## **MODEL VRLS | PROXIMITY® BY DWYER**

# VIBRATING ROD LEVEL SWITCH

Economical, No Material Build Up, For Powder or Bulk Solids





The Model VRLS Vibrating Rod Level Switch is economical choice in level detection of powders and bulk solids. The VRLS incorporates a piezoelectric crystal that vibrates the rod at its natural frequency, when contact material is present it dampens the vibrations and the switch changes state.

#### FEATURES/BENEFITS

- Probe design allows for self-cleaning, ensuring no build-up or bridging of material and accurate detection
- No mechanical moving parts with no routine maintenance required
- Sensitivity is adjustable for detection ranging from large granular material to small powders with low bulk densities.
- The failsafe mode can be set for failure on high level or failure on low level using a selector switch in the enclosure
- Unaffected by the dielectric constant of the sensed material, making it superior to a capacitance level switch for applications where the dielectric constant is too low, where there is more than one material being used in one vessel, and when material moisture content can change
- Ideal for applications where the bulk density is too low for a rotating paddle level switch

#### **APPLICATIONS**

- Pulp and paper processing
- Mining
- Food and beverage
- Silos
- Hoppers

### **SPECIFICATIONS**

51/64 [20.19]

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Service: Dry powder or bulk materials compatible with wetted materials.

Sensitivity: Min. bulk density of 20 lb/ft3 (320 kg/m3).

Wetted Materials: 304 SS.

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Temperature Limits: Ambient: -40 to 140°F (-40 to 60°C): Process: -40 to 176°F (-40 to 80°C).

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Pressure Limit: 150 psi (10 bar).

Power Requirement: 20-250 VAC/VDC, 50/60 Hz.

Power Consumption: 15 VA. Enclosure: Aluminum, painted. Enclosure Rating: IP65.

Switch Type: SPDT.

Electrical Rating: 5 A @ 250 VAC. Electrical Connections: Screw terminals.

Conduit Connection: 1/2" female NPT x 2.

Process Connection: 1" male NPT.

Indication Lights: Internal: green and red LED.

Sensing Delay: 0 to 6 s. Weight: 4.4 lb (2.0 kg).

MODEL CHART	
	Description
VRLS-01	Vibrating rod level switch