



LIGHTING OPTIONS



Laboratory Equipment Pty Ltd

Laboratory Equipment Pty Ltd
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GROLUX

T5/T8



Grolux®

universal

Grolux®

Relative Energy (%)

Wavelength (nm)

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

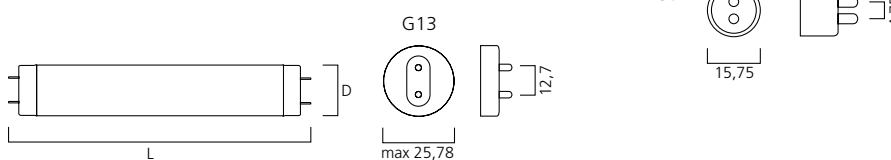
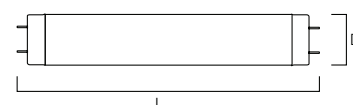
FEATURES

- 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
- Recommended for use in greenhouses, indoor gardens, flower shows and conservatories

APPLICATIONS

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

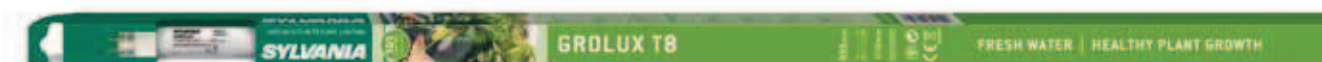
T5 standard	8W	24W	39W	54W	80W
L	288	549	849	1149	1449
D	16	16	16	16	16



T8	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

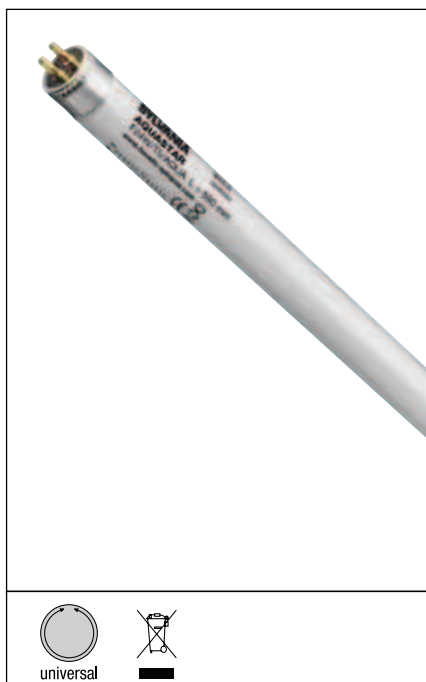
GROLUX T5/T8

Code	Description	Watt	Volt	Current	Colour	Cap	Packing Qty
Grolux T5 Standard Sleeved							
208270	F8W/GRO	8W	56V	0.145A	GroLux	G5	25
202740	FHO24W/GRO	24W	77V	0.295A	GroLux	G5	25
202743	FHO39W/GRO	39W	118V	0.325A	GroLux	G5	25
202746	FHO54W/GRO	54W	120V	0.455A	GroLux	G5	25
202749	FHO80W/GRO	80W	152V	0.530A	GroLux	G5	25
Grolux T8 Standard Sleeved							
200707	F14W/GRO	14W	38V	0.395A	GroLux	G13	25
216430	F15W/GRO	15W	55V	0.310A	GroLux	G13	25
220350	F18W/GRO	18W	57V	0.370A	GroLux	G13	25
231430	F30W/GRO	30W	96V	0.365A	GroLux	G13	25
246250	F36W/GRO	36W	103V	0.430A	GroLux	G13	25
411525	F58W/GRO	58W	120V	0.670A	GroLux	G13	25
Grolux T8 Retail Packs with Display Hook							
216430R	F15W/GRO	15W	55V	0.310A	GroLux	G13	10
220350R	F18W/GRO	18W	57V	0.370A	GroLux	G13	10
200710R	F25W/30"/GRO	25W	84V	0.360A	GroLux	G13	10
231430R	F30W/GRO	30W	96V	0.365A	GroLux	G13	10
246250R	F36W/GRO	36W	103V	0.430A	GroLux	G13	10



