

HÄFELE



## THE LOOX LIGHTING SYSTEM

LED lighting systems for furniture and furnishings

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## LOOX LED 2020

Downlight  
page 22.



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## LED FLEXIBLE STRIP LIGHTS

More detailed information on  
LED flexible strip lights can be  
found from page 24 onwards.



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## LOOX LED 2019 LOOX LED 2021

Different glass edge light-  
ing systems can be found  
from page 38 onwards.



# LOOX

## ENGINEERED BY HÄFELE

Loox is Häfele's own house assortment for LED lighting systems in furniture. The heart of the system consists of the innovative and powerful drivers. The simple and flexible design of the system is reflected in the standardised Plug & Play technology, and makes it easy to integrate LED lighting in your furniture – for both series and individual furniture manufacture. The modular Loox lighting system has many certificates and test symbols, and is therefore predestined for international use.

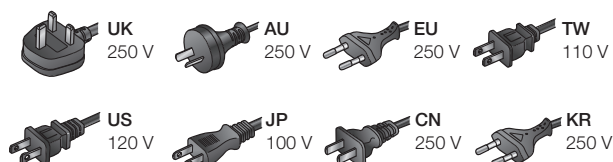
### THE BASIC STRUCTURE OF THE LOOX SYSTEM

#### 1 Driver

Loox has a suitable driver with the right output for any system. The Loox drivers are suitable for the different voltages and frequencies that are found all over the world. Quality and safety are confirmed by certificates.

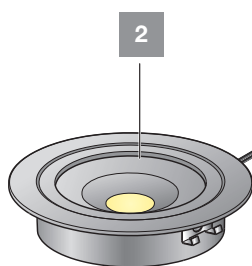
12 V 24 V 350 mA

#### Certified safety



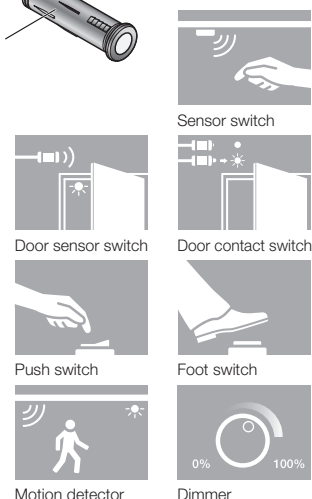
#### 2 Lights

The Loox lighting system provides a wide range of LED lights for the different systems (12 V, 24 V, 350 mA). Individual designs are available and allow to customise your furniture. The standard plug-in connection and the clear colour coding make the system easy to assemble and install.



#### 3 Switches

Connect the standard switches directly to the driver and reap the benefits of the fact that any switch is suitable for any driver (12 V, 24 V or 350 mA). Additional control units are not needed.





## SYSTEM COMPONENTS

Based on the Plug & Play driver, you can customise the system in accordance with your requirements using add-on modules.

The flexible and modular system components make it possible to have a wide range of applications and solutions, simplify installation or provide meaningful combinations of different lights and switches.

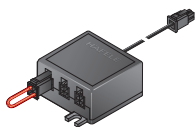
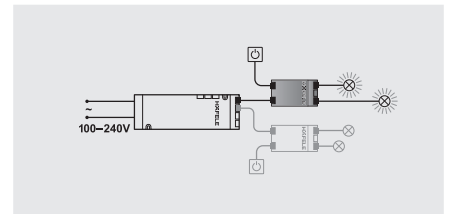
### THE MOST IMPORTANT COMPONENTS OF THE LOOX SYSTEM



#### 3-way distributor with switching function

The relevant lights can be operated separately and individually using the 3-way distributor connected to the output of the light.

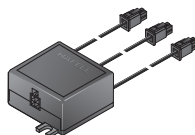
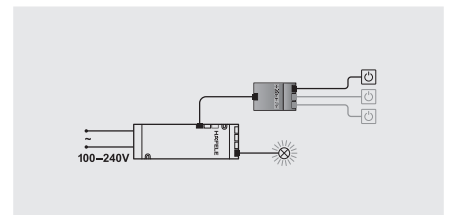
12 V 24 V



#### Multi switch box

1 LED driver operated by up to 3 switches. This way the LED driver can be switched on and off from different points.

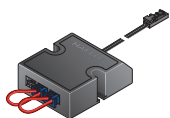
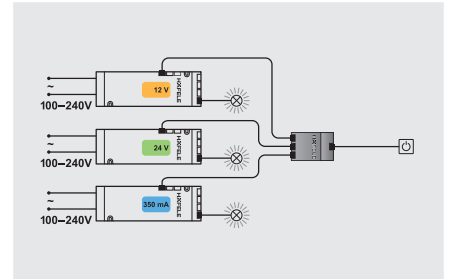
12 V 24 V 350 mA



#### Multi driver box

Up to 3 LED drivers can be controlled with one switch. Several drivers and therefore several lights in the room can be switched on and off with one switch. These can also be 3 of the same driver if you require additional power in a 12 V system, for example.

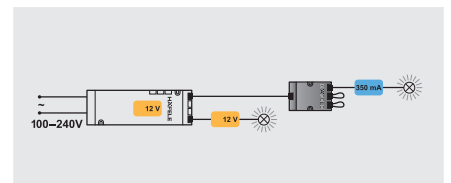
12 V 24 V 350 mA



#### Converter 350 mA to 12 V

Combine 350 mA lights with 12 V lights and operate them using a single 12 V driver.

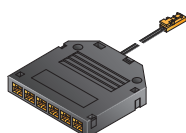
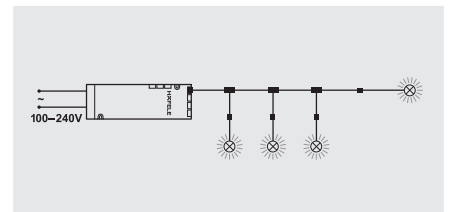
350 mA → 12 V



#### 4-way extension lead (Daisy Chain cable)

4 LED lights can be connected with a single lead from an LED output using the 4-way extension.

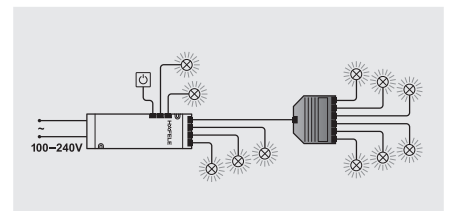
12 V 24 V



#### 6-way distributor

Connect the 6-way distributor to an LED light output and you will be able to operate 6 additional lights using the driver.

12 V 24 V








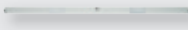









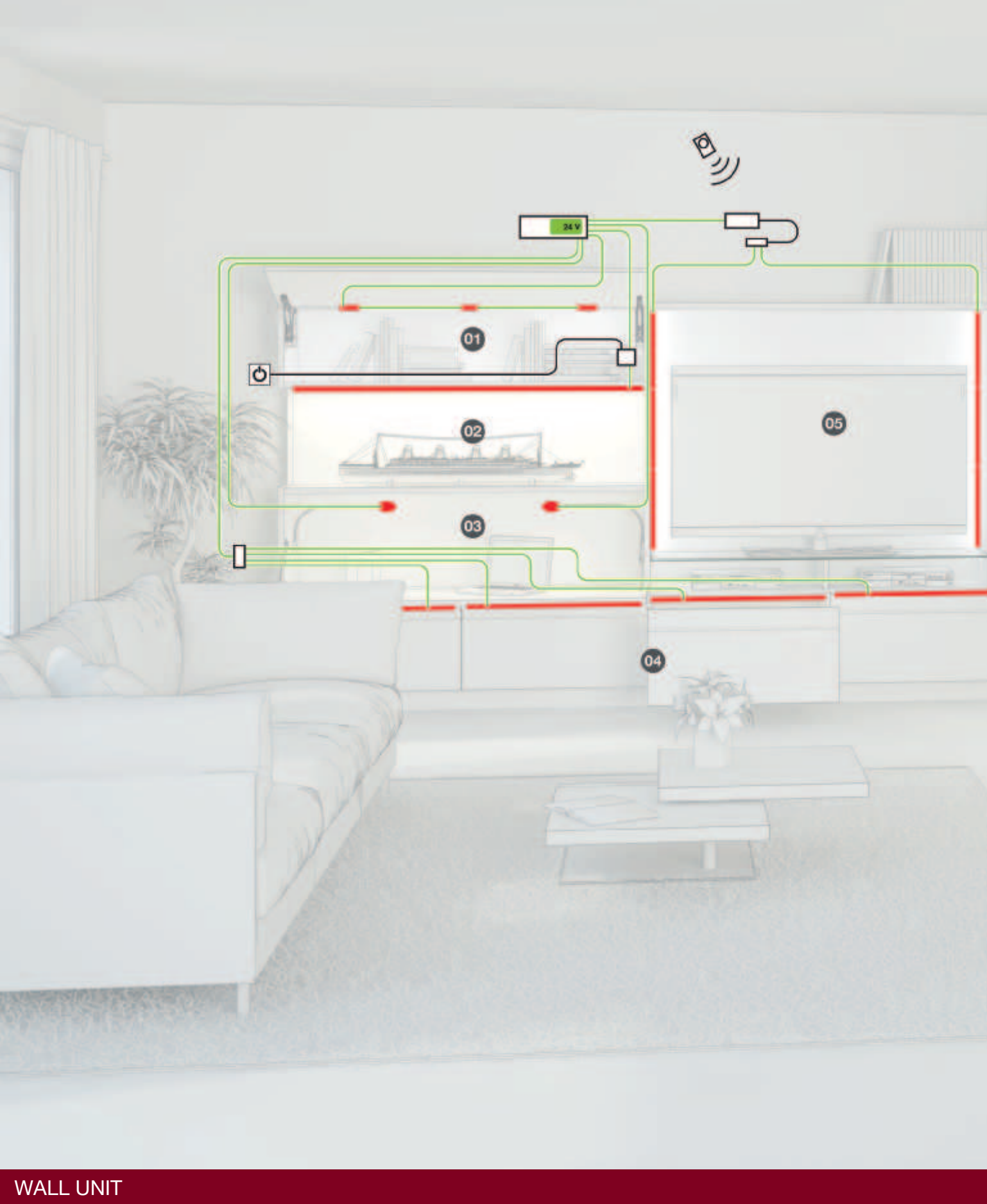
# LOOX

APPLICATION

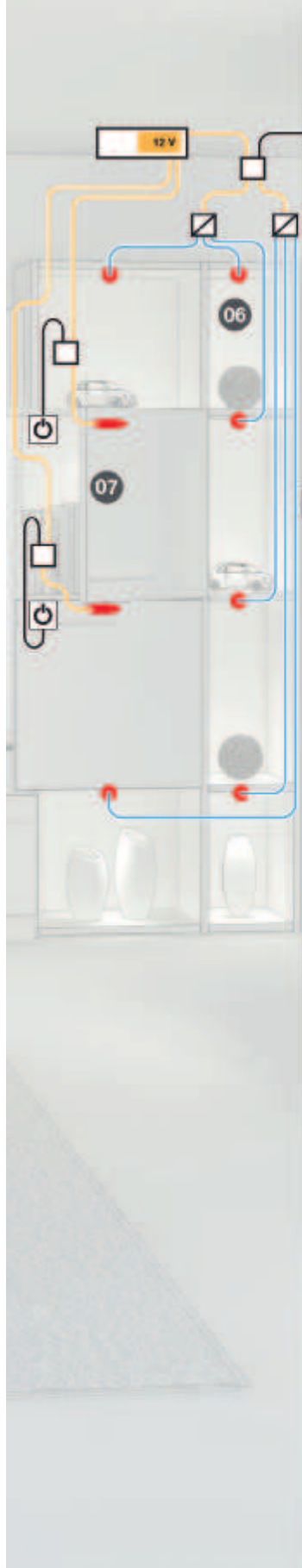


WALL UNIT		
1 x driver 24 V		page 63
<b>01 Wall unit</b>		
1 x LED 3009 master light		page 48
2 x LED 3009 subsequent light (slave)		page 48
<b>02 Closed shelving</b>		
1 x push switch		page 89
1 x LED 3011		page 54
1 x 3-way distributor 24 V		page 91
1 x extension lead for LED 3011		page 91
<b>03 Open shelving</b>		
2 x LED 3018		page 44
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4 x LED 3007		page 62
1 x 6-way distributor 24 V		page 91
<b>05 TV and audio area</b>		
6 x LED 3017, 330 mm		page 60
1 x remote control for multi white mixer		page 61
1 x multi white mixer		page 61
2 x leads for LED 3017		page 61

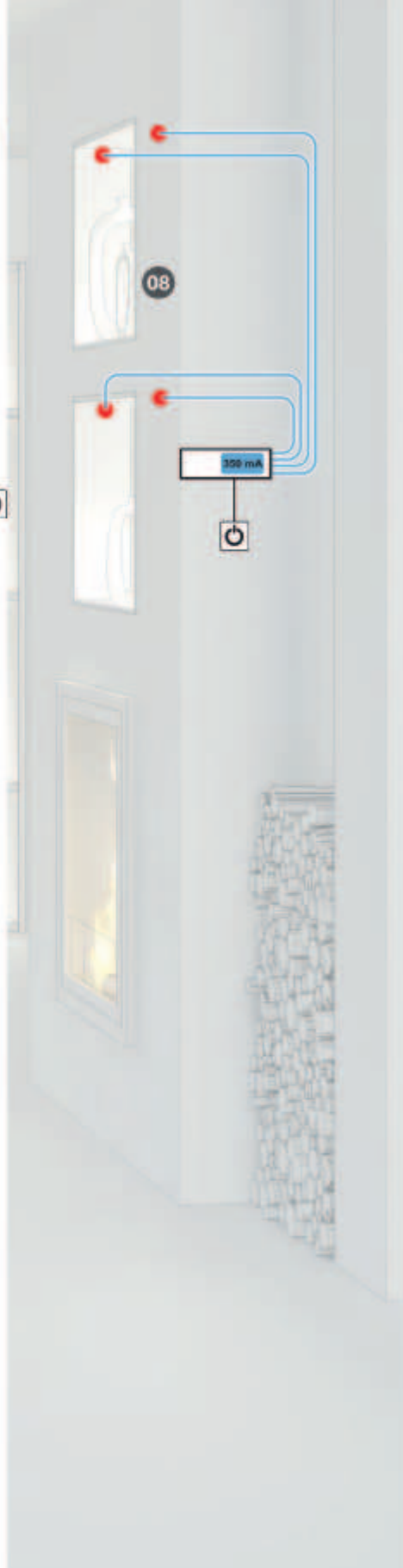




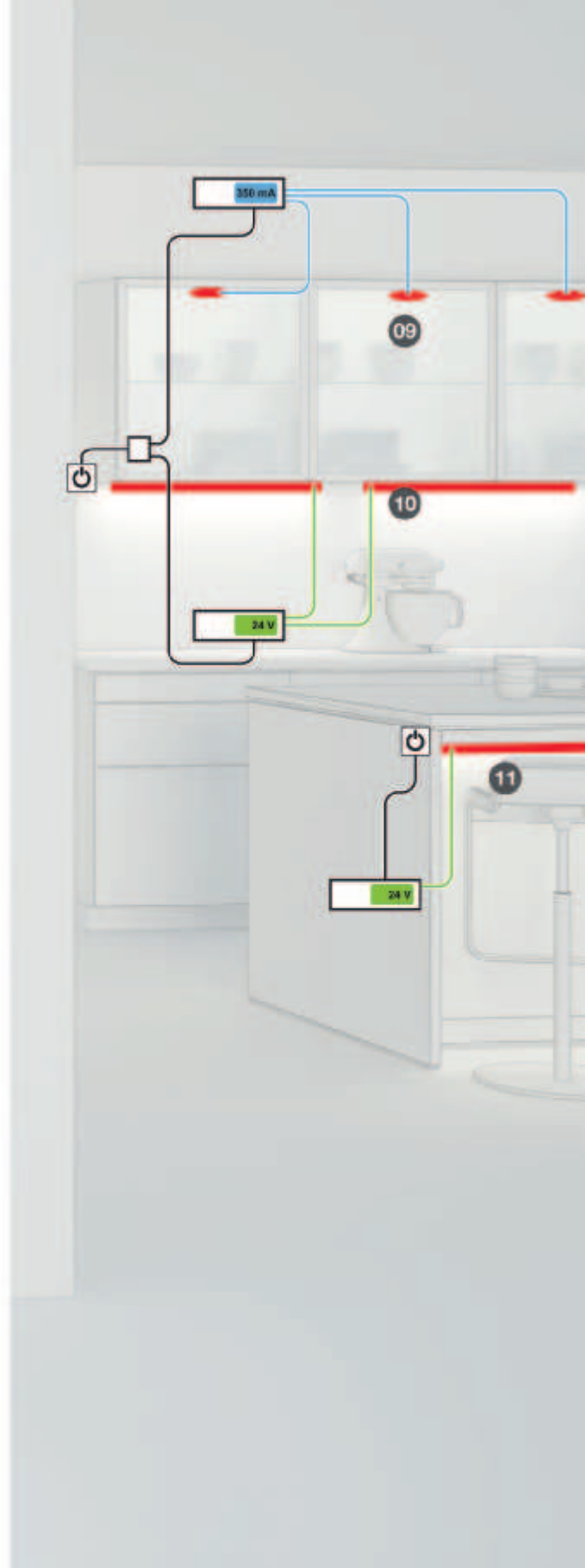




SHELF



FIREPLACE



KITCHEN


SHELF

1 x driver 12 V		page 41
3 x 3-way distributor 12 V		page 91


06 Display cabinet

2 x converter 350 mA to 12 V		page 92
6 x LED 4012		page 77
1 x dimmer		page 88

07 Locker

2 x door contact switch		page 89
2 x LED 2020		page 22

08 FIREPLACE

4 x LED 4013		page 67
1 x driver 350 mA		page 80
1 x dimmer		page 88

KITCHEN

1 x multi driver box		page 92
1 x sensor switch		page 88

09 Wall unit

1 x driver 350 mA		page 80
3 x LED 4016		page 79

10 Work surface

2 x LED 3020		page 53
1 x driver 24 V		page 63

11 Kitchen island

1 x driver 24 V		page 63
1 x dimmer		page 88
1 x LED 3015		page 58
1 x aluminium profile for recess mounting		page 86

## LIGHT IN THE LIVING ROOM



Hardly any room is used today as versatile and frequent as the living room. The light in the living room should always be adapted to the respective atmosphere and functionality. **Comfort light (right):** Warm white lighting provides a cosy atmosphere for watching television.



**Functional light (left):** Spot lighting helps you to find the right reading material and impressively emphasises your collection of exhibits.

**Mood light:** LED flexible strip lights provide indirect cabinet lighting.



## LIGHT IN THE KITCHEN



The kitchen is not just a place for cooking, but also a meeting point for family and friends. Good light to work and pleasant light during meals is therefore called for here. Bright light and good illumination is particularly important in the work surface area.

**Comfort light (right):** Wall units with internal lighting for indirect light and illumination of the contents. **Functional light (left):** The work surface is fully illuminated by powerful lights. **Mood light:** LED flexible strip lights as plinth lighting.

## LIGHT IN THE BEDROOM

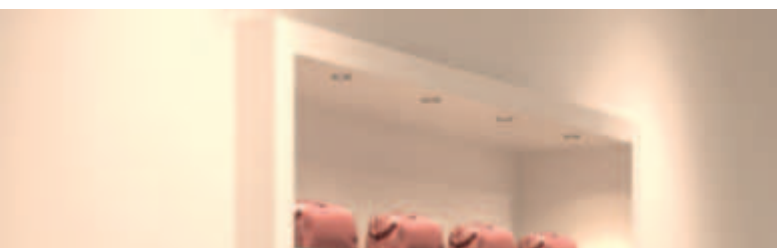


The bedroom is an oasis of peace and relaxation. This is where we recharge our batteries for the next day, relax with a good book and switch off from the day's activities. Next morning, an illuminated wardrobe rail provides us with convenient assistance for choosing what to wear.

**Functional light (left):** Reading light at bed head with flexible neck. **Comfort light (right):** The illuminated wardrobe rail in the wardrobe. **Mood light:** The indirect lighting with LED flexible strip lights at the bed head.



## LIGHT IN STORES



Particularly as far as stores are concerned, it is important to make products look appealing in every room. The intention is to make the customer aware of the product by using appealing accent lighting. Certain products or surfaces can be emphasised using this lighting.



**Comfort light (left):** Recesses are given volume using spot lights. **Functional light (right):** Surface directed, white light is the guarantee of colour fidelity. **Mood light:** Soft, indirect lighting reinforces the feel-good moment.

# OVERVIEW

## LEDs AND ACCESSORIES – 12 V SYSTEM

### 12 V SYSTEM

#### LOOX LED 2018

FLEXIBLE LIGHTS



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#### LOOX LED 2001

SURFACE MOUNTED LIGHTS



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#### LOOX LED 2002

SURFACE MOUNTED LIGHTS



> page 19

#### LOOX LED 2010

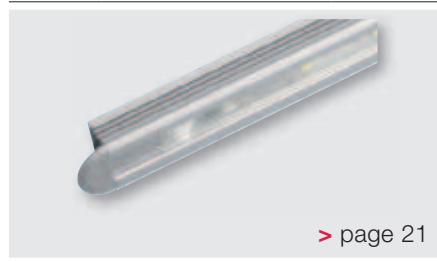
SURFACE MOUNTED LIGHTS  RGB



> page 20

#### LOOX LED 2005

RECESS MOUNTED LIGHTS



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#### LOOX LED 2020

RECESS MOUNTED LIGHTS

IP44



> page 22

#### LOOX LED 2011

LED FLEXIBLE STRIP LIGHTS



> page 24

#### LOOX LED 2012

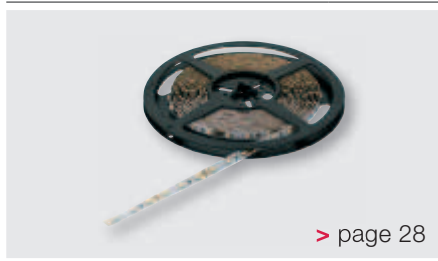
LED FLEXIBLE STRIP LIGHTS  RGB



> page 26

#### LOOX LED 2013

LED FLEXIBLE STRIP LIGHT



> page 28

#### LOOX LED 2014

LED FLEXIBLE STRIP LIGHT  RGB



> page 30

#### LOOX LED 2015

LED FLEXIBLE STRIP LIGHT



> page 32

## LOOX LED 2016

LED FLEXIBLE STRIP LIGHT  RGB



## LOOX LED 2017

LED BAR STRIP LIGHT, 3-PIECE SET



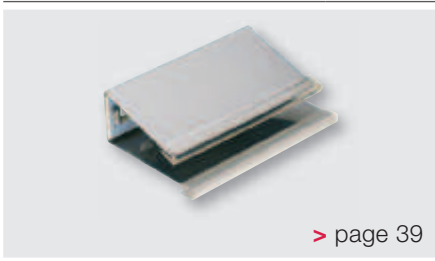
## LOOX LED 2007

GLASS EDGE LIGHT



## LOOX LED 2019

GLASS EDGE LIGHT



## LOOX LED 2021

GLASS EDGE LIGHT



## LOOX LED DRIVERS

CONSTANT VOLTAGE 12 V



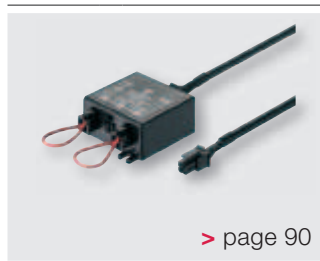
## PROFILES FOR LED FLEXIBLE STRIP LIGHTS



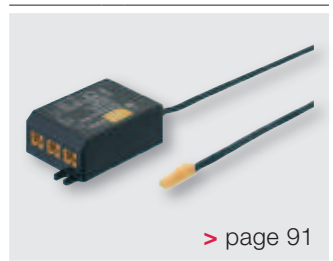
## LOOX ACCESSORIES SWITCHES



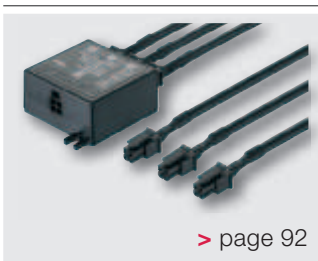
## SWITCH ACCESSORIES



## LEADS AND DISTRIBUTORS



## CONVERTER AND MULTI DRIVER BOX



## CABLE CHANNEL AND PRIMARY LEADS



# LOOX LED 2018

## FLEXIBLE LIGHT

### 12 V SYSTEM



The flexible reading light LED 2018 can be conveniently positioned. The integrated glass lens provides a pleasant, uniform cone of light and can be switched on and off by rotating the head of the light.

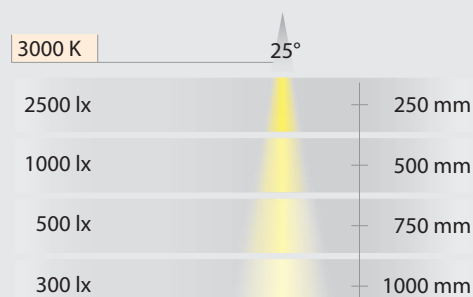


- > Cannot be dimmed
- > With integrated rotary switch at light head



- > Driver see page 41

Cat. No.	833.74.100	833.74.110
Light colour (K)	3000 (warm white)	3000 (warm white)
Length (mm)	450	450
Diameter (mm)	32	32
Wattage (W)	2	2
Number of LEDs	1	1
Light output (Lm)	70	70
Efficacy (Lm/W)	35	35
Colour rendering index (CRI)	93	93
Finish	Aluminium, silver coloured anodized	
Installation	Surface mounted	Recess mounted
Supplied with	1 light with 2 m lead and mounting accessories	



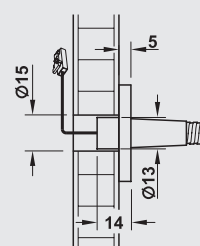
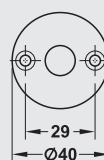
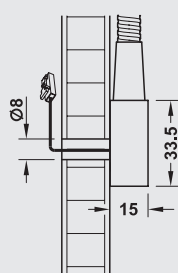
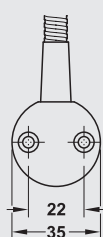
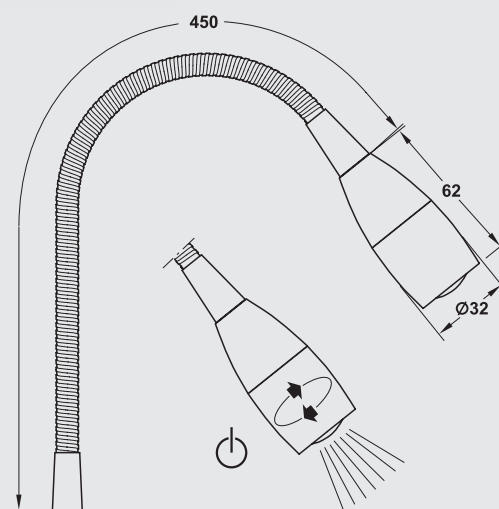
## LED 2018

### Surface mounted

Cat. No. 833.74.100

### Recess mounted

Cat. No. 833.74.110





# LOOX LED 2001

## SURFACE MOUNTED DOWNLIGHT

### 12 V SYSTEM



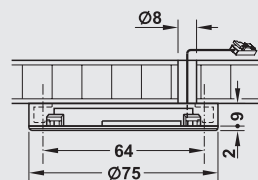
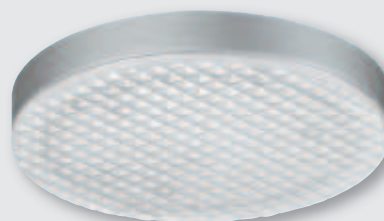
The thin LED 2001 surface mounted downlight is particularly suitable for providing decorative lighting in furniture. A prismatic cover provides pleasant light.



