



Light is essential  
Products for medical devices

Light is OSRAM

**OSRAM**

# The right light for your application



## Analyzing

### Benefits

Effective and optimized illumination for analyzing and diagnostics to identify the molecular structure of a compound or to determine its purity. The filament with tight tolerances provides an excellent and uniform illumination of small areas with constant and brilliant light over the entire lifetime. Customized solutions on request.

### Discharge/Halogen

- HBO®
- XBO®
- HXP®
- 64258
- 64259
- 64623 HLX®
- Halogen modules



## Medical Fiber Optics

### Benefits

Illumination of human organs or tissue containing a well-balanced spectral characteristic and high color rendering. Focused light beam for easy and efficient coupling into light guides with small diameters. Optimized for endoscopy and surgical headlamps.

### Discharge/Halogen

- XBO®
- 64627 HLX®
- 64634 HLX®
- 64653 HLX®



## Microscopy

### Benefits

Illumination for microscopy visualization in medical and life science systems. Providing white light and a wide range of wavelengths for fluorescence applications. Optimized for surgical, diagnostic, and inspection microscopy.

### Discharge/Halogen

- HBO®
- XBO®
- HXP®
- Halogen lamps without reflector



### Surgical Lighting

#### Benefits

Instant brilliant light and light output over life with a constant color temperature and excellent color rendering.

#### Halogen

- 64291 XIR®
- 64292 XIR®
- 64668 XIR®
- 64638 HLX®
- 64642 HLX®
- 64643
- 64647
- 64650



### Purification with UV Light

#### Benefits

Long life and high germicidal efficiency for surface sterilization, air and water purification.

#### Discharge

- PURITEC® HNS®



### Bilirubin therapy lighting

#### Benefits

Used in medical devices, OSRAM BLUE is the perfect solution for the treatment of jaundice. Its compact design is suitable for mobile equipment and hand-held luminaires. It works emission-free and with low energy consumption.

#### Discharge

- DULUX® S BLUE 9W/71
- DULUX® L BLUE 18W/71
- L BLUE 18W/71



### Dental curing

#### Benefits

Exposure of light-activated composites and adhesives. High irradiation level required for short curing times in dental applications.

#### Discharge

- HBO®
- HXP®

#### Halogen

- 64613
- 64617/64617S
- 64624

# The right light for your application

## Halogen lamps

### Halogen HLX® lamp family



- HLX® tungsten halogen low-voltage lamp with or without a reflector
- Xenon-gas-filled lamps have up to 10% higher luminous efficacy than standard lamps
- Instant light
- Dimmable
- Mercury-/Ozone-free

### Infrared-coated capsule XIR®



- Tungsten halogen capsule filled with xenon gas and in addition, with infrared (IR) coating on the glass bulb for maximum energy efficiency
- IR capsule produces up to 30% higher luminous efficacy than standard lamps with the same characteristics (wattage and lamp life)
- Mercury-/Ozone-free

### Halogen Lamp Modules – Customized Solutions



- Various lamp types can be combined with a customized lamp base
- Automatic computer-controlled production process with very tight tolerances
- Lamp is optimally adjusted in the system after the replacement, no readjustment necessary
- Special customized solutions on request

## Discharge lamps

### XBO® 75W, 100W, 150W



- Xenon discharge lamp for DC operation
- Color rendering index >95
- Short arc
- Hot restart

### Optimized UV Light HBO®



- Mercury discharge lamp for DC/AC operation at constant power
- Short arc

### Optimized UV & Blue Light with Long Life HXP® R 120W UV



- Mercury discharge lamp for AC operation at constant power
- Short arc
- Long average life: up to 2,000 hours
- Focus diameter of approx. 5mm
- Reflector of HXP® R 120W UV coated for maximum reflection in 320 ... 500 nm range
- ECG/lamp system

## Discharge lamps

### UV, Blue & White Light with Long Life HXP® R 120W VIS, 200W



- Mercury discharge lamp for AC operation at constant power
- Short arc
- Long average life: up to 2,000 hours
- Focus diameter of approx. 5 mm
- Reflector coated for maximum reflection in blue and visible spectral range
- ECG/lamp system

### Excellent Xenon Light XBO® R 100W, 180W, 300W



- Xenon discharge lamp for DC operation
- Color rendering index >95
- Short arc
- Focus diameter of approx. 5 mm
- Reflector coated for maximum reflection in visible spectral range
- Ozone-free
- Hot restart

### Ceramic Xenon Light XBO® C 175W, 300W



- Xenon discharge lamp for DC operation
- Small arc gap provides a precise focus onto small areas
- High brightness
- Provides daylight color temperature with extremely high CRI
- Highly efficient light source due to pre-aligned reflector
- Compact and rugged design

