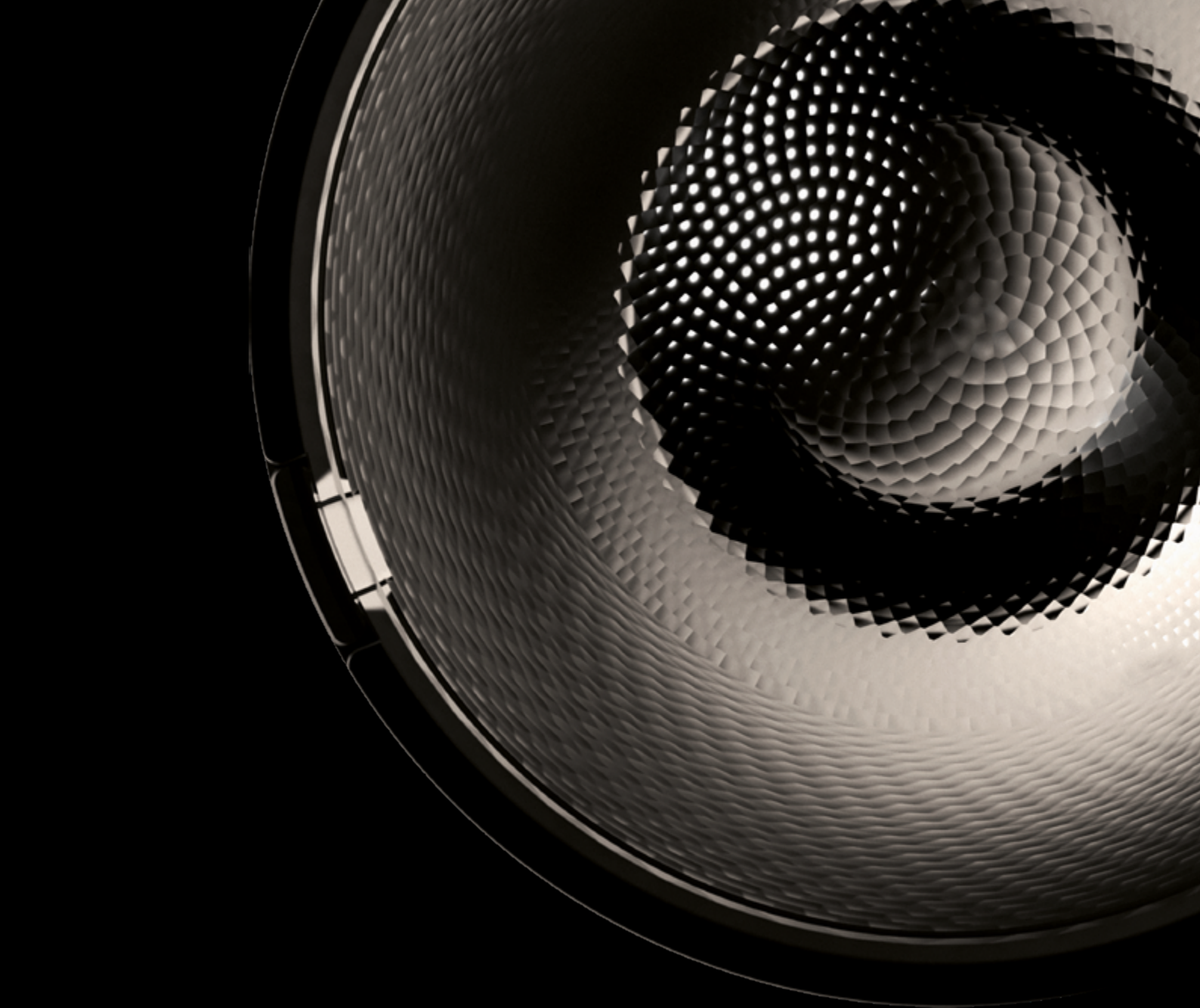




MATTER OF LIGHT

**KRAAB
SYSTEMS**

TABLE OF CONTENTS

VALUES ₄

MATTER OF LIGHT ₆

GRAFFIT ₂₀

POINTS ₄₈

BIONICA ₇₈

VALUES

About people and for people

Every product has people behind it: those who create it and those who use it.

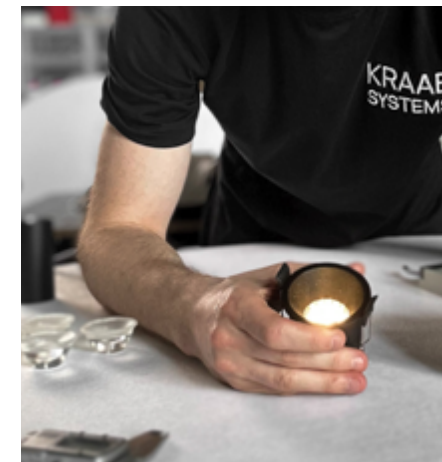
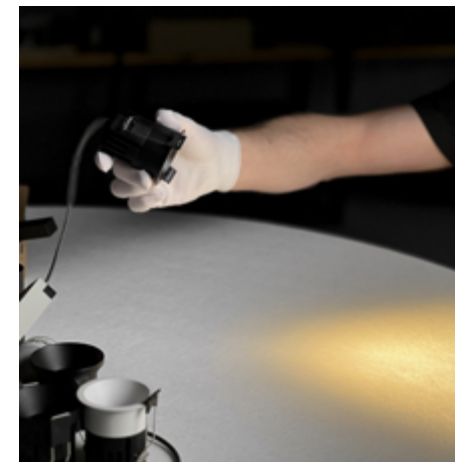
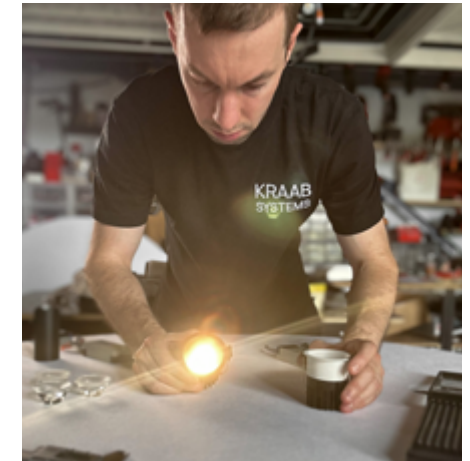
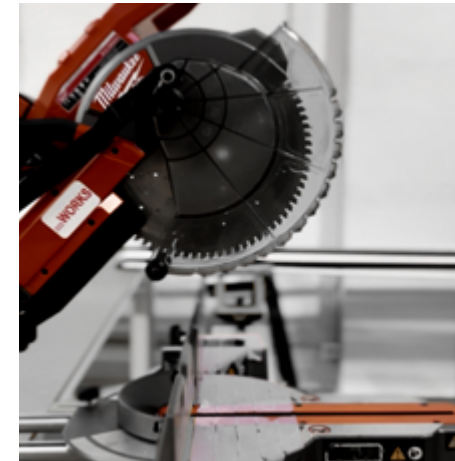
People inside

Today designing high-quality light sources is impossible without a solid understanding of the light spectrum, LED technologies, thermal management, optics and materials. That is why we place great value on a development team with the necessary expertise, experience and—above all—the drive to make a difference.

People outside

The first step in lighting design is to picture real people for whom the light is created—whether a client, designer, site manager or craftsman. We study their needs, tasks and concerns, and we find solutions.

Our path is R&D development. This is a difficult path, but, in our opinion, it is the only way to create a truly high-quality product with the required qualities and performance. KRAAB SYSTEMS is a **high-end lighting system**.



