

Technical Data Sheet

SW40

Blackbody Radiator

- Temperature range from 30 ... 110 (150) °C ¹
- Radiator aperture Ø 40 mm
- Temperature non-uniformity < 0.2 K
- For calibrating Infrared Radiation Thermometers and Thermal Imaging Cameras



Measurement Specifications

Temperature range:	Room temperature + 10 ... 110 (150) °C ¹
Radiator Aperture:	40 mm
Depth of radiator tube:	150 mm
Temperature non-uniformity:	< 0.2 K
Controller oscillations:	± 0.01 °C
Warm-up time:	< 0.5 h
Bath volume:	4 l
Bath fluid:	Water or water-glykol ... 95 °C Silicone oil Korasilon M10 ... 150 °C ¹
Controller:	Immersion circulator Julabo Dyneo DD
Temperature unit:	°C or °F
Set point resolution:	0.01 °C
Emissivity:	> 0.995

Electrical Specifications

Interface:	<input checked="" type="checkbox"/> ² USB <input type="checkbox"/> RS232
Operating voltage:	<input checked="" type="checkbox"/> 230 VAC ± 10 % (50/60 Hz) <input type="checkbox"/> 115 VAC ± 10 % (50/60 Hz)
Power consumption:	2 kW

¹ Set up protection against contact from 110 °C on.

² Standard function
 Option

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General Specifications

Storage temperature:	5 ... 40 °C
Permissible ambient temperature:	5 ... 40 °C
Permissible relative humidity:	80 % @ 31 °C
Protection class:	IP21
Radiator material inside:	Stainless steel
Weight:	6.2 kg (w/o bath fluid)
Required cooling efficiency:	n.a.

Scope of supply and options

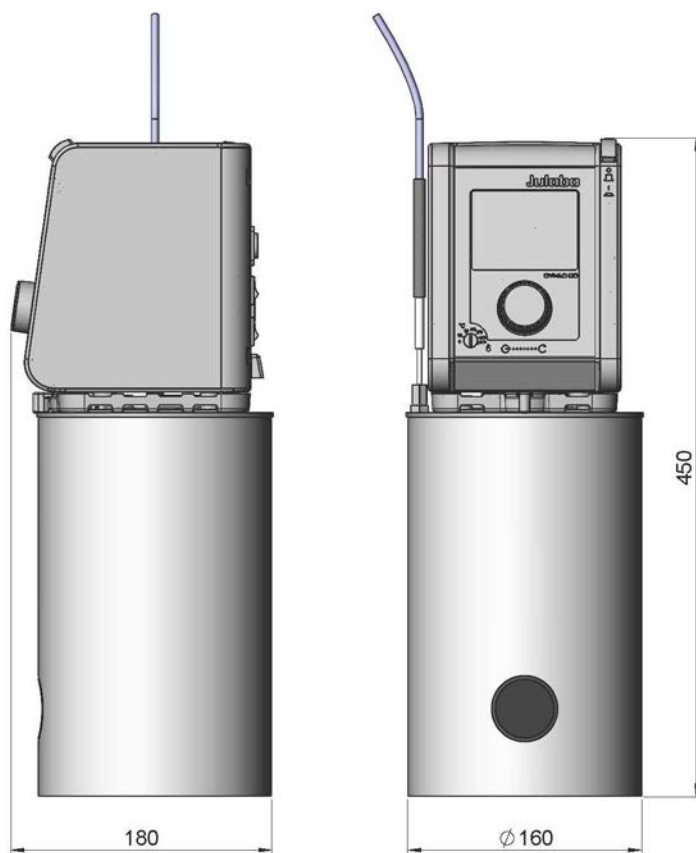
- ² Manual

Measuring the actual temperature of the radiator: Reference radiation thermometer: HEITRONICS Transfer Radiation Thermometer with traceability to National Standards

- Contact probe and emissivity adjustment, e.g. 3 mm Pt100

Calibration certificate: HEITRONICS certificate

Dimensions



Unit: mm