

Technical Information

No. 4186

Edition: 08/05 - subject to change

Substitutes: Edition 01/04

Status: valid

Xenon Short Arc Lamp

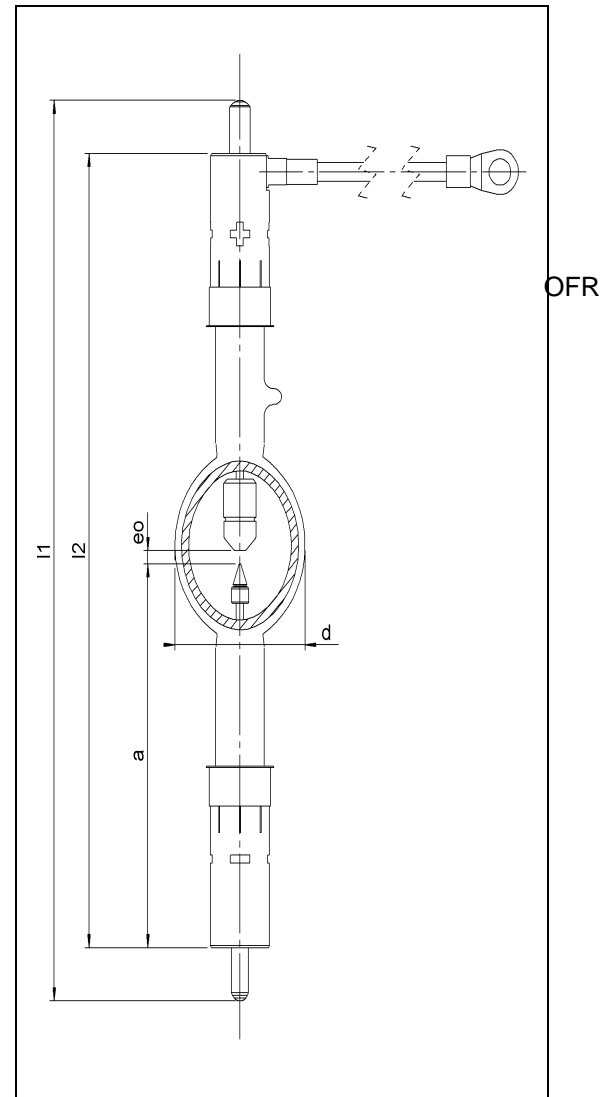
XBO[®] 2000 W/HS OFR

■ Product description

The OSRAM XBO[®] 2000 W/HS OFR is a DC-operated lamp that is especially suited for applications requiring excellent arc stability and a high luminance. The OSRAM XBO[®] 2000 W/HS OFR is designed for horizontal burning position (H = horizontal, S = short).

■ Technical data

Order reference	XBO [®] 2000 W/HS OFR	
Rated lamp wattage	W	2000
Rated lamp voltage	V	24
Rated lamp current (DC)	A	80
Current control range	A	50 – 85
Ignition voltage	kV _P	36
Min. open circuit voltage for cold / hot ignition	V	85 / 110
Luminous flux	lm	80000
Luminous intensity	cd	7500
Average luminance	cd/cm ²	80000
Luminous area w x h *)	mm	1.3 x 4.0
Electrode gap e (cold)	mm	5
Lamp length (overall) l ₁	mm	max. 342
Lamp length l ₂	mm	max. 302
LCL a	mm	145
Bulb diameter d	mm	60
Average service life	h	3000
Warranty	h	2400
Base	Cathode	SFa 27-7,9
	Anode	SFaX 27-9,5



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

■ Lamp operation

Maximum permissible base temperature	230°C
Cooling requirements	forced cooling / fan necessary
Min. air flow velocity around discharge vessel	5 m/s
Operating position	s 30 (vertical ± 30° ; anode up) ; p 30 (horizontal ± 30°)

