

A female scientist with blonde hair tied back, wearing a white lab coat, is looking through a white and black microscope. The background is a soft, out-of-focus laboratory setting.

PHILIPS

Special Lighting

Science & Industry

**A specialist
lamp for
every need**



Give your **customers** **exactly** what they need

As a leading lighting company for more than 120 years, we have unrivaled expertise in specialist lamps for science and industry applications. Take our very broad range of halogens, for example. Their distortion-free quartz bulb, precise filament positioning, and Color Rendering Index of 100 make them perfect for mission-critical systems. And then there are our Flexo print TL /R lamps, which have an internal reflector and produce the ideal UVA spectrum for optimal flexographic curing results.

Over the years we have found that professional end users are searching for lamps with a high performance they can rely on, offering them great value for their money. This is exactly what we offer - so you can give your customers exactly what they need. Find out more about our range and their specifications on the next pages.



Halogen reflector

Our halogen reflector lamps offer unbeatable light quality. This in combination with their proven reliability makes them ideal for professional applications where optimum visual conditions are important, such as medical, projection and scientific illumination systems. A special designed dichroic reflector ensures backwards dissipation of approximately 75% of the generated heat. This helps the optical system remain within temperature limits. In addition, you get all the proven advantages of halogen technology such as an excellent color rendering of 100 - ensuring colors appear naturally and faithfully, as they would in natural daylight - a comfortable crisp white light and a constant high light output over the lifetime of the lamps. A special blue-filter version, capable of blocking out unwanted light above 700 nm, is available for dental curing applications.

Benefits

- Creation of optimum visual conditions
- High performance light you can rely on during the whole lamp life
- Direct retrofit in existing applications, no re-alignment necessary when lamp is replaced

Features

- Excellent distortion-free quartz bulb
- Excellent color rendering of 100
- Dichroic coating on glass reflector radiates about 75% of the generated heat backwards, keeping the temperature within safe limits
- Special blue-filter version available for dental curing applications



GX5.3 smooth



GX5.3 faceted



GX5.3 stippled



G5.3/4.8



GY5.3

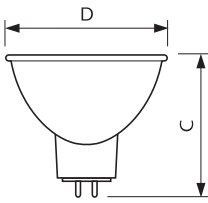


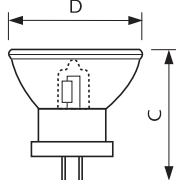
GZ6.35

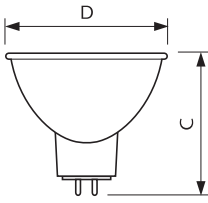


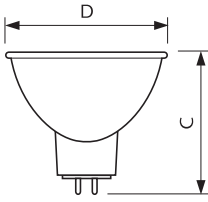
G4/GZ4

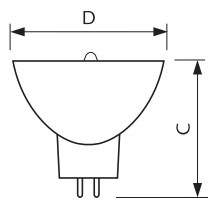
Dimensions (in mm) and applications areas

GX5.3	Product	C (Max)	D (Max)	Applications
 <p>Fig. 1</p>	13117 150W GX5.3 17V 1CT	47	50	Solar simulation, Projection, Overhead projector, Fiber optics
	13163 250W GX5.3 24V 1CT	45	50	Solar simulation, Projection, Overhead projector, Fiber optics
	5995 EJM 150W GX5.3 21V 1CT	44.5	50.7	Fiber optics
	13164 200W GX5.3 24V 1CT	44.5	50.7	Dental hardening
	13158 150W GX5.3 21V 1CT	44.5	50.7	Solar simulation, Projection, Overhead projector, Fiber optics
	14501 150W GX5.3 20V	44.5	50.7	Microfilm, Microfiche
	13289 50W GX5.3 13.8V 1CT	46	50	Microfilm, Microfiche
	13629 150W GX5.3 21V 1CT	44.5	50.7	Fiber optics
	13631 250W GX5.3 24V 1CT	44.5	50.7	Solar simulation, Projection, Overhead projector, Fiber optics
	14515 FO 75W GX5.3 12V 1CT	42	50	Fiber optics
	14527 150W GX5.3 21V 1CT	44.5	50.7	Fiber optics
	13938XHP 50W GX5.3 22.8V 1CT	45	50	Medical surgery lighting
	13194 85W GX5.3 13.8V 1CT	45	50	Microfilm, Microfiche
	13189 50W GX5.3 13.8V 1CT	45	50	Microfilm, Microfiche
	13186 90W GX5.3 14.5V 1CT	45	50	Microfilm, Microfiche
	14516 150W GX5.3 17V 1CT/10X5F	45	50	Heating

G5.3/4.8	Product	C (Max)	D (Max)	Applications
 <p>Fig. 2</p>	13865 75W G5.3/4.8 12V 1CT	38	35	Dental hardening

GY5.3	Product	C (Max)	D (Max)	Applications
 <p>Fig. 3</p>	13096 ELH 300W GY5.3 120V 1CT	44.5	50.7	Solar simulation, Projection, Overhead projector, Fiber optics
	13095 250W GY5.3 120V 1CT	44.5	50.7	Solar simulation, Projection, Overhead projector, Fiber optics

GZ6.35	Product	C (Max)	D (Max)	Applications
 <p>Fig. 4</p>	13861 FO 42W GZ6.35 12V 1CT	42	50	Fiber optics, Projection
	6834/25H FO 100W GZ6.35 12V 1CT	42	50	Fiber optics
	6834 100W GZ6.35 12V 1CT	42	50.7	Fiber optics, Projection
	6834FO 100W GZ6.35 12V 1CT	42	50	Fiber optics
	6853 75W GZ6.35 12V 1CT	42	50	Fiber optics, Projection
	6853 FO 75W GZ6.35 12V 1CT	42	50	Fiber optics
	6423 150W GZ6.35 15V 1CT	42	50.7	Fiber optics, Projection
	6423XHP FO 150W GZ6.35 15V 1CT	42	50	Fiber optics
	6423FO 150W GZ6.35 15V 1CT/10X5F	42	50	Solar simulation, Projection, Overhead projector, Fiber optics
	JCR 15V 150W 5H 1CT	43	50	Fiber optics
	JCR 12-100 H10	42	50	Fiber optics

G4/GZ4	Product	C (Max)	D (Max)	Applications
 <p>Fig. 5</p>	14552 75W GZ4 12V 1CT	43	35	Dental hardening
	13298 52W GZ4 10V 1CT	44	35	Dental hardening
	13528 15W GZ4 6V 1CT	42	35	Microfilm, Microfiche
	13165 35W GZ4 14V 1CT	45	35	Dental hardening
	JCR 12-20 A20H-3	38	35.8	Fiber optics



Halogen non-reflector

All our halogen non-reflector lamps incorporate a distortion-free quartz bulb and a precisely positioned filament. These ensure optimal beam performance and consistent, high light output that is maintained over their lifetime - two elements that are crucial for applications where visual conditions are important. In addition, you get all the proven advantages of halogen technology such as an excellent color rendering of 100 - ensuring colors appear naturally and faithfully, as they would in natural daylight - a comfortable crisp white light and a constant high light output over the lifetime of the lamps. Our halogen non-reflector lamps are easy to install, replace and operate. A wide range of wattages is available for a broad variety of applications, including projection systems.

Benefits

- Creation of optimum visual conditions
- High performance light you can rely on during the whole lamp life
- Direct retrofit in existing applications, no lamp adjustment required

Features

- Distortion-free, quartz bulb and precisely defined filament position for optimum beam performance and high light output
- Excellent color rendering of 100
- XHP version with xenon gas for maximum light output
- Flat filament available



G5.3



GY6.35



G4



GZ9.5



G6.35

Dimensions (in mm) and applications areas

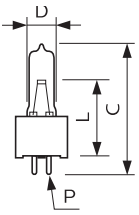
G5.3	Product	C (Max)	D (Max)	L (Min)	L (Norm)	L (Max)	P (Min)	P (Norm)	P (Max)	Applications
	6390 30W G5.3 10.8V 1CT	44	8.5	26.75	27	27.25	1.47	1.56	1.65	Overhead projector, Projection, Microfilm, Microscopes, Endoscopes
	14531 360W G5.3 82V 1CT	57	11.5	30.8	31.8	32.8	1.47	1.56	1.65	Overhead projector, Projection, Microfilm, Microscopes, Endoscopes

Fig. 6

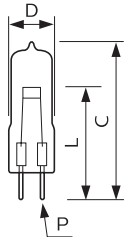
GY6.35	Product	C (Max)	D (Max)	L (Min)	L (Norm)	L (Max)	P (Min)	P (Norm)	P (Max)	Applications
	7023 100W GY6.35 12V 1CT	44	11.5	29.75	30	30.25	1.20	1.25	1.30	Overhead projector, Projection, Microfilm, Microscopes, Endoscopes
	7724 100W GY6.35 12V 1CT	44	10.7	29.65	30	30.35	1.20	1.25	1.30	Overhead projector, Projection, Microfilm, Microscopes, Endoscopes
	7724I 100W GY6.35 12V 1CT	44	10.7	29.65	30	30.35	1.20	1.25	1.30	Overhead projector, Projection, Microfilm, Microscopes, Endoscopes
	14530 300W GY6.35 24V 1CT	55	13.5	32.75	33	33.25	1.20	1.25	1.30	Overhead projector, Projection, Microfilm, Microscopes, Endoscopes

