





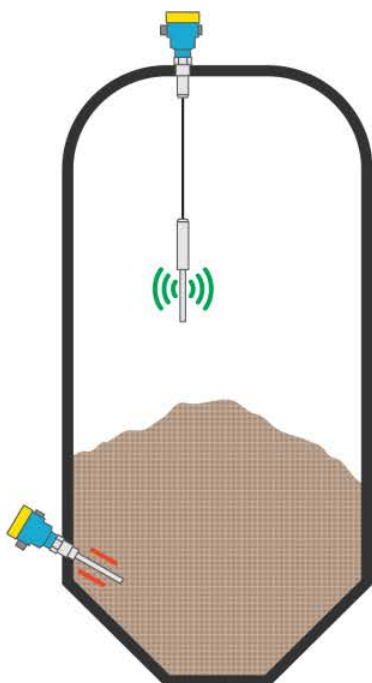
Tube-11 Vibrating Rod Level Switch

Overview

Tube-11 is China's first level switch with an innovative dual-tube probe, designed for measuring powders, granules, and sediment in water. Backed by 10+ core patents and dual gas/dust explosion-proof certification, it ensures reliable detection of various solids. Its strong adaptability and high accuracy make it ideal for demanding industrial environments.

Principle

A piezoelectric driver excites the Tube-11's vibrating rod. When the rod contacts material, vibration amplitude decreases. The electronics detect this change and output a switch signal.

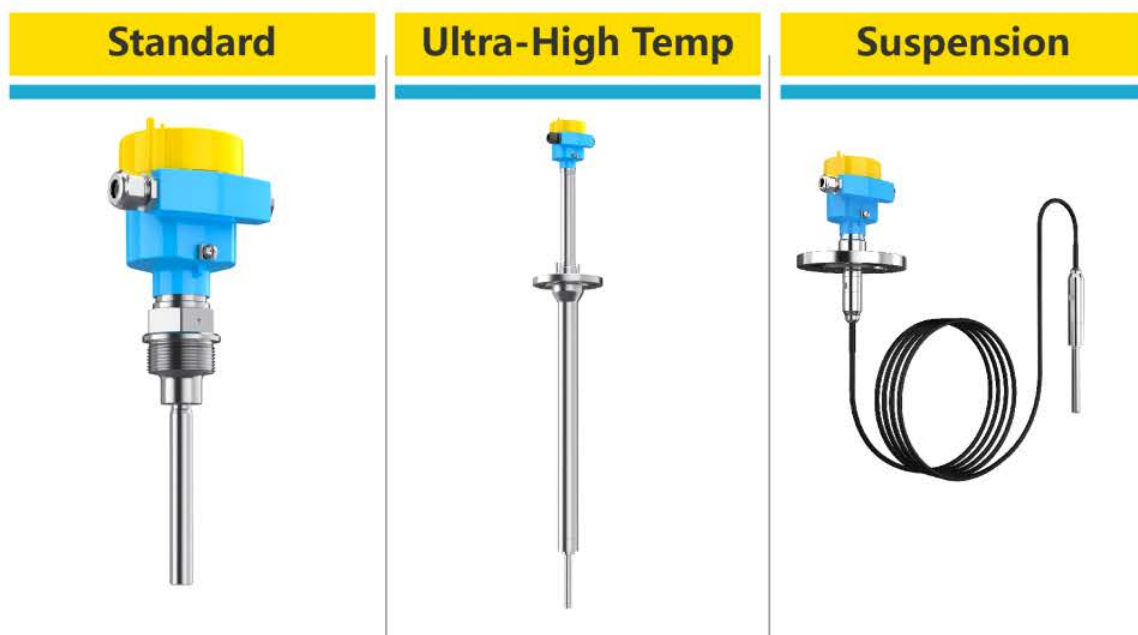


Benefits

- **Dual-tube probe design:** China's first, suitable for various solid materials and sediment measurement in water.
- **High sensitivity:** detects media density as low as 0.02g/cm^3 , covering most conditions.
- **High temperature resistance:** standard up to 250°C , ultra-high up to 400°C , industry-leading.
- **Anti-clogging design:** ideal for viscous or sticky media.
- **Intelligent self-diagnosis:** accurate fault detection, easy maintenance.
- **No calibration needed:** plug-and-play, simple operation.
- **Cable type:** flexible cable connection up to 20 meters, suitable for long-distance measurement.

