

RF Capacitive liquid level Switch

NYDR capacitive liquid level switch is a highly intelligent liquid level measurement product, which overcomes the inconvenience brought to customers by the low alarm accuracy and complex adjustment steps of the previous measurement methods. RF capacitive switches are widely used in chemical industry, metallurgy, petroleum, machinery, food + food stuff and other industries.

Working principle

NYDR capacitive liquid level switch adopts advanced digital intelligent compensation technology to convert the liquid level change in the container into the capacitance change. There are two plates in the probe, the change of the medium changes the dielectric constant between the electrodes, so as to obtain the change of the capacitance. The capacitance is converted into a pulse digital signal through the electronic plug-in, and the design of the alarm point and the realization of the alarm action are completed through the microprocessor.

Design features

- ◎ This product adopts intelligent microprocessor components and differential measurement technology, which can measure water, sewage, mud, and other liquids, especially strong corrosive media effectively and accurately, and can dynamically compensate for environmental changes and hanging materials;
- ◎ This product can be used in the built-in auxiliary electrode of the non-metallic tank sensor, and there is no need to add an electrode in the container;
- ◎ The operation is very simple, you only need to adjust the corresponding sensitivity knob according to the medium, and the surge delay filter can be used;
- ◎ The upper limit and lower limit alarm modes are flexibly set, and the user can set the normally open and normally closed contacts by themselves;
- ◎ Both single-point and multi-point relays use high-performance imported single-pole double-throw relays. The single-point contact current capacity can reach 8A, and the multi-point type 3A. It can directly drive the alarm device within the range;
- ◎ Adopt Teflon probe, no moving parts in the detection part, impact resistance, high temperature resistance, corrosion resistance.

Technical parameter



Typical application	Liquid level control
Product model	NYDR
Probe material	304、PTFE (optional)
Probe length	200mm (length can be customized according to site conditions)
Power supply	24VDC、220VAC
Process temperature	-40~+130℃,-40~+260℃
Process pressure	-0.1~1.0MPa
Process connection	Thread, flange (optional)
Electric shock capacity	Single point :250V 8A Multi-point :250V 3A
Dielectric constant	≥1.6
Time delay	0.5~30s adjustable
Protection grade	IP 67
Explosion-proof grade	Exia II CT6 (see certificate for details)