Fig. 7

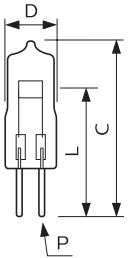
G4	Product	C (Max)	D (Max)	L (Min)	L (Norm)	L (Max)	P (Min)	P (Norm)	P (Max)	Applications
	6605 10W G4 6V 1CT	30	8.5	19.25	19.5	19.75	0.65	0.7	0.75	Microscopes
	7387 10W G4 6V 1CT	30	8.8	19.25	19.5	19.75	0.65	0.7	0.75	Microscopes
	7388 20W G4 6V 1CT	30	8.8	19.25	19.5	19.75	0.65	0.7	0.75	Microscopes
	5761 30W G4 6V 1CT	30	8.5	19.25	19.5	19.75	0.65	0.7	0.75	Microscopes
	14546 20W G4 12V 1CT	32	8.8	21.65	22	22.35	0.65	0.7	0.75	Microscopes
	12345SL 20W G4 12V 1CT	30	8.5	19.25	19.5	19.75	0.65	0.7	0.75	Microscopes

Fig. 8

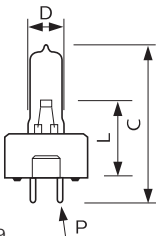
GZ9.5	Product	C (Max)	D (Max)	L (Min)	L (Norm)	L (Max)	P (Min)	P (Norm)	P (Max)	Applications
	5974 150W GZ9.5 24V 1CT	60	13.5	32.5	33.3	34.1	3.10	3.17	3.24	Overhead projector, Projection, Microfilm, Microscopes, Endoscopes
	14623P 95W GZ9.5 17V 1CT	60	13.5	32.5	33.3	34.1	3.10	3.17	3.24	Medical surgery lighting, projection

Fig. 9

G6.35	Product	C (Max)	D (Max)	L (Min)	L (Norm)	L (Max)	P (Min)	P (Norm)	P (Max)	Applications
	6958 250W G6.35 24V 1CT	57	13.5	32.75	33	33.25	0.95	1	1.05	Overhead projector, Projection, Microfilm, Microscopes, Endoscopes
	6899 55W G6.35 24V 1CT	44	11.5	29.75	30	30.25	0.95	1	1.05	Overhead projector, Projection, Microfilm, Microscopes, Endoscopes
	7748XHP 250W G6.35 24V 1CT	55	13.5	32.75	33	33.25	0.95	1	1.05	Overhead projector, Projection, Microfilm, Microscopes, Endoscopes
	7787 400W G6.35 36V 1CT	60	18	35.75	36	36.25	0.95	1	1.05	Overhead projector, Projection, Microfilm, Microscopes, Endoscopes
	7787XHP 400W G6.35 36V 1CT	60	18	35.75	36	36.25	0.95	1	1.05	Overhead projector, Projection, Microfilm, Microscopes, Endoscopes
	7158 150W G6.35 24V 1CT	50	12.75	31.5	32	32.5	0.95	1	1.05	Overhead projector, Projection, Microfilm, Microscopes, Endoscopes
	7158XHP 150W G6.35 24V 1CT	50	13.5	31.5	32	32.5	0.95	1	1.05	Overhead projector, Projection, Microfilm, Microscopes, Endoscopes
	13701 110W G6.35 22.8V 1CT	43	10.7	29.65	30	30.35	0.95	1	1.05	Medical surgery lighting, Overhead projector, Microfiche
	14623 95W G6.35 17V 1CT	50	12.75	31.5	32	32.5	0.95	1	1.05	Medical surgery lighting, projection
	7027 50W G6.35 12V 1CT	44	11.5	29.75	30	30.25	0.95	1	1.05	Overhead projector, Projection, Microfilm, Microscopes, Endoscopes
	6550 150W G6.35 15V 1CT	44	11.5	29.75	30	30.25	0.95	1	1.05	Overhead projector, Projection, Microfilm, Microscopes, Endoscopes

Fig. 10

A man with dark hair, wearing a purple shirt, is leaning on a wooden table. He is looking towards a glass of water and a pitcher of water. The background is a blurred indoor setting.

PHILIPS

Special Lighting

UV Purification

Together
we can be
sure it's pure

Working together to deliver cleaner
water and air, today and tomorrow

Water is an **essential part** of our daily lives and as **precious** as the air we breathe



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30 - 31 The right driver for the right lamp

Together we can be sure it's pure

Water is an essential part of our daily lives and as precious as the air we breathe. As the population rises, demand for clean water and air increases. Water purification companies need to balance this increasing demand with the cost of energy use, maintenance and new legislation.

Partnership

At Philips we offer equipment manufacturers and purification companies the state-of-the-art UV solutions they need to remain competitive. But our expertise goes far beyond innovative products. We also have a proven track record in UV technologies and offer solid development support, including microbiological performance testing. A level of service and support that sets industry standards.

We're also naturally inquisitive and love working with others to refine our ideas. We go out of our way to understand each application, immersing ourselves in the details to make sure that our UV solutions do exactly what you expect them to do for your equipment. In fact, we're the only manufacturer to have developed a complete package of UV lamps, drivers and modules in close co-operation with our partners. We're also pioneering the introduction of UVC LED solutions for equipment manufacturers that will revolutionize the industry. So together we can be sure it's pure, today and tomorrow.

Innovation

Innovation is at the heart of everything we do. Our comprehensive portfolio of UV lamp and driver systems offers the next generation of innovation that improves lives. To achieve the best performance from our UV installations, we also optimize the delicate balance between lamp and driver and test them thoroughly to ensure the ultimate in quality, reliability and performance.

Sustainability

The environment matters to us too. We're leading the way in caring for our planet with innovative systems that maximize quality of life and minimize environmental impact:

- A lack of safe water supply contributes to around 80% of diseases and deaths in the developing world. Our UV lamp systems help provide clean drinking water and air in a cost effective way.
- We contribute to create a better environment by substituting potentially dangerous chemicals in our UV solutions.
- Our products also contain industry-leading low amounts of mercury, have a long lifetime to reduce waste and a high efficacy to reduce energy use.



About UV technology

UV technology deactivates bacteria, viruses and fungal spores and as a result renders them harmless. The technology is primarily used in areas where there is a risk of microbiological contamination.

The main benefits of UV technology are:

- Effective against most viruses, spores and cysts including Cryptosporidium and Giardia
- Does not change the smell and taste of water
- There is no residual effect that can be harmful to humans or aquatic life
- UV disinfection is a physical process rather than a chemical disinfectant, which eliminates the need to generate, handle, transport, or store toxic/hazardous or corrosive chemicals

Integrated UV modules

In addition to our extensive range of individual UV lamps and drivers for water and air purification systems, we offer integrated UV modules on a project by project basis.

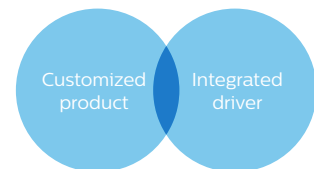
At Philips, we have a strong reputation for high quality products, providing end users with purification equipment that they can rely on to remain competitive. It's something we're committed to maintaining. That's why we have developed the YourSource and the Smart cap features. The objective? Helping you to secure maximum disinfection performance, today and tomorrow.



YourSource

Customized, integrated module

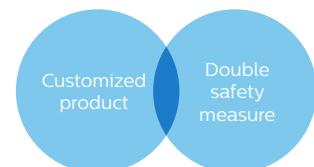
Our YourSource UV module with integrated driver is customized to your equipment. As a result, it provides a seamless fit, both in terms of ergonomics and functionality. The end user can always be confident of the correct performance of the UV Module, because it can only be replaced by the original lamp the system has been designed for. A safety switch avoids exposure to UV.



Smart cap



We can also provide our lamps with a special designed smart cap which allows for an easy lamp replacement. The lamp cap operates a safety switch inside the lamp holder to make sure that only the original lamp that the equipment has been designed for, can be installed. Moreover, the additional safety switch avoids exposure to UV.



Customized products are also available on request. Simply contact us with your requirements to find out what's possible.

Application and technological expertise

Philips lighting has a proven track record in UV and UVC technologies. We're also the No.1 sold LED lighting. Thanks to our deep understanding of the complex factors that need to be taken into account for water and air purification (including quality of the water, water flow and water temperature), we're a partner you can trust to design UV models that are optimized for your application. To learn more about how our integrated modules could benefit you, go to www.philips.com/uvpurification

Technical data



YourSource - Available now*:

Type	Connector	Total power (W)	Voltage (V)	UVC at 100h (W)	Useful life (h)	Depreciation at useful lifetime (%)
PL-S YourSource 12W/230V	IP65	12	230	3.6	5000	20
PL-S YourSource 15W/230V	IP65	15	120	4.1	5000	20
PL-S Yoursource 25W/230V**	cable	25	230	7	9000	20
PL-S Yoursource 40W/230V**	cable	40	230	9	9000	20

* Customized products designed for your specific equipment.

** At optimal bulb temperature in application.

Smart cap - Available now*:

Type	Cap-Base	Technical Lamp Wattage (W)	Lamp Voltage (V)	UVC at 100h (W)	Lamp Current (A)	Useful life (h)	Depreciation at useful lifetime (%)
TUV 36T5 HO Smart	4 Pins Single Ended	75	97	23.0	0.800	9000	15
TUV 36T5 HE Smart	4 Pins Single Ended	40	97	14.0	0.425	9000	15

* Customized products designed for your specific equipment.



