10

lights

The Catalogue is available for download at www.demos-trade.com

Differences between 12 V and 24 V LED strips

12 V LED strips

+ general extensive use
+ divisible after every 3 diodes

– a more noticeable drop in voltage and a change in light intensity if used in long series

24 V LED strips

+ decrease in luminous intensity is not as noticeable as for 12 V LED strips
+ 24 V switches usually have a double power than 12 V switches
+ warm up less than 12 V strips

– divisible after every 6 diodes

Strong Plus series

for installing difficult-to-replace lights, we recommend using Strong Plus lights and accessories series for a high-quality parameters requirement

Pluses of Strong Plus series

- 5-year warranty[1]
- index ofcolour display (CRI Ra) > 90, high colour fidelity[2]
- quality adhesive layer with high heat dissipation[3]
- high-quality components (undercoat layer for lower drop in luminous intensity), Strong Plus series – possible continuous length of up to 20 m (6 W LED strips)

[1] *Extended warranty includes only the replacement of goods piece-for-piece, other refunds are excluded. Installation in accordance with the instructions is a condition for acknowledging the replacement.*
[2] *A more faithful display of colours, the lower the index, the more difficult to recognise individual colours, distortion occurs, etc.*
[3] *Certain surfaces, such as some types of powder paints, have worse adhesion, and for long-term use, we recommend testing adhesion with the LED strip switched-on (heated). Before application, the surface should be thoroughly cleaned, degreased, or used with an adhesive bridge.*

Custom made production

From our aluminium profile, LED strips, switches and transformers, we will make lights according to your wishes.

Before you place your order for lights into production, it is good to consider a few details:

- type of space the light is determined for
- how it should be installed in the furniture/interior
- what type of switch you want to use for switching on
- what type of a LED strip you want to use (colour of light, intensity)
- to what type of profile, its location, layout
- can influence cable management system
- for larger set, it is possible that the considered switch may not have the required power
- some types of switches (into aluminium profiles) may not work with multi-part sets

For production it is necessary to specify:

- lengths of individual parts, division, type of LED strips, profiles, individual components (transformers, switches)
- required positioning of the supply cables (placement of lead/switch)
- requirements for divisibility (e.g., interruption of the line by a hood), multiple forks, corners, etc.
- whether you require to cut LED profiles at specific lengths, whether the length includes end pieces

Our Excel form with a complete offer and clear selection, which you can download on our website, will assist you. The form will guide you step-by-step and will recommend required components.

We offer free training for regular customers. During the training, you will be presented with selected samples, their use and application in practice. You will be also advised on proper technical connection when executing orders.

Colours of light and their use

The light spectrum offers a wide range of light colours from warm white to neutral and cold white. Different colour of light has different uses and recommendations for use.

How to select a correct colour of light:

Each space is unique and can be finalised using different colours of lighting. When designing the interior when the future layout of the room is dealt with, it is good to think over lighting. Proper lighting makes a complete impression of the space and creates a sense of cosiness and comfort. During the design process, it is good to consider the interior colour itself, used colours emphasise the effect – e.g. blue shades + cold colour of light emphasise cold impression even more. Colour temperature is usually indicated in Kelvin.

Warm white (2,700-3,500 K)

It creates a sense of safety, peace and relaxation.
The light spectrum is very similar to the colour **of a setting sun or burning candle**.

Most common use:
- bedrooms
- children's rooms
- living rooms
- rooms for relaxation
- libraries

Neutral white (3,500-5,000 K)

It displays objects in their real colours most accurately.
The light spectrum is very **similar to natural day lighting**.

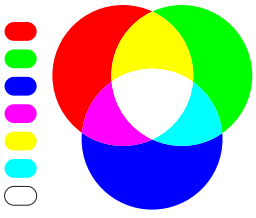
Most common use:
- kitchens
- dining rooms
- entrance halls
- staircases
- bathrooms

Cold white (5,000-6,700 K)

Cold light has the largest share of a light blue component and has a **stimulating effect**.

Most common use:
- desks
- showrooms
- workshops
- public lighting
- commercial spaces

For setting the atmosphere, **RGB LED strips** (possibility to choose the colour of light) can also be used. However, they are not suitable for classic lighting, their spectrum has significant deviations from natural light.



Frequently asked questions about the colour of light:

Is it possible to change the colour of the light on individual strips as needed?
It is possible to use the RGB strip or combine 2 LED strips (warm white + neutral or cold white). Both solutions require an appropriate control.

Why is the colour of the LED strip in gel (IP65) not the same as the gel-free version (IP20)?
Gel used to seal chips is transparent and has the properties of an optical lens. At beam concentration there is also a shift of the spectrum.
As a result, the spectrum shifts to colder shades. **The same type of LED strip in gel will therefore never have the same shade as the gel-free version!**

Will the colour of light be the same when I combine two remaining parts of LED strips for the same assembly?
We try to ensure that each supply has the same colour of light, but there are certain production tolerances. If the same type of LED strip from the same supply is used, the light colour will be the same.
However, if the light was in use for a longer time, a gradual change of the spectrum may occur over a period of time, and then a complete identity cannot be guaranteed.

tips and tricks – LED strips and transformers

LED strips

LED technology has been on the rise for several years due to its long service life and, above all, very low energy consumption. LED strips are especially popular because of the possibility of lighting the space along the whole length, there is no uneven lighting caused by bulb sources. You will find a wide range of LED strips in our offer. Available by the metre, you can specify the length yourself or we will prepare a custom made set for you after completing the form. LED strips are available in 12 V and 24 V versions, with IP20 or IP65. The strips shine either in one colour in warm, neutral or cold white, or you can also purchase RGB with the option to change colour according to your need and mood.

CRI

(COLOR RENDERING INDEX)

CRI Ra~50

CRI Ra~70

CRI Ra~90

Colour Rendering Index (CRI Ra)

CRI Ra is the assessment of colour perception accuracy. Value **Ra = 0** means that it is not possible to distinguish colours in this lighting. On the other hand, **Ra = 100** means that we perceive colours as natural.

The higher the CRI Ra number, the more natural the colour display. However, even the natural daylight almost never has Ra = 100. It is affected by clouds, smog, sun position (morning, evening), etc.

Transformers

It is not possible to combine 12 V LED strips with the 24 V transformer and vice versa. The transformer must always have sufficient reserve for the respective LED strip set. During normal use, the reserve should be 20%, if used for more than 5 hours, we recommend increasing the reserve to 30% or more. Offered transformers have protection to prevent damage, at overloading the transformer switches off and after reducing the load and cooling, the transformer is functional again. However, overloading has a negative impact on the overall service life.

The transformer should be installed so that it can be accessed and possibly replaced at any time and it should be well ventilated. Installation in small, unventilated space reduces its service life.
Please note that the supply voltage must comply with ČSN EN 60038, **damage due to over-voltage in the electrical network is not a reason for placing a complaint.**
Complaints are solved by replacing the faulty transformer. Other costs with replacing the connection are not recognised.

Important notice – work rules

Electronic components such as LED lights, sensors, etc. are equipped with a number of sensitive components. In particular, plastics used all around us (garments, flooring, etc.) contribute to a high risk of their damage due to electrostatic charge. It is therefore necessary to respect necessary work rules.

When working, use antistatic devices, or always secure earthing of the electrostatic charge **before** manipulating with these components.

This can be ensured, for example, by touching radiators, metal pipes and other earthed objects (but, for example, plastic wiring does not guarantee sufficient earthing). Even a slight discharge has a sufficient power for causing an irreversible damage to some components.

When working with electrical equipment, legal norms must be observed and the work should be performed by a competent person.

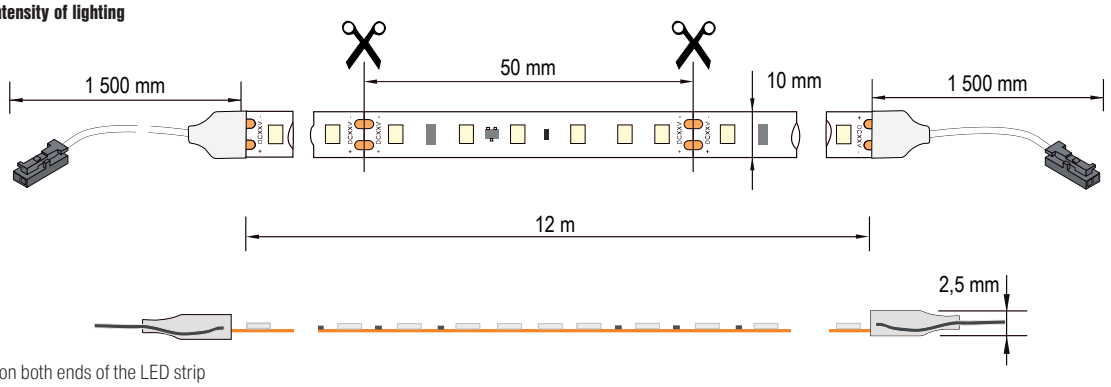
Transformer power (W) = x + 20% (30%)
x = LED strip length (m) × LED strip input power (W/m)

Example: When using a strip with 14.4 W/m and length of 2.5 m, the power of the strip is 36 W + 20% reserve (7.2 W), i.e. 43.2 W. You will thus need a transformer with more than 44 W.

N Strong Plus – 6 W/m IP20

- **LED strips with high-quality components, top parameters and extended warranty (5 years)**
- high CRI for true colour perception, more enjoyable than most conventional LED strips
- special LED strip design CONSTANT CURRENT, ensuring a minimal drop in luminous intensity even in a long line and power supply from only one end
- especially suitable for long installations
- maximum length of continuous strip: 12 m, the strip may have a continuous length of up to 20 m, but the original connecting cables with the connector then cannot be used – they must be replaced by stronger conductors, at least 18 AWG, 2 × 0.5 mm², or must have a power supply from both ends
- coil: 12 m
- cabling: 2 × 1.5 m, finished with Mini connectors
- **decorative intensity of lighting**

The strip type Constant Current allows installation in a continuous length of 20 m without a drop in luminous intensity.



connectors are on both ends of the LED strip

code	colour of light	temperature (K)	luminous intensity (lm/m)	number of diodes per 1 m	CRI Ra
355846	warm white	2700–3500	390	120	90
355847	neutral white	3500–5000	410		
355848	cold white	6000–6700	425		

Warranty 5 years

24V DC | [h] 30000 | MINI

WE RECOMMEND:

code	description
285110	Mini extension cable 1.8 m
285094	connecting cable for soldering, Mini connector, 1.8 m

In order to achieve optimal function, it is recommended to have the transformer as close to the light source as possible. Longer cables cause loss of voltage and consequently a drop in luminous intensity. They may also have disturbing influence on near electrical appliances.

RECOMMENDED TRANSFORMERS[1]

code	power	maximum length of LED strip (m)
355856	36 W, 1,5 A	5
355857	60 W, 2,5 A	8,3
360507	100 W, 4,16 A	13,8
355858	150 W, 6,25 A	20

For the proper operation of LED strips, it is important to place it in an aluminium profile with a cover cap.

[1] To calculate the power, multiply the length of the LED strip with its input power per meter. In case of a long-term load, we recommend increasing the power reserve.

A detailed overview of transformers with a 5-year warranty can be found on page 10.9.

Do not exceed the maximum recommended length of the LED strips. If necessary, divide them to multiple parts and supply them with a higher number of supply cables. Longer lines can be powered from both ends.

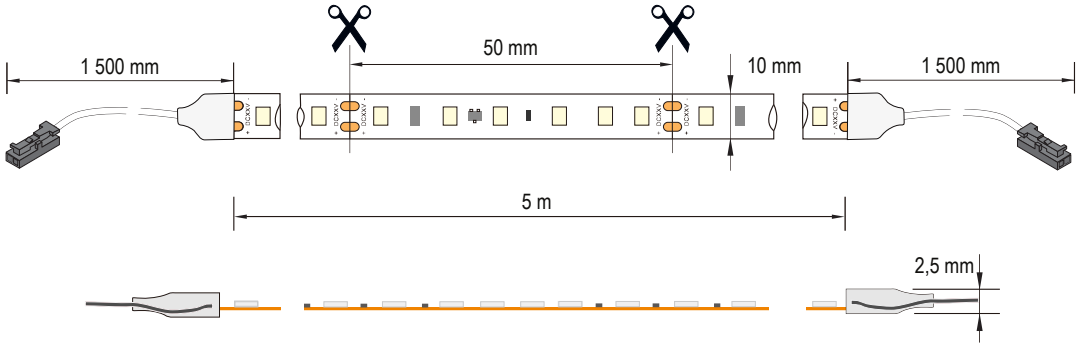
Tips for use:

- strips for thematic lighting, suitable for interiors
- decorative light around the bed/ceiling
- staircase lighting
- glass shelves lighting
- television backlight
- plinth backlight
- night lighting
- wardrobes

Strong Plus LED strips

N Strong Plus – 14.4 W/m IP20

- **LED strips with high-quality components, top parameters and extended warranty (5 years)**
- high CRI for true colour perception, more enjoyable than most conventional LED strips
- maximum length of continuous strip: 5 m
- coil: 5 m
- cabling: 2 × 1.5 m, finished with Mini connectors
- **very strong lighting**



connectors are on both ends of the LED strip

code	colour of light	temperature (K)	luminous intensity (lm/m)	number of diodes per 1 m	CRI Ra
355849	warm white	2700–3500	1300	120	90
355850	neutral white	3500–5000	1400		
355851	cold white	6000–6700	1500		

Warranty 5 years

24V DC | [h] 30000 | MINI

WE RECOMMEND:

code	description
285110	Mini extension cable 1.8 m
285094	connecting cable for soldering, Mini connector, 1.8 m

In order to achieve optimal function, it is recommended to have the transformer as close to the light source as possible. Longer cables cause loss of voltage and consequently a drop in luminous intensity. They may also have disturbing influence on near electrical appliances.

RECOMMENDED TRANSFORMERS[1]

code	power	maximum length of LED strip (m)
355856	36 W, 1,5 A	2
355857	60 W, 2,5 A	3,4
360507	100 W, 4,16 A	5,7[2]
355858	150 W, 6,25 A	8,6[2]

For the proper operation of LED strips, it is important to place it in an aluminium profile with a cover cap.

[1] To calculate the power, multiply the length of the LED strip with its input power per meter. In case of a long-term load, we recommend increasing the power reserve.

A detailed overview of transformers with a 5-year warranty can be found on page 10.9.

[2] Do not exceed the maximum recommended length of the LED strips. If necessary, divide them to multiple parts and supply them with a higher number of supply cables. Longer lines can be powered from both ends.

285110

Tips for use:

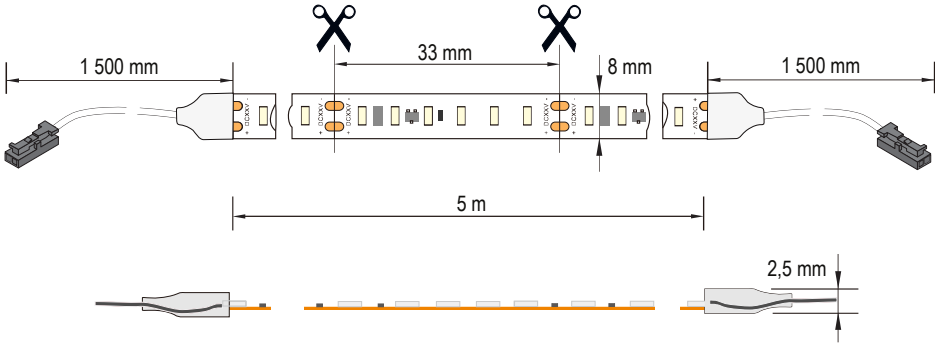
- worktop lighting in the kitchen
- desk lighting
- backlight of ceilings
- wardrobes

Observe necessary work rules for sensitive electronics, for detailed information see p. 10.5

Strong Plus LED strips

N Strong Plus – 21.6 W/m IP20

- **LED strips with high-quality components, top parameters and extended warranty (5 years)**
- high CRI for true colour perception, more enjoyable than most conventional LED strips
- maximum length of continuous strip: 3 m
- coil: 5 m
- cabling: 2 × 1.5 m, ends with Mini connectors
- **extremely strong lighting**



connectors are on both ends of the LED strip

code	colour of light	temperature (K)	luminous intensity (lm/m)	number of diodes per 1 m	CRI Ra
355853	warm white	2700–3500	1890	210	90
355854	neutral white	3500–5000	2000		
355855	cold white	6000–6700	2100		

Warranty 5 years

24V DC | [h] 30000 | MINI

WE RECOMMEND:

code	description
285110	Mini extension cable 1.8 m
285094	connecting cable for soldering, Mini connector, 1.8 m

In order to achieve optimal function, it is recommended to have the transformer as close to the light source as possible. Longer cables cause loss of voltage and consequently a drop in luminous intensity. They may also have disturbing influence on near electrical appliances.

RECOMMENDED TRANSFORMERS[1]

code	power	maximum length of LED strip (m)
355856	36 W, 1,5 A	1,3
355857	60 W, 2,5 A	2,3
360507	100 W, 4,16 A	3,8[2]
355858	150 W, 6,25 A	5,7[2]

For the proper operation of LED strips, it is important to place it in an aluminium profile with a cover cap.

[1] To calculate the power, multiply the length of the LED strip with its input power per meter. In case of a long-term load, we recommend increasing the power reserve.

A detailed overview of transformers with a 5-year warranty can be found on page 10.9.

[2] Do not exceed the maximum recommended length of the LED strips. If necessary, divide them to multiple parts and supply them with a higher number of supply cables. Longer lines can be powered from both ends.

285110

Tips for use:

- worktop lighting in the kitchen
- desk lighting
- backlight of ceilings

Strong Plus transformers

N Strong Plus – transformers

- series of transformers with high-quality components and extended warranty (5 years)
- for power supply of LED strips and lights with 24 V voltage, direct current
- power supply 220-240 V, 50 Hz

code	power	L × D × H (mm)
355856	36 W, 1,5 A	133 × 42 × 30
355857	60 W, 2,5 A	185 × 64 × 22
360507	100 W, 4,16 A	180 × 66 × 32
355858	150 W, 6,25 A	196 × 99 × 32

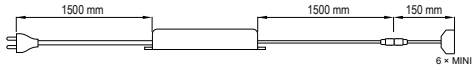
Warranty 5 years

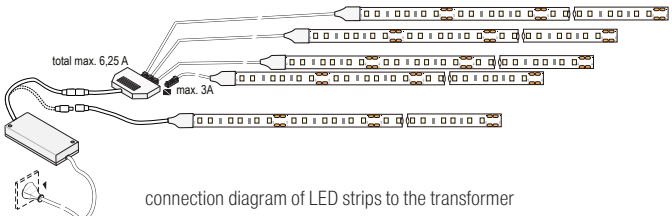
Transformer power (W) = x + 20% (30%)

x = LED strip length (m) × LED strip power input (W/m)

Example: When using a strip with 14.4 W/m and length of 2.5 m, the power of the strip is 36 W + 20 % reserve (7.2 W) = 43.2 W. You will thus need a 60 W transformer.

- output cable with a circular connector + Mini distributor with 6 outputs for easy connection of LED strips and accessories
- maximum load on one output of the 3 A distributor
- covered terminal box for direct connection of the outlet and inlet (direct connection should be carried out by a competent person)
- in order to achieve optimal function, it is recommended to have the transformer as close to the light source as possible (Longer cables cause voltage losses and a subsequent drop in luminous intensity. They may also have disturbing influence on near electrical appliances.)
- power of the transformer must be higher than the input power of the lights, recommended reserve 20%, for continuous lighting the reserve should be increased to 30%
- the transformer should have a minimum distance 0.5 m from other electrical appliances
- place in such a way that sufficient ventilation – heat dissipation – is provided
- cable length 2 m
- CE certificate





connection diagram of LED strips to the transformer

Transformers

It is not possible to combine 12 V LED strips with the 24 V transformer and vice versa. The transformer must always have sufficient reserve for the respective LED strip set. During normal use, the reserve should be 20%, if used for more than 5 hours, we recommend increasing the reserve to 30% or more. Offered transformers have protection to prevent damage, at overloading the transformer switches off and after reducing the load and cooling, the transformer is functional again. However, overloading has a negative impact on the overall service life.

