



- Mass Flow Switch for the mass flow rate detection of liquids and gases.
- Wide operating temperature range -100°F to +850°F (-70°C to +458°C).
- Wide operating flow range of .01 to 5 feet per second (fps) in oil, 2.5 fps in water and .1 to 500 fps in gases.
- Removable, plug in electronics.
- Free of all moving parts that can stick, coat, or fail.
- Fast response time of .5 to 10 seconds depending on the media.
- Self heating sensor design improves repeatability. No separate heater to fail or slow response time.
- Two Year Workmanship Warranty.

MODEL FS51SC

VERSA-SWITCH®

Single Channel Mass Flow 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 0.5inch 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, 220 VAC, or 24 VDC 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:

Independent relay DPDT, contacts rated at 5 amp, 250 VAC with fail safe capability.

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:

Adjustable Flow Rate feet per second (fps), typical: 0.01 to 5.0 fps oil, 2.5 fps in water and 0.1 to 500 fps gases

Response Time:

Sensor response time 0.5 to 10 seconds media dependent

Repeatability:

±1% of setpoint

Approvals:

FM and CSA

Model Number Selection Guide

Code - Model

FS51SC - Single Channel Mass Flow Switch

FS51NX - Single Channel Flow w/o 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

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"

Code - Power Input

FLD - Field Config. (std)

110 - 110 VAC

220 - 220 VAC

24D - 24 VDC

24A - 24 VAC (factory only)

Code - Configuration

LE-Local electronics(std)

RE-Remote electronics

Code - Special Option

00 - No Special Opt.

CB - Calibration req.

EN - Extended Neck

XW- X proof window

VI- Variable Insertion

LT - Live Tap

DS - Double Sided

MT - Medium Temp.

HT - High Temp.

RT - RTD output

TO - Thermocouple

CA - Additional Cable

TG - Stainless Tag

FS51SC - 075 - S6 - 002.00 - 110 - LE - 00 Model Number

Form Number (DML 1005.02)