AQUASTAR

T5/T8



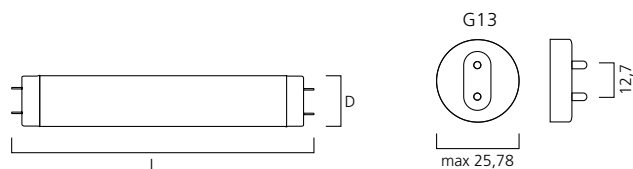
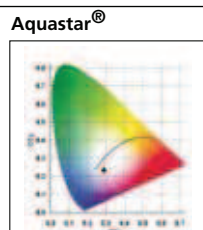
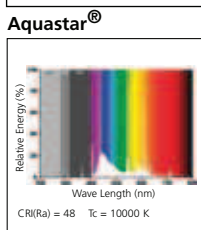
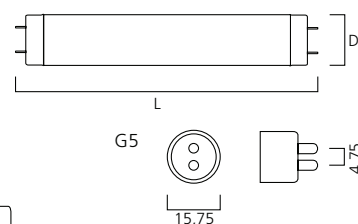
FEATURES

- 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

APPLICATIONS

- For all biological organisms in fresh and marine water aquariums

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



T8	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

AQUASTAR T5/T8

Code	Description	Watt	Volt	Current	Colour	Cap	Luminous Flux	Packing Qty
Aquastar T5 Standard Sleeved								
202741	FHO24W/Aquastar	24W	77V	0.295A	10000K	G5	1120 lm	25
202744	FHO39W/Aquastar	39W	118V	0.325A	10000K	G5	1960 lm	25
202747	FHO54W/Aquastar	54W	120V	0.455A	10000K	G5	2800 lm	25
202750	FHO80W/Aquastar	80W	152V	0.530A	10000K	G5	3500lm	25
Aquastar T8 Standard Sleeved								
202212	F14W/174/Aquastar	14W	38V	0.395A	10000K	G13	525 lm	25
Aquastar T8 Retail Packs with Display Hook								
218415R	F15W/Aquastar	15W	55V	0.310A	10000K	G13	650 lm	10
218418R	F18W/Aquastar	18W	57V	0.370A	10000K	G13	900 lm	10
200654R	F25W/30"/174/Aquastar	25W	84V	0.360A	10000K	G13	1500 lm	10
218430R	F30W/Aquastar	30W	96V	0.365A	10000K	G13	1700 lm	10
218436R	F36W/Aquastar	36W	103V	0.430A	10000K	G13	2200 lm	10
200649R	F58W/Aquastar	58W	110V	0.670A	10000K	G13	3550 lm	10



DAYLIGHTSTAR

T8

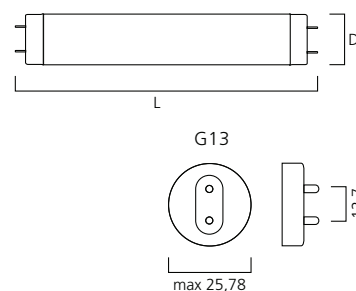


FEATURES

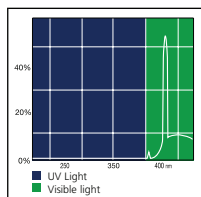
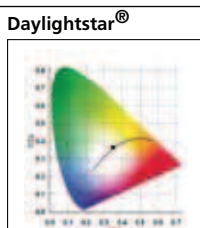
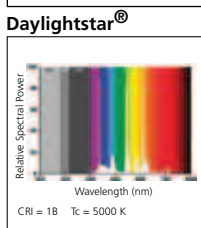
- Reduces algae growth through a special UV-STOP protective sleeve
- Allows fish and plants to be seen in their true colours (high colour rendition)
- 5000K triphosphor lamp with a daylight character
- High colour rendition
- Average lamp life: 10000 hours
- Recommended life time for optimum effect: 4000 hours

APPLICATIONS

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



T8	36W
L	1200
D	26



DAYLIGHTSTAR T8

Code	Description	Watt	Volt	Current	Colour	Cap	Packing Qty
200718	F36W/Daylightstar	36W	103V	0.430A	Daylightstar	G13	10