## Discharge lamps

### Linear PURITEC® HNS® UV-C Light



- Efficient at disinfecting air, water and surfaces
- Effective and environmentally friendly disinfection without chemicals
- Low mercury content
- Long lifetime thanks to special high-quality coating of the glass bulb
- 4W-60W

### Compact PURITEC® HNS® UV-C Light



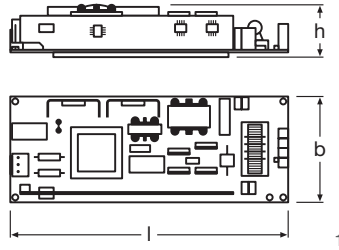
- Efficient at disinfecting air, water and surfaces
- Effective and environmentally friendly disinfection without chemicals
- Low mercury content
- Long lifetime thanks to special high-quality coating of the glass bulb
- 5W-95W

### OSRAM BLUE lamps



- Low mercury content
- Long lifetime thanks to special high-quality coating of the glass bulb
- High quality

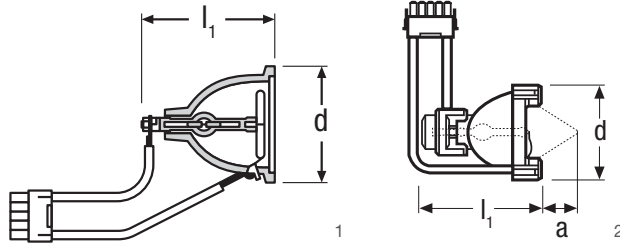
Light Sources



ECG for medical applications

Product Name	Item Number	kV START	W	l [mm]	b [mm]	h [mm]	AC/DC		
PT-VIP 2AC/380 O1 DIM 120 EN	49306	20 <sup>1)</sup>	120	150	60	32	DC/AC <sup>1)</sup>	25	1

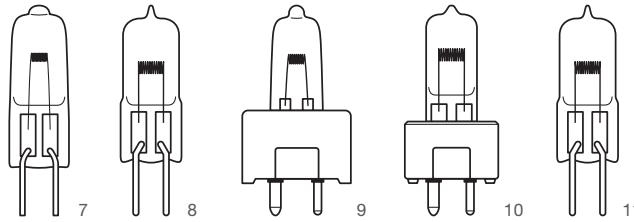
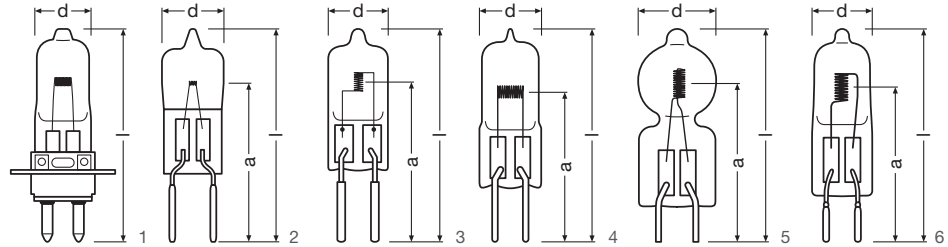
1) Maximum



HXP® Mercury short-arc lamps, long life

Product Name	Item Number	W	V	A	AC/DC	t [h]	e [mm]	l1 max. [mm]				
HXP R 120 W/17 C <sup>1)</sup>	68895	120 <sup>3)</sup>	70...95 <sup>4)</sup>	1.5	AC	2000	65	77	17.3	Forced	p20	50 1
HXP R 120 W/45 C VIS <sup>1)</sup>	69119	120 <sup>3)</sup>	60...90 <sup>4)</sup>	1.4	AC	2000	67	77	45	Forced	p20	2 2
HXP R 120 W/45 C UV <sup>1)</sup>	69120	120 <sup>3)</sup>	60...90 <sup>4)</sup>	1.4	AC	2000	67	77	45	Forced	p20	2 2
HXP R 200 W/45 M <sup>2)</sup>	69820	200 <sup>3)</sup>	60...96 <sup>4)</sup>	3.4	AC	2000	67	77	45	Forced	p20	2 2

1) To be operated with PT-VIP 2AC/380 O1 DIM 120 VS25  
 2) To be operated with PT-VIP 4AC/380 O3 200 DIM VS50  
 3) Not relevant  
 4) Initial voltage range

