

OLIGO



SYSTEM LUMINAIRES
2018

feel the light

feel the light



SMART LIVING

Light makes a difference. To itself, us as people and our view of the world we live in.

The combination of LEDs and new digital technologies opens up a multitude of possibilities for better quality of light and life.

The smallest designs combined with the option for connection to digital building control systems set new standards in lighting technology. They turn system solutions from OLIGO into creative tools for modern lighting planning.

We hope you enjoy discovering the possibilities.

CONTENTS

System luminaires
for living space and property
2018

		PAGE
feel the light	About us and our products	6
	LED lighting technology	22
	Awards	34
New products		36
24 V	LED track system	SMART.TRACK 39
	LED plug connector system	SMART.POINT 97
230 V	Track system	PHASE 133
		CHECK-IN 203
12 V	Track system	READY FOR TAKE OFF 275
	Plug connector system	PLUG-IN 325
	Cable system	LIGHT-LINE 6
12 V / 24 V / 230 V	Recessed system	SHOP 403
Lamps and accessories	Lamp	413
	Transformers and switching power supplies	423
Appendix	Index by luminaire name	428
	Index by item number	430
	Ordering information and technical information	438



OLIGO INDUSTRIAL AND ARTISAN.

OLIGO IS ARTISAN

We have been manufacturing high quality luminaires for living spaces and the select shop and property market since 1987. With our multi-award winning single luminaires and track systems, as well as made-to-measure lighting concepts, we have an appropriate solution for every requirement.

We are creative lighting designers, and are committed to providing excellent workmanship and reliable quality.

OLIGO IS INDUSTRIAL

With around 150 experts, two production sites and state-of-the-art technology, we make precisely manufactured luminaires possible, even in serial production. As a result, we offer our partners and customers all the benefits of industrial production such as consistent functional quality, constant operability and long-lasting lighting technology.

Continual quality assurance is a prerequisite for maintaining our standards: from supplier management through to production and technology monitoring in the factory.



OLIGO IS "MADE IN GERMANY" IN THE BEST SENSE

We design, develop and manufacture OLIGO luminaires with the highest quality requirements entirely in Germany.

Regardless of whether its batch or serial production, we always place our trust in our close and long-term collaboration with specialist partners – tailor-made solutions from expert operations and service providers in the region who provide outstanding support for our product ideas in design and technology.



WE ARE THERE FOR YOU PERSONALLY.

SERVICE IS PARAMOUNT FOR US

Our offering for specialist retailers, planners, architects and installers begins with high quality single luminaires and stretches through to professional lighting advice.

You can get answers to technical questions about our luminaires in our service centre. For us, responsibility for our products does not end with installation. An extensive stock of spare parts provides you with assurance that your OLIGO lights can be returned to perfect working order even after many years of use.

OUR OFFERING FOR LIGHTING PLANNERS AND ARCHITECTS

Whether it's living spaces, office spaces or commercial premises – their effect is substantially determined by the lighting. The wide variety of options from LED lighting technology and innovative operating concepts are making lighting planning increasingly challenging.

We support our customers and partners right from the planning phase with lighting technology expertise and digital planning tools, and we offer professionally planned solutions for almost all interior lighting requirements. A team of experienced sales representatives and lighting planners are available to you for individual advice.



KNOWING WHAT IS IMPORTANT.

WELCOME TO THE OLIGO LIGHTTORIAL

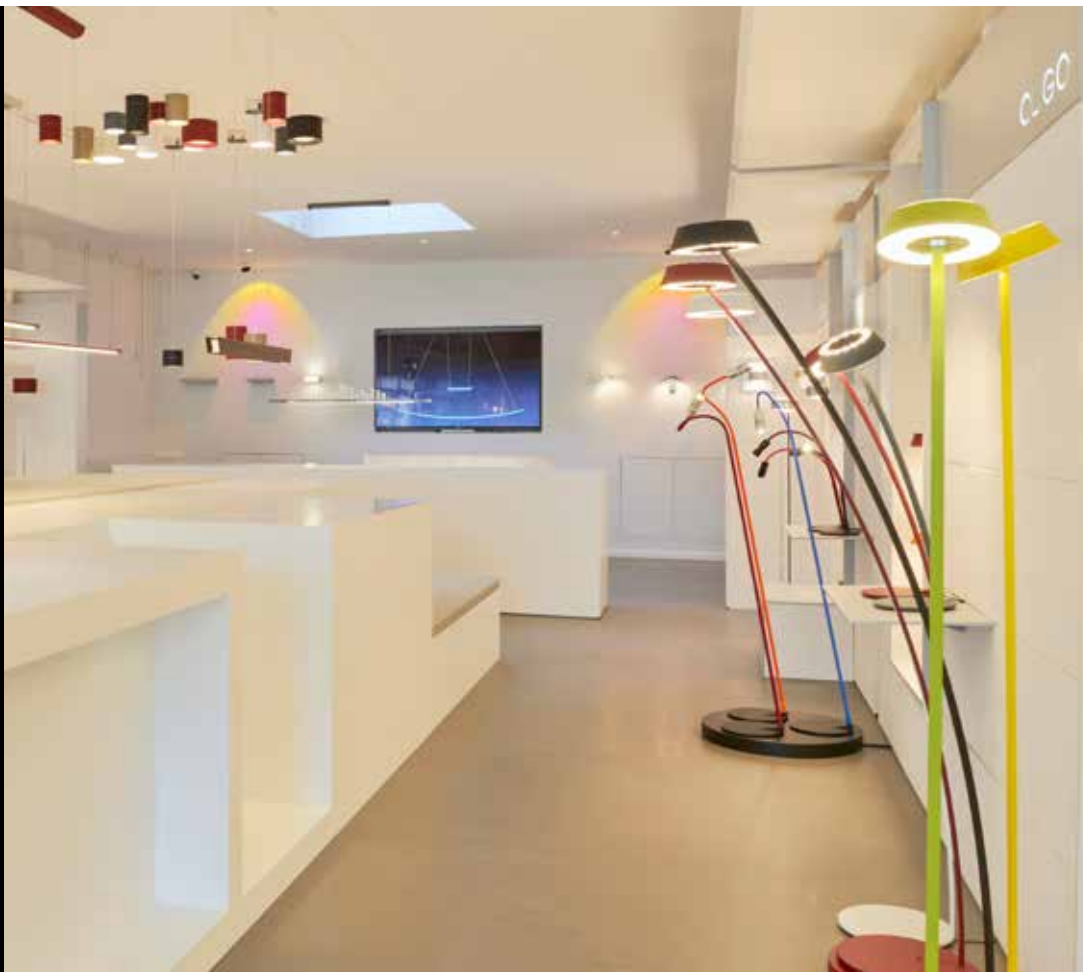
Are you a specialist retailer, lighting planner or electrician? In our training, we offer things worth knowing about lighting technology and lighting systems – underpinned with theory, applied practically and taught by experienced professionals. We deliberately provide training free of charge and in small groups of up to six participants.

OLIGO training courses take place in our Lightorial in Sankt Augustin and also, upon request, at our specialist retailers' sites. Your OLIGO sales contact person will be happy to help you arrange an appointment.

OLIGO Lichttechnik GmbH
Lightorial
Tannenweg 1
53757 Sankt Augustin
GERMANY

Tel.: +49 2241 8958 - 429
eMail: lightorial@oligo.de

Do you have a training requirement which is not yet on our programme? We look forward to receiving your suggestions and are happy to discuss your themes.



OLIGO Showroom

FEEL THE LIGHT EXPERIENCE OLIGO LIVE.

VISIT US IN OUR SHOWROOMS AND POP-UP STORES

In our showrooms, you can obtain comprehensive information about our range of products and experience the optical and material quality of our luminaires for yourself. Among other places, we present our luminaires at our headquarters in Sankt Augustin near Bonn. We request that you make an appointment in advance so that we are able to provide you with individual advice.

In temporary pop-up stores at varying design hotspots in Germany, we present single luminaires for examination and picking up for a limited time. A current overview with addresses can be found at www.oligo.de.

CONCEPT GALLERY – CONCEPTS FOR LIGHT AND SPACE

The concept gallery collects the major furnishing themes of floor, wall, ceiling and light into a comprehensive design concept and is a recommended port of call for planners, developers and lighting enthusiasts. Together with various brand partners, we present light and luminaires in combination with exquisite interior design.

Events and seminars make the concept gallery meeting points for the local lighting and architecture scene. At regular intervals, we, together with our brand partners, invite you to an exchange of ideas or project presentation, a get together or even for excursions.



Concept Gallery Düsseldorf

OLIGO INTERNATIONAL SALES

Are you an architect, interior designer or lighting planner and want to be informed about the concept gallery events? Write to us or give us a call, we will be happy to provide information about planned topics and dates.

Concept Gallery Düsseldorf
Ernst-Gnoss-Strasse 5
40219 Düsseldorf
GERMANY

Tel.: +49 211-1576072-0
email: info@concept-gallery.de
www.concept-gallery.de

Outside Germany, we work with various distribution partners. Find your nearest dealer using the dealer search on our service page at www.oligo.de.



QUALITY THAT YOU CAN
SEE AND FEEL: IN EACH AND
EVERY PRODUCT.

OUR IDEA OF GOOD LIGHT IS THE COMBINATION OF DESIGN, FUNCTION AND QUALITY.

The homogeneous fusion of design and functionality, taking the highest quality standards into account, is a particular feature of OLIGO luminaires.

All OLIGO luminaires are designed by our development team at the Hennef site. In the design and engineering phase, we determine essential product factors such as light output, range of functions, thermal management or area of application and thus directly influence the quality and longevity of our products.

We also make decisions with regard to the components used, the choice of materials and the finishing with great care.

Our preferred material is aluminium. We achieve precise edges and an excellent surface finish in all parts through elaborate processing with exact turning and milling grades. High quality surface finishes, such as polished chrome surfaces or extensive anodic oxidation for example, give our luminaires a finish which is as unique as it is durable.

We also apply the highest quality standards when purchasing LED components. Each luminaire is equipped with LED modules developed in-house in order to be able to optimally balance the light scene and the light output with one another. We thus achieve a homogeneous light output across the entire luminaire surface.

In our optical systems, we use high quality glass lenses and never plastic lenses. Durable materials such as glass and aluminium make each luminaire a long-lasting fixture.

TRACK SYSTEMS •

As many as necessary, as few as possible: when designing track and adapter systems, we concentrate on the smallest, most elegant possible designs. The focus should be on the luminaire and not on the power supply.

SMART.IQ •

Intelligence with a system: still easy to integrate into the lighting system retroactively, wireless adapters developed in-house bring intelligence into play. In the blink of an eye, they transform the track system into a smart home solution and allow the system luminaires to be controlled digitally.

ADAPTERS •

Perfectly coordinated with our track systems: adapters from OLIGO are not only designed precisely for the particular track system, they can also be locked without any tools. This ensures an optimal power supply to the luminaire and quick installation. Intelligent anti-rotation protection guarantees additional security.

LED MODULES •

Guaranteed constant light quality: the lighting properties of the LEDs vary in terms of colour and brightness due to production factors. During the course of consistent quality testing, we are continually ensuring that only LEDs with identical binning (so identical brightness and light colour) are used.



REFLECTORS, OPTICAL LENSES AND PRISMS: REFINEMENTS ON PRECISE LIGHTING CONTROL.

In order to meet the high expectations for modern living space and property lighting, OLIGO has developed a range of LED luminaires with a wide variety of light distribution characteristics. It ranges from directed spotlights through to diffuse room lights and is characterised by excellent light scenes.

Light is omnipresent but hard to grasp. – Or is it? With the right know-how, it can be directed, focused, filtered.

Our work begins with the idea of a well designed luminaire. Only then do we bring light scene and luminaire together in a multi-phase development process. Here, we use quality lenses which are also used, for example, in the automotive industry and aviation. Our aim is to achieve a realisation of the intended light distribution which is as excellent as it is efficient.

REFLECTORS – COUNTLESS FACETS FOR BRILLIANT LIGHT

The light is directed into the room in a controlled manner via reflectors. They are principally used for designing system spotlights and have many benefits in combinations with LEDs.

Finding the optimal reflector for luminaires with a small structural form isn't easy. In order to achieve the highest level of efficiency, the design of the reflector needs to be coordinated with the physical and photometric properties of the LED light source. At the same time, the thermal properties of the luminaire body need to be taken into account. With individually calculated, highly efficient reflectors, we achieve almost complete reflection of the light with exact, almost lossless light control.

OPTICAL LENSES – TRANSPARENT PRECISION

Material and manufacturing processes determine the quality of an optical lens. Cheap plastic lenses project colour fringes at the edges of the cone of light, create turbulent light scenes and have only limited resistance to ageing.

High quality glass lenses, on the other hand, are free from air pockets, precisely formed, polished and centred. That's why we use quality lenses in our luminaires with lens technology, similar to those which are used in measurement technology or microscopy. They ensure a high degree of transmission and allow for exact control of the light spectrum across the entire service life of the luminaire.

In many of the LED luminaires from OLIGO, the optical lenses have a micro satin finish on the back. This fine texture, coordinated individually with the light source, causes further homogenisation of the light scene with excellent colour mixing. The gently fading light-dark border and the absence of any corona formation at the edge of the cone of light are an unmistakeable quality criterion for good light.

PRISMATIC LENSES – SHEER SHINE

Room lights and single luminaires from OLIGO are equipped with high quality prismatic lenses. They reduce the glare of the light source and distribute the light evenly across the breadth.

Quality and purity of the acrylic glass determine the quality of the light scene. Through precise calculation and hot stamping, prismatic structures which combine precise light control functions with the greatest possible efficiency can be created. Carefully calculated, each luminaire receives its individual interpretation in the light scene.

As a fortuitous side effect, prismatic lenses have high decorative value thanks to their diamond-like sparkle which we like to pick up and integrate selectively into the design of our luminaires.



RIDGE MAX Spotlight, reflector 26°
KELVEEN Spotlight, lens 40°

41 DEGREES Room light
KELVEEN Spotlight, lens 90°



WITH HIGH QUALITY SURFACES,
LUMINAIRES FROM OLIGO ADD
SOPHISTICATED ACCENTS TO
THE ROOM.



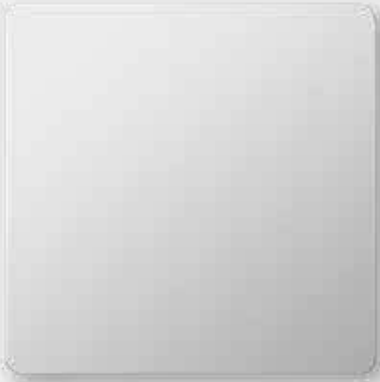
CHROME



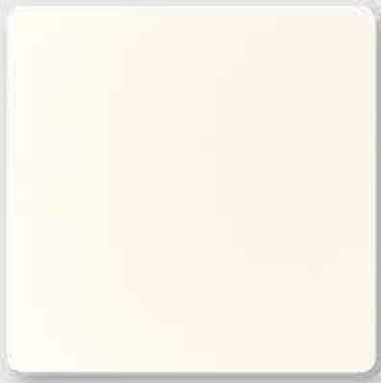
MATT SILVER



MATT BLACK | RAL 9005



MATT SILVER II



MATT WHITE | RAL 9016

FROM MATT TO GLOSSY – OUR COLOURS AND SURFACES.

ANODISED SURFACES

The process of anodising surfaces originated from protection against corrosion, but by now it has also established itself for the finishing of decorative surfaces. Through anodic oxidation, the work piece is given a protective oxidic layer just a few micrometres thick. This is formed through conversion of the upper metal layer. As a result, polished work pieces for which the surface finish must be retained have to be anodised particularly carefully.

BRUSHED ALUMINIUM

A brushed surface can be produced on a variety of pretreated aluminium work pieces. Brushes of different rigidity and thickness are used depending on the hardness of the material. The art is in guiding the work piece evenly onto the brushes so that it results in an even grinding pattern. For an optimal result, the operation must be completed in a single stroke.









POWDERED SURFACES






Powder coating is a tried and tested form of tempering for metal surfaces which was developed in the late 60s from the varnishing processes which were usual at the time. Typical surfaces for powder coating are steel, galvanised steel and aluminium. The process occurs automatically and is also used in car manufacturing to some extent. It guarantees evenly coloured, durable surfaces with a homogeneous surface texture.

POLISHED CHROME SURFACES

The production of a perfectly shiny chrome surface requires at least five work processes. In various steps, the blank is polished, copper-plated, polished again, then nickel-plated and finally chrome-plated. Here, the shine is generated not by the thickness of the chrome layer applied, but by the nickel layer underneath. Shiny surfaces can also be produced by polishing metals.

SYSTEM COLOURS AT A GLANCE

	24 V SMART TRACK			230 V PHASE			230 V CHECK-IN	
								
Description	Matt chrome	Matt white	Matt black	Matt chrome	Matt white	Matt black	Chrome	Matt chrome
Colour code	CM	WM	BM	CM	WM	BM	C	CM
Colour number	06	21	23	06	21	23	05	06
Note						upon request		

	12 V / 24 V / 230 V SHOP			12 V READY FOR TAKE OFF / 12 V PLUG-IN / 12 V LIGHT-LINE	
					
Description	Chrome	Matt chrome	Matt white	Chrome	Matt chrome
Colour code	C	CM	WM	C	CM
Colour number	05	06	21	05	06

THE LED IS LIKE A RAW DIAMOND. ONLY THROUGH COMBINATION WITH HIGHLY PRECISE LENSES, COORDINATED THERMAL MANAGEMENT AND INTELLIGENT ELECTRONICS DOES IT BECOME A HIGH QUALITY LIGHTING TOOL.





LED – INNOVATIVE TECHNOLOGY, INTELLIGENTLY DESIGNED.

The breakneck pace of progress for LED technology has not let up to date. By now, we can no longer imagine living spaces in a modern design without the use of LEDs. The new image has revolutionised the luminaire market as a result, and makes it necessary for manufacturers and buyers of high quality, innovative luminaires to grapple with this development.

LIGHT COLOUR / COLOUR TEMPERATURE

In LED technology, the colour temperature is just as important as the thematically related white balance in digital photography. Ultimately, the thematic background is identical and can most easily be explained through the observation of nature: the sunlight is influenced by a variety of factors so the eye perceives a significantly warmer shade during a sunset than under the brilliant midday sun.

The colour temperature is measured in kelvin (K) – the higher the value, the colder (more blue) the light is. We therefore talk about warm and cold light. However, what is perceived to be pleasant in nature generally does not meet the needs of the private living area. “Cold” light from approx. 5,400 K is considered to be unpleasant in the living area. On the other hand a “warm” 2,700 – 3,000 K acts as a “feel-good colour temperature”. However, there are definitely areas of application, such as in the office or in the food trade, in which completely different colour temperatures are desired or required.

COLOUR REPRODUCTION INDEX

All lamp technologies (e.g. incandescent lamps, fluorescent lamps or halogen lamps) have different qualities with regard to the colour reproduction. This means that colours are not equally easy to recognise with every type of lighting. At 2,700 kelvin, incandescent lamps have a colour reproduction index or colour rendering index (CRI) of 100. High quality LEDs currently achieve values of between 80 and 97 CRI. Depending on the area of application, such as in museums or fashion stores for example, a higher colour reproduction index is absolutely necessary.

TEMPERATURE MANAGEMENT

Contrary to popular belief, temperature plays an exceptionally important role in LEDs. Although they don't get as hot as incandescent lamps, the operating temperature is still crucial for the service life and other qualitative factors of the LED. A high quality LED luminaire therefore has sophisticated temperature management. Extensive testing and development processes are a permanent part of the development service at OLIGO in order to design reliable luminaires. Instead of relying on the massive dimensions of the luminaire body to take care of the necessary temperature regulation, we make use of all of our expertise in order to achieve or exceed comparable light outputs and quality in subtle and delicate sizes.

SERVICE LIFE

Taking optimal temperature management into account, you can assume an average service life of up to 50,000 operating hours for a modern LED. This corresponds to a service life of 17 years with a daily operating period of 8 hours. Because of this, LEDs are often permanently built into the luminaires and do not have a lamp socket which allows the user to change the lamp. Alongside the combination of product design and thermal management in product development, the careful selection of the optimal LED is our commitment to long-lasting and consistent light quality. The same applies for LED lamps which are now available for standard models – so-called LED retrofits.



LED RETROFIT LAMPS REVIEWED IN DETAIL.

The energy-efficient replacement for a conventional lamp is called LED retrofit. This lamp type has gained extensive importance as a result of the ban on incandescent light lamps. Even the classic track and cable systems from OLIGO can be fitted with energy-saving retrofits.

QUALITY ALSO COUNTS FOR LAMPS

If you want to convert an existing lighting system to LED retrofits, we recommend using exclusively high quality products from well-known manufacturers.

There are cheap and often substandard products available on the market which do not allow for objective comparison with branded goods as a result of inadequate or even missing technical information.

For LED retrofits, indications with regard to light colour, service life and replacement capacity should be considered to be average information. Particularly with substandard product quality, the tolerances are often wide apart since comprehensive examination and limitation of the products has been foregone in favour of the price. This can mean that one and the same product have different lighting effects which is particularly noticeable when multiple lamps are operated at the same time.

ENERGY EFFICIENCY CLASSES

In order to describe the efficiency of a lamp, there is a simple classification: the more lumen a lamp emits per watt of power, the more efficiently it converts the energy input into visible light.

As for large household appliances, EU 2014 also introduced the energy label as a labelling requirement for lamps. Thereby, lamps can be divided into the different energy classes. Unlike for fridges, for example, there is no class which is more efficient than the efficiency class A++ for lamps.

In the discussion of energy efficiency and environmental consciousness, the actual effect of light should not be neglected since the right light has a significant effect on general well-being. Cost awareness for consumption and the desired lighting mood should therefore be evaluated individually and the “right” light should always be understood to be an individual decision. For this reason, objective advice from experts is always recommended before the actual implementation of a lighting solution.

WHAT SHOULD BE CONSIDERED FOR A RETROFIT CONVERSION

1. Does the new lamp have the same luminous flux (lumen) and the same beam angle as the model to be replaced?
2. Is the new lamp suitable for the existing fitting and for the shape of the luminaire?
3. Are the accessory parts suitable for the LED retrofit lamp or might there be temperature problems?
4. If the existing luminaires are operated using a dimmer then care should be taken to ensure that the retrofit lamps are also compatible with the dimmer.
5. If a conventional low voltage system is being converted then the transformer must be replaced where applicable.
6. LED retrofit lamps are almost always designed for “free” installation. An enclosed luminaire housing can significantly reduce the specified service life in most cases.

THE LIGHT OF TOMORROW CAN DO MORE THAN JUST ILLUMINATE. INTELLIGENTLY NETWORKED AND DIGITALLY CONTROLLABLE, IT ENSURES WELL-BEING, APPEAL OR CONCENTRATION AND MAKES AN EFFICIENT CONTRIBUTION TO THE MANAGEMENT OF BUILDINGS.



SMART.IQ

FEEL WHAT LIGHT CAN DO!

Like no other light source before, the LED can be combined with the communication and control possibilities of the Internet thanks to its semiconductor technology and changes our handling of light. Discover a new world of intelligent lighting possibilities. Create your own personal light with the touch of a fingertip.

INTELLIGENT LIGHTING TECHNOLOGY FOR MORE LIGHTING CONVENIENCE

At home or in a commercial environment: smart system solutions and options for individual lighting control pave the way for more lighting convenience. With the newly developed SMART.IQ wireless components, OLIGO presents small format system modules which pack a punch. Easy to integrate, they bring intelligence into play and transform the 24 V LED lighting system into a smart home solution in the blink of an eye.

In order to allow for the broadest possible field of application in combination with other smart home compatible luminaires and appliances, OLIGO relies on strong partners in digital lighting control and offers SMART.IQ wireless components for two common wireless technologies. The components support the wireless solution from the Finnish manufacturer Casambi or the common HomeMatic home control system from the German manufacturer eQ-3.

CASAMBI

SIMPLY CLEVER

Casambi is an easy-to-integrate, free software for the mobile control of single luminaires and lighting systems. It is characterised by easy integration, simple technical design, wireless installation and intuitive control via a smartphone or tablet.

Even existing lighting units and conventional light switches can be integrated into the smart lighting control using a switch module which can be retrofitted. Casambi is therefore particularly suitable for retrofitting in existing buildings.



HomeMatic

THE SMART COMPLETE SOLUTION

HomeMatic is a cross-system smart home system for wireless intelligent building control. The system can be used to realise not just lighting, but also building surveillance functions, for example. It is available for retrofitting in the home as well as for new builds.

The individual connected devices such as blinds, heating, access control and weather sensors can be conveniently controlled using a smartphone or tablet, via a built-in centre, by remote control or using the PC software. HomeMatic is a product from the German manufacturer eQ-3.



PROFESSIONALLY SHOWCASING ROOMS WITH DALI.

DALI is the best known digital, standardised interface for controlling lighting technology control units. Originally designed for dimming fluorescent lamps, the system has developed into an all-round tool for professional lighting moods.

DALI – DIGITAL ADDRESSABLE LIGHTING INTERFACE

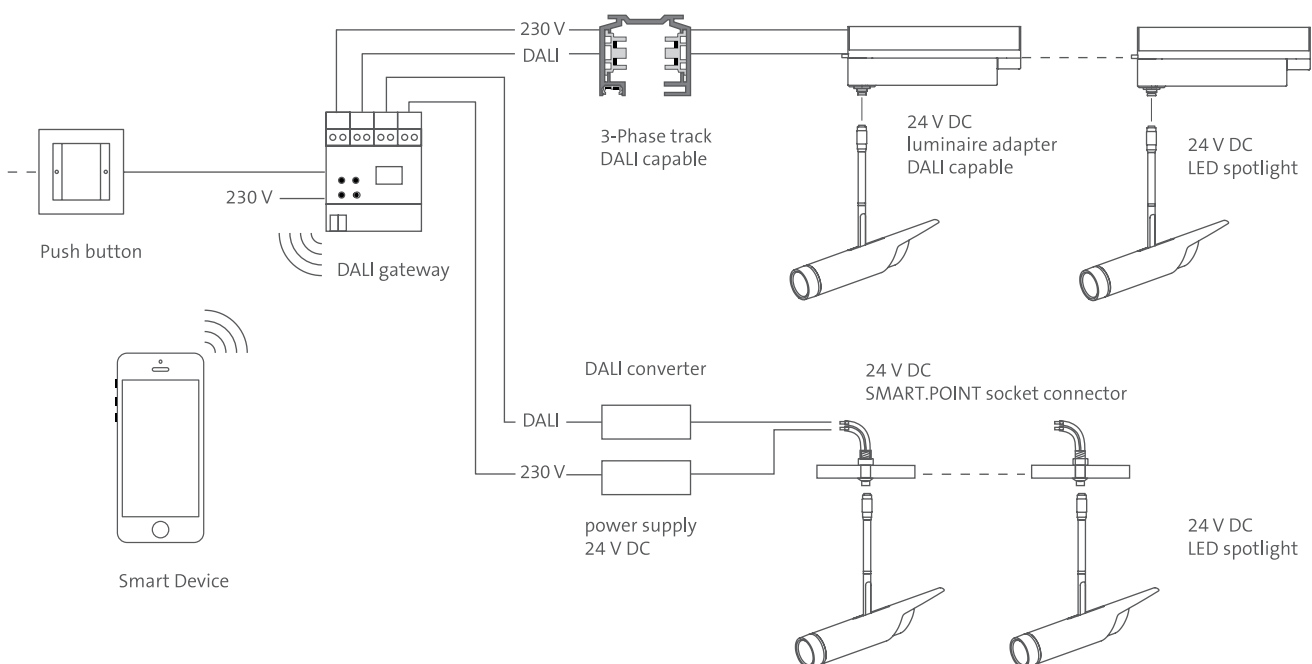
As a digital, open standard, DALI offers a multitude of products and areas of application which have distributed intelligence and automated functions such as individual status reporting or system monitoring.

Interfaces with complex systems for building systems technology such as KNX, LON or DMX allow DALI components to be combined with existing building control technology.

DALI-COMPATIBLE LED SYSTEM LUMINAIRES

With the new 24 volt LED system luminaires, OLIGO offers the option of integrating luminaires into the building automation system by means of DALI-compatible components. A three-pole pin with integrated signal pole allows for the configuration of lighting networks for larger commercial applications, or stand-alone systems for smaller installations.

The energy-efficient renovation of existing three-phase lighting systems in property can also be carried out with 24 volt LED system luminaires.



Example of a DALI application with individual and group control



LESS IS MORE IS NOT ENOUGH.

CONCENTRATION ON WHAT'S IMPORTANT





OLIGO comes from the Greek "oligós" and means "less". This central principle of a reduced design vocabulary defines our design attributes.

We want to showcase design and light with ease: as a glittering experience or in clear practicality, as bright joy or optical magic.

AWARD-WINNING AGAIN AND AGAIN

Concentration on the essential leads to subtle, compact luminaires with impressive light output and lighting technology full of finesse.

The result of the creative work of the OLIGO team, as well as the collaboration with well-known design studios, are lighting technology masterpieces which win recognition again and again.

German Design Prize	Interior Innovation Award	German Design Award Special Mention	Reddot Design Award
 Designpreis der Bundesrepublik Deutschland Nominiert	 interior innovation award 2015 Winner	 German Design Award	 redden design award winner
2009, Nominated BOSS Design: Ralf Keferstein	2015, Winner FLAVIA light object Design: Ottenwälder & Ottenwälder	2018, Winner KELVEEN Table luminaire Design: OLIGO	2011 TRINITY luminaire family Design: EsserKnop Industriedesigner
2004, Nominated CHECK-IN track system Design: Ralf Keferstein	2014, Selection GLANCE luminaire family Design: Ottenwälder & Ottenwälder	2015, Special Mention DECENT MAX Design: OLIGO	2003 CHECK-IN track system Design: Ralf Keferstein
2002, Nominated GATSBY pendant luminaire Design: Ralf Keferstein	2012, Winner TRINITY luminaire family Design: EsserKnop Industriedesigner	2013, Special Mention TRINITY luminaire family Design: EsserKnop Industriedesigner	2001 GATSBY FINE pendant luminaire Design: Ralf Keferstein
			1998 PROP-ELLE Design: Klaus Liese
			1997 PULL-IT I Design: Ralf Keferstein



KELVEEN



RIO



SMART.TRACK

iF Product Design Award



product
design award

2014

2014

GLANCE luminaire family
Design: Ottenwälder & Ottenwälder

2008

BOSS
Design: Ralf Keferstein

2004

CHECK-IN track system
Design: Ralf Keferstein

1998

PULL-IT I
Design: Ralf Keferstein

Luminaire of the Year



2016, 2nd place

RIO
Design: OLIGO

2014, 3rd place

GLANCE luminaire family
Design: Ottenwälder & Ottenwälder

2013, 3rd place

IXO
Design: Christoph Niedeggen

2011, 2nd place

TRINITY
Design: EsserKnop Industriedesigner

2009, 1st place

GRACE UNLIMITED
Design: Ralf Keferstein

2006, 2nd place

BEL-AIR light object
Design: M. Kleinhenn, R. Keferstein

2003, 1st place

KRISTINA D. light object
Design: Antonius Quodt

Focus Open Design Award



Focus Open 2014
Silver

2014

GLANCE luminaire family
Design: Ottenwälder & Ottenwälder

Plus X Award



2017

Track system SMART.TRACK
Design: OLIGO

2012 Innovation, Ease of Use

TOUCHLESS
GESTURE CONTROL

CHEEK
CHEEK 2 CHEEK
GRACE
DECENT
DECENT MAX
GLANCE
TROFEO
LIGHT BOOK PENDANT LUMINAIRE
PALÃO

SMART.LIVING

NEW PRODUCTS 2018

Innovative designs, a long service life and intuitive options for lighting system control make LED luminaires an efficient and decorative highlight in any interior space. Our lighting ideas are sure to inspire you!



RIO and BALINO

LED luminaires for the SMART.TRACK system, with a special system adapter

The RIO and BALINO series of LED luminaires are now available for use with the 24 V SMART.TRACK system. The products are equipped ex works with a special system adapter that is somewhat larger than the standard adapter because it needs to be able to house the LED driver and the control electronics.

The special adapter shape can be used with the SMART.IQ extension. This means that RIO and BALINO can be integrated into the Casambi and HomeMatic lighting control solutions, and can also be dimmed and incorporated into lighting designs just like any other SMART.TRACK luminaire.

The slim RIO luminaires have a special soft touch surface. The surface shimmers in smooth shades depending on the incidence of light. The luminaire is available with a matt finish in white and black.

The small BALINO pendant luminaire stands out through its round and colourful glass shades. An exclusive ice crystal finish in the diamond grey, gold and tobacco models creates a finely textured lighting effect. A fresh orange tone and a classic satin-finish surface are also available.

Further information on the 24 V SMART.TRACK system can be found starting on page 39.

Further information on RIO in combination with SMART.TRACK can be found on page 79; further information on BALINO: page 80.



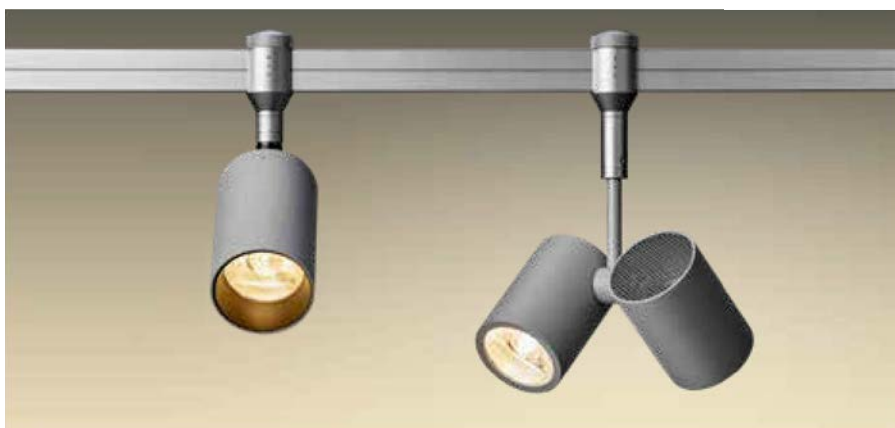
GRACE

LED system luminaire for 24 V systems and CHECK-IN

The timeless GRACE luminaire is considered to be one of the classic decorative pendant luminaires worldwide. The luminaire is ideal for setting the scene at tables and counters. Along with classic surfaces in brushed chrome and aluminium, the GRACE LED version is also available in glossy white and with the new soft touch surfaces. A special procedure is used to apply a shimmering matt finish to the body of the luminaire. The surface shimmers in smooth shades depending on the incidence of light.

The 24 V LED version can be adapted to the following systems: SMART.TRACK (page 81), SMART.POINT (page 119), PHASE (page 187) and SHOP (page 403).

GRACE with high-voltage LEDs can also be used with CHECK-IN (page 241).



WALLEY

CHECK-IN system spotlight with high-voltage LEDs

A minimalist design and structure and impressive lighting performance make the WALLEY spotlight truly special.

The two spotlight heads in the 2-flame variant can be pointed towards each other, which means two different areas can be illuminated simultaneously from one mounting point.

The luminaires can be dimmed externally using many of the latest phase-cut dimmers.

Further information on WALLEY can be found on page 209.



SMART.TRACK

PERFECT LIGHTING, COMPACT DESIGN.

The simplest mechanical design, smallest possible cross section, high quality and at the same time minimalist design – these are just a few of the outstanding features of the SMART.TRACK 24 volt LED track system. The product range consists of spotlights, pendant luminaires and room lights. It offers both elegance and light quality of the highest technical level at the same time.

All luminaires are equipped with the tried and tested plug technology. As a result, the luminaires can be used both in the SMART.TRACK 24 volt LED track system and in the SMART.POINT 24 volt LED spot system.

Different light colours and homogeneous light distribution make the desired individual room atmosphere possible.

The luminaires can be integrated into the common Casambi and HomeMatic smart home systems using SMART.IQ wireless components for digital lighting control. Combinations with controllable single luminaires lead to further lighting design options for smart homes.

Design: OLIGO



CONTENTS	PAGE
System luminaires	49
Luminaire adapters	91
SMART.IQ wireless components for Casambi and HomeMatic	92
System components	86



FLAVIA / A LITTLE BIT MORE

SMART.TRACK

LUMINAIRE OVERVIEW

Low voltage LED track system

LED LUMINAIRES

Spotlights



WALKER
Page 49



NEWTON
Page 51



SENTRY
Page 53



AVIATION PRO
Page 55



AVIATION
Page 56



RIDGE MAX
Page 59



RIDGE
Page 61



A LITTLE BIT MORE
Page 62



A LITTLE BIT
Page 65



HUBBLE
Page 67



KELVEEN
Page 68

Ambient lights



41 DEGREES
Page 73



FLAVIA
Page 76

Pendant luminaires



RIO
Page 79



BALINO
Page 80



GRACE
Page 81



DECENT
Page 83



A LITTLE BIT
Page 85

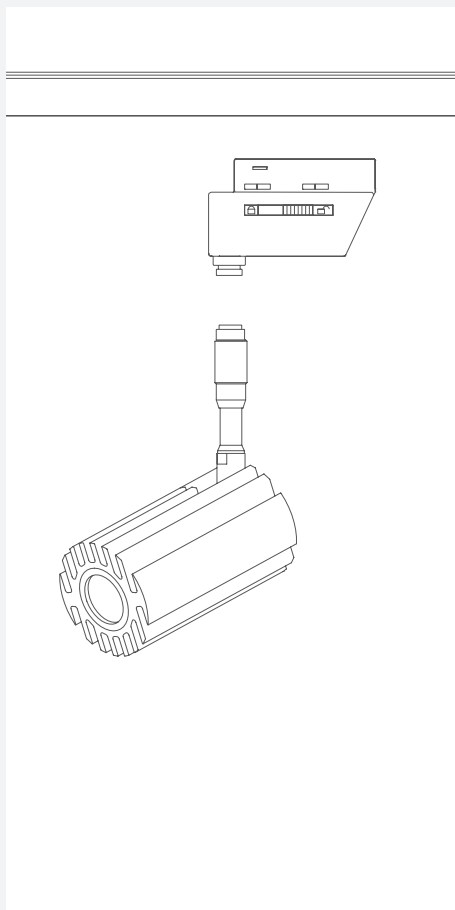
SMART.TRACK

INSTALL AND ADAPT EASILY

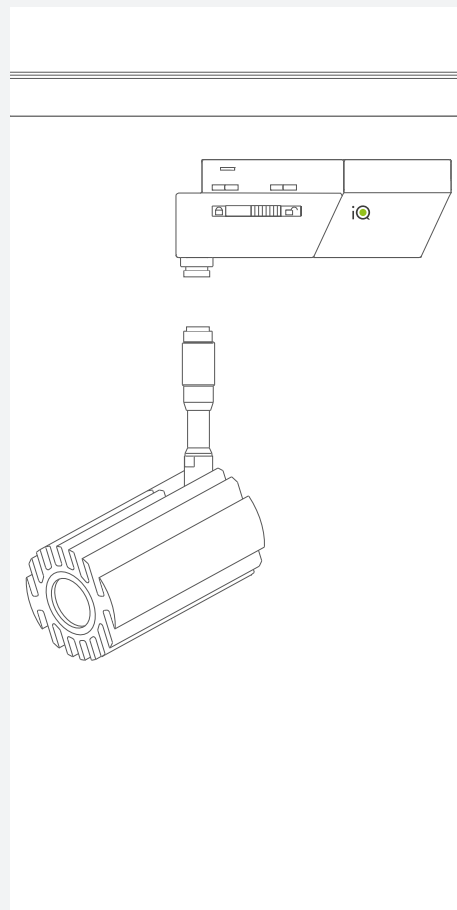
ADVANTAGES AT A GLANCE

- Particularly compact track format: just 17 x 17 mm
- Tracks available in lengths of 500 mm and 1500 mm
- Large systems can be implemented with few connection points
- Wide variety of installation options: ceiling mounting, flush to the ceiling, with supports, on beams
- Wide variety of connector options: I, L, T, X and flex connectors
- Tool-free installation of the track in supports and suspensions
- Tool-free installation of adapters and luminaires
- Live parts with anti-twist protection

ADAPTER



ADAPTER with SMART.IQ WIRELESS ADAPTER



INSTALL EASILY AND SAFELY

24 V SMART.POINT spotlights, ambient lights and pendant luminaires are connected quickly and conveniently to the track system using the extremely small adapter. Installation does not require tools. The subtle slider locks the adapter securely to the track and can be released again at any time.

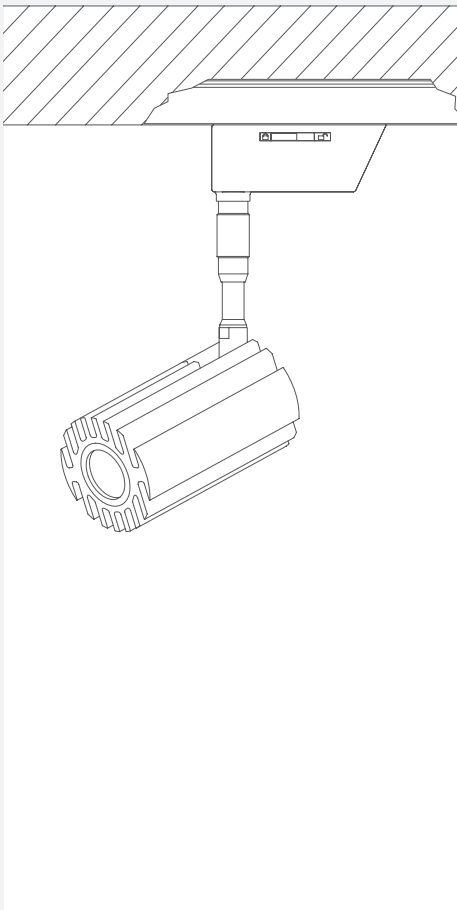
Integrated anti-twist protection in the live components ensures easy and safe installation.

WIRELESS ADAPTER FOR LIGHTING CONTROL

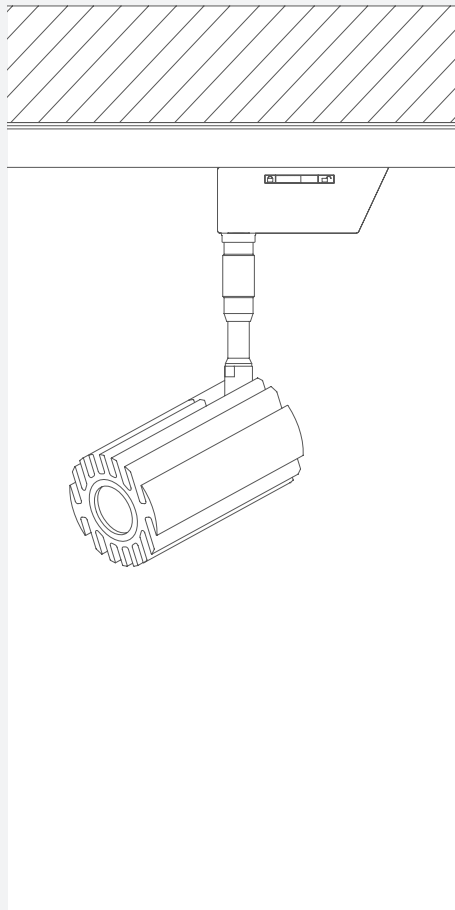
The SMART.IQ wireless adapter, which is easy to integrate retroactively, brings intelligence into play. In the blink of an eye, the SMART.TRACK 24 volt LED track system is transformed into a smart home solution.

The SMART.IQ adapter is simply plugged into the regular luminaire adapter. During commissioning of the system, the spotlight is coupled with the mobile device and establishes a wireless connection.

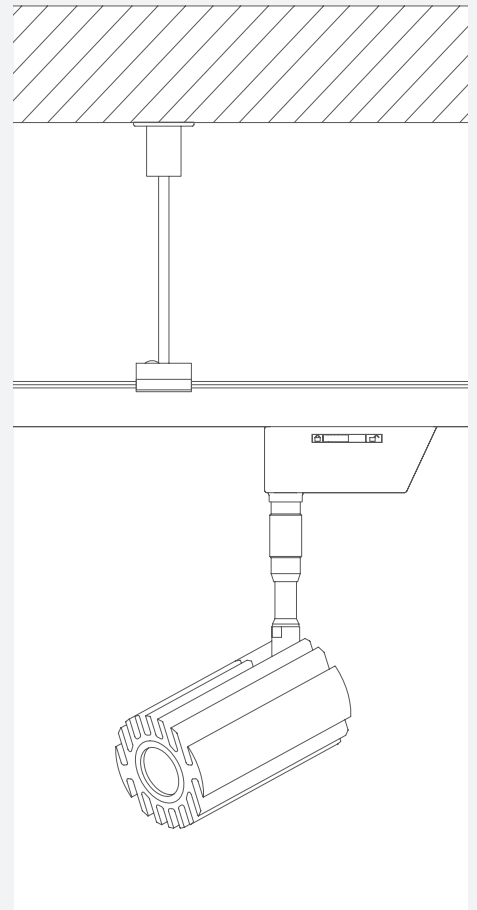
INSTALLATION recessed in the ceiling



INSTALLATION flush with the ceiling



INSTALLATION with supports



FLEXIBLE INSTALLATION OPTIONS

There are a variety of types of installation to choose from for the SMART.TRACK track system. The tracks can be installation recessed into the ceiling, flush with the ceiling, or with supports.

INDIVIDUAL TRACK CONFIGURATIONS

A variety of connection elements such as T and X connectors, for example, allow individual track configurations to be designed. The track elements can be connected with one another almost invisibly using internal track couplings designed in-house.

Thanks to the intelligent design of supports and components, installation can also be done largely without any tools.

PLACE TRACK SUPPORTS ANYWHERE YOU WANT

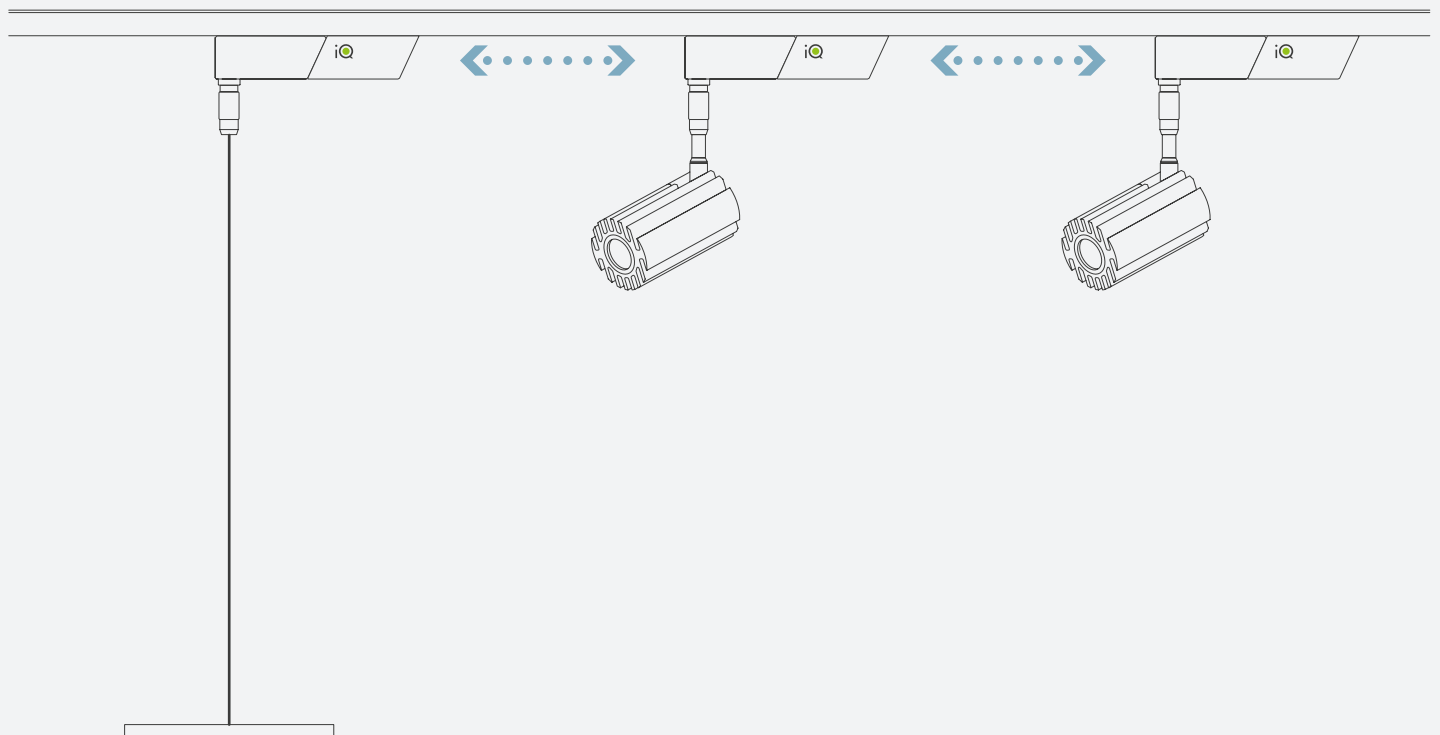
Structural conditions often determine what points on the ceiling a track support can be attached to. The internal track connectors allow for more planning and installation freedom. Regardless of the location of the connector, the points for attachment to the ceiling can be freely determined.



SMART.IQ

DIGITAL LIGHTING CONTROL VIA WIRELESS COMPONENTS

Intelligent solutions for renovation and new builds are more in demand than ever. Particularly when it comes to switching and dimming the lights conveniently. SMART.IQ from OLIGO offers the best conditions for this. Alongside a wide variety of applications, it impresses with simple operation and maximum flexibility.



CASAMBI
HomeMatic

EASY RETROFITTING FOR SMART LIGHT

24 volt LED system luminaires can be integrated into a wireless network using SMART.IQ wireless components and can thus be digitally switched and dimmed.

The user is free to choose whether, at what point in time and to what extent the lighting is integrated into the building automation system. There is a choice between the Bluetooth-based app from Casambi or the wireless-based HomeMatic home control system from the German manufacturer eQ-3 here.

ALWAYS A SECURE CONNECTION

Reliably functioning is the be all and end all of a wireless solution which is safe to use. Both the Casambi application and the HomeMatic application work using bi-directional wireless protocols.

The wireless signal is not just sent from one side, the system is constantly checking whether the receiver has received the wireless signal.

SMART.IQ

in combination with the Casambi wireless solution

SIMPLY CLEVER

Casambi is a free software for the mobile control of single luminaires and lighting systems.

It is characterised by:

- easy integration
- simply technical design
- wireless installation, and
- intuitive control via smartphone or tablet

Even existing lighting units and conventional light switches can be integrated into the mobile lighting control system using a switch module which can be retrofitted. Casambi is therefore particularly suitable for retrofitting in existing buildings.

Thanks to a maximum distance of 50 metres between the modules or the mobile device used as a control, even bigger projects can be realised.

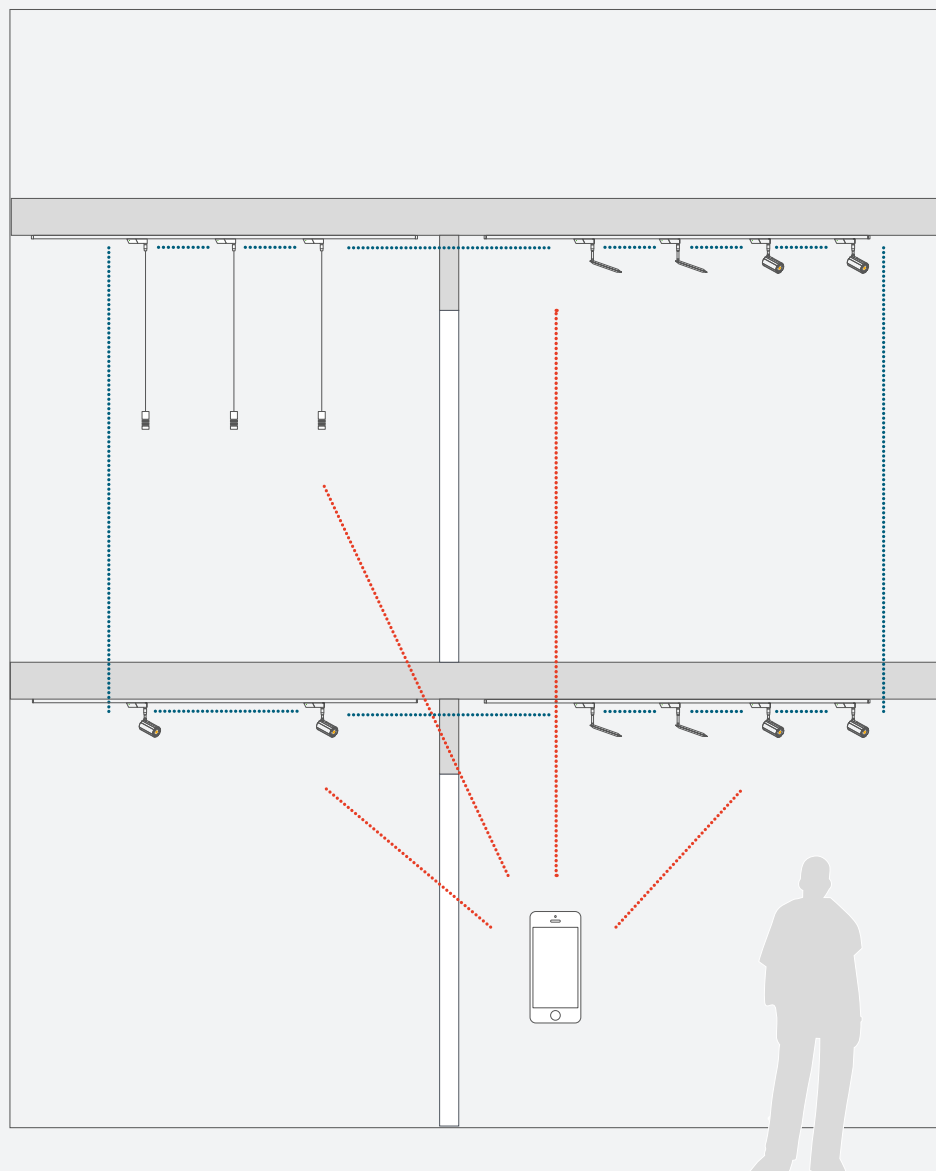
PROVEN TIME AND AGAIN

The software is used by more than 120 companies in the lighting industry and is compatible with products in the Philips Hue range, among others.

It therefore offers end users a convenient, cross-manufacturer lighting control system with just one app.

Detailed information about Casambi can be found at

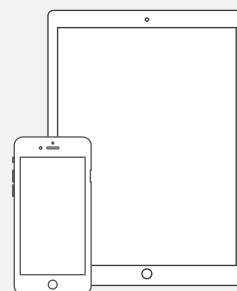
➞ www.casambi.com



Devices
for lighting control



Wireless button /
remote control



Mobile devices

SMART.IQ

in combination with the HomeMatic home control system

SMART HOME VIA WIRELESS

HomeMatic is a cross-system smart home system for wireless intelligent building control. It is available for retrofitting in the home as well as for new builds.

The various connected devices such as blinds and heating, access control, security alarm and weather sensors can be conveniently controlled using a smartphone or tablet, via a built-in centre, by remote control or using the PC software.

The HomeMatic wireless protocol is based on the 868 MHz frequency range. It offers excellent wireless range and has no interference from WiFi or Bluetooth. The wireless signal is secured against external tampering using the AES-128 security technology.

AT HOME AND OUT AND ABOUT

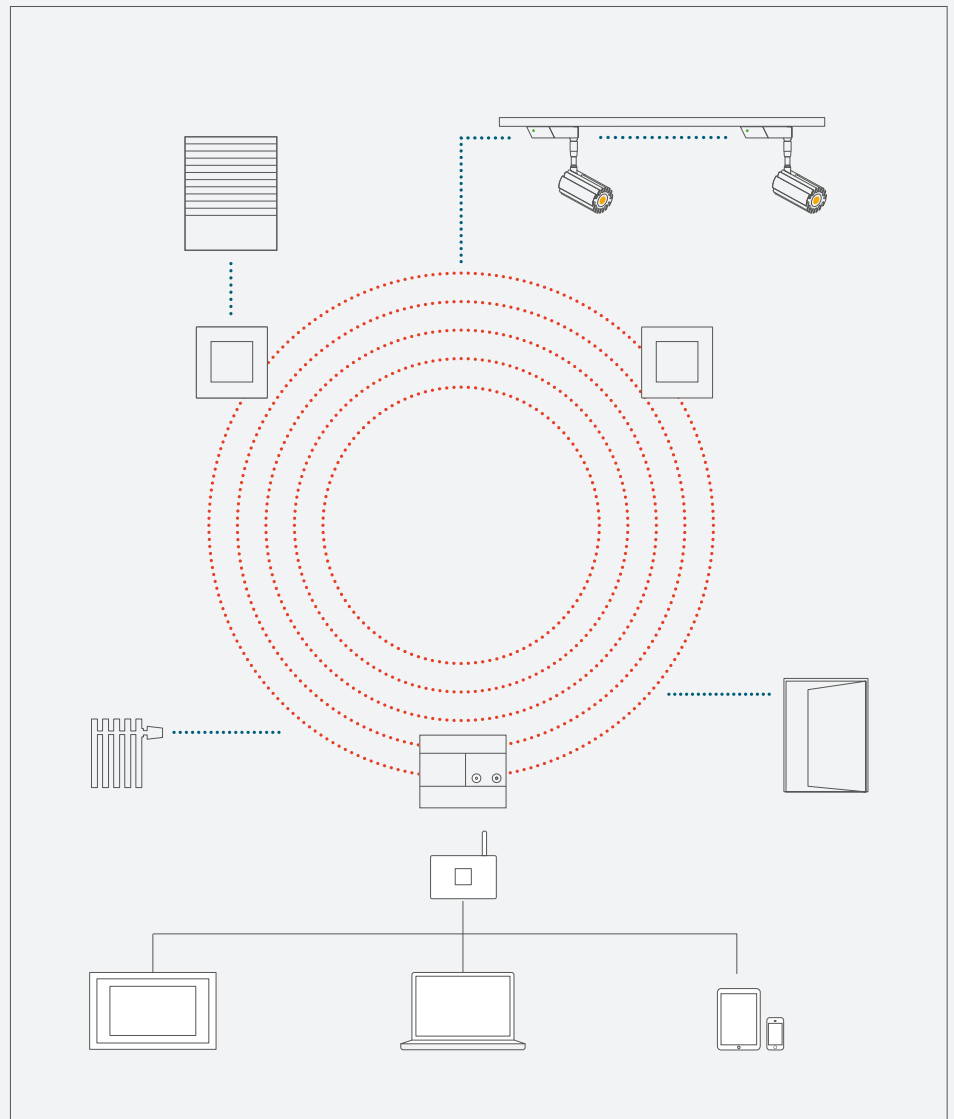
The HomeMatic user interface can be set up using a web browser-based interface and can be controlled both in the local network and over the Internet.

ONE STANDARD, MANY PARTNERS

Thanks to its open interfaces, the system allows for the development of partner solutions in the field of hardware and software. These include, among other things, apps and Cloud services for control via smartphone and tablets which are offered directly by the partners.

Detailed information about HomeMatic can be found at

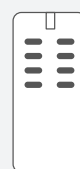
➞ www.homematic.com



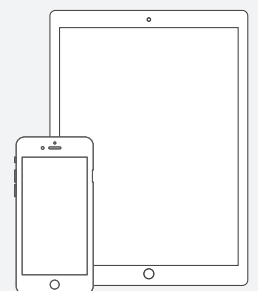
Devices for lighting control



Wireless button



Remote control



Mobile devices



WALKER

WALKER

LED

The bright WALKER reflector spotlight convinces with a luminous flux of 1,850 lumen and, thanks to the three-pole pin, is suitable for digital lighting control systems. With two light distribution characteristics and modern design, WALKER puts the topic of luminaire design in a contemporary context and is perfectly suited for designing creative shop fitting and office concepts.

Design: Böhler Design



SMART CONTROL
READY

LED
INTEGRATED



FEATURES

Spotlight
Rotatable / swivelling
High performance reflector

Lighting control and dimming
Compatible with SMART.IQ components for integration into building automation systems: Page 92

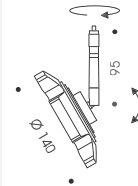
Output data
24 V DC / LED / 1850 lm / 17.8 W /
CRI >90 / Energy efficiency class: A+
Variants: 2700 K / 3000 K / 4000 K /
25° / 45°

Material
Aluminium

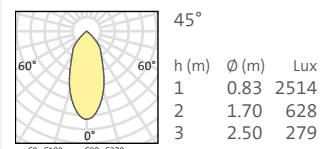
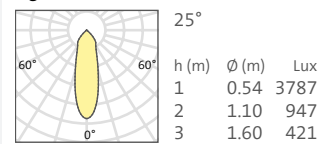
Weight
0.7 kg

TECHNICAL INFORMATION

Order adapter separately



Light distribution



COLOURS



Matt chrome



Matt white



Matt black

PRODUCT

Voltage	Type	lm	W	CRI	EEC	Angle	Colour	2700 K	3000 K	4000 K
24 V DC	LED	1850	17.8	>90	A+	25°	Matt chrome	20-862-20-06	20-862-30-06	20-862-40-06
							Matt white	20-862-20-21	20-862-30-21	20-862-40-21
							Matt black	20-862-20-23	20-862-30-23	20-862-40-23
						45°	Matt chrome	20-862-21-06	20-862-31-06	20-862-41-06
							Matt white	20-862-21-21	20-862-31-21	20-862-41-21
							Matt black	20-862-21-23	20-862-31-23	20-862-41-23

Adapter: Page 91



NEWTON

NEWTON

LED

With a 1,850 lumen luminous flux at a power consumption of 17.8 watts, NEWTON offers a bright, efficient lighting solution for product presentation. The high performance reflector, coordinated in-house with the LED light source shields the spotlight and at the same time defines the softly sketched light scene. The rotatable and swivelling spotlight, with light distribution characteristics of 25° and 45° and light colours of up to 4,000 K, allows for a multitude of options for the modulation of presentation areas.

Design: Böhler Design



SMART CONTROL
READY

LED
INTEGRATED



FEATURES

Spotlight
Rotatable / swivelling
High performance reflector

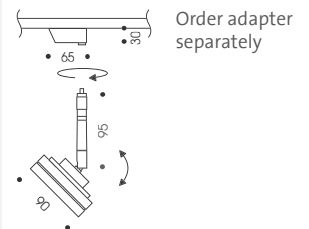
Lighting control and dimming
Compatible with SMART.IQ components for integration into building automation systems: Page 92

Output data
24 V DC / LED / 1850 lm / 17.8 W /
CRI >90 / Energy efficiency class: A+
Variants: 2700 K / 3000 K / 4000 K /
25° / 45°

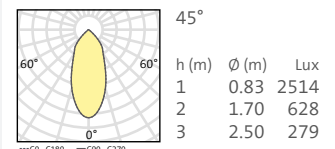
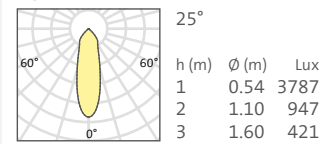
Material
Aluminium

Weight
0.6 kg

TECHNICAL INFORMATION



Light distribution



COLOURS



Matt chrome



Matt white



Matt black

PRODUCT

Voltage	Type	lm	W	CRI	EEC	Angle	Colour	2700 K	3000 K	4000 K
24 V DC	LED	1850	17.8	>90	A+	25°	Matt chrome	20-860-20-06	20-860-30-06	20-860-40-06
							Matt white	20-860-20-21	20-860-30-21	20-860-40-21
							Matt black	20-860-20-23	20-860-30-23	20-860-40-23
						45°	Matt chrome	20-860-21-06	20-860-31-06	20-860-41-06
							Matt white	20-860-21-21	20-860-31-21	20-860-41-21
							Matt black	20-860-21-23	20-860-31-23	20-860-41-23

Adapter: Page 91



SENTRY

SENTRY

LED

The SENTRY LED spotlight presents itself with a slim, cylindrical shape. The luminaire body has a luminous flux of 1,150 lumen and can be directed as desired using a joint which tilts and swivels. The high performance reflector provides a homogeneous light mix across the entire spectrum and ensures the true colour rendering of the illuminated objects. With its timeless design, the spotlight is perfectly suited to use in modern shopping worlds and exhibitions.

Design: OLIGO



SMART CONTROL
READY

LED
INTEGRATED



FEATURES

Spotlight
Rotatable / swivelling

Lighting control and dimming
Compatible with SMART.IQ components for integration into building automation systems: Page 92

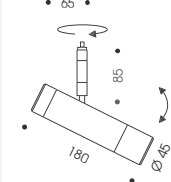
Output data
24 V DC / LED / 1150 lm / 13.9 W /
CRI >90 / Energy efficiency class: A+
Variants: 2700 K / 3000 K / 4000 K /
26° / 43°

Material
Aluminium

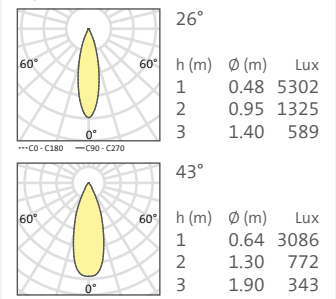
Weight
0.7 kg

TECHNICAL INFORMATION

Order adapter separately



Light distribution



COLOURS



Matt chrome



Matt white



Matt black

PRODUCT

Voltage	Type	lm	W	CRI	EEC	Angle	Colour	2700 K	3000 K	4000 K
24 V DC	LED	1150	13.9	>90	A+	26°	Matt chrome	20-867-60-06	20-867-70-06	20-867-80-06
							Matt white	20-867-60-21	20-867-70-21	20-867-80-21
							Matt black	20-867-60-23	20-867-70-23	20-867-80-23
						43°	Matt chrome	20-867-61-06	20-867-71-06	20-867-81-06
							Matt white	20-867-61-21	20-867-71-21	20-867-81-21
							Matt black	20-867-61-23	20-867-71-23	20-867-81-23

Adapter: Page 91



AVIATION PRO

AVIATION PRO

LED

AVIATION PRO recognisably leans on aeronautics in the design. With a luminous flux of up to 1,200 lumen and a brilliant light scene, the LED spotlight is recommended for professional use in property. Two rod lengths and light characteristics allow for a wide variety of planning options. AVIATION PRO impresses with energy efficiency and outstanding thermal management.

Design: Böhler Design



SMART CONTROL
READY

LED

INTEGRATED



FEATURES

Spotlight
Rotatable / swivelling

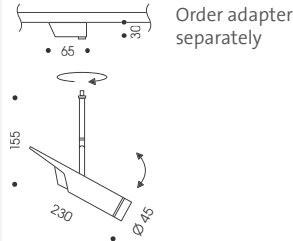
Lighting control and dimming
Compatible with SMART.IQ components for integration into building automation systems: Page 92

Output data
24 V DC / LED / 1200 lm / 13.9 W /
CRI >90 / Energy efficiency class: A+
Variants: 2700 K / 3000 K / 4000 K /
26° / 43°

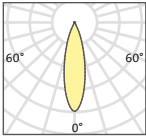
Material
Aluminium

Weight
0.6 kg

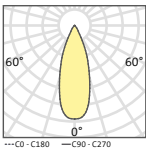
TECHNICAL INFORMATION



Light distribution



h (m)	Ø (m)	Lux
1	0.48	5302
2	0.95	1325
3	1.40	589



h (m)	Ø (m)	Lux
1	0.64	3086
2	1.30	772
3	1.90	343

COLOURS



PRODUCT										
Voltage	Type	lm	W	CRI	EEC	Angle	Colour	2700 K	3000 K	4000 K
24 V DC	LED	1200	13.9	>90	A+	26°	Matt chrome	20-875-30-06	20-875-40-06	20-875-50-06
							Matt white	20-875-30-21	20-875-40-21	20-875-50-21
							Matt black	20-875-30-23	20-875-40-23	20-875-50-23
						43°	Matt chrome	20-875-31-06	20-875-41-06	20-875-51-06
							Matt white	20-875-31-21	20-875-41-21	20-875-51-21
							Matt black	20-875-31-23	20-875-41-23	20-875-51-23
Adapter: Page 91										

AVIATION LED

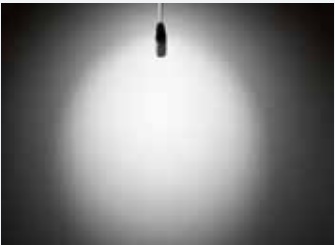
The AVIATION LED spotlight is more delicate but just as elegant. With a luminous flux of 650 lumen, it is particularly suitable for use in private living areas. The high performance reflector is determined in-house for the particularly balanced light scene.

There are two rod lengths and light distribution characteristics to choose from for detailed lighting planning

Design: Böhler Design



AVIATION



FEATURES

Spotlight
Rotatable / swivelling

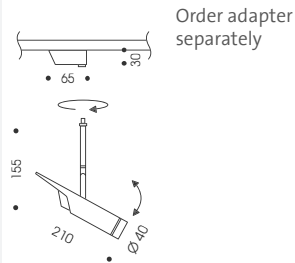
Lighting control and dimming
Compatible with SMART.IQ
components for integration into building automation systems: Page 92

Output data
24 V DC / LED / 650 lm / 8.4 W /
CRI >90 / Energy efficiency class: A+
Variants: 2700 K / 3000 K /
23° / 41°

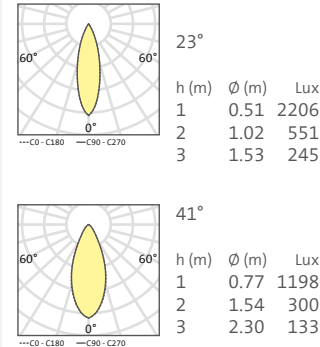
Material
Aluminium

Weight
0.5 kg

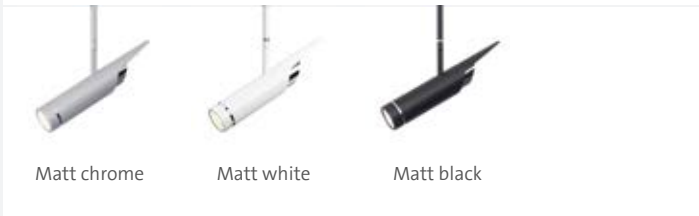
TECHNICAL INFORMATION



Light distribution



COLOURS



PRODUCT								
Voltage	Type	lm	W	CRI	EEC	Angle	Colour	
24 V DC	LED	650	8.4	>90	A+	23°	Matt chrome	2700 K 20-875-60-06
							Matt white	3000 K 20-875-70-21
							Matt black	20-875-70-23
						41°	Matt chrome	2700 K 20-875-61-06
							Matt white	3000 K 20-875-71-21
							Matt black	20-875-71-23

Adapter: Page 91



RIDGE MAX

COLOURS



Matt chrome /
Matt chrome



Matt white /
Matt white



Chrome /
Matt white



Matt black /
Matt black



Chrome /
Matt black

RIDGE MAX

LED

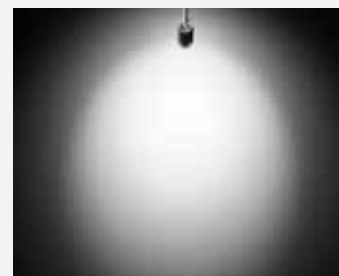
A distinctive heat sink with cooling ribs around the circumference characterises the design of the highly efficient RIDGE MAX LED spotlight. The luminaire head, made from aluminium, surrounds the 1,100 lumen LED and is connected to the adapter by a joint which tilts and swivels. There are three light colours and two light distribution characteristics available to choose from for lighting planning.