CORALSTAR

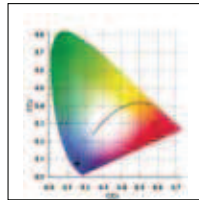
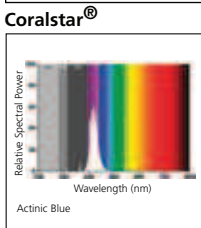
T5/ T8



universal



Coralstar®



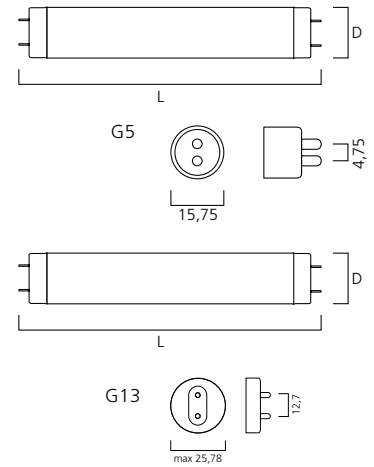
FEATURES

- 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
- T5 - FHO: high output and lumen per watt in comparison to T8 versions

APPLICATIONS

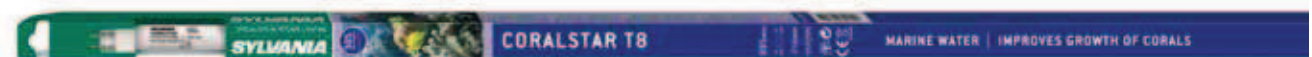
- Lighting to promote growth of coral and invertebrates in marine water aquariums

T5 standard	24W	39W	54W	80W
L	549	849	1149	1449
D	16	16	16	16
T8	18W	30W	36W	
L	590	895	1200	
D	26	26	26.6	



CORALSTAR T5/T8

Code	Description	Watt	Volt	Current	Colour	Cap	Packing Qty
T5 Coralstar Marine Water Lamp Standard Sleeved							
202742	FHO24W/Coralstar	24W	77V	0.295A	Actinic	G5	25
202745	FHO39W/Coralstar	39W	118V	0.325A	Actinic	G5	25
202748	FHO54W/Coralstar	54W	120V	0.455A	Actinic	G5	25
202751	FHO80W/Coralstar	80W	152V	0.530A	Actinic	G5	25
T8 Coralstar Marine Water Lamp Retail Packs with Display Hook							
200719	F18W/Coralstar	18W	57V	0.370A	Actinic	G13	10
200725	F30W/Coralstar	30W	96V	0.365A	Actinic	G13	10
200726	F36W/Coralstar	36W	103V	0.430A	Actinic	G13	10



MARINESTAR

T5 15000K

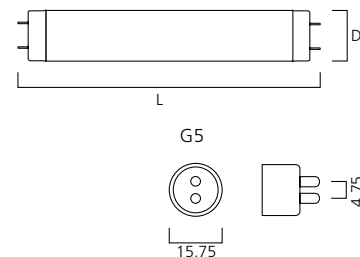


FEATURES

- 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.
- Higher light output than Coralstar and less blue

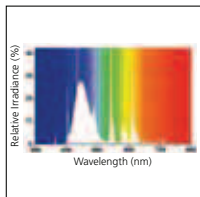
APPLICATIONS

- Lighting of marine water aquaria

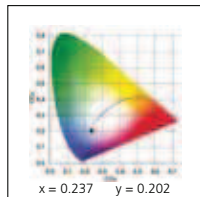


T5	24W	39W	54W	80W
L	549	849	1149	1449
D	16	16	16	16

Marinestar®



Marinestar®



MARINESTAR T5 1500K

Code	Description	Watt	Volt	Current	Colour	Cap	Packing Qty
272000	FHO24W/Marinestar	24W	77V	0.295A	15000K	G5	25
272100	FHO39W/Marinestar	39W	118V	0.325A	15000K	G5	25
272200	FHO54W/Marinestar	54W	120V	0.455A	15000K	G5	25
272300	FHO80W/Marinestar	80W	152V	0.530A	15000K	G5	25



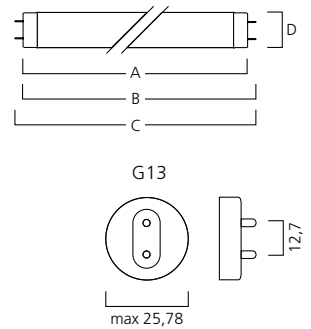
ACTIVA T8



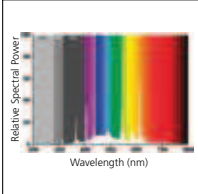
FEATURES

- Full spectrum lamp including UVA
- Radiation reproduces sunlight most closely
- Excellent colour rendering (Ra98/Class 1A)
- Makes the animals look bright and attractive
- Colour temperature: 6500K

