



Vibrating Fork Level Switch (JAYCEEFORK 2000 SERIES)

PRINCIPAL

A tuning fork made of SS 316 L is kept vibrating at its resonant frequency of approx 125 Hz(standard) by piezo ceramic elements. when the service material covers the tines of the fork, vibrations are damped. This damping is sensed electronically and the processed signal is used to energize a relay whose contact in turn are used for control.

Features

- Compact instrument, minimum tine length of 100 mm
- No moving parts, no wear and tear, maintenance -free
- Fast switching response 1 sec
- High pressure up to 30 bar
- Low power consumption
- No Calibration required

Applications

- Dry sand & fly ash
- PET / PVC chips with under water detection
- rice, wheat, other food grain, flour
- iron ore, sinters and pulverized coal
- Milk powder

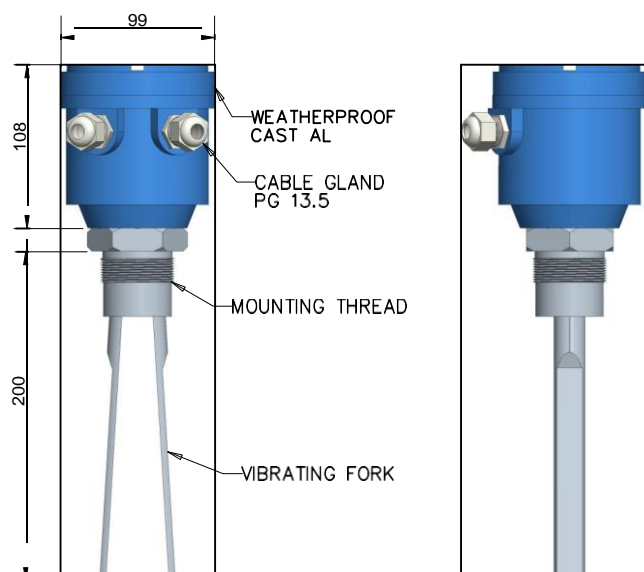


Figure 1 : Parts of vibrating fork level switch

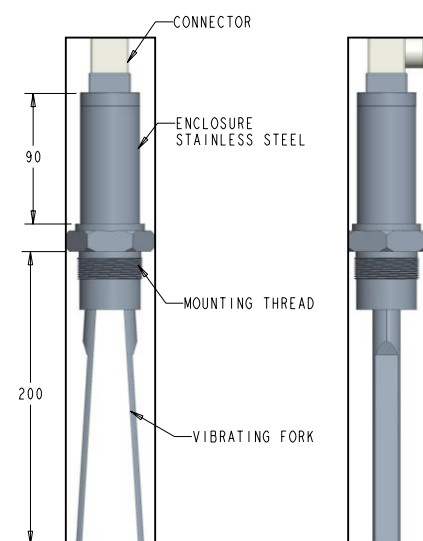


Figure 2 : Parts of vibrating fork (Pipe Fork)

Models

HARP 2010 : 120 hz frequency, Weather proof IP 67 Cast Al housing with AC and DC mains 2 X SPDT relay output

HARP 2020 : 120 hz frequency, Weather proof Cast Al housing. PNP/NPN DC output

HARP 2030 : 120 hz frequency, steel Pipe housing. PNP/NPN DC output

HARP 2020 Ex. : 120 hz frequency, weather proof IP 65 Flameproof as per BIS standard vide CIMFRTc/sR/H642 DT16tA2t20 (In PNP version) and PESO certificate no A/P/HQ/MH/104/2738(P302245)

JAYCEE TECHNOLOGIES PVT. LTD.

