FOX 50

FOX HEAT FLOW METER

The FOX 50 Heat Flow Meter is an accurate, easy-to-use instrument for measuring thermal conductivity according to **ASTM C518** and **ISO 8301**. The FOX 50 provides **rapid results in a compact footprint**. The instrument is configured with the identical high performance features and proprietary technologies of the larger FOX systems including thin film heat flux transducers, digital thickness measurements, responsive temperature control, plus an integrated contact-resistance correction. Covering a wide range of temperatures, the FOX 50 is an ideal choice for measurements of medium-conductivity materials such as plastics, ceramics, glasses, composites, concrete and more.

Features

- Compact size and cost-effective system for thermal conductivity measurements
- Solid state heating/cooling for precise temperature control
- Optical encoder for the most accurate digital measurement of sample thickness
- Proprietary thin film heat flux transducers for the most representative sample heat flow measurement
- Optional liquid cell for testing of fluids.
- Powerful WinTherm-50 software for enhanced testing functionality including heat capacity.
- Optional software for specific heat measurements of solids and liquids.
- Interfacial resistance correction (two-thickness method).
- Pyrex reference standards for calibration and verification. Accurate results can be produced for years between calibrations.
- Automatic sample feeder for high-throughput analyses
- Conforms to ASTM C518 and ISO 8301

FOX 50 Specifications

Maximum Sample Thickness	25 mm (1 inch)
Temperature Range, Standard	-10 ˚C to 110 ˚C
Temperature Range, Variable Heat Sink (VHS) Model	0 ˚C to 190˚C
Temperature Resolution	± 0.01 ˚C
Thermal Conductivity Range	0.1 to 10 W/(mK) (0.633 to 60.3BTU in/hr ft²˚F)
Thermal Resistance Range	0.003 to 0.05 m²K/W
Accuracy, Standard [1]	± 3%
Accuracy, (VHS) [1]	± 4%
Reproducibility	±2%
Sample Diameter	50 mm to 62 mm (25 mm optional)[2]
Available Configuration	Automatic Sample Feeder Vacuum
Proprietary Thin Film Heat Flux Transducer	25 x 25 mm (10 mm dia. optional)[2]
Instrument Dimensions	250 mm width, 170 mm depth, 360 mm height
Instrument Weight	11Kg
Power Requirement	115V or 220V, 50/60 Hz

[1] Two-thickness method specification
[2] Special order, requires small transducer