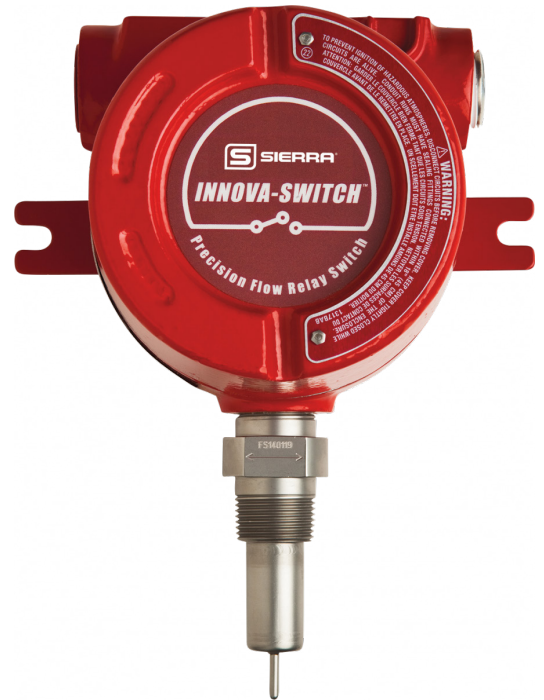


Single Channel Mass Flow Switch

FEATURES

- Mass flow switch for the detection of the mass flow rate of liquids and gases
- Wide operating temperature range -100°F to +850°F (-73.3°C to 454°C)
- Flow Switch range of 0.01 to 5 fps liquids and 0.1 to 500 fps gases
- Fast Flow switch response time of 0.5 to 10 seconds (media dependent)
- CE, CENELEC and CSA approvals

INNOVA-SWITCH™



DESCRIPTION

Sierra's InnovaSwitch™ represents the state-of-the-art in gaseous flow switching, continuing the Sierra tradition of providing the highest quality mass flow meters and controllers in the industry.

Flow detection is accomplished by using a high-resolution thermal differential technique. The sensor consists of a pair of matched Resistance Temperature Detectors (RTD's). One RTD is self-heated using a constant DC current. The other RTD is unheated and provides an accurate process temperature reference. The thermal differential created between the reference and the heated RTD pair is a function of the density and/or velocity of the media with which the sensor is in contact. The sensor and welded parts are of durable 316L stainless steel, all welded construction with no moving parts.

The switch is easy to install and adjust, giving reliable, low maintenance performance in the most demanding applications.



PERFORMANCE SPECIFICATIONS

Operating Range

Flow Switch: Adjustable flow rate (feet per second-fps), typical: 0.01 to 5.0 fps liquids and 0.1 to 500 fps gases

Response Time:

Flow Switch: 0.5 to 10 seconds (media dependent)

Repeatability

+/- 1% of setpoint (Flow) or 1/32" (0.8mm) Level

Stability

Drift <0.5% from calibrated setpoint over a range of +/-50F. Temperature compensated through entire range.

OPERATING SPECIFICATIONS

Operating Temperature

Standard Temp: -70°C to 200°C (-100°F to +39°F)

Medium Temp (MT): 300°C max (572°F)

High Temp (HT): 458°C max (856°F)

Electronics: -40°C to 60°C (-40°F to 140°F). Optional remote electronics for use in medium and Hi T environments

Operating Pressure

to 3000 psia (207 bar)

Input Power

115 VAC, 50/60Hz standard. 230 VAC, 50/60Hz optional, 24VDC optional. 3.1 Watt maximum

Output

5A. 250 VAC. DPDT with fail safe capability

OPERATING SPECIFICATIONS (CONTINUED)

Wetted Materials:

316 L SS, Hastelloy, Monel, Inconel or other materials optional

Enclosure:

Explosion Proof; NEMA 3,4X,7,9. CSA, FM, UL, CENELEC and EECS approved

Process Connection:

