You See®

Innovation. Original.

Made in Germany
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**LUMOTEC IQ Cyo T**
**IXON IQ Speed** (50 Lux)

**With light at close range**
Standard performance, required by German road traffic regulations, StVZO. Standard halogen headlamp.

**IXON Pure B**
**LUMOTEC Lyt B**

**LUMOTEC IQ Cyo R**
**LUMOTEC IQ Fly T**

**IXON Pure**
**LUMOTEC Lyt T**

**LUMOTEC IQ Speed** (50 Lux)
**IXON IQ**

**40 Lux**
**60 Lux**

**LUXOS**

**10 Lux**

**15 Lux**

**30 Lux**

**40 Lux**

**70 Lux**

**40 Lux**
With light at close range
Idea, technology and design - products by Busch & Müller are always created, perfected and manufactured in house. All headlights and rear lights shown in this catalogue are originals - unmistakable in both excellent performance and perfect workmanship.

Busch & Müller is the leading brand for bicycle lighting. All ground breaking innovations such as standlight, IQ light technology, daytime running light and much more originate here. The production facility of the family owned enterprise has always been in Meinerzhagen, Germany, from its founding in 1925 up until current day.
Driving with daytime running light means better being seen by other traffic participants. Especially for bicycles, who are by nature less conspicuous in traffic, daytime running light is a substantial advantage. LICHT24, the daytime running light from Busch & Müller, offers this added safety around the clock.

Additional signalling LEDs shine upwards and fulfil the warning function.

The complete reflective surface is used to focus and guide the light. To that end, a special reflector was developed – if one looks into the reflector of an IQ headlight, one only sees the metalised surface. Once the headlight is turned on, what takes its place is “nothing but light”.

LICHT24 – daytime running light. Better seeing and being seen

Everybody who has ever been cycling at night, using an LED IQ headlight to light his or her way, will never want to do without the comfort this outstanding light output provides. At its core is the revolutionary idea not to have the LED light source in the centre of the reflector.

Driving with daytime running light means better being seen by other traffic participants. Especially for bicycles, who are by nature less conspicuous in traffic, daytime running light is a substantial advantage. LICHT24, the daytime running light from Busch & Müller, offers this added safety around the clock.

The “regular” riding light is focused on the road and limited by its clearly defined light/dark boundary to prevent glaring oncoming traffic.

Daytime running light is an innovation by Busch & Müller. LICHT24 is only available in headlights of the LUMOTEC series. All models marked with a T as well as the new LUXOS are equipped with it.
Conventional technology. This is how headlights have functioned for decades: A light source sits in the centre of the reflector. The result: stray light and loss of efficiency.

IQ technology. Nothing but light. The light revolution from Busch & Müller: A special reflector with an optimised cooling system uses one high output LED as an indirect light source. No LED is to be seen in the centre of the reflector. This creates a field of light that is extremely homogenous, which can be twice as wide as the one created by conventional technology. Lighting effects can be aligned much more precisely - for example the area directly in front of the bicycle can be lit.

IQ2 technology. The evolution. The IQ technology of the next generation: position of the light source and reflector, LED and cooling have been optimised drastically. Using a prism, the light yield and efficiency are raised decisively. Additional LEDs combined with an electronic control system make “dynamic light” possible, perfectly adjusted to the individual riding situation. A dynamo powered headlight thus creates a field of light, larger by a wide margin and more homogenous than ever. The world's first headlight with IQ2 technology is called LUXOS (see p. 8).

LICHT24. The functions
There are two modes: day and night. They provide optimal light output, adjusting to current lighting situations. A light/dark sensor automatically switches between day and night mode.

Regular headlight without daytime running light.

LICHT24 headlight in day mode. For better being seen by other traffic participants. The daytime running light (signalling LEDs) shines maximally bright, the riding light directed at the road is dimmed. Also approved for night time use (by German road traffic regulations).

LICHT24 headlight in night mode. For a maximum lighting of the road. The riding light shines at full capacity (30/40/70/90 Lux). The signalling LEDs are dimmed.
Lux and light field

Busch & Müller states the light output of headlights using the unit Lux. A Lux value provides the illumination level in relation to its distance from the light source - it is exactly this relation which is a deciding factor when considering a headlight, because it states the amount of light on the road. The value Lumen states how much light exits the headlight at the light source and it cannot be told whether that light shines onto the road or is lost as stray light. However, even Lux is an incomplete value when talking about the output of a headlight.

Also important is the quality of the light field which is created on the road. Its width, depth, homogeneity as well as its glare free light/dark boundary directly affect how it is perceived by the observing eye. All those qualities cannot be stated using measured data. This means: Only when one looks at the light field as a whole, the true quality of a headlight can be appraised.

