# MK Instruments Pot. Ltd.

# Vibrating Fork Point level Switch for Solids

# INTRODUCTION

The electronically stimulated fork vibrates at it's 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 this type of Vibrating Fork Level Switch.

#### SILENT FEATURES

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

#### **MEASURING SYSTEM**

• The complete system, Vibrating Fork type Level Switch consists of one Vibrating Fork type Sensing element and one Electronic Switching unit

#### PRIMARY AREA OF APPLICATION

- Building industry materials, cement, sand, lime, etc
- Foodstuff industry, milk powder, flour, salt, food grains, etc
- Plastic industry, powder, granular etc.
- Timber industry, chemical and mining etc

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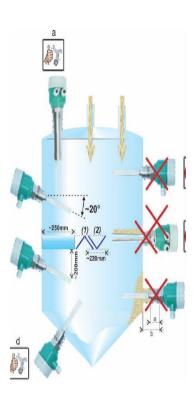


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## **TECHNICAL SPECIFICATIONS (STADARD)**

#### **SWITCHING UNIT:**

Housing	:	Aluminum, weather proof, powder coated.
		Integral with The probe/ suitable for back $\ensuremath{p}\xspace\varepsilon$
		mounting.
Cable entry	:	2 nos.
Ambient	:	$0^{\circ}$ C to +60° C
temperature		
Power	:	2 VA
consumption		
Mains Voltage	:	230/110 V AC (+/-15%),50 Hz,or, 24 V DC
Output	:	2 sets of potential free contacts of 5 A
		Or, PNP output
Switching delay	:	Continuously adjustable From 2 to 20 sec.
		probe Free or probe covered.
Safety operation	:	Field selected switch over for min. or max.
		(FSL/FSH) switching points.
Switch status	:	Green LED shows Normal, Red LED shows alarm.
display		



## FORK (SENSING PROBE):

Mounting	:	Screwed – 1 1/2 " BSP (standard) Or Flanged (optional)
Sense	:	Fork, Stainless steel
Extension	:	Pipe
Length	:	250 mm (standard) up to 3000 mm and as per application.
Operating	:	$150^{\circ}C~$ for the integral switching unit (standard), 200°C (on
Temp in		request)

Continuous efforts for product development may necessitate changes in these details without notice

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