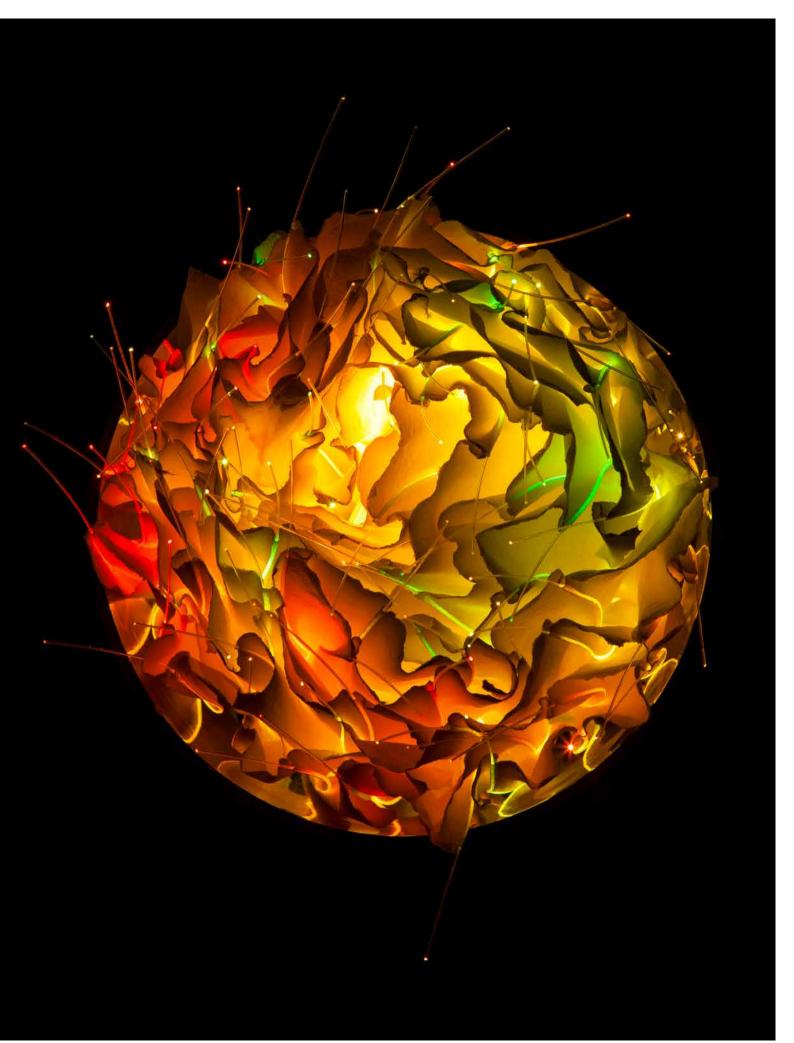


WE DON'T ACTUALLY INVENT LIGHT

BUT WE COME CLOSE EVERY DAY

We expect you to expect a lot from Roblon, and we expect even more from ourselves. Which is why we have years of experience in meeting the highest expectations. And then raising them.













Mini Downlights 84



Classic Downlights &L











Ara 148



Libra 154



Beespot



Framing Spot



XPO-led 166





XPO-led Essential 1R 172



XPO-led Essential 1S 174



XPO-led Essential 2RL Clear 17L



XPO-led Essential 2RL Opal 178



XPO-led Essential 2SL Clear 180



XPO-led Essential 2SL Opal 182

Retail









Note 78





Mini Downlights ∆4



Classic Downlights &L









Fibre harnesses 134



Pyxis 140



Corvus



Ara 148



Libra 154



Twin Peak set



Beespot



Framing Spot



XPO-led



Essential 1R



XPO-led Essential 1S 174

Hospitality









Note 78



Ball & Socket &2



Mini Downlights &4



Classic Downlights &L



Asymmetrics 명4





Beespot 100



Sirius 102





Pyxis 140



Corvus 144



Ara 148



Libra 154



Twin Peak set



Beespot



Framing Spot



XPO-led



XPO-led Essential 1R 172



XPO-led Essential 1S 174

Maritime



Beespot



Sirius 102



Compass



Aquarius

Landscape 108







FL 150-3 126



FL 250 128







Beespot

















Pyxis 140



XPO-led Essential 3SL Clear 184



XPO-led Essential 3SL Opal 186



XPO-led Essential 1QL Clear 188





XPO-led Essential 1QL Opal 190















FL 1000 XT B & FL 1000 XT C 122











XPO-led Essential 2RL Clear 17L



XPO-led Essential 2RL Opal 178



XPO-led Essential 2SL Clear 180



XPO-led Essential 2SL Opal 182



XPO-led Essential 3SL Clear 184



XPO-led Essential 3SL Opal 186



XPO-led Essential 1QL Clear 188



XPO-led Essential 1QL Opal 190



Compass













FL 1000 XT B & FL 1000 XT C 122





FL 150-3







XPO-led Essential 2RL Clear 17L



XPO-led Essential 2RL Opal 178



XPO-led Essential 2SL Clear 180



XPO-led Essential 2SL Opal 182



XPO-led Essential 3SL Clear 184



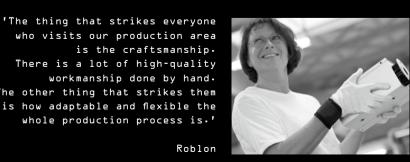
XPO-led Essential 3SL Opal 186



XPO-led Essential 1QL Clear 188



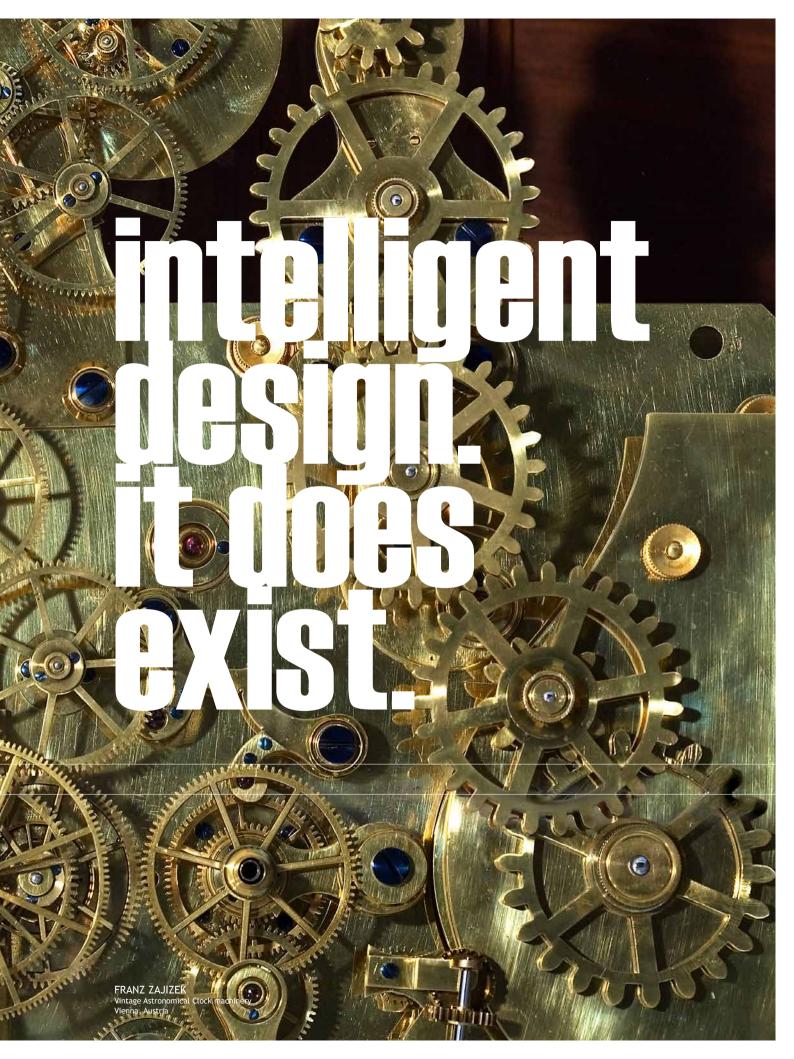
XPO-led Essential 1QL Opal 190



is the craftsmanship. There is a lot of high-quality workmanship done by hand. The other thing that strikes them is how adaptable and flexible the whole production process is.'

Roblon





'Just before midnight on the 3rd of July the clock face is lit with the usual Con Edison corporate blue. Then at midnight, the system gets a computer signal and switches over to red, white and blue. It's a terrific feeling. Con Edison is proud to demonstrate advanced lighting technology for the lighting industry and for New York.'

Peter Jacobson, Lighting Specialist, Con Edison







'The fibre optic solution creates a dramatic reduction in energy, and it improves lighting effectiveness without compromising any aspect of the project.'

Peter Jacobson, Lighting Specialist, Con Edison





When the team at Con Edison chose Roblon fibre optics to illuminate four clock faces, each six metres in diameter and set 27 storeys up in an historic clock tower, they turned their corporate headquarters into a beacon for New York and for innovative lighting technology.

'One of the reasons we did this was to solve the operational issues which arise when using traditional technologies,' explains Con Edison lighting specialist Peter Jacobson.

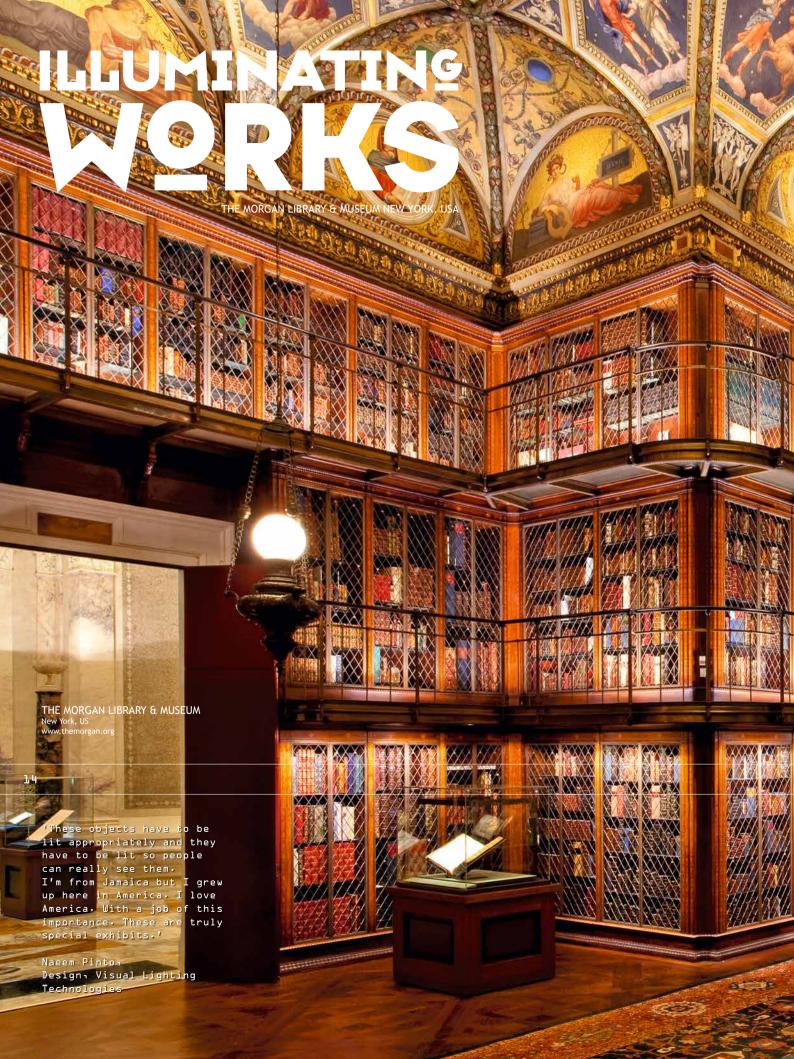
'Fibre optics was perfect. There's the ability to better define the clock face. There's flexibility changing colour. There's the maintenance aspect, the energy aspect, and there's the accuracy. This was just a better way to project and control light.'

11



Roblon staff are as imaginative as they are experienced. They insist on quality and innovation from the drawing board to development, from production to installation, from sales to support. They also insist that there is only one type of lighting solution. The right one.









Notes by Napoleon, Galileo and Voltaire. Letters by Lincoln, Jefferson and Einstein. Gutenberg Bibles and rare editions of Austen, Dickens and Twain.

At the restored Morgan Library & Museum, these illuminating works have been lit for accessibility today and availability tomorrow.

For the Renfro Design Group, Visual Lighting Technologies created a fibre optic solution for showcases and a LED conduit solution for the East Room library bookshelves.

The light had to accentuate precisely the details of the books so that visitors can actually see them, and it had to be safe.

'Renfro needed to contain the light so we designed louvres for the conduits near the edges,' says Naeem Pinto of VLT. 'Roblon just made them to order. Being flexible was important.'

'Documentation was also a huge factor, especially with lighting experts like Renfro because they are very detailed.'

'The LED light quality was key. So was the information you get with Roblon XPO-led. Its light performance and light quality are very well-documented, so you know in advance that it will work well.'

'XPO-led has very little UV and very little heat. It helps with longevity. You just couldn't stick a conventional light in there. The value of these objects to posterity is so important.'





'I went to see it while in NYC on vacation and the effect is every bit as beautiful in reality as it appears in photos. Given all of Photoshop's tricks, you never know these days if a real thing will look like it does in pictures. But at the Morgan, it is like literally stepping into the photo. It is absolutely gorgeous.'

Susan de Vilmorin, Marketing, Visual Lighting Technologies



TALK ABOUT DESIGN

that really has something to say

The design concept for IBM Forum London is a global conversation-starter about starting a global conversation.

Visitors to the conference facility are taken on a journey through IBM's past, present and future. Demo units, graphics, multimedia walls and showcases stimulate an international conversation about the company's work.

An international conversation lies behind the audacious design concept itself.

The Stuttgart-based multidisciplinary architecture studio COASToffice conjured it up in partnership with the global branding agency GPJ and global design firm HOK.

The stunning, startling design concept showcases the client's solutions & technology. Yet it puts the client's clients at the centre of the experience.

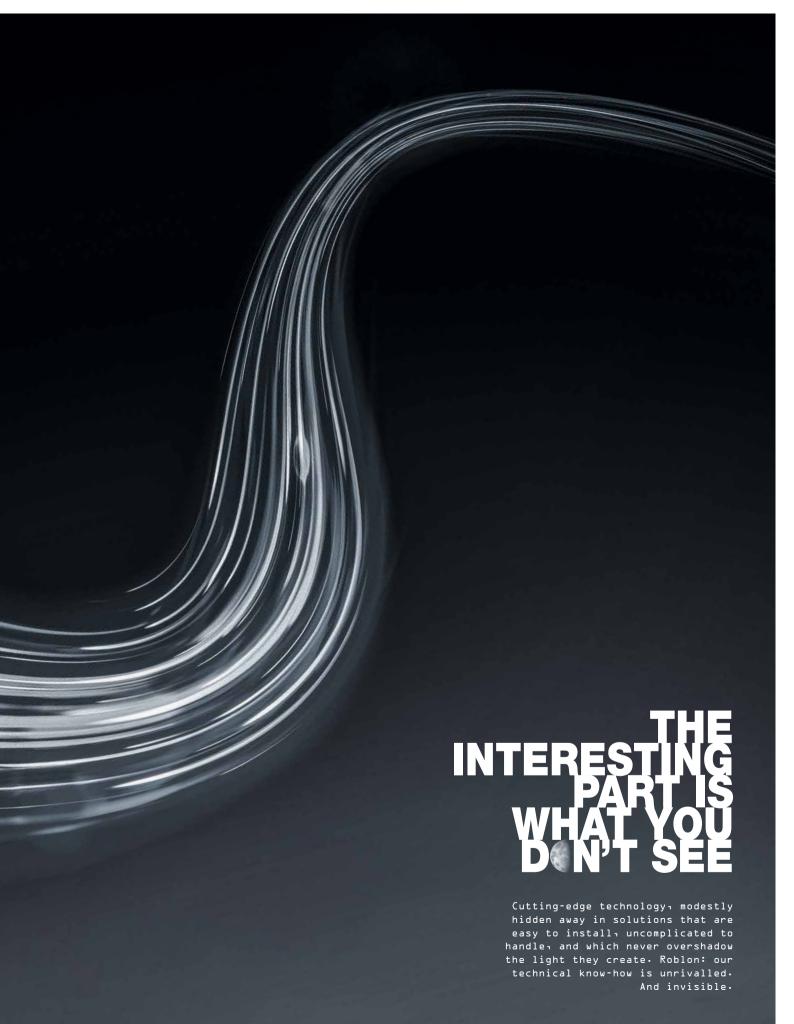
Bold, striking display cases are also at the centre of the experience. Their contents and 'Smarter Planet' quotations further stimulate the conversation. As do witty touches like sudden splashes of vivid colour - and light from cheekily confident Roblon Libra luminaires.

Libra 1

All products used: see pages 58-59







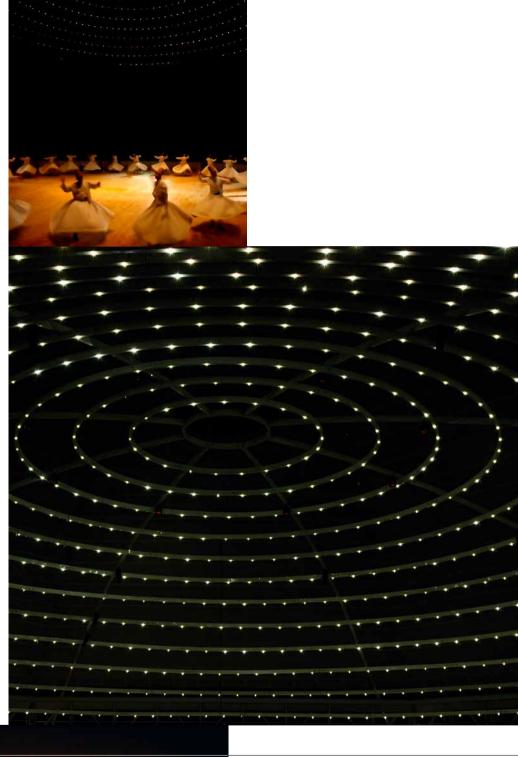
Create 1000 points of light in millimetreperfect symmetry across a dome that is 40 metres in diameter and 17 metres in the air, but only using easily accessible light sources. In less than 30 days. That was Roblon's challenge before the 2,500-seat Whirling Dervish arena in Turkey's Mevlana Cultural Centre opened live on television.

'Roblon responded', says Cevat Karaman.
'They made a special push for the project.
They delivered fast, and it was just
delivered ready to install. The electricians
had no problem.'

'In the great 'Sema' hall, the dervishes turn around to music,' explains Dr. Mehmet Küçükdoğu, President of the Turkish National Committee on Illumination. 'The head slightly slopes, the right hand opens to the sky, and the left hand motions below. The dome's lights simulate the night sky where the dervishes' spirits go up to god.'

'Everybody says this light is wonderful,' says Mr. Karaman. 'It gives a lot of other dimensions to the ceremony.'

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SEE MORE AT WWW.ROBLON.COM/CASES

'A few minutes into the Prime
Minister's speech, they turned
the lights on and all the cameras
stopped showing the Prime
Minister and turned to the dome
and everyone started taking
photographs of it.
I felt, well, happiness. It
wasn't just business. Yes, it was
business, of course. But it was
also culture and it was history

Cevat Karaman, Lamp 83

and it was Turkey.'

THE HEIGHT OF. VOINIE LIGHT

FL 150-2 B light generator







BATAII-BA

To tell the dramatic story of 2,936 heroes and millions of brave Londoners, artist Paul Day created two eight-metre-long bronze reliefs by 'drawing with shadows'.

'A figure is two-dimensional on paper, but when forming it in clay, it becomes 3D and I reform and reshape it to see how light strikes it.' His Battle of Britain monument is therefore 'fundamentally tied in to the way it is lit', he says.

Roblon's lighting had to be more than just artistically flexible. It had to be 'natural'.

'During the day, we needed the lighting not to look like lighting that wasn't on,' recalls architect Tony Dyson.

