



- Simple field configurable unit for mass flow, level, and/or temperature of liquids or gasses with time delay adjustable from 0 to 300 sec.
- Wide operating temperature range -100°F to +850°F (-70°C to +458°C).
- Field selectable operating power 110VAC, 220VAC, or 24VDC.
- Removable, plug in electronics.
- Can be configured with 2 independent outputs, such as level or mass flow with temperature or two mass flow rates
- Can be used for either gas or liquid applications including interface detection.
- Self heating sensor design. No separate heater to establish thermal differential.
- Two Year Workmanship Warranty.

MODEL VS5100

FULL FEATURED VERSA-SWITCH®

SPECIFICATIONS

Sensor

Type:

Thermal Differential, dual RTD sensors with no separate heater

Process Connection:

Standard 0.75 inch MNPT

Optionally 0.25 inch and larger NPT 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 Field selectable 110VAC, 220VAC, or 24VDC at 3 watts (No heater power required) Optionally 24VAC

Operating Temperature Range:

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

Optionally: Remote electronics for use in higher temperature environments.

Outputs:

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.

Failure Alarm Option:

Continuous monitoring circuit to alarm should a failure condition of any sensor, component, wiring, or power occur. (Uses second channel of the VS5100)

Enclosure:

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

Instrument

Operating Range:

Flow 0.01 to 5.0 fps in liquids and 0.1 to 500 fps in gases. Level change as small as .03 inch.

Temperature -70° C to +458° C +/- 1° C.

Response Time:

Media dependent 0.5 to 10 seconds.

Approvals:

CSA Class 1 Div. 1 Groups B,C,&D Class 2

Div. 1 E,F,&G with T4A Temp rating.

Model Number Selection Guide

Model

VS5100 - Dual Channel VERSA-SWITCH®

VS51NX - Dual Channel Without Approvals

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

LFS - Low Flow Sensor

S76 - SP76 Sensor

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

FLD - Field Config. (std)

110 - 110 VAC

220 - 220 VAC

24D - 24 VDC

24A - 24 VAC

Code - Configuration

LE-Local Electronics(std)

RE-Remote Electronics

Code - Special Option

00 - No Special Option

CB - Factory Cal.

EN - Extended Neck

XW- X Proof Window

VI- Variable Insertion

LT - Livetap

DS - Double Sided

FA - Failure Alarm

MT - Medium Temp.

HT - High Temp.

RT - RTD Output

TO-Thermocouple Out

CA - Additional Cable

PC - Potted Cable

TG - Stainless Tag

VS5100 - 075 - S6 - 002.00 - FLD-LE-00 Model Number

Form Number (DML 1009.02)