

HBO Mercury short-arc lamps without reflector 50...200 W

Mercury short-arc lamps without reflector 50...200 W



Areas of application

- Fluorescence microscopy
- UV curing
- A variety of light guide applications

Product family benefits

- High radiance
- High radiant power in the UV and the visible range

Product family features

- Multi-line spectrum



Product family datasheet

Technical data

Product description	Electrical data				Photometrical data		Dimensions & weight
	Nominal voltage	Type of current	Nominal wattage	Rated wattage	Luminous intensity	Nominal luminous flux	Diameter
HBO 50 W/AC 39 V	390 V	AC	5000 W	5000 W	230 cd ¹⁾		100 mm
HBO 50 W/AC 34 V	340 V	AC	5000 W	5000 W	230 cd ¹⁾		100 mm
HBO 50 W/3		DC	5000 W	5000 W	150 cd ¹⁾	1300 lm	9 mm
HBO 100 W/2		DC	10000 W	10000 W	260 cd ¹⁾	2200 lm	100 mm
HBO 103 W/2		DC	10000 W	10000 W	300 cd ¹⁾	2550 lm	100 mm
HBO 200 W/4		AC	20000 W	20000 W	950 cd ¹⁾	9500 lm	170 mm
HBO 202 W/4	57.0 ... 65.0 V	AC	20000 W	20200 W	1000 cd ⁷⁾		180 mm
HBO 200 W/2 49 V	490 V	AC	20000 W	20000 W	1000 cd ¹⁾	9500 lm	170 mm
HBO 200 W/2 57 V	570 V	AC/DC	20000 W	20000 W	1000 cd ¹⁾	9500 lm	170 mm
HBO 200 W/DC 57 V	570 V	DC	20000 W	20000 W	1100 cd ¹⁾	10000 lm	170 mm
HBO 200 W/DC TM	57 V	DC	20000 W	20000 W	1000 cd ¹⁾	9500 lm	170 mm

Product description	Mounting length	Length with base excl. base pins/connection	Light center length (LCL)	Lifespan	Additional product data
				Lifespan	Base anode (standard designation)
HBO 50 W/AC 39 V	47.0 mm ²⁾	47.00 mm ²⁾	22.0 mm ³⁾	100 h	SFa6-2
HBO 50 W/AC 34 V	47.0 mm ²⁾	47.00 mm ²⁾	22.0 mm ³⁾	100 h	SFa6-2
HBO 50 W/3	47.0 mm ²⁾	47.00 mm ²⁾	22.0 mm ³⁾	200 h	SFa8-2
HBO 100 W/2	82.0 mm ²⁾	82.00 mm ²⁾	43.0 mm ³⁾	200 h	SFa9-2
HBO 103 W/2	82.0 mm ²⁾	82.00 mm ²⁾	43.0 mm ³⁾	300 h	SFa9-2
HBO 200 W/4	102.0 mm ²⁾	102.00 mm ²⁾	40.0 mm ³⁾	200 h	SFc10-4
HBO 202 W/4	102.0 mm ²⁾	102.00 mm ²⁾	40.0 mm ³⁾	200 h	SFc10-4
HBO 200 W/2 49 V	102.0 mm ²⁾	102.00 mm ²⁾	40.0 mm ³⁾	400 h ⁸⁾	SFc10-4
HBO 200 W/2 57 V	102.0 mm ²⁾	102.00 mm ²⁾	40.0 mm ³⁾	400 / 200 h ⁹⁾	SFc10-4
HBO 200 W/DC 57 V	102.0 mm ²⁾	102.00 mm ²⁾	40.0 mm ³⁾	1000 h	SFc10-4
HBO 200 W/DC TM	102.0 mm ²⁾	102.00 mm ²⁾	40.0 mm ³⁾	400 h	SFc10-4 ¹⁰⁾

Product family datasheet

		Capabilities	Environmental information Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)	
Product description	Base cathode (standard designation)	Burning position	Date of Declaration	Primary Article Identifier
HBO 50 W/AC 39 V	SFa6-2	s45 ⁴⁾	05-03-2024	4050300507132 4050300629100
HBO 50 W/AC 34 V	SFa6-2	s45 ⁴⁾	05-03-2024	4050300507118
HBO 50 W/3	SFa6-2	s45 ⁵⁾	05-03-2024	4050300506692
HBO 100 W/2	SFa7.5-2	s90 ⁵⁾	05-03-2024	4050300507095
HBO 103 W/2	SFa7.5-2	s90 ⁵⁾	05-03-2024	4050300382128 4008321730664
HBO 200 W/4	SFc10-4	s20 ⁶⁾	05-03-2024	4050300506715
HBO 202 W/4	SFc10-4	s15 ⁶⁾	05-03-2024	4050300507156
HBO 200 W/2 49 V	SFc10-4	s90 ⁵⁾	05-03-2024	4050300508283
HBO 200 W/2 57 V	SFc10-4	s90 ⁵⁾	05-03-2024	4050300508153
HBO 200 W/DC 57 V	SFc10-4	s90 ⁵⁾	05-03-2024	4050300506791
HBO 200 W/DC TM	SFc10-4 ¹⁰⁾	s90 ⁵⁾	05-03-2024	4008321137623

Product description	Candidate List Substance 1	CAS No. of substance 1	Safe Use Instruction	Declaration No. in SCIP database
HBO 50 W/AC 39 V	Lead	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	e8310b2d-6dfd- 4214-99f2- 54a875611416 2cdba8c8-2480- 43e3-bef8- 1501edfbab7b
HBO 50 W/AC 34 V	Lead	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	b4dbd9f8-acc8-44fd- a092-9b5d3d42769a
HBO 50 W/3	Lead	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	b7f62293-c952- 4934-b87d- 0fed8aac3c8e
HBO 100 W/2	Lead	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	8a5de7b7-1ac0- 42b0-9bc6- 43f410d52790
HBO 103 W/2	Lead	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	5c5ffaca-0a20-4808- a8fc-837dfe659a4a cbe25e5b-c77c- 499d-b5cb- d98156b8d489

Product family datasheet

Product description	Candidate List Substance 1	CAS No. of substance 1	Safe Use Instruction	Declaration No. in SCIP database
HBO 200 W/4	Lead	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	0b6aabc0-648f-4d0d-8fa3-737723deaad7
HBO 202 W/4	Lead	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	86fed10b-6f1f-4b7c-a8ef-a5a2c4846634
HBO 200 W/2 49 V				In work
HBO 200 W/2 57 V	Lead	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	0a543a28-ee8e-4f2f-be05-060615b8f13b
HBO 200 W/DC 57 V	Lead	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	5178b200-39bc-438f-9a39-c562426a7852
HBO 200 W/DC TM	Lead	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	5280e35b-70e6-48e0-ac95-d834d6ba11af

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- 1)

Typical initial photometric value
- 2)

Maximum
- 3)

Distance from end of base to tip of anode (cold)
- 4)

Observe "UP" marking
- 5)

Anode underneath
- 6)

Reference base pointing downwards (shorter shaft)
- 7)

Minimum 850 cd
- 8)

Reduced lifespan in AC operation
- 9)

AC operation
- 10)

With 8-32 UNC-3 B thread

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.

References / Links

Further technical information on HBO lamps and information for manufacturers of operating equipment can be requested directly from OSRAM.

Disclaimer

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