

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.

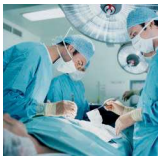
- Discharge/Halogen**
- XBO®
 - 64627 HLX®
 - 64634 HLX®
 - 64653 HLX®



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
As part for 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®
 - XBO®
 - 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® 75 W, 100 W, 150 W



- 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 120 W UV



- 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 of HXP® R 120 W UV coated for maximum reflection in 320 ... 500 nm range
- ECG / lamp system

Discharge lamps

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



- 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® 100 W, 180 W, R 300 W



- 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

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
- 4 W - 60 W

Discharge lamps

Compact PURITEC® HNS® UV-C Light

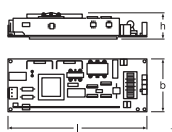


- Efficient at disinfecting air, water and surfaces
- Effective and environmentally friendly disinfection without chemicals
- Low mercury content
- Long lifetime thanks to special high-quality coating of the glass bulb
- 5 W - 95 W

OSRAM BLUE lamps

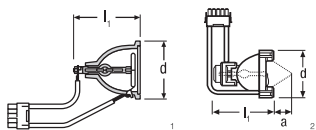


- Low mercury content
- Long lifetime thanks to special high-quality coating of the glass bulb
- High quality



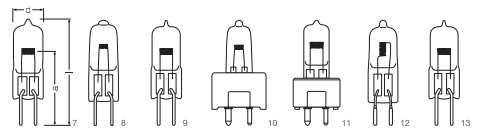
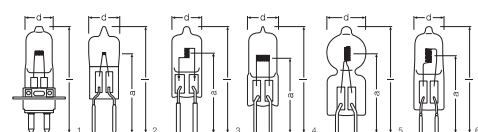
Product name	GTIN (EAN)								
PT-VIP 4AC/380 Q3 DIM	4008321964830	5 ⁺	200	135	50	27	DC/AC ³	50	1
PT-VIP 2AC/380 O1 DIM 120 EN	4008321040855	20 ⁰	120	150	60	32	DC/AC ³	25	

1) Input/Output
2) Maximum



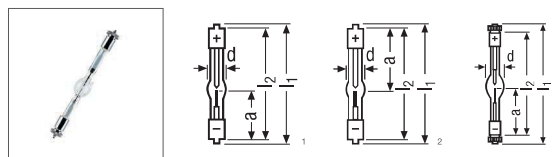
Product name	GTIN (EAN)	W	V	A	AC/DC	tn	IP68	IP max. temp.	UL	CE	RoHS	REACH	RoHS	REACH	RoHS	REACH
HXP R 120 W/17 C ¹	4050300786476	120 ¹	70...95 ¹	1.5	AC	2000	65	77	17.3	Forced	p20	50	1			
HXP R 120 W/45 VIS ²	4050300688272	120 ¹	60...90 ¹	1.4	AC	2000	67	77	45	Forced	p20	2	2			
HXP R 120 W/45 UV ³	4050300866755	120 ¹	60...90 ¹	1.4	AC	2000	67	77	45	Forced	p20	2	2			
HXP R 200 W/45 M ⁴	4008321180070	200 ¹	60...96 ¹	3.4	AC	2000	67	77	45	Forced	p20	2	2			
HXP R 206 W/45C ⁵	4008321331472	200 ¹	48...82 ¹	3.4	AC	1000	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) To be operated with PT-VIP 4AC/380 O3 DIM 206 VS50
- 4) not relevant
- 5) initial voltage range



