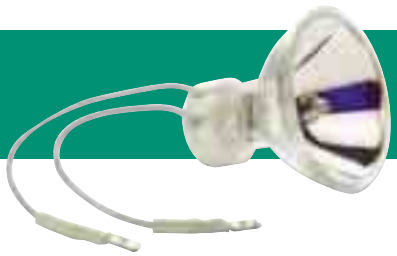
SYLVANIA

Special applications

Catalogue 2010

Special Applications Catalogue 2010

SYLVANIA



SYLVANIA

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HAVELLS SYLVANIA

Havells Sylvania is a leading full-spectrum provider of lighting solutions building on a century of expertise in lamps and fixtures. All over the world, people rely on powerful brands like Concord®, Lumiance® and Sylvania®* for top quality, energy-efficient solutions to their individual lighting needs.

Formed in April 2007, Havells Sylvania is owned by Havells India Ltd. Havells is one of the largest and fastest growing manufacturers of electrical components and systems in India. With 94 branches and representative offices and 8,000 professionals in more than 50 countries, the group has grown rapidly to a 1 billion US$ company.

At 15 manufacturing plants in India, Europe, Latin America & Africa, the group produces globally acclaimed products such as switchgear, cables, wires, fixtures and lamps.

* In Australia, Canada, Mexico, New Zealand, Puerto Rico and the USA the brand name is with different owners.

SYLVANIA Lamps

Havells Sylvania is one of the world's largest producers of light sources and manufactures a wide range of lamps: incandescent, halogen, low-energy, fluorescent, LED and a comprehensive range of HID lamps and other specialist lighting products for the professional specifier and user.

Sylvania lamps are distributed from stock, via our national sales organisations around the world, to original equipment manufacturers and retail outlets and through professional wholesale distribution to installers and end users.

ERLANGEN (GERMANY)

NEEMRANA (INDIA)

TIENEN (BELGIUM)

Factories

Sylvania has created Competency Centres for its major lamp product groups – bringing specific design, marketing and production engineering skills, for each key lamp group, together in one place: to co-ordinate and focus the years of experience this brings to new product development; and to bring products into the marketplace efficiently and effectively.

- **Erlangen** (Germany): produces fluorescent lamps of all types.
- **Neemrana** (India): produces innovative, energy-saving compact fluorescent lamps.
- **Tienen** (Belgium): specialises in low voltage and mains voltage halogen lamps, HID lamps, incandescent lamps and LEDs.

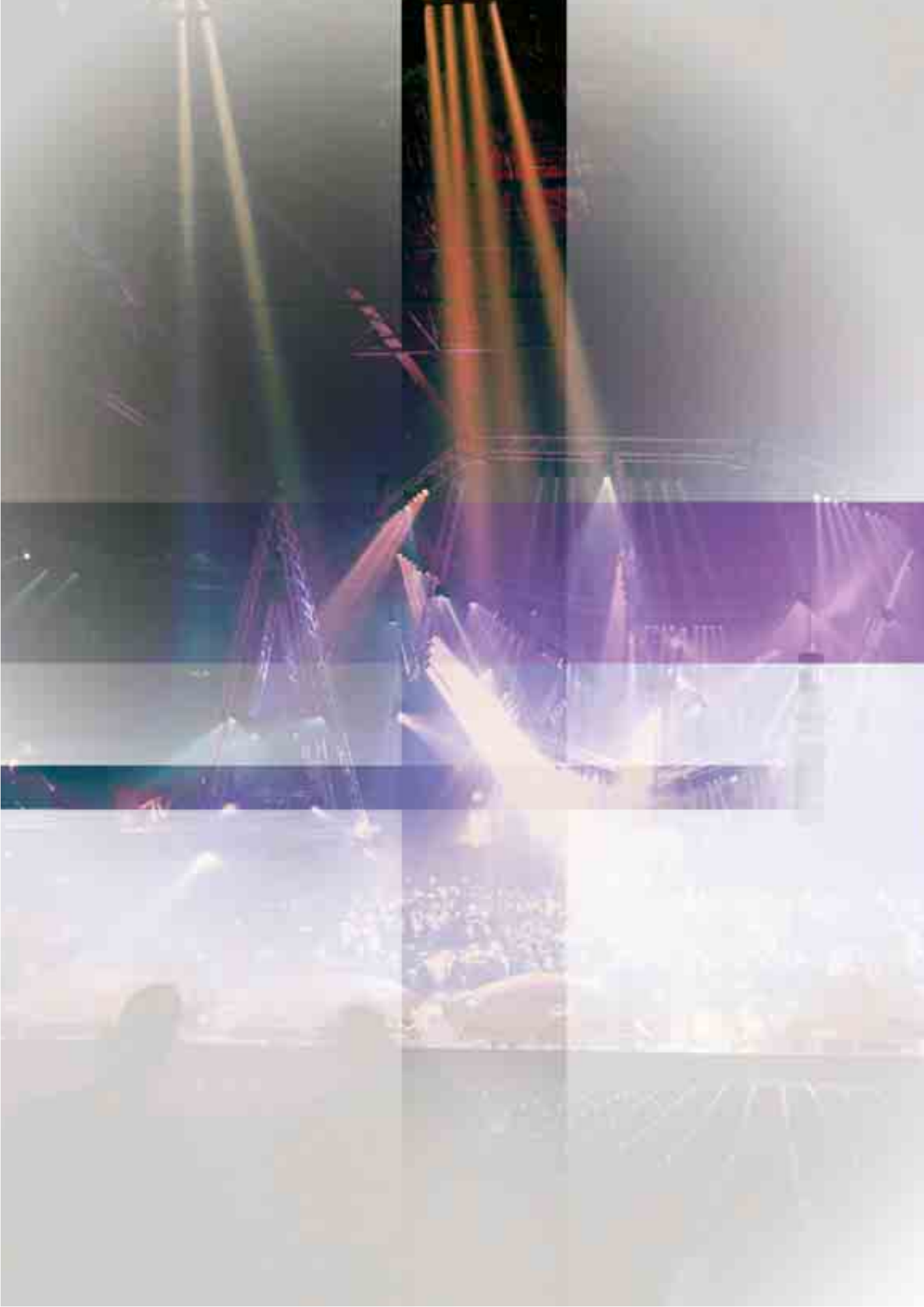

PHOTO OPTIC DISCHARGE LAMPS 5

BriteArc Single Ended Non Hot Restrike **6**

BriteArc Single Ended High Colour Temperature **7**

BriteArc Single Ended Hot Restrike **8**

BriteArc Double Ended **9**

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BRITEARC Single Ended Non Hot Restrike

BriteArc Single Ended Non Hot Restrike lamps are compact light sources with excellent performance, specially designed for a wide variety of audio-visual applications. The BriteArc lamps are filled with mercury and rare earth elements to obtain a high efficacy and a stable colour with a very good rendering index. They can be re-struck after 10 minutes. These lamps can be operated in any position.

BA 575 SE NHR

BA 1200 SE NHR

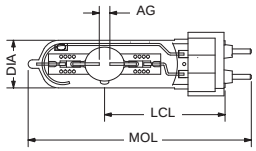


Fig. 1

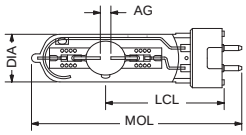


Fig. 2

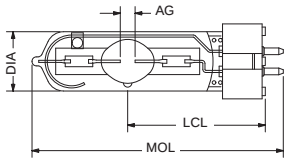


Fig. 3

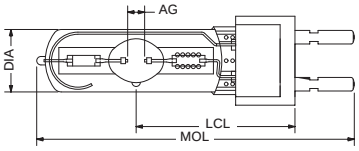


Fig. 4

FEATURES

- High luminous efficacy
- Low infrared
- Colour stability
- Excellent lumen maintenance
- Physical ruggedness

APPLICATIONS

- Show lighting
- Theatre
- Discotheque lighting
- Follow spots
- Effect lighting
- Architectural

DIRECTIONS FOR USE

- Burning position: universal
- Restrike after 10 minutes
- Only use in closed fixtures
- Can be operated on an electronic power supply or on a magnetic ballast

Item description	Watt	Voltage	Current	Ignition Pulse	Average Life	Replacement Time	Luminous Flux	Colour Temp.	CRI	Total UV-output
	W	V	A	kV	hrs	hrs	lm	K		W
BA SE NHR										
BA 150 SE NHR	150	95	1.80	1.9	1000	1500	12400	5600	90	15
BA 400 SE NHR	400	67	6.90	2.2	650	750	33000	6200	92	40
BA 575 SE NHR	575	95	6.95	2.2	750	1000	49000	5600	90	60
BA 1200 SE NHR	1200	100	13.80	2.5	750	1000	110000	6000	95	100
BA SE D (Long Life)										
BA 70 SE T	70	108	0,98	3.5	8000	10000	5500	6000	80	UV-STOP
BA 150 SE T	150	95	1.80	3.0	7000	9000	10000	6000	90	UV-STOP
BA 200 SE D	200	70	3.30	1.9	3000	3500	14000	5600	70	15
BA 250 SE D	250	95	3.00	1.9	3000	3500	18800	5800	80	18
BA 575 SE D	575	95	6.95	2.2	2000	2500	49000	5600	90	60

Item description	Cap	Dimensions				Max. bulb Temp.	Max. pinch Temp.	Figure Nr.	Packing Quantity	Ordering Code
		MOL mm	AG mm	Dia mm	LCL mm	C°	C°			
BA SE NHR										
BA 150 SE NHR	GY9.5	80	5	17	37	700	350	2	10	0023987
BA 400 SE NHR	GX9.5	112	6	23	62	700	350	3	10	0023958
BA 575 SE NHR	GX9.5	125	7	30	65	700	350	3	10	0023960
BA 1200 SE NHR	G22	175	10	40	85	700	350	4	10	0023935
BA SE D (Long Life)										
BA 70 SE T	G12	108	9	20	56	500	350	1	10	0023982
BA 150 SE T	G12	108	11	23	56	500	350	1	10	0023978
BA 200 SE D	GY9.5	108	5	23	55	500	350	2	10	7220168
BA 250 SE D	GY9.5	108	5	23	55	500	350	2	10	7220169
BA 575 SE D	GX9.5	125	7	30	65	600	350	3	10	0023981

Nominal values measured at rated wattage in horizontal position.

BRITEARC Single Ended High Colour Temperature (BA/2 SE)

BriteArc Single Ended/2 lamps are compact light sources with a very high colour temperature offering stable crisp bright light during the complete lamp life.They can be re-struck after about 10 minutes. These lamps can be operated in any position.

BA 250/2 SE D 8.5

BA 575/2 SE NHR 8.5

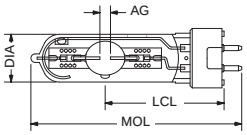


Fig. 1

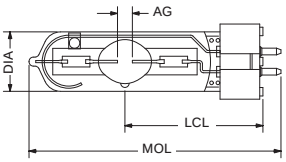
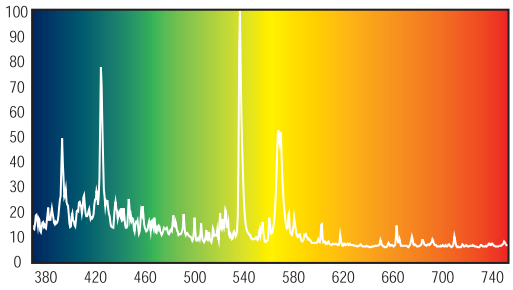


Fig. 2



BA/2 8500 K

FEATURES

- Crisp bright light
- High luminous efficacy
- Low infrared
- Colour stability
- Excellent lumen maintenance
- Physical ruggedness

APPLICATIONS

- Show lighting
- Theatre
- Discotheque lighting
- Effect lighting

DIRECTIONS FOR USE

- Burning position: universal
- Restrike after 10 minutes
- Only use in closed fixtures
- Can be operated on an electronic power supply or on a magnetic ballast

Item description	Watt	Voltage	Current	Ignition Pulse	Average Life	Replacement Time	Luminous Flux	Colour Temp.	CRI	Total UV-output
	W	V	A	kV	hrs	hrs	lm	K		W
BA 250/2 SE D 8.5	250	95	3.00	1.9	3000	3500	18000	8500	65	30
BA 575/2 SE NHR 7.2	575	95	6.95	2.2	1000	1200	45000	7200	85	65
BA 575/2 SE NHR 8.5	575	95	6.95	2.2	1000	1200	44000	8500	80	65

Item description	Cap	Dimensions				Max. bulb Temp.	Max. pinch Temp.	Figure Nr.	Packing Quantity	Ordering Code
		MOL mm	AG mm	Dia mm	LCL mm	C°	C°			
BA 250/2 SE D 8.5	GY9.5	108	5	23	55	500	350	1	10	0023998
BA 575/2 SE NHR 7.2	GX9.5	125	7	30	65	700	350	2	10	0024002
BA 575/2 SE NHR 8.5	GX9.5	125	7	30	65	700	350	2	10	0024000

Nominal values measured at rated wattage in horizontal position.

BRITEARC Single Ended Hot Restrike (BA SE HR)

BriteArc Single Ended Hot Restrike lamps are compact light sources, designed for optimum optical efficiency. The BriteArc lamps are filled with mercury and rare earth elements to obtain a high efficacy and a stable colour with a very good rendering index. They can be re-struck at any time with a voltage peak from 25 to 55 kV. These lamps can be operated in any position.

BA 200 SE HR

BA 575 SE HR

BA 1200 SE HR

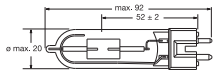


Fig. 1

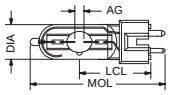


Fig. 2

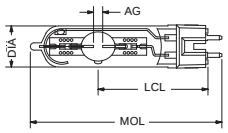


Fig. 3

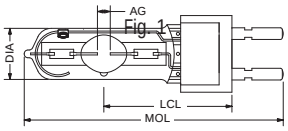


Fig. 4

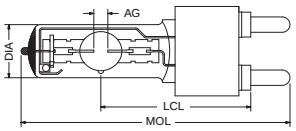


Fig. 5

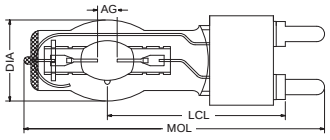


Fig. 6

FEATURES

- High luminous efficacy
- Low infrared
- Colour stability
- Excellent lumen maintenance
- Physical ruggedness
- Hot restrike

APPLICATIONS

- TV-Studio lighting
- Photo studios
- Show lighting
- Theatre
- Follow spots

DIRECTIONS FOR USE

- Burning position: universal
- Only use in closed fixtures
- Can be operated on an electronic power supply or on a magnetic ballast

Frosted top

Item description	Watt	Voltage	Current	Ignition Pulse	Average Life	Replacement Time	Luminous Flux	Colour Temp.	CRI	Total UV-output
	W	V	A	kV	hrs	hrs	lm	K		W
BA 200 SE HR LCL 3200K	200	70	2.7	25.0	1000	1500	19000	3200	88	(*)
BA 200 SE HR LCL 5600K	200	70	3.3	25.0	200	450	15000	5600	95	(*)
BA 200 SE HR	200	70	3.3	25.0	200	450	15000	5600	95	(*)
BA 400 SE HR	400	67	6.9	25.0	650	750	33000	6200	92	40
BA 575 SE HR	575	95	6.9	25.0	750	1000	49000	5600	90	50
BA 400/575 SE HR DIM 3200K	575	67	6.9-8	25.0	650	750	40000	3200	90	50
BA 800 SE HR	800	95	8.5	25.0	1000	1500	64000	6000	95	(*)
BA 1200 SE HR	1200	100	13.8	45.0	750	1000	110000	6000	95	100
BA 1600 SE HR	1600	110	16.7	45,0	500	750	145000	5600	95	110
BA 2500 SE HR	2500	115	25.6	45.0	500	750	240000	6000	95	200
BA 4000 SE HR	4000	200	24.0	50.0	500	750	380000	6300	95	150

Item description	Cap	Dimensions				Max. bulb Temp.	Max. pinch Temp.	Figure Nr.	Packing Quantity	Ordering Code
		MOL mm	AG mm	Dia mm	LCL mm	C°	C°			
BA 200 SE HR LCL 3200K	GZY9.5	92	-	20	52	700	350	1	10	0023940
BA 200 SE HR LCL 5600K	GZY9.5	90	5	20	52	700	350	1	10	0023944
BA 200 SE HR	GZY9.5	80	5	20	39	700	350	2	10	0023941
BA 400 SE HR	GZZ9.5	110	6	23	60	700	350	3	10	0023883
BA 575 SE HR	G22	145	7	30	70	700	350	4	10	0023932
BA 400/575 SE HR DIM 3200K	GZZ9.5	100	4	30	60	900	350	-	10	0023892
BA 800 SE HR	G22	145	7	31	70	700	350	4	10	0023992
BA 1200 SE HR	G38	200	10	40	107	700	350	5	10	0023933
BA 1600 SE HR	G38	200	10	40	107	700	350	5	1	0023893
BA 2500 SE HR	G38	240	14	60	127	700	450	6	1	0023934
BA 4000 SE HR	G38	250	20	75	142	700	450	6	1	0023937

(*) UV stop Lamps

Nominal values measured at rated wattage in horizontal position.

BRITEARC Double Ended (BA DE)

BriteArc Double Ended lamps are metal halide light sources with excellent performance, specially designed for a wide variety of audio-visual applications. The BriteArc lamps are filled with mercury and rare earth elements to obtain a high efficacy and a stable colour. They can be re-struck at any time with a voltage peak from 25 to 55 kV.

BA 1200/2 DE S **GOLD**
BA 700/2 DE S 7.5 **GOLD**

BA 575 DE
BA 575/2 DE
BA 1200 DE S 6.0

BA 2500 DE

BA 2500 DE A

BA 6000 DE

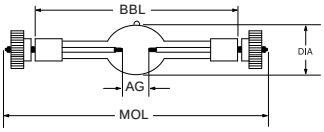


Fig. 1

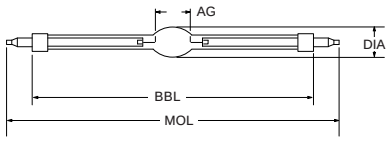


Fig. 2

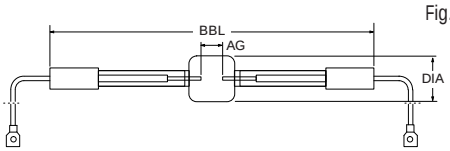


Fig. 3

FEATURES

- High luminous efficacy
- Low infrared
- Colour stability
- Excellent lumen maintenance
- Physical ruggedness
- Hot restrike
- BA 1200 DE S 7.2 and 700 DE S: excellent electrical contact with **GOLD** plated caps

APPLICATIONS

- Show lighting
- Theatre
- Discotheque lighting
- Follow spots
- Effect lighting
- Studio lighting
- Architectural lighting

DIRECTIONS FOR USE

- Burning position: universal for 575W, 700W and 1200W; horizontal plus or minus 30 degrees for BA 2500 DE; horizontal plus or minus 15 degrees for BA 2500 DE A, 4000W, 6000W and 12000W
- Only use in closed fixtures
- Can be operated on an electronic power supply or on a magnetic ballast

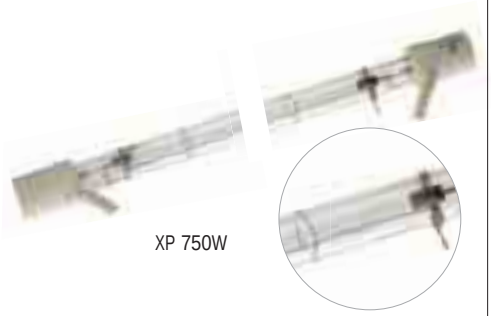
Item description	Watt	Voltage	Current	Ignition Pulse	Average Life	Replacement Time	Luminous Flux	Colour Temp.	CRI	Total UV-output
	W	V	A	kV	hrs	hrs	lm	K		W
BA 575 DE	575	95	7	25,0	750	1000	49000	5600	70	70
BA 575/2 DE	575	95	7	25,0	750	1000	44000	8000	70	100
BA 700/2 DE S 7.5 **GOLD*****	700	70	11.2	25,0	1000	1250	56000	7500	70	100
BA 700/3 DE S 3200K **GOLD*****	700	70	11.2	25,0	750	1000	60000	3200	92	100
BA 1200 DE	1200	100	13.8	45,0	750	1000	110000	5600	80	140
BA 1200 DE S 6.0	1200	105	13.8	25,0	750	1000	110000	6000	90	130
BA 1200/2 DE S 7.2 **GOLD**	1200	100	13.8	25,0	750	1000	95000	7200	77	160
BA 2500 DE	2500	115	26.6	45,0	500	750	240000	5600	90	310
BA 2500 DE S	2500	115	26.6	45,0	500	750	240000	5600	90	310
BA 2500 DE A	2500	120	21.7	45,0	2000	2400	250000	5600	90	150
BA 4000 DE	4000	200	24.0	65,0	500	750	380000	6000	85	640
BA 6000 DE	6000	123	55.0	50,0	350	450	570000	6000	90	1000
BA 12000 DE	12000	160	82.0	65,0	500	550	1100000	6000	90	2200

Item description	Cap	Dimensions MOL	AG	Dia	BBL	Max. bulb Temp.	Max. pinch Temp.	Figure Nr.	Packing Quantity	Ordering Code
		mm	mm	mm	mm	°C	°C			
BA 575 DE	SFc10-4	136	7	21	115	800	230	1	10	0023921
BA 575/2 DE	SFc10-4	138	7	21	115	800	230	1	10	0023917
BA 700/2 DE S 7.5 **GOLD*****	SFc10-4*	136	4	18	115	1000	500 **ETP****	1	10	0023994
BA 700/3 DE S 3200K **GOLD*****	SFc10-4*	136	4	18	115	1000	500 **ETP****	1	10	0023993
BA 1200 DE	SFc15.5-6	220	10	28	180	800	230	1	10	0023922
BA 1200 DE S 6.0	SFc10-4*	138	7	22,5	115	800	450	1	10	0023995
BA 1200/2 DE S 7.2 **GOLD**	SFc10-4*****	136	7	21	115	800	500 **ETP****	1	10	0023996
BA 2500 DE	SFa21-12	355	20.5	32	290	800	230	2	1	0023923
BA 2500 DE S	SFa21-12	210	20.5	32	-	800	230	2	1	0023918
BA 2500 DE A	SFc	364	25	36,5	182	800	230	2	1	0023911
BA 4000 DE	SFa21-12	405	34	40	340	800	230	2	1	0023924
BA 6000 DE	S25.5X60	-	22	52	450	900	230	3	1	0023925
BA 12000 DE	S30X70	-	32	65	470	900	230	3	1	0023927

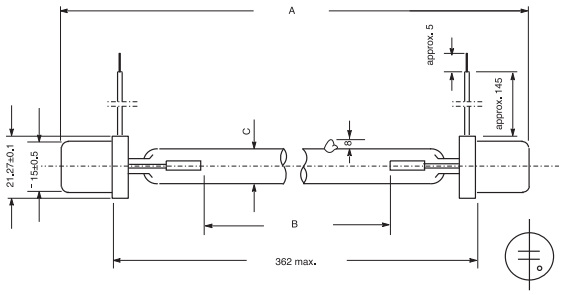
***** Pre-focussed base. Nominal values measured at rated wattage in horizontal position.
****** Extreme Temperature Protection. Maximum allowed pinch temperature 500 °C.
******* Optional : Golden nuts for BA 700W DE S **GOLD** - item 0024001

PULSED XENON

Instant ignition lamps creating a strobe effect.



XP 750W



FEATURES

- Near continuous spectrum ranging from 200-1000nm
- Colour temperature: 5400K. Xenon spectrum, similar to daylight
- Instant ignition, no warming up time
- Can be dimmed

APPLICATIONS

- Strobe lights in discos

DIRECTIONS FOR USE

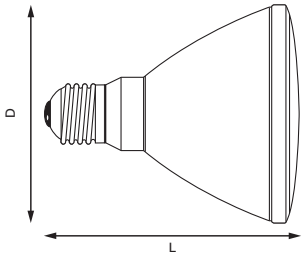
- Operate on a semi resonant ballast
- Ignitor providing a starting pulse of 10kV required
- Forced –air cooling needed
- Due to the high starting voltage, use only insulated lampholders
- The UV radiation must be cut out with a filter glass

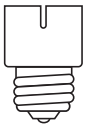
Item description	Watt	Lamp current	Cap	Rated Av. Life	Max.Pinch Temp.	Max.Bulb Temp.	Dimensions (mm)			Packing Quantity	Ordering Code
	W	A		h	C°	C°	A	B	C ∅		
XP 750W	750	12.3	Cable 15.8/14.7	500	350	650	244	158	12	10	0060900
XP 1500W	1500	10.7	Cable 15.8/14.7	500	350	650	398	312	12	10	9023475
XP 2500W	2500	16.0	Cable 15.8/14.7	500	350	650	543	457	12	10	9023401
XP 3000W	3000	18.0	Cable 15.8/14.7	500	350	650	691	615	12	10	0060901

MERCURY PAR 38

Mercury PAR lamps present a high efficiency source of actinic radiation, and satisfy a number of special applications which take advantage of their strong ultra-violet output. They are especially popular when used with a Wood's glass filter for Blacklight effects. The distinctive blue-green colour of unfiltered lamps is well suited to the floodlighting of trees and shrubs, as well as countless special scientific and reprographic applications.

H44GS-100





E29
AdMedium Skirted

E26
Medium Skirted

FEATURES

- High efficiency source of UV-A radiation, with spectral lines peaking at 334.1nm and 365.0nm
- Distinctive blue-green coloured light with visible lines at 404.7nm, 435.8nm, 546.1nm and 578.0nm
- Borosilicate glass envelope filters out dangerous shorter wavelength UV rays
- 8° Narrow Spot is capable of projecting a very high intensity beam over long distances
- Black sprayed reflector to prevent light escape from rear
- Available with Admedium (E29) or Medium (E26) screw base

APPLICATIONS

- Blacklight effects in entertainment lighting, when used with Wood's glass filter
- Detection of cracks and other defects in metal and glass surfaces
- Photo-exposure lamp in reprographic applications
- Medical examination, especially in dermatology
- Exterior floodlighting of trees and bushes
- Stimulation of photo-chemical reactions
- Detection of forgeries, fluorescent inks etc

DIRECTIONS FOR USE

- Universal burning position
- When burned horizontally, lumen value will drop 5-10%
- Operate only in suitable fixture with compatible ballast (USA type H44 or H38)
- Never expose operating lamp to moisture (rain, snow etc)
- Lamp must not be used if the outer envelope is broken or punctured
- Owing to the strong UV output, avoid prolonged exposure of persons
- Warming up time is 15 minutes

Item description	ANSI	Watt W	Hot Restrike Time min	Average Life hrs	Beam Angle	Centerbeam Candlepower cd	Colour Temp. K	CRI
H44 GS-100 SP	H44	100	3 to 9	16000	Spot 8°	16000	5900	20
H44 GS-100/MDSK SP	H44	100	3 to 9	16000	Spot 8°	16000	5900	20

Item description	Cap	Dimensions MOL mm	 Dia mm	Max. bulb Temp. C°	Max. pinch Temp. C°	Packing Quantity	Ordering Code
H44 GS-100 SP	E29 AdMedium Skirted	131	121	400	190	12	9020467
H44 GS-100/MDSK SP	E26 Medium Skirted	131	121	400	190	12	9020664

BLACKLIGHT MERCURY LAMPS

Thanks to a special bulb made from nickel-doped Wood's Glass, these mercury lamps represent a powerful source of blacklight at 365nm. The dark coloured envelope filters out virtually all visible light and dangerous short-wave UV rays, while allowing the deep violet and near UV-A to escape. This produces brilliant fluorescence effects with many materials. The compact source allows a powerful beam to be projected with the use of a polished aluminium reflector.

HSW 125W

HSW 400W

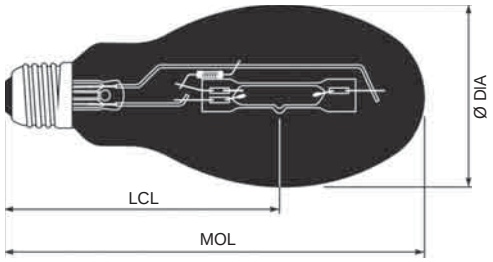
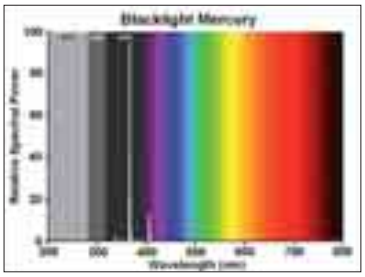


Fig. 1



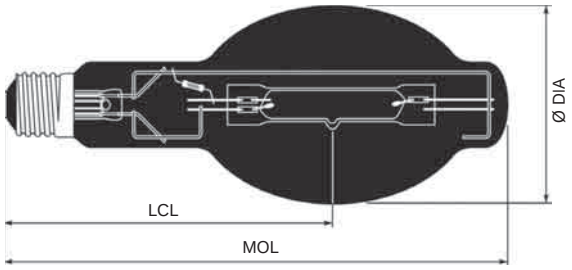


Fig. 2

FEATURES

- Outer bulb in Wood's Glass
- Powerful, compact source of UV-A
- 15% UV depreciation per thousand hours
- Operates on conventional mercury ballast
- 160W version requires no ballast

APPLICATIONS

- Effect lighting
- Theatrical and stage lighting
- Leak and crack detection
- Advertisements and sign boards
- Geological investigation of stones and rocks
- Textile and Food Industries

DIRECTIONS FOR USE

- Burning position for 125, 250 and 400W: universal
- Burning position for 160W: Vertical ± 30°
- 160W is a self ballasted lamp

Item description	Watt W	Voltage V	Current A	UV-A@Im mW/m^2	Average Life hrs	Circuit	Cap	Bulb
HSW 125	125	125	1,15	400	2000	External ballast	E27	ED75
HSW 250	250	130	2,13	700	2000	External ballast	E27	BT90
HSW 400	400	135	3,25	1200	2000	External ballast	E40	BT120
HSBW 160	160	230/240	0,8	150	2000	Self-ballasted	E27	ED75

Item description	MOL mm	LCL mm	Max Diam mm	Max Bulb Temp °C	Max Base Temp °C	Figure Nr.	Packing Quantity	Ordering Code
HSW 125	178	115	76	400	210	1	10	**0023970**
HSW 250	228	145	91	400	250	2	10	**0023971**
HSW 400	292	178	122	400	250	2	10	**0023972**
HSBW 160	178	105	76	400	210	1	10	**0023973**

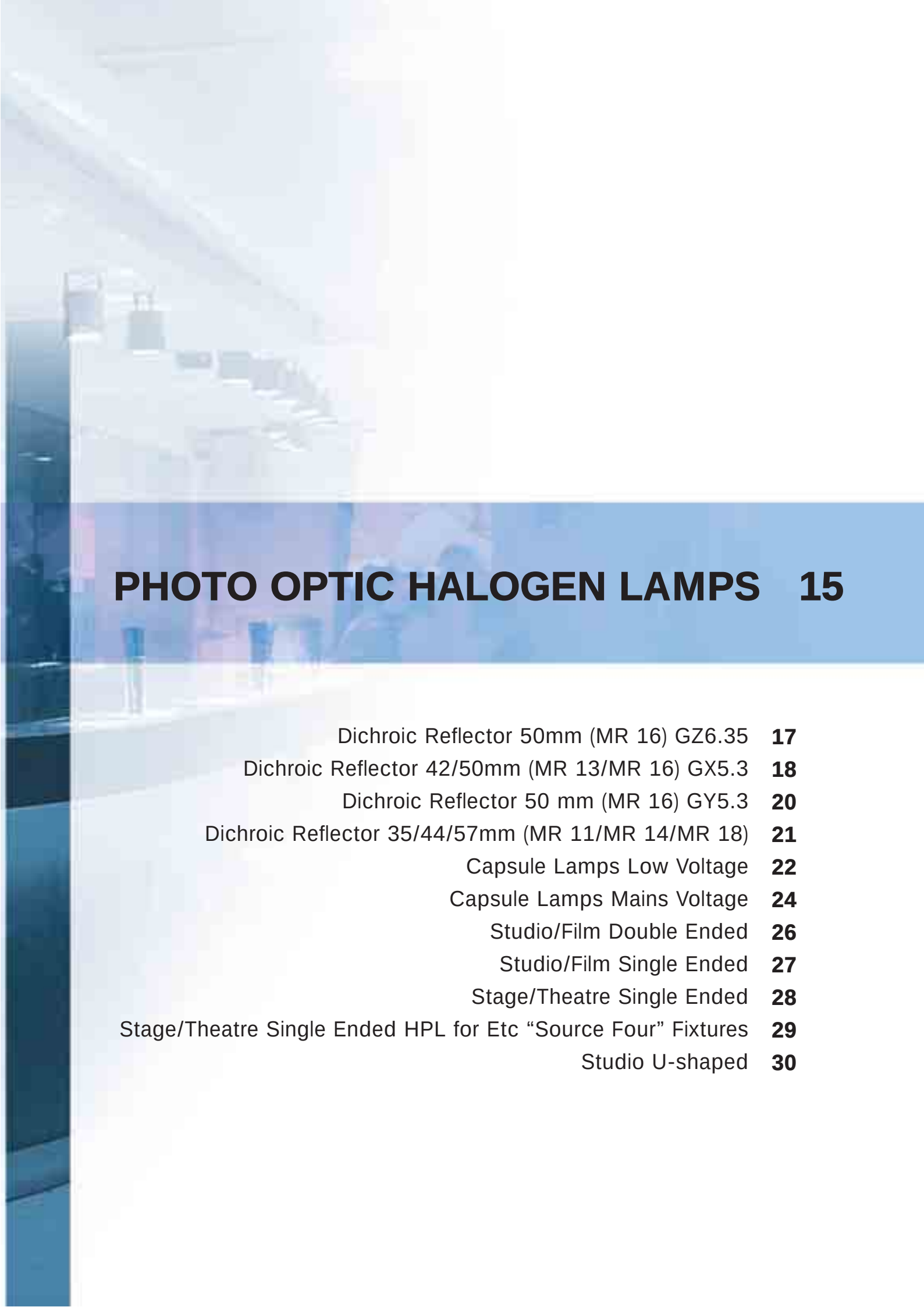
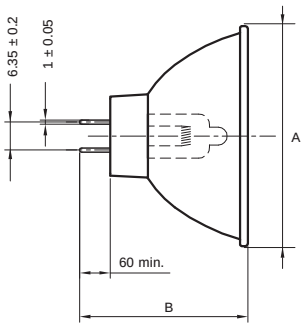


PHOTO OPTIC HALOGEN LAMPS 15

Dichroic Reflector 50mm (MR 16) GZ6.35 **17**
Dichroic Reflector 42/50mm (MR 13/MR 16) GX5.3 **18**
Dichroic Reflector 50 mm (MR 16) GY5.3 **20**
Dichroic Reflector 35/44/57mm (MR 11/MR 14/MR 18) **21**
Capsule Lamps Low Voltage **22**
Capsule Lamps Mains Voltage **24**
Studio/Film Double Ended **26**
Studio/Film Single Ended **27**
Stage/Theatre Single Ended **28**
Stage/Theatre Single Ended HPL for Etc “Source Four” Fixtures **29**
Studio U-shaped **30**

DICHROIC REFLECTOR 50 mm (MR 16) GZ6.35

EFP 12V 100W



FEATURES

- Compact filament
- Highly efficient reflector/lamp combination
- Dichroic reflector, which radiates 75% of heat rearwards

APPLICATIONS

- Film projectors
- Fiber optics
- Enlargers
- Overhead projectors
- Slide projectors

DIRECTIONS FOR USE

- No dimming lower than 10% of rated voltage

Item description	ANSI	LIF	Base	Voltage	Watt	Dimensions		Working distance	Colour Temp.	Rated Av. Life
						A	B			
				V	W	mm	mm	mm	K	h
EFM 8V 50W	EFM	A1/229	GZ6.35	8	50	50	42	32	3400	50
EFN 12V 75W	EFN	A1/230	GZ6.35	12	75	50	42	32	3400	50
EFP 12V 100W	EFP	A1/231	GZ6.35	12	100	50	42	32	3400	50
EFR 15V 150W	EFR	A1/232	GZ6.35	15	150	50	42	32	3400	50

Item description	Reflector Surface	Burning Position	Max. perm. pinch temp. C°	Max. perm. bulb temp. C°	Light Output lm	Packing Quantity	Ordering Code
EFM 8V 50W	Smooth	S105	400	900	380	50	0061341
EFN 12V 75W	Smooth	S105	400	900	550	50	0061342
EFP 12V 100W	Smooth	S105	400	900	650	50	0061344
EFR 15V 150W	Smooth	S105	400	900	800	50	0061350

DICHROIC REFLECTOR 42/50 mm (MR 13/MR 16) GX5.3

EKE 21V 150W

ELC 24V 250W

EXR 82V 300W

FEATURES

- Compact filament
- Perfect alignment of the burner
- Highly efficient reflector/lamp combination
- Dichroic reflector, which radiates 75% of the heat backwards
- Long life versions for disco lighting
- Excellent lumen maintenance over life

APPLICATIONS

- Discos and clubs – long life types
- Medical equipment
- Microfilm readers
- Fibre optic applications
- Enlargers
- Overhead projectors
- Slide projectors

DIRECTIONS FOR USE

- No dimming by more than 10% of their rated voltage. This will reduce life considerably
- Forced cooling necessary

