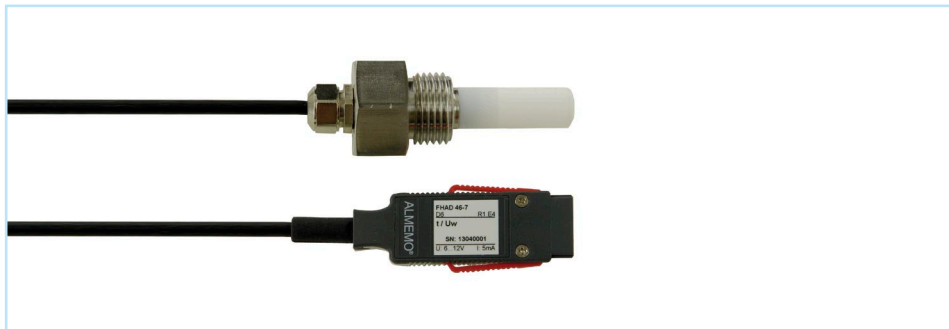


Digital sensor for measuring temperature and humidity FHAD 46-7,



Pressure-sealed variant up to 16 bar, with ALMEMO® D6 plug

- Compact sensor made from stainless steel
- Screw thread, for pressure pipes
- Option - adapter for compressed air pipes
- Digital capacitive humidity sensor with integrated signal processor
- All sensor characteristics and adjustment data are saved in the humidity sensor element itself. Humidity sensor element, plug-in
- Spare elements are inexpensive; a replacement can be fitted on site quickly and easily by virtually anyone; it will be fully accurate straight away needing no special adjustment.
- The humidity variables are calculated from the two primary

measuring channels (real measurable variables): temperature, relative humidity

- Three measuring channels are programmed: temperature (°C, T, t), relative humidity (%H, RH, Uw), dewpoint (°C, DT, td)

One further humidity variable can also be selected: mixture (g/kg, MH, r), absolute humidity (g/m³, AH, dv), vapor pressure (mbar, VP, e), enthalpy (kJ/kg, En, h)

The system pressure needed for automatic pressure compensation of pressure-dependent humidity variables and the channel configuration are entered directly on the PC using USB adapter cable ZA1919AKUV. (see page 04.05).

Technical data

Operative range	-20 to +80 °C, 5 to 98 % RH
Digital temperature / humidity sensor (including A/D converter)	
Humidity	
Measuring range	0 to 100 % RH
Sensor	CMOSens® technology
Accuracy	±1.8 % RH in range 10 to 90 % RH at nominal temperature
Hysteresis	typical ±1 % RH
Nominal temperature	+25 °C
Sensor operating pressure	up to 16 bar
Temperature	
Sensor	CMOSens® technology
Accuracy	±0.3 K at +25 °C ±0.4 K at +10 to +40 °C ±1.3 K at -20 to +80 °C
Reproducibility	typical ±0.1 K

ALMEMO® connecting cable	
PVC Length (see variants) with ALMEMO® D6 plug	
ALMEMO® D6 plug	
Refresh time	2 seconds for all four channels
Supply voltage	6 to 13 VDC
Current consumption	12 mA
Mechanical design	
Sensor	Stainless steel, diameter 12 mm
Filter cap	Overall length approx. 77 mm
Process connection	PTFE sinter filter SK6
Screw-fit cable gland	Male thread G 1/2-inch Fitted length 48 mm, Width across flats 27
	Splash-protected



Adapter for compressed air pipes

Accessories

Adapter for compressed air pipes	Order no. ZB96467AP
PTFE sinter filter (spare) (see page 08.08)	ZB9600SK6
Stainless-steel sinter filter (see page 08.08)	ZB9600SK8

Variants

Digitaler sensor for temperature and humidity, filter cap PTFE, pressure-sealed variant, with fitted cable and ALMEMO® D6 plug, manufacturer's test certificate	Order no.
Connecting cable, length 2 meters	FHAD467
Connecting cable, length 5 meters	FHAD467L05
Connecting cable, length 10 meters	FHAD467L10
Replacement sensor element, digital, adjusted, plug-in	FH0D46

DakKS or factory calibration KH9xxx, temperature, humidity, for digital sensor (see chapter „Calibration certificates“).
DakKS calibration meets all the requirements regarding test resources laid down in DIN EN ISO/IEC 17025.