

# UNIVERSAL LIGHTING UPDATE 2020

MARSSTOR

and the second second



# CUSTOMISED LIGHT DESIGN!

The great variety of shapes and various possible combinations coupled with a technically optimised product design: the universal, modular HELLA Shapeline lamp series is a true innovation in vehicle lighting.

Whether at the front, side or rear of a vehicle, every vehicle series—whether big or small—can have a unique and, at the same time, consistent look using a customised configuration and arrangement of lamps. Even small vehicle series benefit from HELLA Shapeline's striking optics and high recognition value.

Alongside innovative technology and the familiar high quality of HELLA products, the variety of Shapeline lamps shapes provides you with nearly infinite design freedom.

All HELLA Shapeline lamps are available in two different designs: the classic straight-line Shapeline Tech design and the dynamic curved Shapeline Style design.





# TRUCK









2SD 013 342-121

AGRICULTURE



2PS 013 305-011

2SB 013 399-021 2BA 013 333-021

2ZR 013 401-111

8RA 013 347-061

8RA 013 347-061

# ø 0

# THE SHAPELINE CONFIGURATOR: DESIGN A LIGHT!

The HELLA Shapeline online configurator turns customers into lighting designers:

In just a few clicks, create your own customised vehicle lighting design for the front, side and rear of the vehicle and then view the result immediately afterwards, when it gets shown on an indicative vehicle outline.

www.hella.com/shapeline

# GOOD IN EVERY WAY: UNIVERSAL LIGHTING FROM HELLA

#### Good vehicle lighting has many facets.

It not only provides optimum illumination of the work area and, therefore, greater working efficiency, but also offers a high degree of safety for all road users.

This rings particularly true with the HELLA universal lighting products for agricultural machinery, trucks and trailers. Because powerful vehicles require powerful lighting – and that's why HELLA is exactly the right partner for you. From work lights and front, side and rear lighting to auxiliary headlamps: we offer a broad range of high-quality products characterised by fit accuracy, durability and innovative technologies. Throughout, we use our longstanding OE expertise and successfully apply it to the independent aftermarket.

In this brochure, you will find a selection of universal lighting products: efficient all-rounders that you can rely on.

These include the Luminator LED and Rallye 3003 LED, our latest auxiliary headlamp offerings that give light a whole new style thanks to powerful technology and an equally powerful appearance. Or K-LED Rebelution, our beacon revolution that boasts both a minimalist design without a dome and maximum functionality.

In our universal parts catalogue, you will find an overview of our complete universal parts product range, which includes not only lighting but also electrical and electronic products and is available online. www.hella.com/upc



Discover the light distribution of the HELLA work lights and auxiliary headlamps with ELIVER, our unique online tool. **www.hella.com/eliver** 





HAL STOP

1

#### **IP** protection classes

Features and descriptions

#### What does IP protection class mean?

IP stands for International Protection. The IP protection classes are determined according to DIN 40 050, Part 9. The purpose of the norm is to provide an exact definition of the electrical equipment of vehicles against the ingress of solid foreign objects including dust, and against the ingress of water. The varying degrees of protection important for signalling systems are explained in more detail below.

#### Protection class IP 5K4K

Dust may only penetrate to such an extent that the function and safety are not impaired. Water that is sprayed against the housing from every direction at increased pressure must not have any damaging effect.: the water pressure is approx. 4 bar.

#### Protection class IP 9K

Water that is directed from high-pressure/steam-cleaning equipment onto the housing must not have any damaging effect: the water pressure is approx. 80-100 bar.

#### Protection class IP 6K7/IP 6K8

Dust must not penetrate. Even during temporary (IP 6K7) or permanent (IP 6K8) submersion, no water is allowed to penetrate. HELLA products meet the highest requirements and are optimally protected against all weather conditions.

#### Key of icons

Features, descriptions and comments

FEATURES	DESCRIPTION	COMMENTS
Power consumption of LED lamps	<b>Benefits of LEDs:</b> In general, LED lamps require less power than bulb lamps. Savings of up to 90% are possible, thus helping to reduce CO <sub>2</sub> emissions.	
Vehicle electrical system voltage	Defines the power supply of the lamp. Whether 12 V, 24 V or for a multi-voltage range (8–w33 V).	Multi voltage is most flexible: it requires fewer versions, but has more electronic components and is therefore more expensive.

#### Dust and water protection IP



International Protection (IP) according to DIN 40050,

- Part 9. Specific definition for road vehicles.
- 5K = Dust protected

Resistant to high-pressure cleaning

- 6K = Dustproof 9K = Protection against water during high-pressure / steamjet cleaning.

The higher the protection class, the better the protection against penetrating media. IP 67 maximum value

→ Completely sealed against dust and water.



6

#### FEATURES

#### Direction indicator failure control according to ECE R48



#### DESCRIPTION

COMMENTS

**Regulation according to ECE R48:** The driver must be informed if the vehicle's direction

The univer mixture in the ventue's direction indicator function fails. To remain legally compliant, this requirement must also be fulfilled for LED lamps This requirement is met thanks to an integrated selfdiagnosis system on the printed circuit board of the LEDs and an electrical pulse. Since the end of 2011, this HELLA failure control with pulse has been an ISO standard: ISO 13207. If the direction indicator failure control cannot be guaranteed, the General Certification for a vehicle expires. It is therefore forbidden to operate vehicles without the legally required direction indicator failure control in countries subject to ECE-R48.

The direction indicator failure control is guaranteed in combination with ballasts, HELLA item no.: 5DS 009 552-...

#### Electronic circuit



Active



Passive

## Basically, two different circuits are possible for LED lamps:

Active: LED current regulation by means of active electronics.

#### Passive:

Setting a specific voltage range for the LED using a series resistor.

#### Active:

Higher expenditure during development because of complex circuit and necessary EMC approval. Higher price because of electronic components but an optimal current limit makes for a maximum LED service life.

#### Passive:

Inexpensive solution without complex protection measures. Shorter LED service life in case of failure. No EMC approval required.

#### Thermal management



Active



Passive

#### Active:

Electronic power control of the LEDs when high ambient temperatures exceed permitted levels. This ensures that LEDs are protected against destruction caused by overheating.

#### Passive:

Optimised layout of the components for even temperature distribution and temperature spread.

#### Active:

Higher expenditures with active thermal management for development and higher parts prices ensure optimal conditions for maximum service life.

#### Passive:

The warmer the LED gets due to exterior factors or heating caused by its own operation, the shorter the service life.

#### Operating temperature



Whether at cold or warm temperatures, our products must be functional at all times. Thermal management and an optimised housing design ensure full functionality for all operating temperatures as a result of product testing from  $-40^{\circ}$ C to  $100^{\circ}$ C.

#### FEATURES

#### Overvoltage protection



#### DESCRIPTION

Supplement to the electronics for protecting the LED against high voltage/current in the vehicle network as per ISO 7637-2.

#### COMMENTS

The LEDs can become overloaded by increased voltage peaks in vehicles as a result of the following:

→ Starting aid

→ Defective control units
 → Load dump impulse

(incorrect battery contact)

Such peaks stress/damage the LEDs, a situation which can lead to function failure or to a reduction in the length of service life. By supplementing the circuit with appropriate components, it can be protected, so that the service life can be extended and failures can be prevented.

#### Bi-polarity of a lamp



Even if the connecting cable is attached with reverse polarity, the LED functions fully.

The semiconductor in an LED must always be operated with the specified polarity only. Inverse polarity damages the LED: therefore, LED lamps are always equipped with polarity reversal protection (diode). However, this function only works if "+" and "-" are connected correctly. If a lamp has a bi-polar circuit, its functioning is independent of the contact connections. This then ensures that poka yoke (avoidance of faulty assemblies) is present in connection with indentation clamping technology, for example. However, the additional components on the printed circuit board increase the cost outlay.

#### Polarity reversal protection



Even if the connecting cable is connected with reverse polarity, there is still no danger to the electronics.

The semiconductor in an LED must always be operated with the specified polarity only. Inverse polarity damages the LED: therefore, LED lamps are always equipped with polarity reversal protection (diode). However, this function only works if "+" and "-" are connected correctly. If a lamp has a bi-polar circuit, its functioning is independent of the contact connections. This then ensures that poka yoke (avoidance of faulty assemblies) is present in connection with indentation clamping technology, for example. However, the additional components on the printed circuit board increase the cost outlay.

SAE

The product has been tested according to SAE specifications.

Further information can be found next to the relevant products in the footer.



SAE

FEATURES	DESCRIPTION	COMMENTS
ECE		
Approval	This product is approved according to ECE guidelines.	Further information can be found next to the relevant products in the footer.

Approved for dangerous goods transport



ECE

Lamp approved for dangerous goods transport according to the European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR; in German: GGVS).

Mainly required for truck and trailer lighting. Precondition for approval: damage to the light source must not cause explosive media to ignite.

Electromagnetic compatibility





Electromagnetic compatibility (EMC) tested and EC type approval obtained.

If the lamp is not designed and constructed according to EMC specifications, and thus is not certified, then interactions between it and other safety-relevant electronic systems may occur.

Examples: Crackling in the radio loudspeaker, impairment of ABS electronics or lamp failure as a result of sensitivity to

interference.

#### Automotive Electronic Council



Components qualified according to automotive standard.

Electronic components (LEDs, diodes, etc.) governed by automotive specifications are more robust and safer than electronic components designed for industry.

By using certified suppliers, a more robust circuit design is possible with consistent quality, even for longer periods. Therefore, low additional component costs improve the service life of LED lighting functions.

# HELLA WORK LIGHTS

#### For more safety and comfort

Nighttime assignments, whether they include shunting manoeuvres, loading work or field work, have one thing in common: they require optimal work area illumination. And good illumination requires good headlamps! This is the only way to carry out focused work with an efficient result.

That's no problem when using the HELLA work lights! Thanks to our many years of experience, these generate the right workplace illumination for any area of application. HELLA work lights make every nighttime operation simple, whether that's in agriculture, in trucks or in trailers.

### Designed for the toughest working conditions!

Thanks to modern technologies developed using our OE know-how, HELLA work lights can withstand the most challenging environmental conditions. The headlamps' sophisticated thermal management and corrosion resistance in particular ensure a very long service life. After all, high-power illumination performance can only go unhindered if the heat can be optimally dissipated from the high-power LED headlamps. A long service life is guaranteed thanks to corrosion-resistant headlamps with special coatings or plastic housings. Go for the best quality and increase your working efficiency.



CoroSafe coating for work lights with an aluminium housing



NanoSafe coating for work lights with an aluminium housing for particularly tough applications such as mines

#### CoroSafe/NanoSafe

#### New process to combat corrosion in aluminium housings

With its new coating processes against corrosion, HELLA is once again setting standards in the durability and toughness of work lights with aluminium housings. Two additionally implemented layers in the surface coating of the work lights greatly improve their durability. The sophisticated combination of different coating methods ensures a high level of corrosion resistance and improved protection against work light damage. This means that the housing is well-protected and ideal for use in environments with large amounts of salt and water. CoroSafe is used primarily with HELLA LED reversing lights. When using the NanoSafe coating for special applications, such as mines, an additional coating is applied. This protects against corrosion in particularly tough applications.



Videoclip - CoroSafe and Thermo Pro Scan, watch now and find out more.



Innovative heat-conducting plastic housing to combat corrosion

#### Compact series

#### Corrosion-free and lighter plastic housing

The innovative plastic housing of the Compact series boasts similar thermal conductivity properties to aluminium. This allows the LEDs to operate using the full power supply even at high ambient temperatures. Thanks to the housing's innovative plastic material, corrosion is averted and a long service life is guaranteed. In addition, the Compact scores points with its considerably reduced weight and improved vibration characteristics.

# HELLA solutions for more safety and comfort in your everyday working life

Vehicle lighting plays an important role in safety and workplace convenience. There are many situations where there is still room for improvement, especially when it comes to occupational safety. For example, it is important that hazard zones can be optically marked or demarcated at any time so that everyone in the affected area can be warned and protected in good time. Previously, this had to be done by the driver or by other workers, who would manually mark off the areas concerned. This meant that it was not possible to demarcate individual areas as required in a simple, swift and safe action. With the VISIOTECH projection technology, HELLA has brought products onto the market that are designed to help in these exact situations. However, oncoming traffic should not just be warned or alerted. It is also important that it is dazzled as little as possible in order to avoid accidents caused by glare and poor visibility. That is why HELLA has developed **ZERO**GLARE glare-free illumination that does not dazzle oncoming vehicles.



Compare traditional illumination (left) with ZEROGLARE illumination (right)



Glare-free **ZERO**GLARE illumination



Video clip – **ZERO**GLARE Scan, watch and find out more.





#### ZEROGLARE technology for glare-free illumination

In order to transfer the same safety and convenience seen in the automotive sector to other target groups, HELLA has developed a new optical system for work lights. The **ZERO**GLARE system ensures that drivers in oncoming vehicles are not dazzled. Unlike the usual LED work lights, the cut-off line is very sharp and the light of the **ZERO**GLARE headlamp is directed specifically at the area in front of the vehicle. Several series are already available with this technology.

#### VISIOTECH technology - Communicating with light

With the new VISIOTECH projection technology, HELLA allows you to communicate using light by projecting various symbols and illuminations onto the ground.

This warns other vehicles or pedestrians of an oncoming vehicle. The lines projected in front of the vehicle can also be used for easier vehicle navigation. Projecting symbols can also easily and safely mark work areas. This results in increased safety and convenience during the daily work routine.

Using products with VISIOTECH technology is permitted for applications outside the StVZO (German Road Traffic Regulations). Special approvals are required for special applications on the road.

VISIOTECH technology application examples

1GA 995 606-001

1GA 995 606-071

1GA 995 606-011

1GA 995 606-081

#### This LED product has the following features:



Light output (measured): 4,000 lumens, power requirement: 56 watts, colour temperature: 6,500 kelvins, multi voltage, polarity reversal protection, overvoltage protection, thermal management, IP 6K9K / IP 6K8 (resistant to high-pressure cleaning/ submersible), ECE-RIO approved, high-quality aluminium housing, ADR / GGVSEB on request, DEUTSCH connector\*.

Ultra Beam LED Gen. 2

Close-range illumination

Upright or pendant mounting

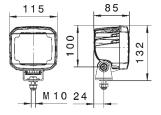
Upright or pendant mounting

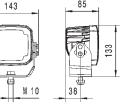
ZEROGLARE illumination

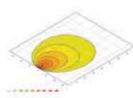
Heavy-duty surrounding bracket

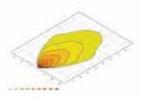
Heavy-duty surrounding bracket Long-range illumination





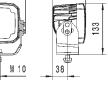






Close-range illumination

Long-range illumination



Video clip – **ZERO**GLARE

1) The ZEROGLARE variants boast illumination with special lens optics. The ZEROGLARE system ensures that drivers in oncoming vehicles are not dazzled. The cut-off line is very sharp and the light of the ZEROGLARE headlamp is directed specifically at the area in front of the vehicle.

This LED product has the following features:





Light output (measured): 2,200 lumens, power requirement: 30 watts, colour temperature: 6,500 kelvins, multi voltage, polarity reversal protection, overvoltage protection, thermal management, IP 6K9K / IP 6K8 (resistant to high-pressure cleaning/ submersible), ECE-R10 approved, high-quality aluminium housing, DEUTSCH connector\*, ADR/GGVS tested.

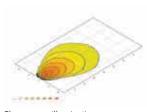
#### Close-range illumination

Upright mounting	1GA 995 506-001
Pendant mounting	1GA 995 506-011
Heavy-duty surrounding bracket	1GA 995 506-081
Long-range illumination	
Upright or pendant mounting	1GA 995 506-031

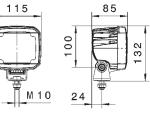
\* Recommended accessories:

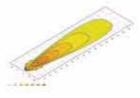
2,000 mm cable with DEUTSCH connector and open 8KB 990 299-011 cable ends





Close-range illumination





Long-range illumination

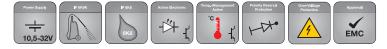
# 85

Upright mounting (available from November 2018) 1GA 995 606-171<sup>1)</sup> \* Recommended accessories:

2,000 mm cable with DEUTSCH connector and open 8KB 990 299-011 cable ends

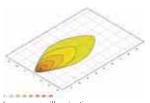


Scan, watch and find out more.





Close-range illumination



Long-range illumination

#### Power Beam 1800 compact

Light output (measured): 1,850 lumens, power requirement: 26 watts, colour temperature: 6,500 % lvins, multi voltage, polarity reversal protection, overvoltage protection, thermal management, IP 6K9K / IP 6K8 (resistant to high-pressure cleaning/submersible), ECE-R10 approved, heat-conducting plastic housing, total corrosion protection thanks to innovative plastic housing, DEUTSCH connector\*.

Close-range illumination	1GA 996 488-001
Long-range illumination	1GA 996 488-011

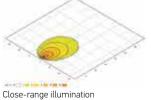
#### \* Recommended accessories:

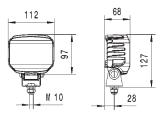
2,000 mm cable with DEUTSCH connector and open akB 990 299-011 & BKB 990 299-011

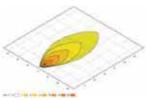
This LED product has the following features:











Long-range illumination

#### Power Beam 1000 compact

Light output (measured): 1,000 lumens, power requirement: 12 watts, colour temperature: 6,500 kelvins, multi voltage, polarity reversal protection, overvoltage protection, thermal management, IP 6K9K / IP 6K8 (resistant to high-pressure cleaning/ submersible), ECE-R10 approved, plastic housing, ADR / GGVS tested, upright/pendant mounting, total corrosion protection thanks to innovative plastic housing, DEUTSCH connector\*.

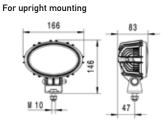
Close-range illumination	1GA 996 188-501
Long-range illumination	1GA 996 188-511
Reversing lights	2ZR 996 188-521

#### \* Recommended accessories:

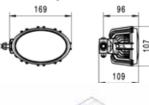
2,000 mm cable with DEUTSCH connector and open	8KB 990 299-011
cable ends	OND 770 277-011

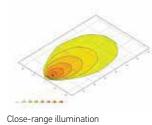






For side mounting





Long-range illumination

#### Oval 100 LED compact

Light output (measured): 1,850 lumens, power requirement: 26 watts, colour temperature: 6,500°kelvins, multi voltage, polarity reversal protection, overvoltage protection, thermal management, IP 6K9K / IP 6K8 (resistant to high-pressure cleaning/submersible), ECE-R10 approved, total corrosion protection thanks to innovative plastic housing, DEUTSCH connector\*.

#### **Close-range illumination**

Upright or pendant mounting	1GA 996 761-101
Side hinge	1GA 996 761-171

#### Long-range illumination

Upright or pendant mounting, without hinge	1GA 996 761-111
Side hinae	1GA 996 761-191

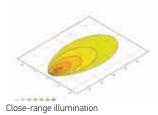
#### \* Recommended accessories:

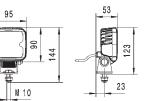
2,000 mm cable with DEUTSCH connector and open cable ends	8KB 990 299-011
--	-----------------

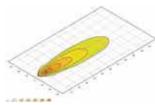
#### This LED product has the following features:











Long-range illumination

#### Q90 LED compact

Light output (measured): 1,200 lumens, power requirement: 15 watts, colour temperature: 6,500°kelvins, multi voltage, polarity reversal protection, overvoltage protection, thermal management, IP 6K9K / IP 6K7 (resistant to high-pressure cleaning/submersible), ECE-R10 approved, upright/pendant mounting, total corrosion protection thanks to innovative plastic housing.

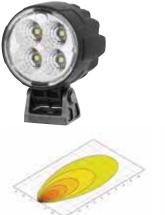
#### Close-range illumination

500 mm cable with open cable ends	1GA 996 284-001
150 mm cable and DEUTSCH connector, ADR / GGVSEB tested	1GA 996 284-081

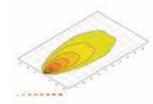
#### Long-range illumination

500 mm cable with open cable ends	1GA 996 284-011
150 mm cable and DEUTSCH connector, ADR / GGVSEB tested	1GA 996 284-091





107 98 M 10 54



........ Close-range illumination

Long-range illumination

#### Module 90 LED

Light output (measured): 3,400 lumens, power requirement: 36 watts, colour temperature: 6,500°kelvins, multi voltage, polarity reversal protection, overvoltage protection, thermal management, IP 6K9K / IP 6K7 (resistant to high-pressure cleaning/ submersible), ECE-R10 approved, high-quality aluminium housing, upright/pendant mounting, DEUTSCH connector\*.

Close-range illumination	1G0 996 263-031
Long-range illumination	1G0 996 263-051

#### \* Recommended accessories:

2,000 mm cable with DEUTSCH connector and open cable ends 8KB 990 299-011

This LED product has the following features:

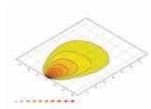


#### Module 70 LED Gen. 4

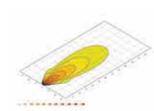
Light output (measured): 2,500 lumens, power requirement: 30 watts, colour temperature: 6,500°kelvins, multi voltage, polarity reversal protection, overvoltage protection, thermal management, IP 6K9K / IP 6K8 (resistant to high pressure cleaning/ submersible), ECE-R10 approved, high-quality aluminium housing, upright/pendant mounting.