'It's always an issue for me that you don't see the lighting, the physical equipment,' agrees lighting architect Graham Phoenix. 'Fibre optic lighting is excellent. During the daytime, it is extremely discreet. It doesn't detract from the architecture.'





Compass
All products used: see pages 58-59



'The council insisted on a 10-year life-costing. Fibre optic lighting comes out really well when you do that. Although there is a higher initial costit is much lower on maintenance. LED costs become quite high over 10 years, and there'll be at least one change of fittings. Fibre optics come out as quite cheap. It's a very economically effective solution.'

Graham Phoenix, Light Matters 27









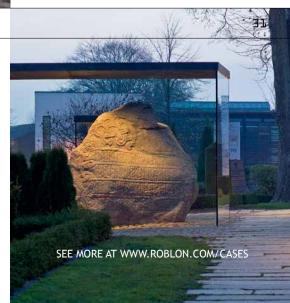
'At first glance, the task seemed impossible,' recalls Erik Nobel. 'How could their sense of presence be maintained while still satisfying the functional and technical requirements?' His solution was striking yet sympathetic bronze-and-glass cases that 'metaphorically hold a hand over the runestones'.

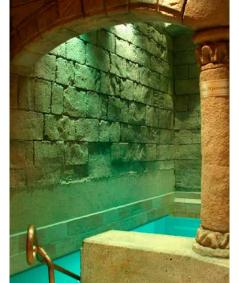
Roblon Avant-garde downlights, hidden in the casing, precisely accentuate the runes and images on the granite.

And the 21st-century lighting technology is soundless. So even on a silent Winter's night, it disturbs neither visitors nor the 10th-century Viking royals at rest in their burial mounds.

Avant-garde
All products used: see pages 58-59







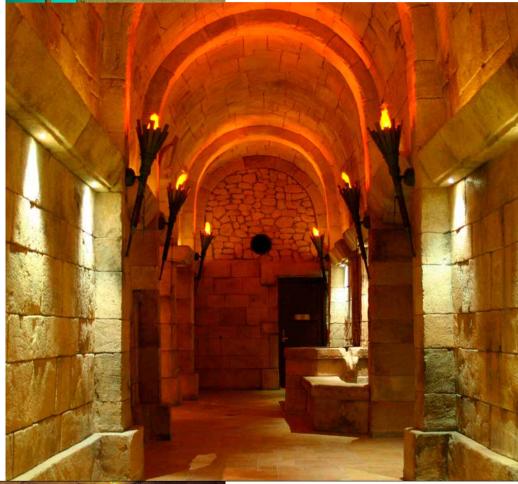
Aquarius 70 All products used: see pages 58-59

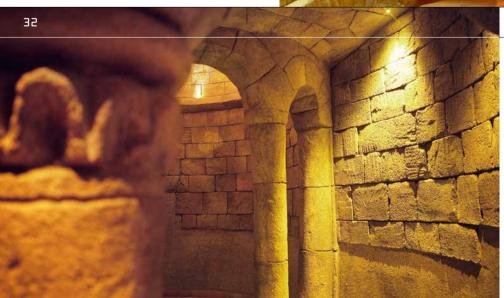


'The Romans didn't have that many electric lights,' as Steen Madsen of Finn Østergaard Architects points out. So when he designed the Roman Baths at Denmark's Skallerup Klit holiday centre, Roblon lighting was used to create 'an illusion which was as close to reality as possible'.

'We chose this light because it could create different kinds of ambience,' he says. 'We could use it to make effects with colour. So it seems like the light comes from daylight and torchlight and oil lamps.'

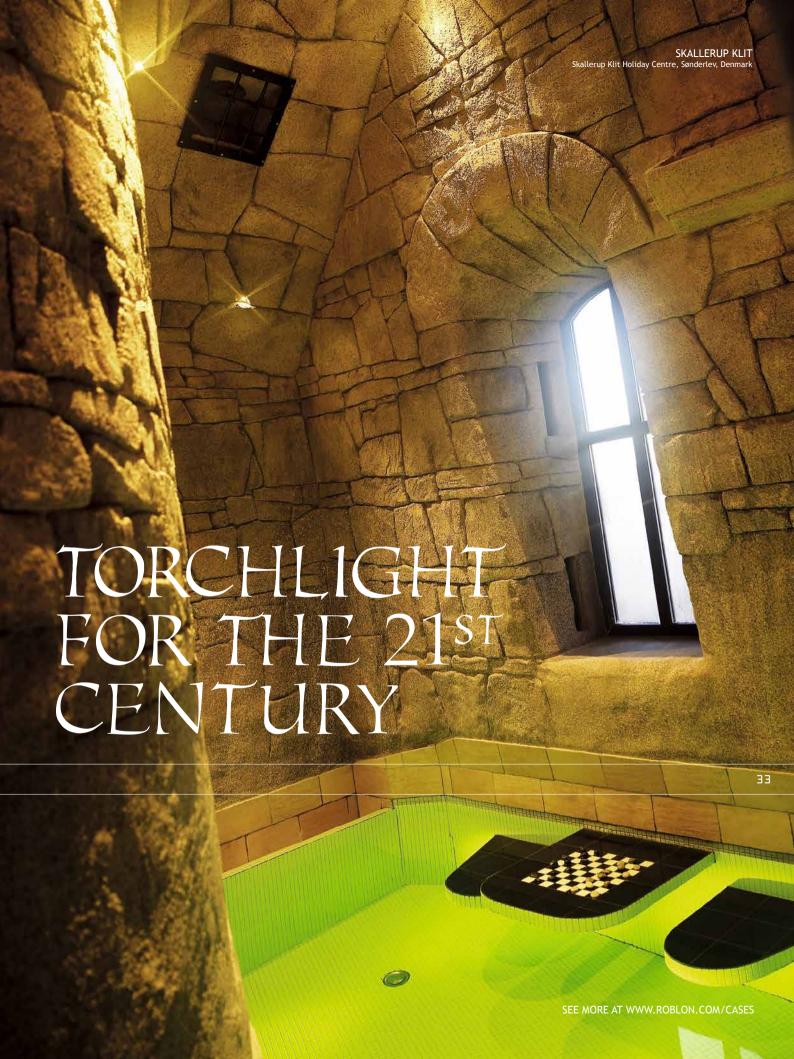
'The simplicity of fibre optic lights was very important for us,' agrees lighting designer Tommy Larsen. 'It was all about hiding them. You must never be able to see the actual lights, just the effect they create.'





'As soon as I saw the Roman Baths I thought: 'candlelight'. I knew, of course, we couldn't use actual candlelight, I just needed it to feel like we did. And I wanted it to be a bit exciting and to feel a bit mystical.'

Royal Danish Theatre lighting designer Tommy Larsen



And you need it tomorrow?



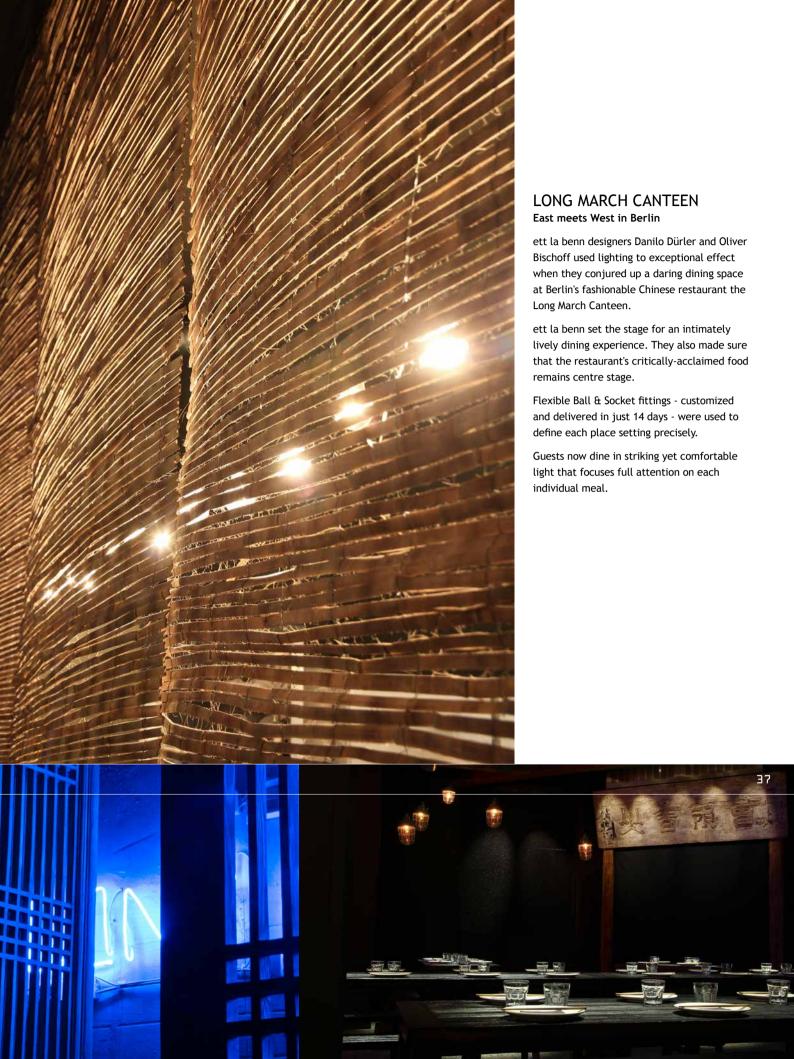
Ball & Socket
All products used: see pages 58-59







LONG MARCH CANTEEN BERLIN Berlin, Germany







Avant-garde
All products used: see pages 58-59



SEILER JEWELLERY STORE

Eliminating in-case heat was a priority when Seiler Juwelier and TIC Beleuchtungen designed new showcase lighting for Seiler's exclusive store in Basel, Switzerland.

They had a problem,' recalls Michael Schweizer of TIC. The jewellery was hot. If a customer wanted to see a ring or a watch, the staff had to take it out and leave it on the table so it could cool down.' The solution was cold fibre optic light with Avant-garde fittings in the in-store cases.

Reproduction requirements were also stringent. 'There are diamonds, platinum, silver, gold - a lot of different materials,' says Mr. Schweizer.

'And in the window, there is intense sunlight.'

So he cleverly combined a fibre optic and an LED colour temperature. 9000 lux was achieved using Ball & Socket fittings and 4,200 K, w250-watt light generators together with a 3,000 K XPO-led conduit system.

The light quality and colour reproduction are very good,' says Michael Schweizer.

'The jewellery absolutely makes an impact.'



When illuminating jewellery, you want it to radiate artistry and beauty.
You do not want it to radiate heat.





Ball & Socket

Custom made design including glare cover & colored in white. All products used: see pages 58-59





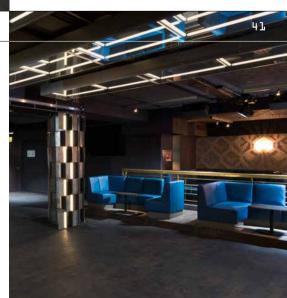


"In a dancing club the Lighting is always the most important thing to create an atmosphere.

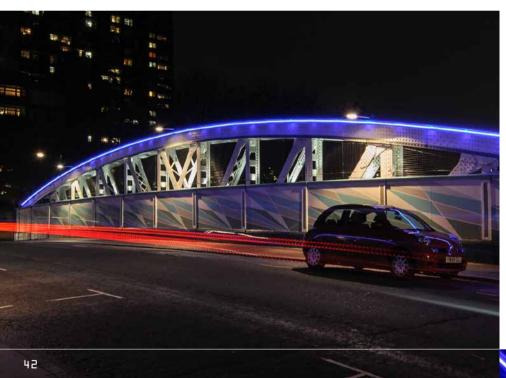
We have chosen Roblon fibre optic-lights to shape (sharp) spotlights on tables and bar in a apart from that darkish room."

Ara 3
All products used: see pages 58-59









LIGHTING THE WAY

The Golborne Road Railway Bridge is an iconic Victorian iron bridge in London's Kensington and Chelsea. Recently, its illumination has been upgraded using Roblon fibre optics and lighting fittings supplied by Light Projects.

Designed and specified by Urban Eye, specialists in using light and specialist surface finishes to transform urban areas, a stunning mix of decorative and task lighting has been installed to provide a safe well-lit road and walkways. This also creates a visual spectacle when seen from all angles, while light spill and glare to the surrounding areas are minimised. The scheme was developed in conjunction with Network Rail and Kensington & Chelsea Council.

Exterior mounted Roblon LED fibre optics with Beespot end points are used together with a blue linear LED system which highlights the graceful sweeping curve of the trusses. The BeeSpots are small, subtle and elegant IP68 rated surface mounted fibre optic spotlights. They are installed throughout the structure, uplighting individual ironwork girders with narrow beam angles to highlight individual architectural features.

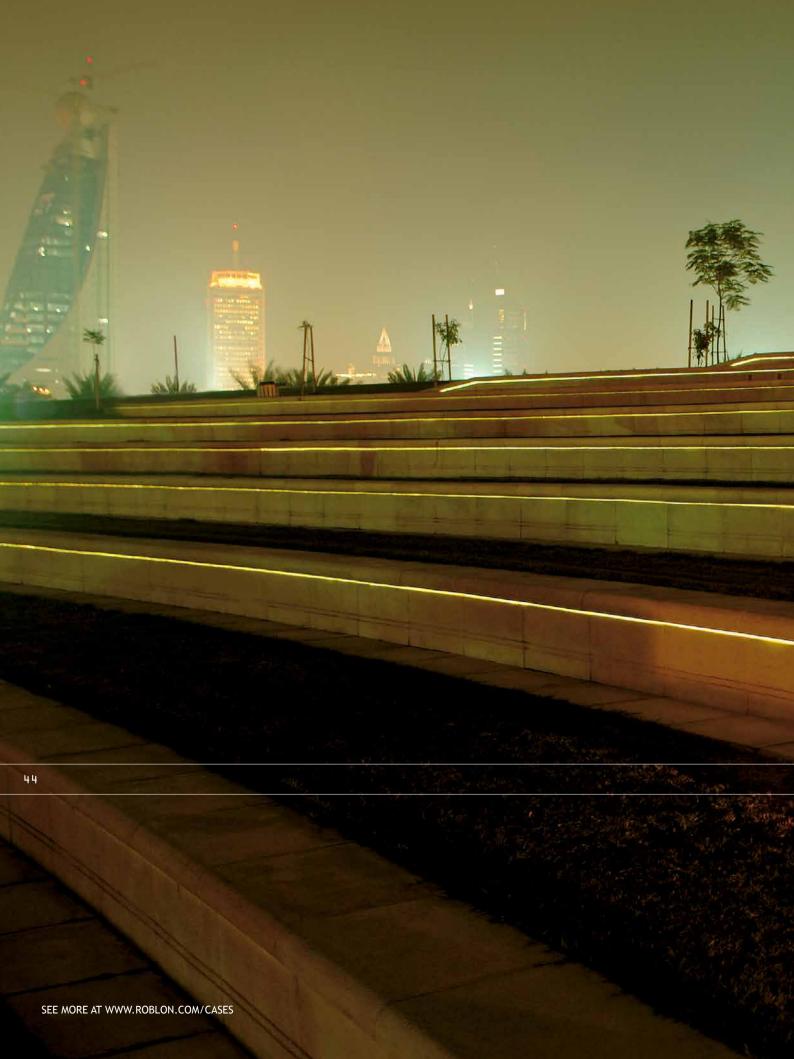
The correct lux levels were determined using Roblon's Lux Calculator. This free clever programme offers lighting designers and specifiers a free and simple method of calculating lux values for any scheme, including the correct specification of light generator and fittings together with fibre type, length and quantity. This information can then be exported as an IES file.

By benefitting from the latest in LED and fibre optic technology, energy costs are minimised while the fittings offer low maintenance and long life cycle performance.









SITTING OVATION FOR A WELL-STAGED SOLUTION

'Earlier, this was an empty
piece of land with nothing but
sand, sand and more sand. Then
all of a sudden a huge park
was set up with water fountains,
trees, playgrounds, a cricket
field, a boating lake, an
amphitheatre, a maze and endless
green fields. The result is
really amazing.'

Khaled Alami, Huda Lighting

Sidelight All products used: see pages 58-59



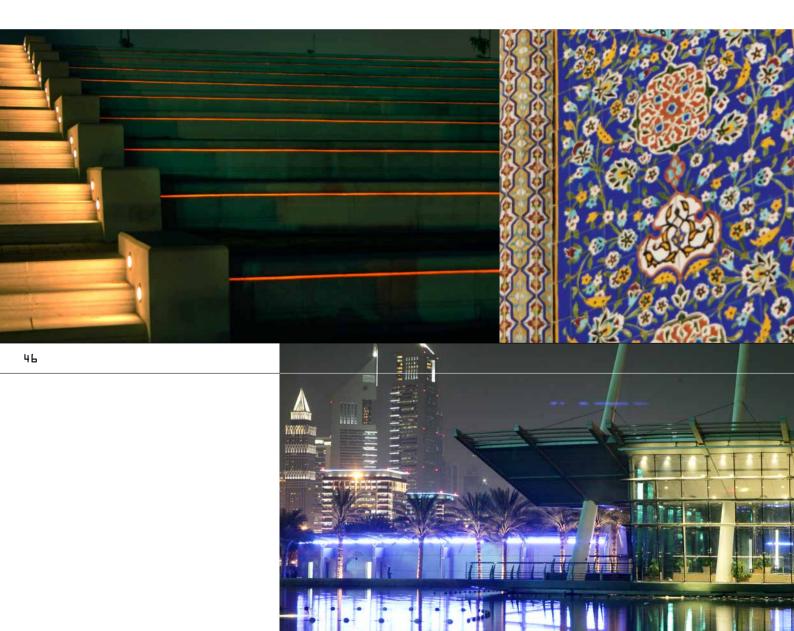
'Other suppliers said this couldn't be done,' says Khaled Alami of Huda Lighting.
'They said you couldn't have fibres that long and still get enough good light off them.
People said: 'Don't get involved'.'

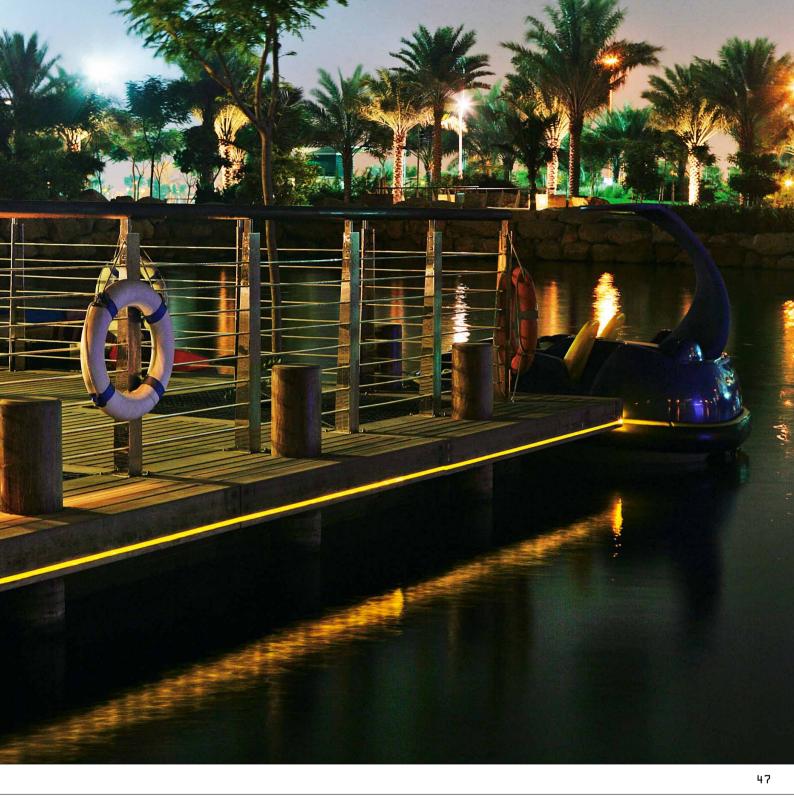
But Roblon staff saw no problem in creating unusually long strips of light to mark off seating rows at the 2,500-seater amphitheatre in Dubai's 40 million Zabeel Theme Park.

