

# HUMIDITY-TEMPERATURE SENSOR

## Shock and vibration-tested...

precision 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.

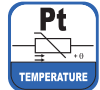
- shock- and vibration-tested in accordance with BV0230/ 0430 and BV0440/ 0240
- EMC-proved in accordance with VG 95373
- sensor is supplied with Calibration Certificate
- high measuring accuracy
- special resistance to air pollutants
- high long-term stability

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

Sensor 8096-Z



Sensor shelter (accessory)



Professional Line	(8096-Z)	Humidity-Temperature Sensor	Id-No. 00.08096.330402
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 $1.5\text{ m/s}$ : $1.5\text{ min}$ )	
Minimum air velocity:		$\geq 0.5\text{ m/s}$	
Output signal:		Humidity: $0\text{...}1\text{ VDC} = 0\text{...}100\%$ r. h. • min. load resistance $\geq 2\text{ k}\Omega$ Temperature: Pt100 (4-wire circuit)	
Supply voltage:		$6\text{...}30\text{ VDC}$	
Current consumption:		$< 1\text{ mA}$	
Sensor protection:		membrane filter for outdoor use	
Cable:		$3.3\text{ m}$ · fixed cable	
Housing/ Weight:		stainless steel · IP 65 · protection class of filter IP 40 • approx. $0.3\text{ kg}$	
EMC:		DIN EN 60945 - Chapter 9, 10 + VG 95 373	
Shock/ Vibration:		BV0230/ 0430 • BV0440/ 0240	
<u>Accessory:</u>		<b>Sensor shelter for protection of the sensor against radiation influences</b>	
<b>00.08141.620 000</b>			