

# Round Hygrometer

Instruction for use 1.0070.xx000 / 1.0074.xx.000



## Range of application

Round-Hygrometers measure and indicate the relative humidity of the surroundings. Humidity is measured either with a hair (H) or a synthetic (K) measuring element.

Typical areas of application include climate control in computer rooms, production and storage halls, offices, laboratories, tree nurseries, museums and galleries.

The Hygrometer is only suitable for use in non-aggressive media and is not suitable for use in superpressure or in underpressure.

## Mode of operation

The measuring element consist of several hairs whose length changes when the humidity changes. These changes in length - which are dependent on the humidity - are transferred to an indicator and can be read directly on the hygro-scale in % relative humidity.

The accuracy of indication can be impaired in acidic or ammoniacal air.

## Technical Data

Measuring range	: 0 ... 100% rel. h.
Graduation	: 1% rel. h.
Scale diameter	: 100 mm
Ambient temperature	: -60 ... +70 °C (H) 0 ... +70 °C (K)
Height of case	: 35 or 36 mm (see dimensions)
Dimensions	: Ø 103 (120) x 36 mm
Weight	: 0,25 kg

## Models available

Order - No.:	1.0070.xx.000	Console
	1.0074.xx.000	Case with flange for wall mounting
	.00.	<b>Measuring element</b> <b>Measuring range</b>
	.02.	H                            10 ... 100% rel. h.
		K                            0 ... 100% rel. h.

## Regenerating and adjusting the Hygro-measuring-element

Measuring elements dry out at relative humidities below 60%. This leads to an increase of ca. 5% or more relative humidity in the zero point. At 60% relative humidity, maximum inaccuracy is attained in three weeks. Maximum inaccuracy is reached in even less time if the humidity values are even lower. This change can be corrected (regeneration) by placing the instrument in saturated air for several hours.

Checking and readjustment of the hygrometer should be carried out in a closed room. Set the hygrometer (with the scale in a vertical position - calibration position) onto a long table next to an aspiration psychrometer and switch on a table fan placed about 2 m away. Let the air from the fan blow on the hygrometer. In about 30 minutes, take comparative measurements with the fan switched off. If there are any differences, then take a screwdriver and re-set the hygrometer by means of the setting screw marked in red and repeat the trial measurement.

Once regeneration has been completed, please check to make sure that the measuring element is adjusted to 98% relative humidity.



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