



Technology with Vision

HELLA NEW ZEALAND
CATALOGUE V16

50 Years Proudly
Manufacturing
in New Zealand

Transport Lighting, Safety Lighting
& Accessories



WELCOME

to the HELLA New Zealand Catalogue

Your comprehensive guide to world leading automotive and commercial transport lighting. When you select a HELLA product, the confidence of certified safety, international approvals and engineered reliability is guaranteed.

Since the launch of our first LED lamps over thirty years ago, HELLA design and manufacturing excellence continues to set benchmarks for the road transport industry thanks to an unwavering Fit and Forget design philosophy.

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FORVIA



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HELLA IS A GLOBAL BUSINESS UNDER THE FORVIA BRAND



HELLA GmbH & Co. KGaA was founded in Lippstadt, Germany in 1899 to develop and manufacture lighting and electronic components for the automotive industry.

Today HELLA is a listed subsidiary of Faurecia. Together the two multinational businesses operate under the umbrella brand of FORVIA. With more than 150,000 employees at over 300 locations, FORVIA is the world's seventh largest automotive supplier.

Within the group, HELLA stands for high-performance lighting technology and automotive electronics. At the same time the company provides a broad range of equipment for garages and workshops, plus product solutions for aftermarket channels and specialist vehicle manufacturers.



The world's 7th largest OEM supplier to leading vehicle manufacturers

FORVIA is a trusted supplier and development partner to manufacturers of passenger cars, commercial vehicles and special purpose vehicles.



Volkswagen, Audi, BMW
Mercedes Benz, Aston Martin
Porsche, Tesla



Iveco, Volvo, Kenworth
Scania, Daimler



Caterpillar, Komatsu
John Deere, Manitou



Iveco, Man
Scania

HELLA HAS BEEN PROUDLY MANUFACTURING IN NEW ZEALAND FOR ALMOST 50 YEARS

For almost 50 years, HELLA New Zealand has developed, manufactured and distributed class leading product for the global commercial transport, automotive and marine industries.

The New Zealand company spans comprehensive design and manufacturing capabilities from facilities located in Auckland and Waihi. Dedicated in-house product, electronic and optical design engineers utilise cutting edge materials to develop innovative, ultra-reliable and energy efficient products using the latest LED (Light Emitting Diode) technology.

The current Auckland site has been occupied since 1980 and covers some 7500m² of state of the art R&D, injection moulding, assembly, testing and logistics. The Waihi electronics plant, purpose built in 2007, boasts the latest automated assembly systems that place 70,000 LEDs daily onto circuit boards.

In 2004 HELLA New Zealand became the global headquarters for Hella marine further strengthening HELLA's presence in New Zealand and into the world's marine export markets.



1973 East Tamaki, Auckland

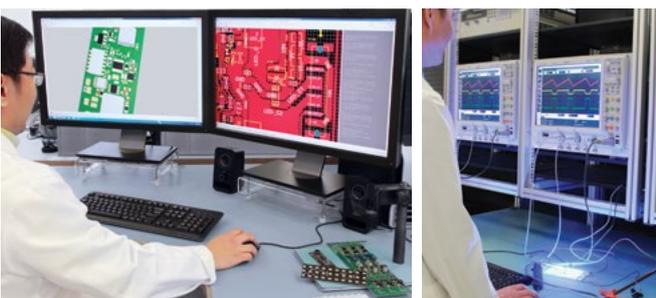


1980 Pakuranga, Auckland



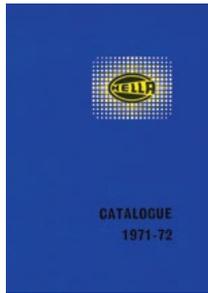
TESTED PROVEN TRUSTED

HELLA's comprehensive in-house design and manufacturing capabilities.



CELEBRATING ALMOST 50 YEARS OF MARKETING WORLD LEADING PRODUCTS

HELLA has earned an enviable reputation for marketing and sales support excellence.



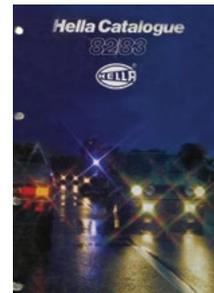
1971/72



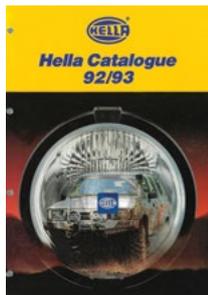
1975/76



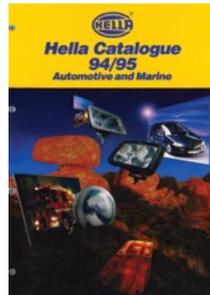
1977/78



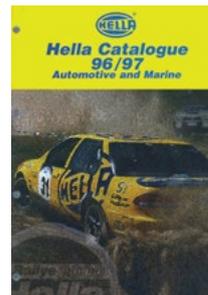
1982/83



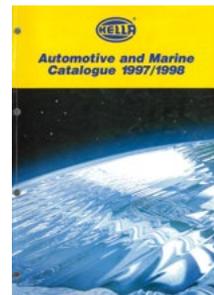
1992/93



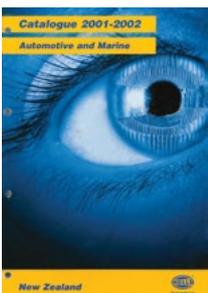
1994/95



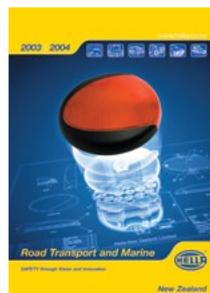
1996/97



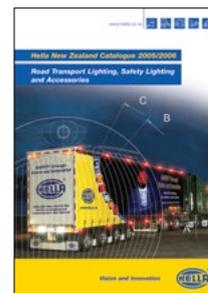
1997/98



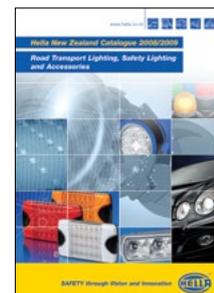
2001/2002



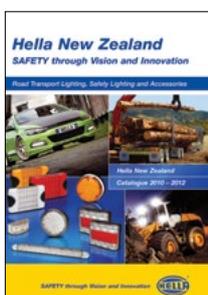
2003/2004



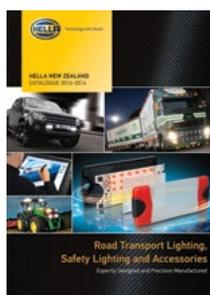
2005/2006



2008/2009



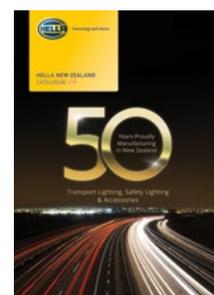
2010/2012



2014/2016



2019/2022



2022



HELLA New Zealand Warranty

Standing Behind Our Product

The "HELLA" trademark shall be synonymous with best in class product and service excellence. When you purchase a HELLA product, you have the complete peace of mind knowing that your product is covered by HELLA's Comprehensive Warranty covering faults in materials, components or workmanship.

- **All DuraLED® branded automotive LED based lighting products supplied by HELLA New Zealand carry a Lifetime* Warranty.**
- **All other HELLA branded LED based automotive lighting products carry a 5 Year Warranty unless otherwise specified.**
- **Micro Light Bars MLB Series 3 Year Warranty**
- **Inspection lamps 3 Year Warranty**
- **All other products carry a 1 Year Warranty**

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

The majority of the LED products in this catalogue are designed and manufactured in New Zealand. Since HELLA New Zealand began designing LED transport lighting in 1990 a no compromise Fit and Forget by Design philosophy was applied. This philosophy together with on-going research and adoption of new technology ensures HELLA continues to set the bench mark for safety, durability and reliability.

In the unlikely event that you should experience a confirmed warranty related problem with a HELLA product, our commitment to your satisfaction ensures that HELLA will, at our discretion, either repair or replace the product or refund the purchase price.

Warranty services may be obtained by returning the product within the warranty period to the business where the product was originally purchased.

This warranty is in addition to and does not preclude any other rights or remedies available to the consumer under the Consumer Guarantees Act.

This warranty does not cover:

Claim/s as a result of normal wear and tear, any modifications, alterations, non-compliance of assembly, service and operating instructions and/or any unfit or improper use.



SUPERIOR MATERIAL CHOICE

QUALITY ASSURANCE

HELLA products are manufactured using high quality, corrosion resistant materials that have been tested and proven to be ultra durable in extreme environments.



Grilamid® - Superior Lens Material

- Toughness against impact
- Resistant to chemical damage from diesel/petrol and washing fluids
- UV resistance from harsh sunlight
- Will not fade or embrittle

Superior Lens and Optic Materials

The majority of HELLA DuraLED® and EuroLED® lamps are produced using a specially formulated enhanced high impact acrylic, that has superior resistance to most commonly used wash and cleaning liquids.

HELLA recommends hermetically sealed marker and signal lamps for all commercial transport applications to provide an ultra long term and environmentally friendly lighting solution.

In 2009 HELLA took the design and development of ultra durable lighting solutions to a new level by specifying the Swiss made high-tech material Grilamid® for selected applications.



Grilamid® is an optical grade Polyamide which offers an unbeatable combination of advantages. Grilamid® has become the specified material of choice for many of HELLA's valued commercial customers and end users.

Long Term Transparency

Grilamid® will not lose its lustre or embrittle over time but will remain clear, transparent and impact tough for the life of the product. Grilamid® retains its superior optical performance without discolouration.

Cleaning Products

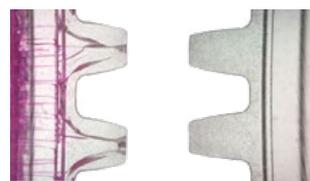
Grilamid® is highly resistant to chemicals and sterilisation equipment commonly used in the transport industry.

Grilamid® Retains its Toughness

LED truck and trailer lamps are frequently exposed to mechanical impacts by stones, tree branches and general shocks. Uncoated Polycarbonate will lose its impact resistance over time.

Tests prove and market feedback confirms the superior strength and toughness of Grilamid® is not compromised even through the prolonged effects of weathering and UV exposure.

Superior Strength and Toughness



Stress cracked PC.

Grilamid® subjected to the same conditions.

UV Resistance



New Zealand and Australia are exposed to some of the highest and harshest UV radiation in the world. Most consumers will have experienced products made from plastic materials that deteriorate, fade and often become brittle very quickly when exposed to the sun.

Most of the LED lighting equipment we supply is likely to be continually exposed to this harsh environment. HELLA New Zealand only manufactures products from materials which are highly resistant to UV deterioration.

HELLA New Zealand LED lamps are designed to withstand harsh environmental conditions and will tolerate long term exposure to high UV levels without fading or embrittlement.

Easy Refurbishment of Acrylic and Grilamid® Lenses

HELLA LED lamps manufactured with enhanced impact acrylic and Grilamid® are a truly long-term investment.

Both these materials can be refurbished to near new condition by polishing out fine scratches and road grime.

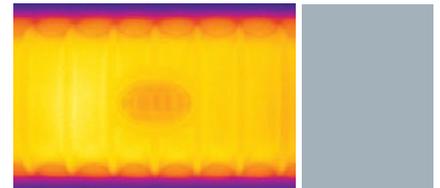


As illustrated using a DuraLED® lamp with many years of active high mileage road use can be refurbished to pristine near new condition.

Thermally Conductive Polymer

A lamp housing made from thermally conductive polymer works much the same as a metal housing. The innovative ceramic based polymer transfers the heat generated by the LEDs and drive electronics to the outside of the lamp body, thereby lowering the internal thermal stress on the components. This in turn ensures a long service life with minimal degradation of the LEDs.

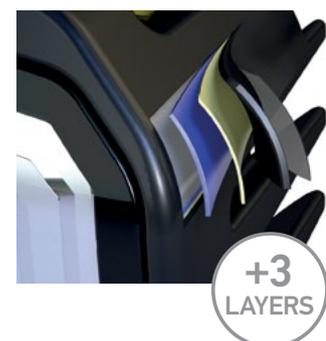
The replacement of metal based housing heat-sinks with thermally conductive polymer means complete corrosion resistance. This is especially important in demanding environmental conditions where lights are constantly exposed to the elements and are sometimes temporarily submerged.



Coating System Technology

HELLA have developed superior coating systems for the latest heavy duty aluminium housings. CoroSafe and NanoSafe technology combine a series of sophisticated coating methods that ensure a high level of corrosion resistance and improved protection against impact. A non-stick surface coating makes for easy cleaning.

For more information about NanoSafe refer to page 136.



ELECTROMAGNETIC INTERFERENCE (EMI)

HELLA LED lamps are electronic devices. The electrical circuits contain components that have been optimised to suppress possible interference, both emission as well as susceptibility.

Electromagnetic interference (EMI) is something you should know about. If you're not familiar with "EMI," the term refers to a disturbance that affects an electrical circuit. If you've ever experienced reception issues with your AM/FM radio when your cell phone rings (or vice versa), that's a perfect example of a problem caused by EMI.



Reception issues with your AM/FM radio caused by EMI.

Lights can both cause and be the victim of EMI issues in your vehicle. For this reason, it is important to have a basic understanding of EMI and look for lights that have been adequately tested.

There are five main types of EMI that you should be aware of:

- Radiated Emissions – Electromagnetic noise emitted by a light through the air that can interfere with other electronics (e.g. Cell phones, radios, etc.).
- Conducted Emissions – Electromagnetic noise conducted down a power line in a vehicle which can interfere with other electronic components on the vehicle.
- Radiated Immunity – The tolerance of a light to inbound electromagnetic noise in the atmosphere. Any broadcast signal (cell phone, radio tower, non-compliant electronics, etc.) can interfere with a light if it is not properly designed.
- Conducted Immunity – The tolerance of a light to inbound electromagnetic noise conducted on vehicle power lines.
- Electrostatic Discharge – This phenomenon can damage any electrical component – lights included.

Car manufacturers specify the level or standard that they want to have their products exceed, as they do not wish for individual components to affect each other once they are combined in a vehicle. An example could be the alternator noise coming through the radio.

RCM New Zealand Legislation

HELLA lighting products are designed and tested to reduce the possible risk of electromagnetic interference, both emissions as well as susceptibility, to limits defined in international standards and regulations.



As prescribed by New Zealand legislation, certain electronic products sold in New Zealand must be labelled with the RCM mark.

HELLA products are designed, tested and labelled to meet the requirements of this legislation.

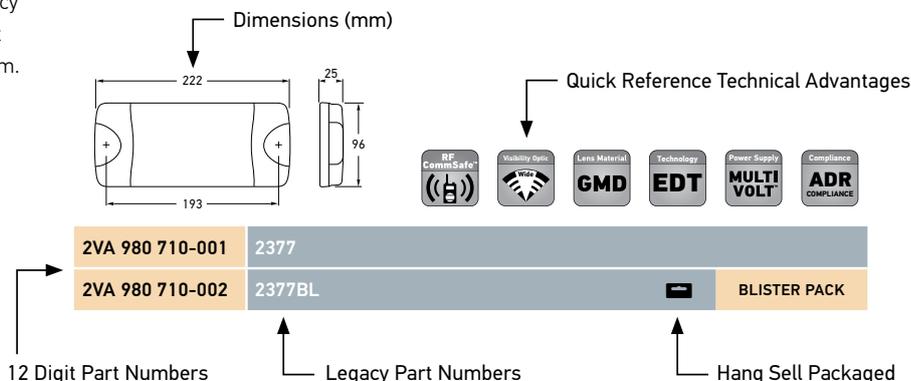
Lamps marketed as RFCommSafe™ are designed to go well beyond the requirements of these international standards and regulations.

Refer to page 123 for more information about RFCommSafe™ technology.

HELLA PART NUMBERS EXPLAINED

HELLA New Zealand is transitioning from legacy part numbers to 12 digit part numbers to meet the HELLA international part numbering system.

Legacy part numbers will continue to be marketed and accepted for electronic and manual ordering until the release of the next catalogue.



QUICK REFERENCE TECHNICAL ADVANTAGES



DuraLED® Lifetime Warranty
HELLA New Zealand's industry leading guarantee for quality and reliability. Refer to page 15.



ADR Compliant
Products displaying this symbol comply with Australian Design Rule, or ADR requirements.



ECE Compliant
Products type approved according to ECE regulations.



Multivolt™
Can be connected to either 12 or 24 volt DC electrical systems.



RFCommSafe™
Lamps marked with RFCommSafe™ are designed to go well beyond the requirements of international EMC standards. Refer to page 123.



UV Resistant
Designed to withstand exposure to severe ultraviolet light without fading or embrittlement. Refer to page 7.



Corrosion Proof
Non-metal housing for the ultimate in longevity under salt water conditions.



Grilamid® Lens Material
High performance clear Polyamide for extreme impact, UV, chemical and stress resistance. Refer to page 6.



Enhanced Definition Technology (EDT)
To further enhance recognition of a stop lamp, an increase in illuminated area (compared to the rear position lamp) is combined with an increase in intensity. As a result the illuminated area gets larger and brighter on an EDT lamp for increased safety and awareness.



RCM Compliant
Regulatory Compliance Mark for sales in Australia and New Zealand. Refer to page 8.



Ultra Wide Visibility Optics
HELLA LED signal lamps, incorporating Ultra-Wide Visibility Optics, far exceed the minimum legal brightness requirement beyond the +/- 10 degree horizontal angle. This provides a significantly enhanced stop and turn signal to the driver of the following vehicle.



HELLA Compatibility Solution (HCS)
HCS technology for safe and seamless conversion between bulb and LED direction indicators. Refer to page 16.



Stainless Steel Bracket
High grade Stainless Steel bracket for confidence in harsh environments.



Heavy Duty Mount
Supplied with heavy duty mounting bracket to withstand extreme vibration.



Bulb Included
Quality bulb included.



Marker and Signal Lamps

“HELLA’s fit and forget philosophy allows us to have peace of mind that using a high quality and reliable product will avoid any costly downtime while our vehicles are on the road.”

Jake Lambert, Manager, APL Direct Ltd



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Marker and Signal Lamps

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LED SINGLE FUNCTION LAMPS



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LED MARKER LAMPS



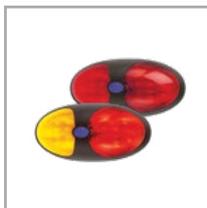
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LED MARKER LAMPS



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BULB LAMPS



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REFLECTORS



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ACCESSORIES



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GRILAMID® LENS

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

CONCEALED MOUNTING

MOUNTING BUSH

Easy to mount on uneven surfaces.

REFLECTOR

Inbuilt retro reflector beneath the outer lens.

CABLE

Glue bath cable entry
IP 6K7, IP 6K9K.

LEDS

High quality LEDs
& the latest electronic
technology.

DURALED® BUILT TO LAST





DURALED®

LIFETIME WARRANTY

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

The DuraLED® range has been specifically engineered by HELLA using proven design principles, precision manufacturing, robust quality systems and a selection of ultra-durable materials and components to ensure an ultra-long operating life.

HELLA's relentless pursuit to create a truly Fit and Forget range of lighting solutions has led to the creation of the DuraLED® range which represents the pinnacle of our no compromise philosophy and commitment to long-term durability and road safety.

After over 20 years of strenuous testing, continuous improvement and proven real world reliability HELLA is proud to stand behind the DuraLED® range with an industry leading Lifetime Warranty.

Whenever you see this DuraLED® logo you will have the confidence to install products that are designed and warranted to last the economic life of the vehicle they were first installed on.



HELLA COMPATIBILITY SOLUTION (HCS)

HELLA HCS lamps, electronic control and flasher units are designed to the latest ISO International Standard to provide compatibility with commercial vehicle indicator failure systems.



Such pure resistive load solutions can be problematic for the following reasons:

- They mask the possible failure of the actual LED signal lamp itself.
- In many cases such pure resistive solutions do not function as they provide a linear time/current response which is significantly different to the time/current response of a bulb filament when it heats up, as in the initial heat-up period the bulbs consume significantly more power than the rated 21 Watt.
- Additional parallel resistors consume a significant amount of energy and thus negate the lower power advantage that LED lamps offer.



Vehicles driven on public roads require the operation of direction indicator lamps to be monitored and a fault instantly signalled

to the driver. Direction indicator lamps are an important road safety feature, signalling the direction change of the vehicle. Failure to signal or failure to recognise a direction indicator signal poses a significant risk of causing an accident.

LED direction indicator lamps offer a reliable Fit and Forget solution and have become the choice for cost conscious transport operators. LED lamps with their low power consumption and Multivolt™ features, are often a challenge

for existing lamp failure detection systems on modern trucks and buses.

Transport fleets often feature a mix of trailers equipped with bulb based lamps as well as trailers with full LED based lighting solutions. For the efficient operation of the fleet, each of these trailers should be compatible with the indicator failure detection systems of any of the trucks in the fleet, both now and in the future.

Some manufacturers recommend fitting additional resistive loads in parallel to the LED lamps, to simulate the 21 watts consumed by a traditional bulb lamp.

LED lamps marked with the HCS symbol feature patented indicator failure control technology which allows seamless communication with HELLA HCS control flasher units, or modern European trucks with body controllers compliant with the ISO 13207-1 standard.

International Organisation for Standardisation

The International Organisation for Standardisation (ISO) is a network of national standards bodies working together to develop International Standards with the common goal of making international trade and industry more effective and efficient. The standards operate by global consensus, with many governments adopting the standards into their legislation.



“HELLA New Zealand has been instrumental in the development of the HELLA Compatibility System (HCS)”

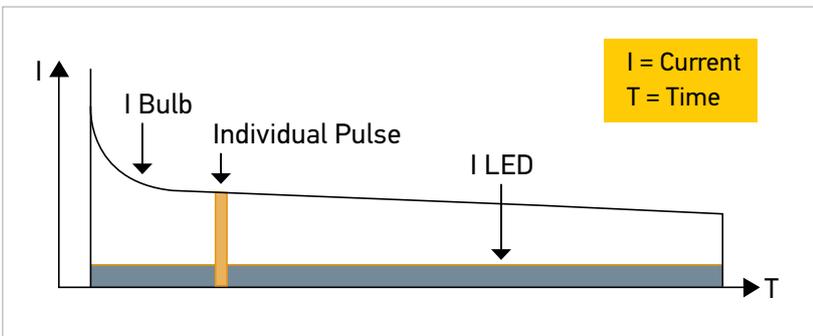
ISO 13207-1 Standard

ISO 13207-1 specifies a precisely timed pulse for a low power LED lamp, which momentarily mimics the power consumption of a conventional incandescent bulb. This pulse is suppressed when the LED direction indicator diagnoses itself as faulty. An ISO 13207-1 compatible flasher or vehicle body controller interprets the pulse suppression and alerts the driver to a faulty lamp or faulty wiring. Body Control Modules or HCS flasher units together with LED lamps designed to ISO 13207-1 maintain the benefit of low power LED lamps, as opposed to a parallel resistor which increases the power consumption to that of a 21 watt bulb.

HELLA New Zealand has been instrumental in laying the groundwork for the development of the HELLA Compatibility Solution (HCS), which became the blueprint for the new ISO 13207-1 standard. HELLA HCS lamps are fully compliant with ISO 13207-1.

ISO 13207-1 has been agreed to by European truck manufacturers and will be incorporated into the vehicle monitoring electronics of European trucks. Astute transport fleet operators are already future-proofing their trailers by specifying HELLA HCS Fit and Forget LED lighting solutions which will be plug-and-play with the 24 volt European trucks of tomorrow.

HELLA lamps which incorporate HCS readily comply with ISO 13207-1.



The HCS innovation generates a pulse that simulates the current draw equivalent to an incandescent bulb.

HELLA HCS Lamps

HELLA products throughout this catalogue displaying the HCS logo incorporate HELLA Compatibility Solutions technology.

2VP 980 980-001

2BA 959 822-641 2SD 980 613-201
2SD 980 602-201

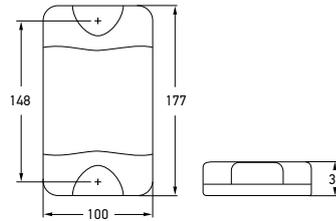
2VP 980 761-821

2BA 980 607-011 2BA 959 041-511
2BA 980 607-511 2BR 980 761-061

A selection of HCS products.

DuraLED® Stop/Rear Position Lamp with Night Light

DuraLED® stop, rear position lamp featuring Enhanced Definition Technology (EDT) for increased safety and awareness. Night light function allows illumination of the rear position lamp independently from the remaining marker lamps on the vehicle. Features HELLA Ultra Wide Visibility Optics for significantly improved side visibility.



2SB 959 060-251	2330V
Mounting	Surface mount with mounting bushes supplied. Suitable for vertical mounting.
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.
Power Consumption	Stop: 6W Rear position: 2.5W Night: 2.5W
Protection	Reverse polarity and 5000 watt Transient Voltage Suppressor (TVS) IP 6K6 (Protection against dust and high-pressure water jets) IP 6K7 (Protection against dust and temporary water immersion)
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.
Compliance	ADR 49/00 E24 5850 ECE R7/02

See page 62 for DuraLED® accessories.

DuraLED® Rear Direction Indicator Lamp

DuraLED® rear direction indicator lamp for trucks, buses, caravans and trailers. Features HELLA Ultra Wide Visibility Optics for significantly improved side visibility.



2BA 959 070-251	2151V	
2BA 980 607-511	2151VCS	HCS TECHNOLOGY
Mounting	Surface mount with mounting bushes supplied. Suitable for vertical mounting.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	2BA 959 070-251 6W	2BA 959 070-511 4W
Protection	Reverse polarity and 5000 watt Transient Voltage Suppressor (TVS) IP 6K6 (Protection against dust and high-pressure water jets) IP 6K7 (Protection against dust and temporary water immersion)	
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.	
Compliance	2BA 959 070-251: ADR 6/00: Cat 2a	2BA 980 607-511: E24 5850 ECE R6/01 ISO 13207-1

See page 16 for further information on HCS Technology and ISO 13207-1.

DuraLED® Reversing Lamp

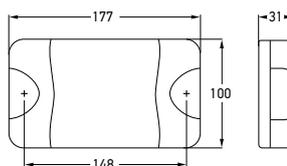
DuraLED® reversing lamp for trucks, buses, caravans and trailers.



2ZR 959 070-551	1430V
Mounting	Surface mount with mounting bushes supplied. Suitable for vertical mounting.
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.
Power Consumption	4W
Protection	Reverse polarity and 5000 watt Transient Voltage Suppressor (TVS) IP 6K6 (Protection against dust and high-pressure water jets) IP 6K7 (Protection against dust and temporary water immersion)
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.
Compliance	ADR 1/00 E24 5850 ECE R23/00

Reversing lamps are not designed for continuous operation.

MARKER AND SIGNAL LAMPS



2SB 959 060-351	2330H	
2SB 959 060-002	2330BL	
2SB 959 060-357	2330HBULK	PACK OF 4

Mounting	Surface mount with mounting bushes supplied. Suitable for horizontal mounting.		
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.		
Power Consumption	Stop: 6W	Rear position: 2.5W	Night: 2.5W
Protection	Reverse polarity and 5000 watt Transient Voltage Suppressor (TVS) IP 6K6 (Protection against dust and high-pressure water jets) IP 6K7 (Protection against dust and temporary water immersion)		
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable. Super seal versions are pre-wired with 250mm of sheathed multi-core cable.		
Compliance	ADR 49/00	E24 5850	ECE R7/02

See page 62 for DuraLED® accessories.

DuraLED® Stop/Rear Position Lamp with Night Light

DuraLED® stop, rear position lamp featuring Enhanced Definition Technology (EDT) for increased safety and awareness. Night light function allows illumination of the rear position lamp independently from the remaining marker lamps on the vehicle. Features HELLA Ultra Wide Visibility Optics for significantly improved side visibility.



2SB 959 060-002



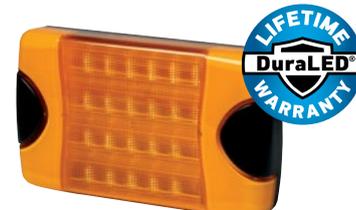
2BA 959 070-351	2151H	
2BA 959 070-012	2151BL	
2BA 959 070-357	2151HBULK	PACK OF 4
2BA 980 607-011	2151HCS	HCS TECHNOLOGY

Power Consumption	2BA 959 070-351, 2BA 959 070-352, 2BA 959 070-357	6W
	2BA 980 607-011	4W
Compliance	2BA 959 070-351, 2BA 959 070-352, 2BA 959 070-357	ADR 6/00: Cat 2a
	2BA 980 607-011:	E24 5850 ECE R6/01 ISO 13207-1

Other specifications as per 2SB 959 060-351. See page 16 for further information on HCS Technology and ISO 13207-1.

DuraLED® Rear Direction Indicator Lamp

DuraLED® rear direction indicator lamp for trucks, buses, caravans and trailers. Features HELLA Ultra Wide Visibility Optics for significantly improved side visibility.



2BA 959 070-012



2ZR 959 070-501	1430H	
Power Consumption	4W	
Compliance	ADR 1/00	E24 5850 ECE R23/00

Other specifications as per 2SB 959 060-351. Reversing lamps are not designed for continuous operation.

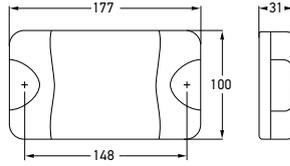
DuraLED® Reversing Lamp

DuraLED® reversing lamp for trucks, buses, caravans and trailers.



DuraLED® Stop/Rear Position Lamp with Night Light

DuraLED® stop, rear position lamp featuring Enhanced Definition Technology (EDT) for increased safety and awareness. Night light function allows illumination of the rear position lamp independently from the remaining marker lamps on the vehicle.



2SB 959 060-001	2330	
2TA 959 060-017	2330BULK	PACK OF 4
Mounting	Surface mount with mounting bushes supplied. Suitable for horizontal or vertical mounting.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	Stop: 6W Rear position: 1W Night: 1W	
Protection	Reverse polarity and 5000 watt Transient Voltage Suppressor (TVS) IP 6K6 (Protection against dust and high-pressure water jets) IP 6K7 (Protection against dust and temporary water immersion)	
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.	
Compliance	ADR 49/00	

See page 62 for DuraLED® accessories.

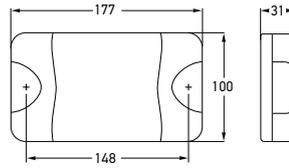
DuraLED® Rear Direction Indicator Lamp

DuraLED® rear direction indicator lamp for trucks, buses, caravans and trailers.



2BA 959 070-001	2151	
2BA 959 070-007	2151BULK	PACK OF 4
Mounting	Surface mount with mounting bushes supplied. Suitable for horizontal or vertical mounting.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	9W	
Protection	Reverse polarity and 5000 watt Transient Voltage Suppressor (TVS) IP 6K6 (Protection against dust and high-pressure water jets) IP 6K7 (Protection against dust and temporary water immersion)	
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.	
Compliance	ADR 6/00: Cat 2a	

MARKER AND SIGNAL LAMPS



2SB 959 060-207	2331BULK	PACK OF 4
Mounting	Surface mount with mounting bushes supplied. Suitable for horizontal or vertical mounting.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	Stop: 6W Rear position: 1W Night: 1W	
Protection	Reverse polarity and 5000 watt Transient Voltage Suppressor (TVS) IP 6K6 (Protection against dust and high-pressure water jets) IP 6K7 (Protection against dust and temporary water immersion)	
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.	
Lens Material	Polycarbonate.	
Compliance	ADR 49/00	
See page 62 for DuraLED® accessories.		

DuraLED® Stop/Rear Position Lamp with Night Light

DuraLED® stop, rear position lamp made from polycarbonate, for off-road vehicles such as logging trucks. Night light function allows illumination of the rear position lamp independently from the remaining marker lamps on the vehicle, resulting in low power consumption.



2BA 959 070-217	2152BULK	PACK OF 4
2BA 959 070-371	2152HCS	HCS TECHNOLOGY
Mounting	Surface mount with mounting bushes supplied. Suitable for horizontal or vertical mounting.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	9W	
Protection	Reverse polarity and 5000 watt Transient Voltage Suppressor (TVS) IP 6K6 (Protection against dust and high-pressure water jets) IP 6K7 (Protection against dust and temporary water immersion)	
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.	
Lens Material	Polycarbonate.	
Compliance	ADR 6/00: Cat 2a	

DuraLED® Rear Direction Indicator Lamp

DuraLED® rear direction indicator lamp made from polycarbonate for off-road vehicles such as logging trucks.



Polycarbonate Lenses

Whilst polycarbonate features a higher impact resistance compared to our preferred Enhanced Impact Acrylic, the trade-off for polycarbonate is its lower resistance to a number of commonly used chemicals.

For applications where both extreme impact resistance as well as a high resistance to chemicals is required, we recommend HELLA LED lamps manufactured from Swiss-made Grilamid® Optical Nylon.

DuraLED® Combi-S Stop/Rear Position/Rear Direction Indicator Lamp - Heavy Duty

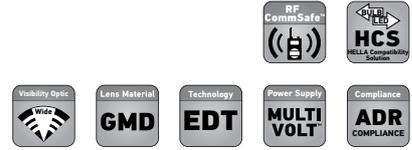
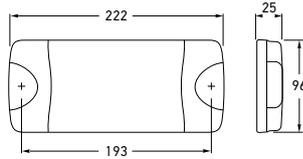
DuraLED® combination lamp featuring Ultra Wide Visibility Optics for significantly improved side visibility and Enhanced Definition Technology (EDT). Suitable for commercial vehicles and boat trailers. Shockproof and fully sealed to withstand water submersion and high-pressure washing. Optic appears clear until illuminated.



2SD 980 613-002



Ultra slim height of only 25mm.



2SD 980 613-001	2378	
2SD 980 613-002	2378BL	BLISTER PACK
2SD 980 613-007	2378BULK	PACK OF 12
2SD 980 613-201	2378CS	HCS TECHNOLOGY
2SD 980 613-031	23786M	6M CABLE
2SD 980 613-037	23786MBULK	6M CABLE PACK OF 12

Mounting	Surface mount with mounting bushes supplied. Suitable for horizontal or vertical mounting.		
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.		
Power Consumption	Stop: Rear direction indicator:	5W 5W	Rear position: 1W
Protection	Reverse polarity and 5000 watt Transient Voltage Suppressor (TVS). IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)		
Cable Length	2SD 980 613-001, 2SD 980 613-002, 2SD 980 613-007, 2SD 980 613-201 Pre-wired with 2.5m of sheathed multi-core cable 2SD 980 613-031, 2SD 980 613-037 Pre-wired with 6m of sheathed multi-core cable		
Lens Material	High impact and chemical resistant Grilamid® lens		
Compliance	ADR 6/00: Cat 2a E24 5883	ADR 49/00 ECE R6/01	ISO 13207-1 (2SD 980 613-201 only) ECE R7/02

See page 62 for DuraLED® accessories. See page 16 for further information on HCS Technology and ISO 13207-1.

COMBI-S LAMP FUNCTIONS

Stop Rear position Rear direction indicator

DuraLED® Combi-S Trailer Lighting Kit

A complete Fit and Forget solution for commercial trailers or boat trailers.

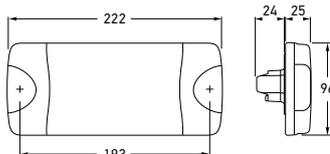


2VB 980 613-801 2378TP

Kit Contents	Each trailer lamp kit contains: 2 x 2SD 980 613-001 DuraLED® Combi-S stop/rear position and rear direction indicator lamp with 6m sheathed multi-core cable. 2 x 8RA 003 326-035 Red retro reflector 1 x 2KA 959 640-341 LED number plate lamp with 5m sheathed multi-core cable. 1 x 8JA 910 032-001 7 pole flat plug
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MARKER AND SIGNAL LAMPS



2SD 980 602-001	2378DT	
2SD 980 602-201	2378DTCS	HCS TECHNOLOGY
Mounting	Surface mount with mounting bushes supplied. Suitable for horizontal or vertical mounting.	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	Stop: 5W Rear position: 1W	Rear direction indicator: 5W Night: 1W
Protection	Reverse polarity and 5000 watt Transient Voltage Suppressor (TVS). IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Accessory	8JA 959 736-801 6 pole DT plug, wedge and 6 contacts.	
Lens Material	High impact and chemical resistant Grilamid® lens	
Compliance	ADR 6/00: Cat 2a E24 5883	ADR 49/00 ECE R6/01 ISO 13207-1 (2SD 980 602-201 only) ECE R7/02

See page 16 for further information on HCS Technology and ISO 13207-1.

DuraLED® Combi-S Stop/Rear Position/Rear Direction Indicator Lamp and Night Light with DT Connector - Heavy Duty

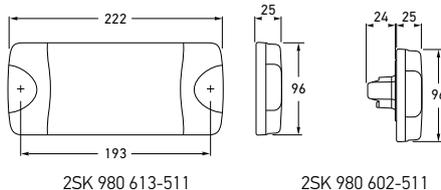
DuraLED® combination lamp featuring Ultra Wide Visibility Optics for significantly improved side visibility and Enhanced Definition Technology (EDT). Night light function allows illumination of the rear position lamp independently from the remaining marker lamps on the vehicle, resulting in low power consumption. Suitable for commercial and boat trailers. Shockproof and fully sealed to withstand water submersion and high-pressure washing. Optic appears clear until illuminated.



8JA 959 736-801
Not included with lamp.



Rear view showing DT connector that allows application of self-adhesive heat shrink.



2SK 980 613-511	238324VCS	HCS TECHNOLOGY
2SK 980 602-511	2383DT24VCS (DT Connector)	HCS TECHNOLOGY
Mounting	Surface mount with mounting bushes supplied. Suitable for horizontal mounting.	
Voltage	24V	
Power Consumption	Stop: 3W Rear position: 1W Rear direction indicator: 3W	Reverse: 3W Night (2SK 980 602-511): 1W
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable (except DT versions).	
Accessory	8JA 959 736-801 6 pole DT plug, wedge and 6 contacts.	
Compliance	E24 5894 ECE R6/01	ISO 13207-1 ECE R7/02 ECE R23/00

Other specifications as per 2SD 980 602-001.

DuraLED® Combi-S Stop/Rear Position/Rear Direction Indicator/ Reversing Lamp and Night Light with DT Connector - Heavy Duty

DuraLED® combination lamp featuring modern clear lens design. Low power consumption and long life equates to economical running costs. Ideal for 24V commercial vehicles. Optic appears clear until illuminated.



Ultra slim height of only 25mm.

COMBINATION LAMP FUNCTIONS



Stop Rear position Rear direction indicator Reverse



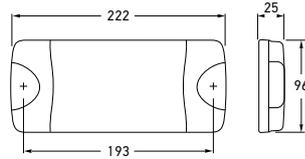
8JA 959 736-801
Not included with lamp.



Rear view showing DT connector that allows application of self-adhesive heat shrink.

DuraLED® Combi-R Stop/Rear Position/Rear Direction Indicator Lamp with Retro Reflector

DuraLED® combination lamp with 34cm² red retro reflector which features Enhanced Definition Technology (EDT). Suitable for light commercial and boat trailers. Shockproof and fully sealed to withstand water submersion and high-pressure washing.



2VA 980 710-002



Ultra slim height of only 25mm.

2VA 980 710-001	2377				
2VA 980 710-002	2377BL				BLISTER PACK
Mounting	Surface mount with mounting bushes supplied. Suitable for horizontal mounting.				
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.				
Power Consumption	Stop:	4W			
	Rear position:	1W			
	Rear direction indicator:	4W			
Protection	Reverse polarity and 5000 watt Transient Voltage Suppressor (TVS). IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)				
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.				
Lens Material	High impact and chemical resistant Grilamid® lens				
Compliance	ADR 47/00 E24 5882	ADR 6/00: Cat 2a ECE R6/01	ADR 49/00 ECE R7/02	ECE R3/02	
See page 62 for DuraLED® accessories.					

COMBI-R LAMP FUNCTIONS



Stop

Rear position

Rear direction indicator

DuraLED® Combi-R Trailer Lighting Kit

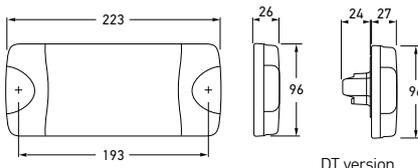
A complete Fit and Forget solution for trailers or caravans.



2VB 980 710-801	2377TP
Kit Contents	Each trailer lamp kit contains: 2 x 2VA 980 710-001 DuraLED® Combi-R stop/rear position and rear direction indicator lamp with retro reflector and 6m sheathed multi-core cable. 1 x 2KA 959 640-341 LED number plate lamp with 5m sheathed multi-core cable. 1 x 8JA 910 032-001 7 pole flat plug



MARKER AND SIGNAL LAMPS



**DuraLED® Combi-SR
Stop/Rear Position/Rear Direction
Indicator/Reversing Lamp
with Retro Reflector**

The all-in-one five function Combi-SR Lamp retains the same mounting footprint while also incorporating a built-in retro reflector, saving both time and money on installation. The all-in-one design makes the Combi-SR the ideal choice for vehicles with limited space to mount a separate reflector.

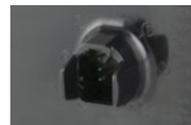


2VP 015 074-001	2380, 2380GMD & 2381 2.5m cable version	
2VP 015 074-002	2380BL 2.5m cable version	BLISTER PACK
2VP 015 074-007	2380BULK 2.5m cable version	PACK OF 12
2VP 015 074-101	2380CS 2.5m cable version	
2VP 015 075-001	2380DT DT version	CARTON PACK
2VP 015 075-101	2380DTCS DT version with HCS Technology	HCS

Mounting	Surface mount with mounting bushes supplied. Suitable for horizontal mounting.
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.
Power Consumption	Stop: 5W Rear position: 1.5W Rear direction indicator: 6W Reverse: 2W Night light: 1.5W (DT version only)
Protection	Reverse polarity and 5000 watt Transient Voltage Suppressor (TVS). IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable (non DT version)
Accessory	8JA 959 736-801 6 pole DT plug, wedge and 6 contacts (DT version)
Compliance	E24 5925 ECE R148/00 ECE R150/00 ECE R10/05 ISO 13207-1
See page 62 for DuraLED® accessories.	



2VP 015 074-002



Rear view showing DT connector that allows application of self-adhesive heat shrink.



8JA 959 736-801
Not included with lamp.

COMBI-SR LAMP FUNCTIONS

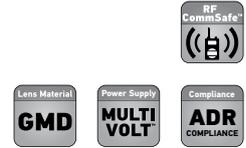
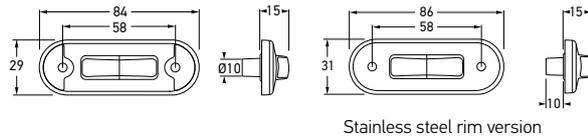


Stop Rear position Rear direction indicator Reverse

The Combi-SR is a direct replacement for the P/N 2380									
Combi-SR Part Number	Slim	Power Supply MULTI VOLT	RF CommSafe	Cable Length (m)	Built-in DT Connector	Lens Material GMD	HELLA Compatibility Solution HCS	Additional Functions	Succession Plan
2VP 015 074-001	✓	✓	✓	2.5	-	✓	-	-	Replaces 2380, 2380GMD & 2381
2VP 015 074-007	✓	✓	✓	2.5	-	✓	-	-	Replaces 2380BULK
2VP 015 075-001	✓	✓	✓	-	✓	✓	-	Night Light	Replaces 2380DT & 2380DTGMD
2VP 015 074-101	✓	✓	✓	2.5	-	✓	✓	-	
2VP 015 075-101	✓	✓	✓	-	✓	✓	✓	Night Light	

DuraLED® Flush Mount Side Marker Lamp

Red/amber flush mount side marker lamp. Featuring a low profile of only 15mm and an ultra durable Grilamid® nylon lens for extreme impact, UV, chemical and stress resistance. Optic appears clear until illuminated. With optional stainless steel rim.

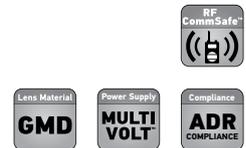
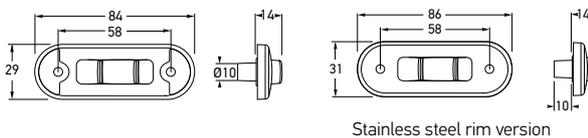


2PS 980 868-001	2083	
2PS 980 868-017	2083BULK (Pack of 16)	
2KA 980 868-021	2083S	POLISHED STAINLESS STEEL RIM
2PS 980 868-037	2083SBULK (Pack of 16)	
Mounting	Flush mount. Suitable for horizontal or vertical mounting.	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	<0.5W	
Protection	Reverse polarity protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Cable Length	Pre-wired with 0.5m of sheathed multi-core cable. Bulk pack pre-wired with 2.5m of sheathed multi-core cable.	
Spare Parts	9HD 980 858-007 9AB 959 685-002	Black screw caps (Pack of 4) Stainless steel rim - Polished
Lens Material	High impact and chemical resistant Grilamid® lens	
Compliance	ADR 45/01	

See pages 62-64 for DuraLED® marker lamp accessories.

DuraLED® Flush Mount Supplementary Side Marker Lamp

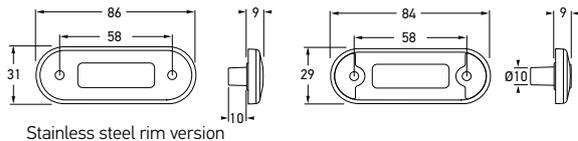
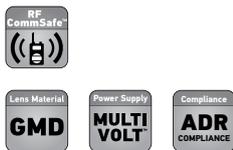
Amber side direction indicator lamps complement HELLA's popular DuraLED® range of flush mount marker lamps for a consistent look to your vehicle. Featuring a low profile of only 14mm and an ultra durable Grilamid® nylon lens for extreme impact, UV, chemical and stress resistance. Optic appears clear until illuminated.



2BM 980 868-301	2086	
2BM 980 868-317	2086BULK (Pack of 16)	
2BM 980 868-321	2086S	POLISHED STAINLESS STEEL RIM
2BM 980 868-337	2086SBULK (Pack of 16)	
Mounting	Suitable for horizontal or vertical mounting.	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	<0.5W	
Protection	Reverse polarity protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Cable Length	Pre-wired with 0.5m of sheathed multi-core cable. Bulk pack pre-wired with 2.5m of sheathed multi-core cable.	
Spare Parts	9HD 980 858-007 9AB 959 685-002	Black screw caps (Pack of 4) Stainless steel rim
Lens Material	High impact and chemical resistant Grilamid® lens	
Compliance	ADR 6/00: Cat 5	

See pages 62-64 for DuraLED® marker lamp accessories.

MARKER AND SIGNAL LAMPS



2PF 980 855-011	2059	
2PF 980 855-037	2059BULK (Pack of 16)	
2PF 980 855-021	2059S	POLISHED STAINLESS STEEL RIM
2PF 980 855-047	2059SBULK (Pack of 16)	
Mounting	Flush mount. Suitable for horizontal or vertical mounting.	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	<0.5W	
Protection	Reverse polarity protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Cable Length	Pre-wired with 0.5m of sheathed multi-core cable. Bulk pack pre-wired with 2.5m of sheathed multi-core cable.	
Spare Parts	9HD 980 858-007 9AB 959 685-002	Black screw caps (Pack of 4) Stainless steel rim - Polished
Lens Material	High impact and chemical resistant Grilamid® lens	
Compliance	ADR 49/00	

See pages 62-64 for DuraLED® marker lamp accessories.

DuraLED® Flush Mount Front Position/End Outline Lamp

White flush mount front position or front end outline LED lamp with optional stainless steel rim. Featuring a low profile ultra durable Grilamid® nylon lens for extreme impact, UV, chemical and stress resistance. Optic appears clear until illuminated.



2PF 980 855-011 2PF 980 855-021



Ultra slim design
Featuring a thickness of just 9mm



2PF 980 855-201	2060	
2PF 980 855- 227	2060BULK (Pack of 16)	
2PF 980 855-211	2060S	POLISHED STAINLESS STEEL RIM
2PF 980 855-237	2060SBULK (Pack of 16)	

Other specifications as per 2PF 980 855-011



2PF 980 855-211

DuraLED® Flush Mount Front End Outline Lamp

Amber flush mount front end outline LED lamp for trailers with optional stainless steel rim. Featuring a low profile ultra durable Grilamid® nylon lens for extreme impact, UV, chemical and stress resistance. Optic appears clear until illuminated.



2XA 980 855-301	2310	
2XA 980 855-327	2310BULK (Pack of 16)	
2PF 980 855-311	2310S	POLISHED STAINLESS STEEL RIM
2XA 980 855-337	2310SBULK (Pack of 16)	

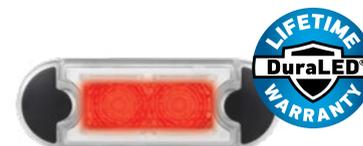
Other specifications as per 2PF 980 855-011



2PF 980 855-311

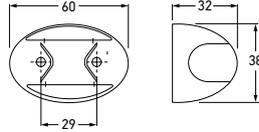
DuraLED® Flush Mount Rear Position/End Outline Lamp

Red flush mount rear position or rear end outline LED lamp with optional stainless steel rim. Featuring a low profile ultra durable Grilamid® nylon lens for extreme impact, UV, chemical and stress resistance. Optic appears clear until illuminated.



DuraLED® Side Marker Lamp

Red/amber side marker LED lamp.
Optic appears clear until illuminated.



2PS 959 660-581 2PS 959 660-691

2PS 959 660-581	2053	
2PS 959 660-502	2053BULK	PACK OF 4
2PS 959 660-691	2053CHROME	CHROME PLATED
Mounting	Surface mount.	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	<1W	
Protection	Reverse polarity protection. IP 6K6 (Protection against dust and high-pressure water jets) IP 6K7 (Protection against dust and temporary water immersion)	
Cable Length	Pre-wired with 0.5m of sheathed multi-core cable. Bulk pack pre-wired with 2.5m of sheathed multi-core cable.	
Spare Part	9BG 910 274-001 Black nylon housing	
Compliance	ADR 45/01	
See pages 62-64 for DuraLED® marker lamp accessories.		

DuraLED® Side Marker Lamp - Grilamid®

Red/amber ultra high impact resistant side marker LED lamp featuring Grilamid® lens and nylon housing. Optic appears clear until illuminated.



2PS 959 660-481	2053GMD	
2PS 959 660-477	2053GMD BULK	PACK OF 4
Mounting	Surface mount.	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	<1W	
Protection	As per 2PS 959 660-581.	
Cable Length	Pre-wired with 0.5m of sheathed multi-core cable. Bulk pack pre-wired with 2.5m of sheathed multi-core cable.	
Spare Part	9BG 910 274-001 Black nylon housing	
Lens Material	High impact and chemical resistant Grilamid® lens	
Compliance	ADR 45/01	

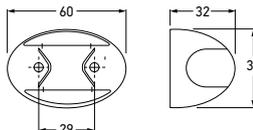
DuraLED® Cab Marker/Supplementary Side Direction Indicator Lamp (Cat. 5)

Amber cab marker or supplementary side indicator LED lamp. Optic appears clear until illuminated.



2BP 959 660-301	2026	
2BP 959 660-357	2026BULK	PACK OF 4
Mounting	Surface mount.	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	<1W	
Protection	As per 2PS 959 660-581.	
Cable Length	Pre-wired with 0.5m of sheathed multi-core cable. Bulk pack pre-wired with 2.5m of sheathed multi-core cable.	
Spare Part	9BG 910 274-001 Black nylon housing	
Compliance	ADR 6/00: Cat 5 ADR 45/01	

MARKER AND SIGNAL LAMPS



2PF 959 570-502	2054	
2PF 959 570-527	2054BULK	PACK OF 4
Mounting	Surface mount. Suitable for horizontal mounting.	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	<1W	
Protection	Reverse polarity protection. IP 6K6 (Protection against dust and high-pressure water jets) IP 6K7 (Protection against dust and temporary water immersion)	
Cable Length	Pre-wired with 0.5m of sheathed multi-core cable. Bulk pack pre-wired with 2.5m of sheathed multi-core cable.	
Spare Part	9BG 910 274-001 Black nylon housing	
Lens Material	High impact and chemical resistant Grilamid® lens	
Compliance	ADR 49/00	

See pages 62-64 for DuraLED® marker lamp accessories.

DuraLED® Front Position/
End Outline Lamp

White ultra high impact resistant front end outline or front position LED lamp featuring Grilamid® lens and nylon housing. Optic appears clear until illuminated.



2PF 959 570-391	2051	
2PF 959 570-347	2051BULK	PACK OF 4
Mounting	Surface mount. Suitable for horizontal mounting.	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	<1W	
Protection	As per 2PF 959 570-502.	
Cable Length	Pre-wired with 0.5m of sheathed multi-core cable. Bulk pack pre-wired with 2.5m of sheathed multi-core cable.	
Spare Part	9BG 910 274-001 Black nylon housing	
Lens Material	High impact and chemical resistant Grilamid® lens	
Compliance	ADR 49/00	

DuraLED® Front End Outline Lamp

Amber ultra high impact resistant front end outline LED lamp for trailers featuring Grilamid® lens and nylon housing. Optic appears clear until illuminated.



2XA 959 560-102	2307	
2XA 959 560-477	2307BULK	PACK OF 4
Mounting	Surface mount. Suitable for horizontal mounting.	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	<1W	
Protection	As per 2PF 959 570-502.	
Cable Length	Pre-wired with 0.5m of sheathed multi-core cable. Bulk pack pre-wired with 2.5m of sheathed multi-core cable.	
Spare Part	9BG 910 274-001 Black nylon housing	
Lens Material	High impact and chemical resistant Grilamid® lens	
Compliance	ADR 49/00	

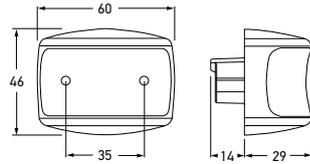
DuraLED® Rear Position/
End Outline Lamp

Red ultra high impact resistant rear end outline or rear position LED lamp featuring Grilamid® lens and nylon housing. Optic appears clear until illuminated.



DuraLED® Heavy Duty Side Marker Lamp with DT Connector - Red/Amber

Heavy duty red/amber LED side marker lamp with DT connector and nylon housing. Featuring ultra durable Grilamid® nylon lens for extreme impact, UV, chemical and stress resistance. Optic appears clear until illuminated.



2PS 980 990-001	2073	
2PS 980 990-007	2073BULK	PACK OF 8
Mounting	Surface mount. Suitable for horizontal mounting.	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	<1W	
Protection	Reverse polarity protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high pressure/steam jet cleaning)	
Spare Parts	8JA 959 736-811 2 pole DT plug, wedge and 2 contacts 8KB 958 757-501 2.0m sheathed cable with DT plug 9BG 980 996-002 Black nylon housing	
Lens Material	High impact and chemical resistant Grilamid® lens	
Compliance	ADR 45/01	



Rear view showing DT connector that allows application of self-adhesive heat shrink.

8JA 959 736-811
Not included with lamp.

DuraLED® Heavy Duty Cab Marker/ Supplementary Side Direction Indicator Lamp with DT Connector

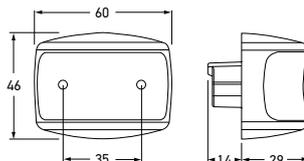
Heavy duty amber LED cab marker or supplementary side direction indicator lamp with DT connector and nylon housing. Featuring ultra durable Grilamid® nylon lens for extreme impact, UV, chemical and stress resistance. Optic appears clear until illuminated.



2BP 980 990-101	2076	
2BP 980 990-107	2076BULK	PACK OF 8
Mounting	Surface mount. Suitable for horizontal mounting.	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	<1W	
Protection	Reverse polarity protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high pressure/steam jet cleaning)	
Spare Parts	8JA 959 736-811 2 pole DT plug, wedge and 2 contacts 8KB 958 757-501 2.0m sheathed cable with DT plug 9BG 980 996-002 Black nylon housing	
Lens Material	High impact and chemical resistant Grilamid® lens	
Compliance	ADR 6/00: Cat 5 ADR 45/01	



MARKER AND SIGNAL LAMPS



2PF 980 990-201	2074	
2PF 980 990-207	2074BULK	PACK OF 8
Mounting	Surface mount. Suitable for horizontal mounting.	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	<1W	
Protection	Reverse polarity protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high pressure/steam jet cleaning)	
Spare Parts	8JA 959 736-811 2 pole DT plug, wedge and 2 contacts 8KB 958 757-501 2.0m sheathed cable with DT plug 9BG 980 996-002 Black nylon housing	
Lens Material	High impact and chemical resistant Grilamid® lens	
Compliance	ADR 49/00	

DuraLED® Heavy Duty Front Position/End Outline Lamp with DT Connector

Heavy duty white front position or end outline LED lamp with DT connector and nylon housing. Featuring ultra durable Grilamid® nylon lens for extreme impact, UV, chemical and stress resistance. Optic appears clear until illuminated.



2PF 980 990-401	2071	
2PF 980 990-407	2071BULK	PACK OF 8
Mounting	Surface mount. Suitable for horizontal mounting.	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	<1W	
Protection	Reverse polarity protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high pressure/steam jet cleaning)	
Spare Parts	As per 2PF 980 990-201	
Lens Material	High impact and chemical resistant Grilamid® lens	
Compliance	ADR 49/00	

DuraLED® Heavy Duty Front End Outline Lamp with DT Connector

Heavy duty amber front end outline LED lamp for trailers with DT connector and nylon housing. Featuring ultra durable Grilamid® nylon lens for extreme impact, UV, chemical and stress resistance. Optic appears clear until illuminated.



2XA 980 990-601	2312	
2XA 980 990-607	2312BULK	PACK OF 8
Mounting	Surface mount. Suitable for horizontal mounting.	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	<1W	
Protection	Reverse polarity protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high pressure/steam jet cleaning)	
Spare Parts	As per 2PF 980 990-201	
Lens Material	High impact and chemical resistant Grilamid® lens	
Compliance	ADR 49/00	

DuraLED® Heavy Duty Rear Position/End Outline Lamp with DT Connector

Heavy duty red rear position or end outline LED lamp with DT connector and nylon housing. Featuring ultra durable Grilamid® nylon lens for extreme impact, UV, chemical and stress resistance. Optic appears clear until illuminated.



MARKER & SIGNAL

DuraLED® Heavy Duty Side Marker Lamp - Red/Amber

Heavy duty red/amber LED side marker lamp with stainless steel housing. Featuring ultra durable Grilamid® nylon lens for extreme impact, UV, chemical and stress resistance. Optic appears clear until illuminated.

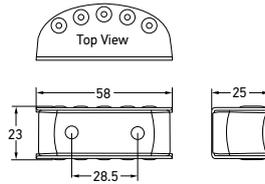


2PS 980 660-001

2PS 980 660-021



2PS 980 660-001



2PS 980 660-001	2058		MATT FINISH
2XS 980 660-018	2058BULK (Pack of 4)		
2PS 980 660-021	2058P		POLISHED FINISH
2XS 980 660-038	2058PBULK (Pack of 4)		
Mounting	Surface mount. Suitable for horizontal mounting.		
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.		
Power Consumption	<1W		
Protection	Reverse polarity protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high pressure/steam jet cleaning)		
Cable Length	Pre-wired with 0.5m of sheathed multi-core cable. Bulk pack pre-wired with 2.5m of sheathed multi-core cable.		
Spare Parts	9BG 980 665-001	Stainless steel housing	
	9BG 980 665-101	Polished stainless steel housing	
Lens Material	High impact and chemical resistant Grilamid® lens		
Compliance	ADR 45/01		
The industrial polishing process utilised on the housings may not always be 100% blemish free.			

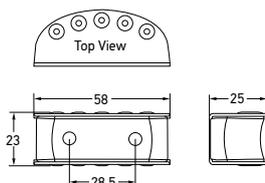
DuraLED® Heavy Duty Cab Marker/ Supplementary Side Direction Indicator Lamp

Heavy duty LED cab marker or supplementary side direction indicator lamp with stainless steel housing. Featuring ultra durable Grilamid® nylon lens for extreme impact, UV, chemical and stress resistance. Optic appears clear until illuminated.



2BP 980 660-101	2027		MATT FINISH
2BP 980 660-118	2027BULK (Pack of 4)		
2BP 980 660-121	2027P		POLISHED FINISH
2BP 980 660-138	2027PBULK (Pack of 4)		
Mounting	Surface mount. Suitable for horizontal mounting.		
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.		
Power Consumption	<1W		
Protection	Reverse polarity protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high pressure/steam jet cleaning)		
Cable Length	Pre-wired with 0.5m of sheathed multi-core cable. Bulk pack pre-wired with 2.5m of sheathed multi-core cable.		
Spare Parts	9BG 980 665-001	Stainless steel housing	
	9BG 980 665-101	Polished stainless steel housing	
Lens Material	High impact and chemical resistant Grilamid® lens		
Compliance	ADR 6/00: Cat 5	ADR 45/01	
The industrial polishing process utilised on the housings may not always be 100% blemish free.			

MARKER AND SIGNAL LAMPS



2PF 980 660-201	2061		MATT FINISH
2PF 980 660-218	2061BULK (Pack of 4)		
2PF 980 660-221	2061P		POLISHED FINISH
2PF 980 660-238	2061PBULK (Pack of 4)		
Mounting	Surface mount. Suitable for horizontal mounting.		
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.		
Power Consumption	<1W		
Protection	Reverse polarity protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high pressure/steam jet cleaning)		
Cable Length	Pre-wired with 0.5m of sheathed multi-core cable. Bulk pack pre-wired with 2.5m of sheathed multi-core cable.		
Spare Parts	9BG 980 665-001	Stainless steel housing	
	9BG 980 665-101	Polished stainless steel housing	
Lens Material	High impact and chemical resistant Grilamid® lens		
Compliance	ADR 49/00		

The industrial polishing process utilised on the housings may not always be 100% blemish free.

DuraLED® Heavy Duty Front Position/End Outline Lamp

Heavy duty white front position/end outline LED lamp with stainless steel housing. Featuring ultra durable Grilamid® nylon lens for extreme impact, UV, chemical and stress resistance. Optic appears clear until illuminated.



2PF 980 660-201



2PF 980 660-301	2062		MATT FINISH
2PF 980 660-318	2062BULK (Pack of 4)		
2PF 980 660-321	2062P		POLISHED FINISH
2PF 980 660-338	2062PBULK (Pack of 4)		

Other specifications as per 2PF 980 660-201.

DuraLED® Heavy Duty Front End Outline Lamp

Heavy duty amber front end outline LED lamp for trailers, with stainless steel housing. Featuring ultra durable Grilamid® nylon lens for extreme impact, UV, chemical and stress resistance. Optic appears clear until illuminated.



2XS 980 660-401	2311		MATT FINISH
2XS 980 660-417	2311BULK (Pack of 4)		
2XS 980 660-421	2311P		POLISHED FINISH
2XS 980 660-437	2311PBULK (Pack of 4)		

Other specifications as per 2PF 980 660-201.

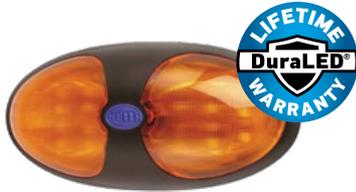
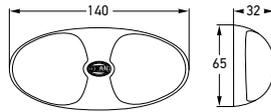
DuraLED® Heavy Duty Rear Position/End Outline Lamp

Heavy duty red rear position/end outline LED lamp with stainless steel housing. Featuring ultra durable Grilamid® nylon lens for extreme impact, UV, chemical and stress resistance. Optic appears clear until illuminated.



DuraLED® Supplementary Side Direction Indicator Lamp (Cat. 5)

LED supplementary side direction indicator featuring amber impact resistant polycarbonate lens and HELLA's Ultra Wide Visibility Optics for significantly improved side visibility. Projected luminous area of 51cm². See page 61 for function category details.



2BM 959 700-011	2031
Mounting	Surface mount with mounting bushes supplied. Suitable for horizontal mounting.
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.
Power Consumption	3W
Protection	Reverse polarity and 5000 watt Transient Voltage Suppressor (TVS) IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.
Spare Part	8HG 959 028-011 Screw boss kit
Lens Material	Polycarbonate.
Compliance	ADR 6/00: Cat 5

DuraLED® Side Marker Lamp with Clear Lens

LED side marker featuring clear impact resistant polycarbonate lens and HELLA's Ultra Wide Visibility Optics for significantly improved side visibility. Optic appears clear until illuminated.



2PS 959 700-201	2033
Mounting	Surface mount with mounting bushes supplied.
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.
Power Consumption	3W
Protection	Reverse polarity and 5000 watt Transient Voltage Suppressor (TVS) IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.
Spare Part	8HG 959 028-011 Screw boss kit
Lens Material	Polycarbonate.
Compliance	ADR 45/01

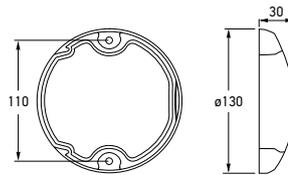
DuraLED® Rear Position/End Outline Lamp

LED rear position/rear end outline lamp featuring red impact resistant polycarbonate lens and HELLA's Ultra Wide Visibility Optics for significantly improved side visibility.



2BA 959 700-301	2309
Mounting	Surface mount with mounting bushes supplied. Suitable for horizontal mounting.
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.
Power Consumption	3W
Protection	Reverse polarity and 5000 watt Transient Voltage Suppressor (TVS) IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.
Spare Part	8HG 959 028-011 Screw boss kit
Lens Material	Polycarbonate.
Compliance	ADR 49/00

MARKER AND SIGNAL LAMPS



2SB 959 821-001	2366	
2SB 959 821-007	2366BULK	PACK OF 12
Mounting	Surface mount with mounting bushes supplied.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	Stop: 2.5W Rear position: 0.5W	
Protection	Reverse polarity and 1500 watt Transient Voltage Suppressor (TVS) IP 6K6 (Protection against dust and high-pressure water jets) IP 6K7 (Protection against dust and temporary water immersion)	
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.	
Compliance	ADR 49/00	E4 10208 ECE R7/02

See page 65 for EuroLED® accessories.

EuroLED® Stop/Rear Position Lamp

EuroLED® stop, rear position lamp with red lens. The use of precision optics enable a single high intensity LED to be used in a commercial vehicle lamp, resulting in low power consumption. Features HELLA Ultra Wide Visibility Optics for significantly improved side visibility.



2BA 959 822-001	2133	
2BA 959 822-007	2133BULK	PACK OF 12
2BA 959 822-641	2133CS	HCS TECHNOLOGY
Mounting	Surface mount with mounting bushes supplied.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	2.5W	
Protection	As per 2SB 959 821-001.	
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.	
Compliance	ADR 6/00: Cat 2a	E4 10208 ECE R6/01 ISO 13207-1 (2BA 959 822-641 only)

See page 16 for further information on HCS Technology and ISO 13207-1.

EuroLED® Rear Direction Indicator Lamp

EuroLED® rear direction indicator lamp with amber lens and single LED. Features HELLA Ultra Wide Visibility Optics for significantly improved side visibility.



2ZR 959 820-001	1433	
2ZR 959 820-007	1433BULK	PACK OF 12
Mounting	Surface mount with mounting bushes supplied.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	2.5W	
Protection	As per 2SB 959 821-001.	
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.	
Compliance	ADR 1/00	E4 10208 ECE R23/00

Reversing lamps are not designed for continuous operation.

EuroLED® Reversing Lamp

EuroLED® reversing lamp with clear lens and single LED.

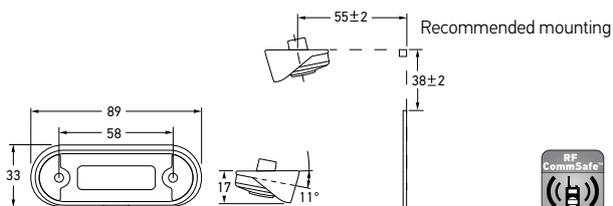


DuraLED® Surface Mount Number Plate Insert

White DuraLED® number plate insert featuring a low profile of only 17mm and an ultra durable Grilamid® nylon lens for extreme impact, UV, chemical and stress resistance. Two inserts per number plate are required for compliance. Can be mounted either above or beside the number plate. Optic appears clear until illuminated.



8HG 958 029-001

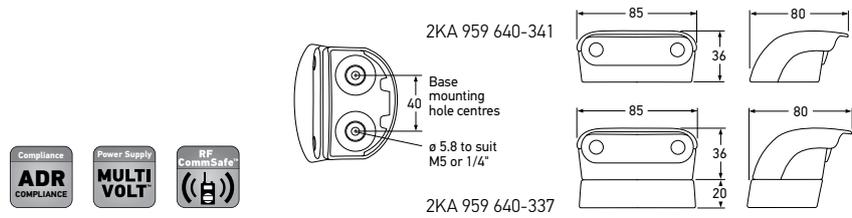


2KA 980 869-001	2560	
2KA 980 869-027	2560BULK	PACK OF 16
Mounting	Surface mount.	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	0.5W	
Protection	Reverse polarity protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high pressure/steam jet cleaning)	
Cable Length	Pre-wired with 0.5m of multi-core cable. Bulk pack pre-wired with 2.5m of multi-core cable.	
Spare Parts	9HD 980 858-007 8HG 958 029-001	Black screw caps (Pack of 4) Angle mount bracket
Lens Material	High impact and chemical resistant Grilamid® lens	
Compliance	ADR 48/00	

NUMBER PLATE LAMP POSITIONING



MARKER AND SIGNAL LAMPS



2KA 959 640-341	2559	
2KA 959 640-337	2559BULK	PACK OF 8
Mounting	Surface mount.	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	0.5W	
Protection	Reverse polarity protection. IP 6K6 (Protection against dust and high-pressure water jets) IP 6K7 (Protection against dust and temporary water immersion)	
Cable Length	Pre-wired with 0.5m of multi-core cable. Bulk pack pre-wired with 2.5m of multi-core cable.	
Spare Parts	2KA 959 640-131	LED insert
Compliance	ADR 48/00	ECE R4/00

LED Number Plate Lamp

White LED number plate lamp. Bulk version includes 20mm mounting spacer. One lamp required for ADR compliance.

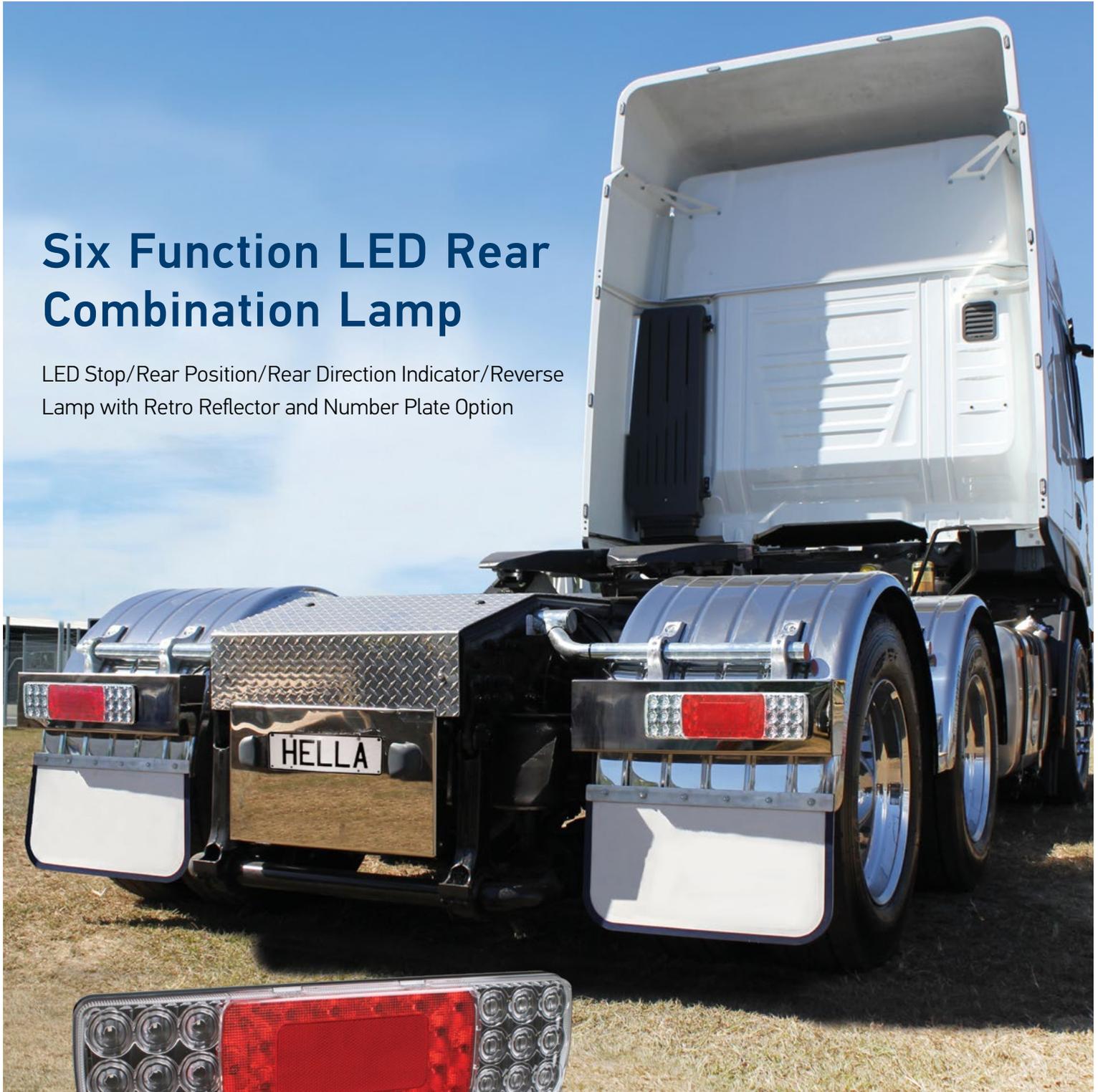


2KA 959 640-341



Six Function LED Rear Combination Lamp

LED Stop/Rear Position/Rear Direction Indicator/Reverse Lamp with Retro Reflector and Number Plate Option



These stylish lamps combine form with function, incorporating stop, rear position, rear direction indicator and reverse lamps with a central reflector, and offers an optional number plate lamp function. To combine all rear marker and signal functions in a single lamp with a five core cable allows for a tangible reduction in installation time.

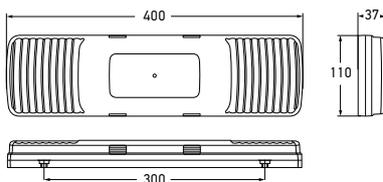
This lamp is protected by a lens made of specially formulated high impact acrylic, which is resistant to long-term harsh UV exposure and tolerant to chemicals commonly used in the transport industry. Our team designed this lamp to HELLA's Fit and Forget standard, to withstand the most demanding environments.



Combination Lamp with Attractive Retail Packaging

All features of this six function rear combination lamp, including the latest ISO 13207-1 compliance, are designed to ensure lowest cost of ownership for the astute transport operator.

MARKER AND SIGNAL LAMPS



2VP 980 980-001	2391		HCS TECHNOLOGY
Mounting	Surface mount with mounting accessories supplied. Suitable for horizontal mounting.		
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.		
Power Consumption	Stop:	5W	
	Rear position:	<2W	
	Rear direction indicator:	6W	
	Reverse:	5W	
Protection	Reverse polarity and 5000 watt Transient Voltage Suppressor (TVS). IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)		
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.		
Spare Part	8HG 958 421-381	Mounting pack	
Compliance	ADR 1/00	ADR 6/00: Cat 2a	ADR 47/00 ADR 49/00 ISO 13207-1
See page 16 for further information on HCS Technology and ISO 13207-1.			

COMBINATION LAMP FUNCTIONS



LED Stop/Rear Position/Rear Direction Indicator/Reversing Lamp with Retro Reflector

LED combination lamp with 64cm² red retro reflector. Modern clear lens design with black mounting base. Features HCS Technology with ISO 13207-1 compliance. Shockproof and fully sealed to withstand water submersion and high-pressure washing. Direction indicator optic appears clear until illuminated.



2VP 980 980-001



2VD 980 980-011	2392L		LEFT HAND SIDE
2VD 980 980-021	2392R		RIGHT HAND SIDE
Mounting	Surface mount with mounting accessories supplied. Suitable for horizontal mounting.		
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.		
Power Consumption	Stop:	5W	
	Rear position/Number plate:	<2W	
	Rear direction indicator:	6W	
	Reverse:	5W	
Protection	Reverse polarity and 5000 watt Transient Voltage Suppressor (TVS). IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)		
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.		
Spare Part	8HG 958 421-381	Mounting pack	
Compliance	ADR 1/00	ADR 6/00: Cat 2a	ADR 47/00 ADR 48/00 ADR 49/00 ISO 13207-1
See page 16 for further information on HCS Technology and ISO 13207-1.			

COMBINATION LAMP FUNCTIONS



LED Stop/Rear Position/Rear Direction Indicator/Reversing Lamp with Retro Reflector and Number Plate Function

LED combination lamp with 64cm² red retro reflector and number plate function. Modern clear lens design with black mounting base. Features HCS Technology with ISO 13207-1 compliance. Shockproof and fully sealed to withstand water submersion and high-pressure washing. Direction indicator optic appears clear until illuminated.



2VD 980 980-011

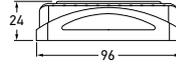
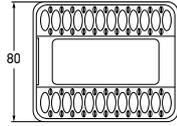
**LED Stop/Rear Position/
Rear Direction Indicator Lamp**

LED stop, rear position and rear direction indicator lamp with 18cm² red retro reflector. Modern clear lens design with black mounting base. Low power consumption and long life equates to economical running costs. Convenient mounting base with multiple fixing points allow easy fitment to most trailers/vehicles. The lamp is fully sealed against dust and moisture ingress. Optic appears clear until illuminated.



8HG 980 727-002
Mounting spacer (Not included with lamp)

2VA 980 720-071



2VA 980 720-071	2394	
2VA 980 720-077	2394BULK	PACK OF 18
2VA 980 720-021	23946M	
2VA 980 720-027	23946MBULK	PACK OF 10
Mounting	Surface mount with choice of mounting holes. Lamp clips into mounting base. Suitable for horizontal or vertical mounting.	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	Stop: 2W Rear position: 1W Rear direction indicator: 2W	
Protection	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)	
Cable Length	2VA 980 720-071 / -077 Pre-wired with 0.5m of sheathed multi-core cable. 2VA 980 720-021 / -027 Pre-wired with 6m of sheathed multi-core cable.	
Spare Parts	8HG 980 726-001 Mounting base 8HG 980 727-002 Mounting spacer (Not included)	
Lens Material	High impact and chemical resistant Grilamid® lens	
Compliance	ADR 6/00: Cat 2a	ADR 47/00 ADR 49/00

TRAILER LAMP FUNCTIONS



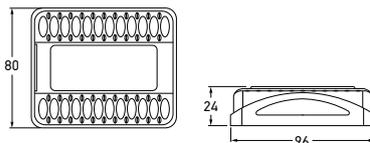
Stop

Rear direction indicator

Rear position



MARKER AND SIGNAL LAMPS



2VB 980 720-561	2395	
2VB 980 720-567	2395BULK	PACK OF 18
2VB 980 720-511	23956M	
2VB 980 720-513	23956MBULK	PACK OF 10
Mounting	Surface mount with choice of mounting holes. Lamp clips into mounting base. Suitable for horizontal or vertical mounting.	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	Stop: 2W Rear position/Number plate: 1W Rear direction indicator: 2W	
Protection	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)	
Cable Length	2VB 980 720-561 / -567 Pre-wired with 0.5m of sheathed multi-core cable. 2VB 980 720-511 / -513 Pre-wired with 6m of sheathed multi-core cable.	
Spare Parts	8HG 980 726-001 Mounting base 8HG 980 727-002 Mounting spacer (Not included) 9GH 958 748-007 Number plate rubber mounting spacer (Not included)	
Lens Material	High impact and chemical resistant Grilamid® lens	
Compliance	ADR 6/00: Cat 2a ADR 47/00 ADR 48/00 ADR 49/00	

LED Stop/Rear Position/Rear Direction Indicator Lamp with Number Plate Function

LED stop, rear position and rear direction indicator lamp with 18cm² red retro reflector and number plate function. Modern clear lens design with black mounting base. Low power consumption and long life equates to economical running costs. Convenient mounting base with multiple fixing points allow easy fitment to most trailers/vehicles. The lamp is fully sealed against dust and moisture ingress. Optic appears clear until illuminated.



8HG 980 727-002 Mounting spacer (Not included with lamp)

2VB 980 720-561



9GH 958 748-007 Number plate rubber mounting spacer (Not included with lamp)

TRAILER LAMP FUNCTIONS



Stop

Rear direction indicator

Rear position/Number plate

LED Combination Lamp Trailer Kit

LED trailer lamp incorporating a modern clear lens design with an 18cm² red retro reflector. The optic in the lamp appears clear until illuminated.



2VB 980 720-801	2395TP	
Lens Material	High impact and chemical resistant Grilamid® lens	
Kit Contents	Each trailer lamp kit contains: 1 x 2VA 980 720-071 Stop/rear position/rear direction indicator lamp with reflex reflector. 1 x 2VB 980 720-561 Stop/rear position/rear direction indicator/Number plate lamp function with reflex reflector. 8 x Connectors (8KW 980 302-132) Crimp connectors with heat shrink insulation.	

