



### Features & Benefits

- High capacity, fully encapsulated N/C, N/O micro-switch
- Suitable for pressure up to 11bar
- Lid-mounted screws provide tamper proofing
- Can be used for high or low measurement

### Technical Overview

The LS-541 is liquid level float switch which is intended to monitor liquid level in a tank or vessel, to provide a switched output to provide local alarm pump or valve control.

The differential between switching is equivalent to approximately 10/14mm. The unit screws directly into a 1" BSPT boss.

### Product Codes

**LS-541**  
Liquid level float switch, 1" BSP brass fitting

### Specification

Mounting	1" BSPT boss
Media	Non-aggressive fluids with specific gravity > 0.75
Operation	For high or low level
Switching differential	10/14mm
Working:	
Temperature	-40 to +85°C
Humidity	10 to 90%RH non-condensing
Max. liquid temp.	85°C
Operating pressure	11bar max.
Materials:	
Float	Acrylic
Rod	Brass
Enclosure	Base, ABS flame retardant Lid, transparent PC
Switch rating	24...250Vac 15(8)A
Dimensions:	
Housing	140 x 65 x 62mm
Float & rod	200 x 25mm dia.
Protection	IP65
Country of origin	Italy

#### WEEE Directive:



At the end of the products useful life please dispose as per the local regulations.  
Do not dispose of with normal household waste.  
Do not burn.



The products referred to in this data sheet meet the requirements of EU 2014/30/EU and 2014/35/EU

## Installation

1. The LS-541 should only be installed by a competent, suitably trained technician, experienced in installation with hazardous voltages. (>50Vac & <1000Vac or >75Vdc & 1500Vdc)
2. Ensure that all power is disconnected before carrying out any work on the LS-541.
3. Maximum cable is 2.5mm<sup>2</sup>, care must be taken not to over tighten terminals.
4. Before installation, test the float gently to ensure that the micro switch is operational.
5. Screw the LS-541 into a 1" BSPT boss, (making sure that the arrow is pointing UP) away from system elements that may cause turbulence or vibration. Ensure that the float is not obstructed in its movement after installation.
6. If the switch is to be mounted outside, it is recommended that the unit be mounted with the cable entry at the bottom. If the cable is fed from above then into the cable gland at the bottom, it is recommended that a rain loop be placed in the cable before entry into the sensor.
7. Remove the front cover by removing the screws and lifting the lid separating it from the main body.
8. Feed the cable through the waterproof gland and terminate the cores at the terminal block. Leaving some slack inside the unit, tighten the cable gland onto the cable to ensure water tightness.
9. Replace the lid and tighten the screws after the electrical connections have been made.
10. Do not under any circumstances remove the protective cover without isolating the power to the switch

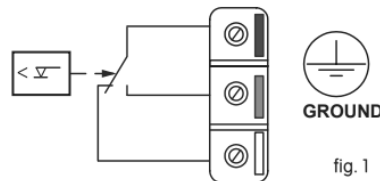
## Connections



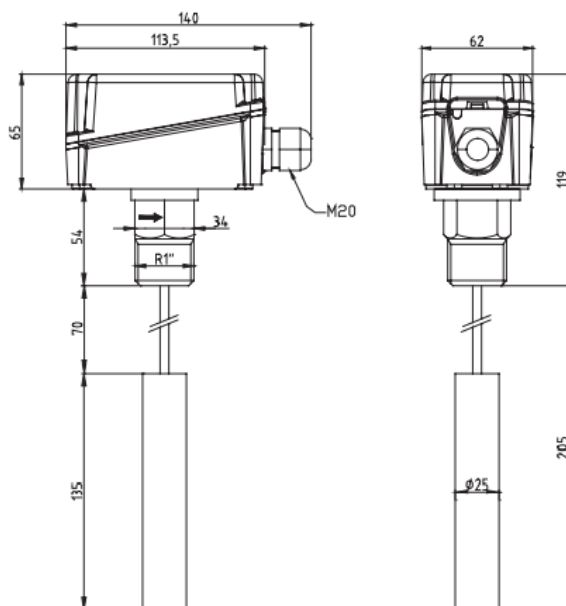
Dangerous voltages may exist within this unit. Connection should be carried out by a competent and suitably qualified electrician only. The relevant earthing requirements should be observed when connecting the unit, especially when using higher voltages.  
Do not over tighten the terminals

**Note:** The switching point is fixed and not adjustable.

Contact red-white opens on water level rise.  
Contact red-blue closes on water rise



## Dimensions



Whilst every effort has been made to ensure the accuracy of this specification, Sontay cannot accept responsibility for damage, injury, loss or expense from errors or omissions. In the interest of technical improvement, this specification may be altered without notice.