

Single Channel Mass Flow or Point Level Switch

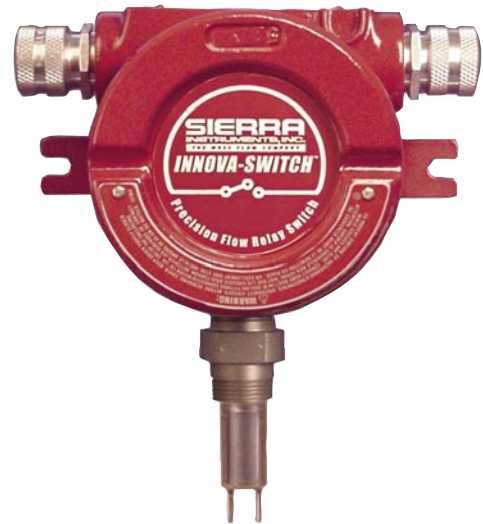
Features

- Mass flow Switch for the detection of the mass flow rate of liquids and gases
- Point level switch for liquid level detection
- Wide operating temperature range -100°F to +850°F (-70°C to 458°C)
- Flow Switch range of 0.01 to 5 fps liquids and 0.1 to 500 fps gases
- Level Switch switches on level change 0.03 inch
- Fast flow switch response time of 0.5 to 10 seconds (media dependent)
- Level switch response time of 0.1 to 1 second of wetting (media dependent)
- CE, CENELEC and CSA approvals



For information online...
www.sierrainstruments.com

Innova-Switch™



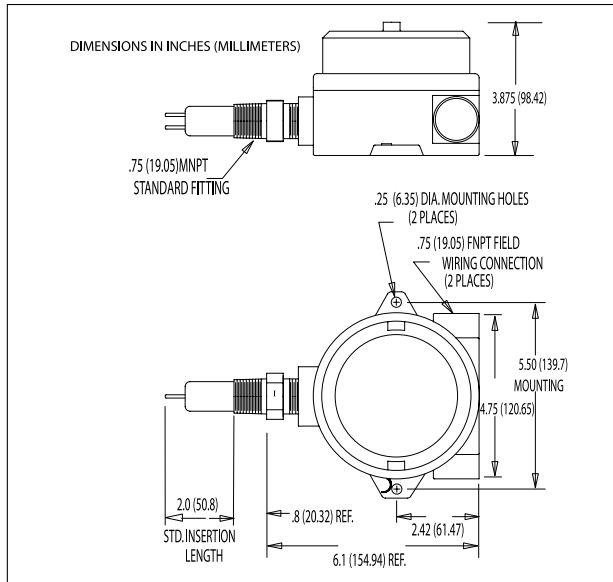
Description

Sierra Instruments' Innova-Switch represents the State-of-the-art in gaseous and liquid flow switching or liquid level control and continues the Sierra tradition of providing the highest quality mass flow meters and controllers in the industry.

Flow and level 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 wetted 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.

Dimensional Specifications



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

Level Switch: Switch on level change of 0.03 inch

Response Time:

Flow Switch: 0.5 to 10 seconds (media dependent)

Level Switch: 0.1 to 1 second (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.

Ordering Information

PARENT MODEL NUMBER		615-LS32							
615-LS32	Innova-Switch LEVEL Switch								
615-FS42	Innova-Switch FLOW Switch								
AGENCY APPROVALS		NX	Non-explosion proof switch						
CS		CSA approved							
CN		CENELEC approved							
PROCESS CONNECTIONS		RA1	Raised face flange 150# 1"						
3A1	1.5" Sanitary with 3A stamp	RA2	Raised face flange 150# 2"						
075	0.75" MNPT (STD)	RB1	Raised face flange 300# 1"						
050	0.50" MNPT	RA1	Raised face flange 300# 2"						
100	1" MNPT	SPL	Special						
SENSOR MATERIAL		HC	Hastalloy C						
S6	316SS (STD)	IO	Inconel 600						
S4	304SS	MN	Monel						
SL	304L SS	A2	Alloy 20						
HB	Hastalloy B	SM	Special Material						
INSERTION LENGTH		000.00	0.5" to 120" in .25" increment						
002.00	2.00" (STD)								
POWER INPUT		24D	24 VDC						
110	110 VAC								
220	220 VAC								
CONFIGURATION		RE	Remote Electronics						
LE	Local Electronics (STD)								
SPECIAL OPTIONS		MT	Medium T						
00	No special options	HT	Hi T						
CB	Calibration Required	RTD	RTD output						
EN	Extended Neck	TO	Thermocouple output						
XW	Explosion Proof window	CA	Additional cable						
V1	Variable insertion	CE	CE approval						
LT	Live (hot) tap								
DS	Double Sided								

Operating Specifications

Operating Temperature:

Process: -70° to 200°C (-100°F to 390°F) standard. Medium T to 300°C (572°F) optional

Hi T to 485°C (850°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

Physical Specifications

Wetted Materials: 316 SS standard. 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