

INSTRUCTIONS FOR USE



SET HYDROMETER + THERMOMETER + PVC TUBE

for checking the status of traction and stationary battery

Thank you for to have choosing our product.

This instrument allows measuring the density of the electrolyte in the batteries. It is the essential and fundamental instrument for checking the status of traction and stationary battery.

It is constituted of a transparent external structure predisposed for the taking of the liquid from the cell of the battery and of the internal float which allows the measurement of the density. The hydrometers are all calibrated manually in dilute sulfuric acid at 30% following the procedures of the comparative method.

In the package you will find:

- **1 hydrometer**
- **1 thermometer** white glass; degrees -10° $+70^{\circ}$ C alcohol – mm 250 x \varnothing 6,00 – div. 1° C
- **1 extension tube** for drafting of the electrolyte mm 150/200 x \varnothing 5

Each element of the hydrometer and every stage of its production are thoroughly tested at our laboratories to ensure the accuracy and quality of the finished product.

■ IDENTIFICATION OF THE COMPONENTS

EXTERNAL STRUCTURE

Description	Characteristics
INTAKE SYRINGE	RUBBER
MAIN PART	GLASS
TERMINAL	PVC
SPOUT	PVC
EXTENSION TUBE	PVC

INTERNAL STRUCTURE

Description	Characteristics
HYDROMETER	White glass
GRADUATED SCALE	1.080 – 1.320 g/cm ³ 10 – 36° Bè +15°C div. 0,01 g/cm ³

■ MEASUREMENT OF DENSITY

Specific gravity	Bè degree	Reading	
1.080 / 1.140 g/cm ³	10/18	ELEMENT EXHAUST	RECHARGE
1.140 / 1.240 g/cm ³	18/27	ELEMENT EXHAUST	RECHARGE
1.240 / 1.300 g/cm ³	27/34	ELEMENT IN GOOD CONDITION	OK



acid-resistant gloves



apron or coveralls antacid



splash goggles

■ INSTRUCTIONS

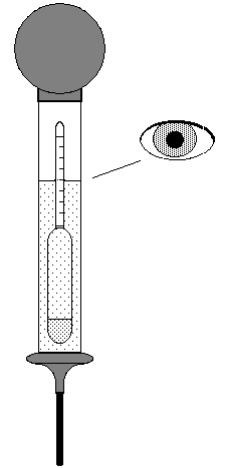


The hydrometer is made of glass: **HANDLE WITH CARE!**

- 1) Remove the protection of the float from the end of the spout.
- 2) Insert carefully the terminal without using force or tools

CAUTION: DO NOT REMOVE THE PUMP

- 3) Hold the hydrometer from the top and keep it in a vertical position.
- 4) Draft of the liquid from the element (In case of element of the batteries longer, it is possible to insert in the particular No. 3, the extension tube in dotation for allow the suction of the acid into the element):
- 5) Press the pump and withdrawing a small amount of liquid which allows the float to float
- 6) Always keep the pump down slightly to prevent excessive entry of liquid or air.
- 7) Do not take too much liquid filling too hydrometer, you can not do the reading.
- 8) Reading: wait for the float to stabilize.
- 9) Keeping the hydrometer in a vertical position, check on which number or color scale has stopped.
- 10) You can now read the specific gravity of electrolyte at the level where the scale on the float emerges from the liquid.
- 11) Having noted the reading, return the electrolyte to the same cell, rinse the hydrometer, dry the terminal and store it in a place away from sources of heat.



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■ CE DECLARATION OF CONFORMITY

UNI ISO 387:1984 Hydrometers -- Principles of construction and adjustment
 UNI ISO 649-1:1983 Laboratory glassware -- Density hydrometers for general purposes Specification
 UNI ISO 649-2: 1983 Laboratory glassware -- Density hydrometers for general purposes Test methods and use