magic Lights

Your furniture in the very best light

Hettich

About us

The company's origins date back to 1888, when Karl Hettich began making the new clock component he had invented. By 1930, his descendants had diversified into furniture fittings, setting up production in East Westphalia a Center of the German furniture industry.

Today, Hettich, still family owned, has become an industry leader with a worldwide reputation. We're one of the world's largest manufacturers of high-quality furniture fittings, with over 6,000 employees in more than 100 countries. The company's success has been built on four enduring values: quality, innovation, close cooperation with customers and absolute reliability. We work to inspire our customers with our ideas and our passion

Hettich Forum at Kirchlengern, Germany

Hettich Manufacturing Plant-Vadodara, India

Hettich Manufacturing Unit at Indore, India

Luxurious Space Efficient Functional Warranty¹
*Refer Website

FREE
Design Services
incl. bill of qty.

Hettich Poddar WoodWorking Institute
Skilling • Upskilling • Reskilling

Warranty
For Warranty
please refer to website.
www.hettich.com/in

Free Design Service:
Looking for Designs to liven up your Living Room, Bedroom, Bathroom & Kitchen. A dedicated team of highly qualified Interior Designers is at your service to provide customised design solution to suit every taste and budget at zero cost to you.

Free Consultation at your doorstep:
Looking for perfect Furniture Fittings solution. A dedicated team of highly qualified professionals is at your service to provide the perfect furniture fittings solution to suit your need and budget at zero cost to you.

Customer Care Service:
In today's fast paced and technologically advanced era, most of the organizations succumb to the pressure of staying ahead in the competition and often, end up neglecting the most critical aspect of business i.e. CUSTOMERS. Hettich, being a CUSTOMER CENTRIC organization, is very sensitive towards this tendency; hence, we constantly try to provide the best and quality driven products and services.

Enquiry & Customer Services
Toll Free : 1800 209 2096 (office hours)
Email: sales_enquiry@in.hettich.com
customer_services@in.hettich.com
www.hettich.com

Free Training Services:
Free Training Services for carpenters of trade partners and customers

Training Center Address:
Hettich Poddar Wood Work Institute
Plot No.2, First Floor,
DLF Industrial Estate - 1
Near NHPC Metro Station
Faridabad, Haryana
Email: info@hpwwi.com
Ph: 0129 - 4203888

Individual solutions Plug-and-play compatibility of all components. Unlimited combination possibilities. No electro-technical expertise required.

To make yourself Meter and roll goods to combine independently. Precisely cut to size. No loss of material.

In-house development Products are designed, developed and tested in-house. The result is the highest quality 'Engineered in Germany'.

Consulting Your customers have bigger plans for you. Involve us at an early stage to put your future projects on a technically sound foundation.

Clean Lines.
magic shows your furniture
in their best light.
Simple. Functional. Decorative

Feel-good factor.

magic embellishes the interior
and makes your clothes shine on stage.

Simple. Surprising. Perfect.

A feast for the eyes.

Individual, classic, modern
or rustic **magic** is at home in
any style.

Simple. Enjoyable. Beautiful.

Pure happiness.

For the special moments everyday. **magic** transforms your bathroom into a wellness oasis.

Simple. Relaxed. Harmonious.

Versa

means versatility. These LED strips are particularly
flexible, they can be shortened and they are available
in various light colours. The decorative ChannelLine
profiles match them perfectly.
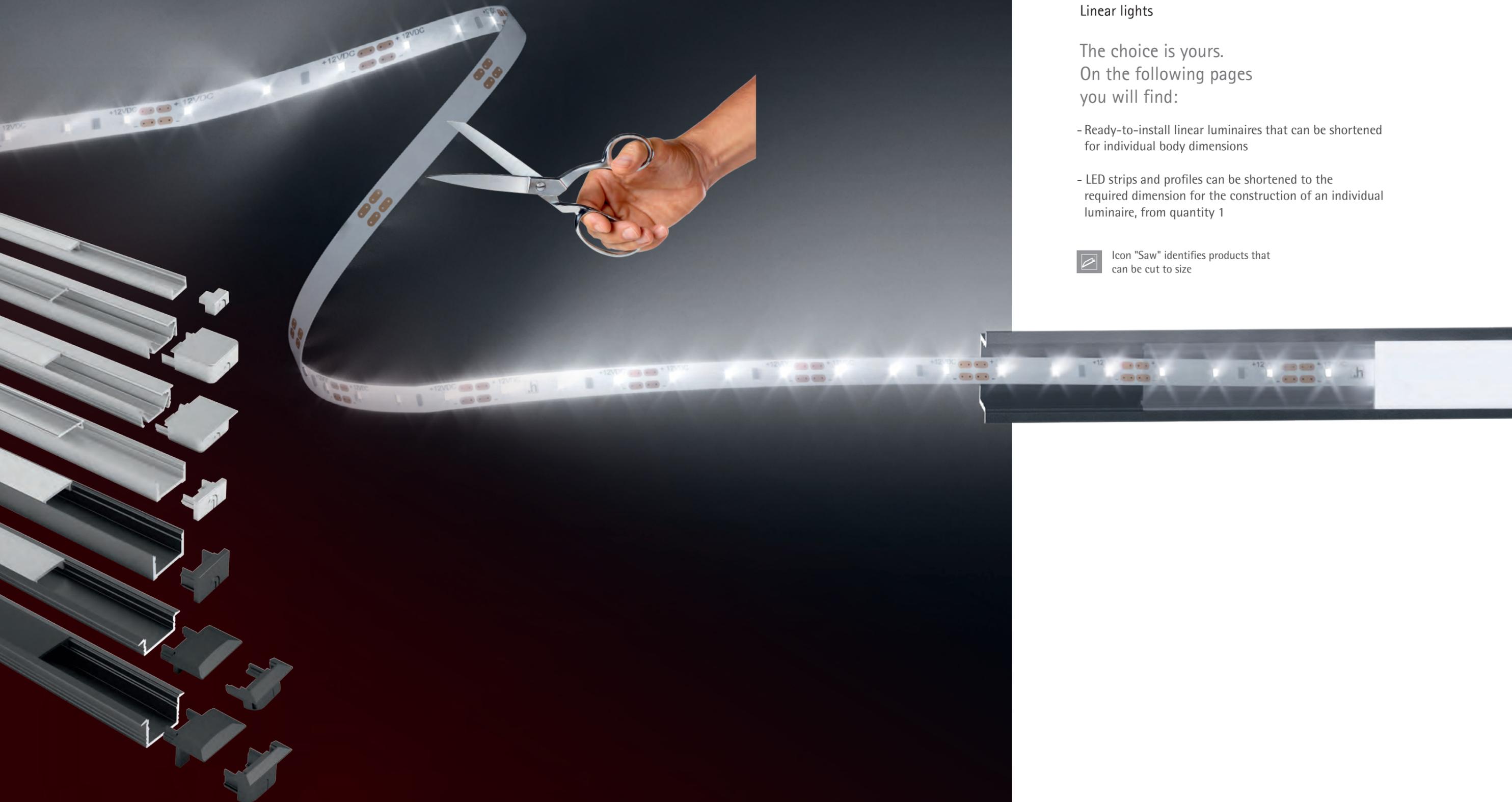
Linear lights

The choice is yours.
On the following pages
you will find:

- Ready-to-install linear luminaires that can be shortened
  for individual body dimensions

- LED strips and profiles can be shortened to the
  required dimension for the construction of an individual
  luminaire, from quantity 1

Icon "Saw" identifies products that
can be cut to size

Overview of Versa strips

Model	Versa Inside 80	Versa Inside 120	Versa Inside 160	Versa Linear (COB)
Voltage	12 V	12 V	12 V	12 V
Illuminance at a distance of 50 cm	360 lux	525 lux	700 lux	550 lux
Output per m	4.8 W/m	7.2 W/m	9.6 W/m	10 W/m
Luminous flux per m	600 lm/m	900 lm/m	1200 lm/m	1000 lm/m
Light source efficiency	125 lm/W	125 lm/W	125 lm/W	100 lm/W
Light colour*	WW NW	WW NW	WW NW MW	WW
Colour rendering/CRI	RA > 90 (R9 > 60)			RA > 90 (R9 > 60)
Strip length	5000 mm		3000 mm (12 Volt DC)	3000 mm
Max. length at a stretch	7000 mm	5000 mm	3750 mm (12 Volt DC)	3600 mm
LEDs per m	80	120	160	LED not visible
Can be cut every	50 mm	33 mm	25 mm (12 Volt DC)	25 mm
Direct connector	9315676 (1 piece) 9310032 (10 pieces)			9321363 (1 piece)
Flexible connector 50 mm	9315677 (1 piece) 9310033 (10 pieces)			9321364 (1 piece)
Flexible connector 150 mm	9310240 (1 piece) 9326308 (10 pieces)			9321365 (1 piece)
Feeder for sections with clip connector			9310035 (12 Volt DC)	9321366
Width / Height	7.5 mm / 2 mm			8 mm / 2 mm
IP rating	IP 20			IP 20

*XW = 2700 K, WW = 3000 K, NW = 4000 K, CW = 6500 K, MW = 2700-6000 K

Versa Inside 80
Page no. 22-23
12 V

Versa Inside 120
Page no. 24-25
12 V

Versa Inside 160
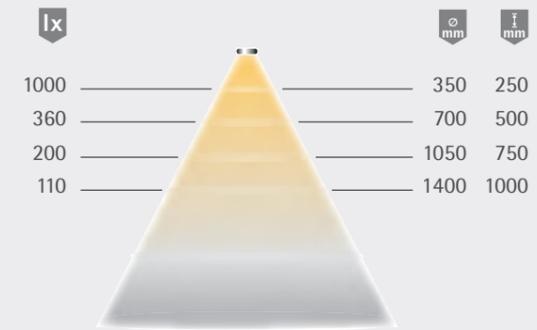Page no. 26-27
12 V

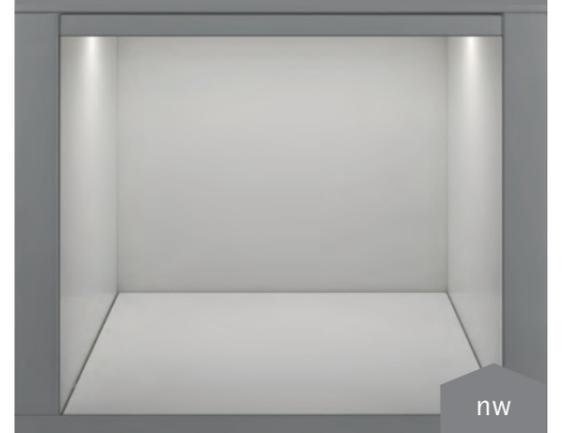Versa Linear
Page no. 28-29
12 V

Versa Up & Down 80
Page no. 30-31
12 V

Versa Inside 80

Advantages
▸ Uniform light distribution
▸ More efficient
▸ More light
▸ Less power consumption

Examples of use
▸ Universal application
▸ Accent lighting in the living area

Order information
▸ For selection see Versa- and ChannelLine overview

Features
▸ Lead on both sides for the 5000 mm length (one cut, two lights), see drawing

Article no.	Product description	Qty	Unit	PU	MRP
9335232	Versa Inside 80, 12VDC WW, L=5m, 4.8W/m, Lead 2x1.8m	1	Pc	1	5,450
9335231	Versa Inside 80, 12VDC NW, L=5m, 4.8W/m, Lead 2x1.8m	1	Pc	1	5,450

Accessories

Article no.	Product description	Qty	Unit	PU	MRP
9315676	Direct Connector (Max.36 Watt)	1	Pc	1	110
9315677	Flexible Connector, L=50mm (Max. 36 Watt)	1	Pc	1	240
9310240	Flexible Connector, L=150mm (Max. 36 Watt)	1	Pc	1	270
9310035	Feeder, L=1800mm (Max. 36 Watt)	1	Pc	1	340
9310032	Direct Connector (Max.36 Watt)	10	Pc	1	950
9310033	Flexible Connector, L=50mm (Max. 36 Watt)	10	Pc	1	2,450
9326308	Flexible Connector, L=150mm (Max. 36 Watt)	10	Pc	1	2,650

Technical details

12 V

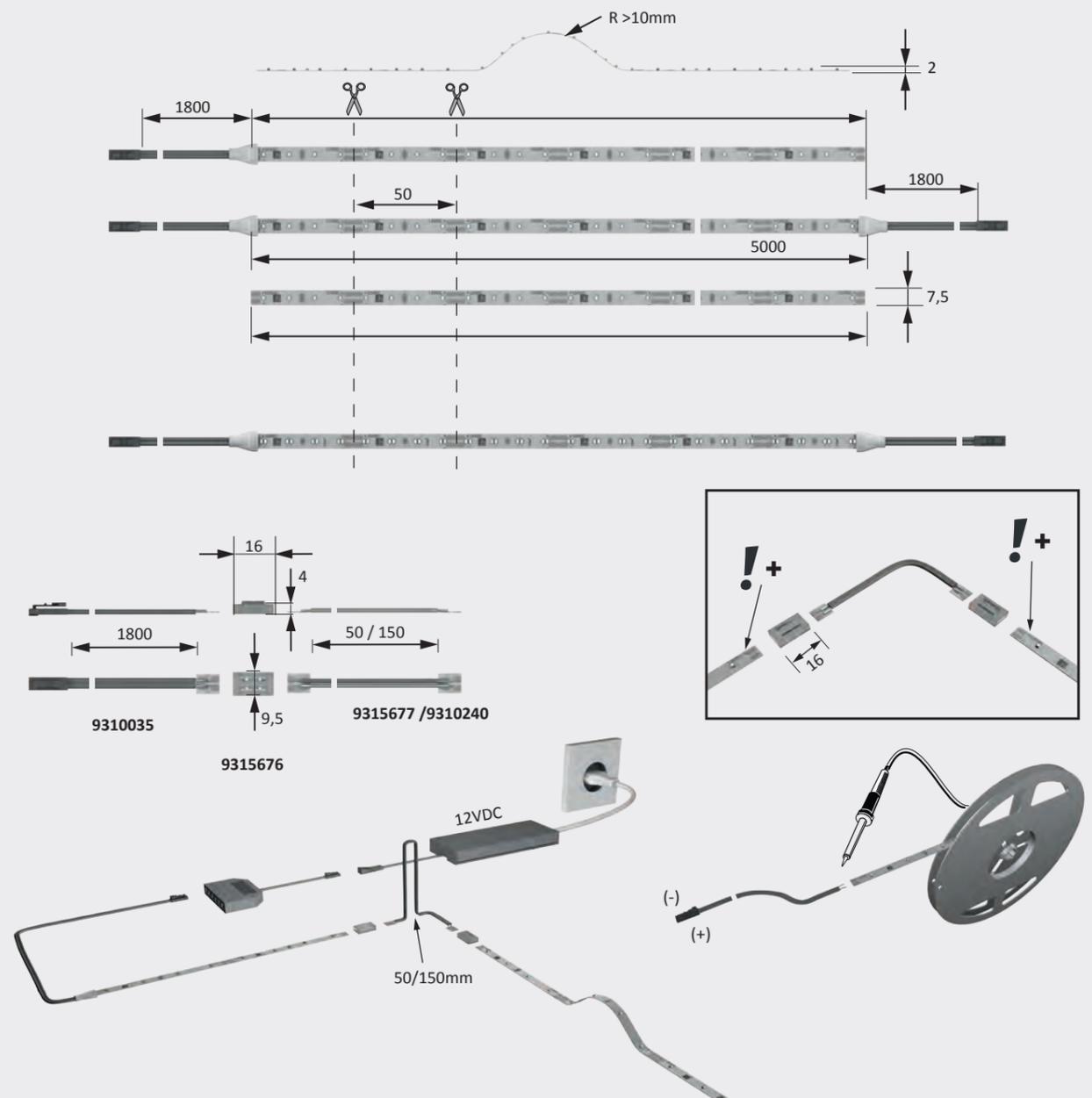|	
Luminaire type:	Surface-mounted light
Type of lighting:	Accent lighting
Operating voltage:	12 V DC
Light colours:	WarmWhite/ NeutralWhite
Colour rendering:	RA >90; R9 >60
Luminous flux:	600 lm/m
Light source efficiency:	125 lm/W
Life span:	40,000 h (L70)
Power consumption:	4.8 W/m
Max. length at a stretch:	7 m
Dimmable:	Yes/PWM/Smart.home
Number of LEDs:	80/m
Beam angle:	120°
Half value angle:	70°
Test marks and symbols:	CE UKCA ◇ VV
Supply lead:	1800 mm
Plug connector:	LED mini connector M1 (max. 36 W)
Protection rating:	IP 20
Connection to:	LED ballast

Light distribution diagram 70°

lx		ø mm	i mm
1000		350	250
360		700	500
200		1050	750
110		1400	1000

Light box

nw

Dimensional drawing / installation ▱ Can be individually cut to size

9310035

9315676

9315677 /9310240
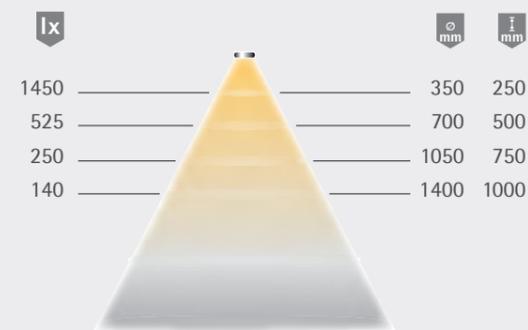
Versa Inside 120

Advantages
▸ Uniform light distribution
▸ More efficient
▸ More light
▸ Less power consumption

▸ Perfect for interior cabinet lighting
▸ Accent lighting in bright surroundings

Order information
▸ For selection see Versa- and ChannelLine overview

Features
▸ Lead on both sides for the 5000 mm length (one cut, two lights), see drawing

Examples of use

Article no.	Product description	Qty	Unit	PU	MRP
9335234	Versa Inside 120, 12VDC WW, L=5m, 7.2W/m, Lead 2x1.8m	1	Pc	1	7,000
9335233	Versa Inside 120, 12VDC NW, L=5m, 7.2W/m, Lead 2x1.8m	1	Pc	1	7,000

Accessories

Article no.	Product description	Qty	Unit	PU	MRP
9315676	Direct Connector (Max.36 Watt)	1	Pc	1	110
9315677	Flexible Connector, L=50mm (Max. 36 Watt)	1	Pc	1	240
9310240	Flexible Connector, L=150mm (Max. 36 Watt)	1	Pc	1	270
9310035	Feeder, L=1800mm (Max. 36 Watt)	1	Pc	1	340
9310032	Direct Connector (Max.36 Watt)	10	Pc	1	950
9310033	Flexible Connector, L=50mm (Max. 36 Watt)	10	Pc	1	2,450
9326308	Flexible Connector, L=150mm (Max. 36 Watt)	10	Pc	1	2,650

Technical details

12 V

Luminaire type:	Surface-mounted light
Type of lighting:	Functional lighting/ accent lighting
Operating voltage:	12 V DC
Light colours:	WarmWhite/ NeutralWhite
Colour rendering:	RA >90; R9 >60
Luminous flux:	900 lm/m
Efficiency light source:	125 lm/W
Lifespan:	40,000 h (L70)
Power consumption:	7.2 W/m
Max. length at a stretch:	5 m
Dimmable:	Yes/PWM/Smart.home
LED count:	120/m
Beam angle:	120°
Half value angle:	70°
Test marks and symbols:	CE UK ⊕ WW
Protection rating:	IP 20
Supply lead:	1800 mm
Plug connector:	LED mini connector M1 (max. 36 W)
Connection to:	LED ballast

Light distribution diagram 70°
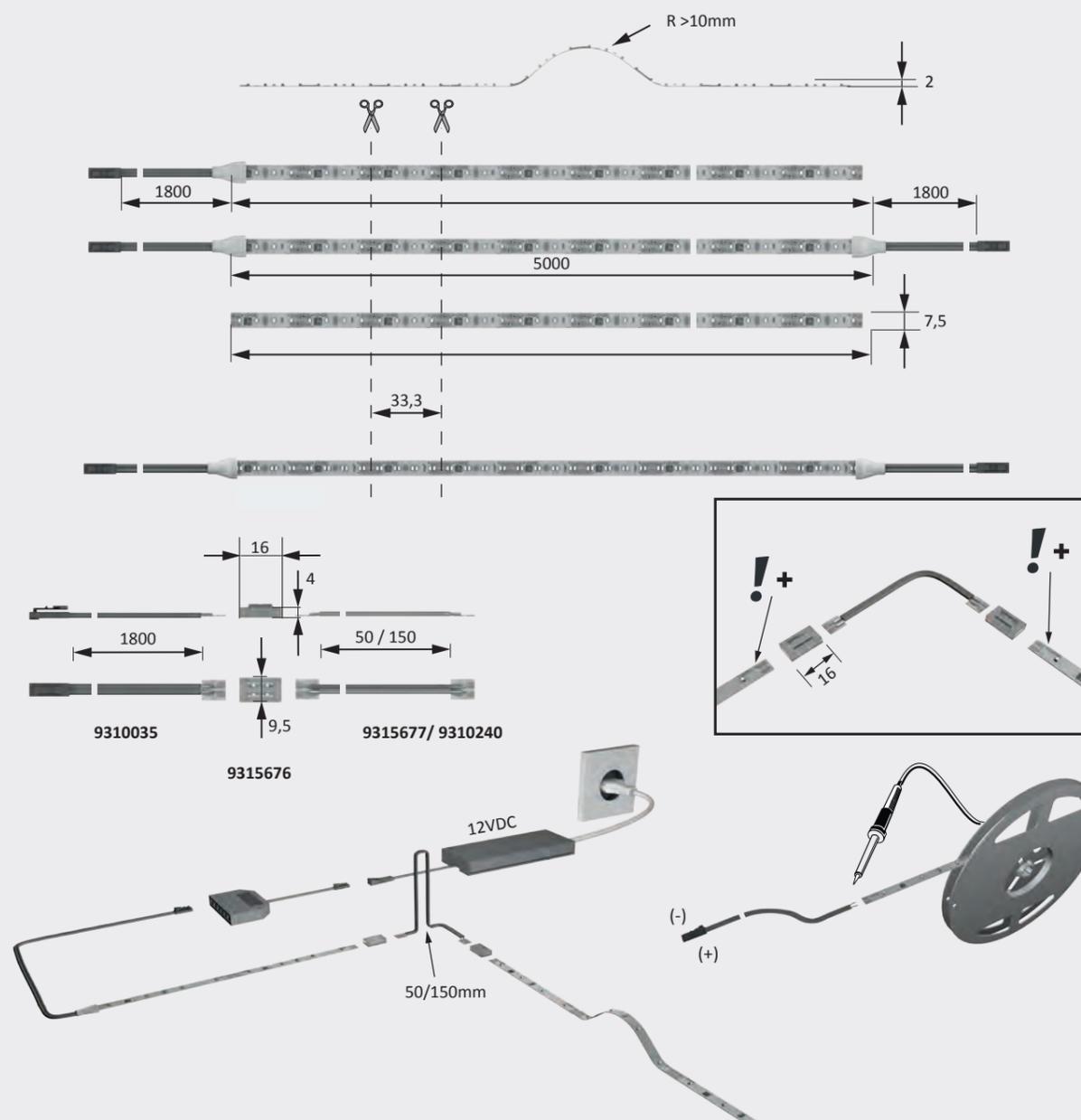
lx		⌀ mm	i mm
1450		350	250
525		700	500
250		1050	750
140		1400	1000

Light box

WW

Dimensional drawing / installation

R >10mm
2
1800
1800
5000
7,5
33,3
16
4
1800
50 / 150
9,5
9310035
9315677/ 9310240
9315676
12VDC
50/150mm
(-)
(+)

Versa Inside 160 / 12 Volt DC

Advantages
▸ Uniform light distribution
▸ More efficient
▸ More light
▸ Less power consumption

Examples of use
▸ Ideal for task and functional lighting

Order information
▸ For selection see Versa- and ChannelLine overview

Features
▸ Lead on both sides for the 3000 mm length (one cut, two lights), see drawing

Technical details

12 V

Article no.	Product description	Qty	Unit	PU	MRP
9335237	Versa Inside 2x160, 12VDC MW², L=3.0m, 9.6W/m, Lead 2x1.8m	1	Pc	1	16,000
9335236	Versa Inside 160, 12VDC WW, L=3m, 9.6W/m, Lead 2x1.8m	1	Pc	1	8,000
9335235	Versa Inside 160, 12VDC NW, L=3m, 9.6W/m, Lead 2x1.8m	1	Pc	1	8,000

Accessories

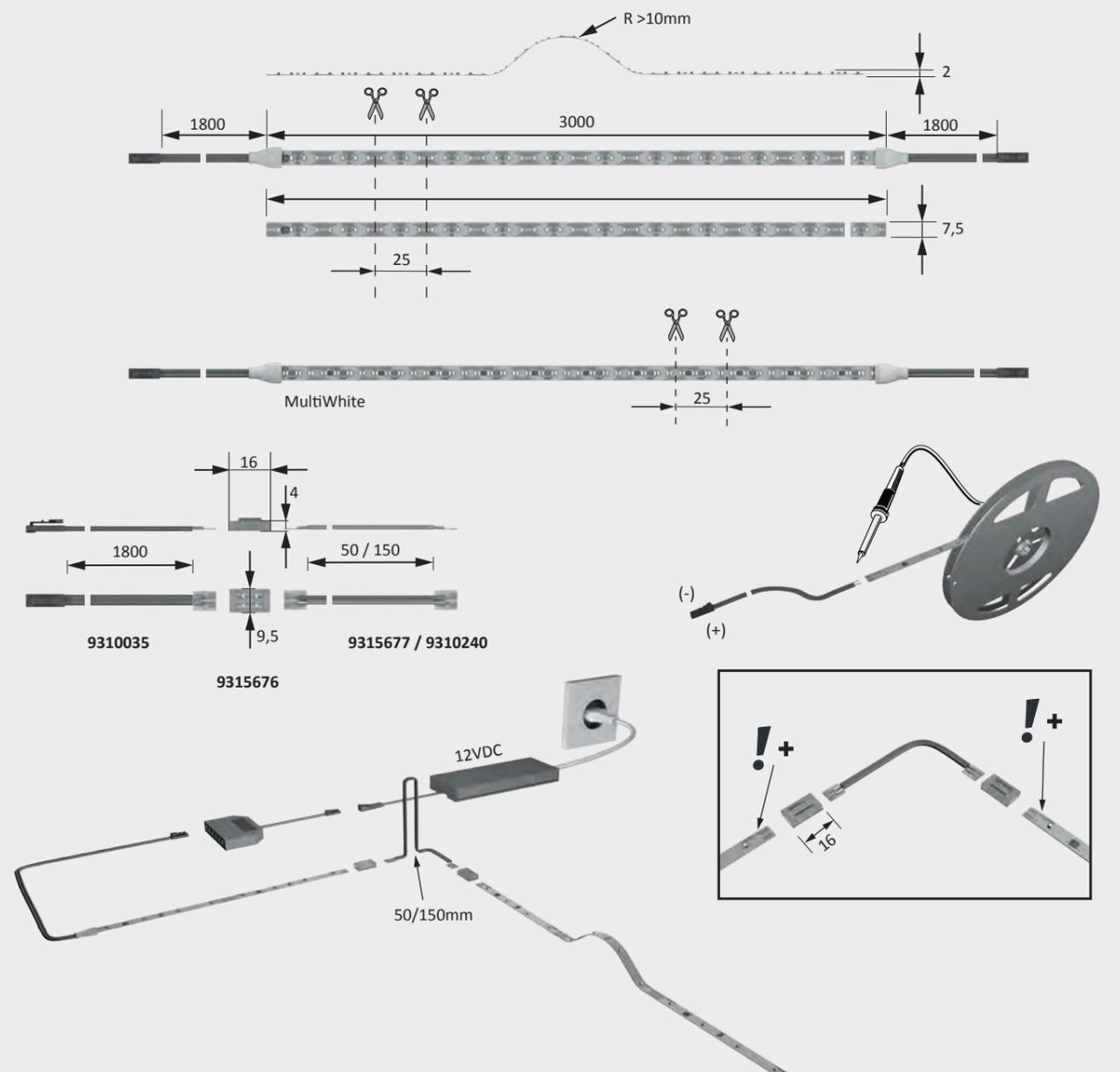| Article no.	Product description	Qty	Unit	PU	MRP
9315676	Direct Connector (Max.36 Watt)	1	Pc	1	110
9315677	Flexible Connector, L=50mm (Max. 36 Watt)	1	Pc	1	240
9310240	Flexible Connector, L=150mm (Max. 36 Watt)	1	Pc	1	270
9310035	Feeder, L=1800mm (Max. 36 Watt)	1	Pc	1	340
9104773	LED extension M1, L=1800mm	1	Pc	1	440
9310032	Direct Connector (Max.36 Watt)	10	Pc	1	950
9310033	Flexible Connector, L=50mm (Max. 36 Watt)	10	Pc	1	2,450
9326308	Flexible Connector, L=150mm (Max. 36 Watt)	10	Pc	1	2,650

