

## EC Declaration of Conformity

We declare under our sole responsibility, that the product

**Make:** LANCIER Monitoring  
**Type:** Float Switch-4S

to which this declaration refers, meets the relevant health and safety requirements of the following EC directives:

**2014/30/EU** Electromagnetic compatibility  
**2011/65/EU** RoHS-II

For proper implementation of the health and safety requirements named in the EC directives the following standard(s) and/or technical specification(s) have been consulted:

**EN 61326-1** Electrical equipment for measurement, control and laboratory use - EMC requirements (class B)

Münster, 06.03.2017

*[Signature]*  
Research and Development

*[Signature]*  
Managing Director

BA 075797.020/Rev. 00

## Operating Instructions

# Float Switch-4S



BA 075797.020/03.17

## General Information

These operating instructions should make it easier for you to become acquainted with the product. They contain important information to ensure safe, appropriate and cost-effective use of the equipment.

The operating instructions endorse the directives of national regulations for the prevention of accidents and the protection of the environment.



These operating instructions shall be read and adopted by anyone assigned to work with/on the equipment, e. g. during operation to include setting-up, maintenance and troubleshooting.

In addition to the operating instructions and the mandatory regulations for the prevention of accidents, applicable in the operator's country and at the place of use, the recognized technical regulations for safe and professional operation shall also be observed.

## Designated Use

The float switch-4S is designed to monitor water levels.

Any non-compliant use excludes the manufacturer from liability for any damages. The operator carries the risk!

## Safety Instructions



**Important!**  
Read and observe safety instructions prior to initial operation!

- Keep the operating instructions ready to hand!

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**Important!**  
It is imperative to read and observe all safety instructions prior to initial operation!



**Ordering Data**  
**Float Switch-4S**  
with 5 m connection cable  
additionally equipped with connecting box  
and casting compound  
Accessory  
Contact grease, 200 ml  
Order-no. 047792.000  
Order-no. 074764.014  
Order-no. 074764.004

Measuring range	open / closed / line disconnection / line short-cut
Equipment	5 m connection cable connecting plug at housing with gold plated contacts waterproof housing, IP 68
Media	water
Operating temperature	-20 .. +70 °C, other temperature ranges on request
Storage temperature	-30 .. +80 °C, other temperature ranges on request
Dimensions	165 mm x diam. 50 mm

## Technical Data Float Switch-4S

## Float Switch-4S operating instructions



### Accident prevention!

All circuit lines must be dead before mounting or dismantling of the sensor or the opening of the sensor housing!

- The Float Switch-4S should only be operated in technically sound condition, for its designated use, with safety and risk awareness in mind, taking into account the operating instructions!
- Do not make any modifications to the Float Switch-4S! It is specifically permitted to turn over the floating unit in order to reverse the switching status.
- Mounting, maintenance and repair work should only be performed by trained personnel!
- Only use original LANCIER Monitoring replacement parts!

## Scope of delivery

- Float Switch-4S
- Connection cable with plug
- Housing clamp
- Screw and rawlplug
- Operating instructions

## Function

The Float Switch-4S is equipped with a reed contact that switches in the event of positional change of the floating unit.

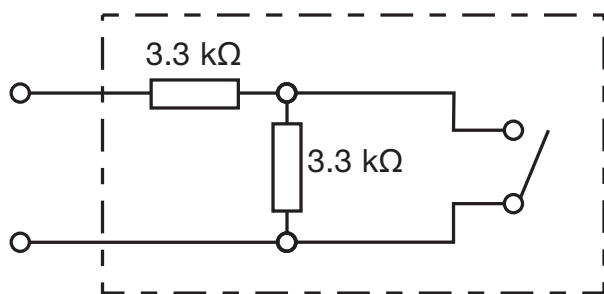
The default mode can be changed by turning the floating unit (default mode is "Break contact").

Float Switch-4S mode can be remotely ascertained via the LANCIER RM module system or an external contact sensor.

The following measuring values will be indicated:

Switch open:	6.6 k $\Omega$
Switch closed:	3.3 k $\Omega$
Line disconnection:	$\infty$ k $\Omega$
Line short-break:	0.0 k $\Omega$

## Circuit diagramme of float switch-4S



## The LANCIER RM-Bus

The LANCIER Monitoring RM Bus is a modular sensor system in which the modules can easily be linked together using internal plug-in contacts. A variety of modules are available for a variety of metrology tasks. Float Switch-4S status can be remotely ascertained e.g. using the RM Loop Module.

## Changing the default contact mode

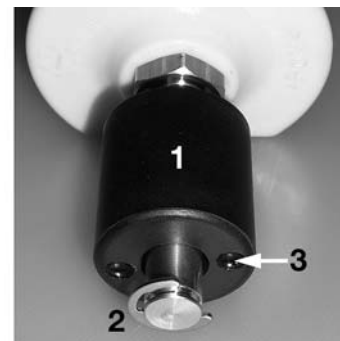
- Default contact mode:

**The contact opens** when the water reaches a set level.

The smooth side of the floating unit [1] faces the spring washer [2].



Break contact



Make contact

- To change the default mode:

Loosen the spring washer [2] and turn the floating unit [1] :

The side with the 2 round depressions [3] must face the spring washer [2].

Secure the spring washer [2] in the groove again.

**The contact closes** when the water level is reached.

- The change can be reversed.

## Float Switch-4S assembly

- Determine where it is to be installed:  
Position it so that the floating unit faces down and reacts when the maximum water level is reached.
- Screw the housing clamp in at the right place with screw and rawlplug and then clamp the Float Switch-4S inside it or fasten it to existing struts with cable fasteners.
- Rawlplug, screw and housing clamp are included in the assembly set supplied.

## Measurement line connection



### Deadly risk!

Electrical connection must only be made by electrical specialists!

- Half fill Float Switch-4S socket with contact protection grease and insert the connecting cable plug in the socket as far as it will go.
- Check desired contact mode (make / break contact) using a continuity tester.
- Connect to the monitoring system.

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