

PRODUCT DATASHEET

LED TUBE T5 HF HE21 P 849 mm 10W 840

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: ≤ 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	10 W
Construction wattage	10.00 W
Nominal voltage	50...90 V
Operating mode	ECG ¹⁾
Nominal current	193 mA
Type of current	AC
Inrush current	12 A
Operating frequency	25...75 kHz
Mains frequency	25...75 kHz
Max. lamp number on MCB B10 A	17
Max. lamp number on MCB B16 A	28
Total harmonic distortion	15 %
Power factor λ	> 0.80

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

Photometrical data

Luminous flux	1500 lm
Luminous efficacy	150 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 sdcn
Rated LLMF at 6,000 h	0.90
Flickering metric (Pst LM)	1
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	863.00 mm
Length with base excl. base pins/connection	849.00 mm
Diameter	18.50 mm
Tube diameter	16 mm
Maximum diameter	19 mm
Product weight	106.00 g

Temperatures & operating conditions

Ambient temperature range	-20...+45 °C ¹⁾
Maximum temperature at tc test point	70 °C
Performance temp. acc. to IEC 62717	60 °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	50000 h
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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
Product remark	The declared values stated in the data sheet refer to the operation of the LED tube on the reference ECG OSRAM / (QTP5 1x14-35 (AA334180455)

Capabilities

Dimmable	No
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Certificates & Standards

Energy efficiency class	D ¹⁾
Energy consumption	10.00 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	863.00 mm
Height	18.50 mm
Width	18.50 mm
Chromaticity coordinate x	0.382
Chromaticity coordinate y	0.38
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	1317792
Model number	AC44160

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.
- Lamp not suitable for emergency operation.

DOWNLOAD DATA

Documents and certificates		Document name
	User instruction / safety instructions	LEDTUBE T5 HF (ECG)
	Addon technical information	LED TUBE T8 UNIVERSAL T8 HF T5 HF Gen 11 ballast compatibility 2023
	Extended installation guide	Installation instructions LED TUBE T8, T5 und DULUX LED 2024 10 EN
	Legal information	Informationstext 18 Abs 4 ElektroG

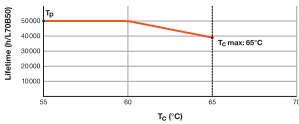
Documents and certificates		Document name
	Declarations of conformity	LED TUBE T5 HF
	Declarations of conformity UKCA	LED TUBE T5 HF
Photometric and lighting design files		Document name
	IES file (IES)	LEDTUBE T5 HF HE21 P 849 10W 840 LEDV
	LDT file (Eulumdat)	LEDTUBE T5 HF HE21 P 849 10W 840 LEDV
	UGR file (UGR table)	LEDTUBE T5 HF HE21 P 849 10W 840 LEDV
	Light distribution curve type polar	LEDTUBE T5 HF HE21 P 849 10W 840 LEDV
	Spectral power distribution	EPREL data spectral diagram PROF LEDr 4000K
Tender texts		Document name
	Tender documents	LED TUBE T5 HF P 849 mm 10W 840-EN

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4099854029400	Sleeve 1	865 mm x 20 mm x 24 mm	121.00 g	0.42 dm³
4099854029417	Shipping box 10	925 mm x 155 mm x 90 mm	1640.00 g	12.90 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.

ADDITIONAL CATALOG INFORMATION



References / Links

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

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.