Luminaire type:	Surface-mounted light
Type of lighting:	Function lighting/ accent lighting
Operating voltage:	12 V DC
Light colours:	WarmWhite/ NeutralWhite/ MultiWhite
Colour rendering:	RA >90; R9 >60
Luminous flux:	1200 lm/m
Light source efficiency:	125 lm/W
Lifespan:	40,000 h (L70)
Power consumption:	9.6 W/m
Max. length at a stretch:	12V – 3.75 m
Dimmable:	Yes/PWM/Smart.home
Number of LEDs:	160/m
Beam angle:	120°
Half value angle:	70°
Test marks and symbols:	CE UK ⚡ ᗐᗐ
Protection rating:	IP 20
Supply lead:	1800 mm
Plug connector:	LED mini connector M1 (max. 36 W)
Connection to:	LED ballast

* MultiWhite accessories required

Light distribution diagram 70°

lx		⌀ mm	i mm
1950		350	250
700		700	500
360		1050	750
200		1400	1000

Light box

nw

Dimensional drawing / installation   ✂ Can be individually cut to size

R >10mm

2

1800 — 3000 — 1800

7,5

25

MultiWhite

25

16

4

1800

50 / 150

9,5

9310035

9315677 / 9310240

9315676

(-)
(+)

12VDC

50/150mm

16

Versa Linear

Advantages
▸ Extremely uniform, homogeneous luminous surface
▸ Equally suited for unctional and accent lighting
▸ Perfect results even in flat profiles

Features
▸ Homogeneous illumination in ChannelLine profiles
▸ For 3000 mm length power supply from two sides (one cut, two lights), see drawing
▸ COB (Chip-On-Board) with continuous phosphor coating

Examples of use
▸ Especially for flat ChannelLine profiles
▸ Ideal for ChannelLine I, I2
▸ Suitable for applications where the light source is visible e.g. frame lighting on mirror cabinet

Order information
▸ Colour uniformity (chromaticity) may vary
▸ For selection see Versa- and ChannelLine Overview

Technical details

12 V

Article no.	Product description	Qty	Unit	PU	MRP
9335238	Versa Linear COB, 12VDC WW, L=3m, 10W/m, lead 2x1.8m	1	Pc	1	5,350

Accessories

Article no.	Product description	Qty	Unit	PU	MRP
9321363	Direct connector COB	1	Pc	1	220
9321364	Flexible Connector COB, L=50mm	1	Pc	1	560
9321365	Flexible Connector COB, L=150mm	1	Pc	1	560
9321366	Feeder COB, L=1800mm	1	Pc	1	560
9104773	LED extension M1, L=1800mm	1	Pc	1	440

Luminaire type: Surface-mounted light
Type of lighting: Function lighting/ Accent lighting
Operating voltage: 12 V DC
Light colours: WarmWhite

Colour rendering: RA >90; R9 >60
Luminous flux: 1000 lm/m
Light source efficiency: 100 lm/W
Life span: 40,000 h (L70)
Power consumption: 10 W/m
Max. length at a stretch: 3.6 m
Dimmable: Yes/PWM/Smart.home
Number of LEDs: 480/m
Beam angle: 120°
Half value angle: 70°
Test mark and symbols: CE UKCA
Protection rating: IP 20
Supply lead: 1800 mm
Plug connector: LED mini connector M1 (max. 36 W)
Connection to: LED ballast

Light distribution diagram 70°

lx		ø mm	i mm
1500		350	250
550		700	500
270		1050	750
150		1400	1000

Light box

nw

Dimensional drawing / installation ✂ Can be individually cut to size

R >10mm 2
1800 8
3000 1800
25

12VDC
50/150mm

16 4
1800 50 / 150
9321366 10 9321364/9321365
9321363

!+ 16 !+
(-)
(+)

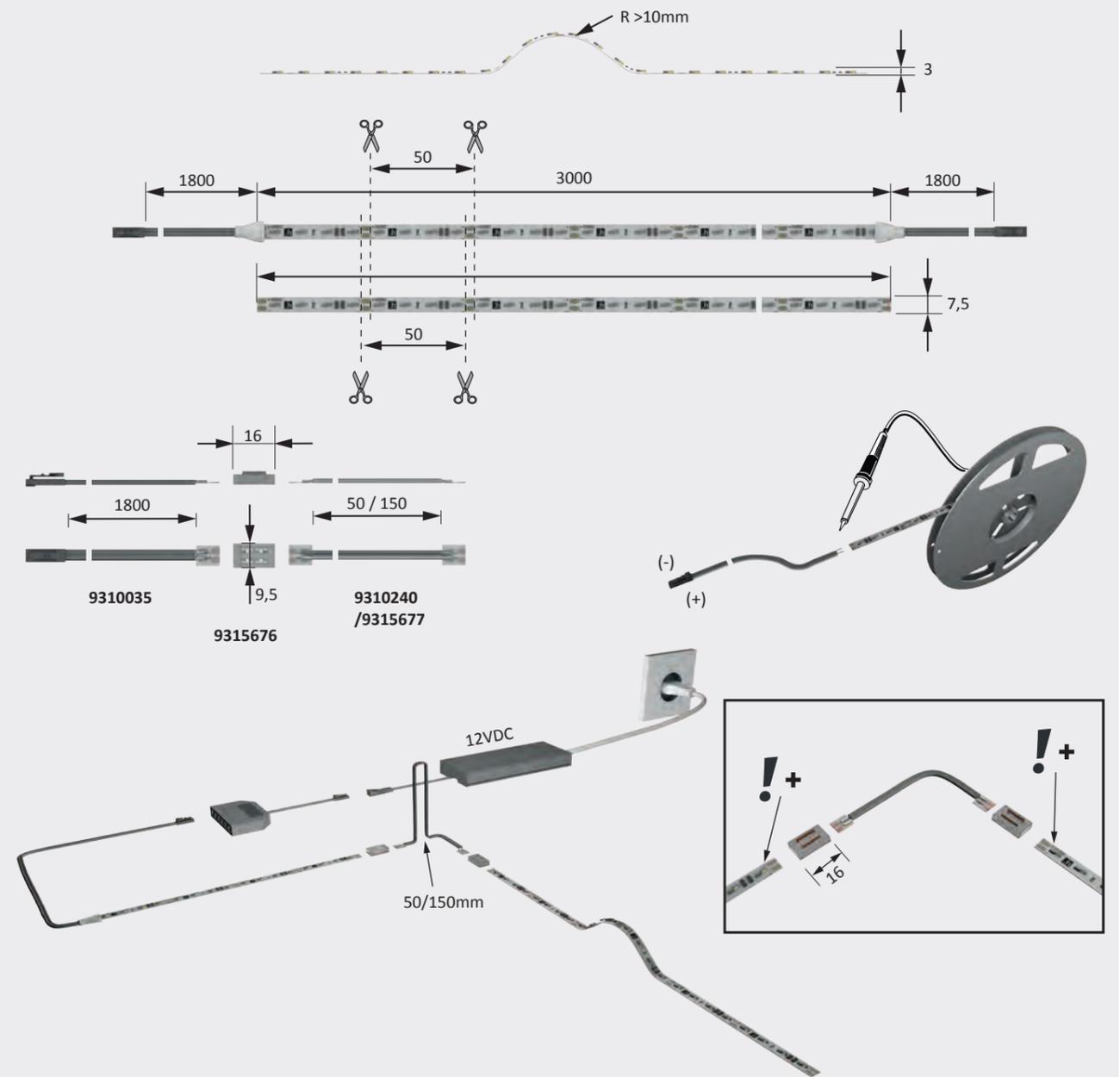## Versa Up&Down 80

Advantages
▶ Needs hardly any distance to the back wall to create a strong light effect
▶ Ideal for upgrading finished furniture

Features
▶ LED lights on both sides (see drawing)
▶ Lead on both sides for the 3000 mm length (one cut, two lights)
▶ Low installation height

Examples of use
▶ Back wall lighting in showcases or shelves

Article no.	Product description	Qty	Unit	PU	MRP
9335240	Versa up&down, 2x80, 12VDC WW, L=3m, 9.6W/m, Lead 2x1.8m	1	Pc	1	10900
9335239	Versa up&down, 2x80, 12VDC NW, L=3m, 9.6W/m, Lead 2x1.8m	1	Pc	1	10900

Accessories

Article no.	Product description	Qty	Unit	PU	MRP
9315676	Direct Connector (Max.36 Watt)	1	Pc	1	110
9315677	Flexible Connector, L=50mm (Max. 36 Watt)	1	Pc	1	240
9310240	Flexible Connector, L=150mm (Max. 36 Watt)	1	Pc	1	270
9310035	Feeder, L=1800mm (Max. 36 Watt)	1	Pc	1	340
9310032	Direct Connector (Max.36 Watt)	10	Pc	1	950
9310033	Flexible Connector, L=50mm (Max. 36 Watt)	10	Pc	1	2,450
9326308	Flexible Connector, L=150mm (Max. 36 Watt)	10	Pc	1	2,650

Technical details

12 V

Luminaire type:	Surface-mounted light
Type of lighting:	Accent lighting
Operating voltage:	12 V DC
Light colours:	WarmWhite/ NeutralWhite
Colour rendering:	RA >90
Luminous flux:	1000 lm/m
Light source efficiency:	104 lm/W
Life span:	40,000 h (L70)
Power consumption:	9.6 W/m
Max. length at a stretch:	3.7 m
Dimmable:	Yes/PWM/Smart.home
Number of LEDs:	2 x 80/m
Beam angle:	2 x 90°
Half value angle:	2 x 70°
Test mark and symbols:	CE UK ◇ ▽▽
Protection rating:	IP 20
Supply lead:	2 x 1800 mm
Plug connector:	LED mini connector M1 (max. 36 W)
Connection to:	LED ballast

Light distribution diagram 2 x 70°

lx	ø mm	i mm
1150	350	250
430	700	500
220	1050	750
130	1400	1000

Light box

nw

Dimensional drawing / installation — Can be individually cut to size

9310035 9315676 9310240/9315677

ChannelLine profiles

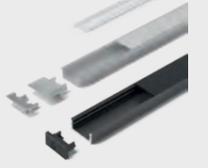## Description of the different cover profiles

Opal cover:
The light is diffused, thus avoiding glare and, with a suitable combination of profile and strip, no LED light points are visible. The special material of the **Magic** covers hardly changes the light colour of the LED. Brightness is lost due to the diffusion effect.

Clear coverage:
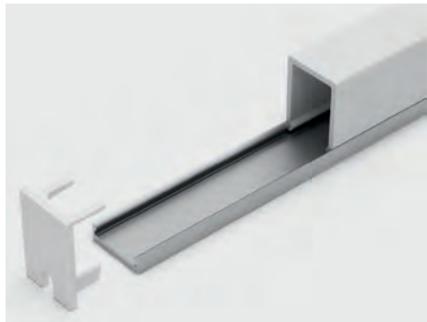Enables maximum light output or brightness, LEDs are visible, care must be taken to avoid glare.

Recommended combinations of Versa strips in ChannelLine profiles

Model	ChannelLine A	ChannelLine B	ChannelLine C / D	
Cover	Opal	Opal	Opal	
Advantages	High quality recessed profile Homogeneous and glare-free light line Can be used at sight level	High quality deep recessed profile B with filigree profile trim D2 for flush mounting	High-quality flat recessed/surface-mounted profile C with filigree profile trim D for flush installation	
Applications / product features	Edge lighting for kitchen worktops backlighting	Interior cabinet lighting in the floor Kitchen niches or top shelves, mirror frame lighting	Interior cabinet lighting in the floor Kitchen niche or top shelves, niches	
Half-value angle	90°	60°	60°	
Versa 80				
Type of lighting	Accent light	Accent light	Accent light	
Light point visibility	Invisible	low / Visible	Visible	
Versa 120				
Type of lighting	Accent/functional light	Accent/functional light / Accent light	Accent/functional light	Accent light
Light point visibility	Invisible	Invisible / Invisible	Visible	Visible
Versa 160				
Type of lighting	Functional light	Functional light / Accent light	Functional light	Accent light
Light point visibility	Invisible	Invisible / Invisible	Visible / Invisible	
Versa Linear (COB)				
Type of lighting	Accent/functional light	Accent/functional light / Accent light	Accent/functional light	Accent light
Light point visibility	Invisible	Invisible	Invisible	Invisible

Recommended combinations of Versa strips in ChannelLine profiles

Model	ChannelLine i / i2		ChannelLine G2		ChannelLine H	ChannelLine F
Cover	Opal		Opal		Opal	Opal
Advantages	High-quality filigree recessed/surface-mounted profile 2 with filigree profile trim I for flush mounting		Glare-free and angled light emission G2 with filigree profile trim G1 for flush recessing		Mounting profile for the corner Almost rimless luminous surfaces wide light emission	Beam angle and homogeneity can be varied with the milling depth
Applications / product features	Accent lighting in display cabinets or shelves Staircase steps		Interior cabinet lighting Retrofitting in kitchen niches Product presentation on sales shelves		Furniture corners Kitchen niches	For milling into the wood
Half-value angle	60°		Straight 60° Oblique 30°		70°	60°
Versa 80						
Type of lighting	Accent light		Accent light		Accent light	Accent light
Light point visibility	Visible		Low	Visible	Low	Low
Versa 120						
Type of lighting	Accent/functional light	Accent light	Accent/functional light	Accent light	Accent/functional light	Accent/functional light
Light point visibility	Visible		Invisible	Low	Invisible	Invisible
Versa 160						
Type of lighting	Functional light	Accent light	Functional light	Accent light	Functional light	Functional light
Light point visibility	Visible		Invisible	Invisible	Invisible	Invisible
Versa Linear (COB)						
Type of lighting	Accent/functional light	Accent light	Accent/functional light	Accent light	Functional light	Accent/functional light
Light point visibility	Invisible	Invisible	Invisible		Invisible	Invisible

ChannelLine A
Page no. 38

ChannelLine B
Page no. 39

ChannelLine C
Page no. 40

ChannelLine D
Page no. 41

ChannelLine i
Page no. 42

ChannelLine i2
Page no. 43

ChannelLine G2
Page no. 44

ChannelLine H
Page no. 45

ChannelLine F
Page no. 46

ChannelLine A

Advantages
▸ High quality recessed profile
▸ Homogeneous and glare-free light line
▸ Can be installed at sight level

Features
▸ Homogeneous light line with Versa Inside from 80 LED/m
▸ Beam angle in installed condition is approx. 35°

Examples of use
▸ Edge lighting for kitchen countertops or vertically between fronts
▸ Backlighting for low or sideboards

Order information
▸ Use of feeders and connectors possible in profile
▸ For selection see ChannelLine overview

Technical details

Article no.	Product description	Qty	Unit	PU	MRP
9084267	ChannelLine A, L=4000 mm, alu & Plastic cover, Opal	1	Pc	1	9,350
9244246	ChannelLine A (End cap Set of 2), Opal	1	Set	1	110
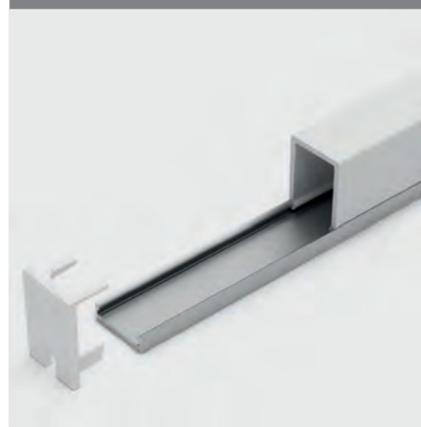
Recommended for:

Versa Inside 80
Versa Inside 120

Dimensional drawing / installation
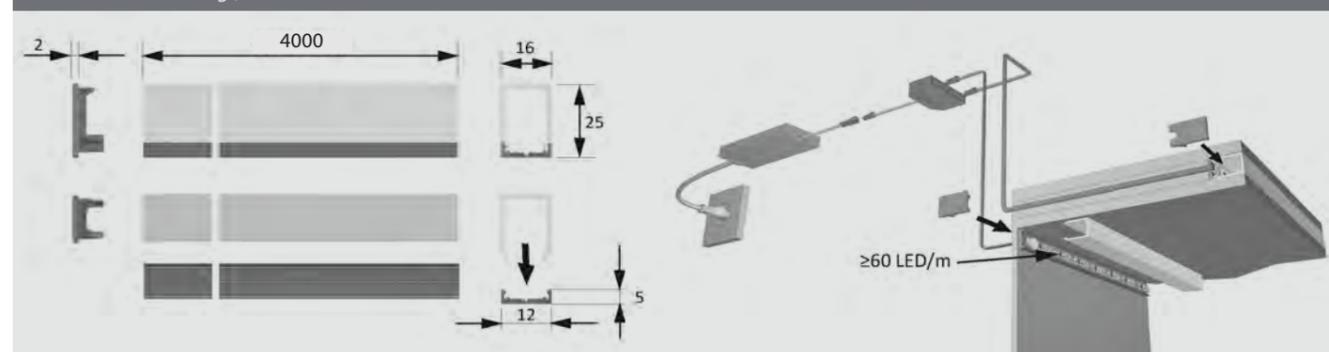
ChannelLine B

Advantages
▸ High quality deep recessed profile
▸ With filigree profile trim
▸ Cover is attachable from above or retractable from the side

Features
▸ New Opal cover – 30% more light and and only slight change in light colour
▸ Homogeneous light line with Versa Inside from 120 LED/m
▸ Wide beam angle of approx. 100°

Examples of use
▸ Interior cabinet lighting in the floor
▸ Kitchen niche or top
▸ Shelves

Order information
▸ Use of feeders and connectors in the profile possible
▸ To increase the luminosity, two Versa Inside can be attached side by side
▸ For selection see ChannelLine overview

Technical details

Article no.	Product description	Qty	Unit	PU	MRP
9308463	ChannelLine B, L=3000 mm, alu & plastic cover, Alu Opal	1	Pc	1	5,750
9310124	ChannelLine B (End cap Type 2 Set of 2),Alu	1	Set	1	190
9310125	ChannelLine B, L=3000, alu & plastic cover, Black Opal	1	Pc	1	6,400
9310128	ChannelLine B (End cap type 2 Set of 2), Black	1	Set	1	190

Recommended for:

Versa Inside 120
Versa Inside 160

Dimensional drawing / installation

Typ 2   Typ 1
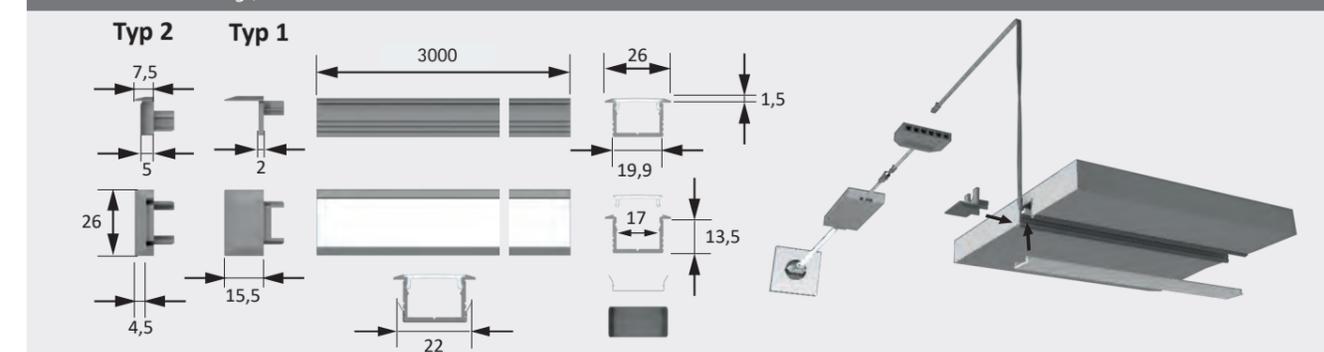
ChannelLine C

Advantages
▸ High quality flat recessed profile
▸ With filigree profile trim
▸ Cover can be attached from above or from the side

Features
▸ New opal cover – 30% more light and and only slight change in light colour
▸ Homogeneous light line with Versa Inside from 160 LED/m
▸ Wide beam angle of approx. 110°

Examples of use
▸ Interior cabinet lighting in the floor
▸ Kitchen niche or top
▸ Shelves

Order information
▸ Use of feeders and connectors in the profile possiblea
▸ To increase the luminosity, two Versa Inside can be attached side by side
▸ For selection see ChannelLine overview

Recommended for:

Versa Inside 120
Versa Inside 160
Versa Linear

Article no.	Product description	Qty	Unit	PU	MRP
9310129	ChannelLine C, L=3000, alu & plastic cover, Alu Opal	1	Pc	1	5,250
9310130	ChannelLine C (End cap Type 2 Set of 2), Alu	1	Set	1	190
9310132	ChannelLine C, L=3000, alu & plastic cover, Black Opal	1	Pc	1	6,400
9310135	ChannelLine C (End cap type 2 Set of 2), Black	1	Set	1	190
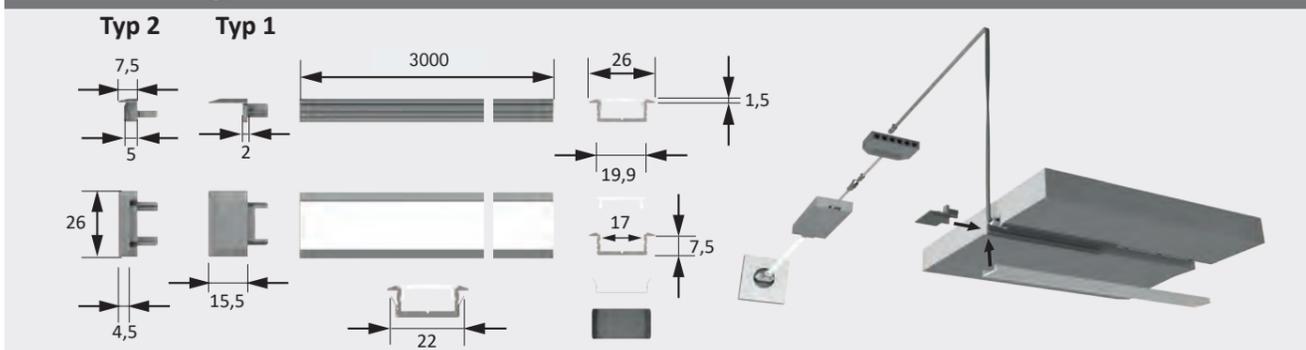
ChannelLine D

Advantages
▸ High-quality flat recessed/surface-mounted profile
▸ For flush mounting
▸ Cover can be attached from above or from the side

Features
▸ New opal cover – 30% more light and and only slight change in light colour
▸ Homogeneous light line with Versa Inside from 160 LED/m with opal diffuser
▸ Very wide beam angle of approx. 110°

Examples of use
▸ Flush with the inside of the cabinet
▸ Retrofitting in niches

Order information
▸ Use of feeders and connectors in the profile possible
▸ To increase the luminosity, two Versa Inside can be attached side by side
▸ For selection see ChannelLine overview

Recommended for:

Versa Inside 120
Versa Inside 160
Versa Linear

Article no.	Product description	Qty	Unit	PU	MRP
9310137	ChannelLine D, L=3000, alu & plastic cover,Alu Opal	1	Pc	1	5,400
9244279	ChannelLine D (End cap Set of 2), Alu	1	Set	1	150
9310138	ChannelLine D, L=3000, alu & plastic cover, Black Opal	1	Pc	1	5,950
9310139	ChannelLine D (End cap Set of 2), Black	1	Set	1	150

Dimensional drawing / installation

Typ 2 Typ 1

7,5 3000 26 1,5

5 2 19,9

26 17 7,5

4,5 15,5 22

Dimensional drawing / installation

2,5 20,5

3000

20,5 17 10

Hettich

Hettich
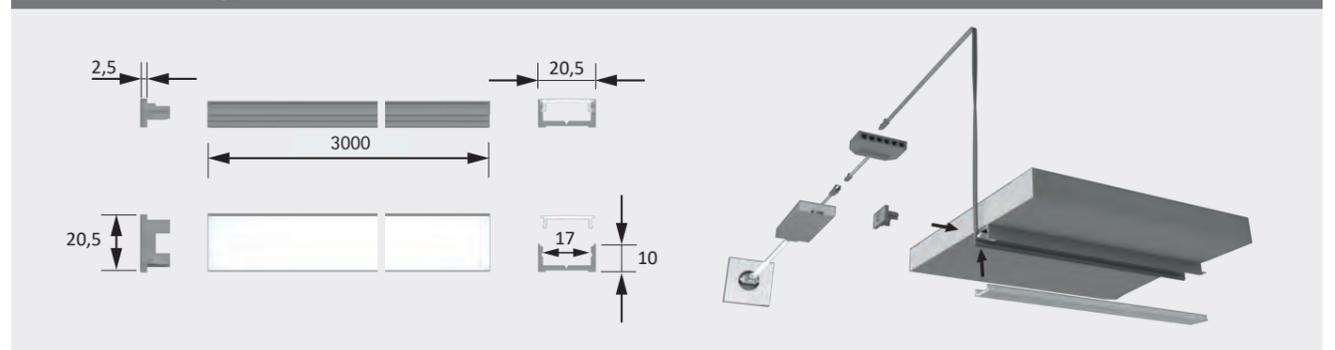
ChannelLine i

Advantages
▸ High-quality recessed/surface-mounted profile
▸ Almost rimless illuminated surface
▸ For flush mounting
▸ Filigree profile for thin materials

Features
▸ New opal cover – 30% more light and
  and only slight change in light colour
▸ Homogeneous light line with Versa Inside
  from 233 LED/m
▸ Very wide beam angle of approx. 100°

Examples of use
▸ Flush with cabinet sides or shelves
▸ Retrofitting in niches

Order information
▸ For selection see ChannelLine overview

Recommended for:

Versa Linear

Article no.	Product description	Qty	Unit	PU	MRP
9310141	ChannelLine i, L=3000, alu & plastic cover, Alu Opal	1	Pc	1	4,700
9244281	ChannelLine i (End cap Set of 2), Alu	1	Set	1	110
9312166	ChannelLine i, L=3000, alu & plastic cover, Black Opal	1	Pc	1	4,850
9312165	ChannelLine i (End cap Set of 2), Black	1	Set	1	110

Dimensional drawing / installation
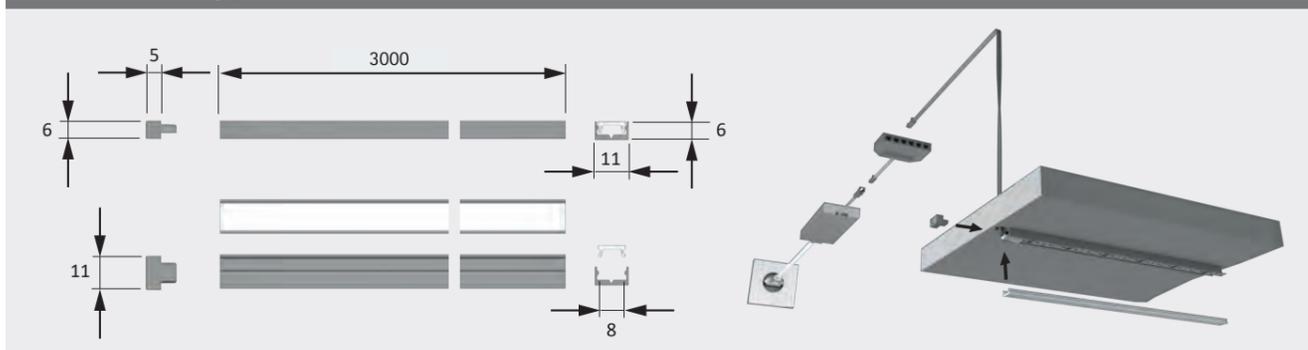
ChannelLine i2

Advantages
▸ High quality recessed profile
▸ With filigree profile trim
▸ Glare-free and concentrated light emission
▸ Filigree profile for thin materials

Features
▸ New Opal cover – 30% more light and
  and only slight change in light colour
▸ Homogeneous light line with Versa Inside
  from 160 LED/m with opal cover
▸ Narrow beam angle of approx. 35°

Examples of use
▸ Accent lighting in display cabinets or shelves
▸ Stairs

Order information
▸ For selection see ChannelLine overview

Technical details

Recommended for:

Versa Inside 160
Versa Linear

Article no.	Product description	Qty	Unit	PU	MRP
9321548	ChannelLine i2, L=3000, alu & plastic cover, Alu Opal	1	Pc	1	5,250
9321550	ChannelLine i2, (End cap Set of 2), Alu	1	Set	1	190
9321549	ChannelLine i2, L=3000, alu & plastic cover, Black Opal	1	Pc	1	5,000
9321691	ChannelLine i2, (End cap Set of 2), Black	1	Set	1	110

