## Schlüter<sup>®</sup>-LIPROTEC

### Illustrated price list LT 24

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### 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

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.

## PRO

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

## ) CONTROL

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

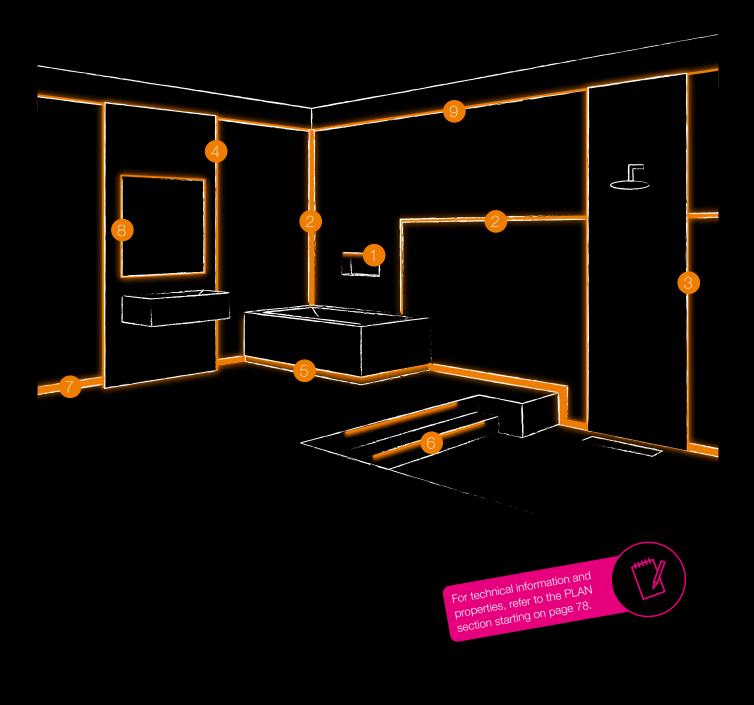
- Available in EASY
   and PRO version
- For white and coloured LED lighting solutions
- With proven Bluetooth<sup>®</sup> technology
- Via remote control, mobile device or wireless rotary control

- Technical details
- 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).



#### Overview: Areas of application

		Overview: Areas of application		
1	NICHE	EASY	PRO	
	NLT – Niche with LED lighting, coloured + white	SET	Page 8	Page
	NLT-BR – Niche with LED lighting, coloured + white, incl. controller	SET	0 10	
2	LINEAR LIGHT	0L1		
2			10	
	LLPM – LED module, coloured + white   Linear light with anchoring leg	MODULE	12	
	LLP – LED module, coloured   Linear light LLPE – LED module, coloured   Linear light   Wall corner	MODULE	14 16	
	LL – Linear light, coloured + white	MODULE	10	22
	LLE – Linear light, coloured + white   Corner			26
3				20
3	SHOWER			
	LLPM – LED module, coloured + white   Linear light with anchoring leg	MODULE	12	
	LLP – LED module, coloured   Linear light	MODULE	14	
	LLPE – LED module, coloured   Linear light   Wall corner	MODULE	16	00
	LL – Linear light, coloured + white			22
	LLE – Linear light, coloured + white   Corner			26
	WS – Wall panel lighting, coloured + white	OFT		30 34/58
	WSK – Wall panel lighting with cable duct, coloured + white	SET		34/58
	WSQ – Wall panel lighting with QUADEC finishing profile, coloured + white			30
4	WALL PANEL			
	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
5	BATHTUB			
	LLPM – LED module, coloured + white   Linear light with anchoring leg	MODULE	12	
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6	STAIRCASE			
	PB – Stair edge lighting, white	SET		42/60
7	BASEBOARD			
	DESIGNBASE-QD – Landing/border profile, white			46
	VB – Cove lighting, white			50
8	MIRROR			
0			10	
	LLPM – LED module, coloured + white   Linear light with anchoring leg	MODULE	12	
	LLP – LED module, coloured   Linear light	MODULE	14	54/00
	D – Carrier profile for mirror, white	SET		54/62 30
	WS – Wall panel lighting, coloured + white WSK – Wall panel lighting with cable duct, coloured + white	SET		30
		SET		
9	LIGHTING COVE			
	WS – Wall panel lighting, coloured + white			30
	WSK – Wall panel lighting with cable duct, coloured + white	SET		34/58
	VB – Cove lighting, white			50

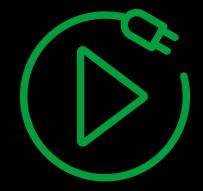
FASY (

## 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.





#### Welcome to the EASY section

# SETSPageNLT - Niche with LED lighting, coloured + whiteSET8NLT-BR - Niche with LED lighting, coloured + white, incl. controllerSET10LLPM - LED module, coloured + white | Linear light with anchoring legMODULE12LLP - LED module, coloured | Linear light | Wall cornerMODULE14LLPE - LED module, coloured | Linear light | Wall cornerMODULE16

#### ACCESSORIES

End cap LED strip	18
Power supply units	18
Cables / Distributors	18/19
Adapter / Hollow-wall box / Tool	19

#### KEY

Explanations of properties / Areas of application	107
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:

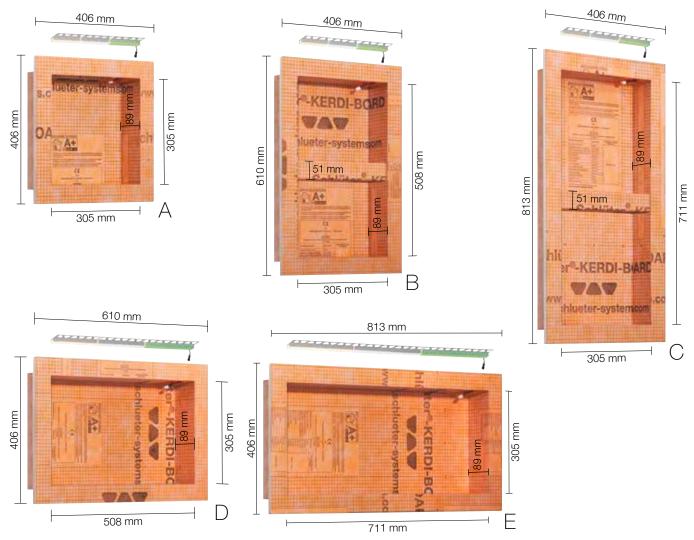
## Schlüter<sup>®</sup>-KERDI-BOARD-NLT



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



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

	o 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
А	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
E	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.

Included cable

#### 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

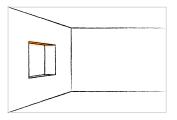
NLT 1 (wa	rm white)
Dimensions of LED (B x H)	12 x 10.5 mm
Rated output (W/Unit)	See table on page 80
Number of LED (u./m)	280
Colour temperature (Kelvin)	3000 K
CRI	92
Included power supply	230 V, 15 W

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



Schlüter-SHELF-N offers precisely fitting shelves for the niche sets A, B and C. Please refer to our Schlüter®-PROFILES and SYSTEMS price list for design variants and material qualities.

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#### 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<sup>®</sup>-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)



#### Set includes:



Note: The different niche variants are listed on page 8.

Including Bluetooth receiver and remote controll For explanations of the symbols, refer to page 107.

#### Niche set with LED lighting and controller

#### Schlüter<sup>®</sup>-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

#### LT PEBR 4

Receiver/remote control transmission standard	Bluetooth/radio
Max. range	10 m
Input voltage	24 V, DC
Max. total load in the LIPROTEC system	90 W
Max. length LED strips	6 m
Degree of protection	IP63
Ambient temperature	-20 °C to +50 °C

Schlüter-SHELF-N offers precisely fitting shelves for the niche sets A, B and C. Please refer to our Schlüter®-PROFILES and SYSTEMS price list for design variants and material qualities.

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#### Note:

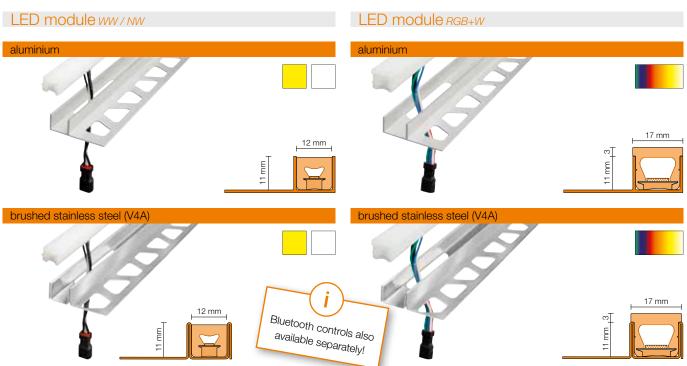
Our Schlüter-LIPROTEC-ERP radio rotary control is available as an optional accessory in the CONTROL section on page 73.



## Schlüter<sup>®</sup>-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)



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 (I	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	5 mm	Can be shortened every 25 m	nm	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.

Schlüte	r®-LIPROTEC-LLPN	Л/EK	
end cap, a	nodised 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

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

Schlüter <sup>®</sup> -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		

## Dx Luminaire Finder

#### 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
	100 200	warm white	LLP 110 AE 1/100	175.26	10
		neutral white	LLP 110 AE 2/100	175.26	10
aluminium		RGB + white	LLP 110 AE 9/100	200.31	10
aiummum		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

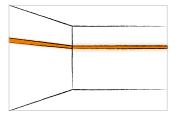
#### LED module | Linear light with anchoring leg brushed stainless steel (V4A)

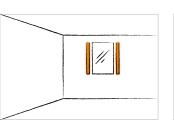
#### Schlüter®-LIPROTEC-LLPM

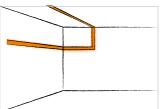
LED module brushed stainless steel (V4A)					
Material	L (cm)	Type of light	Art. No.	€/m	P (Unit)
		warm white	LLP 110 V4A 1/50	225.17	10
	50	neutral white	LLP 110 V4A 2/50	225.17	10
		RGB + white	LLP 110 V4A 9/50	250.90	10
	100	warm white	LLP 110 V4A 1/100	199.43	10
		neutral white	LLP 110 V4A 2/100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

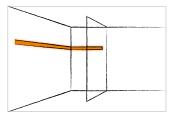
Exact lengths: 50.5 cm, 100.2 cm, 200 cm and 250 cm

#### Application areas









## Schlüter<sup>®</sup>-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)* 



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



Schlüte	Schlüter®-LIPROTEC-WS/EK					
end cap, a indirect illu	nodised aluminium, Imination					
H (mm) Art. No. € / U. P (Un						
17	EK / LT WS I AE 20	16.21	50			



For explanations of the symbols, refer to page 107.