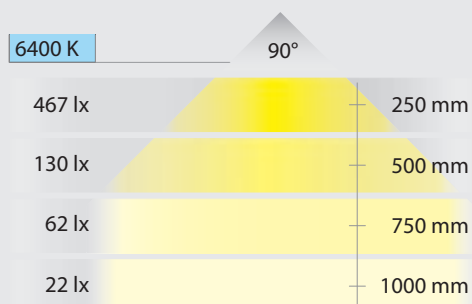
> Cannot be dimmed



> Driver see page 41



Cat. No.	833.73.000
Light colour (K)	6400 (daylight white)
Diameter (mm)	75
Height (mm)	11
Wattage (W)	1.7
Number of LEDs	21
Light output (Lm)	126
Efficacy (Lm/W)	74
Colour rendering index (CRI)	60
Finish	Plastic, silver coloured, with translucent, prismatic cover
Supplied with	1 light with 2 m lead and mounting accessories



# LOOX LED 2002

SURFACE MOUNTED DOWNLIGHT



12 V SYSTEM

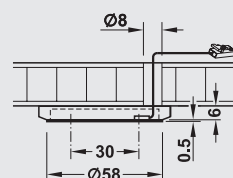
The LED 2002 surface mounted downlight is characterised by its flat shape. In furniture and furnishings it is especially suitable for providing decorative lighting in shelving and display cabinets.



> Dimmable



> Driver see page 41



Cat. No.	833.73.210	833.73.200
Light colour (K)	3200 (warm white)	5000 (cool white)
Diameter (mm)	58	58
Height (mm)	6.5	6.5
Wattage (W)	1.5	1.5
Number of LEDs	19	19
Light output (Lm)	51	62
Efficacy (Lm/W)	34	41
Colour rendering index (CRI)	90	80
Finish	Plastic, silver coloured	
Supplied with	1 light with 2 m lead and mounting accessories	

3200 K	5000 K		
254 lx	400 lx	160°	250 mm
90 lx	140 lx		500 mm
46 lx	80 lx		750 mm
23 lx	40 lx		1000 mm

# LOOX LED 2010

## RGB SURFACE MOUNTED PLINTH/DOWNLIGHT



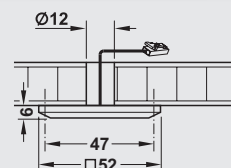
### 12 V SYSTEM



The LED 2010 is the right choice if you wish to create design emphasis in a small amount of space with a colour changing surface mounted plinth/downlight. The colour thereof can be selected by the customer and requires very little space.



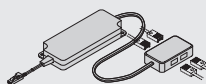
- > Dimmable via RGB colour mixer with remote control
- > Any number of colour mixers can be controlled with 1 remote control



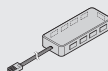
Cat. No.	833.73.100
Light colour (K)	RGB
Length (mm)	52
Width (mm)	52
Height (mm)	6
Wattage (W)	1.7
Number of LEDs	9
Light output (Lm)	15
Efficacy (Lm/W)	9
Finish	Stainless steel matt
Supplied with	1 light with 2.5 m lead and mounting accessories



- > Remote control, white for RGB colour mixer Cat. No. 833.74.701



- > RGB colour mixer, white with 4-way distributor Cat. No. 833.74.800



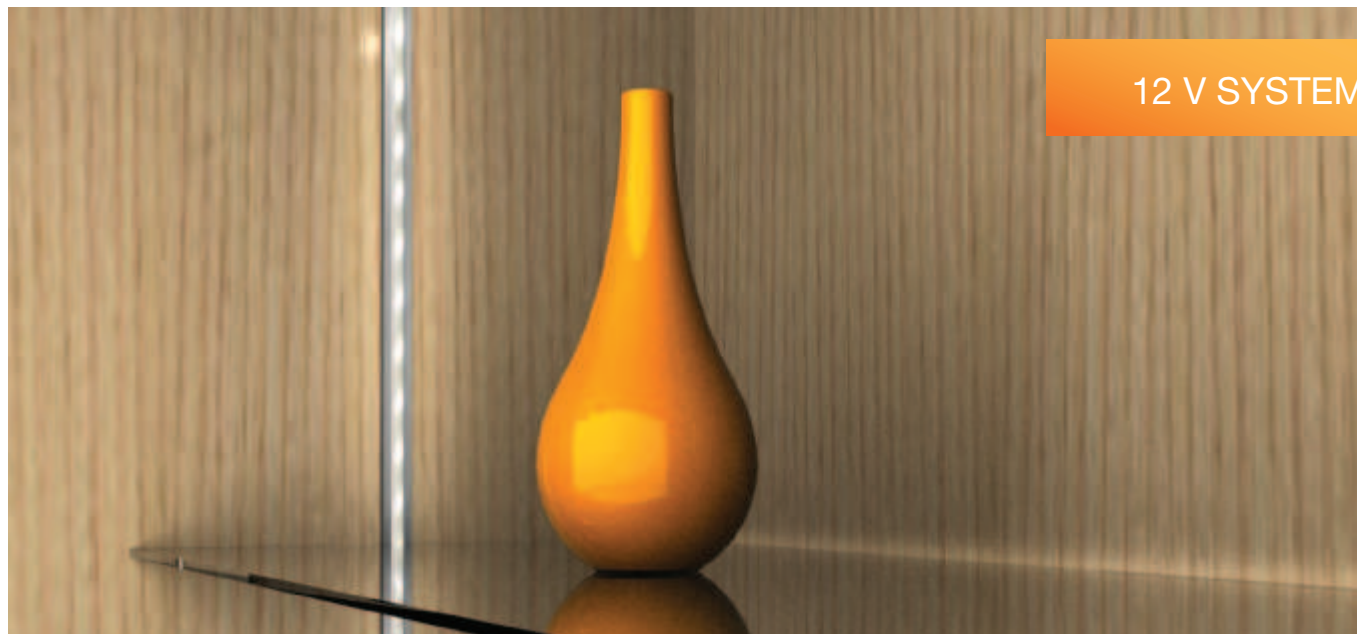
- > 9-way RGB distributor Cat. No. 833.74.741



- > Driver see page 41

# LOOX LED 2005

RECESS MOUNTED BARLIGHT



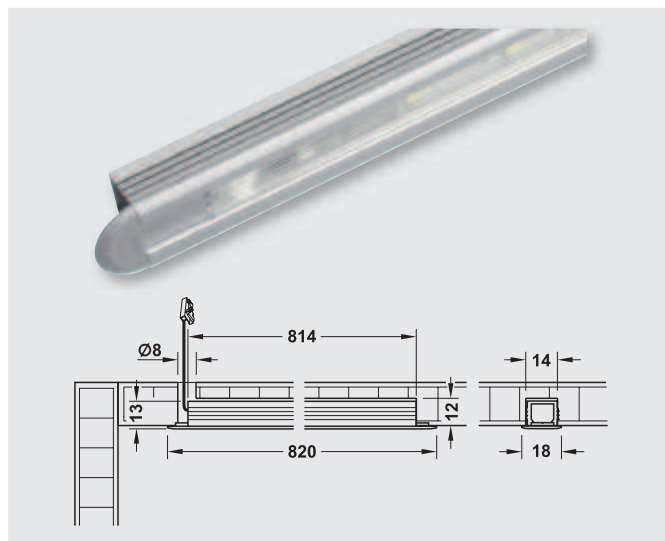
The LED 2005 recess mounted barlight can be integrated flush in furniture without influencing the design thereof. Additional options are provided by two available light colours.



> Dimmable



> Driver see page 41



Cat. No.	833.72.001	833.72.011
Light colour (K)	3400 (warm white)	6400 (daylight white)
Length (mm)	820	820
Width (mm)	14	14
Height (mm)	12	12
Wattage (W)	2.8	2.8
Number of LEDs	36	36
Light output (Lm)	210	210
Efficacy (Lm/W)	75	75
Colour rendering index (CRI)	67	67
Finish	Aluminium, silver coloured anodized	
Supplied with	1 light with 2 m lead	

3400 K	6400 K	
150 lx	200 lx	250 mm
65 lx	90 lx	500 mm
40 lx	50 lx	750 mm
25 lx	35 lx	1000 mm

# LOOX LED 2020

RECESS MOUNTED DOWNLIGHT (SUITABLE FOR WET ROOMS)



## 12 V SYSTEM



The LED 2020 generates uniform, even distributed light and is ideal for atmospheric lighting in all areas. The light can be used in a variety of situations due to having two installation types and three light colours.

IP44

3000 K	4000 K	6000 K	110°	
510 lx	550 lx	550 lx		250 mm
173 lx	182 lx	182 lx		500 mm
83 lx	90 lx	90 lx		750 mm
46 lx	46 lx	46 lx		1000 mm

Cat. No.	833.72.020	833.72.023	833.72.021	833.72.024	833.72.022	833.72.025
Light colour (K)	3000 (warm white)		4000 (cool white)		6000 (daylight white)	
Diameter (mm)	65	65	65	65	65	65
Height (mm)	14.7	14.7	14.7	14.7	14.7	14.7
Degree of protection	IP44	IP44	IP44	IP44	IP44	IP44
Wattage (W)	3.2	3.2	3.2	3.2	3.2	3.2
Number of LEDs	6	6	6	6	6	6
Light output (Lm)	122	122	107	107	99	99
Efficacy (Lm/W)	38	38	33	33	31	31
Colour rendering index (CRI)	85	85	85	85	85	85
Finish	Zinc alloy, nickel plated matt	Zinc alloy, black	Zinc alloy, nickel plated matt	Zinc alloy, black	Zinc alloy, nickel plated matt	Zinc alloy, black
Supplied with	1 light with 2 m lead and mounting accessories					



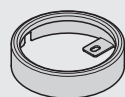
## LED 2020



- > Dimmable
- > Drill hole Ø: 55 mm



- > Driver see page 41



- Bezel
- > Nickel plated matt  
Cat. No. 833.72.800
  - > Black  
Cat. No. 833.72.801



# LOOX LED 2011

## LED FLEXIBLE STRIP LIGHT



### 12 V SYSTEM



The LED 2011 strip light with its extremely small space requirement is easy to process and can be flexibly adapted to any furnishing.

The strip light has a self adhesive backing and can be individually shortened. This means that this light is also ideal for retrofitting. Two lengths and two light colours are available for furniture design.

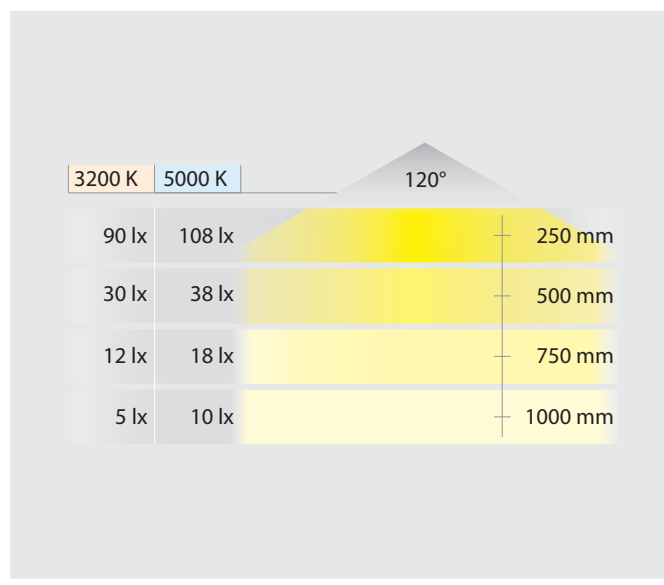


- > Dimmable
- > Can be shortened after every third LED
- > Installation: Self-adhesive

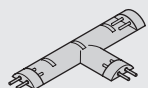
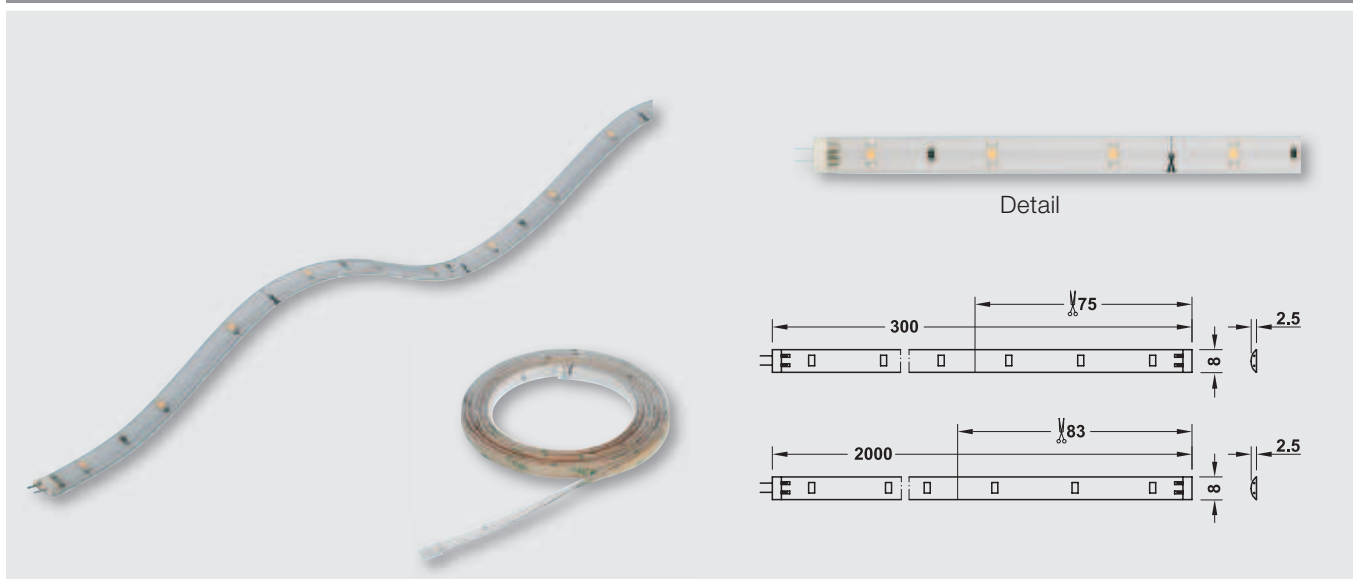


- > Driver see page 41

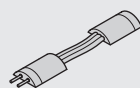
Cat. No.	833.73.260	833.73.262	833.73.250	833.73.252
Light colour (K)	3200 (warm white)		5000 (cool white)	
Length (mm)	300	2000	300	2000
Width (mm)	8	8	8	8
Height (mm)	2.5	2.5	2.5	2.5
Wattage (W)	0.8	5.0	0.8	5.0
Number of LEDs	12	72	12	72
Light output (Lm)	32	194	39	237
Efficacy (Lm/W)	40	39	49	47
Colour rendering index (CRI)	90	90	80	80
Finish	Plastic, white			
Supplied with	1 LED flexible strip light without lead			



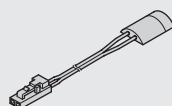
## LED 2011 Flexible strip light



T-connector  
Length: 75 mm; wattage: 0.2 W;  
3 LEDs  
 > 3200 K (warm white)  
Cat. No. 833.73.310  
 > 5000 K (cool white)  
Cat. No. 833.73.300



Interconnecting lead  
(e.g. for corner connection)  
 > 50 mm Cat. No. 833.74.713  
 > 500 mm Cat. No. 833.74.772  
 > 1,500 mm Cat. No. 833.74.775



> 2.5 m lead  
(connection between flexible strip  
lights and driver)  
Cat. No. 833.74.712



# LOOX LED 2012

## LED RGB FLEXIBLE STRIP LIGHT



### 12 V SYSTEM



Furniture is put into the right light by means of individually selectable light colours using the LED 2012 colour changing strip light which is perfectly suitable for retro-fitting.

The strip light can be shortened and flexibly adapted to any furnishing.

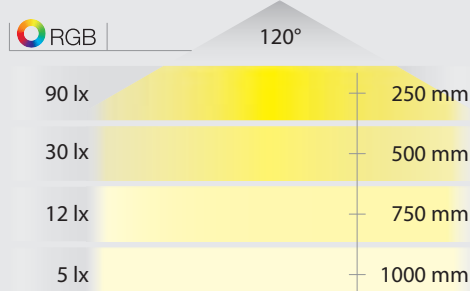


- > Dimmable via RGB colour mixer with remote control
- > Any number of colour mixers can be controlled with 1 remote control
- > Can be shortened after every third LED, every 150 mm.
- > Installation: Self-adhesive

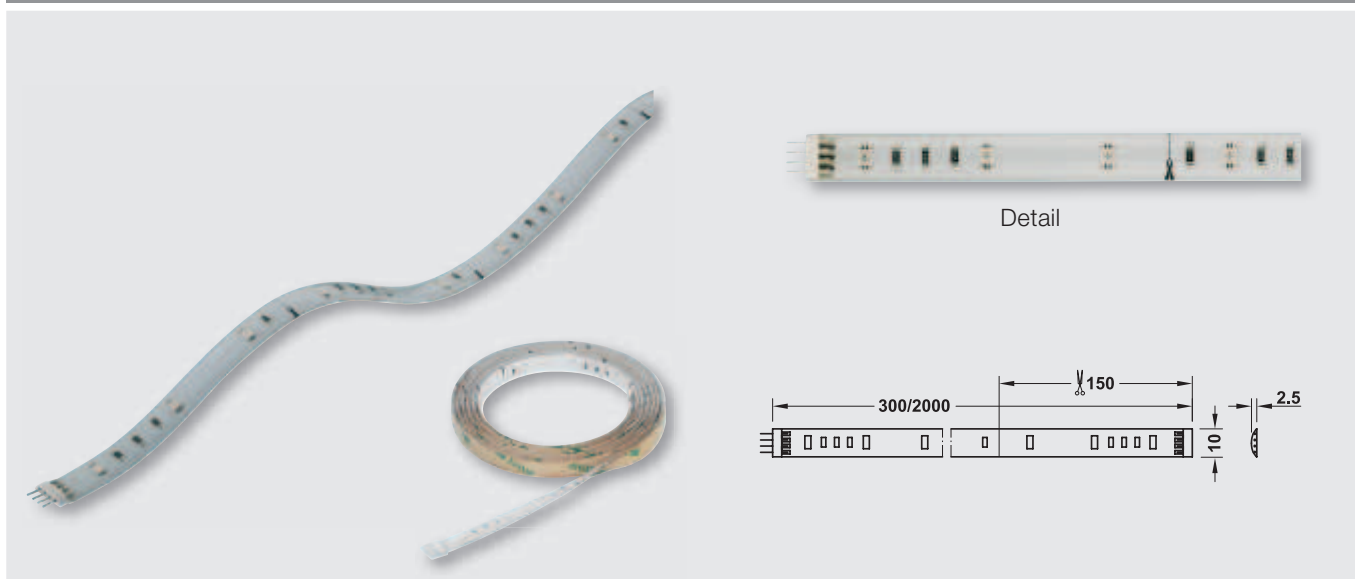


- > Driver see page 41

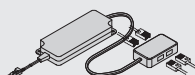
Cat. No.	833.73.320	833.73.322
Light colour (K)	RGB	RGB
Length (mm)	300	2000
Width (mm)	8	8
Height (mm)	2.5	2.5
Wattage (W)	2	12
Number of LEDs	12	72
Light output (Lm)	22	129
Efficacy (Lm/W)	12	13
Finish	Plastic, white	
Supplied with	1 LED flexible strip light	



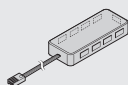
## LED 2012 Flexible strip light



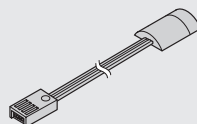
- > Remote control for RGB colour mixer  
Cat. No. 833.74.701



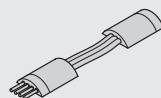
- > RGB colour mixer with 4-way distributor  
Cat. No. 833.74.800



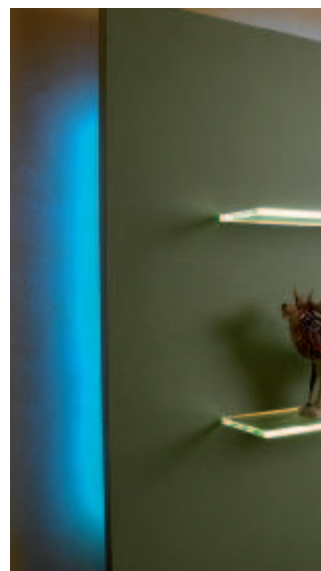
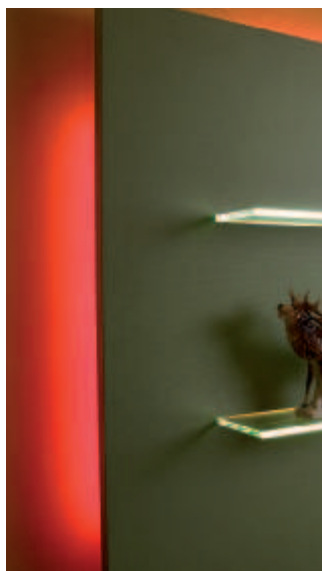
- > 9-way RGB distributor  
Cat. No. 833.74.741



- > 2.5 m RGB lead  
(connection between LED strip lights and RGB colour mixer)  
Cat. No. 833.74.711



- RGB interconnecting lead  
(e.g. for corner connection)
- > 50 mm Cat. No. 833.74.710
- > 500 mm Cat. No. 833.74.762





# LOOX LED 2013

LED FLEXIBLE STRIP LIGHT, 5 M, WITH 300 LEDs



## 12 V SYSTEM



The close LED grouping on the LED 2013 flexible strip light provides uniform lighting. The flexible strip light can be shortened individually and is therefore extremely flexible from a processing point of view.

Give your lighting scenarios an individual touch. In combination with our aluminium profiles, different diffusers and installation types are available.



- > Dimmable
- > Can be shortened every 50 mm
- > Installation: Self-adhesive



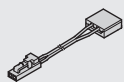
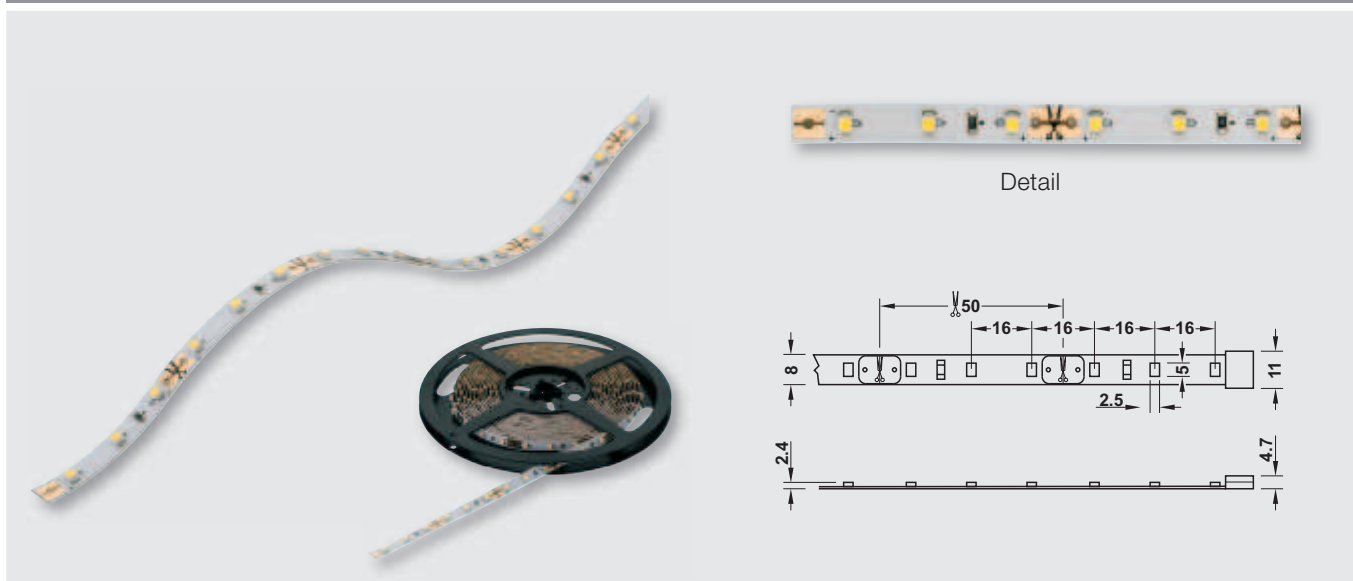
- > Driver see page 41
- > Aluminium profile see page 84

Cat. No.	833.73.330	833.73.331	833.73.340
Light colour (K)	3200 (warm white)	4000 (cool white)	6500 (day-light white)
Length (mm)	5000	5000	5000
Width (mm)	8	8	8
Height (mm)	2.4	2.4	2.4
Wattage (W)	25 (4.8 per metre)		
Number of LEDs	300 (60 per metre)		
Light output (Lm)	1440	1600	1800
Efficacy (Lm/W)	60	64	75
Colour rendering index (CRI)	65	65	75
Finish	LED board, white		
Supplied with	5-metre roll with 2 m lead		

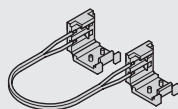
3200 K	4000 K	6500 K	120°	
200 lx	220 lx	240 lx		250 mm
70 lx	76 lx	82 lx		500 mm
32 lx	38 lx	44 lx		750 mm
20 lx	23 lx	26 lx		1000 mm

LOOX 2013, HDE-en, 04/13; Dimensional data not binding. We reserve the right to alter specifications without notice.