With standlight

This innovation presented by Busch & Müller in the nineties has become a safety standard. The affix “plus” means that the product is equipped with standlight. For this function, no batteries are necessary. It works this way: As soon as the bicycle stops, the standlight is powered by a maintenance free capacitor. This capacitor is charged during the ride. By the way: The standlight of a LUMOTEC headlight can shine for many minutes. Therefore, the standlight of IQ headlights can be deactivated manually – so as not to attract thieves to a parked bicycle.

With sensor automatic

If a LUMOTEC headlight has the affix “senso”, it activates automatically when cycling during dusk or darkness and switches off when subjected to daylight. Continuous energy supply by a hub dynamo is required for this function. In order for the headlight to not mistakenly react to car headlights, the sensor functions with a time delay. The sensor function can be deactivated.

In headlights equipped with daytime running light, the sensor automatically switches between day and night mode.

Pictured left. Lumotec Lyt B. Basic LED headlight with 15 Lux. This value exceeds the requirements of German road traffic regulations by 50%.

Pictured centre. 40 Lux created with LED-IQ-TEC. The revolutionary technology offers a wide and homogenous light field. The road is lit directly in front of the bicycle as well as in the distance. The edge of the road can clearly be seen to the right.

Pictured right. Dynamo powered headlight LUXOS with IQ2 technology, creating a superior light field. It shines extremely homogenously and is as wide as the entire road. For the cyclist, this means maximum safety – he can see his immediate surroundings as well as the road in 30 metres distance clearly and precisely.

Pictured above. Improved standlight in combination with daytime running light. LIGHT24 signalling LEDs overtake the standlight function (model Cyo pictured). The advantage: The standlight is not directed onto the road, but rather upwards, directed at oncoming traffic participants.

Pictured below. When the headlight is switched to “S”, the light sensor is active. Set to “1”, the headlight is activated permanently, disabling the sensor.
Light at close range

For a secure ride, it is important to be able to see the road directly in front of the bicycle. Bumps or potholes in the road can be seen better if this area is lit, and can be circumnavigated by short and intuitive steering. During darkness, this is only possible if the area between one and four metres in front of the bicycle is lit brightly and homogenously. Subjectively, the need for light at close range is higher the slower one is riding, because one's balance can more easily be influenced by obstacles.

This catalogue contains headlights whose light output is specially directed into the area just ahead of the bicycle, this is called “light at close range”.

By the way: The new LUMOTEC LUXOS with its IQ2 technology offers a whole new dimension when it comes to light at close range (see p. 8).

Approved by German road traffic regulations

German road traffic regulations (StVZO) stipulate that if a bicycle is to participate in road traffic, it must among other things be equipped with a headlight offering a light output of at least 10 Lux, as well as a rear light, both of which have to be powered by a dynamo. Racing cycles that weigh no more than 11 kg are an exception: They may participate in traffic using specially approved, battery powered lights (current state of affairs).

All headlights and rear lights shown in this catalogue comply with StVZO regulations and carry the relevant approval marks.
The first LUMOTEC with IQ2 technology. Gigantic output. New features. Light delight has never been greater.

- **IQ2 technology**
  With a new light and reflector design, Busch & Müller raises the bar for dynamo powered LED headlights: 70 Lux (e-bike version 140 Lux), light field twice as wide as previous LED headlights, lights an area that is several times larger, maximally homogenous. Dynamo powered light enters a new dimension - so wide, so far, so pristinely bright.

- **Panorama light at close range**
  The light field is as excellent and wide as never before: directly in front of the bicycle and also to its side, beyond the edge of the road. Technology: additional LEDs, controlled electronically.

- **Flood light**
  Full output of all light sources. Ideal for navigating tricky road sections in pitch darkness. Activated by push button. Push button during the day: flashing headlight. During darkness while standing still: full light.

The LUXOS offers maximum safety: The full width of the road is illuminated. The light field is immaculately bright and homogenous - ranging from directly in front of the bicycle until over 30 metres distance!
LUXOS E for fast e-bikes, switchable between 60/140 Lux.

Twin cooling element.

Clip on rear reflector (StVZO), Type 479R

LUXOS B
Basic version with IQ2 technology, LICHT24, sensor automatic and standlight.

LUXOS U
Unique. The definite version of the LUXOS. Equipped with all features.

LUXOS E
140 Lux with an even wider light area. The LUXOS E uses the vehicle’s battery and literally “outshines everything”.

USB charging option
USB socket integrated in handlebar push button. Charges USB devices (mobile phone, GPS, MP3 player) with USB energy. An integrated lithium cache battery supplies constant voltage.

Handlebar push button
Now you control your light directly. All important light functions can be switched on the handlebar: ON/OFF, floodlight, flashing headlight etc.

Integrated lithium cache battery
This additional energy storage unit is used for peaks of demand as well as charging. Recharges continually when cycling. The charging status is indicated by an LED inside the handlebar button.

