

Technical Information

No. FO 4993

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Substitutes: Edition 01/01

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Mercury Short Arc Lamp
For Microlithography

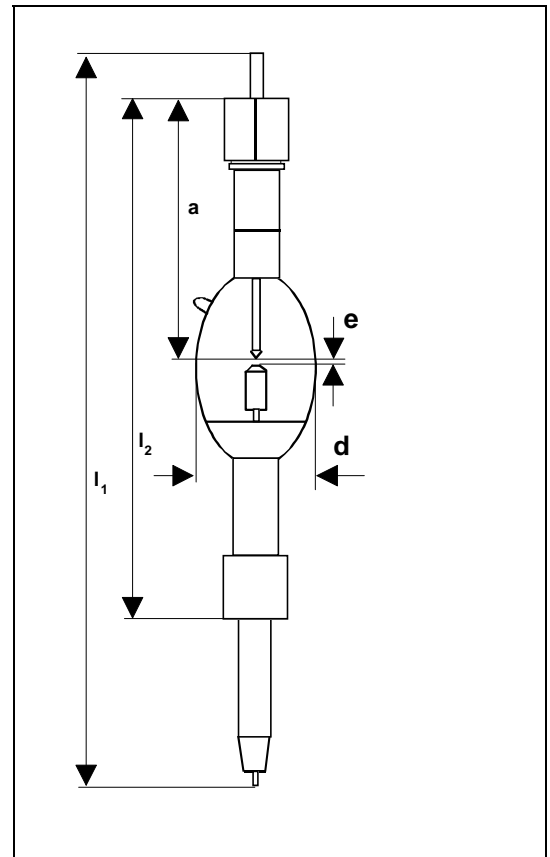
HBO[®] 450 W/GS

■ Product description

The OSRAM HBO[®] 450 W/GS belongs to the family of mercury short arc lamps, where the discharge arc burns in an atmosphere of high pressure mercury vapour. The HBO[®] 450 W/GS is a direct current, UV-emitting lamp type, designed and optimized for ASML PAS 2500/10-PEP; /30-PEP and /40-TEP illumination systems.

■ Technical Data

Order reference	HBO [®] 450 W/GS	
Rated lamp wattage	W	450
Lamp voltage	V	50
Operating current (=)	A	9
Luminous flux	lm	22,000
Lamp length overall l_1	mm	max. 150
Lamp length l_2	mm	105/max. 106
Bulb diameter	mm	22
LCL a	mm	53
Electrode gap e	mm	2.2
Guaranteed life	h	600
Bases	<ul style="list-style-type: none">• Cathode: SFc 13-4• Anode: SFc 13-8 hexagon base with thread 8-32 UNC	



■ Lamp operation

Maximum base temperature allowed	°C	230
Cooling	Convection	
Burning position	Vertical, s15; 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).