

HÄFELE



LOOX5

The LED lighting system
for furniture and rooms.

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Dear Customer,

Häfele has pioneered the way interior fittings are sold across the globe for many years now. Being a German company our foremost concern has always been to offer our customers products that are at the cutting edge of functionality and design; and backed by the highest standards in Customer Service. In our markets, we are increasingly being recognized as a one-stop interior specialist brand that can enable functionality for any interior design through a holistic solution offering, be it door hardware, furniture or kitchen fittings, sliding systems, built-in appliances, bathroom solutions, furniture lighting and interior surfaces.

Keeping this proposition in mind, we are happy to introduce to you our one-of-its-kind, comprehensive lighting catalogue that will enable you to effectively plan the lighting needs for your home. Through this catalogue, we share with you our knowledge and expertise in understanding the functionality of different types of lighting options and how they work effectively to enhance your interior spaces. This catalogue takes you through the entire range of Häfele's 5th Generation Furniture Lighting Solutions – Loox5 that encapsulates the essence of four generations of lighting systems that have redefined home ambience and ergonomics over the last 10 years.

Loox5 takes lighting to the next level. Inspired by the demands of time, Loox5 makes lights easy, logical and linear. These lights have not just been designed but in fact have been engineered keeping the utmost comfort for the consumers in mind. The range presents itself as a unique combination of elegant design and state-of-the-art technology making it the perfect choice for any home furniture application; be it Task Lighting for Kitchen cabinets and plinths, Decorative Lighting for Living room showcases, Mood Lighting for Bedroom Applications or pure Functional Lighting in Wardrobes.

Häfele's Loox Lighting System meets the increasing demands for lighting in furniture and rooms just as well as the growing need for networking, digitalisation and maximum simplicity, and flexibility. It answers the questions that are driving our time. It's easier, better and above all, much smarter than its predecessors. It pays tribute to the demands of the furniture industry with its high reliability, even with around-the-clock operation. The Loox5 lighting system features a significant increase in performance, indispensable for linear lighting that is in great demand in the LED sector.

The planning of light in furniture and furnishings puts a multitude of demands on architects, electricians, contractors and finishers, and even developers and operators. The practical, aesthetic and emotional aspects of lighting ensure that the proposed concepts contribute to unique and flexible room design; in residential, commercial, office and display settings as well as in hotels and serviced apartments. We at Häfele put this important element of light planning at the centre of a comprehensive collection of ideas; it comes as no surprise, therefore, that we are the pioneers of 'furniture lighting' with the widest range of lighting solutions for furniture.

So, go through the many solutions presented in our Loox5 catalogue and visit our Design Showrooms for an informed dialogue with me or the Häfele team. We look forward to partnering with you and assisting every need you may have to make your dream homes a reality.

Jürgen Wolf

Managing Director

Häfele South Asia

Hafele

Reassuring Expertise



"For over 9 decades, we've been helping people make more of their homes.

Established in Germany, and now operating worldwide, we specialise in the fittings, hardware and systems that improve the way your home, works. So when you choose our products as part of your new or reformed home, you know you're getting the benefit of extensive knowledge and decades of experience.

And we're still a family business, owned and managed by family members who really care about the products and service we provide. You can rely on our commitment to the highest standards of quality and reliability, founded on a long tradition of German engineering where attention to detail is second nature.

All our home improvement ideas are built to last – day in, day out – we want you to get the very best from every corner of your home, for many years to come."

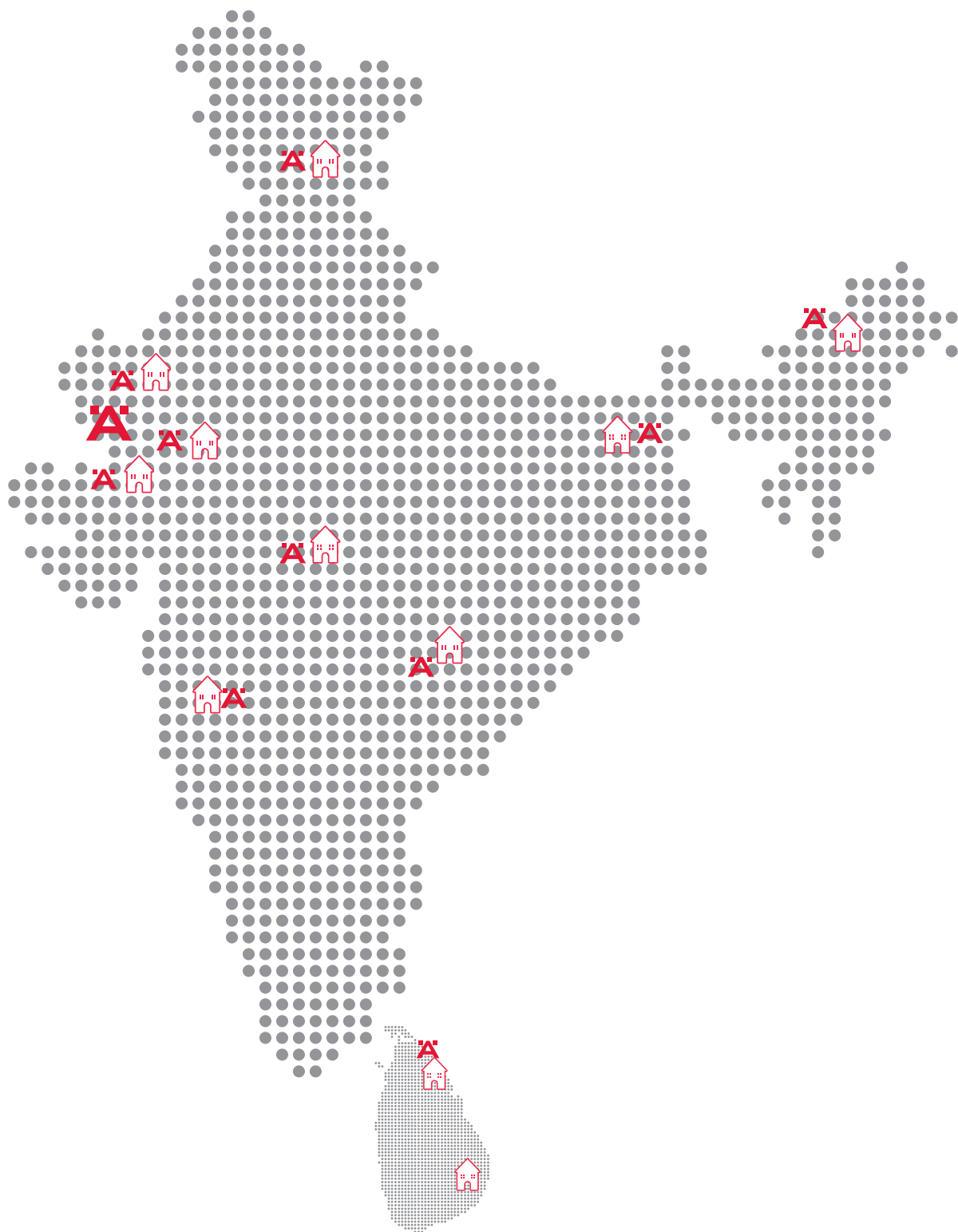
Häfele Worldwide



With its origin in 1923 in a small town named 'Nagold' from the Swabian region of Germany that nurses a passion for hardware technology, it is no surprise that Häfele has lived up to its roots through a successful presence in the architectural and furniture hardware industry for over 9 decades now. Today, Häfele's worldwide penetration includes 38 subsidiaries across Europe, America, Asia, Australia and New Zealand. With these subsidiaries and numerous other sales organisations, Häfele operates in over 150 countries. The Häfele headquarters, 4 manufacturing units and 10 sales offices are located within Germany; while 1 manufacturing unit is located at Budapest, Hungary. The company also owns one of the largest and most sophisticated warehouses in its home country. The Häfele worldwide workforce is empowered by a base of over 7800 employees.

The group services over 150,000 customers across the globe through its extensive range of hardware products and a comprehensive logistics system. In addition to this, Häfele also provides consultative services to its customers, educating and advising them about buying the correct hardware as per their requirements. With this level of market penetration and ability to handle worldwide demand, it comes as no surprise that the company is an authority in the segment of home interior solutions; what is pleasantly surprising, though, is that in spite of its size, Häfele still remains a family owned and run business with a unique, friendly and value-centric work culture which is strongly followed among all its subsidiaries.

Hafele India



 Head Office & Regional Offices

 Hafele Design Showrooms



Häfele India is a wholly-owned subsidiary of the Häfele Global network and has been operating in India since 2003 under the leadership of Mr. Jürgen Wolf (Managing Director). The ability of the company to understand the diverse Indian market has made it an authority in the field of architectural hardware, furniture and kitchen fittings and accessories. The company also has a strong presence in synergized product categories namely Appliances, Lights, Sanitary and Surfaces catering to the focused demand from these industries.

The subsidiary has a strong nation-wide presence with offices in Mumbai, Pune, Ahmedabad, Bangalore, Chennai, Hyderabad, Delhi, Kolkata and Cochin. It has full-scale operations in Sri Lanka and Bangladesh with Regional offices and Design Showrooms in both the countries; and has also spread its operations to other regions of South Asia including Nepal, Bhutan and Maldives.

Häfele's design showrooms are hubs of international home interior trends and cutting edge designs presented in a world-class environment, where customers can see home solutions in their inherent applications. These showrooms function as a one-stop-shop for all home interior and improvement needs - from providing in-depth technical advice to kitchen and wardrobe designing services through a team of experts stationed at the showroom.

Häfele India services its customers with a base of over 850 employees, a well-networked Franchise base of over 130 shops along with over 1000 dealers situated across South Asia. The subsidiary has a sophisticated Logistics centre in Mumbai along with distribution centres in Delhi, Bangalore, Kolkata and Colombo respectively.

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 Light effects
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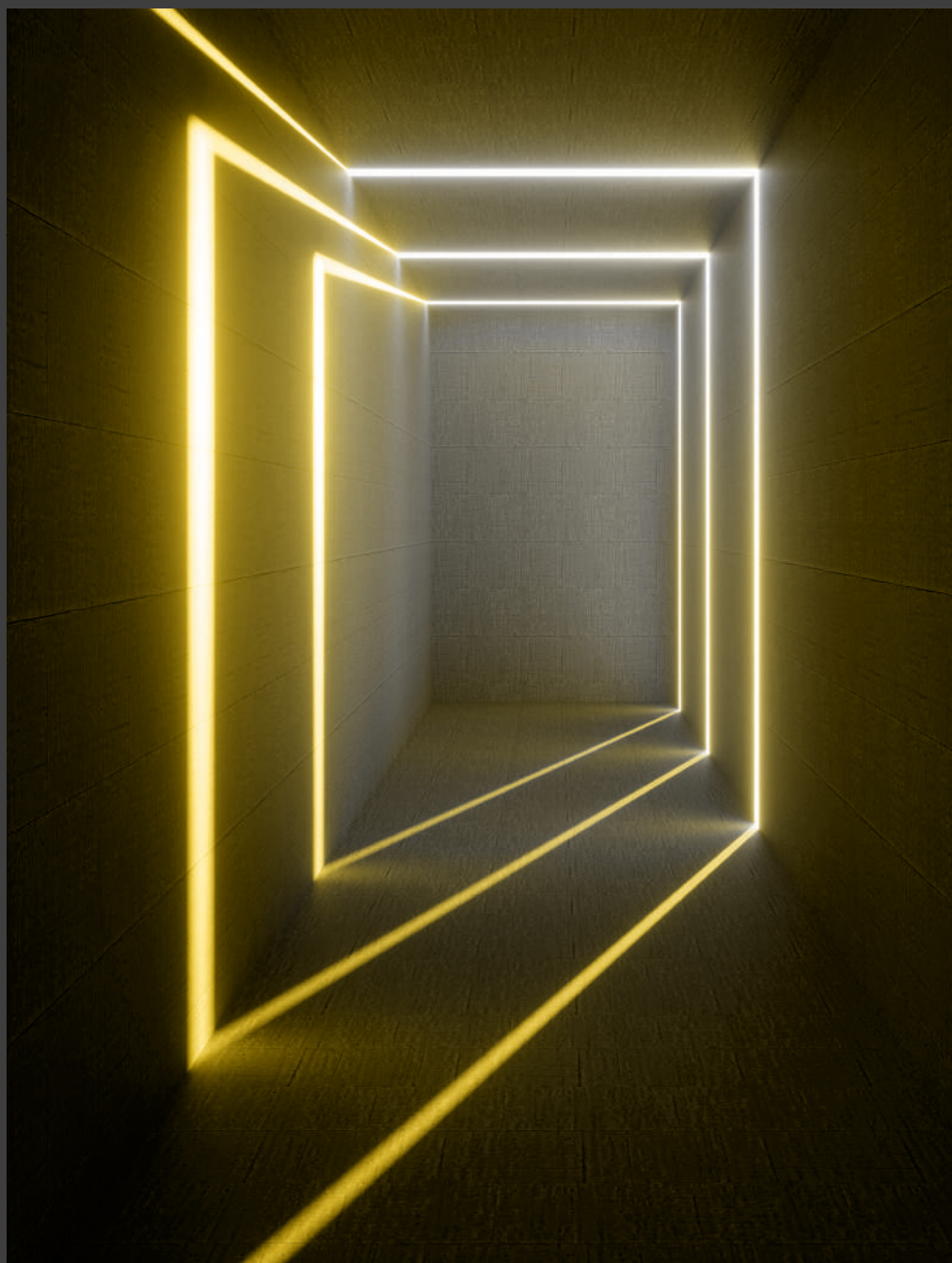


LOX5

LIGHT HAS IMPACT



on.



LOOX5



We have spent about 100,000 hours working with LED lights, we have developed and researched, we have had many valuable discussions with partners in trade and industry – and we have learned a great deal. The market is demanding digital answers.

The result after four generations of Loox LED lights is therefore not simply further development, but a new level. Our development has accelerated. Because the world is accelerating, and the demands of our customers are growing at an equally rapid rate.

The essence of four generations.

We are driven by the same questions
time and time again.

How can it be made easier?
How can it be made better?
How can it be made more intelligent?

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The essence of our experience
therefore has a new face.

Welcome to Loox5.



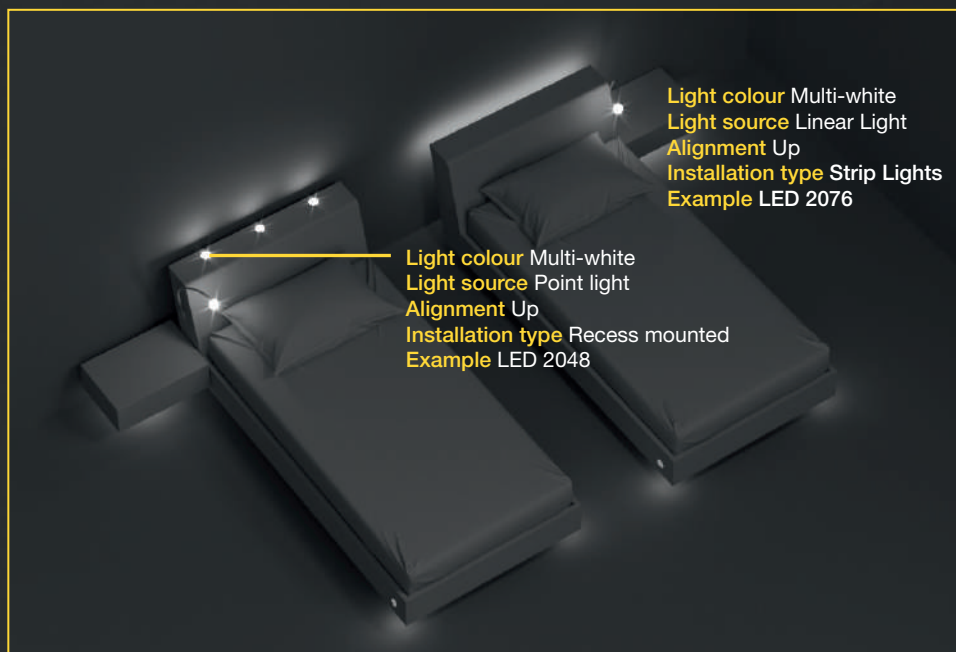
**Easy.
Logical.
Linear.**



Light is easy.

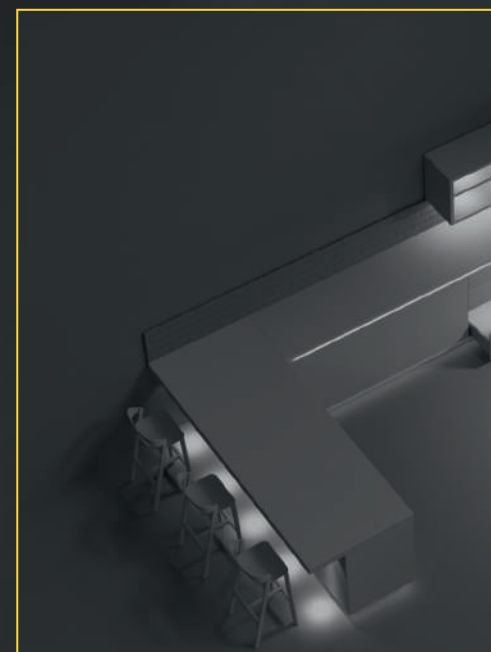
**Few criteria.
Many solutions.**

Light colour	Monochrome Multi-white RGB
Light intensity	Task light Ambient light Accent light
Light source	Linear light Point light
Alignment	Directly or indirectly Up or down Forward or backward To the side
Position on the cabinet	Outside Inside
Installation type	Recess mounted Surface mounted



Light in the sleeping area.

Ambience full of atmosphere for rest areas.



Light in the kitchen.

Functionality for every action.



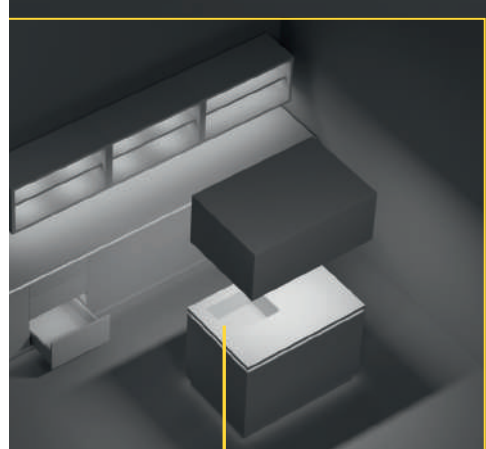
Light colour Monochrome
Light intensity Ambient light
Light source Linear light
Alignment To the side
Installation type Attached at the side to the circular mounting plate behind the mirror
Example LED 2061, just 5 mm wide for slim design applications

Light in the storage space.

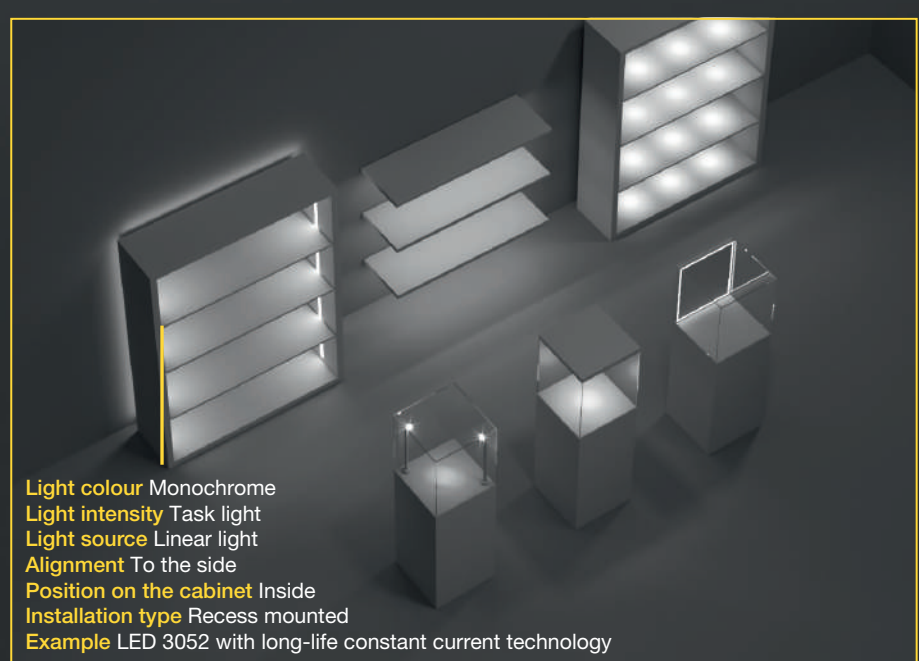
Orientation for perfect organisation.



Light colour Monochrome
Light intensity Accent light
Light source Linear light
Alignment Down
Installation type Recess mounted
Example LED 2062



Light colour Monochrome
Light intensity Task light
Light source Linear light
Alignment Down
Installation type Recess mounted, several strips in parallel
Example LED 3048



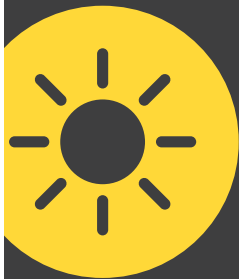
Light colour Monochrome
Light intensity Task light
Light source Linear light
Alignment To the side
Position on the cabinet Inside
Installation type Recess mounted
Example LED 3052 with long-life constant current technology

Light in store fixtures.

Value for the presentation of goods.

Light is plannable.

The need to observe only a few planning steps structures and simplifies the planning of lighting in furniture.



Illuminating.

At the start of the development process, determine the lighting purposes of the furniture (multiple choices possible)

- > **Task light for pleasant and safe working**
- > **Ambient light for highlighting, staging or emotionalising**
- > **Accent light for storage spaces or paths**

Also take into account the overall brightness of the room and the finishes to be illuminated: Sufficiently bright ceiling lighting or sunlight makes the orientation light unnecessary during the day, but at night it may be very pleasant if the ceiling lighting does not need to be used and a few furniture pieces provide some orientation light.

For confidence in the planning process, test lighting and finishes or use bright lighting with dimmers to achieve a balance of incident light and reflection.

The form factor of a light (linear, point) and the number used affects the planarity of the illumination. Light colour, installation type, position on the cabinet, and alignment are further criteria to select the perfect light.



Extending.

Häfele Loox drivers supply not only lights, but also charging stations (inductive and USB), audio systems, as well as electrically operated flap fittings, sliding doors, or TV lifts. Take advantage of the potential of Häfele Loox systems. Create furniture that can do more than simply look good.

The chapter structure of the Loox brochure simplifies the ordering process by using this simple planning process.

Take advantage of the potential of Häfele Loox5 and create furniture that can do more than simply look good.



Switching.

Plan switch requirements and switch positions. Simple mechanical switches or convenient sensors and dimmers can be grouped together by means of multi driver or multi switch boxes to conveniently operate lights from a single location or from different locations.

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Networking.

The Häfele Connect Mobile App is the central element for controlling monochrome lights, multi-white lights, or RGB lights individually or jointly.

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Distributing.

Plan the concealed cable routing and provide holes, grooves, or panels. An extensive range of extension leads and distributors facilitates suitable cabling of your project.

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Supplying.

Add up the wattage of all lights and other devices.

If necessary, take into account possible later expansions and select a driver of the appropriate performance class. Lights of the same voltage type or current may be connected to a common driver. Converters are also available and are necessary if lights with different voltage types and currents will share a driver.

Choose a distributor for your current needs (with or without switching function or with Häfele Connect). The distributor can be easily replaced at a later time. Therefore, make sure the drivers are accessible in the furniture.





