

Technical Information

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Mercury Short Arc Lamp
for Microlithography

HBO[®] 2001 W/NIEL

■ Product description

The HBO[®] 2001 W/NIEL is a direct current i-line lamp for microlithography processes within the wafer production of integrated circuits. This lamp type emits a very high radiant intensity in the ultraviolet and visible wavelength range and is optimized for Nikon stepper machines (NSR-2005 i9C, i10, i11). The HBO[®] 2001 W/NIEL stands out due to its extended long life of 2.250 hours. It is also available as long life-version HBO[®] 2001 W/NIL with 1.500h service life. Nikon approval process ongoing!

■ Technical data

order reference	HBO [®]	2001W/NIEL
Rated lamp wattage	W	1,750
Rated lamp voltage	V	26
Rated lamp current (=)	A	67
Ignition voltage (cold)	kV _s	max. 30
Radiant intensity (wave length range 365 ± 2,5 nm; measured at rated power)	mW/sr	5,500
Electrode gap (cold)	mm	4.5
Lamp length (overall) l_1	mm	max. 251
Lamp length l_2	mm	229
Diameter d	mm	55
LCL a	mm	112.25
Guaranteed life	h	2,250

Base	<ul style="list-style-type: none">• Cathode: SFc 27-7/35 with cable connection (M8)• Anode: SFc 27-10/35
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■ Lamp operation

Maximum permissible base temperature	°C	200
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Cooling	Forced base cooling
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Burning position	Vertical, anode underneath
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■ 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).

