# Schlüter®-LIPROTEC





## SIMPLY INDIVIDUAL - Schlüter®-LIPROTEC

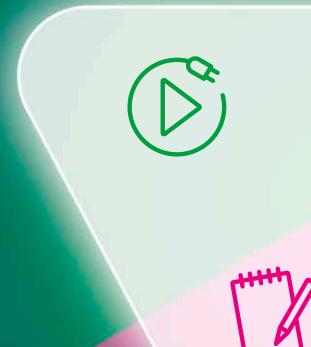
LED light and ceramics – a combination that keeps gaining fans. Schlüter-LIPROTEC makes it easier than ever to create individual light concepts with ceramic or natural stone surfaces. With the Schlüter-LIPROTEC-EASY and Schlüter-LIPROTEC-PRO series, we offer systems that are tailored to the skills of the installers.

Whilst the EASY series is a plug-and-play system that only requires limited expertise in light installation, the PRO series is designed for professional installers who have experience with light installation and wiring. In the CONTROL section you will find the control technology for the two series LIPROTEC-EASY and LIPROTEC-PRO. And finally, Schlüter-LIPROTEC-PLAN provides all the information that professional (light) designers need to create and implement accent lighting with LIPROTEC.

## EASY

Individual light installation made easy – due to convenient plug systems and easy mounting, the plug-and-play series provides solutions for every situation, even for installers who are not experts.

- Convenient plug systems
- Easy installation
- · Ready for immediate use
- Large selection
- Power supply units up to 100 W



# FOR YOUR LIGHT PLANNING

Light data for LIPROTEC-EASY now available on luminaires.dialux.com – Keyword: "Fliese".



Luminaire Finder

## PLAN

In the PLAN section, planners, architects, lighting professionals and installers find all technical information at a glance. With this expertise, there are no limits to what light installations can be created with Schlüter-LIPROTEC products.

Lighting for professional installers - with the PRO series of Schlüter-LIPROTEC, turn any room into an oasis of light.

- Individual light installations
- Products with a multitude of combination options
- Limitless possibilities
- The series for professional installers





Simply control light - Schlüter-LIPROTEC Bluetooth controls offer a wide range of options for conveniently operating individual light sources.

- Available in EASY and PRO version
- For white and coloured LED lighting solutions
- With proven Bluetooth® technology
- Via remote control, mobile device or wireless rotary control

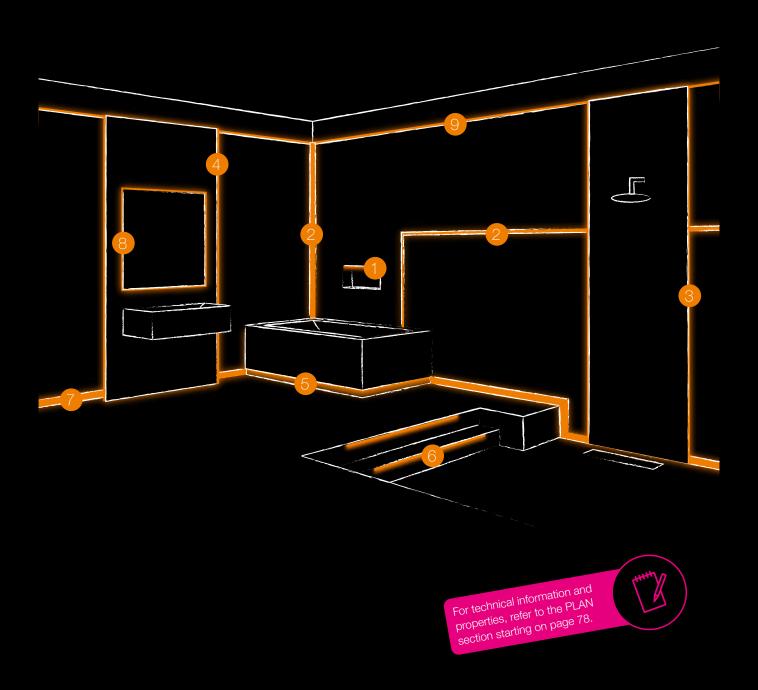


- Compact product overview
- Materials and surfaces
- Planning aids



## AS VERSATILE AS THE LIGHT

Fascinate customers, turn visions of living spaces into reality, immersed in colour and the versatility of light. On the following page you will find the solutions for the various applications, either as EASY (plug-and-play sets) or PRO (individually configurable).



VB – Cove lighting, white

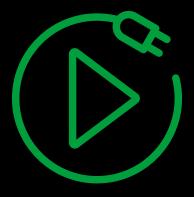


# EASY

Schlüter-LIPROTEC-LLP/-LLPM/-LLPE are LED modules consisting of a fully encased LED strip with homogenous light dispersion and a carrier profile made of aluminium or brushed stainless steel V4A. The LED modules are available either with a fixed white-light colour temperature of 3000 K or 4900 K, or with a RGB+W colour range. The latter makes it possible to choose from more than 16 million hues and colour temperatures from 2500 K – 6500 K.

The robust carrier profile enables applications in areas with exposure to water and vapour, from an installation height of 11 mm. It can be used on walls and ceilings as well as in shower areas. In light traffic indoor areas, the LED modules can even be installed in the floor area. For use in protected outdoor areas and pool landscapes, we recommend using our Schlüter-LIPROTEC-LLPM LED modules with brushed V4A stainless steel profiles.

The LED modules are available as plug-and-play variants in different lengths. Our LED strip can simply be shortened at the marked cutting points and sealed with the supplied end caps to maintain its IP degree of protection. The LED modules can be integrated into a system using cable connections and Y-switches, depending on the light characteristics. Power supply units and LED control components are also designed as plug-and-play variants to facilitate installation. You can find additional accessories such as cable connections, distributors and wall boxes with sealing function in the accessories section.





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For technical information and properties, refer to the PLAN section starting on page 78.





FIND OUT MORE AT:



## Schlüter®-KERDI-BOARD-NLT





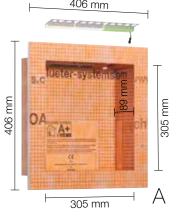


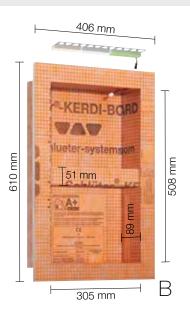


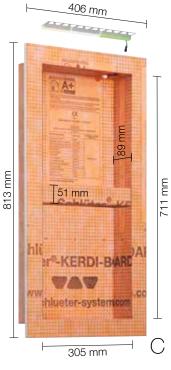
Schlüter-KERDI-BOARD-NLT are prefabricated niche sets made of KERDI-BOARD with plug-and-play LIPROTEC-LED technology. They are used to create illuminated niches and storage surfaces for all kinds of wall areas. These niches can be integrated into the Schlüter-KERDI waterproofing system as a bonded waterproofing assembly. The niches are available in different dimensions and lighting options. The rectangular niches are available with illumination either on the long or the narrow side. The LED module can either be positioned at the front edge, in the centre or at the rear of the wall that is to be tiled. The scope of supply includes all components required for the installation, as well as the cable connection, power supply and sealing collar.

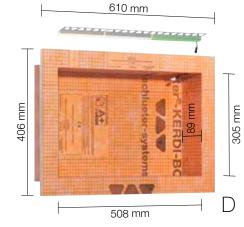
The Bluetooth controls to be ordered separately can be found in the CONTROL section from page 68. (*Product data sheet 12.2*)

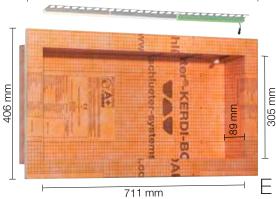
# Dimensions of niches 406 mm











813 mm

Note: The intermediate shelf of niches B and C can be positioned freely.

## Set includes:











For explanations of the symbols, refer to page 107.

## Niche set with LED lighting

## Schlüter®-KERDI-BOARD-NLT

niche set with LED lighting

	B x H x T (mm)	Type of light	Art. No.	€ / Set	PL (Set)
		warm white	KB 12 NL TP1 AE 1	300.46	20
Α	305 x 305 x 89	neutral white	KB 12 NL TP1 AE 2	300.46	20
		RGB + white	KB 12 NL TP1 AE 9	338.01	20
_		warm white	KB 12 NL TP2 AE 1	338.01	20
В	305 x 508 x 89	neutral white	KB 12 NL TP2 AE 2	338.01	20
		RGB + white	KB 12 NL TP2 AE 9	375.57	20
_		warm white	KB 12 NL TP3 AE 1	388.10	20
С	305 x 711 x 89	neutral white	KB 12 NL TP3 AE 2	388.10	20
		RGB + white	KB 12 NL TP3 AE 9	425.65	20
		warm white	KB 12 NL TP4 AE 1	369.32	20
D	508 x 305 x 89	neutral white	KB 12 NL TP4 AE 2	369.32	20
		RGB + white	KB 12 NL TP4 AE 9	388.10	20
		warm white	KB 12 NL TP5 AE 1	450.68	20
Е	711 x 305 x 89	neutral white	KB 12 NL TP5 AE 2	450.68	20
_		RGB + white	KB 12 NL TP5 AE 9	469.47	20

**Note:** The dimensions represent interior clearance dimensions. The first length specification is the illuminated length.

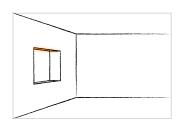
## Technical data of the included LED modules

NLT 9 (RGB+W)			
Dimensions of LED (B x H)	17 x 14.5 mm		
Rated output (W/Unit)	See table on page 80		
Number of LED (u./m)	112		
Colour temperature (Kelvin)	RGB+W (2700 K)		
CRI	90		
Included power supply	230 V, 15 W		
Included cable	3 m		

NLT 1 (warm white)				
Dimensions of LED (B x H)	12 x 10.5 mm			
Rated output (W/Unit)	See table on page 80			
Number of LED (u./m)	280			
Colour temperature (Kelvin)	3000 K			
CRI	92			
Included power supply	230 V, 15 W			
Included cable	3 m			

NLT 2 (neutral white)				
Dimensions of LED (B x H)	12 x 10.5 mm			
Rated output (W/Unit)	See table on page 80			
Number of LED (u./m)	280			
Colour temperature (Kelvin)	4900 K			
CRI	92			
Included power supply	230 V, 15 W			
Included cable	3 m			

## Application areas







#### Note:

In the CONTROL section, you can find the right control system for perfectly completing your Schlüter-LIPROTEC lighting and power supply units and installation material under "Accessories".



## Schlüter®-KERDI-BOARD-NLT-BR











Schlüter-KERDI-BOARD-NLT-BR are prefabricated niche sets made of KERDI-BOARD with plug-and-play LIPROTEC-LED RGB+W technology and with Bluetooth/wireless receivers. The various light colours can be selected either via the supplied remote control or via suitable Bluetooth-compatible smartphones or tablets. They are used to create illuminated niches and storage surfaces for all kinds of wall areas. These niches can be integrated into the Schlüter-KERDI waterproofing system as a bonded waterproofing assembly.

The niches are available in different dimensions. The rectangular niches are available with illumination either on the long or the narrow side. The RGB+W LED module can either be positioned at the front edge, centre or at the rear wall that is to be tiled. The scope of supply includes all components required for the installation, as well as the cable connection, power supply, LIPROTEC-PEBR 4 Bluetooth control and sealing collar. We recommend using a standard light switch for convenience. (Product data sheet 12.2)









## Niche set with LED lighting and controller

## Schlüter®-KERDI-BOARD-NLT-BR

niche set with LED lighting and controller

	B x H x T (mm)	Type of light	Art. No.	€ / Set	PL (Set)
Α	305 x 305 x 89	RGB + white	KB 12 NL TP1 AE 9 BR	557.11	20
В	305 x 508 x 89	RGB + white	KB 12 NL TP2 AE 9 BR	594.66	20
С	305 x 711 x 89	RGB + white	KB 12 NL TP3 AE 9 BR	644.74	20
D	508 x 305 x 89	RGB + white	KB 12 NL TP4 AE 9 BR	607.18	20
E	711 x 305 x 89	RGB + white	KB 12 NL TP5 AE 9 BR	688.54	20

Note: The dimensions represent interior clearance dimensions. The first length specification is the illuminated length.

## Technical data of supplied LED module

NLT 9 BR (RGB+W)				
Dimensions of LED (B x H)	17 x 14.5 mm			
Rated output (W/Unit)	See table on page 80			
Number of LED (u./m)	112			
Colour temperature (Kelvin)	RGB+W (2700 K)			
CRI	90			
Included power supply	230 V, 15 W			
Included cable	3 m			



## Technical data of the included Bluetooth control







#### Note:

Our Schlüter-LIPROTEC-ERP radio rotary control is available as an optional accessory in the CONTROL section on page 73.





## Schlüter®-LIPROTEC-LLPM



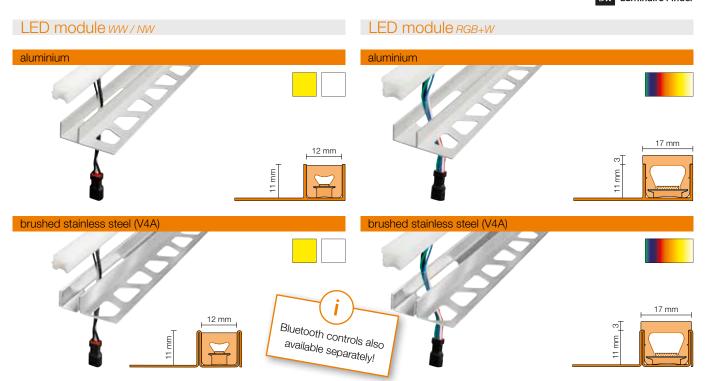






Schlüter-LIPROTEC-LLPM are plug-and-play LED modules consisting of a fully encased LED strip with homogenous light dispersion and a carrier profile made of aluminium or brushed stainless steel V4A with trapezoid perforated anchoring leg. The LED modules are available either with a fixed white-light colour temperature of 3000 K or 4900 K, or with a RGB+W colour range. The latter makes it possible to choose from more than 16 million hues and colour temperatures from 2500 K – 6500 K. The white LED module is available with an installation height of 11 mm, which means it can be installed flush with the tile. (*Product data sheet 15.8*)

Dx Luminaire Finder



**Note:** End caps incl. sealing compound for shortening the LED strip are included in the set. On the RGB+W version, the LED strip protrudes approx. 3 mm from the profile. Only the LED module with white light is suitable for use on the floor in domestic applications.

### Technical data of the included LED modules

LLPM 9 (RGB+W)		LLPM 1 (warm white)		LLPM 2 (neutral white)	
Dimensions of LED (B x H)	17 x 14.5 mm	Dimensions of LED (B x H)	12 x 10.5 mm	Dimensions of LED (B x H)	12 x 10.5 mm
Rated output (W/m)	15	Rated output (W/m)	5	Rated output (W/m)	5
Number of LED (u./m)	112	Number of LED (u./m)	280	Number of LED (u./m)	280
Colour temperature (Kelvin)	RGB+W (2700 K)	Colour temperature (Kelvin)	3000 K	Colour temperature (Kelvin)	4900 K
CRI	90	CRI	92	CRI	92
Can be shortened every 62.5 mm		Can be shortened every 25 r	mm	Can be shortened every 25 m	m

Max. length of aligned LED modules in the LIPROTEC-EASY System: RGB+W = 6 m, white = 18 m

## End cap

Schlüter-LIPROTEC-LLPM/EK are end caps for proper termination of the LED plug-and-play sets. They can be used as left or right end. The holding bar is embedded into the tile adhesive.



## Schlüter®-LIPROTEC-LLPM/EK

end cap, anodised aluminium

B (mm)	Art. No.	€/U.	P (Unit)
12	EK/LLP 110 AE 12	5.51	50
15	EK/LLP 110 AE 15	5.51	50



### Schlüter®-LIPROTEC-LLPM/EK

end cap, brushed stainless steel (V4A)

B (mm)	Art. No.	€/U.	P (Unit)
12	EK/LLP 110 V4A 12	5.51	50
15	EK/LLP 110 V4A 15	5.51	50

Note: B = 12 mm (LED module, white) / B = 15 mm (LED module, RGB+W)









## LED module | Linear light with anchoring leg aluminium

## Schlüter®-LIPROTEC-LLPM

LED module aluminium

Material	L (cm)	Type of light	Art. No.	€/m	P (Unit)
		warm white	LLP 110 AE 1/50	200.31	10
	50	neutral white	LLP 110 AE 2/50	200.31	10
		RGB + white	LLP 110 AE 9/50	225.35	10
		warm white	LLP 110 AE 1/100	175.26	10
	100	neutral white	LLP 110 AE 2/100	175.26	10
aluminium		RGB + white	LLP 110 AE 9/100	200.31	10
aiuiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	200	warm white	LLP 110 AE 1/200	143.97	10
		neutral white	LLP 110 AE 2/200	143.97	10
		RGB + white	LLP 110 AE 9/200	169.01	10
		warm white	LLP 110 AE 1	131.46	10
	250	neutral white	LLP 110 AE 2	131.46	10
		RGB + white	LLP 110 AE 9	156.50	10

**Exact lengths:** 50.5 cm, 100.2 cm, 200 cm and 250 cm













## LED module | Linear light with anchoring leg brushed stainless steel (V4A)

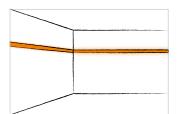
## Schlüter®-LIPROTEC-LLPM

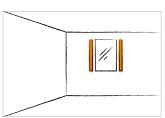
LED module brushed stainless steel (V4A)

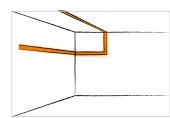
Material	L (cm)	Type of light	Art. No.	€/m	P (Unit)
		warm white	LLP 110 V4A 1/50	225.17	10
	50	neutral white	LLP 110 V4A 2/50	225.17	10
		RGB + white	LLP 110 V4A 9/50	250.90	10 10 10 10 10 10 10 10
		warm white	LLP 110 V4A 1/100	199.43	10
	100	neutral white	LLP 110 V4A 2/100	199.43	10
stainless steel (V4A)		RGB + white	LLP 110 V4A 9/100	225.17	10
Stalliess Steel (V4A)		warm white	LLP 110 V4A 1/200	167.27	10
	200	neutral white	LLP 110 V4A 2/200	167.27	10
		RGB + white	LLP 110 V4A 9/200	193.01	10
		warm white	LLP 110 V4A 1	154.41	10
	250	neutral white	LLP 110 V4A 2	154.41	10
		RGB + white	LLP 110 V4A 9	180.14	10

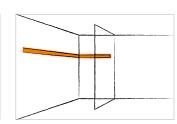
**Exact lengths:** 50.5 cm, 100.2 cm, 200 cm and 250 cm

## Application areas











## Schlüter®-LIPROTEC-LLP







Schlüter-LIPROTEC-LLP are LED modules consisting of a fully encased LED strip with homogenous light dispersion and a U-shaped carrier profile made of aluminium. With the LED modules, coloured RGB+W light strips with more than 16 million different hues and colour temperatures of 2500 K – 6500 K can be created. The carrier profile with an installation height of 17 mm makes flush installation possible. (*Product data sheet 15.8*)

LED module ReB+W

aluminium

Bluetouth controls also available separately!

Note: End caps incl. sealing compound for shortening the LED strip are included in the set.

## Technical data of the included LED modules

LLP 9 (RGB+W)				
Dimensions of LED (B x H)	17 x 14.5 mm			
Rated output (W/m)	15			
Number of LED (u./m)	112			
Colour temperature (Kelvin)	RGB+W (2700 K)			
CRI	90			

Can be shortened every  $62.5\ mm$ 

Max. length of aligned LED modules in the LIPROTEC-EASY System:  $6\ m$ 

### End cap



Schlüter®-LIPROTEC-WS/EK					
end cap, anodised aluminium, indirect illumination					
H (mm) Art. No. € / U. P (Unit)					
17	EK / LT WS I AE 20	16.21	50		







## LED module | Linear light aluminium

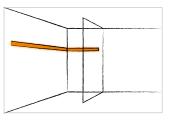
## Schlüter®-LIPROTEC-LLP

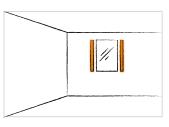
### LED module aluminium

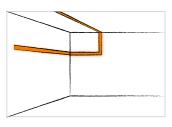
Material	L (cm)	Type of light	Art. No.	€/m	P (Unit)
	50	RGB + white	LLP 2017 AE 9/50	262.90	10
aluminium	100	RGB + white	LLP 2017 AE 9/100	225.35	10
	200	RGB + white	LLP 2017 AE 9/200	187.79	10
	250	RGB + white	LLP 2017 AE 9	175.26	10

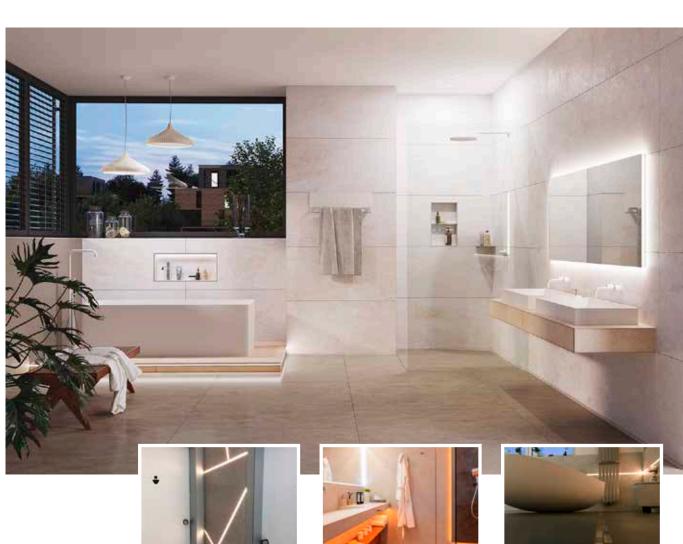
**Exact lengths:** 50.5 cm, 100.2 cm, 200 cm and 250 cm

## Application areas











## Schlüter®-LIPROTEC-LLPE







Schlüter-LIPROTEC-LLPE are LED modules consisting of a fully encased LED strip with homogenous light dispersion and a carrier profile made of anodised aluminium. The LED module with RGB+W coloured light range makes it possible to choose from more than 16 million different hues and colour temperatures from 2500 K – 6500 K. With the LED module, accent lighting can be created at wall corners. It is suitable for use in internal and external corners in the shower, preferably positioned vertically. (Product data sheet 15.8)

Dx Luminaire Finder



Note: End caps incl. sealing compound for shortening the LED strip are included in the set.

