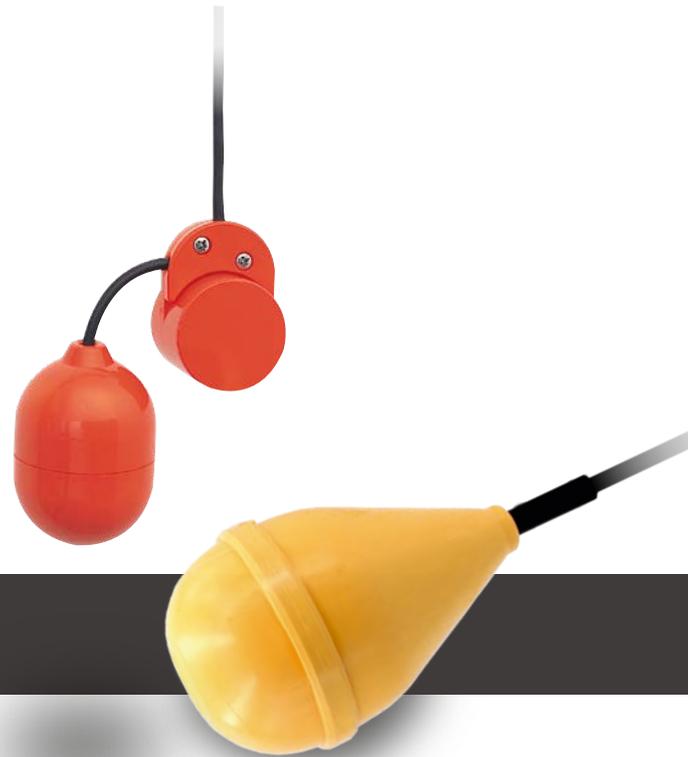


SERIES  
**MT/MC**  
**MF/RF**



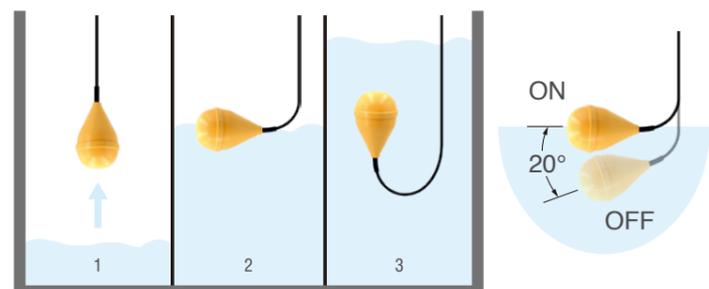
FLOAT SWITCHES  
—WATER LEVEL SENSOR—

# MT –Integrated Counterweight Float Switch–

## Structure

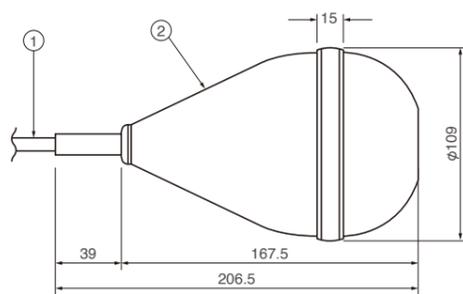


## Float switch position (at different water level)



1. Water level rising
2. Float switch activates
3. As water level rises further, the float switch will overturn and remain submerged due to the integrated counterweight

## Dimensions (mm)



No.	Components	Material
1	Cable	Chloroprene Rubber
2	Float	Polypropylene



## Features

- Three watertight chambers, along with an integrated counterweight, enable the float switch to remain submerged with no external counterweight
- Freely suspended installation design facilitates easy float switch level adjustment
- Teardrop design prevents adhering of solids to the surface, assuring trouble-free operations even in highly-dense scum-filled wastewater
- Mercury-free float switch
- Small operating angle (20°) provides a snap ON-OFF operation

