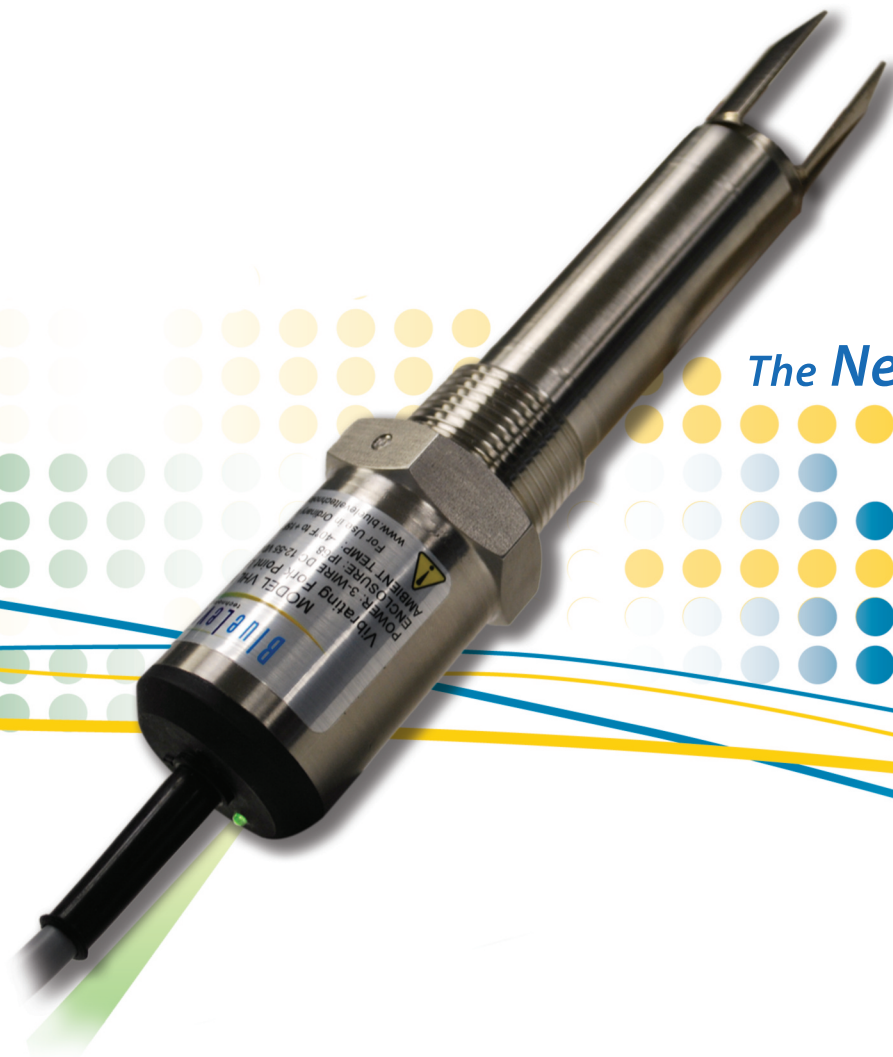


# Model VHL Mini

Vibrating Fork Point Level Sensor for Liquids

**Miniature Enclosure, Proven Technology and High Value**

Ideal Technology for Wide Range of Liquids Solid-State Outputs  
for Use with PLC and Control Systems



*The Next Level*

**BlueLevel**<sup>®</sup>  
technologies

# Model VHL Mini

## Miniature Vibrating Fork for Liquids

- ✓ Polished Vibrating Fork
- ✓ Unaffected by Dielectric Constant, Conductivity, Viscosity, Pressure and Temperature
- ✓ Solid-State Output (AC and DC Versions)
- ✓ High Process Temperature (266°F/130°C)
- ✓ IP68 (NEMA Type 6P)
- ✓ You are protected - *golden parachute support*

### Principal of Operation

Model VHL Mini vibrating fork level switches are suitable for level detection of a wide range of liquids. The operation principle is based on an electronic circuit exciting piezoelectric crystals, thereby making the fork probe vibrate. As the fluid or medium reaches and covers the fork its vibration changes, or stops completely. The fork will start vibrating again as the fluid sets it free. The electronics sense the change of vibration and causes the solid-state output to change state.

