

VIBRATION TYPE LEVEL SWITCH

# KEV-200/400 SERIES



LEADER OF CONTROL

# Vibration Type Level Switch-KEV 200/400 Series

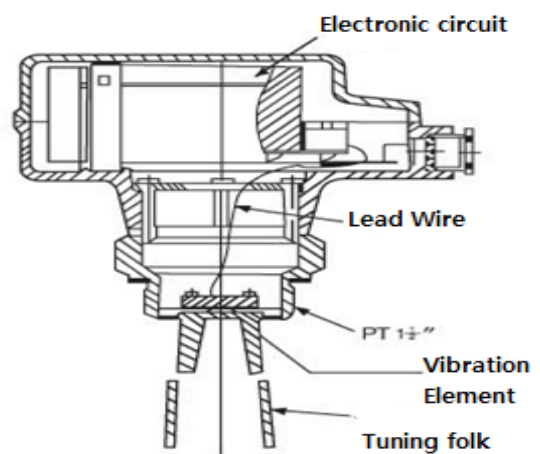
## General

KOSMO E&T Vibration Type Level Switch is measuring level of powder or particles. Level limit switches based on the tuning fork damping principle are eminently suitable for a wide range of bulk materials.

## Operation Principle

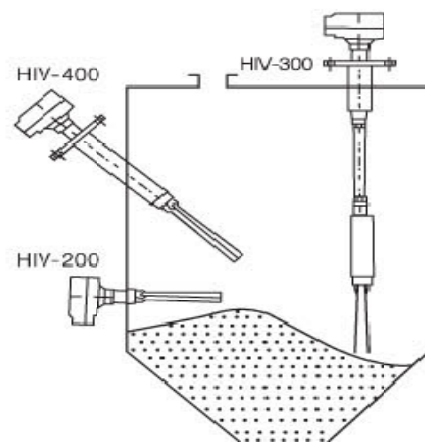
Vibration Sensor(damping) is used to detect the level. When the vibration element starts to vibrate by generating part, the tuning fork sensor(damping) starts to vibrate. Also, if the material to be measured is contacted with the tuning sensor, vibration is decreased and stopped in vibration element.

At this time, this instrument detect whether the vibration happens or not in the circuit. Because of this action, Relay is moved and output is detected.



## Application

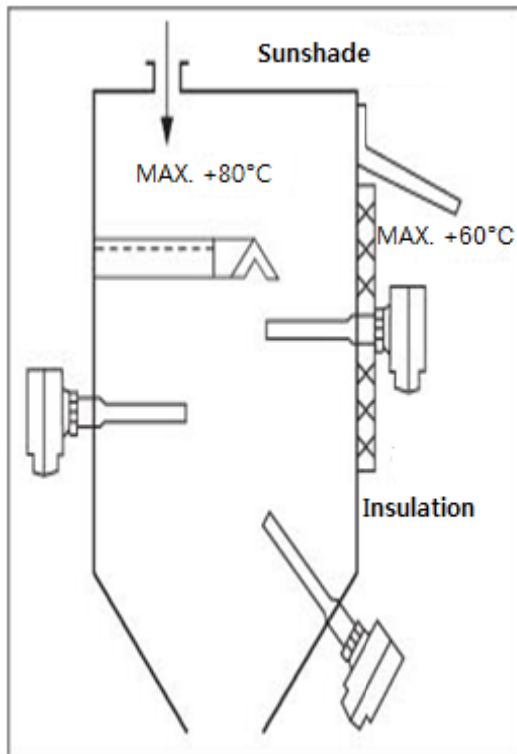
Tuning folk level switch can be mounted horizontally and vertically in the tank wall. KEV-300 type is installable at upper part of the instrument since a strong cable connects the head part and sensor part. So, according to the measurement location of level, length of sensor part can be determined on customer's demand.



## Specification

Model Spec	KEV-200	KEV-300	KEV-400
Mounting Size	PT 1 <sup>1</sup> / <sub>2</sub> (STD)	JIS 50A 10K	
Mounting Method	SCREW or FLANGE		
Process Temp.	Max.80°C	Max.60°C	Max.80°C
Working Pressure	10kgf/cm		
Material	SUS 304 (or 316)		
Power Source	AC 110/220V, 60Hz		
Contact Rating	AC 250V 5A		
Ambient Temp.	-20°C ~ 60°C		
Output Signal	1-SPDT or 1-DPDT		

## Installation

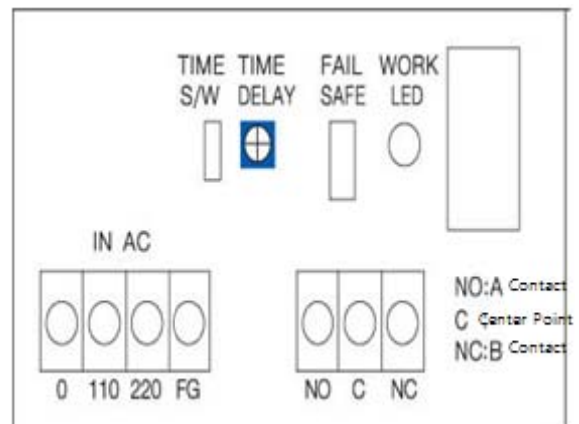


Types using an extension cable or metallic tube should be vertically installed. However, considering the sensor installed in the tank, it should be paid attention for the following these points. (See Fig)

- 1) Material to be measured should not fall between sensor.
- 2) Cable grand must be pointed downwards
- 3) The length of threaded socket should not over 40mm. If it becomes over 40mm, extension type should be used not to cause the malfunction by accumulating the material into the tuning fork.

## Adjustment method

- 1) Check that material to be measured is not in contact with the tuning tank.
- 2) Check the vibration of tuning fork after power supply.
- 3) Check the LED's turn on and RELAY's operation when the vibration stops.



## Application

The level switch using principle of suppression of fork's vibration is suitable for most of the bulk material. However, following restriction should be applied for the practical use.

- 1) Maximum environmental temperature.
- 2) Maximum pressure
- 3) Maximum size of particles
- 4) Specific gravity of the particles



**Order Codes**

