

Technical Information

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Mercury Short Arc Lamp
for Microlithography

HBO[®] 2001 W/NIEL & /NIL

n Product description

The HBO[®] 2001 W/NIEL is a direct current i-line lamp for microlithography. This lamp type emits a very high radiant intensity in the ultraviolet and visible wavelength range and is especially suited for Nikon stepper machines (NSR-2005 i9C, i10, i11). The HBO[®] 2001 W/NIEL stands out due to its extended long life of 2.100 hours. It is also available as longlife-version HBO[®] 2001 W/NIL with 1.500h and as standard-version HBO[®] 2001 W/NI with an average 850h service life. The standard-version is obsolete, delivery on demand only.

n Technical data

order reference	HBO [®]	2001W/NIEL	2001W/NIL
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	
Lamp length (overall) l ₁	mm	max. 251	
Lamp length l ₂	mm	229 / max. 231	
Diameter d	mm	52	
LCL a	mm	112.25	
Electrode gap (cold)	mm	4.5	
Average service life	h	2,250	1,500
Base		• Cathode: SFc 27-7/35 with cable connection (M8) • Anode: SFc 27-10/35	

n Lamp operation

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

n Safety Instruction

Because 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).

