



For top performance and sustainability

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. These T8 LED tubes are the right choice for absolute performance and are designed to stand up to everyday conditions. Unparalleled savings thanks to low energy consumption and an exceptionally long lifetime ensure this tube masters every demanding application.

Benefits

- Absolute performance that provides a solution for every application
- Unparalleled savings with low energy consumption and long lifetime
- Robust and reliable: stands up to everyday conditions
- Extra-long life up to 75,000 hours
- Shatterproof, passing drop test horizontally from a height of 4m on to a flat concrete according to IEC 61549.
- Enable easy implementation of HACCP without need for additional guard, supported by product level NSF certificate
- 160° small beam angle to ensure higher flux where needed
- No mercury

Applications

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

Features

- Retrofit existing T8 lamps on EM ballast or mains
- > 50% energy savings compared to fluorescent tubes with up to 185lm/W

• NOTE: The overall energy efficiency and light distribution of any installation that uses these lamps will be determined by the design of the installation.

Versions



LEDtube T8 G13 2

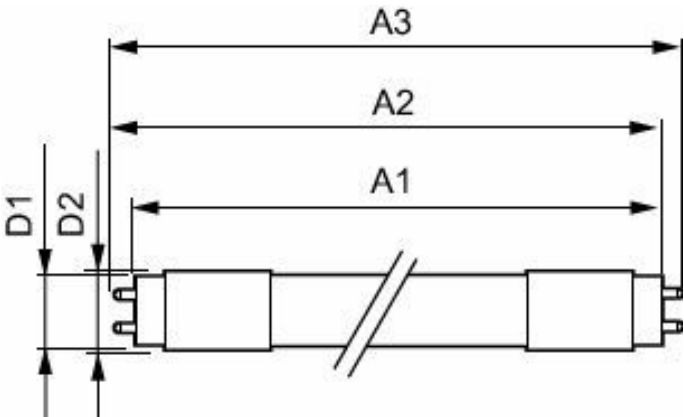


Standard Product Photo

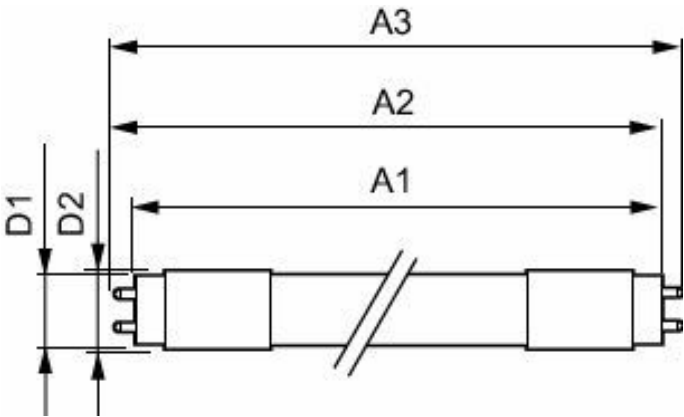


LEDtube MAS GM 20,5W G13

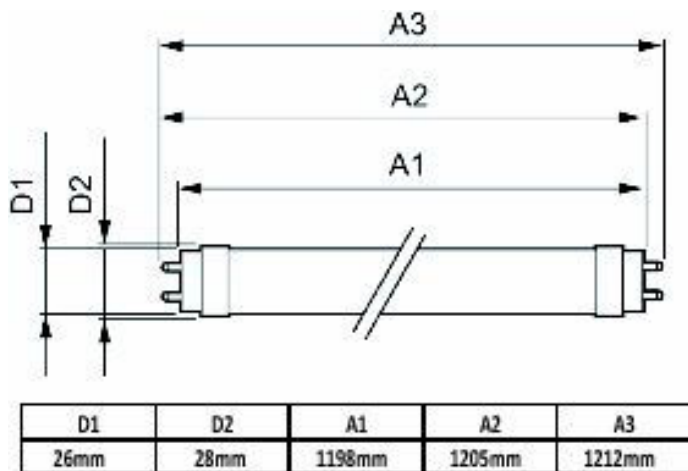
Dimensional drawing



Product	D1	D2	A1	A2	A3
MAS LEDtube 1200mm 20.5W 850 T8 JP G2	25.8 mm	28.1 mm	1,198.2 mm	1,205.3 mm	1,212.4 mm
MAS LEDtube 1200mm 20.5W 865 T8 JP G2	25.8 mm	28.1 mm	1,198.2 mm	1,205.3 mm	1,212.4 mm



