

8093 HUMIDITY-TEMPERATURE SENSOR



Low power consumption

Aloft or at the roadside, is where this humidity-temperature sensor (8093.1) is most commonly used. The instrument is characterised by the high-quality measuring elements, robust housing, reliable membrane filter and low-current electronics. Thus the sensor (8093.1) is especially suitable for meteorological outdoor measurements in very diverse application fields.

- small, light, compact
- easy installation, robust, nearly maintenance free
- low power consumption
- good dynamical behaviour
- reliable membrane filter as protection against pollutants
- high long-term stability and nearly linear characteristic line

APPLICATIONS

- building technology
- traffic systems
- automatic weather stations
- buoys
- agricultural weather stations
- energy supply and disposal systems
- environmental measurement technology

Professional Line	8093 Humidity-temperature sensor
Id-No.	00.08093.100000
Meas. range air temperature	-30...+70 °C
Meas. range rel. humidity	0...100 % r. F.
Accuracy air temperature	± 0.2 °C at -27...+70 °C; Plus: ± 0.007 °C at < +10 °C and > +40 °C
Accuracy rel. humidity	± 2 % r. h. at 5...95 % r. h. • +10...+40°C; Plus: < 0.1 % r. h./ °C at < +10°C and > +40°C
Response time	Humidity: < 20 s (without wind and without filter, otherwise at 1.5 m/s: 1.5 min)
Long-term stability	typical under normal conditions < 1% r. h./ year
Output	0...1 VDC = 0...100% r. h. • min. load resistance ≥ 2.5 kΩ • Pt100 (4-wire circuit)
Supply voltage	10...30 VDC
Power consumption	< 1 mA
Measuring elements	capacitive • Pt100 1/3 DIN • IEC 751 class B
Dimensions	H 122 mm • Ø 20 mm
Housing	aluminium • lacquered • grey-white
Protection class	IP 65 • membrane filter as sensor protection IP 30
Weight	approx. 0.3 kg
Standards	CE/ EMC: DIN 50082-2 • EN 55011 Cl. B
Included in delivery	5 m cable
Accessories (order separately)	00.08141.600000 Sensor shelter with natural ventilation 00.08141.600004 Sensor shelter with artificial ventilation

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