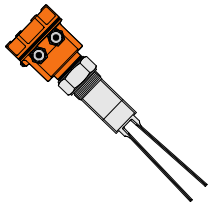


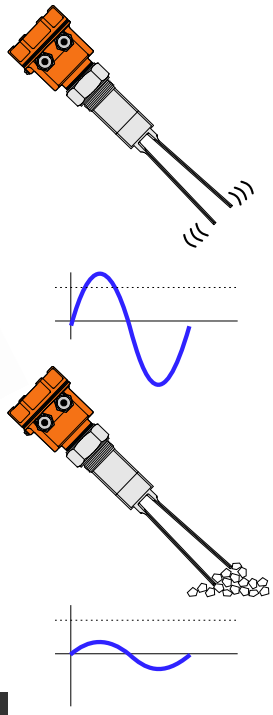
LSV... Technical Specification Document

Vibrating Fork Point Level Switch for Solids & Powders

Approvals & Certifications:

Trumen® sensing matters

Operating Principle



Electronics of LSV excites the piezo-electric-crystals inside tuning fork, which makes the fork tines vibrate at their natural resonance frequency in free air.

Amplitudes of vibration are above threshold when tines are free to vibrate.

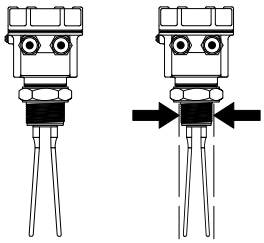
When material touches fork tines, vibration stops as resonance gets disturbed.

Amplitudes of vibration, as seen by electronics falls below the threshold-strength, material presence is thus detected.

Fast Switching Response

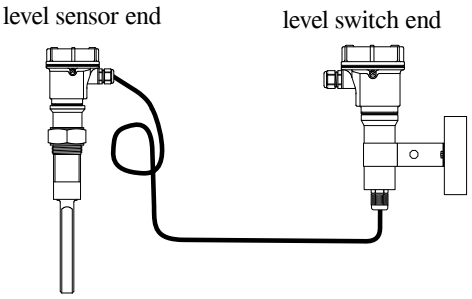
0.8 second on Request
1.5 second on Request
2.0 second as Standard

Compact Process Connection



starting from:-
1" & M30

Remote Electronics



Compact Size

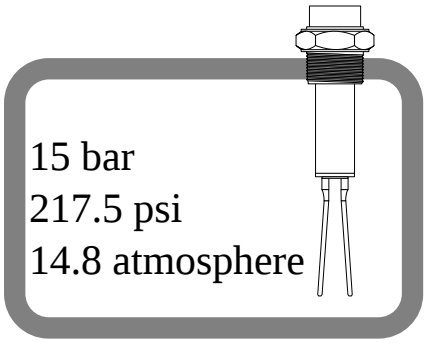
Durable Construction

Immune to External Vibrations

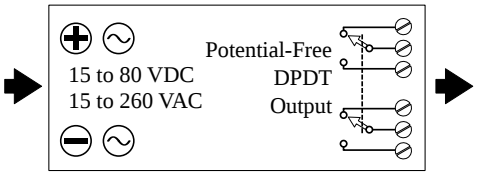
No Calibration Required

Easy Installation

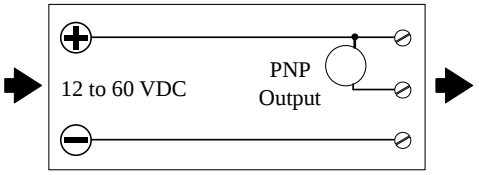
High Pressure Resistant Forks



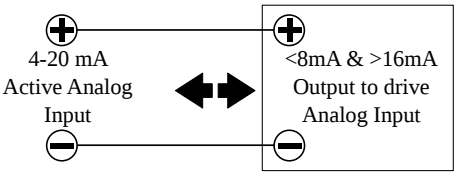
Universal In DPDT Output



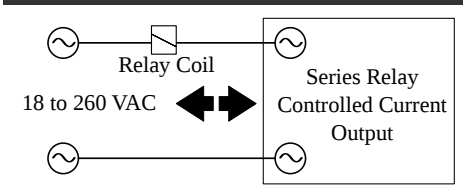
PNP-NPN with DC Supply



Two wire 8/16 mA Signal



Two-wire AC with Series Relay



Order Code

LSV	Vibrating Fork Level Switch for Solids & Powders
Hxx	Enclosure: HAN: Aluminum Non-Hazardous IP-66/68, HAX: Aluminum Flameproof IIa, IIb and IIc, HSN: Stainless steel, HPN: Polycarbonate (Plastic), HES: Specially designed custom enclosure
Tx	Material Temperature (T1: max 80°C, T2: max 200°C, TS: Customer specified - Special designed)
Sx	Sensing Surface Material (S6:SS-316, SL, SS-316L, ST: PTFE coated, SF: PFA coated, SS: Special surface)
Gx	Sensor Extension Material (G0: none, G4: SS-304, G6: SS-316, GL: SS-316-L, GT: PTFE coated, GF: PFA coated, GS: Special surface)
Px	Process Connection Type (PFL: Flanged Type – description of flange - FL -at the end of order code) (PB1: BSP 1", PB2: BSP 1 ½", PB4: BSP 1 ¼", PB5: BSP 2") (PN1: NPT 1", PN2: NPT 1 ½", PN4: NPT 1 ¼", PN5: NPT 2") (PT1: Triclover/Triclamp 1½", PT2: Triclover/Triclamp 2")(PCS: Special Process Connection)
Cx	Process Connection Material: (C4: SS-304, C6: SS-316, CL: SS-316L, CT: PTFE coated, CF: PFA coated, CS: Special material)
	Electronic Power Supply and Outputs:-
EIUD	Integral Electronics with Universal supply (15-80V DC & 15-260V AC) & 1 DPDT potential-free relay output
EIDP	Integral Electronics with DC power supply (12-80V DC) & one short circuit safe PNP output
EIDL	Integral Electronics with Two wire DC supply with 8/16mA current output suitable for 4-20mA analog inputs
EIAR	Integral Electronics with Two wire AC supply for external series relay (>5mA holding current)
EIFS	Integral Electronics specially designed with special output
ERUD	Remote electronics IP 68 wall/pipe mounted with universal power supply (15-80V DC & 15-260V AC) & 1 DPDT potential-free relay output, using 10 meter special interconnection cable for driving sensor
ERFS	Specially Designed Remote Electronics
D1	Fork Length: 150mm (low density medium, slower response)
D2	Fork Length: 125mm (higher density medium, faster response)
D3	Fork Length: 100mm (higher density medium, fastest response)
Lxxxx	Insertion length (125mm to 3000mm)
FLxx	Flange type and bore size specified for ASA/ANSI/JIS/DIN/Custom