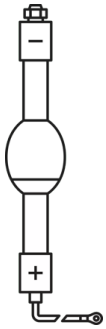
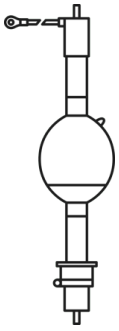
HBO-IC Microlithography lamps for other systems

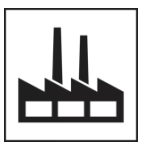
Microlithography lamps for other systems

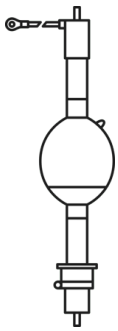


327095_HBO 3500WMR

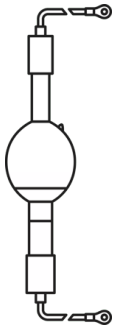


327103_HBO 5000WMF

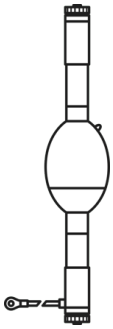




327105_HBO 5000WS



327107_HBO 5000WTA



327109_HBO 5001WF

Product family datasheet

Technical data

	Electrical data					Dimensions & weight	
Product description	**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 [1)]	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 [2)]	60.0 V	83 A	DC	500.00 W	500.00 W	29.0 mm	190.0 mm
HBO 500 W/B [2)]	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 [3)]	50.0 V	10000 A	DC	5000.00 W	5000.00 W	80.0 mm	360.0 mm
HBO 5000 W/S [3)]	50.0 V	100 A	DC	5000.00 W	5000.00 W	80.0 mm	360.0 mm
HBO 5000 W/TA [3)]	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

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

Product family datasheet

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

		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 [6]	05-03-2024	4008321336668 | 4052899514843	Lead
HBO 350 W [1]		05-03-2024	4050300351599	Lead
HBO 350 W/S	Convection [8]	05-03-2024	4050300258041 | 4052899528192	Lead
HBO 1000 W/D	Convection	05-03-2024	4050300288857 | 4062172370745	Lead
HBO 500 W/A [2]		05-03-2024	4050300021089	Lead
HBO 500 W/B [2]		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 [9]	05-03-2024	4050300897585	Lead
HBO 5000 W/MF [3]	Forced [9]	05-03-2024	4050300772264 | 4052899247994	Lead
HBO 5000 W/S [3]	Forced [9]	05-03-2024	4008321147875 | 4008321147899 | 4062172213486	Lead
HBO 5000 W/TA [3]	Forced [9]	05-03-2024	4050300772240	Lead
HBO 5001 W/F	Forced [9]	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 [1)]	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 [2)]	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 [2)]	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 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 [3]	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 [3]	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 [3]	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

[1] 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

[2] Duty cycle 12 h ON/30 min OFF

[3] 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

[4] Anode on top

[5] Distance from end of base to tip of anode or cathode (cold)

[6] Maximum permissible base temperature: 230 °C

[7] Anode underneath

[8] Cooling fins on cathode base

[9] Maximum permissible base temperature: 200 °C

Product family datasheet

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.