Item description	ANSI	LIF	Base	Voltage	Watt	Dimensions		Filament Type	Working distance	Colour Temp.	Rated Av. Life
						A	B				
				V	W	mm	mm		mm	K	h
ENL 12V 50W	ENL	M/109	GX5.3	12	50	50.7	44.5	C-8	40	3000	4000
DED 13.8V 85W	DED	F/109	GX5.3	13.8	85	50.7	44.5	C-8	165	3150	1000
DDM 19V 80W	DDM	-	GX5.3	19	80	50.7	44.5	CC-6	152.4	3350	50
EPV 14,5V 90W	EPV	F/111	GX5.3	14,5	90	50.7	44.5	CC-6	155	3150	500
EPX 14,5V 90W	EPX	F/110	GX5.3	14,5	90	50.7	44.5	CC-6	165	3150	500
DDL 20V 150W	DDL	F/114	GX5.3	20	150	50.7	44.5	CC-6	194.5	3150	500
EJM 21V 150W	EJM	-	GX5.3	21	150	50.7	44.5	CC-6	38.1	3400	40
EJV 21V 150W	EJV	-	GX5.3	21	150	50.7	44.5	CC-6	44.5	3400	40
ELD 21V 150W	ELD	F/112	GX5.3	21	150	50.7	44.5	CC-6	165	3400	40
EKE 21V 150W	EKE	-	GX5.3	21	150	50.7	44.5	CC-6	44.5	3250	200
EJA 21V 150W	EJA	-	GX5.3	21	150	50.7	44.5	CC-6	28.0	3400	40
EWF 24V 200W	EWF	-	GX5.3	24	200	50.7	44.5	CC-8	298.5	3350	50
ELC 24V 250W 50H	ELC	A1/259	GX5.3	24	250	50.7	44.5	CC-6	31.7	3400	50
ELC 24V 250W 500H	ELC/5H	-	GX5.3	24	250	50.7	44.5	CC-6	31.7	3300	500
ELC 24V 250W 1000H	ELC/10H	-	GX5.3	24	250	50.7	44.5	CC-6	31.7	3300	1000
ERV 36V 340W	ERV	-	GX5.3	36	340	50.7	44.5	CC-8	300	3300	75
EXR 82V 300W	EXR	-	GX5.3	82	300	42	44.5	CC-8	152.4	3350	35
FHS 82V 300W	FHS	-	GX5.3	82	300	42	44.5	CC-8	152.4	3300	70

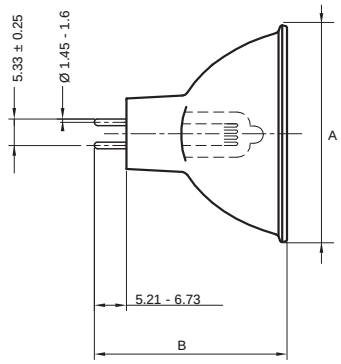


Fig. 1

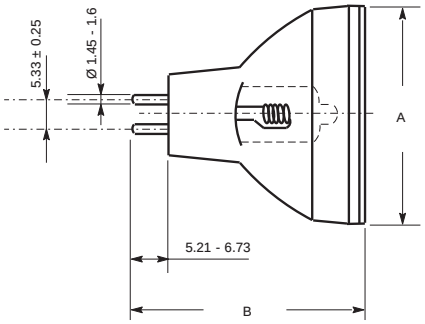
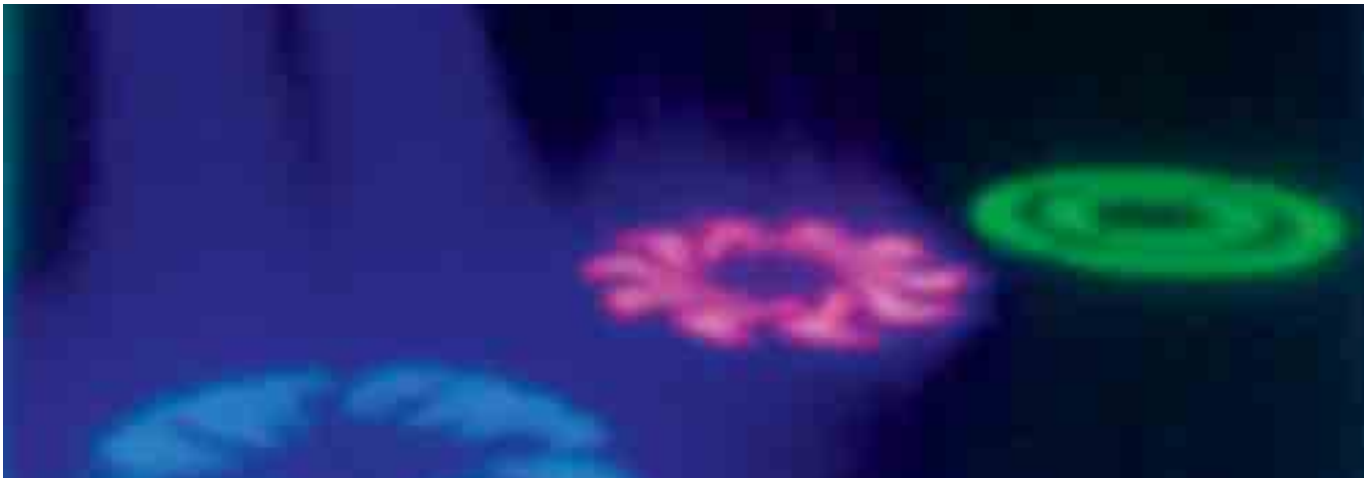


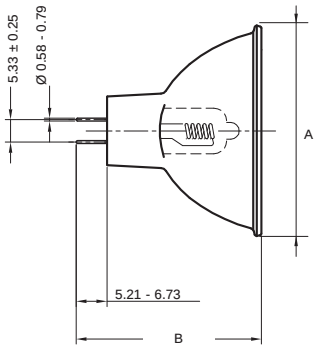
Fig. 2



Item description	Reflector Surface	Burning Position	Max. perm. pinch temp. C°	Max. perm. bulb temp. C°	Min. centre intensity lux	Corner centre ratio %	Figure Nr.	Packing Quantity	Ordering Code
ENL 12V 50W	Faceted	ANY	350	900	-	-	1	10	0061738
DED 13.8V 85W	Faceted	S105	350	900	1000	50	1	10	9060967
DDM 19V 80W	Faceted	S90	350	900	680	15	1	10	9060954
EPV 14,5V 90W	Smooth	S105	350	900	-	-	1	10	9061016
EPX 14,5V 90W	Faceted	S105	350	900	-	-	1	10	9060953
DDL 20V 150W	Faceted	S105	350	900	400	90	1	10	9060984
EJM 21V 150W	Smooth	S90	400	900	1200	50	1	10	9061181
EJV 21V 150W	Smooth	S90	400	900	1500	40	1	10	9060833
ELD 21V 150W	Stippled	S90	400	900	320	30	1	10	9060957
EKE 21V 150W	Smooth	S90	400	900	750	40	1	10	9060943
EJA 21V 150W	Smooth	S90	400	900	1200	50	1	10	9060921
EWF 24V 200W	Faceted	S90	400	900	800	32	1	10	9060890
ELC 24V 250W 50H	Faceted	S90	400	900	1200	50	1	10	0061740
ELC 24V 250W 500H	Smooth	S90	350	900	960	50	1	10	0061741
ELC 24V 250W 1000H	Smooth	S90	350	900	640	50	1	10	0061743
ERV 36V 340W	Faceted	S90	350	900	1050	27	1	10	9060812
EXR 82V 300W	Faceted	S90	400	900	1100	46	2	10	9061039
FHS 82V 300W	Faceted	S90	400	900	1000	46	2	10	9060850

DICHROIC REFLECTOR 50 mm (MR 16) GY5.3

ENH 120V 250W



FEATURES

- Compact filament
- Perfect alignment of the burner
- Highly efficient reflector/lamp combination
- Dichroic reflector, which radiates 75% of the heat backwards

APPLICATIONS

- Microfilm readers
- Medical equipment
- Fiber optic applications
- Enlargers
- Overhead projectors
- Slide projectors

DIRECTIONS FOR USE

- No dimming by more than 10% of their rated voltage. This will reduce life considerably
- Forced cooling necessary

Item description	ANSI	LIF	Base	Voltage	Watt	Dimensions		Filament	Working	Colour	Rated
						A	B	Type	distance	Temp.	Av. Life
				V	W	mm	mm		mm	K	h
EVW 82V 250W	EVW	-	GY5.3	82	250	50.7	44.5	CC-8	298.5	3300	50
ENX 82V 360W	ENX	-	GY5.3	82	360	50.7	44.5	CC-8	298.5	3300	75
FXL 82V 410W	FXL	-	GY5.3	82	410	50.7	44.5	CC-8	298.5	3300	50
JCR 100V 300W	-	-	GY5.3	100	300	50.7	44.5	CC-8	298.5	3200	50
ESD 120V 150W	ESD	-	GY5.3	120	150	50.7	44.5	CC-8	44.5	3350	12
ENH 120V 250W	ENH	-	GY5.3	120	250	50.7	44.5	CC-8	152.4	3250	175
ELH 120V 300W	ELH	-	GY5.3	120	300	50.7	44.5	CC-8	152.4	3350	35

Item description	Reflector Surface	Burning Position	Max. perm. pinch temp. C°	Max. perm. bulb temp. C°	Min. centre intensity lux	Corner centre ratio %	Packing Quantity	Ordering Code
EVW 82V 250W	Faceted	S90	400	900	1250	40	10	9000017
ENX 82V 360W	Faceted	S90	400	900	4300	25	10	9060846
FXL 82V 410W	Faceted	S90	400	900	4700	34	10	9061768
JCR 100V 300W	Faceted	S90	400	900	5000	20	10	9061063
ESD 120V 150W	Stippled	S90	400	900	350	20	10	9061358
ENH 120V 250W	Faceted	S90	400	900	800	40	10	9060940
ELH 120V 300W	Faceted	S90	400	900	850	45	10	9060813

DICHROIC REFLECTOR 35/44/57 mm (MR 11/MR 14/MR 18)

DNF 21V 150W

EMM 24V 250W

FLT 13.8V 25W

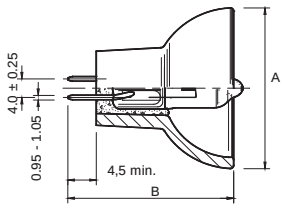


Fig. 1

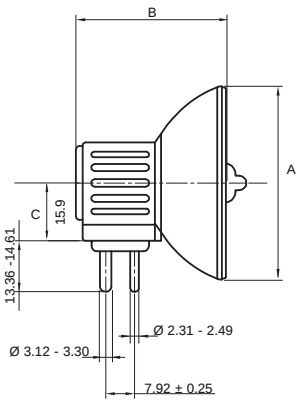


Fig. 2

FEATURES

- Compact filament
- Perfect alignment of the burner
- Highly efficient reflector/lamp combination
- Dichroic reflector, which radiates 75% of the heat backwards

APPLICATIONS

- Film projectors
- Microfilm readers
- Medical equipment
- Enlargers
- Overhead projectors
- Slide projectors

DIRECTIONS FOR USE

- No dimming by more than 10% of their rated voltage. This will reduce life considerably
- Forced cooling necessary

Item description	ANSI	LIF	Base	Voltage	Watt	Dimensions			Filament Type	Working distance	Colour Temp.	Rated Av. Life
						A	B	C				
				V	W	mm	mm	mm		mm	K	h
DNF 21V 150W	DNF	A1/266	GX7.9	21	150	57.2	45.1	15.9	CC-6	69.1	3400	25
EMM/EKS 24V 250W	EMM/EKS	A1/258	GX7.9	24	250	44.5	47.5	15.9	CC-6	65.8	3400	50
FLT 13.8V 25W/S	FLT	F/101	GZ4	13.8	25	35.3	35	-	CC-6	81.5	3100	400

Item description	Reflector Surface	Burning Position	Max. perm. pinch temp. C°	Max. perm. bulb temp. C°	Min. centre intensity lux	Corner centre ratio %	Figure Nr.	Packing Quantity	Ordering Code
DNF 21V 150W	Smooth	p4	400	900	2100	50	2	10	9060743
EMM/EKS 24V 250W	Smooth	p4	400	900	750	55	2	10	9060918
FLT 13.8V 25W/S	Faceted	S105	350	900	1300	700	1	10	9060877

CAPSULE LAMPS Low Voltage

FCS 24V 150W G6.35

FCR 12V 100W

FDS 24V 150W

FEATURES

- Low voltage, quartz halogen lamp
- Flat filament
- Constant high light output
- Pre-focused based lamps have a better defined filament position

APPLICATIONS

- Studio lighting
- Film lighting
- Theatre lighting
- Microfilm readers
- Film projectors
- Overhead projectors
- Slide projectors

DIRECTIONS FOR USE

- No dimming by more than 10% of their rated voltage. This will reduce life considerably

Item description	ANSI	LIF	Base	Voltage	Watt	Dimensions			Type	Filament Dimensions	
						A	B	C			
				V	W	mm	mm	mm		W mm	H mm
BRL 12V 50W	BRL	A1/220	G6.35	12	50	11.5	44	30	CF-6	3.3	1.6
EVB/BRJ 15V 150W	EVB/BRJ	A1/234	G6.35	15	150	11.5	44	30	CF-6	5.0	3.0
FCS 24V 150W	FCS	A1/216	G6.35	24	150	13.5	50	32	CF-6	6.1	3.0
EHJ 24V 250W	EHJ	A1/223	G6.35	24	250	13.5	55	33	CF-6	7.1	3.5
FGX 24V 250W	FGX	M33	G6.35	24	250	13.5	55	33	CF-6	10.0	5.0
EWX 24V 250W	EWX	-	G6.35	24	250	11.5	44	29	CC-6	5.6	3.15
FNT 24V 275W	FNT	-	G6.35	24	275	13.5	55	33	CF-6	7.2	3.5
EVD 36V 400W	EVD	A1/239	G6.35	36	400	18.0	60	36	CF-6	9.5	4.7
FCR 12V 100W	FCR	A1/215	GY6.35	12	100	11.0	44	30	CF-6	6.7	4.6
FLW 24V 300W	FLW	-	GY6.35	24	300	11.0	55	33	CF-6	6.7	4.6
JC 24V 300W	-	-	GY6.35	24	300	13.5	55	33	CF-6	6.7	4.6
FDS/FDT 24V 150W	FDS/FDT	A1/262	GZ9.5	24	150	13.5	57	27	CF-6	5.8	2.9
EYB 82V 360W	EYB	-	G5.3	82	360	11.5	57	32	CC-8	7.6	5.1

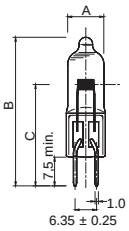


Fig. 1

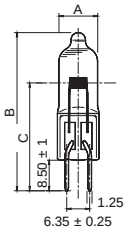


Fig. 2

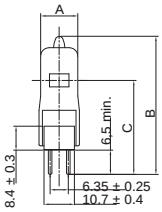


Fig. 3

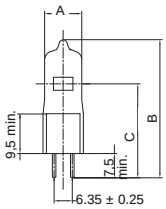


Fig. 4

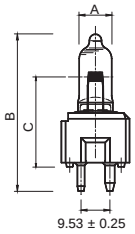


Fig. 5

Item description	Approx. Lumens lm	Colour Temp. K	Rated Av. Life h	Burning Position	Max. pinch temp. C°	Max. bulb temp. C°	Figure Nr.	Packing Quantity	Ordering Code
BRL 12V 50W	1400	3400	50	S90	400	900	1	50	0061300
EVB/BRJ 15V 150W	5000	3400	50	S90	400	900	1	10	0061303
FCS 24V 150W	5000	3400	50	S90	400	900	1	50	0061374
EHJ 24V 250W	10000	3400	50	S90	400	900	1	50	0061367
FGX 24V 250W	8400	3200	300	S90	350	900	1	10	0061465
EWX 24V 250W	8200	3400	50	S90	400	900	1	10	0061494
FNT 24V 275W	10000	3400	75	S90	400	900	1	50	9061150
EVD 36V 400W	16000	3400	50	S90	400	900	1	50	9060826
FCR 12V 100W	3400	3000	50	S90	400	900	2	50	0061373
FLW 24V 300W	10450	3500	50	S90	400	900	3	10	9061142
JC 24V 300W	9900	3400	50	S90	400	900	4	10	9061010
FDS/FDT 24V 150W	5000	3400	50	S90	400	900	5	10	9060924
EYB 82V 360W	11000	3300	75	S90	400	900	5	50	0061495

CAPSULE LAMPS Mains Voltage

JCD 100V 650W

JCP 100V 650W

EPS 240V 500W

FEATURES

- Compact quartz halogen lamp
- Maximum light output, but relatively low life
- Pre-focused based lamps have a better defined filament position

APPLICATIONS

- Overhead projectors
- Slide projectors
- Photo printers

Item description	ANSI	LIF	Base	Voltage	Watt	Dimensions			Type	Filament Dimensions	
						A	B	C			
				V	W	mm	mm	mm		W mm	H mm
ESY 100V 150W	ESY	-	G6.35	100	150	13.5	50	32	CC-6	8.1	2.8
JCD 100V 650W	-	-	G6.35	100	650	22.0	63	36.5	CC-6	14.0	5.3
GKV 240V 600W	GKV	-	G9.5	240	600	18.0	101	60.5	C-13D	13.5	7.5
DYS/DYV 120V 600W	DYS/DYV	A1/264	GY9.5	120	600	22.0	63	36.5	CC-6	15.0	5.2
DYR 240V 650W	DYR	A1/233	GZ9.5	240	650	24.0	64	37	2 CC-8	12.9	11
JCP 100V 650W	-	-	GY9.5	100	650	18.0	76	36.5	C-13D	8.6	8.7
EPS 240V 500W	EPS	A1/268	G17t-7	240	500	19.5	89	41	C-13D	9.0	8.6
A1/244 240V 500W	-	A1/244	GY9.5	240	500	23.0	75	36.5	C-13	9.5	10.7
BRN 120V 1200W	BRN	-	G17t-7	120	1200	23.0	95	39.7	C-13D	10.5	12.5
BTG 120V 1200W	BTG	-	G17t-A24	120	1200	23,0	95	39,7	C-13D	10.5	12.5

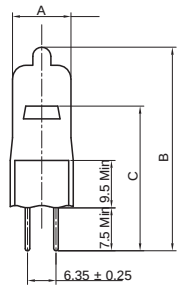


Fig. 1

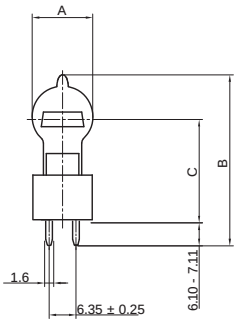


Fig. 2

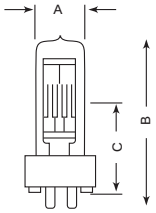


Fig. 3

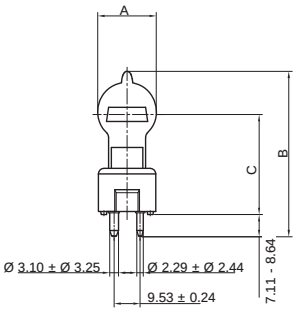


Fig. 4

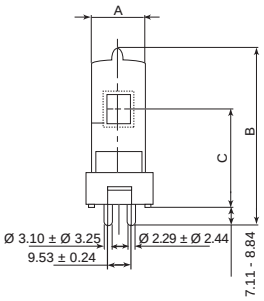


Fig. 5

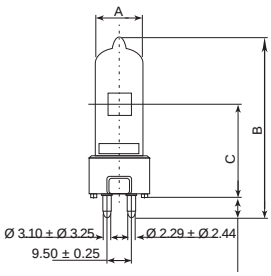


Fig. 6

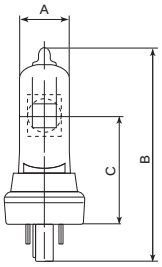


Fig. 7

Item description	Approx. Lumens lm	Colour Temp. K	Rated Av. Life h	Burning Position	Max. pinch temp. C°	Max. bulb temp. C°	Figure Nr.	Packing Quantity	Ordering Code
ESY 100V 150W	3300	3050	200	S10	400	900	1	10	9060962
JCD 100V 650W	17500	3200	150	ANY	400	900	2	10	9061060
GKV 240V 600W	14000	3200	250	ANY	370	900	3	25	0061734
DYS/DYV 120V 600W	17000	3200	75	S90	400	900	4	50	9060779
DYR 240V 650W	16500	3200	50	ANY	370	900	4	50	9060716
JCP 100V 650W	18750	3300	75	ANY	400	900	6	10	9061018
EPS 240V 500W	(1)	3250	50	S90	400	900	7	10	9060927
A1/244 240V 500W	13000	3200	75	ANY	370	900	6	50	9061168
BRN 120V 1200W (1)	-	3350	20	S90	400	900	7	10	9060572
BTG 120V 1200W	38200	3350	20	S90	400	900	7	10	9060934

STUDIO/FILM Double Ended

Mains voltage double ended halogen lamps mainly used in studio and film.

DXX 240V 800W

FEX 240V 2000W

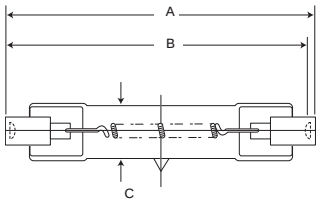


Fig. 1

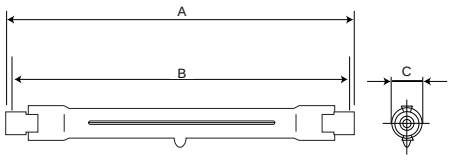


Fig. 2

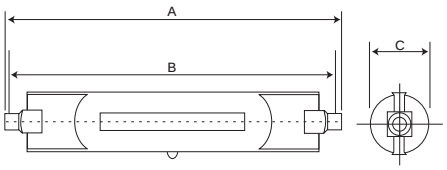


Fig. 3

FEATURES

- High constant light output
- High colour temperature

APPLICATIONS

- Electronic News Gathering (ENG)
- Studio lighting
- Film lighting
- Overhead projectors (FAD type)

Item description	ANSI	LIF	Voltage	Watt	Base	Dimensions			Rated
						A max	B	C	Av. Life
			V	W		mm	mm	mm	h
FAD 118V 650W	FAD	P2/6	118	650	R7s	80.3	74.9	14	100
DXX 240V 800W	DXX	P2/13	240	800	R7s	80.3	74.9	14	75
FDG 230V 1000W	FDG	P1/12	230	1000	R7s	127.1	121.7	12	15
JPD 240V 1000W	-	P2/35	240	1000	R7s	93.8	91.3	18	120
EME 240V 800W	EME	P2/11	230	800	R7s	119.6	114.2	12	150
FEX 240V 2000W	FEX	P2/27	240	2000	RX7s	141.5	138.1	27	300

Item description	Filament Type	Lumen Output Lm	Colour Temp. K	Burning Position	Max. Permissible pinch temp. C°	Figure Nr.	Packing Quantity	Ordering Code
FAD 118V 650W	CC-8	16500	3200	P4	400	1	50	0061371
DXX 240V 800W	CC-8	20000	3200	P15	400	1	50	0061321
FDG 230V 1000W	CC-8	31000	3400	ANY	450	2	10	0061379
JPD 240V 1000W	CC-8	26000	3200	P15	400	1	50	0061327
EME 240V 800W	CC-8	20000	3200	P15	400	2	10	9060822
FEX 240V 2000W	CC-8	50000	3200	ANY	400	3	10	0060884

CC= Coiled Coil • SC= Single Coil

STUDIO/FILM Single Ended

Mains voltage single ended halogen lamps for studio and film lighting applications. Many types feature bi-plane filaments, offering higher performance and replacing the older mono-plane types in parentheses.

CP40-FKJ 240V 1000W

CP70-FVB 240V 1000W

CP82-FRJ 240V 500W

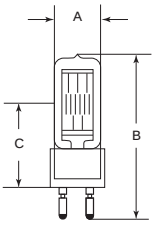


Fig. 1

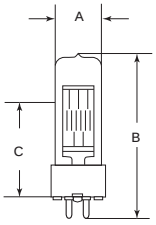


Fig. 2

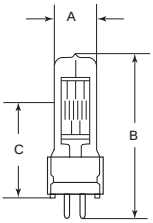


Fig. 3

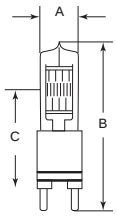


Fig. 4

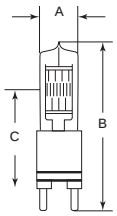


Fig. 5

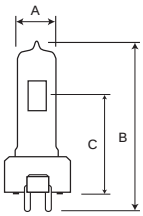


Fig. 6

FEATURES

- High light output from a compact filament source
- Compact square filament design
- Colour temperature: 3200K

APPLICATIONS

- Studio lighting
- Disco lighting
- Film lighting

Item description	ANSI	LIF	Voltage	Watt	Base	Dimensions			Rated
						Diameter	MOL	LCL	Av. Life
			V	W		A (mm)	B (mm)	C (mm)	h
CP/71 FKJ 240V 1000W	(FKJ)	CP/71(CP/40)	240	1000	G22	35	140	63.5	200
CP/73 FKP 240V 2000W	(FKP/FKK)	CP/73 (CP/41)	240	2000	G38	35	210	127.0	400
CP/72 FTL 240V 2000W	(FTL)	CP/72 (CP/43)	240	2000	GY16	35	145	70.0	400
CP/70 FVB 240V 1000W	(FVB)	CP/70 (CP/24)	240	1000	GX9.5	26	110	55.0	200
CP/77 FEP 240V 1000W	FEP	CP77	240	1000	G9.5	20	101	60.5	250
CP/81 FSK 240V 300W	FSK	CP81	240	300	GY9.5	18	90	46.3	150
CP/82 FRJ 240V 500W	FRJ	CP82	240	500	GY9.5	18	90	46.3	150
CP/89 FRM 240V 650W	FRM	CP89	240	650	GY9.5	23	90	46.3	150

Item description	Filament	Filament dimensions		Lumen	Colour	Burning	Max. Perm.	Figure	Packing	Ordering
	Type	W	H	Output	Temp.	Position	pinch temp.	Nr.	Quantity	Code
		mm	mm	Lm	K		C°			
CP/71 FKJ 240V 1000W	BPC-13D	13	15	26000	3200	S90	400	1	20	9061116
CP/73 FKP 240V 2000W	BPC-13D	20	19	52000	3200	S90	400	4	1	9061118
CP/72 FTL 240V 2000W	BPC-13D	20	19	52000	3200	S90	400	3	20	9061119
CP/70 FVB 240V 1000W	BPC-13D	13	15	26000	3200	S90	400	2	20	9061121
CP/77 FEP 240V 1000W	CC-8	6	23	26000	3200	ANY	400	5	10	9061385
CP/81 FSK 240V 300W	MCC-13	8	13	7050	3200	ANY	400	6	10	9061122
CP/82 FRJ 240V 500W	MCC-13	8	18	13500	3200	ANY	400	6	10	9061124
CP/89 FRM 240V 650W	BPC-13D	10	10	16250	3200	S90	400	6	25	9061126

BP=Biplane • CC=Coiled Coil • M=M-shaped

STAGE/THEATRE Single Ended

Mains voltage single ended halogen lamps for stage and theatre. These lamps have bi-plane filaments, offering higher performance and replacing the older mono-plane types in parentheses.

GCJ 240V 500W

FWR 240V 1000W

FWT 240V 1200W

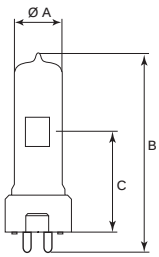


Fig. 1

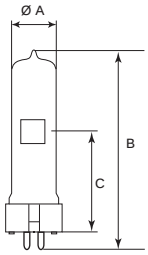


Fig. 2

FEATURES

- Compact filament configuration resulting in more light emitted from the focal point
- Longer life than studio and film lamps

APPLICATIONS

- Stage and theatre
- Effect lighting

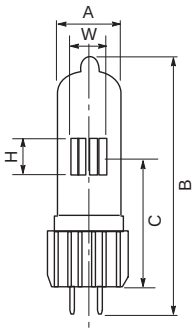
Item description	ANSI	LIF	Voltage	Watt	Base	Dimensions		
						A	B	C
			V	W		mm	mm	mm
T/25 GCJ 240V 500W	GCJ (GCW)	T/25 (T18)	240	500	GY9.5	23	90	46.5
T/27 GCK 230V 650W	GCK (GCT)	T/27 (T/26)	230	650	GY9.5	26	90	46.5
T/27 GCL 240V 650W	GCL (GCS)	T/27 (T/26)	240	650	GY9.5	23	90	46.5
T/19 FWP 230V 1000W	FWP	T/19 (T/11)	230	1000	GX9.5	35	110	55
T/19 FWR 240V 1000W	FWR	T/19 (T/11)	240	1000	GX9.5	26	110	55
T/29 FWT 240V 1200W	FWT	T/29	240	1200	GX9.5	27	125	67
M/40 240V 500W	-	M/40	230	500	GY9.5	23	90	46.5

Item description	Filament Type	Filament dimensions W mm	Filament dimensions H mm	Lumen Output Lm	Rated Av. Life h	Burning Position	Max. Perm. pinch temp. C°	Figure Nr.	Packing Quantity	Ordering Code
T/25 GCJ 240V 500W	BPC-13D	10	10	11000	300	S90	400	1	25	9061542
T/27 GCK 230V 650W	BPC-13D	11	11	14500	400	S90	400	1	25	0061736
T/27 GCL 240V 650W	BPC-13D	10	10	14500	400	S90	400	1	25	9061545
T/19 FWP 230V 1000W	BPC-13D	13	15	20500	750	S90	350	2	20	0061737
T/19 FWR 240V 1000W	BPC-13D	15	13	20500	750	S90	350	2	20	9061548
T/29 FWT 240V 1200W	BPC-13D	15	13	28600	400	S90	350	2	20	9061551
M/40 240V 500W	BPC-13D	11	12.4	8500	2000	ANY	370	1	50	0061733

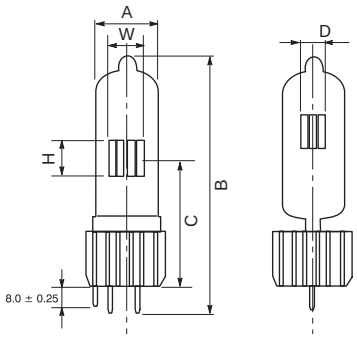
STAGE/THEATRE Single Ended HPL FOR ETC "SOURCE FOUR" FIXTURES

The HPL lamps are designed especially for the «Source Four» spotlight family of ETC. The reflector of the spotlight makes optimum use of the filament construction, so that the generated light output (from 750W lamps) is now the same as for an existing 1000W fixture.

HPL 750W



HPL 575W



HPL 750W

(*) : ETC Source Four Spotlight

FEATURES

- Ultra compact filament design for high lumen output and accurate aiming
- Optimum system performance
- High beam intensity
- Reinforced pinch seal for extra mechanical resistance
- Special heat sink base reducing seal temperature and maximising life. Suited for use in high temperature applications
- Optimal lamp alignment also ensured by the heat sink base
- Long life versions (LL) ideal for architectural lighting

APPLICATIONS

- Theatre lighting
- TV and studio
- Entertainment and Architectural applications
- Professional Photography

DIRECTIONS FOR USE

- To be used in the ETC Source Four range of spotlights only
- **Licensed under U.S. patent # 5268613, Japanese patent #2501772**

Item description	Voltage	Watt	Base	Coil	Lumen	Life	Burning Position	Colour Temp.
	V	W						
HPL 575W 240V	240	575	G9.5	6-C8	14900	400	Any	3200K
HPL 750W 240V	240	750	G9.5	6-C8	19750	300	Any	3200K
HPL 575W 240V LL	240	575	G9.5	6-C8	11780	1500	Any	3050K
HPL 750W 240V LL	240	750	G9.5	6-C8	15600	1500	Any	3050K

Item description	Dimensions			Filament dimensions			Packing Quantity	Ordering Code
	A mm	B mm	C mm	W mm	D mm	H mm		
HPL 575W 240V	19,0	104,0	60,3	8,7	7,5	9,4	10	0061801
HPL 750W 240V	19,0	104,0	60,3	8,7	7,5	11,5	10	0061803
HPL 575W 240V LL	19,0	104,0	60,3	8,7	7,5	12	10	0061805
HPL 750W 240V LL	19,0	104,0	60,3	8,7	7,5	13	10	0061807

STUDIO U-SHAPED

Mains voltage U-shaped halogen lamps mainly used in TV and photo studios.

DJE 230V 1000W

FHB 230V 1000W

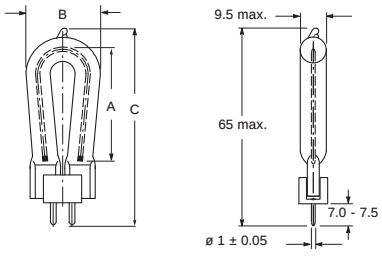


Fig. 1

FEATURES

- U-shaped quartz halogen lamp
- Single coil construction
- Multiple filament supports
- High resistance against vibration

APPLICATIONS

- Studio
- Film
- Photography

Suitable as higher performance replacements for conventional single ended Photofload capsules
Thanks to Sylvania's, unique U-shaped burner, the risk of arcing and premature failures is drammaticaly reduced

Item description	L-code	ANSI	LIF	Voltage	Watt	Base	Dimensions			
							A	B	C	D
				V	W		mm	mm	mm	mm
EWZ 110V 850W	L1222	EWZ	-	110V	850W	GX6.35	30.0	24	65	9.5
DJE 230V 1000W	L1192	DJE	P2/17	230V	1000W	GX6.35	38.5	24	75	9.5
FHB 230V 1000W	L1168	FHB	P1/15	230V	1000W	GX6.35	30.0	24	65	9.5
FHG 230V 1250W	L1171	FHG	P1/19	230V	1250W	GX6.35	38.5	24	75	9.5
U-Shape 230V 1250W	L1173	-	P2/26	230V	1250W	GX6.35	38.5	24	75	9.5
EYN 240V 650W	L1221	EYN	P2/17	240V	650W	GX6.35	30.0	24	65	9.5
EYM 240V 1000W	L1220	EYM	P1/15	240V	1000W	GX6.35	38.5	24	75	9.5

Item description	L-code	Lumen Output Lm	Rated Av. Life h	Colour Temperature K	Burning Position	Max. Perm. pinch temp. C°	Figure Nr.	Packing Quantity	Ordering Code
EWZ 110V 850W	L1222	23000	75	3300	BD +- 90°	400	1	50	0061735
DJE 230V 1000W	L1192	26000	75	3200	BD +- 90°	400	1	50	0061473
FHB 230V 1000W	L1168	33000	15	3400	BD +- 90°	400	1	50	0061391
FHG 230V 1250W	L1171	40000	15	3400	BD +- 90°	400	1	50	0061395
U-Shape 230V 1250W	L1173	35500	75	3200	BD +- 90°	400	1	50	0061510
EYN 240V 650W	L1221	17300	50	3300	BD +- 90°	400	1	50	0061523
EYM 240V 1000W	L1220	28300	75	3300	BD +- 90°	400	1	50	0061520

PHOTO OPTIC INCANDESCENT & PAR LAMPS 33

Conventional Projection BA15S (Blue Top) **34**
PAR 38 Coloured **35**
PAR 36 **36**
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PAR 56 Mains Voltage **38**
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PAR 56 12V Swimming Pool **40**
PAR 56 12V LED Swimming Pool **41**
Hi-spot ES50 GU10 coloured **42**

CONVENTIONAL PROJECTION BA15S (Blue Top)

CJW/CJT 240V 100W BA1

CXR/CXL 8V 50W

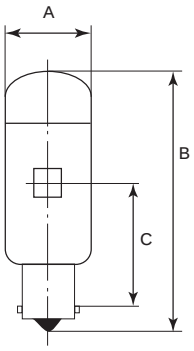


Fig. 1

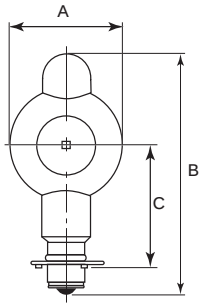


Fig. 2

FEATURES

- Closely-specified colour temperatures
- Tight beam control
- Pre-focused bases allow lamp replacement without adjustment
- High resistance against vibration

APPLICATIONS

- Theatre lighting
- Film projectors
- Slide projectors

Item description	ANSI	LIF	Voltage	Watt	Dimensions			Filament
					A	B	C	Type
			V	W	mm	mm	mm	
CJW/CJT 240V 100W	CJW/CJT	A1/021	240V	100W	25	78	35	CC-13
CNP 230V 300W	CNP	A1/037	230V	300W	27	105	35	CC-13
CXR/CXL 8V 50W	CXR/CXL	A1/017	8V	50W	43	96	47.0	C-6

Item description	Base	Approx. Lumen	Colour Temperature	Rated Av. Life	Burning Position	Figure Nr.	Packing Quantity	Ordering Code
		lm	K	h				
CJW/CJT 240V 100W	Ba15s	1500	2870	50	BD	1	25	9060629
CNP 230V 300W	Ba15s	6600	3050	25	BD	1	25	9060623
CXR/CXL 8V 50W	P30s	36	3200	25	BD	2	25	9061617

PAR 38 Coloured

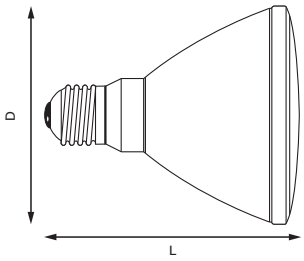
Incandescent PAR lamps with integral parabolic reflector and coloured front lens.

