



The new generation of energy saving tube lighting

MASTER LEDtube EM/Mains

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

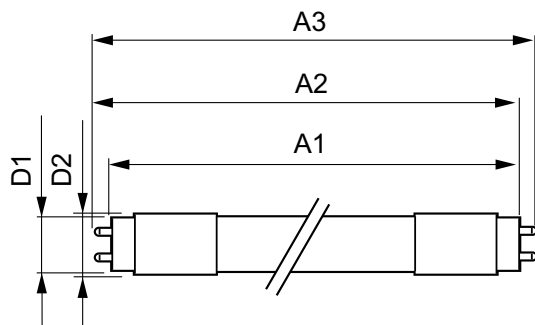
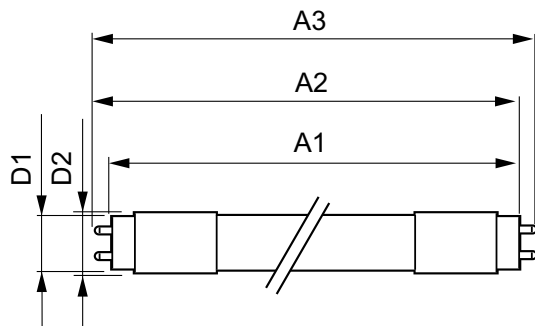
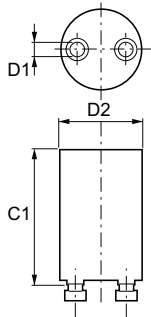
MASTER LEDtube EM/Mains

Versions



MASTER LEDtube EM/Mains

Dimensional drawing



Product	D1	D2	C1
MASTER LEDtube Starter EMP GenII OP	3 mm	21.5 mm	34.5 mm
MASTER LEDtube Starter EMP	3 mm	21.5 mm	34.5 mm

Product	D1	D2	A1	A2	A3
MAS LEDtube 1500mm HO 20W865 T8	25.78 mm	28 mm	1500 mm	1507.1 mm	1514.2 mm
MAS LEDtube 600mm HO 8W865 T8	25.78 mm	28 mm	588.5 mm	595.5 mm	602.5 mm
MAS LEDtube 1200mm UO 16W 840 T8	25.78 mm	28 mm	1198.2 mm	1205.3 mm	1212.4 mm
MAS LEDtube 1200mm UO 16W 865 T8	25.78 mm	28 mm	1198.2 mm	1205.3 mm	1212.4 mm
MAS LEDtube 900mm HO 12W 865 T8	25.78 mm	28 mm	893.3 mm	900.4 mm	907.5 mm
Master LEDTube 600 mm 10W 865 T8 I W	25.6 mm	27.8 mm	588.6 mm	595.7 mm	602.8 mm
Master LEDTube 600 mm 10W 840 T8 I W	25.6 mm	27.8 mm	588.6 mm	595.7 mm	602.8 mm
Master LEDTube 1200 mm 18W 865 T8 I W	25.6 mm	27.8 mm	1198.1 mm	1205.2 mm	1212.3 mm
Master LEDTube 1200 mm 18W 840 T8 I W	25.6 mm	27.8 mm	1198.1 mm	1205.2 mm	1212.3 mm
MASTER LEDtube 1800mm 25W 840 T8 ROT	25.68 mm	28 mm	1762.5 mm	1770 mm	1776.7 mm
MAS LEDtube 1200mm 14W 840 T8 THD	25.8 mm	28 mm	1198.2 mm	1205.3 mm	1212.4 mm
MAS LEDtube 1200mm 14W 865 T8 THD	25.8 mm	28 mm	1198.2 mm	1205.3 mm	1212.4 mm

Product	D1	D2	A1	A2	A3
MAS LEDtube 1200mm HO 14W840 T8	25.8 mm	28 mm	1198.2 mm	1205.3 mm	1212.4 mm
MAS LEDtube 1200mm HO 14W865 T8	25.8 mm	28 mm	1198.2 mm	1205.3 mm	1212.4 mm
MAS LEDtube 1200mm HO 14W830 T8	25.8 mm	28 mm	1198.2 mm	1205.3 mm	1212.4 mm
MAS LEDtube 1500mm HO 18.2W 840 T8	25.8 mm	28 mm	1498.8 mm	1505.9 mm	1513 mm
MAS LEDtube 1500mm HO 18.2W 865 T8	25.8 mm	28 mm	1498.8 mm	1505.9 mm	1513 mm

