



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 ac/dc.....(50/60Hz)
 Max. switched load500 mA
 Max. peak load5 A
 Min. switched load20mA continuous
 Voltage drop 6.5V @ 24V dc / 5.0V @ 240V ac
 Current drawn (load off)<3.0mA continuous
 Supply currentN/A
 Output current (load).....N/A

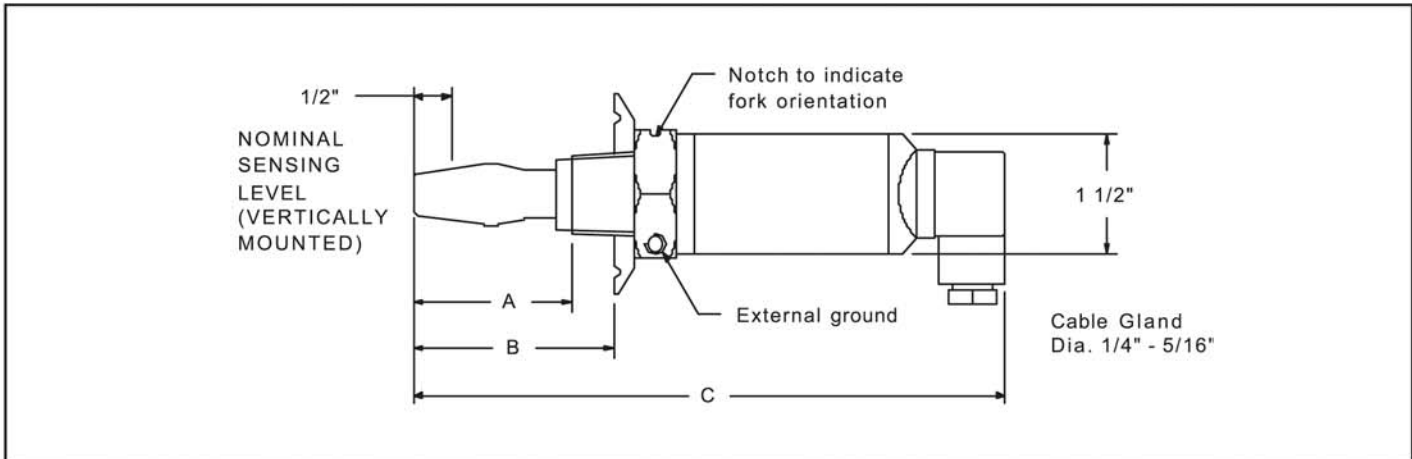
PNP Switching JMSVT1*
 Power supply18-60Vdc
 Max. switched load500 mA
 Max. peak load5A
 Min. switched loadN/A.
 Voltage drop<3V
 Current drawn (load off)N/A
 Supply current.....3 mA nominal
 Output current (load off)<0.5 mA



TECHNICAL DETAILS

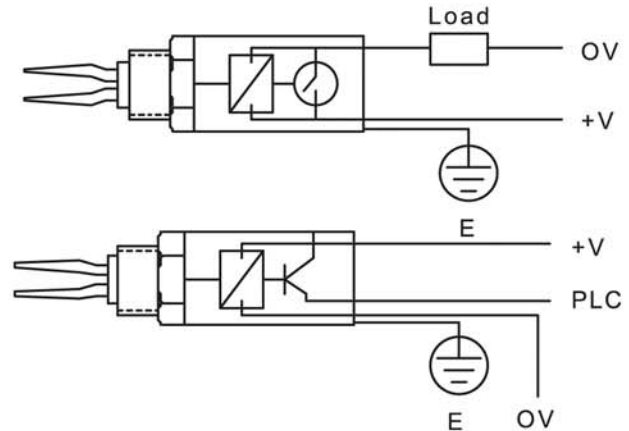
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|-----------------------------|--|
| Wetside material | 316L Stainless steel |
| Gasket (1" BSPP model only) | None-asbestos |
| Body | 304 Stainless steel |
| LED window | Flame retardent Polyamide (Pa12) 12 UL94 V2 |
| Plug | Polyamide (+G) Plug 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

| JMSVT MINI TUNING FORK SWITCH | | |
|-------------------------------|-------------|-----------------------|
| MODEL | SWITCH TYPE | CONNECTION |
| JMSVT00 | Direct Load | 3/4" BSPT |
| JMSVT03 | Direct Load | 1" BSPT |
| JMSVT05 | Direct Load | 3/4" NPT |
| JMSVT07 | Direct Load | 2" Tri-Clamp |
| JMSVT0F | Direct Load | 1" BSPP |
| JMSVT0L | Direct Load | 1" BSPP Semi-Extended |
| JMSVT10 | PNP | 3/4" BSPT |
| JMSVT13 | PNP | 1" BSPT |
| JMSVT15 | PNP | 3/4" NPT |
| JMSVT17 | PNP | 2" Tri-Clamp |
| JMSVT1F | PNP | 1" BSPP |
| JMSVT1L | PNP | 1" BSPP Semi-Extended |



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