### Technical data of the included LED modules

LLPE 9 (RGB+W)				
Dimensions of LED (B x H)	17 x 14.5 mm			
Rated output (W/m)	15			
Number of LED (u./m)	112			
Colour temperature (Kelvin)	RGB+W (2700 K)			
CRI	90			

Can be shortened every  $62.5\ mm$ 

Max. length of aligned LED modules in the LIPROTEC-EASY System:  $6\ m$ 

### End cap



Schlüter®-LIPROTEC-LLE/EK				
end cap, anodised aluminium				
Art. No. € / U. P (Unit)				
EK / LT LLE / AE	14.57	50		







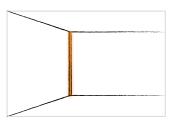
## LED module | Linear light | Wall corner aluminium

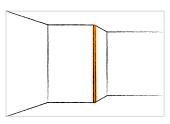
## Schlüter®-LIPROTEC-LLPE

## LED module aluminium

Material	L (cm)	Type of light	Art. No.	€ / m	P (Unit)
aluminium	250	RGB + white	LL EP 4016 AE 9	181.53	10

## Application areas











## **Accessories**

The plug-and-play design of the EASY series accessories makes it much easier to combine the components. You can see how to connect the individual elements and which system limitations exist in the PLAN section from page 98.

### End cap LED strip

#### Schlüter®-LIPROTEC-PES

The scope of delivery of the LIPROTEC-EASY LED modules already includes end caps, which enable a watertight seal when the LED module is shortened. The end cap set, which is available separately, offers an additional option for closing off open LED ends of the LIPROTEC-EASY LED modules.



#### Schlüter®-LIPROTEC-PES

replacement end caps for LT-EASY LED strips

H (mm)	Art. No.	€ / Set	P (Set)
12	EK / LT PES 1	5.26	10
15	EK / LT PES 9	5.88	10

The set contains two end caps, incl. sealing adhesive.

### Power supply

## Schlüter®-LIPROTEC-PEKE

Power supply units convert the mains voltage to the 24 V required by the LED strips. They are easy to install and available in different wattages from 30 to 100 W. They are equipped with a connection cable with Euro plug, as well as plug-and-play connectors for the Schlüter-LIPROTEC-EASY system.



#### Schlüter®-LIPROTEC-PEKE

power supply, 24 V, DC, with Euro plug and connector

Watt	Max. Watt*	Art. No.		€/U.	P (Unit)
30	27	LT PEKE 24V	30W	85.14	10
50	45	LT PEKE 24V	50W	105.15	10
75	67.5	LT PEKE 24V	75W	137.71	10
100	90	LT PEKE 24V 1	00W	192.79	10

\* A safety reserve has to be taken into account when selecting the power supply unit (see maximum load of the corresponding power supply unit).

#### Note:

The dimensions of the power supplies can be found on page 64.

## Low-voltage cable

### Schlüter®-LIPROTEC-PZK

Schlüter-LIPROTEC-PZK is a plug-and-play cable, available in varying lengths, for connecting the power supply unit or Bluetooth receiver and the plug-and-play LED module.



## Schlüter®-LIPROTEC-PZK

low-voltage cable

L (cm)	Art. No.	€/U.	P (Unit)
80	LT PZK / 80	20.66	10
150	LT PZK / 150	22.36	10
300	LT PZK 3M	26.29	10
500	LT PZK 5M	31.30	10

#### Note:

The max. combined cable lengths should not exceed 10 m.

## Low-voltage distributor

#### Schlüter®-LIPROTEC-PZV

Schlüter-LIPROTEC-PZV is a plug-and-play distributor for connecting 2 or 4 additional plug-and-play LED modules to an installation.



### Schlüter®-LIPROTEC-PZV

#### low-voltage distributor

Closing	Art. No.	€/U.	P (Unit)
2	LT PZV 2	25.67	10
4	LT PZV 4	38.81	10

## Low-voltage adapter

## Schlüter®-LIPROTEC-PZA

Schlüter-LIPROTEC-PZA is an adapter cable for connecting the individual components of Schlüter-LIPROTEC-EASY (plug-and-play) and Schlüter-LIPROTEC-PRO. The adapter can also be used to integrate LED modules into a standard electrical installation. This connection must only be carried out by a qualified electrician. The clamping options illustrated schematically on page 99 must be observed.



#### Schlüter®-LIPROTEC-PZA

#### low-voltage adapter cable

L (cm)	Art. No.	€/U.	P (Unit)
100	LT PZA / 100	20.78	10

## Low-voltage hollow-wall box

### Schlüter®-LIPROTEC-PZH

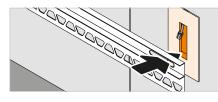
Schlüter-LIPROTEC-PZH is a hollow wall junction box with pre-adhered Schlüter-KERDI sealing collar for use in waterproofing assemblies with tile coverings (e.g. in shower areas). It creates a hollow space for plug connections to reversibly install the plug-and-play LED modules, and is attached with suitable adhesive or with Schlüter-KERDI-COLL.



### Schlüter®-LIPROTEC-PZH

#### low-voltage hollow-wall box

B x H x T (mm)	Art. No.	€ / Set	P (Set)
235 x 140 x 19	LT PZ HD 25	27.54	10



#### Note:

Strain relief is included in scope of supply.

#### Tool

### Schlüter®-PROCUT-PSF

Schlüter-PROCUT-PSF is a special cutting tool for precisely cutting LED strips to size. To ensure that the LED strip retains IP-compliant tightness when it is shortened, it has to be cut at a 45° angle and sealed with the end caps and sealing adhesive included in the set.



### Schlüter®-PROCUT-PSF

profile cutter, joint spacer

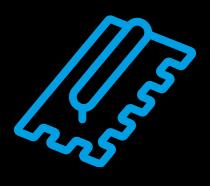
Art. No.	€/U.	P (Unit)
PSF	75.11	10



# PRO

With the plug-and-play sets from the EASY section, you can create a variety of individual light installations with ceramics and natural stone. But Schlüter-LIPROTEC offers a lot more. On the following pages, in the PRO section, you can combine profiles, LED strips, diffuser lenses, control equipment and accessories for individual projects.

On page 4 and 5, you can find an orientation aid for identifying which profile is suitable for which application.





PROFILES		Page
LL - Linear light, coloured + white		22
LLE - Linear light, coloured + white   Corner		26
WS - Wall panel lighting, coloured + white		30
WSK - Wall panel lighting with cable duct, coloured + white	SET	34/58
WSQ - Wall panel lighting with QUADEC finishing profile, coloured + white		38
PB – Stair edge lighting, white	SET	42/60
DESIGNBASE-QD - Landing/border profile, white		46
VB – Cove lighting, white		50
D - Carrier profile for mirror, white	SET	54/62

## **ACCESSORIES**

Power supply units	64
Installation material	64–66
Tool	66

## KEY

Explanations of properties / Areas of application

107



For technical information and properties, refer to the PLAN section starting on page 78.







FIND OUT MORE AT:

LIPROTEC.CO.UK



# Schlüter®-LIPROTEC-LL

You can create a wide variety of individual, linear accent lighting with Schlüter-LIPROTEC-LL. With its discreet, U-formed section, LIPROTEC-LL is suitable for many different installation situations in new buildings and with renovations.











For explanations of the symbols, refer to page 107.

## A real multi-talent!

Schlüter-LIPROTEC-LL is a high quality, anodised aluminium carrier profile for creating accent lighting in wall coverings and ceilings. The illumination is provided by Schlüter-LIPROTEC-ES LED strips laid into the U-shaped profile, in combination with the corresponding diffuser lens. Various direct or indirect light effects are created according to the positioning of the profile.

(Product data sheet 15.5)

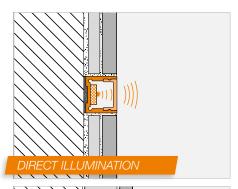


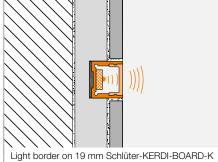


## Application areas:

- ✓ Linear light borders
- ✓ Illuminated borders in wall coverings
- ✓ Illuminated niche constructions

- 1 Schlüter-LIPROTEC-LL profile
- 2 LED strip
- 3 Diffuser lens (direct illumination)





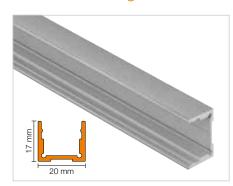
**Note:** Only suitable for vertical installation in the shower.

For horizontal installation, we recommend our LED module LIPROTEC-LLPM on page 12.



## Schlüter®-LIPROTEC-LL

## Profile | Linear light

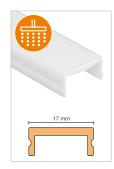


Schlüter®-LIPROTEC-LL			
anodised a	luminium		
L (m)	Art. No.	€/m	KV (Unit)
2.5	LT LL 2017 AE	24.79	60



For simplified installation, we recommend our Schlüter-KERDI-BOARD-K installation modules on page 66.

## Diffuser lens



Schlüter®-LIPROTEC-WSI			
diffuser ler	ns, indirect illumination		
L (m)	Art. No.	€/m	KV (Unit)
2.5	LT WS I 20	20.68	60

## End cap



Schlüte	Schlüter®-LIPROTEC-WS/EK			
end cap, anodised aluminium, indirect illumination				
H (mm)	Art. No.	€/U.	P (Unit)	
17	EK / IT WS I AE 20	16 21	50	

## Control | Accessories



In the CONTROL section, you can find the right control system for perfectly completing your Schlüter-LIPROTEC lighting and power supply units and installation material under "Accessories".

## RGB+W CONTROLLABLE

## WARM WHITE

## NEUTRAL WHITE

## LED strip

















#### Schlüter®-LIPROTEC-ES

LED strips, RGB+W controllable, 24 V, DC

L (cm)	Art. No.	€/m	P (Unit)
50	LT ES 9/50	121.28	10
100	LT ES 9/100	112.05	10
150	LT ES 9/150	112.05	10
200	LT ES 9/200	105.45	10
250	LT ES 9	105.45	10
400	LT ES 9/400	102.65	10

Max. length in the LIPROTEC system: 12 m, connection length: 3 m  $\,$ 

## Schlüter®-LIPROTEC-ES

LED strips, warm white, 24 V, DC

L (cm)	Art. No.	€/m	P (Unit)
50	LT ES 11/50	86.39	10
100	LT ES 11/100	76.36	10
150	LT ES 11/150	71.99	10
200	LT ES 11/200	65.72	10
250	LT ES 11	62.60	10
400	LT ES 11/400	58.85	10

Max. length in the LIPROTEC system: 24 m, connection length: 3 m  $\,$ 

#### Schlüter®-LIPROTEC-ES

LED strips, neutral white, 24 V, DC

L (cm)	Art. No.	€/m	P (Unit)
50	LT ES 21/50	86.39	10
100	LT ES 21/100	76.36	10
150	LT ES 21/150	71.99	10
200	LT ES 21/200	65.72	10
250	LT ES 21	62.60	10
400	LT ES 21/400	58.85	10

Max. length in the LIPROTEC system: 24 m, connection length: 3 m  $\,$ 

## Technical specifications for LED strips

LT ES 9		
Dimensions (B x H)	15 x 5 mm	
Rated output (W/m)	15	
Number of LED (u./m)	192 (96 RGB + 96 W)	
Colour temperature (Kelvin)	RGB+W (2700 K)	
CRI	85	

Can be shortened every 62.5 mm

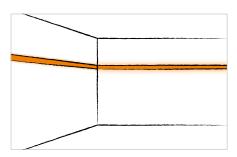
LT ES 1 1		
Dimensions (B x H)	12 x 5 mm	
Rated output (W/m)	7.5	
Number of LED (u./m)	140	
Colour temperature (Kelvin)	3400 K	
CRI	92	

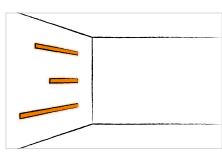
Can be shortened every 50 mm

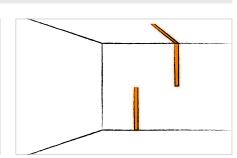
LT ES 2 1		
Dimensions (B x H)	12 x 5 mm	
Rated output (W/m)	7.5	
Number of LED (u./m)	140	
Colour temperature (Kelvin)	4900 K	
CRI	92	

Can be shortened every 50 mm

## Application areas









# Schlüter®-LIPROTEC-LLE

Accent lighting for tile surfaces and much more: Schlüter-LIPROTEC-LLE is our first light profile that can not only be embedded in tiling, but also be used on any other suitable substrate, thanks to an intelligent clip system. LIPROTEC-LLE can be used both for internal and external corners details, as well as in shower areas (if mounted vertically) – a true multi-talent.









For explanations of the symbols, refer to page 107.

## Re-imagine rooms

Schlüter-LIPROTEC-LLE is a high quality carrier profile made of anodised or white coated aluminium for mounting the Schlüter-LIPROTEC-ES LED strips. The profile is designed to create accent lighting in wall corners. It is suitable for use in internal and external corners in horizontal or vertical alignment. With the use of the respective pre-fabricated parts, it can also be installed continuously around corners. The profile can either be simply attached to any suitable substrate with a clip system or is embedded in the tile adhesive. For lighting, the selected LIPROTEC-ES LED strip is adhered within the profile and covered with the corresponding diffuser lens.

(Product data sheet 15.7)

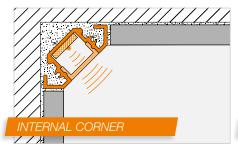


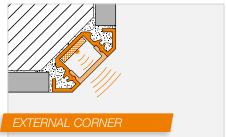
- ✓ Linear light, vertical in the shower
- ✓ Linear light along the ceiling
- ✓ Accent lighting on the corner

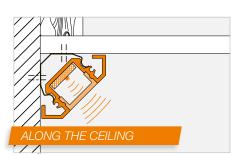




- 1 Schlüter-LIPROTEC-LLE profile
- 2 LED strip
- 3 Diffuser lens (direct illumination)







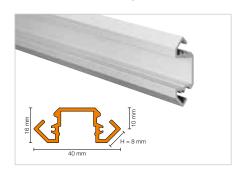
**Note:** Only suitable for vertical installation in the shower.

For horizontal installation, we recommend our LED module LIPROTEC-LLPM on page 12.



## Schlüter®-LIPROTEC-LLE

## Profile | Linear light | Corner



### Schlüter®-LIPROTEC-LLE

#### anodised aluminium

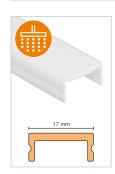
H (mm)	L = 2.50 m Art. No.	€/m	KV (Unit)
8	LT LLE 4016 AE	29.79	60

## Schlüter®-LIPROTEC-LLE-AC

colour coated aluminium, matte brilliant white

H (mm)	L = 2.50 m Art. No.	€/m	KV (Unit)
8	LT LLE 4016 MBW	31.68	60

## Diffuser lens | Mounting aid



## Schlüter®-LIPROTEC-WSI

diffuser lens, indirect illumination

L (m)	Art. No.	€/m	KV (Unit)
2.5	LT WS I 20	20.68	60



#### Schlüter®-LIPROTEC-LLE/MK

installation clip

Art. No.	€ / Set	P (Set)
LT LLE MK	5.00	50

#### Note:

Installation clip incl. attachment material; recommended installation clip spacing: every 50 cm.

#### Corner | End cap



#### Schlüter®-LIPROTEC-LLE/E

90° external corner, ABS appearance

Art. No.	€/U.	P (Unit)
E / LT LLE / AE	6.52	50



#### Schlüter®-LIPROTEC-LLE/I

90° internal corner, ABS appearance

Art. No.	€/U.	P (Unit)
I / LT LLE / AE	6.52	50

#### Note:

The external and internal corners are designed for horizontal installation along the wall only. The profile may not be embedded in the tile covering.

#### Schlüter®-LIPROTEC-LLE-AC/E

90° external corner, ABS

Art. No.	€/U.	P (Unit)
E / LT LLE / MBW	6.52	50

## Schlüter®-LIPROTEC-LLE-AC/I

90° internal corner, ABS

Art. No.	€/U.	P (Unit)
I / LT LLE / MBW	6.52	50



### Schlüter®-LIPROTEC-LLE/EK

end cap, anodised aluminium

Art. No.	€/U.	P (Unit)
EK / LT LLE / AE	14.57	50



## Schlüter®-LIPROTEC-LLE-AC/EK

end cap, colour coated aluminium

Art. No.	€/U.	P (Unit)
EK / LT LLE / MBW	16.16	50

### Control | Accessories



In the CONTROL section, you can find the right control system for perfectly completing your Schlüter-LIPROTEC lighting and power supply units and installation material under "Accessories".

## RGB+W CONTROLLABLE

## WARM WHITE

## NEUTRAL WHITE

## LED strip



















LED strips, RGB+W controllable, 24 V, DC

L (cm)	Art. No.	€/m	P (Unit)
50	LT ES 9/50	121.28	10
100	LT ES 9/100	112.05	10
150	LT ES 9/150	112.05	10
200	LT ES 9/200	105.45	10
250	LT ES 9	105.45	10
400	LT ES 9/400	102.65	10

Max. length in the LIPROTEC system: 12 m, connection length: 3 m

## Schlüter®-LIPROTEC-ES

LED strips, warm white, 24 V, DC

L (cm)	Art. No.	€/m	P (Unit)
50	LT ES 11/50	86.39	10
100	LT ES 11/100	76.36	10
150	LT ES 11/150	71.99	10
200	LT ES 11/200	65.72	10
250	LT ES 11	62.60	10
400	LT ES 11/400	58.85	10

Max. length in the LIPROTEC system: 24 m, connection length: 3 m

LED strips, neutral white, 24 V, DC

L (cm)	Art. No.	€/m	P (Unit)
50	LT ES 21/50	86.39	10
100	LT ES 21/100	76.36	10
150	LT ES 21/150	71.99	10
200	LT ES 21/200	65.72	10
250	LT ES 21	62.60	10
400	LT ES 21/400	58.85	10

Max. length in the LIPROTEC system: 24 m, connection length: 3 m

## Technical specifications for LED strips

LT ES 9			
Dimensions (B x H)	15 x 5 mm		
Rated output (W/m)	15		
Number of LED (u./m) 192 (96 RGB + 96 W)			
Colour temperature (Kelvin) RGB+W (2700			
CRI	85		

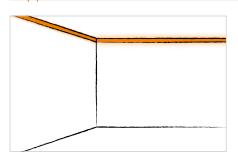
Can be shortened every 62.5 mm

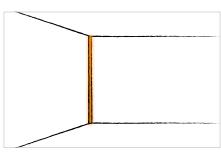
LT ES 1 1		
Dimensions (B x H)	12 x 5 mm	
Rated output (W/m)	7.5	
Number of LED (u./m)	140	
Colour temperature (Kelvin)	3400 K	
CRI	92	

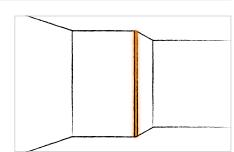
Can be shortened every 50 mm

LT ES 2 1			
Dimensions (B x H)	12 x 5 mm		
Rated output (W/m)	7.5		
Number of LED (u./m)	140		
Colour temperature (Kelvin)	4900 K		
CRI	92		
Can be shortened every 50 mm			

## Application areas









## Schlüter®-LIPROTEC-WS

Providing accent lighting of components and wall panels with atmospheric LED light is the domain of the trusted Schlüter-LIPROTEC-WS profile. They can be combined with diffuser lenses for either indirect or direct light to create individual light experiences in combination with exquisite tiles or natural stone.









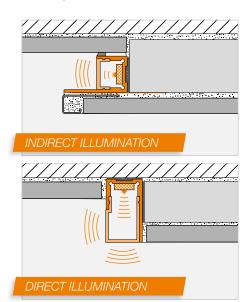
For explanations of the symbols, refer to page 107.

## Building with light

Schlüter-LIPROTEC-WS is a high quality carrier profile of anodised aluminium for illuminating protruding wall panels with various Schlüter-LIPROTEC-ES LED strips integrated into the profile. Differing light effects are created in combination with two different diffuser lenses. The assembly can be used to create recessed direct or indirect lighting for on-wall structures. The profile design allows for the easy replacement of the utilised diffuser lenses and bulbs, even after installation. (Product data sheet 15.2)

## Application areas:

- ✓ Elements
- ✓ Wall panels
- ✓ On-wall features
- ✓ Cove lighting
- ✓ Light strips





- Schlüter-LIPROTEC-WS profile
- 2 LED strip
- 3 Diffuser lens (indirect illumination)
- 4 Diffuser lens (direct illumination)

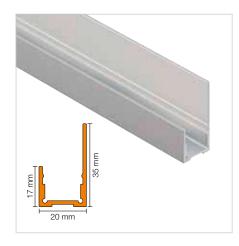
 $\textbf{Note:} \ \ \text{The diffuser lens for indirect lighting is only suitable for vertical installation in the shower.}$ 

The diffuser lens for direct lighting is only suitable for installation outside of areas that are subjected to moisture.



## Schlüter®-LIPROTEC-WS

## Profile | Wall panel



### Schlüter®-LIPROTEC-WS

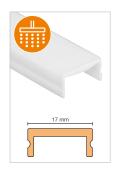
#### anodised aluminium

L (m)	Art. No.	€/m	KV (Unit)
1	LT WS 20 AE/100	26.54	60
1.5	LT WS 20 AE/150	26.54	60
2.5	LT WS 20 AE	26.54	60



To achieve adhesive bonding between the smooth aluminium surface and the tile, the self-adhesive fleece Schlüter-DESIGNBASE-HVL 38/20M is fitted (see page 66).