'At the Roblon factory, they said: 'We can do it. Don't worry. It's no problem.' And they were right. They could. And the light is good.'

Today, fibre optic lights shine at kiosks, fountains, the boating lake and the futuristic 'Space Maze' in the 470,000 square metre high-tech theme park.

And, of course, run continuously for up to 50 metres from one side of the dramatic amphitheatre to the other.





'The contemporary and futuristic style provides the park with an individual, vibrant and unique character, unseen before in other parks of Dubai.'

David Cracknell, Al Khatib Cracknell Landscape Architects

"We like to think of the ridiculously small details. The overall design must be deeply reliable, and then the small details make it smile."

Steffen Schmelling 1 Schmelling Industriel Design





All products used: see pages 58-59



51

NEUES MUSEUM

Broad context and vivid mise-en-scène - the tour of the Neues Museum level 3, newly designed by Berlin architect Hella Rolfes, arouses enthusiasm as time travel through the ancient eras of human history.

Visitors conceive and experience cultural history and everyday life in the Stone Age, Bronze Age and Iron Age, brought to life in a journey through six halls with glass cabinets, display cases and stelae, montages, a processional way and a time machine.

Lighting design here required staging and protecting one of the world's most exquisite prehistoric and early historic collections, presented by a close interaction of exhibit, text and illustration in an environment of carefully adapted historic premises. First and main task for the chosen combination of ceiling and display lighting: Keep the heat out!

The solution: accent, area and point light, accurately defined highlighting of ever so tiny detail - Ara (LED) and XPO (fibre optics) providing superb colour rendering while objects remain perfectly protected from UV or heat damage - differentiated, with maximum flexibility and precision.

"Using our customized combination of Roblon's spotlights and fibre optics we can respond to and stage each exhibit individually.









Framing Spot LED All products used: see pages 58-59









ANNE FRANK

Tight light gets a wider range

The Anne Frank House Museum recently sought a better way to showcase Anne Frank's original diary. They chose to define the diary - a UNESCO Memory of the World heritage document - with light using a Roblon Framing Spot.

For this single exhibit, Roel Meijer of Q-CAT Lighting asked Roblon if it was possible to make an LED version of the existing fibre optic spot.

'Of course it's possible,' said the R&D team.

The maiden LED Framing Spot will be installed at Anne Frank House in Amsterdam later this month. Meanwhile, Roblon has released it as a new model in the Framing Spot series.

Individual requirements determine which model is the better choice for any given project. The LED model is, for example, especially good for lighting a single object, whereas multiple fibre optic models can run off a single light generator to light multiple objects at separate locations.

Both the fibre optic (above & bottom right) and LED (middle) models have high colour rendering and effectively no UV rays, so the light is not just highly defined, but highly safe.





HELSINGBORG

Fibre optic lighting, naturally

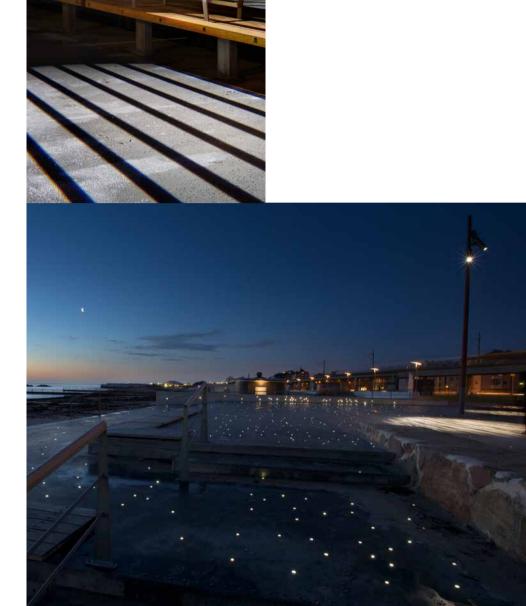
To create scenographic lighting at Helsingborg beach promenade, the lighting designers had to compete with the ultimate attention-seeker: nature.

Except they didn't compete. Instead, the ÅF-Hansen & Henneberg team designed light that is in natural sympathy with the beach, sea and sky.

They embedded 528 fibre optic light points in the concrete waterfront square. They capped them with robust acrylic seals that ensure smooth, consistent light and that can withstand anything that the harsh environment - or for that matter, people - can throw at them.

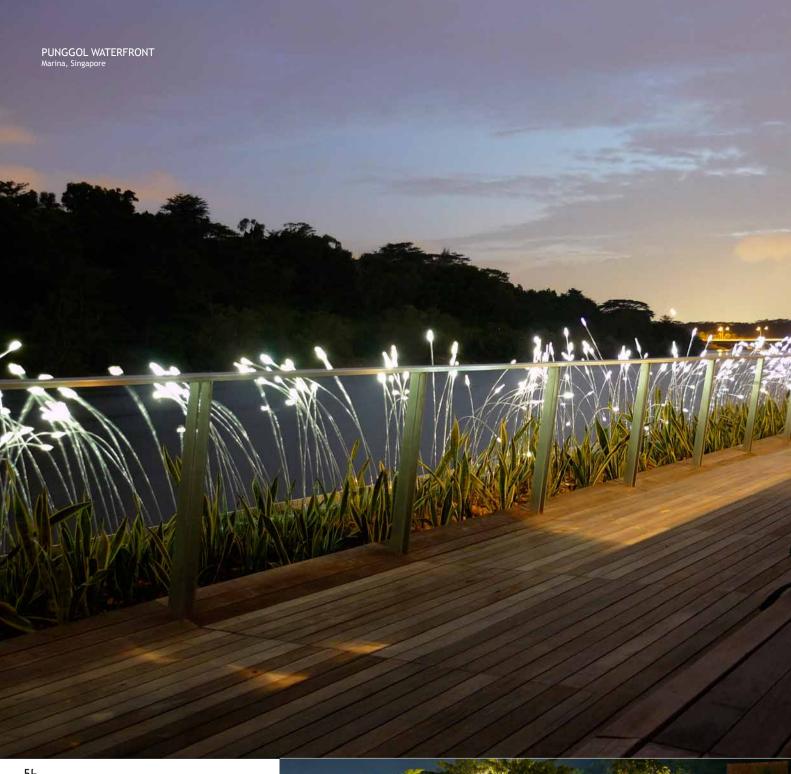
They hid two light generators in a nearby wall and set the twinkle wheels to oscillate irregularly. 'The intensity of the light is gradually reduced towards the water,' explains Elisabeth Malmsten of ÅF-Hansen & Henneberg. 'This makes the transition from the last light points to the sandy beach smooth.'

The result is gorgeous light that sets a natural stage for beach visitors. It cleverly mimics the effect of nature and the night sky without intruding on the natural surroundings. Not even when unlit; by day, the physical light points are so discreet that they are effectively invisible.









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PMMA Endlight Acrylic rod All products used: see pages 58-59



BRIDGE OF MEMORY

Light and space have been used to form an evocative bridge that spans 27 metres and 70 years in Warsaw.

Architect Tomasz Lec's 'Bridge of Memory' replicates the footbridge that briefly connected the smaller and larger sections of Warsaw's Jewish ghetto by passing over 'Aryan' Chlodna Street.



BRIDGE OF MEMORY Chlodna Street, Warsaw, Poland

SR PMMA Sidelight All products used: see pages 58-59





CON EDISON CLOCK TOWER

New York, USA

Products used

- Beespot Focus fittings
- Beespot Wide fittings FL 150-2 C DMX Colour Wheel light generator
- PMMA Ø6 mm Endlight fibres

Lighting distributor

Visual Lighting Technologies - USA



ANNE FRANK HOUSE

Amsterdam, The Netherlands, www.annefrank.org

Products used

Table showcase

- Framing Spot LED fitting
 Framing/Gobo shield

- Wall showcase

 XPO fibre optic conduit systems
- XPO Light Points
- PMMA Ø1.5 mm Endlight fibre FL 2002-2B 75W light generators with dimmer and extra UV filter

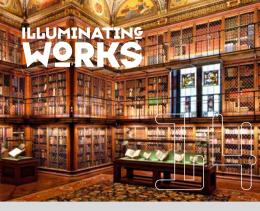
Free-standing showcase

- Ball & Socket Focus fibre optic fittings
- Roblon Glass Ø3 mm Endlight fibre with
- fitting termination
- FL 500 B Ø9 LED 4W light generator with dimmer

Photos by: Mike Bink for Roblon

Lighting distributor

Q-Cat Lighting B.V. - The Netherlands



THE MORGAN LIBRARY & MUSEUM

New York, USA, www.themorgan.org

Products used

North Room librarian's offce

Surface-mounted Roblon XPO-led conduits

East Room library bookshelves

Surface-mounted Roblon XPO-led conduits, customised with louvres

- East Room library showcases
 FL 2002-2 B light generators with colour filter, customised with
- 10 VLT Light Channels

- The Rotunda showcases

 FL 2002-2 B light generators with colour filter, customised with 12-watt lamps
- 4 VLT Light Channels

Lighting distributor

Visual Lighting Technologies - USA



ART BY LICHTPAPIER

Anke Neumann - Light Designer

Products used

- PMMA Ø1 mm fibre
- FL1000-XT-DMX

Photos by: Christoph Beer

LONG MARCH CANTEEN

www.longmarchcanteen.com

Ball & Socket
 FL 1000 LED light generator

Photos by: ett la benn

Products used

East meets West in Berlin, Germany,

Concept, design by: Danilo Dürler & Oliver Bischoff

BRIDGE OF MEMORY

Warsaw, Poland

Products used

- FL 150 XT-2 B lighting generators
- SR PMMA Ø8 mm
- Customized Common End Ø28

Design by: Architect Mr. Tomasz Lec, www.lec.pl/BSP/kladka.html

Photos by: Tomasz Pasternak

Lighting distributor Alfa-Zeta, Poland



NEUES MUSEUM

Staatliche Museen zu Berlin, Germany, www.neues-museum.de

Products used

- → Ara 3 → XPO
- PMMA Ø3 mm Endlight fibres
- FL 1000 LED light generator

Hella Rolfes Architekten: BDA, Berlin, Germany www.rolfes-architekten.com



SKALLERUP KLIT

Skallerup Klit Holiday Centre, Sønderlev, Denmark

Products used

- Sirius Clear fittings, customised for Ø10 mm fibres
 Aquarius 70 Focus fittings
 Aquarius 35 Medium fittings
- Mini Downlight Medium fittings
 FL 150-2 C DMX Electronic Dual Wheel light generator
- PMMA Ø10 mm Endlight fibres
- PMMA Ø6 mm Endlight fibres Ø6 mm glass Endlight fibres
- Lighting distributor Solar, Denmark



PUNGGOL WATERFRONT

Marina, Singapore

Products used • Ø1mm PMMA

- Special acrylic End Cap (100mm & 150mm)
- FL150 light generator with twinkle wheel
 Acrylic hollow Ø6 mm

Designer ompany: Looked Architect

Lighting distributor Krislite, Singapore

HEIGHT PIVINE "LIGHT

DEPMARK'S Birch CERTIFICATE REBORD





MEVLANA CULTURAL CENTRE

Products used

- Standard terminations with starpoint PMMA Ø2 mm Endlight fibres
- FL 150-2 B light generator

Lighting distributor Lamp 83, Turkey



SEILER JEWELLERY

Basel, Switzerland, www.seiler-juwelier.ch

- In-store showcases (pictured)

 Avant-garde size 3-25 Focus, black fibre optic fittings
- > FL75 Ø28 dimmable 75-watt light generator

Window display (not pictured)

- Ball & Socket wide alu fibre optic fittings Ball & Socket focus alu fibre optic fittings
- FL 250B light generators XPO-led 3,000 K LED conduit system
- Photos by: Christophe Bielsa.

Photos courtesy of Seiler Juwelier, Basel.

Lighting distributor

TIC Beleuchtungen, Switzerland

JELLING RUNESTONES 'Denmark's birth certificate' Gorm the Old and Harald Bluetooth's runestones Jelling, Denmark, www.unesco.org

Products used

- Avant-garde size 2-10 fittings
- Avant-garde size 2-20 fittings FL 2002-2 100-watt light generator

Glass Ø3 mm fibres

Architect: NOBEL arkitekter Engineer: Rambøll Lighting solution: Roblon

Electrical installor: Jelling El-forretning

Client: Kulturstyrelsen/The Heritage Agency of Denmark Proprietor: Jelling Church

Architect and designer: Erik Nobel

NOBEL arkitekter, www.nobel.dk Archaeologist: Jørgen Westphal, The Heritage Agency of Denmark, www.kulturarv.dk Consulting Engineers: Rambøll Denmark, www.rambøll.dk

Photo by: Jens Markus Lindhe

THE BATTLE OF BRITAIN

Products used

- Compass Angle Clear fittings, customised with
- a smaller outer casing
- FL 150-2 B light generator PMMA Ø4.5 mm Endlight fibres > PMMA Ø6 mm Endlight fibres
- Lighting distributor

Light Projects, England

Photos by: Timothy Soar®



IBM FORUM LONDON

London, UK, www-05.ibm.com/uk/ibmforum

Products used

Showcases: Libra 1, black

Design by COASToffice architecture - www.coastoffice.de In partnership with George P. Johnson UK & HOK London Copyrights: COASToffice & Thomas Herrmann Photography, www.thomas-herrmann.com

About the project

'Innovation centre' design by COASToffice architecture Stuttgart, Germany, www.coastoffice.de



GOLBORNE BRIDGE

London, UK

Products used

- Beespot PMMA fibre
- FL1000-B2 LED light generator

Lighting Design

Miles Watson/Urban Eye

Photo by: © Greg Townsend/Light Projects



AVENUE

Berlin, Germany, www.avenue-club-berlin.com

Products used

- Ara 3 Ball & Socket
- PMMA Ø4.5 mm Endlight fibres
- FL 1000 LED light generator

Interiordesign: Studio Karhard, www.karhard.de

Photos by: Stefan Wolf Lucks

WELL-STAGED

ZABEEL THEME PARK Dubai, United Arab Emirates

- Products used
 → FL 150 XT-2 F Colour Wheel exterior light generator
- FL 150 XT-2 C Synchron exterior light generator, customised
- Beespot Max XT Focus fittings
- SR PMMA Ø8 mm sidelight SR PMMA Ø14 mm sidelight, ranging in length: 11 m to 50 m
- SR mounting channel for Ø8 mm sidelight
- SR mounting channel for 14 mm sidelight PMMA Ø1 mm Endlight fibres, ranging in length: 5 m to 300 m
- PMMA Ø10 mm Endlight fibres, ranging in length: 6 m to 18 m > PMMA Ø6 mm Endlight fibres, ranging in length: 8 m to 14 m
- Lighting distributor Huda Lighting, United Arab Emirates

with a twinkle wheel Beespot XT Focus fittings

Photos by: Martin Kristiansen

BEACH PROMENADE

Helsingborg, Sweden

Products used

NB: Not all the photos show Roblon lighting. Roblon = 'starry sky'effect on beach only.

Not Roblon = 'zebra stripe' effect or functional lighting.

Waterfront design by: ÅF - Hansen & Henneberg

Customized Ø15 mm acrylic seals

PMMA Ø1.5 mm fibre
 FL 150 XT-2 Twinkle light generators

(Lighting distributor: Flux in name, but in practice, the project was handled directly by Roblon.)



IP 20 Protection rating Estimated ex-works delivery time from order acceptance. 3 days (Large orders and special products by agreement) Tilt angle Tilt angle Rotation on own axis Head rotation 0.5 kg Weight 18 dB(A) Noise level, free-standing fan 1 w @ 350mA Fixture power at max. constant current Protection rating

Mounting hole

CE

Suitable for mounting in normally inflammable surfaces where thermal insulating material may cover the luminaire

Inflammable surfaces in accordance with EN 60598-1

Class II insulation: no earth required European Union conformity seal

CB Certified according to the CB Scheme

FC. Federal Communications Commission conformity seal

c(UL)us UL confornity seal

PSE conformity seal

ETL conformity seal

RoHS RoHS conformity seal

60

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- · mounting instructions
- · user manuals
- details of compatible accessories
- · spare parts
- · product photos
- · data sheets

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- look up contact information for Roblon's distributors worldwide
- browse the casephotos and casestories
- download the Roblon Lux Calculator programme

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Roblon product range

FIBRE

Luminaires	64
Light generator	114
Harnesses	132

LED

Luminaires 138



Nova
Avant-garde
Bebop
Note
Ball & Socket
Mini Downlights
Classic Downlights
Light Tube
Jewellery Tube
Asymmetrics
Crystal
Framing and Gobo Spots
Beespot
Sirius
Compass
Aquarius
Landscape

Fibre luminaires

Nova



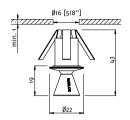
66

A skilful series of downlights with a unique dimple feature for sharp tilting. 360° adjustable. Tilts 35° all around, and up to 50° at the dimple point. Pioneering buttonsystem lets you freely adjust and lock, without using tools, the beam tilt and dimple point. Choose large, medium or uniquely small fittings. Choose wide, medium or focused beams. Ideal for illumination on walls, in niches and in showcases.

Nova: a whole new angle on downlights.

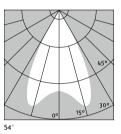
Nova size 1

- · For indoor use
- \cdot For Ø2 mm fibre tails using micro termination
- · UV-stable thermoplastic material
- · Versions with lens: beam angle adjustable after mounting
- · Mounting: semi-recessed with springs



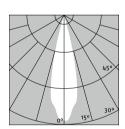


Nova size 1 Wide



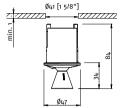
Nova size 1 Focus

Ø 12 mm lens



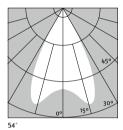
Nova size 2

- · For indoor use
- \cdot For Ø2 Ø6 mm fibre tails using fitting termination
- · UV-stable thermoplastic material and chromed brass
- · Versions with lens: beam angle adjustable after mounting
- · Position lock: friction lock
- · Mounting: semi-recessed with screws



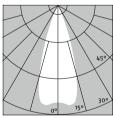


Nova size 2 Wide



Nova size 2 Medium

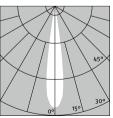
Ø20 mm lens



Ø3: 27-43° / Ø4.5: 28-43° / Ø6: 27-43°

Nova size 2 Focus

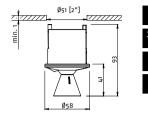
Ø20 mm lens



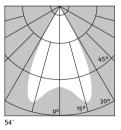
Ø3: 8-28° / Ø4.5: 13-28° / Ø6: 19-28°

Nova size 3

- · For indoor use
- $\cdot\,$ For Ø8 Ø10 mm fibre tails using fitting termination
- · UV-stable thermoplastic material and chromed brass
- · Versions with lens: beam angle adjustable after mounting
- · Position lock: friction lock
- · Mounting: semi-recessed with screws



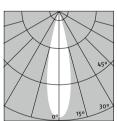
Nova size 3 Wide



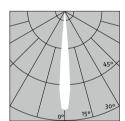
Nova size 3 Focus

Ø26 mm lens

For narrow focus tasks with $\emptyset 3$ - $\emptyset 6$ mm fibre using Focus Adapter



Ø8: 16-31° / Ø10: 21-31°



Ø3: 6-20° / Ø4.5: 8-20° / Ø6: 12-20°

Avant-garde

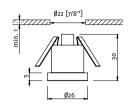


70

Cleverly designed to blend completely in with any given surface. Exceptionally well-defined light beams and flexible functionality for fine-tuning light. 360° adjustable. Glare-free lens. Choose large, medium or innovatively small fittings. Choose wide, medium or focused beams. Ideal for meticulous lighting: create a row of millimetre-perfect light spots or arches; or cast light exactly where you want it on a table, along a wall, through a room. Avant-garde: precision downlights with a chameleon quality.