*10+ Patents:

201610511184.7 (Invention), 201510009538.3 (Invention), 201510059187.7 (Invention), 201520009337.9, 201520012324.7, 201520215527.6, 201520332293.3, 201620679133.0, ZL 201920496471.4, ZL201921754721.6, Software Copyright Registration No. 5443153



Applications	<ul style="list-style-type: none"> Widely used in silos, dust bins, hoppers, and packaging lines. Ideal for extreme temperature level measurement in metallurgy, chemical, cement, and waste incineration industries. 		
Measurement Medium	Powders, granular solids, and sediments ^①		
Structure	Rod	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		
Signal Output	Relay, two-wire		
Process Pressure	-1 ~ 16 bar		
Probe Material	316L, 316L coated with Enamel, ECTFE, PFA, 318S13, Hastelloy C-22		
Housing Material	Aluminum alloy, stainless steel ^②		
Qualifications & Certifications	<ul style="list-style-type: none"> Gas & Dust Explosion-Proof^③: <div> 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 T₂₀₀ 100°C...T₂₀₀ 450°C Da </div> CE: LVD certificate, EMC certificate Ingress Protection: IP66/IP67 		

Note:

① Maximum particle size: 20mm (requires medium density < 0.05g/cm³)

② Customizable with special materials such as food-grade stainless steel, tantalum, Hastelloy, and titanium alloy

③ Explosion-proof versions available upon request

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



Fork-11 Tuning Fork Level Switch

Overview

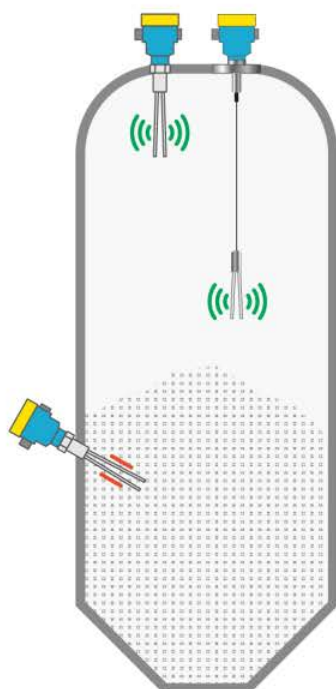
The Fork-11 tuning fork level switch is a high-performance level measurement device specially designed for ultra-low-density powders and fine granular materials. It is used for measuring powdered solids in silos and storage bins. Suitable for silos containing powdery materials such as flour, cement, 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.



Ring-11 Liquid Level Switch

Overview

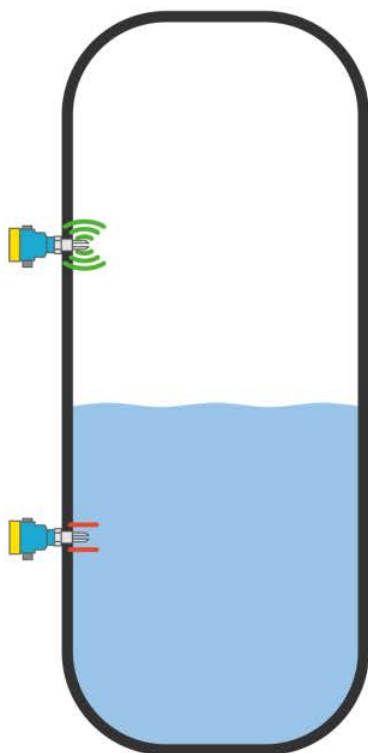
The Ring-11 liquid level switch is China's first SIL2/3-certified level product, also certified with CCC, CE, Gas & Dust explosion-proof, intrinsic safety, and flameproof standards. Its 40mm ultra-short fork, with precision tuning and anti-interference design, ensures accurate liquid level detection, prevents overflow and dry run, and supports pump protection. It remains reliable in turbulence, foam, vibration, and buildup conditions.




Principle

The Ring-11 tuning fork vibrates at its natural frequency. When submerged or exposed by changing liquid levels, its vibration frequency shifts, indicating the liquid level.

Benefits

- **Unique Design:** Measures ultra-low-density liquids ($\geq 0.5\text{g/cm}^3$), withstands up to 400°C .
- **Reliable in Harsh Conditions:** Unaffected by installation, pressure, temperature, foam, viscosity; ideal for LNG.
- **Flexible Outputs:** Relay, two-wire, NAMUR, transistor.
- **SIL Certified:** SIL2/3, CE, explosion-proof.
- **Food-Grade:** Surface $R_a < 0.5\mu\text{m}$.
- **Gas-tight Lead-Through:** Prevents corrosion and leaks in high-temp, high-pressure environments.