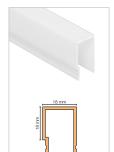
## Diffuser lens



## Schlüter®-LIPROTEC-WSI

#### diffuser lens, indirect illumination

L (m)	Art. No.	€/m	KV (Unit)
1	LT WS I 20/100	20.68	60
1.5	LT WS I 20/150	20.68	60
2.5	LT WS I 20	20.68	60



## Schlüter®-LIPROTEC-WSD

#### diffuser lens, direct illumination

L (m)	Art. No.	€/m	KV (Unit)
1	LT WS D 20/100	23.93	60
1.5	LT WS D 20/150	23.93	60
2.5	LT WS D 20	23.93	60

## End cap



## Schlüter®-LIPROTEC-WS/EK

#### end cap, anodised aluminium, indirect illumination

H (mm)	Art. No.	€/U.	P (Unit)
17	EK / LT WS I AE 20	16.21	50



## Schlüter®-LIPROTEC-WS/EK

### end cap, anodised aluminium, direct illumination

H (mm)	Art. No.	€/U.	P (Unit)
35	EK / LT WS D AE 20	17.36	50

## Control | Accessories



In the CONTROL section, you can find the right control system for perfectly completing your Schlüter-LIPROTEC lighting and power supply units and installation material under "Accessories".

## RGB+W CONTROLLABLE

## WARM WHITE

## NEUTRAL WHITE

## LED strip



















LED strips, RGB+W controllable, 24 V, DC

L (cm)	Art. No.	€/m	P (Unit)
50	LT ES 9/50	121.28	10
100	LT ES 9/100	112.05	10
150	LT ES 9/150	112.05	10
200	LT ES 9/200	105.45	10
250	LT ES 9	105.45	10
400	LT ES 9/400	102.65	10

Max. length in the LIPROTEC system: 12 m, connection length: 3 m

## Schlüter®-LIPROTEC-ES

LED strips, warm white, 24 V, DC

L (cm)	Art. No.	€/m	P (Unit)
50	LT ES 11/50	86.39	10
100	LT ES 11/100	76.36	10
150	LT ES 11/150	71.99	10
200	LT ES 11/200	65.72	10
250	LT ES 11	62.60	10
400	LT ES 11/400	58.85	10

Max. length in the LIPROTEC system: 24 m, connection length: 3 m

LED strips, neutral white, 24 V, DC

L (cm)	Art. No.	€/m	P (Unit)
50	LT ES 21/50	86.39	10
100	LT ES 21/100	76.36	10
150	LT ES 21/150	71.99	10
200	LT ES 21/200	65.72	10
250	LT ES 21	62.60	10
400	LT ES 21/400	58.85	10

Max. length in the LIPROTEC system: 24 m, connection length: 3 m

## Technical specifications for LED strips

LT ES 9			
Dimensions (B x H)	15 x 5 mm		
Rated output (W/m)	15		
Number of LED (u./m)	192 (96 RGB + 96 W)		
Colour temperature (Kelvin)	RGB+W (2700 K)		
CRI	85		
Can be abortaned avery CO E mm			

Can be shortened every 62.5 mm

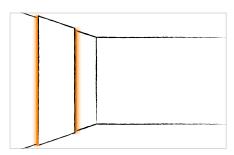
LT ES 1 1			
Dimensions (B x H)	12 x 5 mm		
Rated output (W/m)	7.5		
Number of LED (u./m)	140		
Colour temperature (Kelvin)	3400 K		
CRI	92		

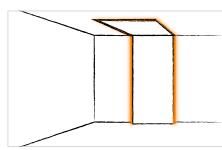
Can be shortened every 50 mm

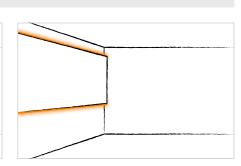
LT ES 2 1			
Dimensions (B x H)	12 x 5 mm		
Rated output (W/m)	7.5		
Number of LED (u./m)	140		
Colour temperature (Kelvin)	4900 K		
CRI	92		

Can be shortened every 50 mm

## Application areas









Thought-through light design: An integrated cable duct, a support bracket for the tried-and-tested KERDI-BOARD (19 mm), diffuser lenses for direct and indirect illumination as desired – we have equipped the LIPROTEC-WSK products with features that make installation easier. And give the owner of the building an individual light experience that provides joy day after day.











For explanations of the symbols, refer to page 107.

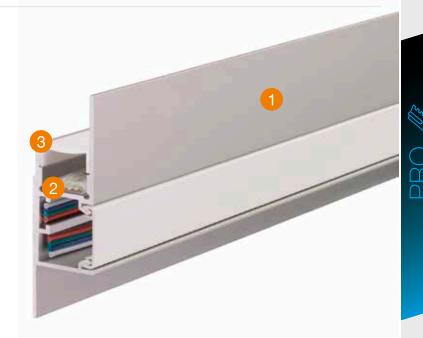
## Accentuate!

Schlüter-LIPROTEC-WSK is a high quality, anodised aluminium carrier profile for illuminating protruding wall panels with various Schlüter-LIPROTEC-ES LED strips laid into the profile. Differing light effects are created in combination with two different diffuser lenses. Recessed, indirect or narrow illumination for wall protrusions are created in this way. An integrated cable duct with milling grooves for cable installation and a support bracket for Schlüter-KERDI-BOARD (19 mm) aid the installation process.

(Product data sheet 15.2)

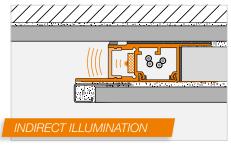
## Application areas:

- ✓ Elements
- ✓ Wall panels
- ✓ On-wall features
- ✓ Cove lighting
- ✓ Light strips





- 1 Schlüter-LIPROTEC-WSK profile
- 2 LED strip
- Oiffuser lens (indirect illumination)



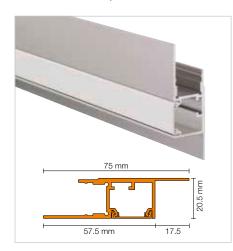
**Note:** The diffuser lens for indirect lighting is only suitable for vertical installation in the shower.

The diffuser lens for direct lighting is only suitable for installation outside of areas that are subjected to moisture.



## Schlüter®-LIPROTEC-WSK

## Profile | Wall panel with cable duct



## Schlüter®-LIPROTEC-WSK

anodised aluminium

L (m)	Art. No.	€/m	KV (Unit)
2.5	WS 20 K1 AAE	42.62	60

(i

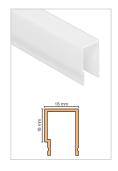
To achieve adhesive bonding between the smooth aluminium surface and the tile, the self-adhesive fleece Schlüter-DESIGNBASE-HVL 38/20M is fitted (see page 66).

### Diffuser lens



Schlüter®-LIPROTEC-WSI	
diffuser lens, indirect illumination	

dilasti iciis, iliali cet ilialililiation			
L (m)	Art. No.	€/m	KV (Unit)
2.5	LT WS I 20	20.68	60



## Schlüter®-LIPROTEC-WSD

diffuser lens, direct illumination

L (m)	Art. No.	€/m	KV (Unit)
2.5	LT WS D 20	23.93	60

## End cap



### Schlüter®-LIPROTEC-WS/EK

 $end\ cap,\ anodised\ aluminium,\ indirect\ illumination$ 

H (mm)	Art. No.	€/U.	P (Unit)
17	EK / LT WS I AE 20	16.21	50



### Schlüter®-LIPROTEC-WS/EK

end cap, anodised aluminium, direct illumination

H (mm)	Art. No.	€/U.	P (Unit)
35	EK / LT WS D AE 20	17.36	50

## Control | Accessories



In the CONTROL section, you can find the right control system for perfectly completing your Schlüter-LIPROTEC lighting and power supply units and installation material under "Accessories".

### RGB+W CONTROLLABLE

### WARM WHITE

### NEUTRAL WHITE

### LED strip



















LED strips, RGB+W controllable, 24 V, DC

L (cm)	Art. No.	€/m	P (Unit)
50	LT ES 9/50	121.28	10
100	LT ES 9/100	112.05	10
150	LT ES 9/150	112.05	10
200	LT ES 9/200	105.45	10
250	LT ES 9	105.45	10
400	LT ES 9/400	102.65	10

Max. length in the LIPROTEC system: 12 m, connection length: 3 m

### Schlüter®-LIPROTEC-ES

LED strips, warm white, 24 V, DC

L (cm)	Art. No.	€/m	P (Unit)
50	LT ES 11/50	86.39	10
100	LT ES 11/100	76.36	10
150	LT ES 11/150	71.99	10
200	LT ES 11/200	65.72	10
250	LT ES 11	62.60	10
400	LT ES 11/400	58.85	10

Max. length in the LIPROTEC system: 24 m, connection length: 3 m

LED strips, neutral white, 24 V, DC

L (cm)	Art. No.	€/m	P (Unit)
50	LT ES 21/50	86.39	10
100	LT ES 21/100	76.36	10
150	LT ES 21/150	71.99	10
200	LT ES 21/200	65.72	10
250	LT ES 21	62.60	10
400	LT ES 21/400	58.85	10

Max. length in the LIPROTEC system: 24 m, connection length: 3 m

### Technical specifications for LED strips

LT ES 9		
Dimensions (B x H)	15 x 5 mm	
Rated output (W/m)	15	
Number of LED (u./m) 192 (96 RGB + 96 W)		
Colour temperature (Kelvin)	RGB+W (2700 K)	
CRI	85	
Can be abardoned arrant CO F mans		

Can be shortened every 62.5 mm

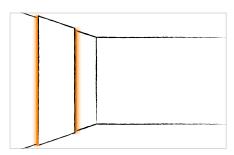
LT ES 1 1		
Dimensions (B x H)	12 x 5 mm	
Rated output (W/m)	7.5	
Number of LED (u./m)	140	
Colour temperature (Kelvin)	3400 K	
CRI	92	

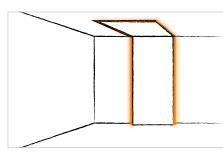
Can be shortened every 50 mm

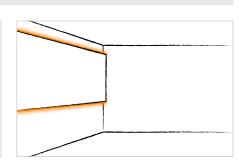
LT ES 2 1		
Dimensions (B x H)	12 x 5 mm	
Rated output (W/m)	7.5	
Number of LED (u./m)	140	
Colour temperature (Kelvin)	4900 K	
CRI	92	

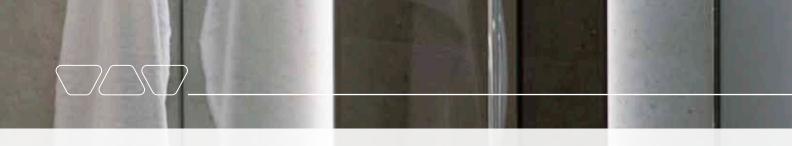
Can be shortened every 50 mm

### Application areas









# Schlüter®-LIPROTEC-WSQ

Accent lighting with integrated cover finish: Schlüter-LIPROTEC-WSQ combines atmospheric LED illumination for bathtubs, prewall installations and wall panels with an elegant cover finish in timeless QUADEC design. Different diffuser lenses for indirect or direct light make it possible to use the LIPROTEC-WSQ for individual light design.









For explanations of the symbols, refer to page 107.

### Building with light

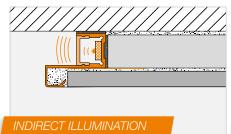
Schlüter-LIPROTEC-WSQ is a high quality carrier profile of anodised aluminium for illuminating raised wall panels with various Schlüter-LIPROTEC-ES LED strips integrated into the profile. Differing light effects are created in combination with two different diffuser lenses. The assembly can be used to create recessed direct or indirect lighting for on-wall structures. LIPROTEC-WSQ features a formed cover finish with timelessly modern Schlüter-QUADEC design. The profile design allows for the easy replacement of the utilised diffuser lenses and bulbs, even after installation.

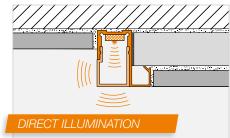
(Product data sheet 15.2)

### Application areas:

- ✓ Elements
- ✓ Wall panels
- ✓ On-wall features
- ✓ Cove lighting
- ✓ Light strips







- 1 Schlüter-LIPROTEC-WSQ profile
- 2 LED strip
- 3 Diffuser lens (indirect illumination)
- 4 Diffuser lens (direct illumination)

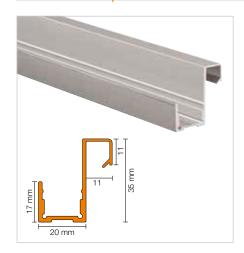
**Note:** The diffuser lens for indirect lighting is only suitable for vertical installation in the shower.

The diffuser lens for direct lighting is only suitable for installation outside of areas that are subjected to moisture.



# Schlüter®-LIPROTEC-WSQ

### Profile | Wall panel with QUADEC finishing profile



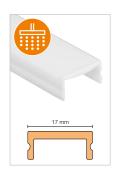
# Schlüter®-LIPROTEC-WSQ anodised aluminium, H = 11 mm L (m) Art. No. € / m KV (Unit)

WS 20Q 110 AE

(j

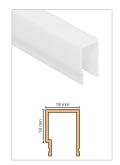
To achieve adhesive bonding between the smooth aluminium surface and the tile, the self-adhesive fleece Schlüter-DESIGNBASE-HVL 38/20M is fitted (see page 66).

### Diffuser lens



Schlute	r®-LIPROTEC-WSI		
diffuser lei			
L (m)	Art. No.	€/m	KV (Unit)
2.5	LT WS I 20	20.68	60

2.5



36.20

60

Schlüte	r®-LIPROTEC-WSD		
diffuser lens, direct illumination			
L (m)	Art. No.	€/m	KV (Unit)
2.5	LT WS D 20	23.93	60

### End cap



Schlüter®-LIPROTEC-WS/EK			
end cap, anodised aluminium, indirect illumination			
H (mm) Art. No. € / U. P (Uni			
EK / LT WS I AE 20	16.21	50	
	nodised aluminium, indir Art. No.	nodised aluminium, indirect illumi Art. No. € / U.	



# Schlüter®-LIPROTEC-WS/EK end cap, anodised aluminium, direct illumination H (mm) Art. No. € / U. P (Unit) 35 EK / LT WS D AE 20 17.36 50

### Control | Accessories



In the CONTROL section, you can find the right control system for perfectly completing your Schlüter-LIPROTEC lighting and power supply units and installation material under "Accessories".

### RGB+W CONTROLLABLE

### WARM WHITE

### NEUTRAL WHITE

### LED strip



















LED strips, RGB+W controllable, 24 V, DC

L (cm)	Art. No.	€/m	P (Unit)
50	LT ES 9/50	121.28	10
100	LT ES 9/100	112.05	10
150	LT ES 9/150	112.05	10
200	LT ES 9/200	105.45	10
250	LT ES 9	105.45	10
400	LT ES 9/400	102.65	10

Max. length in the LIPROTEC system: 12 m, connection length: 3 m

### Schlüter®-LIPROTEC-ES

LED strips, warm white, 24 V, DC

L (cm)	Art. No.	€/m	P (Unit)
50	LT ES 11/50	86.39	10
100	LT ES 11/100	76.36	10
150	LT ES 11/150	71.99	10
200	LT ES 11/200	65.72	10
250	LT ES 11	62.60	10
400	LT ES 11/400	58.85	10

Max. length in the LIPROTEC system: 24 m, connection length: 3 m

LED strips, neutral white, 24 V, DC

L (cm)	Art. No.	€/m	P (Unit)
50	LT ES 21/50	86.39	10
100	LT ES 21/100	76.36	10
150	LT ES 21/150	71.99	10
200	LT ES 21/200	65.72	10
250	LT ES 21	62.60	10
400	LT ES 21/400	58.85	10

Max. length in the LIPROTEC system: 24 m, connection length: 3 m

### Technical specifications for LED strips

LT ES 9		
Dimensions (B x H)	15 x 5 mm	
Rated output (W/m)	15	
Number of LED (u./m)	192 (96 RGB + 96 W)	
Colour temperature (Kelvin)	RGB+W (2700 K)	
CRI	85	

Can be shortened every 62.5 mm

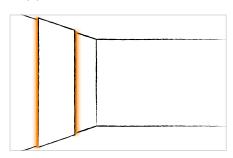
LT ES 1 1		
Dimensions (B x H)	12 x 5 mm	
Rated output (W/m)	7.5	
Number of LED (u./m)	140	
Colour temperature (Kelvin)	3400 K	
CRI	92	

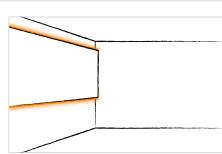
Can be shortened every 50 mm

LT ES 2 1		
Dimensions (B x H)	12 x 5 mm	
Rated output (W/m)	7.5	
Number of LED (u./m)	140	
Colour temperature (Kelvin)	4900 K	
CRI	92	

Can be shortened every 50 mm

### Application areas







# Schlüter®-LIPROTEC-PB

Schlüter-LIPROTEC-PB is our universal solution for illuminated step edges. From highlighting steps in a lobby to giving a reception desk a "floating" appearance, there are thousands of applications for the intelligent illumination technology of Schlüter-Systems. For step edges, combine LIPROTEC-PB with high quality Schlüter-TREP profiles. For staircases, we recommend our sets on page 60.





For explanations of the symbols, refer to page 107.

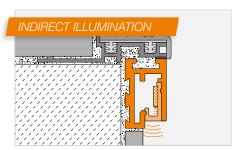
### Step-by-step illumination

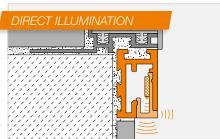
Schlüter-LIPROTEC-PB is a high quality edge profile of anodised aluminium with a visible area of 25 mm. It is designed for mounting Schlüter-LIPROTEC-ES LED strips and can be used with Schlüter-TREP stair nosing profiles to create appealing lighting along the edges of platforms. Differing light effects are created in combination with two different diffuser lenses. Edges can either be illuminated indirectly or directly by adding a 3 mm light strip. Another application area of LIPROTEC-PB is the direct or indirect illumination of work surface front edges. The profile design allows for the easy replacement of the utilised diffuser lenses and bulbs, even after installation.

(Product data sheet 15.4)

## Application areas:

✓ Platform step edges







- Schlüter-LIPROTEC-PB profile
- 2 LED strip
- Oiffuser lens (indirect illumination)
- 4 Diffuser lens (direct illumination)



# Schlüter®-LIPROTEC-PB

### Profile | Stair edge



### Schlüter®-LIPROTEC-PB

### anodised aluminium

L (m)	Art. No.	€/m	KV (Unit
1	LT PB 25 AE/100	30.32	60
1.5	LT PB 25 AE/150	30.32	60
2.5	LT PB 25 AE	30.32	60

### Schlüter®-LIPROTEC-PB-AEEB

brushed stainless steel appearance, anodised aluminium

L (m)	Art. No.	€/m	KV (Unit)
1	LT PB 25 AEEB/100	35.72	60
1.5	LT PB 25 AEEB/150	35.72	60
2.5	LT PB 25 AEEB	35.72	60

### Diffuser lens



Schluter "- LIPKUTEG-VBI			
diffuser le	ns, indirect illumination		
L (m)	Art. No.	€/m	KV (Unit)
1	LT VB I/100	20.32	60
1.5	LT VB I/150	20.32	60
2.5	LT VB I	20.32	60



Schlüter®-LIPROTEC-PBD			
diffuser lens, indirect + direct illumination			
L (m)	Art. No.	€/m	KV (Unit)
1	LT PB D/100	20.47	60
1.5	LT PB D/150	20.47	60
2.5	LT PB D	20.47	60

### End cap



Schlüter®-LIPROTEC-PB/EK		
end cap, anodised aluminium		
Art. No.	€/U.	P (Unit)
EK / LT PB AE	5.17	50



### Schlüter®-LIPROTEC-PB-AEEB/EK

end cap,

brushed stainless steel effect anodised aluminium

Art. No.	€	U. P (Unit	)
EK / LT PB A	EEB <b>6.</b>	<b>07</b> 50	

Note: Matching corner connectors can be found on page 56.

### Control | Accessories



In the CONTROL section, you can find the right control system for perfectly completing your Schlüter-LIPROTEC lighting and power supply units and installation material under "Accessories".

