

## Float Level Switches Manual

LS00 Type

■ English

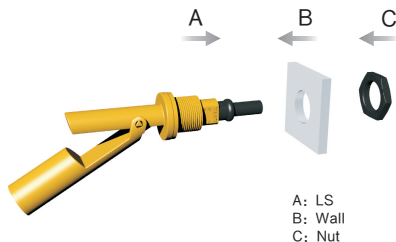


[www.ema-electronic.com](http://www.ema-electronic.com)

### ■ Features

LS series is featured for concise structure, delicate design, durable operations, and perfect function. They are extensively installed in the fuel tanks, oil-pressure equipments, chemical and cooling vessels, and etc. Furthermore, they are mostly used to sense substance such as water, oil, and chemicals. There are three different materials of LS series available now for varied needs from customers.

### ■ Mounting

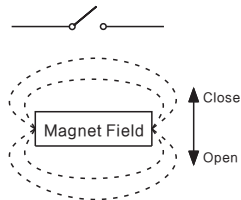


### ■ Hookup



- ① Brown wire . . . . . Positive pole
- ② Blue wire . . . . . Negative pole

### ■ Operating principle

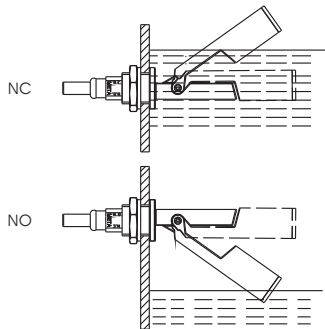


## ■ Connection

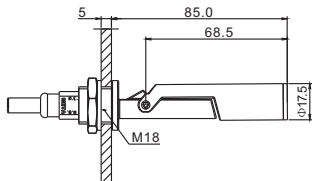
LS series is outputted by magnet reed, and the user can choose the status of NC or NO by the way of mounting. It can connect to the control system such as PLC, Relay, and etc.

Precision :  $\pm 3\text{mm}$  under water

Repetition:  $\pm 1\text{mm}$  under water



## ■ Dimension



Unit: mm

## ■ Technical Data

Order number	LS0001	LS0003
Type	Standard	Strong acid / alkali
Sensing medium	Liquid	
Electrical design	DC / AC	
Output	NO / NC	
Operating voltage	Max. 240V AC/200V DC	
Current rating	0.5A (240V AC/DC)	
Connection	M18	
Switch capacity	70W	
Sensing degree	$\pm 30^\circ$	
Storage humidity	20...70%	
Operating humidity	20...70%	
Operating temperature	-20...+80°C/-4...+176°F	-20...+100°C/-4...+212°F
Ambient temperature	-20...+80°C/-4...+176°F	-20...+100°C/-4...+212°F
Ambient pressure	10 bar	
Contact resistance	80 $\Omega$	
Housing material	PBT	PP
Cable entrance	2M PVC Cable	2M PUR Cable
Protection rating	IP67	
Certification	CE, RoHS	

# Float Level Switches Manual

LS10 Type

■ English



[www.ema-electronic.com](http://www.ema-electronic.com)

## ■ Features

Steel type of LS1000 series is featured for delicate design, durable operation, and long lifetime. They are extensively installed in the fuel tank, oil-pressure equipments, chemical and cooling vessels, and etc. When the level goes up to high position or down to the low position, the controller operates the switch and output warning signal to control the switching of a pump or of a valve.

## ■ Mounting

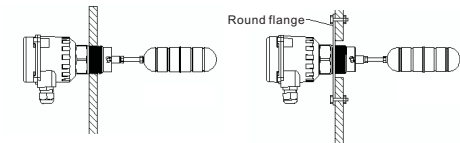


Fig.1 Standard mounting

Fig.2 Mounting with flange

## ■ Connection

The type of output, NO or NC, is defined by the way of mounting. The contact of this product can connect to the other control units.

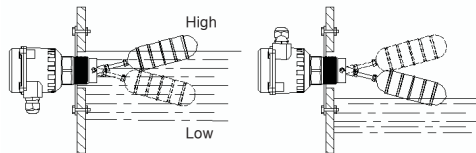
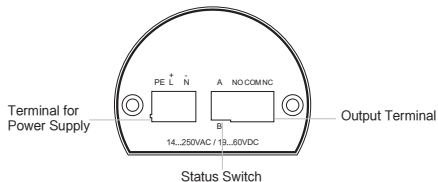


Fig.3 NO

Fig.4 NC

## Terminal mounting



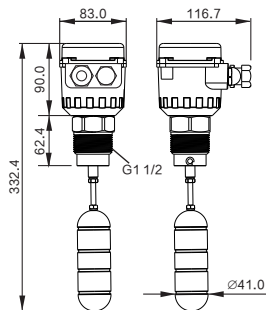
Sign	Description
PE	Connect the ground wire to the housing
L+	Power input: DC 19 ~ 60V, AC 14 ~ 250V.
N-	Power "+" while inputting the DC
COM	Common Terminal
A / B	Choose type of indicator operation between continuous bright or continuous dim via slide switch

Installation of the indicator downward (NO) ↓	Low Level	NO / COM Disconnected	NC / COM Connected
	High Level	NO / COM Connected	NC / COM Disconnected
Installation of the indicator upward (NC) ↑	Low Level	NO / COM Connected	NC / COM Disconnected
	High Level	NO / COM Disconnected	NC / COM Connected

## Technical Data

	LS1001	LS1002
Contact material	SS304	SS316
Operating voltage	19V ~ 60VDC, 14V ~ 250VAC	
Output	NO / NC	
Switch rating	6 ( 2 ) A/250VAC	
Current rating	3 ( 1 ) A/250VAC	
Power consumption	0.025W	
Short circuit	No	
Overload	No	
Sensing degree	± 15°	
Action delay	50ms	
Sensing medium	Liquid	
Medium density	≥ 0.5g/cm <sup>3</sup>	
Mounting	Flange DN40 / Thread G1 1/2"	
Operating pressure	50kg/cm <sup>2</sup>	
Operating temperature	-20...200°C/-4...392°F	
Storage humidity	20...70 (%)	
Operating humidity	20...70 (%)	
Protection rating	IP67	
Certification	CE RoHS	

## ■ Dimension



Unit: mm