

# *New Approved Switch*



- Thermal point level switch for the detection of level in all vessels.
- Wide operating temperature range -100°F to +850°F (-70°C to +458°C).
- Switch on level change of .03 inch without concern for changing temperature, density, dielectric constant or chemical composition.
- Removable, plug in electronics.
- Free of all moving parts that can stick, coat or fail.
- Fast response time of .1 to 1 second on wetting, media dependent.
- Self heating sensor design improves repeatability. No separate heater to fail or slow response time.
- CE, CENELEC and CSA Approved.

# MODEL LS3200

**microtuf**<sup>®</sup>

Single Channel Point Level Switch

## SPECIFICATIONS

### Sensor

#### Type:

Thermal Differential, Dual RTD Sensors

#### Process Connection:

Standard 0.75 inch MNPT

Optionally 0.5 inch and larger MNPT and various other process connections such as sanitary and flanges

#### Insertion Length:

Standard 2.0 inch

Optionally 0.5 inch or greater

#### Operating Temperature Range:

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

Medium Temperature to +572°F (+300°C)

High Temperature to +850°F (+458°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)

Optionally remote electronics for use in medium and high temperature environments

#### Outputs:

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

#### Self-Test:

Integral and Automatic during power up.

#### Enclosure:

Explosion proof; NEMA 3, 4, 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 0.5 inch to 30 feet.

#### Response Time:

Sensor response time 0.1 to 1 second media dependent

#### Stability:

Drift < .5% from calibrated setpoint over a range of  $\pm 50^\circ$  F. Temperature compensated throughout entire range.

#### Repeatability:

$\pm 1\%$  of setpoint

#### Approvals:

CE, CSA, CENELEC (EEx-d IIC T4)

Class 1 Div. 1 Groups B, C, & D

## Model Number Selection Guide

### Model

LS32CS- CSAApproved Switch

LS32CN - CENELEC Approved Switch

LS32NX - Non Explosion Proof Switch

#### Code - Process Connection

3A1 - 1.5 Inch Sanitary w/3A Stamp

075 - 0.75 inch MNPT (std)

050 - 0.50 inch MNPT

100 - 1 inch MNPT

RA1 - Raised face flange 150 # 1 inch

RA2 - Raised face flange 150 # 2 inch

RB1 - Raised face flange 300 # 1 inch

RB2 - Raised face flange 300 # 2 inch

SPL - Special

#### Code - Sensor Material

S6 - 316L Stainless Steel (std)

S4 - 304 Stainless Steel

SL - 304L Stainless Steel

HB - Hastelloy B

HC - Hastelloy C

IO - Inconel 600

MN - Monel

A2 - Alloy 20

SM - Special Material

#### Code - Insertion Length

002.00 - 2.00 inch (std)

000.00 - 0.50" to 120.00" in .25"

000.00 - Custom Length

#### Code - Power Input

110 - 110 VAC

220 - 220 VAC

24D - 24 VDC

#### Code - Configuration

LE-Local Electronics(std)

RE-Remote Electronics

#### Code - SpecialOption

00 - No Special Option

CB - Calibration req.

EN - Extended Neck

XW- X proof Window

VI- Variable Insertion

LT - Livetap

DS - Double Sided

MT - Medium Temp.

HT - High Temp.

RT - RTD Output

TO-Thermocouple Out

CA - Additional Cable

CE - CE Approved

LS32NX - 075 - S6 - 002.00 - 110 - LE-00 Model Number

Form Number (DML 1010.00)