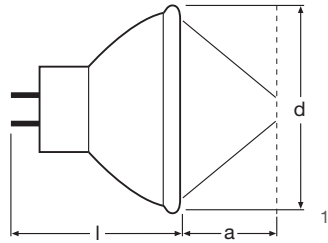


Low-voltage halogen lamps without reflector

Product Name	Item Number	ANSI	LIF	W	V	t [h]	d [mm]	l [mm]	LCL a [mm]	φ <sub>h</sub> [mm]					
64223	54245		M/43	10 <sup>1)</sup>	6	300	9	38	24	1.5*0.7	Any	G4	B	40	2
64225	54260	ESA/FHS	M/29	10 <sup>1)</sup>	6	100	9.5	31	19.5	1.7*0.65	s90	G4	B	40	2
64250 HLX	54261	ESB	M/30	20 <sup>1)</sup>	6	100	9	31	19.4 <sup>2)</sup>	2.3*0.8	Any	G4	B	40	2
64251 HLX	54021			20 <sup>1)</sup>	6	100	9	40	14	2.3*0.8	Any	PG22	B	30	1
64265 HLX	54606			30 <sup>1)</sup>	6	100	9	31	19.5	1.6*1.6	Any	G4	B	40	2
64275	54258		M/137	35 <sup>1)</sup>	6	50	9	35	26 <sup>3)</sup>	1.3*1.6	Any	G4	C	40	3
64258	54262			20 <sup>1)</sup>	12	2000	9.5	30	19.5 <sup>2)</sup>	3.25*0.7 <sup>4)</sup>	s90	G4	C	40	2
64260	54022		M/185	30 <sup>1)</sup>	12	50	9	40	14	2.6*1.3	Any	PG22	B	30	1
64261 HLX	54247		M/130	30 <sup>1)</sup>	12	50	11.5	44	30	2.6*1.3	Any	G6.35	B	40	7
64602	54607		M/134	50 <sup>1)</sup>	12	1100	11.5	44	30	3.0*3	s90	G6.35	C	40	4
64610 HLX	54249	BRL	A1/220	50 <sup>1)</sup>	12	50	11.5	44	30 <sup>3)</sup>	3.3*1.6	s90	G6.35	B	40	7
64611 HLX	54608			50 <sup>1)</sup>	12	100	11.5	44	30	3.3*1.6	s90	G6.35	B	40	7
62138 HLX	54256			100 <sup>1)</sup>	12	50	11.5	37	27	2.4*1.8	p90/p15	G6.35	B	40	3
64621 HLX	54032			100 <sup>1)</sup>	12	2000	11.5	48	18	4.7*2.7	s90	PG22	B	30	1
64623 HLX	54251	EVA	M/28	100 <sup>1)</sup>	12	2000	11.5	44	30	4.7*2.7	s90	GY6.35	B	40	8
64625 HLX	54248	FCR	A1/215	100 <sup>1)</sup>	12	50	11.5	44	30 <sup>3)</sup>	4.2*2.3	s90	GY6.35	B	40	8
64628	54276	FDT	A1/261	100 <sup>1)</sup>	12	50	13	57	27	4.2*2.3	s90	GY9.5	B	12	9
64626 HLX	54038	EHE	A1/45	100 <sup>1)</sup>	12	50	11.5	48	18	4.2*2.3	s90	PG22	B	30	1
64291 XIR	54318			40 <sup>1)</sup>	22.8	800	12	44	30 <sup>3)</sup>	3.9*1.4	h90	G6.35	B	40	5
64650	54257			50 <sup>1)</sup>	22.8	1200	13	44	30	2.0*5	Any	G6.35	C	40	6
64668 XIR	54323			80 <sup>1)</sup>	22.8	400	14	44	30 <sup>3)</sup>	2.2*5.5	h90	G6.35	B	40	5
64292 XIR	54322			150 <sup>1)</sup>	22.8	600	14	44	30 <sup>3)</sup>	2.8*6.7	s90	G6.35	B	40	5
64638 HLX	54252			100 <sup>1)</sup>	24	300	13	50	30	5.3*2.6	Any	G6.35	B	40	8
64647	54320			120 <sup>1)</sup>	24	700	13	44	30	2.3*6.4	Any	G6.35	B	40	3
64640 HLX	54263	FCS	A1/216	150 <sup>1)</sup>	24	50	11.5	50	31.7 <sup>2)</sup>	5.8*2.9	s90	G6.35	B	40	8
64642 HLX	54264	FDV	M/184	150 <sup>1)</sup>	24	300	11.5	50	31.7 <sup>2)</sup>	6.0*3.2	s90	G6.35	B	40	8
64643	54277	FDS	A1/262	150 <sup>1)</sup>	24	100	15	57	33.5	6.0*3	s90	GY9.5	B	12	10
64655 HLX	54254	EJH	A1/223	250 <sup>1)</sup>	24	50	12.5	55	33	7.0*3.5	s90	G6.35	B	40	11
64657 HLX	54255	EVC	M/33	250 <sup>1)</sup>	24	300	13.5	55	33	8.0*4	s90	G6.35	B	40	11
64656 HLX	54253	FNT		275 <sup>1)</sup>	24	75	13.5	55	33	7.0*3.5	s90	G6.35	B	40	11
64654 HLX	54304			250 <sup>1)</sup>	24	300	13.5	67	35	8.0*4	s90	GY9.5	B	12	10
64663 HLX	54259	EVD	A1/239	400 <sup>1)</sup>	36	50	15	60	36	9.3*4.9	s90	G6.35	B	40	11