2,000 mm cable	1G0 996 476-001
Flush mounting	1G0 996 476-121
Long-range illumination	
2,000 mm cable	1G0 996 476-011
Flush mounting	1G0 996 476-041
Extra wide ground illumination	

Extra while ground interimation	
2,000 mm cable	1G0 996 476-031
Flush mounting	1G0 996 476-131

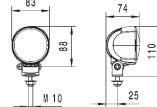


Close-range illumination

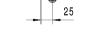


Long-range illumination

Mounting 83 74



Flush mounting 84





Close-range illumination





Light output (measured): 1,800 lumens, power requirement: 20 watts, colour temperature: 6,500° kelvins, multi voltage, polarity reversal protection, overvoltage protection, thermal management, IP 6K9K / IP 6K8 (resistant to high-pressure cleaning/submersible), ECE-R10 approved, high-quality aluminium housing.

#### **Close-range illumination**

2,000 mm cable with open cable ends	1G0 996 576-031
DEUTSCH connector*	1G0 996 576-041

#### Long-range illumination

2,000 mm cable with open cable ends	1G0 996 576-001
DEUTSCH connector*	1G0 996 576-011

Close-range illumination

.....

Long-range illumination

25

Mounting

83

88

M 10

#### This LED product has the following features:

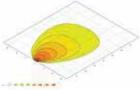




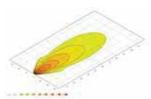
Module 70 LED handheld headlamp with handle and switch comprising 3 highpower LEDs as a version with long-range illumination or close-range illumination



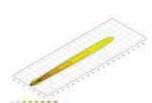
Module 70 handheld headlamp with handle and switch comprising 4 high-power LEDs for extra-wide illumination



Close-range illumination



Long-range illumination



Extra long-range illumination





83



to a switch for continuous operation, the handle also has a touch switch for short-term operation, enabling Morse code. Thanks to their low energy consumption, the Module 70 handheld headlamps are ideal for use on battery-powered vehicles. The headlamp's multi-voltage electronics enable it to be used on vehicles with 12 and 24 volt vehicle electric system voltages. Thanks to CoroSafe technology, the Module 70 LED handheld headlamps are optimally protected against corrosion. The work lights' aluminium housing is also treated with special chemical processes so that they can even withstand the toughest conditions. Colour temperature: 6,500 kelvins, multi voltage 9-32 volts, polarity reversal

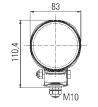
With these variants of the Module 70 LED series, HELLA is introducing compact,

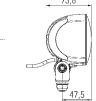
handheld headlamps onto the market, boasting a very powerful light output. The handheld headlamps can be used flexibly thanks to the practical handle. In addition

protection, overvoltage protection, thermal management, IP 6K9K/1P 6K7 (resistant to high-pressure cleaning/ submersible), ECE-R10 approved, DEUTSCH connector

Long-range illumination, 2,500 lumens, 30 watts	1H0 996 476-501
Close-range illumination, 2,500 lumens, 30 watts	1H0 996 476-511
Extra-wide illumination, 800 lumens, 13 watts	1H0 996 376-491







#### Module 70 LED blue

The Module 70 LED blue was specially developed for sprayers and snow ploughs. Less glare when illuminating spray mist, road salt or snow. In addition, the blue lens improves the perception of contrast at night.

Light output (measured): 800 lumens, power requirement: 13 watts, colour temperature: 5,000 kelvins, multi voltage 9-32 volts, polarity reversal protection, overvoltage protection, thermal management, IP 6K9K/IP 6K7 (resistant to high-pressure cleaning/submersible), ECE-R10 approved, DEUTSCH connector\*.

Long-range illumination, recommended tilt angle 5°

1G0 996 276-701

EMC

#### \* Recommended accessories:

2,000 mm cable with DEUTSCH connector and open akB 990 299-011 akB 990 299-011



#### This LED product has the following features:



#### Module 70 with magnetic base and spiral cable

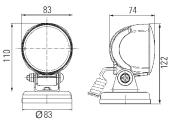
This variant of the Module 70 work light is suited to a wide range of applications thanks to its magnetic base and cigarette lighter. The magnet base enables flexible positioning on all magnetic surfaces and quick and simple mounting and removal. The spiral cable connection also allows optimum storage of the work light in the glove compartment.

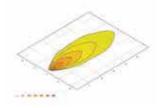
Light output (measured): 800 lumens, power requirement: 13 watts, colour temperature: 6,500 kelvins, multi voltage 9–32 volts, polarity reversal protection, overvoltage protection, thermal management, IP 6K9K/IP 6K7 (resistant to high-pressure cleaning/submersible), ECE-R10 approved, spiral cable with cigarette lighter.

Close-range illumination

1G0 996 376-631



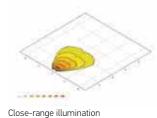


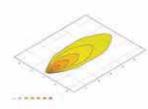


Close-range illumination









M 8

67

88

45

Long-range illumination

Mounting

153

Flush mounting

74

54

б С

<u>M 10</u>

#### Module 50 LED

Light output (measured): 800 lumens, power requirement: 15 watts, colour temperature: 6,500 kelvins, multi voltage 9-50 volts, polarity reversal protection, overvoltage protection, thermal management, IP 6K9K / IP 6K8 (resistant to high-pressure cleaning/ submersible), ECE-R10 approved, high-quality aluminium housing, ADR/GGVS tested, DEUTSCH connector\*.

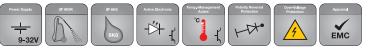
#### **Close-range illumination**

Upright mounting	1G0 995 050-001
Pendant mounting	1G0 995 050-011
Long-range illumination	

#### \* Recommended accessories:

2,000 mm cable with DEUTSCH connector and open cable ends	8KB 990 299-011
--	-----------------

#### This LED product has the following features:



#### Oval 100 LED Gen. 2

Light output (measured): 4,400 lumens, power requirement: 56 watts, colour temperature: 6,500 kelvins, multi voltage, polarity reversal protection, overvoltage protection, thermal management, IP 6K9K / IP 6K8 (resistant to high-pressure cleaning/ submersible), ECE-R10 approved, high-quality aluminium housing, ADR / GGVSEB on request, DEUTSCH connector\*.

#### Close-range illumination

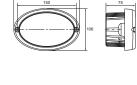
1GA 996 761-001
1GA 996 761-021
1GA 996 761-011

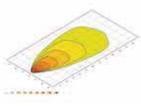
#### \* Recommended accessories:

2,000 mm cable with DEUTSCH connector and open	8KB 990 299-011
cable ends	OND 770 277-011









Long-range illumination





190

112

Light output (measured): 1,100 lumens, power requirement: 11 watts, colour temperature:  $6,500^\circ$  kelvins, multi voltage, polarity reversal protection, overvoltage protection, thermal management, IP 6K9K / IP 6K7 (resistant to high-pressure cleaning/submersible), ECE-R10 approved, impact-resistant plastic housing. Upright mounting, 2,000 mm cable with open cable ends.

#### Close-range illumination

Wall-mounted	1GD 996 193-001
Surrounding bracket	1GD 996 193-011

#### 45° illumination

The special lens optics enable perfect light projection into work area, even with vertical mounting. The structure refracts the light downwards at a  $45^\circ$  angle and therefore provides good illumination in the direct near field area. Wall-mounted

100 004	193-051
100 770	173-031



#### This LED product has the following features:





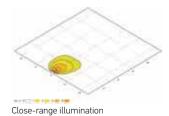
Light output (measured): 550 lumens, power requirement: 7 watts, colour temperature: 6,500°kelvins, multi voltage, polarity reversal protection, overvoltage protection, thermal management, IP 6K9K / IP 6K7 (resistant to high-pressure cleaning/submersible), ECE-R10 approved, impact-resistant plastic housing, 2,000 mm cable with open cable ends.

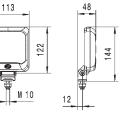
Standard 45° downward illumination: the special lens optics enable perfect light projection into the work area, even with vertical mounting. The structure refracts the light downwards at a 45° angle and therefore provides good illumination in the direct near field area.

#### Close-range illumination

Upright mounting, standard bracket	1GA 995 193-001
Pendant mounting, standard bracket	1GA 995 193-011
Upright mounting, wall-mounted	1GA 995 193-021
Upright mounting, strap fixing	1GA 995 193-031
Upright mounting, surrounding bracket	1GA 995 193-041









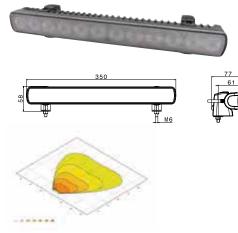
#### LED Lightbar 350

Light output (measured): 2,200 lumens, power requirement: 25 watts, colour temperature: 5,000 kelvins, multi voltage, polarity reversal protection, overvoltage protection, thermal management, IP 6K9K / IP 6K7 (resistant to high-pressure cleaning/submersible), ECE-R10 approved, Thermo Pro plastic housing.

#### **Close-range illumination**

2,500 mm cable with open cable ends

1GJ 958 040-501



Close-range illumination





# HELLA VALUEFIT. PROVEN QUALITY. GOOD PRICE.

Especially oriented toward the specific requirements on the independent aftermarket, the work lights of the HELLA VALUEFIT range provide the optimal mix of reliable quality, excellent performance and competitive pricing.

All HELLA VALUEFIT headlamps meet the relevant technical specifications, are safe and reliable, and enable cost-effective repairs. What's more, there is no need to go without important services.

# IN GOOD SHAPE FOR A STRONG PERFORMANCE

The HELLA VALUEFIT work lights are not only impressive because of their variety of shapes but also because of their light output. Equipped consistently with energy-efficient, bright LED technology, the work lights with up to 5,500 lumens provide outstanding workplace illumination. Whether you opt for the round or square housing shape, or the extra-flat light bar, the robust HELLA VALUEFIT headlamps are the ideal partner for many fields of application in agricultural and construction machinery as well as in trucks and trailers.



#### S800 LED

Light output (measured): 800 lumens, power requirement: 9 watts, protection class: IP 67 and IP 6K9K, aluminium housing, multi voltage: 10-30 volts, polarity reversal protection, ECE-R10 approved and ECE-R23 reversing light approved.

#### Close-range illumination – upright and pendant mounting

800 mm cable with open cable ends	1GA 357 107-012
3,000 mm cable with open cable ends	1GA 357 107-022



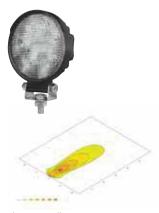
100

129

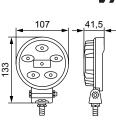
40

Close-range illumination





Close-range illumination



#### R900 LED

Light output (measured): 900 lumens, power requirement: 9 watts, protection class: IP 67 and IP 6K9K, aluminium housing, multi voltage: 10-30 volts, polarity reversal protection, ECE-R10 approved.

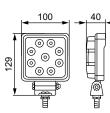
Close-range illumination - upright and pendant mounting

800 mm cable with open cable ends

1G0 357 108-012







#### S1500 LED

Light output (measured): 1,500 lumens, power requirement: 15 watts, protection class: IP 67 and IP 6K9K, aluminium housing, multi voltage: 10-30 volts, polarity reversal protection, ECE-R10 approved.

#### Close-range illumination – upright and pendant mounting ECE-R23 reversing light approved

800 mm cable with open cable ends	1GA 357 103-012
3,000 mm cable with open cable ends	1GA 357 103-022

With handle and switch, close-range illumination -

upright and pendant mounting ECE-R23 reversing light approved

DEUTSCH connector

1GA 357 103-082



#### This LED product has the following features:



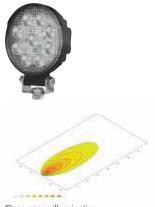


Light output (measured): 1,500 lumens, power requirement: 15 watts, protection class: IP 67 and IP 6K9K, aluminium housing, multi voltage: 10-30 volts, polarity reversal protection, ECE-R10 approved.

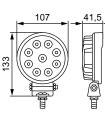
Close-range illumination - upright and pendant mounting

800 mm cable with open cable ends

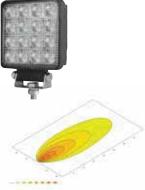
1G0 357 101-012

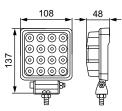












0)||37

000

#### S2500

Light output (measured): 2,500 lumens, power requirement: 25 watts, protection class: IP 67 and IP 6K9K, aluminium housing, multi voltage: 10-30 volts, polarity reversal protection, ECE-R10 approved.

#### Close-range illumination – upright and pendant mounting ECE-R23 reversing light approved

800 mm cable with open cable ends	1GA 357 106-022
3,000 mm cable with open cable ends	1GA 357 106-032

Close-range illumination

This LED product has the following features:



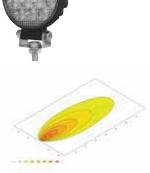
Light output (measured): 2,200 lumens, power requirement: 25 watts, protection class: IP 67 and IP 6K9K, aluminium housing, multi voltage: 10-30 volts, polarity reversal protection, ECE-R10 approved.

Close-range illumination - upright and pendant mounting

800 mm cable with open cable ends

1G1 357 105-022

EMC



Close-range illumination



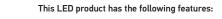
#### S3000 LED

Light output (measured): 3,000 lumens, power requirement: 31 watts, protection type: IP 67 and IP 6K9K, aluminium housing, multi voltage: 10-52 volts, polarity reversal protection, ECE-R10 approved, 800 mm cable.

#### Large area off-road lighting

800 mm cable, DEUTSCH connector included

#### 1GA 357 109-002





#### LBX LED-Lightbars

Light output (measured): up to 5,500 lumens, 9-32 volts, polarity reversal protection, overvoltage protection, IP 67 and IP 6K9K, ECE-R10 approved, aluminium housing, DEUTSCH connector\*, upright/pendant mounting.

#### Close-range illumination

LBX-220 LED, 1,000 lumens, 22 watts	1GE 360 000-002
LBX-380 LED, 2,000 lumens, 44 watts	1GJ 360 001-002

#### Long-range illumination

LBX-540 LED, 3,500 lumens, 66 watts	1GJ 360 002-002
LBX-720 LED, 5,500 lumens, 88 watts	1GJ 360 003-002

#### \* Recommended accessories:

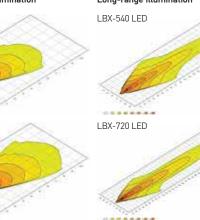
2,000 mm cable with DEUTSCH connector and open cable ends	8KB 990 299-011
--	-----------------

#### Close-range illumination

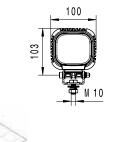
0.0.00

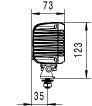
LBX-380 LED





Close-range illumination





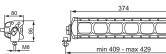
# LBX-220 LED





# 10.00

#### LBX-380 LED

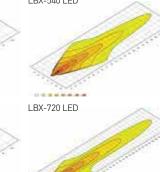








LBX-220 LED



# HELLA VISIOTECH PROJECTION TECHNOLOGY

With the new VISIOTECH projection technology, HELLA allows you to communicate using light by projecting various symbols and illuminations onto the ground. This results in increased safety and convenience during the daily work routine.

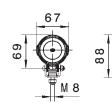
With the SL60 warning lamp, a special lens optic focuses the LED's light beams so much that a stripe-shaped warning line is projected onto the ground. Depending on the mounting, the warning line can be projected horizontally or vertically in front of the vehicle. This application warns other vehicles or pedestrians of an oncoming vehicle. The projected lines in front of the vehicle can also be used for easier vehicle navigation.

In both cases, occupational safety and comfort are significantly increased and accidents can be prevented in advance. Models of the SL60 LED warning lamp are available with a red or blue projection line, making it suitable for the most diverse kinds of applications.

#### This LED product has the following features:

EMC





#### Module 50 LED Spot

-Ď+

Power requirement: 15 watts, multi voltage 9 - 52 volts, polarity reversal protection, overvoltage protection, thermal management, IP 6K9K / IP 6K8 (resistant to highpressure cleaning/ submersible), ECE-R10 approved, high-quality aluminium housing, ADR/GGVS tested, DEUTSCH connector\*.

The Module 50 LED spot series by HELLA greatly contributes to workplace safety. These headlamps feature a special lens technology that focuses the light so strongly that a circular warning point is projected onto the ground. Depending on the surface, the colours white, blue, green or red are preferable.

White	1G0 995 050-051
Blue	1G0 995 050-061
Green	1G0 995 050-071
Red	1G0 995 050-081

#### \* Recommended accessories:

2,000 mm cable with DEUTSCH connector and open cable ends	8KB 990 299-011
--	-----------------

#### Application examples





The Module 50 LED spot warning lamp projects a circular warning point onto the ground. Here, too, a special lens optic focuses the LED light so much that a circular warning spot is projected onto the ground. This application is suitable for a wide range of applications (e.g. forklift). Thanks to its compact dimensions, the Module 50 LED spot is particularly well-suited when there is little space available for installation. The headlamp serves primarily as a warning lamp to visually warn other vehicles or pedestrians of an approaching vehicle, but can also be used to visually mark certain areas. The Module 50 LED spot warning lamp is available in blue, green, red and white.

Using the SL60 LED and Module 50 LED spot warning lamp is permitted for applications outside the StVZO. Special approvals are required for special applications on the road.

#### This LED product has the following features:



SL60 LED

Compact warning lamp. A special lens optic focuses the LED's light beams so much that a stripe-shaped warning line is projected onto the ground. This alerts other vehicles and pedestrians. The lines can also be used for easier vehicle navigation.

Power requirement: 8 watts, multi voltage: 10-80 volts, ECE-R10 approval, IP 67 and IP 6K9K connection: 1,000 mm cable with open cable ends.

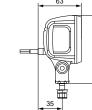
#### Illumination

Blue	1G0 996 210-001
Red	1G0 996 210-011

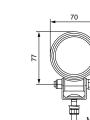
Application examples

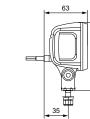






66





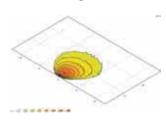


#### Module 70 LED reversing light

800 lumens, power requirement: 13 watts, colour temperature: 6,500 kelvins, extra-wide close-range illumination, IP 6K9K/IP 6K7 (resistant to high-pressure cleaning/submersible), upright/pendant mounting, high-quality aluminium housing with CoroSafe coating, ECE-R10 and ECE-R23 approved.

2,000 mm cable with open cable ends

2ZR 996 376-091



Close-range illumination

#### This LED product has the following features:



Light output (measured): 1,000 lumens, power requirement: 12 watts, colour temperature:

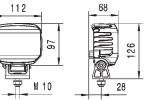
6,500 kelvins, multi voltage, polarity reversal protection, overvoltage protection, thermal management, IP 6K9K/IP 6K8 (resistant to high-pressure cleaning/ submersible), ECE-R10 and ECE-R23 approved, plastic housing, ADR/GGVS tested, upright/pendant mounting, DEUTSCH connector\*.

DEUTSCH connector 2ZR 996 188-521

#### \* Recommended accessories:

2,000 mm cable with DEUTSCH connector and open cable ends 8KB 990 299-011





Close-range illumination

83

88

M 10

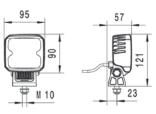
123

25

Power Beam 1000 compact reversing light



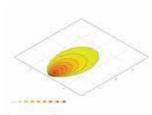




#### Q90 compact LED reversing light

1,000 lumens, power requirement: 15 watts, colour temperature: 5,000°kelvins, IP 6K9K/ IP 6K7 (resistant to high-pressure cleaning/submersible), heat-conducting plastic housing, total corrosion protection thanks to innovative plastic housing, upright/pendant mounting, ECE-R10- and ECE-R23 approved.

2,000 mm cable with open cable ends	2ZR 996 284-501
500 mm cable and DEUTSCH connector, ADR / GGVSEB tested	2ZR 996 284-511



Close-range illumination

#### This LED product has the following features:

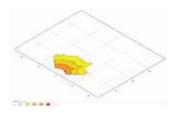




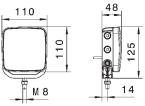
870 lumens, power requirement: 11 watts, colour temperature: 5,500°kelvins, IP 6K9K/ IP 6K7 (resistant to high-pressure cleaning/submersible), heat-conducting plastic housing, total corrosion protection thanks to Thermo Pro technology, upright/pendant mounting, ECE-R10 and ECE-R23 approved.

