## VIBRATING FORK LEVEL SWITCH


$\checkmark$ Fast and Easy Installation. No Calibration.
$\checkmark$ No effect of electrical properties of the Service material. High Reliability.
$\checkmark$ Suitable for the highly dusty environment.
$\checkmark$ Field selectable operation logic.
$\checkmark$ Can be configured either for High or Low Level Point switching.
$\checkmark$ Provides economical solutions.
$\checkmark$ Various model not required.
$\checkmark$ Reduces the Inventory cost.

## FUNCTIONS

The electronically stimulated fork vibrates at its mechanically resonance frequency of 125 Hz when the fork is free of the service material. The resonance is caused by the piezoelectric crystals.
One of the piezo crystals produces a small voltage which is transmitted to the switching amplifier. If the fork is covered by the bulk material, a damping effect is produced and the piezo crystal does not produce the voltage and the amplifier will switch and a corresponding signal output is actuated. The vibration of the fork has self-cleaning properties. The light deposit on the container wall does not affect the operation of the FC FORK

## APPLICATIONS

$\checkmark$ Building industry materials, cement, sand, lime, ect.
$\checkmark$ Foodstuff industry, milk powder, flour, salt, food grains, ect.
$\checkmark$ Plastic industry, powder, granularect.
$\checkmark$ Timber industry, chemical and mining, etc.

## MEASURING SYSTEM

The complete system, FCFORK-HARP- 2000 series, consists of:The sensing probe of Vibrating Fork and The Electronic Switching unit

## STANDARD TECHNICAL SPECIFICATIONS

## 1 SWITCHING UNIT

$\checkmark$ Housing : Aluminum, weather proof, powder coated. Integral with the probe / suitable for back panel mounting.
$\checkmark$ Cable entry : 2 nos. PG 16
$\checkmark$ Ambient temperature : $0^{\circ} \mathrm{C}$ to $+60^{\circ} \mathrm{C}$
$\checkmark$ Power Consumption : 2 VA
$\checkmark$ Mains Voltage : 230/110V AC (+/-15\%), 50 Hz , or $18-55 \mathrm{~V}$ DC 65 to 265 V AC (Optional)
Switch status : Green LED display shows Normal, Red LED Shows alarm.

## 2 FORK (SENSING PROBE)

Mounting: Screwed - 1.1/2" BSP (standard) or Flanged (optional).
Sense : Fork, Stainless steel (SS 326).
Extension : Pipe (SS 304).
Length : a) 200 (standard) up to 3000 mm and as per application (rigid)
b) flexible, Wire probe.

Operating : $150^{\circ} \mathrm{C}$ for the Temp in integral switching vessel unit (standard) $200^{\circ} \mathrm{C}$ (on request).

## Output :

a) 2 sets of potential free c/o contacts rated at $5 \mathrm{amps}, 230 \mathrm{~V}$ AC for non-inductive loads.
b) PNP/NPN with DC mains
$\checkmark$ Switching delay : Continuously adjustable From 2 to 20 sec. probe Free or prob covered. (Optional)
Safety operation : Field selected switch over for min. or max. (FSL/FSM) switching points.


