

## Blackbody Radiation Sources Technical Data

7.2000

### Blackbody Radiation Sources

Type	SW10C	SW11B	SW20	SW15
Temperature range	50 to 400 °C	350 to 1000 °C	30 to 95 (150) °C <sup>1)</sup>	100 °C
Cavity - Aperture ‡ - Depth	25 mm 105 mm	25 mm 145 mm	40 mm 120 mm	20 mm 37 mm
Emissivity	A0,99	A0,99	A0,995	A0,99
Real temperature control	external thermocouple or Pt100	external thermocouple or Pt100	external glass thermometer or PT100	LED
Uniformity of cavity temperature	< 1 °C	< 1 °C	< 0.2 °C	< 1 °C
Temperature sensor	built-in Pt100	built-in NiCrNi thermocouple	s. Thermostat	PTC
Dimensions	D189 mm L 320 mm	D180 mm L 320 mm	D160 H 260 mm	D45 mm H 95 mm
Weight radiator	8.2 kg	7.5 kg	ca. 3.5 kg	0.35 kg
Weight stand	2,15 kg	2,15 kg		
Filling			4l	

1) up to 95 °C with water, up to 150 °C with silicone

### Controllers for Blackbody Radiation Sources

Type	SR10C (for SW10C)	SR11B (for SW11B)	Thermostat (for SW20)
Temperature range	0 to 400 °C	0 to 1000 °C	-50 to 150 °C
Input	Pt100	NiCrNi-Thermocouple	integrated Pt100
Voltage	230 V ± 10 % (50/60 Hz)	230 V ± 10 % (50/60 Hz)	198 - 242 V, 50 - 60 Hz
Control behaviour	PID adjusted at radiator	PID adjusted at radiator	PID
Adjustable accuracy	1° with real value indication	1° with real value indication	0,5 % of accumulated value
Dimensions	235 x 145 x 360 mm	330 x 145 x 360 mm	
Weight	4 kg	10.5 kg	2.4 kg