HELLA

Technology with Vision

PRODUCT & TECHNICAL SERVICES
MINING AND CONSTRUCTION

QUALITY STANDARDS

HELLA has set itself the ambitious standard of guaranteeing consistently high product quality in every respect. This is achieved by defining quality criteria and checking every detail using carefully-selected methods throughout the entire manufacturing process.

Production quality is ensured by parallel quality monitoring and testing. Quality products from HELLA are subject to different test procedures in accordance with the HELLA standard 67101. These test procedures are conducted by the HELLA test laboratory in Germany.

First-class quality by conviction: HELLA guarantees the perfect, long-term functioning of its products and stands for satisfied customers in the spare parts, accessories and light sources areas.

As the long-established company from Lippstadt is an efficient partner to the automotive industry, HELLA products are manufactured to meet the respective precision, tolerance specifications. Combined with the use of sophisticated test procedures in the product development, you can depend on HELLA products in any situation.

HEAT, MOISTURE AND COLD TEST

In temperature cycle tests, HELLA products are exposed to temperature fluctuations from -40 degrees Celsius to +100 degrees Celsius in climatic chambers which have a volume of 600 – 1,000 liters. In addition, condensation and defogging tests are carried out up to max. 95 % air humidity and up to 80 degrees Celsius.

In the so-called „shock chamber", the temperatures changes within seconds (intervals of max. 6 seconds) between -40 degrees Celsius and +100 degrees Celsius. These tests signify utmost stress on any material, both for lighting as well as for the individual electronics components. The heat and cold tests last up to 48 hours.

DUST TEST

In this test, the products are tested for their dust tightness. Unfired Portland cement is used as a test medium for all products. The test is optionally performed in sample function operation, and with overpressure or under pressure exposure of the device under test.

The tests are evaluated by determining the photometric value before and after the test (IP 6KX). This is the only way that HELLA can ensure that dust will not penetrate the product and can guarantee the long service life of the product.

LIGHTING DESIGN SOLUTIONS
A SCIENTIFIC APPROACH TO LIGHTING

At HELLA Australia, we offer a professional lighting design service to create the optimum lighting solution for your requirements, taking the guesswork out of lighting and maximising safety, productivity and profitability.

As a global leader in lighting for mining applications, our lighting design team has comprehensive expertise in this sector and extensive knowledge of the operational requirements and the challenges faced when working in this environment.

They work in close partnership with our customers throughout the process and the customised solutions that they create can be evaluated, influenced and optimised by the stakeholders prior to implementation.

What is a lighting design?

Lighting design is traditionally a field within architecture and interior design that is concerned with the design of lighting systems, including natural light, electric light, or both, to serve human needs.

At HELLA Australia, our lighting design process for mining and quarrying applications uses an engineering-based, application-focused approach that takes into account the following factors for both static and mobile installations:

→ The ambient light levels of the site, whether a surface mine or underground mine

→ The optimum level and distribution of light required to maximise safety and productivity

→ The colour of the light and its effect on the user(s)

→ Environmental factors, such as dust, moisture or vibration, that may determine the durability of the work lights required

→ Cost of ownership and maintenance requirements

The final proposal is provided in a clear and concise document with graphical simulations showing before and after scenarios.

What are the benefits?

Our lighting design team will only propose solutions that they can be confident will deliver clear and measurable results in terms of:

→ Increased safety

→ Enhanced operator ergonomics

→ Higher productivity

→ Reduced downtime

Why choose HELLA?

Whilst HELLA products are used in a wide range of industries globally, mining is a specific area of focus for HELLA and we are committed to delivering quality, innovation and value for our customers in this sector.

Whether work lights, beacons or signal lamps, all HELLA products for mining applications are designed, manufactured and rigorously tested to offer class-leading performance and reliability.

Contact HELLA Australia to arrange a customised lighting design consultation.
Call 1800 061 729 or email info.au.hella@forvia.com

CUSTOMISED LIGHTING DESIGN SOLUTIONS

HELLA Mining lighting designs are tailored to each specific vehicle, taking into account the size of the machine and its configuration. Considering all of these variables results in the optimum lighting solution, ensuring clear and uniform illumination of the work area as well as no-go zones around the vehicle for the safety of site personnel.

Example: Excavator

The lighting scheme utilises RokLUME 380N close range work lights for optimum illumination of the work areas, and UltraRAY 2.0 rotating beacons and BL470 red LED warning lights for maximum operational safety

1 RokLUME 380N Close Range
Page 13

2 BL470 Red LED Warning Light
Page 21

3 UltraRAY 2.0 Rotating Beacon
Page 24

CONTENTS

WHY PC NOT GLASS?

HELLA has been a manufacturer of vehicle lighting since 1899. Throughout this time we have been at the forefront of many lighting innovations and developments. The evolution from glass to PC lenses has allowed for a range of product improvements, making it our lens material of choice for tough and demanding environments.

HIGHLY DURABLE
Shock and impact resistant. Does not shatter on impact and provides long lasting protection

LIGHT WEIGHT
PC lenses are significantly lighter than glass which reduces stress on mounting brackets and decreses overall vehicle weight

EASY MOULDING
PC lenses can be easily moulded into complex shapes allowing for more variety in functionality and aesthetic design when compared to glass

ENERGY EFFICIENT
Less energy required in production, contributing to more environmentally sustainable products
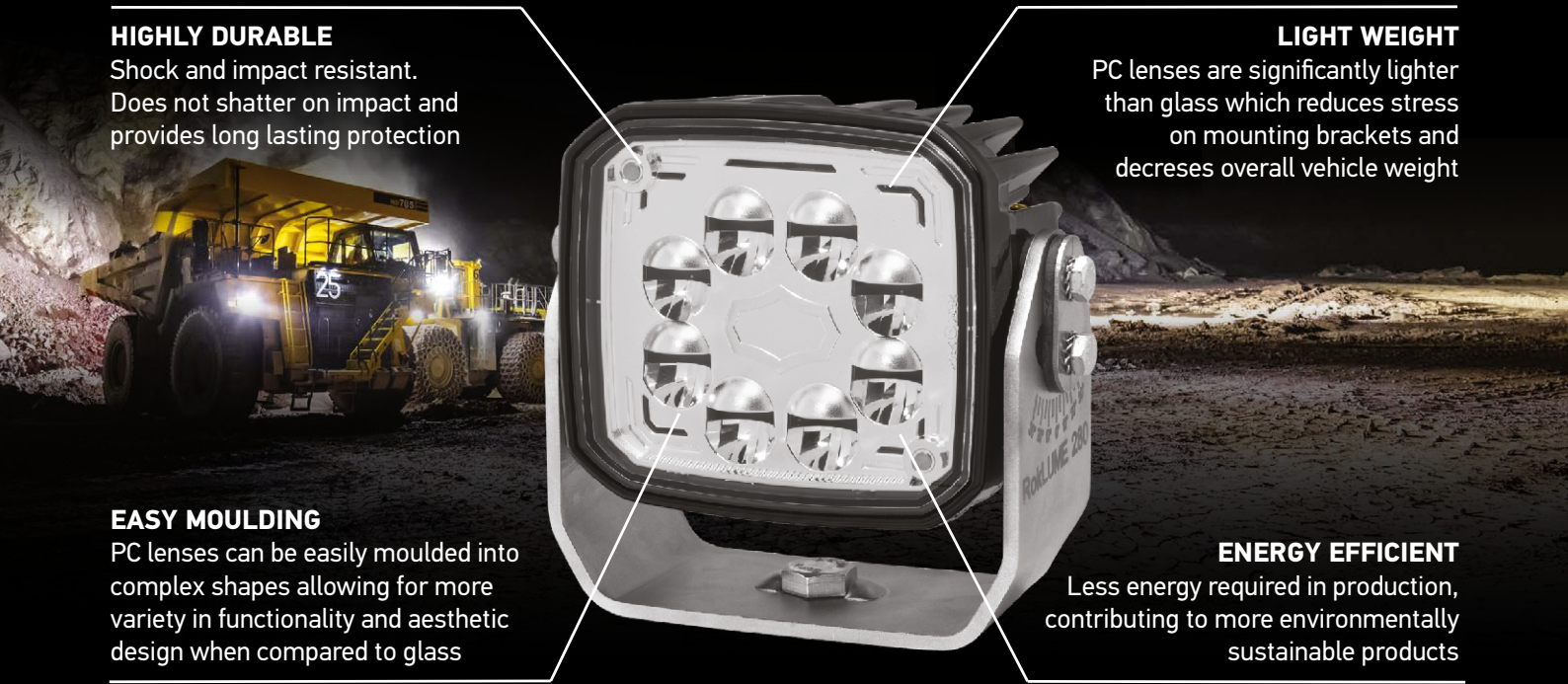
RokLUME 280N
SMART

The adaptation expert for improved visibility & safety

- Intelligent work lamp with smart features enabling easy adjustment to different weather, driving and lighting conditions

- Ensure the highest possible visibility in a range of environments including dust, snow, rain or fog

- Available in six different illumination variants and amber or green colour change options

- Fast and easy installation

- For the toughest industries in the world

Dimming
Helps reduce output during the day or to reduce glare at night

Memory
Stores the different settings into 3 available memories

Anti-theft protection
Once activated the lamp won't work on any other vehicle (unless has SMART setup)

Colour temperature change
Reduces eye strain and fatigue by adjusting to daylight conditions

Colour change
Assists in poor visibility (snow, fog, dust) to create safe operating environments

Lifetime management
Notifies the operator if the lamp is near end of life, helping to reduce downtime

EASY CHANGE
(1:1 CHANGE)

Same dimensions
No additional wiring harness
No change in wiring architecture

Standard work lamp
RokLUME 280N

→ The classic work lamp with LED technology
→ Even higher light output – better than xenon performance
→ For universal use

SMART work lamp
RokLUME 280N SMART

→ The classic work lamp with LED technology
→ Even higher light output – better than xenon performance
→ For universal use
→ **With SMART functions**

SMART FUNCTIONS

DIMMING

CHANGE COLOUR TEMPERATURE

CHANGE COLOUR

RokLUME 280N SMART

Featuring ground-breaking technology, the colour temperature of the RokLUME 280N SMART can be adjusted to provide optimum visibility in different weather or driving conditions. In addition, the intelligent work lamp is equipped with a dimming function to reduce both blinding the operator and oncoming vehicles.

For easy conversion, the RokLUME 280N SMART has the same dimensions as the standard RokLUME 280N work lamp and also has a 2-pole Deutsch DT plug.
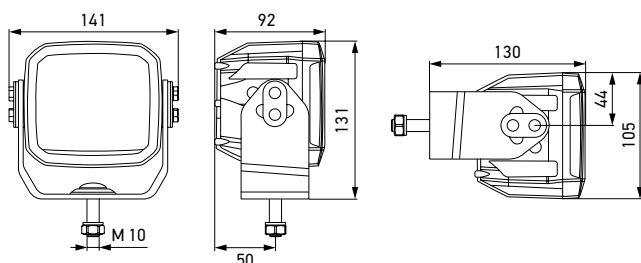
It is available in six different light distribution variants: with Diffuse Flood, Close Range, Long Range, Pencil Beam, Tunnel Flood or **ZERO**GLARE illumination.
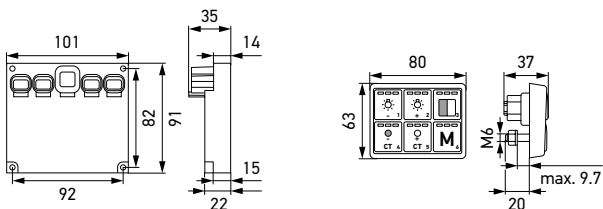
Part No.	Lens Type	Colour change function
1GA 995 707-401	Close-Range	☐ White to ■ Green
1GA 995 707-411	Long-Range	☐ White to ■ Green
1GA 995 707-421	**ZERO**GLARE	☐ White to ■ Green
1GA 995 707-431	Pencil Beam	☐ White to ■ Green
1GA 995 707-441	Diffuse Flood	☐ White to ■ Green
1GA 995 707-451	Tunnel Flood	☐ White to ■ Green
1GA 995 707-551	Close-Range	☐ White to ■ Amber
1GA 995 707-561	Long-Range	☐ White to ■ Amber
1GA 995 707-571	**ZERO**GLARE	☐ White to ■ Amber
1GA 995 707-581	Pencil Beam	☐ White to ■ Amber
1GA 995 707-591	Diffuse Flood	☐ White to ■ Amber
1GA 995 707-601	Tunnel Flood	☐ White to ■ Amber

ZEROGLARE version   Long Range version

RokLUME 280N SMART

Gateway Base / Prime   HELLA control panel

Operating voltage	Single-voltage (18 – 32 V)
Rated voltage	24 V
Current consumption	Ø 2.35 A (24 V)
Power Consumption	Ø 56 W max. 57 W
Light Output	Up to 3,100 lm
Light source	LED
Colour temperature	3,000 K to 6,800 K
Material	Housing: die-cast aluminium Cover lens: hard-coated plastic
Weight	1.597 g / 1.584 g (**ZERO**GLARE)
Temperature range	- 40 °C to + 90 °C (overheat protected)
Degree of protection	Work lamp: IP 6K8, IP 6K9K Gateway Base/ Prime: IP 6K8, IP 6K9K HELLA control panel: IP 6K7
Type approval	UKCA, ECE-R10,
EMC protection	CISPR 25
Salt spray resistance	1,200 h as per DIN EN ISO 9227
Mounting	Upright, pendant and horizontal
Connection	DEUTSCH DT 2 pin connector DEUTSCH DT 2 pin counterpart included
Type approval	CE, UKCA, ECE-R10 RCM, CISPR25

INDIVIDUAL PARTS FOR THE SET-UP

ECE	RCM	EMC ✓	Active-Electronic · Temp.-Management Active · Reverse Polarity Protection · Over-Voltage Protection
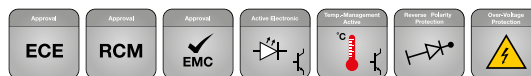
Product image	Description	Additional information	Part number
	Gateway Base	Control of the intelligent work lamps	**9SX 333 522-001**
	Gateway Prime	Control of the intelligent work lamps, cornering light function possible	**9SX 333 523-001**
	HELLA control panel	Setting the colour temperature, the light colour (if applicable), the brightness level and the memory function	**9SX 333 525-001**
	Wiring harness	Connection from the HELLA control panel to the gateway and from the gateway to the fuse box*	**8KB 333 557-001**

* The wiring harness from the gateway to the fuse box must be shortened to the correct length. The wiring harness must not be laid in loops!

RokLUME 280N GEN 2

RokLUME 280N GEN 2 is a high output LED work lamp specifically built for mining with a heavy duty stainless steel bracket and corrosion resistant NanoSafe coating. The variant **ZERO**GLARE has been designed with a new reflector and optical system which improves its illumination. This means its innovative light system creates a sharp horizontal cut-off line at 0° to control the light onto the ground in front of the vehicle. The cut-off line eliminates the danger caused by glaring light coming into contact with the eyes of oncoming drivers.

- Reduced Power consumption
- Increased light output
- Increased temperature range tolerance
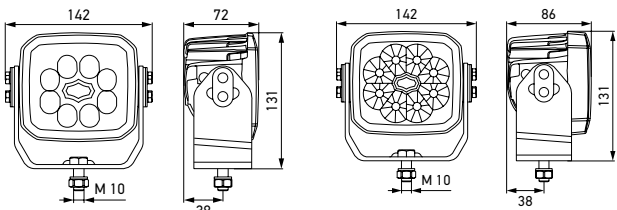
Part No.	Lens Type	Colour
1GA 995 706-521	**ZERO**GLARE	☐ White
1GA 995 706-501	Close Range	☐ White
1GA 995 706-531	Pencil Beam	☐ White
1GA 995 706-511	Long Range	☐ White
1GA 995 706-551	Tunnel Flood	☐ White
1GA 995 706-541	Diffused Flood	☐ White

Country of Origin	Austria
Lens Material	Hard-coated PC
Mounting	Upright, Wall or Pendant
Housing	Aluminium with NanoSafe coating
Voltage	Multivolt 9-33V DC
Power Consumption	50W Max
Actual Light Output	Up to 5000 Lumens
IP Rating	IP 6K9K, IP 6K8
Operating Temperature	-40°C to 90°C
LED Colour Temperature	5000 K
Connection	Integrated 2 Pin Deutsch plug
Weight	1,476 g
EMC Interference Immunity	ECE-R10, CISPR 25 Class 5,

ZEROGLARE version

Long Range version
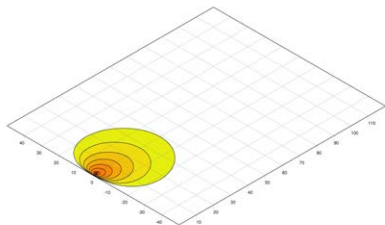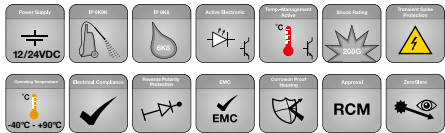
Diffused flood illumination
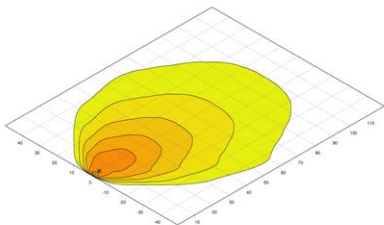
Close range illumination
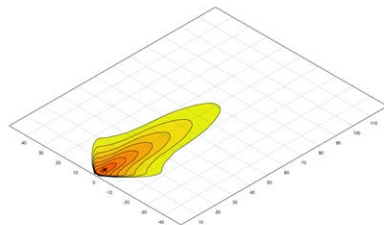
ZEROGLARE illumination
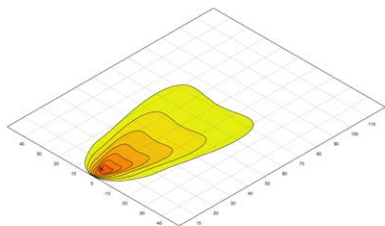
Tunnel flood illumination
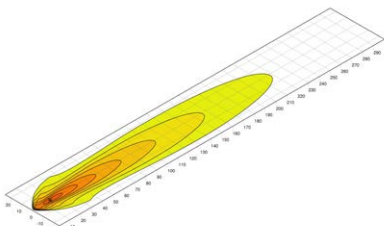
Long range illumination
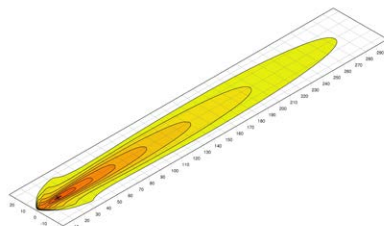
Pencil beam illumination

RokLUME 380N **ZERO**GLARE

OPEN REFLECTOR DESIGN

More airflow for high performance heat dissipation

PATENTED REFLECTOR DESIGN

More airflow for high performance heat dissipation

IMPACT RESISTANT LENS

Hard coated PC lens

ROBUST HOUSING

Die-cast alumiunium housing with corrosion resistant NanoSafe coating

HEAVY DUTY BRACKET

Withstands the highest vibration requirements

HELLA ZEROGLARE
Bringing Onroad Safety to Mining

The innovative **ZERO**GLARE optical system ensures all emitted light is only directed below the horizontal plane where it is needed and not into oncoming operators' field of vision.
Visit **hellazeroglare.com** for more information.

