ARCOS
LED Spotlight System

Sensitivity and high precision – the spotlight system for sophisticated lighting scenarios.

linked
All order numbers in the PDF are linked to the Zumtobel online catalogue.
It is human instinct to be unconsciously drawn to moving objects. That is why our Limbic® research has focused on the human senses and how these are affected by Active Light. The aim is to create a world of experiences linked to various types of personalities that activate our senses and guide our perception, drawing people to what stimulates them and crafting a lighting environment for every kind of individual.

See here how Active Light works:
zumtobel.com/activelight
Active Light | Connecting with Nature

Creating Light Creates Emotion

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Intensity
Carefully planned spatial and time-based differences in lighting levels help showcase both the space and the products. A structured hierarchy of perception directs our line of vision.

Direction
Specific changes in lighting direction and shadowing add a dramatic edge to the goods on display.

Colour
Regulating the light colour in line with the product and the interior architecture improves perception and underlines the impression of quality, which in turn strengthens the willingness to buy.

Time
Active Light adapts the lighting to meet the needs of the people. Expectations stemming from the daylight situation and the time of day are reflected in just the same way as the personality structure of the specific Limbic® customer types.
Grand Hall in Dresden Castle, Dresden | DE
Architects: Peter Kulka Architektur, Dresden | DE
Lighting solution: TECTON continuous-row lighting system, ARCOS spotlight system, ARCOS LED projection spotlights, modular STARFLEX lighting system
ARCOS LED xpert | 22 W | superspot | white
ARCOS LED makes an impression through minimalist design and clear shapes. Available as a spotlight and a wallwasher, it provides a perfectly consistent balance of finely accented lighting with wide coverage. This holistic lighting solution does not detract from the exhibit in any way – on the contrary: The exhibits are pushed into the foreground, their effect reinforced by light and architecture. Thanks to a wide range of accessories and sophisticated lighting technology, ARCOS provides a perfect setting for all kinds of exhibits, taking conservation aspects into account, as UV- and IR-free light treats the exhibits with care. Moreover, the use of innovative LED technology results in a considerable reduction in energy consumption. The combination of pure design and high flexibility guarantees a holistic, effective lighting solution.

“We wanted to create a product together that would not only be installed by museum directors for high quality exhibition spaces but by ourselves as well.”

David Chipperfield
David Chipperfield Architects | Design
**A complete range**

for perfect illumination

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**Spotlights**

**ARCOS 2 LED xpert**
Compact, dimmable LED spotlight with excellent colour rendering (Ra 98) and narrow colour tolerances (1 x 2-step MacAdam); optionally available with super-spot, spot, flood or wideflood beam angles and with an oval or a square light distribution.

New: ARCOS LED xpert blu

Ø 100 mm. Fitted with LED modules of up to 22 W.

**ARCOS 2 LED xpert projection spotlight**
Dimmable LED spotlight for focused accent lighting with sharp outlines.

Ø 100 mm. Fitted with LED modules of up to 22 W.

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**Wallwasher**

**ARCOS 3 LED xpert liteCarve®**
Dimmable LED spotlight for lighting vertical surfaces; uniform light distribution, excellent colour rendering (Ra 98) and tight colour tolerances (1 x 2-step MacAdam), installation height up to 4 m.

New: ARCOS LED xpert blu

Ø 120 mm. Fitted with LED modules of up to 35 W.
ARCOS 3 LED xpert
Dimmable LED spotlight for illumination from higher mounting heights; uniform light distribution, excellent colour rendering (Ra 98) and narrow colour tolerances (1x2-step MacAdam); optionally available with superspot, spot, flood or wideflood beam angles and with an oval or a rectangular light distribution. New: ARCOS LED xpert blu
Ø 120 mm. Fitted with LED modules of up to 35 W.

ARCOS LED tunableWhite
Dimmable LED spotlight with variable white light colours (tunableWhite).
Ø 120 mm. Fitted with LED modules of up to 30 W.

ARCOS LED wallwasher, linear
Linear dimmable luminaire for illumination of large wall surfaces; excellent horizontal and vertical uniformity and good colour rendering (Ra > 90) for installation heights of up to 7 m.
Length: 320 mm. Fitted with LED modules of up to 15 W.

ARCOS LED wallwasher, linear
Linear dimmable luminaire for illumination of large wall surfaces; excellent horizontal and vertical uniformity and good colour rendering (Ra > 90) for installation heights of up to 7 m.
Length: 620 mm. Fitted with LED modules of up to 30 W.
Museo Jumex, Mexico City | MX
Architects: David Chipperfield Architects, London | UK
Lighting design: Arup, London | UK
Lighting solution: ARCOS LED spotlights, PANOS Q downlights, PANOS infinity LED downlights, DIAMO LED downlights, MICRO5 LED downlights, SLOTLIGHT II recessed LED luminaires, ZX2 flexible lighting system, LINARIA light lines, SCUBA moisture-proof diffuser luminaires, CHIARO II moisture-proof diffuser luminaires, ONLITE emergency lighting system, TUBILUX tubular luminaires, LUXMATE basic lighting management system
ARCOS LED xpert blu

Leading the way for a new generation of luminaires
Wireless communication
ARCOS LED xpert spotlights equipped with Bluetooth technology respond to commands from smartphones or any other device equipped with the dedicated app. Now the appropriate light level can be selected without having to rely on a DALI cable or a ladder, while relevant information about the service life of a luminaire is clearly displayed on the screen. Manual operation via the potentiometer on the back of the luminaire is also still possible, helping ARCOS offer a blend of wireless and conventional control that makes it the ideal solution for a wide range of applications.

Flicker-free dimming down to 1%
The intelligent combination of two dimming technologies - control of the lighting intensity via constant current reduction and pulse-width modulation – helps provide dimmed light that is free from disturbing flicker effects. Even the lowest dimming levels can be achieved with the highest quality, guaranteeing a seamless transition from light to dark. Flicker-free light also enables the successful execution of film recordings and even supports the conservation aspect of artificial light, as sensors and lighting management systems regulate the output to protect sensitive exhibits.

Excellent colour rendering
ARCOS blu harnesses the benefits of the Xicato XIM LED module to achieve a narrow colour tolerance (1x2-step MacAdam) and an unsurpassable colour rendering of CRI 98. Spotlights and Litecarve wallwashers thereby show even the slightest colour nuances at their very best.
ARCOS 2 LED xpert

Sustainable technology, compact size
1 Design & functions
ARCOS xpert perfectly combines design and function. Like its conventional predecessor, the LED spotlight system blends harmoniously into a variety of environments. True to Zumtobel's credo “tried-and-tested design, new technology”, the new generation’s appearance has remained unchanged, so that the LED version can easily be combined with conventional ARCOS lighting solutions. ARCOS xpert provides maximum flexibility – due to a variety of additional functions:

- Spotlight can be locked into position
- Spotlight is dimmable (at the luminaire or via DALI)
- Rotating attachment holder and encoded lens
- Cool touch function
- Holder suitable for a large range of accessories

2 The LED light source
Thanks to its compact size, the innovative Xicato Artist LED module is ideal for accent lighting in art and culture applications. This technology boasts excellent colour rendering (Ra 98, R9=98) and an extremely narrow colour tolerance (1x2-step MacAdam). In addition, the light is free from IR and UV, which means that it is gentle on the exhibits and prevents colours from fading. As a result, the ARCOS xpert 2 and 3 LED spotlights catch the eye with superior lighting quality.