Technical Information

No. 5063

Edition: 08/05- subject to change

Substitutes: Edition 01/04

Status: valid

Xenon Short Arc Lamp

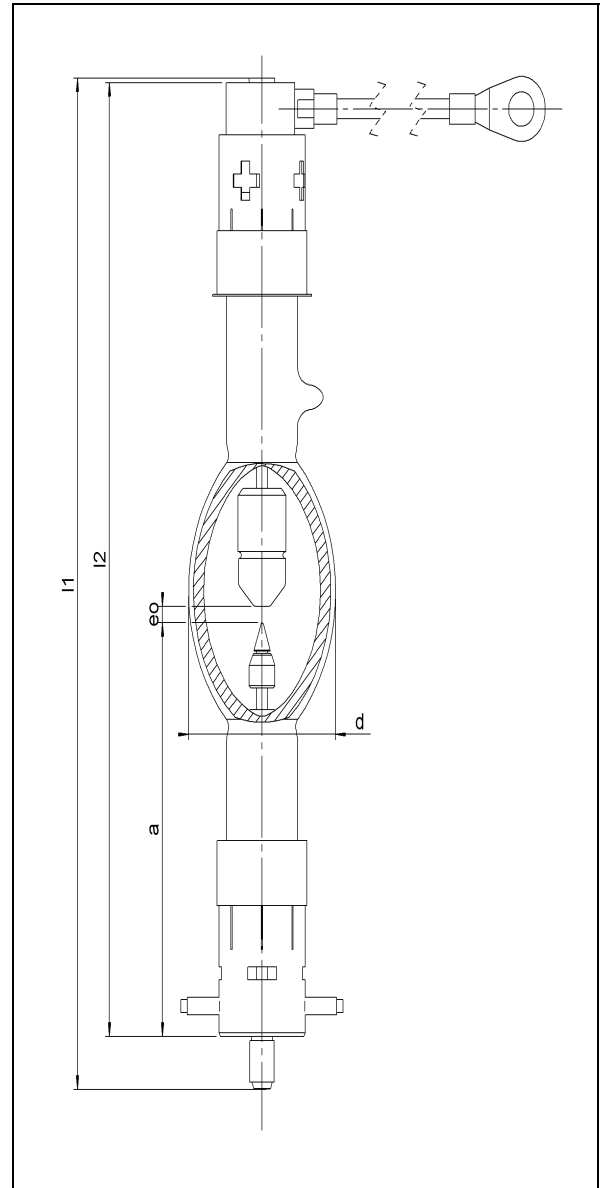
XBO[®] 2000 W/SHSC OFR

■ Product description

The OSRAM XBO[®] 2000 W/SHSC OFR is a DC-operated lamp that is especially suited for applications requiring excellent arc stability and high luminance. The OSRAM XBO[®] 2000 W/SHSC OFR is designed for horizontal burning position (H = horizontal, S = short, C = cable)

■ Technical data

Order reference	XBO [®] 2000W/SHSC OFR	
Rated lamp wattage	W	2000
Rated lamp voltage	V	27
Rated lamp current (=)	A	70
Current control range	A	50 - 85
Ignition voltage	kV _P	33
Min. open circuit voltage for cold / hot ignition	V	85/110
Luminous flux	lm	80000
Luminous intensity	cd	7500
Average luminance	cd/cm ²	80000
Luminous area w x h *)	mm	1.3 x 4.0
Electrode gap e (cold)	mm	5.0
Lamp length (overall) l ₁	mm	max. 236
Lamp length l ₂	mm	max. 222
LCL a	mm	95
Bulb diameter d	mm	46
Average service life	h	2500
Warranty	h	2000
Base	Cathode	SFcX 27-8
	Anode	SK 27/50



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

■ Lamp operation

Maximum permissible base temperature	230 °C
Cooling	forced cooling / fan
Min. air flow velocity around discharge vessel	8 m/s
Burning position	s 20 (vertical ± 20°; anode up); p 20 (horizontal ± 20°)

Technical Information

No. 5261

Edition: 08/05 - subject to change

Supersedes: Edition 01/04

Status: valid

Xenon Short Arc Lamp

XBO[®] 8000 W/HS OFR

■ Product description

The OSRAM XBO[®] 8000 W/HS OFR belongs to the group of double ended Xenon short arc lamps at the highest power level. It is being used in applications where particularly high requirements are set on the stability of the light arc and a very high luminance has to be achieved. The XBO[®] 8000 W/HS OFR is hot re-strike able.