21°

Sharp cut off beam for reduced glare. Excellent for use in foggy or dusty conditions.

Scan code for video on **ZERO**GLARE:

Traditional Lighting   **HELLA ZERO**GLARE
Bringing Onroad Safety to Mining

VS

RokLUME 380N

RokLUME 380N work lamp is particularly suited for extreme operating conditions, for example in the mining sector, due to its outstanding light output and robust design.

With up to 7,800 lumens of light output, the work area is extremely well illuminated. The RokLUME 380N is available with five different light distributions, offering high flexibility for all requirements. In addition to variants for close-range and long-range illumination, it is also available as extra-wide and pencil beam illumination. A variant with the innovative **ZERO**GLARE illumination with a new reflector design and optical system is also available, which effectively prevents the glare of oncoming drivers through special light control.

Thanks to the robust die-cast aluminium housing with NanoSafe coating, the impact-resistant plastic cover lens, and the absolute dust and water tightness, the work lamp can withstand even extreme operating conditions.

Part No.	Lens Type	Colour
1GA 996 197-261	**ZERO**GLARE	☐ White
1GA 996 197-011	Close Range	☐ White
1GA 996 197-021	Long Range	☐ White
1GA 996 197-041	Pencil Beam	☐ White
1GA 996 197-031	Flood	☐ White
1GA 996 197-081*	Flood	■ Amber

Operating voltage range	Single-voltage (20-32V)
Rated voltage	24 V
Current consumption	Ø 3.2 A, max. 4.5 A**
Power Consumption	Ø 75 W, max. 84 W**
Light output (warm)	Up to 7,800 lm
Light source	LED
Colour temperature	5,000 K
Material	Housing: die-cast aluminium, NanoSafe coating Cover lens: hard-coated plastic Bracket: stainless steel
Weight	2,200 g
Temperature range	- 40 °C to + 85 °C
Protection class	IP 6K9K, IP 6K7
Approved	ECE-R10
Compliant	RCM, CISPR 25, Class 4
Protection	Polarity reversal protection, overheating protection
Salt spray resistance	1,200 h acc. to DIN EN ISO 9227
Mounting	Upright and pendant mounting
Connection	300 mm cable with DEUTSCH DT connector 2-pin, DEUTSCH DT counterpart 2-pin enclosed

* Warm measured at 13.2 V after 30 minutes of operation.

** Warm measured at 28 V after 30 minutes of operation.

ZEROGLARE version

Pencil Beam version

179

102

148

M 10

51
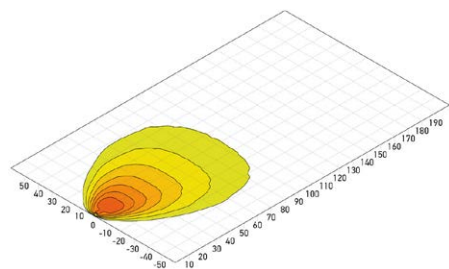
Close-range illumination
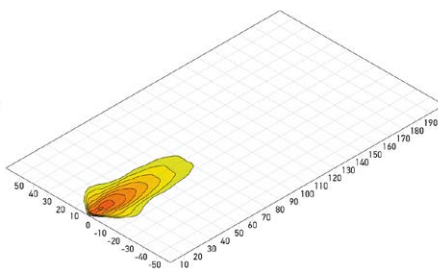
ZEROGLARE illumination
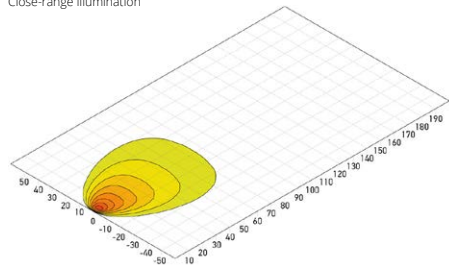
Extra-wide illumination
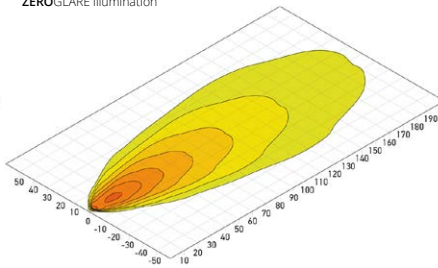
Long-range illumination
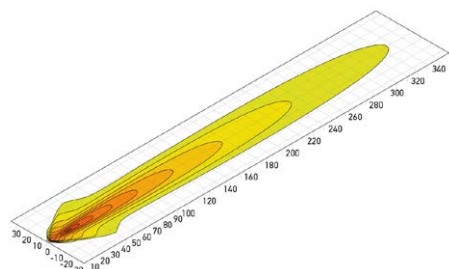
Pencil beam illumination

RokLUME 190TP

The RokLume 190TP is a robust work lamp designed specifically for mining. The innovative Thermo plastic housing reduces weight and offers complete corrosion resistance.
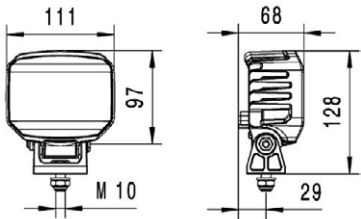
Part No.	Lens Type	Colour
1GA 996 488-501	Close Range	☐ White
1GA 996 488-511	Long Range	☐ White

Lens Material	Grilamid Nylon PA12
Housing	Thermally Conductive Plastic
Voltage	Multivolt 9-33V DC
Power Consumption	26W Max
Actual Light Output	1850 Lumens
IP Rating	IP 6K9K, IP 6K7
Operating Temperature	-40°C to 50°C
LED Colour Temperature	5000 K
Connection	Integrated with 2 Pin Deutsch plug
Type Approval	ECE-R10, CISPR 25 Class 5

Close Range version

1GA 996 488-501 – Close Range	1GA 996 488-511 – Long Range
2.5m high at 10°	2.5m high at 10°
1 LUX 60m	1 LUX 75m
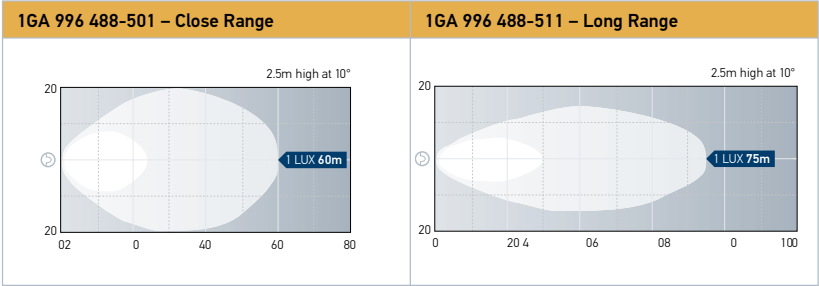
RokLUME 155TP LED

The RokLume 155TP LED is a robust work lamp designed specifically for mining. The innovative Thermo plastic housing reduces weight and offers complete corrosion resistance.
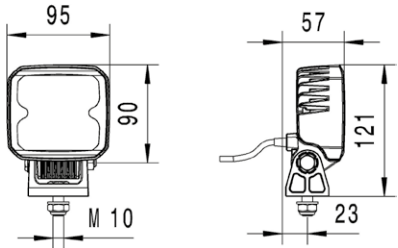
Part No.	Lens Type	Colour
1GA 996 284-051	Close Range	☐ White
1GA 996 284-061	Long Range	☐ White
1GA 996 284-071*	Close Range	▮ Amber

Contact Customer Service for availability custservice@hella.com or 1800 061 729

Lens Material	Polycarbonate
Housing	Thermally Conductive Plastic
Voltage	9-33V DC
Power Consumption	15W Max
Actual Light Output	1200 Lumens
IP Rating	IP 6K9K, IP 6K7
Operating Temperature	-40°C to 50°C
LED Colour Temperature	5000 K
Connection	Lead with 2 Pin Deutsch plug
Type Approval	ECE-R10, CISPR 25 Class 5

1GA 996 284-051 – Close Range	1GA 996 284-061 – Long Range
2.5m high at 12°	2.5m high at 12°
1 LUX 43m	1 LUX 90m

Ultra Beam LED Gen II

The popular Ultra Beam LED II series has now been expanded to include a Pencil Beam version. The light output is a powerful 4000 lumens with a colour temperature of 6500K. The light is distributed by a specially developed multi-faceted reflector, thus ensuring homogeneous illumination. The integrated electronics protect the device in the event of polarity inversion and guarantee constant brightness, even when operating with voltage fluctuations between 9 and 33 Volts DC.

All dimensions in mm.

DT Socket
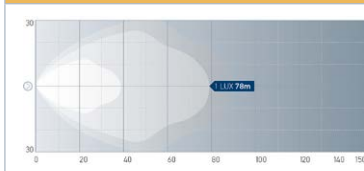
Part No.	Lens Type
1GA 995 606-021 (1566LEDPB)	Pencil Beam, 12V/24V DC
1GA 995 606-001 (1566LED)	Close Range
1GA 995 606-011 (1566LEDLR)	Long Range

Lens Material	Polycarbonate
Housing	Aluminium
Voltage	Multivolt 9-33V DC
Power Consumption	50W
Max. Light Output	4,400 lm
IP Rating	IP6K9K and IP6K8, reverse polarity protection, surge protection, overheating protection
Operating Temperature	-40°C to +50°C
LED Colour Temperature	6500K
Connection	Integrated DT Socket. (Optional 2.0 metre DT Pigtail Loom to be ordered separately)
Type Approval	ECE-R10

1GA 995 606-011 (1566LEDLR) – Long Range
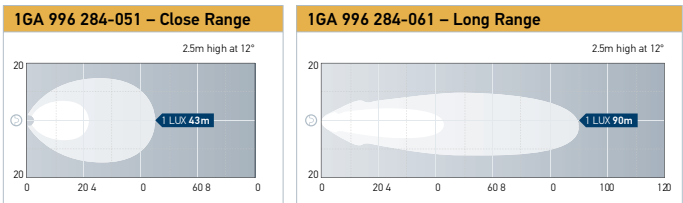1 LUX 78m

1GA 995 606-021 (1566LEDPB) – Pencil Beam
1 LUX 450m
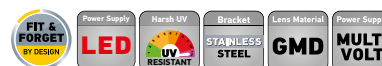
1GA 995 606-001 (1566LED) – Close Range
1 LUX 58m
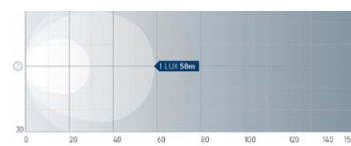
Ultra Beam Search Cabin Controlled Search Light

The Ultra Beam search light is a through-roof mountable lamp, giving beam direction control from inside the cabin.

- Extremely bright 4400 lumen
- Low 50W power consumption
- Far reaching 310m spot illumination
- 360° rotation and 30° vertical adjustment
- IP6K9K (exterior lamp) IPx4 (handle) rated protection
- Easy upgrade from previous model
- 5 year warranty

Part No.
1GA 995 606-091

Installation	Designed for installations through cabin roofs
Color Temperature	6500K
Operating Voltage	Multivolt™ 9-32V DC (12-24V DC Nominal)
Power Consumption	50W (2.1A@12V/4.2A@24V)
Light Output	4400 Lumen
Protection	Lamp: IP6K9K (Protection against dust and high-pressure/steam jet cleaning)
	Handle: IPx4 (Protection from splashing water from any direction)
Cable	350mm of cable, grommet sealed, o-ring included
Lens Material	High impact PC lens
Housing	Premium aluminium
Compliance	CE, EMC, RCM

* Special Order: Contact your local sales representative or HELLA Customer service for more information

Ultra Beam S Series

- Improved light distribution for excellent light output
- Best energy efficiency
- Innovative electronics with power on soft start
- Robust design, also suitable for harsh working environments

1GA 995 706-011
Long-range illumination

1GA 995 706-001
Close-range illumination

Part No.	Lens Type
1GA 995 706-001	Close Range
1GA 995 706-011	Long range

Operating voltage	Multi-voltage (9 – 32 V)
Rated voltage	12 V and 24 V
Current consumption	12 V: Ø 2.95 A* 24 V: Ø 1.39 A**
Power consumption	12 V: Ø 39 W* 24 V: Ø 37.5 W**
Light output	4,400 lm
Light source	LED
Colour temperature	6,500K
Material	Housing: die-cast aluminium Cover lens: plastic Bracket: plastic
Weight	895 g
Temperature range	-40 °C to +85 °C (overheating protection)
Protection class	IP 6K9K, IP 6K8
Type approval	ECE-R10
EMC protection	12 V: CISPR 25 Class 5 24 V: CISPR 25 Class 5
Salt spray resistance	720 h as per DIN EN ISO 9227
Mounting	Upright and pendant
Connection	DEUTSCH DT 2-pin connector

115   83
105   99   131
M 10   24

lux >= 0 ☐ 1 ☐ 2 ☐ 4 ☐ 8 ■ 16 ■ 32 ■ 64 ■ 128 ■ 192 ■ 256 ■

Close range

lux >= 0 ☐ 1 ☐ 2 ☐ 4 ☐ 8 ■ 16 ■ 32 ■ 64 ■ 128 ■ 192 ■ 256 ■
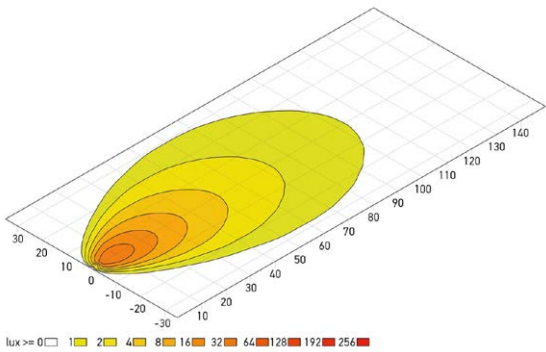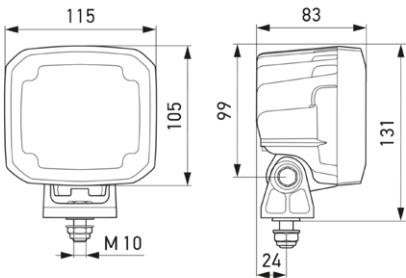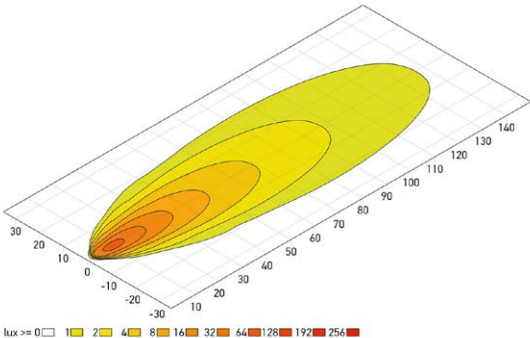
Long range

Power Beam & Module 70 S Series

The Module 70 S series and Powerbeam S series are the LED successors to the well-known, high-quality and yet affordable Module 70 and Powerbeam series of halogen work lamps.

The S series work lamps provide homogeneous illumination with a colour temperature of 6,500 kelvin, providing a similar light to daylight.

The housing and the cover lens are made of special plastics, which keep them very lightweight and provide a high level of corrosion resistance.

