

# 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.

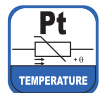
- measuring element temperature: Pt100 1/3 DIN
- capacitive humidity
- measuring element
- high measuring accuracy
- special resistance to air pollutants
- high long-term stability

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