1) Not relevant  
 2) ±0.3 mm  
 3) ±0.5 mm  
 4) Restricted tolerances 3.5±0.25\*0.8±0.10

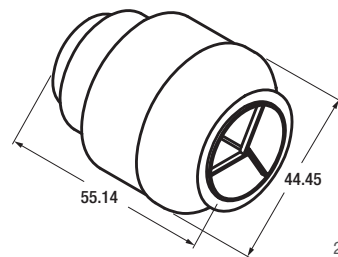
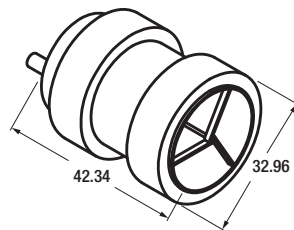
## Light Sources



### Halogen lamps with reflector MR16

Product Name	Item Number	ANSI	LIF	W	V	t[h]	∅ [mm]	l [mm]	a [mm]	Beam Angle	Material	Base	Color	Temp. Class	Quantity	Notes
64607	54123	EFM	A1/229	50 <sup>2)</sup>	8	50	51	42	32	p90/p15	Aluminum	GZ6.35	B	20	1	
64615 HLX	54126	EFN	A1/230	75 <sup>2)</sup>	12	50	51	42	32	p90/p15	Dichroic	GZ6.35	B	20	1	
64627 HLX	54189	EFP	A1/231	100 <sup>2)</sup>	12	50	51	42	32	p90/p15	Dichroic	GZ6.35	B	20	1	
64629	54192	EFP-6		100 <sup>2)</sup>	12	600	51	42	32	p90/p15	Dichroic	GZ6.35	B	20	1	
64637	54223	EBV	A1/271	100 <sup>2)</sup>	12	1500	51	42	32	s120	Dichroic	GZ6.35	B	20	1	
64620	54211	EFR-5		150 <sup>2)</sup>	15	500	50	42	32	p90/p15	Dichroic	GZ6.35	B	20	1	
64634 HLX	54210	EFR	A1/232	150 <sup>2)</sup>	15	50	51	42	32	p90/p15	Dichroic	GZ6.35	B	20	1	
64635 HLX <sup>1)</sup>	54233			150 <sup>2)</sup>	15	50	51	45	19	Any	Gold	GZ6.35		20	1	
93637	54732	EJV		150 <sup>2)</sup>	21	100	51	44.5	44.5	s90	Dichroic	GX5.3	E	24	1	
93638	54842	EKE		150 <sup>2)</sup>	21	200	51	44.5	44.5	s90	Dichroic	GX5.3	E	24	1	
93653	54841	ELC-3		250 <sup>2)</sup>	24	300	51	44.5	35	Any	Dichroic	GX5.3	E	24	1	
93506	54986	ENH		250 <sup>2)</sup>	120	175	51	44.5	152.5	s90	Dichroic	GY5.3	E	24	1	
93518	54776	ELH		300 <sup>2)</sup>	120	35	51	45	152.5	s90	Dichroic	GY5.3	E	24	1	

1) Infrared lamp; temperature at the focal point approximately 1300°C  
2) Not relevant