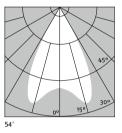
Avant-garde size 1-10

- · For indoor use
- · For Ø2 mm fibre tails using micro termination
- · UV-stable thermoplastic material
- $\cdot~35\,^{\circ}$ shielding angle according to EN 12464-1
- $\boldsymbol{\cdot}$ Mounting: recessed with springs



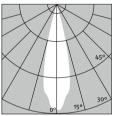


Avant-garde size 1-10 Wide



Avant-garde size 1-10 Focus

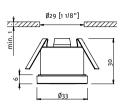
Ø12 mm lens Adjustable beam angle



Ø2: 11-30°

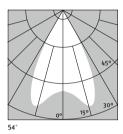
Avant-garde size 2-20

- · For indoor use
- \cdot For Ø2 Ø6 mm fibre tails using fitting termination
- · UV-stable thermoplastic material
- $\cdot~35^{\circ}$ shielding angle according to EN 12464-1
- · Position lock: retaining ring
- · Mounting: recessed with springs



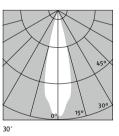


Avant-garde size 2-20 Wide



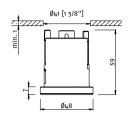
Avant-garde size 2-20 Medium

Ø12 mm lens



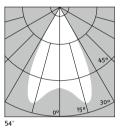
Avant-garde size 2-10

- · For indoor use
- \cdot For Ø2 Ø6 mm fibre tails using fitting termination
- · UV-stable thermoplastic material partly metallised
- \cdot 35 $^{\circ}$ shielding angle according to EN 12464-1
- · Versions with lens: beam angle adjustable after mounting
- · Position lock: retaining ring
- · Mounting: recessed with screws



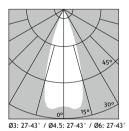


Avant-garde size 2-10 Wide



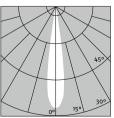
Avant-garde size 2-10 Medium

Ø20 mm lens



Avant-garde size 2-10 Focus

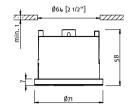
Ø20 mm lens



Ø3: 8-28° / Ø4.5: 13-28° / Ø6: 19-28°

Avant-garde size 2-35

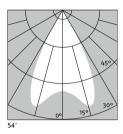
- · For indoor use
- \cdot For Ø2 Ø6 mm fibre tails using fitting termination
- · UV-stable thermoplastic material partly metallised
- · 35° shielding angle according to EN 12464-1
- · Versions with lens: beam angle adjustable after mounting
- · Position lock: retaining ring
- · Mounting: recessed with screws





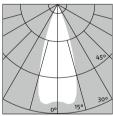


Avant-garde size 2-35 Wide



Avant-garde size 2-35 Medium

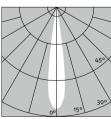
Ø20 mm lens



Ø3: 27-43° / Ø4.5: 27-43° / Ø6: 27-43°

Avant-garde size 2-35 Focus

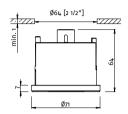
74 Ø20 mm lens



Ø3: 8-28° / Ø4.5: 13-28° / Ø6: 19-28°

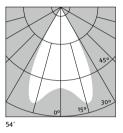
Avant-garde size 3-25

- · For indoor use
- · For Ø8 Ø10 mm fibre tails using fitting termination
- · UV-stable thermoplastic material partly metallised
- \cdot 35 $^{\circ}$ shielding angle according to EN 12464-1
- · Versions with lens: beam angle adjustable after mounting
- · Position lock: retaining ring
- · Mounting: recessed with screws





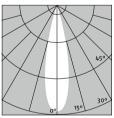
Avant-garde size 3-25 Wide



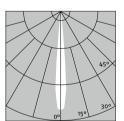
Avant-garde size 3-25 Focus

Ø26 mm lens

For narrow focus tasks with $\emptyset 3$ - $\emptyset 6$ mm fibre using Focus Adapter



Ø8: 16-31° / Ø10: 21-31°



Ø3: 6-20° / Ø4.5: 8-20° / Ø6: 12-20°

Bebop



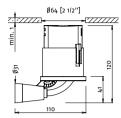


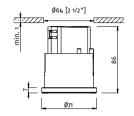


Ingeniously designed to transform from a recessed to a raised fitting in a matter of seconds. When completely recessed, blends completely in with any given surface. Any time you want, and without using tools, pull the optical head out and position it with millimetre-precision. Available with adjustable focused, medium or wide beams and a glare-free lens. Ideal for galleries, museums and retail outlets where displays, designs and moods change. Bebop. It's more than multi-functional. It's multi-form.

Bebop size 2

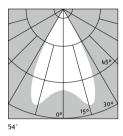
- · For indoor use
- \cdot For Ø2 Ø6 mm fibre tails using fitting termination
- · UV-stable thermoplastic material partly metallised
- \cdot 35 $^{\circ}$ shielding angle according to EN 12464-1
- · Versions with lens: beam angle adjustable after mounting
- · Position lock: finger screw
- · Mounting: recessed with screws





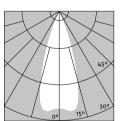


Bebop size 2 Wide



Bebop size 2 Medium

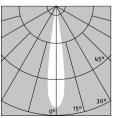
Ø20 mm lens



Ø3: 27-43° / Ø4.5: 27-43° / Ø6: 27-43°

Bebop size 2 Focus

Ø20 mm lens



Ø3: 8-28° / Ø4.5: 13-27° / Ø6: 19-28°

Note







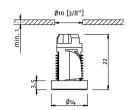


78

Precision light, beautifully wrapped in a simple, subtle design. High light efficiency. An effective foundation for accent lighting. Choose between medium, wide, asymmetric and diffuse light. Choose between miniature, medium and large fittings. Ideal for room lighting, in niches and in display cases. Note lighting: decorative, discreet, yet diligent.

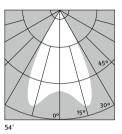
Note size 1

- · For indoor use
- \cdot For Ø2 mm fibre tails using micro termination
- \cdot UV-stable thermoplastic material and chromed thermoplastics
- 30° shielding angle according to EN 12464-1
 Mounting: recessed with springs



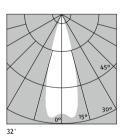


Note size 1 Wide



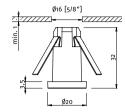
Note size 1 Medium

Ø7 mm lens



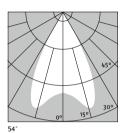
Note size 2

- · For indoor use
- \cdot For Ø2 Ø6 mm fibre tails using fitting termination
- · UV-stable thermoplastic material and chromed brass
- 35° shielding angle according to EN 12464-1
 Mounting: recessed with springs



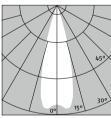


Note size 2 Wide



Note size 2 Medium

Ø12 mm lens

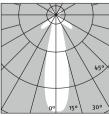


Ø3: 29° / Ø4.5: 27° / Ø6: 29

Note size 2 Diffuse

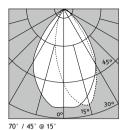
Diffusing acrylic prism

80



Note size 2 Asymmetric

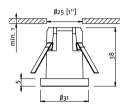
15° asymmetric acrylic prism





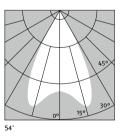
Note size 3

- · For indoor use
- For Ø8 Ø10 mm fibre tails using fitting termination
 UV-stable thermoplastic material and chromed brass
- \cdot 35 $^{\circ}$ shielding angle according to EN 12464-1
- · Mounting: recessed with springs



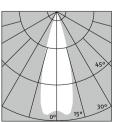


Note size 3 Wide



Note size 3 Medium

Ø20 mm lens



Ø8: 30° / Ø10: 32°



Distinctly different designs and finishes ensure that there is always a fitting which fits in. Lenses can be individually angled to cast the right light on the right object. Especially for architectural lighting and display cases, this is a very flexible range of very flexible fittings.

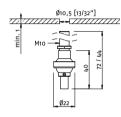
82

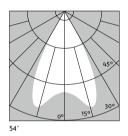
Ball & Socket

- · For indoor use
- · For Ø2 Ø4.5 mm fibre tails using fitting termination
- · Anodised aluminium or gilded brass
- · Surface-mounted with nut
- · Position lock: retaining ring



Ball & Socket Wide

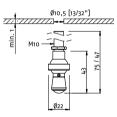


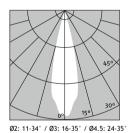


IP 20

Ball & Socket Medium

Ø12 mm lens



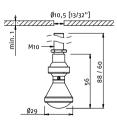


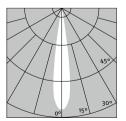
IP 44

IP 44

Ball & Socket Focus

Ø26 mm lens

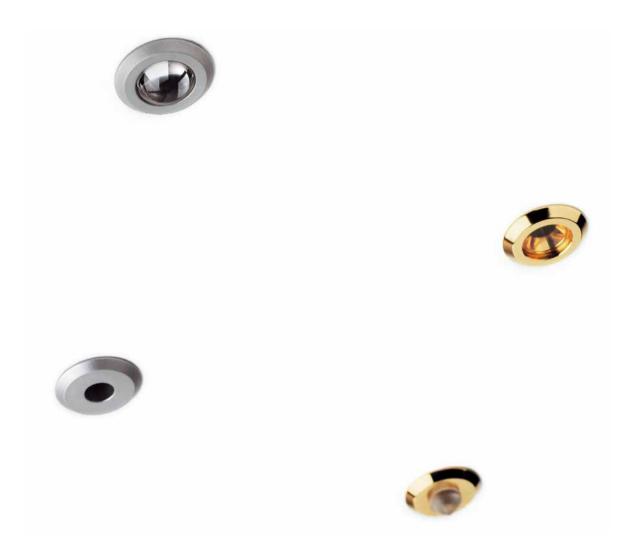




Ø2: 5-24° / Ø3: 7-24° / Ø4.5: 10-25°

83

Mini Downlights



84

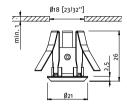
Beautiful design, beautiful features, beautiful light. Choose narrow or wide lighting angles. Choose soft light, diffuse light or decorative effects. Accentuate broad surfaces or individual objects. Make an effect in smaller spaces. Mini Downlights: the dimensions may be discreet. The functionality isn't.

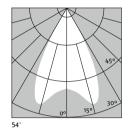
Mini Downlights

- · For indoor use
- \cdot For Ø2 Ø6 mm fibre tails using fitting termination
- · Anodised or painted aluminium or gilded brass
- · Mounting: recessed with springs

0.1 kg

Mini Downlight Wide

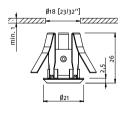


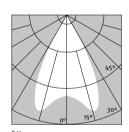


IP 20

Mini Downlight Wide Glass

Ø12 mm clear glass

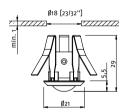


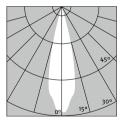


IP 44

Mini Downlight Medium

Ø12 mm lens



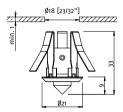


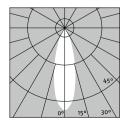
IP 44

Ø3: 16-35° / Ø4.5: 24-35° / Ø6: 36°

Mini Downlight Diffuse

Acrylic cone





Ø2: 21° / Ø3: 27° / Ø4.5: 30°

85

Classic Downlights









on the spot, and the ability to control it. Well-defined light beams let you cast exceptionally precise light. At a conference table, illuminate each individual place,

not face. During a show, illuminate the audience's programmes, not the audience. Classic Downlights: lighting design at

The freedom to design and define light

your fingertips.

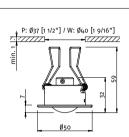
Classic Downlights

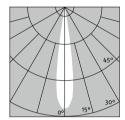
- · For indoor use
- \cdot Suited for Ø2 Ø10 mm fibre tails using fitting termination
- · Anodised or painted aluminium or gilded brass
- · Mounting: recessed with springs

0.1 kg

Classic Downlight Ø50 Focus

Ø26 mm lens Ø2 - Ø6 mm fibre



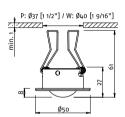


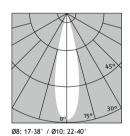
IP 44

Ø3: 7-24° / Ø4.5: 10-25° / Ø6: 14-27°

Classic Downlight Max Ø50 Focus

Ø26 mm lens Ø8 - Ø10 mm fibre

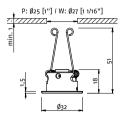


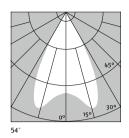


IP 44

Classic Downlight Ø32 Wide Tiltable

Ø12 mm clear glass Ø2 - Ø6 mm fibre

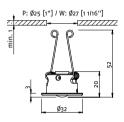


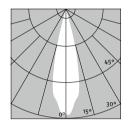




Classic Downlight Ø32 Medium Tiltable

Ø12 mm lens Ø2 - Ø6 mm fibre



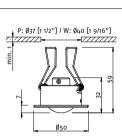


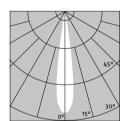


Ø3: 16-35° / Ø4.5: 24-35° / Ø6: 36°

Classic Downlight Ø50 Focus Tiltable

Ø26 mm lens Ø2 - Ø6 mm fibre









Light Tube



90

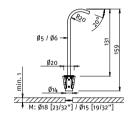
Casts light elegantly downwards in showcases. The slim, discreet design ensures that full focus is on the items displayed. Even in the lowest, smallest display case, it illuminates objects precisely. Choose to illuminate the centre of the case, or highlight several objects individually. 360° adjustable. Ideal for museum and retail exhibits. Light Tube: the subtle way to make a big impression.

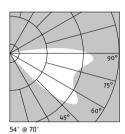
Light Tube

- · For indoor use
- \cdot For Ø3 Ø4.5 mm fibre tails using fitting termination
- · Anodised aluminium
- · Mounting: recessed with springs



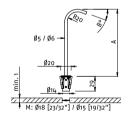
Light Tube

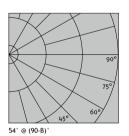




Light Tube Custom

Specify A and B measurements when ordering





Jewellery Tube



92

Casts low-intensity and high-intensity showcase light with absolute precision and absolute flexibility. Slim, discreet design ensures full focus on display items, even in the lowest, smallest, all-glass case. 360° adjustable. Tilts 25° all around. Choose wide or medium beams. Choose to illuminate the whole case or individual objects of different types, sizes and heights. : the right light for ancient artefacts and dazzling diamonds alike.

Jewellery Tube

- · For indoor use
- \cdot For Ø4.5 mm PMMA fibre tails using Jewellery Tube Termination
- Brass
- · Surface-mounted with nut
- $\cdot\,$ Black, bronze, chrome, satin chrome or any other RAL color available

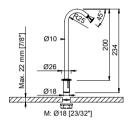


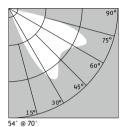




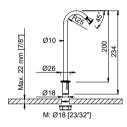


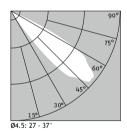
Jewellery Tube Wide





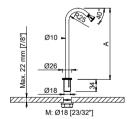
Jewellery Tube Medium

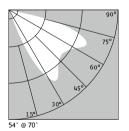




Jewellery Tube Custom Wide

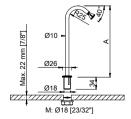
Jewellery Tube Custom Wide

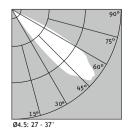




Jewellery Tube Custom Medium

Specify A (max 500 mm) when





Asymmetrics







Direct light discreetly along stairs, floors, ceilings and walls, and on to shelves, niches and display cases. Choose diffuse, diagonal or angled light. Choose integrated fittings which can be concealed. Ideal when installation seems challenging. Asymmetrics fittings: the balanced approach to tricky lighting tasks.

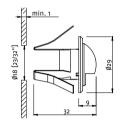
Asymmetrics

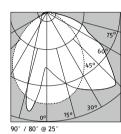
- · For indoor use
- · Anodised or painted aluminium
- · Mounting: recessed with springs

0.1 kg

Staircase Fitting

For Ø2 - Ø6 mm fibre tails using fitting termination

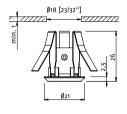


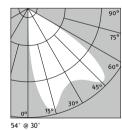




Asymmetric Fitting 30°

For $\emptyset 2$ - $\emptyset 3$ mm fibre tails using shelf termination



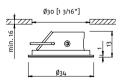


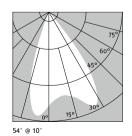


Shelf Fitting

Ø12 mm clear glass

For Ø2 - Ø3 mm fibre tails using shelf termination







Crystal



96

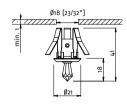
Distinctly decorative fittings. Like all Roblon lights, they are easy to maintain and easy to install. Available in white or gilded brass, they are beautiful objects in themselves. And they cast equally beautiful patterns on ceilings. Crystal fittings: fancy, yet functional. No matter what way you look at them.

Crystal

- · For indoor use
- \cdot For Ø1 Ø6 mm fibre tails using fitting termination
- · Painted aluminium or gilded brass
- · Glass crystal
- Mounting: recessed with springs

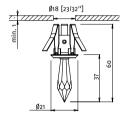
IP 44

Crystal Spear 12.5



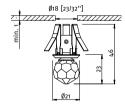


Crystal Spear 31





Crystal Ball 18.5





Framing and Gobo Spots



Framing: paint a space with light, then frame it. Fix a square or triangle of light on one space: on a sculpture, a reception desk, a painting, a furniture display.

Gobo: project images, text and logos. Popular in museums, restaurants, hotels, corporate offices.

Both available with special lenses for long distance, high intensity and extra tight focus. The essence of good-looking functionality, they reveal the unlimited possibilities of limiting light.

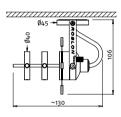
98

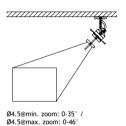
Framing and Gobo Spots

- · For indoor use
- \cdot For Ø2 Ø6 mm fibre tails using fitting termination
- · Anodised aluminium
- · Ø20 and Ø25 mm lenses
- \cdot Surface-mounted with screws
- · Position lock: finger screws



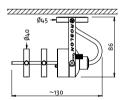
Framing Spot

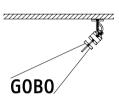




Gobo Spot

Use Ø22.5 mm gobo inserts with 0.1 - 2.0 mm thickness Max. gobo picture size: Ø17 mm Recommended gobo picture size: Ø14 mm





Ø4.5+Ø10 gobo@min. zoom: 22° / Ø4.5+Ø10 gobo@max. zoom: 28°



Beespot

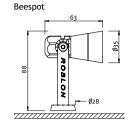


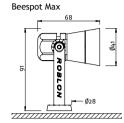
100

Ideal for use indoors, outdoors or underwater. Beautiful to look at, also when unlit. 360° adjustable. A particular favourite for facades, fountains and sculptures. Right down to discreet drip holes on the exterior model, this is design at its most functional.

Beespot

- · For indoor, outdoor or submerged use
- · For Ø3 Ø10 mm fibre tails using fitting termination
- Available in glass-blasted stainless steel AISI 303 and for the XT versions (outdoor use) in glass-blasted stainless steel EN W.nr. 1.4435
- · Surface-mounted with screws
- · Position lock: screw

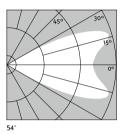






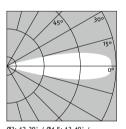
Beespot Wide

Ø26 mm clear glass



Beespot Focus

Ø26 mm lens



Ø3: 12-39° / Ø4.5: 13-40° / Ø6: 16-42° / Ø8: 17-43° / Ø10: 21-44°



Sirius





105

A resourceful range with outdoor, underwater, opal, clear and crescent models. Can be fitted as uplights, as downlights or horizontally. Waterproof models available as total solutions for mounting on sheet plates. Particularly sought after for public spaces, large fountains, walkways and private gardens. Sirius: extremely beautiful design for extremely exposed environments.

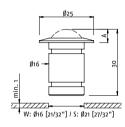
Sirius

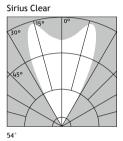
- · For indoor and outdoor use
- · For Ø2 Ø6 mm fibre tails using fitting termination
- · Passivated stainless steel EN W.nr. 1.4435
- · Mounting: multiple methods.

