

Technical Information

No. FO 5008

Edition: 11/2003 - subject to change

Supersedes: 10/2003

Status: valid

Xenon Short Arc Lamp

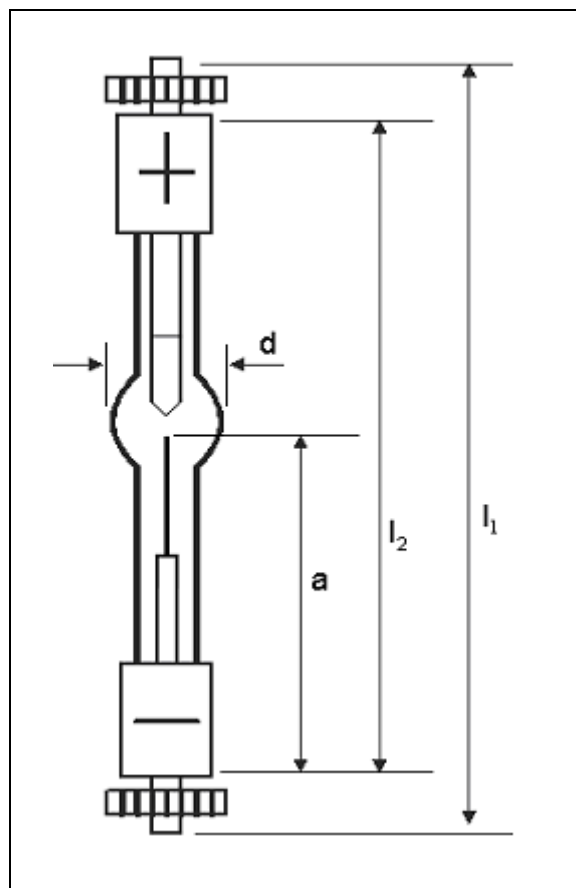
XBO[®] 150 W/4

■ 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)		• SFcX 12-4
Base (cathode side)		• SFc 12-4



■ Performance Data ²

Initial luminous flux	lm	min. 2,400
Initial average luminance	cd/cm ²	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

Technical Information

No. FO 5008

Edition: 11/2003 - subject to change

Supersedes: 10/2003

Status: valid

Xenon Short Arc Lamp

XBO[®] 150 W/4

■ 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, $\pm 15^\circ$)
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.