AMP-SUPERSEAL connector (2-pin) with 2,000 mm cable with open cable ends	2ZR 012 456-201
EasyConn connector (2-pin) with 1,000 mm cable with open cable ends	2ZR 012 456-211
6.3 mm flat receptacles with 3,500 mm cable with open cable ends	2ZR 012 456-221





Close-range illumination



## Accessories

Product photo	Description	Part number
Bracket		
6.0	<b>Pipe-socket mounting bracket</b> For combination with 8HG 002 365-001 socket pipe. Suitable for mounting with 42 mm bracket width. Electrical contacting within the pipe socket via socket according to DIN 7 2 591.	
	With AMP plug connection or grommet <b>Model series:</b> Halogen: Ultra Beam, Mega Beam and Oval 100	8HG 990 320-001
	With DEUTSCH connector or grommet <b>Model series:</b> LED: Ultra Beam, Oval 100, Power Beam and Module 90 Halogen: Ultra Beam	8HG 990 320-011
	<b>Mirror bracket attachment</b> Rotatable universal bracket for mounting on tubes/pipes (diameter: 15-25 mm). For replacement on work lights with 36 mm or 42 mm bracket width.	
	36 mm bracket width <b>Model series:</b> Oval 90, Module 70 and Flat Beam 500	8HG 990 263-111
	42 mm bracket width <b>Model series:</b> Ultra Beam, Mega Beam, Oval 100, Power Beam, Module 90, Q90 LED and AP 1200 LED	8HG 990 263-131
the second se	Magnetic mounting bracket For work lights with U-bracket. Includes 2 x magnets and fastening materials. Model series: All work lights with standard bracket	8HG 004 806-001
, 	Four-point mounting Made of amber chrome-plated steel	9XD 990 298-001
	Model series: All work lights with standard bracket         Four-point mounting         Made of stainless steel with oblong holes         Model series: All work lights with standard bracket	9XS 130 261-001
R R R R R R R R R R R R R R R R R R R	Angle bracket Angle attachment for work lights with 42 mm bracket width Model series: Ultra Beam, Mega Beam, Oval 100, Power Beam, Module 90, Q90 LED and AP 1200 LED	9XD 990 298-031
1010.3	Plastic bracket Glass-fibre-reinforced standard bracket for work lights Model series: Ultra Beam, Mega Beam, Oval 100, Power Beam, Module 90, Q90 LED and AP 1200 LED	
42 42	42 mm bracket width Standard bracket With extra space to the rear	8HG 332 912-002
45	Model series: Ultra Beam, Mega Beam, Oval 100, Power Beam, Module 90, Q90 LED and AP 1200 LED	
Ø10,5	42 mm bracket width	8HG 992 377-042
30	Oblong hole bracket Special bracket with oblong hole for mounting	
	Model series: Oval 90, Module 70 and Flat Beam 500	
08,5	36 mm bracket width Forked bracket Spacial bracket for flat mounting	8HG 331 414-372
	Special bracket for flat mounting  Model series: Oval 90, Module 70 and Flat Beam 500	
30 35	36 mm bracket width	8HG 994 412-372
42	Standard bracket with eyelet Standard bracket for extensions with restricted space to the rear	
R	Standard bracket for extensions with restricted space to the rear <b>Model series:</b> Ultra Beam, Mega Beam, Oval 100, Double Beam, AS 200, Power Beam, Module 90, Q90 LED and AP 1200 LED	
<i>28</i> Ø10,5		8HG 994 974-002

## Accessories



#### Connectors

The comprehensive range of HELLA accessories for plug connections offers solutions for virtually every area of application. Unwanted failures are often caused by faulty wiring and not by the products themselves. With the help of the HELLA SUPERSEAL range, a water- and dustproof connection of the cable ends is achieved. This, in turn, offers the best working conditions in all weathers.

DEUTSCH connector set, 2-pin	8JA 201 022-801
DEUTSCH connector set, 6-pin	8JA 201 022-831
AMP connector set (consisting of AMP connector and installation sleeves)	8JD 990 295-037
HB3 connector (10x)	8JA 990 295-217
H9 connector (20x)	8JD 158 175-807
SUPERSEAL, assortment case, consisting of various SUPERSEAL plug housings, pin/socket contacts, single conductor seals and dummy plugs (780 parts)	8JA 009 256-801

#### Cables

HELLA offers numerous adapter cables as accessories for uncomplicated commissioning of the headlamps.





2,000 mm cable with AMP connector and open cable ends	8KB 990 299-001
2,000 mm cable with DEUTSCH connector and open cable ends	8KB 990 299-011
2,000 mm cable with H9 connector and open cable ends and rubber cap	8KB 990 299-311
2,000 mm cable with HB3 connector and open cable ends	8KB 990 299-331
200 mm adapter cable from DEUTSCH to AMP connector	8KB 990 299-361
230-volt power supply (suitable for headlamps up to max. 45 watts)	8EN 332 584-001

## HELLA BEACONS

#### Play it safe - with beacons from HELLA!

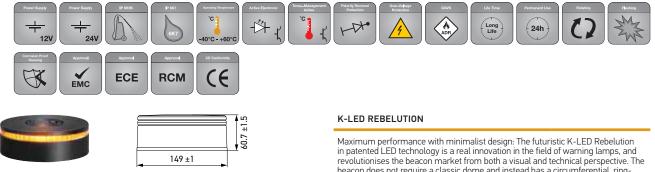
Whenever a special optical warning against dangerous situations is required, beacons are in the limelight. This is not restricted to rescue missions but is also the case during assignments with large, heavy and/or slow vehicles, such as harvesters or heavy-duty transporters. The HELLA beacons have a strong warning effect and tell other road users: please be careful, work is being carried out around the vehicle. Therefore, our beacons do their part in providing greater safety. This safety is also achieved thanks to the optimal light focus and distribution, the resulting long range and the very high luminous intensity of the applied LED technology.

HELLA is also constantly working on the development of new, innovative solutions in the beacon sector, which open up new possibilities for both the warning effect and the design. One example is the use of EdgeLight technology in the new K-LED Rebelution. Here, a special light guide ensures a particularly clear signature through a light-emitting edge. This gives an impressive appearance and a particularly striking and clearly perceptible light image.

In addition, HELLA beacons are characterised by outstanding quality in terms of workmanship and stability – as proven by their long service life.

Do not leave safety to chance - put your trust in HELLA beacons.





Flashing



Rotating

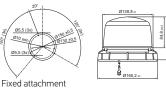
Maximum performance with minimalist design: The futuristic K-LED Rebelution in patented LED technology is a real innovation in the field of warning lamps, and revolutionises the beacon market from both a visual and technical perspective. The beacon does not require a classic dome and instead has a circumferential, ringshaped light band. Despite the minimal light exit area, the beacon emits a clearly visible warning signal and complies with European Directive ECE-R65 for use on public roads. Further advantages are protection against water and dust, as well as outstanding electromagnetic compatibility (EMC).

K-LED Rebelution F, flashing, amber	2XD 455 255-001
K-LED Rebelution F, rotating, amber	2RL 455 256-001

Type approval: ECE-R10, ECE-R65







#### ROTA LED COMPACT

The Rota LED Compact is the LED successor of the existing halogen beacon series Rotafix, Rotaflex and Rota Compact. These can be replaced 1:1. No moving parts are required for the LED functions – no wear and tear and maximum reliability. Since LEDs are maintenance-free, they do not have any additional costs for spare parts or maintenance. Downtimes are reduced to a minimum. The beacon is available in three different mounting variants. Flexible base protects from branch impact: the beacon bends and always returns to its original position.

Fixed, rotating	2RL 014 979-001
Pipe socket Flex, rotating	2RL 014 979-011
Magnet, rotating	2RL 014 979-021
Solid, flashing	2XD 013 979-001
Pipe socket Flex , flashing	2XD 013 979-011
Magnet, flashing	2XD 013 979-021

Type approval: ECE-R10, ECE-R65, SAE J845 class 2, SAE J845 class 1 - version available on request

#### This LED product has the following features:



#### KL 7000 LED

The KL 7000 LED is the logical development of the widely used KL-700 and KL-7000 series. The beacon is characterised by its flat and compact design, long service life, and a high degree of efficiency in converting electric power into light. It makes it easy to change from halogen to LED.

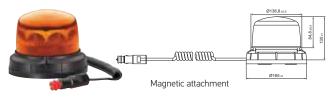
Fixed, rotating	2RL 011 484-001
Pipe socket, rotating	2RL 011 484-011
Magnet, rotating	2RL 011 484-021
Solid, flashing	2XD 012 972-001
Pipe socket, flashing	2XD 012 972-011
Magnet, flashing	2XD 012 972-021

Type approval: ECE-R10, ECE-R65, SAE J845 class 2





Pipe socket mounting Flex

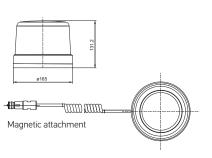


Fixed attachment

•

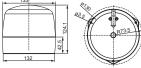
Pipe-socket mounting





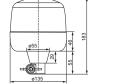




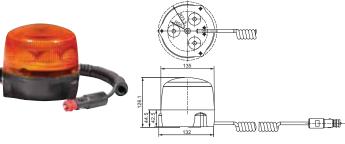


Fixed attachment





Pipe socket mounting Flex



Magnetic attachment

#### ROTA LED

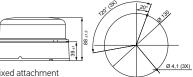
The Rota LED with rotating or flashing LED light function is a convincing offering with its high efficiency, flat and compact design. Due to the shock absorbing rubber foot, it is highly resilient to vibration and thus perfectly suited to challenging applications.

Pipe socket Flex, rotating         2RL 010 979-011           Magnet, rotating         2RL 010 979-021           Solid, flashing         2XD 012 878-001           Pipe socket Flex, flashing         2XD 012 878-011           Magnet, flashing         2XD 012 878-021	Fixed, rotating	2RL 010 979-001
Solid, flashing         2XD 012 878-001           Pipe socket Flex, flashing         2XD 012 878-011	Pipe socket Flex, rotating	2RL 010 979-011
Pipe socket Flex, flashing 2XD 012 878-011	Magnet, rotating	2RL 010 979-021
	Solid, flashing	2XD 012 878-001
Magnet, flashing 2XD 012 878-021	Pipe socket Flex, flashing	2XD 012 878-011
	Magnet, flashing	2XD 012 878-021

Type approval: ECE-R10, ECE-R65, SAE J845 class 2





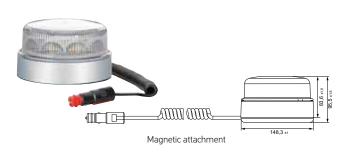


Fixed attachment





Pipe socket mounting Flex

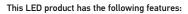


#### K-LED BLIZZARD

The K-LED Blizzard is the successor generation to the popular and widely used K-LED FO. These can be replaced 1:1. The new generation combines its predecessor's popular design with the latest LED technology. Alongside functional control, this beacon boasts the option of synchronising up to four beacons with one another. The beacon is available in three different mounting variants and has a flashing light function.

Solid, flashing	2XD 012 980-001
Pipe socket Flex, flashing	2XD 012 980-011
Magnet, flashing	2XD 012 980-021

Type approval: ECE-R10, ECE-R65, SAE J845 class 2





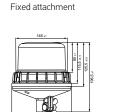


The K-LED 1.2 is the innovative addition to the K-LED family. It is available as a rotating or flashing variant. The double lighting system in the K-LED 1.2 ensures a larger light exit area and thus a particularly large warning effect. No moving parts are required for the K-LED 1.2 either - there is no need to replace wearing parts. The beacon is therefore characterised by a long service life. The impact-resistant data of a double area to the fore the service of the fore the service of the servic dome made of polycarbonate guarantees particularly reliable protection against impacts (e.g. from branches). The radio signals are not disturbed by the K-LED 1.2 as it has a high EMC resistance.

Fixed, rotating	2RL 012 983-301
Pipe socket, rotating	2RL 012 983-401
Solid, flashing	2XD 012 984-301
Pipe socket, flashing	2XD 012 984-401

Type approval: ECE-R10, ECE-R65, SAE J845 class 2





⇒ Ø169.3 ±1 000

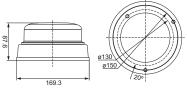
5

Ø6

Pipe-socket mounting







Fixed attachment

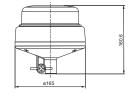
#### K-LED 2.0

The K-LED 2.0 is the first HELLA beacon with a choice between a rotating or flashing warning signal. The integrated light sensor automatically toggles between day and night mode. This guarantees the best possible warning effectiveness. Extremely flat design and impact-resistant dome. Radio signals are not disturbed by the K-LED 2.0.

Fixed attachment, with silver-coloured base plate	2XD 011 557-101
Fixed attachment, with black base plate	2XD 011 557-841
Pipe socket, with silver-coloured base plate	2XD 011 557-201
Pipe socket, with black base plate	2XD 011 557-811
Magnet, with silver-coloured base plate	2XD 011 557-301

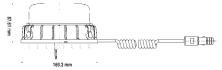
Type approval: ECE-R65, ECE-R10, SAE J845 class 1





Pipe-socket mounting





Magnetic attachment

## Accessories

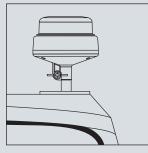
Product photo	Description	Part number	VPE
	Socket pipe to weld on, straight, 100 mm long, with rubber stopper and socket according to DIN 14620	1-pin 8HG 002 365-001 2-pin 8HG 006 294-101	1
11 - 58	Socket pipe with screw-on base plate, total height 126 mm, with rubber stopper and socket according to DIN 14620	1-pin 8HG 006 294-011 2-pin On request	1
	Socket pipe, angled, with lateral screw-on base plate, clearance 90 mm, height 100 mm including rubber stopper, socket , 2 x hexagon screws M8 x 35, 2 x hexagon nuts M8, 2 x spring washers according to DIN 14620	1-pin 8HG 006 294-021 2-pin On request	1
	Socket pipe, angled, with lateral screw-on base plate, clearance 50 mm, height 100 mm including rubber stopper, socket , 2 x hexagon screws M8 x 35, 2 x hexagon nuts M8, 2 x spring washers according to DIN 14620	1-pin 8HG 006 294-111 2-pin On request	1
	Socket pipe for inclined screw-on surfaces, adjustable to 90° parallel to the carriageway, height approx. 105 mm, with rubber stopper, socket, 2 x hexagon screws M8 x 35, 2 x hexagon nuts M8, 2 x spring washers according to DIN 14620	1-pin 8HG 006 294-031 2-pin 8HG 006 294-141	1
	Socket pipe with screw attachment, height approx. 100 mm, with rubber stopper and socket according to DIN 14620	1-pin 8HG 006 294-051 2-pin 8HG 006 294-091	1
0	Socket pipe with 2 screw holes for attaching it to the rear of the cab, with telescope bracket, total height approx. 1,000 mm, can be shifted up to 700 mm, with rubber stopper and socket according to DIN 14620	1-pin 8HG 006 294-041 2-pin On request	1
	Socket pipe to weld on, straight, height 100 mm compatible with 8HG 002 365-001 / 8HG 006 294-101	8HG 096 531-007	2
	Socket pipe, straight, with screw-on base plate, total height 126 mm compatible with 8HG 006 294-011 / -121	8HG 096 531-107	2
	Socket pipe, angled, with base plate for screwing onto side, clearance 90 mm compatible with 8HG 006 294-021 / -221	8HG 096 531-117	2
	Socket pipe, angled, with base plate for screwing onto side, clearance 50 mm compatible with 8HG 006 294-111 / -211	8HG 096 531-127	2
	Socket pipe for inclined screw-on surfaces, adjustable to 90° parallel to the carriageway, height approx. 105 mm compatible with 8HG 06 294-031 / -141	8HG 096 531-137	2

# Accessories

Product photo	Description	Part number	VPE
SIT.	2-pin socket with cover, with 2 blade terminal connections 6.3 mm	8JB 004 777-001* 8JB 004 777-002*	5 1
	2-pin socket with cover, with 300 m cable 2.5 mm2 and 2 blade terminal connections 6.3 mm	8JB 001 946-101*	1
	2-pin aluminium alloy socket with cover and 1 screw connection, ground on housing	8JB 001 946-021*	10
The second	2-pin socket with cover and 2 blade terminal connections 6.3 mm	8JB 004 123-031*	1
0	1-pin round socket with oval-head screw M4 x 8	8JB 850 434-011*	10
	1-pin socket outlet with cover	8JB 001 946-011*	10
	12 V, control unit for monitoring the operation of the rotating beacons and strobe-type beacons, indicates the failure of a beacon	5KG 011 630-101	1
	Rubber stopper/cap according to DIN 14620	9GH 096 532-001 9GH 096 532-007	10 200

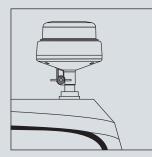
\* Sockets comply with DIN ISO 4165; installation opening: Ø 18.5 mm, control panel thickness max. 7 mm.

#### Mounting examples



Socket pipe with base plate for screwing on

Socket pipe, angled, with base plate for screwing onto side



Socket pipe with screw attachment



Socket pipe, pivoting



#### BST-SLIM

32.89,4

Optimum signalling effect thanks to a combination of power LEDs and a high-grade precision lens. Particularly flat and compact design (construction height 12.8 mm). In addition to continuous light, a total of four flash patterns (single, double, triple,

quadruple flash) can be set as synchronous or alternating signals.

#### Horizontal installation

With 6 LEDs, power consumption 13-17 W (day/night mod	le)
Blue, 2 units	2XD 014 562-001
Amber, 2 units	2XD 014 562-201
Red, 2 units	2XD 014 562-601
With 3 LEDs, power consumption 6-9 W (1 level)	
Blue, 2 units	2XD 014 563-001
Amber, 2 units	2XD 014 563-201
Red, 2 units	2XD 014 563-601

#### Vertical installation

With 6 LEDs, power consumption 13-17 W (day/night mode)	
Blue, 2 units	2XD 014 592-001
Amber, 2 units	2XD 014 592-201
Red, 2 units	2XD 014 592-601

Lighting homologation BST-Slim 3 LED: ECE-R65 XA1, XB1, XR1

Lighting homologation BST-Slim 6 LED: ECE-R65, XA2, XB2, XR2 EMC: ECE-R10, CISPR 25 class 5

K approval (§ 53a StVZO) only for versions in amber

#### This LED product has the following features:

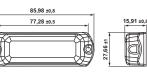


# 

Fixed attachment



Bracket mounting



22.11 ±0,8

64.55 ±0,5

<u>er</u>ne

#### BST - FOR HORIZONTAL MOUNTING

Optimum signalling effect thanks to a combination of three power LEDs and a high-grade precision lens. Flat and compact design. In addition to continuous light, a total of four flash patterns (single, double, triple, quadruple flash) can be set as synchronous or alternating signals. Power consumption: 7-14 W.

#### Fixed attachment

Blue (1 level), 2 units	2XD 014 561-001
Amber (1 level), 2 units	2XD 014 561-201
Red (1 level), 2 units	2XD 014 561-601

#### Bracket mounting

Blue (1 level), 2 units	2XD 014 561-101
Amber (1 level), 2 units	2XD 014 561-401
Red (1 level), 2 units	2XD 014 561-701

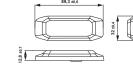
Lighting homologation standard: ECE-R65 XA1, XB1, XR1

EMC: ECE-R10, CISPR 25 class 3

K approval (§ 53a StVZO) only for versions in amber

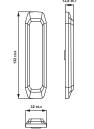
Please observe the statutory mounting guidelines. Use only to such an extent as is permitted by law. Mounting only to the side or to the rear. Front mounting requires special approval from the responsible regional authority.





38

132 ±0,6





#### **BST-V - FOR VERTICAL MOUNTING**

Optimum signalling effect thanks to a combination of six power LEDs and a highgrade precision lens. Flat and compact design. In addition to continuous light, a total of four flash patterns (single, double, triple, quadruple flash) can be set as synchronous or alternating signals. Power consumption: 7-14 W.

#### Fixed attachment

Amber (1 level), 2 units	2XD 012 160-951
Blue (1 level), 2 units	2XD 012 160-901

#### Bracket mounting

Amber (1 level), 2 units	2XD 012 160-961
Blue (1 level), 2 units	2XD 012 160-911

Lighting homologation standard: ECE-R65 XA1, XB1

EMC: ECE-R10, CISPR 25 class 5

K approval (§ 53a StVZO) only for versions in amber

Please observe the statutory mounting guidelines. Use only to such an extent as is permitted by law. Mounting only to the side or to the rear. Front mounting requires special approval from the responsible regional authority.

#### This LED product has the following features:



#### **BST - FOR HORIZONTAL MOUNTING**

Optimum signalling effect thanks to a combination of six power LEDs and a high-grade precision lens. Flat and compact design. In addition to continuous light, a total of four flash patterns (single, double, triple, quadruple flash) can be set as synchronous or alternating signals. Power consumption: 7-14 W.

#### Fixed attachment

Blue (day/night level), 2 units	2XD 014 560-001
Blue (1 level), 2 units	2XD 012 160-801
Amber (day/night level), 2 units	2XD 014 560-201
Amber (1 level), 2 units	2XD 012 160-851
Red (1 level), 2 units	2XD 012 160-821

#### Bracket mounting

Blue (day/night level), 2 units	2XD 014 560-101
Blue (1 level), 2 units	2XD 012 160-811
Amber (day/night level), 2 units	2XD 014 560-401
Amber (1 level), 2 units	2XD 012 160-861
Red (1 level), 2 units	2XD 012 160-831

Lighting homologation standard: ECE-R65 XA1, XB1, XR1, CISPR 25 class 5

Lighting homologation day/night mode: ECE-R65 XA2, XB2, CISPR 25 class 3

EMC: ECE-R10, CISPR 25 class 3 or 5

K approval (§ 53a StVZO) only for versions in amber

Please observe the statutory mounting guidelines. Use only to such an extent as is permitted by law. Mounting only to the side or to the rear. Front mounting requires special approval from the responsible regional authority.



Fixed attachment

27,82 ±1

<del>ie a i</del>



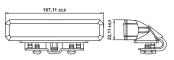
Bracket mounting



Fixed attachment



Bracket mounting



7,61 ±0,

127,45 ±0,8 119,93 ±0,5

# HELLA FRONT LIGHTING

#### Look ahead - with front lighting solutions from HELLA

Nothing works without powerful headlamps - neither on the road nor on the field. They are, so to speak, a vehicle's eyes and therefore an essential safety feature when driving and working at night. The HELLA 90 mm front lighting modules are specially designed to meet the needs of trucks and agricultural vehicles. Due to their wide range of functions, they can be used in almost all vehicles and situations. The modules are small, but powerful. Thanks to their modular concept, they offer a high degree of flexibility, allowing for many areas of application, particularly in trucks and agricultural vehicles.