## LED 2013 Flexible strip light



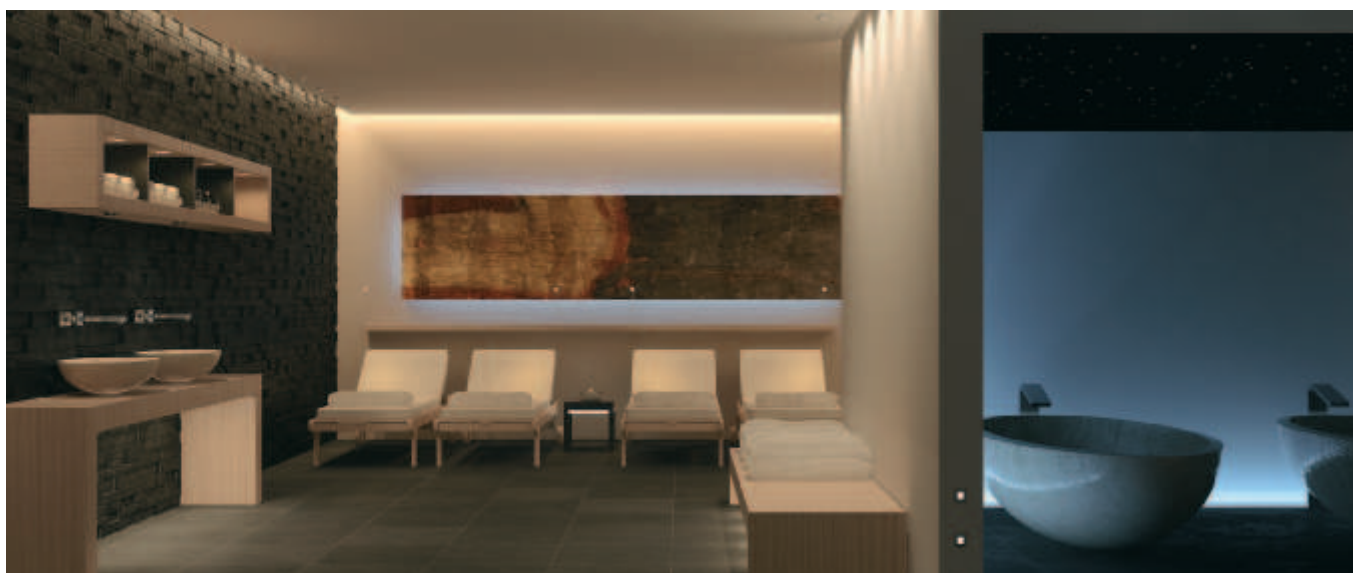
> 2 m lead  
with 12 V plug system  
and clip for LED flexible strip light  
Cat. No. 833.74.718



Interconnecting lead  
with clip for LED flexible strip light  
> 50 mm Cat. No. 833.74.715  
> 500 mm Cat. No. 833.74.719  
> 2,000 mm Cat. No. 833.74.716



> Clip connector for LED flexible  
strip light  
Cat. No. 833.74.720

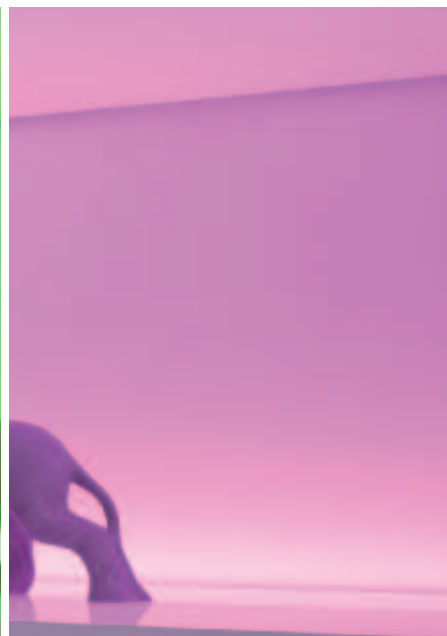
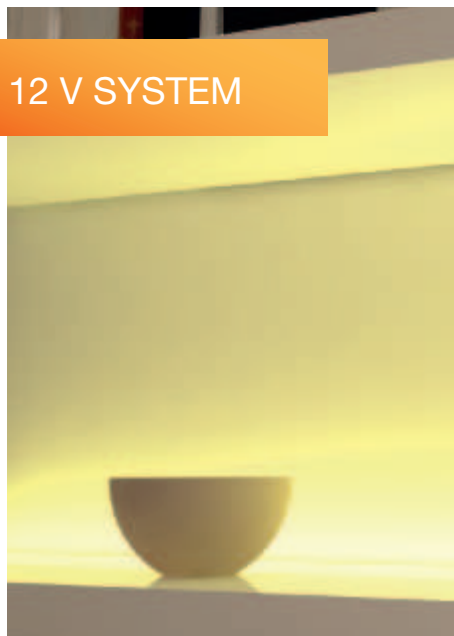


# LOOX LED 2014

LED RGB FLEXIBLE STRIP LIGHT, 5 M, WITH 300 LEDs



## 12 V SYSTEM



Compact light energy in the form of 300 RGB light emitting diodes on a 5-metre strip.

This is the LED 2014 colour changing strip light, which is ideally suited for uniform background lighting of furniture and furnishings because of the close grouping of the LEDs.

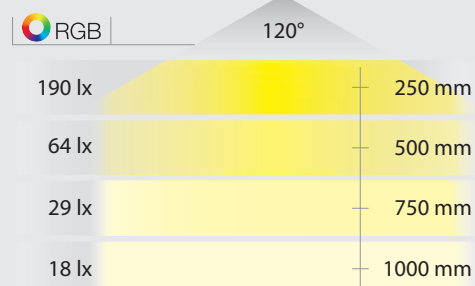


- > Dimmable via RGB colour mixer with remote control
- > Any number of colour mixers can be controlled with 1 remote control
- > Installation: Self-adhesive
- > Single-colour LEDs (each LED chip one colour)
- > Can be shortened after every sixth LED

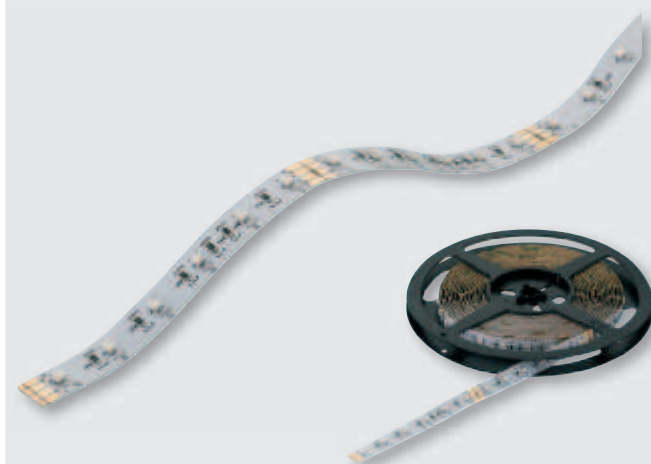


> Driver see page 41

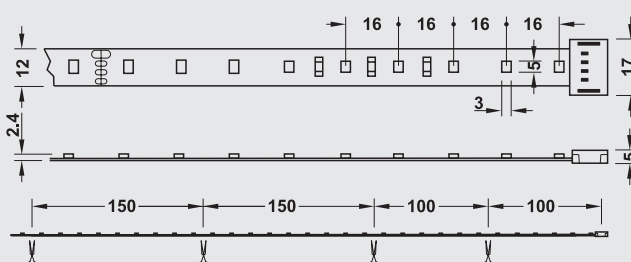
Cat. No.	833.73.370
Light colour (K)	RGB
Length (mm)	5000
Width (mm)	12
Height (mm)	2.4
Wattage (W)	25 (4.8 per metre)
Number of LEDs	300 (60 per metre)
Light output (Lm)	816
Efficacy (Lm/W)	34
Finish	LED board, white
Supplied with	5-metre roll with 2 m lead



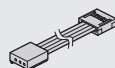
## LED 2014 Flexible strip light



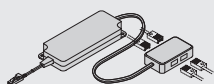
Detail



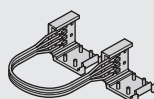
- > Remote control for RGB colour mixer  
Cat. No. 833.74.701



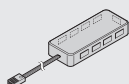
- > 2 m lead with 12 V plug system and clip for LED RGB flexible strip light  
Cat. No. 833.74.717



- > RGB colour mixer with 4-way distributor  
Cat. No. 833.74.800



- Interconnecting lead with clip for LED RGB flexible strip light
- > 50 mm Cat. No. 833.74.750
- > 500 mm Cat. No. 833.74.727
- > 2,000 mm Cat. No. 833.74.752



- > 9-way RGB distributor  
Cat. No. 833.74.741



- > Clip connector for LED RGB flexible strip light  
Cat. No. 833.74.728





# LOOX LED 2015

LED FLEXIBLE STRIP LIGHT, 5 M, WITH 150 LEDs



## 12 V SYSTEM



The 5-metre LED 2015 flexible strip light is ideal for all applications involving direct lighting of furniture. Flexible processing is guaranteed because individual shortening is possible.

Give your lighting scenarios an individual touch. In combination with our aluminium profiles, different diffusers and installation types are available.



- > Dimmable
- > Can be shortened every 100 mm
- > Installation: Self-adhesive

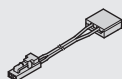
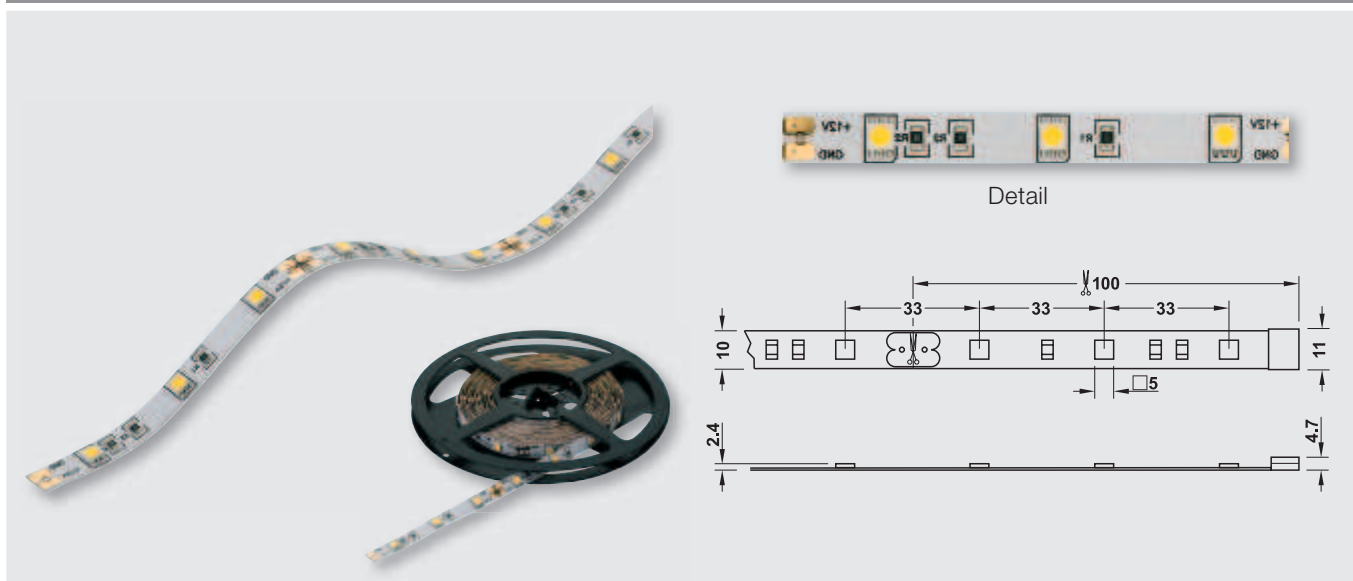


- > Driver see page 41
- > Aluminium profile see page 84

Cat. No.	833.73.400	833.73.401	833.73.410
Light colour (K)	3200 (warm white)	4000 (cool white)	6500 (day-light white)
Length (mm)	5000	5000	5000
Width (mm)	10	10	10
Height (mm)	2.4	2.4	2.4
Wattage (W)	36 (7.1 per metre)		
Number of LEDs	150 (30 per metre)		
Light output (Lm)	2412	2600	2808
Efficacy (Lm/W)	67	73	78
Colour rendering index (CRI)	67	75	78
Finish	LED board, white		
Supplied with	5-metre roll with 2 m lead		

3200 K	4000 K	6500 K	
400 lx	450 lx	500 lx	120°
140 lx	150 lx	165 lx	250 mm
70 lx	80 lx	88 lx	500 mm
40 lx	45 lx	50 lx	750 mm
			1000 mm

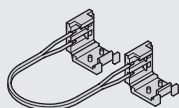
## LED 2015 Flexible strip light



> 2 m lead  
with 12 V plug system  
and clip for LED flexible strip light  
Cat. No. 833.74.718



> Clip connector for LED flexible strip light  
Cat. No. 833.74.720



Interconnecting lead  
with clip for LED flexible strip light  
> 50 mm Cat. No. 833.74.715  
> 500 mm Cat. No. 833.74.719  
> 2,000 mm Cat. No. 833.74.716



# LOOX LED 2016

LED RGB FLEXIBLE STRIP LIGHT, 5 M, WITH 150 LEDS



## 12 V SYSTEM



Bright light sources with changing colours are often in demand for illumination. The LED 2016 colour changing strip light meets these requirements easily.

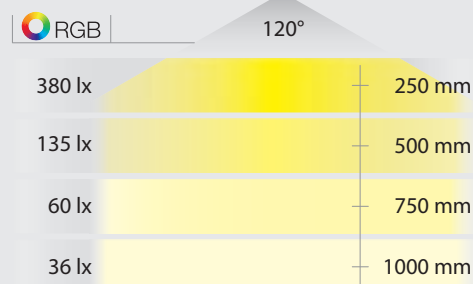


- > Dimmable via RGB colour mixer with remote control
- > Any number of colour mixers can be controlled with 1 remote control
- > Can be shortened every 100 mm
- > Installation: Self-adhesive
- > Multi-colour LEDs (one LED emits all RGB colours)

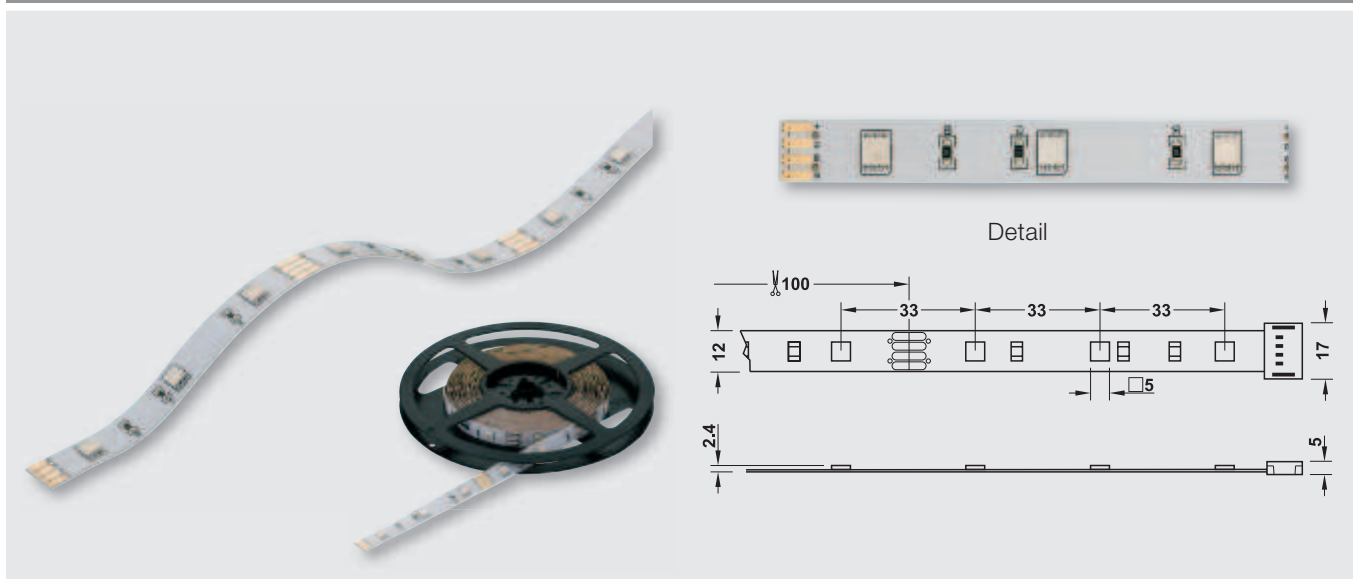


> Driver see page 41

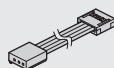
Cat. No.	833.73.450
Light colour (K)	RGB
Length (mm)	5000
Width (mm)	12
Height (mm)	2.4
Wattage (W)	36 (7.1 per metre)
Number of LEDs	150 (30 per metre)
Light output (Lm)	1224
Efficacy (Lm/W)	34
Finish	LED board, white
Supplied with	5-metre roll and 2 m lead



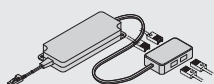
## LED 2016 Flexible strip light



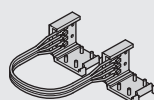
- > Remote control for RGB colour mixer  
Cat. No. 833.74.701



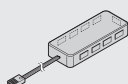
- > 2 m lead with 12 V plug system and clip for LED RGB flexible strip light  
Cat. No. 833.74.717



- > RGB colour mixer with 4-way distributor  
Cat. No. 833.74.800



- Interconnecting lead with clip for LED RGB flexible strip light
- > 50 mm Cat. No. 833.74.750
- > 500 mm Cat. No. 833.74.727
- > 2,000 mm Cat. No. 833.74.752



- > 9-way RGB distributor  
Cat. No. 833.74.741



- > Clip connector for LED RGB flexible strip light  
Cat. No. 833.74.728





# LOOX LED 2017

LED BAR STRIP LIGHT, 3-PIECE SET RIGID



12 V SYSTEM

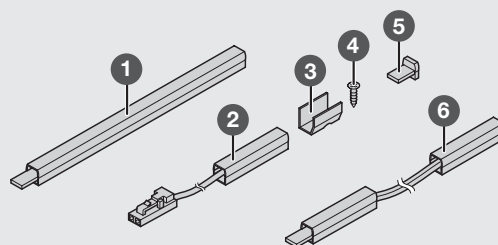


The LED 2017 bar strip light set provides a wide range of decorative usage options.

The set is also perfectly suitable for retrofitting in existing furniture.



- > Dimmable
- > max. 12 connections
- > Set includes:
  - 1 3 LED flexible strip lights,
  - 2 3 leads,
  - 3 6 clips,
  - 4 6 screws
  - 5 3 cover caps,
  - 6 2 interconnecting leads,
  - 6 double-sided adhesive strips



> Driver see page 41

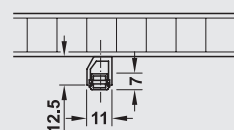
Cat. No.	833.73.071	833.73.080
Light colour (K)	3200 (warm white)	6400 (daylight white)
Length (mm)	900 (300 per strip)	
Width (mm)	9	9
Height (mm)	7	7
Wattage (W)	0.72 x 3 = 2.16	
Number of LEDs	36 (12 per strip)	
Light output (Lm)	150 (50 per strip)	156 (52 per strip)
Efficacy (Lm/W)	70	72
Colour rendering index (CRI)	65	60
Finish	Transparent plastic with double-sided adhesive tape	
Supplied with	3-piece set with mounting accessories	

3200 K	6400 K		120°
36 lx	70 lx		250 mm
17 lx	35 lx		500 mm
11 lx	20 lx		750 mm
7 lx	12 lx		1000 mm

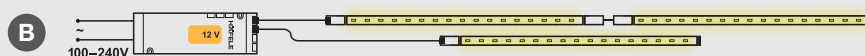
## LED 2017 Bar strip light



Detail



## Application examples



# LOOX LED 2007

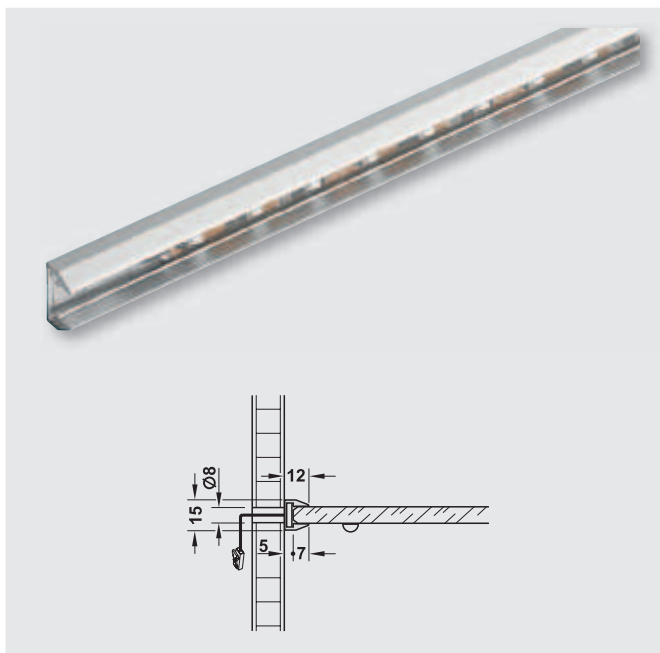
## GLASS EDGE LIGHT



### 12 V SYSTEM



The LED 2007 clip-on profile is designed for installing behind glass shelving. It is ideal for 8 mm thick glass shelves. The design only requires an extremely small amount of space behind the glass shelf. Two lengths are available for individual design.



Cat. No.	833.74.050	833.74.051
Light colour (K)	3400 (warm white)	3400 (warm white)
Length (mm)	560	860
Width (mm)	12	12
Height (mm)	15	15
Wattage (W)	2.5	4.0
Number of LEDs	30	48
Light output (Lm)	180	288
Efficacy (Lm/W)	72	72
Colour rendering index (CRI)	55 – 60	55 – 60
Finish	Aluminium, silver coloured anodized	
Supplied with	1 light with 2 m lead and mounting accessories	



- > Dimmable
- > Without load bearing function!
- > The glass edge light is pushed onto the glass shelf from the rear
- > Can be shortened at both ends by 10 mm
- > Optimum glass thickness 8 mm



- > Driver see page 41

# LOOX LED 2019

GLASS EDGE LIGHT



The LED 2019 opens up a wide range of possible uses. Glass panels between 6 and 12 mm thick can be used with this light.

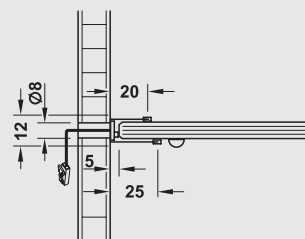
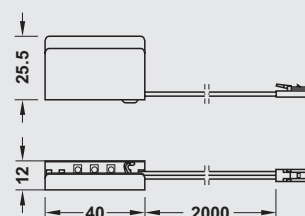
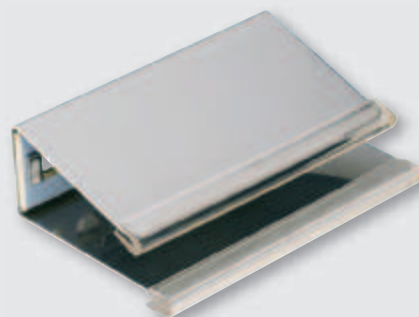


- > Dimmable
- > Without load bearing function!
- > The glass edge light is pushed onto the glass shelf from the rear
- > Glass thickness 6 – 12 mm



> Driver see page 41

Cat. No.	833.74.130	833.74.120
Light colour (K)	4000 (cool white)	6000 (daylight white)
Length (mm)	40	40
Width (mm)	25.5	25.5
Height (mm)	12	12
Wattage (W)	0.2	0.2
Number of LEDs	3	3
Light output (Lm)	15	19
Efficacy (Lm/W)	75	95
Colour rendering index (CRI)	88	84
Finish	Stainless steel, shiny	
Supplied with	1 light with 2 m lead	





# LOOX LED 2021

## GLASS EDGE LIGHT



### 12 V SYSTEM



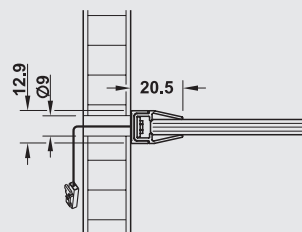
The LED 2021 clip-on profile is attached behind glass shelves and is ideally suitable for stores. It can be used for glass shelves between 6 and 8 mm thick. Upward and downward light output is also provided.



- > Dimmable
- > Without load bearing function!
- > Glass thickness 6 – 8 mm
- > Upward and downward light output is also provided



> Driver see page 41




Cat. No.	833.74.142	833.74.143
Light colour (K)	4000 (cool white)	4000 (cool white)
Length (mm)	562	862
Width (mm)	20.5	20.5
Height (mm)	12.9	12.9
Wattage (W)	2.1	3.2
Number of LEDs	21	32
Light output (Lm)	89	137
Efficacy (Lm/W)	42	43
Colour rendering index (CRI)	70	70
Finish	Aluminium, silver coloured anodized	
Supplied with	1 light with 2 m lead and mounting accessories	


4000 K	30°	
330 lx		250 mm
125 lx		500 mm
70 lx		750 mm
30 lx		1000 mm

# LOOX LED DRIVER

CONSTANT VOLTAGE 12 V



**12 V SYSTEM**

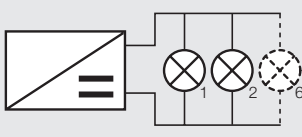


**1** Cat. No. 833.74.900  
 $\otimes_1 + \otimes_2 + \dots + \otimes_6 < 15 \text{ W}$

**2** Cat. No. 833.74.917  
 $\otimes_1 + \otimes_2 + \dots + \otimes_6 < 20 \text{ W}$

**3** Cat. No. 833.74.901  
 $\otimes_1 + \otimes_2 + \dots + \otimes_6 < 30 \text{ W}$

**4** Cat. No. 833.74.913  
 $\otimes_1 + \otimes_2 + \dots + \otimes_6 < 60 \text{ W}$



Parallel connection

The driver is the heart of the Loox system, and is suitable for connecting to all of the most popular power systems that are used around the world. It has an integrated switching function and connections for all of the most popular types of switch.



> Lead length from driver to switch max. 6 m.