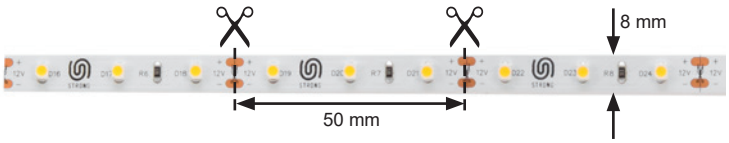
The transformer should be installed so that it can be accessed and possibly replaced at any time and it should be well ventilated. Installation in small, unventilated space reduces its service life.
Please note that the supply voltage must comply with ČSN EN 60038, **damage due to over-voltage in the electrical network is not a reason for placing a complaint.**
Complaints are solved by replacing the faulty transformer.
Other costs with replacing the connection are not recognised.

Observe necessary work rules for sensitive electronics, for detailed information see p. 10.5

LED strips 12 V

Input power 4.8 W/m IP20

- maximum length of continuous strip: 5 m
- coil: 30 m
- **decorative intensity of lighting**



Tips for use:

- strips for thematic lighting, suitable for interiors
- decorative light around the bed
- staircase lighting
- television backlight
- plinth backlight
- night lighting
- wardrobes

code	colour of light	temperature (K)	luminous intensity (lm/m)	number of diodes per 1 m
132251	warm white	2700–3500	360	60
249934	neutral white	3500–5000	380	
131573	cold white	6000–6700	390	

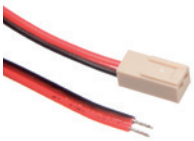
12V DC | [h] 30000

RECOMMENDED CONNECTING CABLES

code	description
285094	Mini connector (soldering), 1.8 m
SAL301	AMP connector (soldering), 2 m
134114	direct connection to transformer (soldering), 2 m
342535	snap-on connector[1] with Mini end piece, 1 m

[1] Do not place snap-on connectors near a hob, kettle or other source of steam and increased humidity. Connectors can oxidise.
Snap-on connectors are only suitable in combination with profiles with sufficient space such as Fanto, Wide and Oval. At the connection point, the light may be interrupted or changed – the LED strip does not touch the profile at the connection. At the connection point, the LED strip and the connector need to be glued to the aluminium profile.


285094


SAL301


134114


342535

RECOMMENDED TRANSFORMERS[2]

code	power	maximum length of LED strip (m)
134110	18 W / 1,5 A	3
134111	30 W / 2,5 A	5,2
134112	48 W / 4,0 A	8,3 [3]
134113	80 W / 6,6 A	13,8[3]
353250	120 W, 10 A	20,8[3]

For the proper operation of LED strips, it is important to place it in an aluminium profile with a cover cap.

[2] To calculate the power, multiply the length of the LED strip with its input power per meter. In case of a long-term load, we recommend increasing the power reserve. For other types of 12 V transformers, see p. 10.21

[3] Do not exceed the maximum recommended length of the LED strips. If necessary, divide them to multiple parts and supply them with a higher number of supply cables. Longer lines can be powered from both ends.

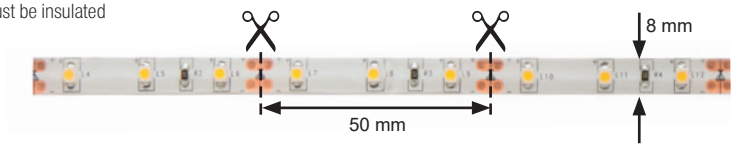
DISTRIBUTORS

code	description
285093	Mini, 6 outlets (individually up to 30 W), total max. 100 W, 0.25 m
134119	AMP, 12 outlets (individually up to 30 W), total max. 72 W, 0.5 m

LED strips 12 V

Input power 4.8 W/m IP65

- waterproof construction[1]
- if used in wet environments, spots that could come into contact with water must be insulated with silicone sealant
- maximum length of continuous strip: 5 m
- coil: 5 m
- **decorative intensity of lighting**



[1] We do not recommend this type of LED strip for long-term lighting because of poor heat dissipation.
Lamino, glass, etc., do not provide sufficient heat dissipation. There is a risk of burning the diodes, damaging the protective coating. Recommended duration of continuous lighting max. 60 min.
Damage by overheating is not subject to warranty.

Tips for use:

- strips for thematic lighting, suitable for exterior
- outdoor staircase lighting
- decorative lighting of the house, arbours, balconies
- bathroom lighting

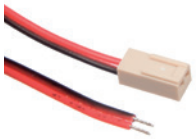
code	colour of light	temperature (K)	luminous intensity (lm/m)	number of diodes per 1 m
132267	warm white	2700–3500	360	60
132266	cold white	6000–6700	390	

12V DC | [h] 30000

RECOMMENDED CONNECTING CABLES

code	description
285094	Mini connector (soldering), 1.8 m
SAL301	AMP connector (soldering), 2 m
134114	direct connection to transformer (soldering), 2 m

285094



SAL301

134114

RECOMMENDED TRANSFORMERS[2]

code	power	maximum length of LED strip (m)
134110	18 W / 1,5 A	3
134111	30 W / 2,5 A	5,2
134112	48 W / 4,0 A	8,3[3]
134113	80 W / 6,6 A	13,8[3]
353250	120 W, 10 A	20,8[3]

For the proper operation of LED strips, it is important to place it in an aluminium profile with a cover cap.

[2] To calculate the power, multiply the length of the LED strip with its input power per meter. In case of a long-term load, we recommend increasing the power reserve. For other types of 12 V transformers, see p. 10.21.

[3] Do not exceed the maximum recommended length of the LED strips. If necessary, divide them to multiple parts and supply them with a higher number of supply cables. Longer lines can be powered from both ends.

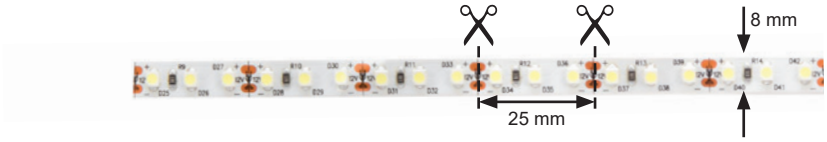
DISTRIBUTORS

code	description
285093	Mini, 6 outlets (individually up to 30 W), total max. 100 W, 0.25 m
134119	AMP, 12 outlets (individually up to 30 W), total max. 72 W, 0.5 m

Observe necessary work rules for sensitive electronics, for detailed information see p. 10.5

Input power 9.6 W/m IP20

- maximum length of continuous strip: 5 m
- coil: 30 m
- **medium lighting**



Tips for use:

- strips for thematic lighting
- decorative light around the bed
- staircase lighting
- wall lighting
- glass shelves lighting
- television backlight
- plinth backlight
- night lighting
- wardrobes

code	colour of light	temperature (K)	luminous intensity (lm/m)	number of diodes per 1 m
231392	warm white	2700–3500	720	120
250029	neutral white	3500–5000	750	
231387	cold white	6000–6700	780	

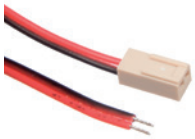
12V DC | [h] 30000

RECOMMENDED CONNECTING CABLES

code	description
285094	Mini connector (soldering), 1.8 m
SAL301	AMP connector (soldering), 2 m
134114	direct connection to transformer (soldering), 2 m
342535	snap-on connector[1] with Mini end piece, 1 m

[1] Do not place snap-on connectors near a hob, kettle or other source of steam and increased humidity. Connectors can oxidise.
Snap-on connectors are only suitable in combination with profiles with sufficient space such as Fanto, Wide and Oval. At the connection point, the light may be interrupted or changed – the LED strip does not touch the profile at the connection. At the connection point, the LED strip and the connector need to be glued to the aluminium profile.

285094



SAL301

134114

342535

RECOMMENDED TRANSFORMERS[2]

code	power	maximum length of LED strip (m)
134110	18 W / 1,5 A	1,5
134111	30 W / 2,5 A	2,6
134112	48 W / 4,0 A	4,1
134113	80 W / 6,6 A	6,9 [3]
353250	120 W, 10 A	10,4 [3]

For the proper operation of LED strips, it is important to place it in an aluminium profile with a cover cap.

[2] To calculate the power, multiply the length of the LED strip with its input power per meter. In case of a long-term load, we recommend increasing the power reserve. For other types of 12 V transformers, see p. 10.21

[3] Do not exceed the maximum recommended length of the LED strips. If necessary, divide them to multiple parts and supply them with a higher number of supply cables. Longer lines can be powered from both ends.

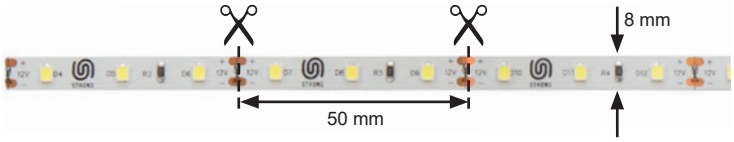
DISTRIBUTORS

code	description
285093	Mini, 6 outlets (individually up to 30 W), total max. 100 W, 0.25 m
134119	AMP, 12 outlets (individually up to 30 W), total max. 72 W, 0.5 m

LED strips 12 V

Input power 12 W/m IP20

- maximum length of continuous strip: 3 m
- coil: 30 m
- **very strong lighting**



Tips for use:

- worktop lighting in the kitchen
- desk lighting
- backlight of ceilings
- wardrobes

code	colour of light	temperature (K)	luminous intensity (lm/m)	number of diodes per 1 m
231394	warm white	2700–3500	1 160	60
250030	neutral white	3500–5000	1 200	
231388	cold white	6000–6700	1 260	

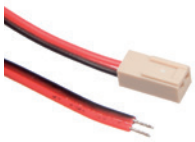
12V DC | [h] 30000

RECOMMENDED CONNECTING CABLES

code	description
285094	Mini connector (soldering), 1.8 m
SAL301	AMP connector (soldering), 2 m
134114	direct connection to transformer (soldering), 2 m
342535	snap-on connector[1] with Mini end piece, 1 m

[1] Do not place snap-on connectors near a hob, kettle or other source of steam and increased humidity. Connectors can oxidise.
Snap-on connectors are only suitable in combination with profiles with sufficient space such as Fanto, Wide and Oval. At the connection point, the light may be interrupted or changed – the LED strip does not touch the profile at the connection. At the connection point, the LED strip and the connector need to be glued to the aluminium profile.


285094


SAL301


134114


342536

RECOMMENDED TRANSFORMERS[2]

code	power	maximum length of LED strip (m)
134110	18 W / 1,5 A	1,25
134111	30 W / 2,5 A	2
134112	48 W / 4,0 A	3
134113	80 W / 6,6 A	5,5 [3]
353250	120 W, 10 A	8,3 [3]

For the proper operation of LED strips, it is important to place it in an aluminium profile with a cover cap.

[2] To calculate the power, multiply the length of the LED strip with its input power per meter. In case of a long-term load, we recommend increasing the power reserve. For other types of 12 V transformers, see p. 10.21

[3] Do not exceed the maximum recommended length of the LED strips. If necessary, divide them to multiple parts and supply them with a higher number of supply cables. Longer lines can be powered from both ends.

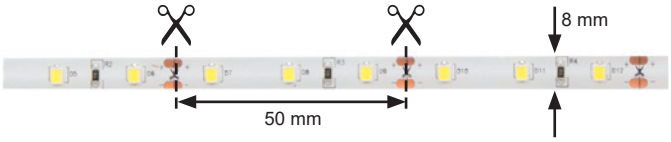
DISTRIBUTORS

code	description
285093	Mini, 6 outlets (individually up to 30 W), total max. 100 W, 0.25 m
134119	AMP, 12 outlets (individually up to 30 W), total max. 72 W, 0.5 m

Observe necessary work rules for sensitive electronics, for detailed information see p. 10.5

Input power 12 W/m IP65

- waterproof construction[1]
- if used in wet environments, spots that could come into contact with water must be insulated with silicone sealant
- maximum length of continuous strip: 3 m
- coil: 5 m
- **very strong lighting**



[1] this type of LED strip is not recommended for long-term lighting. We recommend short-term lighting because of poor heat dissipation. Lamino, glass, etc., do not provide sufficient heat dissipation. There is a risk of burning the diodes, damaging the protective coating. Recommended duration of continuous lighting max. 30 min. Damage by overheating is not subject to warranty.

Tips for use:

- short-term lighting of places with higher humidity

code	colour of light	temperature (K)	luminous intensity (lm/m)	number of diodes per 1 m
231401	warm white	2700–3500	1 160	60
231396	cold white	6000–6700	1 260	

12V DC | [h] 30000

RECOMMENDED CONNECTING CABLES

code	description
285094	Mini connector (soldering), 1.8 m
SAL301	AMP connector (soldering), 2 m
134114	direct connection to transformer (soldering), 2 m

RECOMMENDED TRANSFORMERS[2]

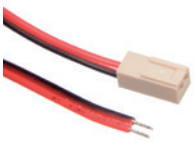
code	power	maximum length of LED strip (m)
134110	18 W / 1,5 A	1,25
134111	30 W / 2,5 A	2
134112	48 W / 4,0 A	3
134113	80 W / 6,6 A	5,5 [3]
353250	120 W, 10 A	8,3 [3]

For the proper operation of LED strips, it is important to place it in an aluminium profile with a cover cap.

[2] To calculate the power, multiply the length of the LED strip with its input power per meter. In case of a long-term load, we recommend increasing the power reserve. For other types of 12 V transformers, see p. 10.21

[3] Do not exceed the maximum recommended length of the LED strips. If necessary, divide them to multiple parts and supply them with a higher number of supply cables. Longer lines can be powered from both ends.

285094



SAL301

134114

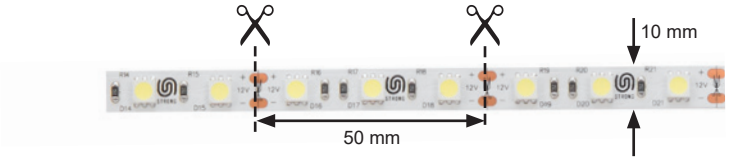
DISTRIBUTORS

code	description
285093	Mini, 6 outlets (individually up to 30 W), total max. 100 W, 0.25 m
134119	AMP, 12 outlets (individually up to 30 W), total max. 72 W, 0.5 m

LED strips 12 V

Input power 14.4 W/m IP20

- maximum length of continuous strip: 3 m
- coil: 30 m
- **very strong lighting**



Tips for use:

- worktop lighting in the kitchen
- desk lighting
- backlight of ceilings
- wardrobes

code	colour of light	temperature (K)	luminous intensity (lm/m)	number of diodes per 1 m
157844	warm white	2700–3500	1 080	60
132276	cold white	6000–6700	1 170	

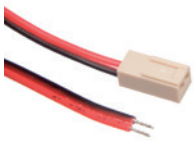
12V DC | [h] 30000

RECOMMENDED CONNECTING CABLES

code	description
285094	Mini connector (soldering), 1.8 m
SAL301	AMP connector (soldering), 2 m
134114	direct connection to transformer (soldering), 2 m
342536	snap-on connector[1] with Mini end piece, 1 m

[1] Do not place snap-on connectors near a hob, kettle or other source of steam and increased humidity. Connectors can oxidise.
Snap-on connectors are only suitable in combination with profiles with sufficient space such as Fanto, Wide and Oval. At the connection point, the light may be interrupted or changed – the LED strip does not touch the profile at the connection. At the connection point, the LED strip and the connector need to be glued to the aluminium profile.


285094


SAL301


134114


342536

RECOMMENDED TRANSFORMERS[2]

code	power	maximum length of LED strip (m)
134110	18 W / 1,5 A	1
134111	30 W / 2,5 A	1,5
134112	48 W / 4,0 A	2,7
134113	80 W / 6,6 A	4,6 [3]
353250	120 W, 10 A	6,9 [3]

For the proper operation of LED strips, it is important to place it in an aluminium profile with a cover cap.

[2] To calculate the power, multiply the length of the LED strip with its input power per meter. In case of a long-term load, we recommend increasing the power reserve. For other types of 12 V transformers, see p. 10.21

[3] Do not exceed the maximum recommended length of the LED strips. If necessary, divide them to multiple parts and supply them with a higher number of supply cables. Longer lines can be powered from both ends.

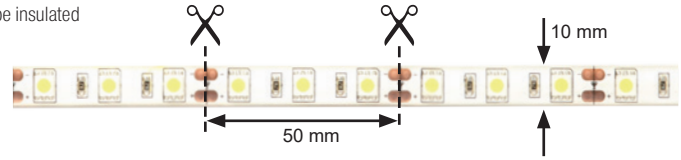
DISTRIBUTORS

code	description
285093	Mini, 6 outlets (individually up to 30 W), total max. 100 W, 0.25 m
134119	AMP, 12 outlets (individually up to 30 W), total max. 72 W, 0.5 m

Observe necessary work rules for sensitive electronics, for detailed information see p. 10.5

Input power 14.4 W/m IP65

- waterproof construction[1]
- if used in wet environments, spots that could come into contact with water must be insulated with silicone sealant
- maximum length of continuous strip: 3 m
- coil: 5 m
- **very strong lighting**



[1] this type of LED strip is not recommended for long-term lighting. We recommend short-term lighting because of poor heat dissipation. Lamino, glass, etc., do not provide sufficient heat dissipation. There is a risk of burning the diodes, damaging the protective coating. Recommended duration of continuous
lighting max. 30 min. Damage by overheating is not subject to warranty.

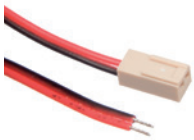
Tips for use:

- short-term lighting of places with higher humidity

code	colour of light	temperature (K)	luminous intensity (lm/m)	number of diodes per 1 m
157845	warm white	2700–3500	1 080	60
134102	cold white	6000–6700	1 170	

12V DC | [h] 30000

285094



SAL301

134114

RECOMMENDED CONNECTING CABLES

code	description
285094	Mini connector (soldering), 1.8 m
SAL301	AMP connector (soldering), 2 m
134114	direct connection to transformer (soldering), 2 m

RECOMMENDED TRANSFORMERS[2]

code	power	maximum length of LED strip (m)
134110	18 W / 1,5 A	1
134111	30 W / 2,5 A	1,5
134112	48 W / 4,0 A	2,7
134113	80 W / 6,6 A	4,6 [3]
353250	120 W, 10 A	6,9 [3]

For the proper operation of LED strips, it is important to place it in an aluminium profile with a cover cap.

[2] To calculate the power, multiply the length of the LED strip with its input power per meter. In case of a long-term load, we recommend increasing the power reserve. For other types of 12 V transformers, see p. 10.21

[3] Do not exceed the maximum recommended length of the LED strips. If necessary, divide them to multiple parts and supply them with a higher number of supply cables. Longer lines can be powered from both ends.

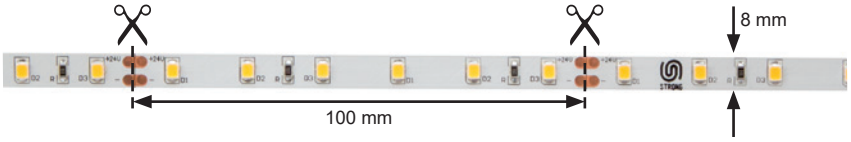
DISTRIBUTORS

code	description
285093	Mini, 6 outlets (individually up to 30 W), total max. 100 W, 0.25 m
134119	AMP, 12 outlets (individually up to 30 W), total max. 72 W, 0.5 m

LED pásky 24 V

Input power 6 W/m IP20

- maximum length of continuous strip: 10 m
- coil: 5 m
- **decorative intensity of lighting**



Tips for use:

- strips for thematic lighting, suitable for interiors
- staircase lighting
- glass shelves lighting
- television backlight
- plinth backlight
- night lighting
- wardrobes

code	colour of light	temperature (K)	luminous intensity (lm/m)	number of diodes per 1 m	CRI Ra
284554	warm white	2700–3500	580	60	80
284555	neutral white	3500–5000	640		
284556	cold white	6000–6700	700		

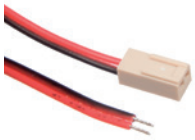
24V DC | [h] 30000

RECOMMENDED CONNECTING CABLES

code	description
285094	Mini connector (soldering), 1.8 m
SAL301	AMP connector (soldering), 2 m
134114	direct connection to transformer (soldering), 2 m
342535	snap-on connector[1] with Mini end piece, 1 m

[1] Do not place snap-on connectors near a hob, kettle or other source of steam and increased humidity. Connectors can oxidise.
Snap-on connectors are only suitable in combination with profiles with sufficient space such as Fanto, Wide and Oval. At the connection point, the light may be interrupted or changed – the LED strip does not touch the profile at the connection. At the connection point, the LED strip and the connector need to be glued to the aluminium profile.