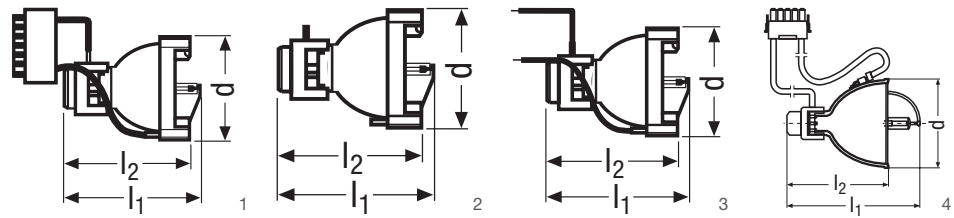


### XBO® Ceramic Xenon short-arc lamps with internal reflector 175W...300W

Product Name	Item Number	W	V	A	t[h]	lm	K	Beam Angle	Notes
XBO C 175W/BF	55202	175	12.5	14	1000 <sup>1), 2)</sup>	2200	5800	Horizontal	1
XBO C 300W/BF	55203	300	14	21	1000 <sup>1), 2)</sup>	5000	5800	Horizontal	1
XBO C 300W/MAJ1817	55204	300	14	21	1000 <sup>1), 2)</sup>	5000	5800	Horizontal	1
XBO C 300W/EPKI	55207	300	13	22	500 <sup>1), 2)</sup>	7400	5900	Horizontal	2
XBO C 300W/X7000 <sup>3)</sup>	55205	300	14	22	1000 <sup>1), 2)</sup>	7450	5900	Horizontal	2
XBO C 300W/X8000 <sup>4)</sup>	55206	300	14	22	1000 <sup>1), 2)</sup>	7450	5900	Horizontal	2

1) Up to 50% of initial output  
2) Warranty is up to 50% of the Average Rated Life  
3) Exclusive only to LuxteL assembly CL1571/X7000  
4) Exclusive only to LuxteL assembly CL1567/X8000

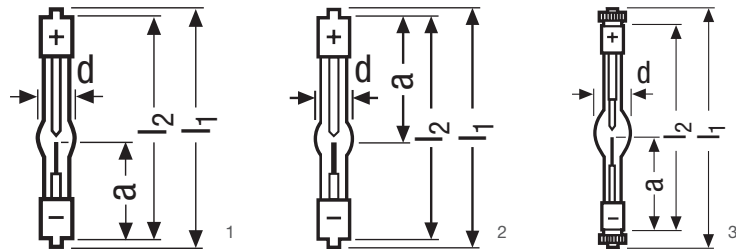




**XBO® Xenon short-arc lamps with reflector 85W...300W**

Product Name	Item Number	W	V	A	t[h]					AC/DC		
XBO R 100 W/45 C OFR <sup>1)</sup>	69191	85...115	12...14 <sup>2)</sup>	7.0...7.4	500	77	45	Forced	p20	DC	2	1
XBO R 100 W/45 OFR <sup>1)</sup>	69197	85...115	12...14 <sup>2)</sup>	7.0...7.4	500	77	45	Forced	p20	DC	2	2
XBO R 101 W/45 C OFR <sup>1)</sup>	69190	85...115	12...14 <sup>2)</sup>	7.0...7.4	500	77	45	Forced	p20	DC	2	3
XBO R 180 W/45 OFR <sup>1)</sup>	69186	150...210	12.8...14.8 <sup>2)</sup>	11.75...12.25	500	81.5	45	Forced	p20	DC	2	2
XBO R 180 W/45 C OFR <sup>1)</sup>	69183	150...210	12.8...14.8 <sup>2)</sup>	11.75...12.25	500	81.5	45	Forced	p20	DC	2	1
XBO R 181 W/45 C OFR <sup>1)</sup>	69184	150...210	12.8...14.8 <sup>2)</sup>	11.75...12.25	500	81.5	45	Forced	p20	DC	2	3
XBO R 300 W/60 C OFR <sup>1)</sup>	69167	250...300	16...20 <sup>2)</sup>	18	1000	80	60	Forced	p20	DC	2	4

