

The floating ball continuous liquid level gauge uses the change of the magnet in the floating ball with the liquid level to change the partial voltage circuit composed of the resistance in the connecting rod and the dry reed. The smaller the gap of the dry reed, the higher the accuracy.



Overview

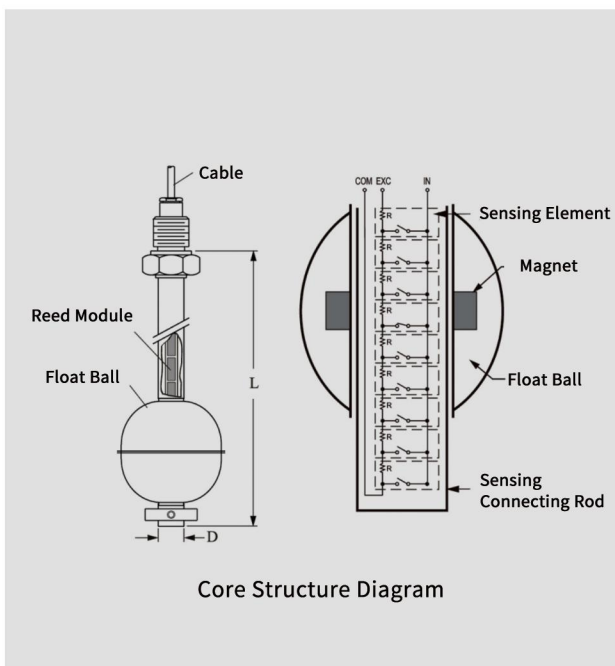
The float level meter is a continuous level meter with advantages such as sensitive action, high reliability, long service life, and strong resistance to load impact. It is widely used in industries such as water treatment, food machinery, shipbuilding, paper-making, power generation equipment, and petrochemicals. It is also used for high and low level liquid level detection in industrial equipment under high temperature environments.

Working Principle

The float level meter utilizes the magnetic field inside the float to change the resistance inside the connecting rod and the voltage divider circuit composed of the reed switch as the liquid level changes. The smaller the gap of the reed switch, the higher the accuracy. The voltage signal can be converted into 0/4~20mA or other different standard signals through a converter. The indicator can be used in conjunction with other displays for remote indication. It is a simple and highly reliable liquid level indicator.

Features

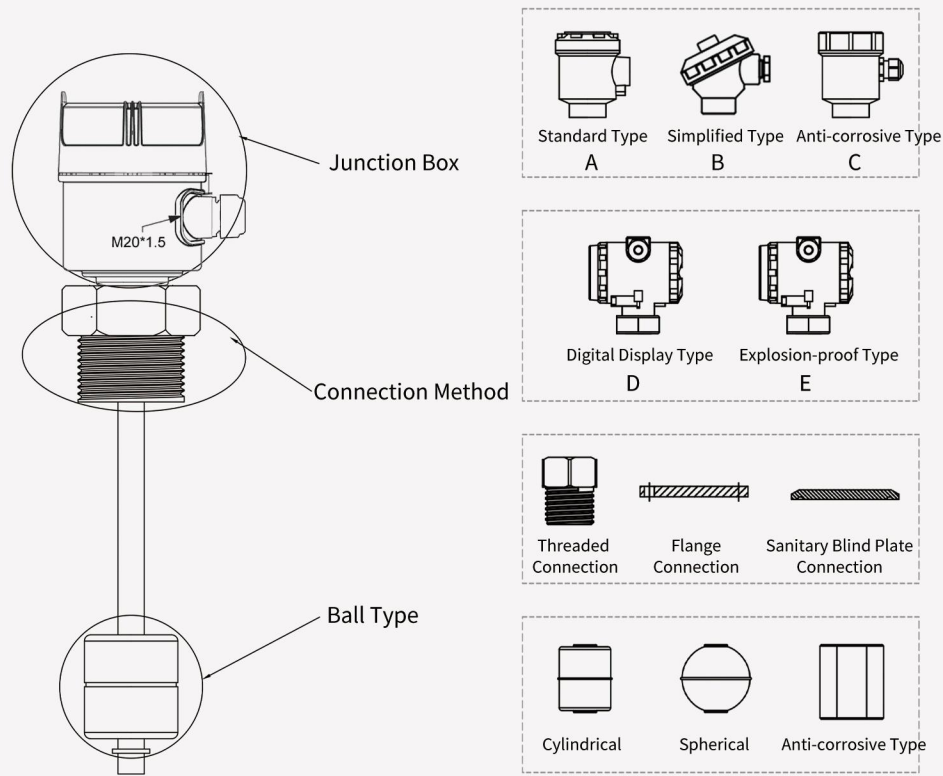
- Reed switch design with protective casing to avoid damage during transportation, installation, or use
- Continuous monitoring of liquid level with high repeatability
- Not affected by foam or conductivity, and not influenced by liquid density or pressure
- Available in various materials to meet different field needs; corrosion-resistant types can be customized
- Can be easily controlled remotely and used in conjunction with control units or digital displays
- Measuring range can be customized according to user requirements
- The indicator mechanism is completely isolated from the measured medium, ensuring good sealing and safe use
- Simple structure, easy installation, and low maintenance cost



