Technical Information

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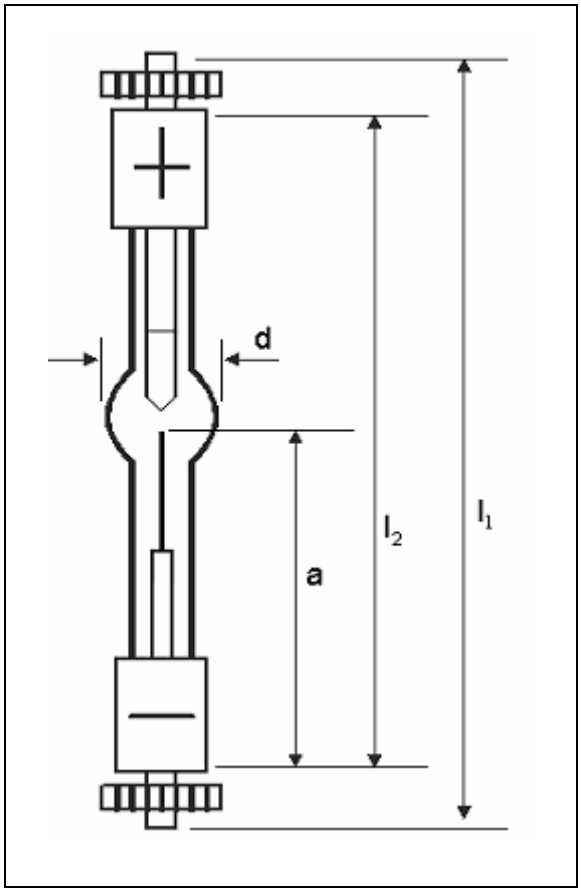
Xenon Short Arc Lamp

XBO® 150 W/4

Product description

- Xenon discharge lamp for DC operation
- Short arc
- High pressure
- Daylight spectrum
- Suprasil quartz for enhanced transmission below 250 nm
- Hot re-start



Electrical Data and Lamp Geometry

Rated lamp current	A	7.5
Rated lamp power	W	150
Initial voltage range	V	17 … 21
Ignition voltage (cold / hot)	kV	25 / 25
Overall lamp length l_1	mm	max. 150
Lamp length l_2	mm	max. 127
Bulb diameter d	mm	max. 20
Length a[1]	mm	57 ± 1
Electrode gap (cold) e	mm	approx. 2.5
Base (anode side) Base (cathode side)		• SFc 12-4 • SFcX 12-4

Performance Data [2]

Initial luminous flux	lm	min. 2,400
Initial average luminance	cd/cm²	min. 12,000
Initial light intensity [3]	cd	min. 240
Colour temperature	K	approx. 5,700
Colour rendering index		approx. 95
Average life	h	1,200

This lamp uses a special quality of quartz known as Suprasil which provides higher transmission below 250 nm in comparison to conventional quartz.

[1] Length „a“ specifies the position of cathode tip referring to reference plane at room temperature.
[2] At rated current if not otherwise specified
[3] Light intensity in the plane containing cathode tip and vertical to lamp axis

Mounting

This lamp should be mounted at the cathode base; the anode base should be left unsupported. It is allowed to mount at the anode base leaving the cathode base unsupported; however, this renders length „a“ meaningless.

Operation Conditions

Burning position		s15 (vertical, cathode down, ± 15°)
Base temperature	°C	max. 230 allowed
Cooling		forced cooling necessary
Arc stabilisation		not required
Allowed power range	W	130 … 175
Allowed current range [4]	A	7.5
Max. peak of inrush current	A	25
Polarity		for proper polarity observe base marking

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 OSRAM Guidelines for Power Supplies and Igniters (see table below).

Safety Instructions

This lamp has a high internal pressure even when cold. When handling it observe precautionary measures laid down in the safety enclosure accompanying each lamp.

For operation use only purpose-built lamp housings which prevent direct viewing of the arc and, in case of lamp bursting, refrain lamp particles.

Additional Documentation

Title	Order reference
• Typical Spectral Distribution	-
• Guidelines for Power Supplies and Igniters	FO GL-10

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

[4] It is recommended to operate this lamp with rated current.