0.75" MNPT standard. 0.5" and larger MNPT and various other process connections such as sanitary and flanges optional

Insertion Length:

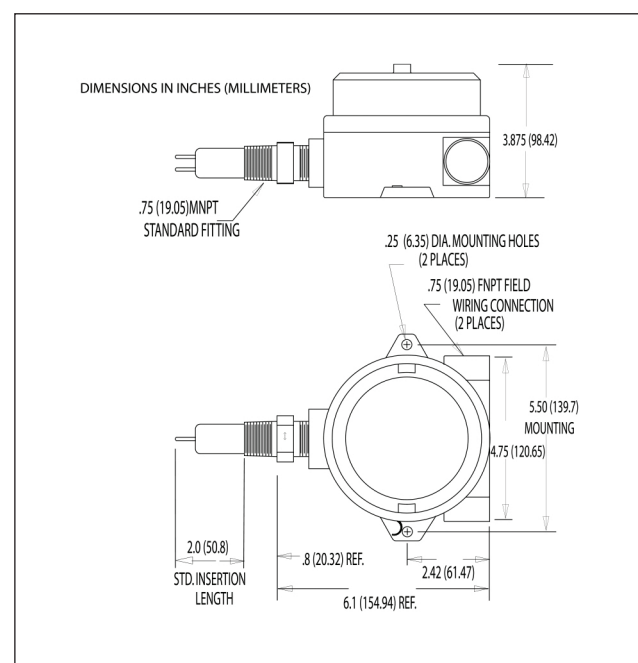
2.0" standard. 0.5" or greater optional

Approvals

CE, CSA, CENELEC Class 1 Div 1 Groups B,C,D

PHYSICAL SPECIFICATIONS

Front and Side Views of InnovaSwitch



PARENT	FEATURES						OPTION(S)				
	1	2	3	4	5	6					
615-FS42											

Instructions: To order a InnovaSwitch 615, please fill in each number block by selecting the codes from the corresponding features below.

Notes: The "Parent" model number and one of each "Feature" must be specified. Example: 615-FS42-S6-NO4-2-110-LE-CS-RTD

Parent	
615-FS42	InnovaSwitch™ Flow Switch

Feature 1: Materials

S6	316L SS
S4	304SS
HC	Hastalloy® C
IO	Iconel 600
MN	Monel
AZ	Alloy 20

Feature 2: Mounting

3A1	1.5-inch Sanitary with 3A stamp
N04	0.50-inch MNPT
N06	0.75-inch MNPT (STD)
N08	1-inch MNPT
RA1-S6	1-inch Stainless steel raised face flange class 150
RA2-S6	2-inch Stainless steel raised face flange class 150
RB1	1-inch Stainless steel raised face flange class 300
RB2	2-inch Stainless steel raised face flange class 300

Feature 3: Insertion Length

2	2.0-inch (50.8 mm) (STD)
xxx.xx	Custom length, specified in .5 inch increments, min. 0.5 inch, max. 120 inches.

Feature 4: Power Input

110	110 VAC
220	220 VAC
24D	24 VDC not available with HT Switch (615-FS42)

Feature 5: Electronics Enclosure

LE	Local electronics (STD)
RE	Remote Electronics with 25-ft cable. (Required for MT and HT)

Feature 6: Approvals

CS	CSA approved
NX	Non-explosion proof switch (STD)

Options

CB	Calibration, air or water (consult factory for other fluids)	HT	High temperature to 850°F (458°C); includes EN(6)
EN (6)	Extended neck 6 inches (152.4mm)	CE	CE approval
XW	Explosion proof window	RTD	RTD output
VI	Variable insertion (>3-inch pipe ID req), 3/4-inch NPT with Teflon ferrule, max. 15 psig (1.0 barg)	TO	Thermocouple output
MT	Medium temperature to 572°F (300°C); includes EN(3)		



Measurably Different.®

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