



- Mass Flow Switch for the detection of the mass flow rate of liquids and gases.
- Wide operating temperature range -100° F to +850° F (-70° C to +458° C).
- Wide flow range of .01 to 5 feet per second (fps) in liquids and .1 to 500 fps in gases.
- Two year workmanship warranty.
- 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.
- CE, CENELEC and CSA Approved.

MODEL FS4200

microtuf[®]

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 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, 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 liquids and 0.1 to 500 fps gases

Response Time:

Sensor response time 0.5 to 10 seconds media dependent

Stability:

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

Repeatability:

±1% of setpoint

Approvals:

CE, CSA, CENELEC

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

Model Number Selection Guide

Model

FS42CS - CSA Approved Switch

FS42CN - CENELEC Approved Switch

FS42NX - 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 - Special Option

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

FS42NX - 075 - S6 - 002.00 - 110 - LE - 00 Model Number

Form Number (DML 1011.01)