PRODUCT DATASHEET
LED TUBE T8 HF P 1500 mm 20W 840

LED TUBE T8 HF P | LED tubes for electronic high frequency control gear (ECG), shatterproof

PERFOR-
MANCE
CLASS

Areas of application

- General illumination within ambient temperatures from -20…+45 °C
- Illumination of production areas
- Traffic zones and corridors
- Supermarkets and department stores
- Industry

Product benefits

- No bending thanks to glass tube
- Shatter protection thanks to special PET coating
- Very high resistance to switching loads
- Quick, simple and safe replacement without rewiring
- Energy savings of up to 66 % (compared to T8 fluorescent lamp)
- Also suitable for operation at low temperatures

Product features

- LED replacement for classic T8 fluorescent lamps with G13 socket for use in ECG luminaires
- Compatible with many common electronic control gears (see also compatibility list)
- Low flicker according to EU 2019-2020 (SVM ≤ 0.4 / PstLM ≤ 1)
- Lamp tube made of glass with splinter protection
- For especially uniform illumination
- Mercury-free and RoHS compliant
- Type of protection: IP20

– Lifetime up to 75,000 h

TECHNICAL DATA

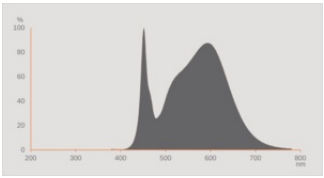
Electrical data

Nominal wattage	20 W
Construction wattage	20.00 W
Nominal voltage	42…72 V
Operating mode	ECG [1)]
Nominal current	490 mA
Type of current	AC
Inrush current	12 A
Operating frequency	35…75 kHz
Mains frequency	35…75 kHz
Max. lamp number on MCB B10 A	12
Max. lamp number on MCB B16 A	19
Total harmonic distortion	< 10 %
Power factor λ	0.90

1) Check ECG compatibility at ledvance.com/compatibility

Photometrical data

Luminous flux	3100 lm
Luminous efficacy	155 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	80
Light color	840
Standard deviation of color matching	≤5 sdcm
Rated LLMF at 6,000 h	0.90
Flickering metric (Pst LM)	1.0
Stroboscope effect metric (SVM)	≤0.4

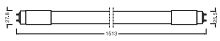


EPREL data spectral diagram PROF LEDr 4000K

Light technical data

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

Dimensions & Weight



Overall length	1513.00 mm
Length with base excl. base pins/connection	1500.00 mm
Diameter	27.80 mm
Tube diameter	25,5 mm
Maximum diameter	28 mm
Product weight	284.00 g

Temperatures & operating conditions

Ambient temperature range	-20…+45 °C [1)]
Maximum temperature at tc test point	75 °C
Performance temp. acc. to IEC 62717	55 °C [2)]

1) Temperature surrounding the lamp - for enclosed luminaires: temperature inside of the luminaire

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

Lifespan

Lifespan L70/B50 at 25 °C	75000 h

Lifespan L80/B50 at 25 °C	75000 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)	G13
Mercury content	0.0 mg
Mercury-free	Yes
Product remark	The declared values stated in the data sheet refer to the operation of the LED tube on the reference ECG OSRAM QTP-OPTIMAL 1x54-58 (AA517330755)

Capabilities

Dimmable	No

Certificates & Standards

Energy efficiency class	D [1)]
Energy consumption	20.00 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 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	1513.00 mm
Height	27.80 mm
Width	27.80 mm
Chromaticity coordinate x	0.3818
Chromaticity coordinate y	0.3797
R9 Colour rendering index	>0
Beam angle correspondence	SPHERE_360
Survival factor	>0.9
Displacement factor	0.9
LED light source replaces a fluorescent light source	No
EPREL ID	1317757
Model number	AC42565

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 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	LEDTUBE T8 HF Ledvance
PDF	Addon technical information	LED TUBE T8 UNIVERSAL T8 HF T5 HF Gen 11 ballast compatibility 2023
PDF	Addon technical information	LED TUBE T8 T5 HF ballast compatibility 2025
PDF	Legal information	Informationstext 18 Abs 4 ElektroG
PDF	Declarations of conformity	LED TUBES T8 HF/UN

	Documents and certificates	Document name
PDF	Declarations of conformity UKCA	LED TUBES T8 HF/UN UKCA
PDF	ECG compatibility list	LED TUBE T8 UNIVERSAL T8 HF T5 HF Gen 11 ballast compatibility 2023

	Photometric and lighting design files	Document name
IES	IES file (IES)	LEDTUBE T8 HF P 1500 20W 840 LEDV
LDT	LDT file (Eulumdat)	LEDTUBE T8 HF P 1500 20W 840 LEDV
	UGR file (UGR table)	LEDTUBE T8 HF P 1500 20W 840 LEDV
	Light distribution curve type polar	LEDTUBE T8 HF P 1500 20W 840 LEDV
	Spectral power distribution	EPREL data spectral diagram PROF LEDr 4000K

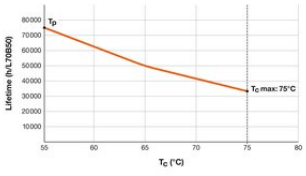
	Tender texts	Document name
TXT	Tender documents	LED TUBE T8 HF P 1500 mm 20W 840-EN

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4099854025990	Sleeve 1	1,520 mm x 31 mm x 31 mm	313.00 g	1.46 dm^3
4099854026003	Shipping box 10	1,572 mm x 210 mm x 115 mm	3902.00 g	37.96 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. When placing an order, for the quantity please enter single or multiples of a shipping unit.

ADDITIONAL CATALOG INFORMATION



References / Links

– For current information see www.ledvance.com/ledtube

Legal advice

– When used to replace a T8 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.