

# PRODUCT DATASHEET SubstiTUBE T8 HF Pro 7.5 W/3000 K 600 mm

SubstiTUBE T8 HF PRO | LED tubes for electronic high frequency control gears (ECG), shatterproof



#### Areas of application

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

#### **Product benefits**

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

#### **Product features**

- T8 LED tube made of glass with G13 base
- Low flicker according to EU 2019/2020
- Lamp tube made of glass with splinter protection e.g. for food industry applications
- Mercury-free and RoHS compliant
- Type of protection: IP20
- Lifetime: up to 60,000 h
- Compatible with many common electronic control gears (see also compatibility list)





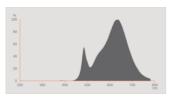
## **TECHNICAL DATA**

## Electrical data

Nominal wattage	7.5 W
Construction wattage	7.50 W
Nominal voltage	2040 V
Nominal current	50 mA
Type of current	AC
Inrush current	20 A
Operating frequency	2075 kHz
Mains frequency	2075 kHz
Total harmonic distortion	< 20 %
Power factor $\lambda$	> 0.80

### Photometrical data

Luminous flux	1000 lm
Luminous efficacy	133 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	83
Light color	830
Standard deviation of color matching	≤5 sdcm
Flickering metric (Pst LM)	<b>`1</b>
Stroboscope effect metric (SVM)	<sup>&lt;</sup> 0,4

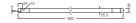


# Light technical data

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

Starting time	< 0.5 s
Rated beam angle (half peak value)	190.00 °

# **Dimensions & Weight**



Overall length	603.00 mm
Diameter	27.80 mm
Tube diameter	25,5 mm
Maximum diameter	28 mm
Product weight	109.00 g

# Temperatures & operating conditions

Ambient temperature range	-20+45 °C
Maximum temperature at tc test point	68 °C

## Lifespan

Lifespan	60000 h
Number of switching cycles	200000
Lumen maintenance at end of serv	0.70
Rated lamp survival factor at 6,000	≥ 0.90

# Additional product data

Base (standard designation)	G13
Mercury content	0.0 mg
Mercury-free	Yes

# **Capabilities**

Dimmable	No
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## Certificates & Standards

Energy efficiency class	E 1)
Energy consumption	9.00 kWh/1000h
Type of protection	IP20
Standards	CE

Photobiological safety group acc. to EN62778 RG	RG0
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<sup>1)</sup> Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (lowest efficiency)

## Country-specific categorizations

Order reference	LEDTUBE T8 HF P
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)	G13
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
Claim of equivalent power	No
Length	603.00 mm
Height	27.80 mm
Width	27.80 mm
Chromaticity coordinate x	0.433
Chromaticity coordinate y	0.403
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	No
EPREL ID	519417
Model number	AC33854

# Safety advice

- Not suitable for operation with low-loss and conventional control gears and main voltage.

- 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
PDF	Installation guide
PDF	Declarations Of Conformity CE
PDF	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
4058075545052	Sleeve 1	610 mm x 31 mm x 31 mm	127.00 g	0.59 dm <sup>3</sup>
4058075545069	Shipping box 10	662 mm x 210 mm x 115 mm	1630.00 g	15.99 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.

#### **DISCLAIMER**

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