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<th>179U</th>
<th>179E</th>
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<td>LICHT24. Daytime running light</td>
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All versions approved by German road traffic regulations or with E mark of approval.

LUXOS B Basic version with IQ2 technology, LICHT24, sensor automatic and standlight.

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LICHT24. Daytime running light
Signalling LEDs shining brightly forward. A sensor automatic switches automatically between day and night mode.

Standlight
Automatic. Special LEDs are directed so they are perceived by other traffic participants. Can be switched off with the handlebar push button.

Rear light monitoring
A control LED inside the headlight continually shows whether or not a connected rear light functions properly.

Aluminium cooling element, glossy piano lacquer.

Integrated into the “forehead” with reflectors of their own: additional LEDs for panorama light at close range and LICHT24.

Hidden inside the “head”, more efficient than ever: the IQ2 LED technology.

Model | 179B | 179U   | 179E   |
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The LUXOS E for fast e-bikes, switchable between 60/140 Lux. Twin cooling element. Clip on rear reflector (StVZO), Type 479R.
LUMOTEC IQ Cyo®

The smallest of the high output dynamo powered headlights from Busch & Müller: compact, elegant, dynamic. Its classically puristic shape is one of the reasons for the huge success of the Cyo. Another reason is the IQ technology’s formidable performance spectrum which is housed in a minimalist casing. Many versions for virtually all different purposes. Approved by German road traffic regulations.

Design
The high output LED’s temperature is kept in check by distinctive cooling fins, which add to the sportive appeal. Mounting bracket and screw made from stainless steel compound the high quality appearance.

LUMOTEC IQ Cyo T

The version offering the maximum safety. With daytime running light LICHT24: Four additional signalling LEDs shine beneath the main IQ LED. The switching options: Off, Day or Senso for automatic change between day and night mode. The standlight function is fulfilled by two signalling LEDs.

- LICHT24. Daytime running light
- LED IQ-TEC
- 60 Lux
- 40 Lux with light at close range
- Standlight & sensor automatic

LUMOTEC IQ Fly®

The elegant high output dynamo powered headlight from Busch & Müller: Its idiosyncratic and spirited shape makes bicycle lighting appear light and friendly. Much copied, never equalled in its confidence. Approved by German road traffic regulations.

Design
The headlight’s range can easily be adjusted by tilting the Fly’s head – it firmly and precisely locks into the chosen position! Mounting bracket and screw made of stainless steel, rear switch.

LUMOTEC IQ Fly T

Elegance plus maximum safety. With daytime running light LICHT24: Six additional signalling LEDs shine beneath the main IQ LED and substantially enhance attention for other traffic participants. IQ-TEC light output with 40 Lux and light at close range.

- LICHT24. Daytime running light
- LED IQ-TEC
- 40 Lux
- 40 Lux with light at close range
- Standlight & sensor automatic
**LUMOTEC IQ Cyo**

When the Cyo was introduced, discriminating "heavy cyclists" were practically overwhelmed by its light output and described it as a "true enlightenment" (see Cyo customer reviews at www.bumm.de).

The petite light wonder is available in both a sportive version with a light output of 60 Lux (without integrated reflector) and as a comfortable 40 Lux version, including a reflector as well as featuring light at close range.

- LED IQ-TEC
- 60 Lux or
- 40 Lux with light at close range
- Standlight & sensor automatic

**LUMOTEC IQ Fly**

Elegant light range adjustment and shape have added to the Fly’s popularity. Adapters available for easy combination with suspension forks.

- LED IQ-TEC
- 40 Lux with light at close range
- Standlight & sensor automatic

**Available upon request:**
Exlusive versions of headlight models Cyo and Fly with E mark of approval for speed e-bikes (electric mopeds, self propelled up to 45 km/h).

**LUMOTEC Fly**

The halogen version of the Fly.

- Halogen headlight
- 17 Lux
- Standlight & sensor automatic

**LUMOTEC IQ Fly**

![Image of IQ Fly headlight]

**Design alternative:** specially chromed casing, aluminium look

- without reflector, 60 Lux, without light at close range
- with reflector, 40 Lux, with light at close range
**LUMOTEC Lyt®**

The LED headlight of the new middle class. Modern LED lens technology creates a very good and homogenous field of light with light at close range and precise light/dark boundary. High operational reliability – the operating life of the LED is many thousands of hours long. With integrated front reflector. Approved by German road traffic regulations.

**Design**

Compact shape with integrated lateral light emission for added safety, extremely robust casing. Stainless steel mounting bracket.

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**LUMOTEC Classic T**

Daytime running light models have a light output of 30 Lux. Distinctive signalling LEDs for better visibility during the day are integrated into the headlight.

- LICHT24, Daytime running light
- LED lens technology
- 30 Lux
- Light at close range

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**LUMOTEC Lyt T**

Daytime running light models have a light output of 30 Lux. Distinctive signalling LEDs for better visibility during the day are integrated into the headlight.

