



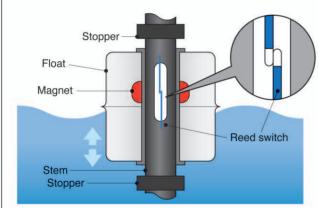
# Float Type Level Switch

MFS series

#### Features

- Max. 4 points detectable by one unit.
- Applicable for the corrosion-resistant resins (PVC, PP etc.).
- The reed switch not easily influenced by temperature, humidity, gas etc. is used as standard.
- Applicable in the site where explosion-proof type (d2G4) is required.

### Operating principle



A float with a built-in magnet moves up and down according to the liquid level, which turns the reed switch built into the system on and off.

#### **Applications**

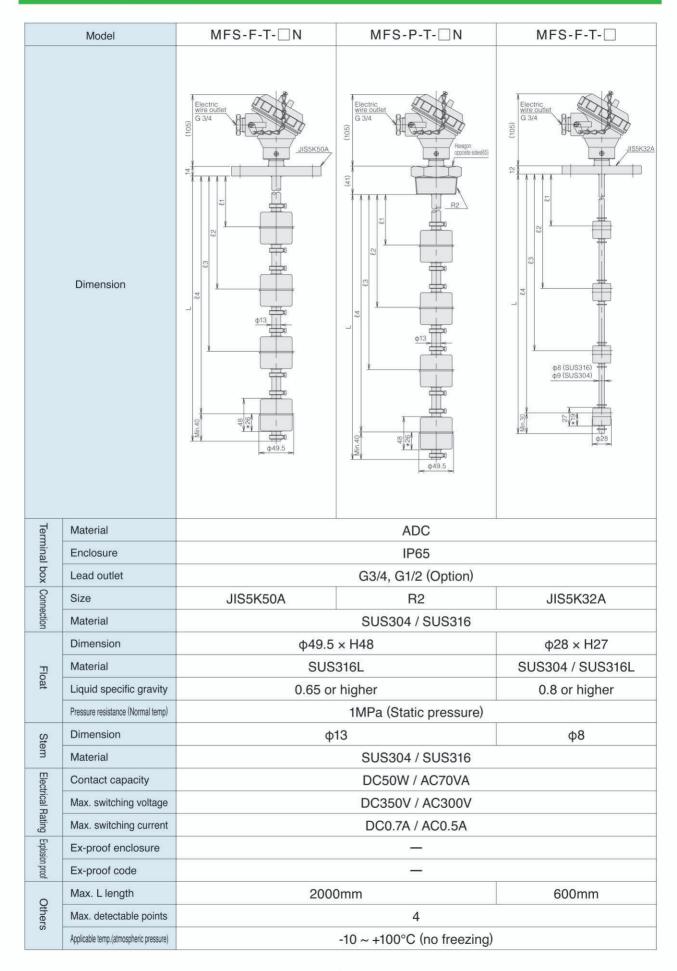


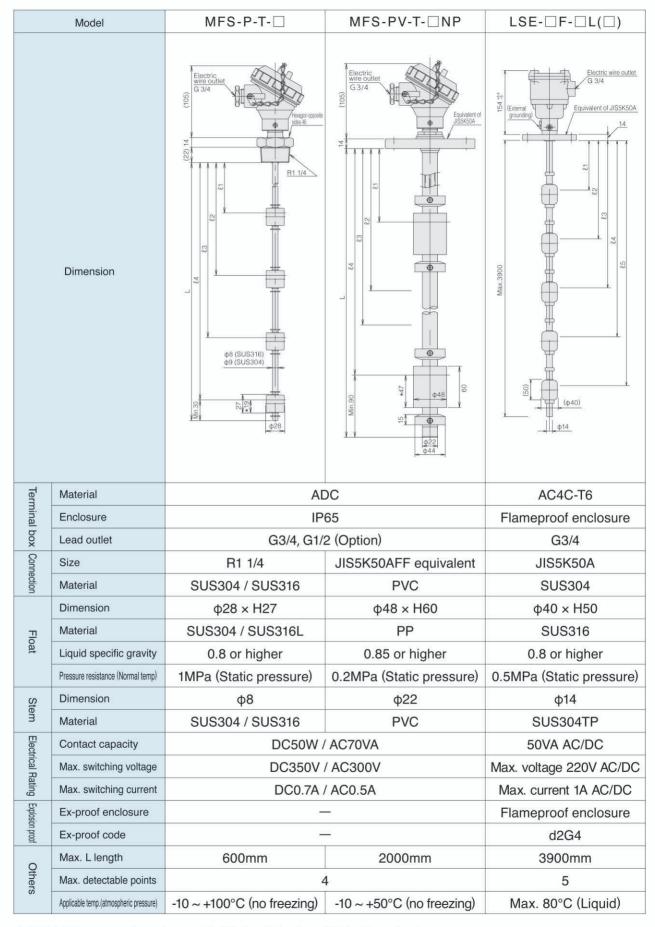
Liquid level detection of water, oil and various chemical solutions



