

# PRODUCT DATASHEET

## LED TUBE T5 EXTERNAL HE28 P 1149 mm 16W 840

LED TUBE T5 EXTERNAL P | LED TUBE T5 EXTERNAL for LED DRIVER EXTERNAL



PERFOR-  
MANCE  
CLASS

### Areas of application

- Industrial lighting (e.g. manufacturing plants, logistic centers, warehouses)
- Linear lighting for office, education, storage areas and retail
- Shops, supermarkets

### Product benefits

- Simple upgrade to dimmable LED system
- Hassle free application, no ballast compatibility check necessary
- Suitable for emergency lighting (self-contained battery pack)
- Shatter protection thanks to special PET coating
- No bending thanks to glass tube
- 5 years guarantee

### Product features

- Designed to power only with LED DRIVER LED TUBE EXTERNAL DALI
- Lamp tube made of glass with splinter protection
- Quality dimming of 1...100 %
- High resistance to switching loads
- Suitable for ambient temperatures from -20...+50 °C



TECHNICAL DATA

Electrical data

Nominal wattage	16 W
Construction wattage	16.00 W
Nominal voltage	41 V
Operating mode	EXT <sup>1)</sup>
Nominal current	400 mA
Type of current	DC
Operating frequency	0 Hz
Mains frequency	0 Hz
Total harmonic distortion	< 20 %
Power factor $\lambda$	0.90

1) Designed to power with LEDVANCE LED DRIVER LED TUBE EXTERNAL DALI P

Photometrical data

Luminous flux	2400 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 sdc <sub>m</sub>
Rated LLMF at 6,000 h	0.80
Flickering metric (Pst LM)	<1
Stroboscope effect metric (SVM)	<0,4



EPREL data spectral diagram PROF  
LEDr 4000K

Light technical data

Beam angle	180 °
Warm-up time (60 %)	< 2.00 s
Starting time	< 1.0 s

Dimensions & Weight



Overall length	1163.00 mm
Length with base excl. base pins/connection	1149.00 mm
Diameter	17.00 mm
Tube diameter	15,7 mm
Maximum diameter	17 mm
Product weight	180.00 g

Temperatures & operating conditions

Ambient temperature range	-20...+50 °C <sup>1)</sup>
Maximum temperature at tc test point	70 °C

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

Lifespan

Lifespan L70/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)	G5
Mercury content	0.0 mg
Mercury-free	Yes
Product remark	Single sided LED TUBE (one-sided DC input ) complying with safety requirement acc. IEC 62776:2014. Safety protection against electrical shock in misuse (ECG/CCG/Mains operation).

## Capabilities

Dimmable	Yes
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## Certificates &amp; Standards

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

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

## Country-specific categorizations

Order reference	LEDTUBE T5 EXT
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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
Claim of equivalent power	No
Length	1163.00 mm
Height	17.00 mm
Width	17.00 mm
Chromaticity coordinate x	0,381
Chromaticity coordinate y	0,379
R9 Colour rendering index	6

Beam angle correspondence	SPHERE_360
Survival factor	0,90
Displacement factor	0,90
LED light source replaces a fluorescent light source	No
EPREL ID	1939316
Model number	AC59120,AC59120

### 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.
- LED TUBE T5 EXTERNAL HO80 cannot be operated with 2-channel driver.
- All electrical connections must be made by a qualified person.
- Disconnect mains before installation.

### DOWNLOAD DATA

Documents and certificates		Document name
	User instruction / safety instructions	LEDTUBE EXT P User instruction LEDV
	Legal information	Informationstext 18 Abs 4 ElektroG
	Declarations of conformity	LEDTUBE T5-T8 EXT
	Declarations of conformity UKCA	LEDTUBE T5_T8 EXT
Photometric and lighting design files		Document name
	IES file (IES)	LEDTUBE T5 EXT HE28 P 1149 16W 840 LEDV
	LDT file (Eulumdat)	LEDTUBE T5 EXT HE28 P 1149 16W 840 LEDV
	UGR file (UGR table)	LEDTUBE T5 EXT HE28 P 1149 16W 840 LEDV
	Light distribution curve type polar	LEDTUBE T5 EXT HE28 P 1149 16W 840 LEDV
	Spectral power distribution	EPREL data spectral diagram PROF LEDr 4000K

## LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4099854294327	Sleeve 1	1,165 mm x 22 mm x 22 mm	211.00 g	0.56 dm <sup>3</sup>
4099854294334	Shipping box 25	1,219 mm x 159 mm x 178 mm	7106.00 g	34.50 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.

## References / Links

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

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