Design: OLIGO



SMART CONTROL
READY

LED
INTEGRATED



FEATURES

Spotlight
Rotatable / swivelling
High performance reflector

Lighting control and dimming
Compatible with SMART.IQ components for integration into building automation systems: Page 92

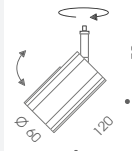
Output data
24 V DC / LED / 1100 lm / 13.9 W /
CRI >90 / Energy efficiency class: A+
Variants: 2700 K / 3000 K / 4000 K /
26° / 43°

Material
Aluminium

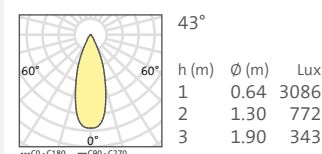
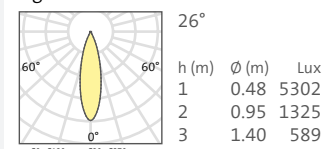
Weight
0.5 kg

TECHNICAL INFORMATION

 Order adapter separately



Light distribution



PRODUCT

Voltage	Type	lm	W	CRI	Angle	Rod colour	Body colour	2700 K	3000 K	4000 K
24 V DC	LED	1100	13.9	>90	26°	Matt chrome	Matt chrome	20-881-51-06	20-881-61-06	20-881-71-06
						Matt white	Matt white	20-881-52-21	20-881-62-21	20-881-72-21
						Chrome	Matt white	20-881-50-21	20-881-60-21	20-881-70-21
						Matt black	Matt black	20-881-53-23	20-881-63-23	20-881-73-23
						Chrome	Matt black	20-881-50-23	20-881-60-23	20-881-70-23
					43°	Matt chrome	Matt chrome	20-881-55-06	20-881-65-06	20-881-75-06
						Matt white	Matt white	20-881-56-21	20-881-66-21	20-881-76-21
						Chrome	Matt white	20-881-54-21	20-881-64-21	20-881-74-21
						Matt black	Matt black	20-881-57-23	20-881-67-23	20-881-77-23
						Chrome	Matt black	20-881-54-23	20-881-64-23	20-881-74-23

Adapter: Page 91



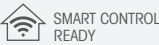
RIDGE

RIDGE

LED

The RIDGE LED spotlight is a little more delicate than its big brother. Here too, the distinctive cooling fins characterise the unmistakeable design. The high quality luminaire head made from aluminium has the same rotating and tilting functionality. With a luminous flux of 650 lumen, RIDGE is ideal for universal use in private living spaces, for example in studies, hallways or modern living and dining rooms. For the RIDGE spotlight too, the matt black and matt chrome surfaces are refined with an intricate grinding pattern.

Design: OLIGO



LED
INTEGRATED



FEATURES

Spotlight
Rotatable / swivelling
High performance reflector

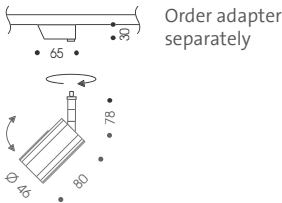
Lighting control and dimming
Compatible with SMART.IQ components for integration into building automation systems: Page 92

Output data
24 V DC / LED / 650 lm / 8 W / 41° / CRI >90 / Energy efficiency class: A+
Variants: 2700 K / 3000 K

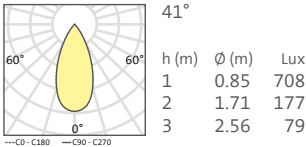
Material
Aluminium

Weight
0.2 kg

TECHNICAL INFORMATION



Light distribution



COLOURS



Chrome /
Matt white



Matt white /
Matt white



Chrome /
Matt black

PRODUCT

Voltage	Type	lm	W	CRI	Angle	EEC	Rod colour	Body colour	2700 K	3000 K
24 V DC	LED	650	8	>90	41°	A+	Matt chrome	Matt chrome	20-889-21-06	20-889-31-06
							Matt white	Matt white	20-889-22-21	20-889-32-21
							Chrome	Matt white	20-889-20-21	20-889-30-21
							Matt chrome	Matt white	20-889-21-21	20-889-31-21
							Chrome	Matt black	20-889-20-23	20-889-30-23

Adapter: Page 91

A LITTLE BIT MORE LED

The A LITTLE BIT MORE LED spotlight offers outstanding lighting technology with individually definable light distribution characteristics. With a luminous flux of 1,100 and up to 4,000 kelvin, the spotlight is intended for use in shops and property.

The beam angle can be continuously adjusted between 20° and 60° using the focusable glass lens. For harmonious light distribution, the high quality lens body is finished separately with a micro texture on the inside.

Design: OLIGO



A LITTLE BIT MORE



FEATURES

Spotlight
Rotatable / swivelling
Beam angle continuously adjustable
between 20° and 60°

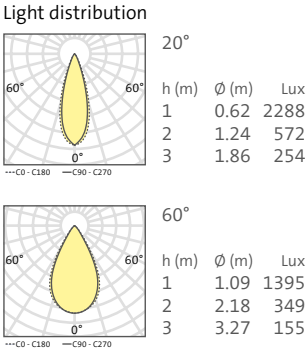
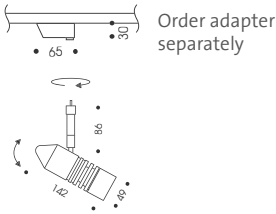
Lighting control and dimming
Compatible with SMART.IQ compo-
nents for integration into building
automation systems: Page 92

Output data
24 V DC / LED / 1000 lm / 11 W /
20° – 60° / CRI >90 /
Energy efficiency class: A+
Variants: 2700 / 3000 / 4000 K

Material
Aluminium, glass lens

Weight
0.6 kg

TECHNICAL INFORMATION



COLOURS



PRODUCT										
Voltage	Type	lm	W	CRI	Angle	Rod colour	Body colour	2700 K	3000 K	4000 K
24 V DC	LED	1000	11	>90	20–60°	Chrome	Chrome	20-882-41-05	20-882-51-05	20-882-61-05
						Matt chrome	Matt chrome	20-882-42-06	20-882-52-06	20-882-62-06
						Chrome	Matt white	20-882-41-21	20-882-51-21	20-882-61-21
						Matt white	Matt white	20-882-43-21	20-882-53-21	20-882-63-21
						Chrome	Matt black	20-882-41-23	20-882-51-23	20-882-61-23
						Matt black	Matt black	20-882-40-23	20-882-50-23	20-882-60-23

Adapter: Page 91



A LITTLE BIT

A LITTLE BIT LED

The A LITTLE BIT LED spotlight is slightly smaller in terms of size and light output, but just as variable when it comes to the light scene. Like its big brother, A LITTLE BIT also has efficient LED lighting technology. The width of the cone of light can be continuously adjusted between 20° and 60°. Different rod lengths allow for different distances from the ceiling. A system pendant luminaire matching this spotlight design is also available.

Design: OLIGO



FEATURES

Spotlight
Rotatable / swivelling
60 or 140 mm rod
Beam angle continuously adjustable between 20° and 60°

Lighting control and dimming
Compatible with SMART.IQ components for integration into building automation systems: Page 92

Output data
24 V DC / LED / 650 lm / 8 W /
20° – 60° / CRI >90 /
Energy efficiency class: A+
Variants: 2700 K / 3000 K

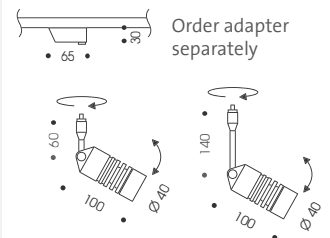
Material
Aluminium, glass lens

Weight
0.3 kg

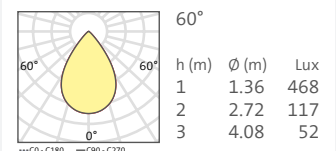
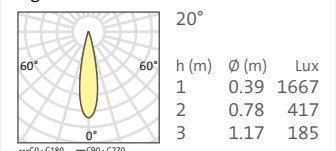


LED
INTEGRATED

TECHNICAL INFORMATION



Light distribution



COLOURS AND MODELS



Chrome /
60 mm



Matt chrome /
60 mm



Chrome /
140 mm



Matt chrome /
140 mm

PRODUCT

Voltage	Type	lm	W	CRI	Angle	Rod length	Rod colour	Body colour	2700 K	3000 K
24 V DC	LED	650	8	>90	20–60°	60 mm	Chrome	Chrome	20-898-40-05	20-898-50-05
							Matt chrome	Matt chrome	20-898-40-06	20-898-50-06
						140 mm	Chrome	Chrome	20-898-41-05	20-898-51-05
							Matt chrome	Matt chrome	20-898-41-06	20-898-51-06

Adapter: Page 91



HUBBLE

HUBBLE

LED

The HUBBLE LED spotlight is a suitable inspiration if high quality materials and an elegant appearance are required. The rotatable and swivelling spotlight can also be aligned as a downlight in a harmonious extension of its blade. The beam angle can be set as desired between 20° and 50° thanks to the manually adjustable focus. HUBBLE is available with light colours of 2,700 or 3,000 kelvin and is suitable for use in living space and property.

Design: Böhler Design



SMART CONTROL
READY

LED
INTEGRATED



FEATURES

Spotlight
Rotatable / swivelling
Beam angle continuously adjustable
between 20° and 50°

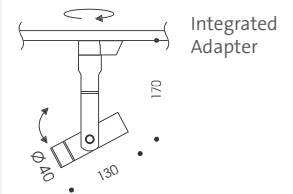
Lighting control and dimming
Compatible with SMART.IQ components
for integration into building
automation systems: Page 92

Output data
24 V DC / LED / 600 lm / 10.5 W /
20° – 50° / CRI >90 /
Energy efficiency class: A
Variants: 2700 K / 3000 K

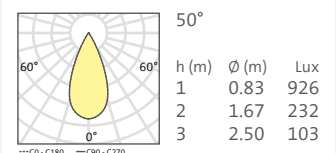
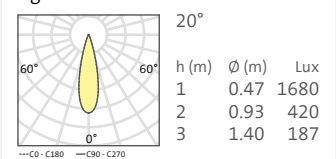
Material
Aluminium

Weight
0.8 kg

TECHNICAL INFORMATION



Light distribution



COLOURS



Matt chrome



Matt white



Matt black

PRODUCT

Voltage	Type	lm	W	CRI	Angle	EEC	Colour	2700 K	3000 K
24 V DC	LED	600	10.5	>90	20–50°	A	Matt chrome	22-872-20-06	22-872-30-06
							Matt white	22-872-20-21	22-872-30-21
							Matt black	22-872-20-23	22-872-30-23

Integrated track adapter.

KELVEEN





KELVEEN

CUSTOMISED COLOURED LIGHTING ENVIRONMENTS

KELVEEN spotlights can be equipped with dichroic filters to create exciting coloured lighting environments for walls and hallways.

No tools are needed to position the filter disk directly above the LED boards. A magnetically fastened glass lens holds the filter securely in place.

The result is an attractive multicoloured light pattern:



Yellow filter



Red filter



Magenta filter



Blue filter



Green filter



KELVEEN

ACCESSORIES

Type	Size (mm)	Colour	Item number
Dichroic filter	Ø 50	Red	62-222-10-24
		Yellow	62-222-10-33
		Green	62-222-10-35
		Blue	62-222-10-37
		Magenta	62-222-10-46

COLOURS

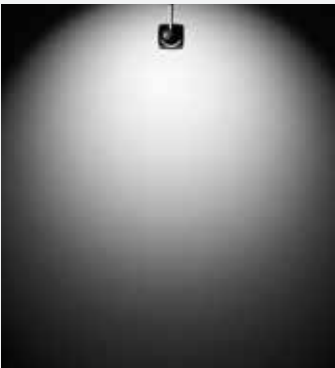
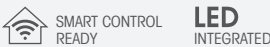


KELVEEN

LED

A striking feature of KELVEEN is the high quality glass lens which is available with two beam angles as a spotlight (40°) or floodlight (90°). In combination with the freely movable luminaire head, KELVEEN can be individually adjusted to suit the actual lighting requirements. The lighting effect can be creatively expanded using dichroic filters which can be inserted.

Design: OLIGO



FEATURES

Spotlight
Rotatable / swivelling

Lighting control and dimming
Compatible with SMART.IQ components for integration into building automation systems: Page 92

Output data
24 V DC / LED / 1000 lm / 12.5 W / CRI >90 / Energy efficiency class: A+
Variants: 2700 K / 3000 K / 40° / 90°

Material
Thermoplastic, aluminium, glass

Weight
0,4 kg

TECHNICAL INFORMATION

Order adapter separately

Light distribution

h (m)	Ø (m)	Lux
1	0.82	803
2	1.63	201
3	2.45	89

h (m)	Ø (m)	Lux
1	1.43	490
2	2.86	122
3	4.30	54

PRODUCT								
Voltage	Type	lm	W	CRI	EEC	Angle	Colour	
24 V DC	LED	1000	12.5	>90	A+	40°	Matt chrome	2700 K 20-869-20-06
							Matt white	3000 K 20-869-30-06
							Matt black	20-869-20-23
						90°	Matt chrome	20-869-21-06
							Matt white	20-869-31-06
							Matt black	20-869-21-23

Adapter: Page 91



41 DEGREES

41 DEGREES

LED

41 DEGREES is an extraordinary room light which redefines the design of light sources for extensive room lighting. It stands out with its clear, geometric shape. The flat luminaire body rests weightlessly as a concentric circular ring in the room. Its soft, warm white silhouette from the inner surface of the ring disseminates a pleasantly cosy lighting mood.

Design: Ottenwlder und Ottenwlder



SMART CONTROL
READY

LED

INTEGRATED



FEATURES

Ambient light
Rotatable / swivelling

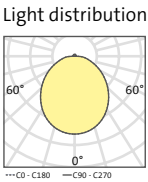
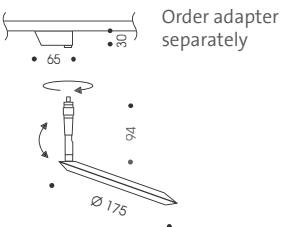
Lighting control and dimming
Compatible with SMART.IQ components for integration into building automation systems: Page 92

Output data
24 V DC / LED / 600 lm / 11 W /
CRI >85 / Energy efficiency class: A
Variants: 2700 K / 3000 K

Material
Aluminium

Weight
0.3 kg

TECHNICAL INFORMATION



COLOURS



Matt chrome



Matt white



Matt black

PRODUCT

Voltage	Type	lm	W	CRI	EEC	Colour	2700 K	3000 K
24 V DC	LED	600	11	>85	A	Matt chrome	20-871-10-06	20-871-11-06
						Matt white	20-871-10-21	20-871-11-21
						Matt black	20-871-10-23	20-871-11-23

Adapter: Page 91

FLAVIA



FLAVIA / A LITTLE BIT MORE



FLAVIA

LED

Like a suspended work of art made of light, FLAVIA magically draws the eye. Thanks to the optionally open or closed prismatic lens, the actual light source remains invisible and the result is the impression of a glowing forest of leaves. With varying light colours of 2,700 and 3,000 kelvin, the delicate FLAVIA can be used both in private living space and in property.

Design: Ottenwlder und Ottenwlder



PRODUCT						
Open prismatic lens						
Voltage	Type	lm	W	K	Body colour	Item number
24 V DC	LED	150	4.8	2700	Matt chrome	20-870-10-06
					Matt white	20-870-10-21
					Matt black	20-870-10-23
24 V DC	LED	150	4.8	3000	Matt chrome	20-870-12-06
					Matt white	20-870-12-21
					Matt black	20-870-12-23

Adapter: Page 91

PRODUCT						
Closed prismatic lens						
Voltage	Type	lm	W	K	Body colour	Item number
24 V DC	LED	200	4.8	2700	Matt chrome	20-870-11-06
					Matt white	20-870-11-21
					Matt black	20-870-11-23
24 V DC	LED	200	4.8	3000	Matt chrome	20-870-13-06
					Matt white	20-870-13-21
					Matt black	20-870-13-23

Adapter: Page 91



FEATURES

Ambient light
Rotatable / swivelling

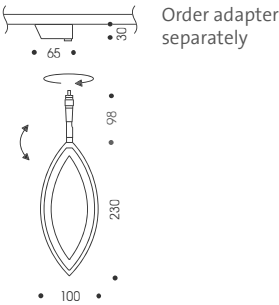
Lighting control and dimming
Non-dimmable

Output data
24 V DC / LED / 100-200 lm / 4.8 W /
CRI >80 / Energy efficiency class: A
Variants: Open prismatic lens /
Closed prismatic lens / Translucent
prismatic lens / 2700 K / 3000 K

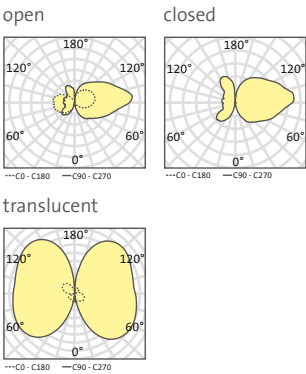
Material
Aluminium

Weight
0.2 kg

TECHNICAL INFORMATION



Light distribution



PRODUCT

Translucent prismatic lens

Voltage	Type	lm	W	K	Body colour	Item number
24 V DC	LED	100	4.8	2700	Matt chrome	20-870-18-06
					Matt white	20-870-18-21
					Matt black	20-870-18-23
24 V DC	LED	100	4.8	3000	Matt chrome	20-870-19-06
					Matt white	20-870-19-21
					Matt black	20-870-19-23

Adapter: Page 91

COLOURS





RIO

RIO

LED novelty

Form, colour, materials and light quality – the RIO LED luminaire series combines all the attributes of high-quality luminaire design. RIO luminaires have a special soft-touch surface. The surface shimmers in smooth shades depending on the incidence of light. The luminaire is also available in a black and white matt finish.

Design: OLIGO



FEATURES

Pendant luminaire

Please provide information on the desired total length; length cannot be shortened at the installation site

Lighting control and dimming

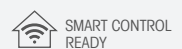
Compatible with SMART.IQ components for integration into building automation systems: Page 92

Output data

24 V DC / 300 mA / 2700 K /
1050 lm / 11.2 W / CRI >90
Energy efficiency class: A+

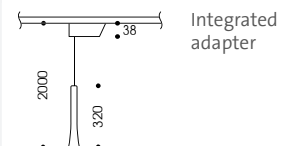
Material
Metal

Weight
0.7 kg



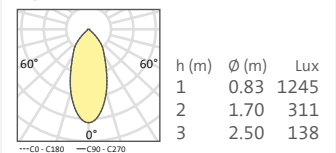
LED
INTEGRATED

TECHNICAL INFORMATION



Special length
Suspension cable up to 5 m available upon request.

Light distribution



PRODUCT

Voltage	Type	lm	K	W	CRI	EEC	Head colour	Matt chrome adapter	Matt white adapter	Matt black adapter
24 V DC	LED	1050	2700	11.2	>90	A+	Pearl silver	22-861-10-06	22-861-20-06	22-861-30-06
							Satin copper	22-861-10-15	22-861-20-15	22-861-30-15
							Atlantic blue	22-861-10-38	22-861-20-38	22-861-30-38
							Patagonia spring	22-861-10-36	22-861-20-36	22-861-30-36
							Red velvet	22-861-10-25	22-861-20-25	22-861-30-25
							Brazilian brown	22-861-10-41	22-861-20-41	22-861-30-41
							Espresso	22-861-10-48	22-861-20-48	22-861-30-48
							Matt white	22-861-10-21	22-861-20-21	22-861-30-21
							Matt black	22-861-10-23	22-861-20-23	22-861-30-23

Integrated track adapter.

COLOURS



BALINO

LED novelty


The small BALINO pendant luminaire stands out through its colourful hand-blown crystal glass. The entire glass body is coloured in the satin-finish and orange models. An exclusive ice crystal finish creates a finely textured lighting effect in the diamond grey, gold and tobacco models. Brilliant illumination underscores the enchanting lighting effect of this high-quality pendant luminaire, which is available with a selection of different caps.


Design: OLIGO



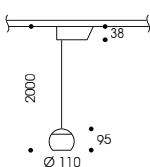
FEATURES

- Pendant luminaire**
Please provide information on the desired total length; length cannot be shortened at the installation site
- Lighting control and dimming**
Compatible with SMART.IQ components for integration into building automation systems: Page 92
- Output data**
24 V DC / LED / 2700 K / 1050 lm / 11.2 W / CRI >90
Energy efficiency class A+
- Material**
Metal, glass
- Weight**
0.5 kg

 SMART CONTROL
READY

 LED
INTEGRATED

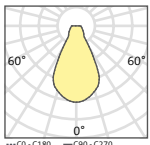
TECHNICAL INFORMATION



Integrated adapter

Special length
Suspension cable up to 5 m available upon request.

Light distribution



h (m)	Ø (m)	Lux
1	1.10	528
2	1.60	235
3	3.20	59

---C0 - C180 ---C90 - C270

COLOURS



Chrome /
Satin finish



Chrome /
Bright diamond grey



Chrome /
Bright orange



Matt chrome /
Satin finish



Matt chrome /
Bright tobacco



Matt chrome /
Bright gold

PRODUCT

Voltage	Type	lm	K	W	CRI	EEC	Body colour	Shade colour	Matt chrome adapter	Matt white adapter	Matt black adapter
24 V DC	LED	1050	2700	11.2	>90	A+	Chrome	Satin finish	22-880-10-05/03	22-880-20-05/03	22-880-30-05/03
							Chrome	Bright diamond grey	22-880-10-05/44	22-880-20-05/44	22-880-30-05/44
							Chrome	Bright orange	22-880-10-05/29	22-880-20-05/29	22-880-30-05/29
							Matt chrome	Satin finish	22-880-10-06/03	22-880-20-06/03	22-880-30-06/03
							Matt chrome	Bright tobacco	22-880-10-06/40	22-880-20-06/40	22-880-30-06/40
							Matt chrome	Bright gold	22-880-10-06/08	22-880-20-06/08	22-880-30-06/08

Integrated track adapter.

GRACE

LED novelty

The timeless GRACE luminaire is considered to be one of the classic decorative pendant luminaires worldwide. The luminaire is ideal for setting the scene at tables and counters. The two lenticular, satin finished shades ensure even, glare-free illumination.

If the luminaire is integrated into a SMART.IQ application then the digital lighting control replaces the individual lighting control via gesture.

Design: Ralf Keferstein

GESTURE CONTROL

SMART CONTROL READY

LED INTEGRATED



FEATURES

Pendant luminaire
Please provide information on the desired total length; length cannot be shortened at the installation site

Lighting control and dimming
Compatible with SMART.IQ components for integration into building automation systems: Page 92

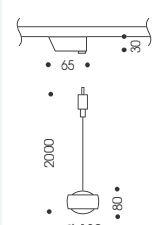
Gesture control
Memory function: Last light brightness value used is saved

Output data
24 V DC / LED / 2700 K / 1300 lm / 18 W / CRI >80
Energy efficiency class A+

Material
Metal, glass

Weight
0.8 kg

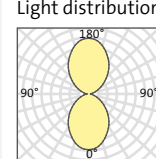
TECHNICAL INFORMATION



Order adapter separately

Special length
Suspension cable up to 5 m available upon request.

Light distribution



h (m)	Ø (m)	Lux
1	1.90	296
2	3.80	74
3	5.70	33

COLOURS



Chrome Brushed aluminium Bright white Satin copper Brazilian brown Espresso Purple grey

PRODUCT									
Voltage	Type	lm	K	W	CRI	EEC	Head colour	Item number	
24 V DC	LED	1300	2700	18	>80	A+	Chrome	G20-931-40-05	
							Brushed aluminium	G20-931-40-12	
							Bright white	G20-931-40-20	
							Satin copper	G20-931-40-15	
							Brazilian brown	G20-931-40-41	
							Espresso	G20-931-40-48	
							Purple grey	G20-931-40-49	

Adapter: Page 91



DECENT

DECENT

LED

DECENT is a flat, subtle LED pendant luminaire in the form of a disc. The evenly flat light radiating downwards is perfectly suited to lighting dining tables or counters. DECENT is controlled touchlessly. A memory function stores the last brightness value selected.

If the luminaire is integrated into a SMART.IQ application then the digital lighting control replaces the individual lighting control via gesture.

Design: OLIGO



FEATURES

Pendant luminaire

Please provide information on the desired total length; length cannot be shortened at the installation site

Lighting control and dimming

Compatible with SMART.IQ components for integration into building automation systems: Page 92

Gesture control

Memory function: Last light brightness value used is saved

Output data

24 V DC / LED / 750 lm / 8,7 W /
CRI >80 / Energy efficiency class: A+
Variants: 2700 K / 3000 K

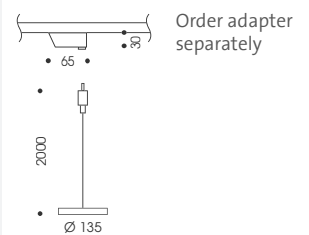
Material

Metal, acrylic glass

Weight

0.5 kg

TECHNICAL INFORMATION

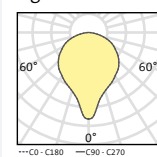


Order adapter separately

Special length

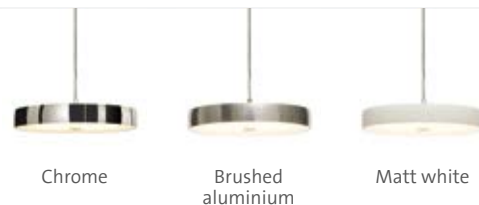
Suspension cable up to 5 m available upon request.

Light distribution



h (m)	Ø (m)	Lux
1	2,00	353
2	3,90	88
3	5,90	39

COLOURS



Chrome

Brushed aluminium

Matt white

PRODUCT

Voltage	Type	lm	W	CRI	Angle	EEC	Colour	2700 K	3000 K
24 V DC	LED	750	8,7	>80	89°	A+	Chrome	G20-885-10-05	G20-885-11-05
							Brushed aluminium	G20-885-10-12	G20-885-11-12
							Matt white	G20-885-10-21	G20-885-11-21

Adapter: Page 91

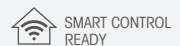


A LITTLE BIT

A LITTLE BIT LED

The A LITTLE BIT pendant luminaire offers a highly flexible lighting solution. The elegant luminaire head made from aluminium integrates a lens which can be focused between 20° and 60°. Elegant surfaces made from polished or matt aluminium round out the luminaire profile of A LITTLE BIT. For harmonious light distribution, the high quality lens body has been finished separately with a texture on the inside. The pendant luminaire design is also available as a spot-light for track installation.

Design: OLIGO



FEATURES

Pendant luminaire

Please provide information on the desired total length; length cannot be shortened at the installation site
Beam angle continuously adjustable between 20° and 60°

Lighting control and dimming

Compatible with SMART.IQ components for integration into building automation systems: Page 92

Dimmer switch

Memory function: Last light brightness value used is saved

Output data

24 V DC / LED / 650 lm / 8 W /
20° – 60° / CRI >90 /
Energy efficiency class: A+
Variants: 2700 K / 3000 K

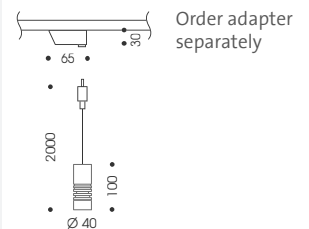
Material

Aluminium

Weight

0.2 kg

TECHNICAL INFORMATION

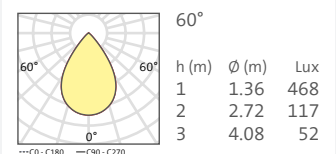
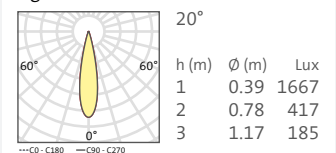


Order adapter separately

Special length

Suspension cable up to 5 m available upon request.

Light distribution



COLOURS



Chrome



Matt chrome

PRODUCT

Voltage	Type	lm	W	CRI	Angle	EEC	Colour	2700 K	3000 K
24 V DC	LED	650	8	>90	20–60°	A+	Chrome	20-898-20-05	20-898-30-05
							Matt chrome	20-898-20-06	20-898-30-06

Adapter: Page 91

SMART.TRACK

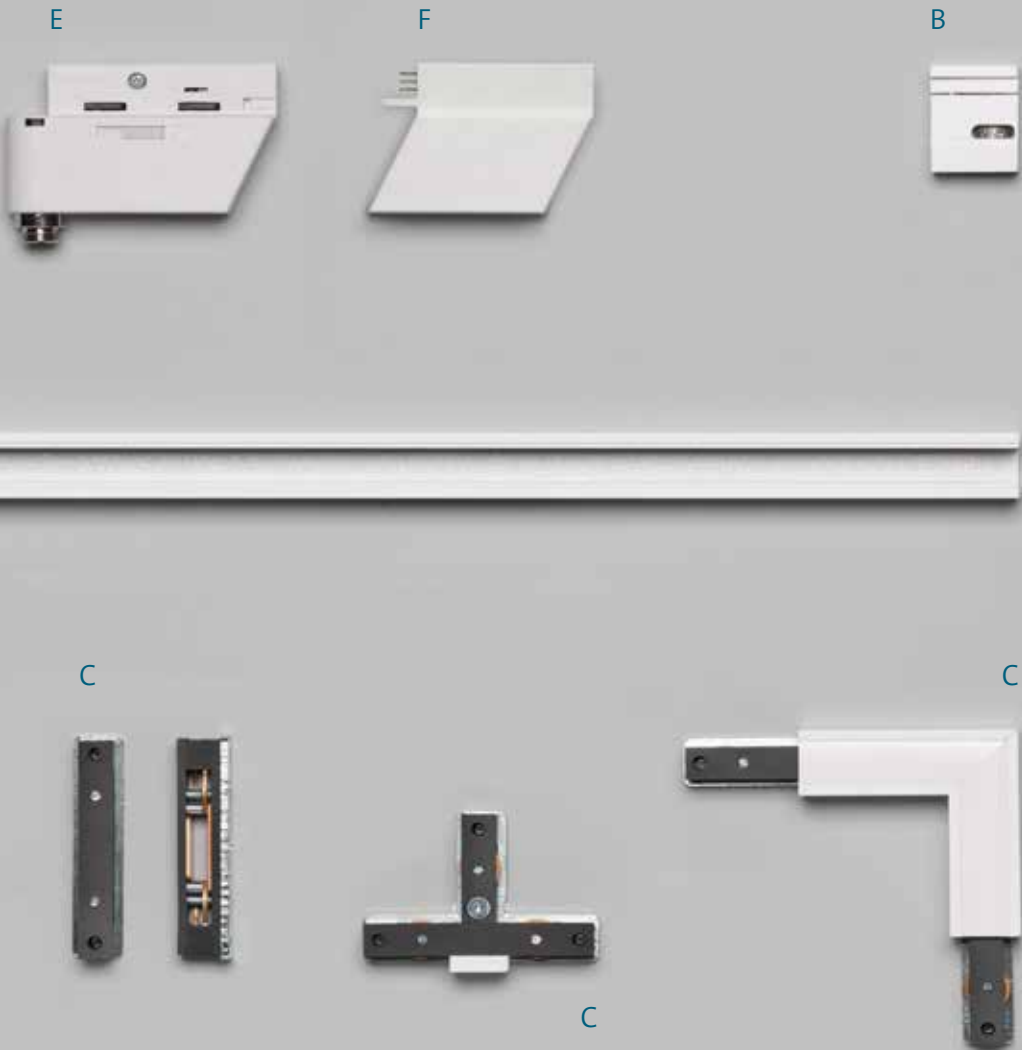
SYSTEM COMPONENTS

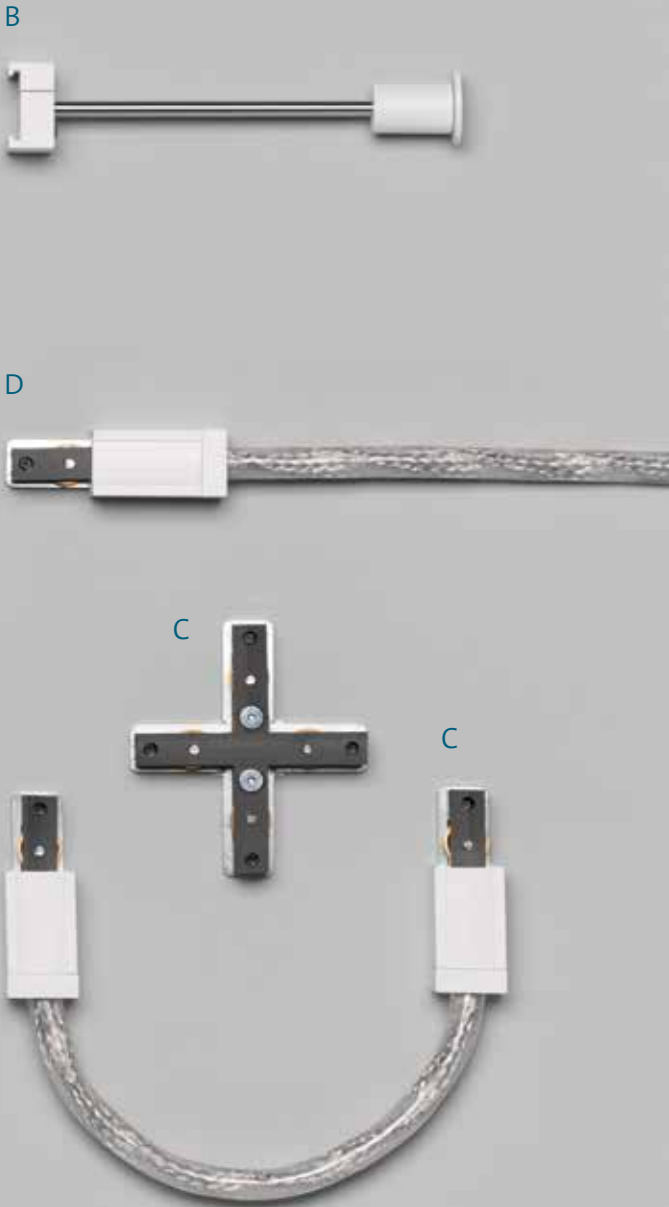
24 V / max. 10 A

The components in a track system vary according to the situation in which it is used and the customer's individual requirements. A functional system always consists of certain base components.

The following checklist facilitates checking the completeness of the system and serves as a guideline for choosing the right components.

Examples





PROFILE SECTION



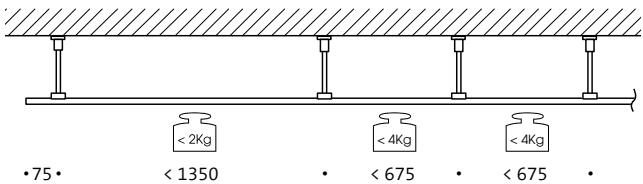
SYSTEM COLOURS

-  Matt chrome
-  Matt white
-  Matt black

BASE COMPONENT CHECKLIST

- A Track
- B Support
- C Connector
- D Power supply
 - End caps
- E Luminaire adapter
- F SMART.IQ wireless adapter
 - DC power supply unit, in the system or external

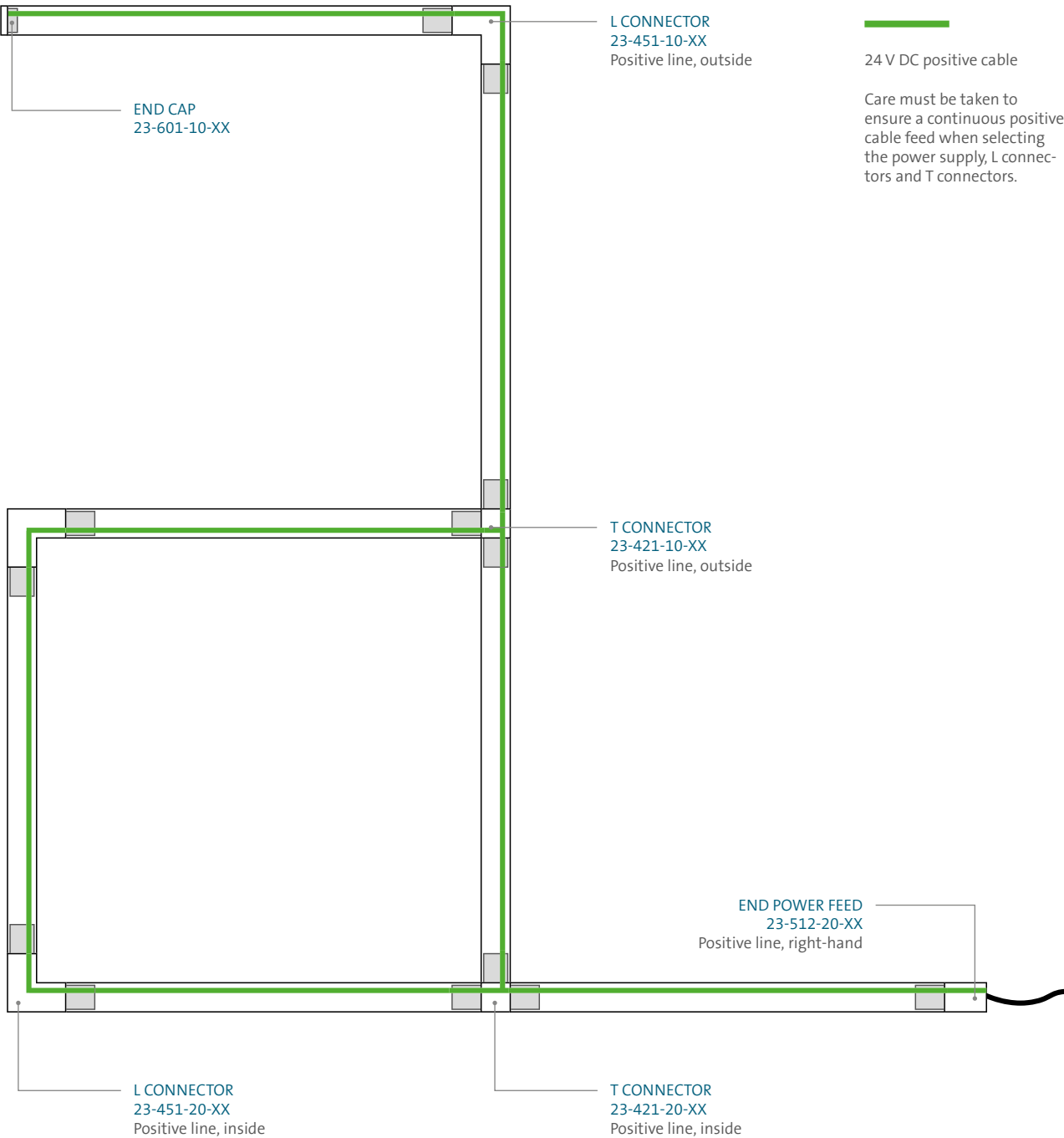
DISTANCES AND WEIGHTS



SMART.TRACK

INSTALLATION EXAMPLE

Material
Metal, plastic



1. TRACK



1.1 TRACK

17 x 17 mm / cable cross section 2x 4.05 mm²

Can be shortened

Track version punched for installation flush to the ceiling with no supports

Material

Metal

Track

Colour	L (mm)	Item number
Matt chrome	500	23-201-10-06
Matt white	500	23-201-10-21
Matt black	500	23-201-10-23
Matt chrome	1500	23-201-12-06
Matt white	1500	23-201-12-21
Matt black	1500	23-201-12-23

Punched track

Colour	L (mm)	Item number
Matt chrome	500	23-201-20-06
Matt white	500	23-201-20-21
Matt black	500	23-201-20-23
Matt chrome	1500	23-201-22-06
Matt white	1500	23-201-22-21
Matt black	1500	23-201-22-23

1.2 TRACK FOR CEILING INSTALLATION

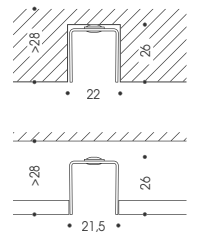
Installation profile 21.5 x 23.5 mm for concrete and suspended ceilings, installation depth min. 28 mm

With 3 perforated plate tabs (150 x 10 mm)
Can be shortened

Track incl. retaining clamps 17 x 21.5 mm

Can be shortened

500 mm track incl. 2 retaining clips
1500 mm track incl. 3 retaining clips



Material

Metal

Punched track, incl. retaining clips

Colour	L (mm)	Item number
Matt chrome	500	23-201-40-06
Matt white	500	23-201-40-21
Matt black	500	23-201-40-23
Matt chrome	1500	23-201-42-06
Matt white	1500	23-201-42-21
Matt black	1500	23-201-42-23

Installation profile with perforated plate tabs

L (mm)	Item number
1000	23-201-30-05

1. TRACK



2. SUPPORT



3. CONNECTOR



1.3 COVER SECTION

Optional accessory
Can be shortened

Material

Plastic

Colour	L (mm)	Item number
Matt chrome	1000	23-651-10-06
Matt white	1000	23-651-10-21
Matt black	1000	23-651-10-23

2.1 SUPPORT

Can be shortened

Material

Metal

Colour	L (mm)	Item number
Matt chrome	100	23-301-10-06
Matt white	100	23-301-10-21
Matt black	100	23-301-10-23

3.1 I CONNECTOR

Material

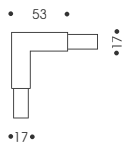
Metal, plastic

Function	Item number
Conductive	23-401-10-00
Insulating	23-401-20-00

3.2 L CONNECTOR

Material

Metal, plastic



Positive line, outside

Colour	Item number
Matt chrome	23-451-10-06
Matt white	23-451-10-21
Matt black	23-451-10-23

Positive line, inside

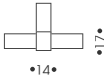
Colour	Item number
Matt chrome	23-451-20-06
Matt white	23-451-20-21
Matt black	23-451-20-23

3. CONNECTOR



3.3 T CONNECTOR

Material
Metal, plastic



Positive line, outside

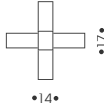
Colour	Item number
Matt chrome	23-421-10-06
Matt white	23-421-10-21
Matt black	23-421-10-23

Positive line, inside

Colour	Item number
Matt chrome	23-421-20-06
Matt white	23-421-20-21
Matt black	23-421-20-23

3.4 X CONNECTOR

Material
Metal, plastic



Colour

Colour	Item number
Matt chrome	23-431-10-06
Matt white	23-431-10-21
Matt black	23-431-10-23

3.5 FLEX CONNECTOR

150 mm
2x 2.5 mm²

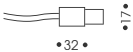


Material
Metal, plastic

Colour	Item number
Matt chrome	23-461-10-06
Matt white	23-461-10-21
Matt black	23-461-10-23

4.1 END POWER FEED

500 mm
2x 2.5 mm²



Material
Metal, plastic

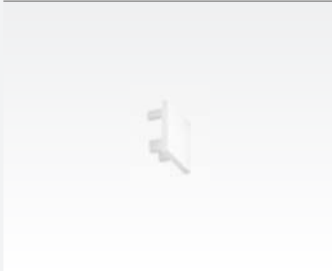
Positive line, left-hand

Colour	Item number
Matt chrome	23-512-10-06
Matt white	23-512-10-21
Matt black	23-512-10-23

Positive line, right-hand

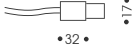
Colour	Item number
Matt chrome	23-512-20-06
Matt white	23-512-20-21
Matt black	23-512-20-23

4. POWER SUPPLY



4.2 END POWER FEED, FLEX CABLE

500 mm
2x 2.5 mm²



Material
Metal, plastic

Positive line, left-hand

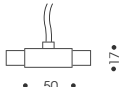
Colour	Item number
Matt chrome	23-512-40-06
Matt white	23-512-40-21
Matt black	23-512-40-23

Positive line, right-hand

Colour	Item number
Matt chrome	23-512-50-06
Matt white	23-512-50-21
Matt black	23-512-50-23

4.3 CENTRAL POWER FEED

500 mm
2x 2.5 mm²



Only in combination with ≥100 mm supports or suspended ceilings

Material
Metal, plastic

Colour	Item number
Matt chrome	23-512-30-06
Matt white	23-512-30-21
Matt black	23-512-30-23

4.4 COVER PANEL

For end and central power feed

Ø 100 mm
Installation opening 18-40 mm

Material
Metal

Colour	Item number
Matt white	23-661-10-21

5. END CAP

17 x 17 x 8.5 mm

Material
Plastic

Colour	Item number
Matt chrome	23-601-10-06
Matt white	23-601-10-21
Matt black	23-601-10-23

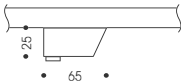
6. LUMINAIRE ADAPTER



For adapting luminaires for the SMART.TRACK track

24 V DC / max. 2 A
Integrated SMART.POINT socket

Material
Metal, plastic



Colour	Item number
Matt chrome	23-623-10-06
Matt white	23-623-10-21
Matt black	23-623-10-23

The compact adapter can be freely positioned on the SMART.TRACK track and is quick to install.

It is simply connected to the track system through mechanical locking.

Integrated anti-rotation protection ensures installation safety.

Expandable with a SMART.IQ wireless adapter (Casambi or HomeMatic) for integrating the luminaire into the building automation system.



LOCKING MECHANISM

The electrical and mechanical connection between the luminaire adapter and track is created by a small slide lock.




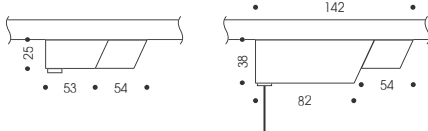
SMART.IQ

WIRELESS COMPONENTS AND ACCESSORIES


FOR DIGITAL LIGHTING CONTROL

For wireless control via Casambi or HomeMatic


7. SMART.IQ – CASAMBI

																
<h3>7.1 WIRELESS ADAPTER</h3> <p>Expansion for luminaire adapters</p> <p>Allows compatible luminaires to be controlled via smartphone, wireless switch or wireless remote control.</p> <p>As a cross-manufacturer application, the Casambi app can also be used with luminaires from other manufacturers, such as the Philips Hue, for example. An Internet connection should be available for setting up the system.</p> <p>24 V DC / 2.4 GHz Bluetooth 4.0 LE</p> <p>Material Plastic</p>  <table><tr><th>Colour</th><th>Item number</th></tr><tr><td>Matt chrome</td><td>23-625-10-06</td></tr><tr><td>Matt white</td><td>23-625-10-21</td></tr><tr><td>Matt black</td><td>23-625-10-23</td></tr></table>	Colour	Item number	Matt chrome	23-625-10-06	Matt white	23-625-10-21	Matt black	23-625-10-23	<h3>CASAMBI APP</h3> <p>Software for wireless lighting control via smartphones and tablets. Creates a mesh network with other Casambi-compatible products. Free, no subscription costs. App available in the App Store and on Google Play.</p> <p>Compatibility iOS operating system from iPhone 4S or later, from iPad 3 or later, from 5th generation iPod touch or later</p> <p>Android operating system Android 5.0 Lollipop or later with full Bluetooth 4.0 support</p> <p>www.casambi.com</p>	<h3>7.2 BUTTON / REMOTE CONTROL</h3> <p>Mobile wireless button for wireless switching and dimming of compatible luminaires, including in groups or scenes. Four programmable buttons. Optional wall mounting.</p> <p>2.4 GHz Bluetooth 4.0 LE Casambi</p> <p>90 x 90 x 12 mm</p> <p>Material Plastic</p> <table><tr><th>Colour</th><th>Item number</th></tr><tr><td>Matt white</td><td>60-626-10-21</td></tr><tr><td>Matt black</td><td>60-626-10-23</td></tr></table>	Colour	Item number	Matt white	60-626-10-21	Matt black	60-626-10-23
Colour	Item number															
Matt chrome	23-625-10-06															
Matt white	23-625-10-21															
Matt black	23-625-10-23															
Colour	Item number															
Matt white	60-626-10-21															
Matt black	60-626-10-23															

8. SMART.IQ – HOMEMATIC



HomeMatic



8.1 WIRELESS ADAPTER

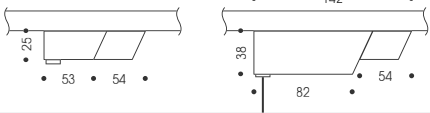
Expansion for luminaire adapters

Allows compatible luminaires to be controlled via smartphone, wireless switch or wireless remote control.

With HomeMatic components from the manufacturer eQ3, projects from individual wireless applications through to fully networked building automation systems using cables and with wireless solutions can be realised according to the modular principle.

24 V DC / 868.3 MHz HomeMatic BidCoS

Material
Plastic



Colour	Item number
Matt chrome	23-625-11-06
Matt white	23-625-11-21
Matt black	23-625-11-23

HOMEMATIC APP

Software
for wireless or wired control of HomeMatic-compatible devices. Costs may be incurred depending on the app. App available in the App Store, Windows Store and on Google Play. HomeMatic centre required on site.

Compatibility
iOS operating system 8.0 or later

Android operating system "HomeDroid" or "Home24" from Android version 1.6 or later

Windows operating system "Orbylon" from Windows 8.1 or later

www.homematic.com

8.2 BUTTON / REMOTE CONTROL

For wireless switching and dimming of compatible luminaires, including in groups or scenes.

Wireless button, programmable

Wireless remote control, eight programmable buttons

868.3 MHz HomeMatic BidCoS

Material
Plastic

Type	Item number
Button	60-626-11-21
Remote control	60-627-11-21

FUNCTIONAL TEST / BUTTON

The connection status is shown by an LED in the housing.

The connected luminaire can be manually switched and dimmed using the integrated micro button for simple functional testing.



DC POWER SUPPLY UNITS

Designer housing

220 – 240 V / 50 – 60 Hz / 24 V DC / protection class 1



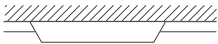
External DC power supply units from page 424

9. NEWPORT



9.1 50 VA / FLUSH

Central / end power feed
422 x 48 x 32 mm



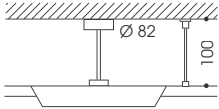
Order separately: 1x / 2x power supply 4.

Material
Metal

Colour	Item number
Matt chrome	60-142-11-06
Matt white	60-142-10-21
Matt black	60-142-12-23

9.2 50 VA WITH SUPPORT

Central / end power feed
422 x 48 x 32 mm



Order separately: 1x / 2x power supply 4.

Material
Metal

Colour	L (mm)	Item number
Matt chrome	100	60-142-15-06
Matt white	100	60-142-14-21
Matt black	100	60-142-16-23

9. NEWPORT

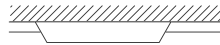


9.4 85 VA / FLUSH

Central / end power feed
500 x 58 x 35 mm

Order separately: 1x / 2x power supply 4.

Material
Metal



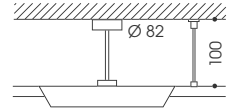
Colour	Item number
Matt chrome	60-142-31-06
Matt white	60-142-30-21
Matt black	60-142-32-23

9.5 85 VA / WITH SUPPORT

Central / end power feed
500 x 58 x 35 mm

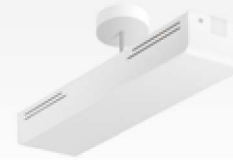
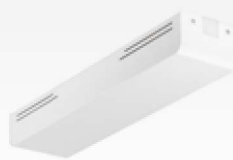
Order separately: 1x / 2x power supply 4.

Material
Metal



Colour	L (mm)	Item number
Matt chrome	100	60-142-35-06
Matt white	100	60-142-34-21
Matt black	100	60-142-36-23

9. NEWPORT

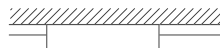


9.7 240 VA / FLUSH

Central / end power feed
370 x 85 x 50 mm

Order separately: 1x / 2x power supply 4.

Material
Metal



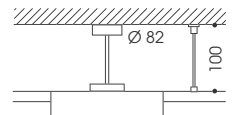
Colour	Item number
Matt chrome	60-142-51-06
Matt white	60-142-50-21
Matt black	60-142-52-23

9.8 240 VA / WITH SUPPORT

Central / end power feed
370 x 85 x 50 mm

Order separately: 1x / 2x power supply 4.

Material
Metal



Colour	L (mm)	Item number
Matt chrome	100	60-142-55-06
Matt white	100	60-142-54-21
Matt black	100	60-142-56-23



SMART.POINT

INTELLIGENCE IN A NUTSHELL.

The SMART.POINT 24 volt lighting system, based entirely on LED lighting technology, makes use of the smaller volumes of the lamps and combines the smallest possible dimensions with the greatest possible degree of flexibility. Regardless of whether it's installed surface mounted onto the ceiling or recessed into it – the system technology, almost invisible to the observer, allows for the maximum creative freedom with minimal energy consumption.

The luminaires can be integrated into the common Casambi and HomeMatic smart home systems using SMART.IQ wireless components for digital lighting control. Combinations with controllable single luminaires lead to further lighting design options for smart homes.

A DALI converter also allows for integration into digitally controllable lighting systems for professional lighting control.

SMART.POINT emphasises brilliant decorative and lighting technology features. It is recommended for use in private living space as well as in public and commercial areas. The system can be individually configured for any lighting requirements imaginable.

Design: OLIGO

CONTENTS	PAGE
System luminaires	104
System components	122
SHOP modular recessed system	403



HUBBLE

SMART.POINT

LUMINAIRE OVERVIEW

Low voltage LED plug connector system

LED LUMINAIRES

Spotlights



WALKER
Page 104



NEWTON
Page 105



SENTRY PRO
Page 106



SENTRY
Page 107



AVIATION PRO
Page 108



AVIATION
Page 109



RIDGE MAX
Page 110



RIDGE
Page 111



A LITTLE BIT MORE
Page 112



A LITTLE BIT
Page 113



HUBBLE
Page 114



KELVEEN
Page 115

Ambient lights



41 DEGREES
Page 116



FLAVIA
Page 117

Pendant luminaires



GRACE
Page 119



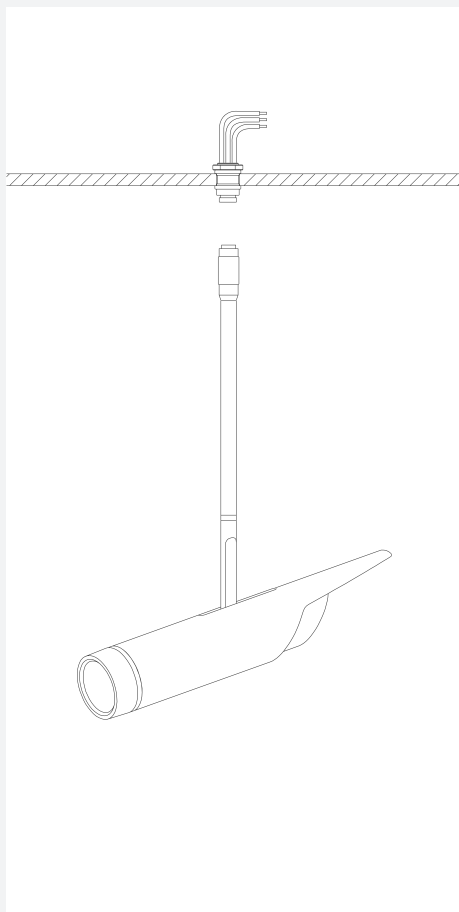
DECENT
Page 120



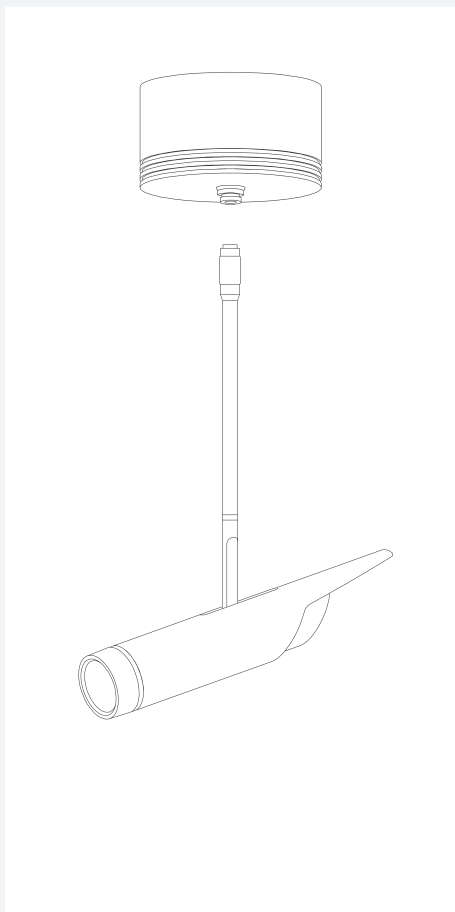
A LITTLE BIT
Page 121

SMART.POINT SIMPLY INSTALL

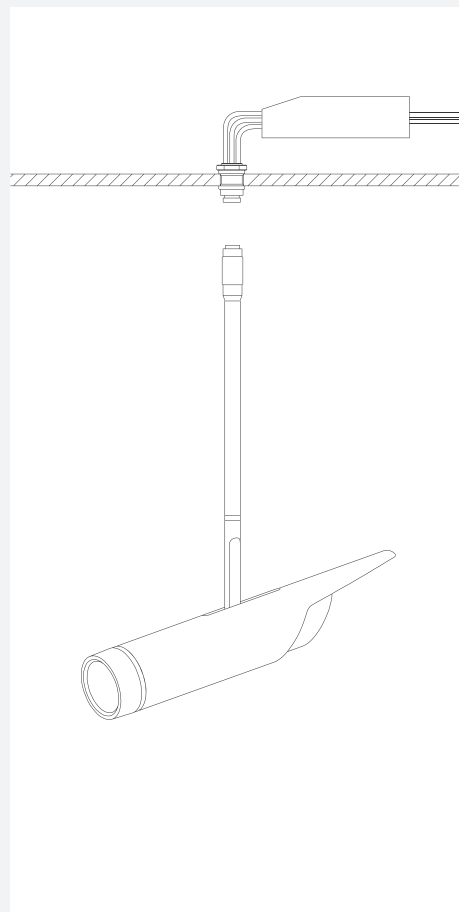
INSTALLATION flush with the ceiling



INSTALLATION Surface mounted on the ceiling



SOCKET with SMART.IQ WIRELESS ADAPTER



INSTALL QUICKLY AND SAFELY

The installation of the 24 v LED system luminaires is extremely easy. Thanks to the plug connection, the luminaires can be put into operation quickly and conveniently.

Once plugged into the three-pole socket, the luminaire is mechanically secured against detaching by the ridged sleeve. At the same time, precise swivelling is thus ensured for the system spotlights.

THE SMART.POINT MOUNTING METHODS

The SMART.POINT 24 V system is suitable for the following mounting methods:

- Recessed installation with external switching power supply in suspended ceilings
- Surface-mounted variant in the form of a ceiling canopy with integrated switching power supply

WIRELESS MODULE FOR LIGHTING CONTROL

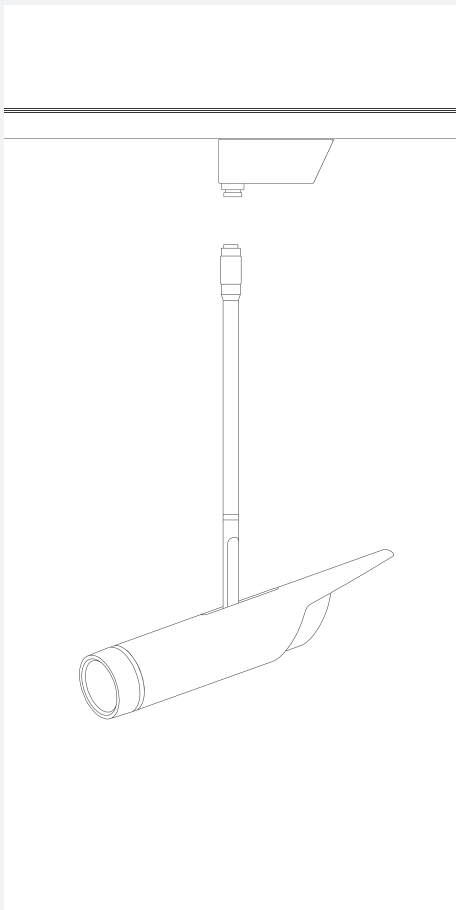
The SMART.IQ wireless module, which is easy to integrate retroactively, brings intelligence into play. In the blink of an eye, the 24 volt LED point outlet system is transformed into a smart home solution.

The SMART.IQ wireless module is simply connected through the plug socket. During commissioning of the system, the spotlight is coupled with the mobile device and establishes a wireless connection.

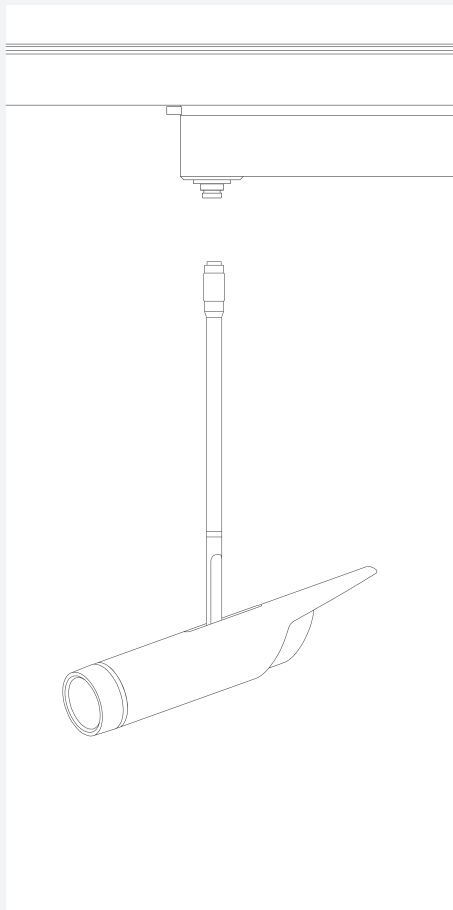
SMART.POINT

COMBINING SYSTEMS AND LUMINAIRES

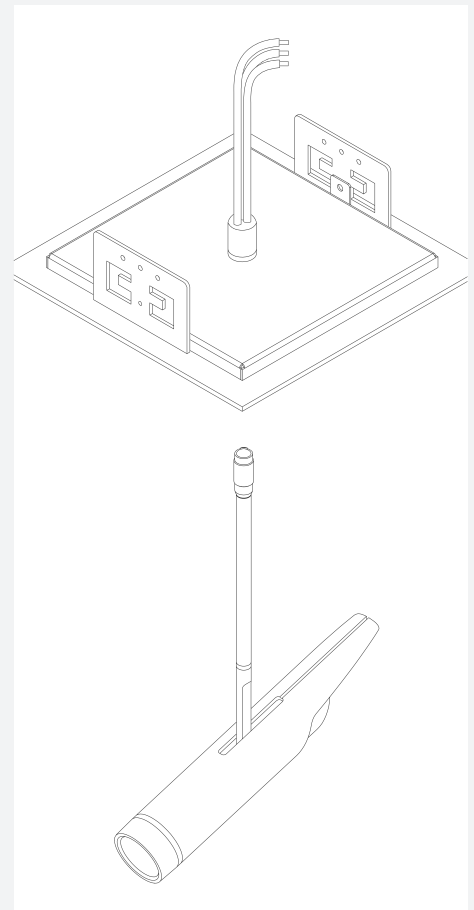
ADAPTERS
24 V LED track system
[SMART.TRACK](#)



ADAPTERS
230 V track system
[PHASE](#)



ADAPTERS
Recessed system
[SHOP](#)



EXPANDABLE AT ANY TIME

Thanks to the flexible pin connection, the luminaires in the SMART.POINT 24 V system range can also be used in other luminaire systems from OLIGO.

With the help of the appropriate three-pole system adapter, integration into both the SMART.TRACK 24 V LED track system and the PHASE 230 V track system, as well as into the SHOP modular recessed luminaire system, is possible.

SMART.IQ

in combination with the Casambi wireless solution

SIMPLY CLEVER

Casambi is a free software for the mobile control of single luminaires and lighting systems.

It is characterised by:

- easy integration
- simply technical design
- wireless installation, and
- intuitive control via smartphone or tablet

Even existing lighting units and conventional light switches can be integrated into the mobile lighting control system using a switch module which can be retrofitted. Casambi is therefore particularly suitable for retrofitting in existing buildings.

Thanks to a maximum distance of 50 metres between the modules or the mobile device used as a control, even bigger projects can be realised.

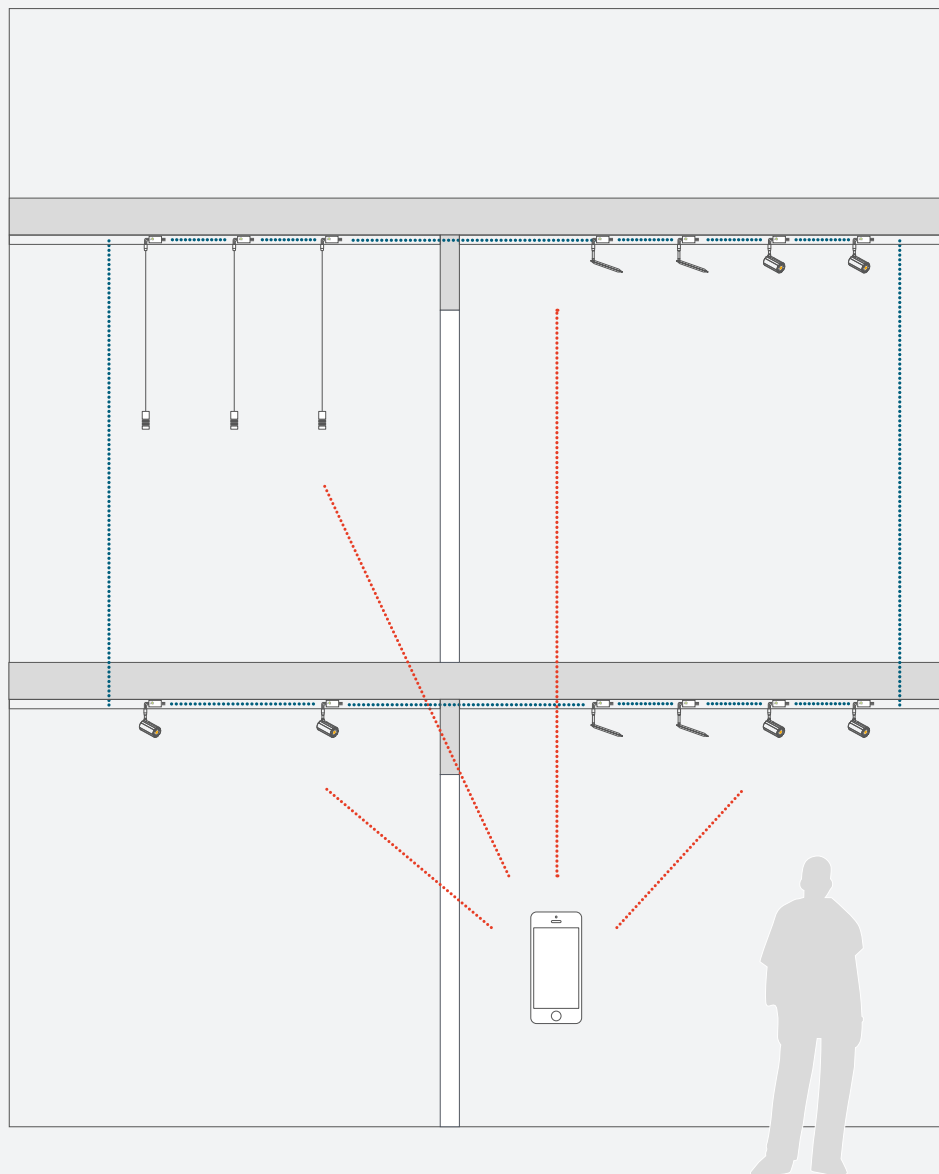
PROVEN TIME AND AGAIN

The software is used by more than 120 companies in the lighting industry and is compatible with products in the Philips Hue range, among others.

It therefore offers end users a convenient, cross-manufacturer lighting control system with just one app.

Detailed information about Casambi can be found at

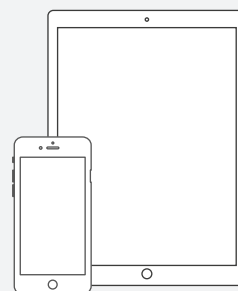
➞ www.casambi.com



Devices
for lighting control



Wireless button /
remote control



Mobile devices

SMART.IQ

in combination with the HomeMatic home control system

SMART HOME VIA WIRELESS

HomeMatic is a cross-system smart home system for wireless intelligent building control. It is available for retrofitting in the home as well as for new builds.

The various connected devices such as blinds and heating, access control, security alarm and weather sensors can be conveniently controlled using a smartphone or tablet, via a built-in centre, by remote control or using the PC software.

The HomeMatic wireless protocol is based on the 868 MHz frequency range. It offers excellent wireless range and has no interference from WiFi or Bluetooth. The wireless signal is secured against external tampering using the AES-128 security technology.

AT HOME AND OUT AND ABOUT

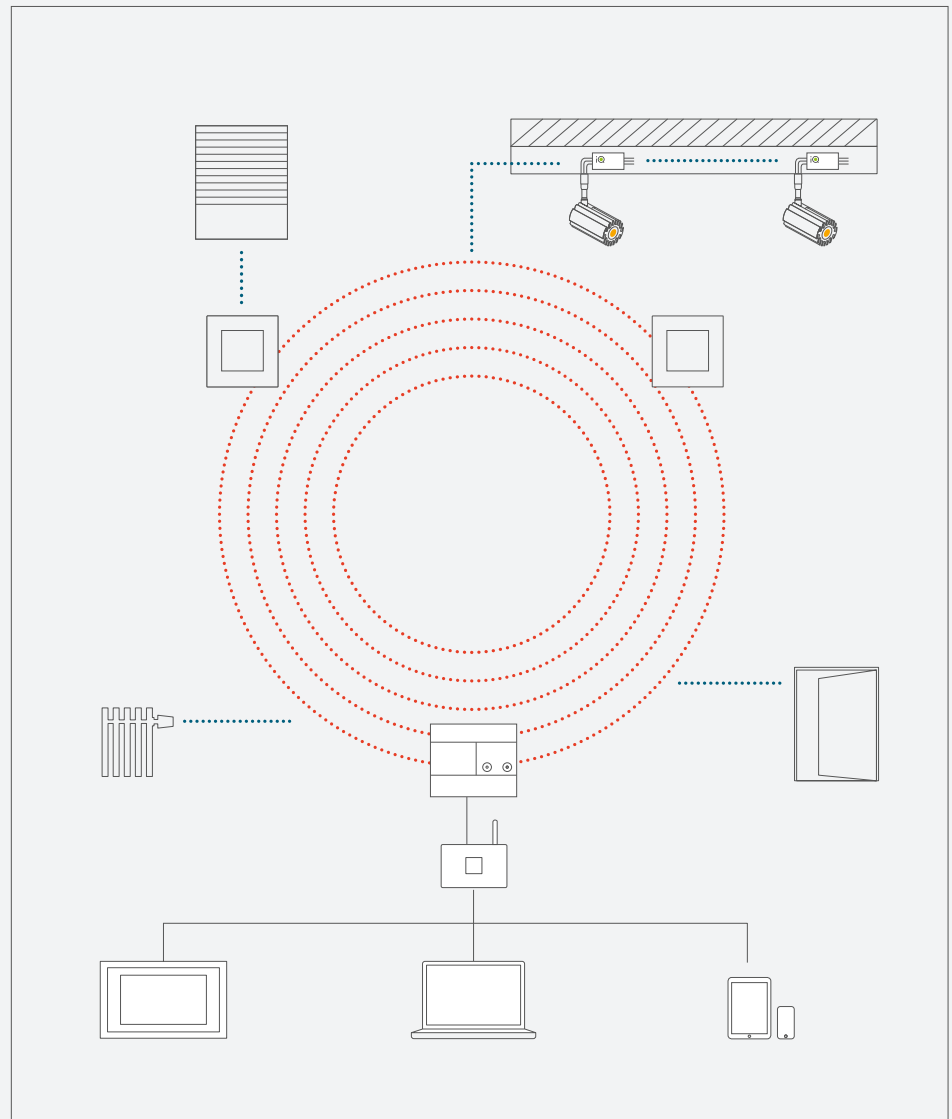
The HomeMatic user interface can be set up using a web browser-based interface and can be controlled both in the local network and over the Internet.

ONE STANDARD, MANY PARTNERS

Thanks to its open interfaces, the system allows for the development of partner solutions in the field of hardware and software. These include, among other things, apps and Cloud services for control via smartphone and tablets which are offered directly by the partners.

Detailed information about HomeMatic can be found at

➞ www.homematic.com



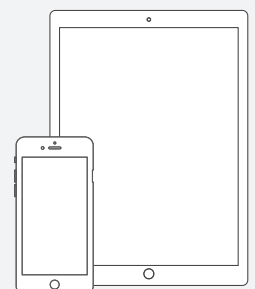
Devices for lighting control



Wireless button



Remote control



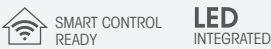
Mobile devices

WALKER

LED

The bright WALKER reflector spotlight convinces with a luminous flux of 1,850 lumen and, thanks to the three-pole pin, is suitable for digital lighting control systems. With two light distribution characteristics and modern design, WALKER puts the topic of luminaire design in a contemporary context and is perfectly suited for designing creative shop fitting and office concepts.