- LICHT24, Daytime running light
- LED lens technology
- 30 Lux
- Light at close range

---

**LUMOTEC Classic®**

LED headlight featuring a classy retro look. 25 Lux create a very good and homogenous field of light with light at close range and precise light/dark boundary. Approved by German road traffic regulations.

**Design**

Specially chromed casing with stainless steel mounting bracket. Ergonomic turn switch.
**LUMOTEC Lyt**

Modern LED lens technology creates a large and homogenous field of light with light at close range and precise light/dark boundary. Light output 25 Lux, compact shape.

- LED lens technology
- 25 Lux
- Light at close range

**LUMOTEC Lyt B**

Entry level LED headlight model. Light output 15 Lux. Good lighting of the road. Economic and ideal for changing from halogen to LED reliability.

- LED lens technology
- 15 Lux

**LUMOTEC Classic**

Modern LED technology with a light output of 25 Lux. Creates a large and homogenous field of light with light at close range and precise light/dark boundary.

- LED lens technology
- 25 Lux
- Light at close range

**LUMOTEC Lyt**

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- for hub dynamo
- standlight
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**LUMOTEC Basic**

In 1991 the LUMOTEC Basic was the first headlight with an integrated ring reflector. Because of its straightforward shape it remains the most popular halogen headlight until today. Approved by German road traffic regulations.

- Halogen
- 17 Lux

**LUMOTEC Lyt**

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**LUMOTEC Classic**

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**LUMOTEC Retro**

The LUMOTEC Retro combines a nostalgic shape with reliable halogen technology. Circular reflector. Approved by German road traffic regulations.

- Halogen
- 17 Lux

**LUMOTEC Lyt**

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Reflectors

Cyclists and pedestrians are very much endangered because they are the ‘weakest’ road users and will often be seen very late by other traffic participants. Reflectors are a considerable safety factor! We only use high quality prisms in order to get high reflection values from small surface areas.

**Refl ectors**

Cyclists and pedestrians are very much endangered because they are the ‘weakest’ road users and will often be seen very late by other traffic participants. Reflectors are a considerable safety factor! We only use high quality prisms in order to get high reflection values from small surface areas.

Headlight bracket overview

<table>
<thead>
<tr>
<th>Bracket Type</th>
<th>Description</th>
<th>Approval Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>470H</td>
<td>Metal, long, black, L = 50 mm</td>
<td>B, D, E, GB</td>
</tr>
<tr>
<td>471F</td>
<td>Metal, short, black</td>
<td>B, D, E, GB</td>
</tr>
<tr>
<td>471U</td>
<td>Diecast zinc, U-shaped, black</td>
<td>B, D, E, GB</td>
</tr>
<tr>
<td>474D</td>
<td>Stainless steel, shiny, short, L/S = 25/18 mm</td>
<td>B, D, E, GB</td>
</tr>
<tr>
<td>474DS</td>
<td>Stainless steel, black, short, L/S = 25/18 mm</td>
<td>B, D, E, GB</td>
</tr>
<tr>
<td>475D</td>
<td>Stainless steel, shiny, medium length, L/S = 45/18 mm</td>
<td>B, D, E, GB</td>
</tr>
<tr>
<td>475D/1</td>
<td>Stainless steel, shiny, medium length, L/S = 45/25 mm</td>
<td>B, D, E, GB</td>
</tr>
<tr>
<td>475DS/1</td>
<td>Stainless steel, black, medium length, L/S = 45/18 mm</td>
<td>B, D, E, GB</td>
</tr>
<tr>
<td>475DU</td>
<td>Stainless steel, black, long, L/S = 60/18 mm</td>
<td>B, D, E, GB</td>
</tr>
<tr>
<td>4706CB</td>
<td>Chromed metal bracket, for head tube mounting (1&quot; or 1 1/8&quot;)</td>
<td>B, D, E, GB</td>
</tr>
<tr>
<td>471F (1&quot;), 471B/1 (1 1/8&quot;)</td>
<td>Plastic, for head tube mounting</td>
<td>B, D, E, GB</td>
</tr>
<tr>
<td>471LH</td>
<td>Plastic, long, extremely break proof, L = 75 mm</td>
<td>B, D, E, GB</td>
</tr>
<tr>
<td>471AR</td>
<td>Adapter for RST forks</td>
<td>B, D, E, GB</td>
</tr>
</tbody>
</table>

**FRONT 313/5WB**
Marks of approval B, D, E, GB. Also available in red: HECK Type 313/1WB.

**FRONT 313/5U**
Interal U shaped plastic bracket. Especially suited for cantilever brakes. Weighs only 12 g. Marks of approval D, E, GB. Also available in red: HECK Type 313/1U.

**FRONT 302F**
Fastening strap for handlebar annex screw or calliper brake. Standing or suspended assembly. Wide angle reflection. Marks of approval B, D, E, GB.