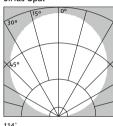
0.1 kg

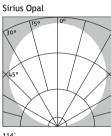
IP 44

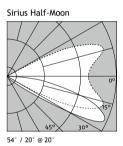
Sirius

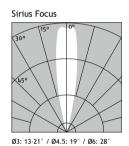






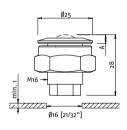


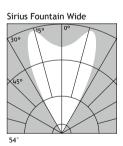


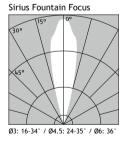


Sirius Fountain

Ø12 mm clear glass or lens



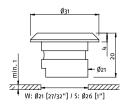


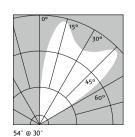




Sirius Angle

Ø14 mm clear glass For Ø2 - Ø4.5 mm fibre







103

Compass

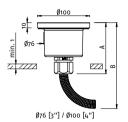


104

Very versatile outdoor uplights with opal, clear, white, coloured, diffuse, fixed and adjustable models. Choose narrow, long-distance beams or wider, shorter beams. Choose polished or burnished finishes. Ideal for facades, fountains, walkways, tunnels and parks. Compass: durable design points the way.

Compass

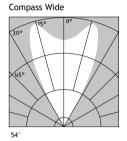
- · For outdoor and submerged use
- · Suited for Ø3 Ø10 mm fibre using Compass termination
- · Passivated stainless steel EN W.nr. 1.4435
- Mounting: embedded or screw-mounted (Embedment kits: see Accessories)
- · High impact resistance. 20 J dynamic load
- 2,500 kg static load
- · Polished or burnished flange finish

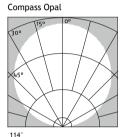




Compass Wide

White conical insert Ø69 mm clear or opal glass



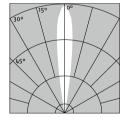


Type	Flange finish	Fibre (mm)	A (mm)	B (mm)
Compass Wide, Clear	Burnished	Ø3 - Ø6	98	160
Compass Wide, Clear	Polished	Ø3 - Ø6	98	160
Compass Wide Max, Clear	Burnished	Ø8 - Ø10	125	190
Compass Wide Max, Clear	Polished	Ø8 - Ø10	125	190
Compass Wide, Opal	Burnished	Ø3 - Ø6	98	160
Compass Wide, Opal	Polished	Ø3 - Ø6	98	160
Compass Wide Max, Opal	Burnished	Ø8 - Ø10	125	190
Compass Wide Max, Opal	Polished	Ø8 - Ø10	125	190

Compass Focus

White or grey clover-shaped insert Ø69 mm clear glass and Ø26 mm lens Position lock for Angle versions: retaining ring Tilt for Angle versions: 18°

Tilt for Angle versions: 18° Rotation for Angle versions: 360°



Ø3: 7-18° / Ø4.5: 10-18° / Ø6: 15-20° / Ø8: 16-20° / Ø10: 19-22°

Type	Flange finish	Fibre (mm)	Insert	A (mm)	B (mm)
Compass Focus, Clear	Burnished	Ø3 - Ø6	White	98	160
Compass Focus, Clear	Polished	Ø3 - Ø6	White	98	160
Compass Focus Max, Clear	Burnished	Ø8 - Ø10	White	125	190
Compass Focus Max, Clear	Polished	Ø8 - Ø10	White	125	190
Compass Angle, Clear	Burnished	Ø3 - Ø6	Grey	98	160
Compass Angle, Clear	Polished	Ø3 - Ø6	Grey	98	160
Compass Angle Max, Clear	Burnished	Ø8 - Ø10	Grey	125	190
Compass Angle Max, Clear	Polished	Ø8 - Ø10	Grey	125	190

Aquarius



106

Uniquely discreet underwater fittings. Small, yet can give off strong light and withstand up to 10 metres' water pressure. Available as total solution ready for embedding in concrete or mounting on sheet plates. In fountains, swimming pools, jacuzzis, saunas and aquariums, this elegant series raises underwater design to new heights.

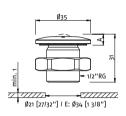
Aquarius

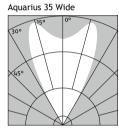
- · For submerged use
- · Passivated stainless steel EN W.nr. 1.4435
- · Mounted with nut or embedded (Embedment kits: see Accessories)

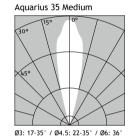


Aquarius 35

Ø12 mm clear glass or lens For Ø2 - 6 mm fibre tails using fitting termination



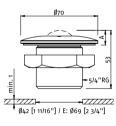


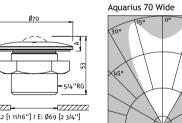


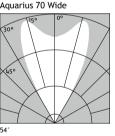
0.1 kg

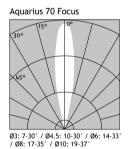
Aquarius 70

Ø26 mm clear glass or lens For Ø3 - 10 mm fibre tails using fitting termination









0.5 kg

Landscape



108

Weatherproof. Well-built.
Well-formed. Choose between crescent-shaped prisms, 360° beams and diffuse light. Choose to mount on walls or bollards.
Choose to plant bollards in soil or cement.
A favourite for gardens, grounds, parks, tunnels and pathways. Landscape: functional design set free.

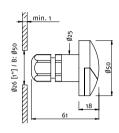
Landscape

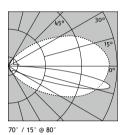
- \cdot For Ø3 Ø6 mm fibre tails using fitting termination
- · Glass-blasted stainless steel AISI 304
- · Screw-mounted
- · Acrylic prism



Eclipse

For indoor and outdoor use Position lock: set screw

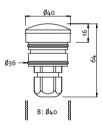


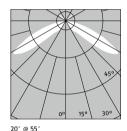




Circle H

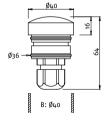
For outdoor use

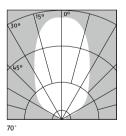




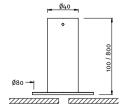
Circle V

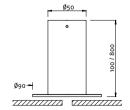
For outdoor use





Bollard





XPO



110

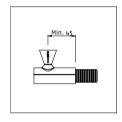
One lighting system, multiple lighting solutions. Choose discreet light points to create uniform light. Choose optical heads to highlight specific objects. Or choose to combine both on one XPO conduit. Choose light beam angles, conduit finishes and lengths. Tilt fittings in multiple directions and adjust their focus as often as you want. Ideal in showcases, and for product and window displays. XPO: the surprisingly simple way to design precisely the right light.

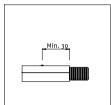
- · For indoor use
- \cdot For Ø0.75 Ø2 mm fibre tails using XPO Light Point termination or for Ø1 Ø4.5 mm fibre tails using fitting termination
- · Conduit system parts in anodised aluminium or plastic
- · Finish: black or grey
- · The conduit system is surface-mounted with nut
- · Packaging systems are added to the purchase orders.

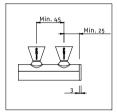
IP 20

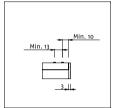
3-6

Design rules:

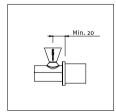


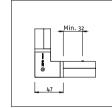


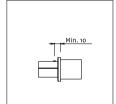


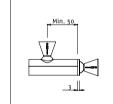


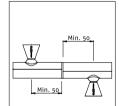


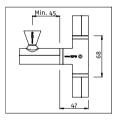


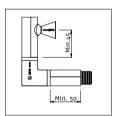












Available:







Horizontal

111

XPO Common End

Glass harnesses with Ø3 - Ø4.5 mm are randomised as standard

Type	Item no.	Suited for	Dimension (mm)
Roblon Ø9	9903 0021	PMMA / Glass	35\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Roblon Ø9-R, randomised	9903 0025	PMMA	Ø ₁₂ 60
Roblon Ø28	9903 0020	PMMA / Glass	31 Ø26
Roblon Ø28-R, randomised	9903 0024	PMMA	Ø30 68
Randomising of Ø1 - Ø2 glass fibre tails. Charge per fibre tail.	9903 0031		

XPO Fibre Tails

Type	Item no.	Max. fib	Max. fibre tails in					
		Conduit	øЯ	Ø9-R	Ø28	Ø28-R		
Roblon PMMA Ø0.75 mm	5200 0507	300	147		1037/518		1 x Ø0.75 mm	
Roblon PMMA Ø1.0 mm	5200 0510	185	82		583/291		1 x Ø1 mm	
Roblon PMMA Ø1.5 mm	5200 0558	100	47	44	333/166	325/166	7 x Ø0.5 mm	
Roblon PMMA Ø2.0 mm	5200 0550	43	21	19	148/74	144/74	7 x Ø0.75 mm	
Roblon PMMA Ø3.0 mm	5200 0551	21	10	9	74/ 37	72/ 37	14 x Ø0.75 mm	
Roblon PMMA Ø4.5 mm	5200 0552	11	5	5	38/19	37/19	27 x Ø0.75 mm	
Roblon Glass Ø1.0 mm	5200 0110	173	85		617/308		400 x Ø50 μm	
Roblon Glass Ø1.5 mm	5200 0115	86	42		308/154		800 x Ø50 μm	
Roblon Glass Ø2.0 mm	5200 0120	49	24		176/88		1,400 x Ø50 μm	
Roblon Glass Ø3.0 mm	5200 0130	23	11		82/41		3,000 x Ø50 μm	
Roblon Glass Ø4.5 mm	5200 0145	10	5		37/18		6,600 x Ø50 μm	

For halogen & metal halide: FL 2002-2, FL 150 og FL 250 For LED: FL 1000 (for object lighting)

XPO Fibre Terminations

Type	Item no.	Suited for (mm)
XPO Light Point Termination, black	9903 0015	Ø0.75 - Ø2
XPO Light Point Termination, grey	9903 0016	Ø0.75 - Ø2
Fitting Termination	9903 0001	Ø1 - Ø4.5
LED Termination, 1W, 2,700 K	1148 1008	Ø4.5







FL 2002-2



116

An extra compact light generator. White light. Especially designed for smaller showcases. Ideal for use in small and enclosed spaces and for many lighting solutions, including room lighting.

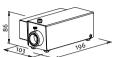
FL 2002-2

- · For indoor use / dry locations
- · Electronic trafo
- · Alu finish

FL 2002-2



FL 2002-2 US





29 dB(A)

FL 2002-2, 75W

CB (€ □ **F**





FL 2002-2, 75W US

120 v / 50-60 Hz 75 watt, halogen lamp, 3,000 K with average 6,000 h lamp life Complies with UL153 Portable Cabinet Light Meets FCC part 15





FL 2002-2, 100W

230 v / 50-60 Hz 100 watt, halogen lamp, 3,400 K with average 2,500 h lamp life







117







FL 500

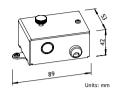


118

A tiny, low-intensity and extremely energy-efficient light generator. Cuts energy consumption by up to 90% compared with halogen generators with the same light output that are used for equivalent tasks. Warm White light. High LED quality. Extremely long life. Easy handling. Ideal for decorative lighting, for areas where space is very limited, for small 'starry sky' solutions and for sauna lighting.

FL 500 B

- · For indoor use / dry locations
- · For use with fibre optic lighting
- · LED average 35,000 h (L70) life
- · Warm White light 3,000 K
- · External electronic driver
- · Grey and aluminium finish
- · UL153 Portable Cabinet Light approval pending
- · Light port: Ø4.5 mm or Ø9 mm
- Total power consumption @ 700 mA 4 W





RoHS €

FL 500 B

100-240 V / 50-60 Hz

Total power consumption	4.3 W
LED power consumption	2.2 W
Light generator input current	700 mA
Electrical driver model	Constant Current
Driver lifetime	35,000 h
Driver size	34 x 115 x 19
Max. ambient temperature	40°C
Min. ambient temperature	0°C
Applied LED	Lumileds LUXEON Z EZ
CCT (nominal)	3,000 K
CRI8 (Ra) typical value	90

FL 500 XT B

230-240 V / 50-60 Hz

 $\boldsymbol{\cdot}$ For outdoor and wet locations

 $\boldsymbol{\cdot}$ For use with fibre optic lighting

· Fiber type PMMA/Glass

· LED average 25,000 h (L70) life

· Warm white light 3.000 K

Total power consumption

Integrated electronic driver

· Phase dimmable

· Black and aluminium finish

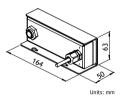
· Light port: Ø9 mm

5.4 W

· Connector size Ø9 mm

· Active diameter Ø8.7mm

 \cdot Total power consumption @ 1.050 mA 5,4 W



LED power consumption	3.Z W
Light generator input current	1.050 mA
Electrical driver model	Constant Current
Driver lifetime	25,000 h
Balast type	Electronic
Dimmable	Phase dimmable
Max. ambient temperature	40°C

Min. ambient temperature

Applied LED

CCT (nominal)

CRI8 (Ra) typical value

20°C

Lumileds LUXEON Z ES

3,000 K

CRI8 (Ra) typical value

90

FL 1000

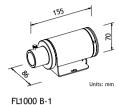


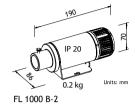
750

A silent, compact, versatile and extremely energy-efficient light generator. Cuts energy consumption by at least 63% compared with halogen generators with the same light output that are used for equivalent tasks. Dimmable. Choose Warm White or Neutral White light. High LED quality. Extremely long life. Easy handling. Ideal for many functional and decorative lighting solutions including interior, 'starry sky' and sauna lighting, niches and showcases.

FL 1000

- · For indoor use / dry locations
- · Outdoor models also available
- · For use with fibre optic lighting
- · LED standard lifetime 50,000 hours
- \cdot Warm White 3,000 K or Neutral White 4,000 K
- · External electronic driver
- · Dimmable
- · Black and aluminium finish
- · Colour filters as accessories
- · CTC filters as accessories
- · Colour wheel kit as accessory
- · Twinkle wheel kit as accessory
- · Diffusion adaptor as accessory
- · Light port: Ø9 mm or Ø28 mm
- · Total power consumption @ 350 mA 13 W
- · Total power consumption @ 700 mA 25 W







RoHS (U) us (E

FL 1000

120-277 V / 50-60 Hz	FL 1000 B-1	FL 1000 B-2
Total power consumption	12.5 W	25.4 W
LED power consumption	9.3 W	19.3 W
Light generator input current	350 mA	700 mA
Electrical driver model	Constant Current	Constant Current
Driver lifetime	50,000 h	50,000 h
Driver size	46 x 188 x 32	46 x 188 x 32
Driver size US model	77 x 108 x 30	77 x 108 x 30
Thermal protection	Auto decrease	Auto decrease
Cooling system	Natural convection	Synjet
Cooling system lifetime	N/a	100,000 h
Noise level	N/a	18 dB(A)
Max. ambient temperature	45°C	45°C
Min. ambient temperature	-20°C	-20°C
Applied LED	Lumileds LUXEON S	Lumileds LUXEON S
CCT (nominal)	3,000 or 4,000 K	3,000 or 4,000 K
CRI8 (Ra) typical value	85/93	85/93

Selection guide

Light port	Connector fibre diameter	No. of 0.75 PMMA fibres	New installation	Retrofit installation
Ø9	1-9 mm	<135	1111	1111
Ø28	9-12 mm	135-200	1111	<i>[[] [] [] [] [] [] [] [] [] [</i>
Ø28	12-20 mm	200-500	111	[] [
Ø28	20-28 mm	500-1000	ſ	<i>f f</i>

/ / / / Extremely suitable; randomising not necessary
/ / / Extremely suitable; randomising may be necessary
/ / Suitable with adaptor; randomising may be necessary
/ Suitable with adaptor for decorative lighting

FL 1000 XT B & FL 1000 XT C

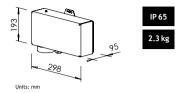


155

Weatherproof, waterproof and extremely energy-efficient light generator. For outdoor use and wet locations. Cuts energy consumption by at least 63% compared with halogen generators with the same light output that are used for equivalent tasks. Dimmable. Warm White light. High LED quality. Extremely long life. Easy handling. IP 65 rating. Ideal for many functional and decorative outdoor lighting solutions including fountains, public art, facades, signs, parks, gardens and swimming pools.

FL 1000 XT B

- · For outdoor use / wet locations
- · Indoor models also available· For use with fibre optic lighting
- · LED standard lifetime 50,000 hours
- · Warm White light 3,000 K
- · Integrated electronic driver
- · Dimmable
- · Grey
- · Colour filters available
- · CTC filters available
- \cdot Light port: Ø9 mm or Ø28 mm
- · Total power consumption @ 700 mA 24 W
- · 1-10 V / Dali on demand



RoHS (UL) us (E

FL 1000 XT B & FL 1000 XT C

120-277 V / 50-60 Hz

Total power consumption	24 W
LED power consumption	19.3 W
Light generator input current	700 mA
Electrical driver model	Constant current
Driver lifetime	50,000 h
Thermal protection	Auto decrease
Cooling system	Natural convection
Cooling system lifetime	N/a
Noise level	N/a
Max. ambient temperature	45°C
Min. ambient temperature	-20°C
Applied LED	Lumileds LUXEON S
CCT (nominal)	3,000 K
CRI8 (Ra) typical value	85
CCT (nominal)	3,000 or 4,000 K
CRI8 (Ra) typical value	85

Selection guide

Light port	Connector fibre diameter	No. of 0.75 PMMA fibres	New installation	Retrofit installation
Ø9	1-9 mm	<135	1111	1111
Ø28	9-12 mm	135-200	1111	1111
Ø28	12-20 mm	200-500	[[[111
Ø28	20-28 mm	500-1000	ſ	<i>[[]</i>

[| f | f | Extremely suitable; randomising not necessary
 [| f | Extremely suitable; randomising may be necessary
 [| Suitable with adaptor; randomising may be necessary
 [| Suitable with adaptor for decorative lighting

753



124

A durable, silent and very versatile light generator. Available with both manually and electronically-controlled effects. Available with white light, a dimming function, a six-colour wheel, a twinkle wheel, or combinations of these. Extremely long lamp life, very high light efficiency, and very quiet. Suitable for many lighting solutions including sidelight, facade illuminations and interior lighting.

- · For indoor use / dry locations
- 150 watt metal halide lamp, 4,200 K with average 6,000 h lamp life
- · Colour wheel models: white, green, orange, blue, red, yellow
- · Dimmer wheel models: six steps
- · DMX Dual Models include colour and dimmer wheels
- · Black and aluminium finish
- · Light port: Ø28 mm





FL 150-2

230-240 V / 50-60 Hz Electronic ballast



FL 150-2 US

120 V / 60 Hz Magnetic ballast





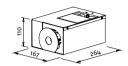




156

A uniquely compact, very durable and very quiet light generator. High light efficiency. Extremely long lamp life. Very easy lamp exchange. Easy handling. Specially designed for showcase lighting, and suitable for many other lighting solutions. A wide voltage range and multiple, international quality approval mean this one generator can be used anywhere in the world.

- · For indoor use / dry locations
- 150 watt metal halide lamp, 4,200 K with average 6,000 h lamp life
- · Electronic ballast
- · Alu finish
- · Complies with UL153 Portable Cabinet Light
- · Light port: Ø28 mm







FL 150-3

100-240 V / 50-60 Hz Warm White with CTC filter



FL 250



159

A very powerful, bright and versatile light generator. Available with electronically-controlled effects. Available with white light, a dimming function, a six-colour wheel, a twinkle wheel, or combinations of these. Long lamp life, very high light efficiency, and very quiet. Ideal for lighting solutions where high lighting intensity is required, including facade and pool lighting, in spacious display cases, and in large or open spaces.

FL 250

- · For indoor use / dry locations
- · 250 watt metal halide lamp, 4,200 K with average 5,000 h lamp life
- · Colour wheel models: white, green, orange, blue, red, yellow
- · Dimmer wheel models: six steps
- \cdot DMX Dual Models include colour and dimmer wheels
- · Electronic ballast
- · Black and aluminium finish
- · Light port: Ø28 mm
- · Meets FCC part 15





FL 250

100-240 V / 50-60 Hz







FL 150 XT-2

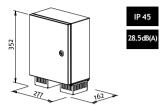


130

A weatherproof, outdoor light generator. Very durable. Very versatile. Available with electronically-controlled effects. Available with white light, a dimming function, a six-colour wheel, a twinkle wheel, or combinations of these. Extremely long lamp life, very high light efficiency, and very quiet. Suitable for many outdoor lighting solutions, including large fountains, public art, facades, signs, parks, gardens and swimming pools.