Powerbeam S

Part No.	Lens Type	Lumens
1GA 996 588-001	Close Range	1,000
1GA 996 588-201	Close Range	1,850

Module 70

Part No.	Lens Type	Lumens
1G0 996 776-001	Close Range	1,000
1G0 996 776-201	Close Range	1,850

	1,000 Lumens	1,850 Lumens
Lens Material	Plastic	
Housing	Heat-conductive plastic	
Voltage	Multivolt™ 9–33 V DC	
Power Consumption	12 W	19 W
Light Output	1,000 lm	1,850 lm
IP Rating	IP 6K7, IP 6K9K	
Operating Temperature	-40 °C to + 85 °C	
LED Colour Temperature	6,500 K	
Connection	DEUTSCH DT connector	
Type Approval	ECE-R10	

ECE | RCM | EMC

1GA 996 588-001

1GA 996 588-201

1G0 996 776-001

1G0 996 776-201

1GA 996 588-001 – 1,000 LUMENS CLOSE RANGE

1 LUX 45m
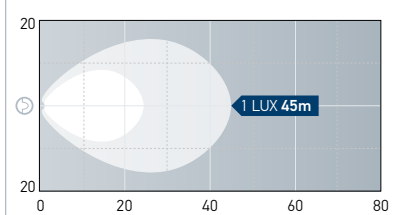
1GA 996 588-201 – 1,850 LUMENS CLOSE RANGE

1 LUX 57m

112 | 87 | 95 | 127 | M10 | 28 | DT Socket | + −
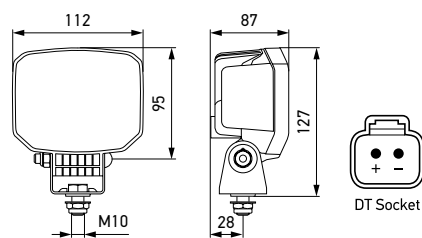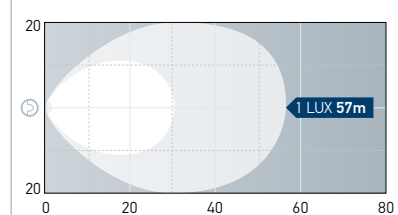
1G0 996 776-001 – 1,000 LUMENS CLOSE RANGE

1 LUX 45m
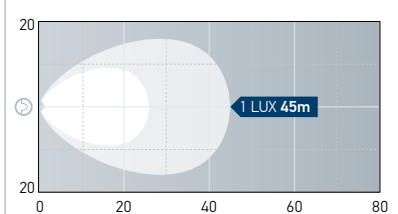
1G0 996 776-201 – 1,850 LUMENS CLOSE RANGE

1 LUX 57m

83 | 64 | 91 | 114 | M10 | 40 | DT Socket | + −
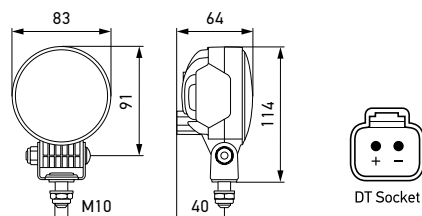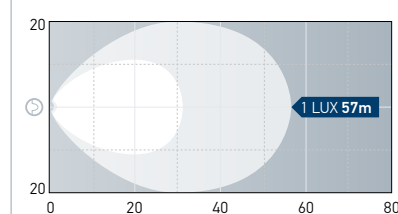
S SERIES HIGHLIGHTS

CISPR25 CLASS 5
No Radio Interference and best EMC Performance

THERMO PLASTIC HOUSING
Light Weight, Corrosion and Chemical Resistant

OVERHEAT PROTECTION
Protects the circuit board and housing of lamp from overheating

INTEGRATED THERMAL MANAGEMENT
Less Degradation of LED = Long lasting performance

COMPETITIVE PRICE
Best performance with affordable price and value for money

IMPACT RESISTANT PC LENS
Precision alignment for maximum performance and prevents accidental damage

DANGEROUS GOODS APPROVED
Can be used on fuel tankers

MADE IN AUSTRIA
Designed and Manufactured in Europe

- The high quality European designed and manufactured S series work lamps provide an excellent price – performance ratio.

- Thanks to the weight reduction, S series is suitable for high vibration area and specialist mounting applications. E.g. Mirror arms, fibreglass moulding.

- S series Work Lamps are Transport of hazardous goods compatible being IP6K7, IP6K9K with integrated DT connector, as opposed to budget work lights with single insulation and "no connector" which do not comply.

- Homogeneously dispersed light output with a colour temperature of 6500K being similar to daylight resulting in reduced fatigue for equipment operators.

- **CISPR 25 class 5** - guarantees no radiated emission to interfere with radio coms and other RF sensitive devices, and can be mounted directly next to antenna.

- Thermo plastic housing and can be used in salty and corrosive environments. E.g Concrete trucks

Q90 Compact LED Reversing Lamp
ADR Compliant

Combining a strong light output with practical design, the Q90 compact LED is the ideal LED reversing Spot Lamp. Four high-power LEDs produce a light output of 1200 lumens, which a reflector directs homogeneously across a wide area behind the vehicle.

This reversing lamp is ideally suitable for mounting to the rear of the vehicle so that it can be manoeuvred safely even at night.

Part No.	
2ZR 996 284-511	

Voltage	Multivolt™ 9-33V DC 15 W
Power Consumption	Aluminium
Max. Light Output	1200 lumens
Colour Temperature	6500 K
Temperature Range	-40°C to 60°C
Protection	Overheating and reverse polarity protection
Protection Class	IP6K7, IP6K9K
Lens	Polycarbonate
Housing	Thermally Conductive Plastic
Cable Length	500 mm cable and DEUTSCH DT connector
Mounting	Pendant and upright mounting
Compliance	(E1) ECE-R10, (E1) ECE-R23, 00 4576, ADR 1/00

1563LED-RE

2.5m high at 12°

1 LUX 43m

Approved for on road

ADR approved reverse lights

Power Beam 1000 Reversing Lamp,
ADR Compliant

Combining a strong light output with practical design, the Power Beam 1000 is the ideal LED Reversing Spot Lamp. This lamp was designed with compact dimensions and a flexible surrounding bracket so that it could be used anywhere.

Part No.	
1551LED-RE	2ZR 996 188-121

Operating voltage/Rated voltage	Multivolt™ 9-33V
Recommended angle of inclination	25°
Light source type	6 high-power LEDs
Power consumption	14 W
Light output	850 lm
Colour temperature	6500 K
Protection class	IP 6K9K and IP 6K8
Compliance	ECE-R10, ECE-R23, ADR 1/00
Housing	Aluminium, CoroSafe, powder-coated grey
Lens	Nylon
Cable Length	Integrated DT Socket (Optional 2 metre DT Pigtail Loom to be ordered separately)
Spare Part	9.1551LED.06 DT Pigtail Loom, 2 metres

1551LED-RE

2.0m high at 10°

1 LUX 25m

HypaLUME 110 / 230V AC

The 110/230V AC HypaLUME has been designed for applications where high output lighting in extreme environments is required.

Comprehensive sealing and anti-corrosion measures have been taken to ensure this lamp withstands the toughest conditions. The premium aluminium housing is corrosion resistant with a non-stick and easy to clean surface coating. The heavy duty Grilamid® lens provides unbeatable protection against impacts and vibration, while providing long term UV stability and resistance to commonly used chemicals for the life of the product. The LEDs have a colour temperature of 5700K to provide a near daylight work environment that is optimal for fatigue avoidance and high alertness.
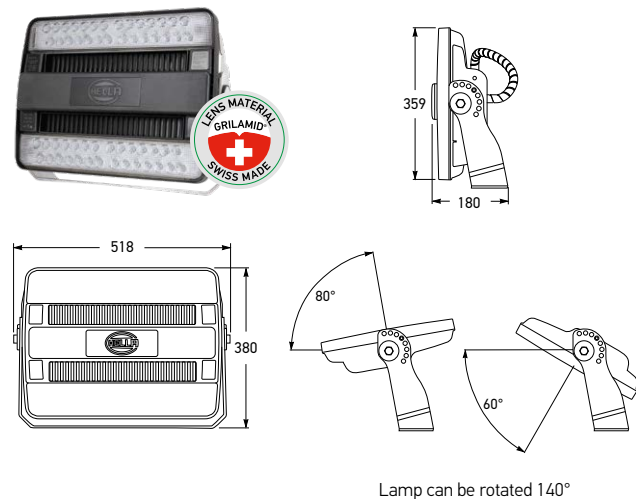
Part No.	Lens Type	Colour
1GJ 958 334-011	Close Range	☐ White
1GJ 958 334-021	Long Range	☐ White
1GJ 958 334-031	Extra Wide	☐ White

Lens Material	Grilamid Nylon PA12
Housing	Aluminium with non-stick coating
Voltage	100 to 240V AC
Power Consumption	300W Max
Actual Light Output	28000 Lumens
IP Rating	IP 6K9K, IP 66, IP 67
Operating Temperature	-40°C to 50°C
LED Colour Temperature	5700 K
Connection	Wieland RST Mini - 16A
Type Approval	AS / NZS 60598.2.5

Lamp can be rotated 140°
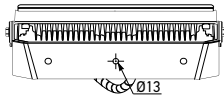
HypaLUME 24 / 48V DC

HypaLUME LED flood light range is available in both AC and DC variants. Designed for applications where high output lighting in extreme environments is required.
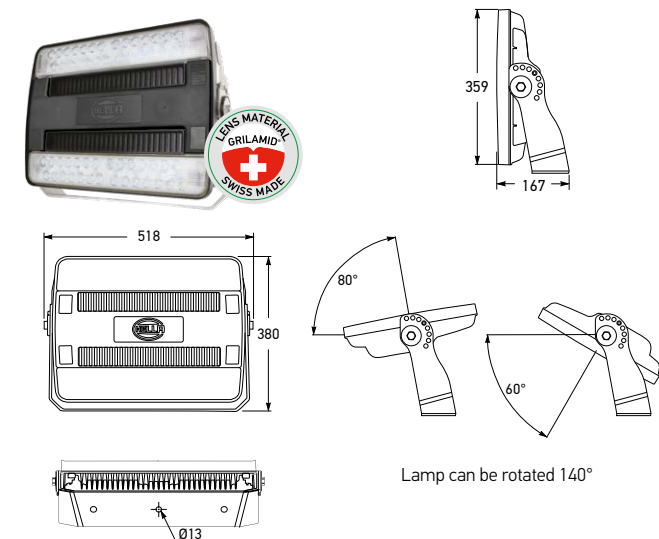
Part No.	Global Part No.	Lens Type	Colour
HMF2000CMOB	1GJ 011 872-501	Close Range	☐ White
HMF2000LMOB	1GJ 011 872-511	Long Range	☐ White
HMF2000WMOB	1GJ 011 872-521	Extra Wide	☐ White
1GJ 011 872-601	1GJ 011 872-601	Close Range	☐ Amber

Lens Material	Grilamid Nylon PA12
Housing	Aluminium with non-stick coating
Voltage	22 to 52V DC
Power Consumption	260W Max
Actual Light Output	25000 Lumens
IP Rating	IP 6K9K
Operating Temperature	-40°C to 50°C
LED Colour Temperature	5700 K
Connection	4Pin Deutsch plug
Type Approval	ECE-R10,

Lamp can be rotated 140°

HypaLUME 24/48V DC - Close Range	HypaLUME 24/48V DC - Long Range	HypaLUME 24/48V DC - Extra Wide
5m high at 15°	5m high at 5°	5m high at 5°
1 LUX 191m	1 LUX 403m	1 LUX 113m
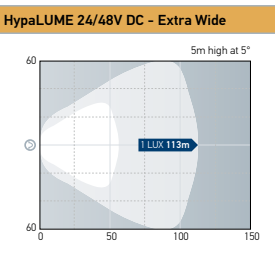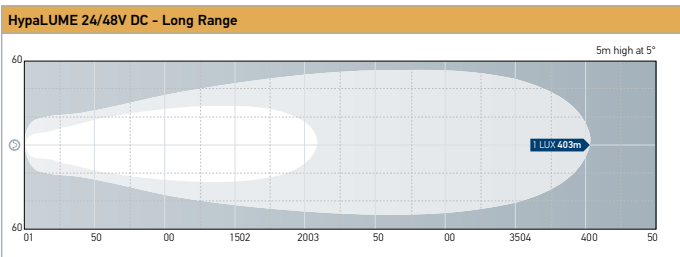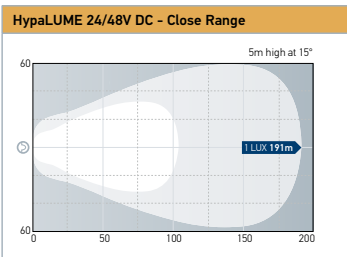
DuraLED® Combi-S 50 White LED Lamps

DuraLED® Combi-S 50 White LED lamps are an extremely powerful source of white light and are available in two light patterns, Spread and Wide Spread, to suit a variety of uses including engine rooms, storage lockers or other heavy duty applications where reliability cannot be compromised. Each lamp is completely sealed, UV, impact and shock resistant ensuring an ultra-long service life.

Ultra slim height of only 25mm.
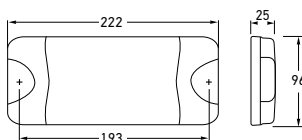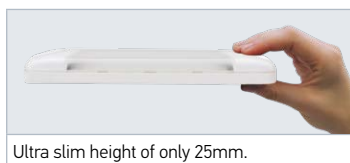
Part No.	Lens Type	Colour
2JA 980 629-501	Wide Spread	☐ White
2JA 980 629-001	Spread	☐ White

Voltage	Multivolt for optimum brightness at input voltages from 9 to 33 volts
Power Consumption	<12W
IP Rating	Reverse polarity and transient spike circuit protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high pressure/steam jet cleaning)
Type Approval	ECE-R10

ILLUMINATION CHARTS

2JA 980 629-001
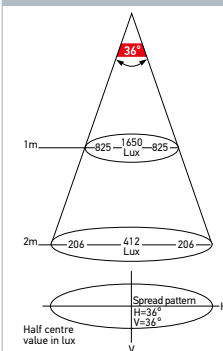
2JA 980 629-501
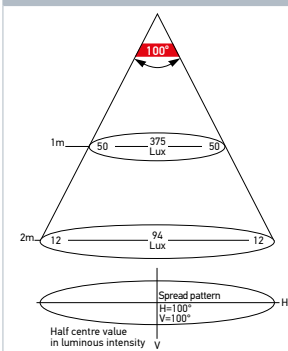
BL 470 Diffused Flood Work Lamp

BL470 Diffused Flood Work Lamp is ideal for illuminating a large area with an ultra-smooth spread. The thermally conductive polymer housing and nylon lens ensure corrosion resistance.
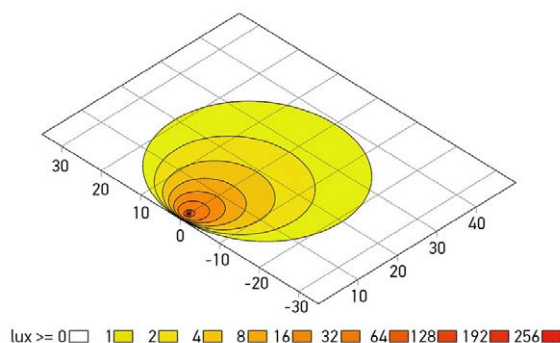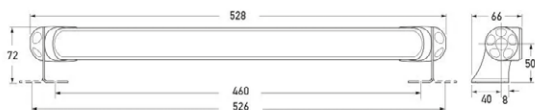
Part No.	Lens Type	Colour
2LT 958 130-501	Diffused Flood	☐ White

Lens	Grilamid Nylon PA12
Current Consumption	Multivolt 12 / 24V DC
Power Consumption	36W Max
IP Rating	IP 6K7, IP 6K9K
Operating Temperature	-40°C to 60°C
EMC Interference Immunity	ECE-R10, CISPR 25 Class 5

lux >= 0 ☐ 1 ☐ 2 ☐ 4 ☐ 8 ☐ 16 ☐ 32 ☐ 64 ☐ 128 ☐ 192 ☐ 256 ☐

FMS

The FMS is the ideal work lamp for flat mounting on the vehicle wall and integrates itself perfectly into the appearance of the vehicle. The special design of this work lamp ensures a great ground illumination, even with a vertical wall mounting.

Base	Prime	Illumination	Housing Colour
1GB 996 098-001	1GB 996 098-011	Close Range	Black

Housing	Housing: die-cast aluminium, CoroSafe coating
Voltage	Multi-voltage (9 – 32 V)
Power Consumption	Base: 14 W Prime: 28 W
Actual Light Output	Base: 1,200 lm Prime: 2,500 lm
IP Rating	IP 6K8, IP 6K9K
Operating Temperature	– 40 °C to +50 °C
LED Colour Temperature	6,500 K
Connection	500 mm cable
Type Approval	ECE-R10, RCM, ADR / GGVSEB

1GB 996 098-001

2.5m high

1 LUX **22m**

1GB 996 098-011

2.5m high

1 LUX **30m**

1GJ 995 181-111 5 m Red

1GJ 995 181-211 10 m Red

1GJ 995 181-121 5 m Green

1GJ 995 181-221 10 m Geen

FlexaTec

The new flexible LED light strip from HELLA for industrial applications ensures homogenous illumination of the working environment. Installation is easy, thanks to the specially designed clips. FlexaTec can be combined to a lenght of up to 80 or 100 metres depending on the country.

10 m version

100 m version

Part No	Length	Rated Voltage	Colour
1GJ 995 181-101	5 m		White
1GJ 995 181-201	10 m		White
1GJ 995 181-601	100 m		White
1GJ 995 181-111	5 m	23V AC	Red
1GJ 995 181-211	10 m		Red
1GJ 995 181-121	5 m		Green
1GJ 995 181-221	10 m		Green

Material	PVC (flammability class V0)
Mounting	Quick fastening via specially designed clips (included in the delivery)
Power Consumption	15 W / m
Light Output	1,500 lm / m
IP Rating	IP 6K7
Operating Temperature	– 20 °C to +40 °C
LED Colour Temperature	5,000 K
Connection	Cable with open ends
Type Approval	(IEC 60598-2-1:1979/AMD1:1987; IEC 60598-1:2014/AMD1:2017)
Supplementary approvals	CRS, SAA

Spare parts*

9XD 990 181-011	Spare parts set 230 V AC version

* Spare parts sets include fastening clips, end cap and connecting cable.

DuraRAY 4.0

DuraRAY 4.0 is a powerful heavy duty beacon made for mining with an automatically controlled day time / night time sensor and 16 rotating and flashing patterns.

Fixed Mount	Magnetic Mount	Colour
2XD 012 985-001	2XD 012 985-101*	◼ Amber

Contact Customer Service for availability custservice@hella.com or 1800 061 729

Dome Lens	Polycarbonate
Housing	Powder-coated die-cast aluminium
Voltage	10-30V
Current Consumption	@ 2.6A (12V), @ 1.3A (24V)
Power Consumption	32W
IP Rating	IP 6K7, IP 6K9K
Operating Temperature	-40°C to 60°C
EMC Interference Immunity	ECE-R10, CISPR 25 Class 5,
Type Approval	SAE J845 class 1, ECE R65
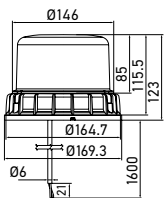
Fixed mount

DuraRAY Flash Pattern
16 different warning signals
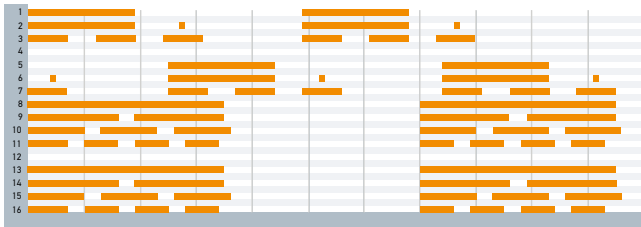
4 and 12 = Rotating Warning Signals
Orange: On / White: Off

UltraRAY 2.0 / 2.1

UltraRAY 2.0 / 2.1 is a powerful heavy duty beacon made for mining, available either as a rotating 2.0 or flashing 2.1 beacon with interference free EMC properties.