Product name	GTIN (EAN)															
			LF	W	V	t	H	J	A	B	C	D	PG22	B	30	1
64222	4050300327273		M/43	10 th	6	300	9	44	14	13.0 th	Any		PG22	B	30	1
64223	4050300310709		M/43	10 th	6	300	9	38	24	15.0 th	Any		G4	B	40	2
64225	4050300006766	ESA/FHS	M/29	10 th	6	100	9.5	31	19.5	17.0 th	s90		G4	B	40	2
64250	HLX 405030012407	ESB	M/30	20 th	6	100	9	31	19.4 th	2.30 th	Any		G4	B	40	2
64251	HLX 405030038860			20 th	6	100	9	40	14	23.0 th	Any		PG22	B	30	1
64256	HLX 405030017053			30 th	6	100	9.5	31	19.5	1.81 th	Any		G4	B	40	2
64275	4050300259939		M/137	3 rd	50	9	35	26	31	3.1 th	Any		G4	C	40	3
64258	405030028513			20 th	12	2000	9.5	30	19.5 th	3.25 th /7 th	s90		G4	C	40	3
64259	4050300312569			20 th	12	1500	9.5	30	19.5 th	1.9 th	s90		G4	B	40	4
64260	4050300099798		M/185	30 th	12	50	9	40	14	2.61 th	Any		PG22	B	30	1
64261	HLX 4050300220529		M/130	30 th	12	50	11.5	44	30	2.61 th	Any		G635	B	40	3
64262	HLX 405030010777		M/134	50 th	12	1100	11.5	44	30	2.61 th	s90		G635	B	40	3
64510	HLX 405030009667	BRL	A/124	50 th	12	100	11.5	44	30 th	3.1 th	s90		G635	B	40	3
64511	HLX 4050302110791			12 th	100	115	10.5	44	30	3.31 th	s90		G635	B	40	8
62138	HLX 4050300242958			100 th	12	50	11.5	37	27	2.41 th	p09/p15	G635	B	40	3	
64621	HLX 4050300535531			100 th	12	2000	11.5	48	18	4.72 th	s90		PG22	B	30	1
64623	HLX 405030012618	ECV	M/26	100 th	12	2000	11.5	44	30	4.72 th	s90		G635	B	40	3
64625	HLX 405030089710	FOR	A/1215	100 th	12	50	11.5	44	30 th	2.23 th	s90		PG135	B	40	3
64628	4050300099169	FDE	A/1261	100 th	12	100	11.5	44	30	2.23 th	s90		G635	B	12	10
64626	HLX 405030006765	FHE	A/145	100 th	12	50	11.5	48	18	2.23 th	s90		PG22	B	30	1
64291	HLX 4050301330550			40 th	22.8	800	12	44	30 th	3.91 th	Any		G635	B	40	3
64650	40083021107138			50 th	22.8	1200	13	44	30	2.0 th	Any		G635	C	40	3
64668	HLX 4050301331182			80 th	22.8	400	14	44	30 th	2.25 th	Any		G635	B	40	3
64292	HLX 405030130598			150 th	22.8	600	14	44	30 th	2.86 th	s90		G635	B	40	3
64293	HLX 4050300202222			100 th	24	300										

- 1) Available on request
- 2) ± 0.3 mm
- 3) ± 0.5 mm
- 4) Restricted tolerances $3.5 \pm 0.25 \cdot 0.8 \pm 0.10$
- 5) Round-core double coil
- 6) not relevant

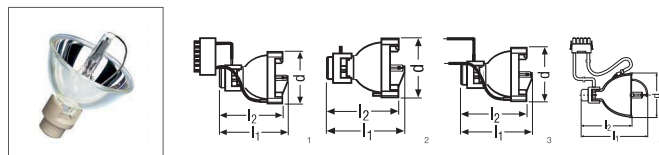


XBO® Xenon short-arc lamps without reflector

Product name	GTIN (EAN)	W	V	A	t _{inj}	L (mm)	B _{max} (mm)	LD (mm)
XBO 75 W/2	4050300508001	64... 86	12... 10 ⁸	4.9... 5.9	400	90	82	37 ^a
XBO 75 W/2 OFR ¹	4050300508025	64... 86	12... 10 ⁸	4.9... 5.9	400	90	82	37 ^a
XBO 100 W OFR ¹	4008321366328	85... 115	12... 18, 14... 6 ^a	7.0... 7.4	500	90	82	44.5 ¹¹
XBO 150 W/CR OFR ¹	4050300508788	125... 180	15... 18 ^a	8.5 ^b	3000 h / 1200 ¹¹	150	127	57 ^a
XBO 150 W/CR	4050300508034	130... 175	17... 21 ^a	7.5 ^b	1200	150	127	57 ^a
XBO 150 W/4	4050300508382	130... 175	17... 21 ^a	7.5 ^b	1200	150	127	57 ^a

Product name	GTIN (EAN)							
XBO 75 W/2	4050300508801	Convection	s100*	SfA9-2	SfA7-5-2	DC	10	1
XBO 75 W/2 OFR*	4050300508825	Convection	s100*	SfA9-2	SfA7-5-2	DC	10	1
XBO 100 W OFR*	4008321386328	Convection	s100*	SfA9-2	SfA7-5-2	DC	10	2
XBO 150 W/CR OFR**	4050300508788	Forced	s15*	SfC12-4	SfC12-4	DC	10	3
XBO 150 W/1	4050300508544	Forced	s15*	SfC12-4	SfC12-4	DC	10	3
XBO 150 W/4*	4050300508382	Forced	s15*	SfC12-4	SfC12-4	DC	10	3

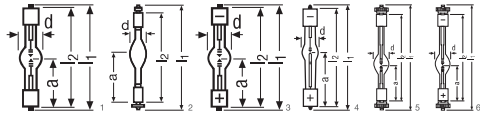
- 1) OFR - Coarse-free version
- 2) Lamp uses a special quality of quartz glass, known as SUPRASIL, which – in comparison to conventional quartz – provides higher transmission below 250 nm
- 3) If vertical, then anode on top; up to 10° below horizontal, cathode on top
- 4) For vertical burning position: 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)