Cat. No.	833.74.900 <b>1</b>	833.74.917 <b>2</b>	833.74.901 <b>3</b>	833.74.913 <b>4</b>
Wattage (W)	0 – 15	0 – 20	0 – 30	0 – 60
Input voltage	100 – 240 V; 50 – 60 Hz		100 – 240 V; 50 – 60 Hz	
Output voltage	DC 12 V	DC 12 V	DC 12 V	DC 12 V
Output current	1.25 A	1.67 A	2.5 A	5 A
Degree of protection	IP20	IP20	IP20	IP20
Number of slots	6 slots for 12 V lights, 1 slot for switch, 1 slot for country-specific primary lead			
Colour	Black	Black	Black	Black
Length (mm)	140	128	195	208
Width (mm)	43	50.5	43	56.5
Height (mm)	20	14	28	30
Supplied with	1 driver with mounting accessories			

## Country-specific primary leads – lead length 2 m

Cat. No.	833.89.000	833.89.001	833.89.002	833.89.003	833.89.004	833.89.005	833.89.006	833.89.007	833.89.009	833.89.050
Plug design										
Designation	UK	AU	EU	US	JP	CN	KR	TW	EU	US
Supplied with	1 piece	1 piece	1 piece	1 piece	1 piece	1 piece	1 piece	1 piece	1 piece	1 piece

# OVERVIEW

## LEDs AND ACCESSORIES – 24 V SYSTEM

### 24 V SYSTEM

#### LOOX LED 3018

FLEXIBLE LIGHTS



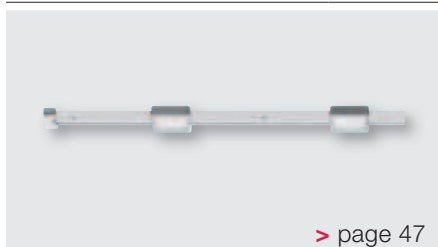
#### LOOX LED 3005

SURFACE MOUNTED LIGHTS



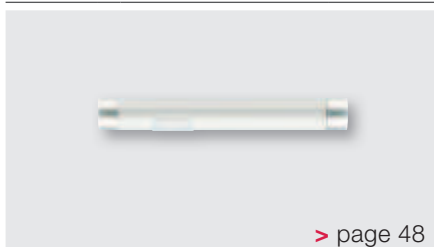
#### LOOX LED 3006

SURFACE MOUNTED LIGHTS



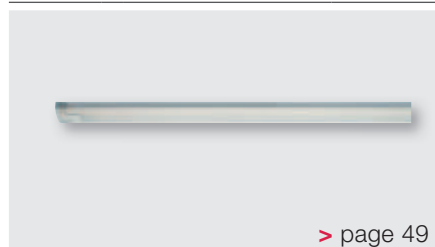
#### LOOX LED 3009

SURFACE MOUNTED LIGHTS



#### LOOX LED 3019

SURFACE MOUNTED LIGHTS



#### LOOX LED 3001

RECESS MOUNTED LIGHTS



#### LOOX LED 3002

RECESS MOUNTED LIGHTS



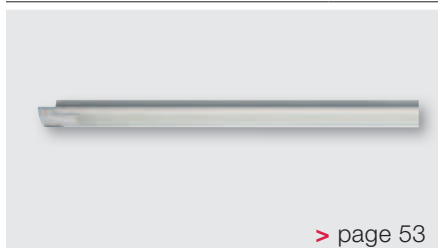
#### LOOX LED 3010

RECESS MOUNTED LIGHTS



#### LOOX LED 3020

RECESS MOUNTED LIGHTS



#### LOOX LED 3011

LED FLEXIBLE STRIP LIGHT



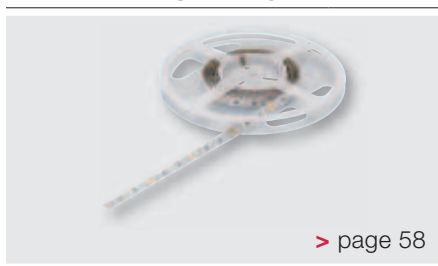
#### LOOX LED 3013

LED FLEXIBLE STRIP LIGHT



## LOOX LED 3015

LED FLEXIBLE STRIP LIGHT



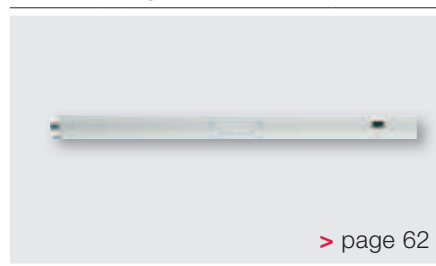
## LOOX LED 3017

LED FLEXIBLE STRIP LIGHT



## LOOX LED 3007

DRAWER LIGHT



## LOOX LED DRIVERS

CONSTANT VOLTAGE 24 V



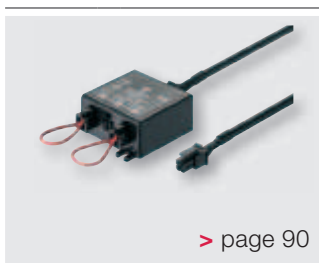
## PROFILES FOR LED FLEXIBLE STRIP LIGHTS



## LOOX ACCESSORIES SWITCHES



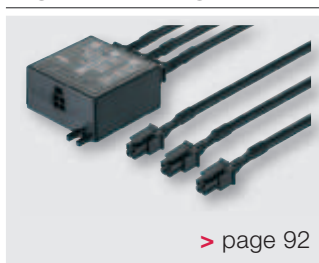
## SWITCH ACCESSORIES



## LEADS AND DISTRIBUTORS



## MULTI DRIVER BOX



## CABLE CHANNEL AND PRIMARY LEADS



# LOOX LED 3018

FLEXIBLE LIGHT



24 V SYSTEM



The flexible and dimmable LED 3018 light is easy to position. Operation takes place using the touch switch on the head of the light.



> With integrated dimmer on light head

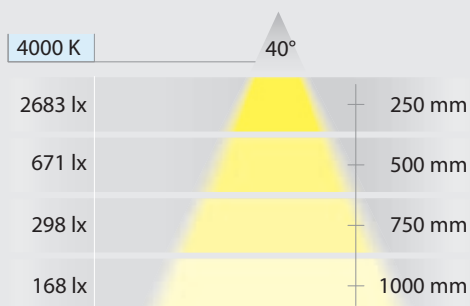


> Driver see page 63



Detail

Cat. No.	833.77.000	833.77.001
Light colour (K)	4000 (cool white)	4000 (cool white)
Diameter (mm)	60	60
Length (mm)	520	520
Wattage (W)	2.75	2.75
Number of LEDs	30	30
Light output (Lm)	150.5	150.5
Efficacy (Lm/W)	55	55
Colour rendering index (CRI)	83	83
Installation	Recess mounted	Surface mounted
Finish	Plastic, silver coloured	
Supplied with	1 light with 2 m lead and mounting accessories	





## LED 3018

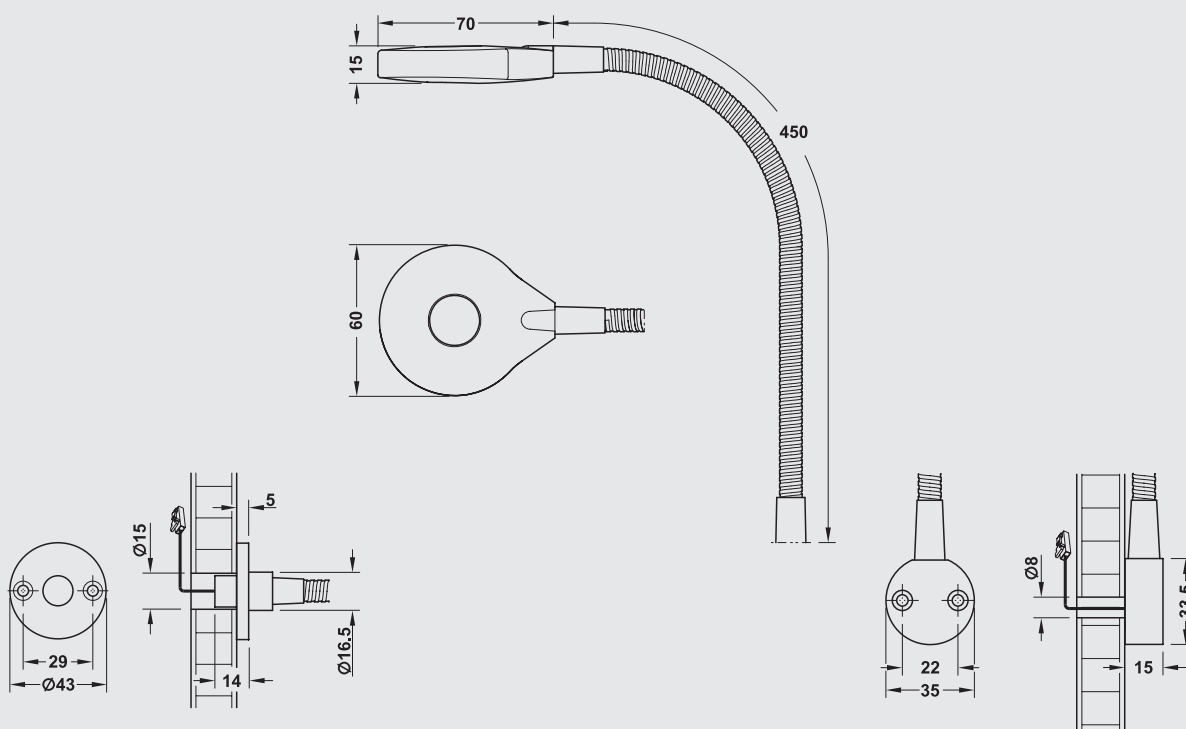
### Recess mounted

Cat. No. 833.77.000

### Surface mounted

Cat. No. 833.77.001

DIMMABLE  
BY FINGER  
TOUCH



# LOOX LED 3005

## SURFACE MOUNTED DOWNLIGHT



### 24 V SYSTEM



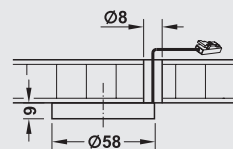
The striking appearance of the LED 3005 stylishly emphasizes the most important aspects of furniture downlights and furnishings.



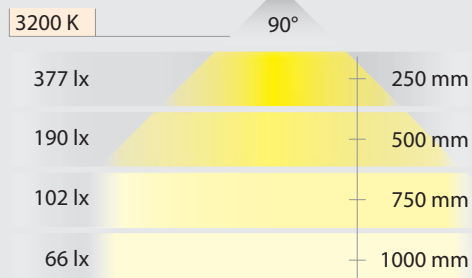
- > Dimmable
- > Installation: Self-adhesive



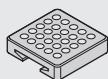
- > Driver see page 63



Cat. No.	833.76.020
Light colour (K)	3200 (warm white)
Diameter (mm)	58
Height (mm)	9
Wattage (W)	0.8
Number of LEDs	12
Light output (Lm)	28
Efficacy (Lm/W)	35
Colour rendering index (CRI)	80 – 90
Finish	Plastic, silver coloured
Supplied with	1 light with 2.5 m lead



## SURFACE MOUNTED SLIDING LIGHT SYSTEM



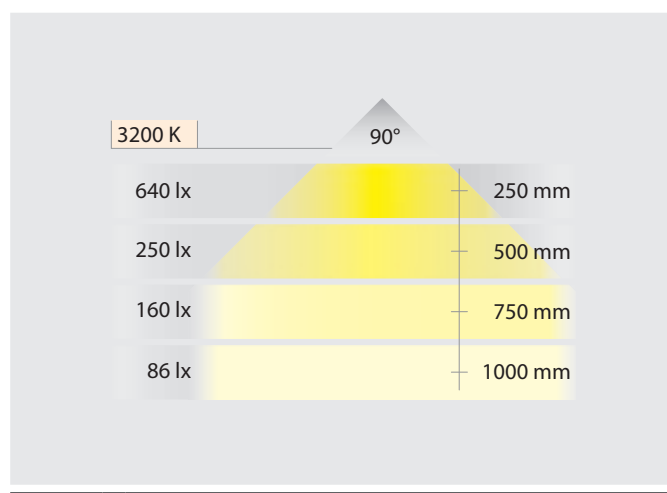
Detail

Technical drawing showing the detail of the lighting fixture, including dimensions and mounting details.

Dimensions and details shown in the drawing:

- Overall length: 900
- Segment length: 272
- End overhang: 42
- Segment width: 55
- Segment height: 17
- Mounting height: 12
- Mounting hole diameter: Ø8

Cat. No.	833.76.040
Light colour (K)	3200 (warm white)
Length (mm)	900
Width (mm)	55
Height (mm)	15
Wattage (W)	1.8 x 3 = 5.4
Number of LEDs	25 x 3
Light output (Lm)	280
Efficacy (Lm/W)	42
Colour rendering index (CRI)	90
Finish	Aluminium, silver coloured anodized
Supplied with	3 lights and 1 rail with 2.5 m lead and mounting accessories



# LOOX LED 3009

## SURFACE MOUNTED PROFILE LIGHT

24 V SYSTEM



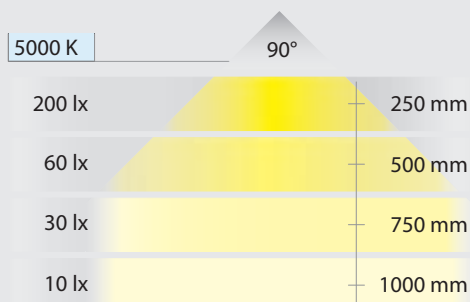
The universal LED 3009 surface mounted light is simple to retrofit. The integrated switch provides a high degree of flexibility.



- > Cannot be dimmed
- > Master light with integrated, switchable sensor switch or door sensor switch
- > max. 15 subsequent lights (slave) can be connected in series to one master light
- > Subsequent lights (slaves) can also be connected directly to the driver

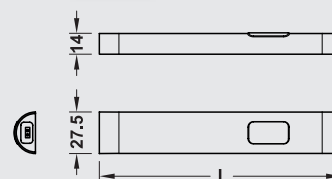


> Driver see page 63



Master light with switch

Subsequent light (slave) without switch



Cat. No.	833.76.110	833.76.111
Light colour (K)	5000 (cool white)	5000 (cool white)
Length (mm)	161	150
Width (mm)	27.5	27.5
Height (mm)	14	14
Wattage (W)	1.9	1.9
Number of LEDs	3	3
Light output (Lm)	30	30
Efficacy (Lm/W)	16	16
Colour rendering index (CRI)	70	70
Application	Light with switch (master)	Subsequent light (slave) without switch
Finish	Aluminium, silver coloured anodized	
Supplied with	1 light with 2 m lead and mounting accessories	

# LOOX LED 3019

0% 100% SURFACE MOUNTED UNDER CABINET LIGHT WITH HIGH LIGHT INTENSITY



24 V SYSTEM

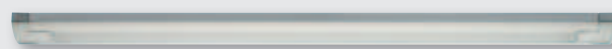
The LED 3019 under cabinet light is the solution for illuminating work surfaces with two different installation options and powerful light intensity. It is also easy to retrofit.



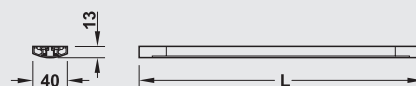
- > Dimmable
- > Corner mounting possible with supplied brackets
- > Metal housing
- > High light intensity, excellent lumen output, e. g. work surfaces



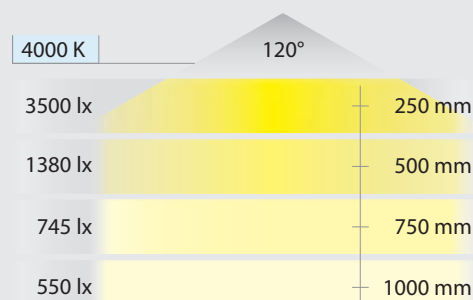
> Driver see page 63



Detail corner angled application



Cat. No.	833.76.090	833.76.091
Light colour (K)	4000 (cool white)	4000 (cool white)
Length (mm)	512	812
Width (mm)	40	40
Height (mm)	13	13
Wattage (W)	11.5	19
Number of LEDs	54	90
Light output (Lm)	720	1200
Efficacy (Lm/W)	63	63
Colour rendering index (CRI)	80	80
Finish	Aluminium, silver coloured anodized	
Supplied with	1 light with brackets, 2 m lead and mounting accessories	





# LOOX LED 3001

## RECESS MOUNTED DOWNLIGHT



### 24 V SYSTEM



The powerful LED 3001 with its prismatic cover provides variable design options with its two light colours, two installation types, and two housing colours.



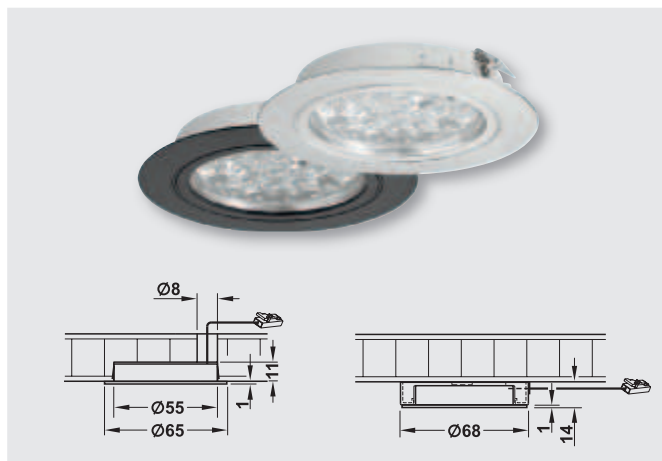
- > Dimmable
- > Drill hole Ø: 55 mm



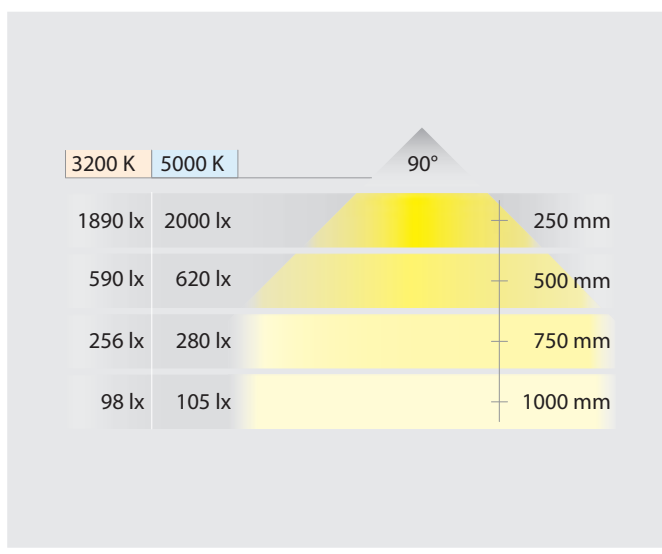
- Bezel
- > Silver coloured Cat. No. 833.77.710
- > Black Cat. No. 833.77.711



- > Driver see page 63



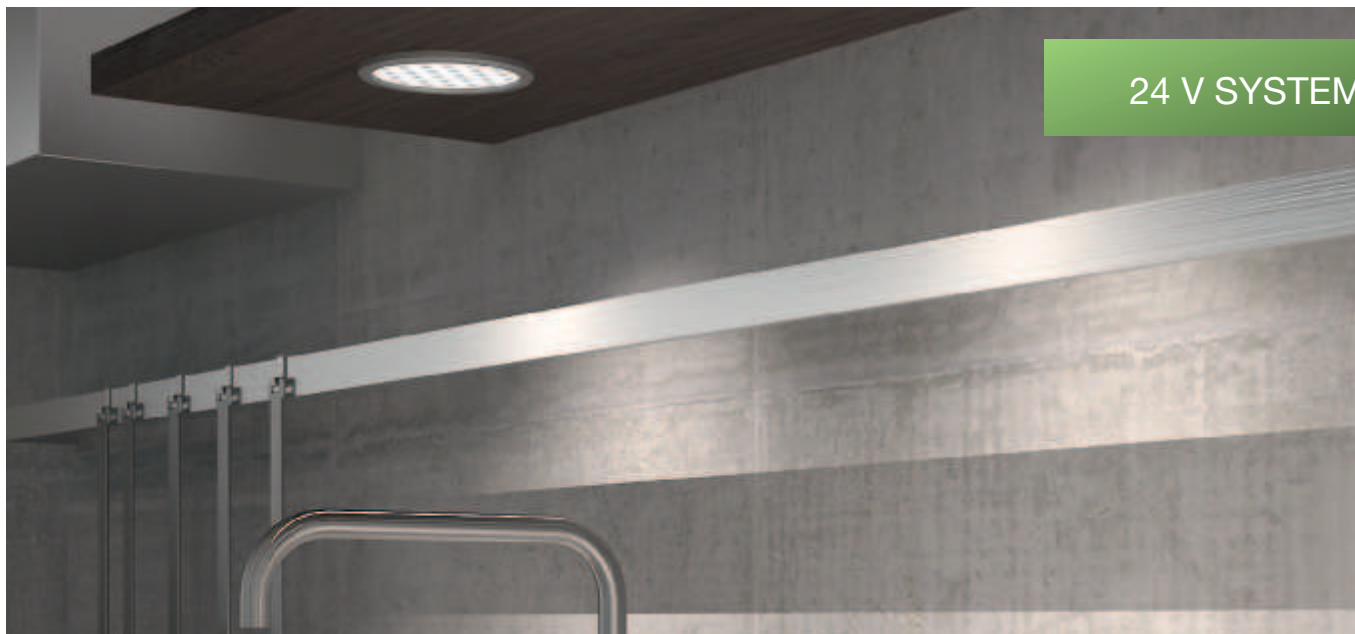
Cat. No.	833.75.010	833.75.011	833.75.000	833.75.001
Light colour (K)	3200 (warm white)		5000 (cool white)	
Diameter (mm)	65	65	65	65
Height (mm)	11	11	11	11
Wattage (W)	1.7	1.7	1.7	1.7
Number of LEDs	24	24	24	24
Light output (Lm)	55	55	67	67
Efficacy (Lm/W)	33	33	41	41
Colour rendering index (CRI)	90	90	90	90
Finish	Aluminium, with clear glass			
Colour	Silver coloured anodized	Black	Silver coloured anodized	Black
Supplied with	1 light with 2.5 m lead			



# LOOX LED 3002

RECESS MOUNTED DOWNLIGHT

24 V SYSTEM



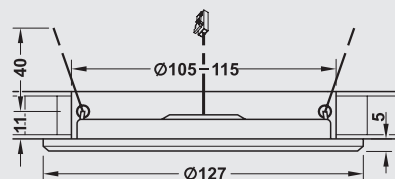
The LED 3002 recess mounted downlight is the specialist for suspended panels, and is appealing because of its high light intensity. Other ideal areas of application are the illumination of wall units, display cabinets and shelving.



- > Cannot be dimmed
- > Panel distance of 40 mm required
- > Through hole mounting:  
Ø 105–115 mm



- > Driver see page 63



Cat. No.	833.75.030	833.75.020
Light colour (K)	3200 (warm white)	5000 (cool white)
Diameter (mm)	127	127
Height (mm)	18	18
Wattage (W)	4.4	4.4
Number of LEDs	60	60
Light output (Lm)	142	168
Efficacy (Lm/W)	32	38
Colour rendering index (CRI)	90	90
Finish	Aluminium, w. clear glass, silver colour. anod.	
Supplied with	1 light with 2.5 m lead	

3200 K	5000 K	
1546 lx	1800 lx	250 mm
554 lx	850 lx	500 mm
310 lx	450 lx	750 mm
190 lx	260 lx	1000 mm

# LOOX LED 3010

## RECESS MOUNTED DOWNLIGHT

24 V SYSTEM



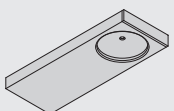
The LED 3010 provides three installation options and is impressive because of its bright, homogenous luminosity.



- > Cannot be dimmed
- > Drill hole Ø: 60 mm



- > Bezel, silver coloured  
Cat. No. 833.77.730

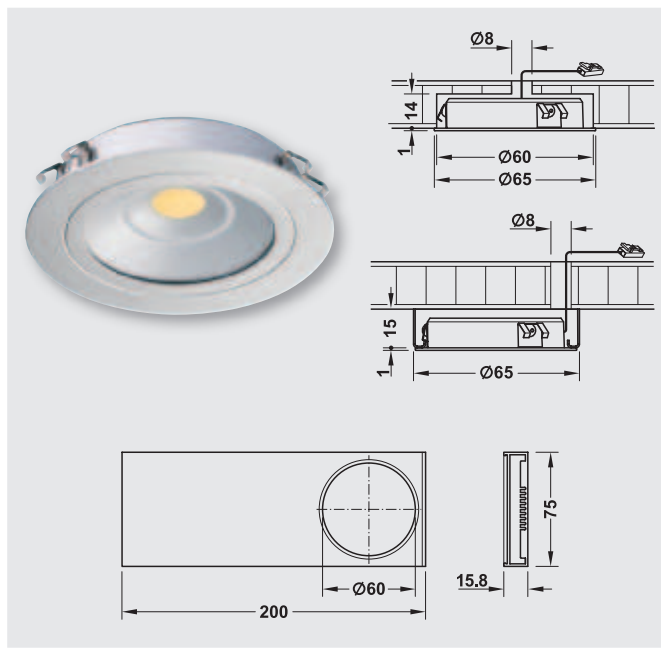


- > Bezel housing, silver coloured  
Cat. No. 833.77.731



- > Driver see page 63

Cat. No.	833.75.040	833.75.041	833.75.042
Light colour (K)	3000 (warm white)	4000 (cool white)	6000 (day-light white)
Diameter (mm)	65	65	65
Height (mm)	13	13	13
Wattage (W)	3.25	3.25	3.25
Number of LEDs	1	1	1
Light output (Lm)	180	204	204
Efficacy (Lm/W)	55	63	63
Colour rendering index (CRI)	84	84	82
Finish	Aluminium, silver coloured anodized		
Supplied with	1 light and 1 frosted replacement glass, 2 m lead and mounting accessories		



3000 K	4000 K	6000 K	105°
1085 lx	1157 lx	1300 lx	250 mm
325 lx	355 lx	421 lx	500 mm
154 lx	184 lx	211 lx	750 mm
71 lx	81 lx	84 lx	1000 mm

# LOOX LED 3020



RECESS MOUNTED UNDER CABINET LIGHT WITH HIGH LIGHT INTENSITY



Because of the extremely high and homogenous luminosity, the LED 3020 is outstanding for illuminating work surfaces.

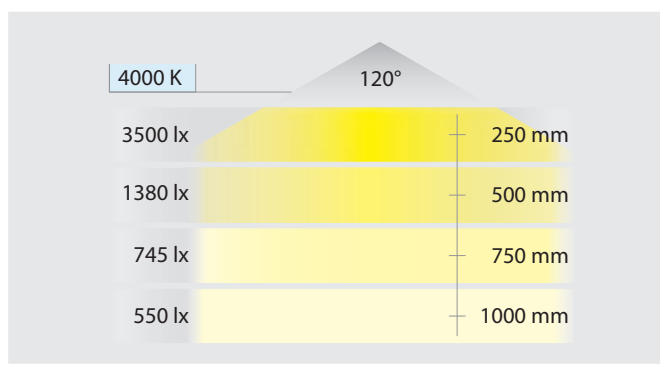
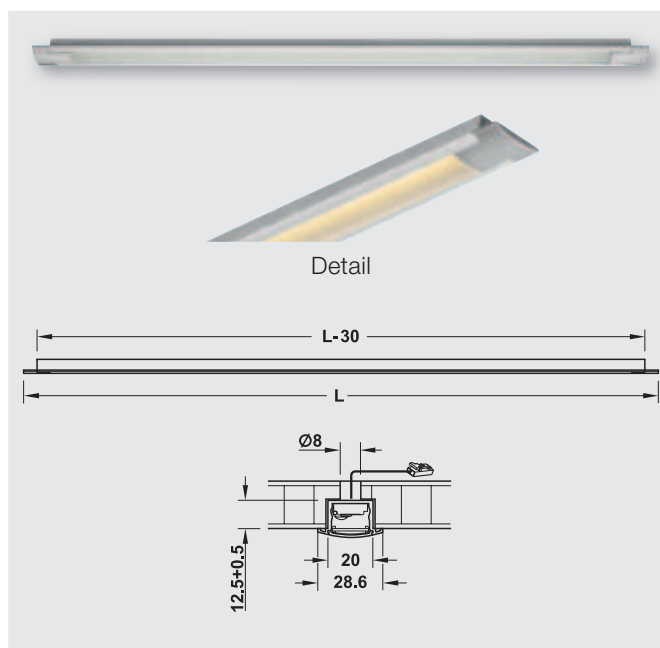


- > Dimmable
- > High light intensity, excellent illumination, e. g. work surfaces
- > Metal housing



- > Driver see page 63

Cat. No.	833.76.100	833.76.101
Light colour (K)	4000 (cool white)	4000 (cool white)
Length (mm)	513	813
Width	28.6	28.6
Height (mm)	16.4	16.4
Wattage (W)	11.5	19
Number of LEDs	54	90
Light output (Lm)	720	1200
Efficacy (Lm/W)	63	63
Colour rendering index (CRI)	80	80
Finish	Aluminium, silver coloured anodized	
Supplied with	1 light with 2 m lead and mounting accessories	



# LOOX LED 3011

## LED FLEXIBLE STRIP LIGHT



### 24 V SYSTEM



The LED 3011 flexible strip light is easy to process. It has a self adhesive backing and can be individually shortened. With three available light colours and two lengths, the strip light can be used in many different applications.