Residential water and air purification

The quality of the air we breathe and the water we drink has a profound effect on our health and well-being.

Many people do not have access to clean drinking water. Impure or contaminated drinking water can cause a range of diseases from typhoid and cholera to gastroenteritis and hepatitis A.

Households can purify their water by installing UV water purification systems at the point of entry in the home, at the point of use (such as the kitchen sink) or via separate purifiers. Combined with a filter to remove suspended particulates or organic materials, the result is clean water.

Next to that, many households are troubled with harmful germs that float through the air, such as the flu and pneumonia. These can be rendered harmless through air purifiers equipped with Philips UV lamp systems. As a result, illnesses that are easily transmitted via the air are minimized and the overall air quality is improved.



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Philips TUV PL-L
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Philips TUV T8
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Philips drivers
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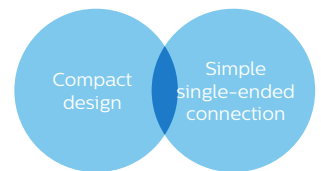


Philips TUV PL-S

Philips TUV PL-S lamps are compact UVC (germicidal) lamps used in residential water and air disinfection units. The compact size of the lamp allows for a small system design and design flexibility. Philips TUV PL-S lamps offer almost constant UV output over their complete lifetime. Thanks to the single-ended lamp base, lamp replacement is easy.

Main applications

- Deactivation of bacteria, viruses and other micro-organisms
- Residential drinking water units
- Pond water units
- Air treatment units
- Stand-alone purifiers



Features

Short-wave UV radiation with a peak at 253.7 nm (UVC) for disinfection purposes

Protective inside coating ensures almost constant UV output over the complete lifetime of the lamp

Special lamp glass filters out the 185 nm ozone-forming radiation

2-Pin PL-S lamp base contains a special starter for almost instant starting on electromagnetic drivers

4-Pin PL-S lamps are designed for use on electronic drivers

Benefits

Compact system design

Simple single-ended connection

Effective disinfection over the useful lifetime of the lamp

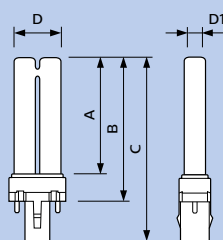
Good environmental choice because of lowest amount of mercury

Technical data

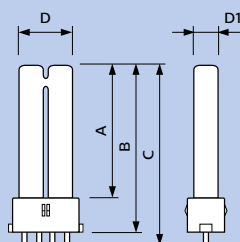


Type	Cap-Base	Dim. no	Technical Lamp Wattage (W)	Lamp Voltage (V)	UVC at 100h (W)	Lamp Current (A)	Useful life (h)	Depreciation at useful lifetime (%)	Packaging type	Packaging configuration	Ordering number 12 NC
5W/2P	G23	1	5.5	35	1	0.18	9000	20	1CT	6x10BOX	927900504007
5W/4P	2G7	2	5.1	27	1	0.19	9000	15	1CT	5x10CC	927900804007
7W/2P	G23	3	7.1	46	1.5	0.18	9000	20	1CT	5x10CC	927901104007
9W/2P	G23	4	8.6	60	2.2	0.17	9000	20	1CT	6x10BOX	927901704007
9W/4P	2G7	5	8.6	60	2.2	0.17	9000	20	1CT	6x10BOX	927901904007
11W/2P	G23	6	11.6	89	3.5	0.16	9000	20	1CT	6x10BOX	927902304007
13W/2P	GX23	7	13.0	56	3.5	0.29	9000	20	1CT	6x10BOX	927902804007

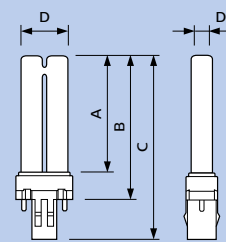
Other 4-pin variations for all lamp types are available on request. Please contact us with your requirements.



G23



2G7



GX23

Dim.*	A	B	C	D	D1
no.	max.	max.	max.	max.	max.
1	67	83	105	28	13
3	97	112,5	135,5	28	13
4	129	145	167	28	13
6	198	213,3	236	28	13

* Dimensions (mm)

Dim.*	A	B	C	D	D1
no.	max.	max.	max.	max.	max.
2	65,2	83	89	28	13
5	129	145	167	28	13

* Dimensions (mm)

Dim.*	A	B	C	D	D1
no.	max.	max.	max.	max.	max.
7	139,5	155,2	178,2	28	13

* Dimensions (mm)

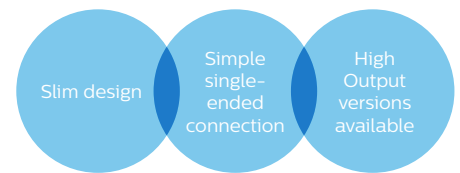
Philips TUV TL Mini



Philips TUV TL Mini lamps are slim double-ended UVC (germicidal) lamps used in residential water and air disinfection units. The small 16 mm diameter of the lamp allows for a small system design and design flexibility. Philips TUV TL Mini lamps offer almost constant UV output over their complete lifetime.

Main applications

- Deactivation of bacteria, viruses and other micro-organisms
- Residential drinking water units
- Fish pond water units
- Stand alone air purifiers



Features

Short-wave UV radiation with a peak at 253.7 nm (UVC) for disinfection purposes

Protective inside coating ensures almost constant UV output over the complete lifetime of the lamp

Special lamp glass filters out the 185 nm ozone-forming radiation

Benefits

Slim system design

Simple single-ended connection

Large range of High Output versions available for optimum UVC output per lamp length, allowing for reduction of system size

Effective disinfection over the useful lifetime of the lamp

Good environmental choice because of lowest amount of mercury

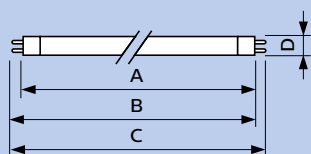
Technical data



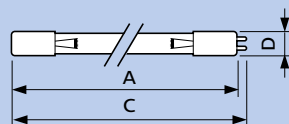
Type	Cap-Base	Dim. no	Technical Lamp Wattage (W)	Lamp Voltage (V)	UVC at 100h (W)	Lamp Current (A)	Useful life (h)	Depreciation at useful lifetime (%)	Electrode distance mm	Packaging type	Packaging configuration	Ordering number 12 NC
4W	G5	1	4.5	25	0.9	0.165	6000	20	84	1FM	10x25BOX	928000104013
6W	G5	2	6	37	1.7	0.165	9000	20	158	1FM	10x25BOX	928000704013
8W	G5	3	8	47	2.6	0.170	11000	15	235	1FM	10x25BOX	928001104013
11W*	G5	2	11	26	2.6	0.425	11000	15	158	1FM	10x25BOX	928002204013
16W*	G5	3	15	33	4.0	0.425	11000	15	235	1FM	10x25BOX	928002004013
20W*	G5	5	20	45	6.0	0.450	11000	15	345	1FM	10x25BOX	928003404013
11W 4P SE*	4 Pins Single Ended	6	11	34	2.6	0.425	9000	15	158	UNP	32	927971204099
16W 4P SE*	4 Pins Single Ended	7	15	43	4.0	0.425	9000	15	235	UNP	32	927971404099
20W 4P SE*	4 Pins Single Ended	8	20	45	6.0	0.450	11000	15	345	UNP	32	927973404099
25W 4P SE*	4 Pins Single Ended	9	25	55	8.0	0.450	9000	20	463	UNP	32	927972204099

* High Output lamps

Customized products with bespoke caps, dimensions and power are possible upon request. Please contact us with your requirements.



G5



4 Pins Single Ended

Dim.*	A	B	B	D	D1
no.	max.	min.	max.	max.	max.
1	135.9	140.6	143.0	150.1	16
2	212.1	216.8	219.2	226.3	16
3	288.3	293.0	295.4	302.5	16
4	288.3	293.0	295.4	302.5	16
5	398.0	402.7	405.1	412.2	16

* Dimensions (mm)

Dim.*	A	C	D
no.	max.	max.	max.
6	244.1	251.8	19
7	320.3	328.0	19
8	430.0	437.7	19
9	548.9	556.6	19

* Dimensions (mm)



Municipal and industrial water purification

Every government aims to provide its citizens with safe and clean drinking water.

If they can de-activate the micro-organisms in water cost-effectively by avoiding, or reducing, the use of chlorine, all the better. Philips is helping to do just that with a range of lamp systems designed to meet all the main municipal requirements and comply with new legislation..

Waste water must also be disinfected before it is discharged into the environment. Not only does this minimize the risk to the local population, it also helps to protect vulnerable natural eco systems in the discharge areas. Here too, our UV lamp systems are becoming increasingly popular.

Highly cost-effective, they treat waste water without adding chemicals or residues. Safeguarding our communities and the environment.



Philips TUV Amalgam XPT System page 16-17



Philips Dynapower System page 18-19



Philips Medium Pressure Mercury page 20-21



Philips TUV T5 page 22-23



Philips drivers page 30-31

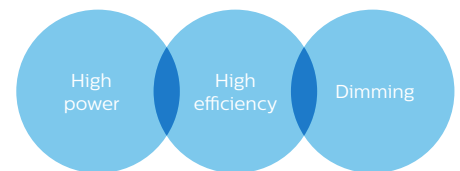
Philips TUV Amalgam XPT System



Philips TUV Amalgam XPT system consists of an electronic driver that operates one TUV Amalgam XPT lamp, mounted in a sleeve. The electrical specifications are tailored to the lamp, ensuring an optimized performance of the Philips TUV Amalgam XPT system. Thanks to extensive testing before a lamp system is released, we can ensure maximum reliability and long lifetime.

