



**OPERATION**

The JMSVT 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 JMSVT 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 JMSVT 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, JMSVT is the stock answer to your level switch needs.

**FEATURES**

- Heartbeat Led
- Failsafe High
- Magnetic Test Point
- Hygienic Fittings
- Resistant to Bubbles & Vibration
- Reverse polarity protected
- Small Fork for Minimal Vessel Intrusion

**SPECIFICATIONS**

JMSVTO \* 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 JMSVT1\*  
 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

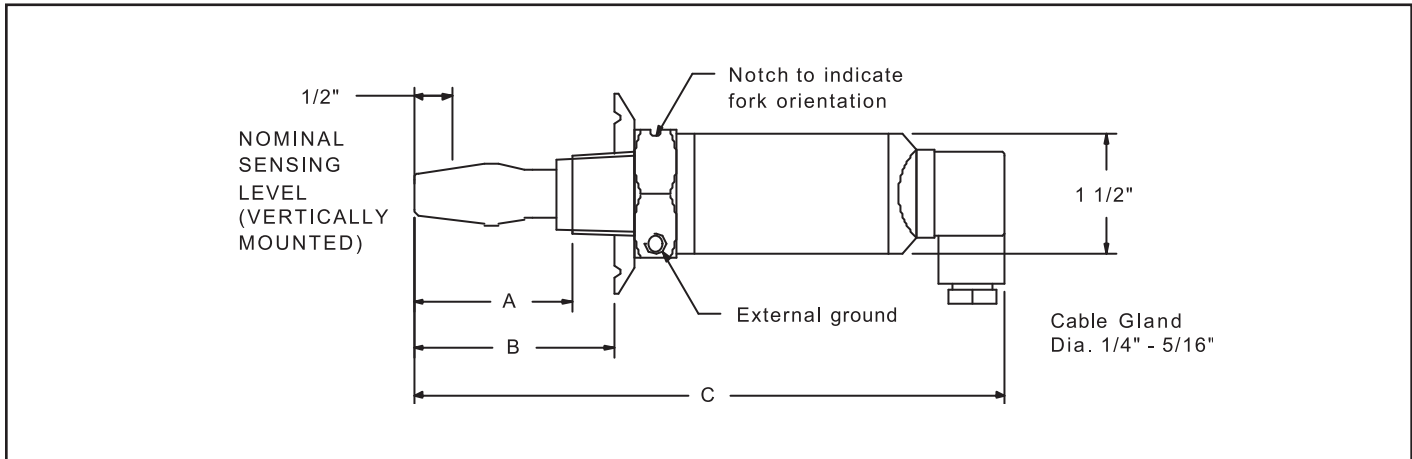


# Installation, Operation and Maintenance Instructions • JMSVT Vibrating Tuning Fork Liquid Level Switch

## TECHNICAL DETAILS

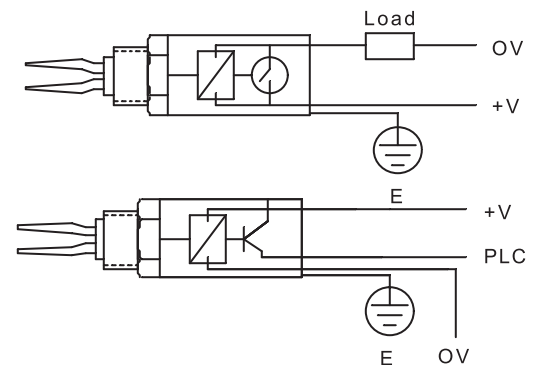
Wetside material	316L Stainless steel		
Gasket (1" BSPP model only)	None-asbestos		
Body	304 Stainless steel		
LED window	Flame retardent Polyamide (Pa12) 12 UL94 V2		
Plug	Ployamide (+G) Plug seal Nitrile butadiene rubber		
Protection rating	NEMA 4X		
Operating temperature range	-40 DEG. F to +302 DEG. 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 GUIDE

Direct load switching	PNP switching	Mounting thread	A	B	C
JMSVT00	JMSVT10	3/4" BSPT	2"	N/A	7 1/2"
JMSVT05	JMSVT15	3/4" NPT	2"	N/A	7 1/2"
JMSVT03	JMSVT13	1" BSPT	2"	N/A	7 1/2"
JMSVT0F	JMSVT1F	1" BSPP	2 3/8"	N/A	8"
JMSVT07	JMSVT17	2" Tri-Clover	2"	2 1/2"	7 1/2"
JMSVT0L	JMSVT1L	Semi-Extended	3 7/8"	N/A	9 1/2"



JMSVT07 & JMSVT17 POLISHED TO 32 µin Finish  
(16 µin Finish Optional)



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