- > Dimmable
- > Can be shortened after every sixth LED, every 165 mm.
- > Installation: Self-adhesive



- > Driver see page 63

3000 K	4000 K	5000 K	120°	
284 lx	247 lx	272 lx		250 mm
136 lx	119 lx	132 lx		500 mm
91 lx	72 lx	81 lx		750 mm
57 lx	50 lx	56 lx		1000 mm

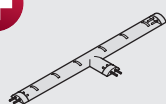
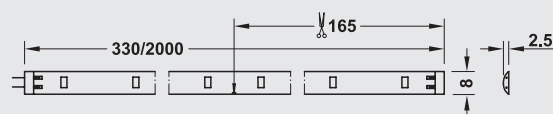
Cat. No.	833.77.020	833.77.021	833.77.030	833.77.031	833.77.040	833.77.041
Light colour (K)	3000 (warm white)		4000 (cool white)		5000 (cool white)	
Length (mm)	330	2000	330	2000	330	2000
Width (mm)	8	8	8	8	8	8
Height (mm)	2.5	2.5	2.5	2.5	2.5	2.5
Wattage (W)	0,9	5.6	0,9	5.6	0,9	5.6
Number of LEDs	12	72	12	72	12	72
Light output (Lm)	44	282	44	282	44	282
Efficacy (Lm/W)	49	50	49	50	49	50
Colour rendering index (CRI)	90	90	90	90	90	90
Finish	Plastic, white		Plastic, white		Plastic, white	
Supplied with	1 LED flexible strip light without lead		1 LED flexible strip light without lead		1 LED flexible strip light without lead	



## LED 3011 Flexible strip light



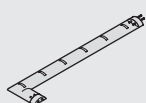
Detail



### T-connector

Length: 166.5 mm; Wattage: 0.4 W  
6 LEDs

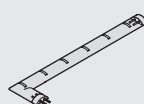
- > with 3000 K Cat. No. 833.77.050
- > with 4000 K Cat. No. 833.77.051
- > with 5000 K Cat. No. 833.77.052



### Left corner connector

length: 156.5 mm; Wattage: 0.4 W  
6 LEDs

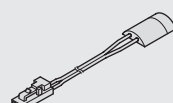
- > with 3000 K Cat. No. 833.77.053
- > with 4000 K Cat. No. 833.77.054
- > with 5000 K Cat. No. 833.77.055



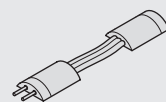
### Right corner connector

Length: 156.5 mm; Wattage: 0.4 W  
6 LEDs

- > with 3000 K Cat. No. 833.77.056
- > with 4000 K Cat. No. 833.77.057
- > with 5000 K Cat. No. 833.77.058



- > 2 m lead (connection between flexible strip light and driver)  
Cat. No. 833.77.796



### Interconnecting lead

- > 50 mm Cat. No. 833.77.790
- > 500 mm Cat. No. 833.77.791
- > 1500 mm Cat. No. 833.77.792



# LOOX LED 3013

LED FLEXIBLE STRIP LIGHT, 5 M, WITH 150 LEDs



## 24 V SYSTEM



Because of the high light output, three light colours and low space requirement, the LED 3013 flexible strip light can be used anywhere.

Give your lighting scenarios an individual touch. In combination with our aluminium profiles, different diffusers and installation types are available.



- > Dimmable
- > Can be shortened every 200 mm
- > Installation: Self-adhesive
- > High light intensity



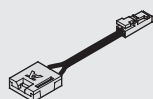
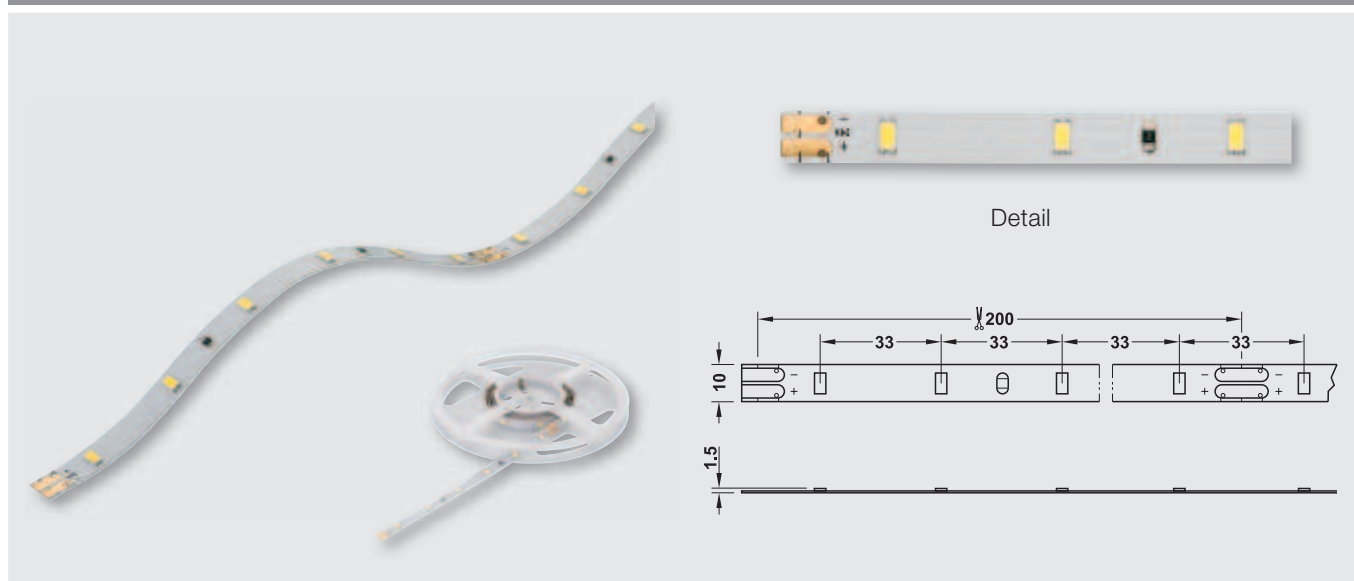
- > Driver see page 63
- > Aluminium profile see page 84

Cat. No.	833.76.070	833.76.071	833.76.072
Light colour (K)	3000 (warm white)	4000 (cool white)	6000 (day-light white)
Length (mm)	5000	5000	5000
Width (mm)	10	10	10
Height (mm)	1.5	1.5	1.5
Wattage (W)	80 (16 per metre)		
Number of LEDs	150 (30 per metre)		
Light output (Lm)	7500	7500	7500
Efficacy (Lm/W)	94	94	94
Colour rendering index (CRI)	85	83	80
Finish	LED board, white		
Supplied with	5-metre roll with 2 m lead		

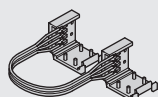
3000 K	4000 K	6000 K	120°
1703 lx	1740 lx	1783 lx	250 mm
545 lx	551 lx	567 lx	500 mm
278 lx	284 lx	292 lx	750 mm
130 lx	131 lx	132 lx	1000 mm

LOOX 2013, HDE-en, 04/13; Dimensional data not binding. We reserve the right to alter specifications without notice.

## LED 3013 Flexible strip light



- > 2 m lead  
with 24 V plug system  
and clip for LED flexible strip light  
Cat. No. 833.77.750



- Interconnecting lead with clip
- > 50 mm Cat. No. 833.77.740
- > 500 mm Cat. No. 833.77.741
- > 2,000 mm Cat. No. 833.77.742



- > Clip connector  
Cat. No. 833.77.760



# LOOX LED 3015

LED FLEXIBLE STRIP LIGHT, 5 M, WITH 600 LEDs



## 24 V SYSTEM



The 600 LEDs of the LED 3015 flexible strip light generate an extremely homogenous and continuous lighting effect. The extremely powerful LED flexible strip light is available in three light colours.

Give your lighting scenarios an individual touch. In combination with our aluminium profiles, different diffusers and installation types are available.



- > Dimmable
- > Can be shortened every 50 mm
- > Installation: Self-adhesive
- > High light intensity

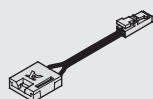
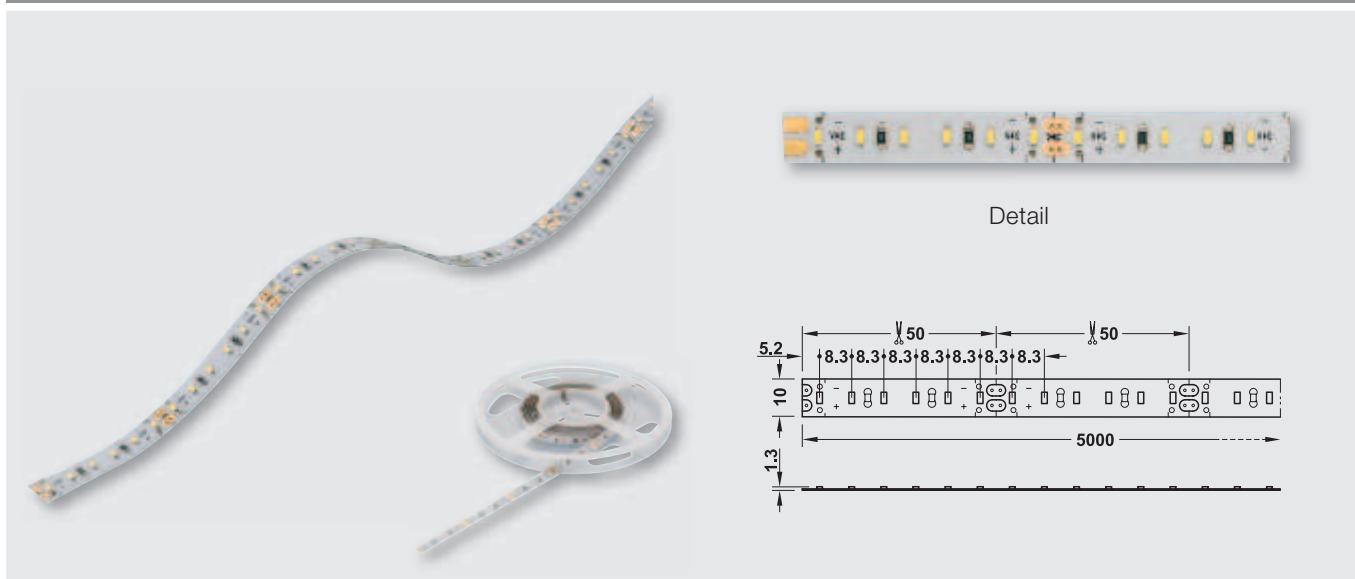


- > Driver see page 63
- > Aluminium profile see page 84

Cat. No.	833.76.080	833.76.081	833.76.082
Light colour (K)	3000 (warm white)	4000 (cool white)	6000 (day-light white)
Length (mm)	5000	5000	5000
Width (mm)	10	10	10
Height (mm)	1.3	1.3	1.3
Wattage (W)	75 (15 per metre)		
Number of LEDs	600 (120 per metre)		
Light output (Lm)	6000	6000	6000
Efficacy (Lm/W)	80	80	80
Colour rendering index (CRI)	85	83	80
Finish	LED board, white		
Supplied with	5-metre roll with 2 m lead		

3000 K	4000 K	6000 K	120°	
1687 lx	1704 lx	1723 lx	250 mm	
523 lx	534 lx	544 lx	500 mm	
278 lx	281 lx	287 lx	750 mm	
133 lx	134 lx	135 lx	1000 mm	

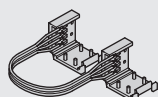
## LED 3015 Flexible strip light



> 2 m lead  
with 24 V plug system  
and clip for LED flexible strip light  
Cat. No. 833.77.750



> Clip connector  
Cat. No. 833.77.760



Interconnecting lead with clip  
> 50 mm Cat. No. 833.77.740  
> 500 mm Cat. No. 833.77.741  
> 2,000 mm Cat. No. 833.77.742





# LOOX LED 3017

LED FLEXIBLE STRIP LIGHT, MULTI-WHITE



24 V SYSTEM



With the LED 3017 flexible strip lights, different lighting moods can be created by means of a smooth transformation from warm white to cool white light.



- > Dimmable using multi-white mixer
- > Can be shortened after every twelfth LED, every 165 mm
- > Light colour adjustable using multi-white mixer
- > max. 60 W can be connected to the multi-white mixer
- > Any number of multi-white mixers can be controlled with 1 remote control within a radius of 15 m



> Driver see page 63

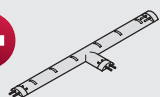
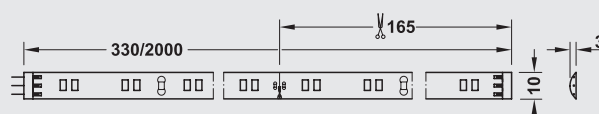
Cat. No.	833.77.010	833.77.011
Light colour (K)	2700 (warm white) to 5000 (cool white)	
Length (mm)	330	2000
Width (mm)	10	10
Height (mm)	3	3
Wattage (W)	1.8	11
Number of LEDs	24	144
Light output (Lm)	70	400
Efficacy (Lm/W)	39	36
Colour rendering index (CRI)	93	93
Finish	LED board, white	
Supplied with	1 LED flexible strip light without lead	

2700 K	5000 K		120°
290 lx	428 lx		250 mm
85 lx	213 lx		500 mm
40 lx	133 lx		750 mm
24 lx	95 lx		1000 mm

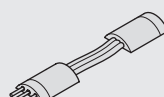
## LED 3017 Flexible strip light



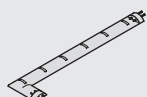
Detail



- > T-connector  
Length: 166.5 mm; Wattage: 0.9 W  
12 LEDs Cat. No. 833.77.770



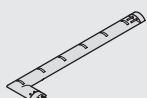
- Interconnecting lead
- > 50 mm Cat. No. 833.77.793
- > 500 mm Cat. No. 833.77.794
- > 1,500 mm Cat. No. 833.77.795



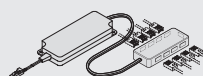
- > Left corner connector  
Length: 157.5 mm; Wattage: 0.9 W  
12 LEDs Cat. No. 833.77.771



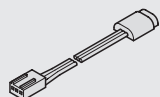
- > Remote control  
for multi-white mixer  
Cat. No. 833.77.781



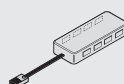
- > Right corner connector  
Length: 157.5 mm; Wattage: 0.9 W  
12 LEDs Cat. No. 833.77.772



- > Multi-white mixer  
with 8-way distributor  
Cat. No. 833.77.780



- > 2 m lead  
Cat. No. 833.77.797



- > 8-way distributor  
Cat. No. 833.77.721



# LOOX LED 3007

## DRAWER LIGHT

### 24 V SYSTEM



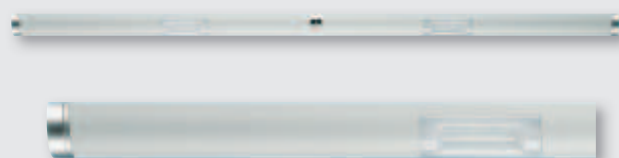
With the integrated door sensor and the space saving design, the LED 3007 is especially suitable for illuminating drawers.



- > Cannot be dimmed
- > With integrated door sensor switch
- > Light for clip fixing, with fixing clips for different side panel thicknesses (16 mm/18 mm/19 mm), for screw fixing to the sides



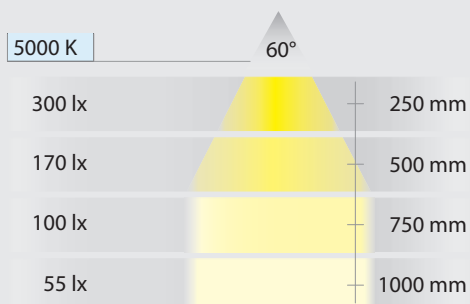
- > Driver see page 63



Detail




Cat. No.	833.76.122	833.76.125
Light colour (K)	5000 (cool white)	5000 (cool white)
Length (mm)	563	863
Width (mm)	27.5	27.5
Height (mm)	14	14
Wattage (W)	4	8
Number of LEDs	6	12
Light output (Lm)	81	162
Efficacy (Lm/W)	20	20
Colour rendering index (CRI)	70	70
Finish	Aluminium, silver coloured anodized	
Supplied with	1 light with 2 m lead and mounting accessories	



# LOOX LED DRIVER

CONSTANT VOLTAGE 24 V



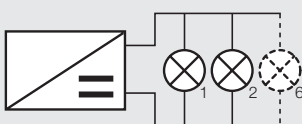
**24 V SYSTEM**

**!** 1 Cat. No. 833.77.900  
 $\otimes_1 + \otimes_2 + \dots + \otimes_6 < 15 \text{ W}$

2 Cat. No. 833.77.912  
 $\otimes_1 + \otimes_2 + \dots + \otimes_6 < 20 \text{ W}$

3 Cat. No. 833.77.901  
 $\otimes_1 + \otimes_2 + \dots + \otimes_6 < 30 \text{ W}$

4 Cat. No. 833.77.914  
 $\otimes_1 + \otimes_2 + \dots + \otimes_6 < 75 \text{ W}$













Parallel connection

The driver is the heart of the Loox system, and is suitable for connecting to all of the world's most frequently used power systems. It has an integrated switching function and connections for all of the most popular types of switch.

**!** > Lead length from driver to switch max. 6 m.

Cat. No.	833.77.900 <b>1</b>	833.77.912 <b>2</b>	833.77.901 <b>3</b>	833.77.914 <b>4</b>
Wattage (W)	0 – 15	0 – 20	0 – 30	0 – 75
Input voltage	100 – 240 V; 50 – 60 Hz	100 – 240 V; 50 – 60 Hz	100 – 240 V; 50 – 60 Hz	100 – 240 V; 50 – 60 Hz
Output voltage	DC 24 V	DC 24 V	DC 24 V	DC 24 V
Output current	0.625 A	0.83 A	1.25 A	3.15 A
Degree of protection	IP20	IP20	IP20	IP20
Number of slots	6 slots for 24 V lights, 1 slot for switch, 1 slot for country-specific primary lead			
Colour	Black	Black	Black	Black
Length (mm)	140	128	195	208
Width (mm)	43	50,5	43	56,5
Height (mm)	20	14	28	30
Supplied with	1 driver with mounting accessories			

## Country-specific primary leads – lead length 2 m

Cat. No.	833.89.000	833.89.001	833.89.002	833.89.003	833.89.004	833.89.005	833.89.006	833.89.007	833.89.009	833.89.050
Plug design										
Designation	UK	AU	EU	US	JP	CN	KR	TW	EU	US
Supplied with	1 piece	1 piece	1 piece	1 piece	1 piece	1 piece	1 piece	1 piece	1 piece	1 piece

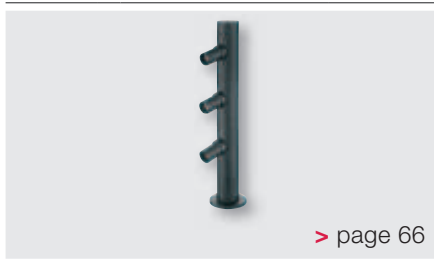
# OVERVIEW

## LEDs AND ACCESSORIES – 350-mA-SYSTEM

### 350-mA SYSTEM

#### LOOX LED 4010

SURFACE MOUNTED LIGHTS



#### LOOX LED 4013

SURFACE MOUNTED LIGHTS



#### LOOX LED 4015

SURFACE MOUNTED LIGHTS



#### LOOX LED 4003

RECESS MOUNTED LIGHTS



#### LOOX LED 4004

RECESS MOUNTED LIGHTS



#### LOOX LED 4005

RECESS MOUNTED LIGHTS



#### LOOX LED 4006

RECESS MOUNTED LIGHTS



#### LOOX LED 4007

RECESS MOUNTED LIGHTS



#### LOOX LED 4009

RECESS MOUNTED LIGHTS



#### LOOX LED 4011

RECESS MOUNTED LIGHTS



#### LOOX LED 4012

RECESS MOUNTED LIGHTS





## LOOX LED 4014

RECESS MOUNTED LIGHTS



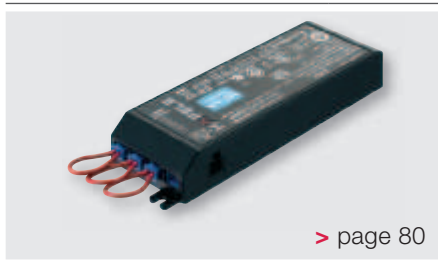
## LOOX LED 4016

RECESS MOUNTED LIGHTS



## LOOX LED DRIVERS

CONSTANT CURRENT 350 mA



## PROFILES FOR LED

FLEXIBLE STRIP LIGHTS

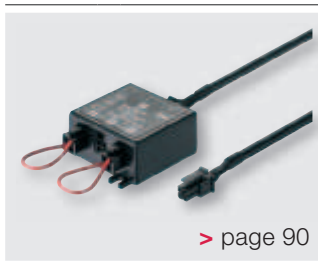


## LOOX ACCESSORIES

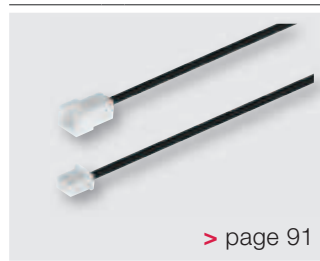
SWITCHES



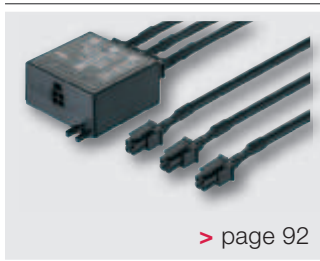
SWITCH ACCESSORIES



LEADS



CONVERTER AND  
MULTI DRIVER BOX



CABLE CHANNEL AND  
PRIMARY LEADS



# LOOX LED 4010

MODULAR SURFACE MOUNTED STACK LIGHT



## 350-mA SYSTEM



The LED 4010 can be individually adapted to requirements thanks to its modular configuration with rotary and swivelling LED modules and the special design. The basic set can be optionally extended.



- > Dimmable
- > 1 light can be extended to max. 8 LED modules and 4 spacers



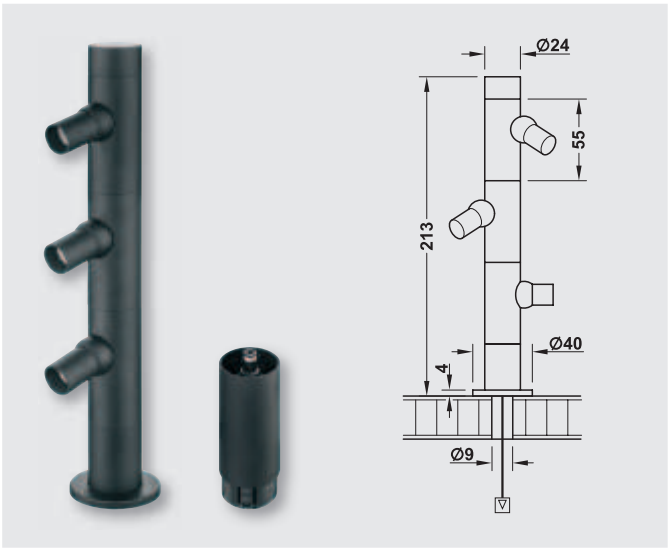
- > LED module  
Length: 72.5 mm; Wattage: 1 W  
Cat. No. 833.80.011



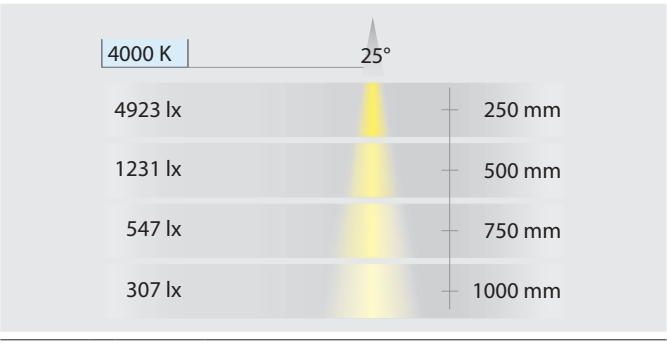
- > Spacer, length: 72.5 mm  
Cat. No. 833.80.012



- > Driver see page 80



Cat. No.	833.80.010
Light colour (K)	4000 (cool white)
Diameter (mm)	24
Length (mm)	214
Wattage (W)	3
Number of LEDs	3 (1 per module)
Light output (Lm)	213 (71 per module)
Efficacy (Lm/W)	71
Colour rendering index (CRI)	85
Finish	Aluminium, black
Supplied with	3 LED modules and 1 base module with 2 m lead



# LOOX LED 4013



SURFACE MOUNTED SPOTLIGHT FOR CORNER APPLICATION



The LED 4013 is characterised by its compact design, a high light intensity and a swivelling light head.

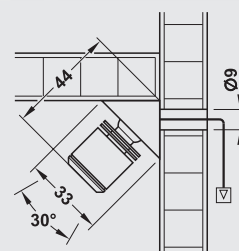
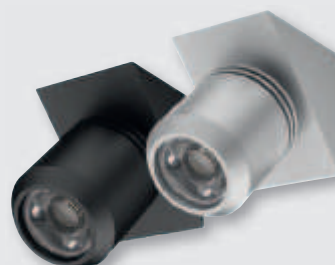


- > Dimmable
- > Space saving and inconspicuous
- > Two installation types:  
Glue fixing or screw fixing



- > Driver see page 80

Cat. No.	833.79.060	833.79.062	833.79.061	833.79.063
Light colour (K)	4000 (cool white)		6000 (daylight white)	
Length (mm)	33	33	33	33
Width (mm)	22	22	22	22
Height (mm)	42	42	42	42
Wattage (W)	1	1	1	1
Number of LEDs	1	1	1	1
Light output (Lm)	64	64	71	71
Efficacy (Lm/W)	64	64	71	71
Colour rendering index (CRI)	87	87	85	85
Finish	Aluminium			
Colour	Silver col. ano-dized	Black	Silver col. ano-dized	Black
Supplied with	1 light with 2 m lead and mounting accessories			



4000 K	6000 K	21°	
2500 lx	2800 lx		250 mm
1500 lx	1600 lx		500 mm
500 lx	585 lx		750 mm
150 lx	287 lx		1000 mm

# LOOX LED 4015

SWIVEL EYEBALL SPOTLIGHT, SURFACE MOUNTED



350-mA SYSTEM



The LED 4015 captivates with its exclusive design. Objects are presented in an ideal setting by means of the bright spotlighting.