### Application and Use

Mounted on pipes or tanks the filling and emptying of vessels can be controlled using the Model VHL as they can generate alarms providing overflow- or dry run protection where input to PLC's, Controls Systems is required, and where switching low current loads is needed (refer to technical specifications for relay).

### Standard Sensor Model Includes

- Threaded or Tri-Clamp process connections
- Short Probe (2.7"/69mm long)
- Standard Probe (4.9"/125mm long)
- Long Probe (7.9"/200mm long)
- Extended Probe (12" - 118"/300mm-3,000mm)
- Ordinary Locations

### Technical Data Summary

Power Supply	2-Wire AC 20-255VAC 3-Wire DC 12-55VDC
Consumption	AC: Load Dependent DC: <0.6W
Wire Connection	3m Prewired Cable
Enclosure Protection	IP68 (NEMA Type 6P)
Process Density	≥ 0.7 S.G. (0.7 g/cm <sup>3</sup> )
Maximum Pressure	588 psi (40 bar)
Maximum Viscosity	10,000 cSt (mm <sup>2</sup> /s)
Medium Temperature	-40°F to +266°F (-40°C to +130°C)
Ambient Temperature	-22°F to +158°F (-30°C to +70°C)
Local Indication	Bi-Color LED Alarm – Red Normal – Green
Output	AC: 350mA Maximum DC: NPN/PNP 350mA Maximum
Material:	316Ti Stainless Steel (DIN 1.4571)
Certifications:	CE Mark

### Ordering Information – Sensor

Final Assembly Part Number Structure

45 - 2X1X - 11X

#### Probe Length

- 1 - 2.7" (69mm)
- 2 - 4.9" (125mm)
- 3 - 7.9" (200mm)
- 4 - Extended  
(12" – 118")

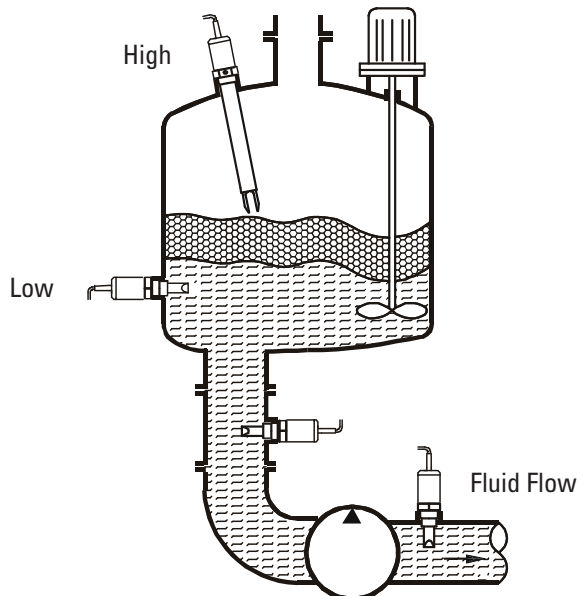
#### Output

- 2 - 2-Wire AC
- 3 - 3-Wire DC NPN/PNP

#### Process Connection

- 1 - 1" NPT
- 2 - 1/2" Tri-Clamp

### Product Use



### The Next Level

BlueLevel Technologies, Inc.  
3778 Timberlake Drive, Richfield, OH 44286  
Ph: 330-523-5215 | Fx: 330-523-5212  
[bluelevel@blueleveltechnologies.com](mailto:bluelevel@blueleveltechnologies.com)  
[www.blueleveltechnologies.com](http://www.blueleveltechnologies.com)

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