MASTER LEDtube EM/Mains

Dimensional drawing

Product	D1	D2	A1	A2	A3
MAS LEDtube 1200mm HO 12.5W 840 T8	25.8 mm	28 mm	1198.2 mm	1205.3 mm	1212.4 mm

Operating and Electrical

Order Code	Full Product Name	Input Frequency	Voltage (Nom)	Power (Rated) (Nom)	Starting Time (Nom)
72928000	MASTER LEDtube Starter EMP	50 to 60 Hz	-	-	-
81965400	MASTER LEDtube Starter EMP GenII OP	-	-	-	-
48037300	MASTER LEDtube 1800mm 25W 840 T8 ROT	50 to 60 Hz	220-240 V	25 W	0.5 s
52408400	Master LEDTube 600 mm 10W 840 T8 I W	50 to 60 Hz	100-240 V	10 W	0.5 s
52410700	Master LEDTube 600 mm 10W 865 T8 I W	50 to 60 Hz	100-240 V	10 W	0.5 s
52404600	Master LEDTube 1200 mm 18W 840 T8 I W	50 to 60 Hz	100-240 V	18 W	0.5 s
52406000	Master LEDTube 1200 mm 18W 865 T8 I W	50 to 60 Hz	100-240 V	18 W	0.5 s
72857400	MAS LEDtube 1200mm 14W 840 T8 THD	50 to 60 Hz	220-240 V	14 W	0.5 s
72859800	MAS LEDtube 1200mm 14W 865 T8 THD	50 to 60 Hz	220-240 V	14 W	0.5 s
68738300	MAS LEDtube 1200mm UO 16W 840 T8	50 to 60 Hz	220-240 V	16 W	0.5 s
68740600	MAS LEDtube 1200mm UO 16W 865 T8	50 to 60 Hz	220-240 V	16 W	0.5 s

Order Code	Full Product Name	Input Frequency	Voltage (Nom)	Power (Rated) (Nom)	Starting Time (Nom)
68716100	MAS LEDtube 1500mm HO 20W865 T8	50 to 60 Hz	220-240 V	20 W	0.5 s
68710900	MAS LEDtube 900mm HO 12W 865 T8	50 to 60 Hz	220-240 V	12 W	0.5 s
69751100	MAS LEDtube 600mm HO 8W865 T8	50 to 60 Hz	220-240 V	8 W	0.5 s
68724600	MAS LEDtube 1200mm HO 14W830 T8	50 to 60 Hz	220-240 V	14 W	0.5 s
68726000	MAS LEDtube 1200mm HO 14W840 T8	50 to 60 Hz	220-240 V	14 W	0.5 s
68728400	MAS LEDtube 1200mm HO 14W865 T8	50 to 60 Hz	220-240 V	14 W	0.5 s
59237000	MAS LEDtube 1200mm HO 12.5W 840 T8	50 to 60 Hz	220-240 V	12.5 W	0.5 s
59243100	MAS LEDtube 1500mm HO 18.2W 840 T8	50 to 60 Hz	220-240 V	18.2 W	0.5 s
59245500	MAS LEDtube 1500mm HO 18.2W 865 T8	50 to 60 Hz	220-240 V	18.2 W	0.5 s

General Information

MASTER LEDtube EM/Mains

Order Code	Full Product Name	Cap-Base	Nominal Lifetime (Nom)	Rated Lifetime (Hours)	Switching Cycle
72928000	MASTER LEDtube Starter EMP	-	-	-	-
81965400	MASTER LEDtube Starter EMP GenII OP	-	-	-	-
48037300	MASTER LEDtube 1800mm 25W 840 T8 ROT	G13	50000 h	50000 h	50000X
52408400	Master LEDTube 600 mm 10W 840 T8 I W	G13	40000 h	40000 h	50000X
52410700	Master LEDTube 600 mm 10W 865 T8 I W	G13	40000 h	40000 h	50000X
52404600	Master LEDTube 1200 mm 18W 840 T8 I W	G13	40000 h	40000 h	50000X
52406000	Master LEDTube 1200 mm 18W 865 T8 I W	G13	40000 h	40000 h	50000X
72857400	MAS LEDtube 1200mm 14W 840 T8 THD	G13	50000 h	50000 h	50000X
72859800	MAS LEDtube 1200mm 14W 865 T8 THD	G13	50000 h	50000 h	50000X
68738300	MAS LEDtube 1200mm UO 16W 840 T8	G13	50000 h	50000 h	200000X