3 The optical system
A combination of specially shaped polycarbonate reflectors and selected lens optics that is perfectly matched to the LED module ensures excellent lighting quality: the ARCOS xpert LED spotlight cannot fail to impress thanks to its excellent glare control (no light source visible) and uniform high-precision light distribution. The high level of luminous intensity is focussed in the centre and softly decreases towards the edges – another characteristic feature of ARCOS xpert adding to its excellent lighting quality.

4 Passive cooling
The level of lighting quality achieved in an application depends on optimum thermal management. The high-power ARCOS xpert LED spotlight boasts an intelligent passive cooling system allowing for luminous flux and service life to remain at a constantly high level. In addition, due to the cooling system’s innovative design, no openings are required in the housing. Like its conventional predecessor, the LED spotlight’s converter box also features a cool touch function: thus, ARCOS xpert spotlights can be individually adjusted to changed situations at any time.
ARCOS 3 LED xpert

Sustainable technology, high light output
1 Design & functions

The only visible difference between ARCOS 3 xpert and ARCOS 2 xpert is the former’s slightly larger diameter – ideal for combining both sizes in one room. That’s not all: the consistently designed ARCOS product range with its various models and lumen packages is able to meet a variety of lighting tasks in museums and art galleries, while perfectly catering for various ceiling heights and lighting distances. With illuminance levels of up to 2000 lm, ARCOS 3 provides perfect accent lighting from great heights. This extremely high flexibility is based on multiple additional functions:

- Spotlight can be locked into position
- Spotlight is dimmable (at luminaire or via DALI)
- Rotating attachment holder and encoded lens
- Cool touch function
- Holder suitable for a wide range of accessories

2 The LED light source

The innovative Xicato Artist LED module ensures perfect accent lighting. The spotlight achieves an excellent colour rendering of Ra 98 at colour temperatures of both 3000 K and 4000 K. All colours are correctly displayed thanks to an almost constant colour spectrum. This technology also features an extra-narrow colour tolerance of 1x2-step MacAdam. With an outstanding R9 level of 98, ARCOS LED spotlights meet the highest requirements placed on museum lighting. The identical colour spectrum means that ARCOS LED 2 and 3 can be flawlessly combined with each other.

3 The optical system

In addition to louvre optics such as ring louvre or honeycomb mesh, a number of reflectors and special films are available for ARCOS xpert. By combining them, light control, glare limitation and lighting effects can be designed as required. The extremely uniform lighting cone is supplemented by beam angles ranging from 8° (superspot) to 40° (wideflood). Using oval or rectangular lenses, the shape of the lighting cones can be modified.

4 Passive cooling

The higher the lumen package, the higher the requirements placed on thermal management. Despite its high output, the designers managed to provide the ARCOS xpert high-performance LED spotlight with an intelligent passive cooling system. Thus, the housing does not need any ventilation slots, although it is ensured that the spotlight achieves maximum luminous flux and has an extremely long service life. Similar to other sizes, the LED spotlight’s converter box features a cool touch function: thus, ARCOS xpert 3 spotlights can be re-adjusted to changed situations at any time.
ARCOS 3 xpert LED liteCarve®

Accentuated Wallwasher
1 Design & function
ARCOS xpert liteCarve® acts as a wallwasher, but is really a spotlight. This makes it possible to set accents as well as illuminate vertical surfaces using a visually consistent lighting solution. In this way, ARCOS xpert fulfils the desires of many architects for different lighting effects for unique designs. In addition to all the functional advantages offered by a dimmable and lockable spotlight with a cool touch function, ARCOS xpert liteCarve® has, with its light head that can be rotated or pivoted, the advantage of flexibility compared to linear wallwashers.

2 The LED light source
With an outstanding colour rendering of Ra 98 and the super-tight colour tolerance of 1x2-step MacAdam, the innovative Xicato Artist LED module guarantees a consistently high light quality. The liteCarve® spotlight is an ideal member of the ARCOS xpert product group, presenting itself as the perfect solution for holistic lighting concepts.

3 & 4 The optical system
The patented liteCarve® reflector technology is an antidote to the rigid system of existing lighting categories. Why? Because for the first time, a spotlight is able to perfectly illuminate vertical surfaces. This is done by combining a special lens with the unique freeform reflector, which directs all the light from the principal LED point light source, focusing it onto the vertical surfaces.
**ARCOS LED**

**tunableWhite**

**Potential damage**

Museum lighting is often faced with the difficult task to set delicate works of art center stage while protecting them against damage or fading. Here ARCOS LED tunableWhite offers the perfect solution. Individually adjustable colour temperatures modify spectral distribution, i.e. the proportion of short and long wavelengths. This has an influence on the damaging potential of the radiation which the objects are exposed to. Contrasts between warm and cool white are created, selectively directing the viewer’s attention. Additionally, the spectrum of the LED includes almost no radiation in the infrared and ultraviolet ranges. Accordingly, impressive yet gentle illumination of valuable exhibits is possible without any auxiliary filters.

*measured at a distance of 2 m and dimmed to 200 lx

Source: PB289/2010 test report, TU Darmstadt, photometrics department

zumtobel.com/tunableWhite
ARCOS LED tunableWhite

The LED spotlight for dynamic white light colours combines excellent colour rendering qualities (Ra 90) with maximum flexibility. ARCOS LED tunableWhite is based on PiLED technology by Tri-donic: white LEDs with greenish phosphor combined with red and blue LEDs can be controlled with high precision to create highly varied accent lighting. This mix ensures that colour temperatures ranging from 2700 K to 6500 K can be continuously adjusted, while a high level of colour rendering quality is maintained, i.e. colours are not distorted. Adjustments are made either via the DALI control system or directly at the spotlight.

<table>
<thead>
<tr>
<th>Colour rendering index Ra (CRI)</th>
</tr>
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<tbody>
<tr>
<td>100</td>
</tr>
<tr>
<td>90</td>
</tr>
<tr>
<td>80</td>
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<td>60</td>
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<tr>
<td>40</td>
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<tr>
<td>20</td>
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<td>0</td>
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</table>

<table>
<thead>
<tr>
<th>Colour temperature (K)</th>
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<tbody>
<tr>
<td>2500</td>
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<tr>
<td>3000</td>
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<tr>
<td>3500</td>
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<td>4000</td>
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<td>5000</td>
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<td>5500</td>
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<tr>
<td>6000</td>
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<tr>
<td>6500</td>
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</table>
ARCOS 2 LED xpert projection spotlight

Compact expert for sharp outlines

Based on the qualities of the ARCOS 2 xpert spotlight, the equally compact projection spotlight sets the exhibits centre stage to optimum effect – with sharp outlines, uniform light distribution and at the same time low illumination of walls. High flexibility is provided thanks to mechanically adjustable lenses ensuring that the light emitted in parallel is given the required shape.

<table>
<thead>
<tr>
<th>Lighting point height</th>
<th>Diameter</th>
<th>Light intensity</th>
<th>Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 m</td>
<td>0,06 m</td>
<td>2400 lx</td>
<td>0,68 m</td>
</tr>
<tr>
<td>2 m</td>
<td>0,13 m</td>
<td>580 lx</td>
<td>1,40 m</td>
</tr>
<tr>
<td>3 m</td>
<td>0,20 m</td>
<td>250 lx</td>
<td>2,17 m</td>
</tr>
<tr>
<td>4 m</td>
<td>0,27 m</td>
<td>140 lx</td>
<td>2,80 m</td>
</tr>
</tbody>
</table>

Projection

Thanks to the framing spotlight's lens system with adjustable focus, objects and pictures can be illuminated with sharp outlines.
A condenser lens embedded into the rotating front ring focuses the light. The combination with a reflection lens placed directly before the LED board results in a unique lens technology, making sure that light distribution is uniform and light beams are emitted in parallel, providing optimum prerequisites for illumination with sharp outlines using framing covers.

