Technical Information
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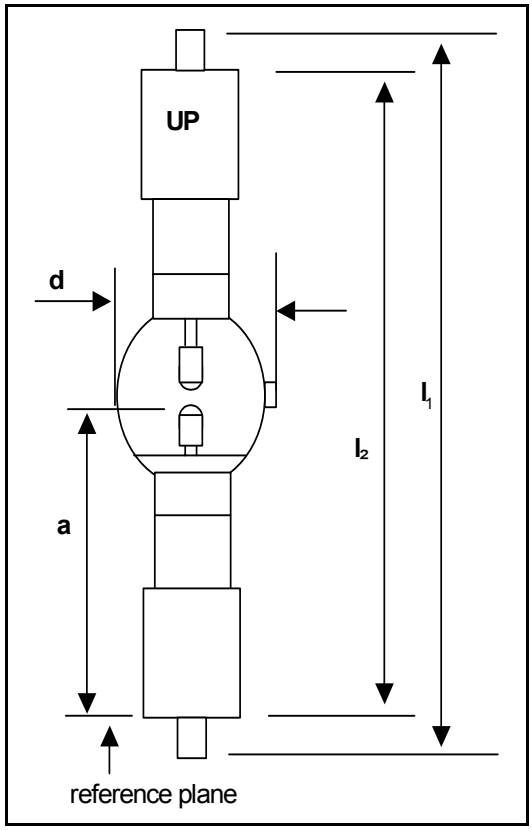
Mercury Short Arc Lamp

HBO® 50 W/AC L1
HBO® 50 W/AC L2

■ Product description

- Mercury discharge lamp
- Short arc
- For AC operation at constant power
- High pressure during operation



■ Electrical Data and Lamp Geometry

Rated lamp power	W		50
Rated lamp current	A	L1:	1.3
		L2:	1.45
Initial voltage range	V	L1:	39 … 45
		L2:	34 … 39
Ignition voltage (cold) [1]	V		700 DC
Overall lamp length l_1	mm		max. 53
Lamp length l_2	mm		max. 47
Bulb diameter d	mm		max. 10.0
Length a [2]	mm		22 ± 2
Arc gap (cold)	mm		approx. 1.15
Base			SFa 6-2

■ Performance Data [3]

Initial luminous flux	lm	min. 1,650
Initial average luminance	cd/cm²	min. 27,000
Initial light intensity [4]	cd	min. 200
Average life [5]	h	100

Full luminous flux is generated after a run-up phase of approximately five minutes.

■ Mounting

This lamp should be mounted at the reference base. The opposite base, which is marked with “UP”, should be left unsupported. Mounting at “UP” base would render length „a“ meaningless.

[1] **This lamp can also be started with started OSRAM St 192**
[3] At rated power and in vertical operation if not otherwise specified
[4] Light intensity in the plane containing electrode tip and vertical to lamp axis.
[5] At switch cycle 2 hours on, 2 hours off

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■ Operation Conditions

Burning position			s 45 (vertical-to-45°); observe ”UP” marking
Base temperature	°C		max. 230 allowed
Cooling			depending on lamp housing convection may be sufficient
Arc stabilisation			not required
Allowed power range [1]	W		50 ... 58
Required inrush current	A	L1:	1.3 … 1.65
		L2:	1.45 … 1.9

This lamp type can be operated both on a standard ballast and on an electronic power supply provided they comply with the requirements laid down in „Guidelines for Power Supplies and Igniters. Mercury Short Arc Lamps. Photo Optics“ (see table below).

■ Additional Documentation

Title	Order reference
• Typical Spectral Distribution	-
• Mercury Safety Instructions for HBO Short Arc Lamps	No. FO 4574
• Guidelines for Power Supplies and Ignitors	No. FO GL-33

For the above mentioned publications contact an OSRAM representative in your neighbourhood.

[1] It is recommended to operate this lamp at rated power.