Design: Böhler Design



FEATURES

Spotlight
Rotatable / swivelling
High performance reflector

Lighting control and dimming
Compatible with SMART.IQ and DALI
components for integration into building automation systems: Page 130

Output data
24 V DC / LED / 1850 lm / 17.8 W /
CRI >90 / Energy efficiency class: A+
Variants: 2700 K / 3000 K / 4000 K /
25° / 45°

Material
Aluminium

Weight
0.7 kg

TECHNICAL INFORMATION

Order adaptation separately

Light distribution

25°

h (m)	Ø (m)	Lux
1	0.54	3787
2	1.10	947
3	1.60	421

---C0 - C180 ---C90 - C270

45°

h (m)	Ø (m)	Lux
1	0.83	2514
2	1.70	628
3	2.50	279

---C0 - C180 ---C90 - C270

COLOURS

Matt chrome

Matt white

Matt black

PRODUCT										
Voltage	Type	lm	W	CRI	EEC	Angle	Colour	2700 K	3000 K	4000 K
24 V DC	LED	1850	17.8	>90	A+	25°	Matt chrome	20-862-20-06	20-862-30-06	20-862-40-06
							Matt white	20-862-20-21	20-862-30-21	20-862-40-21
							Matt black	20-862-20-23	20-862-30-23	20-862-40-23
						45°	Matt chrome	20-862-21-06	20-862-31-06	20-862-41-06
							Matt white	20-862-21-21	20-862-31-21	20-862-41-21
							Matt black	20-862-21-23	20-862-31-23	20-862-41-23
Adaptation variants: from page 124										

NEWTON

LED

With a 1,850 lumen luminous flux at a power consumption of 17.8 watts, NEWTON offers a bright, efficient lighting solution for product presentation. The high performance reflector, coordinated in-house with the LED light source shields the spotlight and at the same time defines the softly sketched light scene. The rotatable and swivelling spotlight, with light distribution characteristics of 25° and 45° and light colours of up to 4,000 K, allows for a multitude of options for the modulation of presentation areas.

Design: Böhler Design



SMART CONTROL
READY

LED
INTEGRATED



IN-B socket

FEATURES

Spotlight
Rotatable / swivelling
High performance reflector

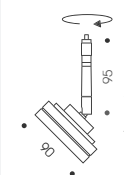
Lighting control and dimming
Compatible with SMART.IQ and DALI
components for integration into building
automation systems: Page 130

Output data
24 V DC / LED / 1850 lm / 17.8 W /
CRI >90 / Energy efficiency class: A+
Variants: 2700 K / 3000 K / 4000 K /
25° / 45°

Material
Aluminium

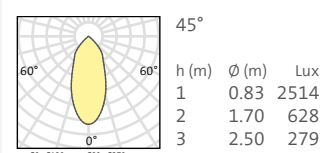
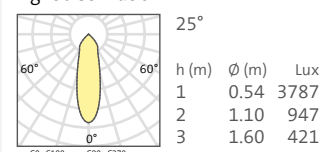
Weight
0.6 kg

TECHNICAL INFORMATION



Order adaptation
separately

Light distribution



COLOURS



Matt chrome



Matt white



Matt black

PRODUCT

Voltage	Type	lm	W	CRI	EEC	Angle	Colour	2700 K	3000 K	4000 K
24 V DC	LED	1850	17.8	>90	A+	25°	Matt chrome	20-860-20-06	20-860-30-06	20-860-40-06
							Matt white	20-860-20-21	20-860-30-21	20-860-40-21
							Matt black	20-860-20-23	20-860-30-23	20-860-40-23
						45°	Matt chrome	20-860-21-06	20-860-31-06	20-860-41-06
							Matt white	20-860-21-21	20-860-31-21	20-860-41-21
							Matt black	20-860-21-23	20-860-31-23	20-860-41-23

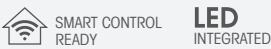
Adaptation variants: from page 124

SENTRY PRO

LED

The SENTRY PRO LED spotlight is businesslike in form, impressive in output. The cylindrical luminaire body, made from aluminium, surrounds a 1,350 lumen LED and is connected to the adapter by a joint which tilts and swivels. Reflectors optimised for the spotlight allow for a particularly homogeneous light mix. SENTRY PRO is particularly suitable for professional use in the retail sector, in galleries and exhibitions and in combination with modern architecture.

Design: OLIGO



FEATURES

Spotlight
Rotatable / swivelling
High performance reflector

Lighting control and dimming
Compatible with SMART.IQ and DALI components for integration into building automation systems: Page 130

Output data
24 V DC / LED / 1350 lm / 15.7 W / CRI >90 / Energy efficiency class: A+
Variants: 2700 K / 3000 K / 4000 K / 26° / 43°

Material
Aluminium

Weight
1,3 kg

TECHNICAL INFORMATION

Order adaptation separately

Light distribution

h (m)	Ø (m)	Lux
1	0.40	7136
2	0.80	1784
3	1.20	793

---C0 - C180 ---C90 - C270

h (m)	Ø (m)	Lux
1	0.59	4421
2	1.20	1105
3	1.80	491

---C0 - C180 ---C90 - C270

COLOURS

Matt chromeMatt whiteMatt black

PRODUCT										
Voltage	Type	lm	W	CRI	EEC	Angle	Colour	2700 K	3000 K	4000 K
24 V DC	LED	1350	15.7	>90	A+	22°	Matt chrome	20-867-30-06	20-867-40-06	20-867-50-06
							Matt white	20-867-30-21	20-867-40-21	20-867-50-21
							Matt black	20-867-30-23	20-867-40-23	20-867-50-23
						40°	Matt chrome	20-867-31-06	20-867-41-06	20-867-51-06
							Matt white	20-867-31-21	20-867-41-21	20-867-51-21
							Matt black	20-867-31-23	20-867-41-23	20-867-51-23
Adaptation variants: from page 124										

SENTRY

LED

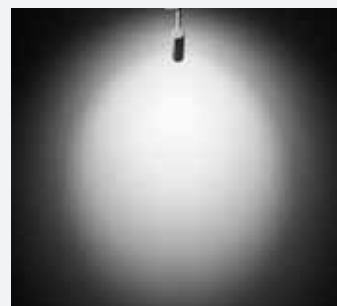
The SENTRY LED spotlight presents itself with a slim, cylindrical shape. The luminaire body has a luminous flux of 1,150 lumen and can be directed as desired using a joint which tilts and swivels. The high performance reflector, developed in-house for the spotlight, provides a homogeneous light mix across the entire spectrum. With its timeless design, the spotlight is perfectly suited to use in modern shopping worlds and exhibitions.

Design: OLIGO



SMART CONTROL
READY

LED
INTEGRATED



IN-B socket

FEATURES

Spotlight
Rotatable / swivelling
High performance reflector

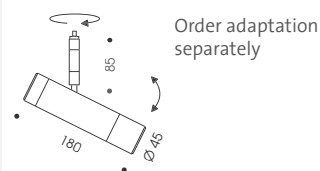
Lighting control and dimming
Compatible with SMART.IQ and DALI
components for integration into building
automation systems: Page 130

Output data
24 V DC / LED / 1150 lm / 13.9 W /
CRI >90 / Energy efficiency class: A+
Variants: 2700 K / 3000 K / 4000 K /
26° / 43°

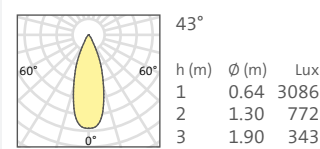
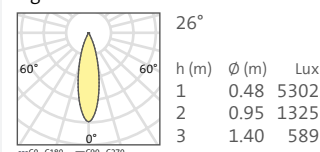
Material
Aluminium

Weight
0.7 kg

TECHNICAL INFORMATION



Light distribution



COLOURS



Matt chrome



Matt white



Matt black

PRODUCT

Voltage	Type	lm	W	CRI	EEC	Angle	Colour	2700 K	3000 K	4000 K
24 V DC	LED	1150	13.9	>90	A+	26°	Matt chrome	20-867-60-06	20-867-70-06	20-867-80-06
							Matt white	20-867-60-21	20-867-70-21	20-867-80-21
							Matt black	20-867-60-23	20-867-70-23	20-867-80-23
						43°	Matt chrome	20-867-61-06	20-867-71-06	20-867-81-06
							Matt white	20-867-61-21	20-867-71-21	20-867-81-21
							Matt black	20-867-61-23	20-867-71-23	20-867-81-23

Adaptation variants: from page 124

AVIATION PRO

LED

AVIATION PRO recognisably leans on aeronautics in the design. With a luminous flux of 1200 lumen and a brilliant light scene, the LED spotlight is recommended for professional use in property. Two rod lengths and light characteristics allow for a wide variety of planning options. AVIATION PRO impresses with energy efficiency and outstanding thermal management. Design: Böhler Design



SMART CONTROL
READY

LED

INTEGRATED



FEATURES

Spotlight
Rotatable / swivelling

Lighting control and dimming
Compatible with SMART.IQ and DALI components for integration into building automation systems: Page 130

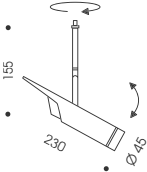
Output data
24 V DC / LED / 1200 lm / 13.9 W / CRI >90 / Energy efficiency class: A+
Variants: 2700 K / 3000 K / 4000 K / 26° / 43°

Material
Aluminium

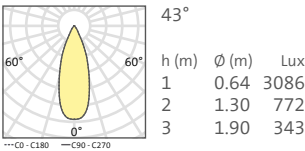
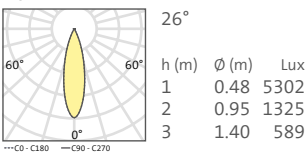
Weight
0.6 kg

TECHNICAL INFORMATION

Order adaptation separately



Light distribution



COLOURS



Matt chrome



Matt white



Matt black

PRODUCT

Voltage	Type	lm	W	CRI	EEC	Angle	Colour	2700 K	3000 K	4000 K
24 V DC	LED	1200	13.9	>90	A+	26°	Matt chrome	20-875-30-06	20-875-40-06	20-875-50-06
							Matt white	20-875-30-21	20-875-40-21	20-875-50-21
							Matt black	20-875-30-23	20-875-40-23	20-875-50-23
						43°	Matt chrome	20-875-31-06	20-875-41-06	20-875-51-06
							Matt white	20-875-31-21	20-875-41-21	20-875-51-21
							Matt black	20-875-31-23	20-875-41-23	20-875-51-23

Adaptation variants: from page 124

AVIATION

LED

The AVIATION LED spotlight is more delicate but just as elegant. With a luminous flux of 650 lumen, it is particularly suitable for use in private living areas. The high performance reflector is determined in-house for the particularly balanced light scene. There are two rod lengths and light distribution characteristics to choose from for detailed lighting planning. Design: Böhler Design



SMART CONTROL
READY

LED
INTEGRATED



IN-B socket

FEATURES

Spotlight
Rotatable / swivelling

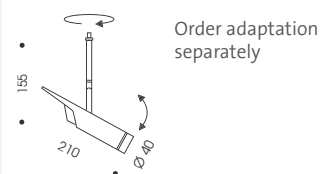
Lighting control and dimming
Compatible with SMART.IQ and DALI components for integration into building automation systems: Page 130

Output data
24 V DC / LED / 650 lm / 8.4 W /
CRI >90 / Energy efficiency class: A+
Variants: 2700 K / 3000 K / 23° / 41°

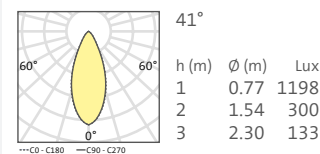
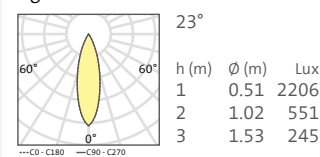
Material
Aluminium

Weight
0.5 kg

TECHNICAL INFORMATION



Light distribution



COLOURS



Matt chrome



Matt white



Matt black

PRODUCT

Voltage	Type	lm	W	CRI	EEC	Angle	Colour	2700 K	3000 K
24 V DC	LED	650	8.4	>90	A+	23°	Matt chrome	20-875-60-06	20-875-70-06
							Matt white	20-875-60-21	20-875-70-21
							Matt black	20-875-60-23	20-875-70-23
						41°	Matt chrome	20-875-61-06	20-875-71-06
							Matt white	20-875-61-21	20-875-71-21
							Matt black	20-875-61-23	20-875-71-23

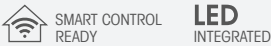
Adaptation variants: from page 124

RIDGE MAX

LED

A distinctive heat sink with cooling ribs around the circumference characterises the design of the highly efficient RIDGE MAX LED spotlight. There are three light colours and light distribution characteristics available to choose from for lighting planning. The black and matt chrome surfaces have a remarkable surface finish thanks to an intricate grinding pattern.

Design: OLIGO



IN-B socket

FEATURES

Spotlight
Rotatable / swivelling
High performance reflector

Lighting control and dimming
Compatible with SMART.IQ and DALI components for integration into building automation systems: Page 130

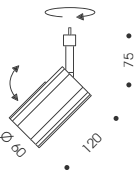
Output data
24 V DC / LED / 1100 lm / 13.9 W / CRI >90 / Energy efficiency class: A+
Variants: 2700 K / 3000 K / 4000 K / 26° / 43°

Material
Aluminium

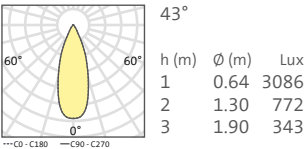
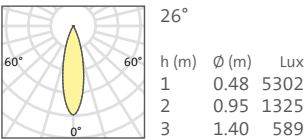
Weight
0.5 kg

TECHNICAL INFORMATION

Order adaptation separately



Light distribution



COLOURS



Matt chrome / Matt chrome Matt white / Matt white Chrome / Matt white Chrome / Matt black

PRODUCT

Voltage	Type	lm	W	CRI	Angle	Rod colour	Body colour	2700 K	3000 K	4000 K
24 V DC	LED	1100	13.9	>90	26°	Matt chrome	Matt chrome	20-881-51-06	20-881-61-06	20-881-71-06
						Matt white	Matt white	20-881-52-21	20-881-62-21	20-881-72-21
						Chrome	Matt white	20-881-50-21	20-881-60-21	20-881-70-21
						Matt black	Matt black	20-881-53-23	20-881-63-23	20-881-73-23
						Chrome	Matt black	20-881-50-23	20-881-60-23	20-881-70-23
						Matt chrome	Matt chrome	20-881-55-06	20-881-65-06	20-881-75-06
					43°	Matt white	Matt white	20-881-56-21	20-881-66-21	20-881-76-21
						Chrome	Matt white	20-881-54-21	20-881-64-21	20-881-74-21
						Matt black	Matt black	20-881-57-23	20-881-67-23	20-881-77-23
						Chrome	Matt black	20-881-54-23	20-881-64-23	20-881-74-23

Adaptation variants: from page 124

RIDGE

LED

The RIDGE LED spotlight is a little more delicate than its big brother. Here too, the distinctive cooling fins characterise the unmistakeable design. With a luminous flux of 650 lumen, RIDGE is ideal for universal use in private living spaces, for example in studies, hallways or modern living and dining rooms. For RIDGE too, the black and matt chrome surfaces are refined with an intricate grinding pattern.

Design: OLIGO



SMART CONTROL
READY



LED
INTEGRATED



IN-B socket

FEATURES

Spotlight
Rotatable / swivelling
High performance reflector

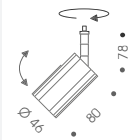
Lighting control and dimming
Compatible with SMART.IQ and DALI components for integration into building automation systems: Page 130

Output data
24 V DC / LED / 650 lm / 8 W / 41° /
CRI >90 / Energy efficiency class: A+
Variants: 2700 K / 3000 K

Material
Aluminium

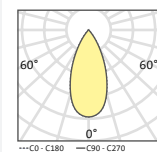
Weight
0.2 kg

TECHNICAL INFORMATION



Order adaptation separately

Light distribution



41°		
h (m)	Ø (m)	Lux
1	0.85	708
2	1.71	177
3	2.56	79

COLOURS



Matt chrome /
Matt chrome



Chrome /
Matt white



Matt white /
Matt white



Chrome /
Matt black

PRODUCT

Voltage	Type	lm	W	CRI	Angle	EEC	Rod colour	Body colour	2700 K	3000 K
24 V DC	LED	650	8	>90	41°	A+	Matt chrome	Matt chrome	20-889-21-06	20-889-31-06
							Matt white	Matt white	20-889-22-21	20-889-32-21
							Chrome	Matt white	20-889-20-21	20-889-30-21
							Matt chrome	Matt white	20-889-21-21	20-889-31-21
							Chrome	Matt black	20-889-20-23	20-889-30-23

Adaptation variants: from page 124

A LITTLE BIT MORE LED

The A LITTLE BIT MORE LED spotlight offers outstanding lighting technology with individually definable light distribution characteristics. With a luminous flux of 1,000 and up to 4,000 kelvin, the spotlight is intended for use in shops and property. The beam angle can be continuously adjusted between 20° and 60° using the focusable glass lens. For harmonious light distribution, the high quality lens body is finished separately with a micro texture on the inside.

Design: OLIGO



FEATURES

Spotlight
Rotatable / swivelling
Beam angle continuously adjustable between 20° and 60°

Lighting control and dimming
Compatible with SMART.IQ and DALI components for integration into building automation systems: Page 130

Output data
24 V DC / LED / 1000 lm / 11 W /
20° – 60° / CRI >90 /
Energy efficiency class: A+
Variants: 2700 / 3000 / 4000 K

Material
Aluminium, glass lens

Weight
0.6 kg

TECHNICAL INFORMATION

Order adaptation separately

Light distribution

20°

h (m)	Ø (m)	Lux
1	0.62	2288
2	1.24	572
3	1.86	254

60°

h (m)	Ø (m)	Lux
1	1.09	1395
2	2.18	349
3	3.27	155

COLOURS

Chrome / Chrome Matt chrome / Matt chrome Matt white / Matt white Chrome / Matt black

PRODUCT										
Voltage	Type	lm	W	CRI	Angle	Rod colour	Body colour	2700 K	3000 K	4000 K
24 V DC	LED	1000	11	>90	20–60°	Chrome	Chrome	20-882-41-05	20-882-51-05	20-882-61-05
						Matt chrome	Matt chrome	20-882-42-06	20-882-52-06	20-882-62-06
						Chrome	Matt white	20-882-41-21	20-882-51-21	20-882-61-21
						Matt white	Matt white	20-882-43-21	20-882-53-21	20-882-63-21
						Chrome	Matt black	20-882-41-23	20-882-51-23	20-882-61-23
						Matt black	Matt black	20-882-40-23	20-882-50-23	20-882-60-23
Adaptation variants: from page 124										

A LITTLE BIT

LED

The A LITTLE BIT LED spotlight is slightly smaller in terms of size and light output, but just as variable when it comes to the light scene. Like its big brother, A LITTLE BIT also has efficient LED lighting technology. The width of the cone of light can be continuously adjusted between 20° and 60°. Different rod lengths allow for different distances from the ceiling. A system pendant luminaire matching this spotlight design is also available.

Design: OLIGO



IN-B socket

FEATURES

Spotlight
Rotatable / swivelling
Stange 60 bzw. 140 mm
Beam angle continuously adjustable between 20° and 60°

Lighting control and dimming
Compatible with SMART.IQ and DALI components for integration into building automation systems: Page 130

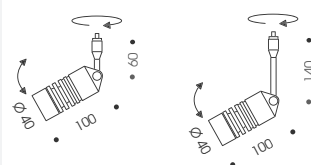
Output data
24 V DC / LED / 650 lm / 8 W /
20° – 60° / CRI >90 /
Energy efficiency class: A+
Variants: 2700 K / 3000 K

Material
Aluminium, glass lens

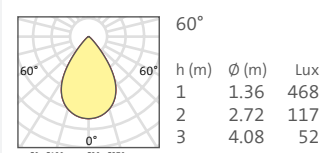
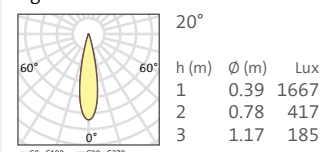
Weight
0.3 kg

TECHNICAL INFORMATION

Order adaptation separately



Light distribution



COLOURS AND MODELS



Chrome /
60 mm



Matt chrome /
60 mm



Chrome /
140 mm



Matt chrome /
140 mm

PRODUCT

Voltage	Type	lm	W	CRI	Angle	Rod length	Rod colour	Body colour	2700 K	3000 K
24 V DC	LED	650	8	>90	20–60°	60 mm	Chrome	Chrome	20-898-40-05	20-898-50-05
							Matt chrome	Matt chrome	20-898-40-06	20-898-50-06
						140 mm	Chrome	Chrome	20-898-41-05	20-898-51-05
							Matt chrome	Matt chrome	20-898-41-06	20-898-51-06

Adaptation variants: from page 124

HUBBLE

LED

The HUBBLE LED spotlight is a suitable inspiration if high quality materials and an elegant appearance are required. The rotatable and swivelling spotlight can also be aligned as a downlight in a harmonious extension of its blade. The beam angle can be set as desired between 20° and 50° thanks to the manually adjustable focus. HUBBLE is available with light colours of 2,700 or 3,000 kelvin and is suitable for use in living space and property.

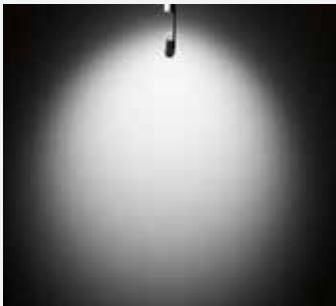
Design: Böhler Design



SMART CONTROL
READY



LED
INTEGRATED



FEATURES

Spotlight
Rotatable / swivelling
Beam angle continuously adjustable
between 20° and 50°

Lighting control and dimming
Compatible with SMART.IQ and DALI
components for integration into building
automation systems: Page 130

Output data
24 V DC / LED / 600 lm / 10,5 W /
20° – 50° / CRI >90 /
Energy efficiency class: A
Variants: 2700 K / 3000 K

Material
Aluminium

Weight
0.8 kg

TECHNICAL INFORMATION

Order adaptation
separately

170
130

Light distribution

20°

h (m)	Ø (m)	Lux
1	0.47	1680
2	0.93	420
3	1.40	187

---C0 - C180 ---C90 - C270

60°

h (m)	Ø (m)	Lux
1	1.09	1395
2	2.18	349
3	3.27	155

---C0 - C180 ---C90 - C270

COLOURS

Matt chrome

Matt white

Matt black

PRODUCT								
Voltage	Type	lm	W	CRI	Angle	EEC	Colour	
24 V DC	LED	600	10,5	>90	20–50°	A	Matt chrome	2700 K 20-872-20-06
							Matt white	3000 K 20-872-20-21
							Matt black	20-872-20-23

Adaptation variants: from page 124

KELVEEN

LED

A striking feature of KELVEEN is the high quality glass lens which is available with two beam angles as a spotlight (40°) or floodlight (90°). In combination with the freely movable luminaire head, KELVEEN can be individually adjusted to suit the actual lighting requirements.

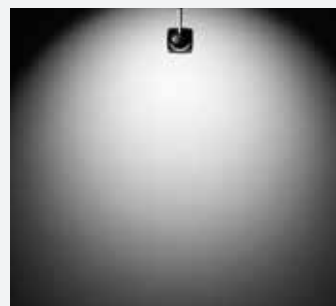
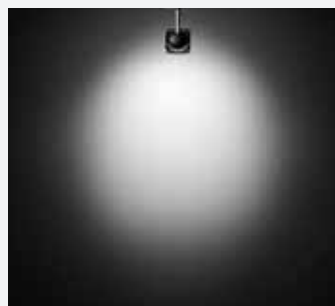
The lighting effect can be creatively expanded using dichroic filters which can be inserted.

Design: OLIGO



SMART CONTROL
READY

LED
INTEGRATED



IN-B socket

FEATURES

Spotlight
Rotatable / swivelling

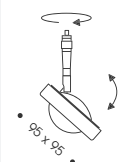
Lighting control and dimming
Compatible with SMART.IQ and DALI components for integration into building automation systems: Page 130

Output data
24 V DC / LED / 1000 lm / 12,5 W /
CRI >90 / Energy efficiency class: A+
Variants: 2700 K / 3000 K / 40° / 90°

Material
Thermoplast, Aluminium, Glas

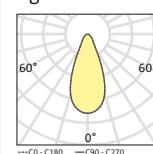
Weight
0.4 kg

TECHNICAL INFORMATION

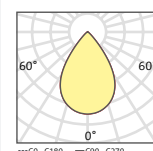


Order adaptation
separately

Light distribution



h (m)	Ø (m)	Lux
1	0.82	803
2	1.63	201
3	2.45	89



h (m)	Ø (m)	Lux
1	1.36	468
2	2.72	117
3	4.08	52

ACCESSORIES

Type	Size (mm)	Colour	Item number
Dichroic filter	Ø 50	Red	62-222-10-24
		Yellow	62-222-10-33
		Green	62-222-10-35
		Blue	62-222-10-37
		Magenta	62-222-10-46

COLOURS



Matt chrome



Matt white



Matt black

PRODUCT

Voltage	Type	lm	W	CRI	EEC	Angle	Colour	2700 K	3000 K
24 V DC	LED	1000	12,5	>90	A+	40°	Matt chrome	20-869-20-06	20-869-30-06
							Matt white	20-869-20-21	20-869-30-21
							Matt black	20-869-20-23	20-869-30-23
						90°	Matt chrome	20-869-21-06	20-869-31-06
							Matt white	20-869-21-21	20-869-31-21
							Matt black	20-869-21-23	20-869-31-23

Adaptation variants: from page 124

41 DEGREES

LED

41 DEGREES is an extraordinary room light which redefines the design of light sources for extensive room lighting. It stands out with its clear, geometric shape. The flat luminaire body rests weightlessly as a concentric circular ring in the room. Its soft, warm white silhouette from the inner surface of the ring disseminates a pleasantly cosy lighting mood.

Design: Ottenwälder und Ottenwälder



IN-B socket



SMART CONTROL
READY

LED

INTEGRATED



FEATURES

Ambient light
Rotatable / swivelling

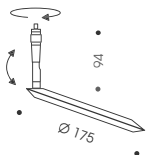
Lighting control and dimming
Compatible with SMART.IQ and DALI components for integration into building automation systems: Page 130

Output data
24 V DC / LED / 600 lm / 11 W /
CRI >85 / Energy efficiency class: A
Variants: 2700 K / 3000 K

Material
Aluminium

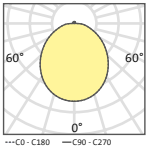
Weight
0.3 kg

TECHNICAL INFORMATION



Order adaptation
separately

Light distribution



COLOURS



Matt chrome



Matt white



Matt black

PRODUCT

Voltage	Type	lm	W	CRI	EEC	Colour	2700 K	3000 K
24 V DC	LED	600	11	>85	A	Matt chrome	20-871-10-06	20-871-11-06
						Matt white	20-871-10-21	20-871-11-21
						Matt black	20-871-10-23	20-871-11-23

Adaptation variants: from page 124

FLAVIA

LED

Like a suspended work of art made of light, FLAVIA magically draws the eye. Thanks to the optionally open or closed prismatic lens, the actual light source remains invisible and the result is the impression of a glowing forest of leaves. With varying light colours of 2,700 and 3,000 kelvin, the delicate FLAVIA can be used both in private living space and in property.

Design: Ottenwälder und Ottenwälder



LED
INTEGRATED



FEATURES

Ambient light
Rotatable / swivelling

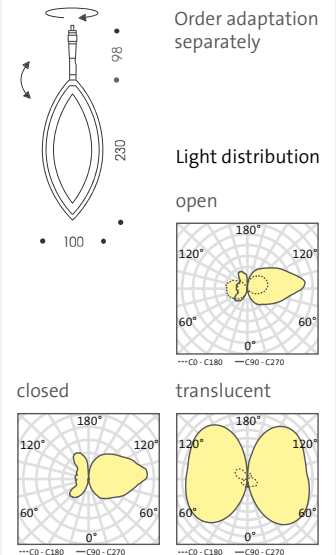
Lighting control and dimming
Non-dimmable

Output data
24 V DC / LED / 100-200 lm / 4.8 W /
CRI >80 / Energy efficiency class: A
Variants: 2700 K / 3000 K

Material
Aluminium

Weight
0.2 kg

TECHNICAL INFORMATION



MODELS



PRODUCT

Voltage	Type	lm	W	CRI	EEC	K	Colour	Open prismatic lens	Closed prismatic lens	Prismatik transl.
24 V DC	LED	150	4.8	>80	A	2700	Matt chrome	20-870-10-06	20-870-11-06	20-870-18-06
							Matt white	20-870-10-21	20-870-11-21	20-870-18-21
							Matt black	20-870-10-23	20-870-11-23	20-870-18-23
						3000	Matt chrome	20-870-12-06	20-870-13-06	20-870-19-06
							Matt white	20-870-12-21	20-870-13-21	20-870-19-21
							Matt black	20-870-12-23	20-870-13-23	20-870-19-23

Adaptation variants: from page 124



GRACE

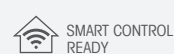
GRACE

LED-Neuheit

The timeless GRACE luminaire is considered to be one of the classic decorative pendant luminaires worldwide. The luminaire is ideal for setting the scene at tables and counters. The two lenticular, satin finished shades ensure even, glare-free illumination.

If the luminaire is integrated into a SMART.IQ or DALI application then the digital lighting control replaces the individual lighting control via gesture.

Design: Ralf Keferstein



FEATURES

Pendant luminaire

Please provide information on the desired total length; length cannot be shortened at the installation site

Lighting control and dimming

Compatible with SMART.IQ and DALI components for integration into building automation systems: Page 130

Gesture control

Memory function: Last light brightness value used is saved

Output data

24 V DC / LED / 2700 K / 1300 lm / 18 W / CRI >80
Energy efficiency class A+

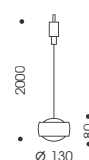
Material

Metal, glass

Weight

0.8 kg

TECHNICAL INFORMATION

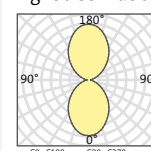


Order adaptation separately

Special length

Suspension cable up to 5 m available upon request.

Light distribution



COLOURS



PRODUCT

Voltage	Type	lm	K	W	CRI	EEC	Head colour	Item number
24 V DC	LED	1300	2700	18	>80	A+	Chrome	G20-931-40-05
							Brushed aluminium	G20-931-40-12
							Bright white	G20-931-40-20
							Satin copper	G20-931-40-15
							Brazilian brown	G20-931-40-41
							Espresso	G20-931-40-48
							Purple grey	G20-931-40-49

Adaptation variants: from page 124

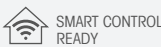
DECENT

LED

DECENT is a flat, subtle LED pendant luminaire in the form of a disc. The evenly flat light radiating downwards is perfectly suited to lighting dining tables or counters. DECENT is controlled touchlessly. A memory function stores the last brightness value selected.

If the luminaire is integrated into a SMART.IQ or DALI application then the digital lighting control replaces the individual lighting control via gesture.

Design: OLIGO



FEATURES

Pendant luminaire

Please provide information on the desired total length; length cannot be shortened at the installation site

Lighting control and dimming

Compatible with SMART.IQ and DALI components for integration into building automation systems: Page 130

Gesture control

Memory function: Last light brightness value used is saved

Output data

24 V DC / LED / 750 lm / 8.7 W / CRI >80 / Energy efficiency class: A+ Variants: 2700 K / 3000 K

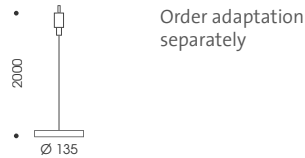
Material

Metal, acrylic glass

Weight

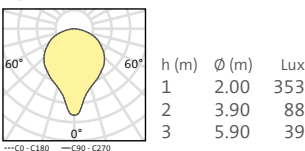
0.5 kg

TECHNICAL INFORMATION



Special length
Suspension cable up to 5 m available upon request.

Light distribution



COLOURS



PRODUCT								
Voltage	Type	lm	W	CRI	Angle	EEC	Colour	
24 V DC	LED	750	8.7	>80	89°	A+	2700 K	3000 K
							Chrome	G20-885-10-05 G20-885-11-05
							Brushed aluminium	G20-885-10-12 G20-885-11-12
							Matt white	G20-885-10-21 G20-885-11-21

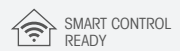
Adaptation variants: from page 124

A LITTLE BIT

LED

The A LITTLE BIT pendant luminaire offers a highly flexible lighting solution. The elegant luminaire head made from aluminium integrates a lens which can be focused between 20° and 60°. Elegant surfaces made from polished or matt aluminium round out the luminaire profile of A LITTLE BIT. For harmonious light distribution, the high quality lens body has been finished separately with a texture on the inside. The pendant luminaire design is also available as a spot-light for track installation.

Design: OLIGO



FEATURES

Pendant luminaire

Please provide information on the desired total length; length cannot be shortened at the installation site
Beam angle continuously adjustable between 20° and 60°

Lighting control and dimming

Compatible with SMART.IQ and DALI components for integration into building automation systems: Page 130

Dimmer switch

Memory function: Last light brightness value used is saved

Output data

24 V DC / LED / 650 lm / 8 W /
20° – 60° / CRI >90 /
Energy efficiency class: A+
Variants: 2700 K / 3000 K

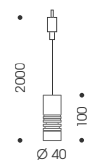
Material

Aluminium

Weight

0.2 kg

TECHNICAL INFORMATION

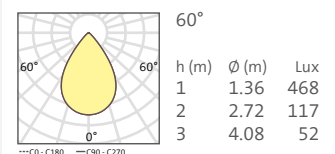
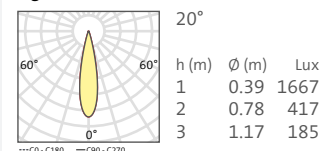


Order adaptation separately

Special length

Suspension cable up to 5 m available upon request.

Light distribution



COLOURS



Chrome



Matt chrome

PRODUCT

Voltage	Type	lm	W	CRI	Angle	EEC	Colour	2700 K	3000 K
24 V DC	LED	650	8	>90	20–60°	A+	Chrome	20-898-20-05	20-898-30-05
							Matt chrome	20-898-20-06	20-898-30-06

Adaptation variants: from page 124

SMART.POINT

SYSTEM COMPONENTS

24 V DC / max. 2 A

The components in a point system vary according to the situation in which it is used and the customer's individual requirements.

The following summary offers an overview of the various options for the adapter.




Examples










D

PLUG SOCKET COLOURS

-  Chrome
-  Matt chrome
-  Matt white

DESIGNER HOUSING SYSTEM COLOURS

-  Chrome
-  Matt chrome
-  Brushed aluminium
-  Matt white
-  Matt black

EXAMPLES OF ADAPTATIONS

- A Designer housing for surface-mounted installation
- B Plug socket for recessed installation
- C Adapter for SMART.TRACK 24 V track system
Adapter for PHASE 230 V track system
- D Modular unit for adaptation in the SHOP system

SOCKETS

Plug sockets for external
DC power supply units

24 V DC / max. 2 A / protection class 3

CASAMBI Home**Matic** 

Compatible with external SMART.IQ wireless modules
and/or with external DALI converters: Page 130



External DC power supply units from page 424

1. [IN-A / 24 V DC](#)



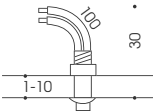
1.1 [PLUG SOCKET](#)

For drywall construction with panel thicknesses of
between 1 and 10 mm

Ø 15 mm, rear screw connection
Installation opening Ø 13 mm

Material
Metal

Design
Ralf Keferstein



Colour	Item number
Chrome	21-401-10-05



1.2 [PLUG SOCKET](#)

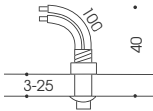
For drywall construction with panel thicknesses of
between 3 and 25 mm

Ø 20 mm, rear screw connection
Installation opening Ø 13 mm

Not suitable for installation on conductive materials

Material
Metal

Design
Ralf Keferstein



Colour	Item number
Chrome	21-401-11-05

2. IN-B / 24 V DC



2.1 PLUG SOCKET

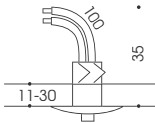
For installation using leaf springs for panel thicknesses of 11 – 30 mm

Ø 40 mm
installation opening Ø 32 mm

When mounted on gypsum boards: maximum luminaire weight is 0.8 kg

Material
Metal

Design
Ralf Keferstein



Colour	Item number
Chrome	21-402-10-05
Matt chrome	21-402-10-06
Matt white	21-402-10-21



2.2 PLUG SOCKET

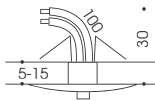
Suitable for covering an inspection opening for installing small electrical transformers.

Ø 70 mm, installation opening Ø 58 mm

Only suitable for ceiling installation

Material
Metal

Design
Ralf Keferstein



Colour	Item number
Chrome	21-402-12-05
Matt chrome	21-402-12-06
Matt white	21-402-12-21

3. IN-D / 24 V DC



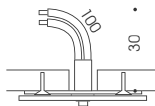
PLUG SOCKET

Cover plate for ceiling lining, concealed mounting screws
Also for concrete installation boxes

Ø 100 mm
Installation opening Ø 25 - 50 mm

Material
Metal

Design
Ralf Keferstein



Colour	Item number
Chrome	21-404-10-05
Matt chrome	21-404-10-06
Matt white	21-404-10-21

CANOPIES

Designer housing
including switching power supply and plug sockets

230 V / 50 – 60 Hz / 24 V DC / protection class 1



All designer housing is suitable for incorporation of a DALI converter (page 131).

4. LONG BEACH / 24 V DC canopy



• 350 •



4.1 SINGLE

1x 30 VA

Joints of a contrasting colour depending on model

Material
Metal

Design
Böhler Design

L 185 x B 70 x H 50 mm

Body	Joints	Item number
Matt white	Chrome	21-451-14-21
Matt white	Matt white	21-451-10-21
Matt chrome	Matt black	21-451-11-06
Matt black	Chrome	21-451-14-23

4.2 TWOFOLD

2x 20 VA

Joints of a contrasting colour depending on model

Material
Metal

Design
Böhler Design

L 510 x B 70 x H 50 mm

Body	Joints	Item number
Matt white	Chrome	21-451-24-21
Matt white	Matt white	21-451-20-21
Matt chrome	Matt black	21-451-21-06
Matt black	Chrome	21-451-24-23

4. LONG BEACH / 24 V DC canopy

• 350 • 350 •

**4.3 THREEFOLD**

3x 20 VA

Joints of a contrasting colour depending on model

Material
Metal**Design**
Böhler Design

L 860 x B 70 x H 50 mm

Body	Joints	Item number
Matt white	Chrome	21-451-34-21
Matt white	Matt white	21-451-30-21
Matt chrome	Matt black	21-451-31-06
Matt black	Chrome	21-451-34-23

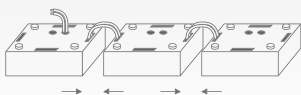
5. LOCAL-A / 24 V DC canopy

1x 18 VA

Material
Metal**Design**
Ralf Keferstein

Ø 87 x H 49 mm

Colour	Item number
Chrome	21-453-10-05
Matt chrome	21-453-10-06
Matt white	21-453-10-21

6. KEY WEST / 24 V DC canopy

The housing is designed such that barely noticeable through-wiring of multiple KEY WESTs is possible.

The body and acrylic glass plates can be combined freely.

Material
Metal / acrylic glass**Design**
Ralf Keferstein

1x 20 VA



Body L 150 x W 150 x H 44

Colour	Item number
Chrome	21-452-10-05
Matt chrome	21-452-10-06
Brushed aluminium	21-452-10-12

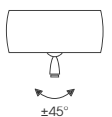
Acrylic glass plate

Colour	Item number
White	14-415-11-20
Green	14-415-11-35
Black	14-415-11-22

7. KEY LARGO / 24 V DC canopy**FOR SLOPING CEILINGS**

1x 36 VA

Luminaire adapter on a ball joint, swivelling range $\pm 45^\circ$
Bright plates, in a contrasting colour depending on model
With optional integrated DALI converter

**Material**
Metal / acrylic glass

Ø 130 x H 57 / H 83 mm

Body	Plate	Item number
Chrome	Bright black	21-454-10-05
Brushed aluminium	Bright black	21-454-10-12
Matt white	Bright white	21-454-10-21

SYSTEM ADAPTER

For adapting SMART.POINT luminaires for 24 V / 230 V track systems and the SHOP recessed system

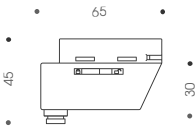
8. TRACK ADAPTERS



8.1 SMART.TRACK

24 V DC / max. 2 A
Can be freely positioned on the track
Tool-free installation, reverse polarity protection

The track adapter can be supplemented with the SMART.IQ wireless adapter. It allows for individual switching and dimming of SMART.POINT LED system luminaires via smart devices or wall-mounted transmitters: Page 130



Material
Plastic

Colour	Item number
Matt chrome	23-623-10-06
Matt white	23-623-10-21
Matt black	23-623-10-23

8. TRACK ADAPTERS

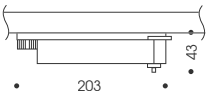


8. SYSTEM ADAPTER



8.2 PHASE

230 V / 50-60 Hz / 24 V DC / 1x 30 VA
Integrated switching power supply
Can be freely positioned on the track
Tool-free installation



Material
Plastic



24 V adapter	
Colour	Item number
Matt chrome	33-624-10-06
Matt white	33-624-10-21
Matt black	33-624-10-23

24 V adapter with DALI converter	
Colour	Item number
Matt chrome	D33-624-10-06
Matt white	D33-624-10-21
Matt black	D33-624-10-23

8.3 SHOP

SHOP is a modular recessed spotlight range which also offers plugs for the adaptation of SMART.POINT luminaires, among other things.

More information about SHOP: 403

Compatible with external SMART.IQ wireless modules and with external DALI converters: Page 130



RIDGE

SMART.IQ

WIRELESS COMPONENTS AND ACCESSORIES FOR DIGITAL LIGHTING CONTROL

For wireless control via Casambi or HomeMatic

For cable-based control via DALI

9. SMART.IQ – CASAMBI



CASAMBI



9.1 WIRELESS MODULE

Suitable for suspended ceilings.

Allows compatible luminaires to be controlled via smartphone, wireless switch or wireless remote control.

As a cross-manufacturer application, the Casambi app can also be used with luminaires from other manufacturers, such as the Philips Hue, for example. An Internet connection should be available for setting up the system.

24 V DC / 2.4 GHz Bluetooth 4.0 LE

82 x 40 x 23 mm

Material
Plastic

Type	Item number
Wireless module	60-312-10-00

CASAMBI APP

Software

for wireless lighting control via smartphones and tablets. Creates a mesh network with other Casambi-compatible products. Free, no subscription costs. App available in the App Store and on Google Play.

Compatibility

iOS operating system
from iPhone 4S or later, from iPad 3 or later, from 5th generation iPod touch or later

Android operating system
Android 5.0 Lollipop or later with full Bluetooth 4.0 support

www.casambi.com

9.2 BUTTON / REMOTE CONTROL

Mobile wireless button for wireless switching and dimming of compatible luminaires, including in groups or scenes. Four programmable buttons. Optional wall mounting.

2.4 GHz Bluetooth 4.0 LE Casambi

90 x 90 x 12 mm

Material
Plastic

Colour	Item number
Matt white	60-626-10-21
Matt black	60-626-10-23

10. SMART.IQ – HOMEMATIC



HomeMatic



10.1 WIRELESS MODULE

Suitable for suspended ceilings.

Allows compatible luminaires to be controlled via smartphone, wireless switch or wireless remote control.

With HomeMatic components from the manufacturer eQ3, projects from individual wireless applications through to fully networked building automation systems using cables and with wireless solutions can be realised according to the modular principle.

24 V DC / 868.3 MHz HomeMatic BidCoS

82 x 40 x 23 mm

Material
Plastic

Type	Item number
Wireless module	60-312-11-00

HOMEMATIC APP

Software

for wireless or wired control of HomeMatic-compatible devices. Costs may be incurred depending on the app. App available in the App Store, Windows Store and on Google Play. HomeMatic centre required on site.

Compatibility

iOS operating system 8.0 or later

Android operating system
"HomeDroid" or "Home24"
from Android version 1.6 or later

Windows operating system
"Orbylon" from Windows 8.1 or later

www.homematic.com

10.2 BUTTON / REMOTE CONTROL

For wireless switching and dimming of compatible luminaires, including in groups or scenes.

Wireless button, programmable

Wireless remote control, eight programmable buttons

868.3 MHz HomeMatic BidCoS

Material
Plastic

Type	Item number
Button	60-626-11-21
Remote control	60-627-11-21

11. DALI



DALI CONVERTER

Suitable for suspended ceilings and installation boxes

As an actuator, allows for control of one or more DALI-compatible SMART.POINT luminaires

41 x 28 x 14 mm

Material
Plastic



Type	Item number
DALI converter	60-311-10-00



PHASE

PERFORMANCE

IS THE NAME OF THE GAME HERE.

PHASE is a three-phase 230 volt track system with a functional design. The high quality aluminium profile track is primarily used for straight line lighting concepts. Thanks to the multitude of combination possibilities for pooled or flat lighting of surfaces and objects to be highlighted, PHASE is particularly recommended for use in the retail sector, in public buildings and conferences, and in galleries and sacred buildings.

PHASE system luminaires are offered with a variety of lighting technologies. Both LED and halogen luminaires are available to choose from.

Both 24 volt and 12 volt OLIGO system luminaires can be used in existing track systems in the Euro format thanks to the SMART.POINT or PLUG-IN adapter.

Through configuration to the adapter, the luminaires are allocated to the individual circuits and allow for the design of a variety of light scenes.

The 24 volt SMART.POINT luminaires can also be integrated into a centrally controllable lighting system using a DALI-compatible adapter.

CONTENTS	PAGE
System luminaires	140
Adapters	156
System components	196
Lamps	413
Lamp accessories	420

PHASE

LUMINAIRE OVERVIEW

3-Phase high voltage track system

LED LUMINAIRES

Spotlights / ambient lights



WALKER
Page 140



NEWTON
Page 142



SENTRY PRO
Page 144



SENTRY
Page 146



AVIATION PRO
Page 148



AVIATION
Page 150



RIDGE MAX
Page 152



RIDGE
Page 153



A LITTLE BIT MORE
Page 154



A LITTLE BIT
Page 156



HUBBLE
Page 158



KELVEEN
Page 160



NEW
VERSION B
Page 163



41 DEGREES
Page 177



FLAVIA
Page 178

Pendant luminaires



DECENT
Page 183



A LITTLE BIT
Page 185



NEW
GRACE
Page 187

LUMINAIRES WITH CONVENTIONAL FITTINGS

Spotlights / ambient lights



TWIN LANE
Page 166



LEVEL
Page 167



ICE
Page 169



GATE B SEVEN
Page 171



HIGH STREAM 16
Page 173



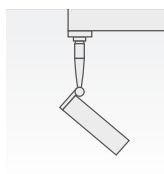
GATE B FOUR
Page 175



MX-HIGH
Page 176



HIGH FLIGHT
Page 181



PLUG-IN
Adapter from page 195
Luminaires from page 337

Pendant luminaires



GRACE
Page 189



PULL-IT 3
Page 191



DONATA
Page 193

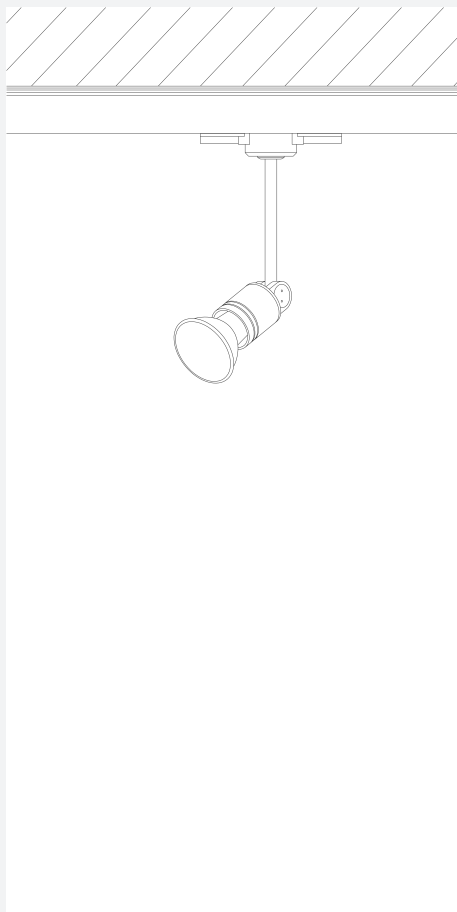


PLUG-IN
Adapter from page 195
Luminaires from page 351

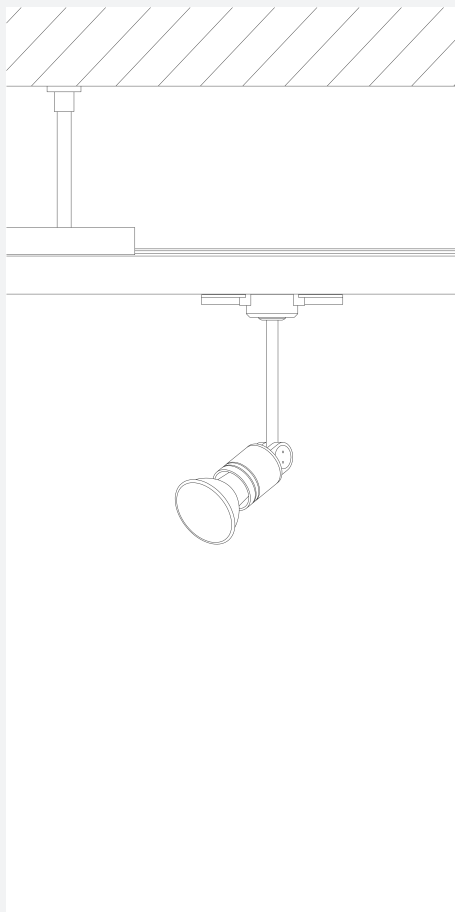
PHASE

VERSATILE OPPORTUNITIES

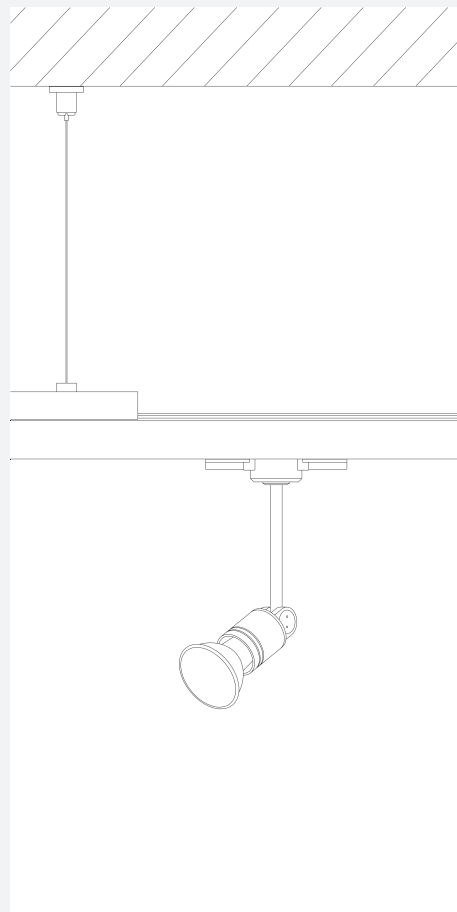
INSTALLATION
flush with the ceiling



INSTALLATION
with supports



INSTALLATION
suspended



INSTALLATION OPTIONS

PHASE is a tried and tested, high performance 230 volt track system which is based on track components from Eutrac.

The 5-cable surface mounted track for three circuits comprises an extruded aluminium profile and two PVC support profiles with two embedded 2.5 mm²

copper cables each, three separate switchable circuits, protective earth through the aluminium profile. On-site length adjustment can be done with no problem through simple sawing.

There is no need to cut back or bend the copper cable. The track has pre-punched

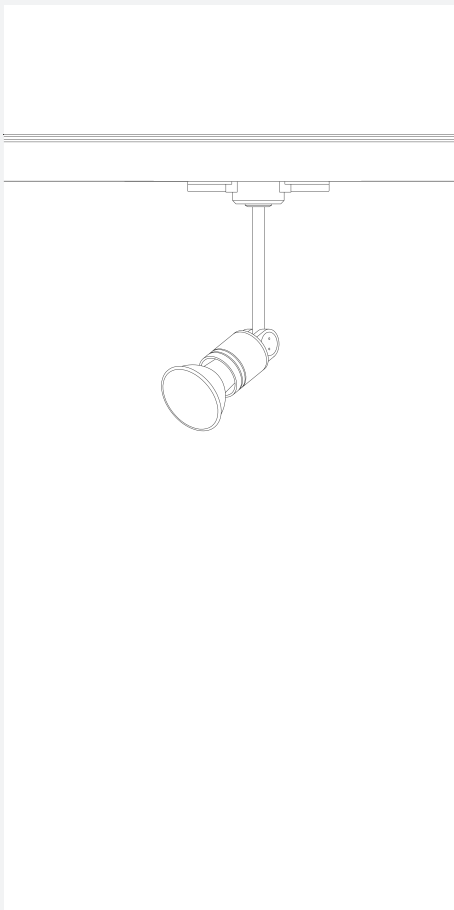
mounting slots and is approved for use within arm's reach.

PHASE can be installed flush to the ceiling, with a distance support and in suspended form. In particular, installation flush with the ceiling creates a homogeneous transition from the ceiling to the lighting system.

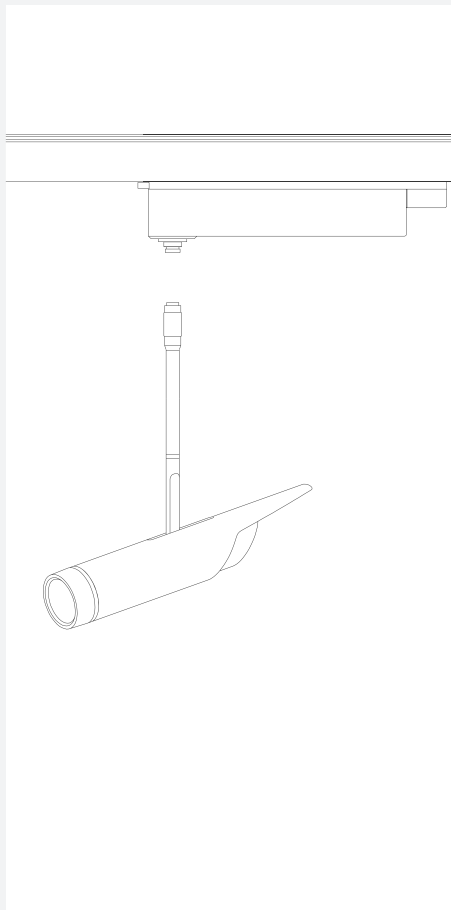
PHASE

COMBINING AND EXPANDING

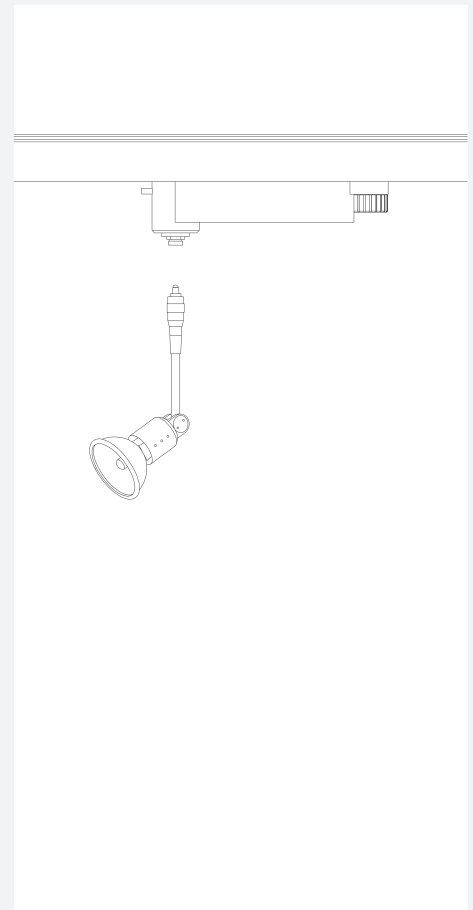
ADAPTER
integrated



ADAPTER
24 V plug connection system
SMART.POINT



ADAPTER
12 V plug connection system
PLUG-IN



LARGE SELECTION OF LUMINAIRES

PHASE system luminaires are equipped with a fixed universal three-phase adapter in the factory. The luminaires are attached to the busbar by means of clamp fastening and can be repositioned in just a few simple steps.

Using a system adapter, the entire selection of SMART.POINT 24 volt system luminaires is available to choose from.

An adapter with DALI converter is also available for integration of the SMART.POINT 24 volt system luminaires into a centrally controllable lighting system.

Likewise, PLUG-IN 12 volt system luminaires can be integrated into the system with no problem using the PHASE-IN adapter.

DALI

DIGITAL LIGHTING CONTROL USING WIRED COMPONENTS

TRIED AND TESTED INTERFACE STANDARD

DALI is a tried and tested international interface standard for digital lighting control. It lends itself to use for professional lighting control in commercial and public spaces.

A poleable two-wire cable which can simply be laid with the normal power supply is sufficient for installation. The open interface standard defines bidirectional communication between control units and up to 64 individual addressable electrical operating units, from any manufacturer. It is thus possible to configure scalable lighting systems.

INTEGRATION INTO BUILDING TECHNOLOGY

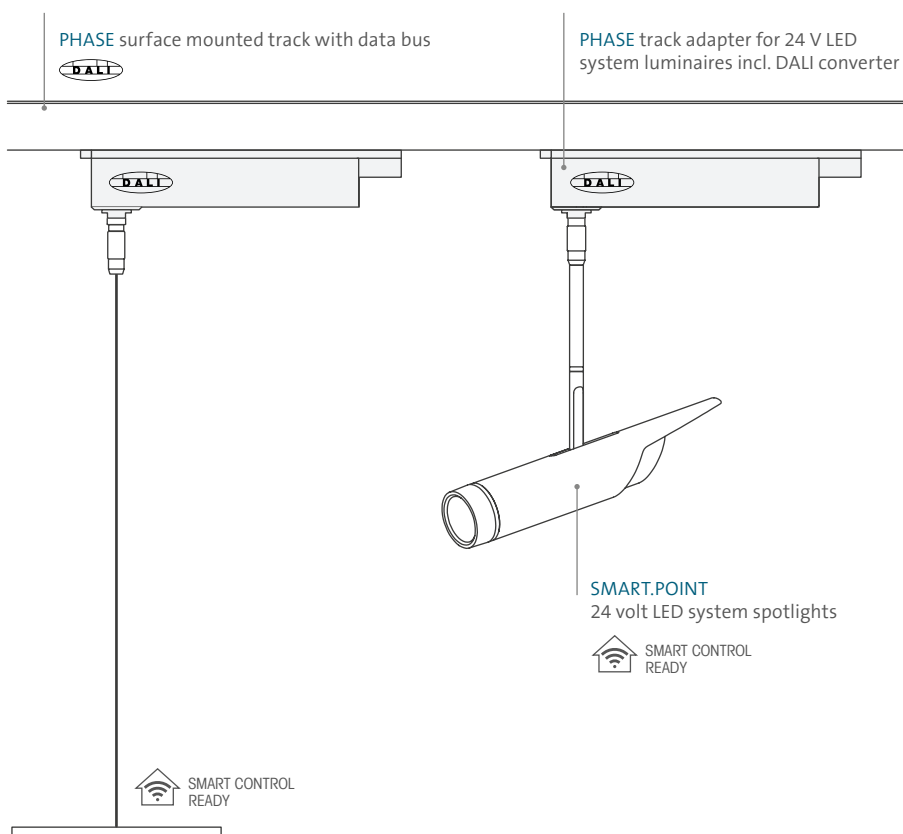
The system allows for extensive configuration modifications without having to subsequently interfere with the existing electrical installation. Complex lighting scenarios, such as test, status and maintenance queries, can likewise be realised using DALI.

In addition, integration of the lighting control system into higher building management systems is also possible.

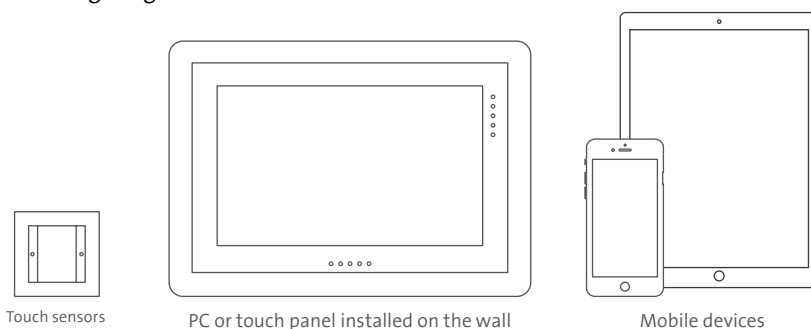
Detailed information about DALI can be found at

➔ www.dali-ag.org

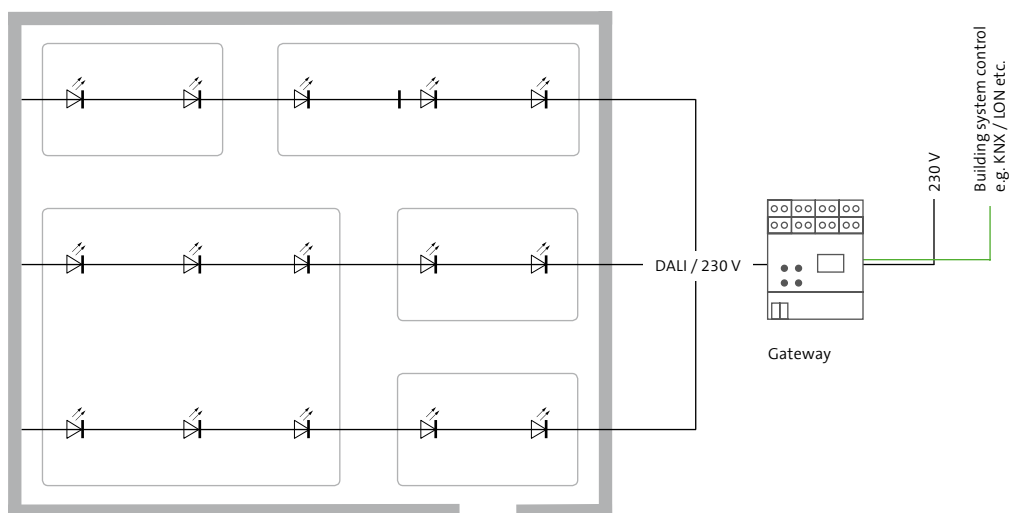
DALI track adapter for PHASE



Devices for lighting control



DALI lighting control



FLEXIBLE INDIVIDUAL OR GROUP CONTROL

24 volt LED system luminaires with DALI interfaces can be addressed flexible, i.e. they can be controlled individually but can also belong to one or more groups. In addition, there is clearly increased functionality since they are able, among other things, to save information for various light scenes or reach target dimming values at the same time as all other devices.

A crucial advantage for planning results from the possibility of assigning light groups independently of the wiring. In a new build, all cables can therefore be laid in the ceiling even if the exact floor plan has not yet been defined.

If a floor plan is subsequently changed then the light groups simply need to be reconfigured in the system.

LIGHT SCENES

Pre-programmed lighting moods in which many different luminaires complement each other to produce an overall look can be called up with the touch of a finger. Effects can also be part of light scenes, so that not only static but also dynamic lighting moods can be created.

WALKER

LED

The bright WALKER reflector spotlight convinces with a luminous flux of 1,850 lumen and, thanks to the three-pole pin, is suitable for digital lighting control systems. With two light distribution characteristics and modern design, WALKER puts the topic of luminaire design in a contemporary context and is perfectly suited for designing creative shop fitting and office concepts.

Design: Böhler Design



FEATURES

Spotlight
Rotatable / swivelling
High performance reflector

Lighting control and dimming
Compatible with DALI components for integration into building automation systems: Page 156, 199

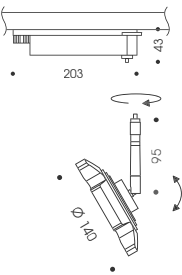
Output data
24 V DC / LED / 1850 lm / 17.8 W / CRI >90 / Energy efficiency class: A+
Variants: 2700 K / 3000 K / 4000 K / 25° / 45°

Material
Aluminium

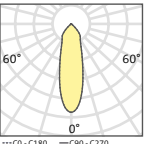
Weight
0.7 kg

TECHNICAL INFORMATION

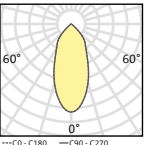
Order adapter separately




Light distribution



25°			
h (m)	Ø (m)	Lux	
1	0.54	3787	
2	1.10	947	
3	1.60	421	



45°			
h (m)	Ø (m)	Lux	
1	0.83	2514	
2	1.70	628	
3	2.50	279	

 SMART CONTROL
READY

LED
INTEGRATED



COLOURS



PRODUCT

Voltage	Type	lm	W	CRI	EEC	Angle	Colour	2700 K	3000 K	4000 K
24 V DC	LED	1850	17.8	>90	A+	25°	Matt chrome	20-862-20-06	20-862-30-06	20-862-40-06
							Matt white	20-862-20-21	20-862-30-21	20-862-40-21
							Matt black	20-862-20-23	20-862-30-23	20-862-40-23
						45°	Matt chrome	20-862-21-06	20-862-31-06	20-862-41-06
							Matt white	20-862-21-21	20-862-31-21	20-862-41-21
							Matt black	20-862-21-23	20-862-31-23	20-862-41-23

Adapter: Page 156

NEWTON

LED

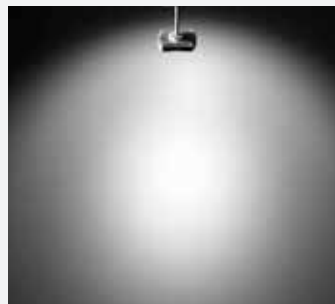
With a 1,850 lumen luminous flux at a power consumption of 17.8 watts, NEWTON offers a bright, efficient lighting solution for product presentation. The high performance reflector, coordinated in-house with the LED light source shields the spotlight and at the same time defines the softly sketched light scene.

The rotatable and swivelling spotlight, with light distribution characteristics of 25° and 45° and light colours of up to 4,000 K, allows for a multitude of options for the modulation of presentation areas.

Design: Böhler Design



NEWTON

SMART CONTROL
READYLED
INTEGRATED

FEATURES

Spotlight
Rotatable / swivelling
High performance reflector

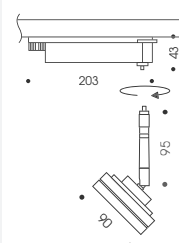
Lighting control and dimming
Compatible with DALI components
for integration into building auto-
mation systems: Page 156, 199

Output data
24 V DC / LED / 1850 lm / 17.8 W /
CRI >90 / Energy efficiency class: A+
Variants: 2700 K / 3000 K / 4000 K /
25° / 45°

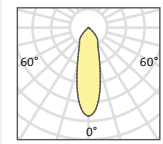
Material
Aluminium

Weight
0.6 kg

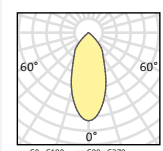
TECHNICAL INFORMATION

Order
adapter
separately

Light distribution



h (m)	Ø (m)	Lux
1	0.54	3787
2	1.10	947
3	1.60	421



h (m)	Ø (m)	Lux
1	0.83	2514
2	1.70	628
3	2.50	279

COLOURS



Matt chrome



Matt white



Matt black

PRODUCT

Voltage	Type	lm	W	CRI	EEC	Angle	Colour	2700 K	3000 K	4000 K
24 V DC	LED	1850	17.8	>90	A+	25°	Matt chrome	20-860-20-06	20-860-30-06	20-860-40-06
							Matt white	20-860-20-21	20-860-30-21	20-860-40-21
							Matt black	20-860-20-23	20-860-30-23	20-860-40-23
						45°	Matt chrome	20-860-21-06	20-860-31-06	20-860-41-06
							Matt white	20-860-21-21	20-860-31-21	20-860-41-21
							Matt black	20-860-21-23	20-860-31-23	20-860-41-23

Adapter: Page 156

SENTRY PRO

LED

The SENTRY PRO LED spotlight is businesslike in form, impressive in output. The cylindrical luminaire body, made from aluminium, surrounds a 1,350 lumen LED and is connected to the adapter by a joint which tilts and swivels. Reflectors optimised for the spotlight allow for a particularly homogeneous light mix.

SENTRY PRO is particularly suitable for professional use in the retail sector, in galleries and exhibitions and in combination with modern architecture.

Design: OLIGO



SENTRY PRO

SMART CONTROL
READYLED
INTEGRATED

FEATURES

Spotlight
Rotatable / swivelling
High performance reflector

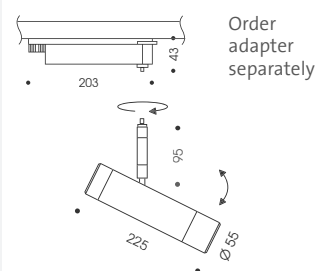
Lighting control and dimming
Compatible with DALI components
for integration into building automa-
tion systems: Page 156, 199

Output data
24 V DC / LED / 1350 lm / 15.7 W /
CRI >90 / Energy efficiency class: A+
Variants: 2700 K / 3000 K / 4000 K /
26° / 43°

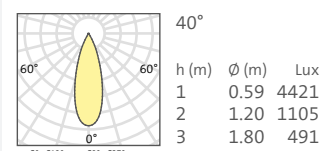
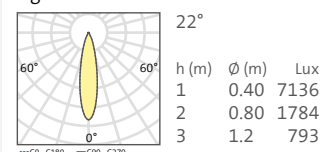
Material
Aluminium

Weight
1,3 kg

TECHNICAL INFORMATION



Light distribution



COLOURS



Matt chrome

Matt white

Matt black

PRODUCT

Voltage	Type	lm	W	CRI	EEC	Angle	Colour	2700 K	3000 K	4000 K
24 V DC	LED	1350	15.7	>90	A+	22°	Matt chrome	20-867-30-06	20-867-40-06	20-867-50-06
							Matt white	20-867-30-21	20-867-40-21	20-867-50-21
							Matt black	20-867-30-23	20-867-40-23	20-867-50-23
						40°	Matt chrome	20-867-31-06	20-867-41-06	20-867-51-06
							Matt white	20-867-31-21	20-867-41-21	20-867-51-21
							Matt black	20-867-31-23	20-867-41-23	20-867-51-23

Adapter: Page 156

SENTRY

LED

The SENTRY LED spotlight presents itself with a slim, cylindrical shape. The luminaire body has a luminous flux of 1,150 lumen and can be directed as desired using a joint which tilts and swivels. The high performance reflector provides a homogeneous light mix across the entire spectrum and ensures the true colour rendering of the

illuminated objects. With its timeless design, the spotlight is perfectly suited to use in modern shopping worlds and exhibitions.

