



MAGNE-SONICS MSVT Vibrating tuning fork Liquid Level Switch

FEATURES

- **Heartbeat Led**
- **Fail-safe High**
- **Magnetic Test Point**
- **Hygienic Fittings (3A)**
- **Resistant to Bubbles & Vibration**
- **Reverse polarity protected**
- **Small Fork for Minimal Vessel Intrusion**

OPERATION

The MSVT series is designed using the principles of a tuning fork. Piezo-electric crystals are used to force the forks to oscillate at their fundamental frequency (natural resonance.)

If the MSVT is installed as a high alarm, the forks are free to oscillate in air, as your liquid level rises and covers the forks they are dampened – it is this change in the frequency that indicates the MSVT to switch. With different electronic outputs to choose from, this allows you to switch a load on / off or interface directly with your PLC.

A compact switch with a rugged stainless steel body for use in a wide range of liquids, MSVT is the stock answer to your level switch needs.

SPECIFICATIONS

MSVTO * Direct load switching
 Power Supply: 21 to 264 VAC.....(50/60Hz)
 Max. switched load.....500 mA
 Max. peak load.....5 A
 Min. switched load.....20mA continuous
 Voltage drop 6.5V @ 24V dc / 5.0V @ 240V ac
 Current drawn (load off).....<3.0mA continuous
 Supply current.....N/A
 Output current (load).....N/A

PNP Switching MSVT1*
 Power supply.....18-60Vdc
 Max. switched load.....500 mA
 Max. peak load..... 5A
 Min. switched load.....N/A.
 Voltage drop.....<3V
 Current drawn (load off).....N/A
 Supply current.....3 mA nominal
 Output current (load off).....<0.5 mA

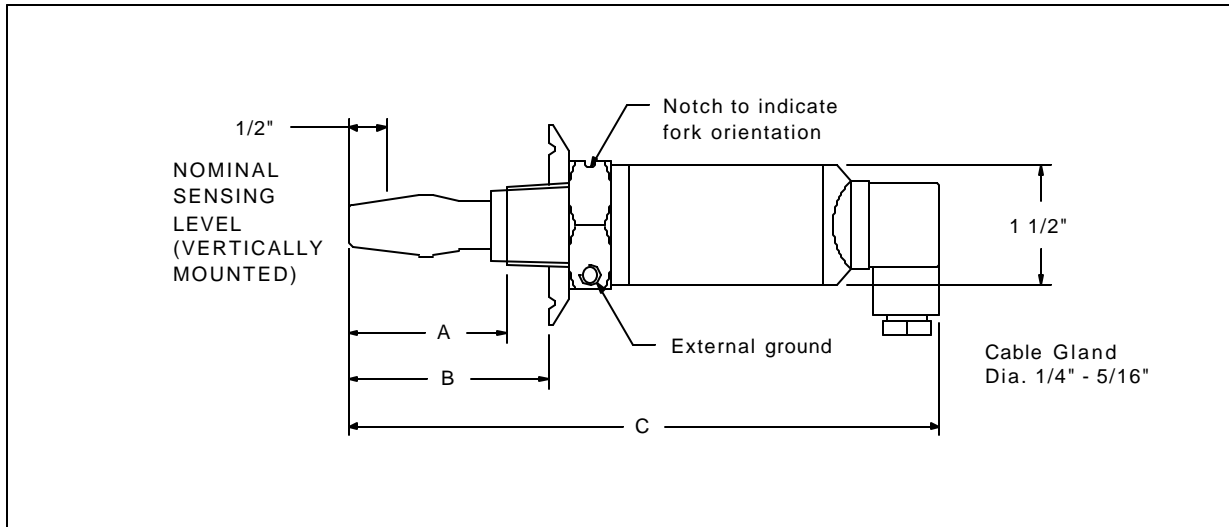
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TECHNICAL DETAILS

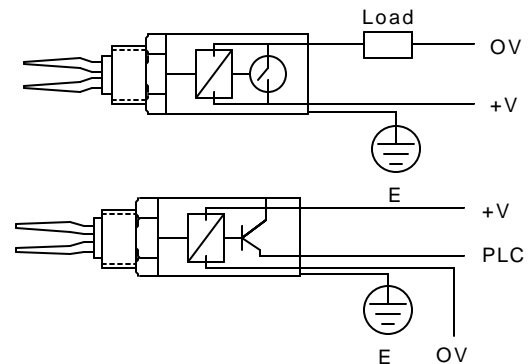
Wetside material	316L Stainless steel		
Gasket (1" BSPP model only)	None-asbestos		
Body	304 Stainless steel		
LED window	Flame retardent Polyamide (Pa12) 12 UL94 V2		
Plug	Ployamide (+G)	Plug seal	Nitrile butadiene rubber
Protection rating	NEMA 4X		
Operating temperature range	-40 DEG. F to +302 DEG. F	CIP cleaning	10,000 cycles for 30 minutes
Ambient temperature range	-40 DEG. F to 176 DEG. F (derated) to 122 DEG. F at 302 DEG. F wetside		
Max. pressure	1480 PSIG		
Specific gravity range	0.6 to 2.0	Liquid viscosity range	0.2 to 10,000 cps
Switching point (water)	1/2" from tip (vertical) / from edge (horizontal) of fork		
Hysteresis (water)	+/- .04"	Switching delay	1 second dry to wet / wet to dry

DIMENSIONS



MODEL SELECTION CODE

Direct load switching	PNP switching	Mounting thread	A	B	C
MSVT00	MSVT10	3/4" BSPT	2"	N/A	7 1/2"
MSVT05	MSVT15	3/4" NPT	2"	N/A	7 1/2"
MSVT03	MSVT13	1" BSPT	2"	N/A	7 1/2"
MSVT0F	MSVT1F	1" BSPP	2 3/8"	N/A	8"
MSVT07	MSVT17	2" Tri-Clover	2"	2 1/2"	7 1/2"
MSVT0L	MSVT1L	Semi-Extended	3 7/8"	N/A	9 1/2"



MSVT07 & MSVT17 POLISHED TO 32 μ m Finish
(16 μ m Finish Optional)

Quality...Reliability...Service

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