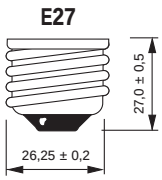
240V 80W BLUE

240V 80W GREEN

240V 80W RED

240V 80W YELLOW





FEATURES

- Parabolic-shaped reflector made from hard glass
- Coloured front lens
- Choice of four colours: Blue, Green Red, and Yellow
- E27 cap

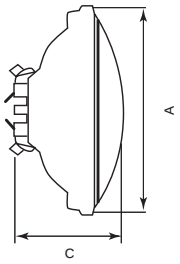
APPLICATIONS

- Mainly used in commercial accent lighting
- To create special effects in bars, clubs and discos and in shop window displays

Item description	Watt	Volt	Cap	Dimensions L mm	Dimensions D mm	Packing Quantity	Ordering Code
80W/FL30°PAR38 blue	80	240	E27	136	124	10	0019650
80W/FL30°PAR38 green	80	240	E27	136	124	10	0019651
80W/FL30°PAR38 red	80	240	E27	136	124	10	0019652
80W/FL30°PAR38 yellow	80	240	E27	136	124	10	0019653

PAR 36

PAR36 6V 30W



FEATURES

- Pressed glass reflector lamps
- Beam patterns: from very narrow spot through wide angle floods
- Consistency from lamp to lamp
- Economical light source for effects
- Halogen version delivers maintained beam intensity throughout life

APPLICATIONS

- Entertainment and Architectural applications
- Displays
- Museums
- Exhibitions
- Gardens
- Discos

DIRECTIONS FOR USE

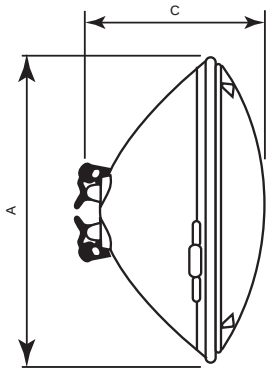
- Easy handling
- Can be used with very economical fixtures (PAR cans)

Item description	ANSI	LIF	Voltage V	Watt W	Beam type	Approx. Beam Spread 10% Peak CD	Base
PAR 36 6,4V 30W Disco (H4515)	-	-	6.4	30	Spot	5x5	Screw Terminal
PAR 36 12,8V 30W (H 4405)	-	-	12.8	30	Spot	6x5	Screw Terminal
PAR 36 12V 50W VNSP			12	50	Very Narrow Spot	6x6	Screw Terminal
PAR 36 12V 50W NSP	-	-	12	50	Narrow Spot	11x10	Screw Terminal
PAR 36 12V 50W WFL	-	-	12	50	Wide Flood	30x25	Screw Terminal
PAR 36 120V 650W	DWE	-	120	650	Medium Flood	40x30	Screw Terminal

Item description	Dimensions A Diameter mm	C MOL mm	Peak Intensity cd	Colour temp. K	Rated Av. Life h	Burning Position	Packing Quantity	Ordering Code
PAR 36 6,4V 30W Disco (H4515)	114	70	55000	3200	200	Any	12	0060500
PAR 36 12,8V 30W (H 4405)	114	70	50000	3200	100	Any	12	9020167
PAR 36 12V 50W VNSP	114	70	19000	3000	2000	Any	12	0060508
PAR 36 12V 50W NSP	114	70	11000	3000	2000	Any	12	0060501
PAR 36 12V 50W NFL	114	70	1300	3000	2000	Any	12	0060502
PAR 36 120V 650W	114	70	24000	3200	100	H15	12	0060503

PAR 56 Low Voltage

PAR56 12V 100W



FEATURES

- Pressed glass reflector lamps
- Beam patterns: from very narrow spot through wide angle floods
- Consistency from lamp to lamp
- Instant replaceability without the need to re-focus and re-aim fixtures

APPLICATIONS

- Theatre lighting
- TV and studio
- Entertainment and Architectural applications
- Displays
- Museums
- Churches
- Towers
- Exhibitions
- Gardens
- Discos

DIRECTIONS FOR USE

- Easy handling
- Can be used with very economical fixtures (PAR cans)

Item description	ANSI	LIF	Voltage V	Watt W	Beam type	Approx. Beam Spread 10% Peak CD	Base
PAR 56 12V 100W (4545)	-	-	12	100	Spot	9x5	Screw Terminal

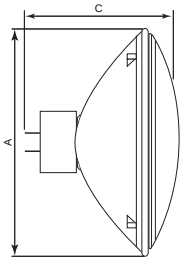
Item description	Dimensions A Diameter mm	C MOL mm	Peak Intensity cd	Colour temp. K	Rated Av. Life h	Burning Position	Packing Quantity	Ordering Code
PAR 56 12V 100W (4545)	178	114	225000	3200	100	Any	12	0060509

PAR 56 Mains Voltage

PAR56 300W NSP

PAR56 300W MFL

PAR56 300W WFL



FEATURES

- Pressed glass reflector lamps
- Beam patterns: from very narrow spot through wide angle floods
- Consistency from lamp to lamp
- Instant replaceability without the need to re-focus and re-aim fixtures

APPLICATIONS

- Theatre lighting
- TV and studio
- Entertainment and Architectural applications
- Displays
- Museums
- Churches
- Towers
- Exhibitions
- Gardens
- Discos

DIRECTIONS FOR USE

- Easy handling
- Can be used with very economical fixtures (PAR cans)

Item description	ANSI	LIF	Voltage	Watt	Beam type	Approx. Beam Spread		Base
						10% Peak CD	50% Peak CD	
			V	W				
PAR 56 300W NSP 240V	-	-	240	300	Narrow Spot	20° x 14°	10° x 8°	GX16d
PAR 56 300W MFL 240V	-	-	240	300	Medium Flood	34° x 19°	23° x 11°	GX16d
PAR 56 300W WFL 240V	-	-	240	300	Wide Flood	57° x 27°	37° x 18°	GX16d

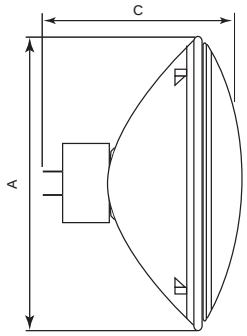
Item description	Dimensions		Peak	Colour	Rated	Burning	Packing	Ordering
	A	C	Intensity	temp.	Av. Life	Position	Quantity	Code
	Diameter mm	MOL mm	cd	K	h			
PAR 56 300W NSP 240V	178,6	127	70000	2750	2000	Any	12	0060513
PAR 56 300W MFL 240V	178,6	127	30000	2750	2000	Any	12	0060514
PAR 56 300W WFL 240V	178,6	127	10000	2750	2000	Any	12	0060515

PAR 64 Mains Voltage

PAR 64 CP60 1000W NSP

PAR 64 CP61 1000W SP

PAR 64 CP62 1000W MFL



FEATURES

- Pressed glass reflector lamps
- Extremely powerful beam
- Halogen inner capsule, for 100% lumen maintenance through life
- Beam patterns: from very narrow spot through wide angle floods
- Consistency from lamp to lamp
- Instant replaceability without the need to re-focus and re-aim fixtures
- Double internal fused for end of life safety

APPLICATIONS

- Theatre lighting
- TV and studio
- Entertainment and Architectural applications
- Displays
- Museums
- Churches
- Towers
- Exhibitions
- Gardens
- Discos

DIRECTIONS FOR USE

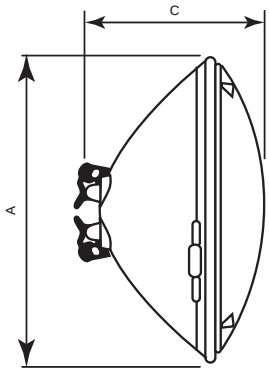
- Easy handling
- Can be used with very economical fixtures (PAR cans)

Item description	ANSI	LIF	Voltage	Watt	Beam type	Approx. Beam Spread		Base
						10% Peak CD	50% Peak CD	
			V	W				
PAR 64 CP86 240V 500W VNSP	-	CP86	240	500	Very Narrow Spot	16x13	10x7	Gx16d
PAR 64 CP87 240V 500W NSP	-	CP87	240	500	Narrow Spot	19x16	11x9	Gx16d
PAR 64 CP88 240V 500W MFL	-	CP88	240	500	Medium Flood	32x19	21x10	Gx16d
PAR 64 CP60 240V 1000W NSP	EXC	CP60	240	1000	Narrow Spot	20x17	12x6	Gx16d
PAR 64 CP61 240V 1000W SP	EXD	CP61	240	1000	Spot	23x20	14x7	Gx16d
PAR 64 CP62 240V 1000W MFL	EXE	CP62	240	1000	Medium Flood	39x24	28x12	Gx16d
PAR 64 CP95 240V 1000W XWFL	EXG	CP95	240	1000	Extra Wide Flood	125x95	70x70	Gx16d

Item description	Dimensions		Peak	Colour	Rated	Burning	Packing	Ordering
	A	C	Intensity	temp.	Av. Life	Position	Quantity	Code
	Diameter mm	MOL mm	cd	K	h			
PAR 64 CP86 240V 500W VNSP	240	152,4	240000	3200	300	Any	6	9061146
PAR 64 CP87 240V 500W NSP	240	152,4	140000	3200	300	Any	6	9061147
PAR 64 CP88 240V 500W MFL	240	152,4	65000	3200	300	Any	6	9061148
PAR 64 CP60 240V 1000W NSP	240	152,4	400000	3200	300	Any	6	9061109
PAR 64 CP61 240V 1000W SP	240	152,4	275000	3200	300	Any	6	9061127
PAR 64 CP62 240V 1000W MFL	240	152,4	130000	3200	300	Any	6	9061128
PAR 64 CP95 240V 1000W	240	152,4	15000	3200	300	Any	6	9061129

PAR 56 12V Swimming Pool

PAR56 12V 300W Swimming Pool



FEATURES

- Low voltage (12V) for safety reasons
- Heat resistant glass
- Sturdily constructed lamp absorbs mechanical shocks
- Wide beam

APPLICATIONS

- Swimming Pools
- Fountains

DIRECTIONS FOR USE

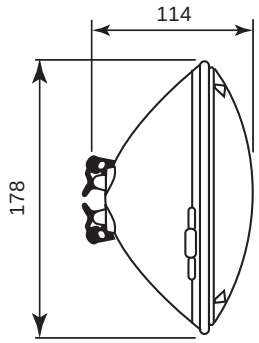
- High running current (25A)

Item description	ANSI	LIF	Voltage V	Watt W	Approx. Beam Spread Hor. x Vert. Degrees	Base
PAR 56 12V 300W Swimming Pool	-	-	12	300	50 x 25	Screw

Item description	Dimensions A Diameter mm	Dimensions C MOL mm	Peak Intensity cd	Colour temp. K	Rated Av. Life h	Burning Position	Packing Quantity	Ordering Code
PAR 56 12V 300W Swimming Pool	178	114	12000	2850	1000	S45	12	9061532

PAR 56 12V LED Swimming Pool

The Sylvania PAR56 LED represents a top class professional development for underwater illumination of swimming pools, fountains etc. By combining high power LEDs of red, green and blue or fixed white colour, together with an internal microprocessor, it is capable of generating the full spectrum of colours. The lamp can be operated in a mode of continuous colour changing, or fixed at any desired colour by briefly switching off and back on again. This is facilitated by the optional Sylvania remote control and receiver.



Remote Control

Receiver

FEATURES

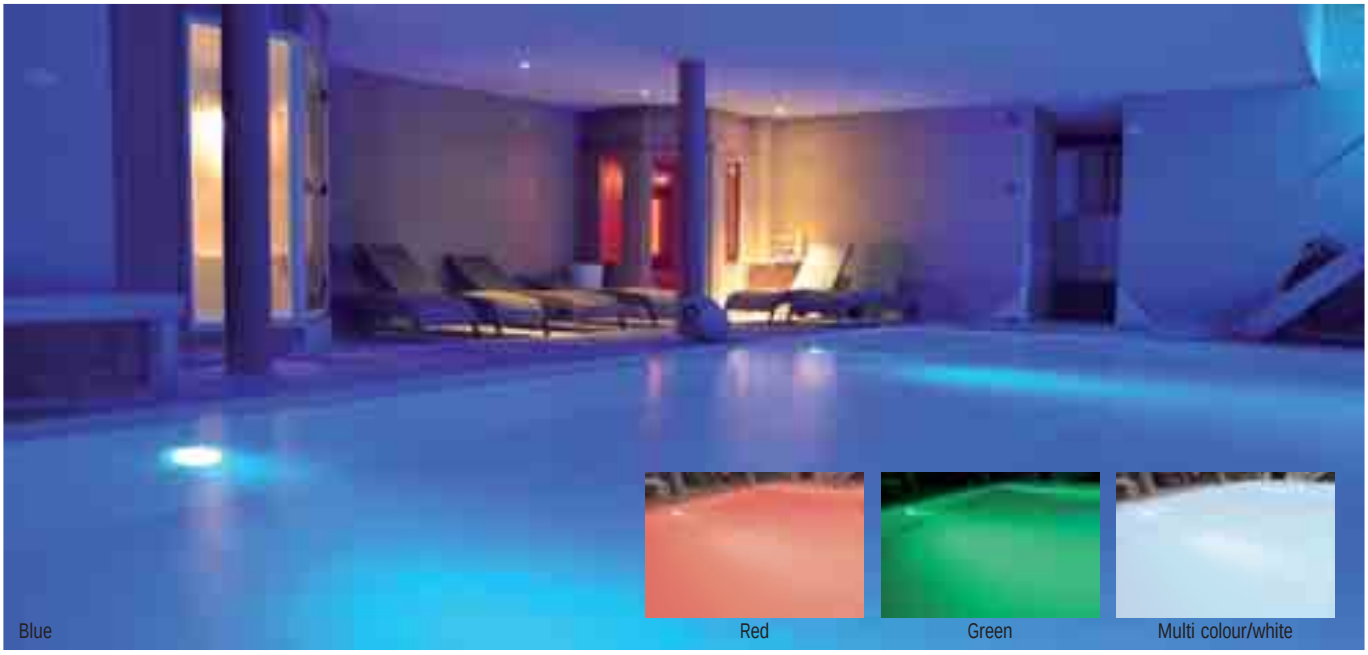
- Choice between RGB or fixed white version
- High power LED retrofit for incandescent PAR lamps
- Produces full spectrum of rich colours or white (multi colours)
- Sylvania patent pending colour control technology
- Simple on/off switching sets colour changing or fixed mode (can be achieved by using a standard switch)
- Optional Sylvania remote control and receiver available
- Identical shape to incandescent PAR56 = easy retrofit
- Unique sealing method guarantees IP68 water-tightness
- Die cast aluminium housing cools LEDs for high output
- Chlorine-resistant materials permits use in swimming pools
- Long lamp lifetime > 25.000 hours
- Low heat generation

APPLICATIONS

- All retrofit PAR56 underwater
- Swimming Pools
- Fountains

DIRECTIONS FOR USE

- Only for use with magnetic (no electronic) transformer
- For adequate cooling, lamp must be operated under water

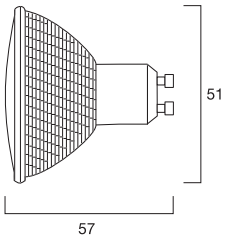


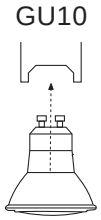
Item description	Watt W	Voltage V	Current A	Peak Intensity cd	Beam Angle °	Bulb	Base	Packing Quantity	Ordering Code
PAR 56 LED POOL RGB+multicolour	25	12	1,15	1000	25	PAR56	Screw Lugs	6	**0060526**
PAR 56 LED POOL White colour	25	12	1,15	1000	25	PAR56	Screw Lugs	6	**0060524**
OPTIONAL REMOTE CONTROL UNIT :									
PAR 56 LED Receiver	max. 250	110/250	max. 1A	50/60Hz	-	-	Screw Terminals	6	**0060523**
PAR 56 LED Remote Control	-	12V Battery	-	-	-	-	-	6	**0060522**

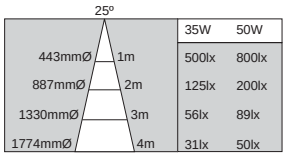
HI-SPOT ES50 GU10 COLOURED

Mains voltage halogen reflector lamps with coloured lens and GU10 base. The Sylvania lamps employ a unique lens made of natural coloured glass, instead of the more standard dichroic coatings. This brings the advantages of a purer light colour in the beam. These new front lenses completely eliminate the unsightly halo of rainbow coloured fringes that are seen around the perimeter of the beam with lamps using dichroic coloured lenses.

universal UV STOP







FEATURES

- Transparent lens in real natural coloured glass
- Pure, saturated beam colours without the usual rainbow-effect halo
- Four colours available: red, yellow, green and blue
- Unique, patented, computer designed spiral facetted aluminised reflector
- Available in medium flood version: 25°

APPLICATIONS

- To bring a touch of colour in a wide range of applications
- Architectural features
- Discos and clubs
- Decorative lighting

DIRECTIONS FOR USE

- For use in mains voltage fixtures with GU10 base
- Universal burning
- Suitable for exterior use in conjunction with waterproof fixtures
- Can be dimmed using standard dimming switches

Item description	Watt W	Voltage V	Beam Angle	Luminous intensity cd	Colour	Cap	Average Rated Life hrs	Packing Quantity	Ordering Code
Hi-Spot ES50 50W BLUE 240V	50	240	25°	30	Blue	GU10	2500	10	0021270
Hi-Spot ES50 50W GREEN 240V	50	240	25°	130	Green	GU10	2500	10	0021271
Hi-Spot ES50 50W RED 240V	50	240	25°	225	Red	GU10	2500	10	0021272
Hi-Spot ES50 50W YELLOW 240V	50	240	25°	550	Yellow	GU10	2500	10	0021273

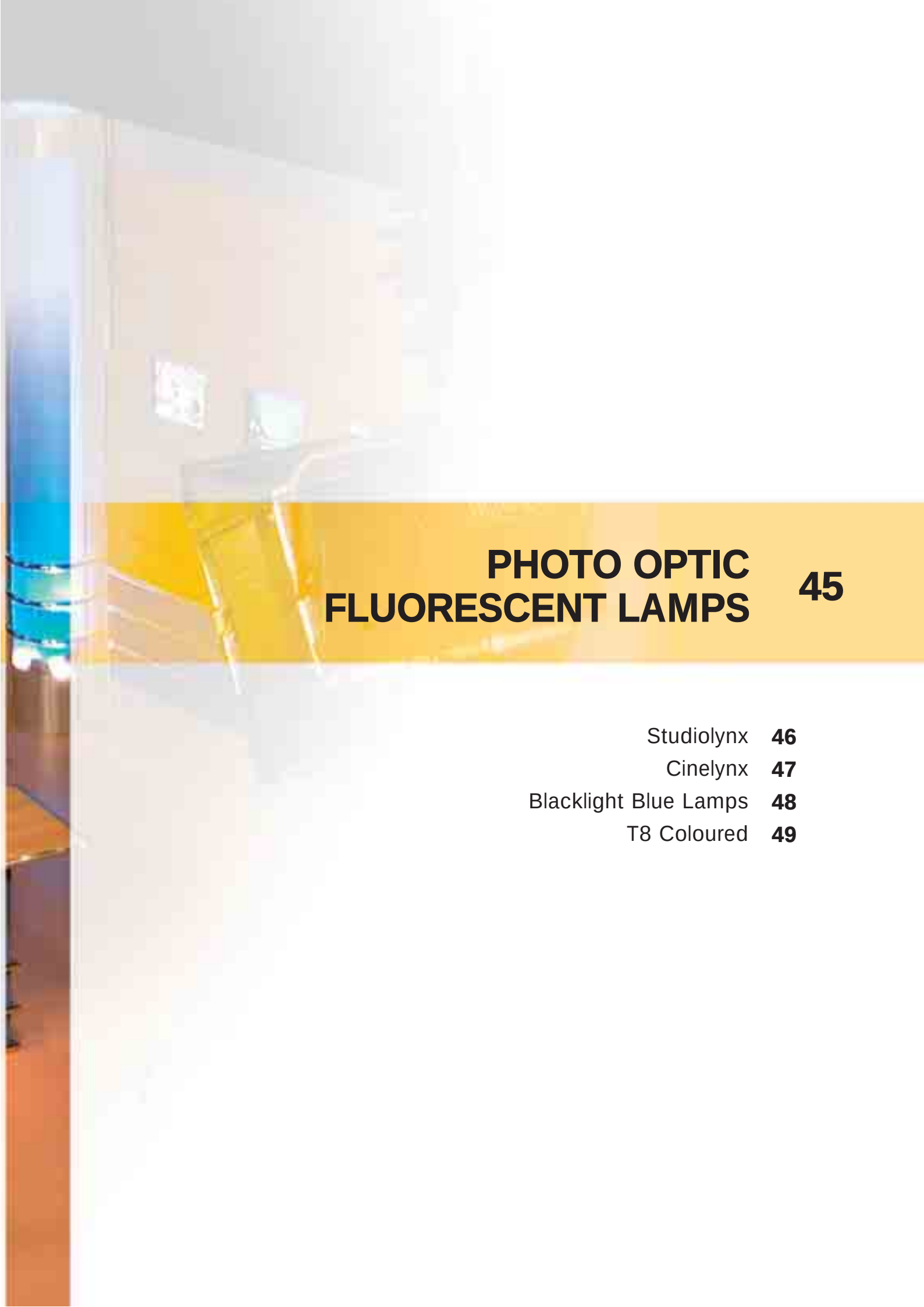
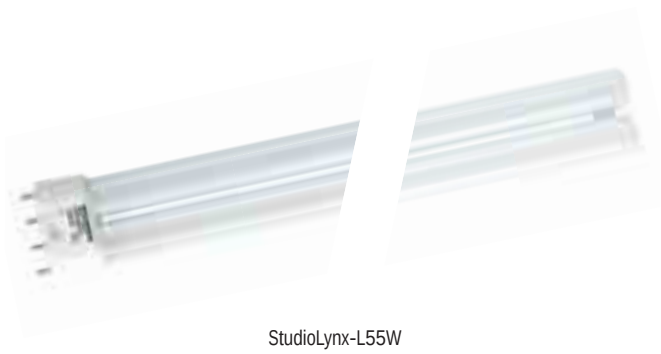


PHOTO OPTIC FLUORESCENT LAMPS 45

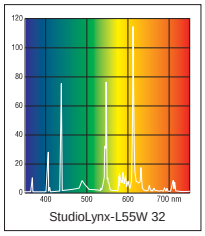
Studiolynx **46**
Cinelynx **47**
Blacklight Blue Lamps **48**
T8 Coloured **49**

STUDIOLYNX

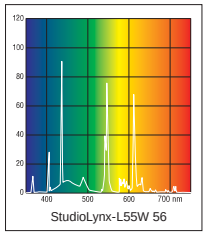
The StudioLynx-lamps are specially designed for television studio lighting. They provide high lumen packages and offer excellent colour stability, even when dimmed. The special phosphors allow them to seamlessly blend in with the light from other tungsten or metal halide lamps on the set.



StudioLynx-L55W

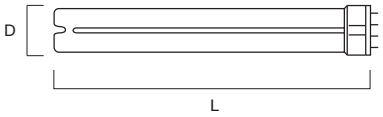


StudioLynx-L55W 32



StudioLynx-L55W 56

universal



FEATURES

- Two colour temperature versions to match both tungsten halogen and metal halide light
- High lumen output
- Excellent colour rendering
- Dimmable, with good colour stability
- Long service life, average 8000hrs
- Offers a soft and diffused light
- Strongly reduced ambient temperature compared to tungsten light sources
- Relatively low power consumption, eliminating heavy duty cables

APPLICATIONS

- TV studios
- Broadcast studios
- Digital TV work on location

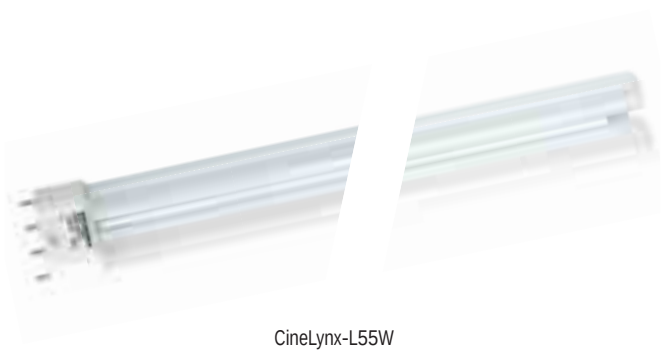
DIRECTIONS FOR USE

- Operate on electronic flicker free ballasts
- To be used in new, smaller light weight fixtures
- Allow lamps to stabilise for 20 min. before checking colour. There is a slight shift in colour during warm-up

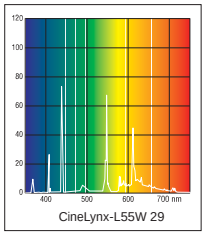
Item description	Watt	Volt	Current	Luminous Flux	Colour chromaticity		CRI	Cap	Dimensions L	D	Rated Av.Life	Packing Quantity	Ordering Code
	W	V	A	lm	X	Y	Ra		MOL mm	mm	hrs		
StudioLynx-L55W 32	55	101	550	4700	0,425	0,385	86	2G11	535	40	8000	10	0025670
StudioLynx-L55W 56	55	101	550	4400	0,330	0,320	86	2G11	535	40	8000	10	0025671

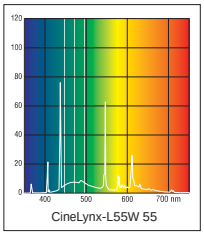
CINELYNX

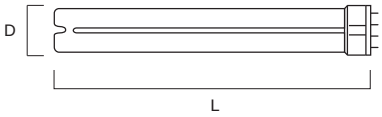
The CineLynx-lamps are specially designed for film applications. They feature a superior phosphor blend, which has been finely tuned to match the spectral sensitivity curves of both tungsten and daylight film stock. Consequently they achieve an extremely high colour rendering index (Ra >90) and there is generally no need for colour correction. Expensive and time consuming correction with filters or gels is therefore not necessary.



CineLynx-L55W







FEATURES

- Two colour temperature versions to match both tungsten halogen and metal halide light
- Matches spectral sensitivity of film, no colour correction necessary
- Excellent colour rendering (CRI up to Ra 93)
- Dimmable, with good colour stability
- Long service life, average 8000hrs
- Offers a soft and diffused light
- Strongly reduced ambient temperature compared to tungsten light sources
- Relatively low power consumption, eliminating heavy duty cables

APPLICATIONS

- Cinematography applications
- Photography
- Applications where photographic film is used

DIRECTIONS FOR USE

- Operate on electronic flicker free ballasts
- To be used in new, smaller light weight fixtures
- Allow lamps to stabilise for 20 min. before checking colour. There is a slight shift in colour during warm-up

Item description	Watt	Volt	Current	Luminous Flux	Colour chromaticity		CRI	Cap	Dimensions L	Dimensions D	Rated Av.Life	Packing Quantity	Ordering Code
	W	V	A	lm	X	Y	Ra		MOL mm	∅ mm	hrs		
CineLynx-L55W 29	55	101	550	3500	0,430	0,380	90	2G11	535	40	8000	10	0025673
CineLynx-L55W 55	55	101	550	3500	0,305	0,310	93	2G11	535	40	8000	10	0025672

BLACKLIGHT BLUE LAMPS

Blacklight Blue lamps differ from standard fluorescent lamps only in the type and composition of phosphor used. The bulb is made of special dark-blue filter glass that absorbs practically all of the visible light, yet freely transmits the ultraviolet radiation. Fixture requirements are simple since the lamp is a completely self-contained blacklight unit.

F8 T5 BLB 8W

F18 T8 BLB 18W

F20 T12 BLB 20W

LYNX S 11W BLB

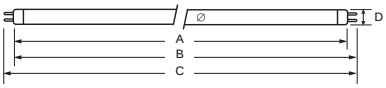


Fig. 1

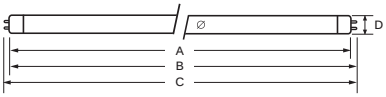


Fig. 2

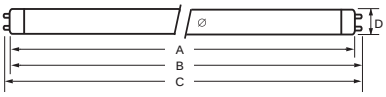


Fig. 3

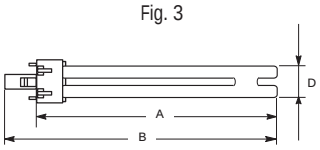
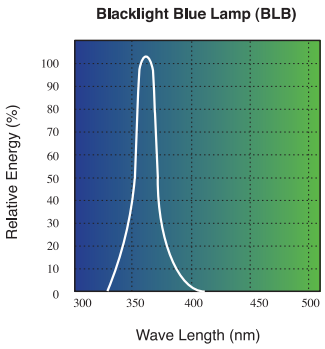


Fig. 4



FEATURES

- The lamps efficiently emit near ultraviolet radiation at 315nm-400nm with strong photochemical and fluorescent effects
- The special deep blue filter glass absorbs visible rays and transmits near (UV-A) ultraviolet rays only
- Shape, electrical characteristics and lighting circuits similar to general fluorescent lamps

APPLICATIONS

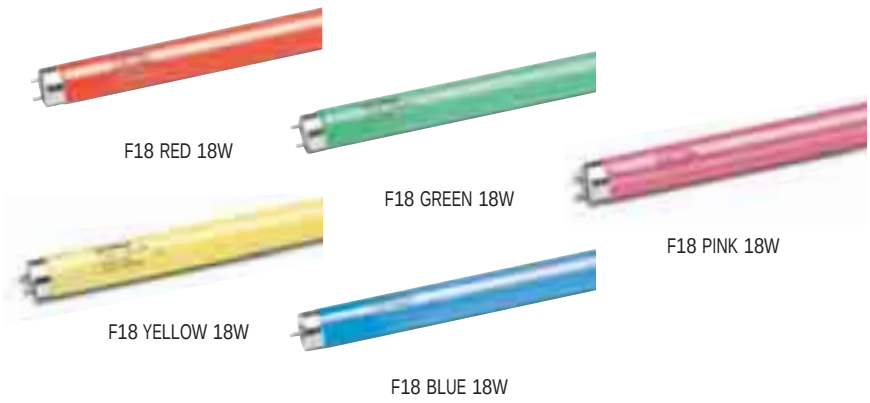
- Special effects
- Counterfeit detection in philately, bank notes, papers, etc.
- Leak and crack detection
- Excitation of fluorescent paints in dark rooms
- Revealing fluorescence of drawings on textiles
- Geological investigation of stones and rocks

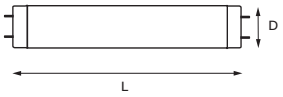
Item description	Watt W	Voltage V	Current A	Spectral Peak nm	UV-A Irradiance at 1 meter µW/cm^2	Cap	Life Hrs
F4 T5 BLB	4	29	0.170	365	≥ 4.5	G5	5000
F6 T5 BLB	6	42	0.160	365	≥ 7	G5	5000
F8 T5 BLB	8	56	0.145	365	≥ 10	G5	5000
F15 T8 BLB	15	55	0.310	365	≥ 22.5	G13	7000
F18 T8 BLB	18	57	0.370	365	≥ 34.5	G13	7000
F30 T8 BLB	30	96	0.365	365	≥ 36.5	G13	8000
F36 T8 BLB	36	103	0.430	365	≥ 39	G13	8000
F20 T12 BLB	20	57	0.370	350	≥ 15.5	G13	7000
F40 T12 BLB	40	103	0.420	350	≥ 17.5	G13	8000
LYNX-S 9W BLB	9	60	0.170	365	≥ 8.5	G23	8000
LYNX-S 11W BLB	11	90	0.155	365	≥ 17.5	G23	8000

Item description	Dimensions L A (mm)	B (mm)	C (mm)	D (mm)	Figure Nr.	Packing Quantity	Ordering Code
F4 T5 BLB	136	143	150	16	1	50	0000008
F6 T5 BLB	212	219	226	16	1	50	0000018
F8 T5 BLB	288	295	303	16	1	50	0000024
F15 T8 BLB	437	445	452	26	2	100	0000077
F18 T8 BLB	590	597	604	26	2	100	0000698
F30 T8 BLB	895	902	909	26	2	25	0000158
F36 T8 BLB	1199	1207	1214	26	2	25	0000699
F20 T12 BLB	590	599	604	41	3	25	9000358
F40 T12 BLB	1199	1207	1214	41	3	25	9000186
LYNX-S 9W BLB	145	167	28	12	4	200	0025043
LYNX-S 11W BLB	215	237	28	12	4	200	0025042

T8 Coloured

Standard halophosphor tubes with a coloured coating for special colour effects.





FEATURES

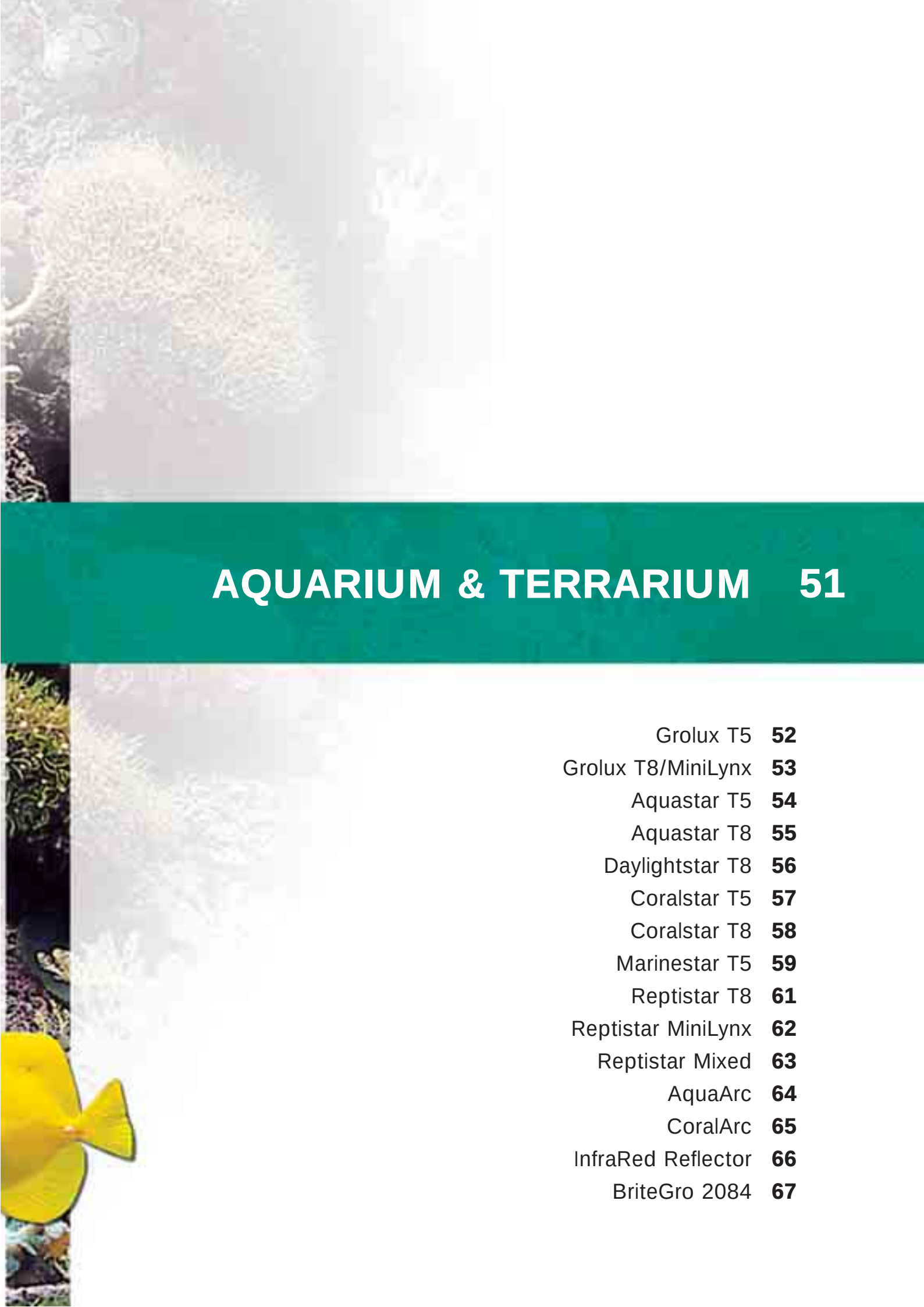
- High quality fluorescent tubes
- Long life
- Available in four colours: Blue, Green, Red, Pink and Yellow

APPLICATIONS

- To create special lighting effects in shop windows, bars, fairground attractions, dance halls and discotheques

Item description	Watt	Colour	Cap	Dimensions		Luminous Flux	Packing Quantity	Ordering Code
				L	D			
	W			mm	mm	lm		
F18W/T8/R	18	Red	G13	590	26	30	25	0002572
F36W/T8/R	36	Red	G13	1200	26	70	25	0002573
F58W/T8/R	58	Red	G13	1500	26	100	25	0002574
F18W/T8/Y	18	Yellow	G13	590	26	750	25	0002561
F36W/T8/Y	36	Yellow	G13	1200	26	1550	25	0002565
F58W/T8/Y	58	Yellow	G13	1500	26	2500	25	0002569
F18W/T8/G	18	Green	G13	590	26	1200	25	0002562
F36W/T8/G	36	Green	G13	1200	26	2800	25	0002566
F58W/T8/G	58	Green	G13	1500	26	4000	25	0002570
F18W/T8/B	18	Blue	G13	590	26	300	25	0002563
F36W/T8/B	36	Blue	G13	1200	26	700	25	0002567
F58W/T8/B	58	Blue	G13	1500	26	1000	25	0002571
F18W/T8/P	18	Pink	G13	590	26	750	25	0002560
F36W/T8/P	36	Pink	G13	1200	26	1700	25	0002564
F58W/T8/P	58	Pink	G13	1500	26	2600	25	0002568

If you need to replace natural light – whether for plants, aquariums or terrariums – Sylvania has an extensive collection of lighting solutions available. For example, Sylvania's GRO-LUX is a world leader in plant illumination. Proper light and UV-radiation is very important for fish and reptiles. Our lighting engineers have developed lamps with specific light spectra for the most diverse uses. Either independently or in combination, Sylvania Aquarium and Terrarium lamps deliver the best results for complex biological requirements. Whether for plants, fish, corals, reptiles, or the entire biotope of aquariums and terrariums - with Sylvania you'll find the appropriate lighting.