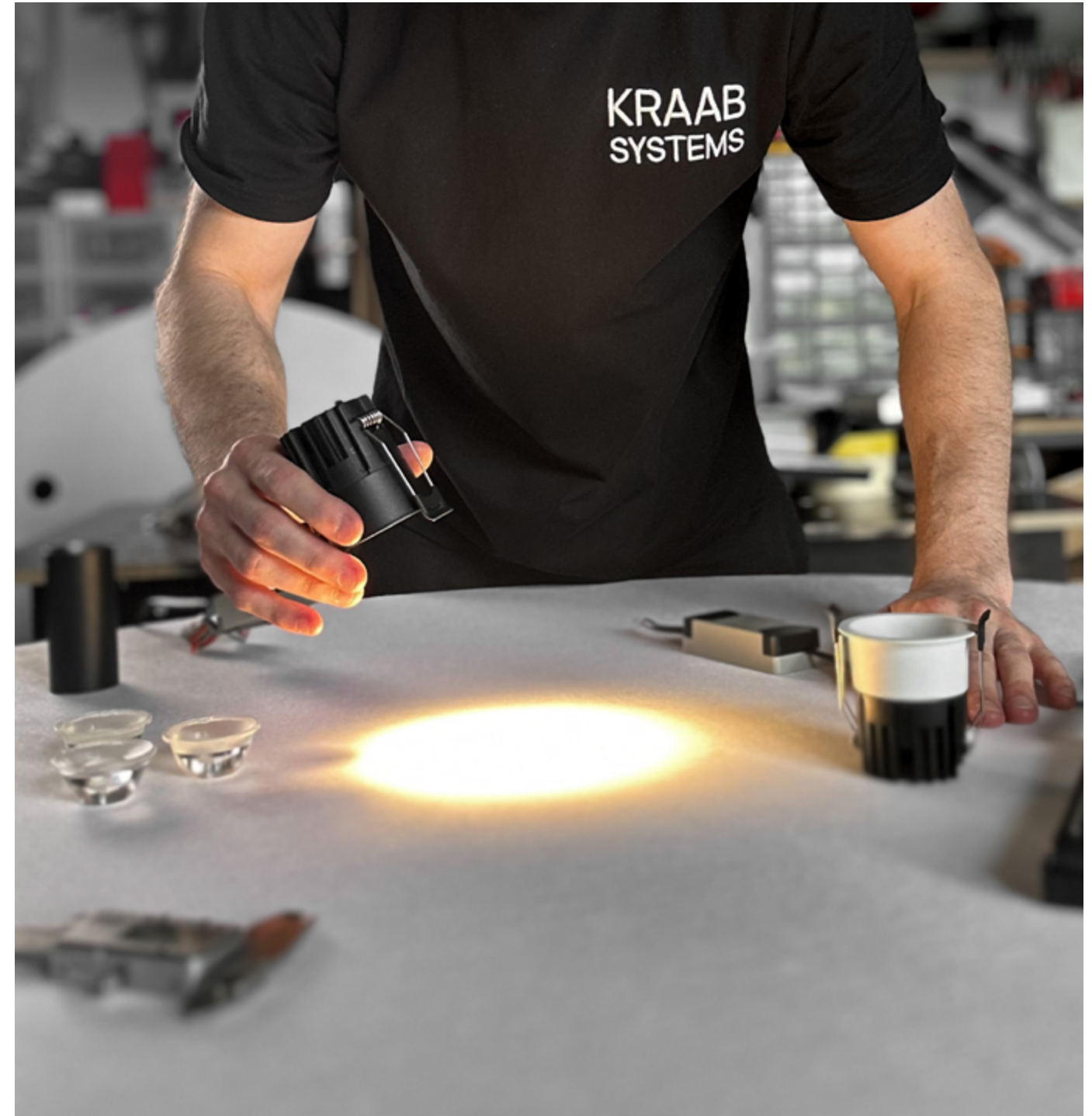
MATTER OF LIGHT

Light is a wave, an emission. And this is also material for us. From our perspective, light has weight, texture, size, and cost. Light is a combination of elements, history, technology and design. It's tangible, and you can hold it in your hands.

Our in-house engineering division and production site are the main assets of KRAAB SYSTEMS.

This allows us to remain flexible, respond quickly to new challenges, test hypotheses, and experiment with materials.

Our love of learning and visual experience allows us, if not to strive, then at least to become the best lighting company.



FULL SPECTRUM

CRI

Colour Rendering Index (CRI, Ra) is one of the key characteristics of a light source. Introduced in 1965, it was intended to differentiate light sources (types of lamps) with the same colour temperature as they conveyed light differently.

Today, however, the relevance of this factor has decreased significantly.

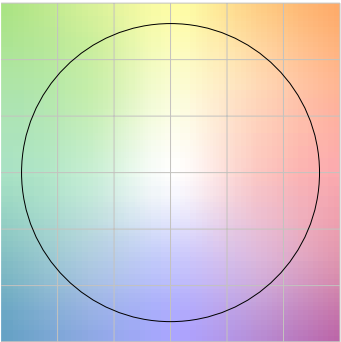
The limitation of the CRI method is that it does not consider colour saturation. As a result, light sources with different lighting spectrum—appearing either duller or more vivid—may share the same CRI value. Moreover, an exceptionally high CRI does not necessarily guarantee visual comfort.

Therefore, we suggest to stick to a new standard for determination of colour rendition IES TM-30.



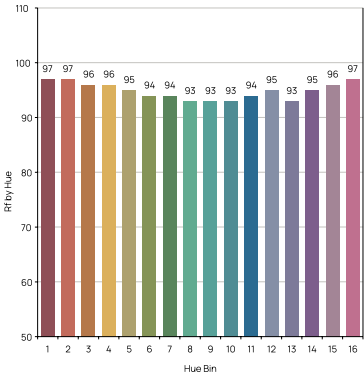
IES TM-30 STANDARD

It is not mandatory for implementation in any country in the world. However, its voluntary use will allow customers to make a more conscious choice now.



PRECISION (Rf)

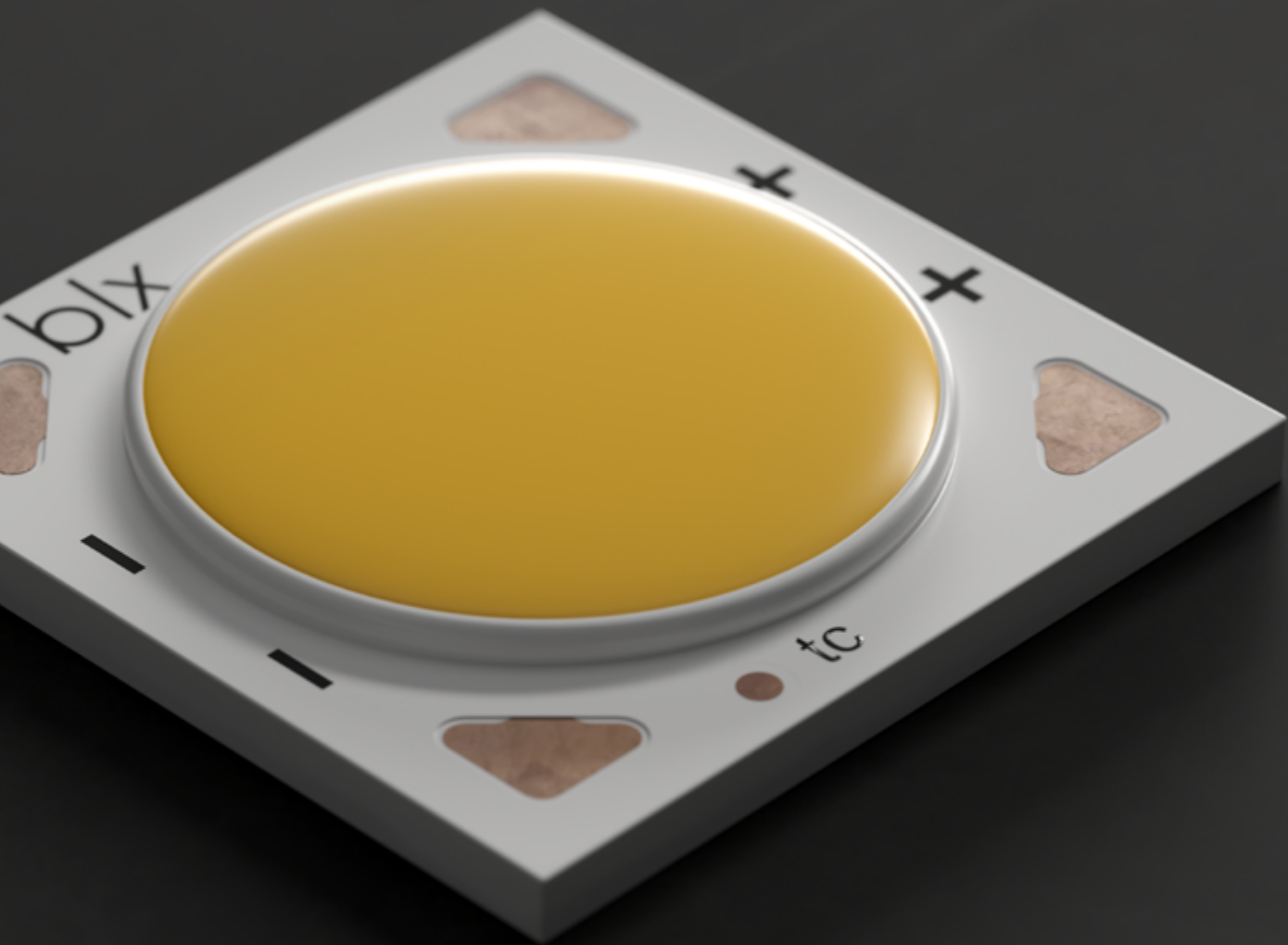
It shows how 99 colours match under the tested light source. Rf is conceptually similar to CRI, but it more reliably determines colour-rendering accuracy by using a larger set of samples. Rf is strictly within range from 0 to 100, where 100 corresponds to the highest accuracy. Measurements under the new standard show that CRI and Rf typically differ by no more than 10 points; in most cases, with rare exceptions, CRI is higher than Rf.



