

The polymer is a combined hygrometer-thermometer for measuring air temperature, absolute and relative humidity of air, saturation vapor pressure, vapor pressure, dew point temperature and saturation deficit.

The polymer has a special importance for the prediction of night frost. The prediction is based on the following physical laws :

At the night the earth radiates heat into the space strongly with clear sky. The cooling down of the earth is transmitted to the lower layers of air near the earth. But there is a limit in cooling down. With reaching the dew point temperature the water vapor contained in the air is condensing and latent heat becomes free. When the measured dew point temperature in the late evening is near 0 °C or below, then the danger of night frost is given.

Polymer

Measuring ranges :	0 to 100 % RH	-35 to +55°C
Accuracy :	± 3 % RH	± 1°C alcohol thermometer ± 2°C bimetallic thermometer
Graduations :	1 % RH	1°C

115.01	Hair hygrometer & alcohol thermometer
125.01	Hygrometer with synthetic hair & alcohol thermometer
118.01	Hair hygrometer & bimetallic thermometer
128.01	Hygrometer with synthetic hair & bimetallic thermometer

Scales : 100 mm, white

Housings : chromed steel, Ø 103 mm

Dimensions : 1x5.01 : 267 x 103 mm max. / 1x8.01 : 249 x 103 max.

Weight : 170 g

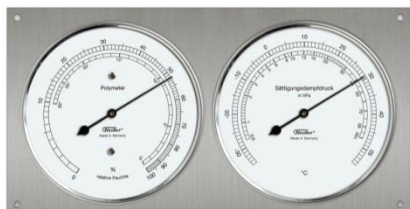
Thermometer	
Measuring range :	-35° to +55°C
Accuracy :	± 1,5°C
Graduations :	1°C
Model Nr :	117.01
Measuring element :	Bimetal
Scale :	white, Ø 100 mm
Housing :	chromed steel Ø 103 mm
Weight :	70 g

Hygrometer	
Measuring range :	0 to 100 % RH
Accuracy :	± 3 % RH
Graduations :	1 % RH
Model Nr :	111.01 / 122.01
Measuring element :	111.01 : hair / 122.01 : synthetic hair
Scale :	white, Ø 100 mm
Housing :	chromed steel Ø 103 mm
Weight :	80 g



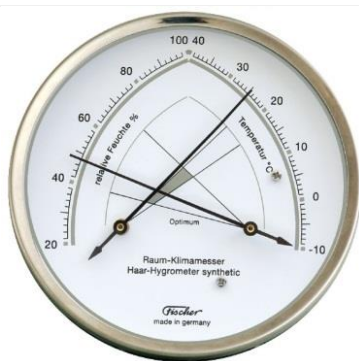
Hygrometer - Thermometer

Measuring ranges :	10 to 100 % RH	-25 to +45°C
Accuracy :	± 3 % RH	± 2°C
Graduations :	1 % RH	1°C
Model Nr :	111.01T	
Measuring element :	Hair hygrometer & bimetallic thermometer	
Scale :	white, Ø 100 mm	
Housing :	chromed steel, Ø 103 mm	
Weight :	85 g	



Polymeter with mounting plate

Measuring ranges :	0 to 100 % RH	-35 to +55°C
Accuracy :	± 3 % RH	± 2°C
Graduations :	1 % RH	1°C
Model Nr :	119.01	
Measuring elements :	Hair hygrometer & bimetallic thermometer	
Scales :	white, Ø 100 mm	
Housing :	chromed steel, Ø 103 mm	
Base plate :	240 x 130 mm (stainless steel)	
Weight :	250 g	



Hygrometer – Thermometer (Comfortmeter)

Measuring ranges :	20 to 100 % RH	-10 to +40°C
Accuracy :	± 3 % RH	± 2°C
Graduations :	1 % RH	1°C
Model Nr :	146.01	
Measuring elements :	Hygrometer with synthetic hair & bimetallic thermometer	
Scale :	white, Ø 127 mm	
Housing :	stainless steel, Ø 130 mm	
Weight :	125 g	