Fixed mount

Rotating 2.0		
Fixed Mount	Magnetic Mount	Colour
2RL 012 983-001	2RL 012 983-101	◼ Amber
2RL 012 983-011	2RL 012 983-111*	◼ Blue
2RL 012 983-031	2RL 012 983-131*	◼ Green
2RL 012 983-041	2RL 012 983-141*	White

Flashing 2.1		
Fixed Mount	Magnetic Mount	Colour
2XD 012 984-001	2XD 012 984-101*	◼ Amber
2XD 012 984-011*	2XD 012 984-111*	◼ Blue
2XD 012 984-031*	2XD 012 984-131*	◼ Green

Contact Customer Service for availability custservice@hella.com or 1800 061 729

Dome Lens	Polycarbonate
Housing	Powder-coated die-cast aluminium
Voltage	10-30V
Current Consumption	Rotating: @ 1.6A (12V) & @ 0.8A (24V) Flashing: @ 1.8A (12V) & @ 0.9A (24V)
Power Consumption	Rotating: 20W, Flashing: 22W
IP Rating	IP 6K7, IP 6K9K
Operating Temperature	-40°C to 60°C
EMC Interference Immunity	ECE-R10, CISPR 25 Class 5,
Type Approval	SAE J845 class 1, ECE R65

K-LED®

K-LED® is a powerful heavy duty low profile beacon made for mining with an automatically controlled day time / night time sensor and 16 rotating and flashing patterns.
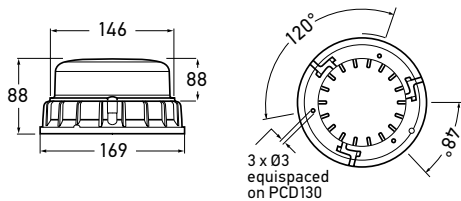
Part No.	Mount	Colour
2XD 011 557-001	Fixed Mount	🟨 Amber
2XD 011 557-021	Fixed Mount	🟥 Red
2XD 011 557-011	Fixed Mount	🟦 Blue
2XD 011 557-031	Fixed Mount	🟩 Green

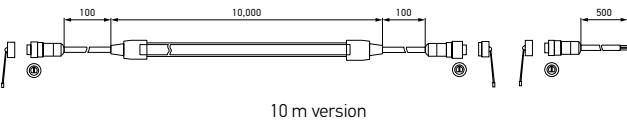|	
Dome Lens	Polycarbonate
Housing	Powder-coated die-cast aluminium
Voltage	Multivolt™ 9-33V DC
Power Consumption	33W Max
IP Rating	IP6K7, IP6K9K
Operating Temperature	-40°C to 60°C
EMC Interference Immunity	CISPR25 class 5, ECE R10
Type Approval	SAE J845 class 1 ECE R65 (Pattern 4 and 2)

Fixed mount
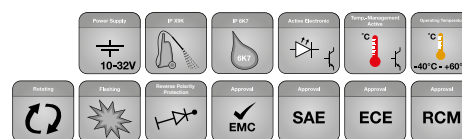
RotaLED Compact & Compact Class 1

Using the latest LED technology, the RotaLED Compact provides a highly visible rotating warning light pattern without the need for moving parts, ensuring greater reliability and a long, maintenance-free operating lifespan, combined with low power consumption.

Built to last it features a rugged, ABS case and impact-resistant Polycarbonate dome. Fully sealed and highly-resistant to dust and water ingress, it is rated to IP 67 and IP X9K and will even withstand high-pressure cleaning.

Part No.	Mount	Colour
2RL 014 979-001	Fixed Mount	🟨 Amber
2RL 014 979-021	Magnetic Mount	🟨 Amber
2RL 014 979-011	Pipe Mount	🟨 Amber
2RL 014 979-041 (Class 1)	Fixed Mount	🟨 Amber
2RL 014 979-051 (Class 1)	Pipe Mount	🟨 Amber
2RL 014 979-061 (Class 1)	Magnet Mount	🟨 Amber

Lens Material	Polycarbonate
Housing	Black, polycarbonate and ABS
Voltage	Multivolt 10 – 30V DC
Power Consumption	7W Max
IP Rating	IP 67, IP X9K
Operating Temperature	-40°C to 60°C
EMC Interference Immunity	CISPR25 Class 5*
Type Approval	ECE-R65 TA 1 004837 SAE J845, Class 2 2RL 014 979-041 = SAE J845, Class 1

*150 - 300 kHz: Class 3

2RL 014 979-001

2RL 014 979-011

2RL 014 979-021

2RL 014 979-041 (Class 1)
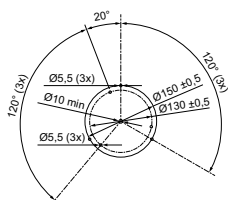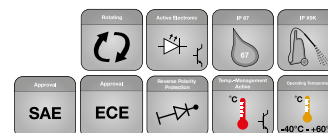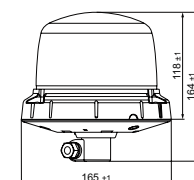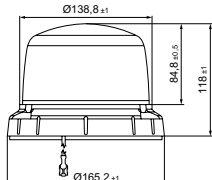
RotaLED Compact F

RotaLED Compact FL
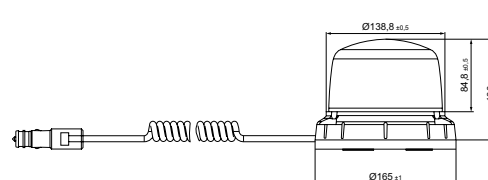
RotaLED Compact M

RotaLED Series

RotaLED Beacon, with the latest LED technology provides an optimum signal image with low power consumption. The combination of thermal management and optics in one module makes a remarkably compact design possible. Impact and dirt-resistant Polycarbonate lens.
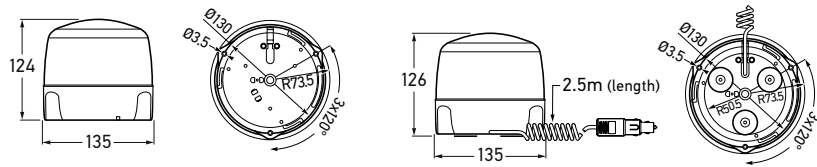
Part No.		Mount	Colour
2RL 010 979-001		Fixed Mount	■ Amber
2RL 010 979-021		Magnetic Mount	■ Amber
2RL 010 979-011		Pipe Mount	■ Amber

Voltage	Multivolt 10 – 30 V DC
Power Consumption	7 W
Rotation	120-133 rpm simulated (2.0-2.2Hz)
IP Rating	IP5KX, IPX4K and IPX9K
Operating Temperature	- 40 °C to + 60 °C
EMC Interference Immunity	CISPR25 Power Controlled Class 5
Type Approval	R65 TA1 (E1) 00 3109 e1 03 5517 ECE-R10,

124
135

Ø130
Ø3.5
R73.5
3×120°

126
2.5m (length)

Ø130
Ø3.5
R73.5
R505
3×120°

135

K-LED® Rebelution

The K-LED® Rebelution is a revolutionary beacon featuring the latest LED technology. It provides maximum performance in a minimalist and highly innovative, dome-free design.Instead, the light is visible through a circumferential, ring-shaped light band. Despite light exit area being smaller than a conventional domed beacon the K-LED® Rebelution emits a highly visible warning signal.
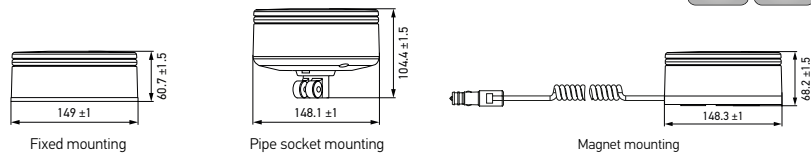
Part No.	Beacon	Mount	Colour
2RL 455 256-001	Rotating	Fixed Mount	■ Amber
2RL 455 256-011	Rotating	Pipe Socket Mount	■ Amber
2RL 455 256-021	Rotating	Magnet Mount	■ Amber

Dome Lens	Polycarbonate
Housing	Aluminium
Voltage	12 / 24V
Current Consumption	Rotating: 1.08 A @ 12 V, 0.54 A @ 24 V
Power Consumption	Rotating: max. 13 W
IP Rating	IP 6K7, IP 6K9K
Operating Temperature	-40°C to 60°C
EMC Interference Immunity	Rotating: CISPR 25 Class 3
Type Approval	ECE-R10

Fixed mounting | Pipe socket mounting | Magnet mounting

149 ±1
60.7 ±1.5

148.1 ±1
104.4 ±1.5

148.3 ±1
68.2 ±1.5

Fixed mounting

Pipe socket mounting

Magnet mounting
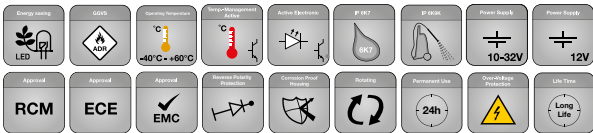
K-LED® Nano 50/80/120

Introducing our new K-LED Nano 50, 80 and 120 series – the expanded version of the popular K-LED Nano range. These upgraded models come with exciting new features, focusing primarily on size, color and the option to personalize with your logo.

The K-LED Nano 50, 80 and 120 beacons are designed to enhance safety and visibility, offering rotating and flashing modes to suit different needs. With various sizes and lens colors (amber, blue, red and green) available, as well as easy mounting options that meet international standards, they provide unmatched flexibility.

K-LED Nano 50

Pipe socket

Fixed

K-LED Nano 80

Pipe socket

Fixed

K-LED Nano 120

Part No.		Mount	Colour
K-LED Nano 50			
2RL 099 147-001	Rotating	Fixed Mount	◼ Amber
2RL 099 147-011	Rotating	Pipe Mount	◼ Amber
2XD 066 147-001	Flashing	Fixed Mount	◼ Amber
2XD 066 147-011	Flashing	Pipe Mount	◼ Amber
K-LED Nano 80			
2RL 099 979-001	Rotating	Fixed Mount	◼ Amber
2RL 099 979-011	Rotating	Pipe Mount	◼ Amber
K-LED Nano 120			
2RL 099 484-001	Rotating	Fixed Mount	◼ Amber

Operating voltage range	Multi-voltage (9 – 32 V)
Rated voltage	12 V and 24 V
Current consumption	Flashing: 1.6 A (12 V) 0.78 A (24 V) Rotating: 0.33 A (12 V) 0.1 A (24 V)
Power Consumption	Flashing: < 19 W Rotating: < 4 W
Light function	Rotating
Light source	LED
Material	Housing: polycarbonate + ABS black
Temperature range	-40 °C to +60 °C
Protection class	IP 6K7, IP 6K9
Approved	ECE R65, ECE R10, ADR / GGVSEB
Compliant	SAE J845 Class 1, RCM, CISPR 25 Class 5
Protection	Overvoltage protection
Mounting	Fixed mounting or pipe socket mounting

K-LED Nano 50

Ø 96.3
72.25 ±1
24.25
Ø 146 ± 0.5
Fixed mounting

Ø 96.3
66.55
123.8 ±1
Ø 108.8 ± 0.5
Pipe socket mounting

K-LED Nano 80

Ø 112.4
29.5 ± 0.5
111 ±1
Ø 143 ± 0.5
Fixed mounting

Ø 112.4
78.78
157.4 ±1
Ø 143
Pipe socket mounting

K-LED Nano 120

Ø 107.05
44.89
165.45 ± 1.2
Ø 146.71 ± 0.5
Fixed mounting
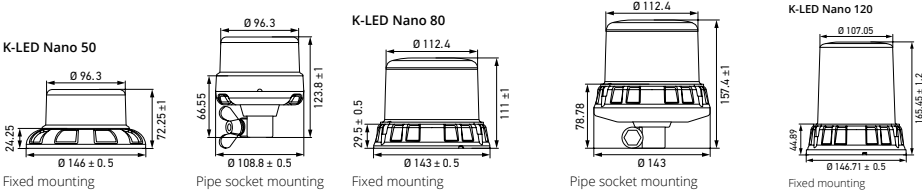
OptiRAY® - E

OptiRAY® E is a compact and extremely robust LED flashing beacon. Impact resistant clear polycarbonate lens and a fibreglass nylon base.
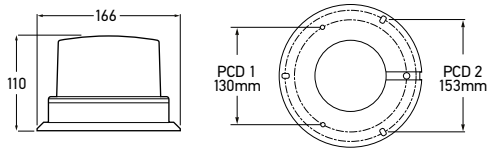
Part No.	Global Part No.	Mount	Colour
HM300ADIR	2RL 910 073-001	Fixed Mount	■ Amber
HM300BDIR	2RL 910 075-011	Fixed Mount	■ Blue
HM300GDIR	2RL 910 075-031	Fixed Mount	■ Green
HM300RDIR	2RL 910 075-051	Fixed Mount	■ Red
HM300WDIR	2RL 910 075-071	Fixed Mount	□ White

Dome Lens	Polycarbonate
Housing	Fiberglass Nylon
Voltage	Multivolt 12-30V DC
Power Consumption	12W Max
IP Rating	IP 6K5
Operating Temperature	-20°C to 50°C
EMC Interference Immunity	ECE-R10,
Type Approval	SAE J845 Class 1 Red 2 Amber

OptiRAY® - R

OptiRAY® R is a compact and extremely robust LED beacon with 16 rotating and flash patterns. Impact resistant clear polycarbonate lens and a fibreglass nylon base.
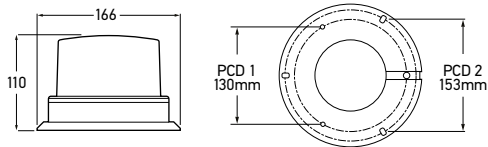
Part No.	Global Part No.	Mount	Colour
HM360ADIR	2RL 910 078-021	Fixed Mount	■ Amber
HM360BDIR	2RL 910 078-061	Fixed Mount	■ Blue
HM360GDIR	2RL 910 078-081	Fixed Mount	■ Green
HM360RDIR	2RL 910 078-111	Fixed Mount	■ Red

Dome Lens	Polycarbonate
Housing	Fiberglass Nylon
Voltage	Multivolt 12-30V DC
Power Consumption	20W Max
IP Rating	IP 6K5
Operating Temperature	-20°C to 50°C
EMC Interference Immunity	ECE-R10,
Type Approval	SAE J845 Class 1 Red 2 Amber

UltraRAY®

UltraRAY® is an extremely robust LED beacon with 4 flash patterns, an impact resistant clear polycarbonate lens and a case alloy base.
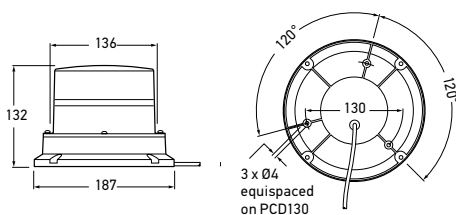
Part No.	Global Part No.	Mount	Colour
HM400ADIR	2RL 910 081-001	Fixed Mount	■ Amber
HM400BDIR	2RL 910 081-011	Fixed Mount	■ Blue
HM400GDIR	2RL 910 081-021	Fixed Mount	■ Green
HM400RDIR	2RL 910 081-031	Fixed Mount	■ Red
HM400WDIR	2RL 910 081-041	Fixed Mount	□ White

Dome Lens	Polycarbonate
Housing	Powder Coated Cast Alloy
Voltage	Multivolt 12–30V DC
Power Consumption	20W Max
IP Rating	IP 6K5
Operating Temperature	–20°C to 50°C
EMC Interference Immunity	ECE-R10,
Type Approval	SAE J845 Class 1 Red 2 Amber

UltraRAY® – R

UltraRAY® R is an extremely robust LED beacon with rotating or quad flash patterns, an impact resistant clear polycarbonate lens and a case alloy base.
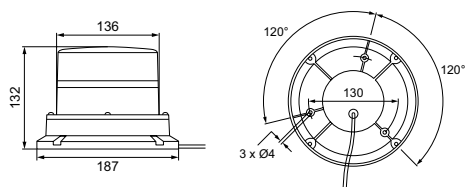
Part No.	Global Part No.	Mount	Colour
HM450ADIR	2RL 910 087-001	Fixed Mount	■ Amber
HM450BDIR	2RL 910 087-041	Fixed Mount	■ Blue
HM450GDIR	2RL 910 087-061	Fixed Mount	■ Green
HM450RDIR	2RL 910 087-081	Fixed Mount	■ Red

Dome Lens	Polycarbonate
Housing	Powder Coated Cast Alloy
Voltage	Multivolt 12–30V DC
Power Consumption	20W Max
IP Rating	IP 6K5
Operating Temperature	–20°C to 50°C
EMC Interference Immunity	ECE-R10,
Type Approval	SAE J845 Class 1 Red 2 Amber

UltraRAY® – R Twin

UltraRAY® R Twin is a High output extremely robust LED beacon with rotating or flash pattern, an impact resistant clear polycarbonate lens and a case alloy base.
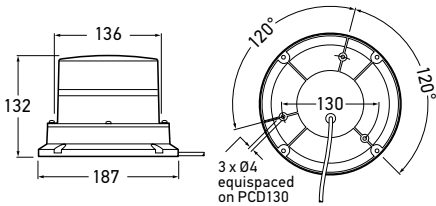
Part No.	Global Part No.	Mount	Colour
HM500ADIR	2RL 910 097-001	Fixed Mount	■ Amber
HM500BDIR	2RL 182 653-102	Fixed Mount	■ Blue
HM500GDIR	2RL 182 653-302	Fixed Mount	■ Green
HM500RDIR	2RL 182 653-502	Fixed Mount	■ Red

Dome Lens	Polycarbonate
Housing	Powder Coated Cast Alloy
Voltage	Multivolt 12-30V DC
Power Consumption	50W Max
IP Rating	IP 6K5
Operating Temperature	-20°C to 50°C
EMC Interference Immunity	ECE-R10,
Type Approval	SAE J845 Class 1 Red 2 Amber

Micro / Mini Lightbar

The Micro and Mini Lightbars combine a flashing and rotating signal in one product and generate an intense 360°-degree warning signal. Both warning lights are optimally protected against strong vibrations and therefore suitable for various applications.

