



# PRODUCT DATASHEET

## LED TUBE T5 HF HE28 P 1149 mm 16W 830

LED TUBE T5 HF P | LED tubes for electronic high frequency control gear (ECG), shatterproof



### 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:  $\leq 5$  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

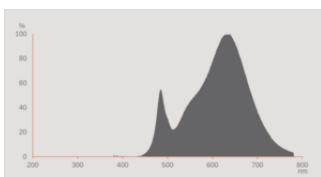
### Electrical data

Nominal wattage	16 W
Construction wattage	16.00 W
Nominal voltage	110...160 V
Operating mode	ECG <sup>1)</sup>
Nominal current	210 mA
Type of current	AC
Inrush current	12 A
Operating frequency	25...75 kHz
Mains frequency	25...75 kHz
Max. lamp no. on circuit break. 10 A (B)	17
Max. lamp no. on circuit break. 16 A (B)	28
Total harmonic distortion	15 %
Power factor $\lambda$	> 0.90

1) Check ECG compatibility at [ledvance.com/compatibility](https://www.ledvance.com/compatibility)

### Photometrical data

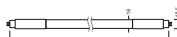
Luminous flux	2160 lm
Luminous efficacy	135 lm/W
Lumen main.fact.at end of nom.life time	0.70
Light color (designation)	Warm White
Color temperature	3000 K
Color rendering index Ra	80
Light color	830
Standard deviation of color matching	≤5 sdcn
Flickering metric (Pst LM)	1
Stroboscope effect metric (SVM)	0.4



## Light technical data

Beam angle	190 °
Warm-up time (60 %)	< 2.00 s
Starting time	< 0.5 s

## Dimensions &amp; Weight



Overall length	1163.00 mm
Length with base excl. base pins/connection	1149.00 mm
Diameter	18.50 mm
Tube diameter	16 mm
Maximum diameter	19 mm
Product weight	147.00 g

## Temperatures &amp; operating conditions

Ambient temperature range	-20...+45 °C
Maximum temperature at tc test point	75 °C
Performance temp. acc. to IEC 62717	60 °C <sup>1)</sup>

1) Tp rated. Tp point coincides with Tc point - marked on device

## 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 &amp; Standards

Energy efficiency class	E 1)
Energy consumption	16.00 kWh/1000h
Type of protection	IP20
Standards	CE
Photobiological safety group acc. to EN62778	RG0

1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (lowest efficiency)

## Country-specific categorizations

Order reference	LEDTUBE T5 HF H
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## LOGISTICAL DATA

Temperature range at storage	-20...+80 °C
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## 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
High luminance light source	No
Anti-glare shield	No
Correlated colour temperature type	SINGLE_VALUE
Standby power	0 W
Networked standby power for CLS	0 W
Claim of equivalent power	No
Length	1163.00 mm
Height	18.50 mm
Width	18.50 mm
Chromaticity coordinate x	0.434
Chromaticity coordinate y	0.403

R9 Colour rendering index	80
Beam angle correspondence	SPHERE_360
Survival factor	0.9
Displacement factor	0.9
LED light source replaces a fluorescent light source	No
EPREL ID	1317794
Model number	AC44156

### 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	
	User instruction
	Addon Technical Information
	Declarations Of Conformity CE
	Declarations Of Conformity UKCA
Photometric and lighting design files	
	IES file (IES)
	LDT file (Eulumdat)
	UGR file (UGR table)
	LDC typ polar
	Spectral power distribution

### LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4099854029325	Sleeve 1	1,165 mm x 20 mm x 24 mm	165.00 g	0.56 dm <sup>3</sup>
4099854029332	Shipping box 10	1,225 mm x 155 mm x 90 mm	2200.00 g	17.09 dm <sup>3</sup>

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.

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### References / Links

– For current information see [www.ledvance.com/ledtube](http://www.ledvance.com/ledtube)

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### 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.

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### DISCLAIMER

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