### WARM WHITE

### NEUTRAL WHITE

### LED strip













### Schlüter®-LIPROTEC-ES

LED strips, warm white, 24 V, DC

L (cm)	Art. No.	€/m	P (Unit)
50	LT ES 51/50	87.64	10
100	LT ES 51/100	77.61	10
150	LT ES 51/150	70.11	10
200	LT ES 51/200	66.35	10
250	LT ES 51	63.85	10
400	LT ES 51/400	58.85	10

Max. length in the LIPROTEC system: 24 m, connection length: 3 m  $\,$ 

### Schlüter®-LIPROTEC-ES

LED strips, neutral white, 24 V, DC

L (cm)	Art. No.	€/m	P (Unit)
50	LT ES 61/50	87.64	10
100	LT ES 61/100	77.61	10
150	LT ES 61/150	70.11	10
200	LT ES 61/200	66.35	10
250	LT ES 61	63.85	10
400	LT ES 61/400	58.85	10

Max. length in the LIPROTEC system: 24 m, connection length: 3 m  $\,$ 

### Technical specifications for LED strips

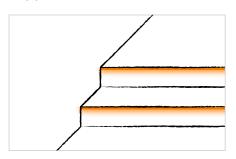
LT ES 5 1		
Dimensions (B x H)	8 x 2.5 mm	
Rated output (W/m)	7.5	
Number of LED (u./m)	140	
Colour temperature (Kelvin)	3200 K	
CRI	92	

Can be shortened every 50 mm

LT ES 6 1			
Dimensions (B x H)	8 x 2.5 mm		
Rated output (W/m)	7.5		
Number of LED (u./m)	140		
Colour temperature (Kelvin)	4900 K		
CRI	92		

Can be shortened every 50 mm

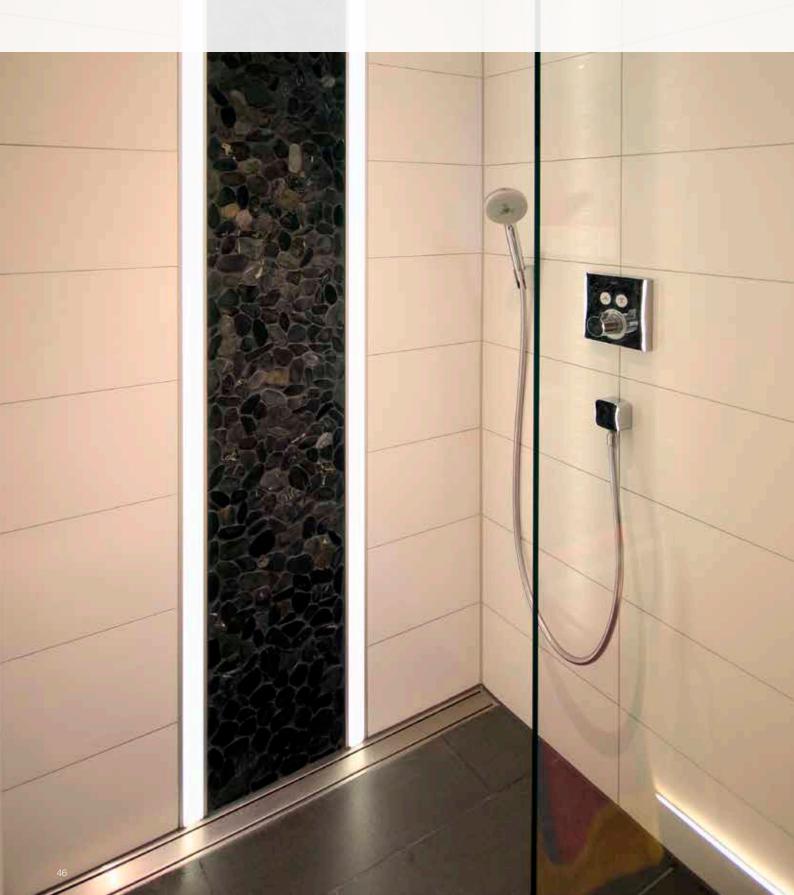
### Application areas





# Schlüter®-DESIGNBASE-QD

Timeless QUADEC design combined with modern LED technology: With Schlüter-DESIGNBASE-QD, illuminated skirtings and borders can be installed with ease. Create illuminated finishes for worktops or wall structures made of stud frame constructions or Schlüter-KERDI-BOARD in next to no time.











For explanations of the symbols, refer to page 107.

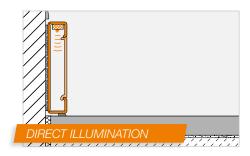
# Defined by light

Schlüter-DESIGNBASE-QD is a high quality profile of anodised aluminium for versatile applications. It is designed for mounting various Schlüter-LIPROTEC-ES LED strips as a skirting or border profile in wall areas. A 39 mm diffuser lens is then used between the 10 mm wide (approx.) visible areas of the profile to create direct illumination. Other decorative materials such as tiles or wooden elements can also be inserted in the open space. The profile design allows for the easy replacement of the utilised diffuser lenses and bulbs, even after installation.

(Product data sheet 16.1)

# Application areas:

- √ Skirting
- ✓ Illuminated borders in wall coverings



**Note:** Only suitable for vertical installation in the shower.

For horizontal installation, we recommend our LED module LIPROTEC-LLPM on page 12.





# Schlüter®-DESIGNBASE-QD

### Profile | Base/Border



### Schlüter®-DESIGNBASE-QD

### Schlüter®-DESIGNBASE-QD-AEEB

anodised aluminium

L (m)	Art. No.	€/m	KV (Unit)
2.5	DB Q1 AE	34.73	60

brushed stainless steel appearance, anodised aluminium

L (m)	Art. No.	€/m	KV (Unit)
2.5	DB Q1 AEEB	41.97	60



To achieve adhesive bonding between the smooth aluminium surface and the tile, the self-adhesive fleece Schlüter-DESIGNBASE-HVL 38/20M is fitted (see page 66).

### Diffuser lens



### Schlüter®-DESIGNBASE-QDD

### diffuser lens

H (mm)	L = 2.50 m Art. No.	€/m	KV (Unit)
39	LT FSS 39	21.35	60



To prevent a disruption of the light effect, the Schlüter-LIPROTEC-RKB self-adhesive, reflective tape is placed over drill holes or cables (see page 66).

### End cap



### Schlüter®-DESIGNBASE-QD/E

external corner, anodised aluminium

anouiseu aiummum		
Art. No.	€/U.	P (Unit)
EV / DB Q1 AE	30.65	50



### Schlüter®-DESIGNBASE-QD-AEEB/E

external corner,

brushed stainless steel effect anodised aluminium

Art. No.	€/U.	P (Unit)
EV / DB Q1 AEEB	36.97	50

### Control | Accessories



In the CONTROL section, you can find the right control system for perfectly completing your Schlüter-LIPROTEC lighting and power supply units and installation material under "Accessories".

### WARM WHITE

### NEUTRAL WHITE

### LED strip

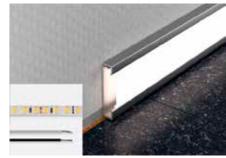












### Schlüter®-LIPROTEC-ES

LED strips, warm white, 24 V, DC

L (cm)	Art. No.	€/m	P (Unit)
50	LT ES 31/50	86.39	10
100	LT ES 31/100	76.36	10
150	LT ES 31/150	71.99	10
200	LT ES 31/200	65.72	10
250	LT ES 31	62.60	10
400	LT ES 31/400	58.85	10

Max. length in the LIPROTEC system: 24 m, connection length: 3 m

### Schlüter®-LIPROTEC-ES

LED strips, neutral white, 24 V, DC

L (cm)	Art. No.	€/m	P (Unit)
50	LT ES 41/50	86.39	10
100	LT ES 41/100	76.36	10
150	LT ES 41/150	71.99	10
200	LT ES 41/200	65.72	10
250	LT ES 41	62.60	10
400	LT ES 41/400	58.85	10

Max. length in the LIPROTEC system: 24 m, connection length: 3 m

### Technical specifications for LED strips

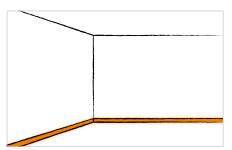
LT ES 3 1		
Dimensions (B x H)	7 x 5 mm	
Rated output (W/m)	7.5	
Number of LED (u./m)	140	
Colour temperature (Kelvin)	3400 K	
CRI	92	

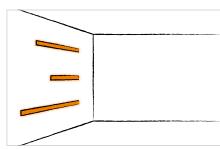
Can be shortened every 50 mm

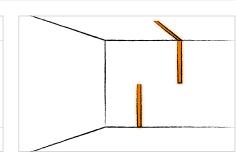
LT ES 4 1			
Dimensions (B x H)	7 x 5 mm		
Rated output (W/m)	7.5		
Number of LED (u./m)	140		
Colour temperature (Kelvin)	4900 K		
CRI	92		

Can be shortened every 50 mm

### Application areas









# Schlüter®-LIPROTEC-VB

Schlüter-LIPROTEC-VB not only is an elegant aluminium finishing profile for tiling – it also allows for integration of decorative accents in the tiling: for example by lighting the ceiling indirectly or as an illuminated guiding strip on the skirting tiles. Four different heights are available. Thanks to the installation height of just 3.5 mm, the Sideview-LED strips specifically designed for Schlüter-Systems are suitable for particularly detailed arrangements and lighting effects.







For explanations of the symbols, refer to page 107.

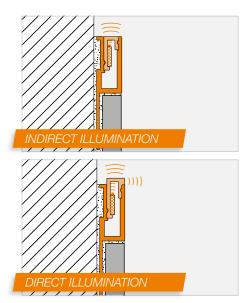
# Light from within the tile!

Schlüter-LIPROTEC-VB is a high quality tile finishing profile for wall areas, with a visible area of 25 mm. It is designed for mounting Schlüter-LIPROTEC-ES LED strips and can be used to create varying light effects in combination with two different diffuser lenses. Indirect light can either radiate from the profile edge to the ceiling via adjoining materials or along the skirting. Additionally, a 3 mm light strip can create direct light. The profile design allows for the easy replacement of the utilised diffuser lenses and bulbs, even after installation.

(Product data sheet 15.1)

# Application areas:

- ✓ Wall coverings
- √ Skirting



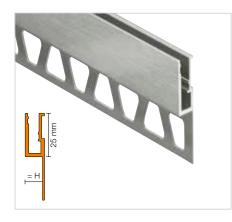


- Schlüter-LIPROTEC-VB profile
- 2 LED strip
- Oiffuser lens (indirect illumination)
- 4 Diffuser lens (direct illumination)



# Schlüter®-LIPROTEC-VB

### Profile | Cove lighting



### Schlüter®-LIPROTEC-VB

### anodised aluminium

H (mm)	L = 2.50 m Art. No.	€/m	KV (Unit)
8	LT VB 80 AE	26.54	60
10	LT VB 100 AE	27.50	60
11	LT VB 110 AE	28.24	60
12.5	LT VB 125 AE	29.29	60

### Schlüter®-LIPROTEC-VB-AEEB

brushed stainless steel appearance, anodised aluminium

H (mm)	L = 2.50 m Art. No.	€/m	KV (Unit)
8	LT VB 80 AEEB	31.70	60
10	LT VB 100 AEEB	32.71	60
11	LT VB 110 AEEB	33.56	60
12.5	LT VB 125 AEEB	35.08	60

### Diffuser lens



Schlüter®-LIPROTEC-VBI				
diffuser lens, indirect illumination				
L (m) Art. No. € / m KV (Unit				
2.5	LT VB I	20.32	60	



Schlüter®-LIPROTEC-VBD				
diffuser lens, direct illumination				
L (m)	Art. No.	€/m	KV (Unit)	
2.5	LT VB D	20.32	60	

Note: The cable feed of the LED strip that radiates light sideways is always on one side only, at the right. The light shines upward.

### Control | Accessories



In the CONTROL section, you can find the right control system for perfectly completing your Schlüter-LIPROTEC lighting and power supply units and installation material under "Accessories".

52 Profile packaging: bundle of 10

### WARM WHITE

### NEUTRAL WHITE

### LED strip













### Schlüter®-LIPROTEC-ES

LED strips, warm white, 24 V, DC

L (cm)	Art. No.	€/m	P (Unit)
50	LT ES 51/50	87.64	10
100	LT ES 51/100	77.61	10
150	LT ES 51/150	70.11	10
200	LT ES 51/200	66.35	10
250	LT ES 51	63.85	10
400	LT ES 51/400	58.85	10

Max. length in the LIPROTEC system: 24 m, connection length: 3 m  $\,$ 

### Schlüter®-LIPROTEC-ES

LED strips, neutral white, 24 V, DC

L (cm)	Art. No.	€/m	P (Unit)
50	LT ES 61/50	87.64	10
100	LT ES 61/100	77.61	10
150	LT ES 61/150	70.11	10
200	LT ES 61/200	66.35	10
250	LT ES 61	63.85	10
400	LT ES 61/400	58.85	10

Max. length in the LIPROTEC system: 24 m, connection length: 3 m  $\,$ 

### Technical specifications for LED strips

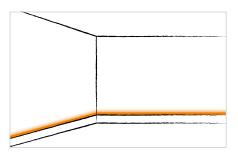
LT ES 5 1			
Dimensions (B x H)	8 x 2.5 mm		
Rated output (W/m)	7.5		
Number of LED (u./m)	140		
Colour temperature (Kelvin)	3200 K		
CRI	92		

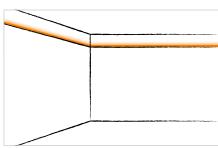
Can be shortened every 50 mm

LT ES 6 1			
Dimensions (B x H)	8 x 2.5 mm		
Rated output (W/m)	7.5		
Number of LED (u./m)	140		
Colour temperature (Kelvin)	4900 K		
CRI	92		

Can be shortened every 50 mm

### Application areas







# Schlüter®-LIPROTEC-D

Schlüter-LIPROTEC-D provides accent lighting for design elements on the wall. Whether you want to highlight decorative elements, borders, pictures or mirrors, create a simple shadow joint, or set accents with indirect light – LIPROTEC-D offers solutions that are as individual and flexible as you are. For a really simple solution, we've put together a frame set for you with dimensions of 118.5 x 93.5 cm, with clean mitre cuts and with power supply unit, LED strips and mounting material. All you need is a suitable mirror or decorative element.





For explanations of the symbols, refer to page 107.

# Properly framed!

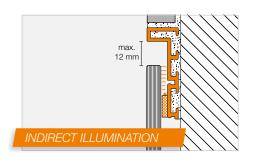
Schlüter-LIPROTEC-D is a decorative carrier profile for wall areas of anodised aluminium with a visible area of 6 mm. It allows for the insertion of various decorative materials such as glass or mirrors to adjoin ceramic tile coverings. LIPROTEC-D can be used to mount Schlüter-LIPROTEC-ES LED strips for creating indirect light effects around a decorative element. The profile design allows for the easy replacement of the utilised diffuser lenses and bulbs, even after installation.

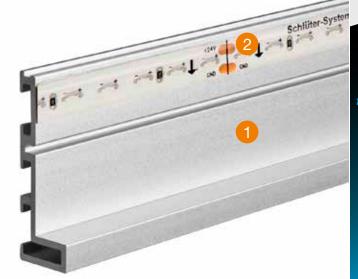
(Product data sheet 15.3)

# Application areas:



✓ Decorative elements made of various materials





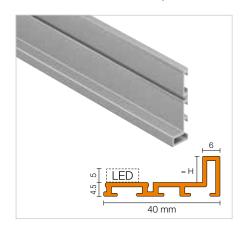


- 1 Schlüter-LIPROTEC-D profile
- 2 LED strip



# Schlüter®-LIPROTEC-D

### Profile | Attachment profile for decorative materials



### Schlüter®-LIPROTEC-D

### anodised aluminium

H (mm)	L = 2.50 m Art. No.	€/m	KV (Unit)
4.5	LT D 45 AE	28.86	60
7.5	LT D 75 AE	29.17	60
9	LT D 90 AE	31.63	60
16.5	LT D 165 AE	32.60	60



### Selection of profile height:

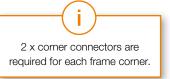
5 mm must be added for the height of the LED strip LT ES 51 or LT ES 61.

The profile LT D 45 AE with an intake height of 4.5 mm is recommended for the insertion of non-illuminated decorative materials.

### Corner connector



# Schlüter®-LIPROTEC-D/V corner connector set, 4 pc. Art. No. € / Set P (Set) V 90 / LT 10/4 13.97 50



### Control | Accessories



In the CONTROL section, you can find the right control system for perfectly completing your Schlüter-LIPROTEC lighting and power supply units and installation material under "Accessories".

Frofile packaging: bundle of 10

### WARM WHITE

### NEUTRAL WHITE

### LED strip













### Schlüter®-LIPROTEC-ES

LED strips, warm white, 24 V, DC

L (cm)	Art. No.	€/m	P (Unit)
50	LT ES 51/50	87.64	10
100	LT ES 51/100	77.61	10
150	LT ES 51/150	70.11	10
200	LT ES 51/200	66.35	10
250	LT ES 51	63.85	10
400	LT ES 51/400	58.85	10

Max. length in the LIPROTEC system: 24 m, connection length: 3 m  $\,$ 

### Schlüter®-LIPROTEC-ES

LED strips, neutral white, 24 V, DC

L (cm)	Art. No.	€/m	P (Unit)
50	LT ES 61/50	87.64	10
100	LT ES 61/100	77.61	10
150	LT ES 61/150	70.11	10
200	LT ES 61/200	66.35	10
250	LT ES 61	63.85	10
400	LT ES 61/400	58.85	10

Max. length in the LIPROTEC system: 24 m, connection length: 3 m

### Technical specifications for LED strips

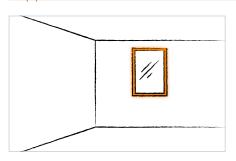
LT ES 5 1			
Dimensions (B x H)	8 x 2.5 mm		
Rated output (W/m)	7.5		
Number of LED (u./m)	140		
Colour temperature (Kelvin)	3200 K		
CRI	92		

Can be shortened every 50 mm

LT ES 6 1			
Dimensions (B x H)	8 x 2.5 mm		
Rated output (W/m)	7.5		
Number of LED (u./m)	140		
Colour temperature (Kelvin)	4900 K		
CRI	92		

Can be shortened every 50 mm

### Application areas



# Wall panel sets (WSK)

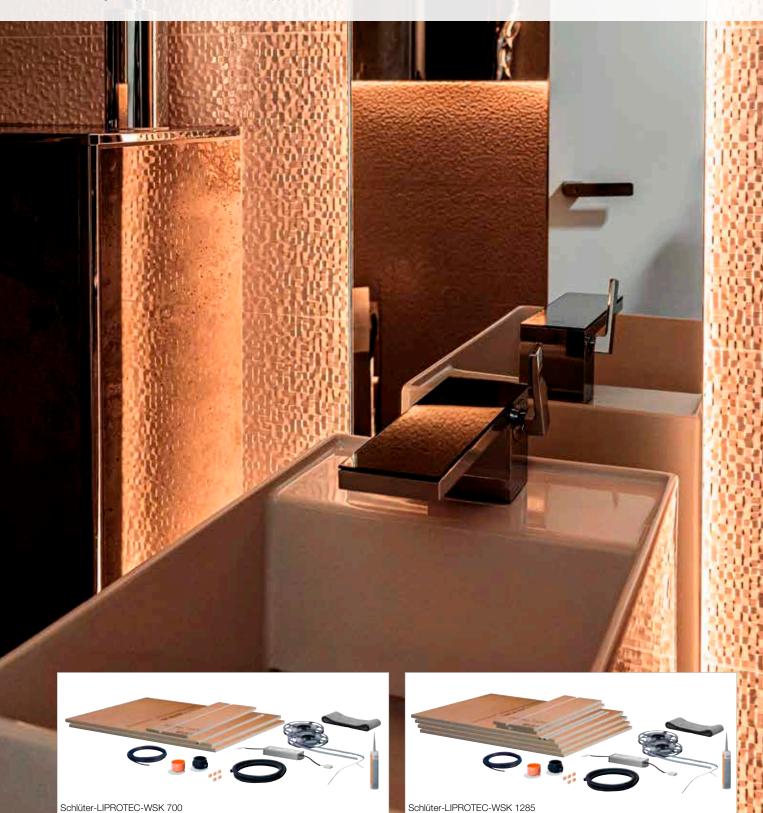








The wall panel sets with RGB+W light makes it easy to make a big impression. Simply select between the wide (128.5 cm) and narrow (70 cm) wall panels and order the practical profile set with it. Our RGB+W technology provides you with unlimited design freedom: more than 16 million hues turn your rooms into colour-flooded leisure zones. White hues from 2500 K – 6500 K let your wall panels radiate the same light as your existing ceiling light. If desired, it can be controlled with a Bluetooth receiver. The matching Schlüter-Systems app can be downloaded for free from Google Play (Android<sup>TM</sup>) or the Apple App Store (iOS).



# HO H

# PRC

# S

### **RGB+W CONTROLLABLE**

### Profile set

### Schlüter®-LIPROTEC-WSK 2500

profile set for backlit wall panel

L (m)	Art. No.	€ / Set	P (Set)
2.5	WS 20 K1 S2 AE	306.82	10



### Accessory set

### Schlüter®-LIPROTEC-WSK 700

accessory set with LED strips, RGB+W

Art. No.	€ / Set	P (Set)
WS 20 ZS2 LT ES9	939.66	10

### Schlüter®-LIPROTEC-WSK 1285

accessory set with LED strips, RGB+W

Art. No.	€ / Set	P (Set)
WS 20 ZS3 LT ES9	1069.25	10



### Contents

### WSK 2500

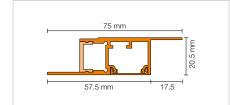
• 2 x Schlüter-LIPROTEC-WSK profiles, length: 250 cm, with cutout for cable routing and integrated covered cable duct, incl. Schlüter-LIPROTEC-WSI diffuser lens

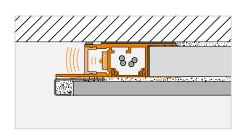
### **WSK 700**

- 2 x Schlüter-LIPROTEC-ES LED strips, length: 250 cm, multi-colour + white light (RGB+W)
- 1 x set Schlüter-KERDI-BOARD, 19 mm, for end format: 250 cm x 70 cm, pre-assembled, with mounting slot for cable duct
- 1 x cable ducts with cover
- 1 x adhesive fleece Schlüter-DESIGNBASE-HVL, width: 7.5 cm, length: 800 cm
- 1 x Schlüter-KERDI-FIX, 290 ml grey
- 1 x power supply unit, 24 V, 100 W, input voltage 230 V, AC
- 1 x Schlüter-LIPROTEC-ZS 5A (connection set)
- 1 x empty strip, 200 cm, 20 mm diameter
- 1 x installation/mounting instruction

### **WSK 1285**

- 2 x Schlüter-LIPROTEC-ES LED strips, length: 250 cm, multi-colour + white light (RGB+W)
- 1 x set Schlüter-KERDI-BOARD, 19 mm, for end format: 250 cm x 128.5 cm, pre-assembled, with mounting slot for cable duct
- 2 x cable ducts with cover
- 1 x adhesive fleece Schlüter-DESIGNBASE-HVL, width: 7.5 cm, length: 800 cm
- 1 x Schlüter-KERDI-FIX, 290 ml grey
- 1 x power supply unit, 24 V, 100 W, input voltage 230 V, AC
- 1 x Schlüter-LIPROTEC-ZS 5A (connection set)
- 1 x empty strip, 200 cm, 20 mm diameter
- 1 x installation/mounting instruction







In the CONTROL section, you can find the right control system for perfectly completing your Schlüter-LIPROTEC lighting.