285094


SAL301


134114


342535

RECOMMENDED TRANSFORMERS[2]

code	power	maximum length of LED strip (m)
284616	18 W, 0,75 A	2,5
284617	30 W, 1,25 A	4,1
284618	60 W, 2,5 A	8,3[3]
284619	80 W, 3,4 A	11,1[3]
284620	120 W, 5 A	16,6[3]

For the proper operation of LED strips, it is important to place it in an aluminium profile with a cover cap.

[2] To calculate the power, multiply the length of the LED strip with its input power per meter. In case of a long-term load, we recommend increasing the power reserve. For other types of 24 V transformers, see p. 10.22

[3] Do not exceed the maximum recommended length of the LED strips. If necessary, divide them to multiple parts and supply them with a higher number of supply cables. Longer lines can be powered from both ends.

DISTRIBUTORS

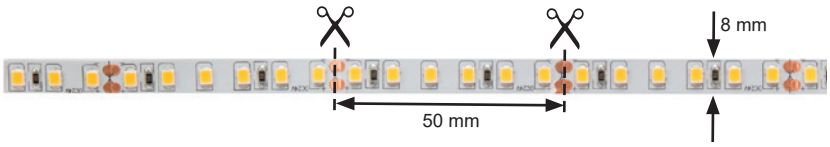
code	description
285093	Mini, 6 outlets (individually up to 30 W), total max. 100 W, 0.25 m
134119	AMP, 12 outlets (individually up to 30 W), total max. 72 W, 0.5 m

Observe necessary work rules for sensitive electronics, for detailed information see p. 10.5

LED pásky 24 V

Input power 12 W/m IP20

- maximum length of continuous strip: 5 m
- coil: 5 m
- **very strong lighting**



Tips for use:

- worktop lighting in the kitchen
- desk lighting
- backlight of ceilings
- wardrobes

code	colour of light	temperature (K)	luminous intensity (lm/m)	number of diodes per 1 m	CRI Ra
284560	warm white	2700–3500	1 080	120	80
284561	neutral white	3500–5000	1 160		
284562	cold white	6000–6700	1 200		

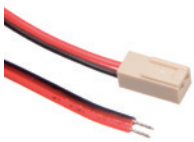
24V DC | [h] 30000

RECOMMENDED CONNECTING CABLES

code	description
285094	Mini connector (soldering), 1.8 m
SAL301	AMP connector (soldering), 2 m
134114	direct connection to transformer (soldering), 2 m
342535	snap-on connector[1] with Mini end piece, 1 m

[1] Do not place snap-on connectors near a hob, kettle or other source of steam and increased humidity. Connectors can oxidise.
Snap-on connectors are only suitable in combination with profiles with sufficient space such as Fanto, Wide and Oval. At the connection point, the light may be interrupted or changed – the LED strip does not touch the profile at the connection. At the connection point, the LED strip and the connector need to be glued to the aluminium profile.

285094



SAL301

134114

342535

RECOMMENDED TRANSFORMERS[2]

code	power	maximum length of LED strip (m)
284616	18 W, 0,75 A	1,25
284617	30 W, 1,25 A	2
284618	60 W, 2,5 A	4,1
284619	80 W, 3,4 A	5,5[3]
284620	120 W, 5 A	8,3[3]

For the proper operation of LED strips, it is important to place it in an aluminium profile with a cover cap.

[2] To calculate the power, multiply the length of the LED strip with its input power per meter. In case of a long-term load, we recommend increasing the power reserve. For other types of 24 V transformers, see p. 10.22.

[3] Do not exceed the maximum recommended length of the LED strips. If necessary, divide them to multiple parts and supply them with a higher number of supply cables. Longer lines can be powered from both ends.

DISTRIBUTORS

code	description
285093	Mini, 6 outlets (individually up to 30 W), total max. 100 W, 0.25 m
134119	AMP, 12 outlets (individually up to 30 W), total max. 72 W, 0.5 m

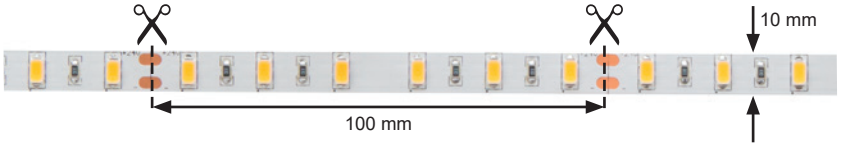
LED pásky 24 V

Input power 14.4 W/m IP20

- maximum length of continuous strip: 5 m
- coil: 5 m
- **very strong lighting**

Tips for use:

- worktop lighting in the kitchen
- desk lighting
- backlight of ceilings



code	colour of light	temperature (K)	luminous intensity (lm/m)	number of diodes per 1 m	CRI Ra
284566	warm white	2700–3500	1 260	60	80
284567	neutral white	3500–5000	1 290		
284568	cold white	6000–6700	1 340		

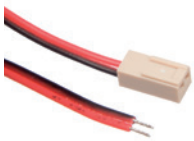
24V DC | [h] 30000

RECOMMENDED CONNECTING CABLES

code	description
285094	Mini connector (soldering), 1.8 m
SAL301	AMP connector (soldering), 2 m
134114	direct connection to transformer (soldering), 2 m
342536	snap-on connector[1] with Mini end piece, 1 m

[1] Do not place snap-on connectors near a hob, kettle or other source of steam and increased humidity. Connectors can oxidise.
Snap-on connectors are only suitable in combination with profiles with sufficient space such as Fanto, Wide and Oval. At the connection point, the light may be interrupted or changed – the LED strip does not touch the profile at the connection. At the connection point, the LED strip and the connector need to be glued to the aluminium profile.


285094


SAL301


134114


342536

RECOMMENDED TRANSFORMERS[2]

code	power	maximum length of LED strip (m)
284616	18 W, 0,75 A	1
284617	30 W, 1,25 A	1,7
284618	60 W, 2,5 A	3,4
284619	80 W, 3,4 A	4,6
284620	120 W, 5 A	6,9[3]

For the proper operation of LED strips, it is important to place it in an aluminium profile with a cover cap.

[2] To calculate the power, multiply the length of the LED strip with its input power per meter. In case of a long-term load, we recommend increasing the power reserve. For other types of 24 V transformers, see p. 10.22

[3] Do not exceed the maximum recommended length of the LED strips. If necessary, divide them to multiple parts and supply them with a higher number of supply cables. Longer lines can be powered from both ends.

DISTRIBUTORS

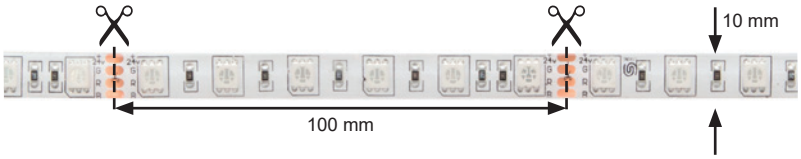
code	description
285093	Mini, 6 outlets (individually up to 30 W), total max. 100 W, 0.25 m
134119	AMP, 12 outlets (individually up to 30 W), total max. 72 W, 0.5 m

Observe necessary work rules for sensitive electronics, for detailed information see p. 10.5

Input power 14.4 W/m RGB

- maximum length of continuous strip: 5 m
- coil: 5 m

RGB LED strips are not suitable for normal lighting. The light spectrum is limited and the light is not natural because the strips consist of colour segments. The segments are intensively stressed in white light and their service life is lower than that of monochromatic LED strips.



code	protection rating	luminous intensity (lm/m)	number of diodes per 1 m
284602	IP20	Not listed for RGB	60
284569	IP65 (in gel)		

24V DC

RECOMMENDED CONNECTING CABLE

code	description
346953	connecting cable to RGB (snap-on)[1]

[1] Do not place snap-on connectors near a hob, kettle or other source of steam and increased humidity. Connectors can oxidise.
Snap-on connectors are only suitable in combination with profiles with sufficient space such as Fanto, Wide and Oval. At the connection point, the light may be interrupted or changed – the LED strip does not touch the profile at the connection. At the connection point, the LED strip and the connector need to be glued to the aluminium profile.

CONTROLS[2]

code	description
284570	Mini control
284574	RF touch control
284571	RGB Wi-Fi

[2] for details about individual controls for RGB, see p. 10.37-10.38

RECOMMENDED TRANSFORMERS[3]

code	power	maximum length of LED strip (m)
284616	18 W, 0,75 A	1
284617	30 W, 1,25 A	1,7
284618	60 W, 2,5 A	3,4
284619	80 W, 3,4 A	4,6
284620	120 W, 5 A	6,9[4]

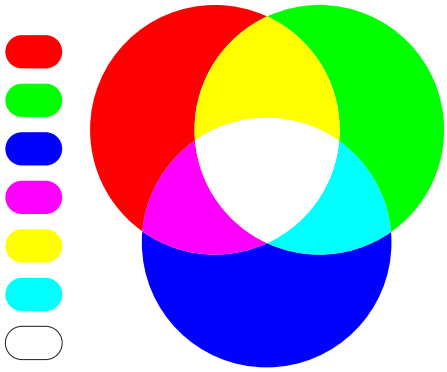
For the proper operation of LED strips, it is important to place it in an aluminium profile with a cover cap.

[3] To calculate the power, multiply the length of the LED strip with its input power per meter. In case of a long-term load, we recommend increasing the power reserve. For other types of 24 V transformers, see p. 10.22

[4] Do not exceed the maximum recommended length of the LED strips, divide them into multiple parts if necessary, and power them using multiple supply cables. Longer lines can be powered from both ends.

Tips for use:

- house lighting
- thematic lighting – an option to change the colour and intensity
- terrace lighting, bar, shops, children's rooms
- backlight of ceilings



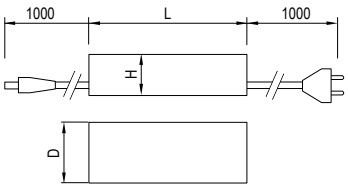
12 V transformers

12 V transformers

- for power supply of LED strips and lights with 12 V voltage, direct current
- power supply 220-240 V, 50 Hz

power	L × D × H (mm)	code
18 W, 1,5 A	95 × 45 × 30	**134110**
30 W / 2,5 A	95 × 45 × 30	**134111**
48 W / 4,0 A	120 × 52 × 32	**134112**
80 W 6,6 A	132 × 57 × 30	**134113**
120 W, 10 A	172 × 73 × 43	**353250**

- circular connector at output
- in order to achieve optimal function, it is recommended to have the transformer as close to the light source as possible (Longer cables cause voltage losses and a subsequent drop in luminous intensity. They may also have disturbing influence on near electrical appliances.)
- the transformer should have a minimum distance 0.5 m from other electrical appliances
- transformers must be located in such a way that sufficient ventilation – heat dissipation – is provided; if located in a closed room, sufficient ventilation (ventilation holes) must be provided
- power of the transformer must be higher than the input power of the lights, recommended reserve 20%, for continuous lighting the reserve should be increased to 30%



Transformer power (W) = x + 20 % (30 %)

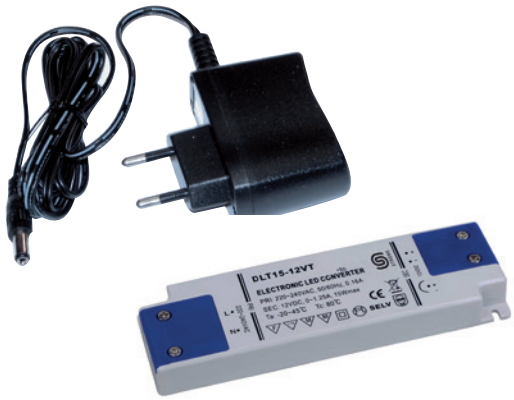
x = LED strip length (m) × LED strip power input (W/m)

Example: When using a strip with 14.4 W/m and length of 2.5 m, the power of the strip is 36 W + 20% reserve (7.2 W) = 43.2 W. You will thus need a transformer with more than 44 W.

12 V transformers

- designed for socket
- for power supply of LED strips and lights, supply voltage 12 V, direct current

power	L × D × H (mm)	code
6 W, 0.5 A	60 × 40 × 25	**134109**



12 V flat transformers

- for power supply of LED strips and lights with 12 V voltage, direct current
- power supply 220-240 V, 50 Hz

power	L × D × H (mm)	code
15 W, 1.25 A	128 × 50 × 13	**231295**
30 W / 2.5 A	251 × 30 × 16	**231296**

- circular connector at output
- in order to achieve optimal function, it is recommended to have the transformer as close to the light source as possible (Longer cables cause voltage losses and a subsequent drop in luminous intensity. They may also have disturbing influence on near electrical appliances.)
- the transformer should have a minimum distance 0.5 m from other electrical appliances
- transformers must be located in such a way that sufficient ventilation – heat dissipation – is provided; if located in a closed room, sufficient ventilation (ventilation holes) must be provided

Notice

It is not possible to combine 12 V LED strips with the 24 V transformer and vice versa. The transformer must always have sufficient reserve for the respective LED strip set. During normal use, the reserve should be 20%, if used for more than 5 hours, we recommend increasing the reserve to 30% or more. Offered transformers have protection to prevent damage, at overloading the transformer switches off and after reducing the load and cooling, the transformer is functional again. However, overloading has a negative impact on the overall service life.

The transformer should be installed so that it can be accessed and possibly replaced at any time and it should be well ventilated. Installation in small, unventilated space reduces its service life.

Please note that the supply voltage must comply with ČSN EN 60038, **damage due to over-voltage in the electrical network is not a reason for placing a complaint.**

Complaints are solved by replacing the faulty transformer. Other costs with replacing the connection are not recognised.

Observe necessary work rules for sensitive electronics, for detailed information see p. 10.5

24 V transformers

24 V transformers

- for power supply of LED strips and lights with 24 V voltage, direct current
- power supply 220-240 V, 50 Hz

power	L × D × H (mm)	code
18 W, 0,75 A	88 × 39 × 28	**284616**
30 W, 1,25 A	85 × 50 × 32	**284617**
60 W, 2,5 A	116 × 52 × 33	**284618**
80 W, 3,4 A	135 × 56 × 34	**284619**
120 W, 5 A	175 × 72 × 42	**284620**

- circular connector at output
- in order to achieve optimal function, it is recommended to have the transformer as close to the light source as possible (Longer cables cause voltage losses and a subsequent drop in luminous intensity. They may also have disturbing influence on near electrical appliances.)
- power of the transformer must be higher than the input power of the lights, recommended reserve 20%, for continuous lighting the reserve should be increased to 30%
- the transformer should have a minimum distance 0.5 m from other electrical appliances
- place in such a way that sufficient ventilation – heat dissipation – is provided
- cable length 2 m
- CE certificate

24 V transformers

- for power supply of LED strips and lights with 24 V voltage, direct current
- power supply 220-240 V, 50 Hz

power	L × D × H (mm)	code
40 W	160 × 58 × 20	**284622**
60 W	184 × 64 × 22	**284623**
100 W	180 × 66 × 32	**284624**

- circular connector at output
- in order to achieve optimal function, it is recommended to have the transformer as close to the light source as possible (Longer cables cause voltage losses and a subsequent drop in luminous intensity. They may also have disturbing influence on near electrical appliances.)
- power of the transformer must be higher than the input power of the lights, recommended reserve 20%, for continuous lighting the reserve should be increased to 30%
- the transformer should have a minimum distance 0.5 m from other electrical appliances
- place in such a way that sufficient ventilation – heat dissipation – is provided
- cable length 2 m
- CE certificate
- covered terminal box for possible connection of other cables (must be carried out by an authorised person)

24 V transformers with a 5-year warranty can be found in Strong LED strips series, p. 10.9.

Transformer power (W) = x + 20 % (30 %)

x = LED strip length (m) × LED strip power input (W/m)

Example: When using a strip with 14.4 W/m and length of 2.5 m, the power of the strip is 36 W + 20% reserve (7.2 W) = 43.2 W. You will thus need a transformer with more than 44 W.

Notice

It is not possible to combine 12 V LED strips with the 24 V transformer and vice versa. The transformer must always have sufficient reserve for the respective LED strip set. During normal use, the reserve should be 20%, if used for more than 5 hours, we recommend increasing the reserve to 30% or more. Offered transformers have protection to prevent damage, at overloading the transformer switches off and after reducing the load and cooling, the transformer is functional again. However, overloading has a negative impact on the overall service life.

The transformer should be installed so that it can be accessed and possibly replaced at any time and it should be well ventilated. Installation in small, unventilated space reduces its service life.

Please note that the supply voltage must comply with ČSN EN 60038, **damage due to overvoltage in the electrical network is not a reason for placing a complaint.**

Complaints are solved by replacing the faulty transformer. Other costs with replacing the connection are not recognised.

accessories for LED strips

Connecting cables

- for connecting the transformer and LED strip (direct connection)

code	description
134114	for power supply of LED strips (soldering), JACK, 2 m

12V DC 24V DC

- use as short connecting cables as possible
- never roll the cables into a ball or coil, but cut the cables to the required length, or let them freely stretched

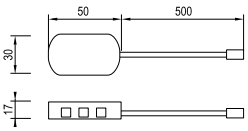
134114

12 V and 24 V distributor

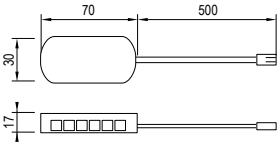
- for distribution at multiple distribution points
- for connecting multiple LED strips

code	type of connector
285093	Mini (up to 30 W separately, 6 outlets), total max. 100 W (jack), 0.25 m
134119	AMP (up to 30 W separately, 12 outlets), total max. 72 W (jack), 0.5 m
134120	AMP+ (up to 30 W separately, 6 outlets), total max. 120 W (jack), 0.5 m

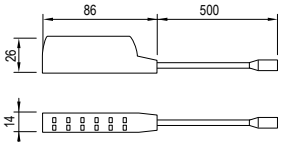
12V DC 24V DC



285093



134119



134120

Connecting cables with connectors

code	description
342541	transformer (jack) – Mini connector, 15 cm

12V DC 24V DC MINI

- suitable for connection of the switch with Mini end piece and Strong transformers
- suitable for connection of the LED strip with Mini end piece and Strong transformers
- suitable for connection of the LED strip with Mini end piece and remote control 223823

342541

code	description
205917	transformer (jack) – AMP connector, 15 cm

12V DC 24V DC

- for connection of lights, switches and sensors with AMP connectors with Strong transformers, length 15 cm

205917

12 V and 24 V distributor

code	type of connector
356328	Mini (up to 30 W separately, 6 outlets), total max. 100 W (Mini), 0.25 m

- for distribution into multiple outlets from sensors and switches at input and output Mini, Mini

Observe necessary work rules for sensitive electronics, for detailed information see p. 10.5

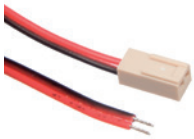
Connecting cable for distributors, for soldering

- for connecting LED strips
- for soldering

code	description
285094	Mini connector[1] F, 1.8 m
SAL301	AMP connector, 2 m
SAL302	AMP+ connector, 2 m

12V DC 24V DC

285094



SAL301

SAL302

[1] this type is equipped with a fuse, we recommend it for use in mechanically stressed places, places with vibrations, etc.