Design: OLIGO



SENTRY

SMART CONTROL
READYLED
INTEGRATED

FEATURES

Spotlight
Rotatable / swivelling
High performance reflector

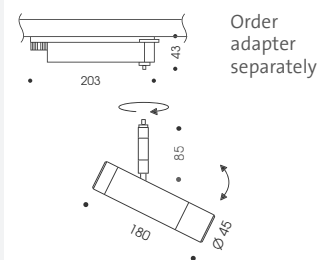
Lighting control and dimming
Compatible with DALI components
for integration into building automa-
tion systems: Page 156, 199

Output data
24 V DC / LED / 1150 lm / 13.9 W /
CRI >90 / Energy efficiency class: A+
Variants: 2700 K / 3000 K / 4000 K /
26° / 43°

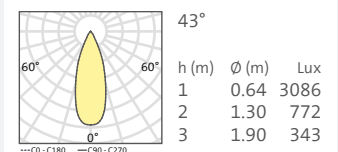
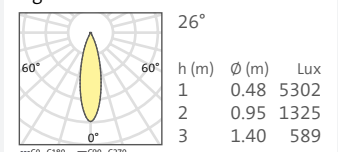
Material
Aluminium

Weight
0.7 kg

TECHNICAL INFORMATION



Light distribution



COLOURS



Matt chrome



Matt white



Matt black

PRODUCT

Voltage	Type	lm	W	CRI	EEC	Angle	Colour	2700 K	3000 K	4000 K
24 V DC	LED	1150	13.9	>90	A+	26°	Matt chrome	20-867-60-06	20-867-70-06	20-867-80-06
							Matt white	20-867-60-21	20-867-70-21	20-867-80-21
							Matt black	20-867-60-23	20-867-70-23	20-867-80-23
						43°	Matt chrome	20-867-61-06	20-867-71-06	20-867-81-06
							Matt white	20-867-61-21	20-867-71-21	20-867-81-21
							Matt black	20-867-61-23	20-867-71-23	20-867-81-23

Adapter: Page 156

AVIATION PRO

LED

AVIATION PRO recognisably leans on aeronautics in the design. With a luminous flux of up to 1,200 lumen and a brilliant light scene, the LED spotlight is recommended for professional use in property. Two rod lengths and light characteristics allow for a wide variety of planning options.

AVIATION PRO impresses with energy efficiency and outstanding thermal management.

Design: Böhler Design



AVIATION PRO

SMART CONTROL
READYLED
INTEGRATED

FEATURES

Spotlight
Rotatable / swivelling

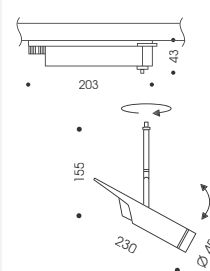
Lighting control and dimming
Compatible with DALI components
for integration into building automa-
tion systems: Page 156, 199

Output data
24 V DC / LED / 1200 lm / 13.9 W /
CRI >90 / Energy efficiency class: A+
Variants: 2700 K / 3000 K / 4000 K /
26° / 43°

Material
Aluminium

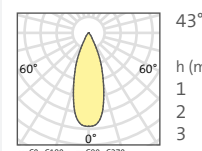
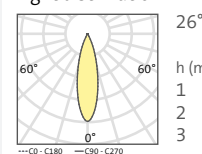
Weight
0.6 kg

TECHNICAL INFORMATION



Order
adapter
separately

Light distribution



COLOURS



Matt chrome



Matt white



Matt black

PRODUCT

Voltage	Type	lm	W	CRI	EEC	Angle	Colour	2700 K	3000 K	4000 K
24 V DC	LED	1200	13.9	>90	A+	26°	Matt chrome	20-875-30-06	20-875-40-06	20-875-50-06
							Matt white	20-875-30-21	20-875-40-21	20-875-50-21
							Matt black	20-875-30-23	20-875-40-23	20-875-50-23
						43°	Matt chrome	20-875-31-06	20-875-41-06	20-875-51-06
							Matt white	20-875-31-21	20-875-41-21	20-875-51-21
							Matt black	20-875-31-23	20-875-41-23	20-875-51-23

Adapter: Page 156

AVIATION

LED

The AVIATION LED spotlight is more delicate but just as elegant. With a luminous flux of 650 lumen, it is particularly suitable for use in private living areas. The high performance reflector is determined in-house for the particularly balanced light scene.

There are two rod lengths and light distribution characteristics to choose from for detailed lighting planning

Design: Böhler Design



AVIATION

SMART CONTROL
READYLED
INTEGRATED

FEATURES

Spotlight
Rotatable / swivelling

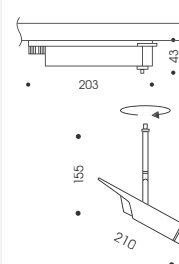
Lighting control and dimming
Compatible with DALI components
for integration into building automa-
tion systems: Page 156, 199

Output data
24 V DC / LED / 650 lm / 8.4 W /
CRI >90 / Energy efficiency class: A+
Variants: 2700 K / 3000 K / 23° / 41°

Material
Aluminium

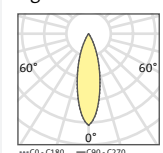
Weight
0.5 kg

TECHNICAL INFORMATION



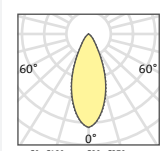
Order
adapter
separately

Light distribution



23°

h (m)	Ø (m)	Lux
1	0.51	2206
2	1.02	551
3	1.53	245



41°

h (m)	Ø (m)	Lux
1	0.77	1198
2	1.54	300
3	2.30	133

COLOURS



Matt chrome



Matt white



Matt black

PRODUCT

Voltage	Type	lm	W	CRI	EEC	Angle	Colour	2700 K	3000 K
24 V DC	LED	650	8.4	>90	A+	23°	Matt chrome	20-875-60-06	20-875-70-06
							Matt white	20-875-60-21	20-875-70-21
							Matt black	20-875-60-23	20-875-70-23
						41°	Matt chrome	20-875-61-06	20-875-71-06
							Matt white	20-875-61-21	20-875-71-21
							Matt black	20-875-61-23	20-875-71-23

Adapter: Page 156

RIDGE MAX

LED

A distinctive heat sink with cooling ribs around the circumference characterises the design of the highly efficient RIDGE MAX LED spotlight. The luminaire head, made from aluminium, surrounds the 1,100 lumen LED and is connected to the adapter by a joint which tilts and swivels. Design: OLIGO



SMART CONTROL
READY

LED

INTEGRATED



FEATURES

Spotlight
Rotatable / swivelling
High performance reflector

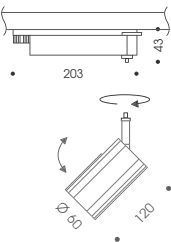
Lighting control and dimming
Compatible with DALI components for
integration into building automation
systems: Page 156, 199

Output data
24 V DC / LED / 1100 lm / 13.9 W /
CRI >90 / Energy efficiency class: A+
Variants: 2700 K / 3000 K / 4000 K /
26° / 43°

Material
Aluminium

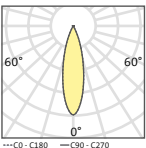
Weight
0.5 kg

TECHNICAL INFORMATION

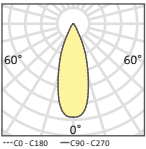


Order
adapter
separately

Light distribution



h (m)	Ø (m)	Lux
1	0.48	5302
2	0.95	1325
3	1.40	589



h (m)	Ø (m)	Lux
1	0.64	3086
2	1.30	772
3	1.90	343

COLOURS



Matt chrome /
Matt chrome



Matt white /
Matt white



Chrome /
Matt black

PRODUCT

Voltage	Type	lm	W	CRI	Angle	Rod colour	Body colour	2700 K	3000 K	4000 K
24 V DC	LED	1100	13.9	>90	26°	Matt chrome	Matt chrome	20-881-51-06	20-881-61-06	20-881-71-06
						Matt white	Matt white	20-881-52-21	20-881-62-21	20-881-72-21
						Chrome	Matt white	20-881-50-21	20-881-60-21	20-881-70-21
						Matt black	Matt black	20-881-53-23	20-881-63-23	20-881-73-23
						Chrome	Matt black	20-881-50-23	20-881-60-23	20-881-70-23
					43°	Matt chrome	Matt chrome	20-881-55-06	20-881-65-06	20-881-75-06
						Matt white	Matt white	20-881-56-21	20-881-66-21	20-881-76-21
						Chrome	Matt white	20-881-54-21	20-881-64-21	20-881-74-21
						Matt black	Matt black	20-881-57-23	20-881-67-23	20-881-77-23
						Chrome	Matt black	20-881-54-23	20-881-64-23	20-881-74-23

Adapter: Page 156

RIDGE

LED

The RIDGE LED spotlight is a little more delicate than its big brother. Here too, the distinctive cooling fins characterise the unmistakeable design. With a luminous flux of 650 lumen, RIDGE is ideal for universal use in private living spaces, for example in studies, hallways or modern living and dining rooms. Design: OLIGO



SMART CONTROL
READY

LED
INTEGRATED



FEATURES

Spotlight
Rotatable / swivelling
High performance reflector

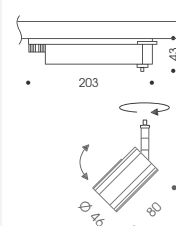
Lighting control and dimming
Compatible with DALI components
for integration into building automa-
tion systems: Page 156, 199

Output data
24 V DC / LED / 650 lm / 8 W / 41° /
CRI >90 / Energy efficiency class: A+
Variants: 2700 K / 3000 K

Material
Aluminium

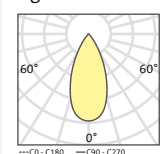
Weight
0.2 kg

TECHNICAL INFORMATION



Order
adapter
separately

Light distribution



h (m)	Ø (m)	Lux
1	0.85	708
2	1.71	177
3	2.56	79

COLOURS



Matt chrome /
Matt chrome



Matt white /
Matt white



Chrome /
Matt black

PRODUCT

Voltage	Type	lm	W	CRI	Angle	EEC	Rod colour	Body colour	2700 K	3000 K
24 V DC	LED	650	8	>90	41°	A+	Matt chrome	Matt chrome	20-889-21-06	20-889-31-06
							Matt white	Matt white	20-889-22-21	20-889-32-21
							Chrome	Matt white	20-889-20-21	20-889-30-21
							Matt chrome	Matt white	20-889-21-21	20-889-31-21
							Chrome	Matt black	20-889-20-23	20-889-30-23

Adapter: Page 156

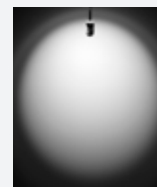
A LITTLE BIT MORE LED

The A LITTLE BIT MORE LED spotlight offers outstanding lighting technology with individually definable light distribution characteristics. With a luminous flux of 1,100 and up to 4,000 kelvin, the spotlight is intended for use in shops and property.

The beam angle can be continuously adjusted between 20° and 60° using the focusable glass lens. For harmonious light distribution, the high quality lens body is finished separately with a micro texture on the inside. Design: OLIGO



A LITTLE BIT MORE

SMART CONTROL
READYLED
INTEGRATED

FEATURES

Spotlight
Rotatable / swivelling
Beam angle continuously adjustable
between 20° and 60°

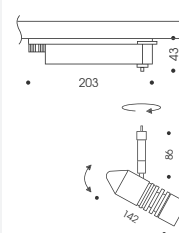
Lighting control and dimming
Compatible with DALI components
for integration into building automa-
tion systems: Page 156, 199

Output data
24 V DC / LED / 1000 lm / 11 W /
20° – 60° / CRI >90 /
Energy efficiency class: A+
Variants: 2700 / 3000 / 4000 K

Material
Aluminium, glass lens

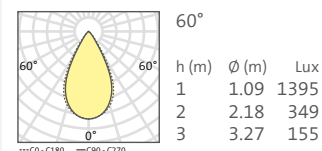
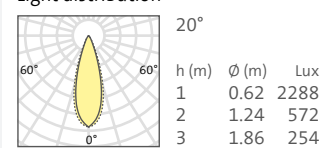
Weight
0.6 kg

TECHNICAL INFORMATION



Order
adapter
separately

Light distribution



COLOURS

Chrome /
ChromeMatt chrome /
Matt chromeMatt white /
Matt whiteChrome /
Matt black

PRODUCT

Voltage	Type	lm	W	CRI	Angle	Rod colour	Body colour	2700 K	3000 K	4000 K
24 V DC	LED	1000	11	>90	20–60°	Chrome	Chrome	20-882-41-05	20-882-51-05	20-882-61-05
						Matt chrome	Matt chrome	20-882-42-06	20-882-52-06	20-882-62-06
						Chrome	Matt white	20-882-41-21	20-882-51-21	20-882-61-21
						Matt white	Matt white	20-882-43-21	20-882-53-21	20-882-63-21
						Chrome	Matt black	20-882-41-23	20-882-51-23	20-882-61-23
						Matt black	Matt black	20-882-40-23	20-882-50-23	20-882-60-23

Adapter: Page 156

A LITTLE BIT LED

The A LITTLE BIT LED spotlight is slightly smaller in terms of size and light output, but just as variable when it comes to the light scene. Like its big brother, A LITTLE BIT also has efficient LED lighting technology. The width of the cone of light can be continuously adjusted between 20° and 60°.

Different rod lengths allow for different distances from the ceiling. A system pendant luminaire matching this spotlight design is also available.

Design: OLIGO



A LITTLE BIT


LED
INTEGRATED

FEATURES

Spotlight

Rotatable / swivelling
Stange 60 oder 140 mm
Beam angle continuously adjustable
between 20° and 60°

Lighting control and dimming

Compatible with DALI components
for integration into building auto-
mation systems: Page 156, 199

Output data

24 V DC / LED / 650 lm / 8 W /
20° – 60° / CRI >90 /
Energy efficiency class: A+
Variants: 2700 K / 3000 K

Material

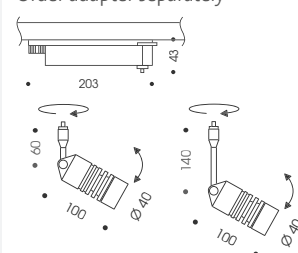
Aluminium, glass lens

Weight

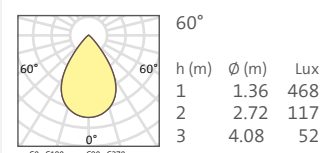
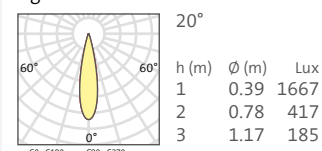
0.3 kg

TECHNICAL INFORMATION

Order adapter separately



Light distribution



COLOURS AND MODELS



Chrome /
60 mm



Matt chrome /
60 mm



Chrome /
140 mm



Matt chrome /
140 mm

PRODUCT

Voltage	Type	lm	W	CRI	Angle	Rod length	Rod colour	Body colour	2700 K	3000 K
24 V DC	LED	650	8	>90	20–60°	60 mm	Chrome	Chrome	20-898-40-05	20-898-50-05
							Matt chrome	Matt chrome	20-898-40-06	20-898-50-06
						140 mm	Chrome	Chrome	20-898-41-05	20-898-51-05
							Matt chrome	Matt chrome	20-898-41-06	20-898-51-06

Adapter: Page 156

HUBBLE

LED

The HUBBLE LED spotlight is a suitable inspiration if high quality materials and an elegant appearance are required. The rotatable and swivelling spotlight can also be aligned as a downlight in a harmonious extension of its blade. The beam angle can be set as desired between 20° and 50° thanks to the manually adjustable focus.

HUBBLE is available with light colours of 2,700 or 3,000 kelvin and is suitable for use in living space and property.

Design: Böhler Design



FEATURES

Spotlight
Rotatable / swivelling
Beam angle continuously adjustable between 20° and 50°

Lighting control and dimming
Compatible with DALI components for integration into building automation systems: Page 156, 199

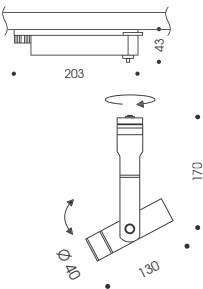
Output data
24 V DC / LED / 600 lm / 10,5 W / 20° – 50° / CRI >90 /
Energy efficiency class: A / Variants: 2700 K / 3000 K

Material
Aluminium, glass lens

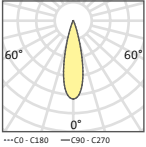
Weight
0.8 kg

TECHNICAL INFORMATION

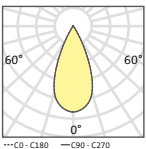
Order adapter separately



Light distribution



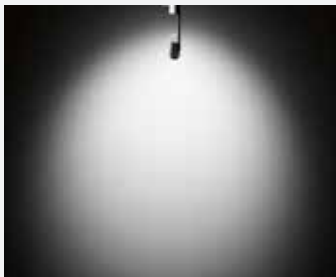
20°			
h (m)	Ø (m)	Lux	
1	0.47	1680	
2	0.93	420	
3	1.40	187	



50°			
h (m)	Ø (m)	Lux	
1	0.83	926	
2	1.67	232	
3	2.50	103	



LED
INTEGRATED



COLOURS



Matt chrome



Matt white



Matt black

PRODUCT

Voltage	Type	lm	W	CRI	Angle	EEC	Colour	2700 K	3000 K
24 V DC	LED	600	10,5	>90	20–50°	A	Matt chrome	20-872-20-06	20-872-30-06
							Matt white	20-872-20-21	20-872-30-21
							Matt black	20-872-20-23	20-872-30-23

Adapter: Page 156

KELVEEN

LED

A striking feature of KELVEEN is the high quality glass lens which is available with two beam angles as a spotlight (40°) or floodlight (90°). In combination with the freely movable luminaire head, KELVEEN can be individually adjusted to suit the actual lighting requirements.

The lighting effect can be creatively expanded using dichroic filters which can be inserted.

Design: OLIGO



SMART CONTROL
READYLED
INTEGRATED

FEATURES

Spotlight
Rotatable / swivelling

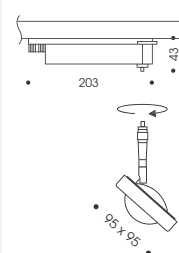
Lighting control and dimming
Compatible with DALI components
for integration into building auto-
mation systems: Page 156, 199

Output data
24 V DC / LED / 1000 lm / 12,5 W /
CRI >90 / Energy efficiency class: A+
Variants: 2700 K / 3000 K / 40° / 90°

Material
Thermoplast, Aluminium, glass lens

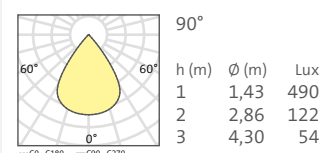
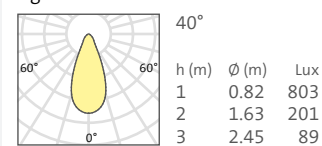
Weight
0.4 kg

TECHNICAL INFORMATION



Order
adapter
separately

Light distribution



ACCESSORIES

Type	Size (mm)	Colour	Item number
Dichroic filter	Ø 50	Red	62-222-10-24
		Yellow	62-222-10-33
		Green	62-222-10-35
		Blue	62-222-10-37
		Magenta	62-222-10-46

COLOURS



Matt chrome

Matt white

Matt black

PRODUCT

Voltage	Type	lm	W	CRI	EEC	Angle	Colour	2700 K	3000 K
24 V DC	LED	1000	12,5	>90	A+	40°	Matt chrome	20-869-20-06	20-869-30-06
							Matt white	20-869-20-21	20-869-30-21
							Matt black	20-869-20-23	20-869-30-23
						90°	Matt chrome	20-869-21-06	20-869-31-06
							Matt white	20-869-21-21	20-869-31-21
							Matt black	20-869-21-23	20-869-31-23

Adapter: Page 156



VERSION B

LED novelty

The powerful LED spotlight has a discreet design and does not require separate operating equipment. It can be used in retail shops and industrial spaces, as well as at artistic and cultural venues. The model is available in two output levels, each of which has two beam angles.



LED
INTEGRATED

FEATURES

Spotlight
Rotatable / swivelling
Protective glass cover
Non-dimmable
Trade item

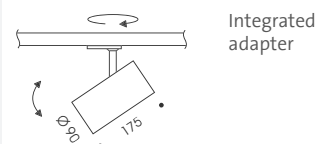
Output data
230 V / 50 Hz / LED / 3000 K / CRI 95
Energy efficiency class: A++

Variants:
28 W / 24° / 2270 lm
28 W / 37° / 2235 lm
35 W / 24° / 2955 lm
35 W / 40° / 2900 lm

Material
Metal, glass

Weight
1.2 kg

TECHNICAL INFORMATION



COLOURS



Matt chrome



Matt white

PRODUCT									
Voltage	Type	K	lm	W	CRI	EEC	Angle	Colour	Item number
230 V	LED	3000	2270	28	95	A++	24°	Matt chrome	32-854-10-06
								Matt white	32-854-10-21
			2235				37°	Matt chrome	32-854-11-06
								Matt white	32-854-11-21
230 V	LED	3000	2955	35	95	A++	24°	Matt chrome	32-854-20-06
								Matt white	32-854-20-21
			2900				40°	Matt chrome	32-854-21-06
								Matt white	32-854-21-21

TWIN LANE





TWIN LANE

Circular shapes and a symmetrical base structure define the design of the TWIN LANE spotlight. The spotlight heads are gimbal-mounted so that almost any point in the room can be lit. Alongside the modest shapes, the luminaire offers high operational reliability since the thermal separation between the luminaire head and the upstream transformer has been taken into account in a separate housing. TWIN LANE is suitable for the use of LED retrofits and fulfils the current requirements for an energy-saving lighting solution.

Design: OLIGO

LED
READY



Retrofit lamp

FEATURES

Spotlight
Rotatable / gimbal mounted heads

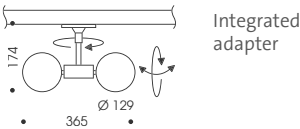
Output data
230 V / 50-60 Hz / 12 V / G 53 /
QR-LP 111 / max. 2x 35 W
Electronic transformer
Energy efficiency class: A to C

230 V / GZ 10 / QPAR 111 /
max. 2x 75 W / LED ready
Energy efficiency class: A++ to E

Material
Aluminium

Weight
0.8 kg

TECHNICAL INFORMATION



COLOURS



PRODUCT

Luminiare			
Socket	Suitable for	Colour	Item number
G 53	12 V halogen	Matt chrome	32-866-20-06
		Matt white	32-866-21-21
GZ 10	230 V retrofit or halogen	Matt chrome	32-866-10-06
		Matt white	32-866-11-21

Lamps from page 415

LEVEL

Balanced proportions and gimbal-mounted luminaire heads characterise the design of the LEVEL spotlights. They can move freely and can be positioned individually. The spotlight is suitable for the use of LED retrofits and fulfils the current requirements for an energy-saving lighting solution.

Design: Ralf Keferstein

LED
READY



Retrofit lamp

FEATURES

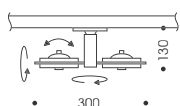
Spotlight
Rotatable / gimbal mounted heads

Output data
230 V / GZ 10 / QPAR 111 /
max. 2x 75 W / LED ready
Energy efficiency class: A++ to E

Material
Aluminium

Weight
0,5 kg

TECHNICAL INFORMATION



Integrated
adapter

COLOURS



Matt chrome



Matt white

PRODUCT

Luminaire

Socket	Suitable for	Colour	Item number
GZ 10	Retrofit or halogen	Matt chrome	32-905-22-06
		Matt white	32-905-23-21

Lamps from page 417



ICE

ICE

The rotatable and swivelling luminaire head of the ICE spotlight allows for precise lighting of a wide variety of objects and surfaces, even from large distances. ICE is suitable for the use of halogen and LED retrofit lamps and fulfils the current requirements for an energy-saving lighting solution.

Design: Ralf Keferstein



Retrofit lamp

LED
READY

FEATURES

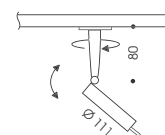
Spotlight
Rotatable / swivelling

Output data
230 V / GZ 10 / QPAR 111
max. 75 W / LED ready
Energy efficiency class: A++ to E

Material
Aluminium

Weight
0.4 kg

TECHNICAL INFORMATION



Integrated
adapter

COLOURS



Matt chrome



Matt white

PRODUCT

Socket	Suitable for	Adapter colour	Body colour	Item number
GZ 10	Retrofit or halogen	Matt chrome	Matt chrome	32-916-10-06
		Matt white	Matt white	32-916-11-21

Lamps from page 417



GATE B SEVEN

GATE B SEVEN

Compact dimensions in a technical and elegant design have made GATE B SEVEN a timeless classic in private and commercial halogen lighting in many countries. The spotlight is also suitable for the use of LED retrofits. The shape and light scene can be varied using decorative rings and other accessories.

Design: Ralf Keferstein



Retrofit lamp

LED
READY

FEATURES

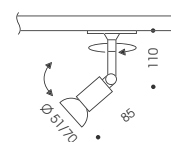
Spotlight
Rotatable / swivelling

Output data
230 V / GZ 10 / QPAR 51/64
max. 50/75 W / LED ready
Energy efficiency class: A++ to E

Material
Aluminium

Weight
0.2 kg

TECHNICAL INFORMATION



Integrated
adapter

ACCESSORIES



Decorative ring R 2



Shade S 2

PRODUCT

Socket	Suitable for	Adapter colour	Body colour	Item number
GZ 10	Retrofit or halogen	Matt chrome	Matt chrome	32-973-10-06
		Matt white	Matt chrome	32-973-11-06

Lamps from page 417, Accessories from page 420



HIGH STREAM 16 / GRACE

HIGH STREAM 16

The design of the HIGH STREAM 16 looks both dynamic and elegant. The elaborately manufactured luminaire head made from aluminium surrounds the halogen lamp and gives the luminaire an aesthetic design. Fine surfaces in bright chrome or matt chrome round out the optical merits of HIGH STREAM 16. There is a subtle spike on the underside which can be used to adjust the luminaire, even during use.

Design: Ralf Keferstein



LED
READY

FEATURES

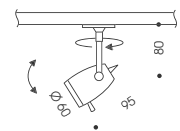
Spotlight
Rotatable / swivelling

Output data
230 V / GU 10 / QPAR 51 max. 50 W
“Cool beam” lamps not permissible
Energy efficiency class: A++ to E

Material
Aluminium

Weight
0.2 kg

TECHNICAL INFORMATION



Integrated
adapter

Retrofit lamp
Lamp length of ≤52 mm recommended

PRODUCT

Socket	Suitable for	Colour	Item number
GZ 10	Retrofit or halogen	Matt chrome	32-968-10-06

Lamps from page 417



GATE B FOUR

GATE B FOUR

Whether with or without glass accessories – the GATE B FOUR spotlight cuts a fine figure in any model. Three different, hand-blown glasses are available, among other things, shaping the light scene and design. The variant with the GZ 10 setting is also suitable for the use of LED retrofits. The appearance and light scene can be varied using decorative rings and other accessories, available separately.

Design: Ralf Keferstein



LED READY
ECO READY

FEATURES

Spotlight
Rotatable / swivelling

Output data
230 V / G 9 / QT-14
max. 75 W / LED ready / ECO ready
Energy efficiency class: A++ to E

230 V / GZ 10 / QPAR 51/64
max. 50 / 75 W / LED ready
Energy efficiency class: A++ to E

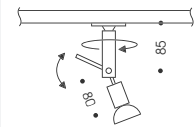
Material
Aluminium, hand-blown glass

Weight
Luminaire: 0.2 kg
Glass shade: 0.5 kg

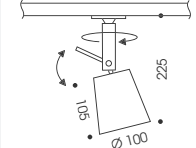
TECHNICAL INFORMATION

Integrated adapter

Without accessories (GZ 10 only)



With glass shade



ACCESSORIES



Matt white
glass shade



Champagne
glass shade



Transparent
glass shade

PRODUCT

Luminaire

Socket	Suitable for	Adapter colour	Body colour	Item number
G 9	Retrofit or halogen	Matt chrome	Matt chrome	32-904-20-06
		Matt white	Matt chrome	32-904-21-06
GZ 10	Retrofit or halogen	Matt chrome	Matt chrome	32-904-10-06
		Matt white	Matt chrome	32-904-11-06

Lamps from page 417, Accessories from page 420

PRODUCT

Accessory: Satin finished glass shade, G 9 socket compatible

Colour	Item number
Matt white	94-904-10-21
Champagne	94-904-10-42

Accessory: Transparent glass shade, GZ 10 socket compatible

Colour	Item number
Transparent	94-904-10-01

MX-HIGH

The rotatable and swivelling head of the MX-HIGH spotlight is characterised by a stainless steel bracket on the back. The slim body remains visually inconspicuous in the background and, in return, provides effective accent lighting for materials and objects. MX-HIGH is suitable for the use of LED retrofits and fulfils the current requirements for an energy-saving lighting solution. The shape and light scene can be varied using decorative rings and other accessories, available separately.

Design: Ralf Keferstein



LED
READY

FEATURES

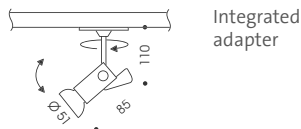
Spotlight
Rotatable / swivelling

Output data
230 V / GZ 10 / QPAR 51 max. 50 W
/ LED ready
Energy efficiency class: A++ to E

Material
Aluminium

Weight
0.4 kg

TECHNICAL INFORMATION



ACCESSORIES



Decorative ring R 2



Shade S 2



Shade Ø 100 mm

PRODUCT Luminaire

Socket	Suitable for	Adapter colour	Body colour	Item number
GZ 10	Retrofit or halogen	Matt chrome	Matt chrome	32-958-10-06
		Matt white	Matt chrome	32-958-20-06

Lamps from page 417, Accessories from page 420

PRODUCT Accessory: Ø 100 mm shade

Material	Colour	Item number
Metal	Matt chrome	62-214-10-06
Glas	Matt white	62-214-10-21

41 DEGREES

LED

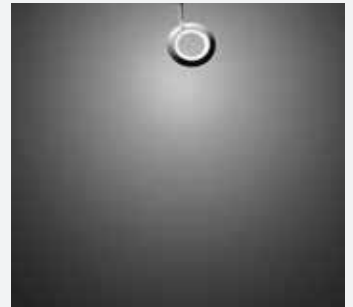
41 DEGREES is an extraordinary room light which redefines the design of light sources for extensive room lighting. It stands out with its clear, geometric shape. The flat luminaire body rests weightlessly as a concentric circular ring in the room. Its soft, warm white silhouette from the inner surface of the ring disseminates a pleasantly cosy lighting mood.

Design: Ottenwälder and Ottenwälder



SMART CONTROL
READY

LED
INTEGRATED



FEATURES

Ambient light
Rotatable / swivelling

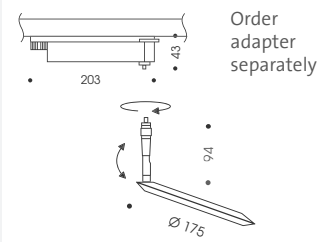
Lighting control and dimming
Compatible with DALI components for integration into building automation systems: Page 156, 199

Output data
24 V DC / LED / 600 lm / 11 W /
CRI >85 / Energy efficiency class: A
Variants: 2700 K / 3000 K

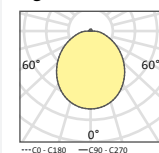
Material
Aluminium

Weight
0.3 kg

TECHNICAL INFORMATION



Light distribution



COLOURS



Matt chrome



Matt white



Matt black

PRODUCT

Voltage	Type	lm	W	CRI	EEC	Colour	2700 K	3000 K
24 V DC	LED	600	11	>85	A	Matt chrome	20-871-10-06	20-871-11-06
						Matt white	20-871-10-21	20-871-11-21
						Matt black	20-871-10-23	20-871-11-23

Adapter: Page 156

FLAVIA

LED

Like a suspended work of art made of light, FLAVIA magically draws the eye. Thanks to the optionally open or closed prismatic lens, the actual light source remains invisible and the result is the impression of a glowing forest of leaves. With light colours of 2,700 and 3,000 kelvin, the delicate FLAVIA can be used both in private living space and in property.

Design: Ottenwälder and Ottenwälder



PRODUCT					
Open prismatic lens					
Type	lm	W	K	Body colour	Item number
LED	150	4.8	2700	Matt chrome	20-870-10-06
				Matt white	20-870-10-21
				Matt black	20-870-10-23
LED	150	4.8	3000	Matt chrome	20-870-12-06
				Matt white	20-870-12-21
				Matt black	20-870-12-23
Adapter: Page 156					

PRODUCT					
Closed prismatic lens					
Type	lm	W	K	Body colour	Item number
LED	200	4.8	2700	Matt chrome	20-870-11-06
				Matt white	20-870-11-21
				Matt black	20-870-11-23
LED	200	4.8	3000	Matt chrome	20-870-13-06
				Matt white	20-870-13-21
				Matt black	20-870-13-23
Adapter: Page 156					



LED
INTEGRATED



FEATURES

Ambient light
Rotatable / swivelling

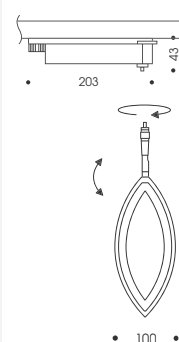
Lighting control and dimming
Non-dimmable

Output data
24 V DC / LED / 100-200 lm /
4.8 W / CRI >80
Energy efficiency class: A
Variants: 2700 K / 3000 K /
Open prismatic lens / closed
prismatic lens / translucent
prismatic lens

Material
Aluminium

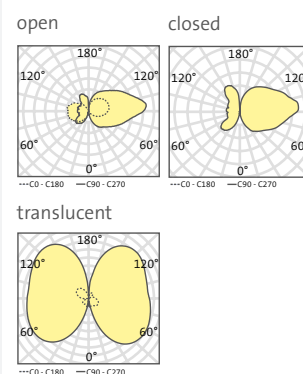
Weight
0.2 kg

TECHNICAL INFORMATION



Order
adapter
separately

Light distribution



PRODUCT

Translucent prismatic lens

Type	lm	W	K	Body colour	Item number
LED	100	4.8	2700	Matt chrome	20-870-18-06
				Matt white	20-870-18-21
				Matt black	20-870-18-23
LED	100	4.8	3000	Matt chrome	20-870-19-06
				Matt white	20-870-19-21
				Matt black	20-870-19-23

Adapter: Page 156

COLOURS





HIGH FLIGHT

HIGH FLIGHT

The HIGH FLIGHT luminaire is both a decorative lighting element and a room light with a fascinating light scene. The temperature-resistant dissipative film ensures soft and homogeneous general lighting. Today, HIGH FLIGHT is one of the best tested room lights for private and commercial lighting solutions.

Design: Ralf Keferstein



ECO
READY

FEATURES

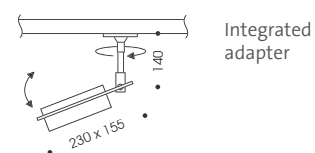
Ambient light
Rotatable / swivelling

Output data
230 V / B15d / QT 18 max. 100 W /
ECO ready
Energy efficiency class: A+ to D

Material
Aluminium, temperature-resistant
film

Weight
0.5 kg

TECHNICAL INFORMATION



PRODUCT

Socket	Suitable for	Adapter colour	Body colour	Item number
B15d	230 V halogen	Matt chrome	Matt chrome	32-969-10-06
		Matt white	Matt chrome	32-969-11-06

Lamps from page 418



DECENT

DECENT

LED

DECENT is a flat, subtle LED pendant luminaire in the form of a disc. The evenly flat light radiating downwards is perfectly suited to lighting dining tables or counters. DECENT is controlled touchlessly. A memory function stores the last brightness value selected.

If the luminaire is integrated into a DALI application then the digital lighting control replaces the individual lighting control via gesture.

Design: OLIGO



FEATURES

Pendant luminaire

Please provide information on the desired total length; length cannot be shortened at the installation site

Lighting control and dimming

Compatible with DALI components for integration into building automation systems: Page 156, 199

Gesture control

Memory function: Last light brightness value used is saved

Output data

24 V DC / LED / 750 lm / 8.7 W / CRI >80 / Energy efficiency class: A+
Variants: 2700 K / 3000 K

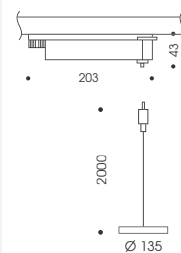
Material

Metal, acrylic glass

Weight

0.5 kg

TECHNICAL INFORMATION

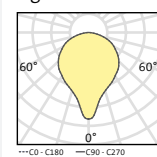


Order
adapter
separately

Special length

Suspension cable up to 5 m available upon request.

Light distribution



h (m)	Ø (m)	Lux
1	2.00	353
2	3.90	88
3	5.90	39

COLOURS



Chrome



Brushed
aluminium



Matt white

PRODUCT

Voltage	Type	lm	W	CRI	Angle	EEC	Colour	2700 K	3000 K
24 V DC	LED	750	8.7	>80	89°	A+	Chrome	G20-885-10-05	G20-885-11-05
							Brushed aluminium	G20-885-10-12	G20-885-11-12
							Matt white	G20-885-10-21	G20-885-11-21

Adapter: Page 156



A LITTLE BIT

A LITTLE BIT

LED

The A LITTLE BIT pendant luminaire offers a highly flexible lighting solution. The elegant luminaire head made from aluminium integrates a lens which can be focused between 20° and 60°. Elegant surfaces made from polished or matt aluminium round out the luminaire profile of A LITTLE BIT. For harmonious light distribution, the high quality lens body has been finished separately with a texture on the inside. The pendant luminaire design is also available as a spot-light for track installation.

Design: OLIGO



FEATURES

Pendant luminaire

Please provide information on the desired total length; length cannot be shortened at the installation site
Beam angle continuously adjustable between 20° and 60°

Lighting control and dimming

Compatible with DALI components for integration into building automation systems: Page 156, 199

Dimmer switch

Memory function: Last light brightness value used is saved

Output data

24 V DC / LED / 650 lm / 8 W /
20° – 60° / CRI >90 /
Energy efficiency class: A+
Variants: 2700 K / 3000 K

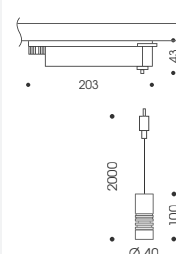
Material

Aluminium, glass lens

Weight

0.2 kg

TECHNICAL INFORMATION

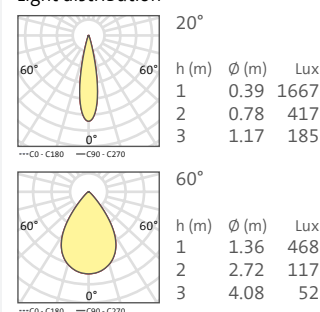


Order
adapter
separately

Special length

Suspension cable up to 5 m available upon request.

Light distribution



COLOURS



Chrome



Matt chrome

PRODUCT

Voltage	Type	lm	W	CRI	Angle	EEC	Colour	2700 K	3000 K
24 V DC	LED	650	8	>90	20–60°	A+	Chrome	20-898-20-05	20-898-30-05
							Matt chrome	20-898-20-06	20-898-30-06

Adapter: Page 156



GRACE

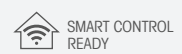
GRACE

LED novelty

The timeless GRACE luminaire is considered to be one of the classic decorative pendant luminaires worldwide. The luminaire is ideal for setting the scene at tables and counters. The two lenticular, satin finished shades ensure even, glare-free illumination.

If the luminaire is integrated into a DALI application then the digital lighting control replaces the individual lighting control via gesture.

Design: Ralf Keferstein



FEATURES

Pendant luminaire

Please provide information on the desired total length; length cannot be shortened at the installation site

Lighting control and dimming

Compatible with DALI components for integration into building automation systems: Page 156, 199

Gesture control

Memory function: Last light brightness value used is saved

Output data

24 V DC / LED / 2700 K / 1300 lm / 18 W / CRI >80
Energy efficiency class A+

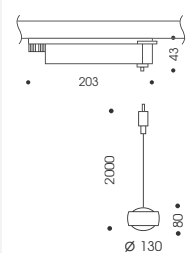
Material

Metal, glass

Weight

0.8 kg

TECHNICAL INFORMATION

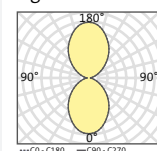


Order adapter separately

Special length

Suspension cable up to 5 m available upon request.

Light distribution



h (m)	Ø (m)	Lux
1	1.90	296
2	3.80	74
3	5.70	33

COLOURS



PRODUCT

Voltage	Type	lm	K	W	CRI	EEC	Head colour	Item number
24 V DC	LED	1300	2700	18	>80	A+	Chrome	G20-931-40-05
							Brushed aluminium	G20-931-40-12
							Bright white	G20-931-40-20
							Satin copper	G20-931-40-15
							Brazilian brown	G20-931-40-41
							Espresso	G20-931-40-48
							Purple grey	G20-931-40-49

Adapter: Page 156



GRACE

GRACE

G 9 socket

Timeless GRACE numbers among the classics of decorative pendant luminaires worldwide. It is ideal for setting the scene at tables or counters. The two lenticular, satin finished shades are surrounded by a luminaire head made from aluminium and ensure even, glare-free illumination. The surfaces in brushed aluminium completely round out the elegant GRACE profile.

Design: Ralf Keferstein

LED **ECO**
READY READY



FEATURES

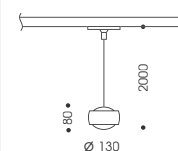
Pendant luminaire
Can be shortened

Output data
230 V / G 9 / QT 14 max. 75 W /
LED ready
Energy efficiency class: A++ to E

Material
Aluminium, satin finished glass
shades

Weight
0.8 kg

TECHNICAL INFORMATION



Integrated
adapter

Special length
Suspension cable up to 5 m available
upon request.

Installation
The lamp can be changed without
any tools.

PRODUCT

Socket	Suitable for	Adapter colour	Shade colour	Item number
G 9	Retrofit or halogen	Matt chrome	Brushed alum.	32-931-10-12
		Matt white	Brushed alum.	32-931-11-12

Lamps from page 417



PULL-IT

PLANUNG / FOTO: ART4LIGHT

PULL-IT 3

The attractive glass shade in combination with the distinctive metal cylinder characterises the PULL-IT 3 pendant luminaire and gives it a unique appearance. The hand-blown glass diffuser directs the light onto the table and at the same time provides pleasant general lighting in the room. In the model with transparent glass shade, the reflector insert directs all of the light onto the table top.

Design: Ralf Keferstein



LED **ECO**
READY READY

FEATURES

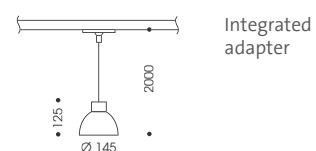
Pendant luminaire
Can be shortened

Output data
230 V / G 9 / QT 14 max. 60 W /
LED ready
Energy efficiency class: A++ to E

Material
Metal, hand-blown glass

Weight
0.8 kg

TECHNICAL INFORMATION



Special length
Suspension cable up to 5 m available
upon request.

COLOURS



Transparent



Matt white

PRODUCT

Socket	Suitable for	Adapter colour	Shade colour	Item number
G 9	Retrofit or halogen	Matt chrome	Transparent	32-952-10-06/01
		Matt chrome	Matt white	32-952-10-06/21

Lamps from page 417



DONATA

DONATA

A conically shaped shade made from satin finished glass defines the restrained design of the DONATA pendant luminaire. It reflects the light and ensures even lighting in the room. DONATA is suitable for the use of energy-efficient high-voltage halogen lamps.

Design: Ralf Keferstein

LED **ECO**
READY READY



FEATURES

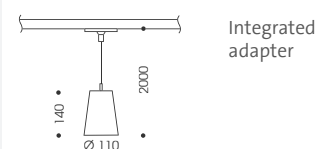
Pendant luminaire
Can be shortened

Output data
230 V / G 9 / QT-14 max. 75 W /
LED ready
Energy efficiency class: A++ to E

Material
Aluminium, borosilicate glass

Weight
0.5 kg

TECHNICAL INFORMATION



Special length
Suspension cable up to 5 m available
upon request.

COLOURS



Matt white



Champagne

PRODUCT

Socket	Suitable for	Adapter colour	Shade colour	Item number
G 9	Retrofit or halogen	Matt chrome	Matt white	32-909-20-06/21
			Champagne	32-909-20-06/42

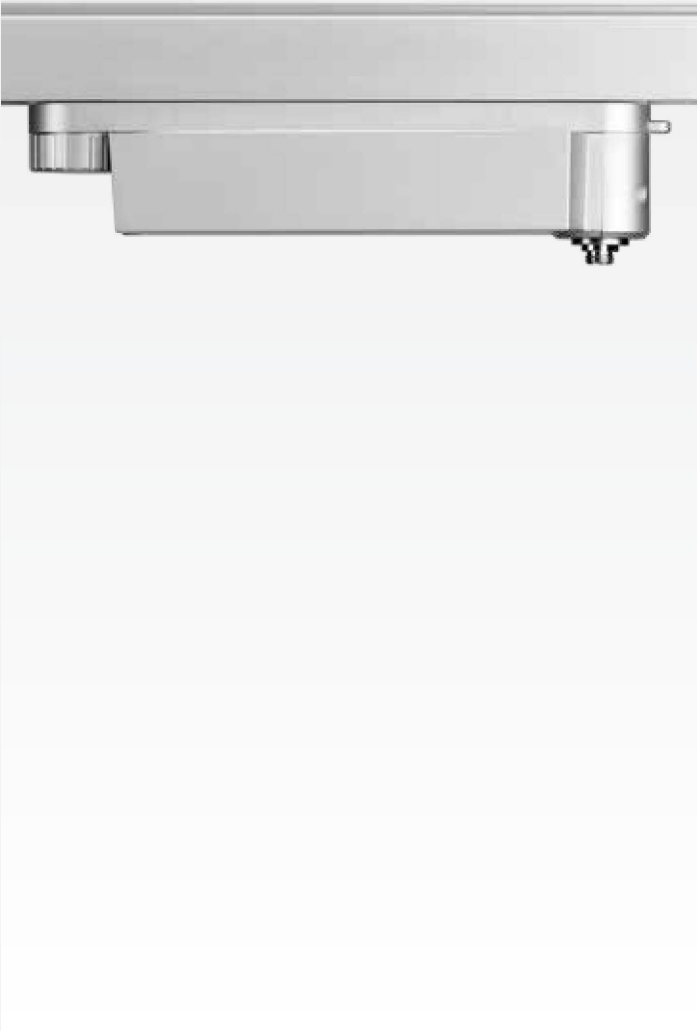
Lamps from page 417

LUMINAIRE ADAPTER

for SMART.POINT 24 V luminaires / DALI control

The luminaire adapter with integrated switching power supply allows for the integration of three-pole point luminaires from the OLIGO SMART.POINT system into the PHASE track system. In this manner, it is possible to benefit from the lighting technology benefits of the LED-based 24 volt technology in Eutrac track systems operated with mains voltage.

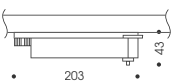
Additionally, an adapter with DALI converter is also available for integration into a centrally controllable lighting system.



FEATURES

- System adapter**
For integration of 24 V SMART.POINT luminaires into the PHASE track system and other Eutrac systems based on 230 V
- Lighting control and dimming**
Optionally with DALI converter for integration into building automation systems
- Output data**
230 V / 50-60 Hz / 24 V DC / 30 VA
Switching power supply
- Material**
Plastic
- Weight**
0.3 kg

TECHNICAL INFORMATION



EXAMPLES OF 24 V POINT LUMINAIRES, DC



NEWTON
Page 105



A LITTLE BIT MORE
Page 112




41 DEGREES
Page 116



DECENT
Page 120

PRODUCT		
24 V adapter, non-dimmable		
Type	Colour	Item number
30 VA	Matt chrome	33-624-10-06
	Matt white	33-624-10-21
	Matt black	33-624-10-23

PRODUCT		
24 V adapter with DALI converter		
Type	Colour	Item number
30 VA	Matt chrome	D33-624-10-06
	Matt white	D33-624-10-21
	Matt black	D33-624-10-23

PHASE-IN

Luminaire adapter for 12 V point luminaires

PHASE-IN is an unobtrusive adapter with integrated transformer and socket for 12 V PLUG-IN luminaires. With the adapter, all point luminaires can be integrated into the PHASE track system. On the one hand, this opens up additional design versatility, and on the other hand the lighting technology benefits of the 12 V luminaires can be used with the mains voltage operated PHASE.



FEATURES

System adapter

For integration of 12 V PLUG-IN luminaires into the PHASE track system and other Eutrac systems based on 230 V

Lighting control and dimming

Compatible with "Type C" dimmers

Output data

230 V / 50-60 Hz / 12 V / 20-60 VA
Electronic transformer
Permissible secondary side cable length <2 m

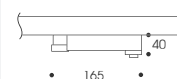
Material

Plastic

Weight

0.2 kg

TECHNICAL INFORMATION



EXAMPLES OF 12 V POINT LUMINAIRES, AC



LP 111
Page 337



CHARLES
Page 347



BALINO
Page 351



COCO
Page 363

PRODUCT

Type	Colour	Item number
20-60 VA	Matt chrome	33-621-10-06
	Matt white	33-621-10-21

PHASE

SYSTEM COMPONENTS

230 V / 1x max. 16 A / 400 V / 3x max. 16 A / protection class 1

The components in a track system vary according to the situation in which it is used and the customer’s individual requirements. A functional system always consists of certain base components.

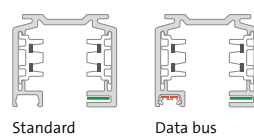
The following checklist facilitates checking the completeness of the system and serves as a guideline for choosing the right components.

Examples





PROFILE SECTION



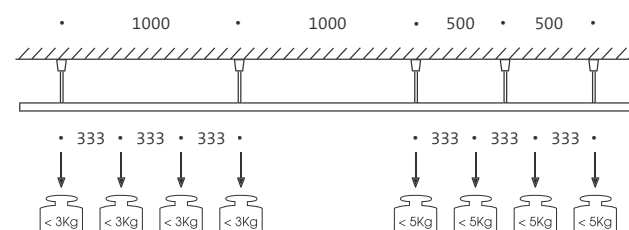
SYSTEM COLOURS

- ☐ Matt white
- ☐ Matt chrome

BASE COMPONENT CHECKLIST

- A Track
- B Support / suspension
- C Connector
- D Power supply
- E End caps

DISTANCES AND WEIGHTS



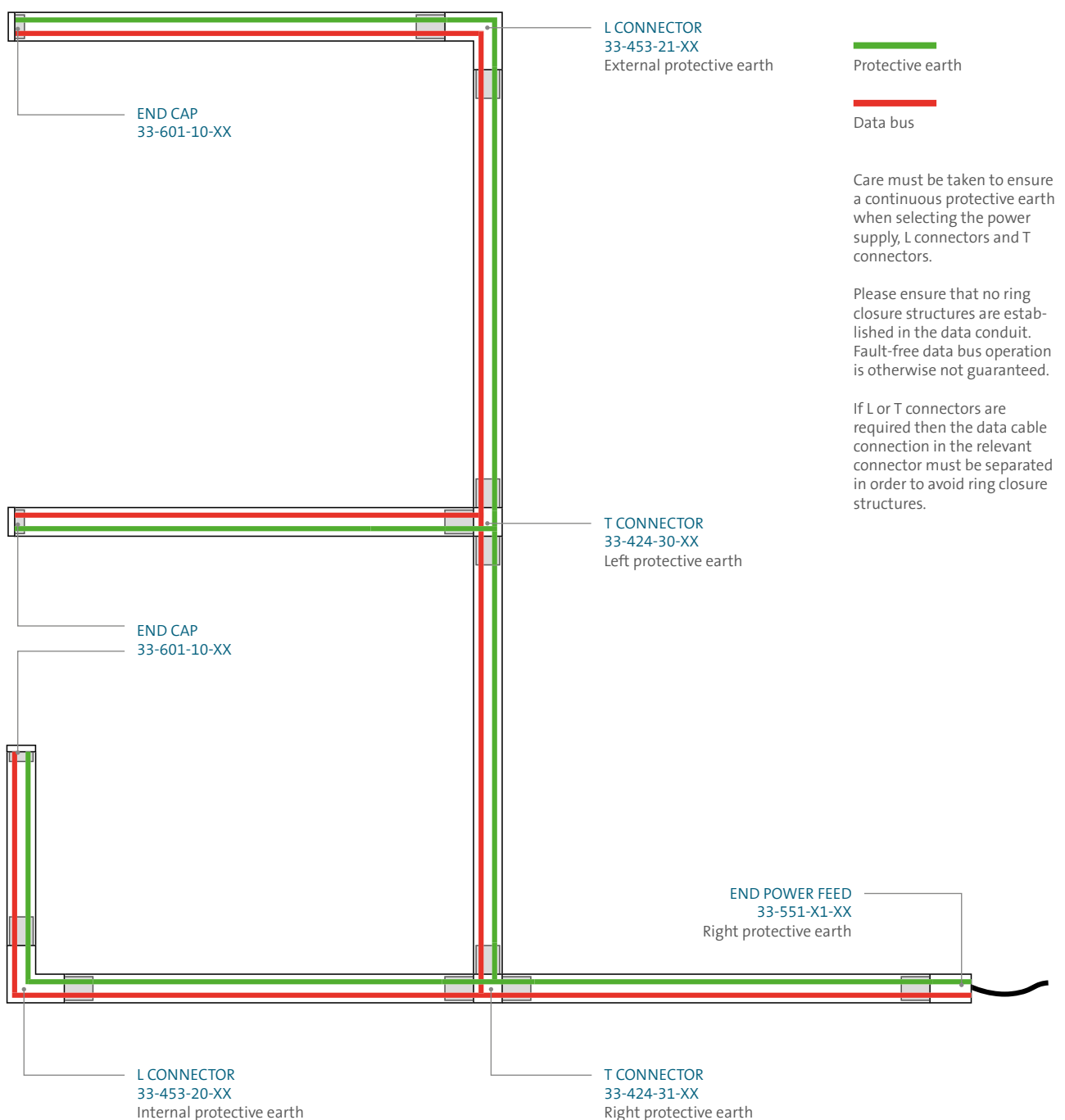


SENTRY

PHASE

INSTALLATION EXAMPLE WITH DATA BUS

Data cable for safety extra-low voltage only (SELV) ~ max: 50V 2A



1. TRACK



3-PHASE BUSBAR, 230 V

36 x 32 mm / 2.5 mm²
Can be shortened

More track colours upon request
When planning a DALI installation, please take care to ensure that the conductive components are continuously equipped with a data bus.

Material
Metal

Standard			Data bus		
Colour	L (mm)	Item number	Colour	L (mm)	Item number
Matt chrome	2000	33-201-10-06	Matt chrome	2000	33-201-11-06
Matt white	2000	33-201-10-21	Matt white	2000	33-201-11-21
Matt chrome	3000	33-201-20-06	Matt chrome	3000	33-201-21-06
Matt white	3000	33-201-20-21	Matt white	3000	33-201-21-21



2. SUPPORT



2.1 CEILING CLIP / CONNECTOR

100 x 36 x 19 mm
for surface mounted on the ceiling
or as a joint connector

Material
Metal

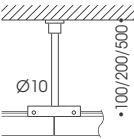


Colour	L (mm)	Item number
Matt chrome	10	33-301-10-06
Matt white	10	33-301-10-21

2.2 DISTANCE SUPPORT

100 x 36 x 19 mm / Ø 10 mm

Material
Metal



Colour	L (mm)	Item number
Matt chrome	100	33-301-11-06
Matt white	100	33-301-11-21
Matt chrome	200	33-301-12-06
Matt white	200	33-301-12-21
Matt chrome	500	33-301-13-06
Matt white	500	33-301-13-21

3. CORD SUSPENSION



CORD SUSPENSION

1500 mm
Can be shortened

Material
Metal

Colour	Item number
Matt chrome	33-331-10-06
Matt white	33-331-10-21

4. CONNECTOR



LONGITUDINAL CONNECTOR

62 x 25 mm

Internal, combine with joint connectors (2.1) for cord suspension or use I connectors (5.2)

Material
Metal

Standard	
Colour	Item number
Matt chrome	33-401-10-06
Matt white	33-401-10-21

Data bus	
Colour	Item number
Matt chrome	33-401-11-06
Matt white	33-401-11-21



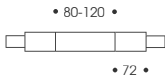
5. POWER SUPPLY WITH CONNECTOR FUNCTION



5.1 FLEX CONNECTOR

from 30° to 330°

Material
Plastic



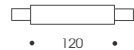
Standard	
Colour	Item number
Matt white	33-461-10-21
Matt black	33-461-10-23

Data bus	
Colour	Item number
Matt white	33-461-11-21
Matt black	33-461-11-23



5.2 I CONNECTOR

Material
Metal



Standard	
Colour	Item number
Matt chrome	33-404-10-06
Matt white	33-404-10-21

Data bus	
Colour	Item number
Matt chrome	33-404-12-06
Matt white	33-404-12-21

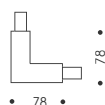


5. POWER SUPPLY WITH CONNECTOR FUNCTION



5.3 L CONNECTOR

Material
Metal



Standard, internal protective earth

Colour	Item number
Matt chrome	33-453-10-06
Matt white	33-453-10-21



Standard, internal protective earth

Colour	Item number
Matt chrome	33-453-11-06
Matt white	33-453-11-21

Data bus



Colour	Item number
Matt chrome	33-453-20-06 *
Matt white	33-453-20-21 *

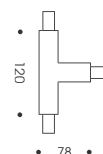
Data bus



Colour	Item number
Matt chrome	33-453-21-06
Matt white	33-453-21-21

5.4 T CONNECTOR

Material
Metal



Standard, left protective earth

Colour	Item number
Matt chrome	33-424-10-06
Matt white	33-424-10-21



Standard, right protective earth

Colour	Item number
Matt chrome	33-424-11-06
Matt white	33-424-11-21

Data bus



Colour	Item number
Matt chrome	33-424-30-06 *
Matt white	33-424-30-21 *

Data bus



Colour	Item number
Matt chrome	33-424-31-06
Matt white	33-424-31-21

6. COVER SECTION / END CAPS



Track cover section L = 1000 mm

Material
Plastic

Track cover section

Colour	Item number
Matt white	33-601-10-21

End caps

Colour	Item number
Matt chrome	33-601-10-06
Matt white	33-601-10-21

7. POWER SUPPLY WITHOUT CONNECTOR FUNCTION



7.1 END POWER SUPPLY

72 x 36 x 36 mm

Material
Metal



Standard, left protective earth

Colour	Item number
Matt chrome	33-551-10-06
Matt white	33-551-10-21

Data bus



Colour	Item number
Matt chrome	33-551-20-06 *
Matt white	33-551-20-21 *



Standard, right protective earth

Colour	Item number
Matt chrome	33-551-11-06
Matt white	33-551-11-21

Data bus



Colour	Item number
Matt chrome	33-551-21-06
Matt white	33-551-21-21

7.2 CENTRE POWER SUPPLY

127 x 36 mm

No connector function,
positionable in any loca-
tion without separation
of the busbar

Material
Metal

Standard

Colour	Item number
Matt chrome	33-551-12-06
Matt white	33-551-12-21

Data bus



Colour	Item number
Matt chrome	33-551-22-06
Matt white	33-551-22-21



CHECK-IN

230 VOLTS IN A COMPACT DESIGN.

CHECK-IN is a slim, single-phase 230 volt track system with which lighting concepts in straight lines, elegant curves or circles can be realised.

The patented and award-winning system consists of a high-strength aluminium profile and an extensive range of luminaires. With dimensions of 22 x 8 millimetres, it is among the smallest of its type in the world and stands out with clear, minimalist design language.

A variety of lighting technologies make CHECK-IN as usable in private living space as it is in the retail sector and property.

For individual curved track configurations and circles, the tracks are curved in the factory upon request by the customer.

Design: Ralf Keferstein

CONTENTS	PAGE
System luminaires	209
Adapter	260
System components	266
Lamps	414
Lamp accessories	420



Designpreis der
Bundesrepublik
Deutschland
Nominiert 2004



red dot design award

CHECK-IN

LUMINAIRE OVERVIEW

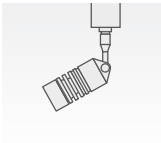
High voltage track system

LED LUMINAIRES

Spotlights



WALLEY
Page 209

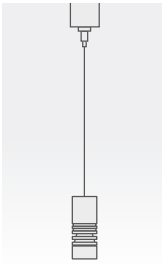


PLUG-IN
Adapter from page 261
Luminaires from page 330

Pendant luminaires



GRACE
Page 241



PLUG-IN
Adapter from page 261
Luminaires from page 349

LUMINAIRES WITH CONVENTIONAL FITTINGS

Spotlights



TWIN LANE
Page 211



LEVEL
Page 213



ICE
Page 215



GATE B SEVEN
Page 217



GATE B SEVEN GALERIE
Page 259



MATCH
Page 218



HIGH STREAM 16
Page 219



MX-HIGH
Page 221



GATE B FOUR
Page 223

LUMINAIRES WITH CONVENTIONAL FITTINGS

Spotlights / Ambient lights



GATE B EIGHT
Page 225



B TUBE
Page 227



HIGH FLIGHT
Page 229



JUST KIDDING
Page 231



HIGH FLIGHT GALERIE
Page 257



BALIBU
Page 233



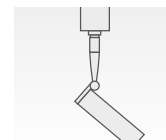
MAGIC
Page 235



MDM. FILOU
Page 235



B2B / 1
Page 237



PLUG-IN
Adapter from page 261
Luminaires from page 337

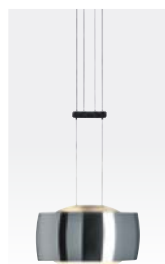
Pendant luminaires



BALINO
Page 239



GRACE
Page 243



GRACE
Page 245



PULL-IT 3
Page 247



PULL-IT
Page 249



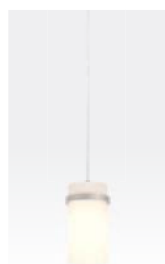
ECOLINO GRANDE
Page 250



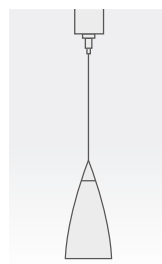
BALIBU BEACH
Page 251



DONATA
Page 253



BENE
Page 255

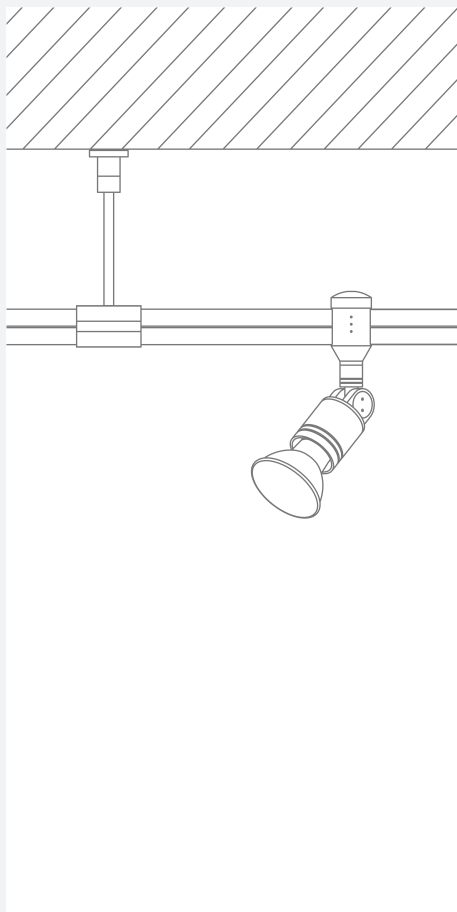


PLUG-IN
Adapter from page 261
Luminaires from page 351

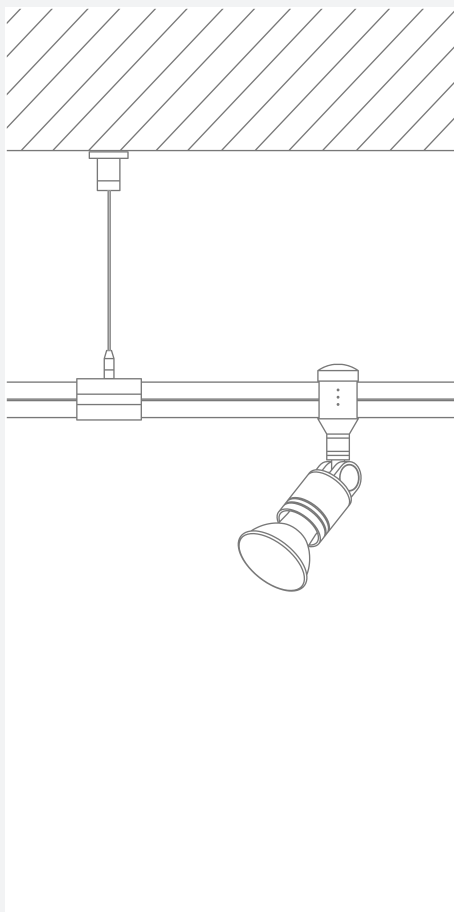
CHECK-IN

SIMPLY INSTALL

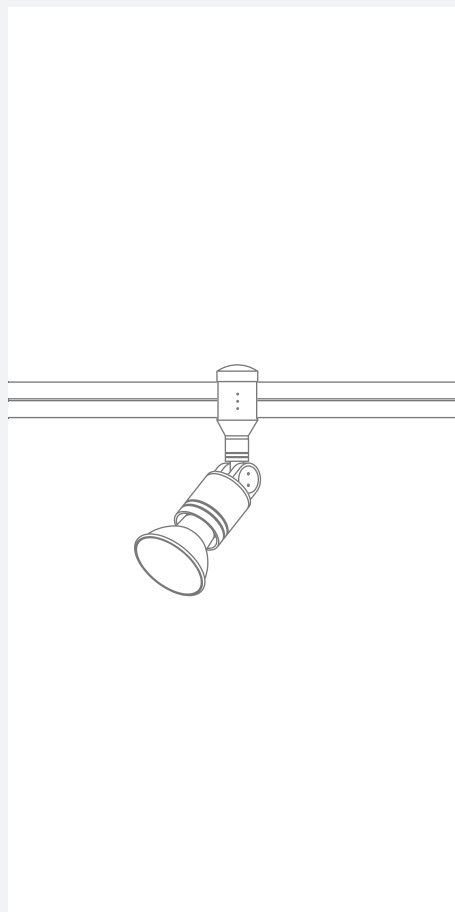
INSTALLATION
with supports



INSTALLATION
suspended



ADAPTER
Integrated



INSTALLATION OPTIONS

CHECK-IN is easy to install. The tracks and luminaires can be installed almost entirely without tools with very little effort. The tracks can easily be shortened on site.

An extensive range of distance supports and cable suspensions allows for different forms of ceiling installation.

Creative solutions can likewise be realised for shelf and image lighting using a wall support and associated gallery spotlights.

EXPANDABLE AT ANY TIME

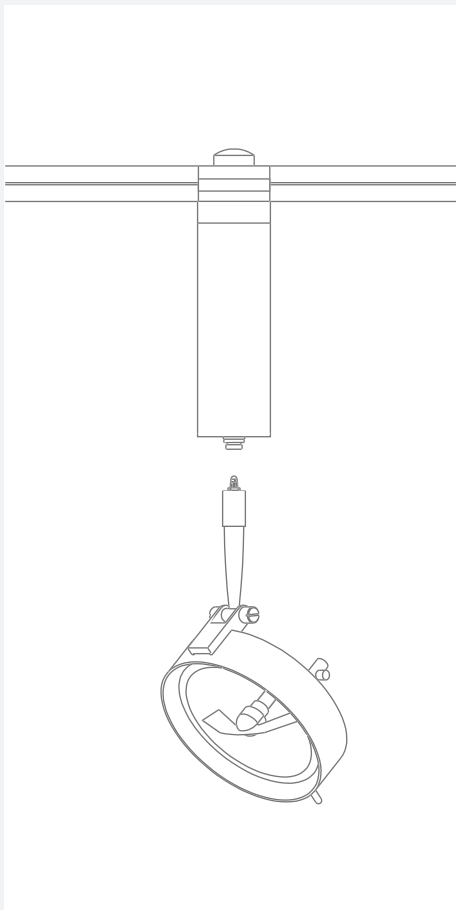
CHECK-IN system luminaires are equipped with an adapter in the factory.

The track system can be flexibly expanded, and at the same time the choice of luminaires is not limited to the CHECK-IN system range.

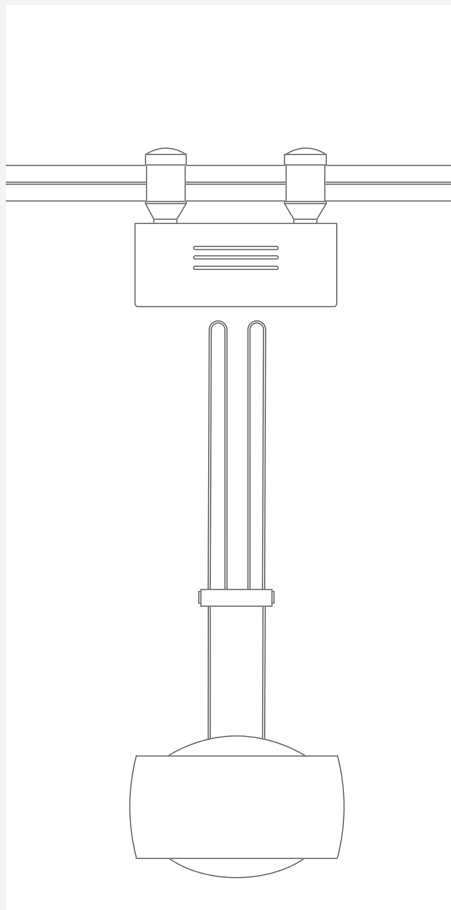
CHECK-IN

COMBINING AND EXPANDING

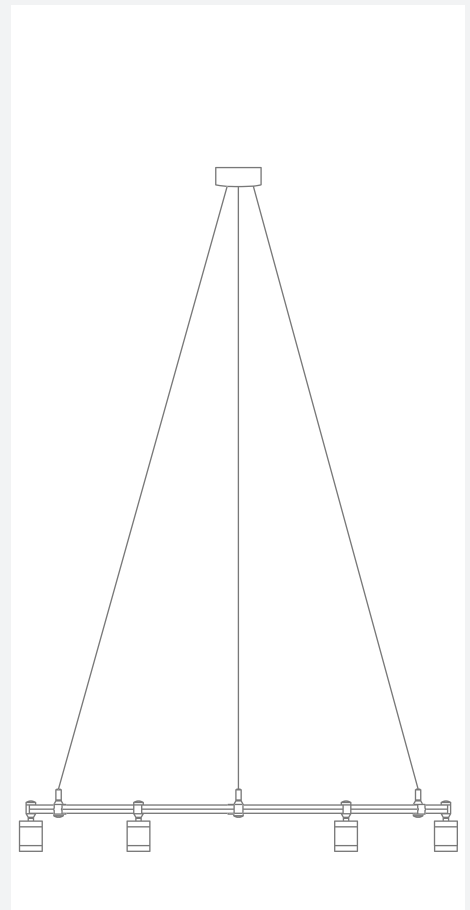
ADAPTER
12 V plug connection system
PLUG-IN



ADAPTER
12 V pendant luminaire
HEIGHT ADJUSTMENT



LIGHT OBJECT
CHECK-IN track circle
BEAUTY FREE



With the CONTACT TUBE adapter, all 12 V PLUG-IN luminaires can be integrated into the CHECK-IN track system. On the one hand, this opens up additional design versatility, and on the other the lighting technology benefits of the 12 V lamps can be used with the mains voltage operated CHECK-IN.

As well as the version with electrical transformer, an adapter with a switching power supply opens up the possibility of integrating LED luminaires into the track system.

For individual expansion, height adjustable 12 V pendant luminaires can be integrated into the system with no problem using the KEEP ON ROLLING adapter.

Owing to their delicate dimensions, CHECK-IN tracks can be bent into individual curves or circles.

BEAUTY FREE track circles with varying diameters can be fabricated in single or multiple suspension and represent a lighting solution which is as subtle as it is solemn.



WALLEY

LED novelty

A minimalist design and structure and impressive lighting performance make this spotlight truly special. The two spotlight heads in the 2-flame variant can be pointed towards each other, which means two different areas can be illuminated simultaneously from one mounting point. The luminaires can be dimmed externally using many of the latest phase-cut dimmers.