1) OFR = Ozone-free version  
2) Initial voltage range

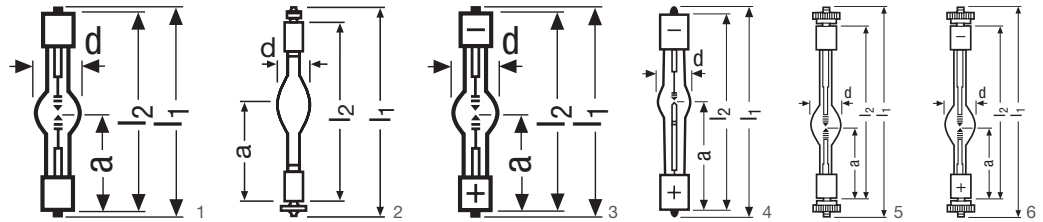


**XBO® Xenon short-arc lamps without reflector**

Product Name	Item Number	W	V	A	t[h]	l [mm]	l max. [mm]	LCL a [mm]
XBO 75 W/2	69231	64...86	12...16 <sup>6)</sup>	4.9...5.9	400	90	82	37 <sup>9)</sup>
XBO 75 W/2 OFR <sup>1)</sup>	69232	64...86	12...16 <sup>6)</sup>	4.9...5.9	400	90	82	37 <sup>9)</sup>
XBO 100 W OFR <sup>1)</sup>	69233	85...115	12.8...14.4 <sup>6)</sup>	7.0...7.4	500	90	82	44.5 <sup>10)</sup>
XBO 150 W/CR OFR <sup>1)</sup>	69237	125...180	15...18 <sup>6)</sup>	8.5 <sup>7)</sup>	3000 h / 1200 <sup>8)</sup>	150	127	57 <sup>9)</sup>
XBO 150 W/1	69234	130...175	17...21 <sup>6)</sup>	7.5 <sup>7)</sup>	1200	150	127	57 <sup>9)</sup>
XBO 150 W/4 <sup>2)</sup>	69238	130...175	17...21 <sup>6)</sup>	7.5 <sup>7)</sup>	1200	150	127	57 <sup>9)</sup>

Product Name	Item Number					AC/DC		
XBO 75 W/2	69231	Convection	s100 <sup>3)</sup>	SFa9-2	SFa7.5-2	DC	10	1
XBO 75 W/2 OFR <sup>1)</sup>	69232	Convection	s100 <sup>3)</sup>	SFa9-2	SFa7.5-2	DC	10	1
XBO 100 W OFR <sup>1)</sup>	69233	Convection	s100 <sup>3)</sup>	SFa9-2	SFa7.5-2	DC	10	2
XBO 150 W/CR OFR <sup>1)</sup>	69237	Forced	s15 <sup>4)</sup>	SFc12-4	SFcX12-4	DC	10	3
XBO 150 W/1	69234	Forced	s15 <sup>4)</sup>	SFc12-4	SFcX12-4	DC	10	3
XBO 150 W/4 <sup>2)</sup>	69238	Forced	s15 <sup>4)</sup>	SFc12-4	SFcX12-4	DC	10	3

1) OFR = Ozone-free version  
2) Lamp uses a special quality of quartz glass, known as SUPRASIL, which – in comparison to conventional quartz – provides higher transmission below 250 nm  
3) If vertical, then anode on top; up to 10° below horizontal, cathode on top  
4) For vertical burning position: anode (+) on top  
5) Anode (+) on top  
6) Initial voltage range  
7) Operation with rated current recommended  
8) In vertical burning position / In horizontal burning position  
9) Distance from end of base to tip of electrode (cold)  
10) Distance from end of base to tip of anode (cold)

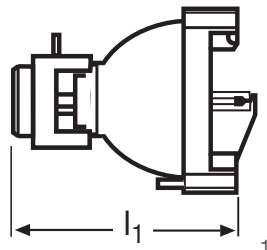


**HBO® Mercury short-arc lamps without reflector 50W...200W**

Product Name	Item Number	W	V	A	AC/DC	t [h]	d [mm]	
HBO 50 W/AC 39 V	69213	50	39...45 <sup>6)</sup>	1.1...1.3 <sup>5)</sup>	AC	100	10	47 <sup>1)</sup>
HBO 50 W/AC 34 V	69214	50	34...39 <sup>6)</sup>	1.3...1.5 <sup>5)</sup>	AC	100	10	47 <sup>1)</sup>
HBO 50 W/3	69215	50	20...26 <sup>6)</sup>	1.9...2.5 <sup>5)</sup>	DC	200	9	47 <sup>1)</sup>
HBO 100 W/2	69217	100		4.3...5.6 <sup>5)</sup>	DC	200	10	82 <sup>1)</sup>
HBO 103 W/2	69182	100	17...25 <sup>6)</sup>	4.0...5 <sup>5)</sup>	DC	300	10	82 <sup>1)</sup>
HBO 200 W/4	69224	200	54...63 <sup>6)</sup>	3.0...3.7 <sup>5)</sup>	AC	200	17	102 <sup>1)</sup>
HBO 200 W/2 57 V	69198	200	57...65 <sup>6)</sup>	3.0...3.5 <sup>5)</sup>	AC/DC	400 h / 200 <sup>8)</sup>	17	102 <sup>1)</sup>
HBO 200 W/DC 57 V	69225	200	48...65 <sup>6)</sup>	3.0...4.3 <sup>5)</sup>	DC	1000	17	102 <sup>1)</sup>
HBO 200 W/DC TM	69163	200	57...65 <sup>6)</sup>	3.0...4.3 <sup>5)</sup>	DC	400	17	102 <sup>1)</sup>

