Technical Information

No. FO 4134

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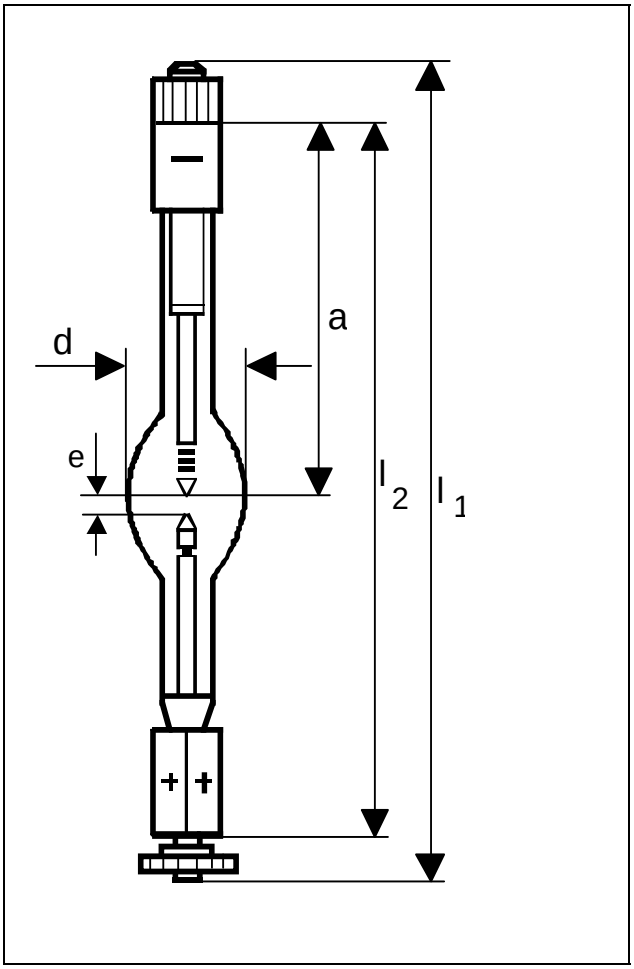
Substitutes: Edition 06/02
Status: valid

Mercury Short Arc Lamp
for Microlithography

HBO® 500 W/B

■ Product description

The OSRAM HBO® 500 W/B is especially optimized for constant power DC-operation. The lamp emits high radiant intensity in the UV and adjacent visible wavelength range. The HBO® 500 W/B distinct features are the high optical quartz glass quality and outstanding arc stability combined with a long service life.



■ Technical data

Order reference		HBO® 500 W/B
Rated lamp wattage	W	500
Rated lamp voltage	V	48.5
Rated lamp current (=)	A	10.3
Ignition voltage	kV_s	max. 15
Radiant power wave-length range 350-450nm	W	60
Radiant intensity wave-length range 350-450nm	mW/sr	5,800
Average luminance	cd/cm^2	64,000
Electrode gap e	mm	3
Lamp length l_1	mm	max. 180
Lamp length l_2	mm	150 / max. 151.5
Bulb diameter d	mm	29
LCL a	mm	78.5
Guaranteed life maintenance/explosion	h	800/1000
Base		• Cathode: SFcY 13-5/20 ka hexagon base with thread M5 • Anode: SXFc 13-5/20 with thread M5

■ Lamp operation

Maximum permissible base temperature	°C	200
Cooling		Convection
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).

Display/Optic Division
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