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Technical Data Sheet

Pressure • Temperature • Humidity • Air Velocity • Airflow • Sound level

New
CE



HM 100 Pin moisture meter



Functions

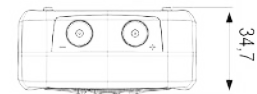
- Indication of humidity percentage for 4 types of different material :
 - > Hardwood
 - > Softwood
 - > Concrete and plaster
 - > Bricks
- Minimum and maximum values for each type of material
- Protection cap and auto-test

Technical features

Display.....	4 lines, LCD technology. Sizes 50 x 34.9 mm. 2 line of 5 digits of 7 segments (value) 2 line of 5 digits of 16 segments (unit)
Housing.....	Shock-proof made of ABS, IP54 protection
Keypad.....	Metal-coated with 5 keys
Conformity.....	electromagnetical compatibility (NF EN 61326-1 guideline)
Power supply.....	1 alcaline battery 9V 6LR61
Environment.....	neutral gas
Operating temperature.....	from 0 to 50°C
Storage temperature.....	from -20 to +80°C
Auto shut-off.....	adjustable from 0 to 120 min
Weight.....	200 g
Languages.....	French, English

Dimensions

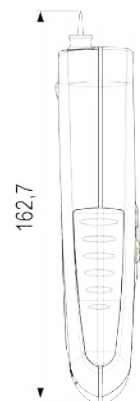
• Top view



• Front view



• Side view



Specifications

Number	Material	Detail	Measuring range	Accuracy*
1	Softwood	Birch, Beech, Spruce, Larch, Cherry tree, Walnut	From 10.0 to 93.7 %	± 1 %
2	Hardwood	Oak, Pine, Maple, Ash, Pin Douglas	From 8.0 to 78.5 %	± 1 %
3	Concrete and plaster		From 1.0 to 2.5 %	± 1 %
4	Bricks		From 0.0 to 22.9 %	± 1 %

*All accuracies indicated in this document were stated in laboratory conditions and can be guaranteed for measurements carried out in the same conditions, or carried out with required compensation.

Working principle

Measurement of the electrical resistance

The way how to determinate material moisture used today is the measurement of the wood electrical resistance.

A withered material is highly resistant to electrical current. Indeed, water presence in material modifies the reaction of this material when it is submitted to an electrical current : the more there is water in material, the lower is its resistance and current circulation is easier. If we consider this variation of resistance according to material moisture, we can observe a precise regularity which, apart from a few exceptions, follows a similar curve with almost all wood species, concrete plaster and bricks. So, a measurement instrument able to indicate material resistance can provide a direct measurement of present moisture with the help of a given scale.

Working principle

The principle consists on **making pass** an electrical current between two pins that are pushed in the wood as the figure below. Water is conductive, so, the more the wood will be wet, the more the current will pass.

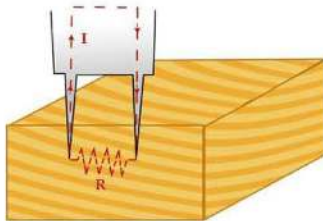


Figure 1 : Measurement principle of electrical resistance

Warranty period

Instruments have 1-year guarantee for any manufacturing defect (return to our After-Sales Service required for appraisal).


Supplied with ...



- Supplied with
- Option

DESCRIPTION	HM 100 S
Protection cap	●
Two sets of pins	●
Fitting certificate	●
Transport case	●
Calibration certificate	

Accessories (See related datasheet)

PH100	CE 100
One set of two additional pins	Protective cover with magnet and holding system 

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