

VIBROSENSE-D

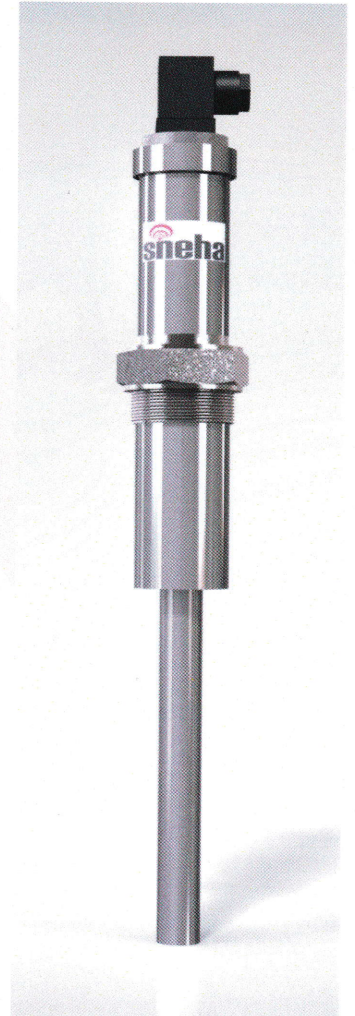


COMPACT VIBRATING ROD POINT LEVEL SWITCH FOR SOLIDS

VIBROSENSE is a single element vibrating rod specially designed for detecting maximum and minimum level in vessels filled with free flowing fine-grained or powdery material. VIBROSENSE being a single element device, it overcomes the limitation of material getting stuck in-between the tines of a vibrating fork wherein both the tines are exposed to the service material. VIBROSENSE can be used for detecting the level of service material having grain size less than 10mm. Variation of electrical parameters of the service material such as conductivity and dielectric constant do not affect its operation. It can be used successfully for level detection of powders and granules of plastic, silica, sand, cement, chalk, pulverized coal, PET, Food grains, minerals, animal feed, Sugar & wood chips etc.

Operating principle

The sense rod is kept vibrating at its mechanical resonant frequency by Piezo electric elements. When the service material covers the rod it resists its movement and so the vibrations are damped. The stoppage of vibrations is sensed electrically and processed to signal an alarm and or control a relay. The relay contacts in turn can be used to control the feed motor or evacuation valve of the vessel.



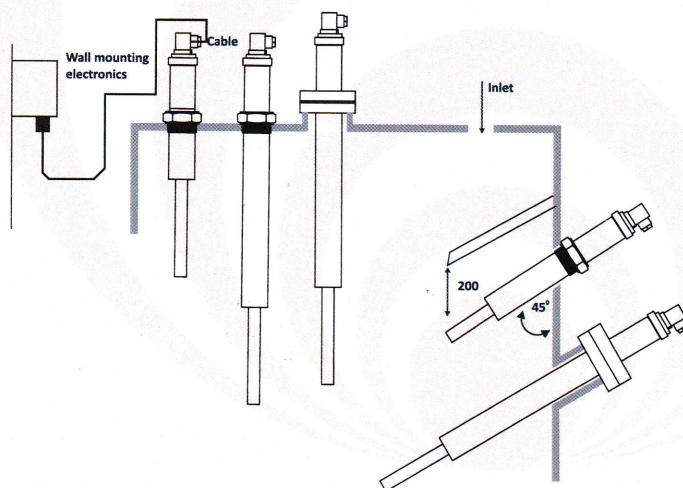
SALIENT FEATURES

- Compact size with integral electronics
- No calibration required so plug and play
- No moving parts so no wear and tear
- Single element exposed to media for reliable sensing
- Open collector PNP output for external relay operation or for input to PLC
- IP 68 ingress protection
- Selectable fail safe mode
- LED indicators for status, alarm and normal operation

TECHNICAL SPECIFICATIONS

Housing	: Ss316
TYPE	: Electronics integral with probe
Probe length	: 250 to 2000 mm max
Cable connection	: plug-in DIN connector PG9
Mounting arrangement Screwed	: 1 ½" BSP / NPT/ SS316 /304 as required
Flanged	: 2" ASA/ANSI /SS316 /SS304/MS as required
Mounting / Pipe extension M.O.C.	: MS / GI / SS304 / SS316 as per requirement
Sensing vibrating Rod	: SS316
Power supply	: 15 to 30 V DC
Power consumption	: 3 VA Max.
Output	: open collector PNP output as standard, current limited to 100ma
Resonant frequency of rod	: 315 Hz approx.
Failsafe condition	: High / Low field selectable.
Indication	: By LEDs, Yellow for status, Blue for Normal, and Red Alarm
Process Temperature	: Up to 150 deg C standard, 200 deg C on request
Ambient Temperature	: -20 to 60 deg C
Process Pressure	: 16 Bars
Ingress Protection	: IP68

TYPICAL INSTALLATIONS



Model Selection

VIBROSENSE										
Process Temperature										
A Upto 150 deg C										
H Upto 200 deg C										
Input Power Supply & Outputs										
D 18 to 30 V DC, Open collector PNP output										
S Universal Power Supply 18-55 VDC, 90-265 VAC SPDT / DPDT relay contact output										
Response Time										
1 sec When covered										
1 sec When uncovered										
Time Delay Settings										
Cover & Uncover Delay 1s to 25s										
Adjustable for model 'S' only										
Sensitivity Settings										
Field Selectable										
Enclosure										
W Weatherproof										
PS IP-65 weatherproof housing										
FA Flameproof for Gas group Ila, IIB										
FC Flameproof for Gas group IIC										
Process Connections (Mounting)										
T Threaded 1-1/2" BSP/2" BSP/NPT										
F Flanged: As per specification										
Extension Length										
Pipe GI / SS 250mm - 3m										
Probe Length										
(Extension + Rod) length										
Extension from 250mm-3mm										
Wetted Parts										
S6 SS-316										
VS	A	S					W	T	GI	S4

NB: Specifications liable to change without notice in lieu of product improvement or up gradation



Sneha Process Control Instruments

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