ILVIB VIBRATION SWITCH LEVEL

The compact vibrating fork level switches ILVIB model allow you to perform the control thresholds set in powders and granules. The vibration sensors are excited by a piezoelectric element and vibrate on their mechanical frequency. When the product touches the sensor, the amplitude of vibration is damped. Damping integrated electronics detects this and triggers a switching command. A pulse signal imposes a further tuning fork vibration, that free from any accumulation of material, thereby restoring the proper functioning.

Typical applications are overfill and dry run protection eg. of flour, cereals, milk powder, sand, cement, plastic granules, polystyrene foam, feathers, etc..

DESCRIPTION

The sensors can be installed in any position, as long as they are at the height of the pre-set point. The different types of product and the individual operational needs require specific installations to be performed taking into account the following information:

Filling opening

Install the sensor so that the vibrating element is not hit by the filling stream. In the event that we can not do otherwise, protect the vibrating element staring over a special foil. The installation in a concave blade has proven valid in the case of abrasive products because of product forms a layer that protects it from abrasion.

Horizontal mounting

To get the point d 'intervention is as exact as possible, install the sensor in a horizontal position. However, if you are granted a tolerance of a few centimeters is recommended that you install the sensor with a downward inclination of approx. 20 °, in order to avoid the formation of deposits of product on the tuning fork. Install the sensor so that the prongs of the tuning fork prove as Silt

Install the sensor so that the prongs of the tuning fork can prove the most cutting, in this way you avoid any silts of material on them. The position of the tuning fork is indicated by a circular mark, which indicates the cutting position, placed on a face of the hexagonal nut of the sensor mounting. In the case in which the particle size of the product is greater than the minimum distance between the two prongs of the tuning fork, 15 mm, particles of controlled material may be pinched, causing false reports of material presence.

Pressure

With tank pressure or vacuum tightness is achieved by wrapping the thread with Teflon tape, hemp or a similar material, or by applying a sealing ring.

TECHNICAL SPECIFICATIONS

Supply:	20 ÷36Vdc; 20 ÷255Vac 50/60Hz
Power consumption:	max.0,8W (Vdc); max.8 VA (Vac)
Enclosure:	polycarbonate
Minimum density of solids	100g/dm3
Protection:	IP65
Cable clamps:	for max. cable cross-section 1.5 sqmm; cable gland Pg13, 5
Process connection:	1 ”½ GAS AISI316
Tuning fork material:	S.S.316
Weight:	1.5Kg
Ambient temperature:	-40…+70°C
Product temperature:	-40…+150°C
Working pressure:	max 25 bar
LED:	for indication of switching condition, for indicating intervention
Operating mode:	detecting the minimum and maximum level
Operating mode selection:	by 2 keys
Relais output:	max.250Vac 5A resistive
Static output:	NPN; Max 55Vdc 0.5A

SATEMA
13856 VIGLIANO B.SE - Via Milano, 395
Tel. +39 015811102 - Fax 0158853029
Mail: info@satema.it http://www.satema.it