

Float-11P Coated Float Level Indicator



Float Level Indicator

Float-11 series are based on Archimedes Buoyancy Principle. Float rises and falls as the fluid level in a vessel changes. Due to magnetic effect, as the float moves, the proximal reed switches in the chamber are magnetized by the permanent magnet in the float and change the status from “open” to “closed”. The resistance value in the sensor changes linearly. The change of resistance value is then converted into 4 ~ 20mA standard DC output signal for remote detection and control. Float-11series can be made of different materials for fluids with different chemical properties. We also offer different floats for fluids with different density to reach the optimal measurement accuracy.

In Float-11 series products, high quality plastic reed switches are used. We emphasize manufacturing details and have also introduced full production process management and quality inspection to ensure our products reach super high reliability. In comparison with other similar products in the market, Jiwei Float-11 Level Indicator has the following advantages:

- Purchased high quality plastic reed switches from international market as its key parts, longer service life.
- LED display with high brightness, can be configured in horizontal or upright, convenient for observation under different conditions on site.
- Explosion proof certified for both Flameproof Enclosure (Ex d IIC T6) and Intrinsic Safety (Ex ia IIC T6).
- Unique sealing techniques, ingress protection rating reaches IP66/IP67.
- Material for wetted part can be selected from 304, 316L, and coating material ECTFE/PTFE.



Float-11 series has two models for various liquids with different chemical properties:

Float-11A Standard: made of 304 or 316L stainless steel, suitable for most of liquids.

Float-11P Coated: With ECTFE/PTFE coating for strong corrosive liquids level measurement.

Float-11P Coated Float Level Indicator

Overview

Float-11P Coated Float Level Indicator is manufactured with unique coating technique to make sure the float slides up and down smoothly along the guide tube. The entire production process and quality inspection are strictly managed to ensure all our products have high reliability. Float-11P is designed for level measurement of strong corrosive liquids. It can be widely used in chemical industry, oil refining, storage, transportation, water treatment and other industries.

Features

- Purchased high quality plastic reed switches from international market as its key parts, longer service life.
- LED display with high brightness, can be configured in horizontal or upright, convenient for observation under different conditions on site.
- Explosion proof certified for both Flameproof Enclosure (Ex d IIC T6) and Intrinsic Safety (Ex ia IIC T6).
- Unique sealing techniques, ingress protection rating reaches IP66/IP67.
- Coated with ECTFE/PTFE, can be applied to strong corrosive liquid level measurement.