Amber light output, clear lens

Amber light output, amber lens
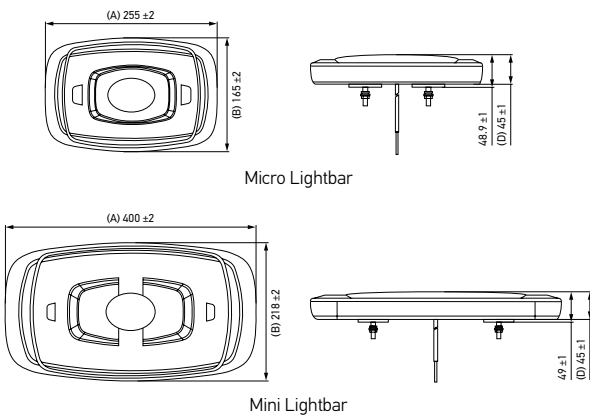
Micro Lightbar

Mini Lightbar

Micro Lightbar			
Part No.		Mount	Colour
2RL 014 566 101		Fixed Mount	■ Amber (Clear lens)
2RL 014 566-301		Fixed Mount	■ Amber (Amber lens)
2RL 014 566-111		Bracket Mount	■ Amber (Clear lens)
2RL 014 566-311		Bracket Mount	■ Amber (Amber lens)
Mini Lightbar			
Part No.		Mount	Colour
2RL 014 565-101		Fixed Mount	■ Amber (Clear lens)
2RL 014 565-301		Fixed Mount	■ Amber (Amber lens)
2RL 014 565-111		Bracket Mount	■ Amber (Clear lens)
2RL 014 565-311		Bracket Mount	■ Amber (Amber lens)

	Micro Lightbar	Mini Lightbar
Dome and Housing	Polycarbonate	
Voltage	Multivolt 10-30V DC	
Power Consumption	Max. 66W	Max. 70W
IP Rating	IP 6X, IP X4K, IP X9K	
Operating Temperature	- 40°C to + 65°C	
EMC Protection	ECE-R10, CISPR 25 Class 3,	
Type Approval	SAE J845 Class 1	

LED 360º Multi-flash Signal Lamp

Multi-purpose LED 360º Warning Lamp with clear nylon (PA12) lens, available in four signal colours and white. The HELLA multi-flash range of warning lamps have 10 programmable flash modes and can be synchronised to flash alternately or in unison. Optic appears clear until illuminated.

98091120

98091140

98091160   98091170

83   90

Part No.	Global Part No.	Mount	Colour
98091100	2XD 980 911-002	Surface Mount	☐ White
98091120	2XD 980 911-202	Surface Mount	🟩 Green
98091140	2XD 980 911-402	Surface Mount	🟥 Red
98091160	2XD 980 911-602	Surface Mount	🟨 Amber
98091170	2XD 980 911-702	Surface Mount	🟦 Blue

Mounting	Upright mointing with three point mount
Voltage	Multivolt for optimum brightness at input voltages from 9 to 33 volts DC
Power Consumption	Less than 5W (less in flashing modes)
Protection	Reverse polarity and voltage spike protection IP 67 (Protection against dust and temporary water immersion)
Cable length	Pre-wired with 2.5m of sheathed multi-core cable
Lens Material	Nylon (PA12)
Compliance	EMC e4 03 1679 ECE-R10
Lamps shown illuminated (right)	

HELLA MULTI-FLASH LAMP OPERATING MODES
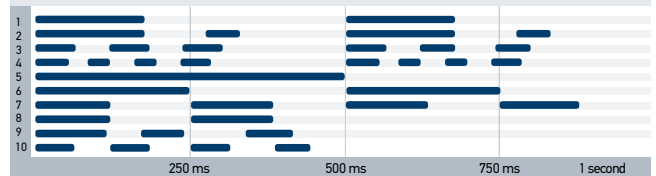
Selectable Flash Patterns

250 ms   500 ms   750 ms   1 second

Flashing Options	
Steady state	Lamp operates as a continuous ON signal
Independent flash	Lamp operates from an external flashing system
Flash state	Lamp operates in the flash mode preselected by the user
Blitz state	Lamp operates in a burst of quad flashes (pattern 4)

The blitz mode overrides the other operating modes and is triggered by switching the blue cable to negative (-).

BST Slim (3 LED)

The BST-Slim is a high-performance warning light with 3 or 6 LEDs.

There are different warning light colours and various flashing sequences which create a synchronous or alternating signal. The Dual

Colour warning light is ECE-R65 type-tested and the rest are SAE approved. It can be used for single, double, triple and quadruple flash as well as with continuous light.

2XD 014 563-401

2XD 014 563-101

2XD 014 563-701

2XD 014 563-901

89,3 ±0,6

32 ±0,4

12,8 ±0,7

BST-Slim 3 LED

Part No.	Colour
2XD 014 563-401	■ Amber
2XD 014 563-101	■ Blue
2XD 014 563-701	■ Red
2XD 014 563-901	☐ White

Voltage	Multivolt 11 – 30 V DC
Current Consumption	Amber: 0.7 A (12 V), 0.35 A (24 V) Blue: 0.7 A (12 V), 0.35 A (24 V) Red: 0.54 A (12 V), 0.27 A (24 V) White: 0.7 A (12 V), 0.35 A (24 V)
Power Consumption	7 – 14 W
IP Rating	IPX7, IPX9K
Operating Temperature	- 40°C to + 65°C
EMC Interference Immunity	ECE-R10, CISPR 25 Class 5,
Type Approval	SAE J595 Class 1

ECE	SAE	EMC	X7
X9K	⇥⇤	⚡	✳

BST Slim (6 LED)

The BST-Slim warning light with 6 LEDs provides a highly visible warning with the same flash patterns as its 3 LED counterpart, as well as a day/night mode

which adjusts the brightness to the ambient light for increased visibility during the day and avoidance of glare at night.

2XD 014 562-401

2XD 014 562-101

2XD 014 562-701

2XD 014 562-811

2XD 014 562-901

132 ±0,6

32 ±0,4

12,8 ±0,7

BST-Slim 6 LED
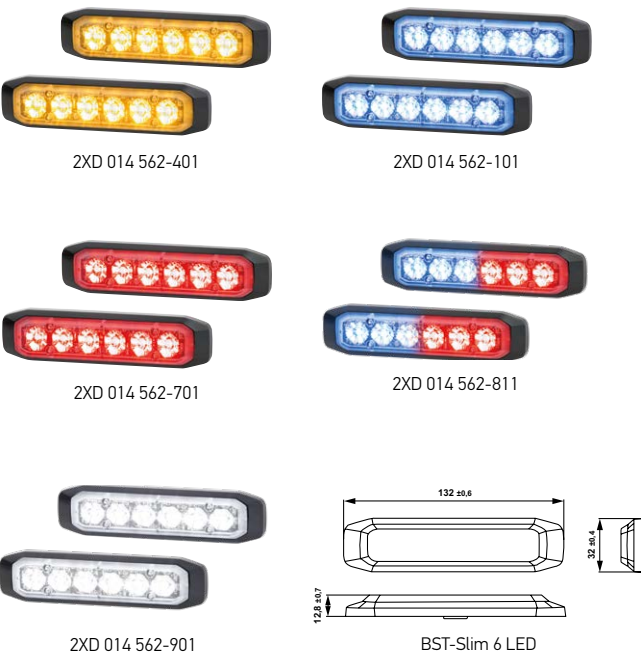
Part No.	Colour
2XD 014 562-401	■ Amber
2XD 014 562-101	■ Blue
2XD 014 562-701	■ Red
2XD 014 562-811	■ ■ Blue/Red
2XD 014 562-901	☐ White

Lens Material	Polycarbonate
Housing	Aluminium
Voltage	Multivolt 11 – 30 V DC
Current Consumption	Amber: 1.4 A (12 V), 0.7 A (24 V) Blue: 1.4 A (12 V), 0.7 A (24 V) Red: 1.1 A (12 V), 0.55 A (24 V) White: 1.4 A (12 V), 0.7 A (24 V)
Power Consumption	7 – 14 W
IP Rating	IPX7, IPX9K
Operating Temperature	- 40°C to + 65°C
EMC Interference Immunity	ECE-R10, CISPR 25 Class 5,
Type Approval	SAE J595 Class 1 For 2XD 014 562-811 (blue/red): ECE-R65 XR1 and XB1

ECE	SAE	EMC	X7
X9K	⇥⇤	⚡	✳

DuraLED Multiflash

DuraLED Multiflash has 11 flash patterns and a high impact resistant Grilamid nylon lens for fit and forget applications.

Part No.	Global Part No.	Type	Colour
HM95903710	2XD 959 037-101	Cable	◼ Amber
HM95903760	2XD 959 037-601	Cable	◼ Blue
HM95903780	2XD 959 037-801	Cable	◼ Green
HM95903700	2XD 959 037-001	Cable	◼ Red
HM95903710D	2XD 959 037-141	DT Connector	◼ Amber
HM95903760D	2XD 959 037-621	DT Connector	◼ Blue
HM95903780D	2XD 959 037-821	DT Connector	◼ Green
HM95903700D	2XD 959 037-021	DT Connector	◼ Red

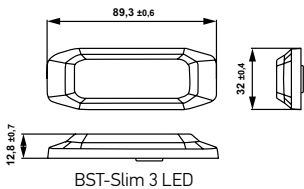|	
Voltage	9-33V DC
Power Consumption	10W Max
IP Rating	IP 6K6, IP 6K9K
Connector	Cable 2.5M or 250mm cable with DT
Compliance	ECE-R10,

Flashing Options	
Steady state	Lamp operates as a continuous ON signal
Independent flash	Lamp operates from an external flashing system
Flash state	Lamp operates in the flash mode preselected by the user
Blitz state	Lamp operates in a burst of quad flashes (pattern 4)

The blitz mode overrides the other operating modes and is triggered by switching the blue cable to negative (-).

HELLA MULTI-FLASH LAMP OPERATING MODES

Selectable Flash Patterns

	250 ms	500 ms	750 ms	1 second

DuraLED Combi MSIP

DuraLED Combi MSIP is a (Mine Safety Indicator Panel) offers both red and green signals in one compact housing.

Part No.	Global Part No.	Type
HM95905030	2XA 959 050-301	6M Bare wire

Voltage	8 to 28V DC
Power Consumption	Red Signal High 5W Red Signal Low 1W Green Signal 5W
Lead Length	6 m cable
IP Rating	IP 6K6, IP 6K7

BL 470 Red LED Warning Lamp

BL470 Red LED warning lamp is fitted with the VISIOTECH technology. A special lens optic allows the light to converge and become so sharply focused that a strip-shaped warning line is projected onto the ground to create a no-go zone.
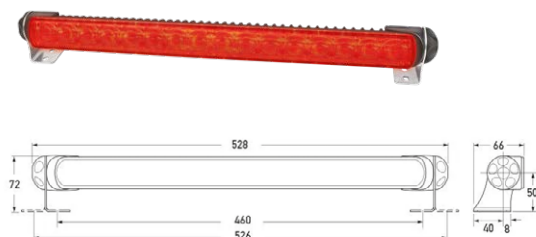
Part No.	Lens Type	Colour
2XD 958 130 661	Spot Beam	■ Red

Lens	Grilamid Nylon PA12
Current Consumption	Multivolt 12 / 24V DC
Power Consumption	36W Max
IP Rating	IP 6K7, IP 6K9K
Operating Temperature	-40°C to 60°C
EMC Interference Immunity	ECE-R10, CISPR 25 Class 5

SL60 LED

A lighting innovation for greater safety: In buildings, projected notices and markings are increasingly replacing signs, posters, and stickers. This provides orientation and increases safety.

HELLA has further advanced this development and transferred it to other applications and areas of use. The objective: more operational safety when using commercial and special vehicles. HELLA VISIOTECH projection technology enables warning signs and symbols to be projected onto the ground, for example, and thus visually warn other road users.

In the SL60 LED warning lamp, the LED light beams are focused by a special lens optic so that a horizontal or vertical (depending on the orientation), blue or red line is projected onto the ground. This provides multiple warning or navigation options. The compact housing shape is optimal for applications with limited space.

Thanks to the energy-efficient LED technology, the warning lamp can also be used with battery-operated vehicles or those with heavily stressed alternators. The robust housing of the dustproof and high-pressure jet cleaner resistant SL60 LED is made of die-cast aluminium. It weighs just 290 grams.
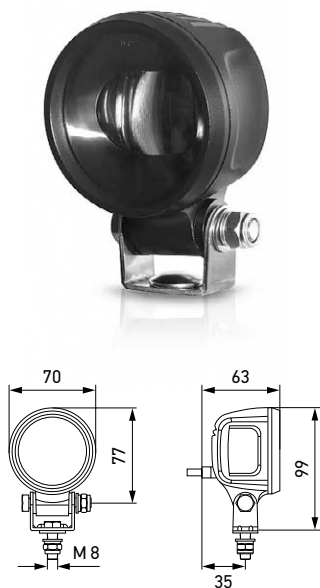
Part No.	Lens Type	Colour
1G0 996 210-001	Light strip	■ Blue
1G0 996 210-011	Light strip	■ Red

Operating voltage	Multi-voltage (10-80 V)
Rated voltage	12 V/ 24 V/ 48 V
Power Consumption	Red: 5.5 W Blue: 7 W
Light source	LED
Material	Housing: die-cast aluminium Cover lens: polycarbonate
Weight	290 g
Temperature range	-40 °C to +50 °C
Protection class	IP 6K9K, IP 6K7
EMC protection	ECE-R10
Projected symbol	Strips (red or blue)
Mounting	Horizontal or vertical (direction of strip) as required
Connection	500 mm cable

HELLA Compatibility Solution (HCS) Technology

LED LAMPS – RETROFIT Q&A

Fitting a LED lamp in place of an old bulb illuminated lamp? If your indicators now flash quickly you no longer comply with Australian Design Rules.

That is because vehicles must have some means to inform the driver of when an indicator fails - **This is a legal requirement of ADR 13/00 6.5.8.** As LED lamps consume relatively little current, many of the bulb detection systems fail to detect that an LED lamp is operating. Once a bulb lamp is replaced with an LED lamp the vehicle will indicate that the lamp has failed via a warning message, a warning light or audio and visual change to the indicator frequency.

What is HCS, how does it help to become ADR 13/00 6.5.8 compliant?

HELLA developed the HCS (Hella Compatibility Solution) to allow for flasher units or lamp control units in vehicles to detect defective LEDs in lamps to allow the vehicle a way of truly detecting LED lamp failures. Every HELLA HCS lamp transmits a 'pulse' to the controller or flasher unit to confirm that the lamp is working correctly. This technology proved so effective that it became the basis of the **ISO 13207-1** standard used on European trucks for lamp failure detection.

Using a system of this type to monitor the function of LED lamps allows for authentic compliance with ADR 13/00 6.5.8
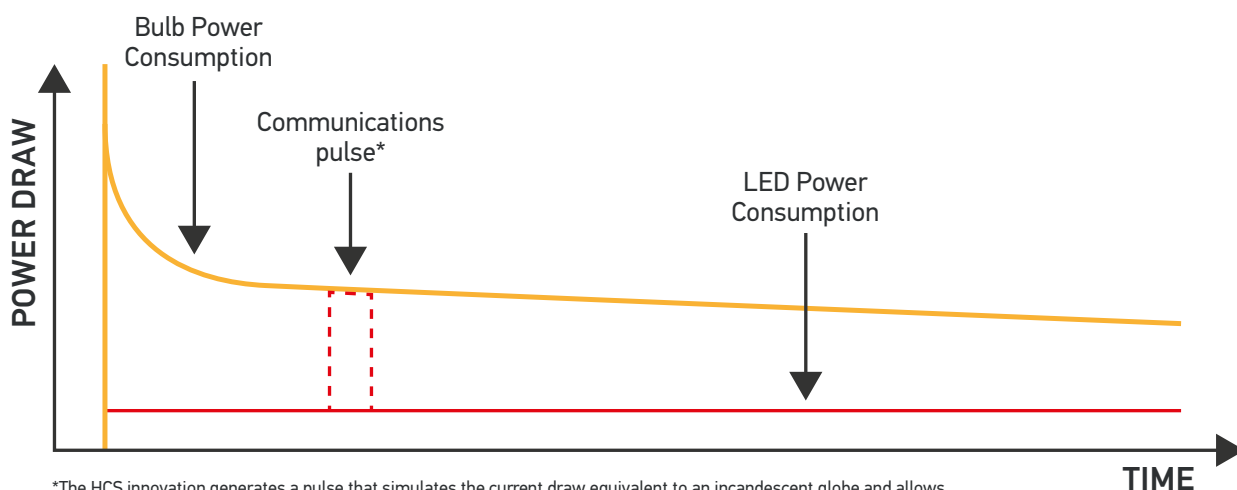
*The HCS innovation generates a pulse that simulates the current draw equivalent to an incandescent globe and allows lamps, flashers and control units to communicate.

HELLA HCS lamps are of course compatible with all trucks and body control modules supporting HCS or **ISO 13207-1** most European trucks incorporate this technology.

For non-European vehicles without **ISO 13207-1** functionality, the HCS Retrofit Ballast unit shown below enables retrofit HCS functionality options.

HCS BASIC CONTROL UNIT (12V AND 24V)
HCS LED indicator outage monitoring unit with 21W bulb current simulation.

5DS 227 488-001	12 VOLT DC
5DS 227 488-101	24 VOLT DC
Connection	DT Type 6-Pin Socket (Indicator Circuit Input/Output)
Note	Control unit is responsible only for monitoring the direction indicators.

Why can't I just use some resistors in series with the lamps?

