DELTA CORPORATION

microtuf®

MODEL FS4200

Single Channel Mass Flow

- 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.
- 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.
- CE, CENELEC and CSA Approved.

MODEL FS4200

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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, 4, 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 (EEx-d IIC T4)
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 - 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

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

Form Number (DML 1011.00)