XBO® Xenon short-arc lamps with reflector 75...300 W

Product name	GTIN (EAN)	W	V	A	t _{in}								
XBO R 100 W/45 C°	4050300367767	85...115	12...14"	7.0...7.4	500	77	45	Forced	p20	DC	2	1	
XBO R 100 W/45 OFR°	4050300317205	85...115	12...14"	7.0...7.4	500	77	45	Forced	p20	DC	2	2	
XBO R 101 W/45 C° OFR°	405030038458	85...115	12...14"	7.0...7.4	500	77	45	Forced	p20	DC	2	3	
XBO R 180 W/45°	4050300432175	150...210	12...18"	11.75...12.25	500	81.5	45	Forced	p20	DC	2	2	
XBO R 180 W/45 OFR°	40503004219	150...210	12...18"	11.75...12.25	500	81.5	45	Forced	p20	DC	2	3	
XBO R 181 W/45°	4050300450872	150...210	12...18"	11.75...12.25	500	81.5	45	Forced	p20	DC	2	3	
XBO R 300 W/60 C° OFR°	400832113722	250...300	16...20"	18	1000	80	60	Forced	p20	DC	2	4	

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

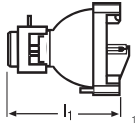


HBO® Mercury short-arc lamps without reflector 50...200 W

Product name	GTIN (EAN)	W	V	A	AC/DC	t _h	Φ	h
HBO 50 W/AC 39 V	4050300507132	50	39...45 ¹⁾	1.1...1.3 ²⁾	AC	100	10	47 ³⁾
HBO 50 W/AC 34 V	4050300507118	50	34...39 ¹⁾	1.3...1.5 ²⁾	AC	100	10	47 ³⁾
HBO 50 W/3	4050300506692	50	20...26 ⁴⁾	1.9...2.5 ⁵⁾	DC	200	9	47 ³⁾
HBO 100 W/2	4050300507095	100	10...15 ⁶⁾	4.3...5.6 ⁶⁾	DC	200	10	82 ³⁾
HBO 103 W/2	4050300382128	100	17...25 ⁶⁾	4.0...5 ⁶⁾	DC	300	10	82 ³⁾
HBO 200 W/4	4050300506715	200	54...63 ⁶⁾	3.0...3.7 ⁶⁾	AC	200	17	102 ³⁾
HBO 202 W/4	4050300507156	200	57...65 ⁶⁾	3.6 ⁶⁾	AC	200	18	102 ³⁾
HBO 200 W/2 57 V	4050300508153	200	57...65 ⁶⁾	3.0...3.5 ⁶⁾	AC/DC	400 h / 200 ⁸⁾	17	102 ³⁾
HBO 200 W/DC 57 V	4050300506791	200	48...65 ⁶⁾	3.0...4.3 ⁶⁾	DC	1000	17	102 ³⁾
HBO 200 W/DC TM	4008321137623	200	57...65 ⁶⁾	3.0...4.3 ⁶⁾	DC	400	17	102 ³⁾

Product name	GTIN (EAN)	h _{max}	LCL	Φ	h	h	h
HBO 50 W/AC 39 V	4050300507132	47 ¹⁾	22 ²⁾	s45 ³⁾	SFA8-2	SFA8-2	10 1
HBO 50 W/AC 34 V	4050300507118	47 ¹⁾	22 ²⁾	s45 ³⁾	SFA8-2	SFA8-2	10 2
HBO 50 W/3	4050300506692	47 ¹⁾	22 ²⁾	s45 ³⁾	SFA8-2	SFA8-2	10 3
HBO 100 W/2	4050300507095	82 ¹⁾	43 ³⁾	s90 ⁴⁾	SFA8-2	SFA7.5-2	10 4
HBO 103 W/2	4050300382128	82 ¹⁾	43 ³⁾	s90 ⁴⁾	SFA8-2	SFA7.5-2	10 4
HBO 200 W/4	4050300506715	102 ¹⁾	40 ³⁾	s20 ⁵⁾	SFC10-4	SFC10-4	10 5
HBO 202 W/4	4050300507156	102 ¹⁾	40 ³⁾	s15 ⁶⁾	SFC10-4	SFC10-4	10 5
HBO 200 W/2 57 V	4050300508153	102 ¹⁾	40 ³⁾	s90 ⁴⁾	SFC10-4	SFC10-4	10 6
HBO 200 W/DC 57 V	4050300506791	102 ¹⁾	40 ³⁾	s90 ⁴⁾	SFC10-4	SFC10-4	10 6
HBO 200 W/DC TM	4008321137623	102 ¹⁾	40 ³⁾	s90 ⁴⁾	SFC10-4 ¹⁾	SFC10-4 ¹⁾	10 6

