

Technical Information

No. FO 4798

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Substitutes: Edition 06/00

Status: valid

Mercury Short Arc Lamp
for Microlithography

HBO[®] 1500 W/CIL

■ Product description

The OSRAM HBO[®] 1500 W/CIL is a long life 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 optimized for use in Canon equipment (e.g. FPA 3000 i1, i2, i3). The HBO[®] 1500 W/CIL has an average 1500h service life.

■ Technical data

Order reference	HBO [®]	1500 W/CIL
Rated lamp wattage	W	1,500
Rated lamp voltage	V	23
Rated lamp current (=)	A	65
Ignition voltage (cold)	kV _S	max. 20
Radiant intensity (wave length range 365 ± 2,5nm)	mW/sr	4,850
Electrode gap e (cold)	mm	4
Lamp length (overall) l ₁	mm	max.262
Lamp length l ₂	mm	240 / max. 242
Bulb diameter d	mm	50
LCL a	mm	122
Guaranteed life	h	1,500

Base	<ul style="list-style-type: none">• Cathode: SFa 27-20/22 with cable connection (M8)• Anode: Sfa 27-10/35 with cable connection (M10)
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■ Lamp operation

Maximum permissible base temperature	°C	200
Cooling	forced base cooling	
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).