SATURATION (Rg)

It shows the saturation of those colours. Typical saturation corresponds to $R_g = 100$. If colours appear more faded than under the reference source, then $R_g < 100$. If saturation increases, then $R_g > 100$. Note that measurements use not only colour samples, but also everyday objects.





LED TECHNOLOGIES

It is only possible to guarantee the quality of light if you have a deep understanding of technologies and cooperate with reliable manufacturers. LED lighting is a world of innovation. In our products, we use LEDs from leading manufacturers - Bridgelux and Osram, focusing on the latest generation of developments.

HEATING DESIGN

The luminaire service life directly depends on the LED cooling. A responsible approach to the design of radiators in terms of efficiency and appearance is an important part of the development.





VISUAL COMFORT

LEDs, optics and the luminaire body are the minimum required to create a quality product. A fine balance between knowledge and experience, technology and form leads us to the result.

X-BEAM lenses reduce glare while maintaining the main luminous flux. The honeycomb light filter puts the final point delivering high factors of the protective angle of light.

Attention to the smallest details improves the perception of space and makes the atmosphere as comfortable as possible.



15° Narrow



36° Medium



50° Wide

TECHNOLOGY DIM TO WARM

Colour temperature 1800K at 0.1% light intensity and 3000K at 100%.



SMOOTH ADJUSTMENT OF LIGHT INTENSITY

Equal colour temperature at gradual increase of the light flux from 0.1% to 100%.





ACCENTS INSPIRED BY SUNSET LIGHT

The toned glass of the SUNSET light filter combined with YOOZ luminaires creates a warm glow in sunset tones bringing a cosy, relaxing atmosphere to any space.





RAL 8004
Terra Cotta



RAL 7009
Ash Green



RAL 9003
White Sand



NATURAL COLOURS

In a world of technology, robotics, high-tech and information flows, we want to return to the origins—natural motifs and natural colours. Each of the six shades complements a lighting composition in the interior.



RAL 9005
Coal Black



RAL 7024
Deep Graphite



RAL 7045
Cloudy Grey



GRAFFIT

An integrated approach to development has led us to creation of a model range that covers all current interior needs. The unifying features of GRAFFIT low-voltage tracks are an individual design of the visible part, continuity in details, compactness in height, a unique colour range of luminaires, convenient and technological installation to any type of ceilings and walls.

GRAFFIT system operates on a constant voltage of 48 V, has a compact R-FIX adapter, replaceable decorative parts of luminaires and light control.



GRAFFIT TRACKS

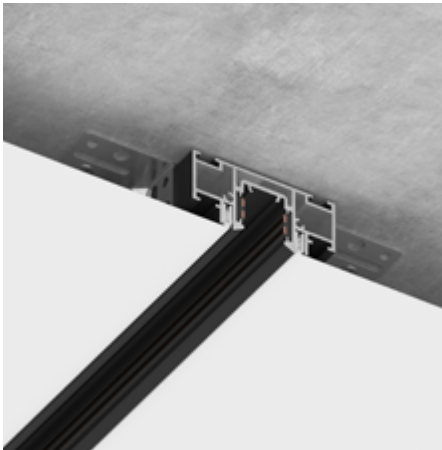
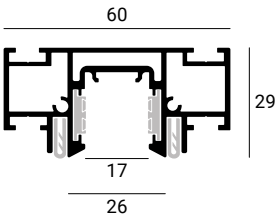
The model range includes a track for stretch PVC and fabric ceilings (RS), a track for drywall installation (RG), a compact suspended or surface-mounted version (SP), and a double track with an upper longitudinal light line (PUD).

Types of tracks



RS TRACK FOR STRETCH CEILING

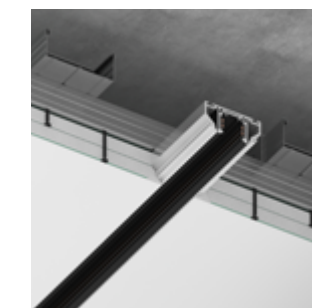
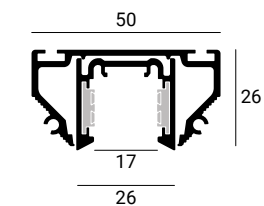
Built-in track system for stretch ceilings. A special canvas fixator - a damper - is the company's own development. This type of fixation is universal and allows you to install the system in both PVC and fabric ceilings. RS track has a solid and compact design. The entire range of GRAFFIT luminaires fits into it.



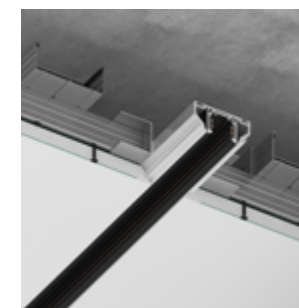


RG TRACK FOR DRYWALL

RG is a revolution! With all our modesty... The system solves the main challenge of installing built-in track in drywall.. By removing the finished track from the painting process, we create a technology that minimises the human factor and allows the track system to be serviced. The structure is divided into two parts: a draft embedded with a protective insert-calibrator, which ensures preservation of the installation gap while drying; a clean track, which is installed after all painting processes are completed. The technology is patented.



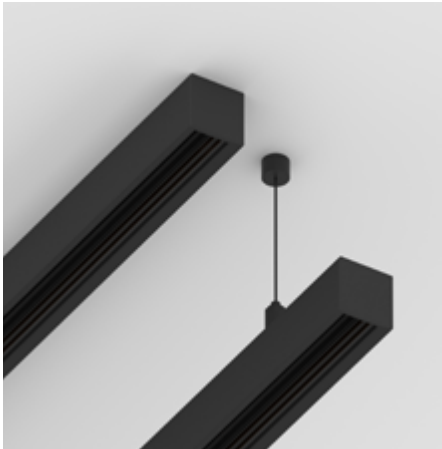
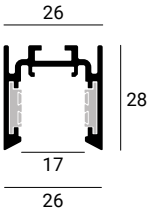
Installation in two layers of drywall



Installation in one layer of drywall

SURFACE OR SUSPENDED SP TRACK

48V track system in a compact design for suspended or surface-mounted installation. The track structure includes adjustment gears and a special groove for connecting the system in a straight line or at corners.

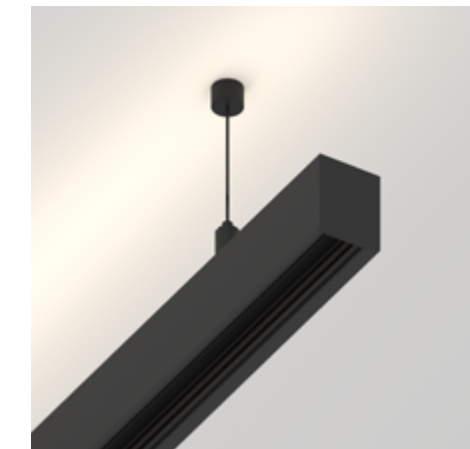
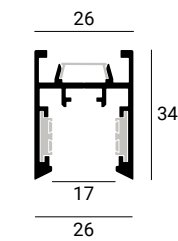




PUD TRACK AND LIGHT LINE

Light to see or light to explore? This unique system has a two-sided structure and solves both of these problems. The upper part contains a light line, providing soft, reflected lighting of the space. The lower part is a standard track system for placing accent lighting.

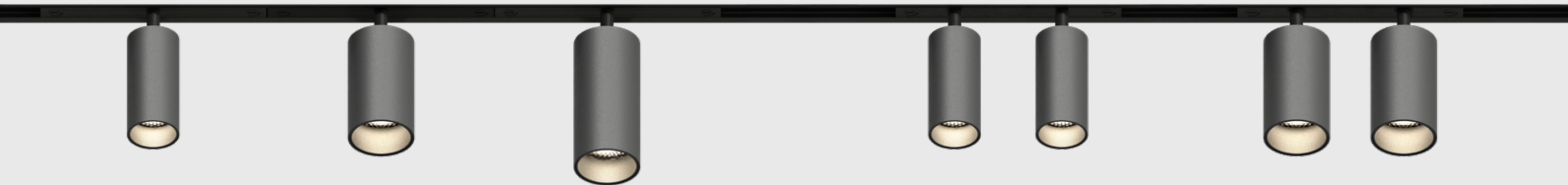
The system has a suspended structure with adjustment gears. In some cases, it can be installed by the surface-mounted method, avoiding lighting in the upper part.