AQUARIUM & TERRARIUM 51

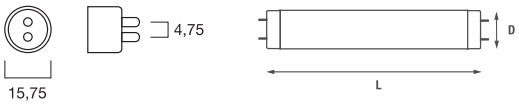
Grolux T5 **52**
Grolux T8/MiniLynx **53**
Aquastar T5 **54**
Aquastar T8 **55**
Daylightstar T8 **56**
Coralstar T5 **57**
Coralstar T8 **58**
Marinestar T5 **59**
Reptistar T8 **61**
Reptistar MiniLynx **62**
Reptistar Mixed **63**
AquaArc **64**
CoralArc **65**
InfraRed Reflector **66**
BriteGro 2084 **67**

Grolux T5

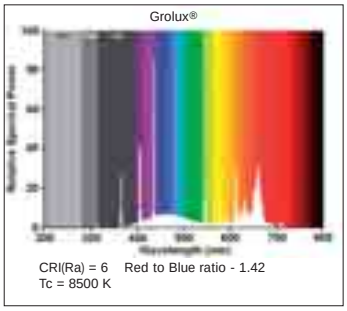
T5 STANDARD	8W	24W	39W	54W	80W
L	288	549	849	1149	1449
D	16	16	16	16	16

T5 l 8	24W	28W	35W	45W	54W	54W
L	438	590	722	845	1047	1200
D	16	16	16	16	16	16

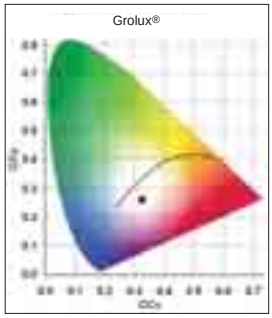
G5



universal



CRI(Ra) = 6 Red to Blue ratio - 1.42
Tc = 8500 K



FEATURES

- High level of blue and red radiation helps promote healthy plant growth
- Strengthens the natural colours of aquatic plants and fish in aquariums
- Promotes the process of photo-synthesis in plants
- Oldest, but most optimal light colour for plants and aquaria
- T5 - FHO: high output and lumen per watt in comparison to T8 versions
- New T5 l 8 : 50% more light output in comparison to the same length in T8. Ideal for the new generation of aquaria with T5 lamps, but in the length of T8 lamps. The ideal fit of the lamps in the aquarium results in a perfect illumination of the aquarium

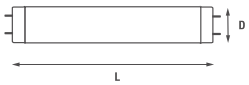
APPLICATIONS

- For lighting of fresh water aquariums
- Complete or additional artificial lighting of plants
- Recommended also for use in greenhouses, indoor gardens, flower shows and conservatories

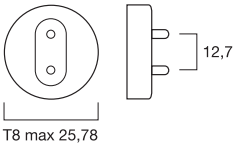
Industrial Pack Quantity per 25	Retail Pack Quantity per 10	Item description	Comparable wattage in T8	Dimensions (mm) L	D	Diameter	Watt W	Colour	Cap
0000026	-	F8W/GRO	-	288	16	T5	8	GroLux	G5
0002740	**0000728**	FHO24W/GRO	-	549	16	T5	24	GroLux	G5
0002743	**0000729**	FHO39W/GRO	-	849	16	T5	39	GroLux	G5
0002746	**0000730**	FHO54W/GRO	-	1149	16	T5	54	GroLux	G5
0002749	**-**	FHO80W/GRO	-	1449	16	T5	80	GroLux	G5
-	**0002821**	F24W T5 l 8 Gro-Lux 438mm	15	438	16	T5	24	GroLux	G5
-	**0002823**	F28W T5 l 8 Gro-Lux 590mm	18	590	16	T5	28	GroLux	G5
-	**0002825**	F35W T5 l 8 Gro-Lux 742mm	25	742	16	T5	35	GroLux	G5
-	**0002827**	F45W T5 l 8 Gro-Lux 895mm	30	895	16	T5	45	GroLux	G5
-	**0002829**	F54W T5 l 8 Gro-Lux 1047mm	38	1047	16	T5	54	GroLux	G5
-	**0002831**	F54W T5 l 8 Gro-Lux 1200mm	36	1200	16	T5	54	GroLux	G5

Packaging Note: The sleeve pictured is for retail sales.

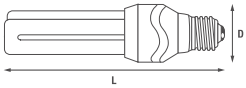
	14W	15W	18W	25W	30W	36W	38W	58W
L	361	438	590	742	895	1200	1047	1500
D	26	26	26	26	26	26	26	26



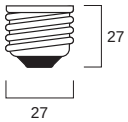
G13



	18W
L	178
D	38



E27



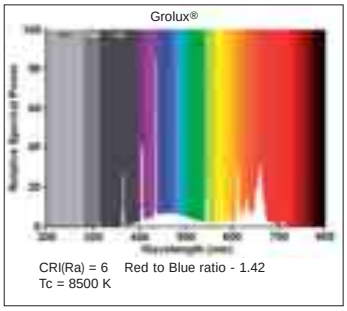
universal

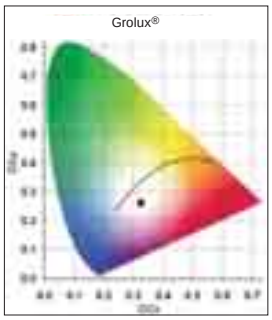
FEATURES

- High level of blue and red radiation helps promote healthy plant growth
- Strengthens the natural colours of aquatic plants and fish in aquariums
- Promotes the process of photo-synthesis in plants
- Oldest, but most optimal light colour for plants and aquaria

APPLICATIONS

- For lighting of fresh water aquariums
- Complete or additional artificial lighting of plants
- Recommended for use in greenhouses, indoor gardens, flower shows and conservatories





Industrial Pack Quantity per 25	Retail Pack Quantity per 10	Retail Pack Quantity per 20	Item description	Dimensions (mm) L	D	Diameter	Watt W	Colour	Cap
0000043	**0000707**	-	F14W/GRO	361	26	T8	14	Gro-Lux	G13
0000069	**0000708**	-	F15W/GRO	438	26	T8	15	Gro-Lux	G13
0001523	**0000709**	-	F18W/GRO	590	26	T8	18	Gro-Lux	G13
0001679	**0000710**	-	F25W/30"/GRO	742	26	T8	25	Gro-Lux	G13
0000150	**0000711**	-	F30W/GRO	895	26	T8	30	Gro-Lux	G13
0001524	**0000712**	-	F36W/GRO	1200	26	T8	36	Gro-Lux	G13
0002213	**0000713**	-	F38W/GRO	1047	26	T8	38	Gro-Lux	G13
0001525	**0000714**	-	F58W/GRO	1500	26	T8	58	Gro-Lux	G13
-	**-**	**0026484**	Minilynx 18W/GRO	178	38	-	18	Gro-Lux	E27

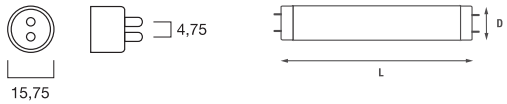
Packaging Note: The sleeve pictured is for retail sales.

Aquastar T5

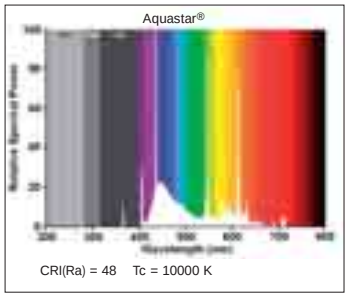
T5 STANDARD	24W	39W	54W	80W
L	549	849	1149	1449
D	16	16	16	16

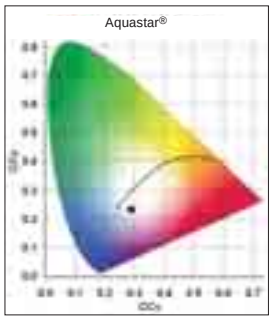
T5 l8	24W	28W	35W	45W	54W	54W
L	438	590	742	895	1047	1200
D	16	16	16	16	16	16

G5



universal





FEATURES

- Light colour: 10000 Kelvin (simulating the tropical light spectrum)
- Promotes the growth of coral and aquatic plants through natural red and blue sections of the light spectrum
- Excellent lighting performance
- T5 - FHO: high output and lumen per watt in comparison to T8 versions
- New T5 l8 : 50% more light output in comparison to the same length in T8. Ideal for the new generation of aquaria with T5 lamps, but in the length of T8 lamps. The ideal fit of the lamps in the aquarium results in a perfect illumination of the aquarium

APPLICATIONS

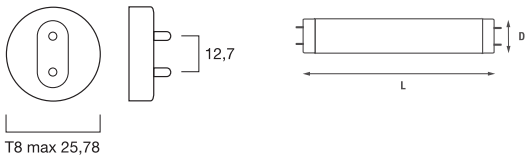
- For all biological organisms in fresh and marine water aquariums
- Excellent results in combination with Daylightstar

Industrial Pack Quantity per 25	Retail Pack Quantity per 10	Item description	Comparable wattage in T8	Dimensions (mm) L	Dimensions (mm) D	Diameter	Watt W	Colour Temp. K	Light Output lm	Cap
0002741	**0002752**	FHO24W/Aquastar	-	549	16	T5	24	10000	1120	G5
0002744	**0002753**	FHO39W/Aquastar	-	849	16	T5	39	10000	1960	G5
0002747	**0002754**	FHO54W/Aquastar	-	1149	16	T5	54	10000	2800	G5
0002750	-	FHO80W/Aquastar	-	1449	16	T5	80	10000	3500	G5
-	**0002820**	F24W T5 l8 Aquastar 438mm	15	438	16	T5	24	10000	900	G5
-	**0002822**	F28W T5 l8 Aquastar 590mm	18	590	16	T5	28	10000	1200	G5
-	**0002824**	F35W T5 l8 Aquastar 742mm	25	742	16	T5	35	10000	1700	G5
-	**0002826**	F45W T5 l8 Aquastar 895mm	30	895	16	T5	45	10000	2100	G5
-	**0002828**	F54W T5 l8 Aquastar 1047mm	38	1047	16	T5	54	10000	2500	G5
-	**0002830**	F54W T5 l8 Aquastar 1200mm	36	1200	16	T5	54	10000	2900	G5

Packaging Note: The sleeve pictured is for retail sales.

	14W	15W	18W	25W	30W	36W	38W	58W
L	361	438	590	742	895	1200	1047	1500
D	26	26	26	26	26	26	26	26

G13



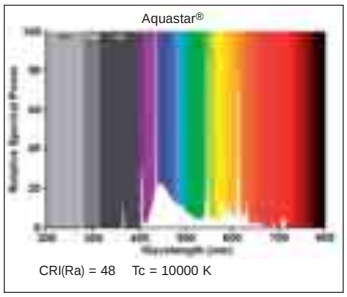
universal

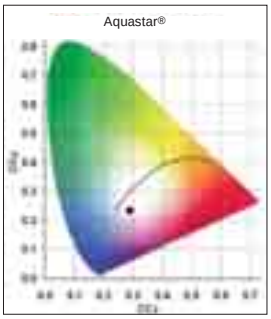
FEATURES

- Light colour: 10000 Kelvin (simulating the tropical light spectrum)
- Promotes the growth of coral and aquatic plants through natural red and blue sections of the light spectrum
- Excellent lighting performance

APPLICATIONS

- For all biological organisms in fresh and marine water aquariums





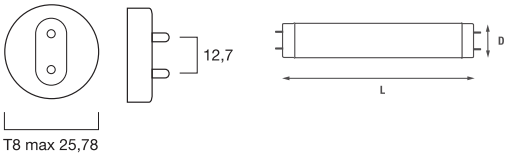
Industrial Pack Quantity per 25	Retail Pack Quantity per 10	Item description	Dimensions (mm) L	D	Diameter	Watt W	Colour Temp. K	Light-output lm	Cap
0002212	**0000727**	F14W/Aquastar	361	26	T8	14	10000	525	G13
0002224	**0000643**	F15W/Aquastar	438	26	T8	15	10000	650	G13
0002221	**0000644**	F18W/Aquastar	590	26	T8	18	10000	900	G13
0002226	**0000645**	F25W/30"/Aquastar	742	26	T8	25	10000	1500	G13
0002225	**0000646**	F30W/Aquastar	895	26	T8	30	10000	1700	G13
0002222	**0000647**	F36W/Aquastar	1200	26	T8	36	10000	2200	G13
0002185	**0000648**	F38W/Aquastar	1047	26	T8	38	10000	2100	G13
0002223	**0000649**	F58W/Aquastar	1500	26	T8	58	10000	3550	G13

Packaging Note: The sleeve pictured is for retail sales.

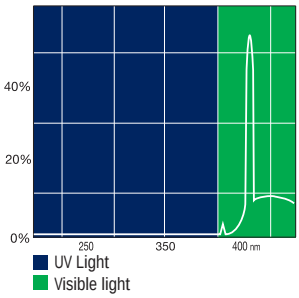
Daylightstar T8

	15W	18W	30W	36W
L	438	590	895	1200
D	26	26	26	26

G13

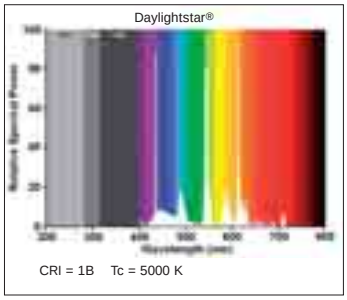


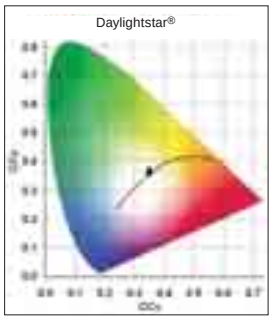
T8 max 25,78



UV STOP

universal





FEATURES

- Reduces algae growth through a special UV-STOP protective sleeve
- Allows fish and plants to be seen in their true colours (high colour rendition)
- 5000K triphosphor lamp with a daylight character
- High colour rendition
- Long life

APPLICATIONS

- For use in fresh water aquariums
- In combination with Gro-Lux® it produces a well balanced and optimal aquarium life

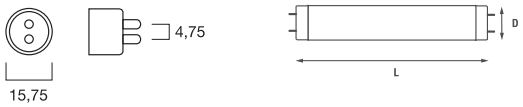
Industrial Pack Quantity per 25	Retail Pack Quantity per 10	Item description	Dimensions (mm) L	D	Diameter	Watt	Colour	Cap
-	**0000715**	F15W/Daylightstar	438	26	T8	15	Daylightstar	G13
-	**0000716**	F18W/Daylightstar	590	26	T8	18	Daylightstar	G13
-	**0000717**	F30W/Daylightstar	895	26	T8	30	Daylightstar	G13
-	**0000718**	F36W/Daylightstar	1200	26	T8	36	Daylightstar	G13

Packaging Note: The sleeve pictured is for retail sales.

T5 STANDARD	24W	39W	54W	80W
L	549	849	1149	1449
D	16	16	16	16

T5 l8	24W	45W	54W
L	590	895	1200
D	16	16	16

G5



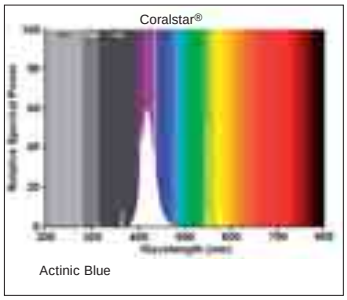
universal

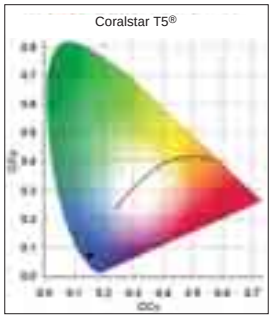
FEATURES

- Reproduces light conditions found at coral reefs through actinic blue light
- Promotes the growth of coral and invertebrates by supporting the growth of zooxanthellae
- See coral in its true colour(s)
- T5 - FHO: high output and lumen per watt in comparison to T8 versions
- New T5 l8 : 50% more light output in comparison to the same length in T8. Ideal for the new generation of aquaria with T5 lamps, but in the length of T8 lamps. The ideal fit of the lamps in the aquarium results in a perfect illumination of the aquarium

APPLICATIONS

- Lighting to promote growth of coral and invertebrates in marine water aquariums



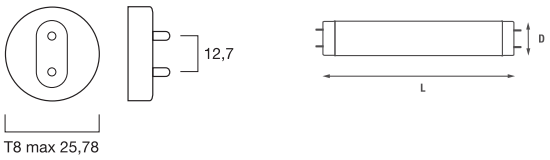


Industrial Pack Quantity per 25	Retail pack Quantity per 10	Item description	Comparable wattage in T8	Dimensions (mm) L	Dimensions (mm) D	Diameter	Watt	Colour	Cap
0002742	**-**	FHO24W/Coralstar	-	549	16	T5	24	Actinic	G5
0002745	**0002755**	FHO39W/Coralstar	-	849	16	T5	39	Actinic	G5
0002748	**0002756**	FHO54W/Coralstar	-	1149	16	T5	54	Actinic	G5
0002751	**-**	FHO80W/Coralstar	-	1449	16	T5	80	Actinic	G5
-	**0002757**	F28W T5 l8 Coralstar 590mm	18	590	16	T5	28	Actinic	G5
-	**0002758**	F45W T5 l8 Coralstar 895mm	30	895	16	T5	45	Actinic	G5
-	**0002759**	F54W T5 l8 Coralstar 1200mm	36	1200	16	T5	54	Actinic	G5

Coralstar T8

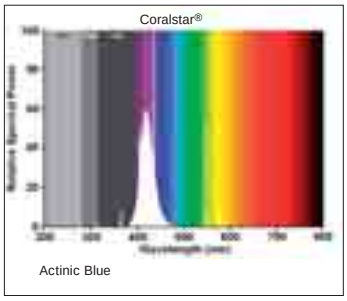
	18W	30W	36W
L	590	895	1200
D	26	26	26

G13

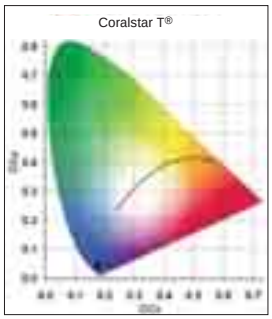


T8 max 25,78

universal



Actinic Blue



FEATURES

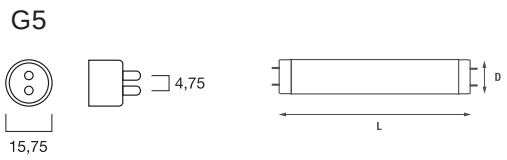
- Reproduces light conditions found at coral reefs through actinic blue light
- Promotes the growth of coral and invertebrates by supporting the growth of zooxanthellae
- See coral in its true colour(s)

APPLICATIONS

- Lighting to promote growth of coral and invertebrates in marine water aquariums

Industrial Pack Quantity per 25	Retail Pack Quantity per 10	Item description	Dimensions (mm) L	D	Diameter	Watt	Colour	Cap
-	**0000719**	F18W/Coralstar	590	26	T8	18	Actinic	G13
-	**0000725**	F30W/Coralstar	895	26	T8	30	Actinic	G13
-	**0000726**	F36W/Coralstar	1200	26	T8	36	Actinic	G13

Packaging Note: The sleeve pictured is for retail sales.



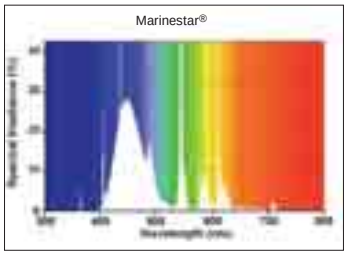
universal

FEATURES

- Ideal lamp for marine lighting.
- High colour rendering of the marine aquatic environment
- High colour temperature: 15000K
- Reproduces light conditions found at coral reefs through radiation in the 420-510 nm wavelength.
- Promotes the growth of coral and invertebrates by supporting the growth of zooxanthellae.

APPLICATIONS

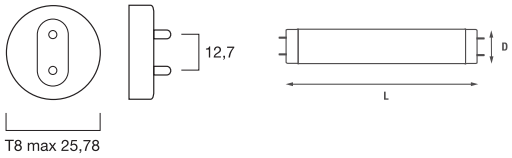
- Lighting of marine water aquaria

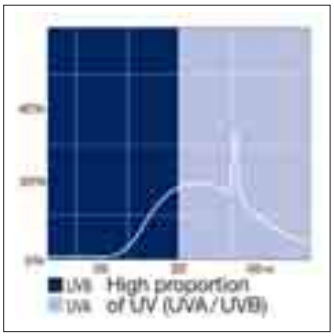


Code	Item description	Dimensions (mm) D	L	Diameter	Watt	Colour W	Cap
0002720	FHO24W/Marinestar	549	16	T5	24	15000K	G5
0002721	FHO39W/Marinestar	849	16	T5	39	15000K	G5
0002722	FHO54W/Marinestar	1149	16	T5	54	15000K	G5
0002723	FHO80W/Marinestar	1449	16	T5	80	15000K	G5

	15W	18W	30W	36W
L	438	590	895	1200
D	26	26	26	26

G13





universal

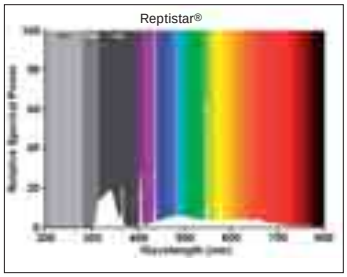
UV-A UV-B
For reptiles only

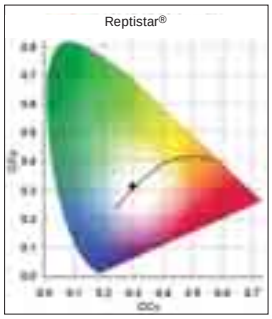
FEATURES

- Promotes vitamin D3 production which aids good health, growth and the general well-being of reptiles in terrariums through a high content of UVB (up to 5%) and UVA (up to 30%)
- This full spectrum (6500 K) lamp improves the natural appearance of reptiles
- Shows reptiles in their true colours

APPLICATIONS

- For the artificial lighting of reptiles in terrariums





DIRECTIONS FOR USE

- This lamp emits UV-radiation. Avoid exposure to skin and eyes.

Code	Item description	Dimensions (mm) D	L	Diameter	Watt	Colour	Cap	Light output lm	Ordering Quantity
0000731	F15W/Reptistar	438	26	T8	15	Reptistar	G13	300	10
0000732	F18W/Reptistar	590	26	T8	18	Reptistar	G13	450	10
0000733	F30W/Reptistar	895	26	T8	30	Reptistar	G13	700	10
0000734	F36W/Reptistar	1200	26	T8	36	Reptistar	G13	1000	10

Packaging Note: The sleeve pictured is for retail sales.

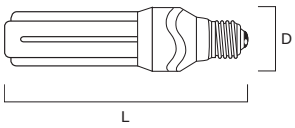
Reptistar MiniLynx

universal

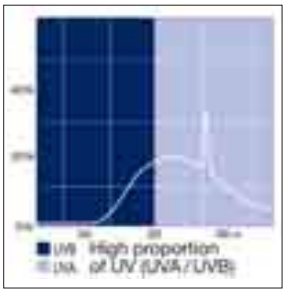
UV-A UV-B

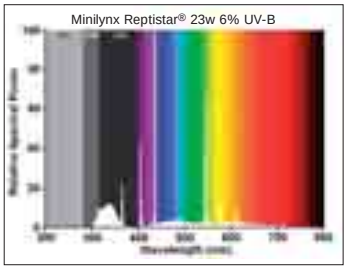
For reptiles only

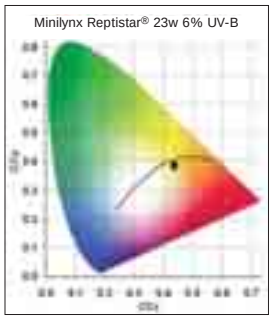
E27	23W
L	166
D	57

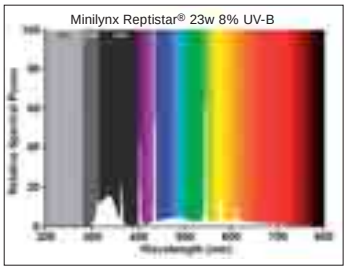


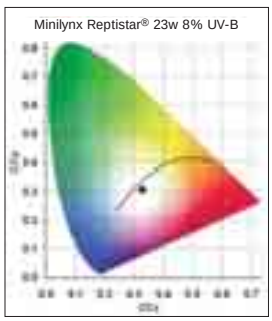
E27











FEATURES

- High UV-B radiation. UV-B peak intensity @ 100mm: 160 µW/cm² for 6% version and 200µW/cm² for the 8% version
- Works on the mains (220-240V) without any special supplementary ballast
- Easy handling: E27 cap
- Effective lamp life: 4000 hrs*

* Effective life time: to 50% of 100 hours UVB output

APPLICATIONS

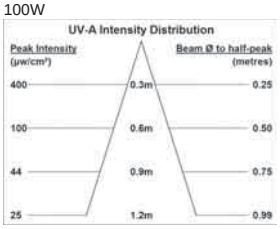
- Provides the necessary UV-B radiation for reptiles in a terrarium in order to keep them healthy
- Two versions (6% and 8%) in order to adapt to the type of reptile
- Could also be used in certain industrial applications

DIRECTIONS FOR USE

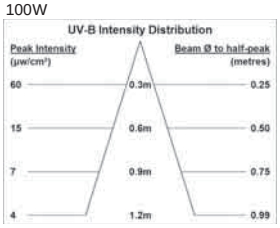
- This lamp emits UV-radiation. Avoid exposure to skin and eyes
- Not suitable for household room illumination
- Burning position: unrestricted
- Lamps comply with EN 60968 (Safety Requirement) and EN 60969 (Performance Requirements) and CE regulations

Code	Item description	Watt W	Mains Voltage V	Current A	Dimensions L mm	Dimensions D mm	Cap	Colour Temp. K	Luminous Flux lm	CRI Class	Spectral Power UV-A At 100mm in µW/cm²	Spectral Power UV-B At 100mm in µW/cm²	Packing Quantity
0027275	MiniLynx 23W Reptistar 6%UV-B	23	220-240	190	166	57	E27	6500	600	1b	610	160	10
0027276	MiniLynx 23W Reptistar 8%UV-B	23	220-240	190	166	57	E27	6500	540	1b	750	200	10

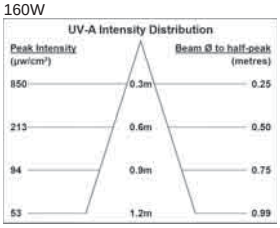
100W



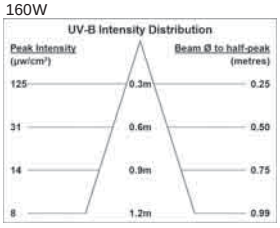
100W



160W



160W



vertical ±30°

For reptiles only

FEATURES

- Tungsten filament provides infra-red radiation
- Mercury discharge provides ultra-violet radiation
- Powerful UV-B generation but without dangerous UV-C output
- Optimal beam angle of 45° for maximum utilisation of the radiation
- Self-ballasted design operates directly on the mains
- Easy handling: E27 screw cap
- Pleasant colour temperature of 4000K (100W) and 4200K (160W)

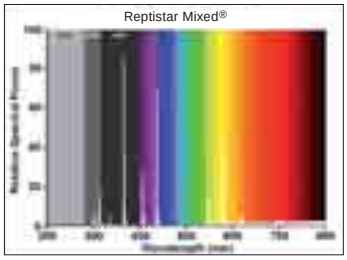
APPLICATIONS

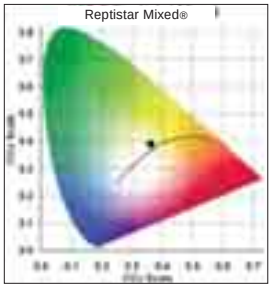
- Provides the necessary radiation for reptiles and birds in captivity

-UV-B: Production of Vitamin D3 to maintain healthy skin and bones

-Infra Red: Provides the warmth which cold-blooded animals are used to in nature

- Horticulture
- Photochemical scientific





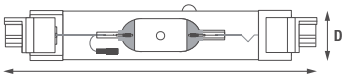
DIRECTIONS FOR USE

- Burning position: VBU ± 30°
- Do not stay in the close vicinity of a burning lamp for prolonged periods.
- Protect operating lamp from splashes and liquids.
- Lamps must not be used for personal tanning applications
- Not suitable for household room illumination

Code	Item description	Watt W	Operating Voltage V	Current A	M.O.L. L mm	M.O.L. D mm	Cap	Colour Temp. K	Beam Angle	Peak Intensity cd	UV-B Peak Intensity At 30cm µW/cm²	Rated Average Life h	Packing Quantity
0020421	HSB-R Reptistar Mixed	100	225-235	0,48	185	125	E27	4000	45°	600	60	6000	6
0020422	HSB-R Reptistar Mixed	160	225-235	0,77	185	125	E27	4200	45°	900	125	6000	6

AquaArc

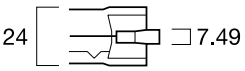
	150W	250W
L	135.4	161.6
D	25	27.5

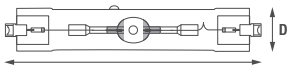


250 W

horizontal ±45°

RX7s-24

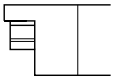


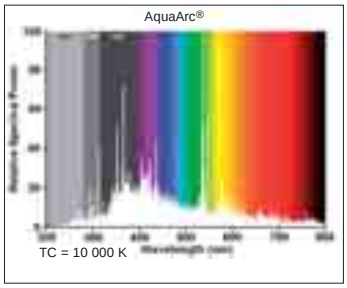


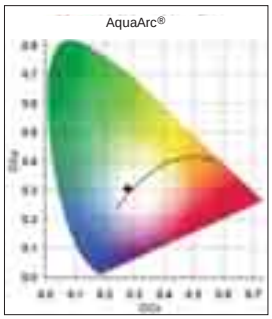
150 W

horizontal ±45°

FC2







FEATURES

- High light output and good efficiency
- High colour rendering
- Very high colour stability over the whole lamp life
- High colour temperature (10000 K)
- Point-source of light creates attractive shadow effect of water ripples on the aquarium bed

APPLICATIONS

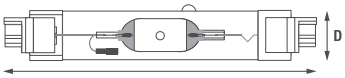
- For use in fresh and sea water aquaria
- Strong directional light which penetrates deep into large tanks
- Lifelike appearance of fish, corals and plants

DIRECTIONS FOR USE

- Burning position: horizontal ± 45°
- External ignitor only
- Only use in luminaires fitted with protective cover glass
- Ensure the lamp envelope is cleaned of finger prints before use
- Lamps should be operated with the arc tube tip-off up - see instructions supplied with lamp
- This lamp emits UV-radiation. Avoid exposure to skin and eyes
- Not suitable for household room illumination

Code	Item description	Dimensions (mm) L	D	Watt W	Volt V	Current A	Cap	Bulb finish	Colour temp. K	Chromaticity Coordinate x	y	Light output lm	Packing Quantity
0021049	HSI-TD 150W AquaArc	135,4	25	150	100	1.80	RX7s	clear	10000	0.277	0.311	9000	10
0021050	HSI-TD 250W AquaArc	161,6	27,5	250	100	3.00	Fc2	clear	10000	0.275	0.323	14000	10

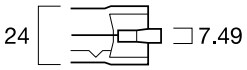
	150W	250W
L	135.4	161.6
D	25	27.5

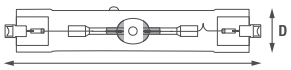


250 W

horizontal ±45°

RX7s-24

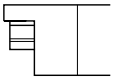




150 W

horizontal ±45°

FC2

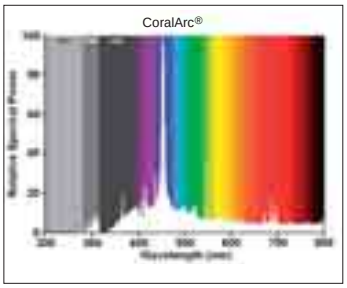


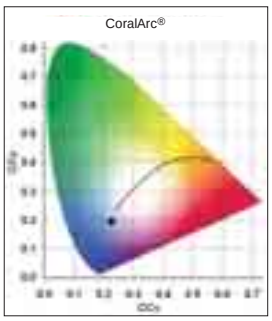
FEATURES

- Very high colour temperature 20000K (bluish light)
- Very high colour stability over the entire lamp life
- Enhanced colour rendition
- Point-source of light creates attractive shadow effect of water ripples on the aquarium bed

APPLICATIONS

- For use in sea water aquaria
- Provides the specific spectrum (400-480 mm) necessary to achieve the blue chlorophyl absorption for zooxanthellae symbioses to develop





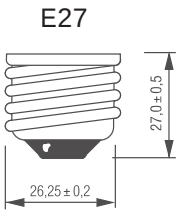
DIRECTIONS FOR USE

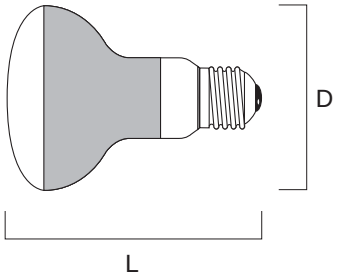
- Burning position: horizontal ± 45°
- External ignitor only
- Only use in luminaires fitted with protective cover glass
- Ensure the lamp envelope is cleaned of finger prints before use
- Lamps should be operated with the arc tube tip-off up - see instructions supplied with lamp
- This lamp emits UV-radiation. Avoid exposure to skin and eyes
- Not suitable for household room illumination

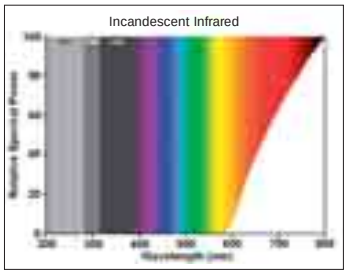
Code	Item description	Dimensions (mm) L	D	Watt W	Volt V	Current A	Cap	Bulb finish	Colour temp. K	Chromaticity Coordinate x	y	Light output lm	Packing Quantity
0021028	HSI-TD 150W CoralArc	135,4	25	150	100	1.80	RX7s	clear	blue	0.261	0.257	5400	10
0021029	HSI-TD 250W CoralArc	161,6	27,5	250	100	3.00	Fc2	clear	blue	0.257	0.243	8000	10

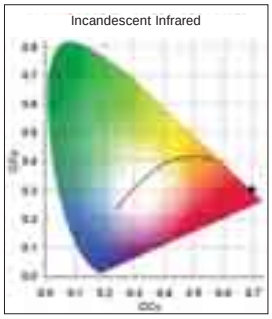
Infrared Reflector

	100W	150W	250W
L	130	181	181
D	95	125	125









FEATURES

- Converts electric current into infrared radiation

APPLICATIONS

- Provides the necessary infrared radiation for reptiles in terrariums and for other pets like hamsters, mice etc

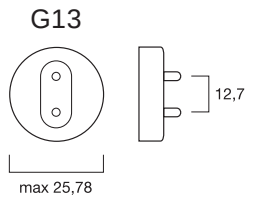
DIRECTIONS FOR USE

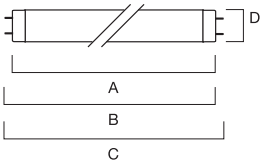
- Not suitable for household room illumination

Code	Item description		Dimensions (mm) L	D	Watt W	Volt V	Cap	Packing Quantity
0033004	Refl. 100W R95	Infrared	130	95	100	230	E27	20
0033002	Refl. 150W R125	Infrared	181	125	150	230	E27	10

BriteGro 2084

	A max	B min	B max	C max	D nom
36W	1199.4	1204.1	1206.5	1213.6	26
58W	1500.0	1504.7	1507.1	1514.2	26





universal

FEATURES

- Fluorescent lamp with a high photosynthetic efficiency and a low part of far red
- The low far red part results in a compact growth, even with low light levels.
- Stimulates side shoot development

APPLICATIONS

- Climate cells
- Phytotrons
- Rooms for cultivation of biological tissue
- Greenhouses
- Winter gardens
- Botanical gardens

Code	Item description	Watt W	Volt V	Cap	Packing Quantity
0001663	F36W/ BriteGro 2084	36	103	G13	25
0001662	F58W/ BriteGro 2084	58	110	G13	25

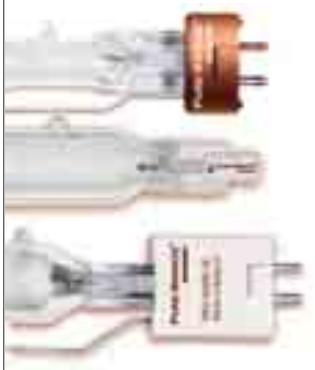
Wellness, sun tanning and body care in general are more and more part of modern life. Our Pure Bronze range of sun tanning low-pressure tubes and high-pressure lamps leave barely any wish unfulfilled. Open and closed glass, 2-meter and miniature tubes, with and without reflectors, standard or long life versions, Pure Bronze provides a matching solution for practically every requirement.

BODYCARE 69

PureBronze Suntanning – High Pressure H.I.D. **70**
PureBronze Suntanning – Low Pressure 0.3 Range **72**
PureBronze Suntanning – Low Pressure Class.4+ Range **74**
Pure Bronze Suntanning Starters **77**
Activa-Seasonal Affective Disorder (SAD) **78**
Medical Halogen **79**

PureBronze Suntanning – High Pressure H.I.D.

High pressure tanning lamps deliver intense UV radiation from a very compact source. The lower wattage versions find their primary application in areas where increased output is required, particularly for facial and shoulder tanning. The higher wattage types are typically used to equip entire sun beds to achieve shorter tanning times in countries where people have naturally darker skin tones. The PBO range is optimized for maximum erythemal efficiency, whereas PBF types employ a built-in filter for the shorter wavelengths to meet FDA requirements in the USA.