- cables for soldering show higher reliability, suitable for use in environments with moisture, etc.
- we recommend insulating the connection with a shrink tubing or at least taping it with an insulation tape

Connecting cable for distributors, without soldering

- for connecting LED strips
- mechanic connector
- cable length 2 m

code	description
132291	AMP connector
132292	AMP+ connector

12V DC 24V DC

132291

132292

- this connector is not recommended for use in mechanically stressed places, places with higher humidity, more vibrations, etc.
- designed for LED strips 8 mm only
- waterproof strips must be insulated
- functional only on one side of the strip (polarity cannot be switched)
- cannot be used at points where LED strips are connected (strips are soldered together at every 50 cm – manufacturing technology)
- connectors fit into profiles: Fanto, Wide

Extension cables

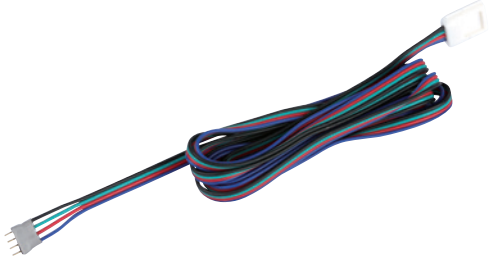
code	description
205237	extension cable AMP – AMP, 1 m
157951	extension cable AMP – AMP, 2 m
285110	extension cable Mini – Mini, 1.8 m

12V DC 24V DC

Connecting cable RGB

code	description
346953	connecting cable to LED

12V DC 24V DC



- for connection of the LED strip to the control unit, or to the RGB distributor
- length 2 m

accessories for LED strips

Cables with connector

- cable length: 1 m
- connector type: MINI
- connectors suitable for monochromatic LED strip of 8 or 10 mm
- not suitable for LED strips with a density of more than 120 LED/m
- connectors fit into profiles: Fanto, Wide, Oval

code	width of the LED strip	connector size (mm)	cable length
342535	8 mm	13 × 15 × 5	1 m
342536	10 mm	15 × 15 × 5	

12V DC | 24V DC | MINI

- a non-soldered joint must not be placed near a hob, kettle or other source of steam and increased humidity (connectors may oxidise)
- an interruption of light can be observed at the connection point
- at the connection point, the LED strip and the connector need to be glued to the aluminium profile

342535

Joining connectors

- connector for connecting 2 LED strips of 8 or 10 mm width
- not suitable for LED strips with a density of more than 120 LED/m
- connectors fit into profiles: Fanto, Wide, Oval

code	LED strip width	size (mm)
342537	8 mm	13 × 15 × 5
342538	10 mm	15 × 15 × 5

12V DC | 24V DC

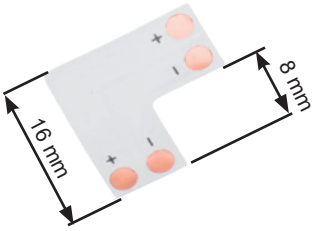
- a non-soldered joint must not be placed near a hob, kettle or other source of steam and increased humidity (connectors may oxidise)
- an interruption of light can be observed at the connection point
- at the connection point, the LED strip and the connector need to be glued to the aluminium profile

LED corner soldering

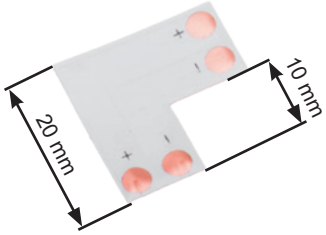
code	width of the LED strip
342539	8 mm
342540	10 mm

12V DC | 24V DC

- corner is suitable for connecting 2 LED strips, at 90° angle
- it is necessary to observe correct polarity



342539

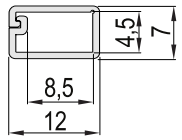


342540

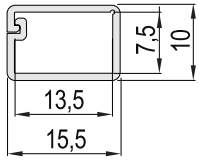
Observe necessary work rules for sensitive electronics, for detailed information see p. 10.5

Wiring duct

- with an adhesive tape
- to cover cables installed in furniture
- material: plastic PVC
- complies with ČSN EN 50085
- degree of flammability B (flammable with difficulty)
- unsuitable for outdoor use



mini 12 × 7 mm



large 15 × 10 mm

length (m)	mini 12 × 7 mm			large 15 × 10 mm
	white	wood	dark wood	white
1	**356970**	**356971**	**356972**	**356973**
2	**356974**	**356975**	**356976**	**356977**

Shrink tubing

code	description
359353	8,0/4,0 mm
359355	10,0/5,0 mm

- suitable for insulating the connection from LED strip to a supply cable
- put on the connection from the cable to the LED strip
- it shrinks when heated
- if a waterproof connection is required, silicone sealant must be applied inside

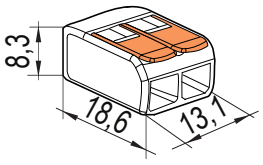
Twin cable

code	description
347904	2 × 0.5 mm, 20 AWG, red and black

- max. load according to DIN VDE 0100 up to 30°C: 7 A (group 1), 9 A (group 2), 12 A (group 3)
- in order to achieve optimal function, it is recommended to have the transformer as close to the light source as possible; longer cables cause voltage losses and a subsequent drop in luminous intensity, they can also affect nearby electrical appliances
- do not roll the cable into a ball or coil – a risk of interference and overheating

Wago connecting node – 2 inputs

code	description
316055	Installation connecting node – 2 poles (Wago)



- serves to connect 12 V, 24 V and 230 V conductors – substitution for soldering
- **inputs are connected together**
- solid conductor 0.2 × 4 mm^2
- fine-stranded conductors 0.14-4 mm^2
- rated voltage 450 V
- 2 interconnected inputs – **for each pole there must be a separate connecting node**
- with control levers – simple handling

230 V switches

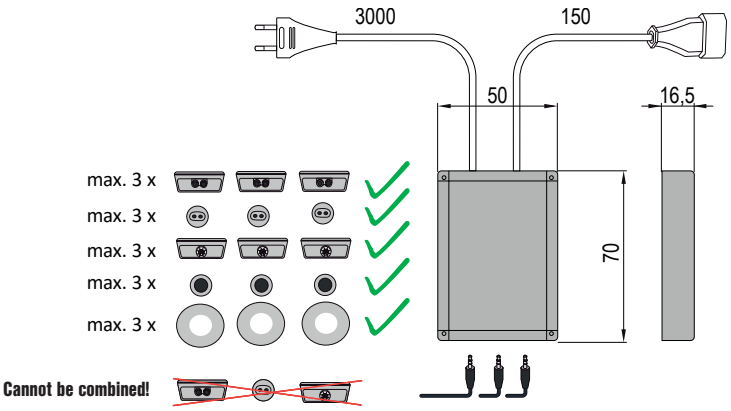
HALEMEIER

Control unit for 230 V

code	description
353614	control unit for 230 V and up to 3 switches

- 230 V voltage control system
- switch-on of appliances up to a maximum power of 500 W, 230 V AC (LED transformers, 230 V lighting or other appliances)
- up to 3 same switches **can be connected to the control unit**, a combination of different types of switches is not possible
- the connection must be carried out in compliance with the instructions, it is forbidden to interfere with the installation
- dimming is not supported with this control unit, it always uses 230 V voltage
- consumption in standby mode: 0.5 W

500 W | 220-240 V

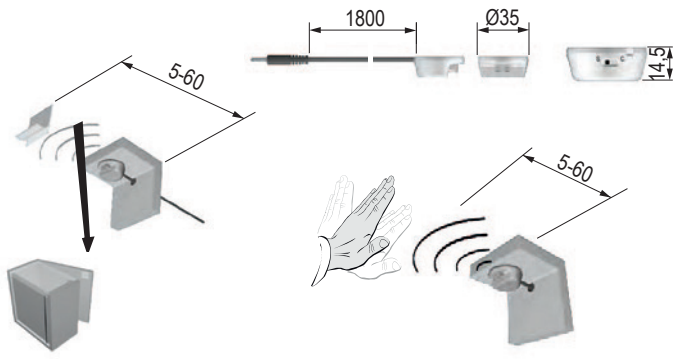


Door switch / touch-free switch

code	description
353610	door switch / touch-free switch
353614	control unit for 230 V and up to 3 switches

- 230 V voltage control system
- up to 3 same switches **can be connected to the control unit**, a combination of different types of switches is not possible
- switch function can be changed: C – door switch, S – touch-free switch
- switch range up to 6 cm
- the connection must be carried out in compliance with the instructions, it is forbidden to interfere with the installation
- dimming is not supported with this control unit, it always uses 230 V voltage
- consumption in standby mode: 0.5 W

500 W | 220-240 V



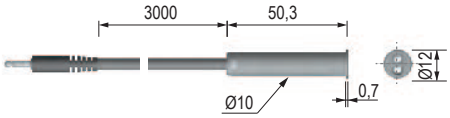
Observe necessary work rules for sensitive electronics, for detailed information see p. 10.5

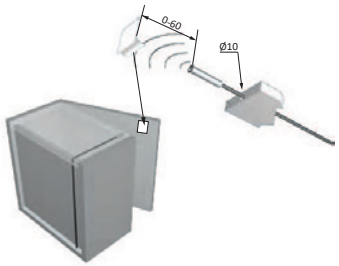
Door switch – for milling-in

code	description
353613	door switch – for milling-in
353614	control unit for 230 V and up to 3 switches

- 230 V voltage control system
- up to 3 same switches **can be connected to the control unit**, a combination of different types of switches is not possible
- switch range up to 6 cm
- the connection must be carried out in compliance with the instructions, it is forbidden to interfere with the installation
- dimming is not supported with this control unit, it always uses 230 V voltage
- consumption in standby mode: 0.5 W

500 W | 220-240 V



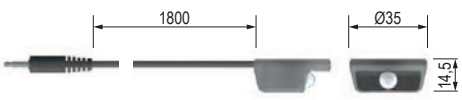


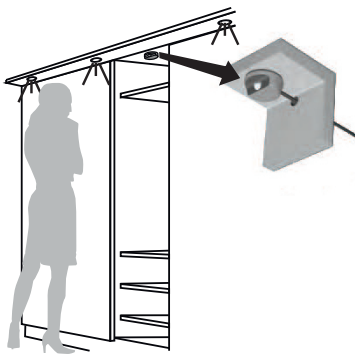
Motion sensor

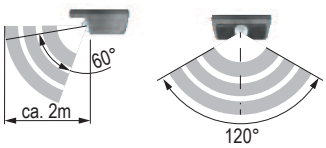
code	description
353620	PIR motion sensor
353614	control unit for 230 V and up to 3 sensors

- 230 V voltage control system
- up to 3 same switches **can be connected to the control unit**, a combination of different types of switches is not possible
- sensor range up to 2 m
- the connection must be carried out in compliance with the instructions, it is forbidden to interfere with the installation
- dimming is not supported with this control unit, it always uses 230 V voltage
- consumption in standby mode: 0.5 W

500 W | 220-240 V







230 V switches

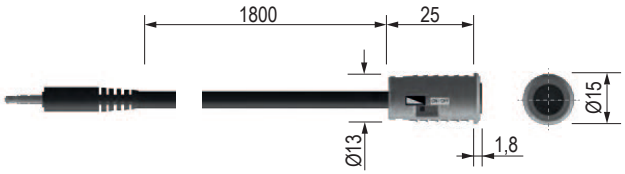
HALEMEIER

Mechanical switch

code	description
353615	mechanical switch
353614	control unit for 230 V and up to 3 switches

- 230 V voltage control system
- up to 3 same switches **can be connected to the control unit**, a combination of different types of switches is not possible
- mechanical button, micro-switch
- the connection must be carried out in compliance with the instructions, it is forbidden to interfere with the installation
- dimming is not supported with this control unit, it always uses 230 V voltage
- consumption in standby mode: 0.5 W

500 W | 220-240 V

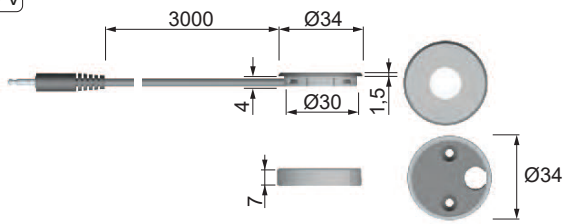


Touch switch

code	description
353617	touch switch
353614	control unit for 230 V and up to 3 switches

- 230 V voltage control system
- up to 3 same switches **can be connected to the control unit**, a combination of different types of switches is not possible
- touch sensor, constantly lit diode
- the connection must be carried out in compliance with the instructions, it is forbidden to interfere with the installation
- dimming is not supported with this control unit, it always uses 230 V voltage
- consumption in standby mode: 0.5 W

500 W | 220-240 V



Accessories for switches

code	description
353616	extension cable, jack 2,5 mm (2 m)

- in the event of cable damage (cutting), the claim will not be accepted

Observe necessary work rules for sensitive electronics, for detailed information see p. 10.5

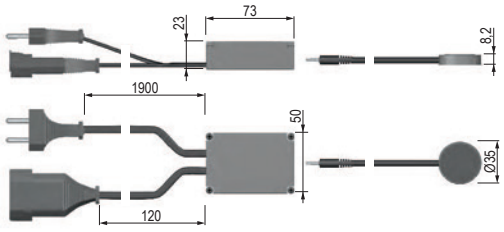
Sub-surface switch

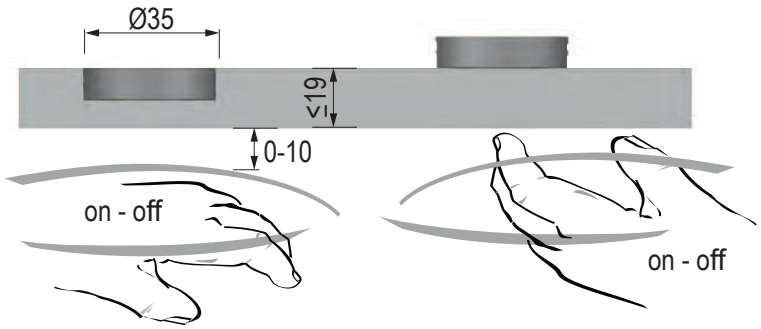
code	description
353618	sub-surface switch

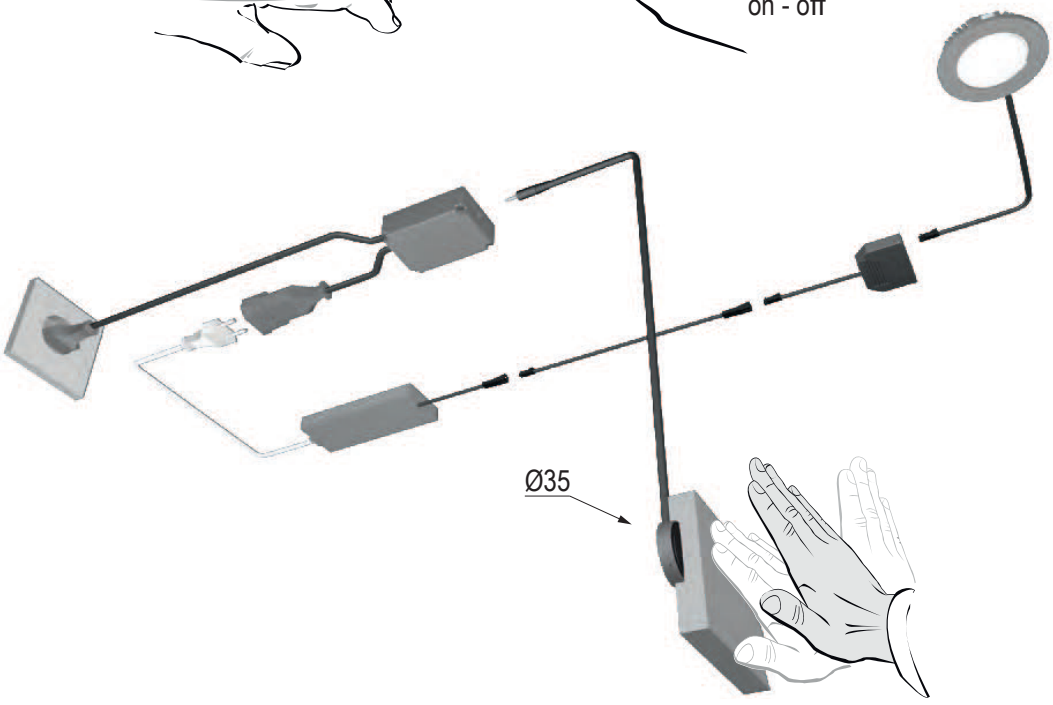
- the light (electrical appliance) switches on/off by touching the surface above the installed switch
- switch-on of appliances up to a maximum power of 250 W, 230 V AC (LED transformers, 230 V lighting or other appliances)
- for material with width of up to 19 mm (non-metallic materials only)
- it must not be located near induction plates, transformers, etc.
- possibility of milling-in
- the connection must be carried out in compliance with the instructions, it is forbidden to interfere with the installation
- consumption in standby mode: 0.5 W

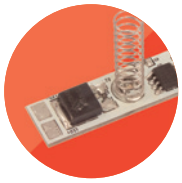
250 W

220-240 V









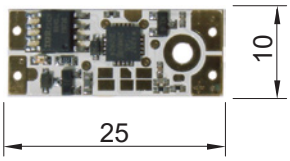
switches for aluminium profiles

Touch switch/dimmer for aluminium profiles

- capacitive sensor – touching any part of the profile will switch the light on/off
- intensity of lighting can be set by a longer touch
- memory function – remembers the intensity at the moment of the switch-off and uses the same intensity when it is switched on

code	colour
215666	yellow LED
215772	blue LED

Technical parameters:
Voltage: 12 V / 24 V
Dimensions: 10 × 25 mm
Regulation range: 0-100%
Max. current: 7.5 A
Maximum switching power: 90 W (12 V), 180 W (24 V)
Standby mode consumption: 0.1 W / (12 V), 0.282 W / (24 V)

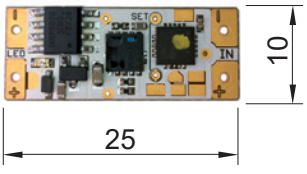


- easy installation by soldering to a LED strip; power supply is soldered from the other end
- necessary to screw to the aluminium profile with a stainless steel screw (2 mm hole)
- maximum length of the control profile 3 m, other profiles must be insulated to avoid interference with sensor function
- does not work when supplied by battery and earthed power sources
- **does not work on varnished profiles (white and other)**
- aluminium profile must not be earthed, contact with wall may cause malfunction, must be tested in place
- we recommend taping the switch with an insulating tape
- slightly bend the end of the LED strip away from the aluminium profile or also tape with the insulating tape
- installation instructions included, detailed instructions and installation video can be found on www.demos24plus.com

Multi-switch/dimmer for aluminium profiles 3 in 1

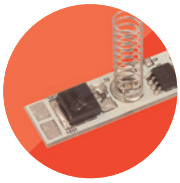
- dimmer/switch for integration into an aluminium profile with an optical proximity sensor and control LED diode (yellow/blue)
- memory function – remembers the intensity at the moment of the switch-off and uses the same intensity when it is switched on
- multi-switch has three modes:
  - touch-free switch
  - door switch
  - twilight switch

code	colour
312315	yellow LED
312316	blue LED



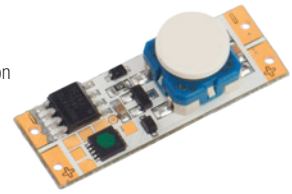
Technical parameters:
Voltage: 12 V DC / 24 V DC,
Dimensions: 10 × 25 mm
Regulation range: 0-100%
Maximum current: 7.5 A
Maximum switching power: 90 W (12 V), 180 W (24 V)
Standby mode consumption: 0.09 W (12 V), 0.18 W (24 V)

Observe necessary work rules for sensitive electronics, for detailed information see p. 10.5



Mechanical switch/dimmer for aluminium profiles

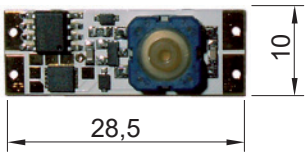
- light switches on/off by pressing the button
- intensity of lighting can be set by a longer touch
- memory function – remembers the intensity at the moment of the switch-off and uses the same intensity when it is switched on



code	description
312317	mechanical switch/dimmer for aluminium profiles

Technical parameters:
Voltage: 12 V DC / 24 V DC
Dimensions: 10 × 28.5 mm
Regulation range: 0-100%
Maximum current: 7.5 A
Maximum switching power: 90 W (12 V), 180 W (24 V)
Standby mode consumption: 0.07 W (12 V), 0.22 W (24 V)

12V DC 24V DC



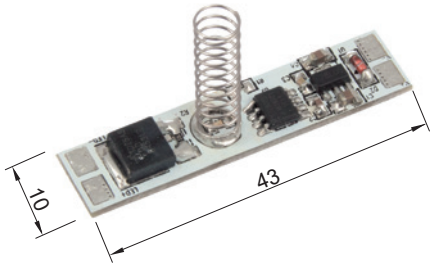
Touch switch/dimmer for aluminium profiles

- the light switches on/off by touching the lit point
- intensity of lighting can be set by a longer touch
- memory function – remembers the intensity at the moment of the switch-off and uses the same intensity when it is switched on

code	description
342513	switch/dimmer for aluminium profiles

Technical parameters:
Voltage: 12 V / 24 V
Dimensions: 10 × 43 mm
Regulation range: 0-100%
Maximum current: 8 A
Maximum switching power: 96 W (12 V), 192 W (24 V)