GRAFFIT LUMINAIRES

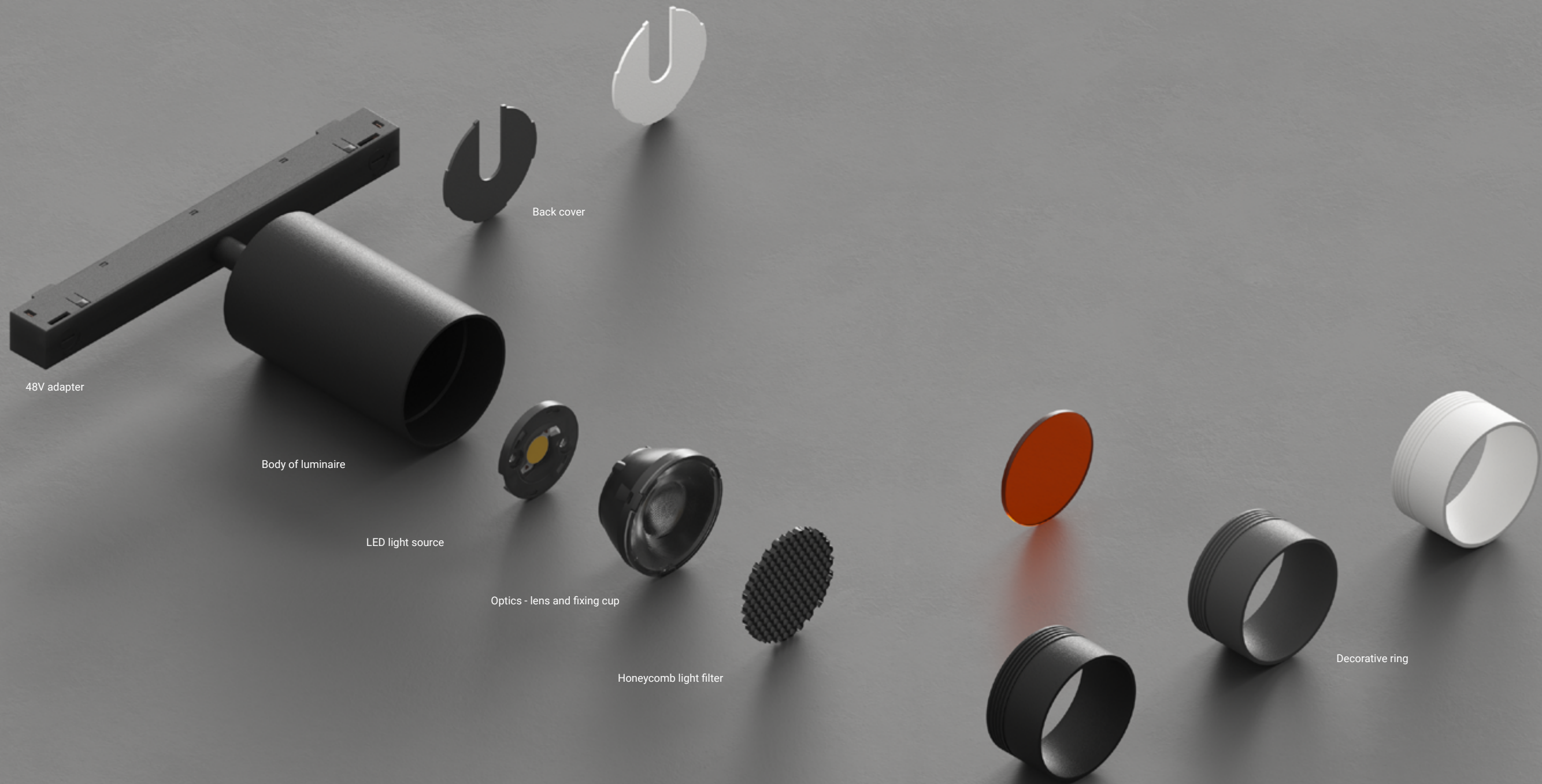
The model range consists of linear luminaires and spotlights with a diameter of 40 and 50 mm, a height of 85 and 110 mm, and various powers — 6 and 12 W. The projectors have interchangeable decorative elements, such as a ring and a back cover. The set can be supplemented with X-BEAM lenses with different light dispersion angles.

Types of luminaires	  
Body colour	 
Colour of accessories	     
Dispersion angle	  
Light filters	



SPOT

Single luminaires with well-balanced proportions. Despite their compact size, they provide high-quality, sufficient illumination. Small and medium sizes are ideal for ceiling heights of 2.6–3.0 m, while larger sizes suit ceilings from 3.0 m and above.



48V adapter

Body of luminaire

Back cover

LED light source

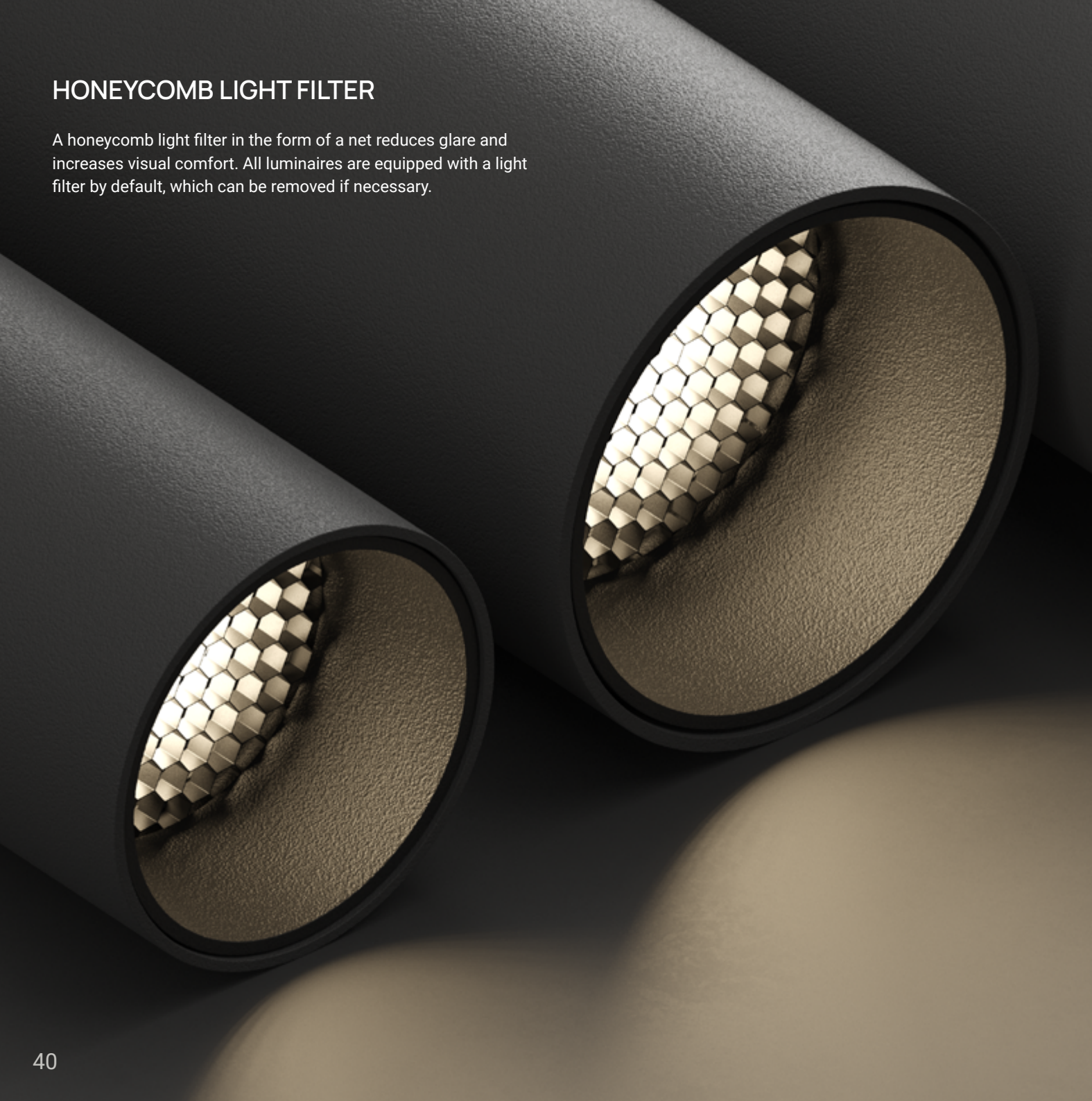
Optics - lens and fixing cup

Honeycomb light filter

Decorative ring

HONEYCOMB LIGHT FILTER

A honeycomb light filter in the form of a net reduces glare and increases visual comfort. All luminaires are equipped with a light filter by default, which can be removed if necessary.



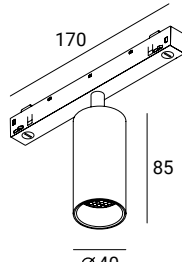
R-FIX

When developing the system, we gave preference to reliable mechanical fixation R-FIX, capable of withstanding any external influences.

