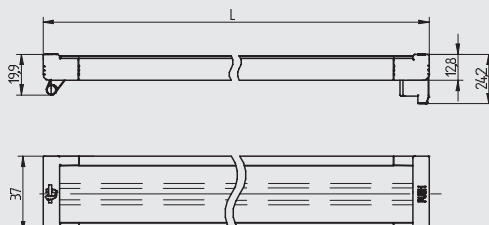


# LED - Lighting and connection technology

32.130  
28.701

## Linear Flat System 1.166 mm GR6d-3 - Narrow beam



pkg. 12  
wt. 530 g  
part no. 32.130.2038.00

Socketable Flat System according to **Zhaga Book 14**  
LED module category designation: **L 120 W5**  
Luminous flux category according to **Zhaga Book 1: 4000**

### Linear Flat System - Narrow beam

Flat and exchangeable LED lamp - No additional tools required  
Length: 1.166 mm  
Small overall height: approx. 13 mm

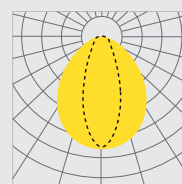
### Range of applications:

Linear- and panel lights  
Office: Work place lighting and corridor lighting  
Shop: General lighting and corridor lighting  
Industry: Park stores, department stores and warehouses  
Public applications: Corridors and stairways

Quick and easy installation even in very narrow luminaires (slot light channels)  
Audible and tactile feedback during mounting process  
„Click-Fit“  
Late Stage Finishing (final configuration of the luminaire shortly before delivery)

Concentrated illumination of areas in high and narrow aisles  
Improved visibility and contrast of the illuminated areas  
Good and uniform light distribution

- Photobiological safety: Risk group: 0
- Protection class: IP20
- Warranty\*: 5 Years



Photometric data	Tc 50 °C
Useful luminous flux (120° cone)	3.150 lm
Colour temperature	4.000 K
Colour Rendering Index CRI	>80
Colour tolerance	≤ 3,5 SDCM
Colour code	840 / 359
Number of LEDs per module	78
Beam angle	narrow beam
Temperature data	
Max. temperature at Tc point	max. 65° C
Operating temperature	-30° C up to +45° C
Storage temperature	-30° C up to +85° C
Electrical data	
Operating mode	Constant current
Operational current I <sub>f</sub> (mA)	700 mA
Max. operational current I <sub>f</sub> (mA)	1.1000 mA
Typical operational voltage U <sub>f</sub> (V) ± 7%	37.00 V
Max. admissible voltage	60V SELV
Maximum power consumption (W)	27.80 W
Dimmable	yes, with suitable electronic control gear
Energy data	
Power consumption	28 kWh/1.000h
Energy efficiency class (A-G)	E
Average life span (L80B10)	50.000 h

\* Warranty conditions of BJB GmbH & Co KG as stated on page 100 of the LED Applications catalogue (Issue No.1 - 2014) and as available via the Internet under [www.bjb.com/warranty-conditions.html](http://www.bjb.com/warranty-conditions.html) are valid.



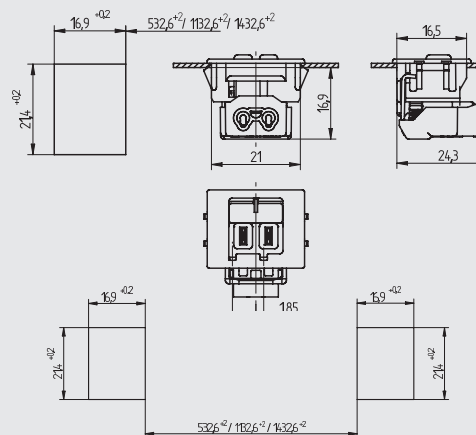
# LED - Lighting and connection technology

31.130  
28.701

Linear-Flat-System 1.166 mm GR6d-3 - Narrow beam



Applicable with:



pkg.	wt.	part no.
480	10 g	<b>28.701.1002.51</b>
for panel thickness: 0.4 - 1.0 mm		
480	10 g	<b>28.701.1006.51</b>
for panel thickness: 1.0 - 2.0 mm		

