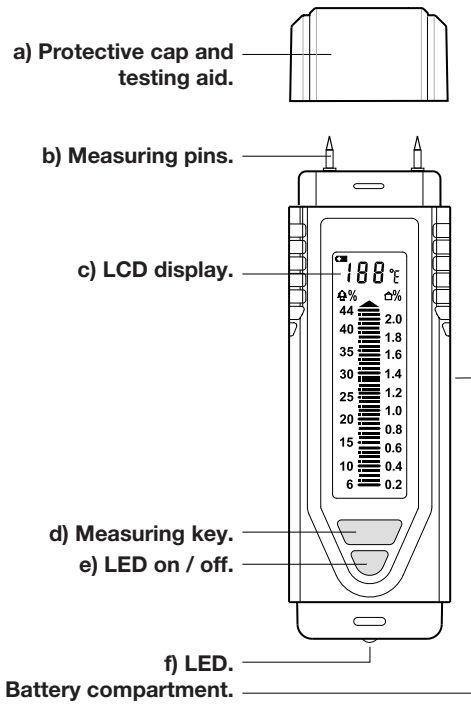


GB Moisture-measuring instrument Article no. 012100

Important: Please read these instructions for use carefully before using the instrument and keep them safely in order to obtain information later on.



Measuring fundamentals

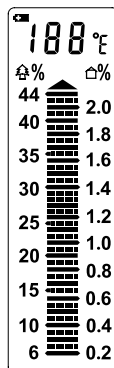
The moisture-measuring instrument is a combined measuring instrument for measuring moisture in wood and dampness in buildings. The moisture can be measured in firewood, paper, cardboard, constructional timber, mortar, concrete and plaster. The measuring instrument displays the ambient temperature in degrees Celsius or Fahrenheit.

LCD Display

The LCD display (c) has the following structure.

- The battery must be changed if this symbol appears.
- The left scale displays moisture in wood ranging from 6 % to 44 %.
- The right scale displays dampness in buildings ranging from 0.2 % to 2 %.
- $^{\circ}\text{C}$ The temperature will be displayed in degrees Celsius or Fahrenheit at the display's upper end.

The measured results will be shown with gauge marks on the display. Every gauge mark on the left scale represents 1 %. Every gauge mark on the right scale represents 0.05 %.



Use

Switch on the instrument by pressing the measuring key (d). Check whether the instrument is functioning faultlessly before taking the measurement. Utilize the testing aid (a) for this purpose. You will find four measuring points marked as B and T on the testing aid. Press the measuring pins (b) on the B measuring point. All of the gauge marks on the display (c) will begin to flash. Now press the measuring pin (b) on the T measuring point. The gauge marks on the display should now indicate 19% (+1%). The instrument is functionally ready if you achieve the given values with both tests.

Press the measuring pins (b) into the material to be tested. The gauge marks on the display indicate the moisture content. Utilize the left scale with the logo, in order to read off the result for firewood, paper, cardboard and constructional timber. Utilize the right scale with the logo, in order to read off the result for mortar, concrete and plaster.

The gauge marks begin to flash if the measured value exceeds the maximum values of 2 % or 44 % respectively.

Take comparable measurements at several points in order to minimize any measuring errors.

Temperature display

The temperature will be displayed at the display's upper end. Press the measuring key (d) for 3 seconds, in order to switch over between Celsius and Fahrenheit.

Torch

Press the LED key (e) for 3 seconds, in order to switch on the LED (f). The LED is switched off by pressing the LED key (e) again.

Automatic switching-off

The instrument switches itself off automatically after 30 seconds has passed without pressing a key. The automatic switching-off does not function while the torch LED (f) is switched on.

Changing the battery

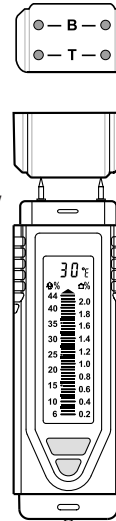
The instrument's batteries must be changed if the symbol appears on the LCD display (c). Unscrew the battery compartment (g) on the instrument's back, in order to change the batteries.

Used batteries must be disposed of properly.

Technical data:

Operating temperature: 0° - 40 °C
Power supply: 4 x 1,5 V AAA type batteries.

Accuracy: moisture in wood: +/- 2 % for measurement under 30 %,
+/- 4 % for measurement over 30 %.
dampness in buildings: +/- 0.1% for measurement under 1.4 %,
+/- 0.2 % for measurement over 1.4 %.



Moisture in wood: approximate values for firewood

- 6 % to 15 % moisture in wood: very good calorific values.
- 16 % to 20 % moisture in wood: suitable for heating with reservations.
- 21 % to 44 % moisture in wood: unsuitable for heating; further drying is necessary.

The values against a grey background are rated as wet.

Measured value on the scale	wet		dry	
	C20 or C 25 concrete	Gypsum plaster	Cement screed	Autoclaved aerated concrete
2,0				
1,8				
1,6				
1,4				
1,2				
1,0				
0,8				
0,6				
0,4				
0,2				

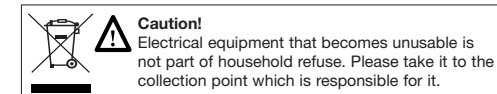
Advice about reliability and safety:

- Keep the working area clean and tidy. Avoid the instrument being affected by blows and impacts.
- Store the moisture-measuring instrument in a dry, secure place.
- Remove the batteries if the moisture-measuring instrument will not be used for a long time, in order to avoid damage being caused by leaking batteries.
- Check the moisture-measuring instrument and all of the individual parts for damage before use. Only use the instrument if all of the parts are in proper condition.
- Repairs are only allowed to be carried out by skilled personnel.
- Only utilize the moisture-measuring instrument for the measuring activities which are given in the operating instructions.
- The moisture-measuring instrument does not contain any parts that need servicing. Please do not open the casing for this reason because the guarantee will be invalidated otherwise.
- Keep the moisture-measuring instrument safely out of children's reach.
- Please never plug into any electrical socket.

Evaluation of the measured results and the measures which result from them lie within the user's own responsibility.

CE DECLARATION OF CONFORMITY

We, kwb tools GmbH, declare according to our sole responsibility that the moisture-measuring instrument to which this declaration refers complies with the following standards: EN 61326:2006 and the 2004/108/EC guideline's provisions.



RoHS ✓

Mr. T. J. J.
kwb Development

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