As a result of the future-proof HELLA upgrade concept, traditional halogen modules can also be converted at a later date to efficient, light-intense LED technology, a feature which is already present in most of the modules.



#### 90 mm modules

Program overview

- $\rightarrow$  For the most diverse applications and maximum demands
- ightarrow Maximum design and technological freedom thanks to modular system
- → More illumination and safety due to innovative LED technology

	LED	Halogen (conventional lighting technology)
Main light functions	<ul> <li>→ Low beam and high beam (bi-modules)</li> <li>→ Low beam</li> <li>→ Low beam with daytime running light and position light</li> <li>→ High beam</li> <li>→ High beam with daytime running light and position light</li> <li>→ High beam and direction indicator light</li> </ul>	<ul> <li>→ Low beam and high beam (bi-modules)</li> <li>→ Low beam</li> <li>→ High beam</li> <li>→ High beam and position light</li> </ul>
Auxiliary light functions	<ul> <li>→ Fog light</li> <li>→ Fog light and cornering light</li> <li>→ Fog light, daytime running light and position light</li> <li>→ Daytime running light</li> <li>→ Daytime running light and position light</li> <li>→ Direction indicator light, daytime running light and position light</li> </ul>	<ul> <li>→ Fog light</li> <li>→ Fog light and cornering light</li> <li>→ Fog light and daytime running light</li> <li>→ Daytime running light and position light</li> <li>→ Position light</li> <li>→ Direction indicator light and position light</li> <li>→ Direction indicator light</li> </ul>

#### 90 mm modules

Configurator

Powerful, cost-efficient and modular. Put together your customised front lighting from our wide range of 90 mm modules.

#### www.hella.com/headlamp-modules



### 90 mm: L 4060 LED low beam

Uniform illumination similar to daylight. Low beam, daytime running light and position light in one module or as a separate low beam. 40 x 60 mm polycarbonate lens for a new design. Mounting points as for Performance module, enabling like-for-like replacement. Choice of FEP or DEUTSCH connection. Hardened cover lens made of plastic. Integrated electronics, robust die-cast aluminium housing, multi voltage: 9-32 volts. Exact adjusting screws for Premium and Performance mounting included with delivery.

ECE SAE EMC

#### LED low beam headlamp L 4060\*

Module headlamp with 40 x 60 mm polycarbonate lens, robust die-cast aluminium housing, silver-coloured design cover (black design cover on request), multi voltage 9-32 volts.

Right-hand traffic/SAE version, FEP connector	1BL 012 488-0011)
Left-hand traffic, FEP connector	1ML 012 488-011
Right-hand traffic/ SAE-Version, DEUTSCH connector	1BL 012 488-101 <sup>1)</sup>
Left-hand traffic, DEUTSCH connector	1ML 012 488-111

Type approval: ECE-R112, ECE-R10, 1BL 012 488-001: ☺ 3831, 1ML 012 488-011: ☺ 4090, 1BL 012 488-101: ☺ 3881, 1ML 012 488-11: ☺ 4090



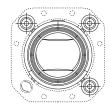
#### LED low beam headlamp L 4060 with daytime running light/ position light\*

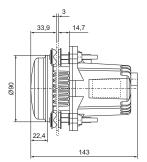
Module headlamp with 40 x 60 mm polycarbonate lens, robust die-cast aluminium housing, silver-coloured design cover (black design cover on request), multi voltage 9-32 volts.

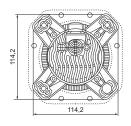
Right-hand traffic/SAE version, FEP connector	1BL 012 488-0211)
Left-hand traffic, FEP connector	1ML 012 488-031
Right-hand traffic/SAE-Version, DEUTSCH connector	1BL 012 488-121 <sup>1)</sup>
Left-hand traffic, DEUTSCH connector	1ML 012 488-131

Type approval: ECE-R112, R87, R7, ECE-R10, 1BL 012 488-021: (©) 3831, 1ML 012 488-031: (©) 4090, 1BL 012 488-121: (©) 3881, 1ML 012 488-131: (©) 4090

Performance module mounting for like-for-like replacement of existing halogen versions







\*In areas where the ECE-R48 regulation applies, vehicles registered in accordance with ECE-R48, series 05 must incorporate suitable measures to safeguard active failure control of an LED headlamp in the vehicle electrical system. The failure control is no longer mandatory for vehicles approved according to ECE-R48 series 06.

A 3A fuse from HELLA is required for all LED headlamps. A fuse of >3A is not sufficient to safely interrupt the power supply in the event of a fault. If the degree of protection is unknown, an external safety switch (e.g. 8JD 743 557-021) can be used. If water gets in, incorrect protection can lead to damage ranging from melting to burning of the product.





### 90 mm: L 4060 LED high beam

High-end illumination. High beam, daytime running light and position light in one module, one high beam/ direction indicator light combination or high beam as a separate module. 40 x 60 mm polycarbonate lens for a new design. Unpatterned and hardened cover lens made of plastic. High beam headlamp either with preassembled carrier frame or as a 90 mm Performance module mount, enabling like-for-like replacement. Integrated FEP connector and driver electronics. Robust die-cast aluminium housing, multi voltage: 9-32 volts.



#### LED high beam headlamp L 4060

Module headlamp with 40 x 60 mm polycarbonate lens, robust die-cast aluminium housing, silver-coloured design cover (black design cover on request), multi voltage 9-32 volts.

Preassembled carrier frame	1F0 011 988-021
Performance mounting	1F0 011 988-121

Type approval: ECE-R112, ECE-R10, 🗊 3831



#### LED high beam headlamp L4060 with daytime running light/position light

Module headlamp with 40 x 60 mm polycarbonate lens, robust die-cast aluminium housing, silver-coloured design cover (black design cover on request), multi voltage 9-32 volts.

Preassembled carrier frame	1F0 011 988-031
Performance mounting	1F0 011 988-131

Type approval: ECE-R112, R87, R7, ECE-R10, 🗐 3831



#### LED high beam headlamp L4060 with direction indicator light

Module headlamp with 40 x 60 mm polycarbonate lens, robust die-cast aluminium housing, silver-coloured design cover (black design cover on request), multi voltage: 9-32 volts.

Preassembled carrier frame with pulse generator*	1F0 011 988-081
Preassembled carrier frame without pulse generator*	1F0 011 988-071
Performance mounting with pulse generator*	1F0 011 988-181
Performance mounting without pulse generator*	1F0 011 988-171

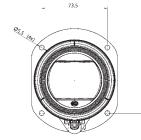
Type approval: ECE-R112, R6, ECE-R10, 3831

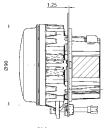
A 3A fuse from HELLA is required for all LED headlamps. A fuse of >3A is not sufficient to safely interrupt the power supply in the event of a fault. If the degree of protection is unknown, an external safety switch (e.g. 8JD 743 557-021) can be used. If water gets in, incorrect protection can lead to damage ranging from melting to burning of the product.

Pulse generator: Malfunctions of the high beam with direction indicator light module can usually be detected using the vehicle control unit. The detection stages are as follows: DI: <400 mA; HB: <800 mA. If your control unit cannot detect stage < 400 mA for DI, the pulse generator will increase the amperage in an interval of 100 to 120 ms to simulate the level consistent with a standard 12 volts (21 watts) bulb.

#### With preassembled carrier frame

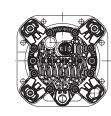
Performance module mounting for like-for-like replacement of existing halogen versions

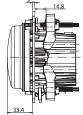






116







\* SAE only up to vehicle width of 2,032 mm

## 90 mm: L 4060 fog light

Uniform illumination similar to daylight. Fog light in various combinations or as a separate module, with daytime running light, position light and cornering light. 40 x 60 mm polycarbonate lens, unpatterned, hardened

cover lens made of plastic, integrated FEP connector and driver electronics.

Robust die-cast aluminium housing, multi voltage: 9-32 volts.





#### LED fog lamp L 4060

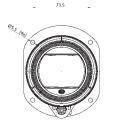
Module headlamp with 40 x 60 mm polycarbonate lens, robust die-cast aluminium housing, silver-coloured design cover (black design cover on request), multi voltage 9-32 volts.

Preassembled carrier frame

Type approval: ECE-R19 F3, ECE-R10, 🗊 3831

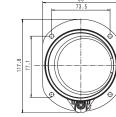
1N0 011 988-051 1N0 011 988-061

With preassembled carrier frame

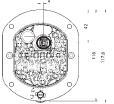


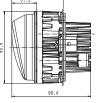
With preassembled carrier frame

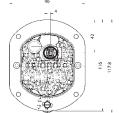
1N0 011 988-001 1N0 011 988-011













#### LED fog lamp L 4060 with daytime running light/position light

Module headlamp with 40 x 60 mm polycarbonate lens, robust die-cast aluminium housing, silver-coloured design cover (black design cover on request), multi voltage: 9-32 volts.

Preassembled carrier frame

Type approval: ECE-R19 F3, R87, R7, ECE-R10, 3831



#### LED fog lamp L 4060 with cornering light

Module headlamp with 40 x 60 mm polycarbonate lens, robust die-cast aluminium housing, silver-coloured design cover (black design cover on request), multi voltage 9-32 volts.

Preassembled carrier frame, right	1N0 011 988-061
Preassembled carrier frame, left	1N0 011 988-051

Type approval: ECE-R19 F3, R119, ECE-R10, (2) 3832

A 3A fuse from HELLA is required for all LED headlamps. A fuse of >3A is not sufficient to safely interrupt the power supply in the event of a fault. If the degree of protection is unknown, an external safety switch (e.g. 8JD 743 557-021) can be used. If water gets in, incorrect protection can lead to damage ranging from melting to burning of the product.



1N0 011 988-001



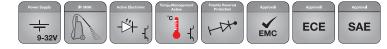


1N0 011 988-011

## 90 mm: Bi-LED low beam and high beam

2nd generation Bi-LED module with further enhanced lighting/electronics. 55 x 70 mm polycarbonate lens, unpatterned, hardened cover lens made of plastic, no moving parts, passive cooling. FEP and DEUTSCH connectors, SAE version available. Integrated function output for failure control. Multi voltage: 9-32 volts.

#### This LED product has the following features:









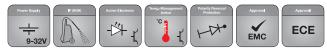
### Bi-LED low beam and high beam headlamp L 5570 2nd generation

Module headlamp with 55 x 70 mm polycarbonate lens, robust die-cast aluminium housing, hardened cover lens made of plastic, no moving parts, multi voltage 9-32 volts.

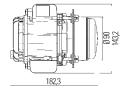
Right-hand traffic, FEP connector	1AL 012 758-001
Left-hand traffic, FEP connector	1LL 012 758-011
SAE version, FEP connector	1AL 012 758-0211)
Right-hand traffic, DEUTSCH connector	1AL 012 758-101
Left-hand traffic, DEUTSCH connector	1LL 012 758-111
SAE version, DEUTSCH connector	1AL 012 758-121 <sup>1)</sup>
Type approval: ECE_R112 ECE_R10	

Type approval: ECE-R112, ECE-R10

#### This LED product has the following features:







#### 1ST GENERATION (SINCE 2012) BI-LED LOW BEAM AND HIGH BEAM HEADLAMP L 70\*

Module headlamp with 70 mm DE lens

Right-hand traffic	1AL 010 820-021**
Left-hand traffic	1LL 010 820-031**

Type approval: right-hand traffic: ECE (1) 3351 / 6189, left-hand traffic: ECE (1) 3352 / 6189

#### 1ST GENERATION (SINCE 2011) LED LOW BEAM HEADLAMP L 70\*

Module headlamp with 70 mm DE lens

Right-hand traffic	1BL 010 820-001**
Left-hand traffic	1ML 010 820-011**

Type approval: right-hand traffic: ECE (©) 3359/6189, left-hand traffic: ECE (©) 3160/6189

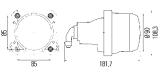
\* In areas where the ECE R48 regulation applies, vehicles registered in accordance with ECE R48 series 05, must incorporate suitable measures to safeguard active failure control of an LED headlamp in the vehicle electrical system. The failure control is no longer mandatory for vehicles approved according to ECE-R48 series 06. \*\* Set versions, consisting of 1x control unit for function monitoring and 1 x 1st gen. LED headlamp, on request.

A 3A fuse from HELLA is required for all LED headlamps. A fuse of >3A is not sufficient to safely interrupt the power supply in the event of a fault. If the degree of protection is unknown, an external safety switch (e.g. 8JD 743 557-021) can be used. If water gets in, incorrect protection can lead to damage ranging from melting to burning of the product.

### 90 mm Premium

High-end illumination. Low beam and high beam from a single headlamp module. 70 mm DE lens. Unpatterned and hardened glass cover lens. High-quality aluminium reflector. Preassembled adjusting screws. Light source included. Connection via 0.5 m shielded supply cable with detachable plug connection.





181.7

These products have the following features:



#### Bi-Halogen® headlamps Low beam and high beam headlamps

Halogen light, low beam and high beam in one headlamp, metal reflectors with clear DE lens. Ideal when combined with the matching high beam headlamp and fog lamps. Incl. light source.

12 V, right-hand traffic, H7, EC E	1AL 009 998-001
12 V, left-hand traffic, H7, ECE	1LL 009 998-011
12 V, right-hand traffic, H9, SAE	1AL 009 998-021
24 V, right-hand traffic, H7, ECE	1AL 009 998-041
24 V, left-hand traffic, H7, ECE	1LL 009 998-051

Type approval: ECE-R112, (1) 2484 and (1) 2485



#### Halogen low beam headlamp

Metal reflectors with clear DE lens. Ideal when combined with the matching high beam headlamp and fog lamps. Incl. light source.

12 V, right-hand traffic, H7, ECE	1BL 009 999-001
12 V, left-hand traffic, H7, ECE	1ML 009 999-011
12 V, right-hand traffic, H7, SAE	1BL 009 999-021
24 V, right-hand traffic, H7, ECE	1BL 009 999-041
24 V, left-hand traffic, H7, ECE	1ML 009 999-051

Type approval: ECE-R112, 🗊 2486 and 🗊 2487

#### Information

If you have been using Classic modules so far, you can easily upgrade them to  $\ensuremath{\mathsf{Performance\,modules}}$  .

The following Performance modules have the same module attachment as the Classic module and are therefore compatible and easy to replace – without having to modify the existing Classic carrier frame structure first.

Would you like to combine modules from the Premium and Performance series without committing yourself right at the start of the vehicle design process?

Then use the tried-and-trusted Premium carrier frame structure as a basis.

Alongside the complete Premium range, the following modules from the Performance series that are compatible with a Premium carrier frame can also be used.

Classic mountings for Performance headlamps	
90 mm high beam with PO, 12 V bulb	1KO 247 043-157
90 mm high beam with 12 V bulb	1K0 247 043-167
90 mm low beam with 12 V bulb Right-hand traffic Left-hand traffic	1BL 247 042-217 1ML 247 042-227
24 V variants on request	

24 V variants on request

Premium mountings

for Performance neadlamps	
90 mm high beam with PO, 12 V bulb	1KO 247 043-117
90 mm high beam with 12 V bulb	1KO 247 043-127
90 mm low beam with 12 V bulb	
Right-hand traffic	1BL 247 042-177
Left-hand traffic	1ML 247 042-187

24 V variants on request

# 90 mm: Performance low beam and high beam

Proven illumination. Modules in enhanced quality for use on long hauls. Unpatterned and hardened glass cover lens. High-quality aluminium reflector. With splash water-protected plug connection. Exact adjusting screws contained in delivery. Including light source. 24 V versions incl. heavy-duty long-life bulbs. Low beam with 50 mm DE lens, high beam with free-form reflector.







#### HALOGEN LOW BEAM HEADLAMP

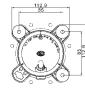
Module headlamp with an aluminium reflector and clear DE lens behind an unpatterned glass cover lens, incl. light source.

12 V, right-hand traffic, H1, for Performance mounting	1BL 247 042-007
12 V, left-hand traffic, H1, for Performance mounting	1ML 247 042-027
12 V, right-hand traffic, H1, for Premium mounting	1BL 247 042-177
12 V, left-hand traffic, H1, for Premium mounting	1ML 247 042-187
24 V, right-hand traffic, H1, for Performance mounting	1BL 247 042-017
24 V, left-hand traffic, H1, for Performance mounting	1ML 247 042-037

Type approval: ECE (2) 2397 and ECE (2) 2398

With a technical solution for the "tourist solution", for temporary use in left-hand traffic countries or for left-hand drive versions in right-hand traffic countries.







#### HALOGEN HIGH BEAM HEADLAMP

Module headlamp with aluminium free-form reflector and unpatterned glass cover lens, incl. light source.

12 V, with position light, H1, for Performance mounting	1K0 247 043-007
12 V, without position light, H1, for Performance mounting	1K0 247 043-017
12 V, with position light, H1, for Premium mounting	1K0 247 043-117
12 V, without position light, H1, for Premium mounting	1K0 247 043-127
Type approval: ECE 🗊 2397	
26 V with position light H1 Heavy Duty Longlife	

for Performance mounting	1K0 247 043-027
24 V, without position light, H1, for Performance mounting	1K0 247 043-037
12 V, with position light, H1, for Classic mounting	1K0 247 043-157
12 V, H1, for Classic mounting	1K0 247 043-167

**Type approval:** ECE (1) 2397 and ECE (2) 2398

#### These products have the following features:



# HELLA AUXILIARY HIGH BEAM HEADLAMPS

#### For that extra bit of light

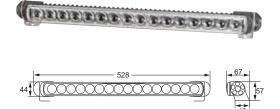
The HELLA auxiliary high beam headlamps offer that something extra: more light, so you can stay on top of the road in every driving situation. In turn, this increases the safety of every road user. HELLA's indisputable quality and use of state-of-the-art technology are a given. Tried-and-tested standard solutions or innovative LED technology: whatever it may be, the HELLA headlamp series is specially tailored to the demands of trucks and continuously developed to offer the optimum solution for every situation. Light you can rely on!

ÍÐ,

#### **LED Light Bars**

## This LED product has the following features:





#### Application example



#### AUXILIARY HIGH BEAM HEADLAMP LED LIGHT BAR 470

16 high-power LEDs, power requirement: 35 watts, e.g. suitable for 12 and 24 volt systems, IP 6K7 (submersible), ECE type-tested R112 and EMC R10.

Ref. 25 with universal bracket	1FJ 958 130-111
Ref. 37.5 with universal bracket	1FJ 958 130-011

Type approval: ECE 🐵 0012 (ref. 25), ECE 🐵 0013 (ref. 37.5)

## AUXILIARY HIGH BEAM HEADLAMP LED LIGHT BAR 470 SINGLE TWIN Dual headlamp for central mounting on the vehicle

 $2\times8$  high-intensity LEDs, power requirement:  $2\times18$  watts, e.g. suitable for  $12\,V$  and  $24\,V$  systems, IP 6K7 (submersible) and IP 6K9K, ECE type-tested R112 and EMC R10.

#### Ref. 17.5 + 17.5 with universal bracket

Type approval: ECE 💿 0019 (ref. 17.5 + 17.5) 💿

1FJ 958 130-301

#### This LED product has the following features:



#### OFF-ROAD HEADLAMPS LED LIGHT BAR 470 COMBI\* Headlamp with 2 light beams: wide and expansive

 $2\,x\,8$  high-intensity LEDs, power requirement:  $2\,x\,18$  watts, e.g. suitable for  $12\,V$  and  $24\,V$  systems, IP 6K7 (submersible) and IP X9K, ECE type-tested EMC R10.

Off-road headlamps with universal bracket	1GJ 958 130-461
Type approval: CE-type-tested ECE R10 EMC 🚳 (electror	nagnetic compatibility)

#### ACCESSORIES - PROTECTIVE CAPS FOR LED LIGHT BARS 470

Protective cap transparent	8XS 958 337-021
Protective cap amber (transparent)	8XS 958 337-031
Protective cap black (with white HELLA logo)	8XS 958 337-111

The use of protective caps is not permitted within areas governed by StVZO. Please observe the valid regulations





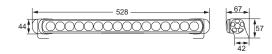




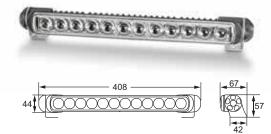
Close-range illumination (wide)



Combination illumination







#### AUXILIARY HIGH BEAM HEADLAMP LED LIGHT BAR 350

12 high-power LEDs, power requirement: 25 watts, e.g. suitable for 12 and 24 volt systems, IP 6K7 (submersible), ECE type-tested R112 and EMC R10.

Ref. 20 with universal bracket	1FJ 958 040-072
Ref. 30 with universal bracket	1FJ 958 040-082

Type approval: ECE 🐵 0008 (ref. 20), ECE 🐵 0009 (ref. 30)

#### SPARE PARTS/ACCESSORIES FOR LED LIGHT BAR SERIES

Bracket set (2 universal brackets)	8HG 958 139-841
Bracket (1 universal bracket without steel bracket, also for customised brackets)	8HG 958 139-071
Bracket set (2 steel brackets for dual mounting)	8HG 958 128-811

This LED product has the following features:





#### AUXILIARY HIGH BEAM HEADLAMP HELLA VALUEFIT DLB 540

9 high-intensity LEDs, power requirement: 66 watts, e.g. suitable for 12 V and 24 V systems, IP 67, ECE type-tested R112 and EMC R10.

