

## **Multi-Point Liquid Level Switch**

(L312 Small Size Vertical Mount)

## Installation & Maintenance General Information:

Switches should be installed securely and clear of obstructions so the float(s) is free to move with liquid level changes.

Switches should be mounted in an area of the tank free of turbulence or direct streams.

Operate only within listed electrical ratings.

#### Maintenance

Periodically inspect the float to be sure it is not coated or contaminated by any material or substance that would significantly change its weight or volume.

### **Important Points**

- Always operate within specified temperature and pressure ratings. Possible surges in temperature and pressure should also be observed, (see table below).
- Only use with liquids compatible with the material of construction. (Consult factory for information).
- Changes in fluid temperature can affect switch set-points since density/specific gravity may vary with temperature.

## **General Temperature & Pressure Limits**

Float Material / P/N	Temperature	Pressure
Nylon (1010 NY)	150 F	50 PSIG
Polypropylene Hollow (1010 PPH)	150 F	50 PSIG
Polypropylene Solid (1010 PPS)	150°F	150 PSIG
PVC (1010 PV)	140 F	50 PSIG
PVDF (1010 KY)	150 F	50 PSIG
Buna-N (1010 BN)	180°F	150 PSIG
Stainless (1000 LW)	300°F	275 PSIG
Stainless (1000 STD)	300°F	600 PSIG
Stainless (1010 STD)	300 F	600 PSIG
Teflon (1010 TES, spring biased)	300 F	900 PSIG

# **Electrical Ratings and Wiring Diagrams**

Reed switches used in *Innovative Solutions* level switches are hermetically sealed and a magnetically actuated SPST or SPDT rated as maximum power limits in Volt-Amps, (VA).

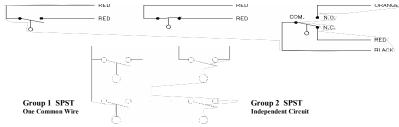
#### CAUTION: DO NOT EXCEED MAXIMUM LOAD RATINGS

Contact protection such as a diode, (DC), or resistor, (AC), should be used to suppress high transient voltages or in rush currents that may cause burning or welding of the switch contacts.

Switch Ratings—Maximum Loads (Resistive)				
VA	Volts	Amps (AC)	Amps (DC)	
50 (SPST)	0-50	0.5	0.5	
	120	0.4	0.4	
100 (SPST)	120	0.8	0.8	
	240	0.2	0.2	
3.0 (SPDT)	30 VDC		0.2	

#### TYPICAL WIRING DIAGRAMS

SPST, NORMALLY OPEN (DRY) SPST, NORMALLY CLOSED (DRY) SPDT , NORMALLY CLOSED (DRY)



SPST Switch Wire Code			
	Group 1	Group 2	
Common Wire	Black	None	
	NO/NC	SW COM/NO/NC	
L1	Red	Red/Red	
L2	Yellow	Yellow/Yellow	
L3	Blue	Blue/Blue	
L4	Brown	Brown/Brown	
L5	Orange	Orange/Orange	