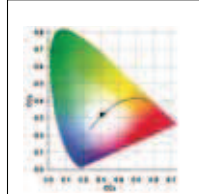
	A	B	B	C	D
	max	min	max	max	nom
15W	437	442	445	452	26
18W	590	595	597	604	26
36W	1199	1204	1207	1214	26
58W	1500	1505	1507	1514	26
70W	1764	1769	1771	1778	26



Activa 172 (970)



Activa 172 (970)

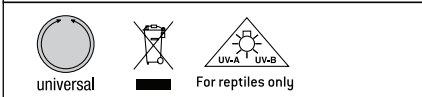


ACTIVA T8

Code	Description	Watt	Volt	Current	Colour	Luminous Flux	Cap	Packing Qty
Activa T8 - Standard Sleeve								
202672	F15W/Activa	15W	55V	0.130A	Activa	700 lm	G13	25
202218	F18W/Activa	18W	57V	0.370A	Activa	1000 lm	G13	25
202219	F36W/Activa	36W	103V	0.430A	Activa	2300 lm	G13	25
202220	F58W/Activa	58W	120V	0.670A	Activa	3700 lm	G13	25
202188	F70W/Activa	70W	128V	0.700A	Activa	4600 lm	G13	25

REPTISTAR

T8



FEATURES

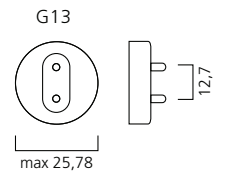
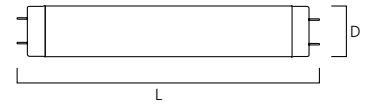
- Promotes vitamin D3 production which aids good health, growth and the general well-being of reptiles in terrariums through a high content of UVB (up to 5%) and UVA (up to 30%)
- This full spectrum (6500 K) lamp improves the natural appearance of reptiles
- Shows reptiles in their true colours
- Average lamp life: 10000 hours
- Recommended life time for optimum effect: 4000 hours

APPLICATIONS

- For the artificial lighting of reptiles in terrariums

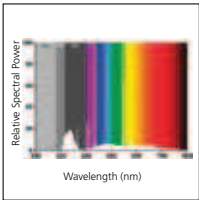
DIRECTIONS FOR USE

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

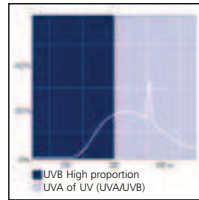
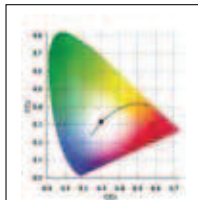


T8	15W	18W	30W	36W
L	438	590	895	1200
D	26	26	26	26

Reptistar®



Reptistar®



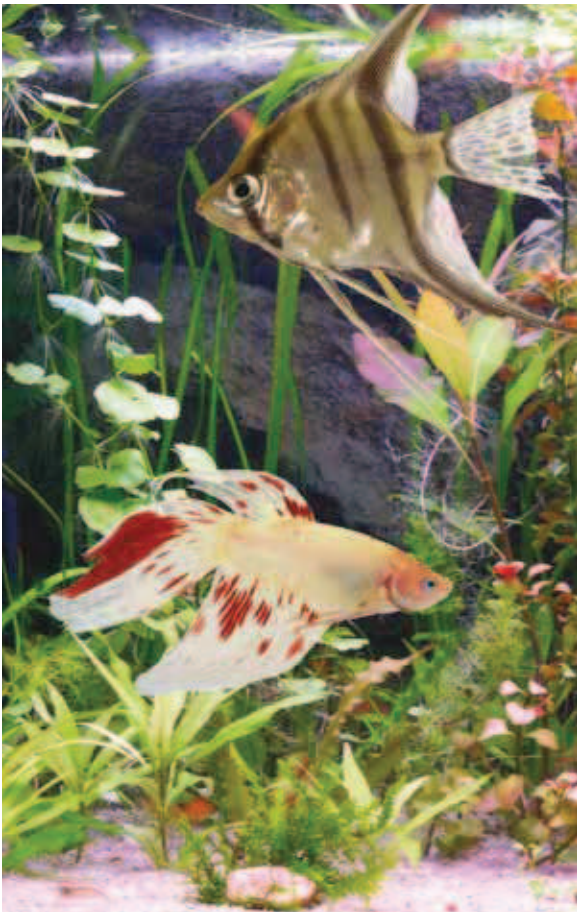
REPTISTAR T8

Code	Description	Watt	Volt	Current	Colour	Luminous Flux	Cap	Packing Qty
200731	F15W/Reptistar	15W	55V	0.310A	Reptistar	300 lm	G13	10
200732	F18W/Reptistar	18W	57V	0.370A	Reptistar	450 lm	G13	10
200733	F30W/Reptistar	30W	96V	0.365A	Reptistar	700 lm	G13	10
200734	F36W/Reptistar	36W	103V	0.430A	Reptistar	1000 lm	G13	10