Ref. 37.5 incl. bracket

1FJ 360 002-502

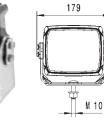
Type approval: ECE, 😂 0027

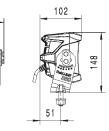
#### ROKLUME

#### This LED product has the following features:









AUXILIARY HIGH BEAM HEADLAMP ROKLUME 380 N For heavy-duty applications with intense illumination of the area in front of the vehicle

12 high-power LEDs, power requirement: max. 85 watts, IP 6K9K, IP 6K8, Fording ability: up to 1 m water depth (max. 60 min), ECE type-tested R112 and EMC R10.

Ref. 40 with stainless steel mounting bracket, 24 V	1FA 996 197-181
Ref. 40 with black mounting bracket made of stainless steel, 12 V (w/o fig.)	1FA 996 197-151

Type approval: ECE, 🗊 4517

₩

#### LUMINATOR

#### This LED product has the following features:

EMC

ECE





129.6

90.5

232.5



LUMINATOR LED

LED high beam headlamp with LED position light and horiz die-cast zinc housing, power requirement: 12 V: position ligi beam 14.5 watts; 24 V: position light 5 watts and high beam for 12 V and 24 V systems, ref. 25 or 50	ht 2.4 watts and high
Luminator LED high beam headlamp, metal (ECE ref. 25)	1F8 016 560-001
Luminator LED high beam headlamp, metal (ECE ref. 50)	1F8 016 560-011
Luminator LED high beam headlamp, chromium (ECE ref. 25)	1F8 016 560-021
Luminator LED high beam headlamp, chromium (ECE ref. 50)	1F8 016 560-031

Type approval: ECE-R112 high beam, ECE-R7 position light, ECE-R10 EMC SPARE PARTS/ACCESSORIES

LED headlamp insert (ECE ref. 25) with LED position light	1F8 241 400-011
LED headlamp insert (ECE ref. 50) with LED position light	1F8 241 429-011

#### This LED product has the following features:



#### LUMINATOR COMPACT LED

LED high beam headlamp, power requirement: 11 watts, e.g. suitable for 12 V and 24 V systems, ECE ref. 45.

With chrome design ring	1F3 011 815-001
With matt black design ring	1F3 011 815-011
Type approval: ECE, 🗊 3738	

#### SPARE PARTS/ACCESSORIES

Cover lens with chrome design ring	9AG 195 614-001
Cover lens with matt black design ring	9AG 195 614-011

#### This LED product has the following features:



#### LUMINATOR X LED

LED high beam headlamp, power requirement: 40 watts, e.g. suitable for 12 V and 24 V systems, ECE ref. 37.5.

With chrome design ring	1F0 012 206-001
With matt black design ring	1F0 012 206-011
Type approval: ECE, 🚱 0417	

#### SPARE PARTS/ACCESSORIES

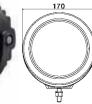
Cover lens with seal	9ES 199 813-001
Matt black design ring	9AG 199 812-011

Chromium



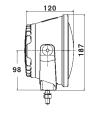
Metal





145

Ŷ



116

0

-02-

0127-

#### LUMINATOR

#### This product has the following features:





H1 high beam headlamp with position light (W5W) Housing, glass holder and bracket made of die-cast zinc, chromium-plated.

High beam headlamp, ECE ref. 50	1F8 007 560-411
High beam headlamp, ECE ref. 37.5	1F8 007 560-311
High beam headlamp, ECE ref. 17.5	1F8 007 560-341

Type approval: ECE, (E) 3099 (ref. 50), (E) 1928 (37.5), (E) 2254 (17.5)

#### Simple upgrade from halogen to full LED

LED headlamp insert (ECE ref. 25) with LED position light	1F8 241 400-011
LED headlamp insert (ECE ref. 50) with LED position light	1F8 241 429-011

#### This LED product has the following features:



#### LUMINATOR CHROMIUM WITH LED POSITION LIGHT

H1 high beam headlamp with LED position light Housing, glass holder and bracket made of die-cast zinc, chromium-plated.

 High beam headlamp, ECE ref. 25
 1F8 007 560-451

 Type approval: ECE, (2) 3047

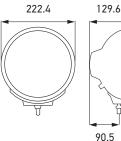
#### Simple upgrade from halogen to full LED

LED headlamp insert (ECE ref. 25) with LED position light	1F8 241 400-011
LED headlamp insert (ECE ref. 50) with LED position light	1F8 241 429-011

#### This product has the following features:







129.6 535.2 535.2

#### LUMINATOR CHROMIUM CELIS WITH LED POSITION LIGHT

H1 high beam headlamp with Celis LED position light

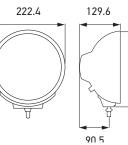
High beam headlamp, ECE ref. 17.5	1F8 007 560-211

Type approval: ECE, 🗊 1753

#### Simple upgrade from halogen to full LED

LED headlamp insert (ECE ref. 25) with LED position light	1F8 241 400-011
LED headlamp insert (ECE ref. 50) with LED position light	1F8 241 429-011





129.6

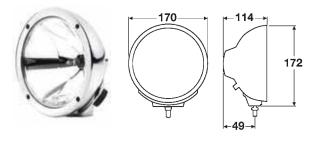
90.5

232.5

232.5

222.4





#### LUMINATOR COMPACT CHROMIUM

H1 high beam headlamp

High beam headlamp, ECE ref. 37.5	1F3 009 094-031
High beam headlamp, ECE ref. 17.5	1F3 009 094-071
Type approval: ECE, 🗊 1901 (ref. 37.5) and 🗊 1902 (ref. 17.5)	

#### **JUMBO 320**

This LED product has the following features:





H7 high beam headlamp with LED position light

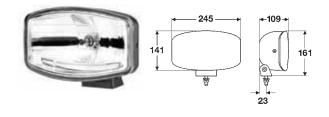
High beam headlamp (ECE ref. 37.5)

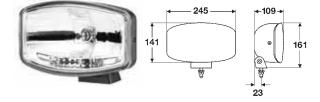
1FE 008 773-081

Type approval: ECE, (c) 1655 (ref. 37.5), (c) 1741 (LED-PO)

#### This product has the following features:







#### JUMBO 320 FF

H7 high beam headlamp

High bea	ım headlamp (ECE ref. 37.5)	1FE 008 773-001
High beam headlamp (ECE ref. 17.5)		1FE 008 773-011
-		

Type approval: ECE, (E) 1655 (ref. 37.5) and (E) 1740 (ref. 17.5)

#### JUMBO 320 FF WITH POSITION LIGHT

H7 high beam headlamp with position light (W5W)

High beam headlamp (ECE ref. 37.5)
Type approval: ECE, 🗊 1655

1FE 008 773-041

#### .

#### **RALLYE 3003**

This LED product has the following features:



#### RALLYE 3003 LED

LED high beam headlamp with LED position light and horizontal cooling fin, impact-resistant thermoplastic housing, power requirement: 12 V: position light 2.4 watts and high beam 14.5 watts; 24 V: position light 5 watts and high beam 14.5 watts, e.g. suitable for 12 V and 24 V systems, ref. 25 or 50

Rallye 3003 LED high beam headlamp (ECE ref. 25) 1F8 016 797-001 Rallye 3003 LED high beam headlamp (ECE ref. 50) 1F8 016 797-011

Type approval: ECE-R112 high beam, ECE-R7 position light, ECE-R10 EMC

#### Spare part\*

1F8 241 429-011

\* Also for upgrading the Rallye 3003 Halogen

#### This LED product has the following features:



#### RALLYE 3003 WITH CELIS POSITION LIGHT

With chrome design ring, H1 high beam headlamp with round Celis LED position light

High beam headlamp (ECE ref. 17.5)	1F8 009 797-451
Type approval: ECE, 🗈 1753	

#### Simple upgrade from halogen to full LED

LED headlamp insert (ECE ref. 25) with LED position light	1F8 241 400-011
LED headlamp insert (ECE ref. 50) with LED position light	1F8 241 429-011

#### This LED product has the following features:



#### RALLYE 3003 WITH LED-POSITION LIGHT

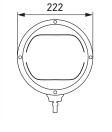
H1 high beam headlamp with LED position light and chrome design ring

High beam headlamp (ECE ref. 25)	1F8 009 797-431
Type approval: ECE, 🗊 3047	

#### Simple upgrade from halogen to full LED

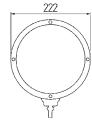
LED headlamp insert (ECE ref. 25) with LED position light	1F8 241 400-011
LED headlamp insert (ECE ref. 50) with LED position light	1F8 241 429-011



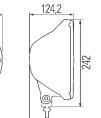








222



124,2

242

124.2

49.3

242



#### RALLYE 3003 WITH POSITION LIGHT

H1 high beam headlamp with position light (W5W) and chrome design ring

High beam headlamp (ECE ref. 50)	1F8 009 797-341
High beam headlamp (ECE ref. 37.5)	1F8 009 797-101 (without fig.)

Type approval: ECE, (2) 3099 (ref. 50) and (2) 1928 (ref. 37.5)

#### Simple upgrade from halogen to full LED

LED headlamp insert (ECE ref. 25) with LED position light	1F8 241 400-011
LED headlamp insert (ECE ref. 50) with LED position light	1F8 241 429-011

#### This product has the following features:



#### RALLYE 3003 COMPACT

H1 high beam headlamp with chrome design ring

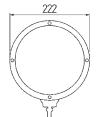
High beam headlamp (ECE ref. 37.5)	1F3 010 119-111
High beam headlamp (ECE ref. 17.5)	1F3 010 119-101

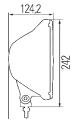
Type approval: ECE, (2) 1901 (ref. 37.5), (2) 1902 (ref. 17.5)

# Spare parts/accessories

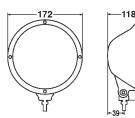
Product photo	Description	Part number	VPE
Bulb H1	Bulb H1	12 V, 55 W 8GH 002 089-131	1
		24 V, 70 W 8GH 002 089-251	1
7-47	Bulb H7	12 V, 55 W 8GH 007 157-121	1
		24 V, 70 W 8GH 007 157-241	1

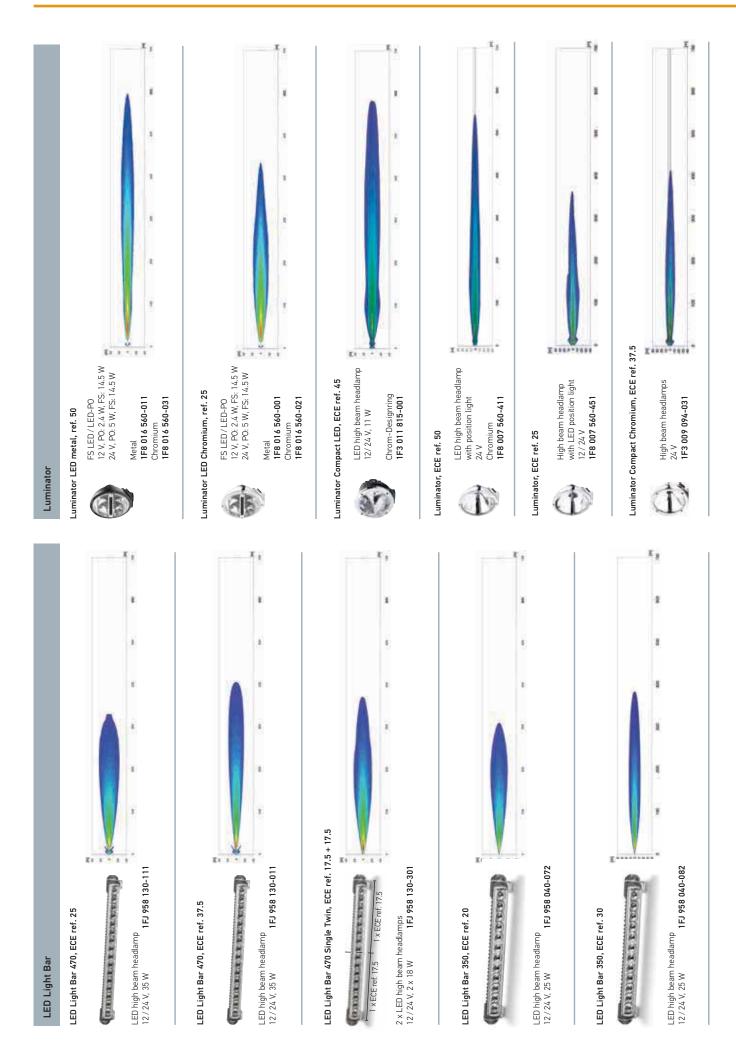


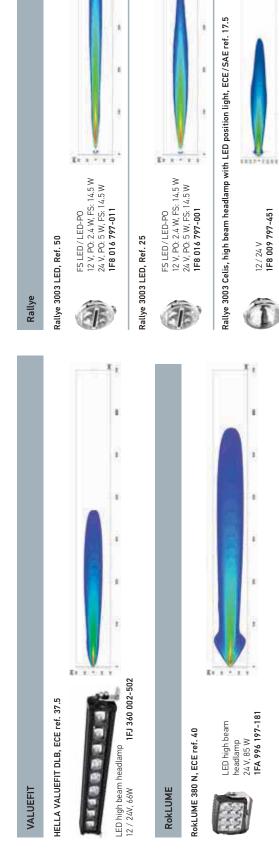












# Jumbo

# Jumbo 320 FF, ECE ref. 37.5



句

Key FS = High-beam headlamp | FS LED = High beam headlamp LED | LED-PO = LED position light

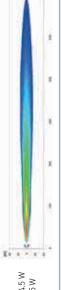
3.5 1.0	35.0	0:090
---------	------	-------

# sod g Lermin



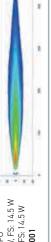
4 U

 $^{\star}$  N $_{3}$  vehicles: for the transportation of goods with a permissible total weight > 12 t



1

t



1

t



# ŧ t ż t

τ,

t

ï

# Rallye 3003, high beam headlamp with LED position light, ECE/SAE ref.



Silver-coloured ring 1F8 009 797-421 Chromring 1F8 009 797-431 12 / 24 V



X g

3

1

# Rallye 3003, LED high beam headlamps with position light, ECE ref.



# 1 ž 1 50 t .... x

τ,

8

Rallye 3003, high beam headlamp with position light, ECE ref. 37.5



Headlamp for high beam (integrated into headlamp and auxiliary high beam headlamp)

Required for all passenger car classes

Mounting Number





Ξ.

8

1

# Rallye 3003 Compact, high beam headlamp, ECE ref. 37.5

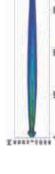


No special regulations but must be installed in such a way that the driver is not disturbed by reflections

No special regulations, i.e. can be freely selected up to a height of 4 m 2 or 4 pieces, for N, vehicles\* max. 6 pieces Switch on the high beam only if the oncoming traffic is not dazzled

> Mounting height Mounting width









# 8 -



# Rallye 3003 Compact, high beam headlamp, ECE ref. 17.5

The high beam headlamps may only be switched on simultaneously or in point. The second high beam headlamps are fitted, then no more than two pairs may be switched on at the same time. Dump the transform from low pairs may be switched on at the same returns the switch of the head When how beam is switched on, all high beam headlamps must switch off at the same time.

Electrical circuit



D

The sum of the reference numbers of all high beam headlamps that are operational on the vehicle must not exceed 100.

Further regulations

Ē ï

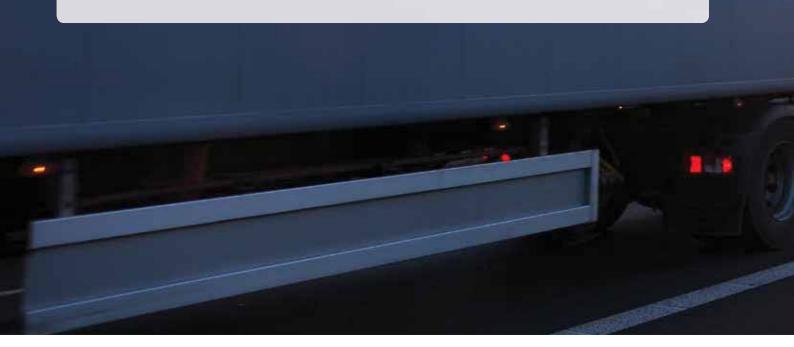
AUXILIARY HIGH BEAM HEADLAMPS 61

X,

3

# HELLA WIRING SYSTEMS -ALWAYS WELL CONNECTED.

The EasyConn connector system is made up of 2, 7, and 15-pin connector housings and female connector housings. For even easier mounting on the trailer, their diameter has been significantly reduced. SUPERSEAL and 7-pin DIN bayonet plug connectors can be used to expand the system. This allows combining lighting systems flexibly and retrofitting and/or converting them, especially in trailers. The 15-pin front, central and rear main cables in the wiring are still treated as a constituent part of the tried-and-tested EasyConn system. The wiring system makes it quick and easy to connect new products to various existing systems.



# COLOURS WITH SYSTEM

Simple connection of all components with process reliability, thanks to the colour system from HELLA



**15-pin EasyConn connector** The 15-pin EasyConn connector housing and female connector housing connect the front adapter, HVL and rear adapter to one another.



**15-pin EasyConn connector II** The proven 15-pin plug connections are also available as a connector set, making it easy to implement customer-specific requests and repairs.



**7-pin EasyConn connector** Rear lamps are connected to the EasyConn system via the 7-pin connector housing and female connector housing.



**7-pin DIN bayonet connector** Our round lamp system and thirdparty products can be connected via a 7-pin DIN bayonet connector.



LED HYBRID ROUND LAMP

SYSTEMS

LED HYBRID REAR LAMP



**2-pin EasyConn connector** The 2-pin EasyConn connector and female connector housing allows, for example, SMLR, position lamps, clearance lamps and 2-pin additional functions to be connected.



2-pin SUPERSEAL connector With the 2-pin SUPERSEAL connection, customers have access to yet another reliable product for connecting singlefunction lamps.



Quick-Link Our quick link press connection: flexible and safe assembly of single-function lamps on our HELLA flat cable.

# HELLA REAR LAMPS

#### A crowning finish for the vehicle rear end

Also in the area of vehicle rear lighting, the introduction of LED lighting has resulted in a quantum leap in developing new, innovative lighting concepts – and HELLA has played a leading role in this development from the very beginning. The combination options of LED and innovative optics systems open up attractive styling options for a unique brand-specific appearance, which is playing an increasingly important role, even for vehicles in the commercial and agricultural fields.

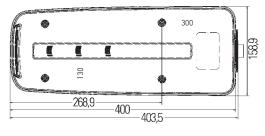
An impressive example made by HELLA: the extraordinary Krone hybrid or full LED rear lamp with integrated logo.

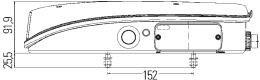


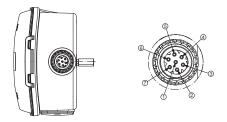












#### Application example





#### MAN FULL LED TRUCK REAR LAMP

Full LED rear lamp for horizontal mounting. With standard direction indicator light. With glowing-body strip optics. Replaceable, non-patterned lens. Curved outer lens for optimum tightness. Housing PC and ABS black, 2 fastening screws M8 (distance: 152 mm), with direction indicator failure control. Protection class: IP 5K4K, IP X9K.

Tail lamp/reflex reflector/stop lamp/direction indicator/rear fog lamp/reverse lamp/clearance lamp/side marker reflector lamp.

#### With 7-pin DIN connector

Left, with licence plate light	2VD 012 381-0111)
Right, without licence plate light	2VP 012 381-0211)
Left, without licence plate light	2VP 012 381-0511)
Right, without licence plate light, with backup alarm	2VP 012 381-0611)

#### With 500 mm cable and 7-pin DIN connector

Left, with licence plate light	2VD 012 381-0311)
Right, without licence plate light	2VP 012 381-0411)
Right, without licence plate light, with backup alarm	2VP 012 381-081 <sup>1)</sup>

#### Spare parts/accessories:

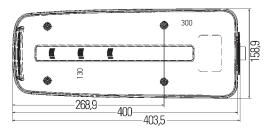
Lens	9EL 208 551-011
LED direction indicator control unit, 24 V	5DS 227 488-101
LED flasher unit, 24 V	4DW 009 492-011

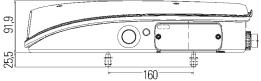
Pin	Pin assignment		
1	Ground (white)		
2	Tail light (black)		
3	Reversing light (pink)		
4	Direction indicator light (amber/green)		
5	Stop light (red)		
6	Rear fog light (blue)		
7	Free or backup alarm ()		

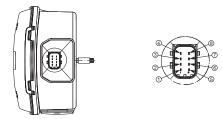
Functions	LEDs	Output	Current consumption
Tail light	12 red	24 V / 2.8 W	0.12 A
Stop light	18 red	24 V / 2.2 W	0.09 A
Direction indicator light	6 amber	24 V / 4.2 W	0.18 A
Rear fog light	8 red	24 V / 2.5 W	0.10 A
Reversing light	4 white	24 V / 4.7 W	0.20 A
Side marker light	5 red	24 V / 2.8 W	0.12 A
Licence plate light	4 white	24 V / 1.7 W	0.07 A











Application example





#### DAF FULL LED TRUCK REAR LAMP

Full LED rear lamp for horizontal mounting. With dynamic direction indicator light. With glowing-body C optics. Replaceable, non-patterned lens. Curved outer lens for optimum tightness. Housing PC and ABS black, 2 fastening screws M8, with pulse for direction indicator failure control. Protection class: IP 5K4K, IP X9K.

