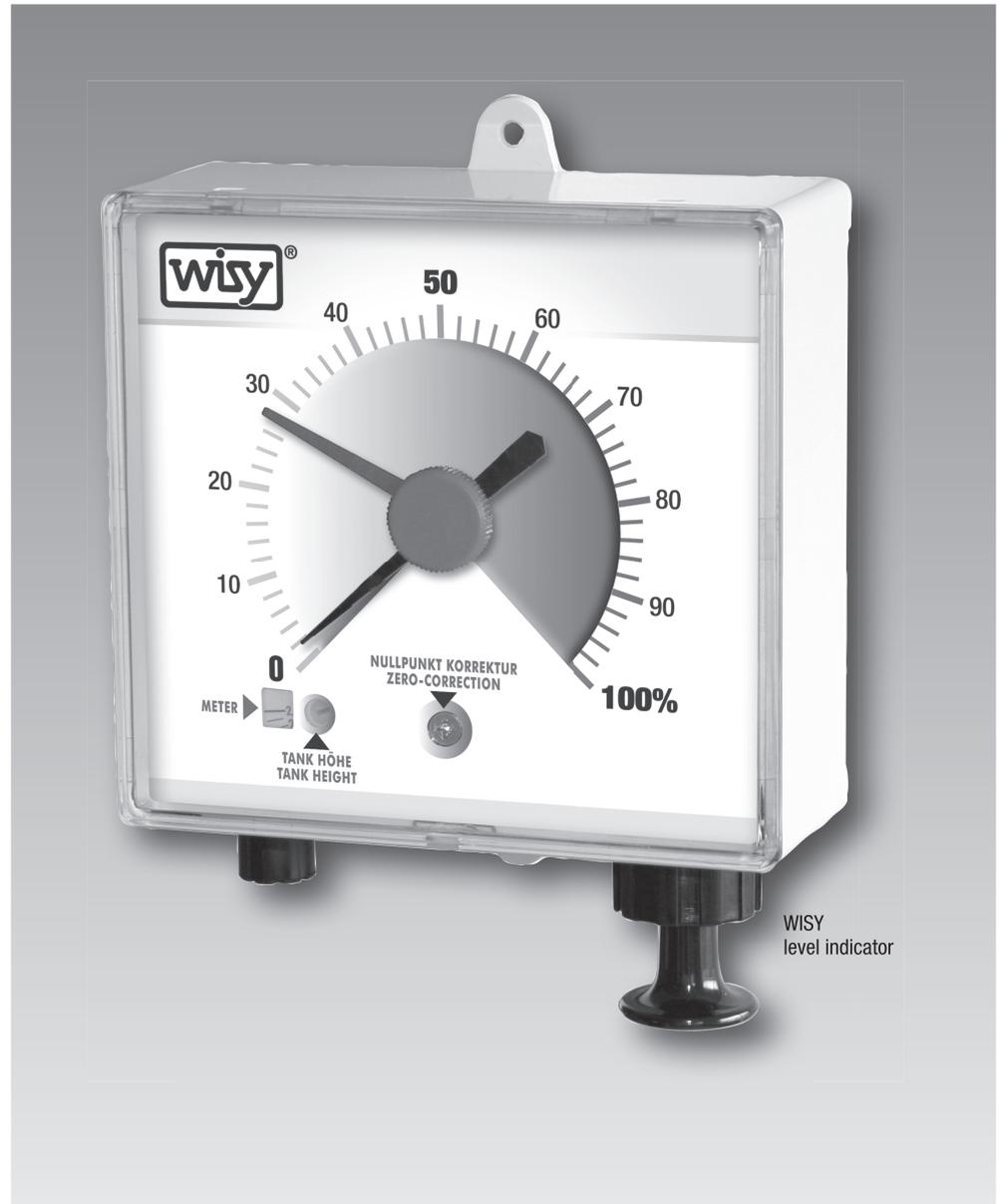




# Pneumatic level indicator

## INSTALLATION INSTRUCTIONS

- Universal pneumatic fill level meter
- Integrated mechanical pump
- Wall-mounted
- Includes 20 m measuring tube
- Extension sets for remote measurement up to 50 m
- Fill level indicated in % irrespective of tank shape