Main applications

- Deactivation of bacteria, viruses and other micro-organisms
- Municipal drinking water treatment equipment
- Municipal waste water treatment equipment
- Process water treatment equipment
- Swimming pool units
- Equipment for the production of ultra-pure water, for example for the semiconductor, pharmaceuticals and cosmetics industries (ozone version)



Features

Short-wave UV radiation with a peak at 253.7 nm (UVC) for disinfection

Special amalgam used for highest efficiency over wide temperature range

Protective inside coating ensures constant UV output over the complete lifetime of the lamp

Special lamp glass filters out the 185 nm ozone-forming radiation

Philips electronic driver available for a perfect interface

Universal burning position possible depending on the application

Lamp can be made from special quartz (open / synthetic) to maximize 185nm Ozone generation

Benefits

High Power allows for design of compact installations

High system efficiency

Approximately 10% energy savings, because lamps can be dimmed to reach the same UV output compared to similar lamps on the market

Effective disinfection over the useful lifetime of the lamp

Best environmental choice because of long reliable life, less waste and industry leading low amount of mercury

Extreme reliability of driver, with annual failure rate of less than 1%

High efficiency during dimming thanks to unique amalgam temperature control of the 800W lamps

Technical data



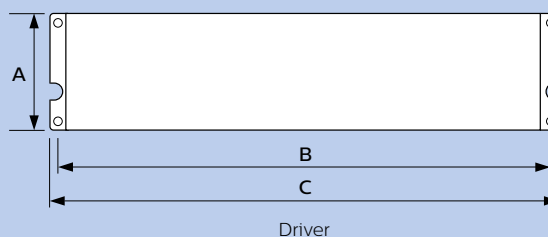
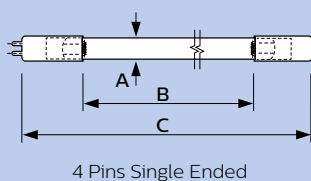
Type	Cap-Base	Dim. no	Technical Lamp Wattage (W)	Lamp Voltage (V)	Lamp Current (A)	UVC ¹ at 0h (W)	UVC ¹ at 100h (W)	Useful life ² (h)	Depreciation at useful lifetime (%)	Ordering number 12 NC
TUV 130W XPT SE	4 Pins Single Ended	1	140	67	2.1	48	46	12000	10	928101805112
TUV 180W XPT SE	4 Pins Single Ended	2	180	90	2.1	63	61	12000	10	928106805112
TUV 200W XPT SE	4 Pins Single Ended	3	200	94	2.1	68	66	12000	10	928106905112
TUV 325W XPT HO SE	4 Pins Single Ended	4	305	160	2.0	118	115	12000	10	928107005112
TUV 330W XPT SE	4 Pins Single Ended	5	275	78	3.6	100	97	12000	10	928101705112
TUV 350W XPT HO SE	4 Pins Single Ended	6	350	73	4.8	123	120	12000	10	928103505112
TUV 800W XHO SE	4 Pins Single Ended	7	815	103	8.0	277	265	12000	15	928107605112

¹ Nominal UVC output (fixed current) under laboratory conditions

² Expected useful lifetime is 12000 h with an intensity decrease of 10% at 254 nm, based on the 100 h UVC value. ** TUV800W depreciation is 15%

Lifetime and depreciation strongly depends on operation conditions

Lamp type	Driver	Ordering number
TUV 130W XPT SE	TUV 130W XPT driver	913700729703
TUV 180W XPT SE	TUV 180-200W XPT driver	913710054695
TUV 200W XPTSE	TUV 180-200 W XPT driver	913710054695
TUV 325W XPT HO SE	TUV 325W XPT (HO) driver	913710054995
TUV 330W XPT SE	advice on request	-
TUV 350W XPT HO SE	advice on request	-
TUV 800W XHO SE	advice on request	-



Dim.*	A	B	C
no.	nom.	nom.	max.
1	19	740	842
2	19	930	1032
3	19	1040	1147
4	19	1480	1582
5	32	1440	1556
6	32	967	1100
7	38	1609	1791

* Dimensions (mm)

Dim.*	A	B	C
	nom.	nom.	max.
	50.8	279.4	279.4

* Dimensions (mm)

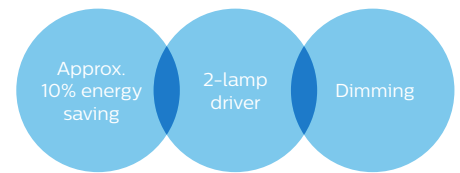
Philips Dynapower System



The Philips DynaPower lamp and driver offers you a best-in-class, no-risk alternative for specific amalgam open channel systems. The delicate balance between lamp and driver has been optimized to achieve the best possible performance. The Philips lamps and drivers are all designed and manufactured in-house, to give you guaranteed peace of mind.

Main applications

- Deactivation of bacteria, viruses and other micro-organisms
- Municipal drinking water treatment equipment
- Municipal waste water treatment equipment
- Process water treatment equipment



Features

Operates 230W, 260W (HO) and 335W (HO) TUV Amalgam XPT lamps

Single lamp operation possible

Cooler operating temperature for additional energy savings

100% stress testing minimizing 0-hour failures

Protection against voltage peaks

Permanent overvoltage protection

Approximately 20 seconds start-up time (compared with 90 seconds for similar drivers on the market)

Special lamp glass filters out the 185 nm ozone-forming radiation

Benefits

Energy savings of approximately 10% compared with similar drivers or lamps, and up to as much as 35% for the HO system

Dimmable up to 60% power level for additional energy savings

The highest levels of service and support with a single supplier for lamp and driver

3-year guarantee on driver and 16,000 operating hours guarantee on lamp

Easier maintenance thanks to single lamp operation, allowing to detect easily which lamps need to be replaced

Best environmental choice thanks to maximum lifetime reliability, in combination with minimum substances, packaging and product weight

Easier to maintain compliance with regulations thanks to reduced risk of failures

Technical data



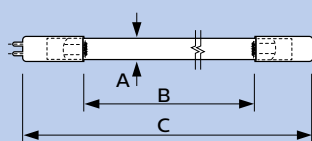
Type	Cap-Base	Technical Lamp Wattage (W)	Lamp Voltage (V)	UVC ¹ at 100h (W)	Useful life ² (h)	Depreciation at useful lifetime (%)	Packaging type	Packaging configuration	Ordering number 12 NC
TUV 230W WE XPT SE	4 Pins Single Ended	230	88	78	16000	10	UNP	32	928 104 005112
TUV 260W XPT DIM	4 Pins Single Ended	222	76	80	16000	10	UNP	32	928 102 805112
TUV 260W XPT HO	4 Pins Single Ended	240	89	98	16000	10	UNP	32	928 104 405112
TUV 335W XPT SE	4 Pins Single Ended	293	77	93	16000	10	UNP	32	928 103 105112
TUV 335W WP XPT SE	4 Pins Single Ended	293	77	93	16000	10	UNP	32	928 105 705112
TUV 335W XPT HO	4 Pins Single Ended	315	94	123	16000	10	UNP	32	928 103 505112

¹ Nominal UVC output (fixed current) under laboratory conditions

² Expected useful lifetime is 16000 h with an intensity decrease of 10% at 254 nm, based on the 100 h UVC value

Lifetime and depreciation strongly depends on operation conditions

Lamp type	Driver	Ordering number
TUV 230W WE XPT SE	DynaPower	91373229695
TUV 260W XPT DIM	DynaPower	91373229695
TUV 260W XPT HO	DynaPower	91373229695
TUV 335W XPT SE	DynaPower	91373229695
TUV 335W WP XPT SE	DynaPower	91373229695
TUV 335W XPT HO	DynaPower	91373229695



4 Pins Single Ended

Dimensions	A	B	C
TUV 230W WE XPT SE	25	1400	1514
TUV 260W XPT DIM	32	1400	1514
TUV 260W XPT HO	32	1400	1514
TUV 335W XPT SE	32	1400	1514
TUV 335W WP XPT SE	32	1400	1514
TUV 335W XPT HO	32	1400	1514

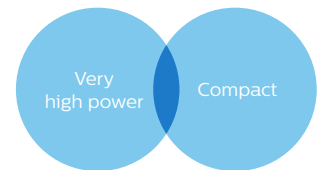
Philips Medium Pressure Mercury



Philips Medium Pressure Mercury lamps are available in a wide range of up to 120 W/cm, with an arc length between 10 and 140 centimeters. The lamps can be fitted with various types of end fitting, or equipped with customer-specific fittings, cables or pins. The lamps are made from selected types of quartz glass, with transmission characteristics tailored to the application. Philips Medium Pressure Mercury lamps contain sophisticated quantities of mercury bromides, providing a self-cleaning halogen cycle, to control the depreciation of UV radiation over lamp life.

Main applications

- Deactivation of bacteria, viruses and other micro-organisms
- Water treatment (waste-, drinking- or process water)
- Surface treatment
- Advanced oxidation (with special quartz glass)
- Ship ballast water treatment



Spectral output

The lamps emit a wide band spectrum in the UVC range. In contrast to Low Pressure lamps, considerable amounts of radiation around the 254 nm is emitted. The power density is very high compared with Low Pressure lamps. Lamps can be made in special quartz to either substantially lower the emission below 240 nm, or to maximize radiation at 185 nm. The former type is used in installations where nitrite formation must be avoided; the latter type is used in installations for ozone production or advanced oxidation.