An ISO 9001-2008 C E Certified Company
 Shed No. 7, Nanekar Industries Building, Survey No. 79/2,
 Dangat Industrial Estate, Shivane, Pune - 411 023, India
 Contact No. : 07447401743
 Email : jayceetech@gmail.com Website : WWW.jayceetech.com



Technical Specification

Mechanical Housing	:	Cast aluminium / Stainless steel
Type	:	Electronics top mounted on fork
Pressure	:	Absolute, max 30 bar on request
Mounting Arrangement	:	Threaded: 1 1/2 " BSP / NPT Flanged : As per requirement Other : As per requirement
Mounting material	:	SS 304 / SS 316 / Others
Probe Length	:	Standard : 200 mm Customized: 100 mm ~ 3000 mm
Extension	:	GI / Stainless steel
Fork Material	:	SS 316 L
Cable Entry	:	2 Nos of PG 13.5 (Polymer)
Temperature in vessel	:	120°C / 120°C - 200°C (Optional)
Electrical indication	:	LED (Normal: Green, Alarm: Red)
Voltage mains	:	18 to 30 V DC and 65 to 265(In cast Al. Housing)
Main power consumption	:	1.9 VA
Output Relay Rating	:	2 sets of potential free c/o contacts rated at 5A,230VAC for non-inductive load PNP/NPN Transistor output in compact model
Fork Frequency	:	125 Hz (Standard)
Delay Setting	:	1-255 seconds (Covered and Uncovered)
Fail-safe Setting minimum maximum	:	Field selectable Fail-safe Low Fail-safe High
Response time	:	Standard : 1 Sec

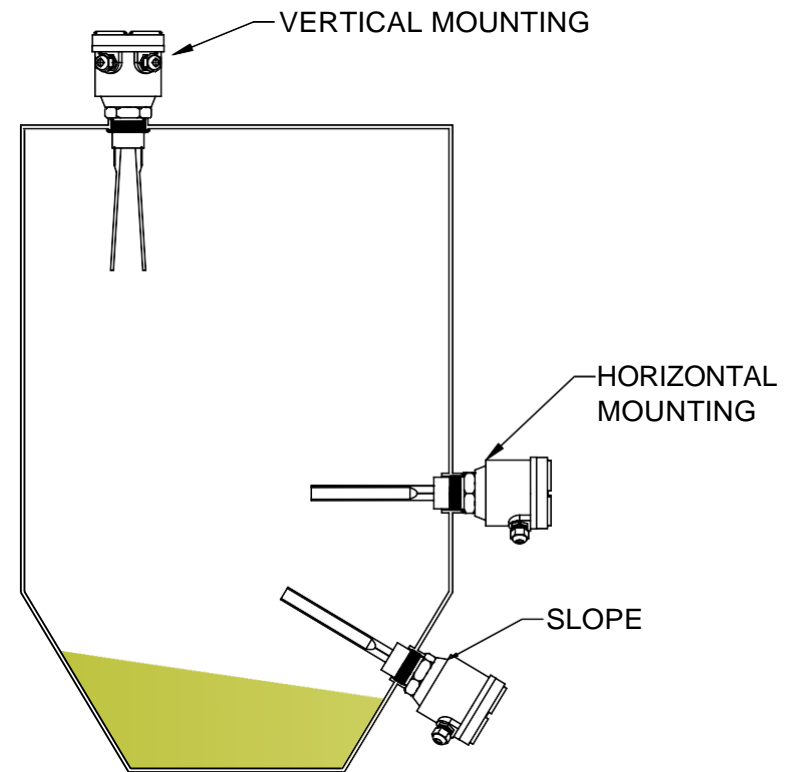


Figure 3 : Mounting Arrangement

Model Selection

JAYCEE FORK						
Enclosure (E)						
1 - Weatherproof IP-65 2 - Flameproof 3 - Stainless Steel (Pipe)						
Temperature (T)						
1-Standard Temperature Up to 80°C 2-High Temperature max 120°C -200°C						
Probe Length (PI)						
1-Standard Probe Length 200 mm 2-Extended Probe Length Up to 3000 mm						
Mounting Arrangement (M)						
1- Threaded BSP / NPT 2-Flanged ANSI/DIN ; 3 -Others						
Wetted Part (W)						
1- SS304 2- SS316 3- SS316L 4-PTFE Line ; 5- Others						
Output (O)						
1 - DPDT Relay Output 2 - Open Collector PNP/NPN						
HARP	E	T	PI	M	W	O
2000	1	1	2	1	2	1