#### LED module | Linear light aluminium

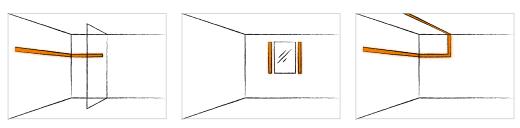
#### Schlüter®-LIPROTEC-LLP

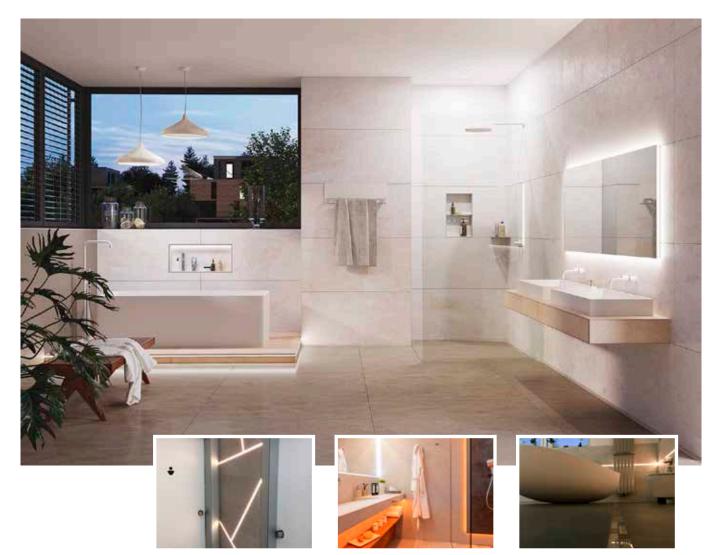
#### LED module aluminium

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
aunnin	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<sup>®</sup>-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)* 



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 (Uni						
EK / LT LLE / AE 14.57 50						

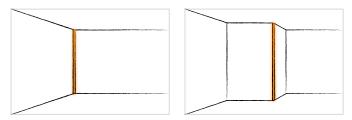
For explanations of the symbols, refer to page 107.

#### LED module | Linear light | Wall corner aluminium

#### Schlüter<sup>®</sup>-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 3	0W 8	5.14	10
50	45	LT PEKE 24V 5	0W <b>10</b>	5.15	10
75	67.5	LT PEKE 24V 7	5W 13	7.71	10
100	90	LT PEKE 24V 10	OW <b>19</b>	2.79	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.



#### Note:

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

#### 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

#### Low-voltage distributor

#### Schlüter<sup>®</sup>-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<sup>®</sup>-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
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.

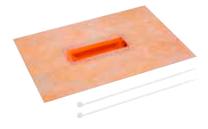


Schlüter®-LIPROTEC-PZA			
low-voltag	e adapter cable		
L (cm)	Art. No.	€/U.	P (Unit
100	LT PZA / 100	20.78	10

#### Low-voltage hollow-wall box

#### Schlüter®-LIPROTEC-PZH

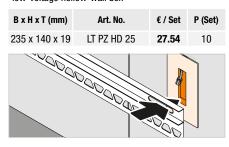
Schlüter-LIPROTEC-PZH is a hollow wall junction box with pre-adhered Schlüter-KERDI sealing collar for use in waterproofing assemblies with tile coverings (e.g. in shower areas). It creates a hollow space for plug connections to reversibly install the plug-and-play LED modules, and is attached with suitable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



**Note:** Strain relief is included in scope of supply.

#### Schlüter®-LIPROTEC-PZH

low-voltage hollow-wall box



#### 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.

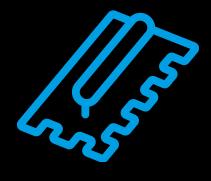


Schlüter®-PROCUT-PSF		
profile cutter, joint spacer		
Art. No.	€/U.	P (Unit)
PSF	75.11	10



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.





#### Welcome to the PRO section

Page

## FASY (

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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

PROFILES

Power supply units	64
Installation material	64-66
Tool	66

KEY

Explanations of properties / Areas of application



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



107



## FIND OUT MORE AT:

## 

## 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)



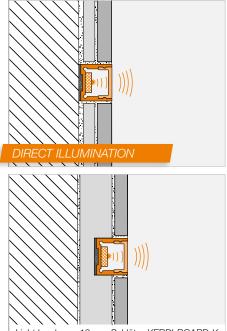


Schluter-Systems

#### Application areas:

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

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

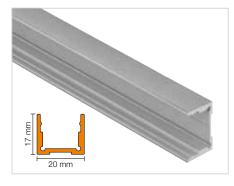


Light border on 19 mm Schlüter-KERDI-BOARD-K

**Note:** Only suitable for vertical installation in the shower. For horizontal installation, we recommend our LED module LIPROTEC-LLPM on page 12.

## Schlüter<sup>®</sup>-LIPROTEC-LL

#### Profile | Linear light

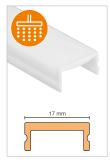


anodised aluminium L (m) Art. No. € / m KV (U	Schlüter <sup>®</sup> -LIPROTEC-LL			
L (m) Art. No. € / m KV (U	nodised a			
	L (m)	KV (Unit)		
2.5 LT LL 2017 AE <b>24.79</b> 60	2.5	60		



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

#### Diffuser lens



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

#### End cap



#### 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  $\,$ 

**LT ES 9** 

Dimensions (B x H)

Rated output (W/m)

Colour temperature

(Kelvin)

CRI

Number of LED (u./m)

Can be shortened every 62.5 mm

Application areas

Technical specifications for LED strips

15 x 5 mm

15

192 (96 RGB + 96 W)

RGB+W (2700 K)

85



#### 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  $\,$ 

**LT ES 1 1** 

12 x 5 mm

7.5

140

3400 K

92

Dimensions (B x H)

Rated output (W/m)

Colour temperature

(Kelvin)

CRI

Number of LED (u./m)

Can be shortened every 50 mm



#### Schlüter®-LIPROTEC-ES

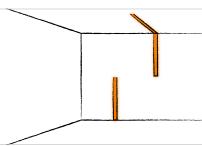
LED strips, neutral white, 24 V, DC

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  $\,$ 

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





## Schlüter<sup>®</sup>-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.

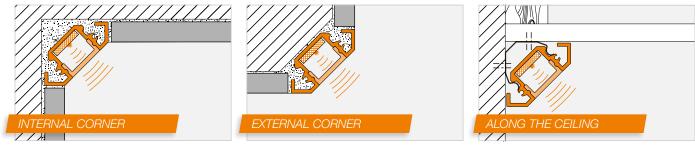
(Product data sheet 15.7)





#### Application areas:

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



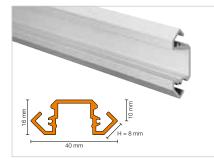
Note: Only suitable for vertical installation in the shower.

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



## Schlüter<sup>®</sup>-LIPROTEC-LLE

#### Profile | Linear light | Corner

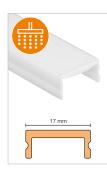


Schlüte	<sup>®</sup> -LIPROTEC-LLE		
anodised a	luminium		
H (mm)	L = 2.50 m Art. No.	€/m	KV (Unit)
8	LT LLE 4016 AE	29.79	60

#### Schlüter®-LIPROTEC-LLE-AC

colour coa	ted aluminium, matte br	illiant whi	te
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 <sup>®</sup> -LIPROTEC-LLE 90° external corner, ABS appeara				Schlüter <sup>®</sup> -LIPROTEC-LLE, 90° internal corner, ABS appearan		
	Art. No.		D (11-14)		Art. No.		D (11-14)
	Art. NO.	€/U.	P (Unit)		Art. NO.	€/U.	P (Unit)
	E / LT LLE / AE	6.52	50		I / LT LLE / AE	6.52	50
Note: The external and internal corners are designed for horizontal installation	Schlüter <sup>®</sup> -LIPROTEC-LLE 90° external corner, ABS	-AC/E			Schlüter <sup>®</sup> -LIPROTEC-LLE	-AC/I	
along the wall only. The profile may not be	Art. No.	€/U.	P (Unit)		Art. No.	€/U.	P (Unit)
embedded in the tile	E / LT LLE / MBW	6.52	50		I / LT LLE / MBW	6.52	50
covering.							
90	Schlüter®-LIPROTEC-LLE	/EK		95	Schlüter®-LIPROTEC-LLE	-AC/EK	
	end cap, anodised aluminium				end cap, colour coated aluminium		
	Art. No.	€/U.	P (Unit)	62 ···	Art. No.	€/U.	P (Unit)
9/20			. ,	1 m			

#### 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

LT ES 1 1

12 x 5 mm

7.5

140

3400 K

92

Dimensions (B x H)

Rated output (W/m)

Colour temperature

(Kelvin) CRI

Number of LED (u./m)

Can be shortened every 50 mm



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

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	

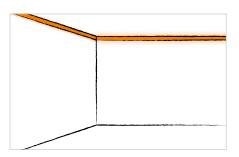
Can be shortened every 50 mm

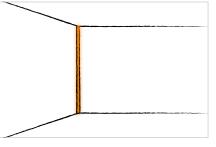
Technical specifications for LED strips

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

#### Application areas







**PR** 

## 

## Schlüter<sup>®</sup>-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.





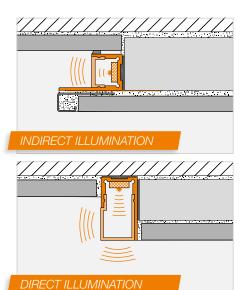
#### Building with light

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:



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



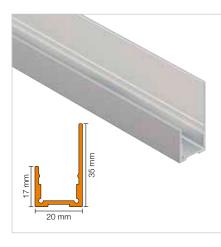


- Schlüter-LIPROTEC-WS profile
   LED strip
   Diffuser lens (indirect illumination)
- Oiffuser lens (direct illumination)

**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<sup>®</sup>-LIPROTEC-WS

#### Profile | Wall panel

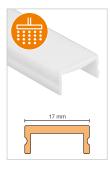


Schlüter <sup>®</sup> -LIPROTEC-WS			
anodised aluminium			
L (m) Art. No. € / m KV (Unit)			
1 LT WS 20 AE/100 <b>26.54</b> 60			
1.5 LT WS 20 AE/150 <b>26.54</b> 60			
2.5 LT WS 20 AE <b>26.54</b> 60			

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).

