

Technical Information

No. FO 4811

Edition: 06/00 - subject to change

Substitutes: Edition 11/98

Status: valid

Mercury Short Arc Lamp
for Microlithography

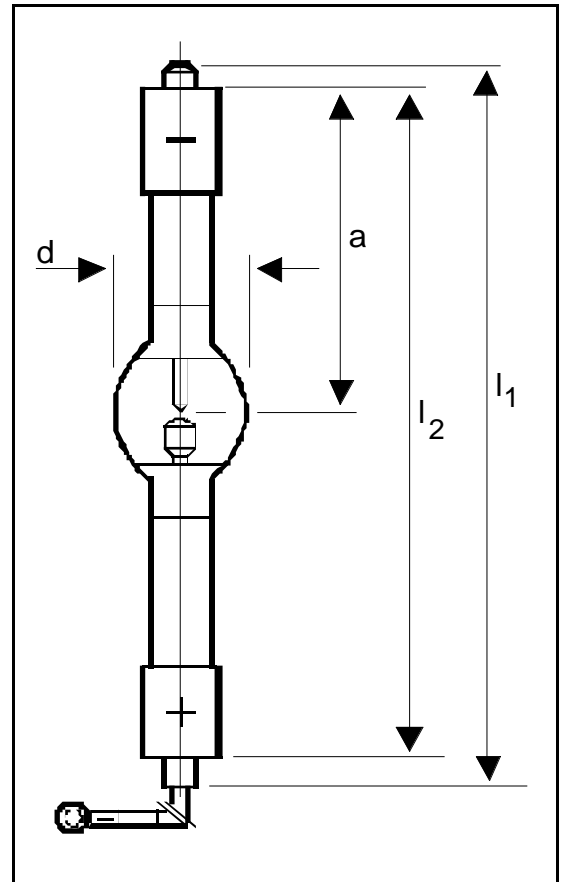
HBO[®] 2501 W/NIL

n Product description

The OSRAM HBO[®] 2501 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-4425 11D).

n Technical data

Order reference	HBO [®] 2501 W/NIL
Rated lamp wattage	W 2.500
Rated lamp voltage	V 23
Rated lamp current (=)	A 110
Ignition voltage (cold)	kV _s max. 20
Radiant intensity (wave length range 365 ± 2,5nm)	mW/sr 7.800
Electrode gap e (cold)	mm 4,5
Lamp length (overall) l ₁	mm max. 367
Lamp length l ₂	mm 325 / max. 327
Bulb diameter d	mm 70
LCL a	mm 157,75
Average service life	h 1.500
Base	<ul style="list-style-type: none">• Cathode: SFc 33,5-14/50• Anode: SFc 33,5-8/50 with cable connector (M8)



n Lamp operation

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

The HBO[®] 2501 W/NIL can either be operated on standard ballasts or on electronic power supplies (ECG).

n Safety Instruction

Because of their high luminous efficacy, the UV radiation which they emit and the high pressure within the lamp, HBO[®] 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).