LOX5

Linear light



Task light Illuminate work spaces with > 500 lx at a distance of 500 mm

					Illuminance max. at a distance of 500 mm lx	
LED 3052	24 V	Constant current	8 mm	19.2 W/m	1840	> Page 32
LED 3048	24 V		8 mm	14.4 W/m	1320	> Page 30
LED 2068	12 V		8 mm	9.6 W/m	955	> Page 30
LED 2061	12 V		5 mm	9.6 W/m	860	> Page 28
LED 2074	12 V		5 mm	9.6 W/m	955	> Page 34



Ambient light 150–500 lx at a distance of 500 mm

					Illuminance max. at a distance of 500 mm lx	
LED 2062	12 V		8 mm	4.8 W/m	470	> Page 30
LED 2071	12 V		8 mm	4.8 W/m	470	> Page 34



Accent light <150 lx at a distance of 500 mm

LED 2019	12 V	Glass edge light		0.2 W	> Page 66
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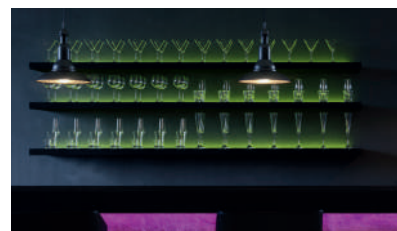
Multi-white lights

					Illuminance max. at a distance of 500 mm lx	
LED 2073	12 V		8 mm	4.8 W/m	445	> Page 36
LED 2076	12 V		8 mm	9.6 W/m	875	> Page 36



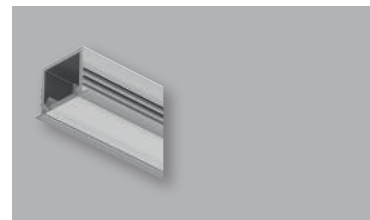
RGB lights

LED 2016	12 V		12 mm	7.1 W/m	-	> Page 38
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Aluminium profiles for recess mounting

Model	Internal dimension		
1104	8 mm	For strip lights up to a width of 5 mm	> Page 40
1103	11 mm		> Page 40
1105	11 mm	Asymmetrical light distribution	> Page 41
	16 mm		> Page 42
1107	8 mm	Asymmetric light distribution, for strip lights up to a width of 5 mm	> Page 43
1106	11 mm	Asymmetrical light distribution	> Page 43



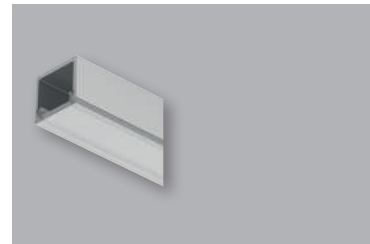
Poly-carbonate profiles for recess mounting

1102	5 mm	> Page 44
1101	8 mm	> Page 44



Aluminium profiles for surface mounting

2102	11 mm	> Page 45
2104	11 mm	With concealed fixing, asymmetric light distribution
	16 mm	> Page 47
	16 mm	With attached diffuser housing
	14 mm	Corner mounting
	14 mm	Drawer profile
	50 mm	Two-way aluminium profile



Aluminium wardrobe rail

15 mm	Asymmetrical light distribution	> Page 50
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Poly-carbonate glass edge profile

11 mm	> Page 50
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Diffusers

For profiles for recess mounting 1103-1107	> Page 52
For profiles for recess mounting 2101-2104	
For Loox profiles with 16 mm internal dimension	> Page 52



Point light



Task light

Illuminate work spaces with > 500 lx at a distance of 500 mm



LED 2026 12 V

Recess
mounted/
surface
mounted

Drill hole
Ø 58 mm

3.0 W

> Page 56



Ambient light

Stage furnishings with 150–500 lx at a distance of 500 mm



LED 2047 12 V

Recess mounted/
surface mounted

Drill hole
Ø 55 mm

3.0 W

> Page 54



LED 2020 12 V

Recess mounted/
surface mounted

Drill hole
Ø 55 mm

3.2 W

> Page 60



LED 2022 12 V

Recess mounted/
surface mounted

Drill hole
Ø 26 mm

1.5 W

> Page 62



LED 2039 12 V

Recess mounted

Ø 58 mm

2.5 W

> Page 64



LED 2027 12 V

Recess mounted

Drill hole
Ø 65 mm

2.6 W

> Page 67



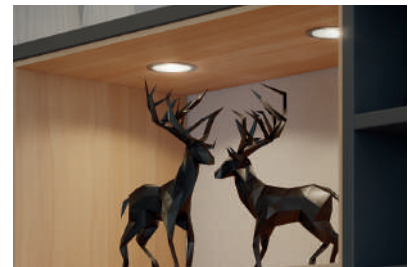
LED 2036 12 V

Recess mounted

-

3.6 W

> Page 70



Accent light

Illuminate non-hazardous traffic areas and corridors or storage spaces with <150 lx at a distance of 500 mm



LED 2028 12 V

Recess mounted

Drill hole
Ø 54 mm

0.3 W

> Page 65



LED 2019 12 V

Glass Edge
Light

-

0.2 W

> Page 66



LED 4004 350 mA

Recess mounted/
surface mounted

Drill hole
Ø 28 mm

1 W

> Page 71



LED 4005 350 mA

Recess mounted/
surface mounted

Drill hole
Ø 28 mm

1 W

> Page 72



Flexible surface mounted lights



LED 2034 12 V

Surface mounted, with charging
station

1.5 W

> Page 68

LED 2035 12 V

Surface mounted

1.5 W

> Page 69





Multi-white lights

	LED 2048	12 V	Recess mounted/ surface mounted	Drill hole Ø 26 mm	3.0 W	> Page 58
	LED 3039	24 V				



Shelf Lights

Deco shelf light	LED Decorative Box Shelf Light	12 V	Surface mounted	-	10/13 W	> Page 73
Deco shelf light	LED Corner Shelf Light	12 V	Surface mounted		4.5 W	> Page 74
Box shelf light	Box Shelf Light	12 V	Surface mounted		6/9 W	> Page 75



Other Lights

LED drawer light	-	12 V	Surface mounted	-	6 W	> Page 76
Two way profile light	-	12 V	Surface mounted		11/17 W	> Page 76





Linear light

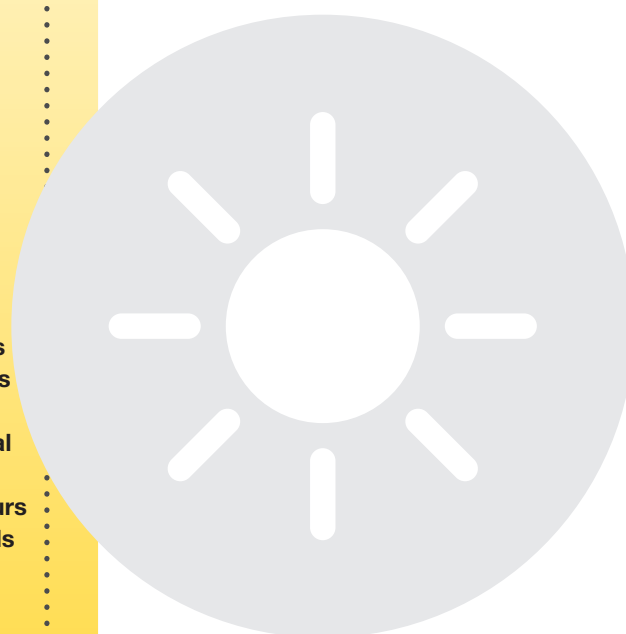
For universal use in furniture.

Good reasons.

- > Continuous light line with homogeneous light distribution
- > Minimalistic design
- > Virtually invisible, glare-free light source
- > Easy installation

For every situation.

- > Radiant task light for work spaces
- > Discreet ambient light for wellness zones
- > Poly-carbonate profiles for vertical illumination in storage spaces
- > Aluminium profiles in trendy colours for top-of-the-line design demands



LED strip lights

Monochrome, 5 mm



Häfele Loox5 LED 2061; High Performance



LED 2061

Illuminance value in lx applies to 1 m strip length:

2700 K	3000 K	4000 K	5000 K	120°	
1860 lx	1960 lx	2000 lx	2060 lx		250 mm
790 lx	850 lx	860 lx	860 lx		500 mm
440 lx	470 lx	480 lx	480 lx		750 mm
270 lx	290 lx	290 lx	290 lx		1000 mm

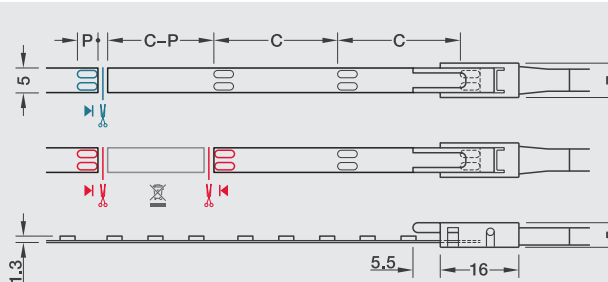
LED 2061

Equipped with high-quality Samsung LEDs

- > Dimmable: Yes
- > Material: Plastic
- > Finish/colour: White
- > Width: 5 mm
- > Height: 1.3 mm
- > Life time L80/B10: >50,000 h
- > Energy efficiency class: A+
- > Degree of protection: IP20
- > Mounting: Self-adhesive
- > Supplied with: 1 roll



Order reference:
Please order lead separately.



- Cut LED strip light to length
(one contact side remains on the remainder piece; reusable)
- Connect LED strip lights
(two contact sides required)

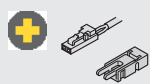
C = section length
P = length of contact surface

Voltage	Quantity	Colour temperature	Wattage	Luminous flux	Luminous efficacy	Colour rendering index CRI		Weight. energy consumpt. per m in kWh/ 1000 h	Section length C	Length of contact surface P	Max. strip length (visual)	Available length
V	LEDs/m	K	W/m	lm/m	lm/W	R _a	R ₉		mm	mm	m	5 m
Häfele Loox5 LED 2061												
	120	2700	9.6	870	91	>90	>50	10.56	25	3	3.0	833.74.328
		3000	9.6	830	97	>90	>50	10.56	25	3	3.0	833.74.329
		4000	9.6	955	99	>90	>50	10.56	25	3	3.0	833.74.330
		5000	9.6	990	103	>90	>50	10.56	25	3	3.0	833.74.331



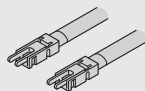
Maximum visual strip length applies for an imperceptible drop in luminous flux of max. 30%.

Häfele Loox5 LED2061; High Performance



> 3.5 A/20 AWG lead for LED strip light
5 mm

Voltage	Length mm	Cat. No.
5 12V	2000	833.72.742



> 3.5 A/20 AWG interconnecting lead for
5 mm LED strip light

Length mm	Cat. No.
500	833.89.195



> 3.5 A clip connector for 5 mm LED strip
light

	Cat. No.
Clip connector	833.89.207



> Corner connector, 90° rigid, 3.5 A for left or
right for 5 mm LED strip light

	Cat. No.
Corner connector rigid	833.89.190



LED strip lights

Monochrome, 8 mm



Häfele Loox5 LED 2062/2068 / 3048; High Performance



LED 2062



LED 2068



LED 3048

Illuminance value in lx applies to
1 m strip length:

2700 K	3000 K	4000 K	5000 K	120°	
1050 lx	1090 lx	1120 lx	1130 lx		250 mm
435 lx	455 lx	460 lx	470 lx		500 mm
240 lx	245 lx	260 lx	260 lx		750 mm
145 lx	150 lx	155 lx	160 lx		1000 mm

LED 2062

2700 K	3000 K	4000 K	5000 K	120°	
2145 lx	2250 lx	2300 lx	2300 lx		250 mm
900 lx	940 lx	950 lx	955 lx		500 mm
480 lx	505 lx	510 lx	515 lx		750 mm
300 lx	310 lx	320 lx	320 lx		1000 mm

LED 2068

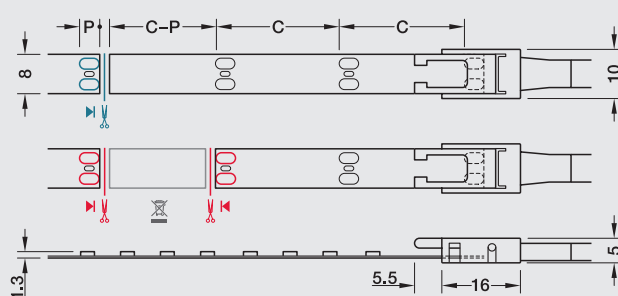
2700 K	3000 K	4000 K	5000 K	120°	
2870 lx	3000 lx	3100 lx	3100 lx		250 mm
1210 lx	1270 lx	1310 lx	1320 lx		500 mm
665 lx	695 lx	715 lx	715 lx		750 mm
415 lx	430 lx	445 lx	450 lx		1000 mm

LED 3048

Equipped with high-quality Samsung LEDs

- > Dimmable: Yes
- > Material: Plastic
- > Finish/colour: White
- > Width: 8 mm
- > Height: 1.3 mm
- > Life time L80/B10: >50,000 h
- > Energy efficiency class: A+
- > Degree of protection: IP20
- > Mounting: Self-adhesive
- > Supplied with: 1 roll

! Order reference:
Please order lead separately.



- Cut LED strip light to length
(one contact side remains on the remainder piece; reusable)
- Connect LED strip lights
(two contact sides required)

C = section length
P = length of contact surface

Häfele Loox5 LED 2062/2068/ 3048; High Performance

Voltage	Quantity	Colour temperature	Wattage	Luminous flux	Luminous efficacy	Colour rendering index CRI		Weight. energy consumpt. per m in kWh/1000 h	Section length C	Length of contact surface P	Max. strip length (visual)	Available length
V	LEDs/m	K	W/m	lm/m	lm/W	R _a	R ₉		mm	mm	m	5 m
5 12V	Häfele Loox5 LED 2062											
	60	2700	4.8	440	92	>90	>50	5.28	50	4	6.0	833.74.336
		3000	4.8	465	97	>90	>50	5.28	50	4	6.0	833.74.337
		4000	4.8	490	102	>90	>50	5.28	50	4	6.0	833.74.338
		5000	4.8	495	103	>90	>50	5.28	50	4	6.0	833.74.339
	Häfele Loox5 LED 2068											
	120	2700	9.6	920	96	>90	>50	10.56	25	4	4.0	833.74.362
		3000	9.6	970	101	>90	>50	10.56	25	4	4.0	833.74.363
		4000	9.6	1000	104	>90	>50	10.56	25	4	4.0	833.74.364
		5000	9.6	1040	108	>90	>50	10.56	25	4	4.0	833.74.365
	Häfele Loox5 LED 3048											
	120	2700	14.4	1270	88	>90	>50	15.84	50	4	6.2	833.76.352
		3000	14.4	1305	91	>90	>50	15.84	50	4	6.2	833.76.353
		4000	14.4	1340	93	>90	>50	15.84	50	4	6.2	833.76.354
		5000	14.4	1430	99	>90	>50	15.84	50	4	6.2	833.76.355



Maximum visual strip length applies for an imperceptible drop in luminous flux of max. 30%.



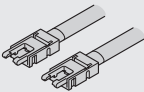
> 5 A/18 AWG lead for LED strip light 8 mm

Voltage	Length mm	Cat. No.
5 12V	2000	833.72.716
5 24V	2000	833.75.705



> 5 A clip connector for 8 mm LED strip light

	Cat. No.
Clip connector	833.89.206



> 5 A/18 AWG interconnecting lead for 8 mm LED strip light

Length mm	Cat. No.
500	833.89.192



> Corner connector, 90° rigid, 5 A for left or right for 8 mm LED strip light

	Cat. No.
Corner connector rigid	833.89.187

LED strip lights

Monochrome, 8 mm

Häfele Loox5 LED 3052; High Performance



LED 3052

Illuminance value in lx applies to 1 m strip length:

2700 K	3000 K	4000 K	5000 K	120°	
4070 lx	4160 lx	4220 lx	4260 lx		250 mm
1750 lx	1780 lx	1800 lx	1840 lx		500 mm
970 lx	990 lx	1000 lx	1020 lx		750 mm
600 lx	620 lx	625 lx	630 lx		1000 mm

LED 3052

Constant current technology

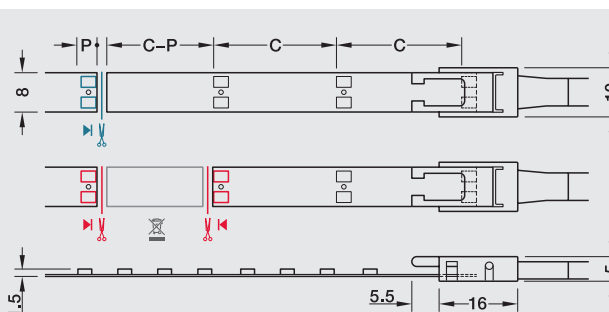
- > Achieves uniform brightness over the entire strip light length
- > Increased life time, higher visual strip length, higher luminous efficacy

Equipped with high-quality Samsung LEDs

- > Dimmable: Yes
- > Material: Plastic
- > Finish/colour: White
- > Width: 8 mm
- > Height: 1.5 mm
- > Life time L80/B10: >70,000 h
- > Energy efficiency class: A+
- > Degree of protection: IP20
- > Mounting: Self-adhesive
- > Supplied with: 1 roll



Order reference: Please order lead separately.



— Cut LED strip light to length
(one contact side remains on the remainder piece;
reusable)

— Connect LED strip lights
(two contact sides required)

C = section length

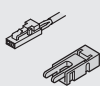
P = length of contact surface

Voltage	Quantity	Colour temperature	Wattage	Luminous flux	Luminous efficacy	Colour rendering index CRI		Weight. energy consumpt. per m in	Section length C	Length of contact surface P	Max. strip length (visual)	Available length
V	LEDs/m	K	W/m	lm/m	lm/W	R _a	R ₉	kWh/1000 h	mm	mm	m	5 m
5 24 V	Häfele Loox5 LED 3052											
	140	2700	19.2	1850	96	>90	>50	21.12	50	3	4.6	833.76.378
		3000	19.2	2015	105	>90	>50	21.12	50	3	4.6	833.76.379
		4000	19.2	2050	107	>90	>50	21.12	50	3	4.6	833.76.380
		5000	19.2	2100	109	>90	>50	21.12	50	3	4.6	833.76.381



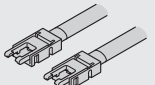
The maximum visual strip length for Loox 5 constant current strips is the length without drop in luminous flux.

Häfele Loox5 LED 3052; High Performance



> 5 A/18 AWG lead for LED strip light 8 mm

Voltage	Length mm	Cat. No.
5 24 V	2000	833.75.705



> 5 A/18 AWG interconnecting lead for 8 mm LED strip light

Length mm	Cat. No.
500	833.89.192



> 5 A clip connector for 8 mm LED strip light

Clip connector	Cat. No.
	833.89.206



> Corner connector, 90° rigid, 5 A for left or right for 8 mm LED strip light

Corner connector rigid	Cat. No.
	833.89.187



LED strip lights

Monochrome, 8 mm

Häfele Loox5 LED 2071 / 2074; Standard



LED 2071



LED 2074

Equipped with high-quality Samsung LEDs

- > Dimmable: Yes
- > Material: Plastic
- > Finish/colour: White
- > Width: 8 mm
- > Height: 1.3 mm
- > Life time L80/B10: >30,000 h
- > Energy efficiency class: A+
- > Degree of protection: IP20
- > Mounting: Self-adhesive
- > Supplied with: 1 roll

! Order reference:
Please order lead separately.

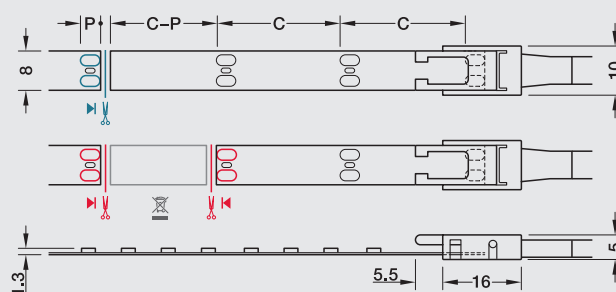
Illuminance value in lx applies to
1 m strip length:

2700 K	3000 K	4000 K	5000 K	120°	
1050 lx	1090 lx	1120 lx	1130 lx		250 mm
435 lx	455 lx	460 lx	470 lx		500 mm
240 lx	245 lx	260 lx	260 lx		750 mm
145 lx	150 lx	155 lx	160 lx		1000 mm

LED 2071

2700 K	3000 K	4000 K	5000 K	120°	
2145 lx	2250 lx	2300 lx	2300 lx		250 mm
900 lx	940 lx	950 lx	955 lx		500 mm
480 lx	505 lx	510 lx	515 lx		750 mm
300 lx	310 lx	320 lx	320 lx		1000 mm

LED 2074



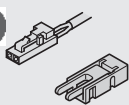
- Cut LED strip light to length
(one contact side remains on the remainder piece; reusable)
- Connect LED strip lights
(two contact sides required)

C = section length
P = length of contact surface

Häfele Loox5 LED 2071 / 2074; Standard

Voltage	Quantity	Colour temperature	Wattage	Luminous flux	Luminous efficacy	Colour rendering index CRI		Weight. energy consumpt. per m in kWh/ 1000 h	Section length C	Length of contact surface P	Max. strip length (visual)	Available length
V	LEDs/m	K	W/m	lm/m	lm/W	R _a	R ₉		mm	mm	m	5 m
5 12 V	Häfele Loox5 LED 2071											
60	2700	4.8	440	92	90	>50	5.28	50	4	6.0	833.74.300	
	3000	4.8	465	97	90	>50	5.28	50	4	6.0	833.74.301	
	4000	4.8	490	102	90	>50	5.28	50	4	6.0	833.74.302	
	5000	4.8	495	103	90	>50	5.28	50	4	6.0	833.74.303	
Häfele Loox5 LED 2074												
120	2700	9.6	920	96	90	>50	10.56	25	4	3.5	833.74.308	
	3000	9.6	970	101	90	>50	10.56	25	4	3.5	833.74.309	
	4000	9.6	1000	104	90	>50	10.56	25	4	3.5	833.74.310	
	5000	9.6	1040	108	90	>50	10.56	25	4	3.5	833.74.311	

! Maximum visual strip length applies for an imperceptible drop in luminous flux of max. 30%.