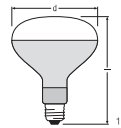
- 1) Maximum
2) Clearance from end of base to tip of anode (cold)
3) Clearance "LPP" marking
4) Anode undercut
5) Reference base pointing downwards (shorter shaft)
6) Initial electrical values
7) With 8-32 UNC-3 B thread
8) Reduced lifespan in AC operation



HBO® Mercury short-arc lamps with reflector 100 W

Product name	GTIN (EAN)	W	V	A	AC/DC	t _h	h _{max}	LCL	Φ	h	h	h
HBO R 103 W/45	4050300405957	100	20...25 ¹⁾	4.0...5 ¹⁾	DC	300	3.8 W / 5 ²⁾	68	77	45	p20	Pin 2 1

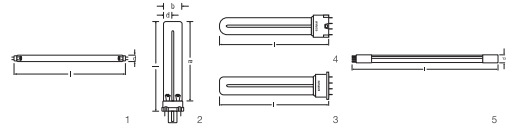
- 1) Initial electrical values
2) Aperture 3 mm round / Aperture 5 mm round



ULTRA VITALUX

Product name	GTIN (EAN)	W	V	t _h	h _{max}	h _{min}	h _{max}	h _{min}	h _{max}	h _{min}	h _{max}	h _{min}
ULTRA VITALUX 300 W 230 V E27	4008321543929	300 ¹⁾	230	1000	13.6	3	127	185	Any	E27	6	1

1) not relevant



PURITEC® HNS® Germicidal ultraviolet lamps

Product name	GTIN (EAN)	W	A	h _{max}	h _{min}	h _{max}	h _{min}	h _{max}	h _{min}	h _{max}	h _{min}
HNS 4 W G5	4008321378316	4 ¹⁾	0.17	16	136	G5	0.9	25	1		
HNS 8 W G5	4008321378330	6 ¹⁾	0.16	16	212	G5	1.7	25	1		
HNS 8 W G5 G5	4008321378385	7 ¹⁾	0.15	16	288	G5	2	25	1		
HNS 11W G5	4008321468796	11 ¹⁾	0.41	16	212	G5	2.5	25	1		
HNS 16 W G5	4008321620774	16 ¹⁾	0.43	16	288	G5	4	25	1		
HNS S 5 W G23 ¹⁾	4008321229946	5 ¹⁾	0.18	28	108	G23	1.3	10	2		
HNS S 7 W G23 ¹⁾	4050300941202	7 ¹⁾	0.18	28	135.5	G23	1.8	10	2		
HNS S 9 W G23 ¹⁾	4050300941226	9 ¹⁾	0.18	28	165.5	G23	2.5	10	2		
HNS S 11 W G23 ¹⁾	4050300941240	11 ¹⁾	0.16	28	235.5	G23	3	10	2		
HNS S/E 7 W 2G7	4008321383891	6.50 ²⁾	0.18	28	112	2G7	1.9	10	3		
HNS S/E 9 W 2G7	4008321384911	8 ¹⁾	0.17	28	142	2G7	2.5	10	3		
HNS S/E 11 W 2G7	4008321384935	11 ¹⁾	0.15	28	212	2G7	3.6	10	3		
HNS S 13 W GX23	4052899040410	13.40 ²⁾	0.28	28	179	GX23	3.4	10			
HNS L 18 W 2G11	4008321220431	18 ¹⁾	0.38	40	214	2G11	5.5	10	4		
HNS L 24 W 2G11	4008321220561	24 ¹⁾	0.35	40	314.5	2G11	7.3	10	4		
HNS L 36 W 2G11	4008321220684	36 ¹⁾	0.44	40	408	2G11	10.8	10	4		
HNS L 55 W 2G11	4052899012394	55 ¹⁾	0.55	40	533	2G11	17	10	4		
HNS L 60 W 2G11	4052899012462	60 ¹⁾	0.8	40	408	2G11	19	10	4		
HNS L 95 W 2G11	4052899012509	95 ¹⁾	0.8	40	533	2G11	27	10	4		
HNS 15W G13	4008321770271	15 ¹⁾	0.33	26	438	G13	4	25	1		
HNS 30W G13	4008321770301	30 ¹⁾	0.36	26	895	G13	12	25	1		
HNS 36W G13	4052899084018	36 ¹⁾	0.44	26	1200	G13	15	25	1		
HNS 55W G13	4052899083936	55 ¹⁾	0.77	26	895	G13	18	25	1		
HNS 16W 4P SE	4052899437586	16 ¹⁾	0.40	16	320.3	4P SE	4	40	5		
HNS 20W 4P SE	4052899437562	20 ¹⁾	0.45	16	430	4P SE	6	40	5		
HNS 36W 4P SE	4052899437630	36 ¹⁾	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 25 °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 portfolio for medical applications, please visit our corporate website:

www.osram.com/pia

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