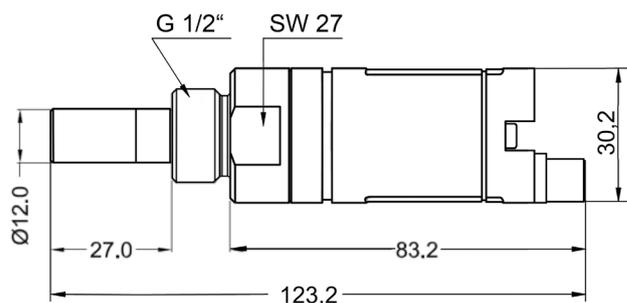


## Digital sensor for dew point, air humidity, temperature FHAD 46-DTC2, Pressure-sealed variant with screw thread, with ALMEMO® D6 plug

02/2024 • We reserve the right to make technical changes.



### 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	Storage temperature:	-40 to 80 °C
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	Output:	digital, plug connection
Nominal conditions:	23 °C ±5 K, pressure: 6 bar	Power supply:	via ALMEMO® D6 plug
Measuring channels:		ALMEMO® connection cable:	pluggable, 2 m PVC cable, with ALMEMO® D6 plug
Temperature:	-20.0 to +70.0 °C	ALMEMO® D6 plug:	
Relative humidity:	0 to 9.0 % RH	Refresh time:	0.5 sec. for all 3 channels
Dew point:	-80.0 to +20.0 °C td	Supply voltage:	6 to 13 V DC
Operating temperature:	-20 to +70 °C, recommended: 0 to 50 °C	Current consumption:	typical 20 mA
Process connection:	screw thread G1/2“ stainless steel	Housing:	
Protective cap:	sintered stainless steel filter (50 µm)	Material:	zinc alloy
Pressure range:	-1 to 50 bar standard	Protection class:	IP65

### Accessories



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  
Advantage: fast measurement without installation costs.

**Order no.**

**ZB9646DTCK**

### Option

Dew point sensor for process pressure up to 350 bar

**OA9646DTC2P**

### Variants including factory calibration certificate

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

**Order no.**

**FHAD46DTC2**