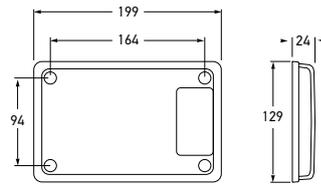


Jumbo-S LED Stop/ Rear Position Lamp

Jumbo-S LED stop, rear position lamp with inbuilt 23cm² red retro reflector, featuring Enhanced Definition Technology (EDT) for the stop signal function. New low profile design allows surface mounting complete with mounting gaskets and screws.



2TA 980 760-032



2TA 980 760-031	2361	
2TA 980 760-032	2361BL	BLISTER PACK
Mounting	Surface mount with mounting bolts supplied. Suitable for horizontal or vertical mounting.	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	Stop: 5W Rear position: 1W	
Protection	Reverse polarity and 5000 watt Transient Voltage Suppressor (TVS) IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Cable Length	Pre-wired with 200mm of cable.	
Compliance	ADR 47/00 ADR 49/00	

See page 66 for Jumbo-S accessories.

Jumbo-S LED Rear Direction Indicator Lamp

Jumbo-S LED rear direction indicator lamp with inbuilt 23cm² red retro reflector. New low profile design allows surface mounting complete with mounting gaskets and screws. Features HCS Technology with ISO 13207-1 compliance.



2BR 980 761-052



2BR 980 761-051	2161	
2BR 980 761-052	2161BL	BLISTER PACK
2BR 980 761-061	2161CS	HCS TECHNOLOGY
Mounting	Surface mount with mounting bolts supplied. Suitable for horizontal or vertical mounting.	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	4W	
Protection	As per 2SB 980 760-031	
Cable Length	Pre-wired with 200mm of cable.	
Compliance	ADR 6/00: Cat 2a ADR 47/00 ISO 13207-1 (2BR 980 761-061 only)	

See page 16 for further information on HCS Technology and ISO 13207-1.

Jumbo-S LED Reversing Lamp

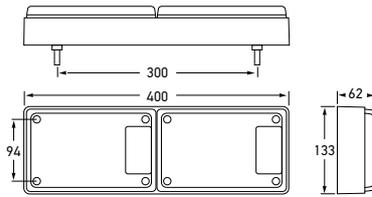
Jumbo-S LED reversing lamp with inbuilt 23cm² red retro reflector. New low profile design allows surface mounting complete with mounting gaskets and screws.



2ZR 980 762-031	1461	
Mounting	Surface mount with mounting bolts supplied. Suitable for horizontal or vertical mounting.	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	4W	
Protection	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)	
Cable Length	Pre-wired with 200mm of cable.	
Compliance	ADR 1/00 ADR 47/00	

Reversing lamps are not designed for continuous operation.

MARKER AND SIGNAL LAMPS

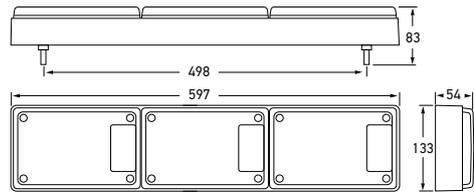


2VA 980 761-801	2429CS	HCS TECHNOLOGY
Mounting	Surface mount with mounting bolts supplied. Suitable for horizontal or vertical mounting.	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	Stop:	5W
	Rear position:	1W
	Rear direction indicator:	4W
Protection	Reverse polarity and 5000 watt Transient Voltage Suppressor (TVS) IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Cable Length	Pre-wired with 2m of sheathed multi-core cable.	
Compliance	ADR 6/00: Cat 2a ADR 47/00 ADR 49/00 ISO 13207-1	

See page 66 for Jumbo-S and Designline accessories.

Jumbo-S LED Double Module Stop/Rear Position/Rear Direction Indicator Lamp

Jumbo-S LED stop, rear position, rear direction indicator lamp with 23cm² red retro reflectors. Lamps are pre-assembled and wired into housing for easy installation. Features HCS Technology with ISO 13207-1 compliance. (See page 16 for further information on HCS Technology and ISO 13207-1).



2VA 980 761-811	2430CS	HCS TECHNOLOGY
Mounting	As per 2VA 980 761-801	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	Stop:	5W x 2
	Rear position:	1W x 2
	Rear direction indicator:	4W
Protection	As per 2VA 980 761-801.	
Cable Length	Pre-wired with 2m of sheathed multi-core cable.	
Compliance	ADR 6/00: Cat 2a ADR 47/00 ADR 49/00 ISO 13207-1	

Jumbo-S LED Triple Module Stop/Rear Position/Rear Direction Indicator Lamp

Jumbo-S LED stop, rear position, rear direction indicator lamp with 23cm² red retro reflectors. Lamps are pre-assembled and wired into housing for easy installation. Features HCS Technology with ISO 13207-1 compliance. (See page 16 for further information on HCS Technology and ISO 13207-1).



2VP 980 761-821	2431CS	HCS TECHNOLOGY
Mounting	As per 2VA 980 761-801.	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	Stop	5W
	Rear position:	1W
	Rear direction indicator:	4W
	Reversing:	4W
Protection	As per 2VA 980 761-801.	
Cable Length	Pre-wired with 2m of sheathed multi-core cable.	
Compliance	ADR 1/00 ADR 6/00: Cat 2a ADR 47/00 ADR 49/00 ISO 13207-1	

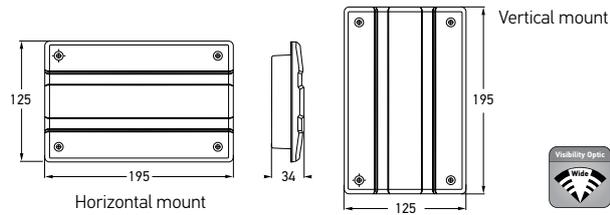
Jumbo-S LED Triple Module Stop/Rear Position/Rear Direction Indicator/Reversing Lamp

Jumbo-S LED stop, rear position, rear direction indicator and reversing lamp with 23cm² red retro reflectors. Lamps are pre-assembled and wired into housing for easy installation. Features HCS Technology with ISO 13207-1 compliance. (See page 16 for further information on HCS Technology and ISO 13207-1).



Designline LED Module Stop/Rear Position Lamp

Designline LED Multivolt™ module designed to update existing bulb type Jumbo or Designline lamps. Features HELLA Ultra Wide Visibility Optics for significantly improved side visibility.



2SB 959 040-501	2332H24	HORIZONTAL
2SB 959 040-701	2332V24	VERTICAL
Mounting	Recess mount.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	Stop: 6W Rear position: 2W	
Protection	Reverse polarity and 5000 watt Transient Voltage Suppressor (TVS).	
Cable Length	Pre-wired with 200mm of cable.	
Compliance	ADR 49/00	

See page 66 for Designline accessories.

Designline LED Module Rear Direction Indicator Lamp

Designline LED Multivolt™ module designed to update existing bulb type Jumbo or Designline lamps. Features HELLA Ultra Wide Visibility Optics for significantly improved side visibility.



2BA 959 041-501	2146H24	HORIZONTAL
2BA 959 041-701	2146V24	VERTICAL
2BA 959 041-511	2146HCS (Incorporates HCS Technology)	HORIZONTAL
Mounting	Recess mount.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	2BA 959 041-501/2BA 959 041-701: 6W 2BA 959 041-511: 5W	
Protection	Reverse polarity and 5000 watt Transient Voltage Suppressor (TVS).	
Cable Length	Pre-wired with 200mm of cable.	
Compliance	ADR 6/00: Cat 2a ISO 13207-1 (2BA 959 041-511 only)	

See page 16 for further information on HCS Technology and ISO 13207-1.

Designline LED Module Reversing Lamp

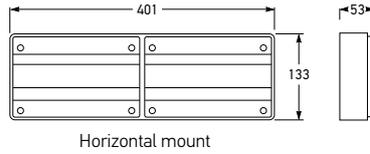
Designline LED Multivolt™ module designed to update existing Designline lamps. The high performance module features 36 High Efficacy LEDs that more than triples the raw lumen output over the standard module. High precision optics ensure ADR compliance by focusing the majority of light down ensuring wide illumination and improved safety when reversing.



2ZR 959 041-321	1446H	HORIZONTAL
Mounting	Recess mount.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	4W	
Protection	Reverse polarity and 5000 watt Transient Voltage Suppressor (TVS).	
Cable Length	Pre-wired with 200mm of cable.	
Compliance	ADR 1/00	

Reversing lamps are not designed for continuous operation.

MARKER AND SIGNAL LAMPS



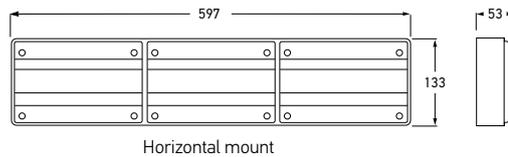
Horizontal mount

2SD 959 040-801	2426H	HORIZONTAL
Mounting	Surface mount.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	Stop: 6W Rear position: 2W Rear direction indicator: 6W	
Cable Length	Pre-wired with 2m of multi-core cable.	
Spare Part	9BG 958 559-011	Double housing
Compliance	ADR 6/00: Cat 2a	ADR 49/00

See page 66 for Designline accessories.

Designline LED Double Module Stop/Rear Position/Rear Direction Indicator Lamp

Double Designline LED module pre-assembled and wired for easy installation. Features a 2m wiring loom and encapsulated bolts so lamp does not have to be disassembled to mount. Features HELLA Ultra Wide Visibility Optics for significantly improved side visibility.



Horizontal mount

2SD 959 040-811	2427H	HORIZONTAL
Mounting	Surface mount.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	Stop: 6W x2 Rear position: 2W x2 Rear direction indicator: 6W	
Cable Length	Pre-wired with 2m of multi-core cable.	
Spare Part	9BG 958 615-011	Triple housing
Compliance	ADR 6/00: Cat 2a	ADR 49/00

Designline LED Triple Module Stop/Rear Position/Rear Direction Indicator Lamp

Triple Designline LED module pre-assembled and wired for easy installation. Features a 2m wiring loom and encapsulated bolts so lamp does not have to be disassembled to mount. Features HELLA Ultra Wide Visibility Optics for significantly improved side visibility.



2SK 959 041-811	2428H	HORIZONTAL
Mounting	Surface mount.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	Stop: 6W Rear position: 2W Rear direction indicator: 6W Reverse: 4W	
Cable Length	Pre-wired with 2m of multi-core cable.	
Spare Part	9BG 958 615-011	Triple housing
Compliance	ADR 1/00	ADR 6/00: Cat 2a ADR 49/00

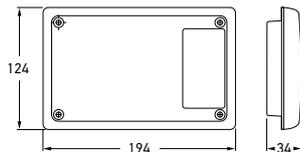
Reversing lamps are not designed for continuous operation.

Designline LED Triple Module Stop/Rear Position/Rear Direction Indicator/Reversing Lamp



Jumbo LED Module Stop/ Rear Position Lamp with Red Retro Reflector

Jumbo LED Multivolt™ module designed to update existing Jumbo or Designline lamps with Enhanced Definition Technology (EDT). Reflector area 33cm².



2TA 959 030-101	2317
Mounting	Recess mount. Suitable for horizontal or vertical mounting.
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.
Power Consumption	Stop: 6W Rear position: 2W
Protection	Reverse polarity and 5000 watt Transient Voltage Suppressor (TVS).
Cable Length	Pre-wired with 200mm of cable.
Compliance	ADR 47/00 ADR 49/00 

See page 66 for Jumbo accessories.

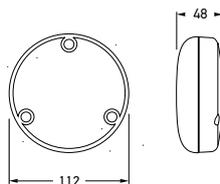
Jumbo LED Module Rear Direction Indicator Lamp with Red Retro Reflector

Jumbo LED Multivolt™ module designed to update existing Jumbo or Designline lamps. Reflector area 33cm².



2BR 959 031-001	2138
Mounting	Recess mount. Suitable for horizontal or vertical mounting.
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.
Power Consumption	9W
Protection	Reverse polarity and 5000 watt Transient Voltage Suppressor (TVS).
Cable Length	Pre-wired with 200mm of cable.
Compliance	ADR 6/00: Cat 2a ADR 47/00 

See page 66 for Jumbo accessories.



110mm Round LED Front Direction Indicator Lamp - Amber Lens

LED front direction indicator specifically designed for trucks, buses and motor homes.



2BA 959 932-311	2135LED	BLACK BASE
Mounting	Surface mount only with lens engraving "TOP" located correctly.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	4W	
Protection	Reverse polarity and 1500 watt Transient Voltage Suppressor (TVS) IP 6K6 (Protection against dust and high-pressure water jets) IP 6K7 (Protection against dust and temporary water immersion)	
Cable Length	Pre-wired with 200mm of cable.	
Compliance	ADR 6/00: Cat 1	

LAMP FUNCTIONS



Front position

Direction indicator

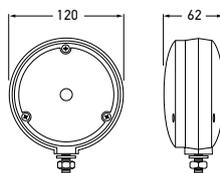
110mm Round LED Front Position/ Front Direction Indicator Lamp - Clear Lens

LED front direction indicator and front position lamp specifically designed for commercial transport, buses, caravans and trailers. Direction indicator optic appears clear until illuminated.



2BE 959 932-152	2131CS	HCS TECHNOLOGY
Mounting	Surface mount only with lens engraving "TOP" located correctly.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	Front position: <1W	Front direction indicator: 3W
Protection	Reverse polarity and 5000 watt Transient Voltage Suppressor (TVS). IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Cable Length	Pre-wired with 200mm of cable.	
Compliance	ADR 6/00: Cat 1 ECE R7/02	ADR 49/00 E24 5851 ECE R6/01 ISO 13207-1

See page 16 for further information on HCS Technology and ISO 13207-1. Diagram as per 2BA 959 932-311



LED Front Direction Indicator Lamp

Single-sided LED front direction indicator fitted with high-intensity LED insert and black housing. Fully sealed to withstand high-pressure washing.



2BA 959 932-301	2128LED	AMBER LENS
Mounting	Single bolt mount.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	4W	
Protection	As per 2BA 959 932-311	
Cable Length	Pre-wired with 200mm of cable.	
Compliance	ADR 6/00: Cat 1	

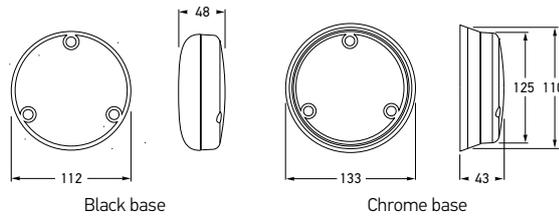
See page 61 for function category details.

110mm Round LED Stop/ Rear Position Lamp

110mm round LED stop, rear position lamp specifically designed for commercial transport, buses, caravans and trailers. Features low power consumption and impact resistant acrylic lens.



2SB 959 931-111



2SB 959 931-121	2359	CHROME BASE
2SB 959 931-111	2367	BLACK BASE
Mounting	Surface mount only with lens engraving "TOP" located correctly.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	Stop: 3W Rear position: 1W	
Protection	Reverse polarity and 1500 watt Transient Voltage Suppressor (TVS) IP 6K6 (Protection against dust and high-pressure water jets) IP 6K7 (Protection against dust and temporary water immersion)	
Cable Length	Pre-wired with 200mm of cable.	
Compliance	ADR 49/00	

110mm Round LED Rear Direction Indicator Lamp



2BA 959 932-711



2BA 959 932-272	2159	CHROME BASE
2BA 959 932-711	2167	BLACK BASE
Mounting	Surface mount only with lens engraving "TOP" located correctly.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	3W	
Protection	As per 2SB 959 931-121	
Cable Length	Pre-wired with 200mm of cable.	
Compliance	ADR 6/00: Cat 2a	

See page 16 for further information on HCS Technology and ISO 13207-1.

110mm Round LED Reversing Lamp



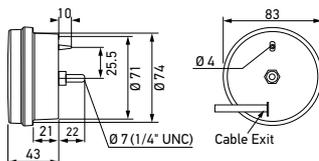
2ZR 959 930-111



2ZR 959 930-121	1459	CHROME BASE
2ZR 959 930-111	1467	BLACK BASE
Mounting	Surface mount only with lens engraving "TOP" located correctly.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	5W	
Protection	As per 2SB 959 931-121	
Cable Length	Pre-wired with 200mm of cable.	
Compliance	ADR 1/00	

Reversing lamps are not designed for continuous operation.

MARKER AND SIGNAL LAMPS



83mm Round LED Safety DayLights™/Front Position/ Front Direction Indicator Lamp

This LED combination lamp features an integrated Safety DayLights™, front position and front direction indicator function. The lamp features a traditional round lens that illuminates with a distinctive ring of white LEDs when used as a Safety DayLight™. This lamp eliminates the need for installation of multiple lamps. Front position lamp and front direction indicator will extinguish the Safety DayLight™ automatically.



2BE 980 687-111	2108GMD	12 VOLT
2BE 980 686-011	2108GMD24V	24 VOLT
Mounting	Surface mount. Single bolt 1/4" stainless UNC thread. Nut and washer supplied.	
Power Consumption	2BE 980 687-111	2BE 980 686-011
	Safety DayLights™: 5W	5W
	Front position: 1W	1W
	Front indicator: 4W	5W
Protection	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)	
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.	
Lens Material	High impact and chemical resistant Grilamid® lens	
Compliance	5921 ECE R6/02 ECE R7/03 ECE R87/01	

See page 66 for mounting accessories.

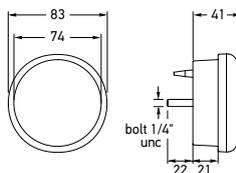
83MM LAMP FUNCTIONS



LED Safety DayLights™ Front position Front direction indicator

83mm Round LED Front Direction Indicator Lamp

Compact, low profile LED front direction indicator fitted with amber polycarbonate lens. Fully sealed to withstand high-pressure washing.

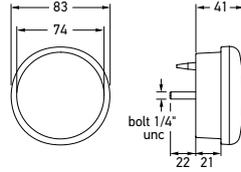


2BA 959 011-121	2107
Mounting	Surface mount. Single bolt 1/4" stainless UNC thread. Nut and washer supplied.
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.
Power Consumption	4W
Protection	Reverse polarity and 5000 watt Transient Voltage Suppressor (TVS) IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.
Compliance	ADR 6/00: Cat 1



83mm Round LED Stop/Rear Position Lamp

83mm diameter LED stop, rear position lamp with single bolt mount, featuring Enhanced Definition Technology (EDT). Features HELLA Ultra Wide Visibility Optics for significantly improved side visibility.



2SB 959 010-032
Rear position

2SB 959 010-041

2SB 959 010-032	2390	
2SB 959 010-041	2390BL	BLISTER PACK
2SB 959 010-037	2390BULK	PACK OF 10
Mounting	Surface mount. Single bolt 1/4" stainless UNC thread. Nut and washer supplied.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	Stop: 3W Rear position: 1W	
Protection	Reverse polarity and 5000 watt Transient Voltage Suppressor (TVS) IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.	
Compliance	ADR 49/00 E4 11391 ECE R7/02	

See page 66 for mounting accessories.

83mm Round LED Rear Direction Indicator Lamp

83mm diameter LED rear direction indicator lamp with single bolt mount. Features HELLA Ultra Wide Visibility Optics for significantly improved side visibility.



2BA 959 011-031

2BA 959 011-013	2130	
2BA 959 011-031	2130BL	BLISTER PACK
2BA 959 011-003	2130BULK	PACK OF 10
Mounting	Surface mount. Single bolt 1/4" stainless UNC thread. Nut and washer supplied.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	2W	
Protection	As per 2SB 959 010-032	
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.	
Compliance	ADR 6/00: Cat 2a E4 11391 ECE R6/01	

Contact HELLA for 24 volt HCS version.

83mm Round LED Reversing Lamp

83mm diameter LED reversing lamp with single bolt mount.

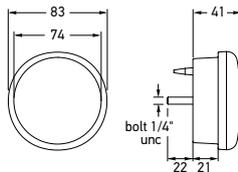


2ZR 959 010-521

2ZR 959 010-512	1490	
2ZR 959 010-521	1490BL	BLISTER PACK
2ZR 959 010-517	1490BULK	PACK OF 10
Mounting	Surface Mount. Single bolt 1/4" stainless UNC thread. Nut and washer supplied.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	4W	
Protection	As per 2SB 959 010-032	
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.	
Compliance	ADR 1/00 E4 11391 ECE R23/00	

Reversing lamps are not designed for continuous operation.

MARKER AND SIGNAL LAMPS



83mm Round LED Stop/
Rear Position/Rear Direction
Indicator Lamp

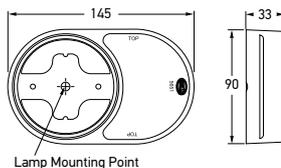
83mm diameter LED stop, rear position and rear direction indicator lamp with single bolt mount.



2SD 959 010-231

2SD 959 010-203	2399	
2SD 959 010-231	2399BL	BLISTER PACK
2SD 959 010-217	2399BULK	PACK OF 10
Mounting	Surface mount. Single bolt 1/4" stainless UNC thread. Nut and washer supplied.	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	Stop: 3W Rear position: 1W Rear direction indicator: 3W	
Protection	Reverse polarity and 5000 watt Transient Voltage Suppressor (TVS) IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable. Bulk pack pre-wired with 6m of sheathed multi-core cable.	
Compliance	ADR 6/00: Cat 2a E 1538	ADR 49/00 ECE R6/01 ECE R7/02

Contact HELLA for 24 volt HCS version. See page 66 for mounting accessories.



Red Retro Reflector Base

Red retro reflector to suit 83mm round lamps.
Reflector area 31.7cm².



8RA 980 565-102	2934H	HORIZONTAL
Mounting	Utilises bolt mount from 83mm round lamps.	
Compliance	ADR 47/00	



LED Lighting Trailer
Conversion Kit

A complete Fit and Forget solution for small trailers.

2VB 959 010-801	2399TP	
Kit Contents	Each trailer lamp kit contains:	
	2 x 2SD 959 010-203	Combination stop/rear position and rear direction indicator lamp with 6m cable
	2 x 8RA 980 565-102	Red retro reflector base – horizontal mount
	1 x 2KA 959 640-341	LED number plate lamp
	1 x 8JA 910 032-001	7 pole flat plug



LED Front Direction Indicator Lamp - Surface Mount

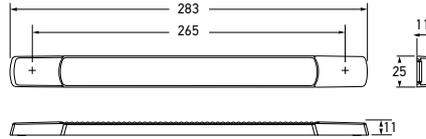
Surface mount LED front direction indicator lamp that is designed with an ultra wide visibility optic for significantly improved side visibility. Featuring a low profile, ultra durable Grilamid® nylon lens for extreme impact, UV, chemical and stress resistance. Optic appears clear until illuminated.



Ultra slim height of only 11mm. Lamp shown active.



2BA 980 888-322



HORIZONTAL MOUNT	
2BA 980 888-301	2109
2BA 980 888-322	2109BL (Blister Pack)
2BA 980 888-401	210924V
VERTICAL MOUNT	
2BA 980 888-501	2109V
2BA 980 888-601	2109V24V
Mounting	Suitable for horizontal and vertical mounting with tolerance. See diagrams.
Power Consumption	3W
Protection	Reverse polarity protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable. (Blister packs with 0.5m cable)
Lens Material	High impact and chemical resistant Grilamid® lens
Spare Parts	9HD 980 885-007 White screw caps (Pack of 4) 9HD 980 885-017 Charcoal screw caps (Pack of 4) 9HD 980 885-107 Chrome plated screw caps (Pack of 4)
Compliance	ADR 6/00: Cat 1 Horizontal (E24) 5869 Vertical (E24) 5890 ECE R6/01

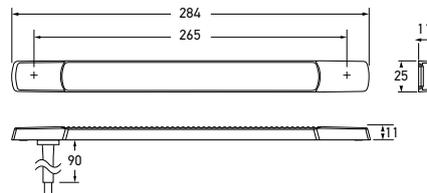
See page 64 for surface mount strip lamp screw caps.

LED Slim Combination Lamp - Surface Mount

Slim surface mount strip lamp available as a combination front direction indicator and position light making it one of the most compact certified front direction/front position lamps available. Featuring a low profile, ultra durable Grilamid® nylon lens for extreme impact, UV, chemical and stress resistance. Optic appears clear until illuminated.



Ultra slim height of only 11mm.



2BE 980 819-301	211012V	12 VOLT
2BE 980 819-401	211024V	24 VOLT
Mounting	Suitable for horizontal or vertical mounting with tolerance.	
Power Consumption	Front position: <1W Front direction indicator: 3W	
Protection	Reverse polarity protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Cable Length	Pre-wired with 3m of sheathed multi-core cable.	
Lens Material	High impact and chemical resistant Grilamid® lens	
Spare Parts	9HD 980 885-007 White screw caps (Pack of 4) 9HD 980 885-017 Charcoal screw caps (Pack of 4) 9HD 980 885-107 Chrome plated screw caps (Pack of 4)	
Compliance	ADR 49/00: Cat S3	ADR 6/00: Cat 1

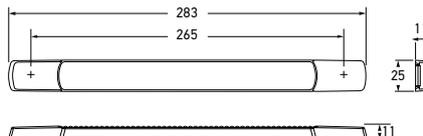
COMBINATION LAMP FUNCTIONS



Front position

Front direction indicator

MARKER AND SIGNAL LAMPS



2DA 980 887-301	5245	12 VOLT
2DA 980 887-401	524524V	24 VOLT
Mounting	Suitable for horizontal or vertical mounting with tolerance. See diagrams.	
Power Consumption	3W	
Protection	Reverse polarity protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.	
Lens Material	High impact and chemical resistant Grilamid® lens	
Spare Parts	9HD 980 885-007 White screw caps (Pack of 4) 9HD 980 885-017 Charcoal screw caps (Pack of 4) 9HD 980 885-107 Chrome plated screw caps (Pack of 4)	
Compliance	ADR 49/00: Cat S3	E24 02 0087 ECE R7/02

LED High Level Brake Lamp - Surface Mount

Surface mount LED high level brake lamp that is designed with an ultra wide visibility optic to suit a wide range of mounting positions and angles. Featuring a low profile, ultra durable Grilamid® nylon lens for extreme impact, UV, chemical and stress resistance. Optic appears clear until illuminated.



Ultra slim height of only 11mm. Lamp shown active.



HORIZONTAL MOUNT		
2ZR 980 889-001	1468	12 VOLT
2ZR 980 889-022	1468BL (Blister Pack)	
2ZR 980 889-201	146824V	24 VOLT
2ZR 980 889-222	146824VBL (Blister Pack)	
VERTICAL MOUNT		
2ZR 980 889-101	1468V	12 VOLT
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable. (Blister packs with 0.5m cable)	
Compliance	Horizontal E24 0027	Vertical E24 0028 ECE R23/00

LED Reversing Lamp - Surface Mount

Surface mount LED reversing lamp. Featuring a low profile, ultra durable Grilamid® nylon lens for extreme impact, UV, chemical and stress resistance. Optic appears clear until illuminated.



Ultra slim height of only 11mm. Lamp shown active.

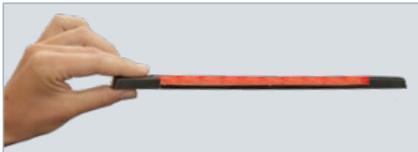
MOUNTING DIAGRAMS			
2DA 980 887-301, 2DA 980 887-401	2DA 980 887-301, 2DA 980 887-401	2ZR 980 889-001, 2ZR 980 889-022, 2ZR 980 889-201, 2ZR 980 889-222	2ZR 980 889-101
Horizontal mount: +/- 15° tilt (up/down)	Vertical mount: +/- 12° tilt (up/down)	Horizontal mount: +/- 10° rotation around lamp (and vehicle) axis	Vertical mount: +/- 15° rotation around lamp (and vehicle) axis



2ZR 980 889-022

LED Stop/Rear Position Lamp - Surface Mount

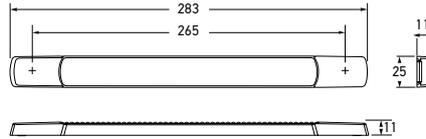
Surface mount LED stop/rear position lamp that features Enhanced Definition Technology (EDT) and is designed with an ultra wide visibility optic for significantly improved side visibility. Featuring a low profile, ultra durable Grilamid® nylon lens for extreme impact, UV, chemical and stress resistance. Optic appears clear until illuminated.



Ultra slim height of only 11mm. Lamp shown active.



2SB 980 887-002



2SB 980 887-001	2318	12 VOLT
2SB 980 887-002	2318BL (Blister Pack)	
2SB 980 887-201	231824V	24 VOLT
2SB 980 887-202	231824VBL (Blister Pack)	

Mounting	Suitable for horizontal and vertical mounting.		
Power Consumption	Stop:	3W	Rear position: <0.5W
Protection	Reverse polarity protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)		
Cable Length	Pre-wired with 0.3m cable.		
Lens Material	High impact and chemical resistant Grilamid® lens		
Compliance	ADR 49/00		

STOP/REAR POSITION LAMP FUNCTIONS



Stop

Rear position

LED Rear Direction Indicator Lamp - Surface Mount

Surface mount LED rear direction indicator lamp that is designed with an ultra wide visibility optic for significantly improved side visibility. Featuring a low profile, ultra durable Grilamid® nylon lens for extreme impact, UV, chemical and stress resistance. Optic appears clear until illuminated.



Ultra slim height of only 11mm. Lamp shown active.



2BA 980 888-022

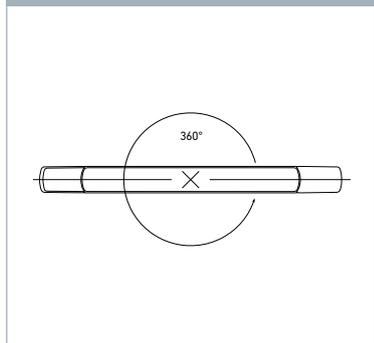


2BA 980 888-001	2168	12 VOLT
2BA 980 888-022	2168BL (Blister Pack)	
2BA 980 888-201	216824V	24 VOLT
2BA 980 888-222	216824VBL (Blister Pack)	

Mounting	Suitable for horizontal and vertical mounting. See diagram.		
Power Consumption	3W		
Protection	As per 2SB 980 887-001		
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable. (Blister packs with 0.5m cable)		
Lens Material	High impact and chemical resistant Grilamid® lens		
Compliance	ADR 6/00: Cat 2a	E20 5891	ECE R6/01

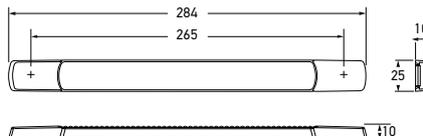
MOUNTING DIAGRAM

2BA 980 888-001, 2BA 980 888-022, 2BA 980 888-201, 2BA 980 888-222



Horizontal mount & Vertical mount:
360° rotation around lamp (and vehicle) axis

MARKER AND SIGNAL LAMPS



2SD 980 819-001	237512V	12 VOLT
2SD 980 819-221	237524V	24 VOLT

Mounting	Suitable for horizontal and vertical mounting.	
Power Consumption	Stop: 2W	Rear position: <0.5W
	Rear direction indicator: 2W	
Protection	Reverse polarity protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.	
Lens Material	High impact and chemical resistant Grilamid® lens	
Spare Parts	9HD 980 885-007	White screw caps (Pack of 4)
	9HD 980 885-017	Charcoal screw caps (Pack of 4)
	9HD 980 885-107	Chrome plated screw caps (Pack of 4)
Compliance	ADR 49/00 ADR 6/00: Cat 2a E24 5902 ECE6/01 ECE 7/02	

LED Stop/Rear Position/Rear Direction Indicator Lamp - Surface Mount

The slim Surface Mount Strip lamp is now available as a combination stop/tail and indicator light making it the most compact and certified STI lamp available. Featuring a low profile, ultra durable Grilamid® nylon lens for extreme impact, UV, chemical and stress resistance. Optic appears clear until illuminated.



Ultra slim height of only 11mm.

STOP/REAR POSITION/REAR DIRECTION INDICATOR LAMP FUNCTIONS



Stop

Rear position

Rear direction indicator

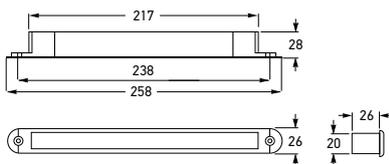
Surface Mount Strip Lamp - Screw Caps

SURFACE MOUNT STRIP LAMP SCREW CAPS		Colour	Quantity
9HD 980 885-017	9100909	CHARCOAL	PACK OF 4
9HD 980 885-007	9265209	WHITE	
9HD 980 885-107	9100910	CHROME PLATED	



LED Stop/Rear Position Lamp

Red LED strip lamp suitable for coaches and buses, featuring Enhanced Definition Technology (EDT).



2SB 959 074-501	233412V	12 VOLT
2SB 959 074-001	233424V	24 VOLT
Mounting	Two hole recess mount. Suitable for horizontal or vertical mounting.	
Power Consumption	Stop: 2W Rear position: 0.3W	
Protection	Reverse polarity protection.	
Cable Length	Pre-wired with 300mm of cable.	
Compliance	ADR 49/00	

LED Rear Direction Indicator Lamp

Amber LED strip lamp suitable for coaches and buses.



2BA 959 075-501	215612V	12 VOLT
2BA 959 075-001	215624V	24 VOLT
Mounting	Two hole recess mount. Suitable for horizontal or vertical mounting.	
Power Consumption	2W	
Protection	Reverse polarity protection.	
Cable Length	Pre-wired with 0.5m of sheathed multi-core cable.	
Compliance	ADR 6/00: Cat 2a	

LED High Level Brake Lamp

Strip LED lamp designed for rear spoiler applications. Clear lens version optic appears clear until illuminated.

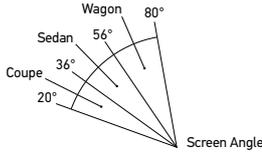


2DA 959 071-071



RED LENS		CLEAR LENS		
2DA 959 071-591	5243	2DA 959 071-271	5243CLEAR	12 VOLT
2DA 959 071-772	524324V			24 VOLT
Mounting	Two hole recess mount. Suitable for horizontal or vertical mounting.			
Power Consumption	2W			
Protection	Reverse polarity protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)			
Cable Length	Pre-wired with 2.5m of multi-core cable.			
Compliance	ADR 49/00: Cat S3	E4 02 7547	ECE R7/02	

MARKER AND SIGNAL LAMPS



2DA 959 190-001	5237 (Coupe)	20° - 36°	12 VOLT
2DA 959 191-001	5238 (Sedan)	37° - 56°	
2DA 959 192-001	5239 (Wagon)	57° - 80°	
Mounting	Adhesive mounting tape to glass.		
Voltage	12V		
Power Consumption	3W		
Cable Length	Pre-wired with 2.5m of multi-core cable.		
Compliance	ADR 49/00: Cat S3		

LED High Level Brake Lamp

Designed for rear windows of angles from 20° (Coupe) to 80° (Wagon). Supplied with installation kit and instruction sheet. Optic appears clear until illuminated.

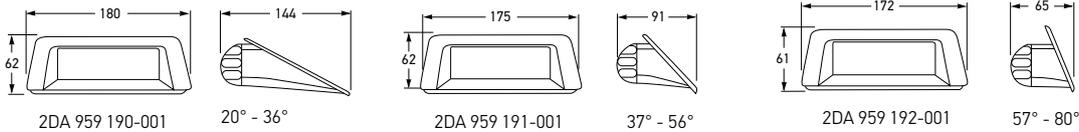


2DA 959 190-001
Shown illuminated



2DA 959 191-001

2DA 959 192-001



2DA 959 190-001

20° - 36°

2DA 959 191-001

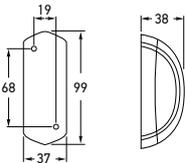
37° - 56°

2DA 959 192-001

57° - 80°

LED Caravan Red/White Clearance Lamp

Red/white side-rear clearance lamp for fitment at the rear of caravans. Combined front end outline (white) and rear end outline (red) lamps. LED replacement lamp for older bulb style lamps.



2XS 205 020-041		12 VOLT
Mounting	Vertical surface mount only at rear of caravan.	
Power Consumption	0.5W	
Cable Length	Pre-wired with 500mm multi-core cable.	
Compliance	ECE R7/02	

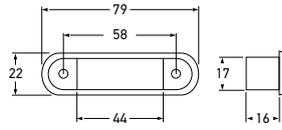


LED Recess Mount Front Position/ End Outline Lamp

White front position or front end outline LED lamp. Optic appears clear until illuminated.



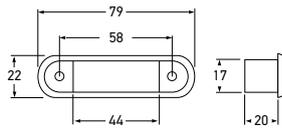
2PF 959 590-491



2PF 959 590-491	2055	
2PF 959 590-547	2055BULK	PACK OF 4
Mounting	Two hole recess mount. Suitable for horizontal or vertical mounting.	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	<1W	
Protection	Reverse polarity protection. IP 6K6 (Protection against dust and high-pressure water jets) IP 6K7 (Protection against dust and temporary water immersion)	
Cable Length	Pre-wired with 0.5m of sheathed multi-core cable. Bulk pack pre-wired with 2.5m of sheathed multi-core cable.	
Compliance	ADR 49/00	E4 0054 ECE R7/02

LED Recess Mount Front End Outline Lamp

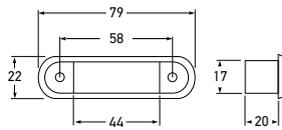
Amber front end outline LED lamp for trailers only. Optic appears clear until illuminated.



2PF 959 590-341	2056	
2PF 959 590-357	2056BULK	PACK OF 4
Mounting	Suitable for horizontal mounting.	
Compliance	ADR 49/00	
Other specifications as per 2PF 959 590-491.		

LED Recess Mount Cab Marker Lamp

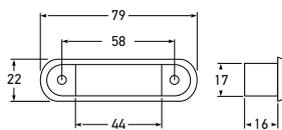
Amber cab marker LED lamp. Optic appears clear until illuminated.



2XS 959 650-011	2057	
2XS 959 650-027	2057BULK	PACK OF 4
Mounting	Suitable for horizontal mounting.	
Compliance	ADR 45/01	
Other specifications as per 2PF 959 590-491.		

LED Recess Mount Rear Position/ End Outline Lamp

Red rear end outline lamp or rear position LED lamp. Optic appears clear until illuminated.

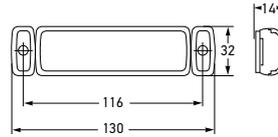
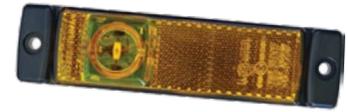


2BA 959 610-441	2308	
2BA 959 610-457	2308BULK	PACK OF 4
Compliance	ADR 49/00	E4 02 7597 ECE R7/02
Other specifications as per 2PF 959 590-491.		

MARKER AND SIGNAL LAMPS

LED Side Marker Lamp - Amber

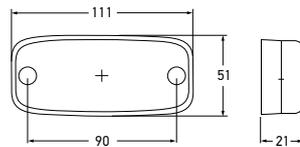
LED side marker lamp with reflex reflector for horizontal mounting. Reverse polarity protection.



2PS 008 645-011		12 VOLT
2PS 008 645-001		24 VOLT
Power Consumption	12V 0.5W 24V 1W	
Cable Length	Pre-wired with 1.5m of sheathed multi-core cable.	
Compliance	(E1) 1395 (E1) 1396 ECE R3/02	ECE R91/00

LED Side Marker Lamp - Amber

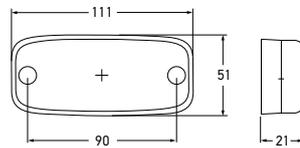
LED side marker with inbuilt amber retro reflector. Bridge circuit for protection against polarity reversal.



2PS 345 600-001		12 VOLT
2PS 345 600-011		24 VOLT
Power Consumption	12V 0.7W 24V 1.3W	
Protection	Fully sealed against dust, high-pressure washing/steam jet cleaning	
Cable Length	Pre-wired with 0.5m of sheathed multi-core cable.	
Compliance	ADR 74/00: Cat. SM1 ADR 47/00 (E24) 5881 ECE R3/02	ECE R91/00

LED Rear Position Lamp - Red

LED rear position lamp with inbuilt red retro reflector. Bridge circuit for protection against polarity reversal.



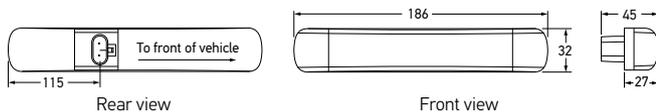
2TM 963 639-301	2305	12 VOLT
2TM 963 639-311	2306	24 VOLT
Power Consumption	12V 0.5W 24V 1W	
Protection	Fully sealed against dust, high-pressure washing/steam jet cleaning	
Cable Length	Pre-wired with 5m of sheathed multi-core cable.	
Compliance	ADR 47/00 ADR 49/00 (E24) 5881 ECE R3/02	ECE R7/02

LED Auxiliary Side Indicator Cat. 6

LED side indicator lamp approved for heavy vehicles and buses/coaches, sealed against dust and water, it will provide many years of trouble free usage. Optic appears clear until illuminated.



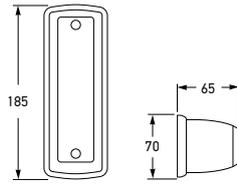
Rear view showing super seal connector



2BM 011 788-041		24 VOLT
Mounting	Horizontal surface mount via adhesive strip	
Power Consumption	4W	
Protection	Reverse polarity IP 6K9 (Protection against dust and high-pressure/steam jet cleaning)	
Spare Parts	8KW 959 881-525	2 Pin super seal plug
Compliance	(E11) 7506 ECE R6/01 Cat.6	
The lamp features an adhesive strip and is attached by pressing on to the vehicle.		

Supplementary Side Direction Indicator Lamp (Cat. 6)

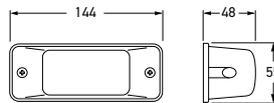
Single bulb holder.



2BA 905 273-002	2142
Mounting	Surface mount
Bulbs to Suit	12V 8GA 002 073-163 24V 8GA 002 073-245
Compliance	ADR 6/00: Cat 6

Supplementary Side Direction Indicator Lamp (Cat. 6)

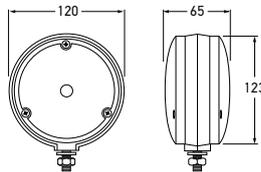
Side mounted direction indicator lamp with rubber base. Suitable for insulated earth circuits.



2BM 006 692-011	2153	LEFT HAND SIDE
2BM 006 692-021	2154	RIGHT HAND SIDE
Mounting	Surface mount.	
Bulbs to Suit	12V 8GA 002 073-163 24V 8GA 002 073-245	
Compliance	ADR 6/00: Cat 6	
Arrow on lens must face direction of travel.		

Front Direction Indicator/ Supplementary Side Direction Indicator Lamp (Cat.1 and 5)

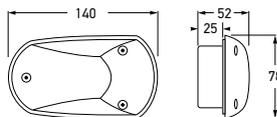
Double-sided direction indicator lamp.



2BA 900 763-291	2127
Mounting	Single bolt mount.
Bulbs to Suit	12V 8GA 002 073-163 24V 8GA 002 073-245
Additional Function	Supplementary side direction indicator lamp where 12V (8GA 002 071-171) or 24V (8GA 002 071-245) bulbs are used.
Compliance	ADR 6/00: Cat 1 ADR 6/00: Cat 5

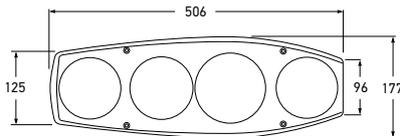
Supplementary Side Direction Indicator Lamp (Cat. 6)

Side mounted direction lamp suitable for either left or right hand mounting.



2BM 008 355-021	215524V (Amber lens)	24 VOLT
Bulbs to Suit	24V 8GA 002 073-245	
Compliance	ADR 6/00: Cat 6	
Arrow on lens must face direction of travel.		

MARKER AND SIGNAL

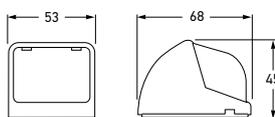


Stop/Rear Position/Rear Direction Indicator/Reversing Lamp

For mobile homes. With reversing light and round reflector.



2VP 341 419-127		RIGHT HAND SIDE
2VP 341 419-137		LEFT HAND SIDE
Mounting	Horizontal flush mount into body.	
Bulbs to Suit	12V	24V
	Stop/Rear position:	8GD 980 329-001 8GD 002 078-242
	Rear direction indicator:	8GA 002 073-163 8GA 002 073-245
	Reversing:	8GA 002 073-163 8GA 002 073-245
Compliance	E4 9836 ECE R6/01 ECE R7/02 ECE R23/00 ECE R3/02	

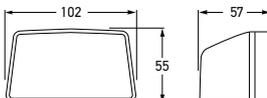


Front Position/Front End Outline Lamp - White

Fitted with polycarbonate lens and single bulb holder.



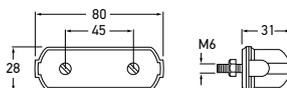
2PF 006 679-031	2066	
Mounting	Surface mount.	
Bulbs to Suit	12V	8GA 002 071-511
	24V	8GA 002 071-254
Compliance	ADR 49/00 E1 32 /691 ECE R7/02	



Number Plate Lamp



2KA 951 068-043	2553	12 VOLT
Bulbs to Suit	12V	8GA 002 071-511
Compliance	ADR 48/00 E1 22819 ECE R4/00	



Number Plate Lamp



2KA 001 389-121	2555	
Mounting	Two bolt mount.	
Bulbs to Suit	12V	8GA 002 092-021
	24V	8GM 002 092-251
Compliance	ADR 48/00 E1 12815 ECE R4/00	
Two lamps required for ADR compliance.		

ADR CATEGORIES OF DIRECTION INDICATORS

ADR compliant indicators are categorised according to their intended function.

- Category 1 Direction indicators for the front of the vehicle.
- Category 2 Direction indicators for the rear of the vehicle.
- Category 5 Supplementary side direction indicators for use on a vehicle also equipped with categories 1 and 2 direction indicators.
- Category 6 Supplementary side direction indicators for use on a heavy vehicle also equipped with categories 1 and 2 direction indicators.

Refer to page 296 for ADR reference guide.

DuraLED® Accessories

Spare screw caps or screw bosses for the DuraLED® lamp range. Two screw caps and two screw bosses are required per lamp.



SCREW CAPS - DURALED®		Colour	Quantity
9HD 959 065-008	9233015	BLACK	PACK OF 4

SCREW CAPS - DURALED® COMBI-S/COMBI-R		Colour	Quantity
9HD 980 712-007	9237815BULK	BLACK	PACK OF 4

SCREW BOSS		Quantity
9NH 959 059-008	9233017	PACK OF 4

MOUNTING SPACERS - DURALED® COMBI		Colour
8HG 980 719-001	98071900	BLACK
8HG 980 719-011	98071901	WHITE

Mounting spacer allows lamps to be surface mounted with the cable exiting any side of the spacer, or through the centre.

DuraLED® Marker Lamp Accessories

Spare mounting shrouds for the surface mount marker and surface mount courtesy lamp range. One mounting shroud is required per lamp.



9BG 910 274-001



9BG 959 565-018

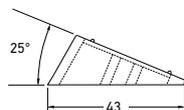


9BG 959 565-408

SHROUDS - DURALED® SURFACE MOUNT		Colour	Quantity
9BG 910 274-001	9205308 (Nylon)	BLACK	SINGLE
9BG 959 565-038	9205310BULK	RED	PACK OF 4
9BG 959 565-018	9205311BULK	WHITE	
9BG 959 565-408	9205320BULK	CHROME PLATED	

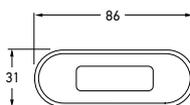


9BG 959 565-038



ANGLE MOUNT - DURALED® SURFACE MOUNT		Colour	Quantity
8HG 910 273-001	9205307	BLACK	SINGLE

MARKER AND SIGNAL



RIMS - DURALED® FLUSH MOUNT MARKER AND SIGNAL/LED WIDE RIM COURTESY LAMPS		
	Colour	Material
9AB 959 686-001	95968600	BLACK
9AB 959 686-011	95968601	WHITE
9AB 959 685-002	95968500	POLISHED
9AB 959 685-062	95968506	SATIN CHROME PLATED
		316 STAINLESS STEEL

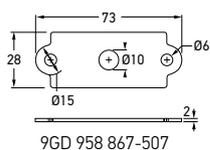
To suit wide marker and signal lamps with 29mm wide rim. Does not fit narrow rim lamps.



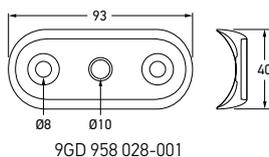
DuraLED® Marker Lamp Accessories



DURALED® ANGLE MOUNT NUMBER PLATE BRACKET		
8HG 958 029-001		SINGLE



9GD 958 867-507



9GD 958 028-001

DuraLED® Flush Mount Gaskets



9GD 980 867-507		RECTANGULAR SEAL
9GD 958 028-001		CURVED SEAL

DuraLED® Marker Lamp Accessories

SCREW CAPS - DURALED® FLUSH MOUNT		
	Colour	Quantity
9HD 980 858-007	9231009BULK	BLACK
9HD 980 858-017	9231011BULK	WHITE
		PACK OF 4

Pack sizes of 50 available upon request.



DuraLED® DT Marker and Signal Lamp Accessories



DURALED® DT MARKER LAMP HOUSING			
		Colour	Quantity
9BG 980 996-002	9207309	BLACK	SINGLE



9BG 980 665-001

9BG 980 665-101

DURALED® HEAVY DUTY MARKER STAINLESS STEEL HOUSING			
9BG 980 665-001	9205809		SINGLE
9BG 980 665-101	9205810	POLISHED	

Surface Mount Strip Lamp - Screw Caps



9HD 980 885-017

9HD 980 885-007

9HD 980 885-107

SURFACE MOUNT STRIP LAMP SCREW CAPS			
		Colour	Quantity
9HD 980 885-017	9100909	CHARCOAL	PACK OF 4
9HD 980 885-007	9265209	WHITE	
9HD 980 885-107	9100910	CHROME PLATED	



SPARE PLASTIC CAPS			
		Colour	Quantity
9HD 959 182-032	9524030	BLACK	PACK OF 50

To suit narrow and wide rim LED courtesy, marker and strip lamps.

DT Marker and Signal Lamp Connectors



8JA 959 736-801

DT PLUG, WEDGE AND CONTACTS			
8JA 959 736-811	4960P		2 POLE
8JA 959 736-801	4963P		6 POLE



8JA 959 736-811

MARKER AND SIGNAL

COVERS			
		Colour	Quantity
8HG 959 027-001	9236608	BLACK	SINGLE
8HG 959 027-011	9236611	WHITE	

SCREW BOSS			
8HG 959 028-011	9236617	WHITE	PACK OF 4

MOUNTING SPACER			
8HG 959 952-002		BLACK	SINGLE
8HG 959 952-012		WHITE	

MOUNTING PACK	
8HG 958 421-381	9239108

ACCESSORIES		
8HG 980 726-001	9239408	FRAME
8HG 980 727-002	9239409	15MM SPACER

Mounting spacer allows lamps to be surface mounted with the cable exiting any side of the spacer, or through the centre.

EuroLED® Accessories

Spare covers or screw bosses for the EuroLED® range of lamps. One cover and two screw bosses are required per lamp.



LED Combination Lamp Mounting Pack

Mounting pack to suit LED combination lamp 2VP 980 980-001, 2VD 980 980-011 and 2VD 980 980-021.



LED Combination Trailer Lamp Accessories

To suit LED combination lamp 2VA 980 720-071 and 2VB 980 720-561



8HG 980 727-002

8HG 980 726-001

Jumbo-S Accessories

Accessories for the Jumbo-S LED lamp range.



MOUNTING GASKET BASE, SPACERS AND 1¼" SCREWS		Quantity
9HD 980 768-801	9236108	SINGLE

Allows Jumbo-S lamps to be surface mounted.

Designline /Jumbo Accessories

Housings and screw caps for the Designline/ Jumbo lamp range.



HOUSING - SINGLE, DOUBLE AND TRIPLE MODULE		MODULE
9BG 958 568-027	9204109BULK	SINGLE
9BG 958 559-011	9242209	DOUBLE
9BG 958 615-011	9242309	TRIPLE

Jumbo-S Triple Chamber Housings

The Jumbo-S LED Triple Module now has additional improvements to ensure it remains the most reliable and most popular lamp cluster on the market.



HOUSING - TRIPLE MODULE		MODULE
9BG 958 338-001	Cable grommet exit	TRIPLE
9BG 958 338-011	ø16.6mm centre hole to suit M16 conduit gland	TRIPLE
9BG 958 338-021	To suit flange mount DT connector	TRIPLE

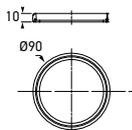
Housings are supplied with gaskets and mounting fasteners. M16 conduit gland and flange mount DT connector need to be sourced separately.



9BG 958 338-011 9BG 958 338-021

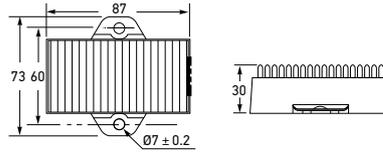
83mm Round Lamps - Mounting Rings

Mounting rings to suit 83mm round lamp range. Allows retro-fitting of lamp into existing applications with mounting holes larger than a diameter of 83mm.



MOUNTING RING		Diameter
9GD 980 696-002	98069600	90MM O.D

MARKER AND SIGNAL



5DS 357 030-011		12 VOLT
Mounting	Two bolt surface mount	
Voltage	12V DC	
Power Consumption	Simulates a 21W conventional bulb	
Protection	IP 6K7 (Protection against dust and temporary water immersion)	
Cable Length	300mm	
Weight	235g	
Compliance	ECE-R10 	

LED Direction Indicator Control Unit

The smart indicator control unit is designed to maintain compliant indicator flash rates when upgrading traditional 12V / 21W bulb lamps with low power consumption LED lamps. Once the HELLA Indicator Control Unit is installed, (one per bulb lamp) the vehicle's flasher unit will see normal power consumption and not activate warnings such as a light on the dash or commence fast indicator flashing. The new HELLA unit activates when it receives a nominal current to confirm an LED lamp is connected, it then adds additional current to simulate a 21W bulb. This is a superior solution to the alternative of adding resistors to the indicator circuit. Resistors will continue to draw current, even if an LED lamp or wiring fails and it may not provide the driver with the required lamp failure warning.

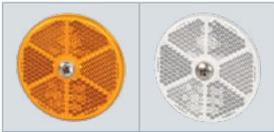


Retro Reflectors

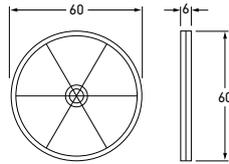
60mm diameter complete with mounting screw, 22cm². Reflectors with self adhesive are ECE certified.



8RA 002 014-233



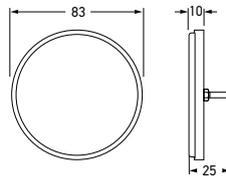
8RA 002 014-253 8RA 002 014-261



8RA 002 014-233	2915	<input type="checkbox"/>	RED
8RA 002 014-282	29151 (Self adhesive)	<input type="checkbox"/>	
8RA 002 014-253	2916	<input type="checkbox"/>	AMBER
8RA 002 014-302	29161 (Self adhesive)	<input type="checkbox"/>	
8RA 002 014-261	2917	<input type="checkbox"/>	WHITE
8RA 002 014-292	29171 (Self adhesive)	<input type="checkbox"/>	
Compliance		ADR 47/00 ECE R3/02	

Retro Reflector - Red

83mm diameter red acrylic retro reflector with black rim, 48cm².



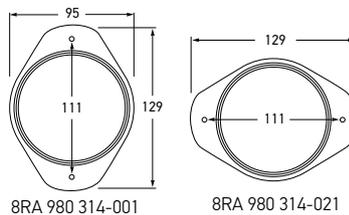
8RA 002 016-113	2902	<input type="checkbox"/>
Mounting	Single bolt mount.	
Compliance	ADR 47/00	

Retro Reflector - Red

83mm diameter acrylic retro reflector with plastic or metal surround, 48cm².



8RA 980 314-001



8RA 980 314-001

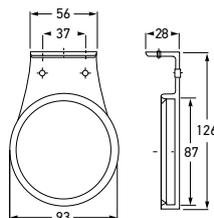
8RA 980 314-021



8RA 980 314-001	2910 (Red)	<input type="checkbox"/>	VERTICAL
8RA 980 314-021	2910H (Red)	<input type="checkbox"/>	HORIZONTAL
Mounting	Two hole surface mount.		
Compliance	ADR 47/00		

Retro Reflector - Red

83mm diameter red acrylic retro reflector with plastic surround, 48cm².

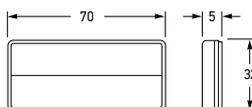


8RA 980 314-201	2930	<input type="checkbox"/>	
8RA 980 314-207	2930BULK	<input type="checkbox"/>	PACK OF 32
Mounting	Right angled base with two holes for optional surface mount.		
Compliance	ADR 47/00		

MARKER AND SIGNAL

Retro Reflectors

70 x 31.5mm self adhesive, 18cm².



8RA 004 412-003	2919		AMBER
8RA 004 412-024	2920		RED
8RA 004 412-027	2920BULK (Pack of 20)		
8RA 004 412-013	2921		WHITE
Compliance	ADR 47/00		



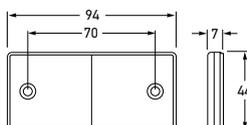
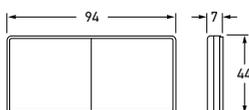
8RA 004 412-003



8RA 004 412-024 8RA 004 412-013

Retro Reflectors

94 x 44mm self adhesive (except two bolt hole versions), 33cm².



8RA 003 326-001 - Two bolt holes

8RA 003 326-045	2922		AMBER
8RA 003 326-013	29222 (Two bolt holes)		
8RA 003 326-035	2923		RED
8RA 003 326-038	2923BULK (Pack of 20)		
8RA 003 326-006	29232 (Two bolt holes)		
8RA 003 326-007	29232BULK (Two bolt holes - Pack of 20)		
8RA 003 326-054	2924		WHITE
Compliance	ADR 47/00	ECE R3/02	



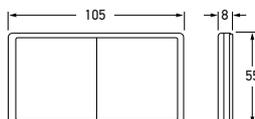
8RA 003 326-013



8RA 003 326-035 8RA 003 326-054

Retro Reflectors

105 x 55mm self adhesive, 50cm².



8RB 004 713-003	2925		AMBER
8RA 342 007-102	2926		RED
8RA 342 007-107	2926BULK (Pack of 100)		
8RA 342 007-801	2926BL (Blister pack - 2 Pack)		
Compliance	ADR 47/00		



8RB 004 713-003



8RB 342 007-102

8RA 342 007-801



To suit 2320

DESIGNLINE LAMP SPARE PARTS		
9EM 958 565-001	9232001	RED LENS
9EL 958 564-031	9214401	AMBER LENS
9EL 958 564-021	9204101	CLEAR LENS



To suit 2144

To suit 2041



To suit 2303

76mmØ LAMP SPARE PARTS		
9EL 956 388-011	2245901	RED LENS
9EL 980 318-001	2683001	AMBER LENS
9EL 956 388-001	2685601	CLEAR LENS



To suit 2100

To suit 2000



To suit 2325

84 X 84mm LAMP SPARE PARTS		
9EL 110 540-002	9232501	RED LENS
9EL 115 003-022	9238401	RED/CLEAR LENS
9EL 110 536-001	9214701	AMBER LENS
9EL 110 544-002	9140501	CLEAR LENS



To suit 2384

To suit 2147

To suit 1405



To suit 2370

STOP/REAR POSITION/REAR DIRECTION INDICATOR SPARE PARTS		
9EM 910 023-032	2316302	RED/AMBER LENS



To suit 2127

110mmØ LAMP SPARE PARTS		
9EL 910 325-012	2980101	RED LENS
9EL 910 325-002	2980009	AMBER LENS
9EL 910 325-021	2980008	CLEAR LENS

MARKER AND SIGNAL

JUMBO LAMP SPARE PARTS		
9EL 954 006-001	9231901	RED LENS
9EL 954 004-001	9214301	AMBER LENS
9EL 954 004-011	9204301	CLEAR LENS



To suit 2319



To suit 2143

To suit 2043

STOP/REAR POSITION/REAR DIRECTION INDICATOR/NUMBER PLATE LAMP SPARE PART		
9EL 910 272-014	9239601	RED/AMBER LENS



To suit 2396

SIDE MARKER LAMP SPARE PARTS		
9EL 905 635-002	9200601	RED LENS
9EL 905 635-012	9200602	AMBER LENS



To suit 2006

MARKER LAMP SPARE PARTS		
9EL 910 089-011	9204201	RED/AMBER LENS
9EL 910 089-021	9204401	AMBER LENS



To suit 2042

MARKER LAMP SPARE PARTS		
9EL 910 028-052	9230401	RED LENS
9EL 910 327-021	9214001	AMBER LENS
9EL 910 327-031	9214101	CLEAR LENS



To suit 2304



To suit
9EL 910 327-021

To suit
9EL 910 327-031



Headlamps and Inserts

Over 100 years of headlamp manufacturing has positioned HELLA as the leader for headlamp innovation, performance, and reliability.



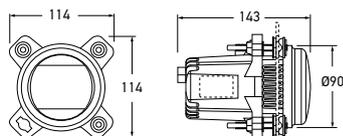
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LED 90mm Low Beam

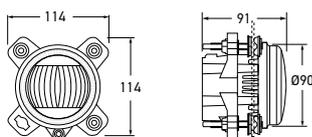
LED low beam featuring a generous spread of light. Low power consumption and ultra long life equates to economical running costs compared to a bulb lamp. Exceptional white light output and extremely homogeneous illumination for reduced driver strain which means greater safety. Complete with 3 screw adjusters.



1ML 012 488-011		LOW BEAM
Mounting	3 point mount, screw adjusters included.	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	20W	
Protection	IP 5K4K (Protection against dust and high-pressure water splash) IP 5K9K (Protection against dust and high-pressure/steam jet cleaning)	
Connector	4 Pole FEP socket (Plug not included)	
Spare Parts	9XX 254 163-007 Adjusters (3, included) 9AH 169 580-011 Mounting frame (not included)	
Compliance	E1 4090 ECE R112/01	

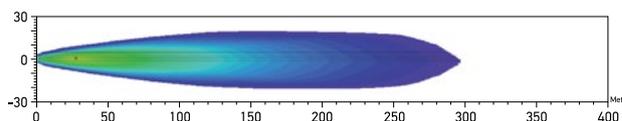
LED 90mm High Beam

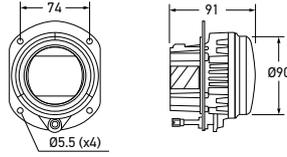
LED high beam featuring a generous spread of light. Low power consumption and ultra long life equates to economical running costs compared to a bulb lamp. Exceptional white light output and extremely homogeneous illumination for reduced driver strain which means greater safety. Complete with 3 screw adjusters.



1F0 011 988-121		HIGH BEAM
Mounting	3 point mount, screw adjusters included.	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	20W	
Protection	IP 5K4K (Protection against dust and high-pressure water splash) IP 5K9K (Protection against dust and high-pressure/steam jet cleaning)	
Connector	4 Pole FEP socket (Plug not included)	
Spare Parts	9XX 254 163-007 Adjusters (3, included) 9AH 169 580-011 Mounting frame (not included)	
Compliance	E1 3831 Ref. 12.5 ECE R112/01	

LED 90mm High Beam distance. (m)





1N0 011 988-001		FOG BEAM
1N0 011 988-011	Daytime Running Lamp/Front Position	FOG BEAM
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	Fog: 25W Daytime Running Lamp: 15W (1N0 011 988-011 version only) Front Position: 3W (1N0 011 988-011 version only)	
Protection	IP 5K4K (Protection against dust and high-pressure water splash) IP 5K9K (Protection against dust and high-pressure/steam jet cleaning)	
Connector	4 Pole FEP socket (Plug not included)	
Compliance	Fog: ECE R87/00 Daytime Running Lamp: ECE R87/00 Front Position: ECE R7/02	

LED 90mm Fog Lamp

LED Fog lamp featuring a generous spread of light. Low power consumption and ultra long life equates to economical running costs compared to a bulb lamp. Exceptional white light output and extremely homogeneous illumination for reduced driver strain which means greater safety.



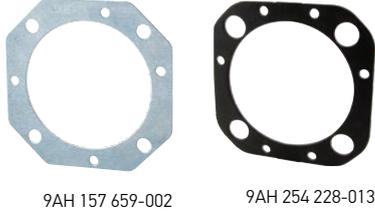
Daytime running lamp Front position

9AH 157 659-002	9102909 (Mounting frame)
9AH 254 228-013	9102910 (Mounting frame)
9AH 169 580-011	9102911 (Mounting frame)
9AH 205 652-111	9102912 (Mounting frame)
8JA 202 231-801	4988P (4 pole FEP plug kit)
8KA 202 117-001	4988DT (4 pole FEP to DT adaptor)



90mm Headlamp Plugs, Adaptors, Mounting Frames, and Adjusters

Spare parts to suit 90mm headlamps



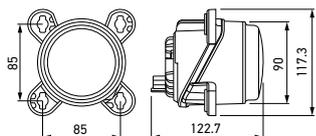
Adjuster to suit 90mm headlamps.



9XB 152 977-001	15297700	PACK OF 3
9XX 254 163-007	25416300	PACK OF 3
To Suit	9XB 152 977-001 Suits 14mm Ø mounting holes 9XX 254 163-007 Suits 17mm Ø mounting holes	

LED 90mm High and Low Beam Headlamps

90mm LED headlamps are designed as cost effective replacements for halogen headlamps found on many New Zealand manufactured buses and coaches. Featuring a robust aluminium housing, tough polycarbonate lens, and an innovative reflector optical system, the new headlamps produce a controlled, homogeneous distribution of light synonymous with the HELLA brand. The 90mm headlamps are an excellent upgrade over halogen lamps to deliver the advantages of a maintenance-free service life and reduced operating costs positioned at competitive price and performance level between HELLA's halogen and premium LED headlamps.



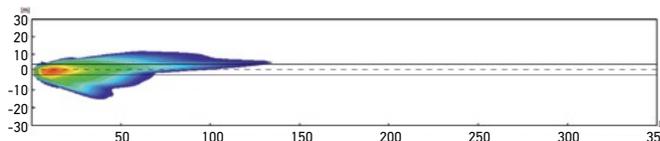
1M0 015 050-011	90mm Headlamp	LOW BEAM
1K0 015 050-021	90mm Headlamp	HIGH BEAM
Mounting	3 point mount, screw adjusters (not included)	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	21W Low Beam 14W High Beam	
Protection	Reverse polarity protection IP 5KX (Protection against dust) IP X4K (Protection against splashing water from all directions with higher pressure) IP X9K (Protection against high-pressure cleaner, specific for road vehicles)	
Connector	2 Pin DT socket (plug not included)	
Spare Parts	9XX 254 163-007 Adjusters (3, included) 9AH 169 580-011 Mounting frame (not included)	
Compliance	ECE-R149 0008 Low Beam 0009 High Beam Ref:17.5 ECE-R10 8993	



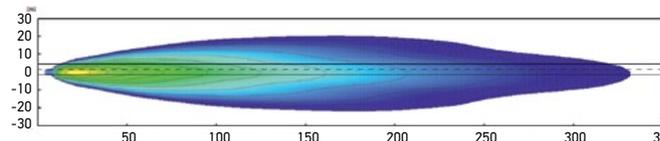
9XX 254 163-007

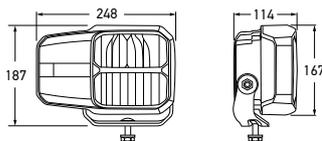
9AH 169 580-011

1M0 015 050-011 Low Beam distance. (m)



1K0 015 050-021 High Beam distance. (m)

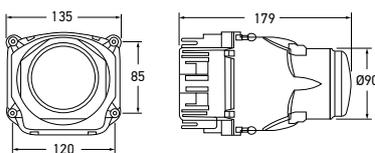




1LE 996 374-031		LEFT HAND
1LE 996 374-041		RIGHT HAND
Mounting	Single bolt mount, upright.	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	High beam	40W
	Low beam	25W
	Indicator	8W
	Position	1W
Protection	IP 6K4K (Protection against dust and water splash) IP X9K (Protection against high-pressure jets)	
Connection	6 pole DT socket	
Spare Parts	8JA 959 736-801	6 pole DT plug, wedge and 6 contacts
Compliance	(E) 4079 ECE R112/01 Ref. 12.5 ECE R6/01 ECE R7/02	

LED Combination Headlamp - High/Low Beam and Indicator/Position

Combination headlamp with all functions in LED technology. For horizontal mounting, with die-cast aluminium housing, lens made of scratch-resistant polycarbonate, with 6-pin DEUTSCH connector, light functions: low and high beam, position light and indicator.



1LL 012 758-131		HIGH/LOW BEAM
Mounting	3 point mount, screw adjusters included.	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	High beam:	30W
	Low beam:	20W
Protection	IP 6K4K (Protection against dust and high-pressure water splash) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Connection	4 pole DT socket	
Spare Parts	8KW 959 772-861	4 pole DT plug kit (included)
	9AH 205 652-111	Mounting frame
Compliance	(E) 4209 Ref. 12.5 ECE R112/01	

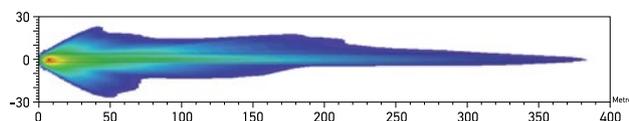
Bi-LED 90mm 2nd Generation High/Low Beam Headlamp

LED high/low beam headlamp featuring a generous spread of light and strong high beam for the open road. Low power consumption and ultra long life equates to economical running costs compared to a bulb lamp. Exceptional white light output and extremely homogeneous illumination for reduced driver eye strain which means greater safety. Complete with 4 screw adjusters and DT plug.



9AH 205 652-111

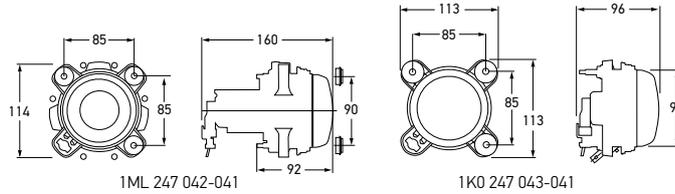
1LL 012 758-131 High Beam distance. (m)



H1 Headlamp - 24 Volt

H1 headlamps with die cast aluminium reflector and hardened glass lens.

HEADLAMPS & INSERTS



1ML 247 042-041	1029H124V	LOW BEAM
1K0 247 043-041	1030H124V	HIGH BEAM
Bulbs to Suit	Low/High Beam: Position:	12V 8GH 002 089-122 8GP 002 067-124
		24V 8GH 002 089-281 8GP 002 067-245
Spare Parts	9XX 254 163-007 9GH 152 654-007 8JD 156 150-811 9AH 254 228-013	Headlamp adjuster (Pack of 3) Rear cap Two pole plug with terminals and seals for position lamp Mounting frame
Compliance	(E1) 2397 Low Beam (E1) 2398 High Beam	



1K0 247 043-041



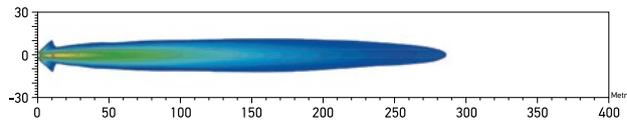
9AH 254 228-013

8JD 156 150-807

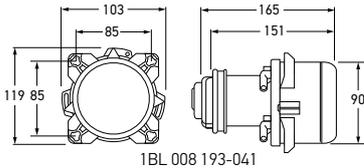
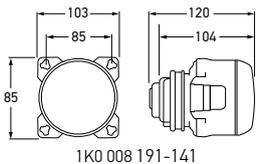
9GH 152 654-007

9XX 254 163-007

1K0 247 043-041 High Beam distance. (m)



HEADLAMPS AND INSERTS



H7 Headlamp - 24 Volt

Compact H7 headlamps with glass lens for buses, coaches and mobile homes. Includes headlamp adjusters.

1BL 008 193-041	102924V	LOW BEAM
1K0 008 191-141	103024V	HIGH BEAM

Bulbs to Suit	12V	24V
	Low/High Beam: 8GH 007 157-131 Position: 8GP 002 067-124	8GH 007 157-244 8GP 002 067-245

Spare Parts	9XB 152 977-001	Headlamp adjuster (Pack of 3)
	9GH 152 654-007	Rear cap
	8JD 156 150-811	Two pole plug with terminals and seals for position lamp
	9AH 157 659-002	Mounting frame

Compliance (E) 917

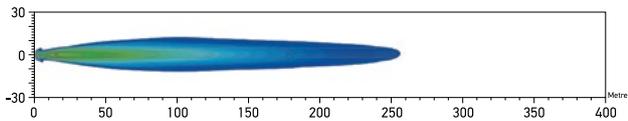


HEADLAMPS & INSERTS



1K0 008 191-141

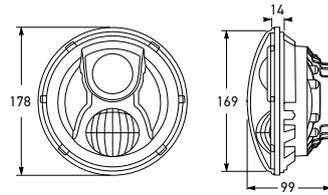
1K0 008 191-141 High Beam distance. (m)



7" Round LED Headlamps - High/Low Beam and Daytime Running Lamp/Front Position

The high/low beam function of the 7" LED headlamp range offers 1150/750 lumen light output and a wide spread creating a superior light distribution increasing peripheral vision. With the added feature of Daytime Running Lamps and Front Position Lamps the 1L6 958 307-011 is a one-stop-shop for all headlight needs, increasing visibility and therefore safety on the road.

Combining the latest state of the art LED technology, multivoltage 12/24V DC circuit design and precision optics, the retrofit lamps provide outstanding visibility, safety, and durability – making them one of the most advanced 7" LED headlamps available. The tough die-cast aluminium housing is IP 67 sealed against water and dust ingress with a UV resistant, hard coated polycarbonate lens making the HELLA's 7" Round LED Headlamp range perfect for use on and off-road.



1L6 958 307-001	1056LED	
1L6 958 307-011	1058LED (Dual Burn - Daytime Running Lamp/Front Position)	
Mounting	Retrofit 178 Ø (7") headlamps	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Light Output	1L6 958 307-001	1L6 958 307-011
	High Beam: 1150 lumen Low Beam: 750 lumen	High Beam: 1340 lumen Low Beam: 694 lumen
Protection	Reverse polarity protection. IP 67 (Protection against dust and high pressure water jets)	
Housing Material	Die-cast Aluminium	
Lens Material	Coated polycarbonate	
Power Consumption	1L6 958 307-001	1L6 958 307-011
	High Beam: 35W Low Beam: 25W	High Beam: 45W Low Beam: 24W Daytime Running Lamp: 19W Front Position: 2W
Cable Length	3 PIN "H4" type male plug (100mm cable) and 2 additional 100mm pre-wired cables with male blade terminals for front position and daytime running lamp functions.	
Compliance	1L6 958 307-001	1L6 958 307-011
	ECE R112/01 Ref. 12.5 (E11) 7581	ECE R112/01 Ref. 20 (E11) 50146 ECE R87/00 ECE R7/02 ECE R10/05



1L6 958 307-001



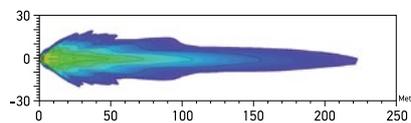
1L6 958 307-011

1L6 958 307-011 LAMP FUNCTIONS

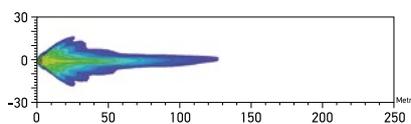


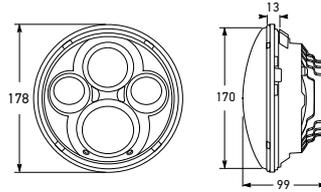
Daytime Running Lamp Front position

High Beam distance. (m)



Low Beam distance. (m)





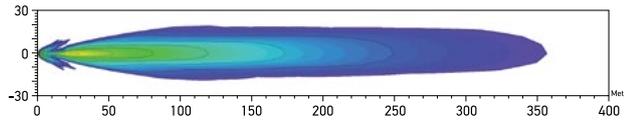
7" Round LED Headlamp - High Beam

This 7" Round LED Headlamp features a high beam function with a massive 1440 lumen light output for only 60W. Combining the latest state of the art LED technology, multivoltage 12/24V DC circuit design and precision optics, the retrofit lamps provide outstanding visibility, safety, and durability – making them one of the most advanced 7" LED headlamps available. The tough die-cast aluminium housing is IP67 sealed against water and dust ingress with a UV resistant, hard coated polycarbonate lens making the HELLA's 7" Round LED Headlamp range perfect for use on and off-road.

1L6 958 307-021	1358LED
Mounting	Retrofit 178 Ø (7") headlamps
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.
Power Consumption	60W
Light Output	1440 lumen
Operating Temperature	-40°C to 65°C
Protection	Reverse polarity protection. IP 67 (Protection against dust and high pressure water jets)
Cable Length	2 x 100mm cables with male blade terminals.
Housing Material	Die-cast Aluminium
Lens Material	Coated polycarbonate
Compliance	Ⓔ1) 7501 ECE R112/01 Ref. 30



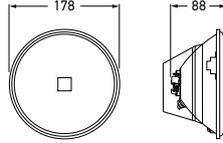
1L6 958 307-021 High Beam distance. (m)



HEADLAMPS & INSERTS

7" (178mm) H4 Halogen High/Low Beam Insert

Semi-sealed headlamp with sealing cap.



1L6 002 395-021	1056
Bulbs to Suit	12V Headlamp: 8GJ 980 324-001
	24V 8GJ 980 324-021
Compliance	E4 53

Where front position lamp is required, use 1L6 002 395-131.



Rear view

7" (178mm) H4 Halogen High/Low Beam Insert

Semi-sealed headlamp with front position lamp bulb holder (includes 8GP 002 067-124 bulb) and sealing boot.



1L6 002 395-131	1058
Bulbs to Suit	12V Headlamp: 8GJ 980 324-001
	24V 8GJ 980 324-021
	Front position: 8GP 002 067-124
Compliance	E4 53



Rear view

7" (178mm) H4 Halogen High/Low Beam Insert - Hardened Glass

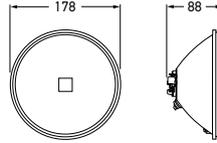
High performance Halogen headlamp insert fitted with extremely robust hardened glass lens providing maximum resistance when subjected to high operating temperatures and thermal shock. Ideal for 24 volt and high wattage bulb applications. Supplied complete with sealing boot and front position lamp bulb holder assembly.



1L6 002 395-261	1058HD
Bulbs to Suit	12V Headlamp: 8GJ 980 324-001
	24V 8GJ 980 324-021
	Front position: 8GP 002 067-124
Compliance	E4 53



Rear view



7" (178mm) H3 Halogen Driving Lamp Insert

Suitable for use as high beam headlamp in most 7" round headlamp carriers.

9DS 113 469-001	9135801		
Bulbs to Suit		12V	24V
	Headlamp:	8GH 980 333-001	8GH 002 090-261
Compliance	E1 14529		



HEADLAMPS & INSERTS

7" (178mm) Chrome Rim

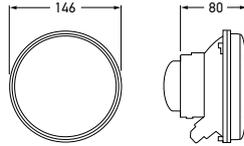
Outer chrome rim to suit 7" headlamp housing.

9AB 912 420-511	1017	CHROME RIM
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5 3/4" (146mm) H4 Halogen High/Low Beam Insert

Semi-sealed headlamp with front position lamp bulb holder (includes 8GP 002 067-124 bulb) and sealing boot. Suitable for dual headlamp systems.



1L3 002 850-064

1055

Bulbs to Suit

12V

24V

Headlamp: 8GJ 980 324-001

8GJ 980 324-021

Front position: 8GP 002 067-124

8GP 002 067-245

Spare Parts

9FF 138 397-001

Front position bulb holder

9GH 126 647-011

Sealing boot

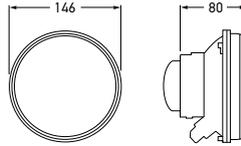
Compliance

17031



Rear view

Sealing boot



5 3/4" (146mm) H1 Halogen High Beam Insert

Semi-sealed headlamp, for high beam section of dual headlamp systems with sealing boot.



1K3 114 155-021	1053		
Bulbs to Suit		12V	24V
	Headlamp:	8GH 002 089-122	8GH 002 089-281
Spare Part	9GH 113 763-001	Sealing boot	
Compliance	Ⓔ 14464		
Earth terminal is a 'Post' (bullet) type connection.			



Rear view

Sealing boot

HEADLAMPS & INSERTS

5 3/4" (146mm) H1 Halogen Long Range Driving Insert

Semi-sealed headlamp, for high beam section of dual headlamp systems and sealing boot.



1K3 002 425-193	1040		
Bulbs to Suit		12V	24V
	Headlamp:	8GH 002 089-122	8GH 002 089-281
Spare Part	9GH 113 763-001	Sealing boot	

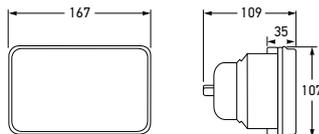


Rear view

Sealing boot

**165 x 100mm H4 Halogen
High/Low Beam Insert**

Semi-sealed headlamp and front position lamp with sealing boot.