Standard	Corrosion-Resistant	High-Temp & Explosion-Proof
		

Applications	<ul style="list-style-type: none"> Designed for industrial liquid level measurement in pipelines, tanks, and wastewater systems. Explosion-proof for safe use in hazardous areas, ideal for LNG and high-pressure gases. Handles acids, alkalis, and viscous media reliably. Suitable for food, petrochemical, pharmaceutical, and pipeline industries. 		
Measurement Medium	Liquid	Corrosive liquid	High-temperature and high-pressure liquid
Process Temperature	-50 ~ 400°C		
Process Connection	Flange, thread, clamp, customizable		
Housing Material	Aluminum alloy, 316L stainless steel, customizable ^①		
Process Pressure	Atmospheric Pressure, -1~64 bar		
Signal Output	Relay, two-wire, NAMUR, transistor		
Fork Material	316L, 316L coated with Enamel, ECTFE, PFA, Hastelloy C-22, Tantalum, 318S13		
Qualifications & Certifications	<ul style="list-style-type: none"> SIL Qualifications: SIL2 (HFT=0) / SIL3 (HFT=1) Explosion Protection: Explosion-Proof — Ex d IIC T6~T1 Gb Intrinsically Safe — Ex ia IIC T6~T1 Ga Flameproof for Gas and Dust — Ex db IIC T6...T1 Gb + Ex tb IIIC T440°C...T80°C Db CE: LVD Certificate, EMC Certificate Ingress Protection: IP66/IP67 		

Note:

①Food-grade stainless steel, tantalum, Hastelloy, titanium alloy, and other materials support customized housings.

Compact Level Switch Liquids | Vibration | Economical



Ring-21 Compact Liquid Level Switch

Overview

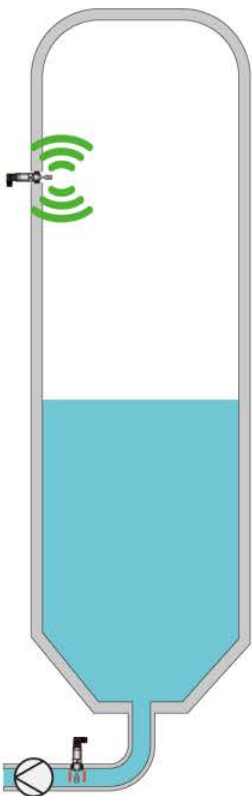
The Ring-21 compact tuning fork level switch is a cost-effective limit switch with a small and lightweight design. It measures only 160.5 mm in length and 31.5 mm in diameter, with a fork length of 38 mm. Suitable for liquids with densities as low as 0.7 g/cm³, it is ideal for low-cost, non-explosion-proof applications in pipelines or narrow spaces.

Principle

Based on the principle that the vibration frequency decreases when the fork is immersed in liquid, the detection circuit identifies the frequency change and outputs a switching signal.

Benefits

- **Cost-effective:** Practical and budget-friendly.
- **Export-ready:** CE certified.
- **High reliability:** Designed based on frequency variation detection.
- **Easy operation:** Safe, reliable, and widely applicable.
- **Compact measurement:** Ideal for pipelines and small tanks.



*Patent: 201520332293.3, Software Copyright Registration No. 1548696

Standard



High-Temp



Applications	<ul style="list-style-type: none"> • The standard model suits small tanks, sumps, cooling tanks, pipelines, labs, water treatment, and HVAC systems. • The high-temperature model is for non-explosion-proof high-temp environments like heat pump hot water, boiler feed tanks, chemical and food industry cleaning fluids, and cooling system pipelines. 	
Measurement Medium	Liquid $\geq 0.7\text{g/cm}^3$	High-Temp Liquid $\geq 0.7\text{g/cm}^3$
Process Temp	$-50 \sim 100^\circ\text{C}$	$-50 \sim 150^\circ\text{C}$
Process Pressure	$-1 \sim 40 \text{ bar}$	
Housing Material	316L	
Process Connection	thread, clamp, customizable	
Signal Output	Relay, PNP, NPN	
Probe Material	316L	
Qualifications & Certifications	<ul style="list-style-type: none"> • Ingress Protection: Pg11 — IP65 M12×1 — IP66/IP67 • CE certificate: LVD certificate, EMC certificate 	

