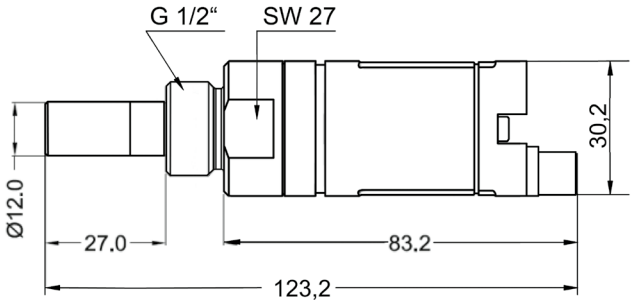
11/2025 • We reserve the right to make technical changes.

Digital sensor for dew point, air humidity, temperature FHAD 46-DTC2, Pressure-sealed variant with screw thread, with ALMEMO® D6 plug





Technical features

- The dew point sensor is intended for continuous monitoring of the dew point in industrial applications. Compressed air systems (refrigerant and adsorptions dryers), pellet dryer, medical gases, non corrosive gases, e.g. Nitrogen.
- High accuracy when measuring the dew point temperature.
- Reliably measuring the dew point in clean, dry, and oil-free gases and compressed air.
- Recommended installation of the sensor indirectly through the measuring chamber (accessory). The measuring chamber is connected to the compressed air pipe via the quick-coupling. Advantage: Simple installation and removal of the sensor (under operating pressure in the line). Fast response time of the sensor thanks to the perforated protective cap and the controlled flow. Protected installation of the sensor. For oily and dirty compressed air, a prefilter can be used in front of the measuring chamber (provided by the customer).
- Alternatively: Installing the sensor via the thread G 1/2“ directly into in the dryer respectively the compressed air pipe. Using the sintered stainless steel filter.
- The dew point sensor is also available with a process connection for high pressures (up to 350 bar) (option).
- The sensor will be supplied in a robust industrial housing.
- The digital dew point sensor works with an integrated AD converter. The measured values are calculated within the sensor and are digitally transmitted via the ALMEMO® D6 plug to the ALMEMO® device.
- 3 measuring channels are preprogrammed: Temperature (°C, t), Relative Humidity (%H, Uw), Dew point (°C, td).
- The overall accuracy of the digital ALMEMO® dew point sensor is independent from the ALMEMO® display device / data logger and from extension cables used.

Technical data:

Measuring range:	-80 °C to +20 °C td dew point temperature
Accuracy at 23 °C:	±1 °C td from -20 to +20 °C td ±2 °C td from -50 to -20 °C td ±3 °C td from -80 to -50 °C td
Nominal conditions:	23 °C ±5 K, pressure: 6 bar
Measuring channels:	
Temperature:	-20.0 to +70.0 °C
Relative humidity:	0 to 9.0 % RH
Dew point:	-80.0 to +20.0 °C td
Operating temperature:	-20 to +70 °C, recommended: 0 to 50 °C
Process connection:	screw thread G1/2“ stainless steel
Protective cap:	sintered stainless steel filter (50 µm)
Pressure range:	-1 to 50 bar standard

Storage temperature:	-40 to 80 °C
Output:	digital, plug connection
Power supply:	via ALMEMO® D6 plug
ALMEMO® connection cable: pluggable, 2 m PVC cable, with ALMEMO® D6 plug	
ALMEMO® D6 plug:	
Refresh time:	0.5 sec. for all 3 channels
Supply voltage:	6 to 13 V DC
Current consumption:	typical 20 mA
Housing:	
Material:	zinc alloy
Protection class:	IP65

Accessories

Order no.



Screw-on measuring chamber for connecting a dew point transmitter to compressed air pipes via quick coupling, up to a maximum of 16 bar, including perforated protective cap **ZB9646DTCK**
Advantage: fast measurement without installation costs.

Option

Dew point sensor for process pressure up to 350 bar **OA9646DTC2P**

Variants including factory calibration certificate

Order no.

Digital sensor for dew point, air humidity, temperature, pressure-sealed variant with screw thread sintered stainless steel filter, plug connection, ALMEMO® connection cable 2 m with ALMEMO® D6 plug **FHAD46DTC2**

Factory calibration certificate KH93xx, dew point, for digital sensors, see chapter „Calibration certificates“