

Tuning Fork Level Switch Solids| Vibration| Ultra-Low Density



Fork-11 Tuning Fork Level Switch

Overview

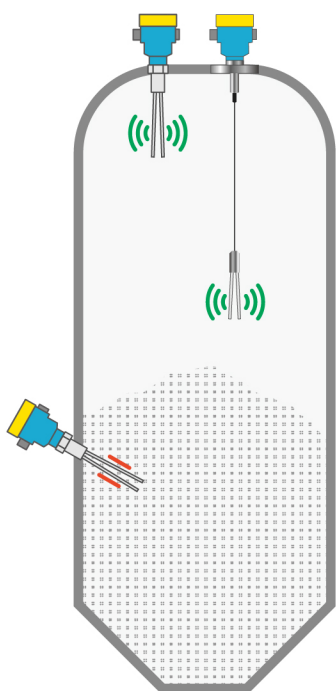
The Fork-11 tuning fork level switch is a high-performance level measurement device specially designed for ultra-low-density powders and fine granular materials. It is used for measuring powdered solids in silos and storage bins. Suitable for silos containing powdery materials such as flour, cement, or sand, as well as containers holding fine granular solids like plastic pellets, small pebbles, or foam plastics. Certified with CE gas and dust explosion-proof safety approval, it ensures enhanced safety during the measurement process.

Principle

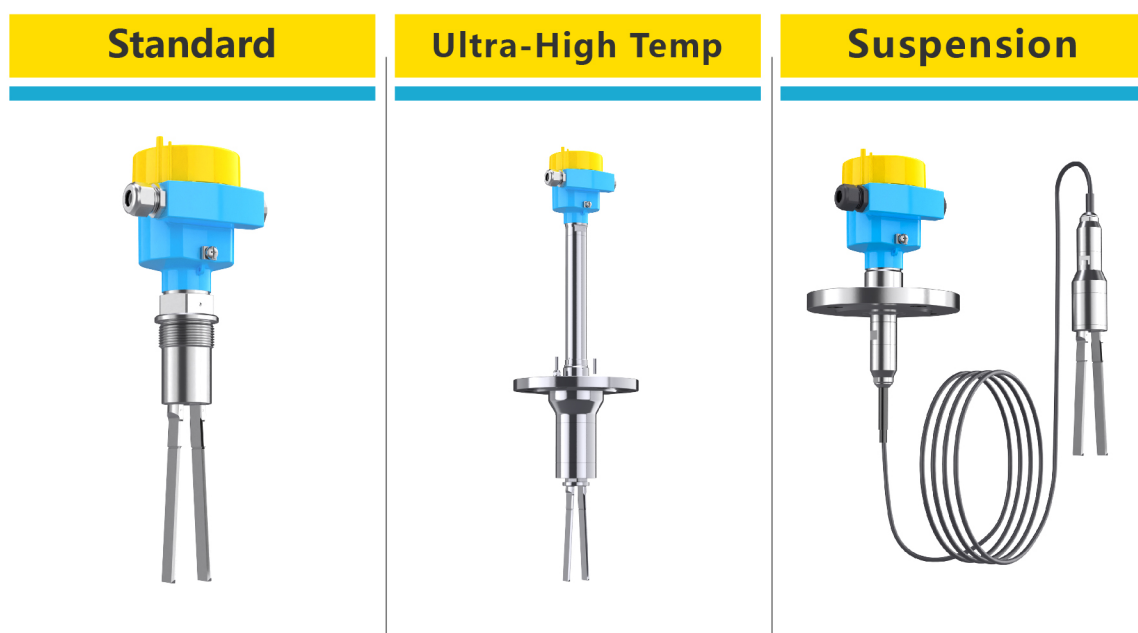
The Fork-11 tuning fork level switch uses a piezoelectric device to make the fork vibrate and detect changes in vibration. When the fork is not touching material, it vibrates freely; when it touches material, the vibration slows down. The device senses this change and sends a switch signal.

Benefits

- China's first 0.008 g/cm³ ultra-low density detection for accurate sediment and solids measurement.
- Optimized for powders and granules, anti-clog, dust-resistant, and works up to 400°C.
- 20m flexible cable probe for complex setups.
- Built-in self-diagnosis, maintenance-free, easy installation, lowers operating costs.



*Patent: 201520332293.3



Applications	<ul style="list-style-type: none"> • Suitable for low-density materials like fumed silica, EPP/EPS pellets, zircon sand, and petroleum coke, with a max temperature of 400°C. • Reliable for powders in pharma, food, chemicals, and mining. Handles high temperature and dust for stable industrial use. 		
Measurement Medium	Powders, granules, sediments, and floating materials		
Structure	Fork	Cooling protective sleeve design	With suspension-type flexible cable, up to 20 meters
Process Temp	-50 ~ 150°C	-50 ~ 400°C	-50 ~ 250°C
Process Connection	Flange, thread, clamp, customizable		
Housing Material	Aluminum alloy, 316L stainless steel, customizable ^①		
Process Pressure	-1 ~ 25 bar		
Signal Output	Relay, two-wire		
Fork Material	316L, 316L coated with PTFE		
Qualifications & Certifications	<ul style="list-style-type: none"> • Explosion Protection: Explosion-Proof Ex db IIC T1...T6 Gb Ex tb IIIC T80°C...T440°C Db Intrinsically Safe Ex ia II CT1...T6 Ga Ex ia IIIC T₂₀₀100°C...T₂₀₀450°C Da • CE: LVD certificate, EMC certificate • Ingress Protection: IP66/IP67 		

Note:

①Customizable housing available in food-grade stainless steel, tantalum, Hastelloy, titanium alloy, and other special materials.