Technical Information

No. FO 5092

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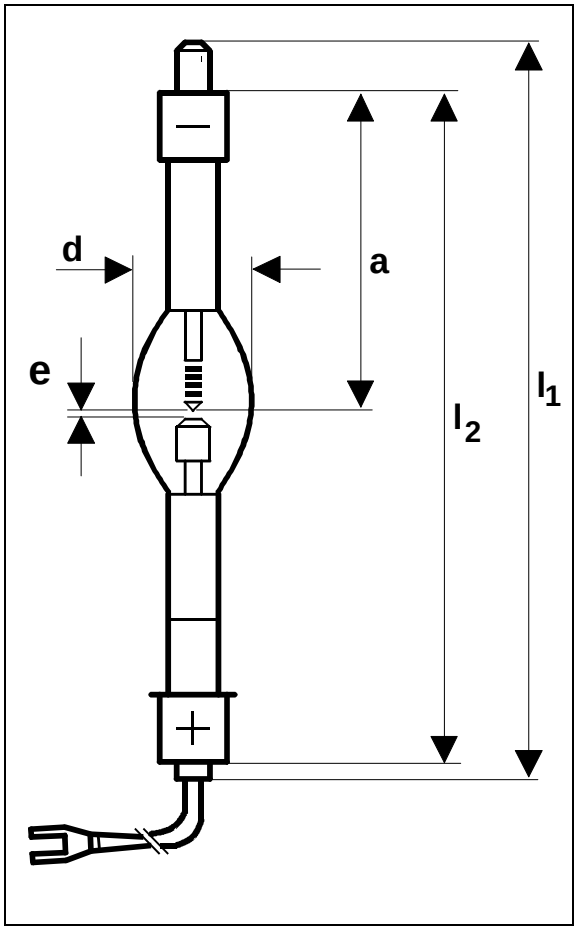
Status: valid

Mercury Short Arc Lamp
for Microlithography

HBO® 1002 W/NIL

■ Produktbeschreibung

The OSRAM HBO® 1002 W/NIL is a mercury short arc lamp designed for the manufacturing of integrated circuits (microlithography). The lamp emits very high radiant intensity in the ultraviolet and visible wavelength range and is optimized for use in Nikon i-line stepper machines (NSR-1505 i6A,7A,8A, NSR 1755 i7A/B). It can both be operated in constant power operation and pulse mode operation. Approved by Nikon!



■ Technische Daten

Order reference	HBO®	1002 W/NIL
Rated lamp wattage (constant power operation)	W	max. 750
Rated lamp wattage (pulse mode operation)	W	700 / 1,000
Rated lamp voltage	V	27.1
Rated lamp current (=)	A	25.8
Ignition voltage (cold)	kV_S	max. 20
Radiant power (wave length range 365 ± 2,5nm)	W	18.7
Radiant intensity (wave length range 365 ± 2,5nm)	mW/sr	2,400
Electrode gap e	mm	3
Lamp length (overall) l_1	mm	max. 187
Lamp length l_2	mm	max. 168
Bulb diameter d	mm	29
LCL a	mm	78.5
Guaranteed life	h	1,500
Base		• Cathode: SFcX 15-6/25 Sleeve base with thread M6 • Anode: SFaX 14-5/21 with cable connector (M5)

■ 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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