FL 150 XT-2

- · For outdoor use / wet locations
- \cdot 150 watt metal halide, 4,200 K with average 6,000 h lamp life
- · Colour wheel models: white, green, orange, blue, red, yellow
- · Dimmer wheel models: six steps
- \cdot DMX Dual Models include colour and dimmer wheels
- · Electronic ballast
- · Grey finish
- · Light port: Ø28 mm



FL 150 XT-2

100-240 V / 50-60 Hz



FL 150 XT-2 US

100-240 V / 50-60 Hz Meets FCC part 15











BEACH PROMENADE

Fibre harnesses



Invent precisely the right light with customised fibre harnesses.

Choose Roblon PMMA for flexible, durable fibres with high light transmittance and high light efficiency.

Choose glass for fibres with a very high temperature resistance, so high that they are ideal for using in saunas and steam baths.

Choose Roblon's randomised fibres for unrivalled uniformity of light. Choose non-randomised harnesses for 'starry sky' lighting.

Choose endlight for very clear, very bright light emitted through fibre ends. Choose sidelight for functionally decorative light emitted uniformly along the entire length of the fibre.

134

PMMA Endlight, Fibre Harnesses

For the common ends, Roblon will charge an extra 8 cm per fibre tail

Common End

Type	Item no.	Fibre (mm)	FL 1000	Drawing
Ø9	9903 0021	Max. Ø9: 147 x Ø0.75	73	1
Ø9-R, randomised	9903 0025	Max. Ø9-R: 138 x Ø0.75	69	2
Ø28	9903 0020	Max. Ø28: 1037 x Ø0.75	500	3
Ø28-R, randomised	9903 0024	Max. Ø28-R: 1014 x Ø0.75	500	3













Fibre Tails

Jacket material: black Megolon S530

Type	Item no.	Max.	fibre	tails	in	Raw fibres	Outer dia.	Bending radius
		ø٩	Ø9-R	ø28	Ø28-R			
PMMA Ø1.0 mm	5200 0524	82		583/29	1	1 x Ø1 mm	Ø2.2 mm	Min. 8 mm
PMMA Ø1.5 mm	5200 0548	49		345 / 17	2	3 x Ø0.75 mm	Ø2.7 mm	Min. 12 mm
PMMA Ø2.0 mm	5200 0550	21	19	148/74	144/74	7 x Ø0.75 mm	Ø3.9 mm	Min. 16 mm
PMMA Ø3.0 mm	5200 0551	10	9	74 /37	72 / 37	14 x Ø0.75 mm	Ø4.9 mm	Min. 24 mm
PMMA Ø4.5 mm	5200 0552	5	5	38/19	37 / 19	27 x Ø0.75 mm	Ø6.4 mm	Min. 36 mm
PMMA Ø6.0 mm	5200 0553	2		20/10	20/10	50 x Ø0.75 mm	Ø8.9 mm	Min. 48 mm
PMMA Ø8 mm	5200 0557	1		13/6	13/6	75 x Ø0.75 mm	Ø10 mm	Min. 60 mm
PMMA Ø10 mm	5200 0595	1		8/4	8/4	71 x Ø1 mm	Ø12 mm	Min. 75 mm

For halogen & metal halide: FL 2002-2, FL 150 og FL 250

For LED: FL 1000 (for object lighting)
For LED: FL 1000 (for decorative lighting)

Glass Endlight, Fibre Harnesses

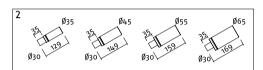
For the common ends, Roblon will charge an extra 8 cm per fibre tail

Common End

Glass harnesses with Ø3 - Ø6 mm fibre tails are randomised as standard

Type	Item no.	Raw fibres	Drawing
Ø9	9903 0021	Max. Ø9: 31,600 x Ø50 μm	1
Ø28	9903 0020	Max. Ø28: 246,000 x Ø50 μm	2
Randomising of Ø1 - Ø2 glass fibre tails. Charge per fibre tail.	9903 0031		





Fibre Tails

Jacket material: black Megolon S530

Type	Item no.	Max. fibre tails in		Raw fibres	Outer dia.	Bending radius
		øЯ	Ø28			
Glass Ø1.0 mm	5200 0110	85	617 / 308	400 x Ø50 μm	Ø2.2 mm	Min. 7 mm
Glass Ø1.5 mm	5200 0115	42	308 / 154	800 x Ø50 μm	Ø2.7 mm	Min. 11 mm
Glass Ø2.0 mm	5200 0120	24	176 / 88	1,400 x Ø50 μm	Ø3.9 mm	Min. 14 mm
Glass Ø3.0 mm	5200 0130	11	82 / 41	3,000 x Ø50 μm	Ø4.9 mm	Min. 21 mm
Glass Ø4.5 mm	5200 0145	5	37/18	6,600 x Ø50 μm	Ø6.4 mm	Min. 32 mm
Glass Ø6.0 mm	5200 0160	3	22/11	11,000 x Ø50 μm	Ø8.9 mm	Min. 42 mm

For halogen & metal halide: FL 2002-2, FL 150 og FL 250 $\,$

For LED: FL 1000 (for object lighting)
For LED: FL 1000 (for decorative lighting)

Sidelight and Decorative Harnesses

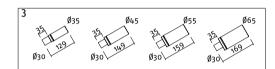
For the common ends, Roblon will charge an extra 8 cm per fibre tail

Common End

Type	Item no.	Raw fibres	FL 1000	Drawing
Ø9	9903 0021	Max. Ø9: 144 x Ø0.75 mm	73	1
Ø9-R, randomised	9903 0025	Max. Ø9-R: 136 x Ø0.75 mm	69	2
Ø28	9903 0020	Max. Ø28: 958 x Ø0.75 mm	500	3
Ø28-R, randomised	9903 0024	Max. Ø28-R: 936 x Ø0.75 mm	500	3







Fibre Tails

Sidelight jacket material: transparent UV stabilised PVC, algae-resistant according to DS/ISO 846 incl. green algae Starfield jacket material: black Megolon S530 Sidelight abbreviation: SR

Type	Item no.	Max.	fibre	tails	in	Raw fibres	Fibre type	Outer dia.
		ø٩	Ø9-R	ø28	Ø28-R			
SR Ø4.5 mm	5200 0600	12	11	78	78	12 x Ø0.75 mm	PMMA	Ø4.5 mm
SR Ø8 mm	5200 0601	2		19	19	49 x Ø0.75 mm	PMMA	Ø8 mm
SR Ø11 mm	5200 0602	1		11	11	84 x Ø0.75 mm	PMMA	Ø11 mm
SR Ø14 mm	5200 0603	1		6	6	144 x Ø0.75 mm	PMMA	Ø14 mm
Schott Sideglow Ø1.3 mm	5200 0413	81		585		420 x Ø50 μm	Glass	Ø2.5 mm
Starfield 50 Ø5.8 mm	5200 0650	3		21		17 x Ø0.5 + 25 x Ø0.75 + 8 x Ø1 mm	PMMA	Ø8.7 mm

For halogen & metal halide: FL 2002-2, FL 150 og FL 250 For LED: FL 1000 (for decorative lighting)





Pyxis



discreetly cast well-defined light exactly as you need it, where you need it. For ambient and accent lighting, for wall-washing, for decorative effects. In showcases, in niches, in ceilings. For room lighting, for surface lighting, for object illumination. High colour rendering in all colour spectra ensures superior white light and true colour reproduction. Recessed LEDs strictly limit glare. Choose narrow, medium or wide lighting angles. Combine wattage and beam angles to design precisely the light you want. Pyxis downlights: you define exactly how

they define exactly.

Classy, cooperative recessed downlights that

Pyxis

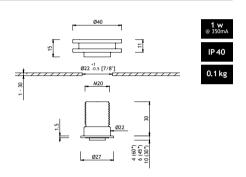
- · For indoor use
- · Recessed with fixed beam angle
- · Surface, shallow and deep-mounted models
- · Mounted with screws, springs or threaded heat sink
- · Anodised aluminium, POM, ABS
- · Beam angle 30°, 45° or 60°
- · Individual reflectors can be changed
- · LED modul can be replaced
- · CRI typical value 90
- · Luminous flux typical values 30 and 35 lm
- · Fixture efficacy typical value 45 lm/W
- · Black, grey, bronze and white. This product can be painted and color matched with RAL codes.

Pyxis 1n

1 watt

Recessed with flange

Fastened from behind with threaded heat sink



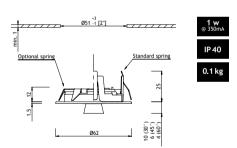
Pyxis 1r

1 watt

Recessed

Mounted with spring

Shallow-mounting spring also available

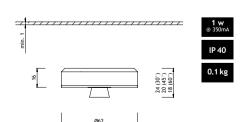


Pyxis 1s

1 watt

Surface-mounted

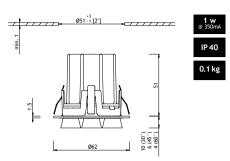
Mounted with screws



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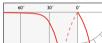
141

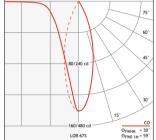
3 watt Recessed Mounted with spring



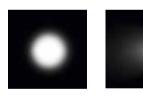
Photometric

Medium 30



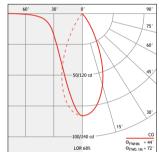


Pyxis 1/3



h (m)	Avg. E (lux)	Max. E (lux)	DFWHM (m)	(w) DLMN•TW
0.25	1,700	2,200	0.14	0.30
0.5	420	550	0.28	0.59
1.0	110	140	0.53	1.1
1.5	48	62	0.79	1.7
h	109/h²	139/h²	0.53·h	1.1∙h

Medium 45

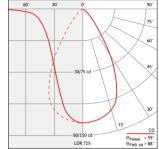


Pyxis 1/3



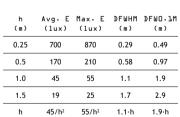
h (m)	Avg. E (lux)	Max. E (lux)	DFWHM (m)	DFW0.1M (m)
0.25	1,110	1,420	0.19	0.35
0.5	269	340	0.39	0.70
1.0	64	80	0.80	1.4
1.5	28	36	1.2	2.2
h	64/h²	80/h²	0.80·h	1.4·h

Wide 60



Pyxis 1/3





 $\Theta_{\mbox{\tiny FWHM}}$ $\,$ is the full-width beam angle where intensity is half the maximum level. $\Theta_{\text{FW0.IM}}$ is the full-width beam angle where intensity is a tenth of the maximum level. This is a non-standard measurement that is close to the perceived beam angle. Illuminance values account for distances (h) greater than 100 mm. The photometric performance was measured at thermal steady state in 22°C ambient temperature using 4,500 K LEDs driven at 350 mA. Multiply results by 0.93 to get according values for 3,000 K. If the luminaire is dimmed, scale the results in accordance with dimming performance. Values given for Pyxis 1 models. For Pyxis 3r, multiply by 2.9.



Corvus









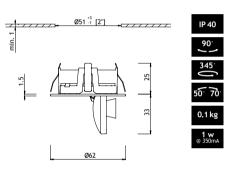
Cleverly created to let you freely set the lighting scene, then freely change your design, your display, your mind. Changes swiftly from recessed to raised. Highly directive in either position. Tilt and twirl the illuminating head to cast well-defined light with millimetre-precision. For ambient and accent lighting, for wall-washing, for decorative effects. In showcases, in niches, in ceilings. For room lighting, for surface lighting, for object illumination. High colour rendering in all colour spectra ensures superior white light and true colour reproduction. Recessed LEDs strictly limit glare. Choose narrow, medium or wide lighting angles. Combine wattage and beam angles to design exactly the light you want. Corvus: audaciously collaborative light.

Corvus

- · For indoor use
- · Retracts & protrudes
- · Stepless rotation & tilt
- Mounted recessed with springs
- · Anodised aluminium, POM, ABS
- \cdot Beam angle 30°, 45° or 60°
- · Individual reflectors can be changed
- · LED modul can be replaced
- · CRI typical value 90
- · Luminous flux typical values 50 and 150 lm
- · Fixture efficacy typical value 50 lm/W
- Black, grey, bronze and white. This product can be painted and color matched with RAL codes.

Corvus 1r

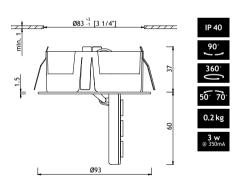
1 watt



cULus CB CE F

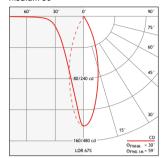
Corvus 3r

3 watt



Photometric

Medium 30



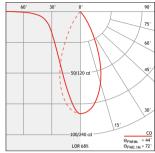






h (m)	Avg. E (lux)	Max. E (lux)	DFWHM (m)	DFW0.1M (m)
0.25	1,700	2,200	0.14	0.30
0.5	420	550	0.28	0.59
1.0	110	140	0.53	1.1
1.5	48	62	0.79	1.7
h	109/h²	139/h²	0.53∙h	1.1∙h

Medium 45



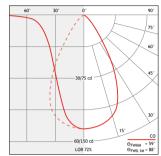
Corvus 1/3





h (m)	Avg. E (lux)	Max. E (lux)	DFWHM (m)	DFW0.1M (m)
0.25	1,110	1,420	0.19	0.35
0.5	269	340	0.39	0.70
1.0	64	80	0.80	1.4
1.5	28	36	1.2	2.2
h	64/h²	80/h²	0.80·h	1.4·h

Wide 60



Corvus 1/3





h (m)	Avg. E (lux)	Max. E (lux)	DFWHM (m)	DFWO.1M (m)
0.25	700	870	0.29	0.49
0.5	170	210	0.58	0.97
1.0	45	55	1.1	1.9
1.5	19	25	1.7	2.9
h	45/h²	55/h²	1.1·h	1.9·h

 $\Theta_{\text{\tiny FWHM}}$ $\;$ is the full-width beam angle where intensity is half the maximum level.

 $\Theta_{\text{PWO},\text{LM}}$ is the full-width beam angle where intensity is a tenth of the maximum level. This is a non-standard measurement that is close to the perceived beam angle.

Illuminance values account for distances (h) greater than 100 mm. The photometric performance was measured at thermal steady state in 22°C ambient temperature using 4,500 K LEDs driven at 350 mA. Multiply results by 0.93 to get according values for 3,000 K. If the luminaire is dimmed, scale the results in accordance with dimming performance. Values given for Corvus 1r. For Corvus 3r, multiply by 2.9.



Ara











Precise, well-defined light from a versatile series of tiny, effective LED fittings. Choose surface-mounted, recessed or recessed-to-raised models. Choose independent magnetic spots or a magnetic track system. Choose fixed, 30°, 70° or 160° tilt. Choose fixed, 350° rotation or total mobility. Choose 10°, 20°, 30° or 48°/8° beam. For indoor use. For object, display, area, ambient and accent lighting. For showcases, niches, open displays, walls and many other applications. Tool-free adjustment. Up to date LED technology.

High-quality, uniform light ensured for entire lifetime. Rigorously tested and documented.

Ara: controlled, controllable light from a free-spirited series of fittings.

- · For indoor use
- · Fixed or adjustable
- Recessed, recessed-to-raised, surface-mounted or magnetic
- · Individual models or track system
- · Anodised aluminium
- · Dimmable
- · 3,000 K
- · Operating ambient temperature -10° to +40°
- \cdot Beam angle 10°, 20°, 30° or 48°/8°
- · Constant Current: Ara 1, 2 and 3
- · Constant Voltage 12 V: Ara 4
- · Up to date LED technology
- · CRI (Ra) 97
- · Other colours and CCT by special order
- · Five-year warranty
- Black. This product can be painted and color matched with RAL codes.





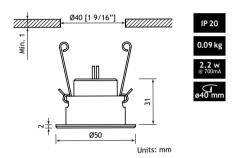
Ara 1

2.2 watt

LED luminous flux 115 lm Fixture luminous efficacy 55 lm/W

Specify when ordering

Beam angle 10°, 20°, 30° or 48°/8°



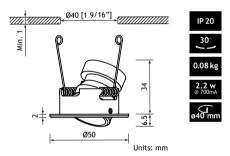
Ara 1 30

2.2 watt

LED luminous flux 115 lm Fixture luminous efficacy 55 lm/W

Specify when ordering

Beam angle 10°, 20°, 30° or 48°/8°



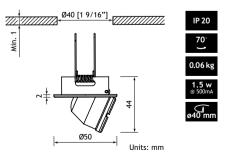
Ara 2

1.5 watt

LED luminous flux 95 lm Fixture luminous efficacy 63 lm/W

Specify when ordering

Beam angle 10°, 20°, 30° or 48°/8°



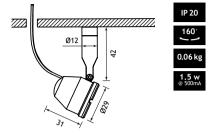


Ara 3

1.5 watt Attaches to any magnetic surface LED luminous flux 95 lm Fixture luminous efficacy 63 lm/W

Specify when ordering

Beam angle 10°, 20°, 30° or 48°/8°

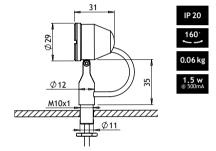


Ara 3 F

1.5 watt M10x1 thread LED luminous flux 95 lm Fixture luminous efficacy 63 lm/W

Specify when ordering

Beam angle 10°, 20°, 30° or 48°/8°

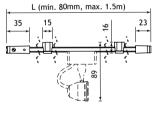


Ara 4

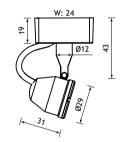
1.5 watt Magnetic spot for use with Track A surface track LED luminous flux 95 lm

Specify when ordering

Beam angle 10°, 20°, 30° or 48°/8° Track length (L) min. 80 mm, max. 1.5 m and on special request



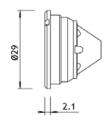
W: Track Brackets 17 / Fixture 29



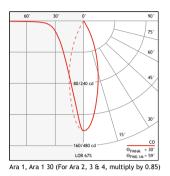


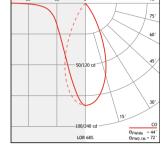
Lenses

Beam angles 10°, 20°, 30° or 48°/8°



Photometrics





Ø0.17m

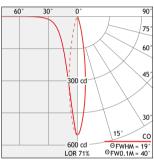
Ø0.34 m

Ø0.51 m

0.34 x **h** [m]

Spot 10

Attribute	Ara l ₁ l 30	Ara 2, 3, 4
Beam Angle	10	10 °
Luminous Flux	90	81 lm





Spot 20

Illum. (E)

87 lm

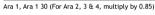
1500 lx

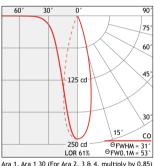
375 lx

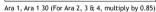
167 lx

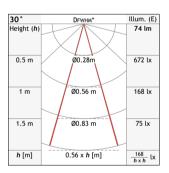
375 h x h

Attribute	Ara l ₁ l 30	Ara 2, 3, 4
Beam Angle	19	19 °
Luminous Flux	87	74 lm



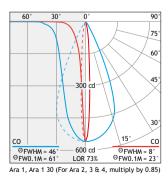


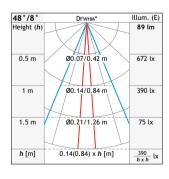




shor an

Attribute	Ara l _a 1 30	Ara 2, 3, 4
Beam Angle	31	31 °
Luminous Flux	74	63 lm





Spot	48/8

Attribute	Ara l _i l 30	Ara 2, 3, 4
Beam Angle	46 / 8	46 / 8 °
Luminous Flux	89	75 lm

 * Illustrated: average over DFWHM For maximum values: multiply results by 1.43

Illuminance values account for distances (h) greater than 100 mm. The photometric performance was measured at thermal steady state in 22°C ambient temperature driven *at 700 mA. If the luminaire is dimmed, scale the results in accordance with dimming *performance.



Libra





Highly directive light from a smart, shapely luminaire. Stage the lighting any way you want, exactly the way you want it. Twirl the heads up, down and all around, then fix in place with millimetre precision. Choose one, two or three illuminating heads as standard. Choose to customise with more. Choose uniform or combined beam angles. Choose the height. Combine illuminating heads, beam angles and dimming to get precisely the light intensity you need. High colour rendering in all colour spectra ensures superior white light and true colour reproduction. Recessed LEDs strictly limit glare. Ideal for object illumination in showcases, in niches, free-standing and surface-mounted. Libra: flexible illumination that really turns heads.

