

Technical Information

No. FO 5145

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Substitutes: new
Status: valid

Mercury Short Arc Lamp
for Microlithography

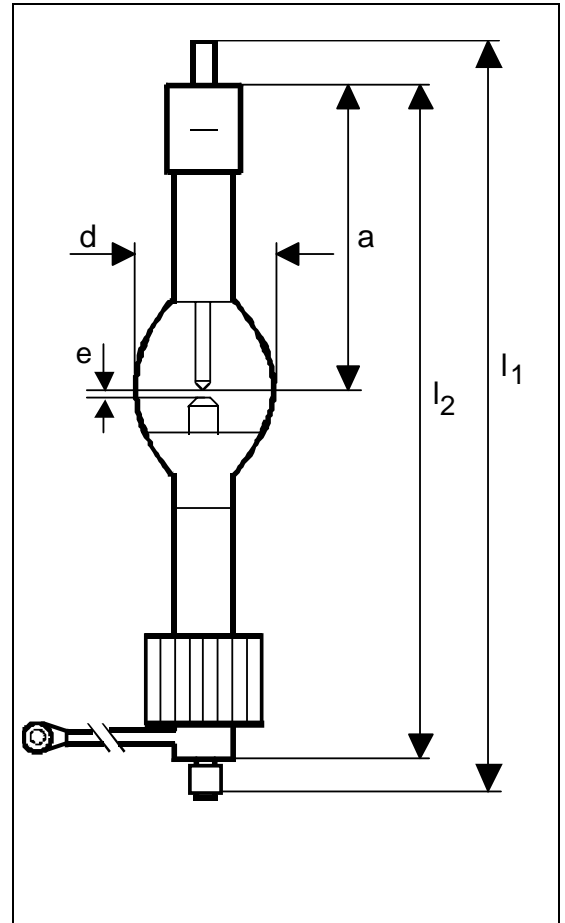
HBO[®] 2100 W/PIL

■ Product description

The OSRAM HBO[®] 2100 W/PIL 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, designed and optimized for use in ASML equipment (PAS 5500/25 and /125).

■ Technical data

Order reference	HBO [®]	2100 W/PIL
Rated lamp wattage	W	2,100
Rated lamp voltage	V	24
Rated lamp current (=)	A	87,5
Ignition voltage (cold)	kV _s	max. 20
Radiant intensity (wave length range 365 ± 2,5nm)	mW/sr	5,200
Electrode gap e (cold)	mm	4.5
Lamp length (overall) l ₁	mm	max. 273
Lamp length l ₂	mm	240 / max. 242
Bulb diameter d	mm	52
LCL a	mm	118
Guaranteed life	h	1,500



Base	<ul style="list-style-type: none">• Cathode: SFc 27-12/35• Anode: SK 33s/42 with cooling fins and cable connection
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■ Lamp operation

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

■ Safety Instruction

Due to 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).