12V DC 24V DC



- shorten the spring as needed to touch the profile cover cap
- in case of a too long spring, a short circuit can occur and thus cause malfunctions or damage to the switch
- excessively shortened spring can be carefully extended – avoid pulling out, risk of damage, careful handling is needed
- especially in case of switching of higher power, the switch must be closely fitted to the aluminium profile so that the heat can dissipate
- we recommend taping with a double-sided adhesive tape 3M
- lit diode cannot be turned off

touch switches

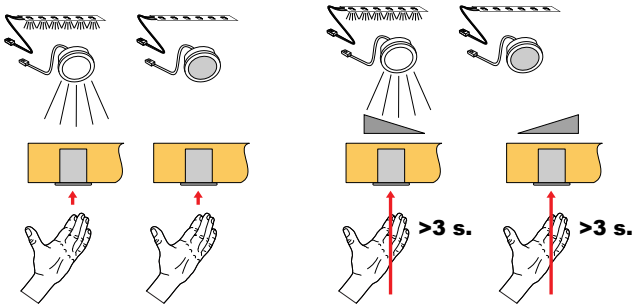
Touch switch

- first touch switches the light on, second touch switches it off
- long touch will set the intensity
- memory function – remembers the intensity at the moment of the switch-off and uses the same intensity when it is switched on

code	colour
342516	black
342517	white

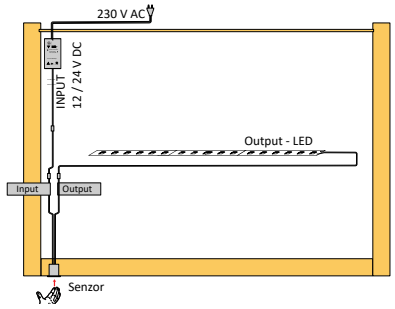
Technical parameters:
Voltage: 12 V / 24 V
Dimensions: 22 × 17 mm
Maximum current: 4 A
Maximum switching power: 48 W (12 V), 96 W (24 V)
Drilling diameter: 18 mm
Connector type: Mini
Cable length: 1 m supply + 1 m output

12V DC | 24V DC | MINI | –+



Tips for use:

- kitchens
- dining rooms
- bed lighting
- lighting control in a gallery

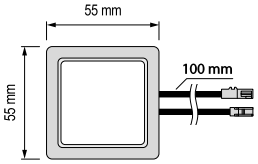


Capacitive switch

- the light switches on/off by touching the surface above the installed sensor
- intended for boards with thickness up to 38 mm

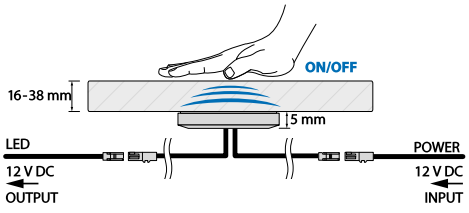
kód
268119

- the sensor is glued to the back side of the board where we wish to control the light
- installation surface needs to be cleaned and degreased
- after installation, connect lighting and finally the power supply
- the sensor does not work on metal surfaces
- cable 0.5 m + 2 m, Mini connectors



Technical parameters:
Voltage: 12 V
Max. current: 2.5 A
Maximum input power: 36 W
intended for boards with thickness up to 38 mm
dimensions 55 × 55 mm
it must not be located near induction plates, transformers, etc.

F | III | 12V DC | MINI



ACCESSORIES

356328	Mini distributor (up to 30 W separately, 6 outlets), total max. 100 W (Mini) 0.25 m
342541	connecting cable, Mini and jack, 15 cm

Observe necessary work rules for sensitive electronics, for detailed information see p. 10.5

Door / touch-free switch, up to 3 sensors

- used to control lighting
- switching-on by moving in front of the sensor or closing the door
- possibility to connect up to 3 sensors
- impulse from each sensor will switch the light on/off
- switch range up to 10 cm
- to increase the range for darker decors, we recommend gluing a white cover cap (code 283272) opposite the sensor
- sensors are not part of the control unit, must be ordered separately
- **extension cable from the switch to the control unit 362939 (2 m)**

code	description
342518	control unit
342519	black sensor
342520	white sensor

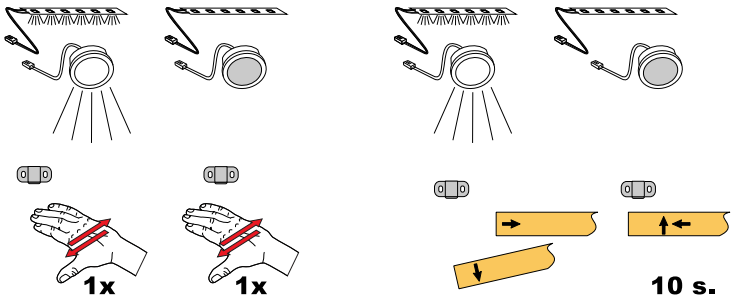
342518

342519

342520

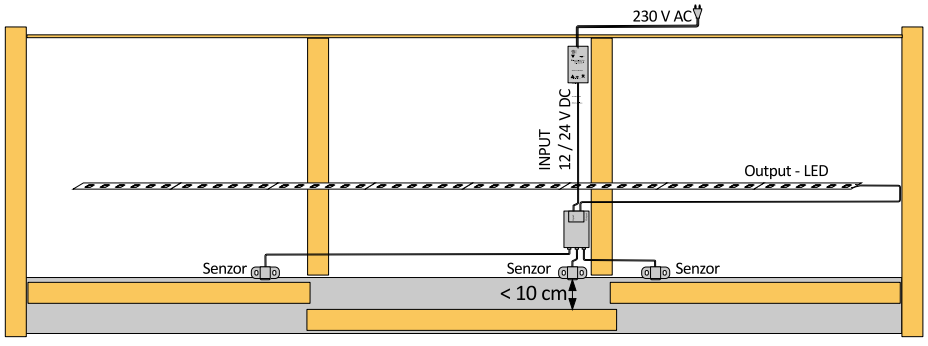
Technical parameters:
Voltage: 12 V / 24 V
Dimensions: 62 × 47 × 22 mm
Maximum current: 8 A
Maximum switching power: 96 W (12 V), 192 W (24 V)
Sensor hole diameter: 16 mm
Sensor cable length: 2.3 m

12V DC 24V DC

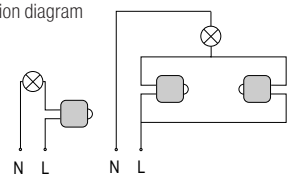


Tips for use:

- built-in cabinets
- sets of several cabinets
- screw connecting nodes for variable use (IN – power supply, OUT – light output)
- "door" switch and "hand" switch (touch-free switch)
- first connect sensors, select the desired mode and then connect to the transformer



connection diagram



RECOMMENDED INPUT CABLES

code	description
134114	connecting cable for transformer (2 m)
179054	connecting cable for transformer (15 cm)
285094	for Mini distributor, 1.8 m
SAL301	for AMP distributor, 2 m
SAL302	for AMP+ distributor, 2 m

- increases switch range
- any twin cable can be used on the output
- with respect to the terminal box, the above-mentioned distributors can also be used on the output

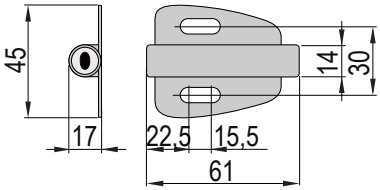
ACCESSORIES

283272	self-adhesive cover cap for dark shades of door

door switches

Door/touch-free switch

- suitable for light control in cabinets
- the light is switched on by opening the door / clearing the area in front of the switch, it is switched off by covering it
- the switch can be fastened with 2 screws, or can be removed from the holder and installed in a hole
- maximum distance of door from the switch is 10 cm (darker door reduces the range of the switch)
- to increase the range for darker decors, we recommend gluin a white cover cap (283272) opposite the sensor



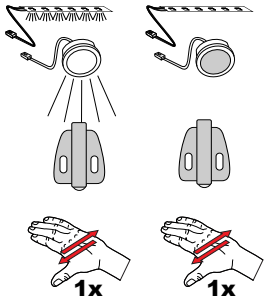
code	description
342515	door/touch-free switch

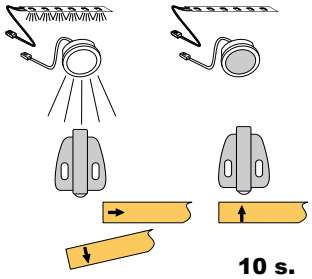
Technical parameters:
Voltage: 12 V / 24 V
Dimensions: 61 × 45 × 17
Installation dimensions: ø 14 mm, depth 54 mm
Maximum current: 4 A
Maximum switching power: 48 W (12 V), 96 W (24 V)
Connector type: MINI
Cable length: 1 m supply + 1 m output

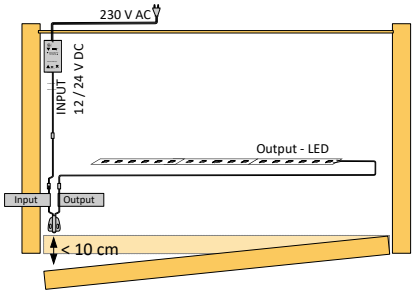
12V DC | 24V DC | MINI

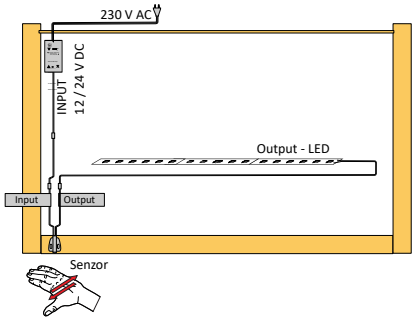
Tips for use:

- cabinet lighting with sliding and opening door
- top cabinets in the kitchen
- drawer lighting
- chests of drawers and others









ACCESSORIES

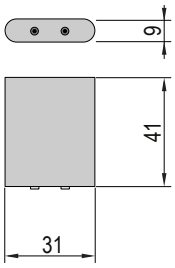
356328	Mini distributor (up to 30 W separately, 6 outlets), total max. 100 W (Mini) 0.25 m
342541	connecting cable, Mini and jack, 15 cm
283272	self-adhesive cover cap for dark shades of door, it will increase switch range

Observe necessary work rules for sensitive electronics, for detailed information see p. 10.5

Door switch

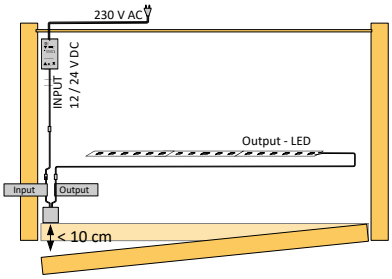
- lighting control in cabinets
- the light is switched on by opening the door / clearing the area in front of the switch, it is switched off by covering it
- the switch has 3M tape for easier installation
- maximum distance of door from the switch is 10 cm (darker door reduces the range of the switch)
- to increase the range for darker decors, we recommend gluing a white cover cap (code 283272) opposite the sensor

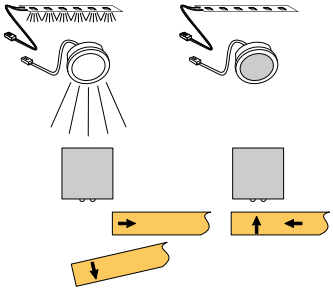
code	description
342514	door switch



Technical parameters:
Voltage: 12 V / 24 V
Dimensions: 41 × 31 × 9 mm
Maximum current: 4 A
Maximum switching power: 48 W (12 V), 96 W (24 V)
Connector type: mini
Cable length: 1 m supply + 1 m output

12V DC | 24V DC | MINI





Tips for use:

- cabinet lighting with sliding and opening door
- top cabinets in the kitchen
- drawer lighting
- chests of drawers and others

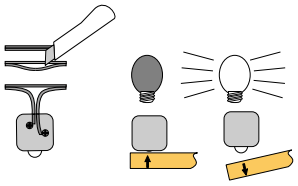
ACCESSORIES

356328	Mini distributor (up to 30 W separately, 6 outlets), total max. 100 W (Mini) 0.25 m
342541	connecting cable, Mini and jack, 15 cm
283272	self-adhesive cover cap for dark shades of door, it will increase switch range

Mechanical (door) switch

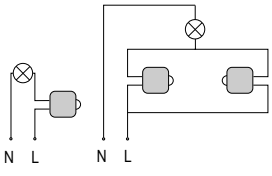
- simple switch, activates on opening
- 12 V DC, 220-240 V, 50 Hz, max. 2 A, 2 × 0.75 mm
- when installing on the door, installation at hinges is recommended to ensure sufficient pressure

code	colour
134116	white
134117	black

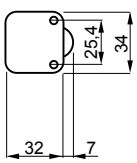


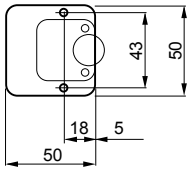
- in case of using at 230 V voltage, installation should be carried out by an authorised person

F | IP 20 | 12V DC | 24V DC | 220-240 V



example of use – switch on of lighting





controls for RGB strips

Controls for RGB strips

- for the correct function of RGB LED strips, an appropriate control unit and sufficiently strong transformer must be used
- for RGB LED levers, see p. 10.20

RGB control Mini RF

- radio control, on/off function, colour change, intensity change, dynamic modes
- remote control included
- range of the receiver about 20 m in open space
- a transformer must be also ordered together with the control, depending on the power of the set
- battery in the remote control – CR 2025

code	description
284570	Mini RF

12V DC | 24V DC | ⎓

Technical parameters:
Voltage: 12 V / 24 V
Unit dimensions: 50 × 10 × 5 mm
Regulation range: 0-100%
Maximum current: 3 × 2 A
Maximum switching power: 72 W (12 V), 144 W (24 V)

RGB control RF Touch

- radio control, on/off function, colour change, intensity change, dynamic modes
- remote control included
- range of the receiver about 20 m in open space
- a transformer must be also ordered together with the control, depending on the power of the set
- AAA battery in the remote control

code	description
284574	RGB RF Touch

12V DC | 24V DC | ⎓

Technical parameters:
Voltage: 12 V / 24 V
Unit dimensions: 130 × 42 × 35 mm
Regulation range: 0-100%
Maximum current: 3 × 6 A
Maximum switching power: 216 W (12 V), 432 W (24 V)

ACCESSORIES

134114	connecting cable for transformer, jack (2 m)
179054	connecting cable for transformer, jack (15 cm)
346953	RGB connecting cable

Observe necessary work rules for sensitive electronics, for detailed information see p. 10.5

RGB Wi-Fi control

- control for LED strips with control using a smartphone – Wi-Fi connection
- remote control – using a smartphone, Wi-Fi connection, you need to install Freecolour application (available for iOS and Android – App Store/Google Play)
- application is in English, easy to understand and use
- can be used to control RGB LED strips, monochromatic LED strips, LED strips with changeable temperature of white (CCT), or can be used to control two LED strips with warm white and cold white to set light temperature
- installation and usage instructions are available for download on www.demos-trade.com

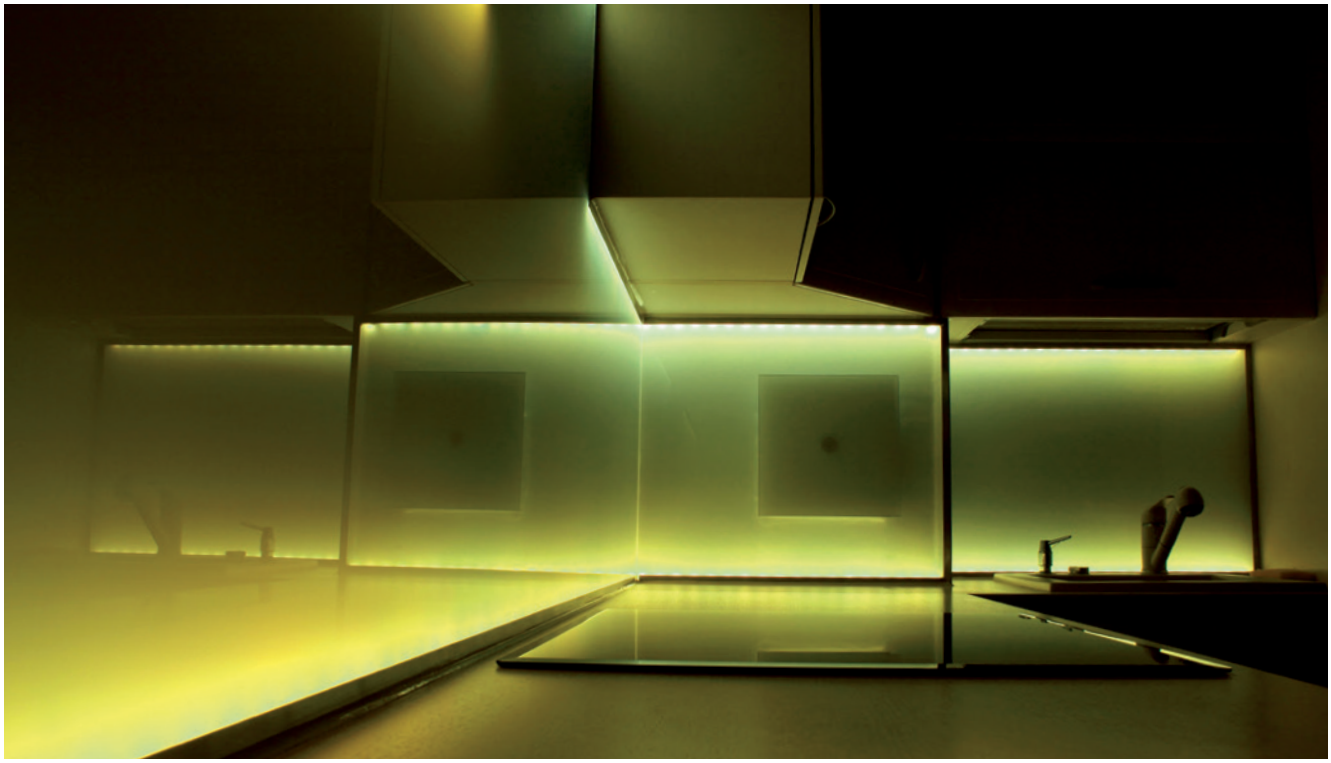
code	description
284571	RGB CCT LED Wi-Fi

12V DC | 24V DC

Technical parameters:
Voltage: 12 V / 24 V
Unit dimensions: 100 × 40 × 23 mm
Regulation range: 0-100%
Maximum current: 3 × 4 A
Maximum switching power: 144 W (12 V), 288 W (24 V)

ACCESSORIES

134114	connecting cable for transformer, jack (2 m)
179054	connecting cable for transformer, jack (15 cm)
346953	RGB connecting cable



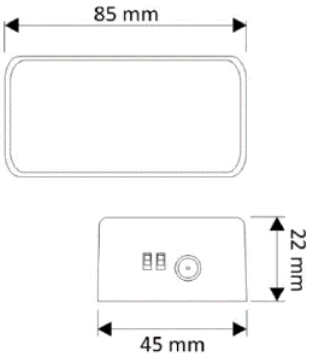
Remote switch/dimmer – 4 channels

- designed to control monochromatic LED strips
- up to 5 control units can be connected to 1 channel
- functions – on / off / intensity regulation
- due to its high power, it is necessary to connect it to a terminal box, in compliance with enclosed instructions
- radio transmission with a range of up to 30 m
- power supply – 2× AAA batteries (not included)

code	description
274353	remote control
274354	control unit for 1 channel

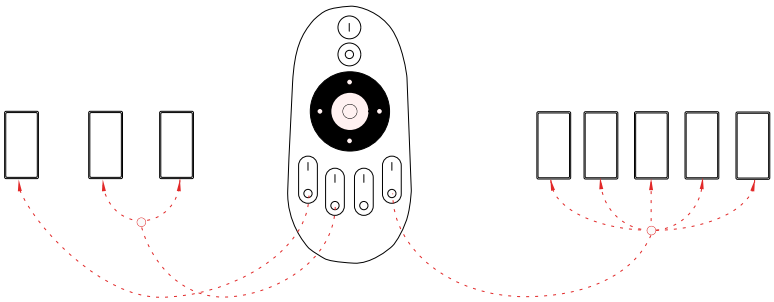
12V DC | 24V DC

Technical parameters:
Voltage: 12 V / 24 V
Control unit dimensions: 85 × 45 × 22 mm
Control dimensions: 110 × 53 mm
Regulation range: 0-100%
Maximum current: 12 A
Maximum switching power: 144 W (12 V), 288 (24 V) – control unit
Control range: max. 30 m (in open space)
Maximum number of control units for one channel: 5