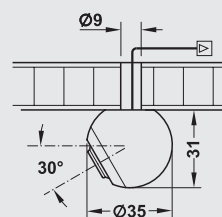
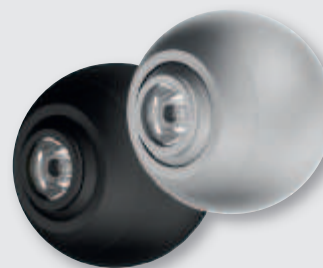


- > Dimmable
- > Bright spotlight with modern design
- > Eyeball swivels 30° in all directions
- > Light housing swivels 360°



> Driver see page 80

Cat. No.	833.79.070	833.79.072	833.79.071	833.79.073
Light colour (K)	4000 (cool white)		6000 (daylight white)	
Diameter (mm)	35	35	35	35
Height (mm)	32	32	32	32
Wattage (W)	1	1	1	1
Number of LEDs	1	1	1	1
Light output (Lm)	72	72	87	87
Efficacy (Lm/W)	72	72	87	87
Colour rendering index (CRI)	87	87	72	72
Finish	Aluminium			
Colour	Silver col. ano-dized	Black	Silver col. ano-dized	Black
Supplied with	1 light with 2 m lead and mounting accessories			



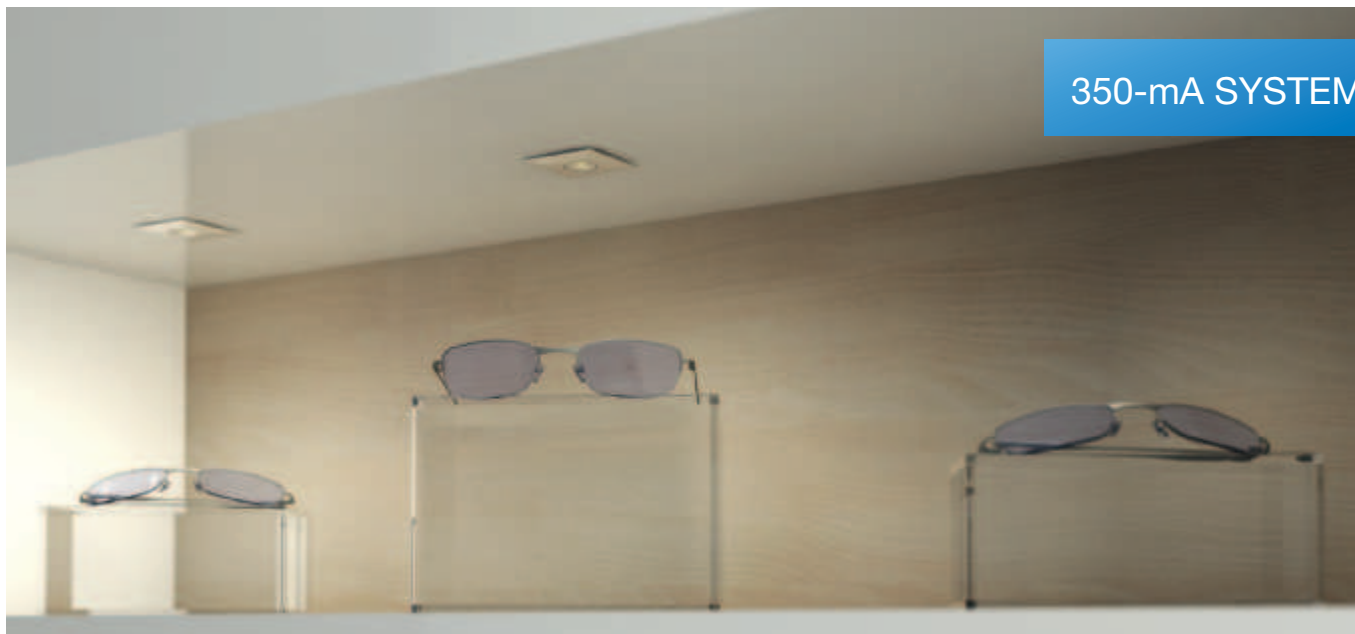
4000 K	6000 K	15°	
7542 lx	8341 lx		250 mm
2156 lx	2300 lx		500 mm
1088 lx	1144 lx		750 mm
414 lx	449 lx		1000 mm

# LOOX LED 4003

RECESS MOUNTED DOWNLIGHT, SQUARE



350-mA SYSTEM



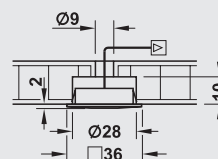
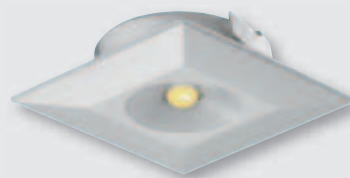
With its small and flat design, the LED 4003 is particularly suitable for illuminating objects in furniture. Depending on the installation situation, this light can also put the emphasis on furniture as an effective sidelight.



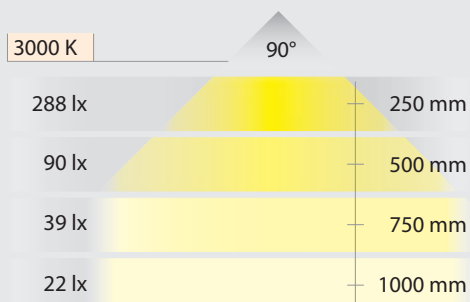
- > Dimmable
- > 3-piece set
- > Drill hole Ø: 28 mm



- > Driver see page 80



Cat. No.	833.78.040
Light colour (K)	3000 (warm white)
Length (mm)	36
Width (mm)	36
Height (mm)	12
Wattage (W)	1
Number of LEDs	1
Light output (Lm)	65
Efficacy (Lm/W)	65
Colour rendering index (CRI)	85
Finish	Plastic, silver coloured
Supplied with	3 lights with 2 m lead and mounting accessories





# LOOX LED 4004

RECESS MOUNTED DOWNLIGHT, ROUND



350-mA SYSTEM

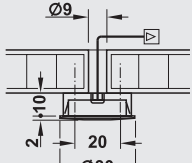
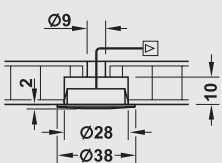
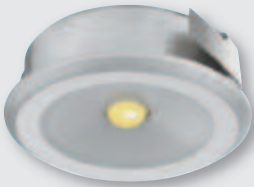
The small and slimline LED 4004 puts objects firmly in the spotlight in the recess mounted and down lit area.



- > Dimmable
- > Bezel for surface mounting supplied
- > 3-piece set
- > Drill hole Ø: 28 mm



- > Driver see page 80



Cat. No.	833.78.080
Light colour (K)	3000 (warm white)
Diameter (mm)	30
Height (mm)	12
Wattage (W)	1
Number of LEDs	1
Light output (Lm)	65
Efficacy (Lm/W)	65
Colour rendering index (CRI)	85
Finish	Plastic, silver coloured
Supplied with	3 lights with 2 m lead and mounting accessories

3000 K

90°

288 lx

250 mm

90 lx

500 mm

39 lx

750 mm

22 lx

1000 mm

# LOOX LED 4005

RECESS MOUNTED SPOTLIGHT, ROUND, WITH LENS



350-mA SYSTEM



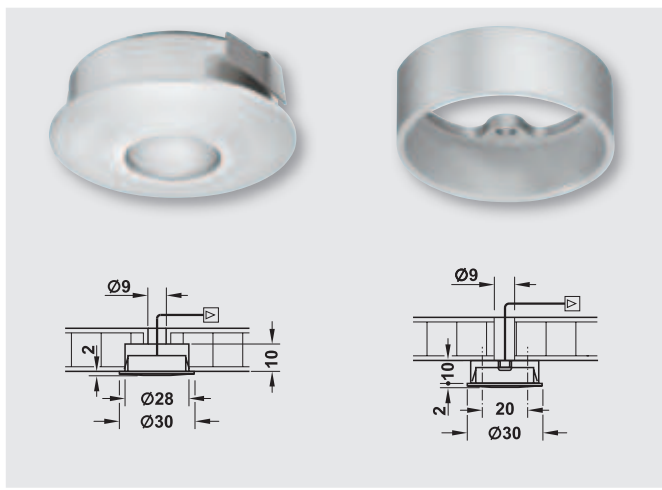
The LED 4005 can be used as a recess mounted or surface mounted light. The extremely small and flat design makes the light easy to integrate in the furniture design. The integrated lens also centres and intensifies the light spot.



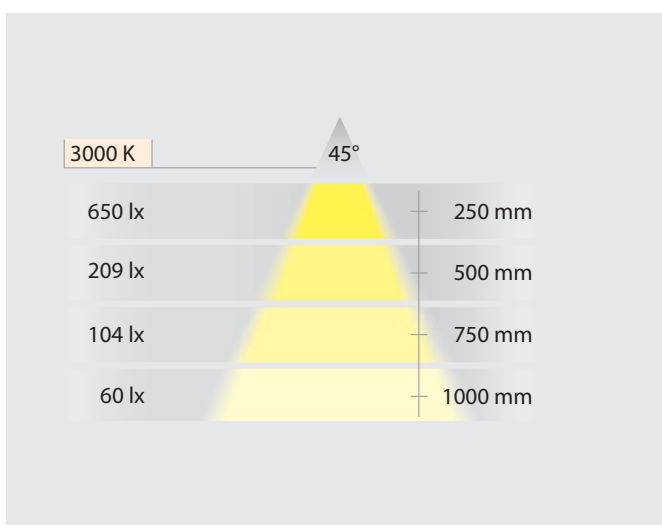
- > Dimmable
- > Surface mounted bezel for surface mounting supplied
- > 3-piece set
- > Drill hole Ø: 28 mm



- > Driver see page 80



Cat. No.	833.78.100
Light colour (K)	3000 (warm white)
Diameter (mm)	30
Height (mm)	12
Wattage (W)	1
Number of LEDs	1
Light output (Lm)	65
Efficacy (Lm/W)	65
Colour rendering index (CRI)	87
Finish	Plastic, silver coloured
Supplied with	3 lights with 2 m lead and mounting accessories

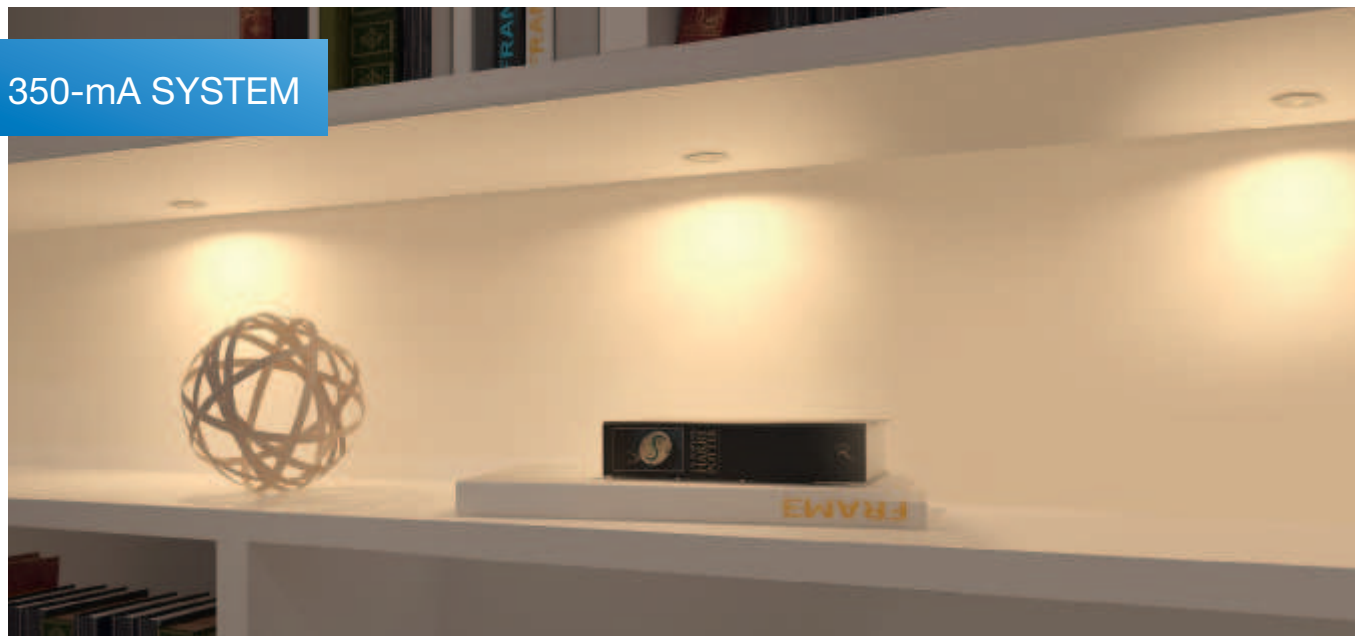


# LOOX LED 4006

RECESS MOUNTED DOWNLIGHT, HEXAGONAL



350-mA SYSTEM



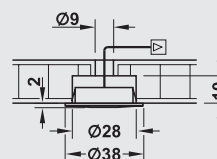
The LED 4006 has a slimline and flat design. Exciting sidelight effects can be created with this light.



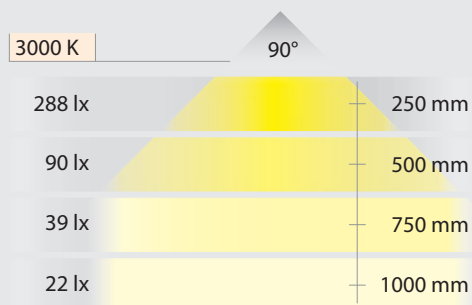
- > Dimmable
- > 3-piece set
- > Drill hole Ø: 28 mm



- > Driver see page 80

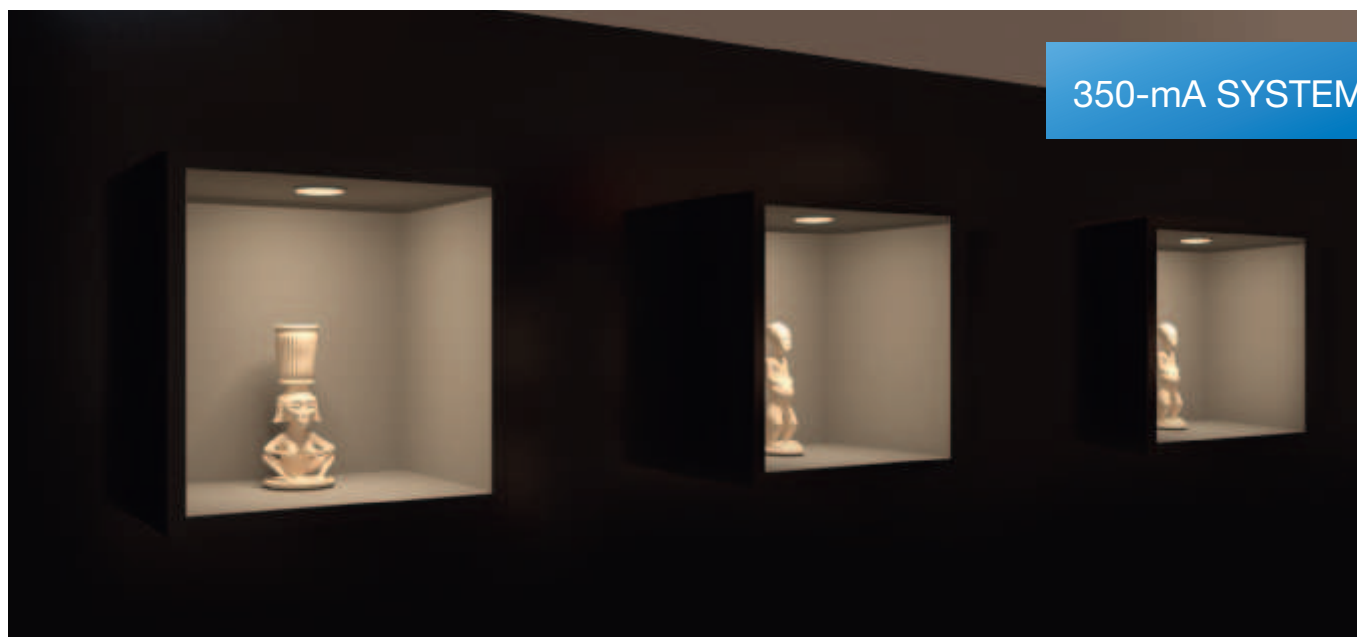


Cat. No.	833.78.000
Light colour (K)	3000 (warm white)
Length (mm)	38
Width (mm)	33
Height (mm)	12
Wattage (W)	1
Number of LEDs	1
Light output (Lm)	65
Efficacy (Lm/W)	65
Colour rendering index (CRI)	85
Finish	Plastic, silver coloured
Supplied with	3 lights with 2 m lead and mounting accessories



# LOOX LED 4007

RECESS MOUNTED DOWNLIGHT, SQUARE



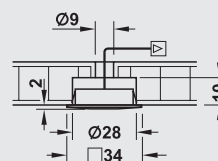
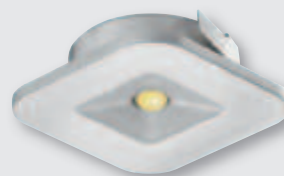
The LED 4007 light spot emphasizes the effect of objects in furniture.



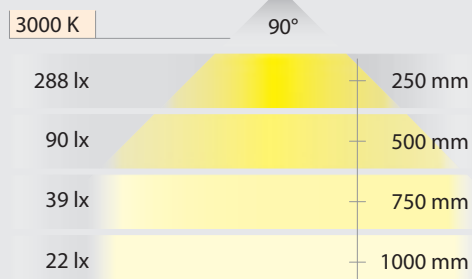
- > Dimmable
- > 3-piece set
- > Drill hole Ø: 28 mm



- > Driver see page 80



Cat. No.	833.78.020
Light colour (K)	3000 (warm white)
Length (mm)	34
Width (mm)	34
Height (mm)	12
Wattage (W)	1
Number of LEDs	1
Light output (Lm)	53
Efficacy (Lm/W)	53
Colour rendering index (CRI)	85
Finish	Plastic, silver coloured anodized
Supplied with	3 lights with 2 m lead and mounting accessories



# LOOX LED 4009

## RECESS MOUNTED DOWNLIGHT



### 350-mA SYSTEM



The LED 4009 recess mounted downlight has three extra-powerful LEDs and therefore generates powerful, directed light. Three different mounting options are available for design purposes.

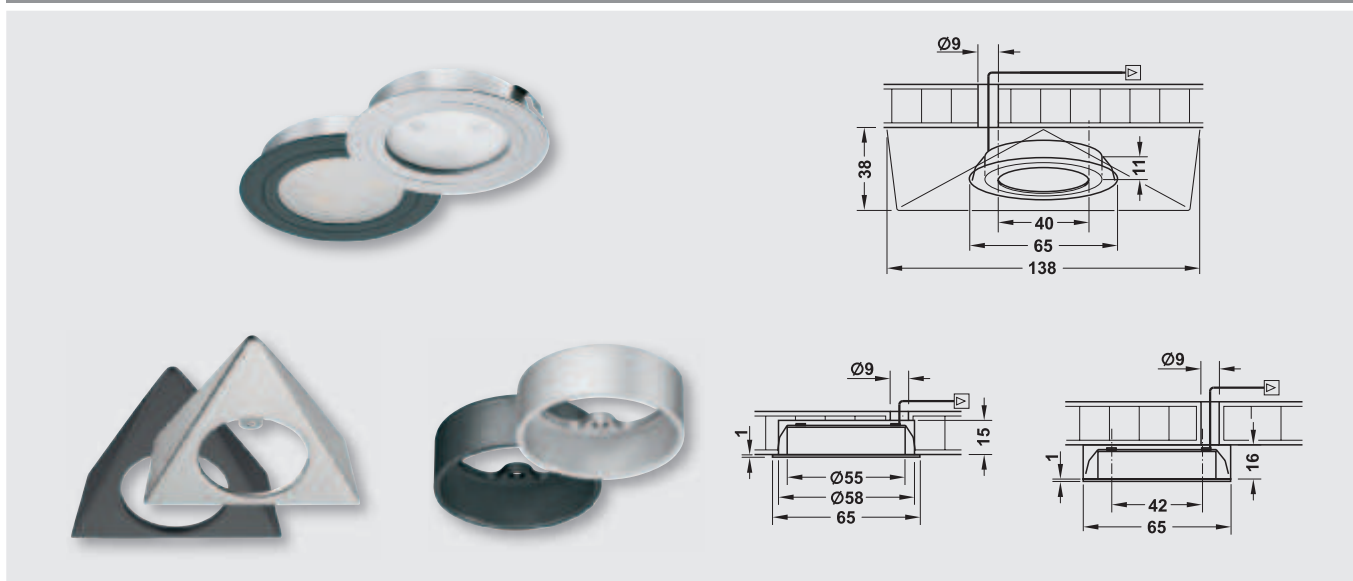
3000 K	6000 K	160°
860 lx	1113 lx	250 mm
215 lx	278 lx	500 mm
96 lx	123 lx	750 mm
54 lx	69 lx	1000 mm

Cat. No.	833.78.140	833.78.142	833.78.150	833.78.152
Light colour (K)	3000 (warm white)		6000 (daylight white)	
Diameter (mm)	65	65	65	65
Height (mm)	15	15	15	15
Wattage (W)	3	3	3	3
Number of LEDs	3	3	3	3
Light output (Lm)	120	120	140	140
Efficacy (Lm/W)	40	40	47	47
Colour rendering index (CRI)	85	85	75	75
Finish	Aluminium	Aluminium	Aluminium	Aluminium
Colour	Nickel plated matt	Black	Nickel plated matt	Black
Supplied with	1 light with 2 m lead		1 light with 2 m lead	

LOOX 2013, HDE-en, 04/13; Dimensional data not binding. We reserve the right to alter specifications without notice.



## LED 4009



Bezel for surface mounting;

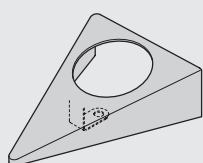
Dim. (Ø x H): 65 x 16 mm

> Nickel plated matt

Cat. No. 833.80.710

> Black

Cat. No. 833.80.712



Triangular housing

for surface mounting;

Dim. (L x W x H): 137 x 116 x 38 mm

> Nickel plated matt

Cat. No. 833.80.711

> Black

Cat. No. 833.80.713



> Dimmable

> Drill hole Ø: 58 mm

> Metal housing



> Driver see page 80



# LOOX LED 4011

## RECESS MOUNTED POST LIGHT



### 350-mA SYSTEM



Because of its extravagant design, its high light intensity and the bar shaped lighting, the LED 4011 is perfect for presentation purposes.

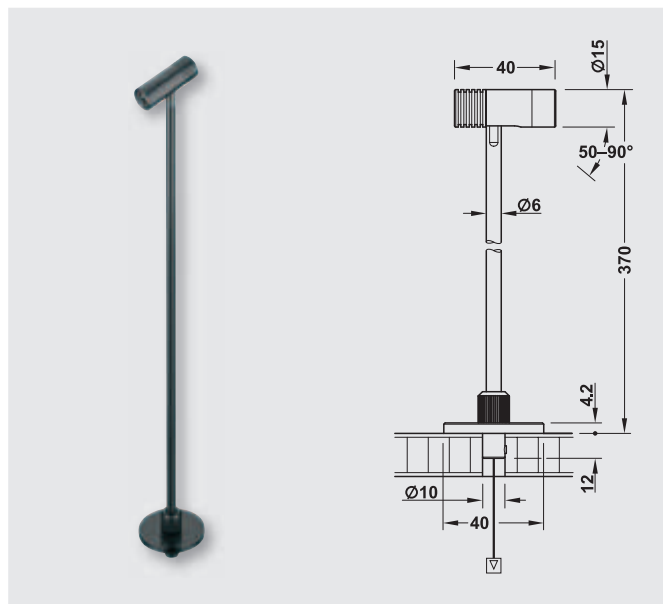


- > Dimmable
- > Swivelling light head
- > Drill hole Ø: 10 mm
- > Height adjustable (bar can be lowered into the cabinet)



> Driver see page 80

Cat. No.	833.80.000	833.80.001
Light colour (K)	4000 (cool white)	6000 (daylight white)
Diameter (mm)	6	6
Length (mm)	370	370
Wattage (W)	1	1
Number of LEDs	1	1
Light output (Lm)	70	75
Efficacy (Lm/W)	70	75
Colour rendering index (CRI)	90	85
Finish	Aluminium and steel, black	
Supplied with	1 light with 2 m lead and mounting accessories	



4000 K	6000 K	
12897 lx	15827 lx	250 mm
3224 lx	3957 lx	500 mm
1433 lx	1759 lx	750 mm
806 lx	990 lx	1000 mm

# LOOX LED 4012



RECESS MOUNTED SPOTLIGHT, SWIVEL FUNCTION



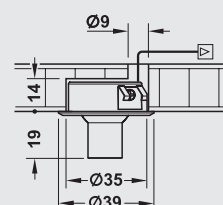
With the swivelling light head and high light intensity, presentation objects can be put in the spotlight.



