

Heat flow

new

Heat flow plates FQA005HF and FQA006HF for special applications

- Thin, flexible heat flow sensor
- For low and high operating temperatures
- Temperature measurement with integrated temperature sensor
- Robust design and moisture-protected (incl. cable connection), for applications in harsh environments, even outdoors
- Suitable for many applications thanks to various sizes

Common technical data for the FQA005HF and FQA006HF series

Heat flow sensor:		ALMEMO® connector (analog):
Accuracy of the calibration value:	$\pm 5\%$ to $\pm 10\,000\text{ W/m}^2$	Channel 1: Connector cold junction compensation (NTC), °C dimension, resolution 0.01 K
Nominal temperature:	20 °C	Channel 2: Temperature of the sensor (thermocouple type T), dimension °C, resolution 0.1 K
Temperature dependence:	$< 0.2\%/K$	Channel 3: Heat flow (voltage), dimension W/m^2 , resolution 1 W/m^2
Temperature sensor: Thermocouple type T		
Accuracy of the temperature sensor:	$\pm 1.0\text{ K}$ or $0.0075 \times T $, the higher value applies	
Protection class:	IP67 (not suitable for long-term use under water or in a condensing environment)	
Standard cable length:	2 m	

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

Heat flow plate FQA005HF1 up to 120 °C



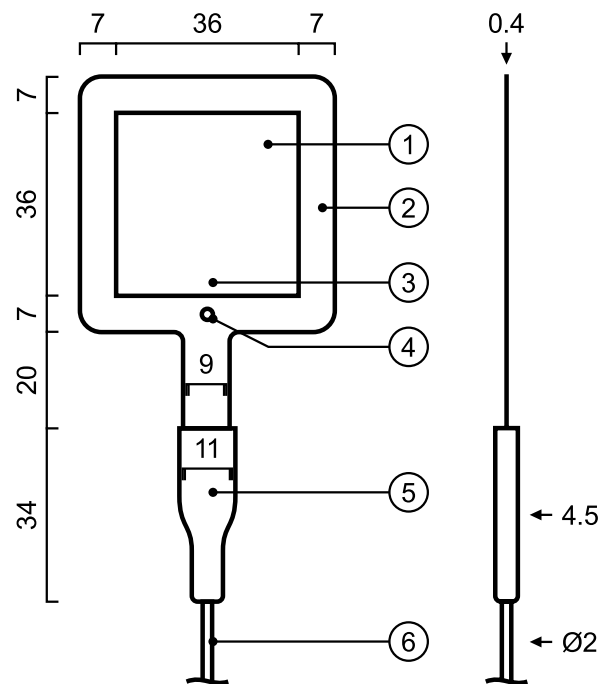
Typical areas of application:

- Building physics (insulation, energy balance issues)
- Use on pipes
- Validation of CFD simulation (numerical flow mechanics)

Technical data FQA005HF1

Measuring range:	Temperature	-70 ... +120 °C
	Heat flow	$\pm 10\,000\text{ W/m}^2$
Sensitivity:	See Variants	
Thickness:	0.4 mm	
Bending radius:	$\geq 7.5\text{ mm}$	
Dimensions:	See Variants	
Common technical data see above		

Dimensions (in mm)



Dimensions for 50 x 50 mm version

- 1) Sensing area with thermal spreaders
- 2) Passive guard
- 3) Type T thermocouple
- 4) Dot indicating frontside
- 5) Potted cable connection block for strain relief
- 6) Cable, standard length 2 m

Variants

Heat flow plate up to 120 °C, with integrated temperature sensor, 2 m cable with ALMEMO® connector
 Dimensions: 50 x 50 mm, Sensitivity: 13 $\mu\text{V}/(\text{W/m}^2)$
 Other dimensions on request: 10 x 10 mm, 15 x 30 mm, 15 x 85 mm, 85 x 85 mm

Order no.

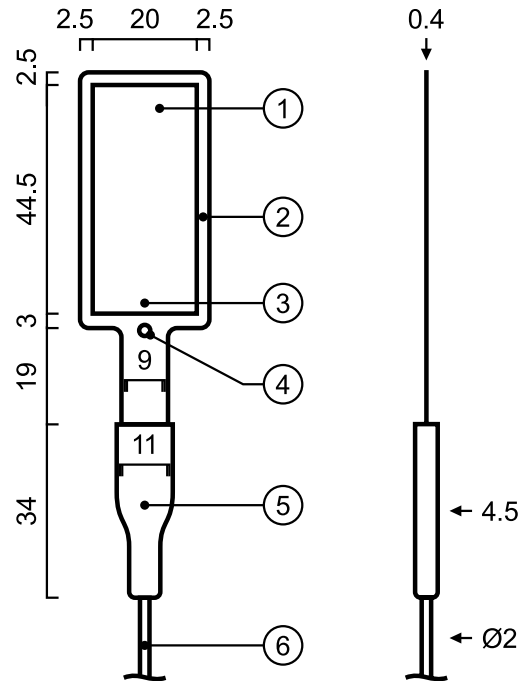
FQA005HF1

new

Heat flow plate FQA006HF1 up to 250 °C



Dimensions (in mm)



Typical areas of application:

- Processing of plastics and composite materials
- Analysis of electric car batteries
- Analysis of industrial ovens

- 1) Sensing area with thermal spreaders
- 2) Passive guard
- 3) Type T thermocouple
- 4) Dot indicating frontside
- 5) Potted cable connection block for strain relief
- 6) Cable, standard length 2 m

Technical data FQA006HF1

Measuring range:	Temperature	-70 ... +250 °C	Bending radius:	≥ 7.5 mm
	Heat flow	± 20 000 W/m ²	Dimensions:	25 x 50 mm
Sensitivity:	5 μV/(W/m ²)		Common technical data see above	
Thickness:	0.38 mm			

Variants

Heat flow plate up to 250 °C, with integrated temperature sensor, 2 m cable with ALMEMO® connector

Order no.
FQA006HF1