Tips for use:

- control of lighting in open space (up to 4 channels)
- living rooms with kitchen
- stores
- terraces, sunrooms
- children's rooms



Observe necessary work rules for sensitive electronics, for detailed information see p. 10.5

Power remote control

- remote control for LED strips (monochromatic) with high power and advanced dimming pulse modulation
- functions – on / off / dimming / dynamic modes
- due to its high power, it is necessary to connect it to a terminal box, in compliance with enclosed instructions
- maximum load 25 A (12 V), 12.5 A (24 V), up to 300 W
- range up to 20 m (in free space)
- possibility to synchronise multiple units using the RJ45 cable
- AAA battery in the remote control

code

284572

12V DC | 24V DC

Technical parameters
Voltage: 12 V / 24 V
Unit dimensions: 130 × 40 × 32 mm
Regulation range: 0-100%
Maximum current: 25 A (12 V), 12.5 A (24 V)
Maximum switching power: 300 W (12 V), 300 W (24 V)
Standby mode consumption: < 1 W

ACCESSORIES

134114	connecting cable for transformer, jack (2 m)
179054	connecting cable for transformer, jack (15 cm)

Remote switch/dimmer

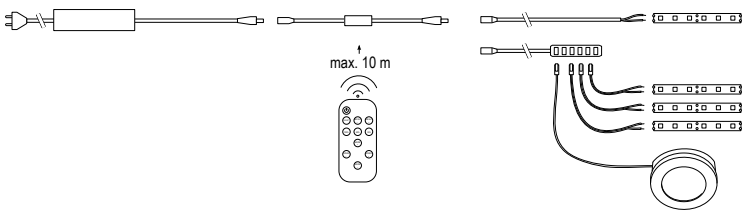
- radio transmission with a range of about 10 m (direct visibility is not required)
- functions – on / off / dimming / dynamic modes
- connectors compatible with supplied transformer for LED strips, just insert into the set
- maximum switching power 72 W
- RoHS, CE
- if you use this switch/dimmer, do not connect other sensors and electronic switches to it, lower dimming voltage affects their function
- battery in the remote control – CR 2025

code

223823

12V DC | 24V DC

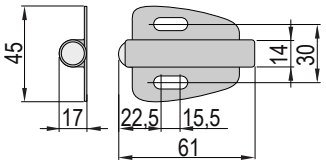
Technical parameters:
Voltage: 12 V / 24 V
Unit dimensions: 50 × 10 × 5 mm
Regulation range: 0-100%
Maximum current: 6 A (12 V), 6 A (24 V)
Maximum switching power: 72 W (12 V), 144 W (24 V)
Standby mode consumption: < 0.5 W



PIR motion switch

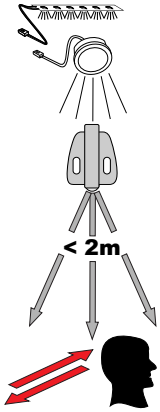
- the light is switched on when a motion is registered, it switches off after 40 seconds of no motion
- the sensor records temperature difference, that is, if an object with the same temperature moves, it may not register any difference and may not switch on the lighting
- the switch can be fastened with 2 screws or removed from the holder and installed in a hole
- maximum range is 2 m

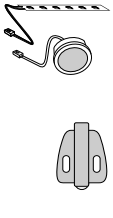
code	description
343040	PIR motion switch

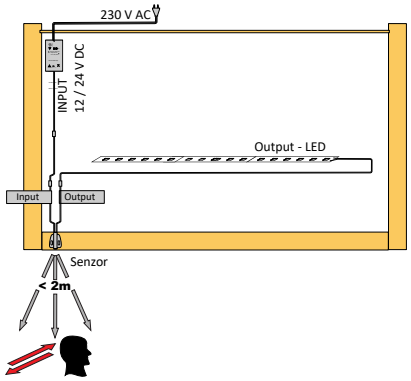


Technical parameters:
Voltage: 12 V / 24 V
Dimensions: 61 × 45 × 17 mm
Installation dimensions: ø 14 mm, depth 54 mm
Detection range: < 2 m
Maximum current: 4 A
Maximum switching power: 48 W (12 V), 96 W (24 V)
Connector type: MINI
Cable length: 1 m supply + 1 m output

12V DC | 24V DC | MINI | 120° | Max 2 m







Tips for use:

- hall lighting
- walk-in wardrobe
- staircases
- orientation lighting

ACCESSORIES

356328	Mini distributor (up to 30 W separately, 6 outlets), total max. 100 W (Mini) 0.25 m
342541	connecting cable, Mini and jack, 15 cm

Cable with foot switch 230 V

- maximum load 2.5 A, 550 W
- length 3.5 m
- conductors 2 × 0.75 mm
- free ends at the output

code
285105

if used for voltage 230 V, installation should be carried out by an authorised person

220-240 V

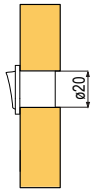
Mechanical switch

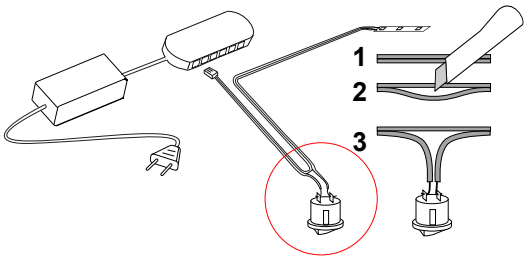
- 12 V DC, 24 V DC, 220-240 V, 50 Hz, max. 4 A

code	colour
SAL341	white
SAL342	black
SAL343	grey
SAL344	brown

- in case of using at 230 V voltage, installation should be carried out by an authorised person

F | IP 20 | 12V DC | 24V DC | 220-240 V

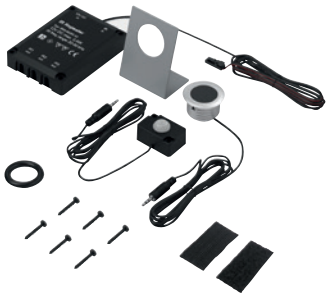




Observe necessary work rules for sensitive electronics, for detailed information see p. 10.5

IR signal repeater

- to transfer IR signal, for example (hi-fi system, DVD, BlueRay, set-top box, game console) to a closed cabinet
- a transformer (12 V) and one transmitter are included in the set
- place the receiver in a visible place which you will aim at with the remote control
- place the receiver inside the cabinet in front of the appliance so that it aims at the receiver of the appliance
- up to 3 receivers can be connected to the repeater so that it is possible to distribute signal even to multiple cabinets or to a larger cabinet where one receiver does not provide sufficient signal coverage
- consumption in standby mode: 0.5 W
- **the repeater transmits a wide spectrum of signals; for flawless operation, we recommend installing the transmitter away from fluorescent light sources that may cause signal interference**

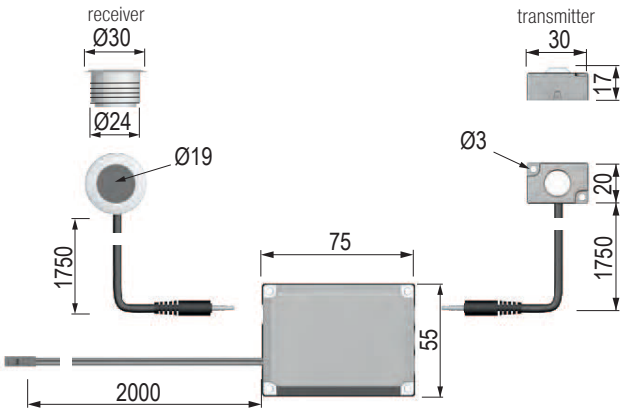


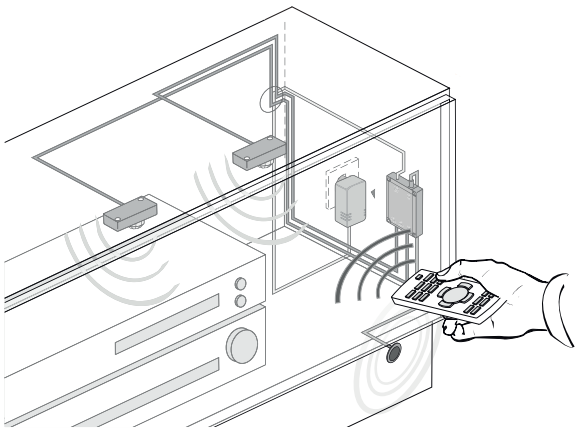
292936

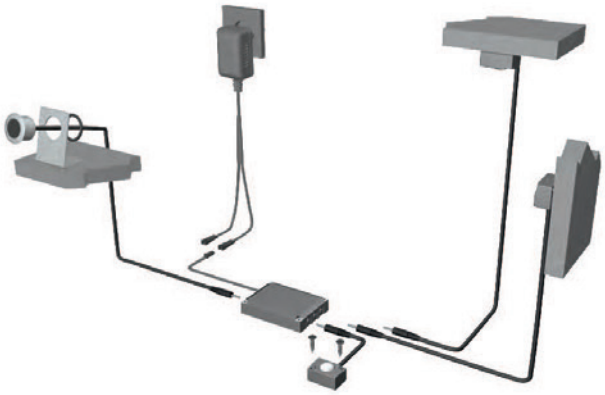
292938

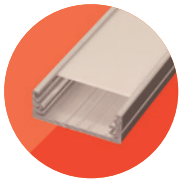
code	description
292936	IR signal repeater incl. transformer and 1 transmitter
292938	IR signal transmitter

220-240 V









tips and tricks – aluminium profiles

Information about aluminium profiles

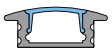
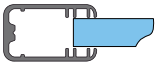
Aluminium profiles warrant cooling of LED strips. Inadequate cooling reduces the service life of the LED strip, or damage to the LED strip may occur.

Profile preparation and glueing

For good adhesion of LED strip, profiles must always be thoroughly cleaned and degreased. Some types of surfaces (e.g. powder paints) have lower adhesion, the LED strip can unglue over time. For long-term use, we recommend testing adhesion with the LED strip switched-on (heated). Surface can be easily roughened to increase adhesion.

Absorbing light using different cover caps

Different types of cover caps are available for individual aluminium profiles, they differ in light transmittance and type of mounting.
Click-in cover caps are the most convenient for mounting, allowing them to be removed from the profile at any time, without the need for additional space around the profile.
Individual cover caps, thanks to their ability to disperse/absorb light, can reduce the intensity of LED lighting or create a continuous light line without the visibility of individual points.
Translucent and transparent cover caps absorb a minimum of light, the individual diodes of the LED strip are visible.
Milk cover caps partially absorb the light from LED strips. Individual types of cover caps absorb 20-30% of the light (depending on the respective type). These cover caps make a more pleasant impression of the LED strip when it is on the front part. Individual LED diodes are not visible on the profiles indicated below, in combination with the appropriate LED strip.

		Strong Plus series			12 V	24 V
		6 W – 120 diodes/m (p. 10.6)	14.4 W – 120 diodes/m (p. 10.7)	21.6 W – 210 diodes/m (p. 10.8)	9.6 W – 120 diodes/m (p. 10.12)	12 W – 120 diodes/m (p. 10.18)
Profiles with surface mounting						
Fanto (p. 10.44)		★ ★ ★ ★ ★	★ ★ ★ ★ ★		★ ★ ★ ★ ★	★ ★ ★ ★ ★
UNI – with a half-round cover cap (p. 10.45)						
ARC 12 – with a half-round cover cap (p. 10.45)		★ ★ ★ ★ ★	★ ★ ★ ★ ★		★ ★ ★ ★ ★	★ ★ ★ ★ ★
Smart – with a milk cover cap (p. 10.46)				not suitable		
Profiles for milling-in						
Ormio (p. 10.48)		★ ★ ★ ★ ★	★ ★ ★ ★ ★		★ ★ ★ ★ ★	★ ★ ★ ★ ★
Floor (p. 10.49)						
Profiles with corner mounting						
Belcore (p. 10.50)		★ ★ ★ ★ ★	★ ★ ★ ★ ★		★ ★ ★ ★ ★	★ ★ ★ ★ ★
Cabi (p. 10.50)		★ ★ ★ ★ ★	★ ★ ★ ★ ★		★ ★ ★ ★ ★	★ ★ ★ ★ ★
Special profiles						
Micro Line (p. 10.59)				not suitable		

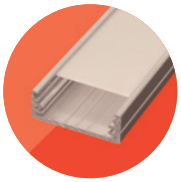
Legend

★ ★ ★ ★ ★ visible points

continuous line (when using a dimmer, looking through a dark foil, reflection, etc., the points may be visible)

Observe necessary work rules for sensitive electronics, for detailed information see p. 10.5

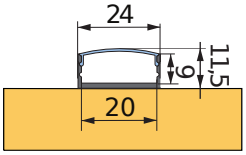
profiles with surface mounting

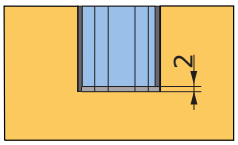


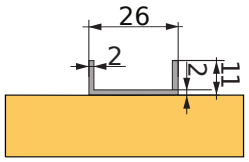
Fanto

- wide profile with a possibility of placing multiple rows of strips one next to another (up to 2 pcs)
- good heat dissipation from the LED strip
- snap-on connectors for LED strips with a width of up to 10 mm fit this profile
- LED strip > 210 diodes/m creates a continuous light line

	profile	click-in cover cap
length	anodised silver	milk
2 m	**342530**	**342531**







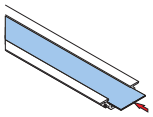
342533

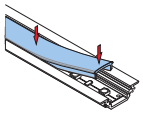
ACCESSORIES

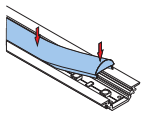
342532	end piece for profile (pcs)
342533	plastic clip (pcs)

Surface

- profile for surface mounting, anodised surface
- fixing with clips, by gluing or screwing
- massive profile for surface mounting, good heat dissipation



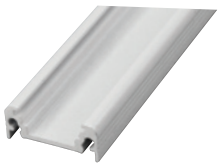


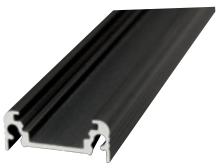


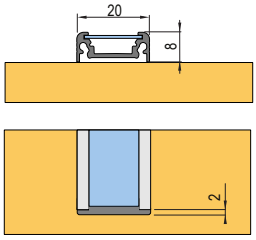
a different profile – illustration of cover caps

	profile			slide-in cover caps		click-in cover cap		semi-circular
length	anodised silver	black matt	varnished white[1]	translucent	milk	translucent	milk	transparent
1 m	**130588**	**231266**	**231267**	**130645**	**130642**	**198516**	**221007**	**130648**
2 m	**130589**	**230903**	**230904**	**130646**	**130643**	**198517**	**221008**	**130649**
3 m	**244328**	**275767**	**285023**	×	×	**244352**	**233554**	×
4 m	**252277**	**353541**	**353540**	×	×	**252279**	**269801**	×

[1] please note that it is not possible to use capacitive touch switches for varnished profiles due to signal insulation

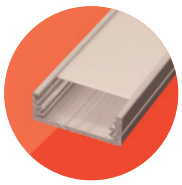






ACCESSORIES

130658	end pieces for profile – light grey (pair)
230911	end pieces for profile – black (pair)
276179	end pieces for profile – white (pair)
215054	spring clamps (pair)



profiles with surface mounting

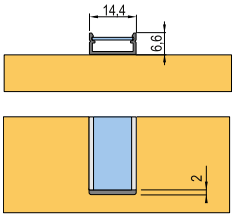
Begton

- profile for surface mounting
- cover cap for top mounting
- fixing by gluing or screwing
- for LED strips with the width of up to 12 mm

length	profile			click-in cover caps	
	anodised silver	black matt	varnished white	translucent	milk
2 m	**285041**	**285043**	**285042**	**285053**	**285052**
3 m	**285044**	×	×	**285055**	×

ACCESSORIES

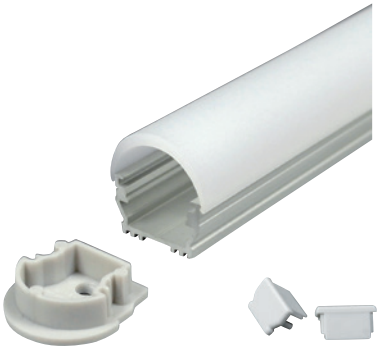
285045	end pieces for profile – light grey (pair)
285047	end pieces for profile – black (pair)
285046	end pieces for profile – white (pair)



Uni

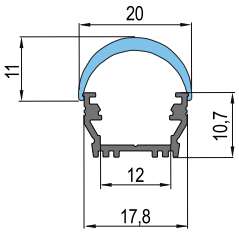
- universal profile with high heat dissipation
- also suitable for high-performance LED strips
- combined with a semi-circular cover cap and LED strip > 120 diodes/m, it creates a continuous light line
- can be embedded into tiles, floor tiles, plasterboard, etc.

length	profile	semi-circular cover cap	click-in cover caps	
	anodised silver	milk	translucent	milk
1 m	**255925**	**255930**	**198516**	**221007**
2 m	**255926**	**255931**	**198517**	**221008**



ACCESSORIES

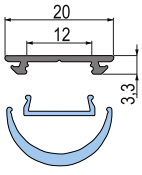
255929	semi-circular end pieces (pair)
255928	flat end pieces (pair)



ARC 12

- simple profile for surface mounting
- it can be bent with a radius of max. 500 mm
- combined with a semi-circular cover cap and LED strip > 210 diodes/m, it creates a continuous light line

length	profile	click-in cover cap		
	raw aluminium	semi-circular milk cover cap	translucent	milk
2 m	**343063**	**255931**	**198517**	**221008**

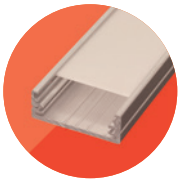


ACCESSORIES

343064	end pieces for profile – semi-circular (pair)
354319	end pieces for profile – flat (pair)

Observe necessary work rules for sensitive electronics, for detailed information see p. 10.5

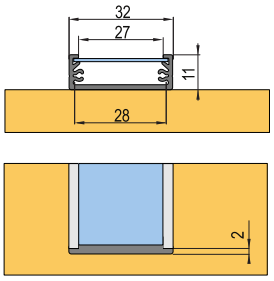
profiles with surface mounting



Wide

- wide profile with a possibility of placing of up to 3 rows of strips one next to another
- for surface mounting
- slide-in cover caps only
- snap-on connectors for LED strips with a width of up to 10 mm fit this profile

length	profile		slide-in cover cap	
	raw aluminium	anodised silver	translucent	milk
1 m	**130639**	**224549**	**130654**	**130651**
2 m	**130640**	**179745**	**130655**	**130652**

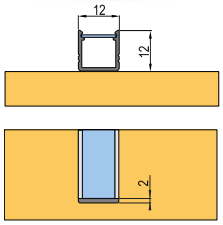


Smart

- for surface mounting
- when using LED strips with at least 120 diodes/m with a milk cover cap, the light blends into a continuous line
- cover cap for top mounting
- fixing by gluing or screwing
- for LED strips with the width of up to 10 mm

length	profile			click-in cover cap	
	anodised silver	black matt	varnished white[1]	translucent	milk
2 m	**285048**	**285050**	**285049**	**215848**	**215846**
3 m	**285051**	×	×	**285031**	×

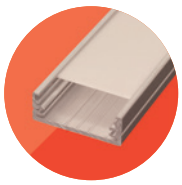
[1] please note that it is not possible to use capacitive touch switches for varnished profiles due to signal insulation



ACCESSORIES

285056	end pieces for profile – light grey (pair)
285058	end pieces for profile – black (pair)
285057	end pieces for profile – white (pair)

230862	stainless steel spring clamps
285060	black spring clamps
285059	white spring clamps