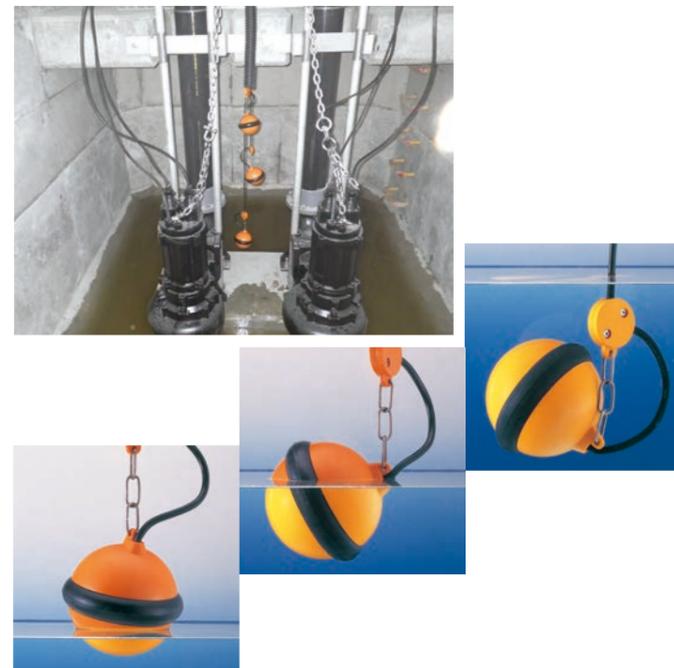
## Applications

- Automatic pumping for sewage treatment plant, wastewater pumping stations, etc
- For sensing alert water levels like high water level or lower water level

## Specifications

Item	Model	MT-1	
Electric characteristics	Power supply	For High-power AC applications	For Low-power AC/DC applications
		Max. 10(8)A 250V AC Resistive load amperage: 10A Inductive load amperage: 8A	0.1A 12/24V
Working temperature range		0 to 50°C	0 to 60°C
		Switch type: Single pole double throw (SPDT)	
Mechanical characteristics	Proof (static) pressure	196kPa (2.0 kgf/cm <sup>2</sup> )	
Cable	Type	H05 RN-F 3X1	
	Cores x area	3 x 1mm <sup>2</sup>	
	Outside diameter	7.5mm	
Weight	Standard length	10m	
		900g (Float only)	

# MC –Ball Float Switch with Shock Absorber–

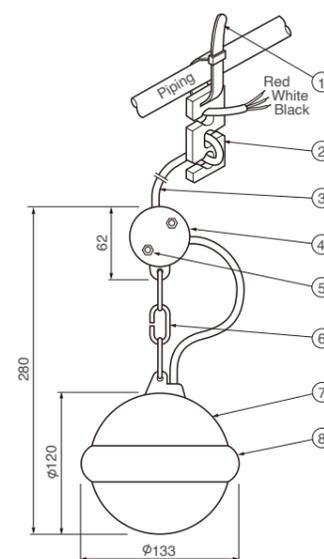


Conductor color	In the air	Submerged	Contact
Red-Black	off (open)	on (closed)	"a"(normally-open)
Red-White	on (closed)	off (open)	"b"(normally-close)

Conductor color	In the air	Submerged
White B	Red C	Red C
Black A	Red C	Red C

## Dimensions (mm)



No.	Components	Material
1	Retaining belt	Nylon
2	Cable clamp	ABS Resin
3	Cable	PVC
4	Cable holder	ABS Resin
5	Screw and nut	304 Stainless Steel
6	Hanging chain	316 Stainless Steel
7	Float	ABS Resin
8	Shock absorber	ABS Resin

## Features

- Simple structure made of a ball float with a shock absorber wrapped around it
- Rugged construction withstanding impact from collision with the tank walls or piping
- Assures trouble-free operations in the water containing any types of suspended solids including scum-filled wastewater
- Switching ON and OFF can be made at steeper angle than mercury type float switches
- Contacts switchable, "a"(normally-open) or "b"(normally-close), at will

## Applications

- Automatic pumping of the wastewater containing lots of scum and suspended solids
- For sensing alert water levels like high water level or lower water level

## Specifications

Item	Model	MC-2
Electric characteristics	Breaking capacity	50VA AC
	Max. current	2A AC
	Working voltage	30V AC
Switch	Contact	c*
	Type	Microswitch
Mechanical characteristics	Proof pressure (static)	98kPa (1.0 kgf/cm <sup>2</sup> )
	Working temperature range	0 to 50°C
Cable	Cores x area	3 x 0.75mm <sup>2</sup>
	Outside diameter	7.6mm
	Standard length	6, 10, 15, 20, 25, 30m
Weight		1,087g (Float only)

\*Usable either at contact "a"(normally-open) or contact "b"(normally-close).