 made  
 in  
 Germany

# WISY

## Rainwater Harvesting

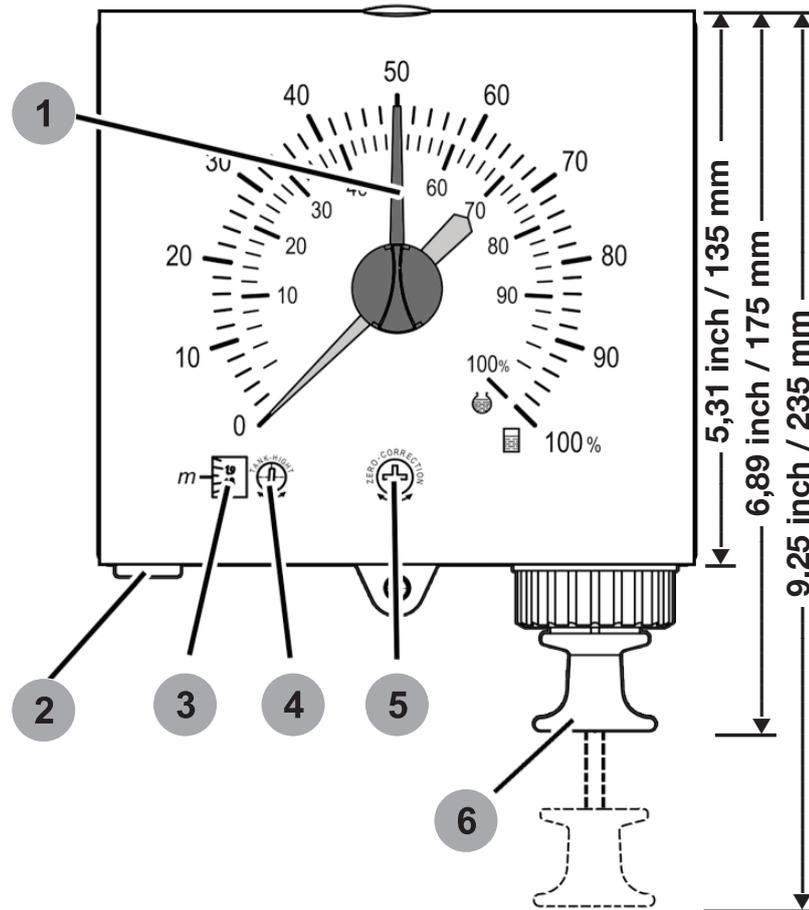
# Pneumatic level indicator

## Description of function

The pneumatic device determines the fill level by measuring the hydrostatic head pressure at the bottom of the tank which varies depending on the water level in the tank. The pressure is measured at a height of 5 cm above the tank base and then converted to show the actual fill level as a percentage from the maximum.

By means of an integrated mechanically actuated pump pneumatic pressure is built up until it is equal to the water pressure above the bottom of the tank. The needle stops at the highest point. The air that has been pumped by the hand pump has displaced the water column in the measuring line. Excess air escapes as bubbles from the end of the measuring line at the bottom of the tank.

- 1 Reference pointer
- 2 Connection for measuring tube
- 3 Adjustment scale
- 4 Adjusting screw for measuring range
- 5 Adjusting screw for zero-point calibration
- 6 Pump handle



## Description of device

Universal, pneumatic fill level meter with integrated mechanical pump for measuring fill levels in water tanks. Wall-mounted housing made of shock and impact-resistant plastic. Adjustable to tank heights of between 100 cm and 250 cm (for measurement of water). Includes a 20 m measuring tube.