**FRONT 305K**
Fastening clamp for handlebar shaft. Transverse or upright assembly. Marks of approval D, E.

**HECK 312H**
Admitted for contour parallel attachment to mudguards (up to 30° inclination). Marks of approval D, E, Type 312H/B: with metal strap for riveted attachment.

**FRONT 313/5WF**
Metal bracket. Especially suited for suspension forks, V brakes, hydraulic and drum brakes. Wide angle reflection. Marks of approval B, D, E, GB. Also available in red: HECK Type 313/1WF.

**FRONT 313/5WU**
U shaped metal bracket. M6 thread. Especially suited for cantilever brakes. Wide angle reflection. Marks of approval B, D, E, GB. Also available in red: HECK Type 313/1WU.

**TEDDY REFLEX 621STPB/CLIP 625**
For pedestrians. Clear or coloured reflector.

**FRONT UNIVERSAL 313/5K**
Tensioning strap and rubber lining for any tube diameter. 10 g only. Marks of approval D, E, GB. Also available in red: HECK universal Type 313/1K.

**HECK 313/12**
For screw on attachment to mudguard. Marks of approval D, E.

1) Many mounting straps available. For the complete range, see www.bumm.de
1) Many mounting straps available. For the complete range, see www.bumm.de

2) Approved by German StVZO as the required second reflector in combination with the luggage carrier rear light with Z reflector.

### Luxos 179/Cyo 175Q/R
- Basic 170
- Lyt 178
- Fly 174
- Classic 1786C
- Retro 1706C
- Oval 171

### Lytos 178

### Classic 1786C

### Retro 1706C

### Oval 171

### Only common applications are shown. Further combinations are possible and available upon request.

### HECK MINI-Z 313/1ZB
- Plastic screw on clamp Ø 13–40 mm. Superior reflection values in spite of small size. Marks of approval D (including Z), E.

### HECK 314/1^2^)

### HECK 314/3Z
- Format 27 x 91 mm. Carrier mounting. Screw hole distance 50 mm. With 2 screws. Mark of approval D (incl. Z).

### SPECIAL 563
- Format 36 mm x 61 mm. Self adhesive foil on the back. Marks of approval E, SAE. Type 563/2: yellow reflector, Type 563/5: white reflector.

### SPECIAL 563/2
- Yellow reflector,

### SPECIAL 563/5
- White reflector.

### Adapter, long, for SR suspension forks CR9 + NEX from 2009

### Length

### Arm

### 2) Approved by German StVZO as the required second reflector in combination with the luggage carrier rear light with Z reflector.
The original TOPLIGHT was the first carrier mounted rear light to receive a German mark of approval. The trade-marked name TOPLIGHT is often used synonymously replacing the term "carrier mounted rear light". It was and is the prototype for the most popular rear light series from Busch & Müller. All rear lights shown here are approved by German road traffic regulations. Further approvals are noted.

TOPLIGHT Line

LED rear light with LineTec: 2 high power LEDs inside the 90 mm LineTec light strip (transparent glass, shines red). Super bright with 320° visibility. Standlight (powered by capacitor, no batteries required), deactivates automatically after 4 minutes (parking function) or manually. Only 53 g, very slim, 94 x 45 x 16.5 mm. Integrated large Z reflector. Mounting distance 50 or 80 mm. Mark of approval F.

- 2 high power LEDs
- LineTec light strip
- 320° visibility
- Standlight, can be deactivated manually
- Large Z reflector

Battery powered versions senso and permanent

- Theft proof: battery compartment can be locked with special screw
- Incl. 1 battery (AA)
- Shines for approx. 40 h
- With battery indicator

LineTec®

Light strip for more safety

LineTec is a light technology featuring a special lens system. The punctual light of one high power LED is spread up to become a wide strip of light, shining homogeneously. Why is that important? In the past, if one approached a bicycle at night from behind, one could only see a single point of light emitting from the rear light, and the distance could only be estimated inadequately. To accurately estimate the distance, the human eye requires a spatial relation – especially in the “spaceless” dark. A rear light sending out a LineTec light strip emits “spatial light”. This is why other traffic participants can estimate the distance much better and more quickly.

Rear light with LineTec and without. The way a car driver sees it.
As a matter of course motorised vehicles signal a brake application to following traffic participants with a red, brightly shining light. Such a “brake light function” is now available for bicycles as well.

The new BrakeTec technology is integrated into the rear light. However, no connection to the brakes has to be established. Simply exchange the existing rear light for a BrakeTec rear light. The new function is approved by German road traffic regulations. This is how it works - provided that the lighting system (dynamo) is turned on: A processor inside the rear light analyses signals from the dynamo. If the velocity decreases significantly, the processor registers deceleration and the rear light shines noticeably brighter.