Dimensional drawing / installation
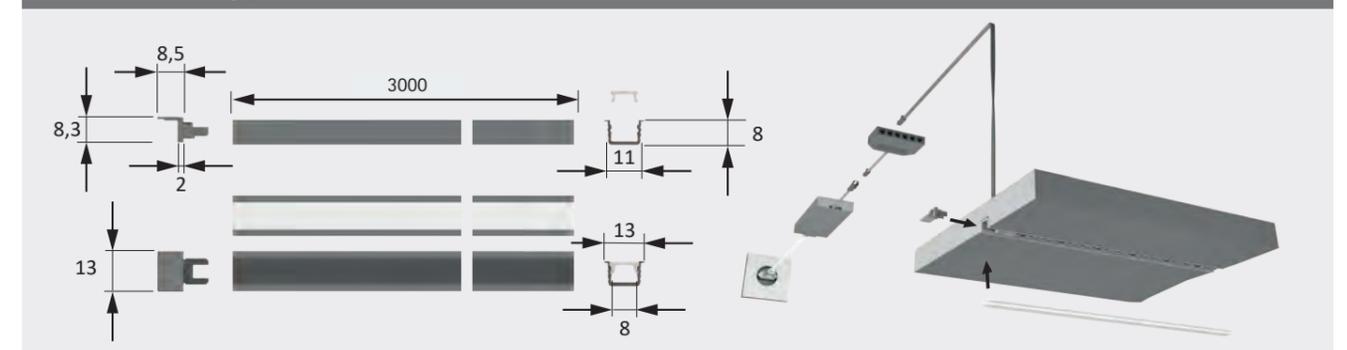
ChannelLine G2

Advantages
▸ Recessed/surface-mounted profile
▸ Glare-free and angled light emission
▸ With filigree profile trim

Features
▸ New Opal cover – 30% more light and
  and only slight change in light colour
▸ Homogeneous light line with Versa Inside
  from 120 LED/m with opal cover
▸ Angled beam angle of approx. 90°

Examples of use
▸ Cabinet interior lighting
▸ Kitchen midway sections
▸ Product presentation on sales shelf

Order information
▸ Two Versa Inside can be inserted
  one radiates diagonally and one radiates straight
  from within the profile
▸ For selection see ChannelLine overview

Technical details

Recommended for:

Versa Inside 120
Versa Inside 160

Article no.	Product description	Qty	Unit	PU	MRP
9315697	ChannelLine G2, L=3000, alu & plastic cover, Alu Opal	1	Pc	1	6,550
9244283	ChannelLine G2 (End cap Set of 2),Alu	1	Set	1	140
9315698	ChannelLine G2, L=3000, alu & plastic cover, Black Opal	1	Pc	1	6,200
9304152	ChannelLine G2 (End cap Set of 2), Black	1	Set	1	140

Dimensional drawing / installation
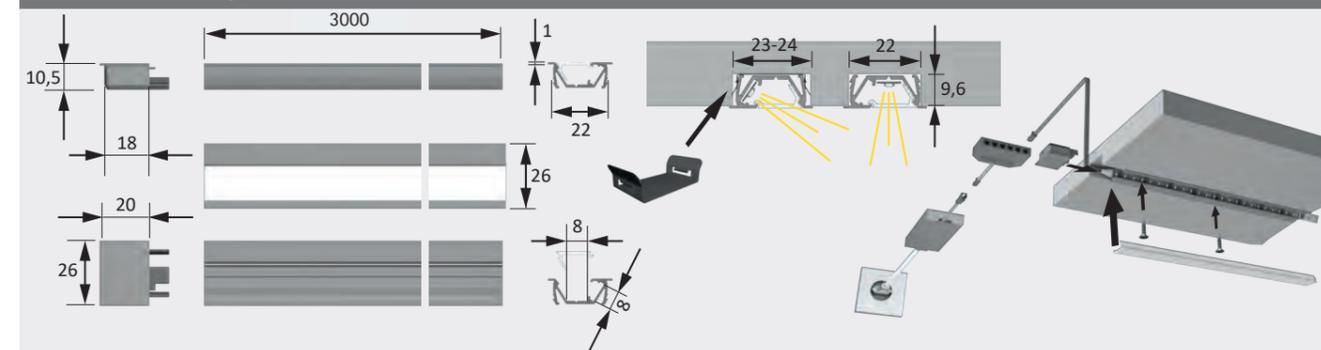
ChannelLine H

Advantages
▸ Surface-mounted profile for corner
▸ Almost rimless illuminated surface
▸ Round cover for wide light emission
▸ Can be screwed on both sides

Features
▸ Homogeneous light line with Versa Inside
  from 120 LED/m
▸ Very wide beam angle of approx. 90°

Examples of use
▸ Furniture corners
▸ Kitchen midway sections

Order information
▸ Use of feeders and connectors in the
  profile possible
▸ To increase the luminosity, two
  Versa Inside can be attached side by side
▸ For selection see ChannelLine overview

Technical details

Recommended for:

Versa Inside 120
Versa Inside 160

Article no.	Product description	Qty	Unit	PU	MRP
9244566	ChannelLine H, L=3000, alu & Plastic cover, Opal	1	Pc	1	5,250
9244567	ChannelLine H (End cap Set of 2), Opal	1	Set	1	110

Dimensional drawing / installation
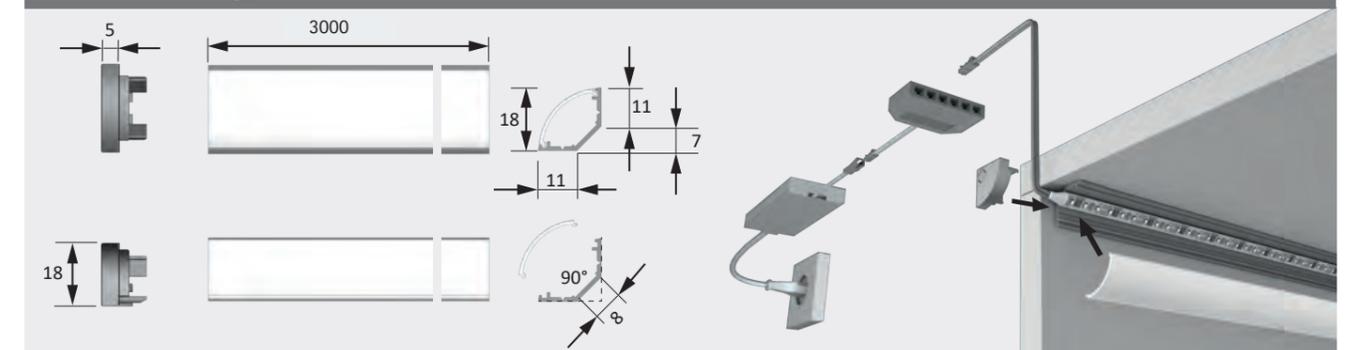
ChannelLine F

Advantages
▸ Versatile use
▸ Entry-level price

Features
▸ Beam angle and homogeneity can be varied
  according to the milling depth

Examples of use
▸ For milling into the wood

Order information
▸ Use of feeders and connectors
  possible in profile
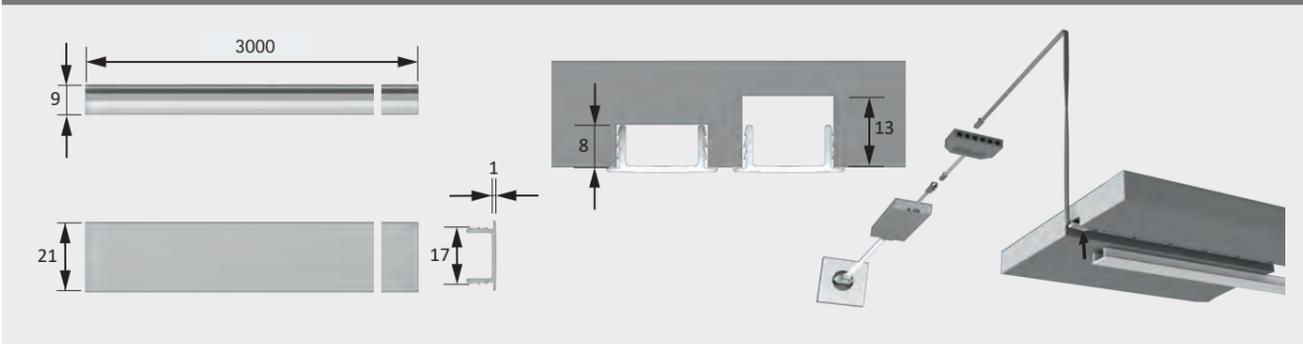▸ For selection see ChannelLine overview

Technical details

Recommended for:

Versa Inside 120
Versa Inside 160

Article no.	Product description	Qty	Unit	PU	MRP
9162630	ChannelLine F, L=3000, Plastic cover, Opal	1	Pc	1	3,100

Dimensional drawing / installation

3000

9

1

8

13

21

17

Spotlights

Outwardly small, but big in luminosity

Our spotlights are small in size but big in performance: in relation to their size, they impress with excellent light output.

Built into ceilings or furniture, they shine with accentuated, focused or pointed light.

Wide beam
LitePanel 68

LitePanel creates
bright light – into the furthest
corners of the furniture.
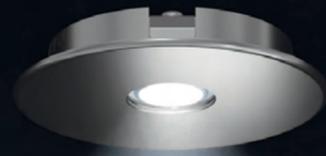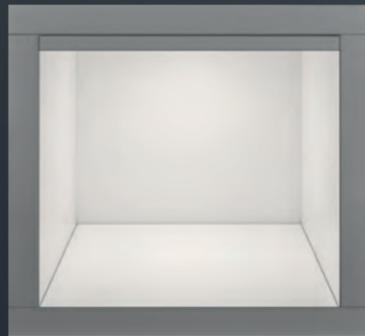
PowerLite
like halogen

The light of the PowerLite draws
an aesthetic shadow
on the back wall of the furniture.

SuperSpot eco Ø 78 mm
Page no. 52-53   12 V

LitePanel 68 Ø 68 mm
Page no. 54-55   12 V

MultiLite Flood Ø 58 mm
Page no. 56-57   12 V

PowerLite Plus Ø 58 mm
Page no. 58-59   12 V

EcoPower L Ø 68 mm
Page no. 60-61   12 V

Eco Spot Ø 58 mm
Page no. 62-63   12 V

SideSpot Ø 35 mm
Page no. 64-65   12 V

SuperSpot eco

Advantages
▶ Powerful furniture LED light
▶ Low installation depth

Features
▶ Robust metal housing
▶ Plug-in connection on housing
▶ Recessed light with 78 mm installed diameter

Examples of use
▶ Shelves
▶ Kitchen niches and top floors

Order information
▶ For a kitchen niche or top shelf
  use at least two luminaires per meter

Article no.	Product description	Qty	Unit	PU	MRP
9335242	SuperSpot Eco WW, 12VDC, 4.2W, Stainless Steel	1	Pc	1	3,350
9335241	SuperSpot Eco NW, 12VDC, 4.2W, Stainless Steel	1	Pc	1	3,350

Accessories

Article no.	Product description	Qty	Unit	PU	MRP
9104773	LED extension M1, L=1800mm	1	Pc	1	440
9084272	6-way distributor M1, L=2000mm	1	Pc	1	560

Technical details

12 V

Luminaire type:	LED recessed light
Type of lighting:	Functional lighting
Surface finish:	Stainless steel look
Operating voltage:	12 V DC
Light colour:	WarmWhite/ NeutralWhite
Colour rendering:	RA>80
Luminous flux:	210 lm
Luminaire efficiency:	50 lm/W
Light source efficiency:	71 lm/W
Life span:	40,000 h (L70)
Power consumption:	max. 4.2 W
Dimmable:	Yes/PWM/Smart.home
Beam angle:	90°
Half value angle:	50°
Test mark and symbols:	CE UK
Protection rating:	IP 20
Installed diameter:	78 mm
Supply lead:	3000 mm
Plug connector:	LED mini M1 plug connector
Connection to:	LED ballast

Light distribution diagram 50°

lx		ø mm	mm
3350		234	250
960		466	500
390		700	750
220		932	1000

Light box

nw

Dimensional drawing / installation

Ø78
3000
Ø8
10
3,2
Ø89

MultiWhite

Ø78
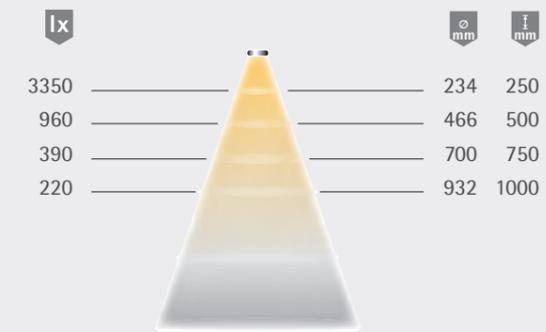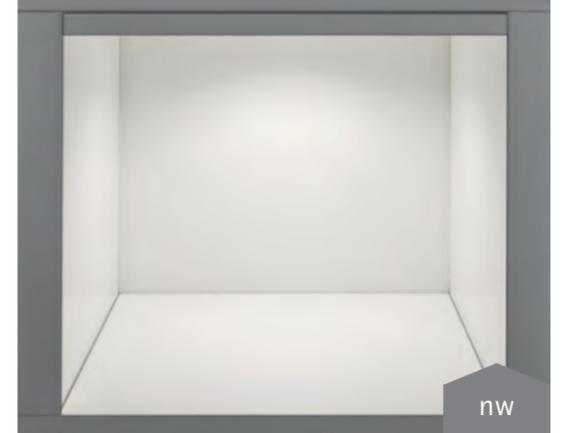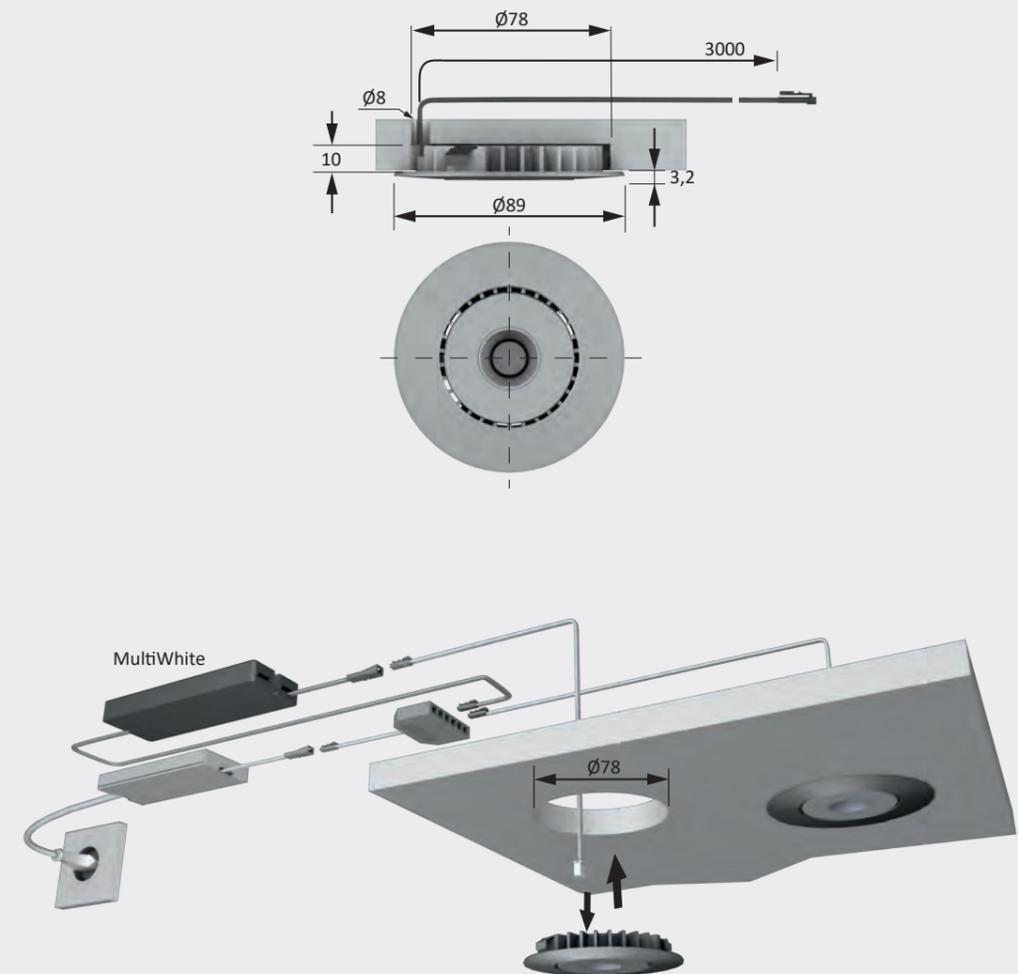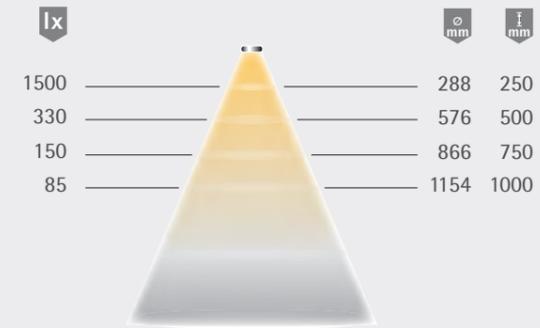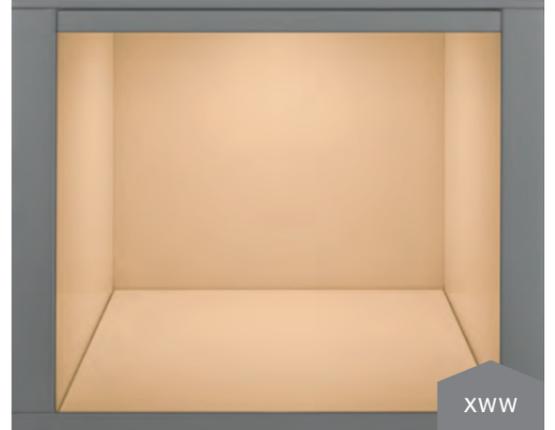
LitePanel 68

Advantages
▶ Modern luminaire in discreet design
▶ Low installation depth
▶ Homogeneous luminous surface

Features
▶ High light output in relation to size
▶ Recessed luminaire for 68 mm mounting diameter
▶ Wide beam without shadows

Examples of use
▶ Shelves
▶ Display cabinets
▶ Kitchen midway sections

Order information
▶ MultiWhite control for colour adjustment required
▶ With direct connection to an electronic ballast, the light colour is XtraWarmWhite (2700K)
▶ Use at least two luminaires per meter of kitchen niche

Article no.	Product description	Qty	Unit	PU	MRP
9335243	LitePanel 68 MW² 12VDC, 4.3W, Black	1	Pc	1	2,500

Accessories

Article no.	Product description	Qty	Unit	PU	MRP
9104773	LED extension M1, L=1800mm	1	Pc	1	440
9084272	6-way distributor M1, L=2000mm	1	Pc	1	560

Technical details

12 V

Luminaire type:	LED recessed light
Type of lighting:	Functional/ accent lighting
Surface finish:	Black
Operating voltage:	12 V DC
Light colour:	MultiWhite / Xtra Warm White
Colour rendering:	RA >80
Luminous flux:	290 lm
Luminaire efficiency:	67 lm/W
Light source efficiency:	84 lm/W
Life span:	40,000 h (L70)
Power consumption:	4.3 W
Dimmable:	Yes/PWM/Smart.home
Beam angle:	90°
Half value angle:	60°
Test mark and symbols:	CE UK 〈symbols〉
Protection rating:	IP 20
Installed diameter:	68 mm
Supply lead:	1800 mm
Plug connector:	LED mini M1 plug connector
Connection to:	LED ballast

Light distribution diagram 60°

lx		ø mm	I mm
1500		288	250
330		576	500
150		866	750
85		1154	1000

Light box

XWW

Dimensional drawing / installation

Ø68 Ø8 1800 9 Ø75 1,5

MultiWhite Ø68
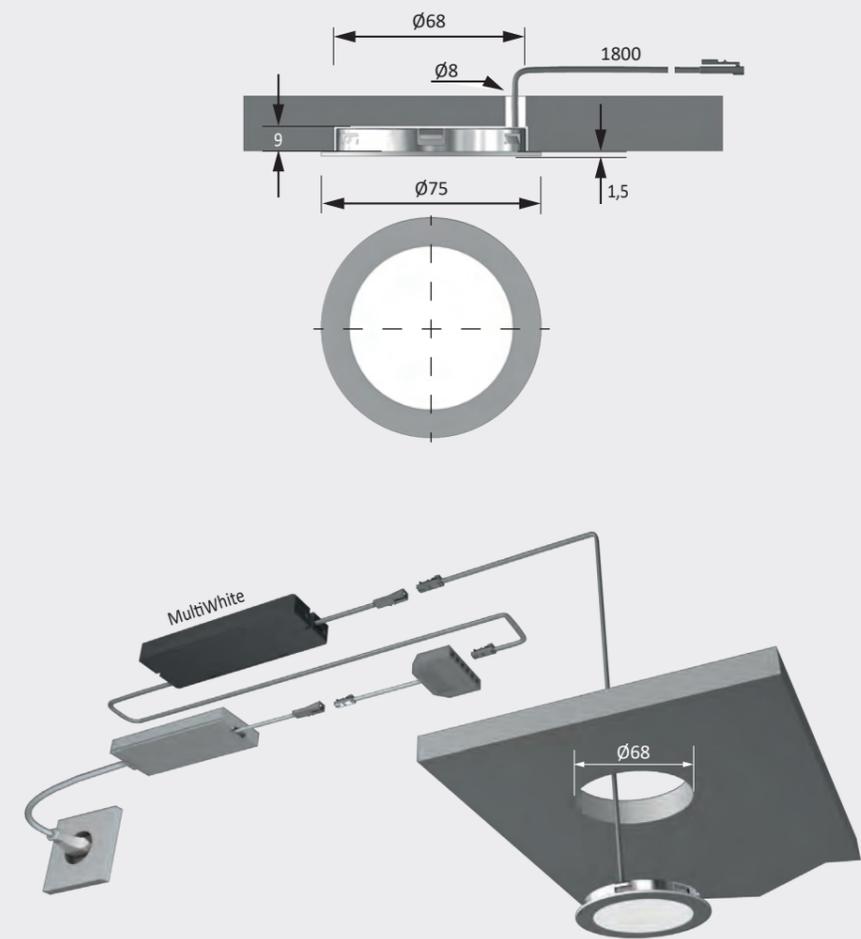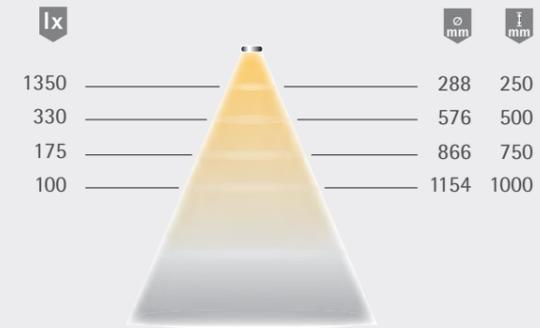
MultiLite Flood

Advantages
- Available in many surfaces
- Evenly illuminated area
- Simple timeless design

Features
- High light output in relation to size
- Plug-in connection on housing
- Recessed luminaire for 58 mm mounting diameter

Examples of use
- Shelves
- Display cabinets
- Kitchen midway sections

Order information
- Luminaire and cover ring must be ordered separately
- For a kitchen niche use at least two luminaires per meter

Technical details

12 V

Article no.	Product description	Qty	Unit	PU	MRP
9335244	MultiLite Flood WW, 12VDC, 4W, round, without ring	1	Pc	1	2,000

Accessories

Article no.	Product description	Qty	Unit	PU	MRP
9245072	MultiLite Flood cover ring, Alu Look	1	Pc	1	320
9245073	MultiLite Flood-cover ring, Chrome Matt	1	Pc	1	320
9245077	MultiLite Flood-cover ring, Stainless Steel look	1	Pc	1	470
9254413	MultiLite Flood-cover ring, Gold coloured	1	Pc	1	370
9254414	MultiLite Flood-cover ring, Bronze look	1	Pc	1	170
9279478	MultiLite Flood-cover ring, Black	1	Pc	1	470
9104773	LED extension M1, L=1800mm	1	Pc	1	440
9084272	6-way distributor M1, L=2000mm	1	Pc	1	560

Luminaire type:	LED recessed light
Type of lighting:	Functional/ accent lighting
Surface finish:	Aluminium look/ chrome
Operating voltage:	12 V DC
Light colour:	WarmWhite
Colour rendering:	RA >85
Luminous flux:	240 lm
Luminaire efficiency:	60 lm/W
Light source efficiency:	70 lm/W
Life span:	40,000 h (L70)
Power consumption:	4 W
Dimmable:	Yes/PWM/Smart.home
Beam angle:	90°
Half value angle:	60°
Test mark and symbols:	CE UKCA
Protection rating:	IP 44
Installed diameter:	58 mm
Supply lead:	2000 mm
Plug connector:	LED mini M1 plug connector
Connection to:	LED ballast

Light distribution diagram 60°

lx		ø mm	I mm
1350		288	250
330		576	500
175		866	750
100		1154	1000

Light box

WW

Dimensional drawing / installation

Ø58
Ø8
13,5
Ø68
3,2
Ø58
MultiWhite
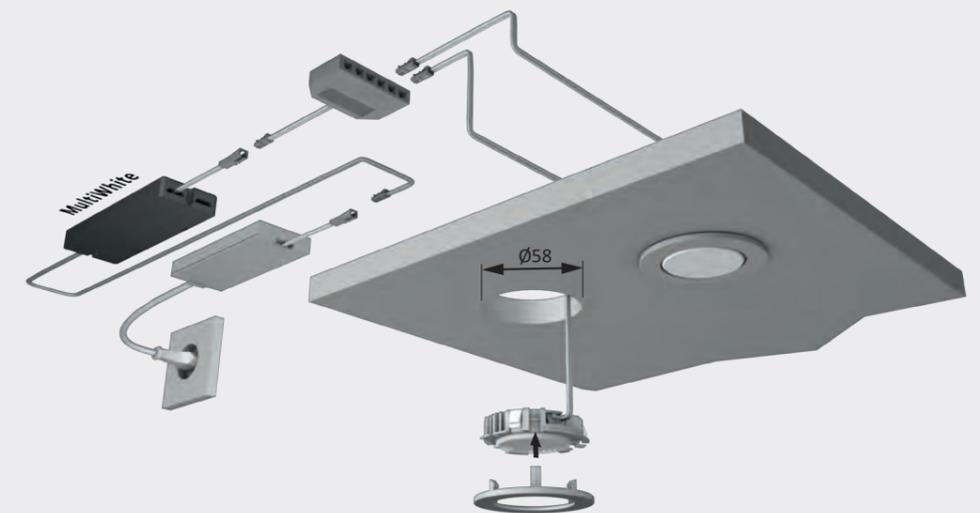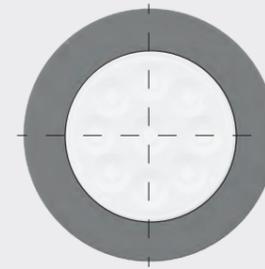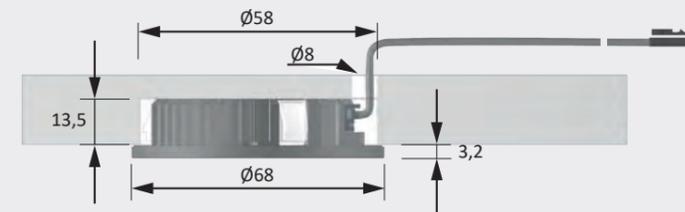
PowerLite Plus

Advantages
▸ Cone of light like halogen spot
▸ High-quality metal housing
▸ Bright versatile luminaire

Examples of use
▸ Kitchen niches and top floors
▸ Shelves
▸ Display cabinets

Features
▸ High light output in relation to size
▸ Plug-in connection on housing
▸ Recessed luminaire for 58 mm mounting diameter

Article no.	Product description	Qty	Unit	PU	MRP
9335247	PowerLite WW, 12VDC, 3.5W, Stainless Steel	1	Pc	1	2,550
9335246	PowerLite NW, 12VDC, 3.5W, Stainless Steel	1	Pc	1	2,550

Accessories

Article no.	Product description	Qty	Unit	PU	MRP
9104773	LED extension M1, L=1800mm	1	Pc	1	440
9084272	6-way distributor M1, L=2000mm	1	Pc	1	560

* MultiWhite accessories required
** Further accessories in section Switch systems

Technical details

12 V

Luminaire type:	LED recessed light
Type of lighting:	Functional/ accent lighting
Surface finish:	Stainless steel look
Operating voltage:	12 V DC
Light colour:	WarmWhite/ NeutralWhite
Colour rendering:	RA >85
Luminous flux:	160 lm
Luminaire efficiency:	45 lm/W
Light source efficiency:	60 lm/W
Life span:	40,000 h (L70)
Power consumption:	3.5 W
Dimmable:	Yes/PWM/Smart.home
Beam angle:	90°
Half value angle:	50°
Test marks and symbols:	CE UK
Protection rating:	IP 44
Installed diameter:	56–58 mm
Supply lead:	3000 mm
Plug connector:	LED mini M1 plug connector
Connection to:	LED ballast

