



**HUKX**

Sensor  
Technology

Fact sheet  
Water-cooled heat flux sensor

**SBG04**

# SBG04

## Water-cooled heat flux sensor

Calibration reference for cone calorimeters

SBG04 is a water-cooled heat flux sensor designed for cone calorimeters. It is widely used as the calibration reference in cone calorimeter systems per ISO 5660 and ASTM E1354. Its novel design combines Gardon gauge and Schmidt-Boelter technology, delivering dependable calibration for fire-testing equipment.



high-temperature cable

water supply tubes

black-coated sensor

dimensions conform to  
ISO 5560

### Built for cone calorimeters

- all specifications and dimensions standardized for cone calorimeter use
- operational measurement range:  $(10 \text{ to } 70) \times 10^3 \text{ W/m}^2$
- limiting range:  $150 \times 10^3 \text{ W/m}^2$
- black-coating emissivity  $> 0.90$

### Fast, stable and accurate

- $< 0.25 \text{ s}$  (63 %) response time enables high-resolution measurements
- low temperature dependence:  $< 0.1\% / ^\circ\text{C}$
- broad, near flat spectral response over  $(0 \text{ to } 50) \times 10^{-6} \text{ m}$

### Robust and proven hardware

- slightly recessed, scratch-resistant black absorber coating
- supplied protection cap protects the black absorber during storage
- high-temperature glass-fiber cable with silicon resin (rated  $-60 \text{ to } +200 \text{ } ^\circ\text{C}$ )

### Simple integration in cone calorimeters

- designed for standard cone calorimeters per ISO 5660 / ASTM E1354
- cooling tubes fixed at  $90^\circ$  to the body axis for correct mounting geometry
- 0.5 inch (12.7 mm) diameter cylindrical sensor body

### World market leader

- SBG series has been on the market for over 10 years and used by majority of fire-testing institutes
- SBG04 is widely adopted as a cone calorimeter calibration reference

### Best paperwork

- formally traceable calibration certificates with every SBG04
- calibrated using the ISO 14934-3 secondary calibration method

## About Hukx

Hukx is the leading innovator in solar radiation and heat flux sensor technology. We are proud to set the standard in high-accuracy measurement, and to be working at the heart of the energy transition.

Customers worldwide rely on our bestselling pyranometers and heat flux sensors. From sensor design and selection to supply and recalibration, we support you across the entire lifecycle.

Hukx is headquartered in the Netherlands, with locally owned representative sales offices in the USA, Brazil, India, China, Southeast Asia, and Japan.

Let us help you select the best sensor for your application. Get in touch with our experts today via: [info@hukx.com](mailto:info@hukx.com)

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