- > Dimmable
- > Swivelling light head
- > Spotlight with good lumen values
- > Drill hole Ø: 35 mm
- > Metal housing



> Driver see page 80



Cat. No.	833.78.050	833.78.052	833.78.051	833.78.053
Light colour (K)	4000 (cool white)		6000 (daylight white)	
Diameter (mm)	39	39	39	39
Height (mm)	31	31	31	31
Wattage (W)	1	1	1	1
Number of LEDs	1	1	1	1
Light output (Lm)	72	72	82	82
Efficacy (Lm/W)	72	72	82	82
Colour rendering index (CRI)	92	92	80	80
Finish	Aluminium			
Colour	Silver col. anodized	Black	Silver col. anodized	Black
Supplied with	1 light with 2 m lead			

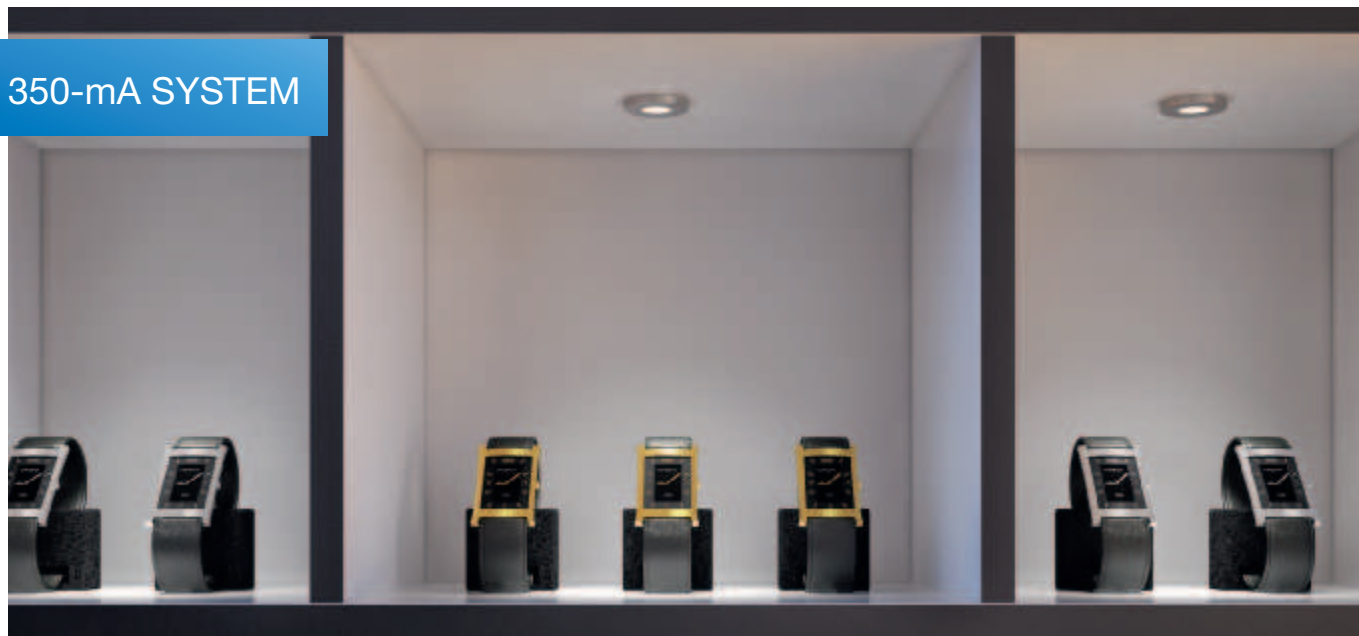
4000 K	6000 K	
4754 lx	5500 lx	250 mm
1420 lx	1516 lx	500 mm
856 lx	957 lx	750 mm
404 lx	435 lx	1000 mm

# LOOX LED 4014

## RECESS MOUNTED SPOTLIGHT



### 350-mA SYSTEM



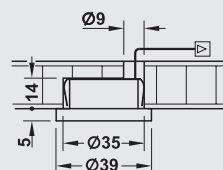
The LED 4014 is impressive because of its top quality design and compact dimensions. It is available in two light colours.



- > Dimmable
- > Small design
- > High luminosity
- > Drill hole Ø: 35 mm
- > Metal housing



> Driver see page 80



Cat. No.	833.78.060	833.78.061
Light colour (K)	4000 (cool white)	6000 (daylight white)
Diameter (mm)	39	39
Height (mm)	20	20
Wattage (W)	1	1
Number of LEDs	1	1
Light output (Lm)	89	91
Efficacy (Lm/W)	89	91
Colour rendering index (CRI)	85	83
Finish	Aluminium, silver coloured anodized, brushed	
Supplied with	1 light with 2 m lead and mounting accessories	

4000 K	6000 K	
4000 lx	4513 lx	250 mm
2300 lx	2432 lx	500 mm
800 lx	840 lx	750 mm
330 lx	339 lx	1000 mm

# LOOX LED 4016

RECESS MOUNTED DOWNLIGHT, MULTIFUNCTIONAL



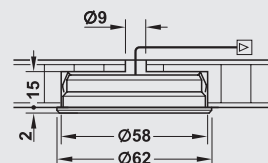
The multifunctional LED 4016 provides extremely even lighting in all areas.  
Its two different light colours also offer additional design options.



- > Dimmable
- > Surface-directed, even illumination
- > IP44 after installation
- > High-quality metal housing
- > Drill hole Ø: 58 mm



> Driver see page 80



Cat. No.	833.78.070	833.78.071
Light colour (K)	3000 (warm white)	4000 (cool white)
Diameter (mm)	62	62
Height (mm)	15	15
Wattage (W)	2	2
Number of LEDs	LED Surface light	LED Surface light
Light output (Lm)	160	190
Efficacy (Lm/W)	80	95
Colour rendering index (CRI)	80	82
Finish	Aluminium, nickel plated matt	
Supplied with	1 light with 2 m lead	

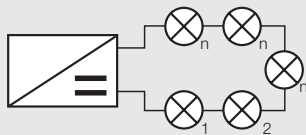
3000 K	4000 K	120°
970 lx	1200 lx	250 mm
266 lx	320 lx	500 mm
188 lx	143 lx	750 mm
72 lx	72 lx	1000 mm



# LOOX LED DRIVER

CONSTANT CURRENT 350 mA

## 350-mA SYSTEM



Series connection



- > Cat. No. 833.80.900  
 $\otimes_1 + \otimes_2 + \dots + \otimes_n$  1 W up to max. 4 W
- > Cat. No. 833.80.901  
 $\otimes_1 + \otimes_2 + \dots + \otimes_n$  5 W up to max. 10 W



- > Cable bridge (alternative)  
Cat. No. 833.80.720

The driver is the heart of the Loox system, and is suitable for connecting to all of the world's most frequently used power systems. It has an integrated switching function and connections for all of the most popular types of switch.



- > Lead length from driver to switch max. 6 m.  
All lights and switches must be connected to the driver first, before connecting the driver to the mains.  
Any unused slot must have a bridge. Bridge connectors are supplied.

Cat. No.	833.80.900	833.80.901
Wattage (W)	1 – 4	5 – 10
Input voltage	100 – 240 V; 50 – 60 Hz	100 – 240 V; 50 – 60 Hz
Constant current	350 mA	350 mA
Degree of protection	IP20	IP20
Number of slots	4 slots for 350 mA lights, 1 slot for switch, 1 slot for country-specific primary lead	10 slots for 350 mA lights, 1 slot for switch, 1 slot for country-specific primary lead
Colour	Black	Black
Length (mm)	140	195
Width (mm)	43	43
Height (mm)	20	28
Supplied with	1 driver with mounting accessories	

### Country-specific primary leads – lead length 2 m

Cat. No.	833.89.000	833.89.001	833.89.002	833.89.003	833.89.004	833.89.005	833.89.006	833.89.007	833.89.009	833.89.050
Plug design										
Designation	UK	AU	EU	US	JP	CN	KR	TW	EU	US
Supplied with	1 piece	1 piece	1 piece	1 piece	1 piece	1 piece	1 piece	1 piece	1 piece	1 piece

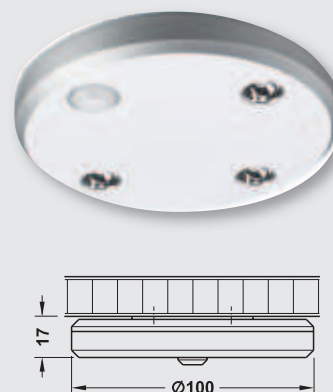
# LOOX LED 9003



SURFACE MOUNTED LIGHT, RECHARGEABLE, WITH MOTION DETECTOR



Niches can be brightly illuminated with the rechargeable LED 9003 battery-operated light with integrated motion detector.



Cat. No.	833.87.012
Light colour (K)	6500 (daylight white)
Diameter (mm)	100
Height (mm)	17
Wattage (W)	0,6
Number of LEDs	3
Light output (Lm)	30
Efficacy (Lm/W)	50
Colour rendering index (CRI)	80
Service life (h)	10
Charging time (h)	3 – 4
Finish	Plastic, silver coloured
Supplied with	1 light with magnetic mounting plate and 0.8 m mini-USB charging cable



- > The light can be recharged using the supplied mini-USB cable
- > With integrated motion detector (120° detection range up to 2 m and 30 seconds delay time)

# LOOX LED 9004

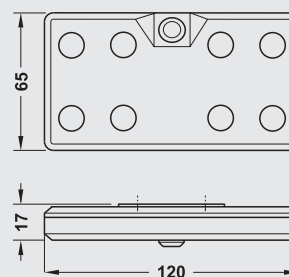
SURFACE MOUNTED LIGHT, RECHARGEABLE, WITH MOTION DETECTOR



## BATTERY-OPERATED LIGHT



Storage spaces and dark corners are ideally illuminated with the LED 9004 battery-operated light. The integrated motion detector makes it possible to activate the light in any application.



Cat. No.	833.87.013
Light colour (K)	6500 (daylight white)
Length (mm)	120
Width (mm)	65
Height (mm)	17
Wattage (W)	0,8
Number of LEDs	8
Light output (Lm)	55
Efficacy (Lm/W)	69
Colour rendering index (CRI)	80
Service life (h)	10
Charging time (h)	3 – 4
Finish	Plastic, silver coloured
Supplied with	1 light with mounting plate for screw fixing and 0.8 m min-USB charging cable



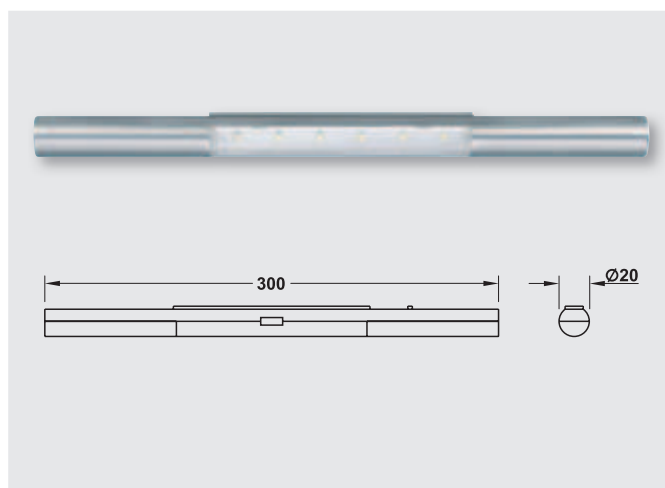
- > The light can be recharged using the supplied mini-USB cable
- > With integrated motion detector (120° detection range up to 2 m and 30 seconds delay time)

# LOOX LED 9005

SURFACE MOUNTED LIGHT, RECHARGEABLE, WITH AUTOMATIC SHUT-OFF



The LED 9005 battery-operated light is perfect for illuminating drawers, storage spaces and recesses.



Cat. No.	833.87.011
Light colour (K)	6500 (daylight white)
Diameter (mm)	20
Length (mm)	300
Wattage (W)	0,5
Number of LEDs	6
Light output (Lm)	31
Efficacy (Lm/W)	62
Colour rendering index (CRI)	80
Service life (h)	10
Charging time (h)	3 – 4
Finish	Plastic, silver coloured
Supplied with	1 light with mounting plate for screw fixing and 0.8 m mini-USB charging cable



- > The light can be recharged using the supplied mini-USB cable
- > The light is pushed onto the mounting plate
- > With automatic shut-off
- > Selectable switch function (factory setting):
  1. Door sensor switch:  
Door open, light on – door closed, light off.  
Energy-saving mode after 30 seconds:  
LED flashes 2 to 3 times and then turns off automatically.
  2. Sensor switch:  
Active on/off switching

# ALUMINIUM PROFILES

FOR LED 2013 / 2015 / 3013 / 3015 FLEXIBLE STRIP LIGHTS

## Profile cover finishes – different light effects



Milky



Frosted

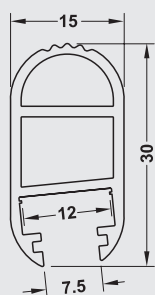
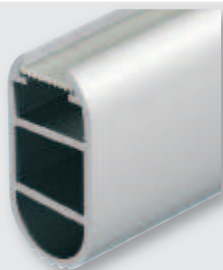
### Milky cover:

The material is dyed. Creates a homogenous surface-directed light with uniform intensity. The light appears “soft”.

### Frosted cover:

The surface is frosted. The light appears “velvet-white” and creates a sophisticated, high-quality impression.

## Wardrobe rail with frosted cover



Cat. No.	833.72.735
Finish	Aluminium, silver coloured anodized
Cover	Frosted
Length (mm)	2500
Width (mm)	15
Height (mm)	30
Application	For recess mounting
Supplied with	1 profile

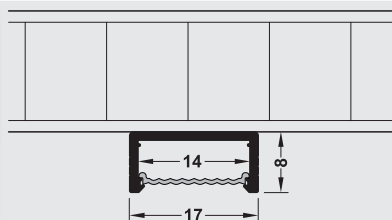
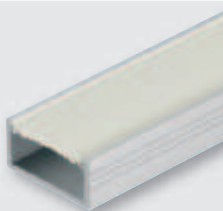


> Oval rail end support (for screw fixing), zinc alloy; 2 pieces  
Cat. No. 803.33.758



> Rail centre support (for screw fixing), zinc alloy, chrome plated; 1 piece  
Cat. No. 802.07.200

## Profile for surface mounting



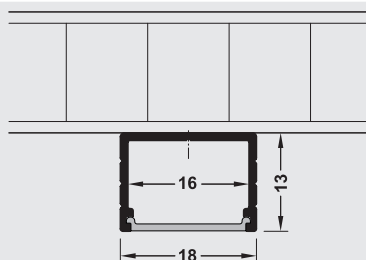
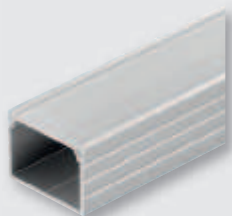
Cat. No.	833.74.729
Finish	Aluminium, silver coloured anodized
Cover	Frosted
Length (mm)	2500
Width (mm)	17
Height (mm)	8
Application	For surface mounting
Supplied with	1 profile



> End cap, plastic, silver coloured, 2 pieces  
Cat. No. 833.74.730



## Profiles for surface mounting

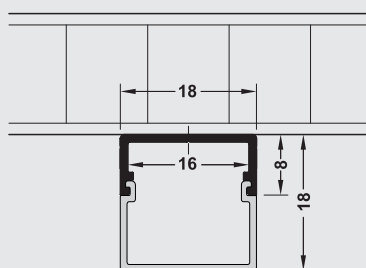
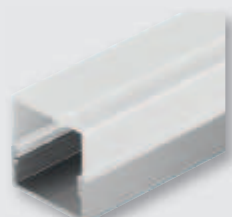


Cat. No.	833.74.810	833.74.811
Finish	Aluminium, silver coloured anodized	
Cover	Milky	Frosted
Length (mm)	2500	2500
Width (mm)	18	18
Height (mm)	13	13
Application	For surface mounting	
Supplied with	1 profile	1 profile

	Visible LED points			
Diffuser	LED 2013	LED 2015	LED 3013	LED 3015
Milky	✓	✓	✓	✗
Frosted	✓	✓	✓	✓



> End cap with cable outlet, plastic, silver coloured, 2 pieces  
Cat. No. 833.74.821



Cat. No.	833.74.813	833.74.814
Finish	Aluminium, silver coloured anodized	
Cover	Milky, rectangular	Milky, round
Length (mm)	2500	2500
Width (mm)	18	18
Height (mm)	18	17
Application	For surface mounting	
Supplied with	1 profile	1 profile

	Visible LED points			
Diffuser	LED 2013	LED 2015	LED 3013	LED 3015
Milky, rectangular	✓	✓	✓	✗
Milky, round	✓	✓	✓	✗



> End cap, rectangular, with cable outlet, plastic, silver coloured, 2 pieces  
Cat. No. 833.74.823

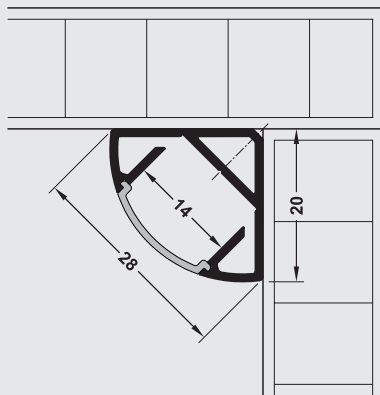


> End cap, rounded, with cable outlet, plastic, silver coloured, 2 pieces  
Cat. No. 833.74.824

# ALUMINIUM PROFILES

FOR LED 2013 / 2015 / 3013 / 3015 FLEXIBLE STRIP LIGHTS

## Profile for corner mounting



Cat. No.	833.74.812
Finish	Aluminium, silver coloured anodized
Cover	Frosted
Length (mm)	2500
Width (mm)	28
Height (mm)	20
Application	For corner mounting
Supplied with	1 profile

	Visible LED points			
Diffuser	LED 2013	LED 2015	LED 3013	LED 3015
Frosted	✓	✓	✓	✗



> End cap with cable outlet, plastic, silver coloured, 2 pieces  
Cat. No. 833.74.822

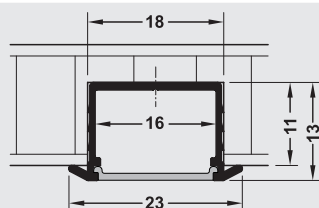
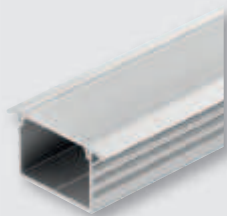


> Bracket, plastic, silver coloured, 2 pieces  
Cat. No. 833.74.825



> Mounting plate, stainless steel, silver coloured, 2 pieces  
Cat. No. 833.74.826

## Profiles for recess mounting



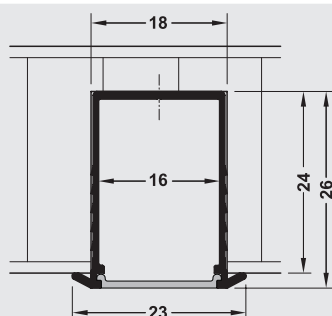
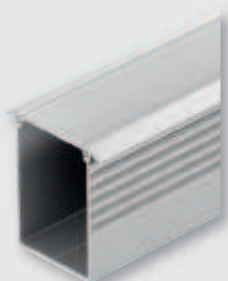
Cat. No.	833.74.815	833.74.816
Finish	Aluminium, silver coloured anodized	
Cover	Milky	Frosted
Length (mm)	2500	2500
Width (mm)	18	18
Height (mm)	13	13
Application	For recess mounting	
Supplied with	1 profile	1 profile

	Visible LED points			
Diffuser	LED 2013	LED 2015	LED 3013	LED 3015
Milky	✓	✓	✓	✗
Frosted	✓	✓	✓	✓



> End cap with cable outlet, plastic, silver coloured, 2 pieces  
Cat. No. 833.74.827

## Profiles for recess mounting

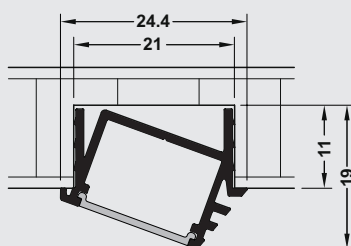
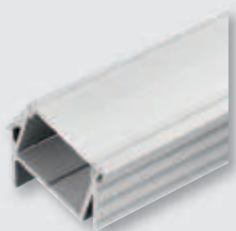


Cat. No.	833.74.819	833.74.820
Finish	Aluminium, silver coloured anodized	
Cover	Milky	Frosted
Length (mm)	2500	2500
Width (mm)	18	18
Height (mm)	26	26
Application	For recess mounting, 24 mm deep	
Supplied with	1 profile	1 profile

	Visibility of LED points			
Diffuser	LED 2013	LED 2015	LED 3013	LED 3015
Opaque	✗	✗	✗	✗
Frosted	✓	✓	✓	✓



> End cap with cable outlet, plastic, silver coloured, 2 pieces  
Cat. No. 833.74.828



Cat. No.	833.74.817	833.74.818
Finish	Aluminium, silver coloured anodized	
Cover	Milky	Frosted
Length (mm)	2500	2500
Width (mm)	21	21
Height (mm)	19	19
Application	For recess mounting	
Supplied with	1 profile	1 profile

	Visibility of LED points			
Diffuser	LED 2013	LED 2015	LED 3013	LED 3015
Opaque	✓	✓	✓	✗
Frosted	✓	✓	✓	✓



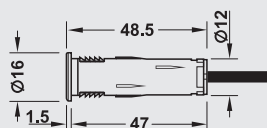
> End cap with cable outlet, plastic, silver coloured, 2 pieces  
Cat. No. 833.74.829

# LOOX ACCESSORIES

## SWITCHES

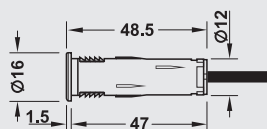
### Sensor switch – touch-free on/off switching

TOUCH-FREE



Cat. No.	833.89.070
Drill hole Ø (mm)	12
Length (mm)	48.5
Contact rating (W)	0 – 75
Sensor range (mm)	0 – 80
Finish	Plastic, silver coloured
Supplied with	1 switch with 2 m lead

### Door sensor switch

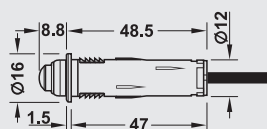


Cat. No.	833.89.071
Drill hole Ø (mm)	12
Length (mm)	48.5
Contact rating (W)	0 – 75
Sensor range (mm)	0 – 80
Finish	Plastic, silver coloured
Supplied with	1 switch with 2 m lead



&gt; Use motion detector with sliding doors

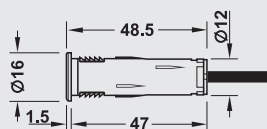
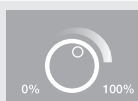
### Motion detector – automatic on/off switching



Cat. No.	833.89.072
Drill hole Ø (mm)	12
Length (mm)	49.7
Contact rating (W)	0 – 75
Sensor range (mm)	0 – 3000
Delay time (seconds)	approx. 30
Finish	Plastic, silver coloured
Supplied with	1 motion detector with 2 m lead

### Dimmer

TOUCH-FREE

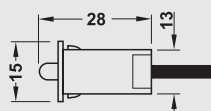
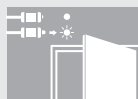


Cat. No.	833.89.073
Drill hole Ø (mm)	12
Length (mm)	48.5
Contact rating (W)	0,3 – 75
Sensor range (mm)	0 – 80
Finish	Plastic, silver coloured
Supplied with	1 dimmer with 2 m lead



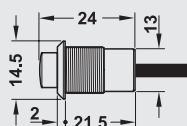
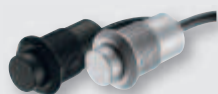
&gt; Cannot be used in combination with multi switch box

## Door contact switch



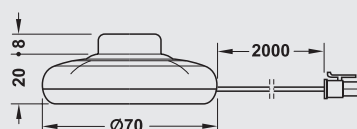
Cat. No.	833.89.045
Drill hole Ø (mm)	13
Length (mm)	28
Contact rating (W)	0 – 75
Finish	Plastic, black
Supplied with	1 switch with 2 m lead

## Push switch



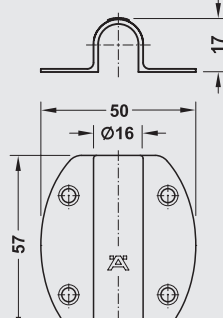
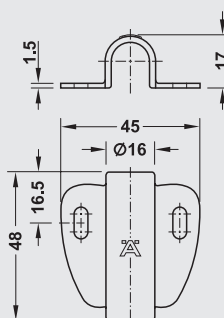
Cat. No.	833.89.044	833.89.074
Drill hole Ø (mm)	13	13
Length (mm)	24	24
Contact rating (W)	0 – 75	0 – 75
Finish	Plastic, black	Plastic, silver coloured
Supplied with	1 switch with 2 m lead	

## Foot switch



Cat. No.	833.89.046
Diameter (mm)	70
Height (mm)	28
Wattage (W)	0 – 75
Finish	Plastic, black
Supplied with	1 switch with 2 m lead

## Housing for switch, for surface mounting



Cat. No.	833.89.090	833.89.048	833.89.049
Diameter (mm)	16	16	16
Length (mm)	48	57	57
Width (mm)	45	50	50
Height (mm)	17	20	20
Finish	Plastic, silver coloured	Plastic, black	Plastic, silver coloured
Supplied with	1 housing	1 housing	1 housing
Application	For switch with Ø 12 mm	For switch with Ø 13 mm	For switch with Ø 13 mm



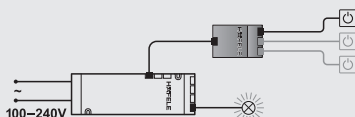
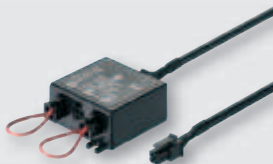
> Suitable for 32 mm series drilled holes



# LOOX ACCESSORIES

## SWITCH ACCESSORIES

### Multi switch box



Cat. No.	833.89.060
Length (mm)	50
Width (mm)	40
Height (mm)	19
Finish	Plastic, black
Supplied with	1 multi switch box with 1 m lead

1 LED driver operated by up to 3 switches.  
Allows the LED driver to be switched on and off from different points.



- > A dimmer cannot be used in combination with multi switch box.
- > Max. 75 W per multi switch box.

### Lead for multi switch box



Cat. No.	833.89.068	833.89.069
Length (mm)	500	2000
Supplied with	1 lead	1 lead



- > Alternative item to the supplied 1 m lead for multi switch box.

### Extension lead for switches



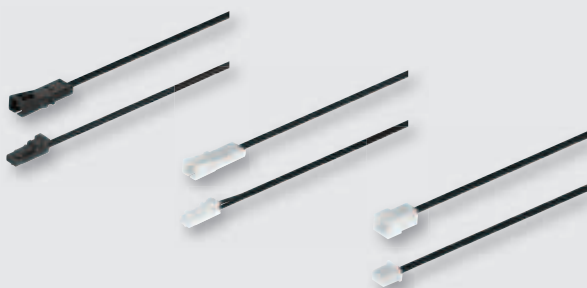
Cat. No.	833.89.067
Length (mm)	2000
Supplied with	1 lead



- > Lead length from driver to switch max. 6 m.
- > The drill hole Ø for the male plug and female socket of the switch leads is 12 mm.

## LEADS AND DISTRIBUTORS

### Extension leads, 12 V / 24 V / 350 mA

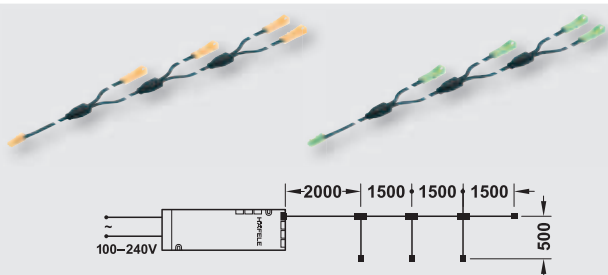


Length (mm)	500	1000	2000
12 V system	833.74.724	833.74.725	833.74.726
24 V system	833.77.706	833.77.707	833.77.708
350 mA system	833.80.704	833.80.705	833.80.706
Supplied with	1 lead		

For extending the connection leads of the LED lights.

