

Capacitive humidity sensor FHA 646 R, miniature sensor



- Compact sensor, extremely small dimensions
- Wide operating temperature range
- Particularly suitable for measuring operations between PCBs,

inside cases, in walls, ceilings, and insulation layers used in the construction industry, and for the protection of listed historic monuments

Technical data

Operative range	-30 to +100 °C, 5 to 98 % RH	Temperature measuring circuit	
Humidity measuring circuit		Sensor	NTC type N
Measuring range	0 to 100 % RH	Accuracy	-20 to 0 ±0.4 K, 0 to +70 ±0.2 K
Sensor	capacitive		+70 to +100 ±0.6 K
Accuracy	±2 % RH in the range <90 % RH at nominal temperature	Reproducibility	0.1 K
Reproducibility	<1 % RH at nominal temperature	Mechanical design	
Nominal temperature	+25 ±3 °C	Sensor tube	nickel-plated, 50 mm long, 5 mm Ø
Response time T63	approx. 10 seconds at 1 m/s	Protective cap	None
		Cable	High-temperature cable (up to +100 °C), 2 meters long, with ALMEMO® plug (no other lengths available)



The sensor can only be operated by plugging DIRECTLY onto an ALMEMO® device. (NOT with extension cables ZA9060VKx or ZA9090VKCx).

Or alternatively, the following sensor types can be used. FHAD36RAS up to +100 °C (see page 200) FHAD46-C2 or FHAD46-C0 Compact design (see page 198)

Accessories

PTFE filter, inside diameter 5 mm suitable for protection against dust, not water-proof

Order no.

ZB9646SKR

Variants

Miniature sensor for temperature / humidity, with fitted high-temperature cable, length 2 meters, with ALMEMO® plug

Order no.

FHA646R

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