



# FLOW SWITCH - *High Flow*

Semiconductor/Speciality Gas Series  
Adjustable Range 1 slpm to 700 slpm



**FS5800 Series Flow Switch - *High Flow***  
available with welded 1/4 and 1/2 VCR®  
Connections with optional Explosion  
Proof Cap

The FS5800 Series Flow Switch - *High Flow* is designed to precisely detect increasing or decreasing flow rate of gases in critical semiconductor and speciality gas processes. Typical applications include flow fault monitor for vacuum pump purging systems, as well as oxygen, hydrogen and nitrogen systems and excess flow safety. The linear, high resolution adjustment allows for precise settings. The compact construction is ideal for high density system packaging.

## FEATURES

- ◆ Fully Field Adjustable
- ◆ Operates in any Orientation
- ◆ Operating Temperature  
-40°F to +220°F  
(-40°C to +105°C)
- ◆ Operating Pressure  
1000 psig (68 bar)
- ◆ 316 Stainless Steel Construction
- ◆ Electro-polished, 16 RA
- ◆ Shock and Vibration Resistant
- ◆ Contamination Resistant
- ◆ Optional Explosion Proof
- ◆ CE compliant

## Applications

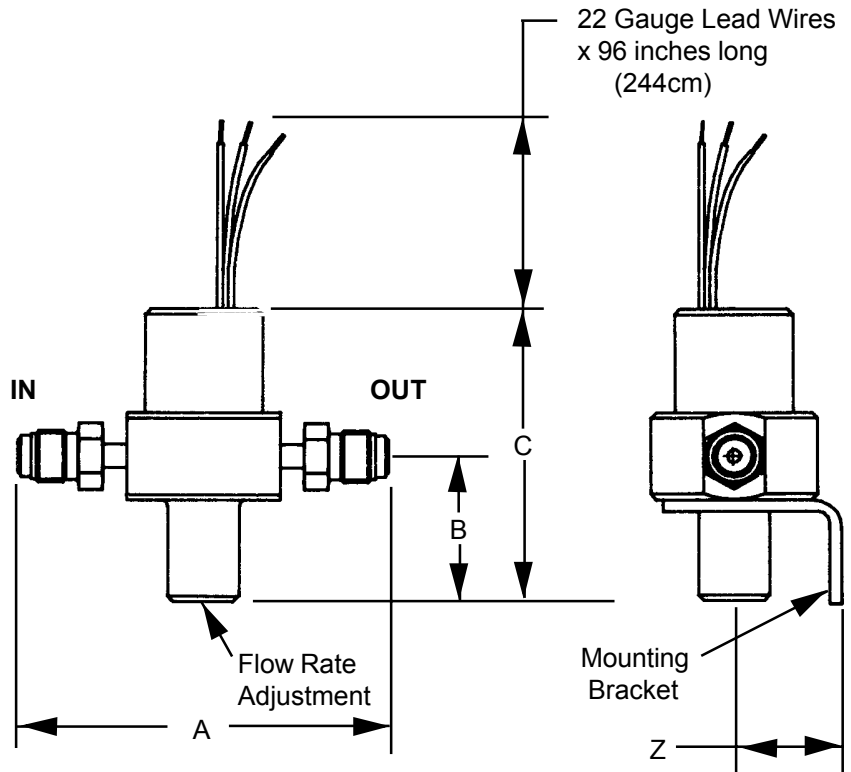
- ◆ Purge flow fault monitor
- ◆ Toxic or hazardous gases
- ◆ Flammable or pyrophoric gases
- ◆ Oxygen systems

# FS5800 Semiconductor/Speciality Gas Series

## FLOW SWITCH - *High Flow*

### SPECIFICATIONS

- ◆ Switch Assembly - SPDT UL 61760
- ◆ 100 VDC, 120 VAC max.
- ◆ 3 Watts resistive max. continuous
- ◆ 0.25 Amp. max. continuous
- ◆ 3.30 VA max. - 100 VDC
- ◆ 2.46 VA max. - 120 VAC
- ◆ 0.20 Ohm max contact resistance
- ◆ Adjustable Flow Rate Setpoint\*  
(see table)
- ◆ Fluid Media: Gases including corrosives
- ◆ Pressure: 1000 psig max. (207 bar)
- ◆ Differential Pressure at set point:  
-5, -8: 1.0 psi max.  
-6, -9: 5.0 psi max.
- ◆ Operating Temperature:  
-40°F to 220°F (-40°C to 105°C)
- ◆ Leakage: 1x10<sup>-7</sup> cc/sec He max.
- ◆ Set Point Accuracy: ±1%
- ◆ Response Time: 10 milliseconds max.
- ◆ Deactuation (reset): less than 12% of actuation set point
- ◆ Internal Filter: 40 micron
- ◆ Materials:  
Body and wetted parts: 316 St Stl  
Spring: Inconel X  
Seals: As specified



| Series | Pressure Ports | Dimensions |      |      |      |    | Adjustable* Flow Rate |
|--------|----------------|------------|------|------|------|----|-----------------------|
|        |                | A          | B    | C**  | Z    |    |                       |
| FS5804 | 1/4 VCR®       | 4.30       | 1.56 | 3.12 | 1.13 | -5 | 1 slpm - 65 slpm      |
|        |                |            |      |      |      | -6 | 1 slpm - 120 slpm     |
| FS5808 | 1/2 VCR®       | 4.18       | 1.56 | 3.12 | 1.13 | -5 | 1 slpm - 65 slpm      |
|        |                |            |      |      |      | -6 | 1 slpm - 120 slpm     |
| FS5808 | 1/2 VCR®       | 4.90       | 2.24 | 3.88 | 1.63 | -8 | 1 slpm - 325 slpm     |
|        |                |            |      |      |      | -9 | 1 slpm - 700 slpm     |

### ORDERING INFORMATION

Part Number Example: **FS5804 C V - 5 M X**

Basic Series: \_\_\_\_\_  
 FS5804 - 1/4 VCR®  
 FS5808 - 1/2 VCR®

Material: \_\_\_\_\_  
 C = 316 Stainless Steel

Seal Material: \_\_\_\_\_  
 V = Viton®  
 B = Buna - N  
 E = Ethylene Propylene  
 K = Kalrez®

Optional Explosion Proof Cap

Optional Mounting Bracket

Adjustable Flow Range\*  
(see table)

\* Adjustable Flow Rate Set Point Nitrogen @ 5 psig (0.34 bar)

\*\* Add 0.99 for Explosion Proof Cap

### ELECTRICAL SCHEMATIC