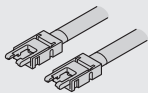
> 5 A/18 AWG lead for LED strip light 8 mm

Voltage	Length mm	Cat. No.
5 12V	2000	833.72.716



> 5 A clip connector for 8 mm LED strip light

	Cat. No.
Clip connector	833.89.206



> 5 A/18 AWG interconnecting lead for 8 mm LED strip light

Length mm	Cat. No.
500	833.89.192



> Corner connector, 90° rigid, 5 A for left or right for 8 mm LED strip light

	Cat. No.
Corner connector rigid	833.89.187



LED strip lights

Multi-white, 8 mm



Häfele Loox5 LED 2073 / 2076; Standard



LED 2073



LED 2076

Illuminance value in lx applies to 1 m strip length:

2700 K	5000 K	120°	
1025 lx	1075 lx		250 mm
425 lx	445 lx		500 mm
230 lx	245 lx		750 mm
145 lx	150 lx		1000 mm

LED 2073

2700 K	5000 K	120°	
2040 lx	2110 lx		250 mm
850 lx	875 lx		500 mm
460 lx	470 lx		750 mm
280 lx	290 lx		1000 mm

LED 2076

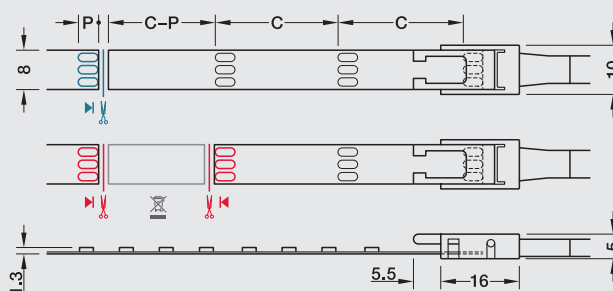
Optimised light mixture

- > Cool white and warm white LEDs in the smallest of spaces
- > Optimal light mixture without flickering

- > Dimmable: Yes
- > Material: Plastic
- > Finish/colour: White
- > Width: 8 mm
- > Height: 1.3 mm
- > Life time L80/B10: >30,000 h
- > Energy efficiency class: A+
- > Degree of protection: IP20
- > Mounting: Self-adhesive
- > Supplied with: 1 roll



Order reference:
Please order lead separately.



- Cut LED strip light to length
(one contact side remains on the remainder piece; reusable)
- Connect LED strip lights
(two contact sides required)

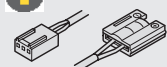
C = section length
P = length of contact surface

Häfele Loox5 LED 2073 / 2076; Standard

Voltage	Quantity	Colour temperature	Wattage	Luminous flux	Luminous efficacy	Colour rendering index CRI		Weight. energy consumpt. per m in	Section length C	Length of contact surface P	Max. strip length (visual)	Available length
V	LEDs/m	K	W/m	lm/m	lm/W	R _a	R ₉	kWh/1000 h	mm	mm	m	5 m
5 12V	Häfele Loox5 LED 2073											
	2 x 60	2700 5000	4.8	425 465	88 96	90	>50	5.28	50	4	4.5	833.74.316
	Häfele Loox5 LED 2076											
	2 x 120	2700 5000	9.6	875 940	91 97	90	>50	10.56	25	3.5	3	833.74.318



Maximum visual strip length applies for an imperceptible drop in luminous flux of max. 30%.



> 3.5 A/20 AWG interconnecting lead for 8 mm multi-white LED strip light

Length mm	Cat. No.
500	833.72.717



> 3.5 A clip connector for 8 mm multi-white LED strip light

	Cat. No.
Clip connector	833.89.208



> Corner connector 90° rigid, 3.5 A for left or right for 8 mm multi-white LED strip light

	Cat. No.
Corner connector rigid	833.89.188



Use Häfele BLE Box to operate the multi-white strip lights. See page 88

LED strip lights

RGB, 12 mm

RGB



Häfele Loox LED 2016



LED 2016

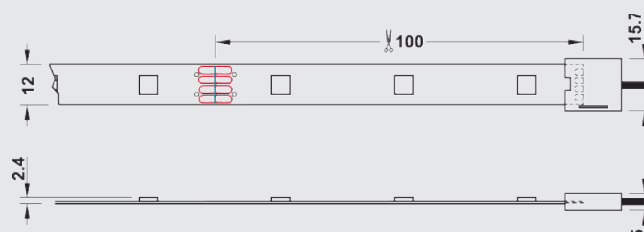


Bright light sources with changing colours are often in demand for lighting. The LED 2016 colour changing strip light meets these requirements easily.

- > Dimmable: Yes, via RGB colour mixer with remote control
- > Material: Plastic
- > Finish/colour: LED board, white
- > Length: 5000 mm
- > Width: 12 mm
- > Height: 2.4 mm
- > Life time L70/B50: 30,000 h
- > Energy efficiency class: A+
- > Degree of protection: IP20
- > RGB color mixers: Max. 10 with 1-10 remote controls within a radius of 15 m
- > Installation: Self-adhesive
- > Supplied with: 5 m roll and 2 m lead 2.5 A/22 AWG



Order reference:
Please order lead separately.

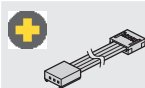


- Cut LED strip light to length
(one contact side remains on the remainder piece; reusable)
- Connect LED strip lights (two contact sides required)

- > Can be shortened every 100 mm
- > Note clip connector width when choosing the aluminium profile

Voltage	Quantity	Colour temperature	Wattage	Luminous flux	Luminous efficacy	Colour rendering index CRI		Weight. energy consumpt. per m in	Section length C	Length of contact surface P	Max. strip length (visual)	Available length
V	LEDs/m	K	W/m	lm/m	lm/W	R _a	R ₉	kWh/1000 h	mm	mm	m	5 m
12V	Häfele Loox5 LED 2016											
	30	RGB	7.1	1050	29	-	-	-	100	-	3.4	833.73.450

Häfele Loox LED 2016



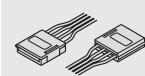
> Lead, 2.5 A/22 AWG, with clip for LED RGB strip light

Volt-age	Length mm	Cat. No.
12V	2000 mm	833.74.764
	4000 mm	833.74.745



> Corner connector, rigid, 2.5 A, for LED RGB strip light

	Cat. No.
Corner connector	833.74.760



> Interconnecting lead, 2.5 A/22 AWG, with clip for LED RGB strip light

	Cat. No.
50 mm	833.74.766
500 mm	833.74.767
1000 mm	833.74.779
2000 mm	833.74.768



> Clip connector, 2.5 A for LED RGB strip light

Length mm	Cat. No.
Clip connector	833.74.761

! Maximum visual strip length applies for an imperceptible drop in luminous flux of max. 30%.

! Use Häfele BLE Box to operate Multi white LED Lights. See page 88



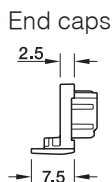
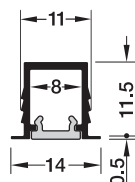
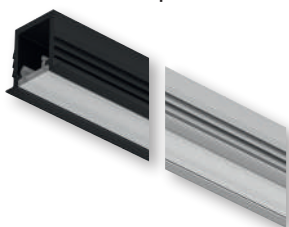
Profiles for recess mounting

Aluminium

Häfele Loox5 profile 1104/1103



Häfele Loox5 profile 1104

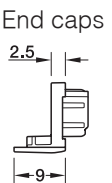
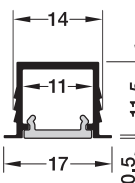
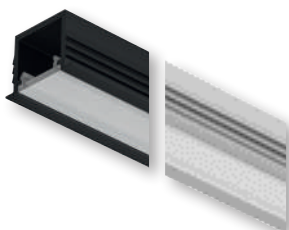


- > Material: Profile: Aluminium, Diffuser: Plastic
- > Finish/colour: Profile: Anodized, Diffuser: White opal, transmittance 70–80 %
- > Length: 3000 mm
- > Diffuser width: Profile 1104: 8 mm, Profile 1103: 11 mm
- > Supplied with: 1 aluminium profile
1 diffuser white opal

Colour	Profile 1104	Profile 1103
Black	833.95.725	833.95.723
Silver coloured	833.95.724	833.95.722

Note
Profile 1104 is usable for LED strip lights up to max. 5 mm width.

Häfele Loox5 profile 1103



End caps for Häfele Loox5 profile 1104, 1103

- > Material: Plastic
- > Version: With cable outlet
- > Supplied with: 5 pairs of end caps

Colour	End cap 1104	End cap 1103
Black	833.95.769	833.95.767
Silver coloured	833.95.768	833.95.766

Diffusers
The diffuser creates a uniform light.
The LED points are invisible from 120 LEDs/m.
If required, please order alternative diffuser in black opal separately.

Diffusers see page 52

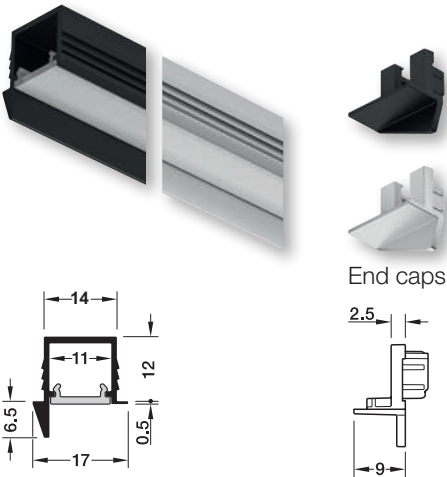
Profiles for recess mounting

Aluminium

Häfele Loox5 profile 1105, asymmetric light distribution



Häfele Loox5 profile 1105



- > Material: Profile: Aluminium, Diffuser: Plastic
- > Finish/colour: Profile: Anodized, Diffuser: White opal, transmittance 70–80 %
- > Length: 3000 mm
- > Diffuser width: 11 mm
- > Supplied with: 1 aluminium profile
1 diffuser white opal

Colour	Cat. No.
Black	833.95.727
Silver coloured	833.95.726

End caps for Häfele Loox5 profile 1105

- > Material: Plastic
- > Version: With cable outlet
- > Packing: 10 pieces

Colour	Cat. No.
Black	833.95.771
Silver coloured	833.95.770

Anti-glare shield
Asymmetric light distribution allows for a glare-free light source.

Diffusers
The diffuser creates a uniform light.
The LED points are invisible from 120 LEDs/m.
If required, please order alternative diffusers in black or transparent separately.

Diffusers see page 52

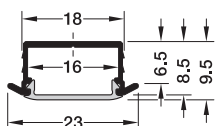
Profiles for recess mounting

Aluminium

Häfele Loox profile for recess mounting



End cap



- > Material: Aluminium
- > Finish/colour: Silver coloured anodized
- > Length x width: 2500 x 18 mm
- > Height: 8.5 mm
- > Supplied with: 1 profile, 1 diffuser

Colour	Cat. No.
Silver coloured with milky diffuser	833.72.844

! LED points are always visible when this profile is used

+ End cap with cable outlet for 833.72.844

- > Material: Plastic
- > Supplied with: 2 pieces

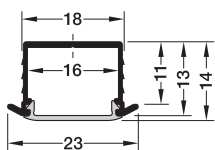
Colour	Cat. No.
Silver coloured	833.72.855

➔ Diffusers see page 52

Häfele Loox profile for recess mounting



End cap



- > Material: Aluminium
- > Finish/colour: Silver coloured anodized
- > Length x width: 2500 x 18 mm
- > Height: 13 mm
- > Supplied with: 1 profile, 1 diffuser

Colour	Cat. No.
Silver coloured with milky diffuser	833.72.846

+ End cap with cable outlet for 833.72.846

- > Material: Plastic, silver coloured
- > Supplied with: 2 pieces

Colour	Cat. No.
Silver coloured	833.72.854

➔ Diffusers see page 52





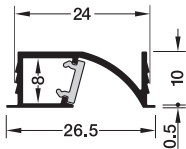
Profiles for recess mounting

Aluminium

Häfele Loox5 profile 1107 / 1106



Häfele Loox5 profile 1107, with asymmetric light distribution

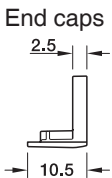
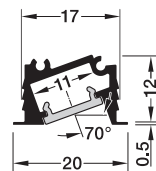
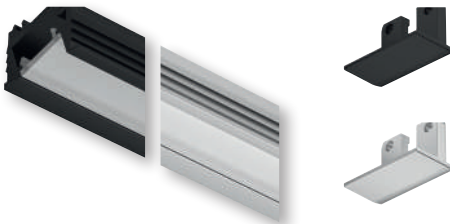


- > Material: Profile: Aluminium, Diffuser: Plastic
- > Finish/colour: Profile: Anodized, Diffuser: White opal, transmittance 70–80 %
- > Length: 3000 mm
- > Diffuser width: Profile 1107: 8 mm, Profile 1106: 11 mm
- > Supplied with: 1 aluminium profile
1 diffuser white opal

Colour	Profile 1107	Profile 1106
Black	833.95.731	833.95.729
Silver coloured	833.95.730	833.95.728

! Profile 1107 is usable for LED strip lights up to max. 5 mm width. Glare-free light, ideal for vertical installation in wardrobes.

Häfele Loox5 profile 1106, with asymmetric light distribution



- + End caps for Häfele Loox5 profile 1106
- > Material: Plastic
- > Version: With cable outlet
- > Mounting: For screw fixing
- > Supplied with: 5 pairs of end caps with screws

Colour	Article No.
Black	833.95.773
Silver coloured	833.95.772

! Diffusers
The diffuser creates a uniform light.
If required, please order alternative diffuser in black opal separately.

➔ Diffusers see page 52



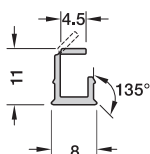
Profiles for recess mounting

Poly-carbonate

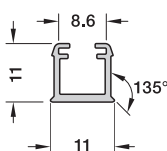
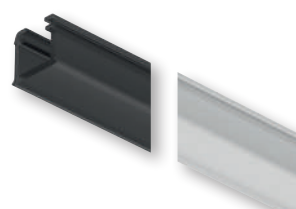
Häfele Loox5 profile 1102/1101



Häfele Loox5 profile 1102



Häfele Loox5 profile 1101



- > Material: Poly-carbonate
- > Finish/colour: White & Black Opal
- > Length: 3000 mm
- > Supplied with: 1 Poly-carbonate profile

Colour	Transmittance	Profile 1102	Profile 1101
Black	~20 %	833.95.741	833.72.899
White	70-80 %	833.95.740	833.72.898



Note

Profiles 1102 and 1101 are usable for LED strip lights up to max. 9.6 W/m.

Profile 1102 is usable for LED strip lights up to max. 5 mm width. Profile 1101 is usable only for LED strip lights with a width of precisely 8 mm.

The diffuser creates a uniform light.

The LED points in the white version are invisible from 120 LEDs/m.



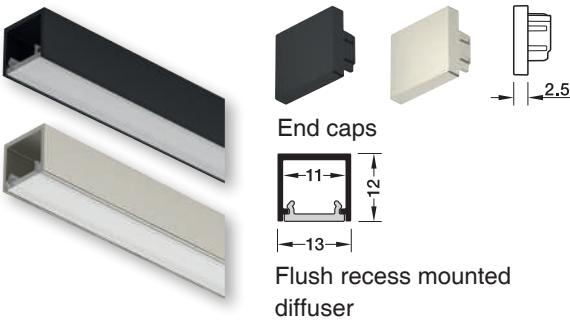
Profiles for surface mounting

Aluminium

Häfele Loox5 profile 2102



Häfele Loox5 profile 2102



- > Material: Profile: Aluminium, Diffuser: Plastic
- > Finish/colour: Profile: Anodized, Diffuser: White opal, transmittance 70–80 %
- > Length: 3000 mm
- > Diffuser width: 11 mm
- > Supplied with: 1 aluminium profile
1 diffuser white opal

Colour	Profile 2102
Black	833.95.735
Brushed stainless steel coloured	833.95.763



Diffusers
The diffuser creates a uniform light.
The LED points are invisible from 120 LEDs/m.
If required, please order alternative diffuser in black opal separately.



Diffusers see page 52

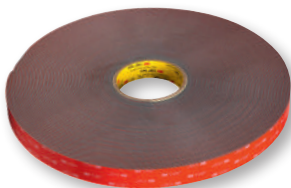


End caps for Häfele Loox5 profile 2102

- > Material: Plastic
- > Version: With drill mark for cable outlet
- > Supplied with: 5 pairs of end caps

Colour	End cap 2102
Black	833.95.778
Brushed stainless steel coloured	833.95.779

Adhesive tape for Häfele Loox5 profile 2102



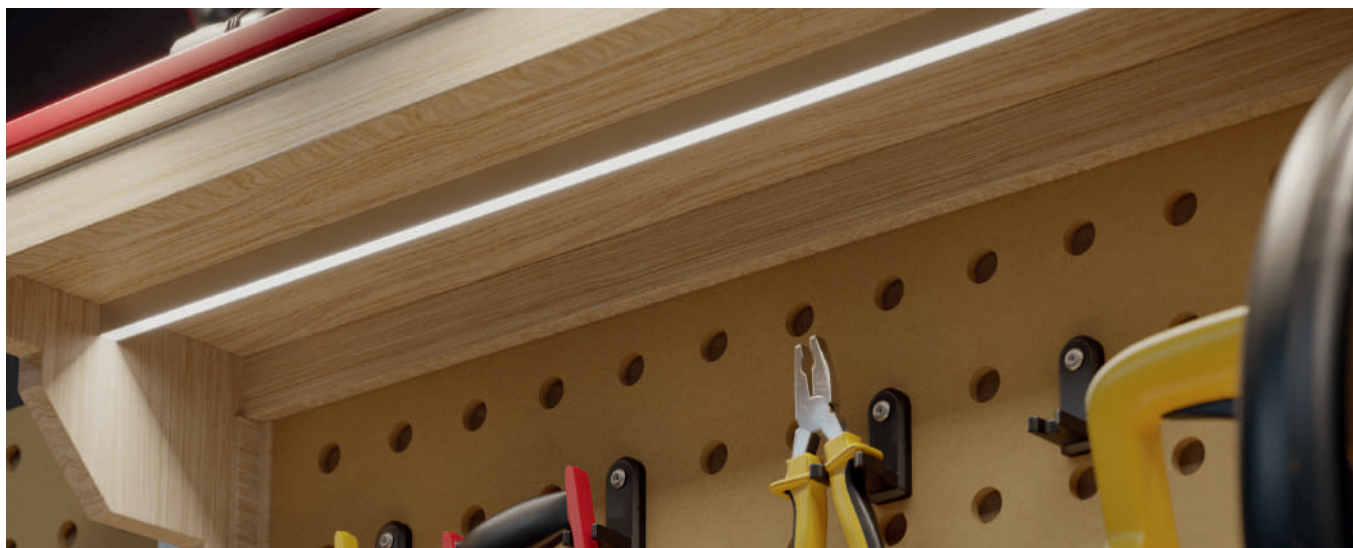
- > Area of application: For fixing aluminium on wood, metals, or plastics
- > Version: Double-sided, high instant adhesion, high temperature resistance
- > Length: 33 m
- > Width: 10 mm
- > Thickness: 0.6 mm

	Article No.
Adhesive tape	833.89.266

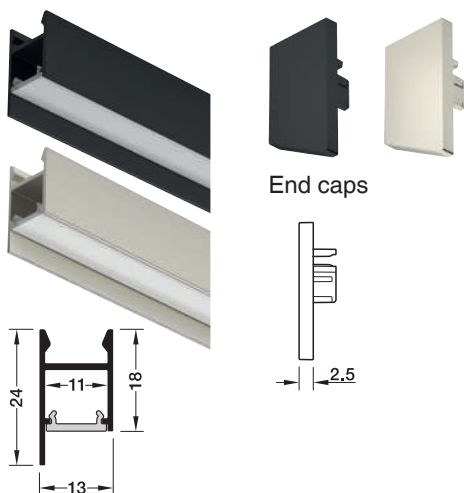
Profiles for surface mounting

Aluminium

Häfele Loox5 profile 2104, with concealed fixing



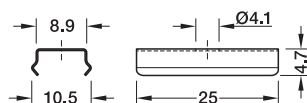
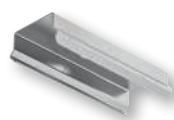
Häfele Loox5 profile 2104, with asymmetric light distribution



Diffusers
The diffuser creates a uniform light.
The LED points are invisible from 120 LEDs/m.
If required, please order alternative diffuser in black opal separately.



Diffusers see page 52



Mounting bracket for concealed fixing

- > Material: Profile: Aluminium, Diffuser: Plastic
- > Finish/colour: Profile: Anodized, Diffuser: White opal, transmittance 70–80 %
- > Length: 3000 mm
- > Diffuser width: 11 mm
- > Supplied with: 1 aluminium profile
1 diffuser white opal

Colour	Profile 2104
Black	833.95.739
Brushed stainless steel coloured	833.95.765



Order reference
Please order (mandatory) mounting bracket separately.



End caps for Häfele Loox5 profile 2104

- > Material: Plastic
- > Version: With drill mark for cable outlet
- > Supplied with: 5 pairs of end caps

Colour	End cap 2104
Black	833.95.784
Brushed stainless steel coloured	833.95.785



Mounting bracket

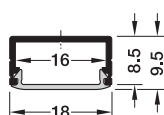
- > Material: Stainless steel
- > Mounting: For screw fixing
- > Supplied with: 5 pairs of mounting brackets

	Article No.
Mounting bracket	833.95.761

Profiles for surface mounting

Aluminium

Häfele Loox profile for surface mounting



End cap



Retaining clip

- > Material: Aluminium
- > Finish/colour: Silver coloured anodized
- > Length x width: 2500 x 18 mm
- > Height: 9.5 mm
- > Supplied with: 1 profile, 1 diffuser

Colour	Cat. No.
Silver coloured with milky diffuser	833.72.840

- Note**
LED points are always visible when this profile is used.
Permanent operation (≥ 8 hours/day) only with LED strip lights up to 9.6 W/m.

End cap for 833.72.840

- > Material: Plastic, silver coloured
- > Supplied with: 2 pieces

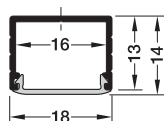
Colour	Cat. No.
Silver coloured	833.72.852

Retaining clip for 833.72.840

- > Material: Stainless steel, silver coloured
- > Supplied with: 2 pieces

Version	Cat. No.
Retaining clip	833.74.832

Diffusers see page 52



End cap



Retaining clip

- > Material: Aluminium
- > Finish/colour: Silver coloured anodized
- > Length x width: 2500 x 18 mm
- > Height: 14 mm
- > Supplied with: 1 profile, 1 diffuser

Colour	Cat. No.
Silver coloured with milky diffuser	833.72.841

End cap for 833.72.841

- > Material: Plastic
- > Supplied with: 2 pieces

Colour	Cat. No.
Silver coloured	833.72.853

Retaining clip for 833.72.841

- > Material: Stainless steel, silver coloured
- > Supplied with: 2 pieces

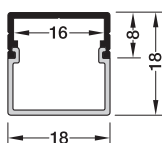
Version	Cat. No.
Retaining clip	833.74.832

Diffusers see page 52

Profiles for surface mounting

Aluminium

Häfele Loox profile for surface mounting, with attached diffuser housing



End cap



Retaining clip

- > Material: Profile: Aluminium
Diffuser housing: Plastic
- > Finish/colour: Profile: Silver coloured anodized
Diffuser housing: Milky
- > Length x width: 2500 x 18 mm
- > Height: 18 mm
- > Supplied with: 1 aluminium profile
1 diffuser housing milky

Colour	Cat. No.
Silver coloured with diffuser housing	833.74.813

+ End cap for 833.74.813

- > Material: Plastic
- > Version: With cable outlet
- > Supplied with: 2 pieces

Colour	Cat. No.
Silver coloured	833.74.823

Retaining clip for 833.74.813

- > Material: Stainless steel
- > Application: For mounting as downlight
- > Supplied with: 2 pieces

Version	Cat. No.
Retaining clip	833.74.832

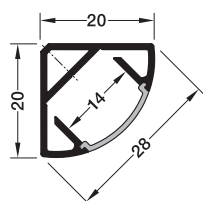
Häfele Loox corner profile



Holder



Mounting plate



- > Material: Aluminium
- > Finish/colour: Profile: Silver coloured anodized
Diffuser: Milky
- > Length x width: 2500 x 28 mm
- > Height: 20 mm
- > Supplied with: 1 aluminium profile
1 diffuser milky

Colour	Cat. No.
Silver coloured	833.74.812

+ End cap and holder/ mounting plate

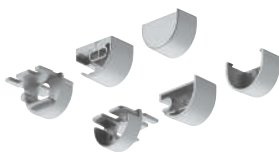
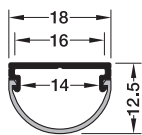
- > Material: End cap and holder: Plastic, silver coloured; Mounting plate: Stainless steel
- > Supplied with: 2 pieces

	Cat. No.
End cap & Holder	833.74.825
Mounting plate	833.74.826

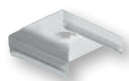
Profiles for surface mounting

Aluminium

Häfele Loox drawer profile



End caps



Retaining clip



Door Sensors

- > Material: Aluminium
- > Finish/colour: Profile: Silver coloured anodized
Diffuser: Milky
- > Length x width: 2500 x 18 mm
- > Height: 12.5 mm
- > Supplied with: 1 aluminium profile
1 diffuser milky

Colour	Cat. No.
Silver coloured	833.74.835

End cap set

- > Material: ABS plastic, silver coloured
- > Supplied with: 5 sets of end caps, fixing screws

	Cat. No.
End cap set	833.74.877

Retaining clip

- > Material: Stainless steel, silver coloured
- > Supplied with: 2 pieces

	Cat. No.
Retaining clip	833.74.893

Door sensor

	Cat. No.
Door sensors for Loox drawer profile (30W)	833.89.110

ILLUMINATING

EXTENDING

SWITCHING

NETWORKING

DISTRIBUTING

SUPPLYING

Profiles

Aluminium

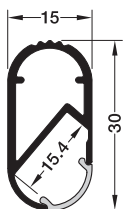
Häfele Loox wardrobe rail, asymmetric light distribution



Rail end support,
side panel



Wardrobe rail,
rail centre support



- > Material: Aluminium
- > Finish/colour: Profile: Silver coloured anodized
Diffuser: Milky
- > Length x width: 2500 x 15 mm
- > Height: 30 mm
- > Supplied with: 1 aluminium profile
1 diffuser milky

Colour	Cat. No.
Silver coloured	833.72.790

! LED points are always visible when this profile is used.

