

HBO-IC Microlithography lamps for ASML i-line systems

Microlithography lamps for ASML i-line systems



327111_HBO 6500WPIH



Product family datasheet

Technical data

Product description	Electrical data					Dimensions & weight	
	Nominal voltage	Nominal current	Type of current	Rated wattage	Nominal wattage	Diameter	Length
HBO 1003 W/PIL	271 V	258 A	DC	70000 W	700 W ... 1000 W	290 mm	1950 mm
HBO 1500 W/PIL	230 V	6500 A	DC	150000 W	150000 W	460 mm	2730 mm
HBO 2100 W/PIL	240 V	78 A	DC	210000 W	210000 W	520 mm	2400 mm
HBO 2500 W/PIL	28.0 V	90 A	DC	250000 W	250000 W	620 mm	3400 mm
HBO 3500 W/PIL	230 V	148 A	DC	340000 W	3400.00 W	770 mm	3600 mm
HBO 5500 W/PIL	270 V	204 A	DC	550000 W	550000 W	850 mm	3255 mm
HBO 5510 W/PIHL ¹⁾	290 V	190 A	DC	550000 W	5500.00 W	8500 mm	3525 mm
HBO 6500 W/PIH ¹⁾	290 V	225 A	DC	650000 W	650000 W	9200 mm	3725 mm

Product description	Mountin g length	Length with base excl. base pins/connection	Light center length (LCL)	Electrode gap cold	Additional product data
					Base anode (standard designation)
HBO 1003 W/PIL	195.0 mm	167.50 mm	85.0 mm ²⁾	3.0 mm	SFcX14-6/25 ³⁾
HBO 1500 W/PIL	273.0 mm	240.00 mm	118.0 mm ²⁾	4.0 mm	SFc30-6/25 ⁷⁾
HBO 2100 W/PIL	273.0 mm	240.00 mm	118.0 mm ²⁾	4.0 mm	
HBO 2500 W/PIL		312.50 mm	149.0 mm ²⁾	7.0 mm	SFa30-6/50 ⁸⁾
HBO 3500 W/PIL		320.00 mm	154.0 mm ²⁾	4.5 mm	SFaX40-6/50 ⁸⁾
HBO 5500 W/PIL	355.0 mm	352.50 mm	154.0 mm ²⁾	5.5 mm	SFcX42.5-6/50 ¹⁰⁾
HBO 5510 W/PIHL ¹⁾	355.0 mm	352.50 mm	154.0 mm ²⁾	5.5 mm	
HBO 6500 W/PIH ¹⁾	372.5 mm	372.50 mm	174.0 mm ²⁾	7.0 mm	SFaX45-6/42 ¹⁰⁾

Product description	Base cathode (standard designation)	Capabilities		Environmental information Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)
		Cooling	Burning position	Date of Declaration
HBO 1003 W/PIL	SFc15-6/25 ⁴⁾	Forced ⁵⁾	Other ⁶⁾	05-03-2024
HBO 1500 W/PIL	SFc27-10/35	Forced ⁵⁾	Other ⁶⁾	05-03-2024
HBO 2100 W/PIL			Other ⁶⁾	05-03-2024

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		Capabilities		Environmental information Information according Art. 33 of EU Regulation (EC) 1907/2006 (RECh)
Product description	Base cathode (standard designation)	Cooling	Burning position	Date of Declaration
HBO 2500 W/PIL	SFc30-6.5/50	Forced ⁵⁾	Other ⁹⁾	05-03-2024
HBO 3500 W/PIL	SFc32.5-6.7/50	Forced ⁵⁾	Other ⁹⁾	05-03-2024
HBO 5500 W/PIL	SFa37.5-9/50	Forced ⁵⁾	Other ⁹⁾	05-03-2024
HBO 5510 W/PIHL ¹⁾			Other ⁹⁾	05-03-2024
HBO 6500 W/PIH ¹⁾	SFa45-11/70	Forced ⁵⁾	Other ⁹⁾	05-03-2024

Product description	Primary Article Identifier	Candidate List Substance 1	CAS No. of substance 1	Safe Use Instruction
HBO 1003 W/PIL	4050300461380 4050300967097	Lead	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.
HBO 1500 W/PIL	4050300461465 4050300801308 4050300967103 4008321630872	Lead	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.
HBO 2100 W/PIL	4050300800431	Lead	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.
HBO 2500 W/PIL	4050300947396	Lead	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.
HBO 3500 W/PIL	4008321355836 4008321355843	Lead	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.
HBO 5500 W/PIL	4008321352293	Lead	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.

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Product description	Primary Article Identifier	Candidate List Substance 1	CAS No. of substance 1	Safe Use Instruction
HBO 5510 W/PIHL ¹⁾	4008321355799	Lead	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.
HBO 6500 W/PIH ¹⁾	4008321352484			

Product description	Declaration No. in SCIP database
HBO 1003 W/PIL	b9c92b80-c1d8-4748-8fda-1d2d66728131 31a5877e-d4ec-4106-b4a4-a38a88565ee5
HBO 1500 W/PIL	e22d7304-fdce-45fd-8d2a-6aa5291d1a5b d36bbc5d-42c8-43bc-a0b2-b64742e4d075 910a2e30-b741-4571-8470-190c5ee7888d
HBO 2100 W/PIL	e65b3165-1b6a-4da8-9fd8-852bef40597d
HBO 2500 W/PIL	7eee76a5-c4d5-4b9f-b456-ddffe12f4ebb
HBO 3500 W/PIL	524e5e1f-27b9-4bac-9f5e-5502c763034c 34bb99bc-0897-4e24-883a-0817db1e7cd5
HBO 5500 W/PIL	6b7278b8-d3b4-462a-9326-20823adb4178
HBO 5510 W/PIHL ¹⁾	b89719ab-c1e6-4c02-9129-76d93997743b
HBO 6500 W/PIH ¹⁾	In work

¹⁾ Lamp contains overpressure even in cold status - additional safety regulations, supplied with the lamps, have to be fulfilled. Please read Technical bulletin DO-SEM TB 004 carefully

²⁾ Distance from end of base to tip of anode or cathode (cold)

³⁾ With cooling fins

⁴⁾ With thread (M6)

⁵⁾ Maximum permissible base temperature: 200 °C

⁶⁾ Anode underneath

⁷⁾ Cooling fins and cable connection (M 8)

⁸⁾ With cooling fins and cable connection (M 10)

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⁹⁾ Anode on top

¹⁰⁾ With cable connection (M 10)

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Safety advice

Because of their high luminance, UV radiation and high internal pressure (when hot) HBO lamps may only be operated in enclosed lamp casings specially constructed for the purpose. Mercury is released if the lamp breaks. Special safety precautions must be taken. More information is available on request or can be found in the leaflet included with the lamp or in the operating instructions.

Application advice

For more detailed application information and graphics please see product datasheet.

Disclaimer

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.