Light distribution diagram 50°

lx		ø mm	i mm
2600		234	250
750		466	500
330		700	750
200		932	1000

Light box

nw

Dimensional drawing / installation

3000
Ø56-58
Ø8
10
1,7
Ø70
Ø56-58

MultiWhite

Light distribution diagram 60°

lx		ø mm	i mm
1175		288	250
310		576	500
145		866	750
85		1154	1000

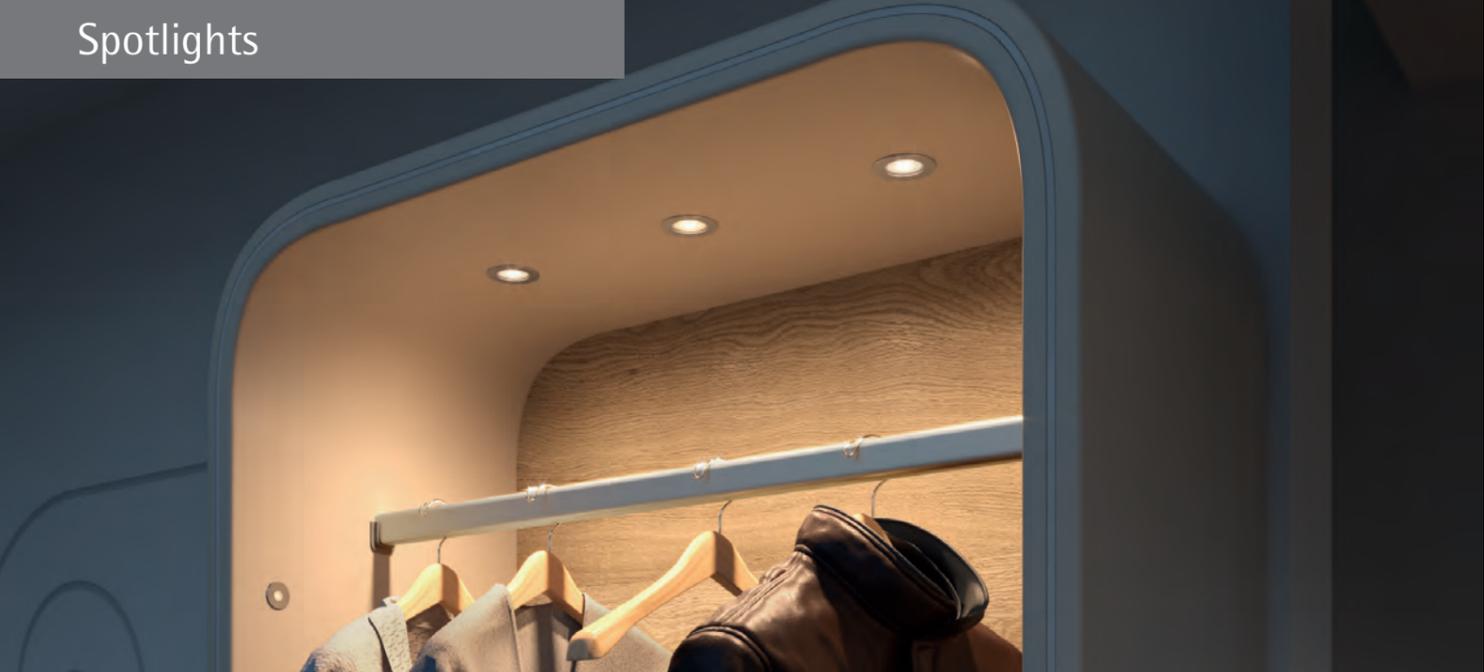## Light box

WW

Dimensional drawing / installation

Ø68-71
Ø8
12
Ø75
1,4

Ø68-71

MultiWhite
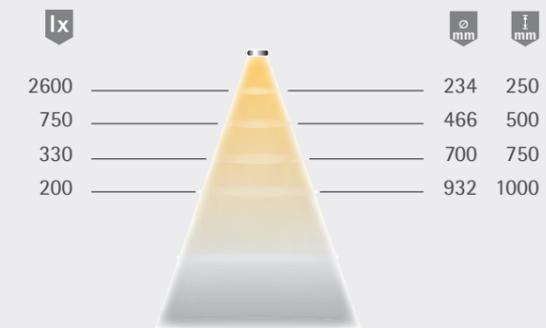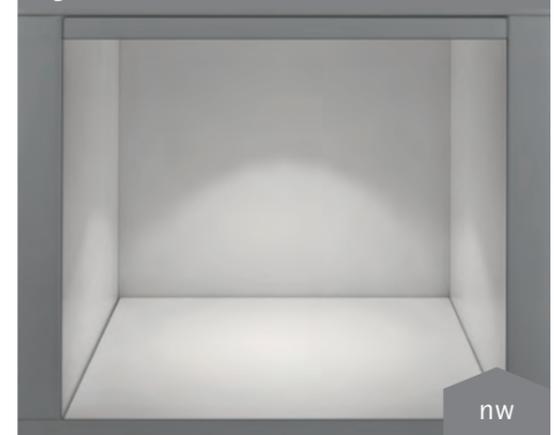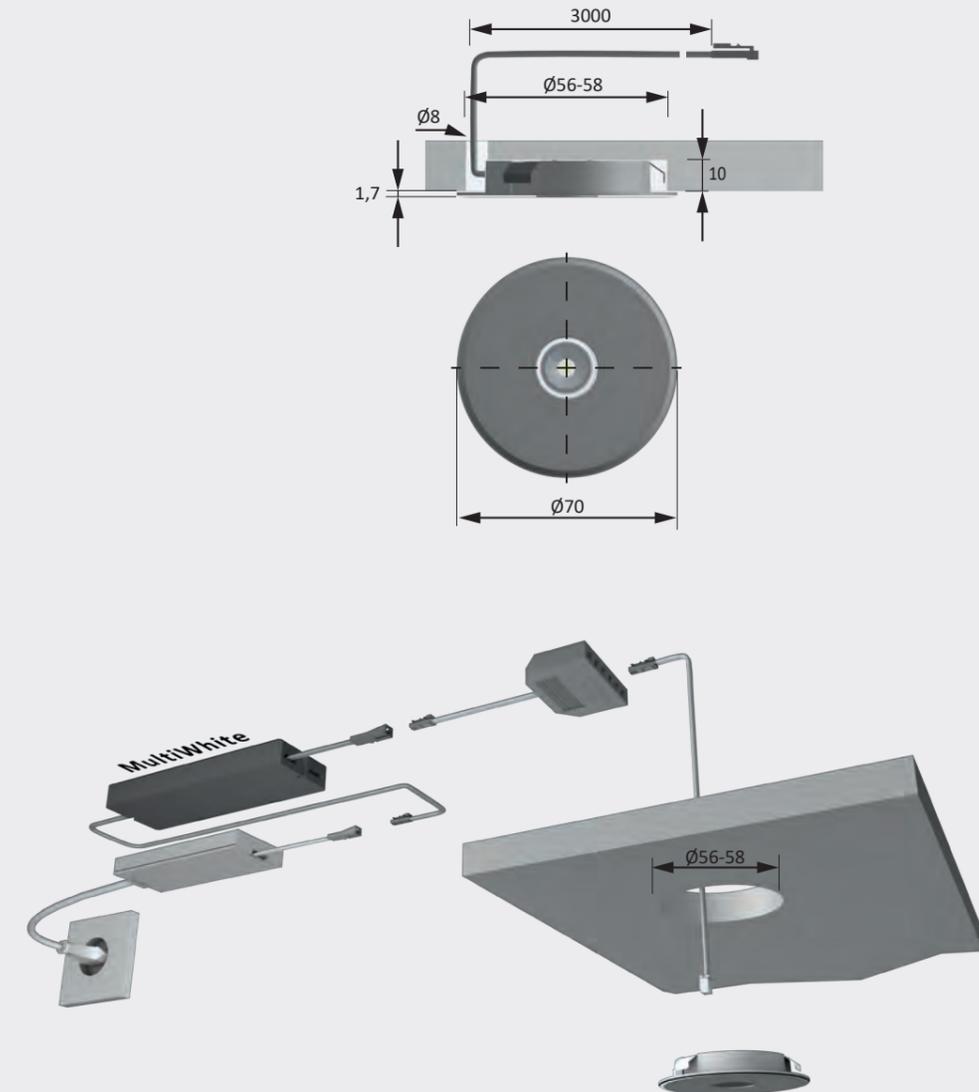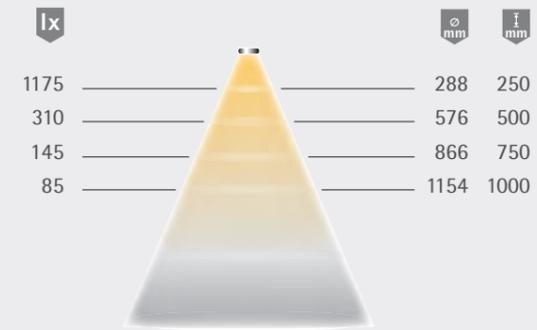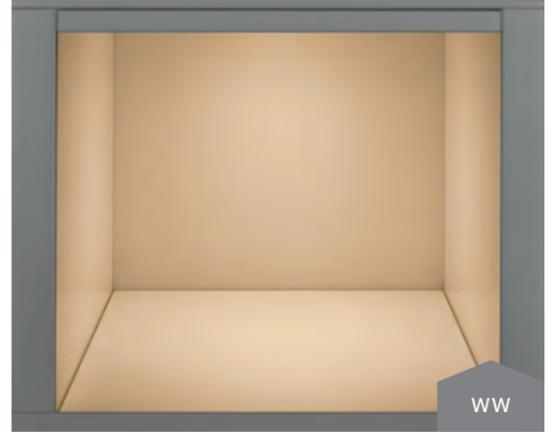
EcoPower L

Advantages
▶ Entry-level recessed spotlight
▶ Compact light

Features
▶ For 68 mm mounting diameter
▶ Wide beam without shadows

Examples of use
▶ Shelves
▶ Display cabinets
▶ Kitchen midway sections

Order information
▶ For a kitchen niche at least two luminaires
  per meter

Article no.	Product description	Qty	Unit	PU	MRP
9335248	Eco Power L WW, 12VDC, 3.2W, Stainless Steel	1	Pc	1	1,750
9335249	EcoPower L WW, 12VDC, 3.2W, Black	1	Pc	1	1,600

Accessories

Article no.	Product description	Qty	Unit	PU	MRP
9104773	LED extension M1, L=1800mm	1	Pc	1	440
9084272	6-way distributor M1, L=2000mm	1	Pc	1	560

## Technical details

12 V

Luminaire type:	LED recessed light
Type of lighting:	Functional/ accent lighting
Surface finish:	Stainless steel look/ black
Operating voltage:	12 V DC
Light colour:	WarmWhite
Colour rendering:	RA > 80
Luminous flux:	230 lm
Luminaire efficiency:	72 lm/W
Light source efficiency:	94 lm/W
Life span:	40,000 h (L70)
Power consumption:	3.2 W
Dimmable:	Yes/PWM/Smart.home
Beam angle:	90°
Half value angle:	60°
Test mark and symbols:	CE UK ◇ WW
Protection rating:	IP 44
Installed diameter:	68 mm
Supply lead:	1800 mm
Plug connector:	LED mini M1 plug connector
Connection to:	LED ballast
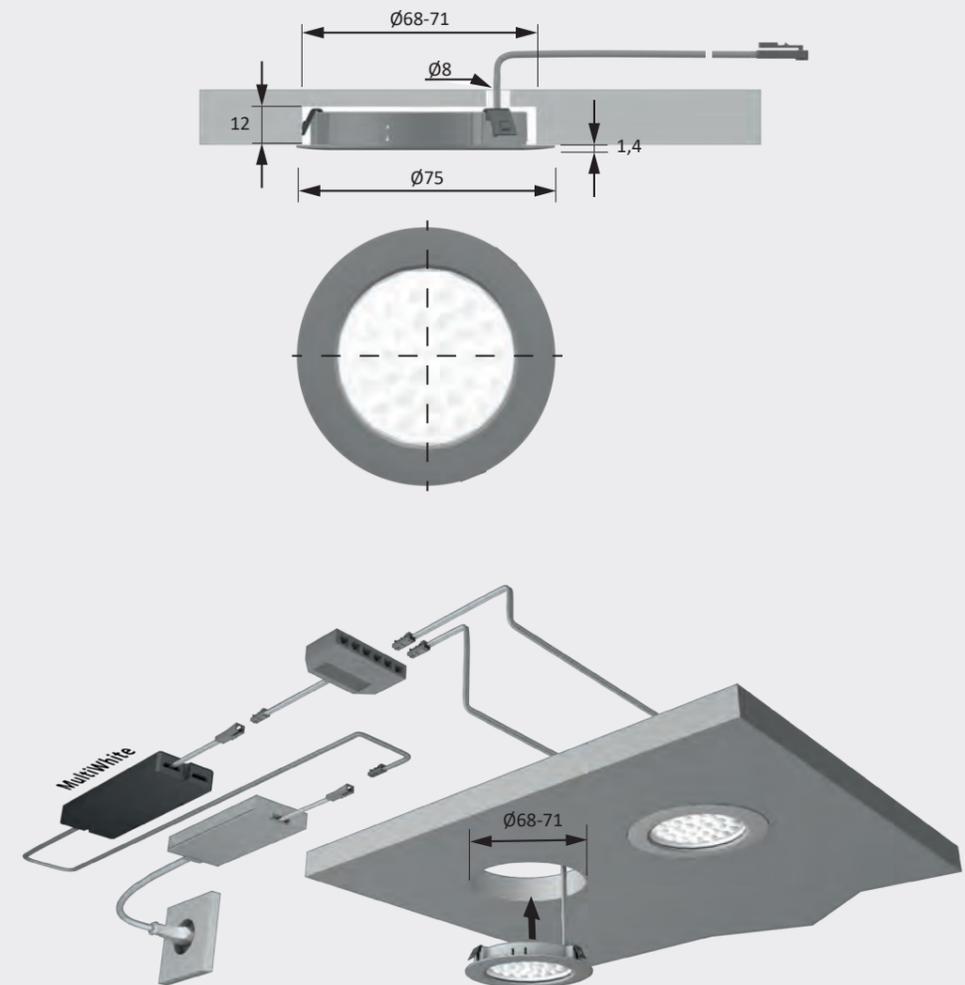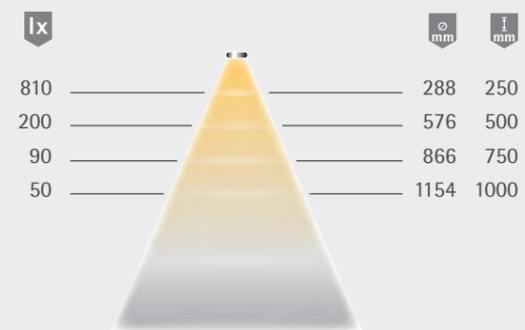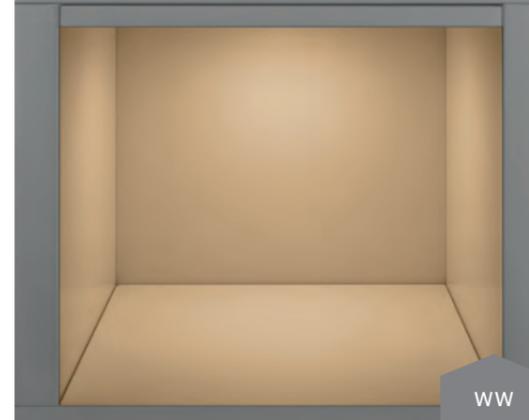
Eco Spot

Advantages
▶ Entry-level recessed spotlight
▶ Compact light
▶ Evenly illuminated area

Features
▶ For 58 mm mounting diameter
▶ Wide beam without shadows

Examples of use
▶ Shelves
▶ Display cabinets

Technical details

12 V

Article no.	Product description	Qty	Unit	PU	MRP
9335250	Eco Spot WW, 12VDC, 1.5W, Stainless Steel	1	Pc	1	1,100

Accessories

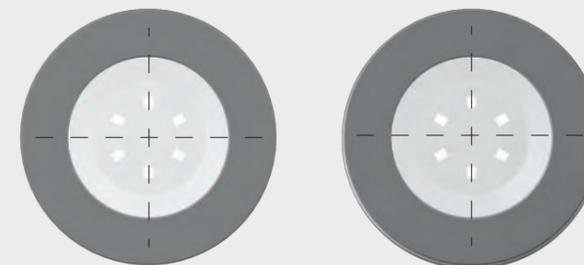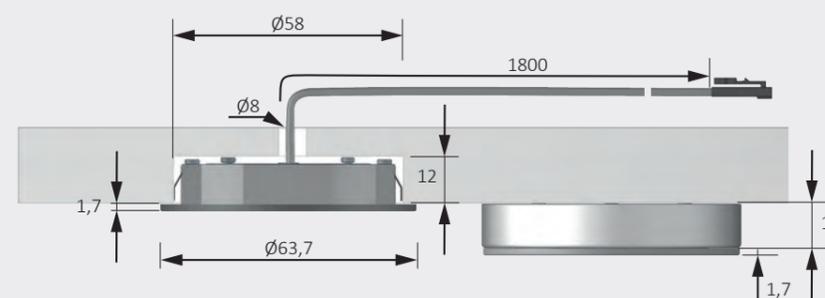| Article no.	Product description	Qty	Unit	PU	MRP
9104773	LED extension M1, L=1800mm	1	Pc	1	440
9084272	6-way distributor M1, L=2000mm	1	Pc	1	560

Luminaire type: LED recessed light
Type of lighting: Functional/ accent lighting
Surface finish: Stainless steel look

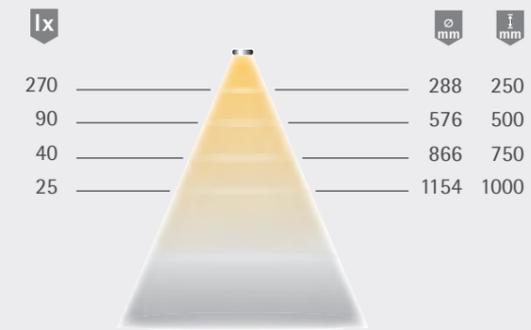Operating voltage: 12 V DC
Light colour: WarmWhite/

Colour rendering: RA >80
Luminous flux: 110 lm
Luminaire efficiency: 73 lm/W
Light source efficiency: 87 lm/W
Life span: 40,000 h (L70)
Power consumption: 1.5 W
Dimmable: Yes/PWM/Smart.home
Beam angle: 90°
Half value angle: 60°
Test mark and symbols: CE
Protection rating: IP 20
Installed diameter: 58 mm
Supply lead: 1800 mm
Plug connector: LED mini M1 plug connector
Connection to: LED ballast

Light distribution diagram 60°
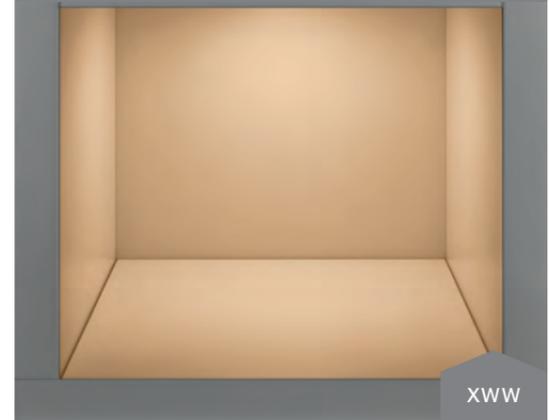
lx	ø mm	i mm
810	288	250
200	576	500
90	866	750
50	1154	1000

Light box

WW

Dimensional drawing / installation

Ø58, 1800, Ø8, 12, 1,7, Ø63,7, 13, 1,7, Ø58

Light distribution diagram 60°

lx		ø mm	I mm
270		288	250
90		576	500
40		866	750
25		1154	1000

Light box

xWW

SideSpot

Advantages
▸ Accentuation by light from below/side
▸ Can be used without glare

Features
▸ Oblique light emission
▸ Recessed luminaire for 35 mm mounting diameter

Examples of use
▸ Shelves
▸ Display cabinets
▸ Carcase sides and shelves

Technical details

12 V

Article no.	Product description	Qty	Unit	PU	MRP
9335251	Side Spot, Extra WW, 12VDC, 1.4W, Black	1	Pc	1	1,350

Accessories

Article no.	Product description	Qty	Unit	PU	MRP
9104773	LED extension M1, L=1800mm	1	Pc	1	440
9084272	6-way distributor M1, L=2000mm	1	Pc	1	560

Luminaire type:	LED recessed light
Type of lighting:	Functional/
	accent lighting
Surface finish:	Black
Operating voltage:	12 V DC
Light colour:	XtraWarmWhite
Colour rendering:	RA >80
Luminous flux:	50 lm
Luminaire efficiency:	30 lm/W
Light source efficiency:	45 lm/W
Life span:	40,000 h (L70)
Power consumption:	1.4 W
Dimmable:	Yes/PWM/Smart.home
Beam angle:	90°
Half value angle:	60°
Test mark and symbols:	CE UK ⊕ ⩗⩗
Protection rating:	IP 20
Installed diameter:	35 mm
Supply lead:	800 mm
Plug connector:	LED mini
	M1 plug connector
Connection to:	LED ballast

Dimensional drawing / installation

1800

Ø35

Ø8

13

Ø40

1

Ø35
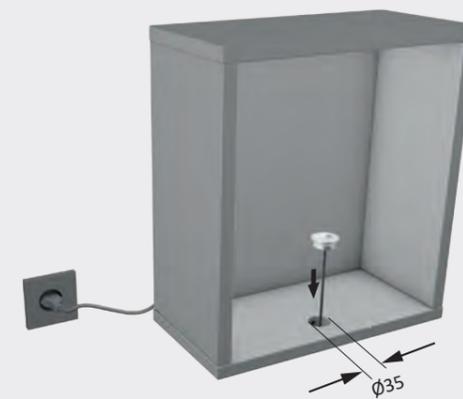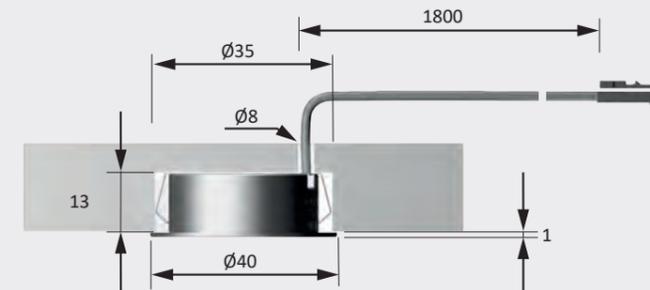
Special lights

Lights for special applications

Lights that showcase a back wall,
react to movement or radiate in two directions
this and further possibilities are opened up by
our wide spectrum of special luminaires.

Light whets the appetite.

Light guides.
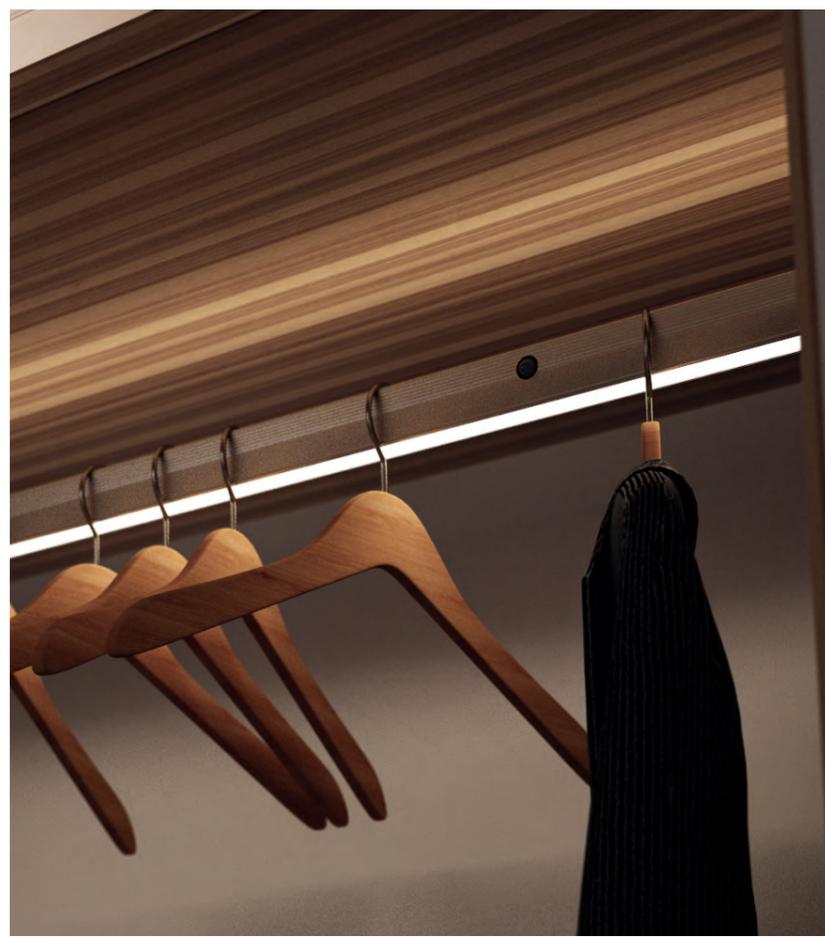
HandleLine
Page no. 70-71
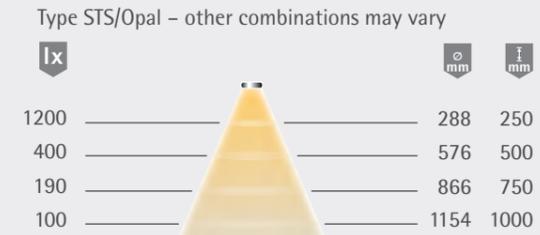12 V

LitePipe
Page no. 72-73
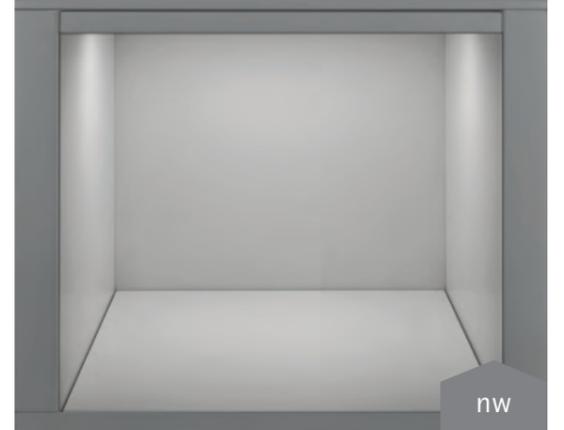12 V

InnoLine Plus
Page no. 74-75
12 V

Light distribution diagram 60°

Type STS/Opal – other combinations may vary

lx		ø mm	I mm
1200		288	250
400		576	500
190		866	750
100		1154	1000

Light box

nw

Dimensional drawing / installation ⟋ Can be individually cut to size

567/867/967/1167

12,2

28

9

50

6

1900

16,3

1

3,8

Ø 8.0

1.

2.