RF Admittance Level Switch Solids |RF Type |Industry-Leading 450°C



Cape-11 RF Admittance Level Switch

Overview

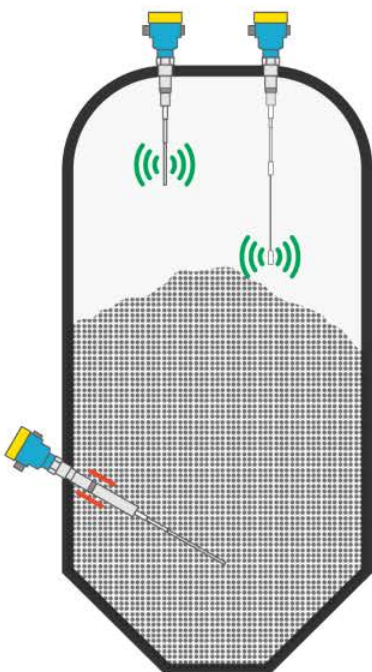
The Cape-11 RF admittance level switch is specially developed for fly ash level measurement. Jiwei adopts proprietary technology and advanced manufacturing processes, ensuring excellent versatility and high reliability. The product features a modular design and an external LED indicator for convenient remote monitoring.

Principle

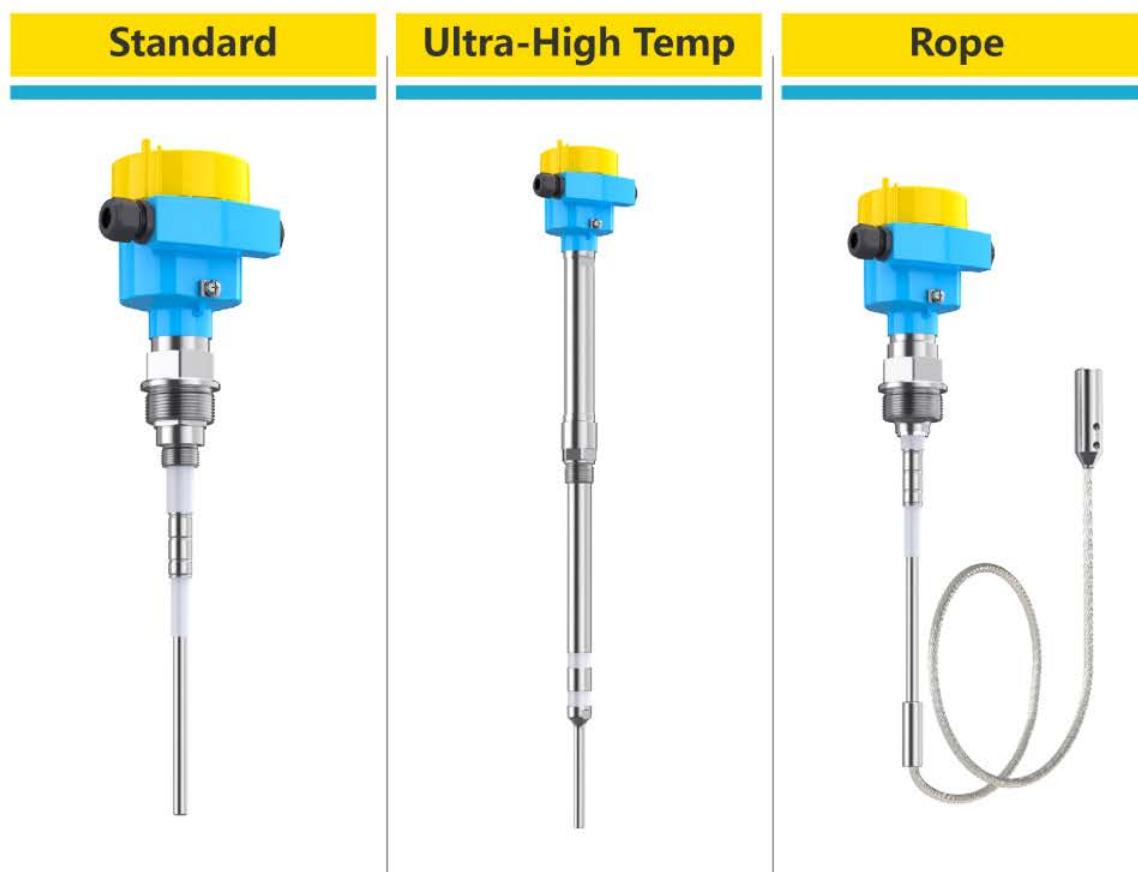
The RF admittance level switch applies a high-frequency signal to the probe and detects changes in dielectric constant and conductivity of the material to monitor level variations in real time.