Liquid level control in tanks and pits (Pump control, upper and lower limit alarm)

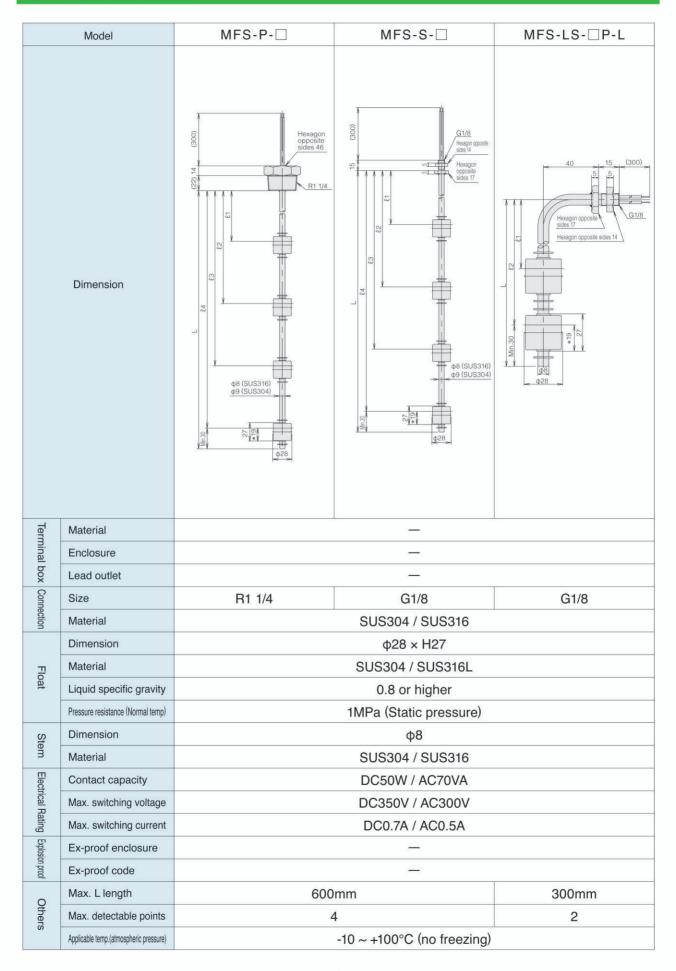






<sup>\*</sup> LSE (Flameproof enclosure) is Wako Keisoku affiliated product.







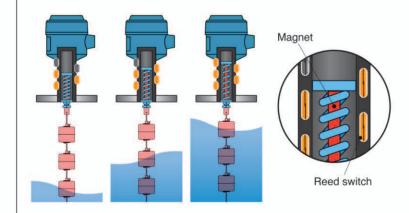
# Displacer Type Float Switch

MFLD series

#### Features

- Applicable for liquids with the liquid specific gravity 0.8 - 1.2.
- It is strong against adhesion and not falsely detect if there is no adhesion that exceeds the weight of the float.
- Contact output at max. 6 points by one unit.
- Max. detectable distance is approx. 9m.
- Contact settings can be freely changed anywhere on the wire.

#### Measurement principle



The float integrated with wire moves up and down due to flotage in response to changes in the liquid level.

The magnet at the top of the wire opens and closes the reed switch built at the bottom of the terminal box to detect the water level.

#### **Applications**



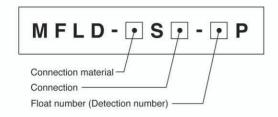
Long liquid tank



Adhesive/viscous liquid



### **Model selection**



Connection material — 4: SUS304 (Standard)

6: SUS316

Connection -

A: JIS5K50A B: JIS10K50A E: R2 thread F: G2 thread

D: Other flanges (Max.100A) H: Specified thread

Float number (Detection number) -

1 - 6: Specify Float number.

