SERIES W74

EFS-EXCESS FLOW SWITCH
UHP safety device

- Flow trip points from 10 to 1,000 slpm with 100 psig (0.69 MPag) N_2
- Two body sizes, 10 – 150 & 225 – 1,000 slpm
- Online sizing and selection guide
- Vacuum to 3,500 psig (24.1 MPag)
- SS 316L VAR construction
- Vertical flow through design
- Replaceable reed switch
- Cable strain relief protects cable's connection to reed switch
- 100% functional and He leak testing
- All manufacturing and testing to Pure T UHP semiconductor standards
- Face seal and tube stub connection options
- Installation and operating instructions posted to www.puretuhp.com in the Pure Tech section

Operating Parameters

Source pressure	vacuum to 3,500 psig (24.1 MPag)
Flow trip reference points	10, 25, 50, 100, 150, 225, 350, 500 & 1000 slpm N_2 at 100 psig (0.69 MPag)
Accuracy	± 10% of trip point
Installation orientation	Vertical within 8° with outlet port at top
Pressure drop at trip point	1/2 psi (0.0034 MPag) differential
Proof pressure	150% of operating pressure
Burst pressure	300% of operating pressure

Other Parameters

Connections	1/4, 1/2 inch face seal or tube weld
Operating temperature*	-23° to +80°C (-10° to +175°F)
Surface finish	10 Ra µ inch (0.25 µm)
Inboard leakage	1×10^{-10} sccs
Outboard leakage	2×10^{-10} sccs at 100 psig

*Trip point varies slightly with temperature change, ±2% over the specified operating range

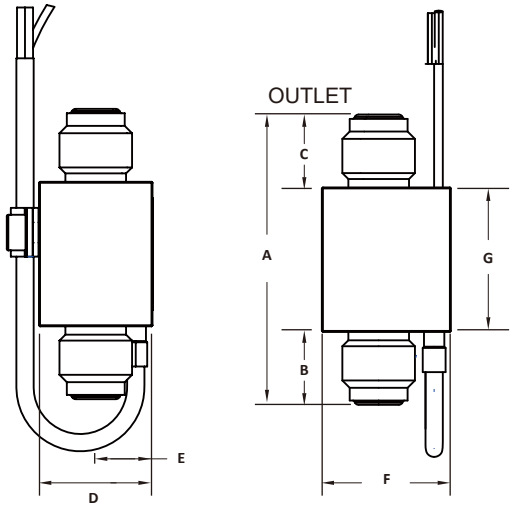
Materials

Wetted Parts		Reed Switch		Cable	
Body	SS 316L VAR	Type	SPDT, 3 wire / 2 position	Wire gauge	Stranded #24 awg, PVC jacket
Float	SS 316L	Power	30 VDC / 5 W max	Cable length	10 ft (3 meters)
Finish	electropolished and passivated	Switching current	0.25 A max	Lead color	Blue: common
		Carrying current	1.5 A max		Brown: normally closed
		Initial contact resistance	0.1 Ohm max		Black: normally open

All specifications subject to change without notice

When safety and purity matter

Dimensional Information



DIMENSION CHART															Trip Points
Connectors (inlet x outlet)	A		B		C		D		E		F		G		
	mm	in[±.03]	mm	in[±.01]	mm	in[±.01]	mm	in[±.03]	mm	in[±.01]	mm	in[±.01]	mm	in[±.01]	
M4 x M4	57.0	2.24	16.0	0.63	16.0	0.63	22.4	0.88	11.2	0.44	25.4	1.00	28.5	1.12	10-150
M8 x M8	77.0	3.03	22.0	0.87	22.0	0.87	28.0	1.10	14.0	0.55	32.2	1.27	33.0	1.30	225-1000

All dimensions in mm (inches). Inch dimensions are for reference only

- The actual trip point varies as the pressure changes, decreasing pressure lowers the trip point. It is recommended to select an actual trip point for the lowest system pressure of switch operation.
- The switch contains a strong magnet which may affect the function of other devices sensitive to such if they are located too closely.
- Do not locate ferrous metals or other magnets within 1 inch of the switch.
- Switch performance is attitude sensitive. It must be mounted within 8 degrees of vertical with the inlet at the bottom.
- The flow switch is strictly intended for gas applications.
- Switch must be properly installed and connected for proper function.

Caution: The customer is entirely responsible for product selection and it should be based upon the customer's own analysis regardless of any recommendations, published or communicated, by Pure T. Products must also be installed, operated and maintained correctly for safe, problem-free usage.

Ordering Information

Model numbers	**W74050SVM4M4**			
Model	Trip point		Material	Connections Inlet / Outlet
W74	010 = 10 slpm 025 = 25 slpm 050 = 50 slpm 100 = 100 slpm 150 = 150 slpm 225 = 225 slpm Trip point in slpm of nitrogen at 100 psig	350 = 350 slpm 500 = 500 slpm 1000 = 1000 slpm	SV = SS 316L VAR	M4 = 1/4 inch face seal male M8 = 1/2 inch face seal male Refer to dimensions chart for porting dimensions

Pure T has product options which are not shown in the data sheet. Please consult your local distributor or the factory directly regarding special requests.