**Socketable Flat System according to Zhaga Book 14**

**Lampholder for Linear Flat LED lamp**

Socket: GR6d-3

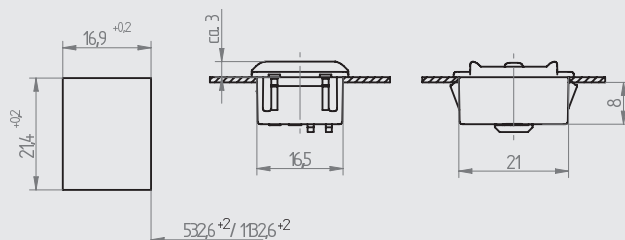
Push in fixing

Holder body: PC

- Also suitable for automatic wiring
- Spring connection "Click-Fit"
- VDE-REG.-Nr. E612

T 80	2 A 250 V		CAD	i
0.25 - 0.75 mm² 98...				

Applicable with:



pkg.	wt.	part no.
480	8 g	<b>28.701.U301.51</b>
for panel thickness: 0.4 - 1.0 mm		
480	8 g	<b>28.701.U302.51</b>
for panel thickness: 1.0 - 2.0 mm		

**Socketable Flat System according to Zhaga Book 14**

**Lamp support for Linear Flat LED lamp**

Push in fixing

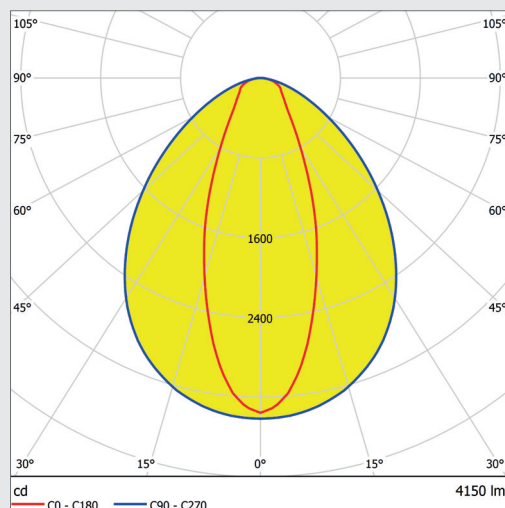
Material: PC

Thermal extension: Axial movement will be compensated

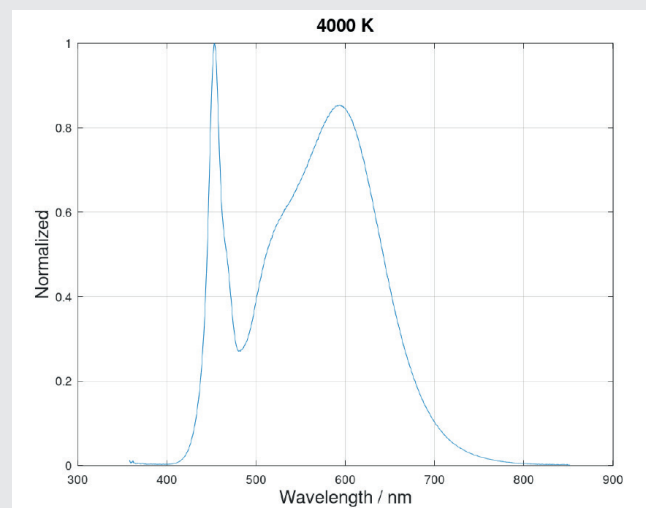
Release function with spring

CAD	i
98...	