Adjustable lenses and covers can be attached via magnets in the required position. This kind of intuitive handling ensures maximum flexibility. Framing covers and iris diaphragms control the light beam, providing perfect illumination of both rectangular and round exhibits. Custom-fit sizes and distances can be continuously adjusted using the focussing lens.

Rectangular exhibits are illuminated with sharp outlines using a framing cover.

The iris diaphragm allows illumination with circular, sharp outlines.

The focussing lens perfectly adjusts the light beam to the lighting distance and the size of the exhibit.
ARCOS 3 LED projection spotlight

Powerful illumination with sharp outlines

ARCOS 3 LED projection spotlight
Offering precise yet gentle accent lighting, the high-performance spotlight provides for an extraordinary experience at exhibitions. Sharp contrasts and uniform light distribution set exhibits centre-stage, perfectly, whilst at the same time minimising the illumination of walls. The dimming level can be adjusted directly at the spotlight. By doing this the requirements of sensitive exhibits can be taken into account at any time, observing the illuminance levels required under aspects of conservation. The LED framing spotlight can also be fixed along both axes.

Projection
Thanks to the framing spotlight’s lens system with adjustable focus, objects and pictures can be illuminated with sharp outlines.
Front ring
Through adjustable framing covers and iris diaphragms, the front ring allows for individual control of the light beam, showing off both square and circular exhibits to optimum effect. A built-in gobo holder creates ideal prerequisites for extraordinary, creative projections. The front ring is attached to the housing via a twist-and-lock mechanism and can therefore be replaced quickly and easily.

Lenses
The optical structure consists of condenser and objective lenses. They are jointly responsible for uniform light distribution and varying beam angles ranging from 6° to 24°. The easily replaceable lenses make the spotlight extremely flexible. New lighting scenes can be composed quickly. The objective lens additionally serves to individually adjust the focus.

1 Condenser lens
2 Framing cover, iris diaphragm as well as gobo holder
3 Adjustable objective lens

1 The framing cover controls the light beam for square illustrations.
2 The iris diaphragm controls the light beam for circular illustrations.
3 The gobo holder accommodates gobos for sharply outlined gobo projections.

Lenses
Condenser lens
Objective lens

Radiation angles
Superspot: 6°
Spot: 14°
Flood: 24°
ARCOS LED xpert | 22 W | superspot
ARCOS LED wallwasher, linear | 30 W | 620 mm long
**Linear ARCOS wallwasher**

Thanks to a new combination of lens and reflector, the linear ARCOS wallwashers deliver an exceptionally uniform vertical and horizontal illumination of large objects and surfaces. We have eliminated LEDs that are too high and thereby irritating, whilst also increasing the colour rendering to Ra > 90. This means that conservation issues and efficiency considerations can both be taken into account when illuminating objects with heights of up to seven metres. With its two design lengths (320 mm and 620 mm), the wallwasher can be specified to suit any architectural setting. The minimalist look enables the fittings to be tastefully combined with ARCOS LED spotlights. The fact that the luminaire can be dimmed – also via DALI – opens up huge energy-saving potential and allows adjustment to reflect the conservation requirements of specific exhibits.
Light distribution
ARCOS LED wallwasher, linear, Design length: 320 mm
**The high-precision lighting tool**

for every lighting task

<table>
<thead>
<tr>
<th>Superspot (8° to 10°)</th>
<th>Spot/medium spot (11° to 15°)</th>
<th>Flood (22° to 30°)</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Superspot Image" /></td>
<td><img src="image2" alt="Spot/medium spot Image" /></td>
<td><img src="image3" alt="Flood Image" /></td>
</tr>
</tbody>
</table>

The superspot is used for highlighting even the smallest details. The spot emphasises single pictures or object areas. For the illumination of mid-sized objects – often in combination with spots.

<table>
<thead>
<tr>
<th>Wideflood (32° to 40°)</th>
<th>Projection</th>
<th>Wallwashers (liteCarve®)</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image4" alt="Wideflood Image" /></td>
<td><img src="image5" alt="Projection Image" /></td>
<td><img src="image6" alt="Wallwashers Image" /></td>
</tr>
</tbody>
</table>

Larger surfaces are brightened up with the wideflood spot. Also used for backlighting. If a sharply outlined, focusable light point is required, the projection spotlight is the right choice. Wall surfaces or larger pictures can be uniformly illuminated with ARCOS 3 xpert liteCarve®.

**Wallwashers**
*(with asymmetrically linear distribution)*

![Wallwashers Image](image7)

Large wall surfaces are lit brightly and uniformly by the new linear wallwashers.
A major requirement for illumination in museums and exhibitions is perfect, glare-free light. For this purpose, ARCOS uses front rings, special reflectors and a series of high-contrast covers and louvres. For the luminaire to be able to respond flexibly to changing lighting tasks, the optical units can be replaced without the need for any tools.

The perfect coordination of Xicato Artist LED module and optical system results in maximum precision, uniformity and intensity. The colour tolerance is exceptionally narrow and has been defined on the MacAdam ellipse as 1 x 2-step. In addition, the colour rendering of Ra 98 is almost unbeatable. An R9-value of 98 meets the highest requirements placed on museum lighting. Because of the identical spectrum of colours all spotlights from the ARCOS xpert product group fit perfectly together.

**Glare control**

The built-in front ring painted in black ensures glare control and also serves as a holding ring for attachments. Superspot spotlights are fitted with a special high-contrast cover and reflector version.

**Dimmability**

All ARCOS models can be dimmed directly on the luminaire or via a DALI lighting controls system.
In combination with a spot reflector, an oval, soft light cone is created that can be rotated with the accessory holder and, hence, can be matched to the exhibit.

If reduced lighting contrasts are required, soft outline lenses or films are used. In this example, the shadow below the picture frame has a softer quality.

In combination with a spot reflector, an oval, soft light cone is created that can be rotated with the accessory holder and, hence, can be matched to the exhibit.

In combination with a spot reflector, ARCOS xpert produces a soft square lighting cone that can be rotated using the attachment holder and thus aligned to the exhibit on display.

<table>
<thead>
<tr>
<th>ARCOS without any lenses</th>
<th>Soft outline lens</th>
<th>30° oval lens</th>
<th>50° oval lens</th>
<th>55° x 70° square lens</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCOS xpert featuring spot light distribution.</td>
<td>If reduced lighting contrasts are required, soft outline lenses or films are used. In this example, the shadow below the picture frame has a softer quality.</td>
<td>In combination with a spot reflector, an oval, soft light cone is created that can be rotated with the accessory holder and, hence, can be matched to the exhibit.</td>
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**ARCOS 2 LED xpert**

- Superspot
- Spot
- Flood
- Wideflood
- Soft outline lens

**ARCOS 3 LED xpert**

- Superspot
- Ring louvre superspot
- Spot
- Ring louvre spot
- Film
- Flood
- Wideflood
- Soft outline lens
**Intelligent accessories**

for perfect presentations

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### Accessories for Perfect Illumination

