

PHILIPS

MASTER LEDtube EM/ Mains T8



MAS LEDtube 1200mm HO 12.5W 865 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. 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.

Warnings and Safety

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

Product data

General Information				
Cap-Base	G13 ROT			
Nominal lifetime	75,000 hour(s)			
Switching Cycle	200,000			
Lighting Technology	LED			
Flux measurement reference	Sphere			
Light Technical				
Color Code	865 [CCT of 6500K]			
Beam Angle (Nom)	160 degree(s)			
Luminous Flux	2,100 lm			
Color Designation	Cool Daylight			
Correlated Color Temperature (Nom)	6500 K			
Luminous Efficacy (rated) (Nom)	168 lm/W			

Color Consistency	<6
Color rendering index (CRI)	80
LLMF At End Of Nominal Lifetime (Nom)	70 %
Photobiological safety according to EN 62471	RG0
Operating and Electrical	
Line Frequency	50 to 60 Hz
Input Frequency	50 to 60 Hz
Power Consumption	12.5 W
Lamp Current (Max)	63 mA
Lamp Current (Min)	52 mA
Starting Time (Nom)	0.5 s
Warm-up time to 60% light	0.5 s
Power Factor (Fraction)	0.9

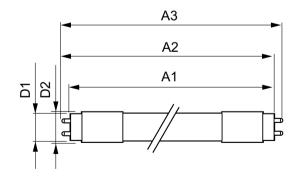
Datasheet, 2025, March 19 data subject to change

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Voltage (Nom)	220-240 V
Ballast Compatibility	EM/Mains
LED alternative to fluorescent lamp power	36 W
Inrush current at mains	8
Max. lamp no. on MCB B type 10A - Mains	90
Max. lamp no. on MCB B type 10A – EM ballast	115
without Compensation Capacitor.	
Max. lamp no. on MCB B type 10A – EM ballast	15
with Compensation Capacitor.	
Max. lamp no. on MCB B type 16A - Mains	150
Max. lamp no. on MCB B type 16A – EM ballast	190
without Compensation Capacitor.	
Max. lamp no. on MCB B type 16A – EM ballast	25
with Compensation Capacitor.	
Temperature	
T-Case Maximum (Nom)	50 °C
Controls and Dimming	
Dimmable	No
Mechanical and Housing	
Bulb Finish	Frosted
Bulb Material	Plastic
Product Length	1,200 mm
Bulb Shape	T8
Net Weight (Piece)	0.230 kg

Approval and Application			
Energy Efficiency Class	С		
Energy Saving Product	Yes		
Approval Marks	RoHS compliance CE marking KEMA		
	Keur certificate ENEC certificate		
Energy Consumption kWh/1000 h	13 kWh		
EPREL Registration Number	1206968		
CE mark	Yes		
EU RoHS compliant	Yes		
Flickering value (PstLM) - Flickering value as per	0.5		
EN 61000-3-3			
Stroboscopic effect visibility measure (SVM)	0.2		
Ambient temperature range	-20 °C to 45 °C		
Product Data			
Order product name	MAS LEDtube 1200mm HO 12.5W		
	865 T8		
Full product name	MAS LEDtube 1200mm HO 12.5W		
	865 T8		
Full product code	871869959239400		
Order code	929001922802		
Material Nr. (12NC)	929001922802		
Numerator - Quantity Per Pack	1		
EAN/UPC - Product/Case	8718699592394		
Numerator - Packs per outer box	10		
EAN/UPC - Case	8718699592400		

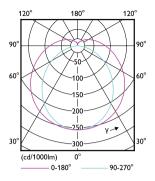
Dimensional drawing



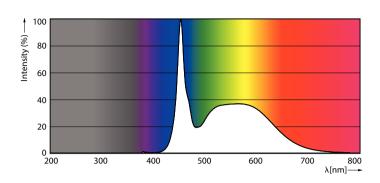
Product	D1	D2	A1	A2	А3
MAS LEDtube 1200mm HO 12.5W	25.8 mm	28 mm	1,198.2 mm	1,205.3 mm	1,212.4 mm
865 T8					

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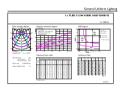
Photometric data



Light Distribution Diagram - MAS LEDtube 1200mm HO 12.5W 865 T8



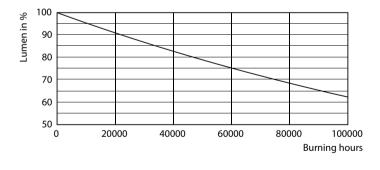
Spectral Power Distribution Colour - MAS LEDtube 1200mm HO 12.5W 865 T8



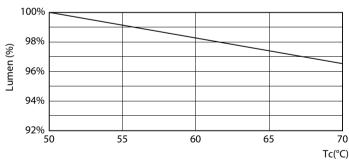
CalculuX Photomerics 4.5. Philips Lighting S.V. Pages 171

General uniform lighting - MAS LEDtube 1200mm HO 12.5W 865 T8

Lifetime



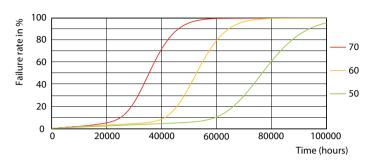
Lumen Maintenance Diagram - MAS LEDtube 1200mm HO 12.5W 865 T8

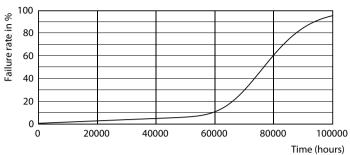


Lumen Maintenance Diagram - MAS LEDtube 1200mm HO 12.5W 865 T8

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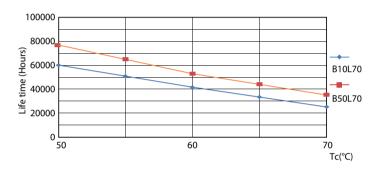
Lifetime





LEDtube-75K-5070-FailureRate-LED





LifetimeVsTc



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