

DELTA CORPORATION Truck & Rail Car Loading Sensor



DELTA M has a specially designed sensor for use in loading trucks and railcars. This unit has a quick locking clamp that attaches to the manhole and allows the probe to be adjusted to the desired level inside of the tank. These units can be used in hazardous areas and corrosive environments. The use of these sensors has been instrumental in preventing spills caused by accidental over filling and in preventing the time and cost involved in off loading material when a truck has been filled beyond its weight restrictions.

SPECIFICATIONS

Sensor

Type:

Thermal Differential, Dual RTD Sensors

Process Connection:

Automatically latching clamp

Insertion Length:

Standard 32.0 inch

Optionally 12 inch to 96 inches

Operating Temperature Range:

Standard -100°F to 390°F (-70°C to +200°C)

Medium Temperature to +572°F (+300°C)

Materials of Construction:

Standard 316L Series Stainless Steel

Optionally Hastelloy, Monel, Inconel and other exotic materials

Operating Pressure Range:

Standard to 3000 psia (207 bar)

Electronics

Power:

Standard 110VAC Optionally 220VAC, or 24VDC at 3 watts (No heater power required)

Operating Temperature Range:

Standard -40°F to +140°F (-40°C to +60°C)

Outputs:

microtuff®

DPDT Relay contacts rated at 5 amp, 250 VAC with fail safe capability

VERSA-SWITCH®

Independent primary relay DPDT and secondary relay SPDT, contacts rated at 5 amp, 250 VAC with fail safe capability; built in time delay 0 to 300 seconds for each channel

Self-Test:

Integral and automatic during power up

Enclosure:

Explosion proof; NEMA 3, 4X, 7, and 9; CSA, FM, UL, CENELEC, and EECS approved

Instrument

Operating Range:

Switch on level change of .03 inch. Available with insertion lengths from 12 to 96 inches.

Response Time:

Sensor response time 0.1 to 1 second media dependent

Stability:

Drift < .5% from calibrated setpoint over a range of ±50° F. Temperature compensated throughout entire range.

Repeatability:

±1% of setpoint

Approvals:

Optionally CE, CSA, CENELEC

Class 1 Div. 1 Groups B, C, & D when used with explosion proof cable and conduit.

Intrinsically Safe when used with IS option and proper barriers Class 1 Div. 1 Groups A, B, C, & D

Code Model

VS5100 - Dual Channel VERSA-SWITCH

VS51NX- Dual Channel Non Explosion Proof

LS51SC - Single Channel Mass Flow Switch

LS51NX- Single Channel Flow Non Explosion Proof

LS32CS - CSA Approved Switch

LS32CN - CENELEC Approved Switch

LS32NX - Non Explosion Proof Switch

Code - Process Connection

TLP - Truck Loading Probe

Code - Sensor Material

S6 - 316L Stainless Steel (std)

HB - Hastelloy B

HC - Hastelloy C

IO - Inconel 600

MN - Monel

A2 - Alloy 20

SM - Special Material

Code - Insertion Length

32.00 - 32.00 inch (std)

00.00 - 12" to 96.00" in .25"

Code - Power Input

FLD - Field Config. (Versa only)

110 - 110 VAC

220 - 220 VAC

24D - 24 VDC

24A - 24 VAC (Versa only)

Code - Configuration

RE - Remote Electronics (std)

RC - Remote Control Unit

Code - Special Option

CO - Clamp On (std)

XW - X proof Window

DS - Double Sided

FA - Failure Alarm

(VS5100 Only)

RT - RTD Output

TO - Thermocouple Out

CA - Additional Cable

CE - CE Approved

IS - Intrinsically Safe

(LS32NX only)

XC - X Proof Cable

LS32NX - TLP - S6 - 32.00 - 24D - RE - CO **Model Number**

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