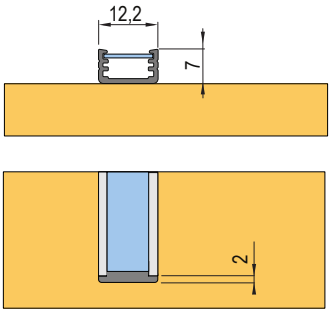


profiles with surface mounting

Slim

- profile for surface mounting, anodised surface
- slide-in cover caps only
- narrow subtle profile for minimalist applications
- **only for LED strips with the width of no more than 8 mm**
- fixing with clips, by gluing or screwing

	profile			slide-in cover cap	
length	anodised silver	black matt	varnished white	translucent	milk
1 m	**215825**	×	×	**215847**	**215845**
2 m	**215826**	**285028**	**285027**	**215848**	**215846**
3 m	**285029**	×	×	**285031**	×



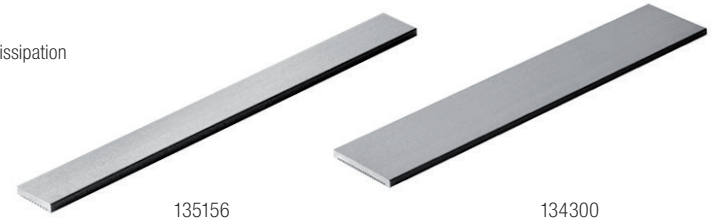
ACCESSORIES

215852	end pieces for profile – light grey (pair)
285033	end pieces for profile – black (pair)
285032	end pieces for profile – white (pair)
230862	stainless steel spring clamps
285060	black spring clamps
285059	white spring clamps

Flat profile S10/S20

- aluminium strip on which a LED strip can be glued
- unsuitable for high-performance LED strips, does not guarantee adequate heat dissipation
- strip is not provided with adhesive
- use: LTD, LDF, glass, mirror
- thickness 2 mm

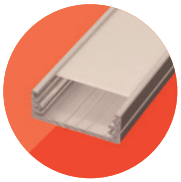
length	width 10 mm	width 20 mm
3 m	**135156**	**134300**



135156 134300

Observe necessary work rules for sensitive electronics, for detailed information see p. 10.5

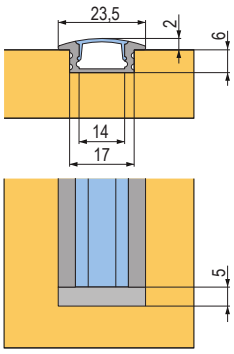
profiles for milling-in



Ormio

- massive profile for milling-in
- good heat dissipation from the LED strip
- fixing by gluing or screwing
- LED strip > 210 diodes/m creates a continuous light line

	profile	click-in cover cap
length	anodised silver	milk
2 m	**342521**	**342522**

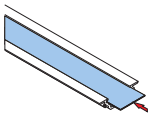


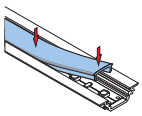
ACCESSORIES

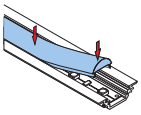
342523	end pieces for profile (pcs)

Groove

- massive profile for milling-in, good heat dissipation
- fixing with clips, by gluing or screwing

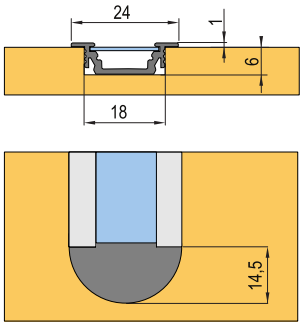






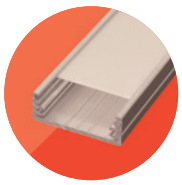
	profile			slide-in cover cap		click-in cover cap		semi-circular
length	anodised silver	black matt	varnished white[1)]	translucent	milk	translucent	milk	transparent
1 m	**130633**	**231268**	**231269**	**130645**	**130642**	**198516**	**221007**	**130648**
2 m	**130634**	**230905**	**230906**	**130646**	**130643**	**198517**	**221008**	**130649**
3 m	**233553**	**277173**	**285024**	×	×	**244352**	**233554**	×
4 m	**269800**	**353543**	**353542**	×	×	**252279**	**269801**	×

[1)] please note that it is not possible to use capacitive touch switches for varnished profiles due to signal insulation



ACCESSORIES

130656	end pieces for profile – light grey (pair)
230909	end pieces for profile – black (pair)
274415	end pieces for profile – white (pair)
215054	spring clamps (pair)



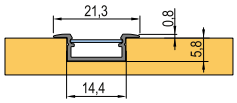
profiles for milling-in

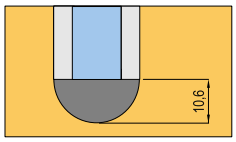
Begtin

- profile for milling-in
- cover cap for top mounting
- fixing by gluing or screwing
- for LED strips with the width of up to 12 mm

length	profile			click-in cover cap	
	anodised silver	black matt	varnished white[1)]	translucent	milk
2 m	**285034**	**285036**	**285035**	**285053**	**285052**
3 m	**285037**	×	×	**285055**	×

[1)] please note that it is not possible to use capacitive touch switches for varnished profiles due to signal insulation





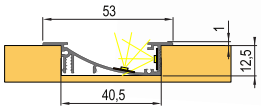
ACCESSORIES

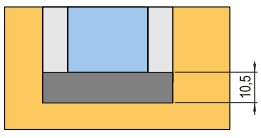
285038	end pieces for profile – light grey (pair)
285040	end pieces for profile – black (pair)
285039	end pieces for profile – white (pair)

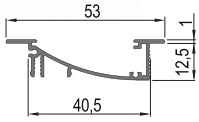
Flat

- wide recessed profile, suitable for lighting of stairs, plinths (possible to install into plasterboard as well)
- side positioning of the LED strip for diffused light
- if intensive lighting is required, multiple LED strips can be installed by glueing straight to the reflection surface

length	profile	slide-in cover cap	
	anodised silver	transparent	milk
1 m	**215047**	**215052**	**215050**
2 m	**215048**	**215053**	**215051**







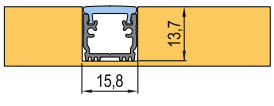
ACCESSORIES

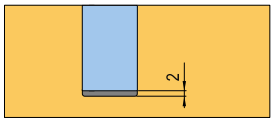
215049	end pieces for profile (pair)

Floor

- highly resistant profile with a massive cover cap, suitable for embedding, walkable
- when using waterproof silicone, it can be used both indoors and outdoors
- combined with a LED strip > 120 diodes/m, it creates a continuous light line

length	profile	click-in cover caps
	anodised silver	milk
2 m	**285070**	**285071**



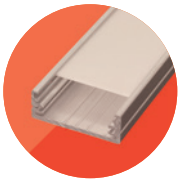


ACCESSORIES

285072	end pieces for profile – grey (pair)

Observe necessary work rules for sensitive electronics, for detailed information see p. 10.5

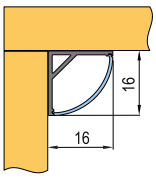
profiles with corner mounting

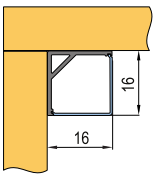


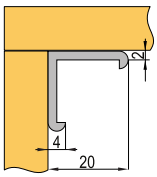
Belcore

- profile for surface mounting
- corner design
- angle of light 45°
- square/round cover cap
- fixing with clips, by gluing or screwing
- combined with a LED strip > 210 diodes/m, it creates a continuous light line

length	profile	click-in cover cap	
	anodised silver	square	round
2 m	**342524**	**342525**	**342526**

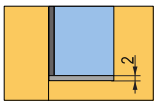


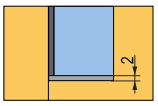


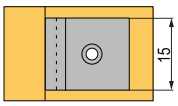


Tips for use:

- kitchens
- stairs
- wardrobes
- floor lighting (instead of the end profile)

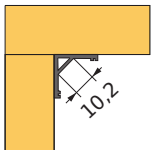




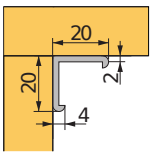


ACCESSORIES

342527	end pieces for profile – square (pcs)
342528	end pieces for profile – round (pcs)
342529	plastic clip (pcs)



342524

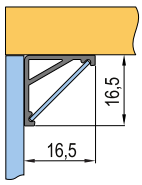


342529

Cabi

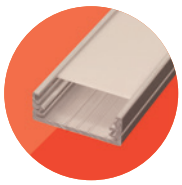
- corner profile with a large dispersion area
- angle of light 30°/60° enables to direct the light as needed
- cover cap for top mounting
- fixing by gluing or screwing
- combined with a LED strip > 210 diodes/m, it creates a continuous light line

length	profile	click-in cover cap	
	anodised silver	translucent	milk
2 m	**285082**	**285083**	**285084**



ACCESSORIES

285085	end pieces for profile – grey (pair)



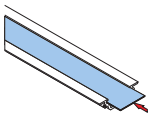
profiles with corner mounting

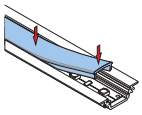
Corner

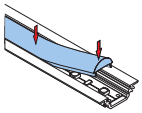
- profile for surface mounting, corner version
- angle of light 30°/60° depending on positioning
- if a touch switch/dimmer is used, the profile must be insulated from a direct contact with the wall (by applying insulating tape etc.) due to possible interference with the function of the switch
- fixing with clips, by gluing or screwing

Tips for use:

- kitchens
- stairs
- wardrobes



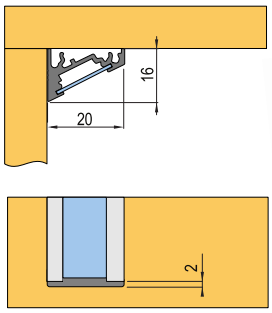


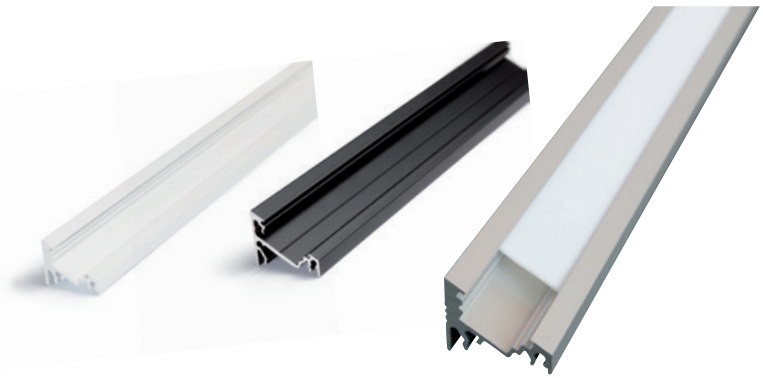


a different profile – illustration of cover caps

length	profile			slide-in cover cap		click-in cover cap		semi-circular
	anodised silver	black matt	varnished white[1]	translucent	milk	translucent	milk	transparent
1 m	130636	231270	231271	130645	130642	198516	221007	130648
2 m	130637	230907	230908	130646	130643	198517	221008	130649
3 m	244329	285025	285026	×	×	244352	233554	×
4 m	252278	353539	353538	×	×	252279	269801	×

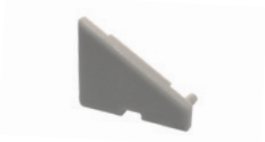
[1] please note that it is not possible to use capacitive touch switches for varnished profiles due to signal insulation



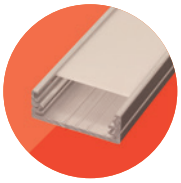


ACCESSORIES

130657	end pieces for profile – light grey (pair)
230910	end pieces for profile – black (pair)
276178	end pieces for profile – white (pair)
215054	spring clamps (pair)

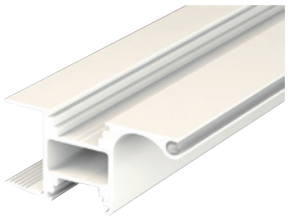


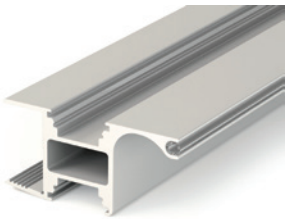
Observe necessary work rules for sensitive electronics, for detailed information see p. 10.5



Lucera

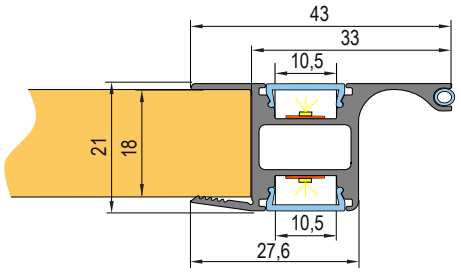
- drive-in profile on the front edge of the board
- possibility to place the LED strips up/down
- front edge of the profile is equipped with a resilient backstop
- the profile can also be used for handleless kitchens





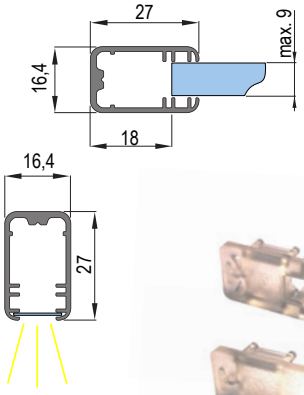
length	profile		click-in cover cap	
	anodised silver	varnished white[1)]	translucent	milk
2 m	359333	359334	198517	221008
4 m	359426	359427	252279	269801

[1)] please note that it is not possible to use capacitive touch switches for varnished profiles due to signal insulation



Micro Line

- profile for installation of glass shelves, can also be installed from the front
- end pieces with a cut-out for installation of shelves, closed end pieces for surface mounting
- glass shelves with the width of 5-9 mm
- embedding of the LED strip creates a narrow strip of light
- combined with a LED strip > 120 diodes/m, it creates a continuous light line



215200

181254

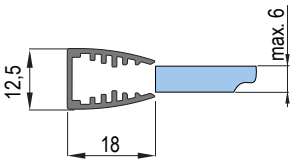
length	profile	cover cap
	anodised silver	milk
1 m	198915	215201
2 m	198916	215202

ACCESSORIES

215200	end pieces for glass shelves (pair)
181254	closed end pieces (pair)

Micro

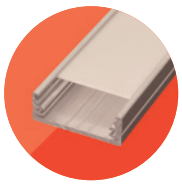
- profile for installation of glass shelves
- max. thickness of glass 6 mm
- **only for LED strips with the width of no more than 8 mm**



length	profile
	anodised silver
1 m	222576
2 m	222577

ACCESSORIES

230845	end pieces for profile (pair)



special profiles

Oval

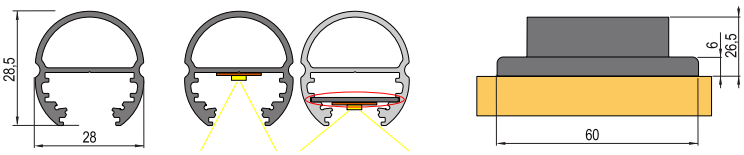
- profile for simple making of illuminated wardrobe rods
- plastic fastener – grey colour
- high load capacity 25 kg (length 1 m)
- snap-on connectors for LED strips with a width of up to 10 mm fit this profile

length	profile	insert[1]	slide-in cover cap		click-in cover cap		semi-circular
	anodised silver		translucent	milk	translucent	milk	transparent
1 m	**215022**	**247571**	**130645**	**130642**	**198516**	**221007**	**130648**
2 m	**215023**	**247572**	**130646**	**130643**	**198517**	**221008**	**130649**

[1] used for gluing the LED strip and widening the angle of light

ACCESSORIES

214915	end pieces for profile (pair)

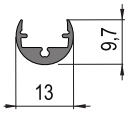


version with insert

Pen

- circular profile suitable for lighting of glass cases, cabinets, etc.
- possibility of rotation, diameter only 13 mm
- only for LED strips with a width of 8 mm
- not suitable for high-performance LED strips for continuous lighting

length	profile	cover cap translucent
1 m	**230866**	**230901**
2 m	**230867**	**230902**



ACCESSORIES

230893	handles and end pieces (pair)

Mounting profile

- for Surface, Corner, Trio profiles
- aluminium, slide-on

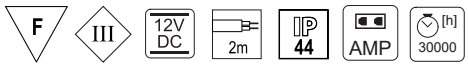
length	code
1 m	**130662**
2 m	**130663**

Observe necessary work rules for sensitive electronics, for detailed information see p. 10.5

Akis S

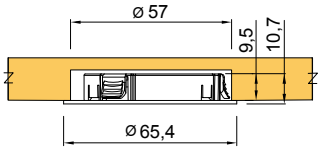
- LED spotlight
- small installation depth
- simple installation, low energy consumption
- body material – laminated plastic

body colour	colour of light warm white	luminous flux (lm)	colour of light cold white	luminous flux (lm)	input power (W)
chrome	**293041**	90	**293043**	95	1,4
satin chrome	**293042**	90	**293044**	95	1,4



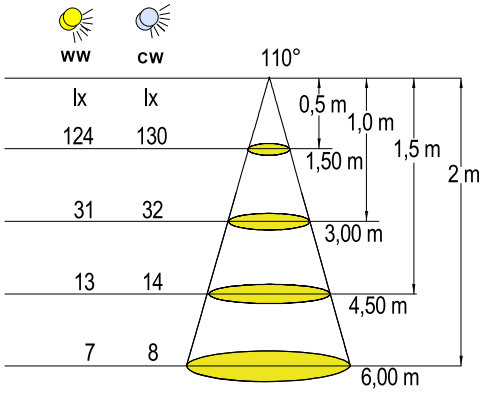
- WW – warm white
- CW – cold white

Technical parameters
voltage: 12 V
dimensions: ø 65.4 (milling ø 57) × 10.7 mm
connector type: Mini
cable length: 1 m



Tips for use:

- kitchens
- living rooms
- wardrobes



ACCESSORIES

205917	connecting cable directly to the transformer (suitable for 1 light)
134119	AMP distributor for up to 12 outlets
157951	AMP extension cable 2 m

RECOMMENDED TRANSFORMERS[1]

code	power	maximum number of lights
134110	18 W / 1,5 A	10
134111	30 W / 2,5 A	17
134112	48 W / 4,0 A	34
134113	80 W / 6,6 A	47

[1] To calculate the power, multiply the number of lights with a given input power. In case of a long-term load, we recommend increasing the power reserve. For other types of 12 V transformers, see p. 10.21


134119


205917

Cirat

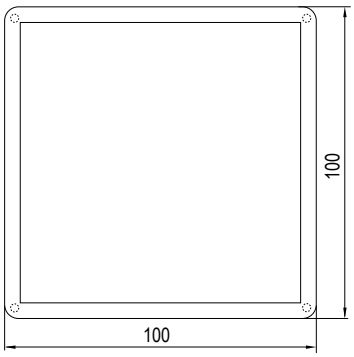
- spotlight with LED diodes with high-intensity light
- individual points are not visible
- very low profile, elegant design
- simple installation, low energy consumption

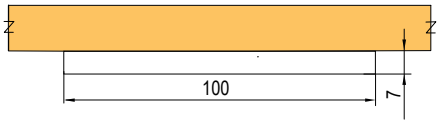
body colour	colour of light warm white	luminous flux (lm)	colour of light cold white	luminous flux (lm)	input power (W)
white	**356615**	180	**356617**	180	3
aluminium	**356620**	180	**356618**	180	3

Technical parameters
voltage: 12 V
dimensions: 100 × 100 × 7 mm
connector type: Mini
cable length: 2 m

Tips for use:

- kitchens
- living rooms
- wardrobes





ACCESSORIES

342541	connecting cable directly to the transformer (suitable for 1 light)
285093	Mini distributor for up to 6 outlets
285110	Mini extension cable 1.8 m

RECOMMENDED TRANSFORMERS[1]

code	power	maximum number of lights
134110	18 W / 1,5 A	5
134111	30 W / 2,5 A	8
134112	48 W / 4,0 A	13
134113	80 W / 6,6 A	22

[1] To calculate the power, multiply the number of lights with a given input power. In case of a long-term load, we recommend increasing the power reserve. For other types of 12 V transformers, see p. 10.21.

