

The connecting rod floating ball liquid level switch is to fix one or more magnetic spring switches in a closed stainless steel or plastic pipe, and then the fixing ring will fix the floating ball on the pipe at the position related to the magnetic tube switch to make the floating ball float up and down within a certain range. The magnet in the floating ball is used to attract the dry contact of the magnetic spring switch to make it open and on to control the liquid level.



## Overview

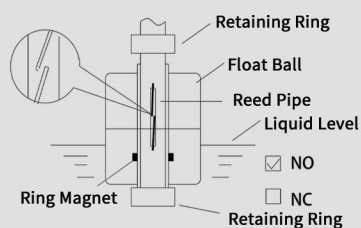
The MP series rod-type float level switch is a liquid level controller with a simple structure and easy installation. It does not have a complicated circuit and is not susceptible to interference. The use of magnetic reed switches does not require a power supply to operate, and the dry contact life is up to 100,000 times. It is available in a variety of materials such as PP, PTFE, SUS304, and SUS316L to meet liquid measurement requirements in most environments. Typical applications include shipbuilding, power generation, petrochemical, food industry, water treatment, and hydraulic machinery.

## Working Principle

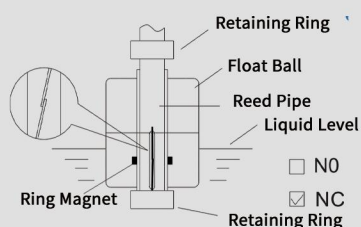
The MP series rod-type float level switch is designed to be installed in a closed stainless steel or plastic pipe. One or multiple magnetic reed switches are fixed inside the pipe, and a fixed ring secures the float ball in a position relevant to the magnetic switch. The float ball can move up and down within a certain range. The magnetic attraction between the magnet inside the float ball and the magnetic reed switch causes the switch to break or connect, controlling the liquid level.

## Features

- Can be used for multi-point control, and the control switch position can be customized according to the customer's requirements.
- All switches are connected to the same terminal box for easy wiring.
- The protection level of the terminal box is above IP65.
- Adjustable delay output from 0 to 30 seconds.
- The magnetic reed switch and wires are completely isolated from the liquid, making it safe to use in high-temperature and high-pressure equipment.



Normally open (NO) setting, reed switch is turned on when the liquid level rises



Normally closed (NC) setting, reed switch is turned off when the liquid level rises

## Float Level Switch

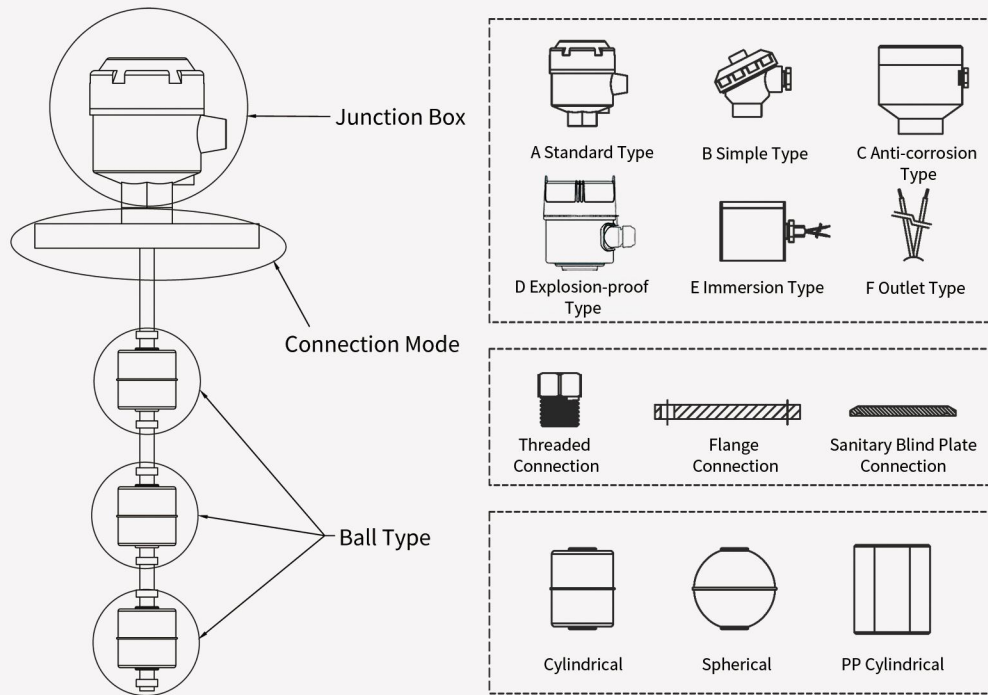
Model	MP-100	MP-200	MP-300
Image			
Application	Liquid	Liquid	Liquid
Contact Form	SPDT/SPST	SPDT/SPST	SPDT/SPST
Liquid Contact Material	304/316L	304/316L	304/316L
Measuring Length	1000MM~6000MM	1000MM~6000MM	1000MM~6000MM
Measuring Rod Diameter	Ø8~Ø22	Ø8~Ø22	Ø8~Ø22
Process Connection	Thread: 1"~3"; Flange: 1"~6" (customizable)	Thread: 1"~3"; Flange: 1"~6" (customizable)	Thread: 1"~3"; Flange: 1"~6" (customizable)
Process Temperature	-20~200°C	-20~200°C	-20~200°C
Process Pressure	-1~25BAR (-100~2500KPA)	-1~25BAR (-100~2500KPA)	-1~25BAR (-100~2500KPA)
Maximum Measurement	SPDTtype 2 sets/5W	2 sets/5W	2 sets/5W
Point Number /Power	SPST type 4 sets/30W	4 sets/30W	3 sets/30W
Junction Box Material	Aluminum Alloy Paint	304/316L	Aluminum Alloy Paint
Certification	CE / ATEX / ISO9001	CE / ATEX / ISO9001	CE / ATEX / ISO9001
Protection Level	IP65	IP65	IP65