Float Level Meter

Model	MF-100	MF-200	MF-300
Image			
Application	Liquid	Liquid	Liquid
Resolution	6MM/12MM	6MM/12MM	6MM/12MM
Liquid Contact Material	304/316L	304/316L	PP/PTFE
Measuring Range	300MM~6000MM	300MM~6000MM	300MM~6000MM
Measuring Rod Diameter	Ø12.7MM~Ø22MM	Ø12.7MM~Ø22MM	Ø16MM~Ø25MM
Process Connection	Thread: 1-1/2"~3"; Flange: 2"~6" (customizable)	Thread: 1-1/2"~3"; Flange: 2"~6" (customizable)	Flange: 2"~6" (customizable)
Process Temperature	-20~200°C	-20~200°C	-20~80°C/-20~200°C
Process Pressure	-1~25BAR (-100~2500KPA)	-1~25BAR (-100~2500KPA)	-1~50BAR/10BAR (-100~5000KPA/1000BAR)
Signal Output	4-20mA Two-wire 24VDC / Three-wire resistance signal	4-20mA Two-wire 24VDC LCD display	4-20mA Two-wire 24VDC LCD display
Junction Box Material	Aluminum Alloy Paint	Aluminum Alloy Paint	Aluminum Alloy Paint
Certification	CE / ATEX / ISO9001	CE / ATEX / ISO9001	CE / ATEX / ISO9001
Protection Level	IP65	IP65	IP65

Structure Form



Float Ball Specifications

Model	Dimensional Size (A-B-C)	Specific Gravity (g/cm ³)	Pressure Resistance (bar)	Material	Maximum Temperature Resistance (°C)	Applicable Rod Diameter (mm)	
S3	42x 50x 15	E>0.6	10	SUS316L	200	Ø12.7	
S4	45x 55x 15	E>0.5	10	SUS316L	200	Ø12.7	
S6	45x 55x 18	E>0.7	10	SUS316L	200	Ø14	
S7	75x 108x 20	E>0.5	10	SUS304	200	Ø16	
S5	52x 52x 15	E>0.55	25	SUS316L	200	Ø12.7	
S8	75x 75x 23	E>0.7	25	SUS304	200	Ø16	
S9	150x 150x 30	E>0.5	15	SUS304	200	Ø22	
P1	40x 50x 22	E>0.85	Normal Pressure	PP	80	Ø18	
T1	60x 70x 24	E>0.9	Normal Pressure	PTFE	200	Ø18	
SS	Special Customization	Special Customization	Special Customization	Special Customization	Special Customization	Special Customization	