LED
INTEGRIERT



FEATURES

Spotlight
Rotatable / separately swiveling heads

Lighting control and dimming
Externally dimmable with phase-cut dimmers

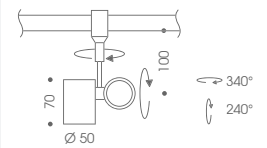
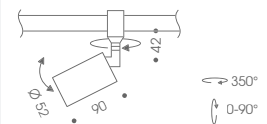
Output data
230 V / 50/60 Hz / LED / 2700 K /
CRI >90 / 30°
Energieeffizienzklasse A+

Variants:
1x 530 lm / 8 W
2x 530 lm / 16 W

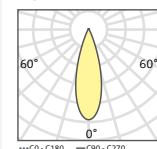
Material
Metal

Weight
0.3 kg / 0.5 kg

TECHNICAL INFORMATION



Light distribution



h (m)	Ø (m)	Lux
1	0.55	1340
2	1.10	335
3	1.70	149

DETAIL VIEW



PRODUCT

Voltage	Type	lm	K	W	CRI	Angle	EEC	Colour	Item number
230 V	LED	1x 530	2700	8	>90	30°	A+	Matt chrome	30-858-10-06
		2x 530	2700	16	>90	30°	A+	Matt chrome	30-858-20-06



TWIN LANE

TWIN LANE

Circular shapes and a symmetrical base structure define the design of the TWIN LANE spotlight. The spotlight heads are gimbal-mounted so that almost any point in the room can be lit. Alongside the modest shape, the luminaire offers high operational reliability since the thermal separation between the luminaire head and the upstream transformer has been taken into account in a separate housing. TWIN LANE is suitable for the use of LED retrofits and fulfils the current requirements for an energy-saving lighting solution.

Design: OLIGO

LED
READY



Retrofit lamp

FEATURES

Spotlight
Rotatable / gimbal mounted heads

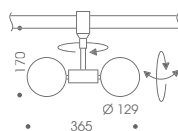
Output data
230 V / 50-60 Hz / 12 V / G 53 /
QR-LP 111 / max. 2x 35 W
Energy efficiency class: A to C

230 V / GZ 10 / QPAR 111 /
max. 2x 75 W
Energy efficiency class: A++ to E

Material
Aluminium

Weight
0.8 kg

TECHNICAL INFORMATION



COLOURS



Chrome

Matt chrome

PRODUCT

Socket	Suitable for	Colour	Item number
G 53	12 V halogen	Chrome	30-866-20-05
		Matt chrome	30-866-20-06
GZ 10	230 V retrofit / 230 V halogen	Chrome	30-866-10-05
		Matt chrome	30-866-10-06

Lamps from page 415



LEVEL

KULTURZENTRUM, SEEON
PLANUNG: PRYM, MÜNCHEN

LEVEL

Balanced proportions and gimbal-mounted luminaire heads characterise the design of the LEVEL spotlights. They can move freely and can be positioned individually. The spotlight is suitable for the use of LED retrofits and fulfils the current requirements for an energy-saving lighting solution.

Design: Ralf Keferstein

LED
READY



Retrofit lamp

FEATURES

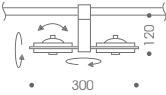
Spotlight
Rotatable / gimbal mounted heads

Output data
230 V / GZ 10 / QPAR 111 /
max. 2x 75 W
Energy efficiency class: A++ to E


Material
Aluminium

Weight
0.5 kg


TECHNICAL INFORMATION



COLOURS



Chrome



Matt chrome

PRODUCT

Socket	Suitable for	Colour	Item number
GZ 10	Retrofit or halogen	Chrome	30-905-21-05
		Matt chrome	30-905-21-06

Lamps from page 417



ICE

ICE

The rotatable and swivelling luminaire head of the ICE spotlight allows for precise lighting of a wide variety of objects and surfaces, even from large distances. ICE is suitable for the use of halogen and LED retrofit lamps and fulfils the current requirements for an energy-saving lighting solution.

Design: Ralf Keferstein



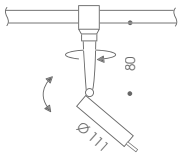
Retrofit lamp

LED
READY

FEATURES

- Spotlight**
Rotatable / swivelling
- Output data**
230 V / GZ 10 / QPAR 111 max. 75 W
Energy efficiency class: A++ to E
- Material**
Aluminium
- Weight**
0.4 kg

TECHNICAL INFORMATION



COLOURS



Chrome



Matt chrome

PRODUCT

Socket	Suitable for	Body colour	Item number
GZ 10	Retrofit or halogen	Chrome	30-916-10-05
		Matt chrome	30-916-10-06

Lamps from page 417



GATE B SEVEN

GATE B SEVEN

Compact dimensions in a technical and elegant design have made GATE B SEVEN a timeless classic in private and commercial halogen lighting in many countries. The spotlight is also suitable for LED retrofits. The shape and light scene can be varied using decorative rings and other accessories.

Design: Ralf Keferstein

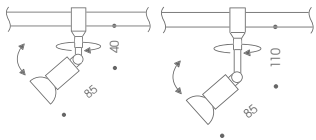


LED
READY

FEATURES

- Spotlight**
Rotatable / swivelling
40 or 110 mm rod
- Output data**
230 V / GZ 10 / QPAR 51/64
max. 50/75 W
Energy efficiency class: A++ to E
- Material**
Aluminium
- Weight**
0.2 kg

TECHNICAL INFORMATION



ACCESSORIES



PRODUCT

Socket	Suitable for	Length (mm)	Body colour	Item number
GZ 10	Retrofit or halogen	40	Chrome	30-973-10-05
			Matt chrome	30-973-10-06
		110	Chrome	30-973-11-05
			Matt chrome	30-973-11-06

Lamps from page 417, Accessories from page 420

MATCH

The timeless design of MATCH is optimised for the use of LED retrofits. Thanks to the conical shape of the luminaire head, these lamps can also be harmoniously integrated into the spotlight. The appearance and light scene of the spotlight can be varied using decorative rings, available separately.

Design: OLIGO



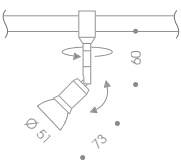
Retrofit lamp

LED
READY

FEATURES

- Spotlight
Rotatable / swivelling
- Output data
230 V / GZ 10 / QPAR 51 max. 50 W
Energy efficiency class: A++ to E
- Material
Aluminium
- Weight
0.2 kg

TECHNICAL INFORMATION



COLOURS AND ACCESSORIES



Chrome



Matt chrome



Decorative ring R 2

PRODUCT

Socket	Suitable for	Body colour	Item number
GZ 10	Retrofit or halogen	Chrome	30-892-10-05
		Matt chrome	30-892-10-06

Lamps from page 417, Accessories from page 420

HIGH STREAM 16

The design of the HIGH STREAM 16 looks both dynamic and elegant. The elaborately manufactured luminaire head made from aluminium surrounds the halogen lamp and gives the luminaire an aesthetic design. Fine surfaces in bright chrome or matt chrome round out the optical merits of HIGH STREAM 16. There is a subtle spike on the underside which can be used to adjust the luminaire, even during use.

Design: Ralf Keferstein



LED
READY

FEATURES

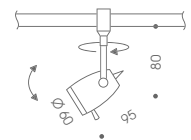
Spotlight
Rotatable / swivelling

Output data
230 V / GU 10 / QPAR 51 max. 50 W
“Cool beam” lamps not permissible
Energy efficiency class: A++ to E

Material
Aluminium

Weight
0.4 kg

TECHNICAL INFORMATION



Retrofit lamp
Lamp length of ≤52 mm recommended

COLOURS



Chrome



Matt chrome

PRODUCT

Socket	Suitable for	Colour	Item number
GU 10	Retrofit or halogen	Chrome	30-968-10-05
		Matt chrome	30-968-11-06

Lamps from page 417



MX-HIGH

MX-HIGH

The rotatable and swivelling head of the MX-HIGH spotlight is characterised by a stainless steel bracket on the back. While the slim body remains visually inconspicuous, it provides effective accent lighting for materials and objects. MX-HIGH is suitable for the use of LED retrofits and fulfils the current requirements for an energy-saving lighting solution. The appearance and light scene can be varied using decorative rings and other accessories, available separately.

Design: Ralf Keferstein

LED
READY



FEATURES

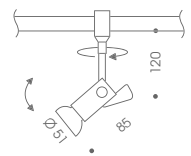
Spotlight
Rotatable / swivelling

Output data
230 V / GZ 10 / QPAR 51 max. 50 W
Energy efficiency class: A++ to E

Material
Aluminium

Weight
0.4 kg

TECHNICAL INFORMATION



ACCESSORIES



Shade Ø 100 mm



Decorative ring R 2



Shade S 2

PRODUCT

Luminiare

Socket	Suitable for	Body colour	Item number
GZ 10	Retrofit or halogen	Matt chrome	30-958-10-06

Lamps from page 417, Accessories from page 420

PRODUCT

Accessory for halogen lamps: Shade Ø 100 mm

Material	Colour	Item number
Metal	Matt chrome	62-214-10-06
Glass	Matt white	62-214-10-21



GATE B FOUR

GATE B FOUR

Whether with or without glass accessories – the GATE B FOUR spotlight cuts a fine figure in any model. Three different, hand-blown glasses are available, among other things, shaping the light scene and design. The variant with the GZ 10 setting is also suitable for the use of LED retrofits. The appearance and light scene can be varied using decorative rings and other accessories.

Design: Ralf Keferstein



LED READY
ECO READY

FEATURES

Spotlight
Rotatable / swivelling

Output data
230 V / G 9 / QT 14 max. 75 W /
ECO ready
Energy efficiency class: A++ to E

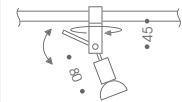
230 V / GZ 10 / QPAR 51/64
max. 50/75 W / LED ready
Energy efficiency class: A++ to E

Material
Aluminium, hand-blown glass

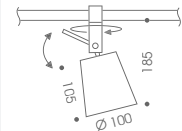
Weight
Luminaire: 0.2 kg
Glass shade: 0.5 kg

TECHNICAL INFORMATION

Without accessory (GZ 10 only)



With glass shade



ACCESSORIES



Matt white
glass shade

Champagne
glass shade

Transparent
glass shade

PRODUCT

Luminaire

Socket	Suitable for	Body colour	Item number
G 9	Retrofit or halogen	Chrome	30-904-20-05
		Matt chrome	30-904-20-06
GZ 10	Retrofit or halogen	Chrome	30-904-10-05
		Matt chrome	30-904-10-06

Lamps from page 417, Accessories from page 420

PRODUCT

Accessory: Satin finished glass shade, G 9 socket compatible

Colour	Item number
Matt white	94-904-10-21
Champagne	94-904-10-42

Accessory: Transparent glass shade, GZ 10 socket compatible

Colour	Item number
Transparent	94-904-10-01



GATE B EIGHT

MUSTERHAUS STREIF

GATE B EIGHT

The GATE B EIGHT spotlight is particularly suitable for use in large volume light sculptures, such as free floating circles or squares, for example. The cylindrical luminaire head made from aluminium provides selective downward lighting. A smaller proportion of light shines upwards and traces a soft point of light on the ceiling. GATE B EIGHT is suitable for the use of LED retrofits.

Design: Ralf Keferstein

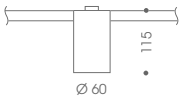


LED
READY

FEATURES

- Spotlight**
- Output data**
230 V / GZ 10 / QPAR 51 max. 50 W
Energy efficiency class: A++ to E
- Material**
Aluminium
- Weight**
0.3 kg

TECHNICAL INFORMATION



COLOURS



PRODUCT

Socket	Suitable for	Body colour	Item number
GZ 10	Retrofit or halogen	Chrome	30-902-10-05
		Matt chrome	30-902-10-06

Lamps from page 417



B TUBE / BEAUTY FREE

B TUBE

The cylinder-shaped glass shade of B TUBE is circumferentially satin finished in the middle. In this area, the lamp is noticeably diffuse while it can be seen clearly in the lower section of the lampshade. The behaviour of the B TUBE light effect is based on this. The spotlight is suitable for the use of LED retrofits and fulfils the current requirements for an energy-saving lighting solution.

Design: Ralf Keferstein



LED
READY

FEATURES

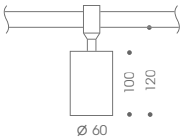
Spotlight

Output data
230 V / GZ 10 / QPAR 51 max. 50 W
Energy efficiency class: A++ to E

Material
Aluminium, partial satin finished
borosilicate glass

Weight
0.3 kg

TECHNICAL INFORMATION



PRODUCT

Socket	Suitable for	Body colour	Item number
GZ 10	Retrofit or halogen	Chrome	30-993-10-05
		Matt chrome	30-993-10-06

Lamps from page 417



HIGH FLIGHT

MUSEUM, BÜHL

HIGH FLIGHT

The HIGH FLIGHT luminaire is both a decorative lighting element and a room light with a fascinating light scene. The temperature-resistant dissipative film ensures soft and homogeneous general lighting. Different rod lengths allow for variable distances from the ceiling. Today, HIGH FLIGHT is one of the best tried and tested room lights for private and commercial lighting solutions, and is also available as a gallery spotlight.

Design: Ralf Keferstein



LED READY
ECO READY

FEATURES

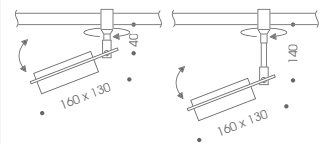
Ambient light
Rotatable / swivelling
40 or 140 mm rod

Output data
230 V / G 9 / QT 14 max. 75 W
Energy efficiency class: A++ to E

Material
Aluminium, temperature-resistant film

Weight
0.3 kg

TECHNICAL INFORMATION



MODELS



40 mm rod

140 mm rod

PRODUCT

40 mm rod

Socket	Suitable for	Body colour	Adapter colour	Item number
G 9	Retrofit or halogen	Matt chrome	Chrome	30-969-10-06
		Matt chrome	Matt chrome	30-969-11-06

Lamps from page 417

PRODUCT

140 mm rod

Socket	Suitable for	Body colour	Adapter colour	Item number
G 9	Retrofit or halogen	Matt chrome	Chrome	30-969-20-06
		Matt chrome	Matt chrome	30-969-21-06

Lamps from page 417



JUST KIDDING / LEVEL

JUST KIDDING

Satin finished glass shades enclose the lamp in the JUST KIDDING room light. It provides the room with warm, undirected light and creates a subtle light effect on the ceiling. The direction of JUST KIDDING can be changed along the longitudinal axis as desired.

Design: Ralf Keferstein

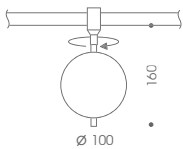


LED **ECO**
READY READY

FEATURES

- Ambient light
Rotatable
- Output data
230 V / G 9 / QT 14 max. 40 W
Energy efficiency class: A++ to E
- Material
Metal, satin-finished glass shade
- Weight
0.4 kg

TECHNICAL INFORMATION



Installation
The lamp can be changed without any tools.

PRODUCT

Socket	Suitable for	Adapter colour	Shade colour	Item number
G 9	Retrofit or halogen	Matt chrome	Satin finish	30-964-10-06/21

Lamps from page 417



BALIBU / GATE B SEVEN

BALIBU

The classically shaped shade made from crystal glass gives the BALIBU room luminaire a light and timeless appearance. There are four glass colours available to choose from, which shape the light scene of the luminaire. With its possibility of creating effective atmospheres, the BALIBU often plays to its strengths in the property environment of hotels, restaurants or businesses. The variant with the GU 10 setting is also suitable for the use of LED retrofits. The luminaire design is also available as the BALIBU BEACH pendant luminaire.

Design: Ralf Keferstein

LED **ECO**
READY READY



FEATURES

Ambient light

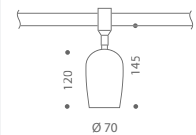
Output data
230 V / G 9 / QT 14 max. 40 W
Energy efficiency class: A++ to E

230 V / GU 10 / QPAR 51 max. 50 W
Energy efficiency class: A++ to D

Material
Aluminium, hand-blown crystal glass, white interior, matt opalised or clear, partial satin finished exterior

Weight
0.3 kg

TECHNICAL INFORMATION



Installation
The luminaire must be installed pointing downwards.

COLOURS



Matt white

Matt pineapple

Matt melon

Partial satin finish

PRODUCT

Socket	Suitable for	Adapter colour	Shade colour	Item number
G 9	Retrofit or halogen	Chrome	Matt white	30-991-10-05/21
		Matt chrome	Matt white	30-991-10-06/21
		Matt chrome	Matt pineapple	30-991-10-06/32
		Matt chrome	Matt melon	30-991-10-06/28

Lamps from page 417

PRODUCT

Socket	Suitable for	Adapter colour	Shade colour	Item number
GU 10	Retrofit or halogen	Chrome	Partial satin finish	30-991-11-05/02
		Matt chrome	Partial satin finish	30-991-11-06/02

Lamps from page 417



MAGIC / B TUBE / GATE B SEVEN

FOTO: FINGERHAUS-MUSTERHAUS MEDLEY, KASSEL

MAGIC

The white satin finished quality glass of the MAGIC luminaire ensures a homogeneous and very soft light scene. When arranged in multiples on a track system, MAGIC can be used to design fascinating lighting chains. MAGIC also shows its extraordinary lighting effect on large light objects such as circles or squares.

Design: Ralf Keferstein

LED
READY

ECO
READY



FEATURES

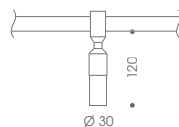
Ambient light

Output data
230 V / G 9 / QT 14 max. 40 W
Energy efficiency class: A++ to E

Material
Metal, borosilicate glass, satin finished

Weight
0.2 kg

TECHNICAL INFORMATION



MADEMOISELLE FILOU

The classic MADEMOISELLE FILOU is a particular eye catcher in the OLIGO range of luminaires. The extravagant design is defined by a standard tea strainer which, in combination with freely movable wings, reminds you of the eyes and proboscis of a fly. Thanks to the flexible swan neck, FILOU can be adjusted in almost any direction.

Design: Sigi Bußinger

LED
READY



FEATURES

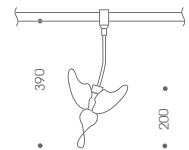
Ambient light
Flexibly swivelling

Output data
230 V / E 14 / D 45-CS max. 25 W
Energy efficiency class: A++ to E

Material
Metal, plastic, temperature-resistant structural fabric

Weight
0.3 kg

TECHNICAL INFORMATION



PRODUCT

Socket	Suitable for	Adapter colour	Shade colour	Item number
G 9	Retrofit or halogen	Matt chrome	Satin finish	30-961-10-06/21

Lamps from page 417

PRODUCT

Socket	Suitable for	Adapter colour	Body colour	Item number
E 14	Retrofit or conventional	Matt chrome	Matt black	30-980-10-23

Lamps from page 417



B2B / 1

B2B / 1

The B2B / 1 workplace luminaire is used to realise attractive general lighting. The prismatic synthetic glass provides a soft, but at the same time low-loss room light. A partial opening at the top allows around 20% of the light, along with the direct light content, to shine indirectly across the ceiling.

Design: Ralf Keferstein



ESL
READY

FEATURES

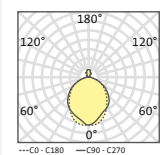
Ambient light
Workplace luminaire

Output data
230 V / 50-60 Hz / G 5 / T 16 / 840 /
39 W bzw. 54 W
Energy efficiency class: A+ to B

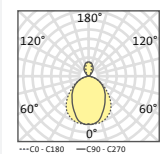
Material
Aluminium, acrylic glass

Weight
39 W: 2,5 kg
54 W: 3,0 kg

LIGHT DISTRIBUTION



39 W			
h (m)	Ø (m)	Lux	
1	1,87	796	
2	3,73	199	
3	5,60	88	



54 W			
h (m)	Ø (m)	Lux	
1	1,87	1143	
2	3,73	286	
3	5,60	127	

TECHNICAL INFORMATION

39 W version



54 W version

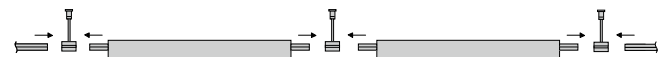


PRODUCT

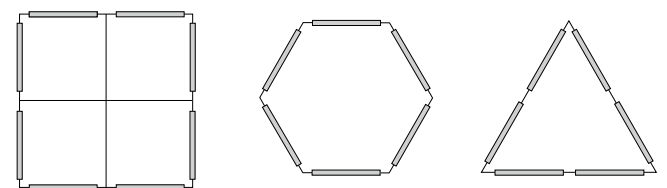
Socket	Suitable for	K	W	Body colour	Item number
G 5	T 16	4000	39	Matt chrome	30-922-10-06
			54	Matt chrome	30-922-11-06

Including 39 or 54 W lamp / 4000 K / EEC: A+ / non-dimmable

INSTALLATION



Typical applications





BALINO

BALINO

Hand-blown crystal glass forms the luminaire body of the small, spherical BALINO pendant luminaire. In the satin finish and orange models, the glass body is solidly coloured. For the tobacco and gold colours, the exclusive finishing with a crystal ice pattern on the interior of the lampshade creates a unique texture. Brilliant illumination highlights the charming lighting effect of this high quality pendant luminaire, which is available with a variety of shades.

Design: OLIGO

LED READY
ECO READY



FEATURES

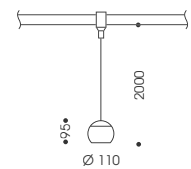
Pendant luminaire
Can be shortened

Output data
230 V / G 9 / QT 14 max. 40 W
Energy efficiency class: A++ to E

Material
Metal, glass

Weight
0.7 kg

TECHNICAL INFORMATION



Special length
Suspension cable up to 5 m available upon request.

COLOURS



Chrome /
Satin finish



Chrome /
Bright orange



Chrome /
Bright tobacco



Chrome /
Bright gold



Matt chrome /
Satin finish



Matt chrome /
Bright orange



Matt chrome /
Bright tobacco



Matt chrome /
Bright gold

PRODUCT

Chrome track adapter

Socket	Suitable for	Body colour	Shade colour	Item number
G 9	Retrofit or halogen	Chrome	Satin finish	30-880-10-05/03
		Chrome	Bright orange	30-880-10-05/29
		Chrome	Bright tobacco	30-880-10-05/40
		Chrome	Bright gold	30-880-10-05/08

Lamps from page 417

PRODUCT

Matt chrome track adapter

Socket	Suitable for	Body colour	Shade colour	Item number
G 9	Retrofit or halogen	Matt chrome	Satin finish	30-880-11-06/03
		Matt chrome	Bright orange	30-880-11-06/29
		Matt chrome	Bright tobacco	30-880-11-06/40
		Matt chrome	Bright gold	30-880-11-06/08

Lamps from page 417



GRACE

GRACE

LED novelty

The timeless GRACE luminaire is considered to be one of the classic decorative pendant luminaires worldwide. The luminaire is ideal for setting the scene at tables and counters. The two lenticular, satin finished shades ensure even, glare-free illumination. The luminaires can be dimmed externally using many of the latest phase-cut dimmers.

Design: Ralf Keferstein

LED
INTEGRIERT



FEATURES

Pendant luminaire
Can be shortened

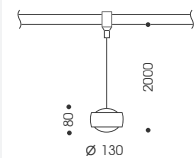
Lighting control and dimming
Externally dimmable with phase-cut dimmers

Output data
230 V / 50-60 Hz / 2700 K /
1020 lm / 20 W / CRI >90
Energy efficiency class A+

Material
Metal, glass

Weight
1.1 kg

TECHNICAL INFORMATION



Special length
Suspension cable up to 5 m available upon request.

PRODUCT

Voltage	Type	lm	K	W	CRI	EEC		
							Chrome adapter	Matt chrome adapter
230 V	LED	1020	2700	20	>90	A+	Item number	Item number
							Chrome	30-931-40-05
							Brushed aluminium	30-931-40-12
							Bright white	30-931-40-20
							Satin copper	30-931-41-15
							Brazilian brown	30-931-41-41
							Espresso	30-931-41-48
							Purple grey	30-931-41-49

COLOURS





GRACE

GRACE

G 9 socket

Timeless GRACE numbers among the classics of decorative pendant luminaires worldwide. It is ideal for setting the scene at tables or counters. The two lenticular, satin finished shades are surrounded by a luminaire head made from aluminium and ensure even, glare-free illumination. Elegant surfaces in bright chrome or brushed aluminium round out the GRACE profile. The pendant luminaire is also available as a height adjustable model.

Design: Ralf Keferstein



LED **ECO**
READY READY

FEATURES

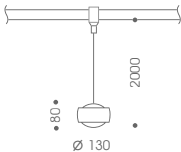
Pendant luminaire
Can be shortened

Output data
230 V / G 9 / QT 14 max. 75 W
Energy efficiency class: A++ to E

Material
Aluminium, satin finished glass shades

Weight
0.8 kg


TECHNICAL INFORMATION



Special length
Suspension cable up to 5 m available upon request.

Installation
The lamp can be changed without any tools.

COLOURS



Chrome

Brushed aluminium

PRODUCT			
Socket	Suitable for	Head colour	Item number
G 9	Retrofit or halogen	Chrome	30-931-10-05
		Brushed aluminium	30-931-10-12
Lamps from page 417			



GRACE

GRACE

Height adjustable

Timeless GRACE numbers among the classics of decorative pendant luminaires worldwide. The two lenticular, satin finished shades are surrounded by a luminaire head made from aluminium and ensure even, glare-free illumination. The adjustable stay subtly integrated into the suspension allows for continuous height adjustment of the luminaire. The low-voltage luminaire is integrated into the track system using the KEEP ON ROLLING adapter.

Design: Ralf Keferstein

IRC
READY



FEATURES

Pendant luminaire
Height adjustable
Can be shortened

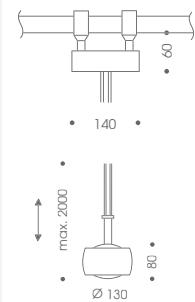
Output data
12 V / GY 6.35 / QT-LP 12 max. 50 W
Energy efficiency class: A++ to C

Material
Aluminium, satin finished glass shades

Weight
0.6 kg

TECHNICAL INFORMATION

Order adapter separately



Installation
The lamp can be changed without any tools.

COLOURS



Chrome



Brushed aluminium

PRODUCT

Socket	Suitable for	Shade colour	Item number
GY 6.35	12 V halogen	Chrome	10-931-10-05
		Brushed aluminium	10-931-10-12

Adapter from page 260, Lamps from page 415



PULL-IT 3

MUSTERHAUS STOMMEL

PULL-IT 3

An attractive glass shade in combination with a distinctive metal cylinder characterises the PULL-IT 3 pendant luminaire and gives it a unique appearance. The hand-blown glass diffuser directs the light onto the table and at the same time provides pleasant general lighting in the room. The pendant luminaire is also available as the height adjustable PULL-IT model.

Design: Ralf Keferstein

LED **ECO**
READY READY



FEATURES

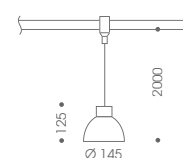
Pendant luminaire
Can be shortened

Output data
230 V / G 9 / QT 14 max. 60 W
Energy efficiency class: A++ to E

Material
Metal, hand-blown glass

Weight
0.8 kg

TECHNICAL INFORMATION



Special length
Suspension cable up to 5 m available upon request.

COLOURS



Transparent



Matt white

PRODUCT

Socket	Suitable for	Shade colour	Item number
G 9	Retrofit or halogen	Transparent	30-952-10-06/01
		Matt white	30-952-10-06/21

Lamps from page 417



PULL-IT

PULL-IT

Height adjustable

An attractive glass shade in combination with a distinctive metal cylinder characterises the PULL-IT pendant luminaire. The hand-blown glass diffuser directs the light onto the table and at the same time provides pleasant general lighting in the room. The PULL-IT pendant luminaire can be set to any height using the integrated counterweight. This low-voltage luminaire is integrated into the track system using the KEEP ON ROLLING adapter.

Design: Ralf Keferstein

IRC
READY



FEATURES

Pendant luminaire
Height adjustable
Can be shortened

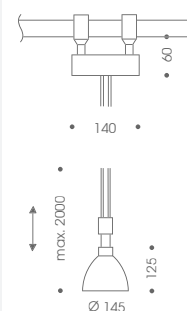
Output data
12 V / GY 6.35 / QT-LP 12 max. 50 W
Energy efficiency class: A++ to C

Material
Metal, hand-blown glass

Weight
1.5 kg

TECHNICAL INFORMATION

Order adapter separately



COLOURS



Transparent

Matt white

PRODUCT

Socket	Suitable for	Shade colour	Item number
GY 6.35	12 V halogen	Transparent	10-952-10-06/01
		Matt white	10-952-10-06/21

Adapter from page 260, Lamps from page 415



ECOLINO GRANDE

Height adjustable

The domed glass shade of ECOLINO GRANDE is bent from flat glass using a special process. It characterises the luminaire and ensures generous lighting. The light satin finish on the glass gently refracts the light and immerses the room in a soft light. The pendant luminaire can be set to any height using the integrated counterweight. The KEEP ON ROLLING adapter allows for integration of the ECOLINO GRANDE into the track system.

Design: Ralf Keferstein



FEATURES

Pendant luminaire
Height adjustable
Can be shortened

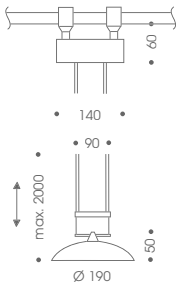
Output data
12 V / GY 6.35 / QT-LP 12 max. 50 W
Energy efficiency class: A++ to C

Material
Metal, domed flat glass

Weight
0.7 kg

TECHNICAL INFORMATION

Order adapter separately



PRODUCT

Socket	Suitable for	Shade colour	Item number
GY 6.35	12 V halogen	Matt white	10-981-20-06/21

Adapter from page 260, Lamps from page 415

BALIBU BEACH

The elegantly shaped shade made from crystal glass gives the BALIBU BEACH pendant luminaire a light and timeless appearance. The hand-blown, satin finished glass shade makes each luminaire a unique item. The luminaire design is also available as the BALIBU room light.

Design: Ralf Keferstein

LED **ECO**
READY READY



FEATURES

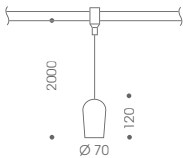
Pendant luminaire
Can be shortened

Output data
230 V / G 9 / QT 14 max. 40 W
Energy efficiency class: A++ to E

Material
Metal, hand-blown crystal glass,
white interior, matt opalised
exterior

Weight
0.4 kg

TECHNICAL INFORMATION



Special length
Suspension cable up to 5 m available
upon request.

PRODUCT

Socket	Suitable for	Shade colour	Item number
G 9	Retrofit or halogen	Matt white	30-991-20-06/21

Lamps from page 417



DONATA

A conically shaped shade made from satin finished glass defines the restrained design of the DONATA pendant luminaire. It reflects the light and ensures even lighting in the room. DONATA is suitable for the use of energy-efficient high-voltage halogen lamps.

Design: Ralf Keferstein

LED **ECO**
READY READY



FEATURES

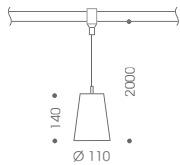
Pendant luminaire
Can be shortened

Output data
230 V / G 9 / QT-14 max. 75 W
Energy efficiency class: A++ to E

Material
Aluminium, borosilicate glass

Weight
0.5 kg

TECHNICAL INFORMATION



Special length
Suspension cable up to 5 m available upon request.

COLOURS



Matt white



Champagne

PRODUCT

Socket	Suitable for	Adapter colour	Shade colour	Item number
G 9	Retrofit or halogen	Chrome	Matt white	30-909-20-05/21
		Matt chrome	Matt white	30-909-20-06/21
		Matt chrome	Champagne	30-909-20-06/42

Lamps from page 417



BENE

The cylindrically shaped glass shade of the BENE pendant luminaire shapes the appearance as well as the light effect. The satin finished glass causes diffuse light refraction and makes a softly glowing tube of BENE. The circumferential ring is both an exciting design element and the invisible mounting for the shade.

Design: Ralf Keferstein

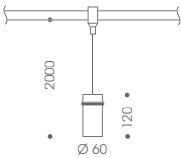
LED **ECO**
READY READY



FEATURES

- Pendant luminaire
Can be shortened
- Output data
230 V / G 9 / QT 14 max. 60 W
Energy efficiency class: A++ to E
- Material
Aluminium, borosilicate glass
- Weight
0.4 kg

TECHNICAL INFORMATION



Special length
Suspension cable up to 5 m available upon request.

PRODUCT

Socket	Suitable for	Shade colour	Item number
G 9	Retrofit or halogen	Matt white	30-935-10-06/21

Lamps from page 417



HIGH FLIGHT

HIGH FLIGHT GALERIE

The HIGH FLIGHT GALERIE room light is particularly suitable for installation on the wall track and provides soft, homogeneous general lighting with a primarily upward light distribution. A smaller proportion of the light is directed downwards by temperature-resistant dissipative film. HIGH FLIGHT GALERIE is both a decorative lighting element and a room light with a fascinating light scene.

Design: Ralf Keferstein

LED READY
ECO READY



FEATURES

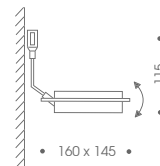
Ambient light
Swivelling

Output data
230 V / G 9 / QT 14 max. 75 W
Energy efficiency class: A++ to E

Material
Metal, temperature-resistant film

Weight
0.4 kg

TECHNICAL INFORMATION



Installation
The luminaire must be installed in an upright position.

PRODUCT

Socket	Suitable for	Adapter colour	Body colour	Item number
G 9	Retrofit or halogen	Matt chrome	Matt chrome	30-969-30-06

Lamps from page 417



GATE B SEVEN GALERIE

GATE B SEVEN GALERIE

GATE B SEVEN GALERIE is particularly suitable for installation on a wall track and optimally lights items or pictures in the area underneath. The spotlight presents itself as an elegant detail which effectively stages the object without intruding on the overall appearance. The spotlight is suitable for the use of LED retrofits and fulfils the current requirements for an energy-saving lighting solution. The appearance and light scene can be varied using decorative rings and other accessories, available separately.

Design: Ralf Keferstein



LED
READY

FEATURES

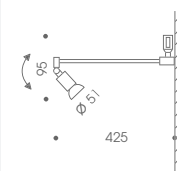
Gallery spotlight
Swiveling head

Output data
230 V / GZ 10 / QPAR 51/64
max. 50/75 W
Energy efficiency class: A++ to E

Material
Aluminium

Weight
0.4 kg

TECHNICAL INFORMATION



ACCESSORIES



Decorative ring R 2



Shade S 2

PRODUCT

Socket	Suitable for	Body colour	Item number
GZ 10	Retrofit or halogen	Chrome	30-973-20-05
		Matt chrome	30-973-20-06

Lamps from page 417, Accessories from page 420

KEEP ON ROLLING

Luminaire adapter for 12 V pendant luminaires with height adjustment

With the integrated transformer, the system adapter reduces the mains voltage to 12 V and connects the height adjustable pendant luminaires with the CHECK-IN system. Adjustable spacing pulleys connect the suspension cables for the various pendant luminaires. The adapter is available in two dimmable models. An electronic transformer with touch dimmer allows pendant luminaires to be dimmed by touching the cable.

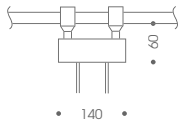
Design: Ralf Keferstein



FEATURES

- System adapter**
For integration of 12 V pendant luminaires with height adjustment
- Output data**
230 V / 50-60 Hz / 12 V / 20-60 VA
Permissible secondary side cable length <2 m
- Electronic transformer
Compatible with “Type C” dimmers
- Electronic transformer, with touch dimmer
Not externally dimmable
- Material**
Metal
- Weight**
0.6 kg

TECHNICAL INFORMATION



EXAMPLES OF 12 V PENDANT LUMINAIRES, AC



GRACE
Page 245



PULL-IT
Page 249



ECOLINO GRANDE
Page 250

PRODUCT
Electronic transformer

Type	Colour	Item number
20-60 VA	Matt chrome	31-641-10-06

PRODUCT
Electronic transformer, with touch dimmer

Type	Colour	Item number
20-60 VA	Matt chrome	T31-641-10-06

CONTACT TUBE

Luminaire adapter for 12 V point luminaires

CONTACT TUBE is an adapter with integrated transformer and socket for 12 V PLUG-IN luminaires. With the adapter, all 12 V point luminaires can be integrated into the CHECK-IN track system. On the one hand, this opens up additional design versatility, and on the other the lighting technology benefits of the 12 V lamps can be used with the mains voltage operated CHECK-IN.

As well as the version with electronic transformer (AC), a model with switching power supply (DC) is also available. It opens up the possibility of integrating LED luminaires and spotlights into the track system.

Design: OLIGO



FEATURES

System adapter
For integration of 12 V PLUG-IN luminaires

Output data
12 V AC version:
230 V / 50-60 Hz / 12 V / 35-60 VA
Electronic transformer
Permissible secondary side cable length < 2 m
Compatible with "Type C" dimmers

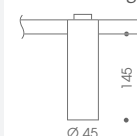
12 V DC version:
230 V / 50-60 Hz / 12 V DC / 10 VA
Switching power supply
Not externally dimmable

Material
Metal

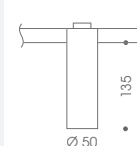
Weight
12 V AC: 0.4 kg
12 V DC: 0.5 kg

TECHNICAL INFORMATION

12 V AC Halogen



12 V DC LED



EXAMPLES OF 12 V POINT LUMINAIRES, AC



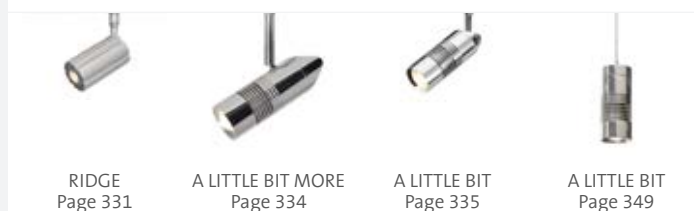
LP 111
Page 337

CHARLES
Page 347

BALINO
Page 351

COCO
Page 363

EXAMPLES OF 12 V POINT LUMINAIRES, DC



RIDGE
Page 331

A LITTLE BIT MORE
Page 334

A LITTLE BIT
Page 335

A LITTLE BIT
Page 349

PRODUCT

CONTACT TUBE 12 V AC Halogen

Type	Colour	Item number
35-60 VA	Chrome	31-621-10-05
	Matt chrome	31-621-10-06

PRODUCT

CONTACT TUBE 12 V DC LED

Type	Colour	Item number
10 VA	Chrome	31-621-11-05
	Matt chrome	31-621-11-06



BEAUTY FREE

for the CHECK-IN track system

BEAUTY FREE is a light object which can be put together individually from the system components in the CHECK-IN track system: modern technology and classic design language come together here in elegant unity.

Fundamentally, each BEAUTY FREE consists of a BASIC ceiling housing with the suspensions, the track circle and the luminaires. The BASIC ceiling housing is suitable for light objects with a diameter of between 1,100 and 4,790 millimetres.

When putting the BEAUTY FREE components together, attention should be paid to a balanced weight distribution. OLIGO is happy to undertake the individual planning for you.

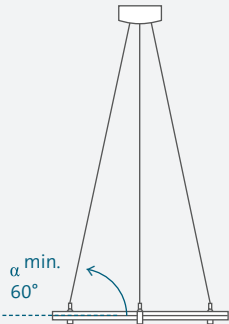
Design: Ralf Keferstein

BEAUTY FREE Components

for the CHECK-IN track system

The number of suspensions technically required is based on the desired diameter of the track circle. One track segment should always be supported by one suspension, so the number of tracks and suspensions is always identical. The minimum length of the cable suspension is determined depending on the diameter of the full track circle used.

Number of BASIC required	1	1	1	1
Number of SUSPENSION/2 required	-	1	2	3
Minimum length of cable suspension	750 mm	1100 mm	1450 mm	1800 mm



During planning, please take care to ensure that the angle between the track circle and the suspension is not smaller than 60°.

BEAUTY FREE COMPONENTS



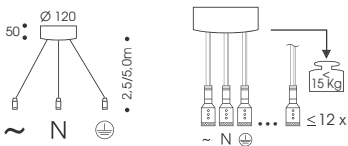
BASIC

Ceiling housing with 3 suspensions and integrated power supply

max. 250 V / max. 16 A
Cable cross section 1.5 mm²
Can be shortened

Material
Metal

Design
Ralf Keferstein



Length (mm)	Item number
3x 2500	31-990-10-06
3x 5000	31-990-11-06



CIRCLE

Full track circle, consisting of track sections and connectors

Ø of between 1100 and 2300 mm

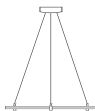
Individual track circle see page 267

Material
Metal

Design
Ralf Keferstein

Colour	Ø (mm)	Number of track sections	Item number
Matt chrome	1100	3	31-231-10-06
Matt chrome	1500	4	31-231-11-06
Matt chrome	1900	5	31-231-12-06
Matt chrome	2300	6	31-231-13-06

EXAMPLE



1x BASIC
1x CIRCLE Ø 1100 mm

**BEAUTY FREE COMPONENTS****SUSPENSION / 1**

Expansion set for BASIC ceiling housing
with 3 suspensions and integrated power supply

One expansion set is required per additional CIRCLE track circle
Cable cross section 1.5 mm²
Can be shortened

Material
Metal

Design
Ralf Keferstein



Length (mm)	Item number
3x 2500	31-990-20-06
3x 5000	31-990-21-06

SUSPENSION / 2

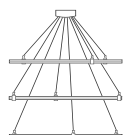
Non-conductive suspension as an expansion
for BASIC ceiling housing

Required for CIRCLE Ø >1100 mm
Cable cross section 1.5 mm²
Can be shortened

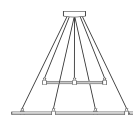
Material
Metal

Design
Ralf Keferstein

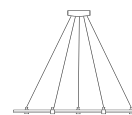
Length (mm)	Item number
1x 2500	31-990-22-06
1x 5000	31-990-23-06

EXAMPLE

1x BASIC
2x SUSPENSION/1
3x CIRCLE Ø 1100 mm

EXAMPLE

1x BASIC
1x SUSPENSION/1
1x SUSPENSION/2
1x CIRCLE Ø 1100 mm
1x CIRCLE Ø 1500 mm



1x BASIC
2x SUSPENSION/2
1x CIRCLE Ø 1900 mm

CHECK-IN

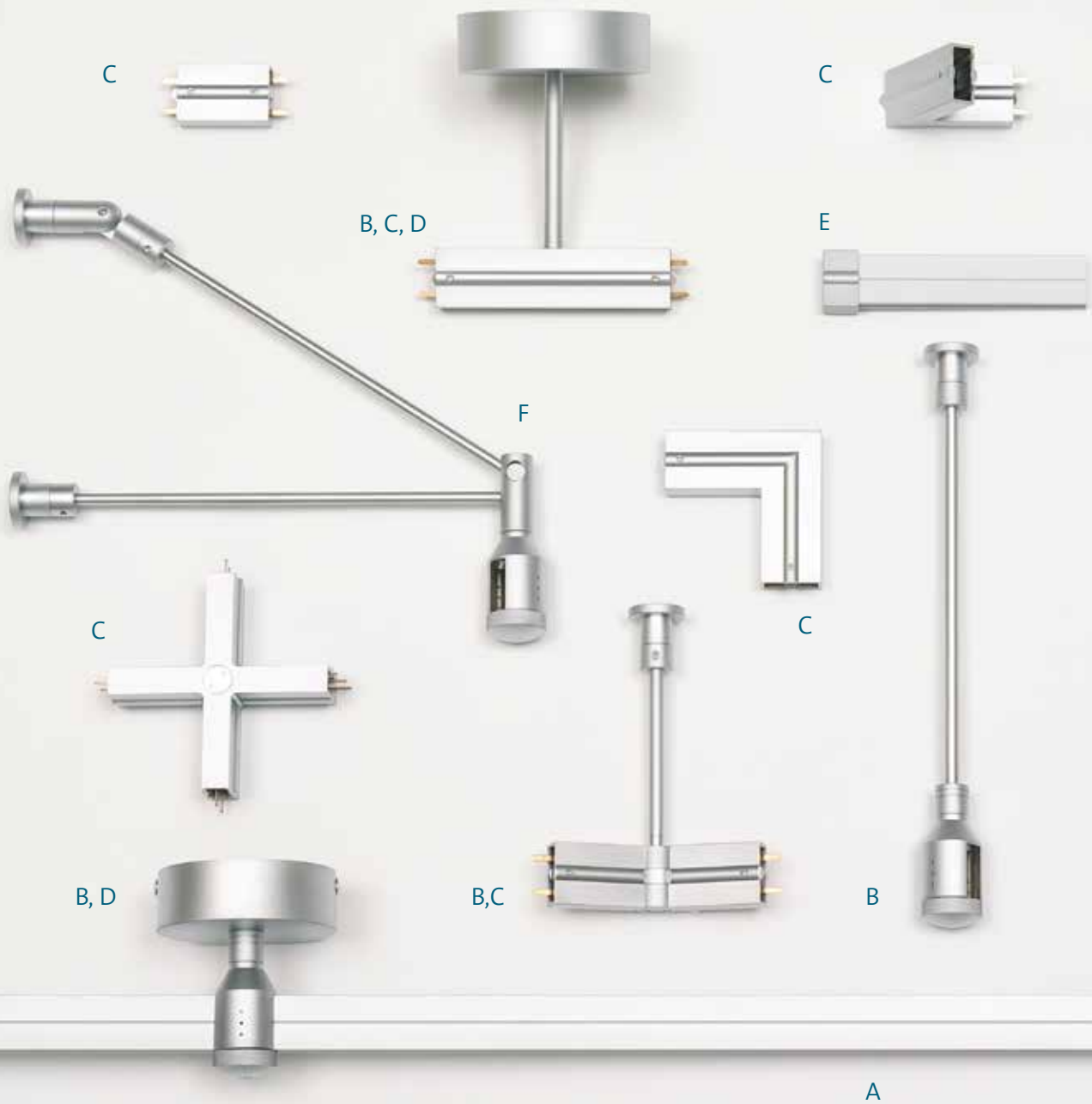
SYSTEM COMPONENTS

max. 250 V / max. 16 A / protection class 1

The components in a track system vary according to the situation in which it is used and the customer’s individual requirements. A functional system always consists of certain base components.



The following checklist facilitates checking the completeness of the system and serves as a guideline for choosing the right components.

Examples





SYSTEM COLOURS

-  Chrome
-  Matt chrome

BASE COMPONENT CHECKLIST

- A Track
- B Support / suspension
- C Connector
- D Power supply
- E End pieces / end caps

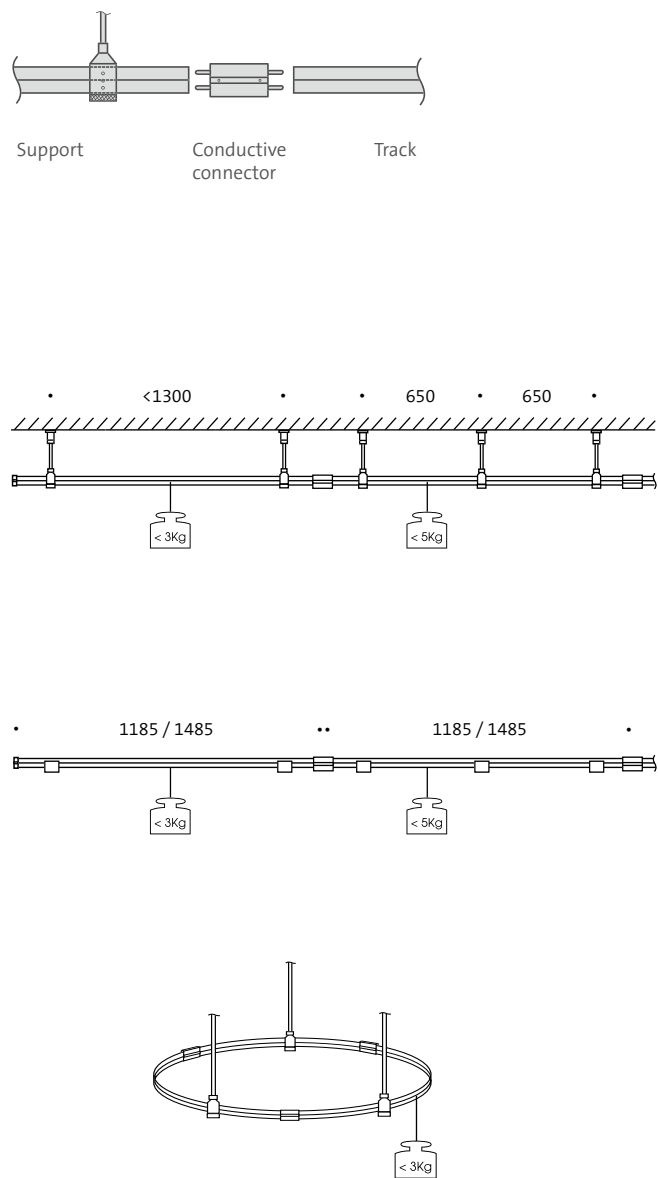
SPECIFIC COMPONENTS

- F Track arm
- Picture mounting

When planning the track system, there is a choice between two technically and stylistically differing support systems (TYPE A and TYPE B).

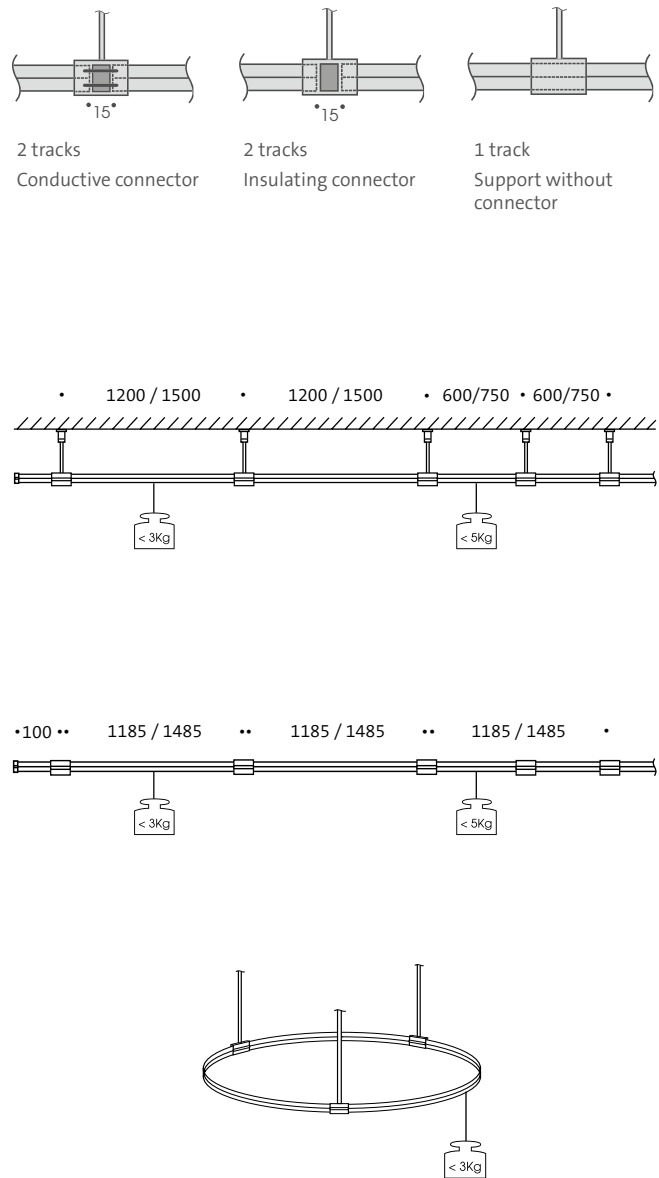
SYSTEM SUPPORT TYPE A

The TYPE A support system is characterised by the functional separation of track support and track connector. A track can be hung in the support at any point. A separate connection is required at another point:



SYSTEM SUPPORT TYPE B

For the TYPE B system, the support and track connector form a unit. Fundamentally, they are divided into three different functional types:



1. TRACK



1.1 STRAIGHT

22 x 8 mm / 1.5 mm²
Can be shortened

Material
Metal

Design
Ralf Keferstein

Colour	L (mm)	Item number
Chrome	1185	31-201-10-05
Matt chrome	1185	31-201-10-06
Matt chrome	1485	31-201-11-06

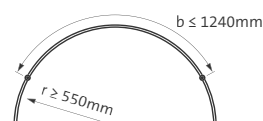


1.2 CURVED

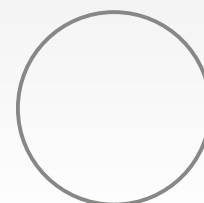
Can be shortened

Material
Metal

Design
Ralf Keferstein



Colour	b (mm)	Item number
Matt chrome	=1240	31-211-10-06
Matt chrome	<1240	31-211-11-06



1.3 CIRCLE

Full circle, consisting of track sections and connectors

Material
Metal

Design
Ralf Keferstein

Colour	Ø (mm)	Item number
Matt chrome	1100	31-231-10-06
Matt chrome	1500	31-231-11-06
Matt chrome	1900	31-231-12-06
Matt chrome	2300	31-231-13-06

2. SUPPORT TYPE A



2.1 SUPPORT Ø 14 mm

Type A

Material
Metal

Design
Ralf Keferstein

Colour	L (mm)	Item number
Chrome	50	31-301-10-05
Matt chrome	50	31-301-10-06



2.2 COVER PLATE

Type A

Ø 24 x 4 mm
Optional accessory
Compatible: 2.1

Material
Metal

Design
Ralf Keferstein

Colour	Item number
Chrome	31-311-10-05
Matt chrome	31-311-10-06



2.3 SUPPORT Ø 6 mm

Type A

Can be shortened

Material
Metal

Design
Ralf Keferstein

Colour	L (mm)	Item number
Chrome	100	31-301-11-05
Matt chrome	100	31-301-11-06
Chrome	225	31-301-12-05
Matt chrome	225	31-301-12-06
Chrome	525	31-301-13-05
Matt chrome	525	31-301-13-06



2.4 TRACK ARM

Type A

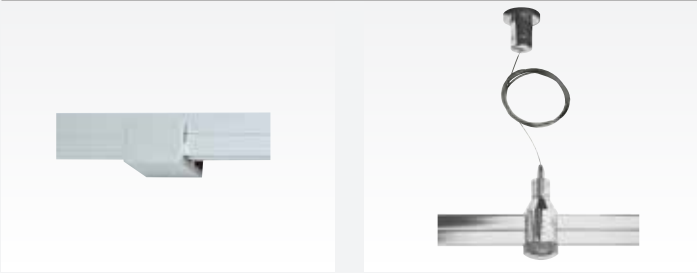
Can be shortened
Wall clearance 200 mm

Material
Metal

Design
Ralf Keferstein

Colour	Item number
Matt chrome	31-351-10-06

2. SUPPORT TYPE A



2.5 WALL SUPPORT

Type A

30 x 26 x 24 mm

Material
Metal

Design
Ralf Keferstein

Colour	Item number
Matt chrome	31-321-10-06

2.6 SUSPENSION

Type A

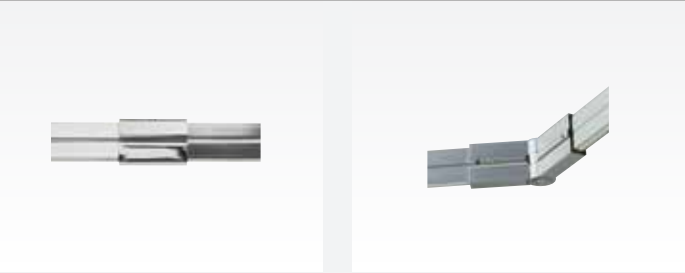
Can be shortened

Material
Metal

Design
Ralf Keferstein

Colour	L (mm)	Item number
Chrome	1500	31-331-10-05
Matt chrome	1500	31-331-10-06

3. CONNECTOR TYPE A



3.1 I-CONNECTOR

Type A

40 x 26 x 12 mm

Material
Metal

Design
Ralf Keferstein

Conductive

Colour	Item number
Chrome	31-401-10-05
Matt chrome	31-401-10-06

Insulating

Colour	Item number
Chrome	31-401-11-05
Matt chrome	31-401-11-06

3.2 SWIVEL CONNECTOR

Type A

90 x 26 x 12 mm
Swivel range 80° - 180°

Material
Metal

Design
Ralf Keferstein

Conductive

Colour	Item number
Chrome	31-411-10-05
Matt chrome	31-411-10-06

Insulating

Colour	Item number
Matt chrome	31-411-11-06

3. CONNECTOR TYPE A



3.3 Y/T-SWIVEL CONNECTOR

Type A

90 x 55 x 26 mm

Material
Metal

Design
Ralf Keferstein

Conductive

Colour	Item number
Matt chrome	31-416-10-06

3.4 X-CONNECTOR

Type A

90 x 90 x 26 mm

Material
Metal

Design
Ralf Keferstein

Conductive

Colour	Item number
Chrome	31-431-10-05
Matt chrome	31-431-10-06

3.5 V-CONNECTOR

Type A

Horizontal 60°

Material
Metal

Design
Ralf Keferstein

Conductive

Colour	Item number
Matt chrome	31-441-10-06

3.6 L-CONNECTOR

Type A

Vertical 90°

Material
Metal

Design
Ralf Keferstein

Conductive

Colour	Item number
Matt chrome	31-451-10-06

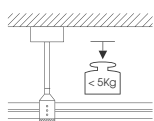
4. POWER SUPPLY TYPE A



POWER SUPPLY, DECKE

Type A

Ø 82 mm

Material
MetalDesign
Ralf Keferstein

Colour	L (mm)	Item number
Chrome	50	31-501-10-05
Matt chrome	50	31-501-10-06
Chrome	100	31-501-11-05
Matt chrome	100	31-501-11-06
Chrome	225	31-501-12-05
Matt chrome	225	31-501-12-06
Matt chrome	525	31-501-13-06

5. END CAP TYPE A



END CAP

Type A

22 x 8 x 15 mm
Transparent model for combination
with chrome trackMaterial
PolykarbonatDesign
Ralf Keferstein

Colour	Item number
Transparent	31-601-10-01
Matt chrome	31-601-10-06

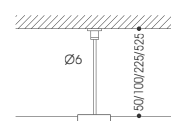
6. SUPPORT WITH CONNECTOR TYPE B



6.1 SUPPORT

Type B

Can be shortened

Material
MetalDesign
Ralf Keferstein

Conductive, with connector

Colour	L (mm)	Item number
Chrome	50	31-302-10-05
Matt chrome	50	31-302-10-06
Chrome	100	31-302-11-05
Matt chrome	100	31-302-11-06
Chrome	225	31-302-12-05
Matt chrome	225	31-302-12-06
Matt chrome	525	31-302-13-06

Continuous, without connector

Colour	L (mm)	Item number
Chrome	50	31-302-30-05
Matt chrome	50	31-302-30-06
Chrome	100	31-302-31-05
Matt chrome	100	31-302-31-06
Chrome	225	31-302-32-05
Matt chrome	225	31-302-32-06
Matt chrome	525	31-302-33-06

6. SUPPORT WITH CONNECTOR TYPE B



6.2 SWIVEL CONNECTOR

Type B

Can be shortened
Swivel range 80° - 180°Material
MetalDesign
Ralf Keferstein

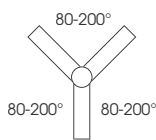
Conductive

Colour	L (mm)	Item number
Matt chrome	50	31-412-10-06
Chrome	100	31-412-11-05
Matt chrome	100	31-412-11-06
Chrome	225	31-412-12-05
Matt chrome	225	31-412-12-06
Matt chrome	525	31-412-13-06

6.3 Y/T-SWIVEL CONNECTOR

Type B

Can be shortened

Material
MetalDesign
Ralf Keferstein

Conductive

Colour	L (mm)	Item number
Matt chrome	50	31-414-10-06
Chrome	100	31-414-11-05
Matt chrome	100	31-414-11-06
Chrome	225	31-414-12-05
Matt chrome	225	31-414-12-06

6.4 X-CONNECTOR

Type B

Material
MetalDesign
Ralf Keferstein

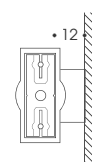
Conductive

Colour	L (mm)	Item number
Matt chrome	50	31-432-10-06
Chrome	100	31-432-11-05
Matt chrome	100	31-432-11-06
Chrome	225	31-432-12-05
Matt chrome	225	31-432-12-06

6.5 WALL SUPPORT

Type B

40 x 26 x 24 mm

Material
MetalDesign
Ralf Keferstein

Conductive, with connector

Colour	Item number
Chrome	31-322-10-05
Matt chrome	31-322-10-06

Continuous, without connector

Colour	Item number
Chrome	31-322-12-05
Matt chrome	31-322-12-06

6. SUPPORT W. CONNECTOR TYPE B



6.6 TRACK ARM

Type B
Wall clearance 200 mm
Can be shortened

Material
Metal

Design
Ralf Keferstein

Continuous	
Colour	Item number
Matt chrome	31-352-10-06

7. SUSPENSION WITH CONNECTOR TYPE B



7.1 SUSPENSION

Type B
1500 mm
Can be shortened

Material
Metal

Design
Ralf Keferstein

Conductive	
Colour	Item number
Chrome	31-332-10-05
Matt chrome	31-332-10-06

Continuous	
Colour	Item number
Matt chrome	31-332-12-06



7.2 SWIVEL CONNECTOR

Type B
1500 mm, can be shortened
Swivel range 80° - 180°

Material
Metal

Design
Ralf Keferstein

Conductive	
Colour	Item number
Matt chrome	31-413-10-06

7. SUSPENSION WITH CONNECTOR TYPE B

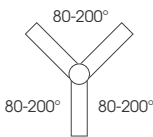


7.3 Y/T-SWIVEL CONNECTOR

Type B
1500 mm, can be shortened

Material
Metal

Design
Ralf Keferstein



Conductive	
Colour	Item number
Matt chrome	31-415-10-06



7.4 X-CONNECTOR

Type B
1500 mm, can be shortened

Material
Metal

Design
Ralf Keferstein

Conductive	
Colour	Item number
Matt chrome	31-433-10-06

8. POWER SUPPLY TYPE B

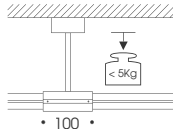


POWER SUPPLY, CEILING

Type B
Ø 82 mm

Material
Metal

Design
Ralf Keferstein



Conductive		
Colour	L (mm)	Item number
Chrome	50	31-502-10-05
Matt chrome	50	31-502-10-06
Chrome	100	31-502-11-05
Matt chrome	100	31-502-11-06

Conductive		
Colour	L (mm)	Item number
Chrome	225	31-502-12-05
Matt chrome	225	31-502-12-06
Matt chrome	525	31-502-13-06

9. END PIECE TYPE B



END PIECE INCLUDING END CAP

Type B

22 x 8 x 100 mm
Chrome track with transparent end cap

Material
Metal, polycarbonate

Design
Ralf Keferstein

Conductive

Colour	Item number
Chrome	31-602-10-05
Matt chrome	31-602-11-06

10. ADDITIONAL JOINT



ADDITIONAL JOINT

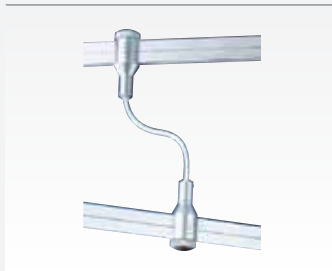
Swivel range 90° - 180°
Compatible with 2.3 / 6.1 / 6.2 / 6.3

Material
Metal

Design
Ralf Keferstein

Colour	Item number
Chrome	62-303-01-05
Matt chrome	62-303-01-06

11. FLEX CONNECTOR



FLEX CONNECTOR

200 mm

Material
Metal

Design
Ralf Keferstein

Conductive

Colour	Item number
Matt chrome	31-461-10-06

12. POWER SUPPLY, CABLE



12.1 CENTRE POWER SUPPLY

Ø 82 mm

Montage

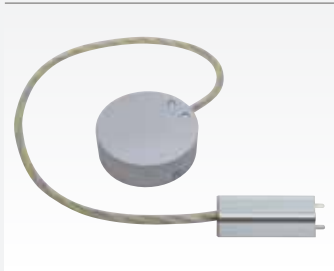
When mounted facing upwards, the unit should be at least 70 mm from the ceiling

Material
Metal

Design
Ralf Keferstein

Colour	L (mm)	Item number
Chrome	600	31-512-10-05
Matt chrome	600	31-512-10-06
Chrome	1600	31-512-11-05
Matt chrome	1600	31-512-11-06

12. POWER SUPPLY, CABLE



12.2 END POWER SUPPLY

Ø 82 mm

Material
Metal

Design
Ralf Keferstein

Colour	L (mm)	Item number
Matt chrome	600	31-512-12-06

13. POWER SUPPLY, WALL



13.1 END POWER SUPPLY

Ø 82 mm

Material
Metal

Design
Ralf Keferstein

Colour	Item number
Matt chrome	31-521-10-06

13.2 END POWER SUPPLY W. SUPPORT



13.2 END POWER SUPPLY W. SUPPORT

100 x 30 x 30 mm
For gallery tracks

Material
Metal

Design
Ralf Keferstein

Colour	Item number
Matt chrome	31-521-11-06

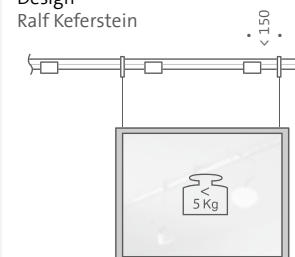
14. PICTURE MOUNTING



PICTURE MOUNTING, 1 PAIR

Material
Metal

Design
Ralf Keferstein



Colour	L (mm)	Item number
Black	1500	62-301-02-23



READY FOR TAKE OFF

SMALL IS BEAUTIFUL.

READY FOR TAKE OFF is a graceful, single-phase 12 volt track system with spirit. Whether it's flat or high spaces, straight line or curved track configurations, or even circles: READY FOR TAKE OFF adapts to your requirements.

With dimensions of 17 x 8 millimetres, the robust rectangular shaped busbar is discreetly dimensioned. Thanks to track connectors and supports designed in-house, the track elements can be connected to one another almost invisibly.

READY FOR TAKE OFF luminaires are offered with a variety of lighting technologies. The user is free to choose between LED or halogen luminaires.

The high quality track system is technically perfectly suited to private living space and is likewise tried and tested for presentable accent lighting in sophisticated retail and in galleries. READY FOR TAKE OFF can be extended and modified at any time.

For individual curved track configurations, the tracks can be curved in the factory upon request.

Design: Ralf Keferstein

CONTENTS	PAGE
System luminaires	281
Adapters	311
System components	312
Lamps	413
Lamp accessories	420

READY FOR TAKE OFF

LUMINAIRE OVERVIEW

Low voltage track system

LED LUMINAIRES

Spotlights



RIDGE MAX
Page 281



RIDGE
Page 283

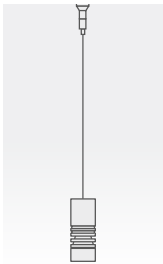


A LITTLE BIT MORE
Page 284



A LITTLE BIT
Page 285

Pendant luminaires



PLUG-IN
Adapter from page 311
Luminaires from page 349

LUMINAIRES WITH CONVENTIONAL FITTINGS

Spotlights / Ambient lights



LEVEL
Page 287



LP 111
Page 287



GATE B FIVE
Page 289



MATCH
Page 291



STREAM 51
Page 291



MX-2
Page 293



GATE B NINE
Page 295



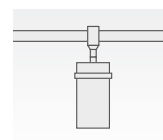
HIGH FLIGHT
Page 293



GATE B TWO
Page 297

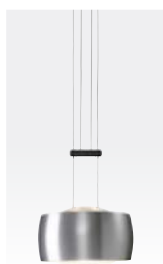


MAGIC
Page 297



PLUG-IN
Adapter from page 311
Luminaires from page 337

Pendant luminaires



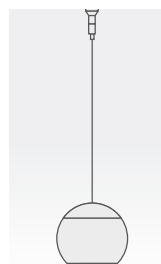
GRACE
Page 299



PULL-IT
Page 301



ECOLINO GRANDE
Page 303



PLUG-IN
Adapter from page 311
Luminaires from page 351

Gallery spotlights



HIGH FLIGHT GALERIE
Page 305



TAIFUN
Page 305

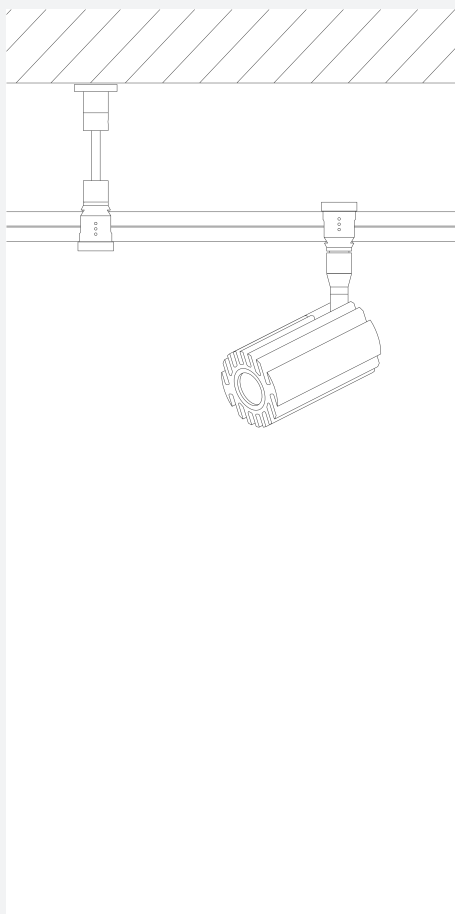


TORINO
Page 307

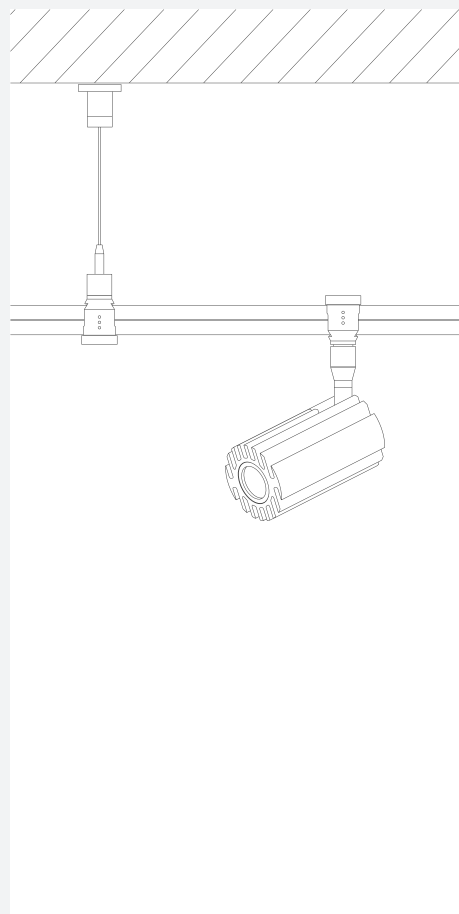
READY FOR TAKE OFF

A SYSTEM WITH THE BEST CONTACTS

INSTALLATION
with supports



INSTALLATION
suspended



INSTALL QUICKLY AND SAFELY

All system components can be combined without virtually any tools in a very simple manner. The interior track connectors are equipped with spring cage contacts. They are pushed into the track conduit during installation and make the connection between the track elements almost invisible. The luminaire adapter spanning the tracks is

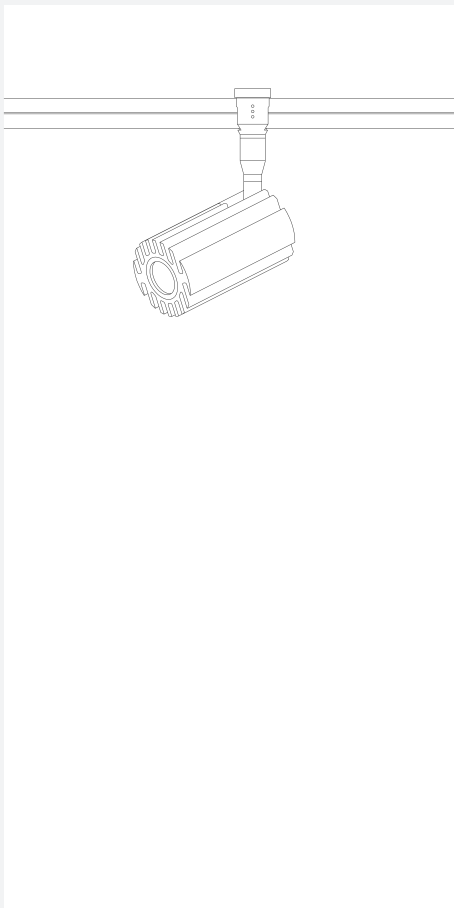
equipped with a spring pressure mechanism for the best contact pressure. It is mechanically secured against release with a ridged cap.