Tail lamp/reflex reflector/stop lamp/direction indicator/rear fog lamp/reverse lamp/clearance lamp/side marker reflector lamp.

With 8-pin HCSCS connector; distance between fastening screws: 160 mm With side connector

Left, with licence plate light	2VD 012 381-2112)
Right, without licence plate light	2VP 012 381-2212)
Right, without licence plate light, with backup alarm	2VP 012 381-2412)

#### With rear connector

Left, with licence plate light	2VD 012 381-2512)
Right, without licence plate light	2VP 012 381-2612)
Right, without licence plate light, with backup alarm	2VP 012 381-281 <sup>2)</sup>

#### With 7-pin DIN connector; distance between fastening screws: 152 mm

With side connector	
Left, with licence plate light	2VD 012 381-3111)
Right, without licence plate light	2VP 012 381-3211)
Right, without licence plate light, with backup alarm	2VP 012 381-3411)

#### With rear connector

Left, with licence plate light	2VD 012 381-3511)
Right, without licence plate light	2VP 012 381-3611)
Right, without licence plate light, with backup alarm	2VP 012 381-3811)

#### Spare parts/accessories:

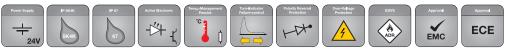
Lens	9EL 208 551-001
LED direction indicator control unit, 24 V	5DS 227 488-101
LED flasher unit, 24 V	4DW 009 492-011

#### Pin assignment

1	Ground (white)
2	Free or backup alarm (black)
3	Free ()
4	Rear fog light (blue)
5	Tail light (black)
6	Reversing light (pink)
7	Direction indicator light (amber/green)

8 Stop light (red)

Functions	LEDs	Output	Current consumption
Tail light	12 red	24 V / 2.8 W	0.12 A
Stop light	18 red	24 V / 2.2 W	0.09 A
Direction indicator light	6 amber	24 V / 4.2 W	0.18 A
Rear fog light	8 red	24 V / 2.5 W	0.10 A
Reversing light	4 white	24 V / 4.7 W	0.20 A
Side marker light	5 red	24 V / 2.8 W	0.12 A
Licence plate light	4 white	24 V / 1.7 W	0.07 A





#### HYBRID AND FULL LED REAR LAMP WITH KRONE LOGO

Hybrid or full LED rear lamp, tail lamp/stop lamp/direction indicator/rear fog lamp/reverse lamp with reflex reflector, with or without rubber arm. Series 340 960/340 961 with white frame. With pulse for direction indicator failure control (full LED versions).

#### Hybrid with EasyConn connector (7-pin)

With rubber arm (LED clearance light)	
Left (amber)	2VP 340 961-5311)
Right (blue)	2VP 340 961-5411)

#### Without rubber arm (LED clearance light)

Left (amber)	2VP 340 961-5111)
Right (blue)	2VP 340 961-5211)

#### Full LED with EasyConn connector (7-pin)

With rubber arm (LED clearance light)	
Left (amber)	2VP 340 960-2311)
Right (blue)	2VP 340 960-2411)

#### Without rubber arm (LED clearance light)

Left (amber)	2VP 340 960-2511)
Right (blue)	2VP 340 960-2611)
The second FCF D/F FCF D10 CCV/C / ADD sets full	ED 2)/D 2/0 0/0

Type approval: ECE-R65, ECE-R10; GGVS / ADR: only full LED 2VP 340 960- ...

Functions	LEDs	Output	Current consumption
Tail light	7 red	24 V/0.02 W	0.01 A
Stop light	7 red	24 V / 20 W	0.83 A
Direction indicator light	7 amber	24 V / 3 W	0.13 A
Rear fog light	7 red	24 V/2.5 W	0.10 A
Reversing light	6 white	24 V/2.5 W	0.10 A
Clearance light	1 red/1 white	24 V/1.2 W	0.05 A
Side marker light	2 amber	24 V / 1 W	0.04 A

#### Also available: The Krone licence plate lamp



With 2,000 mm cable and 6.3 mm flat connector	2KA 012 271-231
With 1,300 mm cable and 2-pin EasyConn angled connector	2KA 012 271-271

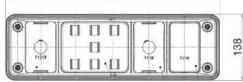
L	ENS	

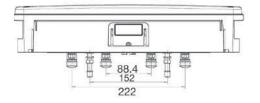
Left	9EL 183 432-031
Right	9EL 183 432-041

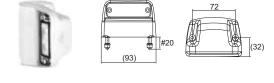
Further information on these products can be found in the Licence plate lamps chapter on page 84.



#### 450 ±1













#### LED hybrid rear lamp

Modular standard hybrid trailer rear lamp, 24 V, for horizontal mounting, tail-stop light always in LED, all other functions possible with bulb or by retrofitting to LED. Tail lamp/stop lamp/direction indicator/fog lamp/reverse lamp with triangular reflex reflector, with or without rubber arm. With black frame.

Functions: LED tail-stop light bulb: direction indicator light, rear fog light and reversing light

Without rubber arm (LED clearance ligh	it)
Hybrid, left (amber)	2VP 340 961-011 <sup>1)</sup>
Hybrid, right (blue)	2VP 340 961-021 <sup>1)</sup>
With rubber arm	
Left (amber)	2VP 340 961-411 <sup>2)</sup>
Right (blue)	2VP 340 961-421 <sup>2)</sup>

Functions: LED: tail-stop light and rear fog light bulb: direction indicator light and reversing light light) 14/3 ....

Without rubber arm (LED clearance light)	
Hybrid, left (amber)	2VP 340 961-0311)
Hybrid, right (blue)	2VP 340 961-0411)
With rubber arm	
Left (amber)	2VP 340 961-4312)
Right (blue)	2VP 340 961-4412)

Functions: LED tail-stop light and side marker light bulb: direction indicator light, rear fog light, reversing light and clearance light

With rubber arm (LED clearance light)

\_

Hybrid, left (amber)	2VP 340 961-1111)
Hybrid, right (blue)	2VP 340 961-1211)

Functions: LED tail-stop light and clearance light ...

bulb: direction indicator light and rear fog light with rubber arm		
Hybrid, left (amber)	2VP 340 961-1311)	
Hybrid, right (blue)	2VP 340 961-1411)	

Functions: LED tail-stop light/rear fog light and clearance light bulb: direction indicator light with rubber arm

Hybrid, left (amber)	2VP 340 961-1511)
Hybrid, right (blue)	2VP 340 961-1611)

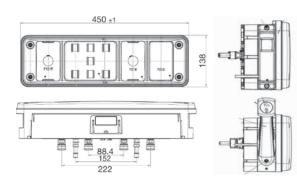
Functions: LED: tail-stop light, direction indicator light and side marker light bulb: direction indicator light, rear fog light and reversing light, without rubber arm

Hybrid, left (amber)	2VP 340 961-2111)
Hybrid, right (blue)	2VP 340 961-2211)

Functions: LED: tail-stop light and clearance light bulb: direction indicator light, rear fog light and reversing light, with flash SMLR, without rubber arm

With integrated electronics for controlling flashing LED sid marker lamps with rubber arm	le
Hybrid, left (amber)	2VP 340 965-1111)
Hybrid, right (blue)	2VP 340 965-1211)





Functions	LEDs	Output	Current consumption
Tail light	7 red	24 V/0.02 W	0.01 A
Stop light	7 red	24 V / 20 W	0.83 A
Direction indicator light	7 amber	24 V / 3 W	0.13 A
Reversing light	6 white	24 V / 2.5 W	0.10 A
Rear fog light	7 red	24 V / 2.5 W	0.10 A
With rubber arm			
Clearance light	1 red, 1 white	24 V / 1.2 W	0.05 A
Side marker reflex reflector light	2 amber	24 V / 1 W	0.04 A



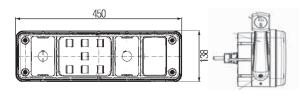
۲

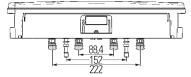


With rubber arm



Without rubber arm







#### Full LED rear lamp

Modular standard full LED trailer rear lamp, 24 V, for horizontal mounting, clear lens, with pulse for direction indicator failure control. Protection classes: lamp IP 5K4K, LED module IP 6K9K. Tail lamp/stop lamp/direction indicator/rear fog lamp and reverse lamp with triangular reflex reflector, with or without rubber arm. With black frame.

Functions	LEDs	Output	Current consumption
Tail light	7 red	24 V/0.2 W	0.01 A
Stop light	7 red	24 V / 20 W	0.83 A
Direction indicator light	7 amber	24 V / 3 W	0.13 A
Reversing light	6 white	24 V/2.5 W	0.10 A
Rear fog light	7 red	24 V/2.5 W	0.10 A
With rubber arm			
Clearance light	1 red	24 V/1.2 W	0.05 A
Side marker light	2 amber	24 V / 1 W	0.04 A

#### Without rubber arm

Left (amber)	2VP 340 960-0111)
Right (blue)	2VP 340 960-021 <sup>1)</sup>
Left	2VP 340 960-271 <sup>2)</sup>
Right	2VP 340 960-281 <sup>2)</sup>

#### With rubber arm

Left (amber)	2VP 340 960-1111)
Right (blue)	2VP 340 960-1211)

Flash encoder for SMLR and rubber arm Versions with integrated electronics for controlling flashing LED side marker lamps.

#### With rubber arm

Left (amber)	2VP 340 964-111 <sup>1)</sup>
Right (blue)	2VP 340 964-1211)

#### Without rubber arm

Left (amber)	2VP 340 964-011 <sup>1)</sup>
Right (blue)	2VP 340 964-0211)

۲

This LED product has the following features:





#### "COLUNA" FULL LED REAR LAMP

Full LED five-chamber lamp. With triangular reflex reflector for horizontal mounting on 24 V trailers. 12 red LEDs for tail light function designed as light curtain. With fastening bolt from the rear. With pulse for direction indicator failure control.

1,000 mm cable with EasyConn connector (7-pin)	
Left (amber)	2VP 345 900-0111)
Right (blue)	2VP 345 900-0211)

1,000 mm cable with DIN bayonet connector AMP (7-pin)

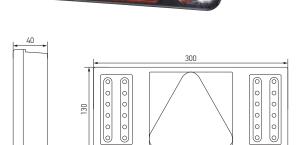
Left	2VP 345 900-0912)
Right	2VP 345 900-101 <sup>2)</sup>

#### 3,000 mm cable with 6.3 mm flat receptacles

Left		2VP 345 900-1313)
Right		2VP 345 900-1413)
-	1 0 5050	

Type approval: 🐵 5879 and 5880, 🗊 10R 04 0071, EMC

Functions	LEDs	Output	Current consumption
Tail light	12 red	24 V / 2.8 W	0.12 A
Stop light	6 red	24 V / 2 W	0.08 A
Direction indicator light	6 amber	24 V / 3.8 W	0.16 A
Rear fog light	6 red	24 V / 2.4 W	0.10 A
Reversing light	6 white	24 V / 5.6 W	0.23 A



2VP 345 900-261

#### This LED product has the following features:



24 V



$\Gamma$		-	30	00	
	130	00000			00000

40

#### "COLUNA" FULL LED REAR LAMP

Full LED rear lamp, tail lamp, stop lamp, direction indicator, rear fog lamp, reverse lamp with reflex reflector. With 36 LEDs. With rectangular reflex reflector for horizontal and vertical mounting.

With 3,000 mm cable and 6.3 mm flat receptacles. Can be used on the right or left.

#### With pulse for direction indicator failure control

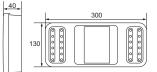
12 V/13.7 W, current consumption = approx. 1.14 A 24 V/16.6 W, current consumption = approx. 0.69 A	
Mounted by inserted fastening screws from the front	
12 V	2VP 345 900-441
24 V	2VP 345 900-241
Fastening bolt from the rear	
12 V	2VP 345 900-461

Type approval: 2 5879 and 5880, 1 10R 04 0071, EMC

This LED product has the following features:







#### "COLUNA" FULL LED REAR LAMP

Full LED rear lamp, tail lamp, stop lamp, direction indicator, rear fog lamp, reverse lamp with reflex reflector. With 36 LEDs.

With rectargular reflex reflector for horizontal and vertical mounting. With 3,000 mm cable and 6.3 mm flat receptacles. Can be used on the right or left.

#### Without pulse for direction indicator failure control

12 V / 13.7 W, current consumption = approx. 1.14 A

Mounted by inserted fastening screws from the front			
12 V	2VP 345 900-451		
24 V	2VP 345 900-251		

#### Fastening bolt from the rear

12 V	2VP 345 900-471
24 V	2VP 345 900-271

Type approval: 🕹 5879 and 5880, 🗊 10R 04 0071, EMC

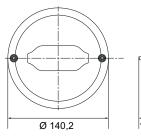


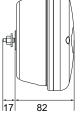


#### HYBRID AND FULL LED REAR LAMP

Suitable for left-hand and right-hand mounting. Lens replaceable in case of damage. Tail lamp, stop lamp and direction indicators are suitable for double mounting.







Functions	LEDs	Output	Current cons	sumption
Tail light	6	24 V/0.25 W	0.01	Д
Stop light	6	24 V / 2.45 W	0.10	Д
Direction indicator light	3	24 V / 1.9 W	0.08	Ą
Rear fog light	6	24 V / 2.45 W	0.10	Д
Reversing light	3	24 V / 1.9 W	0.08	Д
With bulb				
Direction indicator light	-	24 V / 21 W	0.88	Ą
Hybrid: a) tail-stop ligh	t (LED) and dir	ection indicator light (l	oulb)	
300 mm cable, Y-adapt plug housing	er on 7-pin DIN	N bayonet connector a	nd 7-pin DIN ba	yonet
With integrated resistor for stop light function		2SD 0	13 155-001 <sup>1)</sup>	12 3
Without resistance		2SD 0	13 155-011 <sup>»</sup>	12
3,000 mm cable with 6	3 mm flat rece	ptacle connection		
With integrated resistor for stop light function		2SD 0	13 155-021 <sup>3)</sup>	12 3
Without resistance		2SD 0	13 155-031 <sup>3)</sup>	12

 $\mbox{Full LED:}$  b) tail light, stop light and direction indicator light (LED), with GGVS/ADR approval

300 mm cable, Y-adapter on 7-pin DIN bayonet connector and 7-pin DIN bayonet plug housing, without resistor	2SD 013 155-101 <sup>1)</sup>	12 3
3,000 mm cable with 6.3 mm flat receptacle connection, without resistor	2SD 013 155-111 <sup>3)</sup>	12 3

 c) Rear fog light, reversing light (LED) with GGVS / ADR approval

 300 mm cable, Y-adapter on 7-pin DIN

 bayonet connector and separate outflow

 2-pin AMP SUPERSEAL (for connection of auxiliary lighting functions)

 300 mm cable with 7-pin DIN bayonet connector

 3000 mm cable with 6.3 mm flat

 2NR 013 155-221<sup>30</sup>

 @⑤

receptacle connection
Type approval: ECE-R10

#### Accessories

Replacement lens	9EL 213 522-001
Сар	9XX 340 814-017

① Tail light

- ② Stop light
- ③ Direction indicator light
- ④ Rear fog light
- © Reversing light

## Universal rear combination lamps

#### This LED product has the following features:



#### LED DIRECTION INDICATOR "STRIP LAMP"

Ultra-flat design, surface-mounted variant, without pulse for direction indicator failure control, low power consumption, 12 and 24 V, lens made of particularly impact-resistant Grilamid<sup>®</sup>.

12 V, horizontal	2BA 980 888-311
12 V, vertical	2BA 980 888-511
24 V, horizontal	2BA 980 888-411
24 V, vertical	2BA 980 888-611

Type approval: ECE 🐵 5869 and ECE 🐵 5890

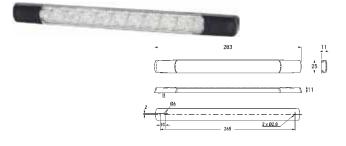
## This LED product has the following features:





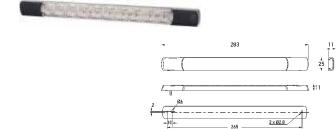
24 V

Mounting variant, horizontal and vertical, low power consumption, 24 V, lens made of particularly impact-resistant Grilamid®, with 300 mm cable.

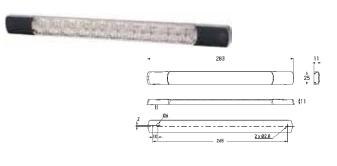


2SB 980 887-211

Type approval: ECE 🗐 10R 04-2913 and 🗐 5891







#### LED DIRECTION INDICATOR "STRIP LAMP"

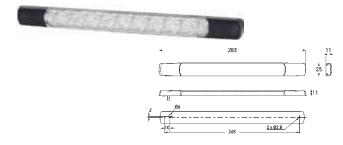
Without pulse for direction indicator failure control, surface-mounted variant, horizontal and vertical, low power consumption, 24 V, lens made of particularly impact-resistant Grilamid®, with 2,500 mm cable.

24 V	2BA 980 888-211
<b>Type approval:</b> ECE 🗐 10R 04-2910 (only 24 V) and 🗐 5891	28A700 000 211

This LED product has the following features:



#### LED AUXILIARY STOP LAMP "STRIP LAMP"



 Surface-mounted variant, horizontal and vertical, low power consumption, 12 and 24 V, lens made of particularly impact-resistant Grilamid®, with 2,500 mm cable.

 12 V
 2DA 980 887-311

 24 V
 2DA 980 887-411

Type approval: ECE 🗐 10R 04-2910 (only 24 V) and 🗐 0087

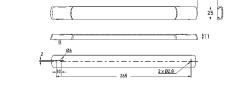


#### LED REAR FOG LAMP "STRIP LAMP"

Surface-mounted variant, horizontal and vertical, low power consumption, 12 and 24 V, lens made of particularly impact-resistant Grilamid®, with 2,500 mm cable.

12 V	2NE 980 889-501
24 V	2NE 980 889-601

Type approval: ECE 🖾 10R 04-2910 (only 24 V) and 🖾 0010



283

11

## This LED product has the following features:

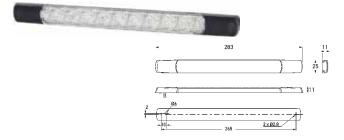


#### LED REVERSE LAMP "STRIP LAMP"

Surface-mounted variant, horizontal or vertical, low power consumption, 12 and 24 V, lens made of particularly impact-resistant Grilamid®, with 2,500 mm cable.

12 V, horizontal	2ZR 980 889-011
12 V, vertical	2ZR 980 889-111
24 V, horizontal	2ZR 980 889-211
24 V, vertical	2ZR 980 889-311

Type approval: ECE 🐵 0027 (horizontal) and 🐵 0028 (vertical)



## Auxiliary stop lamps

## This LED product has the following features:



#### LED AUXILIARY STOP LAMPS

For horizontal or vertical mounting. Construction height 9.5 mm (installed condition). Screw attachment. With 3,000 mm cable. Approved for ECE.

Functions	LEDs	Output	Current consumption
Red lens			
Auxiliary stop light	10 red	12 V/0.7 W	0.06 A
Open cable ends			2DA 343 106-001
Auxiliary stop light	10 red	24 V/1.4 W	0.06 A
Open cable ends			2DA 343 106-011
Smoked glass lens			
Auxiliary stop light	10 red	12 V/0.7 W	0.06 A
Open cable ends			2DA 343 106-021
Auxiliary stop light	10 red	24 V/1.4 W	0.06 A
Open cable ends			2DA 343 106-031

Type approval: ECE 🚱 7696

## This LED product has the following features:



#### LED AUXILIARY STOP LAMPS

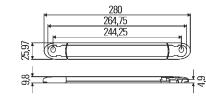
With red lens. Adhesive attachment. For horizontal mounting. With 200 mm cable and 6.3 mm flat receptacles. Approved for ECE. IP67.

Functions	LEDs	Output	Current consumption
Auxiliary stop light	8 red	12 V/1.7 W	0.12 A
Open cable ends			2DA 012 596-001
Auxiliary stop light	8 red	24 V/1.7 W	0.24 A
Open cable ends			2DA 012 596-011
-	0		

Type approval: ECE 🗊 4128, SAE, CCC

	446,6	1
		28,6
T		8







#### LED AUXILIARY STOP LAMPS

For horizontal mounting, with 12 red LEDs, in clear optics, with 3D depth effect. Each of the 12 LEDs is embedded in a separate reflector. With 200 mm cable. Approved for ECE.

Functions	LEDs	Output	Current consumption
Auxiliary stop light	12 red	12 V / 1.8 W	0.15 A
Open cable ends			2DA 343 800-001

Type approval: ECE 🖂 7715

#### This product has the following features:

This LED product has the following features:

GMD

ECE

AECQ

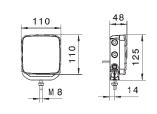


#### AUXILIARY STOP LAMPS

For installation in body or rear spoiler. Red lens and black housing. With 12 V bulb. Without cable. Approved for ECE.