**!** > Lead length from driver to light max. 6 m.

### 4-way extension lead – convenient extension for additional lights

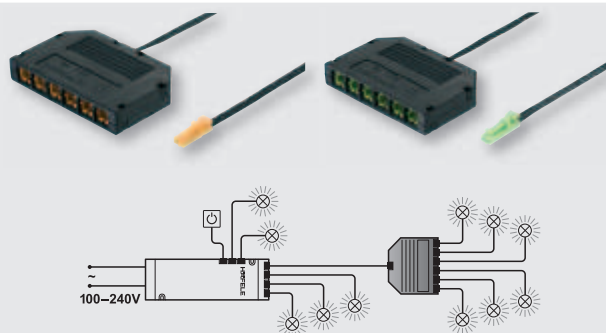


Cat. No.	833.74.765	833.77.800
Length (mm)	6500	6500
Application	12 V system	24 V system
Finish	Plastic, black	
Supplied with	1 lead	

Makes the power supply for multiple lights easier.

**!** > Max. 4 lights per extension can be connected, max. 2 extensions can be coupled.

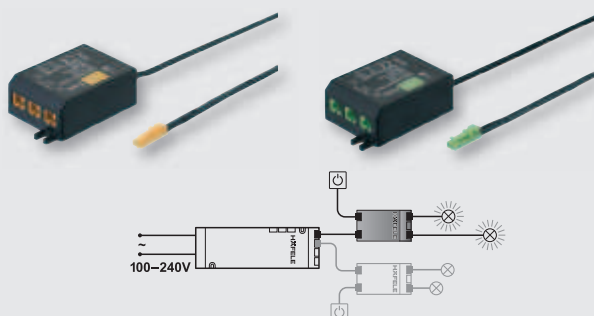
### 6-way distributor – for connecting additional lights to one driver



Cat. No.	833.74.743	833.77.722
Application	12 V system	24 V system
Finish	Plastic, black	
Dim. (L x W x H)	58.5 x 38.2 x 10.2 mm	58.5 x 38.2 x 10.2 mm
Supplied with	1 distributor with 2 m lead	

With the 6-way distributor, up to 6 additional lights can be operated from one driver slot.

### 3-way distributor with switching function 12 V / 24 V



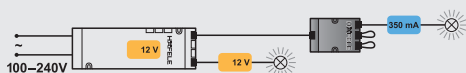
Cat. No.	833.74.742	833.77.720
Application	12 V system	24 V system
Dim. (L x W x H)	57 x 34 x 18 mm	57 x 34 x 18 mm
Supplied with	1 distributor with 2 m lead	

Up to 3 lights can be operated separately and individually using the 3-way distributor with switching function connected to the output of the light.

# LOOX ACCESSORIES

## CONVERTER AND MULTI DRIVER BOX

### Converter 350 mA to 12 V – for connecting 350 mA lights to the 12 V system



Cat. No.	833.80.912
Application	Connecting 350 mA lights to the 12 V system
Primary side	DC 12 V
Secondary side	DC 350 mA (min. 1 W, max. 9 W)
No. of output ports	3 connections for 350 mA lights
Dim. (L x W x H)	61 x 34 x 15 mm
Supplied with	1 converter with 1 m lead

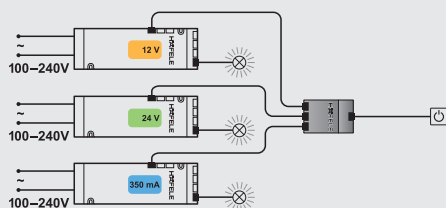
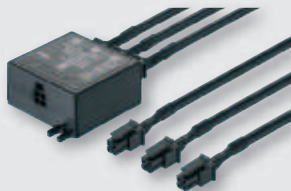


> Cable bridge (alternative); 1 piece  
Cat. No. 833.80.720



> Combine 350 mA lights with 12 V lights and operate them using a single 12 V driver.  
Max. 9 W per converter.

### Multi driver box



Cat. No.	833.89.061
Length (mm)	50
Width (mm)	40
Height (mm)	19
Finish	Plastic, black
Supplied with	1 multi driver box with 3 x 1 m lead



> Up to 3 LED drivers can be controlled with one switch.  
Several drivers and therefore several lights in the room can be switched on and off with one switch. These can be 3 of the same driver if additional power is required in a 12 V system, for example.  
> Max. 3 x 30 W per multi driver box.

### Lead for multi driver box



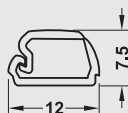
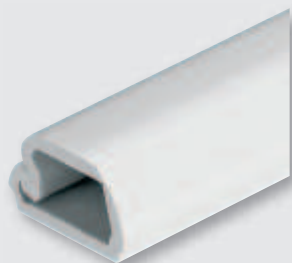
Cat. No.	833.89.068	833.89.069
Length (mm)	500	2000
Supplied with	1 lead	1 lead



> Alternative item to the supplied three 1 m leads for multi driver box

## CABLE CHANNEL AND PRIMARY LEADS

### Cable channel



Cat. No.	833.89.013	833.89.023	833.89.033
Finish	White, RAL 9010	Brown, RAL 8007	Black, RAL 9005
Length (mm)	2500	2500	2500
Width (mm)	12	12	12
Height (mm)	7.5	7.5	7.5
Application	Concealing visible cables in furniture and cabinets		
Supplied with	1 cable channel with adhesive tape		

### Country-specific primary leads



833.89.000 UK

833.89.001 AU

833.89.002 EU

833.89.003 US

833.89.004 JP



833.89.005 CN

833.89.006 KR

833.89.007 TW

833.89.009 EU

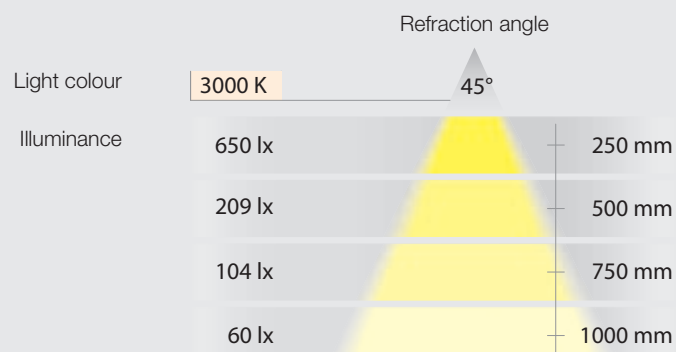
833.89.050 US

Cat. No.	833.89.000	833.89.001	833.89.002	833.89.003	833.89.004	833.89.005	833.89.006	833.89.007	833.89.009	833.89.050
Plug design										
Designation	UK	AU	EU	US	JP	CN	KR	TW	EU	US
Voltage (V)	250	250	250	120	100	250	250	110	250	120
Length (mm)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Finish	Plastic, black									
Supplied with	1 piece	1 piece	1 piece	1 piece	1 piece	1 piece	1 piece	1 piece	1 piece	1 piece

# INFORMATION

## LIGHTING EFFECTS AND LIGHTING TECHNOLOGY














### Cone of light



### Light source comparison

			
	<b>LED</b>	<b>Halogen</b>	<b>Fluorescent lights</b>
<b>Colour temperature</b>	2700–6500 K	3000 K	2700–6500 K
<b>Power consumption</b>	0.5–6 Watt	5–50 Watt	7–58 Watt
<b>Efficacy</b>	30–100 Lm/W	14–18 Lm/W	65–100 Lm/W
<b>Service life</b>	up to 50,000 h	approx. 2,000 h	approx. 20,000 h
<b>Heat generation</b>	approx. 50 °C	approx. 90 °C	approx. 70 °C
<b>Colour rendering index (CRI)</b>	70–95	60–95	50–90




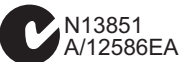

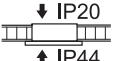


















### Light output comparison

	Light quantity						
	200 lm	400 lm	600 lm	800 lm	1000 lm	1200 lm	1400 lm
<b>LED</b>	2 Watt 	5 Watt 	10 Watt 	15 Watt 			
<b>Fluorescent light</b>		8 Watt 		14 Watt 	16 Watt 		
<b>Halogen</b>	10 Watt 	20 Watt 	35 Watt 	50 Watt 			
<b>Incandescent bulb</b>	25 Watt 	40 Watt 	60 Watt 	75 Watt 			100 Watt 



# SYMBOLS AND TERMS

## TEST SYMBOLS AND DEFINITION OF TECHNICAL TERMS

	Technical Control Board		European Safety Standard
	Underwriters Laboratories (CAN/USA)	IP20	Only for use in dry locations
	Australian Communications Authority	IP44	Protected against solid foreign objects Ø 1 mm and larger and splash water
	Product Safety Electrical Appliance and Material Safety Law (for Japan)		IP44 after installation
	China Quality Certification		Lights to be used indoors only. Not to be used outdoors!
	Electrical Testing Labs (CAN/USA)		Do not use components that impede thermal radiation
	TISI – Thai Industrial Standards Institute		Kelvin
	BSMI (for Taiwan)		Watt
	Korea Certification Mark		Switch
SELV	Protective extra-low voltage		Multi-white
	Furniture installation symbol		Dimmable
	Suitable for directly fixing to standard inflammable surfaces		Motion detector
	Protection class II		RGB light
	Protection class III		

### Technical terms

<b>Light colour/ colour temperature</b>	The light colour is a specification of the colour appearance of a light source and is measured in Kelvin (K). The lower the Kelvin value, the warmer the light; the higher the value, the cooler the light. Light sources of 3400 K and above are considered “warm”, while light sources between 3400 and 5700 K are considered “cold”. Light sources above 5700 K are referred to as “daylight white” sources.
<b>Luminous efficacy</b>	The luminous efficacy is the indication of the illuminance in relation to a surface and its distance. It is indicated in Lux (lx).
<b>Luminous intensity/light output</b>	The luminous intensity indicates the light output, i.e. the quantity of light a lamp emits. It is indicated in Lumen (Lm).
<b>Colour rendering index</b>	The colour rendering index is a parameter that can be used to compare the colour rendering quality of light sources at the same colour temperature.
<b>Binning</b>	LEDs are sorted according to colour temperature. LED colour deviations are dependent on the grade of binning. Loox LED lights have a deviation of ±200 Kelvin.

# LED LIGHTING TECHNOLOGY

LEDs (Light Emitting Diodes) can vary the properties of the light that is generated, and generate almost the entire colour spectrum. Unlike normal light bulbs and halogen lamps, LEDs generate little heat. They use less energy and have a long service life.

## ADVANTAGES:

- > **Long lasting**  
LED lights have an extremely long service life of up to 25 years or more than 40,000 to 50,000 hours.
- > **Insensitive**  
LEDs have an extremely small and robust design. This makes handling easier during furniture construction and transport.
- > **Low heat generation**  
Because of their extremely low power consumption, LED lights generate hardly any heat. This means that LED lighting systems are particularly suitable for displays.
- > **Energy-saving**  
LED lights use an impressive 90 percent less power than conventional light bulbs! This means that they can be used to implement modern lighting scenarios in furniture, and still be in line with the energy saving trend.
- > **Powerful**  
Modern LED lights are bright and have a saturated light colour. They achieve full brightness as soon as they are switched on. LED furniture lighting therefore has a lasting effect at the push of a button.
- > **Rich in variants**  
LED lights are available in different colours, and can also be designed as colour changing lights. This allows the light colour to be coordinated with furniture contents, such as exhibits, in the best possible way.

## THE LOOX LIGHTING TECHNOLOGY:

The Loox LED technology incorporates different power systems. A system is decided on by choosing the driver or by choosing a particular light. The choice of system is an important decision, because the driver that is selected can only be combined with lights from the same system.



### Spoiled for choice in the 12 V system

The LED lights are voltage-controlled and connected in parallel in the 12 V system.

The slots on the driver can be freely allocated. 12 V lights are the most widespread at present.



### Powerful 24 V system

Technically speaking, the 24 V system is identical to the 12 V system, but has a considerably higher power level. 24 V lights can therefore be used when extremely bright lights are required.

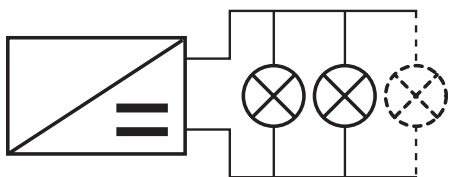


### Spotlights in the 350 mA system

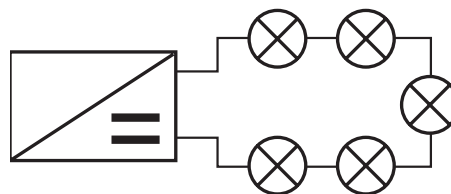
The LED lights in the 350 mA system are current-controlled and connected in series.

This means that each slot has to be either occupied or must have a bridge. 350 mA lights provide extremely great light output and are particularly suitable for spotlighting.

## SWITCHING



Parallel connection for 12 V and 24 V systems

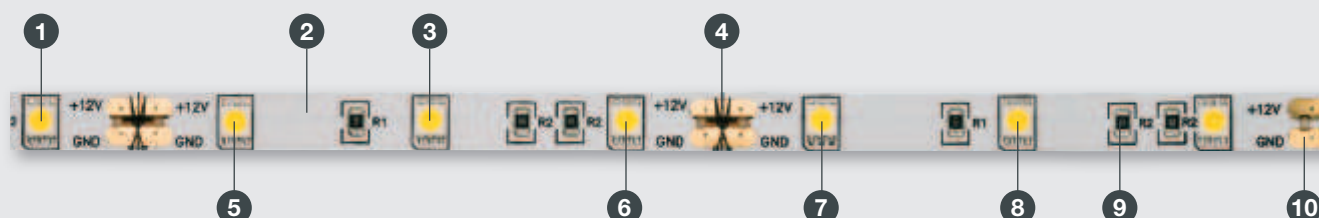


Series connection for 350 mA system

# LED FLEXIBLE STRIP LIGHT

QUALITY FEATURES

What does the design of Loox LED flexible strip lights look like?



- 1 Very bright, high quality LED for the best light quality
- 2 Highly flexible LED strip light with rear 3M® adhesive tape for providing secure adhesion to practically any surface
- 3 Wide refraction angle
- 4 Can be individually shortened and extended via the clip connector
- 5 No UV radiation
- 6 Service life of up to 50,000 hours – tested according to LM-80
- 7 Fine brightness and colour temperature binning
- 8 The multilayer circuit board guarantees minimal loss of performance and minimal heat generation due to its high quality material components.
- 9 Using the maximum quality for the electronic components and the drivers provide consistently high light quality.
- 10 The gold-plated contacts provide a secure connection to the driver using the clip connector.

**Can be individually combined with:**

Profiles (see page 84)  
Switches (see page 88)  
Distributors (see page 91)

TEST THE  
LOOX PLANNING SERVICE  
[www.hafele.com](http://www.hafele.com)



# FAQ

## QUESTIONS AND ANSWERS

### Glossary

#### LED

A light-emitting diode (LED) is a semi-conductor element that emits light when electricity passes through it. This semi-conductor element consists of a crystal that is attached to a metal holder, and are both encapsulated in protective plastic. LEDs are mostly based on inorganic, i.e. non-carbonic materials.

#### OLED

Organic light-emitting diodes (OLEDs) are based upon organic (carbonic) materials. OLEDs are manufactured in thin layers and therefore provide a diffuse light source. The OLED technology is becoming more frequently used in display applications (e.g. mobile phones and PDA screens).

#### Service life of an LED

Up to 50,000 hours.

#### Infrared radiation from LEDs

LEDs do not emit infrared radiation like incandescent bulbs do.

#### Heat generation of LEDs

All light sources produce heat, even LEDs. However, they do not become very hot, especially if the LEDs and lights are fitted with "heat sinks", they help to lead away heat.

#### Test of service life in accordance with the LM-80 standard?

Häfele tests Loox LED flexible strip lights in accordance with the LM-80 standard. LM-80 is a standardised testing method, which allows products to bear the EPA's (Environmental Protection Agency) Energy Star. The test is a manufacturer-independent comparison of LEDs. During the test the luminous flux (Lumen maintenance) and the service life of an LED are tested at three different temperatures (55, 85, and 105 °C) for 6,000 hours.

#### LEDs and foodstuffs

As LEDs do not emit UV radiation, they are the better option for supermarkets, restaurants and kitchen lighting. UV radiation reduces the nutrient content in foodstuffs, and all other light sources – including natural and artificial – emit UV radiation. It must also be taken into consideration that LEDs do not emit heat and keep foodstuffs fresher for longer.

#### Lead in Loox products

Loox Products by Häfele are lead-free and adhere to the RoHS guidelines.

## Technical questions about Loox

### Can the 12 V/24 V lights be dimmed at the primary side? (Phase section - phase dimmer)

No, this is not possible. With LEDs, dimming takes place at the secondary side.

### What has a major effect on the service life of drivers and LEDs?

An ambient temperature and/or voltage that is too high.

### How long should the lead of an LED light / LED flexible strip light be?

6 metres, as with a longer lead the resistance drops and the specified light intensity can no longer be guaranteed.

### What is the service life of the drivers?

approx. 30,000 hours at an ambient temperature of 45 °C.

### Can an LED flexible strip light be used behind acrylic glass?

Yes, however the acrylic glass increases the light colour variations (binning) up to four times and minimal colour deviations are therefore more visible.

### Can the multi switch box, the multi driver box and the 3-way distributor with switching function be connected in series multiple times?

No, because the signals can no longer be transmitted properly.

### With what output tolerance should drivers and LED lights be calculated?

±10 percent

### What binning (colour deviation) do Loox LED lights have?

±200 Kelvin

### Can 12 V and 350 mA lights be used together?

Yes, please use our respective converter. (For converter refer to page 92)

### Which ambient variables can lead to problems when using the door sensor switch?

High-gloss front panels and sliding doors. Solution: Please use motion detector.

### Is it possible to control multiple colour mixers with a single remote control?

Yes, different colour mixers can be taught in on a single remote control.

### Is the dimmer setting saved if the power fails?

The dimmer setting is saved for RGB/multi-white mixers.  
No, this is not saved for the Loox dimmer.



# FAQ

## QUESTIONS AND ANSWERS

### Technical questions about Loox

#### For how many Amperes are the normal commercial LED plug systems and AWG-22 leads suitable?

2.5 Amperes

#### What is the maximum Wattage that I can connect to an AWG-22 lead and plug?

With 12 V systems this is  $12\text{ V} \times 2.5\text{ A} = 30\text{ W}$ .

With 24 V systems this is  $24\text{ V} \times 2.5\text{ A} = 60\text{ W}$ .

#### What is AWG 22?

AWG stands for American Wire Gauge.

It is the coding for wire diameters in electrical leads that are mainly used in North America. This identifies the cross-section of wires in electrical leads that consist of strands and wire.

#### Can your lights be operated using multiple switches?

Yes, please use the multi switch box to do this. Up to three switches can be connected to the multi switch box. The dimmer does not work with the multi switch box (for multi switch box see page 90).

#### What is the difference between the different LED flexible strip lights?

LED 3011, 3017 flexible strip lights are sheathed in silicone, which means that no profiles are required for installation. These LED flexible strip lights can be directly installed in a groove or attached to a surface.

LED 2013, 2015, 3013, 3015 flexible strip lights do not have silicone and it is advisable to use aluminium profiles for installation and heat management.

#### What influence does the type of glass edge have on the lighting effect that is generated?

The lighting effect varies depending on the type of glass shelf.

- > Glass edge with satin finish = even light line
- > Clear glass edge = point light

#### Can I simply cut LED flexible strip lights to length?

Yes, LED flexible strip lights can be shortened at the mark with the scissor symbol.

Please note the following differences when doing this:

- > LED 3011, 3017 flexible strip lights can be shortened but not re-attached.
- > LED 2013, 2015, 3013, 3015 flexible strip lights can be shortened or extended as much as required, since the connection between the strips and the connection to the driver is made using clip connectors.

Example of LED 2013, 2015, 3013, 3015 flexible strip lights: Cut off, fit clip connector and press on – finished.



Can be shortened



Installation: Self-adhesive



Lead with clip connector

### Why do the lights have to be plugged in first before connecting the main plug?

If the driver is connected to the power first, electrical power is output at the secondary side, which leads to overvoltage and therefore damage to the lights if they are connected.

### Can Loox lights be used in vehicles, for example?

Yes, but an upstream voltage stabiliser must always be installed, since voltage fluctuations occur in on-board power supplies and voltage peaks (even slight overvoltage) can reduce the service life of the lights considerably or cause damage.

### How can I compare the output of an LED light with a halogen light?

Use the cone of light and compare the values at 500 mm. A 20 W halogen light features approx. 600 lx at 500 mm.

## Troubleshooting

### Why does the light flash at regular intervals when it is switched off?

This is caused by leakage current in the electrical installation which is charging the capacitor in the driver until it briefly gives off the power at regular intervals to discharge itself and the light therefore briefly flashes.

**Solution:** Check the entire installation.

### Why does my LED light flash?

Flashing is a sign of (under or) overloading.

Use a driver with higher power or reduce the number of consumers.

### What may be the cause if an RGB LED flexible strip light is only displaying individual colours?

The clip connector has been connected the wrong way round or the strip has been connected to the wrong end or to the driver.

### Why is the door sensor switch not operating correctly?

When sliding doors are being used, the door sensor switch cannot record the rapid movement and the movement of the door properly.

Dark surfaces (e.g. jet black) have poor reflection. The optical sensor may therefore fail to detect the door panel.

**Solution:** Use motion detectors



### What are the differences between the output of the different Loox LED flexible strip lights?

	LED 2011	LED 2013	LED 2015	LED 3011	LED 3013	LED 3015
<b>Wattage W/m</b>	2.5	4.8	7.1	2.8	16	15
<b>Number of LED/m</b>	36	60	30	36	30	120
<b>Lumen per Watt*</b>	47	60	67	50	94	80
<b>Lux 500 mm*</b>	30	70	140	136	545	523
<b>max. length [m] per lead</b>	6	6	4.25	6	3.75	4

\* Comparison with warm white light colour 3000–3200 K

# INSTALLATION INSTRUCTIONS

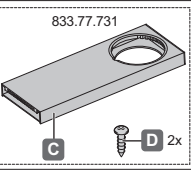
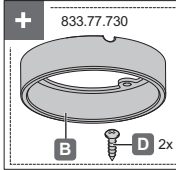
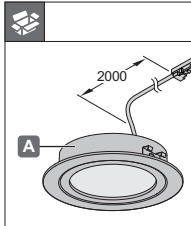
LANGUAGE NEUTRAL FOR ALL MARKETS.



**LED 3010**


**HÄFELE**


833.75.040  
833.75.041  
833.75.042


24 V System	K	W	T <sub>A</sub>	mm	mm	
833.75.040	3000 K	3.25 W	-20 °C – +35 °C -4 °F – +95 °F	Ø 65 x 12	≥ Ø 75 x 22	833.77.900
833.75.041	4000 K					833.77.901
833.75.042	6000 K					833.77.912 833.77.913 833.77.914 833.77.915















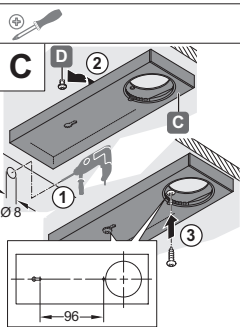
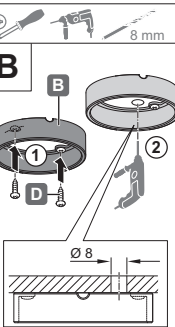
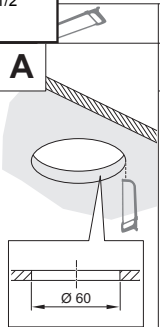


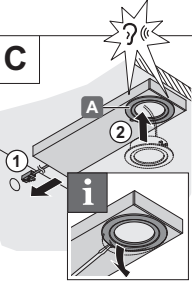
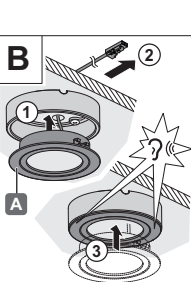
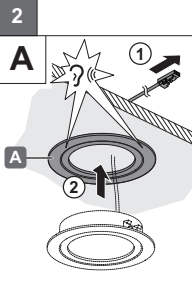


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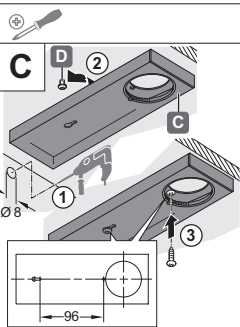
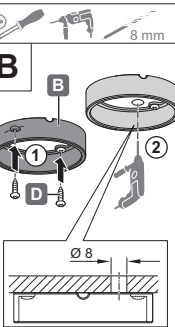
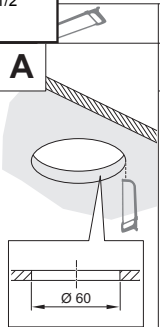
Language neutral installation instructions are provided for all Häfele Loox lighting systems.

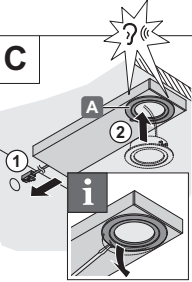
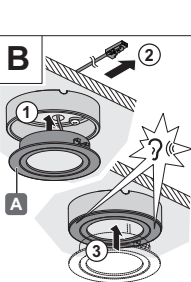
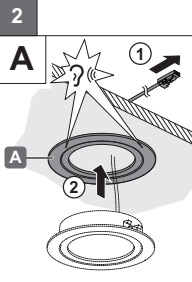
**HÄFELE**



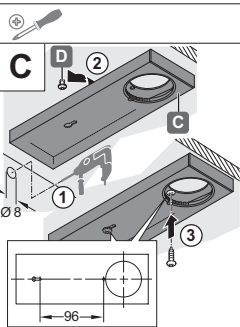
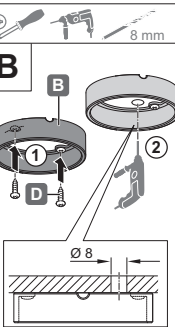
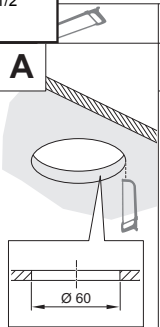


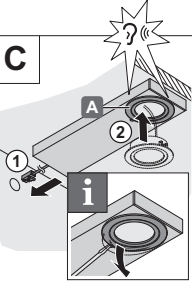
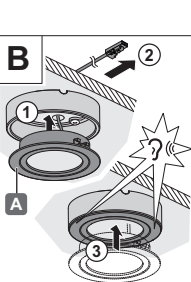
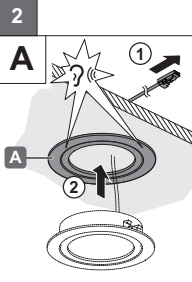
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