Vehicle retrofitters often add resistors in conjunction with LED lamps to add electrical load to the lighting circuit to suppress lamp failure warnings. While the warnings disappear, so does the vehicle's way of warning you of a faulty lamp, therefore losing compliance with **ADR 13/00 6.5.8.** HCS retrofitted systems will preserve the functionality required to meet **ADR 13/00 6.5.8** and maintain a higher level of safety for road users.

Combination Lamps with DT connectors

DuraLED® Combi-SR Stop/
Rear Position/Rear Direction
Indicator/Reversing Lamp
with Retro Reflector
2VP 015 075-101
DT & HCS version
2VP 015 074-101
HCS version

DuraLED® Combi-S Stop/
Rear Position/Rear Direction
Indicator Lamp - Heavy Duty
2SD 980 602-001
(2378DT)
2SD 980 602-201
(2378DTCS)

Compact full-LED rear lamp
328 630 (with HCS)
2VP 328 630-011
2VP 328 630-031

Compact full-LED rear lamp
328 630 (with HCS)
2VP 328 630-041
2VP 328 630-021

01 GRILAMID® LENS

Toughness against impact.
UV & chemical resistant.
Will not fade or embrittle

02 FIT & FORGET

Expertly designed and
precision manufactured

03 RELIABILITY

Continuous improvement
& strenuous testing for an
ultra long operating life

05 REFLECTOR

Inbuilt retro reflector
beneath the outer lens

06 LEDS

High quality LEDs & the
latest electronic technology

07 CONNECTION

Cable or DT option

04 MOUNTING BRUSH

Easy to mount on
uneven surfaces

08 CABLE

Glue bath cable entry
IP6K7, IP6K9K

SIDE MARKERS with DT connectors

DuraLED DT series has integrated DT connector molded into the base

Power Supply
MULTI VOLT™

Compliance
ADR COMPLIANCE

DuraLED® LIFETIME WARRANTY

HELLA Australia offers a Lifetime* Warranty for all automotive LED based lighting products that carry the **DuraLED®** brand.

*Lifetime means the economic life of the vehicle these products were first installed on.

DuraLED® Heavy Duty Side Marker Lamp with DT Connector - Red/Amber
2PS 980 990-001 (2073)
2PS 980 990-007 (2073BULK)

DuraLED® Heavy Duty Cab Marker/ Supplementary Side Direction Indicator Lamp with DT Connector
2BP 980 990-101 (2076)
2BP 980 990-107 (2076BULK)

DuraLED® Heavy Duty Front Position/End Outline Lamp with DT Connector
2PF 980 990-201 (2074)
2PF 980 990-207 (2074BULK)

DuraLED® Heavy Duty Front End Outline Lamp with DT Connector
2PF 980 990-401 (2071)
2PF 980 990-407 (2071BULK)

DuraLED® Heavy Duty Rear Position/End Outline Lamp with DT Connector
2XA 980 990-601 (2312)
2XA 980 990-607 (2312BULK)

White LED license plate lamp
2KA 959 640-381 (2559-1DT)

DuraLED® Flush Mount
Side Marker Lamp
2PS 980 868-041 (2083)
2PS 980 868-061 (2083S)
S/S Rim

DuraLED® Flush Mount
Supplementary Side Direction
Indicator Lamp (Cat 5.)
2BM 980 868-301 (2086)
2BM 980 868-321 (2086S)
S/S Rim

DuraLED® Flush Mount
Rear Position/End Outline
Lamp
2XA 980 855-301 (2310)
2PF 980 855-311 (2310S)
S/S Rim

DuraLED® Flush Mount
Front Position/End Outline
Lamp
2PF 980 855-011 (2059)
2PF 980 855-021 (2059S)
S/S Rim

DuraLED® Flush Mount
Front End Outline Lamp
2PF 980 855-201 (2060)
2PF 980 855-211 (2060S)
S/S Rim

DuraLED Flush Mount
Side Marker Amber SM1 ECE
2PS 980 868-207 (MOQ 24)

DuraLED® Side Marker Lamp
with Chrome housing
2PS 959 660-691
(2053CHROME)

DuraLED® Side Marker Lamp
with Black housing
2PS 959 660-581 (2053)

DuraLED® Front Position/
End Outline Lamp
2PF 959 570-491 (2054)

DuraLED® Front End
Outline Lamp
2PF 959 570-301 (2051)

DuraLED® Rear Position/
End Outline Lamp
2BA 959 560-431 (2307)

DuraLED® Cab Marker/
Supplementary Side Direction
Indicator Lamp (Cat. 5)
2BP 959 660-301 (2026)

LED LAMP DISTRIBUTION MODULE

Looking for a simple and reliable way to connect lighting to your trailer harness? HELLA's revolutionary LED Lamp Distribution Module is the quick connect, easy trouble shooting solution for fitting lamps to heavy trailers and custom vehicles.

8JE 233 496-001

WATERPROOF CONNECTIONS

Rated IP6K7 and IP6K9K

OVERLOAD PROTECTED

Internal electronics protect and isolate individual circuit outputs reducing lamp outages as well as increasing the life of the lamps

TIME SAVING

With no requirement to splice cables, this significantly reduces build time making trouble shooting easier if an outage occurs

FULLY SEALED INTERNALS

Completely sealed internals provides protection against water, dust and high pressure cleaning

TOUGH ABS PLASTIC CONSTRUCTION

A tensile strength polymer that is impact resistant, tough and corrosive resistant

PLUG & PLAY

Quick connecting, easy trouble shooting solution for LED lamps to trailers and customer vehicles

NEW ZEALAND MADE

Wiring Example

Trailer Plug/Truck Input

FEOL

Upper Level

Optional Connection

FEOL

Upper Level

Optional Connection

Side Markers

Side Markers

Reversing Work Lamp

License Plate Lamp

Indicator   Stop/Tail   Reverse
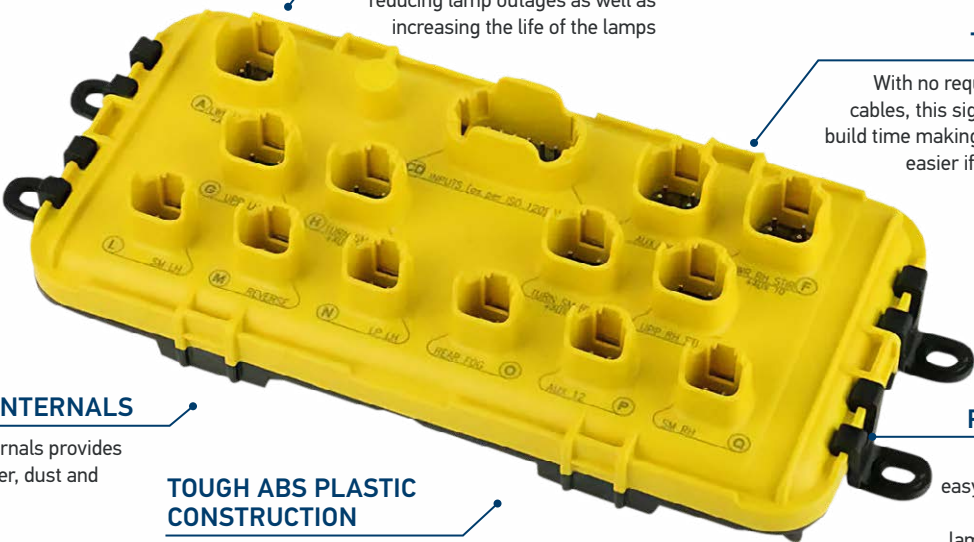
Indicator   Stop/Tail   Reverse
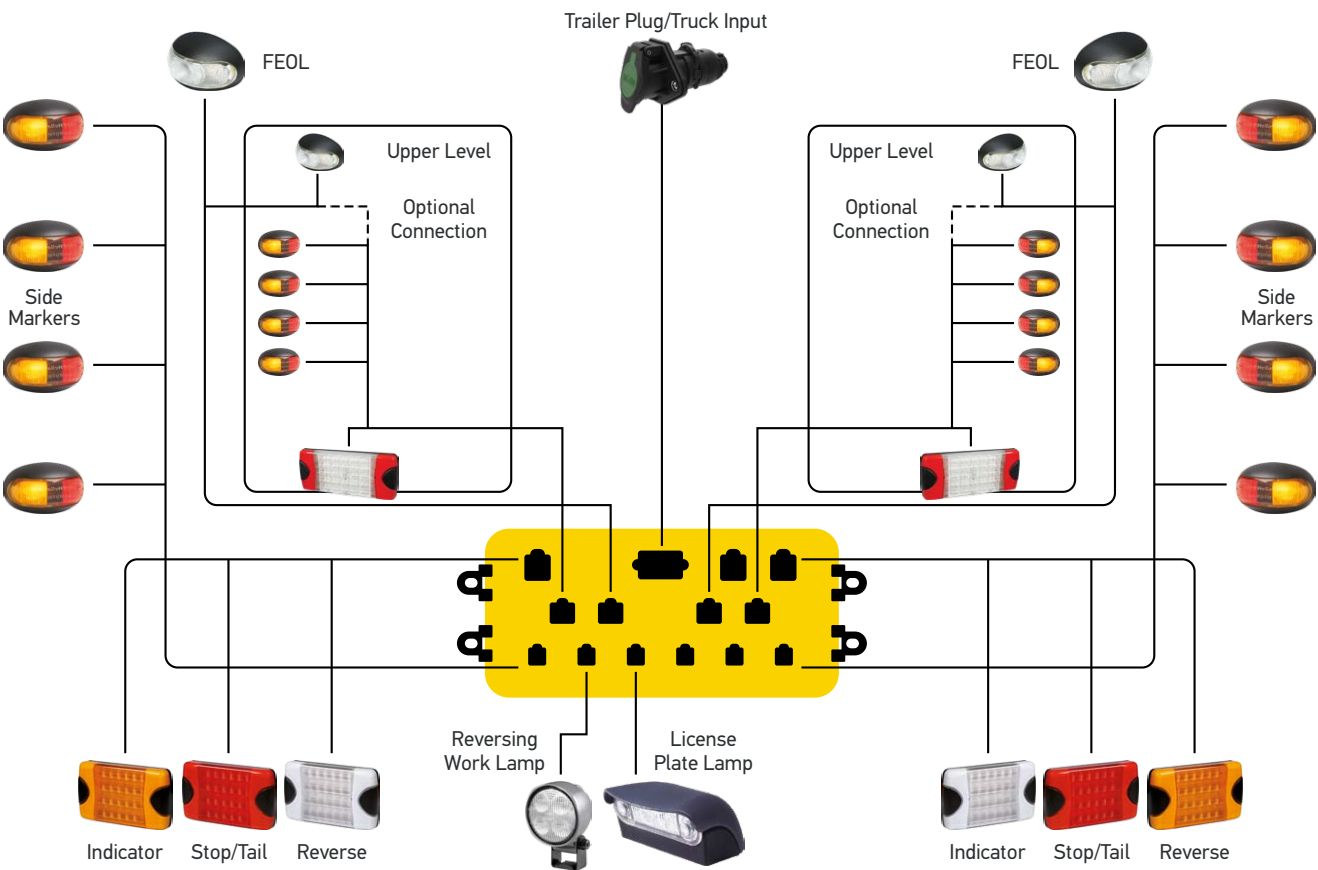
MotoVox Compact 117 dB Horn

Solid state electronic horn designed for extremely long life and to replace high maintenance electromechanical horns. This model is designed to meet or exceed all applicable SAE specifications. Used by major OEMs.
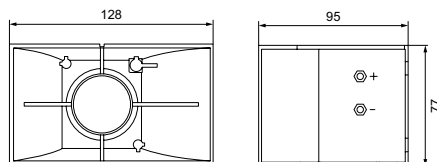
Part No.	Global Part No.	Type
HMF312P	3TA 910 156-021	12-24V DC, bare wire connection

Volume	117 db @ 1.2 m
Approvals	SAE J1105 Sept 89, Type K. U.L. recognised for electric vehicles and fork lifts

MotoVox Forward 117 dB Horn

Electronic forward horn is designed to be used where a high-decibel rugged horn is necessary.
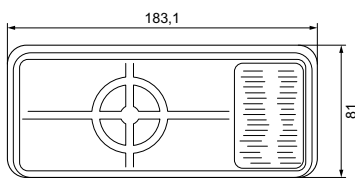
Part No.	Global Part No.	Type
HMFH117P	3TA 910 156-011	12-24V DC, bare wire connection

Volume	117 db @ 1.2 m
Approvals	SAE J1105 Sept 89, Type J @ 24 V systems SAE J1105 Sept 89, Type K @ 12 V systems

Reverse alarms with DT connectors

BM SERIES REVERSING ALARMS

HELLA's BM Series reversing alarms come packed with our legendary OE quality robustness and reliability.

This includes testing to validate the product under conditions such as , low and high temperature, vibration, corrosion, high pressure hot water, dust ingress, sound pressure level and frequency testing.

EPOXY ENCAPSULATED ELECTRONICS

Long service life, resists water and vibration. ECE R10 compliance guarantees radiated emissions do not interfere with radio comms and other RF sensitive devices.

FLEXIBLE MOUNTING OPTIONS

Compact versions (BM10, BM20) for maximum performance in a small size, larger (BM30, BM40) footprints available for heavy duty environments.

DT TYPE CONNECTIONS

Quick fit Industry standard waterproof connections stay reliable for a long time.

* NOTE - BM30 pictured, features & functionality varies according to model.

WHITE NOISE OUTPUT

White noise models best for urban environments to reduce noise pollution and community disturbance.

TONAL NOISE OUTPUT

Tonal noise models are best for attracting attention in noisy industrial environments where maximum audibility is required.

SMART NOISE LEVEL ADJUSTMENTS

Models with smart noise output adjustment reduce noise pollution while maximizing audibility by auto adjusting sound output based on ambient noise level.

Compact Reverse and Warning Alarm BM10

Ideal for light commercial vehicles, the BM10 reversing alarm is available with a long-range, penetrating 97dB(A) or 107 dB(A) alarm sound.

IP67 rated, with an ABS housing and insulated electronics, it has high protection against failure due to rust, moisture and vibrations
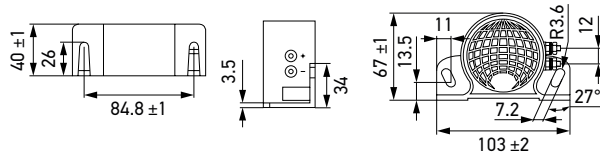
Part No.	Sound Type	Output – Lp @ 1.2m, dB(A)
3SL 009 148-171	Tonal noise	97
6009	Tonal noise	97
3SL 009 148-201	Tonal noise	107

Electrical connection	6009 & 3SL 009 148-201: with 140 mm cable and DT Type connector All others: 2x threaded terminals
Operating voltage	12 - 48 V DC
Frequency range	700 - 2800 Hz
Power consumption	12 W
Operating temperature	-40 °C to 85 °
Protection class	IP 67
Type approval	ECE-R10 (E1) SAE J994

Compact White Noise Reversing Alarm BM20

Providing a white noise warning signal for reduced noise pollution, the BM20 reversing alarm is available with a 97 dB(A) or 102 dB(A) alarm sound, as well as a version with an adjustable 97–112 dB(A) volume level.

IP67 rated, with insulated electronics, it has high protection against failure due to rust, moisture and vibrations.

Part No.	Sound Type	Output – Lp @ 1.2m, dB(A)
3SL 996 139-501	White noise	92
3SL 996 139-511	White noise	97
3SL 996 139-521	White noise	102
3SL 996 139-531	White noise	92-102, Smart self adjusting

Electrical connection	with 140 mm cable and DT Type connector
Operating voltage	12 - 32 V DC
Frequency range	600 –1600 Hz
Power consumption	12 W
Operating temperature	-40 °C to 85 °
Protection class	IP 67
Type approval	ECE-R10 (E1) SAE J994

Reverse and Warning Alarm BM30

Ideal for heavy duty commercial vehicles, the BM30 reversing alarm is available with a long-range, 107 dB(A) or 112 dB(A) alarm sound, as well as a version with an 87 – 112 dB(A) volume level that automatically monitors ambient noise and adjusts to its environment.

Features a glass-filled nylon housing with integrated mounting bracket. IP67 rated, with insulated electronics, it has high protection against failure due to rust, moisture and vibrations.

Part No.	Sound Type	Output - Lp @ 1.2m, dB(A)
6016	Tonal noise	107
6017	Tonal noise	112
6018	Tonal noise	87-112, Smart self adjusting

Electrical connection	with 140 mm cable and DT Type connector
Operating voltage	12 - 48 V DC
Frequency range	700 - 2800 Hz
Power consumption	12 W
Operating temperature	-40 °C to 85 °
Protection class	IP 67
Type approval	ECE-R10 (E1) SAE J994

Heavy Duty Reverse and Warning Alarm BM40

Ideal for heavy duty commercial vehicles, the BM40 reversing alarm is available with a long-range standard or white noise alarm sounds, as well as a version with a 92–107 dB(A) volume level that automatically monitors ambient noise and adjusts to its environment.

Features a glass-filled nylon housing with integrated mounting bracket. IP67 rated, with insulated electronics, it has high protection against failure due to rust, moisture and vibrations.

