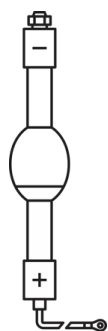


## HBO-IC Microlithography lamps for other systems

Microlithography lamps for other systems



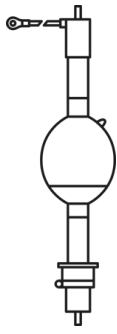
327095\_HBO 3500WMR



327103\_HBO 5000WMF

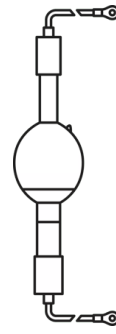


## Product family datasheet



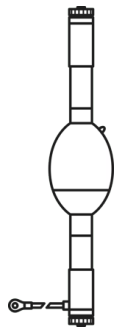
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327105\_HBO 5000WS



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327107\_HBO 5000WTA



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327109\_HBO 5001WF

## 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 201 W/HS-D2	25.0 V	800 A	DC	200.00 W	200.00 W	20.0 mm	150.0 mm
HBO 250 W/LS	39.0 V	64 A	DC	250.00 W	250.00 W	20.0 mm	147.0 mm
HBO 350 W <sup>1)</sup>	67.5 V	53 A	DC	350.00 W	350.00 W	20.0 mm	128.0 mm
HBO 350 W/S	68.0 V	515 A	DC	350.00 W	350.00 W	20.0 mm	127.0 mm
HBO 1000 W/D	37.7 V	2650 A	DC	1000.00 W	1000.00 W	40.0 mm	240.0 mm
HBO 500 W/A <sup>2)</sup>	60.0 V	83 A	DC	500.00 W	500.00 W	29.0 mm	190.0 mm
HBO 500 W/B <sup>2)</sup>	48.5 V	103 A	DC	500.00 W	500.00 W	29.0 mm	175.0 mm
HBO 1000W/DHL	45.0 V	222 A	DC	1000.00 W	1000.00 W	40.0 mm	206.0 mm
HBO 3500 W/MR	62.0 V	56 A	DC	3500.00 W	3500.00 W	70.0 mm	290.0 mm
HBO 3500 W/HK	55.0 V	63 A	DC	3500.00 W	3500.00 W	70.0 mm	280.0 mm
HBO 5000 W/HK	70.0 V	72 A	DC	5000.00 W	5000.00 W	82.0 mm	355.0 mm
HBO 5000 W/MF <sup>3)</sup>	50.0 V	10000 A	DC	5000.00 W	5000.00 W	80.0 mm	360.0 mm
HBO 5000 W/S <sup>3)</sup>	50.0 V	100 A	DC	5000.00 W	5000.00 W	80.0 mm	360.0 mm
HBO 5000 W/TA <sup>3)</sup>	50.0 V	10000 A	DC	5000.00 W	5000.00 W		358.0 mm
HBO 5001 W/F	62.0 V	80 A	DC	5000.00 W	5000.00 W	85.0 mm	490.0 mm

Product description	Electrode gap cold	Length with base excl. base pins/connection	Light center length (LCL)	Capabilities
				Burning position
HBO 201 W/HS-D2	2.0 mm			Other <sup>4)</sup>
HBO 250 W/LS	2.0 mm	127.00 mm	62.0 mm <sup>5)</sup>	Other <sup>7)</sup>
HBO 350 W <sup>1)</sup>	3.0 mm			Other <sup>7)</sup>
HBO 350 W/S	3.0 mm	127.00 mm	52.5 mm <sup>5)</sup>	Other <sup>7)</sup>
HBO 1000 W/D	3.0 mm	208.00 mm	89.5 mm <sup>5)</sup>	Other <sup>7)</sup>
HBO 500 W/A <sup>2)</sup>	4.5 mm			Other <sup>7)</sup>
HBO 500 W/B <sup>2)</sup>	3.0 mm			Other <sup>7)</sup>
HBO 1000W/DHL				Other
HBO 3500 W/MR	7.0 mm			Other <sup>7)</sup>
HBO 3500 W/HK	7.0 mm			Other <sup>4)</sup>
HBO 5000 W/HK	7.5 mm	302.00 mm	152.5 mm <sup>5)</sup>	Other <sup>7)</sup>
HBO 5000 W/MF <sup>3)</sup>	7.5 mm	318.00 mm	143.5 mm <sup>5)</sup>	Other <sup>4)</sup>

## Product family datasheet

Product description	Electrode gap cold	Length with base excl. base pins/connection	Light center length (LCL)	Capabilities
				Burning position
HBO 5000 W/S <sup>3)</sup>	7.5 mm	360.00 mm	143.5 mm <sup>5)</sup>	Other <sup>4)</sup>
HBO 5000 W/TA <sup>3)</sup>	7.5 mm	329.50 mm	148.5 mm <sup>5)</sup>	Other <sup>4)</sup>
HBO 5001 W/F	7.5 mm	430.00 mm	216.0 mm <sup>5)</sup>	Other <sup>7)</sup>