<table>
<thead>
<tr>
<th>55° x 70° square lens</th>
<th>30°/50° oval lens</th>
<th>Soft outline lens</th>
<th>Film holder</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCOS xpert featuring spot light distribution and soft outline lens.</td>
<td>This filter neutralises for example an excessively warm colour temperature created by the dimming process. An alternative is dimming with a special dimming filter.</td>
<td>Holders for special films that can be used to create a variety of colour effects and light distribution options are available for all LED reflectors.</td>
<td>The honeycomb mesh provides additional glare control. Combined with a soft outline lens, the uniformity of the lighting cone is maintained. The cross louvre ensures especially efficient glare control. In combination with other lenses, specific lighting tasks can be fulfilled.</td>
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**A variety of accessories. Unbeatable flexibility**

It is considered the most important lighting task in a museum or an exhibition to present an exhibit’s message or shape to optimum effect. In this respect, the effect is often determined by the finest nuances of a material or colour. Due to its large variety of accessories, the ARCOS range provides optimum prerequisites for finding a target-oriented solution to any challenge in just a few simple steps. The following accessories are available for perfect illumination: four lenses, four exchangeable reflectors, a film holder, two special filters, two anti-glare louvres and barn doors. All lenses can be replaced without any tools and combined in a rotating attachment holder. This wide range of accessories makes the ARCOS LED spotlight system the ideal tool for perfect presentation of exhibits: in terms of flexibility as well as when it comes to lighting quality. Encoding of the lenses makes sure that the accessories used will stay in their exact position even after a light source or reflector has been replaced.
Museo del Duomo, Milan | IT
Architecture: Canali Associati s.r.l., Parma | IT
Light planning: Canali Associati s.r.l., Parma | IT
Lighting solution: ARCOS 2 xpert LED spotlight, PANOS infinity LED downlights, TECTON continuous-row lighting system, LINARIA lighting range, LEDLINE lighting channel system, PERLUCE moisture-proof diffuser luminaire
Simple and secure handling
for routine exhibition work
In addition to the many technical possibilities of a spotlight system, one feature is of particular importance for exhibition work: easy, quick and safe handling. Only when the whole range of activities including replacement of accessories and precise adjustment can be carried out effortlessly and reliably is a spotlight system really tried and tested. When the right spotlight position has been found, ARCOS remembers the setting. Both the pivoting and rotating position can be fixed with two allen keys. Even adjustment of the accessories is automatically fixed with a concealed spring clip, as soon as the attachment ring for replacement of reflectors is removed.

“Cool Touch” thanks to perfect thermal management
ARCOS can be handled and positioned at all times. Sophisticated air circulation prevents unpleasant heating up of the housing. This allows not only particularly easy and convenient usage of ARCOS, but also protects lamp and control gear electronics from premature wear.

Fixing of spotlight alignment using allen key

Releasing the bayonet catch

Direct access to the reflector

With an allen key the spotlight can be securely locked to protect against unintentional misalignment.

The attachment ring placed over the twist-and-lock fastener can be removed to enable replacement of the reflector.

A spring catch fixes the reflector to the back of the attachment. This can simply be unlocked and removed.

Quick attachment of lenses via removable accessory holder

Encoded, self-locking accessory holder secures precise lens position

Lens replacement has never been so easy: just remove the accessory holder and insert up to three or four accessories. Then lock the holder back into its position on the attachment ring and the job’s done.

The encoded lenses ensure that the accessories used will stay in their exact position during maintenance.
**Innovative adapter**

As unobtrusive as the spotlight itself

**Adaptor**

With the introduction of the new adapter, ARCOS comes up with another milestone. This connector is the smallest and most unobtrusive in design that is available on the market today. Since the designers managed to relocate the mechanism to the track level, what is visible of the adaptor is its very flat design, emphasising the ARCOS spotlight system’s linear and unobtrusive structure which consistently continues right up to the track. This adaptor concept will also be the basis for all future spotlight systems by Zumtobel.

With it’s minimalist design and dimensions, it is just as impressive with it’s control in the adapter. By using a bilateral parallel locking mechanism situated close to the bracket axis, an extremely high level of stability is obtained. The high-precision mechanism of the movable parts is remarkable. For instance, the phase is now easily selected via a convenient rotary switch, which can also be used during operation. Another innovation is the implementation of the DALI standard into the 3-phase track. Thus, digital lighting control can be effected via an already existing track.

Open adapter  Closed adapter  Rotary switch for phase selection  or with DALI connection

**DALI compatibility**

Depending on the adapters and feeders used, the 3-phase track can be used both as a conventional and a DALI track.
ARCOS LED xpert | 22 W | with soft outline lens
ARCOS
Applications
1 Muséo Galileo, Florence | IT
2 Het Scheepvaartmuseum, Amsterdam | NL
3 Parish church, Lingenau | AT
4 heart – Herning Museum of Contemporary Art, Herning | DK
5 Albertinum, Dresden | DE
6 Lehmann Maupin Gallery, Hong Kong | CN
**First-class lighting quality**

Sophisticated lighting technology creates the optimum conditions for illuminating artistic exhibits with the highest precision. Pinpoint accent lighting and wide-area lighting compositions are brought together in perfect harmony.

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**Gentle staging**

The excellent colour rendering of CRI 98 brings out even the finest of nuances and sets the scene perfectly for different materials. At the same time, the UV-free and IR-free light is gentle on valuable and sensitive exhibits.

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**High-quality overall solution**

The comprehensive portfolio of spotlights, wallwashers and accessories offers endless combinations, helping make sure that the ARCOS range can comfortably respond to the various challenges associated with museum lighting.
# ARCOS LED

LED spotlight system

## Spotlights

<table>
<thead>
<tr>
<th>Ø 100 mm, Ø 120 mm</th>
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## Wallwashers

<table>
<thead>
<tr>
<th>Wallwasher 320 mm, 620 mm</th>
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## Distribution characteristics

<table>
<thead>
<tr>
<th>Superspot</th>
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<table>
<thead>
<tr>
<th>Spot/medium spot</th>
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<table>
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<tr>
<th>Flood</th>
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</table>

<table>
<thead>
<tr>
<th>Wide flood</th>
</tr>
</thead>
</table>

## LED light colour

<table>
<thead>
<tr>
<th>3000 K warm white</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>4000 K neutral white</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>2700–6500 K Tunable White</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Wallwasher</th>
</tr>
</thead>
</table>
**ARCOS 2**

**Shared properties ARCOS 2**

- Countersunk pivot
- Spotlight rotates through 365° and pivots through 90°
- Mains voltage: 220–240 V / 50/60 Hz
- Must be installed in ceiling for use as point outlet
- Luminaire can only be wall-mounted when used with Zumtobel 3-phase universal adapter and wall-mounting bracket

**ARCOS filters and lenses**

Front cylinder with short attachment ring and anti-glare ring
Includes specular reflector, anti-glare ring, and accessory holder to accommodate up to 2 additional filters or lenses.

Front cylinder with cruciform louvre attachment
Includes specular reflector, cruciform louvre, and accessory holder to accommodate up to three additional filters or lenses.

Front cylinder with wallwasher attachment
Includes specular reflector, flood reflector and special lens.

