

PRODUCT DATASHEET SubstiTUBE T5 HF HO54 26 W/6500 K 1163 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: \leq 5 sdcm



1163 mm



- 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)

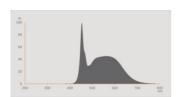
TECHNICAL DATA

Electrical data

Nominal wattage	26 W
Construction wattage	26.00 W
Nominal voltage	4070 V
Operating mode	ECG
Nominal current	147 mA
Type of current	AC
Inrush current	28 A
Operating frequency	2075 kHz
Mains frequency	2075 kHz
Total harmonic distortion	< 20 %
Power factor λ	> 0.90

Photometrical data

Luminous flux	4000 lm
Luminous efficacy	153 lm/W
Lumen main.fact.at end of nom.life time	0.70
Light color (designation)	Cool Daylight
Color temperature	6500 K
Color rendering index Ra	83
Light color	865
Standard deviation of color matching	≤5 sdcm
Flickering metric (Pst LM)	1
Stroboscope effect metric (SVM)	0,4



EPREL data spectral diagram PROF LEDr 6500K

Light technical data

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

Dimensions & Weight



Overall length	1163.00 mm
Length with base excl. base pins/connection	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	83 °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

|--|

Certificates & Standards

Energy efficiency class	D 1)

Energy consumption	29.00 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

Temperature range at storage -20+80 °C	Country-specific categorizations	
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 Anti-glare shield No Correlated colour temperature type SINGLE_VALUE Standby power OW Networked standby power for CLS OW Length 1183.00 mm Height 17.00 mm Width 17.00 mm Chromaticity coordinate x O.328 Bear angle correspondence SPHERE_360 Survival factor O.90 Displacement factor OND	Order reference	LEDTUBE T5 HF H
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) 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 O W Networked standby power for CLS O W Length Height 1163.00 mm Height 17.00 mm Width 17.00 mm Width 17.00 mm Chromaticity coordinate x O.312 Chromaticity coordinate y Ream angle correspondence SPHERE_360 Survival factor O.90 Displacement factor	LOGISTICAL DATA	
Lighting technology used Non-directional or directional Non-directional or directional 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 O W Networked standby power for CLS O W Claim of equivalent power No Length 1163.00 mm Height 17.00 mm Width 17.00 mm Chromaticity coordinate x 0.312 Chromaticity coordinate y 0.328 R9 Colour rendering index 0.90 Survival factor 0.90 Displacement factor	Temperature range at storage	-20+80 °C
Non-directional or directional 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 O W Networked standby power for CLS O W Claim of equivalent power No Length 1163.00 mm Height 17.00 mm Wridth 17.00 mm Wridth 17.00 mm Chromaticity coordinate x 0.312 Chromaticity coordinate y 0.328 R9 Colour rendering index 0.90 Displacement factor 0.90	Energy labelling regulation data acc EU 2019/2015	
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 17.00 mm Wridth 17.00 mm Chromaticity coordinate x 0.312 Chromaticity coordinate y 0.328 R9 Colour rendering index 0.00 Beam angle correspondence SPHERE_360 Survival factor 0.90 Displacement factor 0.90	Lighting technology used	LED
Light source cap-type (or other electric interface) 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 O W Networked standby power for CLS O W Claim of equivalent power No Length 1163.00 mm Height 17.00 mm Width 17.00 mm Chromaticity coordinate x 0.312 Chromaticity coordinate y 89 Colour rendering index Double Consequence SPHERE_360 Survival factor 0.90 Displacement factor	Non-directional or directional	NDLS
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 OW Networked standby power for CLS OW Claim of equivalent power Length 1163.00 mm Height 17.00 mm Width 17.00 mm Chromaticity coordinate x 0.312 Chromaticity coordinate y 0.328 R9 Colour rendering index Sunvival factor 0.90 Displacement factor	Mains or non-mains	NMLS
Color-tuneable light source Envelope No High luminance light source No Anti-glare shield No Correlated colour temperature type SINGLE_VALUE Standby power OW Networked standby power for CLS OW Claim of equivalent power Length Height 1163.00 mm Height 17.00 mm Width 17.00 mm Chromaticity coordinate x 0.312 Chromaticity coordinate y R9 Colour rendering index Survival factor 0.90 Displacement factor	Light source cap-type (or other electric interface)	G5
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 17.00 mm Width 17.00 mm Chromaticity coordinate x 0.312 Chromaticity coordinate y 0.328 R9 Colour rendering index 0.00 Beam angle correspondence SPHERE_360 Survival factor 0.90	Connected light source (CLS)	No