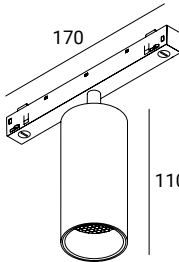


GRAFFIT

Track luminaires



SPOT
LED 48V
6W
3000K | 4000K
CRI 90
3000K: R9 – 74.9,
Rf – 88.7, Rg – 104.2
15° | 36° | 50°
no-dim



SPOT
LED 48V
12W
3000K | 4000K
CRI 90
3000K: R9 – 72.1,
Rf – 88.7, Rg – 103.8
15° | 36° | 50°
no-dim

Decorative rings



D 40 и 50 mm
Coal Black
RAL 9005



D 40 и 50 mm
Deep Graphite
RAL 7024



D 40 и 50 mm
White Sand
RAL 9003



D 40 и 50 mm
Terra Cotta
RAL 8004



D 40 и 50 mm
Ash Green
RAL 7009



D 40 и 50 mm
Cloudy Grey
RAL 7045

Back cover



D 50 mm
Coal Black
RAL 9005



D 50 mm
Deep Graphite
RAL 7024



D 50 mm
White Sand
RAL 9003



D 50 mm
Terra Cotta
RAL 8004



D 50 mm
Ash Green
RAL 7009



D 50 mm
Cloudy Grey
RAL 7045



GRAFFIT LINE

A distinctive feature of GRAFFIT LINE luminaires is that after installation they sit slightly above the ceiling plane reducing glare and improving visual comfort. The matte acrylic diffuser has a three-sided shape, allowing to maintain high output and an aesthetic appearance.

DOT-LINE

The linear luminaire with DOT-LINE dots is almost invisible while fully performing its main function. Neat appearance, recessed lens placement and minimal glare coefficient.

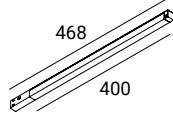
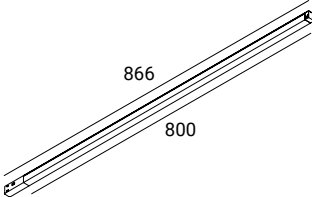
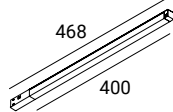
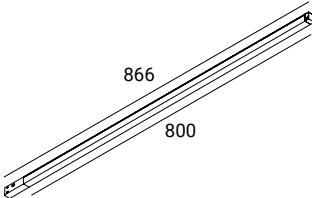
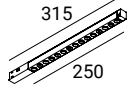
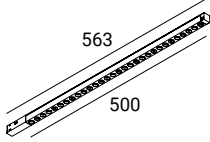


LINE DETAILS

GRAFFIT LINE and DOT-LINE linear luminaires have a simple and reliable fastening system. There is a mechanical button on one side and a lock with a 45° inclination angle on the other side.

GRAFFIT

Linear luminaires

	LINE LED 48V 7W 3000K 4000K CRI 90 3000K: R9 – 62, Rf – 91.1, Rg – 100 120° pwm-dim		LINE LED 48V 14W 3000K 4000K CRI 90 3000K: R9 – 62, Rf – 91.2, Rg – 100.2 120° pwm-dim
	LINE LED 48V 9.5W 3000K 4000K CRI 92 3000K: R9 – 54.8, Rf – 92.1, Rg – 99.2 120° pwm-dim		LINE LED 48V 18W 3000K 4000K CRI 92 3000K: R9 – 54.8, Rf – 92.1, Rg – 99.2 120° pwm-dim
	DOT-LINE LED 48V 8W 3000K 4000K CRI 92 3000K: R9 – 59, Rf – 91, Rg – 97.8 48° pwm-dim		DOT-LINE LED 48V 16W 3000K 4000K CRI 92 3000K: R9 – 60, Rf – 90.4, Rg – 97.5 48° pwm-dim

POINTS

Spotlights are a foundational lighting tool for any project. The combination of simplicity, refined shapes and LED power allows them to fit into any interior and space. The POINTS series can be used for primary or decorative lighting.

POINTS LUMINAIRES

Each luminaire is equipped with a honeycomb light filter by default to reduce glare and create comfortable lighting of the space.

For technological installation of frameless luminaires you need to purchase a special embedded element. Other models of luminaires are universal for installation in any type of ceiling.

Types of luminaires



Types of embedded profiles



Colour of body



Angle of dispersion



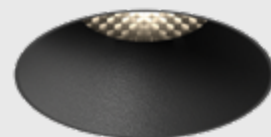
Light filters





GLAZ S

Frameless luminaire with a diameter of 40 mm



GLAZ M

Frameless luminaire for installation in a suspended ceiling



HIDDEN S

A compact frameless luminaire with a uniform wallwasher effect



HIDDEN M

A frameless luminaire with a uniform wallwasher effect



YOOZ M

A rotatable frameless luminaire for accent lighting with a 16° tilt angle

NEW POSSIBILITIES

A solution in the form of double spotlights visually lightens the ceiling space. Achieving such sophistication and minimalism is due to a specially developed embedded structure. We offer an additional opportunity to go beyond the usual in modern design.





The diameter of the luminaire is 38.5 mm, the output of the luminous flux is 22 mm. It sounds fantastic! It is perfect. Functional. It has absorbed the best features of all previous solutions. This is a frameless GLAZ S. Despite its small size, it is ready to illuminate any space and be invisible.

POINTS

GLAZ S



Compact yet powerful, GLAZ S spotlights perfectly illuminate the kitchen island and adjacent spaces, creating uniform, shadow-free lighting. Their small diameter preserves the stylish and laconic look of the interior.

POINTS

GLAZ S



GLAZ S luminaires highlight the texture of objects, adding depth and expressiveness. Even with a small diameter, their power is enough to turn an ordinary detail into an art object.

POINTS

GLAZ S



Spot lighting above a bedside table or mirror replaces bulky pendant lamps - the light is bright enough, but not blinding. The bedroom atmosphere remains intimate, and the interior tranquil. The miniature size of GLAZ S allows you to place them even in compact bedrooms.

POINTS

GLAZ S



GLAZ S spotlights fit organically into narrow spaces and passage areas of corridors, providing sufficient light for safe movement. Their neutral design suits any interior.

HIDDEN — AN INVISIBLE LUMINAIRE

LED
LED light source

The reflector
Collects light from the closed part of the lamp redirecting it in the same direction as the secondary optics

Primary optics
A lens with a narrow light scattering angle

Secondary optics
Refracts the rays of light in one direction and distributes them evenly

The models of the HIDDEN S and M frameless lamps with a power of 6 and 8 watts. The design includes several lenses that are responsible for distributing the direction of light. Comfortable, non-blinding, but wide luminous flux guarantees uniform illumination of vertical surfaces without light arches and unnecessary shadows. The lamp rotates 360°, allowing you to adjust the desired light direction.

UNIFORM VERTICAL LIGHTING

A series of unique point-mounted frameless lamps with the effect of uniform light filling wallwasher for smooth and uniform illumination from ceiling to floor in the POINTS range. Simple installation and installation of frameless spotlights HIDDEN S and M is possible using the PINCH & PINCHER system.



YOOZ IN THE INTERIOR

YOOZ is a compact adjustable luminaire. The complete absence of a frame allows it to visually dissolve into the ceiling, leaving only clean, directional light. It lets you guide attention with ease, creating dynamic accents in any interior.

