



The new generation of energy saving tube lighting

MASTER LEDtube EM/Mains T8

The Philips MASTER LEDtube integrates a LED light source into a traditional fluorescent form factor. Its unique design creates a perfectly uniform visual appearance which cannot be distinguished from traditional fluorescent. For those that are looking for value for money within limited budget and re-lamping efforts for better light effect and lifetime.

Benefits

- Reduced operational cost thanks to lower energy consumption
- Lower maintenance cost thanks to 2-3 times longer lifetime than normal fluorescent tubes
- Fastest and easiest way to upgrade existing luminaire to LED technology; 100%-safe installation process

Features

- Only 50% energy consumption compared to fluorescent tubes
- Extra-long life of 40,000 hours
- Retrofit to existing T8 lamps on EM ballast installations
- Full safety features and EM Protector safety device
- No mercury

Application

- Parking lots / covered car parks
- Warehouses / coldrooms / signage
- Transport and distribution areas
- Food & Museums

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Warnings and Safety

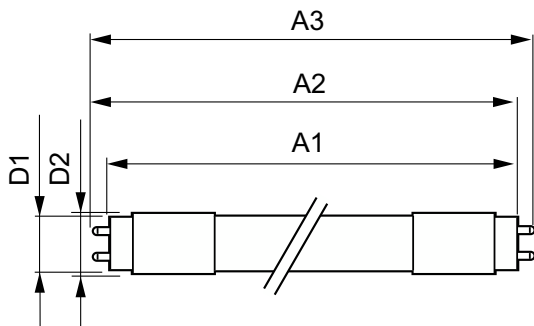
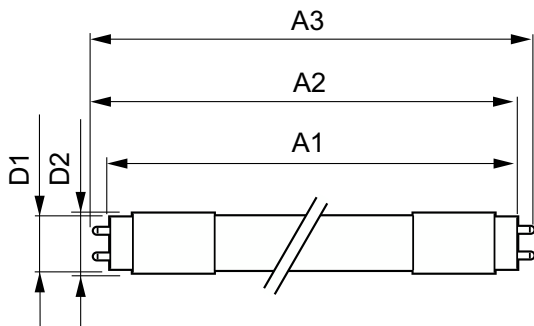
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Versions



LEDtube T8 G13 2

Dimensional drawing



Product	D1	D2	A1	A2	A3
MAS LEDtube 1200mm UO 14.7W 840 T8	25.8 mm	28 mm	1,198.2 mm	1,205.3 mm	1,212.4 mm
MAS LEDtube 1500mm UO 21.7W 840 T8	25.8 mm	28 mm	1,498.8 mm	1,505.9 mm	1,513 mm
MAS LEDtube 600mm HO 8W865 T8	25.78 mm	28 mm	588.5 mm	595.5 mm	602.5 mm
MAS LEDtube 900mm HO 12W 865 T8	25.78 mm	28 mm	893.3 mm	900.4 mm	907.5 mm

Product	D1	D2	A1	A2	A3
MAS LEDtube 1200mm HO 12.5W 840 T8	25.8 mm	28 mm	1,198.2 mm	1,205.3 mm	1,212.4 mm
MAS LEDtube 1200mm HO 14W865 T8	25.8 mm	28 mm	1,198.2 mm	1,205.3 mm	1,212.4 mm
MAS LEDtube 1500mm HO 18.2W 840 T8	25.8 mm	28 mm	1,498.8 mm	1,505.9 mm	1,513 mm
MAS LEDtube 1500mm HO 18.2W 865 T8	25.8 mm	28 mm	1,498.8 mm	1,505.9 mm	1,513 mm

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General Information	
Switching Cycle	200,000
Light Technical	
LLMF At End Of Nominal Lifetime (Nom)	70 %
Operating and Electrical	
Input Frequency	50 to 60 Hz
Line Frequency	50 to 60 Hz
Starting Time (Nom)	0.5 s
Temperature	
Ambient temperature range	-20 °C to 45 °C
Controls and Dimming	
Dimmable	No
Mechanical and Housing	
Bulb Finish	Frosted
Bulb Shape	T8

General Information

Order Code	Full Product Name	Cap-Base	Nominal lifetime
68710900	MASTER LEDtube 900mm HO 12W 865 T8	G13 ROT	75,000 hour(s)
69751100	MASTER LEDtube 600mm HO 8W865 T8	G13 ROT	75,000 hour(s)
31658400	MASTER LEDtube 1200mm UO 14.7W 840 T8	G13 ROT	75,000 hour(s)
31664500	MASTER LEDtube 1500mm UO 21.7W 840 T8	G13 ROT	75,000 hour(s)
46850400	MASTER LEDtube 1200mm HO 14W865 T8	G13	60,000 hour(s)
59237000	MASTER LEDtube 1200mm HO 12.5W 840 T8	G13 ROT	75,000 hour(s)
59243100	MASTER LEDtube 1500mm HO 18.2W 840 T8	G13 ROT	75,000 hour(s)
59245500	MASTER LEDtube 1500mm HO 18.2W 865 T8	G13 ROT	75,000 hour(s)

Light Technical (1/2)

Order Code	Full Product Name	Beam Angle (Nom)	Correlated Color		Color rendering index (CRI)	Color Code
			Temperature (Nom)	Temperature (Nom)		
68710900	MASTER LEDtube 900mm HO 12W 865 T8	160 degree(s)	6500 K	80	865	865
69751100	MASTER LEDtube 600mm HO 8W865 T8	160 degree(s)	6500 K	83	865	865
31658400	MASTER LEDtube 1200mm UO 14.7W 840 T8	160 degree(s)	4000 K	80	840	840
31664500	MASTER LEDtube 1500mm UO 21.7W 840 T8	160 degree(s)	4000 K	80	840	840