1LB 003 177-511	1044
Bulbs to Suit	12V 24V
	Headlamp: 8GJ 980 324-001 8GJ 980 324-021
	Front position: 8GP 002 067-124 8GP 002 067-245
Compliance	E1 7197



Rear view

**165 x 100mm H4 Halogen
High/Low Beam Insert**

Semi-sealed headlamp with sealing boot and wiring adaptor.



1LB 003 177-301	1042
Bulbs to Suit	12V 24V
	Headlamp: 8GJ 980 324-001 8GJ 980 324-021
Spare Part	9GH 126 647-011 Sealing boot
Compliance	E1 7197



Rear view



Sealing boot

**165 x 100mm H1 Halogen
High Beam Insert**

Semi-sealed headlamp with sealing cap.



1KB 003 177-061	1041
Bulbs to Suit	12V 24V
	Headlamp: 8GH 002 089-122 8GH 002 089-281
Compliance	E1 24504



Rear view



1LE 003 427-041	1043	
Bulbs to Suit	12V	24V
	Headlamp: 8GJ 980 324-001	8GJ 980 324-021
	Front position: 8GP 002 067-124	8GP 002 067-245
Spare Parts	9FF 138 397-001 9GH 126 647-011	Front position bulb holder Sealing boot
Compliance	(E1) 17009	(E1) 17119

**200 x 142mm H4 Halogen
High/Low Beam Insert**

Semi-sealed headlamp with front position lamp bulb holder (includes 8GP 002 067-124 bulb).



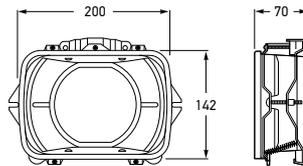
Rear view

Sealing boot

HEADLAMPS & INSERTS

Rectangular Headlamp Housing

Suits 200 x 142mm rectangular headlamp units (1LE 003 427-041). Ideal for truck, bus or body builders.

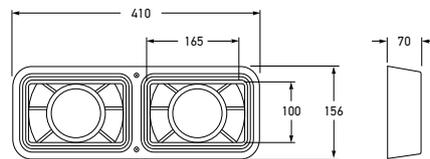


1VE 905 153-001	1024	
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Twin Rectangular Headlamp Housing

For most 165 x 100mm rectangular headlamp units. Chrome plated outer rim. Complete with adjusting mechanisms for vertical/horizontal alignment and wiring loom. Ideal for truck, bus or body builders.



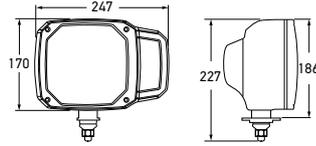
1VB 950 951-001	1025	
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Spare Part	9AB 905 931-001	Chrome plated outer rim
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Headlamp H4 - High/Low Beam and Indicator/Position

The Headlamp H4 is a robust headlamp in a universal, stylish design. The headlamp is equipped with a die-cast aluminium reflector and a borosilicate lens which provides thermal shock resistance. With its flexible design, upright mounting is possible with a 6-pin DT connector (which is integrated into the housing).



1LA 328 450-311		LEFT HAND
1LA 328 450-321		RIGHT HAND
Mounting	Single bolt mount, upright.	
Bulbs to Suit		12V
	Dipped/Main beam:	8GJ 980 324-001
	Indicator:	8GA 002 073-163
	Position:	8GP 002 067-124
	24V	
Dipped/Main beam:	8GJ 980 324-021	
Indicator:	8GA 002 073-245	
Position:	8GP 002 067-245	
Protection	IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Accessories	8JA 959 736-801 6 pole DT plug, wedge and 6 contacts	
Compliance	E9 16338/16339	

1L6 958 307-011 LAMP FUNCTIONS

Right hand Left hand

DAF Headlamp

CF65/75/85 LF45/55, XF95/105 01/01-05-13



HEADLAMP (H1/H7)		
1LJ 247 046-071		LEFT HAND
1LJ 247 046-081		RIGHT HAND
Bulbs to Suit	Low Beam:	8GH 007 157-244
	High Beam:	8GH 002 089-281
Compliance	E1 1134	

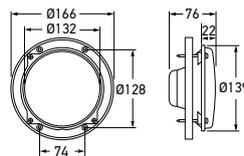
139mmØ H4 Headlamp with Frame



1L3 996 002-221

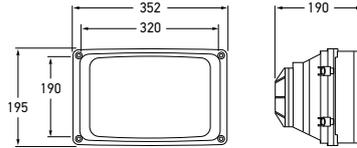


1L3 996 002-411



1L3 996 002-221		
1L3 996 002-411	with Front Position	
Bulbs to Suit		12V
	Headlamp:	8GJ 980 324-001
	Front Position:	8GP 002 067-124
		24V
Headlamp:	8GJ 980 324-021	
Front Position:	8GP 002 067-245	
Compliance	E12 20005	

HEADLAMPS AND INSERTS



H4 Halogen High/Low Beam Headlamp Assembly

Lamp unit, lens dimensions 352 x 195mm, complete with mounting frame and adjusting mechanisms for vertical and horizontal alignment. Fully enclosed housing with removable rear sealing cap for bulb replacement access. Ideal for truck, bus or body builders.

1LG 003 434-182	1027	
Mounting	Simple four point mounting.	
Bulbs to Suit	12V Headlamp: 8GJ 980 324-001 Front position: 8GP 002 067-124	24V 8GJ 980 324-021 8GP 002 067-245
	Spare Parts	9ES 122 221-001 Clear lens 9DE 131 520-012 Reflector
Compliance	Ⓔ 17016	



HEADLAMPS & INSERTS

HID Gas Discharge (G3) Power Pack

5DV 007 760-631		12 VOLT
5DV 007 810-171		24 VOLT
To Suit	D2S and D2R Bulbs	



HID Gas Discharge (G4) Power Pack

5DV 008 855-001		12 VOLT
To Suit	D1S and D1R Bulbs	



HID Gas Discharge Ignitor

5DD 008 319-501		12/24 VOLT
To Suit	D2S and D2R Bulbs	





BE SAFE BE SEEN

HELLA SAFETY DAYLIGHTS™

HELLA Safety DayLights™ are forward facing signal lamps that significantly enhance the visibility of your vehicle during daylight hours to prevent vehicle crashes by 'accidental oversight'.

Safety DayLights™ automatically switch ON when the ignition is switched ON and automatically switch OFF when the headlamps are turned ON in order not to dazzle other road users at night.

Why Install Hella Safety DayLights™?

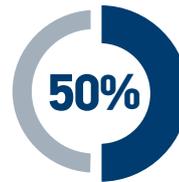
As road users we have all experienced the 'fright second' of a near miss by being overlooked by another car, van or truck.

Equally frightening is almost not noticing another vehicle approaching due to an inconspicuous vehicle colour, the low sun casting harsh shadows or sun strike. Any single one of these 'fright seconds' has the potential to end in a tragic outcome and become a number in the road toll statistics.

Why can't I just switch on my headlamps?

Dipped beam headlamps are designed to effectively light up the road in front of the vehicle during darkness, whilst causing as little glare as possible to oncoming traffic.

During daytime, dipped beam headlamps 'waste' most of their light directed to the road in front of the vehicle but provide very little as a signal to other road users in bright daylight. Using your dipped beam headlamps during daylight hours has only a marginal added safety effect.



Failure to see another road user contributes to over 50% of all daytime accidents.



For daytime intersection accidents this increases to as much as 80%.



Source: The Safety Effects of Daytime Running Lights, SWOV, 1997

Low Beam Headlamps



approx 200cd at driver's sight of vision

Designed to light the road at night without causing glare to other road users.

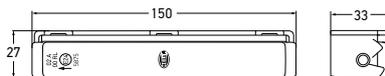
HELLA LED Safety DayLights™



minimum legal requirement of 800cd

Designed to increase the visibility (conspicuity) of your vehicle during daylight hours.

SAFETY DAYLIGHTS™



2PT 980 970-801	5636	12 VOLT
2PT 980 970-802	5636BL (Blister Pack)	
2PT 980 970-851	563624V	24 VOLT
Mounting	Suitable for horizontal mounting.	
Power Consumption	2W	
Protection	Reverse polarity protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.	
Lens Material	High impact acrylic.	
Compliance	ADR 76/00	E24 5875 ECE R87/00
Kit Contents	2PT 980 970-801/ 2PT 980 970-851 2 x LED Safety DayLights™ 2 x Mounting brackets 6 x Mounting screws 1 x Changeover relay 1 x Instruction sheet	2PT 980 970-802 2 x LED Safety DayLights™ 2 x Mounting brackets 6 x Mounting screws 1 x Advanced smart controller relay 1 x Terminal kit 1 x Instruction sheet
See page 95 for front position relay option.		

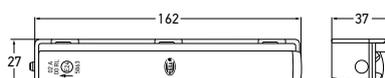
LED Safety DayLights™ Kit - Easy-Fit

Forward facing signal lamps, designed to be mounted on vehicles with flat fronts, or on motorbikes. The lamps are an Easy-Fit installation, usually requiring no extra parts. Once the wiring is complete and the bracket is fitted, the LED lamp easily clips into place and installation is complete.



2PT 980 970-802

SAFETY DAYLIGHTS™



2PT 980 860-841	5630	12 VOLT
2PT 980 860-842	5630BL (Blister Pack)	
2PT 980 860-871	563024V	24 VOLT
2PT 980 860-872	563024VBL (Blister Pack)	
Mounting	Suitable for horizontal mounting.	
Power Consumption	2W	
Protection	Reverse polarity protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.	
Lens Material	High impact acrylic.	
Compliance	ADR 76/00	E24 5863 ECE R87/00
Kit Contents	2PT 980 860-841/ 2PT 980 860-871 2 x LED Safety DayLights™ 2 x Mounting brackets 6 x Mounting screws 1 x Changeover relay 1 x Instruction sheet	2PT 980 860-842/ 2PT 980 860-872 2 x LED Safety DayLights™ 2 x Mounting brackets 6 x Mounting screws 1 x Advanced smart controller relay 1 x Terminal kit 1 x Instruction sheet
See page 95 for front position relay option.		

LED Safety DayLights™ Kit - 15°

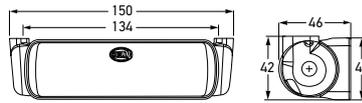
A lens angle of 15 degrees allows installation as close as possible to the corners of a modern motor vehicle. These lamps were designed to fit the curved bumpers of modern vehicles to give the look of Original Equipment fitment. The lamps have extremely low power consumption at 2W per lamp and high impact acrylic lenses to protect against impact damage.



2PT 980 860-842

**LED Safety DayLights™ Kit
- Rectangular**

Rectangular shaped ultra light lamps offering maximum visibility in road traffic during the day. Features lightweight housing, universal mounting bracket and ultra-durable Grilamid® nylon lens for extreme impact, UV and chemical resistance. Easy wiring requiring only 3 connections, earth (-), ignition (+) and position lamps (+). (No extra relay required).



SAFETY DAYLIGHTS™



2PT 980 670-831	5617	
2PT 980 670-812	56170E	
Mounting	Suitable for horizontal mounting.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	<2W	
Protection	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)	
Spare Part	2PT 980 670-002	Single lamp (with 0.5m of multi-core cable)
Cable Length	2PT 980 670-831	Pre-wired with 0.5m of multi-core cable.
	2PT 980 670-812	Pre-wired with 2.5m of multi-core cable.
Lens Material	High impact and chemical resistant Grilamid® lens	
Compliance	ADR 76/00	E24 0002 ECE R87/00



2PT 980 670-831

Wiring harness and super seal connectors.

2PT 980 670-831 Kit Contents:

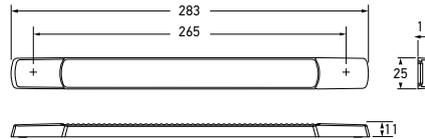
- 2 x LED Safety DayLights™
- 1 x Professional wiring harness and super seal connectors
- 4 x Mounting brackets and fasteners
- 1 x Instruction sheet



2PT 980 670-812

2PT 980 670-812 Kit Contents:

- 2 x LED Safety DayLights™ with 2.5m sheathed multi-core cable.
- 4 x Mounting brackets and fasteners
- 1 x Instruction sheet



2PT 980 880-801	5619 (Horizontal Mount - Kit)	12 VOLT
2PT 980 880-901	5619V (Vertical Mount - Kit)	
2PT 980 880-001	1009 (Horizontal Mount - Single Lamp)	
2PT 980 880-012	1009BL (Horizontal Mount - Blister Pack)	24 VOLT
2PT 980 880-851	561924V (Horizontal Mount - Kit)	
2PT 980 880-951	5619V24V (Vertical Mount - Kit)	
2PT 980 880-101	100924V (Horizontal Mount - Single Lamp)	
2PT 980 880-112	100924VBL (Horizontal Mount - Blister Pack)	
Mounting	Suitable for horizontal or vertical surface mount. (Select correct version) Mounting surface must be flat.	
Power Consumption	3W	
Protection	Reverse polarity protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable. Blister pack is pre-wired with 0.5m of sheathed multi-core cable.	
Spare Parts	9HD 980 885-017 Charcoal screw caps (Pack of 4) 9HD 980 885-107 Chrome plated screw caps (Pack of 4)	
Lens Material	High impact and chemical resistant Grilamid® lens	
Compliance	ADR 76/00 E24 5869 ECE R87/00	
Kit Contents	2 x LED Safety DayLights™ 4 x Mounting screws 4 x Screw caps 1 x Changeover relay 1 x Instruction sheet	

See page 95 for front position relay option.

LED Safety DayLights™ Kit - Surface Mount

Surface mount LED Safety DayLights™ designed to fit flat-fronted vehicles. Comes either as a single lamp, or as a kit. The lamp is ADR compliant and features a Grilamid® lens to protect against impact damage.



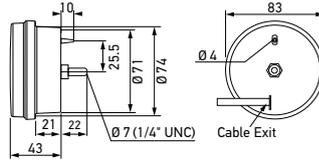
Ultra slim height of only 11mm. Lamp shown active.



2PT 980 880-012
(Single)

83mm Round LED Safety DayLights™

The lamp features a traditional round lens that illuminates with a distinctive ring of white LEDs when used as a Safety DayLight™. 2PT 980 690-401 also features a front position function.



2PT 980 687-501	1006	12 VOLT
2PT 980 686-401	100724V (Includes Front Position Lamp)	24 VOLT
Mounting	Surface mount. Single bolt 1/4" stainless UNC thread. Nut and washer supplied.	
Power Consumption	Safety DayLights™: 5W Front position: 1W (2PT 980 690-401 only)	
Protection	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)	
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.	
Lens Material	High impact and chemical resistant Grilamid® lens	
Compliance	2PT 980 687-501 2PT 980 686-401: E24 5921 ECE R87/01 2PT 980 686-401 also: ECE R7/03	

See page 66 for mounting accessories.

83MM LAMP FUNCTIONS

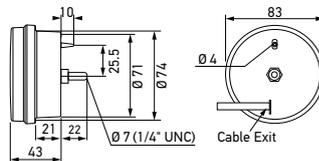


LED Safety DayLights™

Front position (2PT 980 686-401 only)

83mm Round LED Safety DayLights™/Front Position/ Front Direction Indicator Lamp

This LED combination lamp features an integrated Safety DayLight™, front position and front direction indicator function. The lamp features a traditional round lens that illuminates with a distinctive ring of white LEDs when used as a Safety DayLight™. This lamp eliminates the need for installation of multiple lamps. Front position lamp and front direction indicator will extinguish the Safety DayLight™ automatically.



2BE 980 687-111	2108GMD	12 VOLT												
2BE 980 686-011	2108GMD24V	24 VOLT												
Mounting	Surface mount. Single bolt 1/4" stainless UNC thread. Nut and washer supplied.													
Power Consumption	<table border="1"> <tr> <td>Safety DayLights™:</td> <td>2BE 980 687-111</td> <td>2BE 980 686-011</td> </tr> <tr> <td>Front position:</td> <td>5W</td> <td>5W</td> </tr> <tr> <td>Front indicator:</td> <td>1W</td> <td>1W</td> </tr> <tr> <td></td> <td>4W</td> <td>5W</td> </tr> </table>		Safety DayLights™:	2BE 980 687-111	2BE 980 686-011	Front position:	5W	5W	Front indicator:	1W	1W		4W	5W
Safety DayLights™:	2BE 980 687-111	2BE 980 686-011												
Front position:	5W	5W												
Front indicator:	1W	1W												
	4W	5W												
Protection	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)													
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.													
Lens Material	High impact and chemical resistant Grilamid® lens													
Compliance	E24 5921 ECE R6/02 ECE R7/03 ECE R87/01													

See page 66 for mounting accessories.

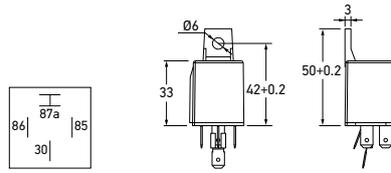
83MM LAMP FUNCTIONS



LED Safety DayLights™

Front position

Front direction indicator



5DF 980 816-041	9563003	12 VOLT
5DF 980 816-061	9563603	
To Suit	5DF 980 816-041 5DF 980 816-061	2PT 980 880-001, 2PT 980 880-801, 2PT 980 860-841 2PT 980 970-801

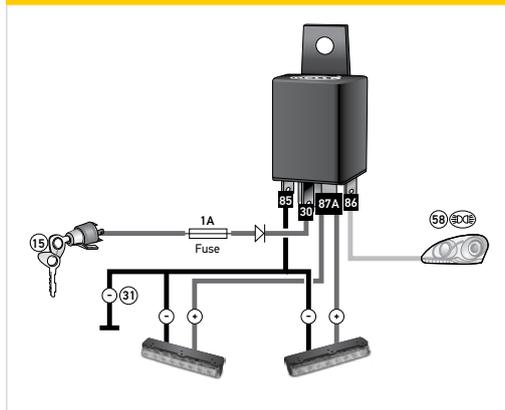
Dual Function Safety DayLights™ Controller

This controller is designed to turn your HELLA Safety DayLights™ into front position lamps at night. The dual function controller is connected and activated by the headlamp of the vehicle.

The dual function controller reduces the current to the Safety DayLights™ thus turning them into road legal* front position lamps. Only one controller is required for a pair of HELLA Safety DayLights™.

*Please note legally required spacing of front position lamps and only one pair of front position lamps is legally permitted.

RECOMMENDED INSTALLATION DIAGRAM FOR WIRING



WIRING SPECIFICATIONS

Terminal Number	Connect to
30	Ignition (+)
85	Earth return (-)
86	Front position or headlamps (+)
87A	Safety DayLights™ (+)



SAFETY DAYLIGHTS™

DESIGNED TO SIMPLIFY INSTALLATION

SAFETY DAYLIGHTS™ SMART CONTROLLER

HELLA's Safety DayLights™ Smart Controller is designed to simplify the installation of Safety DayLights™ by eliminating the need to connect the lamp, or changeover relay, to ignition terminal 15. The vehicle's ignition feed is typically used as a signal to turn Safety DayLights™ ON. Correctly identifying terminal 15 (Ignition) in the engine bay can be a difficult task on some vehicles, requiring specialised tools and in some cases the only solution is to route the wiring back through the fire wall into the vehicle cabin. This procedure can greatly increase the time and cost it takes to install Safety DayLights™. It can also be a daunting experience for the DIY-er not familiar with the electronic complexity of the modern vehicle.

The Safety DayLights™ Smart Controller reduces the installation complexity as it is directly connected to the positive terminal of the battery where it will sense that the vehicle engine has been activated.

The Safety DayLights™ Smart Controller uses advanced electronics that constantly monitor the voltage of the battery and other tell tale signs that the engine has been started. It will automatically switch the Safety DayLights™ ON. It will deactivate the Safety DayLights™ when the headlamps are turned ON or the engine is turned OFF (after a small delay).



5DF 980 818-001



5DF 980 818-011



Designed to simplify installation saving time and install costs.

Standard	5DF 980 818-001
Advanced*	5DF 980 818-011

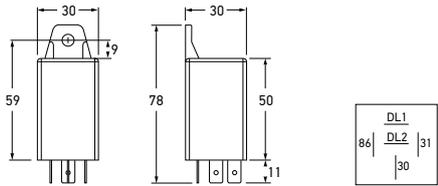
*Advanced version with vibration monitor for installation in vehicles with fuel saving alternator.



For more information about the Safety DayLights™ Smart Controller and the full product range of Safety DayLights™ please visit

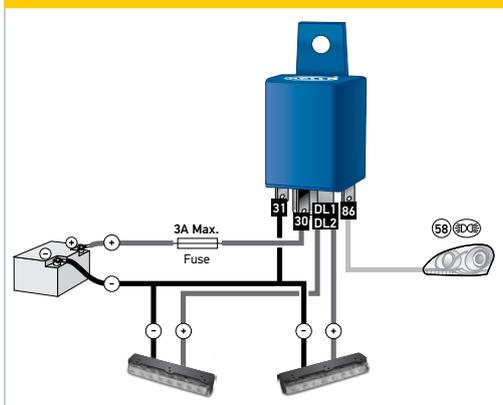
www.safetydaylights.com





5DF 980 818-011	3090	
5DF 980 818-017	3090BULK	
Voltage	Multivolt™, suitable for 12 and 24 volt systems.	
Maximum Continuous Load	20W	
To Suit	HELLA LED Safety DayLights™ range.	
Features a Safety DayLights™ OFF delay of approximately 10 seconds.		

RECOMMENDED INSTALLATION DIAGRAM FOR WIRING



Terminal Number	Connect to
30	Battery (+)
31	Earth return (-)
86	Front position or headlamps (+)
DL1 & DL2	Safety DayLights™ (+)

Safety DayLights™ Smart Controller - Advanced*

This smart controller is designed to simplify the installation of HELLA's LED Safety DayLights™ range by eliminating the need to wire the lamp, or changeover relay to ignition terminal 15.

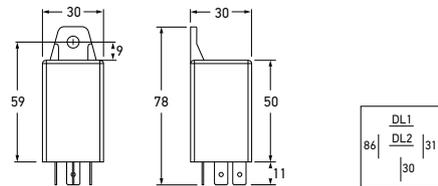
The Safety DayLights™ Smart Controller can be wired directly to the positive terminal of the battery, which saves the difficult and often time consuming task of finding the ignition feed.

The smart controller monitors the voltage supply from the battery and will automatically switch the Safety DayLights™ on when the engine is started, and automatically switch them off when the headlamps are activated, or the engine is turned off.

*Advanced version with vibration monitor for installation in vehicles with fuel saving alternators.

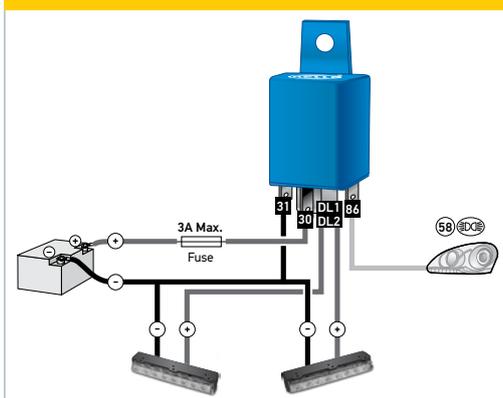


SAFETY DAYLIGHTS™



5DF 980 818-001	3091	
5DF 980 818-007	3091BULK	
Voltage	Multivolt™, suitable for 12 and 24 volt systems.	
Maximum Continuous Load	20W	
To Suit	HELLA LED Safety DayLights™ range.	
Features a Safety DayLights™ OFF delay of approximately 10 seconds.		

RECOMMENDED INSTALLATION DIAGRAM FOR WIRING



Terminal Number	Connect to
30	Battery (+)
31	Earth return (-)
86	Front position or headlamps (+)
DL1 & DL2	Safety DayLights™ (+)

Safety DayLights™ Smart Controller - Standard

This smart controller is designed to simplify the installation of HELLA's LED Safety DayLights™ range by eliminating the need to wire the lamp, or changeover relay to ignition terminal 15.

The Safety DayLights™ Smart Controller can be wired directly to the positive terminal of the battery, which saves the difficult and often time consuming task of finding the ignition feed.

The smart controller monitors the voltage supply from the battery and will automatically switch the Safety DayLights™ on when the engine is started, and automatically switch them off when the headlamps are activated, or the engine is turned off.





Fog and Driving Lamps

Whether in the urban jungle or off-road, superior lighting performance significantly enhances vision and safety.



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DESIGNED WITH STYLE BUILT FOR PERFORMANCE

HELLA driving lights are precision manufactured to the highest OEM standards for professional and recreational drivers and supported by the HELLA 5 year warranty.

HELLA's leading technology is showcased through the unique design signatures of LED driving lamps with their elegantly integrated position lamps.



LED LIGHT BAR 470 PO

The low profile and light weight auxiliary headlamp for long-distance vision with the distinctive position light.



JUMBO LED

Edge Light technology enhances the Jumbo LED series of auxiliary headlamps, the commercial transport benchmark.



LUMINATOR LED

The latest iteration of the revolutionary HELLA Luminator. Proven worldwide on rally cars, 4WD vehicles and heavy duty machinery.

Must be mounted according to local installation regulations for high beam and position lamps.

3 REASONS TO SPECIFY HELLA LED LIGHT BARS

High Performance Automotive Grade LEDs

Precision optics accurately aim the beam, maximising distance and reducing scattered light which can cause glare and unwanted reflections.

Tested to AEC-Q101, a harsh stress test regime of extreme high and low temperature cycles, humidity, vibration and mechanical shock.

The colour temperature is kept below 6000K as cooler colour temperatures have been associated with eye strain and fatigue.

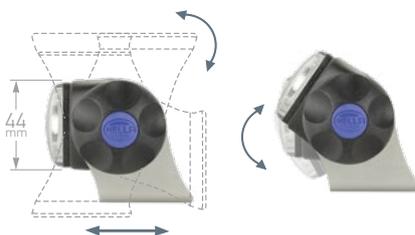


Low Profile Design

The light weight and low profile of HELLA's light bar range offer installation flexibility.

The aerodynamic design equals less air flow disturbance so the vehicle's cooling and performance is not adversely affected if lamps are mounted in front of a radiator grille.

The heavy duty 316 stainless steel bracket will suit most vehicle installations. Swift to mount and adjust.



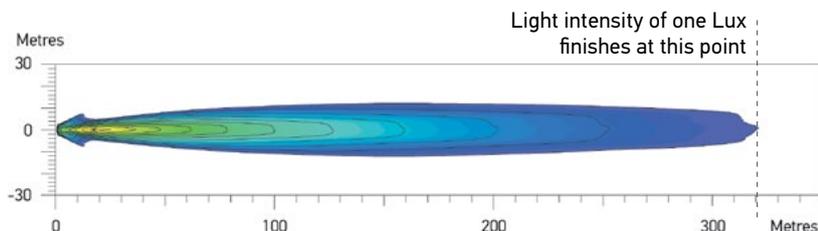
Dust and Waterproof

Built to stand all weather and off-road conditions the light bar is hermetically sealed, making it dust and waterproof.



MEASURING DISTANCE IN LIGHT

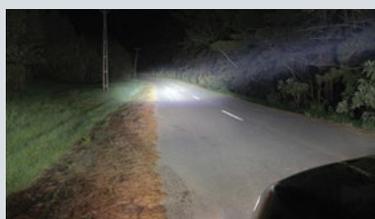
Isolux charts represent the beam pattern and distance illuminated on a flat road by two lamps.



The colour shades represent the distance in metres from the lamps. The dark blue shade indicates illumination of one Lux (320 metres in the diagram). One Lux represents the intensity of the light of a full moon (under clear atmospheric conditions) or just sufficient light to read a newspaper.

Pencil Beam

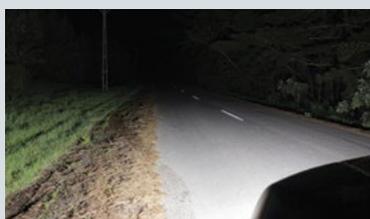
The pencil beam driving light is designed for maximum long-range illumination, providing improved visibility of objects and traffic at great distance. This beam type is recommended for off-road vehicles where objects at a far distance must be recognised early to allow driver action.



Pencil Beam, long distance illumination

Spread Beam

The spread beam driving light provides effective illumination of the area immediately in front of the vehicle and some distance ahead. This beam type is suitable for road vehicles (e.g. cars, trucks and buses) where fatigue-free driving is preferred than recognising long distance objects.



Spread Beam, even illumination in close range

HELLA Fog Lamps

Fog, rain or snow can reflect the light of standard driving lights into the driver's vision creating a dangerous glare which makes it difficult to recognise hidden hazards.

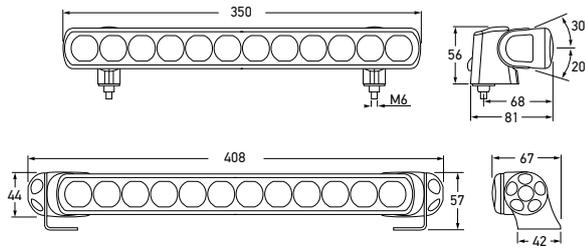
HELLA Fog Lamps are equipped with specially designed reflectors, which evenly illuminate the width of the road, providing a wide path of light for clearer visibility in close range to the vehicle. Particularly suitable for any vehicle driving through humid or moist areas where fog, rain or snow is common.

LED Light Bar 350
- Plastic Bracket / HD Bracket

This innovative, light weight HELLA LED Light Bar 350 is the first such lamp with a body manufactured entirely from non-corrosive, thermally conductive high performance plastics. This aerodynamic powerhouse features 12 durable high performance automotive grade LEDs and a maximum luminous intensity of 145,000 candela with a mere power consumption of only 25 watts.

The dust and waterproof light bar comes in two different beam patterns – High Beam (Ref 20) and Pencil Beam (Ref 30); and two mounting bracket options — Plastic, and ultra durable and corrosion resistant Stainless Steel HD Bracket.

The hermetically sealed and submersible light bar features a Multivolt™ circuit for optimum brightness at input voltages from 9 to 33 volts, is fully road legal with ECE approval and comes with a comprehensive 5 year warranty.



LED LIGHT BAR 350 - PLASTIC BRACKET			
1FJ 958 040-021	1395 (High Beam)		REF. 20
1FJ 958 040-061	1396 (Pencil Beam)		REF. 30

LED LIGHT BAR 350 - HD BRACKET			
1FJ 958 040-031	1395HD (High Beam)		REF. 20
1FJ 958 040-041	1396HD (Pencil Beam)		REF. 30

Mounting	Upright or pendant.
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.

Power Consumption	25W
-------------------	-----

Maximum Luminous Intensity	1FJ 958 040-021 / 1FJ 958 040-031: 96,000 candela 1FJ 958 040-061 / 1FJ 958 040-041: 145,000 candela
----------------------------	---

Protection	Reverse polarity and transient spike protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)
------------	--

Cable Length	Pre-wired with 2.5m of tinned multi-core cable.
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Compliance	E4	2909	R10/04	
	E24	0008	R112/01	Ref. 20
	E24	0009	R112/01	Ref. 30

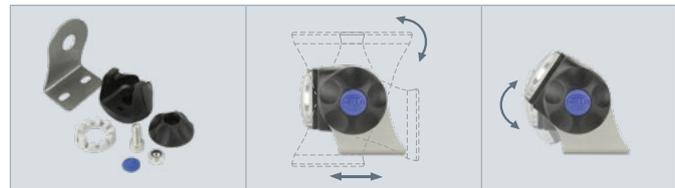
Accessories	8HG 014 075-011 LED Light Bar 350 Number Plate Bracket 8HG 958 139-881 LED Light Bar Joiner Accessory 8XS 958 336-021 LED Light Bar 350 Cover - clear 8XS 958 336-031 LED Light Bar 350 Cover - amber 8XS 958 336-111 LED Light Bar 350 Cover - black 8HG 958 139-841 LED Light Bar - HD Single Bracket Kit 8HG 958 139-851 LED Light Bar - HD Double Bracket Kit
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Contents	(Plastic)	1 x LED Light Bar 350	2 x Plastic mounting brackets	1 x Instruction booklet
	(HD)	1 x LED Light Bar 350	2 x HD mounting brackets	1 x Instruction booklet



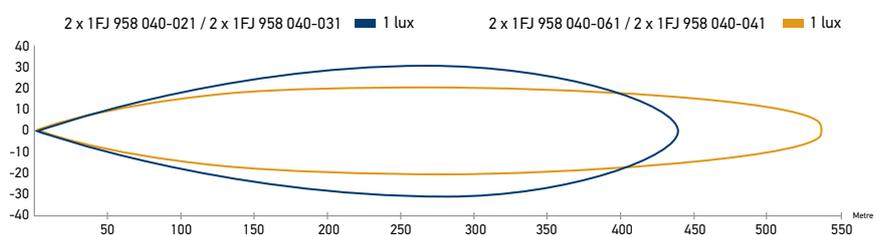
Mounting brackets allow rotation of driving light. Mounting brackets can be positioned to suit most vehicle installations. Plastic single mounting bracket - Disassembled view

The heavy duty HD brackets are made of stainless steel, ultra durable and corrosion resistant. The perfect choice for on or off road applications.



HD single mounting bracket - Disassembled view Mounting brackets can be positioned to suit most vehicle installations.

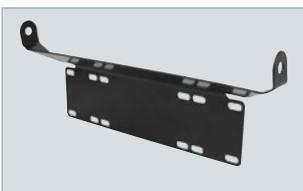
LED Light Bar 350 Beam Pattern distance (m)



LED Light Bar 350 - Plastic Bracket



LED Light Bar 350 - HD Bracket

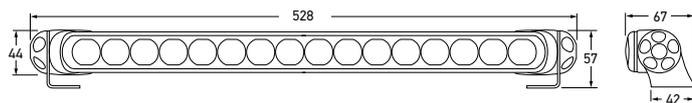


8HG 014 075-011 Number plate bracket light bar 350 - Mounted upright or pendant (Depending on your vehicle) See Page 106



8XS 958 336-111 LED Light Bar 350 Protective Cover See Page 106





1FJ 958 130-121	1397HD (High beam)		REF. 25
1FJ 958 130-021	1398HD (Pencil beam)		REF. 37.5

Mounting	Upright or pendant.		
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.		
Power Consumption	35W		
Maximum Luminous Intensity	1FJ 958 130-121: 113,000 candela 1FJ 958 130-021: 166,000 candela		
Protection	Reverse polarity and transient spike protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)		
Cable Length	Pre-wired with 2.5m of tinned multi-core cable.		
Compliance		1947	R10/05
		0012	R112/01 Ref. 25
		0013	R112/01 Ref. 37.5
Accessories	8HG 014 075-031	LED Light Bar 470 Number Plate Bracket	
	8HG 958 139-881	LED Light Bar Joiner Accessory	
	8XS 958 337-021	LED Light Bar 470 Cover - clear	
	8XS 958 337-031	LED Light Bar 470 Cover - amber	
	8XS 958 337-111	LED Light Bar 470 Cover - black	
	8HG 958 139-841	LED Light Bar - HD Single Bracket Kit	
	8HG 958 139-851	LED Light Bar - HD Double Bracket Kit	

Contents	1 x LED Light Bar 470	2 x HD mounting brackets	1 x Instruction booklet
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LED Light Bar 470 - HD Bracket

The longer and brighter LED Light Bar 470 features high performance automotive LEDs and a maximum luminous intensity of 166,000 candela at a power consumption of only 35 watts.

The dust and waterproof light bar comes in two different beam patterns – High Beam (Ref 25) and Pencil Beam (Ref 37.5). With only 950g weight the light bar is particularly popular for roof mount applications on ATVs and off-road vehicles. The non corrosive, thermally conductive housing is highly resistant to degradation and due to its slim profile, this streamlined light bar is ideal for applications where aerodynamic styling are a valued attribute. The flexible, adjustable mounting system ensures easy installation.

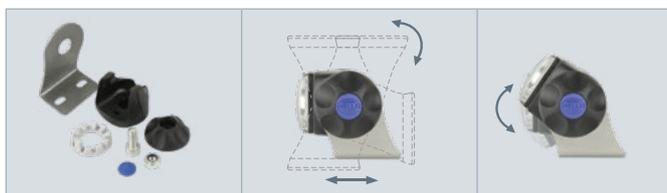
The Light Bar 470 features a Multivolt™ circuit for optimum brightness at a wide range of input voltages from 9 to 33 volts and is fully road legal with ECE approval.

FOG AND DRIVING



Mounting brackets allow rotation of driving light. Mounting brackets can be positioned to suit most vehicle installations. Plastic single mounting bracket - Disassembled view

The heavy duty HD brackets are made of stainless steel, ultra durable and corrosion resistant. The perfect choice for on or off road applications.



HD single mounting bracket - Disassembled view Mounting brackets can be positioned to suit most vehicle installations.

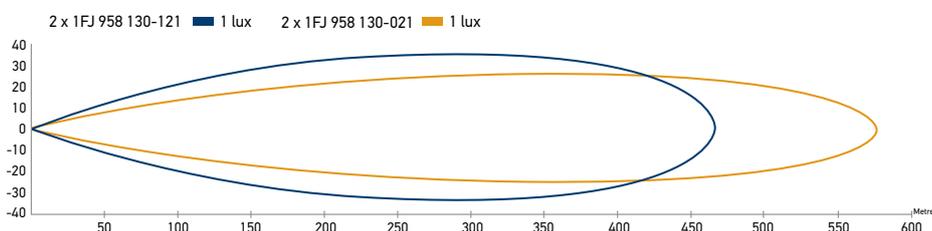


8HG 014 075-031 Number plate bracket light bar 470 - Mounted upright or pendant (Depending on your vehicle) See Page 106



8XS 958 337-111 LED Light Bar 470 Protective Cover See Page 106

LED Light Bar 470 Beam Pattern distance (m)

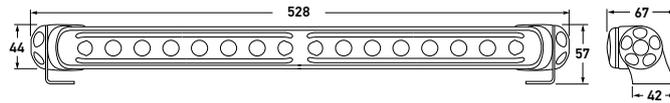


**LED Light Bar 470
with Front Position Function**

Introducing a world-leading innovation from HELLA to enhance the front of your vehicle. For the first time, striking LED light pipe technology has been integrated into a powerful high beam headlamp light bar to provide an innovative position light.

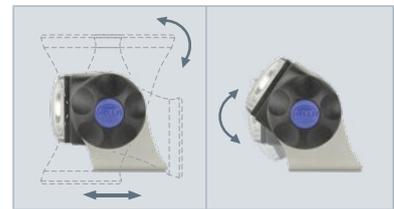
Multivolt™ circuitry means the dual function lamp can be used on 12V or 24V DC, whilst only consuming 36W on high beam. Any input between 9 to 33 volts offers optimum brightness.

The adjustable mounting system ensures easy installation and flexibility in any orientation (Must be mounted according to local installation regulations for High beam and Position lamps). Exceptional HELLA durability and long-term reliability through unmatched corrosion resistance and toughness is provided by a thermally conductive polymer housing.



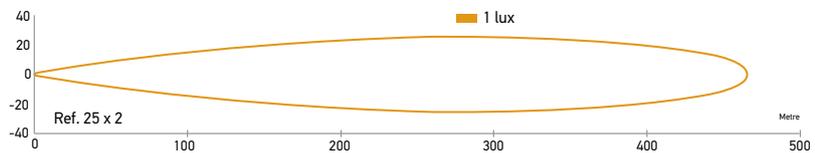
1FJ 958 140-001		REF. 25
Mounting	Upright or pendant	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts	
Power Consumption	Position: 6W	High Beam: 36W
Maximum Luminous Intensity	113,000 candela	
Max. Light Output	1700 lumen	
Protection	Reverse polarity and transient spike protection IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Cable Length	Pre-wired with 2.5m of tinned multi-core cable	
Accessories	8HG 958 139-071 HD single spare end bracket kit 8XS 958 337-021 LED Light Bar 470 - Clear protective cover 8XS 958 337-031 LED Light Bar 470 - Amber protective cover 8XS 958 337-111 LED Light Bar 470 - Black protective cover	
Compliance	E24 2845 R10/05 E24 5930 R148/00 Front Position E24 5930 R149/00 Ref. 25	
Contents	1 x LED Light Bar 470 Front Position 2 x HD mounting brackets 1 x Instruction booklet	

FOG AND DRIVING

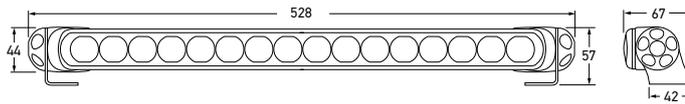


Mounting brackets can be positioned to suit most vehicle installations.

LED Light Bar 470 with Front Position Function Work Lamp Beam Pattern distance (m)



Innovative position light using LED light pipe technology



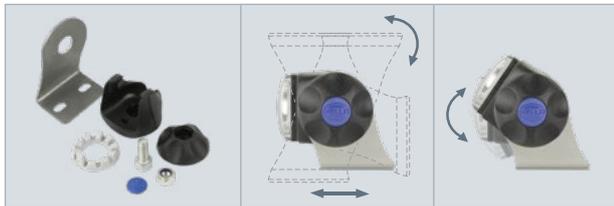
LED Light Bar 470
- Combi Work Lamp HD Bracket

The LED Light Bar 470 Combi is a unique work lamp offering three light options: close range, long range or combined - all in a single light bar. The work lamp is a great addition to any Ute, ATV or off-road vehicle.

Only 1kg of weight means less stress on mounting locations, the low profile design will not restrict cooling airflow when fitted to the front of a vehicle - which can be a problem with larger lights. Don't be fooled by its size though, this light bar certainly punches above its weight with its long distance and spread light output. Multivolt™ circuitry means the lamp can be used with both 12V or 24V DC systems, whilst only consuming 36W. Any input between 9 to 33 volts will give optimum brightness.

The adjustable mounting system ensures easy installation and flexibility in any orientation. Providing unmatched corrosion resistance due to an innovative thermally conductive polymer housing, and the toughness of a UV, chemical and impact resistant Grilamid® lens. The Combi Work Lamp is the natural choice when exceptional durability and long term reliability in demanding environments is needed.

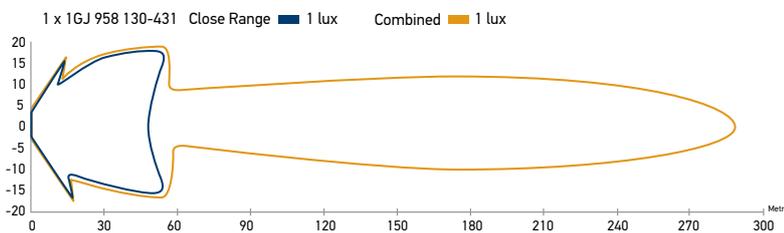
1GJ 958 130-431	1599HD (Close Range and Long Range)	COMBI
Mounting	Upright or pendant.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	Combined: 36W Close/Long Range: 18W	
Maximum Luminous Intensity	77,000 candela	
Max. Light Output	2200 lumen	
Protection	Reverse polarity and transient spike protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Cable Length	Pre-wired with 2.5m of tinned multi-core cable.	
Lens Material	High impact and chemical resistant Grilamid® lens	
Accessories	8HG 014 075-031 Number plate bracket light bar 470 8HG 958 128-811 HD double mount stainless steel feet (one pair) 8HG 958 139-071 HD single spare end bracket kit 8XS 958 337-021 LED Light Bar - Clear protective cover 8XS 958 337-031 LED Light Bar - Amber protective cover 8XS 958 337-111 LED Light Bar - Black protective cover	
Compliance		
Contents	1 x LED Light Bar 470 2 x HD mounting brackets 1 x Instruction booklet	



HD single mounting bracket - Disassembled view Mounting brackets can be positioned to suit most vehicle installations.



LED Light Bar 470 - Combi Work Lamp Beam Pattern distance (m)



8HG 014 075-031
Number plate bracket light bar 470 - Mounted upright or pendant (Depending on your vehicle)

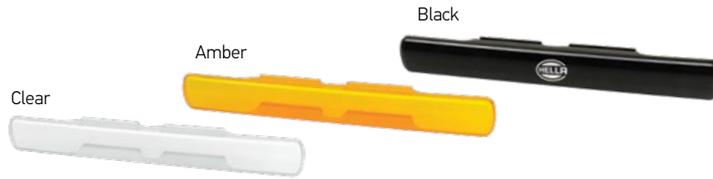


NOTE:
A work lamp must be switched independently of headlamps when mounted on a vehicle.

LED Light Bar Protective Covers

Whether you want to protect your light bar or make your vehicle look unique, we have the light covers you need for the job.

The amber and black covers give your vehicle a distinctive appearance that's sure to get attention, the amber cover is great during foggy conditions as it reduces glare and reflection.



LED LIGHT BAR 350 COVERS		
8XS 958 336-021		CLEAR
8XS 958 336-031		AMBER
8XS 958 336-111		BLACK

LED LIGHT BAR 470 COVERS		
8XS 958 337-021		CLEAR
8XS 958 337-031		AMBER
8XS 958 337-111		BLACK



8XS 958 336-111 LED Light Bar 350 Protective Cover



8XS 958 337-111 LED Light Bar 470 Protective Cover

FOG AND DRIVING

LED Light Bar Joiner Accessory

Connect multiple HELLA LED Light Bars into any number of configurations. The joiner kit simplifies the installation of multiple lamps, reducing overall length by typically 60mm for each pairing, and has the added benefit of aligning the lamps together.

LED LIGHT BAR JOINER ACCESSORY

8HG 958 139-881	
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Kit Contents: 2 x Joiner Accessory Pieces
 (Lamps not included) 1 x M8 (20mm) Stainless Steel Cap Head Screw

To suit the LED Light Bar 350/470 range.

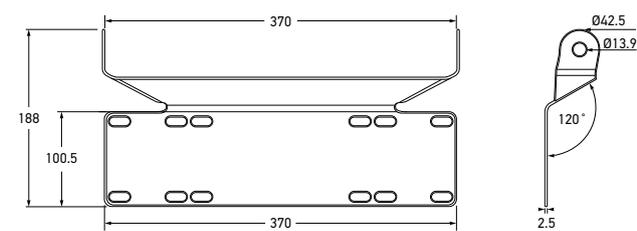


LED Light Bar configuration possibilities using the HELLA LED Light Bar Joiner Accessory. Two lamps in side by side configuration, achieved using 1 Joiner Kit.

LED Light Bar Number Plate Brackets

The sleek and clean number plate bracket has been designed for easy and quick installation.

Depending on your vehicle the light bar can be mounted upright or pendant.



NUMBER PLATE BRACKET LIGHT BAR 350

8HG 014 075-011	8030
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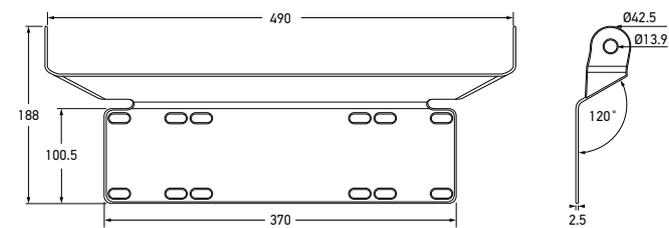
To suit the LED Light Bar 350 Work Lamp Range. Suits standard New Zealand, Australian and European number plates.



Number Plate Bracket Light Bar 350



Number Plate Bracket Light Bar 470

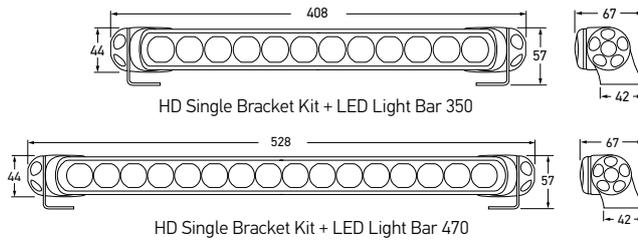


NUMBER PLATE BRACKET LIGHT BAR 470

8HG 014 075-031	8032
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To suit the LED Light Bar 470 Work Lamp Range. Suits standard New Zealand, Australian and European number plates.

FOG AND DRIVING LAMPS



**LED Light Bar
- HD Single Bracket Kit**

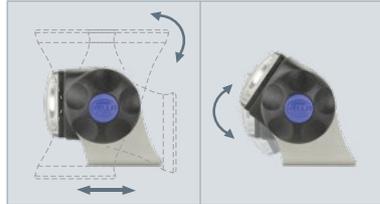
These easy to install heavy bracket kits made to suit the LED Light Bar range and can be mounted upright or pendant to accommodate most vehicle installations. The smooth brackets simply clip onto the ends of the Light Bar. The nuts, bolts and mounting brackets are made from marine grade 316 stainless steel and come with anti-theft screw caps.

8HG 958 139-841

- | | | |
|---------------------|--|----------------------|
| Kit Contents: | 2 x Stainless Steel Mounting Feet | 2 x Friction Washers |
| (Lamp not included) | 2 x Stainless Steel M8 x 20mm Cap Screws | 2 x End Clamps |
| | 2 x Stainless Steel M8 Nylon Lock Nuts | 2 x Screw Caps |
| | 2 x End Adaptors | |



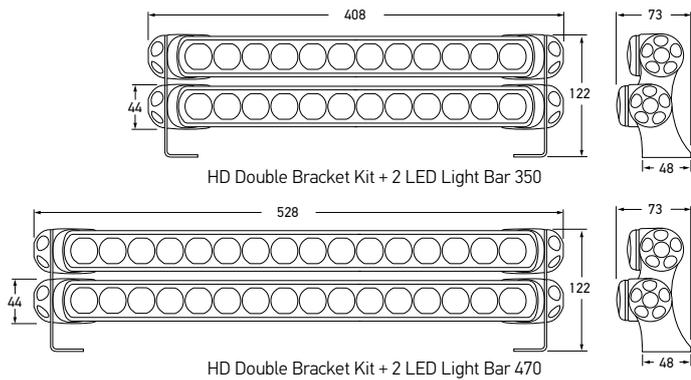
HD Single Bracket Kit + LED Light Bar 350



Mounting brackets can be positioned to suit most vehicle installations.



FOG AND DRIVING



**LED Light Bar
- HD Double Bracket Kit**

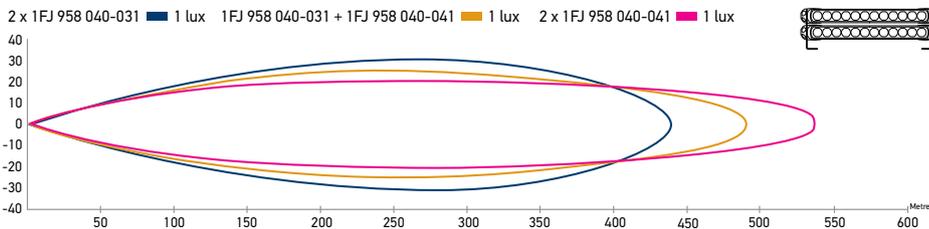


8HG 958 139-851

- | | | |
|----------------------|--|----------------------|
| Kit Contents: | 2 x Stainless Steel Double Mounting Feet | 4 x Friction Washers |
| (Lamps not included) | 4 x Stainless Steel M8 x 20mm Cap Screws | 4 x End Clamps |
| | 4 x Stainless Steel M8 Nylon Lock Nuts | 4 x Screw Caps |
| | 4 x End Adaptors | |

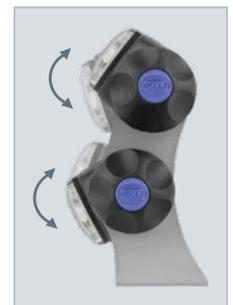
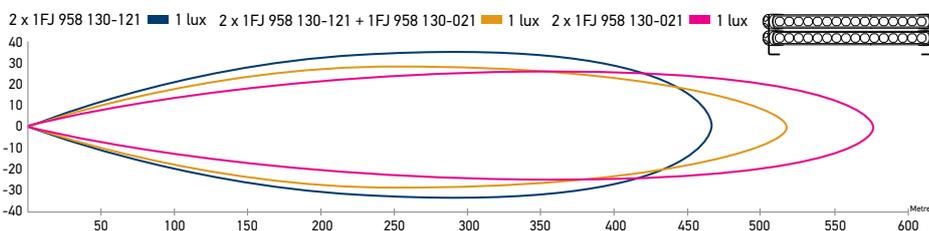
Beam Patterns - Beam distance (m)

LED LIGHT BAR 350



HD Double Bracket Kit + 2 x LED Light Bar 350

LED LIGHT BAR 470

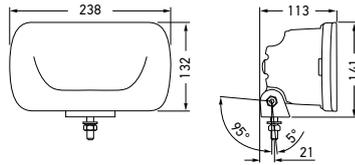


Mounting brackets allow rotation of Light Bar.

**Jumbo LED Driving Lamp
- High Beam Driving Lamp
with Edge Position Light**

The distinctive signature style of HELLA's Jumbo LED driving light is made possible by HELLA's innovative Edge Light technology.

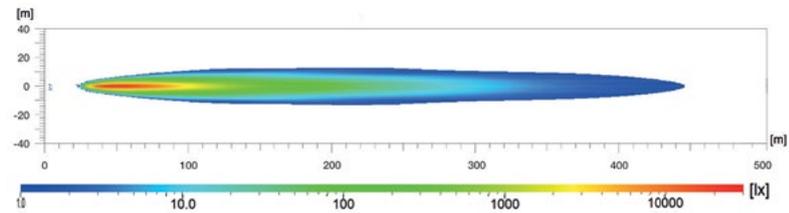
Low power consumption and impressive performance from the latest LED technology illuminates over 440 metres for only 2 x 8W of power. A combination of LED robustness and durable engineering provides a long service life.

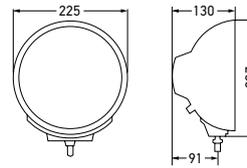


1FE 016 773-001	Spread Beam	REF. 25
Mounting	Upright	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 32V	
Power Consumption	Driving lamp: 8W Position lamp: Max 3W	
Protection	IP 6K7 (Protection against dust and temporary water immersion) IP X9K (Protection against high-pressure cleaner, specific for road vehicles)	
Cable length	800mm of 3 core cable	
Compliance	ECE R149 high beam ECE R148 position light ECE R10	



Jumbo LED Driving Lamp distance recorded with dual lamps. Distance in metres.





Upright mounting.
Tilt angle +/- 7°



1F8 016 560-101	1366LED	WIDE BEAM
1F8 016 560-111	1365LED	NARROW BEAM
Mounting	Upright or pendant	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 32V	
Power Consumption	33W	
Light Temperature	5900K	
Weight	2.7kg	
Protection	IP 6K7 (Protection against dust and temporary water immersion) IP X9K (Protection against high-pressure cleaner, specific for road vehicles) Not suitable for submersion.	
Cable Length	400mm multi core cable and plug	
Spare Parts	1F8 241 430-011 LED Driving Lamp Insert - Wide Beam 1F8 241 449-011 LED Driving Lamp Insert - Narrow Beam	
Compliance	ECE R10 	

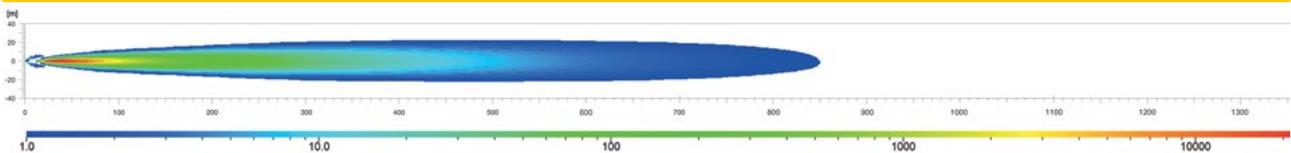
RALLYE 4000 LED High Beam Driving Lamp

The Rallye 4000 LED driving lamp combines performance and durability like never before. These lamps are sturdy and reliable with an efficient low power consumption of 33W. The high efficacy from the latest technology allows up to nearly 1.3km of light. The LED robustness and durable design allows for a long life.

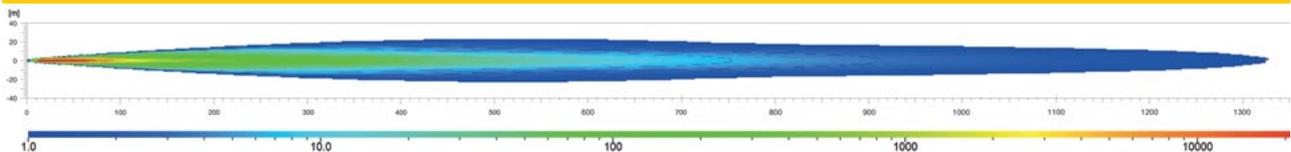


FOG AND DRIVING

RALLYE 4000 LED High Beam Driving Lamp Wide Beam - distance (m)



RALLYE 4000 LED High Beam Driving Lamp Narrow Beam - distance (m)



RALLYE 4000 LED



PREDATOR iX HID



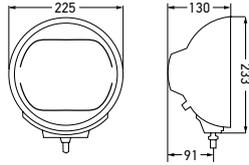
1F8 241 430-011,
1F8 241 449-011
LED Driving Lamp Insert

Rallye 4000 LED driving lamps offer a longer reaching beam compared to Predator iX HID lamps.

Note: Due to the high performance of these LED driving lamps, they exceed the allowed maximum light intensity to be ECE compliant, and therefore are recommended for Motorsport or off-road use only.

LUMINATOR 3.0
LED High Beam Driving Lamp
with Edge Position Light

The latest revolutionary Luminator LED driving lamp now features a distinctive position lamp function made possible by HELLA's innovative Edge Light technology. Utilising the Rallye 4000 metal body, which has proven itself on rally cars and heavy machinery, these lamps are sturdy and reliable. With efficient low power consumption as well as high efficacy from the latest technology allowing up to nearly 600m of light for only 2x15W of power.



Upright mounting.
Tilt angle +/- 7°



1F8 016 560-001	Satin Black (Spread Beam)	ECE REF. 25
1F8 016 560-011	Satin Black (Pencil Beam)	ECE REF. 50
1F8 016 560-021	Chrome (Spread Beam)	ECE REF. 25
1F8 016 560-031	Chrome (Pencil Beam)	ECE REF. 50

Mounting	Upright or pendant.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 32V	
Power Consumption	Driving lamp: 15W Position lamp: Max 5W	
Light Temperature	5900K	
Weight	2.7kg	
Protection	IP 6K7 (Protection against dust and temporary water immersion) IP X9K (Protection against high-pressure cleaner, specific for road vehicles) Not suitable for submersion.	
Cable Length	400mm cable and plug supplied	
Spare Part	1F8 241 400-011 LED Driving Lamp Insert - Spread Beam 1F8 241 429-011 LED Driving Lamp Insert - Pencil Beam	ECE Ref. 25 ECE Ref. 50
Compliance	ECE R112 high beam ECE R7 position light ECE R10	

FOG AND DRIVING

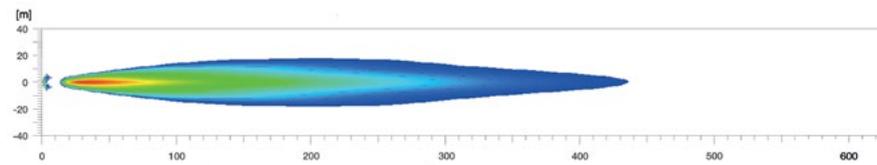


1F8 016 560-021,
1F8 016 560-031
Chrome Housing

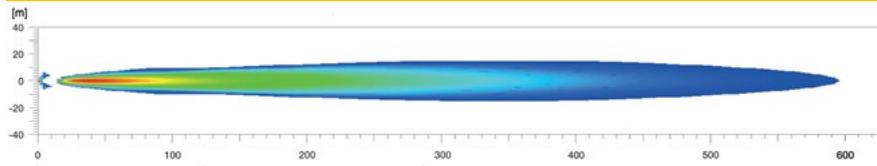


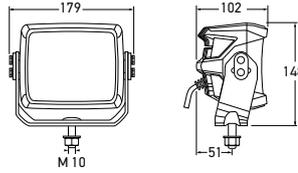
1F8 241 400-011,
1F8 241 429-011 LED
Driving Lamp Insert

LUMINATOR 3.0 LED High Beam Driving Lamp w/ Edge Position Light Spread Beam distance (m)



LUMINATOR 3.0 LED High Beam Driving Lamp w/ Edge Position Light Pencil Beam distance (m)





**RokLUME 380 N
LED Driving Lamp**

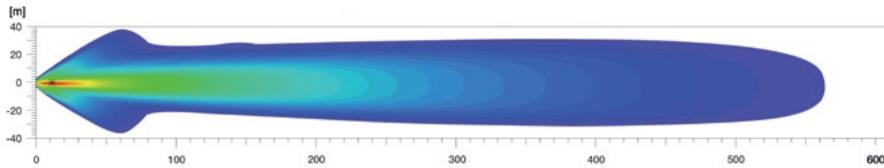
The RokLUME 380 N Driving Lamp provides 7500 lumen, more than double the light of a comparable Xenon driving light. The 12 high-power LEDs create intense illumination at a colour temperature of 5000 Kelvin. The warmer colour temperature reduces glare from highly reflective road signs compared to 6500 Kelvin, predominately used by many LED driving lights.

1FA 996 197-151	Ref. 40		12 VOLT
1FA 996 197-181	Ref. 40		24 VOLT
Mounting	Upright or pendant.		
Voltage	12V or 24V		
Power Consumption	85W		
Max Light Output	7500 lumen		
Protection	Reverse polarity protection. Transient spike circuit protection. IP 6K8 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)		
Housing	Aluminium with NanoSafe Coating		
Cable length	300mm cable with Integrated DT Socket and mating DT Plug (Optional 2.0 metre DT Pigtail Loom to be ordered separately)		
Accessory	8KB 958 757-501 2.0m sheathed cable with DT plug		
Compliance	3161 CISPR 25 Class 5. ECE R10		



1FA 996 197-181

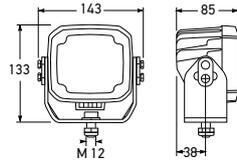
RokLUME 380 N Beam distance recorded with dual lamps. Distance in metres.



FOG AND DRIVING

Ultra Beam Gen II Driving Lamp

The Ultra Beam Gen. II LED Pencil Beam features 8 high power LEDs (6500 Kelvin) and powerful light output of 4000 lumen. Despite being smaller than most driving lights, the Ultra Beam Gen. II LED impresses with consistent light distribution, outperforming larger driving lights. The excellent thermal design of the aluminium die-cast housing enabled HELLA to build a very compact driving light that suits the front of modern vehicles.

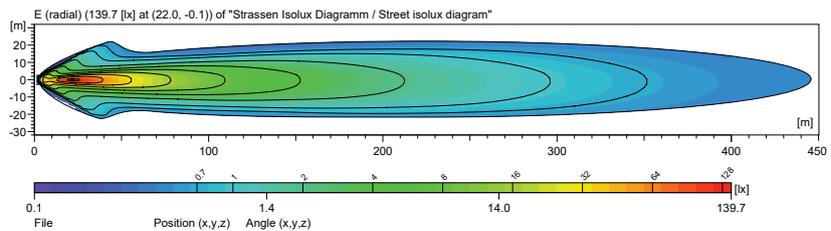


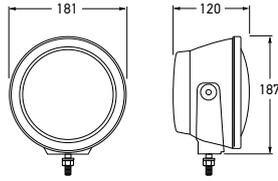
1GA 995 606-021		PENCIL BEAM
Mounting	Upright or pendant.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	56W	
Max Light Output	4000 lumen	
Protection	Reverse polarity protection. Transient spike circuit protection. IP 6K8 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Cable length	Integrated DT Socket	
Accessory	8KB 958 757-501	2.0m sheathed cable with DT plug
Compliance	CISPR 25 Class 5. ECE R10	



FOG AND DRIVING

Ultra Beam Gen II distance recorded with dual lamps. Distance in metres.





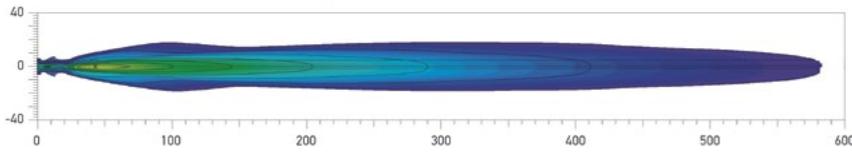
LED Luminator Compact Spread Beam Driving Lamp

Compact Luminator LED lamp with high performance LEDs for long range illumination.

1F3 011 815-001	1394		SPREAD BEAM
Mounting	Upright or pendant.		
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems		
Power Consumption	Driving lamp:	11W	
Compliance	3738	Ref: 45	

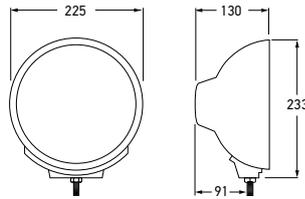


LED Luminator Compact Spread Beam distance (m)



Rallye 4000 Spread Beam Driving Lamp

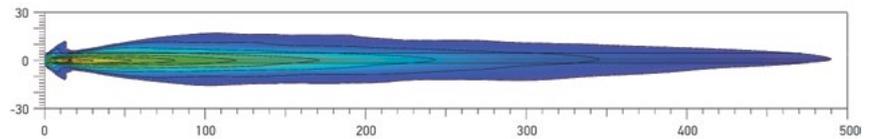
The Rallye 4000 spread beam features a sturdy zinc die-cast metal body and bracket for excellent strength and vibration resistance. The bracket has a large contact surface making the lamp stable in rough conditions. Suitable for professional, commercial and off-road drivers. Complete with protective cover 8XS 147 945-001.



1F8 007 560-362	1366	SPREAD BEAM	
Mounting	Upright.		
Power Consumption	Driving lamp:	55W	
	Position lamp:	5W	
Bulbs to Suit	Driving lamp:	12V	24V
	Position lamp:	8GH 002 089-122 8GA 980 325-001	8GH 002 089-281 8GP 003 594-252
Spare Part	1F8 162 870-011	Spread beam insert (clear lens)	
Compliance	Ⓔ 1928	Ref: 37.5	



Rallye 4000 Spread Beam distance (m)



Rallye 4000 Pencil Beam Driving Lamp

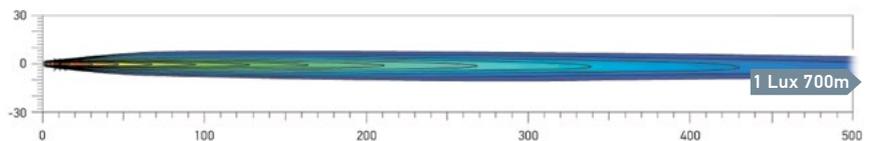
The Rallye 4000 pencil beam features a sturdy zinc die-cast metal body and bracket for excellent strength and vibration resistance. The lamp bracket has a large contact surface making the lamp stable in rough conditions. Suitable for professional, commercial and off-road drivers. Complete with protective cover 8XS 147 945-001.



1F8 007 560-391	1365	PENCIL BEAM	
Mounting	Upright.		
Power Consumption	55W		
Bulbs to Suit	12V	8GH 002 089-122	
	24V	8GH 002 089-281	
Spare Part	1F8 165 948-011	Pencil beam insert	



Rallye 4000 Pencil Beam distance (100W Bulb) (m)

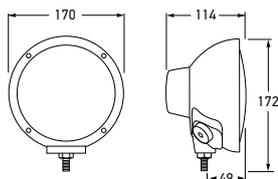


8XS 147 945-001



9HD 905 445-001

8XS 147 945-001	8125	PROTECTIVE COVER	
9HD 905 445-001	8141	CLEAR PROTECTIVE COVER	
Spare Parts	1F8 165 948-011	Pencil beam insert	
	1F8 162 870-011	Spread beam insert (clear lens)	
	8HG 147 947-001	Knurled screw set (2)	



Rallye 4000 Compact Spread Beam Driving Lamp

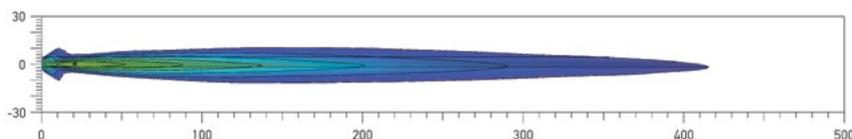
170mm compact version of the Rallye 4000 driving lamp, with clear Free-Form (FF) reflector lens design and sturdy zinc die-cast weatherproof metal housing.

1F1 009 094-043	1378	SPREAD BEAM
Mounting	Upright.	
Power Consumption	55W	
Bulbs to Suit	12V	8GH 002 089-122
	24V	8GH 002 089-281
Spare Part	1F3 161 825-011	Spread beam insert
Compliance	Ⓔ 1901	Ref: 37.5



FOG AND DRIVING

Rallye 4000 Compact Spread Beam distance (m)



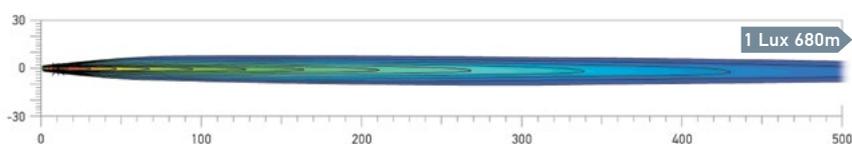
1F3 009 094-161	1380	PENCIL BEAM
Mounting	Upright.	
Power Consumption	55W	
Bulbs to Suit	12V	8GH 002 089-122
	24V	8GH 002 089-281
Spare Part	1F3 161 825-051	Pencil beam Insert

Rallye 4000 Compact Pencil Beam Driving Lamp

Pencil beam driving lamp with clear glass optics. Sturdy die-cast weatherproof metal housing.



Rallye 4000 Compact Pencil Beam distance (100W Bulb) (m)



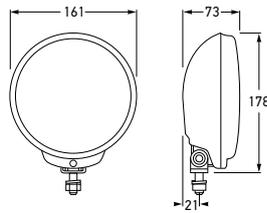
Rallye 4000 Compact Accessories

9HD 905 458-001	8155	CLEAR PROTECTIVE COVER
Spare Parts	8HG 147 947-001	Knurled screw set (2)
	1F3 161 825-011	Spread beam insert
	1F3 161 825-051	Pencil beam Insert



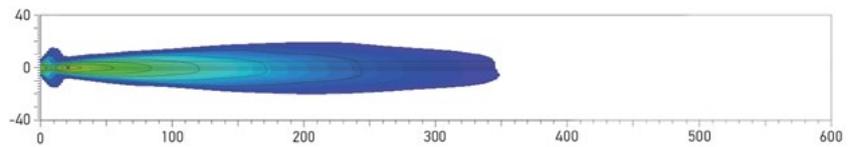
Comet FF 500 Spread Beam Driving Lamp

Modern design clear lens H3 spread beam driving lamp gives long distance beam for safer driving at night.



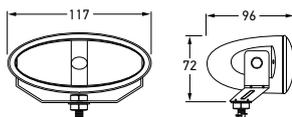
1F6 010 952-011	1325	SPREAD BEAM
Mounting	Upright.	
Power Consumption	55W	
Bulbs to Suit	12V 24V	8GH 980 333-001 8GH 002 090-261
Compliance	ⒺI 3222	Ref: 17.5

Comet FF 500 Spotlight distance (m)



FF 50 Spread Beam Driving Lamp

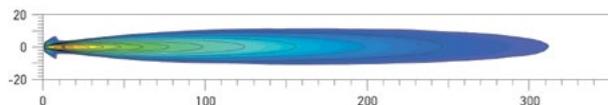
Compact driving lamp featuring modern clear lens design and Free-Form (FF) reflector.



1FA 008 283-011	1322	SPREAD BEAM
Mounting	Upright or pendant.	
Power Consumption	55W	
Bulb to Suit	8GH 007 157-131	
Compliance	E1 1210 Ref: 12.5	



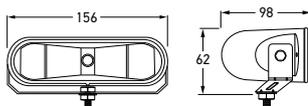
FF 50 Spread Beam distance (m)



FOG AND DRIVING

FF 75 Spread Beam Driving Lamp

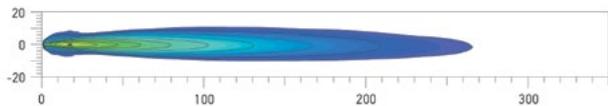
Compact driving lamp featuring modern clear lens design and Free-Form (FF) reflector.



1FA 008 284-011	1323	SPREAD BEAM
Mounting	Upright or pendant.	
Power Consumption	55W	
Bulb to Suit	8GH 007 157-131	
Compliance	E1 1212 Ref: 12.5	



FF 75 Spread Beam distance (m)





Work Lamps

Effective and efficient mobile lighting to increase productivity and safety.



Contents

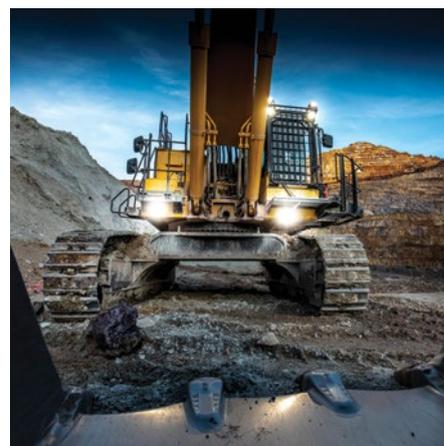
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SUPERIOR LIGHTING FOR WORKING AREAS

The superior performance and safety of HELLA LED work lamps is recognised worldwide. The largest agriculture and construction equipment manufacturers specify HELLA LED product as original equipment.



In heavy duty work environments, HELLA LED work lamps offer decisive advantages over other lighting technologies.

Highly Efficient Light Output

Advanced optics ensure that the right amount of light reaches the area it is most needed. Beam patterns are designed to generate even illumination and avoid bright spots, dark patches or stray light rays that serve no useful purpose.

Long Service Life

High quality materials offer superior impact, shock, vibration, UV and corrosion resistance ensuring an ultra long service life.

Low Power Consumption

LED work lamps consume significantly less power than incandescent bulbs resulting in reduced strain on both alternator and battery and lower operating costs.

Water & Dust Proof

Fully sealed against dust and water ingress, suitable for the harshest environments.

LED Technology

The choice of LEDs, the power supply and thermal management of the work lamp are key factors in achieving optimum light output. The quality of the components used by HELLA ensures, for example, that the light remains at a constant level of brightness in a variety of voltage conditions.

Do you know what the actual light output of your work lamp is?

Some LED work lamp manufacturers typically specify a light output without factoring in the impact of temperature, optical losses or other real world effects on light output performance.

This however, does not correspond to the actual effective light output of the work lamp. When these light values are cited, they are often unrealistically high. Such lumen ratings are referred to as “Raw”, “Calculated” “Theoretical” or “Cold lumen”.

The lumen ratings of all HELLA work lamps are always based on values obtained from measuring actual lamps. The lumen values correspond to the light that is actually emitted from the work lamp. HELLA LED work lamps emit their full output in ambient temperatures of up to 50°C.

Thermal Management

Good thermal management is necessary to ensure a long service life. When an LED is illuminated, heat is produced. As LED temperature increases, light output decreases and the service life reduces. Efficient design for maximum heat dissipation must be ensured. HELLA uses the latest simulation programs during product development to ensure optimal heat dissipation through the housing.

All HELLA LED work lamps are designed to provide reliable protection against the LEDs overheating. This guarantees long service life as well as consistent light output.



Thermal camera testing ensures heat is efficiently & evenly distributed from sensitive internal components.

Thermally conductive polymers offer many benefits including outstanding durability.

Superior Material Choice

Revolutionary plastic ceramic materials, with outstanding thermal performance, open up a world of possibilities that was never thought to be achievable only a few years ago. The replacement of metal based housing heat-sinks with thermally conductive plastic not only opens a myriad of design options, but also means complete corrosion resistance. This is especially important in demanding environmental conditions where lights are constantly exposed to the elements and are sometimes temporarily submerged.

A lamp housing made from thermally conductive polymer works much the same as a metal housing. The innovative ceramic polymer transfers the heat generated by the LEDs and electronics to the outside of the lamp body, thereby lowering the internal thermal stress on the component. This ensures a long service life with minimal degradation of the light output.



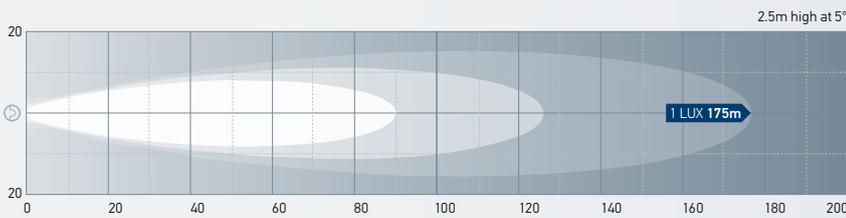
HELLA LED work lamps are designed and tested to provide efficient and effective illumination and an ultra long service life.

ILLUMINATION COMPARISONS

Work lamps can be compared by using an informative isolux lighting diagram. These diagrams display the projected light pattern on a surface in the form of isolux lines (lines of equal light intensity). To compare isolux diagrams, various criteria such as installation height, inclination angle and lux scale must be taken into account. An objective comparison is inaccurate if the criteria differ from one another. Comparing diagrams with different colour scales can be easily misinterpreted.

Long Range

Narrow beam range designed to illuminate distant objects between 60m - 200m (depending on lamp installation, installation height and inclination angle).

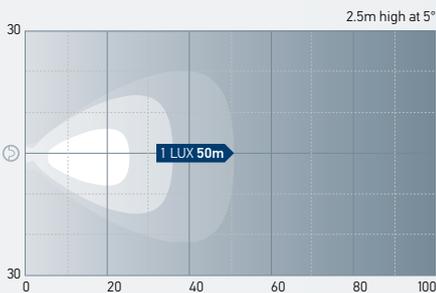


Isolux Lighting Diagram

Isolux diagrams display the projected light pattern on a surface in the form of isolux lines (lines of equal light intensity).

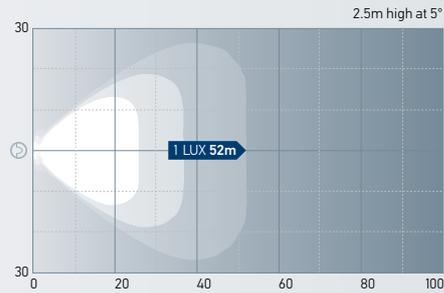
Close Range

Spread beam designed to illuminate an area near the vehicle, range approx. 20m to 60m (depending on installation height and inclination angle).



Flood

Ultra wide spread beam designed to illuminate a large area adjacent to the vehicle, typically emitting an extra wide beam (over 45° each side).



ELIVER

The Light Comparison Tool for Work Lamps

The ELIVER tool allows you to easily test and compare our products against each other in a realistic environment. This lets you find the perfect work lights or auxiliary lights for your individual requirements. You can conveniently compare different technologies, such as halogen, Xenon and LED against each other. You can view the light distribution on a farm track, on a street or under off-road conditions.



ELIVER also provides you with all of the relevant information about performance and technical specifications. This includes information such as the light range, width and intensity. As a special service, you can view the respective light range diagram or download brief information about the product as a PDF at any time.

Visit www.hella.com/eliver

RFCommSafe™

Electromagnetic Compatibility (EMC)



HELLA LED Lighting Products with Superior Electromagnetic Compatibility (EMC)

Electromagnetic Compatibility (EMC) is a significant safety concern for many emergency and industrial applications.

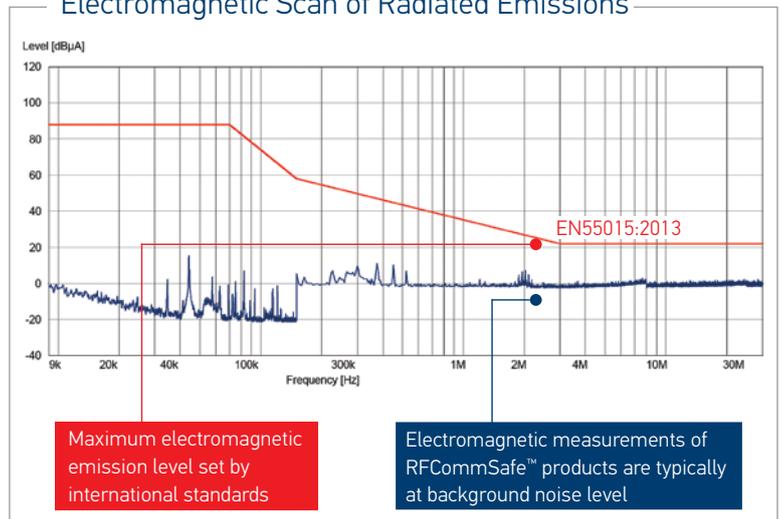
With electronic devices such as LED lamps, the risk of unintended electromagnetic interference (EMI) can have adverse effects on sensitive devices such as radios or communication equipment. It is essential that the circuitry of LED lamps does not cause harmful interference to other devices and at the same time is not susceptible to radiation from other devices.

RFCommSafe™ products were developed in recognition that some radio communication equipment can self-tune to be very sensitive in remote areas. In these situations the limits prescribed by regulatory requirements and as defined in international standards such as EN 55015, CISPR 15, CISPR 25 or relevant UNECE R10, standards may not be sufficient to ensure there is no interference with very sensitive radio communication equipment. Lamps marketed as RFCommSafe™ are designed to go well beyond the requirements of these standards.