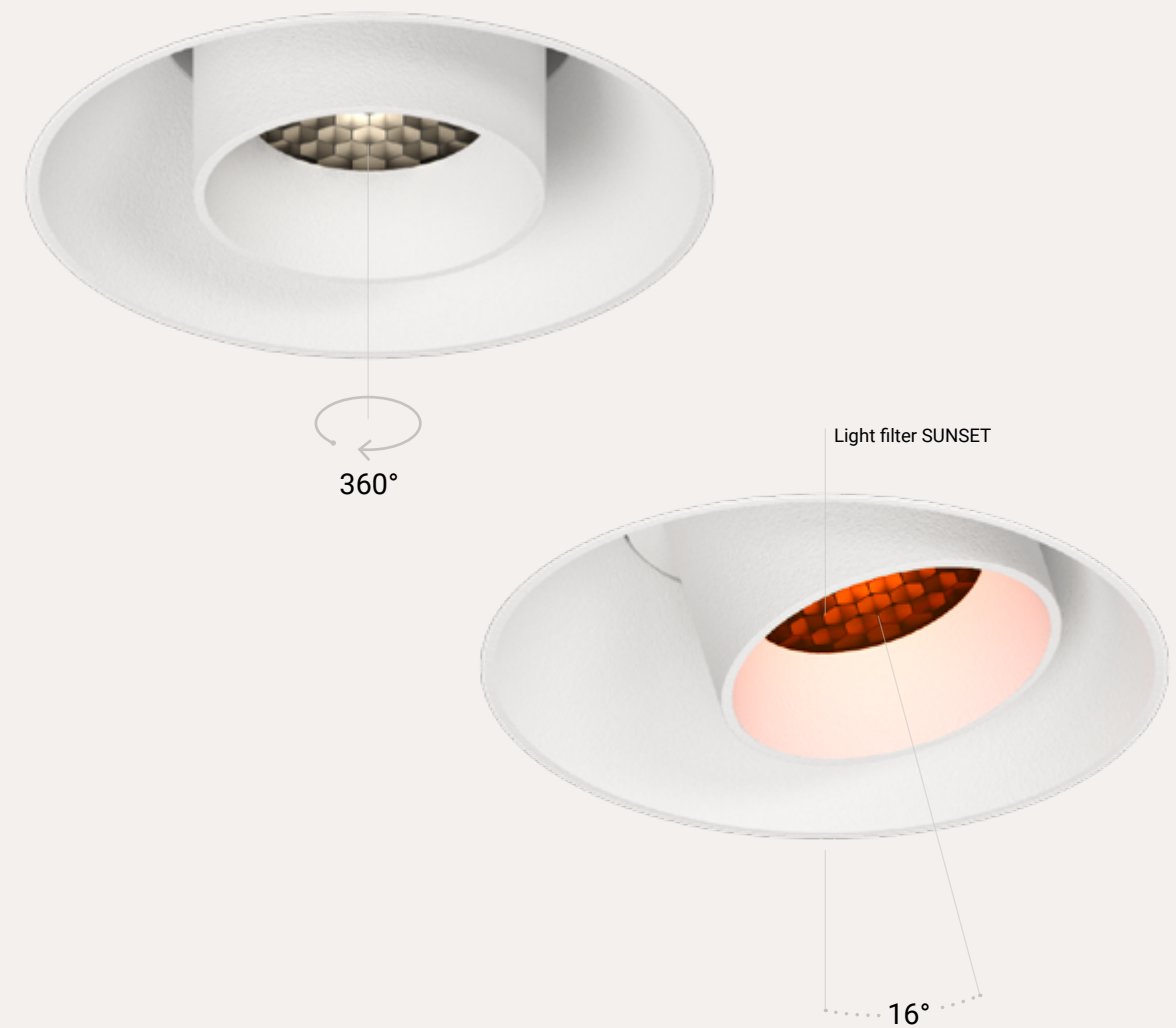




YOOZ

A functional addition to the POINTS line. The perfect combination with GLAZ luminaires for general and accent lighting. In combination with the SUNSET light filter, you can achieve the effect of soft sunset light in the room.
SUNSET light filter.

YOOZ



Due to the rotary mechanism with a tilt angle of up to 16°, you can precisely direct the luminous flux, creating the necessary accents in the interior. The lamp is mounted flush with the ceiling plane. Easy installation of the YOOZ frameless spotlights is possible using the PINCH & PINCHER system.

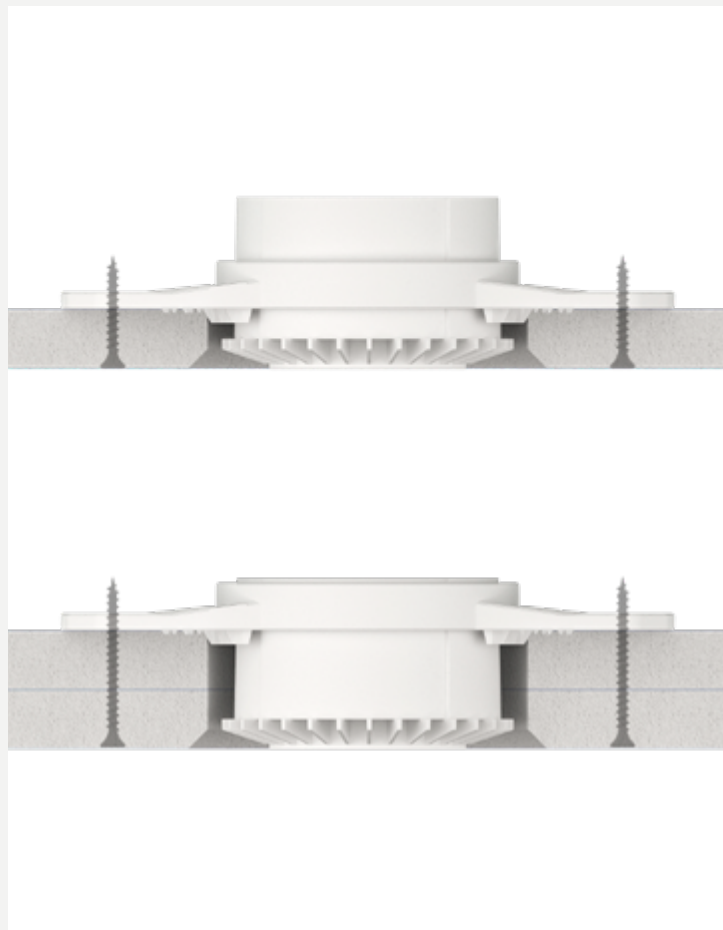


MULTIFACETED APPLICATION

PINCH embedded element for frameless luminaires now has several application options. PORT 40 and 64 is a compact, aesthetic, universal connector for power or suspension output, or both at the same time. PORT is a thin round plate that perfectly preserves the ceiling's uniform design language.



PINCH&PINCHER GIPPS is a two-component system for installing frameless luminaires in drywall board.



The system guarantees a perfectly flat installation without distortions and is suitable for one and two layers of gypsum board with a thickness of 9-26 mm, simplifying and speeding up the installation process.

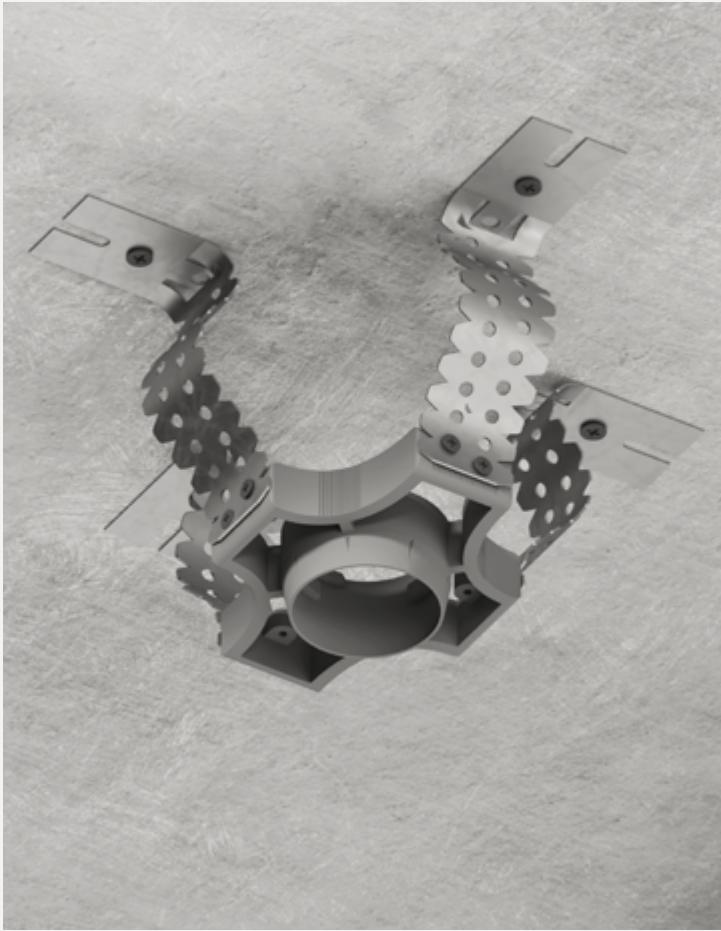


Everything is designed for a perfect result: the special PINCHER calibration tool precisely aligns the luminaire in a plane (0/0.5/1 mm), saving time and eliminating errors. The intelligent design of the luminaire itself, with its "smart" ears, locking pyramids, and a paint plug included, makes installation quick and clean.