Order Code	Full Product Name	Cap-Base	Nominal Lifetime (Nom)	Rated Lifetime (Hours)	Switching Cycle
68740600	MAS LEDtube 1200mm UO 16W 865 T8	G13	50000 h	50000 h	200000X
68716100	MAS LEDtube 1500mm HO 20W865 T8	G13	50000 h	50000 h	200000X
68710900	MAS LEDtube 900mm HO 12W 865 T8	G13	50000 h	50000 h	200000X
69751100	MAS LEDtube 600mm HO 8W865 T8	G13	50000 h	50000 h	200000X
68724600	MAS LEDtube 1200mm HO 14W830 T8	G13	50000 h	50000 h	200000X
68726000	MAS LEDtube 1200mm HO 14W840 T8	G13	50000 h	50000 h	200000X
68728400	MAS LEDtube 1200mm HO 14W865 T8	G13	50000 h	50000 h	200000X
59237000	MAS LEDtube 1200mm HO 12.5W 840 T8	G13	60000 h	60000 h	200000X
59243100	MAS LEDtube 1500mm HO 18.2W 840 T8	G13	60000 h	60000 h	200000X
59245500	MAS LEDtube 1500mm HO 18.2W 865 T8	G13	60000 h	60000 h	200000X

Approval and Application

Order Code	Full Product Name	Energy Consumption kWh/1000 h	Energy Efficiency Label (EEL)
72928000	MASTER LEDtube Starter EMP	-	-
81965400	MASTER LEDtube Starter EMP GenII OP	-	-
48037300	MASTER LEDtube 1800mm 25W 840 T8 ROT	25 kWh	A++
52408400	Master LEDTube 600 mm 10W 840 T8 I W	10 kWh	A+
52410700	Master LEDTube 600 mm 10W 865 T8 I W	10 kWh	A+
52404600	Master LEDTube 1200 mm 18W 840 T8 I W	18 kWh	A+
52406000	Master LEDTube 1200 mm 18W 865 T8 I W	18 kWh	A+
72857400	MAS LEDtube 1200mm 14W 840 T8 THD	14 kWh	A++
72859800	MAS LEDtube 1200mm 14W 865 T8 THD	14 kWh	A++
68738300	MAS LEDtube 1200mm UO 16W 840 T8	16 kWh	A++
68740600	MAS LEDtube 1200mm UO 16W 865 T8	16 kWh	A++

Order Code	Full Product Name	Energy Consumption kWh/1000 h	Energy Efficiency Label (EEL)
68716100	MAS LEDtube 1500mm HO 20W865 T8	20 kWh	A++
68710900	MAS LEDtube 900mm HO 12W 865 T8	12 kWh	A++
69751100	MAS LEDtube 600mm HO 8W865 T8	8 kWh	A++
68724600	MAS LEDtube 1200mm HO 14W830 T8	14 kWh	A++
68726000	MAS LEDtube 1200mm HO 14W840 T8	14 kWh	A++
68728400	MAS LEDtube 1200mm HO 14W865 T8	14 kWh	A++
59237000	MAS LEDtube 1200mm HO 12.5W 840 T8	13 kWh	A++
59243100	MAS LEDtube 1500mm HO 18.2W 840 T8	19 kWh	A++
59245500	MAS LEDtube 1500mm HO 18.2W 865 T8	19 kWh	A++

Controls and Dimming

MASTER LEDtube EM/Mains

Order Code	Full Product Name	Dimmable	Order Code	Full Product Name	Dimmable
72928000	MASTER LEDtube Starter EMP	-	68740600	MAS LEDtube 1200mm UO 16W 865 T8	No
81965400	MASTER LEDtube Starter EMP GenII OP	-	68716100	MAS LEDtube 1500mm HO 20W865 T8	No
48037300	MASTER LEDtube 1800mm 25W 840 T8 ROT	No	68710900	MAS LEDtube 900mm HO 12W 865 T8	No
52408400	Master LEDTube 600 mm 10W 840 T8 I W	No	69751100	MAS LEDtube 600mm HO 8W865 T8	No
52410700	Master LEDTube 600 mm 10W 865 T8 I W	No	68724600	MAS LEDtube 1200mm HO 14W830 T8	No
52404600	Master LEDTube 1200 mm 18W 840 T8 I W	No	68726000	MAS LEDtube 1200mm HO 14W840 T8	No
52406000	Master LEDTube 1200 mm 18W 865 T8 I W	No	68728400	MAS LEDtube 1200mm HO 14W865 T8	No
72857400	MAS LEDtube 1200mm 14W 840 T8 THD	No	59237000	MAS LEDtube 1200mm HO 12.5W 840 T8	No
72859800	MAS LEDtube 1200mm 14W 865 T8 THD	No	59243100	MAS LEDtube 1500mm HO 18.2W 840 T8	No
68738300	MAS LEDtube 1200mm UO 16W 840 T8	No	59245500	MAS LEDtube 1500mm HO 18.2W 865 T8	No

