

HEAT FLOW

Heat Flow Plates Type FQ90xxx



Technical Features:

- ▶ For determining the heat flow density up to max. 150°C.
- ▶ Application-oriented designs, consisting of a meander of opposing thermocouples that are embedded in a substrate.
- ▶ In case of thick substrates no lateral circulation of the heat flow because of sufficient meander shell zone.
- ▶ Software for k value measurement, see page 06.07.



Each heat flow plate has been assigned a calibration value, which corresponds to the heat flow density in W/m^2 when the plate provides an output of 1mV. The calibration value will be stored as factory-setting in the ALMEMO® connector so that ALMEMO® devices will immediately indicate the current heat flow density in W/m^2 .

Types:

Model	Application	Order No.
117	for even surfaces, e.g. casement sections	FQA017C
118	for universal applications, e.g. solar-electric systems and insulating plates	FQA018C
119	especially for constructional industry, brickwork insulating plates, old buildings	FQA019C
120	small heat flow plate, e.g. for medicine, veterinary medicine, small components etc.	FQA020C
117 SI	flexible heat flow plate, suitable for even surfaces, e.g. casement sections	FQA017CSI
118 SI	flexible heat flow plate, suitable for even surfaces, e.g. solar-electric systems and insulating plates	FQA018CSI
150-1	flexible heat flow plate, particularly suitable for high temperatures e.g. for brickwork, insulated boilers and pipes	FQA0801H
150-2	particularly suitable for high temperatures, especially for the construction industry, masoned walls and insulating plates	FQA0802H

Technical Data:

Type	Dimensions (mm)	Meander Size (mm)	Substrate	Temperature Stability	Calibr. Val. approx. ($W/m^2 \approx 1 \text{ mV}$)	Accuracy of Calibr. Value
117	100 x 30 x 1.5	80 x 20	epoxy resin	80°C	< 50	5% at 25°C
118	120 x 120 x 1.5	90 x 90	epoxy resin	80°C	< 15	5% at 25°C
119	250 x 250 x 1.5	180 x 180	epoxy resin	80°C	< 8	5% at 25°C
120	33 Ø x 1.5	20 Ø	epoxy resin	80°C	< 150	5% at 25°C
117SI	100 x 30 x 3	80 x 20	silicone	80°C	< 50	5% at 25°C
118SI	120 x 120 x 3	90 x 90	silicone	80°C	< 15	5% at 25°C
150-1	180 x 100 x 0.6	170 x 90	Teflon	150°C	< 80	5% at 25°C
150-2	500 x 500 x 0.6	490 x 490	Teflon	150°C	< 10	5% at 25°C

Accessories:

Heat-conducting paste	Order No. ZB9000WP
Scotch tape for room temperature	Order No. ZQ9017KB
Self-adhesive film 24 x 100cm for room temperature	Order No. ZQ9017KF