ALMEMO® dewpoint sensor FHA 646 DTC1, dewpoint transmitter MT 8716 DTC1

- Especially suitable for monitoring pressurized systems
- Digital transfer of measured values to the ALMEMO® display device (avoids risk of inaccuracy on connecting lines or display section itself)
- High-level accuracy sustained down to -80 °C
- Quick response time
- Displayed variables temperature, relative humidity, dewpoint
- Process connection for high pressures (option, up to 350 bar)

**Technical data**

<table>
<thead>
<tr>
<th>FHA 646 DTC1</th>
<th>MT 8716 DTC1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output</td>
<td>ALMEMO® digital</td>
</tr>
<tr>
<td>Power supply</td>
<td>via ALMEMO® plug, approx. 5 mA</td>
</tr>
<tr>
<td>Connection</td>
<td>Cable, 1.5 meters, with ALMEMO® plug</td>
</tr>
<tr>
<td>Output</td>
<td>4 to 20 mA / -80 to +20 °C (DT), 2 wires</td>
</tr>
<tr>
<td>Power supply</td>
<td>10 to 30 VDC, load &lt;500 ohms</td>
</tr>
<tr>
<td>Connection</td>
<td>Transmitter connector</td>
</tr>
</tbody>
</table>

**Measuring range**

-80 to +20°C dewpoint temperature (DT)

**Measuring accuracy**

± 0.5 °C from -10 to +20 °C DT

typical ±2 °C DT at -40 °C DT

**Measuring channels** (FHA646DTC1 only)

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Relative humidity</th>
<th>Dewpoint</th>
</tr>
</thead>
<tbody>
<tr>
<td>-20.0 to +70.0 °C</td>
<td>0 to 98.0 % RH</td>
<td>-80.0 to +20.0 °C (DT)</td>
</tr>
</tbody>
</table>

**Operating temperature**

-20 to +70 °C

**Process connection**

Screw thread G 1/2-inch, stainless steel

**Protective cap**

Sintered stainless steel filter

**Pressure range**

-1 to +50 bar standard

**Storage temperature**

-40 to +80 °C

**Accessories**

Screw-on measuring chamber for connecting a dewpoint transmitter to compressed air pipes via a ball valve up to maximum 16 bar including perforated protective cap

- Advantage high-speed measuring without waiting for installation.

**Order no.**

ZB9646DTCK

**Option**

Dewpoint sensor for process pressure up to 350 bar

OA9646DTCP

**Variants** including factory calibration certificate

ALMEMO® dewpoint sensor with connecting cable, 1.5 meters long, and ALMEMO® plug

Dewpoint transmitter with current output, including connector

Factory calibration KH93xx, dewpoint, for digital sensor (see chapter „Calibration certificates“)

**Order no.**

FHA646DTC1

MT8716DTC1