Technical Information
No. FO 5232
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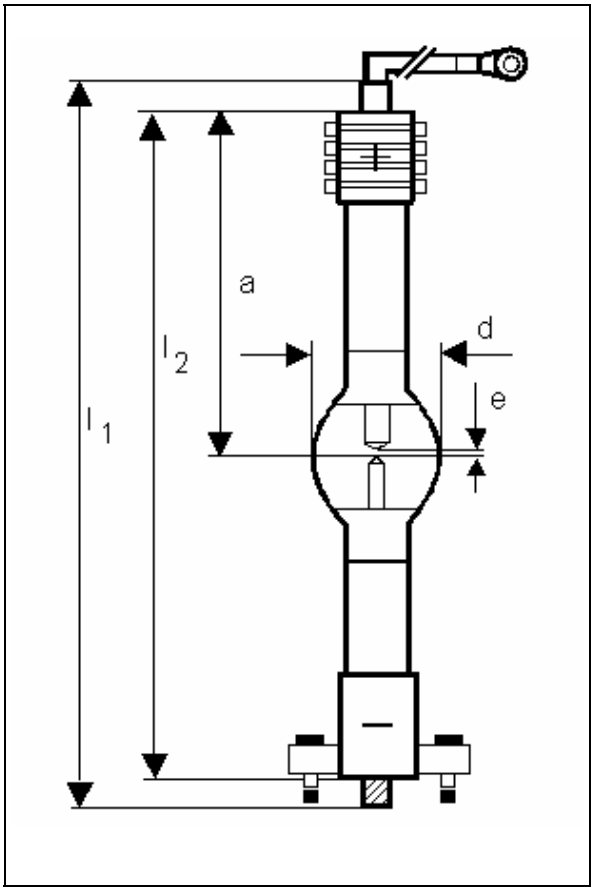
Substitutes: - - /- -
Status: preliminary

Mercury Short Arc Lamp
for Microlithography

HBO® 5001 W/NIL

■ Product description

The OSRAM HBO® 5001 W/NIL 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 SF 120 and SF 130. Approval process by Nikon is ongoing



■ Technical data

Order reference		HBO® 5001 W/NIL
Rated lamp wattage	W	5,000
Rated lamp voltage	V	32
Rated lamp current (=)	A	156
Ignition voltage (cold)	kV_S	25
Electrode gap e (cold)	mm	7.7
Lamp length (overall) l_1	mm	max.485
Lamp length l_2	mm	445/max.448
Bulb diameter d	mm	100
LCL a	mm	205
Guaranteed life	h	1,500
Base		• Cathode SFaX85-16/70 • Anode SfaX 46-15/72 with cable and lug(M8)

■ 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.

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