Typical applications

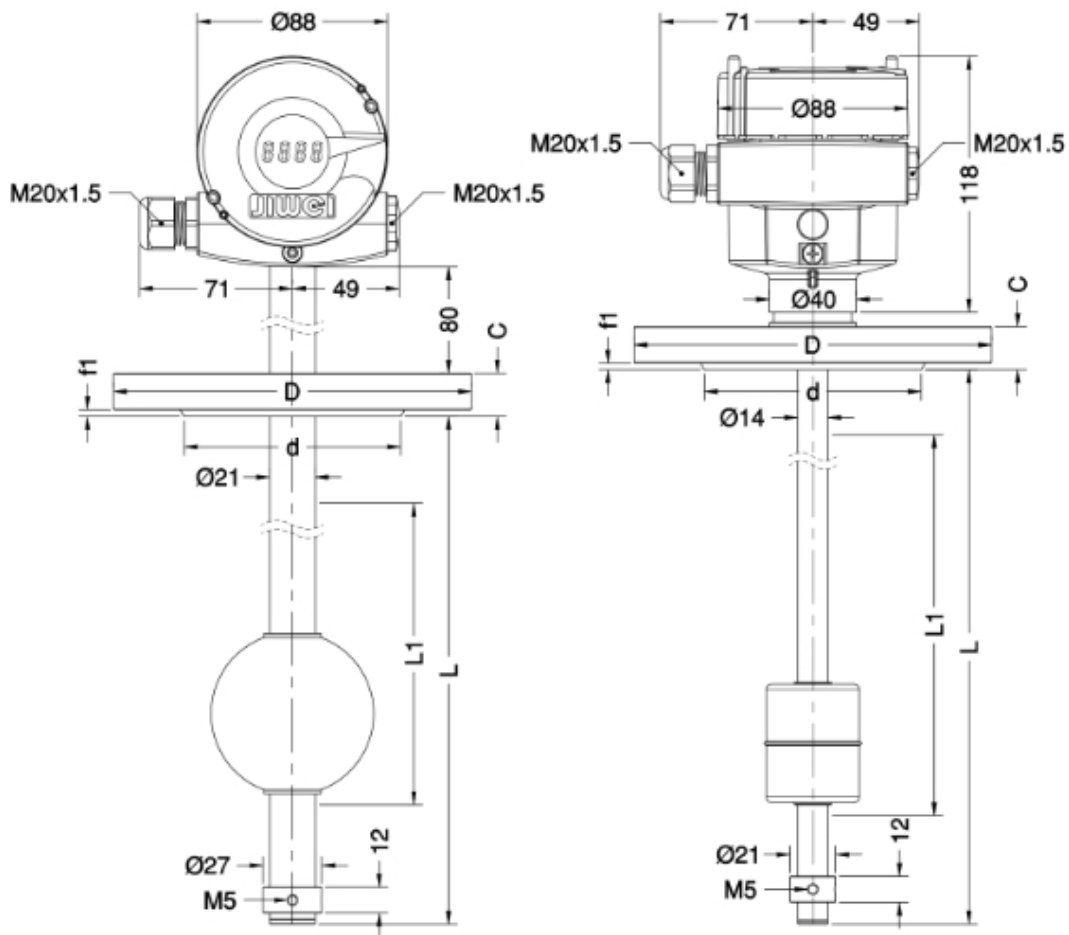
- Level measurement for various acid and alkali storage tanks in chemical industry production process.
- Level measurement and control for bio pharmaceutical reaction tanks.

Technical data

Measured medium	Liquid
Measuring range	300~6000mm
Medium Density	$\geq 0.5\text{g/cm}^3$
Process pressure	$\leq 25\text{bar}$
Process temperature	$-20^{\circ}\text{C} \sim +120^{\circ}\text{C}$
Ambient temperature	$-40 \sim 70^{\circ}\text{C}$
Process fitting	Flange
Accuracy	$\pm 5\text{mm}/\pm 10\text{mm}$

Guide tube	φ 21 x 2mm,
	φ 14 x 1mm
External housing	Aluminum alloy
Coating material (for Float/Guide tube/Process fitting)	ECTFE
	PTFEP
Ingress protection rating	IP66/IP67
Signal output	4~20mA
Power supply	18~36V DC
Approval	Flameproof Enclosure: Ex d II C T6
	Intrinsic Safety: Ex ia II C T6

Dimensional drawings

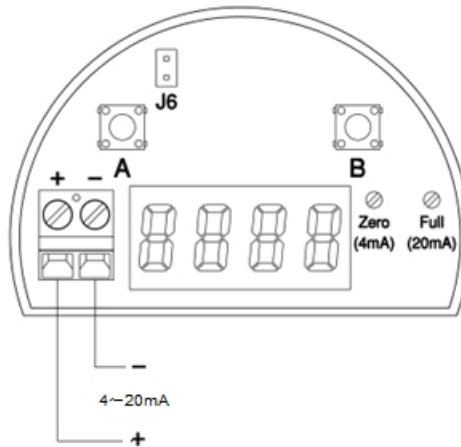


Horizontal display

Upright display

Note: L is total length of the guide tube. L1 is measurement range.

Wiring plan



Order information

	Float-11	P							
Material (for Guide/Float/Process fitting)		E PTFE T ECTFE							
Accuracy	F ±5mm T ±10mm								
Process fitting	FA Flange DN50 PN40 FB Flange DN80 PN40 FC Flange DN50 PN16 FD Flange DN80 PN16 XX Customized design								
Display	N None T Upright H Horizontal								
Cable entry	M M20 x 1.5 N 1/2"NPT								
Approvals	N None explosion hazards I Intrinsic Safety (Ex ia IIC T6) D Flameproof Enclosure (Ex d IIC T6)								
Measurement range	L Total length of the guide tube in mm. e.g. Total length 1000mm, expressed as L-1000								