### Environmental information Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)

Product description	Cooling	Date of Declaration	Primary Article Identifier	Candidate List Substance 1
HBO 201 W/HS-D2		05-03-2024	4050300591940	Lead
HBO 250 W/LS	Convection <sup>6)</sup>	05-03-2024	4008321336668   4052899514843	Lead
HBO 350 W <sup>1)</sup>		05-03-2024	4050300351599	Lead
HBO 350 W/S	Convection <sup>8)</sup>	05-03-2024	4050300258041   4052899528192	Lead
HBO 1000 W/D	Convection	05-03-2024	4050300288857   4062172370745	Lead
HBO 500 W/A <sup>2)</sup>		05-03-2024	4050300021089	Lead
HBO 500 W/B <sup>2)</sup>		05-03-2024	4050300275819	Lead
HBO 1000W/DHL		06-03-2024	4008321673145	Lead
HBO 3500 W/MR		05-03-2024	4050300628301	Lead
HBO 3500 W/HK		05-03-2024	4050300628349   4008321546197	Lead
HBO 5000 W/HK	Forced <sup>9)</sup>	05-03-2024	4050300897585	Lead
HBO 5000 W/MF <sup>3)</sup>	Forced <sup>9)</sup>	05-03-2024	4050300772264   4052899247994	Lead
HBO 5000 W/S <sup>3)</sup>	Forced <sup>9)</sup>	05-03-2024	4008321147875   4008321147899   4062172213486	Lead
HBO 5000 W/TA <sup>3)</sup>	Forced <sup>9)</sup>	05-03-2024	4050300772240	Lead
HBO 5001 W/F	Forced <sup>9)</sup>	05-03-2024	4050300553016	Lead

Product description	CAS No. of substance 1	Safe Use Instruction	Declaration No. in SCIP database
HBO 201 W/HS-D2	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	0e66b0e9-1432-4003-8cc4-4d3a9d357685

## Product family datasheet

Product description	CAS No. of substance 1	Safe Use Instruction	Declaration No. in SCIP database
HBO 250 W/LS	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	872b1190-ab05-48f3-8283-61ef79b983c3   c2f27551-e9f2-44a8-9229-f4eeb5f6fb66
HBO 350 W <sup>1)</sup>	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	69139dd2-ff81-43c7-bcfa-b84bcd0b9cc1
HBO 350 W/S	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	664a7846-47f2-4d61-8323-e72e69aa88b3
HBO 1000 W/D	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	a7ed535d-b58b-40ea-8c22-64880ddaa6bb
HBO 500 W/A <sup>2)</sup>	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	454e0682-41e1-4c7d-a6fb-66d0753e0edc
HBO 500 W/B <sup>2)</sup>	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	5f991f9f-8f20-4d97-8224-80639ee6776f
HBO 1000W/DHL	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	35e19ed5-53bd-45ba-8079-3737c9f2fc21
HBO 3500 W/MR	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	17abf204-4183-4567-b724-a13eff07fd7a
HBO 3500 W/HK	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	9e83d6f9-1434-4cc3-823e-05a65726cf8e   43786f93-bbf9-4419-bc65-ce101b279063

## Product family datasheet

Product description	CAS No. of substance 1	Safe Use Instruction	Declaration No. in SCIP database
HBO 5000 W/HK	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	db52bb49-e4f0-495f-9c4a-2e113c01961f
HBO 5000 W/MF <sup>3)</sup>	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	026d4f20-6678-4452-8959-076527d7602a   56104d2b-53c0-4c9e-a751-6d8f2033b8f6
HBO 5000 W/S <sup>3)</sup>	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	df72245a-57ed-42fb-90a2-5ca3c09b618d   c0d6f8d6-6d7d-4632-96fe-32aacce2ee6a
HBO 5000 W/TA <sup>3)</sup>	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	d85e2c98-ac1c-41a5-8096-8ada8888ead0
HBO 5001 W/F	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	F53E86C1-B9C8-4685-B790-15AE3F0950FA

<sup>1)</sup> Lamp suitable for pulse operation between 250...500 W. Maximum permissible power is 350 W for constant power operation. Duty cycle 12 h ON/30 min OFF

<sup>2)</sup> Duty cycle 12 h ON/30 min OFF

<sup>3)</sup> 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

<sup>4)</sup> Anode on top

<sup>5)</sup> Distance from end of base to tip of anode or cathode (cold)

<sup>6)</sup> Maximum permissible base temperature: 230 °C

<sup>7)</sup> Anode underneath

<sup>8)</sup> Cooling fins on cathode base

<sup>9)</sup> Maximum permissible base temperature: 200 °C

## 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.