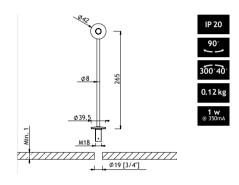
Libra

- · For indoor use
- · Free-standing or surface-mounted vertically or horizontally
- · Individually directive heads
- · Surface-mounted with nut or screws
- · Anodised aluminium, POM, ABS
- · Beam angle 30°, 45° or 60°
- · Beam angles can be combined
- · Individual reflectors can be changed
- · LED modul can be replaced
- · CRI typical value 90
- · Luminous flux typical values 50 and 150 lm
- · Fixture efficacy typical value 50 lm/W
- · Black, grey and bronze. This product can be painted and color matched with RAL codes.

Libra 1

1 watt

Beam angle 30° or 60°



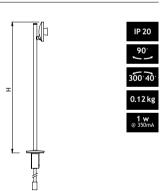
Libra 1 Custom

1 watt

Centre of head 21 mm from top Height min. 75 mm, max. 700 mm

Specify when ordering

3,000 or 4,500 K Head 30°, 45° or 60° Height (H)

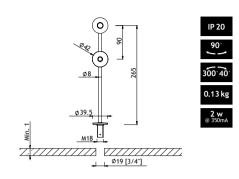




Libra 2

2 watt

Top head beam angle 30° Bottom head beam angle 60°



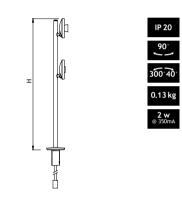
Libra 2 Custom

2 watt

Centre of head 21 mm from top Centre of head min. 54 mm from surface Height min. 75 mm, max. 700 mm

Specify when ordering

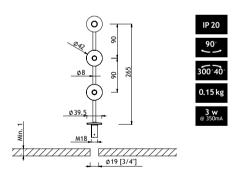
3,000 or 4,500 K Top head 30°, 45° or 60° Bottom head 30°, 45° or 60° Height (H)



Libra 3

3 watt

Top head beam angle 30° Middle head beam angle 45° Bottom head beam angle 60°



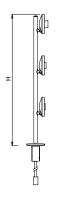
Libra 3 Custom

3 watt

Centre of head 21 mm from top Centre of head to centre of next head min. 90 mm. Centre of head min. 54 mm from surface Height min. 75 mm, max. 700 mm

Specify when ordering

3,000 or 4,500 K Top head 30°, 45° or 60° Middle head 30°, 45° or 60° Bottom head 30°, 45° or 60° Height (H)

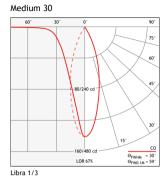


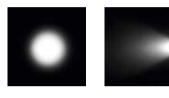




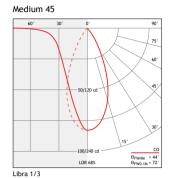
3 w @ 350mA

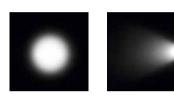
Photometrics



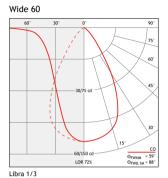


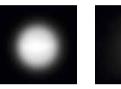
h (m)	Avg. E (lux)	Max. E (lux)	DFWHM (m)	DFW0.1M (m)
0.25	1,700	2,200	0.14	0.30
0.5	420	550	0.28	0.59
1.0	110	140	0.53	1.1
1.5	48	62	0.79	1.7
h	109/h ²	139/h²	0.53·h	1.1·h





h (m)	Avg. E (lux)	Max. E (lux)	DFWHM (m)	DFW0.1M (m)
0.25	1,110	1,420	0.19	0.35
0.5	269	340	0.39	0.70
1.0	64	80	0.80	1.4
1.5	28	36	1.2	2.2
h	64/h²	80/h²	0.80·h	1.4∙h







		DFWHM (m)	DFW0.1M (m)
700	870	0.29	0.49
170	210	0.58	0.97
45	55	1.1	1.9
19	25	1.7	2.9
45/h²	55/h²	1.1·h	1.9·h
	700 170 45 19	(1ux) (1ux) 700 870 170 210 45 55 19 25	700 870 0.29 170 210 0.58 45 55 1.1 19 25 1.7

 $\Theta_{\mbox{\tiny FWHM}}$ $\,$ is the full-width beam angle where intensity is half the maximum level.

 $\Theta_{\text{PWO.IM}}$ is the full-width beam angle where intensity is a tenth of the maximum level. This is a non-standard measurement that is close to the perceived beam angle.

Illuminance values account for distances (h) greater than 100 mm. The photometric performance was measured at thermal steady state in $22^{\circ}\mathrm{C}$ ambient temperature using 4,500 K LEDs driven at 350 mA. Multiply results by 0.93 to get according values for 3,000 K. If the luminaire is dimmed, scale the results in accordance with dimming performance.

Twin Peak set



The freedom to design, define and redesign light on the spot. Two free-standing LED luminaires with driver. Plug-and-play installation. Unplug-and-play adjustment. Lift them out individually any time to rotate or to remove temporarily. Tilts 90°. Rotates 360°. For indoor use. For object, display and surface lighting. For showcases, niches and open display areas Citizen LED technology. High colour rendering. Superior, precise, uniform light. Glare-free. Light quality ensured for entire lifetime. Rigorously tested. Rigorously documented. aks: the height of simply designable light.

Peak

- · For indoor use
- · Twin chrome luminaires with driver
- · Free-standing, recessed and flush-mounted
- · Tilts 90°
- · Rotates 360°
- · Glare-free
- · Dimmable
- · 3,000 K
- Operating ambient temperature -10° to +40°
 Beam angle 58°

- · Constant Current
- · Up to date LED technology
- · TCI Jolly driver 1-10 V or push-dim
- · CRI (Ra) 80 · Five-year warranty
- · LED standard lifetime 50,000 hours
- · LED luminous flux 225 lm
- · LED efficacy 65 lm/W
- · Chrome-plated brass



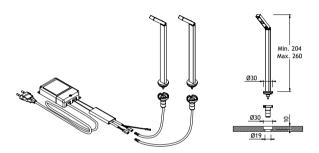






RoHS **(€**

Twin Peak set



Beespot



For accent lighting, for wall-washing, for decorative effects. For facades, for surfaces large and small, for objects large and small. Choose standard colour rendering for high flux. Choose high colour rendering for even better colour

submerged. Beautiful to look at, also when

unlit. Fully adjustable in all directions.

Ideal for use indoors, outdoors or

reproduction. Recessed LEDs strictly limit glare. Beespot: unobtrusive, unpretentious, unashamedly

functional light.

Beespot

- · For indoor, outdoor or submerged use
- · Surface-mounted with screws
- · Position lock
- · Available in glass-blasted stainless steel AISI 303 and for the XT versions (outdoor use) in glass-blasted stainless steel EN W.nr. 1.4435
- · 3,000 K or 4,500 K
- Beam angle 25°, 35°, 55° or 25°/45°

- · Fibre optic series also available
- · Lenses can be replaced
- · LED modul can be replaced
- · CRI min. 85
- \cdot Luminous flux typical values 100 and 150 \mbox{lm}
- \cdot Fixture efficacy typical value 50 and 75 lm/W
- · Grey

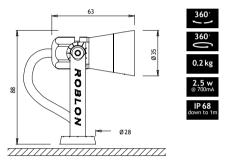


Beespot

2.5 watt Indoor Beam angle 25°, 35°, 55° or 25°/45° Stainless steel AISI 303

Specify when ordering

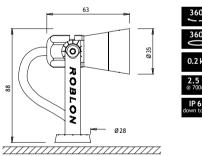
3,000 or 4,500 K Beam angle



Beespot XT

2.5 watt Outdoor or submerged Beam angle 25°, 35°, 55° or 25°/45° Stainless steel AISI 316

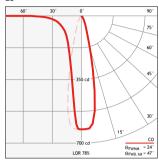
Specify when ordering 3,000 or 4,500 K Beam angle





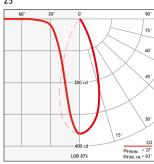
Photometrics

25°



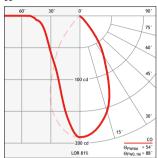
h (m)		Max. E (lux)		DFW0.1M (m)
0.5	2,824	3,130	0.29	0.58
1.0	677	765	0.59	1.20
2	170	189	1.15	2.34
h	677/h ²	765/h²	0.59∙h	1.20·h

25°



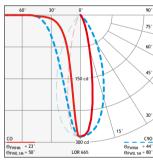
h (m)		Max. E (lux)		DFW0.1M (m)
0.5	1,468	1,764	0.44	0.82
1.0	374	421	0.88	1.65
2	87	104	1.77	3.33
h	374/h²	421/h²	0.88·h	1.65·h

55°



h (m)		Max. E (lux)		DFW0.1M (m)
0.5	770	938	0.65	1.27
1.0	193	224	1.30	2.60
2	45	55	2.63	5.3
h	193/h²	224/h²	1.30∙h	2.60·h

25°/45°



 $\Theta_{\mbox{\tiny FWHM}}$ $\,$ is the full-width beam angle where intensity is half the maximum level.

 $\Theta_{\text{PW0.1M}}$ is the full-width beam angle where intensity is a tenth of the maximum level. This is a non-standard measurement that is close to the perceived beam angle.

Illuminance values account for distances (h) greater than 100 mm. The photometric performance was measured at thermal steady state in $22^{\circ}\mathrm{C}$ ambient temperature using 4,500 K LEDs driven at 700 mA. Multiply results by 0.71 to get according values for 3,000 K. If the luminaire is dimmed, scale the results in accordance with dimming performance.



Framing Spot

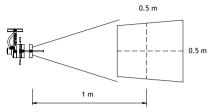


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Paint a space with light, then frame it. Fix a square or triangle of light on one space: on a sculpture, a reception desk, a painting, a furniture display. High colour rendering in all colour spectra ensures superior white light and true colour reproduction. Available with special lenses for long distance, high intensity and extra tight focus. Framing Spot: good-looking functionality that offers unlimited opportunities for limiting light.

Framing Spot

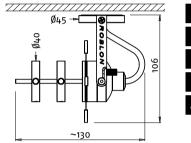
- · For indoor use
- · Surface-mounted with screws
- · Position lock
- · Anodised aluminium
- \cdot POM, ABS, stainless steel
- · Fibre optic series also available
- · LED modul can be replaced
- · CRI typical value 90
- · Black and grey. This product can be painted and color matched with RAL codes.





Framing Spot

2.5 watt 3,000 K

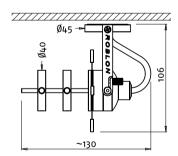




Framing Spot Custom

2.5 watt

Specify when ordering Colour temperature [ANSI C78.377)









One lighting system. Multiple lighting solutions. Multiple configurations. Multiple applications. Create consistent light in showcases, in niches, in exhibition areas, in display areas, on surfaces. High colour rendering in all colour spectra ensures superior white light and true colour reproduction. Recessed LEDs strictly limit glare. Choose to mount suspended, on surfaces, wall-to-wall, vertically, horizontally, free-standing. Choose light beam angles. Choose light direction. Choose conduit finishes, shapes, lengths and heights. XPO-led: the surprisingly simple way to design precisely the right light.

XPO-led

- · For indoor use
- · Suspended
- · Wall-to-wall
- · Surface-mounted vertically or horizontally
- · Mounted with nut or screws
- · Adonised aluminium, POM, ABS
- · Fibre optic series also available
- · Beam angle 68°/110°
- · Individual reflectors can be changed

- · LED modul can be replaced
- · CRI typical value 92
- · Luminous flux typical values 30 and 35 lm
- · Fixture efficacy typical value 40 lm/W
- $\boldsymbol{\cdot}$ Black and grey. This product can be painted and color matched with RAL codes.







Vertical XPO-led

Height min. 185 mm, max. 2.11 m Wire length min. 500 mm, max. 5 m (default 3 m)

Specify when ordering

3,000 or 4,500 k Height (H) Wire length (L)

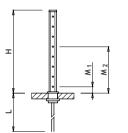
Specify an LED layout

Max. possible no. of LEDs for specified height

5-LED modules, evenly spaced

4-LED modules at specified positions (M1, M2, M3 etc.)

5-LED modules at specified positions (M1, M2, M3 etc.)





Wall-to-wall XPO-led

Width min. 200 mm, max. 2.15 m Wire length min. 500 mm, max. 5 m (default 3 m)

Specify when ordering

3,000 or 4,500 k Width (W) Wire length (L)

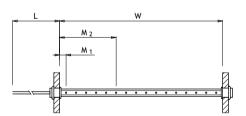
Specify an LED layout

Max. possible no. of LEDs for specified width

5-LED modules, evenly spaced

4-LED modules at specified positions (M1, M2, M3 etc.)

5-LED modules at specified positions (M1, M2, M3 etc.)





Horizontal XPO-led Ø8 mm legs

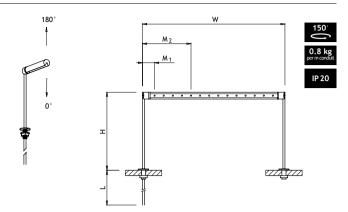
Width min. 200 mm, max. 2.15 m Leg height min. 32 mm, max. 500 mm Wire length min. 500 mm, max. 5 m (default 3 m) Light direction 0° or 180°

Specify when ordering

3,000 or 4,500 k Light direction Width (W) Leg height (H) Wire length (L)

Specify an LED layout

Max. possible no. of LEDs for specified width 5-LED modules, evenly spaced 4-LED modules at specified positions (M1, M2, M3 etc.) 5-LED modules at specified positions (M1, M2, M3 etc.)



Horizontal XPO-led Ø26 mm legs

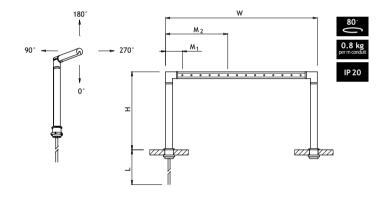
Width min. 235 mm, max. 2.20 m Leg height min. 32 mm, max. 2.15 mm Wire length min. 500 mm, max. 5 m (default 3 m) Light direction 0° , 90° , 180° or 270°

Specify when ordering

3,000 or 4,500 k Light direction Width (W) Leg height (H) Wire length (L)

Specify an LED layout

Max. possible no. of LEDs for specified width 5-LED modules, evenly spaced 4-LED modules at specified positions (M1, M2, M3 etc.) 5-LED modules at specified positions (M1, M2, M3 etc.)



Free-mounted XPO-led

Width min. 150 mm, max. 3 m Wire length min. 500 mm, max. 5 m (default 3 m)

Specify when ordering

3,000 or 4,500 k Width (W) Wire length (L)

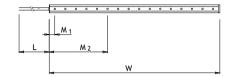
Specify an LED layout

Max. possible no. of LEDs for specified width

5-LED modules, evenly spaced

4-LED modules at specified positions (M1, M2, M3 etc.)

5-LED modules at specified positions (M1, M2, M3 etc.)





Surface-mounted XPO-led

Width min. 175 mm, max. 3 m Wire length min. 500 mm, max. 5 m (default 3 m)

Specify when ordering

3,000 or 4,500 k Width (W) Wire length (L)

Specify an LED layout

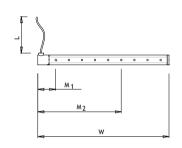
Max. possible no. of LEDs for specified width

5-LED modules, evenly spaced

4-LED modules at specified positions (M1, M2, M3 etc.)

5-LED modules at specified positions (M1, M2, M3 etc.)







Suspended XPO-led

Distance from ceiling max. 2.4 m Customised width min. 200 mm, max. 2.11 m '1.2' models: 3,000 K and width 1.2 m

Specify when ordering (custom models)

3,000 or 4,500 k Width (W)

Specify an LED layout (all models)

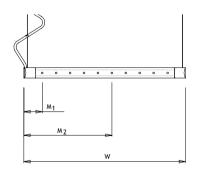
Max. possible no. of LEDs for specified width

5-LED modules, evenly spaced

4-LED modules at specified positions (M1, M2, M3 etc.)

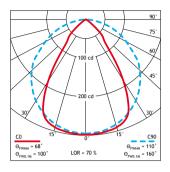
5-LED modules at specified positions (M1, M2, M3 etc.)







Photometrics







Throw (m)	Illuminance¹ (lux)	Width ² FWHM (m)	Width ² FWD.lm (m)	
0.25	1980	0.34	0.60	
0.5	710	0.67	1.2	
1.0	210	1.4	2.4	
1.5	95	2.0	3.6	
2.0	55	2.7	4.8	
2.5	36	3.4	6.0	
3.0	25	4.1	7.2	
3.0		1.35 x throw	2.40 x throw	

 Θ_{FWHM} is the full-width beam angle where intensity is half the maximum level. The plot shows Θ_{FWHM}

 $\Theta_{\text{PWO.IM}}$ is the full-width beam angle where intensity is a tenth of the maximum level. This is a non-standard measurement that is close to the perceived beam angle.

1) Illuminance with three 5-LED modules and 100% utilisation. 2) Width refers to the spot width in the CO plane (across the fixtures). Multiply results by 0.88 to get according values for 3,000 K.

XPO-led system calculations

Calculate conduit size

Conduit size = the actual section in which LEDs can be installed Min. 140 mm, max. 2.1 m

 $\label{lem:calculate} \textbf{Calculate conduit size by subtracting fixed part dimensions}$

Vertical XPO-led:	Height - 10 mm
Wall-to-wall XPO-led:	Width - 10 mm
Horizontal XPO-led Ø8 mm legs:	Width - 48 mm
Horizontal XPO-led Ø26 mm legs:	Width - 94 mm
Free-mounted XPO-led:	Width - 6 mm
Surface-mounted XPO-led:	Width - 35 mm
Suspended XPO-led custom:	Width - 56 mm

Calculate number of LEDs

Min. conduit length (mm)	Total LEDs	5-LED modules	4-LED modules	Min. conduit length (mm)	Total LEDs	5-LED modules	4-LED modules
150	4	0	1	1,200	34	6	1
185	5	1	0	1,235	35	7	0
290	8	0	2	1,270	36	4	4
325	9	1	1	1,305	37	5	3
360	10	2	0	1,340	38	6	2
430	12	0	3	1,375	39	7	1
465	13	1	2	1,410	40	8	0
500	14	2	1	1,445	41	5	4
535	15	3	0	1,480	42	6	3
570	16	0	4	1,515	43	7	2
605	17	1	3	1,550	44	8	1
640	18	2	2	1,585	45	9	0
675	19	3	1	1,620	46	6	4
710	20	4	0	1,655	47	7	3
745	21	1	4	1,690	48	8	2
780	22	2	3	1,725	49	9	1
815	23	3	2	1,760	50	10	0
850	24	4	1	1,795	51	7	4
885	25	5	0	1,830	52	8	3
920	26	2	4	1,865	53	9	2
955	27	3	3	1,900	54	10	1
980	28	4	2	1,935	55	11	0
1,025	29	5	1	1,970	56	8	4
1,060	30	6	0	2,005	57	9	3
1,095	31	3	4	2,040	58	10	2
1,130	32	4	3	2,075	59	11	1
1,165	33	5	2	2,110	60	12	0



XPO-led Essential 1R



XPO-led Essential 1R. For indoor use. For display, decorative and task lighting. For lighting objects and surfaces. For showcases, niches, shelves, cove lighting, room skirting and many other applications. Multiple colour temperatures. Multiple configurations. Surface-mounted or recessed.

From the XPO-led Essential series.
Consistent, uniform light. Excellent light output. High CRI. Nichia LED technology.
Easy to install. Easy to move. Easy to reuse.
Hard-working, high-quality, low-energy light in tiny multipurpose conduits. LED lighting made simple.

