



HIGH ACCURACY SLAB TEMPERATURE SENSOR HATSSL Series

The HATSSL single point slab temperature sensor utilizes a high accuracy sensor encapsulated in a thermal conductive coating (ZW, FT & MP) and used to measure the temperature of a concrete slab. The MPS is encapsulated and potted in a 12.7 mm (0.5") D X 101.5 mm (4") L double walled, S/S probe that allows for total liquid submersion. They are available with various sensor types, wire types and lengths. All probes are constructed to provide excellent heat transfer, fast response and to resist moisture penetration.

SPECIFICATION:

Sensor Type Platinum RTD, 1000 Ω , 385 Alpha @ 0°C
NTC Thermistor, 10,000 Ω @ 25°C, Type 2 or 3
NTC Thermistor, 20,000 Ω @ 25°C

Temperature Range ZW: -20 to 105°C (-4 to 221°F)
FT: -20 to 60°C (-4 to 140°F)
MP: -20 to 80°C (-4 to 176°F)

Accuracy RTD Class A: $\pm 0.15^\circ\text{C}$ @ 0°C
RTD 1/3 DIN: $\pm 0.1^\circ\text{C}$ @ 0°C
RTD 1/10 DIN: $\pm 0.03^\circ\text{C}$ @ 0°C
NTC Thermistor Type 39: $\pm 0.05^\circ\text{C}$, 0-70°C
NTC Thermistor Type 55: $\pm 0.03^\circ\text{C}$, 0-70°C
NTC Thermistor Type 40/46: $\pm 0.1^\circ\text{C}$, 0-70°C

Wire Material ZW: PVC Zip wire, 22 AWG
FT: Plenum rated FT-6, 22 AWG
MP: EPC Moisture proof, 20AWG
MPS: EPC Moisture proof, 20AWG

Probe MPS: Double walled, 304 S/S
12.7 mm D X 101.5 mm L (0.5" X 4")

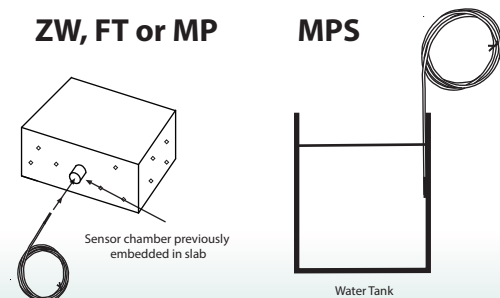
Termination Pigtail 2 or 3 wire

TYPICAL INSTALLATION:

For complete installation and wiring details, please refer to the product installation instructions.

ZW, FT & MP: Typically a predetermined area is defined where the temperature reading is required. During concrete installation a sufficient length of conduit or copper tubing is imbedded from this point to an area that will be accessible once complete. At HATSSL and carefully insert sensor and feed into chamber until the chamber end is reached.

MPS: Unravel the sensor and lower the probe in the tank until below the liquid line or at desired depth. Secure cable to maintain depth. The probe may also be attached to the tank wall with some form of clamp at desired depth.



PART NUMBER SELECTED

PRODUCT SELECTION INFORMATION:

CODE	Product Description
HATSSL	High Accuracy Slab Temperature Sensor

CODE	Sensor
18	1000 Ω Platinum, 2 Wire, IEC 751, 385 Alpha, thin film, Class A
48	1000 Ω Platinum, 2 Wire, IEC 751, 385 Alpha, thin film, 1/3 DIN
22	1000 Ω Platinum, 2 Wire, IEC 751, 385 Alpha, thin film, 1/10 DIN
41	1000 Ω Platinum, 3 Wire, IEC 751, 385 Alpha, thin film, Class A
49	1000 Ω Platinum, 3 Wire, IEC 751, 385 Alpha, thin film, 1/3 DIN
50	1000 Ω Platinum, 3 Wire, IEC 751, 385 Alpha, thin film, 1/10 DIN
39	10,000 Ω , Type 2, NTC Thermistor, $\pm 0.05^\circ\text{C}$
55	10,000 Ω , Type 2, NTC Thermistor, $\pm 0.03^\circ\text{C}$
40	10,000 Ω , Type 3, NTC Thermistor, $\pm 0.1^\circ\text{C}$
46	20,000 Ω , NTC Thermistor, $\pm 0.1^\circ\text{C}$

CODE	Wire Type
ZW	PVC Zip Wire - 22 AWG (1000 Ω Platinum Only)
FT	Plenum rated FT-6 - 22 AWG
MP	Moisture Proof Burial - 20 AWG
MPS	Moisture Proof Submersible - 20 AWG

CODE	Wire Length
5	5' (1.5 m)
10	10' (3 m)
25	25' (7.6 m)
50	50' (15.25 m)
100	100' (30.5 m)
**	Custom, Please contact Greystone