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#### Diffuser lens



Schlüter <sup>®</sup> -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	



Schlüt	or®_	OTE	C_W	en.
Joinna	<b>GI</b> -	 IUIL	<b>G-VV</b>	עפ

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



Schlüte	r®-LIPROTEC-WS/I	ΞK	
end cap, a	nodised aluminium, indir	ect illumi	nation
H (mm)	Art. No.	€/U.	P (Unit)
17	EK / LT WS I AE 20	16.21	50



end cap, a	nodised aluminium, dire	ct illumina	ation
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



#### 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

**LT ES 9** 

Technical specifications for LED strips

15 x 5 mm



#### 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  $\,$ 

**LT ES 1 1** 

12 x 5 mm

7.5

140

3400 K

92



#### 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  $\,$ 

LT E	S 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

**PR** 

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15	Rated output (W/m)
192 (96 RGB + 96 W)	Number of LED (u./m)
RGB+W (2700 K)	Colour temperature (Kelvin)
85	CRI

Dimensions (B x H)

Can be shortened every 50 mm

Can be shortened every 62.5 mm

Dimensions (B x H)

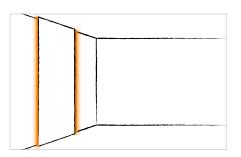
Rated output (W/m)

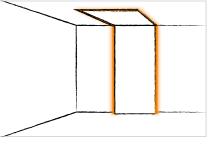
Colour temperature

(Kelvin) CRI

Number of LED (u./m)

#### Application areas





### Schlüter<sup>®</sup>-LIPROTEC-WSK

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.



Profiles



For explanations of the symbols, refer to page 107.

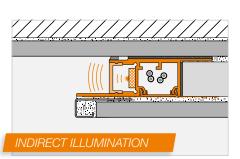
#### Accentuate!

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



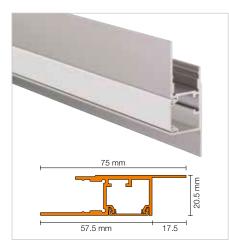
**Note:** The diffuser lens for indirect lighting is only suitable for vertical installation in the shower. The diffuser lens for direct lighting is only suitable for installation outside of areas that are subjected to moisture.

Schlüter-LIPROTEC-WSK profile
 LED strip
 Differenties (in the string)

Oiffuser lens (indirect illumination)

## Schlüter<sup>®</sup>-LIPROTEC-WSK

#### Profile | Wall panel with cable duct

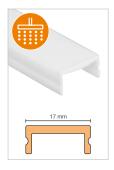


Schlüter <sup>®</sup> -LIPROTEC-WSK			
anodised a	aluminium		
L (m)	Art. No.	€/m	KV (Unit)
2.5	WS 20 K1 AAE	42.62	60

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).

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#### Diffuser lens



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

#### End cap



Schluter <sup>®</sup> -LIPRUTEG-WS/EK			
end cap, anodised aluminium, indirect illumination			
H (mm)	Art. No.	€/U.	P (Unit)
17	FK / IT WS LAF 20	16 21	50



end cap, a	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



### 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  $\,$ 

**LT ES 9** 

Dimensions (B x H)

Rated output (W/m)

Colour temperature

(Kelvin)

CRI

Number of LED (u./m)

Can be shortened every 62.5 mm

Technical specifications for LED strips



### 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  $\,$ 

**LT ES 1 1** 

12 x 5 mm

7.5

140

3400 K

92

Dimensions (B x H)

Rated output (W/m)

Colour temperature

(Kelvin)

CRI

Number of LED (u./m)

Can be shortened every 50 mm



### 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  $\,$ 

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

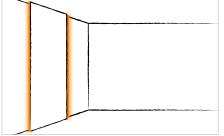
15 x 5 mm

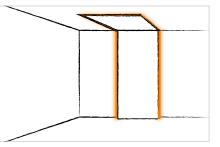
15

192 (96 RGB + 96 W)

RGB+W (2700 K)

85







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## Schlüter<sup>®</sup>-LIPROTEC-WSQ

 $\Box$ 

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.





### Building with light

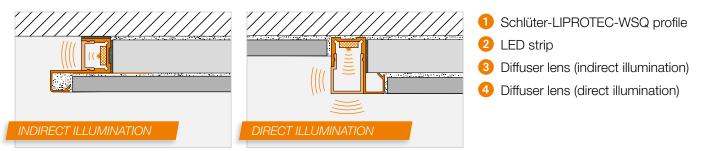
Schlüter-LIPROTEC-WSQ is a high quality carrier profile of anodised aluminium for illuminating raised wall panels with various Schlüter-LIPROTEC-ES LED strips integrated into the profile. Differing light effects are created in combination with two different diffuser lenses. The assembly can be used to 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

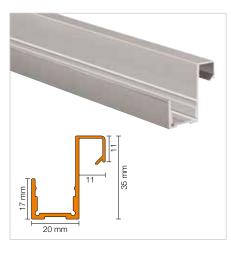




**Note:** The diffuser lens for indirect lighting is only suitable for vertical installation in the shower. The diffuser lens for direct lighting is only suitable for installation outside of areas that are subjected to moisture.



### Profile | Wall panel with QUADEC finishing profile



Schlüter®-LIPROTEC-WSQ			
anodised aluminium, H = 11 mm			
L (m)	Art. No.	€/m	KV (Unit)
2.5	WS 20Q 110 AE	36.20	60

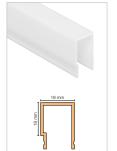
To achieve adhesive bonding between the smooth aluminium surface and the tile, the self-adhesive fleece Schlüter-DESIGNBASE-HVL 38/20M is fitted (see page 66).

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### Diffuser lens



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



Schlüte	llüter®-LIPROTEC-WSD		
diffuser ler	ns, 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	



end cap, a	nodised aluminium, diree	ct illumina	ation
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



### 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  $\,$ 

LT ES 1 1

12 x 5 mm

7.5

140

3400 K

92

Dimensions (B x H)

Rated output (W/m)

Colour temperature

(Kelvin) CRI

Number of LED (u./m)

Can be shortened every 50 mm



#### 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  $\,$ 

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		
0			

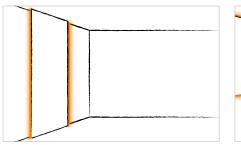
Can be shortened every 50 mm

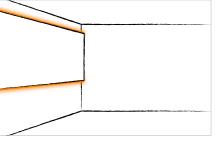
Technical specifications for LED strips

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

### Application areas







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# Schlüter<sup>®</sup>-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.



Profiles



For explanations of the symbols, refer to page 107.

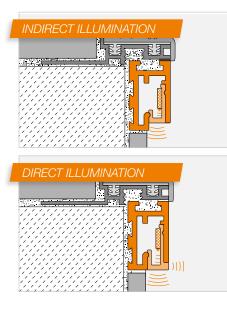
# Step-by-step illumination

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
   LED strip
   Diffuser lens (indirect illumination)
- 4 Diffuser lens (direct illumination)

# Schlüter<sup>®</sup>-LIPROTEC-PB

### Profile | Stair edge



Schlüter <sup>®</sup> -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



Schlüte	r®-LIPROTEC-VBI		
diffuser lens, 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 (Ur				
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 <sup>®</sup> -LIPROTEC-PB/EK			
end cap, anodised aluminium			
Art. No.	€/U.	P (Unit)	
EK / LT PB AE 5.17 50			

11000	Schli
	end ca brushe
1.10	

Coblittor		тес ББ /	
Schulter	-LIPRU	TEC-PB-/	

end cap, brushed stainless steel effect anodised aluminium

Art. No.	€/U.	P (Unit)
EK / LT PB AEEB	6.07	50

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



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".

Profiles

### 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

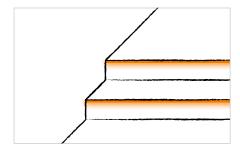
Max. length in the LIPROTEC system: 24 m, connection length: 3 m  $\,$ 

### Technical specifications for LED strips

LT E	S 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 1Dimensions (B x H)8 x 2.5 mmRated output (W/m)7.5Number of LED (u./m)140Colour temperature<br/>(Kelvin)4900 KCRI92Can be shortened every 50 mm

### Application areas







# Schlüter<sup>®</sup>-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

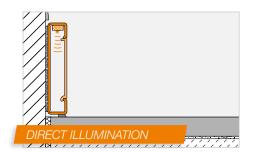
Schlüter-DESIGNBASE-QD is a high quality profile of anodised aluminium for versatile applications. It is designed for mounting various Schlüter-LIPROTEC-ES LED strips as a skirting or border profile in wall areas. A 39 mm diffuser lens is then used between the 10 mm wide (approx.) visible areas of the 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.