High luminance light source 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 17.00 mm Width 17.00 mm Chromaticity coordinate x 0.312 Chromaticity coordinate y 0.328 R9 Colour rendering index 0.00 Beam angle correspondence SPHERE_360 Survival factor 0.90 Displacement factor	Color-tuneable light source	No
Anti-glare shield 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 17.00 mm Width 17.00 mm Chromaticity coordinate x 0.312 Chromaticity coordinate y 0.328 R9 Colour rendering index 0.00 Beam angle correspondence SPHERE_360 Survival factor 0.90 Displacement factor	Envelope	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 17.00 mm Width 17.00 mm Chromaticity coordinate x 0.312 Chromaticity coordinate y 0.328 R9 Colour rendering index 0.00 Beam angle correspondence SPHERE_360 Survival factor 0.90 Displacement factor	High luminance light source	No
Standby power 0 W Networked standby power for CLS 0 W Claim of equivalent power No Length 1163.00 mm Height 17.00 mm Width 17.00 mm Chromaticity coordinate x 0.312 Chromaticity coordinate y 0.328 R9 Colour rendering index 0.00 Beam angle correspondence SPHERE_360 Survival factor 0.90 Displacement factor 0.90	Anti-glare shield	No
Networked standby power for CLS Claim of equivalent power No Length 1163.00 mm Height 17.00 mm Width 17.00 mm Chromaticity coordinate x 0.312 Chromaticity coordinate y R9 Colour rendering index Beam angle correspondence SPHERE_360 Survival factor 0.90 Displacement factor	Correlated colour temperature type	SINGLE_VALUE
Claim of equivalent power Length 1163.00 mm Height 17.00 mm Width 17.00 mm Chromaticity coordinate x 0.312 Chromaticity coordinate y 0.328 R9 Colour rendering index 0.00 Beam angle correspondence SPHERE_360 Survival factor 0.90 Displacement factor	Standby power	0 W
Length 1163.00 mm Height 17.00 mm Width 17.00 mm Chromaticity coordinate x 0.312 Chromaticity coordinate y 0.328 R9 Colour rendering index 0.00 Beam angle correspondence SPHERE_360 Survival factor 0.90 Displacement factor 0.90	Networked standby power for CLS	0 W
Height 17.00 mm Width 17.00 mm Chromaticity coordinate x 0.312 Chromaticity coordinate y 0.328 R9 Colour rendering index 0.00 Beam angle correspondence SPHERE_360 Survival factor 0.90 Displacement factor 0.90	Claim of equivalent power	No
Width 17.00 mm Chromaticity coordinate x 0.312 Chromaticity coordinate y 0.328 R9 Colour rendering index 0.00 Beam angle correspondence SPHERE_360 Survival factor 0.90 Displacement factor 0.90	Length	1163.00 mm
Chromaticity coordinate x Chromaticity coordinate y 0.312 Chromaticity coordinate y 0.328 R9 Colour rendering index 0.00 Beam angle correspondence SPHERE_360 Survival factor 0.90 Displacement factor 0.90	Height	17.00 mm
Chromaticity coordinate y 0.328 R9 Colour rendering index 0.00 Beam angle correspondence SPHERE_360 Survival factor 0.90 Displacement factor 0.90	Width	17.00 mm
R9 Colour rendering index 0.00 Beam angle correspondence SPHERE_360 Survival factor 0.90 Displacement factor 0.90	Chromaticity coordinate x	0.312
Beam angle correspondence SPHERE_360 Survival factor 0.90 Displacement factor 0.90	Chromaticity coordinate y	0.328
Survival factor 0.90 Displacement factor 0.90	R9 Colour rendering index	0.00
Displacement factor 0.90	Beam angle correspondence	SPHERE_360
	Survival factor	0.90
LED light source replaces a fluorescent light source No	Displacement factor	0.90
	LED light source replaces a fluorescent light source	No

EPREL ID	642862
Model number	AC35147

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 temperature on the product prior to installation.
- All electrical connections must be made by a qualified person.
- Not suitable for emergency lighting.

DOWNLOAD DATA

	Documents and certificates	Document name	
PDF	User instruction / safety instructions	SubstiTUBE T5 HF (ECG) LED TUBE	
PDF	Extended installation guide	SubstiTUBE® T8 T5	
PDF	Declarations of conformity	LEDTUBE T5 HF	
PDF	Declarations of conformity UKCA	LEDTUBE T8 and T5	

Photometric and lighting design files	Document name
IES file (IES)	ST5HO54 1.2M 26W 865 HF G5 OSRAM
LDT file (Eulumdat)	ST5HO54 1.2M 26W 865 HF G5 OSRAM
Light distribution curve type polar	ST5HO54 1.2M 26W 865 HF G5 OSRAM
Spectral power distribution	EPREL data spectral diagram PROF LEDr 6500K

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075543041	Sleeve 1	1,165 mm x 20 mm x 24 mm	173.00 g	0.56 dm ³
4058075543058	Shipping box 10	1,218 mm x 153 mm x 80 mm	2151.00 g	14.91 dm ³

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products.

1163 mm

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.

1163 mm