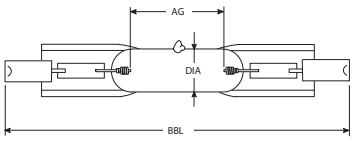


Fig. 1

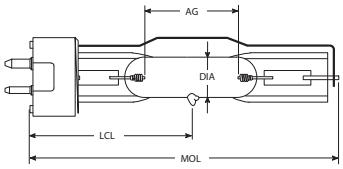


Fig. 3

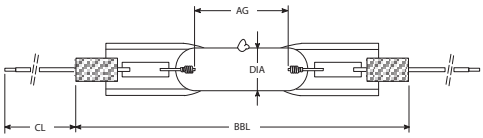


Fig. 2

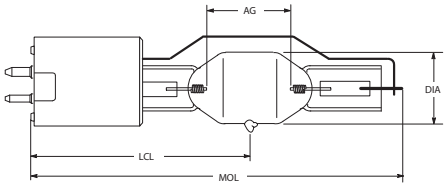
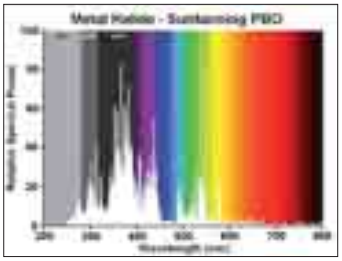
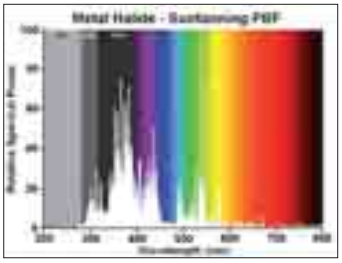


Fig. 4

	250	400	500	700	1000	2000
Single Ended						
MOL	71	103			129	
DIA	20	14			25	
C (Cable)						
BBL		116			139	174
DIA		14			25.5	27
S (R7s) Base						
BBL		106	118			
DIA		14	14			





FEATURES

- Short irradiation and exposure times
- Ozone free construction
- Long-life types offer outstanding UV-A maintenance out to 1000 hours
- Built according to DIN-EN-ISO 9001
- Special versions available upon request
- Complete PBF range also available

APPLICATIONS

- Domestic cosmetic facial tanning
- Professional facial, half body and full body units
- Short intense tanning sessions

DIRECTIONS FOR USE

- Only use in tanning devices equipped with appropriate filter and timer
- Burning position : horizontal ± 10° for double ended types
  : universal for single ended types
- Do not touch the quartz envelope with bare fingers
- Pinch temperature : max 350°C
- Bulb temperature : min 750°C, max 950°C

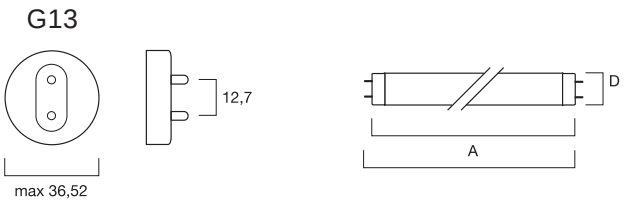
Ordering code	Description	Wattage (W)	Base/Cap	Life time* (hrs.)	Maximum diameter D (mm)	Maximum length L (mm)	Fig.
Performance							
0024200	PureBronze PBO 400W S	250-500	R7s	600	14,0	106,0	1
0024201	PureBronze PBO 400W SL	250-500	R7s long	600	14,0	117,9	1
0024202	PureBronze PBO 400W C	250-500	Cable	600	14,0	116,0	2
0024203	PureBronze PBO 400W SE	250-500	GY 9,5	600	14,0	103,0	3
0024210	PureBronze PBO 500W S	300-600	R7s	600	17,0	106,0	1
0024263	PureBronze PBO 500W SL	300-600	R7s long	600	17,0	117,9	1
0024211	PureBronze PBO 500W C	300-600	Cable	600	17,0	114,0	2
0024212	PureBronze PBO 500W SE	300-600	GY 9,5	600	17,0	107,0	3
0024265	PureBronze PBO 800W S	500-800	R7s	600	18,5	115,0	1
0024264	PureBronze PBO 800W C	500-800	Cable	600	18,5	115,0	2
0024260	PureBronze PBO 800W SE	500-800	GY 9,5	600	18,5	108,5	3
0024220	PureBronze PBO 1000W C 230 V	1 000	Cable	600	25,5	139,0	2
0024221	PureBronze PBO 1000W C 400 V	1 000	Cable	600	25,5	139,0	2
0024222	PureBronze PBO 1000W SE	500-1.000	GQ 9,5	600	25,0	129,0	4
0024223	PureBronze PBO 1000W SE short	500-1.000	GY 9,5	600	25,0	108,5	3
0024230	PureBronze PBO 2000W C 400V	2 000	Cable	600	27,0	174,0	2
Top Line							
0024204	PureBronze PBO 400W S LL	250-500	R7s	1 000	14,0	106,0	1
0024205	PureBronze PBO 400W SE LL	250-500	GY 9,5	1 000	14,0	103,0	3
0024213	PureBronze PBO 500W SE LL	300-600	GY 9,5	1 000	17,0	107,0	3
0024224	PureBronze PBO 1000W SE LL	500-1.000	GQ 9,5	1 000	25,0	129,0	4

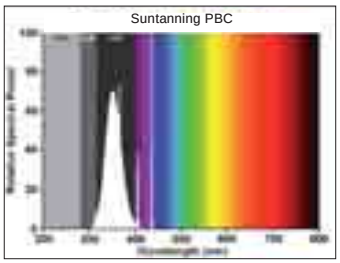
Legend for table of high-pressure lamps:

PB = PureBronze
O = Ozone Free Quartz
S = R7s base
C = Cable
SE = Single Ended
LL = LongLife

PureBronze Suntanning – Low Pressure 0.3 Range

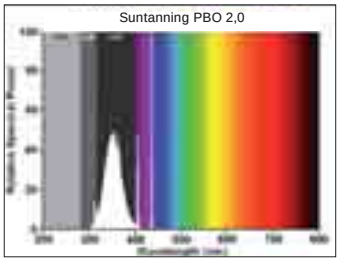
Responding to the recent European Directive which calls for a maximum irradiance of 0.3 W/m2 in the sunbed, Sylvania has developed a comprehensive range of retrofit tubes which allow you to bring equipment in line with the new regulations. By optimal balance of the UV-A and UV-B ratios, tanning times are maintained as short as possible. From the three product ranges TopLine, PerformanceLine and ClassicLine, Sylvania can offer a tube to meet the performance and budgetary requirements of the entire spectrum from professional salon to domestic user.





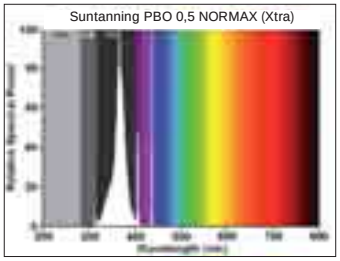
CLASSICLINE : FOR THE BEGINNER

- Comprehensive product range from 15W to 180W
- Closed glass tube limits the deeper UV wavelengths
- Available with and without internal reflector
- The starter series for both home use and smaller salons
- Lower cost tube suitable for the beginner
- Guaranteed UV output for 600 hours life



PERFORMANCELINE : FOR IMMEDIATE TANNING

- Increased power tubes from 20W to 200W
- Professional quality open glass tube lets out the important UV wavelengths
- Ideal choice for professional solaria
- High levels of direct pigmentation are achieved thanks to the open glass
- Guaranteed UV output for 600 hours life



TOPLINE : FOR THE PROFESSIONAL

- Ultimate output of 80W to 250W for reduced tanning times
- Professional quality open glass tube lets out the important UV wavelengths
- Top performance choice for professional solaria
- DirectTan technology for instant visual results
- PurePower models deliver up to 30% more direct pigmentation
- Guaranteed UV output for industry-leading 1000 hours life
- Sylvania LongLife technology delivers low cost of ownership for professional salons

DIRECTIONS FOR USE

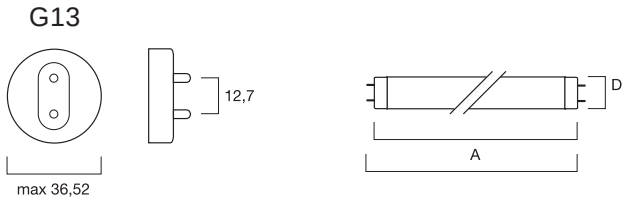
- Always consider the type of equipment and your skin type when using Sylvania tanning tubes

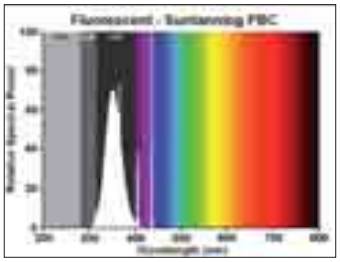
PureBronze Suntanning – Low Pressure 0.3 Range

Ordering Code	Description		Wattage (W)	Life time* (h)	Length (cm)	Typical radiation strength (mW/cm²)	UVB (%)	UVA (W)	Sun/ erythema factor fse	Sunning time HT 3 (min)	UV Code
Classic 15-100W											
0003012	PBC 15W 1,0		15	600	28,8	16	1,0	2,8	0,04	21	15-O-7/3.0
0003009	PBC 25W 1,0	**NEW**	25	600	52	16	1,0	5	0,05	21	25-O-7/3.0
0001160	PBC 80W 0,7		80	600	150	17	0,8	21	0,05	24	80-O-13/2.5
0001161	PBC 80W 1,3		80	600	150	17	1,2	21	0,07	20	80-O-17/3.9
0001180	PBC 100W 0,7		100	600	176	17	0,8	27	0,05	24	100-O-14/2.5
0001181	PBC 100W 1,3		100	600	176	17	1,3	27	0,07	20	100-O-17/3.9
0001182	PBC 100W 2.0		100	600	176	17	2,0	27	0,11	12	100-O-34/7.0
Classic 80-100W											
0001163	PBC 80W 0,7 R		80	600	150	18	0,7	20	0,07	24	80-R-21/2.2
0001169	PBC 100W 0,7 R		100	600	176	18	0,7	26	0,07	24	100-R-23/2.4
0001170	PBC 100W 1,0 R		100	600	176	18	1,0	26	0,08	21	100-R-26/2.9
0001301	PBC 100W 1,3 R	**NEW**	100	600	176	18	1,3	26	0,1	18	100-R-32/4.2
Classic 140-160W											
0001313	PBC 140W 1,3 R	**NEW**	140	600	150	21	1,3	33	0,12	15	140-R-45/4.0
0001244	PBC 160W 0,5 R	**NEW**	160	600	176	21	0,5	33	0,06	27	160-R-23/1.6
0001217	PBC 160W 0,7 R		160	600	176	21	0,7	33	0,08	22	160-R-31/2.1
0001214	PBC 160W 1,0 R		160	600	176	21	1,0	33	0,1	18	160-R-38/2.9
0001300	PBC 160W 1,3 R	**NEW**	160	600	176	21	1,3	33	0,12	15	160-R-45/4.0
Extra-long tubes											
0001299	PBC 180W 0.7 R 2m	**NEW**	180-200	600	200	23	0,7	41	0,08	22	180-R-31/2.0
0001298	PBC 120W 0.7 R 2m	**NEW**	100-120	600	200	18	0,7	30	0,08	22	120-R-23/2,3
0001297	PBC 120W 0.7 R 1.9m	**NEW**	100-120	600	190	19	0,7	30	0,08	22	120-R-25/2,4
Performance 80-100W											
0001166	PBO 80W 1,0 R		80	600	150	19	1,0	23	0,11	18	80-R-33/4.0
0001248	PBO 100W 0,5 R		100	600	176	19	0,5	30	0,06	27	100-R-20/2.3
0001200	PBO 100W 0,7 R		100	600	176	20	0,7	30	0,08	21	100-R-26/3.2
0001201	PBO 100W 1,0 R		100	600	176	20	1,0	30	0,1	19	100-R-34/3.9
0001202	PBO 100W 1,3 R		100	600	176	20	1,3	30	0,13	15	100-R-45/4,7
Performance 160W											
0001247	PBO 160W 0,3 R	**NEW**	160	600	176	23	0,3	36	0,05	30	160-R-20/1.8
0001267	PBO 160W 0,5 R		160	600	176	23	0,5	36	0,06	23	160-R-25/2.2
0001249	PBO 160W 0,7 R		160	600	176	23	0,7	36	0,08	18	160-R-34/2.9
0001218	PBO 160W 1,0 R		160	600	176	23	1,0	36	0,12	15	160-R-43/3.7
TopLine 100W											
0001246	PBO 100W R NormMax Xtra LL		100	1 000	176	21	0,5	32	0,06	26	100-R-20/2.5
0001279	PBO 100W R NormMax LL		100	1 000	176	21	0,7	32	0,08	23	100-R-26/3.0
0001280	PBO 100W R NormMax+ LL		100	1 000	176	21	1,0	32	0,11	18	100-R-35/4.1
0001263	PBO 100W R A-Max LL		100	1 000	176	21	0,97	33	0,15	12	100-R-45/6.5
TopLine 140-160W											
0001314	PBO 140W R NormMax Xtra LL	**NEW**	140	1 000	150	25	0,6	30	0,06	22	140-R-24/2.2
0001286	PBO 160W R NormMax Ultra LL	**NEW**	160	1 000	176	25	0,3	38	0,05	30	160-R-20/1.9
0001320	PBO 160W R NormMax Xtra LL		160	1 000	176	25	0,6	38	0,07	22	160-R-26/2.3
0001281	PBO 160W R NormMax LL		160	1 000	176	25	0,8	38	0,09	17	160-R-33/3.1
0001234	PBO 160W R NormMax+ LL		160	1 000	176	25	0,95	38	0.13	14	160-R-45/3.8
0001264	PBO 160W R Amax LL		160	1 200	176	27	1,05	40	0,15	11	160-R-56/5.8
0001306	PPB 160W R NormMax Xtra LL	**NEW**	160	1 000	176	28	0,3	46	0,06	30	160-R-21/1.5
0001273	PPB 160W R NormMax LL		160	1 000	176	28	0,5	46	0,09	23	160-R-28/2.2
0001275	PPB 160W R NormMax + LL		160	1 000	176	28	0,7	46	0,11	17	160-R-35/3.0
0001277	PPB 160W R Amax LL		160	1 200	176	29	0,9	48	0,14	13	160-R-46/5.9
Extra-long tubes											
0001282	PPB 180/250W R NormMax Xtra LL 2m		180 - 250	1 000	200	28	0,25	51	0,06	30	180-R-21/1.5
0001274	PPB 180/250W R NormMax LL 2m		180 - 250	1 000	200	28	0,35	51	0,08	23	180-R-27/2.1
0001276	PPB 180/250W R NormMax+ LL 2m		180 - 250	1 000	200	28	0,65	51	0,11	17	180-R-34/2.9
0001278	PPB 180/250W R Amax LL 2m		180 - 250	1 200	200	29	0,85	53	0,14	13	180-R-47/5.8

PureBronze Suntanning – Low Pressure Class.4+ Range

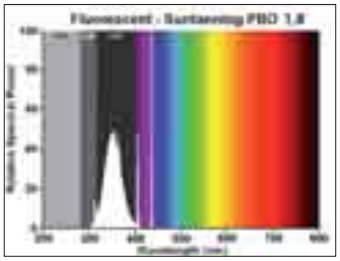
Not all sun beds need to be equipped with reduced power tubes in order to conform with the 0.3 W/m2 directive.
For these applications Sylvania continues to offer a comprehensive selection of high output tubes delivering high erythemal performance.
The products are split into the same categories of ClassicLine, PerformanceLine and TopLine to suit the lifetime and performance requirements of different consumers.





CLASSICLINE : FOR THE BEGINNER

- Comprehensive product range from 15W to 180W
- Closed glass tube limits the deeper UV wavelengths
- Available with and without internal reflector
- The starter series for both home use and smaller salons
- Lower cost tube suitable for the beginner
- Guaranteed UV output for 600 hours life



PERFORMANCELINE : FOR IMMEDIATE TANNING

- Increased power tubes from 20W to 200W
- Professional quality open glass tube lets out the important UV wavelengths
- Ideal choice for professional solaria
- High levels of direct pigmentation are achieved thanks to the optimised UV-A spectrum
- Guaranteed UV output for 600 hours life

TOPLINE : FOR THE PROFESSIONAL

- Ultimate output of 80W to 250W for reduced tanning times
- Professional quality open glass tube lets out the important UV wavelengths
- Top performance choice for professional solaria
- DirectTan technology for instant visual results
- PurePower models deliver up to 30% more direct pigmentation
- Guaranteed UV output for industry-leading 1000 hours life
- Sylvania LongLife technology delivers low cost of ownership for professional salons

DIRECTIONS FOR USE

- Always consider the type of equipment and your skin type when using Sylvania tanning tubes

PureBronze Suntanning – Low Pressure Class.4+ Range

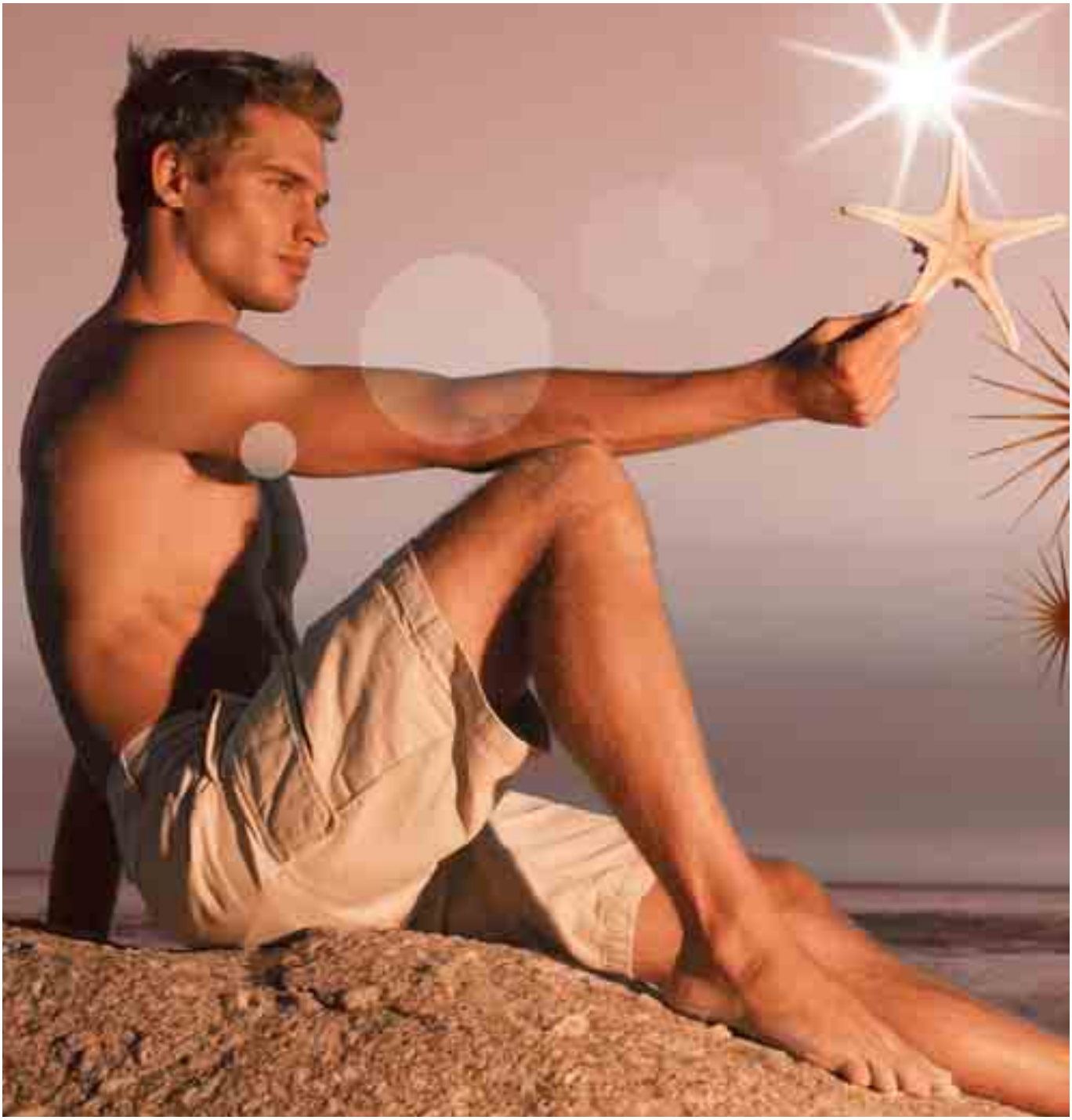
Ordering Code	Description		Wattage (W)	Life time* (h)	Length (cm)	Typical radiation strength (mW/cm²)	UVB (%)	UVA (W)	Sun/ erythema factor fse	Sunning time HT 3 (min)	UV Code
Classic 25-36W											
0003013	PBO 25W 1,5		25	600	52	16	1,5	5,5	0,08	14	25-O-24/3.5
0003011	PBO 25W 2,5		25	600	52	16	1,5	5,5	0,11	12	25-O-31/8.3
0003010	PBO 25W 2,5 R		25	600	52	20	2,5	6	0,14	9	25-R-45/7.3
0025380	PBO 36W 2,0 pink	**NEW**	36	600	41,5	20	2,0	9,5	0,15	8	36-O-45/6.9
Classic 100W											
0001171	PBC 100W 1,6 R		100	600	176	18	1,6	26	0,12	15	100-R-36/4.6
0001172	PBC 100W 2,3 R		100	600	176	18	2,3	25	0,17	11	100-R-50/6.0
Classic 160W											
0001215	PBC 160W 1,6 R		100	600	176	21	1,6	31	0,14	13	160-R-55/4.9
0001216	PBC 160W 2,3 R		100	600	176	21	2,3	30	0,21	10	160-R-70/7.0
Performance 80-100W											
0001168	PBO 80W 2,3 R		80	600	150	19	2,3	21	0,21	9	80-R-66/6.4
0001203	PBO 100W 1,6 R		100	600	176	19	1,6	30	0,16	12	100-R-50/5.3
0001204	PBO 100W 2,0 R		100	600	176	19	2,0	30	0,19	10	100-R-60/6.8
0001205	PBO 100W 2,3 R		100	600	176	19	2,3	30	0,21	9	100-R-69/8.0
0001206	PBO 100W 2,6 R		100	600	176	19	2,6	30	0,23	8	100-R-75/9.0
Performance 140-160W											
0001213	PBO 140W 2,3 R		140	600	150	23	2,3	30	0,26	8	140-R-96/7.5
0001220	PBO 160W 1,6 R		160	600	176	23	1,6	37	0,23	10	160-R-72/5.3
0001221	PBO 160W 2,0 R		160	600	176	23	2,0	38	0,25	9	160-R-85/6.5
0001222	PBO 160W 2,3 R		160	600	176	23	2,3	38	0,27	8	160-R-96/7.5
0001223	PBO 160W 2,6 R		160	600	176	23	2,6	38	0,30	6	160-R-99/8.2
0001283	PBO 160W 3,3 R		160	600	176	23	3,3	38	0,32	4	160-R-120/10.4
0001238	PBO 100W 3,3 R		100	600	176	19	3,3	30	0,27	6	100-R-90/10.5
0001284	PBO 160W 3,6 R LL	**NEW**	160	600	176	20	3,6	38	0,34	3	160-R-132/11.0
Extra-long tubes											
0001228	PBO 120W 2,0 R 2m	**NEW**	100-120	600	200	19	2,0	32	0,19	10	120-R-65/6.9
0001310	PBO 120W 3,3 R 2m		100-120	600	200	19	3,3	31	0,28	6	120-R-90/11.0
0001233	PBO 180W 2,0 R 1,9m	**NEW**	160-200	600	190	23	2,0	42	0,25	9	180-R-85/6.5
0001245	PBO 180W 3,3 R 1,9m	**NEW**	160-200	600	190	23	3,3	41	0,32	4	180-R-120/10.4
0001236	PBO 180W 1,3 R 2m		160-200	600	200	23	1,3	41	0,17	11	180-R-62/4.7
0001230	PBO 180W 2,0 R 2m	**NEW**	160-200	600	200	23	2,0	42	0,25	9	180-R-85/6.5
0001237	PBO 180W 2,6 R 2m		160-200	600	200	23	2,6	42	0,30	6	180-R-103/8.2
TopLine 100W											
0001209	PBO 100W 2,3 R LL	**NEW**	100	1000	176	19	2,3	30	0,23	9	100-R-69/8.0
0001308	PBO 100W 3,0 R LL	**NEW**	100	1000	176	19	3,0	30	0,28	7	100-R-86/10.7
0001309	PBO 100W 3,6 R LL		100	1000	176	19	3,6	30	0,31	6	100-R-95/11.5
TopLine 140-160W											
0001225	PBO 160W 2,0 R LL		160	1 000	176	23	2,0	38	0,25	9	160-R-85/6.5
0001226	PBO 160W 2,3 R LL	**NEW**	160	1 000	176	23	2,3	38	0,27	8	160-R-93/7.5
0001311	PBO 160W 3,0 R LL	**NEW**	160	1 000	176	23	3,0	38	0,30	6	160-R-105/9.0
0001321	PBO 160W 4,0 R LL	**NEW**	160	1000	176	23	4	38	0,37	3	160-R-132/11.0
0001242	PPB 140W 3,0 R LL		140	1 000	150	28	3,0	35	0,40	5	140-R-120/10.2
0001252	PPB 160W 2,3 R LL	**NEW**	160	1 000	176	28	2,3	46	0,36	6	160-R-110/7.8
0001312	PPB 160W 3,0 R LL		160	1 000	176	28	3,0	46	0,42	5	160-R-125/10.0
0001253	PPB 160W 3,3 R LL	**NEW**	160	1 000	176	28	3,3	46	0,46	4	160-R-135/10.5
0001307	PPB 160W 3,6 R LL		160	1 000	176	28	3,6	46	0,50	3	160-R-148/11.3
Extra-long tubes											
0001239	PPO 180W 2,6 R LL 2m		160-200	1 000	200	23	2,6	42	0,27	7	180-R-103/8.2
0001285	PPO 180W 3,6 R LL 2m		160-200	1 000	200	23	3,6	41	0,34	3	180-R-132/11.0
0001257	PPB 180/250W 2,0 R LL 2M		180-250	1 000	200	32	2,0	53	0,33	6	180-R-95/7.1
0001258	PPB 180/250W 2,3 R LL 2M		180-250	1 000	200	28	2,3	50	0,37	5,5	180-R-105/7.5
0001259	PPB 180/250W 2,6 R LL 2M		180-250	1 000	200	28	2,6	50	0,42	5	180-R-115/8.7
0001318	PPB 180/250W 3,0 R LL 2M		180-250	1 000	200	32	2,6	53	0,46	4	180-R-125/10.0
0001319	PPB 180/250W 3,6 R LL 2M		180-250	1 000	200	32	3,3	53	0,52	3	180-R-148/11.3

Sunlamp – CAUTION – ultraviolet (UV) and infrared (IR) radiation. Please follow the instructions. Ultraviolet and infrared radiation from solarium tubes carry a number of health risks and may lead to disorders such as cancer, premature aging of the skin, burns, eye damage, cataracts, deficiency of the immune system, allergic reactions and damage to the vascular system. Pregnant women and persons taking prescription or over the counter medications should consult their physician before using a tanning bed in a solarium. The simultaneous use of medications such as tranquilizers, antibiotics, diuretic, hypotensive, antineoplastic or contraceptive substances may lead to sunburn occurring more quickly because such substances raise the skin's sensitivity to light. The same applies for cosmetics. UV radiation may accelerate the aging process of your skin and increase the risk of skin cancer, such as squamous or basal cell carcinoma. Your risk of contracting skin cancer rises with the frequency of exposure to UV radiation. People who do not tan in sunlight will generally not go brown in a solarium and are therefore more at risk from the negative effects of tanning lamps. If you do not tan in sunlight, you should avoid tanning lamps. UV exposure in childhood is suspected of favoring melanoma formation in adulthood. Consequently, children should only be allowed to use solaria under medical supervision.

ALWAYS WEAR SUITABLE EYE PROTECTION WHEN TANNING (UV PROTECTIVE GOGGLES)! FAILURE TO WEAR EFFECTIVE EYE PROTECTION MAY LEAD TO SEVERE BURNS OR PERMANENT VISUAL DAMAGE!

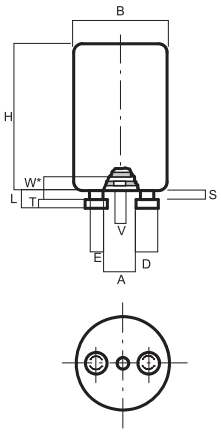
Use tanning lamps EXCLUSIVELY with a timer switch in line with the equipment and lamp manufacturers' instructions and according to your skin type. Take all the necessary safety precautions before installing the lamp and replacing the tubes, and follow the manufacturers' instructions concerning the tanning equipment and lighting device.

DISCLAIMER: SYLVANIA shall not be liable for damage resulting from improper use of the product or failure to observe statutory and local authority regulations relating to the use of the product by customers or end users. All of the data listed here result from laboratory measurements conducted under standardized conditions. Information on the reduction of UVA radiation and the guaranteed service life of the equipment is based on the 5-hour value and refers to operating conditions defined by SYLVANIA. SYLVANIA reserves the right to alter these technical data without prior notice.



Pure Bronze Suntanning Starters

Dimension	Min.	Max.
A	12,5	12,9
B	-	21,5
D	4,7	5,0
E	2,8	3,2
H	33,0	36,0
L	-	4,3
S	1,7	-
T	1,9	2,2
V	2,7	-
W*	4,2	-



universal

FEATURES

- Will perfectly start the PureBronze fluorescent lamps
- The high performance types (PBS 160) work with a broad range of lamp wattages.
- Long Life (at least 20.000 starts)
- No delay or flickering. This avoids unnecessary blackening around the electrodes and lengthens the lamps economic life
- Resistant to ultra-violet light
- ENEC, VDE and VL approved

APPLICATIONS

- Sunbeds

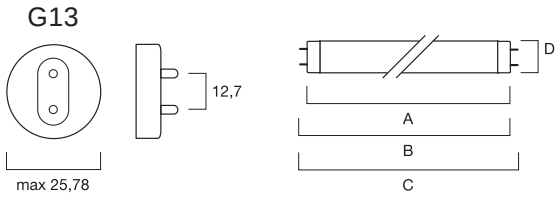
DIRECTIONS FOR USE

- Single electrical circuit
- Designed for use on 220-240V
- Minimum ambient temperature : 0°C min
- Maximum temperature in any part of the starter : 100 °C max
- Sylvania recommends to change the starters when changing lamps and not later than the second lamp change.

Ordering code	Starter Type	Wattage (W)	Voltage (V)	No. of starts	Electrical Circuit	Packaging unit
0024475	PureBronze PBS-25	4 -65	220-240	20.000	Single	10
0024476	PureBronze PBS-100	80-100	220-240	20.000	Single	10
0024477	PureBronze PBS-160	80-180	220-240	20.000	Single	10

Activa-Seasonal Affective Disorder (SAD)

	A max	B min	B max	C max	D nom
15W	437.4	442.1	444.5	451.6	26
18W	589.8	594.5	596.9	604.0	26
36W	1199.4	1204.1	1206.5	1213.6	26
58W	1500.0	1504.7	1507.1	1514.2	26
70W	1763.8	1768.5	1770.9	1778.0	26



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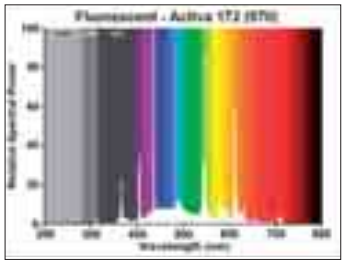
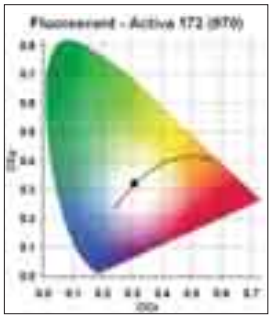




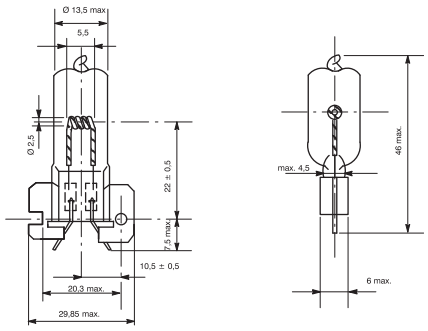
FEATURES

- Full-spectrum high colour rendering T8 fluorescent lamp
- Colour rendering: Ra98/Class 1A
- Colour temperature of 6500K (daylight characteristic)

APPLICATIONS

- For all applications where natural colour rendering is required
- Supports the treatment of Seasonal Affective Disorder (Winter Depression) SAD

Code	Description	Nominal Lamp Watt	Volt	Current	Lamp Colour	CRI Group	Cap	Colour Temp	Luminous Flux	Packing Qty
0002672	F15W/172 Activa	15W	55V	0.310A	Activa	1A	G13	6500K	700 lm	25
0002218	F18W/172 Activa	18W	57V	0.370A	Activa	1A	G13	6500K	1000 lm	25
0002219	F36W/172 Activa	36W	103V	0.430A	Activa	1A	G13	6500K	2300 lm	25
0002220	F58W/172 Activa	58W	110V	0.670A	Activa	1A	G13	6500K	3700 lm	25
0002188	F70W/172 Activa	70W	128V	0.700A	Activa	1A	G13	6500K	4600 lm	25



FEATURES

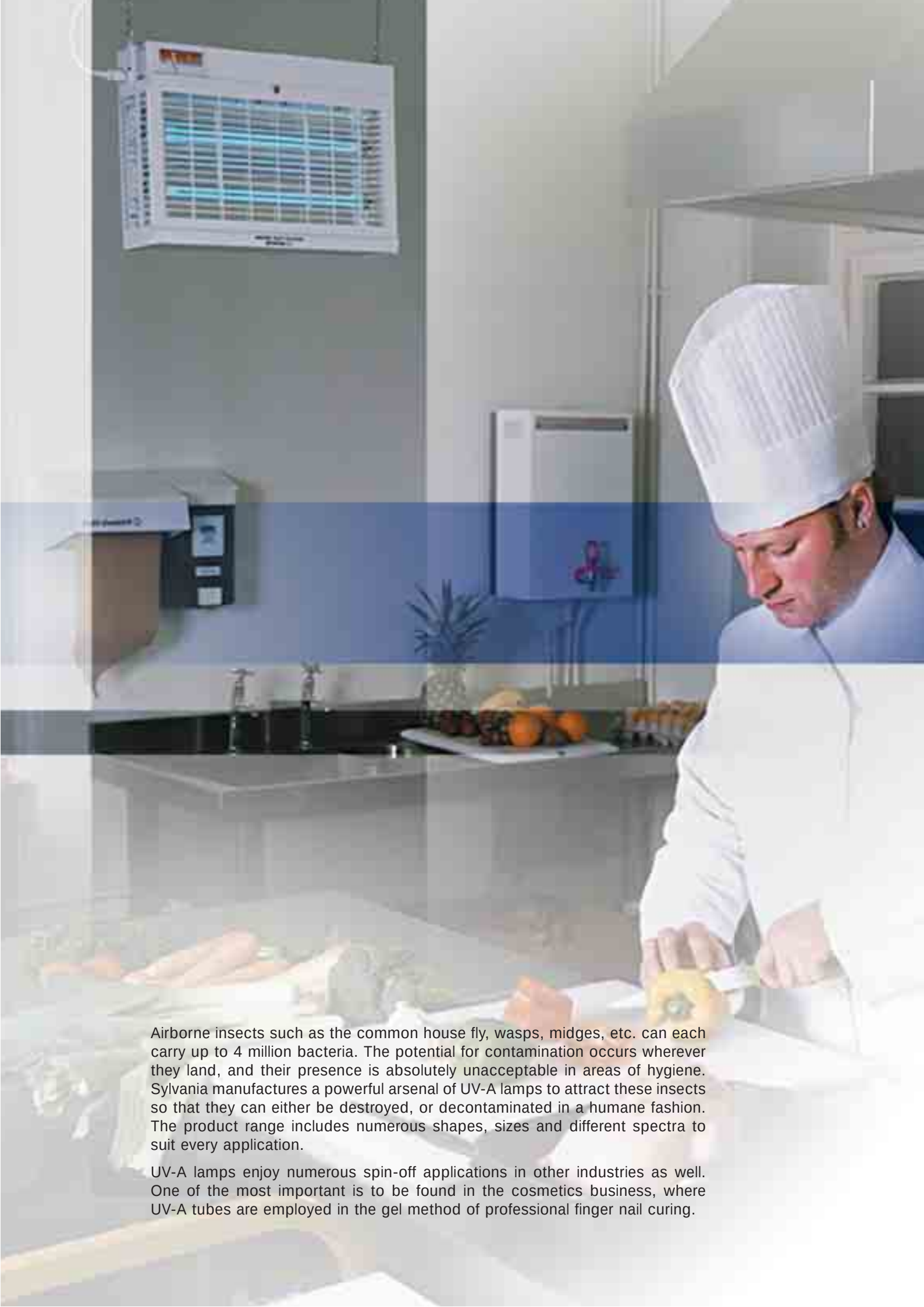
- High light efficacy
- Stable colour temperature and light output
- Voltage 24V
- Unique lamp cap

APPLICATIONS

- Operation theatres

Code	Item Description	ANSI	Base	Voltage	Watt	Filament Type
0021921	24V 120W - L2329	-	A26/14	24	120W	CC6

Code	Item Description	Approx. Lumens lm	Colour Temp. K	Rated Av. life h	Burning Position	Max. pinch Temp	Max. bulb Temp	Packing Packing Qty
0021921	24V 120W - L2329	3000	3200	200	BD+/-90	400	900	50



Airborne insects such as the common house fly, wasps, midges, etc. can each carry up to 4 million bacteria. The potential for contamination occurs wherever they land, and their presence is absolutely unacceptable in areas of hygiene. Sylvania manufactures a powerful arsenal of UV-A lamps to attract these insects so that they can either be destroyed, or decontaminated in a humane fashion. The product range includes numerous shapes, sizes and different spectra to suit every application.

UV-A lamps enjoy numerous spin-off applications in other industries as well. One of the most important is to be found in the cosmetics business, where UV-A tubes are employed in the gel method of professional finger nail curing.