The warning function of BrakeTec harmonises ideally in connection with LineTec - so that a wide strip lights up. BrakeTec is an innovation by Busch & Müller.

BrakeTec works only when the rear light is connected to a headlight whose rear light contacts supply alternating current. This applies to all N and senso headlights from Busch & Müller as well as the new LUXOE.
TOPLIGHT® Mini

The world’s smallest TOPLIGHT rear light. Many functions in a minimalistic casing: Two high power LEDs shine brightly. Fully automatic standlight included!

- 2 high power LEDs
- Standlight
- Large Z reflector
- More safety due to exceptional lateral light emission

Design

Only 95 x 38 x 17 mm, at 34 g extremely light. Ideally fits on modern bikes with slender carriers. Mounting distance 50 or 80 mm.

SECULA®

Bright. Compact. Sturdy.
The compact rear light for mudguard mounting. A prism system creates a light crown from one high power LED, which is very distinctive due to its “spatial” shape and enables other traffic participants to better estimate the distance to the bicycle.

- 1 high power LED
- Exceptionally bright LineTec light crown
- Standlight
- Centrally integrated rear reflector
- Compact casing

Design

Circumferential, elegant transparent glass. When operating, the light crown shines a bright red.

Optional
Rear light for bar mounting, type 331/2ALK
**D-TOPLIGHT XS**
Delicate and yet robust carrier mounted rear light. Protected against shocks and moisture by soft touch sealing edge. With large Z reflector. Available as dynamo or battery powered version. Carrier mounting with 50 or 80 mm mounting distance.

**D-TOPLIGHT. The classic**
For dynamo, battery or both energy sources in combination (version Duo). Large Z reflector.

**SELECTRA® plus**
Basic carrier mounted rear light with 3 LEDs, electronic standlight function. Large Z reflector. Carrier mounting with 50 or 80 mm mounting distance.

**TOPLIGHT XS**
The delicate yet robust carrier mounted rear light is also available as a version with an incandescent bulb. Large Z reflector.

**TOPLIGHT. The original**
With incandescent bulb. Large Z reflector. Marks of approval E and F. Carrier mounting with 50 or 80 mm mounting distance.

**SECULITE®**
With 1 high power LED. Integrated rear reflector. Mark of approval F.

**4D-Lite plus**
Rear light with 4 LEDs and protective frame.

**Standard**
Mudguard rear light with incandescent bulb 6V/0.6W, integrated rear reflector.

**TRAILERMATIC®**
For trailer lighting
Switching hub TRAILERMATIC (A) connected between dynamo powered bicycle and trailer lighting system. When riding with the trailer hooked up, the rear light (B) is switched off and the trailer rear light (C) shines automatically. In accordance with German road traffic regulations. Easy mounting, no tools needed.
Power without mains
For all those that do not want to do without mobile phone, GPS, MP3 player or other electronic devices while cycling, Busch & Müller has developed the bike mobile E-WERK. Connected to a hub dynamo; the energy is made useable to charge and/or power mobile devices.

- Voltage and current adjustable
- Universal connections (e.g. USB)
- Extensive accessories
- Splash and rainwater proof

Dynamo supplies USB energy
The USB-WERK supplies 5 V and up to 1 A current. An integrated small cache battery ensures a constant voltage supply during slow riding and/or stops. For these reasons, the USB-WERK is a perfect fit for charging/powering USB devices of any kind: mobile phone, GPS, MP3 player etc. Contains cable with USB socket.
Universally usable
With this dynamo connected, universal powering device, voltage (up to 13.3 V) and current (up to 1.5 A) can be adjusted variably in small increments. It charges at velocities of approx. 8 km/h and faster. At only 15 km/h it charges as quickly as standard mains connected chargers. It can be fed with up to 50 V DC, so that operation with an e-bike or car battery is possible as well.

Mounting
The E-WERK can be connected to bicycle frames of different diameters, in any suitable position using rubber bands or cable straps. The E-WERK is splash and rainwater proof.

Connection options of the E-WERK
Universal connections for USB, Mini USB, Micro USB. 2 free cables for individual connections. With special plugs for SON and Shimano hub dynamos. Watertight cable screw joints.

Cache battery for E-WERK (type 361)
Constantly supplies 5 V – the standard voltage for charging via USB connection. 1400 mAh capacity. With nylon bag. Weighs approx. 180 g. Measurements 80 x 40 x 40 mm.

Some sensitive mobile electronic devices react to voltage fluctuations by interrupting the charging process. Since the E-WERK is connected to a hub dynamo, it cannot supply power free of those kinds of fluctuations. The cache battery harmonises the voltage and prevents charging interruptions.