6mm

Ø 8mm

3,5mm

12VDC

MultiWhite

HandleLine

Advantages
▸ High-quality aluminium profile light
▸ Can be individually cut to size
▸ Handle strip and niche lighting in one Profile combined

Examples of use
▸ Handleless fronts in the kitchen
▸ Wall cabinet with door

Features
▸ Fits perfectly on 16 mm floors and walls
▸ When connected directly to an electronic ballast, the light colour is XtraWarmWhite (2700K)

Article no.	Product description	Qty	Unit	PU	MRP
9335192	HandleLine i MW² Stainless Steel, 567mm, 12VDC, max. 5.3W	1	Pc	1	3,000
9335193	HandleLine i MW² Stainless Steel, 867mm,12VDC, max. 8.2W	1	Pc	1	4,350
9335194	HandleLine i MW² Stainless Steel, 967mm,12VDC, max. 9.2W	1	Pc	1	4,550
9335195	HandleLine i MW² Stainless Steel, 1167mm,12VDC, max. 11.1W	1	Pc	1	5,650
9335196	HandleLine i MW² blackopal 567mm,12VDC, max. 5.3W	1	Pc	1	4,810
9335197	HandleLine i MW² blackopal 867mm, 12VDC, max. 8.2W	1	Pc	1	4,550
9335198	HandleLine i MW² blackopal 967mm, 12VDC, max. 9.2W	1	Pc	1	4,750
9335199	HandleLine i MW² blackopal 1167mm, 12VDC, max. 11.1W	1	Pc	1	5,800

Accessories

| Article no.	Product description	Qty	Unit	PU	MRP
9335263	LED ballast, 12VDC, 20W, 200-240V L=2m, M1x6 (6-Way distributor)	1	Pc	1	2,400
9104773	LED extension M1, 12VDC, L=1800mm, black	1	Pc	1	440
9084272	6-way distributor M1, 12VDC, L=2000mm, black	1	Pc	1	560

Technical details

12 V

|	
Luminaire type:	LED recessed light
Type of lighting:	Functional lighting
Surface finish:	Stainless steel look/ Black
Operating voltage:	12 V DC
Light colour:	MultiWhite
Colour rendering:	RA >90; R9 >60
Luminous flux:	560 lm/m
Luminaire efficiency:	60 lm/W
Light source efficiency:	90 lm/W
Life span:	40,000 h (L70)
Power consumption:	see ordering chart
Dimmable:	Yes/PWM/Smart.home
Beam angle:	90°
Half value angle:	60°
Test marks and symbols:	CE UK ⏦ ▽▽
Protection class:	IP 20
Supply lead:	1900 mm
Plug connector:	LED mini M1 plug connector
Connection to:	LED ballast MultiWhite control unit
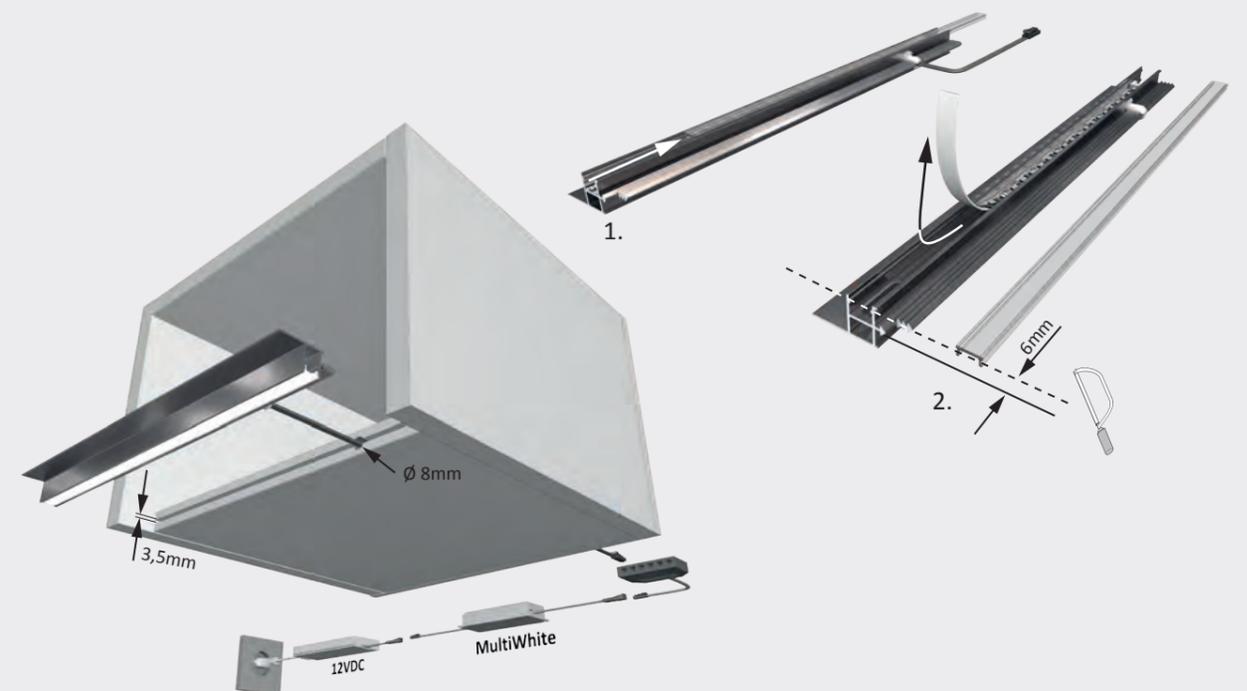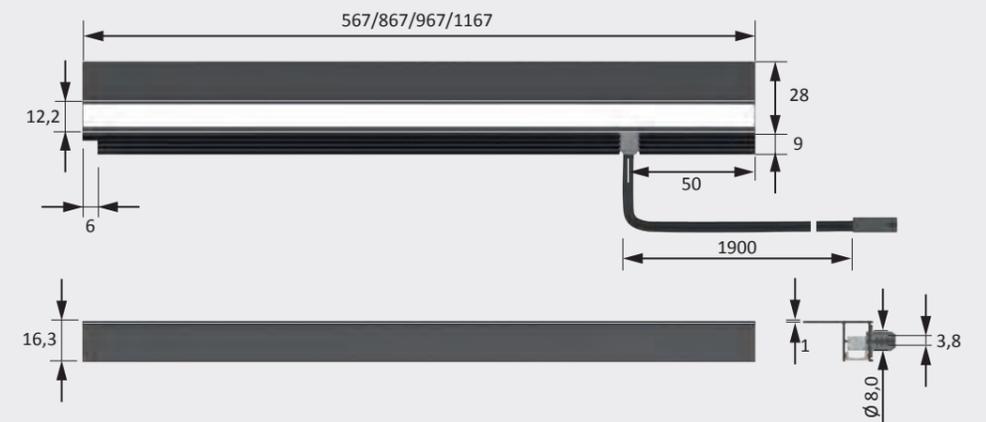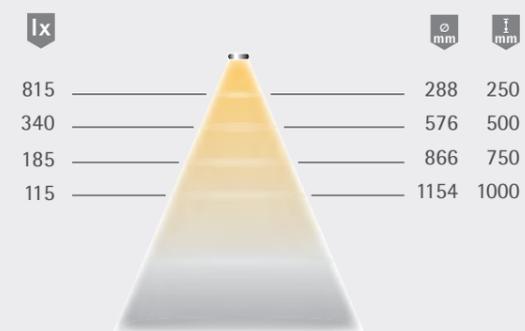
LitePipe

Advantages
- Activated by motion sensor
- Can be individually cut to size

Examples of use
- Wardrobes
- Cloakrooms

Features
- Load capacity of up to 40 kg/m
- Can be retrofitted into furniture

Article no.	Product description	Qty	Unit	PU	MRP
9335255	Lite Pipe, 1000mm, Alu, WW, 12VDC, 5.0W	1	Pc	1	10,450
9335254	Lite Pipe, 1200mm, Alu, WW, 12VDC, 5.5W	1	Pc	1	11,420
9335253	Lite Pipe, 1000mm, Alu, NW, 12VDC, 5.0W	1	Pc	1	10,450
9335252	Lite Pipe, 1200mm, Alu, NW, 12VDC, 5.5W	1	Pc	1	11,420

Accessories

Article no.	Product description	Qty	Unit	PU	MRP
9335263	LED ballast, 12VDC, 20W, 200-240V L=2m, M1x6 (6-Way distributor)	1	Pc	1	2,400
9104773	LED extension M1, L=1800mm	1	Pc	1	440
9084272	6-way distributor M1, L=2000mm	1	Pc	1	560

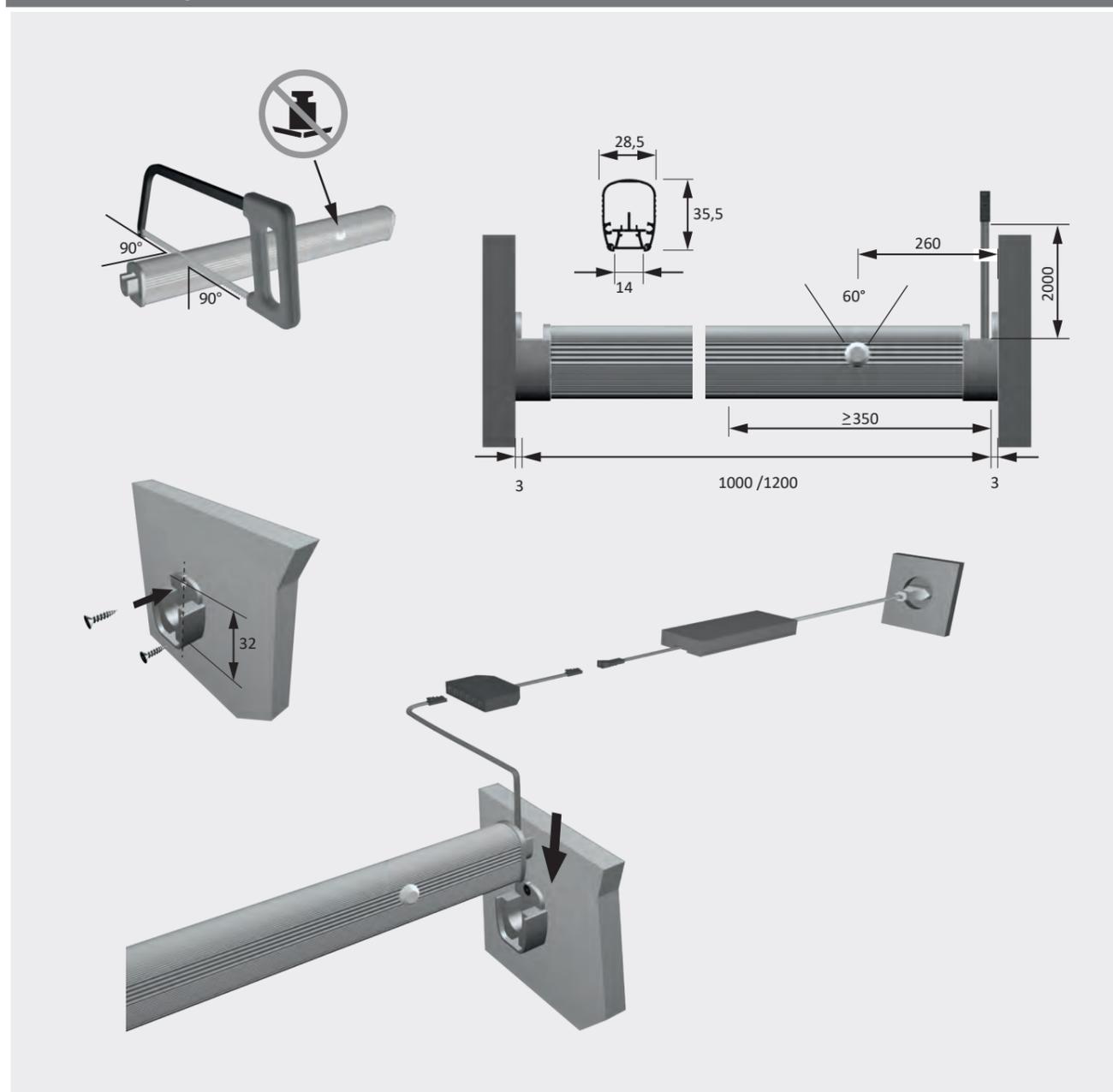### Technical details

12 V

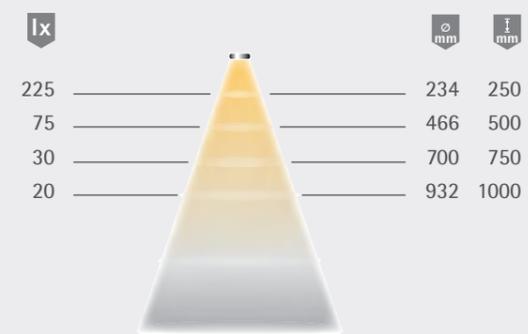|	
Luminaire type:	Wardrobe rail LED light
Type of lighting:	Functional lighting
Surface finish:	Aluminium
Operating voltage:	12 V DC
Light colour:	WarmWhite/ NeutralWhite
Colour rendering:	RA >80
Luminous flux:	220 lm/m
Luminaire efficiency:	44 lm/W
Light source:	80 lm/W
Life span:	30,000 h (L70)
Power consumption:	max. 5.5 W
Dimmable:	No
Beam angle:	90°
Half value angle:	60°
Test marks and symbols:	CE UK
Protection rating:	IP 20
Supply lead:	2000 mm
Motion sensor	
Detection angle:	60°
Reach:	2 m
Stay-'ON' time:	40 seconds
Plug connector:	LED mini M1 plug connector
Connection to:	LED ballast

Light distribution diagram 60°

lx		⌀ mm	↕ mm
815		288	250
340		576	500
185		866	750
115		1154	1000

Light box

nw

Dimensional drawing / installation

90°
90°

28,5
35,5
14

260
60°
2000

≥350

3   1000 /1200   3

32

InnoLine Plus

Advantages
‣ Drawer lighting
‣ No dark zones
‣ Integrated infrared sensor switch

Features
‣ Can be retrofitted into furniture

Examples of use
‣ In drawers

Order information
‣ When ordering, specify article number and interior body dimension in mm
‣ Order cable duct separately if required

Article no.	Product description	Qty	Unit	PU	MRP
9335256	Innoline Plus, NW, 12VDC, 2.3W, L=401-500mm, IR Sensor	1	Pc	1	5,320
9335257	Innoline Plus, NW, 12VDC, 2.8W, L=501-600mm, IR Sensor	1	Pc	1	4,900
9335258	Innoline Plus, NW, 12VDC, 4.2W, L=801-900mm, IR Sensor	1	Pc	1	6,500
9335259	Innoline Plus, NW, 12VDC, 4.7W, L=901-1000mm, IR Sensor	1	Pc	1	6,500
9335260	Innoline Plus, NW, 12VDC, 5.7W, L=1101-1200mm, IR Sensor	1	Pc	1	7,500

Accessories

Article no.	Product description	Qty	Unit	PU	MRP
9104773	LED extension M1, L=1800mm	1	Pc	1	440
9084272	6-way distributor M1, L=2000mm	1	Pc	1	560

## Technical details

12 V

|	
Luminaire type:	Surface-mounted light
Type of lighting:	Functional lighting
Surface finish:	Aluminium
Operating voltage:	12 V DC
Light colour:	NeutralWhite
Colour rendering:	RA >80
Luminous flux:	158 lm/m
Luminaire efficiency:	34 lm/W
Light source efficiency:	70 lm/W
Sensor range:	3–50mm
Life span:	30,000 h (L70)
Power consumption:	see ordering chart
Dimmable:	No
Beam angle:	90°
Half value angle:	50°
Test marks and symbols:	CE UK ⚡ ▽▽
Protection rating:	IP 20
Supply lead:	2400 mm
Plug connector:	LED mini M1 plug connector
Connection to:	LED ballast

Light distribution diagram 50°

lx		ø mm	i mm
225		234	250
75		466	500
30		700	750
20		932	1000

Light box

nw

Dimensional drawing / installation ✂ Can be individually cut to size   ◀▶ Light can be made to measure

L

14

44

2500

L-18

39

4

7

50

17

33

5

3-50

Ø 8mm

min. 3
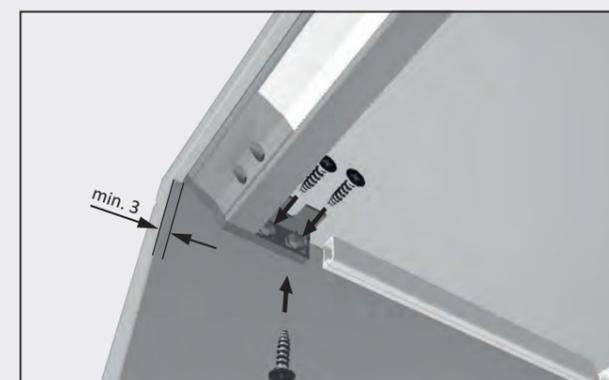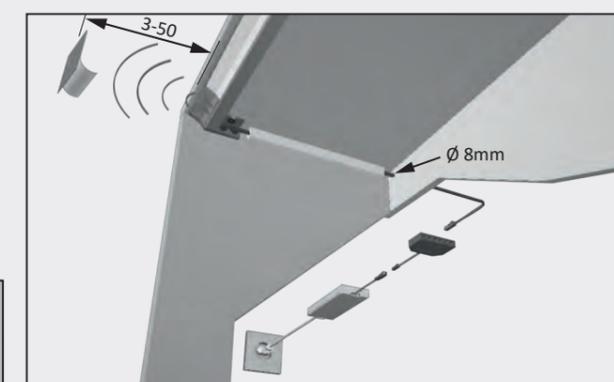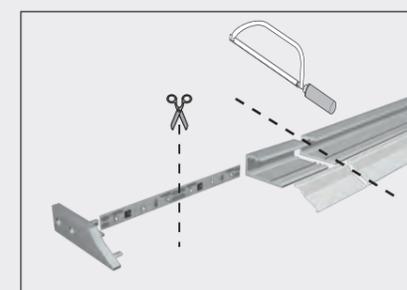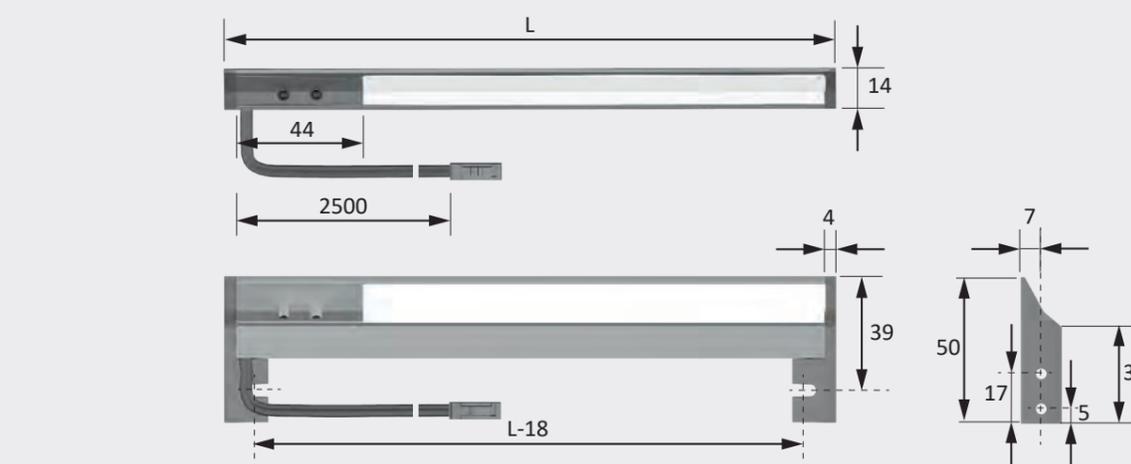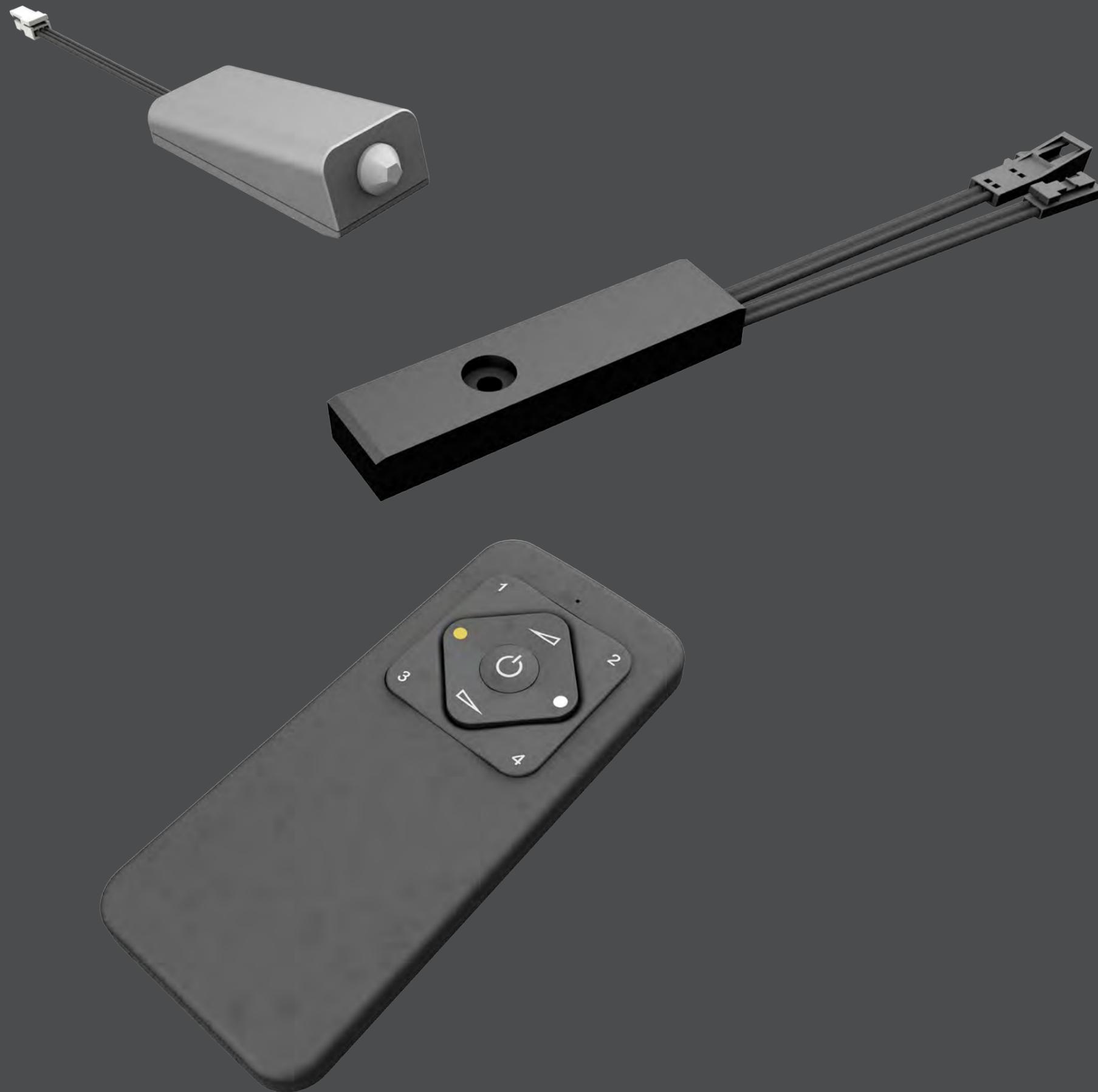
Switch systems

The right system for any installation

Gentle dimming of luminaires, suitable lighting scenes or lights that respond to movement:

whether smart or conventional, our switch systems provide the right atmosphere at the right time.

However, our switch systems do not only work via Smart.home or remote control.

Lights can also be switched on automatically with motion sensors or door contact switches.

Of course, they can also be operated with the push of a button.

You can easily operate your furniture lighting or integrate it into your smart home – without any particular technical skills.
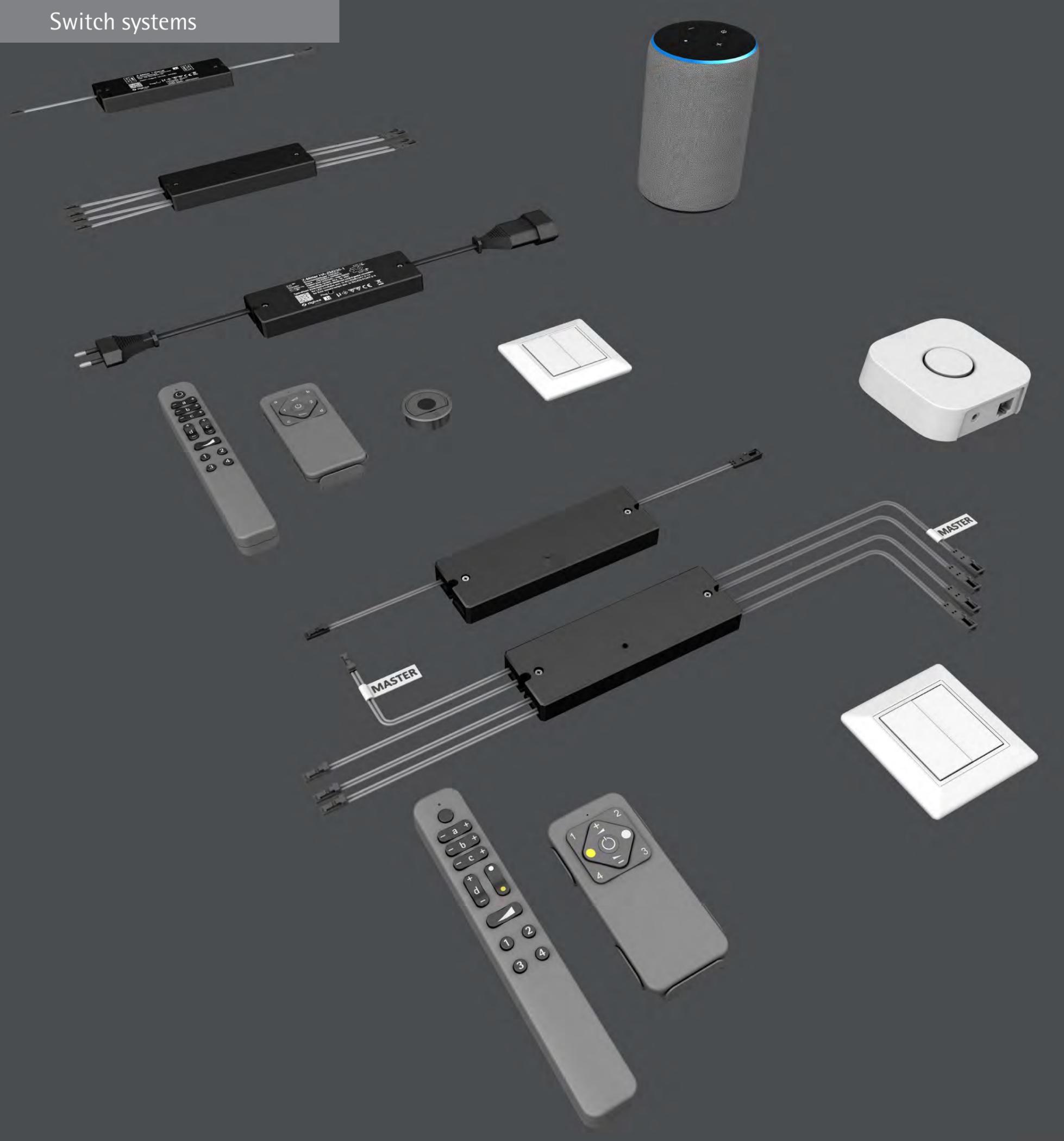
Smart receiver

Simply switch smart – in every situation

Our Smart receivers enable simple and intelli-
gent lighting control. They work independently
with remote control via TouchLink or optionally
in the Smart Home via Zigbee 3.0 in combina-
tion with many other devices from well-known
manufacturers in the Zigbee Alliance.

The smart receivers not only receive signals,
but also synchronise them wirelessly with each
other (mesh). This allows you to set up large
lighting systems with several lighting circuits or
receivers.

Each smart receiver increases the range
and stability of the overall system.