Light Technical (1/2)

Order Code	Full Product Name	Beam Angle (Nom)	Colour Code	Correlated Colour Temperature (Nom)	Colour	Llmf At End Of		
					Rendering Index (Nom)	Nominal Lifetime (Nom)	Luminous Flux (Nom)	Luminous Flux (Rated) (Nom)
72928000	MASTER LEDtube Starter EMP	-	-	-	-	-	-	-
81965400	MASTER LEDtube Starter EMP GenII OP	-	-	-	-	-	-	-
48037300	MASTER LEDtube 1800mm 25W 840 T8 ROT	160 °	841	4000 K	83	70 %	3700 lm	3700 lm
52408400	Master LEDTube 600 mm 10W 840 T8 I W	160 °	841	4000 K	82	70 %	1050 lm	1050 lm
52410700	Master LEDTube 600 mm 10W 865 T8 I W	160 °	865	6500 K	82	70 %	1050 lm	1050 lm
52404600	Master LEDTube 1200 mm 18W 840 T8 I W	160 °	841	4000 K	82	70 %	2100 lm	2100 lm
52406000	Master LEDTube 1200 mm 18W 865 T8 I W	160 °	865	6500 K	82	70 %	2100 lm	2100 lm
72857400	MAS LEDtube 1200mm 14W 840 T8 THD	-	841	4000 K	83	70 %	2100 lm	2100 lm
72859800	MAS LEDtube 1200mm 14W 865 T8 THD	-	865	6500 K	83	70 %	2100 lm	2100 lm
68738300	MAS LEDtube 1200mm UO 16W 840 T8	160 °	841	4000 K	83	70 %	2500 lm	2500 lm
68740600	MAS LEDtube 1200mm UO 16W 865 T8	160 °	865	6500 K	83	70 %	2500 lm	2500 lm
68716100	MAS LEDtube 1500mm HO 20W865 T8	-	865	6500 K	83	70 %	3100 lm	3100 lm
68710900	MAS LEDtube 900mm HO 12W 865 T8	160 °	865	6500 K	83	70 %	1575 lm	1575 lm
69751100	MAS LEDtube 600mm HO 8W865 T8	160 °	865	6500 K	83	70 %	1050 lm	1050 lm
68724600	MAS LEDtube 1200mm HO 14W830 T8	-	830	3000 K	83	70 %	2000 lm	2000 lm
68726000	MAS LEDtube 1200mm HO 14W840 T8	-	841	4000 K	83	70 %	2100 lm	2100 lm
68728400	MAS LEDtube 1200mm HO 14W865 T8	-	865	6500 K	83	70 %	2100 lm	2100 lm
59237000	MAS LEDtube 1200mm HO 12.5W 840 T8	160 °	841	4000 K	83	70 %	2100 lm	2100 lm
59243100	MAS LEDtube 1500mm HO 18.2W 840 T8	160 °	841	4000 K	83	70 %	3100 lm	3100 lm
59245500	MAS LEDtube 1500mm HO 18.2W 865 T8	160 °	865	6500 K	83	70 %	3100 lm	3100 lm

Light Technical (2/2)

Order Code	Full Product Name	Rated Beam Angle	Order Code	Full Product Name	Rated Beam Angle
72928000	MASTER LEDtube Starter EMP	-	81965400	MASTER LEDtube Starter EMP GenII OP	-

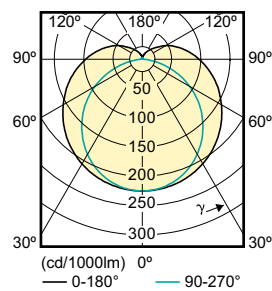
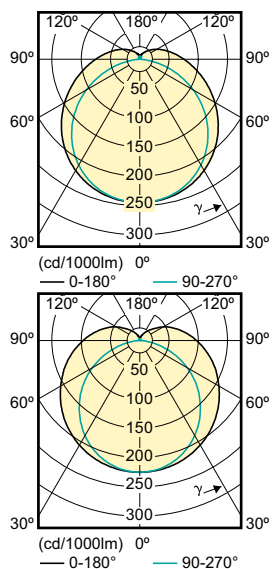
MASTER LEDtube EM/Mains