+ Rail end support, side panel

- > Material: Zinc alloy
- > Mounting: For screw fixing to side panel
- > Supplied with: 1 piece

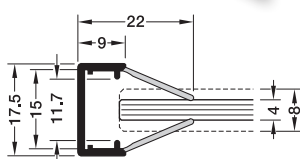
	Cat. No.
Rail end support, side panel	803.33.757

Rail centre support, wardrobe rail

- > Material: Zinc alloy, chrome plated
- > Mounting: For screw fixing
- > Supplied with: 1 piece

	Cat. No.
Wardrobe rail, rail centre support	802.07.200

Häfele Loox glass edge profile



- > Material: Poly-carbonate
- > Finish/colour: Profile: Silver coloured
Diffusers: Milky
- > Length x width: 2000 x 17.5 mm
- > Height: 22 mm
- > Application: For screw fixing
- > Supplied with: 1 aluminium profile
2 diffusers milky

Colour	Cat. No.
Silver coloured	833.74.733

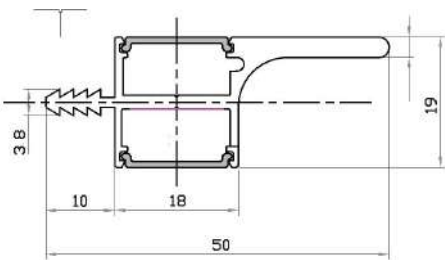
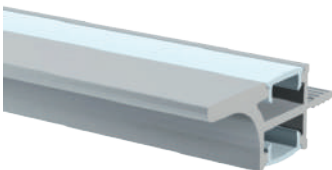
Effect of the glass edge on the light

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

! For manufacturing customised glass edge lighting for glass thicknesses of 4–8 mm.
Without load bearing function.
Only for LED strip lights with max. 9.6 W/m.
Note the dimensions of the clip connector.

Profiles

Häfele two way aluminium profile



- > Material: Aluminium
- > Finish/colour: Silver coloured anodized
Diffuser: Milky
- > Length x width: 2500 x 50 mm
- > Height: 19 mm

Colour	Cat. No.
Silver coloured	833.01.720

ILLUMINATING



EXTENDING



SWITCHING



NETWORKING



DISTRIBUTING



SUPPLYING

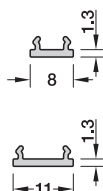


Diffusers

Häfele Loox5 diffusers for profiles for recess mounting 1103 / 1104 / 1106 / 1107 as well as for profiles for surface mounting 2102 & 2104



Dimensions

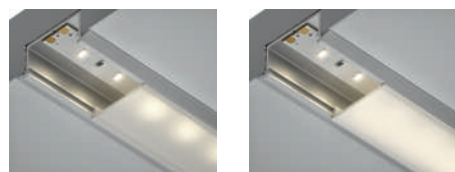


- > Material: Plastic
- > Length: 3000 mm
- > Supplied with: 1 diffuser

Width mm	Transmittance black, ~25 %
8	833.95.758
11	833.95.759

! The LED points are invisible from 120 LEDs/m. When using the black diffuser, LED points may be visible.

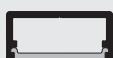
Replacement diffuser for Loox profiles with 16 mm internal dimension



Diffuser version: Protruding, for push fitting

- > Material: Plastic
- > Length: 2500 mm
- > Supplied with: 1 diffuser

Diffuser	Frosted	Milky
Protruding, for push fitting	833.74.780	833.74.781



Diffuser version: Flush, for sliding in

- > Material: Plastic
- > Length: 2500 mm
- > Supplied with: 1 diffuser

Diffuser	Frosted	Milky
Protruding, flush for sliding in	833.72.858	833.72.859

- !**
- > Simple replacement of existing diffusers in order to switch from frosted to milky
 - > Cannot be used for the following aluminium profiles: 833.74.812, 833.74.813 or for aluminium profiles with curved diffusers
 - > Can be used only with Loox aluminium profiles



Recess/surface mounted downlights

Monochrome, drill hole Ø: 55 mm



Häfele Loox LED 2047



- > Dimmable: Yes
- > Material: Steel
- > Finish: Polished chrome plated
- > Energy efficiency class: A+
- > Degree of protection: IP20
- > Mounting: For mounting in drilled hole, for clamp fixing or for screw fixing
- > Drill hole Ø: 55 mm
- > Supplied with: 1 light with 2 m lead



12 V Loox 12 V driver see page 92

3000 K	4000 K	5000 K	120°	
560 lx	570 lx	670 lx		250 mm
210 lx	215 lx	245 lx		500 mm
115 lx	115 lx	135 lx		750 mm
75 lx	75 lx	90 lx		1000 mm

LED 2047

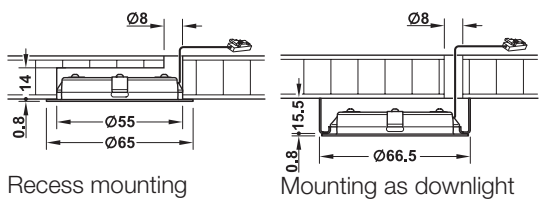
Voltage V	Number of LEDs	Colour tem- perature K	Wattage W	Luminous flux lm	Luminous efficacy lm/W	Colour render- ing index CRI R _a	Weighted energy consumption kWh/1000 h	Cat.No
12 V	Häfele Loox LED 2047							
	24	3000	3	210	70	90	3.3	833.72.300
		4000	3	216	72	90	3.3	833.72.301
		5000	3	240	80	83	3.3	833.72.302

Häfele Loox LED 2047



Downlight housing

Colour	Cat. No.
Polished chrome plated	833.72.802



Recess mounting

Mounting as downlight



Recess/surface mounted downlight

Modular, drill hole Ø: 58 mm



Häfele Loox LED 2026

12 V
SYSTEM



- > Dimmable: Yes
- > Material: Aluminium
- > Finish: Polished chrome plated
- > Energy efficiency class: A+
- > Degree of protection: IP44 as recess mounted downlight; IP20 as surface mounted downlight
- > Mounting: For mounting in drilled hole, for clamp fixing or for screw fixing
- > No. of LED: 6
- > Drill hole Ø: 58 mm
- > Supplied with: 1 light module

2700 K	3000 K	4000 K	5000 K	80°
1400 lx	1800 lx	1850 lx	1950 lx	250 mm
400 lx	500 lx	520 lx	550 lx	500 mm
175 lx	225 lx	235 lx	250 lx	750 mm
100 lx	125 lx	135 lx	140 lx	1000 mm

LED 2026



Note

The IP44 degree of protection is reduced to IP20 when mounting as downlight or recess mounting with through hole.

Order reference

Please order lead and housing separately.



12 V

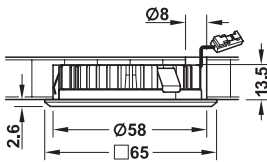
Loox 12 V driver see page 92

Häfele Loox LED 2026

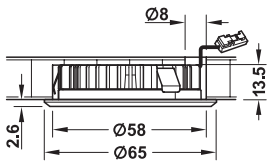
Voltage	Quantity	Colour temperature	Wattage	Luminous flux	Luminous efficacy	Colour rendering index		Weighted energy consumption	Cat. No.
V	LEDs	K	W	lm	lm/W	R _a	R ₉	kWh/1000 h	
12 V	Häfele Loox LED 2026								
	1	2700	3.0	185	62	>90	–	3.30	833.72.360
		3000	3.0	210	70	>90	–	3.30	833.72.361
		4000	3.0	221	74	>90	–	3.30	833.72.362
		5000	3.0	260	87	>83	–	3.30	833.72.137



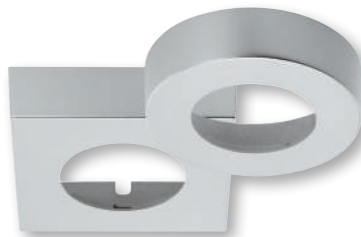
Recess mounted housing



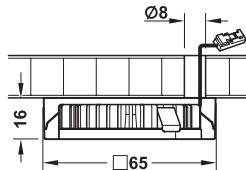
Recess mounting, square



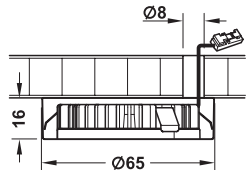
Recess mounting, round



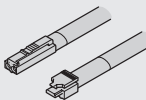
Downlight housing



Mounting as downlight, square



Mounting as downlight, round



Lead, 1.5 A/24 AWG, with snap-in connector

Voltage	Length	Cat. No.
12 V	500 mm	833.72.880
	1000 mm	833.72.881
	2000 mm	833.72.882



Housing for recess mounting, plastic

Colour	Round	Square
Silver coloured	833.72.126	833.72.127
Black	833.72.168	833.72.172
Stainless steel coloured	833.72.382	833.72.385



Downlight housing, plastic

Colour	Round	Square
Silver coloured	833.72.124	833.72.125
Black	833.72.160	833.72.164
Stainless steel coloured	833.72.194	833.72.197

Recess/surface mounted downlights

Multi-white, drill hole Ø: 55 mm



Häfele Loox LED 2048/3039



2700 K	5000 K	120°
290 lx	345 lx	250 mm
110 lx	130 lx	500 mm
60 lx	70 lx	750 mm
40 lx	45 lx	1000 mm

LED 2048

2700 K	5000 K	120°
335 lx	350 lx	250 mm
125 lx	130 lx	500 mm
70 lx	70 lx	750 mm
45 lx	45 lx	1000 mm

LED 3039

- > Dimmable: Yes, via Häfele BLE box
- > Material: Steel
- > Finish: Silver coloured, Polished chrome plated
- > Energy efficiency class: A+
- > Degree of protection: IP20
- > Mounting: For mounting in drilled hole, for clamp fixing or for screw fixing
- > Drill hole Ø: 55 mm
- > Supplied with: 1 light with 2 m multi-white lead

! Use Häfele BLE Box to operate Multi white LED Lights. See page 88

12V Loox 12 V driver see page 92

24V Loox 24 V driver see page 93

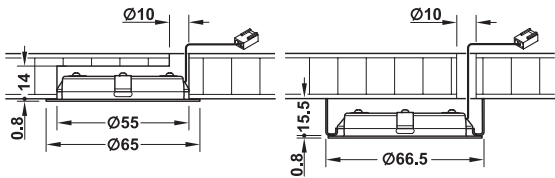
Häfele Loox LED 2048 / 3039

Voltage V	Number of LEDs	Colour tempera- ture K	Wattage W	Luminous flux lm	Luminous efficacy lm/W	Colour ren- dering index CRI R _a	Weighted energy con- sumption kWh/1000 h	Silver colour- ed	Polished chrome plated
12 V	Häfele Loox LED 2048								
	60	2700 - 5000	3	255	85	90 83	3.3	833.72.311	833.72.310
24 V	Häfele Loox LED 3039								
	60	2700 - 5000	3	258	85	90 83	3.3	833.75.131	833.75.130



Downlight housing

Colour	Cat. No.
Silver coloured	833.72.803
Polished chrome plated	833.72.802



Recess mounting

Mounting as downlight



Recess/surface mounted downlights

Monochrome, drill hole Ø: 55 mm



Häfele Loox LED 2020



12 V
SYSTEM



- > Dimmable: Yes
- > Material: Zinc alloy
- > Finish: Black, Matt nickel plated, Polished chrome plated
- > Energy efficiency class: A
- > Degree of protection: IP44 as recess mounted downlight; IP20 with downlight housing (surface mounted downlight)
- > Number of LEDs: 6
- > Mounting: For mounting in drilled hole, for clamp fixing or for screw fixing
- > Drill hole Ø: 55 mm
- > Supplied with: 1 light with 2 m lead, including fixing materials

3000 K	4000 K	5000 K		100°
760 lx	860 lx	840 lx		250 mm
190 lx	215 lx	210 lx		500 mm
85 lx	95 lx	95 lx		750 mm
48 lx	50 lx	50 lx		1000 mm



12 V Loox 12 V driver see page 92



The IP44 degree of protection is reduced to IP20 when mounting as downlight or recess mounting with through hole.

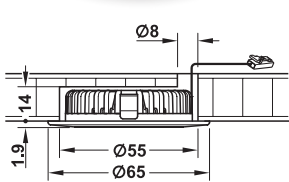
Voltage	Colour temperature	Wattage	Luminous flux	Luminous efficacy	Colour rendering index CRI R _a	Weighted energy consumption kWh/1000 h	Black	Matt nickel plated	Polished chrome plated
V	K	W	lm	lm/W					
12 V	3000	3.2	142	44	83	3.52	833.72.281	833.72.280	833.72.282
	4000	3.2	150	47	83	3.52	833.72.284	833.72.283	833.72.285
	5000	3.2	150	47	83	3.52	833.72.287	833.72.286	833.72.288

Häfele Loox LED 2020

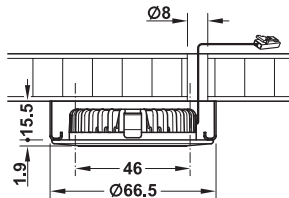


Downlight housing

Colour	Cat. No.
Black	833.72.801
Matt nickel plated	833.72.800
Polished chrome plated	833.72.802



Recess mounting



Mounting as downlight



Recess/surface mounted downlights

Monochrome, drill hole Ø: 26 mm



Häfele Loox LED 2022



- > Dimmable: Yes
- > Material: Aluminium
- > Finish: Silver coloured anodized
- > Energy efficiency class: A+
- > Degree of protection: IP44 as recess mounted downlight; IP20 with downlight housing (surface mounted downlight)
- > Number of LEDs: 3
- > Mounting: For mounting in drilled hole, for clamp fixing or for screw fixing
- > Drill hole Ø: 26 mm
- > Supplied with: 1 light with 2 m lead

3000 K	4000 K	5000 K	90°	
650 lx	650 lx	650 lx		250 mm
163 lx	163 lx	163 lx		500 mm
72 lx	72 lx	72 lx		750 mm
40 lx	40 lx	40 lx		1000 mm



12 V Loox 12 V driver see page 92



The IP44 degree of protection is reduced to IP20 when mounting as downlight or recess mounting with through hole.

Voltage	Colour temperature	Wattage	Luminous flux	Luminous efficacy	Colour rendering index CRI R _a	Weighted energy consumption kWh/1000 h	Cat. No.
V	K	W	lm	lm/W			
12 V	3000	1.5	105	70	82	1.65	833.72.040
	4000	1.5	105	70	87	1.65	833.72.041
	5000	1.5	105	70	88	1.65	833.72.042

Häfele Loox LED 2022



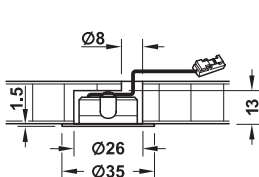
Downlight housing, round

Colour	Cat. No.
Silver coloured anodized	833.72.831

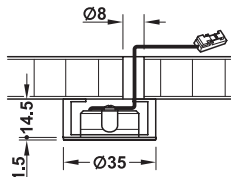


Downlight housing, wedge-shaped

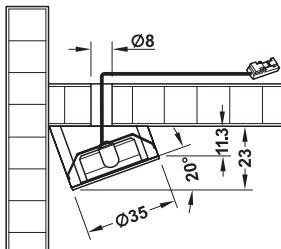
Colour	Cat. No.
Silver coloured anodized	833.72.832



Recess mounting



Mounting as downlight



Recess mounted downlights

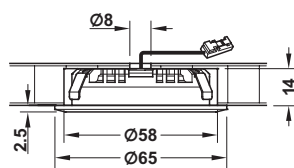
Monochrome, drill hole Ø: 58 mm



Häfele Loox LED 2039



12 V
SYSTEM



- > Dimmable: Yes
- > Material: Zinc alloy
- > Finish: Matt nickel plated
- > Energy efficiency class: A
- > Degree of protection: IP65 after installation
- > Number of LEDs: 18
- > Mounting: For mounting in drilled hole, for clamp fixing
- > Drill hole Ø: 58 mm
- > Supplied with: 1 light with 4 m lead



12 V Loox 12 V driver see page 92

3000 K

94°

785 lx		250 mm
196 lx		500 mm
87 lx		750 mm
49 lx		1000 mm

Voltage	Colour temperature	Wattage	Luminous flux	Luminous efficacy	Colour rendering index	Weighted energy consumption	Cat. No.
V	K	W	lm	lm/W	CRI R _a	kWh/1000 h	
12 V	3000	2.5	125	50	85	2.75	833.72.091

Recess mounted downlights

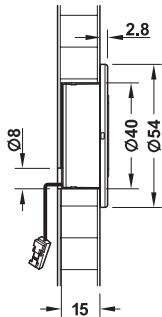
Monochrome, sensor-controlled, drill hole Ø: 40 mm



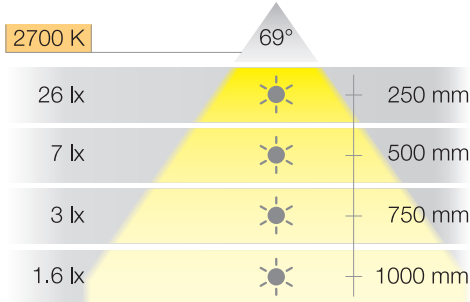
Häfele Loox LED 2028 with motion detector



12 V
SYSTEM



- > Dimmable: No
- > Material: Stainless steel, plastic
- > Finish: Black
- > Version: With motion detector active from a decreasing ambient light of 15 lx
- > Energy efficiency class: A+
- > Degree of protection: IP44
- > Delay time: approx. 2 min.
- > Sensor range: 0–3000 mm
- > Number of LEDs: 3
- > Mounting: For mounting in drilled hole
- > Drill hole Ø: 40 mm
- > Supplied with: 1 light with 2 m lead including fixing materials



12 V Loox 12 V driver see page 92

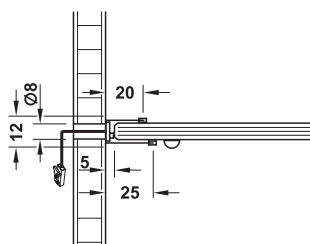
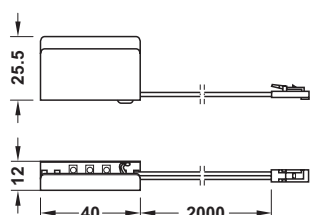
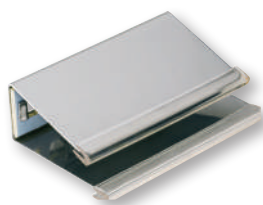
Voltage	Colour temperature	Wattage	Luminous flux	Luminous efficacy	Colour rendering index CRI R _a	Weighted energy consumption kWh/1000 h	Cat. No.
V	K	W	lm	lm/W			
12 V	2700	0.3	4	13	90	0.37	833.73.111

Glass edge light

Monochrome



Häfele Loox LED 2019



Effect of the glass edge on the light

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

- > Dimmable: Yes
- > Material: Stainless steel
- > Length x width: 40 X 25.5 mm
- > Height: 12 mm
- > Degree of protection: IP20
- > Number of LEDs: 3
- > Mounting: Is pushed onto the glass shelf from the rear
- > Glass thickness: 6–12 mm
- > Supplied with: 1 light with 2 m lead



Without load bearing function



12 V Loox 12 V driver see page 92

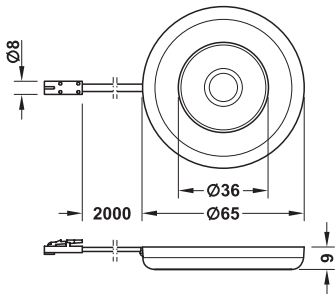
Voltage	Colour temperature	Wattage	Luminous flux	Luminous efficacy	Colour rendering index CRI	Weighted energy consumption kWh/1000 h	Finish/colour	Cat. No.
	K	W	lm	lm/W	R _a			
12 V	4000	0.2	15	75	88	0.22	Bright	833.74.130
	6000	0.2	19	95	84	0.22	Bright	833.74.120

Surface mounted downlights

Monochrome, Ø 65 mm



Häfele Loox LED 2027



- > Dimmable: Yes
- > Material: Aluminium, plastic
- > Finish: Silver coloured
- > Diameter: 65 mm
- > Height: 9 mm
- > Energy efficiency class: A+
- > Degree of protection: IP20
- > Number of LEDs: 27
- > Mounting: For screw fixing
- > Supplied with: 1 light with 2 m lead, including fixing materials

 **12 V** Loox 12 V driver see page 92

3000 K	4000 K	5000 K		117°
867 lx	884 lx	918 lx		250 mm
216 lx	221 lx	229 lx		500 mm
96 lx	98 lx	102 lx		750 mm
54 lx	55 lx	57 lx		1000 mm

Voltage V	Colour temper- ature K	Wattage W	Luminous flux lm	Luminous efficacy lm/W	Colour rendering index CRI R _a	Weighted energy consumption kWh/1000 h	Cat. No.
12 V	3000	2.6	190	73	85	2.86	833.72.050
	4000	2.6	208	80	85	2.86	833.72.051
	5000	2.6	218	84	85	2.86	833.72.052

Flexible surface mounted lights

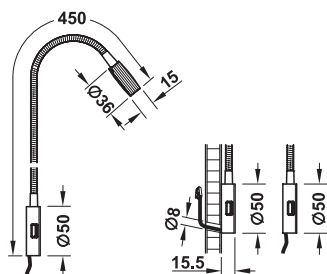
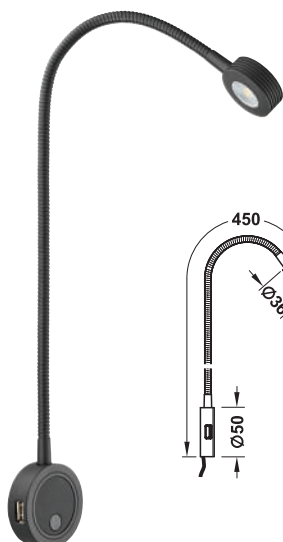
Monochrome with USB



Häfele Loox LED 2034



WITH USB CHARGING STATION



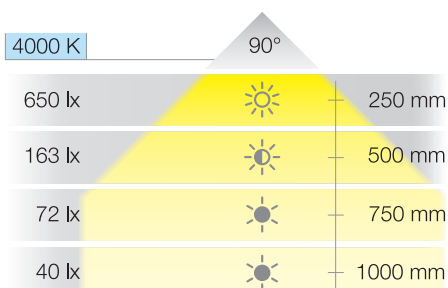
- > Dimmable: Yes
- > Version: Integrated twin USB charging station 5 V / 2 A, integrated push switch for 2 brightness levels
- > Material: Aluminium
- > Length x width: 450 x 50 mm
- > Height: 15.5 mm
- > Energy efficiency class: A+
- > Degree of protection: IP20
- > Number of LEDs: 3
- > Mounting: For screw fixing beneath magnetic cover
- > Supplied with: 1 light with 2 m lead including fixing materials



12 V

Loox 12 V driver see page 92

Min. 20 W driver per light for optimum operation of the USB charging station.



