

pH Meter Stick PHT-01 ATC

Version 10/04



Item no. 12 27 83

Introduction

Dear customer,

Thank you for acquiring this product. With this Voltcraft® product, you have acquired a state-of-the-art device.

Voltcraft® - This name stands for above-average high-quality products in the field of measuring, charging and network technology. The products are characterised by expert competence, extraordinary efficiency and permanent innovation.

And now enjoy your new Voltcraft® product!

With this measuring device it is very simple to find out how acidic or alkaline a solution is. The area of application is the domestic area but also (fish) ponds, swimming pools, photo laboratories, schools, nurseries, etc. The measuring device is not suitable for the use in the industrial area (eg galvanotechnics). ATC (automatic temperature compensation) makes sure that there are stable measurement values, even in the case of fluctuating temperatures.

The pH meter stick PHT-01 ATC is a state-of-the-art product and therefore meets the requirements of the current European and national guidelines. All the relevant documents have been deposited at the manufacturer.

Prescribed Use

- Measurement of pH levels from 0.00 to 14.00 pH of dead (idle), non-flammable or non-corrosive liquids (immersion depth min. 10 or max. 80 mm); with automatic temperature compensation ATC.
- Only a 9 V block battery may be used as power supply.



Any use other than one described above damages this product. Moreover, this involves dangers, such as short-circuit, fire, electric shock etc. Always observe the safety instructions!

Safety Instructions



In the case of any damages which are caused due to the failure to observe these operating instructions, the guarantee will expire! We do not assume liability for resulting damages!

An exclamation mark in a triangle points out important instructions in the operating manual. Carefully read through the whole operating manual before putting the device into operation.

Measuring devices should be kept out of reach of children!

In industrial facilities, the safety regulations laid down by the professional trade association for electrical equipment and facilities must be adhered to.

Check the measuring electrode for damage before each measurement.

Given adverse lighting conditions eg in the case of sunlight, the visibility of the optical display can be affected.

In the case of deliberate mechanical (deformation) or electrical changes (modification) of the measuring device the right to claim under guarantee expires.

Be careful when handling flammable or corrosive liquids. Make sure to wear protective gloves, goggles and apron. Only carry out measurements in well ventilated surroundings.

Dip the sensor head into the idle measuring medium. Immersion depth must not be under 10 mm or exceed 80 mm.

Included in Delivery

- Measuring device PHT-01 ATC
- Soaking solution
- 7.00 pH buffer/calibration solution
- Calibration screwdriver
- stable storage box and operating instructions

Inserting the Battery - Changing the Battery

In order for the PHT-01 ATC to work properly, it needs to be equipped with a 9 V block battery. When the display disappears, you need to change the battery. For this purpose, proceed as follows:

- Open the battery compartment on the back of the PHT-01 ATC by pushing the battery compartment lid off with the belt clip.
- Replace the old battery with a new type of the same battery, slide the battery compartment lid back onto the PHT-01 ATC until it clicks into place.



Warning!

Never operate the PHT-01 ATC when it is open. Do not leave exhausted batteries in the PHT-01 ATC, because even leakage-proof batteries might corrode and thus release chemicals which are hazardous for your health and destroy the battery compartment. Do make sure to treat exhausted batteries as hazardous waste and therefore dispose of them in an environmentally friendly way. You can return spent batteries free of charge at any collecting point of your local authority, at our stores or at any other store where batteries/storage batteries are sold.

Getting Started, Calibration, Measuring

- Switch on the PHT-01 ATC by pressing the ON/OFF button.
- Remove the square protective cover of the device as well as the round protective cover of the pH electrode and pull out the pH electrode until the necessary distance has been reached. Because of the slide-out pH electrode, the immersion depth can be up to 80 mm.
- Rinse the pH electrode with distilled or deionised water (also before and after every use/measuring) and rub it dry. Dip the pH electrode into the 7.00 pH buffer/calibration solution, included in delivery, stir it briefly and wait until the display has stabilised (up to 5 minutes).
- Now set the display value to "7.00" by turning the calibration trimmer (CAL) on the side of the PHT-01 ATC with the screwdriver included in delivery.
- Clean the pH electrode again with distilled or deionised water and wipe it dry.
- Dip the pH electrode into the liquid to be measured and stir it briefly. After stabilization of the display the pH level of the liquid can be read straight away. The automatic temperature compensation (ATC) always ensures precise measurements even in the case of variable temperatures of the liquid.
- In order to ensure the function of this device over a long period of time, the pH electrode needs to be cleaned after each measurement (see maintenance and cleaning).



Notes on calibration!

It is not necessary to calibrate the PHT-01 ATC before each measurement. It is recommended to carry out a calibration after every tenth measurement or every two weeks. If the 7.00 pH calibration solution included in delivery is used up, it can be bought again.



Notes on pH electrode!

The pH electrode always needs to be kept damp in order to be able to supply precise measurement result over a long period of time. This is why the round protective cap always needs to be put on the pH electrode. Put a little bit of the soaking solution into the protective cap and put it back onto the pH electrode. If the soaking solution is used up, a new one can be bought.

The pH electrode is a wearing part. Worn out electrodes are not covered by the guarantee.

Maintenance and Cleaning

For cleaning (rinsing) of the sensor head, use only distilled or deionised water and paper towels, to dab off. Do not use any cleaning agents which contain carbon or petrol, alcohol or the like to clean the product. This can harm the surface of the measuring device. The fumes are furthermore a health hazard and explosive. Sharp-edged tools, screwdrivers or metal brushes should not be used for cleaning.

Disposal

Please dispose of the defective device which can no longer be used in accordance with the current legal regulations.

Technical Specifications

PH measuring range	0.00 to 14.00 pH
Resolution	0.01 pH
Accuracy	± 0.01 pH at 25°C
Ambient temperature	0 to +50°C
Working temperature	0 to max. +50° C (ATC)
Power supply	9V block battery
Battery life	approx. 350 hours. (alkaline)
Dimensions	158 x 40 x 34 mm
Weight	85 g