Model		MFLD-□S□-□P			
Dimension		Min. dimension of each contact  Float number 1P 2P 3P 4P 5P 6P  Max. upper limit 75mm  Between contacts 65mm  From the lowest point to top end 105 100 95 90 85 80			
Sensor part	Detection method	Displacer type			
	Measured object	General liquid (SUS corrosion resistance required)			
	Wetted parts material	SUS304 *Float only SUS316L (Option SUS316)			
	Float dimension	φ50 × 45			
	Liquid specific gravity	0.8 ~ 1.2			
	Process pressure	Max. 0.5MPa (static pressure)			
	Wire length	Standard 5m (Max. 9m)			
	Wire	dia.1mm, Tensile strength 1t			
	Spring	More than 10 million expansion & contraction operations			
Output unit	Output contact number	SPST reed switch a contact (N/O=↑ON)			
	Max. contact rating	10W, DC100V, DC0.5A / 10VA, AC100V, AC0.5A			
	Operating position	ON at 20mm from the top of Float (ON hysteresis ±2.5mm) OFF at middle (30mm from top end) (OFF hysteresis +5mm / -10mm)			
Installation specifications	Process temperature	-20 ~ +180°C (no freezing)			
	Ambient temperature	-10 ~ +55°C			
	Terminal box	AC4A (IP65)			
	Lead outlet	G1/2			
	RoHS directive	Applicable (At order, please specify.)			
	Against fume	Teflon tubing shaft (standard) Rust-proof coated spring (option)			



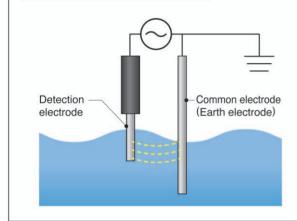
# Electrode Type Level Switch

**MRE Series** 

#### Features

- applicable for various liquids by changing the electrode material.
- Contact output at max. 6 points by one unit.
- The detection position can be freely changed by cutting the electrode part.
- It has no moving parts and can be used for a long time.

#### Measurement principle



Used in combination with Relay unit.
As Relay unit supplies a weak AC current, no current will flow to the electrode if the surface of the conductive liquid is not in contact with the electrode rod.

When the electrode rod touches the liquid surface, the current will flow.

#### **Applications**

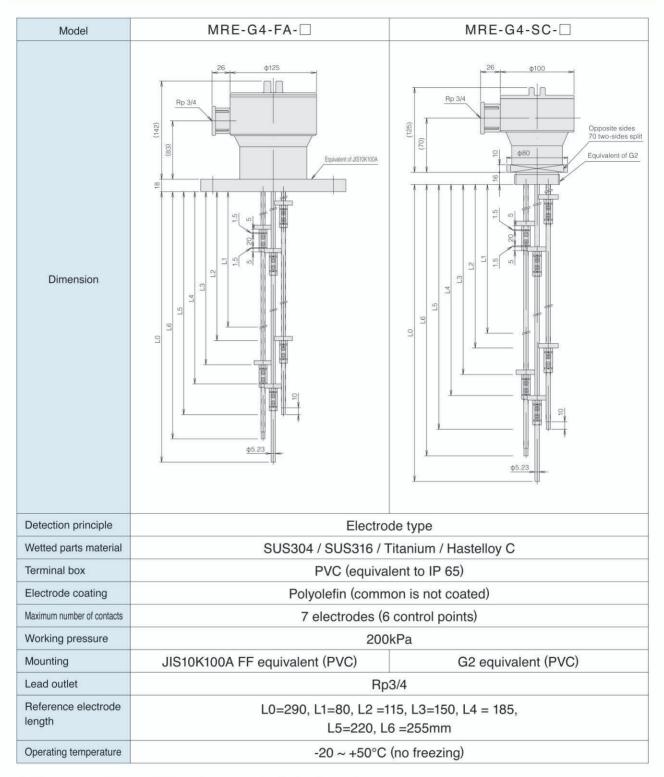


Water tank, Elevated water tank



Water purification plant





<sup>\*</sup> Please use Omron 61F series or equivalent relay unit.



## Pointer Type Liquid Transmitter

Pointer Type Liquid Transmitter is a mechanical type of liquid level transmitter that uses a float to detect liquid level in various processes. In addition, alarm mechanical contacts and DC4-20mA output specifications can be selected, allowing for remote liquid level monitoring. No drive power is required for measurement and display, and it can be used even in emergencies. It is also ideal as a backup instrument for many uses.

### Capacitance Level Switch

Capacitance Level Switch is a level switch that detects presence of an object by detecting changes in capacitance between electrode and side wall of tank. There are no moving parts, and maintenance performance is excellent. This allows stable detection of many substances. We offer a wide variety of electrodes and substrates, so we can accommodate a variety of measuring objects, applications, and usage conditions.





### Admittance Type Level Switch

Admittance Type Level Switch is one of capacitive type switch that are resistant to adhesion of the materials. It can detect not only liquids and powders but also highly viscous and sticky objects such as slurry without malfunction. For those who are unsure whether it can be detected, we offer a sample test confirmation service. After the test, we will confirm that there are no problems before using it.

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ISO9001 ISO14001

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Caution

•Read the instructions to ensure correct and suitable application of products.

•Contact our nearest sales office when using our products for any systems used in situations which may be life threatening.

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