

Technical Information

No. FO 4687

Edition: 10/98 - subject to change

Substitutes: 02/98

Status: valid

Mercury Short Arc Lamp

HBO[®] 200 W/2

■ Product description

The OSRAM HBO[®] 200 W/2 belongs to the group of mercury short arc lamps, of which the discharge arc burns in an atmosphere of high pressure mercury vapour. The HBO[®] 200 W/2 is a UV-emitting lamp type, which generally is used in fluorescence microscopy and could be operated in alternating as well as in direct current mode. The ignition behaviour of the lamp is improved being ignited by the main electrodes.

■ Technical data

Order reference		HBO [®] 200 W/2
Rated lamp wattage	W	200
Lamp voltage	DC V	65 - 47
	AC / I ₁ V	61 ± 4
	AC / I ₂ V	53 ± 4
Operating current	DC A	3,1 - 4,2
	AC / I ₁ A	3,6
	AC / I ₂ A	4,2
Luminous flux	lm	10.000
Average luminance	cd/cm ²	40.000
Luminous area w x h ^{*)}	mm	0,6 x 2,2
Lamp length (overall) l ₁	mm	max. 128
Lamp length l ₂	mm	max. 102
Bulb diameter d	mm	17
LCL a	mm	40
Electrode gap	mm	2,5 ± 0,2
Average life-time	DC h	400
	AC h	200
Base		SFc 10-4/15

*) w = luminance half width value; h = height of luminous area (corresponds to electrode gap, hot)

■ Lamp operation

Maximum permissible base temperature °C 230

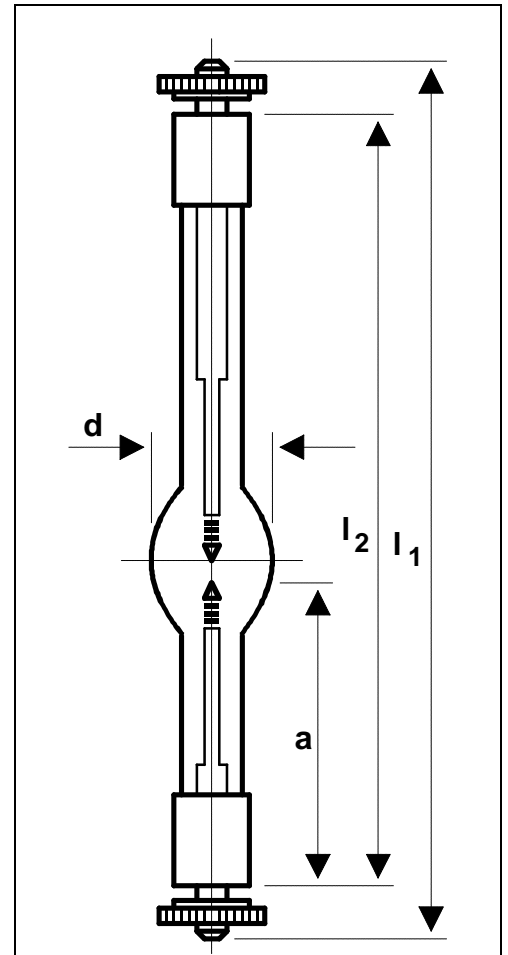
Cooling Convection

Burning position vertical ± 45°, s 45; anode (+) underneath

The HBO[®] 200 W/2 is an „all-current“ lamp and can be operated with both alternating or direct current. However direct current operation improves the stability of the luminous data (particularly arc stability) and makes for a longer overall life.

For alternating current operation, special choke or leakage transformers are mainly used. Due to leakage of the operating voltage, it is not possible to use fixed chokes. The chokes are equipped with two taps for the two operating voltage ranges, which are marked I₁ and I₂.

Because their high luminous efficacy, the UV radiation which they emit and the high pressure within the lamp, HBO[®] lamps may only be operated within enclosed, purpose-built housings. When a lamp breaks, mercury is



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released. Particular safety regulations should be paid attention (for details please request technical information sheet no. FO 4574).

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