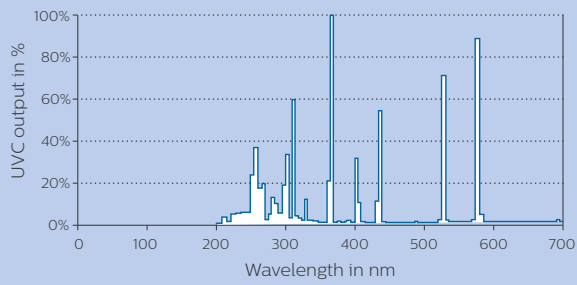
Operation

Philips Medium Pressure Mercury lamps can be tailored to operate on conventional electromagnetic or electronic drivers. A permissible bulb temperature for HOK type lamps is in the 600 – 900 C range. Permissible pinch temperature is 300 C, higher pinch temperatures up to 420 C are possible using the Philips patented Pinch Protection.

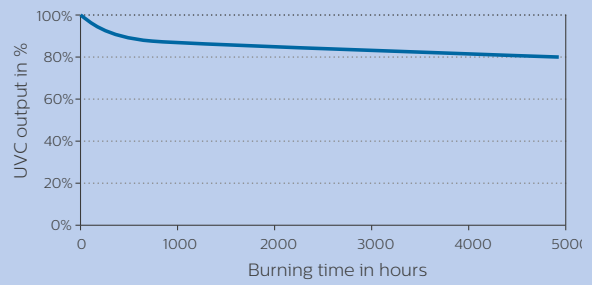
Technical data



Philips HOK lamp spectrum



Philips HOK: Maintenance relation between UVC output and burning time



Technical data	MP Lamps
Tube diameter	22 mm
Arc Length	105-1400 mm
Power range	1100W -16800W
Specific electrical power	80-120 W/cm
Irradiance	1400-21000 $\mu\text{W}/\text{cm}^2$

Note: bulb diameters for HOK lamps are typically around 22 mm nominal for 120 W/cm lamps. Standard lamps are available (contact our sales department for details), different dimensions are available on request.

Customization possible on

- Connectors
- Pens
- Cables
- Design
- Special glass

Please contact us with your requirements.

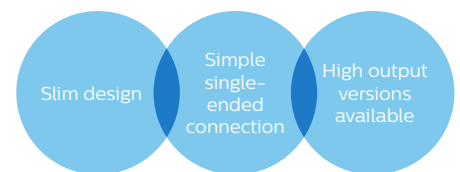
Philips TUV T5



TUV T5 lamps are single- or double-ended UVC (germicidal) lamps used in professional water and air disinfection units. The small 16 mm diameter of the lamp allows for a small system design and design flexibility. TUV T5 lamps offer almost constant UV output over their complete lifetime.

Main applications

- Deactivation of bacteria, viruses and other micro-organisms
- Industrial water disinfection equipment, e.g. for food & beverage industry
- Small municipal water treatment systems
- Swimming pool units
- Air treatment systems (High Output lamp versions)



Features

Short-wave UV radiation with a peak at 253.7 nm (UVC) for disinfection

Small diameter

Protective inside coating ensures almost constant UV output over the complete lifetime of the lamp

Special lamp glass filters out the 185 nm ozone-forming radiation

Benefits

Slim system design

Simple single-ended connection

High Output versions for improved performance in moving air and reducing amount of required lamps

Effective disinfection over the useful lifetime of the lamp

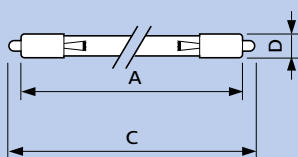
Good environmental choice because of lowest amount of mercury

Technical data

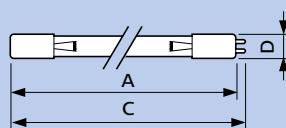


Type	Cap-Base	Dim. no	Technical Lamp Wattage (W)	Lamp Voltage (V)	UVC at 100h (W)	Lamp Current (A)	Useful life (h)	Depreciation at useful lifetime (%)	Packaging type	Packaging configuration	Ordering number 12 NC
TUV 36T5 HE SP	Single Pin	1	40	97	14.0	0.425	9000	15	UNP	32	927970004099
TUV 36T5 HO 4P SE	4 Pins Single Ended	2	75	97	23.0	0.800	9000	15	UNP	32	927972104099
TUV 36T5 HE 4P SE	4 Pins Single Ended	2	40	97	14.0	0.425	9000	15	UNP	32	927970204099
TUV 64T5 HE 4P SE (Rapid Start)	4 Pins Single Ended	3	75	178	29.0	0.425	9000	15	UNP	32	927970704099
TUV 64T5 HE 4P SE (Instant Start)	4 Pins Single Ended	3	75	178	29.0	0.425	9000	15	UNP	32	927970804099
TUV 64T5 HO 4P SE	4 Pins Single Ended	3	140	175	45.0	0.800	9000	15	UNP	32	927971104099

Customized products with bespoke caps, dimensions and power are possible upon request. Please contact us with your requirements.



Single Pin



2 Pins / 4 Pins Single Ended

Dim.* no.	A max.	C max.	D max.
1	845.4	863.9	19

* Dimensions (mm)

Dim.* no.	A max.	C max.	D max.
2	845.4	853.1	19
3	1556.6	1564.4	19

* Dimensions (mm)



Commercial and Professional air purification

Increasingly, we spend more time indoors, for example at work, on trains and in aircrafts, in schools, cinemas and shopping centres. The air we breathe in these environments is anything but clean. In fact, it's often re-circulated along with all the bacteria, viruses, pollen, smoke and toxic gases that are trapped along with it.

In hospitals this can be a real problem. Hospital acquired infections affect around 10% of patients during their stay. And there is increasing evidence that up to 20% of these infections, like the flu, moulds, pneumonia and MRSA, is transmitted via the air - at a huge price, both in terms of human life and financial costs. Tuberculosis is even 100% transmitted via the air. Philips UV purification lamp systems provide a safe, reliable and sustainable solution. Ideal for use in ventilation air ducts, air disinfection units or stand-alone air purifiers, they help protect against airborne pathogens, creating a safer and healthier indoor environment with the power of light.



Philips TUV PL-L
page 28-29



Philips TUV PL-L
Intelligent
page 30-31



Philips TUV T8
page 32-33



Philips TUV T5
page 24-25



Philips drivers
page 34-35

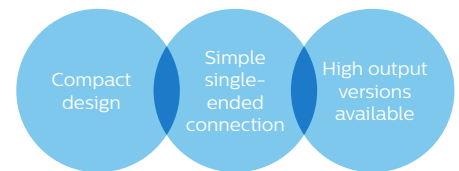


Philips TUV PL-L

Philips TUV PL-L lamps are compact UVC (germicidal) lamps used in water and air disinfection units. The compact size of the lamp allows for a small system design and design flexibility. Philips TUV PL-L lamps offer almost constant UV output over their complete lifetime. Thanks to the single-ended lamp base, lamp replacement is easy, making maintenance hassle free.

Main applications

- Deactivation of bacteria, viruses and other micro-organisms
- Air disinfection systems in for example hospitals, universities and laboratories
- In-duct air treatment units
- Stand alone air purifiers
- Residential drinking water units
- Fish pond and process water units



Features

Short-wave UV radiation with a peak at 253.7 nm (UVC) for disinfection purposes

Protective inside coating ensures almost constant UV output over the complete lifetime of the lamp

Special lamp glass filters out the 185 nm ozone-forming radiation

Benefits

Compact system design

Simple single-ended connection

High Output versions for improved performance in moving air and reducing amount of required lamps

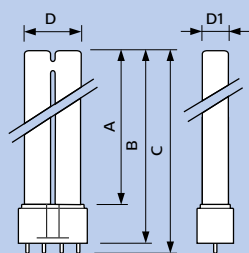
Effective disinfection over the useful lifetime of the lamp

Good environmental choice because of lowest amount of mercury

Technical data



Type	Cap-Base	Dim. no	Technical Lamp Wattage (W)	Lamp Voltage (V)	UVC at 100h (W)	Lamp Current (A)	Useful life (h)	Depreciation at useful lifetime (%)	Packaging type	Packaging configuration	Ordering number 12 NC
18W/4P	2G11	1	18	60	5.5	0.375 (0.370)	9000	15	1CT	25	927903004007
24W/4P	2G11	2	24	87	7.0	0.350	9000	15	UNP	50	927903204016
36W/4P	2G11	3	36	106	12.0	0.440	9000	15	1CT	25	927903404007
55W/4P	2G11	4	55	105	17.0	0.525 (0.540)	9000	15	1CT	25	927908704007
35W/4P HO	2G11	5	35	42	11.0	0.850	9000	15	1CT	25	927904204007
60W/4P HO	2G11	3	65	82	19.0	0.800	9000	15	1CT	25	927909004007
95W/4P HO	2G11	4	90	84 (82)	27.0	0.800	9000	15	1CT	25	927909804007



2G11

Dim.* no.	A max.	B max.	C max.	D1 max.
1	195	220	225	18
2	290	315	320	18
3	385	410	415	18
4	505	530	535	18
5	195	220	226	18

* Dimensions (mm)

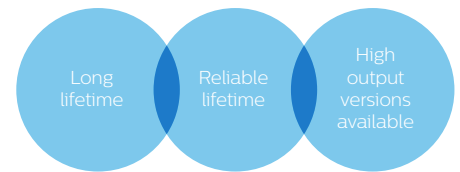
Philips TUV T8



TUV T8 lamps are double-ended UVC (germicidal) lamps used in professional air disinfection units. TUV T8 lamps offer almost constant UV output over their complete lifetime. Moreover, they have a long and reliable lifetime, which allows maintenance to be planned for in advance.