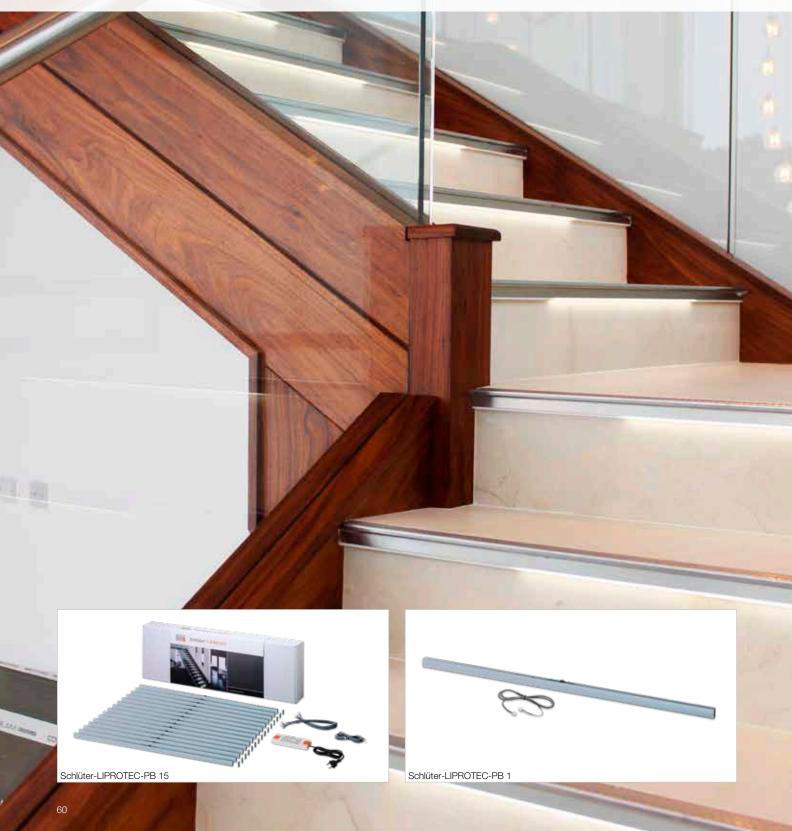
# Staircase sets (PB)





Schlüter-LIPROTEC-PB stair sets put light where it is needed: in the middle of the stair step. The PB 15 sets for 15 steps have 60 cm wide LED modules pre-mounted in the middle. With their diffuser lenses, they provide indirect illumination with a discreet line of light. The combinations of aluminium carrier profile and diffuser lens are 100/150 cm long and can be shortened individually as required. The LED modules have a 4500 K neutral white colour temperature and are cabled by means of a simple coupling system; a 500 cm connection cable and power supply are included in the set.

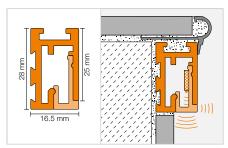
If that isn't enough, the stair set can easily be expanded to 18 steps with only one supply line. With this in mind, use the Schlüter-LIPROTEC-PB 1 single-step sets.



### **NEUTRAL WHITE**

### Advantages

- ✓ Pre-assembled ready for installation
- Cabling and power supply unit in a complete set
- ✓ Easy installation of the sets in tile adhesive



Note: Use only with indoor applications! The set is designed for straight staircases. The appropriate stair profiles for the respective cover material has to be ordered separately.

In the CONTROL section, you can find the

right control system for perfectly completing

your Schlüter-LIPROTEC lighting.



### Schlüter®-LIPROTEC-PB 15

set for staircases, anodised aluminium

Art. No.	€ / Set	P (Set)
PB 15 S1 AE/100	2351.65	10
PB 15 S1 AE/150	2556.15	10

### Schlüter®-LIPROTEC-PB 15

set for staircases, brushed stainless steel effect anodised aluminium

Art. No.	€ / Set	P (Set)
PB 15 S1 AEEB/100	2454.41	10
PB 15 S1 AEEB/150	2714.54	10

### Schlüter®-LIPROTEC-PB 1

set for one step, anodised aluminium

William Car

Art. No.	€ / Set	P (Set)
PB S1 AE/100	184.72	10
PB S1 AE/150	198.36	10

### Schlüter®-LIPROTEC-PB 1

set for one step, brushed stainless steel effect anodised aluminium

Art. No.	€ / Set	P (Set)
PB S1 AEEB/100	193.42	10
PB S1 AEEB/150	208.08	10

### Contents

### PB 15

- 15 x profiles Schlüter-LIPROTEC-PB, 100/150 cm each, incl. locking plate, cable feedthrough, 15 end caps
- 15 x Schlüter-LIPROTEC-PBD diffuser lenses, 100/150 cm each, incl. LED module, neutral white 4500 K, coupling system
- 14 x connection cables, 70 cm each, plug/plug system, 2 x 0.32 mm<sup>2</sup> (AW G22)
- 1 x supply cable 500 cm, single-sided plug system, 2 x 0.32 mm<sup>2</sup> (AW G22)
- 1 x power supply unit, 24 V, 75 W, input voltage 230 V, AC
- 1 x installation/mounting instruction

- 1 x profile Schlüter-LIPROTEC-PB, 100/150 cm, incl. locking plate, cable feedthrough, end cap
- 1 x Schlüter-LIPROTEC-PBD diffuser lens, 100/150 cm, incl. LED module, neutral white 4500 K, coupling system
- 1 x connection cable 70 cm, plug/plug system, 2 x 0.32 mm<sup>2</sup> (AW G22)
- 1 x installation/mounting instruction

### Supply cable

### Schlüter®-LIPROTEC-ZZK



Schlüter-LIPROTEC-ZZK is a supply cable (2 x 0.32 mm², AWG 22) with a length of 500 cm for connecting the Schlüter-LIPROTEC-PB staircase systems to the voltage supply.

### Schlüter®-LIPROTEC-ZZK

### supply cable

Art. No.	€/U.	P (Unit)
LT ZZK 2A 5M	13.60	10

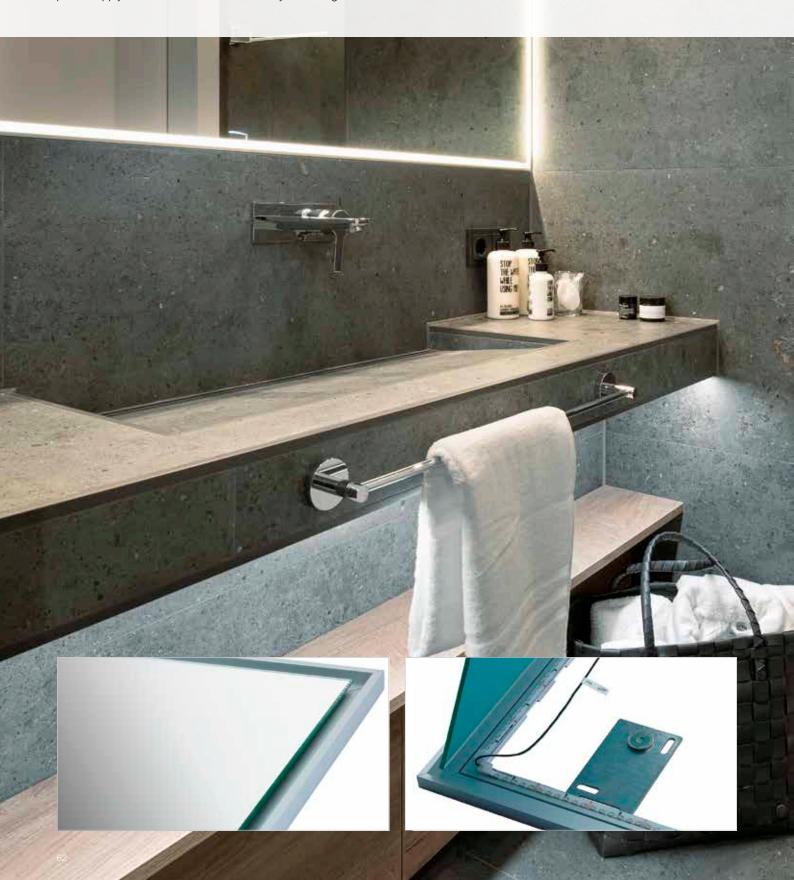


# Decorative frame sets (D)





Schlüter-LIPROTEC-D 90 are sets for creating illuminated decorative frames. With these sets, mirrors or design elements such as printed glass or decor panels can be elegantly framed with indirect LED lighting. The support profiles are already mitre-cut. Four matching Schlüter-LIPROTEC-ES-LED strips with a colour temperature of 3200 K (warm white) or 4900 K (neutral white) are included in the set, as well as the power supply unit and all material for assembly and wiring.



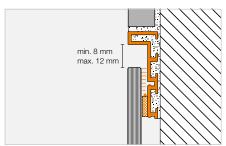
### WARM WHITE

### **NEUTRAL WHITE**

### Advantages

- ✓ Pre-assembled ready for installation
- ✓ Complete cabling in the set
- Set includes suitable power supply unit
- ✓ Easy installation of the sets in tile adhesive

# A STATE OF THE STA



# 40 mm

**Note:** For fastening the decorative element (e.g. mirror), the instructions in the manuals have to be followed.

In the CONTROL section, you can find the right control system for perfectly completing your Schlüter-LIPROTEC lighting.

### Schlüter®-LIPROTEC-D 90 S1

frame set, warm white, 3200 K

H (mm)	Art. No.	€ / Set	P (Set)
9	LT D 90 S1 AE	788.66	10

### Schlüter®-LIPROTEC-D 90 S2

frame set, neutral white, 4900 K

H (mm)	Art. No.	€ / Set	P (Set)
9	LT D 90 S2 AE	788.66	10

### Contents

### D 90 S1

- 1 x profile frame Schlüter-LIPROTEC-D 90, 118.5 cm x 93.5 cm, incl. mitre cuts and milled edges for decorative material support incl. Schlüter-LIPROTEC-D/V corner connector
- 2 x LED strips, Schlüter-LIPROTEC-ES, length: 110 cm, warm white 3200 K
- 2 x LED strips, Schlüter-LIPROTEC-ES, length: 85 cm, warm white 3200 K
- 1 x set of decorative material supports, above/below (4 units)
- 1 x set of mirror plates, above/below (4 units)
- 1 x Schlüter-LIPROTEC-ZS connection set
- 1 x empty strip, 200 cm, 20 mm diameter
- 1 x power supply unit, 24 V, 50 W, input voltage 230 V, AC
- 1 x installation/mounting instruction
- 1 x installation tool/mounting aid

### D 90 S2

- 1 x profile frame Schlüter-LIPROTEC-D 90, 118.5 cm x 93.5 cm, incl. mitre cuts and milled edges for decorative material support incl. Schlüter-LIPROTEC-D/V corner connector
- 2 x LED strips, Schlüter-LIPROTEC-ES, length: 110 cm, neutral white 4900 K
- 2 x LED strips, Schlüter-LIPROTEC-ES, length: 85 cm, neutral white 4900 K
- 1 x set of decorative material supports, above/below (4 units)
- 1 x set of mirror plates, above/below (4 units)
- 1 x Schlüter-LIPROTEC-ZS connection set
- 1 x empty strip, 200 cm, 20 mm diameter
- 1 x power supply unit, 24 V, 50 W, input voltage 230 V, AC
- 1 x installation/mounting instruction
- 1 x installation tool/mounting aid



Decorative element dimensions (e.g. mirror):

115.3 cm x 90.3 cm (10 mm illuminated joint) **Decorative element weight:** max. 16 kg



# Accessories

The accessories in the LIPROTEC-PRO series can be brought together individually via Wago connectors. The cables can be shortened as required. The coloured sheathing of the cables simplifies installation. You can see how to connect the individual components and which system limitations exist in the PLAN section from page 98.

### Power supply

### Schlüter®-LIPROTEC-EKE

Schlüter-LIPROTEC-EKE power supply units convert the mains voltage to the 24 V required by the LED strips. They are easy to install and available in different wattages from 30 to 200 W. They are equipped with a connection cable with Euro plug for the Schlüter-LIPROTEC-PRO system.

Length of supply line: 1.8 m

Ambient temperature: -20 °C to +50 °C

Input voltage: 230 V, AC



### Schlüter®-LIPROTEC-EKE

power supply unit 24 V, DC

Watt	Max. Watt*	Art. No.	€/U.	P (Unit)
30	27	LT EKE 24V 30W	70.11	10
50	45	LT EKE 24V 50W	91.39	10
75	67.5	LT EKE 24V 75W	122.69	10
100	90	LT EKE 24V 100W	179.02	10
150	135	LT EKE 24V 150W	202.81	10
200	180	LT EKE 24V 200W	235.36	10

\* A safety reserve has to be taken into account when selecting the power supply unit (see maximum load of the corresponding power supply unit).

	LT EKE 24V 30W	LT EKE 24V 50W	LT EKE 24V 75W	LT EKE 24V 100W	LT EKE 24V 150W	LT EKE 24V 200W
B x H x T (mm)	156 x 50 x 17	160 x 58 x 18	160 x 58 x 18	164 x 57 x 17	177 x 57 x 18	195 x 67 x 31

### Low-voltage cable

### Schlüter®-LIPROTEC-ZK

Schlüter-LIPROTEC-ZK are colour-coded low-voltage cables for connecting Schlüter-LIPROTEC LED strips to a suitable power supply unit and/or receiver.



### Schlüter®-LIPROTEC-ZK

low-voltage cable 2 x 1.31 mm<sup>2</sup> (AWG 16)

L (m)	Art. No.	€/U.	P (Unit)
25	LT ZK 2A 10 25M	68.86	10

Cable for LED strips LT ES 11 - LT ES 61 and for connecting power supply and receiver



### Schlüter®-LIPROTEC-ZK

low-voltage cable 5 x 1.31 mm<sup>2</sup> (AWG 16)

L (m)	Art. No.	€/U.	P (Unit)
25	LT ZK 5A 10 25M	151.59	10

Cable for LED strips LT ES 9

### Low-voltage cable set | Wago connector

### Schlüter®-LIPROTEC-ZS

Schlüter-LIPROTEC-ZS are connecting sets for connecting Schlüter-LIPROTEC installations to a suitable power supply unit and/or receiver.





Schlüter®-LIPROTEC-ZKL

2-core

### Schlüter®-LIPROTEC-ZS

### connection set, 2-core

Art. No.	€ / Set	P (Set)
LT ZS 2A	43.96	10

Connection set for LED strip LT ES 11 -LT ES 61, and for power supply unit and receiver connection

### **Contents**

- 1 x cable 800 cm, 2 x 1.31 mm<sup>2</sup> (AWG 16)
- 1 x hollow wall junction box with lid
- 1 x concealed junction box with lid
- 2 x Wago connectors, 32 A, 5-core

### Schlüter®-LIPROTEC-ZS

### connection set, 5-core

Art. No.	€ / Set	P (Set)
LT ZS 5A	69.85	10

Connection set for LED strip LT ES 9

### Schlüter®-LIPROTEC-ZKL

### Wago connectors

Cores	Package (Units)	Art. No.	€ / Package	P (Package)
3	50	LT ZKL 1 3A	50.71	10
5	25	LT ZKL 1 5A	41.31	10

### **Contents**

- 1 x cable 800 cm, 5 x 1.31 mm<sup>2</sup> (AWG 16)
- 1 x hollow wall junction box with lid
- 1 x concealed junction box with lid
- 5 x Wago connectors, 32 A, 3-core

### Conduit | Cable duct

### Schlüter®-LIPROTEC-ZLR

# Schlüter®-LIPROTEC-ZKK



### Schlüter®-LIPROTEC-ZLR

### conduit, 20 mm diameter

L (m)	Art. No.	€/U.	P (Unit)
50	LT ZLR 20 50M	103.35	10



### Schlüter®-LIPROTEC-ZKK

### cable duct, white

L (m)	Art. No.	€/U.	P (Unit)
2.5	LT ZKK 2010	4.82	10



### Junction box

### Schlüter®-LIPROTEC-Z

### Schlüter®-LIPROTEC-Z

hollow wall junction box with lid, set = 5 units

H (mm)	Ø mm	Art. No.	€ / Set	P (Set)
47	68	LT Z 5HD 47	19.30	10

### Schlüter®-LIPROTEC-Z

hollow wall junction box with lid, set = 5 units

H (mm)	Ø mm	Art. No.	€ / Set	P (Set)
47	68	LT Z 5HDD 47	90.27	10







### Schlüter®-LIPROTEC-Z

concealed junction box with lid, set = 5 units

H (mm)	Ø mm	Art. No.	€ / Set	P (Set)
46	65	LT Z 5UD 46	14.47	10

### Schlüter®-LIPROTEC-Z

concealed junction box with cover, set = 5 units

L x B x H (mm)	Art. No.	€ / Set	P (Set)
87 x 87 x 60	LT Z 5UK 60	51.70	10

### Assembly module for cable duct

### Schlüter®-KERDI-BOARD-K

Schlüter®-KERDI-BOARD-K are installation modules with pre-milled grooves for accommodating Schlüter®-LIPROTEC cable ducts. The groove is designed to also accommodate a 19 mm Schlüter-KERDI-BOARD or the Schlüter-LIPROTEC-LL carrier profile. (Product data sheet 12.1)



### Schlüter®-KERDI-BOARD-K

installation module with cable groove, 15 x 250 cm

H (mm)	Art. No.	€/U.	PL (Unit)
19	KB 19 150 2500 K1	20.84	10
28	KB 28 150 2500 K1	24.74	10

### Bonding fleece | Reflector tape

### Schlüter®-DESIGNBASE-HVL

### Schlüter®-DESIGNBASE-HVL

self-adhesive bonding fleece

B (mm)	L = 20 m Art. No.	€/U.	P (Unit)
38	HVL 38 / 20M	34.73	10
75	HVL 75 / 20M	69.96	10



### Schlüter®-LIPROTEC-RKB

### Schlüter®-LIPROTEC-RKB

self-adhesive reflector tape

B (mm)	L = 50 m Art. No.	€/U.	P (Unit)
38	LT Z RKB 38 50M	6.90	10

### Tool

### Schlüter®-PROCUT-PSF

Schlüter-PROCUT-PSF is a special cutting tool for precisely cutting LED strips to size. To ensure that the LED strip retains IP-compliant tightness when it is shortened, it has to be cut at a 45° angle and sealed with the end caps and sealing adhesive included in the set.



### Schlüter®-PROCUT-PSF

profile cutter, joint spacer

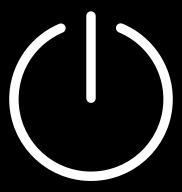
Art. No.	€/U.	P (Unit)
PSF	75.11	10





# CONTROL

Schlüter-LIPROTEC-CONTROL technology offers all the possibilities of modern lighting control with the LIPROTEC-CLASSIC and LIPROTEC-ZONES variants. The tried-and-tested CLASSIC system is a simple but convenient solution for controlling a LIPROTEC light source with a mobile device, a remote control or now also with a wireless rotary control. If you want to control several lighting areas with one control element, the new LIPROTEC-ZONES control system offers a wide range of options, including time dependent programming. Both systems work with the proven Bluetooth technology. CLASSIC or ZONES – the choice is yours, to suit your requirements for contemporary accent lighting.









PRO

EASY

CLASSIC CONTROL		Page	Page
LIPROTEC-PEBR   Receiver	SET	73	
LIPROTEC-EBR   Receiver	SET		73
LIPROTEC-ERP   Rotary control		73	73

# ZONES CONTROL

LIPROTEC-PEBZS   Starter-set receiver	SET	76	
LIPROTEC-EBZS   Starter-set receiver	SET		76
LIPROTEC-PEBZR   Receiver		77	
LIPROTEC-EBZR   Receiver			77
LIPROTEC-ERPZ   Rotary control		77	77

### KEY

Explanations of properties ,	/ Araga of application	107
	#A1(#212#01#2101011(#211(0)4	107

For technical information and properties, refer to the PLAN section starting on page 96.







FIND OUT MORE AT:

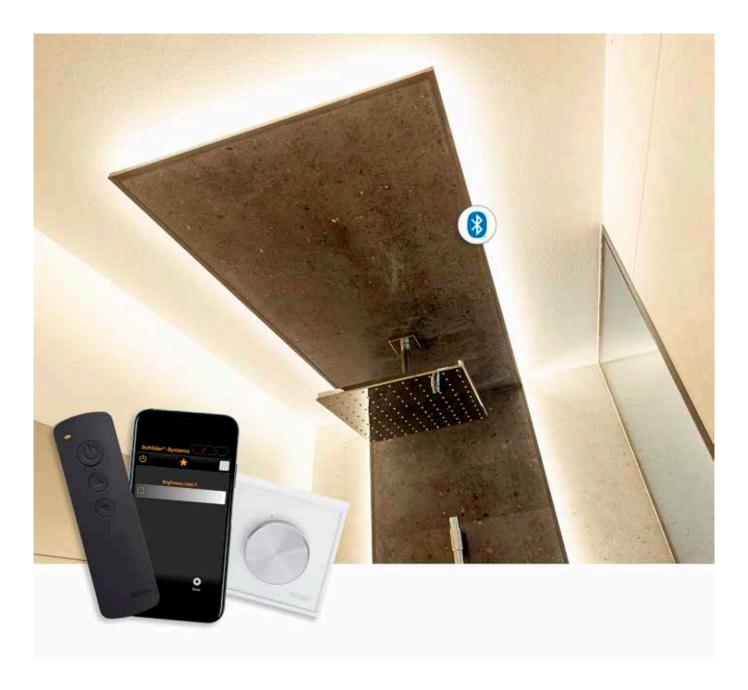
LIPROTEC.CO.UK



# Schlüter®-LIPROTEC-CLASSIC

The classic for controlling simple LED installations with Schlüter-LIPROTEC. You cannot control a light source more simply. The LIPROTEC-CLASSIC control system enables convenient control of uniform light sources throughout the room, either coloured or white. Optionally, the installation can take place in the PRO or EASY system, this is entirely at the discretion of the user. As a user, you have the choice of whether you want to control it via the remote control, the Schlüter-LED-Colour-Control app or optionally with the new, stylish wireless rotary control. The control sets can be extended by additional receivers at any time as required.