RFCommSafe™ lamps do not cause harmful interference to other devices.

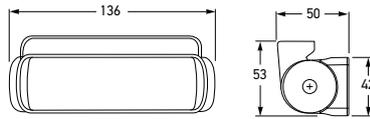


Electromagnetic Scan of Radiated Emissions



DuraLED® WL550 Work Lamp

LED universal work lamp with low profile stainless steel bracket. Lamp may be mounted upright or pendant and may be adjusted vertically up or down. Totally sealed against dust and moisture and with a superior tolerance to chemical and long term harsh UV exposure Grilamid® lens as well as technologically advanced thermally conductive non-metal housing.



Dual Intensity: Switch Control

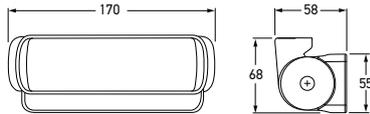
Housing: CORROSION PROOF | Bracket: STAINLESS STEEL | Lens Material: GMD | Power Supply: MULTI VOLT

1GA 980 573-101	CLOSE RANGE
Mounting	Upright or pendant.
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.
Power Consumption	7W
Actual Light Output	550 lumen
Protection	Reverse polarity and voltage spike protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.
Lens Material	High impact and chemical resistant Grilamid® lens
Compliance	CE

WORK LAMPS

DuraLED® WL750 LED Work Lamp

Featuring an integrated dual intensity circuit, a high level of spike protection and energy efficient Multivolt™ technology, the innovative DuraLED® WL750 will appeal for applications where energy efficiency and reliability is a must. Totally sealed against dust and moisture and with a superior tolerance to chemical and long term harsh UV exposure Grilamid® lens as well as technologically advanced thermally conductive non-metal housing.



Dual Intensity: Switch Control

Housing: CORROSION PROOF | Bracket: STAINLESS STEEL | Lens Material: GMD | Power Supply: MULTI VOLT

1GD 980 950-031	CLOSE RANGE
1GD 980 950-231	LONG RANGE
Mounting	Upright or pendant.
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.
Power Consumption	High intensity mode: 12W (1A@12V/0.50A@24V) Low intensity mode: 2W (0.17A@12V/0.08A@24V)
Actual Light Output	750 lumen
Protection	As per 1GA 980 573-101
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.
Lens Material	High impact and chemical resistant Grilamid® lens
Compliance	CE

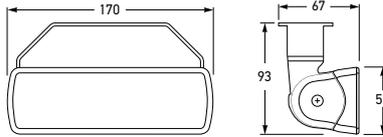


Easy adjustment without tools.

Completely sealed lamp/cable entry.



WORK LAMPS

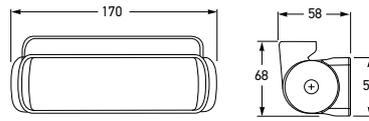


DuraLED® WL1300 RFLCommSafe™ LED Work Lamp - 24V DC

LED work lamp developed with RFLCommSafe™ technology and 14 high performance LEDs for applications where energy efficiency and reliability is a must. Features a tough, chemical resistant lens made from Grilamid®, a highly impact resistant Swiss-made crystal clear polyamide with superior tolerance to chemical and long term harsh UV exposure, as well as technologically advanced thermally conductive non-metal housing.



1GA 980 740-511	FLOOD
Mounting	Upright or pendant.
Voltage	24V
Power Consumption	14W
Light Output	900 lumen
Protection	Reverse polarity and voltage spike protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.
Lens Material	High impact and chemical resistant Grilamid® lens
Compliance	



DuraLED® WL1300 LED Work Lamp

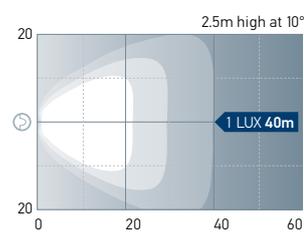
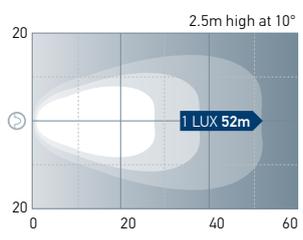
The WL1300 LED Work Lamp incorporates the latest technology to offer a powerful, durable lighting solution for a multitude of applications. Featuring an integrated dual intensity light output circuit, a high level of spike protection, and energy efficient Multivolt™ technology, this work lamp will appeal to applications where energy efficiency and reliability are a must.



1GD 980 740-321	CLOSE RANGE
1GD 980 740-021	FLOOD
Mounting	Upright or pendant.
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.
Power Consumption	High intensity mode: 18W Low intensity mode: 2W
Light Output	1500 lumen
Protection	Reverse polarity and voltage spike protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.
Lens Material	High impact and chemical resistant Grilamid® lens
Compliance	CE

BEAM PATTERNS

WL1300 - Close Range	WL1300 - Flood
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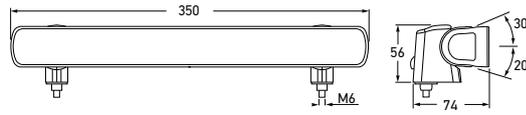
WORK LAMPS

BL350 LED Work Lamp

The BL350 LED Work Lamp incorporates the latest technology to offer a powerful, durable lighting solution for a multitude of applications.

Featuring energy efficient Multivolt™ technology, this work lamp will appeal to applications where energy efficiency and reliability are a must. These lamps offer a formidable net light output of 2200 lumen.

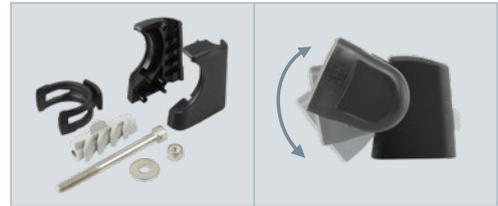
Designed with Fit and Forget durability in mind, the BL350 work lamp features a highly impact resistant lens made of Grilamid®, a crystal clear polyamide with superior tolerance to chemical and long term harsh UV exposure, as well as a technologically advanced thermally conductive non-metal housing.



1GJ 958 040-551		CLOSE RANGE
Mounting	Upright or pendant.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	25W	
Actual Light Output	2200 lumen	
Protection	Reverse polarity and voltage spike protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Cable Length	Supplied with 2.5m of sheathed multi-core cable.	
Lens Material	High impact and chemical resistant Grilamid® lens	
Spare Parts	8HG 958 053-801	Single spare end plastic bracket
Compliance	E24 ECE R10	



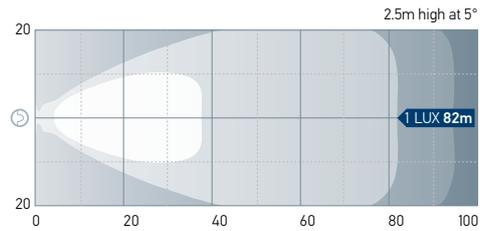
WORK LAMPS

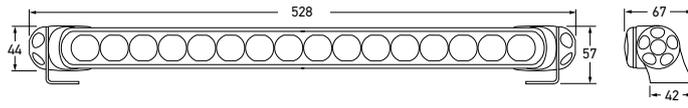


Single plastic bracket - disassembled view

Mounting brackets allow rotation of work lamp

BEAM PATTERNS
BL350 - Close Range





1GJ 958 130-431	1599HD (Close Range and Long Range)	COMBI
Mounting	Upright or pendant.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	Combined: 36W Close/Long Range: 18W/18W	
Maximum Luminous Intensity	77,000 candela	
Actual Light Output	2200 lumen	
Protection	Reverse polarity and transient spike protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Cable Length	Pre-wired with 2.5m of tinned multi-core cable	
Lens Material	High impact and chemical resistant Grilamid® lens	
Accessories	8HG 014 075-031 Number plate bracket light bar 470 8HG 958 128-811 HD double mount stainless steel feet (one pair) 8HG 958 139-071 HD single spare end bracket kit 8XS 958 337-021 LED Light Bar - Clear protective cover 8XS 958 337-031 LED Light Bar - Amber protective cover 8XS 958 337-111 LED Light Bar - Black protective cover	
Compliance	ECE R10	

LED Light Bar 470 - Combi Work Lamp

The LED Light Bar 470 Combi is a unique work lamp offering three light options: close range, long range or combined - all in a single light bar. The work lamp is a great addition to any Ute, ATV or off-road vehicle.

Only 1kg of weight means less stress on mounting locations, the low profile design will not restrict cooling airflow when fitted to the front of a vehicle - which can be a problem with larger lights. Don't be fooled by its size though, this light bar certainly punches above its weight with its long distance and spread light output. Multivolt™ circuitry means the lamp can be used with both 12V or 24V DC systems, whilst only consuming 36W. Any input between 9 to 33 volts will give optimum brightness.

The adjustable mounting system ensures easy installation and flexibility in any orientation. Providing unmatched corrosion resistance due to an innovative thermally conductive polymer housing, and the toughness of a UV, chemical and impact resistant Grilamid® lens. The Combi Work Lamp is the natural choice when exceptional durability and long term reliability in demanding environments is needed.

WORK LAMPS

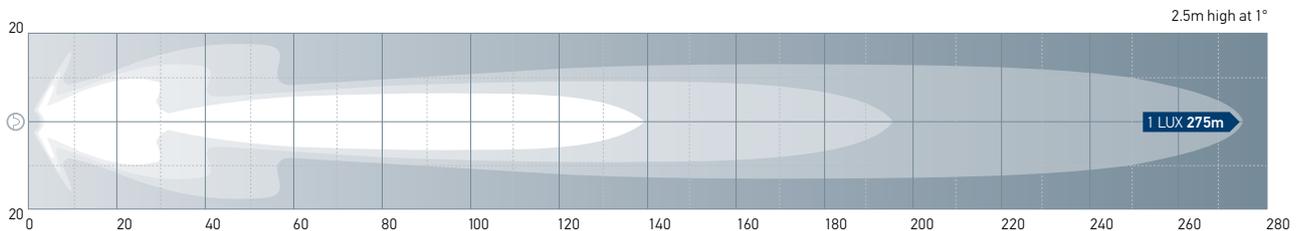


Mounting brackets can be positioned to suit most vehicle installations.

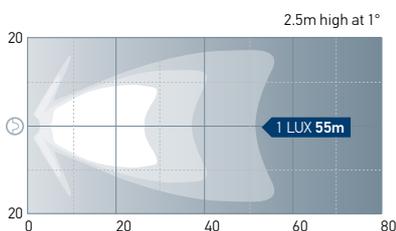
8HG 958 128-811 HD double mount stainless steel feet



BEAM PATTERNS
Combi Light Bar 470 - Combined (Close Range and Long Range)



Combi Light Bar 470 - Close Range



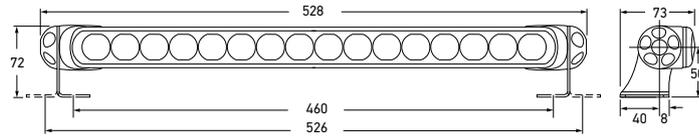
NOTE:
A work lamp must be switched independently of headlamps when mounted on a vehicle.

BL470 LED Work Lamps

The BL470 work lamp comes in two different beam patterns - close range or long range, making it a great work lamp for an array of applications like agriculture and construction.

It is a high performance lamp with a light output of 2800 lumen for either spread or distance whilst only consuming 36W. Multivolt™ circuitry means the lamp can be used with both 12V or 24V DC systems, whilst only consuming 36W on high or 4W on low. Any input between 9 to 33 volts will give optimum brightness. The dual function level (100% and 10%) is also handy for reducing power consumption during long term use, or when operating on battery power.

The adjustable mounting system ensures easy installation and flexibility in any orientation. Providing unmatched corrosion resistance due to an innovative thermally conductive polymer housing, and the toughness of a UV, chemical and impact resistant Grilamid® lens, the BL470 is the natural choice when exceptional durability and long term reliability in demanding environments is needed.



1GJ 958 130-621		CLOSE RANGE
Mounting	Upright or pendant.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	High: 36W Low: 4W	
Actual Light Output	High: 2800 lumen Low: 280 lumen	
Protection	Reverse polarity and transient spike protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Cable Length	Supplied with 2.5m of sheathed multi-core cable.	
Lens Material	High impact and chemical resistant Grilamid® lens	
Spare Parts	8HG 958 128-811	HD double mount stainless steel feet (one pair)
Compliance	E24 ECE R10	

WORK LAMPS

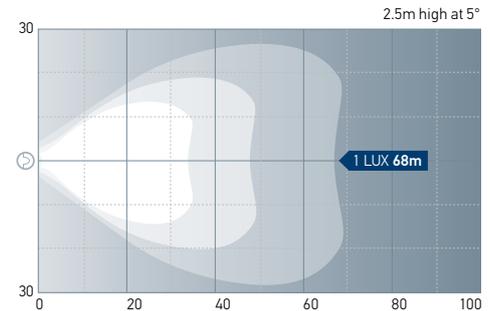


8HG 958 128-811
HD double mount
stainless steel feet

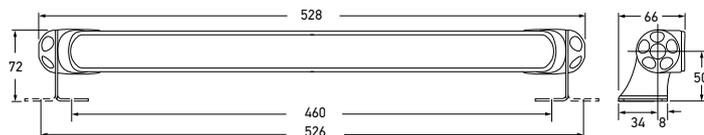
HD stainless steel mounting
brackets allow 360° rotation
of work lamp.

BEAM PATTERNS

BL470 - Close Range



WORK LAMPS



BL470 LED Work Lamp - Diffuse Flood

The BL470 LED work lamp featuring a unique diffuse flood lens with a powerful light output of 3600 lumen while only consuming 36W.

The new lamp is ideal for illuminating decks, garages, workshops, trailers, caravans and other close range applications where large amounts of light are needed. The ultra-smooth spread has no harsh borders or hotspots, therefore reducing eye strain and fatigue.

Providing unmatched corrosion resistance due to an innovative thermally conductive polymer housing, and the toughness of a UV, chemical and impact resistant Grilamid® lens, the BL470 is the natural choice when exceptional durability and long term reliability in demanding environments are needed.

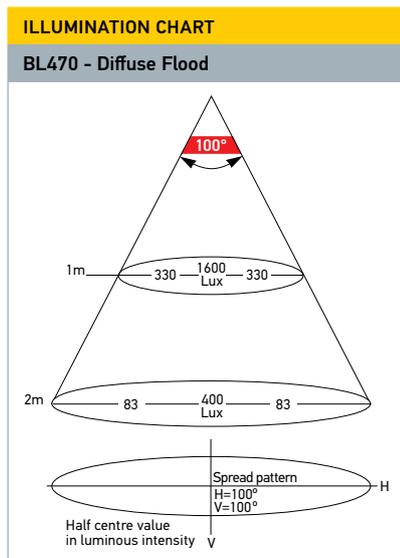
The new work light features Multivolt™ circuitry, operating between 9 to 33V, and can therefore be used with 12V or 24V DC supply. The dual function level (100% and 10%) is also handy for reducing power consumption during long term use. Designed with Fit and Forget durability in mind, the completely sealed BL470 is covered by a 5 year warranty.

1GJ 958 130-521	DIFFUSE FLOOD
Mounting	Upright or pendant.
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.
Power Consumption	High: 36W Low: 4W
Actual Light Output	3600 lumen
Protection	Reverse polarity and transient spike protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)
Cable Length	Supplied with 2.5m of sheathed multi-core cable.
Lens Material	High impact and chemical resistant Grilamid® lens
Spare Parts	8HG 958 128-811 HD double mount stainless steel feet (one pair)
Compliance	E24 ECE R10



HD stainless steel mounting brackets allow 360° rotation of work lamp.

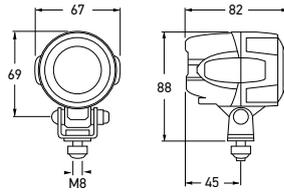
8HG 958 128-811 HD double mount stainless steel feet



WORK LAMPS

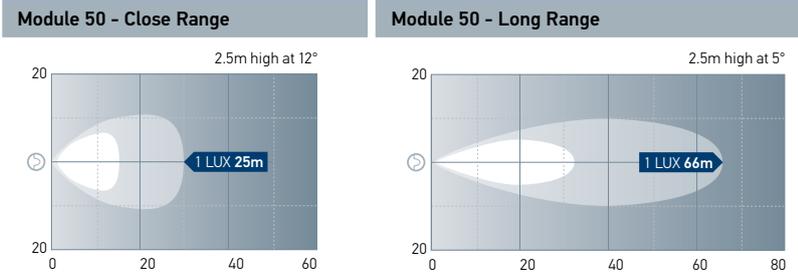
Module 50 LED Ultra-Compact Work Lamp

The Module 50 LED is the smallest work lamp in the HELLA product range and is therefore particularly suitable for installations with space constraints. At 800 lumens, the light output is well suited to close-range illumination. There is also an optic-free version that facilitates long-range and/or spot illumination.



1G0 995 050-121	1560	CLOSE RANGE
1G0 995 050-131	1560LR	LONG RANGE
Mounting	Upright.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	15W	
Actual Light Output	800 lumen	
Protection	Reverse polarity protection. IP 6K8 (Protection against dust and prolonged water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Cable Length	Supplied with 2m of sheathed twin core cable and DT plug.	
Spare Part	8KB 958 757-501	2.0m sheathed cable with DT plug
Compliance	E1 ECE R10	

BEAM PATTERNS

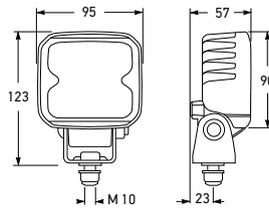


1G0 995 050-131

WORK LAMPS

Q90 Compact LED Work Lamp

The Q90C LED is a robust LED work lamp in a universal, attractive design. The innovative thermally conductive synthetic material housing also features cooling fins which ensure the required heat dissipation from the 4 high-power LEDs. The Q90C LED offers the advantage of complete corrosion resistance.

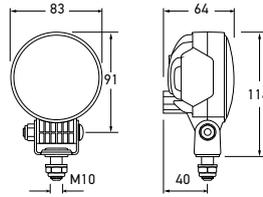


1GA 996 284-001	1563C	CLOSE RANGE
Mounting	Upright or pendant.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	16W	
Actual Light Output	1200 lumen	
Protection	Reverse polarity protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Cable Length	Supplied with 500mm of cable	
Compliance	E12 ECE R10	

BEAM PATTERN



WORK LAMPS



1G0 996 776-001	SPREAD BEAM
Mounting	Upright or pendant.
Voltage	Multivolt™ for optimum brightness at input voltages in 12 and 24 volt systems
Power Consumption	12W
Actual Light Output	1000 lumen
Protection	Reverse polarity protection IP 6K7 (Protection against dust and prolonged water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)
Cable Length	Supplied with 2.0m sheathed cable with DT plug
Spare Part	8KB 958 757-501 2.0m sheathed cable with DT plug
Compliance	E12 ECE-R10

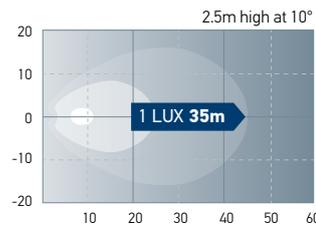
M70 LED Spread Beam Work Lamp

The M70 has been upgraded with more light output (1000lm vs 850lm) and a new corrosion resistant body. The M70 features two LEDs providing consistent illumination with 12 or 24V systems. The innovative thermally conductive synthetic material housing also features cooling fins which ensure the required heat dissipation from the high-power LEDs.

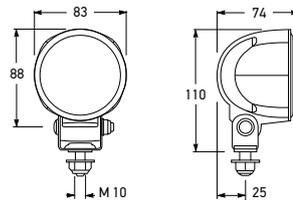


BEAM PATTERNS

M70 - Spread Beam



WORK LAMPS



1G0 996 476-641	1567	CLOSE RANGE
Mounting	Upright or pendant.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	30W	
Actual Light Output	2500 lumen	
Protection	Reverse polarity protection. IP 6K8 (Protection against dust and prolonged water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Cable Length	Supplied with 2.0m of sheathed twin core cable.	
Compliance	E1 ECE R10	

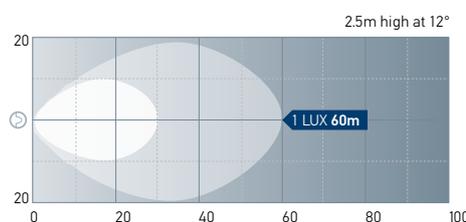
Module 70 LED Gen IV Work Lamp

Equipped with 3 high-performance multi-chip LEDs the new M70 LED work lamp produces 2500 lumens of crisp white light while consuming just 30W of power. Completely sealed (IP 6K9K) this lamp is particularly suitable for tough conditions and work areas. Advanced Multivolt™ 9-33V electronics ensure reliable illumination and lamp protection even under severe voltage fluctuations and low battery voltage.



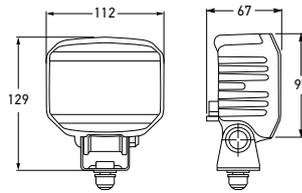
BEAM PATTERNS

M70 Gen IV - Close Range



Power Beam 1500 LED Work Lamp

Premium LED work lamp with aluminium housing. Light output rated at 1300 lumen.

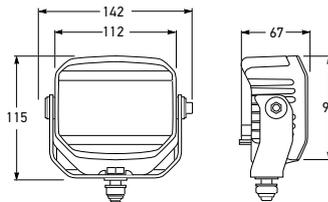


1GA 996 288-221	1557	CLOSE RANGE
Mounting	Upright or pendant.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	22W	
Actual Light Output	1300 lumen	
Protection	Reverse polarity protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Cable Length	Supplied with 2m of sheathed multi-core cable and DT plug.	
Spare Part	8KB 958 757-501	2.0m sheathed cable with DT plug
Compliance	E ECE R10	

WORK LAMPS

Power Beam 1500 LED Work Lamp - Heavy Duty

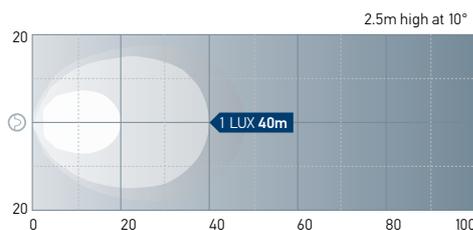
Premium heavy duty LED work lamp with aluminium housing. Light output rated at 1300 lumen.



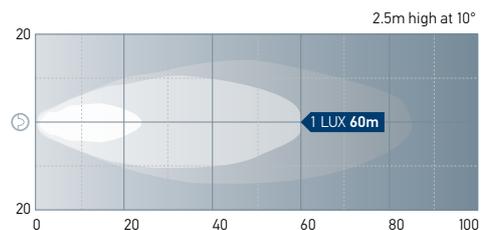
1GA 996 288-231	1557HD	CLOSE RANGE
1GA 996 288-241	1557HDLR	LONG RANGE
Mounting	Upright or pendant.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	22W	
Actual Light Output	1300 lumen	
Protection	Reverse polarity protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Cable Length	Supplied with 2m of sheathed twin core cable and DT plug.	
Spare Part	8KB 958 757-501	2.0m sheathed cable with DT plug
Compliance	E ECE R10	

BEAM PATTERNS

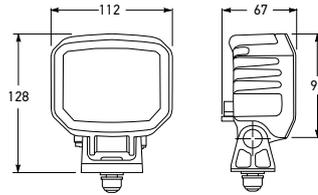
Power Beam 1500 - Close Range



Power Beam 1500 - Long Range



WORK LAMPS



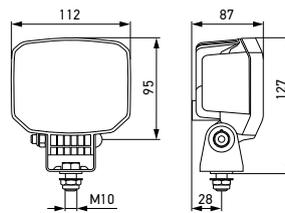
Power Beam 1800 LED Work Lamp

Premium LED work lamp with a light output rated at 1850 lumen. Lightweight thermally conductive plastic housing resistant to corrosion.



1GA 996 488-001	CLOSE RANGE
Mounting	Upright or pendant.
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 32 volts.
Power Consumption	26W
Actual Light Output	1850 lumen
Protection	Reverse polarity and voltage spike protection. IP 6K8 (Protection against dust and prolonged water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)
Connection	DT 2 pin plug.
Spare Part	8KB 958 757-501 2.0m sheathed cable with DT plug
Compliance	ECE R10

WORK LAMPS



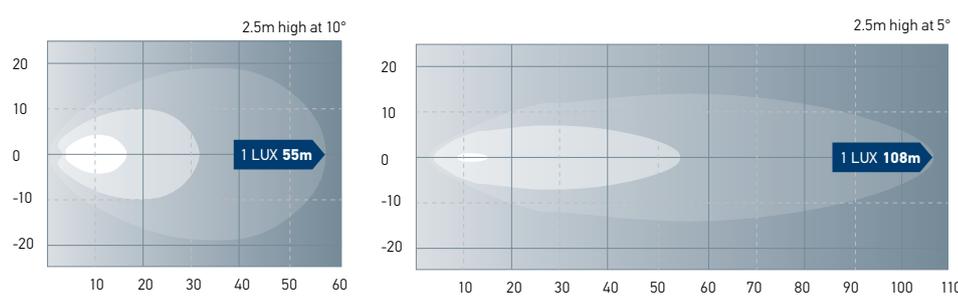
Power Beam S-Series LED Work Lamp

The Power Beam S-Series has been upgraded, with more light output of 1850 lumen while consuming less power, and a new corrosion resistant body. Featuring high-powered LEDs providing consistent illumination with 12 or 24V systems. The innovative thermally conductive synthetic material housing also features cooling fins which ensure the required heat dissipation from the high-power LEDs. Along with weight reduction, the material offers the further advantage of being totally corrosion-resistant.



1GA 996 588-201	SPREAD
1GA 996 588-211	LONG RANGE
Mounting	Upright or pendant.
Voltage	Multivolt™ for optimum brightness at input voltages in 12 and 24 volt systems
Power Consumption	19W
Actual Light Output	1850 lumen
Protection	Reverse polarity protection IP 6K7 (Protection against dust and prolonged water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)
Cable Length	Supplied with 2.0m sheathed cable with DT plug
Spare Part	8KB 958 757-501 2.0m sheathed cable with DT plug
Compliance	ECE-R10

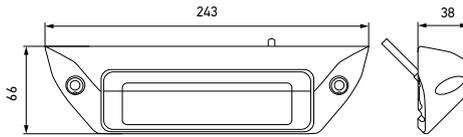
BEAM PATTERNS



1GA 996 588-211

FMS LED Work Lamp
– Wide Spread Beam

HELLA introduces the FMS low profile and powerful LED work lamps, purpose designed to integrate discretely into tight spaces and exterior recesses. With a protrusion of only 38mm, the FMS is sleek and unobtrusive, while ensuring great ground illumination and an evenly lit work area. This feature is highly advantageous for municipal and emergency vehicles, as well as for heavy equipment, where a lot of work is done around the perimeter of the vehicle. Two light intensities are offered: The FMS1200 with 1200 lumens; and the FMS2500, with a powerful 2500 lumens of even, close-range illumination directly underneath the lamp. HELLA LED technology is the answer for energy efficient, completely sealed, shock and vibration resistant lighting.

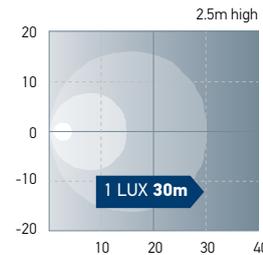
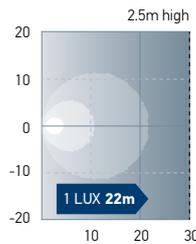


1GB 996 098-501		SPREAD BEAM 1200
1GB 996 098-511		SPREAD BEAM 2500
Mounting	Surface mount.	
Voltage	Multivolt™ 12/24V DC	
Power Consumption	FMS1200: 14W FMS2500: 28W	
Actual Light Output	FMS1200: 1200 Lumen FMS2500: 2500 Lumen	
Protection	IP 6K8 (Protection against dust and prolonged water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Cable Length	Pre-wired with 500mm cable	
Compliance	Ⓜ 0108 (FMS1200) 0109 (FMS2500) ECE-R10	

BEAM PATTERN

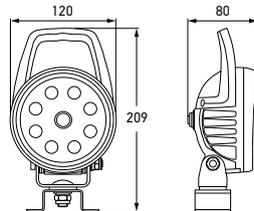
Spread Beam FMS 1200

Spread Beam FMS 2500



R120S LED Work Lamp

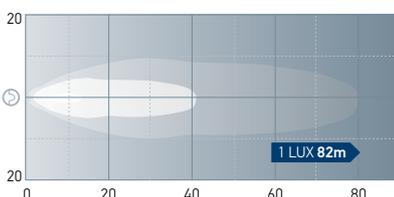
The R120S LED Work Lamp is designed with a moulded handle and swivel mounting bracket, which enables the lamp to be rotated in almost any direction. It also has a convenient on/off switch at the rear of the lamp.



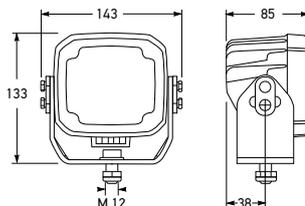
1G2 996 220-001		CLOSE RANGE
Mounting	Swivel base mounting	
Voltage	Multivolt™ 10 to 30V DC	
Power Consumption	23W	
Max. Light Output	1500 lumen	
Colour Temp.	6500K	
Protection	Reverse polarity protection, overheating protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Housing	Aluminium	
Temperature range	-40°C to +50°C	
Compliance	ECE R10	

BEAM PATTERN

R120S - Close range



WORK LAMPS



Ultra Beam Gen II LED Work Lamp

The Ultra Beam LED Gen II can replace even the Xenon work lights without any problems. The light is distributed by a specially developed multifaceted reflector, thus ensuring homogeneous illumination. Despite the enormous light yield, the Ultra Beam LED Gen II is efficient, using just 56 watts.

1GA 995 606-281	1566HD	CLOSE RANGE
1GA 995 606-291	1566HDLR	LONG RANGE
Mounting	Upright or pendant.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	56W	
Actual Light Output	4000 lumen	
Protection	Reverse polarity and voltage spike protection. IP 6K8 (Protection against dust and prolonged water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Cable Length	Supplied with 2m of sheathed twin core cable and DT plug.	
Spare Part	8KB 958 757-501	2.0m sheathed cable with DT plug
Compliance	E ECE R10	



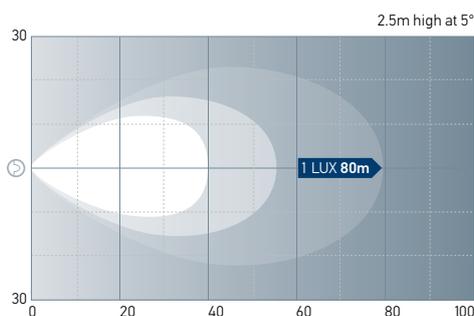
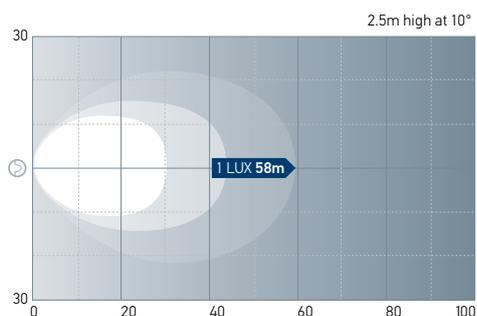
1GA 995 606-291

WORK LAMPS

BEAM PATTERNS

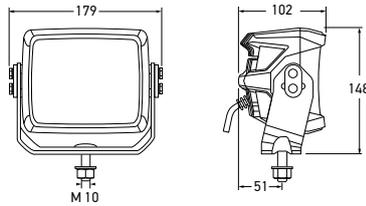
Ultra Beam Gen II - Close Range

Ultra Beam Gen II - Long Range



**RokLUME 380 LED Work Lamp
- Close Range**

The LED RokLUME 380 close range features a powerful light output of 7500 measured lumens and an extremely robust design, ideal for the most demanding environments and applications. The latest LEDs and engineered optics combine to produce a broad and even light reaching up to 142m long by 100m wide. The colour temperature of 5000K is similar to daylight meaning improved comfort and reduced eye strain over long periods of use.



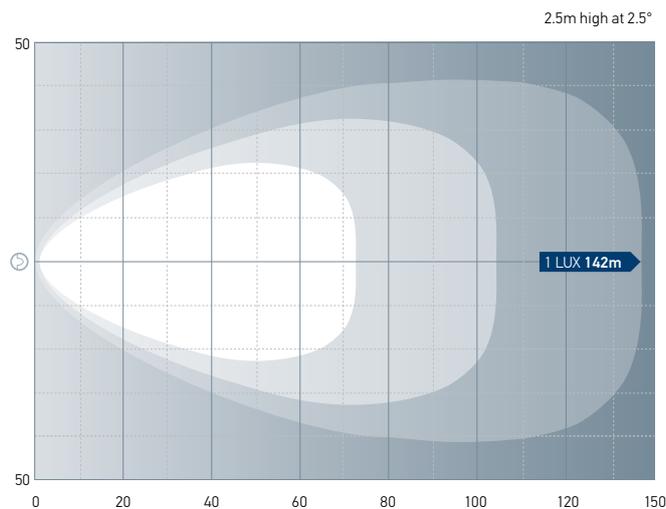
1GA 996 197-011		CLOSE RANGE
Mounting	Upright or pendant.	
Voltage	20-32V	
Power Consumption	84W	
Actual Light Output	7500 lumen	
Protection	Reverse polarity and voltage spike protection. IP 6K8 (Protection against dust and prolonged water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Housing	<u>NanoSafe Technology</u> : Non-stick and easy to clean surface coating. Three additional layers are implemented into the NanoSafe coating leading to much higher and longer resistance against corrosion.	
Cable Length	300mm harness with DT socket (counter plug supplied)	
Compliance	ECE R10	

WORK LAMPS



RokLUME 380
- Back view

BEAM PATTERN
RokLUME 380 - Close Range



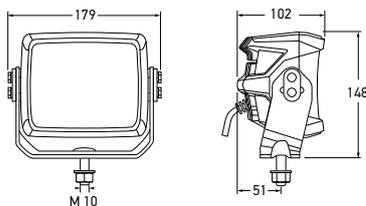
NanoSafe
Housing Technology

The RokLUME work lamps feature an advanced NanoSafe non-stick and easy to clean surface coating. Three additional layers were implemented into the NanoSafe coating leading to much higher and longer resistance against corrosion.

The NanoSafe technology is ideal for mining applications, where conditions are extremely harsh.



WORK LAMPS



1GA 996 197-001	CLOSE RANGE
Mounting	Upright or pendant.
Voltage	20-32V
Power Consumption	84W
Protection	Reverse polarity and voltage spike protection. IP 6K8 (Protection against dust and prolonged water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)
Housing	<u>NanoSafe Technology</u> : Non-stick and easy to clean surface coating. Three additional layers are implemented into the NanoSafe coating leading to much higher and longer resistance against corrosion.
Cable Length	300mm harness with DT socket (counter plug supplied)
Compliance	ECE R10

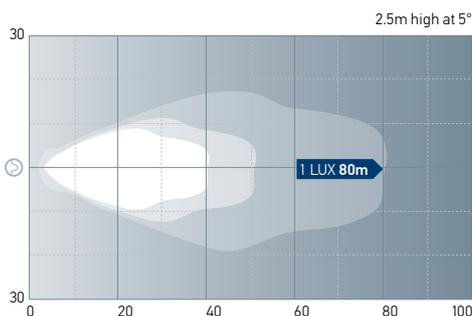
RokLUME 380 LED Work Lamp - ZEROGLARE

The LED RokLUME 380 **ZEROGLARE** brings the safety and comfort of highway driving to mining operations. The **ZEROGLARE** optical system features a powerful light output with a sharp horizontal cut-off, similar to a low beam headlamp. This ensures no light is directed into the eyes of oncoming drivers or other workers, therefore enhancing site safety. The cut off beam also significantly reduces glare in conditions such as fog or dust.



RokLUME 380 - Back view

BEAM PATTERNS
ROKLUME 380 - ZEROGLARE

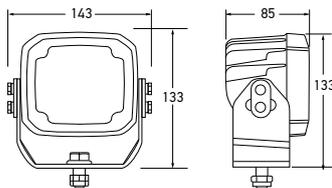


ZEROGLARE Technology

The innovative **ZEROGLARE** 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.



WORK LAMPS



1GA 995 606-541	ZERO GLARE
Mounting	Upright or Pendant. Heavy Duty bracket resists vibration
Voltage	Multivolt™ 9 – 32V DC
Power Consumption	Max. 56W
Protection	Reverse polarity protection. Transient spike circuit protection IP 6K8 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)
Housing	Aluminium Die Cast. <u>NanoSafe Technology</u> : Non-stick and easy to clean surface coating. Three additional layers are implemented into the NanoSafe coating leading to much higher and longer resistance against corrosion.
Lens Material	Nylon (PA12)
Cable Length	Integrated DT socket
Compliance	

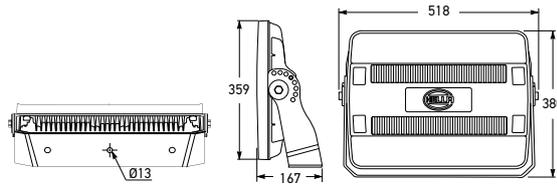
RokLUME 280 N LED Work Lamp - ZEROGLARE

Compact size suitable for all mining machinery. Heavy duty bracket for high vibration requirements. **Corrosion resistant NanoSafe coating.**



HypaLUME 24/48V DC LED Flood Light - Heavy Duty

The 24/48V DC HypaLUME has been designed for applications where high output lighting in extreme environments is required. The lamp produces a net output of 25,000 lumens whilst consuming less than 260W. Comprehensive sealing and anti-corrosion measures have been taken to ensure this lamp with stands the toughest conditions. The premium aluminium housing is corrosion resistant with a nonstick and easy to clean surface coating. The LEDs have a colour temperature of 5700K to provide a near daylight work environment that is optimal for fatigue avoidance and high alertness. The LED driver electronics ensure light output remains stable over a wide range of voltage variations. The HypaLUME is also protected from reverse polarity and short circuit faults.



1GJ 011 872-501	CLOSE RANGE
1GJ 011 872-511	LONG RANGE
1GJ 011 872-521	EXTRA WIDE

Mounting	Upright or pendant.
Voltage	Optimum brightness at input voltages from 22 to 52 volts.
Power Consumption	260W max. (10A @ 24V DC)
Actual Light Output	25,000 lumen
Operating Temperature Range	-40°C to +50°C
LED Colour Temperature	5700 K
Protection	Reverse polarity, transient spike and over voltage protection IP 6K9K (Fully sealed against dust and high-pressure/steam jet cleaning) Advanced thermal management
Cable Length	Supplied with 1.8m of easy plug-in sheathed cable
Connection	4 Pin Deutsch plug
Lens Material	High impact and chemical resistant Grilamid® lens
Compliance	CE FC ISO 13766 CISPR25



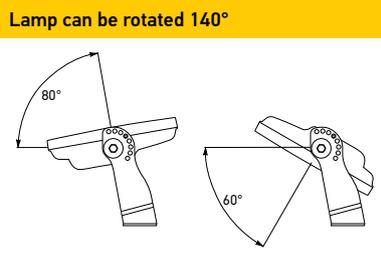
Amber option available



Locking mechanism Rear view Side view Front View

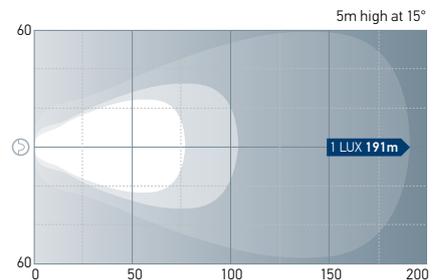


Supplied with 1.8m of easy plug-in sheathed cable

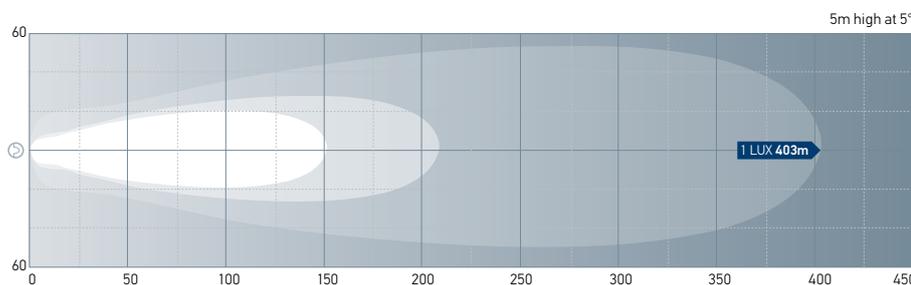


BEAM PATTERNS

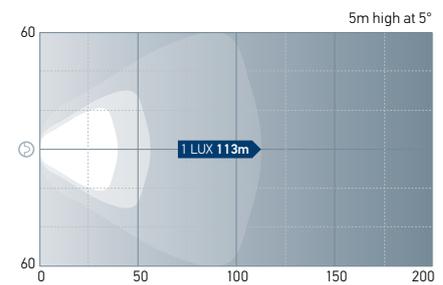
HypaLUME 24/48V DC - Close Range



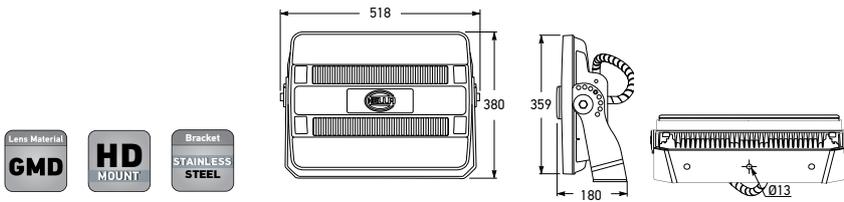
HypaLUME 24/48V DC - Long Range



HypaLUME 24/48V DC - Extra Wide



WORK LAMPS



1GJ 958 334-011		CLOSE RANGE
1GJ 958 334-021		LONG RANGE
1GJ 958 334-031		EXTRA WIDE
Mounting	Upright or pendant.	
Voltage	Optimum brightness at input voltages from 100 to 240V AC	
Power Consumption	300W max.	
Actual Light Output	28,000 lumen	
Operating Temperature Range	-40°C to +50°C	
LED Colour Temperature	5700 K	
Protection	IP 66 (Protection against dust and high pressure water jets) IP 67 (Protection against dust and temporary water immersion) Advanced thermal management	
Cable Length	Supplied with 2.0m of easy plug-in sheathed cable	
Connection	Wieland RST Mini - 16A	
Lens Material	High impact and chemical resistant Grilamid® lens	
Compliance	AS/NZS 60598.2.5 CE FC	

HypaLUME 110/230V AC LED Flood Light - Heavy Duty

The 110/230V AC HypaLUME has been designed for applications where high output lighting in extreme environments is required. The lamp produces a net output of 28,000 lumens at a voltage input range of 100-240V AC whilst only consuming 300W. Comprehensive sealing and anti-corrosion measures have been taken to ensure this lamp with stands the toughest conditions. The premium aluminium housing is corrosion resistant with a non-stick and easy to clean surface coating. The LEDs have a colour temperature of 5700K to provide a near daylight work environment that is optimal for fatigue avoidance and high alertness.



WORK LAMPS



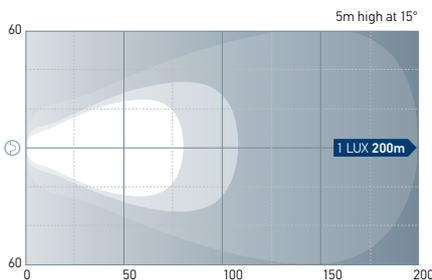
Front view Side view Rear view Locking mechanism



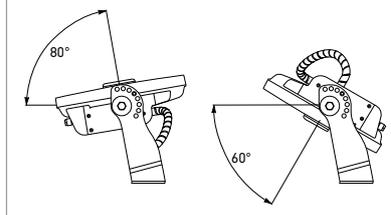
Amber option available

BEAM PATTERNS

HypaLUME 110/130V AC - Close Range

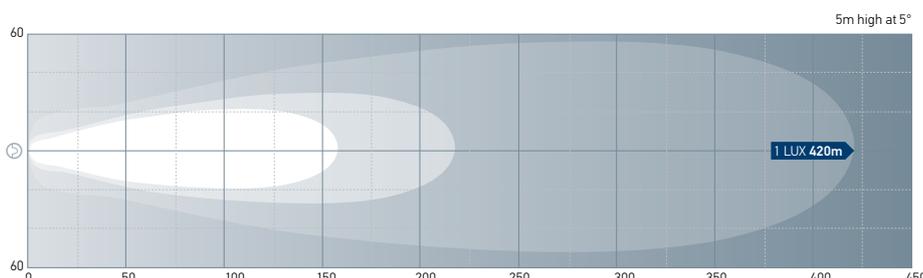


Lamp can be rotated 140°

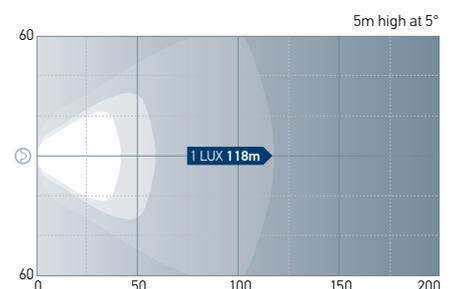


Supplied with 2.0m of easy plug-in sheathed cable.

HypaLUME 110/130V AC - Long Range

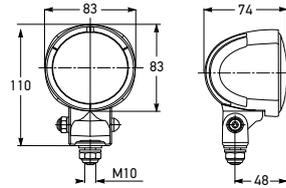


HypaLUME 110/130V AC - Extra Wide



M70 LED Reversing Lamp

M70 LED Multivolt™ reversing lamp features 4 high performance white LEDs providing consistent close range illumination and lamp protection with 12 or 24V systems. Housed in an impact resistant aluminium die-cast housing, fully sealed for an ultra long service life in demanding high vibration environments.

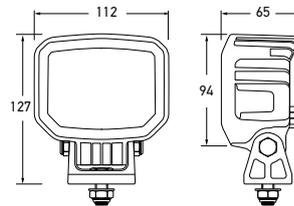


2ZR 996 376-091	1547RE
Mounting	Upright or pendant. Lamp inclined 18° downwards.
Voltage	Multivolt™ for optimum brightness at input voltages in 12 and 24 volt systems.
Power Consumption	13W
Actual Light Output	800 lumen
Protection	Reverse polarity and voltage spike protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)
Cable Length	Supplied with 2.0m of sheathed cable.
Compliance	Ⓔ 3902 ECE R10 ECE R23

WORK LAMPS

Power Beam 1000 Compact LED Reversing Lamp

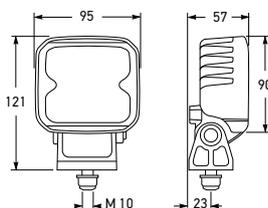
The PB1000 is designed and fully compliant for 12V or 24V trucks and light commercial applications. The thermal polymer housing and high strength nylon bracket is impervious to corrosion with no coating to chip, peel or corrode. Weight is reduced by up to 50% compared to a metal housing, and efficient LED technology reduces power consumption to quarter that of a traditional halogen reversing bulb.



2ZR 996 188-521	
Mounting	Upright. Lamp inclination of 24° downwards
Voltage	Multivolt™ for optimum brightness at input voltages in 12 and 24 volt systems
Power Consumption	12W
Light Output	1000 lumen
Protection	Reverse polarity protection IP 6K8 (Protection against dust and prolonged water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)
Spare Part	8KB 958 757-501 2.0m sheathed cable with DT plug
Compliance	Ⓔ 4767 ECE-R23 Ⓔ 0083 ECE-R10

Q90 Compact LED Reversing Lamp

The Q90C LED is a robust LED reversing lamp in a universal, attractive design. The innovative thermally conductive synthetic material housing also features cooling fins which ensure the required heat dissipation from the 4 high-power LEDs. The Q90C LED offers the advantage of complete corrosion resistance.



2ZR 996 284-501	1563CRE
Mounting	Upright or pendant. Lamp inclined 25° downwards.
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.
Power Consumption	16W
Actual Light Output	1000 lumen
Protection	As per 2ZR 996 376-091
Cable Length	Supplied with 2.0m of cable
Compliance	Ⓔ ECE R10 Ⓔ 4576 ECE R23

WORK LAMPS

HAND HELD SPOT LAMP - BLUE BODY - LONG RANGE		
2XM 905 113-002	1520	Long Range
Features	Blue hand held long range spot lamp. Includes plug, spiral cable (extendable to 2m) and on-off switch.	
Power Consumption	100W	



LED HAND HELD SPOT LAMP		
2XM 958 372-001	1520LED	Long Range
2XM 958 373-001	1521LED	Medium Range
Features	The LED hand held spot lamp only uses 1/3 of the power consumption of the 1520. It has a compact size and light weight, and is comfortable to hold even for long periods.	
Power Consumption	35W	

STAINLESS STEEL BRACKET ASSEMBLY		
8HG 990 358-001	9153007	
To Suit	42mm wide lamp mount.	



ULTRA BEAM PIPE SOCKET BASE		
8HG 990 320-001	9153108	
Mounting	Pipe socket mounting system. Allows work lamps be to be mounted on vehicles and removed again quickly.	
Features	Integrated power feed is via the pipe socket. No separate wiring is necessary for the work lamp. Tightening the wing nut attaches the pipe socket attachment tightly to the base. Suitable for 8HG 002 365-001, 8HG 006 294-011, 8HG 006 294-111 and 8HG 006 294-051.	
To Suit	42mm wide lamp mount.	

Ultra Beam Pipe Socket Base

Suitable for applications that require a removable work lamp.



PEDESTAL BRACKET		
9XD 990 298-022	9153308	
Pedestal swivel bracket to suit most work lamps.		



SPIRAL CABLE COMPLETE PLUG		
8KA 951 191-002	9152007 (Plug and 2m extendable sheathed cable)	
To Suit	HELLA hand held spot lamps.	



2 PIN DEUTSCH PLUG AND LEAD TO SUIT LED AND HID WORK LAMPS		
8KB 958 757-501	9155705 (2m of sheathed cable)	0.75mm²
8KB 958 757-001	9154905 (2.5m of sheathed cable)	1.25mm²
To Suit	PB1000, PB1500, PB1800, Module 50, Module 90, Ultra Beam I/II and RokLUME LED lamps.	



Emergency Lighting and Signal Warning Lamps

Technology to improve work place safety and meet the requirements of a modern Emergency Response Fleet.



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HELLA EMERGENCY AND SIGNAL WARNING LIGHTING

HELLA's extensive range of LED Emergency Lighting and Signal Warning Lamps provide high levels of performance and reliability for situations where a powerful warning light is required.



- Outstanding light performance
- Reduced maintenance & downtime
- Low power consumption
- Ultra long service life
- Excellent temperature management

LED is the most desired light technology by emergency services due to the many advantages it offers: ultra-long service life, low power consumption, outstanding light performance, reduced downtime and maintenance requirements.

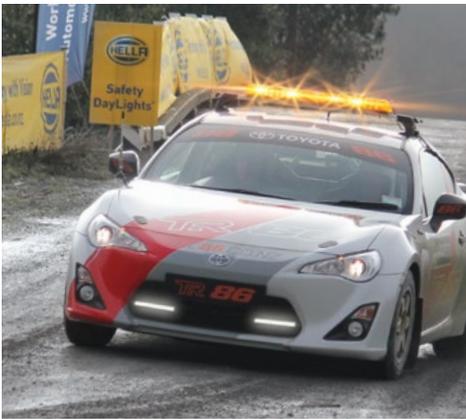
Quality materials and robust construction are combined to handle demanding and harsh environments. High-quality components, advanced technology and no moving parts offer extremely long design life. LEDs are solid state components and thus demonstrate a considerable higher vibration resistance compared to bulb and motor driven products.

HELLA's rotating and signal warning lamps, offer choices of signal colour, luminous intensities, flash patterns and supply voltages, providing a complete range of warning lamps to suit most applications and performance requirements.

The rotating light pattern is well recognised as a highly effective warning signal in all conditions, even in bright sunlight. Instant activation is ensured from ambient temperatures ranging from -40°C to $+60^{\circ}\text{C}$.

HELLA LED products must meet the highest quality requirements before being approved for the market.





Light output in accordance with ECE Regulation R65

ECE regulations are performance standards that are mandated in Europe and accepted by many other countries, including New Zealand.

ECE R65 relates to beacons, flashing and rotating, and requires a minimum light output as well as other mechanical and electrical tests (e.g. EMC, vibration etc).

Most of our beacons comply to ECE standards, however we supplement our range with SAE (American standards) lamps as well, which are also accepted in New Zealand.

Choose the right lamp for you

Selecting the right product is not always easy. With the online product comparison tool ELIVER, you can simulate light distribution patterns from HELLA beacons and visual warning systems in a variety of real-world scenarios.

ELIVER also provides you with all of the relevant information about performance and technical specifications.

ELIVER

The unique online comparison tool for light distribution.

www.hella.com/eliver



HELLA EMERGENCY LAMPS ARE TESTED TO INTERNATIONAL STANDARDS



Vibration Test

This test simulates the behaviour of the products in harsh off-road conditions and verifies resistance to potholes, washboard road patterns and gravel roads.

A (wide band random vibration) test is used to test the mechanical endurance strength of the test specimen. The vibration frequency range extends from 10 to 1000 Hertz. In addition to vibration testing, products are subjected to a temperature overload of -40°C to +60°C.

Ingress Protection (IP ratings)

HELLA Emergency and Signal Warning Lighting contain precision electronic and mechanical components in order to achieve outstanding product performance. In order to protect these components and assure long term reliability, HELLA products are designed and tested to meet international standards on ingress protection as per IEC 60529, DIN 40050-9 or ISO 20653.

Dust Test

Entry of dust can affect the optical and mechanical operation of a lamp, potentially compromising its performance and reliability. Accordingly HELLA products are designed and tested to ensure the risk of dust ingress is minimised or eliminated. Dust-resistant products are rated at IP 5(K) X, while dust-proof products are rated at IP 6(K) X.

Water Splash Test

HELLA products that fulfil the water splash test requirement have been subjected to environmental testing designed to simulate operating conditions representing normal weather conditions. When correctly installed, heavy rain, direct splashes and water sprays up to 4 bar will have no adverse effects on the long term reliability and performance of the product. This level of protection is provided on HELLA products rated at IP X4K or above.

Temporary Immersion Test

HELLA products that fulfil the temporary immersion test requirement have been subjected to tests designed to simulate operating conditions that involve brief immersions in water such as off-road driving through a stream. This level of protection is provided on HELLA products rated at IP X7.

High-Pressure Cleaner Test

For the ultimate in water ingress protection, HELLA products that fulfil the high-pressure cleaner test requirement are able to withstand water and steam jets of up to 80°C and 100 bar that may be encountered during commercial and industrial cleaning processes. This level of protection is provided on HELLA products rated at IP X9K.

IP 6K 9K

First Digit - Second Digit

First Digit Below: Table 1

Protection against solid foreign objects and access to hazardous parts.

Second Digit Right: Table 2

Protection against liquids.

FIRST DIGIT

0	Non-protected.
1	Protected against solid foreign objects of 50mm diameter and greater.
2	Protected against solid foreign objects of 12.5mm diameter and greater.
3	Protected against solid foreign objects of 2.5mm diameter and greater.
4	Protected against solid foreign objects of 1.0mm diameter and greater.
5	Dust-protected.
5K	Dust-protected.
6	Dust-sealed.
6K	Dust-sealed.

SECOND DIGIT

0	Non-protected.
1	Protected against drops of water falling vertically.
2	Protected against drops of water falling vertically at up to 15° from the vertical.
3	Protected against spraying water falling vertically at up to 60° from the vertical.
4	Protected against splashing water from all directions.
4K	With higher pressure.
5	Protected against jet of water from all directions.
6	Protected against powerful water jets.
6K	With higher pressure, specific for road vehicles.
7	Protected against the effects of immersion.
8	Protected against prolonged effects of immersion under pressure to specified depth.
9K	Protected against high-pressure cleaner, specific for road vehicles.

What beacon is best for which application?

There is no one beacon specific to certain applications as they are all designed to be used in multiple situations. There are a few factors to consider whenever selecting a beacon. The selection can be narrowed with the help of certain criteria. To find the right beacon for the right application, you should ask yourself the following questions before purchasing.

Where or how intensively / frequently will the beacon be used?

How frequent the beacon will be used and in which environment needs to be taken into account. If the beacon is used very frequently the advantages of LED technology such as design life, low maintenance, low power consumption will be more important than if its use is low.

What kind of warning effects do I want to achieve?

In highly populated areas you would want to draw attention of approaching vehicles to the situation/incident from a reasonable distance. In this case, we recommend using a beacon with a high warning effect. However, if the beacon isn't used frequently and in areas that don't need a high warning effect, a halogen beacon is completely sufficient.

How high is the vibration stress for beacons?

Take into account whether the vehicle will absorb some of the vibration also what kind of environment the beacon will be used in e.g. the roads it will be used on (are they smooth or rough). If needed look at beacons with a mounting attachment that will absorb some of the stress, also look at the design and materials as they may help to reduce vibration stress.

How do I want to attach the beacon to the vehicle?

The type of vehicle and position on the vehicle the beacon will be mounted on will determine which attachment will work best. There are three different mounting options to choose from – fixed, flexible pipe socket and magnetic. The different attachment variants are legally stipulated in DIN 14620.

Fixed Attachment



Flexible Pipe Socket Attachment



Magnetic Attachment



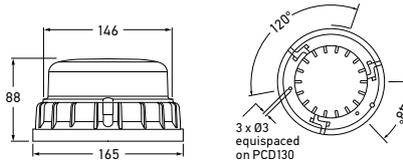
CAUTION: MOUNTING OF MAGNETIC BASE REVOLVING LAMPS

Due to HELLA being unable to control the condition of the mounting surface or the potential forces that may occur during deceleration, fitment of warning lamps with a magnetic base cannot be recommended for use on moving vehicles.



K-LED 2 Beacon - Fixed Mount

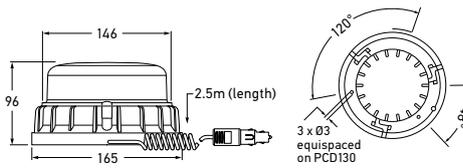
K-LED low profile beacons are the ideal choice wherever beacons risk interference with radio communications. Featuring 20 high power LEDs providing high light output for best visibility. An automatic day/night sensor adjusts brightness to avoid glare discomfort at night. 14 different flashing and 2 rotating patterns.



2XD 011 557-101	1614	AMBER
Mounting	Fixed mounting on horizontal surfaces	
Voltage	Multivolt™ for optimum brightness at input voltages from 10 to 32 volts	
Power Consumption	30W max.	
Protection	Reverse polarity and Transient Spike Circuit protection IP 67 (Protection against dust and temporary water immersion)	
Flash Rate	Simulated rotation 120rpm (2.0 Hz)	
Cable Length	Pre-wired with 150mm cable	
RF Suppression	CISPR25 Class 5	
Compliance	ECE R65/00 TA2	ECE R65 TR2 SAE J 845 Class 1

K-LED 2 Beacon - Magnetic Mount

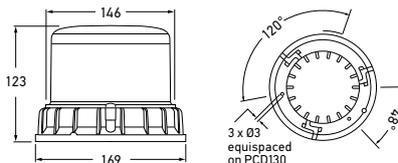
K-LED low profile beacons are the ideal choice wherever beacons risk interference with radio communications. Featuring 20 high power LEDs providing high light output for best visibility. An automatic day/night sensor adjusts brightness to avoid glare discomfort at night. 14 different flashing and 2 rotating patterns.



2XD 011 557-301	1614MAG	AMBER
Mounting	Magnetic mounting on horizontal surfaces	
Voltage	Multivolt™ for optimum brightness at input voltages from 10 to 32 volts	
Power Consumption	30W max.	
Protection	Reverse polarity and Transient Spike Circuit protection IP 67 (Protection against dust and temporary water immersion)	
Flash Rate	Simulated rotation 120rpm (2.0 Hz)	
Cable Length	Spiral cable extends to 2.5m	
RF Suppression	CISPR25 Class 5	
Compliance	ECE R65/00 TA2	ECE R65 TR2 SAE J 845 Class 1

Caution: Mounting of Magnetic Base Revolving Lamps

Due to HELLA being unable to control the condition of the mounting surface or the potential forces that may occur during deceleration, fitment of warning lamps with a magnetic base cannot be recommended for use on moving vehicles.



**LED DuraRAY 4.0
Rotating/Flashing Beacon**

Heavy duty LED beacon with the choice of 16 rotating or flashing patterns, and also includes a light sensor for day/night operation. Excellent light output and rugged design makes for one of the toughest LED beacons on the market. Suitable for harsh and demanding conditions, such as mining.

2XD 012 985-001	AMBER		
Mounting	Fixed mounting on horizontal surfaces		
Voltage	Multivolt™ for optimum brightness at input voltages from 10 to 30 volts		
Power Consumption	Up to 32W		
Protection	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)		
Flash Rate	16 selectable flash pattern including rotating		
Cable Length	Pre-wired with 1.5m cable		
RF Suppression	CISPR25 Class 5		
Compliance	ECE R65/00 TA1	ECE R10	SAE J845 Class 1

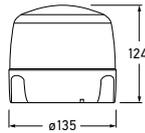


SELECTABLE PATTERN	FLASHING SEQUENCE (FS)
1	Single flash 2 Hz
2	Double flash 2 Hz (ECE)
3	Triple flash 2 Hz
4	Rotation 2 Hz 120rpm (ECE)
5	Single flash 2 Hz (250ms offset to FS1)
6	Double flash 2 Hz (250ms offset to FS2)
7	Triple flash 2 Hz (250ms offset to FS3)
8	Single flash 1.4 Hz SAE

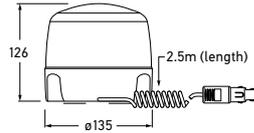
SELECTABLE PATTERN	FLASHING SEQUENCE (FS)
9	Double flash 1.4 Hz SAE
10	Triple flash 1.4 Hz SAE
11	Quad flash 1.45 Hz SAE
12	Rotating signal 1.4 Hz 84rpm SAE
13	Single flash 1.4 Hz SAE (250ms offset to FS8)
14	Double flash 1.4 Hz SAE (250ms offset to FS9)
15	Triple flash 1.4 Hz SAE (250ms offset to FS10)
16	Quad flash 1.4 Hz SAE (250ms offset to FS11)

RotaLED Beacons

RotaLED Beacon, with the latest LED technology provides an optimum signal image with low power consumption featuring rotating LED light function. The combination of thermal management and optics in one module makes a remarkably compact design possible. Impact and dirt resistant Polycarbonate lens.



2RL 010 979-001



2RL 010 979-021



2RL 010 979-021

2RL 010 979-001	1611 (Fixed Mount)	AMBER
2RL 010 979-021	1613 (Magnetic Mount)	
Mounting	Fixed mount: Upright, fixed mounting on horizontal surfaces. Magnetic mount: Magnetic mounting on horizontal surfaces.	
Voltage	Multivolt™ for optimum brightness at input voltages from 10 to 32 volts	
Power Consumption	10W	
Protection	IP 5KX (Protection against dust) IP X4K (Protection against splashing water from all directions. With higher pressure) IP X9K (Protection against high-pressure cleaner, specific for road vehicles)	
Flash Rate	Simulated rotation 120-133rpm (2.0-2.2 Hz)	
Cable Length	2RL 010 979-001	Pre-wired with 120mm cable
	2RL 010 979-021	Spiral cable extends to 2.5m
RF Suppression	CISPR25 Class 5	
Compliance	ECE R65/00 TA1	ECE R10

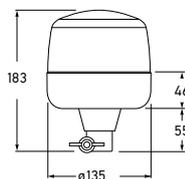
Caution: Mounting of Magnetic Base Revolving Lamps

Due to HELLA being unable to control the condition of the mounting surface or the potential forces that may occur during deceleration, fitment of warning lamps with a magnetic base cannot be recommended for use on moving vehicles.

EMERGENCY & SIGNAL

RotaLED Beacon - Pipe Mount

RotaLED Beacon, with the latest LED technology provides an optimum signal image with low power consumption featuring rotating LED light function. The combination of thermal management and optics in one module makes a remarkably compact design possible. Impact and dirt resistant Polycarbonate lens.



2RL 010 979-011	1612	AMBER
Mounting	Pipe Mounting. Tubular base incorporates connection plug. Must be used in conjunction with connecting piece 8HG 002 365-001, or other HELLA 2-pole beacon mounts.	
Voltage	Multivolt™ for optimum brightness at input voltages from 10 to 32 volts	
Power Consumption	10W	
Protection	Same as 2RL 010 979-001 above	
Flash Rate	Simulated rotation 120-133rpm (2.0-2.2 Hz)	
Cable Length	Pre-wired with 120mm cable	
Accessories	8HG 002 365-001	2 Pole beacon mount - Pipe
	8HG 006 294-011	2 Pole beacon mount - Flat mount
	8HG 006 294-111	2 Pole beacon mount - Flat angle mount
	8HG 006 294-051	2 Pole beacon mount - Threaded mount
RF Suppression	CISPR25 Class 5	
Compliance	ECE R65/00 TA1	ECE R10



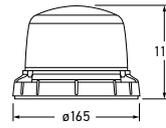
8HG 002 365-001

8HG 006 294-011

8HG 006 294-111

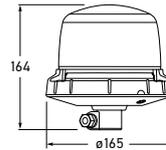
8HG 006 294-051

**RotaLED Compact Beacon
- Fixed Mount**



2XD 013 979-001	AMBER		
Mounting	Fixed mounting on horizontal surfaces.		
Voltage	Multivolt™ for optimum brightness at input voltages from 10 to 30 volts		
Power Consumption	10W		
Protection	Reverse polarity and transient spike circuit protection IP 67 (Protection against dust and temporary water immersion) IP X9K (Protection against high-pressure cleaner, specific for road vehicles)		
Flash Rate	124 +/- 10 per minute, double flash		
Cable Length	Pre-wired with 150mm cable		
RF Suppression	CISPR25 Class 5		
Compliance	ECE R65/00 TA1	ECE R10	SAE J845 Class 1

A high performance LED beacon offering a double flash signal and 360° warning effect which provides ultimate attention in many applications. The impact-resistant dome and no moving parts provide maximum reliability.



2XD 013 979-011	AMBER		
Mounting	Tubular base incorporates connection plug. Must be used in conjunction with 8HG 002 365-001: 2 pole beacon mount - pipe, or other HELLA 2-pole beacon mounts.		
Voltage	Multivolt™ for optimum brightness at input voltages from 10 to 30 volts.		
Power Consumption	10W		
Protection	Same as 2RL 010 979-001		
Flash Rate	124 +/- 10 per minute, double flash.		
Cable Length	Pre-wired with 150mm cable		
Accessories	8HG 002 365-001	2 Pole beacon mount - Pipe	
	8HG 006 294-011	2 Pole beacon mount - Flat mount	
	8HG 006 294-111	2 Pole beacon mount - Flat angle mount	
	8HG 006 294-051	2 Pole beacon mount - Threaded mount	
RF Suppression	CISPR25 Class 5		
Compliance	ECE R65/00 TA1	ECE R10	SAE J845 Class 2

**RotaLED Compact Beacon
- Pipe Mount**

A high performance LED beacon offering a double flash signal and 360° warning effect which provides ultimate attention in many applications. The impact-resistant dome and no moving parts provide maximum reliability. The flexible pipe mount softens impacts and minimises the risk of damage thanks to its special design.



8HG 002 365-001

8HG 006 294-011

8HG 006 294-111

8HG 006 294-051



Extremely flexible pipe mount rubber base mechanism

KL7000LED Beacon - Fixed Mount

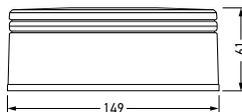
KL7000LED Beacon, with the latest LED technology provides an optimum signal image with low power consumption featuring rotating LED light function. The combination of thermal management and optics in one module makes a remarkably compact design possible. Impact and dirt resistant PMMA lens.



2RL 011 484-001	1608	AMBER
Mounting	Upright, fixed mounting on horizontal surfaces.	
Voltage	Multivolt™ for optimum brightness at input voltages from 10 to 32 volts.	
Power Consumption	10W	
Protection	IP 5KX (Protection against dust) IP X4K (Protection against splashing water from all directions. With higher pressure) IP X9K (Protection against high-pressure cleaner, specific for road vehicles)	
Flash Rate	Simulated rotation 120-133rpm (2.0-2.2 Hz)	
Cable Length	Pre-wired with 120mm cable	
RF Suppression	CISPR25 Class 5	
Compliance	ECE R65/00 TA1	ECE R10

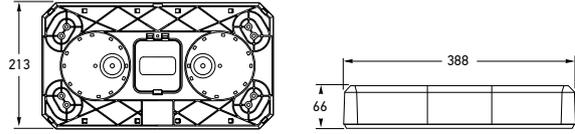
K-LED Rebelution LED Warning Beacon - Fixed Mount

K-LED low profile beacons are the ideal choice wherever beacons risk interference with radio communications. Featuring 20 high power LEDs providing high light output for best visibility. An automatic day/night sensor adjusts brightness to avoid glare discomfort at night. 14 different flashing and 2 rotating patterns.



2RL 455 256-001	Rotating	AMBER
2XD 455 255-001	Flashing	AMBER
Mounting	Surface Mount	
Voltage	12/24V	
Power Consumption	Rotating: 13 Watts Flashing: 38 Watts	
Protection	IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Cable Length	150mm cable	
Lens Material	Polycarbonate	
Housing	Aluminium	
RF Suppression	ECE-R10: 058840 Rotating: CISPR 25 Class 3 Flashing: CISPR 25 Class 5	
Compliance	ECE-R65 TA1 (E1)	

EMERGENCY & SIGNAL



12 VOLT		24 VOLT		
2RL 980 310-001	454201A	2RL 980 310-021	454201A24V	AMBER
2RL 980 310-031	454205A (Economy Version - 12 Volt)			AMBER
Flash Rate	20 user selectable flash patterns.			
Current Draw	12V - 5.0A max. 24V - 3.0A max.			
Compliance	SAE J845 Class 1			

LED Highlighter™ Mini Light Bar

The Highlighter™ LED Mini Light Bar combines the high performance ROC™ (Reliable On-board Circuitry) with the high efficiency Solaris™ reflector design. The innovative reflector design offers uniform 360° light distribution, which means no dark spots or shadows. Highlighter™ units (except economy 2RL 980 310-031) can be wired together, or to other devices for a completely synchronized warning system.



LENSES (SINGLE)		
9EL 980 312-051	945420105	(Clear)

MOUNTING KITS/BRACKETS		
8HG 980 311-001	454217	(Mount Riser 52mm)
9XD 980 311-101	452341	(Magnetic Mount Kit)
9XD 980 311-011	454218	(Mount Flat 12mm)



9XD 980 311-101

LED Highlighter™ Mini Light Bar Accessories



9EL 980 312-051



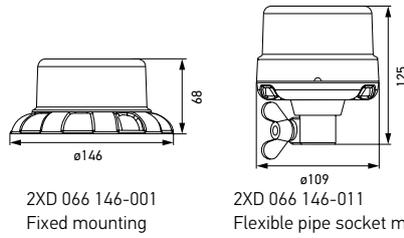
8HG 980 311-001



9XD 980 311-011

K-LED Nano Beacon - Fixed Mount

The K-LED Nano produces above-average light intensity, despite its compact dimensions. HELLA's smallest homologated beacon to date generates a long-range, flashing amber warning signal. There are two different variants suitable for fixed attachment. The standard version is characterised by a slightly curved base, which conforms to HELLA's usual 130mm diameter bolt circle mounting points. In addition, a variant with flexible pipe socket mounting is available. This shock-absorbing and vibration-damping base briefly tilts the beacon by up to 45° and cushions even strong impacts. Thanks to this option and to the beacon's completely sealed construction, the K-LED Nano can be used both in vibration-intensive and dusty environments.



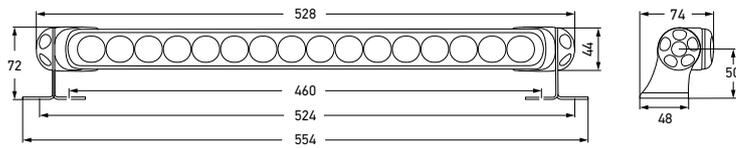
2XD 066 146-001	Fixed Mounting	AMBER
2XD 066 146-011	Flexible Pipe Socket Mounting	AMBER
Mounting	Upright, fixed mounting on horizontal surfaces.	
Voltage	Multi-voltage. 12 V / 24 V	
Power Consumption	max. 19W	
Protection	IP 6K7 (Protection against dust and temporary water immersion) IP 6K9 (Protection against dust and high-pressure/steam jet cleaning)	
Flash Rate	124 +/- 10 per minute	
Cable Length	150 mm cable with 6.3 x 0.8 – 1.5 flat connector	
Accessories	8HG 002 365-001 2 Pole beacon mount - Pipe 8HG 006 294-011 2 Pole beacon mount - Flat mount 8HG 006 294-111 2 Pole beacon mount - Flat angle mount 8HG 006 294-051 2 Pole beacon mount - Threaded mount	
RF Suppression	ECE R10, CISPR 25 Class 5, RCM	
Compliance	ECE R65 TA1 005218, SAE J845 Class 1	ECE R10



2XD 066 146-011



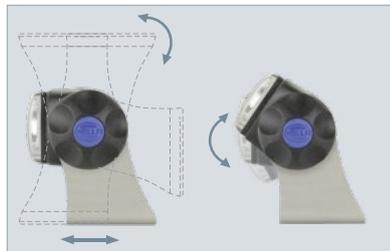
EMERGENCY LIGHTING AND SIGNAL WARNING LAMPS



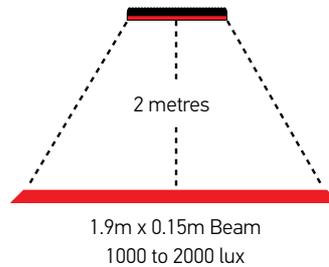
2XD 958 130-661		RED
Mounting	Upright or pendant	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	25W	
Protection	Reverse polarity and transient spike protection IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Cable Length	Pre-wired with 2.5m of tinned multi-core cable	
Lens Material	Grilamid®	
Accessories	8HG 958 128-811 HD double mount stainless steel feet (one pair)	
Compliance		

BL470R LED Warning Lamp

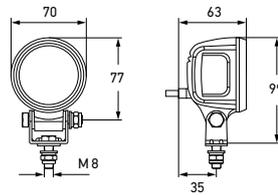
It is essential to protect employees from the potential dangers of moving machinery. The BL470R LED warning lamp features a powerful red safety strip of light that indicates a no-go zone to keep staff and pedestrians at a safe distance so ideal for use on forklifts, and earth moving equipment which need surrounding work space to be identified by a no-go line.



Mounting brackets can be positioned to suit most vehicle installations.



EMERGENCY & SIGNAL



1G0 996 210-011		RED
1G0 996 210-001		BLUE
Voltage	Multivolt™ for optimum brightness at input voltages from 10 to 80 volts.	
Power Consumption	Red: 5.5W Blue: 7W	
Protection	Reverse polarity and transient spike protection IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Cable Length	500mm cable	
Lens Material	Polycarbonate	
Housing	Aluminium Die Cast	
Compliance	ECE-R10	

SL60 LED Warning Lamp

The SL60 LED warning lamp has a special lens optic that focuses the light rays into a horizontal or vertical line that appears on the ground, day and night. This warning symbol not only alerts vehicles and pedestrians about an approaching vehicle or a potentially dangerous working area, the lines can also facilitate vehicle navigation. The SL60 LED warning lamp is available with red or blue projection line.

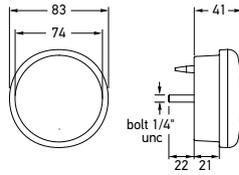


1G0 996 210-011

1G0 996 210-001

LED 83mm Round Multi-flash Signal Lamp

83mm diameter round LED signal lamps with single bolt mount for emergency vehicles. The HELLA multi-flash range of warning lamps have 10 programmable flash modes and can be synchronised to flash alternately or in unison.



2XD 959 011-452 2XD 959 011-602 2XD 959 011-652

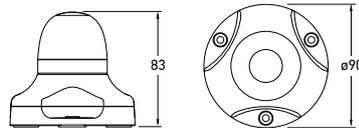
2XD 959 011-402	RED
2XD 959 011-452	AMBER
2XD 959 011-602	BLUE
2XD 959 011-652	GREEN

Mounting	Single bolt 1/4" stainless UNC thread. Nut and washer supplied.
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.
Power Consumption	6W continuous (less in flashing modes).
Protection	Reverse polarity and voltage spike protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.
Compliance	ECE R10

See page 66 for mounting accessories.

LED 360° Multi-flash Signal Lamp

Multi-purpose LED 360° warning lamp with clear Grilamid® 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.



2XD 980 911-202 2XD 980 911-402

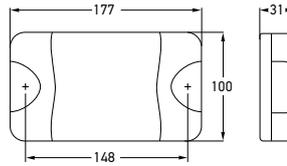


2XD 980 911-602 2XD 980 911-702

2XD 980 911-002	WHITE
2XD 980 911-202	GREEN
2XD 980 911-402	RED
2XD 980 911-602	AMBER
2XD 980 911-702	BLUE

Mounting	Upright mounting with three point mount.
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.
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	High impact and chemical resistant Grilamid® lens
Compliance	ECE R10

Lamps shown illuminated (left).



2XD 959 037-012	RED
2XD 959 037-112	AMBER
2XD 959 037-612	BLUE
2XD 959 037-812	GREEN

Mounting	Two hole surface mount with mounting bushes supplied.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	9W continuous (less in flashing modes).	
Protection	Reverse polarity and 5000 watt Transient Voltage Suppressor (TVS) IP 6K6 (Protection against dust and high-pressure water jets) IP 6K7 (Protection against dust and temporary water immersion)	
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.	
Compliance	SAE J595 Class 1 (Red and amber versions)	ECE R10

See pages 62 for DuraLED® accessories.

DuraLED® Multi-flash Signal Warning Lamp

Multivolt™ warning lamps for emergency vehicles. The HELLA multi-flash range of warning lamps have 10 programmable flash modes and can be synchronised to flash alternately or in unison.



2XD 959 037-112

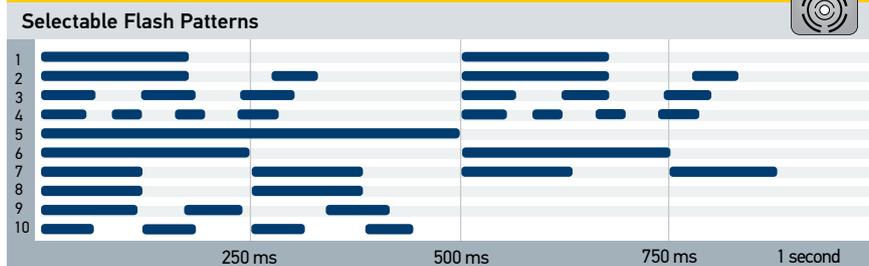
2XD 959 037-612



2XD 959 037-812

EMERGENCY & SIGNAL

HELLA MULTI-FLASH LAMP OPERATING MODES

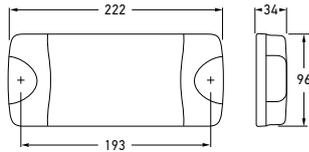


Flashing Options	
Steady state	Lamp operates as a continuous ON signal
Independent flash	Lamp operates from an external flashing system
Flash state	Lamp operates in the flash mode preselected by the user
Blitz state	Lamp operates in a burst of quad flashes (pattern 4)

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

DuraLED® Combi Red/Green Signal Warning Lamp

This DuraLED® red/green signal warning lamp is designed as a stop/go lamp to signal when it is safe or dangerous to approach and/or work on a vehicle. The red signal has two outputs, either 1.5W or 6W, allowing the lamp to function even for long periods (e.g. overnight) without draining batteries. It is completely sealed, UV, impact and shock resistant, ensuring an ultra-long service life.



2XA 959 050-321		RED/GREEN
Mounting	Surface mount with mounting bushes supplied.	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	Red: 1.5W/6W Green: 3W	
Protection	Reverse polarity and transient spike circuit protection. IP 6K6 (Protection against dust and high-pressure water jets) IP 6K7 (Protection against dust and temporary water immersion)	
Cable Length	Pre-wired with 6.0m of sheathed multi-core cable.	
Lens Material	High impact and chemical resistant Grilamid® lens	
Compliance		
Note: Light output suitability is at the discretion of the installer.		

COMBI LAMP FUNCTIONS



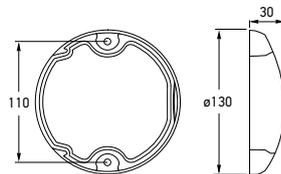
Red/High

Red/Low

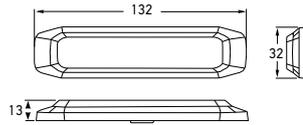
Green/Go

**EuroLED® Signal Warning Lamp
- 24 Volt**

Low profile signal warning LED lamp featuring Ultra Wide Visibility Optics for significantly improved side visibility.