Order Code	Full Product Name	Rated Beam Angle
48037300	MASTER LEDtube 1800mm 25W 840 T8 ROT	160 °
52408400	Master LEDTube 600 mm 10W 840 T8 I W	160 °
52410700	Master LEDTube 600 mm 10W 865 T8 I W	160 °
52404600	Master LEDTube 1200 mm 18W 840 T8 I W	160 °
52406000	Master LEDTube 1200 mm 18W 865 T8 I W	160 °
72857400	MAS LEDtube 1200mm 14W 840 T8 THD	-
72859800	MAS LEDtube 1200mm 14W 865 T8 THD	-
68738300	MAS LEDtube 1200mm UO 16W 840 T8	160 °
68740600	MAS LEDtube 1200mm UO 16W 865 T8	160 °

Order Code	Full Product Name	Rated Beam Angle
68716100	MAS LEDtube 1500mm HO 20W865 T8	-
68710900	MAS LEDtube 900mm HO 12W 865 T8	160 °
69751100	MAS LEDtube 600mm HO 8W865 T8	160 °
68724600	MAS LEDtube 1200mm HO 14W830 T8	-
68726000	MAS LEDtube 1200mm HO 14W840 T8	-
68728400	MAS LEDtube 1200mm HO 14W865 T8	-
59237000	MAS LEDtube 1200mm HO 12.5W 840 T8	160 °
59243100	MAS LEDtube 1500mm HO 18.2W 840 T8	160 °
59245500	MAS LEDtube 1500mm HO 18.2W 865 T8	160 °

Temperature

Order Code	Full Product Name	T-Ambient (Max)	T-Ambient (Min)	T-Case Maximum (Nom)	T-Storage (Max)	T-Storage (Min)
72928000	MASTER LEDtube Starter EMP	-	-	-	-	-
81965400	MASTER LEDtube Starter EMP GenII OP	-	-	-	-	-
48037300	MASTER LEDtube 1800mm 25W 840 T8 ROT	30 °C	-5 °C	61 °C	65 °C	-40 °C
52408400	Master LEDTube 600 mm 10W 840 T8 I W	45 °C	-20 °C	70 °C	65 °C	-40 °C
52410700	Master LEDTube 600 mm 10W 865 T8 I W	45 °C	-20 °C	70 °C	65 °C	-40 °C
52404600	Master LEDTube 1200 mm 18W 840 T8 I W	45 °C	-20 °C	70 °C	65 °C	-40 °C
52406000	Master LEDTube 1200 mm 18W 865 T8 I W	45 °C	-20 °C	70 °C	65 °C	-40 °C
72857400	MAS LEDtube 1200mm 14W 840 T8 THD	45 °C	-20 °C	55 °C	65 °C	-40 °C
72859800	MAS LEDtube 1200mm 14W 865 T8 THD	45 °C	-20 °C	55 °C	65 °C	-40 °C
68738300	MAS LEDtube 1200mm UO 16W 840 T8	35 °C	-20 °C	55 °C	65 °C	-40 °C
68740600	MAS LEDtube 1200mm UO 16W 865 T8	35 °C	-20 °C	55 °C	65 °C	-40 °C
68716100	MAS LEDtube 1500mm HO 20W865 T8	45 °C	-20 °C	60 °C	65 °C	-40 °C
68710900	MAS LEDtube 900mm HO 12W 865 T8	45 °C	-20 °C	50 °C	65 °C	-40 °C
69751100	MAS LEDtube 600mm HO 8W865 T8	35 °C	-20 °C	50 °C	65 °C	-40 °C
68724600	MAS LEDtube 1200mm HO 14W830 T8	45 °C	-20 °C	55 °C	65 °C	-40 °C
68726000	MAS LEDtube 1200mm HO 14W840 T8	45 °C	-20 °C	55 °C	65 °C	-40 °C
68728400	MAS LEDtube 1200mm HO 14W865 T8	45 °C	-20 °C	55 °C	65 °C	-40 °C
59237000	MAS LEDtube 1200mm HO 12.5W 840 T8	45 °C	-20 °C	50 °C	65 °C	-40 °C
59243100	MAS LEDtube 1500mm HO 18.2W 840 T8	45 °C	-20 °C	55 °C	65 °C	-40 °C
59245500	MAS LEDtube 1500mm HO 18.2W 865 T8	45 °C	-20 °C	55 °C	65 °C	-40 °C



MASTER LEDtube EM/Mains