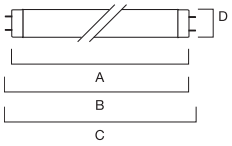
INSECT TRAPPING & DISINFECTION 81

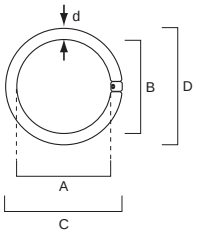
Blacklight BL350 Linear & Circline **82**
Blacklight BL350 Compact **83**
Blacklight BL368 Linear & Circline **84**
Blacklight BL368 Compact **85**
Blacklight BL350 & BL368 FEP Toughcoat™ **86**
Germicidal Linear **88**
Germicidal Compact **89**

Blacklight BL350 Linear & Circline

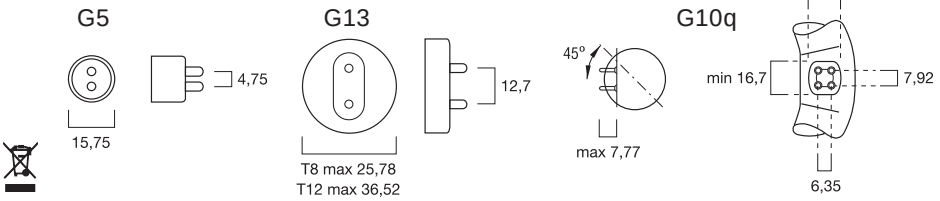
universal

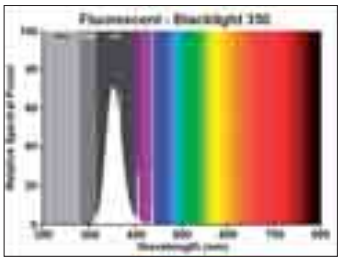
	A max	B min	B max	C max	D nom
4W	135.9	140.6	143.0	150.1	16
6W	212.1	216.8	219.2	226.3	16
8W	288.3	293.0	295.4	302.5	16
11W	212.1	216.8	219.2	226.3	16
15WT5	288.3	293.0	295.4	302.5	16
15WT8	437.4	442.1	444.5	451.6	26
25WT8 18"	437,4	442,1	444,5	451,6	26
15WT12 15"	-	-	-	375,4	38
20WT12 24"	589.8	594.5	596.9	604.0	38
40WT12 24"	589.8	594.5	596.9	604.0	38
40WT12 48"	1199.4	1204.1	1206.5	1213.6	38

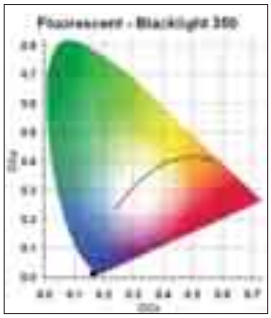




	A min	A max	B min	B max	D min	D max	d min	d max
22W	149.1	155.6	147.6	157.2	203.2	215.9	26.2	30.9
32W	149.1	155.6	147.6	157.2	203.2	215.9	26.2	30.9







FEATURES

- Lamps emit UV-radiation between 315nm and 400nm with a peak at 352nm.
- The 352nm wave length attracts insects, mainly flies and mosquitos.
- Equivalent to other fluorescent lamps for all electrical and physical characteristics

APPLICATIONS

- Insect traps
- Diazo printing machines
- Photo Polymerisation
- Chemical processing
- Mineral detection
- Various technical applications

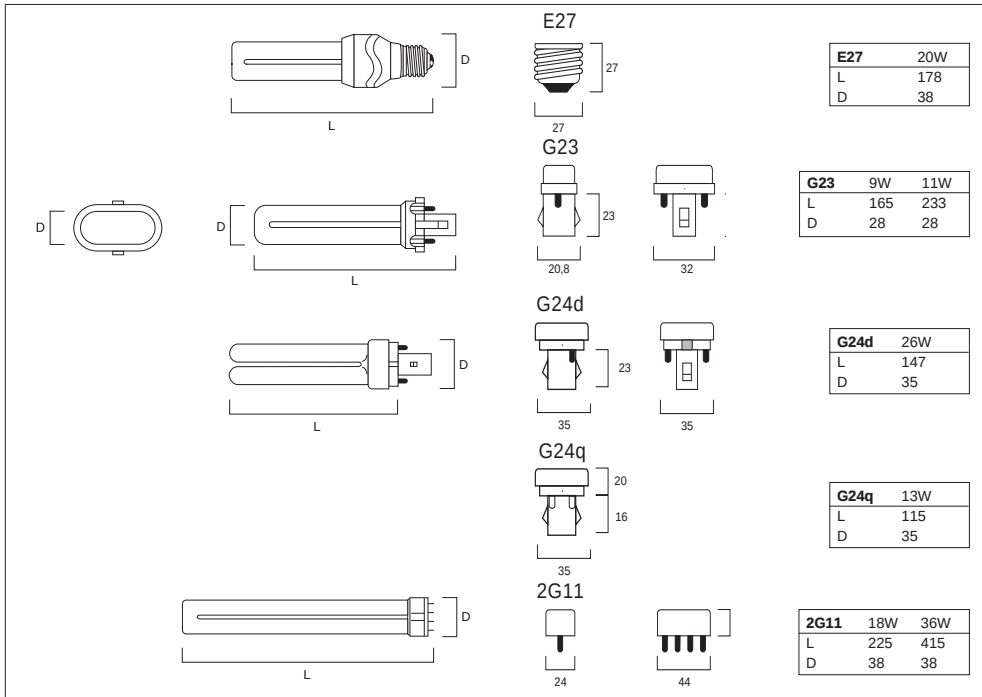
DIRECTIONS FOR USE

- Maximum exposure limits are set by EN60335-2-59:1997 at an effective 1,0 milliWatt per metre squared (1,0 mW/m^2) measured at a distance of 1 metre – originally based on the recommendations of the National Radiological Protection Board in the UK. The irradiance value for a single BL-lamp measured without reflector and/or fixture, in free air at 25 celsius, is varying between 0,2 and 0,4 mW/m^2 depending on the wattage.

Courtesy PestWest

Ordering Code	Item description	Watt W	Volt V	Current A	Lamp Colour	Cap	Packing Quantity
0000007	F4 T5 BL350	4	29	0,170	BL350	G5	50
0000017	F6 T5 BL350	6	42	0,160	BL350	G5	25
0000023	F8 T5 BL350	8	56	0,145	BL350	G5	25
0000384	F11 T5 BL350	11	34	0,350	BL350	G5	25
0000045	F15 T5 BL350	15	44	0,310	BL350	G5	200
0000076	F15 T8 BL350	15	55	0,310	BL350	G13	25
0002165	F25 T8 BL350 18"	25	38	0,600	BL350	G13	25
0022918	F15 T12 BL350 500PH 15"	22	57	0,500	BL350	G13	30
0000359	F20 T12 BL350 24"	20	57	0,370	BL350	G13	25
0001635	F40 T12 BL350 24"	40	47	0,880	BL350	G13	25
0000185	F40 T12 BL350 48"	40	103	0,430	BL350	G13	25
0000489	FC22 BL350 8"	22	62	0,400	BL350	G10q	12
0000455	FC32 BL350 8"	32	57	0,480	BL350	G10q	12

Blacklight BL350 Compact



E27	20W
L	178
D	38

G23	9W	11W
L	165	233
D	28	28

G24d	26W
L	147
D	35

G24q	13W
L	115
D	35

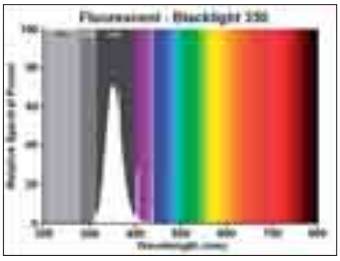
2G11	18W	36W
L	225	415
D	38	38

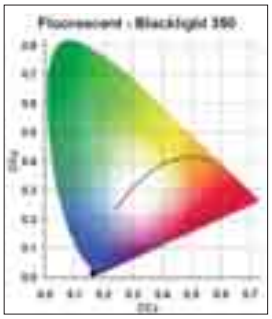
FEATURES

- Lamps emit UV-radiation between 315nm and 400nm with a peak at 352nm.
- The 352nm wave length attracts insects, mainly flies and mosquitoes.
- Equivalent to other fluorescent lamps for all electrical and physical characteristics

APPLICATIONS

- Insect traps
- Nail curing
- Diazo printing machines
- Photo Polymerisation
- Chemical processing
- Mineral detection
- Various technical applications





DIRECTIONS FOR USE

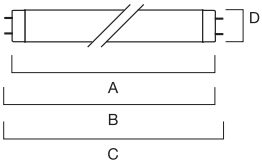
- Maximum exposure limits are set by EN60335-2-59:1997 at an effective 1,0 milliWatt per metre squared (1,0 mW/m^2) measured at a distance of 1 metre – originally based on the recommendations of the National Radiological Protection Board in the UK. The irradiance value for a single BL-lamp measured without reflector and/or fixture, in free air at 25 celsius, is varying between 0,2 and 0,4 mW/m^2 depending on the wattage.

Code	Item description	Watt W	Volt V	Current A	Lamp Colour	Cap	Length mm	Packing Quantity
0028318	Mini-Lynx 20W BL350 Longlife	20	230	0,160	BL350	E27	178	20
0025275	LYNX-S BL355 9W	9	60	0,170	BL355	G23	165	50
0025276	LYNX-S BL350 9W	9	60	0,170	BL350	G23	165	50
0025277	LYNX-S BL350 11W	11	91	0,155	BL350	G23	233	50
0025158	LYNX-DE BL350 13W	13	91	0,175	BL350	G24q-1	115	50
0025454	LYNX-D BL350 26W	26	105	0,325	BL350	G24d-3	147	50
0025239	LYNX-L BL350 18W	18	58	0,375	BL350	2G11	225	10
0025247	LYNX-L BL350 36W	36	106	0,435	BL350	2G11	415	10

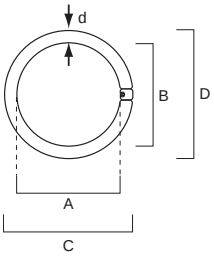
Blacklight BL368 Linear & Circline

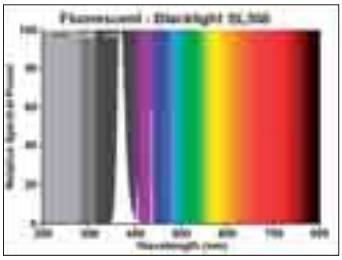
universal

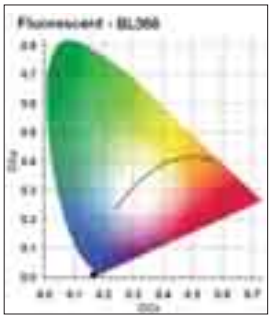
	A max	B min	B max	C max	D nom
F6 T5 BL368 9"	212,1	216,8	219,2	226,3	16
F8 T5 BL368 12"	288,3	293,0	295,4	302,5	16
F15 T5 BL368 12"	288,3	293,0	295,4	302,5	16
15WT8	437,4	442,1	444,5	451,6	26
20W 24"	589,8	594,5	596,9	604,0	26
40W 24"	589,8	594,5	596,9	604,0	26



	A min	A max	B min	B max	C or D min	C or D max	d min	d max
22W	149.1	155.6	147.6	157.2	203.2	215.9	26.2	30.9







FEATURES

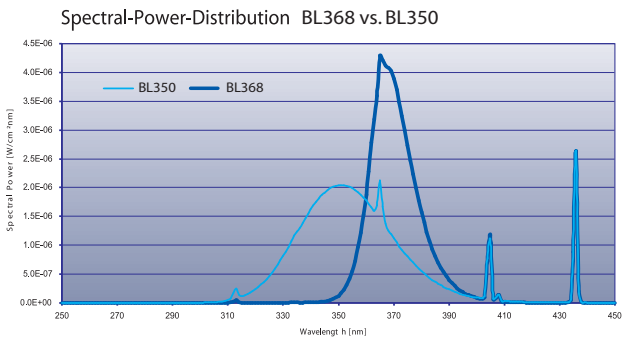
- BL368 tubes emit an upgraded highly concentrated radiation with peak around 365 nm. Flying insects eye sensitivity is generally at or near this frequency
- 100% improvement in effectiveness (at 365nm)
- Depreciation of UV-A output over time is significantly reduced (80% at 5000hrs of original 100 hour output)
- Performs longer and better throughout the insect season
- Same shape, structural and electrical characteristics and control circuits as standard T12, T8 or T5 tubes

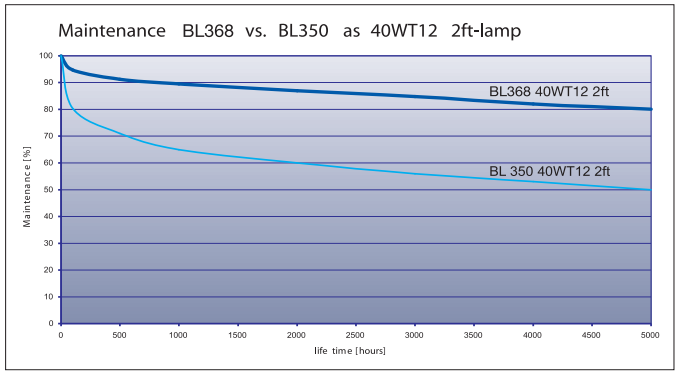
APPLICATIONS

- Insect traps, insect attraction is strongly increased
- Restaurants, kitchens, food shops, supermarkets
- Diazo printing machines
- Photo Polymerisation
- Chemical processing
- Mineral detection
- Various technical applications

DIRECTION FOR USE

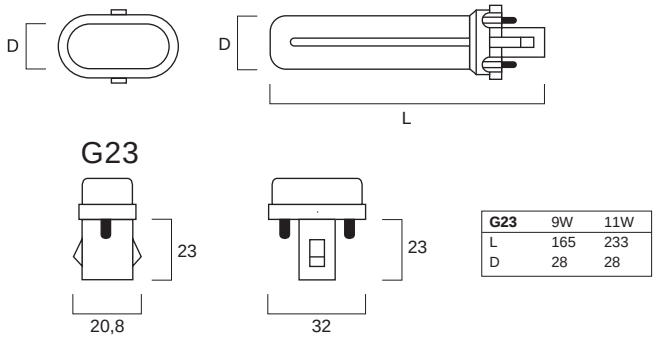
- Maximum exposure limits are set by EN60335-2-59:1997 at an effective 1,0 milliWatt per metre squared (1,0 mW/m²)
  measured at a distance of 1 metre – originally based on the recommendations of the National Radiological Protection Board in the UK. The irradiance value for a single BL368-lamp measured without reflector and/or fixture, in free air at 25 celsius, is varying between 0,2 and 0,4 mW/m² depending on the wattage.





Ordering Code	Item description	Watt W	Volt V	Current A	Lamp Colour	Cap	Cap to Cap Lamp Length (mm)	Packing Quantity
0000088	F6 T5 BL368 9"	6	42	0,160	BL368	G5	212	25
0000089	F8 T5 BL368 12"	8	56	0,145	BL368	G5	288	25
0000090	F15 T5 BL368 12"	15	44	0,310	BL368	G5	288	25
0000082	F15 T8 BL368	15	55	0,310	BL368	G13	437	25
0002166	F25 T8 BL368 18"	25	38	0,600	BL368	G13	451,6	25
0000361	F20 T12 BL368 24"	20	57	0,370	BL368	G13	590	25
0001638	F40 T12 BL368 24"	40	47	0,880	BL368	G13	590	25
0000456	FC22 T12 BL368	22	62	0.400	BL368	G10q	216	12
0025412	LYNX-S BL368 11W	11	91	0,155	BL368	G23	233	50
0025268	LYNX-L BL368 18W	18	58	0,375	BL368	2G11	225	10

Blacklight BL368 Compact



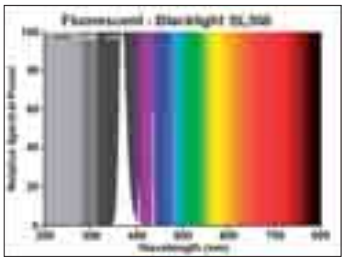
G23	9W	11W
L	165	233
D	28	28

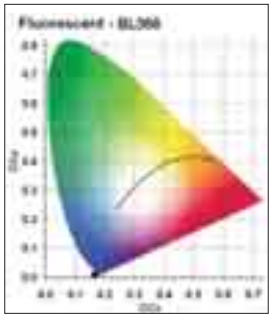
FEATURES

- These BL368 tubes emit an upgraded highly concentrated radiation with peak around 365 nm. Flying insect's eye sensitivity is generally at or near this frequency
- 100% improvement in effectiveness (at 365nm)
- Depreciation of UV-A output over time is significantly reduced (80% at 5000hrs of original 100 hour output)
- Performs longer and better throughout the insect season

APPLICATIONS

- Nail curing
- Insect traps, insect attraction is strongly increased
- Restaurants, kitchens, food shops, supermarkets
- Diazo printing machines
- Contact lend desinfection
- Photo Polymerisation
- Chemical processing
- Mineral detection
- Various technical applications





DIRECTION FOR USE

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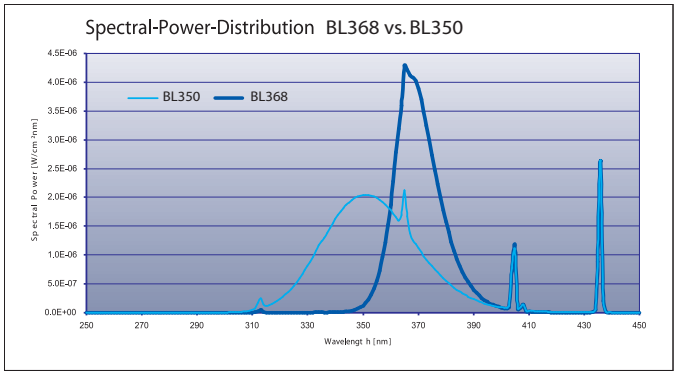
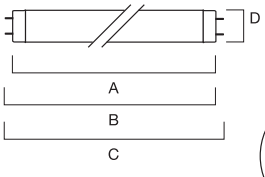
  measured at a distance of 1 metre – originally based on the recommendations of the National Radiological Protection Board in the UK. The irradiance value for a single BL368-lamp measured without reflector and/or fixture, in free air at 25 celsius, is varying between 0,2 and 0,4 mW/m² depending on the wattage.

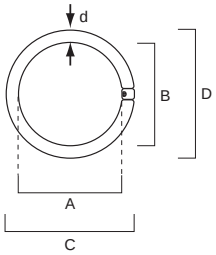


Ordering Code	Item description	Watt W	Volt V	Current A	Lamp Colour	Cap	Cap to cap Lamp Length mm	Packing Quantity
0025411	LYNX-S BL368	9	60	0,170	BL368	G23	165	50

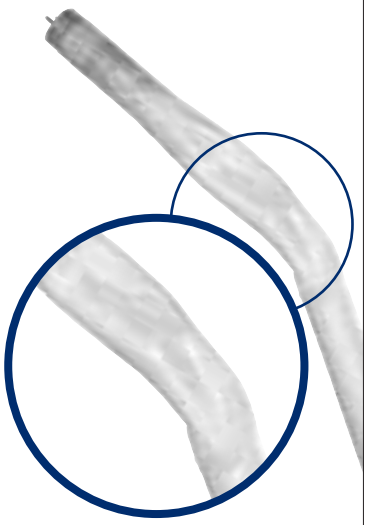
Blacklight BL350 & BL368 FEP **Toughcoat™**

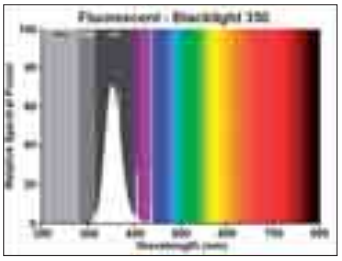
	A max	B min	B max	C max	D nom
15WT8	437.4	442.1	444.5	451.6	26
20W	589.8	594.5	596.9	604.0	26
40W/2ft	589.8	594.5	596.9	604.0	26
40W	1199.4	1204.1	1206.5	1213.6	26

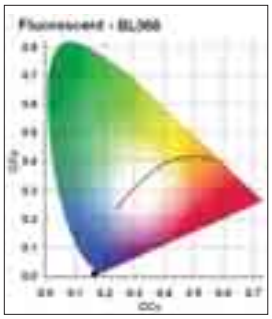




	A min	A max	B min	B max	C or D min	C or D max	d min	d max
22W	149.1	155.6	147.6	157.2	203.2	215.9	26.2	30.9







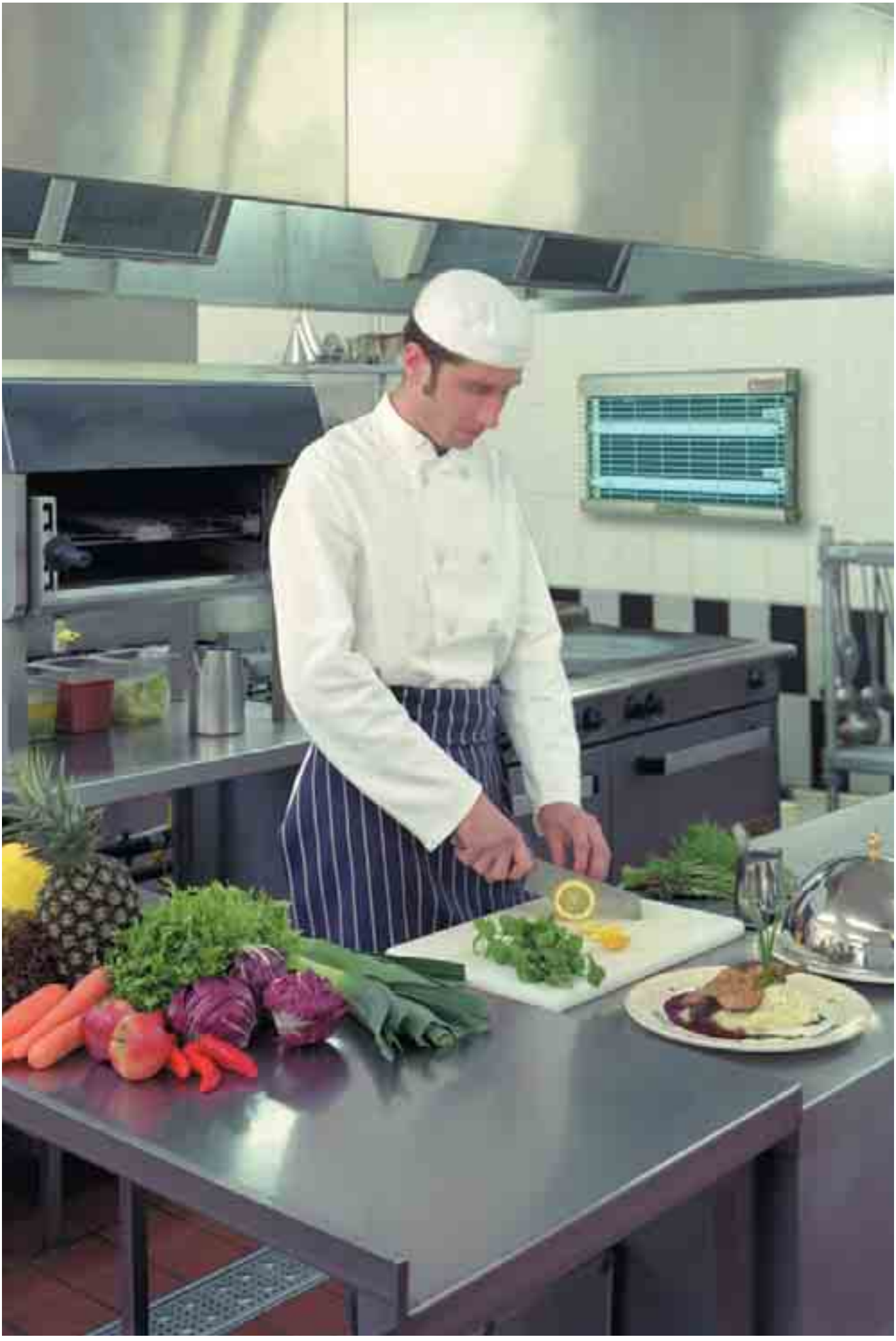
FEATURES

- Excellent fragment retention in the event of breakage
- The protective FEP coating meets the IEC60068-2-75 Pendulum Hammer test (5 Joule) and the 4m drop test, demonstrating excellent glass retention in the event of accidental lamp breakage
- The 97% UV-A transmission of FEP maintains maximum insect attraction
- No discolouration or yellowing of shatter resistant coating during the entire lamp life (> 10,000 hrs)
- The FEP material does not degrade during life. Versions employing PET coatings become brittle, and may not contain fragments. PET is also less transparent for UV-radiation
- The coating withstands up to 200°C in both open and enclosed IP65 fittings. The melting temperature is 260°C
- Meets all necessary regulations for resistance to heat and fire, and does not support combustion when exposed to naked flame or excessive heat. It passes the 850°C Glow Wire Test
- Satisfies the requirements of the International Food Standard (IFS 2004)
- FDA approved, in compliance with 21CFR177.1550 Regulatory Compliance Status
- Satisfies the requirements of the BRC (British Retail Consortium) leading supermarkets global standard. In paragraph 3.2.2.6.2 it states “All bulbs and strip lights, including those on electric fly killer units, where they constitute a risk to products, shall be protected by shatterproof plastic diffusers, sleeve covers or with a shatterproof protective coating”

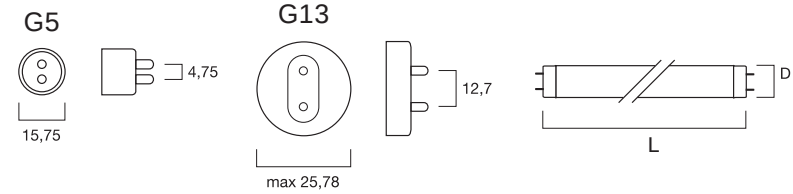
APPLICATIONS

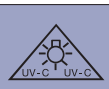
- Insect attraction in restaurants, kitchens, food shops, supermarkets
- Food processing plants
- Pharmaceutical industry
- The risk of glass and mercury contamination is strongly decreased
- Help to avoid injury and loss of production time

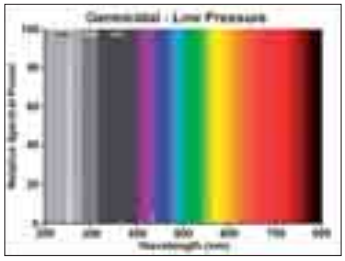
Code	Item description	Watt W	Volt V	Current A	Lamp Colour	Cap	Cap to Cap Lamp Length mm	Packing Quantity
Blacklight BL350 - FEP TOUGHCOAT™								
0000044	F8W T5 BL350 TOUGHCOAT™	8	56	0,145	BL350	G5	288	25
0000133	F15W T8 BL350 TOUGHCOAT™	15	55	0,310	BL350	G13	437	25
0000127	F20W T12 BL350 TOUGHCOAT™	20	57	0,370	BL350	G13	590	25
0000128	F40W T12 2ft BL350 TOUGHCOAT™	40	47	0,880	BL350	G13	590	25
0000121	F40W T12 4ft BL350 TOUGHCOAT™	40	103	0,430	BL350	G13	1199	25
0000132	FC22W BL350 TOUGHCOAT™	22	62	0,400	BL350	G10q	216	12
Blacklight BL368 - FEP TOUGHCOAT™								
0000124	F15W T8 BL368 TOUGHCOAT™	15	55	0,310	BL368	G13	437	25
0000125	F20W T12 BL368 TOUGHCOAT™	20	57	0,370	BL368	G13	590	25
0000126	F40W T12 2ft BL368 TOUGHCOAT™	40	47	0,880	BL368	G13	590	25

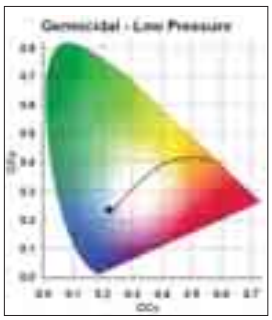


Germicidal Linear









FEATURES

- Lamps radiate more than 85% of their energy in the UV-C spectrum at 253.7nm
- Shape, electrical characteristics and lighting circuits are similar to general fluorescent lamps
- The majority of germicidal lamps operate most efficiently in still air at an ambient temperature of 25°
- All lamps are Ozone Free

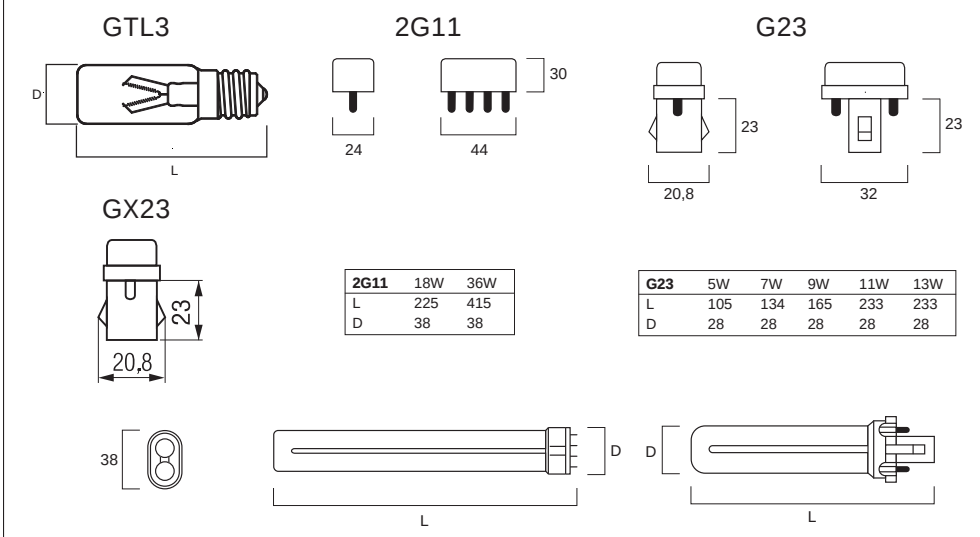
APPLICATIONS

- Water purification
- Destruction of bacteria, viruses, mould spores and other micro-organisms
- Sterilisation of air, gases, liquids and surfaces
- Typical application areas are hospitals, dairies, bakeries, breweries
- Disinfection of drinking water, swimming pools, air conditioning systems
- Industrial graphic equipment.
- Fluorescent effects
- Mineral detection
- Erasing EEPROM memories

DIRECTIONS FOR USE

- The radiation from these lamps is very harmful to eyes and skin. Always protect your eyes and skin against radiation.
- Germicidal lamps must only be used in appropriate equipment and applications.
- When using UV-C emitting lamps, the official reference guides and the current industrial safety guideline must be followed.
- Maximum Permissible Exposure Time (MPET) can be established for a given range of wavelengths. For example: 1 minute/day at a distance of 30cm.
- Germicidal lamps emit UV-C radiation and must not be used for general lighting purposes.

Ordering Code	Item Description	Watt W	Voltage V	Current A	UV output at 25°C W	Cap	L mm	D mm	life hrs	Packing Quantity
0002328	G4 T5	4	29	0.170	0.8	G5	136	16	6000	50
0002216	G6 T5	6	42	0.160	1.7	G5	212	16	6000	50
0000501	G8T5	8	56	0.145	2.5	G5	288	16	6000	24
0000507	G11 T5	11	37	0,330	2,2	G5	212	16	8000	50
0000508	G16 T5	16	50	0,350	3,2	G5	288	16	8000	24
0002482	G10 T8	10	46	0.230	2.6	G13	330	26	6000	10
0000502	G15 T8	15	55	0.310	4.9	G13	437	26	8000	24
9000526	G25 T8	25	46	0.600	6.9	G13	436	26	8000	24
0000503	G30 T8	30	96	0.365	13.4	G13	894	26	8000	24
0000504	G36 T8	36	103	0.430	15.5	G13	1198	26	8000	20
0002208	G55 T8	55	83	0.770	18.0	G13	893	26	8000	96
0002217	G58 T8	58	110	0.670	20.0	G13	1500	26	5000	12
9002500	G20 T10	20	58	0.360	7.5	G13	590	34	8000	10
9002327	G40 T10	40	106	0.420	19.8	G13	1199	34	8000	10



2G11	18W	36W
L	225	415
D	38	38

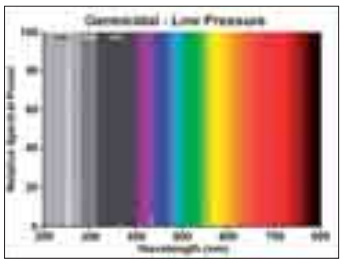
G23	5W	7W	9W	11W	13W
L	105	134	165	233	233
D	28	28	28	28	28

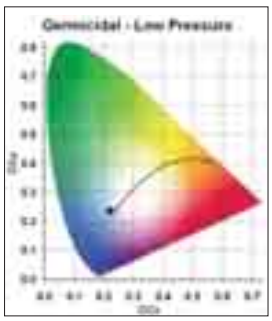
FEATURES

- Lamps radiate more than 85% of their energy in the UV-C spectrum at 253.7nm
- Shape, electrical characteristics and lighting circuits are similar to general fluorescent lamps
- The majority of germicidal lamps operate most efficiently in still air at an ambient temperature of 25°
- All lamps are Ozone Free
- GTL3 replaces older G4S11 types

APPLICATIONS

- Water purification
- Destruction of bacteria, viruses, mould spores and other micro-organisms
- Sterilisation of air, gases, liquids and surfaces
- Typical application areas are hospitals, dairies, bakeries, breweries
- Disinfection of drinking water, swimming pools, air conditioning systems
- Industrial graphic equipment
- Fluorescent effects
- Mineral detection
- Erasing EPROM memories





DIRECTIONS FOR USE

- The radiation from these lamps is very harmful to eyes and skin. Always protect your eyes and skin against radiation.
- Germicidal lamps must only be used in appropriate equipment and applications.
- When using UV-C emitting lamps, the official reference guides and the current industrial safety guideline must be followed.
- Maximum Permissible Exposure Time (MPET) can be established for a given range of wavelengths. For example: 1 minute/day at a distance of 30cm.
- Germicidal lamps emit UV-C radiation and must not be used for general lighting purposes.

Ordering Code	Item Description	Watt W	Voltage V	Current A	UV output at 25°C W	Cap	L mm	D mm	life hrs	Packing Quantity
9002460	GTL 3	3	10.5	0.300	0.16	E17	63	20	2000	50
0025046	G5 Lynx-S	5	35	0.180	1.0	G23	85	28	8000	10
0025050	G9 Lynx-S	9	59	0.170	2.4	G23	145	28	8000	10
0025051	G11 Lynx-S	11	89	0.160	3.6	G23	215	28	8000	10
0025047	G13 Lynx-S	13	59	0.285	3.4	GX23	170	28	8000	10
0025049	G18 L	18	58	0.375	5.5	2G11	225	38	8000	25
0025048	G36 L	36	106	0.435	12.0	2G11	415	38	8000	25
0025045	G55 L	55	103	0.540	17.0	2G11	533	38	8000	25

Airfields require lighting to provide aircraft with accurate information on positioning and direction. Sylvania offers a range of halogen capsule and reflector lamps for runways and taxiways. In such a critical 24/7 environment, all Airfield lighting must be of the highest quality.

Sylvania lamps are also used internally in aircraft cabins throughout the world.

Special incandescent lamps are supplied to local authority, government and maintenance companies for use in traffic lights. With an exceptional average life of 8000hrs, these lamps have a reinforced filament in order to absorb shocks.