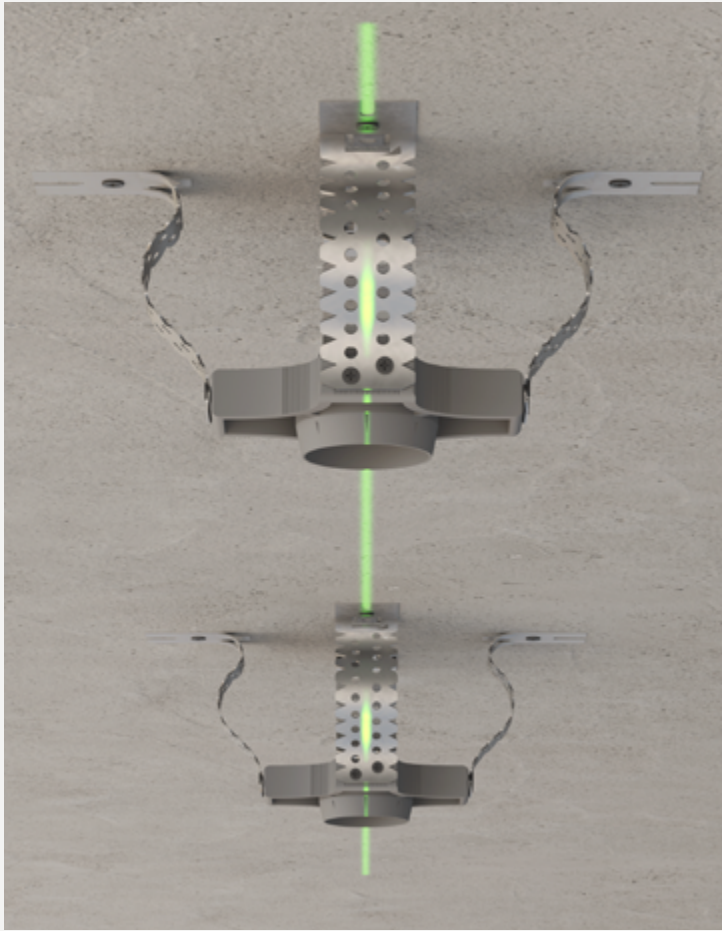


The system is reliable, patented and provides absolute control over the result on the site. It eliminates dust, distortions, and guarantees a flawless installation.

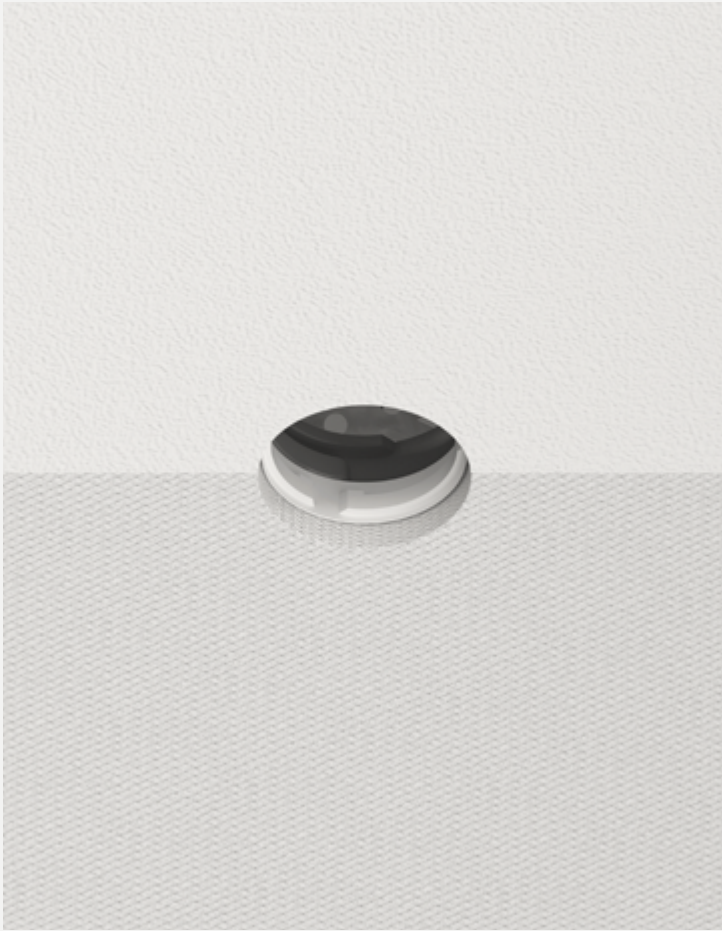
NEW INSTALLATION TECHNOLOGY PINCH + PINCHER



Installing a frameless luminaire in a suspended ceiling has never been easier. We have developed a new installation technology that does not require gluing the canvas.



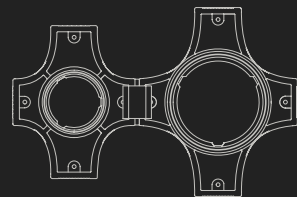
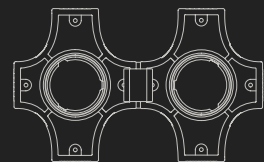
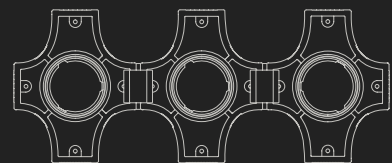
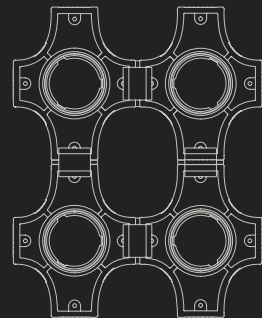
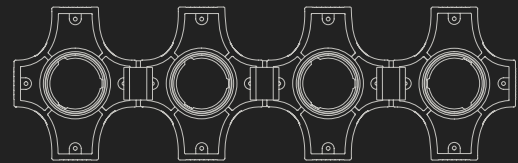
The versatility of the solution allows you to install a frameless light in both PVC and fabric ceilings. The embedded structure is grey, located 10 mm above the canvas and is not translucent.



The embedded structure features four notches with markings for easy installation and secure fixation of the entire assembly.



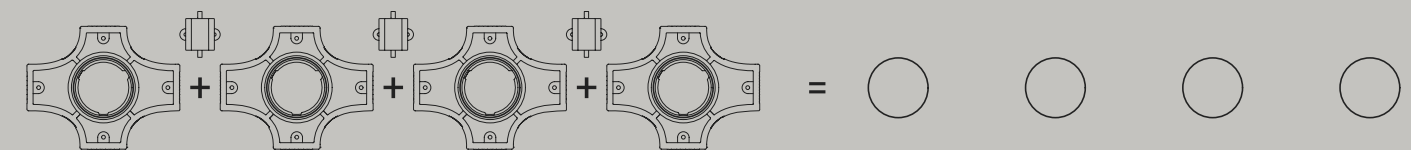
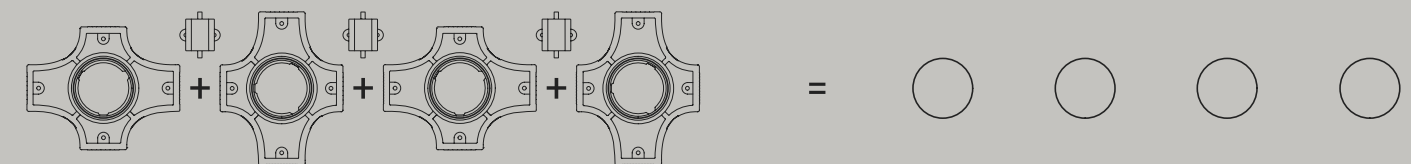
The luminaires can be leveled using the laser level, thanks to the special notches at 45° and 90°.



EXPERT OF COMBINATIONS

To create a variety of combinations of luminaires, we have designed the embedded structure in such a way that they can be easily connected to each other using special durable clips. The shape of the embedded structure allows you to choose the desired distance between the luminaires.

The distance between the structures can be adjusted by turning them in the desired direction. This means that the center distance of the PINCH lights can be 107, 117, or 127 mm, while the center distance of the PINCH 40 lights can be 83, 93, or 103 mm.