Voltage	Colour temperature	Wattage	Luminous flux	Luminous efficacy	Colour rendering index CRI	Weighted energy consumption kWh/1000 h	Finish/colour	Cat. No.
	K	W	lm	lm/W	R _a			
12 V	4000	17 (light: 1.5)	105	70	82	1.65	Black	833.74.097

Flexible surface mounted lights

Monochrome



Häfele Loox LED 2035

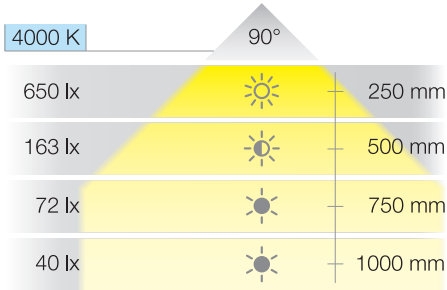


12 V
SYSTEM



- > Dimmable: Yes
- > Version: Integrated push switch for 2 brightness levels
- > Material: Aluminium
- > Length x width: 450 x 50 mm
- > Height: 15.5 mm
- > Energy efficiency class: A+
- > Degree of protection: IP20
- > Number of LEDs: 3
- > Mounting: For screw fixing beneath magnetic cover
- > Supplied with: 1 light with 2 m lead, including fixing materials

12 V Loox 12 V driver see page 92



Voltage	Colour temperature	Wattage	Luminous flux	Luminous efficacy	Colour rendering index CRI	Weighted energy consumption kWh/1000 h	Finish/colour	Cat. No.
	K	W	lm	lm/W	R _a			
12 V	4000	1.5	105	70	82	1.65	Black	833.74.153

Recess mounted lights

Monochrome

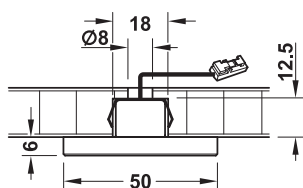


Häfele Loox LED 2036

**12 V
SYSTEM**


The LED 2036 impresses with its extremely homogeneous, extensive light, which is also reinforced by the illuminated edge. The acrylic glass gives this light a high-quality appearance.

- > Dimmable: Yes
- > Material: Aluminium, acrylic glass
- > Length: 250 mm
- > Width: 50 mm
- > Height: 18.5 mm
- > Energy efficiency class: A+
- > Number of LEDs: 36
- > Supplied with: 1 light with 2 m lead,


12 V Loox 12 V driver see page 92

3000 K 4000 K 5000 K
100°

984 lx	1015 lx	1033 lx	250 mm
246 lx	250 lx	255 lx	500 mm
109 lx	110 lx	114 lx	750 mm
62 lx	65 lx	66 lx	1000 mm

Voltage	Colour temperature	Wattage	Luminous flux	Luminous efficacy	Colour rendering index CRI	Weighted energy consumption kWh/1000 h	Finish/colour	Cat. No.
	K	W	lm	lm/W	R _a			
12 V	3000	3.6	182	51	82	3.96	White	833.72.080
	4000	3.6	190	53	82	3.96	White	833.72.081
	5000	3.6	210	58	82	3.96	White	833.72.082

Recess/surface mounted downlights

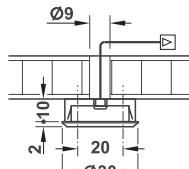
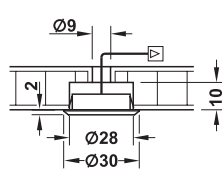
Monochrome



Häfele Loox LED 4004

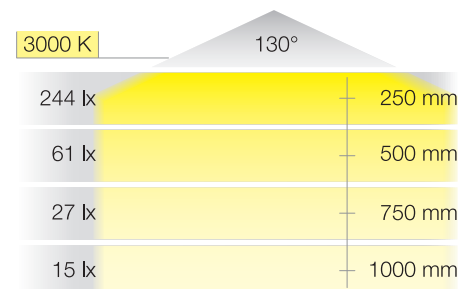


The small and slimline LED 4004 puts objects firmly in the spotlight in the recess mounted and down lit area.



- > Dimmable: Yes
- > Material: Plastic
- > Height: 12 mm
- > Ø: 30 mm
- > Drill hole Ø: 28 mm
- > Number of LEDs: 1
- > Energy efficiency class: A+
- > Supplied with: 3 lights with 2 m lead and housing each, and fixing material

350 mA Loox 350 mA driver see page 94



Voltage	Colour temperature	Wattage	Luminous flux	Luminous efficacy	Colour rendering index CRI	Weighted energy consumption kWh/1000 h	Finish/colour	Cat. No.
	K	W	lm	lm/W	R _a			
350 mA	3000	1	80	80	80	1.10	Silver coloured	833.78.080

ILLUMINATING

EXTENDING

SWITCHING

NETWORKING

DISTRIBUTING

SUPPLYING

Recess/surface mounted downlights

Monochrome, round with lens

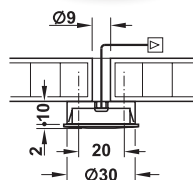
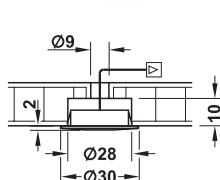
Häfele Loox LED 4005

350 mA
SYSTEM

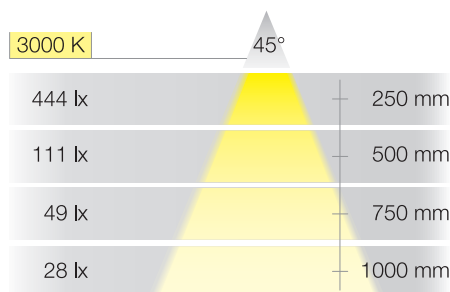


The LED 4005 can be used as a recess mounted or surface mounted downlight. The extremely small and flat design makes the light easy to integrate in the furniture design. The integrated lens also centres and intensifies the light spot.

- > Dimmable: Yes
- > Material: Plastic
- > Height: 12 mm
- > Ø: 30 mm
- > Drill hole Ø: 28 mm
- > Number of LEDs: 1
- > Energy efficiency class: A+
- > Supplied with: 3 lights with 2 m lead and housing each, and fixing material



350 mA Loox 350 mA driver see page 94



Voltage	Colour temperature	Wattage	Luminous flux	Luminous efficacy	Colour rendering index CRI	Weighted energy consumption kWh/1000 h	Finish/colour	Cat. No.
	K	W	lm	lm/W	R _a			
350 mA	3000	1	63	63	80	1.10	Silver coloured	833.78.100

Deco shelf light

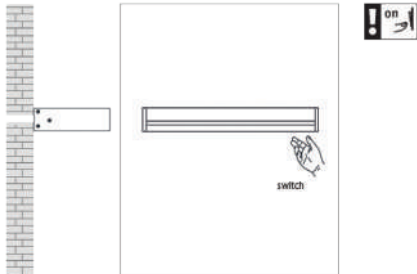
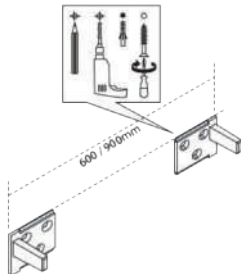
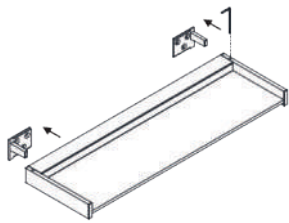
LED Decorative Box Shelf Light



Deco LED Box Shelf Lights seamlessly blend into the environment giving a floating effect to your precious artefacts. The design accentuates your wall spaces, adding more light and airy feel in your room.

- > Material: Aluminum with Glass Shelf
- > Switching: On /Off Switch Inbuilt
- > Input Voltage: 230V
- > Supplied with: Allen Key & Mounting Screws
- > Driver: Built-In Driver
- > Life: 50,000 hours (LED)
- > Warranty: 2 year

Colour temperature K	Luminous Intensity lm	L X W X H mm	Output W	Load Bearing Capacity Kg	Cat. No.
4000	350	600 X 200 X 40	10	1	833.14.670
4000	550	900 X 200 X 40	13	2	833.14.671



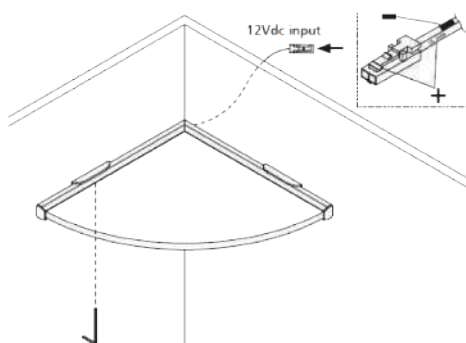
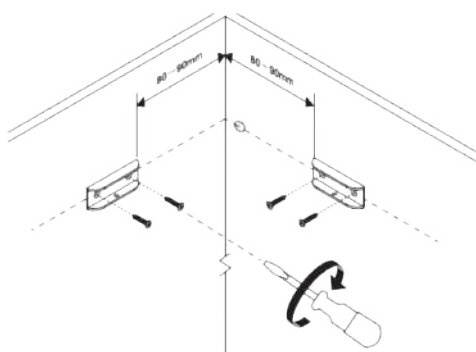
Deco shelf light

LED Corner Shelf Light

12 V
SYSTEM


Deco LED Corner Shelf Light reinforces the brightness in crisp white spaces and keep dark rooms from being too heavy. The design accentuates the corners of your wall spaces, adding more light and airy feel in your room.

- > Material: Aluminum with Acrylic Shelf
- > Switching: External Switch
- > Supplied with: 1.5m cable with MOLEX connector and 2 Side Bracket
- > Warranty: 2 year



Voltage	Colour temperature	Luminous Intensity	L X W X H	Output	Load Bearing Capacity	Cat. No.
	K	lm	mm	W	Kg	
12V	4000	300	202 X 202 X 15	4.5W	0.7	833.14.672

 12V Loox 12 V driver see page 92

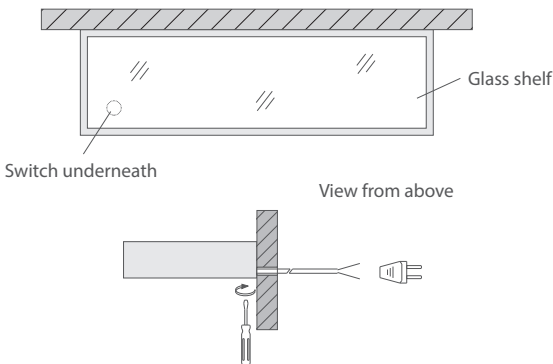
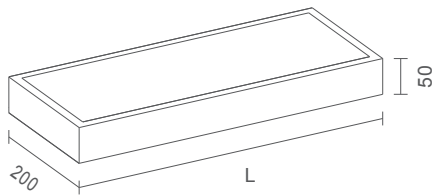
Box shelf light

LED Lit Glass Shelf Box



Decorative lights add the much needed zing and drama to enhance your furniture and design objects. They add a dimension of style and aesthetics to match the individualist grace of your homes. The effortless yet uniquely crafted designs speak utmost of the change it can bring to the entire ambience.

- > Works directly on 220 VAL mains
- > Switching: Built-in on/off switch
- > Life: 50,000 hours (LED)
- > Load bearing capacity: 10 kgs
- > Driver: Built-in LED driver



Output	Colour temperature	L X W X H	Finish	Cat. No.
W	K	mm		
6	6400	600 X 200 X 50	Silver Anodized Aluminum Profile	833.14.271
9	6400	900 X 200 X 50	Silver Anodized Aluminum Profile	833.14.272



LED drawer light & Two way profile light

LED Drawer Light with Built-in Infra Red Sensor



LED Drawer Light helps you locate and search through the drawer and cabinet contents. The inbuilt sensor gets activated by the movement of door, automatically switching on and off as you open and close the drawer / shutter.

- > LED Drawer Light with Built-in Infra Red Sensor
- > Silver Anodized Aluminum Profile
- > Life: 50,000 hours

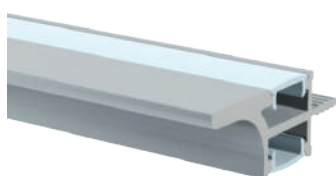


LED drawer lights

Output W	Colour temperature K	L X W X H mm	Cat. No.
2.4	6400	563 X 18 X 14	833.01.003
5.2	6400	863 X 18 X 14	833.01.006
6	5000	563 X 18 X 13	833.71.889
6	5000	863 X 18 X 13	833.71.836

The Two Way Profile Light helps illuminate the under-cabinet area as well as the area inside the cabinet. It also simultaneously functions as a handle for your wall cabinet.

- > Two Way Profile Light with Built-in Infra Red Sensor
- > Silver Anodized Aluminum Profile
- > Life: 50,000 hours



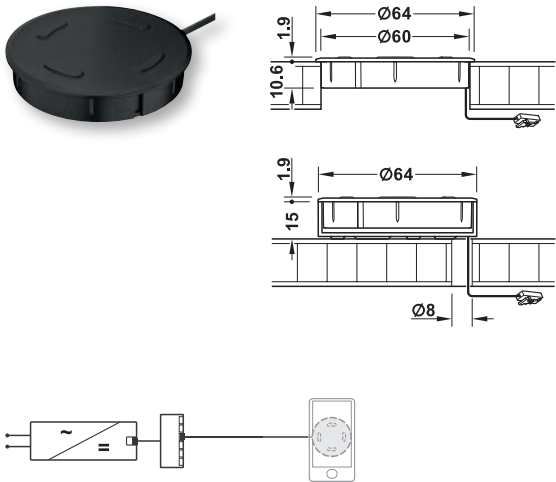
Two way profile lights

Output W	Colour temperature K	L X W X H mm	Cat. No.
11	3000	563 X 50 X 19	833.70.178
17	3000	863 X 50 X 19	833.70.179

Extending

Charging Stations

Häfele Loox ESC 2002 inductive charging station – for 12 V system



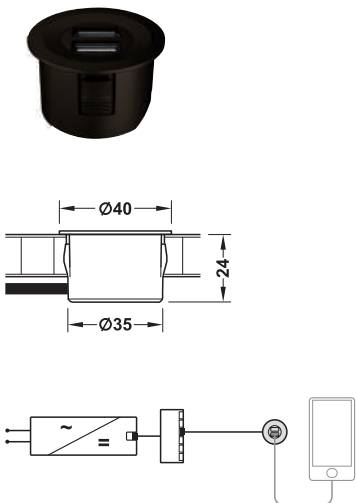
- > Material/colour: Plastic, matt black
- > Diameter: 64
- > Charging current: 1 A
- > Output voltage: 5 V
- > Standby power consumption: 0.3 W
- > Power consumption: Max. 10 W
- > Standard: WPC compatible
- > Supplied with: 1 inductive charging station with mounting ring and 2 m lead

Voltage		Cat. No.
12 V	ESC 2002 inductive charging station	833.73.776

! Drill hole Ø for plug: 8 mm

12 V Loox 12 V driver see page 92

Häfele Loox ESC 2001 USB charging station, modular – for 12 V system



- > Material: Plastic, matt
- > Output voltage: 5 V
- > Output current: 2 A
- > Power consumption: Max. 15 W
- > Drill hole Ø: 35 mm
- > Mounting: For mounting in drilled hole, for clamp fixing
- > Supplied with: 1 USB charging station

Colour	Round
Black	833.73.751

+ Lead with snap-in connector

mm	Cat.No
500	833.72.880
1000	833.72.881
2000	833.72.882

➔ Please order lead separately.

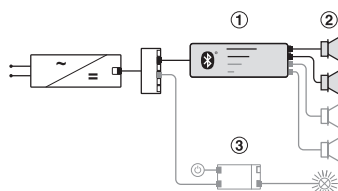
12 V Loox 12 V driver see page 92

Sound systems



420 E sound system, exciter speakers

12 V
SYSTEM



- ① Sound system
- ② Exciter speaker
- ③ 3-way distributor with switching function

- > Material/finish: Plastic, black
- > Dimensions: 140 x 45 x 15 mm (L x W x H)
- > Power consumption: Operation with 2 exciter speakers: Max. 19 W, operation with 4 exciter speakers: Max. 32 W, standby: <0.3 W
- > Music wattage: Operation with 2 or 4 exciter speakers: 2 x 10 W (RMS)
- > Reception range: Max. 10 m
- > Mounting: For screw fixing
- > Supplied with: 1 Bluetooth® receiver with 2 m lead and 4 connections for exciter speakers, incl. 2 exciter speakers

Voltage	Cat. No.
12 V	420 E sound system (stereo and 2 exciter speakers) 822.65.034



Please observe the installation regulations for bathrooms!
Can be installed on glass and mirror glass (3–6 mm each), acrylic glass (3 mm), chipboard (10–20 mm) and mineral composite boards.



12 V Loox 12 V driver see page 92



Exciter speaker

- > Dimensions: Ø 65 x 22 mm
- > Wattage: Rated/music load capacity 4/15 W
- > Mounting: For screw fixing or for glue fixing
- > Supplied with: 1 exciter speaker with 1 m speaker lead

Cat. No.
Exciter speaker (wattage with 12 V plug system) 822.65.039

Pop-Up-Sockets

Pop-up Socket



Less is indeed more! Functionality at a pull. Häfele integrates concepts of space efficiency, functionality, ease, entertainment and advanced technology seamlessly into its New Pop-up Socket Systems.

- > Effective utilisation of space
- > Reduces dependency on the traditional wall socket systems:
- > Packs-in a unique dose of entertainment through the integrated Bluetooth audio system.
- > Is splash-proof (IP54 in a close position) which means that it is resistant to water splashing from all directions

Type	Dimensions (mm)	No. of Sockets	Input	Cat. No.
Pop-up Socket with Bluetooth Speaker	430 x Ø100	10A universal socket x 2 USB socket (Max.2100mA) x 2 Bluetooth audio system x 1 On/Off neon switch x 1 2 meter cable with SA plug	220 – 240 V ~ 50 Hz	822.80.900
Pop-up Socket without Bluetooth Speaker	430 x Ø100	10A universal socket x 2 USB socket (Max.2100mA) x 2 On/Off neon switch x 1 2 meter cable with SA plug	220 – 240 V ~ 50 Hz	822.80.901



Switching

Sensor switches

Sensor switch	> Page 81
Door sensor switch	> Page 81
Motion detector	> Page 81
Dimmer	> Page 82
Captive switch/dimmer	> Page 82
Sensor switch, surface mounted	> Page 83



Sensor switch for aluminium profiles

Door sensor for drawer profile	> Page 83
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Mechanical switches

Universal door contact switch	> Page 84
Door contact switch	> Page 84
Rocker switch	> Page 85
Housing for switch, surface mounted	> Page 85



Multi switch box, multi driver box

Multi switch box	> Page 86
Multi driver box	> Page 87



Symbol overview

Sensor switch

Touchless, soft on/off switching



Door sensor switch

Soft on/off switching



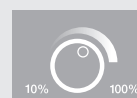
Motion detector

Automatic on/off switching



Dimmer

Soft on/off switching and dimming



Captive switch/dimmer

Touchless on/off switching and dimming



Universal door contact switch

On/off switching



Door contact switch

On/off switching,
door closed = light off,
door open = light on



Rocker switch

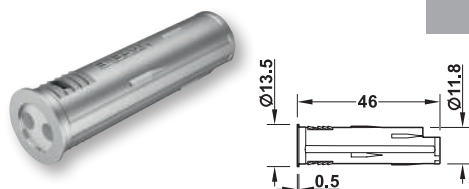
On/off switching



Sensor switches

Häfele Loox sensor switch, modular – touchless, soft on/off switching

TOUCHLESS



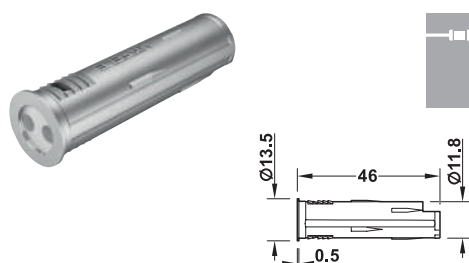
- > Material/colour: Plastic, silver coloured
- > Degree of protection: IP20
- > Sensor range: 0–80 mm
- > Power consumption: ≤ 0.3 W
- > Drill hole Ø: 12 mm
- > Supplied with: 1 switch

	Cat. No.
Sensor switch, modular	833.89.127

- + Please order lead with snap-in connector for modular switches driver separately. Length 2 m: Cat. No. 833.89.142. see page 84

- ! On/off state is stored without the need for power supply (memory function).

Häfele Loox door sensor switch, modular – soft on/off switching

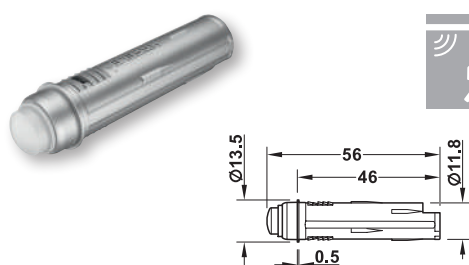


- > Material/colour: Plastic, silver coloured
- > Degree of protection: IP20
- > Sensor range: 0–100 mm
- > Power consumption: ≤ 0.3 W
- > Drill hole Ø: 12 mm
- > Supplied with: 1 switch

	Cat. No.
Door sensor switch, modular	833.89.128

- + Please order lead with snap-in connector for modular switches driver separately. Length 2 m: Cat. No. 833.89.142. see page 84

Häfele Loox motion detector, modular – automatic on/off switching



- > Material/colour: Plastic, silver coloured
- > Degree of protection: IP20
- > Sensor range: 0–3000 mm
- > Sensor angle: 120 °
- > Power consumption: ≤ 0.1 W
- > Delay time: 30 sec.
- > Drill hole Ø: 12 mm
- > Supplied with: 1 motion detector

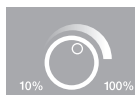
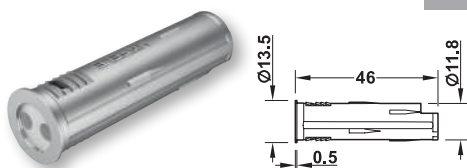
	Cat. No.
Motion detector, modular	833.89.129

- + Please order lead with snap-in connector for modular switches driver separately. Length 2 m: Cat. No. 833.89.142. see page 84

Sensor switches

Häfele Loox dimmer, modular – automatic on/off switching

WITH TOUCH/
TOUCHLESS



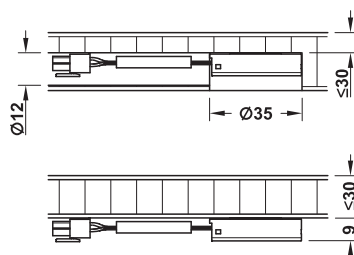
- > Material/colour: Plastic, silver coloured
- > Degree of protection: IP20
- > Power consumption: ≤ 0.3 W
- > Drill hole Ø: 12 mm
- > Supplied with: 1 dimmer

	Sensor range	Cat. No.
With touch	–	833.89.058
Touchless	0–60 mm	833.89.126

+ Please order lead with snap-in connector for modular switches driver separately. Length 2 m: Cat. No. 833.89.142. see page 84

! Dimming value is stored without the need for voltage supply (memory function)

Häfele Loox capacitive switch/dimmer, modular – touchless on/off switching and dimming



- > Manual operation (proximity sensor), memory function
- > Concealed installation in wood, glass or stone (not in metalliferous materials) at a maximum depth of 30 mm
- > For screw fixing or recess mounting (drill hole Ø 35 mm)
- > A distance of min. 500 mm to electromagnetic fields (power lines, microwave) must be adhered to.