Product	D1	D2	A1	A2	A3
MAS LEDtube 1200mm HO 13W830 T8	25.8 mm	28 mm	1,198.2 mm	1,205.3 mm	1,212.4 mm
MAS LEDtube 1200mm HO 13W840 T8	25.8 mm	28 mm	1,198.2 mm	1,205.3 mm	1,212.4 mm
MAS LEDtube 1200mm HO 13W865 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 1200mm MO 23W840 T8	25.7 mm	28 mm	1,199.4 mm	1,206.5 mm	1,213.6 mm
MAS LEDtube 1200mm MO 23W865 T8	25.7 mm	28 mm	1,199.4 mm	1,206.5 mm	1,213.6 mm
MAS LEDtube 600mm HO 8W830 T8	25.8 mm	28 mm	595.7 mm	598.8 mm	604 mm
MAS LEDtube 600mm HO 8W840 T8	25.8 mm	28 mm	595.7 mm	598.8 mm	604 mm
MAS LEDtube 600mm HO 8W865 T8	25.8 mm	28 mm	595.7 mm	598.8 mm	604 mm
MAS LEDtube STD 1200mm 10.5W865 T8	25.8 mm	28 mm	1,198.2 mm	1,205.3 mm	1,212.4 mm



Product	D1	D2	A1	A2	A3
MAS LEDtube DE 1200mm 13W840 100-240V T8	26 mm	28 mm	1,198 mm	1,205 mm	1,212 mm
MAS LEDtube DE 1200mm 13W865 100-240V T8	26 mm	28 mm	1,198 mm	1,205 mm	1,212 mm

General Information

Cap-Base	G13
Switching Cycle	200,000

Light Technical

LLMF At End Of Nominal Lifetime (Nom)	70 %
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Operating and Electrical

Line Frequency	50 to 60 Hz
Input Frequency	50 to 60 Hz
Starting Time (Nom)	0.5 s

Controls and Dimming

Dimmable	No
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Mechanical and Housing

Bulb Finish	Frosted
Bulb Shape	T8

General Information

Order Code	Full Product Name	Nominal lifetime
46844300	MASTER LEDtube STD 1200mm 10.5W865 T8	60,000 hour(s)
46850400	MASTER LEDtube 1200mm HO 14W865 T8	60,000 hour(s)
31591400	MASTER LEDtube 600mm HO 8W830 T8	60,000 hour(s)
31593800	MASTER LEDtube 600mm HO 8W840 T8	60,000 hour(s)
31597600	MASTER LEDtube 600mm HO 8W865 T8	60,000 hour(s)

Order Code	Full Product Name	Nominal lifetime
31605800	MASTER LEDtube 1200mm HO 13W830 T8	60,000 hour(s)
31607200	MASTER LEDtube 1200mm HO 13W840 T8	60,000 hour(s)
31611900	MASTER LEDtube 1200mm HO 13W865 T8	60,000 hour(s)
39080500	MASTER LEDtube 1200mm MO 23W840 T8	60,000 hour(s)
39082900	MASTER LEDtube 1200mm MO 23W865 T8	60,000 hour(s)
34096100	MASTER LEDtube 1200mm 20.5W 850 T8 JP G2	50,000 hour(s)
34090900	MASTER LEDtube 1200mm 20.5W 865 T8 JP G2	50,000 hour(s)
30112200	MASTER LEDtube DE 1200mm 13W865 100-240V T8	50,000 hour(s)
30116000	MASTER LEDtube DE 1200mm 13W840 100-240V T8	50,000 hour(s)

Light Technical

Order Code	Full Product Name	Color Code	Beam Angle (Nom)	Luminous Flux	Correlated Color Temperature (Nom)	Color rendering index (CRI)
46844300	MASTER LEDtube STD 1200mm 10.5W865 T8	865	190 degree(s)	1,600 lm	6500 K	80
46850400	MASTER LEDtube 1200mm HO 14W865 T8	865	190 degree(s)	2,100 lm	6500 K	80
31591400	MASTER LEDtube 600mm HO 8W830 T8	830	190 degree(s)	1,150 lm	3000 K	80
31593800	MASTER LEDtube 600mm HO 8W840 T8	840	190 degree(s)	1,200 lm	4000 K	80
31597600	MASTER LEDtube 600mm HO 8W865 T8	865	190 degree(s)	1,200 lm	6500 K	80
31605800	MASTER LEDtube 1200mm HO 13W830 T8	830	190 degree(s)	2,000 lm	3000 K	80
31607200	MASTER LEDtube 1200mm HO 13W840 T8	840	190 degree(s)	2,100 lm	4000 K	80
31611900	MASTER LEDtube 1200mm HO 13W865 T8	865	190 degree(s)	2,100 lm	6500 K	80
39080500	MASTER LEDtube 1200mm MO 23W840 T8	840	160 degree(s)	3,700 lm	4000 K	80
39082900	MASTER LEDtube 1200mm MO 23W865 T8	865	160 degree(s)	3,700 lm	6500 K	80
34096100	MASTER LEDtube 1200mm 20.5W 850 T8 JP G2	850	190 degree(s)	3,300 lm	5000 K	83
34090900	MASTER LEDtube 1200mm 20.5W 865 T8 JP G2	865	190 degree(s)	3,300 lm	6500 K	83
30112200	MASTER LEDtube DE 1200mm 13W865 100-240V T8	865	240 degree(s)	2,100 lm	6500 K	80
30116000	MASTER LEDtube DE 1200mm 13W840 100-240V T8	840	240 degree(s)	2,100 lm	4000 K	80