Main applications

- Air disinfection systems in professional applications such as universities, hospitals, jails and laboratories
- Upper air and whole room disinfection equipment in hospitals, intensive care units and surgery rooms
- Areas with low maintenance and/or disruptive costs
- Fish ponds and process water units



Features

Short-wave UV radiation with a peak at 253.7 nm (UVC) for disinfection purposes

Protective inside coating ensures constant UV output over the complete lifetime of the lamp

Long lifetime of 18,000 hours*

High reliability with the lowest percentage of lamps that fail prematurely in the market (90% of all lamps still operate on full output and quality after 15,000 hours*)

Special lamp glass filters out the 185 nm ozone-forming radiation

Benefits

Effective disinfection over the useful lifetime of the lamp

Maintenance can be planned in advance, virtually eliminating the need for expensive spot replacement of prematurely failed lamps

High Output versions available for optimum UVC output per lamp length, allowing for reduction of system size

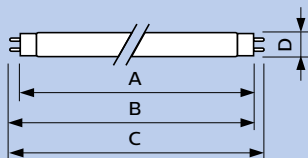
Good environmental choice because of lowest amount of mercury

* based on operation on a Philips electronic driver

Technical data



Type	Cap-Base	Dim. no	Technical Lamp Wattage (W)	Lamp Voltage (V)	UVC (W) at 100h on EM gear (W)	UVC (W) at 100h on HF gear (W)	Lamp Current (A)	Useful life on EM gear (h)	Useful life on HF gear (h)	Depreciation at useful lifetime (%)	Packaging type	Packaging configuration	Ordering number 12 NC
10W	G13	1	9.0	44.5	2.5	-	0.230	9000	-	15	SLV	25	928024204005
15W	G13	2	15.5	55.0	4.9	5.1	0.335	9000	18000	10	SLV	25	928039004005
T8 F17	G13	3	16.7	72.0	4.5	-	0.265	9000	-	15	SLV	25	927941904020
25W	G13	2	25.0	48.0	7	7.5	0.600	9000	18000	15	SLV	25	928039404005
30W	G13	4	30.0	102.0	12	13.1	0.370	9000	18000	10	SLV	25	928039504005
36W	G13	5	36.0	103.0	15	15.5	0.440	9000	18000	10	SLV	6	928048604003
55W HO	G13	4	54.0	86.0	18.5	20.0	0.770	9000	18000	10	SLV	6	928049504003
75W HO	G13	5	75.0	110.0	25.5	28.1	0.840	9000	18000	10	SLV	6	928049404003



G13

Dim.*	A	B	C	D
1	331.5	338.6	345.7	28
2	437.4	444.5	451.6	28
3	589.8	596.9	604.0	28
4	894.6	901.7	908.8	28
5	1199.4	1206.5	1213.6	28

* Dimensions (mm)

The right driver for the right lamp

Driver development is possible on request. Please contact us with your requirements.

	12 NC Philips Electronic driver 50 Hz	Philips Electronic Driver 50 Hz	Philips Advance Electronic driver 60 Hz	Philips Advance Electromagnetic driver 60 Hz
TUV PL-S				
TUV PL-S 5W/2P				LC49CTP LPL59TP H1B9TPW H2B9TPW
TUV PL-S 7W/2P				LC49CTP LPL59TP H1B9TPW
TUV PL-S 9W/2P				LC49CTP LPL59TP H1B9TPW
TUV PL-S 9W/4P	913700421366	HF-M BLUE 109 LH TL/PL-S 230-240V	RMB1P1 13S1 1L	
	913700422866	HF-M RED 109 SH TL/PL-S 230-240V	RMB1P1 13S1 2L	
TUV PL-S 11W/4P	913700631166	HF-P 1 13-17 PL-T/C/R EII 220-240V		
	913700631266	HF-P 2 13-17 PL-T/C/R EII 220-240V		
TUV PL-S 13W/2P				LC13TP LO1322TP H1B13TPW
TUV TL Mini				
Philips TUV 4W				LC49CTP w/starter LPL59TP w/starter
Philips TUV 6W	913700421366	HF-M BLUE 109 LH TL/PL-S 230-240V		LC49CTP w/starter LPL59TP w/starter
Philips TUV 8W	913700422866	HF-M RED 109 SH TL/PL-S 230-240V	RMB13S1 1L RMB13S1 2L	LC49CTP w/starter LPL59TP w/starter
Philips TUV 11W	Driver on request			LOI322TP w/starter RLQ120TP RL2SP20TP
Philips TUV 16W	Driver on request			LC1420CPT w/starter HM2SP20TP
Philips TUV 20W	913713031066	HF-P 1 14-35 TL5 HE III 220-240V 50/60Hz		
	913713031166	HF-P 2 14-35 TL5 HE III 220-240V 50/60Hz		
TUV T5				
Philips TUV 11W 4P SE	Driver on request			LOI322TP w/starter RLQ120TP RL2SP20TP
Philips TUV 16W 4P SE	Driver on request			LC1420CPT w/starter HM2SP20TP
Philips TUV 25W 4P SE			IUV2S36M2LD IUV2S36M2LD ICN2S39 1L ICN2S39 2L	



	12 NC Philips Electronic driver 50 Hz	Philips Electronic Driver 50 Hz	Philips Advance Electronic driver 60 Hz	Philips Advance Electromagnetic driver 60 Hz
TUV T5				
Philips TUV 36T5 HE SP			ICN2P60N	RSM175STP
			ICN2P60N	
Philips TUV 36T5 HE 4P SE	913713031866	HF-P 158 TL-D III 220-240V 50/60 Hz	ICN2P60N	RSM175STP
	913713028266	HF-P 154/155 TL5 HO/PLL III 220-240V IDC	ICN2P60N	
	913713031566	HF-P 136 TL-D III 220-240V 50/60 Hz	ICN2S5490CN	
	913713031666	HF-P 236 TL-D III 220-240V 50/60 Hz	ICN2S5490CN	
Philips TUV 36T5 HO 4P SE		IUV2S60M4LD (914499999001)	IUV2S60M4LD (914499999001)	
Philips TUV 64T5 HE 4P SE	913713034266	HF-P 180 TL5 III 220-240V 50/60 Hz		
Philips TUV 64T5 HO 4P SP		IUV2S60M4LD (914499999001)	IUV2S60M4LD (914499999001)	
Philips TUV PL-L				
Philips TUV PL-L 18W/4P	913700420666	HF-M RED 124 SH TL/TL5/PL-L 230-240V	IUV2S18H1LD 1L	LC25TP w/starter
	913700418066	HF-M BLUE 124 LH TL/TL5/PL-L 230-240V	IUV2S18H1LD 2L	
Philips TUV PL-L 24W/4P	913700420666	HF-M RED 124 SH TL/TL5/PL-L 230-240V	IUV2S36M2LD 1L	
	913700418066	HF-M BLUE 124 LH TL/TL5/PL-L 230-240V	IUV2S36M2LD 2L	
			ICN2S39N	
			ICN2S39T	
Philips TUV PL-L 35W/4P HO		IUV2S60M4LD 1L (914499999001)	IUV2S60M4LD 1L	
		IUV2S60M4LD 2L (914499999001)	IUV2S60M4LD 2L	
Philips TUV PL-L 36W/4P	913713028466	HF-P 136 PL-L III 220-240V 50/60 Hz IDC	IUV2S36M2LD 1L	
	913713028566	HF-P 236 PL-L III 220-240V 50/60 Hz IDC	IUV2S36M2LD 2L	
			ICN2S39N	
			ICN2S39T	
Philips TUV PL-L 55W/4P HF	913713028266	HF-P 154/155 TL5 HO/PLL III 220-240V IDC	ICN2S5490CN	
	913713028366	HF-P 254/255 TL5 HO/PLL III 220-240V IDC	ICN2S5490CN	
			ICN2S80T	
Philips TUV PL-L 60W /4P HO		IUV2S60M4LD (914499999001)	IUV2S60M4LD (914499999001)	
Philips TUV PL-L 95W/4P HO		IUV2S60M4LD (914499999001)	IUV2S60M4LD (914499999001)	
TUV T8 and TUV T8 Xtra				
Philips TUV 10W	913700648566	HF-P 118 PL-T/C III 220-240V 50/60Hz		
	913700648666	HF-P 218 PL-T/C III 220-240V 50/60Hz		
Philips TUV 15W	913713031266	HF-P 118 TL-D III 220-240V 50/60 Hz		LC1420CTP w/starter
	913713031366	HF-P 218 TL-D III 220-240V 50/60 Hz		HM2SP20TP
Philips TUV 18W	913713031266	HF-P 118 TL-D III 220/240V 50/60 Hz		
Philips TUV 25W		IUV2S60M4LD (914499999001)	IUV2S60M4LD (914499999001)	
Philips TUV 30W	913713031566	HF-P 136 TL-D III 220-240V 50/60 Hz	ELB2S40N	
	913713031666	HF-P 236 TL-D III 220-240V 50/60 Hz	ELB2S40N	
Philips TUV 36W	913713031566	HF-P 136 TL-D III 220-240V 50/60 Hz	IUV2S36M2LD 1L	
	913713031666	HF-P 236 TL-D III 220-240V 50/60 Hz	IUV2S36M2LD 2L	
			ICN2S5490CN	
			ICN2S5490CN	
Philips TUV 55W HO		IUV2S60M4LD (914499999001)	IUV2S60M4LD (914499999001)	
Philips TUV 75W HO		IUV2S60M4LD (914499999001)	IUV2S60M4LD (914499999001)	





Ceramic Discharge Metal-Halide (CDM)

The perfect color rendering and long life of these Ceramic Discharge Metal-halide lamps make them ideal for fiber optics lighting in shop displays, decorative lighting systems and swimming pool illumination systems.