Zigbee controller for controlling lights

• Uses the Zigbee 3.0 protocol
• Supports Zigbee TouchLink
• Adding devices to the self-configuring
  Zigbee Touchlink network possible
• Compatible with Zigbee Gateway universal products
• Compatible with Zigbee universal remote controls

X-Mitter
Page 82-83   `12 V`

S-Mitter
Page 84-85   `12 V`

4-Mitter
Page 86-87   `12 V`

S-Mitter MultiWhite
Page 90-91   `12 V`

S-Mitter Basic MultiWhite
Page 92-93   `12 V`

MultiSwitch² Contact
Page 96-97   `12 V`

MultiSwitch² PIR
Page 98-99   `12 V`

Repeater
Page 100-101   `24 V MP`   `12 V`

IR Door Switch
Page 102   `12 V`

LED motion sensor
Page 103   `12 V`

zigbee

Products are Zigbee compatible

1-channel wireless switch and dimmer

X-Mitter

Advantages
▸ 1-channel wireless switch and dimmer
▸ Comfortable light switching
▸ Can be integrated in a smart home

Features
▸ Memory function for power failure
▸ Set works independently or in the smart home network
▸ Remote control and smart receiver are programmed in the set

Order information
▸ Set consists of X-Mitter Smart Remote Control and Smart Receiver
▸ The Smart.home overview shows how our switch systems can be combined with each other and with third party providers

Article no.	Product description	Qty	Unit	PU	MRP
9326539	X-Mitter Smart Remote control incl. Mounting Ring (Zigbee)	1	Pc	1	3,850

Accessories

Article no.	Product description	Qty	Unit	PU	MRP
9326532	Smart Receiver 12VDC, Max.36W (Zigbee)	1	Pc	1	5,250
9326538	Extension set 12VDC 60W, Smart Receiver 60W Ballast, M1x9	1	Pc	1	13,500

Technical details

12 V

Transmitter surface: soft lacquer black
Receiver housing: black
Max. switching power: 12 Volt DC-36 W

Test mark and symbols: CE UK ▽▽
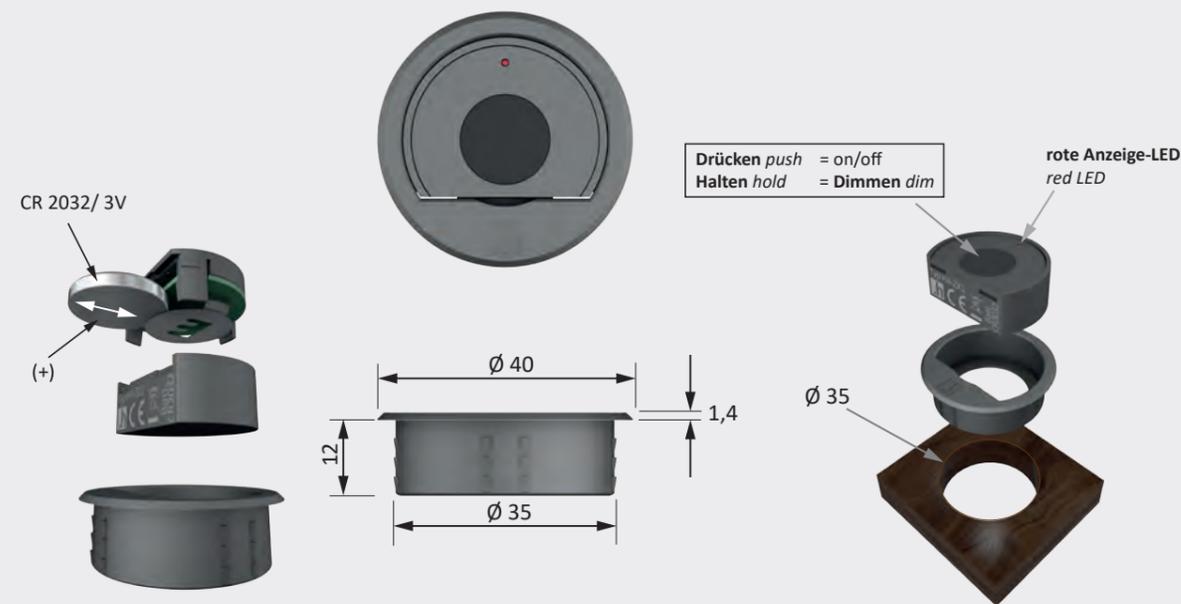Line lengths: see drawing
Standby receiver HV: <0.5 W
Standby receiver NV: <0.3 W
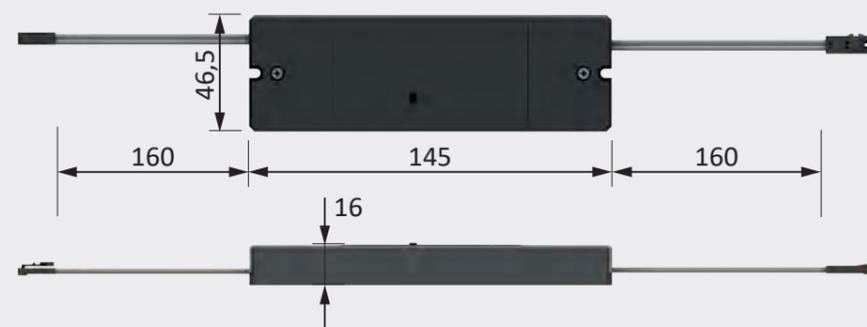Plug connector: LED connector M1

◉ zigbee

Zigbee controller for controlling lights

• Uses the Zigbee 3.0 protocol
• Supports Zigbee TouchLink
• Adding devices to the self-configuring Zigbee Touchlink network possible
• Compatible with Zigbee Gateway universal products
• Compatible with Zigbee universal remote controls

* Further accessories in section Switch systems/Ballasts and leads

Dimensional drawing / installation

CR 2032/ 3V

(+)

Drücken push = on/off
Halten hold = **Dimmen** dim

rote Anzeige-LED red LED

Ø 40
Ø 35
12
1,4
Ø 35

9326540 **Smartempfänger** smartreceiver 12VDC

46,5
160
145
160
16

5-channel wireless switch and dimmer

S-Mitter

Advantages
▸ 5-channel wireless switch and dimmer
▸ Comfortable light switching
▸ Can be integrated in a smart home

Features
▸ Memory function in case of power failure
▸ Storage of up to 4 light scenes
▸ Remote control and smart receiver are
  programmed in the set
▸ Set works independently or in the smart home
  network

Order information
▸ Set consists of S-Mitter Smart Remote Control
  and 1 channel Smart Receiver
▸ The Smart.home overview shows
  how our switch systems can be combined with
  each other and with third party providers

Article no.	Product description	Qty	Unit	PU	MRP
9326542	S-Mitter Smart set, 12VDC (5-channel wireless switch and dimmer) Max. 36W, (Zigbee)	1	Pc	1	10,600
9326545	S-Mitter Smart Remote control (Zigbee)	1	Pc	1	4,050

Accessories

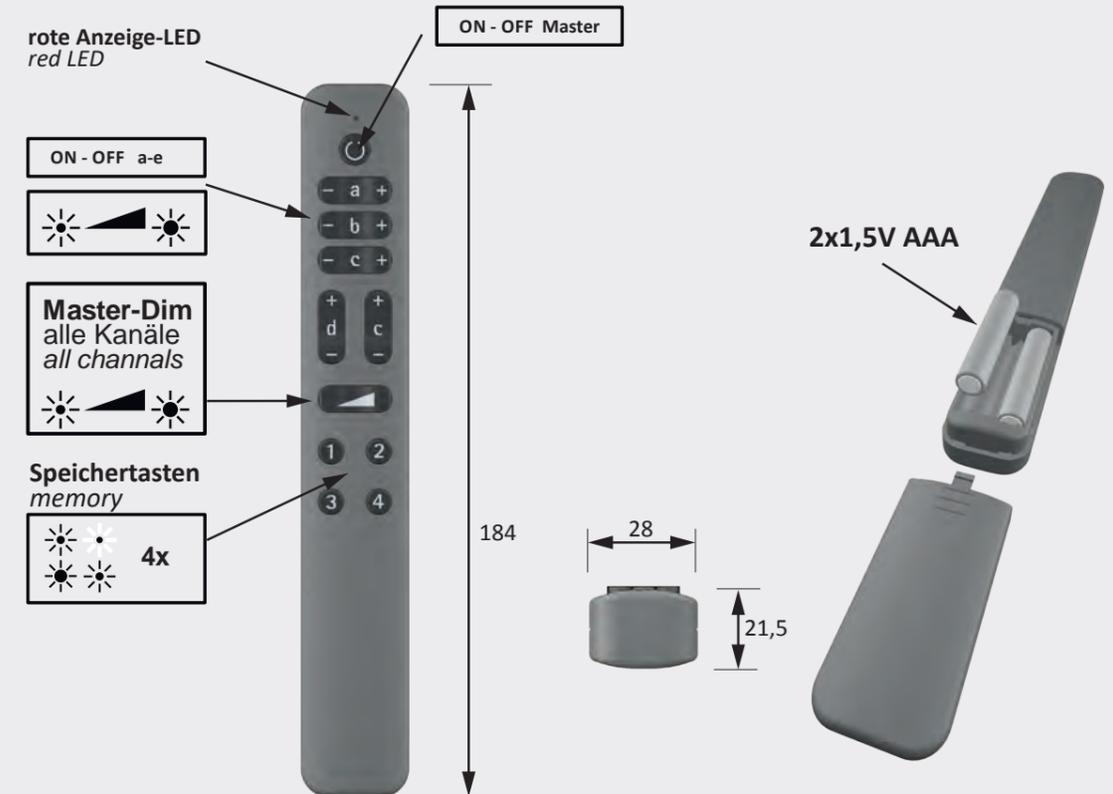| Article no.	Product description	Qty	Unit	PU	MRP
9326532	Smart Receiver 12VDC, Max.36W, (Zigbee)	1	Pc	1	5,250
9326538	Extension set 12VDC, 1-Channel Receiver, 60W, Smart Receiver, 60W Ballast, M1x9	1	Pc	1	13,500

Technical details

12 V

Transmitter surface: soft lacquer black
Receiver housing: black
Max. switching power: 12 Volt DC-36 W

Test mark and symbols: CE UK ⟱⟱
Line lengths: see drawing
Standby receiver HV: <0.5 W
Standby receiver NV: <0.3 W
Plug connector: LED
     Plug connector
     M1
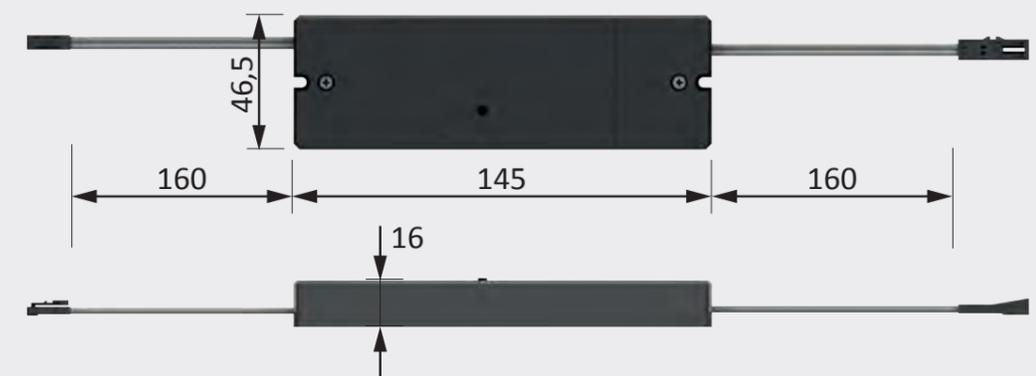
zigbee
Zigbee controller for controlling lights

• Uses the Zigbee 3.0 protocol
• Supports Zigbee TouchLink
• Adding devices to the self-configuring
  Zigbee Touchlink network possible
• Compatible with Zigbee Gateway universal products
• Compatible with Zigbee universal remote controls

Dimensional drawing / installation

rote Anzeige-LED
red LED

ON - OFF Master

ON - OFF a-e

2x1,5V AAA

Master-Dim
alle Kanäle
all channals

Speichertasten
memory

4x

184

28

21,5

9326542 **Smartempfänger** *smartreceiver* 12VDC

46,5

160   145   160

16

4-channel wireless switch and dimmer

4-Mitter

Advantages
▸ 4-channel wireless switch and dimmer
▸ Comfortable light switching
▸ Can be integrated in a smart home

Features
▸ Memory function for power failure
▸ Storage of 2 light scenes
▸ Remote control and smart receiver are in the set programmed in the set
▸ Set works independently or in smart home network

Order information
▸ Set consists of 4-Mitter Smart Remote control and Smart Receiver
▸ The Smart.home overview shows how our switch systems can be combined with each other and with third party providers

Article no.	Product description	Qty	Unit	PU	MRP
9312046	4-Mitter Smart Radio Switch Set 12VDC, (4-channel wireless switch and dimmer), 4x36W (Zigbee)	1	Pc	1	12,500

Technical details

12 V

Transmitter surface: Soft lacquer black
Receiver housing: Black
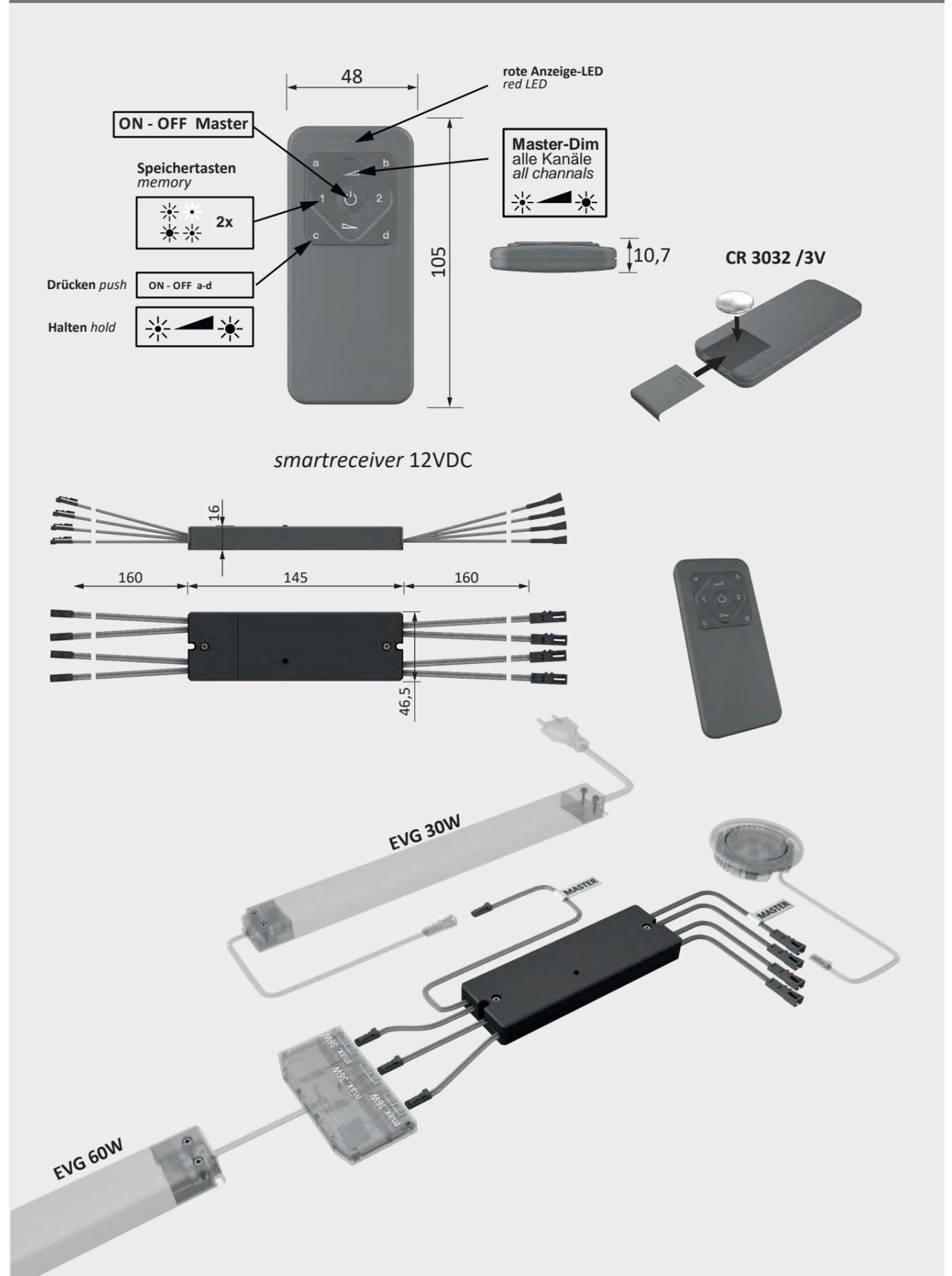Max. switching power: 12 Volt DC-4*36W

Test marks and symbols: CE UK ◇ ⋈
Supply lead: 160 mm
Switching lead: 160 mm
Standby receiver: <0.3 W
Plug connector: LED
   Plug connector
   M1

zigbee

Zigbee controller for controlling lights

• Uses the Zigbee 3.0 protocol
• Supports Zigbee TouchLink
• Adding devices to the self-configuring Zigbee Touchlink network possible
• Compatible with Zigbee Gateway universal products
• Compatible with Zigbee universal remote controls

Dimensional drawing / installation

48

rote Anzeige-LED
red LED

ON - OFF Master

Speichertasten
memory

2x

Master-Dim
alle Kanäle
all channals

Drücken *push*   ON - OFF a-d

Halten *hold*

105

10,7   CR 3032 /3V

smartreceiver 12VDC

16

160   145   160

46,5

EVG 30W

MASTER

EVG 60W

MultiWhite

Always the right light colour

Warm or cool white light? Bright and fresh light for preparing and cooking food. When the dish is ready, the light changes to cosy WarmWhite.

With MultiWhite, light colours and moods can be changed according to requirements – smart wireless solutions make it possible. When you have found your preferred light settings, simply save them so you can call up the same light scenes whenever you want them.

By choosing MultiWhite, you're always on the safe side. If customer wishes or requirements change, you can react completely flexibly with the product.

MultiWhite can also be easily adapted to existing luminaires.

zigbee

| 6500 K | 4000 K | 3000 K | 2700 K |
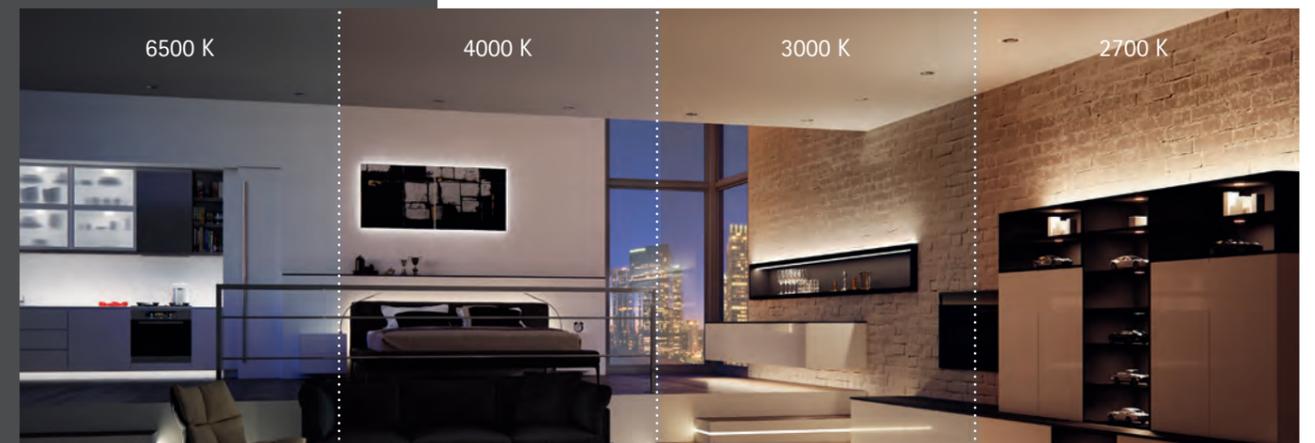
From ExtraWarmWhite to CoolWhite – MultiWhite is always the right choice

4-channel wireless switch and dimmer

Dimensional drawing / installation

rote Anzeige-LED
red LED

ON - OFF Master

ON - OFF a-d

2x1,5V AAA

Master-Dim
alle Kanäle
all channals

Cool White *

Warm White

Speichertasten
memory

4x

184

28

21,5

*Einstellung cw/ww
richtet sich an den
zuletzt angewählten
Kanal*
*The setting cw/ww
is based on the last
selected channel*

S-Mitter MultiWhite

Advantages
▶ 4-channel wireless switch and dimmer
▶ Stepless adjustment of the light colour from CoolWhite to ExtraWarmWhite
▶ Can be integrated in a smart home

Features
▶ Memory function for power failure
▶ Storage of up to 4 light scenes
▶ Remote control and smart receiver are in the set programmed in the set
▶ Set works independently or in the smart home network

Order information
▶ Set consists of S-Mitter Smart Remote Control and 1-channel Smart Receiver
▶ Plus Set consists of S-Mitter Smart Remote Control, 1-channel or 4-channel Smart Receiver and a 60 W ballast
▶ The Smart.home overview shows how our switch systems can be combined with each other and with third-party suppliers

Technical details

12 V

Article no.	Product description	Qty	Unit	PU	MRP
9326546	S-Mitter MW² Smart Remote control (4-channel wireless switch and dimmer) (Zigbee)	1	Pc	1	4,050

Accessories

Article no.	Product description	Qty	Unit	PU	MRP
9312158	Smart Receiver MW², 1- Channel, Max.36W (Zigbee)	1	Pc	1	5,250
9312160	Extension set MW², 12VDC, Ballast 60 W, M1x9	1	Pc	1	15,000

For use with: MultiWhite LED lights
Transmitter surface: soft lacquer black
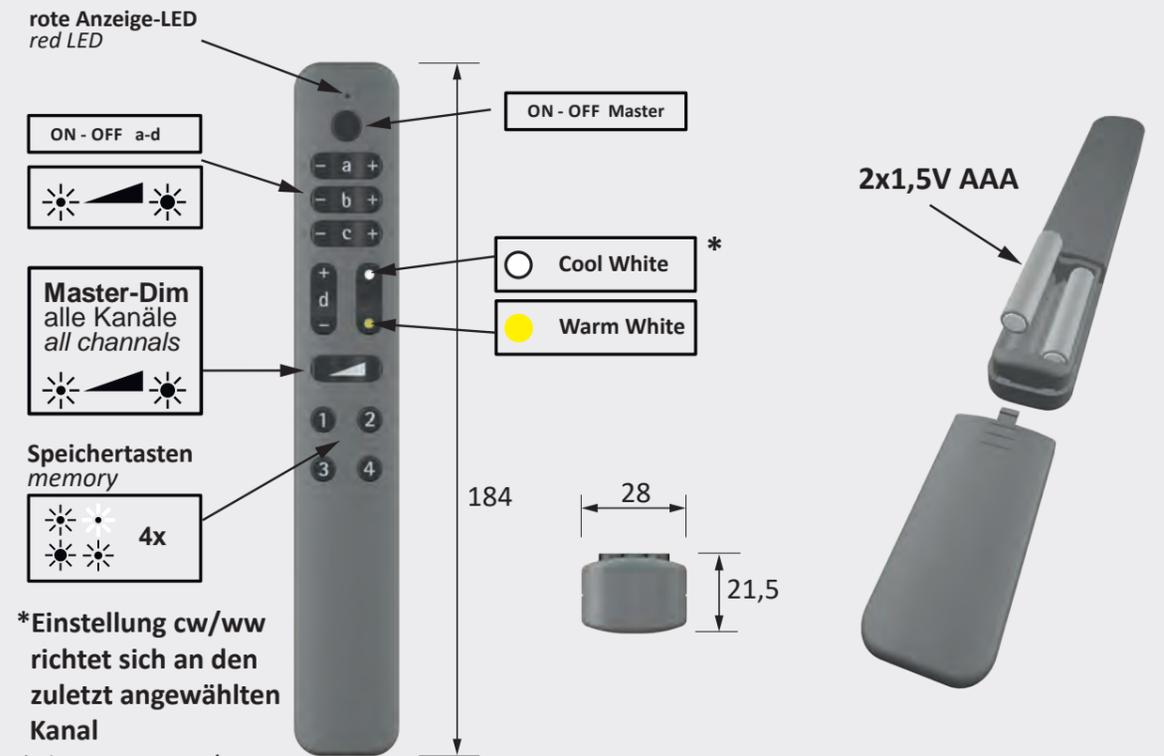Receiver housing: black
Max. switching power: 12 Volt DC– 36 W/60 W

Test marks and symbols: CE UK ◇ VV
Supply lead: 160 mm
Switching lead: 160 mm
Standby receiver: <0.3 W
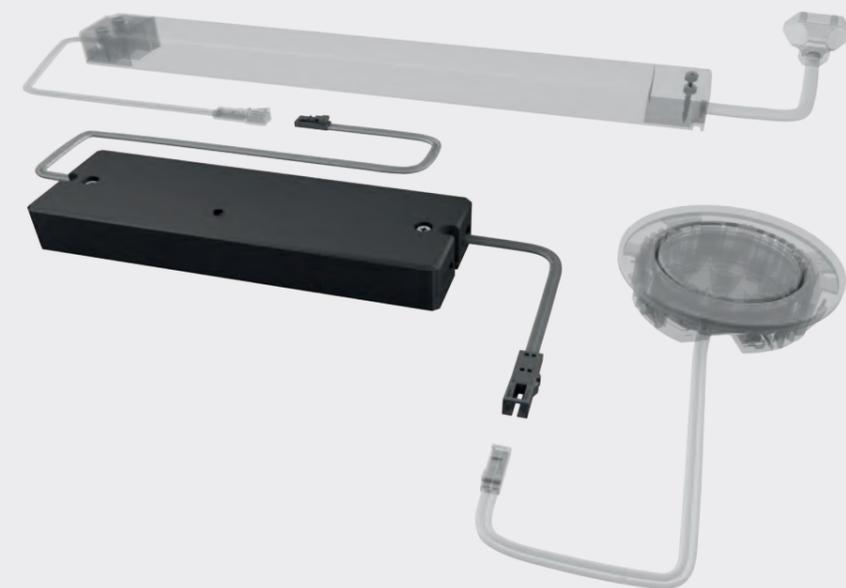Plug connector: LED mini connector M1

zigbee

ZigBee controller for the control of MultiWhite lights via 2-wire system

• Uses the Zigbee 3.0 protocol
• Supports Zigbee TouchLink
• Adding devices to the self-configuring Zigbee Touchlink network possible
• Compatible with Zigbee Gateway universal products
• Compatible with CCT Zigbee universal remote controls

www.hettich.com   www.hettich.com

1-channel wireless switch and dimmer

S-Mitter Basic MultiWhite

Advantages
▶ 1-channel wireless switch and dimmer
▶ Stepless adjustment of the light colour from CoolWhite to ExtraWarmWhite
▶ Can be integrated in a smart home

Features
▶ Memory function for power failure
▶ Storage of up to 4 light scenes
▶ Remote control and smart receiver are in the set programmed in the set
▶ Set works independently or in the smart home network

Order information
▶ Set consists of S-Mitter Basic Smart Remote Control and Smart Receiver
▶ Plus Set consists of S-Mitter Basic Smart Remote Control, Smart Receiver and a 60 W ballast
▶ The Smart.home overview shows how our switch systems can be combined with each other and with third-party suppliers

Article no.	Product description	Qty	Unit	PU	MRP
9312157	S-Mitter Basic MW² Remote control(1-channel wireless switch and dimmer) (Zigbee)	1	Pc	1	3,850

Accessories

Article no.	Product description	Qty	Unit	PU	MRP
9312158	Smart Receiver MW², 1- Channel, Max.36W (Zigbee)	1	Pc	1	5,250
9312160	Extension set MW², 12VDC, Ballast 60 W, M1x9	1	Pc	1	15,000

Technical details

12 V

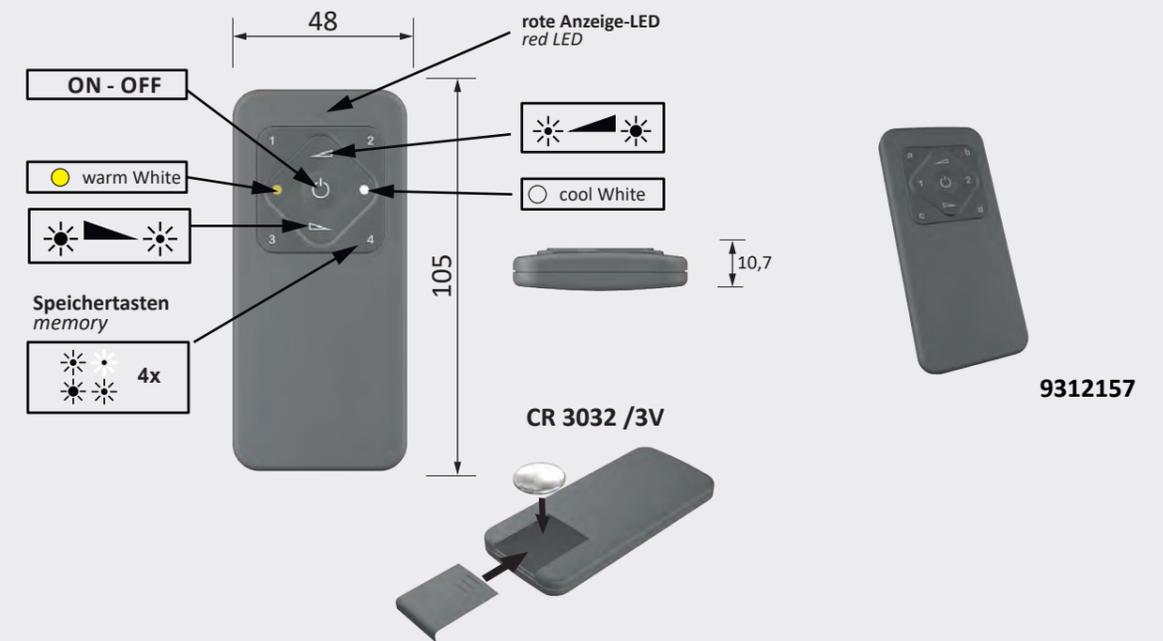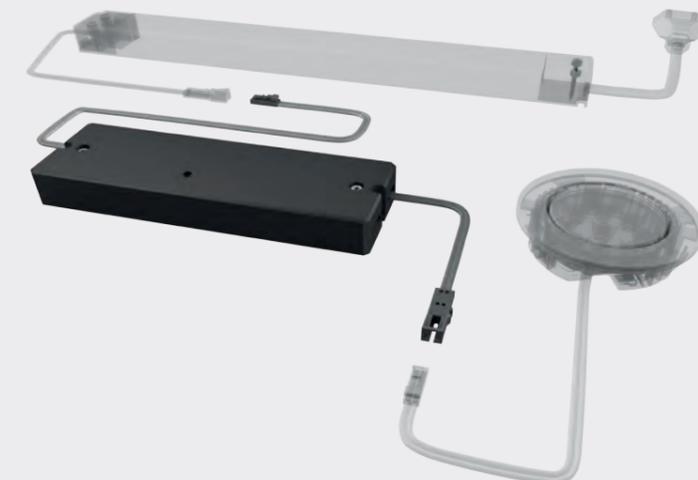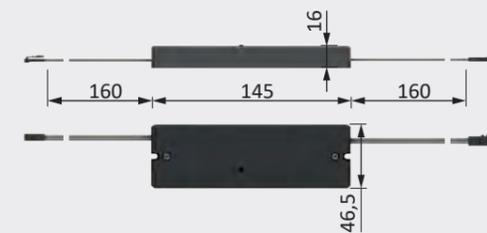| For use with:	LED lights
Transmitter surface:	soft lacquer black
Receiver housing:	black
Max. switching power:	12 Volt DC–36 W/60 W
Test marks and symbols:	CE 品 ⬙ ⎁⎁
Supply lead:	160 mm
Switching lead:	160 mm
Standby receiver:	<0.3 W
Plug connector:	LED M1 plug connector

zigbee

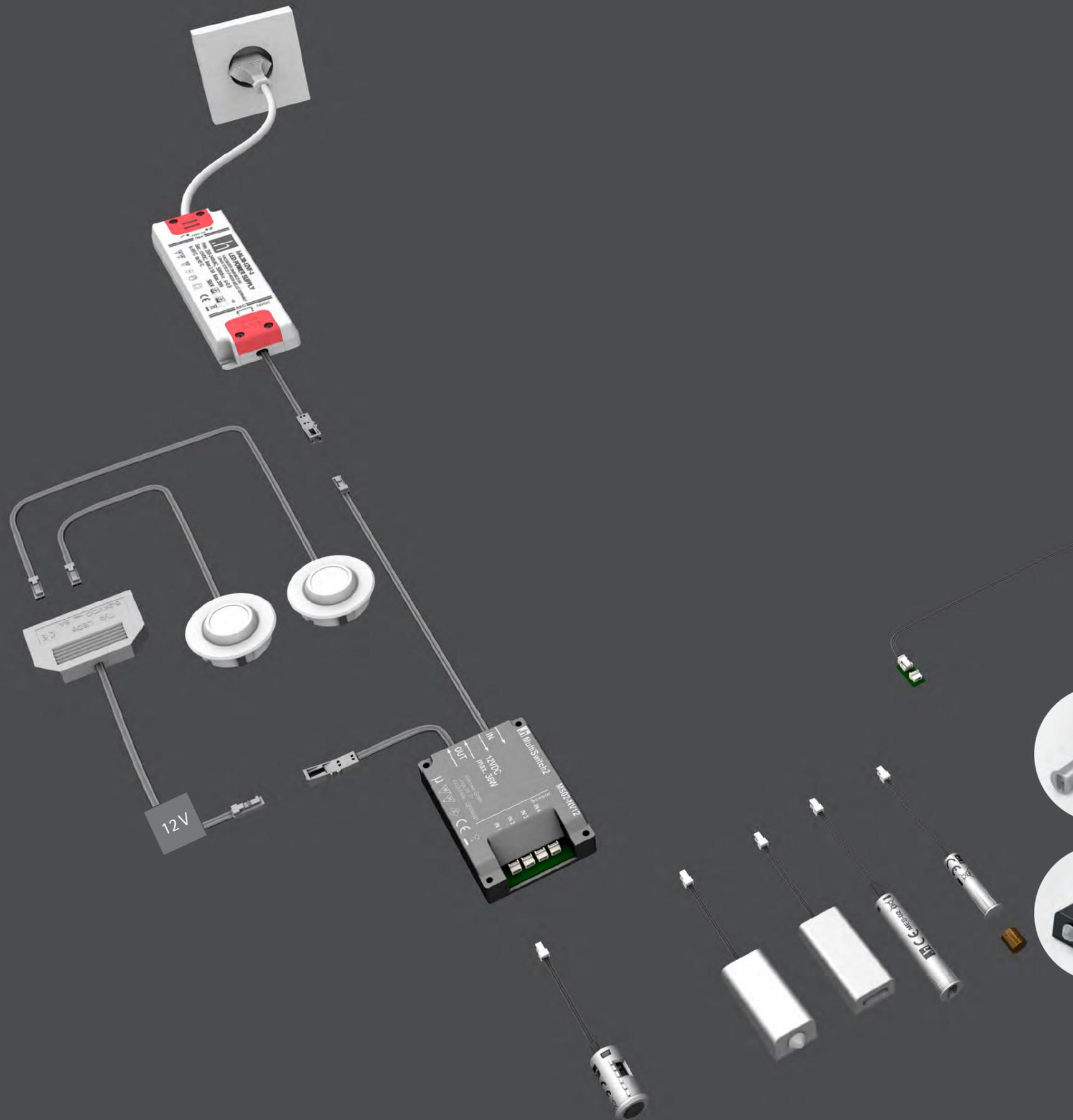ZigBee controller for the control of MultiWhite lights via 2-wire system