2XD 959 020-812		RED
Mounting	Two hole surface mount with mounting bushes supplied.	
Voltage	20-28V	
Power Consumption	5W	
Protection	Reverse polarity and Transient Spike Circuit protection. IP 6K6 (Protection against dust and high-pressure water jets) IP 6K7 (Protection against dust and temporary water immersion)	
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.	
Compliance	ECE R10	
This lamp requires an external flasher unit such as 4JZ 177 846-001. See page 65 for EuroLED® accessories.		



2XD 014 562-401	AMBER
Mounting	Surface mount
Voltage	Multivolt™ for optimum brightness at input voltages from 11-30V DC
Power Consumption	Max 17W
Protection	IPX7 IPX9K
Cable Length	250mm
Compliance	ECE-R10, CISPR 25 Class 5 SAE J595 Class 1 Amber

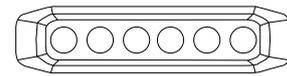
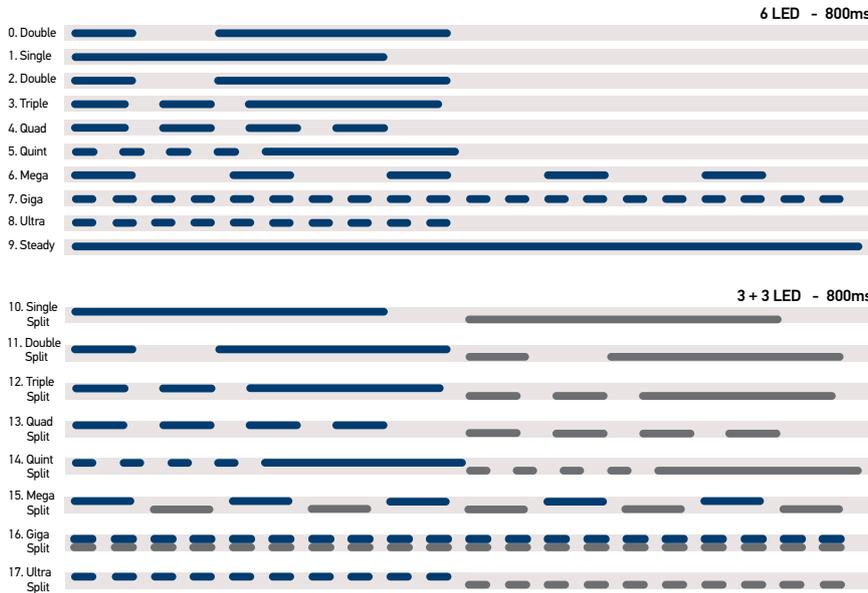
Multi-flash Slim 6 LED Amber Warning Lamp

The Multi-flash Slim Signal Warning Lamp offers 18 different flash patterns, compliant to SAE J595 Class 1 – being the brightest class, and is suitable for on road use. The lamps are Multivolt™ so may be used on 12 or 24V vehicles. The 6 high power LEDs produce an optimum signalling effect via the high-quality precision lens. An additional optional feature is night mode, wired into the headlamp circuit, which dims the lamp to ½ output so not to dazzle or create blinding glare.

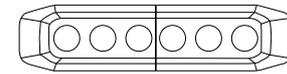


HELLA MULTI-FLASH LAMP OPERATING MODES

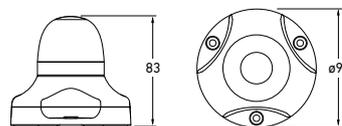
Signal Warning Lamp - 18 Flash Patterns



6 LED



6 LED Split
3 + 3



2XA 980 910-442	RED
Mounting	Upright mounting with three point mount.
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.
Power Consumption	5W
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	High impact and chemical resistant Grilamid® lens
Compliance	ECE R10
See page 156 for multi-flash versions. This lamp requires an external flasher unit such as 4JZ 177 846-002.	

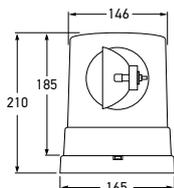
LED 360° Warning Lamp

Multi-purpose LED 360° warning lamp with Grilamid® lens available in four signal colours and white. Optics appear clear until illuminated.



Revolving Beacon KL 700 - Amber

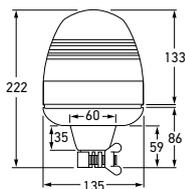
The halogen bulb is replaced from the rear of the reflector eliminating the need to touch the highly polished reflector surface. Twin belt drive ensures a smooth and quiet operation.



2RL 905 143-001	1724	12 VOLT
Power Consumption	12V - 55W	
Rotation	160rpm	
RF Suppression	VDE 0879, Class 3, FM 5.	
Bulbs to Suit	12V	8GH 002 089-122
Protection	IP 5K4K (Protection against dust and water splashing with increased pressure) IP X9K (Protection against high-pressure/steam jet cleaning)	
Spare Parts	9EL 856 418-021 ● Amber lens with optics	
Compliance	ECE R65/00	
HELLA does not recommend the magnetic base version for use on a moving vehicle (see page 147).		

**Rotaflex Revolving Beacon
- Amber**

Rotaflex revolving beacon with polycarbonate lens and flexible rubber base.



2RL 006 846-001	1730	12 VOLT
2RL 006 846-011	1731	24 VOLT
Mounting	Tubular base incorporates connection plug. Must be used in conjunction with connecting piece 8HG 002 365-001, 8HG 006 294-011, 8HG 006 294-111 or 8HG 006 294-051.	
Power Consumption	12V - 55W 24V - 70W	
Rotation	160rpm	
RF Suppression	Conducted Class 5 (CISPR 25).	
Bulbs to Suit	12V	8GH 002 089-122
	24V	8GH 002 089-281
Protection	IP 5K4K (Protection against dust and water splashing with increased pressure) IP X9K (Protection against high-pressure/steam jet cleaning)	
Spare Parts	8HG 002 365-001 2 Pole beacon mount - Pipe 8HG 006 294-011 2 Pole beacon mount - Flat mount 8HG 006 294-111 2 Pole beacon mount - Flat angle mount 8HG 006 294-051 2 Pole beacon mount - Threaded mount	
Compliance	ECE R65/00	e1 2181



8HG 002 365-001

8HG 006 294-011



8HG 006 294-111

8HG 006 294-051

Pipe Mount for Beacons

Pipe mount system. Connecting pieces suitable for applications that require removable Beacons or Work lamps.

2 POLE BEACON MOUNT - PIPE	
8HG 002 365-001	8007



2 POLE BEACON MOUNT - FLAT MOUNT	
8HG 006 294-011	8007FM



2 POLE BEACON MOUNT - FLAT ANGLE MOUNT	
8HG 006 294-111	8007RA



2 POLE BEACON MOUNT - THREADED	
8HG 006 294-051	8008



PIPE MOUNT FOR BEACONS - Ø165MM	
8HG 005 436-011	
Suits	2RL 905 143-001, 2XD 011 557-101





Interior/Exterior Lighting

HELLA's extensive range of ultra reliable LED products enhance interior/exterior spaces with superior illumination.



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LED LIGHTING TECHNOLOGY - ENERGY EFFICIENT ILLUMINATION

HELLA LED lighting enhances interiors by adding functionality, increased energy efficiency and long term durability.

Compared to traditional incandescent lighting, LED technology provides low power consumption, increased reliability, a reduction in radiated heat, longer life and less maintenance.

Not all LEDs are created equal

When comparing one LED product to another it is important to not just look at the initial purchase price but consider the full life time cost and what attributes combine to make a quality LED product.

To design efficient and reliable LED luminaires, many factors need to be considered. Light output, beam pattern, material choices and lamp protection can all make a significant difference in the performance and life of a lamp.

It is also important to consider the application where the lamp is likely to be used and what sort of illumination you desire. Corrosive moisture, heat, vibration and voltage fluctuations can all affect an LED device so these factors need to be managed.



HELLA LED lamps utilise the latest technology, quality components and materials to provide the best efficacy (lumens per watt), consistent colour and light output with long term reliability, even in the most demanding conditions.

With many LED lamps offered throughout the world's markets, it is important to understand the differences and what aspects to consider when comparing LED products.

- **Actual Light Output**
- **Colour Temperature and Colour Rendering Index (CRI)**
- **Thermal Management and Sealing for reliability**
- **Electrical Interference and Flicker**

Light Output and Beam Patterns

The term 'Lumen' is commonly used to describe the light output of LED lights. Many companies describe 'Raw' lumen figures rather than the more realistic 'Effective' lumens.

Raw Lumens are a measure of the theoretical output of a light and is calculated by multiplying the theoretical rated output of the LEDs by the number of LEDs in the lamp.

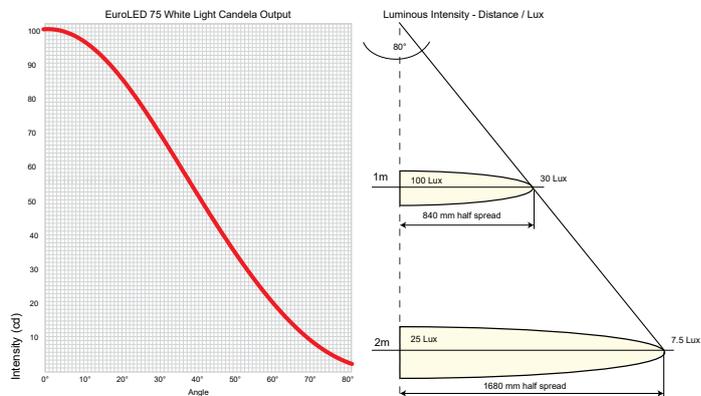
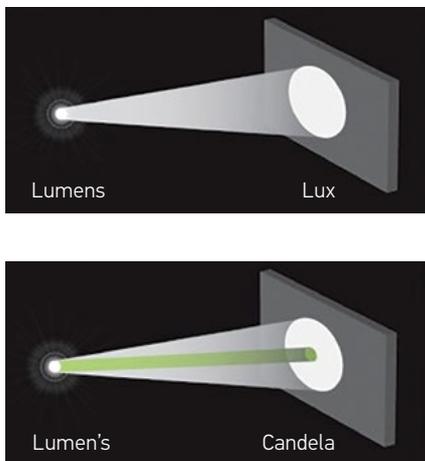
Example: 8 LEDs rated at 100 Lumens per watt $8 \times 100 = 800$ Raw Lumens.

Factors such as the power used to drive the lamp, thermal losses and optical losses all contribute to a possible 20-50% decrease of the light lumens emitted by the LED.

Effective Lumens measure the actual output from a light after taking into consideration real world losses (e.g. thermal, optical, and assembly). Therefore it is a much more accurate representation of the light being produced.

Example: Raw lumens may = 800 but when light decreases due to thermal, optical and assembly, a 50% decrease in actual output and usable light can result. $800 \text{ raw lumens} - 50\% \text{ losses} = 400 \text{ Effective Lumens}$.





Lux and candela diagrams to illustrate accurate light output and beam angles.

Thermal Losses can equate for 20-30% decrease in light output

LEDs produce a tremendous amount of power in a relatively small area and some of this power is converted to heat. However unlike incandescent lamps LEDs do not like heat. As the LEDs increase in temperature the actual light output diminishes.

LED manufacturers typically measure the Raw Lumen output produced by their LEDs after 25 milliseconds (ms). That is equivalent to a flash bulb, giving a lumen number that is the absolute maximum value. However real world applications require the lamp to run much longer meaning potential losses of up to 30%.

All HELLA LED lamps are designed to dissipate heat away from LEDs through effective thermal management. HELLA also uses sophisticated photometric equipment to measure the lamps and only after 30 minutes of operation so the LED temperature has stabilised, ensuring you always get a more accurate 'effective' lumens measure.

Optical & Assembly losses can equate to 10-20% decrease in light

These losses are present whether the light source is an LED or a bulb. As light travels through an object (such as a lens), it loses intensity depending on the clarity of the material. This is due to inherent losses internal to the material and also to losses at the boundary of the part as the light travels from air, through the lens, and back to air.

There are also losses associated with assembly and manufacturing variation. The LED output varies as the assembly tolerances may diminish the overall performance from theoretical LED maximums.

Simply adding the expected values of the LED light sources together will never result in a lamp that shines that amount of light on the ground.

To accurately measure light performance and beam angles compare Lux Charts

Lumens are not the only measurement that is important – Another, more useful measurement of actual light output is Lux. Lux and candela ratings refer to the actual light intensity from the lamp at given distances and direction. This way you know what light levels to expect when designing your lighting layout.

Quality lighting manufacturers using state of the art photometric equipment, are able to provide accurate lux or candela charts so consumers get a fair representation of the expected Luminaire performance.

Another aspect to consider when reviewing luminaire performance is the evenness of illumination. Expressed as 'beam angle' this gives the user an idea of how spread or narrow the luminaire will be. Down lights will often have a wide spread optic to fill a room. By overlapping the wide spread beams from several luminaires, shadows are reduced. Other lamps like spotlights or courtesy lighting may be designed to focus or direct the light in a certain direction to achieve a specific effect. Make sure you select a luminaire with a lens and optical design to suit your application.

COLOUR TEMPERATURE, COLOUR RENDERING INDEX (CRI) & THERMAL MANAGEMENT

White LED lighting once had a reputation for appearing ‘cold’ and ‘blue’ due to the phosphorous coating technology. However today’s devices rival traditional incandescent sources for colour and ambience.

LED colours set the tone, so choosing Luminaires that complement your interior or exterior is important

Colour temperature is measured in Kelvin and is a sliding scale of light that appears bluer or more orange at each end. HELLA describes higher colour temperatures (5000K) as ‘cool white’ and lower colour temperatures (3000K) as ‘warm white’.

Cool white is recommended for visual tasks, work areas and exterior lighting, as it is known to reduce fatigue and increase alertness over long periods of time.

Warm white is suggested for interior spaces as it adds life and vibrancy to people and objects. It is considered more flattering to skin tones or fabrics and makes food look fresh and attractive.

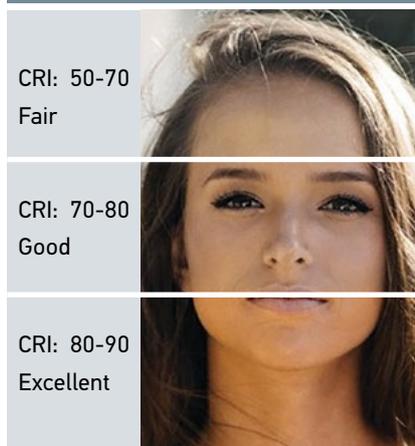
1850K	Candle
2800K	Halogen Bulb (Incandescent Lamp)
3000K~	Warm White LED
5000K~	Cool White LED
5700K~	Daylight

When selecting LED interior lighting look for lamps with a high colour rendering index (CRI)

The higher the CRI rating the better and truer colour reproduction you will get of various objects. For example sunlight has the highest CRI rating of 100. LED lamps with a CRI rating of 80 or higher will reproduce the colour scheme of the interior with good accuracy.

HELLA LED chips are selected from tight specification bins to ensure that lamps are the same brightness and colour temperature grade. This ensures a room full of lights will all have the same appearance e.g. colour temperature and intensity.

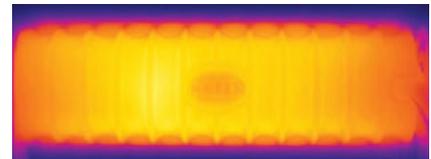
Colour Rendering Index - CRI



CRI ratings >80 produce natural colours

Thermal Management and Sealing for Reliability

Although LED lamps run much cooler than incandescent lamps, LEDs and the electronics inside a lamp do heat up and if not cooled effectively can affect the light performance and the expected life span of the lamp. It is important lamp housings are designed to efficiently transport this heat away from the LED itself.



HELLA thermally conductive plastics are 30 times more thermally conductive than conventional plastic.

LEDs that overheat, meaning the junction temperature of the LED rises above a set threshold, will permanently degrade, significantly reducing their output. A very hot running Luminaire can also cause issues when interacting with the surrounding materials.

HELLA lamps are designed within stringent heat thresholds that ensures lamps will not overheat, meaning longer life.

Reliable Design and Quality Construction

Manufacturers of raw LEDs quote the lifetime of the LED chip as '50,000 hours'. This period of time is then often used to promote the expected life of the complete lamp. However to achieve this life expectancy, LEDs require precise current control, overvoltage/spike protection and temperature control to avoid any premature failure. For LED luminaire designers and manufacturers, in-depth design and engineering is required to produce such durable products. Sadly, most do not make the cut, despite their claims.

LED reliability is compromised if dust, moisture and other contaminants find their way inside the lamp. So the most effective way to protect the lamp is by completely sealing it from the elements. Sealed housings and cable entries, along with components designed to withstand shock, vibration and impacts all contribute towards exceptional life expectancy.

All HELLA LED lamps are at least IP 67 rated, meaning they can be washed and cleaned on the exterior of vehicles. If used for interior applications moisture and condensation from bathrooms and kitchens will not affect the lamp.

Electrical Interference and Flicker

Some LED products can demonstrate a flickering effect, usually when dimmed or if the lamps use low frequency components or dimmers. Not only is a flicker annoying and uncomfortable, it can also be harmful to those susceptible.

A recent US Department of Energy (DOE) report warns of poorly designed LED luminaires, associating low frequency 'Flicker' with the possibility to trigger epileptic attacks in parts of the population that are susceptible.

Electromagnetic Compatibility (EMC)

This is another safety concern, especially for emergency and industrial applications. Electromagnetic interference (EMI) can disrupt radio signals especially when in remote locations or areas with low reception. As electronic devices such as LED lamps become more common, so does the risk of unintended EMI that can have adverse effects on sensitive devices such as radios or communication equipment.

All HELLA LED products use quality components to prevent any possible flickering and are tested and certified to international standards for electromagnetic interference.



IP 30 (open)

IP 54 (partially sealed)

IP 67 (completely sealed)

**DIMMABLE LOGOS
WHAT DO THEY MEAN?**

Logos used throughout the Interior/Exterior section to help quick referencing of important product features are explained below.



Light intensity is reduced as the DC input voltage is reduced below the lamps specified operating voltage.



Light intensity is controlled through the lamp's own internal circuitry via in-built buttons, an external DC power source and a standard switch. See specific lamp instructions for further information.



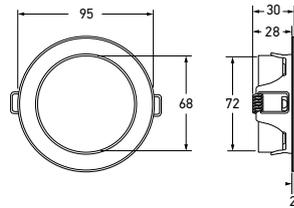
Light intensity is adjusted between 10-100% using a high frequency PWM (pulse width modulation) DC power supply, with adjustable duty cycle control.



Light intensity can be switched between 100% and a lower level factory pre-set value, usually via an additional cable input supplied with the lamp using a positive feed from the DC power supply within the lamps operating voltage range.

EuroLED® 95 Gen 2 Round Down Lights - Recess Mount With Spring Clip

The next generation of LED high intensity down lights offers an improved class leading efficiency and durability. The smooth diffused lens creates a comfortable and uniform appearance with over 420 lumens of actual light in a broad and even illumination.



2JA 958 340-011		WHITE
2JA 958 340-101		WHITE/RED
2JA 958 340-111		WHITE/BLUE
2JA 958 340-021		WARM WHITE
2JA 958 340-121		WARM WHITE/RED
2JA 958 340-131		WARM WHITE/BLUE



Warm White

Red - Secondary colour

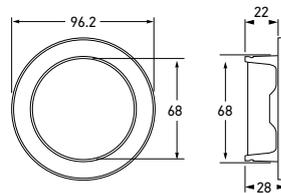


Blue - Secondary colour

Mounting	Recess mount, 76mm diameter hole. Spring clip.
Voltage	Multivolt™ for optimum brightness at input voltage from 9 to 33 volts.
Power Consumption	6W
Protection	IP 6K9K (Protection against dust and high pressure/steam jet cleaning)
Cable Length	Pre-wired with 120mm of cable.
Compliance	CE

EuroLED® 95 Gen 2 Round Down Lights - Dual Colour- Screw Mount

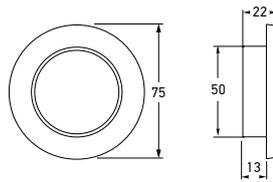
The EuroLED 95 screw mount down lights, continue to deliver the latest in style, functionality and performance. The smooth diffused lens creates a comfortable and uniform appearance. The low profile trim is highly polished and is made from marine grade 316 stainless steel or white plastic. The ultimate in versatility, with a choice of light temperature between 5000K white and 2700K warm white. Red and Blue secondary LED colours also add increased functionality.



Red - Secondary colour Blue - Secondary colour

STAINLESS TRIM		WHITE TRIM		
2JA 958 340-161	Screw Mount	2JA 958 340-061	Screw Mount	WHITE/RED
2JA 958 340-171	Screw Mount	2JA 958 340-071	Screw Mount	WARM WHITE/RED
2JA 958 340-181	Screw Mount	2JA 958 340-081	Screw Mount	WHITE/BLUE
2JA 958 340-191	Screw Mount	2JA 958 340-091	Screw Mount	WARM WHITE/BLUE

Mounting	Screw mount, 75mm diameter hole. Recess screw mount.
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.
Power Consumption	6W (0.5A @ 12V / 0.25A @ 24V)
Protection	IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high pressure/steam jet cleaning)
Cable Length	Pre-wired with 120mm marine tinned cable
Compliance	CE



12 VOLT DC		24 VOLT DC		
2JA 958 110-031		2JA 958 110-131		WHITE
2JA 958 109-031		2JA 958 109-131		WARM WHITE
Mounting	Recess mount, 50mm diameter hole.			
Voltage	12V DC or 24V DC			
Power Consumption	<3W			
Protection	IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high pressure/steam jet cleaning)			
Cable Length	Pre-wired with 130mm of cable			
Compliance	CE			

Additional rims and housings are available see page 181.

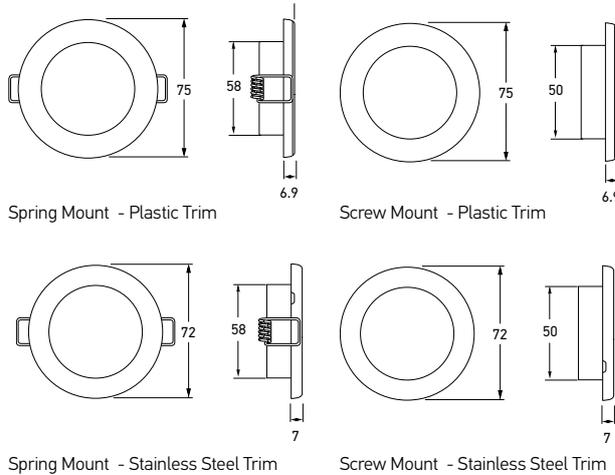
**EuroLED® 75 Down Lights
- Recess Mount**

This down light features the latest in LED technology and is available in two white colour temperatures. Both the cool white and the warm white option feature a smooth, evenly distributed illumination and an optic specifically designed to reduce individual light source glare, which can lead to discomfort and eye strain. Each down light includes a black and a white plastic rim.



9AB 959 505-901

Black and white supplied plastic rims



Spring Mount - Plastic Trim

Screw Mount - Plastic Trim

Spring Mount - Stainless Steel Trim

Screw Mount - Stainless Steel Trim



EuroLED® 75 Dual Colour LED Down Lights

Leading LED technology delivers exceptional colour rendering, an impressive output of 190 actual lumens, and a bright, broad and even illumination. Available in warm white/red or white/red, the secondary red LED colour also adds increased functionality by enhancing nighttime visibility. EuroLED® 75 lamps are completely sealed and suitable for both interior and exterior applications, wet or dry, and available in screw or spring mount options.

STAINLESS TRIM		WHITE TRIM		
2JA 015 247-021	Screw Mount	2JA 015 247-011	Screw Mount	WHITE/RED
2JA 015 247-121	Screw Mount	2JA 015 247-111	Screw Mount	WARM WHITE/RED
2JA 015 247-521	Spring Mount	2JA 015 247-511	Spring Mount	WHITE/RED
2JA 015 247-621	Spring Mount	2JA 015 247-611	Spring Mount	WARM WHITE/RED

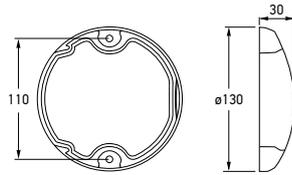
Mounting	50mm diameter hole screw mount, 58mm hole spring mount.			
Voltage	12V DC			
Power Consumption	3W			
Protection	IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high pressure/steam jet cleaning)			
Cable Length	Pre-wired with 120mm of cable			
Supplied Rims	UV resistant plastic or 316 stainless steel options			
Compliance	CE			

Additional rims and housings are available see page 181.



EuroLED® White Touch Lamp

White LED lamp with touch switching and clear lens. Touch the white pad to turn on and the black pad to turn off. Provides ultra long service life and is shock and vibration proof.



BLACK SHROUD		
2JA 959 950-551		WHITE
Mounting	Two hole surface mount with mounting bushes supplied.	
Voltage	Multivolt™ for optimum brightness at input voltage from 9 to 33 volts.	
Power Consumption	4W	
Protection	Reverse polarity and transient spike circuit protection. IP 6K6 (Protection against dust and high-pressure water jets) IP 6K7 (Protection against dust and temporary water immersion)	
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.	
Accessories	8HG 959 952-002 8HG 959 027-001 8HG 959 028-011	Mounting spacer - Black EuroLED® Cover - Black Screw boss kit - Pack of 4
Compliance	CE	

EuroLED® Lamp

White LED lamp with clear lens. Provides ultra long service life and is shock and vibration proof. Includes a black and a white rim. No switching or dimming.

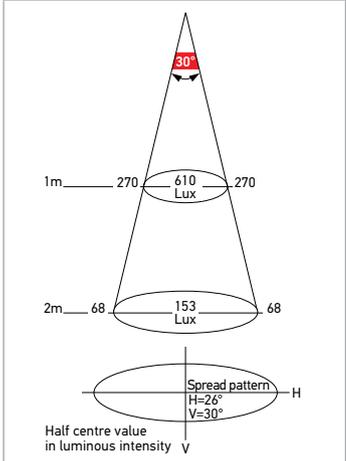


2JA 959 820-502		WHITE
Mounting	Two hole surface mount with mounting bushes supplied.	
Voltage	Multivolt™ for optimum brightness at input voltage from 9 to 33 volts.	
Power Consumption	4W	
Protection	Reverse polarity and transient spike circuit protection. IP 6K6 (Protection against dust and high-pressure water jets) IP 6K7 (Protection against dust and temporary water immersion)	
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.	
Accessories	8HG 959 952-002 8HG 959 027-001 8HG 959 028-011	Mounting spacer - Black EuroLED® Cover - Black Screw boss kit - Pack of 4
Compliance	CE	

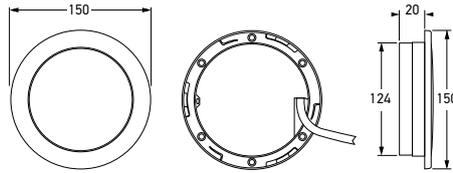
INTERIOR/EXTERIOR

ILLUMINATION CHART

EuroLED® Interior Lamps



INTERIOR/EXTERIOR LIGHTING



EuroLED® 150 Down Lights

White LED lamp with clear lens. Provides ultra long service life and is shock and vibration proof.

WHITE PLASTIC RIM	POLISHED STAINLESS STEEL RIM	
2JA 980 631-501	2JA 980 631-511	WHITE
Mounting	Recess mount, 124mm diameter hole. Surface mount via optional spacer.	
Voltage	Multivolt™ for optimum brightness at input voltage from 9 to 33 volts.	
Power Consumption	4W	
Protection	Reverse polarity and transient spike circuit protection. Sealed against dust and water ingress.	
Cable Length	Pre-wired with 0.5m of sheathed multi-core tinned cable.	
Compliance	CE	



Packaging



WHITE PLASTIC RIM	POLISHED STAINLESS STEEL RIM	
2JA 980 630-501	2JA 980 630-511	WHITE
Mounting	Recess mount, 124mm diameter hole. Surface mount via optional spacer.	
Voltage	Multivolt™ for optimum brightness at input voltage from 9 to 33 volts.	
Power Consumption	4W	
Protection	Reverse polarity and transient spike circuit protection. Sealed against dust and water ingress.	
Cable Length	Pre-wired with 0.5m of sheathed multi-core tinned cable.	
Compliance	CE	

EuroLED® Touch 150 Down Lights - Touch Switch

White LED lamp with touch switching and clear lens. Touch the white pad to turn on and the black pad to turn off. Provides ultra long service life and is shock and vibration proof.

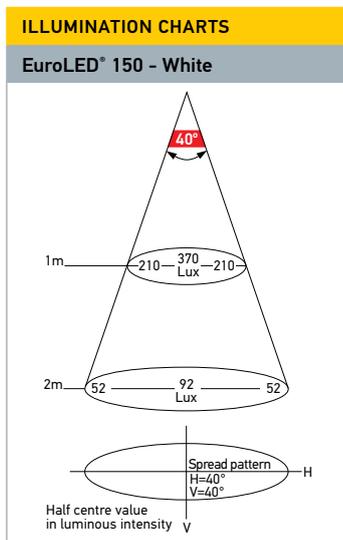


Packaging



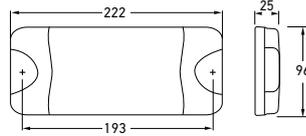
Sealed cable entry

INTERIOR/EXTERIOR



DuraLED® Combi-S 50 White LED Lamp

DuraLED® Combi-S white 50 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.



2JA 980 629-501	WIDE SPREAD
2JA 980 629-001	SPREAD

Mounting	Two hole surface mount with mounting bushes supplied.
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.
Power Consumption	<12W
Protection	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)
Cable Length	Pre-wired with 2.5m of cable.
Compliance	



Ultra slim height of only 25mm.

DuraLED® Combi-S 50 White LED Lamp - Charcoal

DuraLED® Combi-S white 50 LED charcoal lens is an extremely powerful source of white light offering a safe, energy efficient and reliable alternative to incandescent and fluorescent lighting. Lens manufactured from Grilamid® clear nylon which features high UV and chemical resistance, and high impact strength. The lamp is fully sealed against dust and moisture ingress.



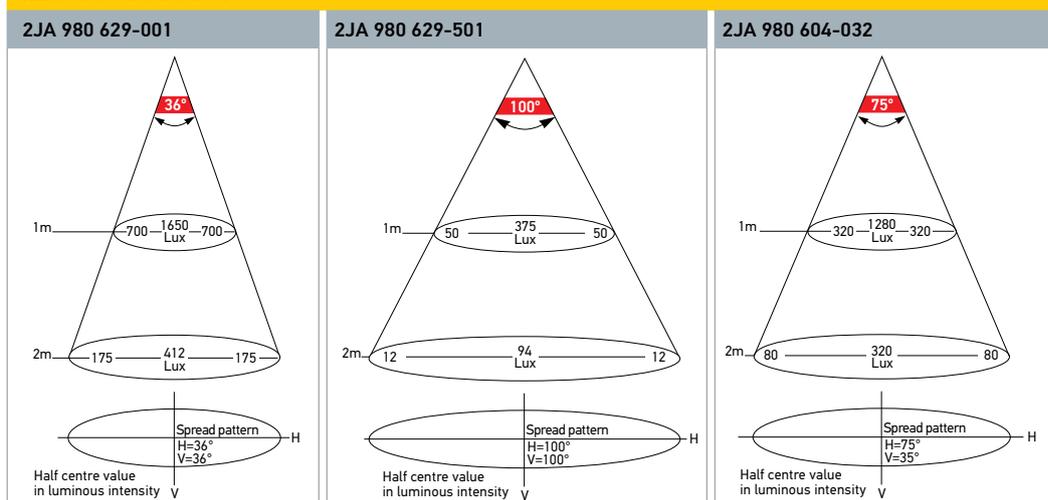
2JA 980 604-032	WIDE SPREAD
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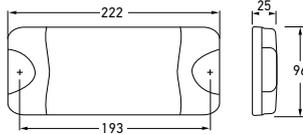
Mounting	Two hole surface mount with mounting bushes supplied.
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.
Power Consumption	<12W
Protection	As per 2JA 980 629-501 above.
Cable Length	Pre-wired with 2.5m of cable.
Lens Material	High impact and chemical resistant Grilamid® lens
Compliance	



Ultra slim height of only 25mm.

ILLUMINATION CHARTS

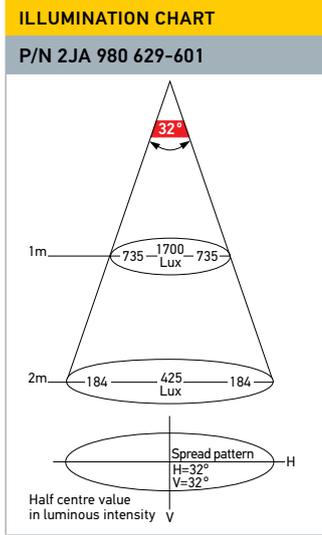




2JA 980 629-601			SPREAD
Mounting	Two hole surface mount with mounting bushes supplied.		
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.		
Power Consumption	<12W		
Protection	Reverse polarity and transient spike circuit protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high pressure/steam jet cleaning)		
Cable Length	Pre-wired with 130mm of cable with DT connector.		
Lens Material	High impact and chemical resistant Grilamid® lens		
Accessories	8KA 958 360-001	2 Pole Switch plug and socket (300mm)	
	8KA 958 361-001	2 Pole Y-splitter joint plug and socket (300mm)	
	8KA 958 363-001	2 Pole DT extension plug and socket (2.5m)	
Compliance			

DuraLED® Combi-S 50 White LED Lamp with DT Connector

DuraLED® Combi-S white 50 LED is an extremely powerful source of white light offering a safe, energy efficient and reliable alternative to incandescent and fluorescent lighting. Lens manufactured from Grilamid® clear nylon which features high UV and chemical resistance, and high impact strength. The lamp is fully sealed against dust and moisture ingress.



Rear view showing DT Connector



Ultra slim height of only 25mm.

INTERIOR/EXTERIOR

8KA 958 360-001	(Switch)	1.5MM² CABLE SIZE
8KA 958 361-001	(Y-Splitter Joint)	
8KA 958 363-001	(Extension Cable)	

DT Connectors - 2 Pole Plug, Socket and Switch Accessories



8KA 958 363-001
Extension cable -2.5m

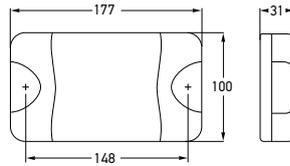


8KA 958 360-001
Switch-300mm

8KA 958 361-001
Y-splitter joint-300mm

DuraLED® White 36 LED Lamp

White high brightness LED lamp with Grilamid® lens. Exceptional light output, incorporating high efficacy electronics and LEDs resulting in low power consumption (<9 watts) and low heat. Lens manufactured from Grilamid® clear nylon which features high UV and chemical resistance, and high impact strength. The lamp is fully sealed against dust and moisture ingress.



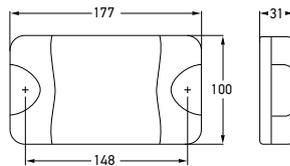
WHITE LENS	
2JA 959 037-202	SPREAD
Mounting	Two hole surface mount with mounting bushes supplied.
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.
Power Consumption	<9W
Protection	Reverse polarity and transient spike circuit protection. IP 6K6 (Protection against dust and high-pressure water jets) IP 6K7 (Protection against dust and temporary water immersion)
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.
Lens Material	High impact and chemical resistant Grilamid® lens
Compliance	CE
See page 62 for DuraLED® accessories.	

DuraLED® White 36 LED Lamp

White LED interior lamp with either a diffusion or clear acrylic lens. The lamps are shock and vibration proof and are fully sealed against dust and moisture ingress.

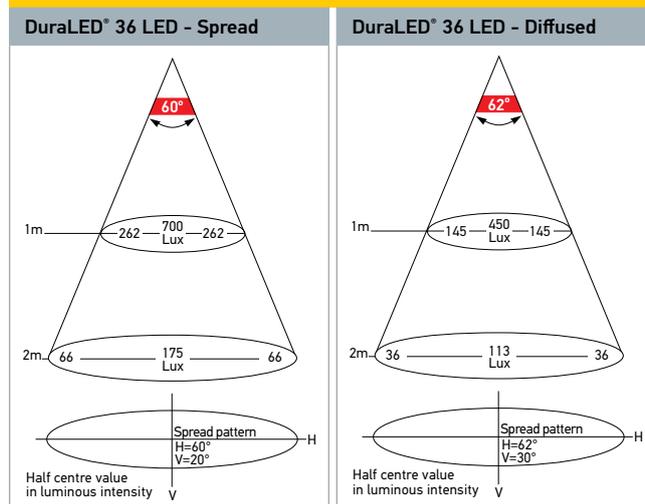


2JA 959 037-511

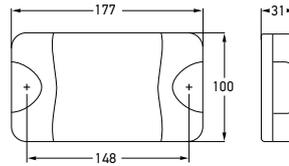


2JA 959 037-501	DIFFUSED
2JA 959 037-511	SPREAD
Mounting	Two hole surface mount with mounting bushes supplied.
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.
Power Consumption	<9W
Protection	See DuraLED® White 36 LED Lamp above.
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.
Lens Material	Acrylic
Compliance	CE

ILLUMINATION CHARTS



INTERIOR/EXTERIOR LIGHTING

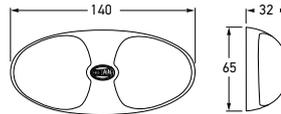


2JA 980 608-112	SPREAD
Mounting	Two hole surface mount with mounting bushes supplied.
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.
Power Consumption	5W
Protection	Reverse polarity and transient spike circuit protection. IP 6K6 (Protection against dust and high-pressure water jets) IP 6K7 (Protection against dust and temporary water immersion)
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.
Compliance	CE

See page 62 for DuraLED® accessories.

DuraLED® White 20 LED Lamp

White high brightness LED lamp. Exceptional light output, incorporating high efficacy electronics and LEDs resulting in low power consumption (<5 watts) and low heat. The lamp is fully sealed against dust and moisture ingress.



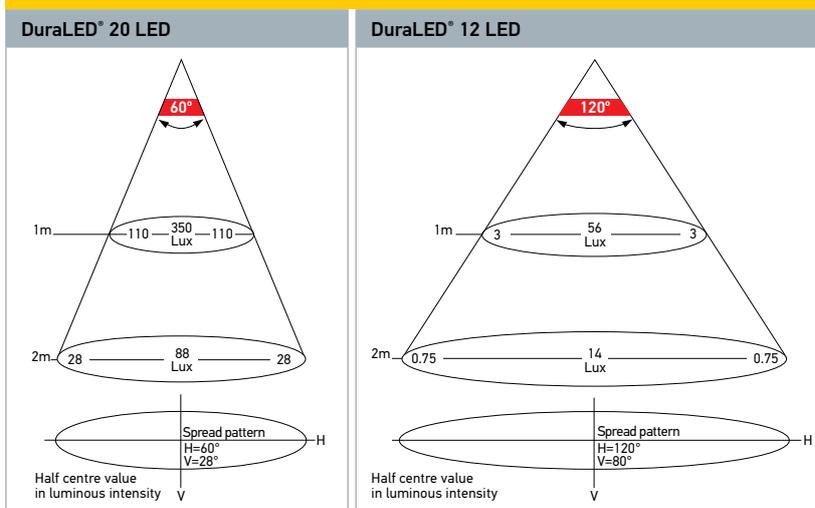
2JA 959 700-112	WIDE SPREAD
Mounting	Two hole surface mount with mounting bushes supplied.
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.
Power Consumption	<3W
Protection	Reverse polarity and transient spike circuit protection. Fully sealed against dust, high-pressure washing and temporary water immersion.
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.
Compliance	CE

DuraLED® White 12 LED Lamp

White high brightness LED lamp. Exceptional light output, incorporating high efficacy electronics and LEDs resulting in low power consumption (<3 watts) and low heat. The lamp is fully sealed against dust and moisture ingress.



ILLUMINATION CHARTS



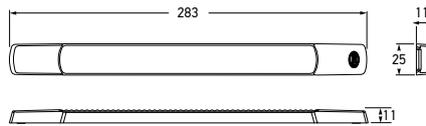
INTERIOR/EXTERIOR

LED Interior/Exterior Strip Lamp - Surface Mount

LED interior surface mount strip lamps feature a shallow 11mm profile, completely sealed housing and class leading efficiency. The range is an ideal replacement for bulky fluorescent lighting and a wide range of wet or dry interior or exterior applications.



Ultra slim height of only 11mm.



12 VOLT DC		24 VOLT DC		
2JA 958 124-021	2652	2JA 958 124-421	265224V	WHITE
Mounting	Surface mount.			
Power Consumption	<3W			
Protection	Reverse polarity protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)			
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.			
Spare Parts	9HD 980 885-007 9HD 980 885-017 9HD 980 885-107	White screw caps (MOQ 4) Charcoal screw caps (MOQ 4) Chrome plated screw caps (MOQ 4)		
Note: Includes charcoal and white screw caps.				

LED Interior/Exterior Strip Lamp with Sealed Switch - Surface Mount

These LED interior surface mount strip lamps with sealed waterproof switch feature a shallow 11mm profile, completely sealed housings and class leading efficiency. The range is ideal for a wide range of interior or exterior applications.

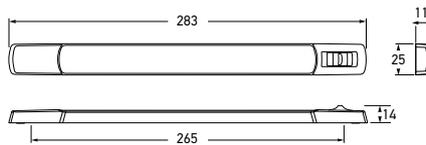


2JA 958 121-011
White/Blue

2JA 958 121-001
White/Red



Ultra slim height of only 11mm.

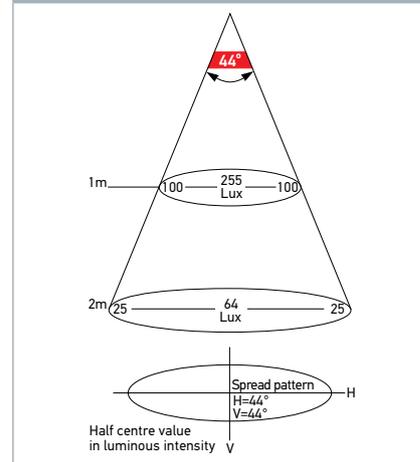


12 VOLT DC		24 VOLT DC		
2JA 958 123-021	2652SW	2JA 958 123-421	2652SW24V	WHITE
2JA 958 121-011				WHITE/BLUE
2JA 958 121-001				WHITE/RED
Mounting	Surface mount.			
Power Consumption	White function: <3W		Colour function: <1W	
Protection	As per 2JA 958 124-021			
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable. Dual colour lamps are pre-wired with 0.5m of twin core cable.			
Spare Parts	9HD 958 108-822 9HD 958 108-832	1 White switch screw cap + 1 white standard screw cap 1 Charcoal switch screw cap + 1 charcoal standard screw cap		
Note: 2JA 958 123-021 & 2JA 958 123-421 include charcoal screw caps only. 2JA 958 121-xxx include white screw caps only.				

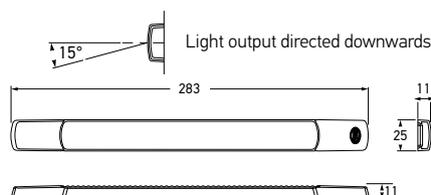
INTERIOR/EXTERIOR

ILLUMINATION CHART

2JA 958 123-xxx/2JA 958 121-xxx



INTERIOR/EXTERIOR LIGHTING



12 VOLT DC		24 VOLT DC	
2JA 980 879-001		2JA 980 879-101	WHITE
Mounting	Mounting Two hole surface mount.		
Power Consumption	<3W		
Protection	Reverse polarity protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)		
Cable Length	Pre-wired with 2.5m of twin core cable.		
Lens Material	High impact and chemical resistant Grilamid® lens		
Spare Part	9HD 980 885-007 9HD 980 885-017 9HD 980 885-107 8HG 958 000-021 8HG 958 000-011	White screw caps (MOQ 4) Charcoal screw caps (MOQ 4) Chrome plated screw caps (MOQ 4) Mounting bracket 45° - Charcoal Mounting bracket 45° - White	

See page 64 for surface mount strip lamp screw caps.

LED Awning Lamp - Surface Mount

LED awning lamp with an ultra slim profile of only 11mm, a heavy duty Grilamid® lens and low power consumption of less than 3W, HELLA's LED Awning Lamp is ideal for interior and exterior use. It comes complete with charcoal as well as white end caps and can be accessorised with a matching 45° mounting bracket to angle the beam further. Combining state of the art technology with sophisticated looks, this new low profile LED Awning Lamp is a lighting solution which will fit many applications. The precision optic, with a 15° downwards spread pattern, is designed to cause minimum glare.



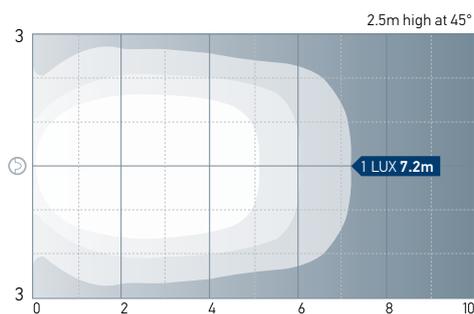
8HG 958 000-021

8HG 958 000-011



Ultra slim height of only 11mm.

ILLUMINATION CHART
98087900/...10



ILLUMINATION CHARTS EXPLAINED

HELLA light performance charts show illuminance and spread in an easy to read format. At the top is the horizontal spread angle, with the boundary threshold being defined as half of the peak luminous intensity. While there is light beyond the indicated angles, the majority of light will be inside the cone shown. Luminous intensity is the measure of light emanating from a source in a specific direction.

The difference between lux (illuminance) and lumen (luminous flux) is that lux takes into account the area over which the luminous flux is spread. Accordingly the lux value decreases with distance. Most interior lamps will be installed at around the 2 - 2.5 metre height.

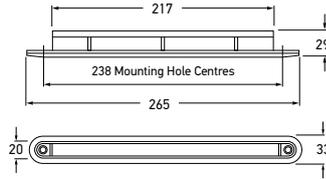
As a guideline, some 40 - 100 lux is required for corridors and passageways, around 300 lux for reading and 500 - 800 lux for offices. The spread pattern may not always be designed as symmetrical so the spread horizontally (H) and vertically (V) are given.

Luminance and Illuminance is additive, meaning overlapping light patterns or multiple lamps lighting the same surface add their luminance.

One Lux represents the intensity of the light of a full moon (under clear atmospheric conditions) or just sufficient light by which to read a newspaper.

LED White Interior/Exterior Strip Lamp - Recess Mount

White LED interior lamp with clear UV resistant acrylic lens. Ideal for steps, interior or exterior courtesy lighting and storage areas.

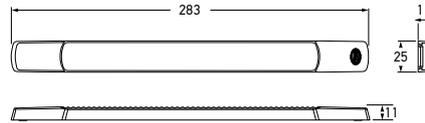


2JA 959 076-521

12 VOLT DC		24 VOLT DC		
2JA 959 073-011	264112V	2JA 959 073-211	264124V	WHITE
2JA 959 076-521	2641HB	2JA 959 076-631	2641HB24V	HIGH BRIGHTNESS WHITE
Mounting	Recess mount.			
Power Consumption	<2W			
Protection	Reverse polarity protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)			
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.			

LED Courtesy Strip Lamp - Surface Mount

These LED courtesy surface mount strip lamps feature a shallow 11mm profile and completely sealed housings. Available in blue, red and green colour variants.



2JA 980 881-602

2JA 980 881-802



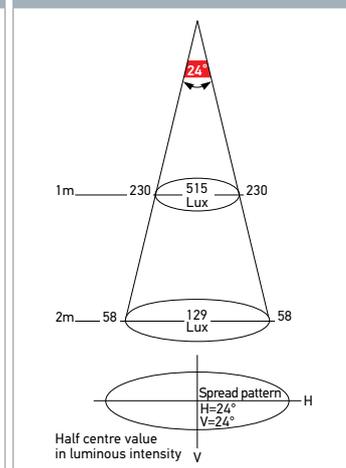
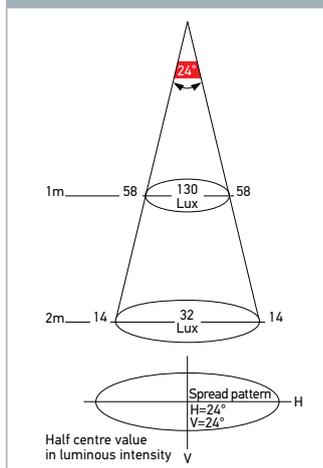
Ultra slim height of only 11mm.

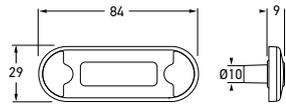
12 VOLT DC		24 VOLT DC		
2JA 980 881-402		2JA 980 881-502		BLUE
2JA 980 881-602		2JA 980 881-702		RED
2JA 980 881-802		2JA 980 881-902		GREEN
Mounting	Surface mount.			
Power Consumption	<2W			
Protection	Reverse polarity protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)			
Cable Length	Pre-wired with 0.5m of sheathed multi-core tinned cable.			
Spare Parts	9HD 980 885-007 9HD 980 885-017 9HD 980 885-107	White screw caps (MOQ 4) Charcoal screw caps (MOQ 4) Chrome plated screw caps (MOQ 4)		
See page 64 for surface mount strip lamp screw caps.				

ILLUMINATION CHARTS

2JA 959 073-011/ 2JA 959 073-211

2JA 959 076-521/2JA 959 076-631



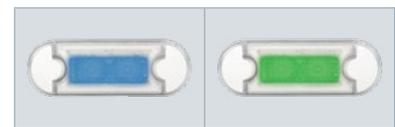
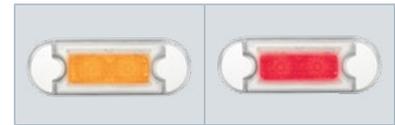


2XT 980 855-101		WHITE
2XT 980 855-251		AMBER
2XT 980 855-351		RED
2XT 980 855-401		BLUE
2XT 980 855-501		GREEN

Mounting	Two hole flush mount.
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.
Power Consumption	<1W
Protection	Reverse polarity protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)
Cable Length	Pre-wired with 0.5m of sheathed multi-core cable.
Lens Material	High impact and chemical resistant Grilamid® lens
Compliance	

DuraLED® Flush Mount Courtesy Lamp - Low Profile

These LED courtesy lamps feature a shallow 9mm profile and completely sealed housing. Available in a range of colours. Optic appears clear until illuminated.



RIMS			
Part Number	Colour	Material	
9AB 959 686-001	BLACK	PLASTIC	
9AB 959 686-011	WHITE		
9AB 959 685-002	POLISHED	316 STAINLESS STEEL	
9AB 959 685-062	SATIN CHROME PLATED		

DuraLED® Flush Mount Courtesy Lamp Accessories

Accessory rims and screw caps for the LED flush mount courtesy lamp family.



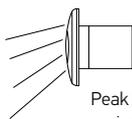
SCREW CAPS			
Part Number	Quantity	Colour	
9HD 980 858-007	PACK OF 4	BLACK	
9HD 980 858-037		RED	
9HD 980 858-017		WHITE	



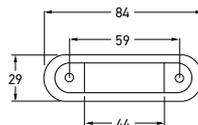
INTERIOR/EXTERIOR

LED Wide Rim Rectangular Courtesy Step Lamp

Wide rim, flush mount, courtesy step lamp with either white, red, green or blue LEDs. Optic appears clear until illuminated.



Peak light output is projected down at 30°



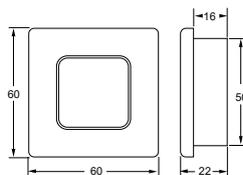
12/24 VOLT (CLEAR LENS)	
2XT 959 680-861	WHITE
Mounting	Recess mount.
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.
Power Consumption	<1W
Protection	Reverse polarity protection. IP 6K6 (Protection against dust and high-pressure water jets) IP 6K7 (Protection against dust and temporary water immersion)
Cable Length	Pre-wired with 120mm of cable.
Compliance	CE

LED Square Courtesy Lamps

Attractive, energy efficient square LED courtesy lamps for interior and exterior use. Available in either white, warm white, red or blue. Optic appears clear until illuminated.



2XT 980 580-551, 2XT 980 581-551

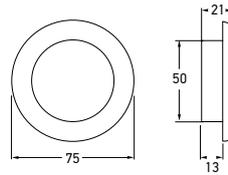


12 VOLT DC		24 VOLT DC	
2XT 980 580-551		2XT 980 581-551	WHITE
2XT 980 580-751		2XT 980 581-751	WARM WHITE
2XT 980 582-251		2XT 980 583-251	BLUE
Mounting	Recess mount, 50mm diameter hole.		
Power Consumption	<1W		
Protection	Reverse polarity protection. Fully sealed against dust, high-pressure washing and temporary water immersion.		
Cable Length	Pre-wired with 120mm of cable.		



2XT 980 580-751, 2XT 980 582-251,
2XT 980 581-751, 2XT 980 583-251

INTERIOR/EXTERIOR



12 VOLT DC		24 VOLT DC		
2XT 980 500-511		2XT 980 501-511		WHITE
2XT 980 500-711		2XT 980 501-711		WARM WHITE
2XT 980 507-211		2XT 980 508-211		RED
2XT 980 502-211		2XT 980 503-211		BLUE

Mounting	Recess mount, 50mm diameter hole.
Power Consumption	<1W
Protection	Reverse polarity protection. Fully sealed against dust, high-pressure washing and temporary water immersion.
Cable Length	Pre-wired with 120mm of cable.

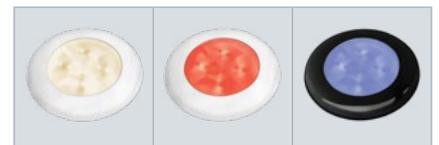
Each lamp includes a black and a white plastic rim. See other available colours below

LED Round Courtesy Lamps - Clear Lens

Attractive, energy efficient square LED courtesy lamps for interior and exterior use. Available in either white, warm white, red or blue and supplied with a white and black rim. Optic appears clear until illuminated.



2XT 980 500-511



2XT 980 500-711 2XT 980 507-211 2XT 980 502-211

ROUND RIMS - SINGLE			
Part Number		Colour	Material
9AB 959 505-012		CHROME PLATED	PLASTIC
9AB 959 505-203		BLACK	
9AB 959 505-503		POLISHED	316 STAINLESS STEEL
9AB 959 505-563		SATIN CHROME PLATED	

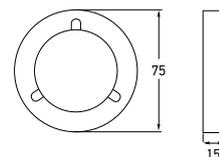
ROUND HOUSING			
Part Number		Colour	Material
8HG 959 993-103		BLACK	PLASTIC
8HG 959 993-113		WHITE	



8HG 959 993-103 9AB 959 505-503 9AB 959 505-563

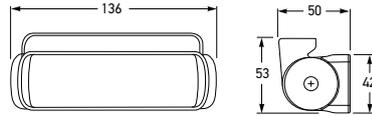
Round Courtesy Lamp Accessories

Spare rims and housings for the round courtesy lamp family. One rim is required per lamp.



DuraLED® WL200 Work Lamp - Close Range

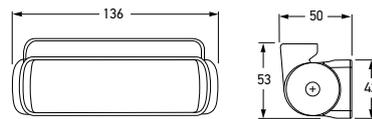
LED universal work lamp with low profile stainless steel bracket. Lamp may be mounted upright or pendant and may be adjusted vertically up or down. Totally sealed against dust and moisture and with a tough, chemical resistant Grilamid® lens.



1GA 980 670-421	WHITE
Mounting	Upright or pendant.
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.
Power Consumption	3W
Actual Light Output	200 lumen
Protection	Reverse polarity and voltage spike protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.
Lens Material	High impact and chemical resistant Grilamid® lens
Compliance	CE

DuraLED® WL200 RFCommSafe™ Work Lamp - Close Range

LED universal work lamp with low profile stainless steel bracket developed with RFCommSafe™ technology. RFCommSafe™ products offer superior electromagnetic compatibility (EMC) dramatically removing the risk of unintended electromagnetic inference (EMI) on sensitive devices such as radios or communication equipment well beyond the requirement of international standards. Lamp may be mounted upright or pendant and may be adjusted vertically up or down. Hermetically sealed against dust and moisture. Featuring a tough, chemical resistant Grilamid® lens.

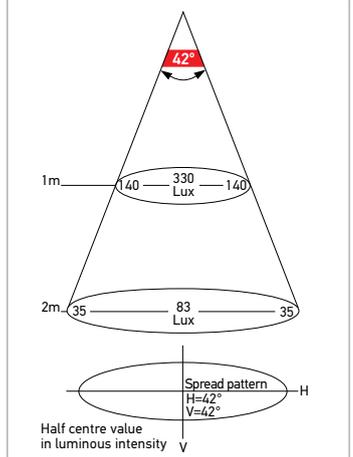


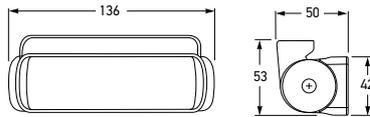
12 VOLT		24 VOLT	
1GA 980 670-382	1GA 980 670-622		WHITE
Mounting	Upright or pendant.		
Power Consumption	4W		
Actual Light Output	150 lumen		
Protection	Reverse polarity and voltage spike protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)		
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.		
Lens Material	High impact and chemical resistant Grilamid® lens		
Compliance	CE		

INTERIOR/EXTERIOR

ILLUMINATION CHARTS

2JA 980 670-302 WL200-Close Range

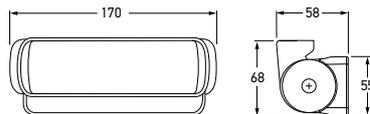




CLOSE RANGE	FLOOD	
1GA 980 573-101	1GA 980 573-001	WHITE
Mounting	Upright or pendant.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	7W	
Actual Light Output	550 lumen	
Protection	Reverse polarity and voltage spike protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.	
Lens Material	High impact and chemical resistant Grilamid® lens	
Compliance	CE	

DuraLED® WL550 Work Lamp

LED universal work lamp with low profile stainless steel bracket. Lamp may be mounted upright or pendant and may be adjusted vertically up or down. Totally sealed against dust and moisture and with a tough, chemical resistant Grilamid® lens. Option of two light patterns, close range or flood.



CLOSE RANGE	FLOOD	
1GD 980 950-031		WHITE
Mounting	Upright or pendant.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	High intensity mode: 12W (1A@12V DC/0.50A@24V DC) Low intensity mode: 2W (0.17A@12V DC/0.08A@24V DC)	
Actual Light Output	750 lumen	
Protection	Reverse polarity and voltage spike protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.	
Lens Material	High impact and chemical resistant Grilamid® lens	
Compliance	CE	

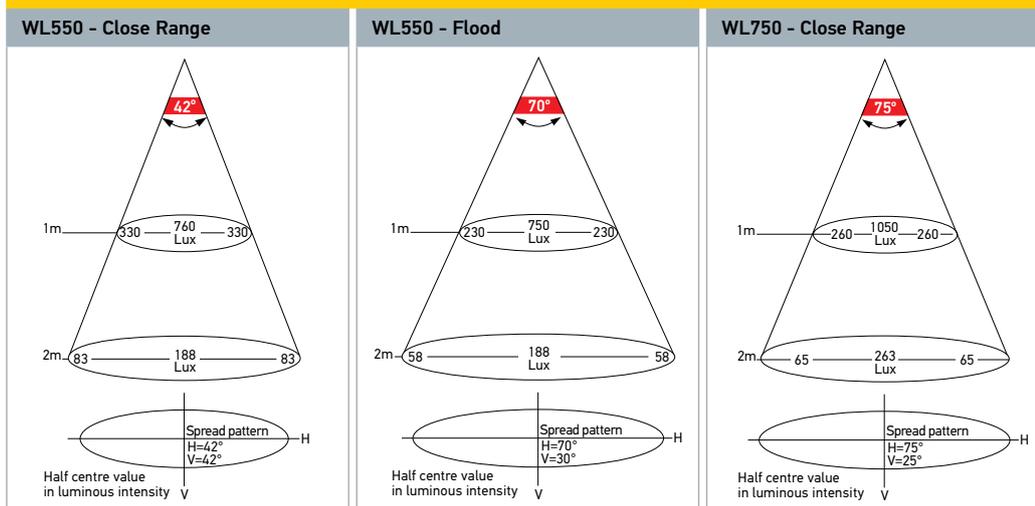
DuraLED® WL750 Work Lamp - Close Range

Featuring an integrated dual intensity circuit, a high level of spike protection and energy efficient Multivolt™ technology, the innovative DuraLED® WL750 will appeal for applications where energy efficiency and reliability is a must. Features a tough, chemical resistant Grilamid® lens, a highly impact resistant Swiss-made crystal clear polyamide with superior tolerance to chemical and long term harsh UV exposure, as well as technologically advanced thermally conductive non-metal housing.



INTERIOR/EXTERIOR

ILLUMINATION CHARTS



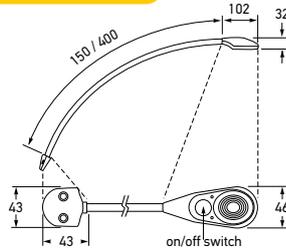
Friction mounts; easy adjustment without tools.



Completely sealed lamp/cable entry. Marine grade stainless steel bracket.

LED Flexible Map Reading Lamp

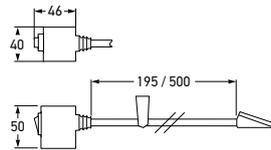
LED map reading light featuring a strong flexible shaft and an on/off switch on the lamp head. Low power consumption.



2JA 343 720-123	2639		400MM ARM SIZE
Mounting	Screw mount.		
Voltage	Multivolt™ for optimum brightness at input voltage from 9 to 31 volts.		
Power Consumption	2.4W		
Protection	Reverse polarity protection. IP 53 (Protection against dust and water spray)		
Cable Length	Pre-wired with 150mm of cable.		
Compliance	CE		
Suitable for interior use only.			

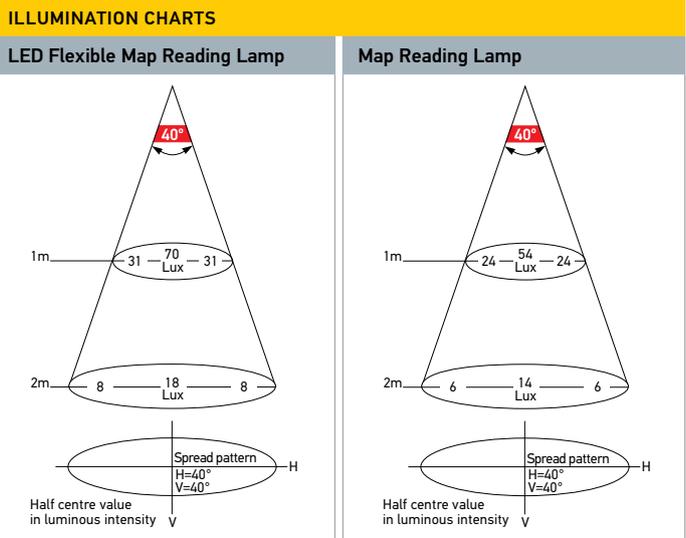
Map Reading Lamp

Flexible black arm. Lamp head has an integral rocker on/off switch and is fitted with a clear diffuser lens for glare-free illumination. Pillar or dash mounting. Includes additional red lens.



2AB 004 532-171	2633		195MM ARM SIZE
Mounting	Screw mount.		
Power Consumption	7W		
Bulbs to Suit	12V	8GP 007 676-124	
	24V	8GP 008 285-002	

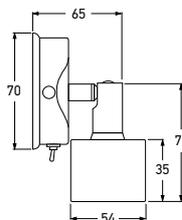
INTERIOR/EXTERIOR





Dimmable:
Analog DC Input

Dimmable:
PWM 10-100%



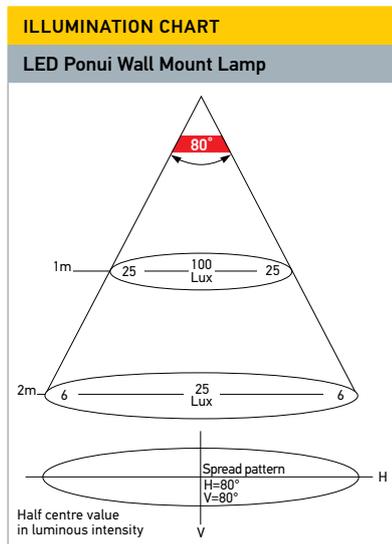
12 VOLT DC		24 VOLT DC		
2JA 958 358-001		2JA 958 358-201		WHITE
2JA 958 358-011		2JA 958 358-211		WARM WHITE
Mounting	Wall mount.			
Voltage	12V DC or 24V DC			
Power Consumption	<3W			
Protection	Electronics are completely sealed from moisture and dust ingress.			
Cable Length	Pre-wired with 100mm of cable			
Compliance				

LED Ponui Wall Mount Lamp

LED Ponui wall mount interior lamp is an energy efficient and high quality wall light offering an attractive and modern design in a chrome plated housing. Both the cool white and the warm white option feature a smooth, evenly distributed illumination and an optic specifically designed to reduce individual light source glare, which can lead to discomfort and eye strain.



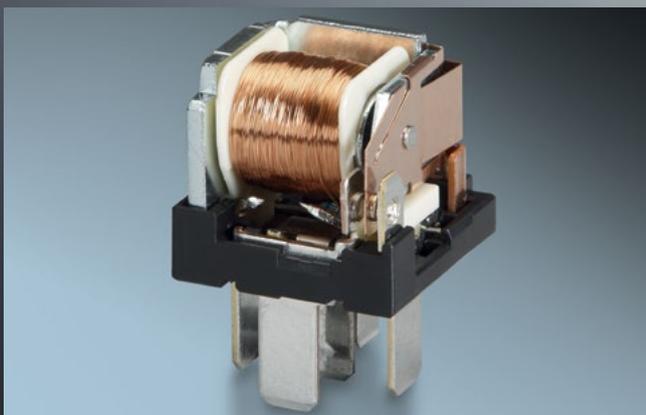
2JA 958 358-011





Relays and Flasher Units

HELLA manufactures more than 100 million relay and flasher units per year that consistently benchmark as the highest reliability in the industry.



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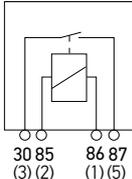
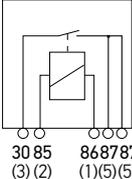
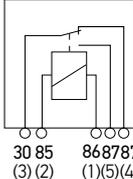
HELLA RELAYS

HELLA offers a comprehensive range of relays to suit 12 and 24 volt applications. Quality accessories facilitate the expansion into new applications and provide customers with new solutions.

COMMON PIN DESIGNATIONS FOR RELAYS

Pin No.	Description	Eliminating Voltage Spikes Voltage spikes from 300V to 500V can occur momentarily when a relay is switched off. Sensitive electronic equipment can be damaged or malfunctions can occur if these spikes reach the vehicle electrical network without suppression. A relay with a diode or resistor minimises voltage spikes.
85/2	Earth (end of winding to ground or negative)	
86/1	Positive	
87/5	Output (to consumer e.g. driving lamp)	
87a/4	Alternative output (1st output, break side)	
30/3	Positive supply (Input from + battery terminal, direct)	

The Different Types of Relays

The Normally Open Relay	The Normally Open Relay with Dual Output	The Change-over Relay
 <p>30 85 86 87 (3) (2) (1) (5)</p>	 <p>30 85 86 87 87a (3) (2) (1) (5) (5)</p>	 <p>30 85 86 87 87a (3) (2) (1) (5) (4)</p>
<p>A normally open relay is used to close the electric circuit between power source and electrical load, e.g. the load is switched on. Relays are operated by means of switches, pulse generators or control devices.</p> <p>Application: Headlamps, auxiliary driving lamps, auxiliary fog lamps, horns, heaters, motors for fans and power windows, air-conditioners and ignition assemblies.</p>		<p>The change-over relay changes the load path from one electrical load to another. The relay is operated by a dashboard switch.</p> <p>Application: Switching over from town horn to fanfare horn, for 2 speed appliances such as heated rear window or fan motors.</p> <p>Change-over relays can be used as:</p> <ul style="list-style-type: none"> • Change-over relays • Normally open relays • Normally closed relays

Relays have been predicted to be obsolete in modern vehicles, however the automotive industry needs relays since relay functions cannot always be replaced by control units. Only relays make “galvanic isolation” possible between input and output. Semi-conductor devices cannot manage this at the moment. Another positive factor is the cost advantage relays have compared with an electronic solution.

In motor vehicles, relays are used to switch high currents. For example the engine control unit is switched by a relay. Their sturdiness allows them to be installed near electric consumers. As only low control currents are required, the cable cross-sections can be kept small. The switching/amplifier function of a relay can only be achieved with a lot more effort and a lot less reliability using “modern” electronics. An additional advantage is that the replacement of a relay is quick and easy. These characteristics guarantee that relays will have a regular place in many vehicles for a long time to come.

Trust in our Quality Relays

- Production expertise: HELLA produces more than 100 million relays per year. Thanks to optimised production we can offer a competitive price for customers. HELLA relays have an extremely low failure rate.
- OEM customers: HELLA develops and produces relays for AGCO, Claas, Daimler AG, Ford, VW, GM, JCB, Opel, Nissan, John Deere, Chrysler and Jaguar/Land Rover among others. We have been working with many customers for decades.

RELAY QUICK REFERENCE CHART

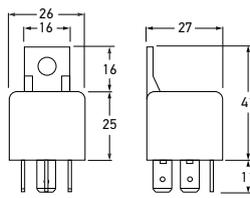
MINI RELAYS - NORMALLY OPEN									
Part Number	Voltage	Pins	Function	Protection	Maximum Load	Current Draw	Bracket	Description	
4RA 965 400-072	3078	12V	4	N/O		30A	140mA	Yes	
4RA 007 791-023	3078R	12V	4	N/O	Resistor	40A	140mA	Yes	
4RA 905 330-002	3053	12V	4	N/O	Diode	40A	170mA	Yes	
4RA 905 330-032	3059	12V	4	N/O	Diode	50A	210mA	Yes	Terminals 30 and 87 are 8.1mm terminals
4RA 933 791-062	3082	12V	5	N/O		40A	140mA	Yes	
4RA 905 330-013	3055	12V	5	N/O	Diode	40A	170mA	Yes	
4RA 965 400-102	3079	24V	4	N/O		30A	70mA	Yes	
4RA 007 957-013	3079R	24V	4	N/O	Resistor	30A	90mA	Yes	
4RA 905 330-242	3054	24V	4	N/O	Diode	22A	90mA	Yes	
4RA 905 330-272	3060	24V	4	N/O	Diode	30A	90mA	Yes	Terminals 30 and 87 are 8.1mm terminals
4RA 933 791-081	3083	24V	5	N/O		20A	70mA	No	
4RA 905 330-252	3056	24V	5	N/O	Diode	22A	90mA	Yes	
MINI RELAYS - NORMALLY OPEN FUSED									
4RA 003 530-044	3076	12V	4	N/O		25A	140mA	Yes	
4RA 003 530-053	3077	24V	4	N/O		15A	80mA	Yes	
MINI RELAYS - CHANGE-OVER									
4RD 933 332-043	3080	12V	5	N/O-N/C		30-87, 30A/30-87a, 20A	140mA	Yes	
4RD 007 794-033	3080RBULK	12V	5	N/O-N/C	Resistor	3-5, 30A/3-4, 20A	140mA	Yes	
4RD 905 330-023	3057	12V	5	N/O-N/C	Diode	30-87, 40A/30-87a, 15A	170mA	Yes	
4RD 933 332-062	3081	24V	5	N/O-N/C		30-87, 20A/30-87a, 10A	70mA	Yes	
4RD 007 903-012	3081RBULK	24V	5	N/O-N/C	Resistor	3-5, 20A/3-4, 10A	70mA	Yes	
4RD 905 330-262	3058	24V	5	N/O-N/C	Diode	30-87, 22A/30-87a, 10A	90mA	Yes	
WEATHERPROOF RELAY - CHANGE-OVER									
4RD 933 332-031	3080S	12V	5	N/O-N/C	Resistor	30-87, 30A/30-87a, 20A	160mA	Yes	Connector 8JD 745 801-001
SOLID STATE RELAY - NORMALLY OPEN									
4RA 931 773-952	3063	12V	4	N/O		22A		No	
HIGH CAPACITY RELAYS - NORMALLY OPEN									
4RA 003 437-082	3084	12V	4	N/O		60A	140mA	Yes	Terminals 30 and 87 are 9.5mm terminals
4RA 905 330-041	3061	12V	4	N/O		180A peak (100A continuous)	380mA	Yes	Terminals 30 and 87 are M6 studs
4RA 003 437-093	3085	24V	4	N/O		60A	70mA	Yes	Terminals 30 and 87 are 9.5mm terminals
4RA 905 330-281	3062	24V	4	N/O		80A peak (60A continuous)	180mA	Yes	Terminals 30 and 87 are M6 studs
MICRO RELAY - NORMALLY OPEN									
4RA 933 766-111	3064	12V	4	N/O	Resistor	20A	140mA	No	Terminals 85 and 86 are 4.8mm
MICRO RELAY - CHANGE-OVER									
4RD 007 814-071	3065	12V	5	N/O-N/C	Resistor	30-87, 20A/30-87a, 10A	140mA	No	Terminals 85, 86 and 87a are 4.8mm
MICRO RELAY - LATCHING									
4RC 933 364-021	3064L	12V	5	Latching		20A	140mA	No	Terminals 1, 2 and 6 are 4.8mm
TIME CONTROL RELAYS									
5HE 996 152-132	3086	12V	5	N/O-N/C	Contact opened 10A, Contact closed 20A 30min			Yes	
5HE 996 152-152	3087	12V	5	N/O-N/C	Contact opened 10A, Contact closed 20A 30min			Yes	
5HE 996 152-142	308624V	24V	5	N/O-N/C	Contact opened 10A, Contact closed 20A 30min			Yes	
5HE 996 152-162	308724V	24V	5	N/O-N/C	Contact opened 10A, Contact closed 20A 30min			Yes	

Normally Open Mini Relay

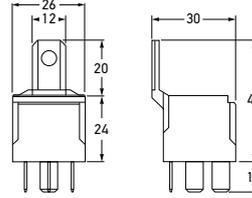


4RA 965 400-072

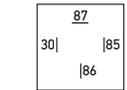
4RA 007 791-023



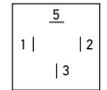
4RA 965 400-072



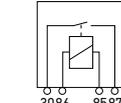
4RA 007 791-023



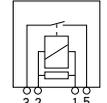
4RA 965 400-072



4RA 007 791-023



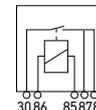
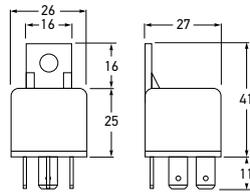
4RA 965 400-072



4RA 007 791-023

4RA 965 400-072	3078		4 PIN	12 VOLT
4RA 965 400-078	3078BULK (Pack of 10)			
4RA 007 791-023	3078R (With resistor)			
Maximum Load	4RA 965 400-072	30A	4RA 007 791-023	40A
Current Draw	140mA			

Normally Open Mini Relay Dual Output



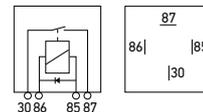
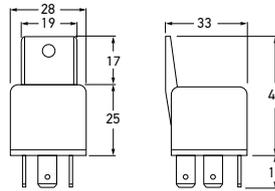
4RA 933 791-062	3082		5 PIN	12 VOLT
4RA 933 791-063	3082BULK (Pack of 10)			
Maximum Load	40A			
Current Draw	140mA			

Normally Open Mini Relay with Diode

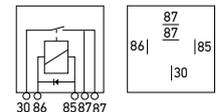


4RA 905 330-002

4RA 905 330-013



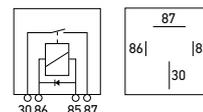
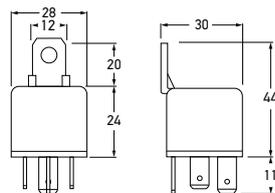
4RA 905 330-002



4RA 905 330-013

4RA 905 330-002	3053		4 PIN	12 VOLT
4RA 905 330-013	3055			
Maximum Load	40A			
Protection	Diode			
Current Draw	170mA			

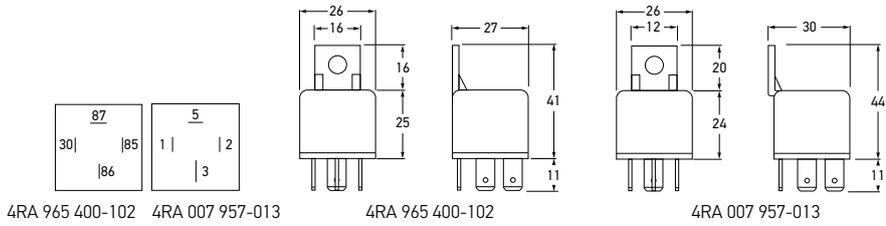
Normally Open Mini Relay with Diode



Terminals 30 and 87 are 8.1mm terminals

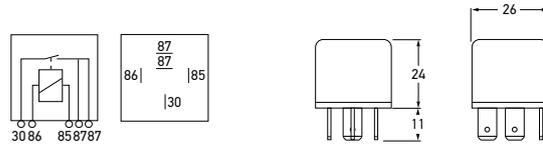
4RA 905 330-032	3059		4 PIN	12 VOLT
Maximum Load	50A			
Protection	Diode			
Current Draw	210mA			

RELAYS AND FLASHER UNITS



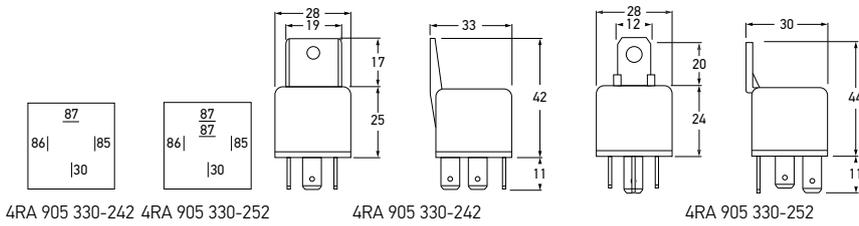
4RA 965 400-102	3079		4 PIN	24 VOLT
4RA 965 400-037	3079BULK (Pack of 10)			
4RA 007 957-013	3079R (With resistor)			
Maximum Load	20A			
Current Draw	4RA 965 400-102:	70mA	4RA 007 957-013:	90mA

Normally Open Mini Relay



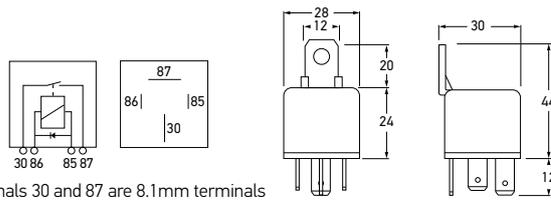
4RA 933 791-081	3083		5 PIN	24 VOLT
Maximum Load	20A			
Current Draw	70mA			

Normally Open Mini Relay Dual Output - Without Bracket



4RA 905 330-242	3054		4 PIN	24 VOLT
4RA 905 330-252	3056		5 PIN	
Maximum Load	22A			
Protection	Diode			
Current Draw	90mA			

Normally Open Mini Relay With Diode



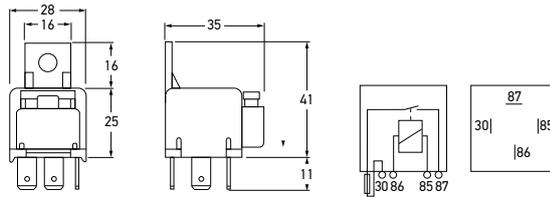
4RA 905 330-272	3060		4 PIN	24 VOLT
Maximum Load	30A			
Protection	Diode			
Current Draw	90mA			

Normally Open Mini Relay With Diode



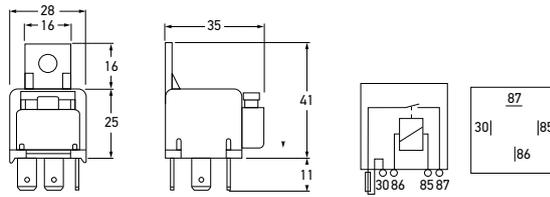
RELAYS

Normally Open Fused Relay
- 12 Volt



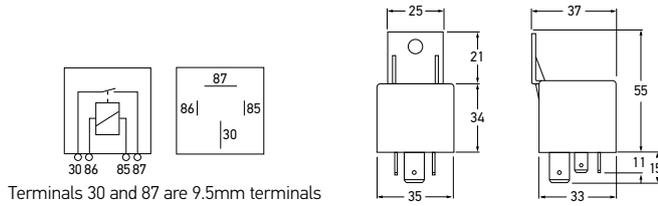
4RA 003 530-044	3076		4 PIN	12 VOLT
Maximum Load	25A with 25A fuse			
Current Draw	140mA			

Normally Open Fused Relay
- 24 Volt



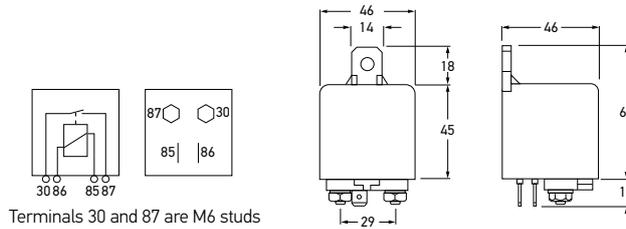
4RA 003 530-053	3077		4 PIN	24 VOLT
Maximum Load	15A with 15A fuse			
Current Draw	80mA			

RELAYS AND FLASHER UNITS



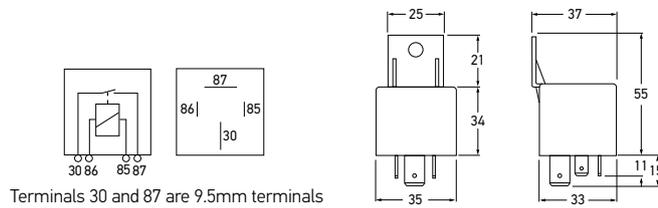
High Capacity Normally Open Relay - 12 Volt

4RA 003 437-082	3084		4 PIN	12 VOLT
Maximum Load	60A			
Current Draw	140mA			



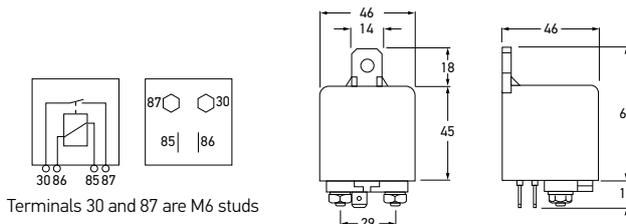
High Capacity Normally Open Relay - 12 Volt

4RA 905 330-041	3061		4 PIN	12 VOLT
Maximum Load	180A peak current (100A continuous)			
Current Draw	380mA			



High Capacity Normally Open Relay - 24 Volt

4RA 003 437-093	3085		4 PIN	24 VOLT
Maximum Load	60A			
Current Draw	70mA			

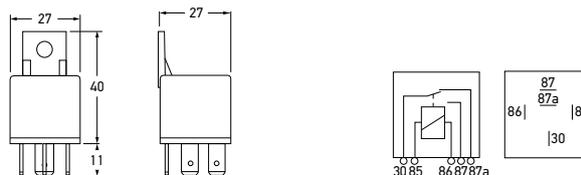


High Capacity Normally Open Relay - 24 Volt

4RA 905 330-281	3062		4 PIN	24 VOLT
Maximum Load	80A peak current (60A continuous)			
Current Draw	180mA			

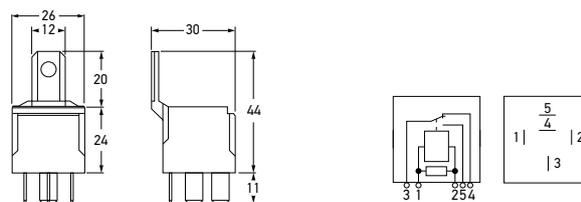


Change-over Relay



4RD 933 332-043	3080	5 PIN	12 VOLT
4RD 933 332-048	3080BULK		
Maximum Load	30-87, 40A/30-87a, 20A		
Current Draw	140mA		

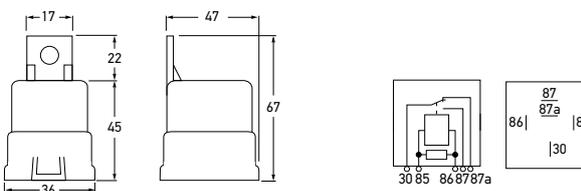
Change-over Relay with Resistor



4RD 007 794-033	3080RBULK	5 PIN	12 VOLT
Maximum Load	3-5, 30A/3-4 20A		
Current Draw	140mA		

Weatherproof Change-over Relay

Change-over relay with matching plug to form a dust and weatherproof seal. Pre-wired connector with 300mm of 3 x 2.90mm² cable and 2 smaller signal cables (to be purchased separately).