**ARCOS 2 xpert LED Bluetooth**

- [...] LED spotlight "xpert stableWhite" with outstanding colour rendering (LED module: XICATO ARTIST)
- Optimized for efficient and high quality accent lighting in museums, exhibition spaces and art galleries
- Housing made of die-cast aluminium
- Colour: white micro-textured paint
- Front ring provides excellent glare control
- More than one accessory at once can be fitted without tools on the front ring
- Axes of movement can be fixed separately using Allen key
- Dimming of illuminance (0.1–100 %) using rotary potentiometer, fine adjustment via Bluetooth®
- Flicker-free light
- Specular reflector of aluminised PC, highly specular, iridescence-free
- Service life: 50,000 h at 80 % luminous flux
- Colour temperature: 3000 K
  (LED930: warm white)
- Colour rendering: Ra >98 / R9 98
- Luminaire luminous flux up to 800 lm

**3-phase LED spotlight, flood (with universal adapter)**

<table>
<thead>
<tr>
<th>kg</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,5</td>
<td>60 715 074</td>
</tr>
<tr>
<td>1,5</td>
<td>60 715 075</td>
</tr>
</tbody>
</table>

**3-phase LED spotlight, spot (with universal adapter)**

<table>
<thead>
<tr>
<th>kg</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,5</td>
<td>60 715 073</td>
</tr>
<tr>
<td>1,5</td>
<td>60 715 072</td>
</tr>
</tbody>
</table>

**Accessory**

- USB dongle for Bluetooth® programming: 60 700 397
- Replacement reflector, superspot: 60 700 336
- Replacement reflector, spot: 60 700 337
- Replacement reflector, flood: 60 700 338
- Replacement reflector, wideflood: 60 700 339
- Anthracite wall-washer attachment: 60 700 333
- White wall-washer attachment: 60 700 340
- Oval-outline lens 30°: 60 700 109
- Oval-outline lens 50°: 60 700 110
- Oval-outline lens 55 x 70°: 60 700 111
- Soft outline lens: 60 700 342
- Honeycomb louvre, black: 60 700 108
- Anthracite cross-louvre: 60 700 335
- White cross-louvre: 60 700 350
- Anti-glare blades, black: 60 700 116
- Filter holder for film, 2 pieces (4 rings): 60 700 334

For recessed/surface-mounting: please order additional point outlet (see Tracks and Accessories).

Please order additional wall-mounting bracket for wall mounting (see Tracks and Accessories).
ARCOS 2 xpert LED

- LED spotlight “xpert stableWhite” with outstanding colour rendering (LED module: XICATO ARTIST)
- Optimised for efficient and high quality accent lighting in museums, exhibition spaces and art galleries
- Housing made of die-cast aluminium
- Finish: anthracite or white microtextured paint
- Front ring provides excellent glare control
- More than one accessory at once can be fitted without tools on the front ring
- Axes of movement can be fixed separately using Allen key
- Dimming of illuminance 1–100 % using rotary potentiometer or dimmable DALI only
- Specular reflector of aluminised PC, highly specular, iridescence-free
- Service life: 50,000 h at 70 % luminous flux
- Colour temperature: 3000 K (LED930: warm white) or 4000 K (LED940: intermediate)
- Colour rendering: Ra >98 / R9 98
- Luminaire luminous flux up to 850 lm
- Please note: DALI model is only suitable for use with Zumtobel 3-phase/L3+DALI track
- Dalii point-outlet version available on request

### 3-phase LED spotlight, flood (with universal adapter)

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Order no.</th>
<th>kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/23 W LED930 flood, rotary potentiometer</td>
<td>60 714 123</td>
<td>1,5</td>
</tr>
<tr>
<td>1/23 W LED930 wideflood, rotary potentiometer</td>
<td>60 714 124</td>
<td>1,5</td>
</tr>
<tr>
<td>1/23 W LED940 flood, rotary potentiometer</td>
<td>60 714 133</td>
<td>1,5</td>
</tr>
<tr>
<td>1/23 W LED940 wideflood, rotary potentiometer</td>
<td>60 714 134</td>
<td>1,5</td>
</tr>
</tbody>
</table>

### 3-phase LED spotlight, spot (with universal adapter)

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Order no.</th>
<th>kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/23 W LED930 spot, rotary potentiometer</td>
<td>60 714 121</td>
<td>1,5</td>
</tr>
<tr>
<td>1/23 W LED930 superspot, rotary potentiometer</td>
<td>60 714 120</td>
<td>1,5</td>
</tr>
<tr>
<td>1/23 W LED940 spot, rotary potentiometer</td>
<td>60 714 119</td>
<td>1,5</td>
</tr>
<tr>
<td>1/23 W LED940 superspot, rotary potentiometer</td>
<td>60 714 118</td>
<td>1,5</td>
</tr>
</tbody>
</table>

### 3-phase spot (with universal adapter and wallwasher attachment)

- **White anthracite**
  - 1/23 W LED930, rotary potentiometer: 60 714 127, 60 714 126
  - 1/23 W LED940: 60 714 137, 60 714 136

### L3+DALI LED spotlight, flood (including Universal adapter)

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Order no.</th>
<th>kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/30 W LED930 flood, dimmable Dali only</td>
<td>60 714 103</td>
<td>1,5</td>
</tr>
<tr>
<td>1/30 W LED930 wideflood, dimmable Dali only</td>
<td>60 714 104</td>
<td>1,5</td>
</tr>
<tr>
<td>1/30 W LED940 flood, dimmable Dali only</td>
<td>60 714 113</td>
<td>1,5</td>
</tr>
<tr>
<td>1/30 W LED940 wideflood, dimmable Dali only</td>
<td>60 714 114</td>
<td>1,5</td>
</tr>
</tbody>
</table>

### L3+DALI LED spotlight, spot (including Universal adapter)

- **White anthracite**
  - 1/30 W LED930 spot, dimmable Dali only: 60 714 101, 60 714 100
  - 1/30 W LED930 superspot, dimmable Dali only: 60 714 099, 60 714 098
  - 1/30 W LED940 spot, dimmable Dali only: 60 714 111, 60 714 110
  - 1/30 W LED940 superspot, dimmable Dali only: 60 714 109, 60 714 108

### L3+DALI spotlight (including universal adapter and wallwasher attachment)

- **White anthracite**
  - 1/30 W LED930, dimmable Dali only: 60 714 107, 60 714 106
  - 1/30 W LED940, dimmable Dali only: 60 714 117, 60 714 116

### Accessory

- Replacement reflector, superspot: 60 700 336
- Replacement reflector, spot: 60 700 337
- Replacement reflector, flood: 60 700 338
- Replacement reflector, wideflood: 60 700 339
- Anthracite wall-washer attachment: 60 700 333
- White wall-washer attachment: 60 700 349
- Oval-outline lens 30°: 60 700 340
- Oval-outline lens 50°: 60 700 341
- Oval-outline lens 55 x 70°: 60 700 342
- Soft outline lens: 60 700 343
- Honeycomb louvre, black: 60 700 108
- Anthracite cross-louvre: 60 700 335
- White cross-louvre: 60 700 340
- Anti-glare blades, black: 60 700 116
- Filter holder for film, 2 pieces (4 rings): 60 700 334

For recessed/surface-mounting:
- please order additional point outlet (see Tracks and Accessories).
- Please order additional wall-mounting bracket for wall mounting (see Tracks and Accessories).
ARCOS xpert LED projection

- LED spotlight (optical bank) with stabilised colour temperature “xpert stable White”
- Applications with high ceiling mounting
- Optimum accent lighting for museums, exhibitions, art galleries and sales and showroom areas
- Projection elements consist of stray-light shield, lens and iris or framing attachment
- Iris model provides sharp-edged and high-contrast circular illumination; intuitive adjustment of aperture via iris diaphragm
- Framing attachment model for sharp-edged, high-contrast and rectangular illumination of surfaces
- Front cylinder (optic) is fixed to rear housing with twist-and-lock mechanism
- Simple handling of accessories: replaceable framing attachment and iris
- Housing made of extruded aluminium section and die-cast aluminium
- Finish: anthracite or white microtextured paint
- Axes of movement can be fixed using Allen key supplied
- Dimming of illuminance 1–100 % using rotary potentiometer or dimmable DALI only
- Service life: 50,000 h at 70 % luminous flux
- Colour temperature:
  - 3000 K (LED930: warm white) or 4000 K (LED940: intermediate)
- Colour rendering index: Ra > 90
- Colour tolerance: SDCM 2 initial, LED PCBs premium-selected
- Luminaire luminous flux up to 800 lm
- Please note: DALI model is only suitable for use with Zumtobel 3-phase/L3+DALI track
- DALI point-outlet version available on request