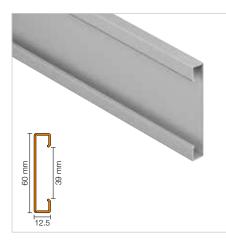
# Profile AE Profile AEEB

3 LED strip

4 Diffuser lens (direct illumination)

# Schlüter<sup>®</sup>-DESIGNBASE-QD

### Profile | Base/Border

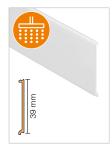


Schlüter®-DESIGNBASE-QD anodised aluminium			Schlüter <sup>®</sup> -DESIGNBASE-QD-AEEB brushed stainless steel appearance, anodised aluminium			
Art. No.	€/m	KV (Unit)	L (m) Art. No. € / m KV			
DB Q1 AE	34.73	60	2.5	DB Q1 AEEB	41.97	60
				Art. No. € / m KV (Unit) L (m)	Art. No. € / m KV (Unit) L (m) Art. No.	Art. No. € / m KV (Unit) L (m) Art. No. € / m

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).

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### 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		



### End cap



Schlüter®-DESIGNBASE-QD/E				
external corner, anodised aluminium				
Art. No. € / U. P (Unit)				
EV / DB Q1 AE	30.65	50		



Cobline R F	DESIGNBASE-0	
Schuller~-I	IFS IGN BASE I	

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".

PBR(

### 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

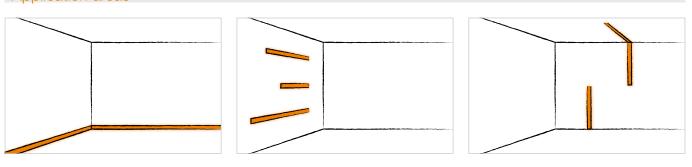
### Technical specifications for LED strips

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	S 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<sup>®</sup>-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!

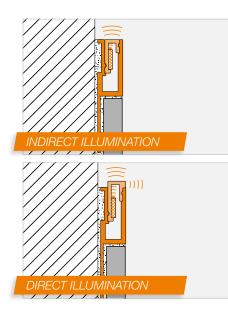
Schlüter-LIPROTEC-VB is a high quality tile finishing profile for wall areas, with a visible area of 25 mm. It is designed for mounting Schlüter-LIPROTEC-ES LED strips and can be used to create varying light effects in combination with two different diffuser lenses. Indirect light can either radiate 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:



✓ Skirting





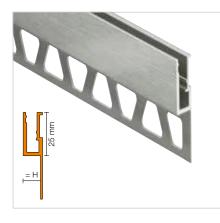
- 2 LED strip
- 3 Diffuser lens (indirect illumination)
- 4 Diffuser lens (direct illumination)

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# Schlüter<sup>®</sup>-LIPROTEC-VB

### Profile | Cove lighting



Schlüte	r®-LIPROTEC-VB			S
anodised a	lluminium			bi ai
H (mm)	L = 2.50 m Art. No.	€/m	KV (Unit)	1
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 <sup>®</sup> -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



diffuser lens, indire	ect illumination		
L (m)	Art. No.	€/m	KV (Unit)
2.5	LT VB I	20.32	60

8.5 mm	
J	

Schlüter	9_  DD		WPN
Senuter		U I E U E	VDU

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".

Profiles

### 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

400LI ES 51/40058.8510Max. length in the LIPROTEC system: 24 m,<br/>connection length: 3 mN



### 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

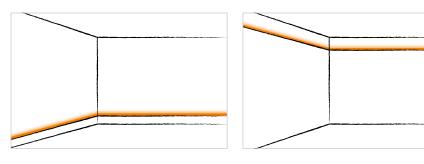
### Technical specifications for LED strips

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

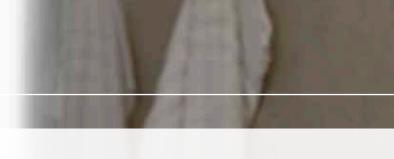
LT ES 6 1				
Dimensions (B x H)	8 x 2.5 mm			
Rated output (W/m)	7.5			
Number of LED (u./m)	140			
Colour temperature (Kelvin)	4900 K			
CRI	92			
Can be shortened every 50 mm				

### Application areas



# PRO 2003





# Schlüter<sup>®</sup>-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!

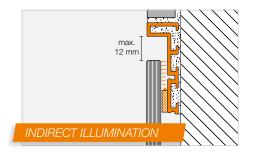
Schlüter-LIPROTEC-D is a decorative carrier profile for wall areas of anodised aluminium with a visible area of 6 mm. It allows for the insertion of various decorative materials such as glass or mirrors to adjoin ceramic tile coverings. LIPROTEC-D can be used to mount Schlüter-LIPROTEC-ES LED strips 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:

✓ Mirror

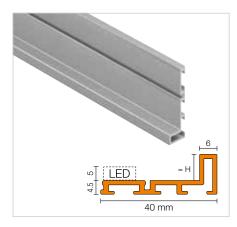
✓ Decorative elements made of various materials





# Schlüter<sup>®</sup>-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		



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

1	Schlüter®-LIPROTEC-D/V			
8	corner connector set, 4 pc.			
	Art. No.	€ / Set	P (Set)	2 x corner connectors are
	V 90 / LT 10/4	13.97	50	required for each frame corner.





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".

Profiles

PBR(

### 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

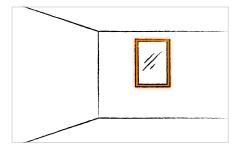
Max. length in the LIPROTEC system: 24 m, connection length: 3 m  $\,$ 

### 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 1Dimensions (B x H)8 x 2.5 mmRated output (W/m)7.5Number of LED (u./m)140Colour temperature<br/>(Kelvin)4900 KCRI92Can be shortened every 50 mm

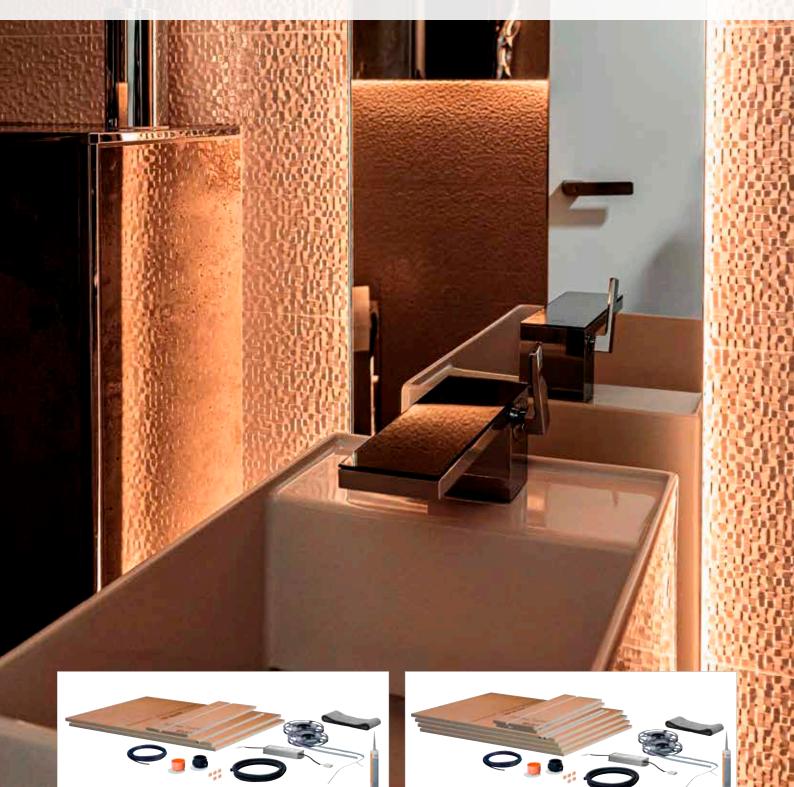
### Application areas



# 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).



Schlüter-LIPROTEC-WSK 700

Schlüter-LIPROTEC-WSK 1285



### **RGB+W CONTROLLABLE**

### Profile set

Schlüter <sup>®</sup> -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		Schlüter®-LIPROTEC-WSK 1285			
accessory set with LED strips, RGE	ccessory set with LED strips, RGB+W		accessory set with LED strips, RGB	+W	
Art. No.	€ / Set	P (Set)	Art. No.	€ / Set	P (Set)
WS 20 ZS2 LT ES9	939.66	10	WS 20 ZS3 LT ES9	1069.25	10



### 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**

150

- 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

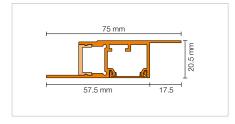
### WSK 1285

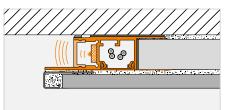
- 2 x Schlüter-LIPROTEC-ES LED strips, length: 250 cm, multi-colour + white light (RGB+W)
- 1 x set Schlüter-KERDI-BOARD, 19 mm, for end format: 250 cm x 128.5 cm, pre-assembled, with mounting slot for cable duct
- 2 x cable ducts with cover
- 1 x adhesive fleece Schlüter-DESIGNBASE-HVL, width: 7.5 cm, 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.

# 250 ... 1225 0 10 04 WSK 1285

WSK 700



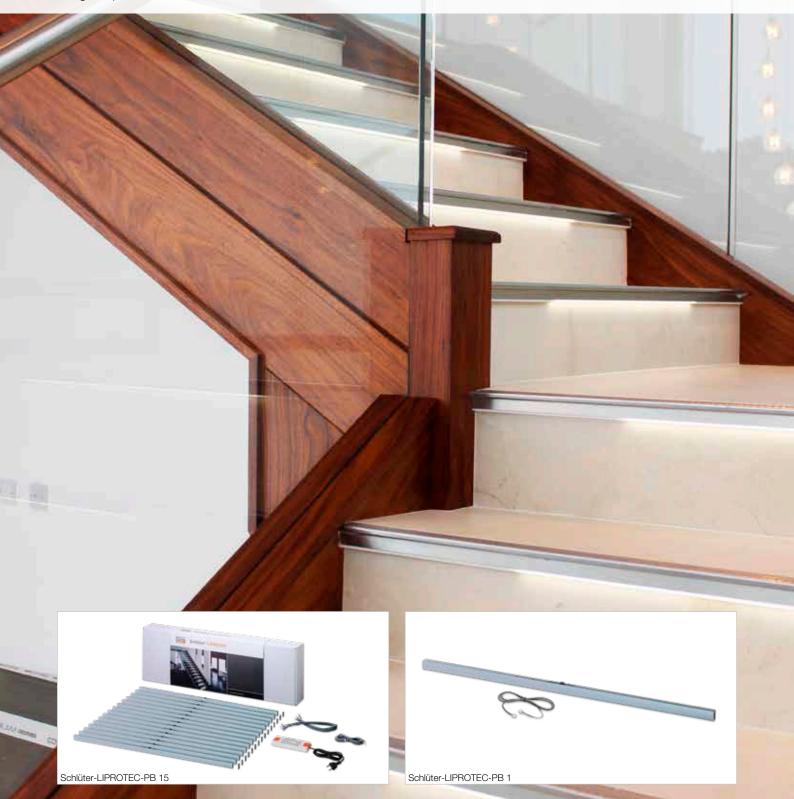


### Staircase sets (PB)

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.