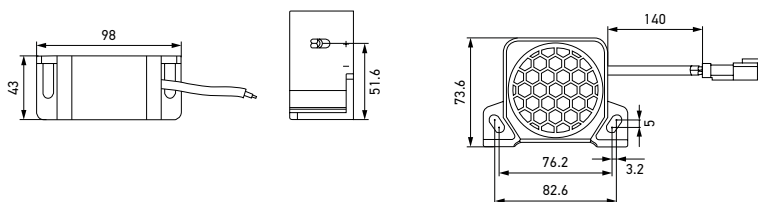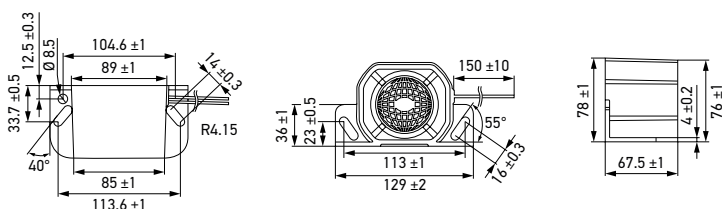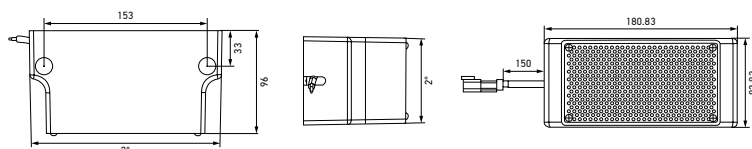| Part No.	Sound Type	Output - Lp @ 1.2m, dB(A)
3SL 996 139-551	Tonal noise	97, 102 or 112, Switchable
3SL 996 139-561	White noise	97, 102 or 107, Switchable
3SL 996 139-571	Tonal noise	97-112, Smart self adjusting
3SL 996 139-581	White noise	92-107, Smart self adjusting

Electrical connection	with 150 mm cable and DT Type connector
Operating voltage	12 - 48 V DC
Frequency range	"800 - 1400 Hz (Tonal noise) 600 - 1600 Hz (White noise)"
Power consumption	18 W
Operating temperature	-40 °C to 85 °
Protection class	IP 65
Type approval	ECE-R10 (E1) SAE J994

STAR LIGHT.
STAR BRIGHT.

STAND OUT FROM THE CROWD WITH THE ALL NEW HELLA ANTARES 9" LED DRIVING LIGHTS.

Named after the radiant Antares star, these driving lights are engineered to illuminate the darkest roads, ensuring your journey is safe and spectacular.

Co-designed in Australia for Australian roads, the Antares is sure to meet all your needs and more.

SAFETY & VISIBILITY DAY & NIGHT
- Daytime Running Lamps provide visibility during daylight to alert oncoming traffic
- Unique look position lamps increase visibility in urban environments

SELECTABLE OUTPUT MODES
- Easily adjust between high and low output for optimal driver comfort

DIECAST ALUMINUM HOUSING & BRACKET
- Durable, lightweight and corrosion resistant
- Mounting holes for maximum stability

TOUGH DRL INTEGRATED COVERS
- Provides stylish protection against sand, dust, mud and bugs.
- Includes distinctive Antares edgelight design

COMPOSITE LIGHTING DESIGN
- 3x projector spot beams exceed 800m distance
- 9x diamond glow position lamp with unique umbrella reflector technology
- 8x wide beam 10W LED clusters for even wider light dispersal (80m)

COVER DETECTION
- Switches off main beam when cover applied for greater operating efficiency

TOUGH CONSTRUCTION
- IP69K dust & waterproof, suits harsh Australian conditions
- Hard-coated UV stable polycarbonate lens

PLUG & PLAY WIRING HARNESS
- With H4 & HB3 adaptors for easy DIY install

Part number 1F0 358 228-871

TAKE CONTROL OF YOUR LIGHTING WITH A MULTITUDE OF HELLA LIGHTING TECHNOLOGIES FOR SAFETY AND VISIBILITY, DAY AND NIGHT.

HIGH OUTPUT MODE

LOW OUTPUT MODE

DAYTIME RUNNING LIGHT
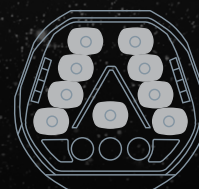
POSITION LIGHT

The Hella Antares integrates lighting techniques mastered in collaboration with the largest automotive brands and decades of Australia's harshest driving conditions, creating a composite beam that delivers incredibly constant and impressive output:

- 80m wide beam exceeds 150m distance with the ultra-wide specific LED clusters

- Impressive mid-range width of 46m that exceeds 650m distance with the umbrella LED optic

- Precision Projector LED gives a total distance exceeding 800m

- All at the industry standard 1 Lux.

HIGH OUTPUT MODE

80 METERS

46 METERS

LOW OUTPUT MODE (ECE)

METERS	100	200	300	400	500	600	700	800 METERS
LUX	1000	100	10	5	1			

ISOLUX = 2 LIGHTS
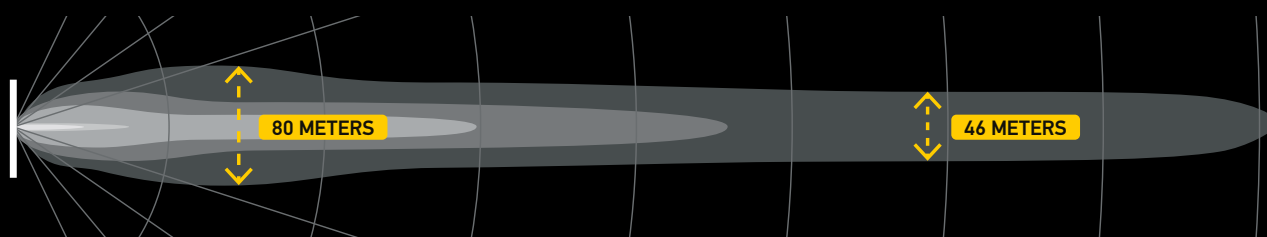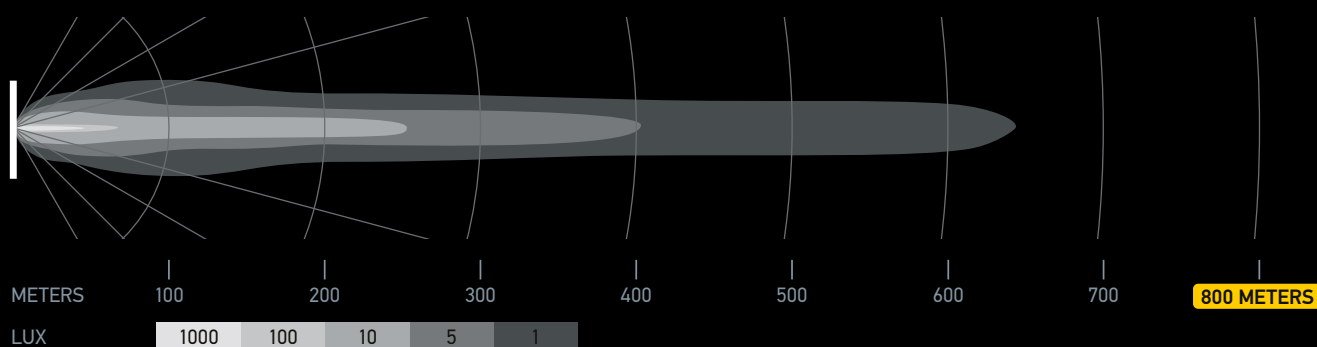
C140

The C140 LED is a combination headlight that features all light functions in LED technology: low beam, high beam, indicator and position light. A specially developed thermal design with temperature sensors prevents the headlight from overheating.

The housing of the C140 LED is made of aluminium and features cooling fins on its rear, which ensure heat removal from the high-power LEDs. A specially developed thermal design with temperature sensors prevents the headlight from overheating.

With its robust, heavy-duty bracket and a lens made of toughened, shatterproof plastic, the headlight is particularly resistant to vibration and impact. Ideal for the tough conditions on construction vehicles (strong vibrations, dust, moisture, mechanical shock, etc.).

The C140 LED headlight is a fully sealed, maintenance-free system: it obviates the need to replace bulbs, saving time and money for the final consumer. The low LED power consumption compared to conventional halogen headlights also saves fuel, further driving down costs.
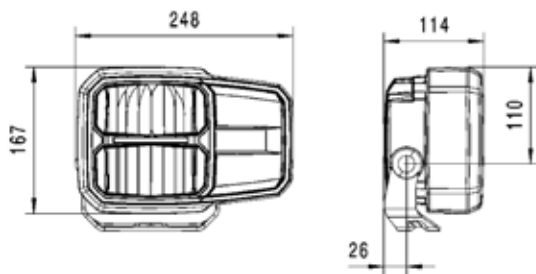
Part No.	Lens Type
1LE 996 374-031	Left side, horizontal
1LE 996 374-041	Right side, horizontal

Lens Material	Polycarbonate
Housing	Aluminium
Voltage	10-32V DC
Connection	DEUTSCH connector, 6-pole
Power Consumption	Max. 84W (Reduces if Thermal Management is in effect)
Recommended Tilt Angle	0° to 10°
Energy Consumption	Low beam 25 W High beam 40 W Indicator 8 W Position light 0.8 W
IP Rating	IP 6K8, IP 6K9K, IP6K8
Compliance	4080 R112/01 Low & High Beam (Ref 17.5) 4079 R6 Cat.1b & 5, R7/02 ECE R10
Reverse Polarity Protection	Yes
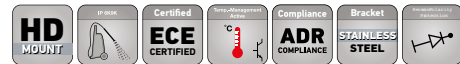
C140 Low beamd istance. Recorded with single lamp. Distance in metres.

1 LUX 52m
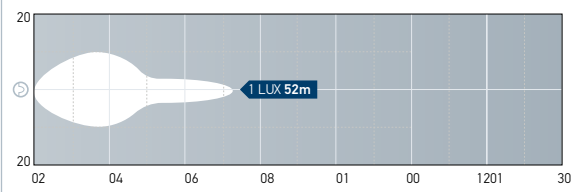
C140 High beamd istance. Recorded with single lamp. Distance in metres.

1 LUX 125m
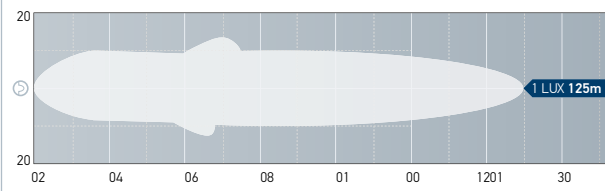
Driving Lamp (ECE Ref. 40)

The RokLUME 380 N LED Driving Lamp (ECE Ref. 40) is an extremely durable wide spot light for road illumination.

Using LED technology combined with state-of-the-art electronics, it provides a light output of up to 7800 lumens with a colour temperature of 5000K, yet power consumption is a highly efficient 84 W.

Originally developed to perform in the toughest operating environments such as mining, the RokLUME 380 N has a premium aluminium housing with NanoSafe coating (providing a non-stick and easy to clean surface), high-impact hard coated polycarbonate lens and heavy duty stainless steel surrounding bracket.
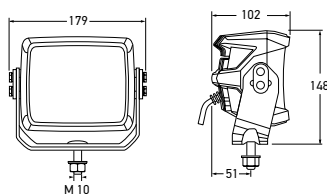
Part No.	Lens Type
1FA 996 197–151	Pencil Beam, 12V
1FA 996 197–181	Pencil Beam, 24V

Lens Material	Hard-coated PC
Housing	Aluminium
Voltage	12 V DC / 24 V DC
Power Consumption	Max. 84W (Reduces if Thermal Management is in effect)
Max. Light Output	7800 lm
IP Rating	IP 6K8, IP 6K9K, IP6K8
Operating Temperature	–40°C to +90°C
LED Colour Temperature	5000K
Connection	300mm Cable with DT Socket (optional 2.0 metre DT Pigtail Loom to be ordered separately)
Type Approval	ECE-R10 ⬦ (E1) C€ CISPR 25 Class 5 Ref. 40
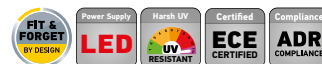
RokLUME 380N Pencil Beam distance. Recorded with single lamp. Distance in metres.

1 LUX **570m**

HELLA **BLACK MAGIC**

360°
BLACK
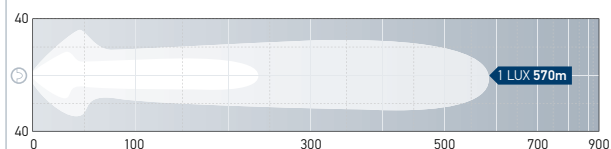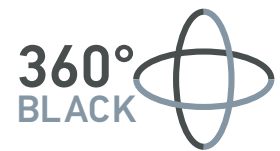
High Level Light Output
Up to **20,000 effective lumens**

Versatile mounting
- Upright/pendant
- Fully adjustable slide brackets also available

Integrated Thermal Management
Thermal Management = high output
Long Lasting LED performance

Black out appearance
Unique design creates black out appearance without effecting performance

Tough Construction
- Tough design and fully sealed, protects against sand, dust and water!
- Suits harsh Australian conditions
- Tested to the exacting Hella Germany Rallye standard

Impact Resistant PC Lens
- UV stabilised to protect against sun damage
- Tested against high vibration resistance

BLACK
ON THE OUTSIDE.
BRIGHT
ON THE INSIDE.

Let the adventure begin.

The **HELLA Black Magic Series of Light Bars** are available in 25 different variants for on or off-road use. The unmistakable black design down to the last screw combines good looks and excellent operation. It's quite simple: **everything is black** – from every angle and perspective. However, the design with subtle HELLA branding isn't the only unmistakable feature.

With up to 80 LEDs, an effective light output of up to 20,000 lumens **leaves absolutely nothing in the dark.** The light bars are available in a range of lengths as "Slim" and as "Double Row" and for the first time are now also available as curved variants. All models are equipped with a temperature control system: it adjusts the light bars temperature, protecting against overheating and regulating the light output in cold ambient temperatures.

Mounted upright or pendant, the mounting angles are freely adjustable and thus adaptable to any situation. **Bring on the dirt and grime,** the HELLA Black Magic Light Bars are up for anything and everything. They boast the highest dust and water resistance class, they are totally robust and have a particularly long lifetime – ideal for the unique Australian conditions, no matter on which track you happen to be driving.

Absolute freedom that you can feel and see. On or Off the road!

BLACK MAGIC
TOUGH RANGE

TECHNICAL SPECS

| Order no.	Sales Text	Shape	Lumen	Lumen eff.	Distance 1Lux	LED	Gross Weight g	Net Weight g	Volt-age	Ampere (A)	Volt-age	Ampere (A)	Max Watt + 10%	Wiring
1FJ 358 196–451	7" MINI LIGHTBAR	"Double Straight"	5,040	2,100	500m	12	2,100	1,700	12	1.97	24	1.04	28	2000mm, open end cable
1FJ 358 196–461	13" MINI LIGHTBAR	"Double Straight"	10,080	3,800	560m	24	2,650	2,150	12	4.01	24	2.05	55	2000mm, open end cable
1GJ 358 197–301	20" SLIM LIGHTBAR	"Slim Straight"	8820	6000	610m	21	3,000	2,450	12	5.68-7.73	24	2.77-3.59	107	2000mm, open end cable
1GJ 358 197–311	32" SLIM LIGHTBAR	"Slim Straight"	13860	9000	770m	33	3,900	3,300	12	8.28-12.7	24	4.22-5.78	184	2000mm, open end cable
1GJ 358 197–321	40" SLIM LIGHTBAR	"Slim Straight"	17640	12000	830m	42	4,750	4,000	12	10.73-16.51	24	5.13-7.32	239	2000mm, open end cable
1GJ 358 197–331	50" SLIM LIGHTBAR	"Slim Straight"	22680	15000	920m	54	6,600	5,800	12	13.63-18.46	24	6.61-9.59	277	2000mm, open end cable
1GJ 358 197–401	21.5" DOUBLE ROW LIGHTBAR	"Double Straight"	16800	11000	750m	40	3,800	3,200	12	8.14-14.85	24	4.2-7.4	215	2000mm, open end cable
1GJ 358 197–411	30" DOUBLE ROW LIGHTBAR	"Double Straight"	25200	13500	850m	60	5,250	4,500	12	11.87-19.19	24	6.45-10.73	310	2000mm, open end cable
1GJ 358 197–421	40" DOUBLE ROW LIGHTBAR	"Double Straight"	33600	16000	990m	80	6,300	5,500	12	14.83-26.43	24	7.94-15.23	439	2000mm, open end cable
1GJ 358 197–441	52" DOUBLE ROW LIGHTBAR	"Double Straight"	42000	20000	1100m	100	7,670	6,700	12	18.25-27.17	24	9.59-18.48	546	2000mm, open end cable
1GJ 358 197–601	21.5" DOUBLE ROW CURVED LIGHTBAR	"Double Curved"	16800	11000	550m	40	3,800	3,200	12	7.34-14.66	24	4-7.37	212	2000mm, open end cable
1GJ 358 197–611	30" DOUBLE ROW CURVED LIGHTBAR	"Double Curved"	25200	13500	540m	60	5,250	4,500	12	11.54-19.27	24	5.89-10.72	310	2000mm, open end cable
1GJ 358 197–621	40" DOUBLE ROW CURVED LIGHTBAR	"Double Curved"	33600	16000	510m	80	6,350	5,500	12	15.28-25.34	24	8.13-14.76	426	2000mm, open end cable
1GJ 358 197–641	52" DOUBLE ROW CURVED LIGHTBAR	"Double Curved"	42000	20000	590m	100	7,700	6,700	12	18.83-26.67	24	9.86-17.07	500	2000mm, open end cable
8HG 358 176–371	Brackets Black Magic slim row. 2 pieces	Slim					154	150						
8HG 358 176–381	Brackets Black Magic double row, 2 pieces	Double					230	226						

Battery Master Switch

Double-pole, 2-position (off-on) Battery Master Switch with plated steel case designed to disconnect both battery and field circuit. Actuated by chrome-plated die-cast lever. Part No. 4643 features silver laminated contacts.
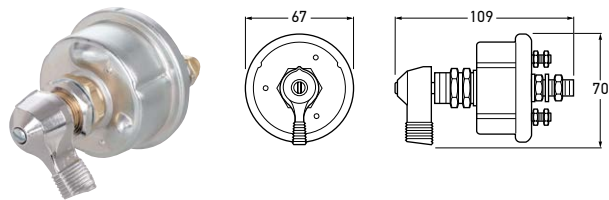
Part No.	Global Part No.	Variant
4642	6EK 905 424-001	Standard Contact
4643	6EK 905 424-011	■ Silver Laminated Contacts

Mounting	19mm diameter opening
Maximum Load	1000A at 6-36V DC intermittent
Maximum Continuous Load	125A at 6-36V DC continuous (large studs) 20A continuous (small studs)
For Panels	Up to 4.75mm thick
Spare Part	4645 Key ❶
Accessories	4646 Face Plate ❷

❶

P / N 4645

❷

P / N 4646

Battery Master Switch (Weatherproof)

Weatherproof double-pole, 2-position (off-on) Battery Master Switch featuring plated steel case, silver laminated contacts and O-ring seal to protect from dirt and moisture. Also features index pin to align unit and prevent rotation.
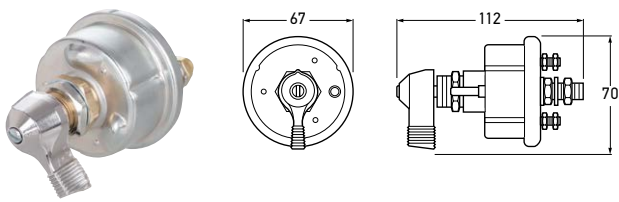
Part No.	Global Part No.	Variants
4644	6EK 905 424-021	■ Silver Laminated Contacts

Mounting	19mm diameter opening.
Maximum Load	1000A at 6-36V DC intermittent
Maximum Continuous Load	125A at 6-36V DC continuous (large studs) 20A continuous (small studs)
For Panels	Up to 6.75mm thick.
Spare Part	4645 Key ❶
Accessories	4646 Face Plate ❷

❶

P / N 4645

❷

P / N 4646

Heavy Duty Battery Master Switch

For trucks, buses and earth moving equipment.
Complete with removable key.
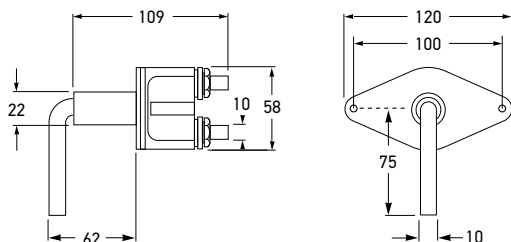
Part No.	Global Part No.	Positions
4653	6EK 001 559-002	OFF-ON

Mounting	22mm diameter opening
Maximum Load	12V DC 5000A for 10 seconds 24V DC 2500A for 10 seconds
Maximum Continuous Load	12 / 24V DC 100A continuous at a maximum ambient temperature of 60°C with 50mm2 lead connected with ring-type terminals
Termination	2 x 10mm studs
Protection	IP X4 (Protection against water splashing)
Spare Part	4654 Spare key

Switch not designed for marine applications.

