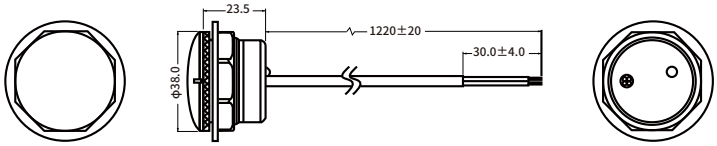
Xintec
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General Specification

Capacitive Level Sensor
NO: CP-1002



Dimensions (mm)



Product characteristics

- **Non-contact capacitive sensing technology**
  Detects water level through tank walls without direct exposure to liquid, reducing contamination and scaling risk.
- **High sensitivity and stability**
  Accurate detection of water presence and level variation, even in detergent-rich or high-temperature environments.
- **Resistant to foam and steam interference**
  Optimized signal processing ensures stable performance in demanding wash cycles.
- **No moving parts**
  Solid-state design eliminates mechanical wear and enhances long-term reliability.
- **High temperature and humidity tolerance**
  Designed for continuous operation in hot wash and rinse conditions.
- **Compact and easy integration**
  Suitable for space-constrained commercial appliance designs.
- **Low maintenance and long service life**
  Reduced scaling impact compared to mechanical float switches.
- **EMI/EMC resistant design**
  Stable operation in electrically noisy commercial kitchen environments.

Applications

- **Commercial Dishwashers & Glass Washers**
  Wash tank level monitoring, overflow protection, and heater dry-run prevention in high-temperature, detergent-rich environments.
- **Washing Machines & Laundry Systems**
  Precise water level detection for filling control, rinse cycle management, and energy optimization.
- **Coffee Machines & Beverage Equipment**
  Reservoir level monitoring and low-water protection for safe and continuous operation.
- **Water Purifiers & Filtration Systems**
  Storage tank level control and overflow management.
- **HVAC & Humidification Systems**
  Condensate and reservoir level monitoring for efficient system control.
- **Industrial Fluid Control Systems**
  Non-contact level detection in tanks and reservoirs requiring hygienic or sealed sensing solutions.

Product performance characteristics

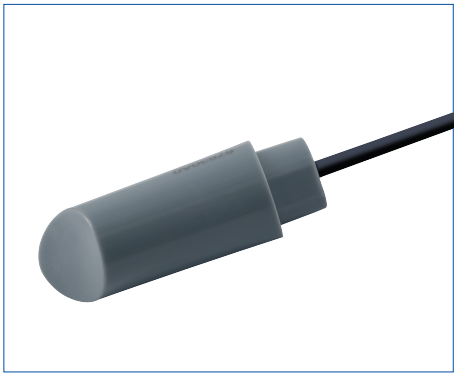
Characteristics	Parameter	Rating
Electrical Characteristics	1-1. Power Requirement	24V DC
	1-2. Output Signal	Relay Output
	1-3. Detection Object	Tap water
	1-4. Detection output Status	Relay output is closed, and LED willturn on when in of the detectionsensitivity specification.
	1-5. Detection output Status	Relay output is open, and LED will turnoff when out of the detectionsensitivity specification
	1-6. Detection sensitivity	Center line：-3mm,+6mm
	1-7. Working current	50mA
Mechanical Characteristics	1-8. Waterproof level	IP67
	1-9. Line length	4 FT
Operating Condition	1-10. Temperature of the liquid	0 - 60°C
	1-11. Storage temperature	0 - 70°C
	1-12. Service	Compatible with all kinds of water quality

Please contact sales@xintec.hk for latest product details

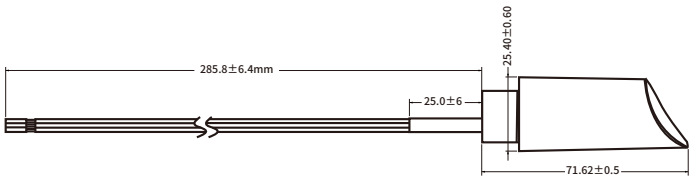
Xintec
Your Sensor & Switch Experts

General Specification

Capacitive Level Sensor
NO: CP-1003



Dimensions (mm)



Product characteristics

- **Non-contact capacitive sensing technology**
  Detects water level through tank walls without direct exposure to liquid, reducing contamination and scaling risk.
- **High sensitivity and stability**
  Accurate detection of water presence and level variation, even in detergent-rich or high-temperature environments.
- **Resistant to foam and steam interference**
  Optimized signal processing ensures stable performance in demanding wash cycles.
- **No moving parts**
  Solid-state design eliminates mechanical wear and enhances long-term reliability.
- **High temperature and humidity tolerance**
  Designed for continuous operation in hot wash and rinse conditions.
- **Compact and easy integration**
  Suitable for space-constrained commercial appliance designs.
- **Low maintenance and long service life**
  Reduced scaling impact compared to mechanical float switches.
- **EMI/EMC resistant design**
  Stable operation in electrically noisy commercial kitchen environments.

Applications

- **Commercial Dishwashers & Glass Washers**
  Wash tank level monitoring, overflow protection, and heater dry-run prevention in high-temperature, detergent-rich environments.
- **Washing Machines & Laundry Systems**
  Precise water level detection for filling control, rinse cycle management, and energy optimization.
- **Water Purifiers & Filtration Systems**
  Storage tank level control and overflow management.
- **HVAC & Humidification Systems**
  Condensate and reservoir level monitoring for efficient system control.
- **Industrial Fluid Control Systems**
  Non-contact level detection in tanks and reservoirs requiring hygienic or sealed sensing solutions.

Product performance characteristics

Characteristics	Parameter	Rating
Electrical Characteristics	1-1. Power Requirement	5V DC +/-0.1V
	1-2. Output Signal	High - and low - level output
	1-3. Detection Object	Tap water
	1-4. Detection output level	Output High level when Detected water out of sensitivity range
	1-5. Detection output level	Output Low level when Detected water in of sensitivity range
	1-6. Detection sensitivity	Refer to “The sensitivity test standard diagram”
	1-7. Working current	10mA
Mechanical Characteristics	1-8. Waterproof level	IP67
	1-9. Line length	1 FT
Operating Condition	1-10. Temperature of the liquid	0 - 60°C
	1-11. Storage temperature	0 - 70°C
	1-12. Service	Compatible detection for tap water, Spring water, distilled water

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