• Uses the Zigbee 3.0 protocol
• Supports Zigbee TouchLink
• Adding devices to the self-configuring Zigbee Touchlink network possible
• Compatible with Zigbee Gateway universal products
• Compatible with CCT Zigbee universal remote controls

Dimensional drawing / installation

48

rote Anzeige-LED
red LED

ON - OFF

⦿ warm White

☀◀☀

○ cool White

☀▶☀

105

Speichertasten
memory

☀•☀ 4x

10,7

CR 3032 /3V

9312157

9312158

16

160   145   160

46,5

MultiSwitch²

Simple. Automatic. Switching.

We have further developed our proven MultiSwitch and equipped it with various additional highlights. Now with 4 sensors to monitor 4 doors.

The overall smaller plug-in system is space-saving and the intelligent sensor system prevents faulty switching.

In addition, the sensors are now also available in the trendy colour black.

MultiSwitch sensors

Infrared sensor for drill-hole mounting (IR door contact switch, optionally in aluminium look or in black colour)

Screw-on motion sensor (PIR sensor, optionally in aluminium look or in black colour)

12 V

MultiSwitch² Contact

Advantages
▶ Infrared sensor for drill-hole or surface mounting
▶ Connection of 1 up to 4 identical sensors to a Master unit

Features
▶ Soft ON/OFF function (soft-start when power Switching on/off only with 12/24 Volt DC)
▶ Memory function for power failure
▶ Not compatible with dimmers

▶ The sensor has two settings - switch and door contact

Examples of use
▶ Door contact switch
▶ Non-contact sensor switch (infrared sensor) for screwing on)

Order information
▶ For other sensors, see other pages

Technical details

12 V

Article no.	Product description	Qty	Unit	PU	MRP
9308466	MultiSwitch² drill in sensor (IR door contact switch, Alu.)	1	Pc	1	1,750
9312193	MultiSwitch² drill in sensor (IR door contact switch, Black)	1	Pc	1	1,600
9309582	MultiSwitch² IR surface mounted Door, (IR sensor or door contact switch, Alu.)	1	Pc	1	1,900
9312192	MultiSwitch² IR surface, (IR sensor or door contact switch, black)	1	Pc	1	1,750
9326517	MultiSwitch² Master 230-240V, AC, 500 W, 3m Euro Plug 150mm, Jack	1	Pc	1	5,300
9308462	MultiSwitch² Master 12VDC, Max.36W	1	Pc	1	3,000

Accessories

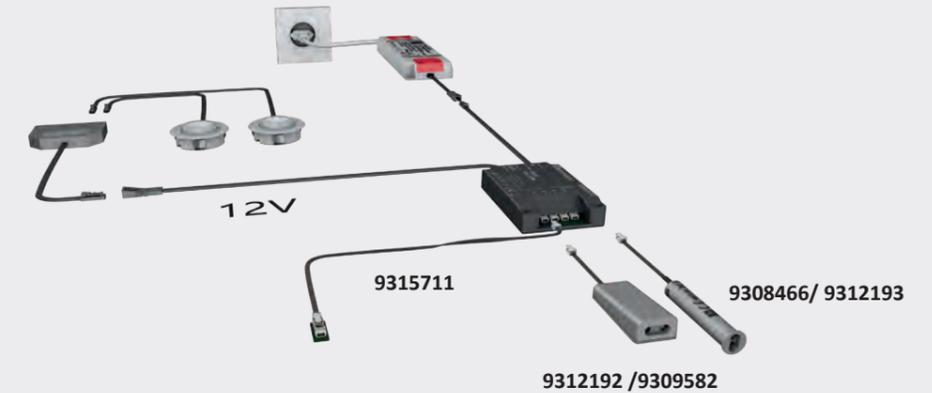| Article no.	Product description	Qty	Unit	PU	MRP
9246079	Repeater for 12VDC, Max.36W	1	Pc	1	1,700
9315711	Extension MultiSwitch² 3000mm	1	Pc	1	370

For use with: LED lights
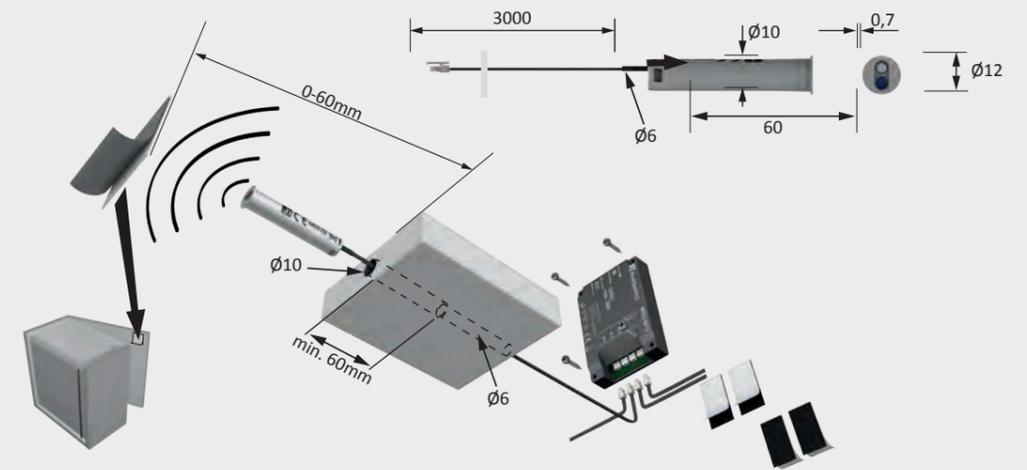Max. switching power: 12 Volt DC–36 W
24 Volt DC–120 W
230 V AC–500 W

Test marks and symbols: CE UK VV
Switching distance: see drawing
Sensor lead: 3000 mm
Master unit
Supply lead: HV 3000 mm
LV 2000 mm
Switching lead: HV 150 mm
LV 300 mm
Standby: <0.5 W
Plug connector: LED connector M1/MP2/ Euroflat

9315711

9308466/ 9312193

9312192 /9309582

Max. 4x 9308466 /9312193

3000
Ø10
0.7
Ø12
0-60mm
Ø6
60

Ø10
min. 60mm
Ø6

9315711

9312194/9312195

Max. 4x 9312194/9312195

3000

45

20

15

ca. 2m

60°

120°

Ø6

MultiSwitch² PIR

Advantages
▸ Motion sensor for surface mounting
▸ Responds to heat and movement
▸ Connection of 1 up to 4 identical sensors to a
  Master unit

Features
▸ Soft ON/OFF function (soft-start when power
  Switching on/off only with 12/24 Volt DC)
▸ Memory function for power failure
▸ Not compatible with dimmers

Examples of use
▸ Ideal for walk-in wardrobes without fronts
▸ Problem-solver for furniture where no magnetic
  or IR sensor can be used

Order information
▸ For further sensors see other pages

12 V

Article no.	Product description	Qty	Unit	PU	MRP
9312194	MultiSwitch² PIR sensor for surface mounting (motion sensor)	1	Pc	1	1,800
9312195	MultiSwitch² Screw-on PIR sensor (motion sensor, black)	1	Pc	1	1,600
9326517	MultiSwitch² Master 230-240V AC 500 W, 3m Euro Plug 150mm, Jack	1	Pc	1	5,300
9308462	MultiSwitch² Master 12VDC, Max.36W	1	Pc	1	3,000

Accessories

Article no.	Product description	Qty	Unit	PU	MRP
9246079	Repeater for 12VDC, Max.36W	1	Pc	1	1,700
9315711	Extension MultiSwitch² 3000mm	1	Pc	1	370

For use with: LED lights
Max. switching power: 12 Volt DC–36 W
                             24 Volt DC–120 W
                             230 V AC–500 W
Test marks and symbols: CE UK ᐁᐁ
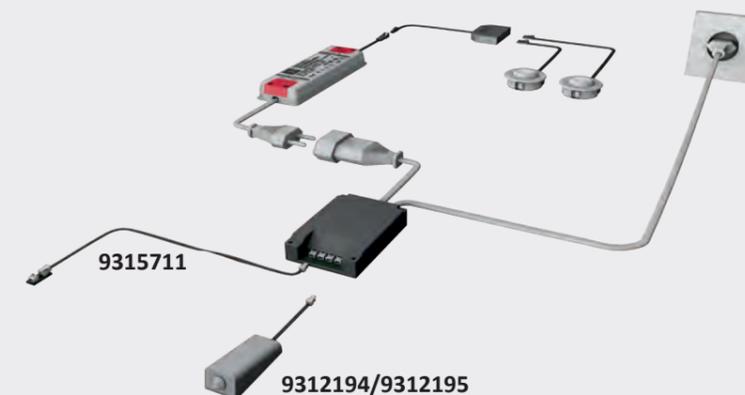Motion sensor
Sensing angle: 120°
Range: 2 m
Stay-'ON' time: 30 seconds
Sensor lead: 3000 mm
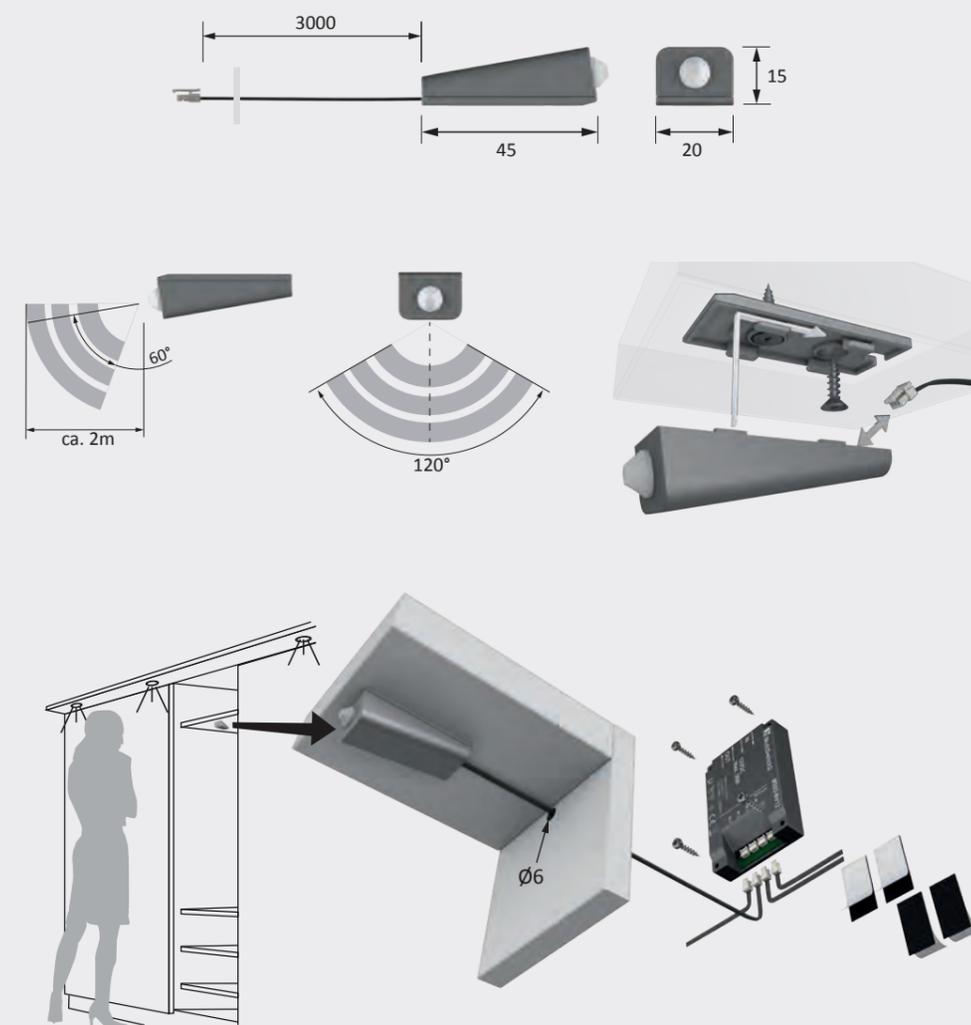Master unit
Supply lead: HV 3000 mm
                             LV 2000 mm
Switching lead: HV 150 mm
                             LV 300 mm
Standby: <0.5 W – Master unit
                             sensors included

Repeater

Advantages
▸ Inexpensive control of large outputs
▸ Easy to install
▸ Can be combined with many different
  remotes and dimmers

▸ Works with all Hettich PWM dimmers
▸ Works with MultiSwitch²
▸ Not combinable with dimmable electronic ballast
▸ Not combinable with Smart.home

Features
▸ Any number of repeaters can be connected in
  parallel in order to achieve the desired overall per-
  formance . Each repeater requires a control signal
  from the dimmer/switch and sufficient ballast
  power to control the connected luminaires

Order information

Article no.	Product description	Qty	Unit	PU	MRP
9246079	Repeater for 12VDC, Max.36W	1	Pc	1	1,700

Technical details

12 V

For use with:	LED lights
Max. switching power:	12 Volt DC–36 W
	24 Volt DC–72 W
Test mark and symbols:	CE UK ◇ ▽▽
Line lengths:	see drawing

9246079

12V DC

Eingang synchro

49

600

13

250   124   150
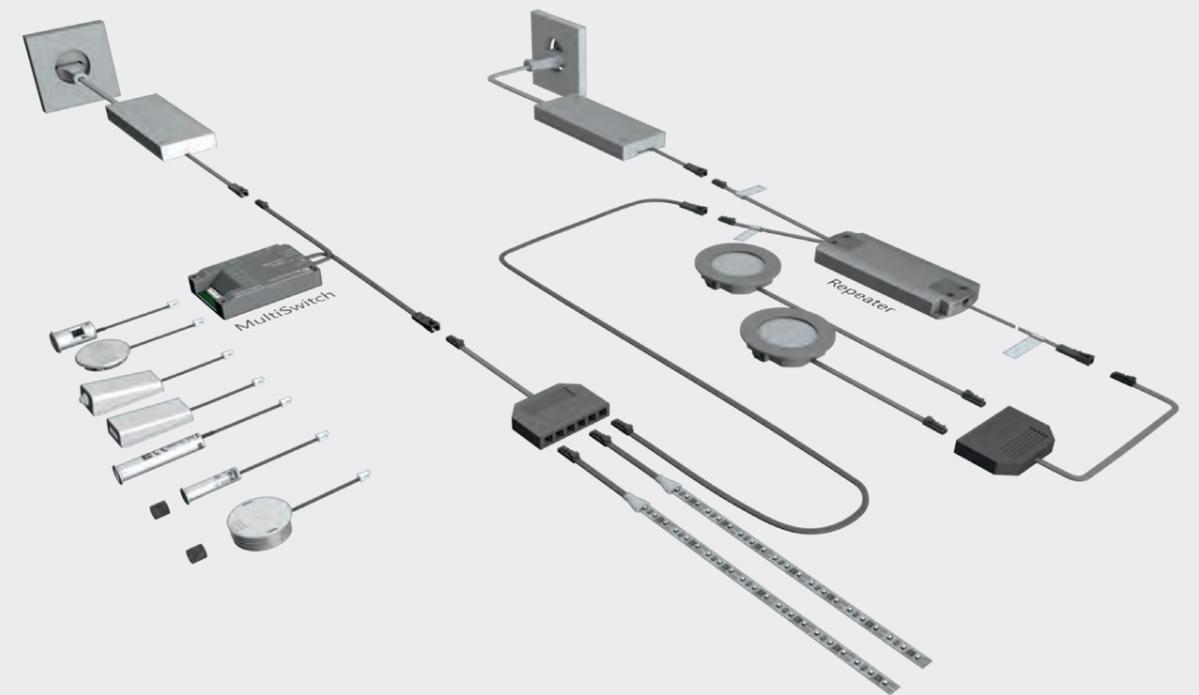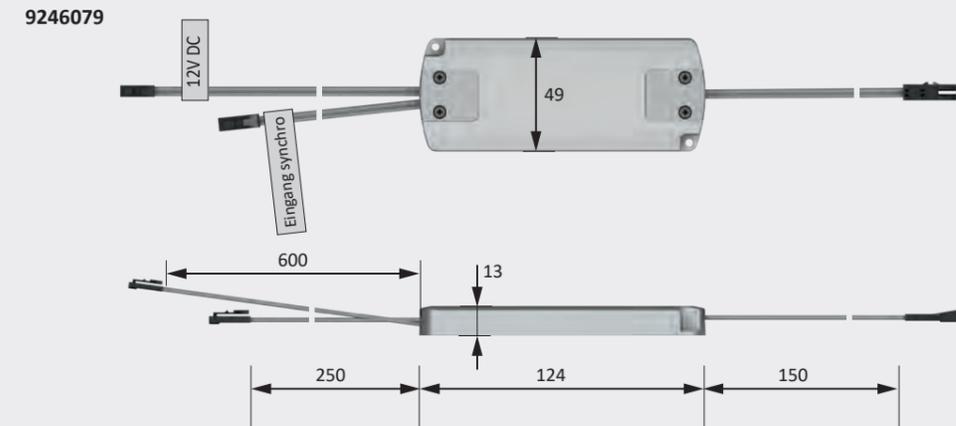
* Further accessories in section Switch systems/Ballasts and leads

IR Door Switch

Advantages
▸ Particularly small infrared sensor for drilling into place
▸ Entry-level price

Features
▸ Only 8 mm drill hole required

Examples of use
▸ Door contact switch

12 V

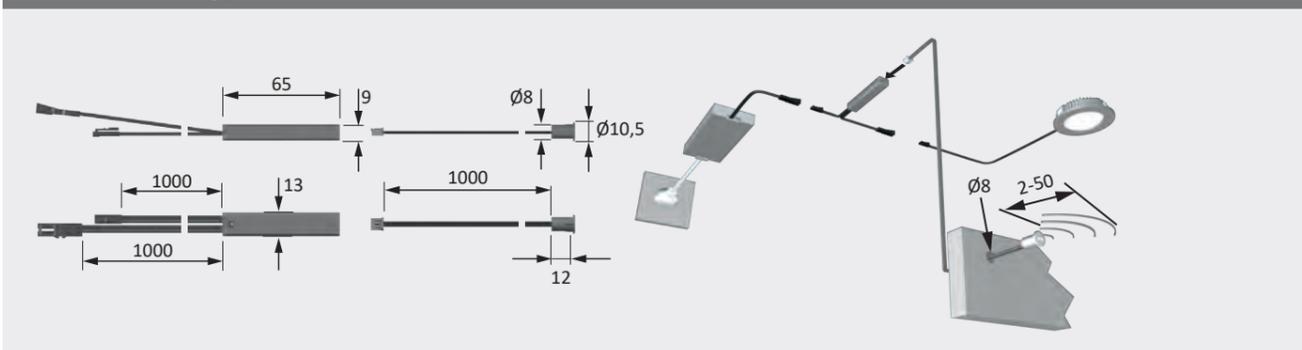| Article no.	Product description	Qty	Unit	PU	MRP
9267112	IR Door Switch12VDC, Max. 36W, Lead M1	1	Pc	1	1,950

For use with: LED lights
Surface finish: Aluminium look
Max. switching power: 12 Volt DC-36 W
Test marks and symbols: CE UK ◇ ▽▽
Switching distance: see drawing
Sensor lead: 1000 mm
Supply lead: 1000 mm
Switching lead: 1000 mm
Standby: <0.1 W

* A repeater enables the control of a lighting circuit of more than 36 W at 12 volts DC.

Dimensional drawing / installation

LED motion sensor

Advantages
▸ Motion sensor for drilling into place
▸ Responds to heat and movement

Features
▸ As on/off switch
▸ Not compatible with dimmers

Examples of use
▸ As motion sensor (PIR sensor)

Order information
▸ Only for use with dimmable LED luminaires

12 V

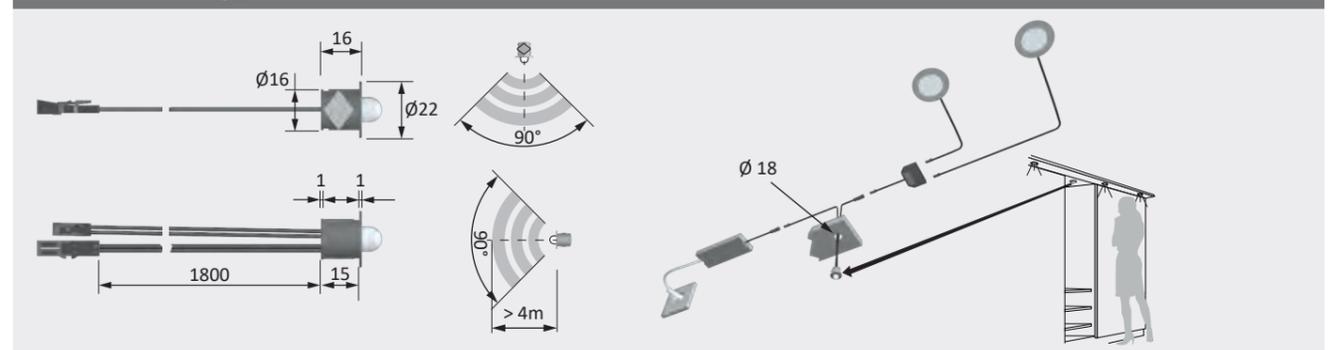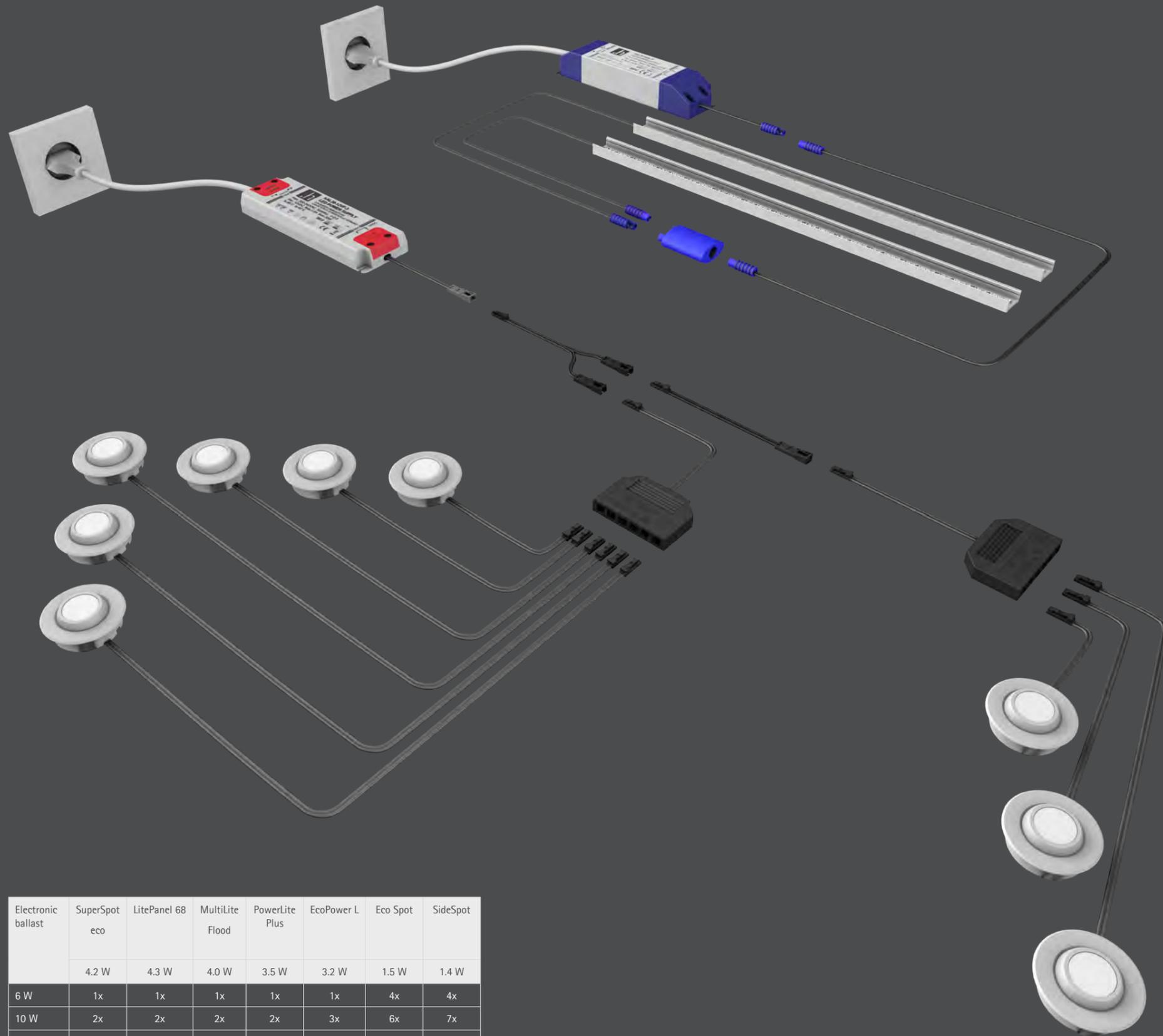| Article no.	Product description	Qty	Unit	PU	MRP
9267111	LED Motion sensor 12VDC max. 36W, Lead M1	1	Pc	1	1,350

For use with: LED lights
Surface finish: Grey
Max. switching power: 12 Volt DC-36 W
Test marks and symbols: CE UK ◇ ▽▽
Motion sensor
Sensing angle: 90°
Range: 4 m
Stay-'ON' time: 30 seconds
Supply lead: 1800 mm
Switching lead: 1800 mm to light
Standby: <0.01 W

* A repeater enables the control of a lighting circuit of more than 36 W at 12 volts DC.