## Float Level Switch

Model	MP-400	MG-B81-500	MG-B81-600
Image			
Application	Liquid	Liquid	Liquid
Contact Form	SPDT/SPST	SPDT/SPST	SPDT/SPST
Liquid Contact Material	PP/PTFE	304/316L	PP/PTFE
Measuring Length	3000MM~6000MM	1000MM~6000MM	3000MM~6000MM
Measuring Rod Diameter	Ø16~Ø25	Ø8~Ø22	Ø16~Ø25
Process Connection	Flange: 2"~6" (customizable)	Thread: 1"~3"; Flange: 1"~6" (customizable)	Flange: 2"~6" (customizable)
Process Temperature	-20~80°C/-20~200°C	-20~200°C	-20~80°C/-20~200°C
Process Pressure	-1~50BAR/-1~10BAR (-100~5000KPA)/(-100~1000KPA)	-1~25BAR (-100~2500KPA)	-1~50BAR/-1~10BAR (-100~5000KPA)/(-100~1000KPA)
Maximum Measurement	SPDTtype 4 sets/10W	2 sets/5W	4 sets/10W
Point Number /Power	SPST type 4 sets/30W	4 sets/30W	4 sets/30W
Junction Box Material	Aluminum Alloy Paint/ABS	Aluminum Alloy Paint	Aluminum Alloy Paint
Certification	CE / ATEX / ISO9001	CE / ATEX / ISO9001	CE / ATEX / ISO9001
Protection Level	IP65	IP65	IP65

# Float Level Switch

## Structural Form



## Float Ball Specifications

Model	Specification Size (outer diameter-height-hole diameter)	Specific Gravity	Pressure Resistance(Mpa)	Weight(g)	Material	Temperature Resistance(°C)
M1	Φ28-28-Φ9.5	>0.75	1.0	8.0	304/316	-20~200
M2	Φ45-55-Φ15	>0.60	1.5	36.0	304/316	-20~200
M3	Φ52-Φ52-Φ 15	>0.55	3.0	40.0	304/316	-20~200
M4	Φ 75-Φ 75-Φ 23	>0.55	3.0	137.0	304/316	-20~200
P1	Φ25-25-Φ9.5	>0.55	0.5	8.0	PP/PVDF	-20~80/120
P2	Φ63-67-Φ21	>0.60	0.5	129.0	PP/PVDF	-20~80/120
P3	Φ45-55-Φ21	>0.65	0.5	5.0	PP/PVDF	-20~80/120

Remark: PP has the highest temperature resistance of 80°C among plastic materials, and PVDF has the highest temperature resistance of 120°C. Float balls of different specifications can be customized according to on-site requirements.

## Float Ball Material/Liquid Applicability Range

Liquid Environment Float Ball Material	Acidity	Alkalinity	Fuel Oil	Solvent
SUS304	D	C	A	A
SUS306	C	B	A	A
PP	B	B	B	D
PVDE	A	A	B	B

Remark: A = excellent B = good C = general D = not suitable for use.