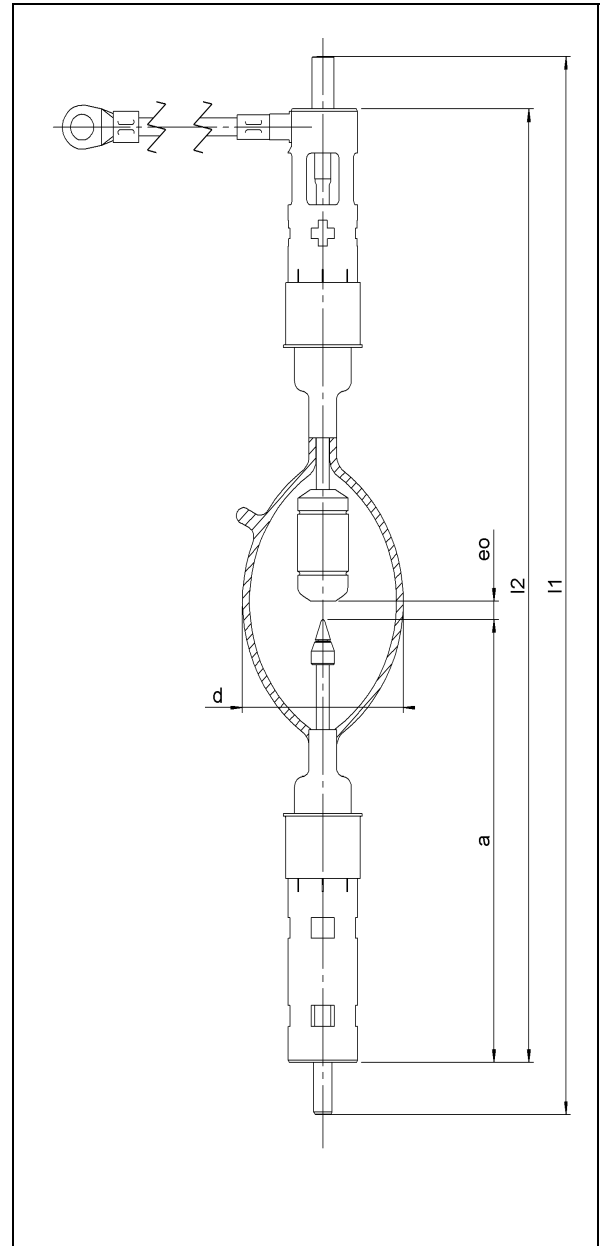
■ Technical data

Order reference	XBO [®] 8000 W/HS OFR
Rated lamp wattage	W 8,000
Rated lamp voltage	V 45
Rated lamp current (=)	A 175
Current control range	A 150 - 180
Ignition voltage	kV _p 45
Min. open circuit voltage for cold / hot ignition	V 120 / 140
Luminous flux	lm 400,000
Luminous intensity	cd 40,000
Average luminance	cd/cm ² 110,000
Luminous area w x h *)	mm 2.5 x 10.5
Electrode gap e (cold)	mm 12.0
Lamp length (overall) l ₁	mm max. 433
Lamp length l ₂	mm max. 393
LCL a	mm 170.5
Bulb diameter d	mm 90
Average service life	h 500
Warranty	h 500
Base	• Cathode: SFa 30-7,9 • Anode: SFaX 30-9,5

*) w = half width value of light arc
h = light arc height during operation (electrode gap hot)

■ Lamp operation

Maximum permissible base temperature	°C	230
Cooling		forced cooling / fan
Min. air flow velocity around discharge vessel	m/s	10
Magnetic arc stabilization		necessary for horizontal operation
Burning position		s 15 (vertical ± 15° ; anode up) ; p 15 (horizontal ± 15°)



