

VERSA-SWITCH[®] MODEL FS51SC Single Channel Mass Flow



- 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 ranage 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.
- 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 $+200^{\circ}$ C) Medium Temperature to $+572^{\circ}F$ ($+300^{\circ}C$) High Temperature to $+850^{\circ}F$ ($+458^{\circ}C$) **Materials of Construction:** Standard 316 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 $+140^{\circ}$ F (-40° C to $+60^{\circ}$ 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, 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 **Repeatability:**

±1% of setpoint Approvals: FM and CSA

Model Number Selection Guide

Code - Model FS51SC - Single Channel Mass Flow 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 FA1 - Flat face flange 150 # 1 inch FA2 - Flat face flange 150 # 2 inch FB1 - Flat face flange 300 # 1 inch FB2 - Flat face flange 300 # 2 inch SPL - Special Code - Sensor Material S6 - 316 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 12.00" in .25" 000.00 - 12.25" 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 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 FS51SC - 075 - S6 - 002.00 - 110 - LE - 00 Model Number

Form Number (DML 1005.01)