<table>
<thead>
<tr>
<th>3-phase LED spotlight (with universal adapter)</th>
<th>kg</th>
<th>Order no.</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/16 W LED930 Projection with framing attachment, rotary potentiometer</td>
<td>2,2</td>
<td>60 714 146</td>
<td>60 714 147</td>
</tr>
<tr>
<td>1/16 W LED930 Projection with iris, rotary potentiometer</td>
<td>2,1</td>
<td>60 714 138</td>
<td>60 714 139</td>
</tr>
<tr>
<td>1/16 W LED940 Projection with framing attachment, rotary potentiometer</td>
<td>2,2</td>
<td>60 714 148</td>
<td>60 714 149</td>
</tr>
<tr>
<td>1/16 W LED940 Projection with iris, rotary potentiometer</td>
<td>2,1</td>
<td>60 714 140</td>
<td>60 714 141</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>L3+DALI LED spotlight (including Universal adapter)</th>
<th>white</th>
<th>anthracite</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/16 W LED930 Projection with framing attachment, dimmable DALI only</td>
<td>2,2</td>
<td>60 714 150</td>
</tr>
<tr>
<td>1/16 W LED930 Projection with iris, dimmable DALI only</td>
<td>2,1</td>
<td>60 714 142</td>
</tr>
<tr>
<td>1/16 W LED940 Projection with framing attachment, dimmable DALI only</td>
<td>2,2</td>
<td>60 714 152</td>
</tr>
<tr>
<td>1/16 W LED940 Projection with iris, dimmable DALI only</td>
<td>2,1</td>
<td>60 714 144</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Accessory</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Framing attachment, anthracite</td>
<td>60 700 364</td>
</tr>
<tr>
<td>Framing attachment, white</td>
<td>60 700 362</td>
</tr>
<tr>
<td>Iris, anthracite</td>
<td>60 700 362</td>
</tr>
<tr>
<td>Iris, white</td>
<td>60 700 361</td>
</tr>
</tbody>
</table>

For recessed/surface-mounting: please order additional point outlet (see Tracks and Accessories).
Please order additional wall-mounting bracket for wall mounting (see Tracks and Accessories).
Countersunk pivot
Spotlight rotates through 365° and pivots through 90°
Mains voltage: 220–240 V / 50/60 Hz
Must be installed in ceiling for use as point outlet

**ARCOS 3 xpert LED Bluetooth®**

- "xpert stableWhite" LED spot with stabilized colour temperature
- Optimized for efficient and high quality accent lighting in museums, exhibition spaces and art galleries
- Applications with high ceiling mounting
- Combination of precision reflectors and specially designed lenses enables precise, homogeneous light distribution characteristics
- Housing made of die-cast aluminium
- Colour: white micro-textured paint
- Front ring provides excellent glare control
- More than one accessory at once can be fitted without tools on the front ring
- Axes of movement can be fixed separately using Allen key
- Dimming of illuminance (0.1–100 %) using rotary potentiometer, fine adjustment via Bluetooth®
- Flicker-free light
- Specular reflector (SSP/SP/MSP): PC reflector, aluminized, highly reflective, iridescence-free, louvre (SSP/SP) and film
- Specular reflector (FL/WFL): PC reflector, aluminized, highly reflective, iridescence-free with glass cover
- Service life: 50,000 h at 80 % luminous flux
- Colour temperature: 3000 K (LED930: warm white)
- Colour rendering: Ra 9.95
- Colour tolerance: SDCM 1–2 initial up to 40,000 hrs., LED PCBs premium-selected
- Luminaire luminous flux to 2000 lm
- Luminaire efficiency: 55 lm/W
- Luminaire can only be wall-mounted when used with Zumtobel 3-phase universal adapter and wall-mounting bracket

### 3-phase LED spotlight, flood (with universal adapter)

<table>
<thead>
<tr>
<th>Order no.</th>
<th>kg</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>60 715 069</td>
<td>2.3</td>
<td>1/35 W LED930 flood, rotary potentiometer/Bluetooth®</td>
</tr>
<tr>
<td>60 715 070</td>
<td>2.3</td>
<td>1/35 W LED930 wideflood, rotary potentiometer/Bluetooth®</td>
</tr>
</tbody>
</table>

### 3-phase LED spotlight, spot (with universal adapter)

<table>
<thead>
<tr>
<th>Order no.</th>
<th>kg</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>60 715 068</td>
<td>2.3</td>
<td>1/35 W LED930 spot, rotary potentiometer/Bluetooth®</td>
</tr>
<tr>
<td>60 715 067</td>
<td>2.3</td>
<td>1/35 W LED930 superspot, rotary potentiometer/Bluetooth®</td>
</tr>
</tbody>
</table>

**Accessory**

- USB dongle for Bluetooth® programming 60 700 397
- Replacement reflector, superspot 60 700 357
- Replacement reflector, spot 60 700 358
- Replacement reflector, medium spot 60 700 367
- Replacement reflector, flood 60 700 359
- Replacement reflector, wideflood 60 700 368
- Oval-outline lens 50° 60 700 132
- Oval-outline lens 55 x 70° 60 700 133
- Soft outline lens 60 700 130
- Softener film (filter holder + film) 60 700 366
- Filter holder, 2 pieces (4 rings) 60 700 360
- Honeycomb louvre, black 60 700 129

For recessed/surface-mounting:

- please order additional point outlet (see Tracks and Accessories).
- Please order additional wall-mounting bracket for wall mounting (see Tracks and Accessories).
ARCOS 3

ARCOS 3 xpert LED

- “xpert stableWhite” LED spot with stabilized colour temperature
- Optimized for efficient and high quality accent lighting in museums, exhibition spaces and art galleries
- Applications with high ceiling mounting
- Combination of precision reflectors and specially designed lenses enables precise, homogeneous light distribution characteristics
- Housing made of die-cast aluminium
- Finish: anthracite or white microtextured paint
- Front ring provides excellent glare control
- More than one accessory at once can be fitted without tools on the front ring
- Axes of movement can be fixed separately using Allen key
- Dimming of illuminance 1–100 % using rotary potentiometer or dimmable DALI only
- Specular reflector (SSP/SP/MSP): PC reflector, aluminized, highly reflective, iridescence-free, louvre (SSP/SP) and film
- Specular reflector (FL/WFL): PC reflector, aluminized, highly reflective, iridescence-free with glass cover
- Service life: 50,000 h at 70 % luminous flux
- Colour temperature: 3000 K (LED930: warm white) or 4000 K (LED940: intermediate)
- Colour rendering index: Ra > 98
- Colour tolerance: SDCM 1–2 initial - up to 40,000 h, LED PCBs premium-selected
- Luminaire luminous flux to 2000 lm
- Luminaire efficiency: 55 lm/W
- Please note: DALI model is only suitable for use with Zumtobel 3-phase/L3+DALI track
- Dali point-outlet version available on request
- Luminaire can only be wall-mounted when used with Zumtobel 3-phase universal adapter and wall-mounting bracket