Benefits

- Low cost of ownership
- Perfect colors

Features

- Long life
- High efficiency
- Very good Color Rendering Index of 96



CDM-SA/R

Dimensions (in mm) and applications areas

CDM-SA/R	Product	C (Max)	D (Max)	X (Norm)	Applications
	CDM-SA/R 150W/942 UNP	106	95.3	280	Fiber optics

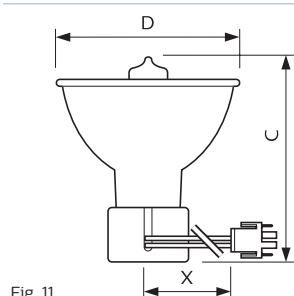


Fig. 11



Flexo Print

Flexo print TL lamps emit almost all of their light (99.9%) in the useful UVA and visible blue wavebands – between 350 and 400 nm – and have peak intensity at 370 nm (except for the /03 version). This makes them ideal for flexo printing equipment and photopolymerization processes. In addition, the 'R' lamps in the family have an internal 200-degree reflector to further optimize the lamp's overall efficiency.

Benefits

- Best match with photo sensitizers
- Highest output on irradiated area

Features

- Emit radiation in the range 380–480 nm with a peak at 370 nm
- Internal reflector



TL G13

Dimensions (in mm) and applications areas

TL G13

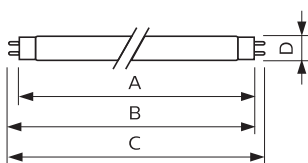








Fig. 12

Product	A (Max)	B (Min)	B (Max)	C (Max)	D (Max)	Applications
Actinic BL TL-K 40W/10-R	589.8	594.5	596.9	604	40.5	Reprography
TL 60W/10-R 1SL	1199.4	1204.1	1206.5	1213.6	40.5	Reprography
TL 80W/10-R SLV	1500	1504.7	1507.1	1514.2	40.5	Reprography
TUV TL-D 95W HO SLV/25	1500	1504.7	1507.1	1514.2	40.5	Reprography
TL 100W/10-R UV-A	1763.8	1768.5	1770.9	1778	40.5	Reprography
TL 140W/03	1500	1504.7	1507.1	1514.2	40.5	Reprography

Specifications and ordering information

Halogen reflector

Full product name	Philips code	Lamp Wattage	Cap Base	Voltage	Operating Position	Lamp Luminosity	Color Temperature	Color Rendering Index (Ra8)
13117 150W GX5.3 17V ICT	13117	150 W	GX5.3	17 V	any	23000 lx	3200 K	100
13163 250W GX5.3 24V ICT	13163	250 W	GX5.3	24 V	s105	-/-	3400 K	100
5995 EJM 150W GX5.3 21V ICT	5995	150 W	GX5.3	21 V	s90	1200 lx	3400 K	100
13164 200W GX5.3 24V ICT	13164	200 W	GX5.3	24 V	s90	1100 lx	3400 K	100
13158 150W GX5.3 21V ICT	13158	150 W	GX5.3	21 V	s90	320 lx	3400 K	100
14501 150W GX5.3 20V	14501	150 W	GX5.3	20 V	s105	400 lx	3150 K	100
13289 50W GX5.3 13.8V ICT	13289	50 W	GX5.3	13.8 V	any	1000 cd	-/-	100
13629 150W GX5.3 21V ICT	13629	150 W	GX5.3	21 V	s90	900 lx	3250 K	100
13631 250W GX5.3 24V ICT	13631	250 W	GX5.3	24 V	s90	1500 lx	3400 K	100
14515 FO 75W GX5.3 12V ICT	14515 FO	75 W	GX5.3	12 V	s90	420 lm	2900 K	100
14527 150W GX5.3 21V ICT	14527	150 W	GX5.3	21 V	s90	1200 lx	3400 K	100
13938XHP 50W GX5.3 22.8V ICT	13938XHP	50 W	GX5.3	22.8 V	any	380 lx	3200 K	100
13194 85W GX5.3 13.8V ICT	13194	85 W	GX5.3	13.8 V	s105	1000 lx	3150 K	100
13189 50W GX5.3 13.8V ICT	13189	50 W	GX5.3	13.8 V	s105	380 lx	3150 K	100
13186 90W GX5.3 14.5V ICT	13186	90 W	GX5.3	14.5 V	s105	1300 lx	3200 K	-/-
14516 150W GX5.3 17V ICT/10X5F	14516	75 W 	GX5.3	12 V 	s90 	4100 lx	3150 K	100
13865 75W G5.3/4.8 12V ICT	13865	75 W 	G5.3	12 V 	s105 	-/-	-/-	100
13096 ELH 300W GY5.3 120V ICT	13096	300 W	GY5.3	120 V	s90	850 lx	3350 K	100
13095 250W GY5.3 120V ICT	13095	250 W	GY5.3	120 V	s90	800 lx	3250 K	100
13861 FO 42W GZ6.35 12V ICT	13861 FO	42 W	GZ6.35	12 V	s90	230 lx	2900 K	100
6853 75W GZ6.35 12V ICT	6853	75 W	GZ6.35	12 V	s105	-/-	3400 K	100
6834 100W GZ6.35 12V ICT	6834	100 W	GZ6.35	12 V	s90	-/-	3400 K	100
6834/25H FO 100W GZ6.35 12V ICT	6834/25H FO	100 W	GZ6.35	12 V	any	420 lm	3100 K	100
6834 FO 100W GZ6.35 12V ICT	6834 FO	100 W	GZ6.35	12 V	s105	750 lm	3400 K	100
6423 150W GZ6.35 15V ICT	6423	150 W	GZ6.35	15 V	s105	-/-	3350 K	100
6423XHP FO 150W GZ6.35 15V ICT	6423XHP FO	150 W	GZ6.35	15 V	s90	950 lm	3450 K	100
6423 FO 150W GZ6.35 15V ICT/10X5F	6423 FO	150 W	GZ6.35	15 V	S105	840 lm	3350 K	100
6423 FO 150W GZ6.35 15V ICT	6423	150 W	GZ6.35	15 V	s105	340 lm	3350 K	100
6853 FO 75W GZ6.35 12V ICT	6853 FO	75 W	GZ6.35	12 V	s105	600 lm	3400 K	100
JCR 15V 150W 5H 1CT	-/-	150 W	GZ6.35	15 V	s90	73000 lx	3100 K	100
JCR 12-100 H10	021195	100 W	GZ6.35	12 V	s90	125000 lx	3100 K	-/-
14552 75W GZ4 12V 1CT	14552	75 W	GZ4	12 V	s105	-/-	-/-	100
13298 52W GZ4 10V 1CT	13298	52 W	GZ4	10 V	any	-/-	-/-	100
13528 15W GZ4 6V 1CT	13528	15 W	GZ4	6 V	s105	700 lx	2900 K	100
13165 35W GZ4 14V 1CT	13165	35 W	GZ4	14 V	any	-/-	-/-	100
JCR 12-20 A20H-3	022740	20 W	GZ4	12 V	any	5300 lx	3000 K	-/-

