

# Hand held pH-meter BMW 102



## USER MANUAL

**BAMO** INTERNATIONAL

22, Rue de la Voie des Bans · Z.I. de la gare · 95100 ARGENTEUIL

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Hand held pH-meter  
**BMW 102**

22-10-2021

M-180.01-EN-AA

pH

180-01 /1

## PRECAUTIONS

- Commissioning must be carried out by qualified personnel.
- The use of the device is strictly limited to the applications mentioned, in a clean environment with temperature from 0 to 50 °C and a maximum humidity of 95 %

## APPLICATIONS

- Measurements of pH and temperature in the fields of education, agriculture, horticulture, water and environmental analysis.

## DESCRIPTION

This pH-meter, with an ergonomic design, is ideal for low-budget projects, requiring reliable and repeatable measurements.

### Details of supply:

- 1 Hand held BMW 102 pH-meter
- 1 pH electrode, cable output (1 m long) with a BNC connector
- 1 Pt100  $\Omega$  temperature probe, cable output (1 m long) with connector
- 1 dosis to prepare 20 ml of buffer 7.01 pH
- 1 dosis to prepare 20 ml of solution for calibration
- 1 alkaline battery, 9 V

## CALIBRATION

### a) Preparing the routine:

- Use at least two buffers: 7.01 pH and 4.01 pH or 10.01 pH
- Pour the solutions into two beakers and use a third one for rinsing the electrode with water.

### b) Asymmetry calibration:

- Place the temperature probe and the pH electrode in the buffer 7.01 pH (taking care to remove the protecting cap).
- Press CAL to enter to the calibration mode.
- The display flashes pH 7.01 and an hourglass lights up.
- When the hourglass goes out and the pH symbol stops flashing, press the CFM key to save the asymmetry calibration.

### c) Slope adjustment:

- Press CAL again until the value of the buffer corresponding to the solution in use, is displayed.
- Rinse the electrode and place it in the corresponding beaker (buffer 4.01 pH or 10.01 pH)
- Wait for the hourglass symbol light off, then press the CFM key to save the slope calibration.

(To exit the calibration mode, press the ON / OFF key)

## TECHNICAL FEATURES

Measuring range	0... 14 pH and -5 ... +70 °C
Resolution	0.01 pH and 0.1 °C
Accuracy	$\pm 0.02$ pH and $\pm 0.5$ °C
Calibration	On 2 points with buffers 7.01 pH and 4.01 pH or 10.01 pH
Compensation in temperature	Automatic from 0 ... 70 °C
pH electrode	Cable output, cable length 1m with BNC connector
Temperature probe	With Pt100 $\Omega$ sensor, cable output, cable length 1 m
Power supply	1 alkaline battery 9 V
Autonomy	About 300 hours of continuous use
Automatic shutdown	About 8 minutes after the last operation
Environment	0... 50 °C - Maximum humidity 95 %
Dimensions	145 x 80 x 40 mm
Mass	220 g (with 9 V battery)

**EC Conformity:** The instrument meets the legal requirements of the current European Directives.

## SPARE PARTS

Code	Reference	Description
180 102	1001 BNC	pH electrode

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