

## **30+** years in Process Control Instrumentation

# SLP Vibrosonde - Vibrating Rod

Vibrosonde, vibrating rod type level switch, is a compact level limit switch for freeflowing as well as for bulk solids. They are also available in flameproof enclosures suitable for hazardous areas.

## **Principle**

Vibrosonde level limit switch consists of a cylindracally shaped coaxial resonator which is kept vibrating at its natural frequency by piezo-electric elements. When one of the vibrating elements is covered by the material, the mechanical vibrations are damped. This damping is electrically sensed and the signal is used to cause a relay to change state. The base of the Vibrosonde is relatively insensitive as compared to the tip, so moderate amount of material buildup from vessel wall to base doesn't affect its operation.

Approvals CE Marking, RoHS Compliance

### **Features**

- · Low power consumption, less heat, durability
- Fast switching
- Self-diagnosis
- Independent of material's electrical properties
- · Immunity to spurious external vibrations

## **Applications**

Industries requiring level sensing in free-flowing solids:

- Plastic Processing: Powders, pellets, granules
- Chemicals: Powders, pills, crystals
- Agriculture & Food: Grains, rice, cereals, flour, sugar
- Paper & Pulp Industry: Crushed cellulose, shavings
- Recycling: Paper cuts, ground plastic
- Cement & Power: Fly-ash, lime, carbon black, cement
- Mining, Construction: Pulverized coal, sand, cement, clay

### Parts

The parts of SLP Vibrosonde are explained in Figure 1. All dimensions are in millimeters.



Figure 1. Faits of SEF VIDIOSOFILE

Manufacturing Level Instruments & Speed Monitoring Systems

## SAPCON INSTRUMENTS PVT. LTD.

An ISO 22000 company

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Version 2.1





Figure 2: Mounting Arrangement for SLP Vibrosonde

## **Technical Specifications**

## **Evaluation Unit**

Cast Aluminium, Weatherproof
or Flameproof Housing
2 Nos.
Ambient: -20°C to + 60°C
3 W
Universal Power Supply 18-55
V DC, 90-265 V AC
Field Selectable
Fail-safe Low
Fail-safe High
Bi-color LED (Normal: Green,
Alarm: Red)
1 second typically
Adjustable from 1 to 25 seconds

## Why Sapcon

- Sapcon ~ Synonymous with Level Measurement.
- Pioneers in this field with over 32 years of expertise.
- Understanding your problems, always ready with solutions.
- Masters in customization.
- Offering accelerated delivery, saving your inventory costs.

### **Model Selection**

#### SLP VIBROSONDE

## POWER SUPPLY AND OUTPUT D- UNIVERSAL POWER SUPPLY 18-55 VDC, 90-265 VAC, SINGLE POINT-FREE RELAY OUTPUTS RATED AT 6A S- UNIVERSAL POWER SUPPLY 18-55 VDC, 90-265 VAC -SINGLE-POINT SINGLE RELAY (RATED 6A) -OPEN COLLECTOR PNP OUTPUT SERVICE TEMPERATURE A- AMBIENT: BELOW 100°C H- HIGH TEMPERATURE: UPTO 150°C RESPONSE TIME J-1 sec WHEN COVERED K- 1 sec WHEN UNCOVERED TIME DELAY SETTINGS V- COVER & UNCOVER DELAY- 1s TO 25s THROUGH TOGGLE SWITCHES SENSITIVITY SETTINGS Y- FIELD SELECTABLE- THROUGH TOGGLE SWITCHES ENCLOSURE W- WEATHER PROOF SQUARE P5- IP-65 WEATHERPROOF HOUSING FA- FLAMEPROOF (GAS GROUPS IIA & IIB) FC- FLAMEPROOF (GAS GROUPS IIA. IIB & IIC) PROBE MOUNTING ARRANGEMENT\* T- THREADED F- FLANGED O- OTHER EXTENSION LENGTH **PIPE- STAINLESS** STEEL 250mm - 3m PROBE LENGTH PX- (EXTENSION + ROD) LENGTH EXTENSIBLE FROM 250mm-3m WETTED PARTS



S6- SS-316

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