Operating and Electrical

Order Code	Full Product Name	Power Consumption	Wattage Equivalent
46844300	MASTER LEDtube STD 1200mm 10.5W865 T8	10.5 W	-
46850400	MASTER LEDtube 1200mm HO 14W865 T8	14 W	-
31591400	MASTER LEDtube 600mm HO 8W830 T8	8 W	18 W
31593800	MASTER LEDtube 600mm HO 8W840 T8	8 W	18 W
31597600	MASTER LEDtube 600mm HO 8W865 T8	8 W	18 W
31605800	MASTER LEDtube 1200mm HO 13W830 T8	13 W	36 W
31607200	MASTER LEDtube 1200mm HO 13W840 T8	13 W	36 W
31611900	MASTER LEDtube 1200mm HO 13W865 T8	13 W	36 W
39080500	MASTER LEDtube 1200mm MO 23W840 T8	23 W	48 W

Order Code	Full Product Name	Power Consumption	Wattage Equivalent
39082900	MASTER LEDtube 1200mm MO 23W865 T8	23 W	48 W
34096100	MASTER LEDtube 1200mm 20.5W 850 T8 JP G2	20.5 W	36 W
34090900	MASTER LEDtube 1200mm 20.5W 865 T8 JP G2	20.5 W	36 W
30112200	MASTER LEDtube DE 1200mm 13W865 100-240V T8	13 W	-
30116000	MASTER LEDtube DE 1200mm 13W840 100-240V T8	13 W	-

Temperature

Order Code	Full Product Name	T-Case Maximum (Nom)
46844300	MASTER LEDtube STD 1200mm 10.5W865 T8	50 °C
46850400	MASTER LEDtube 1200mm HO 14W865 T8	50 °C
31591400	MASTER LEDtube 600mm HO 8W830 T8	50 °C
31593800	MASTER LEDtube 600mm HO 8W840 T8	50 °C
31597600	MASTER LEDtube 600mm HO 8W865 T8	50 °C
31605800	MASTER LEDtube 1200mm HO 13W830 T8	50 °C
31607200	MASTER LEDtube 1200mm HO 13W840 T8	50 °C
31611900	MASTER LEDtube 1200mm HO 13W865 T8	50 °C
39080500	MASTER LEDtube 1200mm MO 23W840 T8	55 °C
39082900	MASTER LEDtube 1200mm MO 23W865 T8	55 °C
34096100	MASTER LEDtube 1200mm 20.5W 850 T8 JP G2	60 °C
34090900	MASTER LEDtube 1200mm 20.5W 865 T8 JP G2	60 °C
30112200	MASTER LEDtube DE 1200mm 13W865 100-240V T8	65 °C
30116000	MASTER LEDtube DE 1200mm 13W840 100-240V T8	65 °C

Approval and Application

Order Code	Full Product Name	Ambient temperature range
46844300	MASTER LEDtube STD 1200mm 10.5W865 T8	-20 °C to 45 °C
46850400	MASTER LEDtube 1200mm HO 14W865 T8	-20 °C to 45 °C
31591400	MASTER LEDtube 600mm HO 8W830 T8	-20 to +45 °C
31593800	MASTER LEDtube 600mm HO 8W840 T8	-20 to +45 °C
31597600	MASTER LEDtube 600mm HO 8W865 T8	-20 to +45 °C
31605800	MASTER LEDtube 1200mm HO 13W830 T8	-20 to +45 °C
31607200	MASTER LEDtube 1200mm HO 13W840 T8	-20 to +45 °C
31611900	MASTER LEDtube 1200mm HO 13W865 T8	-20 to +45 °C
39080500	MASTER LEDtube 1200mm MO 23W840 T8	-20 to +45 °C
39082900	MASTER LEDtube 1200mm MO 23W865 T8	-20 to +45 °C
34096100	MASTER LEDtube 1200mm 20.5W 850 T8 JP G2	-20 to +45 °C
34090900	MASTER LEDtube 1200mm 20.5W 865 T8 JP G2	-20 to +45 °C
30112200	MASTER LEDtube DE 1200mm 13W865 100-240V T8	-20 °C to 45 °C
30116000	MASTER LEDtube DE 1200mm 13W840 100-240V T8	-20 °C to 45 °C