

Technical Information

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Mercury Short Arc Lamp
for Microlithography

HBO[®] 2000 W/NIL & /NI

n Product description

The OSRAM HBO[®] 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 especially suited for use in Nikon equipment (NSR-2005 8A). The HBO[®] 2000 W/NIL is the long-life version of the standard type HBO[®] 2000 W/NI with an average service life of 850h.

n Technical data

Order reference	HBO [®] 2000	2000 W/NI
Rated lamp wattage	W	1,750
Rated lamp voltage	V	26
Rated lamp current (=)	A	67
Ignition voltage (cold)	kV _s	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 ₁	mm	max. 251
Lamp length l ₂	mm	219 / max. 221
Bulb diameter d	mm	52
LCL a	mm	112.25
Average service life	h	1,500 / 850

Base

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

n Lamp operation

Maximum permissible
base temperature °C 200

Cooling forced base cooling

Burning position vertical, anode (+) up

The HBO[®] 2000 W/NIL can either be operated on standard ballasts or on electronic power supplies (ECG).

n Safety Instruction

Because 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).