<table>
<thead>
<tr>
<th>3-phase LED spotlight, flood (with universal adapter)</th>
<th>Order no.</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/35 W LED930 flood, rotary potentiometer</td>
<td>2,2</td>
<td>60 713 214  60 713 215</td>
</tr>
<tr>
<td>1/35 W LED930 wideflood, rotary potentiometer</td>
<td>2,2</td>
<td>60 713 216  60 713 217</td>
</tr>
<tr>
<td>1/35 W LED940 flood, rotary potentiometer</td>
<td>2,2</td>
<td>60 713 222  60 713 223</td>
</tr>
<tr>
<td>1/35 W LED940 wideflood, rotary potentiometer</td>
<td>2,2</td>
<td>60 713 224  60 713 225</td>
</tr>
</tbody>
</table>

For recessed/surface-mounting: please order additional point outlet (see Tracks and Accessories).
Please order additional wall-mounting bracket for wall mounting (see Tracks and Accessories).
ARCOS 3
ARCOS 3 LED (tunableWhite)

- Ideal for accent lighting in museums, exhibitions, art galleries and sales and display areas
- Housing made of extruded aluminium section and die-cast aluminium
- Finish: anthracite or white microtextured paint
- Axes of movement can be fixed separately using Allen key
- Colour temperature can be continuously adjusted at the spotlight from warm white to daylight white (momentary-action switch/ rotary pot model)
- Colour temperature can be adjusted from warm white to daylight white via DALI signal (DT8 2010 DALI system)
- Electronically stabilised colour temperature over the entire service life
- Illuminance adjustment: 15–100 % (DALI signal, momentary-action switch/rotary potentiometer)
- Service life: 50 000 h at 70 % luminous flux
- Colour rendering index: Ra 90
- Luminous flux up to 780 lm at 2700 K
- Please note: DALI model is only suitable for use with Zumtobel 3-phase/L3+DALI track
- Dali point-outlet version available on request
- Luminaire can only be wall-mounted when used with Zumtobel 3-phase universal adapter and wall-mounting bracket

<table>
<thead>
<tr>
<th>3-phase LED spotlight, flood (with universal adapter)</th>
<th>kg</th>
<th>Order no.</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/28 W LED927–965 flood, momentary action switch/ rotary potentiometer</td>
<td>2,2</td>
<td>60 712 850</td>
<td>60 712 849</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3-phase LED spotlight, spot (with universal adapter)</th>
<th>kg</th>
<th>Order no.</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/28 W LED927–965 spot, momentary action switch/ rotary potentiometer</td>
<td>2,2</td>
<td>60 712 852</td>
<td>60 712 851</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>L3+DALI LED spotlight, flood (including Universal adapter)</th>
<th>kg</th>
<th>Order no.</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/28 W LED927–965 flood, dimmable Dali only</td>
<td>2,2</td>
<td>60 712 333</td>
<td>60 712 335</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>L3+DALI LED spotlight, spot (including Universal adapter)</th>
<th>kg</th>
<th>Order no.</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/28 W LED927–965 spot, dimmable Dali only</td>
<td>2,2</td>
<td>60 712 332</td>
<td>60 712 334</td>
</tr>
</tbody>
</table>

**Accessory**
- Anti-glare blades, black | 60 700 137
- Oval-outline lens 50° | 60 700 132
- Replacement reflector, flood | 60 700 292
- Replacement reflector, spot | 60 700 291
- Soft outline lens | 60 700 130

For recessed/surface-mount installation, please order additional point outlet (see Tracks and Accessories).
For wall-installation, please order additional wall-mounting bracket (see Tracks and Accessories).

---

**Beam Data**

**FLOOD**
- Beam Diameter = 798 lm
- Half beam angle = 2x18°
- LOR = 100%
- Average illuminance at 850°C
  - 4 m: 94 lux
  - 2.53 m: 167 lux
  - 2 m: 376 lux
  - 1 m: 1505 lux

**SPOT**
- Beam Diameter = 758 lm
- Half beam angle = 2x13°
- LOR = 100%
- Average illuminance at 850°C
  - 4 m: 228 lux
  - 2.53 m: 317 lux
  - 2 m: 249 lux
  - 1 m: 120 lux
- optimum accent lighting for museums, exhibitions, art galleries and sales and showroom areas
- LED spotlight with optical bank
- Designed for precise, sharp-focused projection of a light field
- Projection elements comprise condenser lens, objective lens, diffuser lens, spherical lens and iris or framing attachment or reflector
- Iris model provides sharp-edged and high-contrast circular illumination; intuitive adjustment of aperture via iris diaphragm
- Framing attachment model for sharp-edged, high-contrast and rectangular illumination of surfaces
- Front lens adjusts the sharpness
- Front cylinder (optic) is fixed to rear housing with twist-and-lock mechanism
- Easy-to-use accessories: condenser lens, objective lens, diffuser lens, spherical lens, iris, framing attachment and reflector can be interchanged with other accessory units
- Housing made of extruded aluminium section and die-cast aluminium
- Finish: anthracite or white microtextured paint
- Axes of movement can be fixed using Allen key supplied
- Service life: 50,000 h at 70 % luminous flux
- Colour temperature: 3000 K (LED930: warm white)
- Colour rendering index: Ra 90
- Rotary potentiometer provides 10–100 % illuminance adjustment
- Mount for gobos, lenses and irises available as optional accessory
- Fully assembled spot with mount for gobos or mount with ring on request
- Wall-mounting not permissible

### 3-phase LED spotlight, flood (with universal adapter)

<table>
<thead>
<tr>
<th>Light Source</th>
<th>Order no.</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/25 W LED930 flood (25°), framing-attachment projection</td>
<td>3,8 60 713 957</td>
<td>60 713 963</td>
</tr>
<tr>
<td>1/25 W LED930 flood (25°), iris projection</td>
<td>3,8 60 713 960</td>
<td>60 713 966</td>
</tr>
</tbody>
</table>

### 3-phase LED spotlight, spot (with universal adapter)

<table>
<thead>
<tr>
<th>Light Source</th>
<th>Order no.</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/25 W LED930 spot (14°), framing-attachment projection</td>
<td>3,8 60 713 956</td>
<td>60 713 962</td>
</tr>
<tr>
<td>1/25 W LED930 spot (14°), iris projection</td>
<td>3,8 60 713 959</td>
<td>60 713 965</td>
</tr>
<tr>
<td>1/25 W LED930 superspot (6°), framing-attachment projection</td>
<td>3,8 60 713 955</td>
<td>60 713 961</td>
</tr>
<tr>
<td>1/25 W LED930 superspot (6°), iris projection</td>
<td>3,8 60 713 958</td>
<td>60 713 964</td>
</tr>
</tbody>
</table>

### Accessory

<table>
<thead>
<tr>
<th>Accessory</th>
<th>Order no.</th>
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<tbody>
<tr>
<td>Condenser lens 14°/25°</td>
<td>60 700 296</td>
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<tr>
<td>Condenser lens 6°</td>
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<tr>
<td>Framing attachment, anthracite</td>
<td>60 700 287</td>
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<tr>
<td>Framing attachment, white</td>
<td>60 700 265</td>
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<tr>
<td>Iris, anthracite</td>
<td>60 700 286</td>
</tr>
<tr>
<td>Iris, white</td>
<td>60 700 264</td>
</tr>
<tr>
<td>Lens set, flood (25°)</td>
<td>60 700 285</td>
</tr>
<tr>
<td>Lens set, spot (14°)</td>
<td>60 700 284</td>
</tr>
<tr>
<td>Lens set, superspot (6°)</td>
<td>60 700 283</td>
</tr>
<tr>
<td>Mount for gobos, anthracite</td>
<td>60 700 288</td>
</tr>
<tr>
<td>Mount for gobos, white</td>
<td>60 700 266</td>
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<tr>
<td>Objective lens 25°, black</td>
<td>60 700 294</td>
</tr>
<tr>
<td>Objective lens 14°/25°, black</td>
<td>60 700 292</td>
</tr>
</tbody>
</table>

