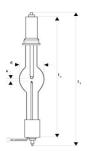


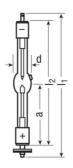
# HBO-IC

Microlithography lamps for other systems

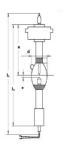




Product line drawing



Product line drawing

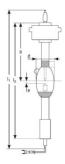


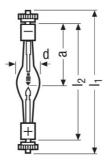
Product line drawing

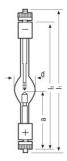








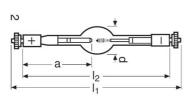


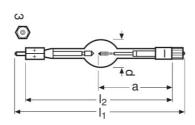


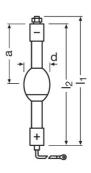
Product line drawing

Product line drawing

Product line drawing





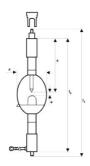


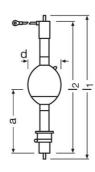
Product line drawing

Product line drawing

Product line drawing



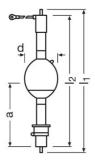


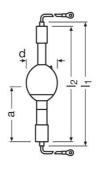


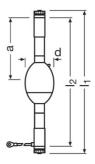
Product line drawing

Product line drawing

Product line drawing







Product line drawing

Product line drawing

Product line drawing

### Technical data

	Electrical data					Dimensions & weight	
Product description	Nominal voltage	Nominal current	Type of current	Rated wattage	Nominal wattage	Diamete r	Length
HBO 201 W/HS-D2	25.0 V	8.00 A	DC	200.00 W	200.00 W	20.0 mm	150.0 mm
HBO 250 W/BY	40.0 V	6.25 A	DC	250.00 W	250.00 W	20.0 mm	152.0 mm
HBO 250 W/HS	40.0 V	6.30 A	DC	250.00 W	250.00 W	20.0 mm	142.0 mm
HBO 250 W/LS	39.0 V	6.4 A	DC	250.00 W	250.00 W	20.0 mm	147.0 mm
HBO 350 W <sup>1)</sup>	67.5 V	5.3 A	DC	350.00 W	350.00 W	20.0 mm	128.0 mm
HBO 350 W/S	68.0 V	5.15 A	DC	350.00 W	350.00 W	20.0 mm	127.0 mm
HBO 1000 W/D	37.7 V	26.5 A	DC	1000.00 W	1000.00 W	40.0 mm	240.0 mm
HBO 500 W/A <sup>2)</sup>	60.0 V	8.3 A	DC	500.00 W	500.00 W	29.0 mm	190.0 mm
HBO 500 W/B <sup>2)</sup>	48.5 V	10.3 A	DC	500.00 W	500.00 W	29.0 mm	175.0 mm
HBO 1000W/DHL	45.0 V	22.2 A	DC	1000.00 W	1000.00 W	40.0 mm	206.0 mm
HBO 3500 W/MR	62.0 V	56.0 A	DC	3500.00 W	3500.00 W	70.0 mm	290.0 mm
HBO 3500 W/HK	55.0 V	63.0 A	DC	3500.00 W	3500.00 W	70.0 mm	280.0 mm
HBO 5000 W/HK	70.0 V	72.0 A	DC	5000.00 W	5000.00 W	82.0 mm	355.0 mm
HBO 5000 W/MF <sup>3)</sup>	50.0 V	100 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	100 A	DC	5000.00 W	5000.00 W	80.0 mm	358.0 mm
HBO 5001 W/F	62.0 V	80.0 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)	Dimmable
HBO 201 W/HS-D2	2.0 mm			No
HBO 250 W/BY	2.0 mm			No
HBO 250 W/HS	2.0 mm			No
HBO 250 W/LS	2.0 mm	127.00 mm	62.0 mm <sup>6)</sup>	No
HBO 350 W <sup>1)</sup>	3.0 mm			No
HBO 350 W/S	3.0 mm	127.00 mm	52.5 mm <sup>6)</sup>	No
HBO 1000 W/D	3.0 mm	208.00 mm	89.5 mm <sup>6)</sup>	No
HBO 500 W/A <sup>2)</sup>	4.5 mm			No
HBO 500 W/B <sup>2)</sup>	3.0 mm			No
HBO 1000W/DHL				No
HBO 3500 W/MR	7.0 mm			No
HBO 3500 W/HK	7.0 mm			No
HBO 5000 W/HK	7.5 mm	302.00 mm	152.5 mm	No
HBO 5000 W/MF <sup>3)</sup>	7.5 mm	318.00 mm	143.5 mm	No
HBO 5000 W/S <sup>3)</sup>	7.5 mm	360.00 mm	143.5 mm	No
HBO 5000 W/TA <sup>3)</sup>	7.5 mm	329.50 mm	148.5 mm	No
HBO 5001 W/F	7.5 mm	430.00 mm	216.0 mm	No

Product description	Burning position	Cooling
HBO 201 W/HS-D2	Other <sup>4)</sup>	
HBO 250 W/BY	Other 5)	
HBO 250 W/HS	Other <sup>5)</sup>	
HBO 250 W/LS	Other <sup>5)</sup>	Convection 7)
HBO 350 W <sup>1)</sup>	Other <sup>5)</sup>	
HBO 350 W/S	Other <sup>5)</sup>	Convection <sup>8)</sup>
HBO 1000 W/D	Other <sup>5)</sup>	Convection
HBO 500 W/A <sup>2)</sup>	Other <sup>5)</sup>	
HBO 500 W/B <sup>2)</sup>	Other <sup>5)</sup>	
HBO 1000W/DHL	Other	
HBO 3500 W/MR	Other 5)	
HBO 3500 W/HK	Other <sup>4)</sup>	
HBO 5000 W/HK	Other <sup>5)</sup>	Forced <sup>9)</sup>
HBO 5000 W/MF <sup>3)</sup>	Other <sup>4)</sup>	Forced <sup>9)</sup>
HBO 5000 W/S 3)	Other <sup>4)</sup>	Forced <sup>9)</sup>
HBO 5000 W/TA <sup>3)</sup>	Other <sup>4)</sup>	Forced <sup>9)</sup>
HBO 5001 W/F	Other <sup>5)</sup>	Forced <sup>9)</sup>

<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> Anode underneath

 $<sup>^{6)}</sup>$  Distance from end of base to tip of anode or cathode (cold)

 $<sup>^{7)}\,\</sup>mathrm{Maximum}$  permissible base temperature: 230 °C

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

 $<sup>^{9)}</sup>$  Maximum permissible base temperature: 200 °C

### 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.