

HUMIDITY-TEMPERATURE SENSOR

Precision measuring instrument...

for measuring relative humidity and air temperature.

The compact sensor is characterised by a power-saving electronic and high measuring accuracy. A membrane filter reliably protects the high-quality capacitive measuring element from air pollutants.

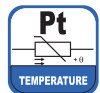
- measuring element temperature: Pt100 1/3 DIN
- capacitive humidity
- measuring element
- high measuring accuracy
- special resistance to air pollutants
- high long-term stability

high-quality use in meteorology and industry • automatic weather stations in all climatic zones

Sensor 8096



Sensor shelter (accessory)



Professional Line	(8096)	Humidity-Temperature Sensor	Ident-Nr. 00.08096.230402
Measuring elements:		Humidity: capacitive Temperature: Pt100 1/3 DIN (DIN EN 60571) · IEC 751 Class B ($\pm 0.1\text{ }^{\circ}\text{C}$)	
Range of application:		0...100 % r. h. • $-40\text{...}+70\text{ }^{\circ}\text{C}$	
Measuring range:		0...100 % r. h. • $-40\text{...}+70\text{ }^{\circ}\text{C}$	
Accuracy:		Humidity: $\pm 2\%$ r. h. at: 5...95 % r. h. • $+10\text{...}+40\text{ }^{\circ}\text{C}$ (at $\geq 0.5\text{ m/s}$) Plus: $< 0.1\%$ r. h./ $^{\circ}\text{C}$ at: $< +10\text{ }^{\circ}\text{C}$ • $> +40\text{ }^{\circ}\text{C}$ Temperature: $\pm 0.1\text{ }^{\circ}\text{C}$, 1/3 DIN IEC 751 Class B	
Response time:		Humidity: $< 20\text{ s}$ (without wind and without filter, otherwise at 1.5 m/s : 1.5 min)	
Minimum air velocity:		$\geq 0.5\text{ m/s}$	
Output signal:		Humidity: $0\text{...}1\text{ V DC} = 0\text{...}100\%$ r. h. • min. load resistance $\geq 2\text{ k}\Omega$ Temperature: Pt100 (4-wire circuit)	
Supply voltage:		$6\text{...}30\text{ V DC}$	
Current consumption:		$< 1\text{ mA}$	
Sensor protection:		membrane filter for outdoor use	
Cable:		3.3 m · fixed cable	
Housing:		stainless steel · IP 65 · protection class of filter IP 40	
Weight:		approx. 0.3 kg	
EMC:		DIN EN 60945 - Chapter 9, 10	
<u>Accessory:</u>			
00.08141.600000	(8141.6)	Sensor shelter for (8096)	