Order Code	Full Product Name	Beam Angle (Nom)	Correlated Color		Color rendering index (CRI)	Color Code
			Temperature (Nom)	Temperature (Nom)		
46850400	MASTER LEDtube 1200mm HO 14W865 T8	190 degree(s)	6500 K	80	865	865
59237000	MASTER LEDtube 1200mm HO 12.5W 840 T8	160 degree(s)	4000 K	80	840	840
59243100	MASTER LEDtube 1500mm HO 18.2W 840 T8	160 degree(s)	4000 K	80	840	840
59245500	MASTER LEDtube 1500mm HO 18.2W 865 T8	160 degree(s)	6500 K	80	865	865

Light Technical (2/2)

Order Code	Full Product Name	Luminous Flux
68710900	MASTER LEDtube 900mm HO 12W 865 T8	1,575 lm
69751100	MASTER LEDtube 600mm HO 8W865 T8	1,050 lm
31658400	MASTER LEDtube 1200mm UO 14.7W 840 T8	2,500 lm
31664500	MASTER LEDtube 1500mm UO 21.7W 840 T8	3,700 lm

Order Code	Full Product Name	Luminous Flux
46850400	MASTER LEDtube 1200mm HO 14W865 T8	2,100 lm
59237000	MASTER LEDtube 1200mm HO 12.5W 840 T8	2,100 lm
59243100	MASTER LEDtube 1500mm HO 18.2W 840 T8	3,100 lm
59245500	MASTER LEDtube 1500mm HO 18.2W 865 T8	3,100 lm

Operating and Electrical

Order Code	Full Product Name	Power Consumption
68710900	MASTER LEDtube 900mm HO 12W 865 T8	12 W

Order Code	Full Product Name	Power Consumption
69751100	MASTER LEDtube 600mm HO 8W865 T8	8 W

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Order Code	Full Product Name	Power Consumption
31658400	MASTER LEDtube 1200mm UO 14.7W 840 T8	14.7 W
31664500	MASTER LEDtube 1500mm UO 21.7W 840 T8	21.7 W
46850400	MASTER LEDtube 1200mm HO 14W865 T8	14 W

Order Code	Full Product Name	Power Consumption
59237000	MASTER LEDtube 1200mm HO 12.5W 840 T8	12.5 W
59243100	MASTER LEDtube 1500mm HO 18.2W 840 T8	18.2 W
59245500	MASTER LEDtube 1500mm HO 18.2W 865 T8	18.2 W

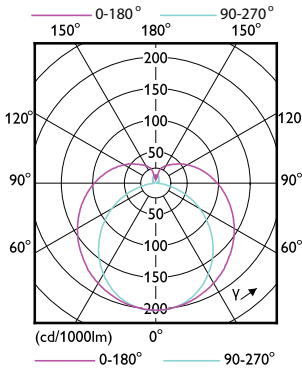
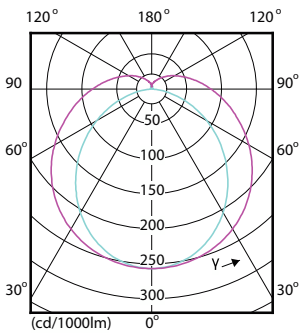
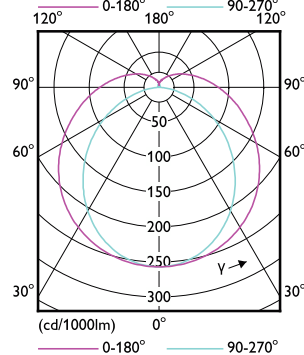
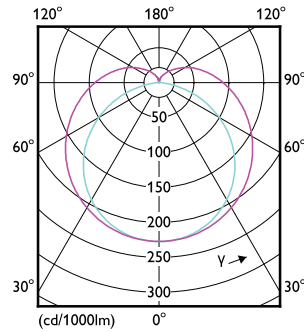
Temperature

Order Code	Full Product Name	T-Case Maximum (Nom)
68710900	MASTER LEDtube 900mm HO 12W 865 T8	50 °C
69751100	MASTER LEDtube 600mm HO 8W865 T8	50 °C
31658400	MASTER LEDtube 1200mm UO 14.7W 840 T8	55 °C
31664500	MASTER LEDtube 1500mm UO 21.7W 840 T8	60 °C

Order Code	Full Product Name	T-Case Maximum (Nom)
46850400	MASTER LEDtube 1200mm HO 14W865 T8	50 °C
59237000	MASTER LEDtube 1200mm HO 12.5W 840 T8	50 °C
59243100	MASTER LEDtube 1500mm HO 18.2W 840 T8	55 °C
59245500	MASTER LEDtube 1500mm HO 18.2W 865 T8	55 °C

Approval and Application

Order Code	Full Product Name	Energy Consumption kWh/1000 h
68710900	MASTER LEDtube 900mm HO 12W 865 T8	12 kWh
69751100	MASTER LEDtube 600mm HO 8W865 T8	8 kWh
31658400	MASTER LEDtube 1200mm UO 14.7W 840 T8	15 kWh
31664500	MASTER LEDtube 1500mm UO 21.7W 840 T8	22 kWh
46850400	MASTER LEDtube 1200mm HO 14W865 T8	-
59237000	MASTER LEDtube 1200mm HO 12.5W 840 T8	13 kWh
59243100	MASTER LEDtube 1500mm HO 18.2W 840 T8	19 kWh
59245500	MASTER LEDtube 1500mm HO 18.2W 865 T8	19 kWh



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