

## Hygrograph (250)



### Application

Hygrographs serve for the determination and continuous recording of the relative humidity of the air within the temperature range from approx.  $-35$  to  $+70$  °C. Their measuring range comprises 0 to 100% relative humidity. Hygrographs should not be used if the temperatures in the measuring room often exceed  $70$  °C. In case of temperatures exceeding  $70$  °C, the hygrometric measuring element changes its characteristics so that an unobjectionable recording of the humidity is no longer guaranteed.

### Putting into Operation

After having removed the instrument from its packing and after having released the pen arm as well as the lifting rod, the measuring element should be regenerated in order to avoid incorrect readings caused by drying during the transport. The regeneration will be carried out by thoroughly wetting the measuring element with distilled water or pure rain water by means of a sprayer or a soft brush. By steady repetition the hair element must be kept wet for approximately 15 to 20 minutes. At the end of the regeneration the disposable fibre recording point respectively the metal nib pen must point to 95% relative humidity. Deviations from this value can be corrected by turning the adjusting screw arranged on the top of the pillar. The adjustment shall only be made while the measuring element is still exposed to humidity-saturated air.

After having wound up the clockwork, set the drum into the correct position, removed the tip cap of the fibre recording point according to the instructions for use for „Lambrecht Drum Recorders“, the hygrograph is ready for use.

## Maintenance

Every hair hygrograph kept constantly in rooms which never attain saturation humidity, will in the course of the time deliver readings which are several per cent above the correct ones. It is, therefore, recommendable to regenerate the measuring element as described above approx. every fortnight. This, at the same time, serves as a control for a reliable indication of the instrument. It has been found by experience that the instrument precisely adjusted to 95% will generally give correct readings throughout the full scale. If measurements are taken in relatively dry air with higher temperature, it is advisable to carry out the regeneration more frequently (for instance, when using hygrographs in drying plants, before every drying procedure). Provided that the relative humidity at the measuring point often achieves 95% relative humidity (or more), the measuring element is self-acting re-generated.

Elements which are damaged by the influence of heat will always deliver readings which are several per cent above the correct ones. If erroneous recordings have to be attributed to this fact, the regeneration will show no success. In this case the half grid has to be replaced.

The aforementioned instructions are also applicable for the regeneration of the measuring element of the special type „PERNIX“.

If the instrument should occasionally be transported, the pen arm with the disposable fibre recording point respectively with the nib pen has to be lifted off the chart and the metal pen has to be cleaned. Hereafter the pen arm has to be fastened to the lifting rod in such a way that the fibre recording point respectively the nib pen points to approx. 0 % relative humidity. Hereby a tugging of the measuring element during transport will reliably be avoided.

## Technical data

### Series (250)

Measuring element:	Natural hair grid • standardized (removable)
Measuring range:	0...100% r. h.
Accuracy:	± 2% r. h. with regular regeneration
Range of application:	Temperatures -35...+70°C • humidity 0...100% r. h.
Housing/ Weight:	Dimensions 280 x 145 x 180 mm • RAL 9010 (clean-white) • approx. 3 kg
Included in delivery:	1 set = 100 pieces of graph paper • 1 violet felt-tipped pen

### Varieties:

**00.02500.111 000**

### (250) Hygrograph

Recording period 7 days

**00.02500.131 000**

### (250 Ua) Hygrograph

Recording period 7 days or 1 day selectable

(31 days on request.)

### Accessories:

34.02500.001 000	(250 D1) Graph paper for 7 days [1set=100 pieces, approx. 0.25 kg]
34.02500.003 000	(250 D3) Graph paper for 1 day [1set=100 pieces, approx. 0.25 kg]
33.02520.144 000	(252-144) Felt-tipped pens (6 pieces) • violet
33.02520.144 010	(252-144a) Felt-tipped pens (6 pieces) • red
33.02520.144 020	(252-144b) Felt-tipped pens (6 pieces) • black

The ink of a felt-tipped pen is sufficient for one year.

The felt-tipped pens are applicable for all drum recorders.

### Enclosure:

Instructions for Use for „Lambrecht Recording Instruments“



Quality System certified by DQS according to  
DIN EN ISO 9001:2000 Reg. No. 003748 QM

Subject to change without notice.

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