SET

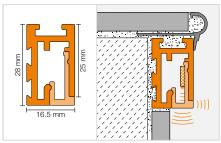
If that isn't enough, the stair set can easily be expanded to 18 steps with only one supply line. With this in mind, use the Schlüter-LIPROTEC-PB 1 single-step sets.



### 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.



### Set





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

### 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



### Schlüter®-LIPROTEC-PB 1

set for one step, anodised aluminium

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

**PB 1** 

- 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 mm<sup>2</sup>, AWG 22) with a length of 500 cm for connecting the Schlüter-LIPROTEC-PB staircase systems to the voltage supply.

### Schlüter®-LIPROTEC-ZZK

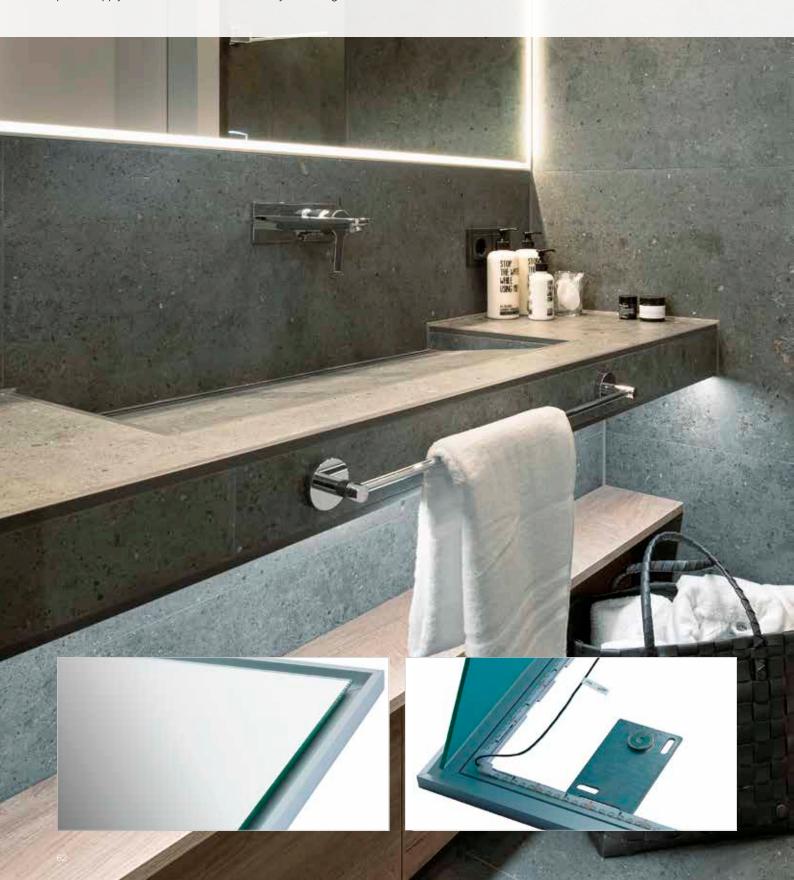
### supply cable

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.

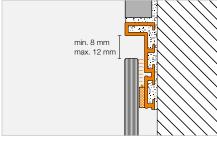


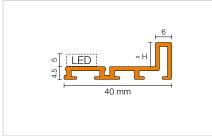
### WARM WHITE

### NEUTRAL WHITE

### **Advantages**

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





**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.

### Set



### 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

Prices exclude VAT

# 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<sup>®</sup>-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.

# 2-core

### Schlüter®-LIPROTEC-ZK

low-voltage cable 2 x 1.31	1 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-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<sup>®</sup>-LIPROTEC-ZLR



### Schlüter®-LIPROTEC-ZLR

conduit.	20	mm	diameter
conduit,	20		ulamotor

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

### Schlüter<sup>®</sup>-LIPROTEC-ZKK



### Schlüter®-LIPROTEC-ZKK

cable duct, white

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

### Schlüter®-LIPROTEC-ZKL



### 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	IT 7 5HD 47	10 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	

### Assembly module for cable duct

### Schlüter®-KERDI-BOARD-K

Schlüter<sup>®</sup>-KERDI-BOARD-K are installation modules with pre-milled grooves for accommodating Schlüter<sup>®</sup>-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®-LIPROTEC-Z

concealed junction box with lid, set = 5 units					
H (mm) Ø mm Art. No. € / Set P (Se					
46	65	LT 7 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	

### 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<sup>®</sup>-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<sup>®</sup>-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.

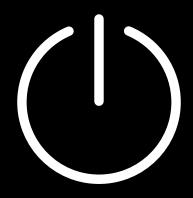


Schlüter®-PROCUT-PSF		
profile cutter, joint spacer		
Art. No.	€/U.	P (Unit)
PSF	75.11	10



# 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.





### Welcome to the CONTROL section

	EASY	PRO
	Page	Page
CLASSIC CONTROL		
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 / Areas of application

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



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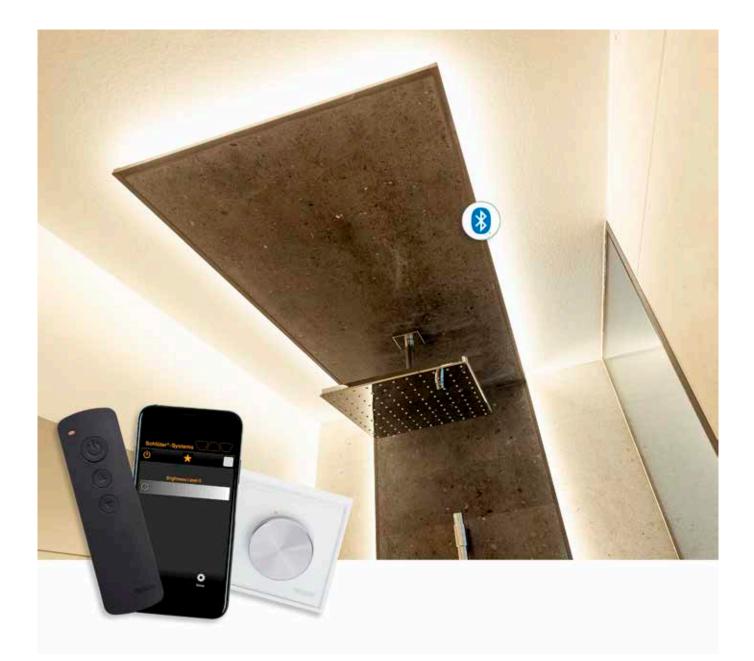


# FIND OUT MORE AT:

# Schlüter<sup>®</sup>-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<sup>®</sup>-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<sup>®</sup>-LIPROTEC-PEBR Schlüter<sup>®</sup>-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<sup>®</sup>-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<sup>®</sup>-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.

## Rotary control with a "twist"

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.





ZONES control

# 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 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.

Starter set Light colour white + RGB+W



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)



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
PRO	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	LT EB ZS 1/4
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<sup>®</sup>-LIPROTEC-PEBZR Schlüter<sup>®</sup>-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
PRO	white	LT EB ZR 1	168.10	10
PRO	RGB+W	LT EB ZR 4	174.25	10

Note: Incl. Wago connectors (PRO only)

## Technical specifications for ZONES receivers

### LT PEB ZR 4 LT EB ZR 1 LT PEB ZR 1 LT EB ZR 4 90 W 90 W 180 W 180 W Max. total load in the LIPROTEC system Max. length LED strips 18 m 6 m 24 m 12 m Note: For additional technical information and The Bluetooth Mesh receivers can be freely properties, refer to the PLAN section. combined with the ZONES starter sets.

## 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<sup>®</sup>-LIPROTEC-ERPZ

ZONES rotary control for Bluetooth Mesh applications

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



CONTRO



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.







