

## Technical Information

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Status: valid

Mercury Short Arc Lamp  
for Microlithography

# HBO<sup>®</sup> 3501 W/PI

### ■ Product description

The OSRAM HBO<sup>®</sup> 3501 W/PI is a direct current i-line lamp for microlithography processes within the wafer fabrication for Integrated Circuits. This lamp type emits a very high radiant intensity in the ultraviolet and visible wavelength range and is developed and optimized for use in ASML scanner equipment (PAS 5500/400 B/C).

### ■ Technical data

Order reference		HBO <sup>®</sup> 3501 W/PI
Rated lamp wattage	W	3,400
Rated lamp voltage	V	23
Rated lamp current (=)	A	148
Ignition voltage (cold)	kV <sub>s</sub>	max. 20
Radiant intensity (wave length range 365 ± 2,5 nm)	mW/sr	9,000
Electrode gap e	mm	4.5
Lamp length l <sub>1</sub>	mm	max. 360
Lamp length l <sub>2</sub>	mm	322.5
Bulb diameter d	mm	77
LCL a	mm	154
Guaranteed life	h	850

Base	<ul style="list-style-type: none"><li>• Cathode: SFc 32.5-6.7/50</li><li>• Anode: SFaX 40-6/50 with cable connection (M10)</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 may only be operated within enclosed, purpose-built housings. When a lamp breaks, mercury is released. Particular safety regulations should be paid attention (for details please request technical information sheet no. FO 4574).

