

## HBO Microlithography Lamps for ASML i-line Systems



### Areas of application

- Microlithography

### Product features and benefits

- High spectral intensity with peak irradiance at 365nm wavelength, making it ideal for microlithography
- Designed for long lasting performance
- Qualified with ASML
- Qualified with ASML



Product family datasheet

Technical data

General Product Information				
Product description	Product number (Americas)	Product name (Americas)	Family brand	Global order reference
HBO 1003 W/PIL	69180	HBO 1003 W/PIL	HBO	HBO 1003 W/PIL
HBO 1500 W/PIL	69181	HBO 1500W/PIL 6/CS 1/SKU	HBO	HBO 1500 W/PIL
HBO 2100 W/PIL	69501	HBO 2100W/PIL 1/CS 1/SKU	HBO	HBO 2100 W/PIL
HBO 2500 W/PIL	69172	HBO 2500W/PIL 1/CS 1/SKU	HBO	HBO 2500 W/PIL
HBO 3500 W/PIL	69117	HBO 3500W/PIL 4/CS 1/SKU		HBO 3500 W/PIL
HBO 5500 W/PIL	69521	HBO 5500W/PIL 1/CS 1/SKU	HBO	HBO 5500 W/PIL
HBO 5510 W/PIHL <sup>1)</sup>	69556	HBO 5510W/PIHL 1/CS 1/SKU	HBO	HBO 5510 W/PIHL

Product description	Lamp type	Electrical Data		Photometric Data
		Nominal wattage	Nominal voltage	Light center length (LCL)
HBO 1003 W/PIL		1003 W	27.1 V	85.0 mm <sup>2)</sup>
HBO 1500 W/PIL	DOUBLE ENDED	1500 W	23 V	118.0 mm <sup>2)</sup>
HBO 2100 W/PIL		2100 W	24 V	118.0 mm <sup>2)</sup>
HBO 2500 W/PIL	DOUBLE ENDED	2500 W	28.0 V	149.0 mm <sup>2)</sup>
HBO 3500 W/PIL		3500 W	23 V	154.0 mm <sup>2)</sup>
HBO 5500 W/PIL		5500 W	27 V	154.0 mm <sup>2)</sup>
HBO 5510 W/PIHL <sup>1)</sup>		5500 W	29 V	154.0 mm <sup>2)</sup>

Product description	Physical Attributes & Dimensions	Operating Conditions		Lifetime Data
	Length	Burning position	Cooling	Nominal lifetime
HBO 1003 W/PIL	195.0 mm	Other <sup>3)</sup>	Forced <sup>4)</sup>	1500 hr
HBO 1500 W/PIL	273.0 mm	Other <sup>3)</sup>	Forced <sup>4)</sup>	1500 hr
HBO 2100 W/PIL	240.0 mm	Other <sup>3)</sup>		1500 hr
HBO 2500 W/PIL	340.0 mm	Other <sup>5)</sup>	Forced <sup>4)</sup>	1500 hr
HBO 3500 W/PIL	360.0 mm	Other <sup>5)</sup>	Forced <sup>4)</sup>	
HBO 5500 W/PIL	325.5 mm	Other <sup>5)</sup>	Forced <sup>4)</sup>	1500 hr
HBO 5510 W/PIHL <sup>1)</sup>	352.5 mm	Other <sup>5)</sup>		1500 hr

Product family datasheet

Environmental & Regulatory Information Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)				
Product description	Primary article identifier	Declaration no. in SCIP database	Candidate list substance 1	CAS No. of substance 1
HBO 1003 W/PIL	4050300461380   4050300967097	b9c92b80-c1d8-4748-8fda-1d2d66728131   31a5877e-d4ec-4106-b4a4-a38a88565ee5	Lead	7439-92-1
HBO 1500 W/PIL	4050300967103   4050300461465	910a2e30-b741-4571-8470-190c5ee7888d   e22d7304-fdce-45fd-8d2a-6aa5291d1a5b	Lead	7439-92-1
HBO 2100 W/PIL	4050300800431	e65b3165-1b6a-4da8-9fd8-852bef40597d	Lead	7439-92-1
HBO 2500 W/PIL	4050300947396	7eee76a5-c4d5-4b9f-b456-ddffe12f4ebb	Lead	7439-92-1
HBO 3500 W/PIL	4008321355843	34bb99bc-0897-4e24-883a-0817db1e7cd5	Lead	7439-92-1
HBO 5500 W/PIL	4008321352293	6b7278b8-d3b4-462a-9326-20823adb4178	Lead	7439-92-1
HBO 5510 W/PIHL <sup>1)</sup>	4008321355799	b89719ab-c1e6-4c02-9129-76d93997743b	Lead	7439-92-1

Product description	Safe use instruction
HBO 1003 W/PIL	The identification of the Candidate List substance is sufficient to allow safe use of the article.
HBO 1500 W/PIL	The identification of the Candidate List substance is sufficient to allow safe use of the article.
HBO 2100 W/PIL	The identification of the Candidate List substance is sufficient to allow safe use of the article.

Product family datasheet

Product description	Safe use instruction
HBO 2500 W/PIL	The identification of the Candidate List substance is sufficient to allow safe use of the article.
HBO 3500 W/PIL	The identification of the Candidate List substance is sufficient to allow safe use of the article.
HBO 5500 W/PIL	The identification of the Candidate List substance is sufficient to allow safe use of the article.
HBO 5510 W/PIHL <sup>1)</sup>	The identification of the Candidate List substance is sufficient to allow safe use of the article.

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) Anode underneath

4) Maximum permissible base temperature: 200 °C

5) Anode on top

## Product family datasheet

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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.

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### Application advice

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

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### Disclaimer

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