- > Material/colour: Plastic, silver coloured
- > Diameter: 35 mm
- > Height: 10 mm
- > Degree of protection: IP20
- > Power consumption: ≤ 1 W
- > Supplied with: 1 switch

	Cat. No.
Capacitive switch/dimmer, modular	833.89.133

This completely invisible operating solution opens up completely new possibilities in continuously adjustable light control.

+ Please order lead with snap-in connector for modular switches driver separately. Length 2 m: Cat. No. 833.89.142. see page 84

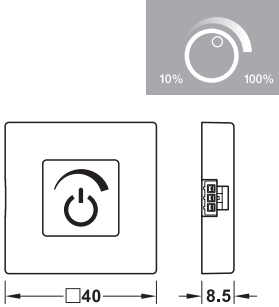
Sensor switches

Häfele Loox dimmer, surface mounted modular – soft on/off switching and dimming

WITH TOUCH



With touch function



> Material/colour:	Plastic, silver coloured	
> Dimesion:	40 x 40 x 8.5 mm (L x W x H)	
> Degree of protection:	IP20	
> Sensor range:	0–100 mm	
> Power consumption:	≤0.3 W	
> Supplied with:	1 switch with fixing material	
	Sensor range	Cat. No.
With touch	–	833.89.134

+ Please order lead with snap-in connector for modular switches driver separately. Length 2 m: Cat. No. 833.89.142. see page 84

! Dimming value is stored without the need for voltage supply (memory function)

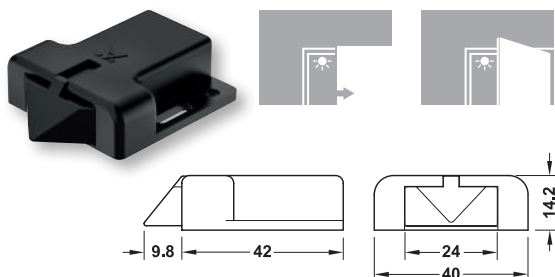
Häfele Loox door sensor for drawer profile



Door sensor		Cat. No.
Door sensor for Loox drawer profile for 833.74.835		833.89.110

Mechanical switches

Häfele Loox universal door contact switch, modular – on/off switching



- > Material/colour: Plastic, black
- > Dimension: 51.8 x 40 x 14.2 mm (L x W x H)
- > Degree of protection: IP20
- > Supplied with: 1 switch with fixing material

	Cat. No.
Universal door contact switch, modular	833.89.143

- + Please order lead with snap-in connector for modular switches driver separately. Length 2 m: Cat. No. 833.89.142. see page 84

- ! The universal door contact switch is suitable for hinged doors or single-leaf sliding doors.

Häfele Loox lead with snap-in connector for modular switches



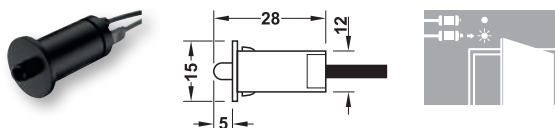
- > Degree of protection: IP20
- > Supplied with: 1 lead

Material/colour:	Length mm	Cat. No.
Lead with snap-in connector for modular switches	1000 mm	833.89.141
	2000 mm	833.89.142

- + Required for modular switches

- ! Drill hole Ø for plug: 12 mm

Häfele Loox door contact switch – on/off switching



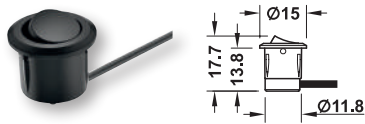
- > Material/colour: Plastic, Black
- > Degree of protection: IP20
- > Drill hole Ø: 12 mm
- > Length: 28 mm
- > Supplied with: 1 switch with 2 m lead

	Cat. No.
Door contact switch	833.89.059

- ! Drill hole Ø for plug: 12 mm

Mechanical switches

Häfele Loox rocker switch – on/off switching

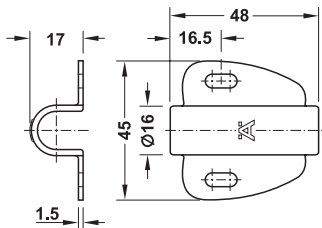


- > Material/colour: Plastic, black
- > Diameter: 15 mm
- > Height: 17.7 mm
- > Drill hole Ø: 12 mm
- > Supplied with: 1 switch with 2 m lead

	Cat. No.
Rocker switch	833.89.106

! Drill hole Ø for plug: 12 mm

Housing for switch, surface mounted



- > Dimension: 48 x 45 x 17 mm (L x W x H)
- > Diameter: 16 mm
- > Material/colour: Plastic, silver coloured
- > Supplied with: 1 housing
- > Application: For switch Ø 12 mm

	Cat. No.
Housing for switch	833.89.090

! Suitable for 32 mm series drilled holes

ILLUMINATING



EXTENDING



SWITCHING



NETWORKING



DISTRIBUTING

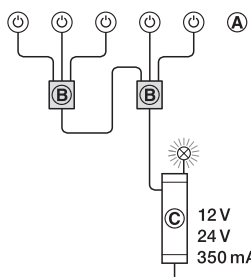


SUPPLYING



Multi switch box

Häfele Loox multi switch box



- (A) Switch
- (B) Multi switch box
- (C) Driver



1 LED driver operated by up to 3 switches.
Allows the LED driver or distributor with switching function to be switched on and off from different positions.

- > Function: 2 operating modes can be selected using an integrated toggle switch.
- Cross circuit:** On/off switching at different switches
- Deactivated cross circuit:** Switching on with switch 1, 2 or 3. For switching off, all switches that were switched on have to be activated again
- > Material/colour: Plastic, black
- > Length x width: 55 x 45 mm
- > Height: 16 mm
- > Standby power consumption: ≤ 0.3 W
- > Degree of protection: IP20
- > Supplied with: 1 multi switch box with 1 m lead for switch

Standby power consumption W	Cat. No.
Multi-switch box	833.89.066

Lead from multi boxes to switching input

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

- ! Cannot be used in combination with dimmer 833.89.043
- Drill hole Ø for plug: 12 mm
- Alternative to the supplied 1 m lead
- For multi switch box.
- The drill hole Ø for the male plug and the female socket of the switch leads is 12 mm.

Häfele Loox extension lead for switches



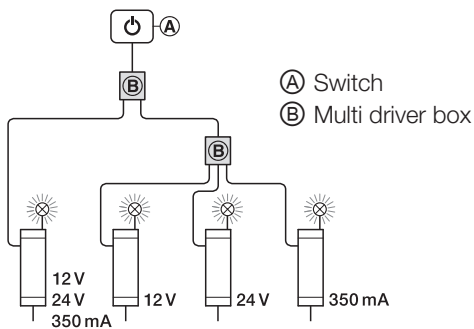
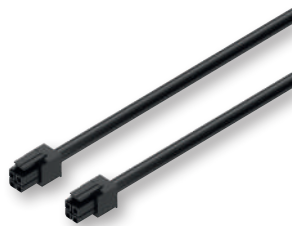
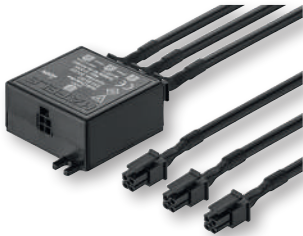
- > Length: 2000 mm
- > Supplied with: 1 lead

	Cat. No.
Extension lead for switches	833.89.067

- ! Drill hole Ø for plug: 12 mm
- Can also be used for the multi switch box and the multi driver box.
- The maximum lead length of a switch is 6 m.
- The drill hole Ø for the male plug and the female socket of the switch leads is 12 mm.

Multi driver box

Häfele Loox multi driver box



- > Material/colour: Plastic, black
- > Length x width: 50 x 40 mm
- > Height: 19 mm
- > Standby power consumption: 1.5 W
- > Supplied with: 1 multi driver box with 3 x 1 m lead for switch

Standby power consumption W	Cat. No.
1.5 W	833.89.061

! Max. 3 x 75 W per multi driver box.

Lead for multi boxes to switching input

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

! Drill hole Ø for plug: 12 mm
 Alternative to the supplied three 1 m leads for multi driver box.
 The drill hole Ø for the male plug and the female socket of the switch leads is 12 mm.

Up to 3 LED drivers with different voltages or distributors with a switching function can be controlled with 1 switch.
 Several lights in the room can be switched on and off with one switch.
 These can also be 3 of the same driver if you require additional power in a 12 V system, for example.

Häfele Loox extension lead for switches



- > Length: 2000 mm
- > Supplied with: 1 lead

Extension lead for switches	Cat. No.
	833.89.067

! Drill hole Ø for plug: 12 mm
 Can also be used for the multi switch box and the multi driver box.
 The maximum lead length of a switch is 6 m.
 The drill hole Ø for the male plug and the female socket of the switch leads is 12 mm.

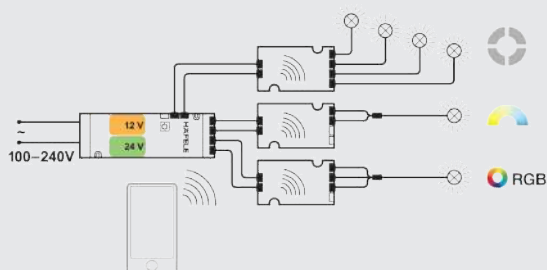


Networking

Häfele Connect BLE Box



- > The Häfele Connect BLE box (Bluetooth low energy technology – ideal protocol for wireless light control) makes it possible to intuitively control furniture lighting and electrically operated fittings using a convenient app.
- > A 12 V or 24 V driver supplies the BLE box via two leads. A single BLE Box or an entire network of BLE boxes is intuitively controlled via a Smartphone or tablet.
- > The Häfele Connect App makes it possible to control individual lights and electrically operated fittings.

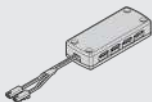


- > The app controls the switching status (on/off), the brightness (0–100%) and also the colour temperature (with multi white lights) and the light colour (with RGB lights).
- > All parameters can be saved as scenarios and retrieved at any time. Even time-controlled alteration of the brightness, the colour temperature, the light colour and the position of fittings is possible.
- > Real-life images of the actual room and the actual lights provide an intuitive operating experience. The Häfele Connect App is free for Apple IOS® and Android™.



Voltage V	Version	Number of connections	L X W X H mm	Output current	Standby power consumption W	Supplied with	Cat. No.
12 V	For on/off switching and dimming of lights (0–100%). Please order the BLE adapter separately for operating RGB lights or multi white lights.	4	100 x 57 x 17	Single unit output: max. 30 W; Total output for all units: max. 60 W	<0.5 W	1 BLE box, lead 300 mm	BLE box 850.00.005
24 V		4	100 x 57 x 17	Single unit output: max. 60 W; Total output for all units: max. 90 W	<0.6 W	1 BLE box, lead 300 mm	BLE box 850.00.006

Häfele Connect BLE Box



Multi-white lights adaptor for BLE box

Voltage	Output Slots	Cat. No.
12 V	8	850.00.011
24 V	8	850.00.012



RGB lights adaptor for BLE box

Voltage	Output Slots	Cat. No.
12 V	4	850.00.013



- > The distance between the Smartphone or tablet to the nearest BLE box is approx. 10 m.
- > Multiple BLE boxes create a network, and can also be placed approx. 10 m apart.
- > One BLE box occupies 2 outputs of the driver.



Distributing

Main leads

Country-specific main leads, socket at cable: C7



833.89.002 EU



833.89.009 EU

- > Voltage: 250 V
- > Length: 2000 mm
- > Supplied with: 1 piece

Plug design



Cat. No.

833.89.002



833.89.009

Switch leads

Häfele Loox extension lead for switches



- > Area of application: Switches and modular switches
- > Length: 2000 mm
- > Drill hole Ø: Plug 12 mm
- > Supplied with: 1 extension lead plug/socket

Length mm

Cat. No.

Extension lead for switches

833.89.067



The maximum lead length of a switch is 6 m.

Häfele Loox lead for modular switches



- > Area of application: Modular switches
- > Version: With snap-in connector
- > Drill hole Ø: Plug 12 mm
- > Supplied with: 1 lead plug/plug

Length mm

Cat. No.

1000

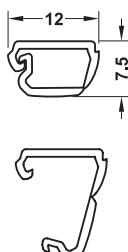
833.89.141

2000

833.89.142

Cable routing

Häfele Loox cable channel



- > Dimension: 2500 x 12 x 7.5 mm (L x W x H)
- > Application: Concealing visible cables in furniture and cabinets
- > Supplied with: 1 cable channel with adhesive tape

Finish

Cat. No.

Brown, RAL 8007

833.89.023

White, RAL 9010

833.89.013

Supplying

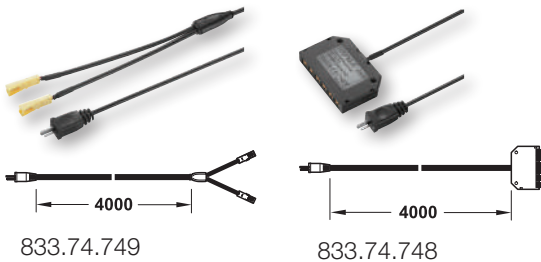
Driver, Constant voltage 12 V

Häfele Loox wall plug driver 12 V



- > Colour: Black
- > Degree of protection: IP20
- > Input voltage: 100–240 V~; 50–60 Hz
- > Output voltage: DC 12 V
- > Standby power consumption: 0.1 W
- > Supplied with: 1 wall plug driver

Plug design/ designation	Output power W	Dim. (L x W x H) mm	Cat. No.
EU	6	61 x 37 x 57	833.74.933
	15	78 x 46 x 68	833.74.935
	27	84 x 50 x 72	833.74.937



Leads 12 V		
	Plug design/ designation	Cat. No.
12 V	4 m lead 2.5 A/22 AWG with 2 slots	833.74.749
	4 m lead 2.5 A/22 AWG with 6-way distributor	833.74.748

! 12 V All sockets for 12 V Loox.

ILLUMINATING

EXTENDING

SWITCHING

NETWORKING

DISTRIBUTING

SUPPLYING

Loox LED Driver

Constant voltage 12 V

Häfele Loox driver constant voltage 12 V



1

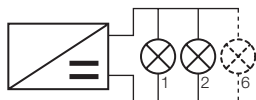
EXTRA
FLAT



2



3



Parallel connection



- 1 Article No.: 833.74.960
 $\otimes_1 + \otimes_2 + \dots + \otimes_6 < 20 \text{ W}$
- 2 Article No.: 833.74.962
 $\otimes_1 + \otimes_2 + \dots + \otimes_6 < 40 \text{ W}$
- 3 Article No.: 833.74.964
 $\otimes_1 + \otimes_2 + \dots + \otimes_6 < 60 \text{ W}$
max. 42 W per light output

- > Version: With overload protection
- > Colour: Black
- > Degree of protection: IP20
- > Input voltage: 100–240 V~; 50–60 Hz
- > Output voltage: DC 12 V
- > Number of connections: 6 x consumer, 1 x switch
- > Supplied with: 1 driver with mounting accessories

12V	Output power	Output current	Standby power consumption	Dim. (L x W x H)	Cat. No.
	W	A	W	mm	
1	0-20	1.67	≤0.1	140 x 50 x 16	833.74.960
2	0-40	3.33	≤0.1	190 x 60 x 16	833.74.962
3	0-60	3.5	≤0.2	230 x 70 x 16	833.74.913

The driver is the heart of the Loox system, and is suitable for connecting to all of the worlds most frequently used mains voltages and frequencies. All of the switches in the Loox product range can be connected to the drivers with a universal switch input. All drivers are energy efficient and equipped with overload protection.



- > Lead length from driver to switch max. 6 m..
- > Provide for sufficient air supply and circulation at the mounting location of the driver.



Country-specific mains leads

- > Description: EU
- > Supplied with: 1 piece

Plug design	Cat. No.
	833.89.002
	833.89.009

Loox LED Driver

Constant voltage 24 V

Häfele Loox driver constant voltage 24 V



- > Version: With overload protection
- > Colour: Black
- > Degree of protection: IP20
- > Input voltage: 100–240 V~; 50–60 Hz
- > Output voltage: DC 24 V
- > Number of connections: 6 x consumer, 1 x switch
- > Supplied with: 1 driver with mounting accessories

24 V	Output power	Output current	Standby power consumption	Dim. (L x W x H)	Cat. No.
	W	A	W	mm	
1	0-20	0.83	≤0.1	140 x 50 x 16	833.77.945
2	0-40	1.67	≤0.1	190 x 60 x 16	833.77.947
3	0-90	3.5	≤0.2	316 x 70 x 16	833.77.949

The driver is the heart of the Loox system, and is suitable for connecting to all of the world's most frequently used mains voltages and frequencies. All of the switches in the Loox product range can be connected to the drivers with a universal switch input. All drivers are energy efficient and equipped with overload protection.

- ! > Lead length from driver to switch max. 6 m.
- > Provide for sufficient air supply and circulation at the mounting location of the driver.

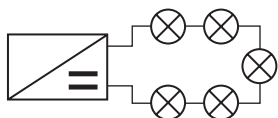
- ! 1 Article No.: 833.77.945
⊗₁ + ⊗₂ + ... + ⊗₆ < 20 W
- 2 Article No.: 833.77.947
⊗₁ + ⊗₂ + ... + ⊗₆ < 40 W
- 3 Article No.: 833.77.949
⊗₁ + ⊗₂ + ... + ⊗₆ < 90 W
max. 84 W per light output

+	Country-specific mains leads	
> Description:	EU	
> Supplied with:	1 piece	
Plug design	Cat. No.	
⏻	833.89.002	
🔧	833.89.009	

Loox LED Driver

350 mA

Häfele Loox driver 350 mA



Series connection



Article No.: 833.80.900

 $\otimes_1 + \otimes_2 + \dots + \otimes_n$ 1 W up to max. 4 W

Article No.: 833.80.901

 $\otimes_1 + \otimes_2 + \dots + \otimes_n$ 5 W up to max. 10 W

- > Colour: Black
- > Degree of protection: IP20
- > Input voltage: 100–240 V~; 50–60 Hz
- > Constant current: DC 350 mA
- > Standby power consumption: <0.5 W
- > Supplied with: 1 driver with mounting accessories

Number of connections	Output power W	Dim. (L x W x H) mm	Cat. No.
4 x devices, 1 x switch	>1.5–4	140 x 43 x 20	833.80.900
10 x devices, 1 x switch	>5–10	195 x 43 x 28	833.80.901



Note minimum output power.

Lead length from driver to switch max. 6 m.

All lights and switches must be connected to the driver first, before connecting the driver to the mains. Any unused slot must have a cable bridge. Bridge connectors are supplied.

Ensure that there is a sufficient air supply and circulation at the mounting location.

Ambient temperature –10 °C to +40 °C



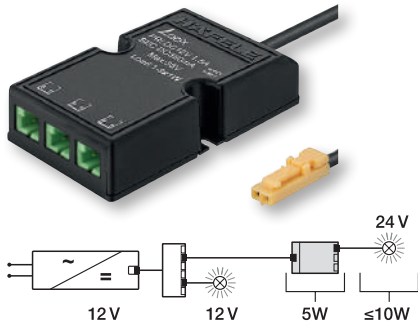
Country-specific mains leads

- > Description: EU
- > Supplied with: 1 piece

Plug design	Cat. No.
	833.89.002
	833.89.009

Converters

Häfele Loox converter 24 V to 12 V – for connecting 24 V lights to the 12 V system



Maximum possible connected rating of 10 W per converter.

- > Application: Connecting 24 V lights to the 12 V system
- > Dimensions: 61 x 34 x 15 mm (L X W X H)
- > Wattage: Input 15 W, output 10 W
- > Standby power consumption: 0.3 W
- > Primary side: DC 12 V
- > Secondary side: DC 24 V
- > Number of output ports: 3 connections for 24 V lights
- > Supplied with: 1 converter with 200 mm lead

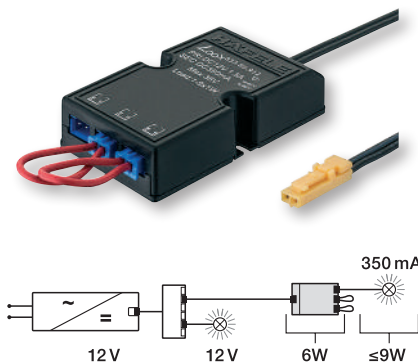
Converter 24 V to 12 V

Cat. No.

833.77.934

12 V Loox 12 V driver see page 92

Häfele Loox converter 350 mA to 12 V – for connecting 350 mA lights to the 12 V system



Maximum possible connected rating of 9 W per converter.

- > Application: Connecting 350 mA lights to the 12 V system
- > Dimensions: 61 x 34 x 15 mm (L X W X H)
- > Wattage: Input 15 W, output 9 W
- > Standby power consumption: 0.2 W
- > Primary side: DC 12 V
- > Secondary side: DC 350 mA (min. 1 W, max. 9 W)
- > Number of output ports: 3 connections for 350 mA lights
- > Supplied with: 1 converter with 200 mm lead

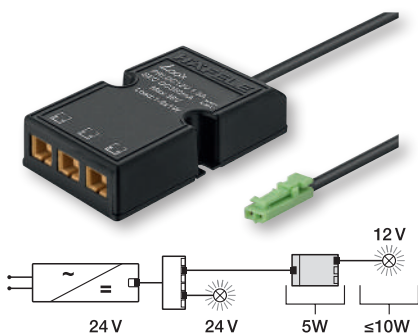
Converter 350 mA to 12 V

Cat. No.

833.80.912

12 V Loox 12 V driver see page 92

Häfele Loox converter 12 V to 24 V – for connecting 12 V lights to the 24 V system



Maximum possible connected rating of 10 W per converter.

- > Application: Connecting 12 V lights to the 24 V system
- > Dimensions: 61 x 34 x 15 mm (L X W X H)
- > Wattage: Input 15 W, output 10 W
- > Standby power consumption: 0.3 W
- > Primary side: DC 24 V
- > Secondary side: DC 12 V
- > Number of output ports: 3 connections for 12 V lights
- > Supplied with: 1 converter with 200 mm lead

Converter 12 V to 24 V

Cat. No.