Product Name	Item Number							
HBO 50 W/AC 39 V	69213	47 <sup>1)</sup>	22 <sup>2)</sup>	s45 <sup>3)</sup>	SFa6-2	SFa6-2	10	1
HBO 50 W/AC 34 V	69214	47 <sup>1)</sup>	22 <sup>2)</sup>	s45 <sup>3)</sup>	SFa6-2	SFa6-2	10	2
HBO 50 W/3	69215	47 <sup>1)</sup>	22 <sup>2)</sup>	s45 <sup>4)</sup>	SFa8-2	SFa6-2	10	3
HBO 100 W/2	69217	82 <sup>1)</sup>	43 <sup>2)</sup>	s90 <sup>4)</sup>	SFa9-2	SFa7.5-2	10	4
HBO 103 W/2	69182	82 <sup>1)</sup>	43 <sup>2)</sup>	s90 <sup>4)</sup>	SFa9-2	SFa7.5-2	10	4
HBO 200 W/4	69224	102 <sup>1)</sup>	40 <sup>2)</sup>	s20 <sup>5)</sup>	SFc10-4	SFc10-4	10	5
HBO 200 W/2 57 V	69198	102 <sup>1)</sup>	40 <sup>2)</sup>	s90 <sup>4)</sup>	SFc10-4	SFc10-4	10	6
HBO 200 W/DC 57 V	69225	102 <sup>1)</sup>	40 <sup>2)</sup>	s90 <sup>4)</sup>	SFc10-4	SFc10-4	10	6
HBO 200 W/DC TM	69163	102 <sup>1)</sup>	40 <sup>2)</sup>	s90 <sup>4)</sup>	SFc10-4 <sup>7)</sup>	SFc10-4 <sup>7)</sup>	10	6

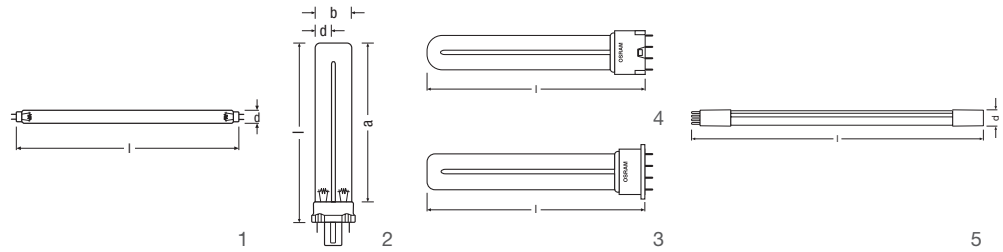
- 1) Maximum
- 2) Distance from end of base to tip of anode (cold)
- 3) Observe "UP" marking
- 4) Anode underneath
- 5) Reference base pointing downwards (shorter shaft)
- 6) Initial electrical values
- 7) With 8-32 UNC-3 B thread
- 8) Reduced lifespan in AC operation







**HBO® Mercury short-arc lamps with reflector 100W**

Product Name	Item Number	W	V	A	AC/DC	t [h]	UVA/W	d [mm]						
HBO R 103 W/45	69311	100	20...25 <sup>1)</sup>	4.0...5 <sup>1)</sup>	DC	300	3.8 W / 5 <sup>2)</sup>	68	77	45	p20	Pin	Pin	2 1

