

# BANNING SMART LEVEL SWITCH LT710





## DESCRIPTION

LT710 is a smart liquid level switch integrating liquid level measurement, display and control. The product is a fully electronic structure. The stainless steel silicon pressure sensor probe is put into use. After careful design and adjustment, the high-speed response of the liquid level switch is realized. The output signal is amplified and processed by a highprecision, low-temperature drift amplifier, sent to a highprecision A/D converter, processed by a microprocessor, displayed on-site, and output 2 switching quantities and 4-20mA analog quantities for the control system, the liquid level is detected and controlled.

## PREFORMANCE

## **CHARACTERISTICS**

- High switching accuracy
- Adjustable response time
- NPN, PNP compatible, can be switched freely
- Button adjustment, quick one-key zero calibration, quick unit switching
- OLED displays the current liquid level
- Liquid and oil level measurement

Parameter	LT710		
Measuring range	0~1m H <sub>2</sub> 05m H <sub>2</sub> 0		
Overload capacity	150 ~ 300%FS		
Accuracy	0.2%、0.5%		
Power supply	12 ~ 30V, 24V is recommended		
Display method	4-digit OLED display		
Output method	Two-way switch, NPN, PNP compatible +4 ~ 20mA		
Load capacity	24V 1.2A		
Power consumption	15mA		
Operating temperature	-25 ~ 80		
Storage temperature	-40 ~ 100		
Response time	20ms		
Insulation	100M /250VDC		
Protection level	IP65		
Shell material	304 stainless steel		
Media compatible	Wetted diaphragm ( 316L stainless steel ), 304 stainless steel probe		

# APPLICATION

- Hydropower
- Chemical industry
- Urban water supply
- Research
- Accurate measurement and control of fluid pressure



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# DIMENSIONS

LT710 Ø26.5 Dimensions Unit: mm 100 50 M12 Ø34 10 Wiring M12 × 1 aviation plug body Wiring definition Wiring diagram VCC SP1 SP2 LT710 GND 4~20mA  $\Box$ 1: VCC (power supply +) 2: SP2 (2# switch) PNP output wiring diagram 3: GND (power supply -) 4: SP1 (1# switch) 5: 4 ~ 20mA SP1 VCC SP2 LT710 4 ~ 20mÅ GND NPN output wiring diagram



# SIGNAL INTERFERENCE SUPPRESSION:

- The sampling frequency of the current pressure measurement value, which is the basis for determining the switch action, is programmable. When DAP is activated, the pressure sampling data will be the average pressure over a period of time.
- Low sampling frequency can effectively suppress high-frequency pressure signal noise.



## QUICK SETTING :

- When system is at the time when the liquid level is normally displayed, press [ ]/[ ] to achieve fast zero point correction and fast switch unit function.
- Key operation instructions:



When the liquid level is displayed normally:

- [ ] Short press to call out the menu interface
- [ ]Long press for quick zero point correction
- [ ]Short press the shortcut to switch unit

When entering the menu interface:

- [ ] OK/Exit
- Long press [ ][ ] to edit data



# SWITCH ACTION DELAY MECHANISM:

• When the pressure switch captures a switch action task, the user can select the switch to act immediately or after a delay of t seconds.

During the delay time, the pressure switch does not respond to any switch operations, thereby avoiding repeated switch actions.



Schematic diagram of switch delay function-hysteresis mode as an example

during which no other switching tasks will be accepted



# SWITCHING CHARACTERISTICS :

- Two switch modes are supported:
  - 1. Hysteresis mode
  - 2. Window mode
- Normally open/normally closed optional





# RANGE SELECTION TABLE

Range code	Measuring range	Overload %FS	Burst pressure%FS
1 M	0~1m H <sub>2</sub> O	300	600
2M	0~2m H <sub>2</sub> O	300	600
5M	0~5m H <sub>2</sub> O	300	600

### NOMENCLATURE



#### FOR EXAMPLE : LT710-1MB1M1

The series is LT710 liquid level switch, the range is 0~1m water level, the output signal is 2 switches, and the watertight cable length is 1 meter;

## ACCESSORIES

Name	Specification
Electrical connections	Female M12 five-core aviation plug, plug cable 2 meters
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## ORDER REMINDER

• Please pay attention to the compatibility of the tested medium and the contact part of the product when selecting

the model.

• If there are special requirements for product shape and performance parameters, our company can provide customization.



# DISCLAIMER

#### A Warning

LIFE OR PROPERTY RISK

 Please ensure that this product has been designed as part of whole system and already considered related risks, make sure the product has the correct ratings and is designed based on the entire system. It must not be used when applications related to serious life or property damage risks.

Failure to follow this instruction can result in death or serious injury.

#### A Warning

PERSONAL INJURY

• DO NOT USE these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury.

Failure to follow this instruction can result in death or serious injury.

#### A Warning

MISUSE OF DOCUMENTATION

- The information presented in this product sheet is for reference only. Do not use this document as a product installation guide.
- Complete installation, operation, and maintenance information is provided in the instructions supplied with each product.

Failure to follow this instruction can result in death or serious injury.

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Banning (Nanjing) Sensing Technology Co., Ltd. Nanjing,Daqiao rth road #48 Huadongmall, building C3-1, 12th floor TEL : 400-7181-886 TEL : 025-5829 5589





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Invoice

INTEGRITY INTERNATIONAL INNOVATION

Official Website : www.banningsensor.com Service Hotline : 400-7181-886 Official mailbox : sales@banningsensor.com

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