Benefits

- **450°C High-Temperature Resistance:** Industry-leading temperature endurance.
- **External Dual-Color LED Indicator:** Enables easy remote status monitoring.
- **Cable Probe Version:** Designed for large silos and tall vessels; vertical installation reduces material impact.
- **Modular Design:** Improves efficiency and simplifies maintenance.



*Patent: 201520332293.3



Applications	<ul style="list-style-type: none"> Designed for dusty industrial environments, it is ideal for monitoring the level of powdered materials like pulverized coal, fly ash, and cement clinker in applications such as power plant ash hoppers, coal bunkers, and desulfurization silos. 		
Measurement Medium	Coal ash and powder		
Process Temp	-40 ~ 250°C	-40 ~ 450°C	-40 ~ 250°C
Probe length	250 ~ 2000mm	400 ~ 1800mm	600 ~ 6000mm
Process Connection	Flange, thread (304/316 stainless steel customizable)		
Signal Output	Relay		
Ingress Protection	IP66		

Rotary Paddle Switch Solids | Gas & Dust Explosion-Proof



Spin-11 Rotary Paddle Switch

Overview

The Spin-11 rotary paddle switch is a highly reliable industrial material level control device, widely used for automatic detection and control of extreme levels in silos containing powdery, granular, or block materials.

Principle

The rotating paddle contacts the material to detect its presence or absence, enabling level detection and control.

Benefits

- **High-level protection:** Fully dustproof and waterproof, certified for gas and dust explosion protection.
- **Premium materials:** Made of 304 or 316L stainless steel, offering excellent corrosion resistance and durability.
- **Innovative design:** Integrated anti-loosening structure for easy replacement and maintenance; dual bearing design ensures smoother operation and longer service life.
- **Proprietary technology:** Outperforms most products on the market with a lifespan three times longer.