Universal cockpit adapter
For devices with a width ranging from 45 to 115 mm. For handlebar diameters from 22 to 40 mm. Easy mounting with elastic strap, no tools necessary. Detachable.
Battery powered LED headlight* with IQ technology. When set to HighPower mode, the high output LED inside the LED reflector shines extremely bright for up to 5 hours. In CityEco mode, 10 Lux are reached – for 20 hours. The electronic system (90% efficiency) shows battery capacity, charging process and condition. Supercharging is not possible.

* In Germany approved as the sole light on racing bicycles up to 11 kg.

---

Battery powered LED headlight* with lens technology. Very good lighting of the road, with light at close range. A circumferential rubber edge protects from shocks and serves as an anti glare protection for the cyclist when riding out of the saddle. Lateral light emission: improved visibility for other traffic participants.

* In Germany approved as the sole light on racing bicycles up to 11 kg.
Power supply
4 rechargeable Ni-MH batteries, each 2100 mAh, no memory effect. Charging time approx. 5 hours using provided charging unit. Power supply by 4 non-rechargeable AA batteries possible.

Mounting
Easy mounting, convenient handling: The headlight can be tilted, pivoted and removed from its mounting bracket with one click.

Optional: Oversized mounting brackets for handlebar diameters up to 32 mm (type 492HOPB).

Anti glare protection
Type 492BPB
Anti glare protection. For IXON IQ and IXON IQ Speed. Prevents glaring when cycling out of saddle. Easy mounting with adhesive pads.

Fork mounting
Type 475D/492GAPB
Fork mounting made of stainless steel for IXON IQ and IXON Pure. Special screw for all stainless steel mounting brackets.

Mounting bracket 492UHPB
for all handlebar diameters from 22 to 32 mm

Set with rear light, type 192QLMA/382S

RIDE&CHARGE
For cycling travellers and “global bikers”. Charging power created be pedalling. The electronic switching point RIDE&CHARGE uses the hub dynamo to charge batteries inside the IXON IQ.

IXON Pure B
Economically priced basic version with good lighting of the road. No charging socket.

- Approx. 15 Lux
- Shines for up to 12 hours
- Power supply: standard AA or externally charged rechargeable AA batteries

Power supply
3 AA batteries, rechargeable or non-rechargeable. Batteries included with type 194LA.

Quick mounting
Same handlebar mounting as the IXON IQ. Removable with one click. For further options like oversized or fork mounting bracket, see IXON IQ.

IXON IQ

Full charging equipment with 3 rechargeable AA batteries (inside the headlight)
ixon iq®

Speed

The sportive, high end battery powered headlight. Powerful. Robust. Best lighting of the road with a single LED, considering German road traffic regulations. 50 Lux light output in HighPower mode. Weighs only 98 g (without battery/cable). Test winner in Europe’s largest racing cycle magazine.

Type 193Q

- LED IQ-TEC
- 50 Lux
- With light at close range
- HighPower mode: 10 hours – 50 Lux
  or LowPower mode: 50 hours – 10 Lux
- Approved by German road traffic regulations

Optional:
- Secondary headlight
- Helmet mounting
- Forehead mounting
- Separate anti glare protection

Basic set: headlight with charging unit and battery pack
- 193QLA

Secondary headlight
- 193QZ

Secondary headlight with mounting set for helmet and forehead
- 193QK

Replacement set: mounting set for helmet and forehead
- 493HHSTB

Anti glare protection
- 492BPB

ixback®

Battery powered LED rear light

Light box

Casing

- Battery powered LED rear light
- LineTec: patented lens system
- Clear glass light box, shines super bright
- Automatic activation (light/motion sensor) or permanent light
- 50 g (incl. batteries)
- Approved by German road traffic regulations

Type 382S

25 hours full light intensity. Powered by two AAA batteries, included. Quick and easy mounting using rubber bands or cable straps – light box can be removed with one click.

Also possible: maximally theft protected mounting.

Design: The clear glass shines red when the rear light is activated.
Quick mounting
Headlight universally mounted on handlebars using quick release elastic strap, suitable for all handlebar diameters. Pivots, can be adapted to handlebar curve.

Up to 100 Lux
Low power mode is economical and persistent in city traffic. High power mode is super bright for off road challenges. Using a second headlight (type 193QZ or 193QK), perfect for competitions: supreme light output of up to 100 Lux.

By the way: A second headlight is allowed to be used in road traffic when used as a helmet light.

Power supply
High output battery pack, separate in nylon bag with Velcro strap. Second socket for additional headlight. Charging unit deactivates automatically.
Millions of motorcycles and scooters from many large brands use our rear view mirrors (BMW, Honda, KTM, MBK, Peugeot, Yamaha etc.). We transfer these high tech standards to bicycles uncompromisingly.

**CYCLE STAR**

The premium rear view mirror series for bicycles. The pronounced curvature of the mirror provides an extra large field of vision. Its glass has a diameter of 60 mm and is protected against shattering. The black, elegantly shaped plastic casing is extremely adjustable and folds in. Especially sturdy when using the internal handlebar mounting made of aluminium.