Creative solutions can likewise be realised for shelf and image lighting using a wall support and associated gallery spotlights.

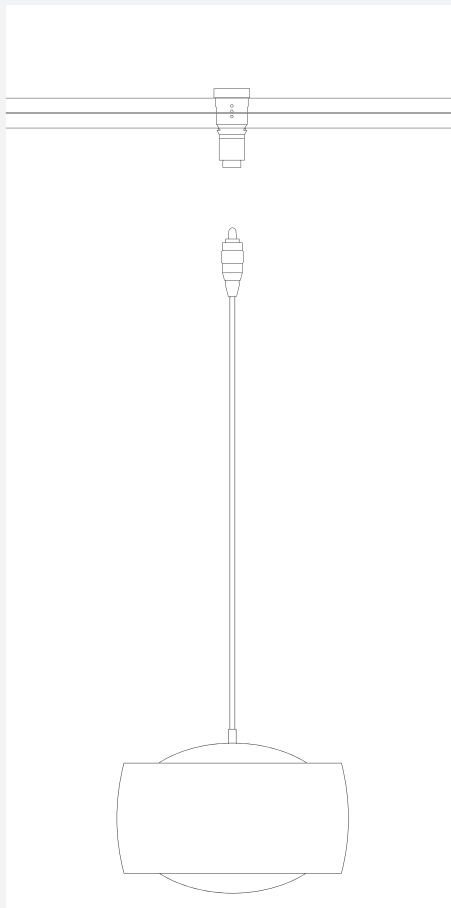
READY FOR TAKE OFF

COMBINING AND EXPANDING

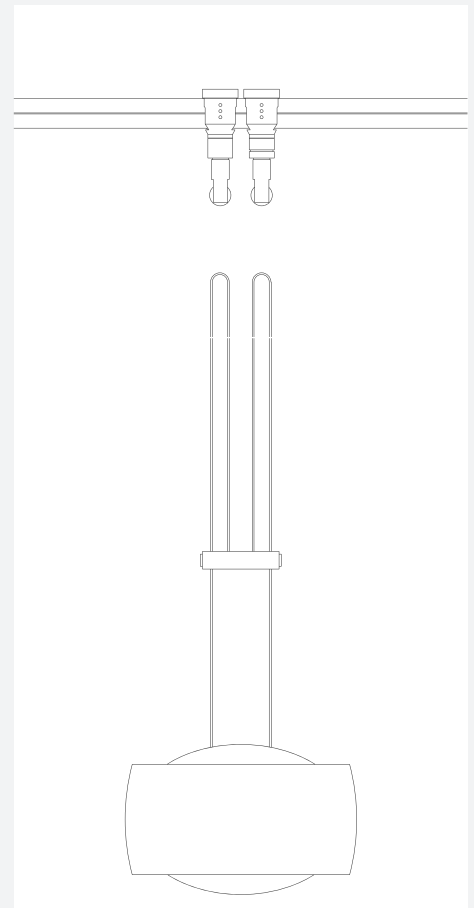
ADAPTER
integrated



ADAPTER
12 V plug connection system
PLUG-IN



ADAPTER
12 V pendant luminaire
HEIGHT ADJUSTMENT



EXPANDABLE AT ANY TIME

READY FOR TAKE OFF system luminaires leave the factory with a fixed adapter.

The track system can be flexibly expanded, and at the same time the choice of luminaires is not limited to the READY FOR TAKE OFF system range.

Using a special adapter, all 12 volt PLUG-IN system luminaires can be integrated into the track system.

Height adjustable 12 V pendant luminaires can also be integrated into the track system without a problem using an adapter.



RIDGE MAX

RIDGE MAX

LED

A distinctive heat sink with cooling ribs around the circumference characterises the design of the highly efficient RIDGE MAX LED spotlight. The luminaire head, made from aluminium, surrounds the 1,100 lumen LED and is connected to the adapter by a joint which tilts and swivels. The matt black and matt chrome surfaces have a remarkable surface finish thanks to an intricate grinding pattern.

Design: OLIGO



FEATURES

Spotlight
Rotatable / swivelling
High performance reflector
Non-dimmable

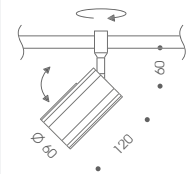
Output data
12 V / LED / 1100 lm / 15 W AC /
15 W DC / CRI >90
Energy efficiency class: A+
Variants: 2700 K / 3000 K / 26° / 43°

Material
Aluminium

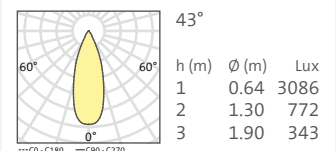
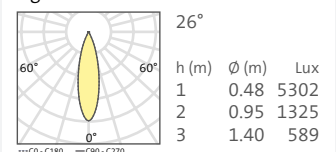
Weight
0.5 kg

Installation
Operation only possible on magnetic
12 V transformers or 12 V DC power
supply units.

TECHNICAL INFORMATION



Light distribution



COLOURS



Matt chrome /
Matt chrome



Chrome /
Matt white



Chrome /
Matt black

PRODUCT

Voltage	Type	lm	W	CRI	EEC	Angle	Rod colour	Body colour	2700 K	3000 K
12 V	LED	1100	15 AC / 15 DC	>90	A+	26°	Chrome	Matt white	11-881-50-21	11-881-60-21
							Chrome	Matt black	11-881-50-23	11-881-60-23
							Matt chrome	Matt chrome	11-881-51-06	11-881-61-06
							Matt chrome	Matt black	11-881-51-23	11-881-61-23
						43°	Chrome	Matt white	11-881-52-21	11-881-62-21
							Chrome	Matt black	11-881-52-23	11-881-62-23
							Matt chrome	Matt chrome	11-881-53-06	11-881-63-06
							Matt chrome	Matt black	11-881-53-23	11-881-63-23



RIDGE

RIDGE

LED

The RIDGE LED spotlight is a little more delicate than its big brother. Here too, the distinctive cooling fins characterise the unmistakeable design. The high quality luminaire head made from aluminium has the same rotating and tilting functionality. With a luminous flux of 550 lumen, RIDGE is ideal for universal use in private living spaces, for example in studies, hallways or modern living and dining rooms. For RIDGE too, the matt black and matt chrome surfaces are refined with an intricate grinding pattern

Design: OLIGO



FEATURES

Spotlight
Rotatable / swivelling
High performance reflector
Non-dimmable

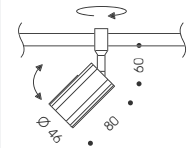
Output data
12 V / LED / 550 lm / 10.3 W AC /
7.6 W DC / 41° / CRI >90
Energy efficiency class: A
Variants: 2700 K / 3000 K

Material
Aluminium

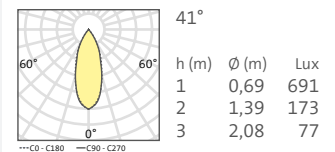
Weight
0.2 kg

Installation
Operation only possible on magnetic
12 V transformers or 12 V DC power
supply units.

TECHNICAL INFORMATION



Light distribution



COLOURS



Matt chrome /
Matt chrome



Chrome /
Matt white



Chrome /
Matt black

PRODUCT

Voltage	Type	lm	W	CRI	Angle	EEC	Rod colour	Body colour	2700 K	3000 K
12V	LED	550	10.3 AC / 7.6 DC	>90	41°	A	Matt chrome	Matt chrome	11-889-21-06	11-889-31-06
							Chrome	Matt white	11-889-20-21	11-889-30-21
							Chrome	Matt black	11-889-20-23	11-889-30-23

A LITTLE BIT MORE LED

With a luminous flux of 1,000 lumen, the A LITTLE BIT MORE LED spotlight offers outstanding brightness with individually definable light distribution characteristics. The beam angle can be continuously adjusted between 20° and 60° using the focusable glass lens. For harmonious light distribution, the high quality lens body has been finished separately with a texture on the inside.

Design: OLIGO

LED
INTEGRATED



FEATURES

Spotlight
Rotatable / swivelling
Beam angle continuously adjustable between 20° and 60°
Non-dimmable

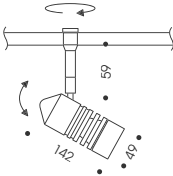
Output data
12 V / LED / 1000 lm / 11.5 W AC / 11.5 W DC / 20 - 60° / CRI >90
Energy efficiency class: A+
Variants: 2700 K / 3000 K

Material
Aluminium, glass lens

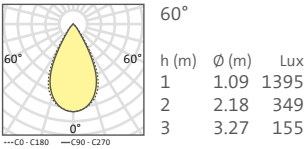
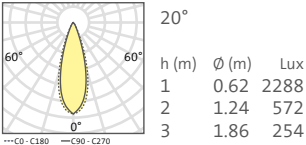
Weight
0.6 kg

Installation
Operation only possible on magnetic 12 V transformers or 12 V DC power supply units.

TECHNICAL INFORMATION



Light distribution



COLOURS



PRODUCT

Voltage	Type	lm	W	CRI	Angle	EEC	Rod colour	Body colour	2700 K	3000 K
12 V	LED	1000	11.5 AC / 11.5 DC	>90	20-60°	A+	Matt chrome	Matt chrome	11-882-21-06	11-882-41-06
							Chrome	Chrome	11-882-20-05	11-882-40-05
							Chrome	Matt white	11-882-20-21	11-882-40-21
							Chrome	Matt black	11-882-20-23	11-882-40-23

A LITTLE BIT

LED

The A LITTLE BIT LED spotlight is slightly smaller in terms of size and light output, but just as variable when it comes to the light scene. Like its big brother, A LITTLE BIT also has efficient LED lighting technology, the qualities of which can be determined by means of a continuously adjustable lens. Different rod lengths also allow for different distances from the ceiling. A pendant luminaire matching this design is also available.

Design: OLIGO



FEATURES

Spotlight
Rotatable / swivelling
50 or 140 mm rod
Beam angle continuously adjustable between 20° and 60°
Non-dimmable

Output data
12 V / LED / 550 lm / 10.3 W AC / 7.6 W DC / 20 - 60° / CRI >90
Energy efficiency class: A
Variants: 2700 K / 3000 K

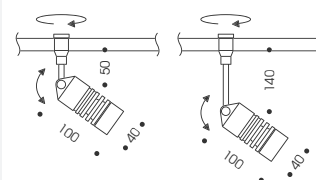
Material
Aluminium, glass lens

Weight
0.3 kg

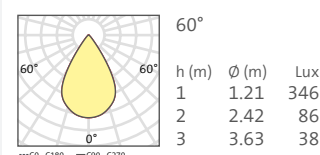
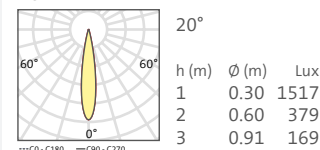
Installation
Operation only possible on magnetic 12 V transformers or 12 V DC power supply units.

LED
INTEGRATED

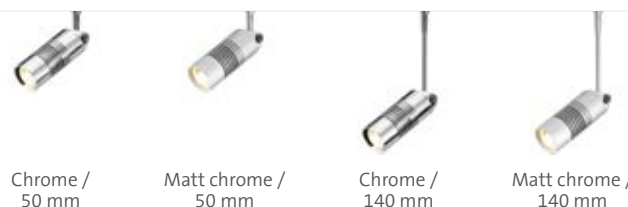
TECHNICAL INFORMATION



Light distribution



COLOURS AND MODELS



PRODUCT

Voltage	Type	lm	W	CRI	Angle	EEC	Rod length	Body colour	2700 K	3000 K
12 V	LED	550	10.3 AC / 7.6 DC	>90	20-60°	A+	50 mm	Chrome	11-898-40-05	11-898-50-05
								Matt chrome	11-898-40-06	11-898-50-06
							140 mm	Chrome	11-898-41-05	11-898-51-05
								Matt chrome	11-898-41-06	11-898-51-06



LEVEL

Balanced proportions and gimbal-mounted luminaire heads characterise the design of the LEVEL spotlights. They can move freely and can be positioned individually. The spotlight is suitable for the use of LED retrofits and fulfils the current requirements for an energy-saving lighting solution.

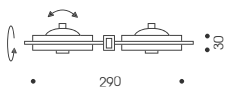
Design: Ralf Keferstein

LED
READY

IRC
READY



Retrofit lamp

FEATURES	TECHNICAL INFORMATION
Spotlights Gimbal mounted heads	
Output data 12 V / G 53 / QR-LP 111 max. 2x 50 W Energy efficiency class: A to C	Installation The minimum distance from the ceiling must be 150 mm.
Material Metal	
Weight 0.5 kg	

PRODUCT			
Socket	Suitable for	Colour	Item number
G 53	Retrofit or halogen	Matt chrome	11-905-20-06
Lamps from page 414			

LP 111

The QR-LP 111 lamp determines the shape of the LP 111 spotlights and also led to its naming. It allows for precise illumination of larger areas even from greater distances. In addition, the spotlight is suitable for the use of LED retrofits and satisfies the current requirements for an energy-saving lighting solution.

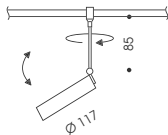
Design: Ralf Keferstein

LED
READY

IRC
READY



Retrofit lamp

FEATURES	TECHNICAL INFORMATION
Spotlight Rotatable / swivelling	
Output data 12 V / G 53 / QR-LP 111 max. 50 W Energy efficiency class: A to C	
Material Metal	
Weight 0.3 kg	

PRODUCT			
Socket	Suitable for	Colour	Item number
G 53	Retrofit or halogen	Matt chrome	11-934-10-06
Lamps from page 414			



GATE B FIVE

GATE B FIVE

Compact dimensions in a technical and elegant design have made the GATE B FIVE spotlight a timeless classic in private and commercial halogen lighting in many countries. GATE B FIVE is also suitable for the use of LED retrofits. The shape and light scene can be varied using decorative rings and other accessories.

Design: Ralf Keferstein



Accessory Decorative ring R 2

PRODUCT

Luminaire

Socket	Suitable for	Length (mm)	Colour	Item number
GU 5.3	Retrofit or halogen	40	Chrome	11-974-10-05
			Matt chrome	11-974-10-06
		140	Chrome	11-974-11-05
			Matt chrome	11-974-11-06

Lamps from page 414, Accessories from page 420

LED **IRC**
READY READY

FEATURES

Spotlight
Rotatable / swivelling
40 or 140 mm rod

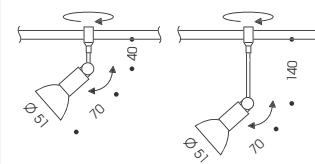
Output data
12 V / GU 5.3 / QR-CBC 51 max. 50 W
Energy efficiency class: A+ to C

Material
Metal

Weight
Luminaire: 0.1 kg
Accessory glass shade: 0.2 kg

TECHNICAL INFORMATION

Luminaire



GATE B TUBE glass shade



ACCESSORIES



GATE B TUBE



Shade S 1

PRODUCT

Accessory: GATE B TUBE glass shade

Colour	Item number
Partial satin finish	62-111-11-01



STREAM 51

MATCH

The timeless design of MATCH is optimised for the use of LED retrofits. The appearance and light scene can be varied using decorative rings and other accessories, available separately.

Design: OLIGO

LED
READY

IRC
READY



Retrofit lamp

FEATURES

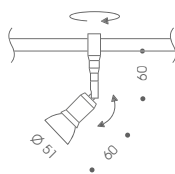
Spotlight
Rotatable / swivelling

Output data
12 V / GU 5.3 / QR-CBC 51 max. 50 W
Energy efficiency class: A+ to C

Material
Metal

Weight
0.2 kg

TECHNICAL INFORMATION



STREAM 51

The elegant luminaire head made from aluminium surrounds the halogen lamp and gives the spotlight an aesthetic design. Fine surfaces in chrome and matt chrome round out the optical merits of STREAM 51.

Design: Ralf Keferstein

LED
READY



FEATURES

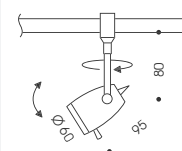
Spotlight
Rotatable / swivelling

Output data
12 V / GU 5.3 / QR-C 51 max. 50 W
Energy efficiency class: A+ to C
"Cool beam" lamps not permissible

Material
Metal

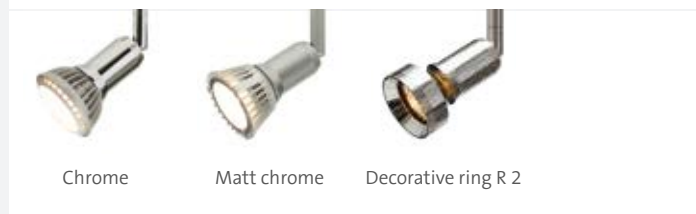
Weight
0.3 kg

TECHNICAL INFORMATION



Retrofit lamp
Lamp length of ≤48 mm recommended

COLOURS AND ACCESSORIES

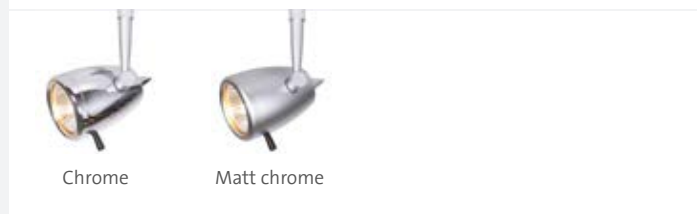


Chrome

Matt chrome

Decorative ring R 2

COLOURS



Chrome

Matt chrome

PRODUCT

Socket	Suitable for	Colour	Item number
GU 5.3	Retrofit or halogen	Chrome	11-892-10-05
		Matt chrome	11-892-10-06

Lamps from page 414, Accessories from page 420

PRODUCT

Socket	Suitable for	Colour	Item number
GU 5.3	Retrofit or halogen	Chrome	11-945-10-05
		Matt chrome	11-945-10-06

Lamps from page 414



NIGHT FLIGHT / GATE B FIVE

MX-2

A stainless steel bracket on the back characterises the design of MX-2. The spotlight is suitable for the use of LED retrofits and fulfils the current requirements for an energy-saving lighting solution, and can be varied using separately available accessories.

Design: Ralf Keferstein

LED
READY

IRC
READY



Accessory: Decorative ring R 2

FEATURES

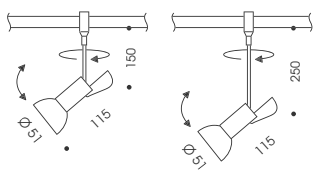
Spotlight
Rotatable / swivelling

Output data
12 V / GU 5.3 / QR-CBC 51 max. 50 W
Energy efficiency class: A+ to C

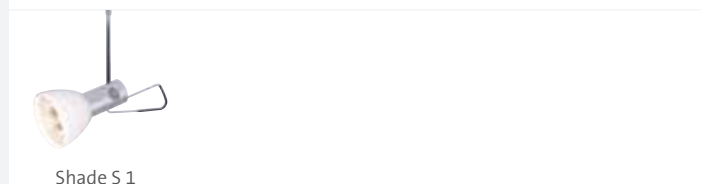
Material
Metal

Weight
0.2 kg

TECHNICAL INFORMATION



ACCESSORIES



Shade S 1

PRODUCT

Socket	Suitable for	Length (mm)	Adapter colour	Item number
GU 5.3	Retrofit or halogen	150	Chrome	11-959-10-06
			Matt chrome	11-959-20-06
		250	Matt chrome	11-959-30-06

Lamps from page 414, Accessories from page 420

HIGH FLIGHT

The HIGH FLIGHT luminaire is both a decorative lighting element and a room light with a fascinating light scene. The temperature-resistant dissipative film ensures soft and homogeneous general lighting in the room.

Design: Ralf Keferstein

IRC
READY



FEATURES

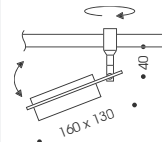
Ambient light
Rotatable / swivelling

Output data
12 V / GY 6.35 / QT-LP 12 max. 50 W
Energy efficiency class: A++ to C

Material
Metal, temperature-resistant film

Weight
0.2 kg

TECHNICAL INFORMATION



PRODUCT

Socket	Suitable for	Adapter colour	Item number
GY 6.35	Halogen	Chrome	11-969-10-06
		Matt chrome	11-969-11-06

Lamps from page 415



GATE B NINE

GATE B NINE

GATE B NINE is suitable for use in large volume light sculptures, such as free floating circles or squares, for example. With its cylindrical form and the internal lamp, the spotlight provides selective downward lighting. GATE B NINE is also suitable for the use of LED retrofits.

Design: Ralf Keferstein



LED
READY

FEATURES

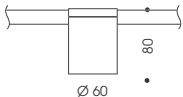
Spotlights

Output data
12 V / GU 5.3 / QR-C 51 max. 35 W
Energy efficiency class: A+ to C
“Cool beam” lamps not permissible

Material
Metal

Weight
0.2 kg

TECHNICAL INFORMATION



COLOURS



PRODUCT

Socket	Suitable for	Colour	Item number
GU 5.3	Retrofit or halogen	Chrome	11-901-10-05
		Matt chrome	11-901-10-06

Lamps from page 414



GATE B FIVE

GATE B TWO

The shape of the GATE B TWO room light is very minimalist. The similarity to the BALIBU 12 V pendant luminaire here in terms of shape is entirely intentional. Both luminaires can thus be combined into a lighting concept with consistent design language.

Design: Ralf Keferstein

IRC
READY



MAGIC

The white satin finished quality glass of the MAGIC luminaire ensures a homogeneous and very soft light scene. With repeated positioning, MAGIC is able to immerse the ceiling in a fascinating sea of light. MAGIC also shows its extraordinary lighting effect on large light objects such as circles or squares.

Design: Ralf Keferstein

IRC
READY



FEATURES

Ambient light

Output data

12 V / G 4 / QT-LP 9 max. 20 W
Energy efficiency class: A++ to E

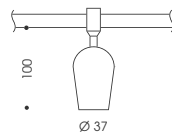
Material

Metal, glass

Weight

0.2 kg

TECHNICAL INFORMATION



FEATURES

Ambient light

Output data

12 V / G 4 / QT-LP 9 max. 20 W
Energy efficiency class: A++ to E

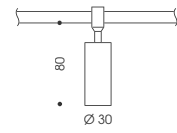
Material

Metal, borosilicate glass

Weight

0.2 kg

TECHNICAL INFORMATION



COLOURS



Matt white

Matt pineapple

PRODUCT

Socket	Suitable for	Colour	Item number
G 4	Halogen	Matt white	11-972-10-06/21
		Matt pineapple	11-972-10-06/32

Lamps from page 415

PRODUCT

Socket	Suitable for	Adapter colour	Item number
G 4	Halogen	Chrome	11-961-10-05/21
		Matt chrome	11-961-10-06/21

Lamps from page 415



GRACE

GRACE

Height adjustable

GRACE numbers among the classics of decorative pendant luminaires worldwide. It is ideal for setting the scene at tables or counters. The two lenticular, satin finished shades are surrounded by a luminaire head made from aluminium and ensure even, glare-free illumination. The elegant bright chrome or brushed aluminium surfaces completely round out the GRACE profile. The luminaire is height adjustable using an integrated adjustment mechanism. It is integrated into the track system using the PULLEY-TO adapter.

Design: Ralf Keferstein

IRC
READY



FEATURES

Pendant luminaire
Height adjustable
Can be shortened

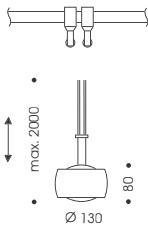
Output data
12 V / GY 6.35 / QT-LP 12 max. 50 W
Energy efficiency class: A++ to C

Material
Aluminium

Weight
0.6 kg

TECHNICAL INFORMATION

Order adapter separately



Installation
The lamp can be changed without any tools.

COLOURS



Chrome



Brushed aluminium

PRODUCT

Socket	Suitable for	Shade colour	Item number
GY 6.35	Halogen	Chrome	10-931-10-05
		Brushed aluminium	10-931-10-12

Adapter from page 311, Lamps from page 415



PULL-IT

PULL-IT

Height adjustable

The attractive glass shade in combination with the distinctive metal cylinder gives the PULL-IT pendant luminaire and unmistakable appearance. The hand-blown glass diffuser directs the light onto the table and at the same time provides pleasant general lighting in the room. The models with transparent or bright black shades direct all of the light onto the table top. A free-moving counterweight allows for continuous height adjustment of the luminaire. It is integrated into the track system using the PULLEY-TO adapter. The luminaire has been awarded multiple design prizes.

Design: Ralf Keferstein

IRC
READY



FEATURES

Pendant luminaire
Height adjustable
Can be shortened

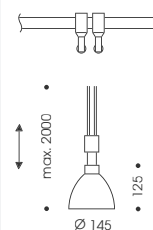
Output data
12 V / GY 6.35 / QT-LP 12 max. 50 W
Energy efficiency class: A++ to C

Material
Metal, hand-blown glass

Weight
1.5 kg

TECHNICAL INFORMATION

Order adapter separately



COLOURS



Transparent



Matt white

PRODUCT

Body Matt chrome

Socket	Suitable for	Shade colour	Item number
GY 6.35	Halogen	Transparent	10-952-10-06/01
		Matt white	10-952-10-06/21

Adapter from page 311, Lamps from page 415





ECOLINO GRANDE

ECOLINO GRANDE

Height adjustable

The domed glass shade of ECOLINO GRANDE is bent from flat glass using a special process. It characterises the luminaire and ensures generous lighting. The light satin finish on the glass gently refracts the light and immerses the room in a soft light. The ECOLINO GRANDE pendant luminaire can be set to any height using the integrated counterweight. It is integrated into the track system using the PULLEY-TO adapter.

Design: Ralf Keferstein

IRC
READY



FEATURES	TECHNICAL INFORMATION
<p>Pendant luminaire Height adjustable Can be shortened</p> <p>Output data 12 V / GY 6.35 / QT-LP 12 max. 50 W Energy efficiency class: A++ to C</p> <p>Material Metal, domed flat glass</p> <p>Weight 0.7 kg</p>	<p>Order adapter separately</p> <p>90° max. 2000 Ø 190 50</p>

PRODUCT			
Socket	Suitable for	Shade colour	Item number
GY 6.35	Halogen	Matt white	10-981-20-06/21

Adapter from page 311, Lamps from page 415



HIGH FLIGHT GALERIE / TORINO

HIGH FLIGHT GALERIE

The HIGH FLIGHT GALLERY room light is intended for wall mounting and provides general lighting with a primarily upward light distribution. HIGH FLIGHT GALLERY is both a decorative lighting element and a room light with a fascinating light scene.

Design: Ralf Keferstein

IRC
READY



FEATURES

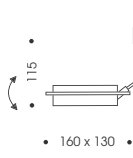
Gallery spotlight
Swivelling

Output data
12 V / GY 6.35 / QT-LP 12 max. 50 W
Energy efficiency class: A++ to C

Material
Metal, temperature-resistant film

Weight
0.2 kg

TECHNICAL INFORMATION



Installation
The luminaire must be installed in an upright position.
Minimum distance from ceiling 0.5 m.

TAIFUN

The TAIFUN gallery spotlight is developed for wall mounting and optimally lights pictures in the area underneath it. It can be fitted with LED retrofit lamps and can be varied in appearance and light scene using separately available decorative rings and other accessories.

Design: Ralf Keferstein

LED
READY

IRC
READY



FEATURES

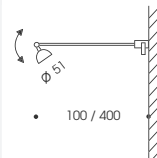
Gallery spotlight
Swivelling head
100 or 400 mm length
The 400 mm version can be shortened up to 100 mm minimum length

Output data
12 V / GU 5.3 / QR-CBC 51 max. 50 W
Energy efficiency class: A+ to C

Material
Metal

Weight
0.1 kg

TECHNICAL INFORMATION



ACCESSORIES



Decorative ring R 1

Shade S 1

PRODUCT

Socket	Suitable for	Adapter colour	Item number
GY 6.35	Halogen	Chrome	11-969-30-06
		Matt chrome	11-969-31-06

Lamps from page 415

PRODUCT

Socket	Suitable for	Length (mm)	Body colour	Item number
GU 5.3	Retrofit or halogen	100	Matt chrome	11-944-10-06
		400	Chrome	11-944-11-05
			Matt chrome	11-944-11-06

Lamps from page 414, Accessories from page 420



TORINO

TORINO

The TORINO gallery spotlight is developed for wall mounting and optimally lights objects or pictures in the area underneath it. The delicate, curved arm gives the spotlight a particularly lightweight look. TORINO is suitable for the use of LED retrofits and fulfils the current requirements for an energy-saving lighting solution. The appearance and light scene of TORINO can be varied using decorative rings and other accessories, available separately.

Design: Ralf Keferstein

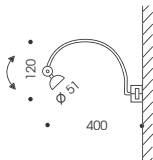
LED
READY **IRC**
READY



FEATURES

- Gallery spotlight
- Swivelling head
- Output data
- 12 V / GU 5.3 / QR-CBC 51 max. 50 W
- Energy efficiency class: A+ to C
- Material
- Metal
- Weight
- 0.1 kg

TECHNICAL INFORMATION



ACCESSORIES



PRODUCT

Socket	Suitable for	Adapter colour	Item number
GU 5.3	Retrofit or halogen	Chrome	11-943-10-05
		Matt chrome	11-943-10-06

Lamps from page 414, Accessories from page 420



SEVEN MILES FINAL / A LITTLE BIT

SEVEN MILES FINAL

The SEVEN MILES FINAL designer housing is a canopy for ceiling or wall mounting. Two integrated adapters support and connect the busbar. A complete single luminaire consists of housing with an integrated transformer or switching power supply, as well as a track and the desired luminaires.

All luminaires in the READY FOR TAKE OFF track system can be individually combined with SEVEN MILES FINAL. For combination with pendant luminaires, an appropriate adapter must be ordered separately (see page 311).

Design: Ralf Keferstein

SEVEN MILES FINAL COMPONENTS



Transformer

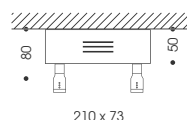
230 V / 50-60 Hz / 12 V / 35-150 VA

Transformer for 12 V halogen luminaires

Track end caps included in scope of delivery
Electronic transformer
Permissible secondary side cable length <2 m
Compatible with "Type C" dimmers
Protection class 1

Material

Metal



Switching power supply 12 V DC (LED)

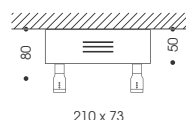
230 V / 50-60 Hz / 12 V DC / 30 VA

Switching power supply for 12 V DC LED luminaires

Track end caps included in scope of delivery
Protection class 1

Material

Metal



Track

17 x 8 x 1000 / 1500 mm

Material

Metal

Type	Colour	Item number
12 V / 35-150 VA	Chrome	60-435-10-05
	Matt chrome	60-435-10-06

Type	Colour	Item number
12 V DC / 30 VA	Chrome	60-442-10-05
	Matt chrome	60-442-10-06

Length (mm)	Colour	Item number
1000	Chrome	12-201-10-05
	Matt chrome	12-201-10-06
1500	Chrome	12-201-11-05
	Matt chrome	12-201-11-06



BALINO

PULLEY-TO

Luminaire adapter for 12 V pendant luminaires with height adjustment

PULLEY-TO connects height adjustable low voltage pendant luminaires to the READY FOR TAKE OFF track system. Adjustable spacing pulleys connect the suspension cables for the various pendant luminaires. The luminaires are protected by a 5A/T fuse located in the adapter.

Design: Ralf Keferstein



FEATURES

Material
Metal

TECHNICAL INFORMATION

The net weight of the luminaires may require the use of additional track supports.

EXAMPLES OF HEIGHT ADJUSTABLE LUMINAIRES



GRACE
Page 299

PULL-IT
Page 301

ECOLINO GRANDE
Page 303

PRODUCT

Type	A	Colour	Item number
12 V	max. 5	Chrome	12-644-10-05
		Matt chrome	12-644-10-06

READY-IN

Luminaire adapter for 12 V point luminaires

READY-IN is an adapter with integrated socket for all 12 V PLUG-IN point luminaires. This adapter provides additional design variety, in particular with regard to the integration of 12 V pendant luminaires into the track system. Suitable coaxial pendant luminaires as well as other spotlights can be found in the 12 V PLUG-IN chapter.

Design: Ralf Keferstein



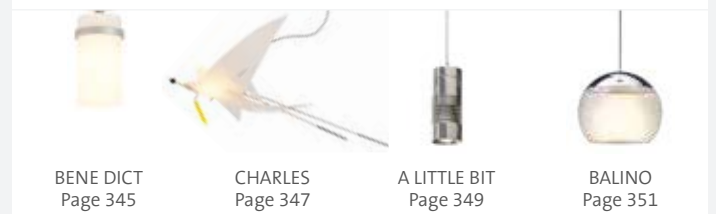
FEATURES

Material
Metal

TECHNICAL INFORMATION

The net weight of the luminaires may require the use of additional track supports.

EXAMPLES OF 12 V PLUG-IN LUMINAIRES



BENE DICT
Page 345

CHARLES
Page 347

A LITTLE BIT
Page 349

BALINO
Page 351

PRODUCT

Type	A	Colour	Item number
12 V	max. 5	Chrome	12-621-10-05
		Matt chrome	12-621-10-06

READY FOR TAKE OFF SYSTEM COMPONENTS

12 V / max. 25 A

The components in a track system vary according to the situation in which it is used and the customer's individual requirements. A functional system always consists of certain base components.



The following checklist facilitates checking the completeness of the system and serves as a guideline for choosing the right components.

Examples





SYSTEM COLOURS

-  Chrome
-  Matt chrome

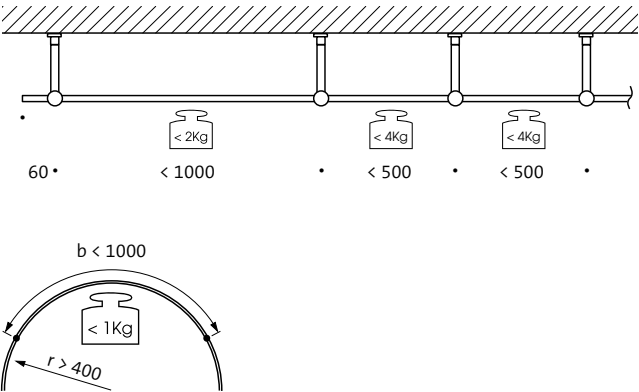
BASE COMPONENT CHECKLIST

- A Track
- B Support / suspension
- C Connector
- D Power supply
- E End pieces / end caps
 - Transformer / power supply, in the system or external

SPECIFIC COMPONENTS

- F Track arm
 - Picture mounting

DISTANCES AND WEIGHTS



1. TRACK



1.1 STRAIGHT

17 x 8 mm / 28 mm²
Can be shortened

Material
Metal

Design
Ralf Keferstein

Colour	L (mm)	Item number
Chrome	1000	12-201-10-05
Matt chrome	1000	12-201-10-06
Chrome	1500	12-201-11-05
Matt chrome	1500	12-201-11-06

1.2 CURVED

17 x 8 mm / 28 mm
Can be shortened

r = (> 400mm)

If you want to create a full-circle installation, please order CONNECTOR 3.1 or 3.2

Material
Metal

Design
Ralf Keferstein

Colour	L (mm)	Item number
Chrome	840	12-211-10-05
Matt chrome	840	12-211-10-06
Chrome	1340	12-211-11-05
Matt chrome	1340	12-211-11-06

2. SUPPORT



2.1 SUPPORT Ø 14 mm

Material
Metal

Design
Ralf Keferstein

Colour	L (mm)	Item number
Chrome	20	12-301-10-05
Matt chrome	20	12-301-10-06
Chrome	30	12-301-11-05
Matt chrome	30	12-301-11-06

2.2 COVER PLATE

Ø 24 x 4 mm
Optional Accessory
Compatible: 2.1

Material
Metal

Design
Ralf Keferstein

Colour	Item number
Chrome	12-311-10-05
Matt chrome	12-311-10-06

2. SUPPORT



2.3 SUPPORT Ø 5 mm

Can be shortened

Material
Metal

Design
Ralf Keferstein

Colour	L (mm)	Item number
Chrome	80	12-301-12-05
Matt chrome	80	12-301-12-06
Chrome	100	12-301-13-05
Matt chrome	100	12-301-13-06
Chrome	225	12-301-14-05
Matt chrome	225	12-301-14-06
Chrome	525	12-301-15-05
Matt chrome	525	12-301-15-06
Matt chrome	1025	12-301-16-06

2.4 ADDITIONAL JOINT

Swivel range 90 - 180°
Compatible: 2.1 / 2.3

Material
Metal

Design
Ralf Keferstein

Colour	Item number
Chrome	62-303-01-05
Matt chrome	62-303-01-06

2.5 SUSPENSION

1500 mm
Can be shortened

Material
Metal

Design
Ralf Keferstein

Colour	Item number
Chrome	12-331-10-05
Matt chrome	12-331-10-06

2.6 SUPPORT, WALL

30 x 21 x 24 mm

Material
Metal

Design
Ralf Keferstein

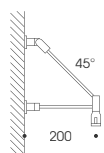
Colour	Item number
Chrome	12-321-10-05
Matt chrome	12-321-10-06

2. SUPPORT**2.7 TRACK ARM**

Wall clearance 200 mm
Can be shortened

Material
Metal

Design
Ralf Keferstein



Colour	Item number
Chrome	12-351-10-05
Matt chrome	12-351-10-06

3. CONNECTOR**3.1**

For straight and curved track
Compatible: 1.1 / 1.2 (R > 1000 mm)

Material
Metal

Design
Ralf Keferstein

Conductive

Colour	Item number
Chrome	12-401-10-05

**3.2**

For curved track
Compatible: 1.2 (R < 1000 mm)

Material
Metal

Design
Ralf Keferstein

Conductive

Colour	Item number
Chrome	12-403-10-05

**3.3 INSULATING CONNECTOR**

For straight and curved track
Compatible: 1.1 / 1.2

Material
Plastic

Design
Ralf Keferstein

Insulating

Colour	Item number
Matt black	12-401-11-05

3. CONNECTOR**3.4 SWIVEL CONNECTOR**

Swivel range 60 - 180°

Material
Metal

Design
Ralf Keferstein

Horizontal, conductive

Colour	Item number
Chrome	12-411-10-05
Matt chrome	12-411-10-06

Vertical, conductive

Colour	Item number
Chrome	12-411-11-05
Matt chrome	12-411-11-06

**3.5 T-CONNECTOR**

Swivel range 60 - 90°

Material
Metal

Design
Ralf Keferstein

Conductive

Colour	Item number
Chrome	12-421-10-05
Matt chrome	12-421-10-06

**3.6 X-CONNECTOR**

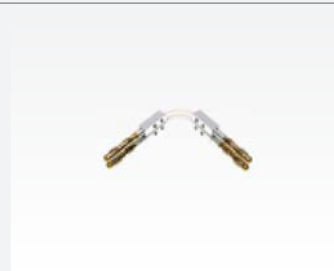
Swivel range 60 - 90°

Material
Metal

Design
Ralf Keferstein

Conductive

Colour	Item number
Chrome	12-431-10-05
Matt chrome	12-431-10-06

**3.7 FLEX CONNECTOR**

6 mm² / 50 mm

Material
Metal

Design
Ralf Keferstein

Conductive

Colour	Item number
Chrome	12-461-10-05
Matt chrome	12-461-10-06

4. END PIECE



4.1 END PIECE

17 x 8 x 60 mm

Material
Metal

Design
Ralf Keferstein

Colour	Item number
Chrome	12-601-10-05
Matt chrome	12-601-10-06

4.2 END CAPS

8 x 8 x 12 mm

Material
Plastic

Design
Ralf Keferstein

Colour	Item number
Matt black	12-601-11-23

5. PICTURE MOUNTING



PICTURE MOUNTING, 1 PAIR

Material
Metal, Plastic

Design
Ralf Keferstein

Colour	L (mm)	Item number
Black	1500	62-301-02-23

6. POWER SUPPLY



6.1 ROD

Can be shortened
Compatible: 8.1 / 8.2 / 11 / 12 / 13

Material
Metal

Design
Ralf Keferstein

Colour	L (mm)	Item number
Chrome	250	12-513-10-05
Matt chrome	250	12-513-10-06
Chrome	500	12-513-11-05
Matt chrome	500	12-513-11-06

6. POWER SUPPLY



6.2 RECESSED

Can be shortened
Compatible: 2.3
Rear locking

Material
Metal

Design
Ralf Keferstein

Colour	L (mm)	Item number
Matt chrome	250	12-513-20-06
Matt chrome	550	12-513-21-06

6.3 PLUG

End power supply

8 x 17 x 25 mm
6 mm²
Compatible: 8.3 / 9 / 10 / 13

Material
Metal

Design
Ralf Keferstein

Colour	Item number
Chrome	12-511-10-05
Matt chrome	12-511-10-06

6.4 PLUG + CABLE

End power supply

8 x 17 x 25 mm
6 mm² / 500 mm
Can be shortened
Compatible: 10 / 11

Material
Metal

Design
Ralf Keferstein

Colour	Item number
Chrome	12-511-11-05
Matt chrome	12-511-11-06

6.5 CLIPS

Central power supply, lateral

Ø 10 x 30 mm
6 mm²
Compatible: 8.3 / 9 / 13

Material
Metal

Design
Ralf Keferstein

Colour	Item number
Chrome	12-511-20-05
Matt chrome	12-511-20-06

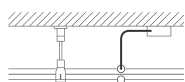
6. POWER SUPPLY**6.6 CLIPS + CABLE**

Central power supply, lateral

Ø 10 x 30 mm
6 mm² / 500 mm
Can be shortened
Compatible: 10 / 11

Material
Metal

Design
Ralf Keferstein



Colour	Item number
Chrome	12-511-21-05
Matt chrome	12-511-21-06

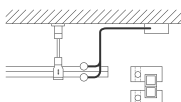
6.7 CLIPS

Central power supply, vertical

Ø 10 x 25 mm
6 mm²
Compatible: 8.3 / 9 / 13

Material
Metal

Design
Ralf Keferstein



Colour	Item number
Chrome	12-511-30-05
Matt chrome	12-511-30-06

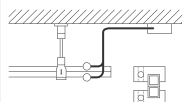
6.8 CLIPS + CABLE

Central power supply, vertical

Ø 10 x 25 mm
6 mm² / 500 mm
Can be shortened
Compatible: 10 / 11

Material
Metal

Design
Ralf Keferstein



Colour	Item number
Chrome	12-511-31-05
Matt chrome	12-511-31-06

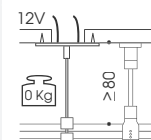
8. POWER SUPPLY, CEILING**8.1 RECESSED**

Ø 95 x 5 / 51mm
Compatible: 2.3 (≥ 80 mm)

Order separately: 6.1

Material
Metal

Design
Ralf Keferstein



Colour	Item number
Chrome	12-501-10-05
Matt chrome	12-501-10-06

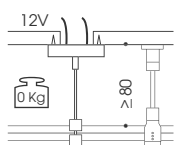
8. POWER SUPPLY, CEILING**8.2 SURFACE MOUNTED**

Ø 82 x 24 / 70mm
Compatible: 2.3 (≥ 80 mm)

Order separately: 6.1

Material
Metal

Design
Ralf Keferstein



Colour	Item number
Chrome	12-501-11-05
Matt chrome	12-501-11-06

8.3 SURFACE MOUNTED, SIDE CABLE

Ø 82 x 24 mm
4 mm² / 500 mm
Can be shortened
Compatible: 2.3 (≥ 80 mm)

Order separately: 6.3 / 6.5 / 6.7

Material
Metal

Design
Ralf Keferstein

Colour	Item number
Chrome	12-501-12-05
Matt chrome	12-501-12-06



A LITTLE BIT

TRANSFORMERS AND DC POWER SUPPLY UNITS

Options for combination of LED luminaires and various lamp types with transformers and DC power supply units

Magnetic transformer	VA	Catalogue page	LED luminaires	Retrofit lamps	Conventional lamps	
PYRAMID	200 / 300	320	yes	yes	yes	Permissible LED luminaire or lamp combinations see table below
CHARGE	105 / 200 / 300	321	yes	yes	yes	
extern, e.g. MT 1	105 / ... / 400	424	yes	yes	yes	

Electronic transformer					
TRANSFORMER XT 105/150	105 / 150	321	-	-	yes
TRANSFORMER 150	150	322	-	-	yes
TRANSFORMER 150 - TO	150	322	-	-	yes
SEVEN MILES FINAL	150	309	-	-	yes
extern, e.g. ET 5	105	423	-	-	yes

12 V DC power supply unit					
CONNECT	60	322	yes	yes	-
SEVEN MILES FINAL 12 V DC	30	309	yes	yes	-
extern, e.g. DC 1	45 / 60	424	yes	yes	-

The operation of LED luminaires and 12 V DC-compatible retrofit lamps within the same system is permissible

Permissible LED luminaire and lamp combinations within a **READY FOR TAKE OFF** track system with magnetic transformer

LED luminaires	yes	-	yes *
Retrofit lamps	-	yes	yes *
Conventional lamps	yes *	yes *	yes *

* In order to avoid negatively affecting the service life of conventional lamps during simultaneous operation of LED luminaires and/ or retrofit lamps, a load of at least 70% of the specified maximum capacity of the transformer should be ensured.

TRANSFORMERS

Designer housing
230 V / 50 – 60 Hz / 12 V / protection class 1



External transformers from page 422

9. PYRAMID



9.1 PYRAMID-1

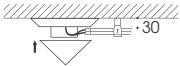
6 mm² / 500 mm
Magnetic SELV transformer, dimmable with type L dimmers

300 VA version including power inductor
Compatible: 2.1 (≥ 30 mm)

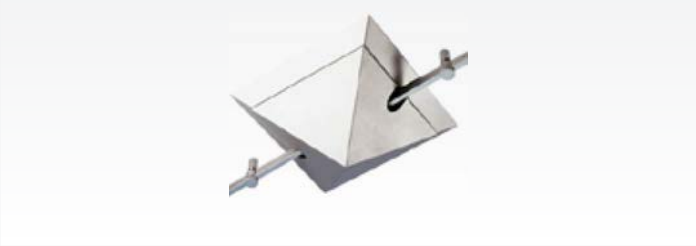
Order separately: Power supply 6.3

Material
Metal

Design
Ralf Keferstein



245 x 245 x 130 mm		
Colour	VA	Item number
Matt chrome	200	60-122-10-06
Matt chrome	300	60-122-11-06



9.2 PYRAMID-2

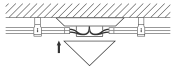
6 mm² / 500 mm
Magnetic SELV transformer, dimmable with type L dimmers

300 VA version including power inductor
Compatible: 2.1 (≥ 30 mm)

Order separately: 2x Power supply 6.3

Material
Metal

Design
Ralf Keferstein



245 x 245 x 130 mm		
Colour	VA	Item number
Matt chrome	200	60-122-20-06
Matt chrome	300	60-122-21-06

9. PYRAMID**9.3 PYRAMID-3**

6 mm² / 500 mm
Magnetic SELV transformer, dimmable with type L dimmers

300 VA version including power inductor
Compatible: 2.3 (≥ 100 mm)

Order separately: Power supply 6.3 / 6.5 / 6.7

Material

Metal

Design

Ralf Keferstein

245 x 245 x 130 mm

Colour	VA	Item number
Matt chrome	200	60-122-30-06
Matt chrome	300	60-122-31-06

10. CHARGE-1

Magnetic SELV transformer, dimmable with type L dimmers
300 VA version including power inductor
Compatible: 2.3 (≥ 100 mm)

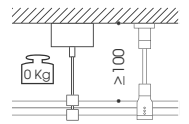
Order separately: Power supply 6.1 / 6.4 / 6.6 / 6.8

Material

Metal

Design

Ralf Keferstein



Ø 120 x 57 / 77 mm

Colour	VA	Item number
Chrome	105	60-126-10-05
Matt chrome	105	60-126-10-06

Ø 140 x 72 / 93 mm

Colour	VA	Item number
Chrome	200	60-126-11-05
Matt chrome	200	60-126-11-06
Chrome	300	60-126-12-05
Matt chrome	300	60-126-12-06

11. CHARGE-2

Magnetic SELV transformer, dimmable with type L dimmers
300 VA version including power inductor
Compatible: 2.3 (≥ 100 mm)

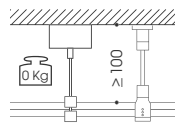
Order separately: Power supply 6.1 / 6.4 / 6.6 / 6.8

Material

Metal, plastic

Design

Ralf Keferstein



Ø 115 x 53 / 73 mm

Colour	VA	Item number
Matt white	105	60-127-10-21

Ø 140 x 65 / 85 mm

Colour	VA	Item number
Matt white	200	60-127-11-21
Matt white	300	60-127-12-21

12. TRANSFORMER XT 105/150

Electronic transformer
Permissible secondary side cable length < 2 m
Compatible with "Type C" dimmers, capacitive
Compatible: 2.3 (≥ 100 mm)

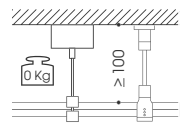
Order separately: Power supply 6.1

Material

Metal

Design

Ralf Keferstein



Ø 103 x 53 / 100 mm

Colour	VA	Item number
Chrome	35-105	60-131-10-05
Matt chrome	35-105	60-131-10-06

210 x 75 x 52 / 100 mm

Colour	VA	Item number
Chrome	35-150	60-131-11-05
Matt chrome	35-150	60-131-11-06

13. TRANSFORMER 150



Electronic transformer
230 V / 50 - 60 Hz / 12 V / 150 VA
Permissible secondary side cable length <2 m
Compatible with "Type C" dimmers, capacitive
Compatible: 2.1 (30 mm)

Order separately: Power supply 6.3 / 6.5 / 6.7

Material
Metal

Design
Ralf Keferstein

210 x 75 x 54 mm / incl. 100/300 mm cabel 2,5 mm²

Colour	VA	Item number
Chrome	35 - 150	60-132-10-05
Matt chrome	35 - 150	60-132-10-06

14. TRANSFORMER 150 - TO



Electronic transformer
230 V / 50-60 Hz / 12 V / 150 VA
Permissible secondary side cable length <2 m
Compatible with "Type C" dimmers, capacitive
Compatible: 2.3 (80 mm)

Material
Metal

Design
Ralf Keferstein

210 x 75 x 54 / 90 mm

Colour	VA	Item number
Chrome	35 - 150	60-133-10-05
Matt chrome	35 - 150	60-133-10-06

DC POWER SUPPLY UNIT

Designer housing

230 V / 50 – 60 Hz / 12 V DC / protection class 1



External 12 V DC power supply units from page 424

15. CONNECT / 12 V DC (LED)



Ø 60 x 328 / 100 mm
Switching power supply
Compatible: 2.3 (100 mm)

Compatible with LED luminaires

Material
Metal

Colour	VA	Item number
Chrome	60	60-141-10-05
Matt chrome	60	60-141-10-06



CONNECT



PLUG-IN

INDIVIDUAL WISHES INCLUDED.

PLUG-IN is a delicate, versatile 12 V plug connector system. Much like the principle of plug and plug socket, the PLUG-IN luminaires are connected to the corresponding plug sockets. The plug connection can be detached at any time and allows for combination of the luminaires any way you like.

Depending on the installation situation and planned electrical installation, the system offers a wide variety of optical possibilities. High quality designer housing is intended for surface mounted installation. With an integrated transformer and up to five plug-in slots, the housing allows for the individual combination of single luminaires.

Plug sockets for recessed installation in suspended ceilings offer the option of designing individually tailored lighting concepts. PLUG-IN luminaires are offered with a variety of lighting technologies. Both LED and halogen luminaires are available to choose from.

The PLUG-IN system creates decorative accents and is recommended for use both in private living space and for the shop and property sector. It can be individually configured for any lighting requirements imaginable.

Design: Ralf Keferstein

CONTENTS	PAGE
System luminaires	330
System components	364
SHOP recessed system	403
Lamp	413
Lamp accessories	420

PLUG-IN

LUMINAIRE OVERVIEW

Low voltage plug connector system

LED LUMINAIRES

Spotlights



[RIDGE MAX](#)
Page 330



[RIDGE](#)
Page 331



[A LITTLE BIT MORE](#)
Page 334



[A LITTLE BIT](#)
Page 335

Pendant luminaires



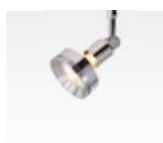
[A LITTLE BIT](#)
Page 349

LUMINAIRES WITH CONVENTIONAL FITTINGS

Spotlights



LP 111
Page 337



GATE B FIVE
Page 339



STREAM 51
Page 341



MATCH
Page 341



MX-2
Page 343

Ambient lights



BENE DICT
Page 345

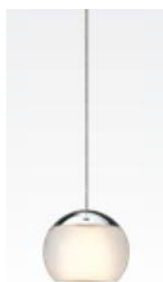


HIGH FLIGHT
Page 345



CHARLES
Page 347

Pendant luminaires



BALINO
Page 351



GRACE
Page 353



PULL-IT
Page 355



BENE
Page 357



BALIBU
Page 359



DONATA
Page 361

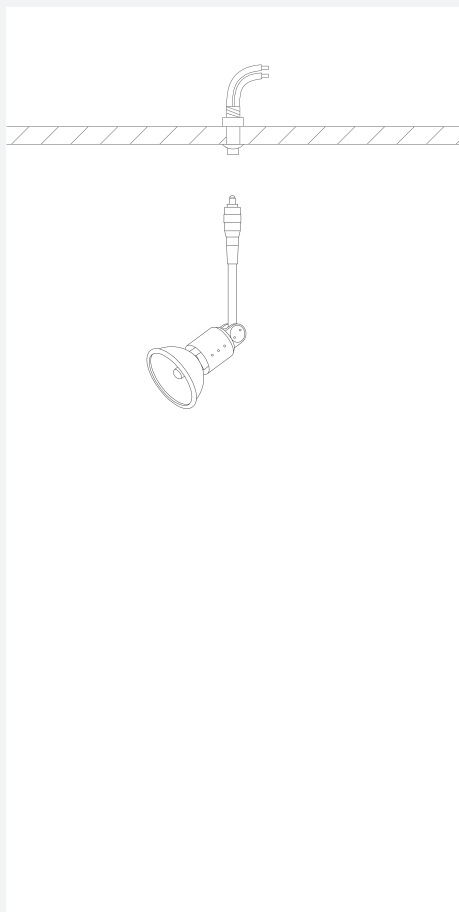


COCO
Page 363

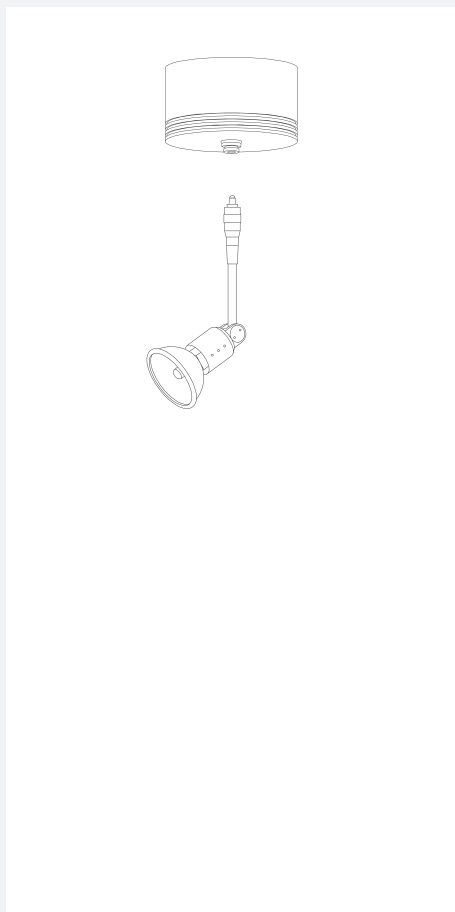
PLUG-IN

ONE SYSTEM, MANY OPTIONS

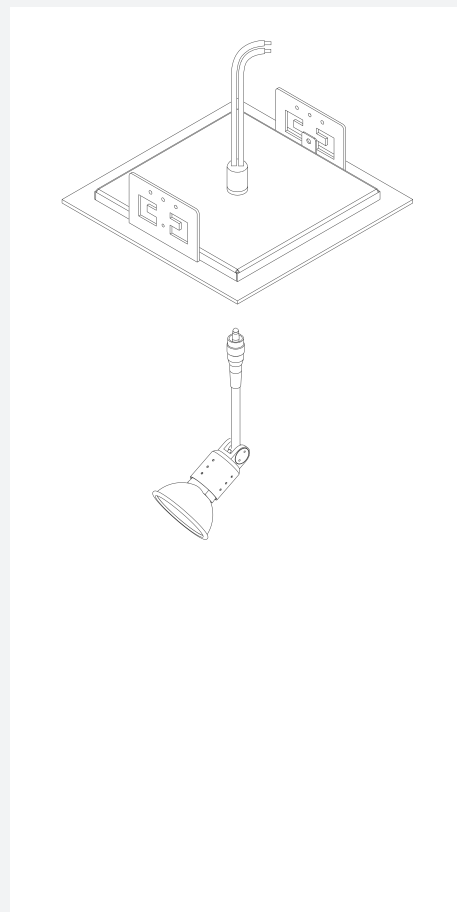
INSTALLATION recessed in the ceiling



INSTALLATION Surface mounted



ADAPTERS Recessed system [SHOP](#)



INSTALL QUICKLY AND SAFELY

The installation of PLUG-IN luminaires is remarkably simple. Thanks to the plug connection, the luminaires can be put into operation quickly and conveniently.

Once plugged into the two-pole socket, the luminaire is mechanically secured against detaching by the ridged sleeve. At the same time, precise swivelling is thus ensured for the system spotlights.

THE PLUG-IN INSTALLATION METHODS

Depending on the area of application, there are two installation methods:

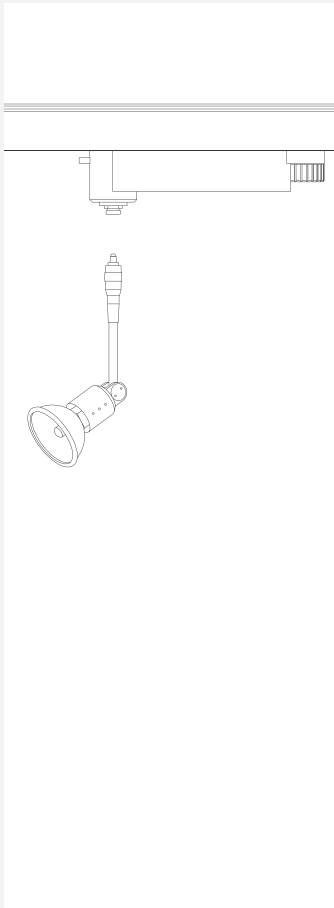
- Recessed installation with external transformer in suspended ceilings / cavity walls
- Surface mounted variant in the form of a ceiling canopy with integrated transformer on wall or ceiling surfaces.

The coaxial cable provided in the factory for pendant luminaires is always two metres long and can be shortened at the plug as you wish.

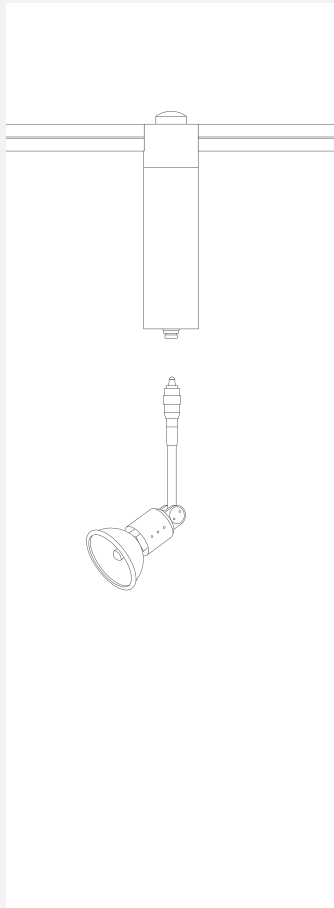
PLUG-IN

COMBINING AND EXPANDING

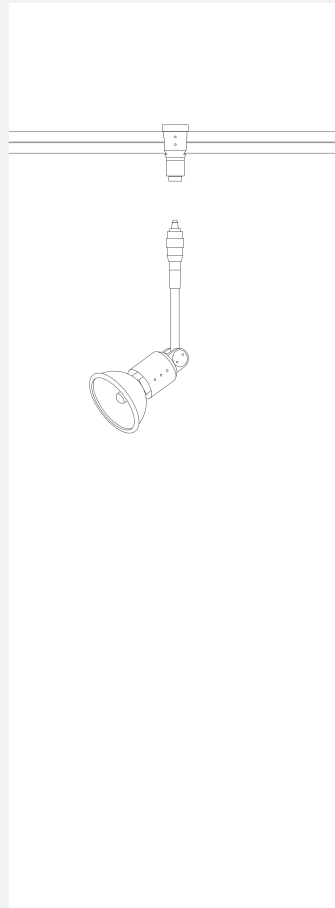
ADAPTERS
230 V track system
PHASE



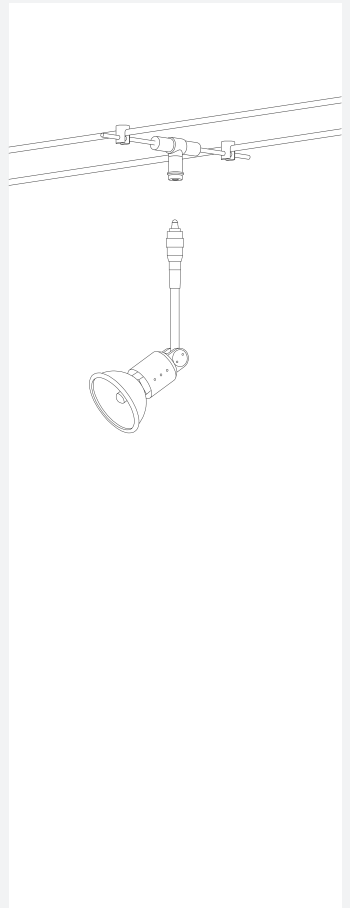
ADAPTERS
230 V track system
CHECK-IN



ADAPTERS
12 V track system
READY FOR TAKE OFF



ADAPTERS
12 V cable system
LIGHT-LINE



COMBINING PLUG-IN LUMINAIRES WITH HIGH VOLTAGE SYSTEMS

The luminaire range from the 12 V PLUG-IN system can be combined with a wide range of other OLIGO track and cable systems using a variety of adapter technology. The luminaires can be integrated into high voltage track systems using the PHASE-IN and CONTACT-TUBE adapter systems.

COMBINING PLUG-IN LUMINAIRES WITH LOW VOLTAGE SYSTEMS

The READY-IN and LIGHT-IN adapters allow for combination with the delicate 12 volt track and cable systems from OLIGO.

RIDGE MAX

LED

The distinctive cooling ribs around the circumference characterise the design of the highly efficient RIDGE MAX LED spotlight. The luminaire head, made from aluminium, surrounds the 1,200 lumen LED and is connected to the adapter by a joint which tilts and swivels. There are two light distribution characteristics available to choose from for lighting planning. The black and matt chrome surfaces have a remarkable surface finish thanks to an intricate grinding pattern.

Design: OLIGO

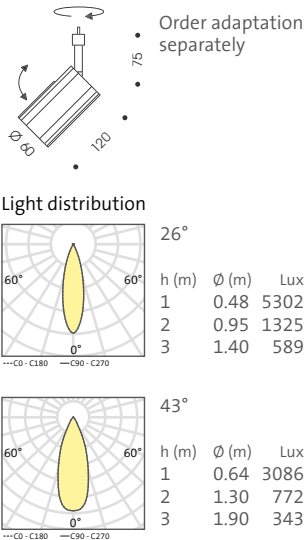
LED
INTEGRATED



FEATURES

- Spotlight**
Rotatable / swivelling
High performance reflector
Non-dimmable
- Output data**
12 V / LED / 1100 lm / 15 W AC /
15 W DC / CRI >90
Energy efficiency class: A+
Variants: 2700 K / 3000 K / 26° / 43°
- Material**
Aluminium
- Weight**
0.5 kg
- Installation**
Operation only possible on magnetic
12 V transformers or 12 V DC power
supply units.

TECHNICAL INFORMATION



COLOURS



PRODUCT										
Voltage	Type	lm	W	CRI	EEC	Angle	Rod colour	Body colour	2700 K	3000 K
12 V	LED	1100	15 AC / 15 DC	> 90	A+	26°	Matt chrome	Matt chrome	13-881-51-06	13-881-61-06
							Matt white	Matt white	13-881-52-21	13-881-62-21
							Chrome	Matt white	13-881-50-21	13-881-60-21
							Chrome	Matt black	13-881-50-23	13-881-60-23
						43°	Matt chrome	Matt chrome	13-881-54-06	13-881-64-06
							Matt white	Matt white	13-881-55-21	13-881-65-21
							Chrome	Matt white	13-881-53-21	13-881-63-21
							Chrome	Matt black	13-881-53-23	13-881-63-23
Adaptation variants: from page 370										

RIDGE

LED

The RIDGE LED spotlight is a little more delicate than its big brother. The high quality luminaire head made from aluminium has the same rotating and tilting functionality. With a luminous flux of 360 lumen, RIDGE is ideal for universal use in private living spaces, for example in studies, hallways or modern living and dining rooms. For RIDGE too, the black and matt chrome surfaces are refined with an intricate grinding pattern.

Design: OLIGO



Socket IN-B

FEATURES

Spotlight
Rotatable / swivelling
High performance reflector
Non-dimmable

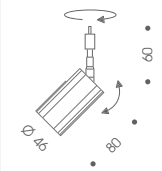
Output data
12 V / LED / 550 lm / 10.3 W AC /
7.6 W DC / 41° / CRI >90
Energy efficiency class: A
Variants: 2700 K / 3000 K

Material
Aluminium

Weight
0.2 kg

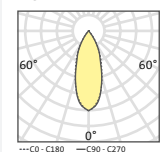
Installation
Operation only possible on magnetic
12 V transformers or 12 V DC power
supply units.

TECHNICAL INFORMATION



• Order adaptation
separately

Light distribution



41°

COLOURS



Chrome /
Matt white



Matt white /
Matt white



Chrome /
Matt black

PRODUCT

Voltage	Type	lm	W	CRI	EEC	Angle	Rod colour	Body colour	2700 K	3000 K
12 V	LED	550	10.3 AC / 7.6 DC	> 90	A	41°	Matt chrome	Matt chrome	13-889-21-06	13-889-31-06
							Matt white	Matt white	13-889-22-21	13-889-32-21
							Chrome	Matt white	13-889-20-21	13-889-30-21
							Chrome	Matt black	13-889-20-23	13-889-30-23

Adaptation variants: from page 370



A LITTLE BIT with Socket IN-B



A LITTLE BIT with Socket IN-B

A LITTLE BIT MORE LED

The A LITTLE BIT MORE LED spotlight offers outstanding lighting technology with individually definable light distribution characteristics. With a luminous flux of 1,100 lumen and 3,500 kelvin, the spotlight is intended for use in shops and property. The beam angle can be continuously adjusted between 20° and 60° using the focusable glass lens. For harmonious light distribution, the high quality lens body has been finished separately with a texture on the inside.

Design: OLIGO

LED
INTEGRATED



Socket IN-B

FEATURES

Spotlight
Rotatable / swivelling
Beam angle continuously adjustable between 20° and 60°
Non-dimmable

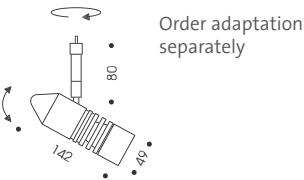
Output data
12 V / LED / 1000 lm / 11.5 W AC / 11.5 W DC / 20 – 60° / CRI >90
Energy efficiency class: A+
Variants: 2700 K / 3000 K

Material
Aluminium, glass lens

Weight
0.6 kg

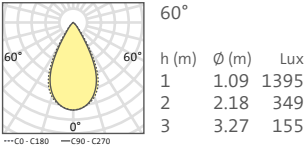
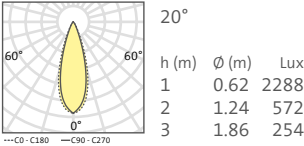
Installation
Operation only possible on magnetic 12 V transformers or 12 V DC power supply units.

TECHNICAL INFORMATION



Order adaptation separately

Light distribution



COLOURS



PRODUCT

Voltage	Type	lm	W	CRI	EEC	Angle	Rod colour	Body colour	2700 K	3000 K
12 V	LED	1000	11.5 AC / 11.5 DC	> 90	A+	20 – 60°	Chrome	Chrome	13-882-21-05	13-882-31-05
							Matt chrome	Matt chrome	13-882-22-06	13-882-32-06
							Matt white	Matt white	13-882-21-21	13-882-31-21
							Chrome	Matt white	13-882-23-21	13-882-33-21
							Chrome	Matt black	13-882-21-23	13-882-31-23

Adaptation variants: from page 370

A LITTLE BIT

LED

The A LITTLE BIT LED spotlight is slightly smaller in terms of size and light output, but just as variable when it comes to the light scene. Like its big brother, A LITTLE BIT also has efficient LED lighting technology, the qualities of which can be determined by means of a continuously adjustable lens. Different rod lengths also allow for different distances from the ceiling. A pendant luminaire matching this spotlight design is also available.

Design: OLIGO



Socket IN-B

FEATURES

Spotlight
Rotatable / swivelling
50 or 140 mm rod
Beam angle continuously adjustable between 20° and 60°
Non-dimmable

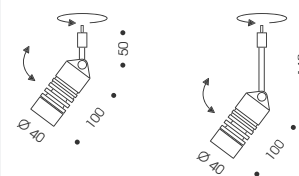
Output data
12 V / LED / 550 lm / 10.3 W AC / 7.6 W DC / 20 – 60° / CRI >90
Energy efficiency class: A
Variants: 2700 K / 3000 K

Material
Aluminium, glass lens

Weight
0.3 kg

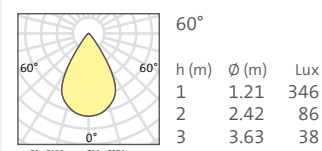
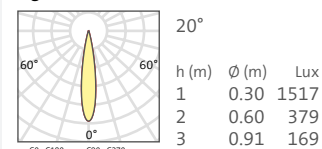
Installation
Operation only possible on magnetic 12 V transformers or 12 V DC power supply units.

TECHNICAL INFORMATION



Order adaptation separately

Light distribution



COLOURS AND MODELS



Chrome / 50 mm



Matt chrome / 50 mm



Chrome / 140 mm



Matt chrome / 140 mm

PRODUCT

Voltage	Type	lm	W	CRI	EEC	Angle	Rod length	Colour	2700 K	3000 K
12 V	LED	550	10.3 AC / 7.6 DC	> 90	A	20 – 60°	50 mm	Chrome	13-898-40-05	13-898-50-05
								Matt chrome	13-898-40-06	13-898-50-06
							140 mm	Chrome	13-898-41-05	13-898-51-05
								Matt chrome	13-898-41-06	13-898-51-06

Adaptation variants: from page 370



LP 111 with Socket IN-C

LP 111

The rotatable and swivelling luminaire head of the LP 111 spotlight allows for precise lighting of a wide variety of objects and surfaces, even from large distances. LP 111 is suitable for the use of halogen and LED retrofit lamps and fulfil the current requirements for an energy-saving lighting solution.

Design: Ralf Keferstein

LED **IRC**
READY READY



FEATURES

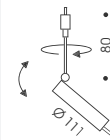
Spotlight
Rotatable / swivelling

Output data
12 V / G 53 / QR-LP 111 max. 50 W
Energy efficiency class: A to C

Material
Metal

Weight
0.3 kg

TECHNICAL INFORMATION



Order adaptation separately

PRODUCT

Socket	Suitable for	Item number
G 53	Retrofit or halogen	13-934-10-06

Adaptation variants: from page 370, Lamps from page 414



GATE B FIVE with transformer KEY-4 and accessory GATE B TUBE

GATE B FIVE

Compact dimensions in a technical and elegant design have made GATE B FIVE a timeless classic in private and commercial halogen lighting in many countries. The spotlight is also suitable for the use of LED retrofits. The shape and light scene can be varied using decorative rings and other accessories.