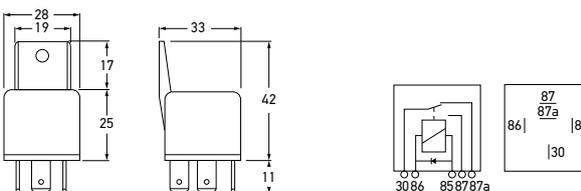


4RD 933 332-031	3080S	5 PIN	12 VOLT
Maximum Load	30-87, 30A, 30-87a, 20A		
Current Draw	160mA		
Spare Part	8JD 745 801-001 Connector with cable		
Protection	Resistor		



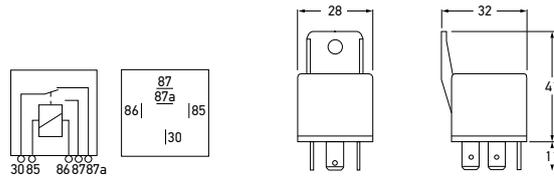
8JD 745 801-001

Change-over Relay with Diode



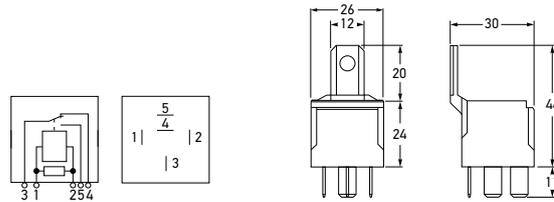
4RD 905 330-023	3057	5 PIN	12 VOLT
Maximum Load	30-87, 40A/30-87a, 15A		
Protection	Diode		
Current Draw	170mA		

RELAYS AND FLASHER UNITS



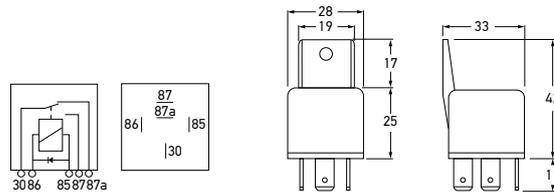
4RD 933 332-062	3081		5 PIN	24 VOLT
4RD 933 332-063	3081BULK			
Maximum Load	30-87, 20A/30-87a, 10A			
Current Draw	70mA			

Change-over Relay



4RD 007 903-012	3081RBULK		5 PIN	24 VOLT
Maximum Load	3-5, 20A/3-4 10A			
Current Draw	70mA			

Change-over Relay with Resistor



4RD 905 330-262	3058		5 PIN	24 VOLT
Maximum Load	30-87, 22A/30-87a, 10A			
Protection	Diode			
Current Draw	90mA			

Change-over Relay with Diode



8JA 003 526-004	4973	
8JA 003 526-022	4973BULK	PACK OF 50
Mounting	Single screw mounting.	
To Suit	4 and 5 pin relays with 6.3mm flat pin connectors.	
4RA 003 530-044 and 4RA 003 530-053 are not suitable for multiple installation using this connector.		

Mini Relay Connector

Single screw mounting. Sturdy plastic casing. Supplied with 5 blade terminals. Several holders may be joined together or mated with fuse holder 8JA 007 024-002.



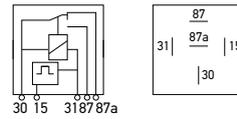
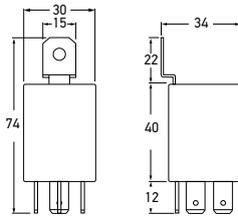
RELAYS

Time Control Unit with Drop-out Delay

Relay with manually adjustable drop-out delay function, 0 – 900 seconds.



Switch view



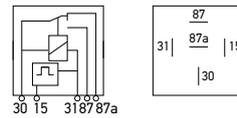
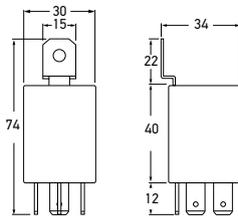
5HE 996 152-132	3086		5 PIN	12 VOLT
5HE 996 152-142	308624V			24 VOLT
Maximum Load	Contact opened 10A Contact closed 20A/30min			
Protection	IP 50 (Protection against dust)			
Switching terminal 15 starts timing.				

Time Control Unit with Pick-up Delay

Relay with manually adjustable pick-up delay function, 0 – 900 seconds.



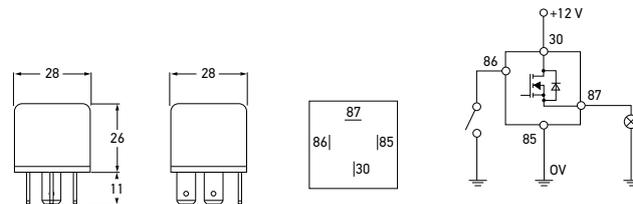
Switch view



5HE 996 152-152	3087		5 PIN	12 VOLT
5HE 996 152-162	308724V			24 VOLT
Maximum Load	Contact opened 10A Contact closed 20A/30min			
Protection	IP 50 (Protection against dust)			
Switching terminal 15 starts timing.				

Normally Open (Solid State) Relay

Solid-state relays are modern semi-conductor switches. Satisfies the increasing trend of controlling loads (e.g. fan motors, glow plugs, headlamp and heaters) with power regulation.

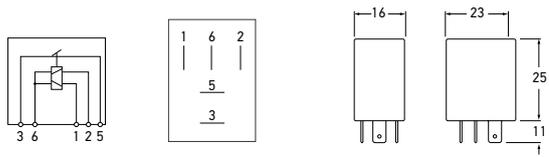


4RA 931 773-952	3063		4 PIN	12 VOLT
Maximum Load	22A @ 12V			
Protection	IP 67 (Protection against dust and temporary water immersion)			

FEATURES

- Suitable for resistive loads, lamp loads and inductive loads.
- Pulse width modulation allows regulation of the power for the loads.
- Maximum switching reliability, particularly suited for switching functions relevant for safety.
- Silent switching, e.g. in passenger compartment.
- Resistant to short-circuit and overload.
- Protection against polarity reversal and earth disconnection.
- Shock and vibration-resistant.
- Water-proof, potted design.
- Protection against overheating.
- Low quiescent current.

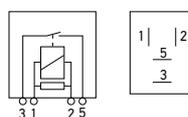
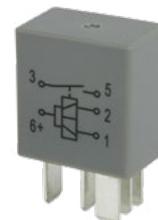
RELAYS AND FLASHER UNITS



4RC 933 364-021	3064L		5 PIN	12 VOLT
Maximum Load	20A			
Current Draw	0.15A			

Latching On/Off Micro Relay

Latching relay that will remain in its open or closed state when power is removed, i.e. it will remain on or off and not automatically return to off. A negative (-) voltage pulse is required on either terminal 1 or 2 to switch on or off.



NORMALLY OPEN				
4RA 933 766-111	3064		4 PIN	12 VOLT
Maximum Load	20A @ 12V			
Protection	Resistor			

Micro Relay

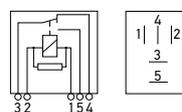
Micro relay with parallel resistor. 4RA 933 766-111 features two 4.8mm and two 6.3mm blade terminal contacts (terminals 3 and 5). Change-over relay 4RD 007 814-071 features three 4.8mm and two 6.3mm blade terminal contacts (terminals 3 and 5).



4RA 933 766-111



4RD 007 814-071



CHANGE-OVER				
4RD 007 814-071	3065		5 PIN	12 VOLT
Maximum Load	3-5 20A/3-4 10A			
Protection	Resistor			

Terminal designations: 1 = 86, 2 = 85, 3 = 30, 4 = 87a, 5 = 87.

8JD 733 767-002	4973M		5 POLE	
Socket	5 pole			
To Suit	4RA 933 766-111, 4RC 933 364-021 and 4RD 007 814-071.			

Micro Relay Connector

For micro-relays with 5 pole SAE terminal arrangement. For receiving three 4.8mm and two 6.3mm blade terminal connectors. Made of black plastic.



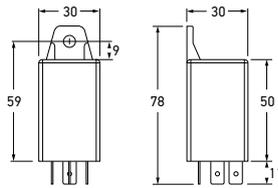
**Safety DayLights™ Smart Controller
- Advanced***

This smart controller is designed to simplify the installation of HELLA's LED Safety DayLights™ range by eliminating the need to wire the lamp, or changeover relay to ignition terminal 15.

The Safety DayLights™ Smart Controller can be wired directly to the positive terminal of the battery, which saves the difficult and often time consuming task of finding the ignition feed.

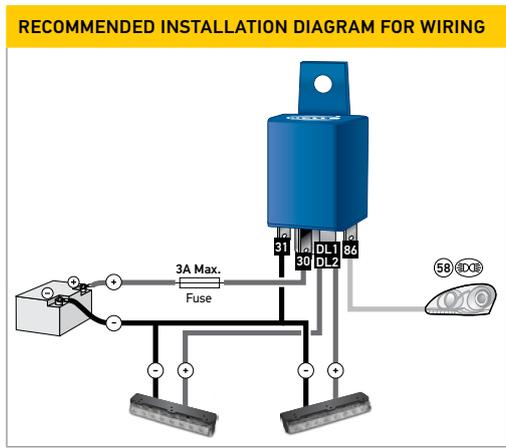
The smart controller monitors the voltage supply from the battery and will automatically switch the Safety DayLights™ on when the engine is started, and automatically switch them off when the headlamps are activated, or the engine is turned off.

*Advanced version with vibration monitor for installation in vehicles with fuel saving alternators.



5DF 980 818-011	3090	
5DF 980 818-017	3090BULK	
Voltage	Multivolt™ suitable for 12 and 24 volt systems.	
Maximum Continuous Load	20W	
To Suit	HELLA LED Safety DayLights™ range.	
Features a Safety DayLights™ OFF delay of approximately 10 seconds.		

WIRING SPECIFICATIONS	
Terminal Number	Connect to
30	Battery (+)
31	Earth return (-)
86	Front position or headlamps (+)
DL1 & DL2	Safety DayLights™ (+)

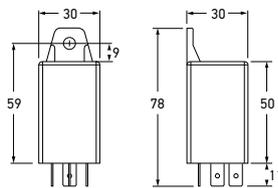


**Safety DayLights™ Smart Controller
- Standard**

This smart controller is designed to simplify the installation of HELLA's LED Safety DayLights™ range by eliminating the need to wire the lamp, or changeover relay to ignition terminal 15.

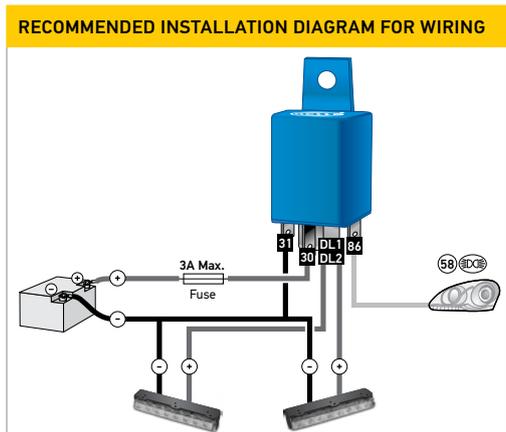
The Safety DayLights™ Smart Controller can be wired directly to the positive terminal of the battery, which saves the difficult and often time consuming task of finding the ignition feed.

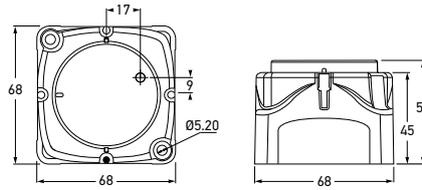
The smart controller monitors the voltage supply from the battery and will automatically switch the Safety DayLights™ on when the engine is started, and automatically switch them off when the headlamps are activated, or the engine is turned off.



5DF 980 818-001	3091	
5DF 980 818-007	3091BULK	
Voltage	Multivolt™, suitable for 12 and 24 volt systems.	
Maximum Continuous Load	20W	
To Suit	HELLA LED Safety DayLights™ range.	
Features a Safety DayLights™ OFF delay of approximately 10 seconds.		

WIRING SPECIFICATIONS	
Terminal Number	Connect to
30	Battery (+)
31	Earth return (-)
86	Front position or headlamps (+)
DL1 & DL2	Safety DayLights™ (+)

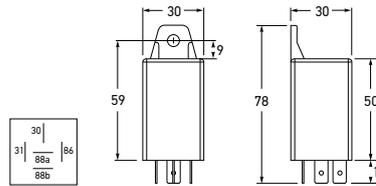




4RD 980 830-001	3099	
Voltage	Multivolt™, suitable for 12 and 24 volt systems.	
Mounting	Recess or surface mount.	
Maximum Continuous Load	140A	
Termination	2 x 6mm studs	

Voltage Sensitive Relay Module

Digital voltage sensitive relay with dual sensing for 12 and 24 volt systems. Suitable for boats, caravans and 4WD vehicles, this relay allows a separate battery to be used independently from another battery permitting, for example, the starting battery not to be discharged. However when either battery is charged, the relay will connect both batteries to allow dual charging. The relay automatically detects either 12 or 24 volt operation. Very low power consumption (less than 2mA) or none in power storage mode.



5DS 980 818-501	3101	
Voltage	Multivolt™, suitable for 12 and 24 volt systems.	
Maximum Continuous Load	5A	
Compliance		

Voltage Sensitive Relay Module

The Voltage Sensitive Relay (VSR) is designed to automatically monitor the battery condition of your vehicle through constant voltage measurements. Then depending upon the voltage level the VSR will activate or deactivate the connected load to prevent the battery from over-discharging.



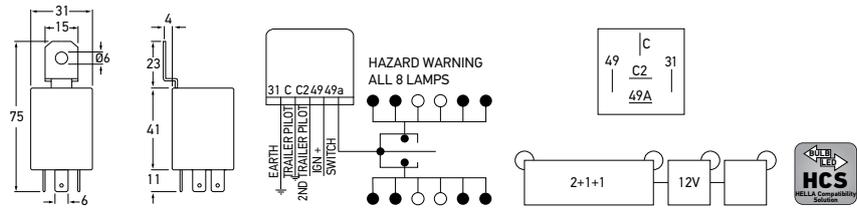
The Voltage Sensitive Relay installation must be protected by a suitably rated fuse.

WIRING SPECIFICATIONS	
Terminal Number	Connect to
30	Battery (+)
31	Earth return (-)
86	Activate (+) / Deactivate VSR (- or open)
88a & 88b	Dual outputs (+)

PRE-SET VOLTAGE LIMITS AND OPERATION		
System Voltage	VSR turns outputs ON when	VSR turns outputs OFF when
12V DC	Battery voltage is above 13.4V DC	Battery voltage is below 12.8V DC
24V DC	Battery voltage is above 26.8V DC	Battery voltage is below 25.6V DC
Note	The pre-set voltage values stated above may vary by +/- 3%.	

HCS Electronic Flasher Unit - 2+1+1

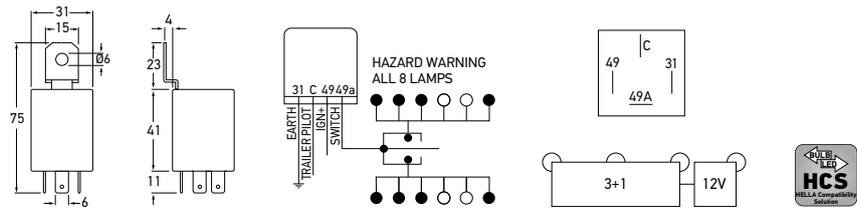
LED compatible flasher unit specifically designed for use with HCS (HELLA Compatibility Solution) LED indicator lamps. Provides stable flash rate and reliable bulb/LED lamp failure indication, for towing vehicles and trailers. Suitable to operate combinations of HCS LED and conventional 21W bulb-type lamps.



4DN 009 492-101	3036	12 VOLT
Maximum Load	2+1+1(8) x HCS or 21W + 0-5W	
Frequency	90 +/- 30 flash signals per minute for direction indication and hazard warning.	
Protection	IP 53 (Protection against dust and water spray)	
See page 16 for further information on HCS technology.		

HCS Electronic Flasher Unit - 3+1

LED compatible flasher unit specifically designed for use with HCS (HELLA Compatibility Solution) LED indicator lamps. Provides stable flash rate and reliable bulb/LED lamp failure indication, for towing vehicles and trailers. Suitable to operate combinations of HCS LED and conventional 21W bulb-type lamps.

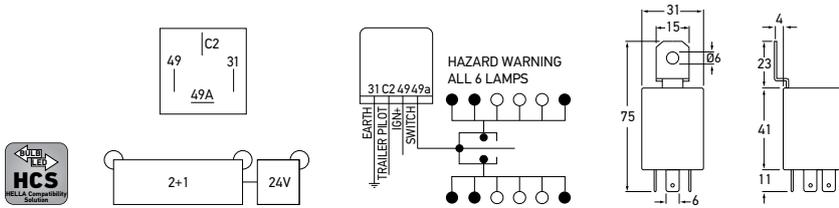


4DW 009 492-111	3039	12 VOLT
Maximum Load	3+1 (8) x HCS or 21W	
Frequency	90 +/- 30 flash signals per minute for direction indication and hazard warning.	
Protection	IP 53 (Protection against dust and water spray)	
See page 16 for further information on HCS technology.		

FLASHER UNITS

COMMON PIN DESIGNATIONS FOR FLASHER UNITS	
Terminal Number	Description
49/X	Flasher input (+)
49a/L	Flasher output (+) to lamps or indicator switch
30b	Flasher input (+) from hazard switch
31	Earth (-)
C/C1/CP/P	Pilot lamp output (+)
C2	1st trailer pilot lamp output (+)
C3	2nd trailer pilot lamp output (+)

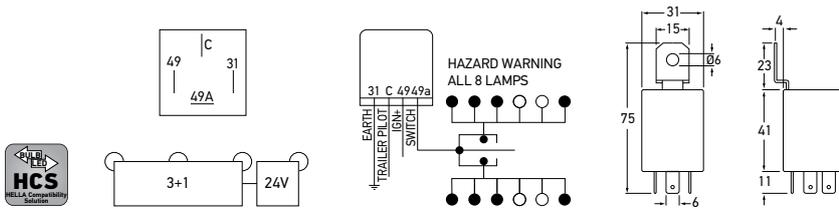
RELAYS AND FLASHER UNITS



4DM 009 492-001	3037	24 VOLT
Maximum Load	2+1 (6) x HCS or 21W + 0-5W	
Frequency	90 +/- 30 flash signals per minute for direction indication and hazard warning.	
Protection	IP 53 (Protection against dust and water spray)	
See page 16 for further information on HCS technology.		

HCS Electronic Flasher Unit - 2+1

LED compatible flasher unit specifically designed for use with HCS (HELLA Compatibility Solution) LED indicator lamps. Provides stable flash rate and reliable bulb/LED lamp failure indication, for towing vehicles and trailers. Suitable to operate combinations of HCS LED and conventional 21W bulb-type lamps.



4DW 009 492-011	3038	24 VOLT
Maximum Load	3+1 (8) x HCS or 21W	
Frequency	90 +/- 30 flash signals per minute for direction indication and hazard warning.	
Protection	IP 53 (Protection against dust and water spray)	
See page 16 for further information on HCS technology.		

HCS Electronic Flasher Unit - 3+1

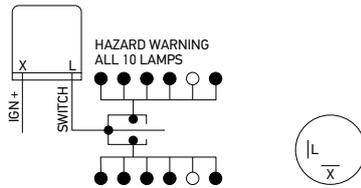
LED compatible flasher unit specifically designed for use with HCS (HELLA Compatibility Solution) LED indicator lamps. Provides stable flash rate and reliable bulb/LED lamp failure indication, for towing vehicles and trailers. Suitable to operate combinations of HCS LED and conventional 21W bulb-type lamps.



FLASHER UNITS

High Capacity Flasher Unit

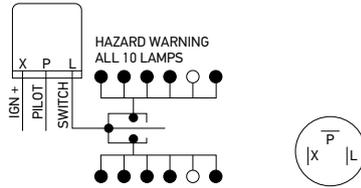
High capacity electronic flasher unit. Complete with bracket. Designed to take up to 210W loads. Reverse polarity protection, polycarbonate cover and silver contacts. Clear audible signal.



4LZ 961 553-125	3026	2 PIN	12 VOLT
Maximum Load		1-10 x 21W	

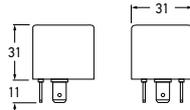
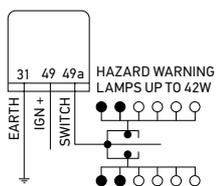
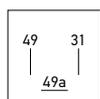
High Capacity Flasher Unit

High capacity electronic flasher unit. Complete with bracket. Designed to take up to 210W loads. Reverse polarity protection, polycarbonate cover and silver contacts. Clear audible signal.



4LZ 961 553-134	3027	3 PIN	12 VOLT
4LZ 961 553-234	3028		24 VOLT
Maximum Load		1-10 x 21W	

RELAYS AND FLASHER UNITS

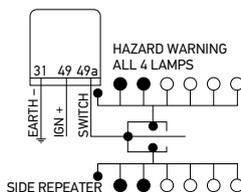


4JZ 177 846-002	3040	3 PIN
Voltage	9-33V DC (suitable for 12V and 24V)	
Maximum Load	42W max.	
Frequency	90 +/- 30 flash signals per minute for direction indication and hazard warning.	
Protection	IP 53 (Protection against dust and water spray)	



Electronic Flasher Unit

LED compatible flasher unit for universal connection of LED indicator lamps without electronic pulse. Maintains the standard flash rate of 90 +/- 30 fpm and operates on bulb and LED loads from 1W to 42W.

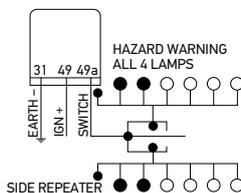


4DB 003 750-723	3016	3 PIN	12 VOLT
No. of Bulbs	2(4) x 21W + 0 - 5W		



Electronic Flasher Unit

To operate 2 or 3 lamps on either side of vehicle.



4DB 003 750-742	3016LED1	3 PIN	12 VOLT
4DB 003 750-752	3016LED2		
No. of Bulbs	4DB 003 750-742	1(2) x 21W + 1(2)9W	
	4DB 003 750-752	1(2) x 21W + 1(2) x 5W + 1(2) x 9W	



4DB 003 750-752



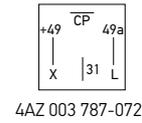
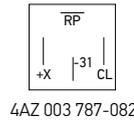
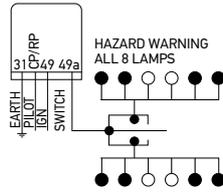
LED Electronic Flasher Unit

Modified version of 4DB 003 750-723 electronic flasher unit. Specifically designed for use with DuraLED® rear direction indicator lamps on motor vehicles such as prime movers, trucks and motor homes, maintaining the mandatory bulb failure warning signal function.

FLASHER UNITS

High Capacity Flasher Unit

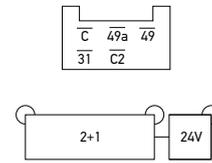
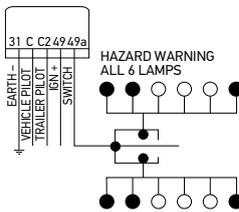
Heavy duty flasher unit manufactured to take up to 200W loads.



4AZ 003 787-082	3014	4 PIN	12 VOLT
4AZ 003 787-072	3015		24 VOLT
Load	10-200W		

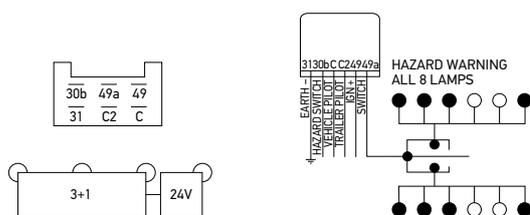
Electronic Flasher Unit - 2+1

Flasher unit designed to operate 2 or 3 lamps on either side of a vehicle with caravan or trailer. Includes mounting bracket. Separate pilot lamp indicates operation of flasher lamp on the trailer.



4DM 003 474-003	3018	5 PIN	24 VOLT
No. of Bulbs	2+1 (6) x 21W		

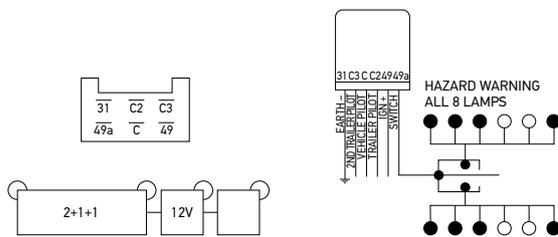
RELAYS AND FLASHER UNITS



4DW 003 944-071	3032	6 PIN	24 VOLT
No. of Bulbs	3+1 (8) x 21W		

Electronic Flasher Unit - 3+1

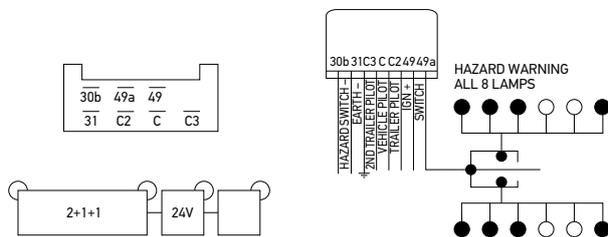
For heavy trucks with trailers. With mounting bracket. To operate 3 lamps on either side of towing vehicle, plus an additional lamp on either side of a trailer. Separate pilot lamp indicates operation of flasher lamp on the trailer.



4DN 008 768-191	3033	6 PIN	12 VOLT
No. of Bulbs	2+1+1 (8) x 21W		

Electronic Flasher Unit - 2+1+1

To operate 2 lamps on either side of a towing vehicle plus an additional lamp on either side of each of two trailers. Separate pilot lamps indicate operation of flasher lamps on the trailers.



4DN 009 124-011	3034	7 PIN	24 VOLT
No. of Bulbs	2+1+1 (8) x 21W		

Electronic Flasher Unit - 2+1+1

To operate 2 lamps on either side of a towing vehicle plus an additional lamp on either side of each of two trailers. Separate pilot lamps indicate operation of flasher lamps on the trailers.



FLASHER UNITS



Accessories

All HELLA products are extensively tested for quality, durability and function.

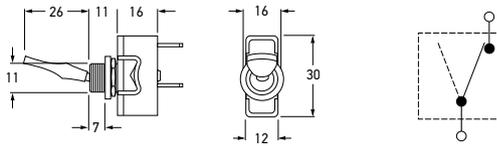


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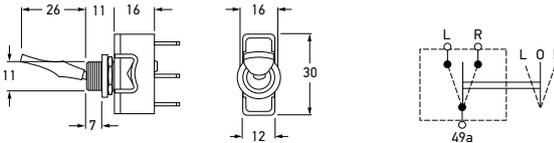
Toggle Switch - Off-On



6EH 905 361-022	4456		OFF-ON
Mounting	13mm diameter opening.		
For Panels	Up to 6mm thick.		
Maximum Load	15A @ 12V 7.5A @ 24V		

Toggle Switch - On-Off-On

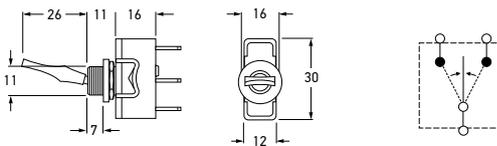
Toggle switch, suitable for controlling direction indicator lamps.



6FG 905 346-002	4202		ON-OFF-ON
Mounting	13mm diameter opening.		
For Panels	Up to 6mm thick.		
Maximum Load	15A @ 12V 7.5A @ 24V		

Momentary Spring Return Switch - (On)-Off-(On)

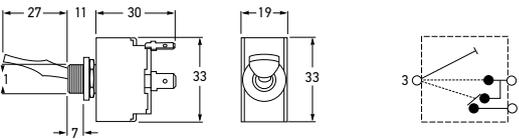
Momentary on-off-on, spring return aerial switch. Flick toggle with spring return to centre.



6EH 905 361-032	4460		(ON)-OFF-(ON)
Mounting	13mm diameter opening.		
For Panels	Up to 6mm thick.		
Maximum Load	15A @ 12V 7.5A @ 24V		

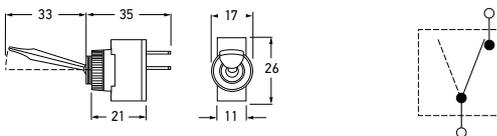
Headlamp Switch - Off-On-On

Three position switch:
Upper = Off
Centre = Position lamps
Lower = Headlamps and position lamps



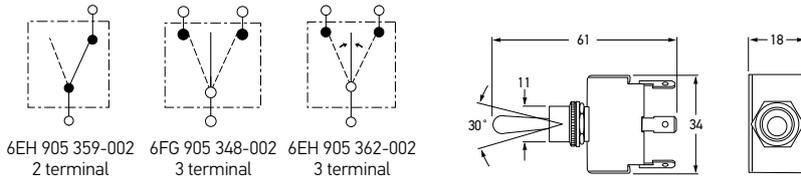
6FG 905 343-012	4056		OFF-ON-ON
Mounting	13mm diameter opening.		
For Panels	Up to 6mm thick.		
Maximum Load	20A @ 12V 10A @ 24V		

Plastic Toggle Switch



6EH 905 361-002	4453		OFF-ON
Mounting	13mm diameter opening.		
For Panels	Up to 6mm thick.		
Maximum Load	8A @ 12V		

ACCESSORIES

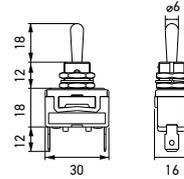


6EH 905 359-002	4451		OFF-ON
6FG 905 348-002	4302		ON-OFF-ON
6EH 905 362-002	4461 (Momentary spring return)		(ON)-OFF-(ON)
Mounting	12mm diameter opening.		
For Panels	Up to 5mm thick.		
Maximum Load	20A @ 12V 10A @ 24V		

Metal Shaft Toggle Switch



6EH 905 359-002



6EH 905 361-101	4203		OFF-ON
Mounting	12mm diameter opening.		
For Panels	Up to 5mm thick.		
Maximum Load	15A @ 12V 7.5A @ 24V		

Metal Shaft Toggle Switch - Off-On

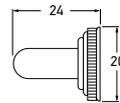


Aircraft Style Switch Cover - Red

Red aircraft style switch cover to prevent accidental switch operation.



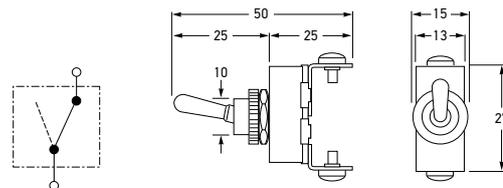
9HB 905 360-101	4455		RED
To Suit	6EH 905 359-002 6EH 905 361-101		



6EH 905 360-002	4452	
6EH 905 360-007	4452BULK	PACK OF 10
To Suit	Toggle switch 6FG 905 348-002 6EH 905 359-002 6EH 905 362-002	

Toggle Boot

To be used with toggle switches.



6EG 905 310-002	2762		OFF-ON
Mounting	11mm diameter opening.		
For Panels	Up to 6mm thick.		
Maximum Load	15A @ 12V 7.5A @ 24V		
Toggle boot 6EH 905 360-002 does not fit this switch.			

Brass Toggle Switch - Off-On

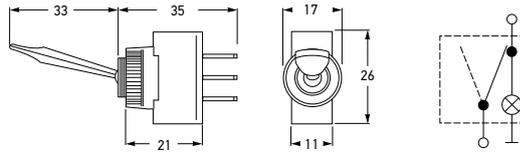
Chrome toggle and face nut. Brass construction.



**Illuminated Toggle Switch,
Off-On - 12 Volt**



6EG 905 354-012 6EG 905 354-032

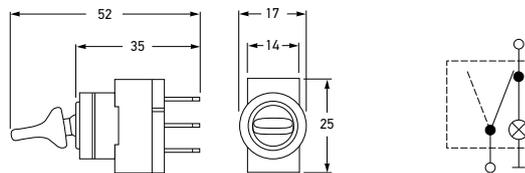


6EG 905 354-002	4433		RED
6EG 905 354-012	4434		GREEN
6EG 905 354-032	4436		BLUE
Mounting	12.5mm diameter opening.		
For Panels	Up to 6mm thick.		
Maximum Load	10A @ 12V		
Suitable for 12V only. Bulb not replaceable.			

**Illuminated Duckbill Switch,
Off-On - 12 Volt**

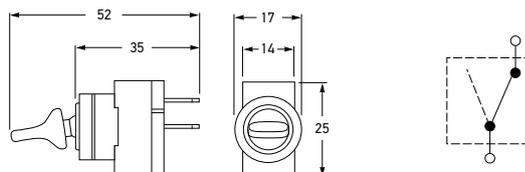


6EG 905 351-032 6EG 905 351-042



6EG 905 351-012	4421		RED
6EG 905 351-032	4423		BLUE
6EG 905 351-042	4424		AMBER
Mounting	12.5mm diameter opening.		
For Panels	Up to 6mm thick.		
Maximum Load	10A @ 12V		
Suitable for 12V only. Bulb not replaceable.			

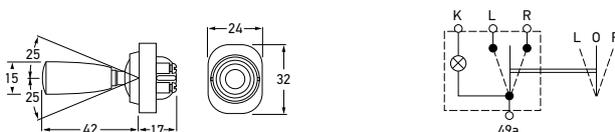
Duckbill Switch



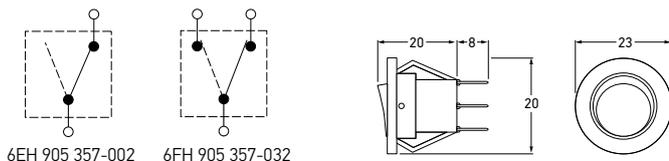
6EG 905 351-002	4420		OFF-ON
Mounting	12.5mm diameter opening.		
For Panels	Up to 6mm thick.		
Maximum Load	10A @ 12V	5A @ 24V	

**Illuminated Toggle Switch,
On-Off-On**

Three position latching switch for indicators.
Illuminates green.



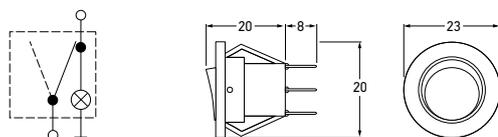
6FG 905 347-002	4206		ON-OFF-ON
Mounting	19mm diameter opening.		
For Panels	Up to 2mm thick.		
Maximum Load	6A @ 12V		
Bulb to Suit	12V	8GP 002 095-081	



6EH 905 357-002	4444		OFF-ON
6FH 905 357-032	4447		ON-ON
Mounting	20mm diameter opening.		
For Panels	Up to 4mm thick.		
Maximum Load	10A @ 12V		

Rocker Switch

Panel push fit.



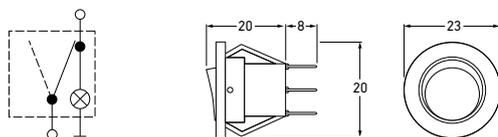
6EH 905 357-012	4445		AMBER
6EH 905 357-022	4446		RED
Mounting	20mm diameter opening.		
For Panels	Up to 4mm thick.		
Maximum Load	10A @ 12V		
Suitable for 12V only. Bulb not replaceable.			

Illuminated Rocker Switch, Off-On - 12 Volt

Panel push fit.



6EH 905 357-022



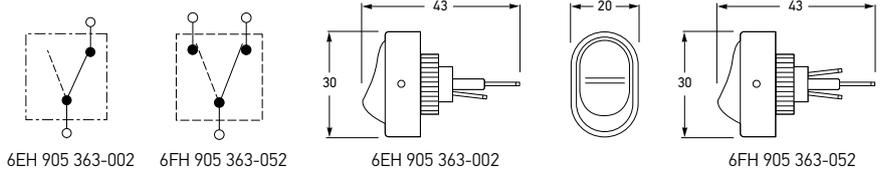
6EH 905 357-042	4448		RED
Mounting	20mm diameter opening.		
For Panels	Up to 4mm thick.		
Maximum Load	10A @ 12V		
Suitable for 12V only. LED included, not replaceable.			

LED Rocker Switch, Off-On - 12 Volt

Panel push fit.

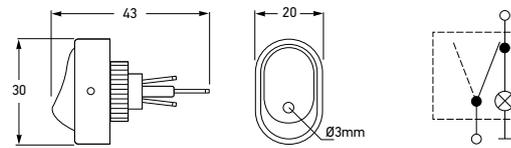


Rocker Switch



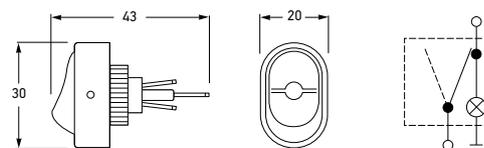
6EH 905 363-002	4470		OFF-ON
6FH 905 363-052	4475		ON-ON
Mounting	12mm diameter opening.		
For Panels	Up to 5mm thick.		
Maximum Load	10A @ 12V		

LED Rocker Switch, Off-On
- 12 Volt



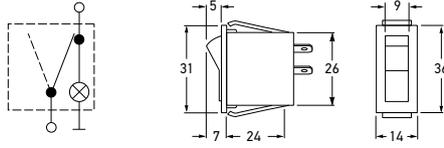
6FH 905 363-092	4479		AMBER
6FH 905 363-112	4481		RED
Mounting	12mm diameter opening.		
For Panels	Up to 5mm thick.		
Maximum Load	10A @ 12V		
Suitable for 12V only. LED included, not replaceable.			

Illuminated Rocker Switch,
Off-On - 12 Volt



6EH 905 363-012	4471		AMBER
Mounting	12mm diameter opening.		
For Panels	Up to 5mm thick.		
Maximum Load	10A @ 12V		
Suitable for 12V only. Bulb not replaceable.			

ACCESSORIES



Illuminated Rocker Switch, Off-On - 12 Volt

Panel push fit.



6EH 905 352-012	4427		RED
6EH 905 352-022	4428		GREEN
6EH 905 352-032	4429		BLUE
6EH 905 352-042	4430		AMBER

Mounting 29 x 12mm opening.

Maximum Load 10A @ 12V

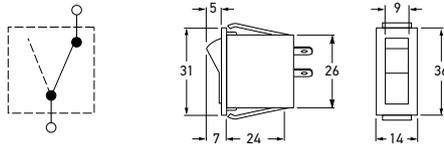
Suitable for 12V only. Bulb not replaceable.



6EH 905 352-022 6EH 905 352-032 6EH 905 352-042

Rocker Switch - Off-On

Panel push fit.



6EH 905 352-002	4426		OFF-ON
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Mounting 29 x 12mm opening.

Maximum Load 10A @ 12V
5A @ 24V

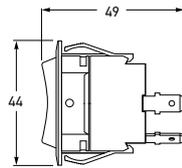


Heavy Duty Rocker Switch

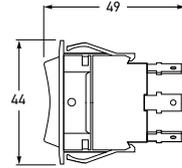
Extremely robust rocker switch featuring push-on terminals and weather resistant black plastic housing. Panel push fit.



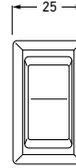
6FH 905 364-012



6FH 905 364-002

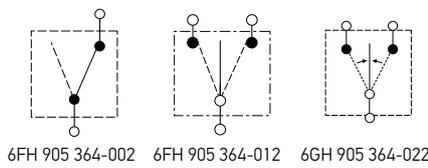


6FH 905 364-012 & 6GH 905 364-022



6FH 905 364-002	4482		OFF-ON
6FH 905 364-012	4483		ON-OFF-ON
6GH 905 364-022	4484 (Momentary spring return)		(ON)-OFF-(ON)

Mounting	20 x 36mm opening.
For Panels	Up to 4mm thick.
Maximum Load	25A @ 12V 12.5A @ 24V

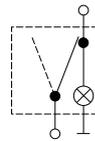
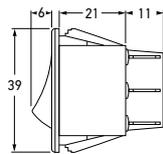


LED Illuminated Rocker Switch, Off-On - 12 Volt

Panel push fit.

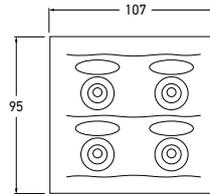


6EH 980 321-011 6EH 980 321-021



6EH 980 321-001	4486A		AMBER
6EH 980 321-011	4486G		GREEN
6EH 980 321-021	4486R		RED

Mounting	20 x 35mm opening.
For Panels	Up to 4mm thick.
Maximum Load	10A @ 12V
Suitable for 12V only. LED included, not replaceable.	

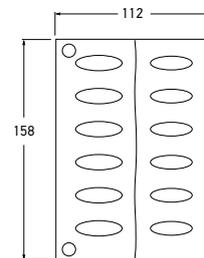


Compact Switch Panel

Splash proof switch panel protected with neoprene rubber boots. Inline fuse holders with fuses behind panel.



8HG 998 514-042	2690 (4 way)		OFF-ON
8HG 998 514-052	2691 (6 way)		
Housing	Impact resistant plastic.		
Switches	4 or 6 off-on toggle switches.		
Maximum Load	20A @ 12V		



Switch Panel, LED Backlight

Splash proof switch panel featuring LED backlit labels. Protected by neoprene rubber boots. Removable cover plate over switches conceals screws.



8HG 998 514-002	2692 (6 way)		OFF-ON
Voltage	Multivolt™, suitable for 12 and 24 volt systems.		
Housing	Impact resistant plastic.		
Switches	6 off-on toggle switches.		
Maximum Load	20A @ 12V		

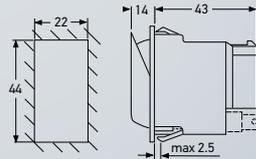
HELLA Universal Rocker Switches

HELLA universal flush-fit rocker switches are readily adaptable to 12 and 24V applications. This large and varied range covers nearly all switching types and connections. A wide selection of symbols ensures proper labelling of all main switching and monitoring functions. The switching and control displays can be illuminated.

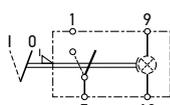
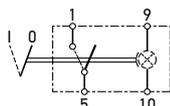
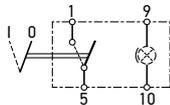


Mounting	Mounted directly to properly dimensioned opening (1 - 2.5mm thick) or by mounting panels (for more information see page 218).
Maximum Load	16A @ 12V, 8A @ 24V.

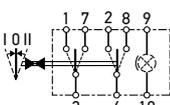
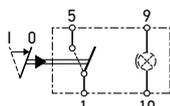
Connectors, symbols, mounts and bulb holders are to be purchased separately.



Location lamp illuminates lamp with park lights. Pilot lamp illuminates when switch is in the 'on' position.

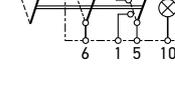
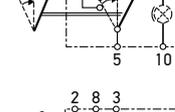
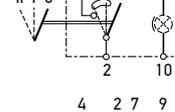
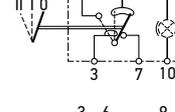
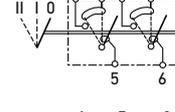
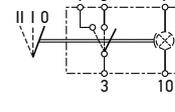
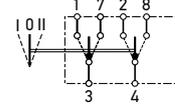
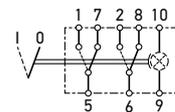
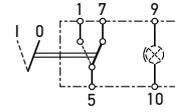


ON-OFF SWITCHES			
Part Number	Symbol	Description	Function
6EH 007 832-011	LOCATION	Suitable for use with location light.	ON-OFF
6EH 007 832-021	PILOT	Suitable for use with location and pilot light.	
	LOCATION		
6EH 007 832-041	PILOT	With mechanism for blocking operation. Suitable for use with location light and pilot light.	
	LOCATION		



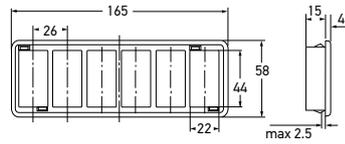
MOMENTARY SPRING RETURN SWITCHES			
6GM 007 832-191	LOCATION	Suitable for use with location light.	OFF-(ON)
6GM 007 832-251	LOCATION	Suitable for use with location light.	(ON)-OFF-(ON)

CHANGE-OVER SWITCHES			
Part Number	Symbol	Description	Function
6FH 007 832-061	LOCATION	Suitable for use with location light.	ON-ON
6FH 007 832-101	PILOT LOCATION	Suitable for use with location light and pilot light.	
6FH 007 832-161		Without location light, without pilot light.	ON-OFF-ON
6RH 007 832-351	PILOT LOCATION	Suitable for use with location light and pilot light.	OFF-ON-ON
6RH 007 832-377	PILOT LOCATION	Suitable for use with location light and pilot light.	
6RH 007 832-391	LOCATION	Max. load 16A @ 12V, 8A @ 24V. Suitable for use with location light, without pilot light.	
6RH 007 832-441	LOCATION	Suitable for use with location light.	
6RH 007 832-411	LOCATION	Suitable for use with location light.	
6HH 007 832-281	PILOT	Max. load 10A @ 12V and 24V. Without location light. Includes pre-fitted 12V bulb. Hazard flasher switch.	HAZARD

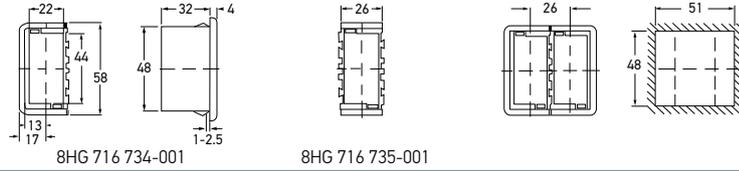


See page 219 for the range of coloured symbols.

Accessories for Switches in Model Range 007 832-...



MOUNTING PANELS		
8HG 713 626-001	(156.1 x 48.2mm)	SIX SWITCHES
8HG 714 504-001	(77.6 x 48.2mm)	THREE SWITCHES



MODULAR MOUNTING-PANEL SYSTEM		
8HG 716 734-001		END PIECE
8HG 716 735-001		MIDDLE PIECE



Two end pieces are required to make a mounting panel.
By adding middle pieces, this panel can be extended as required.



BLANKING PLUG FOR EMPTY SWITCH APERTURES	
9HB 713 629-001	



WARNING LIGHTS		
2AA 713 628-021		12 VOLT
2AA 713 628-031		24 VOLT
2AA 713 628-041	(LED)	12/24 VOLT
Bulbs to Suit	12V 24V	8GP 002 095-122 8GP 002 095-243



WARNING LIGHTS		
9FF 713 627-001		12 VOLT
9FF 713 627-011		24 VOLT
9FF 713 627-031	(LED)	12/24 VOLT
Bulbs to Suit	12V 24V	8GP 002 095-122 8GP 002 095-243

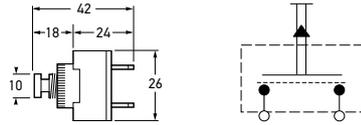


CONNECTORS		
8JA 713 631-001	(For switch)	8 POLE
8JA 715 600-001	(For bulb holder)	2 POLE
8KW 905 512-032	8573 (For connectors - Pack of 100)	BRASS TERMINALS

SYMBOL CARDS FOR SWITCHES 007 832...					
Part Number	Symbol	Symbol Card	Part Number	Symbol	Symbol Card
9XT 713 630-001	Green	Without symbol	9XT 714 300-201		Battery
9XT 713 630-011	Black	Without symbol	9XT 713 630-181		Window lift
9XT 713 630-021	Red	Without symbol	9XT 713 630-101		Windscreen
9XT 713 630-031	Yellow	Without symbol	9XT 713 630-121		Window wiper/wash
9XT 713 630-301		Light	9XT 713 630-131		Windscreen wash
9XT 714 300-131		Main beam	9XT 713 630-521		Defroster
9XT 713 630-421		Work lamp front	9XT 713 630-461		Air horn
9XT 713 630-701		Work lamp rear	9XT 713 630-201		Heater
9XT 714 300-141		Flasher lamp	9XT 713 630-221		Heater fan
9XT 713 630-391		Warning lamp	9XT 713 630-691		Slow
9XT 713 630-371		Work light	9XT 713 630-551		Front door
9XT 713 630-281		Rotating beacon	9XT 713 630-561		Rear door
9XT 713 630-711		Rotating beacon	Fan		
9XT 714 300-011		Parking brake	9XT 713 630-251		Fast
Interior Lighting					
9XT 713 630-271		High			

Momentary Spring Return Switch - Off-(On)

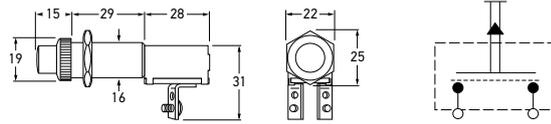
Off-momentary on push button (spring return).



6JF 905 371-101	4507		OFF-(ON)
Mounting	12mm diameter opening.		
For Panels	Up to 4mm thick.		
Maximum Load	6A @ 12V		

Momentary Spring Return Push Button Starter Switch - Off-(On)

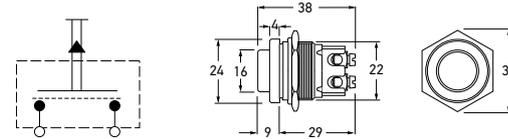
Brass construction. Chrome plated face nut and button. Off-momentary on push button (spring return).



6JF 905 311-002	2763		OFF-(ON)
Mounting	16mm diameter opening.		
For Panels	Up to 25mm thick.		
Maximum Load	20A @ 12V 10A @ 24V		

Momentary Spring Return Push Button Switch - Off-(On)

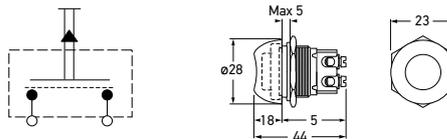
Off-momentary on push button (spring return) switch.



6JF 001 571-004	4501		OFF-(ON)
Mounting	22mm diameter opening.		
For Panels	Up to 6mm thick.		
Maximum Load	16A @ 12V 8A @ 24V		

Momentary Spring Return Push Button Switch - Off-(On)

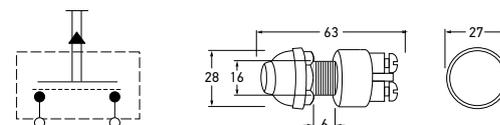
Water resistant push button type switch with rubber cap. Off-momentary on push button (spring return).



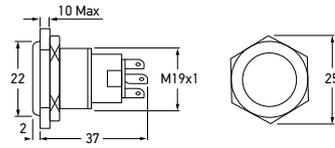
6JF 001 571-152	4503		OFF-(ON)
Mounting	23mm diameter opening.		
For Panels	Up to 2mm thick.		
Maximum Load	16A @ 12V 8A @ 24V		
Do not remove rubber cap/front face nut when fitting.			

Momentary Spring Return Push Button Switch - Off-(On)

Water resistant starter switch. Off-momentary on push button (spring return).



6JB 905 371-002	4506		OFF-(ON)
Mounting	16mm diameter opening.		
For Panels	Up to 10mm thick.		
Maximum Load	60A @ 12V 40A @ 24V		



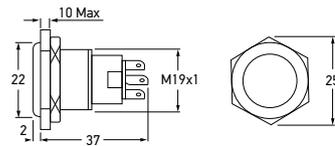
12 VOLT		24 VOLT		
8HG 958 455-001		8HG 958 455-101		RED
8HG 958 455-011		8HG 958 455-111		BLUE
Mounting	19mm diameter opening.			
Maximum Load	5A			
Protection	IP 67 (Protection against dust and temporary water immersion)			
For Panels	Up to 10mm thick.			
Accessories	8KB 990 258-021 Switch pigtail loom			

Stainless Steel Latching Switch with LED Ring - Off-On

Exterior durable, 304 stainless steel switches featuring a ring of LED light. These through panel mount switches are ideal for switching lighting or installing into custom switch panels. The light rings may be wired to show power to a system or signal circuit activation.



8KB 990 258-021



12 VOLT		24 VOLT		
8HG 958 455-201		8HG 958 455-301		RED
8HG 958 455-211		8HG 958 455-311		BLUE
Mounting	19mm diameter opening.			
Maximum Load	5A			
Protection	IP 67 (Protection against dust and temporary water immersion)			
For Panels	Up to 10mm thick.			
Accessories	8KB 990 258-021 Switch pigtail loom			

Stainless Steel Momentary Switch with LED Ring - Off-(On)

Exterior durable, 304 stainless steel switches featuring a ring of LED light. These through panel mount switches are ideal for switching lighting or installing into custom switch panels. The light rings may be wired to show power to a system or signal circuit activation.



8KB 990 258-021

12 VOLT		24 VOLT		
8HG 958 456-001		8HG 958 456-101		RED
Mounting	19mm diameter opening.			
Sound Level	>80dB (1m)			
Protection	IP 50 (Protection against dust)			
For Panels	Up to 10mm thick.			

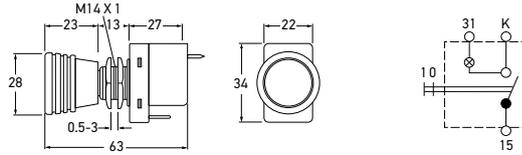
Stainless Steel Buzzer with LED Ring

Exterior durable, 304 stainless steel warning buzzer to match stainless steel switches (above). Also feature a ring of LED light.



Illuminated Switch - Off-On

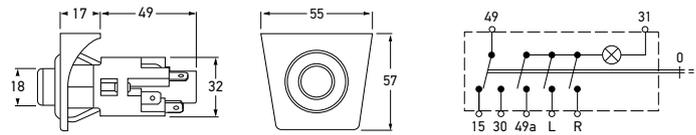
Knob incorporates red or green pilot lamp.



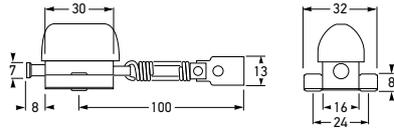
6ED 004 778-014	4412		RED
Mounting	14mm diameter opening.		
For Panels	Up to 6mm thick.		
Maximum Load	10A @ 12V 5A @ 24V		
Bulb to Suit	12V	8GP 002 095-122	
	24V	8GP 002 095-243	

Hazard Warning Switch

For cars, trucks, buses with and without trailers. Black plastic mounting panel. Red knob with pilot lamp. Includes 8 pole multiple adaptor. Push-on 6mm terminals supplied. Wiring diagram and instructions are included.



6HF 001 579-081	5227		OFF-ON
Mounting	29mm diameter opening.		
Maximum Load	7A @12V		
For Panels	Up to 3mm thick.		
Bulbs to Suit	12V	8GP 002 066-123	
	24V	8GP 002 066-243	

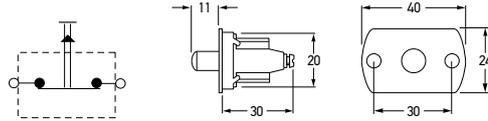


6DD 905 374-002	4560		OFF-ON
Maximum Load	10A @ 12V 5A @ 24V		



Stop Lamp Switch - Off-On

Normally open, contacts are closed when tension is applied to the spring. Complete with splash proof rubber cap. Brake linkage clamp 6mm diameter.

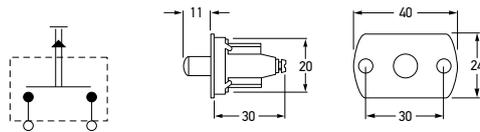


6ZF 003 549-004	4550		ON-OFF
Mounting	21mm diameter opening.		
Maximum Load	2A @ 12V 1A @ 24V		



Door Contact Switch - On-Off

Switch closes circuit if door is opened.

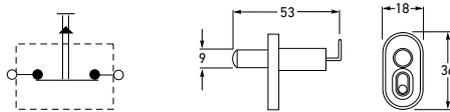


6ZF 003 549-023	4551		OFF-ON
Mounting	21mm diameter opening.		
Maximum Load	2A @ 12V 1A @ 24V		



Door Contact Switch - Off-On

Switch opens circuit if door is opened. May be used as safety cut-off switch.

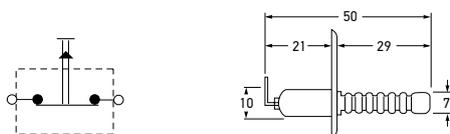


6ZF 905 373-002	4553		ON-OFF
Mounting	12mm diameter opening and screw.		
Maximum Load	3.5A @ 12V		
Plunger automatically adjusts to door gap on initial operation.			



Door Contact Switch - On-Off

Switch closes circuit if door is opened. Corrosion proof black plastic. Rubber seal. Push-on terminal.



6ZF 905 373-011	4554		ON-OFF
Mounting	10mm diameter opening and screw.		
Maximum Load	5A @ 12V		

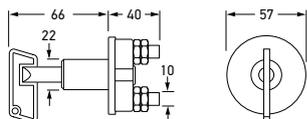


Door Contact Switch - On-Off

Extended arm which may be cut to length to suit opening.

Battery Master Switch

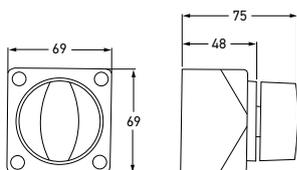
Suitable for cars and medium sized trucks. Complete with removable key. For interrupting circuits (prevents theft and short circuit).



6EK 002 843-052	4650		OFF-ON
Mounting	22mm diameter opening		
Maximum Load	12V 24V	1000A for up to 10 seconds. 500A for up to 10 seconds.	
Maximum Continuous Load	12/24V - 50A at a maximum ambient temperature of 80°C with 35mm ² lead, connected with ring-type terminals.		
Termination	2 x M10 studs.		
Spare Part	9SL 706 729-013 Spare key		
Switch not designed for Marine applications.			

Battery Master Switch

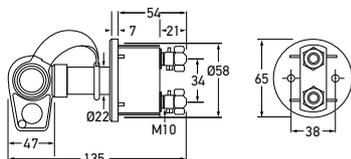
Suitable for cars and medium sized trucks. Complete with removable key.



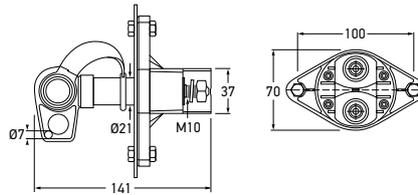
6EK 998 540-002	4640		OFF-ON
Mounting	Recess or surface mount.		
Maximum Load	12/24V	1250A for up to 10 seconds	
Maximum Continuous Load	12/24V	275A	
Termination	2 x M10 studs.		
Spare Part	9SL 980 832-001 Spare key		

Battery Master Switch

Suitable for cars and medium sized trucks, with a continuous rating of 250 amps. Provides effective protection against theft and fire in case of accidents. With sealing cap when not in use which doubles as a key holder.



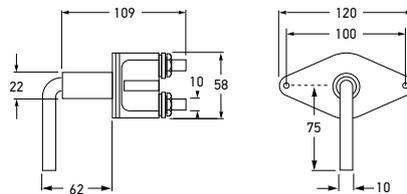
6EK 002 843-141	4649		OFF-ON
Mounting	22mm diameter opening.		
Maximum Load	24V	2000A for 5 seconds	
Maximum Continuous Load	12/24V	250A	
Termination	2 x M10 studs.		
Protection	IP 65 (Protection against dust and water jets)		



6EK 002 843-121	4648		OFF-ON
Mounting	21mm diameter opening.		
Maximum Load	24V	2500A for 10 seconds	
Maximum Continuous Load	12/24V	500A	
Termination	2 x M10 studs.		
Protection	IP 65 (Protection against dust and water jets)		

High Capacity Battery Master Switch

Suitable for trucks and other commercial machinery, with a high continuous rating of 500 amps. Provides effective protection against theft and fire in case of accidents. With sealing cap when not in use which doubles as a key holder.



6EK 001 559-001	4653		OFF-ON
Mounting	22mm diameter opening.		
Maximum Load	12V 24V	5000A for 10 seconds 2500A for 10 seconds	
Maximum Continuous Load	12/24V	100A continuous at a maximum ambient temperature of 60°C with 50mm ² lead connected with ring-type terminals.	
Termination	2 x M10 studs.		
Protection	IP X4 (Protection against water splashing)		
Spare Part	9SL 042 991-003	Spare key	
Switch not designed for Marine applications.			

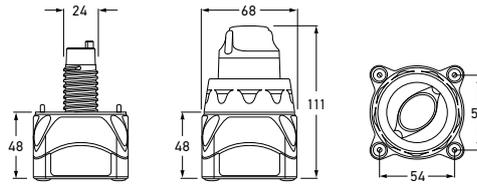
Heavy Duty Battery Master Switch

For trucks, buses and earth moving equipment. Complete with removable key.



**Battery Master Switch
- Threaded Collar**

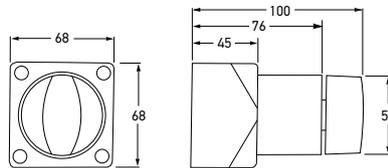
Battery master switch with threaded collar. Suitable for cars and medium sized trucks. Complete with removable key, labelled handle and removable back cover. For interrupting circuits (prevents theft and short circuit).



1GJ 980 833-001	4722		OFF-ON
Mounting	Recess or surface mount. 24mm diameter opening.		
Maximum Load	12/24V	1250A for up to 10 seconds.	
Maximum Continuous Load	12/24V	275A	
Termination	2 x 10mm studs.		
Protection	IP 56 (Protection against solid foreign objects up to 1mm and powerful water jets)		

Remote Operated Battery Master Switch

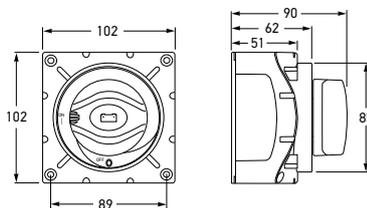
Battery switch with tin-plated copper studs and nuts. Can be operated manually or remotely with a separate switch (not supplied). Suitable for mounting alongside battery reducing cable lengths to starter motor. Complete with removable key and 3 way DTM plug.



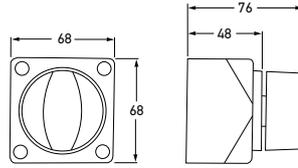
6EN 980 835-001	4724		OFF-ON
Mounting	Recess or surface mount. 53mm diameter opening.		
Voltage	12/24V		
Power Consumption	2W @ 12V when operating, 0.25W static.		
Maximum Load	12/24V	1250A for up to 10 seconds.	
Maximum Continuous Load	12/24V	275A	
Termination	2 x 10mm studs.		
Cable Length	500mm		

Heavy Duty Battery Master Switch

For commercial use. Features sliding contact for self cleaning.



6EK 998 540-062	4720		OFF-ON
Mounting	Recess or surface mount. 85mm diameter opening.		
Maximum Load	12/24V	2500A for up to 10 seconds.	
Maximum Continuous Load	12/24V	600A	
Termination	2 x 12mm studs.		
Protection	IP 56 (Protection against solid foreign objects up to 1mm and powerful water jets)		

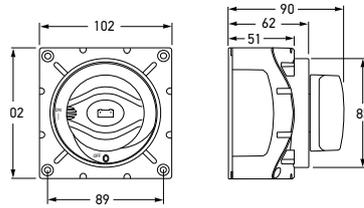


Battery Selector Switch

Battery switch to select either from two power sources or combine together. Will also isolate from the power sources.



2SL 980 834-001	4723		OFF-B1-BOTH-B2
Mounting	Recess or surface mount.		
Maximum Load	12/24V	1000A for up to 10 seconds.	
Maximum Continuous Load	12/24V	200A	
Termination	3 x 5/16" studs.		
Protection	IP 56 (Protection against solid foreign objects up to 1mm and powerful water jets)		



Battery Selector Switch

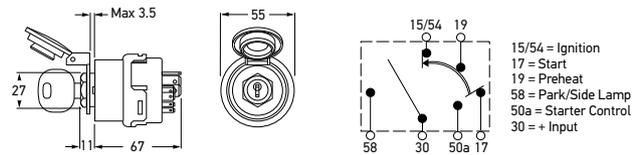
Battery switch to select either from two power sources or combine together. Will also isolate from the power sources.



6EB 998 540-202	4721		OFF-B1-BOTH-B2
Mounting	Recess or surface mount. 85mm diameter opening.		
Maximum Load	12/24V	1500A for up to 10 seconds	
Maximum Continuous Load	12/24V	350A	
Termination	3 x 10mm studs.		
Protection	IP 56 (Protection against solid foreign objects up to 1mm and powerful water jets)		

Diesel Pre-heating Starter Switch

Pre-heating starter switch supplied with two keys. Key removes in park and off.



6JB 003 959-001	4005	
Mounting	27mm diameter opening.	
For Panels	Up to 3.5mm thick.	
Function	5 position switch (park, off, driving, pre-heat, start).	

TERMINAL	POSITION	FUNCTION	CURRENT @ 24V
30-58	P	Park Lamps	4A
30-15/54	1	Driving	18A
30-19	2	Preheat	35A
30-50a/17	3	Start	5A/35A

Ignition and Starter Switch

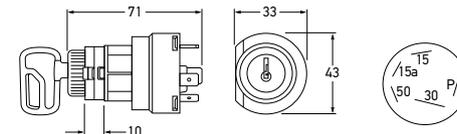
Switch with spring loaded return. Supplied with two keys.



6JB 950 505-002	4008	
Mounting	19mm diameter opening.	
For Panels	Up to 19mm thick.	
Maximum Load	@12V ignition 25A, start 12A, accessory 15A.	
Spare Part	Blank key number Silca BH4.	
Function	Four position switch (accessory, off, ignition, start).	

Heavy Duty Ignition and Starter Switch

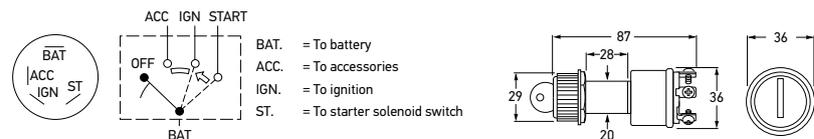
Heavy duty ignition and starter switch, featuring plastic outer construction for maximum protection against damage. Supplied with two keys.



6JK 905 339-002	4008HD	
Mounting	19mm diameter opening.	
For Panels	Up to 10mm thick.	
Maximum Load	@12V park 20A, ignition 20A, start 25A.	
Function	Four position switch (park, off, ignition, start). Key removes in park and off.	

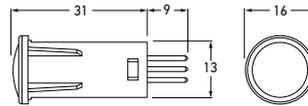
Ignition and Starter Switch

Four position switch with spring loaded return. Four screw terminals.



6JB 905 313-002	2766	
Mounting	21mm diameter opening.	
For Panels	Up to 25mm thick.	
Maximum Load	@12V ignition 5A, start 5A, accessory 10A.	
Function	Four position switch (accessory, off, ignition and start)	

ACCESSORIES



2AA 905 300-002	2708		RED
2AA 905 300-012	2709		GREEN
2AA 905 300-022	2710		BLUE
2AA 905 300-032	2711		AMBER

Mounting 12.5mm diameter opening.

Voltage	12V
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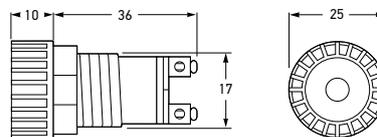
Suitable for 12V only. Bulb not replaceable.

Pilot Lamp - 12 Volt

Panel push fit pilot lamp with non-replaceable bulb. See below for function descriptions.



2AA 905 300-012 2AA 905 300-022 2AA 905 300-032



2AA 905 301-002	2712		RED
2AA 905 301-012	2713		GREEN
2AA 905 301-022	2714		BLUE
2AA 905 301-032	2715		AMBER

Mounting 17mm diameter opening.

Bulbs to Suit	12V	8GP 002 068-123
	24V	8GP 002 068-244

Pilot Lamp

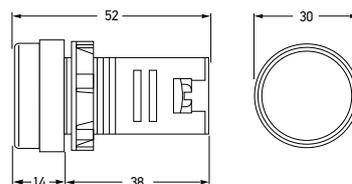
Pilot lamp utilizing bayonet based bulb for use under heavy duty conditions. See below for function descriptions.



2AA 905 301-012 2AA 905 301-022 2AA 905 301-032

FUNCTION DESCRIPTIONS

RED	Ignition, handbrake and hazard warning lamps
GREEN	Indicator lamps
BLUE	Main beam and auxiliary headlamps
AMBER	Fog lamps



LED Pilot Lamp

Heavy duty multi-chip LED pilot lamp featuring shock-resistant one-piece construction for long service life and polycarbonate lens. See left for function descriptions.



2AA 910 233-032 2AA 910 233-012

2AA 910 233-042	2716		RED
2AA 910 233-102	271624V		RED
2AA 910 233-032	2717		GREEN
2AA 910 233-092	271724V		GREEN
2AA 910 233-012	2718		AMBER
2AA 910 233-062	271824V		AMBER
2AA 910 233-022	2720		BLUE
2AA 910 233-072	272024V		BLUE

Mounting 22mm diameter opening.

For Panels	Up to 38mm thick.
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Voltage	12V or 24V AC/DC
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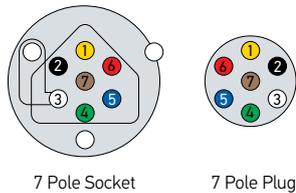
Protection	IP 65 (Protection against dust and water jets) when installed.
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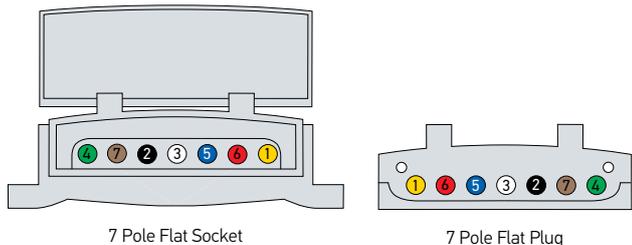
2AA 910 233-022

Trailer Connector Wiring Specifications

Cable Entry View



Front View



7 POLE CONNECTOR WIRING SPECIFICATIONS	
Terminal Number	Connect to
1	Left-hand flasher lamps
2	Reversing lamps (optional)
3	Earth return
4	Right-hand flasher lamps
5	Service brakes (or Auxiliary, optional)
6	Stop lamps
7	Rear position, number plate and clearance lamps

Where service brakes are not fitted, terminal no.5 may be used for auxiliaries.

7 Pole Flat Socket

Impact resistant, UV stabilised plastic spring loaded lid. Nickel plated contacts for excellent electrical performance.



8JB 910 032-011	4920	
8JB 910 032-017	4920BULK	PACK OF 50
Maximum Load	20A @ 12V (total) 10A @ 24V (total)	

7 Pole Flat Plug

Impact resistant, UV stabilised plastic. Nickel plated contacts for excellent electrical performance.



8JA 910 032-001	4921	
8JA 910 032-007	4921BULK	PACK OF 50
Maximum Load	20A @ 12V (total) 10A @ 24V (total)	

7 Pole Round 12V Spiral Cable



8KA 004 797-021	
Material	Polyurethane with alloy plugs
Cable	6 x 1.0mm ² + 1 x 1.5mm ²
Cable Length	Up to 4.0m
Compliance	ISO 1724 / ISO 6722

ACCESSORIES

8JB 001 943-004	4901	
Maximum Load	16A @ 12V with 1.5mm ² cable (total).	25A @ 12V with 2.5mm ² cable (total).
Accessory	9GD 735 641-002 Gasket with cable exit	

7 Pole Plastic Socket

Black plastic socket with removable contact set. 8JB 001 943-081 with disconnecting contact for rear fog or rear parking sensors.



9GD 735 641-002

8JA 001 930-004	4902	
Maximum Load	16A @ 12V with 1.5mm ² cable (total).	25A @ 12V with 2.5mm ² cable (total).

7 Pole Plastic Plug

Black plastic plug with strain relief.



8JB 001 939-004	4909	
Maximum Load	16A @ 12V with 1.5mm ² cable (total).	25A @ 12V with 2.5mm ² cable (total).

7 Pole Plastic Socket

Simply stores in boot until required. Requires no permanent bumper mounting.



8JA 001 918-005	4911	
8JA 001 918-007	4911BULK	PACK OF 25
Maximum Load	16A @ 12V with 1.5mm ² cable (total).	25A @ 12V with 2.5mm ² cable (total).

7 Pole Metal Plug

Solid metal plug with cable strain relief.



8JB 001 941-006	4912	
8JB 001 941-007	4912BULK	PACK OF 25
Maximum Load	16A @ 12V with 1.5mm ² cable (total).	25A @ 12V with 2.5mm ² cable (total).

7 Pole Metal Socket

Solid metal socket with removable contact set.



Closed view

7 Pole Heavy Duty Metal Socket with Screw Terminals - N Type



8JB 003 833-003	4907	SOCKET
Maximum Load	15A @ 24V with 1.5mm ² cable (total) 20A @ 24V with 2.5mm ² cable (total)	
Cable	Suitable for cable 9.5 - 12.5mm in diameter.	
Compliance	ISO 1185	

7 Pole Heavy Duty Metal Plug with Screw Terminals - N Type



8JA 003 831-003	4908	PLUG
Maximum Load	15A @ 24V with 1.5mm ² cable (total) 20A @ 24V with 2.5mm ² cable (total)	
Cable	Suitable for cable 9.5 - 12.5mm in diameter.	
Compliance	ISO 1185	

13 Pole (7 + 6) WeST Plug



8JA 005 951-061		PLUG
Maximum Load	15A @ 12V with 1.5mm ² cable (Total)	
Cable	Suitable for 11.5 - 14.0 mm in diameter.	
Compliance	ISO 11446	

13 Pole (7 + 6) WeST Socket



8JB 005 949-031		SOCKET
Maximum Load	15A @ 12V with 1.5mm ² cable (Total)	
Compliance	ISO 11446	
Note: Can be used with standard 7 pole plugs.		

5/7 Pole ABS Socket

Made of black fibreglass reinforced nylon.

8JB 007 645-021		CRIMP
8JB 007 645-031		SCREW
Mounting	54mm diameter opening.	
Maximum Load	25A @ 24V (total)	
Cable	Suitable for cable 9 - 16mm in diameter.	
Spare Parts	9MK 726 762-831 Crimp contact set – 5 x 1.5mm ² , 2 x 4.0mm ² , 2 x 6.0mm ² , 2 x Blanks.	



5/7 Pole ABS Plug

Made of black fibreglass reinforced nylon.

8JA 007 644-041		CRIMP
8JA 007 644-051		SCREW
Maximum Load	25A @ 24V (total)	
Spare Parts	9MK 726 759-831 Crimp contact set – 5 x 1.5mm ² , 2 x 4.0mm ² , 2 x 6.0mm ² , 2 x Blanks.	
Cable	Suitable for cable 11 - 13mm in diameter.	



Plug-in Socket Tester - 24V

Designed for testing ABS sockets.

8PD 004 508-031		
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7 Pole EBS Spiral Cable - 24 Volt

Spirally coiled cable with 2 plugs and guard grommets. Extremely resistant to high and low temperatures as well as weathering. High resistance to oils and chemicals. Made to withstand repeated bending.

8KA 007 648-021		7 PIN
Cable	7 Pin	5 x 1.5mm ² + 2 x 4.0mm ²
Cable Length	Up to 4.0m	



13 Pole Socket

**8JB 005 949-001****SOCKET**

Maximum Load 16A @ 24V with 1.5mm² cable (total)
25A @ 24V with 2.5mm² cable (total)

Compliance ISO 11446

13 Pole Plug

**8JA 005 951-001****PLUG**

Maximum Load 16A @ 24V with 1.5mm² cable (total)
25A @ 24V with 2.5mm² cable (total)

Compliance ISO 11446

13 Pole to 7 Pole Adaptors

Adaptors for connecting a 13 pole vehicle socket with a 7 pole trailer plug.

**8JA 005 952-001**

Maximum Load 16A @ 12V (total)

To suit late model vehicles with 13 pole plugs to standard round 7 pole, 250mm long.

**8JA 005 952-121**

Maximum Load 16A @ 12V (total)

To suit late model vehicles with 13 pole plugs to standard flat 7 pole, 250mm long.

8JA 007 241-021		SCREW
8JA 007 241-031		CRIMP
Maximum Load	16A @ 24V with 1.5mm ² cable (total) 25A @ 24V with 2.5mm ² cable (total)	
Cable	Suitable for cable diameter measuring 12 - 18mm.	

15 Pole Plastic Plug

Plastic plug with rubber gasket and nickel-plated pins. Featuring fibre glass reinforced polyamide housing and mechanical strain relief. Secure arrest with rust resistant metal bail (ISO 12 098).



15 Pole Plastic Socket

Plastic socket with lid, rubber gasket and nickel-plated pins. Featuring fibre glass reinforced polyamide housing. PC gland for cable exit.



8JB 007 242-011		SCREW
8JB 007 242-021		CRIMP
Maximum Load	16A @ 24V with 1.5mm ² cable (total) 25A @ 24V with 2.5mm ² cable (total)	
Cable	Suitable for cable diameter measuring 12 - 18mm.	

15 Pole Spiral Cable - 24 Volt

Spirally coiled cable with 2 plugs and guard grommets. Extremely resistant to high and low temperatures as well as weathering. Maximum resistance to oils and chemicals. Made to withstand repeated bending.



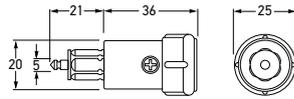
8KA 007 648-041	
Cable	12 x 1.5mm ² plus 3 x 2.5mm ² leads.
Cable Size	4m (stretched).

