: Campbell Scientific CR1000 with AVW200 has capacity for 2 VW sensors. With an AM16/32 multiplexer connected, capacity increases to 16 or 32.

Campbell Scientific CR1000 has capacity for 8 RTDs or Thermistors. With an AM16/32, capacity increases to 32 RTDs or Thermistors.