Output	Current consumption
12 V /1.8 W	0.15 A
	2DA 007 421-001

Type approval: ECE 🗊 02198, SAE



#### REPULSE PRO REVERSING LIGHT

-Ď+

870 lumen, power requirement: 11 watts, colour temperature: 5,500 kelvins, heat-conducting plastic housing, total corrosion protection thanks to Thermo-Pro-technology, upright/pendant mounting. With 3 LEDs.

EMC 3

AMP-SUPERSEAL connector (2-pin) with 2,000 mm cable	2ZR 012 456-001
EasyConn connector (2-pin) with 1,000 mm cable	2ZR 012 456-011
6.3 mm flat receptacles with 3,000 mm cable	2ZR 012 456-021

Type approval: ECE-R23, ECE-R10, 🐵 0017

## 

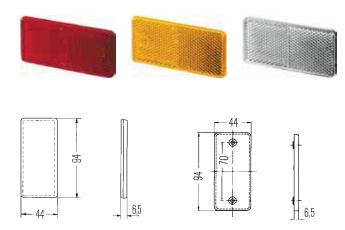
	-
· · · · · · · · · · · · · · · · · · ·	
4	15.2

## 

## HELLA SIDE MARKER LAMPS

Side marker lamps are an important safety feature making it easier for other road users to see the vehicle contour, especially during darkness. Vehicles with large dimensions, e.g. harvesters, long transporters, etc. in particular can be better represented that way. In some countries, active side marker lamps are required by law from a certain vehicle length.

HELLA side marker lamps meet the highest standards even in demanding application fields and are a convincing offering thanks to their durability and HELLA's well-known high quality.



## REFLEX REFLECTORS

For horizontal or vertical mounting. Effective area of reflection 22  $\mbox{cm}^2.$  Approved for ECE.

#### 20 each:

Red, self-adhesive	8RA 003 326-031
Red, screw attachment (w/o fig.)	8RA 003 326-001
Amber, self-adhesive	8RA 003 326-041
Amber, screw attachment (w/o fig.)	8RA 003 326-011
White, self-adhesive	8RA 003 326-051
White, screw attachment (w/o fig.)	8RA 003 326-021
Type approval: _001 _011 _021 ECE (=) 0221395 _031	-0/41 -051 ECE 🔊 92031

Type approval: -001, -011, -021 ECE 🗊 0221395, -031, -041, -051 ECE 😰 92031

Adhesive attachment

-60-

Adhesive attachment

Screw attachment: Ø 4.3 mm





## REFLEX REFLECTORS

Made of PMMA material, with white base plate. Effective area of reflection 22 cm<sup>2</sup>. Approved for ECE.

## 25 each:

Red, self-adhesive	8RA 002 014-281
Red, screw attachment (w/o fig.)	8RA 002 014-231
Amber, self-adhesive	8RA 002 014-301
Amber, screw attachment (w/o fig.)	8RA 002 014-251
White, self-adhesive	8RA 002 014-291
White, screw attachment (w/o fig.)	8RA 002 014-241
<b>▼</b>	

Type approval: -231, -241, -251 ECE 🐵 020030, -281, -291, -301 ECE 🐵 020031





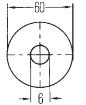
#### TRIANGULAR REFLEX REFLECTOR ~

Effective area of reflection 85 cm <sup>2</sup> . Approved for ECE.	
Red, with plastic base plate and 2 holes Ø 6 mm, for fastening screws	8RA 002 020-001
Red, with plastic base plate and additional metal base plate, 2 fastening screws M5 x 20	8RA 002 020-051
Time energy   FCF @ 022//	

Type approval: ECE 🗊 02346







Screw attachment





#### LED SIDE MARKER LAMP WITH REFLEX REFLECTOR

With light guide, passive electronics and ADR/GGVS tested, mounting via 5.8 mm screw holes, operating temperature -40 °C to +60 °C, protection class IP 5K9K. Tested according to HELLA norm 67101 class 5.1. Approved for ECE.

Functions	LEDs	Output	Current consumption
Side marker light and reflex reflector	2 amber	1.2 W / 24 V	approx. 0.05 A

With 500 mm cable, open cable ends

Type approval: 😥 5881

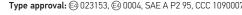
This product has the following features:

2PS 345 600-011

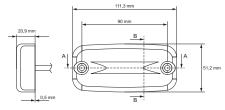


### SIDE MARKER LAMP

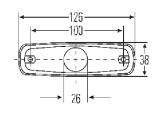
For horizontal or vertical installation, with reflex reflector, 12 V or 24 V bulb, white or amber base plate. Approved for ECE	
White base plate, 12 V/3 W	2PS 962 964-031
Amber base plate, 24 V/3 W	2PS 962 964-012
Type approval: 🗐 023153, 🚱 0004, SAE A P2 95, CCC 109000	7

















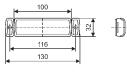
#### LED SIDE MARKER LAMP WITH REFLEX REFLECTOR

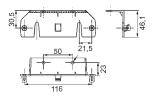
For horizontal or vertical mounting, amber lens, amber light, black housing. With horizontal mounting, the optical field must point towards the outer edge of the vehicle. With cellular rubber seal for sealing the lamp and 2 holes for B4.2 fastening screws, or by using a bracket (to be ordered separately). Protection class IP 6K9K. Also suitable for flash function. ADR/GGVS tested.

Functions	LEDs	Output	Current consumption
Side marker light	1 amber	24 V/1.2 W	approx. 0.05 A
Mounting			
Horizontal mounting, v	vith 1,500 mm cable	5	2PS 008 645-0011
Vertical mounting, with	1,500 mm cable		2PS 008 645-9911
For horizontal mount	ng, with EasyConi	n connector nousir	ig (z-piii)
			a (2 nin)
For horizontal mount With 1,300 mm cable	ing, with EasyConi		2PS 008 645-311 <sup>2</sup>
With 1,300 mm cable			
With 1,300 mm cable	ing, with quick link	< wiring	2PS 008 645-3112 2PS 008 645-6213
With 1,300 mm cable For horizontal mount With 1,300 mm cable	ing, with quick link	< wiring	2PS 008 645-3112 2PS 008 645-6213 nection
With 1,300 mm cable For horizontal mount With 1,300 mm cable For horizontal mount	ing, with quick link	< wiring	2PS 008 645-3112 2PS 008 645-6213

**Type approval:** (a) 021395, (b) 001396, (c) 021397, (c) 001397, SAE AP2 01, CCC A047950







## HELLA MARKER LAMPS

With HELLA's licence plate lamps, clearance lamps, position lamps and direction indicators, you can ensure that the vehicle is clearly visible to all road users, even in the dark and when visibility is poor. A clear advantage for the safety of each individual situation, whether on the road or during field work. Throughout, we are always committed to the greatest quality and implement innovative and efficient technologies for the lamps, such as LED technology. With up to 80 % less power consumption than conventional bulb technology, our lamps are paving the way towards more design and safety with maximum service lives. Frequent bulb replacements are not only time-consuming, but also cost-intensive in the long run, especially for trucks and agricultural machinery with high mileages. Therefore, retrofitting to the innovative HELLA LED lamps is an efficient choice in every which way! HELLA marker lamps are also characterised by outstanding quality when it comes to workmanship and stability – and their long service life proves it.

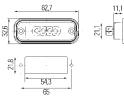
Do not leave safety to chance - put your trust in HELLA marker lamps.

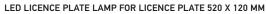






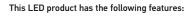






For installation above the licence plate (520  $\times$  120 mm), 2 lamps required to illuminate the licence plate, protection class IP 6K9K.

Functions	LEDs	Output	Current consumption
Licence plate light	4 white	24 V / 1 W	approx. 0.04 A
With frame, without cab	ble, flat connector 6	5.3 x 0.8 mm	2KA 010 278-011 <sup>1)</sup>
Functions	LEDs	Output	Current consumption
Licence plate light	4 white	12 V / 1 W	approx. 0.08 A
With frame, without cal	ble, flat connector 6		approx. 0.08 A

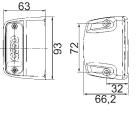






1

۲



#### LED LICENCE PLATE LAMP

For mounting to the right or left of the licence plate, with 4 LEDs, clear lens, black plastic housing, with  $6.3 \times 0.8$  mm flat connector.

For 520 x 120 mm licence plates, only 1 lamp required for illumination	
12 V/1 W, current consumption = approx. 0.08 A	2KA 010 278-3211)
24 V/1 W, current consumption = 0.04 A	2KA 010 278-021 <sup>1)</sup>

Type approval: 🗊 2609

#### For 340 x 240 mm and 280 x 200 mm licence plates

12 V/1 W, current consumption = approx. 0.08 A	2KA 010 278-4211)
24 V/1 W, current consumption = 0.04 A	2KA 010 278-1211)
T	

Type approval: 1 2911





1)

EMC approval class 3, operating temperature -40 °C to +85 °C, protection class IP 5K9K. Tested according to HELLA norm 67101 class 5.1. Multi voltage.

Functions	LEDs	Output	Current consumption
Licence plate light	2 white	12 V/0.3 W 24 V/0.6 W	0.03 A
Housing colour: black			
	d ( ) no no flat no o	enteelee	OKA 010 071 0010
With 2,000 mm cable ar	id 6.3 mm ital reci	eplacies	2KA 012 271-031 <sup>1)</sup>
With 1,300 mm cable and EasyConn connector		2KA 012 271-0513)	
With 1,300 mm cable ar	nd SUPERSEAL co	nnector	2KA 012 271-061 <sup>2)</sup>
Housing colour: white			
Tiousing colour: write			
With 2,000 mm cable ar	nd 6.3 mm flat rec	eptacles	2KA 012 271-231
With 1,300 mm cable ar 90° angled	nd EasyConn conn	ector,	2KA 012 271-271
Type approval: @ 2609	)		

Type approval: 🙆 2609

### Also available: the Krone rear lamp

Further information on these products can be found in the Rear lamps chapter on page 67.



₽

(93)

72

Q

(32)



#### LICENCE PLATE LAMP

For licence plate 340 x 240 mm: Mounting above or below the licence plate. (1 lamp)

For licence plate 520 x 120 mm: Mounting on the side or above the licence plate (2 lamps)

For licence plate 240 x 165 mm: Mounting on the side of the licence plate (1 or 2 lamps)

#### Licence plate light 10 W for 6 V, 12 V or 24 V applications; scope of delivery without bulb

Housing colour: grey

For screw attachment, 6.3 mm flat connector and grommet 2KA 003 389-001

Housing colour: black

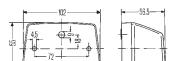
For screw attachment, 6.3 mm flat connector and grommet	2KA 003 389-061
Type approval: (22819, SAE, CCC (only -061)	

Spare parts/accessories

R10W bulb	
12 V	8GA 002 071-131
24 V	8GA 002 071-251
24 V (HD)	8GA 002 071-271





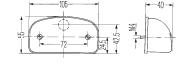


۲



8GM 002 092-121





#### LICENCE PLATE LAMP

For licence plate 340 x 240 mm: Mounting above the licence plate (1 lamp) Mounting on the side of the licence plate (2 lamps)

For licence plate 520 x 120 mm: Mounting on the side or above the licence plate (2 lamps)

Housing colour: black, 2 pieces For screw attachment, 6.3 mm flat connector and grommet **2KA 001 386-231** 

#### Spare parts/accessories

12 V

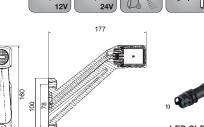
Type approval: 🗊 12820

#### This LED product has the following features:

ECE

AECQ







#### LED CLEARANCE LAMP

LED end-outline marker, vertical mounting, protection class IP 6K9K, operating temperature -40  $^\circ C$  to +50  $^\circ C.$ 

Functions	LEDs	Output	Current consumption
Side marker light, position light and clearance light	4	12 / 24 V 0.9/1.8 W	approx. 0.08 A

#### With 500 mm cable and EasyConn connector (2-pin), 90°

Left	2XS 011 744-0111)
Right	2XS 011 744-021 <sup>1)</sup>

## With 3,000 mm cable and 6.3 mm flat receptacles

Left	2XS 011 744-0312)
Right	2XS 011 744-0412)

#### With 2,000 mm cable and AMP-SUPERSEAL

Left	2XS 011 744-0513)
Right	2XS 011 744-061 <sup>3)</sup>

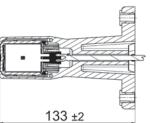
#### With 1,000 mm cable and quick link

Left		2XS 011 744-1914)
Right		2XS 011 744-1814)
	-	

Type approval: 🖾 11392, 🗊 10R-057951



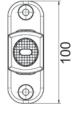






#### LED CLEARANCE LAMP

LED end-outline marker, short mounting, protection class IP 6K9K, operating temperature -40  $^\circ\mathrm{C}$  to +50  $^\circ\mathrm{C}.$ 

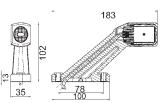


Functions	LEDs	Output	Current consumption
Side marker light, position light and clearance light	4	12 / 24 V 0.9/1.8 W	approx. 0.08 A
With 500 mm cable and quick link connector			2XS 011 768-0011)
With 500 mm cable and EasyConn connector (2-pin), not angled			2XS 011 768-0212)
With 2,000 mm cable and AMP-SUPERSEAL			2XS 011 768-0313)
With 400 mm cable and DEUTSCH connector			2XS 011 768-1174)

#### This LED product has the following features:









### LED CLEARANCE LAMP

LED end-outline marker, horizontal mounting, protection class IP 6K9K, operating temperature -40  $^{\circ}{\rm C}$  to +50  $^{\circ}{\rm C}.$ 

Functions	LEDs	Output	Current consumption
Side marker light, position light and clearance light	4	12 / 24 V 0.9/1.8 W	approx. 0.08 A

## With 500 mm cable and EasyConn connector (2-pin)

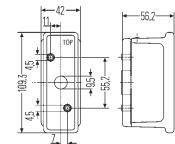
Left	2XS 011 769-011 <sup>1)</sup>
Right	2XS 011 769-021 <sup>1)</sup>

### With 670 mm cable and quick link connector

Left	2XS 011 769-091 <sup>2)</sup>
Right	2XS 011 769-101 <sup>2)</sup>







#### REAR-LOGIC CLEARANCE LAMP

For mounting on side of trailers. Lens for clearance light clear to front, red to rear, side marker reflector light amber.

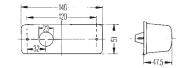
Housing made of black plastic, with grommet	
Screw attachment, left	2XS 007 841-011
Screw attachment, right	2XS 007 841-021

When used on towing vehicles, the clear lens must be replaced with a black **9EL 148 673-021** lens.

#### This product has the following features:



The second



#### AUXILIARY DIRECTION INDICATOR LAMP

For side mounting, category 5 and 6 for 12 V and 24 V/21 W, with bulb, GGVS/ADR suitable.

Left	2BM 006 692-011
Right	2BM 006 692-021
T	

Type approval: 🗊 0152621

#### This product has the following features:

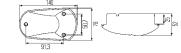


### AUXILIARY DIRECTION INDICATOR LAMP

For side mounting, category 6 for 24 V/21 W, without bulb, very flat design, ECE and SAE approved.

Lens, amber

Type approval: (1059 (P21W), (1848 (PY21W), SAE









### LED AUXILIARY DIRECTION INDICATOR LAMP CATEGORY 6

With black frame.

Functions	LEDs	Output	Current consumption
Additional direction indicator light	7 amber	12 V/4.8 W 24 V/3.5 W	0.4 A 0.15 A
12 V, direct screw connection, AMP SUPERSEAL			2BM 011 788-011 <sup>2)</sup>
12 V, direct screw connection, 500 mm cable, with open cable end			2BM 011 788-031 <sup>1)</sup>
24 V, direct screw connection, AMP SUPERSEAL			2BM 011 788-001 <sup>2)</sup>
24 V, direct screw connection, 500 mm cable, with open cable end		2BM 011 788-021 <sup>1)</sup>	

#### Spare parts/accessories

Frame, black	9AB 194 559-007
AMP-SUPERSEAL mating connector (AMP no. 282080-1)	8JA 746 184-022
Type approval: (1) 7506 FCE SAE CCC	

Type approval: 🗊 7506, ECE, SAE, CCC



44.5

## This LED product has the following features:





#### LED AUXILIARY DIRECTION INDICATOR LAMP CATEGORY 6

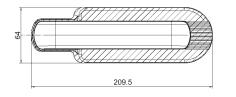
Without frame.

Functions	LEDs	Output	Current consumption
Additional direction indicator light	7 amber 12 V/4.8 W 24 V/3.5 W		0.4 A 0.15 A
12 V, self-adhesive, AMP-SUPERSEAL			2BM 011 788-0512)
12 V, self-adhesive, 500 mm cable, with open cable end			2BM 011 788-071 <sup>1)</sup>
24 V, self-adhesive, AMP-SUPERSEAL			2BM 011 788-0412)
24 V, self-adhesive, 500 mm cable, with open cable end			2BM 011 788-0611)

#### Spare parts/accessories

AMP-SUPERSEAL mating connector (AMP no. 282080-1)	8JA 746 184-022
Type approval: ECE	

Direction of travel  $\rightarrow$ 



Framed variant



Direction of travel  $\rightarrow$ 



Self-adhesive variant





When the motor is running, the battery is charged via contacts in the charging bracket.

Automatic vehicle electrical system voltage changeover 12/24 V, operating time in flashing mode 40 hours or 7 hours with work light. Charging bracket and lead-gel battery included in scope of delivery.

Type tested

2XW 007 146-011



#### HAZARD WARNING LAMP MODEL 3003

With fastening bracket (for battery operation with 5 mono cells, not included in scope of delivery).

Type tested

```
2XW 007 146-001
```

### This LED product has the following features:





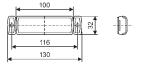
## LED POSITION LAMP WITH REFLEX REFLECTOR

For horizontal and vertical mounting, white light, black housing and black plastic base plate. With horizontal mounting, the LED field must point to the outer edge of the vehicle. With vertical mounting, the LED field may point upwards or downwards. The lamp is mounted via lateral mounting holes (for B4.2 screws) or by means of a bracket (to be ordered separately). Protection class IP 6K9K. ADR/ GGVS tested.

Functions	LEDs	Output	Current consumption
Position light (with reflector)			approx. 0.04 A
			000 000 ((5.054))
With 500 mm cable and open cable ends			2PG 008 645-9711)
With 1,300 mm cable and quick link coupling			2PG 008 645-5412)
	1205		

Type approval: 🗊 021395









#### LED POSITION LAMP WITH REFLEX REFLECTOR

For horizontal mounting, white light, black housing and black plastic base plate. The lamp is mounted via lateral mounting holes (for B4.2 screws) or by means of a bracket (to be ordered separately). Protection class IP 6K9K.

Functions	LEDs	Output	Current consumption
Position light (with reflector)	1 white	24 V/0.9 W	approx. 0.04 A

 With 450 mm cable and AMP-SUPERSEAL connector
 2PG 008 645-831"

 Type approval: (©) 021395
 2

This LED product has the following features:



#### LED TAIL LAMP WITH REFLEX REFLECTOR

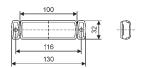
For horizontal or vertical mounting, red light, red lens, black housing and 2 holes for B4.2 fastening screws. Can be mounted using a bracket (to be ordered separately). Can also be used as clearance lamp with reflex reflector. With pulse for direction indicator failure control.

With horizontal mounting, the LED field must point to the outer edge of the vehicle. For vertical mounting, the LED field may point upwards or downwards.

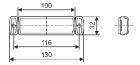
Functions	LEDs	Output	Current consumption
Tail light with reflex reflector	1 red	24 V/1.2 W	approx. 0.05 A
With 5,000 mm cable a (2-pin)	2TM 008 645-351 <sup>2)</sup>		
With 5,000 mm cable with quick link coupling incl. Clamping piece for contacting a 2-wire flat cable			2TM 008 645-661 <sup>3)</sup>
With 500 mm cable			2TM 008 645-951 <sup>1)</sup>

Type approval: 🗊 021395, 🗊 021398, SAE









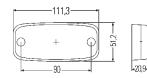
2TM 345 600-3111)

#### This LED product has the following features:





\*



#### LED TAIL LAMP WITH REFLEX REFLECTOR

With light guide, passive electronics and ADR/GGVS tested, mounting via 5.8 mm screw holes, operating temperature -40 °C to +50 °C, protection class IP 6K9K. Tested according to HELLA norm 67001 class 6.3. Approved for ECE.

Functions	LEDs	Output	Current consumption
Tail light with reflex reflector	2	24 V/1.2 W	0.05 A 0.05 A

With 5,000 mm cable

Type approval: 😥 5881

This LED product has the following features:





#### LED POSITION LAMP WITH REFLEX REFLECTOR

For horizontal mounting, through 2 x 5.8 mm holes, passive electronics, ADR/GGVS tested, operating temperature from -40 °C to +50 °C, protection class IP 6K9K. Approved according to HELLA norm 67101, class 6.3.