# MF –Mini-float Switch–



## Features

- Float cut down to the smallest possible size
- Available in two types; contact “a”(normally-open) and contact “b”(normally-close)
- Ideal for a maximum/minimum water-level alert system
- Two floats usable in case the sensor is connected to the control panel for automatic pump operations

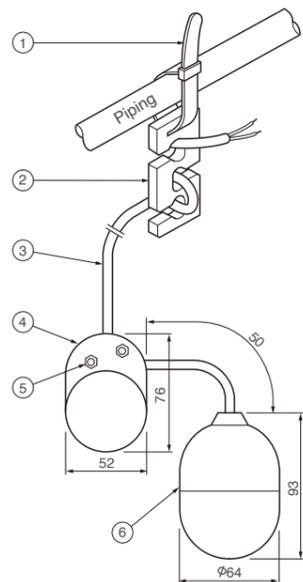
## Applications

- Automatic pumping of water, wastewater, etc.
- For sensing alert water levels like high water level or lower water level

## Specifications

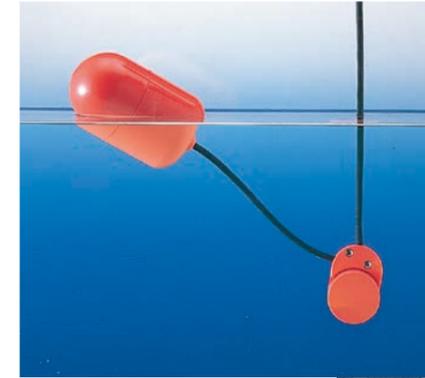
Item	Model	
	MF-3A	MF-3B
Electric characteristics	Breaking capacity	50VA AC
	Max. current	2A AC
	Working voltage	30V AC
Switch	Contact	“a”(normally-open) “b”(normally-close)
	Type	Microswitch
Mechanical characteristics	Proof pressure (static)	98kPa (1.0 kgf/cm <sup>2</sup> )
	Working temperature range	0 to 50°C
Cable	Cores x area	2 x 0.3mm <sup>2</sup>
	Outside diameter	5.3mm
	Standard length	6, 10, 15, 20, 25, 30m
Weight	98g (Float only)	

## Dimensions (mm)



No.	Components	Material
1	Retaining belt	Nylon
2	Cable clamp	ABS Resin
3	Cable	CSPE
4	Intermediate weight	ABS Resin
5	Screw and nut	304 Stainless Steel
6	Float	ABS Resin

# RF –Snap-action Float Switch–



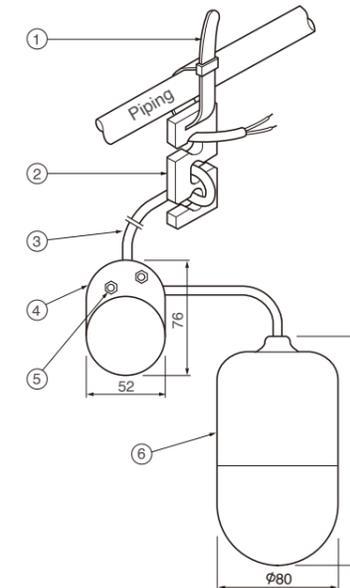
## Features

- Detecting cut-in and cut-out water levels with single float
- Snap ON-OFF action ensures stable operations in clean water, wastewater or liquids containing suspended matter or oil and fat
- Hanging length readily adjustable with cable clamp

## Applications

- Automatic pumping of water, wastewater, etc.
- For sensing alert water levels like high water level or lower water level

## Dimensions (mm)



No.	Components	Material
1	Retaining belt	Nylon
2	Cable clamp	ABS Resin
3	Cable	CSPE
4	Intermediate weight	ABS Resin
5	Screw and nut	304 Stainless Steel
6	Float	ABS Resin

## Specifications

Item	Model	RF-5
Electric characteristics	Breaking capacity	50VA AC
	Max. current	2A AC
	Working voltage	30V AC
Switch	Contact	“a” (normally-open)
	Type	Microswitch
Mechanical characteristics	Proof pressure (static)	98kPa (1.0 kgf/cm <sup>2</sup> )
	Working temperature range	0 to 50°C
Level control	Min. 400mm, Max. 3,000mm	
Cable	Cores x area	2 x 0.5mm <sup>2</sup>
	Outside diameter	6.5mm
	Standard length	6, 10, 15, 20, 25, 30m
Weight	207g (Float only)	



We reserve the right to change the specifications and designs without prior notice. The OO series and model OO are indicated with our series/model codes in this catalog.

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