

## Technical Information

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Mercury Short Arc Lamp  
for Microlithography

# HBO<sup>®</sup> 5001 W/NIL

### ■ Product description

The OSRAM HBO<sup>®</sup> 5001 W/NIL is a direct current high intensity mercury short arc i-line lamp designed for the manufacture of integrated circuits (microlithography). This lamp type emits a very high radiant intensity in the ultraviolet and visible wavelength range and is especially suited for use in Nikon equipment SF 120 and SF 130.

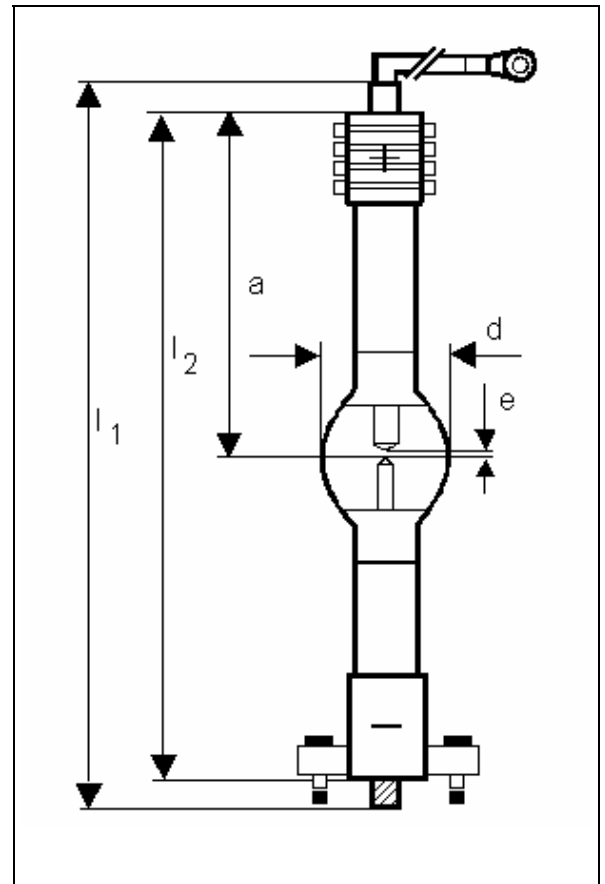
Approved by NIKON!

### ■ Technical data

Order reference		HBO <sup>®</sup> 5001 W/NIL
Rated lamp wattage	W	5,000
Rated lamp voltage	V	32
Rated lamp current (=)	A	156
Ignition voltage (cold)	kV <sub>S</sub>	25
Electrode gap e (cold)	mm	7.7
Lamp length (overall) l <sub>1</sub>	mm	max.485
Lamp length l <sub>2</sub>	mm	445/max.448
Bulb diameter d	mm	100
LCL a	mm	205
Guaranteed life	h	1,500

Base

- Cathode SFaX85-16/70
- Anode SfaX 46-15/72 with cable and lug(M8)



### ■ Lamp operation

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

### ■ 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).

**The lamp contains overpressure even in the cold status – additional safety regulations, supplied with the lamps, have to be fulfilled. Please read Technical bulletin DO-SEM TB 004 carefully.**