Dimensional drawing / installation

Matching power sources

Plug-in systems for Plug & Play

On the following pages you will find the right power sources for your lighting. You will find here the distributors and extension leads for all luminaires and controls you need to realise even large systems. The easily distinguishable plug-in systems ensure Plug & Play and make a wrong combination impossible.

All electronic ballasts, called ballast for short, have overload protection, temperature protection, short-circuit resistance and are explicitly designed for use with LED luminaires and for use in furniture.

Our ballasts are certified by external testing bodies such as TÜV for compliance with all current safety and product standards.

Electronic ballast	SuperSpot eco	LitePanel 68	MultiLite Flood	PowerLite Plus	EcoPower L	Eco Spot	SideSpot
	4.2 W	4.3 W	4.0 W	3.5 W	3.2 W	1.5 W	1.4 W
6 W	1x	1x	1x	1x	1x	4x	4x
10 W	2x	2x	2x	2x	3x	6x	7x
15 W	3x	3x	3x	4x	4x	10x	10x
20 W	4x	4x	5x	5x	6x	13x	14x
30 W	7x	7x	7x	8x	9x	20x	21x
60 W	14x	13x	15x	17x	18x	33x	42x
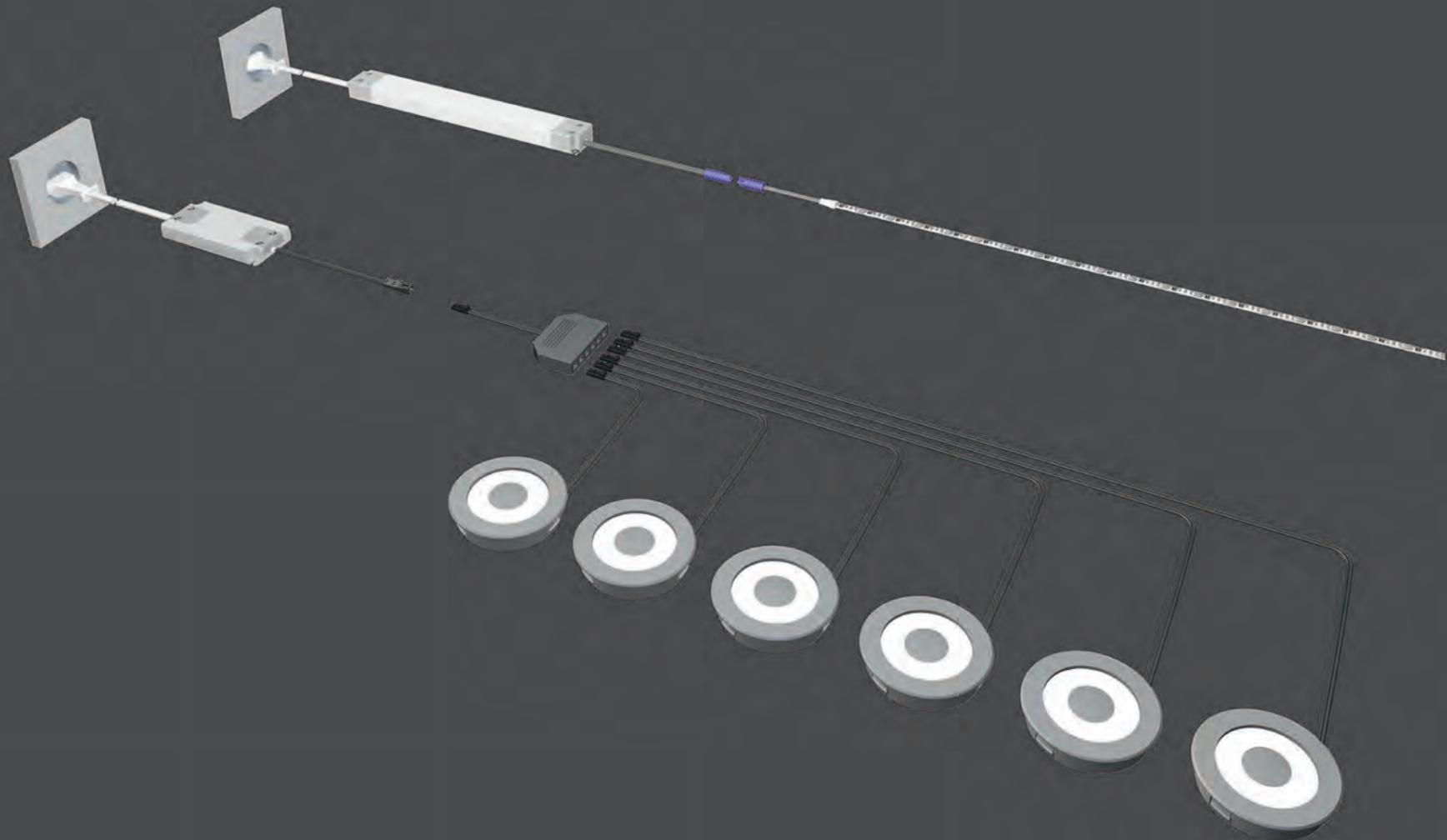
Electronic ballasts 12 Volt DC
Page 108-109

12 V

Leads 12 Volt DC
Page 110

12 V

Ballast 12 Volt DC

Advantages
▶ Short-circuit-proof
▶ Overload-protected
▶ Temperature-protected

Examples of use
▶ For 12 V DC furniture lights

Order information
▶ The ballast power must be equal to or higher than the total power of the connected consumers

Technical details

12 V

For use with: LED lights
Surface finish: white
Operating voltage: 100 V DC
240 V AC
Mains frequency: 50 Hz/60 Hz
Output voltage: 12 V DC
Test marks and symbols: CE UK***□ ▽▽ □ ⚠
Plug connector
Primary: 2000 mm with
flat Euro plug
Plug connector: LED Mini
M1 plug connector

Article no.	Product description	Qty	Unit	PU	MRP
9335261	LED ballast 12VDC, 6W , Europlug M1x1	1	Pc	1	2,300
9335262	LED ballast 12VDC, 15W, 200-240V, 2m EFS 0,2m, M1+0.15m, M1x6 (6-Way Distributor)	1	Pc	1	2,300
9335263	LED ballast.12VDC, 20W,200-240V, 2m EFS 0.2m, M1+0.15m, M1x6 (6-Way Distributor)	1	Pc	1	2,400
9335264	LED ballast. 12VDC, 30W,200-240V, 2m EFS 0.2m, M1+0.15m, M1x6 (6-Way Distributor)	1	Pc	1	4,500
9335265	LED ballast. 12VDC, 60W, 2m EFS 0.15m, M1x9	1	Pc	1	6,150

Dimensional drawing / installation

Leads 12 Volt DC

Advantages
▸ LED plug-in system for 12 Volt DC lights

Features
▸ Plug bore diameter 8 mm

Order information
▸ Maximum connected load 3A/36 W
▸ Max. 5 m extension lead per light

Technical details

Type:	Plug system
Connected load:	max. 3 A (36 W)
Surface finish:	black
Plug connector:	LED Mini
	M1 plug connector

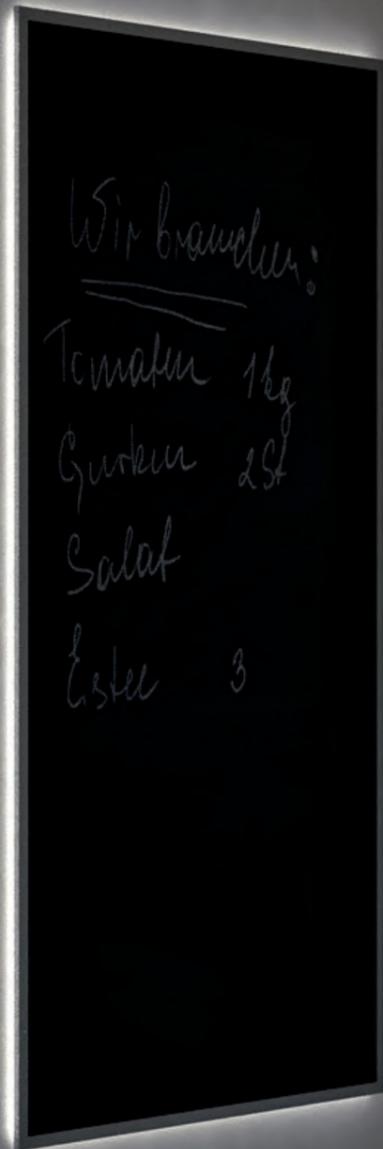| Article no.	Product description	Qty	Unit	PU	MRP
9104773	LED extension M1 12VDC, L=1800mm, Black	1	Pc	1	440
9246083	LED 6-way Distributor M1, 12VDC, L=200mm, Black	1	Pc	1	270
9084272	LED 6-way distributor M1, 12VDC, L=2000mm, Black	1	Pc	1	560

Dimensional drawing / installation

1800

34

200/2000

55

38
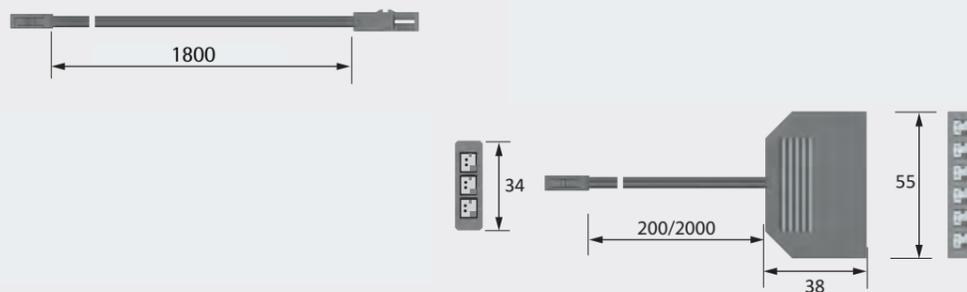
Types of lighting
Light can shape, change and move.

▶ Functional lighting
Functional, neutral white light is ideal for the work area in the kitchen. The colours and fine structures of food can be seen best in this light. Lights can be installed discreetly in the upper cabinets directly above the working area. Thus uniform, glare-free illumination can be achieved.

▶ Accent lighting
One room, two moods: The dining table is bathed in gentle light for a leisurely dinner. It is at the very centre of the room. In the background, accent lighting creates a captivating sense of depth.

▶ Orientation lighting
The same room takes on a different appearance due to the change in lighting. Decorative elements such as backlit picture frames unfold their effect. Energy-saving LEDs serve as orientation light – even during the night.
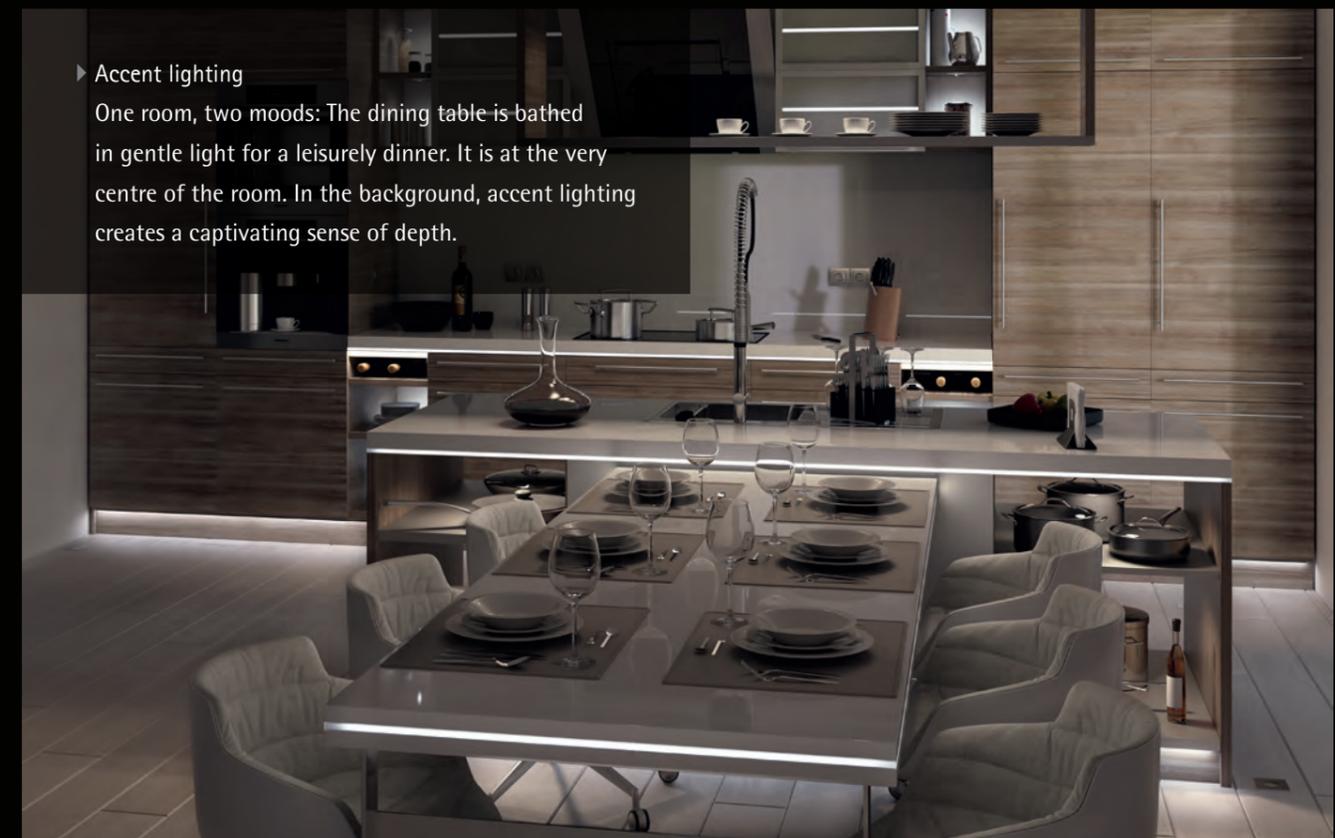
6500 K

3000 K

4000 K

2700 K

Illuminating facts about light
We bring light into the darkness

Lux, lumen and kelvin, warm white, cool white and neutral white: although the terminology of lighting systems is all around us, it is not always clear to us. We would like to bring light into the dark with a few explanations.

▶ Light colour and colour temperature
White light is composed of the entire colour spectrum, i.e. it is the sum of all light colours. If the proportion of red in the light dominates the light appears warm, and cooler if it contains more blue. This colour impression that a light source gives us is called the light colour. Colour temperature is measured in Kelvin (K). This only provides information on the visual colour impression; it does not say anything about the thermal value of the light. The annealing colours of a black test piece heated to the appropriate temperature serve as a reference for this.

▶ The classifications

XW XtraWarmWhite
2500 - 2800 K
Illumination of e.g. baked goods

WW WarmWhite
2900 – 3300 K
Comfortable, calming

NW NeutralWhite
4000 – 4500 K
Objective

CW CoolWhite
5000 – 6500 K
Daylight-like, technical, stimulating

MW MultiWhite 2500 – 6500 K
Adjustable white
Cosy to daylight-like

Extra WarmWhite
2700 K

WarmWhite
3000 K

NeutralWhite
4000 K

CoolWhite
6000 K

MultiWhite
2700 - 6000 K
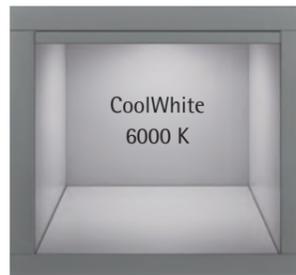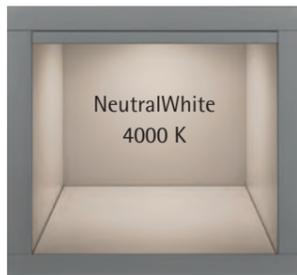
The colour designations are not standardised and do not designate specific light colours, but merely colour ranges.

▶ Colour rendering
The colour rendering of light determines whether the light makes the colours appear dull or bright. It is important for good visual results and pleasant viewing experiences.

Light that contains all spectral colours – such as day light – makes the colours of objects look natural. Colour rendering is neutral, and therefore particularly favourable for judging colours.

The colours of objects tend to look unnatural in light with an unbalanced colour spectrum.

The quality of the colour rendering of a light source is assessed by the colour rendering index (CRI). It is derived from common test colours and indicates how naturally colours are rendered. Depending on the visual task, the appropriate colour rendition should be chosen. To ensure a relaxed and positive visual experience, the colour rendering index should not be less than 80.

Many customers attach great importance to high-quality furnishings and fittings for their homes and living environments. A lot of money and passion is invested in the ambience. But only the optimal lighting can bring their interior design perfectly to the fore.

Only an indirect relationship exists between light colour temperature and colour rendition. The currently best method uses the principle of "luminescence conversion" and is used both for LED and fluorescent lamps. In this method the original blue LED light is transformed into white light by a very thin layer of phosphor material. Currently, CRI values of up to over 90 can be achieved with this method. This method currently provides the best price/performance ratio for high quality lighting solutions.

CRI ~ 50

CRI ~ 70

CRI ~ 90

▶ Luminous flux
Luminous flux describes the luminous efficiency of a light source and is expressed in lumen (Lm).

▶ Luminous intensity
Light intensity (illuminance) is probably the term most frequently used in lighting and defines the incidence of luminous flux on a defined surface, measured in lux (lx).
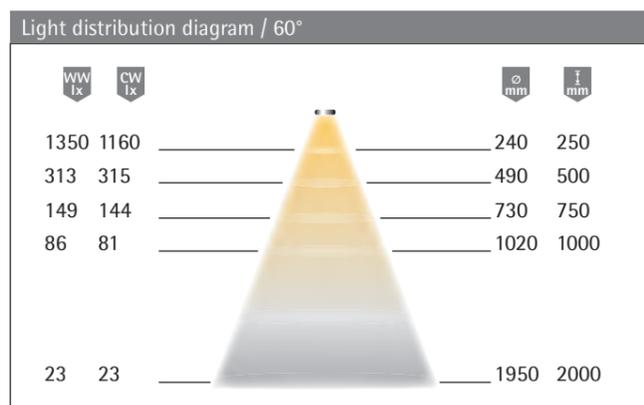
▶ Light distribution diagrams
The light distribution diagrams shown in the catalogue help to select the right luminaire.

The diagrams illustrate:
1. the illuminance at a distance from the luminaire
2. the light distribution area
3. the half value angle

Light distribution diagram / 60°

WW lx	CW lx		⌀ mm	↕ mm
1350	1160		240	250
313	315		490	500
149	144		730	750
86	81		1020	1000
23	23		1950	2000

Why do we give the illuminance in lux, and not in lumens or watts?

The wattage of a luminaire says practically nothing about what kind of lighting effect the luminaire produces. All we learn by specifying watts is how much power a light consumes while it is operating. Or put simply: what it costs us to turn them on. In other words, watts are important for assessing the efficiency of a luminaire and for selecting the appropriate electronic ballast. However, they say nothing about the brightness of this light.
The illuminance in lux specified for the luminaire, on the other hand, makes it easy to assess what effect – functional, decorative, accentuating or orienting – can be achieved.

Brightness is a generic term for subjective impressions and objective measured quantities for the visual perception of – visible – light.
This means that we all have a different "need" for brightness. As a rule, older people, for example, need more light than young people in order to have the same impression of brightness.

When planning, it should also be taken into account that dark surfaces "swallow" more light than light surfaces. Therefore: The lower the reflectance and the more difficult the visual task, the higher the illuminance needs to be.

Some examples of degrees of reflection:

▶ White walls up to 85 percent
▶ Maple and birch up to 60 percent
▶ Light oak up to 35 percent
▶ Red bricks up to 25 percent
▶ Dark oak only up to 15 percent

▶ BSI Mark

▶ ENEC

▶ VDE-GS mark

▶ EMC

▶ CE

▶ F mark

▶ MM mark
▶ Temperature-protected electronic transformer

▶ Short-circuit-proof safety transformer

▶ Independent electronic transformer

▶ Maximum permissible ambient temperature

▶ Temperature reference point

▶ Protective extra-low voltage

▶ Safety class 1 – Devices with earth conductor connection

▶ Protection class 2 – devices without protective earth connection

▶ Protection class 3 – Devices with protective extra- low voltages

▶ Protection against foreign bodies / water

▶ Use only in dry rooms

▶ QPS test mark for Canada and USA

▶ Test mark of the UL Institute

▶ Test mark of the ETL Institute

▶ Declaration of conformity for products in the United Kingdom

▶ Zigbee is the complete solution for the majority of major smart home solutions.

Tips & tricks

▶ Using Lux and Lumen values to select the right product
If you are searching for functional lighting with a certain level of illumination, you can easily see whether the chosen product has the right degree of brightness by reading the Lux values on the lighting diagram. This also allows you to compare different lights. The luminous flux, or light output of a lamp, does not provide any information on these values. It is suitable only for selecting a light in systems where these are replaceable.

▶ Extending LED leads
Leads cannot be infinitely extended. Firstly, unwanted EMC effects could occur (leading to disturbances in electronic systems); secondly, ballasts could be overloaded or the light output of the lamp significantly reduced.

▶ Our lights based on 12 V DC are supplied with a mini LED plug system M1 and may be generally extended by 2 extension leads of 1.8 m each in addition to the supply lead fitted as standard.

▶ Dimming LED lights
In the information box "Technical details", which you will find on every product page in the catalogue, we indicate whether a luminaire is dimmable. LED luminaires are dimmed by PWM (pulse width modulation) on the extra-low voltage side. This is done either by our Smart.home controls, LED dimmers or by special electronic ballasts, which are controlled by a 1-10 volt control voltage or a phase-cut dimmer, depending on the type. Important: Standard LED ballasts are not dimmable.

▶ Who remembers what?
All switches of this range "remember" their state when the power was switched off. This means, for example, for the S-Mitter that the previously set dimming level remains available after disconnection from the mains.

▶ Factors affecting life span
As a basic rule, the indicated life span of technical equipment is based on an ambient temperature of 25° Celsius. Higher temperatures usually reduce the lifetime.
When installing, avoid predictable heat build-up (e.g. by mounting a ballast between two wooden plates), unless absolutely necessary.

▶ Heat generation
The light emission of LED generates a certain amount of heat, which is however is so low (compared to other technical appliances) that it has almost no impact on the environment. The design of the light ensures that under normal conditions of use no heat accumulation will occur that reduces the life of the electronic components and the LED in particular. When using high-powered LED flex strips, the mounting surface must be able to dissipate some of the heat. We therefore recommend the use of ChannelLine profiles made of aluminium that act as heat sinks for LED light strips.

▶ Loads of ballasts for LED lights, connection of electronic switches
The power consumption of small LED lights or the standby power of our switches is sometimes so low that you need to consider the minimum load when selecting the appropriate ballast. Electronic switches should only be connected to the ballasts whose power range is specified from 0 to X W. If voltage drops below the minimum load, reliable operation is no longer guaranteed.

▶ Overload of ballasts
Make sure that the ballast is not overloaded with the number of lights connected to it.

▶ Observe the inrush current
Fully electronic ballast have no inductance in the input circuit which limits the current rise at switch-on. Therefore, a high current peak may occur when the mains voltage is switched on. When using large number of ballasts (e.g. in an exhibition) this should be considered when protecting the circuit.

▶ Electronic ballast with output control
Electronic ballast with output control compensate mains voltage fluctuations of +/- 10%, so that the emitted light flux is nearly constant. Devices of this type are also called controlled devices.
In so-called uncontrolled devices, mains voltage fluctuations of +/- 10% also mean a +/- 10% fluctuation of lamp power and light output.

▶ Using IR switches
When using IR sensors, such as in combination with the Multiswitch or the integrated sensor of InnoLine, make sure that the infrared beam is reflected cleanly to the receiver. High gloss but also too strongly frosted surfaces and incorrect mounting distances can lead here to errors. Please use the reflector stickers supplied.

▶ Blinking LED lights
Blinking lights are typical of the over- or under-loading of a ballast. This can be caused by an inappropriate number of lights excessively long line connections or a partial short-circuit (e.g. clamped line).

▶ Malfunctions or different levels of brightness in LED Versa strips.
When you connect sections of the Versa Inside strips, you need to ensure that connectors have the exact polarity and are firmly seated.

▶ Binning allows for constant product quality.
In the industrial production of LED chips, deviations always occur during the manufacturing process. The photometric properties of the chips differ in colour and luminosity. To ensure a constant light quality with the same brightness level and uniform light colour, the LED of a batch must be sorted. They are divided into selection classes, called "bins". Important selection criteria for this are chromaticity, luminous flux (unit: lumen) and colour temperature (unit: Kelvin). This is why the precise specification of the light colour of a light series is simply not possible. To ensure availability and appropriate price/performance ratio, LED lights with different production data can be equipped with different selection classes of a LED. We are committed to infrequent change of selection classes and in many lights types we already offer "single binning" – i.e. fittings with always the same LED selection.

▶ Replacing LED light bulbs
LED light bulb replacement is not provided.

▶ Care and maintenance
Please only clean your light in OFF state.
The care is limited to surfaces, e.g. acrylic glass and covers. Ensure that no moisture enters the terminal boxes or electrical parts.

▶ Important information for LED lighting systems
LED lighting systems can produce very intense beam that can possibly damage the eyes if used improperly.
Therefore, never look directly into the light from a short distance.

▶ Correct disposal of LEDs
LED modules and LED lights are mercury free, but contain electronic components. They therefore fall within the regulations of the Waste Electrical and Electronic Equipment Act (ElektroG/WEEE). LEDs must therefore not be disposed of in the residual waste. LED lights can be disposed of free of charge at appropriate collection points.

▶ Safety instructions for installation:
Always follow these instructions and the installation instructions for a safe and secure installation and use of this lamp. Keep the installation manual for future reference. Installation and electrical connections must be carried out by a qualified person. Always disconnect the power supply before connecting the circuit and secure it against unintentional reconnection. Make sure there is no voltage present before starting work. The maximum output in watts indicated on the lamp/operating unit must be taken into account when connecting it to a power circuit or a power supply unit. Under no circumstances may the specified value be exceeded! Lights may be used only for their intended purpose. Interior lighting may not be used outdoors. Lights may not be covered by any objects.

Attention! To avoid risks, a damaged outer flexible cable of this light may only be replaced by a qualified electrician or the manufacturer.

Optimisation of transport routes

A well-functioning supply chain management contributes to reducing the ecological footprint. At our Berlin plant, for example, we have completed two major optimisation projects since 2018: By rationalising transport routes as well as packaging and goods handling processes, we have reduced annual CO2 emissions by a total of 126,000 kilograms.

Mobility Management

The often great physical distance to our customers as well as to major projects requires our company vehicle fleet. The Hettich Mobility Team has set itself the task of using the vehicle fleet more effectively and environmentally friendly in the future through redesign and - where appropriate - electrification. The first tests on the topic of e-mobility in the vehicle pool were carried out as early as 2015, and additional participation in a scientific study led to further tasks after the data were evaluated: The next step was to install a paperless, digital Car-Sharing system to manage the pool vehicles.

In 2019, the vehicle pool included three electric vehicles and, as company cars four electric vehicles and one plug-in hybrid vehicle. Currently the fleet has already been expanded by four plug-in hybrid vehicles and one electric vehicle. At Kirchlengern site, an e-scooter is used for internal plant traffic.

In addition to the use of electric vehicles including home charging solutions for company car users and the establishment of an electric charging infrastructure, the Hettich Company Car Directive was also revised in 2019 with regard to CO2 emissions and drive technology, thus creating further incentives for more climate-friendly mobility behaviour: The mobility budget now offers the possibility to use the unspent budget for other offers, such as bicycle leasing.

Currently, a car-sharing exchange for the formation of carpools is being integrated into the digital Car-Sharing system of the pool vehicles. With corporate benefits such as the offer of discounted tickets on public transport (Jobticket) or the possibility of bicycle leasing through deferred compensation (JobRad), we support environmentally friendly mobility behaviour among our colleagues.

Other activities to make mobility management more environmentally friendly are being planned, such as a motivation leasing scheme or a fuel-saving competition.

Sustainable travel planning

In order to avoid unnecessary travel in advance, we have expanded our travel policy to include the aspect of sustainable travel planning: Before every business trip, we check whether it can be replaced by telephone or video conferences, thus completely avoiding traffic-related CO2 emissions.

If a business trip is indispensable, we want to take both economic and ecological aspects into account, for example by combining dates that are geographically close to each other, dispensing with domestic flights or using rail instead of car.

Energy and resource management

Own energy generation – Kirchlengern To implement our energy concept, we are further expanding the share of combined heat and power generation. In addition to the existing combined heat and power plants at the Kirchlengern site, the combined heat and power plant in the new building B7 was put into operation at the end of 2018.

Three heat pumps were also installed in B7: Two water-to-water heat pumps use the waste heat from the cooling system for heating processes. One air-to-water heat pump is used for cooling and heating processes depending on the weather conditions.

In 2019, the amount of heat obtained via combined heat and power generation –including used waste heat - amounted to 6,408 MWH at the Kirchlengern site.

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