- For simple control of uniform light sources
- White LEDs or RGB+W can be controlled
- Control via app, remote control or rotary control
- Receiver and remote control in one set



# Schlüter®-LIPROTEC-ZONES

The new Schlüter-LIPROTEC-ZONES control sets standards with innovative Bluetooth Mesh technology. Even more complex installations of LED systems from the Schlüter-LIPROTEC-EASY and -PRO series can be conveniently controlled with LIPROTEC-ZONES. The LED elements can be controlled individually or combined into zones that are addressed together. With the Bluetooth Mesh technology, various light sources can be dependably operated, including across extended LED assemblies with LIPROTEC-ZONES. The practical starter sets can be extended by additional receivers at any time as required. You can control the system either with the remote control included in the starter set, with an app installed in a mobile device or with a rotary control that is available as an accessory.

- Bluetooth Mesh technology
- Control light separately in zones
- White LEDs or RGB+W or combined can be controlled
- Control via app, remote control or rotary control
- Starter sets





# Control via app

Convenient and intuitive: LIPROTEC-CLASSIC and LIPROTEC-ZONES each offer the option of control with an app for smartphones or tablets. Both apps are available for Android and iOS devices and can be downloaded and used free of charge.



schlueter-systems.com/app/





#### CLASSIC control





# Schlüter®-LIPROTEC-PEBR Schlüter®-LIPROTEC-EBR

Schlüter-LIPROTEC-PEBR/-EBR are Bluetooth receivers for controlling white or RGB+W LED strips using the included remote control or via Bluetooth on smartphones or tablets. The receiver is operated via Bluetooth by means of the Schlüter-LED-Colour-Control app, which is downloadable for free for both Android and iOS devices.

Up to two mobile devices can be simultaneously connected to the receiver. It is possible to store a preselection of lighting scenarios as favourites in the app. The very compact dimensions of the Bluetooth receiver enable space-saving installation.

The receivers are optionally available as EASY version in plug-and-play design or in the PRO version with open cable ends for connection with Wago connectors.



#### Control sets each contain:

- 1 x LIPROTEC-CLASSIC receiver
- 1 x LIPROTEC-CLASSIC remote control with wall mount
- Incl. Wago connectors (PRO only)

#### Schlüter®-LIPROTEC-PEBR | Schlüter®-LIPROTEC-EBR

control incl. receiver and remote control

Version	Type of light	Art. No.	€/U.	P (Unit)
EASY	white	LT PEBR 1	215.95	10
EASY	RGB+W	LT PEBR 4	219.09	10
PR0	white	LT EBR 1	191.13	10
PR0	RGB+W	LT EBR 4	197.70	10

#### Technical specifications for CLASSIC control

	LT PEBR 1	LT PEBR 4	LT EBR 1	LT EBR 4
Use with LED modules	white	RGB+W	-	-
Use with LED strips	-	-	LT ES 11 - LT ES 61	LT ES 9
Max. total load in the LIPROTEC system	90 W	90 W	180 W	180 W
Max. length LED strips	18 m	6 m	24 m	12 m

#### Note:

For additional technical information and properties, refer to the PLAN section.

### **CLASSIC** rotary control



# Schlüter®-LIPROTEC-ERP

Schlüter-LIPROTEC-ERP is a wireless rotary control for operating Schlüter-LIPROTEC-PEBR/-EBR Bluetooth receivers. The rotary control units include on / off / dim functions and support the use of memorised favourite light settings with the app. The units can operate both white and coloured LED strips. The genuine glass carrier plate with brilliant white rear lacquering can be combined with many commercially available frame 55 series, using the supplied adapter. If you prefer the stand-alone variant, you can also individually attach the LIPROTEC rotary control in your preferred location with our standard frame.

#### Schlüter®-LIPROTEC-ERP

wireless rotary control for Bluetooth receiver EBR / PEBR

Art. No.	€/U.	P (Unit)
LT ERP BW	106.60	10

#### Note:

For additional technical information and properties, refer to the PLAN section.



# Schlüter®-LIPROTEC-ZONES

# Creating worlds of light at home

Schlüter-LIPROTEC-ZONES is a control tool for the LED systems Schlüter-LIPROTEC-EASY and -PRO. The starter sets can be used to individually control light sources and combine them into zones. With the Bluetooth Mesh Technology, various light sources can be operated. LIPROTEC-ZONES offers 3 individual and convenient control options for your light solutions:

- Remote control supplied as a starter set
- App in a mobile device
- Rotary control available as an accessory

Decide for yourself which option is most convenient for you. The app is available free of charge for both Android and iOS devices. The simple menu lets you arrange individual light colours and colour sequences. You can also save your favourite white and coloured hues in the app.

Plug-and-play doesn't get any better than LIPROTEC-EASY: The starter sets contain pre-assembled components. More experienced users can also use the LIPROTEC-ZONES control as a PRO variant.



Our rotary control units are truly "easy" and require no wiring connection. They can be combined with many standard frames from the 55 series. All rotary controls are shipped with a corresponding adapter module. If you prefer the stand-alone variant, you can also individually attach the LIPROTEC rotary control in your preferred location with our standard frame.







# Lighting control

# with Schlüter®-LIPROTEC-ZONES

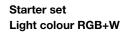
The various starter sets support the following lighting options:

Starter set Light colour white



EASY: LT PEB ZS 1 PRO: LT EB ZS 1

**Max. LED lengths in the starter set:** 2 x 18 m (EASY) / 2 x 24 m (PRO)





EASY: LT PEB ZS 4 PRO: LT EB ZS 4

Max. LED lengths in the starter set: 2 x 6 m (EASY) / 2 x 12 m (PRO)

#### Note

The RGB+W technology can also generate specific white hues ranging from warm white to neutral white.



Starter set



EASY: LT PEB ZS 1/4 PRO: LT EB ZS 1/4

Max. LED lengths (white) in the starter set: 18 m (EASY) / 24 m (PRO)

Max. LED lengths (RGB+W) in the starter set: 6~m (EASY) / 12~m (PRO)



#### Starter set

#### Starter sets each contain:

2 x LIPROTEC-ZONES Bluetooth Mesh receivers 1 x LIPROTEC-ZONES remote control with wall mount



The rotary controls can be combined with many commercially available series 55 frames.



**Rotary control** 

Available as an optional accessory



#### ZONES starter set





### Schlüter®-LIPROTEC-PEBZS Schlüter®-LIPROTEC-EBZS

Schlüter-LIPROTEC-PEBZS/-EBZS are starter sets for conveniently controlling light sources in a LIPROTEC-ZONES system. The sets allow for individual control or combining lights into zones. With the Bluetooth Mesh technology, various light sources can be independently operated, including across extended LED assemblies. You can control the system either with the remote control included in the starter set, with an app installed in a mobile device or with a rotary control that is available as an accessory. The app is available free of charge for both Android and iOS devices. The simple menu lets you arrange individual light colours and colour sequences. You can also save your favourite white and coloured hues in the app. In addition, you can specify time controlled light settings with the app. For example, you can generate automatic light scenarios for a recurring daily sequence.



#### Schlüter®-LIPROTEC-PEBZS | Schlüter®-LIPROTEC-EBZS

ZONES starter set Bluetooth Mesh receiver incl. remote control and 2 receivers

Version	Type of light	Art. No.	€/U.	P (Unit)
EASY	white	LT PEB ZS 1	364.90	10
EASY	RGB+W	LT PEB ZS 4	376.18	10
EASY	white + RGB+W	LT PEB ZS 1/4	371.05	10
PR0	white	LT EB ZS 1	342.35	10
PR0	RGB+W	LT EB ZS 4	353.63	10
PR0	white + RGB+W	LT EB ZS 1/4	348.50	10

#### Starter sets each contain:

- 2 x LIPROTEC-ZONES Bluetooth Mesh receivers
- 1 x LIPROTEC-ZONES remote control with wall mount
- Incl. Wago connectors (PRO only)

#### Technical specifications for ZONES starter sets

	LT PEB ZS 1	LT PEB ZS 4	LT PEB ZS 1/4	LT EB ZS 1	LT EB ZS 4	<b>LT EB ZS 1/4</b>
Max. total load in the LIPROTEC system	2 x 90 W	2 x 90 W	2 x 90 W	2 x 180 W	2 x 180 W	2 x 180 W
Max. length LED strips	2 x 18 m	2 x 6 m	white: 18 m. RGB+W: 6 m	2 x 24 m	2 x 12 m	white: 24 m. RGB+W: 12 m

#### Note:

For additional technical information and properties, refer to the PLAN section.



#### **ZONES** receiver

# Schlüter®-LIPROTEC-PEBZR Schlüter®-LIPROTEC-EBZR

Schlüter-LIPROTEC-PEBZR/-EBZR are Bluetooth Mesh receivers for controlling multiple LIPROTEC LED strips via the ZONES remote control, suitable Bluetooth enabled mobile devices or with a ZONES rotary control. The receivers expand light installations with Schlüter-LIPROTEC-ZONES starter sets. The receivers are operated via Bluetooth by means of the Schlüter-LED-ZONES-CONTROL app, which is available free of charge for both Android and iOS devices. The compact dimensions of the receiver enable space-saving installation.



#### Schlüter®-LIPROTEC-PEBZR | Schlüter®-LIPROTEC-EBZR

ZONES Bluetooth Mesh receiver

Version	Type of light	Art. No.	€/U.	P (Unit)
EASY	white	LT PEB ZR 1	179.38	10
EASY	RGB+W	LT PEB ZR 4	185.53	10
PR0	white	LT EB ZR 1	168.10	10
PR0	RGB+W	LT EB ZR 4	174.25	10

Note: Incl. Wago connectors (PRO only)

#### Technical specifications for ZONES receivers

	LT PEB ZR 1	LT PEB ZR 4	LT EB ZR 1	LT EB ZR 4
Max. total load in the LIPROTEC system	90 W	90 W	180 W	180 W
Max. length LED strips	18 m	6 m	24 m	12 m

#### Note:

For additional technical information and properties, refer to the PLAN section.



# ZONES rotary control

#### Schlüter®-LIPROTEC-ERPZ

Schlüter-LIPROTEC-ERPZ are Bluetooth Mesh rotary controls for operating the LIPROTEC-ZONES illuminated profile technology. The control units include on / off / dim functions. The units can operate both white and coloured LED strips. When controlling RGB+W settings, the white light colour temperature can be seamlessly adjusted from warm white (2700 K) to cold white (6500 K). The genuine glass carrier plate with brilliant white rear lacquering can be combined with many commercially available standard frame series, using the supplied adapter. If you prefer the stand-alone variant, you can also individually attach the LIPROTEC rotary control in your preferred location with our standard frame.



#### Note:

For additional technical information and properties, refer to the PLAN section.

#### Schlüter®-LIPROTEC-ERPZ

**ZONES** rotary control for Bluetooth Mesh applications

Art. No.	€/U.	P (Unit)
LT ERPZ BW	117.88	10





Good planning is the prerequisite for a project's success. The PLAN section contains all the information needed to plan your LIPROTEC projects and ensure their success - from detailed dimensions of the profile to the photometric data of our LED light strips.



FOR YOUR LIGHT PLANNING.
Light data for LIPROTEC-EASY now available on luminaires.dialux.com – Keyword: "Fliese".



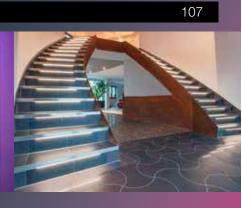


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Explanations of properties / Areas of application





FIND OUT MORE AT:

LIPROTEC.CO.UK



# Schlüter®-KERDI-BOARD-NLT/-NLT-BR

Schlüter-KERDI-BOARD-NLT/-NLT-BR are prefabricated niche sets made of KERDI-BOARD with plug-and-play LIPROTEC-LED technology. They are used to create illuminated niches and storage surfaces for all kinds of wall areas. These niches can be integrated into the Schlüter-KERDI waterproofing system as a bonded waterproofing assembly. The niches are available in different dimensions and lighting options. The rectangular niches are available with illumination either on the long or the narrow side. The LED module can either be positioned at the front edge, in the centre or at the rear of the wall that is to be tiled. The niches are available both with or without Bluetooth control. We recommend using a standard light switch for convenience. (*Product data sheet 12.2*)

NICHES	APPLICATION AREA	PROPERTIES	DIMENSIONS			
B x H x T (mm)			VERSION	LED LENGTHS (mm)	LIGHT COLOUR	
305 x 305 x 89		SET	WARM WHITE/ NEUTRAL WHITE		warm white	
305 x 508 x 89		SE 7	12 mm	300	neutral white	
305 x 711 x 89		<b>₩</b>	mm t		RGB+W	
					warm white	
508 x 305 x 89			RGB+W	505	neutral white	
		IP67	17 mm		RGB+W	
			T mm T.		warm white	
711 x 305 x 89				705	neutral white	
					RGB+W	

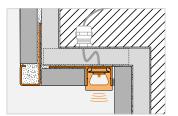
# Schlüter®-LIPROTEC-LLP

Schlüter-LIPROTEC-LLP are LED modules consisting of a fully encased LED strip with homogenous light dispersion and a U-shaped carrier profile made of aluminium. With the LED modules, coloured RGB+W light strips with more than 16 million different hues and colour temperatures of 2500 K – 6500 K can be created. The carrier profile with an installation height of 17 mm makes flush installation possible. (Product data sheet 15.8)

PROFILES / TYPE OF LIGHT	APPLICATION AREA PROPERTIES		DIMENSIONS OF LED MODULE			
	ALUMINIUM		WIDTH / HEIGHT (mm)	LENGTH (cm)		
RGB+W				50		
				100		
			20 mm	200		
	Î	IP67		250		

**Exact lengths:** 50.5 cm, 100.2 cm, 200 cm and 250 cm **Length of supply line:** 12 cm with plug connector

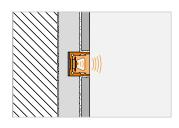




PHOTOMETRIC DATA									
RATED OUTPUT (W / Unit)	NUMBER OF LEDs (LEDs / m)	CRI	COLOUR TEMPERATURE (Kelvin)	LIGHT CURRENT (lm)	EEC	kWh / 1000 h	DEGREE OF PROTECTION	LIGHT DIRECTIONS	
1.60	280	92	3000	80	E	2		WARM WHITE/ NEUTRAL WHITE	
1.60	280	92	4900	84	Е	2			-C0-C180 -C90-C270
4.40	112	90	2700	156	F	2			90° 45° 0° 45° 90°
2.60	280	92	3000	133	Е	3			
2.60	280	92	4900	141	Е	3	IP67	RGB+W	
7.30	112	90	2700	262	F	3			-C0-C180
3.50	280	92	3000	187	Е	4			-C90-C270
3.50	280	92	4900	197	Е	4			180° 90° 0° 90° 180°
10.10	112	90	2700	364	F	3			

The specified light current refers to the entire light-emitting surface of the LED tube and may be reduced in the installed state, depending on the profile material and geometry.

In the case of RGB+W LEDs, light current, energy efficiency class and weighted consumption refer to white light only.



Dx Luminaire Finder

RATED OUTPUT (W / m)	NUMBER OF LEDs (LEDs / m)	CRI	COLOUR TEMPERATURE (Kelvin)	LIGHT CURRENT (Im / m)	EEC	kWh / 1000 h	DEGREE OF PROTECTION	LIGHT DIRECTIONS		
				323	F	3				
15	112	90	00	00	90 2700	323	F	5	IP67	-C0-C180 -C90-C270
13	112	90	2700	323	F	9	11 07	90° 45° 0° 45° 90°		
				323	F	11				

**Note:** LED strips can be shortened every 62.5 mm.

Max. length of aligned LED modules in the LIPROTEC-EASY System:  $6\ \mathrm{m}$ 

The specified energy efficiency classes refer to the light-emitting surface of the LED strip. This surface is determined by the profile geometry. In the case of RGB+W LEDs, light current, energy efficiency class and weighted consumption refer to white light only.



# Schlüter®-LIPROTEC-LLPM

Schlüter-LIPROTEC-LLPM are plug-and-play LED modules consisting of a fully encased LED strip with homogenous light dispersion and a carrier profile made of aluminium or brushed stainless steel V4A with trapezoid perforated anchoring leg. The LED modules are available either with a fixed white-light colour temperature of 3000 K or 4900 K, or with a RGB+W colour range. The latter makes it possible to choose from more than 16 million hues and colour temperatures from 2500 K – 6500 K. The white LED module is available with an installation height of 11 mm, which means it can be installed flush with the tile. (*Product data sheet 15.8*)

PROFILES / TYPE OF LIGHT	APPLICA	TION AREA	PROPERTIES	DIMENSIONS OF	LED MODULE	
	ALUMINIUM	V4A		WIDTH / HEIGHT (mm)	LENGTH (cm)	
WARM WHITE/ NEUTRAL WHITE			₹.	ALUMINIUM FT	50	
N S			Û	TH mm	100	
				V4A	200	
à			V		250	
RGB+W	Î	Î	<b>♦</b>	ALUMINIUM 17 mm	50	
		<b>₹</b>	IP67	T I I I I I I I I I I I I I I I I I I I	100	
				V4A	200	
•				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	250	

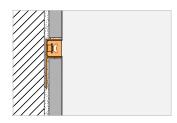
Exact lengths: 50.5 cm, 100.2 cm, 200 cm and 250 cm Length of supply line: 12 cm with plug connector

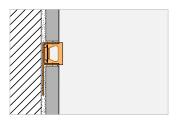
# Schlüter®-LIPROTEC-LLPE

Schlüter-LIPROTEC-LLPE are LED modules consisting of a fully encased LED strip with homogenous light dispersion and a carrier profile made of anodised aluminium. The LED module with RGB+W coloured light range makes it possible to choose from more than 16 million different hues and colour temperatures from 2500 K – 6500 K. With the LED module, accent lighting can be created at wall corners. It is suitable for use in internal and external corners in the shower, preferably positioned vertically. (*Product data sheet 15.8*)

PROFILES / TYPE OF LIGHT	APPLICATION AREA	PROPERTIES	DIMENSIONS OF LED MODULE		
	ALUM	INIUM	WIDTH / HEIGHT (mm)	LENGTH (cm)	
RGB+W		IP67	17 mm 40 mm	250	

Length of supply line: 12 cm with plug connector





Dx Luminaire Finder

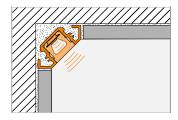
				PHOTOMETRIC	DATA									
RATED OUTPUT (W / m)	NUMBER OF LEDs (LEDs / m)	CRI	COLOUR TEMPERATURE (Kelvin)	LIGHT CURRENT (Im / m)	EEC	kWh / 1000 h	DEGREE OF PROTECTION	LIGHT DIRECTIONS						
				242 / 274	E/E	3/3		-c0-c180						
F	200	00	3000 / 4900		242 / 274	E/E	6/6		-c90-c270					
5	280	92		242 / 274	E/E	10 / 11		90° 45° 0° 45° 90°						
						242 / 274	E/E	13 / 13	IP67	90° 45° 0° 45° 90°				
		112 90								375	F	3	IPO/	-C0-C180
45	110			375	F	5								
15	112		112 90 2700	2700	90 2700	375	F	9						
				375	F	11		180° 90° 0° 90° 180°						

Note: LED strips can be shortened every 25 mm (warm white/neutral white) or 62.5 mm (RGB+W).

Max. length of aligned LED modules in the LIPROTEC-EASY System: RGB+W = 6 m, white = 18 m

The specified light current refers to the entire light-emitting surface of the LED tube and may be reduced in the installed state, depending on the profile material and geometry.

In the case of RGB+W LEDs, light current, energy efficiency class and weighted consumption refer to white light only.





Dx Luminaire Finder

				PHOTOMETRIC	DATA			
RATED OUTPUT (W / m)	NUMBER OF LED <sub>s</sub> (LEDs / m)	CRI	COLOUR TEMPERATURE (Kelvin)	LIGHT CURRENT (Im / m)	EEC	kWh / 1000 h	DEGREE OF PROTECTION	LIGHT DIRECTIONS
15	112	90	2700	323	F	11	IP67	90° 45° 0° 45° 90°

Note: LED strips can be shortened every 62.5 mm.

Max. length of aligned LED modules in the LIPROTEC-EASY System: 6 m

The specified energy efficiency classes refer to the light-emitting surface of the LED strip. This surface is determined by the profile geometry. In the case of RGB+W LEDs, light current, energy efficiency class and weighted consumption refer to white light only.



# Schlüter®-LIPROTEC-LL

Schlüter-LIPROTEC-LL is a high quality, anodised aluminium carrier profile for creating accent lighting in wall coverings and ceilings. The illumination is provided by Schlüter-LIPROTEC-ES LED strips laid into the U-shaped profile, in combination with the corresponding diffuser lens. Various direct or indirect light effects are created according to the positioning of the profile. (*Product data sheet 15.5*)

PROFILES / TYPE OF LIGHT	APPLICATION AREA	PROPERTIES	PROFILE DIMENSIONS		DIMENSIONS LED STRIPS	
	ALUMINI	UM	WIDTH / HEIGHT (mm)	LENGTH (m)	LENGTH (cm)	
WARM WHITE/ NEUTRAL WHITE					50	
					100	
Schrüter-Systems WAW	vertical installation only				150	
1 1 1 113,		IP67			200	
			و السال		250	
			17 mm	2.5	400	
RGB+W			20 mm	2.5	50	
					100	
AT ATTEMPT OF					150	
					200	
					250	
					400	

Supply line: 3 m. The 400 cm LED strips are equipped with two supply lines each. The photometric data describes the LED strips only. The optical efficiency is influenced by the properties of the diffuser lens.