Design: Ralf Keferstein

LED
READY

IRC
READY



Socket IN-B and Accessory Decorative ring R 2

FEATURES

Spotlight
Rotatable / swivelling
50 or 90 mm rod

Output data
50 mm rod
12 V / GU 5.3 / QR-C 51 max. 35 W
"Cool beam" lamps not permissible

90 mm rod
12 V / GU 5.3 / QR-CBC 51 max. 50 W

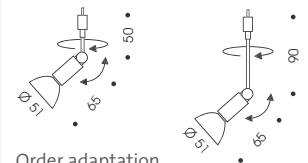
Energy efficiency class: A+ to C

Material
Metal

Weight
Luminaire: 0.1 kg
Accessory GATE B TUBE: 0.2 kg

TECHNICAL INFORMATION

Luminaire



Order adaptation separately

GATE B TUBE glass shade



ACCESSORIES



GATE B TUBE



Shade S 1

PRODUCT

Luminaire

Socket	Suitable for	Length (mm)	Colour	Item number
GU 5.3	Retrofit or halogen	50	Chrome	13-974-10-05
			Matt chrome	13-974-10-06
		90	Chrome	13-974-11-05
			Matt chrome	13-974-11-06

Adaptation variants: from page 370, Lamps from page 414, Accessories from p. 420

PRODUCT

Accessory: Glass shade GATE B TUBE

Colour	Item number
Partial satin finish	62-111-11-01



STREAM 51 with Socket IN-D

STREAM 51

The design of the STREAM 51 spotlight looks both dynamic and elegant. The elaborately manufactured luminaire head made from aluminium surrounds the lamp and gives the luminaire an aesthetic design. There is a subtle spike on the underside which can be used to adjust the luminaire, even during use.

Design: Ralf Keferstein

LED
READY



Socket IN-B

MATCH

The timeless design of MATCH is optimised for combination with LED retrofits. The appearance and light scene can be varied using decorative rings and other accessories, available separately.

Design: OLIGO

LED
READY

IRC
READY



Socket IN-B / LED Retrofit Lamp

FEATURES

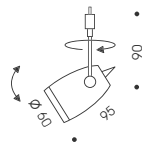
Spotlight
Rotatable / swivelling

Output data
12 V / GU 5.3 / QR-C 51 max. 50 W
Energy efficiency class: A+ to C
"Cool beam" lamps not permissible

Material
Aluminium

Weight
0.3 kg

TECHNICAL INFORMATION



• Order adaptation separately

Retrofit lamp
Lamp length of ≤48 mm recommended

FEATURES

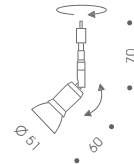
Spotlight
Rotatable / swivelling

Output data
12 V / GU 5.3 / QR-CBC 51 max. 50 W
Energy efficiency class: A+ to C

Material
Metal

Weight
0.2 kg

TECHNICAL INFORMATION



• Order adaptation separately

COLOURS



Chrome



Matt chrome

COLOURS AND ACCESSORIES



Chrome



Matt chrome



Decorative ring R 2

PRODUCT

Socket	Suitable for	Colour	Item number
GU 5.3	Retrofit or halogen	Chrome	13-945-11-05
		Matt chrome	13-945-11-06

Adaptation variants: from page 370, Lamps from page 414

PRODUCT

Socket	Suitable for	Colour	Item number
GU 5.3	Retrofit or halogen	Chrome	13-892-10-05
		Matt chrome	13-892-10-06

Adaptation variants: from page 370, Lamps from page 414, Accessories from p. 420



MX-2 with transformer KEY WEST and accessory Decorative ring R 2

MX-2

The rotatable and swivelling head of the MX-2 spotlight is characterised by a stainless steel bracket on the back. While the slim body remains visually inconspicuous, it provides effective accent lighting for materials and objects. MX-2 is suitable for the use of LED retrofits and fulfils the current requirements for an energy-saving lighting solution. The appearance and light scene can be varied using decorative rings and other accessories, available separately.

Design: Ralf Keferstein

LED
READY

IRC
READY



FEATURES

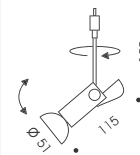
Spotlight
Rotatable / swivelling

Output data
12 V / GU 5.3 / QR-CBC 51 max. 50 W
Energy efficiency class: A+ to C

Material
Metal

Weight
0.1 kg

TECHNICAL INFORMATION



Order adaptation separately

ACCESSORIES



Shade S 1

PRODUCT

Socket	Suitable for	Colour	Item number
GU 5.3	Retrofit or halogen	Matt chrome	13-959-10-06

Socket IN-B and accessory Decorative ring R 2

Adaptation variants: from page 370, Lamps from page 414, Accessories from p. 420



BENE DICT mit Socket IN-B

BENE DICT

The satin finished glass shade of the timeless BENE DICT causes diffuse light refraction and makes a softly glowing tube of the room light. The circumferential ring is both an exciting design element and the invisible mounting for the shade. A pendant luminaire matching BENE DICT is available.

Design: Ralf Keferstein

IRC
READY



HIGH FLIGHT

HIGH FLIGHT is both a decorative lighting element and a room light with a fascinating light scene. The temperature-resistant dissipative film ensures soft and homogeneous general lighting. Different rod lengths allow for variable distances from the ceiling.

Design: Ralf Keferstein

IRC
READY



Socket IN-B

FEATURES

Ambient light

Output data

12 V / GY 6.35 / QT-LP 12 max. 35 W
Energy efficiency class: A++ to C

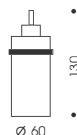
Material

Aluminium, borosilicate glass

Weight

0.3 kg

TECHNICAL INFORMATION



Order adaptation separately

FEATURES

Ambient light

Rotatable / swivelling
40 or 120 mm rod

Output data

12 V / GY 6.35 / QT-LP 12 max. 50 W
Energy efficiency class: A++ to C

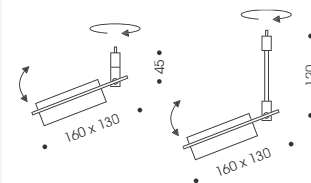
Material

Metal, temperature-resistant film

Weight

0.2 kg

TECHNICAL INFORMATION



Order adaptation separately

MODELS



40 mm

120 mm

PRODUCT

Socket	Suitable for	Item number
GY 6.35	Halogen	13-935-20-06/21

Adaptation variants: from page 370, Lamps from page 415

PRODUCT

Socket	Suitable for	Length (mm)	Item number
GY 6.35	Halogen	40	13-969-10-06
		120	13-969-11-06

Adaptation variants: from page 370, Lamps from page 415



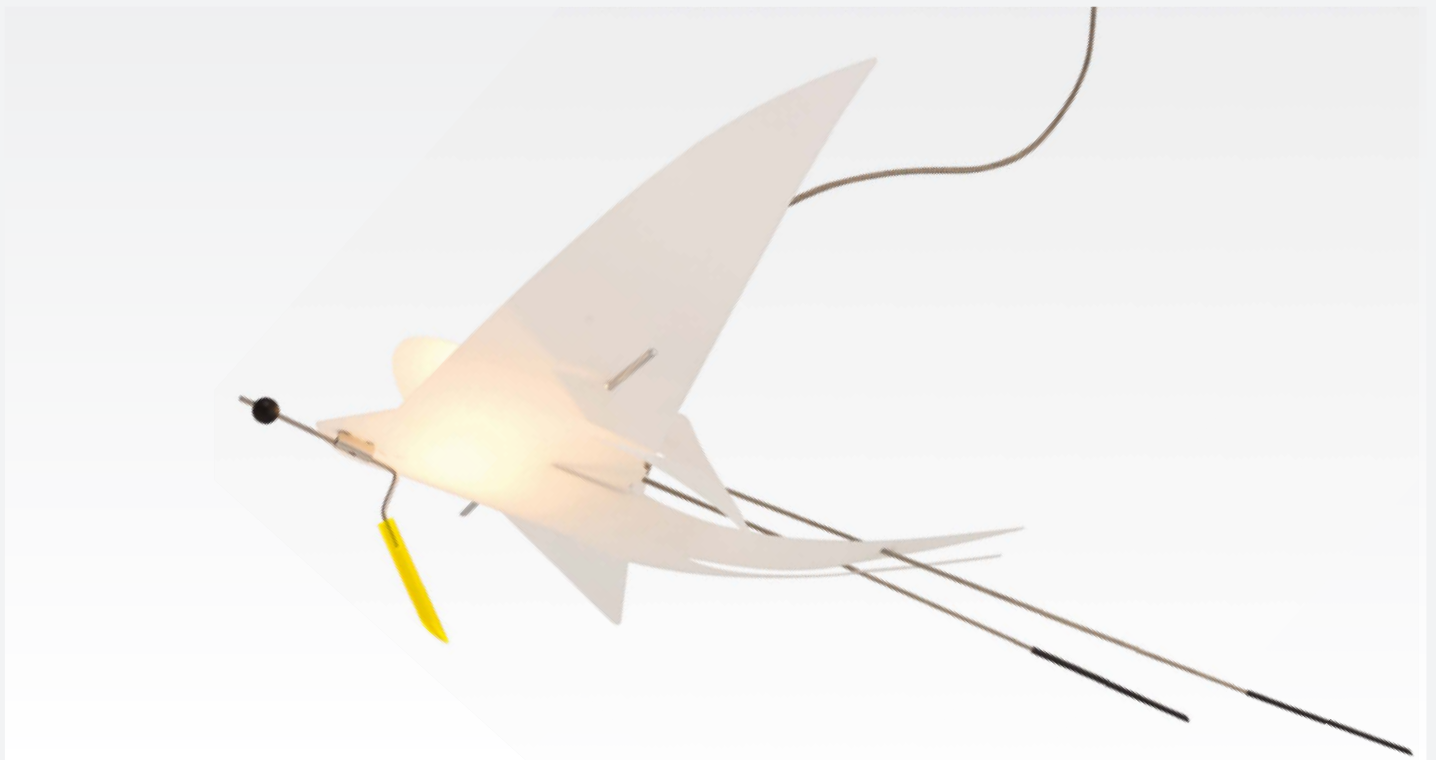
CHARLES mit Socket IN-B

CHARLES

The elegant and artistic handling of temperature-resistant dissipative film makes the CHARLES a decorative element which generates harmonious and soft room light. CHARLES cuts an effective and dapper figure both individually and in a swarm.

Design: Ralf Keferstein

IRC
READY



FEATURES

Ambient light

Output data

12 V / GY 6.35 / QT- LP 12 max. 50 W
Energy efficiency class: A++ to C

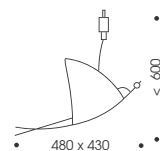
Material

Metal, temperature-resistant film, suspension flexible coaxial cable

Weight

0.3 kg

TECHNICAL INFORMATION



Order adaptation separately

PRODUCT

Socket	Suitable for	Item number
GY 6.35	Halogen	13-986-10-05

Adaptation variants: from page 370, Lamps from page 415



A LITTLE BIT

A LITTLE BIT

LED

The A LITTLE BIT pendant luminaire offers a highly flexible lighting solution. The elegant luminaire head made from aluminium integrates a lens which can be focused between 20° and 60°. For harmonious light distribution, the high quality lens body has been finished separately with a texture on the inside. The pendant luminaire can be dimmed using a button on the top. Elegant surfaces made from polished or matt aluminium round out the luminaire profile of A LITTLE BIT.

Design: OLIGO



FEATURES

Pendant luminaire
Can be shortened
Beam angle continuously adjustable between 20° and 60°
Dimmer switch
Memory function: Last light brightness value used is saved

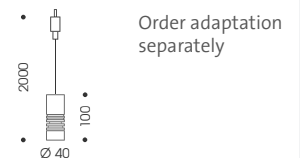
Output data
12 V / LED / 550 lm / 10.3 W AC / 7.6 W DC / 20 – 60° / CRI >90
Energy efficiency class: A
Variants: 2700 K / 3000 K

Material
Aluminium

Weight
0.2 kg

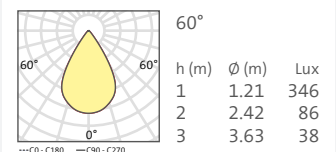
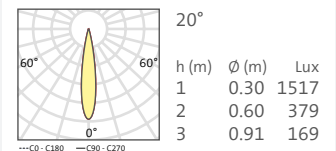
Installation
Operation only possible on magnetic 12 V transformers or 12 V DC power supply units.

TECHNICAL INFORMATION



Special length
Suspension cable up to 5 m available upon request.

Light distribution



COLOURS



Chrome



Matt chrome

PRODUCT

Voltage	Type	lm	W	CRI	EEC	Angle	Colour	2700 K	3000 K
12 V	LED	550	10.3 AC / 7.6 DC	> 90	A	20 – 60°	Chrome	13-898-60-05	13-898-70-05
							Matt chrome	13-898-60-06	13-898-70-06

Adaptation variants: from page 370



BALINO

BALINO

Hand-blown crystal glass forms the luminaire body of the small, spherical BALINO pendant luminaire. In the bright white, satin finished and orange models, the glass body is solidly coloured. For the tobacco and gold colours, the exclusive finishing with a crystal ice pattern on the interior of the lampshade creates a unique texture. Brilliant illumination highlights the charming lighting effect of this high quality pendant luminaire, which is available with a variety of shades.

Design: OLIGO

IRC
READY



FEATURES

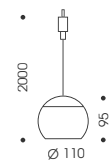
Pendant luminaire
Can be shortened

Output data
12 V / GY 6.35 / QT-LP 12 max. 35 W
Energy efficiency class: A++ to C

Material
Metal, glass

Weight
0.5 kg

TECHNICAL INFORMATION



Order adaptation separately

Special length
Suspension cable up to 5 m available upon request.

COLOURS



Chrome /
Satin finish



Chrome /
Bright orange



Matt chrome /
Satin finish



Matt chrome /
Bright tobacco



Matt chrome /
Bright gold

PRODUCT

Chrome body

Socket	Suitable for	Shade colour	Item number
GY 6.35	Halogen	Satin finish	13-880-10-05/03
		Bright orange	13-880-10-05/29

Adaptation variants: from page 370, Lamps from page 415

PRODUCT

Matt chrome body

Socket	Suitable for	Shade colour	Item number
GY 6.35	Halogen	Satin finish	13-880-10-06/03
		Bright tobacco	13-880-10-06/40
		Bright gold	13-880-10-06/08

Adaptation variants: from page 370, Lamps from page 415



GRACE

GRACE

Timeless GRACE numbers among the classics of decorative pendant luminaires worldwide. It is ideal for setting the scene at tables or counters. The two lenticular, satin finished shades are surrounded by a luminaire head made from aluminium and ensure even, glare-free illumination. The elegant surfaces in bright chrome or brushed aluminium completely round out the GRACE profile.

Design: Ralf Keferstein

IRC
READY



FEATURES

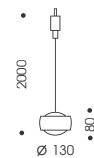
Pendant luminaire
Can be shortened

Output data
12 V / GY 6.35 / QT-LP 12 max. 50 W
Energy efficiency class: A++ to C

Material
Aluminium, glass

Weight
0.6 kg

TECHNICAL INFORMATION



Order adaptation separately

Special length
Suspension cable up to 5 m available upon request.

Installation
The lamp can be changed without any tools.

COLOURS



Chrome



Brushed Aluminium

PRODUCT

Socket	Suitable for	Colour	Item number
GY 6.35	Halogen	Chrome	13-931-10-05
		Brushed aluminium	13-931-10-12

Adaptation variants: from page 370, Lamps from page 415



PULL-IT

PULL-IT

The attractive glass shade in combination with the distinctive metal cylinder characterises the PULL-IT pendant luminaire and ensures an unmistakeable appearance. The hand-blown glass diffuser directs the light onto the table and at the same time provides pleasant general lighting in the room. In the model with transparent glass shade, the reflector insert directs all of the light onto the table top.

Design: Ralf Keferstein

IRC
READY



FEATURES

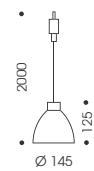
Pendant luminaire
Can be shortened

Output data
12 V / GY 6.35 / QT-LP 12 max. 50 W
Energy efficiency class: A++ to C

Material
Metal, hand-blown glass

Weight
1.1 kg

TECHNICAL INFORMATION



Order adaptation separately

Special length
Suspension cable up to 5 m available upon request.

COLOURS



Matt chrome /
Matt white



Matt chrome /
Transparent

PRODUCT

Socket	Suitable for	Body colour	Shade colour	Item number
GY 6.35	Halogen	Matt chrome	Matt white	13-952-10-06/21
		Matt chrome	Transparent	13-952-10-06/01

Adaptation variants: from page 370, Lamps from page 415



BENE

BENE

The satin finished glass of the lampshade causes diffuse light refraction and makes a softly glowing tube of the BENE pendant luminaire. The circumferential ring is both an exciting design element and the invisible mounting for the shade. A room light matching this pendant luminaire is also available. The luminaires can be fitted with energy-efficient low voltage halogen lamps.

Design: Ralf Keferstein

IRC
READY



FEATURES

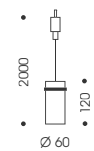
Pendant luminaire
Can be shortened

Output data
12 V / GY 6.35 / QT-LP 12 max. 50 W
Energy efficiency class: A++ to C

Material
Aluminium, glass

Weight
0.2 kg

TECHNICAL INFORMATION



Order adaptation separately

Special length
Suspension cable up to 5 m available upon request.

PRODUCT

Socket	Suitable for	Colour	Item number
GY 6.35	Halogen	Matt white	13-935-10-06/21

Adaptation variants: from page 370, Lamps from page 415



BALIBU

BALIBU

The elegantly shaped shade made from crystal glass gives the BALIBU pendant luminaire a light and timeless appearance. The hand-blown, satin finished glass shade makes each luminaire a unique item. There are four different glass colours to choose from. The light scene of the BALIBU varies according to the choice of lamp. With its possibility of creating effective atmospheres, the BALIBU often plays to its strengths in the property environment of hotels, restaurants or businesses.

Design: Ralf Keferstein



LED
READY

IRC
READY

FEATURES

Pendant luminaire
Can be shortened

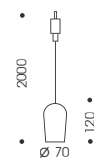
Output data
Satin finished shade:
12 V / GY 6.35 / QT-LP 12 max. 50 W
Energy efficiency class: A++ to C

Partial satin finished shade:
12 V / GU 5.3 / QR-CBC 51 max. 50 W
Energy efficiency class: A+ to C

Material
Aluminium, hand-blown crystal glass, white interior, opalised matt or clear partial satin finished exterior

Weight
0.4 kg

TECHNICAL INFORMATION



Order adaptation separately

Special length
Suspension cable up to 5 m available upon request.

COLOURS AND MODELS



Matt white



Matt pineapple



Matt melon



Partial satin finish

PRODUCT

Socket	Suitable for	Colour	Item number
GY 6.35	Halogen	Matt white	13-991-10-06/21
		Matt pineapple	13-991-10-06/32
		Melon	13-991-10-06/28
GU 5.3	Retrofit or halogen	Partial satin finished	13-991-11-06/02

Adaptation variants: from page 370, Lamps from page 415



DONATA

DONATA

A conically shaped shade made from satin finished glass defines the restrained design of the DONATA pendant luminaire. It reflects the light and ensures even lighting in the room. DONATA is suitable for the use of energy-efficient low-voltage halogen lamps.

Design: Ralf Keferstein

IRC
READY



FEATURES

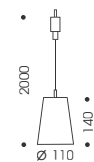
Pendant luminaire
Can be shortened

Output data
12 V / GY 6.35 / QT-LP 12 max. 50 W
Energy efficiency class: A++ to C

Material
Aluminium, borosilicate glass

Weight
0.4 kg

TECHNICAL INFORMATION



Order adaptation separately

Special length
Suspension cable up to 5 m available upon request.

COLOURS



Matt white



Champagne

PRODUCT

Socket	Suitable for	Colour	Item number
GY 6.35	Halogen	Matt white	13-909-20-06/21
		Champagne	13-909-20-06/42

Adaptation variants: from page 370, Lamps from page 415



COCO mit Socket IN-F

COCO

The slim and narrowly tapered glass of the COCO pendant luminaire allows it to become an elegant luminaire with a soft, homogeneous light scene. Four different glass colours for the lampshade open up a multitude of design possibilities. COCO can be fitted with energy-efficient low voltage halogen lamps.

Design: Ralf Keferstein

IRC
READY



FEATURES

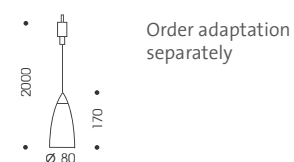
Pendant luminaire
Can be shortened

Output data
12 V / GY 6.35 / QT-LP 12 max. 50 W
Energy efficiency class: A++ to C

Material
Metal, hand-blown glass

Weight
0.4 kg

TECHNICAL INFORMATION



Special length
Suspension cable up to 5 m available upon request.

COLOURS



Matt white



Matt melon

PRODUCT

Socket	Suitable for	Shade colour	Item number
GY 6.35	Halogen	Matt white	13-983-10-06/21
		Matt melon	13-983-10-06/28

Adaptation variants: from page 370, Lamps from page 415

PLUG-IN

SYSTEM COMPONENTS

12 V / max. 5 A

The components in a point system vary according to the situation in which it is used and the customer's individual requirements.

The following summary offers an overview of the various options for the adapter.

Examples

A



B



C

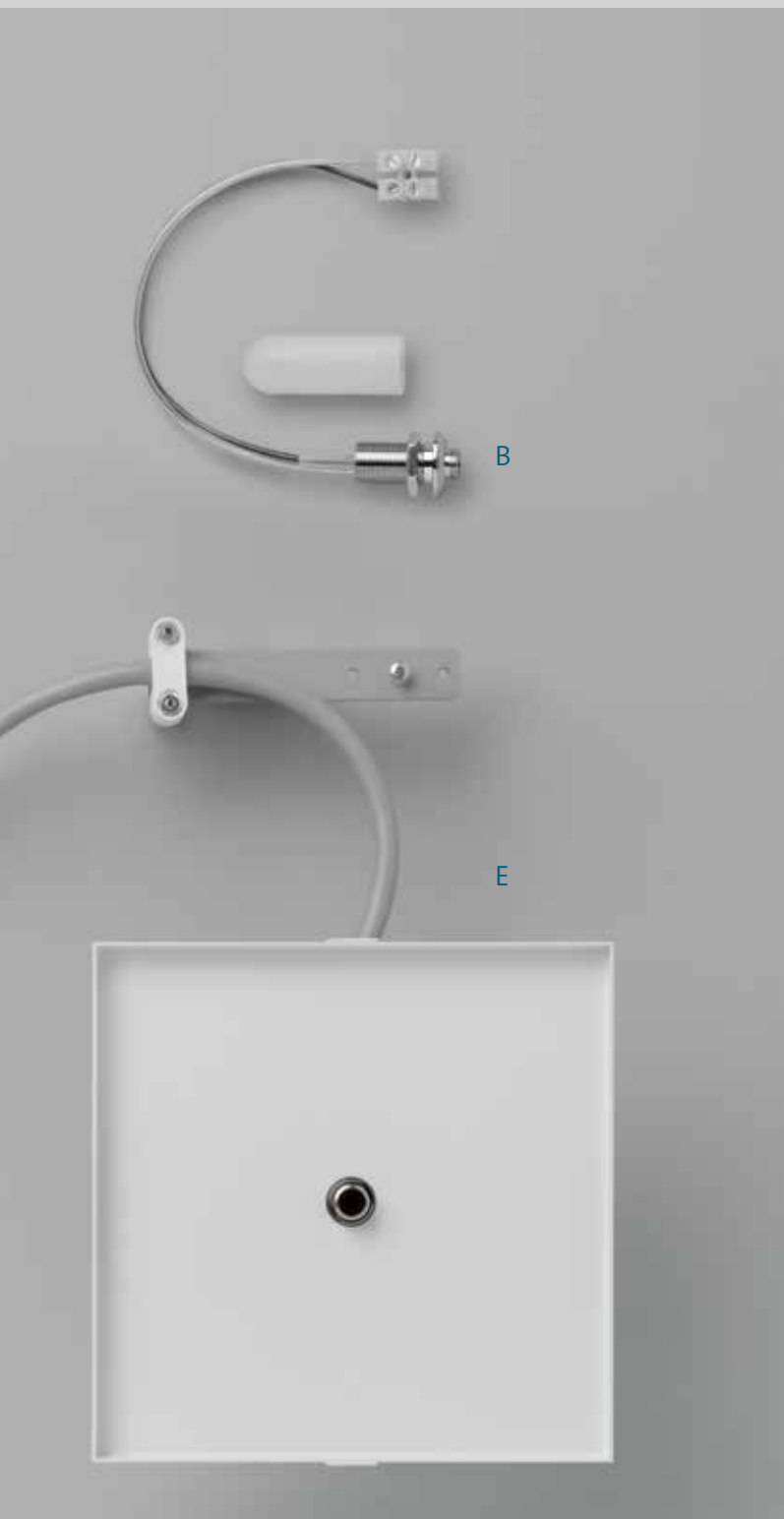


D





B





SYSTEM COLOURS

-  Chrome
-  Matt chrome

EXAMPLES OF ADAPTATIONS

- A Design housing for surface-mounted installation
- B Plug socket for recessed installation
- C Adapter for 12 V READY FOR TAKE OFF track system
- D Adapter for 230 V CHECK-IN track system
- E Modular unit for adaptation in the SHOP system



Canopy KEY-5 with ambient light CHARLES and spotlight GATE B FIVE

TRANSFORMERS AND DC POWER SUPPLY UNITS

Options for combination of LED luminaires and various lamp types
with transformers and DC power supply units

Magnetic transformer	VA	Catalogue page	LED luminaires	Retrofit lamps	Conventional lamps	
LOCAL-A	1x 50	371	yes	yes	yes	
external, e.g. MT 1 with sockets, e.g. IN-B	105 / ... / 400	424	yes	yes	yes	Permissible LED luminaire or lamp combina- tions see table below
Electronic transformer						
KEY	1x / ... / 5x 50	370	-	-	yes	
KEY WEST	1x / 2x 50	371	-	-	yes	
CONTACT TUBE	1x 60	372	-	-	yes	
PHASE-IN	1x 60	372	-	-	yes	
external, e.g. ET 5 with sockets, e.g. IN-B	105	423	-	-	yes	
12 V DC power supply unit						
CONTACT TUBE 12 V DC	1x 30	373	yes	yes	-	
external, e.g. DC 1 with sockets, e.g. IN-B	45 / 60	424	yes	yes	-	The operation of LED luminaires and 12 V DC- compatible retrofit lamps on the same DC po- wer supply unit is permissible

Permissible LED luminaire and lamp combinations with multiple PLUG-IN sockets on
the same magnetic transformer

LED luminaires	yes	-	yes *
Retrofit lamps	-	yes	yes *
Conventional lamps	yes *	yes *	yes *

* In order to avoid negatively affecting the service life of conventional lamps during
simultaneous operation of LED luminaires and/ or retrofit lamps, a load of at least
70% of the specified maximum capacity of the transformer should be ensured.

SOCKETS

Plug sockets for external transformers
and DC power supply units

12 V / max. 5 A / protection class 3

External transformers and
12 V DC power supply units from page 422



Socket IN-B Ø 70 mm, with pendant luminaire DONATA Foto: Artmix

1. IN-A



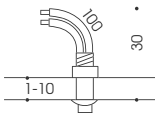
1.1 PLUG SOCKET

For drywall construction with panel thicknesses of
between 1 and 11 mm

Ø 15 mm, rear screw connection
Installation opening Ø 11 mm

Material
Metal

Design
Ralf Keferstein



Colour	Item number
Chrome	14-401-10-05

1.2 PLUG SOCKET

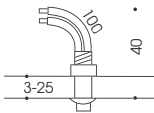
For drywall construction with panel thicknesses of
between 3 and 24 mm

Ø 20 mm, rear screw connection
Installation opening Ø 13 mm

Not suitable for installation on conductive materials

Material
Metal

Design
Ralf Keferstein



Colour	Item number
Chrome	14-401-11-05

2. IN-B**2.1 PLUG SOCKET**

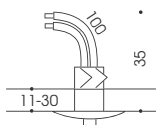
For invisible installation using leaf springs for panel thicknesses of 11 to 30 mm

Ø 40 mm
Installation opening Ø 32 mm

When mounted on gypsum boards: maximum luminaire weight is 0.8 kg

Material
Metal

Design
Ralf Keferstein



Colour	Item number
Chrome	14-402-10-05
Matt chrome	14-402-10-06
Matt white	14-402-10-21

2.2 PLUG SOCKET

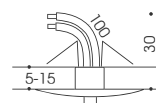
Suitable for covering an inspection opening for installing small electrical transformers.

Ø 70 mm
installation opening Ø 58 mm

Only suitable for ceiling installation

Material
Metal

Design
Ralf Keferstein



Colour	Item number
Chrome	14-402-12-05
Matt chrome	14-402-12-06
Matt white	14-402-12-21

3. IN-D**PLUG SOCKET**

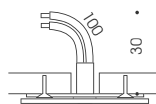
Cover plate for ceiling lining, concealed mounting screws

Ø 100 mm
Installation opening Ø 25 - 50 mm

Installation on standard concrete installation boxes possible

Material
Metal

Design
Ralf Keferstein



Colour	Item number
Chrome	14-404-10-05
Matt chrome	14-404-10-06
Matt white	14-404-10-21

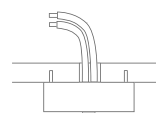
4. IN-F**PLUG SOCKET**

Surface mounted

Ø 72 x 24 mm
Installation opening Ø 10 - 20 mm

Material
Metal

Design
Ralf Keferstein



Colour	Item number
Chrome	14-405-10-05
Matt chrome	14-405-10-06

CANOPIES

Designer housing
including transformer and plug sockets
230 – 240 V / 50 – 60 Hz / 12 V / protection class 1



Canopy LOCAL-A with spotlight GATE B FIVE and accessory GATE B TUBE

5. KEY Canopy

- 200 •
- 600 •



- 300 • 300 •
- 500 • 500 •



5.1 KEY-2

2x 20 - 50 VA
Electronic transformer
Permissible secondary side cable length <2 m
Compatible with “Type C” dimmers

Material
Metal

Design
Ralf Keferstein

B 60 x H 40 mm

Colour	L (mm)	Item number
Matt chrome	270	14-411-20-06
Matt chrome	670	14-411-22-06

5.2 KEY-3

3x 20 - 50 VA
Electronic transformer
Permissible secondary side cable length <2 m
Compatible with “Type C” dimmers

Material
Metal

Design
Ralf Keferstein

B 60 x H 40 mm

Colour	L (mm)	Item number
Matt chrome	670	14-411-31-06
Matt chrome	1150	14-411-32-06

5. KEY Canopy

- 330 • 330 • 330 •
- 500 • 500 • 500 •



- 375 • 375 • 375 • 375 •

**5.3 KEY-4**

4x 20 - 50 VA
Electronic transformer
Permissible secondary side cable length <2 m
Compatible with "Type C" dimmers

Material
Metal

Design
Ralf Keferstein

B 60 x H 40 mm

Colour	L (mm)	Item number
Matt chrome	1150	14-411-41-06
Matt chrome	1700	14-411-42-06

5.4 KEY-5

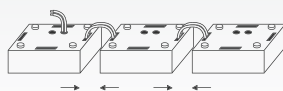
5x 10 - 50 VA
Electronic transformer
Permissible secondary side cable length <2 m
Compatible with "Type C" dimmers

Material
Metal

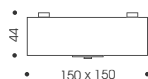
Design
Ralf Keferstein

B 60 x H 40 mm

Colour	L (mm)	Item number
Matt chrome	1700	14-411-50-06

6. KEY WEST Canopy

20 - 50 VA
Electronic transformer
Permissible secondary side cable length <2 m
Compatible with "Type C" dimmers



The body and acrylic glass plates can be combined freely.
The housing is designed such that barely noticeable through-wiring of multiple KEY WESTs is possible.

Material
Metal

Design
Ralf Keferstein

Body		Acrylic glass plate	
Colour	Item number	Colour	Item number
Chrome	14-415-10-05	White	14-415-11-20
Matt chrome	14-415-10-06	Green	14-415-11-35
Brushed aluminium	14-415-10-12	Black	14-415-11-22

7. LOCAL-A Canopy

LED
READY

50 VA
SELV magnetic transformer
Compatible with "Type L" dimmers

Also suitable for 12 V luminaires with LED technology or LED retrofit lamps

Material
Metal

Design
Ralf Keferstein

Ø 87 x H 49 mm	
Colour	Item number
Chrome	14-414-10-05
Matt chrome	14-414-10-06
Matt white	14-414-10-21

SYSTEM ADAPTER

for the integration of PLUG-IN luminaires into track, cable and recessed systems



System adapter READY-IN with pendant luminaire GRACE

8. SYSTEM ADAPTER 230 V

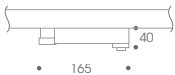


8.1 PHASE-IN

1x 20 - 60 VA
Electronic transformer
Permissible secondary side cable length <2 m
Compatible with “Type C” dimmers

Compatible with the PHASE track system

Material
Metal



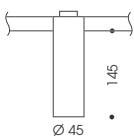
Colour	Item number
Chrome	33-621-10-06
Matt white	33-621-10-21

8.2 CONTACT TUBE

1x 35 - 60 VA
Electronic transformer
Permissible secondary side cable length <2 m
Compatible with “Type C” dimmers

Compatible with the CHECK-IN track system

Material
Metal



Colour	Item number
Chrome	31-621-10-05
Matt chrome	31-621-10-06

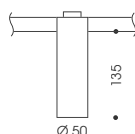
8. SYSTEM ADAPTER 230 V**LED**
READY**9. SYSTEM ADAPTER 12 V****LED**
READY**8.3 CONTACT TUBE / 12 V DC (LED)**

1x 10 VA
DC power supply unit
230 V / 50 - 60 Hz / 12 V DC

Suitable for 12 V luminaires with LED technology
or 12 V DC retrofit lamps

Compatible with the CHECK-IN track system

Material
Metal



Colour	Item number
Chrome	31-621-11-05
Matt chrome	31-621-11-06

9.1 READY-IN

max. 5 A

Compatible with the READY FOR TAKE OFF track system

Depending on the voltage of the overall system: suitable for 12 V halogen luminaires, 12 V luminaires with LED technology and luminaires with 12 V retrofit lamps.

Material
Metal

Design
Ralf Keferstein

Colour	Item number
Chrome	12-621-10-05
Matt chrome	12-621-10-06

9. SYSTEM ADAPTER 12 V**LED**
READY**10. SHOP RECESSED LUMINAIRES****LED**
READY**9.2 LIGHT-IN**

max. 5 A

Compatible with the LIGHT-LINE cable system

Depending on the voltage of the overall system: suitable for 12 V halogen luminaires, 12 V luminaires with LED technology and luminaires with 12 V retrofit lamps.

Material
Metal

Design
Ralf Keferstein

Colour	Item number
Chrome	16-611-10-05
Matt chrome	16-611-10-06

MOD 3 ADAPTER

SHOP is a modular recessed spotlight range which also offers plugs for point luminaires, among other things

Depending on the voltage of the module: suitable for 12 V halogen luminaires, 12 V luminaires with LED technology and luminaires with 12 V retrofit lamps.

More information about SHOP: Page 403



LIGHT-LINE

LIGHT LIGHTS.

LIGHT-LINE is a delicate 12 volt cable system and a veritable all-rounder. It fits into any architecture with ease, and is a flexible problem solver particularly in historic buildings and private old buildings.

With a gauge of 110 millimetres, rooms are spanned subtly and with a dedicated function. The copper cable allows the system to fade into the background and sets the stage for the light.

The range of luminaires comprises timeless classic spotlights and artfully designed light objects.

Equipped with high performance low voltage lamps, LIGHT-LINE can be used as an application-oriented lighting solution, as a creative lighting concept in private living space or as a sleek looking lighting solution.

Design: Ralf Keferstein

CONTENTS	PAGE
System luminaires	381
Adapter	393
System components	394
Lamps	413
Lamp accessories	420



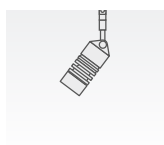
LIGHT-LINE

LUMINAIRE OVERVIEW

Low voltage cable system

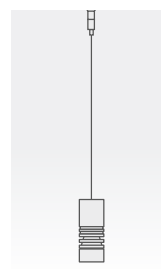
LED LUMINAIRES

Spotlights



PLUG-IN
Adapter from page 393
Luminaires from page 330

Pendant luminaires



PLUG-IN
Adapter from page 393
Luminaires from page 349

LUMINAIRES WITH CONVENTIONAL FITTINGS

Spotlights /
Ambient lights



GALERIE
Page 381



FUTURA
Page 383



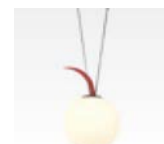
YPS
Page 383



DELTA
Page 385



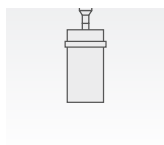
IGUA
Page 387



OKI-DOKI
Page 389



CHARLES
Page 389



PLUG-IN
Adapter from page 393
Luminaires from page 337

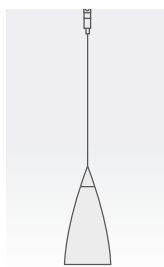
Pendant luminaires



GRACE
Page 391



ECOLINO GRANDE
Page 392

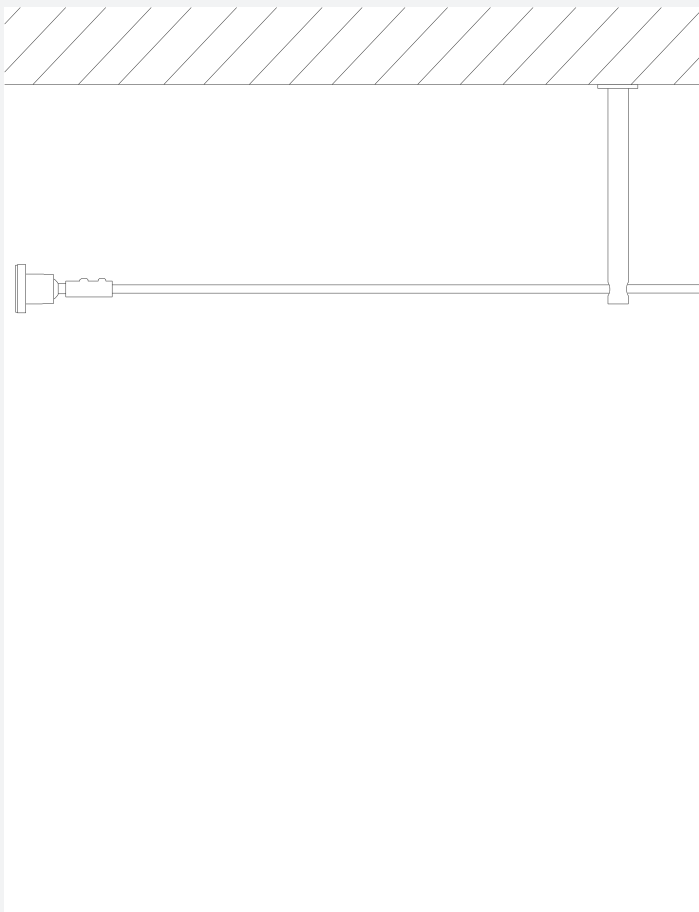


PLUG-IN
Adapter from page 393
Luminaires from page 351

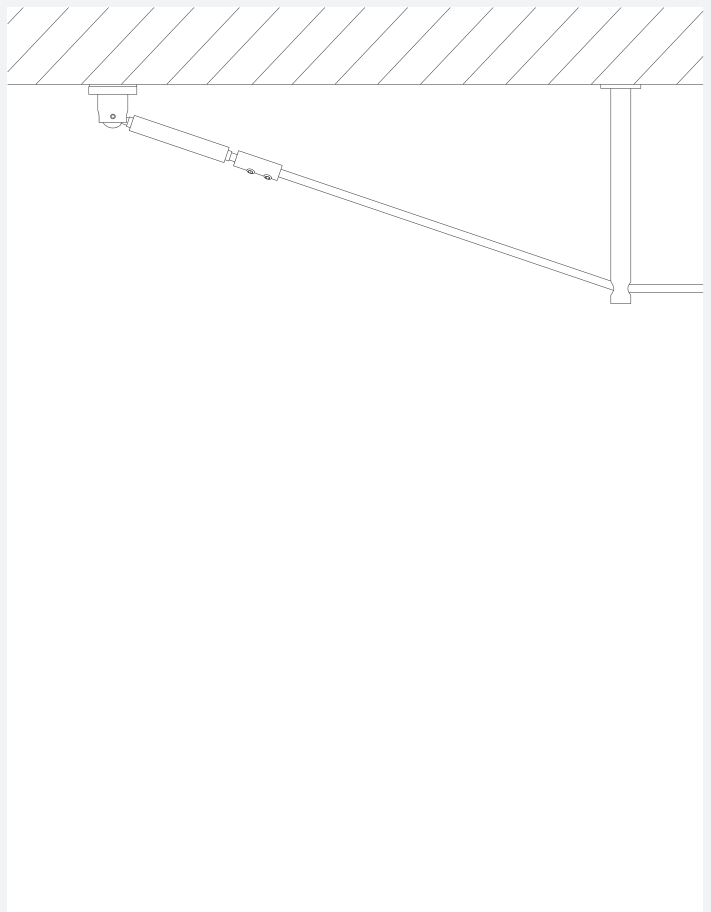
LIGHT-LINE

FLEXIBILITY WITH A SYSTEM

INSTALLATION
wall



INSTALLATION
ceiling



VARIOUS FORMS OF INSTALLATION

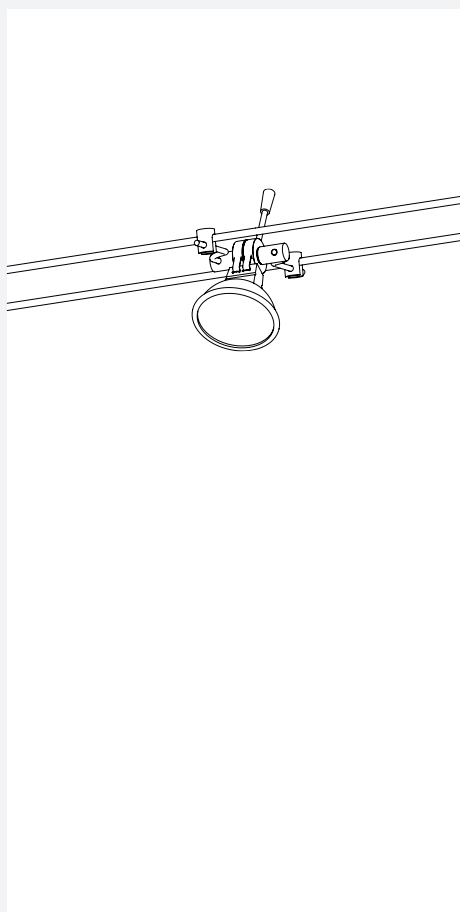
LIGHT-LINE is a cable system that can be used flexibly, which offers strong lighting solutions even in challenging room situations. LIGHT-LINE can be installed across corners and in sloping roofs. Crossing cable configurations or shapes are also possible.

The extensive range, consisting of cable tensioners, connectors, supports and pulleys, opens up an extraordinary variety of possible solutions.

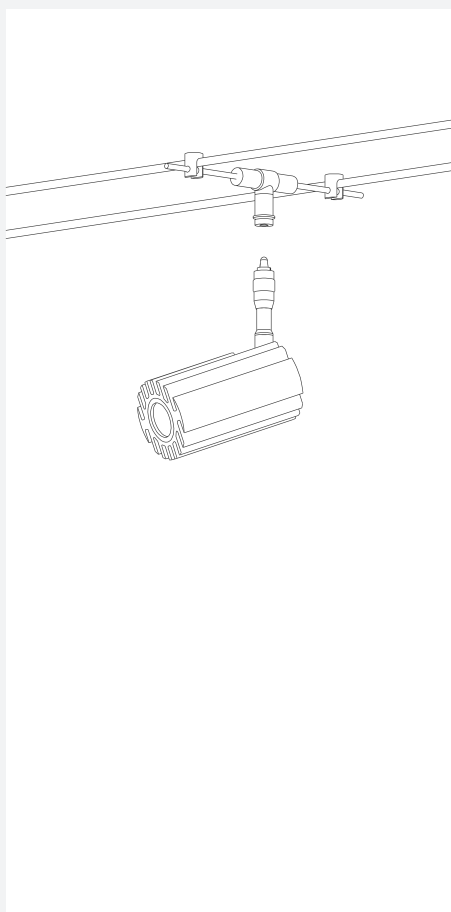
LIGHT-LINE

COMBINING AND EXPANDING

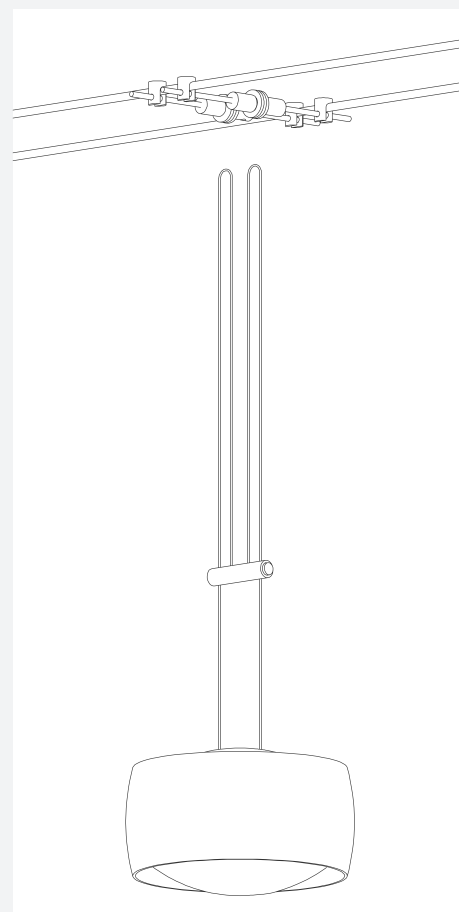
ADAPTER
integrated



ADAPTER
12 V plug connection system
PLUG-IN



ADAPTER
12 V pendant luminaire
HEIGHT ADJUSTMENT



EXPANDABLE AT ANY TIME

LIGHT-LINE system luminaires are equipped with a fixed adapter in the factory.

The cable system can be flexibly expanded, and at the same time the choice of luminaires is not limited to the LIGHT-LINE system range.

Using the LIGHT-IN adapter, the full selection of PLUG-IN 12 V system luminaires can be integrated into the cable system.

In addition, the height adjustable 12 V pendant luminaires can be integrated into the cable system without a problem using the PULLEY-LL adapter.



GALERIE

GALERIE

The curved adapter rods offset the fitting of the GALLERY spotlight parallel to the cable guide, giving it its elegant appearance. The chrome-plated spike with black protective cap allows the spotlight to be adjusted while switched on. GALLERY is suitable for the use of high performance halogen lamps and energy-efficient LED retrofits. The appearance and light scene can be varied using decorative rings and other accessories, available separately.

Design: Ralf Keferstein

LED
READY

IRC
READY



FEATURES

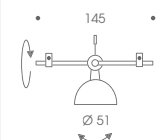
Spotlight
Rotatable / swivelling

Output data
12 V / GU 5.3 / QR-CBC 51 max. 50 W
Energy efficiency class: A+ to C

Material
Metal, Plastic

Weight
0.1 kg

TECHNICAL INFORMATION



ACCESSORIES



Shade S 1



Shade S 3

PRODUCT

Socket	Suitable for	Colour	Item number
GU 5.3	Retrofit or halogen	Chrome	15-976-10-05
		Matt chrome	15-976-10-06

Accessory Decorative ring R 2 and retrofit lamp

Lamps from page 414, Accessories from page 420



FUTURA

FUTURA

The FUTURE spotlight stands out with its miniaturised fitting and looks subtle and unobtrusive. The chrome-plated spike with black plastic sphere allows the spotlight to be adjusted while switched on. FUTURA is suitable for the use of high performance halogen lamps and energy-efficient LED retrofits. The appearance and light scene can be varied using decorative rings and other accessories, available separately.

Design: Ralf Keferstein

LED
READY

IRC
READY



Accessory Decorative ring R 2 and Retrofit lamp

FEATURES

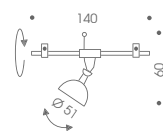
Spotlight
Rotatable / swivelling

Output data
12 V / GU 5.3 / QR-CBC 51 max. 50 W
Energy efficiency class: A+ to C

Material
Metal, Plastic

Weight
0.1 kg

TECHNICAL INFORMATION



ACCESSORIES



Shade S 1

Anti glare A 2

PRODUCT

Socket	Suitable for	Colour	Item number
GU 5.3	Retrofit or halogen	Chrome	15-977-10-05
		Matt chrome	15-977-10-06

Lamps from page 414, Accessories from page 420

YPS

The rotatable and swivelling YPS spotlight can be oriented according to requirements. With its subtle design, it offers a timeless lighting solution. YPS is suitable for the use of high performance halogen lamps and energy-efficient LED retrofits. The separately available, delicate decorative ring is used for glare free lighting.

Design: Ralf Keferstein, OLIGO

LED
READY

IRC
READY



Accessory Decorative ring R 2 and Retrofit lamp

FEATURES

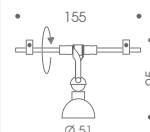
Spotlight
Rotatable / swivelling

Output data
12 V / GU 5.3 / QR-CBC 51 max. 50 W
Energy efficiency class: A+ to C

Material
Metal

Weight
0.1 kg

TECHNICAL INFORMATION



ACCESSORIES



Decorative ring R 2

PRODUCT

Socket	Suitable for	Colour	Item number
GU 5.3	Retrofit or halogen	Chrome	15-938-10-05
		Matt chrome	15-938-10-06

Lamps from page 414, Accessories from page 420



DELTA

DELTA

DELTA is a classic among cable system spotlights. The subtle, black plastic pennant on the fitting allows the spotlight to be adjusted while it is switched on. DELTA is suitable for the use of high performance halogen lamps and energy-efficient LED retrofits. The appearance and light scene can be varied using decorative rings and other accessories, available separately.

Design: Ralf Keferstein



Accessory Decorative ring R 2 und Retrofit lamp

LED READY
IRC READY

FEATURES

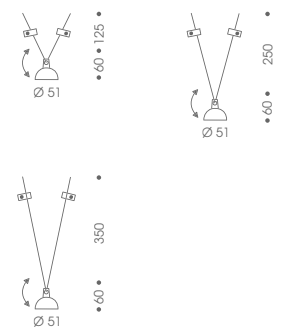
Spotlight
Swivelling head
Lengths 125, 250 or 350 mm

Output data
12 V / GU 5.3 / QR-CBC 51 max. 50 W
Energy efficiency class: A+ to C

Material
Metal

Weight
0.1 kg

TECHNICAL INFORMATION



ACCESSORIES



Shade S 1

PRODUCT

Socket	Suitable for	Length (mm)	Colour	Item number
GU 5.3	Retrofit or halogen	125	Chrome	15-982-10-05
			Matt chrome	15-982-10-06
		250	Chrome	15-982-20-05
			Matt chrome	15-982-20-06
		350	Chrome	15-982-30-05
			Matt chrome	15-982-30-06

Lamps from page 414, Accessories from page 420



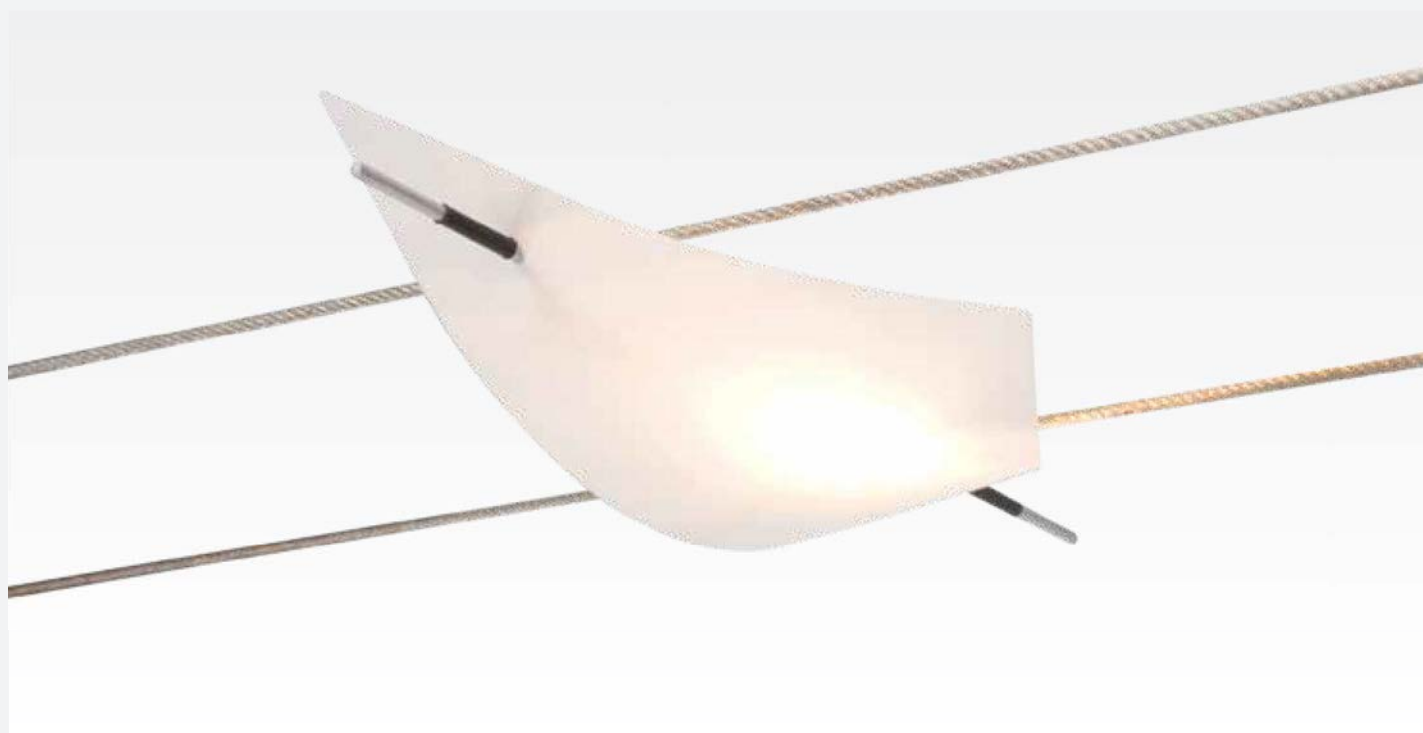
IGUA, GALERIE, GRACE (LIGHT-IN)

IGUA

The temperature-resistant dissipative film gives the IGUA room light an inviting and homogeneous lighting mood. The shape of its light sail allows IGUA to float effectively through the space in both the vertical and the horizontal position.

Design: Ralf Keferstein

IRC
READY



FEATURES

Ambient light

Output data

12 V / GY 6.35 / QT-LP 12 max. 50 W
Energy efficiency class: A++ to C

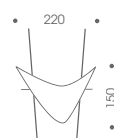
Material

Metal, temperature-resistant film

Weight

0.1 kg

TECHNICAL INFORMATION



PRODUCT

Socket	Suitable for	Colour	Item number
G Y 6.35	Halogen	Chrome	15-967-10-05
		Matt chrome	15-967-10-06

Lamps from page 415



CHARLES

OKI-DOKI

OKI-DOKI is a classic among decorative system luminaires. The white satin finished glass ball ensures soft, homogeneous room lighting and almost appears to float thanks to the delicate cable suspension.

Design: Ralf Keferstein



FEATURES

Ambient light

Output data

12 V / G 4 / QT-LP 9 max. 20 W
Energy efficiency class: A++ to E

Material

Hand-blown glass, plastic

Weight

0.2 kg

TECHNICAL INFORMATION



PRODUCT

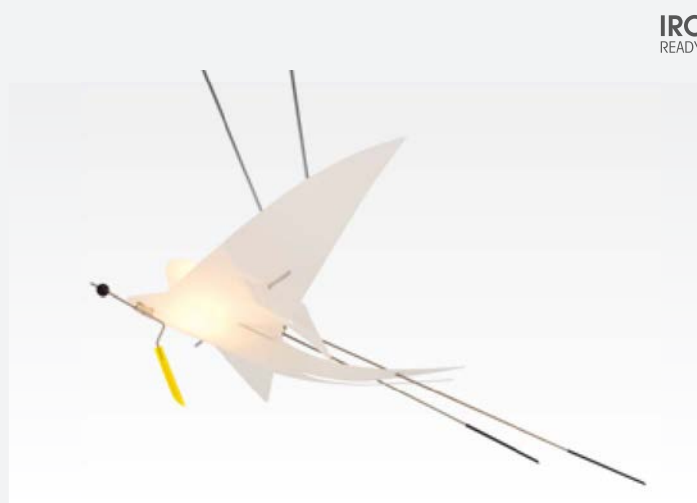
Socket	Suitable for	Colour	Item number
G 4	Halogen	Chrome	15-956-10-05/21
		Matt chrome	15-956-10-06/21

Lamps from page 415

CHARLES

The elegant and artistic handling of temperature-resistant dissipative film makes the CHARLES a decorative element which generates harmonious and soft room light. CHARLES cuts an effective and dapper figure both individually and in a swarm.

Design: Ralf Keferstein



FEATURES

Ambient light

Output data

12 V / Gy 6.35 / QT-LP 12 max. 50 W
Energy efficiency class: A++ to C

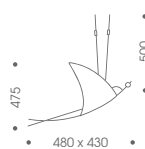
Material

Metal, temperature-resistant film

Weight

0.4 kg

TECHNICAL INFORMATION



PRODUCT

Socket	Suitable for	Item number
Gy 6.35	Halogen	15-986-10-05

Lamps from page 415



GRACE

GRACE

Height adjustable

Timeless GRACE numbers among the classics of decorative pendant luminaires worldwide. The two lenticular, satin finished shades are surrounded by a luminaire head made from aluminium and ensure even, glare-free illumination. The adjustable stay subtly integrated into the suspension allows for continuous height adjustment of the luminaire. The luminaire is integrated into the cable system with the help of the PULLEY-LL adapter.

Design: Ralf Keferstein

IRC
READY



FEATURES

Pendant luminaire
Height adjustable
Can be shortened

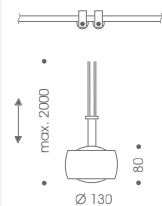
Output data
12 V / GY 6.35 / QT-LP 12 max. 50 W
Energy efficiency class: A++ to C

Material
Metal

Weight
0.6 kg

TECHNICAL INFORMATION

Order adapter separately



Installation
The lamp can be changed without any tools.

COLOURS



Chrome



Brushed aluminium

PRODUCT

Socket	Suitable for	Colour	Item number
GY 6.35	Halogen	Chrome	10-931-10-05
		Brushed aluminium	10-931-10-12

Adapter from page 393, Lamps from page 415

ECOLINO GRANDE

Height adjustable

The domed glass shade of ECOLINO GRANDE is bent from flat glass using a special process. It characterises the luminaire and ensures generous lighting. The light satin finish on the glass gently refracts the light and immerses the room in a soft light. The pendant luminaire can be set to any height using the integrated counterweight. The PULLEY-LL adapter allows for integration of the ECOLINO GRANDE into the cable system.

Design: Ralf Keferstein



IRC
READY

FEATURES

Pendant luminaire
Height adjustable
Can be shortened

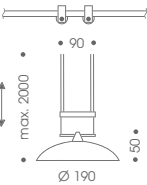
Output data
12 V / GY 6.35 / QT-LP 12 max. 50 W
Energy efficiency class: A++ to C

Material
Metal, domed flat glass

Weight
0.7 kg

TECHNICAL INFORMATION

Order adapter separately



COLOURS



Matt white

PRODUCT

Socket	Suitable for	Shade colour	Item number
GY 6.35	Halogen	Matt white	10-981-20-06/21

Adapter from page 393, Lamps from page 415

PULLEY-LL

Luminaire adapter for
12 V pendant luminaires with
height adjustment

PULLEY-LL combines height adjustable low voltage pendant luminaires with the LIGHT-LINE cable system. Adjustable spacing pulleys connect the suspension cables for the various pendant luminaires.

Design: Ralf Keferstein



FEATURES

Material
Metal

TECHNICAL INFORMATION

The net weight of the luminaires may require the use of additional cable supports.

EXAMPLES OF 12 V PENDANT LUMINAIRES



GRACE
Page 391

ECOLINO GRANDE
Page 392

PRODUCT

Type	A	Colour	Item number
12 V	max. 5	Chrome	16-631-10-05
		Matt chrome	16-631-10-06

LIGHT-IN

Luminaire adapter for
12 V point luminaires
from the PLUG-IN system

LIGHT-IN is an adapter with integrated socket for all 12 V PLUG-IN point luminaires. The adapter provides additional design variety. The examples below and more coaxial pendant luminaires and spotlights can be found in the 12 V PLUG-IN section.

Design: Ralf Keferstein



FEATURES

Material
Metal

TECHNICAL INFORMATION

The net weight of the luminaires may require the use of additional cable supports.

EXAMPLES OF 12 V POINT LUMINAIRES



A LITTLE BIT
Page 335

A LITTLE BIT
Page 349

BALINO
Page 351

COCO
Page 363

PRODUCT

Type	A	Colour	Item number
12 V	max. 5	Chrome	16-611-10-05
		Matt chrome	16-611-10-06

LIGHT-LINE

SYSTEM COMPONENTS

12 V / max. 25 A

The components in a cable system vary according to the situation in which it is used and the customer’s individual requirements. A functional system always consists of certain base components.

The following checklist facilitates checking the completeness of the system and serves as a guideline for choosing the right components.

Examples



SYSTEM COLOURS

- Chrome
- Matt chrome

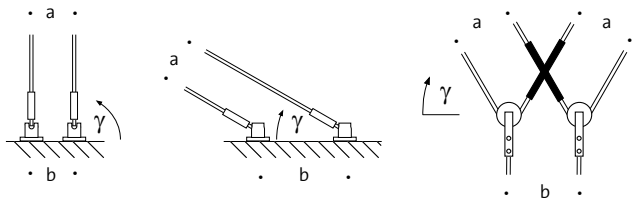
BASE COMPONENT CHECKLIST

- A Cable
- B Cable tensioner
- C Power supply
 - Transformer / power supply, in the system or external

SPECIFIC COMPONENTS

- D Connector
- E Cable support / cable guide

DISTANCES AND ANGULAR DIMENSIONS



a	b	γ
110	220	30°
110	155	45°
110	110	90°
92	130	45°

Cable distance 110 mm, luminaire width ±20 mm

1. CABLE



Please note the table for luminous flux reduction in 12 V installations on page 439

Type	4 mm²	6 mm²	2x 4mm²	2x 6mm²
Standard	16-101-10-06	16-101-11-06		
Insulating	16-102-10-06	16-102-11-06	16-102-20-06	16-102-21-06
Kevlar®	16-103-10-06	16-103-11-06		
Insulating/Kevlar®		16-104-11-06		

2. CABLE TENSIONER



2.1 TENSIONER

Material
Metal

Design
Ralf Keferstein

Insulating	
Colour	Item number
Chrome	16-111-10-05
Matt chrome	16-111-10-06

2.2 HOLDER

Material
Metal

Design
Ralf Keferstein

Insulating	
Colour	Item number
Chrome	16-112-10-05
Matt chrome	16-112-10-06

2. CABLE TENSIONER



3. CONNECTOR



2.3 CLAMPING SET 03

A set consists of two cable holders and two clamping elements.

Suitable for cable lengths of up to 5 m.

Material
Metal

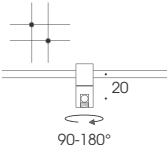
Design
Ralf Keferstein

Insulating	
Colour	Item number
Chrome	16-113-11-05
Matt chrome	16-113-11-06

3.1 X-CONNECTOR

Material
Metal

Design
Ralf Keferstein



Conductive	
Colour	Item number
Chrome	16-122-10-05
Matt chrome	16-122-10-06

Insulating	
Colour	Item number
Chrome	16-122-11-05
Matt chrome	16-122-11-06

3.2 I-CONNECTOR

Material
Metal

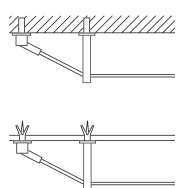
Design
Ralf Keferstein

Insulating	
Colour	Item number
Chrome	16-121-10-05
Matt chrome	16-121-10-06

4. CABLE SUPPORT



Ø 10 mm

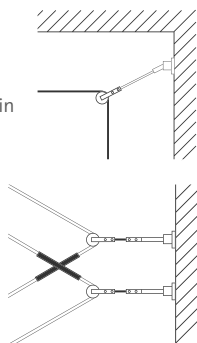
Material
MetalDesign
Ralf Keferstein

Colour	L (mm)	Item number
Chrome	100	16-141-10-05
Matt chrome	100	16-141-10-06
Chrome	150	16-141-11-05
Matt chrome	150	16-141-11-06
Chrome	200	16-141-12-05
Matt chrome	200	16-141-12-06

5. CABLE GUIDE



5.1 CEILING-WALL / PULLEY

Material
MetalDesign
Ralf Keferstein

Colour	Item number
Chrome	16-152-10-05
Matt chrome	16-152-10-06

5.2 WALL

60 - 120°
Material
MetalDesign
Ralf Keferstein

Colour	Item number
Chrome	16-153-10-05
Matt chrome	16-153-10-06

5.3 CEILING

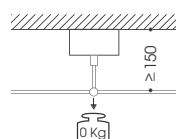
60 - 120°
Material
MetalDesign
Ralf Keferstein

Colour	L (mm)	Item number
Chrome	100	16-155-10-05
Matt chrome	100	16-155-10-06
Chrome	150	16-155-11-05
Matt chrome	150	16-155-11-06

6. POWER SUPPLY



6.1 ROD

Can be shortened
Compatible with 7.1 / 7.2 / 10 /
11 / 12Material
MetalDesign
Ralf Keferstein

Colour	L (mm)	Item number
Chrome	250	16-161-10-05
Matt chrome	250	16-161-10-06

6.2 CLIPS

4 - 6 mm²

Compatible with 7.3 / 9 / 12

Material
MetalDesign
Ralf Keferstein

Colour	Item number
Chrome	16-163-10-05
Matt chrome	16-163-10-06

6.3 CLIPS + CABLE

6 mm²Can be shortened
Compatible with 10 / 11Material
MetalDesign
Ralf Keferstein

Colour	L (mm)	Item number
Chrome	250	16-164-10-05
Matt chrome	250	16-164-10-06
Chrome	500	16-164-11-05
Matt chrome	500	16-164-11-06
Chrome	1000	16-164-12-05
Matt chrome	1000	16-164-12-06

7. POWER SUPPLY, CEILING



7.1 RECESSED

Ø 95 x 5 / 50 mm

Order separately: 6.1

Material
Metal

Design
Ralf Keferstein

Colour	Item number
Chrome	12-501-10-05
Matt chrome	12-501-10-06

7.2 SURFACE MOUNTED

Ø 82 x 24 / 70 mm

Order separately: 6.1

Material
Metal

Design
Ralf Keferstein

Colour	Item number
Chrome	12-501-11-05
Matt chrome	12-501-11-06

7.3 SURFACE MOUNTED, SIDE CABLE

Ø 82 x 24

2x 4 mm² / 500 mm
Can be shortened
Order separately: 6.1 / 6.3

Material
Metal

Design
Ralf Keferstein

Colour	Item number
Chrome	12-501-12-05
Matt chrome	12-501-12-06

TRANSFORMERS AND DC POWER SUPPLY UNITS

Options for combination of LED luminaires and various lamp types
with transformers and DC power supply units

Magnetic transformer	VA	Catalogue page	LED luminaires	Retrofit lamps	Conventional lamps	
PYRAMID	200 / 300	400	yes	yes	yes	Permissible LED luminaire or lamp combinations see table below
CHARGE	105 / 200 / 300	400	yes	yes	yes	
external, e.g. MT 1	105 / ... / 400	424	yes	yes	yes	
Electronic transformer						
TRANSFORMER XT 105/150	105 / 150	401	-	-	yes	
TRANSFORMER 150	150	401	-	-	yes	
external, e.g. ET 5	105	423	-	-	yes	
12 V DC power supply unit						
external, e.g. DC 1	45 / 60	424	yes	yes	-	The operation of LED luminaires and 12 V DC-compatible retrofit lamps within the same system is permissible

Permissible LED luminaire and lamp combinations within a
LIGHT-LINE cable system with magnetic transformer

LED luminaires	yes †	-	yes *
Retrofit lamps	-	yes	yes *
Conventional lamps	yes *	yes *	yes *

* In order to avoid negatively affecting the service life of conventional lamps during simultaneous operation of LED luminaires and/ or retrofit lamps, a load of at least 70% of the specified maximum capacity of the transformer should be ensured.

† Integration of 12 V LED point luminaires using the LIGHT-IN adapter, page 393.

TRANSFORMERS

Designer housing
230 V / 50 – 60 Hz / 12 V / protection class 1



External transformers and
external 12 V DC power supply units from page 422

8. PYRAMID-3



6 mm² / 500 mm
Magnetic SELV transformer, dimmable with type L dimmers
300 VA version including power inductor
Order separately: Power supply 6.2

Material
Metal

Design
Ralf Keferstein

245 x 245 x 130 mm

Colour	VA	Item number
Matt chrome	200	60-122-30-06
Matt chrome	300	60-122-31-06

9. CHARGE-1



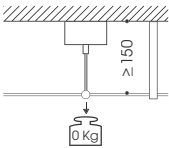
Magnetic SELV transformer, dimmable with type L dimmers
300 VA version including power inductor
Order separately: Power supply 6.1 / 6.3

Material
Metal

Design
Ralf Keferstein

Ø 120 x 57 / 77 mm

Colour	VA	Item number
Chrome	105	60-126-10-05
Matt chrome	105	60-126-10-06



Ø 140 x 72 / 93 mm

Colour	VA	Item number
Chrome	200	60-126-11-05
Matt chrome	200	60-126-11-06
Chrome	300	60-126-12-05
Matt chrome	300	60-126-12-06

10. CHARGE-2



Magnetic SELV transformer, dimmable with type L dimmers

300 VA version including power inductor

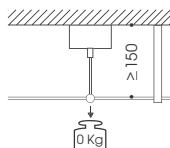
Order separately: Power supply 6.1 / 6.3

Material

Metal, Plastic

Design

Ralf Keferstein



Ø 115 x 53 / 73 mm

Colour	VA	Item number
Matt white	105	60-127-10-21

Ø 140 x 65 / 85 mm

Colour	VA	Item number
Matt white	200	60-127-11-21
Matt white	300	60-127-12-21

11. TRANSFORMER XT 105/150



Electronic transformer

Permissible secondary side cable length <2 m

Compatible with "Type C" dimmers, capacitive

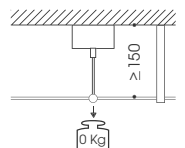
Order separately: Power supply 6.1

Material

Metal

Design

Ralf Keferstein



Ø 103 x 53 / 100 mm

Colour	VA	Item number
Chrome	35-105	60-131-10-05
Matt chrome	35-105	60-131-10-06

210 x 75 x 52 / 100 mm

Colour	VA	Item number
Chrome	35-150	60-131-11-05
Matt chrome	35-150	60-131-11-06

12. TRANSFORMER 150



Electronic transformer

230 v / 50 - 60 Hz / 12 V / 150 VA

Permissible secondary side cable length <2 m

Compatible with "Type C" dimmers, capacitive

Compatible: 2.1 (30 mm)

Order separately: Power supply 6.2

Material

Metal

Design

Ralf Keferstein

210 x 75 x 54 mm / incl. 100/300 mm cable 2,5 mm²

Colour	VA	Item number
Chrome	35-150	60-132-10-05
Matt chrome	35-150	60-132-10-06



SHOP

THE RECESSED SYSTEM WITH MAXIMUM VERSATILITY.

SHOP is an innovative and at the same time modular recessed luminaire system which was designed for flexible use in 12 volt, 24 volt and 230 volt technologies. The system offers a variety of luminaire units which each consist of a frame (FRAME) and an electrical unit (MOD). A multitude of highly efficient spotlights and lamps from the OLIGO range can be used with the MOD and can be freely chosen from and exchanged according to the lighting task. The variety of combinations offer a multitude of possibilities for planners and decision-makers in the design of professional lighting solutions.

