

# Elcometer 116 Whirling & Sling Hygrometer



The Elcometer 116 Whirling and Sling Hygrometers are designed to determine the dew point and relative humidity (RH) at any given time.

The Elcometer 116A Whirling Hygrometer is available in Celsius scale. A guide for Relative Humidity (RH) determination is supplied with each instrument and the dewpoint can accurately be calculated using the Elcometer 114 Dewpoint Calculator.

The Elcometer 116C Sling Hygrometer, shown as the black unit in the photograph, is a convenient, self-contained instrument with an inbuilt slide rule for the calculation of %RH and dewpoint. This hygrometer has spirit filled thermometers and is available in °C or °F scales.

- Manual operation, no power supply required
- Spirit filled thermometers

## Test Method and Operation

Hygrometers use a manual technique to measure Relative Humidity (RH) and dewpoint. These instruments consist of two thermometers, the bulb of one being covered by a wick. The wick is saturated by filling the plastic container with water. Hold the Hygrometer by the handle and whirl through 360° facing the wind or any airflow for about 90 seconds.

This is repeated until the wet bulb thermometer cools down to a constant frame temperature and two consecutive pairs of readings agree.

The RH and dewpoint are then calculated from the wet and dry bulb temperature readings using the Dew Point Table or the Elcometer 114 Dewpoint Calculator. Ensure the wet bulb wick dips into the small water container attached to the Hygrometer frame. Check the water level each time before using.

## Technical Specifications

Part Number	Description
G116A---1	Elcometer 116A Whirling Hygrometer - Metric °C
G116C---1	Elcometer 116C Sling Hygrometer - Metric °C
Measuring Range	-5°C to 50°C
Dimensions	17 x 22mm
Weight	300g

## Accessories

Part Number	Description
T1164441-	Elcometer 116A Spare Thermometer - °C
T11631224	Elcometer 116C Spare Thermometer - °C (Pack of 2)
T1164487-	Elcometer 116A Wicks (Pack of 5)
T13827259	Pure Distilled Water - 250ml
T11600212	Elcometer 116A Replacement Slide Rule
T11631168	Elcometer 116C Wicks (Pack of 4)
T13827494	Pure Distilled Water - 1000ml



## Packing List

Elcometer 116A Whirling Hygrometer

Slide Rule Table

Operating Instructions

**OR**

Elcometer 116C Sling Psychrometer

Slide Rule Table

Operating Instructions

## Video



**YouTube Video - How to measure Dewpoint & Relative Humidity using a Whirling Hygrometer or Sling Psychrometer**  
 (Click on the image to the left to view the video)

Applying a coating in the correct climatic conditions is vital, as if conditions are not suitable - say the surface is too hot, the atmosphere is too humid, or moisture has condensed on the surface to be painted for example - this could cause the coating to fail.