TRAFFIC 91

Airfield Capsules PK30d base **92**
Airfield Capsule Lamps **93**
Airfield Reflector Lamps MR16 **94**
Airfield Lynx-L **95**
Traffic Signal Incandescent Ball **96**
Traffic Signal Incandescent Mushroom **97**

Airfield Capsule Pk30d base

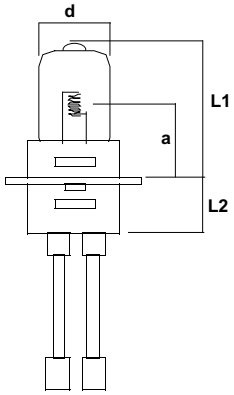
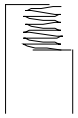


Fig 1



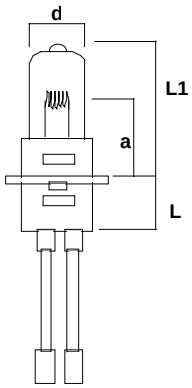


Fig 2

FEATURES

- The pre-focus base allows for optimal alignment of the filament
- Very easy replacement, no adjustment necessary
- Cable connections reduce the risk of pinch seal overheating and molybdenum foil oxidation
- Current controlled (6,6A)
- Constant colour temperature
- Dimmable operation possible

APPLICATIONS

- Taxiway lights
- Approach lights
- Runway edge lights
- Precision Approach Path Indicator (PAPI)

DIRECTIONS FOR USE

- Bulb should never be touched with bare fingers

Ordering Code	Description	L-nr	LIF-code	Wattage W	Current A	Dia d mm	L1 max mm	L2 max mm	Luminous flux Lm	Average Life h	LCL a mm	Filament Type	Connector Type	Fig. Nr	Packing Quantity
0021570	45W 6.6A Pk30d Ma	L2600 M	J1/76	45	6,6	13,5	37	21	800	1000	16	C8	male	1	50
0021571	45W 6.6A Pk30d Fem	L2601 F	J1/77	45	6,6	13,5	28	27	800	1000	16	C8	female	1	50
0021572	45W 6.6A Pk30d Ma	L2601 M	J1/77	45	6,6	13,5	28	27	800	1000	16	C8	male	1	50
0021573	45W 6.6A Pk30d Fem	L2602 F		45	6,6	13,5	32	23	800	1000	20	C8	female	1	50
0021574	45W 6.6A Pk30d Ma	L2602 M		45	6,6	13,5	32	23	800	1000	20	C8	male	1	50
0021575	65W 6.6A Pk30d Fem	L2603 F		65	6,6	13,5	32	21	1450	1000	20	CBAR-6	female	2	50
0021576	65W 6.6A Pk30d Ma	L2603 M		65	6,6	13,5	32	21	1450	1000	20	CBAR-6	male	2	50
0021577	100W 6.6A Pk30d Fem	L2604 F	J1/79	100	6,6	13,5	32	23	2700	1000	20	CBAR-6	female	2	50
0021578	100W 6.6A Pk30d Ma	L2604 M	J1/79	100	6,6	13,5	32	23	2700	1000	20	CBAR-6	male	2	50
0021579	100W 6.6A Pk30d Fem	L2605 F	J1/80	100	6,6	13,5	41	17	2700	1000	20	CBAR-6	female	2	50
0021580	100W 6.6A Pk30d Ma	L2605 M	J1/80	100	6,6	13,5	41	17	2700	1000	20	CBAR-6	male	2	50
0021581	150W 6.6A Pk30d Fem	L2606 F	J1/83	150	6,6	13,5	35	23	3600	1000	20	CBAR-6	female	2	50
0021582	150W 6.6A Pk30d Ma	L2606 M	J1/83	150	6,6	13,5	35	23	3600	1000	20	CBAR-6	male	2	50
0021583	200W 6.6A Pk30d Fem	L2607 F	J1/84	200	6,6	13,5	43	21	4800	1000	20	CC6	female	2	50
0021584	200W 6.6A Pk30d Ma	L2607 M	J1/84	200	6,6	13,5	43	21	4800	1000	20	CC6	male	2	50

Airfield Capsule Lamps

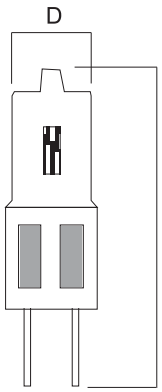


Fig 1

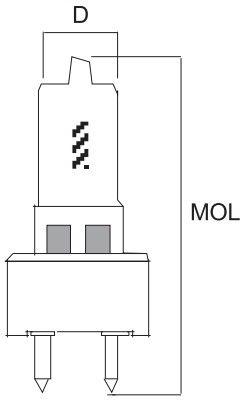


Fig 2

Code	M.O.L.	LCL	D
0021479	45.0	33	11.0
0022213	45.0	33	11.0
0021480	45.0	33	11.0
0022214	45.0	33	11.0
0022215	45.0	33	11.0
0022212	47.0	33	13.5
0021491	47.0	33	13.5
0022211	47.0	33	13.5
0021492	47.0	33	13.5
0021757	44.0	25,4	11.4
0021686	44.0	25,4	11.4
0024529	57.0	39,1	13.5
0021683	57.0	39,1	13.5
0021696	57.0	39,1	13.5
0024531	57.0	39,1	13.5
0024530	57.0	39,1	13.5

L2513
G6.35

L2502
GZ9.5

FEATURES

- Current controlled (6.0, 6.6A & 8.33A) lamps
- Long reliable through life performance
- Complete interchangeability for existing capsule types
- Constant colour temperature
- Dimming possible
- Infra red radiation output allowing operation in toughest winter conditions

APPLICATIONS

- Approach lights
- Runway edge lights
- Threshold lights
- Runway lights
- Taxiway lights
- Visual approach slope indicator systems

DIRECTIONS FOR USE

- Bulb should never be touched with bare fingers

Code	Item description	Watt W	Current A	Cap	Light Output lm	Filament type	Rated Average life h	Burning position	Fig. #	Packing quantity
0021479	L2516 30W 6.6A J1/74	30	6.6	G6.35	400	C-8	1500	BD+/-90°	1	50
0022213	L2510 36W 6.0A J1/59	36	6.0	G6.35	610	C-8	1200	BD+/-90°	1	50
0021480	L2517 36W 6.6A J1/75	36	6.6	G6.35	610	C-8	1500	BD+/-90°	1	50
0022214	L2511 45W 6.6A J1/57	45	6.6	G6.35	960	C-8	1200	BD+/-90°	1	50
0022215	L2512 65W 6.6A	65	6.6	G6.35	1450	C-8	1200	BD+/-90°	1	50
0022212	L2513 100W 6.6A J1/58	100	6.6	G6.35	2300	FC-6	1200	BD+/-90°	1	50
0021491	L2518 100W 8.33A J1/66	100	8.33	G6.35	2300	C-6	1200	BD+/-90°	1	50
0022211	L2514 200W 6.6A J1/39	200	6.6	G6.35	4700	FC-6	1200	BD+/-90°	1	50
0021492	L2519 200W 8.33A J1/65	200	8.33	G6.35	4700	C-8	1200	BD+/-90°	1	50
0021757	L2500 30W 6.6A EXL	30	6.6	GZ9.5	400	C-8	1000	BD+/-90°	2	50
0021686	L2501 45W 6.6A EXM	45	6.6	GZ9.5	960	C-8	1000	BD+/-90°	2	50
0024529	L2502 150W 6.6A EWR/1	150	6.6	GZ9.5	3600	FC-6	1000	BD+/-90°	2	50
0021683	L2503 175W 6.6A	175	6.6	GZ9.5	4700	C-8	1000	BD+/-90°	2	50
0021696	L2504 200W 6.6A EZL	200	6.6	GZ9.5	5000	FC-6	1000	BD+/-90°	2	50
0024531	L2505 115W 6.6A EVV	115	6.6	GZ9.5	2700	FC-6	1000	BD+/-90°	2	50
0024530	L2502 150W 6.6A EWR/2	150	6.6	GZ9.5	4400	FC-6	1000	BD+/-90°	2	50

Airfield Reflector Lamps MR16

L2372

Code	Cable Length	M.O.L.	D
0021484	100	45.6	50.6
0021483	100	45.6	50.6
0021494	110	45.6	50.6
7024522	122	45.6	50.6
7221518	135	45.6	50.6
0021496	110	45.6	50.6
0021497	100	45.6	50.6
0021489	100	45.6	50.6
0021487	110	45.6	50.6
0021488	100	45.6	50.6
7024526	122	50.0	50.6
0021498	110	50.0	50.6
0021499	100	50.0	50.6

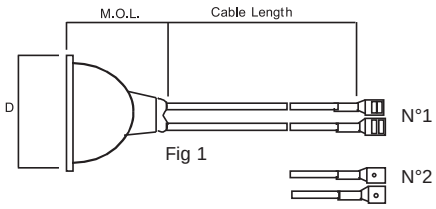


Fig 1

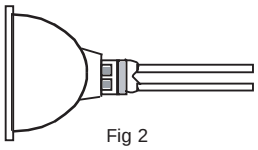


Fig 2

N°1 = Female
N°2 = Male
N°3 = Bullet

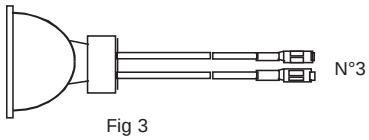


Fig 3

FEATURES

- Current controlled (6.0, 6.6A) lamps
- Temperature resistant hard coated reflector
- Optimum alignment in the reflector
- High luminaire efficiency
- Constant colour temperature (3000K) over life
- Long life (1500hrs)
- Infra red radiation output allowing operation in toughest winter conditions
- Cable connections reduce the risk of pinch seal overheating and molybdenum foil oxidation

APPLICATIONS

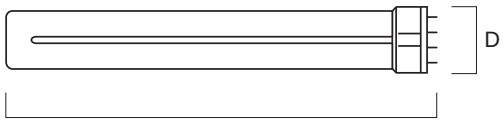
- Runway lights
- Taxiway lights
- Approach lights
- Threshold lights
- Runway edge lights
- Visual approach slope indicator systems
- Taxiway guidance signs

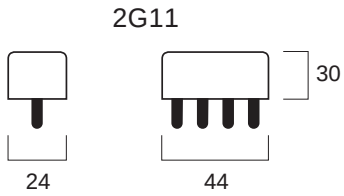
DIRECTIONS FOR USE

- Bulb should never be touched with bare fingers

Code	Item description	Watt W	Current A	Con-nector	Con-nector type	Average Life h	Peak intensity (cd)	Beam Angle 50% (°)	Fig. #	Packing quantity
0021483	L2373 30W 6.6A MR16	30	6.6	2	Male	1500	19000	6	1	10
0021484	L2372 36W 6A MR16	36	6.0	2	Male	1500	24000	5	1	10
0021494	L2378 36W 6.6A MR16	36	6.6	1	Female	1500	19000	6	2	10
7024522	L2352 45W 6.6A MR16	45	6.6	3	Bullet	1500	22000	7	2	10
7221518	L2354 48W 6.6A MR16	48	6.6	1+2	Fem/Male	1000	30000	6	1	10
0021496	L2358 48W 6.6A MR16	48	6.6	1	Female	1500	22000	7	1	10
0021497	L2359 48W 6.6A MR16	48	6.6	2	Male	1500	22000	7	1	10
0021489	L2371 48W 6.6A MR16	48	6,6	1	Female	1500	11000	13	1	10
0021487	L2374 60W 6.6A MR16	60	6.6	1	Female	1500	26000	7.5	1	10
0021488	L2375 60W 6.6A MR16	60	6.6	1	Female	1500	11000	15	1	10
7024526	L2362 105W 6.6A MR16	105	6.6	3	Bullet	1000	33000	10	3	10
0021498	L2368 105W 6.6A MR16	105	6.6	1	Female	1000	33000	10	3	10
0021499	L2369 105W 6.6A MR16	105	6.6	2	Male	1000	33000	10	3	10

2G11	24W
L	320
D	38





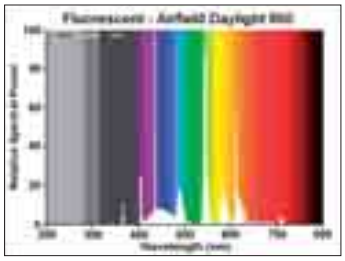
universal

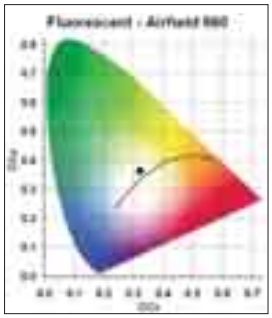
FEATURES

- Lamps with very specific colour point (CCx: 0,319, CCy: 0,369 after 100 h) and colour temperature: 6000K
- Colour point responds to the International Airfield Standard
- Very long reliable through life performance
- High colour rendering: Ra 85

APPLICATIONS

- Used in guidance signs to mark direction, destination and boundary



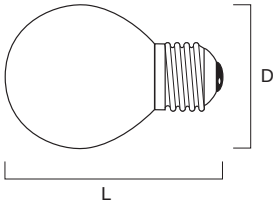


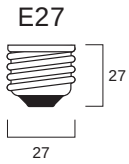
DIRECTIONS FOR USE

- Lamp ambient temperature should not be lower than -30°C
- Burning position: any

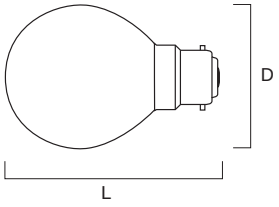
Code	Item description	Watt W	Current A	Operating Voltage	M.O.L. mm	D mm	Cap	Colour Temp. K	CCx	CCy	Luminous Flux lm	Average Life h	Packing quantity
0025682	Lynx-L 24W 860 Airfield	24	345	50	320	40	2G11	6000	0,319	0,369	1700	15000	10

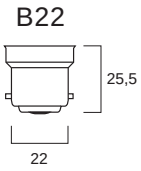
Traffic Signal Incandescent Ball





Code	L	D	LeL
0009873	71	45	53
0009869	70	45	52
0009893	71	45	53
0009891	71	45	53
0009894	70	45	52
0009895	71	45	53





FEATURES

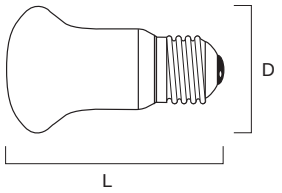
- Round (45mm) envelope
- Robust construction: the filament is held by extra supports to resist vibration
- Average rated life: 8000 hours
- Krypton filled lamps for increased life time
- Available in E27 and B22 base

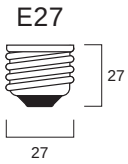
APPLICATIONS

- Traffic lights and signs
- Private parkings
- Tramway traffic lights
- Industrial sites

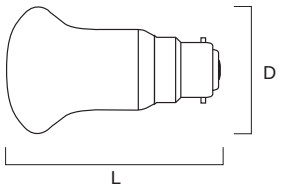
Ordering Code	Item description	Finish	Gas Fill	Watt W	Voltage V	Cap	Avg. Life (h)	Rated Lumens	Packing Quantity
0009873	25W 230V E27	Clear	Krypton	25	230	E27	8000	150	100
0009869	25W 230V B22	Clear	Krypton	25	230	B22	8000	150	100
0009893	40W 230V E27	Clear	Krypton	40	230	E27	8000	320	100
0009891	40W 130V E27	Clear	Krypton	40	130	E27	8000	390	100
0009894	40W 230V B22	Clear	Krypton	40	230	B22	8000	320	100
0009895	40W 260V E27	Clear	Krypton	40	260	E27	8000	260	100

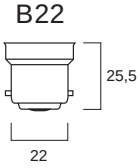
Traffic Signal Incandescent Mushroom





Code	L	D
0009718	86	50
0009716	86	50
0009719	86	50
0009720	86	50
0009753	86	50
0009752	86	50
0009749	86	50
0009754	95	60





FEATURES

- Mushroom shaped (50mm and 60mm) envelope
- Robust construction: the filament is held by extra supports to resist vibration
- Average rated life: 8000 hours
- Krypton filled lamps for increased lifetime
- Available in E27 and B22 base

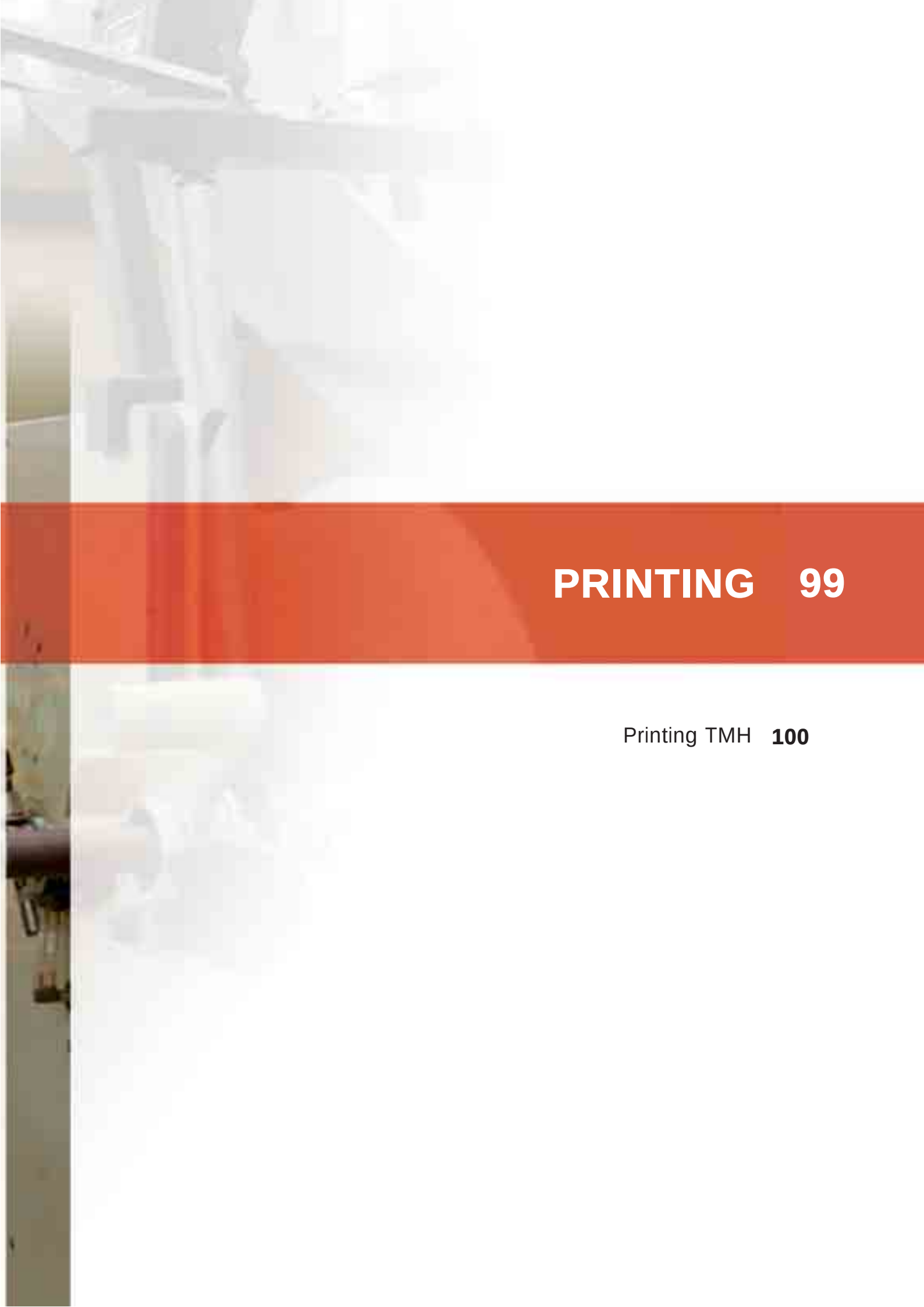
APPLICATIONS

- Traffic lights and signs
- Private parkings
- Tramway traffic lights
- Industrial sites

Ordering Code	Item description	Finish	Gas Fill	Watt W	Voltage V	Cap	Avg. Life (h)	Rated Lumens	Packing Quantity
0009718	55W 230V E27	Clear	Krypton	55	230	E27	8000	465	100
0009716	55W 130V E27	Clear	Krypton	55	130	E27	8000	545	100
0009719	55W 230V B22	Clear	Krypton	55	230	B22	8000	465	100
0009720	60W 230V B22	Clear	Krypton	60	230	B22	8000	510	100
0009753	70W 230V E27	Clear	Krypton	70	230	E27	8000	645	100
0009752	70W 130V E27	Clear	Krypton	70	130	E27	8000	755	100
0009749	70W 230V B22	Clear	Krypton	70	230	B22	8000	645	100
0009754	100W 230V E27	Clear	Krypton	100	230	E27	8000	1030	100
0009760	100W 230V B22	Clear	Krypton	100	230	B22	8000	1030	100

The applications of metal halide lamps extend well beyond the boundaries of general lighting, where they play an important role in countless industrial processes. Stretching from traditional diazo printing techniques to the production of DVD's, photo-polymerisation of plastics or the UV-curing of inks, numerous applications rely on high efficiency sources of Ultra-Violet radiation.

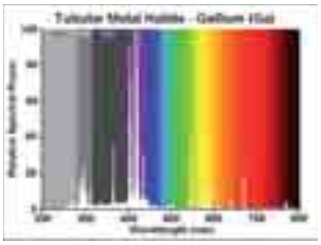
Sylvania offers a broad variety of Tubular Metal Halide lamps, featuring compact dimensions and very high loading. These powerful sources are renowned for their insensitivity to variations in ambient temperature. By adding different metal halide salts to the discharge tube it is possible to achieve a spectral power distribution that is ideally suited to a particular process. The high UV efficiency is typically achieved by mixing the halides of iron, cobalt, gallium, lead or tin to the mercury discharge.

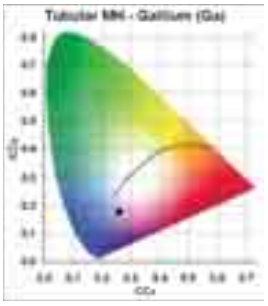


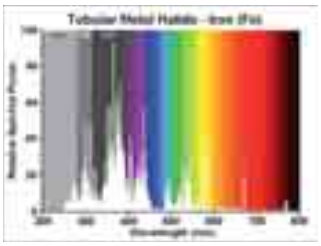
PRINTING 99

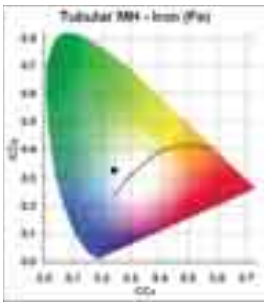
Printing TMH **100**

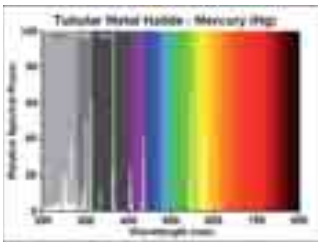
Printing TMH (Tubular Metal Halide)

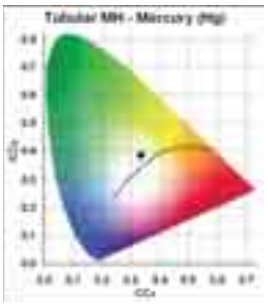












UV-C UV-C

horizontal ±10°

Fig. 1

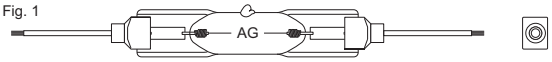


Fig. 2

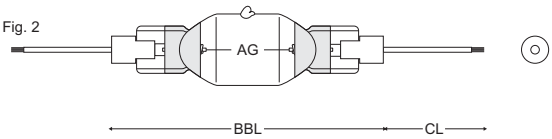


Fig. 3

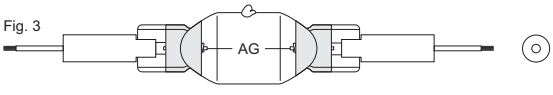


Fig. 4

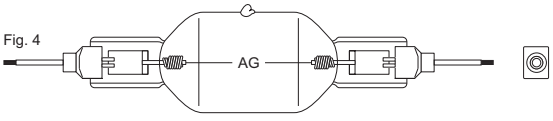


Fig. 5

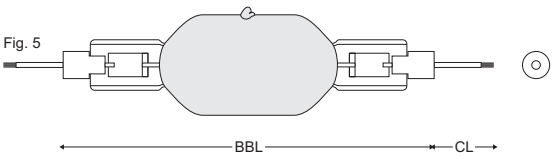


Fig. 6

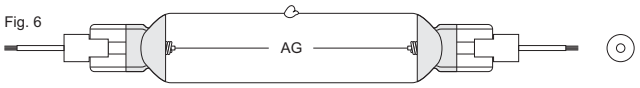


Fig. 7

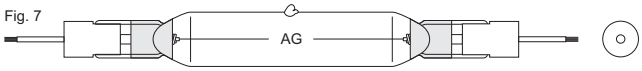


Fig. 8

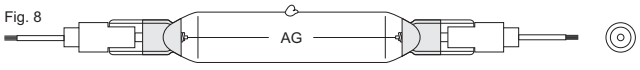


Fig. 9

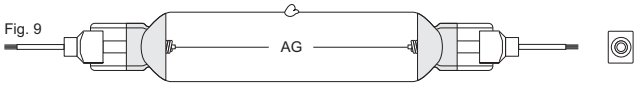
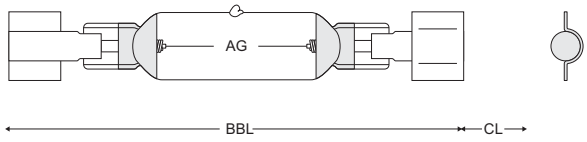


Fig. 10

Fig. 11



Printing TMH (Tubular Metal Halide)

FEATURES

- All TMH lamps contain mercury, but in most lamps one or more metals are added.
- Most common metals used are Gallium (Ga), Iron (Fe) and Lead (Pb). All three metals result in a specific and complex multiline spectrum
- These Metal Iodides radiate in the following spectrum band:
  Gallium (Ga) - 400-420nm
  Iron (Fe) - 350-450nm
  Lead (Pb) - strong lines at 364-368 and 406 nm

APPLICATIONS

Tubular Metal Halide lamps are used for reprographic and photo-chemical applications including the following:

- Industrial Processing: chemical milling, printed circuit boards, photo-engraving, photo-rotogravure, plastics polymerization, resin curing
- Reprographic: photocopying, plate making, microfilm and microfiche duplication, projection
- Biological: water purification, germicidal, bacteriological, medical/cosmetic

DIRECTIONS FOR USE

- Tubular metal halide lamps require special ballasting devices. They provide extra starting voltage and the proper current and are usually particular to each lamp type.
- Operating lamps emit ultraviolet radiation - avoid harmful exposure to eyes and skin.
- For optimal functioning a system of cooling the lamps has to be foreseen
- Lamps operating at a higher wattage than nominal will have reduced life.
- Burning position: horizontal ±10°

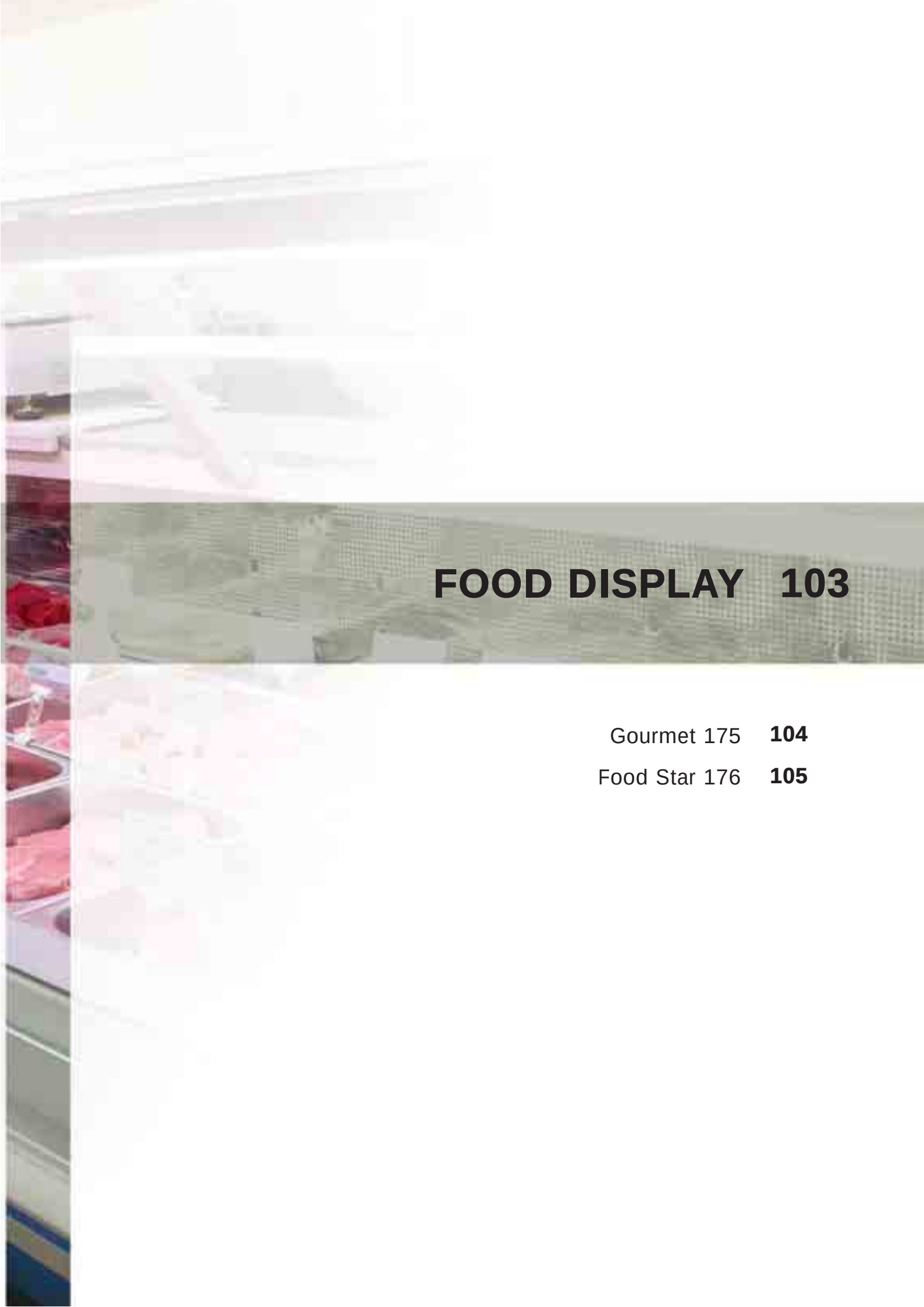
Ordering Code	Sylvania Ref.	Watt W	Voltage V	Ampere A	Fill	Life hrs	Burning Position	Base	Cable length mm (CL)	Arc gap mm (AG)	Base to base length mm (BBL)	Diameter mm	Cable End	Fig No.	Packing Quantity
0024360	M114	400	125	4.0	Ga + Pb	500	p10°	R	280	44	110	18.5	None	1	10
7224327	M024.1	1000	100	11.5	Ga	500	p10°	Q10L	95	30	128	26	¼" Receptacle	3	10
0024345	M059	1000	100	10.5	Fe+Co	500	p10°	Q10L	95	25	130	24.5	¼" Receptacle	3	1
7224363	M125.17	1000	135	8.0	Ga + Pb	500	p10°	R	130	75	160	26	M5 Ring	9	10
7277058	UHA 220i	1900	210	10.0	Hg	1000	p10°	Q17-13.5	95	220	330	21	M5 Ring	8	1
0024337	M038	2000	240	9.0	Ga + Pb	500	p10°	R	285	132	218	33	none	9	10
0024343	M058	2000	200	11.0	Fe + Sn	500	p10°	Q10S	110	50	130	29	¼" Receptacle	2	10
7224369	M129	2000	145	15.0	Fe	500	p10°	Q10L	360 Frosted		136	29	M5 Ring	5	10
7223480	M129.22	2000	145	15.0	Fe	500	p10°	Q10L	360	45	136	29	M5 Ring	3	10
7224329	M025	2000	200	11.5	Ga	500	p10°	Q10S	110	50	130	29	¼" Receptacle	2	10
7224333	M027.3	2000	200	11.5	Ga	500	p10°	Q10L	75	56	185	29	¼" Receptacle	3	10
7224336	M036.1	2000	210	11.0	Ga	500	p10°	Q10S	100	100	172	26	M5 Ring	6	10
7224338	M041.15	2000	200	11.0	Ga	500	p10°	R	85	100	172	26	¼" Receptacle	9	10
7224354	M073	2000	200	11.5	Ga	500	p10°	Q10S	85	56	135	29	¼" Receptacle	2	10
7224364	M128	3000	235	13.5	Ga	500	p10°	Q16	90	150	270	19.5	¼" Receptacle & M5 Ring	7	10
0024331	M026	4000	400	11.5	Ga	500	p30°	Q10S	85	105	180	29	¼" Receptacle	6	10
7224334	M028.4	4000	380	11.5	Ga	500	p10°	Q10S	85	105	180	29	¼" Receptacle	6	10
0024341	M057	4000	400	10.5	Fe	500	p10°	Q10S	85	105	180	29	¼" Receptacle	6	1
0024326	M022	4500	300	15.0	Ga	500	p10°	R	150	110	205	33	none	9	10
7224298	M250.21	4500	260	15.5	Fe	500	p10°	R	250	50	140	38.3	none	4	10
7224349	M061	4500	260	15.5	Fe	500	p10°	JF	/	105	229	29	none	11	10
7224358	M112	4500	260	15.5	Fe	500	p10°	JF	/	105	229	29	none	11	10
7224359	M113	4500	260	15.5	Ga	500	p10°	JF	/	105	229	29	none	11	10
7224365	M223	4500	280	15.0	Ga	500	p10°	JF	/	100	224	33	none	11	10
0024347	M060	5000	400	12.5	Ga	500	p10°	Q10S	110	160	248	29	M5 Ring	6	1
0024348	M060.2	5000	400	12.5	Ga	500	p10°	QF	120	150	243	29	¼" Receptacle	10	10
0024371	M069.1	5000	380	13.5	Fe	500	p10°	Q10S	110	160	248	29	M5 Ring	6	1
0024353	M069.2	5000	400	12.5	Fe	500	p30°	QF	120	160	243	29	¼" Receptacle	10	1

For a cross reference table to other manufacturer types, please refer to p.113

Fill
Ga= Gallium
Fe=Iron
Pb= Lead
Hg=Mercury
Sn= Tin

Bases
RX7s
Q
QF
JF

With a specially modified spectrum, food display lamps are the perfect lighting for butchers, bakeries and supermarkets. In particular, meat products can be displayed very attractively using this form of specialist lamp. Food display lamps have an excellent colour rendering and are direct retro-fit for conventional linear fluorescent lamps.



FOOD DISPLAY 103

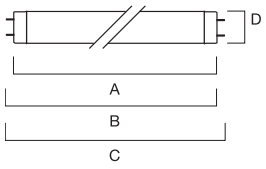
Gourmet 175 **104**

Food Star 176 **105**

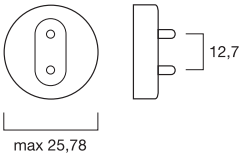
Gourmet 175

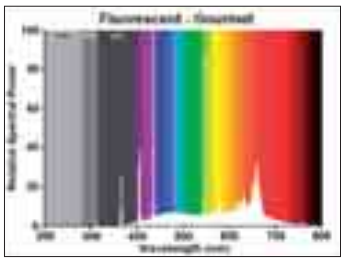
universal

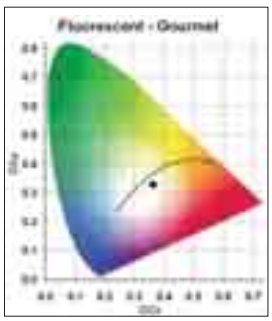
	A max	B min	B max	C max	D nom
18W	589.8	594.5	596.9	604.0	26
30W	894.6	899.3	901.7	908.8	26
36W	1199.4	1204.1	1206.5	1213.6	26
58W	1500.0	1504.7	1507.1	1514.2	26
70W	1763.8	1768.5	1770.9	1778.0	26



G13







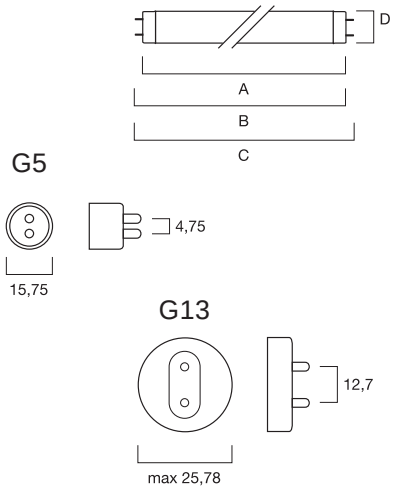
- Special T8 fluorescent lamps to display meat products
- The perfect lighting for butcher shops, restaurants and supermarkets
- Excellent colour rendering Class 1B (RA 80-89)
- Colour temperature 3700K
- Direct retrofit for all T8 Standard and T8 Luxline Plus lamps

Code	Item Description	Watt W	Volt V	Current A	Colour	CRI	Cap	Colour Temp K	Luminous Flux Lm	Packing Quantity
0001810	F18W/175 Gourmet	18W	57V	0.370A	Gourmet	1B	G13	3700	650	25
0001971	F30W/175 Gourmet	30W	96V	0.365A	Gourmet	1B	G13	3700	1100	25
0001811	F36W/175 Gourmet	36W	103V	0.430A	Gourmet	1B	G13	3700	1500	25
0001812	F58W/175 Gourmet	58W	110V	0.670A	Gourmet	1B	G13	3700	2400	25
0002540	F70W/175 Gourmet	70W	128V	0.700A	Gourmet	1B	G13	3700	2800	25

	A max	B min	B max	C max	D nom
14W	549	553.7	556.1	563.2	16
21W	849	853.7	856.1	863.2	16
28W	1149	1153.7	1156.1	1163.2	16
35W	1449	1453.7	1456.1	1463.2	16

	A max	B min	B max	C max	D nom
36W	1199.4	1204.1	1206.5	1213.6	26
58W	1500.0	1504.7	1507.1	1514.2	26

	A max	B min	B max	C max	D nom
36W/1m	970.0	974.1	977.1	984.2	26



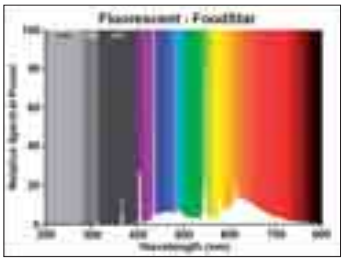
universal

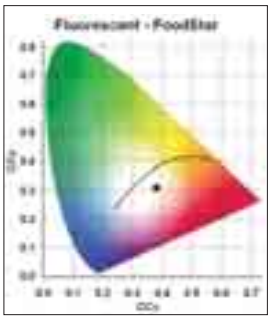
FEATURES

- Foodstar lamps feature a specially tailored spectrum that complements the natural colours of meats, breads and other food products
- Illuminates foods in their optimum colours for an irresistible presentation to the customer
- Truthful colour rendering does not disturb the natural colours of the products
- Manufactured in compliance with the DIN 10504 standard.

APPLICATIONS

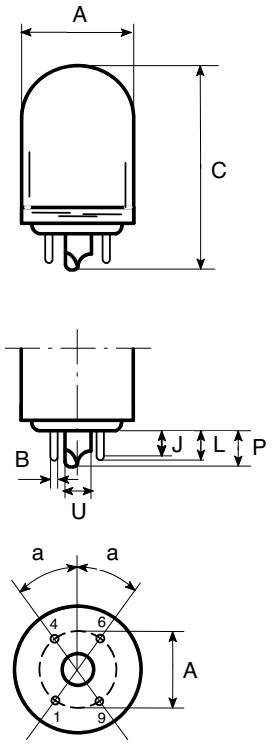
- Perfect lighting of food products in butchers, bakeries and supermarkets





Code	Item description	Watt W	Volt V	Current A	Cap to cap Lamp length mm	CRI	Cap	Colour Temp. K	Luminous Flux lm	Packing Quantity
0001819	FHE 21W T5 176 FOODSTAR	21W	126	0,165	849	84	G5	3500	1050	25
0001820	FHE 28W T5 176 FOODSTAR	28W	166	0,170	1149	84	G5	3500	1400	25
0001821	FHE 35W T5 176 FOODSTAR	35W	205	0,175	1449	84	G5	3500	1750	25
0001816	F36W T8 176 FOODSTAR	36W	103	0,430	1200	84	G13	3500	1800	25
0001817	F36W T8 1M 176 FOODSTAR	36W	80	0,560	970	84	G13	3500	1600	25
0001818	F58W T8 176 FOODSTAR	58W	110	0,670	1500	84	G13	3500	2850	25

UV Phototubes



	Type 1	Type 2
ref.	max.	max.
Dimension A	13,3 mm	20.2 mm
Length C	29,0 mm	38.9 mm

ref.	min.	nom.	max.	degree
A		11.90		
B	0.95	1.00	1.06	
J	4.75	-	-	
L			7.00	
P			8.00	
U			4.00	
a				36.0

FEATURES

- Relative spectral sensitivity: 190 - 280nm
- Extremely rapid response time:
  < 3ms for high voltage cell.
  < 10ms for low voltage cell
- Directionality : sensitive to both front and side incoming radiation
- High reliability and long operational life
- Very compact design and low weight
- Dimensions comply with standard UV-Phototubes (see table)
- Standard glass base for electronic tubes according to DIN 41559 Page 1

APPLICATIONS

- Flame control devices (gas /oil)
- Flame detection devices (gas and oil combustion devices)
- Detection of electrical arcs (e.g. in high voltage devices and transformers)
- Fire alarm systems
- General UV-detection
- Detection of leakages of UV rays
- Combustion monitoring
- Fire monitoring systems

DIRECTIONS FOR USE

- Burning position: Universal
- For further details please telephone: +49 (0) 9131 793220.

