

Aloft...
or at the roadside this humiditytemperature sensor (8093.1) is most commonly used.
The instrument is characterized 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 different 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
building technology - traffic systems • automatic weather stations • buoys • agricultural weather stations • energy supply and disposal systems • environmental measurement technology


## Professional Line

Measuring elements:
Measuring range:
Accuracies:

Time constant:
Long-term stability:
Outputs:
Supply voltage:
Current consumption:
Housing:

Dimensions/ Weight:
Standards:
Accessories:
00.08141 .400000
(8093.1) Humidity-Temperature Sensor
capacitive • Pt100 1/3 DIN • IEC 751 class B
o... $100 \%$ r. h. $-30 . . .+70^{\circ} \mathrm{C}$
$\pm 2 \%$ r. h. at $5 \ldots 95 \%$ r. h. ${ }^{\bullet}+10 \ldots+40^{\circ} \mathrm{C}$ Plus: $\left\langle 0.1 \%\right.$ r. h. at $\left\langle+10^{\circ} \mathrm{C}\right.$ and $\rangle+40^{\circ} \mathrm{C}$ $\pm 0.2^{\circ} \mathrm{C}$ at $-27 \ldots+70^{\circ} \mathrm{C} \quad$ Plus: $\pm 0.007^{\circ} \mathrm{C} /{ }^{\circ} \mathrm{C}$ at $\left\langle+10^{\circ} \mathrm{C}\right.$ and $\rangle+40^{\circ} \mathrm{C}$ humidity < 20 S (without wind and filter, otherwise at $1.5 \mathrm{~m} / \mathrm{s}: 1.5 \mathrm{~min}$ typical under normal conditions < $1 \%$ r. h./ year
$0 . . .1 \mathrm{~V}_{\mathrm{DC}}=0 . . .100 \% \mathrm{r} . \mathrm{h} . \circ \min$. load resistance $\geq 2.5 \mathrm{k} \Omega \bullet \mathrm{Pt} 100$ ( 4 -wire circuit) $10 \ldots 30 \mathrm{~V}_{\mathrm{DC}}$
< 1 mA
aluminium $\cdot$ lacquered $\cdot$ grey-white $\cdot I P 65^{\circ}$ membrane filter as sensor protection IP $30 \cdot$ incl. 5 m cable
H $122 \mathrm{~mm} \cdot \emptyset 20 \mathrm{~mm} \cdot$ approx. 0.3 kg
CE/ EMC: DIN 50082-2 • EN 550011 Cl B
(8141.4) Sensor shelter for sensor (8093.1)

