

## Technical Information

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Substitutes: Edition 06/00

Status: valid

Mercury Short Arc Lamp  
for Microlithography

# HBO<sup>®</sup> 2000 W/NIL

### ■ Product description

The OSRAM HBO<sup>®</sup> 2000 W/NIL is a direct current 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 optimized for use in Nikon equipment (NSR-2005 i8A).

### ■ Technical data

Order reference	HBO <sup>®</sup>	2000 W/NIL
Rated lamp wattage	W	1,750
Rated lamp voltage	V	26
Rated lamp current (=)	A	67
Ignition voltage (cold)	kV <sub>S</sub>	max. 20
Radiant intensity (wave length range 350 ± 2,5nm)	mW/sr	5,200
Electrode gap e (cold)	mm	4.5
Lamp length (overall) l <sub>1</sub>	mm	max. 251
Lamp length l <sub>2</sub>	mm	219
Bulb diameter d	mm	55
LCL a	mm	112.25
Guaranteed life	h	1,500

Base

- Cathode: SFc 27-7/35 with cable connection (M8)
- Anode: SFc 27-12/35

### ■ Lamp operation

Maximum permissible 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).