# Schlüter®-LIPROTEC-LLE

Schlüter-LIPROTEC-LLE is a high quality carrier profile made of anodised or white coated aluminium for mounting the Schlüter-LIPROTEC-ES LED strips. The profile is designed to create accent lighting in wall corners. It is suitable for use in internal and external corners in horizontal or vertical alignment. With the use of the respective pre-fabricated parts, it can also be installed continuously around corners. The profile can either be simply attached to any suitable substrate with a clip system or is embedded in the tile adhesive. For lighting, the selected LIPROTEC-ES LED strip is adhered within the profile and covered with the corresponding diffuser lens. (*Product data sheet 15.7*)

PROFILES / TYPE OF LIGHT	APPLICATION AREA	PROPERTIES	PROFILE DIMENSIONS		DIMENSIONS LED STRIPS
	ALUMINI	UM	WIDTH / HEIGHT (mm)	LENGTH (m)	LENGTH (cm)
WARM WHITE/ NEUTRAL WHITE					50
					100
Schlüter Systems WAW	vertical installation only				150
2 2 2 2 2 2 2 2 4		IP67			200
			10 mm		250
				2.5	400
RGB+W			H = 8 mm	2.0	50
			40 mm		100
AT ATTACHE OF					150
man mark Thomas man Sm					200
					250
					400

Supply line: 3 m. The 400 cm LED strips are equipped with two supply lines each. The photometric data describes the LED strips only. The optical efficiency is influenced by the properties of the diffuser lens.









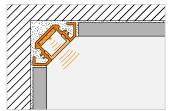
				PHOTOMETRIC	DATA			
RATED OUTPUT (W / m)	NUMBER OF LEDs (LEDs / m)	CRI	COLOUR TEMPERATURE (Kelvin)	LIGHT CURRENT (Im / m)	EEC	kWh / 1000 h	DEGREE OF PROTECTION	LIGHT DIRECTIONS
				708 / 700	F/F	4/4		
	7.5 140			730 / 752	E/F	8/8		
7.5		92	3400 / 4900	746 / 721	E/E	11 / 11		
7.5		40 52	3400 / 4900	719 / 756	E/E	14 / 15		
				771 / 741	E/E	18 / 17		
				666 / 633	E/F	26 / 26	IP67	
			387 G 4 393 G 7	387	G	4		
					_			
15.0	192	85	2700	403	G	8		
10.0	(96 RGB + 96 W)	65	2100	406	G	12		
				405	405 G 15			
				375	G	24		

Note: LED strips can be shortened every 50 mm (warm white/neutral white) or 62.5 mm (RGB+W).

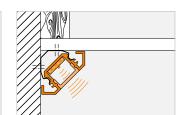
The specified energy efficiency classes exclusively refer to the LED strip.

In the case of RGB+W LEDs, light current, energy efficiency class and weighted consumption refer to white light only.









				PHOTOMETRIC	DATA				
RATED OUTPUT (W / m)	NUMBER OF LEDs (LEDs / m)	CRI	COLOUR TEMPERATURE (Kelvin)	LIGHT CURRENT (Im / m)	EEC	kWh / 1000 h	DEGREE OF PROTECTION	LIGHT DIRECTIONS	
				708 / 700	F/F	4/4			
				730 / 752	E/F	8/8			
7.5	140	92	3400 / 4900	746 / 721	E/E	11 / 11			
7.5	140	92		3400 / 4900	719 / 756	E/E	14 / 15		
				771 / 741	E/E	18 / 17			
					666 / 633	E/F	26 / 26	IP67	
				387	G	4	IPO/		
				393	G	7			
15.0	192 (96 RGB + 96 W)	85	2700	403	G	8			
15.0		00	2700	406	G	12			
				405	G	15			
				375	G	24			

Note: LED strips can be shortened every 50 mm (warm white/neutral white) or 62.5 mm (RGB+W).

The specified energy efficiency classes exclusively refer to the LED strip.

In the case of RGB+W LEDs, light current, energy efficiency class and weighted consumption refer to white light only.



# Schlüter®-LIPROTEC-WS

Schlüter-LIPROTEC-WS is a high quality carrier profile of anodised aluminium for illuminating protruding wall panels with various Schlüter-LIPROTEC-ES LED strips integrated into the profile. Differing light effects are created in combination with two different diffuser lenses. The assembly can be used to create recessed direct or indirect lighting for on-wall structures. The profile design allows for the easy replacement of the utilised diffuser lenses and bulbs, even after installation. (*Product data sheet 15.2*)

PROFILES / TYPE OF LIGHT	APPLICATION AREA	PROPERTIES	PROFILE DIMENSIONS		DIMENSIONS LED STRIPS	
	ALUMINI	UM	WIDTH / HEIGHT (mm)	LENGTH (m)	LENGTH (cm)	
WARM WHITE/ NEUTRAL WHITE			INDIRECT		50	
				1	100	
Schiller Systems WAW	vertical installation only		35 mm	'	150	
		IP67	2 H		200	
					250	
			20 mm '	1.5	400	
RGB+W			DIRECT	1.0	50	
			E		100	
10 10 10 10 10			E		150	
			17 mm 3	2.5	200	
			20 mm	2.0	250	
			not in the shower		400	

Supply line: 3 m. The 400 cm LED strips are equipped with two supply lines each. The photometric data describes the LED strips only. The optical efficiency is influenced by the properties of the diffuser lens.

# Schlüter®-LIPROTEC-WSK

Schlüter-LIPROTEC-WSK is a high quality, anodised aluminium carrier profile for illuminating protruding wall panels with various Schlüter-LIPROTEC-ES LED strips laid into the profile. Differing light effects are created in combination with two different diffuser lenses. Recessed, indirect or narrow illumination for wall protrusions are created in this way. An integrated cable duct with milling grooves for cable installation and a support bracket for Schlüter-KERDI-BOARD (19 mm) aid the installation process. (Product data sheet 15.2)

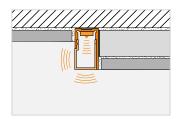
PROFILES / TYPE OF LIGHT	APPLICATION AREA	PROPERTIES	PROFILE DIMENSIONS		DIMENSIONS LED STRIPS	
	ALUMINI	UM	WIDTH / HEIGHT (mm)	LENGTH (m)	LENGTH (cm)	
WARM WHITE/ NEUTRAL WHITE			INDIRECT		50	
NEOTIVE WITHE			75 mm		100	
Schiller Systems WAW	vertical installation only		20.5 mm		150	
2 2 2 2 2 2 4		IP67	20.5		200	
			57.5 mm 17.5		250	
				2.5	400	
RGB+W			DIRECT	2.0	50	
			75 mm		100	
AT ATTEMPT OF			20.5 mm		150	
3 3 3			So.		200	
			57.5 mm 17.5		250	
			not in the shower		400	

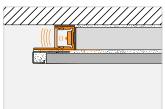
Supply line: 3 m. The 400 cm LED strips are equipped with two supply lines each. The photometric data describes the LED strips only. The optical efficiency is influenced by the properties of the diffuser lens.











				PHOTOMETRIC	DATA				
RATED OUTPUT (W / m)	NUMBER OF LEDs (LEDs / m)	CRI	COLOUR TEMPERATURE (Kelvin)	LIGHT CURRENT (Im / m)	EEC	kWh / 1000 h	DEGREE OF PROTECTION	LIGHT DIRECTIONS	
				708 / 700	F/F	4/4		INDIRECT	
				730 / 752	E/F	8/8			
7.5	140	92	3400 / 4900	746 / 721	E/E	11 / 11			
7.5		140 92	34007 4300	719 / 756	E/E	14 / 15			
				771 / 741	E/E	18 / 17		_	
				666 / 633	E/F	26 / 26	IP67		
				387	G	4	IP07	DIRECT	
				393	G	7			
15	192	0700	0.5	0700	403	G	8		
15	(96 RGB + 96 W) 85	83	2700	406	G	12			
					405	G	15		
				375	G	24			

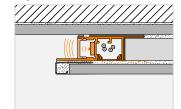
Note: LED strips can be shortened every 50 mm (warm white/neutral white) or 62.5 mm (RGB+W).

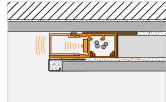
The specified energy efficiency classes exclusively refer to the LED strip.

In the case of RGB+W LEDs, light current, energy efficiency class and weighted consumption refer to white light only.









					PHOTOMETRIC	DATA				
	RATED OUTPUT (W / m)	NUMBER OF LEDs (LEDs / m)	CRI	COLOUR TEMPERATURE (Kelvin)	LIGHT CURRENT (Im / m)	EEC	kWh / 1000 h	DEGREE OF PROTECTION	LIG	HT DIRECTIONS
					708 / 700	F/F	4/4		INDIRECT	
		140		3400 / 4900	730 / 752	E/F	8/8			
	7.5		92		746 / 721	E/E	11 / 11			
			32.		719 / 756	E/E	14 / 15			
					771 / 741	E/E	18 / 17			
					666 / 633	E/F	26 / 26	IP67		
					387	G	4	IP07	DIRECT	
					393	G	7			
	15	192	05	2700	403	G	8			
	15	(96 RGB + 96 W)		2700	406	G	12			
					405	G	15			
					375	G	24			

Note: LED strips can be shortened every 50 mm (warm white/neutral white) or 62.5 mm (RGB+W).

The specified energy efficiency classes exclusively refer to the LED strip.

In the case of RGB+W LEDs, light current, energy efficiency class and weighted consumption refer to white light only.



# Schlüter®-LIPROTEC-WSQ

Schlüter-LIPROTEC-WSQ is a high quality carrier profile of anodised aluminium for illuminating raised wall panels with various Schlüter-LIPROTEC-ES LED strips integrated into the profile. Differing light effects are created in combination with two different diffuser lenses. The assembly can be used to create recessed direct or indirect lighting for on-wall structures. LIPROTEC-WSQ features a formed cover finish with timelessly modern Schlüter-QUADEC design. The profile design allows for the easy replacement of the utilised diffuser lenses and bulbs, even after installation. (*Product data sheet 15.2*)

PROFILES / TYPE OF LIGHT	APPLICATION AREA	PROPERTIES	PROFILE DIMENSIONS		DIMENSIONS LED STRIPS	
	ALUMINI	UM	WIDTH / HEIGHT (mm)	LENGTH (m)	LENGTH (cm)	
WARM WHITE/ NEUTRAL WHITE			INDIRECT T		50	
			=		100	
Schiller Systems WAW	vertical installation only		11		150	
2 2 2 2 2 2 2 2 2 3 4		IP67	33		200	
					250	
			' 20 mm '	2.5	400	
RGB+W			DIRECT	2.5	50	
			ء الله		100	
AT ATTION OF SH			11		150	
3 3 3			mm 71 mm 8		200	
			20 mm		250	
			not in the shower		400	

Supply line: 3 m. The 400 cm LED strips are equipped with two supply lines each. The photometric data describes the LED strips only. The optical efficiency is influenced by the properties of the diffuser lens.

# Schlüter®-LIPROTEC-PB

Schlüter-LIPROTEC-PB is a high quality edge profile of anodised aluminium with a visible area of 25 mm. It is designed for mounting Schlüter-LIPROTEC-ES LED strips and can be used with Schlüter-TREP stair nosing profiles to create appealing lighting along the edges of platforms. Differing light effects are created in combination with two different diffuser lenses. Edges can either be illuminated indirectly or directly by adding a 3 mm light strip. Another application area of LIPROTEC-PB is the direct or indirect illumination of work surface front edges. The profile design allows for the easy replacement of the utilised diffuser lenses and bulbs, even after installation. (*Product data sheet 15.4*)

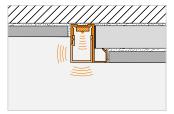
PROFILES / TYPE OF LIGHT	APPLICATION AREA	PROPERTIES	PR	OFILE DIMENSIONS	DIMENSIONS LED STRIPS		
	ALUMINI	UM		/ HEIGHT nm)	LENGTH (m)	LENGTH (cm)	
WARM WHITE / NEUTRAL WHITE		0.0	INDIRECT	DIRECT	1	50	
	7				1	100	
CINE OF MANAGE			28 mm	28 mm	1.5	150	
		IP65		28 - 28 - 28 - 28 - 28 - 28 - 28 - 28 -	1.5	200	
			16.5 mm	16.5 mm	2.5	250	
					2.0	400	

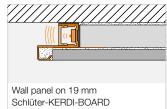
Supply line: 3 m. The 400 cm LED strips are equipped with two supply lines each. The photometric data describes the LED strips only. The optical efficiency is influenced by the properties of the diffuser lens.











					PHOTOMETRIC	DATA			
	RATED OUTPUT (W / m)	NUMBER OF LEDs (LEDs / m)	CRI	COLOUR TEMPERATURE (Kelvin)	LIGHT CURRENT (Im / m)	EEC	kWh / 1000 h	DEGREE OF PROTECTION	LIGHT DIRECTIONS
				3400 / 4900	708 / 700	F/F	4/4		INDIRECT
		140			730 / 752	E/F	8/8		
	7.5		92		746 / 721	E/E	11 / 11		
					719 / 756	E/E	14 / 15		
					771 / 741	E/E	18 / 17		_
					666 / 633	E/F	26 / 26	IP67	
					387	G	4	IP07	DIRECT
					393	G	7		
	15	192	85	2700	403	G	8		
	15	(96 RGB + 96 W)	00	2100	406	G	12		
					405	G	15		
					375	G	24		

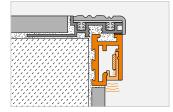
Note: LED strips can be shortened every 50 mm (warm white/neutral white) or 62.5 mm (RGB+W).

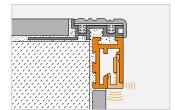
The specified energy efficiency classes exclusively refer to the LED strip.

In the case of RGB+W LEDs, light current, energy efficiency class and weighted consumption refer to white light only.









				PHOTOMETRIC	DATA			
RATED OUTPUT (W / m)	NUMBER OF LEDs (LEDs / m)	CRI	COLOUR TEMPERATURE (Kelvin)	LIGHT CURRENT (lm / m)	EEC	kWh / 1000 h	DEGREE OF PROTECTION	LIGHT DIRECTIONS
			(Kelvili)	610 / 650	F/F	4/4		INDIRECT
				614 / 621	F/F	8/8		
7.5	140	92	3200 / 4900	603 / 636	F/F	11 / 11	IP65	
7.5	140	92	3200 / 4900	621 / 637	F/F	15 / 15	11-03	DIRECT
				566 / 630	F/F	18 / 18		
				541 / 587	F/F	26 / 27		

**Note:** LED strips can be shortened every 50 mm (warm white/neutral white). The specified energy efficiency classes exclusively refer to the LED strip.



# Schlüter®-DESIGNBASE-QD

Schlüter-DESIGNBASE-QD is a high quality profile of anodised aluminium for versatile applications. It is designed for mounting various Schlüter-LIPROTEC-ES LED strips as a skirting or border profile in wall areas. A 39 mm diffuser lens is then used between the 10 mm wide (approx.) visible areas of the profile to create direct illumination. Other decorative materials such as tiles or wooden elements can also be inserted in the open space. The profile design allows for the easy replacement of the utilised diffuser lenses and bulbs, even after installation. (*Product data sheet 16.1*)

PROFILES / TYPE OF LIGHT	APPLICATION AREA	PROPERTIES	PROFILE DIMENSIONS	PROFILE DIMENSIONS		
	ALUMINI	UM	WIDTH / HEIGHT (mm)	LENGTH (m)	LENGTH (cm)	
WARM WHITE / NEUTRAL WHITE		N N			50	
	vertical installation only	<b>%</b>			100	
	vertical installation only	IP67	шш 09	2.5	150	
			99	2.0	200	
		$\frac{\Diamond}{\Diamond}$	12.5		250	
					400	

Supply line: 3 m. The 400 cm LED strips are equipped with two supply lines each. The photometric data describes the LED strips only. The optical efficiency is influenced by the properties of the diffuser lens.

# Schlüter®-LIPROTEC-VB

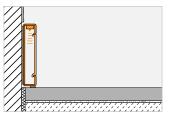
Schlüter-LIPROTEC-VB is a high quality tile finishing profile for wall areas, with a visible area of 25 mm. It is designed for mounting Schlüter-LIPROTEC-ES LED strips and can be used to create varying light effects in combination with two different diffuser lenses. Indirect light can either radiate from the profile edge to the ceiling via adjoining materials or along the skirting. Additionally, a 3 mm light strip can create direct light. The profile design allows for the easy replacement of the utilised diffuser lenses and bulbs, even after installation. (*Product data sheet 15.1*)

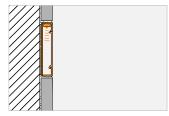
PROFILES / TYPE OF LIGHT	APPLICATION AREA	PROPERTIES	PI	ROFILE DIMENSIONS	DIMENSIONS LED STRIPS		
	ALUMINI	UM		H / HEIGHT	LENGTH (m)	LENGTH (cm)	
WARM WHITE / NEUTRAL WHITE			INDIRECT	DIRECT	4	50	
			25 mm - 25		ı	50 100 150	
CINEN N MENINE				25 1	1.5		
•		IP65		*	1.5	200	
			= H	= H	2.5	250	
				U	2.0	400	

Supply line: 3 m. The 400 cm LED strips are equipped with two supply lines each. The photometric data describes the LED strips only. The optical efficiency is influenced by the properties of the diffuser lens.







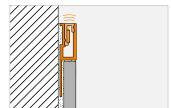


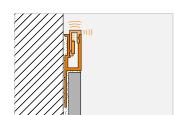
	PHOTOMETRIC DATA											
	RATED OUTPUT (W / m)	NUMBER OF LEDs (LEDs / m)	CRI	COLOUR TEMPERATURE (Kelvin)	LIGHT CURRENT (Im / m)	EEC	kWh / 1000 h	DEGREE OF PROTECTION	LIGHT DIRECTIONS			
				3400 / 4900	771 / 757	F/F	4/4					
					772 / 794	F/F	8/8					
	7.5	140	140 92		880 / 817	E/E	12 / 12	IP67				
	7.5 14	140			801 / 780	E/E	15 / 15					
					785 / 799	E/E	18 / 18					
					725 / 693	E/E	27 / 25					

**Note:** LED strips can be shortened every 50 mm (warm white/neutral white). The specified energy efficiency classes exclusively refer to the LED strip.









				PHOTOMETRIC	DATA			
RATED OUTPUT (W / m)	NUMBER OF LEDs (LEDs / m)	CRI	COLOUR TEMPERATURE (Kelvin)	LIGHT CURRENT (Im / m)	EEC	kWh / 1000 h	DEGREE OF PROTECTION	LIGHT DIRECTIONS
				610 / 650	F/F	4/4		INDIRECT
			0000 / 4000	614 / 621	F/F	8/8		
7.5	140	00		603 / 636	F/F	11 / 11	IP65	
7.5	140	92	3200 / 4900	621 / 637	F/F	15 / 15	IFOO	DIRECT
				566 / 630	F/F	18 / 18		
				541 / 587	F/F	26 / 27		

**Note:** LED strips can be shortened every 50 mm (warm white/neutral white). The specified energy efficiency classes exclusively refer to the LED strip.



# Schlüter®-LIPROTEC-D

Schlüter-LIPROTEC-D is a decorative carrier profile for wall areas of anodised aluminium with a visible area of 6 mm. It allows for the insertion of various decorative materials such as glass or mirrors to adjoin ceramic tile coverings. LIPROTEC-D can be used to mount Schlüter-LIPROTEC-ES LED strips for creating indirect light effects around a decorative element. The profile design allows for the easy replacement of the utilised diffuser lenses and bulbs, even after installation. (*Product data sheet 15.3*)

P	ROFILES / TYPE OF LIGHT	APPLICATION AREA	PROPERTIES	PROFILE DIMENSIONS			DIMENSIONS LED STRIPS	
		ALUMINI	UM	WIDTH / HEIGHT (mm)		LENGTH (m)	LENGTH (cm)	
	ARM WHITE / EUTRAL WHITE		<b>₽</b>		H = 4.5		50	
			Ŷ	6			100	
41	on the System of the Land			ω H=H	H = 7.5	2.5	150	
	•		IP65	40 mm	H = 9.0	2.5	200	
			11 00				250	
					H = 16.5		400	

Supply line: 3 m. The 400 cm LED strips are equipped with two supply lines each. The photometric data describes the LED strips only. The optical efficiency is influenced by the properties of the diffuser lens.

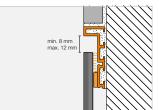
# Wall panel sets (WSK)

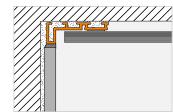
The wall panel sets with RGB+W light makes it easy to make a big impression. Simply select between the wide (128.5 cm) and narrow (70 cm) wall panels and order the practical profile set with it. Our RGB+W technology provides you with unlimited design freedom: more than 16 million hues turn your rooms into colour-flooded leisure zones. White hues from 2500 K – 6500 K let your wall panels radiate the same light as your existing ceiling light. If desired, it can be controlled with a Bluetooth receiver. The matching Schlüter-Systems app can be downloaded for free from Google Play (Android<sup>TM</sup>) or the Apple App Store (iOS).

PROFILES / TYPE OF LIGHT	APPLICATION AREA	PROPERTIES	PROFILE DIMENSIONS	DIMENSIONS LED STRIPS		
	ALUMINI	UM	WIDTH / HEIGHT (mm)	LENGTH (m)	LENGTH (cm)	
RGB+W		SET	75 mm	2,5	250	

Supply line: 3 m. The photometric data describes the LED strips only.





