Vibrating Fork Level Switch (JAYCEEFORK 7000 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 125 mm
- No moving parts, no wear and tear, maintenance-free
- Fast switching response 1 sec
- External magnetic key setting in certain model
- High pressure up to 30 bar
- Low power consumption
- No Calibration required

Applications

- Most liquids with max 10000 mm2/s viscosity
- Corrosive, thick, turbulent, flowing liquids
- Powders and light granules with min. density 0.05 kg/dm3

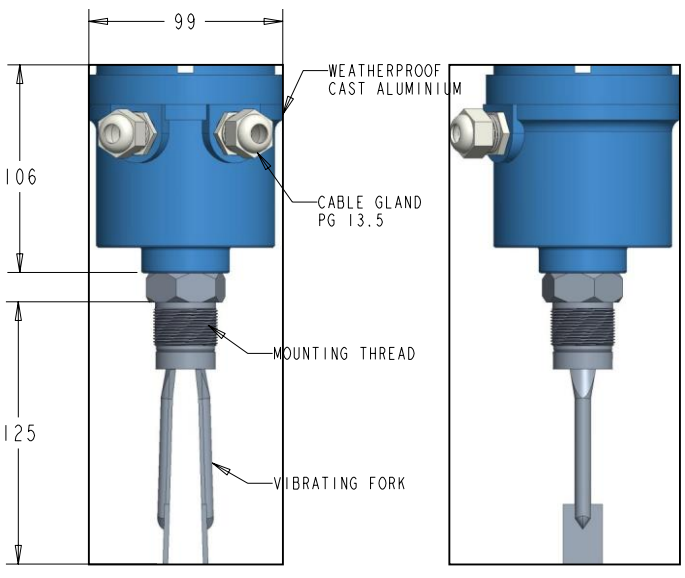

Figure 1 : Vibrating fork level switch

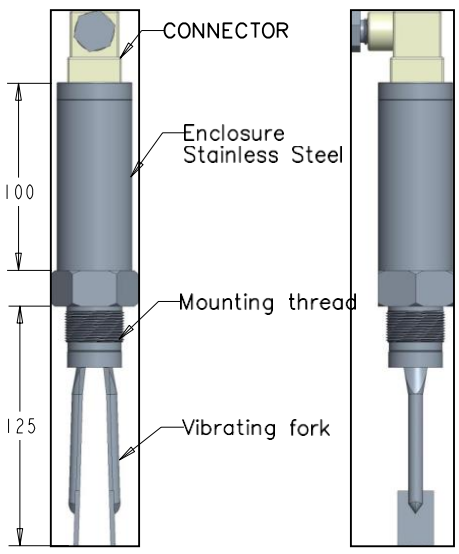

Figure 2 : Vibrating fork (Pipe Fork)

Models

SWIFT 7010 : 330hz frequency, Weather proof IP 67 Cast Al housing. With AC and DC mains. 1 DPDT relay output.

SWIFT 7020 : 330hz frequency, Weather proof Cast Al compact housing. PNP/NPN DC output.

SWIFT 7030 : 330hz frequency, Steel Pipe housing. PNP DC output

SWIFT 7020 Ex : 330 Hz frequency, Weather proof IP65, Flameproof as per BIS standard vide CIMFRTc/sR/H642 DT16tA2t20 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	:	Max 30 bar on request
Mounting Arrangement	:	Threaded: 1" BSP / NPT Flanged : As per requirement Other : As per requirement
Mounting material	:	SS 304 / SS 316 / Others
Probe Length	:	Standared : 125 mm Customized: 125 mm ~ 3000 mm
Extension	:	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 36 VDC and 65 to 265 VAC (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
Fork Frequency	:	125 Hz (Standard)
Delay Setting	:	1-255 seconds (Covered and Uncovered)
Fail-safe Setting	:	Field selectable
minimum	:	Fail-safe Low
maximum	:	Fail-safe High
Response time	:	Standard : 1 Sec

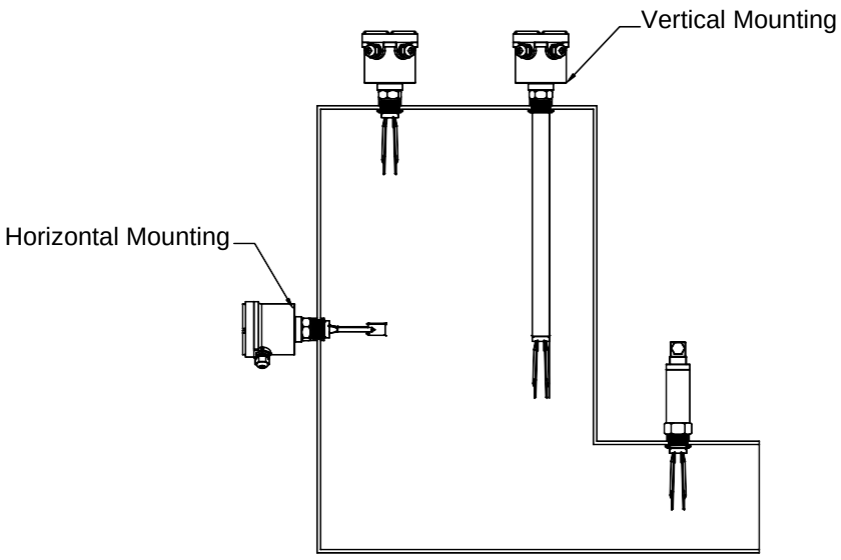

Figure 3 : Mounting Arrangement

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 (Pl)
1- Standard Probe Length 125 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

SWIFT	E	T	Pl	M	W	O
7000	1	1	1	1	1	1