833.74.947

24 V Loox 24 V driver see page 93



Give your designs the perfect touch in the bath, vanity or closet areas with Häfele's Aquasys Range of Light Mirrors, consisting of the Aquasys, Aquasys X+ and Aquasys X Series. Beautifully designed, the mirrors add value, functionality and style to any interior space.

Aquasys Light Mirror

Multi-Functional Convenience



Bluetooth Capable Transducer System

- > Plays music from your mobile on the sound system integrated into the mirror



Demister (Mirror Heater)

- > Prevents the mirror from fogging up



Background Lighting

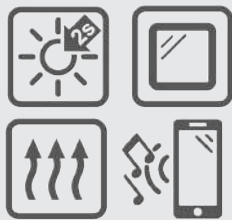
- > Functions as a source of mood and ambient lighting



Front Lighting

- > Offers adjustable lighting option from warm white to natural white

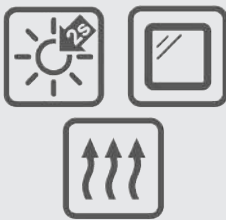
AQUASYS



The mirrors from the Aquasys Series are top-of-the-range models and come feature packed with the following:

- > Front Lighting
 - > Background Lighting
 - > Demister (Mirror heater)
 - > Bluetooth Capable Transducer System
- Application: Bathrooms

AQUASYS X+



The mirrors from the Aquasys X+ Series include mid-range models which have the following features:

- > Front Lighting
 - > Background Lighting
 - > Demister (Mirror heater)
- Application: Bathrooms

AQUASYS X



The mirrors from the Aquasys X Series provide economical options for those looking for mirrors with:

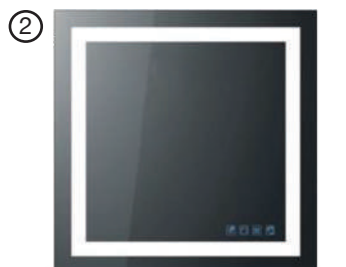
- > Front Lighting
 - > Background Lighting
- Application: Dressing Rooms, Living Rooms & Bathrooms

Aquasys Light Mirror

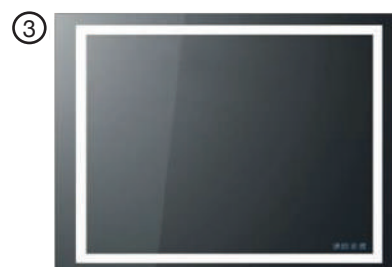
SIZE VARIANTS & PRODUCT SPECIFICATIONS



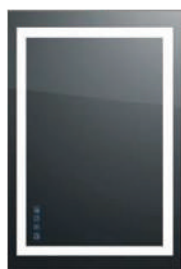
900(W) X 600 (H) X 54 (D) mm



900(W) X 900 (H) X 54 (D) mm



1200(W) X 900 (H) X 54 (D) mm



600(W) X 900 (H) X 54 (D) mm



900(W) X 1200 (H) X 54 (D) mm

Please Note: The size variant can also be installed vertically

Article No.:	983.19.010 (Aquasys) 983.19.110 (Aquasys X+) 983.19.210 (Aquasys X)	983.19.020 (Aquasys) 983.19.120 (Aquasys X+) 983.19.220 (Aquasys X)	983.19.030 (Aquasys) 983.19.130 (Aquasys X+) 983.19.230 (Aquasys X)
Dimensions (W x H x D):	900 x 600 x 54 mm	900 x 900 x 54 mm	1200 x 900 x 54 mm
Colour Temperature:			
> Front Lighting:	Warm White (2700K) & Natural White (4000K)		
> Back Lighting:	Warm White (2700K)		
Front Lighting Lumen Output:			
> Warm White:	1080 Lm	1080 Lm	1560 Lm
> Cool White:	1230 Lm	1470 Lm	1764 Lm
Colour Rendering Index:	> 90	> 90	> 90
Wattage:	95 W	102 W	111 W
Lux @ 70 cm (luminous Flux / Area):	500		
Nominal Voltage:	DC 12 V		
Input Voltage:	100-240 V; 50-60 Hz		
Material:	LED Profile – Aluminium; Rear Back Plate – Wood		
Switch Type:	Touch LED Illuminated (Operation – Warm White, Stand-by – Blue)		
Demister (Mirror Heater):	Standby after 45 minutes (only applicable for Aquasys and Aquasys X+ Mirrors)		
Sound System:	Bluetooth Transducer System; Password – 0000 (only applicable for Aquasys Mirrors)		
Bluetooth Frequency:	2.4 GHz (only applicable for Aquasys Mirrors)		
Degree of Protection:	IP 44 (Splash-proof for use in wet rooms)		
Warranty:	2 Years		
Energy Efficiency Class:	A		
Certification	BIS/ UL / CUL / SAA / CE / TÜV certified as per EN 1036-1:2007 against corrosion resistance		



Series Name	Article No	Dimensions (WxHxD) mm	Net Weight Kg.	Front Lighting	Background Lighting	Demister Mirror Heater)	Bluetooth Capable Transducer System
Aquasys	983.19.010	900 × 600 × 54	10.82	•	•	•	•
Aquasys	983.19.020	900 × 900 × 54	14.88	•	•	•	•
Aquasys	983.19.030	1200 × 900 × 54	19.38	•	•	•	•
Aquasys X+	983.19.110	900 × 600 × 54	9.70	•	•	•	
Aquasys X+	983.19.120	900 × 900 × 54	13.30	•	•	•	
Aquasys X+	983.19.130	1200 × 900 × 54	18.00	•	•	•	
Aquasys X	983.19.210	900 × 600 × 54	9.40	•	•		
Aquasys X	983.19.220	900 × 900 × 54	13.00	•	•		
Aquasys X	983.19.230	1200 × 900 × 54	17.50	•	•		

LED strip lights

Technical data, monochrome 5 mm / 8 mm

	Voltage V	Model Häfele Loox5	Quantity LEDs/m	Colour tempera- ture K	Illuminance lx Distance				Watt- age W/m	
					250 mm	500 mm	750 mm	1000 mm		
LED strip lights monochrome, 5 mm										
	5 12 V	LED 2061	120	2700	1860		790	440	270	9.6
				3000	1960		850	470	290	9.6
				4000	2000		860	480	290	9.6
				5000	2060		860	480	290	9.6
LED strip lights monochrome, 8 mm										
	5 12 V	LED 2062	60	2700	1050		435	240	145	4.8
				3000	1090		455	245	150	4.8
				4000	1120		460	260	155	4.8
				5000	1130		470	260	160	4.8
		LED 2068	120	2700	2145		900	480	300	9.6
				3000	2250		940	505	310	9.6
				4000	2300		950	510	320	9.6
				5000	2300		955	515	320	9.6
	5 24 V	LED 3048	120	2700	2870		1210	665	415	14.4
				3000	3000		1270	695	430	14.4
				4000	3100		1310	715	445	14.4
				5000	3100		1320	715	450	14.4

Technical data, monochrome constant current 8 mm

	Volt- age	Model Häfele Loox5	Quantity	Colour temper- ature	Illuminance lx				Watt- age		
	V		LEDs/m	K	Distance 250 mm	500 mm	750 mm	1000 mm	W/m		
LED strip light, monochrome 8 mm											
 LED 3052	5 24 V	LED 3052	140	2700	4070		1750	970	600	19.2	
				3000	4160		1780	990	620	19.2	
				4000	4220		1800	1000	625	19.2	
				5000	4260		1840	1020	630	19.2	
LED strip lights monochrome, 8 mm											
 LED 2071	5 12 V	LED 2071	60	2700	1050		435	240	145	4.8	
				3000	1090		455	245	150	4.8	
				4000	1120		460	260	155	4.8	
				5000	1130		470	260	160	4.8	
 LED 2074	5 12 V	LED 2074	120	2700	2145		900	480	300	9.6	
				3000	2250		940	505	310	9.6	
				4000	2300		950	510	320	9.6	
				5000	2300		955	515	320	9.6	

	Luminous flux	Luminous efficacy	Section length	Colour rendering index CRI		Available length	Max. strip length (visual)	Max. strip length wattage-dependent m on the Loox driver			
	lm/m	lm/W	mm	R _a	R ₉	5 m	m	20 W	40 W	60 W	90W
	870	91	25	>90	>50	833.74.328	3.0	2.00	4.10	6.20	–
	830	97	25	>90	>50	833.74.329	3.0				
	955	99	25	>90	>50	833.74.330	3.0				
	990	103	25	>90	>50	833.74.331	3.0				

	440	92	50	>90	>50	833.74.336	6.0	4.10	8.30	12.50	–
	465	97	50	>90	>50	833.74.337	6.0				
	490	102	50	>90	>50	833.74.338	6.0				
	495	103	50	>90	>50	833.74.339	6.0				
	920	96	25	>90	>50	833.74.362	4.0	2.00	4.10	6.20	–
	970	101	25	>90	>50	833.74.363	4.0				
	1000	104	25	>90	>50	833.74.364	4.0				
	1040	108	25	>90	>50	833.74.365	4.0				
	1270	88	50	>90	>50	833.76.352	6.2	1.30	2.70	–	6.20
	1305	91	50	>90	>50	833.76.353	6.2				
	1340	93	50	>90	>50	833.76.354	6.2				
	1430	99	50	>90	>50	833.76.355	6.2				

	Luminous flux	Luminous efficacy	Section length	Colour rendering index CRI		Available length	Max. strip length (visual)	Max. strip length wattage-dependent m on the Loox driver			
	lm/m	lm/W	mm	R _a	R ₉	5 m	m	20 W	40 W	60 W	90W
	1850	96	50	>90	>50	833.76.378	4.6	1.00	2.00	–	4.60
	2015	105	50	>90	>50	833.76.379	4.6				
	2050	107	50	>90	>50	833.76.380	4.6				
	2100	109	50	>90	>50	833.76.381	4.6				

	440	92	50	90	>50	833.74.300	6.0	4.10	8.30	12.50	–
	465	97	50	90	>50	833.74.301	6.0				
	490	102	50	90	>50	833.74.302	6.0				
	495	103	50	90	>50	833.74.303	6.0				
	920	96	25	90	>50	833.74.308	3.5	2.00	4.10	6.20	–
	970	101	25	90	>50	833.74.309	3.5				
	1000	104	25	90	>50	833.74.310	3.5				
	1040	108	25	90	>50	833.74.311	3.5				

LED strip lights

Technical data, multi-white 8 mm

	Voltage	Model	Quantity	Colour	Illuminance				Wattage
	V	Häfele Loox5	LEDs/m	temperature	lx	Distance			
				K	250 mm	500 mm	750 mm	1000 mm	W/m

 LED strip lights multi-white, 8 mm, 3- wire

 LED 2073	5 12V	LED 2073	2 x 60	2700	1025	425	230	145	4.8
				5000	1075	445	245	150	
 LED 2076		LED 2076	2 x 120	2700	2040	850	460	280	9.6
				5000	2110	875	470	290	

 LED strip lights, RGB, 12 mm

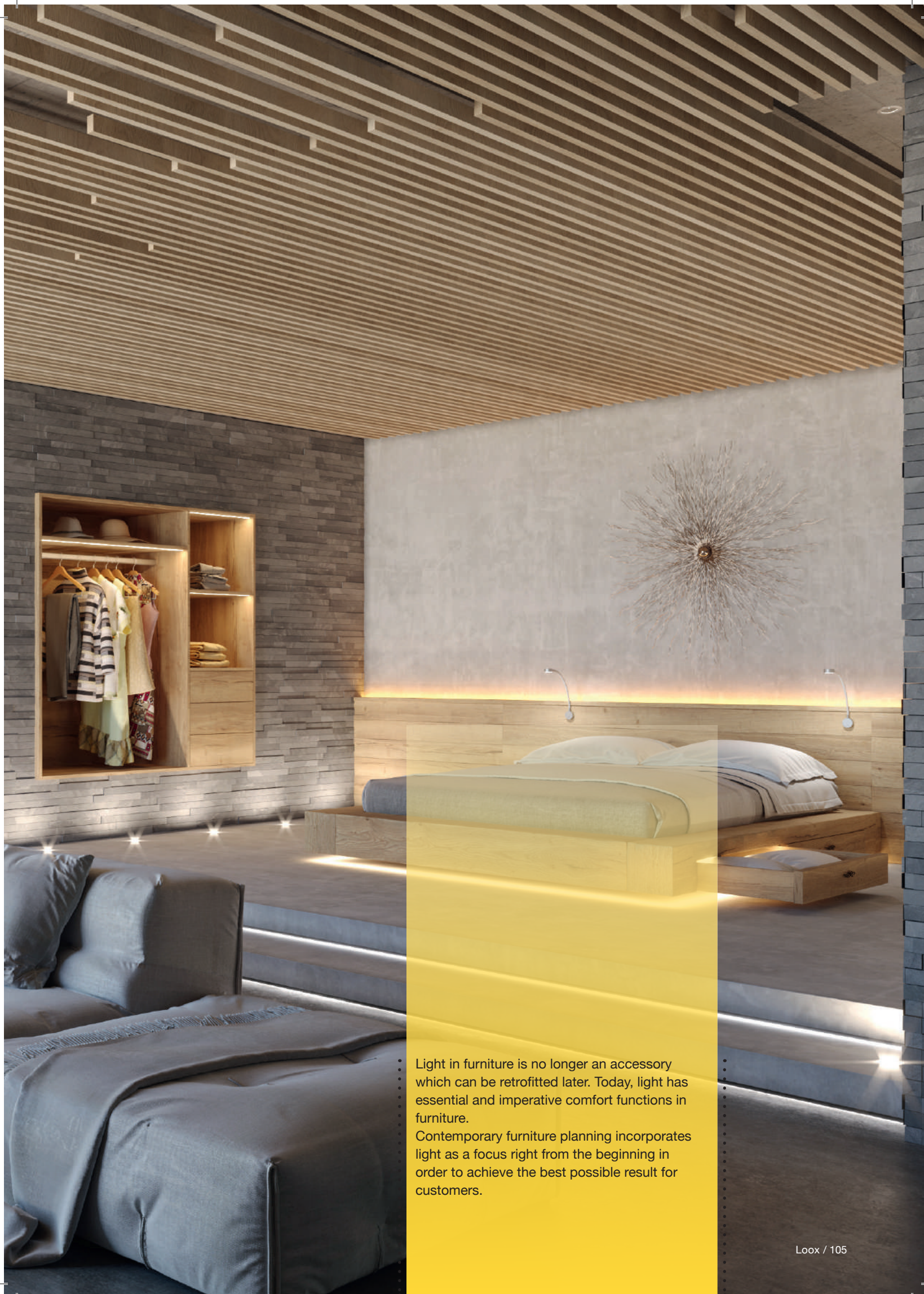
 LED 2016	12V	LED 2016	30	RGB	-	-	-	-	7.1
					-	-	-	-	

Wattage n	Luminous flux	Luminous efficacy	Section length	Colour rendering index CRI		Weight energy consumption	Length of contact surface P	Available length	Max. strip length (visual)	Max. strip length wattage-depend- ent m on the Loox5 driver			
	lm/m	lm/W	mm	R _a	R ₉	kwh/1000 h	mm	5 m	m	20 W	40 W	60 W	90W
8	425	88	50	>90	>50	5.28	4	833.74.352	4.5	4.10	8.30	12.50	–
	465	96											
6	875	91	25	>90	>50	10.56	3.5	833.74.318	3	2.00	4.10	6.20	–
	940	97											
1	1050	29	100	-	-	-	-	833.73.450	3.4	2.81	5.63	8.45	–

Light shapes rooms.

Light in furniture is more than just accessories.

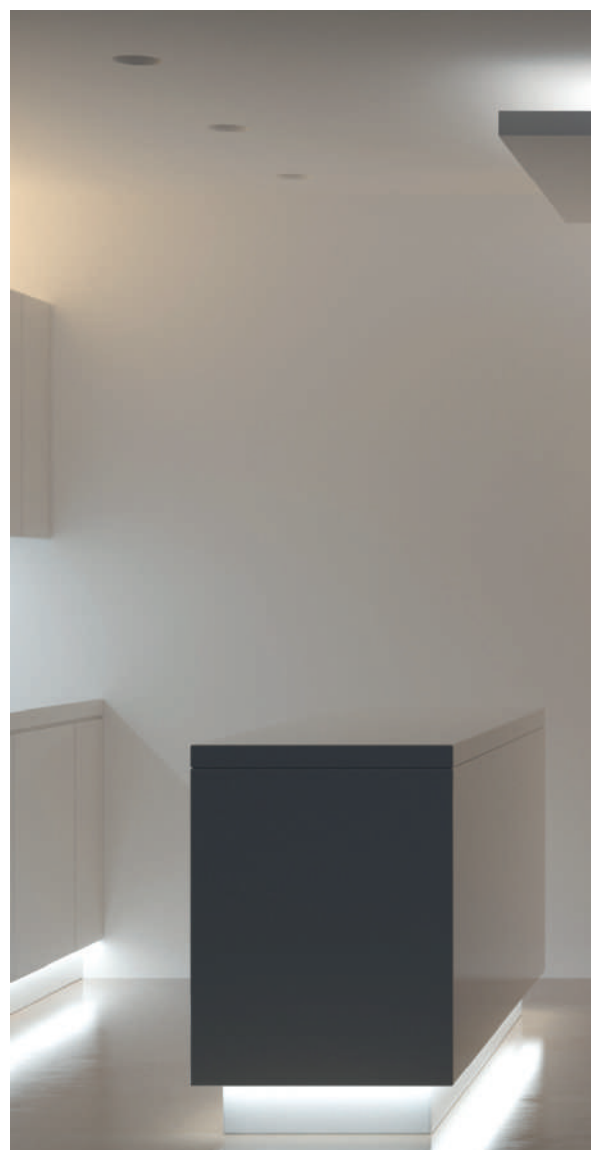




• Light in furniture is no longer an accessory
• which can be retrofitted later. Today, light has
• essential and imperative comfort functions in
• furniture.
• Contemporary furniture planning incorporates
• light as a focus right from the beginning in
• order to achieve the best possible result for
• customers.

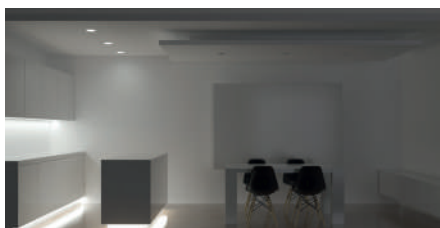
Light changes spaces.

The interplay of light in rooms and light in furniture promotes a feeling of well-being.



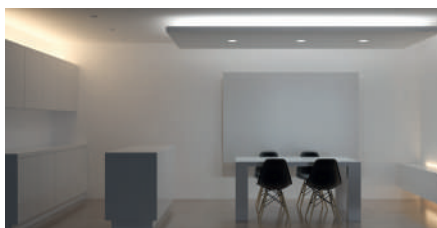
Cooking.

Bright, neutral white light makes for a pleasant illumination of the important work spaces and ensures the proper reflection of the colour of food and products.



Eating.

The combination of direct, flat light for a perfect illumination of the dining table, supplemented with indirect, warm effect lights on ceilings and walls creates an atmospheric ambience.



Relaxation.

The interaction of areas of light and horizons created by light creates a comfortable and cozy atmosphere.



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Light and intensity.

When lighting a room, using a combination of several light sources is critical.

In the 1950s, Richard Kelly, a pioneer of lighting design, already differentiated between light to see – ambient luminescence, focal glow – the illumination of an object or area, and play of brilliants – in which the light itself is the object to observe.



Depending on the purpose for the lighting plan of a room and specific areas, task light is used. To create a specific ambiance ambient light is used.



Task light.

For example, the lighting need in a home office can differ and depends on the location of the desk as well as the influx of daylight. When work is done on computer or tablet a glare-free light source is required. Since the screen is the work area, a backlight can be sufficient. However, drawing or writing require a well lit work surface.



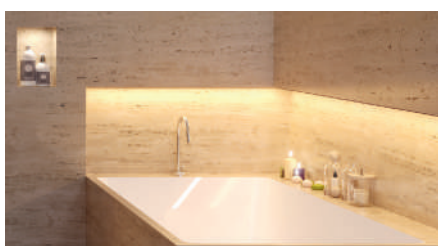
Ambient light.

To create an atmospheric ambience, the room light can also be used as indirect lighting in the furniture. Ambient light provides less illumination and serves to create an appealing environment. The light source is often hidden, for example it can be embedded in shelving or behind moldings. It is important that ambient light beams do not create brightly lit surfaces or produce sharp edges.



Light evokes emotions.

Light situations trigger associations: romantic, comfortable, relaxing and cold.



Staging.

Spotlights make the illuminated objects on shelves and showcases the focus. And wall wash light makes wall structures visible.



Highlighting.

Highlighting functional areas with even, bright light is a sensible addition to the general room light.



Setting accents.

The Loox lighting system offers many possibilities to set accents in a room. With the appropriate light composition corners, edges and surfaces can be dramatized.

With a smart lighting plan specific moods can be created in the living environment. The Häfele Loox system can turn a purposefully designed bathroom into a spa. Edge lighting creates an artificial horizon, dimmable spotlights create a candlelight atmosphere. Warm light creates a mood simulating a sunset.

Light and colour.



Light makes colour visible.

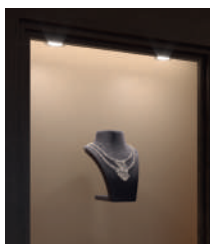
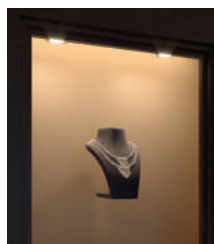
Light is made up of electromagnetic waves which only become visible to the human eye through reflection on objects. A red object reflects only the red colour. The other colours are absorbed. All light sources are tested and measured based on the accuracy of their colour reproduction, the so-called colour rendering index (CRI). The higher the CRI, the higher the quality of colour reproduction.

Warm light. Cool light.

The colour of the light, also referred to as colour temperature, controls our state of well-being. Light with a high blue component has an invigorating effect on the body. Just like the cool fresh light of an early morning. By comparison, strong red and yellow-coloured light has a relaxing effect and evokes a state of rest. Just like the warm glow in the late afternoon or a candle.

Consistent colour quality and performance.

An important factor for new technologies is the reliability in use.



Häfele has set high standards for the selection of materials, which are continually tested and certified internationally. Setting a narrow binning is one of them. All LEDs are tested and sorted to specified quality criteria after production. Häfele selects the highest quality class LEDs for maximum life time, energy efficiency and to ensure after market replacement quality.

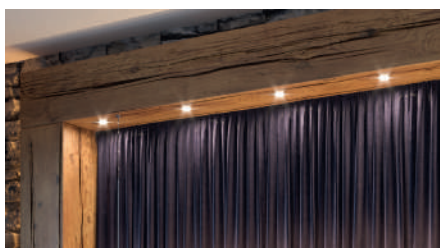
Light with effect.

Every room comes to life with light and shadows.



Linear light.

Linear illumination is created with LED strip lights. Inside cabinets and shelves, on work surfaces or enclosures of furniture, LED strip lights provide uniform light with a broad area of illumination.



Directional light.

Narrow beam Loox spotlights can create directional lighting effects to highlight specific objects. With surface mounted or built-in spotlights in a row it is possible to achieve flat surface illumination of specific areas. A special effect is created by overlapping cones of light.