Luminaire Finder



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## FIND OUT MORE AT: LIPROTEC.COM

LED PROFILES	
LL - Linear light, coloured + white	
LLE - Linear light, coloured + white   Corner	

NLT / NLT-BR - Niche with LED lighting, coloured + white

LLPE – LED module, coloured | Linear light | Wall corner

LLPM – LED module, coloured + white | Linear light with anchoring leg

LLP – LED module, coloured | Linear light

LIPROTEC wiring diagrams

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Explar

# Schlüter<sup>®</sup>-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*)

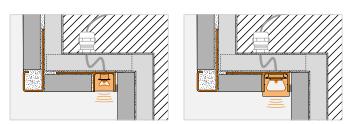
NICHES	APPLICATION AREA	PROPERTIES	D	IMENSIONS		
B x H x T (mm)			VERSION	LED LENGTHS (mm)	LIGHT COLOUR	
305 x 305 x 89		SET	WARM WHITE/ NEUTRAL WHITE		warm white	
305 x 508 x 89			12 mm	300	neutral white	
305 x 711 x 89					RGB+W	
					warm white	
508 x 305 x 89			RGB+W	505	neutral white	
		IP67	17 mm		RGB+W	
					warm white	
711 x 305 x 89				705	neutral white	
					RGB+W	

# Schlüter<sup>®</sup>-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 MODULI	DIMENSIONS OF LED MODULE				
	ALUM	INIUM	WIDTH / HEIGHT (mm)	LENGTH (cm)				
RGB+W				50				
				100				
				200				
•		IP67		250				

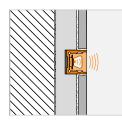
Exact lengths: 50.5 cm, 100.2 cm, 200 cm and 250 cm Length of supply line: 12 cm with plug connector



				PHOTOMETRIC	DATA				
RATED OUTPUT (W / Unit)	NUMBER OF LEDs (LEDs / m)	CRI	COLOUR TEMPERATURE (Kelvin)	LIGHT CURRENT (Im)	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	E	2			C0-C180 C90-C270
4.40	112	90	2700	156	F	2			$\overline{-}$
2.60	280	92	3000	133	E	3		90° 45° 0° 45°	90°
2.60	280	92	4900	141	E	3	IP67	RGB+W	
7.30	112	90	2700	262	F	3			0-C180
3.50	280	92	3000	187	E	4			90-C270
3.50	280	92	4900	197	E	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

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			
				323	F	3					
15	110	00	0700	323	F	5	1007				
15	112	90 2700	2700	323	F	9	IP67	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 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<sup>®</sup>-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			æ		50	
× 3			Û		100	
4.5				V4A	200	
à					250	
RGB+W			<u>AP</u>		50	
X A			IP67	11 mm	100	
40				V4A	200	
4					250	

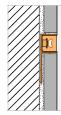
Exact lengths: 50.5 cm, 100.2 cm, 200 cm and 250 cm Length of supply line: 12 cm with plug connector

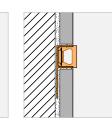
# Schlüter<sup>®</sup>-LIPROTEC-LLPE

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		() () () () () () () () () () () () () (		250				

Length of supply line: 12 cm with plug connector







	PHOTOMETRIC DATA										
	OUTPUT / 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				
	5	280	92	3000 / 4900	242 / 274	E/E	6/6			-C90-C270	
	)	200	00 <del>3</del> 2	30007 4900	242 / 274	E/E	10/11		90° 45° 0° 45°	90° 45° 0° 45° 90°	
					242 / 274	E/E	13 / 13	IP67		90° 45° 0° 45° 90°	
					375	F	3	IP07			
	-	110	00	0700	375	F	5			-C90-C270	
1	15	112	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.

LIGHT CURRENT

(lm / m)

323

kWh /

1000 h

11

EEC

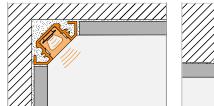
F

DEGREE OF

PROTECTION

IP67

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



NUMBER OF LED<sub>s</sub>

(LEDs / m)

112

RATED OUTPUT

(W / m)

15



COLOUR

TEMPERATURE

(Kelvin)

2700



Note: LED strips can be shortened every 62.5 mm.

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

CRI

90

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<sup>®</sup>-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	IUM	WIDTH / HEIGHT (mm)	LENGTH (m)	LENGTH (cm)	
WARM WHITE/ NEUTRAL WHITE					50	
					100	
Schlüter Systems	vertical installation only				150	
2 1 2 1 <u>1</u>		IP67			200	
					250	
				2.5	400	
RGB+W			20 mm	2.5	50	
					100	
					150	
na mattanas ma su					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.

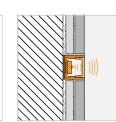
# Schlüter<sup>®</sup>-LIPROTEC-LLE

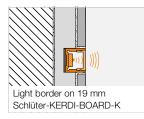
Schlüter-LIPROTEC-LLE is a high quality carrier profile made of anodised or white coated aluminium for mounting the Schlüter-LIPROTEC-ES LED strips. The profile is designed to create accent lighting in wall corners. It is suitable for use in internal and external corners in horizontal or vertical alignment. 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		5.0			50	
					100	
Schulter Systems	vertical installation only				150	
		IP67			200	
					250	
				2.5	400	
RGB+W			H = 8 mm	2.0	50	
			40 mm		100	
					150	
ma mathematication					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.







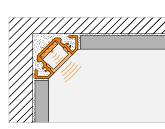
				PHOTOMETRIC	DATA			
RATED OUTPUT (W / m)	NUMBER OF LEDs (LEDs / m)	CRI	COLOUR TEMPERATURE (Kelvin)	LIGHT CURRENT (Im / m)	EEC	kWh / 1000 h	DEGREE OF PROTECTION	LIGHT DIRECTIONS
				708 / 700	F/F	4 / 4		
				730 / 752	E / F	8 / 8		
7.5	140	92	3400 / 4900	746 / 721	E/E	11/11		
7.5	140	92		719 / 756	E / E	14 / 15		
				771 / 741	E / E	18/17		
				666 / 633	E/F	26 / 26	IP67	
				387	G	4	1601	
				393	G	7		-
15.0	192	85	2700	403	G	8		
15.0	(96 RGB + 96 W)	05	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).

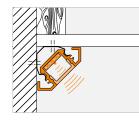
The specified energy efficiency classes exclusively refer to the LED strip.

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	LIGHT DIRECTIONS
				708 / 700	F/F	4 / 4		
				730 / 752	E / F	8 / 8		
7.5	140	00	2400 / 4000	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	1007	
				387 G 4 IP67				
				393	G	7		
17.0	192			403	G	8		
15.0	(96 RGB + 96 W)	85	2700	406	G	12		
				405	G	15		
				375	G	24		

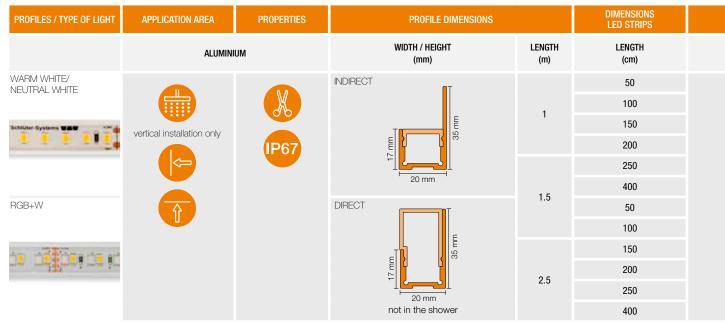
Note: LED strips can be shortened every 50 mm (warm white/neutral white) or 62.5 mm (RGB+W).

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<sup>®</sup>-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*)



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<sup>®</sup>-LIPROTEC-WSK

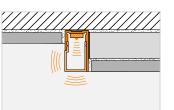
Schlüter-LIPROTEC-WSK is a high quality, anodised aluminium carrier profile for illuminating protruding wall panels with various Schlüter-LIPROTEC-ES LED strips laid into the profile. Differing light effects are created in combination with two different diffuser lenses. Recessed, indirect or narrow illumination 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*)

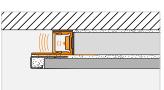
PROFILES / TYPE OF LIGHT	APPLICATION AREA	PROPERTIES	PROFILE DIMENSIONS		DIMENSIONS LED STRIPS	
	ALUMINI	UM	WIDTH / HEIGHT (mm)	LENGTH (m)	LENGTH (cm)	
WARM WHITE/ NEUTRAL WHITE			INDIRECT		50	
			⊢ 75 mm		100	
Schulter Systems	vertical installation only		505 mm		150	
		IP67	<sup>50</sup> .51		200	
			57.5 mm 17.5		250	
				2.5	400	
RGB+W			DIRECT	2.5	50	
			75 mm		100	
AT AN AND AD AN			50:5 mm		150	
na malina inter					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.









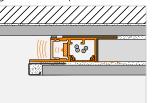
### PHOTOMETRIC DATA COLOUR RATED OUTPUT NUMBER OF LEDs LIGHT CURRENT kWh / DEGREE OF CRI TEMPERATURE EEC LIGHT DIRECTIONS (W / m) (LEDs / m) (lm / m) 1000 h PROTECTION (Kelvin) INDIRECT 708 / 700 F/F4/4 730 / 752 E/F 8/8 746 / 721 E/E 11/11 7.5 140 92 3400 / 4900 719/756 E/E 14/15 771 / 741 E/E 18/17 666 / 633 E/F 26 / 26 IP67 DIRECT 387 4 G 393 G 7 403 8 G 192 (96 RGB + 96 W) 2700 15 85 406 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 COLOUR RATED OUTPUT NUMBER OF LEDs LIGHT CURRENT kWh / DEGREE OF CRI TEMPERATURE EEC LIGHT DIRECTIONS (W / m) (LEDs / m) (lm / m) 1000 h PROTECTION (Kelvin) INDIRECT 708 / 700 F/F 4/4 730 / 752 E/F 8/8 746 / 721 E/E 11/11 140 92 3400 / 4900 7.5 719/756 E/E 14/15 771 / 741 18/17 E/E 666 / 633 E/F 26 / 26 IP67 DIRECT 387 G 4 393 G 7 403 G 8 192 (96 RGB + 96 W) 2700 15 85 406 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<sup>®</sup>-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	
	ALUMIN	IUM	WIDTH / HEIGHT (mm)	LENGTH (m)	LENGTH (cm)	
WARM WHITE/ NEUTRAL WHITE					50	
			Ŧ		100	
Schlüter Systems	vertical installation only				150	
· · · · · · · ·		IP67			200	
					250	
			20 mm 1	2.5	400	
RGB+W				2.5	50	
					100	
					150	
na mattana sa sa			۳ ۳ ۳		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<sup>®</sup>-LIPROTEC-PB

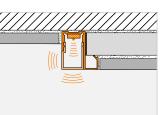
Schlüter-LIPROTEC-PB is a high quality edge profile of anodised aluminium with a visible area of 25 mm. It is designed for mounting Schlüter-LIPROTEC-ES LED strips and can be used with Schlüter-TREP stair nosing profiles to create appealing lighting along the edges of platforms. Differing light effects 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*)

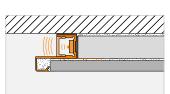
PROFILES / TYPE OF LIGHT	APPLICATION AREA	PROPERTIES	PROFILE DIMENSIONS			DIMENSIONS LED STRIPS	
	ALUMINIUM			/ HEIGHT nm)	LENGTH (m)	LENGTH (cm)	
WARM WHITE / NEUTRAL WHITE			INDIRECT	DIRECT	1	50	
	P				I	100	
			28 mm	25 mm	1.5	150	
•		IP65			1.5	200	
			16.5 mm	16.5 mm	2.5	250	
					2.0	400	

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.