Battery Master Lockout Switch – 2 Pole

Heavy-duty 2-pole lockable battery lock out switch. The Battery lockout switch provides a reliable power disconnection and safety cut-off that protects the vehicle against tampering, theft and battery drain. It also protects service personnel from electrical hazards during service operations.
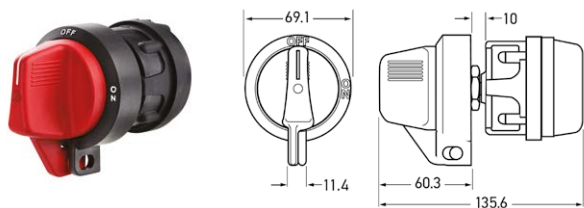
Part No.	Global Part No.	Variants
HM7592B	9MK 910 109-001	🟥 Red handle
HM7592Y	9MK 910 109-011	🟨 Yellow handle

Mounting	Sealed design allows switch to be mounted in the best location regardless of environment.
Operating Temp.	-40°C to 85°C
Protection	Waterproof and dustproof to IP67

Battery Master Lockout Switch - 4 Pole

Heavy-duty 4-pole lockable battery lock out switch. The Battery lockout switch provides a reliable power disconnection and safety cut-off that protects the vehicle against tampering, theft and battery drain. It also protects service personnel from electrical hazards during service operations. Isolates of both positive and negative sides from the battery, or isolation of one circuit with only one switch.

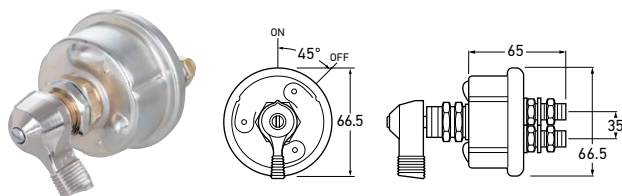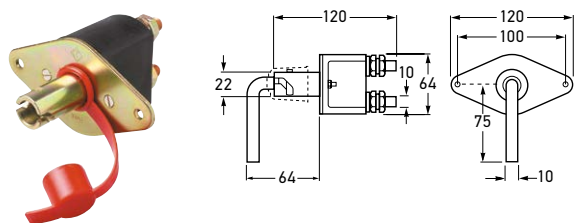| Part No.	Global Part No.	Variants
HM7591S	9MK 910 109-201	■ Silver Laminated Contacts

Mounting	19mm diameter opening
Operating Temp.	-40°C to +29°C
Maximum Load	125A at 6-36V DC continuous
Protection	Waterproof and dustproof to IP67

Heavy Duty Battery Master Switch

Extremely robust, single-pole (2 post) Battery Master Switch featuring double-cut copper contacts. Supplied complete with removable handle, security chain and PVC protective cover. Suitable for industrial vehicles and agricultural machinery.

Part No.	Global Part No.
4655	6EK 905 397-001

Mounting	24mm diameter opening
Maximum Load	2500A at 12-24V DC for 5 seconds
Maximum Continuous Load	250A at 12-24V DC continuous
Protection	IP 66
Spare Parts	4655COV Strap & PVC Protective Cover ❶ 4655KEY Handle, Chain & Protective Cover ❷

❶ 4655COV

❷ 4655KEY

Relays

Weatherproof Changeover Relay and Connector Assembly Kits

Part No.	Global Part No.	Rating
HMWPR001	8KW 910 182-001	12V
HMWPR002	8KW 910 182-011	24V

Operating Range	-40°C to +125°C
Contact Current Rating	12V NO 35A / NC 20A 24V NO 40A / NC 30A
Coil Resistance	12V 70-90 Ohms @ 23°C 24V 300 Ohms
Transient Suppressor Resistor	12V 680 Ohms 24V 2700 Ohms
Kit Contents	ISO mini relay and connector assembly kit contains: 1 x ISO-style changeover relay. 1 x Connector body with seals for pull to seat terminals. 3 x Large barrel pull to seat terminal 6.3mm width suits cable size 3.00mm^2 2 x Small barrel pull to seat terminal 6.3mm width suits cable size 1.00 - 2.00mm^2

NO PARKING WITHIN 50 METRES

Mining E-Stop

The Mining E-Stop offer versatility, safety and fast installation. This Heavy Duty unit features LED illumination visible from 3 sides for added safety, a user-friendly 60mm push button, DT connection and direct mount capability. It is a fully-sealed, pressure tested unit, IP 6K9 / IP 6K8 rated.
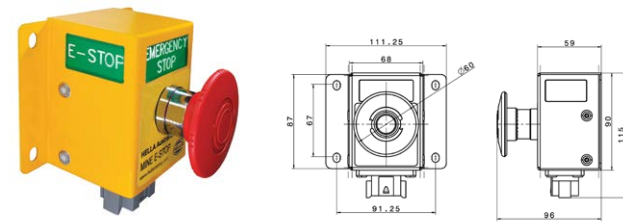
Part No.	Global Part No.
HM7593E	6HF 012 416-001

Features and benefits:

→ Added safety through illumination via LED (visible from 3 sides)

→ IP 6K9 und IP 6K8 rated fully-sealed, pressure tested unit

→ "Plug and Play", supplied with mating DT Connector

→ High visibility yellow powder-coated 316 Stainless Steel

→ User friendly, large 60 mm mushroom button

→ Two normally closed and one normally open contacts (each rated 10A)

# High current jump start connector

Heavy duty, high capacity jump-start connectors for vehicles and equipment, ideal for use where access to terminals is restricted or dangerous. Eliminates chance of cross polarity connections through the specially shaped plug and reduces chance of sparking and possible ignition of flammable materials. Mounting bracket, protective cap, and kit containing the terminal, bracket and cap are also available. Suitable for 70 mm2 cable. Connection via crimping and soldering process.
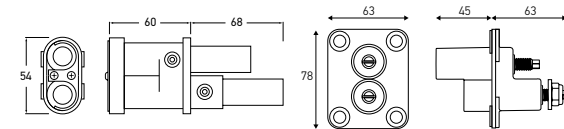
Jump Start Plug		
Part No.	Global Part No.	Description
HM7546P	8JA 177 305-101	High impact ABS plastic. Copper (silver brass coated) terminals
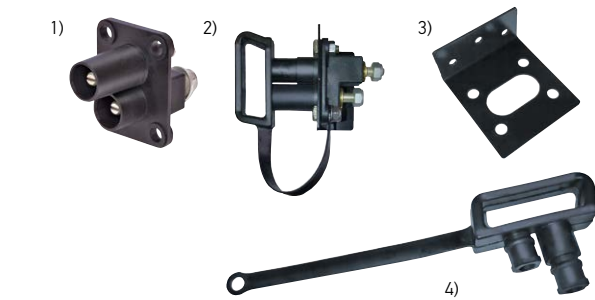
Jump Start Terminal		
Part No.	Global Part No.	Description
HM7546J	8JB 177 305-001	1) Jump Start Terminal Removes risk of terminal crossing, high impact ABS plastic, zinc coated terminals
HM7546KIT	8HG 177 305-031	2) Terminal Kit Kit of jump start terminal, bracket and cap
HM7546B	8HG 177 305-021	3) Terminal Bracket Bracket for mounting jump start terminal to vehicle body
HM7546C	9HD 177 305-011	4) Terminal Cap Cap to protect terminal from external environment when not in use

Replacement DT Connectors / Tools

DT connectors are environmentally sealed connectors rated at -55°C to +125°C. Solid copper crimp contacts (pins) rated to 13A and locking wedges

Part No.	Qty	Description
9.HM4940	15	2-Way Plug DT Connector (incl. wedge)
9.HM4941	15	2-Way Receptacle DT Connector (incl. wedge)
9.HM4942	15	3-Way Plug DT Connector (incl. wedge)
9.HM4943	15	3-Way Receptacle DT Connector (incl. wedge)
9.HM4944	10	4-Way Plug DT Connector (incl. wedge)
9.HM4945	10	4-Way Receptacle DT Connector (incl. wedge)
9.HM4946	10	6-Way Plug DT Connector (incl. wedge)
9.HM4947	10	6-Way Receptacle DT Connector (incl. wedge)
9.HM4948	5	8-Way Plug DT Connector (incl. wedge)
9.HM4949	5	8-Way Receptacle DT Connector (incl. wedge)
9.HM4950	5	12-Way Plug DT Connector (incl. wedge)
9.HM4951	5	12-Way Receptacle DT Connector (incl. wedge)
9.HM4954	100	Plug DT Connector Pin
9.HM4955	100	Receptacle DT Connector Socket
9.HM4959	1	Locking Wedge and Contact Pin Release Tool
HM8277	1	DT Contact Crimping Tool – 0.5 - 1.0mm

9.HM4940 9.HM4941 9.HM4942

9.HM4943 9.HM4944 9.HM4945

9.HM4946 9.HM4947 9.HM4948

9.HM4949 9.HM4950 9.HM4951

9.HM4954 9.HM4955 9.HM4959

HM8277

Handy Box® DT Connector Kit

The Handy Box® DT Connector Kit (incl. Crimping Tool HM8277) contains 258 of the most popular DT Connectors including tools. All parts in the kit are available as spares.

Handy Box® DT Connector Kit HM8292

Contents:

10 x 2-Way Male DT Connector incl. Wedge

10 x 3-Way Male DT Connector incl. Wedge

8 x 6-Way Male DT Connector incl. Wedge

10 x 2-Way Female DT Connector incl. Wedge

10 x 3-Way Female DT Connector incl. Wedge

8 x 6-Way Male DT Connector incl. Wedge

100 x Male DT Connector Socket

100 x Female DT Connector Socket

1 x Crimping Tool

1 x DT Wedge Removal Tool

Insulated Terminal and Connector Kit 1025 Piece

This professional assortment containing 1025 HELLA Connectors / Terminals (incl. Ratchet Crimping Tool 8273) is designed to meet the requirements of the mining industry. Includes a quantity of 20 complete packs.

Insulated Terminal and Connector Kit – 1025 Piece 8284

Contents:	Quantity
Female blade terminal	100
Female blade terminal	100
Female blade terminal	50
Fully Insulated female blade terminal	50
Female blade terminal	50
Male blade terminal	50
Male blade terminal	50
Male bullet connector	50
Male bullet connector	50
Male bullet connector	50
Female bullet connector	50
Female bullet connector	50
Cable connector	50
Cable connector	50
Eye terminal	50
Eye terminal	50
Eye terminal	50
Eye terminal	25
Eye terminal	25
Eye terminal	25

Crimp Terminals

Female Blade Terminals			
Part No.	Qty	Size	Cable Conductor Size (Diameter or Area)
8500	100	6.3mm	2.5 to 3mm cable 0.75 to 1.13mm² cable
8501	100	6.3mm	4mm cable. 1.84mm² cable
8502	50	6.3mm	5 To 6mm cable 2.9 To 4.59mm² cable
8503	50	9.5mm	5 To 6mm cable 2.9 To 4.59mm² cable
Fully Insulated Female Blade Terminals			
8504	100	6.3mm	2.5 To 3mm cable 0.75 To 1.13mm² cable
8505	100	6.3mm	4mm cable. 1.84mm² cable
2-Way Male and Female Blade Terminals			
8510	100	6.3mm	2.5 To 3mm cable 0.75 To 1.13mm² cable
8511	100	6.3mm	4mm cable. 1.84mm² cable
Male Blade Terminals			
8513	100	6.3mm	2.5 To 3mm cable 0.75 To 1.13mm² cable
8514	100	6.3mm	4mm cable. 1.84mm² cable
8515	100	6.3mm	5 To 6mm cable 2.9 To 4.59mm² cable
Male Bullet Connector			
8520	100	-	2.5 To 3mm cable 0.75 To 1.13mm² cable
8521	100	-	4mm cable. 1.84mm² cable
Female Bullet Connector			
8522	100	-	2.5 to 3mm cable 0.75 to 1.13mm² cable
8523	100	-	4mm cable 1.84mm² cable
Cable Connector			
8530	100	-	2.5 to 3mm cable 0.75 to 1.13mm² cable
8531	100	-	4mm cable 1.84mm² cable
8532	100	-	5 to 6mm cable 2.9 to 4.59mm² cable
Eye Terminals			
8541	100	5mm	2.5 to 3mm cable 0.75 to 1.13mm² cable
8543	100	5mm	4mm cable. 1.84mm² cable
8544	100	6.3mm	4mm cable. 1.84mm² cable
8546	50	6.3mm	5 to 6mm cable 2.9 to 4.59mm² cable
8547	50	8.4mm	5 to 6mm cable 2.9 to 4.59mm² cable
8548	50	9.5mm	5 to 6mm cable 2.9 to 4.59mm² cable
Crimping Tool			
8273	1	Crimps for 2.5 - 6mm dia. cable	Adjustable ratchet mechanism and spring release ensures a perfect crimp every time for insulated terminals.

8500   8501   8502

8503   8504   8505

8510   8511   8513

8514   8515   8520

8521   8522   8523

8530   8531   8532

8541   8543   8544

8546   8547   8548

8273

CONSTRUCTION AND MEANING OF THE IP (INGRESS PROTECTION) CODE

The specification of a degree of protection for protection against access and foreign object includes all lower degrees of protection.

The degrees of protection 1 to 6K for protection against water include all the lower degrees of protection.

Due to different physical affects, this does not automatically have to apply to water protection grades 7, 8 and 9K.
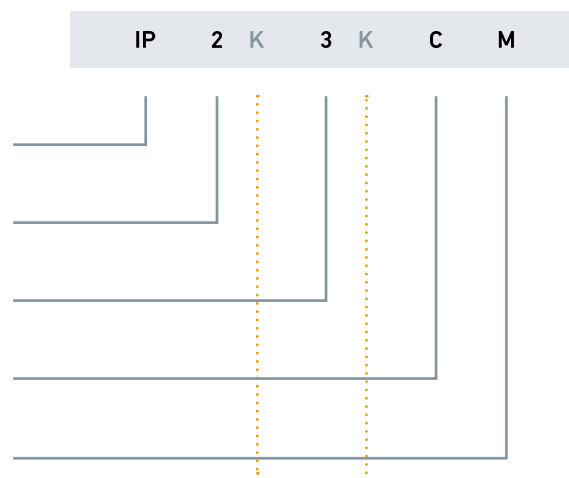
	IP	2	K	3	K	C	M

Code letters
(Ingress Protection)

First characteristic numeral
(Numerals 0 to 6 or letter X)

Second characteristic numeral
(Numerals 0 to 8 or letter X)

Additional letter (optional)
(Letters A, B, C, D)

Supplementary letter (optional)
(Letters M, S)
(Letter K)

Element	Numeral/letter	Meaning for the protection of electrical equipment	Meaning for the protection of persons
First characteristic numeral/supplementary letter		Against the ingress of solid foreign objects (including dust):	Against access to hazardous parts (unless described by extra letters):
	0	Not protected	Not protected
	1	With Ø ≥ 50 mm	With back of hand
	2	With Ø ≥ 12.5 mm	With finger
	3	With Ø ≥ 2.5 mm	With tool
	4	With Ø ≥ 1 mm	With wire
	5K	Dust-protected	With wire
	6K	Dust-tight	With wire
Second characteristic numeral/supplementary letter		Against the ingress of water:	
	0	Not protected	
	1	Vertical dripping	
	2	Dripping (inclined 15°)	
	3	Spraying	
	4	Splashing	
	4K	Same with increased pressure	
	5	Jetting	
	6	Powerful jetting	
	6K	Same at increased pressure	
	7	Temporary immersion	
	8	Continuous immersion	
	9K	High-pressure/steam jet cleaning	
Additional letter (optional)			Against access to hazardous parts (unless described by first characteristic numeral):
	A		With back of hand
	B		With finger
	C		With tool
	D		With wire
Supplementary letter (optional)		Meaning for the protection of electrical equipment:	
	M	Movement of moving parts during water test	
	S	Standstill of moving parts during water test	
	K	Specifically for the electrical equipment in road vehicles	

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