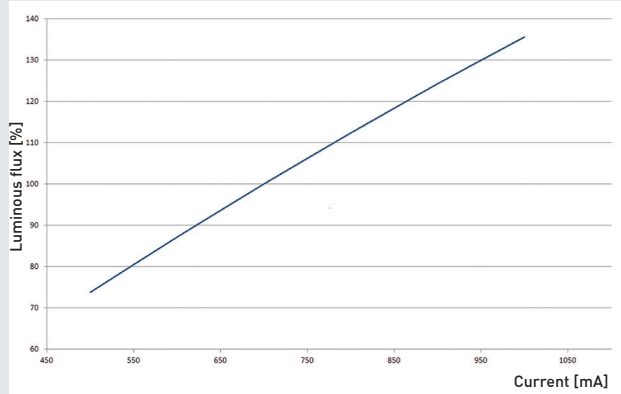
Light distribution



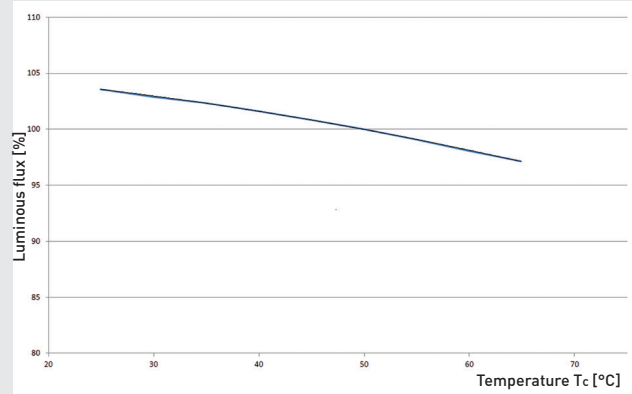
Spectral intensity



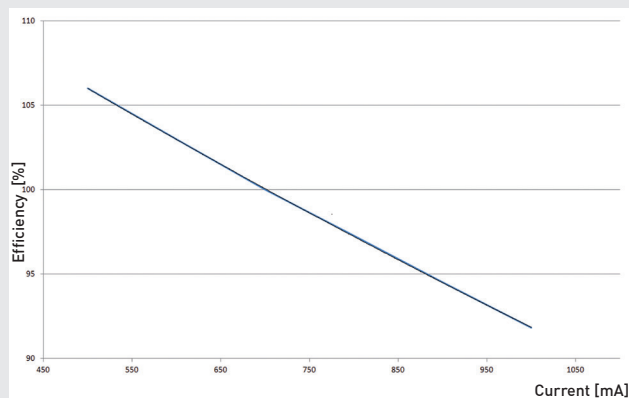
Relative luminous flux based on operational current



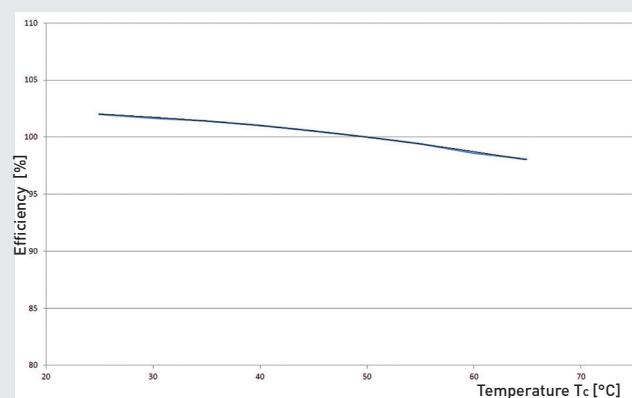
Relative luminous flux based on T<sub>c</sub>



