

HBO-IC Microlithography lamps for Nikon i-line systems

Microlithography lamps for Nikon i-line systems



327115_HBO 7500WNIL



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 1000 W/NEL ¹⁾	47.0 V	16 A	DC	750.00 W	750.00 ... 1000.00 W	28.0 mm	187.0 mm
HBO 1002 W/NEL ¹⁾	47.0 V	16 A	DC	750.00 W	750.00 ... 1000.00 W	28.0 mm	187.0 mm
HBO 1002 W/NIL ²⁾	27.1 V	25.8 A	DC	750.00 W	750.00 ... 1000.00 W	29.0 mm	190.0 mm
HBO 2000 W/NIL	26.0 V	67 A	DC	1750.00 W	2000.00 W	55.0 mm	219.0 mm
HBO 2001 W/NIL ³⁾	26.0 V	67 A	DC	1750.00 W	2000.00 W	52.0 mm	251.0 mm
HBO 2002 W/NIL	26.0 V	67 A	DC	1750.00 W	2000.00 W	999.0 mm	232.0 mm
HBO 2011 W/NIL	25 V	80 A	DC	2000.00 W	2000.00 W	55.0 mm	256.0 mm
HBO 2011 W/NILH ⁴⁾	24.0 V	83 A	DC	2000.00 W	2000.00 W	55.0 mm	234.0 mm
HBO 2501 W/NIL	23.0 V	109 A	DC	2500.00 W	2500.00 W	70.0 mm	357.0 mm
HBO 2510 W/NIL	23.0 V	109 A	DC	2500.00 W	2500.00 W	70.0 mm	357.0 mm
HBO 2510 W/NILH ⁴⁾	24.0 V	109.00 A	DC	2500.00 W	2500.00 W	70.0 mm	325.0 mm
HBO 3500 W/NIL ⁴⁾	27.0 V	130.00 A	DC	3500.00 W	3500.00 W	82.0 mm	382.0 mm
HBO 5002 W/NIL ⁴⁾	33.0 V	152 A	DC	5000.00 W	5000.00 W	110.0 mm	445.0 mm
HBO 5003 W/NIL ⁴⁾	33.0 V	152 A	DC	5000.00 W	5000.00 W	109.0 mm	485.0 mm
HBO 7500 W/NIL ⁴⁾	36.6 V	205.00 A	DC	7500.00 W	7500.00 W	100.0 mm	445.0 mm
HBO	36.5 V	205.00 A	DC	7500.00 W	7500.00 W	109.0 mm	485.0 mm

Product description	Mounting length	Light center length (LCL)	Electrode gap cold	Length with base excl. base pins/connection	Capabilities
					Burning position
HBO 1000 W/NEL ¹⁾	190.0 mm	84.5 mm ⁵⁾	3.0 mm		Other ⁶⁾
HBO 1002 W/NEL ¹⁾	190.0 mm	78.5 mm ⁵⁾	3.0 mm		Other ⁶⁾
HBO 1002 W/NIL ²⁾	168.0 mm		3.0 mm		Other ⁶⁾

Product family datasheet

Product description	Mountin g length	Light center length (LCL)	Electrode gap cold	Length with base excl. base pins/connection	Capabilities
					Burning position
HBO 2000 W/NIL	219.0 mm		4.5 mm		Other ⁷⁾
HBO 2001 W/NIL ³⁾	251.0 mm	122.25 mm ⁵⁾	4.5 mm	219.00 mm	Other ⁶⁾
HBO 2002 W/NIL	254.0 mm	107.75 mm ⁵⁾	4.5 mm	232.00 mm	Other ⁷⁾
HBO 2011 W/NIL	256.0 mm	107.75 mm ⁵⁾	4.5 mm	234.00 mm	Other ⁷⁾
HBO 2011 W/NILH ⁴⁾	256.0 mm	107.75 mm ⁵⁾	4.5 mm	234.00 mm	Other ⁷⁾
HBO 2501 W/NIL	367.0 mm		4.5 mm	325.00 mm	Other ⁶⁾
HBO 2510 W/NIL		157.75 mm ⁵⁾	4.5 mm	325.00 mm	Other ⁷⁾
HBO 2510 W/NILH ⁴⁾	372.0 mm	157.75 mm ⁵⁾	4.5 mm	327.00 mm	Other ⁷⁾
HBO 3500 W/NIL ⁴⁾		180.0 mm ⁵⁾	5.5 mm	335.00 mm	Other ⁷⁾
HBO 5002 W/NIL ⁴⁾	485.0 mm		8.0 mm	445.00 mm	Other ⁷⁾
HBO 5003 W/NIL ⁴⁾		205.0 mm ⁵⁾	8.0 mm	448.00 mm	Other ⁷⁾
HBO 7500 W/NIL ⁴⁾		205.0 mm ⁵⁾	7.5 mm	445.00 mm	Other ⁷⁾
HBO	485.0 mm	205.0 mm	8.5 mm	447.00 mm	Other

		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 1000 W/NEL ¹⁾		05-03-2024	4050300412603	Lead
HBO 1002 W/NEL ¹⁾		05-03-2024	4050300412610	Lead
HBO 1002 W/NIL ²⁾		05-03-2024	4050300461427 4050300461403 4008321474032	Lead
HBO 2000 W/NIL		05-03-2024	4050300490212 4050300812007	Lead
HBO 2001 W/NIL ³⁾		05-03-2024	4050300461489	Lead
HBO 2002 W/NIL		05-03-2024	4050300772714 4050300772721	Lead
HBO 2011 W/NIL	Forced ⁹⁾	05-03-2024	4050300652641 4050300947556	Lead
HBO 2011 W/NILH ⁴⁾		05-03-2024	4050300991665 4050300991658	Lead
HBO 2501 W/NIL		29-03-2024	4050300947297 4050300628288	Lead