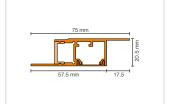


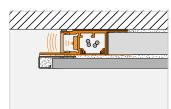
	PHOTOMETRIC DATA										
	RATED OUTPUT (W / m)	NUMBER OF LEDs (LEDs / m)	CRI	COLOUR TEMPERATURE (Kelvin)	LIGHT CURRENT (Im / m)	EEC	kWh / 1000 h	DEGREE OF PROTECTION	LIGHT DIRECTIONS		
					610 / 650	F/F	4/4				
			140 92 3:		614/ 621	F/F	8/8				
	7.5	140		3200 / 4900	603 / 636	F/F	11/11	IP65			
	7.5 140	140			621 / 637	F/F	15 / 15	IPOS			
				566 / 630	F/F	18 / 18					
				541 / 587	F/F	26 / 27					

**Note:** LED strips can be shortened every 50 mm (warm white/neutral white). The specified energy efficiency classes exclusively refer to the LED strip.









			PHOTOMETRIC DATA						
RATED OUTPUT (W / m)	NUMBER OF LEDs (LEDs / m)	CRI	COLOUR TEMPERATURE (Kelvin)	LIGHT CURRENT (lm / m)	EEC	kWh / 1000 h	DEGREE OF PROTECTION	Ц	GHT DIRECTIONS
15	192 (96 RGB + 96 W)	85	2700	405	2 x G	2 x 15	IP67	INDIRECT	

Note: LED strips can be shortened every 62.5 mm (RGB+W).

The specified energy efficiency classes exclusively refer to the LED strip.

In the case of RGB+W LEDs, light current, energy efficiency class and weighted consumption refer to white light only.



# Staircase sets (PB)

Schlüter-LIPROTEC-PB stair sets put light where it is needed: in the middle of the stair step. The PB 15 sets for 15 steps have 60 cm wide LED modules pre-mounted in the middle. With their diffuser lenses, they provide indirect illumination with a discreet line of light. The combinations of aluminium carrier profile and diffuser lens are 100/150 cm long and can be shortened individually as required. The LED modules have a 4500 K neutral white colour temperature and are cabled by means of a simple coupling system; a 500 cm connection cable and power supply are included in the set.

If that isn't enough, the stair set can easily be expanded to 18 steps with only one supply line. With this in mind, use the Schlüter-LIPROTEC-PB 1 single-step sets.

PROFILES / TYPE OF LIGHT	APPLICATION AREA	PROPERTIES		PROFILE DIMENSIONS	DIMENSIONS LED STRIPS		
	ALUMINI	UM		WIDTH / HEIGHT (mm)	LENGTH (m)	LENGTH (cm)	
NEUTRAL WHITE	<b>U</b> C	SET	DIRECT	ir si	1	60	
	7	QZI)		28 mm	1.5	60	
					1 (15 units)	60 (15 units)	
				16.5 mm 1	1.5 (15 units)	60 (15 units)	

The photometric data describes the LED strips only.

# Decorative frame sets (D)

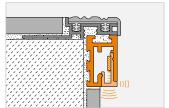
Schlüter-LIPROTEC-D 90 are sets for creating illuminated decorative frames. With these sets, mirrors or design elements such as printed glass or decor panels can be elegantly framed with indirect LED lighting. The support profiles are already mitre-cut. Four matching Schlüter-LIPROTEC-ES-LED strips with a colour temperature of 3200 K (warm white) or 4900 K (neutral white) are included in the set, as well as the power supply unit and all material for assembly and wiring.

PROFILES / TYPE OF LIGHT	APPLICATION AREA	PROPERTIES	PROFILE DIM	PROFILE DIMENSIONS		DIMENSIONS LED STRIPS	
	ALUMINI	UM	WIDTH / HEIGHT (mm)		LENGTH (m)	LENGTH (cm)	
S1 WARM WHITE	<b>(</b>	SET					
all the first that the first training			6				
S2 NEUTRAL WHITE			40 mm	H = 9.0	1.185 / 0.935 (2 units)	110 / 85 (2 units)	
data a stata							

Supply line: 3 m. The photometric data describes the LED strips only.







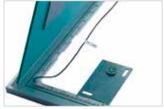
PHOTOMETRIC DATA								
RATED OUTPUT (W)	NUMBER OF LEDs (Unit)	CRI	COLOUR TEMPERATURE (Kelvin)	LIGHT CURRENT (Im / m)	EEC	kWh / 1000 h	DEGREE OF PROTECTION	LIGHT DIRECTIONS
3.7	72	80	4500	375	E	3	IP20	DIRECT
5.1	12	00	4300	373	15 x E	15 x 3	11 20	

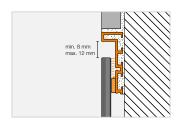
**Note:** Single step sets are delivered with a 70 cm connecting cable.

Complete sets with 15 profiles are supplied with a 500 cm cable supply line and 14 x 70 cm connecting cables.

The specified energy efficiency classes exclusively refer to the LED strip.







PHOTOMETRIC DATA								
RATED OUTPUT (Set)	NUMBER OF LEDs (LEDs / m)	CRI	COLOUR TEMPERATURE (Kelvin)	LIGHT CURRENT (lm / m)	EEC	kWh / 1000 h	DEGREE OF PROTECTION	LIGHT DIRECTIONS
29,3	140 92	92	3200	595	4 x F	2 x 8 2 x 11	IP65	
28,9		140 92	4900	609	4 x F	2 x 8 2 x 11		

Note: LED strips can be shortened every 50 mm (warm white/neutral white).

The energy efficiency class and the weighted consumption refer to the unshortened LED strips only. The rated output describes the power rating for the LED strips that have been shortened to size for the installation.



# **CLASSIC** control

# Schlüter®-LIPROTEC-PEBR | Schlüter®-LIPROTEC-EBR

#### Technical specifications for control

	LT PEBR 1	LT PEBR 4	LT EBR 1	LT EBR 4
Version	EASY	EASY	PRO PRO	PRO
Receiver/remote control transmission standard	Bluetooth/radio	Bluetooth/radio	Bluetooth/radio	Bluetooth/radio
Use with LED modules	white	RGB+W	-	-
Use with LED strips	-	-	LT ES 11 - LT ES 61	LT ES 9
Max. range	10 m	10 m	10 m	10 m
Input voltage	24 V, DC	24 V, DC	24 V, DC	24 V, DC
Max. total load in the LIPROTEC system	90 W	90 W	180 W	180 W
Max. length LED strips	18 m	6 m	24 m	12 m
Degree of protection	IP63	IP63	IP63	IP63
Ambient temperature	−20 °C to +50 °C	-20 °C to +50 °C	-20 °C to +50 °C	-20 °C to +50 °C

# **ZONES** control

# Schlüter®-LIPROTEC-PEBZS | Schlüter®-LIPROTEC-EBZS

#### Technical specifications for ZONES starter sets

	LT PEB ZS 1	LT PEB ZS 4	LT PEB ZS 1/4	LT EB ZS 1	LT EB ZS 4	LT EB ZS 1/4
Version	EASY	EASY	EASY	PR0	PR0	PR0
Transmission standard	Bluetooth Mesh	Bluetooth Mesh	Bluetooth Mesh	Bluetooth Mesh	Bluetooth Mesh	Bluetooth Mesh
Max. range	10 m	10 m	10 m	10 m	10 m	10 m
Input voltage	24 V, DC	24 V, DC	24 V, DC	24 V, DC	24 V, DC	24 V, DC
Max. total load in the LIPROTEC system	2 x 90 W	2 x 90 W	2 x 90 W	2 x 180 W	2 x 180 W	2 x 180 W
Max. length LED strips	2 x 18 m	2 x 6 m	white: 18 m. RGB+W: 6 m	2 x 24 m	2 x 12 m	white: 24 m. RGB+W: 12 m
Degree of protection	IP63	IP63	IP63	IP63	IP63	IP63
Ambient temperature	−20 °C to +50 °C	-20 °C to +50 °C	−20 °C to +50 °C	-20 °C to +50 °C	−20 °C to +50 °C	−20 °C to +50 °C

# Schlüter®-LIPROTEC-PEBZR | Schlüter®-LIPROTEC-EBZR

# Technical specifications for ZONES receivers

	LT PEB ZR 1	LT PEB ZR 4	LT EB ZR 1	LT EB ZR 4
Version	EASY	EASY	PRO PRO	PRO PRO
Transmission standard	Bluetooth Mesh	Bluetooth Mesh	Bluetooth Mesh	Bluetooth Mesh
Max. range	10 m	10 m	10 m	10 m
Input voltage	24 V, DC	24 V, DC	24 V, DC	24 V, DC
Max. total load in the LIPROTEC system	90 W	90 W	180 W	180 W
Max. length LED strips	18 m	6 m	24 m	12 m
Degree of protection	IP63	IP63	IP63	IP63
Ambient temperature	-20 °C to +50 °C	−20 °C to +50 °C	-20 °C to +50 °C	−20 °C to +50 °C

# CLASSIC/ZONES rotary control

# Schlüter®-LIPROTEC-ERP | Schlüter®-LIPROTEC-ERPZ

# Technical specifications for rotary control

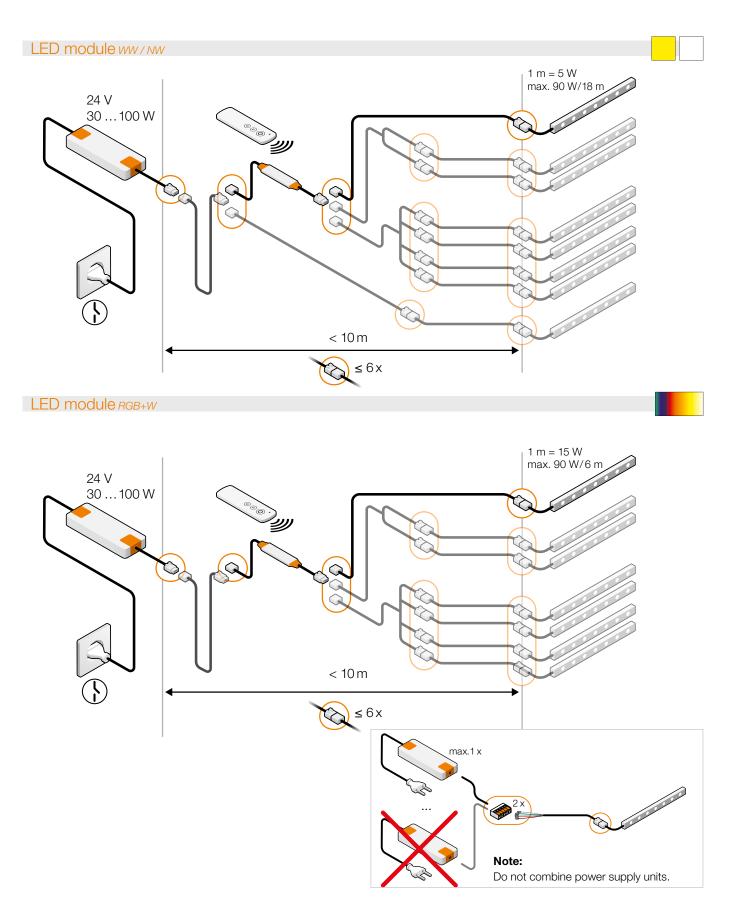
	LT ERP	LT ERPZ
Version	CLASSIC	ZONES
Transmission standard	Radio (433.92 MHz)	Bluetooth Mesh
Max. range	10 m	10 m
Battery type	CR2032	CR2032
Degree of protection	IP20	IP20
Ambient temperature	+10 °C to +50 °C	+10 °C to +50 °C

#### Note:

The rotary control must be protected against direct exposure to water. It can only be combined with flat frames measuring  $55 \times 55$  mm.



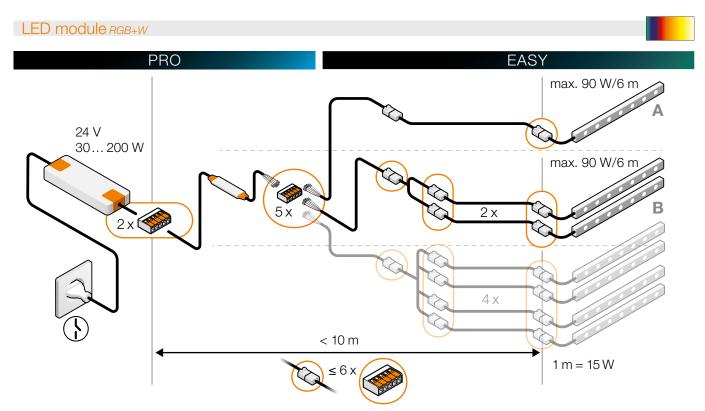
# LIPROTEC-EASY-CLASSIC wiring diagrams



# LIPROTEC-EASY and -PRO-CLASSIC wiring diagrams using an adapter

# PRO EASY max. 90 W/18 m A 30 ... 200 W a 1 m = 5 W

**Note:** Max. length of LED modules in a row in the LIPROTEC-EASY system when using the plug-and-play adapter: 18 m per cable strand (A or B) depending on the power supply unit used.



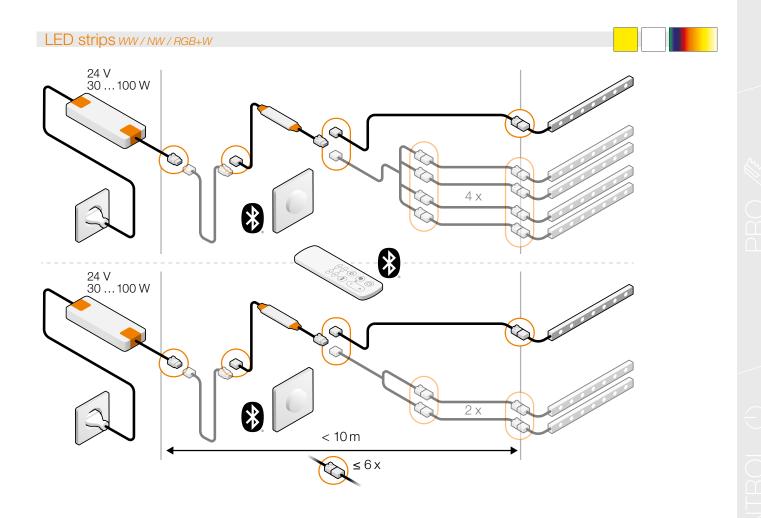
**Note:** Max. length of LED modules in a row in the LIPROTEC-EASY system when using the plug-and-play adapter: 6 m per cable strand (A or B) depending on the power supply unit used.



# LIPROTEC-PRO wiring diagrams

# Use of Wago connectors in the PRO system max. 180 W max. 180 W representation of the property of the proper

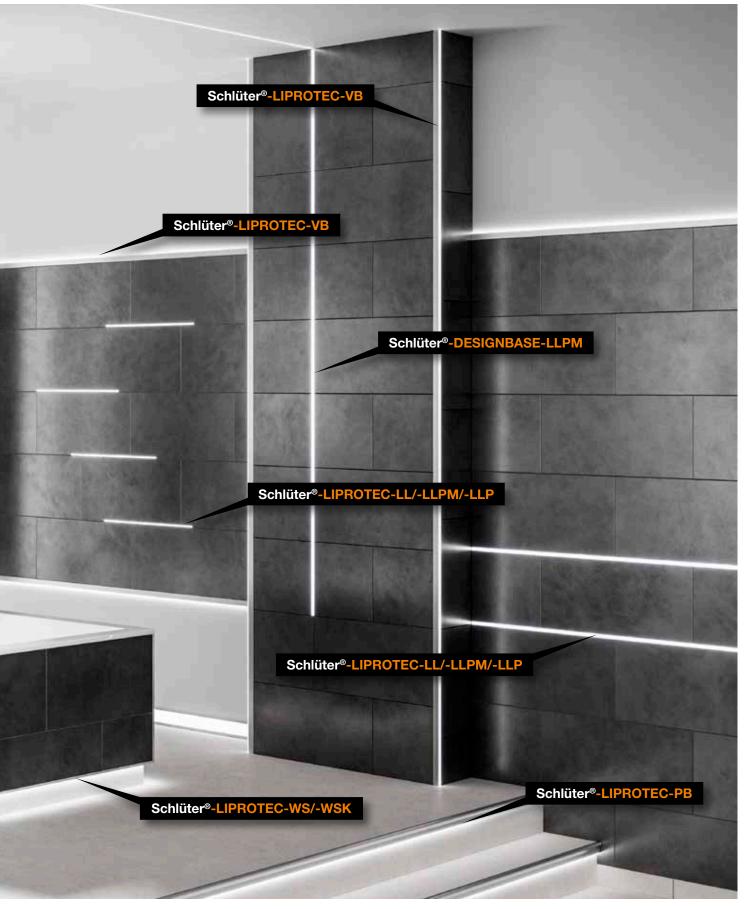
# LIPROTEC-EASY-ZONES wiring diagrams



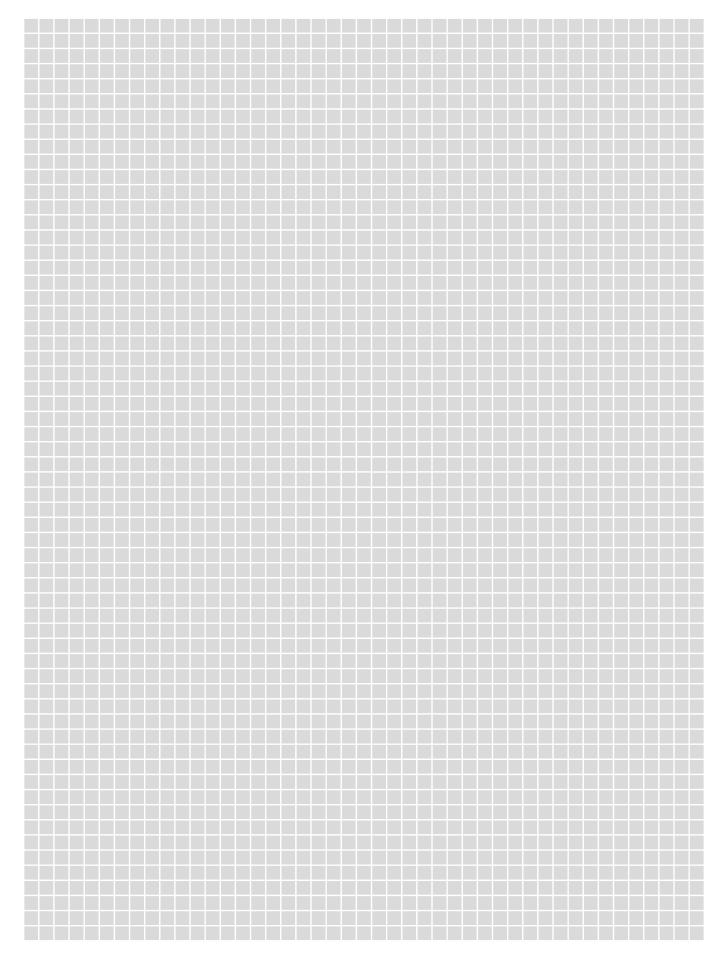


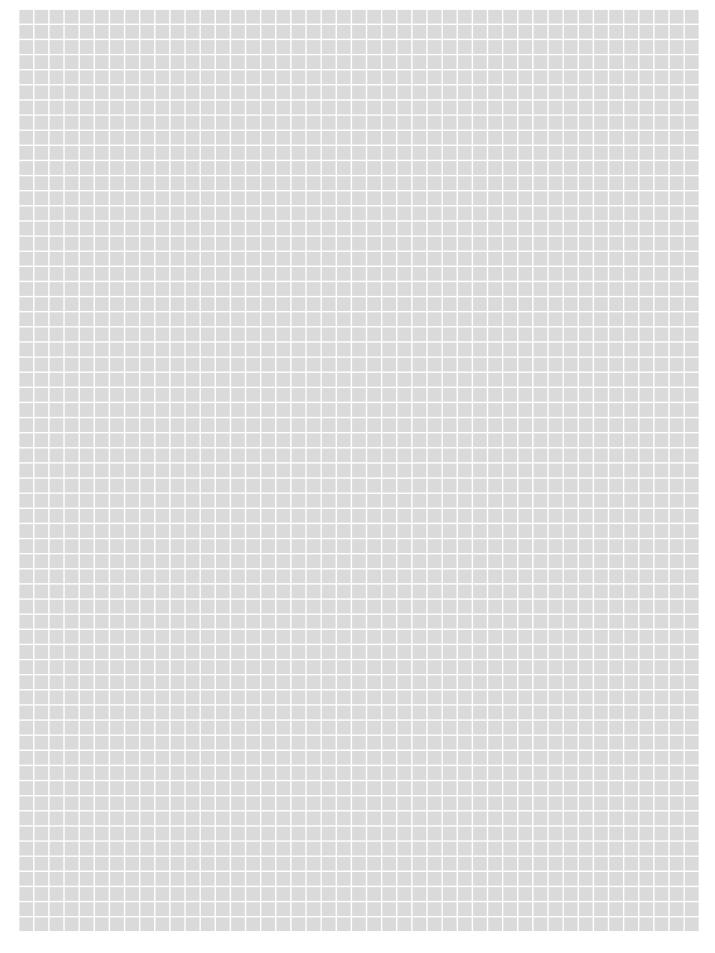
# Schlüter®-LIPROTEC application areas













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# Key

Properties



Low assembly height



Plug-and-play



Available as a set



LED can be shortened



IP X5 (protection against water jets)



IP X7 (protection against temporary submersion)



Bluetooth-enabled



Radio-compatible

# Application areas



Suitable for use on the wall in the shower area



Suitable for use on walls in interior spaces



Suitable for use on the ceiling



Suitable for use in inner corners of rooms



Suitable for use on an external room corner



Suitable for use on the floor of privately used areas



Suitable for use on staircase steps



For use in pool landscapes, but not underwater (increased resistance against chlorine)



Suitable for use on walls in exterior spaces

#### **Packaging units**

P = box packaging

KV = case packaging

PL = euro pallet

Unit = units

#### **Dimensions**

H = height

= length

= width

Τ = depth

#### **Innovations**







liprotec.com

schlueter-systems.com/app/

# Information Find out more!





Please refer to the Technical Manual or the operating instructions accompanying the product for detailed technical information on the installation of Schlüter-LIPROTEC.

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