Packaging Note: The sleeve pictured is for retail sales.







WHICH FLUORESCENT LAMPS TO USE FOR OPTIMAL LIGHTING?

WHICH LAMP COLOUR TO USE?

In order to create a healthy and balanced environment, several criteria should be observed in selecting the ideal Sylvania tube.

When there is only one lamp in the aquarium, the choice is simple. However, with two or more tubes you have the freedom to combine multiple colours for superior biological as well as visual effects.

ONE LAMP

For tropical / fresh water aquaria, **Aquastar** is the natural choice. It stimulates tropical sunlight and provides a good spectrum for plant care. **GroLux** remains the classical favourite which enhances the colours of tropical fish, while also stimulating voracious plant growth. The colour of **Daylightstar** is a neutral white and it should be installed if algae growth is a problem, thanks to its unique UV-stop coating. For marine / salt water aquaria, **Aquastar** is the only option when there is just a single lamp available.

TWO LAMPS

For tropical aquaria, a popular combination is **Daylightstar plus GroLux**. The latter will care for your plants while Daylightstar provides a very high light level with a spectrum that minimises growth of algae. The combination **Daylightstar plus Aquastar** delivers a natural whiter light with similar results, but less photosynthesis effect.

For marine aquaria the ideal combination is **Aquastar plus Coralstar**. The former is necessary for the principal light generation, while the latter stimulates growth of corals. In case salt water plants are being grown instead of coral, then the combination **Aquastar plus GroLux** yields especially desirable results.

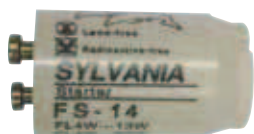
	Fresh Water	Sea Water
One Lamp Solutions	GroLux Daylightstar Aquastar	
Two Lamp Solutions	GroLux + Daylightstar Daylightstar + Aquastar	GroLux + Aquastar GroLux + Daylightstar Daylightstar + Aquastar Coralstar + Aquastar



TIPS FOR YOUR PET'S WELL BEING

- How much light does your aquarium need?
A general rule of thumb is that at least 0.5 watts of lighting per litre of water in the tank (more is better) must be available.
- Never use fluorescent tubes for an aquarium that is deeper than 60cm. AquaArc and CoralArc lamps are required to achieve deeper penetration.
- Avoid positioning your aquarium near a window. The UVA and UVB in the sunlight will develop algae.
- Use a timer to light your aquarium at a certain hour each day. Lighting should be for between 10 and 14 hours per day.
- Change the fluorescent lamps at least once a year. Once 12 months have passed, the light output of the lamps will be insufficient due to normal ageing.
- Don't change all the lamps in the aquarium at the same time. Throughout life, the efficiency of the lamp gradually decreases. If all the lamps are changed at once, the increase in light output risks upsetting the daily cycle of the fish and plants. Change therefore each of the lamps at intervals of one month.
- Don't forget to change the starter when relamping. It is a requirement for good lamp operation.

Length of Aquarium	Volume Litres	Length of Lamps	Lamp Power		Lamps
			T8	T5	
40 cm	251	30 cm	-	8W	1
50 cm	451	45 cm	15W	24W	1
60 cm	551	45 cm	15W	24W	1
80 cm	1281	60 cm	18W	28W	2
100 cm	2501	90 cm	30W	48W	4
120 cm	3001	100 cm	38W	54W	4
130 cm	3251	120 cm	36W	54W	4
150 cm	3751	120 cm	36W	54W	4
160 cm	4001	150 cm	58W	-	4



STARTER

Code	Description	Watt	Volt	Lamp Type	Circuit	Packing Qty
900007	FS-14	18-58W	220-240V	26 mm	Single	25
900008	FS-22	18-22W	220-240V	26 mm	Twin	25