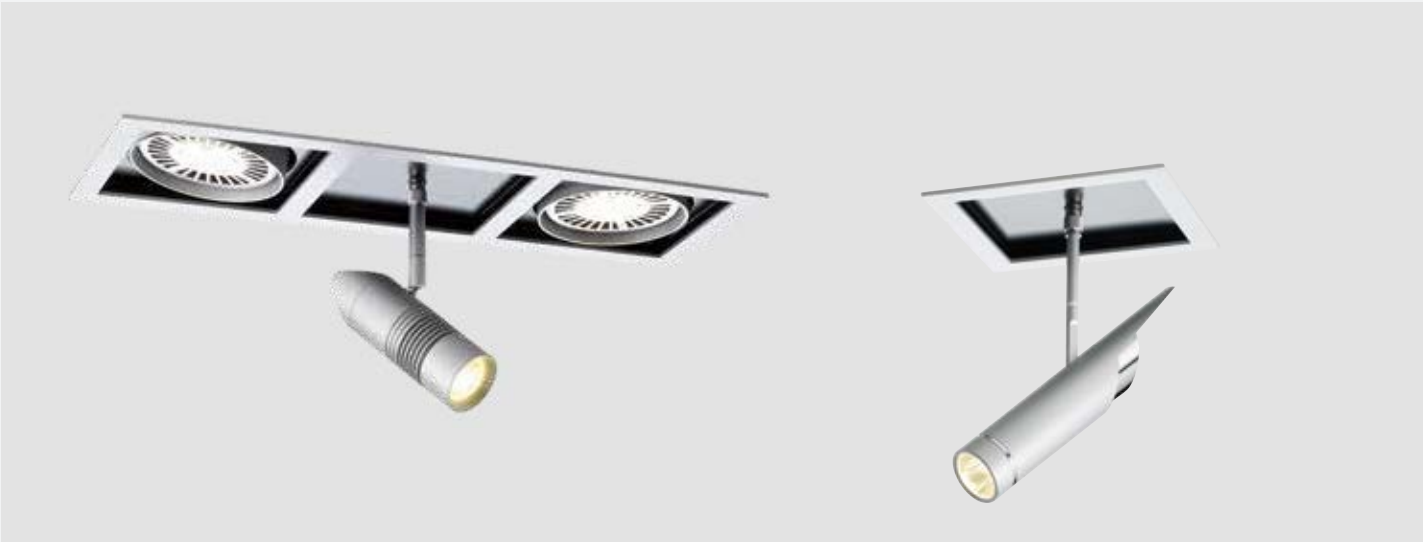
For retail, SHOP allows for selective lighting quality in the shop window and entrance area, in retail areas and in the staging of display cases and shelves.

The simple design of more effective lighting moods opens up and inviting ambience and, at the same time, optimal presentation of goods. According to the lighting technology required, LED spotlights, LED retrofit lamps and even halogen lamps can be used in SHOP. The modular system can be converted at any time by changing the components.

The FRAME is optionally available in decorative chrome, matt silver or white. As well as staging shopping worlds, SHOP can also be used for the sophisticated living room.

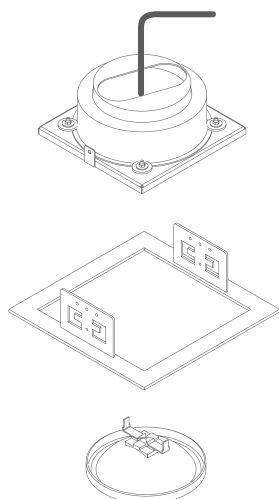
Design: Ralf Keferstein

CONTENTS	PAGE
Frames	407
Electrical units / modules	409
Lamps	413
Transformers	422
Switching power supplies	424

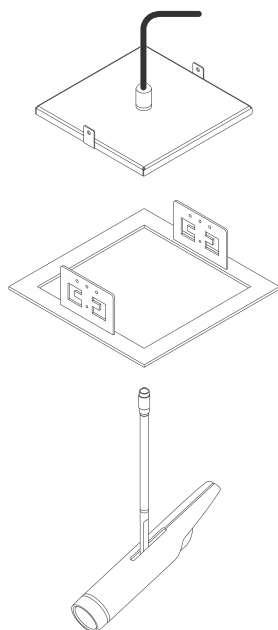


COMBINING AND EXPANDING

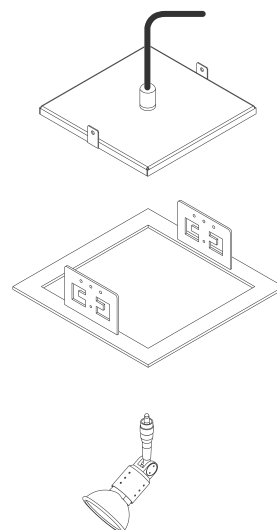
SPOTLIGHTS with gimballed suspension



SMART.POINT 24 V SPOT SYSTEM adapter



PLUG-IN 12 V SPOT SYSTEM adapter



MOD 1 is designed to accept gimbal mounted recessed spotlights. Various lamps such as LED retrofits or halogen reflector lamps can be used.

MOD 3 / 24 V allows for the connection of any 24 volt LED spotlights from the SMART.POINT system. In combination with a DALI converter, these can be integrated into a DALI-compatible lighting system.

Alternatively, the lighting can be integrated into a system with wireless lighting control via Casambi or HomeMatic using SMART.IQ components. More information about the SMART.IQ wireless module can be found from page 120.

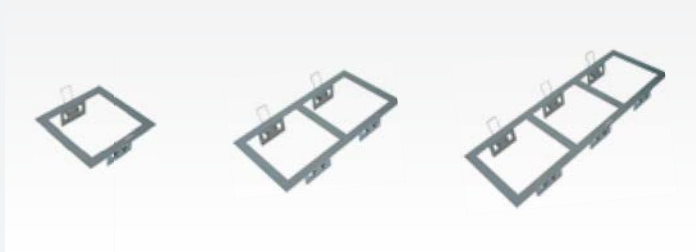
All luminaires from the PLUG-IN system can be adapted using MOD 3 / 12 V. This solution is particularly suitable for use in private living space.



SHOP with MOD 1, MOD 3 / 24 V and HUBBLE



SHOP COMPONENTS



FRAME

Frames for electrical units MOD 1 / MOD 3
For material thicknesses of between 5 and 15 mm
For ceiling installation only

Material
Metal

PRODUCT

Type	Size (mm)	Installation opening (mm)	Colour	Item number
1-fach	180 x 180	160 x 160	Matt chrome	51-917-10-06
			Matt white	51-917-10-21
2-fach	180 x 341	160 x 320	Matt chrome	51-917-11-06
			Matt white	51-917-11-21
3-fach	180 x 502	160 x 480	Matt chrome	51-917-12-06
			Matt white	51-917-12-21



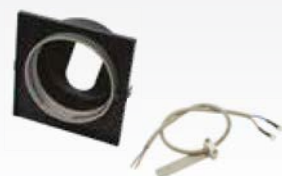
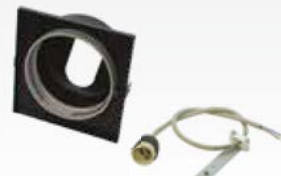


SHOP with MOD 1

FOTO: XL PHOTODESIGN XAVER LOCKAU



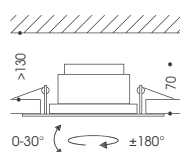
SHOP COMPONENTS

LED
READYLED
READY

MOD 1 / G 53

Module: gimbal-mounted recessed spotlight
G 53 fitting with 500 mm cable
Energy efficiency class: A to C (halogen version)
or energy efficiency class: A (LED retrofit version)
Protection class 3

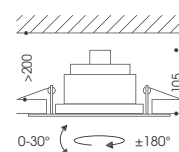
Material
Metal, Aluminium



MOD 1 / GZ 10

Module: gimbal-mounted recessed spotlight
GZ 10 fitting with 500 mm cable
Energy efficiency class: A++ to A (LED retrofit)
Protection class 2

Material
Metal, Aluminium



PRODUCT

Socket	Suitable for	Body colour	Colour Ring	Item number
G 53	12 V Halogen	Matt white	Matt white	51-917-20-21
		Matt black	Chrome	51-917-22-23
		Matt black	Matt chrome	51-917-21-23
G 53	12 V Retrofit	Matt white	Matt white	51-917-30-21
		Matt black	Chrome	51-917-32-23
		Matt black	Matt chrome	51-917-31-23

Lamps from page 414. Transformer or switching power supply ab Page 422

PRODUCT

Socket	Suitable for	Body colour	Colour Ring	Item number
GZ 10	230 V Retrofit	Matt white	Matt white	51-917-50-21
		Matt black	Chrome	51-917-52-23
		Matt black	Matt chrome	51-917-51-23

Lamps from page 417



SHOP with MOD 1, MOD 3 / 12 V and GRACE



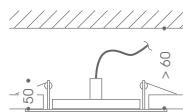
SHOP COMPONENTS



MOD 3 / 12 V PLUG-IN

Module for 12 V and 12 V DC (LED) PLUG-IN system luminaires
Socket with 500 mm cable
Protection class 3

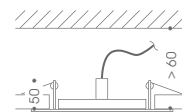
Material
Metal, Aluminium



MOD 3 / 24 V SMART.POINT

Module for 24 V DC SMART.POINT LED system luminaires
Socket with 500 mm cable
Protection class 3
Compatible with external SMART.IQ wireless modules or
with external DALI converter: Page 131

Material
Metal, Aluminium



EXAMPLES OF 12 V POINT LUMINAIRES



A LITTLE BIT
Page 335



MATCH
Page 341



BALINO
Page 351



GRACE
Page 353

EXAMPLES OF 24 V LED POINT LUMINAIRES



NEWTON
Page 105



AVIATION
Page 109



DECENT
Page 120



A LITTLE BIT
Page 121

PRODUCT

Type	A	Body colour	Item number
12 V	5	Matt white	51-917-80-21
		Matt black	51-917-80-23

PLUG-IN luminaires from page 330. Transformer or switching power supply from p. 422

PRODUCT

Type	A	Body colour	Item number
24 V	2	Matt white	51-917-81-21
		Matt black	51-917-81-23

SMART.POINT luminaires from page 104. Switching power supply from page 424



LAMPS AND ACCESSORIES

Information about the lamps listed in this chapter is correct at the time of printing. We reserve the right to use new lamps in the course of general technical developments in order to be able to provide our customers with the most suitable lamp in each case.

CONTENTS	PAGE
Low voltage lamps	414
High voltage lamps	417
Lamp accessories	420
Transformers and other accessories	422

12 VOLT LED-RETROFIT

Energy-efficient low voltage lamp

LED
READY

Quality lamp from a well-known brand manufacturer.

Retrofit lamps are only compatible with lamp accessories (e.g. decorative rings) to a limited extent.

Reliable dimming of retrofit lamps is dependent on the actual transformer/dimmer combination and should be checked on a case by case basis.



Equivalent to GU 5.3 / QR-C 51

V	W	K	lm	Beam angle	Dimmable	CRI	EEC	Service life (h)	Item number
12	6	2,700	380	40°	no	>80	A+	50,000	61-122-12-06

Compatible with decorative rings. Suitable for magnetic transformers and DC power supply units (12 V DC).



Equivalent to G 53 / QR-LP 111

V	W	K	lm	Beam angle	Dimmable	CRI	EEC	Service life (h)	Item number
12 AC	10.5	3,000	800	40°	no	>80	A+	30,000	61-124-16-06

Suitable for magnetic transformers.



Equivalent to G 53 / QR-LP 111

V	W	K	lm	Beam angle	Dimmable	CRI	EEC	Service life (h)	Item number
12 DC	12.5	2,700	735	36°	yes	>80	A	25,000	61-124-14-06

Suitable for DC power supply units (12 V DC).

12 VOLT IRC

Energy-efficient low voltage halogen lamp

IRC READY

Quality lamp from a well-known brand manufacturer.

Dimmable with phase cut-off dimmers (dimmer "type C") or phase cut-on dimmers (dimmer "type L") or universal dimmers (dimmer type "R, L, C").

IRC lamps offer the same light output as standard lamps but with lower energy consumption. Conventional lamps can generally be replaced with IRC lamps with a lower wattage.

Examples:

75 W conventional -> 50 W IRC

50 W conventional -> 35 W IRC

35 W conventional -> 25 W IRC



G 4 / QT-LP 9

V	W	K	lm	Dimmable	EEC	Service life (h)	Item number
12	14	3,000	240	yes	B	4,000	61-111-11-00



GY 6.35 / QT-LP 12

V	W	K	lm	Dimmable	EEC	Service life (h)	Item number
12	35	3,000	900	yes	B	4,000	61-112-11-00
12	50	3,000	1,250	yes	B	4,000	61-112-12-00



Cool beam

GU 5.3 / QR-CBC 51

V	W	K	cd	Beam angle	Dimmable	EEC	Service life (h)	Item number
12	20	3,100	1,000	36°	yes	B	4,000	61-113-13-00
12	35	3,100	2,200	36°	yes	B	4,000	61-113-17-00
12	50	3,100	2,850	36°	yes	B	4,000	61-113-21-00



G 53 / QR-LP 111

V	W	K	cd	Beam angle	Dimmable	EEC	Service life (h)	Item number
12	35	3,000	4,500	24°	yes	B	4,000	61-114-10-00
12	50	3,000	5,800	24°	yes	B	4,000	61-114-11-00

12 VOLT CONVENTIONAL

Low voltage halogen lamp

Quality lamp from a well-known brand manufacturer.

Dimmable with phase cut-off dimmers (dimmer “type C”), phase cut-on dimmers (dimmer “type L”) or universal dimmers (dimmer type “R, L, C”).



G 4 / QT-LP 9

V	W	K	lm	Dimmable	EEC	Service life (h)	Item number
12	20	3,000	320	yes	C	4,000	61-101-12-00



GY 6.35 / QT-LP 12

V	W	K	lm	Dimmable	EEC	Service life (h)	Item number
12	35	3,000	600	yes	C	4,000	61-102-11-00
12	50	3,000	930	yes	C	4,000	61-102-12-00



Cool beam

GU 5.3 / QR-CBC 51

V	W	K	cd	Beam angle	Dimmable	EEC	Service life (h)	Item number
12	20	3,000	780	36°	yes	B	4,000	61-103-11-00
12	35	3,000	1,500	36°	yes	B	4,000	61-103-22-00
12	50	3,000	2,200	36°	yes	B	4,000	61-103-32-00

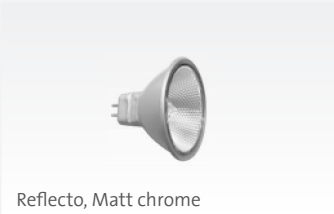
GU 5.3 / QR-CBC 51

V	W	K	cd	Beam angle	Dimmable	EEC	Service life (h)	Item number
12	50	3,000	1,500	36°	yes	B	15,000	61-104-41-00



GU 5.3 / QR-C 51

V	W	K	cd	Beam angle	Dimmable	EEC	Service life (h)	Item number
12	20	2,900	350	36°	yes	B	4,500	61-105-12-00
12	35	2,900	1,500	36°	yes	B	4,500	61-105-22-00
12	50	2,900	2,200	36°	yes	B	4,500	61-105-32-00



Reflecto, Matt chrome

GU 5.3 / QR-C 51

V	W	K	cd	Beam angle	Dimmable	EEC	Service life (h)	Item number
12	20	2,900	510	36°	yes	B	4,500	61-106-10-06
12	35	2,950	1,200	36°	yes	B	4,500	61-106-11-06

230 VOLT LED RETROFIT

High voltage LED lamp

LED READY

Quality lamp from a well-known brand manufacturer.

Retrofit lamps are only compatible with lamp accessories to a limited extent. Reliable dimming is dependent on the actual dimmer combination and should be checked on a case by case basis.



Length: 58 mm

Equivalent to G 9

V	W	K	lm	Beam angle	Dimmable	CRI	EEC	Service life (h)	Item number
230	3.5	2,700	350	300°	yes	>80	A++	25,000	61-242-10-05

Not compatible with wall luminaire SMART.



Length: 56 mm

Equivalent to GU 10 / QPAR 51 (QPAR 16)

V	W	K	lm	Beam angle	Dimmable	CRI	EEC	Service life (h)	Item number
230	8.5	2,700	590	35°	yes	>80	A+	30,000	61-227-10-06
230	8.5	3,000	620	35°	yes	>80	A+	30,000	61-227-11-06

Compatible with decorative rings.



Length: 87 mm

Length: 87 mm

Equivalent to GU 10 / QPAR 111

V	W	K	lm	Beam angle	Dimmable	CRI	EEC	Service life (h)	Item number
230	18	2,700	730	40°	yes	80	A	50,000	61-226-11-06

Equivalent to GU 10 / QPAR 111

V	W	K	lm	Beam angle	Dimmable	CRI	EEC	Service life (h)	Item number
230	14	2,700	780	40°	yes	90	A	25,000	61-226-13-06



Mirrored, Ø 45 mm

Equivalent to E 14 / D 45 CS

V	W	K	lm	Dimmable	CRI	EEC	Service life (h)	Item number
230	2.5	2,700	220	no	80	A+	15,000	61-228-10-00



Length: 109 mm, Ø 38 mm

Equivalent to E 27 / A 60

V	W	K	lm	Beam angle	Dimmable	CRI	EEC	Service life (h)	Item number
230	11.5	2,700	1.055	150°	yes	80	A+	15,000	61-126-10-06



Length: 132 mm, Ø 68 mm

Equivalent to E 27 / A 60

V	W	K	lm	Beam angle	Dimmable	CRI	EEC	Service life (h)	Item number
230	16	2,700	1.521	150°	yes	80	A+	15,000	61-126-11-06

230 VOLT ECO

Energy-efficient high voltage halogen lamp

ECO READY

Quality lamp from a well-known brand manufacturer.

Dimmable with phase cut-off dimmers (dimmer “type C”) or phase cut-on dimmers (dimmer “type L”) or universal dimmers (dimmer type “R, L, C”).

ECO lamps offer a particularly high light output per watt and thus better energy efficiency than conventional lamps of the same type.



G 9 / QT 14

V	W	K	lm	Dimmable	EEC	Service life (h)	Item number
230	33	2,900	460	yes	C	2,000	61-213-10-00
230	60	2,900	980	yes	C	2,000	61-213-12-00



B15d / QT 18 / 86 mm

V	W	K	lm	Dimmable	EEC	Service life (h)	Item number
230	70	2,900	1,180	yes	D	2,000	61-214-10-00



R7s / QT-DE 11/12 / 78 mm

V	W	K	lm	Dimmable	EEC	Service life (h)	Item number
230	120	2,900	2,250	yes	C	2,000	61-215-12-00

R7s / QT-DE 11/12 / 118 mm

V	W	K	lm	Dimmable	EEC	Service life (h)	Item number
230	230	2,900	5,000	yes	C	2,000	61-215-22-00

230 VOLT CONVENTIONAL

High voltage halogen lamp

Quality lamp from a well-known brand manufacturer.

Dimmable with phase cut-off dimmers (dimmer “type C”) or phase cut-on dimmers (dimmer “type L”) or universal dimmers (dimmer type “R, L, C”).

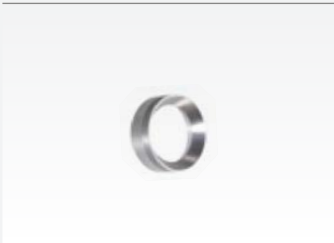


E 14 / D 45-CS							
V	W	K	lm	Dimmable	EEC	Service life (h)	Item number
230	25	3,100	185	yes	E	1,000	61-201-10-00

LAMP ACCESSORIES



1. DECORATIVE RINGS

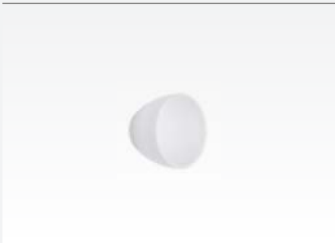


R 2

Ø 56 x 20mm
Compatible with lamp type:
QR-CBC 51 / QPAR 51
Design: Ralf Keferstein
Material
Aluminium

Colour	Item number
Chrome	62-202-10-05
Matt chrome	62-202-10-06
Brushed aluminium	62-202-10-12

2. SHADES



2.1 S 1

Ø 56 x 40 mm
Compatible with lamp type:
QR-CBC 51 Halogen
Compatible with lamps pointing
downwards
Design: Ralf Keferstein
Material
Glass / Metal

Colour	Material	Item number
White	Glass	62-211-10-21
Red	Glass	62-211-10-25
Pineapple	Glass	62-211-10-32
Yellow	Glass	62-211-10-34
Blue	Glass	62-211-10-38
Silver	Metal	62-211-11-45

Luminaire

- DELTA
- FUTURA
- GALERIE
- GATE B FIVE
- GATE B FOUR
- GATE B SEVEN
- GATE B SEVEN GALERIE
- MATCH
- MX-2
- MX-HIGH
- TAIFUN
- TORINO
- YPS

Compatibility

- yes
- yes
- yes
- yes
- yes
- yes
- yes
- yes
- yes
- yes
- yes
- yes

Compatibility

- yes
- yes
- yes
- yes
-
-
-
-
- yes
-
- yes
- yes
- yes



2. SHADES



2.2 S2

Ø 56 x 38 mm

Compatible with lamp type:
QPAR 51 Halogen

Compatible with lamps pointing
downwards

Design: Ralf Keferstein

Material
Glass / Metal

Colour		Item number
White	Glass	62-212-10-21
Silver	Metal	62-212-11-45



2.3 S3

Compatible with lamp type:
QR-CBC 51 Halogen / QPAR 51
Halogen

Design: Ralf Keferstein

Material
Temperature resistant film

Colour	Item number
White	62-213-10-21

3. GLARE SHIELD



A2

Anti-glare shutters

Compatible with lamp type:
QR-CBC 51, QPAR 51

Two anti-glare shutters can
be combined

Material
Metal

Colour	Item number
Matt chrome	62-232-10-06
Black	62-232-10-23

Compatibility

-
-
-
-
-
yes
yes
-
-
yes
-
-
-

Compatibility

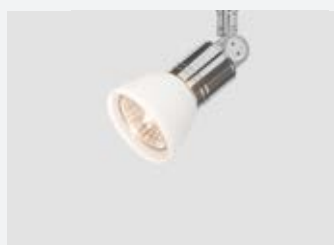
yes
yes
yes
yes
-
yes
yes
yes
yes
yes
yes
yes

Compatibility

yes
yes
yes
yes
-
yes
yes
yes
yes
yes
yes
yes
yes

Luminaires

DELTA
FUTURA
GALERIE
GATE B FIVE
GATE B FOUR
GATE B SEVEN
GATE B SEVEN GALERIE
MATCH
MX-2
MX-HIGH
TAIFUN
TORINO
YPS



ACCESSORIES

Transformers, power switching supply
and dimmers

1. TRANSFORMERS



1.1 OSRAM MOUSE™

230 V / 50-60 Hz / 12 V
Electronic transformer
Permissible secondary side cable length <2 m
Compatible with "Type L" and "Type C" dimmers
Protection class 2

Installation in or on furniture elements with
normal flammability permissible

Certificates
ENEC, VDE

VA	Size (mm)	Ceiling cut-out (mm)	Item number
20-75	104 x 33 x 22	Ø 40	60-116-10-21
35-105	108 x 52 x 33	Ø 55	60-116-11-21
50-150	153 x 54 x 36	Ø 55	60-116-12-21

1.2 ET 4

230 V / 50-60 Hz / 12 V
Electronic flat transformer
Permissible secondary side cable length <2 m
Compatible with dimmer "Type C"
Protection class 2

Primary 2x terminals / secondary 3 terminals max. 3x 35 W

Certificates
ENEC, VDE

VA	Size (mm)	Item number
35-105	175 x 42 x 18	60-112-10-21

1. TRANSFORMERS



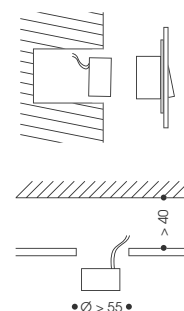
1.3 ET 5 QUAD

230 V / 50-60 Hz / 12 V
Electronic transformer
Permissible secondary side cable length <2 m
Compatible with dimmer "Type C"
Protection class 2

VA	Size (mm)	Item number
20-60	55 x 48 x 28	60-113-10-23
35-105	89 x 45 x 28	60-113-11-23
50-150	127 x 42 x 30	60-113-13-21

1.4 ET 5 MINI

230 V / 50-60 Hz / 12 V
Electronic transformer
Permissible secondary side cable length <2 m
Compatible with dimmer "Type C"
Protection class 2



VA	Size (mm)	Item number
20-60	Ø 53 x 29	60-113-20-23

1. TRANSFORMERS



1.5 ET 6

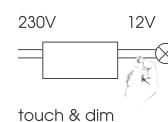
230 V / 50-60 Hz / 12 V
Electronic cord transformer, with sliding dimmer
Permissible secondary side cable length <2 m
Protection class 2

Certificates
ENEC, VDE

VA	Size (mm)	Item number
20-105	150 x 70 x 36	60-114-10-23

1.6 ET 7 TOUCH

230 V / 50-60 Hz / 12 V
Electronic transformer, with touch dimmer
Permissible secondary side cable length <2 m
Protection class 2



2-cable system

VA	Size (mm)	Item number
35-60	144 x 45 x 34 mm	60-115-10-23
35-105	144 x 45 x 34 mm	60-115-11-23

1. TRANSFORMERS



1.7 MT 1

230 V / 50-60 Hz / 12 V
Magnetic transformer
Compatible with dimmer "Type L"
Protection class 2

300 mm primary cable and glass fuse

Certificates
ENEC

VA	Size (mm)	Item number
105	108 x 78 x 80	60-101-10-21
150	130 x 85 x 80	60-101-11-21
200	130 x 85 x 100	60-101-12-21
300	130 x 85 x 100	60-101-13-21
400	175 x 128 x 118	60-101-14-21

2. POWER INDUCTOR



230 V / 50-60 Hz
For reducing dimmer noise
Compatible with magnetic transformers / MT 1

A	Size (mm)	Item number
max. 1.5	Ø 52 x 26	60-301-10-23

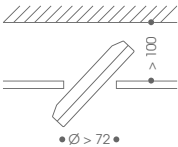
3. SWITCHING POWER SUPPLIES



3.1 DC 1

100-240 V / 50-60 Hz / 12 V DC
With functional earthing

Screw terminals with terminal covers



Certificates
ENEC

VA	Size (mm)	Item number
45	182 x 62 x 35	60-211-11-21
60	182 x 62 x 35	60-211-12-21



3.2 DC 2

100-240 V / 50-60 Hz / 24 V DC
Protection class 1
IP 65

VA	Size (mm)	Item number
60	171 x 62 x 37	60-211-20-06
120	220 x 68 x 39	60-211-21-06
240	244 x 68 x 39	60-211-22-06

3. SWITCHING POWER SUPPLIES

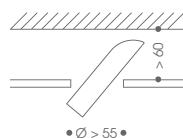


3.3 DC 3

110-240 V / 50 Hz / universal
 Constant current 350/700/1050 mA
 Constant current 10 V DC max. 10 W
 Constant current 12 V DC max. 12 W
 Constant current 24 V DC max. 20 W
 Protection class 2

Screw terminals with terminal covers

Certificates
 ENEC



VA	Size (mm)	Item number
20	110 x 52 x 24	60-211-10-21

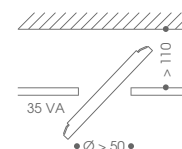


3.4 DC 4

100-277 V / 50-60 Hz / 24V DC /
 Protection class 2

Plug terminals with terminal covers

Certificates
 ENEC



VA	Size (mm)	Item number
3.5 - 35	220 x 40 x 21	60-211-23-21
4.8 - 60	250 x 40 x 21	60-211-24-21

3. SWITCHING POWER SUPPLIES

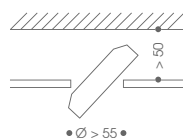


3.5 LED DRIVER, CONSTANT CURRENT

220-240 V / 50-60 Hz / 300 mA Konstantstrom /
 26-43 V DC / 7,8 – 12,9 W / U_{max} 58 V
 Dimmable with phase-cut dimmers
 Protection class 2

Plug terminals with terminal covers

Certificates
 ENEC



W	Size (mm)	Item number
7,8 - 12,9	86 x 41 x 22	60-211-30-10

4. LED ROTARY DIMMER / WALL



DIMMER INSERT / SET

Busch Jaeger 6523 U-102
 LED dimmer UP insert
 With rotary actuation, pressure sequence toggle switch and soft detent
 Rated voltage: 230 V~, + 10 % / - 10 %
 Rated frequency: 50 Hz/60 Hz
 Rated output: 2 - 100 W/VA

Busch Jaeger 1721-184K
 Single cover frame, colour: Studio white
 80 x 80 x 11 mm

Busch Jaeger 6540-84-102
 Central slide with rotary knob and glow lamp, colour: Studio white
 63 x 63 mm

Type	Item number
Dimmer insert	60-671-00-00
Set: dimmer insert with rotary knob and cover frame	60-625-00-00

APPENDIX

CONTENTS	PAGE
Index by luminaire name	428
Index by item number	430
Ordering information and technical information	438

INDEX

BY LUMINAIRE NAME

Luminaire name	SMART.TRACK Page 39	SMART.POINT Page 97	PHASE Page 133	CHECK-IN Page 203	READY FOR TAKE OFF Page 275	PLUG-IN Page 325	LIGHT-LINE Page 375
41 DEGREES	73	116	177				
A LITTLE BIT (Spotlight)	65	113	156		285	335	
A LITTLE BIT (Pendant luminaire)	85	121	185			349	
A LITTLE BIT MORE	62	112	154		284	334	
AVIATION	56	109	150				
AVIATION PRO	55	108	148				
B2B / 1				237			
BALIBU				233		359	
BALIBU BEACH				251			
BALINO (Halogen)				239		351	
BALINO (LED)	80						
BENE				255		357	
BENE DICT						345	
B TUBE				227			
CHARLES						347	389
COCO						363	
DECENT	83	120	183				
DELTA							385
DONATA			193	253		361	
ECOLINO GRANDE				250	303		392
FLAVIA	76	117	178				
FUTURA							383
GALERIE							381
GATE B EIGHT				225			
GATE B FIVE					289	339	
GATE B FOUR			175	223			
GATE B NINE					295		
GATE B SEVEN			171	217			
GATE B SEVEN GALERIE				259			
GATE B TWO					297		
GRACE (Halogen)			189	243, 245	299	353	391
GRACE (LED)	81	119	187	241			

Luminaire name	SMART.TRACK Page 39	SMART.POINT Page 97	PHASE Page 133	CHECK-IN Page 203	READY FOR TAKE OFF Page 275	PLUG-IN Page 325	LIGHT-LINE Page 375
HIGH FLIGHT			181	229	293	345	
HIGH FLIGHT GALERIE				257	305		
HIGH STREAM 16			173	219			
HUBBLE	67	114	158				
ICE			169	215			
IGUA							387
JUST KIDDING				231			
KELVEEN	68, 71	115	160				
LEVEL			167	213	287		
LP 111					287	337	
MADEMOISELLE FILOU				235			
MAGIC				235	297		
MATCH				218	291	341	
MX-2					293	343	
MX-HIGH			176	221			
NEWTON	51	105	142				
OKI-DOKI							389
PULL-IT			191	247, 249	301	355	
RIDGE	61	111	153		283	331	
RIDGE MAX	59	110	152		281	330	
RIO	79						
SENTRY	53	107	146				
SENTRY PRO		106	144				
STREAM 51					291	341	
TAIFUN					305		
TORINO					307		
TWIN LANE			166	211			
WALLEY				209			
VERSION B			163				
WALKER	49	104	140				
YPS							383

INDEX

BY ITEM NUMBER

Item number	Page	Item number	Page	Item number	Page	Item number	Page
10-931-10-05	245, 299, 391	11-901-10-06	295	12-311-10-06	314	12-601-10-06	316
10-931-10-12	245, 299, 391	11-905-20-06	287	12-321-10-05	314	12-601-11-23	316
10-952-10-06/01	249, 301	11-934-10-06	287	12-321-10-06	314	12-621-10-05	311, 373
10-952-10-06/21	249, 301	11-943-10-05	307	12-331-10-05	314	12-621-10-06	311, 373
10-981-20-06/21	392	11-943-10-06	307	12-331-10-06	314	12-644-10-05	311
10-981-20-06/21	250, 303	11-944-10-06	305	12-351-10-05	315	12-644-10-06	311
		11-944-11-05	305	12-351-10-06	315		
11-881-50-21	281	11-944-11-06	305	12-401-10-05	315	13-880-10-05/03	351
11-881-50-23	281	11-945-10-05	291	12-401-11-05	315	13-880-10-05/29	351
11-881-51-06	281	11-945-10-06	291	12-403-10-05	315	13-880-10-06/03	351
11-881-51-23	281	11-959-10-06	293	12-411-10-05	315	13-880-10-06/08	351
11-881-52-21	281	11-959-20-06	293	12-411-10-06	315	13-880-10-06/40	351
11-881-52-23	281	11-959-30-06	293	12-411-11-05	315	13-881-50-21	330
11-881-53-06	281	11-961-10-05/21	297	12-411-11-06	315	13-881-50-23	330
11-881-53-23	281	11-961-10-06/21	297	12-421-10-05	315	13-881-51-06	330
11-881-60-21	281	11-969-10-06	293	12-421-10-06	315	13-881-52-21	330
11-881-60-23	281	11-969-11-06	293	12-431-10-05	315	13-881-53-21	330
11-881-61-06	281	11-969-30-06	305	12-431-10-06	315	13-881-53-23	330
11-881-61-23	281	11-969-31-06	305	12-461-10-05	315	13-881-54-06	330
11-881-62-21	281	11-972-10-06/21	297	12-461-10-06	315	13-881-55-21	330
11-881-62-23	281	11-972-10-06/32	297	12-501-10-05	317	13-881-60-21	330
11-881-63-06	281	11-974-10-05	289	12-501-10-05	398	13-881-60-23	330
11-881-63-23	281	11-974-10-06	289	12-501-10-06	317, 398	13-881-61-06	330
11-882-20-05	284	11-974-11-05	289	12-501-11-05	317	13-881-62-21	330
11-882-20-21	284	11-974-11-06	289	12-501-11-05	398	13-881-63-21	330
11-882-20-23	284			12-501-11-06	317, 398	13-881-63-23	330
11-882-21-06	284	12-201-10-05	309, 314	12-501-12-05	317	13-881-64-06	330
11-882-40-05	284	12-201-10-06	309, 314	12-501-12-05	398	13-881-65-21	330
11-882-40-21	284	12-201-11-05	309, 314	12-501-12-06	317, 398	13-882-21-05	334
11-882-40-23	284	12-201-11-06	309, 314	12-511-10-05	316	13-882-21-21	334
11-882-41-06	284	12-211-10-05	314	12-511-10-06	316	13-882-21-23	334
11-889-20-21	283	12-211-10-06	314	12-511-11-05	316	13-882-22-06	334
11-889-20-23	283	12-211-11-05	314	12-511-11-06	316	13-882-23-21	334
11-889-21-06	283	12-211-11-06	314	12-511-20-05	316	13-882-31-05	334
11-889-30-21	283	12-301-10-05	314	12-511-20-06	316	13-882-31-21	334
11-889-30-23	283	12-301-10-06	314	12-511-21-05	317	13-882-31-23	334
11-889-31-06	283	12-301-11-05	314	12-511-21-06	317	13-882-32-06	334
11-892-10-05	291	12-301-11-06	314	12-511-30-05	317	13-882-33-21	334
11-892-10-06	291	12-301-12-05	314	12-511-30-06	317	13-889-20-21	331
11-898-40-05	285	12-301-12-06	314	12-511-31-05	317	13-889-20-23	331
11-898-40-06	285	12-301-13-05	314	12-511-31-06	317	13-889-21-06	331
11-898-41-05	285	12-301-13-06	314	12-513-10-05	316	13-889-22-21	331
11-898-41-06	285	12-301-14-05	314	12-513-10-06	316	13-889-30-21	331
11-898-50-05	285	12-301-14-06	314	12-513-11-05	316	13-889-30-23	331
11-898-50-06	285	12-301-15-05	314	12-513-11-06	316	13-889-31-06	331
11-898-51-05	285	12-301-15-06	314	12-513-20-06	316	13-889-32-21	331
11-898-51-06	285	12-301-16-06	314	12-513-21-06	316	13-892-10-05	341
11-901-10-05	295	12-311-10-05	314	12-601-10-05	316	13-892-10-06	341

Item number	Page	Item number	Page	Item number	Page	Item number	Page
13-898-40-05	335	14-404-10-21	369	16-111-10-06	396	20-860-30-23	51, 105, 143
13-898-40-06	335	14-405-10-05	369	16-112-10-05	396	20-860-31-06	51, 105, 143
13-898-41-05	335	14-405-10-06	369	16-112-10-06	396	20-860-31-21	51, 105, 143
13-898-41-06	335	14-411-20-06	370	16-113-11-05	396	20-860-31-23	51, 105, 143
13-898-50-05	335	14-411-22-06	370	16-113-11-06	396	20-860-40-06	51, 105, 143
13-898-50-06	335	14-411-31-06	370	16-121-10-05	396	20-860-40-21	51, 105, 143
13-898-51-05	335	14-411-32-06	370	16-121-10-06	396	20-860-40-23	51, 105, 143
13-898-51-06	335	14-411-41-06	371	16-122-10-05	396	20-860-41-06	51, 105, 143
13-898-60-05	349	14-411-42-06	371	16-122-10-06	396	20-860-41-21	51, 105, 143
13-898-60-06	349	14-411-50-06	371	16-122-11-05	396	20-860-41-23	51, 105, 143
13-898-70-05	349	14-414-10-05	371	16-122-11-06	396	20-862-20-06	49, 104, 141
13-898-70-06	349	14-414-10-06	371	16-141-10-05	397	20-862-20-21	49, 104, 141
13-909-20-06/21	361	14-414-10-21	371	16-141-10-06	397	20-862-20-23	49, 104, 141
13-909-20-06/42	361	14-415-10-05	371	16-141-11-05	397	20-862-21-06	49, 104, 141
13-931-10-05	353	14-415-10-06	371	16-141-11-06	397	20-862-21-21	49, 104, 141
13-931-10-12	353	14-415-10-12	371	16-141-12-05	397	20-862-21-23	49, 104, 141
13-934-10-06	337	14-415-11-20	127, 371	16-141-12-06	397	20-862-30-06	49, 104, 141
13-935-10-06/21	357	14-415-11-22	127, 371	16-152-10-05	397	20-862-30-21	49, 104, 141
13-935-20-06/21	345	14-415-11-35	127, 371	16-152-10-06	397	20-862-30-23	49, 104, 141
13-945-11-05	341			16-153-10-05	397	20-862-31-06	49, 104, 141
13-945-11-06	341	15-938-10-05	383	16-153-10-06	397	20-862-31-21	49, 104, 141
13-952-10-06/01	355	15-938-10-06	383	16-155-10-05	397	20-862-31-23	49, 104, 141
13-952-10-06/21	355	15-956-10-05/21	389	16-155-10-06	397	20-862-40-06	49, 104, 141
13-959-10-06	343	15-956-10-06/21	389	16-155-11-05	397	20-862-40-21	49, 104, 141
13-969-10-06	345	15-967-10-05	387	16-155-11-06	397	20-862-40-23	49, 104, 141
13-969-11-06	345	15-967-10-06	387	16-161-10-05	397	20-862-41-06	49, 104, 141
13-974-10-05	339	15-976-10-05	381	16-161-10-06	397	20-862-41-21	49, 104, 141
13-974-10-06	339	15-976-10-06	381	16-163-10-05	397	20-862-41-23	49, 104, 141
13-974-11-05	339	15-977-10-05	383	16-163-10-06	397	20-867-30-06	106, 145
13-974-11-06	339	15-977-10-06	383	16-164-10-05	397	20-867-30-21	106, 145
13-983-10-06/21	363	15-982-10-05	385	16-164-10-06	397	20-867-30-23	106, 145
13-983-10-06/28	363	15-982-10-06	385	16-164-11-05	397	20-867-31-06	106, 145
13-986-10-05	347	15-982-20-05	385	16-164-11-06	397	20-867-31-21	106, 145
13-991-10-06/21	359	15-982-20-06	385	16-164-12-05	397	20-867-31-23	106, 145
13-991-10-06/28	359	15-982-30-05	385	16-164-12-06	397	20-867-40-06	106, 145
13-991-10-06/32	359	15-982-30-06	385	16-611-10-05	373, 393	20-867-40-21	106, 145
13-991-11-06/02	359	15-986-10-05	389	16-611-10-06	373, 393	20-867-40-23	106, 145
				16-631-10-05	393	20-867-41-06	106, 145
				16-631-10-06	393	20-867-41-21	106, 145
14-401-10-05	368	16-101-10-06	396			20-867-41-23	106, 145
14-401-11-05	368	16-101-11-06	396	20-860-20-06	51, 105, 143	20-867-50-06	106, 145
14-402-10-05	369	16-102-10-06	396	20-860-20-21	51, 105, 143	20-867-50-21	106, 145
14-402-10-06	369	16-102-11-06	396	20-860-20-23	51, 105, 143	20-867-50-23	106, 145
14-402-10-21	369	16-102-20-06	396	20-860-21-06	51, 105, 143	20-867-51-06	106, 145
14-402-12-05	369	16-102-21-06	396	20-860-21-21	51, 105, 143	20-867-51-21	106, 145
14-402-12-06	369	16-103-10-06	396	20-860-21-23	51, 105, 143	20-867-51-23	106, 145
14-402-12-21	369	16-103-11-06	396	20-860-30-06	51, 105, 143	20-867-60-06	53, 107, 147
14-404-10-05	369	16-104-11-06	396	20-860-30-21	51, 105, 143	20-867-60-21	53, 107, 147
14-404-10-06	369	16-111-10-05	396				

Item number	Page	Item number	Page	Item number	Page	Item number	Page
20-867-60-23	53, 107, 147	20-875-30-23	55, 108, 149	20-882-41-21	63, 112, 155	21-451-34-21	127
20-867-61-06	53, 107, 147	20-875-31-06	55, 108, 149	20-882-41-23	63, 112, 155	21-451-34-23	127
20-867-61-21	53, 107, 147	20-875-31-21	55, 108, 149	20-882-42-06	63, 112, 155	21-452-10-05	127
20-867-61-23	53, 107, 147	20-875-31-23	55, 108, 149	20-882-43-21	63, 112, 155	21-452-10-06	127
20-867-70-06	53, 107, 147	20-875-40-06	55, 108, 149	20-882-50-23	63, 112, 155	21-452-10-12	127
20-867-70-21	53, 107, 147	20-875-40-21	55, 108, 149	20-882-51-05	63, 112, 155	21-453-10-05	127
20-867-70-23	53, 107, 147	20-875-40-23	55, 108, 149	20-882-51-21	63, 112, 155	21-453-10-06	127
20-867-71-06	53, 107, 147	20-875-41-06	55, 108, 149	20-882-51-23	63, 112, 155	21-453-10-21	127
20-867-71-21	53, 107, 147	20-875-41-21	55, 108, 149	20-882-52-06	63, 112, 155	21-454-10-05	127
20-867-71-23	53, 107, 147	20-875-41-23	55, 108, 149	20-882-53-21	63, 112, 155	21-454-10-12	127
20-867-80-06	53, 107, 147	20-875-50-06	55, 108, 149	20-882-60-23	63, 112, 155	21-454-10-21	127
20-867-80-21	53, 107, 147	20-875-50-21	55, 108, 149	20-882-61-05	63, 112, 155		
20-867-80-23	53, 107, 147	20-875-50-23	55, 108, 149	20-882-61-21	63, 112, 155	22-861-10-06	79
20-867-81-06	53, 107, 147	20-875-51-06	55, 108, 149	20-882-61-23	63, 112, 155	22-861-10-15	79
20-867-81-21	53, 107, 147	20-875-51-21	55, 108, 149	20-882-62-06	63, 112, 155	22-861-10-21	79
20-867-81-23	53, 107, 147	20-875-51-23	55, 108, 149	20-882-63-21	63, 112, 155	22-861-10-23	79
20-869-20-06	71, 115, 161	20-875-60-06	57, 109, 151	20-889-20-21	61, 111, 153	22-861-10-25	79
20-869-20-21	71, 115, 161	20-875-60-21	57, 109, 151	20-889-20-23	61, 111, 153	22-861-10-36	79
20-869-20-23	71, 115, 161	20-875-60-23	57, 109, 151	20-889-21-06	61, 111, 153	22-861-10-38	79
20-869-21-06	71, 115, 161	20-875-61-06	57, 109, 151	20-889-21-21	61, 111, 153	22-861-10-41	79
20-869-21-21	71, 115, 161	20-875-61-21	57, 109, 151	20-889-22-21	61, 111, 153	22-861-10-48	79
20-869-21-23	71, 115, 161	20-875-61-23	57, 109, 151	20-889-30-21	61, 111, 153	22-861-20-06	79
20-869-30-06	71, 115, 161	20-875-70-06	57, 109, 151	20-889-30-23	61, 111, 153	22-861-20-15	79
20-869-30-21	71, 115, 161	20-875-70-21	57, 109, 151	20-889-31-06	61, 111, 153	22-861-20-21	79
20-869-30-23	71, 115, 161	20-875-70-23	57, 109, 151	20-889-31-21	61, 111, 153	22-861-20-23	79
20-869-31-06	71, 115, 161	20-875-71-06	57, 109, 151	20-889-32-21	61, 111, 153	22-861-20-25	79
20-869-31-21	71, 115, 161	20-875-71-21	57, 109, 151	20-898-20-05	85, 121, 185	22-861-20-36	79
20-869-31-23	71, 115, 161	20-875-71-23	57, 109, 151	20-898-20-06	85, 121, 185	22-861-20-38	79
20-870-10-06	76, 117, 178	20-881-50-21	59, 110, 152	20-898-30-05	85, 121, 185	22-861-20-41	79
20-870-10-21	76, 117, 178	20-881-50-23	59, 110, 152	20-898-30-06	85, 121, 185	22-861-20-48	79
20-870-10-23	76, 117, 178	20-881-51-06	59, 110, 152	20-898-40-05	65, 113, 157	22-861-30-06	79
20-870-11-06	76, 117, 178	20-881-52-21	59, 110, 152	20-898-40-06	65, 113, 157	22-861-30-15	79
20-870-11-21	76, 117, 178	20-881-53-23	59, 110, 152	20-898-41-05	65, 113, 157	22-861-30-21	79
20-870-11-23	76, 117, 178	20-881-54-21	59, 110, 152	20-898-41-06	65, 113, 157	22-861-30-23	79
20-870-12-06	76, 117, 178	20-881-54-23	59, 110, 152	20-898-50-05	65, 113, 157	22-861-30-25	79
20-870-12-21	76, 117, 178	20-881-55-06	59, 110, 152	20-898-50-06	65, 113, 157	22-861-30-36	79
20-870-12-23	76, 117, 178	20-881-56-21	59, 110, 152	20-898-51-05	65, 113, 157	22-861-30-38	79
20-870-13-06	76, 117, 178	20-881-57-23	59, 110, 152	20-898-51-06	65, 113, 157	22-861-30-41	79
20-870-13-21	76, 117, 178	20-881-60-21	59, 110, 152			22-861-30-48	79
20-870-13-23	76, 117, 178	20-881-60-23	59, 110, 152	21-401-10-05	124	22-872-20-06	67
20-870-18-06	77, 117, 179	20-881-61-06	59, 110, 152	21-401-11-05	124	22-872-20-21	67
20-870-18-21	77, 117, 179	20-881-62-21	59, 110, 152	21-402-10-05	125	22-872-20-23	67
20-870-18-23	77, 117, 179	20-881-63-23	59, 110, 152	21-402-10-06	125	22-872-30-06	67
20-870-19-06	77, 117, 179	20-881-64-21	59, 110, 152	21-402-10-21	125	22-872-30-21	67
20-870-19-21	77, 117, 179	20-881-64-23	59, 110, 152	21-402-12-05	125	22-872-30-23	67
20-870-19-23	77, 117, 179	20-881-65-06	59, 110, 152	21-402-12-06	125	22-880-10-05/03	80
20-871-10-06	73, 116, 177	20-881-66-21	59, 110, 152	21-402-12-21	125	22-880-10-05/29	80
20-871-10-21	73, 116, 177	20-881-67-23	59, 110, 152	21-404-10-05	125	22-880-10-05/44	80
20-871-10-23	73, 116, 177	20-881-70-21	59, 110, 152	21-404-10-06	125	22-880-10-06/03	80
20-871-11-06	73, 116, 177	20-881-70-23	59, 110, 152	21-404-10-21	125	22-880-10-06/08	80
20-871-11-21	73, 116, 177	20-881-71-06	59, 110, 152	21-451-10-21	126	22-880-10-06/40	80
20-871-11-23	73, 116, 177	20-881-72-21	59, 110, 152	21-451-11-06	126	22-880-20-05/03	80
20-872-20-06	114, 159	20-881-73-23	59, 110, 152	21-451-14-21	126	22-880-20-05/29	80
20-872-20-21	114, 159	20-881-74-21	59, 110, 152	21-451-14-23	126	22-880-20-05/44	80
20-872-20-23	114, 159	20-881-74-23	59, 110, 152	21-451-20-21	126	22-880-20-06/03	80
20-872-30-06	114, 159	20-881-75-06	59, 110, 152	21-451-21-06	126	22-880-20-06/08	80
20-872-30-21	114, 159	20-881-76-21	59, 110, 152	21-451-24-21	126	22-880-20-06/40	80
20-872-30-23	114, 159	20-881-77-23	59, 110, 152	21-451-24-23	126	22-880-30-05/03	80
20-875-30-06	55, 108, 149	20-882-40-23	63, 112, 155	21-451-30-21	127	22-880-30-05/29	80
20-875-30-21	55, 108, 149	20-882-41-05	63, 112, 155	21-451-31-06	127	22-880-30-05/44	80

Item number	Page	Item number	Page	Item number	Page	Item number	Page
22-880-30-06/03	80	23-512-50-23	90	30-931-41-41	241	31-302-31-06	271
22-880-30-06/08	80	23-601-10-06	90	30-931-41-48	241	31-302-32-05	271
22-880-30-06/40	80	23-601-10-21	90	30-931-41-49	241	31-302-32-06	271
		23-601-10-23	90	30-935-10-06/21	255	31-302-33-06	271
23 -201-10-06	89	23-623-10-06	91, 128	30-952-10-06/01	247	31-311-10-05	269
23-201-10-21	89	23-623-10-21	91, 128	30-952-10-06/21	247	31-311-10-06	269
23-201-10-23	89	23-623-10-23	91, 128	30-958-10-06	221	31-321-10-06	270
23-201-12-06	89	23-625-10-06	92	30-961-10-06/21	235	31-322-10-05	271
23-201-12-21	89	23-625-10-21	92	30-964-10-06/21	231	31-322-10-06	271
23-201-12-23	89	23-625-10-23	92	30-968-10-05	219	31-322-12-05	271
23-201-20-06	89	23-625-11-06	93	30-968-11-06	219	31-322-12-06	271
23-201-20-21	89	23-625-11-21	93	30-969-10-06	229	31-331-10-05	270
23-201-20-23	89	23-625-11-23	93	30-969-11-06	229	31-331-10-06	270
23-201-22-06	89	23-651-10-06	89	30-969-20-06	229	31-332-10-05	272
23-201-22-21	89	23-651-10-21	89	30-969-21-06	229	31-332-10-06	272
23-201-22-23	89	23-651-10-23	89	30-969-30-06	257	31-332-12-06	272
23-201-30-05	89	23-661-10-21	90	30-973-10-05	217	31-351-10-06	269
23-201-40-06	89			30-973-10-06	217	31-352-10-06	272
23-201-40-21	89	30 -858-10-06	209	30-973-11-05	217	31-401-10-05	270
23-201-40-23	89	30-858-20-06	209	30-973-11-06	217	31-401-10-06	270
23-201-42-06	89	30-866-10-05	211	30-973-20-05	259	31-401-11-05	270
23-201-42-21	89	30-866-10-06	211	30-973-20-06	259	31-401-11-06	270
23-201-42-23	89	30-866-20-05	211	30-980-10-23	235	31-411-10-05	270
23-301-10-06	89	30-866-20-06	211	30-991-10-05/21	233	31-411-10-06	270
23-301-10-21	89	30-880-10-05/03	239	30-991-10-06/21	233	31-411-11-06	270
23-301-10-23	89	30-880-10-05/08	239	30-991-10-06/28	233	31-412-10-06	271
23-401-10-00	89	30-880-10-05/29	239	30-991-10-06/32	233	31-412-11-05	271
23-401-20-00	89	30-880-10-05/40	239	30-991-11-05/02	233	31-412-11-06	271
23-421-10-06	90	30-880-11-06/03	239	30-991-11-06/02	233	31-412-12-05	271
23-421-10-21	90	30-880-11-06/08	239	30-991-20-06/21	251	31-412-12-06	271
23-421-10-23	90	30-880-11-06/29	239	30-993-10-05	227	31-412-13-06	271
23-421-20-06	90	30-880-11-06/40	239	30-993-10-06	227	31-413-10-06	272
23-421-20-21	90	30-892-10-05	218			31-414-10-06	271
23-421-20-23	90	30-892-10-06	218	31 -201-10-05	269	31-414-11-05	271
23-431-10-06	90	30-902-10-05	225	31-201-10-06	269	31-414-11-06	271
23-431-10-21	90	30-902-10-06	225	31-201-11-06	269	31-414-12-05	271
23-431-10-23	90	30-904-10-05	223	31-211-10-06	269	31-414-12-06	271
23-451-10-06	89	30-904-10-06	223	31-211-11-06	269	31-415-10-06	272
23-451-10-21	89	30-904-20-05	223	31-231-10-06	264, 269	31-416-10-06	270
23-451-10-23	89	30-904-20-06	223	31-231-11-06	264, 269	31-431-10-05	270
23-451-20-06	89	30-905-21-05	213	31-231-12-06	264, 269	31-431-10-06	270
23-451-20-21	89	30-905-21-06	213	31-231-13-06	264, 269	31-432-10-06	271
23-451-20-23	89	30-909-20-05/21	253	31-301-10-05	269	31-432-11-05	271
23-461-10-06	90	30-909-20-06/21	253	31-301-10-06	269	31-432-11-06	271
23-461-10-21	90	30-909-20-06/42	253	31-301-11-05	269	31-432-12-05	271
23-461-10-23	90	30-916-10-05	215	31-301-11-06	269	31-432-12-06	271
23-512-10-06	90	30-916-10-06	215	31-301-12-05	269	31-433-10-06	272
23-512-10-21	90	30-922-10-06	237	31-301-12-06	269	31-441-10-06	270
23-512-10-23	90	30-922-11-06	237	31-301-13-05	269	31-451-10-06	270
23-512-20-06	90	30-931-10-05	243	31-301-13-06	269	31-461-10-06	273
23-512-20-21	90	30-931-10-12	243	31-302-10-05	271	31-501-10-05	271
23-512-20-23	90	30-931-40-05	241	31-302-10-06	271	31-501-10-06	271
23-512-30-06	90	30-931-40-12	241	31-302-11-05	271	31-501-11-05	271
23-512-30-21	90	30-931-40-15	241	31-302-11-06	271	31-501-11-06	271
23-512-30-23	90	30-931-40-20	241	31-302-12-05	271	31-501-12-05	271
23-512-40-06	90	30-931-40-41	241	31-302-12-06	271	31-501-12-06	271
23-512-40-21	90	30-931-40-48	241	31-302-13-06	271	31-501-13-06	271
23-512-40-23	90	30-931-40-49	241	31-302-30-05	271	31-502-10-05	272
23-512-50-06	90	30-931-41-15	241	31-302-30-06	271	31-502-10-06	272
23-512-50-21	90	30-931-41-20	241	31-302-31-05	271	31-502-11-05	272

Item number	Page	Item number	Page	Item number	Page	Item number	Page
31-502-11-06	272	33-201-10-06	200	33-621-10-06	195, 372	60-131-10-05	321, 401
31-502-12-05	272	33-201-10-21	200	33-621-10-21	195, 372	60-131-10-06	321, 401
31-502-12-06	272	33-201-11-06	200	33-624-10-06	128, 194	60-131-11-05	321, 401
31-502-13-06	272	33-201-11-21	200	33-624-10-21	128, 194	60-131-11-06	321, 401
31-512-10-05	273	33-201-20-06	200	33-624-10-23	128, 194	60-132-10-05	322, 401
31-512-10-06	273	33-201-20-21	200	33-651-10-21	201	60-132-10-06	322, 401
31-512-11-05	273	33-201-21-06	200			60-133-10-05	322
31-512-11-06	273	33-201-21-21	200	51-917-10-06	407	60-133-10-06	322
31-512-12-06	273	33-301-10-06	200	51-917-10-21	407	60-141-10-05	322
31-521-10-06	273	33-301-10-21	200	51-917-11-06	407	60-141-10-06	322
31-521-11-06	273	33-301-11-06	200	51-917-11-21	407	60-142-10-21	94
31-601-10-01	271	33-301-11-21	200	51-917-12-06	407	60-142-11-06	94
31-601-10-06	271	33-301-12-06	200	51-917-12-21	407	60-142-12-23	94
31-602-10-05	273	33-301-12-21	200	51-917-20-21	409	60-142-14-21	94
31-602-11-06	273	33-301-13-06	200	51-917-21-23	409	60-142-15-06	94
31-621-10-05	261, 372	33-301-13-21	200	51-917-22-23	409	60-142-16-23	94
31-621-10-06	261, 372	33-331-10-06	200	51-917-30-21	409	60-142-30-21	95
31-621-11-05	261, 373	33-331-10-21	200	51-917-31-23	409	60-142-31-06	95
31-621-11-06	261, 373	33-401-10-06	200	51-917-32-23	409	60-142-32-23	95
31-641-10-06	260	33-401-10-21	200	51-917-50-21	409	60-142-34-21	95
31-990-10-06	264	33-401-11-06	200	51-917-51-23	409	60-142-35-06	95
31-990-11-06	264	33-401-11-21	200	51-917-52-23	409	60-142-36-23	95
31-990-20-06	265	33-404-10-06	200	51-917-80-21	411	60-142-50-21	95
31-990-21-06	265	33-404-10-21	200	51-917-80-23	411	60-142-51-06	95
31-990-22-06	265	33-404-12-06	200	51-917-81-21	411	60-142-52-23	95
31-990-23-06	265	33-404-12-21	200	51-917-81-23	411	60-142-54-21	95
		33-424-10-06	201			60-142-55-06	95
32-854-10-06	163	33-424-10-21	201	60-101-10-21	424	60-142-56-23	95
32-854-10-21	163	33-424-11-06	201	60-101-11-21	424	60-211-10-21	425
32-854-11-06	163	33-424-11-21	201	60-101-12-21	424	60-211-11-21	424
32-854-11-21	163	33-424-30-06	201	60-101-13-21	424	60-211-12-21	424
32-854-20-06	163	33-424-30-21	201	60-101-14-21	424	60-211-20-06	424
32-854-20-21	163	33-424-31-06	201	60-112-10-21	422	60-211-21-06	424
32-854-21-06	163	33-424-31-21	201	60-113-10-23	423	60-211-22-06	424
32-854-21-21	163	33-453-10-06	201	60-113-11-23	423	60-211-23-21	425
32-866-10-06	166	33-453-10-21	201	60-113-13-21	423	60-211-24-21	425
32-866-11-21	166	33-453-11-06	201	60-113-20-23	423	60-211-30-10	425
32-866-20-06	166	33-453-11-21	201	60-114-10-23	423	60-301-10-23	424
32-866-21-21	166	33-453-20-06	201	60-115-10-23	423	60-311-10-00	131
32-904-10-06	175	33-453-20-21	201	60-115-11-23	423	60-312-10-00	130
32-904-11-06	175	33-453-21-06	201	60-115-20-23	423	60-312-11-00	131
32-904-20-06	175	33-453-21-21	201	60-115-21-23	423	60-435-10-05	309
32-904-21-06	175	33-461-10-21	200	60-116-10-21	422	60-435-10-06	309
32-905-22-06	167	33-461-10-23	200	60-116-11-21	422	60-442-10-05	309
32-905-23-21	167	33-461-11-21	200	60-116-12-21	422	60-442-10-06	309
32-909-20-06/21	193	33-461-11-23	200	60-122-10-06	320	60-625-00-00	425
32-909-20-06/42	193	33-551-10-06	201	60-122-11-06	320	60-626-10-21	92, 130
32-916-10-06	169	33-551-10-21	201	60-122-20-06	320	60-626-10-23	92, 130
32-916-11-21	169	33-551-11-06	201	60-122-21-06	320	60-626-11-21	93, 131
32-931-10-12	189	33-551-11-21	201	60-122-30-06	321, 400	60-627-11-21	93, 131
32-931-11-12	189	33-551-12-06	201	60-122-31-06	321, 400	60-671-00-00	425
32-952-10-06/01	191	33-551-12-21	201	60-126-10-05	321, 400		
32-952-10-06/21	191	33-551-20-06	201	60-126-10-06	321, 400	61-101-12-00	416
32-958-10-06	176	33-551-20-21	201	60-126-11-05	321, 400	61-102-11-00	416
32-958-20-06	176	33-551-21-06	201	60-126-11-06	321, 400	61-102-12-00	416
32-968-10-06	173	33-551-21-21	201	60-126-12-05	321, 400	61-103-11-00	416
32-969-10-06	181	33-551-22-06	201	60-126-12-06	321, 400	61-103-22-00	416
32-969-11-06	181	33-551-22-21	201	60-127-10-21	321, 401	61-103-32-00	416
32-973-10-06	171	33-601-10-06	201	60-127-11-21	321, 401	61-104-41-00	416
32-973-11-06	171	33-601-10-21	201	60-127-12-21	321, 401	61-105-12-00	416

Item number	Page
61-105-22-00	416
61-105-32-00	416
61-106-10-06	416
61-106-11-06	416
61-111-11-00	415
61-112-11-00	415
61-112-12-00	415
61-113-11-00	415
61-113-13-00	415
61-113-17-00	415
61-113-21-00	415
61-114-10-00	415
61-114-11-00	415
61-122-12-06	414
61-124-14-06	414
61-124-16-06	414
61-126-10-06	417
61-126-11-06	417
61-201-10-00	419
61-213-10-00	418
61-213-12-00	418
61-214-11-00	418
61-215-12-00	418
61-215-22-00	418
61-226-11-06	417
61-226-13-06	417
61-227-10-06	417
61-227-11-06	417
61-228-10-00	417
61-242-10-05	417
62-111-11-01	289, 339
62-202-10-05	420
62-202-10-06	420
62-202-10-12	420
62-211-10-21	420
62-211-10-25	420
62-211-10-32	420
62-211-10-34	420
62-211-10-38	420
62-211-11-45	420
62-212-10-21	421
62-212-11-45	421
62-213-10-21	421
62-214-10-06	176, 221
62-214-10-21	176, 221
62-222-10-24	70, 115, 161
62-222-10-33	70, 115, 161
62-222-10-35	70, 115, 161
62-222-10-37	70, 115, 161
62-222-10-46	70, 115, 161
62-232-10-06	421
62-232-10-23	421
62-301-02-23	273, 316
62-303-01-05	273, 314
62-303-01-06	273, 314
94-904-10-01	175, 223
94-904-10-21	175, 223
94-904-10-42	175, 223

Item number	Page
D33-624-10-06	128, 194
D33-624-10-21	128, 194
D33-624-10-23	128, 194
G20-885-10-05	83, 120, 183
G20-885-10-12	83, 120, 183
G20-885-10-21	83, 120, 183
G20-885-11-05	83, 120, 183
G20-885-11-12	83, 120, 183
G20-885-11-21	83, 120, 183
G20-931-40-05	81, 119, 187
G20-931-40-12	81, 119, 187
G20-931-40-15	81, 119, 187
G20-931-40-20	81, 119, 187
G20-931-40-41	81, 119, 187
G20-931-40-48	81, 119, 187
G20-931-40-49	81, 119, 187
T31-641-10-06	260



THE OLIGO ITEM NUMBERS

With the OLIGO item number system, you can order even more easily. Each item number comprises four blocks of numbers. The blocks of numbers stand for functions, product families, variants and colour key. By means of the number combination, you can clearly see whether a plan is consistent and coherent with regard to system, luminaire family, surface and colour.

Operating features such as gesture control or touch dimmers are indicated by letters at the beginning of the item number.

This system applies for all products in the OLIGO range.

AN EXAMPLE OF THE SYSTEM

20 - 862 - 13 - 21

The number sequence in this item number indicates the SMART.POINT 24 V WALKER spotlight in matt white.

Primary colour

05 = chrome, 06 = matt chrome, 07 = leaf silver, etc.
20 = bright white, 21 = matt white,
22 = bright black, 23 = matt black, etc.

A shade colour is separated from the primary colour by an oblique stroke.

Indication of luminaire-specific features,
e.g. the type of reflector

Family identification

e.g. 862 = WALKER, 898 = A LITTLE BIT, etc.

System or function indication

20 = 24 V SMART.POINT, 30 = CHECK-IN, etc.

Letters to indicate an operating function are placed before the item number: T = touch dimmer,

G = gesture control D = integrated DALI converter

ORDERING INFORMATION AND TECHNICAL INFORMATION

ORDERS

Unless otherwise specified, luminaires are always supplied without lamps. Accessories should always be ordered separately.

Products from OLIGO should only be acquired from our specialist retail and wholesale trade partners. A retailer overview can be found at www.oligo.de.

All previous brochures become invalid with the publication of this catalogue. In case of doubt, the order date applies for the aforementioned effectiveness.

All offers are non-binding and only take effect with our written confirmation on the basis of our T&C. Verbal agreements require written confirmation.

For special models of our products, please contact our customer service department.

TECHNICAL INFORMATION

LIGHT VALUES

For luminaires with integrated LEDs, all lumen information comprises actual measures values at operating temperature for the luminaire. Nominal information from the LED manufacturer is up to 20% higher.

SURFACES, COLOURS AND MATERIALS

All information regarding surfaces are merely colour information and do not specify material designation.

Matt metal surfaces are either varnished, anodised or galvanised. Bright metal surfaces are either polished or galvanised.

Shades are generally satin finished on the outside and reflection coated on the inside. Some shades are hand-blown and hand crafted single unit products with individual character. Small differences are unavoidable.

PROTECTION CLASS

Unless otherwise, luminaires are always technically designed according to protection class IP 20. All transformers and power supply units have safety extra-low voltage (SELV).

LAMPS

Information regarding lamps complies with the ZVEI [Central Association of the Electrical and Electronics Industry] lamp designation system (LBS).

Subject to technical modifications. No liability shall be accepted to the accuracy of technical information or for colour differences.

KEY

LED
INTEGRIERT

Luminaires with integrated LED technology. The LED lamps in these luminaires can only be changed by the manufacturer.

LED
READY

This symbol indicates the compatibility of luminaire and lamp. The thermal and mechanical usability of the LED retrofit lamps recommended in this catalogue has been tested.

IRC
READY

Luminaires marked with this symbol can be fitted with energy-efficient low voltage halogen lamps.

ECO
READY

Luminaires marked with this symbol can be fitted with energy-efficient high voltage halogen lamps.

ESL
READY

Luminaires marked with this symbol can be fitted with energy-saving lamps.

 System component can be integrated into a DALI system.

 SMART CONTROL
READY

Special accessories allow the luminaire to be integrated into, and controlled by, a smart-home system or building automation system.

 DIMMER
SWITCH

Luminaire comes with a dimmer switch for dimming and switching the luminaire on and off.

 GESTURE
CONTROL

Luminaire is equipped with a sensor for touch-free gesture control (switching and dimming).

TYPICAL UNITS OF MEASUREMENT AND ABBREVIATIONS

cd	=	Candela
lm	=	Lumen
K	=	Kelvin
CRI	=	Colour rendering index
V	=	Volt
VA	=	Volt-ampere
AC	=	Alternating current
DC	=	Direct current
Hz	=	Hertz
W	=	Watt
RAL	=	Standardised colour value
EEC	=	Energy efficiency class

ADDITIONAL INFORMATION

National and international property rights such as patents, registered designs, industrial designs or trademarks are registered for many OLIGO lighting systems and luminaires.

All information in this catalogue – particularly the illustrations – may only be reproduced with prior written authorisation.

PROTECTION CLASSES ACCORDING TO 60529 (IP = Ingress Protection)

Protection against foreign substances and contact

Protection against water

IP 2x	> 12 mm	IP x0	No protection
IP 3x	> 2.5 mm	IP x2	Droplets up to 15° to the vertical
IP 4x	> 1 mm	IP x3	Spray up to 60° to the vertical
IP 5x	Protected against dust	IP x4	Spray from all directions
IP 6x	Dust-proof	IP x5	Water jet from all directions
		IP x7	Waterproof

Example:
IP 67 = dust-proof / waterproof

PROTECTION CLASSES ACCORDING TO DIN 40 100 (EC Publ. 417)

Protection class 1

Exposed metal parts connected to the protective earth of the luminaire.

Protection class 2

Live parts are additionally insulated and cannot be touched in the event of a fault.

Protection class 3

Safety extra-low voltage (SELV).

LUMINOUS FLUX REDUCTION FOR 12 V AC INSTALLATIONS

	10% luminous flux reduction					20% luminous flux reduction					30% luminous flux reduction				
	Cable length s/m					Cable length s/m					Cable length s/m				
	2.5	5.0	7.5	10.0	15.0	2.5	5.0	7.5	10.0	15.0	2.5	5.0	7.5	10.0	15.0
Lamp output W	Cable cross section mm²					Cable cross section mm²					Cable cross section mm²				
20	0.75	0.75	1.5	1.5	2.5	0.75	0.75	0.75	0.75	1.5	0.75	0.75	0.75	0.75	0.75
40	0.75	1.5	2.5	4	6	0.75	0.75	1	1.5	2.5	0.75	0.75	0.75	1	1.5
50	1	2.5	4	4	6	0.75	1	1.5	2.5	4	0.75	0.75	1	1.5	2.5
60	1.5	2.5	4	6	10	0.75	1.5	2.5	2.5	4	0.75	0.75	1	1.5	2.5
75	1.5	4	6	6	10	0.75	1.5	2.5	4	4	0.75	1	1.5	2.5	2.5
80	1.5	4	6	10	10	0.75	1.5	2.5	4	6	0.75	1	1.5	2.5	4
100	2.5	4	6	10	16	1	2.5	4	4	6	0.75	1.5	2.5	2.5	4
120	2.5	6	10	10	16	1.5	2.5	4	6	10	0.75	1.5	2.5	4	4
140	4	6	10	16	16	1.5	2.5	4	6	10	1	2.5	2.5	4	6
150	4	6	10	16	25	1.5	4	4	6	10	1	2.5	2.5	4	6
160	4	6	10	16	25	1.5	4	6	6	10	1	2.5	4	4	6
180	4	10	10	16	25	2.5	4	6	10	10	1.5	2.5	4	4	6
200	4	10	16	16	25	2.5	4	6	10	16	1.5	2.5	4	6	10
225	6	10	16	25	25	2.5	4	6	10	16	2.5	2.5	4	6	10
250	6	10	16	25	-	2.5	6	10	10	16	2.5	4	6	6	10
300	6	16	25	25	-	4	6	10	16	16	2.5	4	6	10	10
350	10	16	25	-	-	4	10	10	16	25	4	4	6	10	16
400	10	16	25	-	-	6	10	16	16	25	6	6	10	10	16
450	10	25	25	-	-	6	10	16	16	25	6	6	10	10	16
500	10	25	-	-	-	6	10	16	25	-	6	6	10	16	25
550	10	25	-	-	-	10	10	16	25	-	10	10	10	16	25
600	16	25	-	-	-	10	16	16	25	-	10	10	10	16	25

OLIGO Lichttechnik GmbH is a partner
in the following cooperations:

licht.de

Fördergemeinschaft Gutes Licht
[Association for the Promotion of
Good Lighting]

ZVEI:

Zentralverband Elektroindustrie
[Central Association of the Electrical
and Electronics Industry]

DIALux

Lichtplanungs-Software
[Light Planning Software]



feel the light