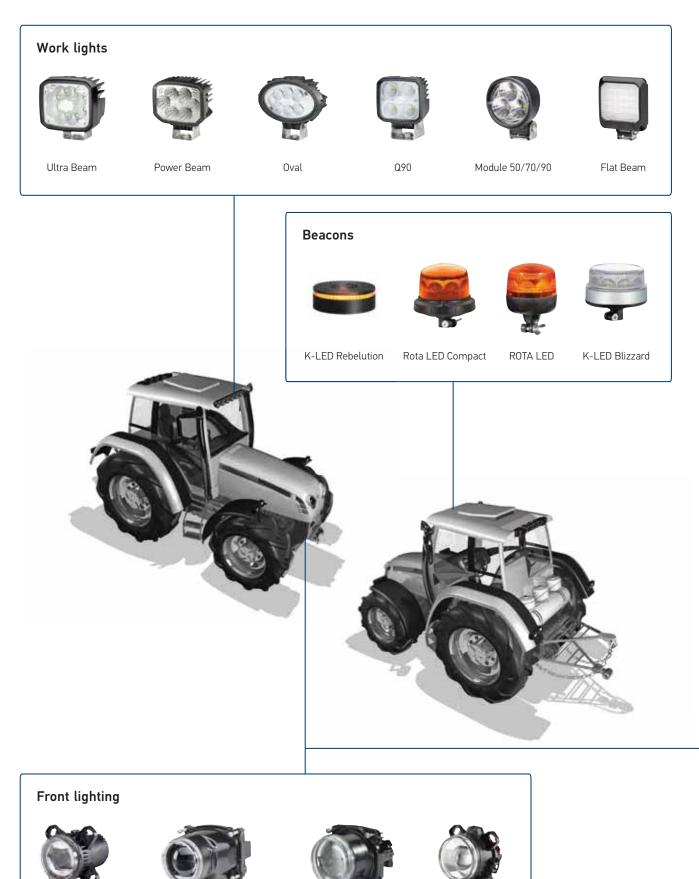
Functions	LEDs	Output	Current consumption
Position light	2 white	24 V/1.2 W	0.05 A
With 500 mm cable			2PG 345 600-401

Type approval: 😥 5881

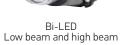


	—111,3	•		
0	+	0	51,2	
	90			<b>₁</b> 20,9-

## PRODUCT OVERVIEW



L 4060



Premium

Performance



## Trailer rear lighting



Hybrid and full LED rear lamp





LED hybrid rear lamp



"COLUNA" full LED rear lamp



Repulse Pro

## ORDER NUMBER OVERVIEW

Order no.

1F8 016 560-001

1F8 016 560-011

Page

55, 60

55, 60

Order no.	Page
1AL	
1AL 009 998-001	50
1AL 009 998-021	50
1AL 009 998-041	50
1AL 010 820-021	49
1AL 012 758-001	49
1AL 012 758-021	49
1AL 012 758-101	49
1AL 012 758-121	49
1BL	
1BL 009 999-001	50
1BL 009 999-021	50
1BL 009 999-041	50
1BL 010 820-001	49
1BL 012 488-001	46
1BL 012 488-021	46
1BL 012 488-101	46
1BL 012 488-121	46
1BL 247 042-007	51
1BL 247 042-017	51
1BL 247 042-177	51
1BL 247 042-217	50
1F0	
1F0 011 988-021	47
1F0 011 988-031	47
1F0 011 988-071	47
1F0 011 988-081	47
1F0 011 988-121	47
1F0 011 988-131	47
1F0 011 988-171	47
1F0 011 988-181	47
1F0 012 206-001	55
1F0 012 206-011	55
1F3	
1F3 009 094-031	57, 60
1F3 009 094-071	57
1F3 009 094-071	57
1F3 010 119-101	59, 61
1F3 010 119-111	59
1F3 011 815-001	60
1F3 011 815-011	55
1F8	
1F8 007 560-211	56
1F8 007 560-311	56
1F8 007 560-341	56
1F8 007 560-411	56, 60
1F8 007 560-451	56, 60
1F8 009 797-101	59, 61
1F8 009 797-341	59, 61
1F8 009 797-431	58, 61
1F8 009 797-451	58, 61

1F8 016 560-021	55, 60
1F8 016 560-031	55, 60
1F8 016 797-001	58
1F8 016 797-011	58
1F8 241 400-011	55, 56, 58, 59
1F8 241 429-011	55, 56, 58, 59
1FA	
1FA 996 197-151	54
1FA 996 197-181	54, 61
1FE	
1FE 008 773-001	57, 61
1FE 008 773-011	57
1FE 008 773-041	57, 61
1FE 008 773-081	57, 61
1FJ	
1FJ 360 002-502	54, 61
1FJ 958 040-072	54, 60
1FJ 958 040-082	54, 60
1FJ 958 130-011	53, 60
1FJ 958 130-111	53, 60
1FJ 958 130-301	53, 60
1G0	
1G0 357 101-012	25
1G0 357 108-012	24
1G0 995 050-001	19
1G0 995 050-011	19
1G0 995 050-021	19
1G0 995 050-051	28
1G0 995 050-061	28
1G0 995 050-071	28
1G0 995 050-081	28
1G0 996 210-001	29
1G0 996 210-011	29
1G0 996 263-031	16
1G0 996 263-051	16
1G0 996 276-701	18
1G0 996 376-631	18
1G0 996 476-001	16
1G0 996 476-011	16
1G0 996 476-031	16
1G0 996 476-041	16
1G0 996 476-121	16
1G0 996 476-131	16
1G0 996 576-001	17
1G0 996 576-011	
1G0 996 576-031	17
1G0 996 576-041	17
	17
<b>1G1</b> 1G1 357 105-022	26
101 007 100 022	20

Order no.	Page
1GA	
1GA 357 103-012	25
1GA 357 103-022	25
1GA 357 103-082	25
1GA 357 106-022	26
1GA 357 106-032	26
1GA 357 107-012	24
1GA 357 107-022	24
1GA 357 109-002	27
1GA 995 193-001	20
1GA 995 193-011	20
1GA 995 193-021	20
1GA 995 193-031	20
1GA 995 193-041	20
1GA 995 506-001	13
1GA 995 506-011	13
1GA 995 506-031	13
1GA 995 506-081	13
1GA 995 606-001	13
1GA 995 606-011	13
1GA 995 606-071	13
1GA 995 606-081	13
1GA 995 606-171	13
1GA 996 188-501	14
1GA 996 188-511	14
1GA 996 284-001	14
1GA 996 284-011	15
1GA 996 284-081	15
1GA 996 284-091	15
1GA 996 488-001	14
1GA 996 488-011	14
1GA 996 761-001	
1GA 996 761-011	19
1GA 996 761-021 1GA 996 761-101	19
	15
1GA 996 761-111 1GA 996 761-171	15
	15
1GA 996 761-191	15
1GD	
1GD 996 193-001	20
1GD 996 193-011	20
1GD 996 193-051	20
1GE	
1GE 360 000-002	27
1GJ	
1GJ 360 001-002	27
1GJ 360 002-002	27
1GJ 360 003-002	27
1GJ 958 040-501	21
1GJ 958 130-461	53

Order no.	Page
1HO	
1H0 996 376-491	17
1H0 996 476-501	17
1H0 996 476-511	17
1K0	
1K0 247 043-007	51
1K0 247 043-017	51
1K0 247 043-027	51
1K0 247 043-037	51
1K0 247 043-117	51
1K0 247 043-127	51
1K0 247 043-157	51
1K0 247 043-167	51
1KO 247 043-117	50
1KO 247 043-127	50
1KO 247 043-157	50
1KO 247 043-167	50
1LL 1LL 009 998-011	50
1LL 009 998-051	50
1LL 010 820-031	49
1LL 012 758-011	49
1LL 012 758-111	49
1ML	
1ML 009 999-011	50
1ML 009 999-051	50
1ML 010 820-011	49
1ML 012 488-011	46
1ML 012 488-031	46
1ML 012 488-111	46
1ML 012 488-131	46
1ML 247 042-027	51
1ML 247 042-037	51
1ML 247 042-187	50, 51
1ML 247 042-227	50
1N0	
1N0 011 988-001	48
1N0 011 988-011	48
1N0 011 988-051	48
1N0 011 988-061	48
2BA	
2BA 980 888-211	74
2BA 980 888-311	73
2BA 980 888-411	73
2BA 980 888-511	73
2BA 980 888-611	73
2BM	
2BM 006 692-011	87
	-

2BM 006 692-021

Order no.	Page
2BM 008 355-001	87
2BM 011 788-001	88
2BM 011 788-011	88
2BM 011 788-021	88
2BM 011 788-031	88
2BM 011 788-041	88
2BM 011 788-051	88
2BM 011 788-061	88
2BM 011 788-071	88

#### 2DA... 2DA 007 421-001 77 2DA 012 596-001 76 2DA 012 596-011 76 76 2DA 343 106-001 2DA 343 106-011 2DA 343 106-021 76 76 2DA 343 106-031 76 2DA 343 800-001 77 2DA 980 887-311 74 2DA 980 887-411 74

## 2KA.

87

20.4	
2KA 001 386-231	85
2KA 003 389-001	84
2KA 003 389-061	84
2KA 010 278-011	83
2KA 010 278-021	83
2KA 010 278-121	83
2KA 010 278-311	83
2KA 010 278-321	83
2KA 010 278-421	83
2KA 012 271-031	84
2KA 012 271-051	84
2KA 012 271-061	84
2KA 012 271-231	67, 84
2KA 012 271-271	67, 84

#### 2NE...

2NE 980 889-501	75
2NE 980 889-601	75

#### 2NR...

2NR 013 155-201	72
2NR 013 155-211	72
2NR 013 155-221	72

### 2PG...

2PG 008 645-541	89
2PG 008 645-831	90
2PG 008 645-971	89
2PG 345 600-401	91

### 2PS...

2PS 008 645-001	81
2PS 008 645-311	81

Order no.	Page
2PS 008 645-621	81
2PS 008 645-891	81
2PS 008 645-991	81
2PS 345 600-011	80
2PS 962 964-012	80
2PS 962 964-031	80

### 2RL...

2RL 010 979-001	37
2RL 010 979-011	37
2RL 010 979-021	37
2RL 011 484-001	36
2RL 011 484-011	36
2RL 011 484-021	36
2RL 012 983-301	38
2RL 012 983-401	38
2RL 014 979-001	36
2RL 014 979-011	36
2RL 014 979-021	36
2RL 455 256-001	35

#### 2SB... 73 2SB 980 887-211

2SD	
2SD 013 155-001	72
2SD 013 155-011	72
2SD 013 155-021	72
2SD 013 155-031	72
2SD 013 155-101	72
2SD 013 155-111	72

## 2TM...

2TM 008 645-351	90
2TM 008 645-661	90
2TM 008 645-951	90
2TM 345 600-311	91

## 2VD...

2VD 012 381-011	65
2VD 012 381-031	65
2VD 012 381-211	66
2VD 012 381-251	66
2VD 012 381-311	66
2VD 012 381-351	66

#### 2VP... 2VP 012 381-021 65 2VP 012 381-041 65 2VP 012 381-051 65 2VP 012 381-061 65 2VP 012 381-081 65 2VP 012 381-221 66 2VP 012 381-241 66 2VP 012 381-261 66 2VP 012 381-281 66

# ORDER NUMBER OVERVIEW

Order no.	Page	Order no.	Page	Order no.	Page
2VP 012 381-321	66			_	
2VP 012 381-341	66	2XD		2XS	
2VP 012 381-361	66	2XD 011 557-101	39	2XS 007 841-011	87
VP 012 381-381	66	2XD 011 557-201	39	2XS 007 841-021	87
VP 340 960-011	69	2XD 011 557-301	39	2XS 011 744-011	85
VP 340 960-021	69	2XD 011 557-811	39	2XS 011 744-021	85
VP 340 960-111	69	2XD 011 557-841	39	2XS 011 744-031	85
VP 340 960-121	69	2XD 012 160-801	43	2XS 011 744-041	85
VP 340 960-231	67	2XD 012 160-811	43	2XS 011 744-051	85
VP 340 960-241	67	2XD 012 160-821	43	2XS 011 744-061	85
VP 340 960-251	67	2XD 012 160-831	43	2XS 011 744-181	85
VP 340 960-261	67	2XD 012 160-851	43	2XS 011 744-191	85
VP 340 960-271	69	2XD 012 160-861	43	2XS 011 768-001	86
/P 340 960-281	69	2XD 012 160-901	43	2XS 011 768-021	86
/P 340 961-011	68	2XD 012 160-911	43	2XS 011 768-031	86
/P 340 961-021	68	2XD 012 160-951	43	2XS 011 768-117	86
/P 340 961-031	68	2XD 012 160-961	43	2XS 011 769-011	86
/P 340 961-041	68	2XD 012 878-001	37	2XS 011 769-021	86
/P 340 961-111	68	2XD 012 878-011	37	2XS 011 769-091	86
VP 340 961-121	68	2XD 012 878-021	37	2XS 011 769-101	86
VP 340 961-131	68	2XD 012 972-001	36		
/P 340 961-141	68	2XD 012 972-011	36	2XW	
VP 340 961-151	68	2XD 012 972-021	36	2XW 007 146-001	89
VP 340 961-161	68	2XD 012 980-001	38	2XW 007 146-011	89
VP 340 961-211	68	2XD 012 980-011	38		
VP 340 961-221	68	2XD 012 980-021	38	2ZR	
VP 340 961-411	68	2XD 012 984-301	38	2ZR 012 456-001	77
VP 340 961-421	68	2XD 012 984-401	38	2ZR 012 456-011	77
VP 340 961-431	68	2XD 013 979-001	36	2ZR 012 456-021	77
VP 340 961-441	68	2XD 013 979-011	36	2ZR 012 456-201	31
VP 340 961-511	67	2XD 013 979-021	36	2ZR 012 456-211	31
VP 340 961-521	67	2XD 014 560-001	43	2ZR 012 456-221	31
VP 340 961-531	67	2XD 014 560-101	43	2ZR 980 889-011	75
VP 340 961-541	67	2XD 014 560-201	43	2ZR 980 889-111	75
VP 340 964-011	69	2XD 014 560-401	43	2ZR 980 889-211	75
VP 340 964-021	69	2XD 014 561-001	42	2ZR 980 889-311	75
VP 340 964-111	69	2XD 014 561-101	42	2ZR 996 188-521	14, 30
VP 340 964-121	69	2XD 014 561-201	42	2ZR 996 284-501	31
VP 340 965-111	68	2XD 014 561-401	42	2ZR 996 284-511	31
VP 340 965-121	68	2XD 014 561-601	42	2ZR 996 376-091	30
VP 345 900-011	70	2XD 014 561-701	42		
VP 345 900-021	70	2XD 014 562-001	42		
VP 345 900-091		2XD 014 562-201	42	4DW 009 492-011	65, 66
VP 345 900-101	70	2XD 014 562-601	42	4511 007 472 011	
VP 345 900-131	70	2XD 014 563-001	42		
VP 345 900-141		2XD 014 563-201	42	5DS 227 488-101	65, 66
VP 345 900-241	70	2XD 014 563-601	42	505227 400-101	00,00
VP 345 900-251	71	2XD 014 583-801	42		
VP 345 900-261	71	2XD 014 592-201	42		41
VP 345 900-281 VP 345 900-271	71	2XD 014 592-601	42		41
VP 345 900-441	71	2XD 014 372-801 2XD 455 255-001	35	8EN	
VP 345 900-441 VP 345 900-451		280 400 200 001		8EN 332 584-001	33
		_		ULIN 332 J04-UUI	
VP 345 900-461	_ <u>71</u> 71	_			

Order no.	Page
BGA	
BGA 002 071-131	84
BGA 002 071-251	84
3GA 002 071-271	84
8GH	
8GH 002 089-131	59
8GH 002 089-251	59
3GH 007 157-121	59
BGH 007 157-241	59
BGM	
BGM 002 092-121	85
BHG	
8HG 002 365-001	32, 40
8HG 004 806-001	32
3HG 006 294-011	40
3HG 006 294-021	40
3HG 006 294-031	40
3HG 006 294-041	40
3HG 006 294-051	40
3HG 006 294-091	40
3HG 006 294-101	40
3HG 006 294-111	40
3HG 006 294-141	40
3HG 096 531-007	40
8HG 096 531-107	40
3HG 096 531-117	40
8HG 096 531-127	40
3HG 096 531-137	40
3HG 160 409-002	81
3HG 331 414-372	32
8HG 332 912-002	32
3HG 958 128-811	54
8HG 958 139-071	54
3HG 958 139-841	54
3HG 990 263-111	32
3HG 990 263-131	32
3HG 990 320-001	32
3HG 990 320-011	32
3HG 992 377-042	32
3HG 994 412-372	32
HG 994 974-002	32

8JA...

8JA 009 256-801 8JA 201 022-801 
 BJA 201 022-831

 BJA 746 184-022

 BJA 990 295-217

8JB	
8JB 001 946-011	41
8JB 001 946-021	41
8JB 001 946-101	41
8JB 004 123-031	41
8JB 004 777-001	41
8JB 004 777-002	41
8JB 850 434-011	41

Page

## 8JD.

Order no.

000111	
8JD 158 175-807	33
8JD 990 295-037	33

## 8KB...

8KB 990 299-001	33
8KB 990 299-011	13, 14, 15, 16, 18, 19, 27, 28, 30, 33
8KB 990 299-311	33
8KB 990 299-331	33
8KB 990 299-361	33

8RA 002 014-231	79
3RA 002 014-241	79
3RA 002 014-251	79
8RA 002 014-281	79
8RA 002 014-291	79
8RA 002 014-301	79
8RA 002 020-001	79
8RA 002 020-051	79
8RA 003 326-001	79
8RA 003 326-011	79
8RA 003 326-021	79
8RA 003 326-031	79
8RA 003 326-041	79
8RA 003 326-051	79

#### 8XS...

8XS 958 337-021	53
8XS 958 337-031	53
8XS 958 337-111	53

#### 9AB...

9AB 194 559-007 88

## 9AG...

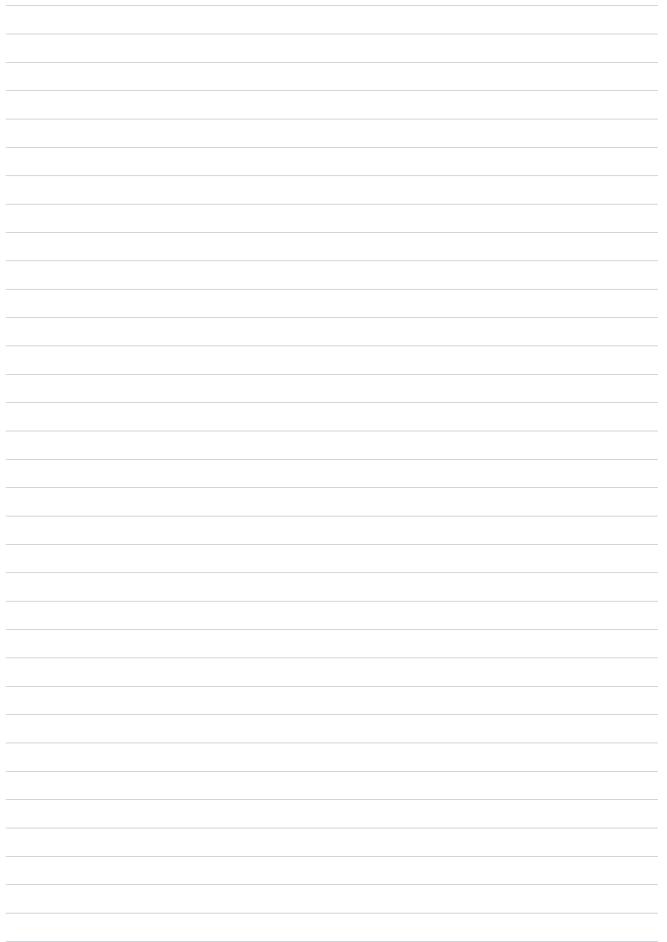
33 33

33 88 33

9AG 195 614-001	55
9AG 195 614-011	55
9AG 199 812-011	55

Order no.	Page
9EL	
9EL 183 432-031	67
9EL 183 432-041	67
9EL 208 551-001	66
9EL 208 551-011	65
9EL 213 522-001	72
9ES 199 813-001	55
<b>9GH</b> 9GH 096 532-001	41
9GH 096 532-001	41
9GH 096 532-007	41
9XD	
9XD 990 298-001	32
9XD 990 298-031	32
9XS	
	32

## NOTES





# FOCUS ON CUTTING-EDGE TECHNOLOGY

As the technological leader for intelligent light distribution systems, halogen, xenon and full LED headlamps, and as a partner to renowned international automotive manufacturers, HELLA always meets the highest expectations and quality standards. We have also applied this standard to our range of bulbs: Top technology in uncompromisingly high, laboriously tested quality. In practice, this means optimal visibility thanks to premium light quality and minimum failure rates.

## PORTFOLIO: THE RIGHT ONE FOR EVERYONE

The HELLA bulb range covers a wide range of applications and therefore offers the right light source for every requirement. The HELLA range has everything to offer: whether it's proven Standard lamps, Lifetime for a longer service life,

Performance for higher light output or Design for a special look!



STANDARD





BLUE LIGHT

PERFORMANCE + 120



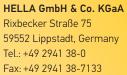
CHROME TOP 2.0



## THE FASTEST WAY TO THE RIGHT HELLA LIGHT SOURCE

Which bulb is right for each vehicle and area of use? The answer to these and many other questions can be found using the brand new and completely innovative HELLA lamp configurator with many additional functions. In addition to detailed information on the HELLA bulb range, the configurator allows you to identify the right bulb for your specific requirements in just a few clicks – easily, quickly and conveniently!

www.hella.com/bulbs



© HELLA GmbH & Co. KGaA, Lippstadt

J01625/10.19 Subject to technical and price modifications