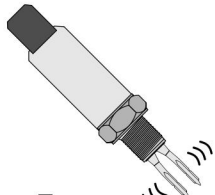


LFV12: Vibrating Fork Liquid Level Switch

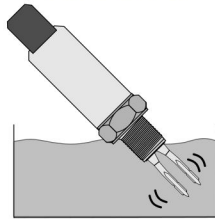
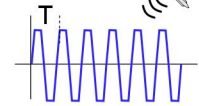
Instructions



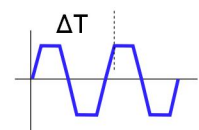
Operating Principle



Electronics of LFV12 excites the piezo-electric-crystals inside tuning fork, which makes the fork tines vibrate at their natural resonance frequency in free air.



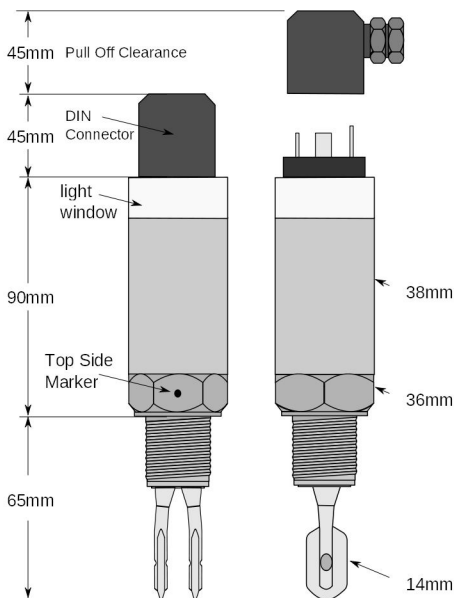
When fork tines are immersed in liquid, the frequency of fork vibration falls due to the density of liquid.



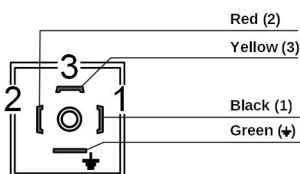
This change in frequency is detected by electronic circuit.

Liquid presence is thus detected.

1/2" Threaded (NPT/BSP) dims.

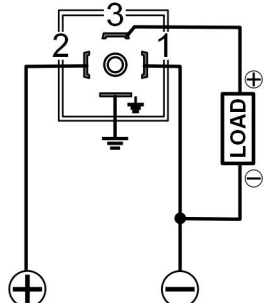


Trumen 4-wire cable details



PNP-DC Electrical Connections

High Level Failsafe Mode



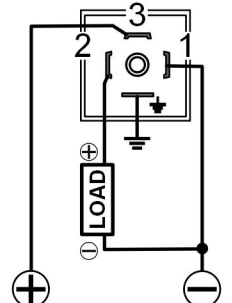
12V to 60V DC
Max Load Current: 250mA

Indication & Output

Level Status	High Level Failsafe	Low Level Failsafe
	LED: ● red ● green Load: Float	LED: ● red ● green Load: Active
	LED: ● red ● green Load: Active	LED: ● red ● green Load: Float

● LED off
● LED on

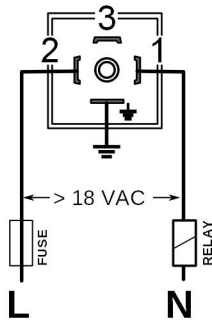
Low Level Failsafe Mode



12V to 60V DC
Max Load Current: 250mA

Two-Wire-AC Electrical Connections

High Level Failsafe Mode



18 to 270 VAC
50/60 Hz

Indication & Output

Level Status	High Level Failsafe	Low Level Failsafe
	LED: ● red ● green Load: Active	LED: ● red ● green Load: <4mA
	LED: ● red ● green Load: <4mA	LED: ● red ● green Load: Active

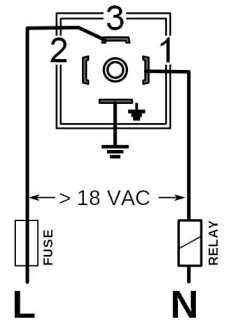
● LED off
● LED on

Voltage across terminals must be greater than 18 Volts

Relay coil must match supply voltage

Relay Holding Current > 5mA

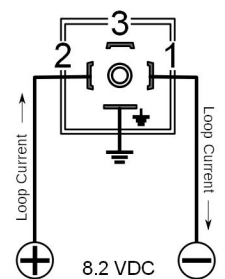
Low Level Failsafe Mode



18 to 270 VAC
50/60 Hz

NAMUR Electrical Connections (Loop Powered)

High Level Failsafe Mode



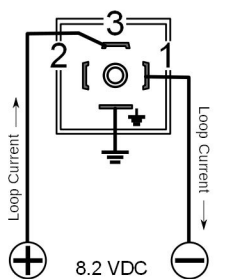
8.2 VDC through NAMUR barrier
max 1000 Ohm series resistance

Indication & Output

Level Status	High Level Failsafe	Low Level Failsafe
	LED: ● red ● green Loop: <1.2mA	LED: ● red ● green Loop: 2.2... 2.8mA
	LED: ● red ● green Loop: 2.2... 2.8mA	LED: ● red ● green Loop: <1.2mA

● LED off
● LED on

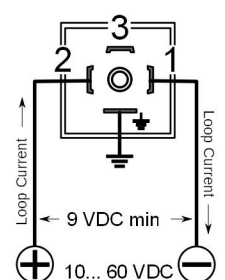
Low Level Failsafe Mode



8.2 VDC through NAMUR barrier
max 1000 Ohm series resistance

8/16mA Electrical Connections (Loop Powered)

High Level Failsafe Mode



Indication & Output

Level Status	High Level Failsafe	Low Level Failsafe
	LED: ● red ● green Loop: <8mA	LED: ● red ● green Loop: >16mA
	LED: ● red ● green Loop: <16mA	LED: ● red ● green Loop: <8mA

● LED off
● LED on

Voltage across terminals must be atleast 9V DC

Low Level Failsafe Mode