Wall panel on 19 mm Schlüter-KERDI-BOARD

				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	32	340074300	719 / 756	E / E	14 / 15	IP67	
				771 / 741	E/E	18/17		-
				666 / 633	E / F	26 / 26		
				387	G	4		DIRECT
				393	G	7		
15	192	85	2700	403	G	8		
15	(96 RGB + 96 W)	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.



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	92		603 / 636	F/F	11/11	IP65		
7.5	140	92	3200 / 4900	621 / 637	F/F	15 / 15	1602	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<sup>®</sup>-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	DIMENSIONS LED STRIPS		
	ALUMIN	UM	WIDTH / HEIGHT (mm)	LENGTH (m)	LENGTH (cm)	
WARM WHITE / NEUTRAL WHITE					50	
		Ī		100		
		installation only	2.5	150		
			Co K	2.5	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<sup>®</sup>-LIPROTEC-VB

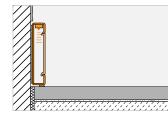
Schlüter-LIPROTEC-VB is a high quality tile finishing profile for wall areas, with a visible area of 25 mm. It is designed for mounting Schlüter-LIPROTEC-ES LED strips and can be used to create varying light effects in combination with two different diffuser lenses. Indirect light can either radiate 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*)

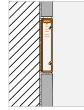
PROFILES / TYPE OF LIGHT	APPLICATION AREA	PROPERTIES	PROFILE DIMENSIONS			DIMENSIONS LED STRIPS	
	ALUMINI	UM		/ HEIGHT mm)	LENGTH (m)	LENGTH (cm)	
WARM WHITE / NEUTRAL WHITE			INDIRECT	DIRECT	1	50	
					I	100	
A THE PARTY NAMES OF A THE PARTY NAMES			22 <sup>22</sup>	ع الله الله الله الله الله الله الله الل	1.5	150	
		IP65			1.5	200	
		=H		<u> </u>	2.5	250	
			I		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
				771 / 757	F/F	4 / 4		
				772 / 794	F/F	8 / 8		
7.5	140	92	3400 / 4900	880 / 817	E/E	12 / 12	IP67	
7.5	140			801 / 780	E/E	15 / 15	IF07	
				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.

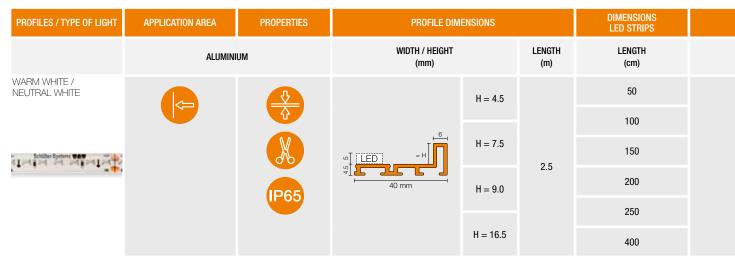


				THOTOMETHIC	DAIA			
RATED OUTPUT (W / m)	NUMBER OF LEDs (LEDs / m)	CRI	COLOUR TEMPERATURE (Kelvin)	LIGHT CURRENT (Im / m)	EEC	kWh / 1000 h	DEGREE OF PROTECTION	LIGHT DIRECTIONS
				610 / 650	F/F	4 / 4		INDIRECT
		140 92	3200 / 4900	614 / 621	F/F	8 / 8		
7.5	140			603 / 636	F/F	11/11	IP65	
7.5	140	92	3200/4900	621 / 637	F/F	15 / 15	IF05	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<sup>®</sup>-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*)



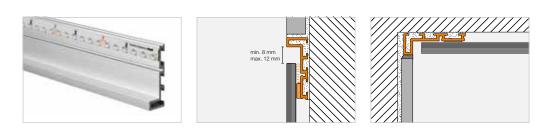
Supply line: 3 m. The 400 cm LED strips are equipped with two supply lines each. The photometric data describes the LED strips only. The optical efficiency is influenced by the properties of the diffuser lens.

# 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	NDIRECT	2,5	250	

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



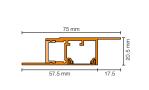
## PHOTOMETRIC DATA

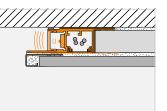
RATED OUTPUT (W / m)	NUMBER OF LEDs (LEDs / m)	CRI	COLOUR TEMPERATURE (Kelvin)	LIGHT CURRENT (Im / m)	EEC	kWh / 1000 h	DEGREE OF PROTECTION	LIGHT DIRECTIONS
				610 / 650	F/F	4 / 4		
				614/ 621	F/F	8 / 8		
7.5	140	92	3200 / 4900	603 / 636	F/F	11/11	IP65	
7.5	140		32007 4300	621 / 637	F/F	15 / 15	11 05	
				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 (Im / m)	EEC	kWh / 1000 h	DEGREE OF PROTECTION	LIG	HT 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	
	ALUMINIUM			WIDTH / HEIGHT (mm)	LENGTH (m)	LENGTH (cm)	
NEUTRAL WHITE	N_	SET	DIRECT	T <b>er sa</b> t	1	60	
				58 mm	1.5	60	
					1 (15 units)	60 (15 units)	
				16.5 mm	1.5 (15 units)	60 (15 units)	

The photometric data describes the LED strips only.

## Decorative frame sets (D)

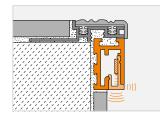
Schlüter-LIPROTEC-D 90 are sets for creating illuminated decorative frames. With these sets, mirrors or design elements such as printed glass or decor panels can be elegantly framed with indirect LED lighting. The support profiles are already mitre-cut. Four matching Schlüter-LIPROTEC-ES-LED strips with 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 DIME	INSIONS		DIMENSIONS LED STRIPS	
	ALUMIN	UM	WIDTH / HEIGHT (mm)		LENGTH (m)	LENGTH (cm)	
S1 WARM WHITE	Þ	SET					
			س] (LED) = H		1.185 /	110 / 85	
S2 NEUTRAL WHITE				H = 9.0	0.935 (2 units)	(2 units)	

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
0.7	12		4000	0.0	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 (Im / m)	EEC	kWh / 1000 h	DEGREE OF PROTECTION	LIGHT DIRECTIONS
29,3	140	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	CON	

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.

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## 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	PR0
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<sup>®</sup>-LIPROTEC-PEBZS | Schlüter<sup>®</sup>-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	PRO	PRO	PRO
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
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			

## CLASSIC/ZONES rotary control

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

## Technical specifications for rotary control

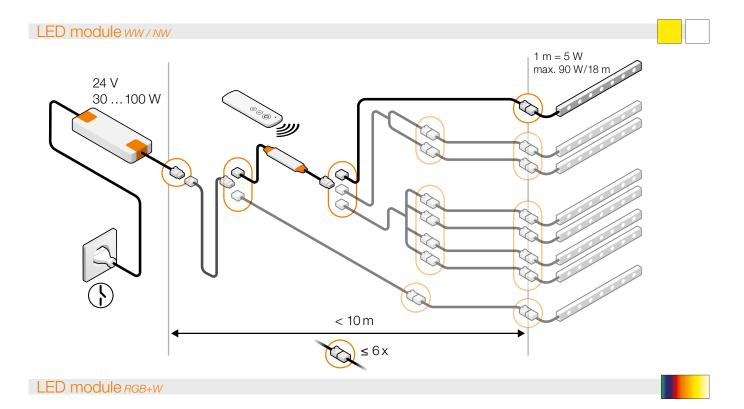
	LT ERP	LT ERPZ
Version	CLASSIC	ZONES
Transmission standard	Radio (433.92 MHz)	Bluetooth Mesh
Max. range	10 m	10 m
Battery type	CR2032	CR2032
Degree of protection	IP20	IP20
Ambient temperature	+10 °C to +50 °C	+10 °C to +50 °C

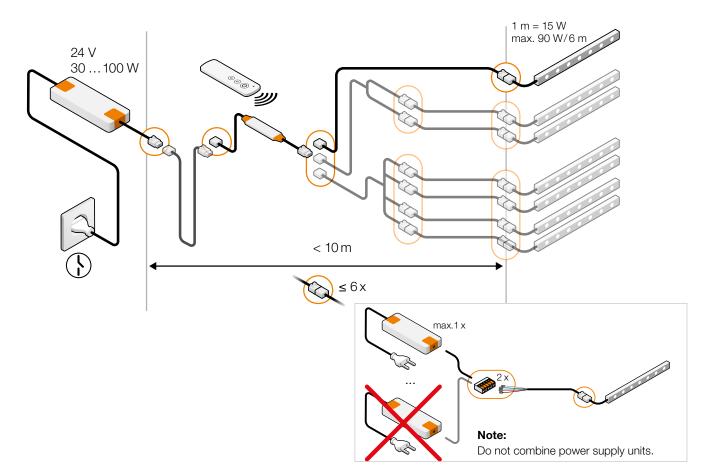
## Note:

