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:	
Accuracy of the calibration value:	± 5 % to ± 10 000 W/m²
Nominal temperature:	20 °C
Temperature dependence:	< 0.2 %/K
Temperature sensor:	Thermocouple type T
Accuracy of the temperature sensor:	± 1.0 K or 0.0075 × | 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
ALMEMO® connector (analog):	
Channel 1:	Connector cold junction compensation (NTC), °C dimension, resolution 0.01 K
Channel 2:	Temperature of the sensor (thermocouple type T), dimension °C, resolution 0.1 K
Channel 3:	Heat flow (voltage), dimension W/m², resolution 1 W/m²

Heat flow plate FQA005HF1 up to 120 °C

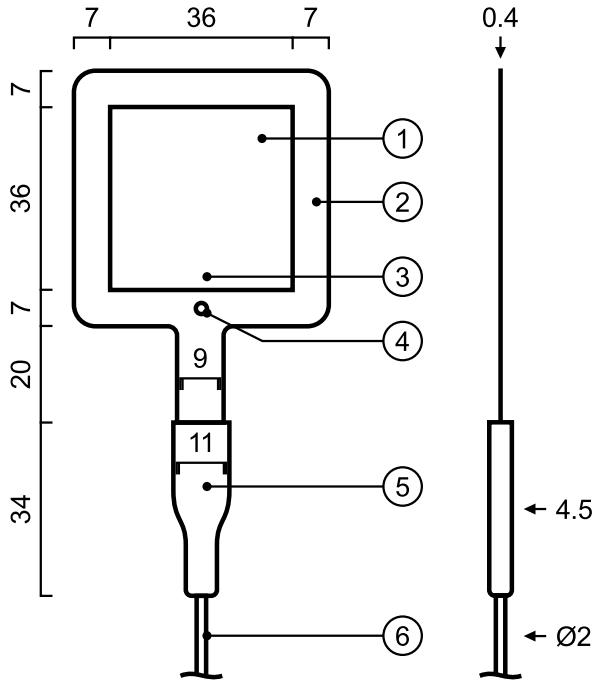


Typical areas of application:
- Building physics (insulation, energy balance issues)
- Use on pipes
- Validation of CFD simulation (numerical flow mechanics)

Technical data FQA005HF1

Measuring range:	Temperature	-70 … +120 °C
	Heat flow	± 10 000 W/m²
Sensitivity:	See Variants	
Thickness:	0.4 mm	
Bending radius:	≥ 7.5 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	Order no.
Heat flow plate up to 120 °C, with integrated temperature sensor, 2 m cable with ALMEMO® connector Dimensions: 50 x 50 mm, Sensitivity: 13 µV/(W/m²) Other dimensions on request: 10 x 10 mm, 15 x 30 mm, 15 x 85 mm, 85 x 85 mm	**FQA005HF1**

Accessories: Heat-conducting paste for surface measurement, tube 20 ml, operative range -30 to +200 °C — **Order no. ZB9000WP**

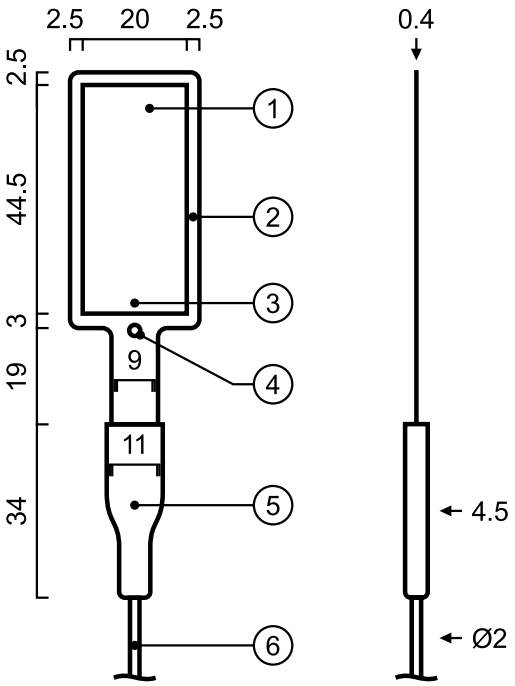
09/2026 • We reserve the right to make technical changes.

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
	Heat flow	± 20 000 W/m²
Sensitivity:	5 µV/(W/m²)	
Thickness:	0.38 mm	

Bending radius:	≥ 7.5 mm
Dimensions:	25 x 50 mm
Common technical data see above	

Variants	Order no.
Heat flow plate up to 250 °C, with integrated temperature sensor, 2 m cable with ALMEMO® connector	**FQA006HF1**

Accessories: Heat-conducting paste for surface measurement, tube 20 ml, operative range -30 to +200 °C — **Order no. ZB9000WP**

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