*Patent: 201520332293.3

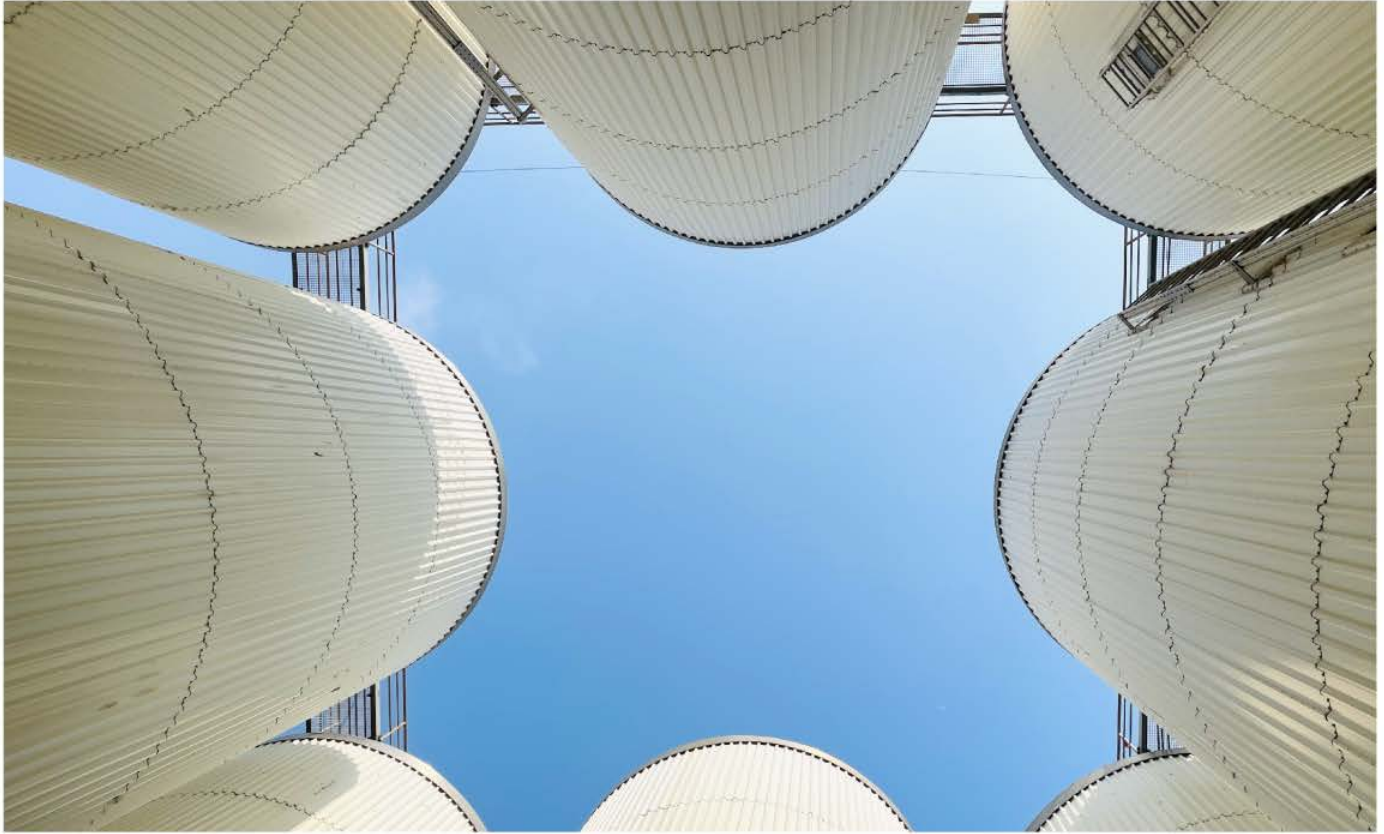
High-Temp & Explosion-Proof



Guard



Applications	<ul style="list-style-type: none"> Suitable for measuring granular materials like wood chips, feed, grains, sand, ore, fly ash, resin, rubber, and plastics. It operates reliably in harsh conditions such as high temperature and dust. 	
Measurement Medium	Solid granular powders $\geq 0.3 \text{ g/cm}^3$	Powders and fine granules $\geq 0.3 \text{ g/cm}^3$
Process Temp	Normal temperature: $-20 \sim 70^\circ\text{C}$ High temperature: $-20 \sim 400^\circ\text{C}$	
Operating Voltage	24V DC, 220V AC 50/60Hz	
Material	Aluminum alloy, 316L/304	
Process Connection	Flange (standard/thin), thread, customizable	
Various paddles	Sickle type, foldable type, paddle type, straight blade type	
Process Pressure	Atmospheric pressure	
Qualifications & Certifications	<ul style="list-style-type: none"> Explosion Protection: Flameproof Enclosure -----Ex db IIC T6~T1 Gb Flameproof Enclosure -----Ex tb IIIC T80°C~T440°C Db Gas/Dust Explosion-proof -----Ex db IIC T6~T1 Gb + Ex tb IIIC T80°C~T440°C Db Ingress Protection: IP65 	



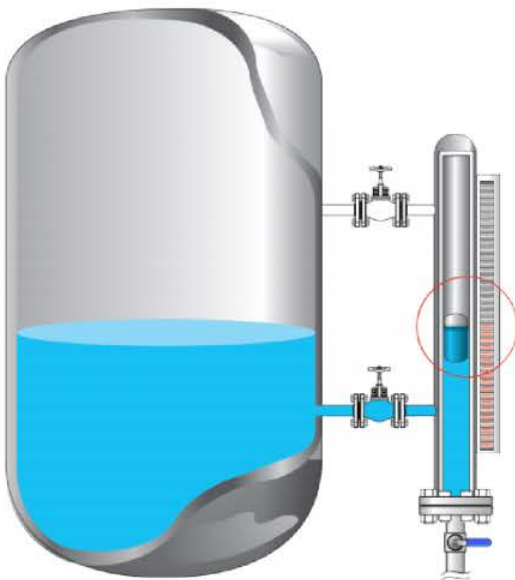
Flap-11 Magnetic Level Indicator

Overview

Jiwei's Flap-11 series features proprietary innovations in design and manufacturing, ensuring high reliability and overcoming common issues in similar products. It has obtained seven national invention and utility model patents.

Principle

A bypass tube mounted on the vessel contains a float with a magnet. As the liquid level changes, the float moves, flipping magnetic flags outside the tube to show the level—clearly visible with red/white color contrast and no direct contact needed.






Benefits

- Real-time level indication without the need for external power.
- Non-contact magnetic display, resistant to fouling or buildup.
- Optional magnetic switches and transmitters are SIL2/3 certified and explosion-proof, with IP65 or IP66/IP67 protection.