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

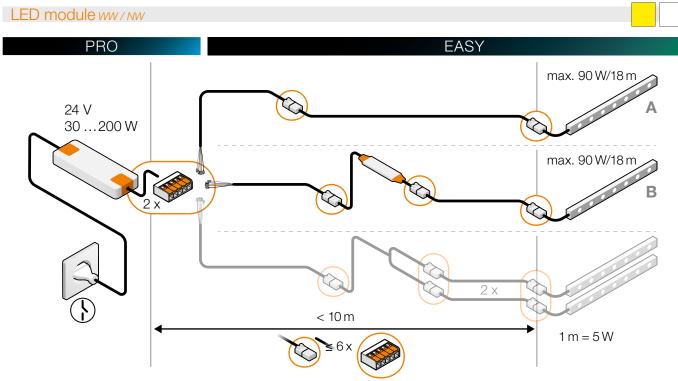


## LIPROTEC-EASY-CLASSIC wiring diagrams

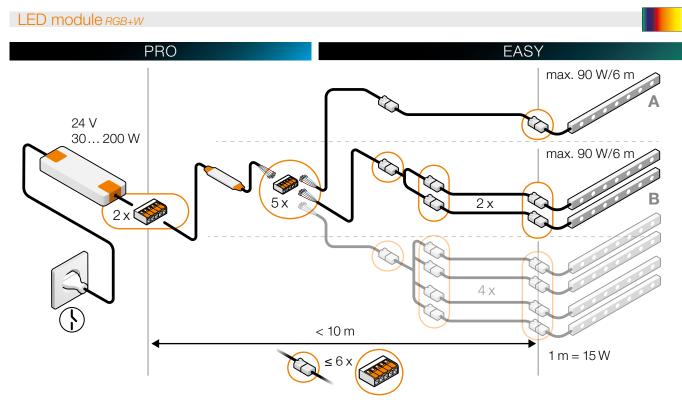




# LIPROTEC-EASY and -PRO-CLASSIC wiring diagrams using an adapter



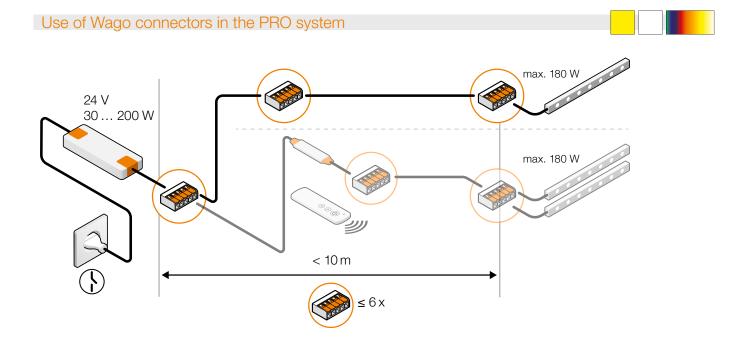
**Note:** Max. length of LED modules in a row in the LIPROTEC-EASY system when using the plug-and-play adapter: 18 m per cable strand (A or B) depending on the power supply unit used.



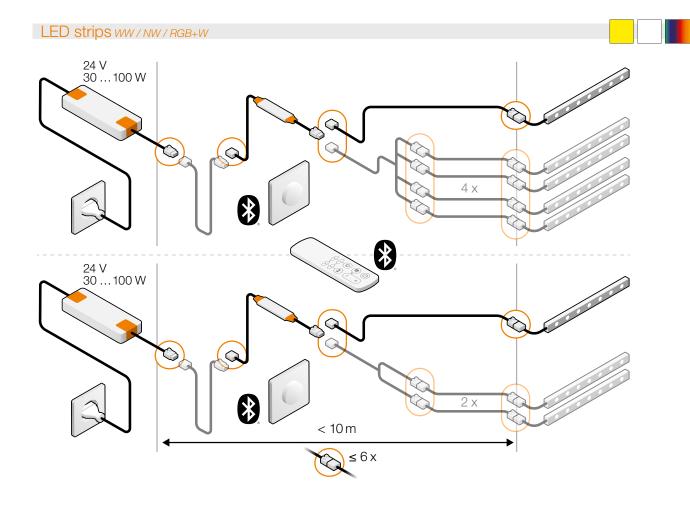
**Note:** Max. length of LED modules in a row in the LIPROTEC-EASY system when using the plug-and-play adapter: 6 m per cable strand (A or B) depending on the power supply unit used.



## LIPROTEC-PRO wiring diagrams



## LIPROTEC-EASY-ZONES wiring diagrams



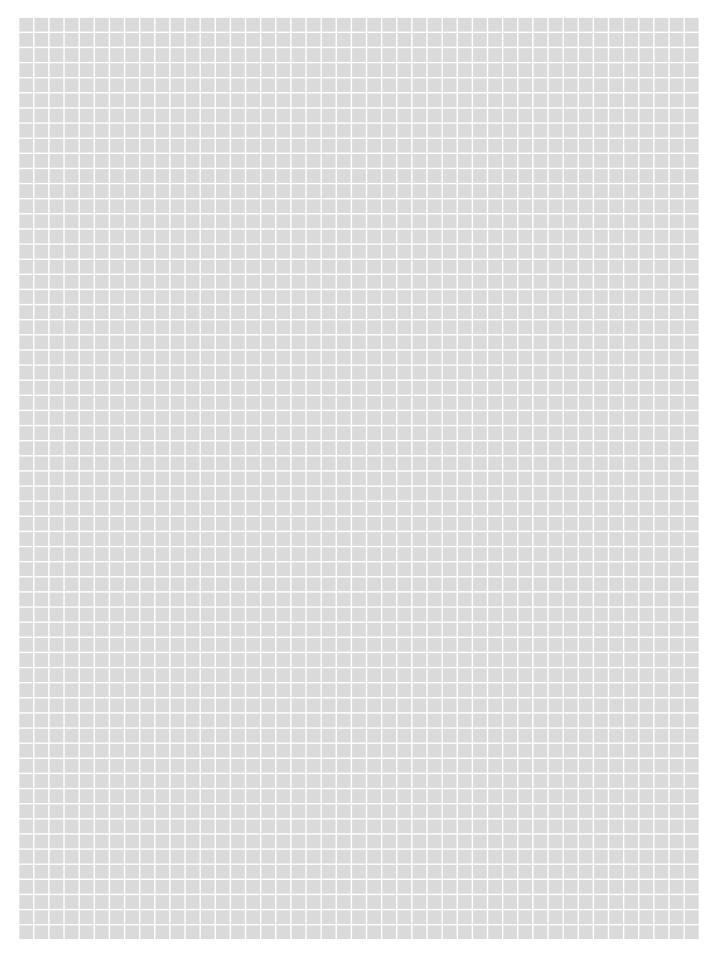


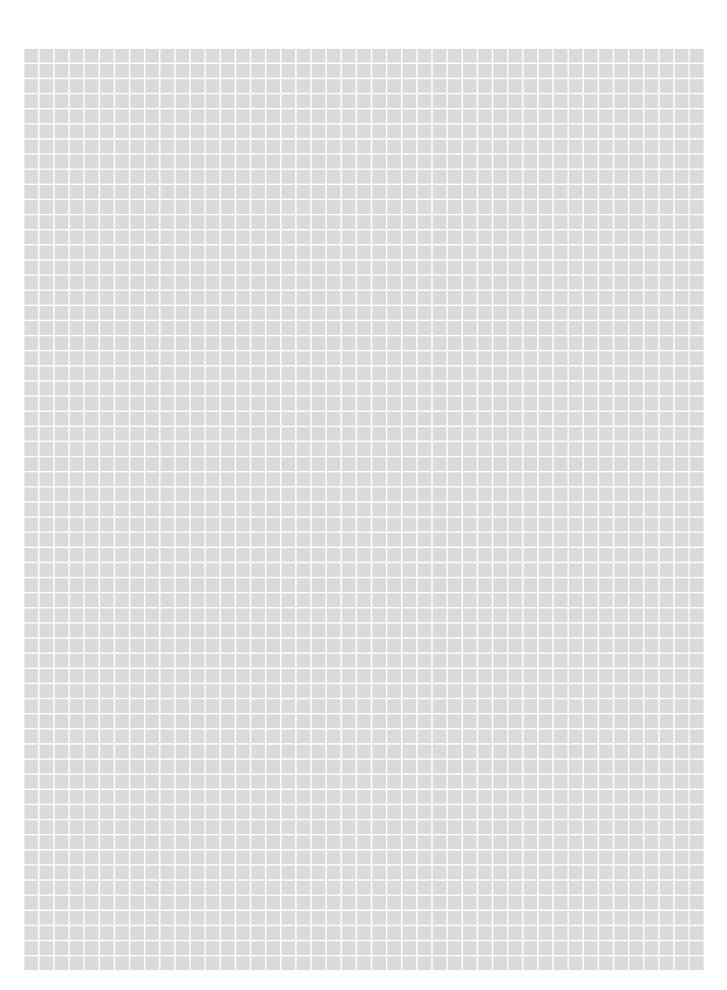
## Schlüter<sup>®</sup>-LIPROTEC application areas











# **General Terms and Conditions**



Exclusively subject to our General Terms and Conditions, which can be downloaded in the latest version from **schlueter-systems.com/agb** or which we will gladly send to you upon request.

The Bluetooth<sup>®</sup> word mark and logos are registered trademarks owned by Bluetooth SIG, Inc.. Other trademarks and trade names are those of their respective owners.

# Key

Properties

**IP65** 

Low	assembly	height
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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

EDEDUCIOUSSuitable for use on the wall in the shower areaImage: Display stateSuitable for use on walls in interior spacesImage: Display stateSuitable for use on the ceilingImage: Display stateSuitable for use on the ceilingImage: Display stateSuitable for use in inner corners of roomsImage: Display stateSuitable for use on an external room cornerImage: Display stateSuitable for use on the floor of privately used areasImage: Display stateSuitable for use on staircase stepsImage: Display stateFor use in pool landscapes, but not underwater<br/>(increased resistance against chlorine)Image: Display stateSuitable for use on walls in exterior spaces

Pac	ckaging units
Р	= box packaging
KV	<ul> <li>case packaging</li> </ul>
PL	= euro pallet
Uni	t = units
Din	nensions
Н	= height
L	= length
В	= width
Т	= depth
Inn	ovations New product





## Information Find out more!

Did we pique your interest in the illuminated profile technology of Schlüter-Systems? Then you might like to learn more. The fastest way is to visit our website. For more information, visit **liprotec.com**.

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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