

Technical Information

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Mercury Short Arc Lamp
for i-line Microlithography

HBO® 5500 W/PIL

■ Product description

The OSRAM HBO® 5500 W/PIL is a direct current mercury short arc lamp designed for the manufacture of integrated circuit 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 AT:400B/C/D, PAS/450F w/PEP, and XT:4x0E scanner series.

■ Technical data

Order reference	HBO®	5500 W/PIL
Operation wattage	W	3,500 - 5,500
Rated wattage	W	5,500
Voltage at rated power	V	24.5 – 28.0
Current at rated power	A	196 – 225
Ignition voltage (cold)	kVs	max. 20
Lamp length (overall) l_2	mm	352.5 / max. 355
Bulb diameter d	mm	85
Electrode gap e (cold)	mm	5.5
LCL a	mm	154
Guaranteed life	h	See warranty declaration

Base	<ul style="list-style-type: none">• Anode: SFcX 42.5-6• Cathode: SFA 32.5-9
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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® 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).