Extension sets containing a 50 m measuring tube are available for taking remote measurements at a distance of up to 50 m. Linear capsule element; measuring accuracy +/- 3 % of full scale value. Semi-permanent display, i.e. as you operate the pump, the needle will rise to the % figure that equals the current fill level in the tank, and then drop very slowly down. The air cushion produced in this way protects the capsule element.

Connection for tube with 7 mm outer diameter. Fill level is indicated in % irrespective of the tank shape.

## Installation Instructions

### 1. Installation of device

Using two 4 x 30 round head wood screws, mount the device vertically, making sure that the site in which it is installed is protected against moisture and direct exposure to weather and sunlight.

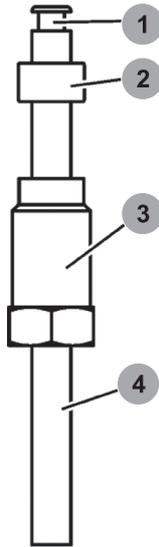
### 2. Installation of measuring tube

Install the measuring tube along a continuous gradient towards the tank. Do not bend the tube (to prevent water pockets!). If necessary, use Nail clamps to fix it in position.

Install the measuring tube with the metal weight in the storage tank in such a way that the weight at the end of the tube is positioned approximately 5 cm above the tank base and is not resting in contact with other tank components (e.g. floating suction filter line).

When connecting the measuring tube to the level indicator, push the connector parts onto the hose as shown in Figure 2 and fit the brass insert into the end of the tube. Then insert the hose as far as it will go into the connector and tighten the compression nut slightly.

- 1 Brass insert (acts as „support“)
- 2 Rubber seal
- 3 Compression nut (black plastic) with hole for insertion of measuring tube; is screwed into connector in wall-mounted unit
- 4 Measuring tube



## Device setting instructions

*(remove the glass cover)*

### Setting the “empty” marking (0%)

1. For tanks without mains water top-up. Use the zero-point calibration screw (5) to position the needle at “0” (empty). Turn the screw by maximum one revolution to the left or right until the needle is pointing to “0”.

2. For tanks with mains water top-up. Top up mains water in the tank until the float switch closes the mains water inlet. Now set the pointer to “0” (empty) using the zero-point calibration screw. Turn the screw by maximum one revolution to the left or right until the needle is pointing to “0”.

*(reinstall the glass cover)*

### Setting the “full” marking (100%)

*(remove the glass cover)*

1. For tanks without mains water top-up. Use a tape measure (in metres) to measure the maximum fill level (from tank base to overflow edge of siphon) and set the dimension precisely (to prevent measuring errors) on the adjustment scale (3) using the adjusting screw (4).

2. For tanks with mains water top-up. Use a tape measure (in metres) to measure the maximum fill level (from mains water top-up “off” up to overflow edge of siphon) of the tank and set the dimension precisely (to prevent measuring errors) on the adjustment scale (3) using the adjusting screw (4).

*(reinstall the glass cover)*

## Operation

Pull the pump handle out as far as it will go and then release. In the case of long distance, repeat the pump process until the pointer remains stable and then read off the fill level.



**Mechanically operated level indicator**



## Accessories

Measuring tube extension for longer distances to storage tank, length 50 m.  
Item No.: FA 9917

## Indication errors and causes

1. Needle does not move when pump is operated, or drops very quickly back to 0: Leak in connections or measuring tube.
2. Needle indicates value higher than 100% full or pointer does not reach end position: The measuring tube is blocked or bent, or the measuring range is set incorrectly.
3. Indication error: Device set incorrectly; check the fill level and correct on the adjustment scale, check the zero-point setting.

## Warranty

### Content and scope of the warranty

The pneumatic level indicator is manufactured with care and subject to stringent quality controls to ensure trouble-free operation. In the unlikely event of defects, we shall replace it.

### Limitation of the warranty

The guarantee does not cover any damage resulting from improper installation of the equipment or use of force.

### Period and commencement of the warranty

WISY offers a 2-year warranty valid as of the date of purchase from a specialist retailer. WISY shall replace defective materials within this period.



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