*Patents:

ZL 2021 20818524.7, ZL201721092126.1, ZL201721282291.3, ZL 201821348285.8, 201621028672.4, 201621183730.0, 201621192459.7

Standard	Explosion-proof	Transducer
		

Applications	<ul style="list-style-type: none"> Uses non-contact measurement, ideal for large tanks and ponds. Easy to install and maintain, with fast, accurate readings for industries like wastewater, chemicals, power, and marine. 		
Environment	Open tanks in safe areas	Open tanks in hazardous (explosive) areas	Hazardous conditions requiring remote monitoring
Structure	Integrated design		Transducer model, customizable cable length over 10m
Material	Housing: Aluminum alloy		Transducer: ABS, PVDF
Process Connection	Flange, threaded		
Process Temp	-20 ~ 80°C		
Process Pressure	Atmospheric pressure		
Signal Output	Two-wire, four-wire, RS-485, and relay outputs optional		
Range	5m, 10m, 15m		
Qualifications & Certifications	<ul style="list-style-type: none"> •CE: LVD certificate, EMC certificate •Ingress Protection: IP66/IP67 	<ul style="list-style-type: none"> •Explosion Protection: Explosion-Proof: Ex d IIC T6 Gb •CE: LVD certificate, EMC certificate •Ingress Protection: IP66/IP67 	<ul style="list-style-type: none"> •Explosion Protection: Explosion-Proof: Ex d IIC T6 Gb •CE: LVD certificate, EMC certificate •Ingress Protection: Transducer IP68 Transmitter IP65



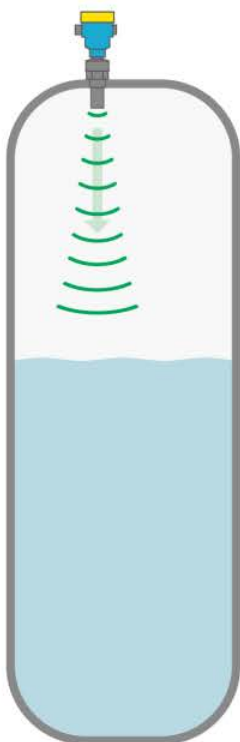
Uson Ultrasonic Level Transmitter

Overview

The Uson series ultrasonic level transmitter is designed for continuous, non-contact liquid level measurement. It operates reliably in open tanks and is widely used in chemical, power, environmental, and water industries.




Principle

The transducer emits ultrasonic pulses that reflect off the liquid surface. The level is calculated by measuring the time between emission and echo.



Benefits

- **High protection:** Rated IP66/IP67 for excellent dust and water resistance.
- **Explosion-proof:** Certified Exd IIC T6 Gb for safe use in hazardous areas.
- **Reliable:** High-accuracy measurement with intelligent temperature compensation.
- **Flexible options:** Corrosion-resistant and split-type models available for special applications.

Economy	Plastic	Lined
		

Applications	<ul style="list-style-type: none"> • Ideal for large tanks and basins, this high-visibility level gauge offers easy installation, low maintenance, and accurate measurement. It suits continuous monitoring in power plants, wastewater treatment, dyeing, hospitals, refining, and storage industries. 		
Measurement Medium	Slightly corrosive liquids with density 0.45–2g/cm ³	Acidic liquids incompatible with PP with density 0.45–2g/cm ³	Strongly corrosive liquids with density 0.8–2g/cm ³
Material	304, 316/316L, all-aluminum flap, acrylic plate	PP, all-aluminum flap, PA66 nylon flap, glass (standard), acrylic plate	316/316L with external F46 lining
Process Temp	–40 ~ 350°C	–20 ~ 80°C	≤120°C
Process Pressure	Vacuum ~ 100 bar	–1 ~ 6 bar	0 ~ 16 bar
Process Connection	Flange, thread, dimensions customizable		
Range	Single part: 200–5600 mm; multi-segment structures up to 20 meters or more		
Signal Output	Magnetic switch: 220V AC 3A, SPDT		
Qualifications & Certifications	<ul style="list-style-type: none"> •SIL Qualifications: SIL2 (HFT≥0)/SIL3 (HFT≥1) •Explosion Protection: Explosion-Proof: Ex d IIC T6 Gb (Magnetic switch and remote transmitter) Intrinsically Safe: Ex ia IIC T6 Ga (Magnetic switch and remote transmitter) •Ingress Protection: IP66/IP67 		