- 1) Initial electrical values
- 2) Aperture 3 mm round / Aperture 5 mm round



**PURITEC® HNS® Germicidal ultraviolet lamps**

Product Name	Item Number	W	A	∅ [mm]	l [mm]				
G4T5/OF (HNS 4 W G5)	23397	4 <sup>2)</sup>	0.17	16	136	G5	0.9	25	1
G6T5/OF (HNS 6 W G5)	23399	6 <sup>2)</sup>	0.16	16	212	G5	1.7	25	1
G8T5/OF (HNS 8 W G5 G5)	21061	7 <sup>2)</sup>	0.15	16	288	G5	2	25	1
HNS 11W G5 25X1 (HNS 11W G5)	23354	11 <sup>2)</sup>	0.41	16	212	G5	2.5	25	1
HNS 16 W G5 (HNS 16 W G5)	TBD	16 <sup>2)</sup>	0.43	16	288	G5	4	25	1
GCF5DS/G23/SE/OF (HNS S 5 W G23) <sup>1)</sup>	23396	5 <sup>2)</sup>	0.18	28	108	G23	1.3	10	2
GCF7DS/G23/SE/OF (HNS S 7 W G23) <sup>1)</sup>	20390	7 <sup>2)</sup>	0.18	28	135.5	G23	1.8	10	2
GCF9DS/G23/SE/OF (HNS S 9 W G23) <sup>1)</sup>	21062	9 <sup>2)</sup>	0.18	28	165.5	G23	2.5	10	2
GCF11DS/G23/SE/OF (HNS S 11 W G23) <sup>1)</sup>	23398	11 <sup>2)</sup>	0.16	28	235.5	G23	3	10	2
HNS S/E 7 W 2G7 (HNS S/E 7 W 2G7)	TBD	6.50 <sup>2)</sup>	0.18	28	112	2G7	1.9	10	3
HNS S/E 9 W 2G7 (HNS S/E 9 W 2G7)	TBD	8 <sup>2)</sup>	0.17	28	142	2G7	2.5	10	3
HNS S/E 11 W 2G7 (HNS S/E 11 W 2G7)	TBD	11 <sup>2)</sup>	0.15	28	212	2G7	3.6	10	3
HNS S 13 W GX23 (HNS S 13 W GX23)	TBD	13.40 <sup>2)</sup>	0.28	28	179	GX23	3.4	10	
GFT18DL/2G11/SE/OF (HNS L 18 W 2G11)	21054	18 <sup>2)</sup>	0.38	40	214	2G11	5.5	10	4
GFT24DL/2G11/SE/OF (HNS L 24 W 2G11)	20849	24 <sup>2)</sup>	0.35	40	314.5	2G11	7.3	10	4
GFT36DL/2G11/SE/OF (HNS L 36 W 2G11)	23392	36 <sup>2)</sup>	0.44	40	408	2G11	10.8	10	4
GFT55DL/2G11/SE/OF (HNS L 55 W 2G11)	23401	55 <sup>2)</sup>	0.55	40	533	2G11	17	10	4
GFT60DL/2G11/SE/OF (HNS L 60 W 2G11)	23402	60 <sup>2)</sup>	0.8	40	408	2G11	19	10	4
GFT95DL/2G11/SE/OF (HNS L 95 W 2G11)	23403	95 <sup>2)</sup>	0.8	40	533	2G11	27	10	4
G15T8/OF (HNS 15W G13)	21259	15 <sup>2)</sup>	0.33	26	438	G13	4	25	1
G25T8/OF (HNS 25W G13)	55197	25 <sup>2)</sup>	0.60	26	437.3	G13	7.8	25	1
G30T8/OF (HNS 30W G13)	21080	30 <sup>2)</sup>	0.36	26	895	G13	12	25	1
HNS 36W G13 (HNS 36W G13)	TBD	36 <sup>2)</sup>	0.44	26	1200	G13	15	25	1
G55T8/OF (HNS 55W G13)	21283	55 <sup>2)</sup>	0.77	26	895	G13	18	25	1
G16T5L/4PSE (HNS 16W 4P SE)	55030	16 <sup>2)</sup>	0.40	16	320.3	4P SE	4	40	5
G20T5L/4PSE (HNS 20W 4P SE)	55031	20 <sup>2)</sup>	0.45	16	430	4P SE	6	40	5
G36T5L/4PSE (HNS 36W 4P SE)	55032	36 <sup>2)</sup>	0.43	16	845.4	4P SE	14	40	5

1) UV irradiance 253.7 nm measured at a distance of 1 m at mid-lamp level, at 20 ° C ambient temperature, free-burning. Between 0.3...3.0 m, the irradiance is inversely proportional to the square of the distance  
 2) Not relevant

If you are interested in learning more about OSRAM lamps for medical applications, please visit our website: [www.osram.us/medical](http://www.osram.us/medical)

**OSRAM SYLVANIA Inc.**

OSRAM Americas:

200 Ballardvale Street  
Wilmington, MA 01887 USA  
877-636-5267  
[www.osram.us](http://www.osram.us)

**OSRAM SYLVANIA Inc.**

Specialty Lighting:

129 Portsmouth Avenue  
Exeter, NH 03833 USA  
888-677-2627  
[www.osram.us](http://www.osram.us)

OSRAM, DULUX, HBO, HLX, HXP, PURITEC, HNS, XBO and XIR are registered trademarks of OSRAM GmbH.  
All other trademarks are those of their respective owners.  
Specifications subject to change without notice.

© 2018 OSRAM SYLVANIA Inc.

**Distributor:**

  
**Techni-Lux**  
[www.techni-lux.com](http://www.techni-lux.com)

Phone: 407-857-8770  
Fax: 407-857-8771  
Email: [sales@techni-lux.com](mailto:sales@techni-lux.com)

**OSRAM**