

Technical Information

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Mercury Short Arc Lamp for Microlithography

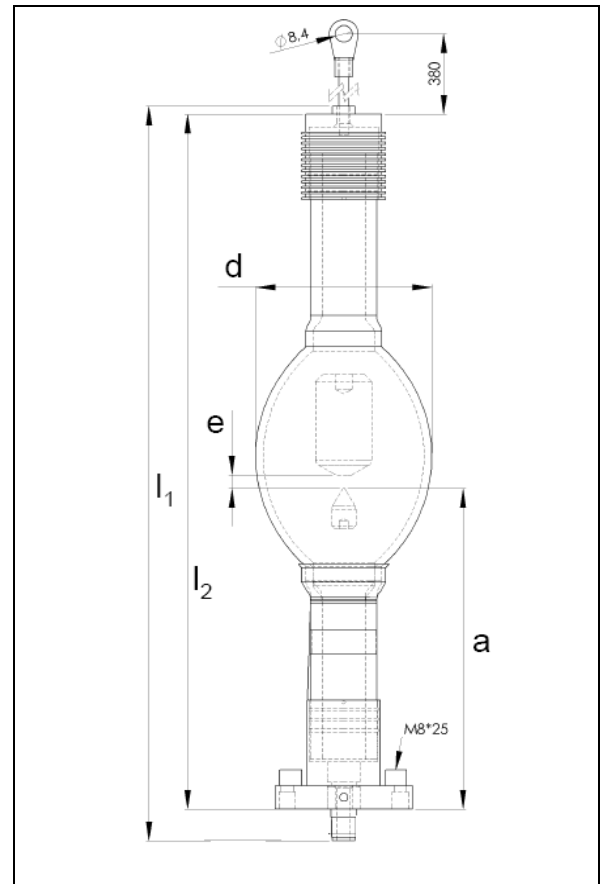
HBO[®] 7500 W/NILH2

■ Product description

The OSRAM HBO[®] 7500 W/NILH2 is a direct current high intensity 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 SF140, SF150, and SF155.

■ Technical data

Order reference		HBO [®] 7500 W/NILH2
Rated lamp wattage	W	7,500
Rated lamp voltage	V	34 – 39
Rated lamp current (=)	A	195 – 217
Ignition voltage (cold)	kV _s	25
Electrode gap e (cold)	mm	8.5
Lamp length (overall) l ₁	mm	max. 485
Lamp length l ₂	mm	447
Bulb diameter d	mm	109
LCL a	mm	205
Weight	g	3100
Warranty*	h	1500
Base		<ul style="list-style-type: none">• Cathode SFaX 85-16/65• Anode Sfa 52-14/72 with cable and lug (M8)



*) Intensity, Ignition and Rupture

■ Lamp operation

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

■ 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).

The lamp contains overpressure even in the cold status – additional safety regulations, supplied with the lamps, have to be fulfilled. Please read Technical bulletin DO-SEM TB 004 carefully.