APPENDIX 109

Incandescent & Halogen Cross Reference: ANSI-Sylvania **110**
Incandescent & Halogen Cross Reference: LIF-Sylvania **111**
Incandescent & Halogen Cross Reference: Japanese Code-Sylvania **111**
Incandescent & Halogen Cross Reference: Philips-Sylvania **112**
Incandescent & Halogen Cross Reference: Osram-Sylvania **113**
BriteArc Cross Reference **114**
TMH Cross Reference List **115**
Radiation Doses for Inactivating Various Microorganisms **116**
Base Types Incandescent & Halogen **118**
Base Types BriteArc / Base Types Tubular Metal Halide **119**
Base Types Fluorescent / Base Types Compact Fluorescent **120**
Filament types **121**
Burning positions **122**
Index Sylvania Code **123**

Incandescent & Halogen Cross Reference: ANSI-Sylvania

ANSI Code	SYLVANIA Code	Page
BRL	0061300	23
BRN	9060572	23
CJW/CJT	9060629	34
CNP	9060623	34
CXR/CXL	9061617	34
DDL	9060984	19
DDM	9060954	19
DED	9060967	19
DJE	0061473	30
DNF	9060743	21
DXX	0061321	26
DYR	9060716	25
DYS/DYV	9060779	25
EFM	0061341	17
EFN	0061342	17
EFP	0061344	17
EFR	0061350	17
EHJ	0061367	23
EJA	9060921	18
EJM	9061181	19
EKE	9060943	19
ELC	0061740	19
ELC/10H	0061743	19
ELC/5H	0061741	19
ELD	9060957	19
ELH	9060813	20
EME	9060822	26
EMM/EKS	9060918	21
ENH	9060940	20
ENL	0061738	19
ENX	9060846	20
EPS	9060927	25
EPV	9061016	19
EPX	9060953	19
ERV	9060812	19
ESD	9061358	20
ESY	9060962	25
EVB/BRJ	0061303	23
EVD	9060826	23
EVW	9000017	20
EWF	9060890	19
EWX	0061494	23
EWZ	0061735	30
EXC	9061109	41
EXD	9061127	41
EXE	9061128	41
EXG	9061129	41
EXR	9061039	19
EYB	0061495	23
EYM	0061520	30
EYN	0061523	30
FAD	0061371	26
FCR	0061373	23
FCS	0061374	23
FDG	0061379	26
FDS/FDT	9060924	23
FEP	9061385	27
FEX	0060884	26
FGX	0061465	23
FHB	0061391	30
FHG	0061395	30
FHS	9060850	19
(FKJ)	9061116	27
(FKP/FKK)	9061118	27
FLT	9060877	21
FLW	9061142	23
FNT	9061150	23
FRJ	9061124	27
FRM	9061126	27
FSK	9061122	27
(FTL)	9061119	27
(FVB)	9061121	27
FWR	9061548	28
FWT	9061551	28
FXL	9061768	20
GCJ (GCW)	9061542	28
GCK (GCT)	0061736	28
GCL (GCS)	9061545	28
GKV	0061734	25
H44	9020467 / 9020664	12

ANSI=American National Standards Institute

Incandescent & Halogen Cross Reference: LIF-Sylvania

LIF Code	SYLVANIA Code	Page
A1/017	9061617	34
A1/021	9060629	34
A1/037	9060623	34
A1/215	0061373	23
A1/216	0061374	23
A1/220	0061300	23
A1/223	0061367	23
A1/229	0061341	17
A1/230	0061342	17
A1/231	0061344	17
A1/232	0061350	17
A1/233	9060716	25
A1/234	0061303	23
A1/239	9060826	23
A1/244	9061731 / 9061168	24
A1/258	9060918	21
A1/259	0061740	19
A1/262	9060924	23
A1/264	9060779	24
A1/266	9060743	21
A1/268	9060927	25
CP/70 (CP/24)	9061121	27
CP/71(CP/40)	9061116	27
CP/72 (CP/43)	9061119	27
CP/73 (CP/41)	9061118	27
CP60	9061109	41
CP61	9061127	41
CP62	9061128	41
CP77	9061385	27
CP81	9061122	27
CP82	9061124	27
CP86	9061146	41
CP87	9061147	41
CP88	9061148	41
CP89	9061126	27
CP95	9061129	41

LIF Code	SYLVANIA Code	Page
F/101	9060877	21
F/109	9060967	19
F/110	9060953	19
F/111	9061016	19
F/112	9060957	19
F/114	9060984	19
M/109	0061738	19
M/40	0061733	28
M33	0061465	23
P1/12	0061379	26
P1/15	0061391 / 0061520	30
P1/19	0061395	30
P2/11	9060822	26
P2/13	0061321	26
P2/17	0061473 / 0061523	30
P2/26	0061510	30
P2/27	0060884	26
P2/35	0061327	26
P2/6	0061371	26
T/19 (T/11)	0061737 / 9061548	28
T/25 (T18)	9061542	28
T/27 (T/26)	9061545	28
T/29	9061551	28

LIF=Lighting Industry Federation (UK)

Incandescent & Halogen Cross Reference: Japanese Code-Sylvania

Japanese Code	SYLVANIA Code	Page
JCR 100V 300W	9061063	20
JC 24V 300W	9061010	23
JCD 100V 650W	9061060	25

Japanese Code	SYLVANIA Code	Page
JCP 100V 650W	9061018	25
JPD 240V 1000W	0061327	26

Incandescent & Halogen Cross Reference: Philips-Sylvania

PHILIPS	SYLVANIA	ANSI	Page
5995	9061181	EJM	19
6423	0061350	EFR	17
6550	0061303	EVB/BRJ	23
6834	0061344	EFP	17
6847	0061341	EFM	17
6853	0061342	EFN	17
6958	0061465	FGX	23
7023	0061373	FCR	23
7027	0061300	BRL	23
13095	9060940	ENH	20
13096	9060813	ELH	20
13098	9060812	ERV	19
13158	9060957	ELD	19
13163	0061740	ELC	19
13186	9061016	EPV	19
13186	9060953	EPX	19
13194	9060967	DED	19
13629	9060943	EKE	19
13630	9060890	EWF	19
13634	9060850	FHS	19
13700	9061150	FNT	23
13824	9060846	ENX	20
13830	9000017	EVW	20
14501	9060984	DDL	19
14502	9061039	EXR	19
14526	9061768	FXL	20
14527	9060921	EJA	19
14529	9060743	DNF	21
14530	9061142	FLW	23
14531	0061495	EYB	23
13120C	9061617	CXR/CXL	35
13162R	0061321	DXX	26
13477R	9060822	EME	26
5974/5973	9060924	FDS/FDT	23
6365R	0061371	FAD	26
6638P	9061126	FRM	27
6820P	9061542	GCJ (GCW)	28
6823P	9061545	GCL (GCS)	28
6823P	0061736	GCK (GCT)	28
6872P	9061122	FSK	27
6873P	9061124	FRJ	27
6897P	9061551	FWT	28
6983P	9061385	FEP	27
6986P	0061734	GKV	25
6994Z	9061118	(FKP/FKK)	27
6995Z	9061116	(FKJ)	27
6996P	9061548	FWR	28
6996P	0061737	FWP	28
7158 XHP	0061374	FCS	23
7748S	0061367	EHJ	23
7787 XHP	9060826	EVD	23
JCR 24-250 H5	0061741	ELC/5H	19
PF801R	0061379	FDG	26

Incandescent & Halogen Cross Reference: Osram-Sylvania

OSRAM	SYLVANIA	ANSI	Page
64571	0061321	DXX	26
64579	0061379	FDG	26
64607	0061341	EFM	17
64618	9060967	DED	19
64619	9060953	EPX	19
64643	9060924	FDS/FDT	23
64686	9060716	DYR	25
64716	0061734	GKV	25
64718	0061736	GCK (GCT)	28
64744	0061737	FWP	28
64789	9061118	(FKP/FKK)	27
93505	9000017	EVW	20
93506	9060940	ENH	20
93515	9061039	EXR	19
93518	9060813	ELH	20
93520	9060850	FHS	19
93525	9060846	ENX	20
93609	0061738	ENL	19
93631	9060743	DNF	21
93637	9060833	EJV	19
93638	9060943	EKE	19
93734	9061385	FEP	27
64610HLX	0061300	BRL	23
64615HLX	0061342	EFN	17
64625HLX	0061373	FCR	23
64627HLX	0061344	EFP	17
64633HLX	0061303	EVB/BRJ	23
64634HLX	0061350	EFR	17
64640HLX	0061374	FCS	23
64653HLX	0061740	ELC	19
64655HLX	0061367	EHJ	23
64656HLX	9061150	FNT	23
64663HLX	9060826	EVD	23
64737/3	9061109	EXC	41
64738/3	9061127	EXD	41
64739/3	9061128	EXE	41

BriteArc Cross Reference

BriteArc Ordering Code	Cross reference Sylvania	Philips	Osram	GE Lighting
SINGLE ENDED NON HOT RESTRIKE				
0023987	BA 150 SE NHR	-	-	-
0023958	BA 400 SE NHR	MSR 400	HSR 400/60	-
0023960	BA 575 SE NHR	-	HSR 575/60	-
0023961	BA 700 SE NHR	MSR 700	HSR 700/60	-
0023935	BA 1200 SE NHR	MSR 1200	HSR 1200/60	-
SINGLE ENDED NON HOT RESTRIKE - LONG LIFE				
0023982	BA 70 SE T 6000K	CDM-T 70 4000K	HSD 70	CMH 70
0023978	BA 150 SE T 6000K	CDM-SA/T 150 4200K	HSD 150	CMH 150
7220168	BA 200 SE D	MSD 200	HSD 200/60	-
7220169	BA 250 SE D	MSD 250	HSD 250/60	-
0023981	BA 575 SE D	MSD 575	HSD 575/72	-
SINGLE ENDED NON HOT RESTRIKE - HIGH COLOUR TEMPERATURE				
0023998	BA 250/2 SE D 8.5	MSD 250/2	HSD 250/80	CSD 250/2/SE
0024002	BA 575/2 SE D 7.2	MSR 575/2	HSR 575/72	CSR 575/2/SE
0024000	BA 575/2 SE D 8.5		-	-
SINGLE ENDED HOT RESTRIKE				
0023944	BA 200 SE HR LCL 5600K			
0023940	BA 200 SE HR 3200K			
0023941	BA 200 SE HR	MSR 200 HR	HMI 200W/SE	CSR 200/SE/HR
0023883	BA 400 SE HR	MSR 400 HR	HMI 400W/SE	CSR 400/SE/HR
0023932	BA 575 SE HR	MSR 575 HR	HMI 575W/SE	CSR 575/SE/HR
0023892	BA 400/575 SE HR DIM 3200K	-	-	-
0023992	BA 800 SE HR	-	-	CSR 800/SE/HR
0023933	BA 1200 SE HR	MSR 1200 HR	HMI 1200W/SE	CSR 1200/SE/HR
0023893	BA 1600 SE HR	-	-	-
0023934	BA 2500 SE HR	MSR 2500 HR	HMI 2500W/SE	CSR 2500/SE/HR
0023937	BA 4000 SE HR	MSR 4000 HR	HMI 4000W/SE	CSR 4000/SE/HR
DOUBLE ENDED				
0023921	BA 575 DE	MSI 575W	HMI 575W/GS	CSR 575/DE
0023917	BA 575/2 DE	MSI 575/2 DE	HTI 575/DE	CSR 575/2/DE
0023994	BA 700/2 DE S 7.5 GOLD	MSR Gold 700SA/2 DE	HTI 700W/D4/75	
0023993	BA 700/3 DE S 3.2 GOLD	-	-	-
0023922	BA 1200 DE	MSI 1200W	HMI 1200W GS	CSR 1200/DE
0023995	BA 1200 DE S 6.0	MSR Gold1200SA/DE	HTI 1200W/D7/60	CSR 1200/S/DE
0023996	BA 1200 DE S 7.2 GOLD	MSR Gold1200SA/2 DE	HTI 1200W/D7/75	-
0023923	BA 2500 DE	MSI 2500W	HMI 2500W GS	CSR 2500/DE
0023918	BA 2500 DE S		HMI 2500W/S	
0023911	BA 2500 DE A	MSA 2500 DE	HMI 2500W SFa21	
0023924	BA 4000 DE	MSI 4000W	HMI 4000W	CSR 4000/DE
0023925	BA 6000 DE	MSI 6000W	HMI 6000W	CSR 6000/DE
0023927	BA 12000 DE	MSI 12000W	HMI 12000W/GS	CSR 12000/DE

TMH Cross Reference List

Ordering Code	Sylvania Code	Watt W	Voltage V	Ampere A	Fill	Base	Arc gap mm	Theimer	Heraeus	Amba	Philips
0024360	M114	400	125	4	Ga + Pb	R7s	44	TH 530	Q 408 Z11	580X	HPM 12
7224327	M024.1	1000	100	11.5	Ga	Q10S	30	TH 1000	Q 1148 Z1	687X	HPM 1000/20
0024345	M059	1000	100	10.5	Fe+Co	Q10S	25	TH 1007	Q 1148 Z4	576X	HPA 1000/20
7224363	M125.17	1000	135	8	Ga + Pb	R	75	-	-	5189	-
7277058	UHA 220i	1900	210	10	Hg	Q17-13.5	220	-	-	4390	-
0024337	M038	2000	240	9.0	Ga + Pb	R	132	TH 2160/2030	Q 2137 Z11	571X	HPM 15
0024343	M058	2000	200	11	Fe + Sn	Q10L	50	TH 3007	Q 2128 Z4	597X	HPA 2010
7224369	M129	2000	145	15	Fe	Q10L	Frosted	TH 2817	-	-	-
7223480	M129.22	2000	145	15	Fe	Q10L	45	-	-	5217	-
7224329	M025	2000	200	11.5	Ga	Q10L	50	TH 3000	Q 2128 Z1	595X	HPM 2010
7224333	M027.3	2000	200	11.5	Ga	Q10S	56	-	-	-	-
7224336	M036.1	2000	210	11	Ga	Q10S	100	TH 2000A	-	-	-
7224338	M041.15	2000	200	11	Ga	R	100	-	-	-	-
7224354	M073	2000	200	11.5	Ga	Q10L	56	-	-	-	-
7224364	M128	3000	235	13.5	Ga	Q16	150	TH 3030	-	-	-
0024331	M026	4000	400	11.5	Ga	Q10S	105	TH 5000	Q 4128 Z1	610X	HPM 3000
7224334	M028.4	4000	380	11.5	Ga	Q10S	105	-	-	-	-
0024341	M057	4000	400	10.5	Fe	Q10S	105	TH 5007	Q 4128 Z4	612X	HPA 3000
0024326	M022	4500	300	15	Ga	R	110	TH 4080/4010	Q 4137 Z1	606 X	HPM 30
7224298	M250.21	4500	260	15.5	Fe	R	50	-	-	5139	-
7224349	M061	4500	260	15.5	Fe	JF	105	TH 4007	Q 5527 Z4	605X	-
7224358	M112	4500	260	15.5	Fe	JF	105	-	-	-	-
7224359	M113	4500	260	15.5	Ga	JF	105	-	-	5061B	-
7224365	M223	4500	280	15	Ga	JF	100	TH 4000	Q 5527 Z1	604X	-
0024347	M060	5000	400	12.5	Ga	Q10S	160	TH 5020	Q 6138 Z11	614X	HPM 4020
0024348	M060.2	5000	400	12.5	Ga	QF	150	THS 5020	Q 6139 Z1	615XS	HPM 4048
0024371	M069.1	5000	380	13.5	Fe	Q10S	160	TH 5187	Q 6138 Z4	616X	HPA
0024353	M069.2	5000	400	12,5	Fe	QF	160	THS 5027/5067	Q 6139 Z4	617XS	HPA

Ga= Gallium
Fe=Iron
Pb= Lead
Hg=Mercury
Sn= Tin

Bases
RX7s
Q
QF
JF

Radiation Doses for Inactivating Various Microorganisms

The following values relate to an inactivation of 90% at a wavelength of 254 nm, where UV radiation is particularly effective against bacteria. The radiation dose H is defined as UV power x time/irradiated area (Ws/m²). Values in bold are mean values for the respective families of microbes. Values in brackets show the range of values found in the literature. Additionally, individual examples of the microbe families are listed.

Bacteria

Bacillus (vegetative)	**32 (13-58)**
Bac. anthracis	45
Bac. Megatherium	13
Bac. paratyphosus	32
Bac. subtilis	58
Bacillus (spore)	**118 (11-365)**
Bac. Megatherium	27
Bac. subtilis	120
Bac. anthracis	45
Bac. Subtilis (ATCC6633)	365
Bacillus subtilis	11
Bac. subt. spore ATCC6633	152
Campylobacter jejuni	**29**
Clostridium tetani	**130**
Coryneb. diphteria	**34**
Citrob. freundii (ATCC8090)	**42**
Enterob. cloaca (ATCC13047)	**64**
Escherichia coli:	**45 (7-58)**
Escherichia coli	30
Escherichia coli (in air)	7
Escherichia coli (in water)	54
Escherichia coli ATCC 11229	25
Escherichia coli ATCC 25922	30
Escherichia coli K 12 AB 1157	58
Escherichia coli B/ r ATCC12407	53
Klebsi. Pneumon. ATCC4352	**42**
Legionella	**15 (4-26)**
Legionella dumoffi	24
Legionella gormanii	26
Legionella micdadei	15
Legionella longbeachae 1	12
Legionella longbeachae 2	10
Legionella oakridgensis	22
Legionella micdadei	18
Legionella jordanis	11
Legionella wadsworthii	4
Legionella pneumophila	25
Legionella bozemanii	20
Leptospira	**20 (8-28)**
Leptospira biflexa	23
Leptrospira illini	8
Leptrospira interrogans	28
Micrococcus	**80 (61-100)**
Micrococcus candidus	61
Microc. sphaeroides	100
Neisseria catarrhalis	**44**
Pseudomonas aerug.	**35 (15-55)**
Pseudomonas aeruginosa	55
Salmonella	**43(21-80)**
Salm. Typhimurium	80
Salm. Enteritidis	40
Salmonella typhi	21
Serratia marcescens	**32 (7-85)**
Shigella paradysenteriae	**17**
Staph	**44 (18-110)**
Staph. albus	18
Staph. aureus	26
Staph. epidermis	110
Strep.	**36 (18-65)**
Strep. haemolyticus	22
Strep. lactis	62
Strep. viridans	20
Strep. faecalis (ATCC29212)	65
Strep. faecalis	55
Strep. pyogenes	22
Strep. salivarius	20
Strep. albus	18
Vibrio	**24 (8-39)**
Yersinia enterecolitica	**15**

DNA-Viruses

Parvovirus	**35 (30-40)**
Bov. parvovirus	40
Kilham rat virus	30
HCC (Dog hepat. Adenov)	**265**
Herpes virus	**57 (15-165)**
Pseudorabies virus	70
Herpes simplex MP str.	67
Herpes simplex MP str.	15
Herpes simplex , type 1	165
Vaccinia	**18**

Radiation Doses for Inactivating Various Microorganisms

RNA-Viruses	
Picornavirus	**72 (36-186)**
Poliovirus	110
Poliov type 1 Mahoney	67
Poliov	133
Poliov type 1	36
Poliov Mahoney	45
ECBO	80
Coxsackiev	186
Reovirus	**102 (48-163)**
Reovirus type 1	48
Reov type 1 (Lang str)	163
Rotav	159
Rotav SA11	65
Paramyxovirus	**35 (15-55)**
Sindbis virus	55
Newcastle Disease	15
Orthomyxovirus	**35**
Influenza	35
HIV (Lentiv)	**1438 (600-2400)**
HIV (HTLVIII)	600
HIV (Sup T1)	1450
HIV (H9)	2400
HIV (PHA-stim.PBL)	1300

Phages	
Bacteriophage	**152 (65-310)**
Bac. subt. phage SP02C12	150
Bac. subt. phage SPP1	195
Bac. subt. phage diam. 29	70
Bacteriophage F specific	292
Coliphage f2	310
Staph. phage A994	65

Yeasts	59 (23-100)
Oospora lactis	50
Saccharomyces cerevisiae	33-100
(baking yeast, brewing yeast)	
Saccharomyces ellipsoideus	60
Saccharomyces sp.	80
Torula sphaerica (in milk and cream)	23

Fungi	713 (130-3000)
Aspergillus glaucus	440
Aspergillus flavus	600
Aspergillus niger	1320
Aspergillus niger (pasta)	1500
Aspergillus amstelodami (meat)	700
Candida paraposilosis	220
Cladospor. herbarum (cold stores)	500
Mucor racemosus	170
Mucor mucedo (meat, bread, fat)	600
Oospora lactis	50
Penicillium chrysogenum (fruit)	500
Penicillium roquefortii	130
Penicillium expansum	130
Penicillium digitatum	440
Rhisopus nigricans	1100
Rhizopus nigricans (cheese)	1100
Scopulariopsis brevicaulis (cheese)	800

Protozoa	600-1000

Algae	3000-6000
Green algae, blue algae, diatoms	

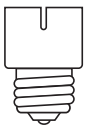
Base Types Incandescent & Halogen

BA15s

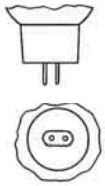
E26
Medium Skirted

E27

E29
AdMedium Skirted



GZ4



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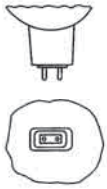
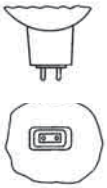


GY5.3

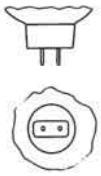


G6.35 -13 -15 -20

GY6.35 -13 -15

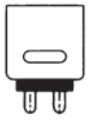
GX6.35

GZ6.35



GX7.9

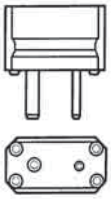
G9.5



GY5.3

GX9.5

GY16



GX16d

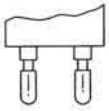
G17t-7

G17q-7

GX17q-7

GY17q-7

G22



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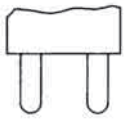

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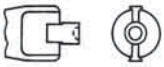
R7s



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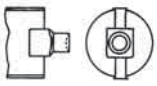
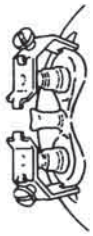


2 screw Terminals

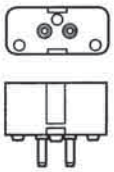


Base Types BriteArc

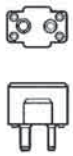
FaX1.5-3x1

GZY9.5(GZZ9.5)

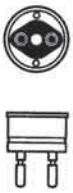
GX9.5



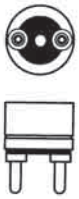
GY9.5



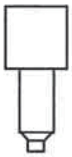
G22



G38

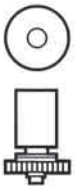


SFa21-12

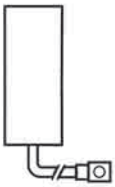


SFc10-4

SFc-15.5-6



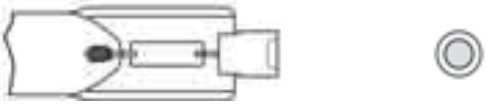
S25.5 x60



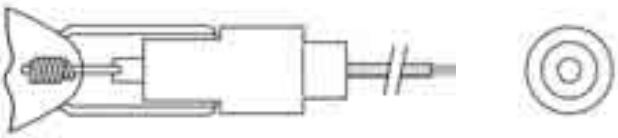
S30 x70

Base Types Tubular Metal Halide

R7s



Q17-13.5



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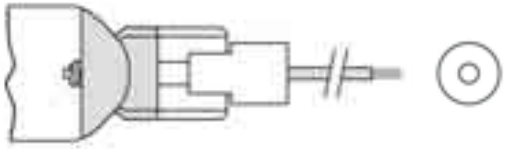
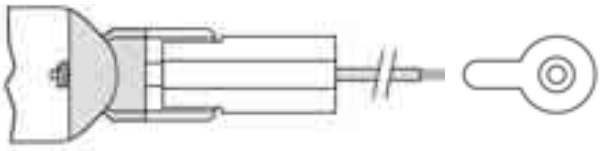
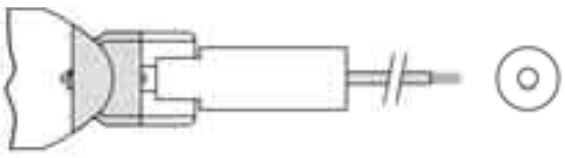


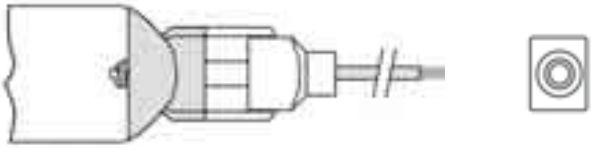
QF



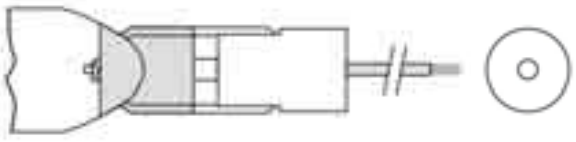
Q10L



R

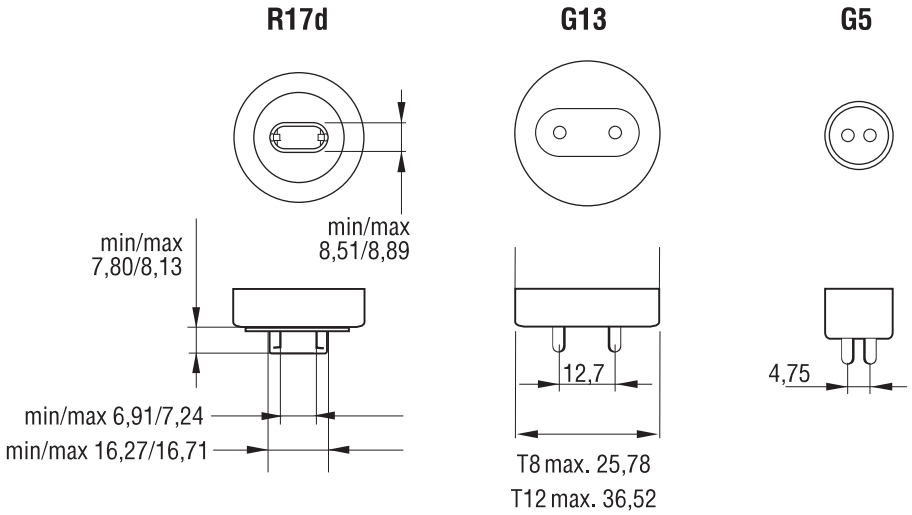


Q16

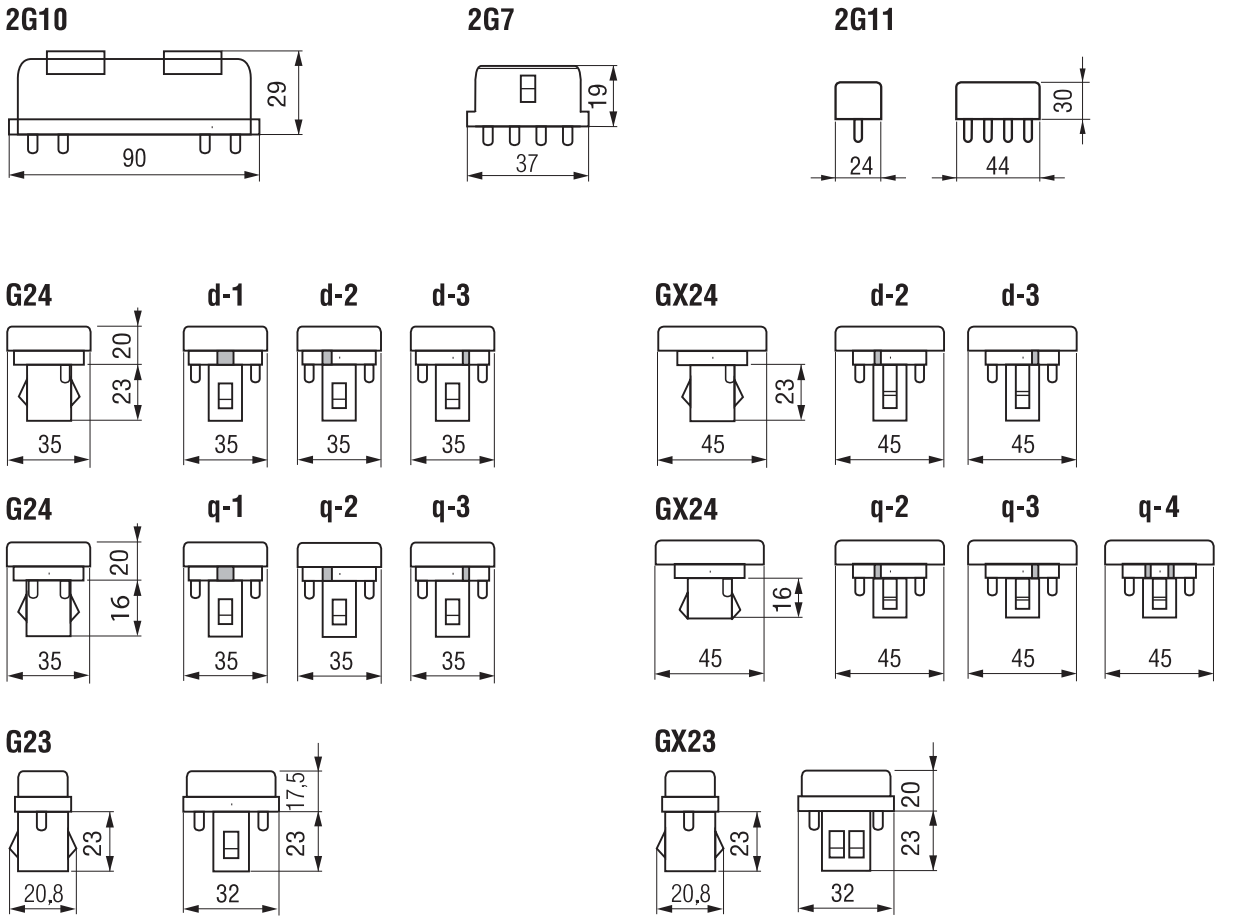


JF

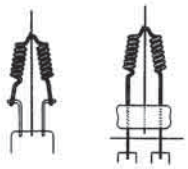
Base Types Fluorescent



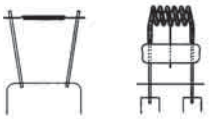
Base Types Compact Fluorescent



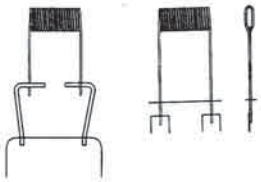
C-2V, CC-2V



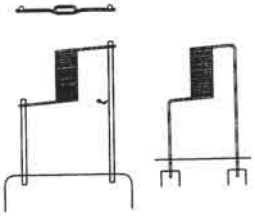
C-6, CC-6



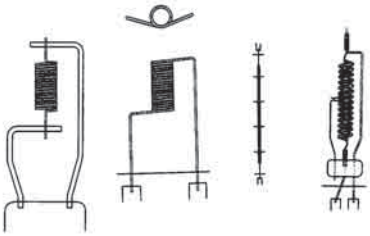
CBar6 (CF-6)



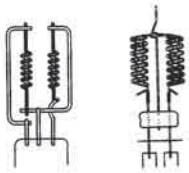
CBar8 (CF-9)



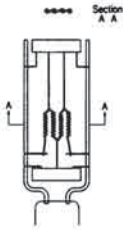
C-8, CC-8



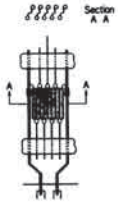
2CC-8



C-13, CC-13

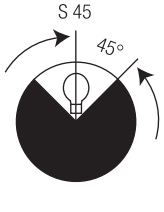
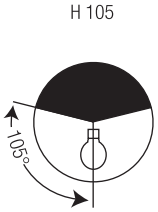
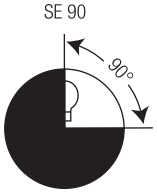
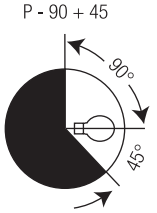
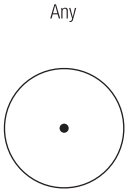
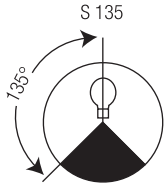
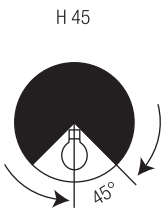
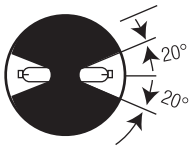


C-13D, CC-13D

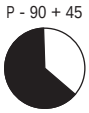


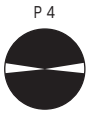
C: single Coil
CC: Double Coil (Coiled Coil)
C BAR: Flat Coil

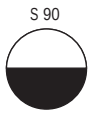
Burning Positions

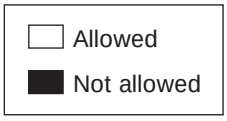
Symbols	S = BASE DOWN	H = BASE UP (hanging)	SE = BASE DOWN and one direction of rotation	P = HORIZONTAL	ANY
Example					
					

Different symbols used for Projection, Photo, Studio, Theatre, TV and Disco lamps









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9000017	EVW 82V 250W	Photo Optic Halogen Lamps	20
9000186	F40 T12 BLB	Photo Optic Fluorescent Lamps	48
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9000526	G25 T8	Insect Trapping & Desinfection	88
9002327	G40 T10	Insect Trapping & Desinfection	88
9002460	GTL 3	Insect Trapping & Desinfection	89
9002500	G20 T10	Insect Trapping & Desinfection	88
9020167	PAR 36 12,8V 30W (H 4405)	Photo Optic Incandescent & PAR Lamps	36
9020467	H44 GS-100 SP	Photo Optic Discharge Lamps	12
9020664	H44 GS-100/MDSK SP	Photo Optic Discharge Lamps	12
9023401	XP 2500W	Photo Optic Discharge Lamps	11
9023475	XP 1500W	Photo Optic Discharge Lamps	11
9060572	BRN 120V 1200W (1)	Photo Optic Halogen Lamps	25
9060623	CNP 230V 300W	Photo Optic Incandescent & PAR Lamps	34
9060629	CJW/CJT 240V 100W	Photo Optic Incandescent & PAR Lamps	34
9060716	DYR 240V 650W	Photo Optic Halogen Lamps	25
9060743	DNF 21V 150W	Photo Optic Halogen Lamps	21
9060779	DYS/DYV 120V 600W	Photo Optic Halogen Lamps	25
9060812	ERV 36V 340W	Photo Optic Halogen Lamps	19
9060813	ELH 120V 300W	Photo Optic Halogen Lamps	20
9060822	EME 240V 800W	Photo Optic Halogen Lamps	26
9060826	EVD 36V 400W	Photo Optic Halogen Lamps	23
9060833	EJV 21V 150W	Photo Optic Halogen Lamps	19
9060846	ENX 82V 360W	Photo Optic Halogen Lamps	20
9060850	FHS 82V 300W	Photo Optic Halogen Lamps	19
9060877	FLT 13.8V 25W/S	Photo Optic Halogen Lamps	21
9060890	EWF 24V 200W	Photo Optic Halogen Lamps	19
9060918	EMM/EKS 24V 250W	Photo Optic Halogen Lamps	21
9060921	EJA 21V 150W	Photo Optic Halogen Lamps	19
9060924	FDS/FDT 24V 150W	Photo Optic Halogen Lamps	23
9060927	EPS 240V 500W	Photo Optic Halogen Lamps	25
9060934	BTG 120V 1200W	Photo Optic Halogen Lamps	25
9060940	ENH 120V 250W	Photo Optic Halogen Lamps	20
9060943	EKE 21V 150W	Photo Optic Halogen Lamps	19
9060953	EPX 14,5V 90W	Photo Optic Halogen Lamps	19
9060954	DDM 19V 80W	Photo Optic Halogen Lamps	19
9060957	ELD 21V 150W	Photo Optic Halogen Lamps	19
9060962	ESY 100V 150W	Photo Optic Halogen Lamps	25
9060967	DED 13.8V 85W	Photo Optic Halogen Lamps	19
9060984	DDL 20V 150W	Photo Optic Halogen Lamps	19
9061010	JC 24V 300W	Photo Optic Halogen Lamps	23
9061016	EPV 14,5V 90W	Photo Optic Halogen Lamps	19
9061018	JCP 100V 650W	Photo Optic Halogen Lamps	25
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9061124	CP/82 FRJ 240V 500W	Photo Optic Halogen Lamps	27
9061126	CP/89 FRM 240V 650W	Photo Optic Halogen Lamps	27
9061127	PAR 64 CP61 240V 1000W SP	Photo Optic Incandescent & PAR Lamps	39
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9061385	CP/77 FEP 240V 1000W	Photo Optic Halogen Lamps	27
9061532	PAR 56 12V 300W	Photo Optic Incandescent & PAR Lamps	40
9061542	T/25 GCJ 240V 500W	Photo Optic Halogen Lamps	28
9061545	T/27 GCL 240V 650W	Photo Optic Halogen Lamps	28
9061548	T/19 FWR 240V 1000W	Photo Optic Halogen Lamps	28
9061551	T/29 FWT 240V 1200W	Photo Optic Halogen Lamps	28
9061617	CXR/CXL 8V 50W	Photo Optic Incandescent & PAR Lamps	34
9061768	FXL 82V 410W	Photo Optic Halogen Lamps	20

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CAT5712 - 04/2010 - In One / Brussels

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