285093

342541

285110

Observe necessary work rules for sensitive electronics, for detailed information see p. 10.5

Bailen

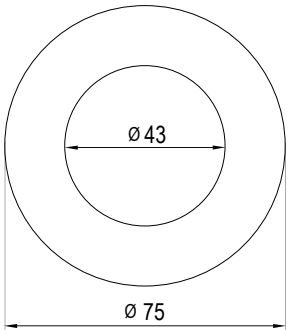
- spotlight with LED diodes with high-intensity light
- individual points are not visible
- very low profile, elegant design
- simple installation, low energy consumption
- possibility of milling-in / surface mounting

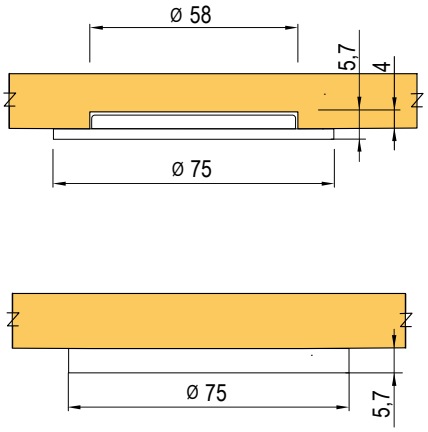
body colour	colour of light warm white	luminous flux (lm)	colour of light cold white	luminous flux (lm)	input power (W)
white	**358290**	100	**358293**	100	2,5
grounded steel	**358289**	100	**358287**	100	2,5

Technical parameters
voltage: 12 V
dimensions: ø 75 mm × 5.7 mm
connector type: Mini
cable length: 2 m

Tips for use:

- kitchens
- living rooms
- wardrobes





ACCESSORIES

342541	connecting cable directly to the transformer (suitable for 1 light)
285093	Mini distributor for up to 6 outlets
285110	Mini extension cable 1.8 m

285093

342541

285110

RECOMMENDED TRANSFORMERS[1]

code	power	maximum number of lights
134110	18 W / 1,5 A	5
134111	30 W / 2,5 A	8
134112	48 W / 4,0 A	13
134113	80 W / 6,6 A	22

[1] To calculate the power, multiply the number of lights with a given input power. In case of a long-term load, we recommend increasing the power reserve. For other types of 12 V transformers, see p. 10.21.

spotlights

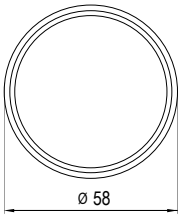
Arnes

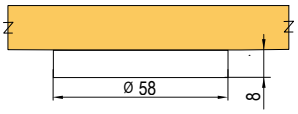
- spotlight with LED diodes
- very low profile, elegant design
- simple installation, low energy consumption

body colour	colour of light warm white	luminous flux (lm)	colour of light cold white	luminous flux (lm)	input power (W)
aluminium	**356611**	80	**356400**	80	1,5

12V DC | MINI | 2m

Technical parameters
voltage: 12 V
dimensions: ø 58 mm × 8 mm
connector type: Mini
cable length: 2 m





Tips for use:

- kitchens
- living rooms
- wardrobes
- staircase lighting

ACCESSORIES

342541	connecting cable directly to the transformer (suitable for 1 light)
285093	Mini distributor for up to 6 outlets
285110	Mini extension cable 1.8 m

285093

342541

285110

RECOMMENDED TRANSFORMERS[1]

code	power	maximum number of lights
134110	18 W / 1,5 A	10
134111	30 W / 2,5 A	16

[1] To calculate the power, multiply the number of lights with a given input power. In case of a long-term load, we recommend increasing the power reserve. For other types of 12 V transformers, see p. 10.21

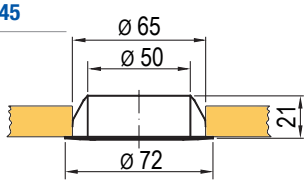
LED spotlight

- LED spotlight (21 diodes, max. 2 W) for milling-in
- separate light with cables of approx. length of 15 cm
- the set contains a transformer directly for the socket, including connecting cables with the length of 2 m
- colour of light – cold white
- material – metal

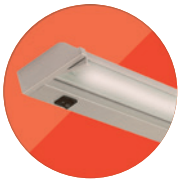
description	power (W)	chrome	grounded stainless steel	aluminium
separate light, without transformer	2	**157837**	**231661**	**231742**
set of 3 lights + transformer 15 W	3 × 2	**157840**	**231662**	**231745**

- voltage 12 V
- for relevant transformers, see p. 10.21

III | 12V DC | 2m | [h] 20000



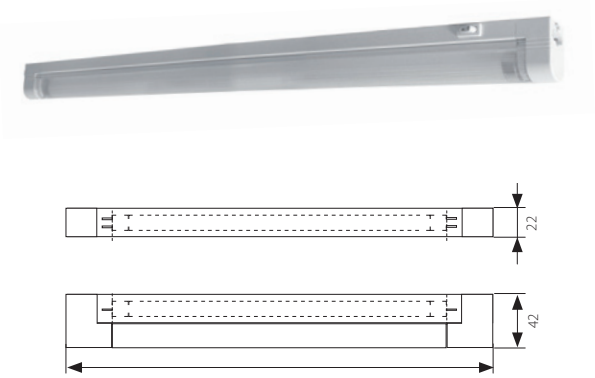
Observe necessary work rules for sensitive electronics, for detailed information see p. 10.5



Mera fluorescent light

- power supply 220-240 V, 50 Hz
- inserted T5 fluorescent light
- supply cable 1.75 m
- colour of light – neutral white
- mutually connectible
- connecting cable 200 mm (157748)

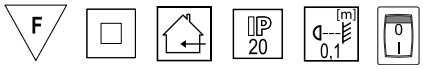
code	power (W)	length (mm)
SK00054	8	343
SK00055	13	573
SK00056	21	900
157699	28	1,200

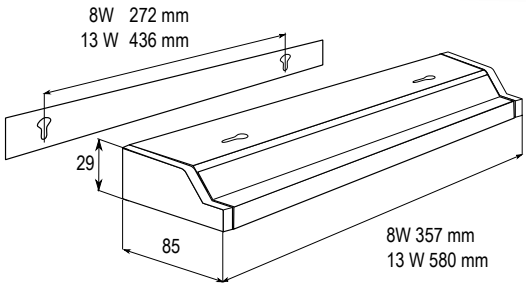


Pivoting fluorescent light – rear outlet

- built-in switch
- supply cable 1.5 m
- IP20
- cap G5
- spare fluorescent light type T5

code	input power (W)	length (mm)
160008	8	357



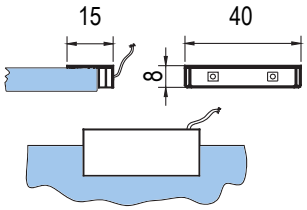


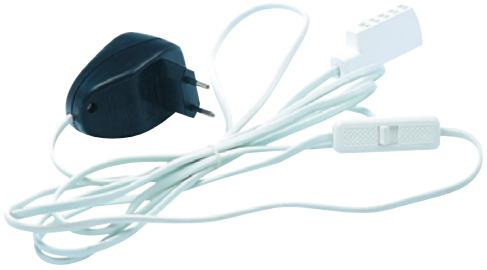
Shelf lighting

- clip designed for lighting glass shelves has a self-adhesive sticker for attachment
- simple installation; when installing the set, a total of 4 clips can be attached to a transformer
- the light strikes the brushed edge of the light and scatters; several clips can be used for one shelf according to shelf length and required intensity of lighting
- this set contains a transformer into socket, cable with a switch, distributor with 4 outlets at the end

code	description	power
SAL091	separate	0.25 W
SAL111	set of 2 lights + transformer 1 W	2 × 0.25 W

- cable length for clip is 1.5 m





lit bottoms

LED lit bottom

Lit bottoms and shelves are tailored to the customer's needs. It is possible to choose from several types of finishes, light colours, controls and front edge designs.

For price calculation and placing an order – always use the current version of the form, which can be found at our website www.demos-trade.com.

TYPE OF FRONT EDGE

description	abbreviation
handleless version	HV
standard version	SV

COLOUR OF LIGHT

description	abbreviation
cold white	CW
warm white	WW

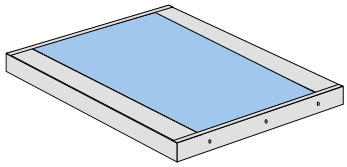
FINISH

description	abbreviation
anodised	AN
grounded anodised	GE
grounded stainless steel	GSS

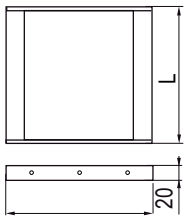
CONTROL

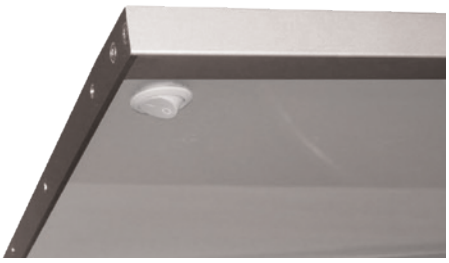
description	abbreviation
mechanical switch	MS
without switch	WS
touch-free switch	TFS

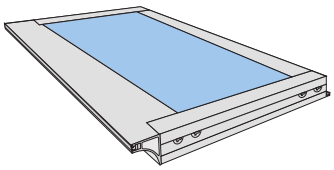
- lightened LED bottom, with high-intensity light diodes
- main luminous flux directed down, adequate lighting of the work area
- supply voltage 12 V, transformer is not included in the supply
- cable 2 m, connector AMP, installation hole 8 mm
- service life min. 20,000 hours
- **warning:** top glass is only inserted, mind sharp edges when handling!
- safety glass



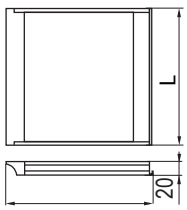
standard version

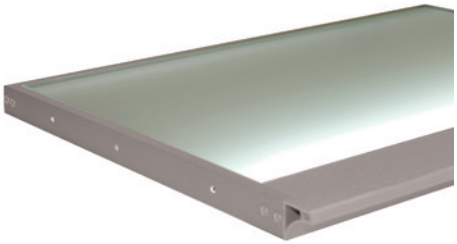






handleless version





Recommended accessories

for connecting cable, see p. 10.24
for distributor, see p. 10.23
for transformers, see p. 10.21

Observe necessary work rules for sensitive electronics, for detailed information see p. 10.5

Mirror with LED lighting

- protection level: IP20, IP44 as required
- energy class: A
- type of LED strip: 6 W/m (60 diodes/m)
- power supply 230 V, on the rear of the mirror there is a terminal box (IP44) for connecting supply cables, incl. supply transformer
- between the mirror and other furniture, there must be a gap of at least 30 mm
- maximum length of one edge may be 1,500 mm
- mirror circumference must not exceed 4.8 m

Mirrors are tailored to the customer's needs.

For price calculation and placing an order – always use the current version of the form, which can be found at our website www.demos-trade.com.

OPTIONAL COLOUR OF LIGHT

description	abbreviation
cold white	CW
neutral white	NW
warm white (2,800-3,300 K)	WW

OPTIONAL FINISH

description	abbreviation
anodised	AN
varnished white	W
varnished black	B

- individual types may have a limited range of finishes
- white RAL9003
- black – anodised

OPTIONAL TYPE OF LED STRIP

the heavy-current part is always IP44, different types of mirrors have a different construction and therefore also different design of the LED strip covering with mirror/glass itself

description	abbreviation
for normal environment	IP20
waterproof	IP44[1)]

[1)] This type of LED strip is not suitable for continuous lighting, maximum time of continuous lighting is 1 hour, then a min. break of 30 min is necessary.

OPTIONAL ACCESSORIES

touch switch (switch is located above the lower edge of the mirror)

heated foil 30 × 42 cm

Tip: heated foil is located on the back of the mirror. Once the light is switched on, the foil begins to heat up the mirror so that it is demisted. The foil is located below the centre part, it does not cover the entire surface of the mirror.

switch detail

aluminium

white

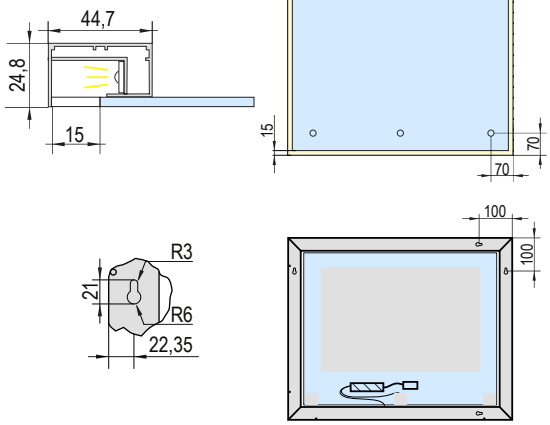
black

The photos of surfaces are illustrative!

mirrors with LED lighting

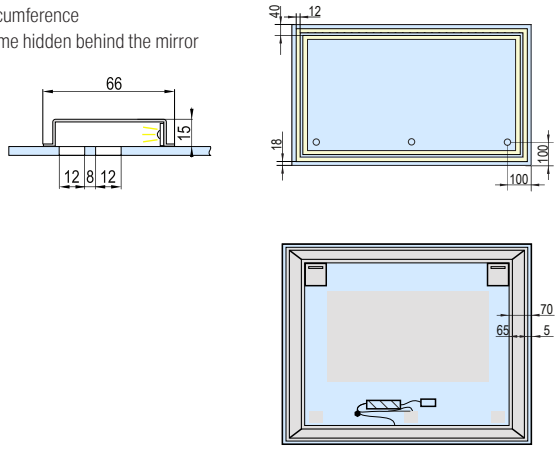
Classic Line

- simple lighting line around the entire circumference
- visible frame can be selected in multiple colour designs



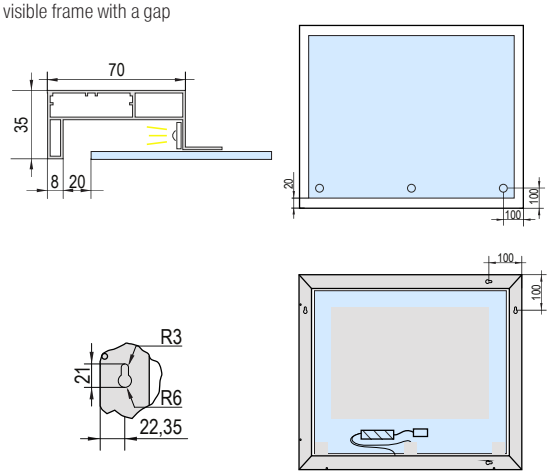
Double Line

- double illumination line around the entire circumference
- frame hidden behind the mirror



Gap Line

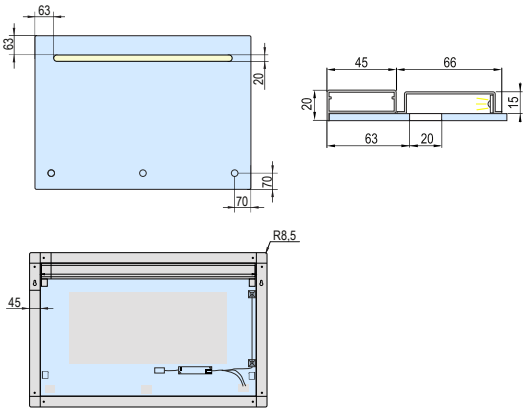
- simple lighting line around the entire circumference
- visible frame with a gap



Observe necessary work rules for sensitive electronics, for detailed information see p. 10.5

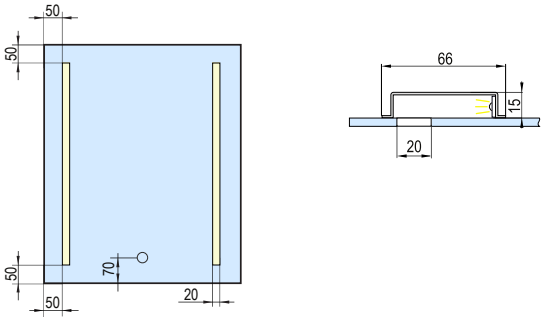
Q Line

- simple lighting line
- visible frame



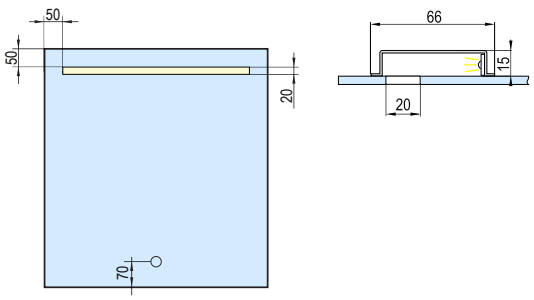
Simple Line Vertical

- two illumination lines around the entire circumference
- suspension attachment



Simple Line Horizontal

- simple lighting line
- suspension attachment

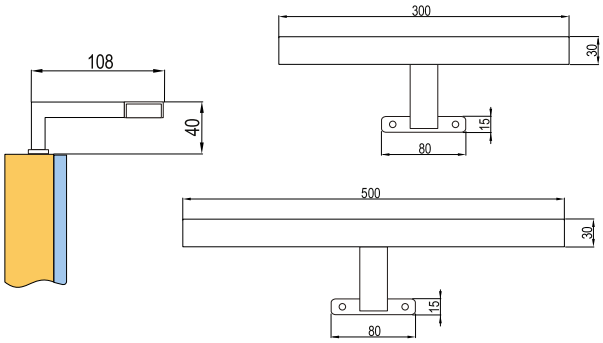


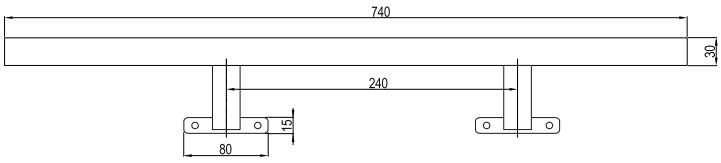
bathroom lights

Lucius

- designer light in IP44 design, suitable for bathrooms
- finish – chrome
- built-in transformer – power supply 230 V
- colour of light 4,000 K – neutral white CRI Ra > 80, certification CE, Rohs
- possible mounting from the top with screws or fastening on the mirror
- cable 2 m

code	length (mm)	luminous intensity (lm)	input power (W)
283383	300	300 - 350	5
283384	500	550 - 600	8
283385	740	750 - 800	11

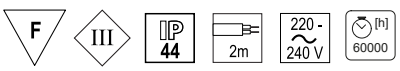


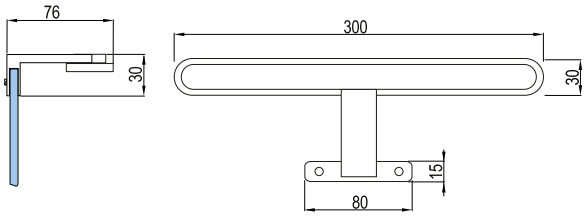


Ovallo

- designer light in IP44 design, suitable for bathrooms
- finish – chrome
- external transformer included in the package, power supply 230 V
- colour of light 4,000 K – neutral white CRI Ra > 80, certification CE, Rohs
- possible mounting from the top with screws or fastening on the mirror
- cable 2 m

code	length (mm)	luminous intensity (lm)	input power (W)
283386	300	300 - 350	5





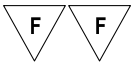
Observe necessary work rules for sensitive electronics, for detailed information see p. 10.5

explanatory pictograms

Protection classes (insulation)

class	symbol	description
0	none	Protection against electric shock is based on basic insulation.
I		Protection against electric shock is based on and secured by the connection of non-live parts to a protective conductor.
II		Devices in protection class II do not contain means for connecting to a protective conductor, such devices are equipped with additional or strengthened insulation.
III		Class III protection against electric shock is based on safe and low-voltage power supply.

Protection against flare-up

symbol	description
none	Designed for installation on non-flammable surfaces (stone, concrete).
	Designed for installation on naturally flammable surfaces (furniture). Material flare-up temperature is above 200°C.
	Designed for installation on easily flammable surfaces. Flare-up temperature is below 200°C.

IP – protection levels against penetration of solid objects and water

the first number refers to the level of protection against mechanical objects, the second refers to the level of protection against water

IP	description	IP	description
0	without protection	0	without protection
1	protection against objects larger than 50 mm	1	protection against dripping water
2	protection against objects larger than 12 mm	2	protection against dripping water at 15° inclination
3	protection against objects larger than 2.5 mm	3	protection against sprayed water
4	protection against objects larger than 1 mm	4	protection against splashing water
5	protection against dust	5	protection against spouting water
6	dust-proof	6	protection against intensively spouting water
		7	protection against effects of temporary immersion in water
		8	protection against effects of permanent immersion in water

Power supply

pictogram	description
	direct voltage 12 V
	direct voltage 24 V
	alternating voltage 220-240 V, 50 Hz

Types of connectors

pictogram	description
	for proper operation, components with the same type of connector and the same supply voltage must be used
	
	

Other properties

pictogram	description	pictogram	description
	for internal use		equipped with a switch
	minimum distance from the object of lighting		dimming function
	cable length		service life