**DYMOTEC 6**

High output tyre dynamo with approx. 40% efficiency. The position to the tyre as well as the contact pressure can be aligned perfectly with two easy adjustments. With easy touch trigger: a quick press of the finger suffices, and the dynamo pivots toward the tyre.

- Unique efficiency: approx. 40%
- Position and contact pressure adjustable
- Separate versions for mounting to the left or right of the bicycle

A special separate roller with high alloyed steel brushes is available for temporary use under extreme conditions. During rain, slush, snow or ice it works with optimised contact pressure and maximal traction – gentle to the tyre and self cleaning.
**CYCLE STAR 901**
Extra long bar

**CYCLE STAR 901/1**
Short straight bar

**CYCLE STAR 901/2**
Only with internal handlebar mounting

**CYCLE STAR 901/3**
Short curved bar

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**E-bike mirror 913/801VLME**
With mark of approval "E". Complies with requirements for fast e-bikes. Defined size, curvature and function: The mirror must not stay rigid during collisions, but must collapse.

**Mirror 902/1**
Plastic casing: Ø 93 mm, plane glass. Bar: Ø 6 mm, with sturdy metal clamp.

**Mirror 902/2**

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**Original spare parts. Tools. Accessories.**

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<tr>
<th>Type 208A</th>
<th>Type 702K</th>
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<th>Type 289</th>
<th>Typ 470KS</th>
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<td>6V, 2.4W halogen – type 427H</td>
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<th>Type 427H3W</th>
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<tr>
<td>6V, 3W halogen – type 427H3W</td>
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</tbody>
</table>

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Rear view mirrors for motorcycles

- Universal Ref. no. 911/2 - L+R / P+V
- Legshield mirror Ref. no. 912/3 - L+R / P+V
- Swivel mirror (retractable) Ref. no. 913/1 - version made of plastic
- Universal Ref. no. 920P
- Universal Ref. no. 922 - M / P+V
- Universal Ref. no. 922/15 - M / P+V / e
- Universal Ref. no. 922/16 - M / P+V / e
- Pivot mirror Ref. no. 960VE - V / e

Honda
- Ref. no. 926/38VM

Honda
- Ref. no. 926/500AVME / L+R

KTM
- Ref. no. 916/809VM / L+R

KTM
- Ref. no. 916/909VE / L+R

KTM
- Ref. no. 916/962VM / L+R

MBK
- Ref. no. 928/805SILBVE / L+R

This is just a selection from our range. Many more models available upon request!

L+R separate versions available for mounting on the left or right
P+V available with plane or convex glass
V only available with convex glass
M available also with black matt finish
C chrome coloured version available
BMW
Ref. no. 1911/302VML

BMW
Ref. no. 1911/903VCE

BMW
Ref. no. 1911/77BVME

Honda
Ref. no. 926/25A30VM

Honda
Ref. no. 926/300A0VE2

Honda
Ref. no. 926/37V / M+C

Hercules
Ref. no. 913/4 - L+R / P+V
Ref. no. 913/2 - universal handlebar end fitting

MBK
Ref. no. 928/808VE / L+R

MZ
Ref. no. 928/05AVM / L+R

Peugeot
Ref. no. 917/90V - L+R

Triumph
Ref. no. 928/27VME

Vespa
Ref. no. 928/44 - L+R / P+V

Zündapp, Kreidler
Ref. no. 911/62K - L+R / P+V / M

Zündapp, Kreidler
Ref. no. 911/67M - P+V / C / e

Zündapp, Kreidler
Ref. no. 911/6 - L+R / P+V

M+C black matt finish or chromed versions available

e also available with mark of approval “e” (EU standard)

E also available with mark of approval “E” (ECE standard)

1) exclusive for original equipment manufacturers
The perfect light and merchandise presentation.
We support retailers with system modules for sales presenters. For more information, please send an email with the subject “Retail wall system” to info@bumm.de

Our technical sales people exclusively advise retailers in all matters regarding “Best light for bicycles”. If you are a retailer, make an appointment with our technically versed advisors.


Light adapter, type 447LIA: Show the full output of headlights in display windows or during sales pitches - without using a dynamo. Connect the light adapter to the mains and the headlight to the quick connection terminals. (Both Lightcheckers do not show the full light output.)
Stainless steel light display
All products light up. Preassembled. Shows (among other things) the difference between riding light and standlight. With mains connector. Stainless steel. For longtime continuous operation.

Daytime running light display
Presents LICHT24, the daytime running light for bicycles. Preassembled. With mains connector.

BrakeTec display
Presents BrakeTec, the brake light function. Switches continually between regular light and “brake light”. Preassembled. With mains connector.
Made in Germany

Our products can be found mounted on premium quality bicycles or at well sorted retailers.

More information at www.bumm.de

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