

## Technical Information

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Substitutes: new

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## Mercury Short Arc Lamp for Microlithography

# HBO<sup>®</sup> 5500 W/PI

### ■ Product description

The OSRAM HBO<sup>®</sup> 5500 W/PI is a direct current mercury short arc lamp designed for the manufacture of printed circuit boards and semiconductor manufacturing. This lamp type emits a very high radiant intensity in the ultraviolet and visible wavelength range and is designed with the latest technology for a low intensity degradation over lifetime. It has been developed and optimized to fit in the ASML AT400B and PAS /450F; AT400C, D, XT:400E; scanner series.

### ■ Technical data

Order reference	HBO <sup>®</sup>	5500 W/PI
Rated lamp wattage	W	5,000
Rated lamp voltage	V	25
Rated lamp current (=)	A	200
Ignition voltage (cold)	kV <sub>s</sub>	max. 20
Radiant intensity 365 +/- 2,5 (mW/sr)	mW/sr	12,410
Electrode gap e (cold)	mm	5.5
Lamp length (overall) l <sub>2</sub>	mm	352.5 / max. 355
Bulb diameter d	mm	85
LCL a	mm	154
Guaranteed life	h	850

Base	<ul style="list-style-type: none"><li>• Anode: SFcX 42.5-6/50 with cable connection (M10)</li><li>• Cathode: SFa 37.5-9/50</li></ul>
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### ■ Lamp operation

Maximum permissible base temperature	°C	200
Cooling	forced base cooling	
Burning position	vertical, anode (+) up	

### ■ Safety Instruction

Due to their high luminous efficacy, the UV radiation which they emit and the high pressure within the lamp, HBO<sup>®</sup> lamps must be operated within enclosed, purpose-built housings. When a lamp breaks, mercury is released. Particular safety regulations must be paid attention (for details please request technical information sheet no. FO 4574).