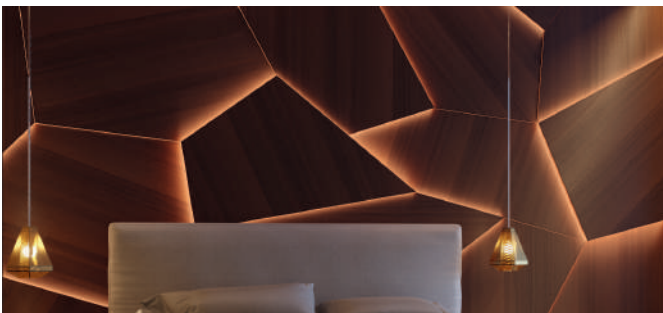
Linear illumination can be used to create horizons. With direct light objects can be partially emphasized. Wall wash light can highlight and reinforce structures (stone structures, relief wallpapers).

Light and surfaces.



Depending on the material and structure a surface reacts differently to light. Light is partially absorbed, a part is reflected and depending on the surface it is scattered. With translucent or transmissive materials, the light can also shine through the body.

Depending on the material and structure a surface reacts differently to light.



Dark surfaces.

Dark materials absorb light, so it is necessary to use stronger light. However, too much light destroys the ambiance and comfort.



Bright surfaces.

A bright floor or bright materials reflect the light much better than dark materials. A brightly designed space therefore requires less overall light. Extra effect lighting adds freshness and a feeling of spaciousness to the room.

Light and control.

A Smart Home also includes the smart control of different lighting scenarios inside the building.



The Häfele Loox system offers several solutions for controlling lights; from the direct control via simple switching points to the remote control of more complex lighting scenarios.

In addition to the lighting, digital solutions can also be used to centrally operate and control the stereo, television, heating, alarm system and more.



Remote control of light.

Especially important is the control of light scenarios in multi-functional rooms. Depending on the application remote controls can be used for easy control of several light sources, from multi-white lights to coloured RGB lights.



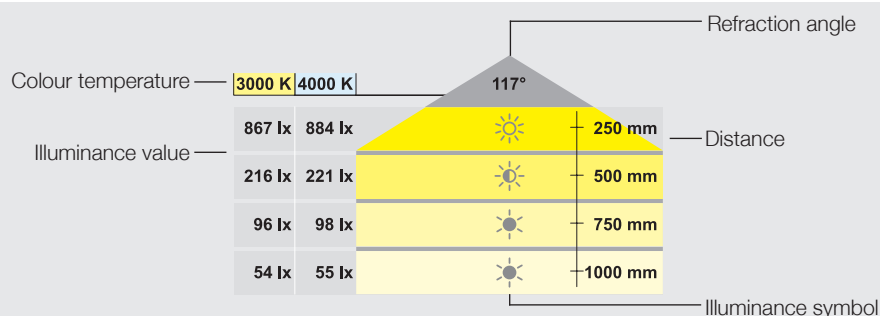
Control light (and more) centrally.

An app connects and centrally controls all installed light components and allows the design of light effects individually with a smartphone or tablet. In this way multiple scenarios can be saved and programmed, or simply retrieved with just by finger tip.



Light effects and lighting technology

Cone of light



	>500 lx
	150–500 lx
	<150 lx



Note:

The illuminance symbol always represents the best value of all colour temperatures and is meant to be for quick guidance only. Please note the specific values of the individual colour temperatures and the refraction angle before ordering!

Recommendation for illumination of interior rooms

Interior room type	Illuminance in Lux at 500 mm	Colour temperature
Kitchen, dining area	300–500	2700–4000 K
Store fixtures, galleries	300–500	4000–6500 K
Bedroom, living room	200–300	2700–4000 K
Bathroom	200–500	3500–4000 K
Storage room	100	4000–5000 K
Orientation light, hallway, wardrobe	10–50	4000–5000 K

Test symbols and symbols

Product features

-  Dimmable
-  RGB light
-  Multi-white light
-  Bluetooth®: industry standard for data transmission between electronic devices by radio over a short distance. The Bluetooth® word mark and logos are registered trademarks of Bluetooth SIG, Inc., and Häfele uses these marks under licence. Other trademarks and names are the propriety of their respective owners.

Test symbol

-  TÜV seal of quality
-  Bureau of Indian Standards (BIS) Mandatory Certification of Quality Assurance
-  Confirmation from manufacturer that the product complies with the product-specific applicable European norms and standards. Häfele will not use the certification in advertising.
- RoHS** Restriction of Hazardous Substances (EU directive 2011/65/EU). Häfele will not use the certification in advertising.
-  Underwriters Laboratories, correspondence with the national standards in the USA and Canada
-  Energy efficiency standard VI of the United States Department of Energy
-  Product Safety Electrical Appliance and Material Safety Law (for Japan)
-  Regulatory Compliance Mark (for Australia)
-  China Compulsory Certification
- EAC** Eurasian Conformity, for CU countries (Russia, Kazakhstan, Belarus)
-  Korea Certification Mark
-  Bureau of Standards, Metrology & Inspection BSMI (for Taiwan)
-  Thai Industrial Standards Institute TISI
-  European Norms Electrical Certification, with indication of the testing laboratory (one of 18 European national institutes)
- FC** Declaration of Conformity for telecommunication and radio equipment (USA)
-  Telecommunication and Radio Equipment (Japan)

Protection classes

-  Protection class II
-  Protection class III

Degrees of protection

- IP20** Only for use in dry locations
- IP44** Penetration by solid foreign bodies $q \geq 1$ mm is prevented. Water spray protection (water from all directions)
- IP65** Dustproof, protection from water spray (jet) from any angle.



IP44 after installation



IP65 after installation

Safety symbols

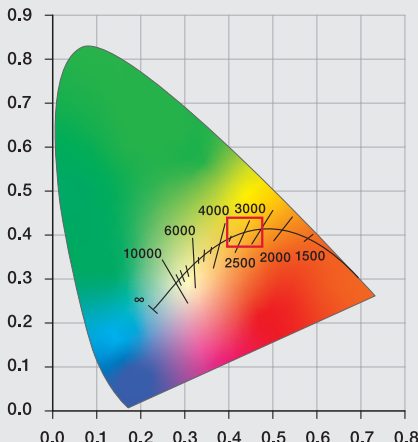
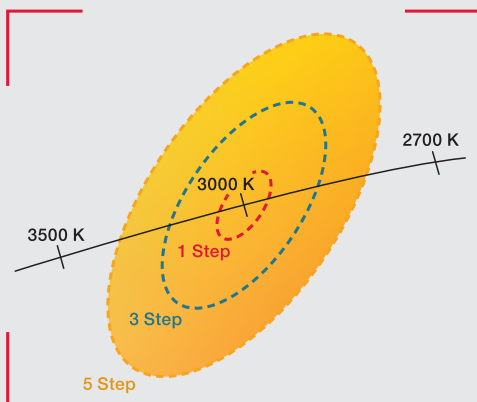
-  Installation permitted on or in furniture, whose ignition properties are unknown.
-  Max. surface temperature in case of fault
-  Lights to be used indoors only. Not to be used outdoors!
-  Do not use components that impede thermal radiation.
-  Waste of Electrical and Electronic Equipment. Do not dispose of in residential waste!
-  Driver, converts alternating current to direct current

Voltage supply

- SELV** Safety Extra Low Voltage
-  Independent operating unit for use outside of light without additional cover.
-  Short-circuit proof with safety isolation

Technical terms

Technical terms

Refraction angle	The refraction angle (beam angle) describes the angle between two imagined straight lines in a plane through the visual beam axis, whereby these straight lines go through the centre of the front of the lamp and through the points at which the illuminance is 50% of the illuminance on the visual beam axis.														
Illuminance	The illuminance is the luminous flux (lm) in relation to a surface (m ²) and it is indicated in Lux (lx). It is used to measure the brightness with which a surface is illuminated.														
Binning	During industrial manufacture, LEDs differ from each other with regard to colour, luminous flux (brightness) and forward voltage. In order to achieve consistent light quality with the same brightness level and a uniform light colour, they are therefore sorted according to colour, luminous flux and forward voltage and separated into bins ("containers") during manufacture. This sorting process is known as Binning. Häfele exclusively uses bins with a high degree of brightness in order to achieve high efficiency.														
Bluetooth® Mesh	Network technology which was introduced in 2017, based on Bluetooth® Low Energy, in which all components (controls, devices) form a joint network, which is ideal for controlling lights. Häfele Connect Mesh uses this technology.														
Energy efficiency class	The energy efficiency class provides information about the relevant energy consumption. Lamps and lights are categorised in classes E to A++. LED lights achieve the highest classes A to A++.														
Colour temperature and light colour	The colour temperature is a specification of the colour appearance of a white light source and is measured in Kelvin (K). The lower the colour temperature, the warmer the light colour; the higher the colour temperature, the cooler the light colour. White light sources with a colour temperature below 3400 K are considered "warm white" by Häfele, white light sources with a colour temperature between 3400 K and 5700 K are considered "cool white". White light sources above 5700 K are referred to as "daylight white".														
Colour consistency/ colour differences	  Colour differences are specified in stages, so called "MacAdams Ellipses" or "SDCM" (Standard Deviation of Colour Matching). Häfele uses 3 SDCM binnings for its LED products. This is a good value, because it is statistically unlikely that LEDs with a maximum colour difference will be next to each other on the strip light or in the light and that the colour difference is visible. In its ErP directive, the EU Commission stipulates that 6 SDCMs may not be exceeded for LED products. <table border="1"> <thead> <tr> <th>SDCM</th><th>Visibility</th></tr> </thead> <tbody> <tr> <td>1</td><td>Only people with extremely good vision can see the most minimal colour differences.</td></tr> <tr> <td>2</td><td>Most minimal colour differences are visible.</td></tr> <tr> <td>3</td><td>Very small colour differences are visible.</td></tr> <tr> <td>4</td><td>Colour differences are visible.</td></tr> <tr> <td>5</td><td>Significant colour differences are visible.</td></tr> <tr> <td>>5</td><td>Very clear colour differences are visible.</td></tr> </tbody> </table>	SDCM	Visibility	1	Only people with extremely good vision can see the most minimal colour differences.	2	Most minimal colour differences are visible.	3	Very small colour differences are visible.	4	Colour differences are visible.	5	Significant colour differences are visible.	>5	Very clear colour differences are visible.
SDCM	Visibility														
1	Only people with extremely good vision can see the most minimal colour differences.														
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4	Colour differences are visible.														
5	Significant colour differences are visible.														
>5	Very clear colour differences are visible.														
Colour rendering index CRI	The colour rendering index is a parameter that can be used to compare the colour rendering quality of light sources at the same colour temperature. The higher the value, the better the colour rendering. A value of 100 corresponds to the colour rendering of daylight.														
Weighted energy consumption	The weighted energy consumption is rounded to two decimal places in kilowatt hours in relation to 1,000 hours of use. It applies to operation of the LED with an external driver. The calculation and publication of this value is defined by EU ordinance No. 874/2012.														

Technical terms

Constant current technology	The same current flows through each LED. That means that the brightness of all LEDs is the same, and a drop in luminous flux is prevented. This increases the maximum visual length of the strip lights.																												
Life time	Specified in operating hours. The life time mainly depends on the warming of the products. The hotter the environment, the shorter the life time. The replacement rate in years is calculated from the total life time and the average operating time per annum. The following table can be used as a planning aid. The specified life time relates to L70/B50. <table><tr><th>Indoor use</th><th>Annual operating time (EN 15193) hours</th><th>Replacement rate Years</th><th>Life time installation Hours</th></tr><tr><td>Office</td><td>2,500</td><td>20</td><td>50,000</td></tr><tr><td>Education</td><td>2,000</td><td>25</td><td>50,000</td></tr><tr><td>Hospital</td><td>5,000</td><td>10</td><td>50,000</td></tr><tr><td>Hotel</td><td>5,000</td><td>10</td><td>50,000</td></tr><tr><td>Restaurant</td><td>2,500</td><td>10</td><td>25,000</td></tr><tr><td>Shop</td><td>5,000</td><td>10</td><td>50,000</td></tr></table>	Indoor use	Annual operating time (EN 15193) hours	Replacement rate Years	Life time installation Hours	Office	2,500	20	50,000	Education	2,000	25	50,000	Hospital	5,000	10	50,000	Hotel	5,000	10	50,000	Restaurant	2,500	10	25,000	Shop	5,000	10	50,000
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Life time L80/B10	L80 is the time after which the LED is still emitting 80 % of its original light. B10 means that 10 % of the LEDs may have less than 80 % of the original light output. Häfele tests all LEDs it uses in accordance with the LM-80 standard. LM-80 is a standardised testing method, which allows products to bear the EPA's (Environmental Protection Agency) Energy Star. The test is a manufacturer-independent comparison of LEDs. During the test the luminous flux (Lumen maintenance) of an LED is tested at three different temperatures for a minimum of 6,000 hours. Then the life time L80 is calculated by means of extrapolation. The extrapolation procedure is described in regulation IES TM-21.																												
LED	A light-emitting diode (LED) is a semi-conductor element that emits light when electricity passes through it. This semi-conductor element consists of a crystal that is attached to a metal base, and both are encapsulated in protective plastic. LEDs are mostly based on inorganic, i.e. non-carbonic materials.																												
Luminous efficacy	The luminous efficacy is the ratio of the luminous flux and the wattage absorbed. It is used to measure the operating efficiency of the light source. It is indicated in Lumen per Watt (lm/W).																												
Luminous flux	It is indicated in Lumen (lm). The luminous flux indicates the light output, i.e. the quantity of light a source emits. The value may be subject to measurement and production-related fluctuations of ±10 %.																												
Drop in luminous flux	The brightness of the LEDs on LED strip lights decreases with the length of the strip light due to the increasing resistance of the copper line. A drop in luminous flux from the first to the last LED of up to 30% is imperceptible to the human eye. That's why Häfele specifies a maximum strip light length for this visual value. Generally, it is possible to operate strip lights with longer lengths, but a difference in brightness will be visible. Exception: The LEDs of the strip lights with constant current technology (LED 3052) always have the same brightness.																												
Max. strip light length	Visual value Strip light length with an imperceptible drop in luminous flux of max. 30%. Wattage-dependent value Strip light length = output power of driver / wattage of the strip light per meter. If the wattage-dependent value is greater than the visual value, a difference in brightness will be perceivable. Exception: The LEDs of the strip lights with constant current technology (LED 3052) always have the same brightness.																												
Multi-white	The light colour of shades of white can be changed as required with Häfele Connect. BLE, e.g. from warm white to cool white.																												
RGB	RGB is the abbreviation for red, green and blue. In combination with Häfele Connect BLE, almost any colour combination can be created from the three primary colours.																												
RoHS – Lead in Loox products	Loox Products by Häfele are lead-free and adhere to the RoHS guidelines. RoHS is part of CE conformity. All Loox products are CE compliant. Häfele does not advertise the CE conformity in its catalogues, since only CE compliant products are allowed to be offered. The declaration of conformity is available online at www.hafele.com																												
Transmittance	Ratio of transmitted light to incidental light. An ideal transparent body would have a transmittance of 100 %																												

Technical questions

Technical questions

How do I clean an LED strip light?	LED strip lights without a silicone sleeve do not require cleaning. Silicone strip lights can be wiped down with a damp antistatic cloth. Scouring agents and aggressive cleaners can destroy the surface and attack the LEDs.																																				
May I use drivers from other manufacturers?	In order to ensure the safety and functionality of the installation, only Loox drivers or drivers that have been explicitly approved by Häfele may be used. If an electronics technician installs the system, Loox can also be connected and coupled with on-site electrical equipment. However, we explicitly point out that these tasks must be performed by a qualified electrician.																																				
What is the life time of the products in permanent operation?	Loox5 drivers >50,000 hrs. with max. ambient temperature (40 °C/45 °C), wall plug drivers 30,000 hrs. at an ambient temperature of max. 40 °C. Provide for sufficient air supply and circulation at the mounting location of the driver. Loox5 LED strip lights >50,000 hrs. at an ambient temperature of max. 45 °C. Cooling with an aluminium profile is recommended from 9.6 W/m.																																				
Can the multi switch box, the multi driver box and the 3-way distributor with switching function be connected in series multiple times?	No, because the signals can no longer be transmitted properly.																																				
Can 12 V and 350 mA lights or 12 V and 24 V lights be used together?	Yes, please use our respective converter. (converters see chapter Supplying)																																				
How can sensor switch malfunctions be avoided (q 12 mm)?	Check for correct switch installation. The TOP lettering on the switch must point upwards in the installation situation.																																				
How is consistent bulb light colour guaranteed?	Häfele makes high demands on the selection of the materials. All Loox5 strip lights contain high-quality and long-lasting LEDs from Samsung and Lumileds. Setting very tight quality specifications ensures not only luminous flux and breakdown voltage, but also consistent light colour for follow-up purchases.																																				
What is the maximum wattage that I can connect to a device output of the driver?	With 12 V systems it is 12 V x 5.0 A = 60 W with a 60 W driver With 24 V systems it is 12 V x 3.75 A = 90 W with a 90 W driver																																				
How long may the lead between the driver and the device be?	The maximum lead length from the Loox5 driver to the device is 10 m. Long cable lengths in combination with large loads (strip light lengths) can result in voltage losses in the cable. These lead to visible loss of brightness in the lights. The illuminance listed with the lights has been determined with the rated output voltage of the driver. (12 V or 24 V).																																				
What is AWG?	AWG stands for American Wire Gauge. It is the coding for wire diameters in electrical leads that are mainly used in North America. This identifies the cross-section of wires in electrical leads that consist of strands and wire.																																				
What is the current carrying capacity of my cable?	Häfele allows the following current carrying capacity and wattage: <table><tr><th>Type of cable</th><th colspan="2">24 AWG</th><th colspan="2">22 AWG</th><th colspan="2">20 AWG</th><th colspan="2">18 AWG</th></tr><tr><td>Current carrying capacity</td><td colspan="2">1.5 A</td><td colspan="2">2.5 A</td><td colspan="2">3.5 A</td><td colspan="2">5.0 A</td></tr><tr><td>Voltage</td><td>12 V</td><td>24 V</td><td>12 V</td><td>24 V</td><td>12 V</td><td>24 V</td><td>12 V</td><td>24 V</td></tr><tr><td>Wattage</td><td>18 W</td><td>36 W</td><td>30 W</td><td>60 W</td><td>42 W</td><td>84 W</td><td>60 W</td><td>110 W</td></tr></table> The type of cable is imprinted on the coating of the cable.	Type of cable	24 AWG		22 AWG		20 AWG		18 AWG		Current carrying capacity	1.5 A		2.5 A		3.5 A		5.0 A		Voltage	12 V	24 V	12 V	24 V	12 V	24 V	12 V	24 V	Wattage	18 W	36 W	30 W	60 W	42 W	84 W	60 W	110 W
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Wattage	18 W	36 W	30 W	60 W	42 W	84 W	60 W	110 W																													
Can an LED flexible strip light be used behind acrylic glass?	Yes, however the acrylic glass increases the colour variations (binning) up to four times and minimal colour deviations are therefore more visible.																																				
Can Loox lights be operated using multiple switches?	Yes, please use the multi switch box to do this. Up to three switches can be connected to the multi switch box (multi switch box see page 86).																																				
Why do the lights have to be plugged in first before connecting the high voltage mains plug?	If the driver is connected to the mains first, electrical power is output at the secondary side, which leads to overvoltage and therefore damage to the lights if they are connected.																																				
Can Loox lights be used in RVs/boats/cars?	Yes, for sure. We have special IC strip lights that compensate for voltage fluctuations of the vehicles without problems. Our regular LED strip lights can be used as well. It is important to note, however, that the voltage peaks may reduce the life time.																																				

**Mumbai Design Centre:**

Haji Moosa Patrawala Ind.(SOBO)
Estate, Near Famous Studio,
Mahalaxmi (West), Mumbai - 400 011.
Tel.: 022 6264 7100.

Mumbai Design Centre:

#2 Filix Building, Opp. Asian Paints,
L.B.S. Marg, Bhandup (West),
Mumbai - 400 078.
Tel.: 022 2596 9660/
2596 9787/2594 7305

New Delhi Design Centre:

D-89 , 1st Floor, Okhla Phase-I,
New Delhi - 110 020.
Tel.: 011-66574999 .
Fax: 011-41605482.

Bangalore Design Centre:

Incubex Nestavera Spaces Pvt Ltd,
No:13, Langford Place, Langford Road,
Shanti Nagar, Bangalore - 560 025.
Tel.: 080 4132 6116.
Fax: 080 4132 6226.

Sri Lanka:**Hafele Design Centre:**

52, Nandana Gardens
(On Duplication Road), Colombo 04.
Tel: +94 112 500 501.
Fax: 0094 112 500 553.

Hafele Design Centre:

448, Galle Road, Rawathawatta,
Moratuwa, Sri Lanka.
Tel.: +94 112 644 600.

Hafele Boutique:

747A, Sirimawo Bandaranayaka
Mawatha, Mulgampola,
Kandy, Sri Lanka.
Tel.: +94 812 223 338.

Hyderabad Design Centre:

SJR Building - # 1-57/89/1 & 1-57/89/2
Opp Allahabad Bank, Gachibowli,
Hyderabad – 500032
Tel.: 040 29557578 / 040 29557588

Kolkata Design Centre:

PS PACE, Premises No. 1/1A,
Mahendra Roy Lane, Topsia,
Kolkata - 700 046.
Tel.: 033 40086814 / 033 40089268
Fax: 033 24988020.

Chennai Design Centre:

1st Floor No.24, College Road,
Nungambakkam, Chennai 600 006.
Tel.: 044 - 4215 1542
Fax: 044 2446 0922.

Pune Design Centre:

Showroom No. 2, Ground floor,
F P no. 403, A/2, ICC Trade tower,
Senapati Bapat Marg,
Shivaji Nagar, Pune -411016
Tel.: 020 2563 3301
Fax: 020 2563 3302

Pune Office:**Bangladesh Office:**

2nd Floor, House - 181, Road - 2,
Mohakhali DOHS, Dhaka - 1206.
Tel.: 01844018431/ 01844018432/
01844018433/ 01844018437.

Bangladesh Design Center:

House - 106, Road - 12,
Block - E, Banani, Dhaka - 1213
Phone - 02-48810380-81

Nepal:

Monika Home Decor
Kathmandu Plaza, Kamalldhi,
Kathmandu, Nepal
Tel.: 00 9851 030 556 /
00 977 9818496082 / 9851030556

Office No. 12, Vastushree Complex,
Survey No.587, Near Hyde Park,
Gultekdi, Market Yard, Pune - 411 037.
Tel.: 020 2426 6264
Fax: 020 2426 6274.

Ahmedabad Office:

Hafele India Pvt. Ltd., Office No. 302,
3rd Floor,, Shangrila Arcade,
Near Shyamal Cross Road, Satellite,
Ahmedabad - 380015.
Tel.: +91 79695 55505 / 8866220505.

Bhutan:

SMART HOMES
Gr Floor, Druk Building (Opp Helipad)
Babesa -Thimpu Expressway, Thimpu
Tel.: +975-2-333419
Mobile: +975-77277615, 17839717,
77114228,1760063,17669840



Mumbai Corporate Office:
Office No. 3, Building "A", BETA,
I Think Techno Campus, Off J.V.L.R.,
Opp. Kanjurmarg East, Mumbai – 400 042.
Tel.: 022 6142 6100 | Fax: 022 6702 0531.

For Enquiries SMS "HAFELE" to 56070
Toll Free Customer Care: 1800 266 6667
Customer Care WhatsApp: +91 97691 11122
customer care@hafeleindia.com
info@hafeleindia.com

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