Technical Information

No. FO 4916

Edition: 08/05 - subject to change

Supersedes: Edition 09/02

Status: valid

Xenon Short Arc Lamp

XBO[®] 10000 W/HS OFR

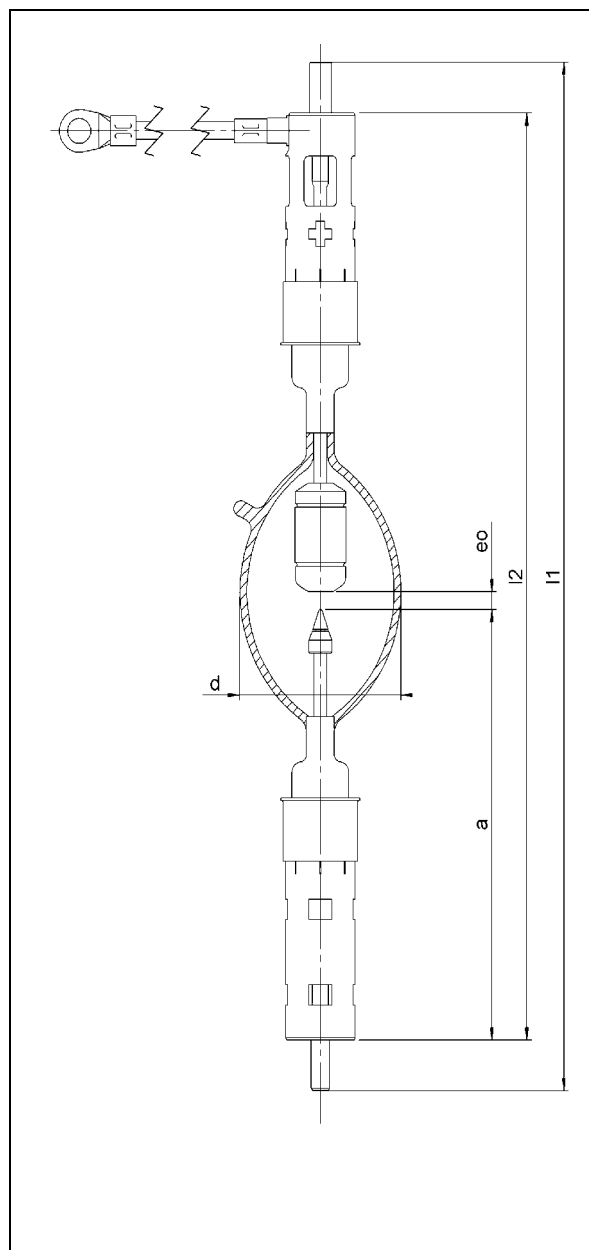
■ Product description

The OSRAM XBO[®] 10000 W/HS OFR is a DC-operated lamp that is especially suited for applications requiring excellent arc stability and a high luminance. The OSRAM XBO[®] 10000 W/HS OFR is designed for horizontal burning position (H = horizontal, S = short).

■ Technical data

Order reference	XBO [®] 10000 W/HS OFR	
Rated lamp wattage	W	9,800
Rated lamp voltage	V	50
Rated lamp current (=)	A	195
Current control range	A	160 - 200
Ignition voltage	kV _P	55
Min. open circuit voltage for cold / hot ignition	V	150 / 180
Luminous flux	lm	500,000
Luminous intensity	cd	47,500
Average luminance	cd/cm ²	90,000
Luminous area w x h *)	mm	2.4 x 12.0
Electrode gap e (cold)	mm	13.5
Lamp length (overall) l ₁	mm	max. 433
Lamp length l ₂	mm	max. 393
LCL a	mm	170.5
Bulb diameter d	mm	90
Average service life	h	500
Base	Cathode:	SFa 30-7,9
	Anode:	SFaX 30-9,5

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



■ Lamp operation

Maximum permissible base temperature	230°C
Cooling	forced cooling / fan
Min. air flow velocity around discharge vessel	10 m/s
Magnetic arc stabilization	necessary for horizontal operation
Burning position	≤ 15° (vertical ± 15° ; anode up) ; p 15 (horizontal ± 15°)