

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 ¹⁾	100 °C
Cavity - Aperture \varnothing - Depth	25 mm 105 mm	25 mm 145 mm	40 mm 120 mm	20 mm 37 mm
Emissivity	$\geq 0,99$	$\geq 0,99$	$\geq 0,995$	$\geq 0,99$
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	\varnothing 189 mm L 320 mm	\varnothing 180 mm L 320 mm	\varnothing 160 H 260 mm	\varnothing 45 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			4 l	

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 \pm 10 % (50/60 Hz)	230 V \pm 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