XPO-led Essential 1R

- · For indoor use/dry locations
- · Multiple mounting options
- · Conduit min. 120 mm, max. 2.42 m
- · 16 mm between LEDs
- · Default wire length 2.44 m
- · Anodised aluminium
- \cdot Operating ambient temperature -30 $^{\circ}$ to +40 $^{\circ}$
- · 2,400 K, 2,700 K, 3,000 K, 3,500 K, 4,000 K,
- 4,500 K or 5,000 K · Beam angle 116°

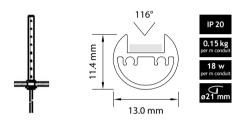
- · Dimmable
- · Constant Voltage 24 V
- · Nichia LED technology
- · CRI (Ra) 85/92+
- · Five-year warranty
- · Fixture luminous flux 725 to 889 lm/m
- · Fixture luminous efficacy 40 to 49 lm/W
- \cdot Black and grey. This product can be painted and color matched with RAL codes

RoHS . € €



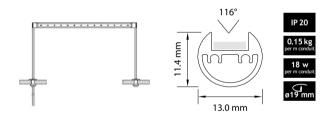


Vertical XPO-led Essential 1R

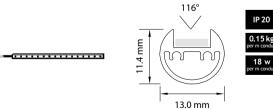


Horizontal XPO-led Essential 1R

Height min. 25 mm, max. 0.5 m Legs Ø8 mm



Free-mounted XPO-led Essential 1R





XPO-led Essential 1S



XPO-led Essential 1S. For indoor use. For display, decorative and task lighting. For lighting objects and surfaces. For showcases, niches, shelves, cove lighting, room skirting and many other applications. Multiple colour temperatures. Surfacemounted or recessed. Fixed or adjustable.

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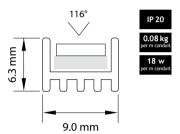
XPO-led Essential 1S

- · For indoor use/dry locations
- · Recessed or surface-mounted
- · Adjustable or fixed mounting clips
- · Conduit min. 120 mm, max. 2.42 m
- \cdot 16 mm between LEDs
- · Default wire length 2.44 m
- · Anodised aluminium
- \cdot Operating ambient temperature -30 $^{\circ}$ to +40 $^{\circ}$
- · 2,400 K, 2,700 K, 3,000 K, 3,500 K, 4,000 K, 4,500 K or 5,000 K
- · Beam angle 116°

- · Dimmable
- · Constant Voltage 24 V
- · Nichia LED technology
- · CRI (Ra) 85/92+
- · Five-year warranty
- · Fixture luminous flux 725 to 889 lm/m
- \cdot Fixture luminous efficacy 40 to 49 lm/W
- · Black and grey. This product can be painted and color matched with RAL codes



XPO-led Essential 1S





XPO-led Essential 2RL Clear



XPO-led Essential 2RL Clear. For indoor and damp locations. For display, decorative and task lighting. For lighting objects and surfaces. For showcases, niches, shelves, walls and many other applications. Multiple colour temperatures. Multiple configurations. Surface-mounted or recessed. Opal models available.

From the XPO-led Essential series.

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XPO-led Essential 2RL Clear

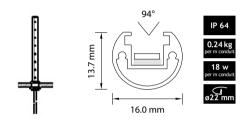
- · For indoor use/damp locations
- · Multiple mounting options
- · Conduit min. 120 mm, max. 2.42 m
- · 16 mm between LEDs
- · Default wire length 2.44 m
- · Anodised aluminium
- · Clear acrylic cover
- · Opal models also available
- · Operating ambient temperature -30° to +40°
- · 2,400 K, 2,700 K, 3,000 K, 3,500 K, 4,000 K, 4,500 K or 5,000 K
- · Beam angle 94°
- · Dimmable
- · Constant Voltage 24 V
- · Nichia LED technology
- · CRI (Ra) 85/92+
- · Five-year warranty
- · Fixture luminous flux 866 to 1063 lm/m
- · Fixture luminous efficacy 48 to 58 lm/W
- · Black and grey. This product can be painted and color matched with RAL codes

RoHS . € €



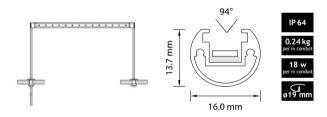


Vertical XPO-led Essential 2RL Clear



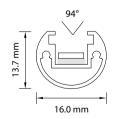
Horizontal XPO-led Essential 2RL Clear

Height min. 25 mm, max. 0.5 m Legs Ø8 mm



Free-mounted XPO-led Essential 2RL Clear









XPO-led Essential 2RL Opal



XPO-led Essential 2RL Opal. For indoor and damp locations. For decorative and surface lighting. Multiple colour temperatures. Multiple configurations. Surface-mounted or recessed. Clear models available.

From the XPO-led Essential series.

Consistent, uniform light. Excellent light output. High CRI. Nichia LED technology.

Easy to install. Easy to move. Easy to reuse.

Hard-working, high-quality, low-energy light in tiny multipurpose conduits. LED lighting made simple.

XPO-led Essential 2RL Opal

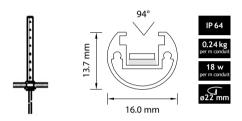
- · For indoor use/damp locations
- · Multiple mounting options
- · Conduit min. 120 mm, max. 2.42 m
- · 16 mm between LEDs
- · Default wire length 2.44 m
- · Anodised aluminium
- · Opal acrylic cover
- · Clear models also available
- · Operating ambient temperature -30° to +40°
- · 2,400 K, 2,700 K, 3,000 K, 3,500 K, 4,000 K, 4,500 K or 5,000 K
- · Dimmable
- · Constant Voltage 24 V
- · Nichia LED technology
- · CRI (Ra) 85/92+
- · Five-year warranty
- · Fixture luminous flux 505 to 620 lm/m
- · Fixture luminous efficacy 28 to 35 lm/W
- · Black and grey. This product can be painted and color matched with RAL codes

RoHS . € €



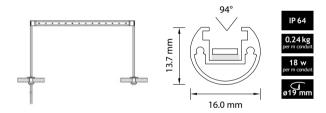


Vertical XPO-led Essential 2RL Opal



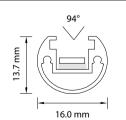
Horizontal XPO-led Essential 2RL Opal

Height min. 25 mm, max. 0.5 m Legs Ø8 mm



Free-mounted XPO-led Essential 2RL Opal









XPO-led Essential 2SL Clear



XPO-led Essential 2SL Clear. For indoor and damp locations. For display, decorative and task lighting. For lighting objects and surfaces. For showcases, niches, shelves, walls and many other applications. Multiple colour temperatures. Multiple configurations. Surface-mounted or recessed. Fixed or adjustable. Opal models available.

From the XPO-led Essential series.

Consistent, uniform light. Excellent light output. High CRI. Nichia LED technology.

Easy to install. Easy to move. Easy to reuse.

Hard-working, high-quality, low-energy light in tiny multipurpose conduits. LED lighting made simple.

XPO-led Essential 2SL Clear

- · For indoor use/damp locations
- · Recessed or surface-mounted
- · Adjustable or fixed mounting clips
- · Conduit min. 120 mm, max. 2.42 m
- \cdot 16 mm between LEDs
- · Default wire length 2.44 m
- · Anodised aluminium
- · Clear acrylic cover
- · Opal models also available
- \cdot Operating ambient temperature -30 $^{\circ}$ to +40 $^{\circ}$
- · 2,400 K, 2,700 K, 3,000 K, 3,500 K, 4,000 K, 4,500 K or 5,000 K

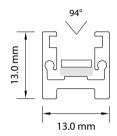
- · Beam angle 94°
- · Dimmable
- · Constant Voltage 24 V
- · Nichia LED technology
- · CRI (Ra) 85/92+
- · Five-year warranty
- · Fixture luminous flux 866 to 1063 lm/m
- · Fixture luminous efficacy 48 to 58 lm/W
- · Black and grey. This product can be painted and color matched with RAL codes

RoHS . € €





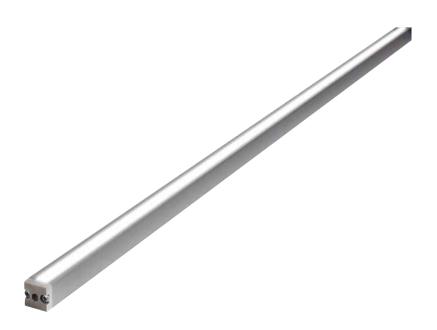
XPO-led Essential 2SL Clear







XPO-led Essential 2SL Opal



XPO-led Essential 2SL Opal. For indoor and damp locations. For decorative and surface lighting. Multiple colour temperatures. Multiple configurations. Surface-mounted or recessed. Fixed or adjustable. Clear models available.

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XPO-led Essential 2SL Opal

- · For indoor use/damp locations
- · Recessed or surface-mounted
- · Adjustable or fixed mounting clips
- · Conduit min. 120 mm, max. 2.42 m
- \cdot 16 mm between LEDs
- · Default wire length 2.44 m
- · Anodised aluminium
- · Opal acrylic cover
- · Clear models also available
- \cdot Operating ambient temperature -30 $^{\circ}$ to +40 $^{\circ}$
- · 2,400 K, 2,700 K, 3,000 K, 3,500 K, 4,000 K, 4,500 K or 5,000 K

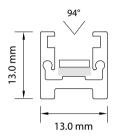
- · Dimmable
- · Constant Voltage 24 V
- · Nichia LED technology
- · CRI (Ra) 85/92+
- · Five-year warranty
- · Fixture luminous flux 505 to 620 lm/m
- \cdot Fixture luminous efficacy 28 to 35 lm/W
- \cdot Black and grey. This product can be painted and color matched with RAL codes

RoHS . € €





XPO-led Essential 2SL Opal







XPO-led Essential 3SL Clear



XPO-led Essential 3SL Clear. For indoor and damp locations. For display, decorative and task lighting. For lighting objects and surfaces. For showcases, niches, shelves, walls and many other applications. Multiple colour temperatures. Surface-mounted or recessed. Fixed or adjustable. Single or double LED row. Opal models available.

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XPO-led Essential 3SL Clear

- · For indoor use/damp locations
- · Multiple mounting options
- · Conduit min. 120 mm, max. 2.42 m
- · 16 mm between LEDs
- · Default wire length 2.44 m
- · Anodised aluminium
- · Opal acrylic cover
- · Clear models also available
- · Operating ambient temperature -30° to +40°
- · 2,400 K, 2,700 K, 3,000 K, 3,500 K, 4,000 K, 4,500 K or 5,000 K
- · Constant Voltage 24 V
- · Nichia LED technology
- · CRI (Ra) 85/92+
- · Five-year warranty
- · Fixture luminous flux 505 to 620 lm/m
- · Fixture luminous efficacy 28 to 35 lm/W
- · Black and grey. This product can be painted and color matched with RAL codes

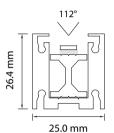
RoHS . € €





XPO-led Essential 3SL Clear Single

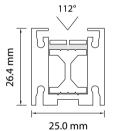
Fixture luminous flux 1045 to 1283 lm/m Fixture luminous efficacy 58 to 71 lm/W Single row of LEDs 18 watt





XPO-led Essential 3SL Clear Double

Fixture luminous flux 1296 to 1591 lm/mFixture luminous efficacy 36 to 44 lm/W Double row of LEDs 36 watt







XPO-led Essential 3SL Opal



XPO-led Essential 3SL Opal. For indoor and damp locations. For decorative and surface lighting. Multiple colour temperatures. Surface-mounted or recessed. Fixed or adjustable. Single or double LED row. Clear models available.

From the XPO-led Essential series.

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Easy to install. Easy to move. Easy to reuse.

Hard-working, high-quality, low-energy light in tiny multipurpose conduits. LED lighting made simple.

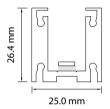
XPO-led Essential 3SL Opal

- · For indoor use/damp locations
- · Single or double LED row
- · Recessed or surface-mounted
- · Adjustable or fixed mounting clips
- · Conduit min. 120 mm, max. 2.42 m
- · 16 mm between LEDs
- · Default wire length 2.44 m
- · Anodised aluminium
- · Opal acrylic cover
- · Clear models also available
- · Operating ambient temperature -30° to +40°
- $\cdot\,$ 2,400 K, 2,700 K, 3,000 K, 3,500 K, 4,000 K, 4,500 K or 5,000 K
- · Dimmable
- · Constant Voltage 24 V
- · Nichia LED technology
- · CRI (Ra) 85/92+
- · Five-year warranty
- Black and grey. This product can be painted and color matched with RAL codes



XPO-led Essential 3SL Opal Single

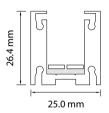
Fixture luminous flux 303 to 372 lm/m Fixture luminous efficacy 17 to 21 lm/W Single row of LEDs 18 watt





XPO-led Essential 3SL Opal Double

Fixture luminous flux 577 to 708 lm/m Fixture luminous efficacy 16 to 20 lm/W Double row of LEDs 36 watt







XPO-led Essential 1QL Clear



XPO-led Essential 1QL Clear. For indoor and damp locations. For display, decorative and task lighting. For lighting objects and surfaces. For showcases, niches, shelves, walls and many other applications. Multiple colour temperatures. Surface-mounted or corner-mounted. Opal models available.

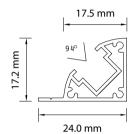
From the XPO-led Essential series.
Consistent, uniform light. Excellent light output. High CRI. Nichia LED technology.
Easy to install. Easy to move. Easy to reuse.
Hard-working, high-quality, low-energy light in tiny multipurpose conduits. LED lighting made simple.

XPO-led Essential 1QL Clear

- · For indoor use/damp locations
- · Surface-mounted with screws
- · Conduit min. 120 mm, max. 2.42 m
- · 16 mm between LEDs
- · Default wire length 2.44 m
- · Anodised aluminium
- · Clear acrylic cover
- · Opal models also available
- · Operating ambient temperature -30° to +40°
- · 2,400 K, 2,700 K, 3,000 K, 3,500 K, 4,000 K, 4,500 K or 5,000 K
- · Beam angle 94°
- · Dimmable
- · Constant Voltage 24 V
- · Nichia LED technology
- · CRI (Ra) 85/92+ · Five-year warranty
- · Fixture luminous flux 866 to 1063 lm/m
- · Fixture luminous efficacy 48 to 58 lm/W
- Black and grey. This product can be painted and color matched with RAL codes

RoHS ♠ C€

XPO-led Essential 1QL Clear







XPO-led Essential 1QL Opal



XPO-led Essential 1QL Opal. For indoor and damp locations. For decorative and surface lighting. Multiple colour temperatures. Surface-mounted. Corner-mounted. Clear models available.

From the XPO-led Essential series.

Consistent, uniform light. Excellent light output. High CRI. Nichia LED technology.

Easy to install. Easy to move. Easy to reuse.

Hard-working, high-quality, low-energy light in tiny multipurpose conduits. LED lighting made simple.

XPO-led Essential 1QL Opal

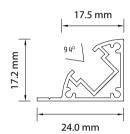
- · For indoor use/damp locations
- · Surface-mounted with screws
- · Conduit min. 120 mm, max. 2.42 m
- · 16 mm between LEDs
- · Default wire length 2.44 m
- · Anodised aluminium
- · Opal acrylic cover
- · Clear models also available
- · Operating ambient temperature -30° to +40°
- · 2,400 K, 2,700 K, 3,000 K, 3,500 K, 4,000 K, 4,500 K or 5,000 K
- · Dimmable
- · Constant Voltage 24 V
- · Nichia LED technology
- · CRI (Ra) 85/92+
- · Five-year warranty
- · Fixture luminous flux 505 to 620 lm/m
- \cdot Fixture luminous efficacy 28 to 35 lm/W
- · Black and grey. This product can be painted and color matched with RAL codes

RoHS ♠ C€





XPO-led Essential 1QL Opal







Mounting options

Fixed metal clip - 1s



Fixed metal clip - 2sl, 1S*



Fixed metal clip - 3sl



Adjustable metal clip - 1S



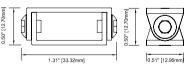
Adjustable metal clip - 2sl, 1S*



Adjustable metal clip - 3sl



Aadjustable bracket - 1s, 2sl, 3sl, 4sl



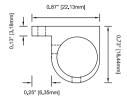
Plastic clip - 1r



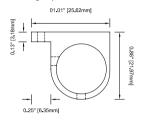
Plastic clip - 2rl



Locking clip -1R



Locking clip -2RL



Self-adhesive locking clip



Self-adhesive locking clip



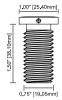
Metal round clip - 1r



Metal round clip - 2rl



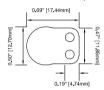
Bushing -1R



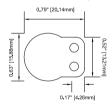
Bushing - 2rl



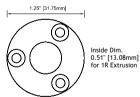
Inside mount end cap - 1R



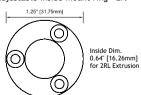
Inside mount end cap - 2rl



Adjustable inside mount ring - 1r



Adjustable inside mount ring - 2rl

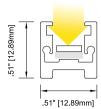


Fixture Extrusions & Beam Angels

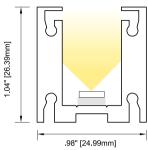
1S - Small Square



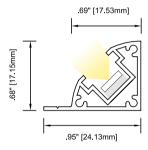
2SL - Medium Square/Lensed



3SL - Large Square/Lensed



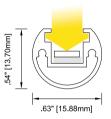
1QL- Quarter Round/Lensed



1R - Small Round



2RL - Large Round/Lensed



Beam Angels (FWHM)

When used with:



Lens 1 (L1)
"Bubble" Profile, Clear



Lens 2 (L2) "Bubble" Profile, Frosted



Lens 3 (L3) Flat Bottom, Frosted

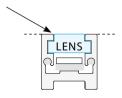


Lens 3 (L3) Contour Profile, Frosted

1118 or 2545 LED Board	18°	22°	30°	78°	
5163 LED Board	Not Recommended	18°	30°	78°	
2640, 3645 or 4645 LED Board	Not Recommended	31°	42°	82°	

Field angle for Lens 1 is $27^{\circ};\;$ field angle for all other lenses is greater than 120°

All flat lenses (PG, OP1, OP2 and OP3) are notched for a flush top surface



Focusing Lenses (L1, L2, L3 and L4) are convex and protrude 0.074" (1.88mm) above the fixture surface



Roblon Lux Calculator

The calculated way to customise lighting solutions

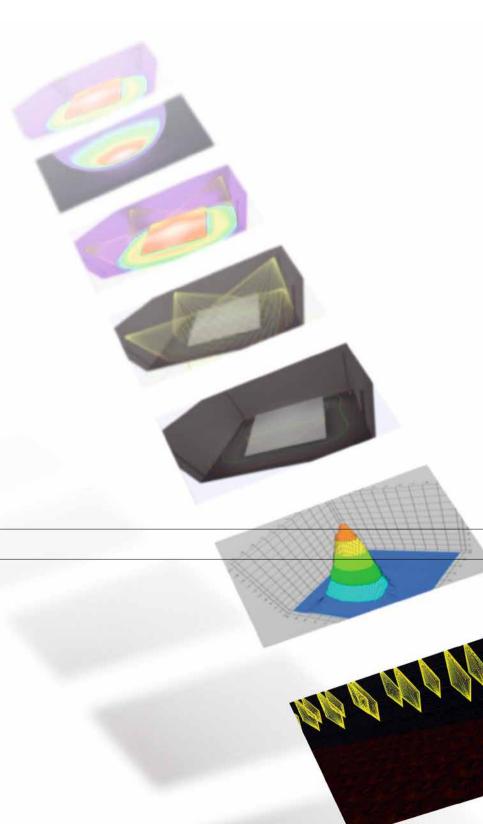
The Roblon Lux Calculator is a unique software programme with which you can customise lighting solutions and calculate precise lux values, beam angles and beam diameters in a matter of seconds.

And it takes just another few seconds to print your calculations and to save them electronically in files which can be imported back into the Lux Calculator whenever you want and which can be emailed to colleagues and clients.

Your calculations can also be saved as IES files which are compatible with other professional light planning and 3D design programmes including DIALux and Visual.

Roblon designed and developed the user-friendly Lux Calculator programme as a free service. It can be downloaded any time from www.roblon.com.

Roblon Lux Calculator. It's quick. It's compatible. It's multilingual. It's accurate.







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Download the Roblon Lux Calculator for free at

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