Technical Information

No. FO 4873

Edition: 06/02 - **subject to change**

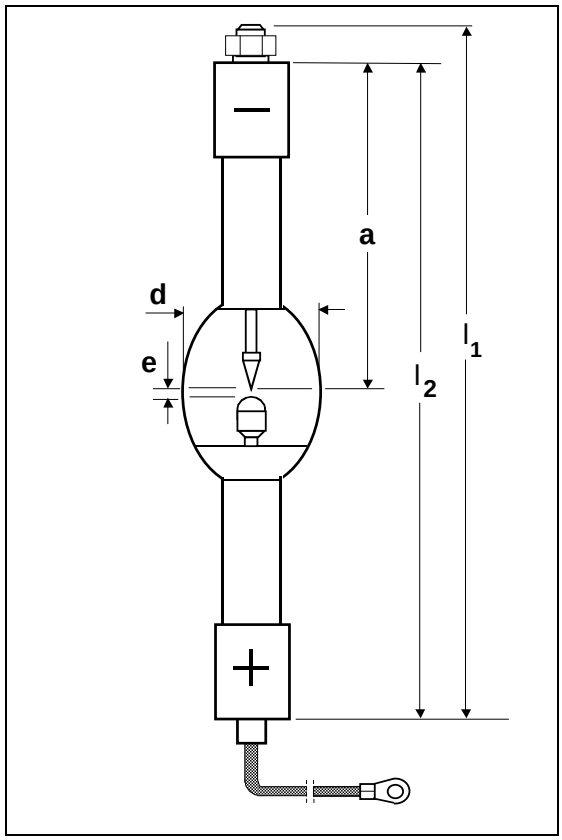
Substitutes: Edition 01/99
Status: valid

Mercury Short Arc Lamp
for Microlithography

HBO® 3500 W/MR

■ Product description

The OSRAM HBO® 3500 W/MR 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 and is optimized for the 4500 series of MRS panel-printers.



■ Technical data

Order reference		HBO® 3500 W/MR
Rated lamp wattage	W	3,500
Rated lamp voltage	V	62
Rated lamp current (=)	A	56
Ignition voltage (cold)	kV_S	max. 20
Radiant intensity (wave length range 365 ~ 450nm)	mW/sr	40,800
Electrode gap e (cold)	mm	6.6
Lamp length (overall) l_1	mm	max.317
Lamp length l_2	mm	290 / max.292
Bulb diameter d	mm	70
LCL a	mm	141.7
Guaranteed life	h	1,000
Base		• Cathode: SXFc 27-8/35 • Anode: SFc 27-5/35 with cable connection (M8)

■ 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).

Display/Optic Division
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