JWrada Radar Level Meter

Overview

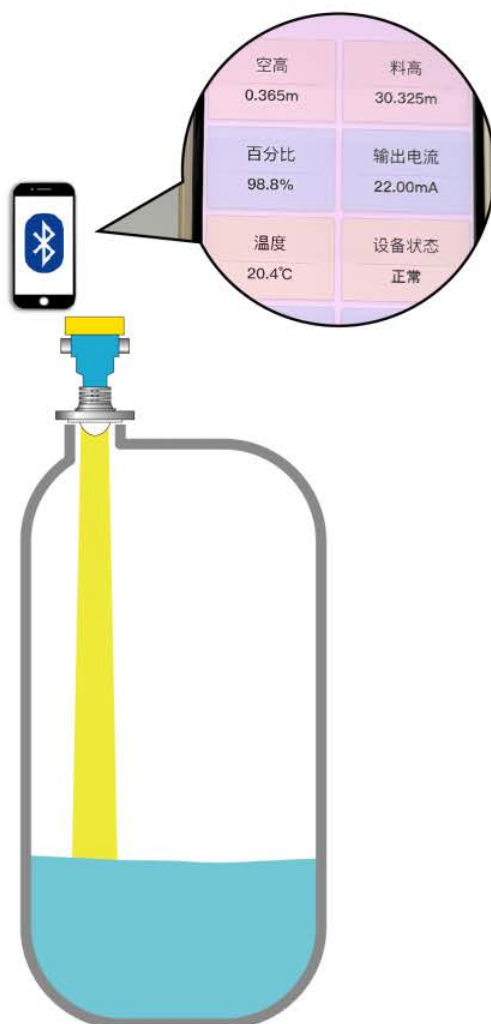
The JWrada series radar level meters utilize 80GHz FMCW technology, offering a measuring range of up to 120 meters. With a narrow beam angle and focused energy, they are ideal for low dielectric constant and complex media. Each unit undergoes over 50 rigorous factory tests and is well-suited for harsh conditions such as high temperature, high pressure, steam, and dust.

Principle

Radar level meters send microwave signals from above to the material surface. The signal bounces back, and the device calculates the distance to measure the level. This method works for both liquids and solids.

Benefits

- **Non-contact Measurement:** High-precision radar technology with accuracy up to ± 1 mm, ensuring reliable results without physical contact.
- **Excellent Environmental Adaptability:** Measurement remains stable regardless of medium properties or process conditions.
- **User-Friendly Design:** Easy setup with support for remote commissioning via the "Jiwei Smart Control" Bluetooth app.
- **Self-Developed Intelligent Echo Technology:** Proprietary echo-learning algorithm that intelligently adapts to complex environments for optimized accuracy.



	JWrada-31	JWrada-32	JWrada-33
			
Features	Economical 80GHz high frequency radar level meter with wide applicability	Long range up to 120m, 80GHz high-frequency radar, suitable for general liquid and solid level measurement, complete explosion-proof certification	80GHz high-frequency radar designed for high temperature, high pressure, and corrosion resistance with a maximum range of 120 meters
Applications	For continuous non-contact liquid measurement in complex containers in pharmaceutical, food, energy, and water industries	Liquid and bulk solid level measurement in various conditions, suitable for flammable and explosive environments in oil, chemical, and mining industries	Level measurement for liquids and bulk solids in harsh conditions, ideal for petroleum, chemical, metallurgy, and power industries; withstands 220°C, corrosion, and steam interference.
Measurement Medium	Liquids	For liquids and solid particles	
Range	Max. 30m	Max. 120m	
Antenna	PFA/316L+PTFE	PFA/316L+PTFE	Stainless steel 316L / PTFE diaphragm
Process Temp	Ambient temperature: -40 ~ 150°C High temperature: -40 ~ 220°C		
Process Pressure	-1 ~ 25 bar		
Beam Angle	≥ 3°		
Process Connection	Thread, flange, bracket, hanger		
Frequency	80GHz		
Wireless Communication	Support Bluetooth® v5.4		
Signal Output	<ul style="list-style-type: none"> • Analog output: 4~20mA • Communication protocols: HART / RS-485 / MODBUS protocols 		
Qualifications & Certifications	None	<ul style="list-style-type: none"> • Explosion Protection: Ex db IIC T1...T6 Gb (Explosion-Proof) Ex ia IIC T1...T6 Ga (Intrinsically Safe) Ex tb IIIC T80°C Db (Gas & Dust) • Ingress Protection: IP66/67 	



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