

Single Rod Level Switch

User Manual



1. Overview

Single-rod vibration level switch is caused by the piezoelectric crystal resonance to vibrate, when subjected to material damping, the sharp decline in the amplitude and frequency and phase changes significantly, these changes will be detected by the internal electronic circuit, after treatment After the conversion into the switch signal output. The product can detect the level of the tank bit, control and alarm, for a variety of liquids, powders, granular solids. It is practical and simple, reliable operation, applicability is basically maintenance-free, both the tuning fork and the output state, are indicated by light-emitting diodes can be used to adjust the status indication, and with three input methods (DC 24V, AC 110V And AC 220V) and a variety of output methods (DC current output type, relay contact output type, DC voltage output type). All types have high or low fault alarm mode and selectable meter switch sensitivity.

2. Technical parameters

Medium temperature range: $-20\text{ }^{\circ}\text{C} \sim 150\text{ }^{\circ}\text{C}$

Ambient temperature: $-20\text{ }^{\circ}\text{C} \sim 80\text{ }^{\circ}\text{C}$

Environmental humidity: $\leq 95\% \text{ RH}$

Measured medium: liquid, powder or granular solid

Measured medium density: solid $\geq 0.1\text{g} / \text{cm}^3$

Liquid $\geq 0.7\text{g} / \text{cm}^3$

Measured solid particle size: $\leq 10\text{mm}$

Maximum liquid viscosity: $<1000\text{mm}^2 / \text{s}$

The measured medium angle of rest: ≥ 200

Pressure range: $\leq 1\text{MPa}$

Housing material: Die-cast aluminum

Fork material: 1Cr18Ni9Ti

Enclosure rating: IP65

Connection: 1 "NPT thread;

Flange (user selected)

3. Electrical parameters:

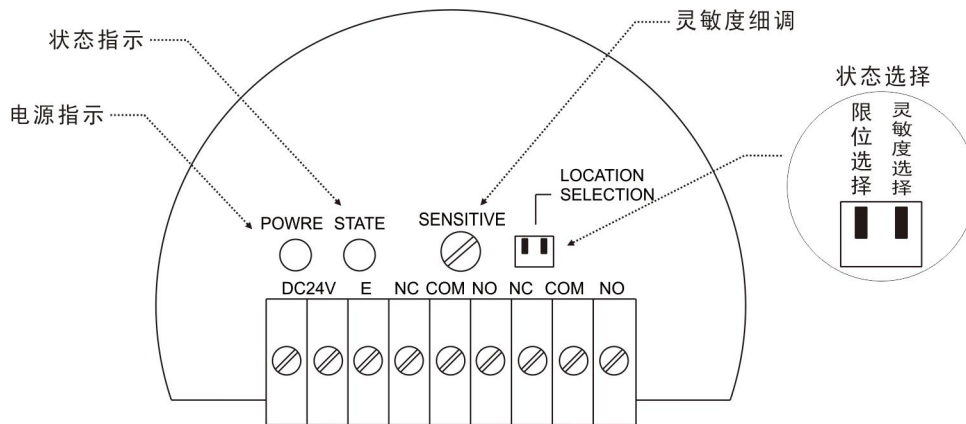
- Supply voltage: DC24V; AC220V 50HZ
- Output signal: Relay Output: 5A 220V AC 3A 24V DC
- Power consumption: ≤ 2W

Tuning fork vibration frequency: 300 ± 50Hz

Environmental vibration level: V.L.4 acceleration is not greater than 1g

Switch signal action time: 1-60S

4. Electrical connection



- After the power is turned on, the device delays for 5 seconds into normal operation, the upper limit alarm will limit
- Choose to dial to the top, the lower limit alarm when the limit will be selected to dial below.
- The sensitivity of the selected dial to the top of the high sensitivity, to the bottom of the low sensitivity.
- Sensitivity fine-tuning for the anti-clockwise sensitivity increases, clockwise to reduce the sensitivity.