Parking Socket for EBS Plugs



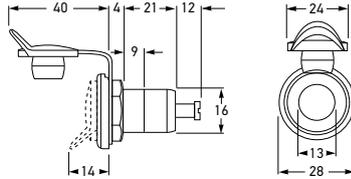
8HG 007 647-001	
Mounting	54mm diameter opening

2 Pole Plug



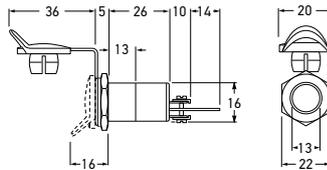
8JA 002 262-004	4914		PLUG
Maximum Load	16A @ 12V 8A @ 24V		
Sockets to Suit	8JB 001 946-025 8JB 004 777-012 8JB 004 123-006 8JB 905 388-002		

2 Pole Socket with Cover



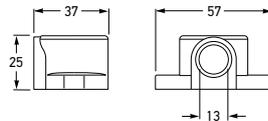
8JB 001 946-025	4915		SOCKET
Mounting	19mm diameter opening.		
Maximum Load	16A @ 12V 8A @ 24V		

2 Pole Socket with Cover - Insulated Earth



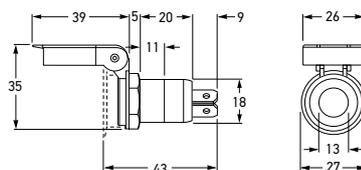
8JB 004 777-012	4916		SOCKET
Mounting	19mm diameter opening.		
Maximum Load	16A @ 12V 8A @ 24V		

2 Pole Surface Mount Socket



8JB 004 123-006	4917		SOCKET
Mounting	Surface mount.		
Maximum Load	16A @ 12V 8A @ 24V		

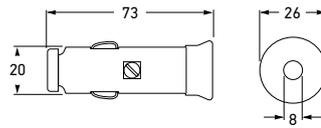
2 Pole Socket with Metal Earth Tab and Cover



8JB 905 388-002	4918		SOCKET
Mounting	22mm diameter opening.		
Maximum Load	16A @ 12V 8A @ 24V		

2 Pole Power Plug

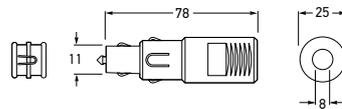
Suitable for standard cigarette sockets.



8JA 905 395-002	4950		PLUG
Maximum Load	8A @ 12V 4A @ 24V		
Socket to Suit	8JB 008 023-051		

2 Pole Fused Power/DIN Plug

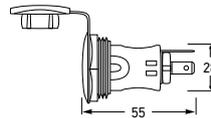
Combination lighter/DIN 2 pole plug with in-built 8A ceramic type fuse suitable for both cigarette lighter and DIN ISO 4165 sockets (standard 2 pole sockets).



8JA 007 589-004	4952		PLUG
Maximum Load	8A @ 12V		
Sockets to Suit	8JB 001 946-025 8JB 004 777-012 8JB 004 123-006 8JB 905 388-002 8JB 008 023-051		

2 Pole Power Socket

2 pole lighter size power socket with protective cover for connection of a variety of electrical accessories.



8JB 008 023-051	4943R	SOCKET
Maximum Load	15A @ 12V	

Super Tone Horn - Set of 2

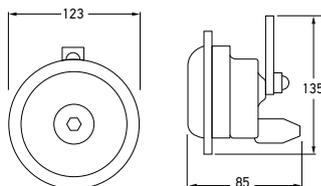
Traffic blaster, generates a penetrating strong tone. Robust housing in a first-class design with striking grille. 3AG 003 399-081 also suitable for off-road use.



3AG 003 399-801



3AG 003 399-081 Rear view



3AG 003 399-801	6036 (2 Horns)		12 VOLT
3AG 003 399-081	6037 (2 Horns)		
3AG 003 399-101	603724V (2 Horns)		24 VOLT
Power Consumption	3AG 003 399-801 66W x 2 3AG 003 399-081 78W x 2 3AG 003 399-101 84W x 2		
Frequency	3AG 003 399-801 300/500Hz 3AG 003 399-081 3AG 003 399-101 375/500Hz		
Sound Level	118dB		



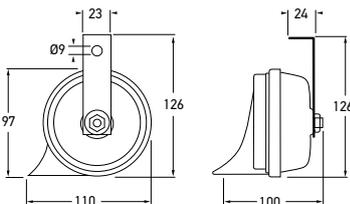
3AG 003 399-801 Packaging 3AG 003 399-081/...101 Packaging

Twin Tone Scroll Horn - Set of 2

Includes 12 volt relay.



Packaging



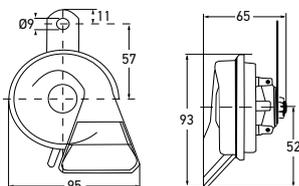
3FH 007 424-801	6004 (2 Horns)		12 VOLT
Power Consumption	72W x 2		
Voltage	12V		
Frequency	High Tone 500Hz Low Tone 400Hz		
Sound Level	Combined 110dB @ 2.0m		

Twin Tone Scroll Horn - Set of 2

Galvanised metal housing and plastic trumpet. Safe from corrosion.



Packaging



3FH 007 728-831	6005 (2 Horns)		12 VOLT
Power Consumption	72W x 2		
Voltage	12V		
Frequency	High Tone 500Hz Low Tone 400Hz		
Sound Level	Combined 110dB @ 2.0m		

Low and High Tone Disc Horns

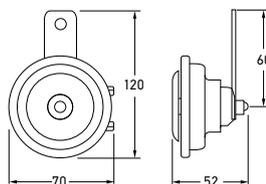
Single bolt mount. 92mm diameter.

LOW TONE		HIGH TONE		
3AL 002 952-013	6001	3AL 980 315-001	6003	12 VOLT
3BA 002 768-383	6002	3AL 980 315-021	6020	24 VOLT
Power Consumption	72W			
Frequency	Low tone	335Hz		
	High tone	435Hz		
Sound Level	110dB @ 2.0m			



3AL 002 952-013

3AL 980 315-001



S70 Compact Horn

Single bolt mount.

3AL 922 196-011	6029	12 VOLT
Power Consumption	30W	
Voltage	12V	
Protection	IP X4K (Protection against high pressure water splash)	
Frequency	420Hz	
Sound Level	112dB @ 2m	
Connector	Male blade terminals	
Compliance	ECE R28	

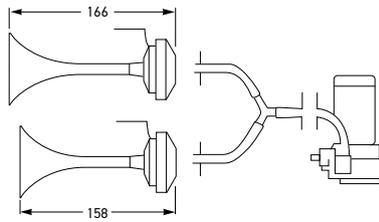


Dual Trumpet Air Horn Kit

Installation accessories included.



Blister packaging



3PB 003 001-651	6014		12 VOLT
3PB 003 001-661	6027		24 VOLT
Mounting	Installation accessories included.		
Current Draw	20A @ 12V 10A @ 24V		
Frequency	840/795Hz		
Sound Level	117dB		
Operating Pressure	110Kpa (16psi)		

Vacuum Pump UP28

The UP28 vacuum pump can be triggered on demand to support the brake booster. If the combustion engine does not supply sufficient vacuum under certain operating conditions, i.e. cold start/warming up phase, the UP28 supplies the vacuum to ensure brake booster operation.

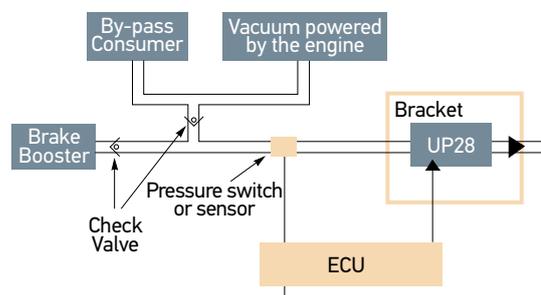
The UP28 is installed parallel to the main combustion engine. The UP28 sucks in filtered air via the brake booster and flexible pipes. To enable accurate pressure measurement by the control unit, non-return pressure valves are installed (see diagram). The electric contact between the UP28 and the control unit is established via a cable equipped with an engine compartment plug attached to the vacuum pump.

The braking system is one of the most important systems in any vehicle. To ensure that a constant and effective brake power is accessible at all times, the use of a vacuum pump is often necessary. Most vehicle brake boosters use a vacuum that is generated by the naturally aspirated engine. Current engine development projects mainly aim to increase the efficiency of drive concepts and further conserve resources. Substantially lower fuel consumption can be achieved by e.g. running the engine as unthrottled as possible, which under certain operating conditions, may result in an insufficient vacuum supply from the combustion engine for brake boost.

8TG 009 428-087	
Operating Temperature Range	- 40 °C ... + 100 °C (< 20 min. up to + 120 °C)
Voltage	10.5 - 16V DC
Maximum Vacuum Level	≥ 86% (Below ambient pressure level)
Pressure build-up time at 100 hPa ambient pressure, 12V	$p_{abs} = 500 \text{ mbar in } t \leq 6 \text{ sec}$ $p_{abs} = 300 \text{ mbar in } t \leq 12 \text{ sec}$
Test volume	Approx. 3.2 l
Pump Operating Time	> 600 hours
Switching Operations	> 450,000



OPERATION DIAGRAM



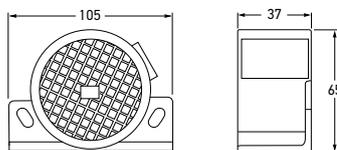
ACCESSORIES



3SL 980 316-031	6050SA	77-97dB
Mounting	Integrated universal mounting bracket for upright, pendant or surface mounting.	
Voltage	12-24V	
Current Draw	Less than 1A.	
Frequency	White noise/broadband.	
Sound Level	77-97 ± 4dB @ 1.2m	
Temperature	Operating range -40 to 85°C.	
Protection	IP 68 (Protection against dust and water immersion)	
Compliance	SAE J994	CE

Broadband Reversing Alarm

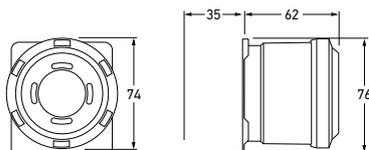
Reversing alarm with multi-frequency broadband sound.



3SL 980 316-021	6052	97dB
Mounting	Integrated universal mounting bracket for upright, pendant or surface mounting.	
Voltage	12-24V	
Current Draw	Max. 0.5A	
Frequency	White noise/broadband.	
Sound Level	97 ± 4dB @ 1.2m	
Other specifications	as 3SL 980 316-031	

Broadband Reversing Alarm

Reversing alarm with multi-frequency broadband sound.



3SL 980 316-001	6042	87dB
3SL 905 415-001	6043	97dB
3SL 905 415-011	6044	112dB
Mounting	Universal mounting comes complete with heavy-gauge plated steel mounting bracket. Can be installed on positive and negative ground vehicles.	
Voltage	12-48V	
Current Draw	Less than 0.20A	
Frequency	80 signals per minute +/- 20%	
Sound Level	3SL 980 316-001	87dB @ 1.2m
	3SL 905 415-001	97dB @ 1.2m
	3SL 905 415-011	112dB @ 1.2m
Temperature	Operating range -40°C to 74°C	
Protection	Protection against dust and high pressure washing	
Compliance	SAE J994	

Evacuator Plus Heavy Duty Reversing Alarm

The Evacuator Plus heavy duty reversing and warning alarm features a lightweight piezoelectric output circuit.

The housing is constructed of high impact ABS plastic resin and is environmentally sealed against moisture, dust and corrosion. Evacuator Plus reversing and warning alarms are steam cleanable.



3SL 980 316-001



3SL 905 415-001 3SL 905 415-011

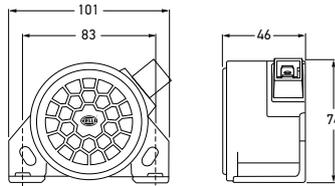
ACCESSORIES

Heavy Duty Reversing Alarm

Heavy duty reversing alarm with integral AMP connection and fixed sound pressure levels of 97/107dB @ 1.2 metres. Epoxy encapsulated circuit boards offer protection against humidity, dirt and vibration.



8KA 990 258-011



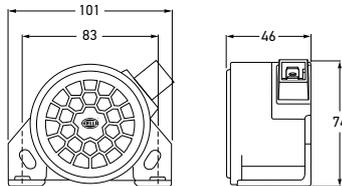
3SL 009 148-011	6009	97dB
3SL 009 148-021	6010	107dB
Mounting	Integrated universal mounting bracket for upright, pendant or surface mounting.	
Voltage	12-24V	
Current Draw	3SL 009 148-011	0.2A
	3SL 009 148-021	0.3A
Frequency	60 signals per minute (± 20%).	
Sound Level	3SL 009 148-011	97 ± 4dB @ 1.2m
	3SL 009 148-021	107 ± 4dB @ 1.2m
Temperature	Operating range -40°C to 85°C.	
Protection	IP 66 (Protection against dust and high pressure washing)	
Spare Part	8KA 990 258-011	Plug and lead
Compliance	SAE J994	

Heavy Duty Reversing Alarm

Heavy duty reversing alarm with integral AMP connection. Automatically adjusts sound pressure level to changing noise environments. Solid state electronics, self-adjusting to the minimum of 5dB above surrounding noise levels effectively reducing irritation. Epoxy encapsulated circuit boards offer protection against humidity, dirt and vibration.

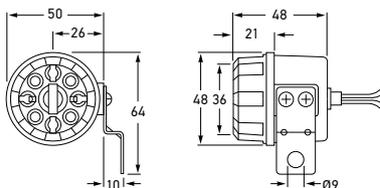


8KA 990 258-011



3SL 009 148-101	6013	82-102dB
Mounting	Integrated universal mounting bracket for upright, pendant or surface mounting.	
Voltage	12-24V	
Current Draw	0.4A	
Frequency	60 signals per minute (± 20%).	
Sound Level	82 - 102 ± 4dB @ 1.2m	
Temperature	Operating range -40°C to 85°C.	
Protection	IP 66 (Protection against dust and high pressure washing)	
Spare Part	8KA 990 258-011	Plug and lead
Compliance	SAE J994	

ACCESSORIES



3SL 950 751-012	6023		12-36 VOLT
Current Draw	Less than 50mA.		
Sound Level	89 +/- 2dB (at 1.2m)		

Multivolt™ Reversing Alarm

Durable intermittent reversing alarm. Easily fitted to any car or truck's reversing lamp wiring system or wire to a switch on your dashboard.



3SL 905 415-031	6048	87-112dB AUTO
Mounting	Universal mounting brackets.	
Voltage	12-24V	
Current draw	Less than 0.50A	
Frequency	80 signals per minute.	
Sound level	87 to 112dB @ 1.2m	
Temperature	-40°C to 77°C	
Protection	IP 55 (Protection against dust and water jets)	
Compliance	SAE J994	

Reversing Alarm

Durable intermittent reversing alarm. Easily fitted to any car or truck's reversing lamp wiring system or wire to a switch on your dashboard.



3SL 905 415-041	6049	107/112dB MANUAL
Mounting	Universal mounting brackets.	
Voltage	12-24V	
Current draw	Less than 0.8A	
Frequency	80 signals per minute.	
Sound level	107 or 112dB @ 1.2m	
Temperature	-40°C to 77°C	
Protection	IP 55 (Protection against dust and water jets)	
Compliance	SAE J994	

Reversing Alarm

Durable intermittent reversing alarm. Easily fitted to any car or truck's reversing lamp wiring system or wire to a switch on your dashboard.

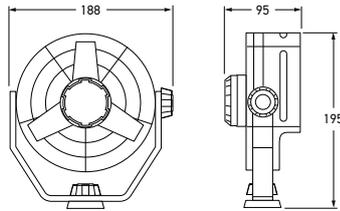


Reactor alarms comply with SAE J994 requirements and OSHA regulations.

ACCESSORIES

Turbo Fan

Turbo fans provide high capacity at low power consumption. Features include impact resistant housing, low-noise operation and soft plastic impellers, shielded by sturdy protective grille for added safety. Fans can be turned in all directions, and locked in position. Airflow can be regulated by two-stage switch.



8EV 003 361-002		12 VOLT
8EV 003 361-022	White	
8EV 003 361-012		24 VOLT
Power Consumption	6.5W	
Cable Length	Pre-wired with 140mm of cable.	
Min. Service Life	5000 hours (tested under extreme conditions)	

Circuit Tester

Circuit Tester for quick fault tracing in vehicle electrical systems. Sturdy metal construction with screw-off cap and testing needle.



8PD 003 798-001	7013
Bulb to suit	24V (M243)
Suits	6, 12 and 24V applications



CRIMPING TOOL - INSULATED TERMINALS

8PE 905 478-012 8271

Specially designed for the handyman and hobbyist, a useful crimping tool that cuts cable, strips cable insulation and crimps all popular insulated terminals.



CRIMPING TOOL - INSULATED TERMINALS

8PE 905 478-021 8272

Spring return hand grips. Cuts and strips insulation from cable measuring 2.5-6mm in diameter (0.75-6mm²). Crimps all popular insulated and non-insulated terminals. Cuts bolts with metric threads M2.6, M3, M3.5, M4, M5.



CRIMPING TOOL - INSULATED TERMINALS

8PE 905 479-001 8273

Adjustable ratchet mechanism and spring release ensures a perfect crimp every time for insulated terminals.



CRIMPING TOOL - NON-INSULATED TERMINALS

8PE 905 479-021 8274

Adjustable ratchet mechanism and spring release ensures a perfect crimp every time for open barrel non-insulated terminals.



DT Connectors

Environmentally sealed connectors rated at -55° to 125°C. Supplied with solid copper crimp contacts, locking wedges and large I.D. removable contacts.

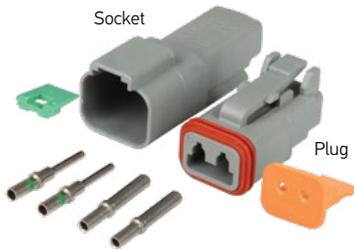


Maximum Load	13A - all contacts	
Spare Parts	8KW 959 764-812	Small I.D. female contact to suit plug
	8KW 959 764-832	Small I.D. male contact to suit socket
	8KW 959 764-852	Large I.D. female contact to suit plug
	8KW 959 764-872	Large I.D. male contact to suit socket
	9GD 959 777-802	Sealing plug

Small I.D. = 1.7mm up to 1.5mm² cable. Large I.D. = 2.0mm up to 2.0mm² cable. Plug and socket kits come complete with terminals and seals.

2 Pole Plug and Socket

Supplied with 4 solid copper crimp contacts and 2 locking wedges. Bulk pack supplied with 2 pole connectors and contacts to suit.



2 POLE PLUG AND SOCKET		
8KW 959 772-821	4960	
2 POLE PLUG		
8JA 959 772-811	4960MF	PACK OF 10
2 POLE SOCKET		
9MK 910 095-002	4960FM	PACK OF 10
2 POLE PLUG KIT		
8JA 959 736-811	4960P	

3 Pole Plug and Socket

Supplied with 6 solid copper crimp contacts and 2 locking wedges.



8KW 959 772-851	4961
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4 Pole Plug and Socket

Supplied with 8 solid copper crimp contacts and 2 locking wedges.



8KW 959 772-861	4962
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6 Pole Plug and Socket

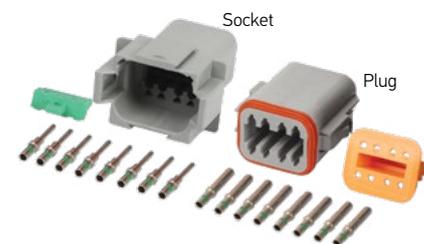
Supplied with 12 solid copper crimp contacts and 2 locking wedges.



8KW 959 774-821	4963
6 PIN PLUG KIT	
8JA 959 736-801	4963P

8 Pole Plug and Socket

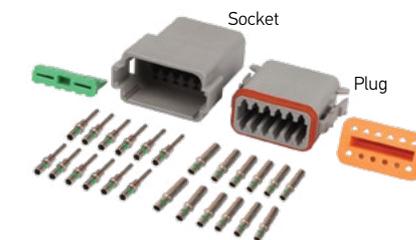
Supplied with 16 solid copper crimp contacts and 2 locking wedges.



8KW 959 774-831	4964
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12 Pole Plug and Socket

Supplied with 24 solid copper crimp contacts and 2 locking wedges.



8KW 959 774-841	4965
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CRIMPING TOOL - DT TERMINALS	
8PE 980 837-001	8275

Specially designed crimping tool with multiple jaws for an even crimp of DT terminals.



CRIMPING TOOL - DT TERMINALS	
8PE 910 118-011	

Capable of crimping both male and female DT terminals.



A PROPER CRIMP

Conductor strands must be visible through the inspection hole.

Crimp centred between the inspection hole and crimp barrel end.

Visual Inspection Checklist

- ✓ NO damaged wire strands.
- ✓ NO missing wire strands.
- ✓ ALL strands entered into contact barrel.

Super Seal Connectors

Super seal connector housings were developed to satisfy increasing requirements for safety and reliability in the field of electrical connections. The connectors can be connected to existing components and used with the equipment presently in use in the automotive industry (sensors, oil pressure sensors, water temperature monitoring circuits, etc.).

- IP 67 (Protection against dust and temporary water immersion)
- Robust and reliable contact. Max. current 14A.
- Prefabricated secondary lock ensures that the terminal is plugged into the housing correctly and prevents slipping out of the connector.



For 'P' and 'S' versions only the bare connector is supplied. Select appropriate seals and terminals to suit. Plug and socket kits come complete with terminals and seals.



1 POLE PLUG AND SOCKET		
8KW 959 881-515	4981P (Pack of 4)	PLUG
8KW 959 881-015	4981S (Pack of 4)	SOCKET



2 POLE PLUG AND SOCKET		
8KW 959 881-811	4982 (Kit)	PLUG AND SOCKET
8KW 959 881-525	4982P (Pack of 4)	PLUG
8KW 959 881-005	4982S (Pack of 4)	SOCKET

Spare Part 9HB 343 699-011 Rubber sealing boot – cable support



3 POLE PLUG AND SOCKET		
8KW 959 881-821	4983 (Kit)	PLUG AND SOCKET
8KW 959 881-535	4983P (Pack of 3)	PLUG
8KW 959 881-035	4983S (Pack of 3)	SOCKET

Spare Part 9HB 332 130-011 Rubber sealing boot – cable support



4 POLE PLUG AND SOCKET		
8KW 959 881-831	4984 (Kit)	PLUG AND SOCKET
8KW 959 881-545	4984P (Pack of 3)	PLUG
8KW 959 881-045	4984S (Pack of 3)	SOCKET



5 POLE PLUG AND SOCKET		
8JA 959 881-555	4985P (Pack of 2)	PLUG
8JA 959 881-055	4985S (Pack of 2)	SOCKET



6 POLE PLUG AND SOCKET		
8KW 959 881-565	4986P (Pack of 2)	PLUG
8KW 959 881-065	4986S (Pack of 2)	SOCKET

ACCESSORIES

8JA 009 256-801	4980
Contents	5 of each connector, plug and socket 100 8KW 959 882-511 Socket terminals 100 8KW 959 882-111 Plug terminals 100 9GD 959 883-001 Yellow seals 100 9GD 959 883-501 Red cavity plugs

Super Seal Connector Kit

Kit contains a variety of super seal connectors.



FEMALE TERMINALS FOR PLUG - PACK OF 50		
8KW 959 882-811	9498001	0.35 - 0.50mm² CABLE
8KW 959 882-511	9498002	0.50 - 1.50mm² CABLE



MALE TERMINALS FOR SOCKET - PACK OF 50		
8KW 959 882-411	9498003	0.35 - 0.50mm² CABLE
8KW 959 882-111	9498004	0.50 - 1.50mm² CABLE



SEALS FOR PLUG/SOCKET - PACK OF 50		
9GD 959 883-201	9498005	GREEN SEAL
9GD 959 883-001	9498006	YELLOW SEAL
9GD 959 883-301	9498007	RED SEAL
9GD 959 883-501	9498009	RED CAVITY PLUG (NO HOLE)



To Suit	9GD 959 883-201	Cable insulation 1.2 - 1.6mm diameter
	9GD 959 883-001	Cable insulation 1.7 - 2.4mm diameter
	9GD 959 883-301	Cable insulation 2.5 - 3.3mm diameter
	9GD 959 883-501	Red cavity plug (no hole)

RUBBER SEALING BOOT - CABLE SUPPORT		
9HB 343 699-011	9498205	2 PIN CONNECTOR
9HB 332 130-011	9498305	3 PIN CONNECTOR



SUPER SEAL TOOLS		
8PE 863 807-391	9498020	CONTACT EXTRACTION TOOL
8PE 863 807-381	9498021	SECONDARY LOCK TOOL

Extraction tools for the popular super seal range of connectors, to assist in disassembly if required.

CRIMPING TOOL - SUPER SEAL TERMINALS	
8PE 980 838-001	8298

Crimping tool designed for use with super seal connector terminals.



ACCESSORIES



8KW 980 300-002
Blister pack shown



8KW 980 300-003
Bulk pack shown



PUSH-ON FEMALE TERMINALS

Part Number	Type	Quantity Per Pack	Size	Cable
8KW 980 300-002	8200	BLISTER PACK	20	6.3mm 2.5 to 3mm cable 0.75 to 1.13mm ² cable
8KW 980 300-003	8500	BULK PACK	100	
8KW 980 300-102	8201	BLISTER PACK	20	6.3mm 4mm cable. 1.84mm ² cable
8KW 980 300-103	8501	BULK PACK	100	
8KW 980 300-202	8202	BLISTER PACK	15	6.3mm 5 to 6mm cable 2.9 to 4.59mm ² cable
8KW 980 300-203	8502	BULK PACK	100	

FULLY INSULATED FEMALE TERMINALS

8KW 980 300-012	8204	BLISTER PACK	12	6.3mm 2.5 to 3mm cable 0.75 to 1.13mm ² cable
8KW 980 300-013	8504	BULK PACK	100	
8KW 980 300-112	8205	BLISTER PACK	12	6.3mm 4mm cable. 1.84mm ² cable
8KW 980 300-113	8505	BULK PACK	100	

PUSH-ON 2-WAY MALE AND FEMALE TERMINALS

8KW 980 300-022	8210	BLISTER PACK	15	6.3mm 2.5 to 3mm cable 0.75 to 1.13mm ² cable
8KW 980 300-023	8510	BULK PACK	100	
8KW 980 300-122	8211	BLISTER PACK	12	6.3mm 4mm cable. 1.84mm ² cable
8KW 980 300-123	8511	BULK PACK	100	
8KW 980 302-012	8212	BLISTER PACK	15	6.3mm
8KW 980 302-013	8512	BULK PACK	100	

BLADE MALE TERMINALS

8KW 980 300-402	8213	BLISTER PACK	15	6.3mm 2.5 to 3mm cable 0.75 to 1.13mm ² cable
8KW 980 300-403	8513	BULK PACK	100	
8KW 980 300-502	8214	BLISTER PACK	12	6.3mm 4mm cable. 1.84mm ² cable
8KW 980 300-503	8514	BULK PACK	100	
8KW 980 300-602	8215	BLISTER PACK	10	6.3mm 5 to 6mm cable 2.9 to 4.59mm ² cable
8KW 980 300-603	8515	BULK PACK	100	

BULLET SINGLE MALE CONNECTORS

8KW 980 301-402	8220	BLISTER PACK	12	2.5 to 3mm cable 0.75 to 1.13mm ² cable
8KW 980 301-403	8520	BULK PACK	100	
8KW 980 301-502	8221	BLISTER PACK	14	4mm cable. 1.84mm ² cable
8KW 980 301-503	8521	BULK PACK	100	

BULLET SINGLE FEMALE CONNECTORS

8KW 980 301-002	8222	BLISTER PACK	12	2.5 to 3mm cable 0.75 to 1.13mm ² cable
8KW 980 301-003	8522	BULK PACK	100	
8KW 980 301-102	8223	BLISTER PACK	14	4mm cable. 1.84mm ² cable
8KW 980 301-103	8523	BULK PACK	100	

CABLE CONNECTORS				
Part Number		Type	Quantity Per Pack	Size Cable
8KW 980 302-002	8230	BLISTER PACK	15	2.5 to 3mm cable 0.75 to 1.13mm ² cable
8KW 980 302-003	8530	BULK PACK	100	
8KW 980 302-102	8231	BLISTER PACK	15	4mm cable. 1.84mm ² cable
8KW 980 302-103	8531	BULK PACK	100	
8KW 980 302-202	8232	BLISTER PACK	10	5 to 6mm cable 2.9 to 4.59mm ² cable
8KW 980 302-203	8532	BULK PACK	100	



QUICK CONNECT CABLE CONNECTORS				
8KW 980 302-322	8235	BLISTER PACK	15	
8KW 980 302-323	8535	BULK PACK	50	



With the use of pliers, connects splices and insulates 0.75 to 1.13mm² (2.5 to 3mm) cable.

EYE TERMINALS					
8KW 980 303-002	8240	BLISTER PACK	25	4.3mm	
8KW 980 303-003	8540	BULK PACK	100		
8KW 980 303-012	8241	BLISTER PACK	20	5mm	2.5 to 3mm cable 0.75 to 1.13mm ² cable
8KW 980 303-013	8541	BULK PACK	100		
8KW 980 303-022	8242	BLISTER PACK	15	6.3mm	
8KW 980 303-023	8542	BULK PACK	100		
8KW 980 303-102	8243	BLISTER PACK	20	5mm	
8KW 980 303-103	8543	BULK PACK	100		
8KW 980 303-112	8244	BLISTER PACK	20	6.3mm	4mm cable. 1.84mm ² cable
8KW 980 303-113	8544	BULK PACK	100		
8KW 980 303-122	8245	BLISTER PACK	15	8.4mm	
8KW 980 303-123	8545	BULK PACK	100		
8KW 980 303-202	8246	BLISTER PACK	12	6.3mm	5 to 6mm cable 2.9 to 4.59mm ² cable
8KW 980 303-203	8546	BULK PACK	100		
8KW 980 303-212	8247	BLISTER PACK	12	8.4mm	
8KW 980 303-213	8547	BULK PACK	100		
8KW 980 303-222	8248	BLISTER PACK	10	9.5mm	
8KW 980 303-223	8548	BULK PACK	100		



NON-INSULATED BRASS LUCAR TERMINAL - WITH LOCK TAB					
8KW 905 512-032	8573	BULK PACK	100	6.3mm	1.84mm ² cable



Garage/Auto Electrical Assortment Kit - 186 Piece

Assortment containing 12 types of HELLA connectors/terminals specifically designed to meet the requirements of the automotive industry.



8KW 980 300-821	8282
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Contents A quantity of 12 complete packs.

Part Number	Description	Quantity
8KW 980 300-002	8200 Push-on female terminal	20
8KW 980 300-102	8201 Push-on female terminal	20
8KW 980 300-202	8202 Push-on female terminal	15
8KW 980 300-022	8210 Push-on 2-way male and female terminal	15
8KW 980 300-122	8211 Push-on 2-way male and female terminal	12
8KW 980 302-002	8230 Cable connector	15
8KW 980 302-102	8231 Cable connector	15
8KW 980 302-202	8232 Cable connector	10
8KW 980 303-012	8241 Eye terminal	20
8KW 980 303-112	8244 Eye terminal	20
8KW 980 303-212	8247 Eye terminal	12

Insulated Terminal and Connector Kit - 800 Piece

Assortment containing 16 types of HELLA connectors/terminals specifically designed to meet the requirements of the automotive industry. Kit includes crimp tool 8PE 905 478-021.



8KW 980 300-831	8284
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Contents 16 types of HELLA connectors/terminals.

Part Number	Description	Quantity
8KW 980 300-002	8200 Push-on female terminal	50
8KW 980 300-102	8201 Push-on female terminal	50
8KW 980 300-012	8204 Fully Insulated female terminal	50
8KW 980 300-112	8205 Fully Insulated female terminal	50
8KW 980 300-402	8213 Blade male terminal	50
8KW 980 300-502	8214 Blade male terminal	50
8KW 980 301-402	8220 Bullet single male connector	50
8KW 980 301-502	8221 Bullet single male connector	50
8KW 980 301-002	8222 Bullet single female connector	50
8KW 980 301-102	8223 Bullet single female connector	50
8KW 980 302-002	8230 Cable connector	50
8KW 980 302-102	8231 Cable connector	50
8KW 980 302-322	8235 Quick connect cable connector	50
8KW 980 303-012	8241 Eye terminal	50
8KW 980 303-112	8244 Eye terminal	50
8KW 980 303-212	8247 Eye terminal	50
8PE 905 478-021	8272 Crimping tool – Insulated terminals	1

**Heat Shrink Insulated Crimp
Terminals Pack of 10**

Fully insulated cable terminals with shrink-on nylon cap either with hot air gun or other heat source. Shrinking temperature 135°C.

Part Number		Type	Colour	Cable Size	Description
8KW 980 300-042	8204S 	BLADE RECEPTACLES	RED	0.5 - 1mm ²	To suit blade terminals 6.3 x 0.8mm. Fully insulated.
8KW 980 300-142	8205S 		BLUE	1.5 - 2.5mm ²	
8KW 980 300-432	8213S 	BLADE TERMINALS	RED	0.5 - 1mm ²	Size of blade terminal 6.3 x 0.8mm.
8KW 980 300-532	8214S 		BLUE	1.5 - 2.5mm ²	
8KW 980 303-032	8240S 	RING CONNECTORS	RED	0.5 - 1mm ²	To suit M4 pins.
8KW 980 303-192	8236S 		BLUE	1.5 - 2.5mm ²	
8KW 980 303-042	8241S 	RING CONNECTORS	RED	0.5 - 1mm ²	To suit M5 pins.
8KW 980 303-132	8243S 		BLUE	1.5 - 2.5mm ²	
8KW 980 303-332	8249S 		YELLOW	4 - 6mm ²	
8KW 980 303-142	8244S 	RING CONNECTORS	BLUE	1.5 - 2.5mm ²	To suit M6 pins.
8KW 980 303-232	8246S 		YELLOW	4 - 6mm ²	
8KW 980 303-182	8245S 	RING CONNECTORS	BLUE	1.5 - 2.5mm ²	To suit M8 pins.
8KW 980 303-242	8247S 		YELLOW	4 - 6mm ²	
8KW 980 302-032	8230S 	BUTT CONNECTORS	RED	0.5 - 1mm ²	Cable to cable connection
8KW 980 302-132	8231S 		BLUE	1.5 - 2.5mm ²	
8KW 980 302-232	8232S 		YELLOW	4 - 6mm ²	



**Heat Shrink Insulated Crimp
Connectors - Pack of 100**

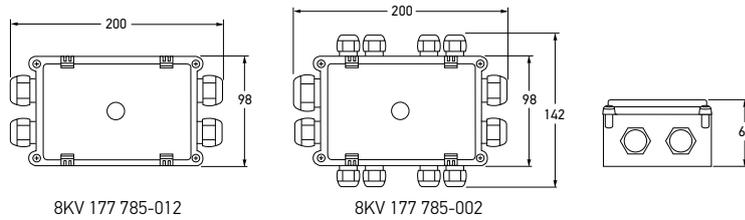
Part Number		Type	Colour	Cable Size	Description
8KW 980 302-033	8530S 	BUTT CONNECTORS	RED	0.5 - 1mm ²	Cable to cable connection
8KW 980 302-133	8531S 		BLUE	1.5 - 2.5mm ²	
8KW 980 302-233	8532S 		YELLOW	4 - 6mm ²	



8KW 980 302-133
Box shown

Cable Junction Box

Compact cable junction box with the option of 4 or 12 inlet/outlets, and outer cable size from Ø10mm to Ø17mm. Complete with connecting cartridge allowing 14 separate groups of connections (6 x 8-way and 8 x 4-way) all using 6.3mm flat blade connectors. The heavy duty nylon housing will withstand common lubricants found underneath truck and trailers, and is safe to clean with high pressure washing equipment.



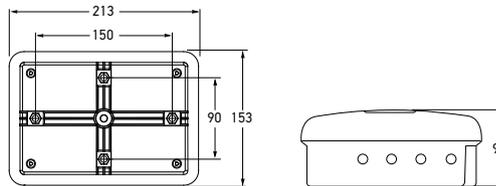
8KV 177 785-012	2770	4 OUTLETS
8KV 177 785-002	2771	12 OUTLETS
Fittings	8KV 177 785-012 4 x Ø13mm 8KV 177 785-002 1 x Ø17mm + 3 x Ø13mm + 8 x Ø10mm	
Protection	IP 69K (Protection against dust and high pressure/steam jet cleaning)	
Plug Cartridge	14 separate connection groups.	



Connecting cartridge

Junction Box - Heavy Duty

Heavy duty nylon junction box. Box can be opened without tools via a single stainless steel bolt. Large sealing gasket withstands high pressure water blasting. Internal mounting plate for fitment of connector blocks and/or relays by self-tapping screws. Large size allows for multiple connections.



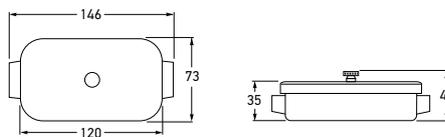
8JB 959 540-011	2755
------------------------	-------------



Open view

Cable Junction Box

8 Screw connections.



8KV 002 143-033	2757
------------------------	-------------

Cable Suitable for medium cable up to 6mm² cross-sectional area.

Cable Junction Box

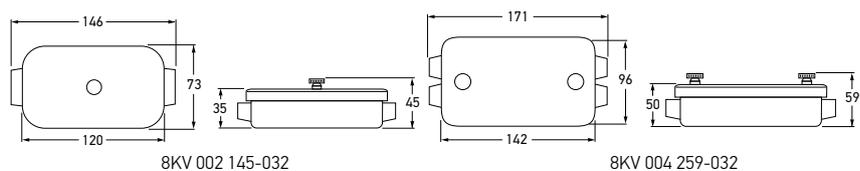
8 pole, 8 double flat plug connection.



8KV 004 259-032



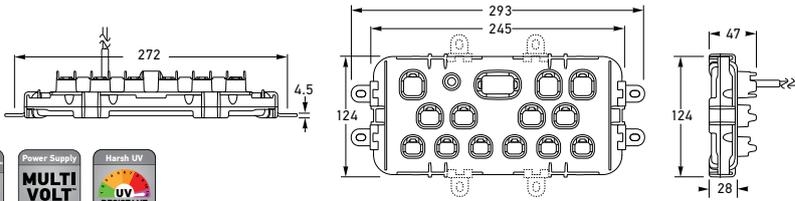
8KV 002 145-032



8KV 002 145-032	2758
8KV 004 259-032	2759

To Suit 8KV 002 145-032 Suitable for medium cable up to 6mm² cross-sectional area.
8KV 004 259-032 Suitable for heavy cable up to 10mm² cross-sectional area.

ACCESSORIES



8JE 233 496-001

Housing material	ASA Plastic				
Mounting	Horizontal or Vertical, Surface mount (4x mounting clips provided)				
Plug Connections	Deutsch DT Plugs (not provided)				
Voltage	Multivolt™ suitable for 12 and 24 volt systems				
Current per output pin	Temp (°C)	20	25	40	50
	Max Output (A)	1.85	1.74	1.53	1.37
Maximum Input	13A (Total system)				
Operating Temp	-40° to 50° Celsius				
Protection	IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high pressure/steam jet cleaning)				
Accessory	8HG 244 382-001	Protective Cover			
	8HS 248 756-007	DT Locking Clip (Pack of 15)			
	See pages 246-247 for DT connectors.				

LED Lamp Distribution Box

HELLA's revolutionary LED Lamp Distribution Box is the quick connect, easy trouble shooting solution for fitting LED lamps to heavy trailers and custom vehicles.

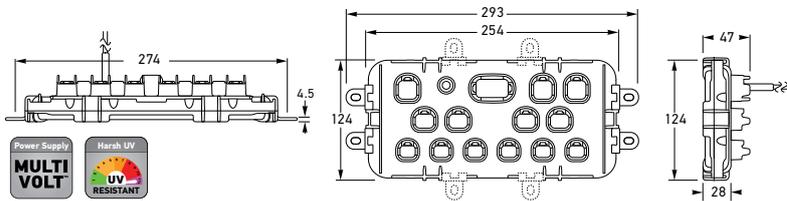
The LED Lamp Distribution Box is designed with integrated Deutsch DT connector sockets that provide easy and reliable lamp connection. Internal electronics isolate individual circuits and reduce lamp outage to ensure a long life and reliable lamp operation. A completely sealed housing and durable materials provide protection against water, dust and high pressure/steam jet cleaning.



Locking Clip



Protective Cover



8JE 233 496-011

Housing material	ASA Plastic				
Mounting	Horizontal or Vertical, Surface mount (4 x mounting clips provided)				
Plug Connections	Deutsch DT Plugs (not provided)				
Voltage	Multivolt™ suitable for 12 and 24 volt systems				
Current per output pin	Temp (°C)	20	25	40	50
	Max Output - DT Output Sockets M/N/O/P (A)	5.00	4.85	4.15	3.85
	Max Output - All other DT Output Sockets (A)	1.85	1.74	1.53	1.37
Maximum Input	25A (Total system)				
Operating Temp	-40° to 50° Celsius				
Protection	IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high pressure/steam jet cleaning)				
Accessory	8HG 244 382-001	Protective Cover			
	8HS 248 756-007	DT Locking Clip (Pack of 15)			
	See pages 246-247 for DT connectors.				

LED Lamp Distribution Box - High Current Version

The high current version of HELLA's revolutionary LED Lamp Distribution Box has been upgraded to include 4 high current outputs to allow connection of higher power reversing lamps, work lamps and other equipment. The distribution box is designed with integrated Deutsch DT connector sockets to provide a quick connect, easy trouble shooting solution for fitting LED lamps to heavy trailers and custom vehicles.

Internal electronics isolate individual circuits and reduce lamp outage to ensure a long life and reliable lamp operation. A completely sealed housing and durable materials provide protection against water, dust and high pressure/steam jet cleaning.



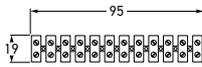
Locking Clip



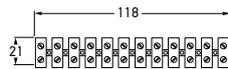
Protective Cover

Cable Connectors

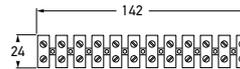
Strip of 12 brass connectors. Flexible plastic.



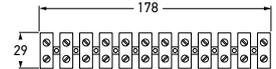
8KV 002 137-005



8KV 002 139-004



8KV 002 140-003



8KV 002 141-001

8KV 002 137-005	8455	CABLES UP TO 2.5MM (0.75MM ²)
8KV 002 139-004	8452	CABLES UP TO 3MM (1.13MM ²)
8KV 002 140-003	8453	CABLES UP TO 4MM (2.90MM ²)
8KV 002 141-001	8454	CABLES UP TO 6MM (4.59MM ²)



8KV 002 139-004

8KV 002 140-003

8KV 002 141-001

Connector Kits

White connector kits. Includes brass terminals.



8KW 980 309-001	4991	1 POLE
8KW 980 309-011	4992	2 POLE
8KW 980 309-021	4993	3 POLE
8KW 980 309-031	4994	4 POLE
8KW 980 309-041	4995	6 POLE
8KW 980 309-051	4996	8 POLE

Max. Load 10A per terminal.

Max. Cable Size 2.0mm²



8KW 980 309-011

8KW 980 309-021

8KW 980 309-031

8KW 980 309-041

8KW 980 309-051

Insulation Tape - Black

Black insulation tape. Made from lead free PVC. Suitable for fine wire, cables and applications requiring non-corrosive tape.

9MJ 905 490-001	8312	18MM X 20M
Tape Thickness	0.18mm	
Elongation at Break	215%	

Duct Tape - Black

Premium quality plastic coated rayon fabric backing, with a high tack aggressive rubber based adhesive on one side.

9MJ 905 490-051	8320	48MM X 30M
-----------------	------	------------



Nylon Cable Ties

100% 6/6 nylon cable ties. Very flexible locking latch. Bell-mouthed head allows easier threading than previous ties. Strongest possible locking power without damaging the serrations of the tie. Quick fastening and simple locking mechanism. Black ties are UV resistant.



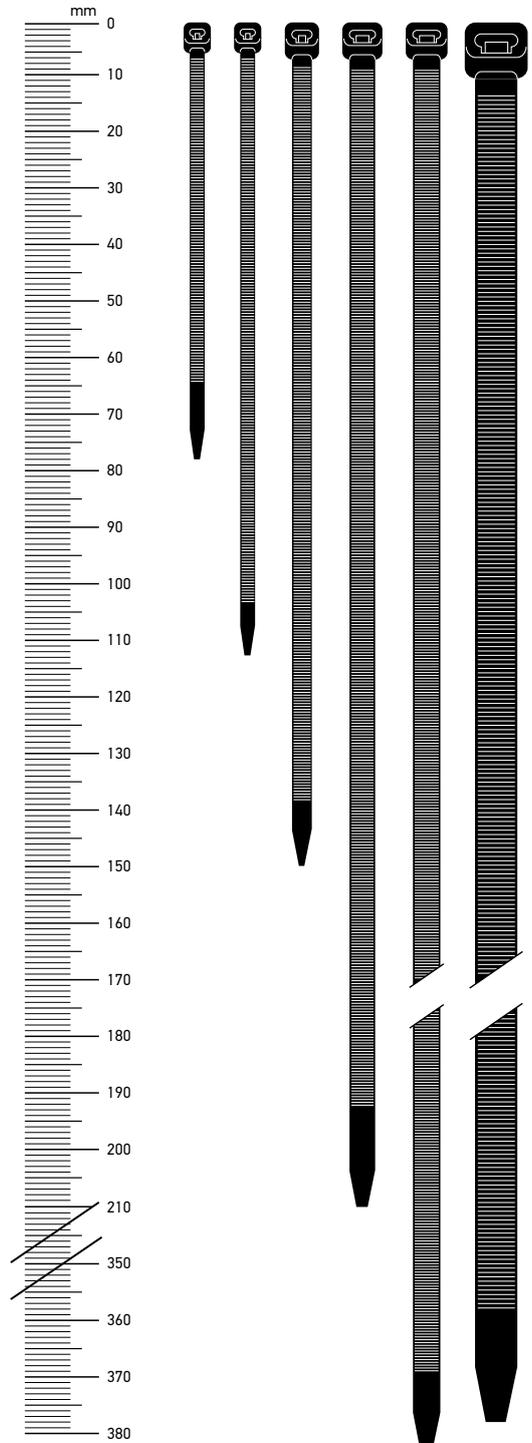
WHITE CABLE TIES			
	Quantity 100 Per Pack	Length	Width
8HL 905 491-161	8344	191mm	4.8mm
8HL 905 491-181	8345	368mm	4.8mm



BLACK UV RESISTANT CABLE TIES			
	Quantity 10 Per Pack	Length	Width
8HL 905 491-051	8334UV	208mm	4.6mm
8HL 905 491-071	8335UV	390mm	4.8mm
8HL 905 491-091	8336UV	380mm	7.6mm

BLACK UV RESISTANT CABLE TIES			
	Quantity 100 Per Pack	Length	Width
8HL 905 491-112	8341UV	80mm	2.5mm
8HL 980 340-001	8342UV	103mm	2.5mm
8HL 980 341-001	8343UV	147mm	3.2mm
8HL 980 342-001	8344UV	208mm	4.6mm
8HL 980 343-001	8345UV	390mm	4.8mm
8HL 980 344-001	8346UV	380mm	7.6mm

BLACK UV RESISTANT CABLE TIES			
	Quantity 1000 Per Pack	Length	Width
8HL 980 342-007	8344UVBULK	208mm	4.6mm



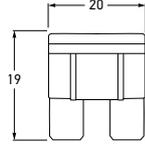
Standard Blade Fuses (ATS)
- Pack of 10



8JS 711 683-822



8JS 980 305-012



8JS 980 305-022 8JS 980 305-032 8JS 980 305-042



8JS 980 305-052 8JS 980 305-062 8JS 980 305-072

8JS 711 683-822	8770		PURPLE	3A
8JS 980 305-012	8771		TAN	5A
8JS 980 305-022	8772		BROWN	7.5A
8JS 980 305-032	8773		RED	10A
8JS 980 305-042	8774		BLUE	15A
8JS 980 305-052	8775		YELLOW	20A
8JS 980 305-062	8776		WHITE	25A
8JS 980 305-072	8777		GREEN	30A

Motorist Fuse Assortment (ATS)
- Pack of 10

10 popular blade fuses – ideal for the glove box.



8JS 980 305-811	8779	
Contents	1 x 7.5A 2 x 10A 2 x 15A 2 x 20A 2 x 25A 1 x 30A	

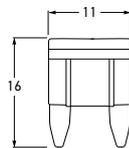
Mini Blade Fuses (ATN) - Pack of 10



8JS 980 305-104



8JS 980 305-112



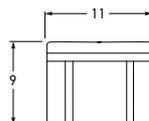
8JS 980 305-122 8JS 980 305-132 8JS 980 305-142



8JS 980 305-152 8JS 980 305-162 8JS 980 305-172

8JS 980 305-104	8770MINI		PURPLE	3A
8JS 980 305-112	8771MINI		TAN	5A
8JS 980 305-122	8772MINI		BROWN	7.5A
8JS 980 305-132	8773MINI		RED	10A
8JS 980 305-142	8774MINI		BLUE	15A
8JS 980 305-152	8775MINI		YELLOW	20A
8JS 980 305-162	8776MINI		WHITE	25A
8JS 980 305-172	8777MINI		GREEN	30A

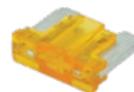
Low Profile Blade Fuses (ATT)
- Pack of 10



8JS 980 305-204	8770LP		PURPLE	3A
8JS 980 305-212	8771LP		TAN	5A
8JS 980 305-222	8772LP		BROWN	7.5A
8JS 980 305-232	8773LP		RED	10A
8JS 980 305-242	8774LP		BLUE	15A
8JS 980 305-252	8775LP		YELLOW	20A
8JS 980 305-262	8776LP		WHITE	25A
8JS 980 305-272	8777LP		GREEN	30A



8JS 980 305-204



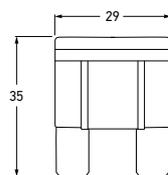
8JS 980 305-212



8JS 980 305-222 8JS 980 305-232 8JS 980 305-242



8JS 980 305-252 8JS 980 305-262 8JS 980 305-272

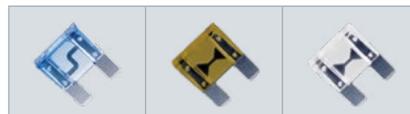


Maxi Blade Fuses (ATM)
- Single Pack

8JS 980 305-502	8790		YELLOW	20A
8JS 980 305-512	8791		GREEN	30A
8JS 980 305-522	8792		ORANGE	40A
8JS 980 305-532	8793		RED	50A
8JS 980 305-542	8794		BLUE	60A
8JS 980 305-552	8796		BROWN	70A
8JS 980 305-562	8795		WHITE	80A
8JS 980 305-582	8797		PURPLE	100A



8JS 980 305-512 8JS 980 305-522 8JS 980 305-532



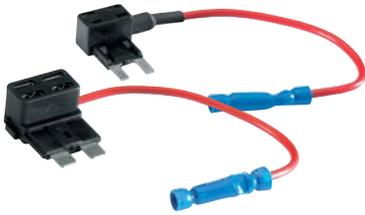
8JS 980 305-542 8JS 980 305-552 8JS 980 305-562



8JS 980 305-582

Auxiliary Blade Fuse Holder

Add on fuse holder. Fuse holder allows you to piggy back off the original fuse with an additional holder and separate fused circuit. Comes complete with 4 fuses (3A, 5A, 7.5A and 10A).



8JD 743 557-802	8701		MINI
8JD 743 557-812	8703		STANDARD/ATS
To Suit		Mobile phones, stereos, amplifiers, navigation systems and fridges.	

Pre-wired Blade Fuse Holders



8JD 980 307-022 8JS 980 307-032

8JD 980 307-012	8713		MINI
8JD 980 307-022	8714		STANDARD
8JS 980 307-032	8715		MAXI

Single Maxi Blade Fuse Holder

Splash-proof fuse holder with plastic cover. For loads up to 60A. Complete with 2 sets of terminals, set one for 2.5 - 6mm² and set two for 5 - 10mm².

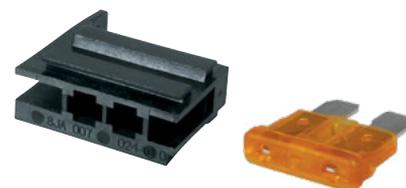


8JD 743 708-002	8707
Cable	Suitable for cables up to 2.5mm ² - 10mm ² cross sectional area.
Fuse Type	Maxi Blade Fuses (ATM)
See page 259 for full listing of Maxi Blade Fuses (ATM)	

Single Blade Fuse Holder

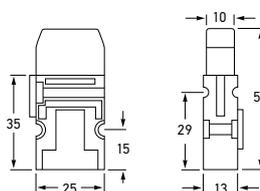
Several holders may be joined together or mated with 8JA 003 526-004 (relay holder). Comes complete with 2 terminals.

8JA 007 024-002	8704
Cable	Suitable for cable up to 2.5mm ² cross sectional area.
Fuse Type	Standard Blade Fuses (ATS)
See page 258 for full listing of Standard Blade Fuses (ATS)	



Single Blade Fuse Holder

30 amps maximum. May be interlocked face to face or end to end. Complete with transparent dust cover lid and snap-in terminals.



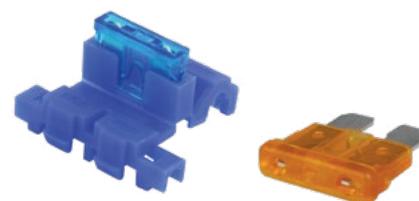
8JD 005 235-003	8718
Cable	Suitable for cable up to 2.90mm ² cross sectional area.
Fuse Type	Standard Blade Fuses (ATS)
See page 258 for full listing of Standard Blade Fuses (ATS)	



Single In-line Blade Fuse Holder

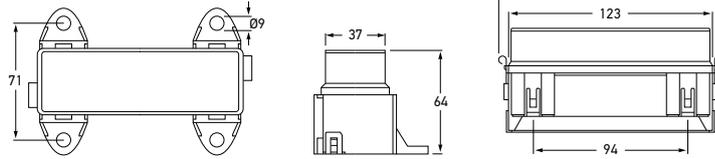
20 amps maximum. Complete with 15A blade fuse. Quick connect type.

8JD 980 307-002	8719
Cable	Suitable for cable up to 1.84mm ² cross sectional area.



Blade Fuse Box - 16 Fuses

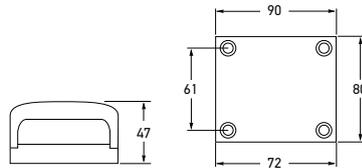
16-way fuse box featuring black plastic housing with secondary locks, transparent cover and sealing gasket. Supplied with mounting brackets.



8JD 905 524-032	8724
Number of Fuses	16
Fuse Type	6 x 10A 6 x 15A 2 x 20A 2 X 25A

Blade Fuse Box - 6 Fuses

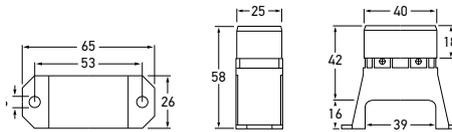
Black plastic housing with transparent snap-fit lid and 6.3mm male blade terminals. 5mm diameter stud input. Complete with 2 spare fuse holders and label set.



8JD 005 993-093	8725
Number of Fuses	6
Fuse Type	3 x 10A 3 x 15A

Blade Fuse Box - 4 Fuses

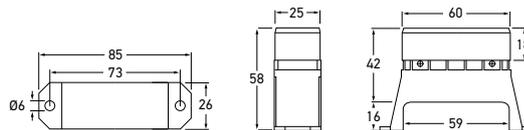
Black plastic housing with transparent snap-fit lid. Flat plug connections.



8JD 905 524-002	8720	
8JD 905 524-041	8720S	SIDE CONNECTORS
Number of Fuses	4	
Fuse Type	2 x 10A 2 x 15A	

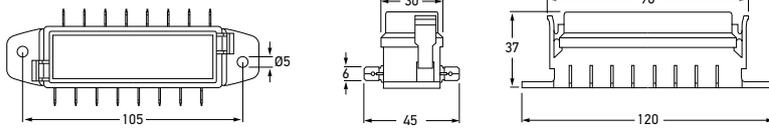
Blade Fuse Box - 6 Fuses

Black plastic housing with transparent snap-fit lid. Flat plug connections.



8JD 905 524-012	8721	
8JD 905 523-011	8721S	SIDE CONNECTORS
Number of Fuses	6	
Fuse Type	3 x 10A 3 x 15A	

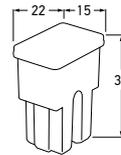
ACCESSORIES



8JD 905 524-022	8722	
8JD 905 524-051	8722S	SIDE CONNECTORS
Number of Fuses	8	
Fuse Type	4 x 10A 4 x 15A	

Blade Fuse Box - 8 Fuses

Black plastic housing with transparent snap-fit lid. Flat plug connections.



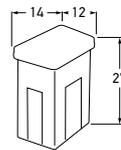
Fusible Link - Female

Female plug-in fuse link.

8JS 980 306-502	8790FLFS		LIGHT BLUE	20A
8JS 980 306-512	8791FLFS		PINK	30A
8JS 980 306-522	8792FLFS		GREEN	40A
8JS 980 306-532	8793FLFS		RED	50A
8JS 980 306-542	8794FLFS		YELLOW	60A
8JS 980 306-552	8795FLFS		BROWN	70A
8JS 980 306-562	8796FLFS		BLACK	80A
8JS 980 306-572	8797FLFS		BLUE	100A



8JS 980 306-512 8JS 980 306-522 8JS 980 306-532 8JS 980 306-542 8JS 980 306-552 8JS 980 306-562



Mini Fusible Link - Female

Female mini plug-in fuse link.

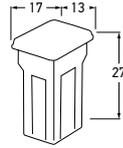
8JS 980 306-302	8790FLFE		LIGHT BLUE	20A
8JS 980 306-312	8791FLFE		PINK	30A
8JS 980 306-322	8792FLFE		GREEN	40A
8JS 980 306-332	8793FLFE		RED	50A
8JS 980 306-342	8794FLFE		YELLOW	60A
8JS 980 306-352	8795FLFE		BROWN	70A
8JS 980 306-362	8796FLFE		BLACK	80A



8JS 980 306-322 8JS 980 306-332 8JS 980 306-342 8JS 980 306-352 8JS 980 306-362

Mini Fusible Link - Female

Mini female plug-in fuse link.



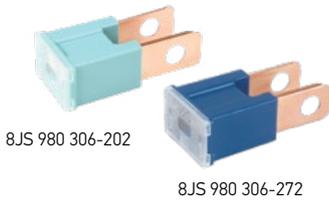
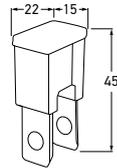
8JS 980 306-402	8790FLFM		LIGHT BLUE	20A
8JS 980 306-412	8791FLFM		PINK	30A
8JS 980 306-422	8792FLFM		GREEN	40A
8JS 980 306-432	8793FLFM		RED	50A
8JS 980 306-442	8794FLFM		YELLOW	60A
8JS 980 306-452	8795FLFM		BROWN	70A
8JS 980 306-462	8796FLFM		BLACK	80A
8JS 980 306-472	8797FLFM		BLUE	100A



8JS 980 306-412 8JS 980 306-422 8JS 980 306-432 8JS 980 306-442 8JS 980 306-452 8JS 980 306-462

Fusible Link - Male

Male bolt-in fuse link.



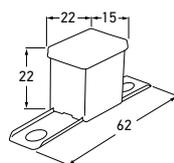
8JS 980 306-202	8790FLM		LIGHT BLUE	20A
8JS 980 306-212	8791FLM		PINK	30A
8JS 980 306-222	8792FLM		GREEN	40A
8JS 980 306-232	8793FLM		RED	50A
8JS 980 306-242	8794FLM		YELLOW	60A
8JS 980 306-252	8795FLM		BROWN	70A
8JS 980 306-262	8796FLM		BLACK	80A
8JS 980 306-272	8797FLM		BLUE	100A
8JS 980 306-282	8798FLM		WHITE	120A



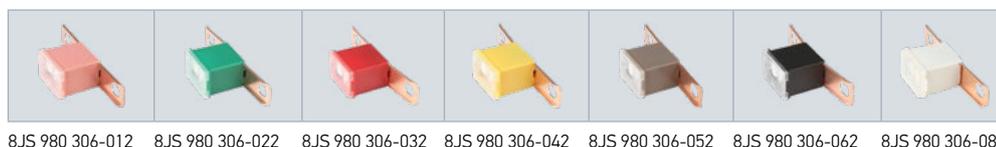
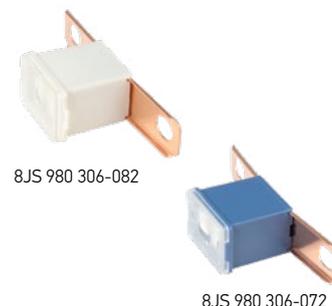
8JS 980 306-212 8JS 980 306-222 8JS 980 306-232 8JS 980 306-242 8JS 980 306-252 8JS 980 306-262 8JS 980 306-282

Fusible Link, Male - L-Type Long

Male L-type fuse link with long leg.



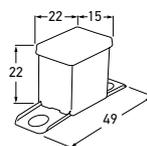
8JS 980 306-012	8791FLB		PINK	30A
8JS 980 306-022	8792FLB		GREEN	40A
8JS 980 306-032	8793FLB		RED	50A
8JS 980 306-042	8794FLB		YELLOW	60A
8JS 980 306-052	8795FLB		BROWN	70A
8JS 980 306-062	8796FLB		BLACK	80A
8JS 980 306-072	8797FLB		BLUE	100A
8JS 980 306-082	8798FLB		WHITE	120A



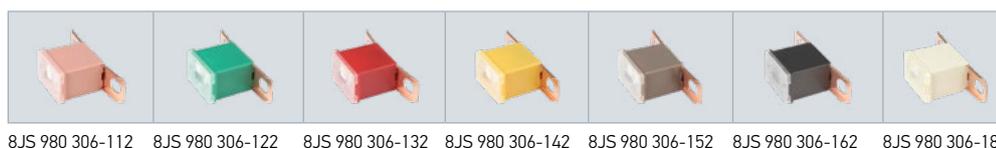
8JS 980 306-012 8JS 980 306-022 8JS 980 306-032 8JS 980 306-042 8JS 980 306-052 8JS 980 306-062 8JS 980 306-082

Fusible Link, Male - L-Type Short

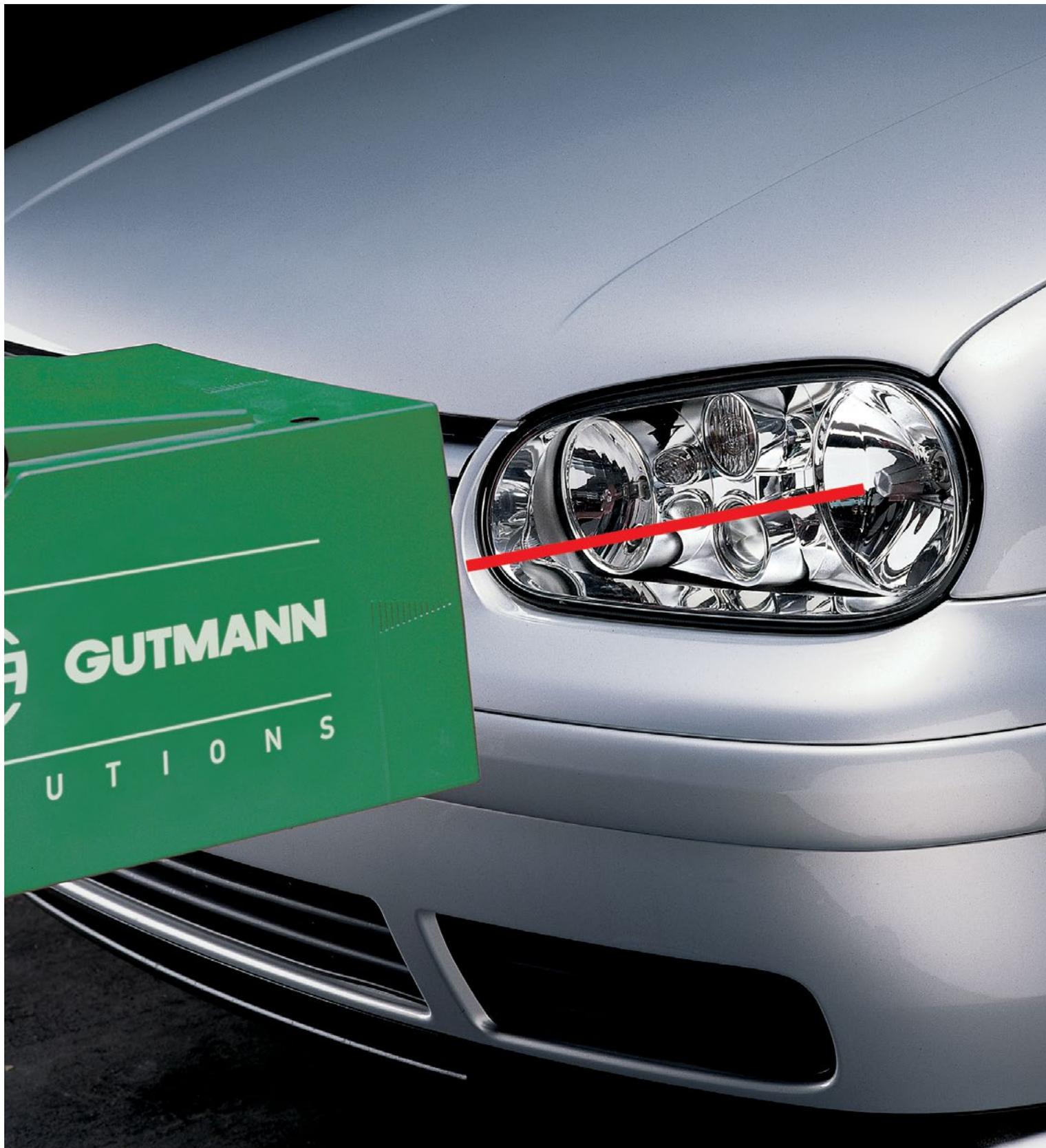
Male L-type fuse link with short leg.



8JS 980 306-102	8790FLBS		LIGHT BLUE	20A
8JS 980 306-112	8791FLBS		PINK	30A
8JS 980 306-122	8792FLBS		GREEN	40A
8JS 980 306-132	8793FLBS		RED	50A
8JS 980 306-142	8794FLBS		YELLOW	60A
8JS 980 306-152	8795FLBS		BROWN	70A
8JS 980 306-162	8796FLBS		BLACK	80A
8JS 980 306-172	8797FLBS		BLUE	100A
8JS 980 306-182	8798FLBS		WHITE	120A



8JS 980 306-112 8JS 980 306-122 8JS 980 306-132 8JS 980 306-142 8JS 980 306-152 8JS 980 306-162 8JS 980 306-182



The HELLA Headlamp Aimer is a precision workshop instrument designed to accurately check vehicle headlamps. It was developed especially for use in professional workshops and vehicle testing stations.

HELLA BEAMSETTERS

Precision Headlamp Adjustment. The importance of regular checking and re-adjustment of headlamps emerges clearly from the fact that about 33% of all vehicles coming in for this service have incorrectly adjusted headlamps. In about half these cases the headlamp beams are too high and dazzle oncoming traffic, while in the remaining cases the headlamps are too low or point left or right, reducing the driver's field of vision and driving safety.

The HELLA Headlamp Aimer provides high accuracy in lighting checks and is also able to test the latest in new technology headlamps. The beamsetter box, the heart of the unit, is constructed of impact and corrosion resistant material that withstands even aggressive fluids used in workshops.

Its functional design allows quick, precise and simple headlamp adjustment. Precision workshop instrument with wide-band sight aligner for quick and precise checking and setting of headlamps, auxiliary driving and fog lamps on all vehicles. The unit features a sturdy base, large viewing screen and a combination volt and light output meter and easy height adjustment.

HELLA Beamsetter

Standard Beamsetter with digital voltage and lux readings.

8PA 007 732-311 SEG 700DLX (Includes laser sight aligner)

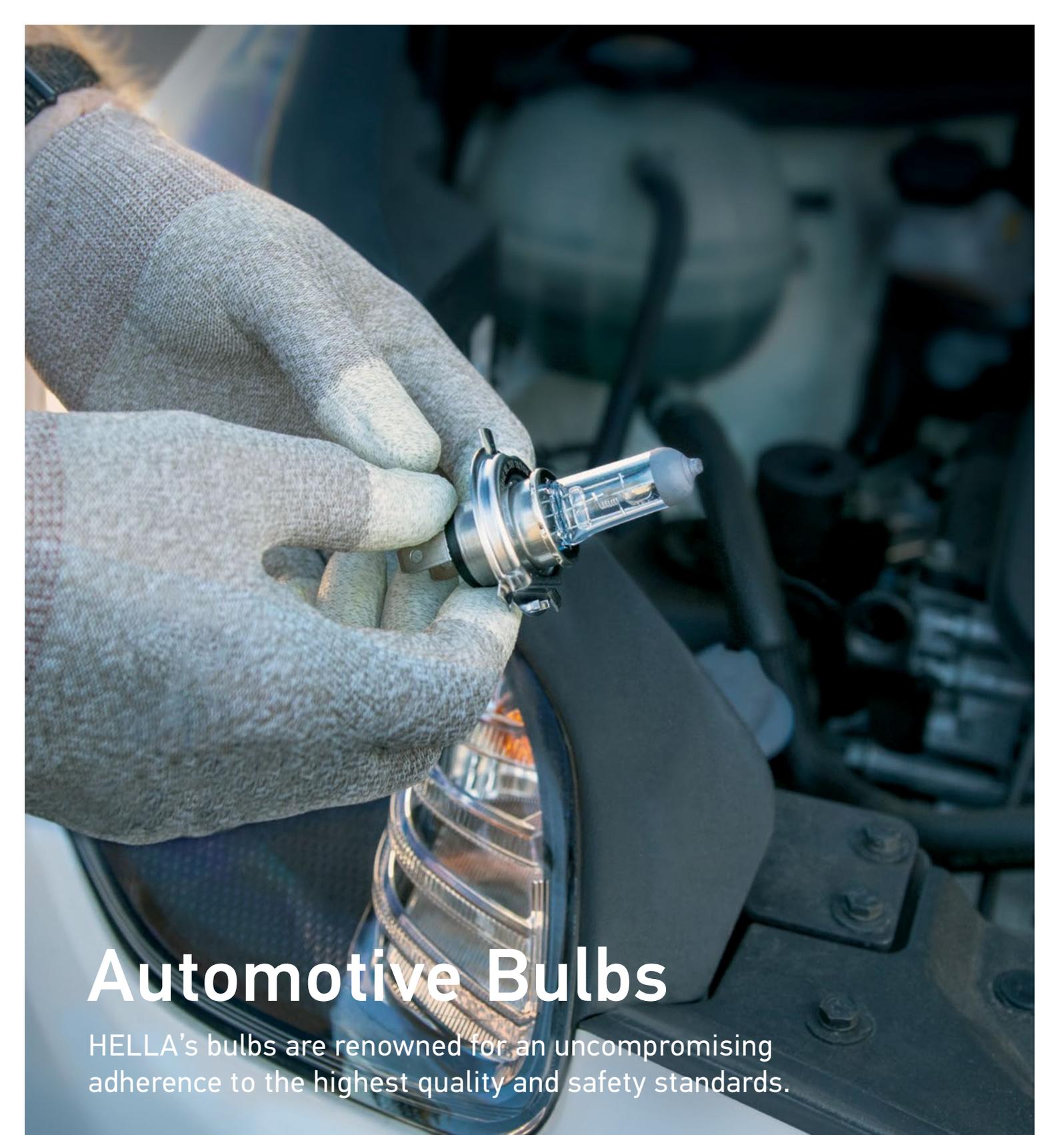
Digital indication of illuminance.



Features include:

- Wide band sight aligner
- Combination volt and light output meter
- Sturdy base
- Large viewing screen
- Easy height adjustment
- Spare parts available





Automotive Bulbs

HELLA's bulbs are renowned for an uncompromising adherence to the highest quality and safety standards.



Contents

Automotive Bulbs

Quick Reference Bulb Guides	274-277
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SUPERIOR ILLUMINATION

**THE HUMAN HEART BEATS ONCE PER SECOND.
HELLA INSTALLS ~ 5.7 BULBS IN THE SAME PERIOD OF TIME**

Why HELLA Bulbs?

HELLA automotive bulbs are renowned for their uncompromising adherence to the highest quality and safety standards. There's a HELLA bulb to suit almost every requirement.

- Optimal light quality
- Uncompromisingly high testing standards
- Durable and robust products
- Lowest possible failure rate

TS Pro Bulbs

TS Pro bulbs are a new generation of high-performance halogen bulbs specifically designed to cope with the heavy duty demands of 24 volt heavy commercial transport applications.

Utilising innovative single-coil filaments, TS Pro halogen bulbs offer significantly increased service life of up to 100% when compared to standard halogen bulbs. They also feature superior vibration resistance during extended periods of operation, leading to reduced vehicle servicing costs and downtime.

In addition to extended service life and improved durability, TS Pro halogen bulbs provide up to 100% increased illumination of the road ahead when compared to a standard halogen bulb. This results in improved vision and clearer visibility of objects and traffic situations in the distance ahead, effectively reducing eyestrain and driver fatigue, adding valuable seconds to driver reaction times for improved night driving safety.

Replacement Bulbs

The New Zealand lighting rules state that all certified legal lamps (headlamps or tail lamps) must be fitted with an approved light source to remain legal, if the light source is replaced.

Most HELLA bulbs will be marked with an 'E mark' to show compliance. Some bulbs, to suit older vehicles or imports not originally destined for our market, may have different standards such as JIS (Japanese Industrial Standard). HELLA shows compliant bulbs under the category column in the bulb section.

Safe for Modern Headlamps

All halogen bulb filaments produce UV radiation. If the glass casing of the bulb does not filter the UV radiation, it will be harmful to the polycarbonate lenses used on most of today's vehicles.

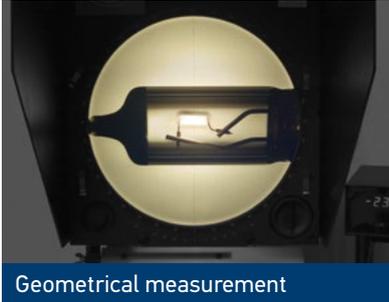
Excessive UV radiation from the halogen or HID bulb will result in discolouration and substantially diminished light transmission of the headlamp lens. All HELLA halogen and HID automotive bulbs are UV-reduced and are safe for use in modern headlamps with polycarbonate lenses.



Note: LED replacement bulbs are generally illegal for use in marker, signal and headlights as they do not comply with a lighting standard.

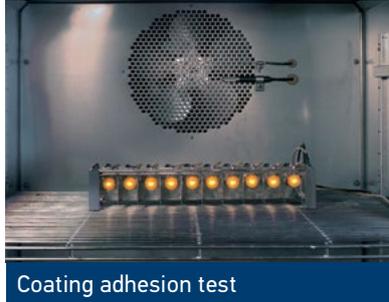
To avoid failing a Warrant/Certificate of Fitness inspection, all lighting equipment must comply with the law and meet approved standards.

RIGOROUS TESTING GUARANTEES PREMIUM QUALITY



Geometrical measurement

A measuring projector is used to check the filament geometry - with regard to the statutory standards in accordance with IEC 60810. The filament must be dimensioned and positioned within the bulb as specified in the standard. This is the only way to achieve optimum headlight power and prevent glare to oncoming traffic.



Coating adhesion test

The adhesion of paint on coloured glass bulbs - such as the PY21W for example - is tested in a climate chamber at different temperatures and air humidities. Optimal adhesion of glass bulb paint guarantees the prescribed amber indicator light.



Vibration and shock test

Vibration resistance of the bulbs and the filament in particular is tested on an electro-dynamic vibration table.



Service life test

Sophisticated tests are used to prove the high reliability of HELLA bulbs over a long period.



Luminous flux measurement

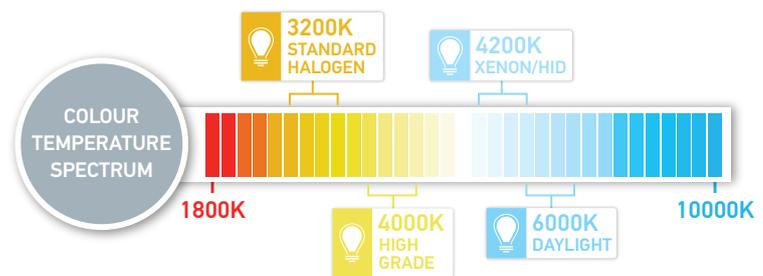
The Ulbricht sphere and goniometer are used to determine the light fluxes and luminous intensities of the HELLA bulbs. This guarantees optimum light output of the bulbs. These tests and measurements form the basis of our tested quality.

COLOUR TEMPERATURE EXPLAINED

Colour temperature is a measurement in degrees Kelvin that indicates the hue of a specific type of light source. (Kelvin is indicated by the unit symbol K).

Colour temperatures over 4000K are called cool colours (blueish white), while lower colour temperatures (2700 – 3000K) are called warm colours (yellowish white through red).

The higher the temperature of a light source is, the greater the proportion of blue and the lower the proportion of red in the colour spectrum. An incandescent light bulb has a warm white colour temperature of approx. 2700K.

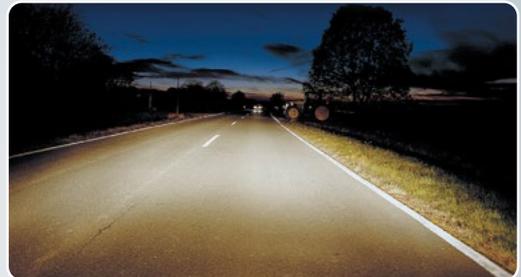


The illustration provides an indication of the colour temperature spectrum.

XENON GAS DISCHARGE LAMPS

Xenon (HID) based front lighting systems are still among the best lighting systems available in terms of both quality and quantity.

- 01 Over twice the luminous flux* (light quantity/light power)
- 02 Considerably longer service life
- 03 Light colour is closer to daylight
- 04 Significantly lower power consumption of only 35W (plus 7W for ballast)
- 05 Superior light performance (photometric efficiency)
- 06 Lower thermal load on the system



Illumination with good low beam



Illumination with Xenon low beam

*Compared to standard Halogen bulbs.

The Xenon gas discharge, or high intensity discharge (HID) bulb illuminates via a light arc that is ignited between two electrodes. This technology requires a complex electronic ballast.

To optimise and maintain a safe lighting system, additional system features are often required e.g. headlamp cleaning systems, automatic headlight range adjustment and levelling systems for ECE type approved systems.

Additional Regulations for Xenon Low Beam

In the ECE region, headlights with Xenon low beams may only be used in conjunction with automatic or dynamic headlight range adjustment and levelling system as well as a headlight cleaning system. This regulation takes into account the intense luminous performance of the Xenon bulb and is designed to ensure the safety of all road users.

How They Work

A sophisticated ballast supplies the ignition voltage required to ignite the gas between two electrodes. This ignition voltage can be up to 30kV in 4th generation ballasts. Inside the bulb is a mixture of inert Xenon gas, metals and metal halides, which are ionised upon ignition resulting in a powerful light arc.

During the controlled supply of alternating current (at approx. 400Hz) the liquid and solid substances evaporate, due to high internal temperatures. The lamp only achieves its full brightness after a few seconds when all the components have been ionised. To prevent destruction of the lamp through uncontrolled increases in current, the current is limited by a ballast. Once the full light output has been reached, an operating voltage (not the ignition voltage) of only 85V is necessary to maintain the physical process. The luminous flux, light output, luminance and service life of Xenon HID bulbs significantly surpasses halogen bulbs.

HID Ultra plus (UP) - Up to + 70% brighter

Ultra Plus bulbs are the ideal bulbs for drivers looking to increase safety with more light on the road. This HID bulb produces up to 70% more light on the road, has a beam that is up to 20 metres longer than a standard bulb.

Colour Match HID Bulbs

As HID bulbs age, the colour temperature increases resulting in a whiter light. When an HID bulb is replaced with a new bulb it can look yellow compared to the original bulb, and will whiten with use. If a white light from installation is desired, a colour match bulb may be used (D2R-5K, D2S-5K) which will be a closer match to the older bulb from the first use. These bulbs are ECE compliant.

Fault Diagnosis for HID bulbs

Check whether the ballast is attempting to ignite the bulb after the light has been switched on. Ignition attempts can be heard clearly near the headlight.

If ignition attempts are unsuccessful, the Xenon bulb should be checked by swapping it with one from the other headlight and the process tried again. If no ignition attempt is carried out, the fuse should be checked.

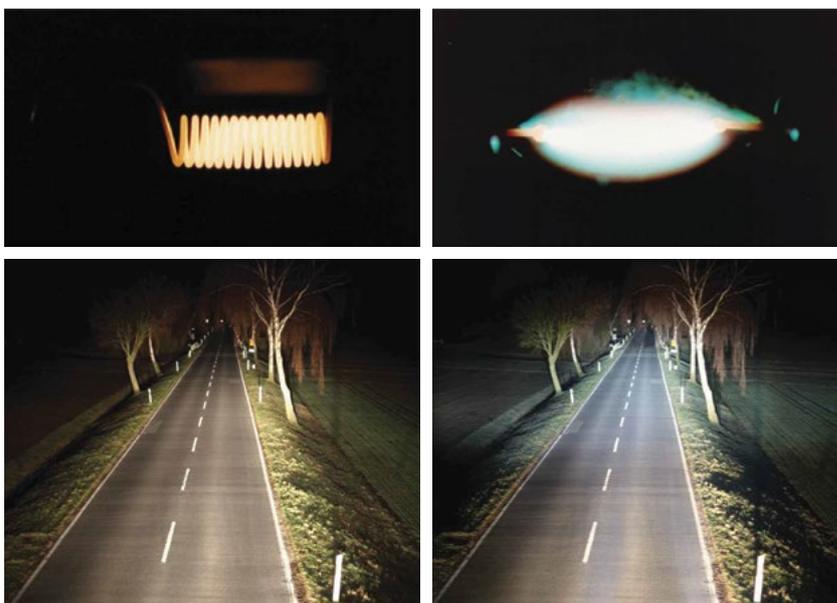
If the fuse is functional, check the voltage and ground supply directly at the ballast. Voltage must be at least 9V for 12V systems. If the voltage ground is verified and the Xenon bulbs are functional a faulty ballast is likely to be cause of the problem.