Life to 50% failures	ANSI code	LIF Code	Reflector Diameter	Reflector finish	Dimmable	Lamps per outer box	Dimensional drawing	Order code
1000 hr	-/-	-/-	R50	smooth	Yes	50	Fig. 1	923915819104
35 hr	ELC	A1/259	R50	smooth	Yes	50	Fig. 1	923919720501
40 hr	EJM	-/-	R50	smooth	Yes	24	Fig. 1	923921019894
50 hr	EJL	A1/252	R50	smooth	Yes	24	Fig. 1	923921120594
40 hr	ELD/EJN	-/-	R50	stippled	Yes	24	Fig. 1	923921319894
500 hr	DDL	-/-	R50	facetted	Yes	24	Fig. 1	923921419794
1000 hr	-/-	-/-	R50	smooth	Yes	50	Fig. 1	923931518204
200 hr	EKE/ENA	-/-	R50	smooth	Yes	24	Fig. 1	924010319894
50 hr	ELC/FA	A1/259	R50	facetted	Yes	24	Fig. 1	924010520594
1600 hr	-/-	-/-	R50	-/-	Yes	50	Fig. 1	924034417104
40 hr	EJA	-/-	R50	-/-	Yes	24	Fig. 1	924041119894
750 hr	-	-/-	R50	smooth	Yes	50	Fig. 1	924059828301
1000 hr	DED	-/-	R50	smooth	Yes	50	Fig. 1	923883618204
1000 hr	EPZ/DJT	-/-	R50	smooth	Yes	50	Fig. 1	923883518204
500 hr	EPX/EPV	-/-	R50	-/-	Yes	50	Fig. 1	923891214904
750 hr	-/-	-/-	R50	-/-	Yes	50	Fig. 1	924053619103
50 hr	-/-	-/-	R35	smooth	Yes	50	Fig. 2	924010017104
35 hr	ELH	-/-	R50	facetted	Yes	24	Fig. 3	923920936394
175 hr	ENH	-/-	R50	facetted	Yes	24	Fig. 3	923921536394
4000 hr	-/-	-/-	R50	-/-	Yes	50	Fig. 4	924030617102
50 hr	EFN	A1/230	R50	smooth	Yes	50	Fig. 4	923916617104
50 hr	EFP	A1/231	R50	smooth	Yes	50	Fig. 4	923916717104
2500 hr	EFP/25H	A1/231/25H	R50	smooth	Yes	50	Fig. 4	924058317104
50 hr	EFP	A1/231	R50	-/-	Yes	50	Fig. 4	924048417104
50 hr	EFR	A1/232	R50	smooth	Yes	50	Fig. 4	923916818504
50 hr	EFR	A1/232	R50	-/-	Yes	50	Fig. 4	924044218504
50 hr	EFR	A1/232	R50	-/-	Yes	50	Fig. 4	924048218504
50 hr	EFR	A1/232	R50	smooth	Yes	50	Fig. 4	923916818504
50 hr	EFN	A1/230	R50	-/-	Yes	50	Fig. 4	924048617104
500 hr	-/-	-/-	R50	smooth	Yes	24	Fig. 4	924793618594
1000 hr	-/-	-/-	R50	smooth	Yes	24	Fig. 4	924812017194
50 hr	-/-	-/-	R35	smooth	Yes	50	Fig. 5	924043217103
25 hr	-/-	-/-	R35	smooth	Yes	50	Fig. 5	924008915804
750 hr	-/-	-/-	R35	smooth	Yes	50	Fig. 5	923883810104
50 hr	-/-	-/-	R35	smooth	Yes	50	Fig. 5	923889018304
2000 hr	-/-	-/-	R35	smooth	Yes	24	Fig. 5	924849217194

Specifications and ordering information

Halogen non-reflector

Full product name	Philips code	Lamp Wattage	Cap Base	Voltage	Operating Position	Lamp Luminosity	Color Temperature	Color Rendering Index (Ra8)
6390 30W G5.3 10.8V 1CT	6390	30 W	G5.3	10.8 V	s90	570 lm	3100 K	100
14531 360W G5.3 82V 1CT	14531	360 W	G5.3	82 V	s90	10000 lm	3300 K	100
7023 100W GY6.35 12V 1CT	7023	100 W	GY6.35	12 V	s90	3400 lm	3400 K	100
7724 100W GY6.35 12V 1CT	7724	100 W	GY6.35	12 V	s90	2550 lm	3100 K	100
7724I 100W GY6.35 12V 1CT	7724I	100 W	GY6.35	12 V	s90	2550 lm	3100 K	100
14530 300W GY6.35 24V 1CT	14530	300 W	GY6.35	24 V	s90	10450 lm	3500 K	100
6605 10W G4 6V 1CT	6605	10 W	G4	6 V	any	150 lm	2700 K	100
7387 10W G4 6V 1CT	7387	10 W	G4	6 V	any	197 lm	3200 K	100
7388 20W G4 6V 1CT	7388	20 W	G4	6 V	any	475 lm	3200 K	100
5761 30W G4 6V 1CT	5761	30 W	G4	6 V	any	765 lm	3200 K	100
14546 20W G4 12V 1CT	14546	20 W	G4	12 V	any	350 lm	2900 K	100
12345SL 20W G4 12V 1CT	12345SL	20 W	G4	12 V	any	640 lm	3100 K	100
5974 150W GZ9.5 24V 1CT	5974	150 W	GZ9.5	24 V	s90	5200 lm	3400 K	100
14623P 95W GZ9.5 17V 1CT	14623P	95 W	GZ9.5	17 V	s90	2150 lm	2900 K	100
6958 250W G6.35 24V 1CT	6958	250 W	G6.35	24 V	s90	8400 lm	3400 K	100
6899 55W G6.35 24V 1CT	6899	55 W	G6.35	24 V	any	1200 lm	3000 K	100
7748XHP 250W G6.35 24V 1CT	7748XHP	250 W	G6.35	24 V	s90	10000 lm	3400 K	100
7787 400W G6.35 36V 1CT	7787	400 W	G6.35	36 V	s90	14790 lm	3400 K	100
7787XHP 400W GY6.35 36V 1CT	7787XHP	400 W	G6.35	36 V	s90	16000 lm	3400 K	100
7158 150W G6.35 24V 1CT	7158	150 W	G6.35	24 V	s90	5200 lm	3400 K	100
7158XHP 150W G6.35 24V 1CT	7158XHP	150 W	G6.35	24 V	s90	6000 lm	3400 K	100
13701 110W G6.35 22.8V 1CT	13701	110 W	G6.35	22.8 V	s90	2900 lm	3100 K	100
14623 95W G6.35 17V 1CT	14623	95 W	G6.35	17 V	s90	2150 lm	2900 K	100
7027 50W G6.35 12V 1CT	7027	50 W	G6.35	12 V	s90	1500 lm	3300 K	100
6550 150W G6.35 15V 1CT	6550	150 W	G6.35	15 V	s90	5000 lm	3400 K	100

CDM

Full product name	Lamp Wattage	Cap Base	Lamp Current	Operating Position	Lamp Luminosity	Color Temperature	Color Rendering Index (Ra8)
CDM-SA/R 150W/942 UNP	150 W	Ceramic Cap-Cable	1.8 A	any	5000 lm	4200 K	96

Flexo Print

Full product name	Lamp Wattage	Cap Base	Useful life	Bulb	Color code	Color Designation	Lamp Current
Actinic BL TL-K 40W/10-R	40 W	G13	2000 hr	T12	10-R	Ultra Violet A	0.86 A
TL 60W/10-R 1SL	60 W	G13	1000 hr	T12	10-R	Ultra Violet A	0.7 A
TL 80W/10-R SLV	80 W	G13	1000 hr	T12	10-R	Ultra Violet A	0.83 A
TL 100W/10-R UV-A	100 W	G13	1000 hr	T12	10-R	Ultra Violet A	0.97 A
TUV TL-D 95W HO SLV/25*	95 W	G13	8000 hr	T8	-/-	Ultra Violet C	0.62 A
TL 140W/03	140 W	G13	3000 hr	T12	03	Blue	1.46 A

* For further details please contact our local Key Account Manager

Life to 50% failures	ANSI code	LIF Code	lamps per outer box	Dimensional drawing	Order code
1000 hr	DZA	-/-	100	Fig. 6	822234361802
75 hr	EYB	-/-	24	Fig. 6	924041528894
50 hr	FCR	A1/215	100	Fig. 7	923870017103
2000 hr	EVA	M28	100	Fig. 7	923872517103
2000 hr	EVA	M28	100	Fig. 7	923875717103
50 hr	FLW	-/-	24	Fig. 7	924041420594
2000 hr	-/-	M42	100	Fig. 8	923873910103
100 hr	ESA/FHD	M29	100	Fig. 8	923874510103
100 hr	ESB	M30	100	Fig. 8	923874610103
100 hr	-/-	-/-	100	Fig. 8	923931110103
2000 hr	-/-	-/-	100	Fig. 8	924043117102
100 hr	-/-	-/-	100	Fig. 8	924068417103
50 hr	FDS/DZE	A1/262	100	Fig. 9	923928620503
2000 hr	-/-	-/-	100	Fig. 9	924053319103
300 hr	EVC/FGX	M33	100	Fig. 10	923882020503
750 hr	-/-	-/-	100	Fig. 10	923906220503
50 hr	EHJ	A1/223	100	Fig. 10	924006520503
100 hr	EVD	A1/239	24	Fig. 10	924031323306
50 hr	EVD	A1/239	24	Fig. 10	924031623306
50 hr	FCS	A1/216	100	Fig. 10	923870520503
40 hr	FCS	A1/216	100	Fig. 10	924031720503
700 hr	-/-	-/-	100	Fig. 10	924031928303
2000 hr	-/-	-/-	100	Fig. 10	924049819103
50 hr	BRL/BCD	A1/220	100	Fig. 10	923870217103
50 hr	EVB/BRJ	A1/234	100	Fig. 10	923870618503

Life to 50% failures	Color code	Color Designation	Dimmable	Lamps per outer box	Dimensional drawing	Order code
6000 hr	942	Cool White	No	1	Fig. 11	928086805303

Radiation Output	Dimensional drawing	Order code
8.0 W	Fig. 12	928004101029
16 W	Fig. 12	928008401003
19 W	Fig. 12	928005901029
26.0 W	Fig. 12	928006901029
22.5 W	Fig. 12	928049804006
34.2 W	Fig. 12	928012700303

Legend

Icons



Solar simulation



Projection



Overhead Projector (OHP)



Fiber optics



Dental hardening



Microfilm



Heating



Microfiche



Microscopes



Endoscopes



Medical surgery lighting

Operating Position



s105



s90



any