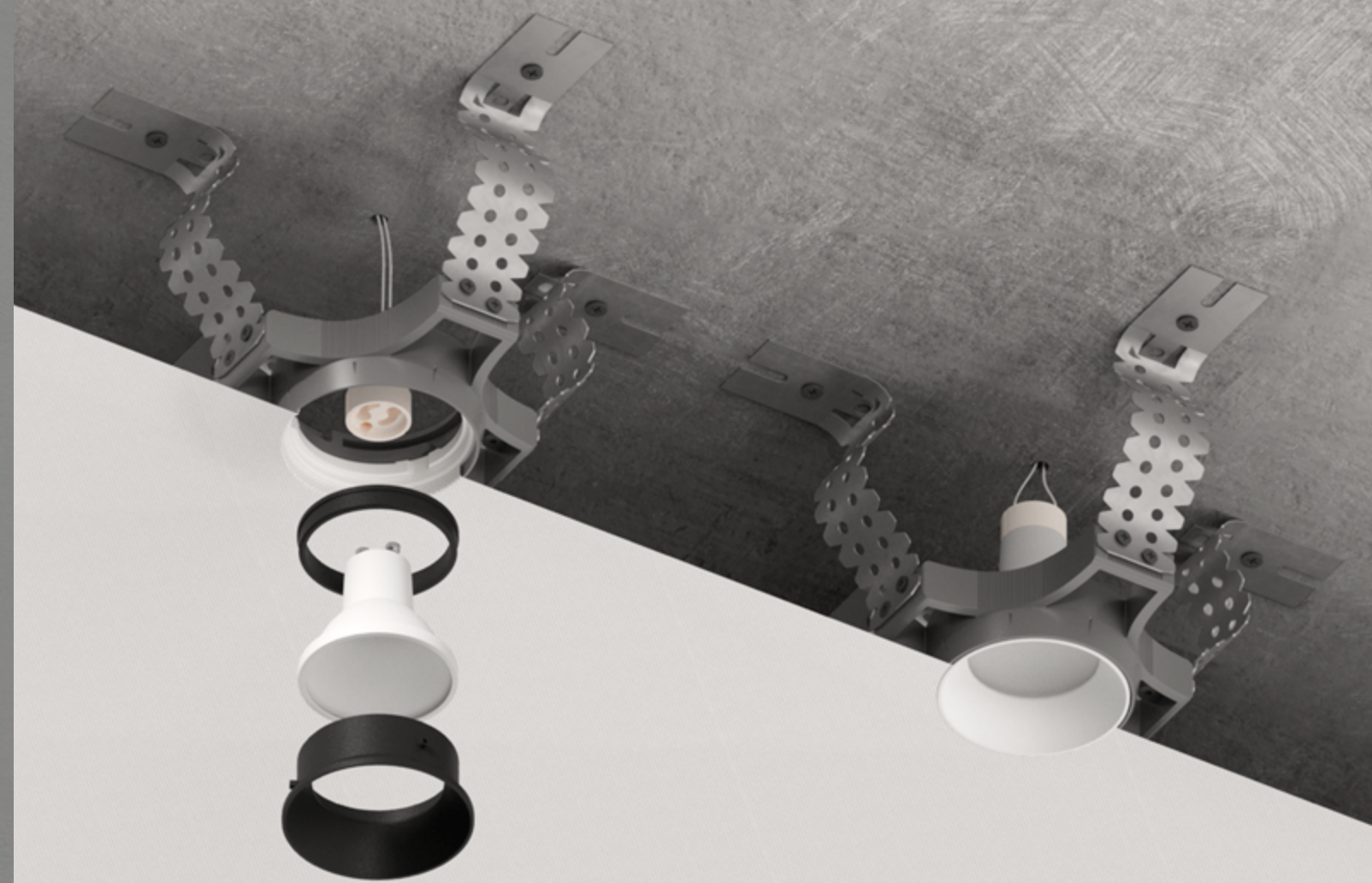
Radiator of luminaire

LED light source

Optics - lens and fixing cup

Honeycomb light filter

Decorative overlay



ALPHA M

The ALPHA M recessed spotlight features a minimalist design and easy installation in a trimless configuration for PVC and fabric stretch ceilings. It is part of the PINCH & PINCHER ecosystem, ensuring fast, reliable, and clean installation without adhesive bonding. The retaining ring securely fixes

a GU10 lamp or module and allows the use of additional elements up to 4 mm thick, such as colored glass or light filters. ALPHA M pairs perfectly with the POINTS range by KRAAB SYSTEMS, creating stylish and functional lighting.

ADDITIONAL COLOURS

Unique colours of the visible part of the luminaire in natural shades are available for order.



POINTS

Built-in spotlights



GLAZ S
LED 220V
6W
3000K | 4000K
CRI 92+
3000K: R9 - 75.6,
Rf - 90.6, Rg - 102.7
15° | 36° | 50°
no-dim
Ø 38.5



HIDDEN S
LED 220V
6W
3000K | 4000K
CRI 91.5
3000K: R9 - 75,
Rf - 89.6, Rg - 103.4
WW (wallwasher)
no-dim
Ø 38.5



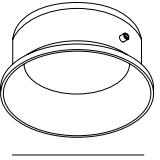
GLAZ M
LED 220V
8W
3000K | 4000K
CRI 90
3000K: R9 - 70.4,
Rf - 90.8, Rg - 101.2
15° | 36° | 50°
no-dim
Ø 62



HIDDEN M
LED 220V
8W
3000K | 4000K
CRI 92
3000K: R9 - 72.4,
Rf - 90.7, Rg - 101.7
WW (wallwasher)
no-dim
Ø 62.5



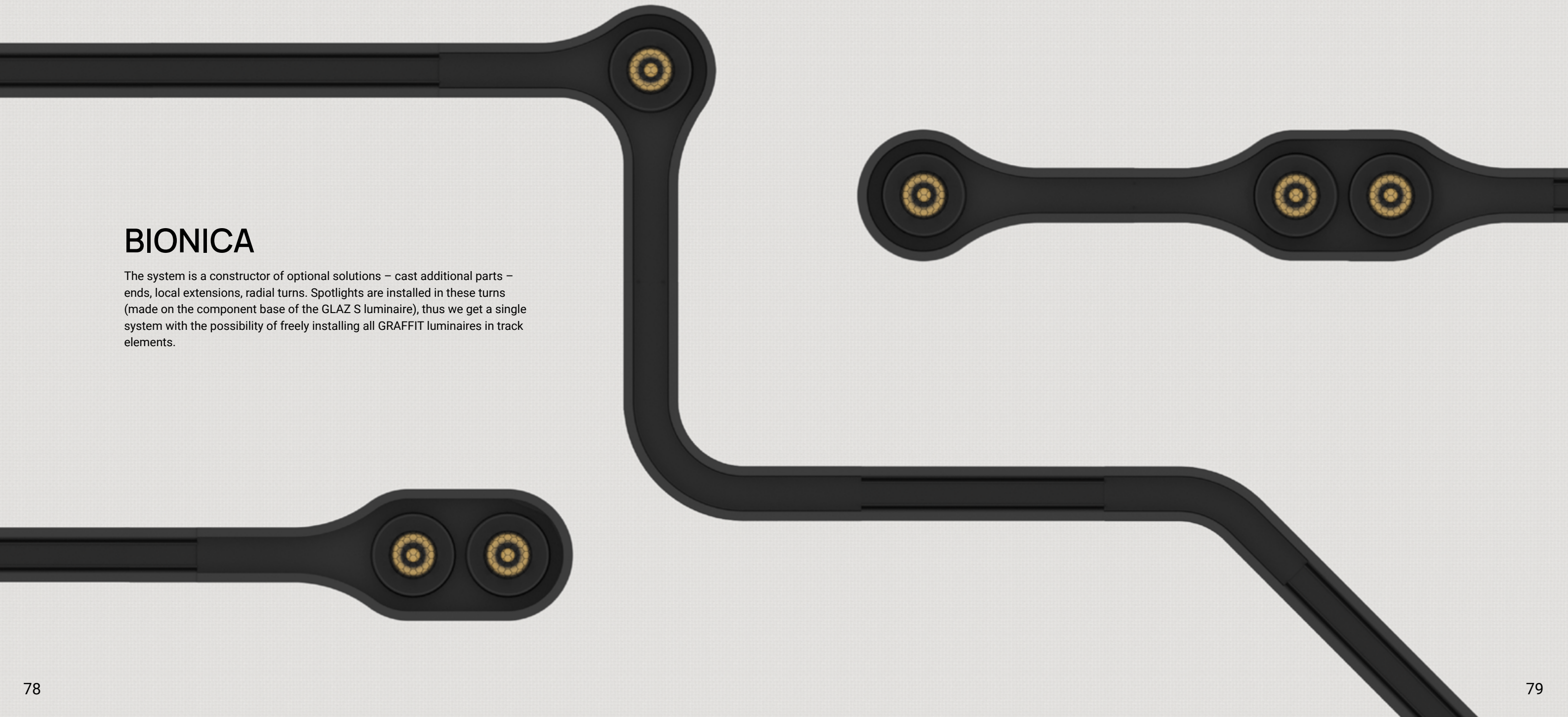
YOOZ M
LED 220V
6W
3000K | 4000K
CRI 92
3000K: R9 - 75.6,
Rf - 90.6, Rg - 102.7
15° | 36° | 50°
no-dim
Ø 62.5



ALPHA M
The light source is not included
Ø 62.5
27
GU10 socket

BIONICA

The system is a constructor of optional solutions – cast additional parts – ends, local extensions, radial turns. Spotlights are installed in these turns (made on the component base of the GLAZ S luminaire), thus we get a single system with the possibility of freely installing all GRAFFIT luminaires in track elements.





LIGHT SOURCES:

- GRAFFITI LINE linear lights
- SPOT and TWIN-SPOT track lights
- DOTLINE linear lights
- GLAZ S spotlights

COMPONENTS:

- Graffit 48 V track system
- bionic extensions



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