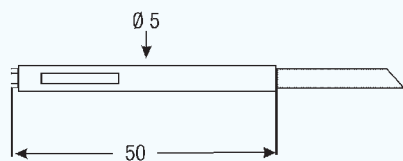


## Capacitive Humidity Sensor Type FHA646R



- Compact sensor with extremely small dimensions.
- Particularly suitable for measurements between PCBs, within housings, in walls, ceilings, and insulations used in structural engineering and protection of historic monuments.
- Sensor usable in the range  $-30 \dots 100^{\circ}\text{C} / 5 \dots 98\% \text{ r.H.}$

### Accessories:

Extension cable, 2m long	Order No. ZA9060VK2
Extension cable, 4m long	Order No. ZA9060VK4

### Types:

Length 50mm

**Order No. FHA646R**

### Technical Data:

**Operative range :**  $-30 \text{ to } +100^{\circ}\text{C} / 5 \text{ to } 98\% \text{ r.H.}$

#### Humidity Measuring Circuit

Measuring range:	0 to 100 % r.H.
Sensor:	capacitive
Accuracy:	$\pm 2\% \text{ r.H.}$ in the range $< 90\% \text{ RH}$ at nominal temperature
Reproducibility:	$< 1\% \text{ r.H.}$ at nominal temperature
Nominal temperature:	$25^{\circ}\text{C} \pm 3^{\circ}\text{C}$
Response time $T_{63}$ :	approx. 10s at 1m/s

#### Temperature Measuring Circuit

Sensor:	NTC type N
Accuracy:	$-20 \dots 0^{\circ}\text{C}: \pm 0.4^{\circ}\text{C}$ $0 \dots 70^{\circ}\text{C}: \pm 0.1^{\circ}\text{C}$ $70 \dots 100^{\circ}\text{C}: \pm 0.6^{\circ}\text{C}$
Reproducibility:	$0.1^{\circ}\text{C}$

#### Mechanical Construction

Sensor tube:	nickel plated, 50mm long, 5mm Ø
Protective cap:	none
Cable:	2m long, ALMEMO® connector

## High-temperature moisture transmitter Type MT8636HR6



- High-temperature cable sensor with transmitter, suitable for fixed installation.
- Build in socket for supply and analogue output
- Analog output range, scalable to  $-40 \text{ to } +180^{\circ}\text{C} / 0 \text{ to } 100\% \text{ r.H.}$
- Analog output type, 0 to 10 V standard (0 to 5 V or 0/4 to 20 mA also available from the factory).
- Pressure-sealed, up to 15 bar, available on request.

### Options:

High-temp. sensor cable, 5 meters	Order no. : OT8636HR6L05
High-temp. sensor cable, 10 meters	Order no. : OT8636HR6L10
High-temp. sensor cable, 20 meters	Order no. : OT8636HR6L20

### Types (including manufacturer's test certificate)

High-temperature moisture transmitter with sensor cable, 2 m long, incl. output connector **Order no. : MT8636HR6**  
ALMEMO® connector cable, 2 meters long, PVC including ALMEMO® connector and mains adapter ZB3090NA, 12 V / 200 mA **Order no. : ZA8636HR6AK**

### Technical data :

#### Operative range :

Sensor, including sensor cable :	$-40 \text{ to } +180^{\circ}\text{C}$
Electronics housing :	$-40 \text{ to } +60^{\circ}\text{C}$

#### Humidity measuring circuit

Measuring range :	0 to 100 % r.H.
Sensor :	capacitive
Accuracy :	$\pm 2\% \text{ r.H.}$ in range 0 to 90 % r.H. $\pm 3\% \text{ r.H.}$ in range 0 to 100 % r.H. each at nominal temperature
Nominal temperature :	$+23^{\circ}\text{C} \pm 3 \text{ K}$
Response time :	$< 10 \text{ seconds}$ without filter

#### Temperature measuring circuit

Sensor:	Pt1000
Accuracy :	DIN EN 60751, class A

#### Electrical data

Supply voltage :	8 to 48 V DC / 12 to 35 V AC
Power consumption at 24 V	typical 40 mA / 1 W (V output) typical 80 mA (mA output)

#### Mechanical data

Sensor :	stainless steel, L=238mm, d=12mm
Protective cap :	sintered stainless steel filter (see page 09.06)
Sensor cable :	2 meters long, optional : 5/10/20 m
Electronics housing :	plastic PC, 135 x 90 x 87 mm

10/2008 We reserve the right to make technical changes.