

Technical Information

No. FO 4877

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Substitutes: 01/99

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Mercury Short Arc Lamp
for Microlithography

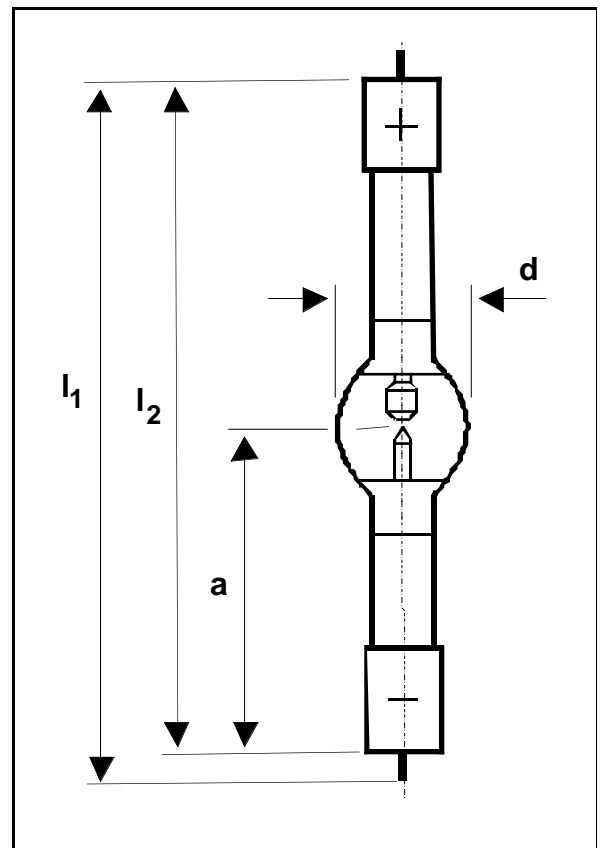
HBO[®] 4300 W/N

n Product description

The OSRAM HBO[®] 4300 W/N 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 (FX-501D3, FX-601F).

n Technical data

Order reference		HBO [®] 4300 W/N
Rated lamp wattage	W	4.300
Rated lamp voltage	V	45
Rated lamp current (=)	A	96
Ignition voltage (cold)	kV _s	max.
Electrode gap e (cold)	mm	5
Lamp length (overall) l ₁	mm	max. 387
Lamp length l ₂	mm	335 / max. 337
Bulb diameter d	mm	80
LCL a	mm	177,5
Average service life	h	750



Base

- Cathode: SFc 33,5-12/50
- Anode: SFc 33,5-14/50

n Lamp operation

Maximum permissible
base temperature °C 200

Cooling forced base cooling

Burning position vertical, anode (+) up

The HBO[®] 4300 WN 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).