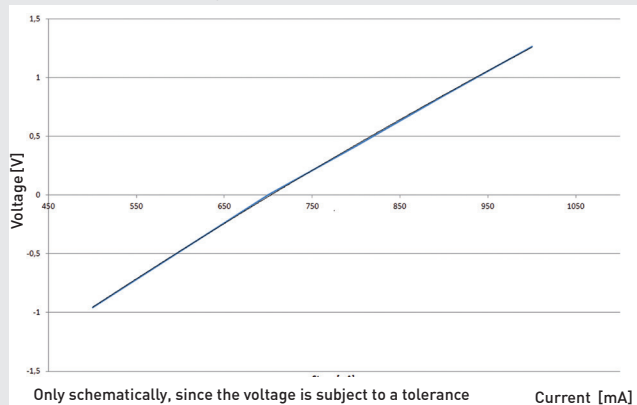
Efficiency / leading power



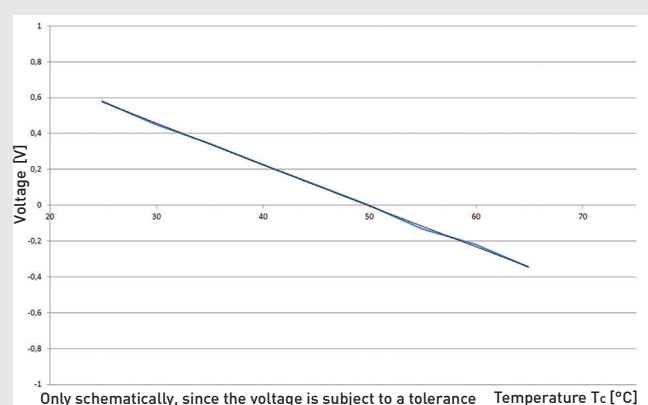
Efficiency / temperature



Electrical current / voltage characteristics



Voltage / temperature



# LED - Lighting and connection technology

32.130  
28.701

General information Linear-Flat-System 1.166 mm GR6d-3 - Narrow beam



## EOS/ESD safety guidelines

Some components of the BJB /// OEM – Line Modular System might be harmed by electrostatic discharge (ESD) and electrical overstress (EOS) and may only be installed in the factory and on site if appropriate EOS/ESD protection measures have been taken.

Modules like the Linear Flat System with enclosed housing, where no contact to the LED module is possible do not need special measures for protection of electrostatic discharge (ESD).

## Assembly instructions

Applicable with lampholder and fixing element **28.701**

The LED lamp is inserted into the lamp support and then being swivelled into the lampholder. Afterwards the lamp snaps with the "PUSH" marked side into the click-fit mechanism of the lampholder. Another press on this "PUSH" releases the lamp again. A safety mechanism remains the lamp hanging in the lampholder so that it does not fall out.

**Advice:** Before pressing again, the LED lamp must be removed completely from the lampholder.

Before an installation or removal of the LED lamp the power supply has to be switched off. A replacement with power supply might harm the LED lamp and /or the controll gear.

## Attention should be paid to:

Do not cover the lamp with paper, fabric or other easily inflammable material.

Keep the lamp apart from water and intense humidity.

Avoid additional mechanical stress.

Do not touch the lamp during or shortly after use – Risk of burns!

Do not look directly into the lamp.

Before working on the lamp or luminaire always disconnect from the mains!

## Note to chemical reactions

Chemical substances may harm the LED module. This could lead to reduced luminous flux, colour shift or total failure of the module caused by corrosion of electrical connections. Avoid corrosive atmosphere during usage and storage.

## Life span and lumen maintenance

The light output of an LED module decreases over the life-time, this is characterized with the L value.

L70 means that the LED module will give 70 % of its initial luminous flux. This value is always related to the number of operation hours and therefore defines the lifetime of an LED module. As the L value is a statistical value and the lumen maintenance may vary over the delivered LED modules.

## Thermal design, tc point, ambient temperature and life-time

The rated life of a LED module depends to a large extent on the temperature. If the permissible temperature limits are exceeded, the life of the LED module will be greatly reduced or the module may be destroyed.

The temperature at tc reference point is crucial for the light output and life-time of a LED module.

## Electrical supply

LED modules from BJB are not protected against overvoltages, overcurrents, overloads or short-circuit currents. Safe and reliable operation can only be guaranteed in conjunction with a LED control gear which complies with the relevant standards.

The BJB LED modules shall be operated with SELV converters ( $U_{out}$  max. 60 V DC) which provide a constant current. Operation with a constant voltage LED control gear will lead to an irreversible damage of the module. Wrong polarity can damage the LED module. If LED modules are wired in parallel connection and a wire breaks or a complete module fails then the current passing through the other module increases. This may reduce its life considerably. In addition there can be slight differences in light output caused by tolerances.

## Wiring and cross section for lampholder 28.701

For solid conductors or conductors with tinned wire ends with a cross section of 0.25 to 0.75 mm<sup>2</sup>