Gobos available as custom-made item on request.
ARCOS 3 xpert LED WW liteCarve®

- LED wallwasher spotlight with stabilised colour temperature “xpert stableWhite” (LED module: XICATO ARTIST)
- Optimised for the high quality vertical lighting of surfaces and objects in museums, exhibition spaces and art galleries
- Use up to 4.5 m height ceiling mounting
- Lamp unit: Zumtobel patented liteCarve® free-form reflector technology in combination with a special lens for uniform light distribution on surfaces
- From an LED point light source, the liteCarve® reflector guides the light 100% indirectly, targeted and without stray light onto the vertical surface
- Housing made of die-cast aluminium
- Finish: anthracite or white microtextured paint
- Front ring provides excellent glare control
- Axes of movement can be fixed separately using Allen key
- Dimming of illuminance 1–100 % using rotary potentiometer or dimmable DALI only
- Specular reflector of aluminised PC, highly specular, iridescence-free
- Service life: 50,000 h at 70 % luminous flux
- Colour temperature: 3000 K (LED930: warm white) or 4000 K (LED940: intermediate)
- Colour rendering: Ra 995
- Colour tolerance: SDCM ≤2
- Luminaire luminous flux up to 1400 lm
- Luminaire efficiency: 40 lm/W
- Please note: DALI model is only suitable for use with Zumtobel 3-phase/L3+DALI track
- Dali point-outlet version available on request
- BLE control on request

3-phase LED spot unit (with universal adapter) kg Order no. white anthracite
1/35 W LED930, rotary potentiometer 2.5 60 714 705 60 714 706
1/35 W LED930, rotary potentiometer/Bluetooth® 2.5 60 715 071
1/35 W LED940, rotary potentiometer 2.5 60 714 707 60 714 708
L3+DALI LED spotlight, dimmable Dali only (including Universal adapter) kg Order no. white anthracite
1/35 W LED930, dimmable Dali only 2.5 60 714 709 60 714 710
1/35 W LED940, dimmable Dali only 2.5 60 714 711 60 714 712

Accessory
USB dongle for Bluetooth® programming 60 700 397

With recessing/surface-mounting: order additional point outlet (see Tracks and Accessories).
**ARCOS WW LED asymmetric**

- LED linear wallwasher spotlight with stabilised stableWhite colour temperature in following models: short (14 W) and long (28 W)
- Optimised for efficient and uniform lighting of vertical wall surfaces up to 7 m in height, and objects in museums, exhibitions and art galleries
- Asymmetric specular reflector made of high-grade aluminium in anodised silver-look finish; designed specifically for the LED module
- Spotlight design delivers excellent glare control, with no direct view of LED light source
- Housing made of extruded aluminium section with die-cast aluminium end faces
- Finish: anthracite or white microtextured paint
- Spotlight unit can tilt through ±15° and the 14 W model can pivot through 365°
- With polycarbonate protective panel
- 5 to 100 % illuminance adjustment possible using rotary potentiometer or dimmable Dali only
- Service life: 50,000 h at 80 % luminous flux
- Colour temperature: 3000 K (LED930: warm white) or 4000 K (LED940: intermediate)
- Colour rendering index: Ra > 90
- Colour tolerance: MacAdam 3
- Luminaire luminous flux: up to 1000 lm (14 W) or up to 2000 lm (28 W)
- Mains voltage: 220–240 V / 50/60 Hz
- Wall-mounting not permissible
- Suitable for point outlet (14 W model)
- Please note: DALI model is only suitable for use with Zumtobel 3-phase/L3+DALI track

### 3-phase LED spotlight (with universal adapter)

<table>
<thead>
<tr>
<th>Model</th>
<th>Luminous Flux (lm)</th>
<th>Colour Temperature</th>
<th>Colour Rendering Index</th>
<th>Service Life (h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/14 W LED930</td>
<td>1000</td>
<td>3000 K</td>
<td>&gt;90</td>
<td>50,000</td>
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<tr>
<td>1/28 W LED930</td>
<td>2000</td>
<td>4000 K</td>
<td>&gt;90</td>
<td>50,000</td>
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### L3+DALI spotlight (with Universal adapter)

<table>
<thead>
<tr>
<th>Model</th>
<th>Luminous Flux (lm)</th>
<th>Colour Temperature</th>
<th>Colour Rendering Index</th>
<th>Service Life (h)</th>
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</thead>
<tbody>
<tr>
<td>1/14 W LED930</td>
<td>1000</td>
<td>3000 K</td>
<td>&gt;90</td>
<td>50,000</td>
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<tr>
<td>1/28 W LED930</td>
<td>2000</td>
<td>4000 K</td>
<td>&gt;90</td>
<td>50,000</td>
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### Order Information

<table>
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<tr>
<th>Model</th>
<th>Colour</th>
<th>Order No.</th>
<th>Order No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/14 W LED930</td>
<td>white</td>
<td>60 714 562</td>
<td>60 714 561</td>
</tr>
<tr>
<td>1/28 W LED930</td>
<td>white</td>
<td>60 714 564</td>
<td>60 714 563</td>
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<tr>
<td>1/14 W LED940</td>
<td>white</td>
<td>60 714 566</td>
<td>60 714 565</td>
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<tr>
<td>1/28 W LED940</td>
<td>white</td>
<td>60 714 569</td>
<td>60 714 568</td>
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<tr>
<td>1/14 W LED930</td>
<td>anthracite</td>
<td>60 714 570</td>
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<td>anthracite</td>
<td>60 714 572</td>
<td>60 714 573</td>
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<td>1/14 W LED940</td>
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<td>60 714 574</td>
<td>60 714 575</td>
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<tr>
<td>1/28 W LED940</td>
<td>anthracite</td>
<td>60 714 576</td>
<td>60 714 577</td>
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</tbody>
</table>
Zumtobel, a company of the Zumtobel Group, is an internationally leading supplier of integral lighting solutions for professional indoor and outdoor building lighting applications.

We provide unique customer benefits by integrating technology, design, emotion and energy efficiency. We combine the best possible ergonomic lighting quality for an individual’s well-being with the responsible use of energy resources. The company’s own sales organisations in twenty countries, as well as commercial agencies in fifty other countries, form an international network of experts and design partners providing professional lighting consulting, design assistance and comprehensive services.

**Lighting and sustainability**

In line with our corporate philosophy “We want to use light to create worlds of experience, make work easier and improve communications and safety while remaining fully aware of our responsibility to the environment”, Zumtobel offers energy-efficient high-quality products, while at the same time making sure that our production processes based on the considerate use of resources are environmentally compatible.

zumtobel.com/sustainability

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Top quality – with a five-year guarantee.
As a globally leading luminaire manufacturer, Zumtobel provides a five year manufacturer’s guarantee on all Zumtobel branded products in accordance with the terms of guarantee at zumtobel.com/guarantee.

Order no 04 900 313-EN 11/17 © Zumtobel Lighting GmbH
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