

# PRODUCT DATASHEET SubstiTUBE T5 HF HE28 17 W/4000 K 1149 mm

SubstiTUBE TUBE T5 HF | LED tubes for electronic high frequency control gears



#### Areas of application

- General illumination within ambient temperatures from -20...+45 °C
- Offices, public buildings
- Supermarkets and department stores
- Industry

#### **Product benefits**

- No bending thanks to glass technology
- Quick, simple and safe replacement without rewiring
- High luminous flux for sophisticated lighting tasks
- Also suitable for operation at low temperatures

#### **Product features**

- Retrofit replacement of existing T5 lamps on HF ballast installations
- Lamp tube made of glass with splinter protection e.g. for food industry applications
- High color consistency: ≤ 5 SDCM





- Lifetime: up to 50,000 h
- Low flicker according to EU 2019-2020 (SVM  $\leq$  0,4 / PstLM  $\leq$  1)
- Type of protection: IP20
- Compatible with many common electronic control gears (see also compatibility list)

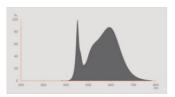
## **TECHNICAL DATA**

## Electrical data

Nominal wattage	17 W
Construction wattage	17.00 W
Nominal voltage	100130 V
Nominal current	147 mA
Type of current	AC
Inrush current	18 A
Operating frequency	2075 kHz
Mains frequency	2075 kHz
Total harmonic distortion	< 20 %
Power factor $\lambda$	> 0.90

## Photometrical data

Luminous flux	2400 lm
Luminous efficacy	141 lm/W
Lumen main.fact.at end of nom.life time	0.70
Light color (designation)	Cool White
Color temperature	4000 K
Color rendering index Ra	83
Light color	840
Standard deviation of color matching	≤5 sdcm
Flickering metric (Pst LM)	1
Stroboscope effect metric (SVM)	0,4



# Light technical data

Beam angle	190 °
Warm-up time (60 %)	< 2.00 s

# **Dimensions & Weight**



Overall length	1149.00 mm
Diameter	17.00 mm
Tube diameter	16 mm
Maximum diameter	17 mm
Product weight	155.00 g

# Temperatures & operating conditions

Ambient temperature range	-20+45 °C
Maximum temperature at tc test point	62 °C

# Lifespan

Lifespan L70/B50 at 25 °C	50000 h
Number of switching cycles	200000
Lumen maintenance at end of service lifetime	0.70
Rated lamp survival factor at 6,000 h	≥ 0.90

# Additional product data

Base (standard designation)	G5
Mercury content	0.0 mg
Mercury-free	Yes
Design / version	Frosted

## **Capabilities**

Dimmable No
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## Certificates & Standards

Energy efficiency class	E 1)
Energy consumption	19.00 kWh/1000h
Type of protection	IP20
Standards	CE

Photobiological safety group acc. to EN62778	RG0

 $<sup>1) \ {\</sup>sf Energy \ efficiency \ class \ (EEC) \ on \ a \ scale \ of \ A \ (highest \ efficiency) \ to \ G \ (lowest \ efficiency)}$ 

Country specific sategorizations	
Country-specific categorizations	
Order reference	LEDTUBE T5 HF H
LOGISTICAL DATA	
Temperature range at storage	-20+80 °C
Energy labelling regulation data acc EU 2019/2015  Lighting technology used LED	
Non-directional or directional	NDLS
Mains or non-mains	NMLS
Light source cap-type (or other electric interface)	G5
Connected light source (CLS)	No
Color-tuneable light source	No
Envelope	No

No No

SINGLE\_VALUE

Anti-glare shield	
Correlated colour temperature type	

High luminance light source

Standby power	0 W
Networked standby power for CLS	0 W

Claim of equivalent power	No

Length	1149.00 mm

Height	17.00 mm
Width	17 00 mm

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R9 Colour rendering index	0.00
Beam angle correspondence	SPHERE_360

Survival factor	0.90

Displacement factor	0.90

LED light source replaces a fluorescent light source
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EPREL ID	642870

Model number

## Safety advice

- Operation in outdoor applications in suitable damp-proof luminaires possible according to data sheet and installation instruction.
- The operating temperature range of LED tube is restricted. In case of doubt regarding suitability of the application please measure Tc max temperature on the product prior to installation.

#### **DOWNLOAD DATA**

	Documents and certificates
POF	User instruction
POF	Installation guide
POF	Declarations Of Conformity CE
POF	Declarations Of Conformity UKCA
	Photometric and lighting design files
	IES file (IES)
	LDT file (Eulumdat)
	LDC typ polar
	Spectral power distribution

## **LOGISTICAL DATA**

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075543201	Sleeve 1	1,165 mm x 20 mm x 24 mm	173.00 g	0.56 dm <sup>3</sup>
4058075543218	Shipping box 10	1,218 mm x 153 mm x 80 mm	2151.00 g	14.91 dm³

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit.

#### References / Links

- For current information see www.ledvance.com/osram-substitube

## Legal advice

- When used to replace a T5 fluorescent lamp the total energy efficiency and light distribution depends on the design of the lighting system.

## **DISCLAIMER**

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.