



ALTS Thermal Flow & Level Switch

GENERAL

Smartmeasurement™ ALTS thermal switch represents the State-of-the-art in gas or liquid flow switching or liquid level controls. The ALTS provides the highest quality flow and level detection by using a high-resolution thermal differential technique. The sensor consists of a pair of matched Resistance Temperature Detectors (RTD's). One RTD is using a self-heated 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.

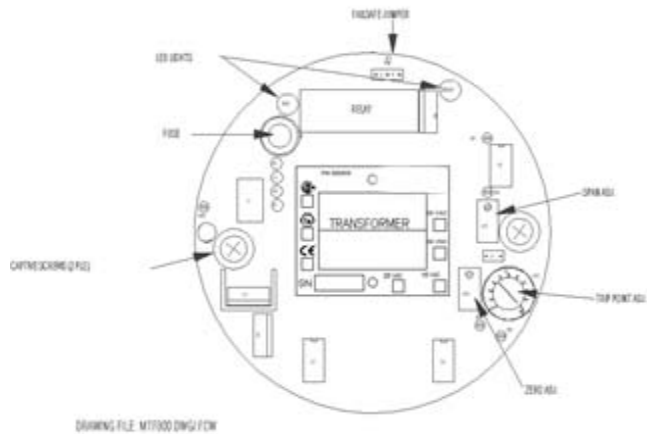
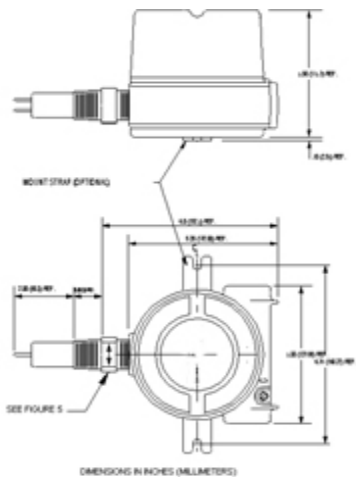
FEATURING

- ❑ Mass flow Switch for the detection of the mass flow rate of liquids and gases
- ❑ No moving parts and no leak paths, no O-rings or graph oil seals to wear, fail or leak.
- ❑ Point level switch for liquid level detection
- ❑ Wide operating temperature range -70C to 458C (-100F to +850F)
- ❑ Flow Switch range of 0 to 1.5 mps (5 fps) liquids and 0.07 to 150 mps (500 fps) gases
- ❑ Level Switch switches on level change 0.076 cm (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)
- ❑ Insertion length from 1.27cm to 100cm
- ❑ CE, CENELEC and CSA approvals



SPECIFICATION

- Process Connection : 0.75" MNPT standard. 0.5 to larger MPNT, Sanitary and flanges optional
- Process temperature : -70C to 200C (-100F to 390F) standard Medium T to 300C (572F) and High T to 485C (850F)
- Operating pressure : to 207 bar (3000 psia)
- Velocity Range : Depends on fluids
Liquids : 0 to 1.5 mps Adjustable flow rate
Gas: 0.07 to 150 mps Adjustable flow rate
- Repeatability : +/- 1% of set point (Flow) or 1/32" (0.8mm) Level
- Material : 316 SS standard. Hastelloy, Monel, Inconel, etc
- Housing protection : Explosion Proof; NEMA 3,4X,7,9
- Ex-protection : CSA, FM, UL, CENELEC and EECs approved
- Power requirements : 115 VAC, 50/60Hz or 230 VAC, 50/60Hz 24VDC optional. 3.1 Watt maximum
Electronics: -40C to 60C (-40F to 140F)
- Output: 5A. 250 VAC. DPDT with fail safe capability
- Insertion Length: 2.0" standard. 0.5" or greater optional
- Flow Switch: over a range of +/-10C.
- Temperature compensated through entire range.
- Stability: Drift <0.5% from calibrated set point



Smartmeasurement LLC.



www.cstc.tw
台湾冠瑄: TEL: +886 7 7532980
Taiwan: E-Mail: TW@CSTC.TW

冠瑄科技有限公司

Creation Service Technology Co., Ltd.
上海可翔国际贸易有限公司
Shanghai Creation International Trading Co., Ltd.
上海可翔: TEL: +86 21 57558972
Shanghai: E-Mail: SH@CSTC.TW

You also need to provide the following information:

Type of liquid	We need the name of your liquid, or gas
Switch point settings	Flow set point and units..
Line Size	we need to know your pipe size as well connection type (flange, threaded, etc..)
Process Temperature	We calibration your Flowmeter as close to your application as possible
Type of Electronics	Indicate if you want integral or remote mounted
Power Requirements	Specify your power requirements such as 24 VDC or 115 VAC or 230 VAC

ALTS Thermal flow & level switches									
ALTS-FS4200 flow switch	XX	XXXX	XXX		XX"	XXX	XXX		Description
ALTS-FS3200 - level switch	XX	XXXX	XXX		XX"	XXX	XXX		Description
CSA approvals	CSA								Agency Approvals
Cenelec Approvals	CNL								
No Approvals	NX								
0.75" MNPT (Standard)	0750		Process connection						
0.5" MPNT	050								
1" MNPT	100								
Raised face flange 150# 1"	RA1								
Raised face flange 150# 2"	RA2								
Raised face flange 300# 1"	RB1								
Raised face flange 300# 2"	RB2								
Special	SPL								
Sanitary with 3A stamp	3A1								
316 SS (Std)	S6								
304 SS	S4								
304L SS	SL								
Hastelloy B	HB								
Hastelloy C	HC								
Inconel 600	IO								
Monel	MN								
Alloy 20	A2								
Special Material	SM								
Local Electronics			LE	Mounting					
Remote electronics with 3 meter cable			RE						
2 inch standard			002.0	Insertion length					
000.00 (0.5" and greater)			??						
24VDC			DC24	Power requirement					
AC120			AC110						
AC220			AC220						
200-300C			NT	Temperature					
300-458 C			HT						
Calibration required			CB						
Extended Neck (high temp)			EN						
Explosion Proof Window			XW						
Variable insertion			V1						
Hot Tap (live)			LT						
DS (double sided enclosure)			DS						
Thermocouple output			THM						
RTD output			RTD						
CE Approvals			CE						

