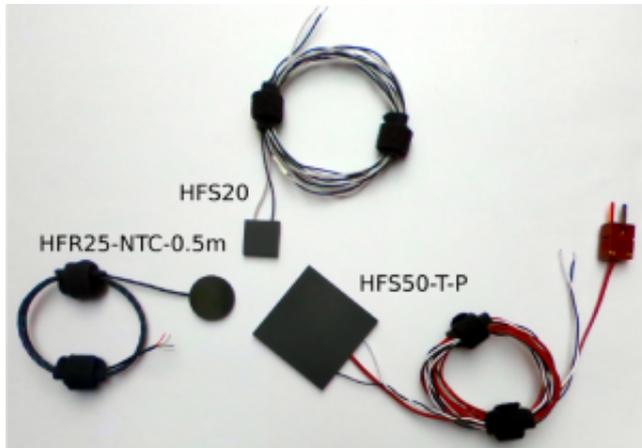


# angular universal Heat Flux Sensor with 20x20mm

**Order number: C03-020-010 Series/Model: HFS20**



[Bitte klicken zum Vergrößern](#)

**Universal Heat Flux Sensor in angular design for industry, laboratory and research**

## Main Product Features

- **Direct Heat Flux Readout**
- **Measures Bidirectional Heat Flow**
- **Sensitivity unaffected by Vacuum**
- **Self-generating output - requires no Amplifier no**
- **Power Supply or Reference Junction**
- **Easy to install - stick (glue**

The heat flow ( $\Phi$ ) through the sensor creates a small temperature gradient that is proportional to the heat flow.

The temperature gradient perpendicular to the sensor surface generates an equivalent voltage.

The heat flow readout of the sensor is the voltage multiplied with the calibration constant of the sensor.

## Applications:

- Green Roof and Soil
- Insulation evaluation of Roofs, Walls ect.
- Submarines and Vessels
- Biomedical research
- Laboratory & Classrooms

# Temperature Sensor Option

In order to also be able to measure the temperature during the heat flow measurement, the Heat-Flux-Sensor is optionally available with a temperature sensor.

Possible sensors are:

- Thermocouple type T (without/with plug)NTC with  $2.2k\Omega$  at  $25^{\circ}C$
- Thermocouple type K (without/with plug)
- NTC with with  $2.2k\Omega$  at  $25^{\circ}C$

## Cabels and wiring:

Sensors are equipped with 1 m cable.

Without temperature sensors cables are twisted pair FEP cables with black/white color coding and 1.2 mm diameter (AWG24).

Thermocouple temperature sensors are equipped with (1.4×2.4 mm, AWG24) PTFE cables. Sensors with NTC are connected by 0.6 mm (AWG30) FEP isolated cables for heat flow and NTC in a black FEP coating with a total diameter of 1.85 mm. Refer to Fig. 1 for the color coding.

Other cable coatings as i.e. PU on request possible.

## Heat-Flux-Sensor datasheet:

 [Universal Heat-Flux-Sensors Series HFxx \(821.4 KiB\)](#)



Opening the Download-Files May require the Adobe-Acrobat-Reader.  
[Click here to download the Adobe-Acrobat-Reader.](#)

---

*If you have questions please don't hesitate to contact us any time.*

Phone +49 (89) 3133007, Fax +49 (89) 3146706, [wuntronic@wuntronic.de](mailto:wuntronic@wuntronic.de) or send us our [Contact form](#)

Wuntronic GmbH, Heppstrasse 30, D-80995 Munich, Germany