Product family datasheet

		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 2510 W/NIL	Forced ⁹⁾	05-03-2024	4050300947433 4050300628400	Lead
HBO 2510 W/NILH ⁴⁾	Forced ⁹⁾	05-03-2024	4008321377401 4008321786814	Lead
HBO 3500 W/NIL ⁴⁾	Forced ⁹⁾	05-03-2024	4050300660769 4008321786852	Lead
HBO 5002 W/NIL ⁴⁾		05-03-2024	4008321396235 4008321498519	Lead
HBO 5003 W/NIL ⁴⁾	Forced ⁹⁾	05-03-2024	4008321597267	Lead
HBO 7500 W/NIL ⁴⁾	Forced ⁹⁾	05-03-2024	4008321352316 4008321635570	
HBO		06-03-2024	4052899192782	Lead
				Additional product data
Product description	CAS No. of substance 1	Safe Use Instruction	Declaration No. in SCIP database	Base anode (standard designation)
HBO 1000 W/NEL ¹⁾	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	b7aad6b7-239d-4797-a805-ae6751a3f976	
HBO 1002 W/NEL ¹⁾	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	1f2e946d-9c55-4867-9f0d-f02313a6c9b4	
HBO 1002 W/NIL ²⁾	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	a26110e2-bfaa-414e-a23a-66ef049262ec 6b6a843c-4c31-4245-a669-c55c9f941fc5	
HBO 2000 W/NIL	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	872bea5e-e36d-4d20-8070-c712fa71ac1a 52221302-1626-4f9b-9c7d-2853312df798	
HBO 2001 W/NIL ³⁾	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	51d17212-f48f-4e56-91b0-487db4ddc57b	

Product family datasheet

Product description	CAS No. of substance 1	Safe Use Instruction	Declaration No. in SCIP database	Additional product data
				Base anode (standard designation)
HBO 2002 W/NIL	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	d33a557f-f498-403d-81a3-7361ab714e29 dafe614e-50f7-4bbb-a24f-2dddcc546c20	
HBO 2011 W/NIL	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	5efb91be-af08-429e-aaec-b47e173fcb09 157b0c08-4c81-445d-8e68-87463e9cc30e	SFc27-7/35 ⁸⁾
HBO 2011 W/NILH ⁴⁾	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	61f82125-dd19-4a18-bcd9-b6d55245163a a1a066c2-cfdc-4227-8c5c-832a0146d005	
HBO 2501 W/NIL	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	faa2dfd8-6274-4952-b7d7-bd1fda2095b5 acad9a73-72da-4647-89c2-6332ec6c3c88	
HBO 2510 W/NIL	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	df583275-90c5-465a-a872-03833323bf4a ff6ff5ad-e173-4d6b-9e5c-d3c870774670	SFc33.5-12/50 ⁸⁾
HBO 2510 W/NILH ⁴⁾	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	92bc9755-eece-4ee3-b849-a0feb7ed059e d4772f0a-950e-4b36-82ff-5713e9129d61	SFc33.5-12/50 ⁸⁾
HBO 3500 W/NIL ⁴⁾	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	5df92030-3a5e-4864-84bf-e882635c629e 9a5773fe-12ce-4705-8ec8-420be627d42f	SFc33.5-16/50 ¹⁰⁾
HBO 5002 W/NIL ⁴⁾	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	3e9390ca-2914-4f60-8a71-81d16b10ba4b 2457b9ca-73a1-4b55-8427-c4753d9d4e97	

Product family datasheet

				Additional product data
Product description	CAS No. of substance 1	Safe Use Instruction	Declaration No. in SCIP database	Base anode (standard designation)
HBO 5003 W/NIL ⁴⁾	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	4f96383f-f294-498d-b0e7-d3ae255c89bc	SFaX46-15/72 ⁸⁾
HBO 7500 W/NIL ⁴⁾			In work	SFaX46-15/72 ⁸⁾
HBO	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	842ad130-da79-4606-836a-4b05927d72e6	

Product description	Base cathode (standard designation)
HBO 1000 W/NEL ¹⁾	
HBO 1002 W/NEL ¹⁾	
HBO 1002 W/NIL ²⁾	
HBO 2000 W/NIL	
HBO 2001 W/NIL ³⁾	
HBO 2002 W/NIL	
HBO 2011 W/NIL	SFc27-12x1.5/35
HBO 2011 W/NILH ⁴⁾	
HBO 2501 W/NIL	
HBO 2510 W/NIL	SFc33.5-14/50
HBO 2510 W/NILH ⁴⁾	SFc33.5-14/50
HBO 3500 W/NIL ⁴⁾	SFa33.5-12/50 ¹¹⁾
HBO 5002 W/NIL ⁴⁾	
HBO 5003 W/NIL ⁴⁾	SFaX85-16/70
HBO 7500 W/NIL ⁴⁾	SFaX85-16/70
HBO	

¹⁾ Lamp suitable for pulsed operation between 700...1000 W/Maximum permissible power 750 W for constant power operation

²⁾ Lamp suitable for pulsed operation between 700...1000 W

³⁾ Also available as Super Longlife version with 2,250 h lifespan: HBO 2001 W/NIEL (4050300538211)

⁴⁾ 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

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

⁶⁾ Anode underneath

⁷⁾ Anode on top

⁸⁾ With cable connection (M 8)

⁹⁾ Maximum permissible base temperature: 200 °C

¹⁰⁾ With thread (M 16)

¹¹⁾ With cable connection (M8)

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.