Conversion kits (HID and LED)

Converting an approved headlamp to another light source (e.g. Halogen to LED bulb) is not permitted, as the light sources are currently not compliant with New Zealand regulations. Therefore it is illegal to import, sell or fit these conversion bulbs to a vehicle that requires a WOF or COF.

Refer to www.nzta.govt.nz and search for the 'Get your Lights Right' Guide.

Comparison between filament bulb (halogen) / light arc gas discharge lamp (Xenon)



Typical light distribution and colour temperature of a light beam with standard halogen bulb.

Typical light distribution and colour temperature of a light beam with HID bulb.

	HALOGEN BULB (H1)	GAS DISCHARGE LAMP (XENON D1S)
Light source:	Filament	Light arc
Luminance Flux:	1550 lm	3200 lm
Luminance:	1450 cd/m ²	3000 cd/m ²
Capacity:	55W	35W
Energy balance:	8% light radiation 92% heat radiation	28% light radiation 58% heat radiation 14% UV radiation
Service life:	Approx. 500 hours	Approx. 2500 hours
Vibration-proof:	To a certain extent	Yes
Ignition voltage:	No	Yes 23000V (3rd generation)
Electronic control:	No	Yes
Kelvin Temperature (Daylight ± 6000 K)	3200 K	4150 K (Projection system)

Tips for Dealing with HID Electronic Ballasts	A faulty ballast leads to complete headlight failure. Possible causes for failure of the ballast are:	→ Lack of voltage/ sufficient current supply. → Lack of ground connection.	→ Faulty electronics of the device. → Internal short-circuits.
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QUICK REFERENCE BULB GUIDE

HALOGEN HEADLAMP BULBS

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H16



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HB3



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HB4



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HIR2



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XENON GAS DISCHARGE BULBS

800 SERIES



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D1



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D2



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D3



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D4



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CONVENTIONAL SIGNAL AND MARKER BULBS

BAYONET



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WEDGE



PAGE 292

FESTOON



PAGE 294

PLASTIC



PAGE 289

QUICK REFERENCE UPGRADE BULB GUIDE



COOL BLUE (CB) AND BLUE VISION (BV) – WHITER (UP TO 4200°K)

These bulbs come close to emulating the colour of a Xenon HID lamp. The high colour temperature of the Cool Blue bulbs creates the crisp white light which provides illumination that is conspicuous while being easy on the eye.

UPGRADE BULBS								
Bulb	Category	Part Number	Legacy Part Number		Voltage	Power Consumption	Base	Page
	H1	8GH 002 089-144	C1255CB		12V	55W	P14.5s	282
	H7	8GH 007 157-411	CA1255CB		12V	55W	PX26d	281
	HB3	8GH 005 635-053	CB1265CB		12V	65W	P20d	286
	HB4	8GH 005 635-033	CC1255CB		12V	55W	P22d	286
	H11	8GH 008 358-182	CG1255CB		12V	55W	PGJ19-2	284
	T4W	8GP 002 067-832	HL124BV		12V	4W	BA9s	291
	W5W	8GP 003 594-561	W125BV		12V	5W	W2.1x9.5d	293
	H4	8GJ 002 525-365	XD1260/55CB		12V	60/55W	P43t	280
	H3	8GH 002 090-032	YC1255CB		12V	55W	PK22s	283

COLOUR MATCH HID BULBS (D2R-5K/D2S-5K/D1S-5K) – WHITER (UP TO 5000°K)

As HID bulbs age, the colour temperature increases resulting in a whiter light. These 5K bulbs offer up to 30% more light on the road and a whiter look to match used bulbs. These bulbs are ECE compliant.

	D2R	8GS 007 001-242	D2R5K		12/24V	35W	P32d-3	278
	D2S	8GS 007 949-252	D2S5K		12/24V	35W	P32d-3	278
	D1S	8GS 009 028-622	D1S5K		12/24V	35W	PK32d-2	279

LONGLIFE (LL) - UP TO TWICE THE LIFE



LongLife (LL) bulbs are increasing in popularity for applications such as taxis and drivers using headlamps during the day. Many new vehicles now come equipped with LongLife bulbs as a standard fitment. The bulbs will provide safe and legal light performance and can be rated at twice or greater the service life of standard bulbs.

UPGRADE BULBS								
Bulb	Category	Part Number	Legacy Part Number		Voltage	Power Consumption	Base	Page
	H1	8GH 002 089-111	C1255LL		12V	55W	P14.5s	282
	H7	8GH 007 157-142	CA1255LL		12V	55W	PX26d	281
	P21/5W	8GD 002 078-171	S1221/5VLL		12V	21/5W	BAY15d	289
	W5W	8GP 003 594-162	W125LL		12V	5W	W2.1 x 9.5d	293
	H4	8GJ 002 525-483	XD1260/55LL		12V	60/55W	P43t	280
	H3	8GH 002 090-112	YC1255LL		12V	55W	PK22s	283



XENON (X) - UP TO + 30% BRIGHTER

This bulb outshines a standard headlamp bulb by achieving up to 30% more light on the road in the 50-75m range allowing better orientation and earlier reaction to hazards.

UPGRADE BULBS

Bulb	Category	Part Number	Legacy Part Number		Voltage	Power Consumption	Base	Page
	H1	8GH 002 089-384	C1255X		12V	55W	P14.5s	282
	H3	8GH 002 090-024	YC1255X		12V	55W	PK22s	283
	H4	8GJ 002 525-005	XD1260/55X		12V	60/55W	P43t	280
	H7	8GH 007 157-562	CA1255X		12V	55W	PX26d	281
	H11	8GH 008 358-152	CG1255X		12V	55W	PGJ19-2	284



HID ULTRA PLUS (UP) - UP TO + 70% BRIGHTER

Ultra Plus bulbs are the ideal bulbs for drivers looking to increase safety with more light on the road. This HID bulb produces up to 70% more light on the road, has a beam that is up to 20 metres longer than a standard bulb.

UPGRADE BULBS

Bulb	Category	Part Number	Legacy Part Number		Voltage	Power Consumption	Base	Page
	D1S	8GH 009 028-081	D1SUP		12V/24V	35W	PK32d-2	279
	D2S	8GH 007 949-271	D2SUP		12V/24V	35W	PK32d-2	278



ULTRA PLUS (UP) - UP TO + 100% BRIGHTER

Ultra Plus bulbs are the ideal bulbs for drivers looking to increase safety with more light on the road. This halogen bulb produces up to 100% more light on the road, has a beam that is up to 35 metres longer and provides light that is up to 10% whiter than a standard bulb.

UPGRADE BULBS

Bulb	Category	Part Number	Legacy Part Number		Voltage	Power Consumption	Base	Page
	H1	8GH 178 560-472	C1255UP		12V	55W	P14.5s	282
	H4	8GJ 178 560-484	XD1260/55UP		12V	60/55W	P43t	280
	H7	8GH 178 560-494	CA1255UP		12V	55W	PX26d	281
	H11	8GH 008 358-041	CG1255UP		12V	55W	PGJ19-2	284

Lifetime and performance gains are compared to standard versions of the bulb. Greater performance is measured between 50 and 75m in front of vehicle.



ULTRA MAX (UM) - UP TO + 150% BRIGHTER

Ultra Max bulbs are the ultimate upgrade bulb for drivers desiring the best performance from an approved bulb. This halogen bulb produces up to 150% more light on the road, and has a beam that is up to 40 metres longer and up to 20% whiter combining a highly engineered filament, pure xenon gas filling and innovative laser processing technology.

UPGRADE BULBS								
Bulb	Category	Part Number	Legacy Part Number		Voltage	Power Consumption	Base	Page
	H1	8GH 358 193-071	C1255UM		12V	55W	P14.5s	282
	H3	8GH 358 193-031	YC1255UM		12V	55W	PK22s	283
	H4	8GJ 958 631-031	XD1260/55UM		12V	60/55W	P43t	280
	H7	8GH 958 879-041	CA1255UM		12V	55W	PX26d	281
	H8	8GH 358 193-021	CE1235UM		12V	55W	PGJ19-1	283
	H11	8GH 358 193-061	CG1255UM		12V	55W	PGJ19-2	284
	HB3	8GH 358 193-051	CB1265UM		12V	65W	P20d	286
	HB4	8GH 358 193-041	CC1255UM		12V	55W	P22d	286



TS PRO - UP TO 2.5 TIMES THE LIFETIME AND 100% MORE LIGHT ON THE ROAD (HALOGEN BULBS).

At night, truck drivers need the best possible light on the road ahead. TS Pro out-performs conventional 24V bulbs, allowing drivers to concentrate on the essentials. With their extremely long life and robust construction, these bulbs save on replacements and downtime, reducing fleet costs

UPGRADE BULBS								
Bulb	Category	Part Number	Legacy Part Number		Voltage	Power Consumption	Base	Page
	H1	8GH 002 089-255	C2470TS		24V	70W	P14.5s	282
	H3	8GH 002 090-461	YC2470TS		24V	70W	PK22s	283
	H4	8GJ 002 525-282	XD2475/70TS		24V	75/70W	P43t	280
	H7	8GH 007 157-271	CA2470TS		24V	70W	PX26d	281
	H11	8GH 008 358-252	CG2470TS		24V	70W	PGJ19-2	284
	P21/5W	8GD 002 078-013	S2421/5TS		24V	21/5W	BAY15d	289
	R5W	8GP 342 760-941	G245TS		24V	5W	BA15s	290
	R10W	8GA 002 071-274	G2410TS		24V	10W	BA15s	290
	T4W	8GP 002 067-263	HL244TS		24V	4W	BA9s	291
	P21W	8GA 002 073-253	R2421TS		24V	21W	BA15s	288
	PY21W	8GA 006 841-253	RY2421TS		24V	21W	BAU15s	288



SUPREME - UP TO 200% BRIGHTER.

For the ultimate performance upgrade, select HELLA Supreme (S) with mirror chrome caps. Dominate with 200% more light, up to 20% whiter and beams up to 150 metres.

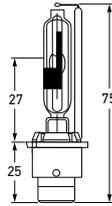
UPGRADE BULBS								
Bulb	Category	Part Number	Legacy Part Number		Voltage	Power Consumption	Base	Page
	H7	8GH 358 193-011	CA1255S		12V	55W	PX26d	281
	H4	8GJ 358 193-001	XD1260/55S		12V	60/55W	P43t	280



8GS 007 001-152



P32d-3



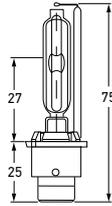
D2 - COLOUR MATCH BULBS						
Part Number	Legacy Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
8GS 007 001-152	D2R	12/24V	35W	P32d-3	D2R	
8GS 007 001-242	D2R5K	12/24V	35W	P32d-3	D2R	



8GS 007 949-262



P32d-2



8GS 007 949-262	D2S	12/24V	35W	P32d-2	D2S	
8GH 007 949-271	D2SUP	12/24V	35W	P32d-2	D2S	
8GS 007 949-252	D2S5K	12/24V	35W	P32d-2	D2S	

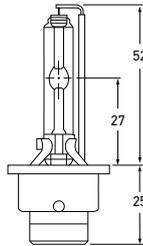
See page 273 for further information on colour match bulbs (5K).
See page 89 for information on power packs and ballast leads.



8GS 007 949-302



P32d-5

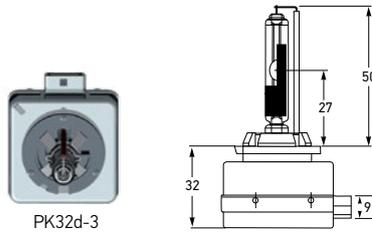


D4S						
Part Number	Legacy Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
8GS 007 949-302	D4S	12/24V	35W	P32d-5	D4S	

BASE CODING (VIEWED FROM TOP SIDE)



AUTOMOTIVE BULBS



PK32d-3



8GS 009 499-001

D1					
Part Number	Legacy Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category
8GS 009 499-001	D1R	12/24V	35W	PK32d-3	D1R



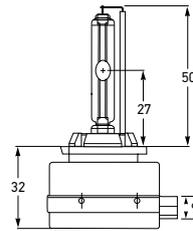
PK32d-2

8GS 009 028-051/8GH 009 028-081



PK32d-2

8GS 009 028-622



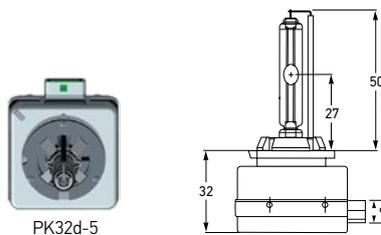
8GS 009 028-051

8GS 009 028-051	D1S	12/24V	35W	PK32d-2	D1S
8GH 009 028-081	D1SUP	 12/24V	35W	PK32d-2	D1S
8GS 009 028-622	D1S5K	 12/24V	35W	PK32d-2	D1S

See page 89 for information on power packs and ballast leads.



8GS 009 028-622



PK32d-5



8GS 009 028-312

D3S					
Part Number	Legacy Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category
8GS 009 028-312	D3S	12/24V	35W	PK32d-5	D3S

BASE CODING (VIEWED FROM TOP SIDE)





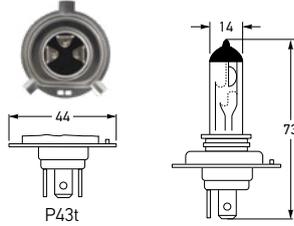
8GJ 958 631-031



8GJ 002 525-652



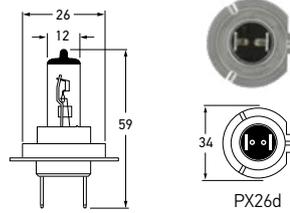
8GJ 980 324-021



HALOGEN BULBS - H4 12 VOLT							
Part Number	Legacy Part Number		Voltage	Power Consumption	Base	ADR 51/00 Category	
8GJ 980 324-001	XD1260/55		12V	60/55W	P43t	H4	☑
8GJ 980 324-007	XD1260/55BULK		12V	60/55W	P43t	H4	
8GJ 002 525-483	XD1260/55LL		12V	60/55W	P43t	H4	☑
8GJ 002 525-005	XD1260/55X		12V	60/55W	P43t	H4	☑
8GJ 178 560-484	XD1260/55UP		12V	60/55W	P43t	H4	☑
8GJ 958 631-031	XD1260/55UM		12V	60/55W	P43t	H4	☑
8GJ 358 193-001	XD1260/55S		12V	60/55W	P43t	H4	
8GJ 002 525-365	XD1260/55CB		12V	60/55W	P43t	H4	☑
8GJ 002 525-206	XD12100/90		12V	100/90W	P43t		☑
8GJ 002 525-207	XD12100/90BULK		12V	100/90W	P43t		

HALOGEN BULBS - H4 24 VOLT							
Part Number	Legacy Part Number		Voltage	Power Consumption	Base	ADR 51/00 Category	
8GJ 980 324-021	XD2475/70		24V	75/70W	P43t	H4	☑
8GJ 002 525-287	XD2475/70BULK		24V	75/70W	P43t	H4	
8GJ 002 525-282	XD2475/70TS		24V	75/70W	P43t	H4	☑
8GJ 002 525-267	XD2475/70TSBULK		24V	75/70W	P43t	H4	
8GJ 002 525-454	XD24100/90		24V	100/90W	P43t		☑
8GJ 002 525-457	XD24100/90BULK		24V	100/90W	P43t		

Bulk packs are sold in packs of 10.



8GH 958 879-041



8GH 007 157-271

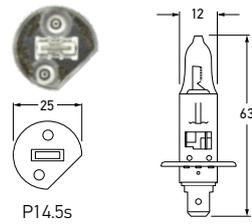
HALOGEN BULBS - H7 12 VOLT						
Part Number	Legacy Part Number		Voltage	Power Consumption	Base	ADR 51/00 Category
8GH 007 157-131	CA1255		12V	55W	PX26d	H7
8GH 007 157-137	CA1255BULK		12V	55W	PX26d	H7
8GH 007 157-142	CA1255LL		12V	55W	PX26d	H7
8GH 007 157-562	CA1255X		12V	55W	PX26d	H7
8GH 178 560-494	CA1255UP		12V	55W	PX26d	H7
8GH 958 879-041	CA1255UM		12V	55W	PX26d	H7
8GH 358 193-011	CA1255S		12V	55W	PX26d	H7
8GH 007 157-411	CA1255CB		12V	55W	PX26d	H7

HALOGEN BULBS - H7 24 VOLT						
Part Number	Legacy Part Number		Voltage	Power Consumption	Base	ADR 51/00 Category
8GH 007 157-244	CA2470		24V	70W	PX26d	H7
8GH 007 157-247	CA2470BULK		24V	70W	PX26d	H7
8GH 007 157-271	CA2470TS		24V	70W	PX26d	H7
8GH 007 157-277	CA2470TSBULK		24V	70W	PX26d	H7

Bulk packs are sold in packs of 10.



8GH 002 089-122



8GH 178 560-472



8GH 002 089-144

HALOGEN BULBS - H1 12 VOLT

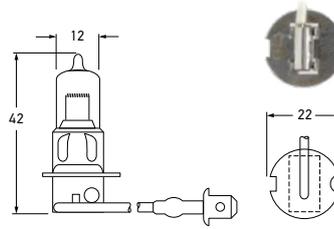
Part Number	Legacy Part Number		Voltage	Power Consumption	Base	ADR 51/00 Category	
8GH 002 089-122	C1255		12V	55W	P14.5s	H1	
8GH 002 089-127	C1255BULK		12V	55W	P14.5s	H1	
8GH 002 089-111	C1255LL		12V	55W	P14.5s	H1	
8GH 002 089-384	C1255X		12V	55W	P14.5s	H1	
8GH 178 560-472	C1255UP		12V	55W	P14.5s	H1	
8GH 358 193-071	C1255UM		12V	55W	P14.5s	H1	
8GH 002 089-144	C1255CB		12V	55W	P14.5s	H1	
8GH 002 089-155	C12100		12V	100W	P14.5s		

HALOGEN BULBS - H1 24 VOLT

Part Number	Legacy Part Number		Voltage	Power Consumption	Base	ADR 51/00 Category	
8GH 002 089-281	C2470		24V	70W	P14.5s	H1	
8GH 002 089-287	C2470BULK		24V	70W	P14.5s	H1	
8GH 002 089-255	C2470TS		24V	70W	P14.5s	H1	
8GH 002 089-257	C2470TSBULK		24V	70W	P14.5s	H1	
8GH 002 089-455	C24100		24V	100W	P14.5s		

Bulk packs are sold in packs of 10.

AUTOMOTIVE BULBS



HALOGEN BULBS - H3 12 VOLT						
Part Number	Legacy Part Number		Voltage	Power Consumption	Base	ADR 51/00 Category
8GH 980 333-001	YC1255		12V	55W	PK22s	H3
8GH 002 090-147	YC1255BULK		12V	55W	PK22s	H3
8GH 002 090-112	YC1255LL		12V	55W	PK22s	H3
8GH 002 090-024	YC1255X		12V	55W	PK22s	H3
8GH 358 193-031	YC1255UM		12V	55W	PK22s	H3
8GH 002 090-032	YC1255CB		12V	55W	PK22s	H3
8GH 002 090-053	YC12100		12V	100W	PK22s	H3



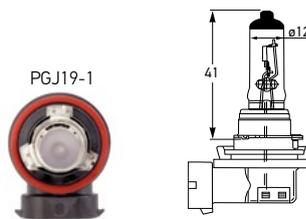
8GH 002 090-024

HALOGEN BULBS - H3 24 VOLT						
Part Number	Legacy Part Number		Voltage	Power Consumption	Base	ADR 51/00 Category
8GH 002 090-261	YC2470		24V	70W	PK22s	H3
8GH 002 090-267	YC2470BULK		24V	70W	PK22s	H3
8GH 002 090-461	YC2470TS		24V	70W	PK22s	H3
8GH 002 090-467	YC2470TSBULK		24V	70W	PK22s	H3
8GH 002 090-455	YC24100		24V	100W	PK22s	H3



8GH 002 090-461

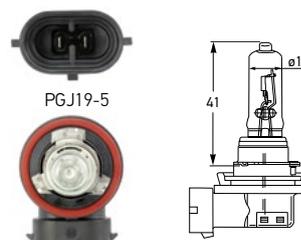
Bulk packs are sold in packs of 10.



HALOGEN BULBS - H8						
Part Number	Legacy Part Number		Voltage	Power Consumption	Base	ADR 51/00 Category
8GH 008 356-002	CE1235		12V	35W	PGJ19-1	H8
8GH 358 193-021	CE1235UM		12V	35W	PGJ19-1	H8



8GH 008 356-002



HALOGEN BULBS - H9						
Part Number	Legacy Part Number		Voltage	Power Consumption	Base	ADR 51/00 Category
8GH 008 357-003	CF1265		12V	65W	PGJ19-5	H9



8GH 008 357-003



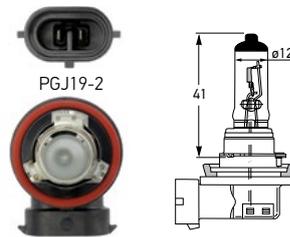
8GH 980 326-001



HALOGEN BULBS - H10						
Part Number	Legacy Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
8GH 980 326-001	CH1242	12V	42W	PY20d	H10	



8GH 008 358-002

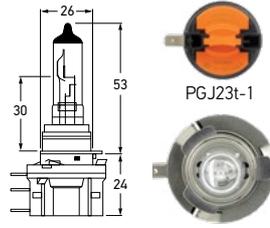


HALOGEN BULBS - H11						
Part Number	Legacy Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
8GH 008 358-002	CG1255	12V	55W	PGJ19-2	H11	
8GH 008 358-152	CG1255X	12V	55W	PGJ19-2	H11	
8GH 008 358-041	CG1255UP	12V	55W	PGJ19-2	H11	
8GH 358 193-061	CG1255UM	12V	55W	PGJ19-2	H11	
8GH 008 358-182	CG1255CB	12V	55W	PGJ19-2	H11	
8GH 008 358-244	CG2470	24V	70W	PGJ19-2	H11	
8GH 008 358-252	CG2470TS	24V	70W	PGJ19-2	H11	



8GH 008 358-182

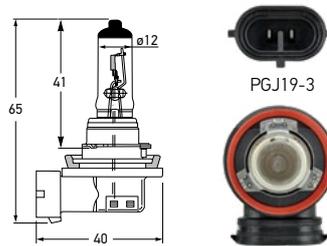
AUTOMOTIVE BULBS



DAYTIME RUNNING LAMP AND FOG LAMP BULB - H15					
Part Number	Legacy Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category
8GJ 168 119-002	XH1215/55	12V	15/55W	PGJ23t-1	H15



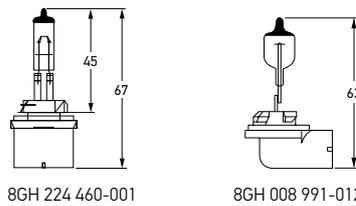
8GJ 168 119-002



HALOGEN BULBS - H16					
Part Number	Legacy Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category
8GH 186 996-012	CF1219	12V	19W	PGJ19-3	H16



8GH 186 996-012



HALOGEN BULBS - 800 SERIES					
Part Number	Legacy Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category
8GH 008 991-023	CF1227H27W/1	12V	27W	PG13	H27W/1
8GH 008 991-012	CF1227H27W/2	12V	27W	PGJ13	H27W/2



8GH 008 991-012

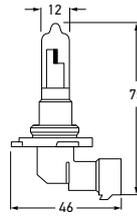




8GH 005 635-211



P20d



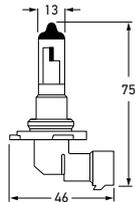
HALOGEN BULBS - HB3 (9005)						
Part Number	Legacy Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
8GH 005 635-302	CB1265	12V	65W	P20d	HB3	
8GH 358 193-051	CB1265UM	12V	65W	P20d	HB3	
8GH 005 635-053	CB1265CB	12V	65W	P20d	HB3	



8GH 005 636-161



P22d



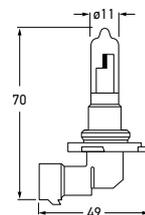
HALOGEN BULBS - HB4 (9006)						
Part Number	Legacy Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
8GH 005 636-123	CC1255	12V	55W	P22d	HB4	
8GH 358 193-041	CC1255UM	12V	55W	P22d	HB4	
8GH 005 635-033	CC1255CB	12V	55W	P22d	HB4	



8GH 009 319-011

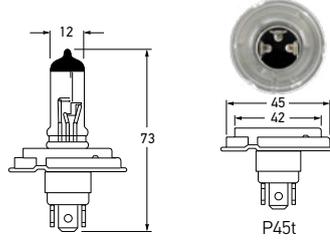


PX22d



HALOGEN BULBS - H1R2						
Part Number	Legacy Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
8GH 009 319-011	CI1255	12V	55W	PX22d	H1R2	

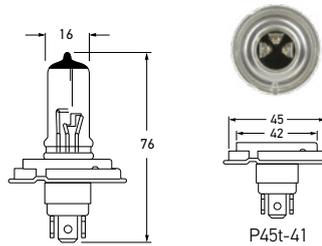
AUTOMOTIVE BULBS



HALOGEN HEADLAMP BULBS						
Part Number	Legacy Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
8GJ 178 555-211	XE2475/70	24V	70/75W	P45t-41		



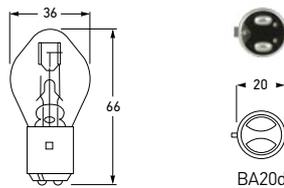
8GJ 178 555-211



HEADLAMP BULBS						
Part Number	Legacy Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
8GD 002 088-132	A1245/40	12V	45/40W	P45t-41	R2	
8GD 002 088-272	A2455/50	24V	55/50W	P45t-41	R2	



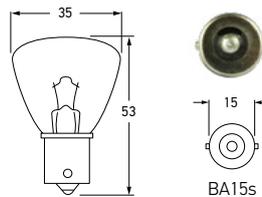
8GD 002 088-132



8GD 002 084-153	B1245/40	12V	45/40W	BA20d		
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8GD 002 084-153



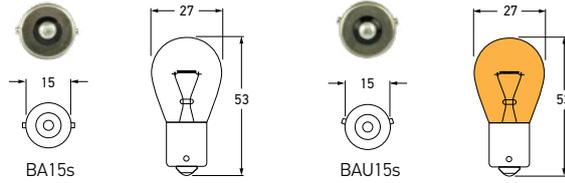
SPECIAL BULBS FOR EMERGENCY FLASHER AND REVOLVING LAMPS						
Part Number	Legacy Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
8GA 002 074-123	U1245	12V	45W	BA15s		
8GA 002 074-243	U2445	24V	45W	BA15s		



8GA 002 074-123



8GA 002 073-163



8GA 006 841-124

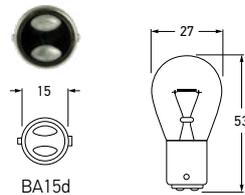
BAYONET INDICATOR AND STOP LAMP BULBS

Part Number	Legacy Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
8GA 002 073-163	R1221	12V	21W	BA15s	P21W	
8GA 002 073-168	R1221BULK	12V	21W	BA15s	P21W	
8GA 006 841-124	RY1221	12V	21W	BAU15s	PY21W	
8GA 006 841-127	RY1221BULK	12V	21W	BAU15s	PY21W	
8GA 002 072-243	R2418	24V	18W	BA15s		
8GA 002 073-245	R2421	24V	21W	BA15s	P21W	
8GA 002 073-247	R2421BULK	24V	21W	BA15s	P21W	
8GA 002 073-253	R2421TS	24V	21W	BA15s	P21W	
8GA 006 841-242	RY2421	24V	21W	BAU15s	PY21W	
8GA 006 841-253	RY2421TS	24V	21W	BAU15s	PY21W	

Bulk packs are sold in packs of 10.



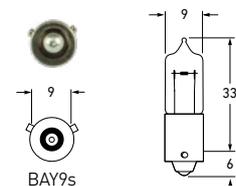
8GA 002 073-282



8GA 002 073-282	FD1221	12V	21W	BA15d	P21W	
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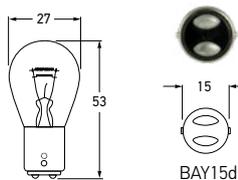
8GH 008 417-003



BAYONET HALOGEN INDICATOR AND STOP LAMP BULBS

Part Number	Legacy Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
8GH 008 417-003	RQ1221	12V	21W	BAY9s	H21W	
8GH 008 417-052	RQ2421	24V	21W	BAY9s	H21W	

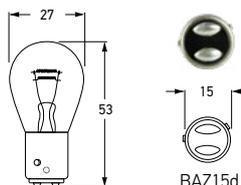
AUTOMOTIVE BULBS



8GD 980 329-001

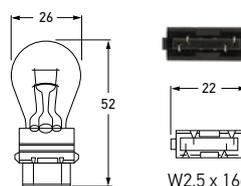
BAYONET STOP AND TAIL LAMP BULBS						
Part Number	Legacy Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
8GD 980 329-001	S1221/5V	12V	21/5W	BAY15d	P21/5W	
8GD 980 329-007	S1221/5VBULK	12V	21/5W	BAY15d	P21/5W	
8GD 002 078-171	S1221/5VLL	12V	21/5W	BAY15d	P21/5W	
8GD 002 078-242	S2421/5V	24V	21/5W	BAY15d	P21/5W	
8GD 980 329-021	S2421/5VBULK	24V	21/5W	BAY15d	P21/5W	
8GD 002 078-013	S2421/5TS	24V	21/5W	BAY15d	P21/5W	

Bulk packs are sold in packs of 10.



8GD 004 772-122

BAYONET EUROPEAN STOP AND TAIL LAMP BULBS						
Part Number	Legacy Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
8GD 004 772-122	SZ1221/4	12V	21/4W	BAZ15d	P21/4W	



8GD 007 731-274

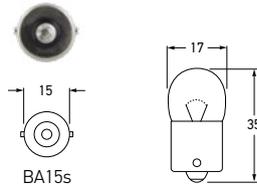


8GD 007 731-281

PLASTIC BASED BULBS						
Part Number	Legacy Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
8GA 007 731-233	WP1227	12V	27W	W2.5 x 16d	P27W	
8GD 007 731-274	WP1227/7	12V	27/7W	W2.5 x 16q	P27/7W	
8GD 007 731-281	WPA1227/7	12V	27/7W	W2.5 x 16q	PY27/7W	



8GH 008 358-002



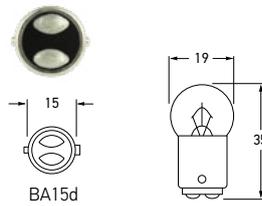
REAR POSITION, MARKER AND CLEARANCE BULBS

Part Number	Legacy Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
8GA 002 071-171	G125	12V	5W	BA15s	R5W	
8GA 002 071-177	G125BULK	12V	5W	BA15s	R5W	
8GA 002 071-511	G1210	12V	10W	BA15s	R10W	
8GA 002 071-517	G1210BULK	12V	10W	BA15s	R10W	
8GA 002 071-245	G245	24V	5W	BA15s	R5W	
8GA 002 071-247	G245BULK	24V	5W	BA15s	R5W	
8GP 342 760-941	G245TS	24V	5W	BA15s	R5W	
8GA 002 071-254	G2410	24V	10W	BA15s	R10W	
8GA 002 071-257	G2410BULK	24V	10W	BA15s	R10W	
8GA 002 071-274	G2410TS	24V	10W	BA15s	R10W	

Bulk packs are sold in packs of 10.

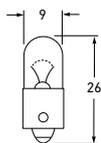


8GA 002 071-372

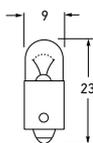


8GA 002 071-372	GD125	12V	5W	BA15d	R5W	
8GA 002 071-362	GD245	24V	5W	BA15d	R5W	

AUTOMOTIVE BULBS



8GP 002 067-124, 8GP 002 067-832,
8GP 002 067-245, 8GP 007 676-124



8GP 002 068-123, 8GP 002 068-133,
8GP 002 068-244



BA9s



1.

8GP 002 067-124



2.

8GP 002 067-832



3.

8GP 002 068-123

PILOT/DASH BULBS							
Part Number	Legacy Part Number	Picture	Voltage	Power Consumption	Base	ADR 51/00 Category	
8GP 002 067-124	HL124	1	12V	4W	BA9s	T4W	
8GP 002 067-126	HL124BULK	1	12V	4W	BA9s	T4W	
8GP 002 067-832	HL124BV	2	12V	4W	BA9s	T4W	
8GP 002 067-245	HL244	1	24V	4W	BA9s	T4W	
8GP 002 067-248	HL244BULK	1	24V	4W	BA9s	T4W	
8GP 002 067-263	HL244TS	1	24V	4W	BA9s	T4W	
8GP 008 285-002	HL247	1	24V	7W	BA9s		
8GP 002 068-123	H122	3	12V	2W	BA9s		
8GP 002 068-133	H123	3	12V	3W	BA9s		
8GP 002 068-137	H123BULK	3	12V	3W	BA9s		
8GP 007 676-124	H126	1	12V	6W	BA9s		
8GP 007 676-127	H126BULK	1	12V	6W	BA9s		
8GP 002 068-244	H242	1	24V	2W	BA9s		
8GP 002 068-247	H242BULK	1	24V	2W	BA9s		

Bulk packs are sold in packs of 10.

LED RETROFITS						
Part Number	Legacy Part Number	Voltage	Power Consumption	Base		
8GL 980 327-001	HLLED124	12V	1W	BA9s		

Not for use in marker and signal lamps.



8GL 980 327-001



8GA 008 892-121



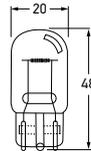
8GP 009 021-121



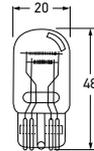
8GP 938 026-002



W3 x 16d



W3 x 16d



W3 x 16q

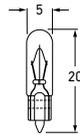
WEDGE BASE BULBS

Part Number	Legacy Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
8GA 008 892-121	CAP1221	12V	21W	W3 x 16d	W21W	
8GA 008 892-127	CAP1221BULK	12V	21W	W3 x 16d	W21W	
8GP 009 021-121	CAPY1221	12V	21W	W3 x 16d	WY21W	
8GD 008 893-112	CAP1221/5	12V	21/5W	W3 x 16q	W21/5W	
8GD 008 893-117	CAP1221/5BULK	12V	21/5W	W3 x 16q	W21/5W	

Bulk packs are sold in packs of 10.

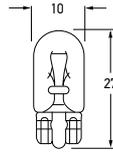


W2 x 4.6d



8GP 002 095-122	W1212	12V	1.2W	W2 x 4.6d		
8GP 002 095-127	W1212BULK	12V	1.2W	W2 x 4.6d		
8GP 938 026-002	WBL122	12V	2W	W2 x 4.6d		
8GP 002 095-141	WS122	12V	2W	W2 x 4.6d		
8GP 002 095-243	W2412	24V	1.2W	W2 x 4.6d		
8GP 002 095-247	W2412BULK	24V	1.2W	W2 x 4.6d		
8GP 002 095-012	WS242	24V	2W	W2 x 4.6d		

Bulk packs are sold in packs of 10.



W2.1 x 9.5d



8GP 002 095-072

WEDGE BASE BULBS						
Part Number	Legacy Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
8GP 002 095-072	W122	12V	2W	W2.1 x 9.5d		
8GP 003 594-144	W123	12V	3W	W2.1 x 9.5d	W3W	
8GA 980 325-001	W125	12V	5W	W2.1 x 9.5d	W5W	
8GA 980 325-007	W125BULK	12V	5W	W2.1 x 9.5d	W5W	
8GP 003 594-162	W125LL	12V	5W	W2.1 x 9.5d	W5W	
8GP 003 594-561	W125BV	12V	5W	W2.1 x 9.5d	W5W	
8GP 003 594-544	WY125	12V	5W	W2.1 x 9.5d	WY5W	
8GA 178 560-337	W242BULK	24V	2W	W2.1 x 9.5d		
8GP 003 594-244	W243	24V	3W	W2.1 x 9.5d	W3W	
8GP 003 594-252	W245	24V	5W	W2.1 x 9.5d	W5W	
8GP 003 594-256	W245BULK	24V	5W	W2.1 x 9.5d	W5W	

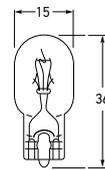
Bulk packs are sold in packs of 10.



8GP 003 594-561



8GP 003 594-544



W2.1 x 9.5d



8GA 008 246-002

8GA 222 459-001	WS1212	12V	12W	W2.1 x 9.5d		
8GA 008 246-002	W1216	12V	16W	W2.1 x 9.5d	W16W	



8GL 178 560-602

LED RETROFITS						
Part Number	Legacy Part Number	Voltage	Power Consumption	Base		
8GL 178 560-602	WLLED125	12V	1W	W2.1x9.5d		

Not for use in marker and signal lamps.



8GM 002 091-184



8GM 002 091-253



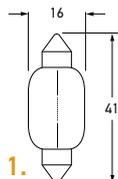
8GM 211 656-692



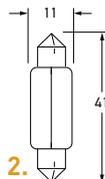
8GM 002 091-362



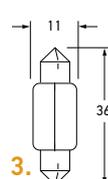
SV8.5-8



1. 8GM 002 091-184



2. 8GM 002 091-253



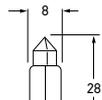
3. 8GA 002 092-021

FESTOON BULBS

Part Number	Legacy Part Number	Diagram	Voltage	Power Consumption	Base	ADR 51/00 Category	
8GM 980 328-001	K1210	2	12V	10W	SV8.5-8		
8GM 980 328-007	K1210BULK	2	12V	10W	SV8.5-8		
8GM 002 091-184	K1221	1	12V	21W	SV8.5-8	C21W	
8GM 002 091-187	K1221BULK	1	12V	21W	SV8.5-8	C21W	
8GM 002 091-253	K2410	2	24V	10W	SV8.5-8		
8GM 002 091-257	K2410BULK	2	24V	10W	SV8.5-8		
8GM 002 091-012	K2421	1	24V	21W	SV8.5-8		
8GM 002 091-017	K2421BULK	1	24V	21W	SV8.5-8		
8GA 002 092-021	L125	3	12V	5W	SV8.5-8	C5W	
8GA 002 092-027	L125BULK	3	12V	5W	SV8.5-8	C5W	
8GM 002 091-342	L1210	3	12V	10W	SV8.5-8		
8GM 002 092-251	L245	3	24V	5W	SV8.5-8	C5W	
8GM 002 092-257	L245BULK	3	24V	5W	SV8.5-8	C5W	
8GM 304 927-001	L2410	3	24V	10W	SV8.5-8		
8GM 304 927-007	L2410BULK	3	24V	10W	SV8.5-8		



SV7-8

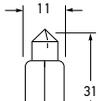


M123

8GM 211 656-692	M123		12V	3W	SV7-8		
8GM 211 656-697	M123BULK		12V	3W	SV7-8		
8GM 211 656-772	M243		24V	3W	SV7-8		
8GM 211 656-777	M243BULK		24V	3W	SV7-8		



SV8.5-8

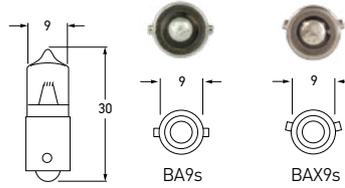


N1210

8GM 002 091-362	N1210		12V	10W	SV8.5-8		
8GM 002 091-367	N1210BULK		12V	10W	SV8.5-8		

Bulk packs are sold in packs of 10.

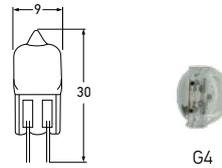
AUTOMOTIVE BULBS



HALOGEN/INTERIOR BULBS						
Part Number	Legacy Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
8GH 002 473-512	YL125	12V	5W	BA9s		
8GH 007 643-123	YL126	12V	6W	BAX9s	H6W	
8GH 002 473-221	YL1210	12V	10W	BA9s		
8GH 002 473-134	YL1220	12V	20W	BA9s		



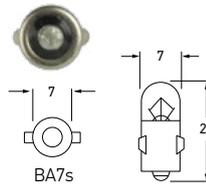
8GH 002 473-512



8GS 910 372-001	YM125	12V	5W	G4		
8GS 910 371-001	YM1210	12V	10W	G4		
8GS 910 371-011	YM1220	12V	20W	G4		
8GS 910 371-251	YM2420	24V	20W	G4		



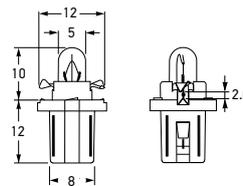
8GS 910 371-001



MINIATURE BULBS						
Part Number	Legacy Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
8GP 002 066-123	J122	12V	2W	BA7s		
8GP 002 066-243	J243	24V	3W	BA7s		



8GP 002 066-123



DASHBOARD BULBS						
Part Number	Legacy Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
8GP 004 017-121	WD1212BULK	12V	1.2W	B8.5d		
8GA 178 560-267	WD2412BULK	24V	1.2W	B8.5d		



8GP 004 017-121

Bulk packs are sold in packs of 10.

3RD EDITION ADR REFERENCE GUIDE

The following pages are a guide to mounting HELLA lamps in compliance with the Australian Design Rules (ADR). The diagrams in this section are intended as a general guide only, for exact mounting specifications please refer to ADR 13/00.



A quick reference



1. Find the product that fulfils your illumination requirement.



2. Check for the ADR symbol on the product page to ensure it's compliant.

HELLA Part No.	Engineering Drawing No.	A.D.R. No.	Function
2550	001384-28	48/00	Number Plate Lamp
2551	001386-29	48/00	Number Plate Lamp
2553	951068-02	48/00	Number Plate Lamp
2554	950921-00	48/00	Number Plate Lamp
2555	001389-19	48/00	Number Plate Lamp
	000947-03	48/00	Number Plate Lamp

3. Look up the part number on the chart on page 300 for complete ADR information.

Simpler ADR Compliance

The 3rd edition ADR covers all vehicles and trailers, even those not subject to registration requirements such as very light trailers or 'box' trailers.

To simplify the ADR approval process for smaller manufacturers and individual home-builders, HELLA has made a consolidated Summary

of Evidence (SE) submission to the Federal Office of Road Safety (FORS). This submission covers all HELLA products that comply with 3rd Edition ADRs.

This catalogue lists both the HELLA and FORS Component Registration Numbers (CRN) beside each item in a quick reference ADR application

chart in this section (page 300). HELLA provides specific ADR related lamp orientation and mounting requirements to enable customers requiring ADR compliance to simply quote the relevant CRN or CTA number to the authorities (who maintain a central register), rather than undertake detailed SE submissions for each lamp function.

REAR

- 1 ADR 49/00 Rear End Outline Lamps
- 2 ADR 48/00 Number Plate Lamps
- 3 ADR 6/00: Cat.2 Rear Direction Indicators
- 4 ADR 49/00 Rear Position Lamps
- 5 ADR 49/00 Stop Lamps
- 6 ADR 47/00 Rear Retro Reflectors
- 7 ADR 1/00 Reversing Lamps

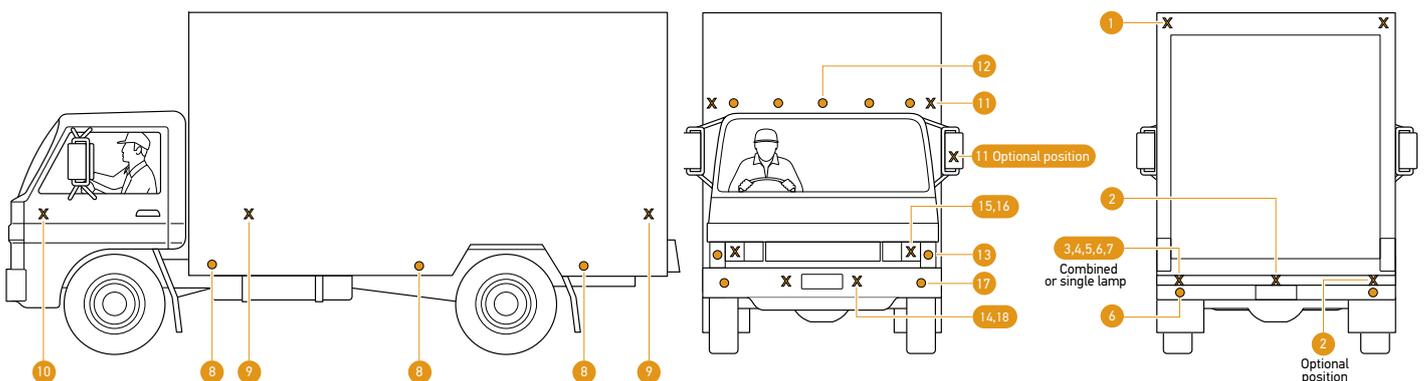
SIDE

- 8 ADR 47/00 Side Retro Reflectors
- 9 ADR 45/01 or 74/00 Side Markers
- 10 ADR 6/00 Supplementary Side Direction Indicators

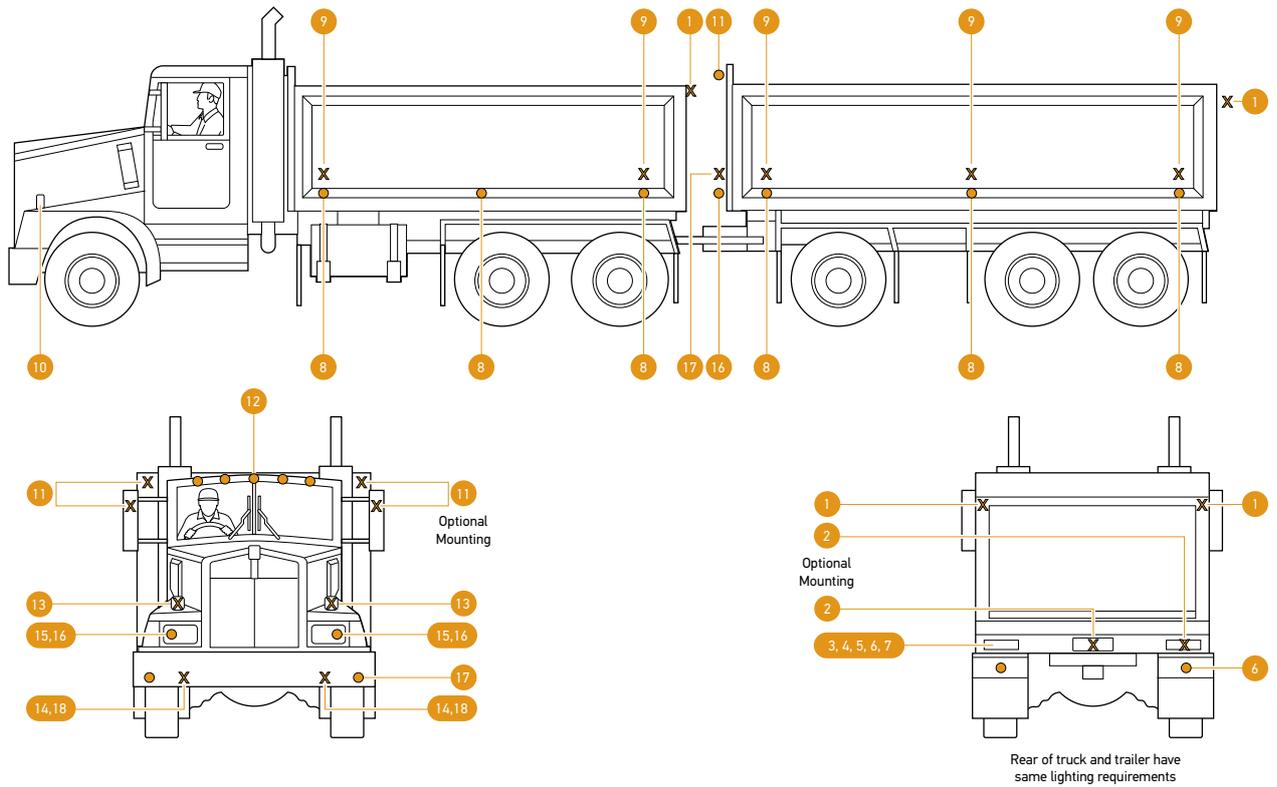
FRONT

- 11 ADR 49/00 Front End Outline Lamps
- 12 ADR 45/01 Cab Markers (optional)
- 13 ADR 6/00: Cat.1 Front Direction Indicators
- 14 ADR 50/00 Front Fog Lamps (optional)
- 15 ADR 46/00 Headlamps
- 16 ADR 49/00 Front Position Lamps
- 17 ADR 47/00 Front Retro Reflectors
- 18 ADR 76/00 Daytime Running Lamps (optional)

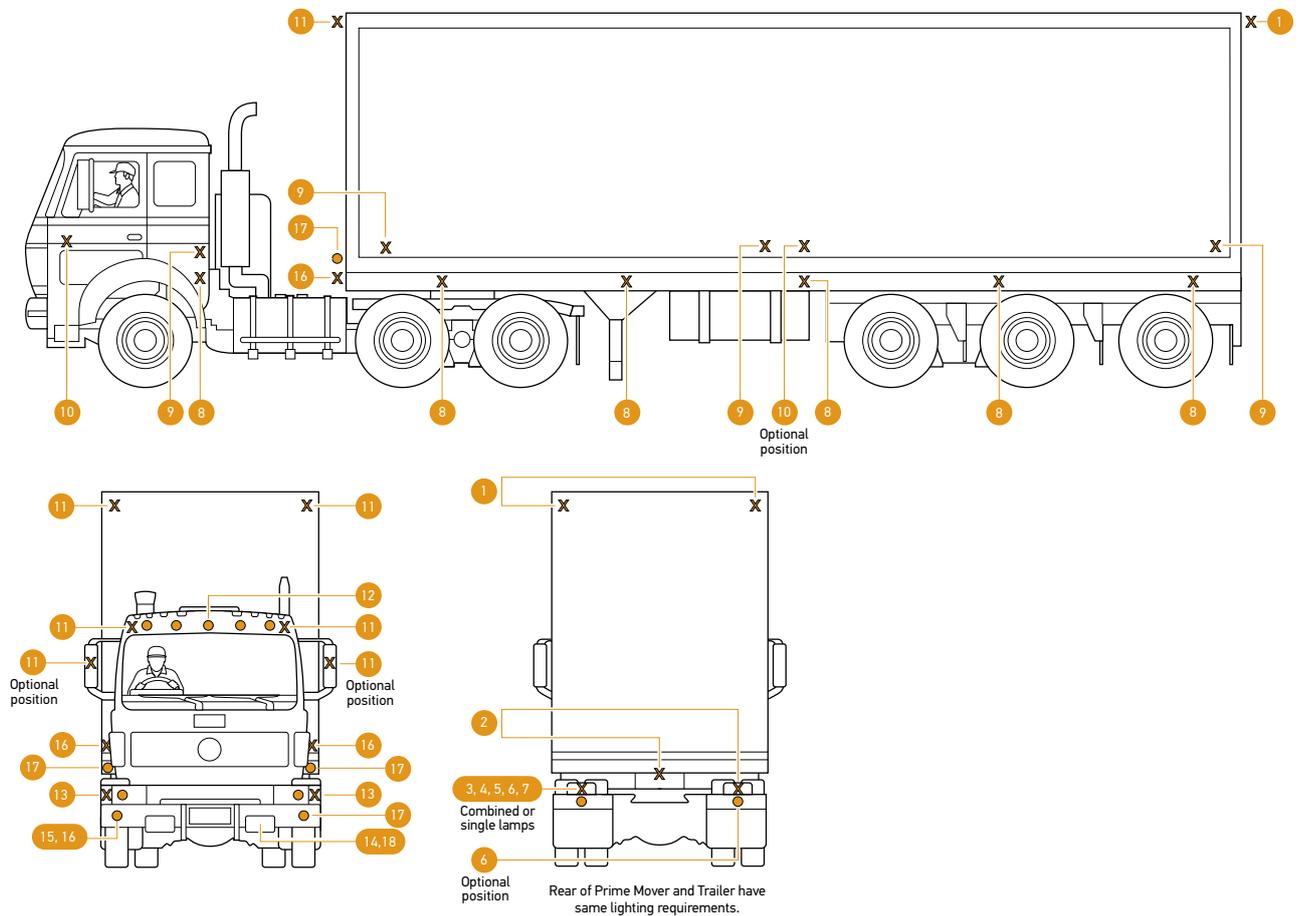
SMALL TRUCK



SINGLE TRAILER



SEMI TRAILER



REAR

- 1 ADR 49/00 Rear End Outline Lamps
- 2 ADR 48/00 Number Plate Lamps
- 3 ADR 6/00: Cat.2 Rear Direction Indicators
- 4 ADR 49/00 Rear Position Lamps
- 5 ADR 49/00 Stop Lamps
- 6 ADR 47/00 Rear Retro Reflectors
- 7 ADR 1/00 Reversing Lamps

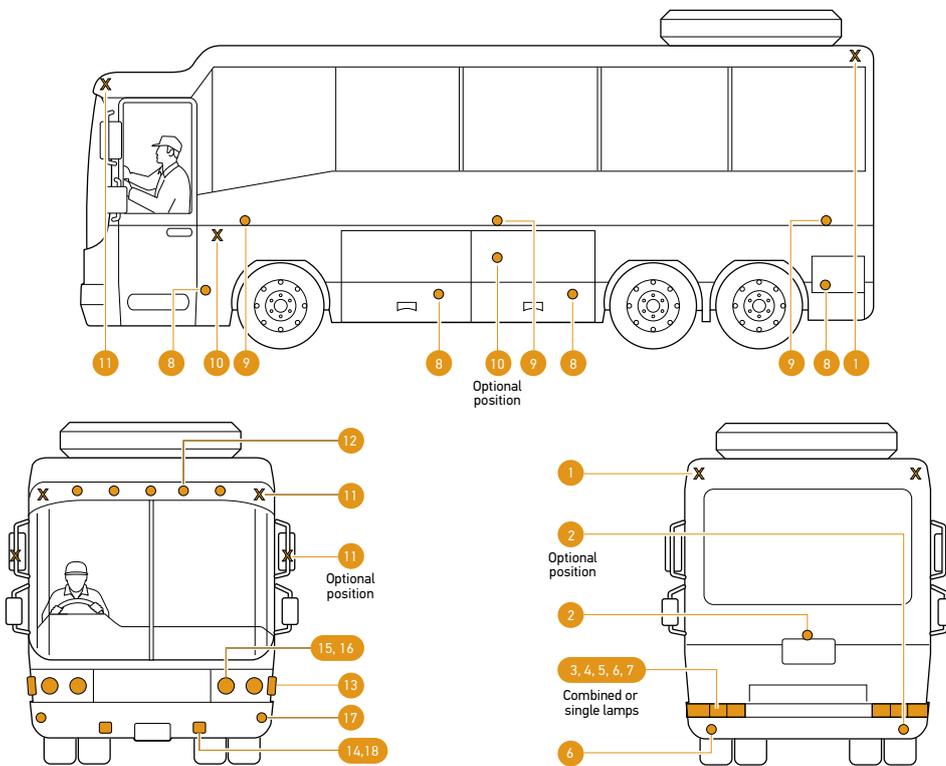
SIDE

- 8 ADR 47/00 Side Retro Reflectors
- 9 ADR 45/01 or 74/00 Side Markers
- 10 ADR 6/00 Supplementary Side Direction Indicators

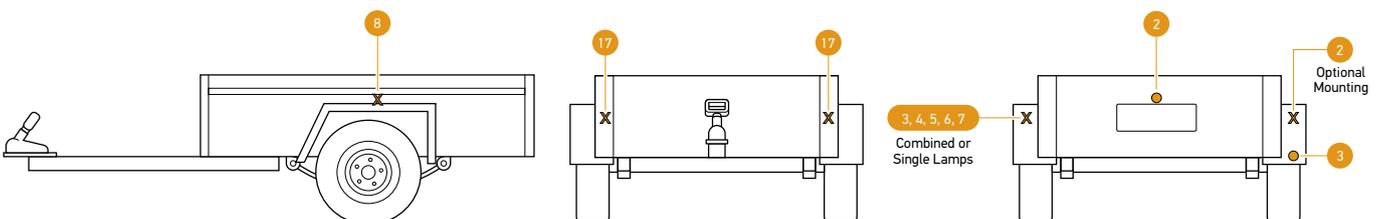
FRONT

- 11 ADR 49/00 Front End Outline Lamps
- 12 ADR 45/01 Cab Markers (optional)
- 13 ADR 6/00: Cat.1 Front Direction Indicators
- 14 ADR 50/00 Front Fog Lamps (optional)
- 15 ADR 46/00 Headlamps
- 16 ADR 49/00 Front Position Lamps
- 17 ADR 47/00 Front Retro Reflectors
- 18 ADR 76/00 Daytime Running Lamps (optional)

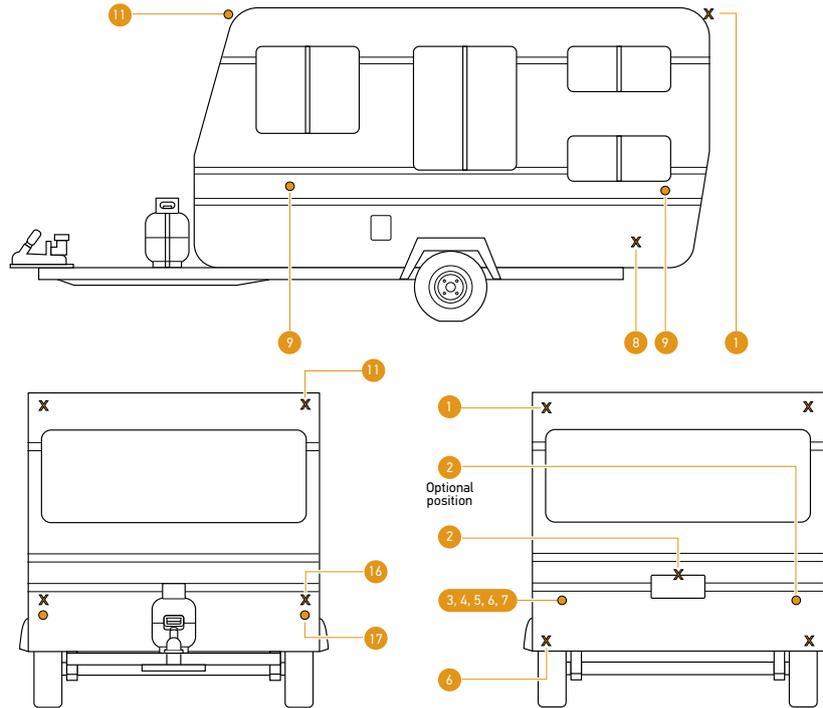
COACH



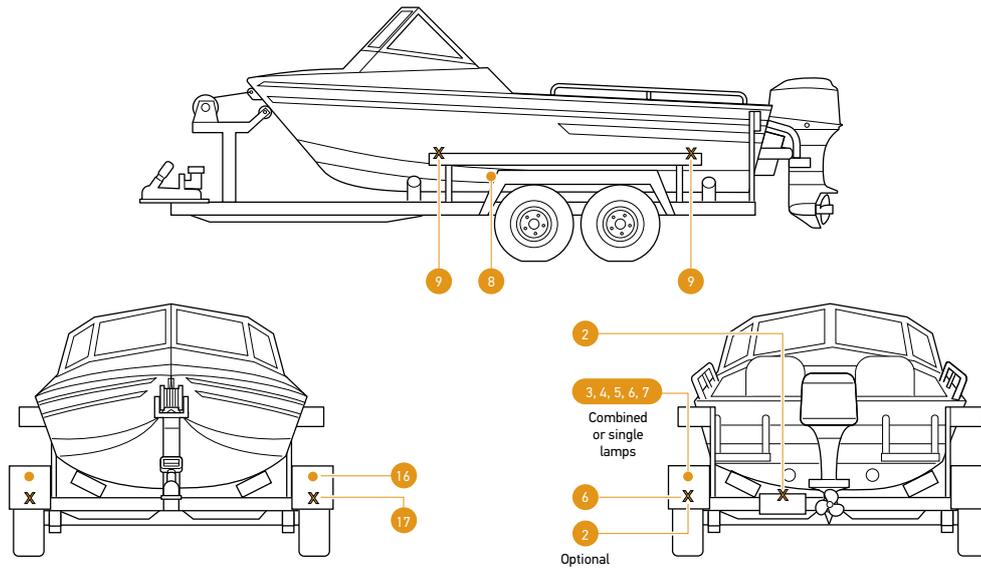
SMALL TRAILER



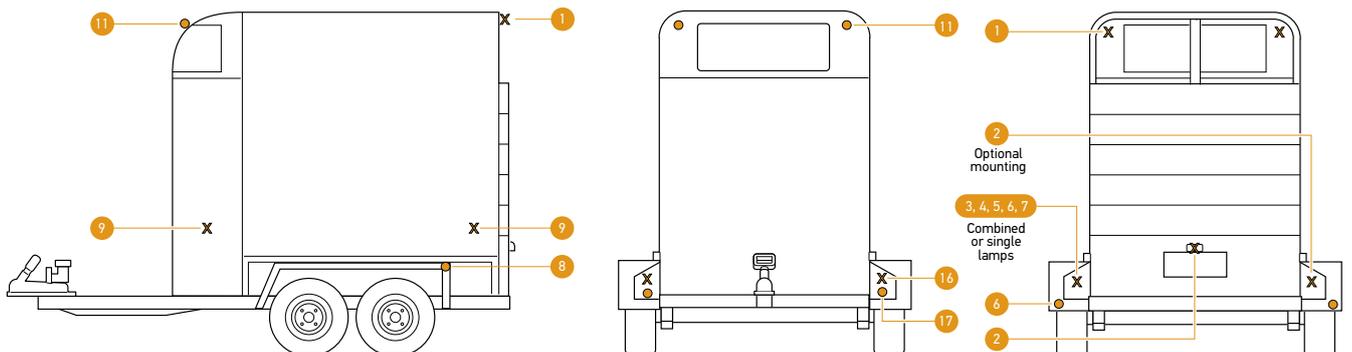
CARAVAN



BOAT TRAILER



HORSE FLOAT



HELLA Part No.	Engineering Drawing No.	ADR No.	Function	Bulb(s)	Bulb Type	HELLA Ref. or ECE	FORS Ref: CRN/CTA or ECE	Instruction Sheet No.	Lamp Identification
1004	980670-00	76/00	Daytime Running Lamp	LED	N/A LED	N/A ECE	E24 87R-000002	980-703-10	E24 0002 (0670)
HM1535DRL	980670-80								
1005	980680-00	76/00	Daytime Running Lamp	LED	N/A LED	N/A ECE	E24 87R-000001	980-703-12	E24 0001 (0680)
1005-24V	980680-50							980-703-24	
1006	980690-50	76/00	Daytime Running Lamp	LED	N/A LED	DRL*1006*A	42763	980-703-47	0690
1007-24V	980690-40	76/00	Daytime Running Lamp	LED	N/A LED	N/A ECE	E24 5854	980-703-53	0690
		49/00	Front Position Lamp	LED	N/A LED	N/A ECE	E24 5854		
1008	980680-11	76/00	Daytime Running Lamp	LED	N/A LED	N/A ECE	E24 87R-000001	980-703-68	E24 0001 (0680)
1008-24V	980680-61							980-703-69	
1009	980880-00	76/00	Daytime Running Lamp	LED	N/A LED	DRL*1009*A	44200	958-780-04	0880
1009-24V	980880-10					DRL*1009-24V*A	44202		
1009V	980880-40	76/00	Daytime Running Lamp	LED	N/A LED	1009V*DRL*C	CTA-045962	958-780-92	0880 B
1009V-24V	980880-50					1009V-24V*DRL*C	CTA-045965		
1013	980970-00	76/00	Daytime Running Lamp	LED	N/A LED	*DRL*1013*A	44776	958-780-44	0970
1013-24V	980970-50					*DRL*1013-24V*A	44783		
1027	003434-18	46/00	Headlamp	XD1260/55	H4	HL*1027*A	15311	911-352-79	17016
		49/00	Front Position Lamp	HL124	T4W	FP*1027*A	15317		
1028	007834-00	46/00	Headlamp (Low/Dipped Beam)	C1255	H1	HL*1028*A	32013	911-353-80	550
1029	008193-00	46/00	Headlamp (Low/Dipped Beam)	CA1255	H7	HL*1029*A	32008	911-353-81	917
1030	008191-00/02	46/00	Headlamp (High/Main Beam)	CA1255	H7	HL*1030*A	32009	911-353-79	917
		49/00	Front Position Lamp (1030 only)	HL124	T4W	FP*1030*A	32014		
1041	003177-06	46/00	Headlamp	C1255	H1	HL*1041*A	15071	911-351-06	24504
1042	003177-30	46/00	Headlamp	XD1260/55	H4	HL*1042*A	15072	911-351-07	7197R20
1043	003427-04	46/00	Headlamp	XD1260/55	H4	HL*1043*A	15198	911-351-08	17009
		49/00	Front Position Lamp	HL124	T4W	FP*1043*A	15197		
1044	003177-51	46/00	Headlamp	XD1260/55	H4	HL*1044*A	15073	911-351-10	7197R20
		49/00	Front Position Lamp	HL124	T4W	FP*1044*A	15074		
1053	114155-00	46/00	Headlamp	C1255	H1	HL*1053*A	15075	911-351-14	14464R8
1055 & 1055HD	002850-06 & 002850-21	46/00	Headlamp	XD1260/55	H4	HL*1055*A	15088	911-351-16	17031R20
		49/00	Front Position Lamp	HL124	T4W	FP*1055*A	15089		
1056	002395-84	46/00	Headlamp	XD1260/55	H4	HL*1056*A	15094	911-351-17	53
		49/00	Front Position Lamp	HL124	T4W	FP*1056*A	15095		
1058 & 1058HD	002395-13 (950519-00) & 002395-26	46/00	Headlamp	XD1260/55	H4	HL*1058*A	15096	911-351-18	53
		49/00	Front Position Lamp	HL124	T4W	FP*1058*A	15097		
1058LED	958307-01	46/00	Headlamp	LED	N/A LED	N/A ECE	A02 HCR 01 PL RL 00 E11 12.5 6080	958-315	53
		49/00	Front Position Lamp	LED	N/A LED	N/A ECE			
		76/00	Daytime Running Lamp	LED	N/A LED	N/A ECE			
1ML012488111	012.488-111	46/00	Low Beam Headlamp	LED	N/A LED	N/A ECE	E1 4090	HKG & ADR 13/00	E1 4090
1ML012488131	012.488-131	46/00	Low Beam Headlamp	LED	N/A LED	N/A ECE			
		49/00	Front Position Lamp	LED	N/A LED	N/A ECE			
		76/00	Daytime Running Lamp	LED	N/A LED	N/A ECE			
1F0011988-121	011.988-121	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE	E1 3831	HKG & ADR 13/00	E1 3831
1F0011988-131	011.988-131	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE			
		49/00	Front Position Lamp	LED	N/A LED	N/A ECE			
		76/00	Daytime Running Lamp	LED	N/A LED	N/A ECE			
1F0011988-171	011.988-171	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE			
		6/00: Cat 1	Front Direction Indicator Lamp	LED	N/A LED	N/A ECE			
1M0015050011	015.050-011	46/00	Low Beam Headlamp	LED	N/A LED	N/A ECE	E1 8993	HKG & ADR 13/00	E1 8993
1M0015050021	015.050-021		High Beam Headlamp	LED	N/A LED	N/A ECE			
1LL012758111	012.758-111	46/00	Headlamp	LED	N/A LED	N/A ECE	E1 4209	HKG & ADR 13/00	E1 4209
1LL015318041	015.318-041						E1 0020		E1 0020
1KL998570621	998.570-621	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE	E4 24910	HKG & ADR 13/00	E4 24910

3RD EDITION ADR REFERENCE GUIDE

HELLA Part No.	Engineering Drawing No.	ADR No.	Function	Bulb(s)	Bulb Type	HELLA Ref. or ECE	FORS Ref: CRN/CTA or ECE	Instruction Sheet No.	Lamp Identification																																																																																																																																																																																																																																																																																																																																																																																																												
1KL998570631	998.570-631	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE	E4 26353	HKG & ADR 13/00	E4 26353																																																																																																																																																																																																																																																																																																																																																																																																												
		49/00	Front Position Lamp	LED	N/A LED	N/A ECE				1108	005750-04	50/00	Front Fog Lamp	YC1255	H3	FF*1108*A	15137	911-351-30	18213R19	1109	005700-02	50/00	Front Fog Lamp	YC1255	H3	FF*1109*A	15134	911-351-31	18216R19	1110	005860-00	50/00	Front Fog Lamp	YC1255	H3	FF1110*A	15218	911-351-32	18227	1123	008284-00	50/00	Front Fog Lamp	CA1255	H7	FF*1123*A	26830	911-353-47	021211	1307	956329-01	46/00	High Beam Headlamp	YC1255	H3	HL*1307*A	15121	911-351-42	24556R8	1308	005750-30	46/00	High Beam Headlamp	YC1255	H3	HL*1308*A	15139	911-351-43	0444404R8	1309	005700-11	46/00	High Beam Headlamp	YC1255	H3	HL*1309*A	15132	911-351-44	0444410R8	1310	005860-03	46/00	High Beam Headlamp	YC1255	H3	HL*1310*A	15220	911-351-45	044442	1311	006300-12	46/00	High Beam Headlamp	YC1255	H3	HL*1311*A	15254	911-351-46	0444444	1322	008283-01	46/00	High Beam Headlamp	CA1255	H7	HL*1322*A	26822	911-353-44	041210	1323	008284-01	46/00	High Beam Headlamp	CA1255	H7	HL*1323*A	26823	911-353-46	041212	1324	001951-00	46/00	High Beam Headlamp	YC1255	H3	N/A ECE	HR 01 12.5 E1 3221	HKG 460 845-16 & Refer ADR 13/00	E1 3221 R112	1325	001952-00	46/00	High Beam Headlamp	YC1255	H3	N/A ECE	HR 01 17.5 E1 3222	HKG 460 845-16 & Refer ADR 13/00	E1 3222 R112	1326	001953-00	46/00	High Beam Headlamp	YC1255	H3	N/A ECE	HR 01 12.5 E1 3223	HKG 460 845-16 & Refer ADR 13/00	E1 3223 R112	1378	009094-02	46/00	High Beam Headlamp	C1255	H1	HL*1378*A	33671	911-353-94	00 1901	1378CHROME	009094-03	1394LED	011815-00	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE	HR PL 01 45 E1 3738	HKG 460 818-29 & Refer ADR 13/00	E1 3738	1394LEDHD	011815-03	1395	958 040-02	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE	E24 112R-010008	460 881-50	E24 20 0008	1395HD	958 040-03	460 881-51	1396	958 040-06	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE	E24 112R-010009	460 881-50	E24 30 0009	1396HD	958 040-04	460 881-51	1397HD	958 040-12	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE	E24 112-01 0012	460 881-51	E24 25 0012	1398HD	958 040-02	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE	E24 112-01 0013	460 881-51	E24 37.5 0013	1F8 016 560-001	016 560-00	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE	E24 5919	HKG	E24 25 5919	49/00	Front Position Lamp	LED	N/A LED	N/A ECE	1F8 016 560-011	016 560-01	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE	E24 5920	HKG	E24 50 5920	49/00	Front Position Lamp	LED	N/A LED	N/A ECE	E24 5919	1F8 016 560-021	016 560-02	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE	E24 5919	HKG	E24 25 5919	49/00	Front Position Lamp	LED	N/A LED	N/A ECE	1F8 016 560-031	016 560-03	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE	E24 5920	HKG	E24 50 5920	49/00	Front Position Lamp	LED	N/A LED	N/A ECE	E24 5919	1F8 016 797-111	016 797-11	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE	E24 5919	HKG	E24 25 5919	49/00	Front Position Lamp	LED	N/A LED	N/A ECE	1F8 016 797-011	016 797-01	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE	E24 5920	HKG	E24 50 5920	49/00	Front Position Lamp	LED	N/A LED	N/A ECE	E24 5919	1FA 996 197-151	996 197-15	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE	E1 4517	HKG	E1 4517	1FA 996 197-181	997 197-18	1405	003014-09	1/00	Reversing Lamp	R1221	P21W	RL*1405*A	15131	911-351-53	8703R23	1430-H	959070-50	1/00	Reversing Lamp	LED	N/A LED	RL*1430-H*A	36417	959-150-10	9060	1430-V	959070-55	RL*1430-V*A	36418	1433	959820-00	1/00	Reversing Lamp	LED	N/A LED	RL*1433*A	33190	959-149-69	9020	1446-H	959041-30	1/00	Reversing Lamp	LED	N/A LED	RL*1446-H*A	CTA-035980	959-149-95	9040	1446-V	959041-40	RL*1446-V*A	CTA-036243	1447L	959041-37	1/00	Reversing Lamp	LED	N/A LED	1447*RV*C	CTA-045662	958-780-84	9040	1447R	959041-36	1461	980762-01	1/00	Reversing Lamp	LED	N/A LED	RL*1461*A	CTA-045442	958-780-72	0760	47/00	Retro Reflector (Red/Rear)	N/A	N/A	RE*2161*A	45633	1465	959930-00	1/00	Reversing Lamp	LED
1108	005750-04	50/00	Front Fog Lamp	YC1255	H3	FF*1108*A	15137	911-351-30	18213R19																																																																																																																																																																																																																																																																																																																																																																																																												
1109	005700-02	50/00	Front Fog Lamp	YC1255	H3	FF*1109*A	15134	911-351-31	18216R19																																																																																																																																																																																																																																																																																																																																																																																																												
1110	005860-00	50/00	Front Fog Lamp	YC1255	H3	FF1110*A	15218	911-351-32	18227																																																																																																																																																																																																																																																																																																																																																																																																												
1123	008284-00	50/00	Front Fog Lamp	CA1255	H7	FF*1123*A	26830	911-353-47	021211																																																																																																																																																																																																																																																																																																																																																																																																												
1307	956329-01	46/00	High Beam Headlamp	YC1255	H3	HL*1307*A	15121	911-351-42	24556R8																																																																																																																																																																																																																																																																																																																																																																																																												
1308	005750-30	46/00	High Beam Headlamp	YC1255	H3	HL*1308*A	15139	911-351-43	0444404R8																																																																																																																																																																																																																																																																																																																																																																																																												
1309	005700-11	46/00	High Beam Headlamp	YC1255	H3	HL*1309*A	15132	911-351-44	0444410R8																																																																																																																																																																																																																																																																																																																																																																																																												
1310	005860-03	46/00	High Beam Headlamp	YC1255	H3	HL*1310*A	15220	911-351-45	044442																																																																																																																																																																																																																																																																																																																																																																																																												
1311	006300-12	46/00	High Beam Headlamp	YC1255	H3	HL*1311*A	15254	911-351-46	0444444																																																																																																																																																																																																																																																																																																																																																																																																												
1322	008283-01	46/00	High Beam Headlamp	CA1255	H7	HL*1322*A	26822	911-353-44	041210																																																																																																																																																																																																																																																																																																																																																																																																												
1323	008284-01	46/00	High Beam Headlamp	CA1255	H7	HL*1323*A	26823	911-353-46	041212																																																																																																																																																																																																																																																																																																																																																																																																												
1324	001951-00	46/00	High Beam Headlamp	YC1255	H3	N/A ECE	HR 01 12.5 E1 3221	HKG 460 845-16 & Refer ADR 13/00	E1 3221 R112																																																																																																																																																																																																																																																																																																																																																																																																												
1325	001952-00	46/00	High Beam Headlamp	YC1255	H3	N/A ECE	HR 01 17.5 E1 3222	HKG 460 845-16 & Refer ADR 13/00	E1 3222 R112																																																																																																																																																																																																																																																																																																																																																																																																												
1326	001953-00	46/00	High Beam Headlamp	YC1255	H3	N/A ECE	HR 01 12.5 E1 3223	HKG 460 845-16 & Refer ADR 13/00	E1 3223 R112																																																																																																																																																																																																																																																																																																																																																																																																												
1378	009094-02	46/00	High Beam Headlamp	C1255	H1	HL*1378*A	33671	911-353-94	00 1901																																																																																																																																																																																																																																																																																																																																																																																																												
1378CHROME	009094-03																																																																																																																																																																																																																																																																																																																																																																																																																				
1394LED	011815-00	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE	HR PL 01 45 E1 3738	HKG 460 818-29 & Refer ADR 13/00	E1 3738																																																																																																																																																																																																																																																																																																																																																																																																												
1394LEDHD	011815-03																																																																																																																																																																																																																																																																																																																																																																																																																				
1395	958 040-02	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE	E24 112R-010008	460 881-50	E24 20 0008																																																																																																																																																																																																																																																																																																																																																																																																												
1395HD	958 040-03							460 881-51																																																																																																																																																																																																																																																																																																																																																																																																													
1396	958 040-06	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE	E24 112R-010009	460 881-50	E24 30 0009																																																																																																																																																																																																																																																																																																																																																																																																												
1396HD	958 040-04							460 881-51																																																																																																																																																																																																																																																																																																																																																																																																													
1397HD	958 040-12	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE	E24 112-01 0012	460 881-51	E24 25 0012																																																																																																																																																																																																																																																																																																																																																																																																												
1398HD	958 040-02	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE	E24 112-01 0013	460 881-51	E24 37.5 0013																																																																																																																																																																																																																																																																																																																																																																																																												
1F8 016 560-001	016 560-00	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE	E24 5919	HKG	E24 25 5919																																																																																																																																																																																																																																																																																																																																																																																																												
		49/00	Front Position Lamp	LED	N/A LED	N/A ECE				1F8 016 560-011	016 560-01	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE	E24 5920	HKG	E24 50 5920	49/00	Front Position Lamp	LED	N/A LED	N/A ECE	E24 5919	1F8 016 560-021	016 560-02	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE	E24 5919	HKG	E24 25 5919	49/00	Front Position Lamp	LED	N/A LED	N/A ECE	1F8 016 560-031	016 560-03	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE	E24 5920	HKG	E24 50 5920	49/00	Front Position Lamp	LED	N/A LED	N/A ECE	E24 5919	1F8 016 797-111	016 797-11	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE	E24 5919	HKG	E24 25 5919	49/00	Front Position Lamp	LED	N/A LED	N/A ECE	1F8 016 797-011	016 797-01	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE	E24 5920	HKG	E24 50 5920	49/00	Front Position Lamp	LED	N/A LED	N/A ECE	E24 5919	1FA 996 197-151	996 197-15	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE	E1 4517	HKG	E1 4517	1FA 996 197-181	997 197-18	1405	003014-09	1/00	Reversing Lamp	R1221	P21W	RL*1405*A	15131	911-351-53	8703R23	1430-H	959070-50	1/00	Reversing Lamp	LED	N/A LED	RL*1430-H*A	36417	959-150-10	9060	1430-V	959070-55	RL*1430-V*A	36418	1433	959820-00	1/00	Reversing Lamp	LED	N/A LED	RL*1433*A	33190	959-149-69	9020	1446-H	959041-30	1/00	Reversing Lamp	LED	N/A LED	RL*1446-H*A	CTA-035980	959-149-95	9040	1446-V	959041-40	RL*1446-V*A	CTA-036243	1447L	959041-37	1/00	Reversing Lamp	LED	N/A LED	1447*RV*C	CTA-045662	958-780-84	9040	1447R	959041-36	1461	980762-01	1/00	Reversing Lamp	LED	N/A LED	RL*1461*A	CTA-045442	958-780-72	0760	47/00	Retro Reflector (Red/Rear)	N/A	N/A	RE*2161*A	45633	1465	959930-00	1/00	Reversing Lamp	LED	N/A LED	RL*1465*A	CTA-035981	959-150-04	9930																																																																																																																																																																																																																												
1F8 016 560-011	016 560-01	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE	E24 5920	HKG	E24 50 5920																																																																																																																																																																																																																																																																																																																																																																																																												
		49/00	Front Position Lamp	LED	N/A LED	N/A ECE	E24 5919																																																																																																																																																																																																																																																																																																																																																																																																														
1F8 016 560-021	016 560-02	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE	E24 5919	HKG	E24 25 5919																																																																																																																																																																																																																																																																																																																																																																																																												
		49/00	Front Position Lamp	LED	N/A LED	N/A ECE																																																																																																																																																																																																																																																																																																																																																																																																															
1F8 016 560-031	016 560-03	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE	E24 5920	HKG	E24 50 5920																																																																																																																																																																																																																																																																																																																																																																																																												
		49/00	Front Position Lamp	LED	N/A LED	N/A ECE	E24 5919																																																																																																																																																																																																																																																																																																																																																																																																														
1F8 016 797-111	016 797-11	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE	E24 5919	HKG	E24 25 5919																																																																																																																																																																																																																																																																																																																																																																																																												
		49/00	Front Position Lamp	LED	N/A LED	N/A ECE																																																																																																																																																																																																																																																																																																																																																																																																															
1F8 016 797-011	016 797-01	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE	E24 5920	HKG	E24 50 5920																																																																																																																																																																																																																																																																																																																																																																																																												
		49/00	Front Position Lamp	LED	N/A LED	N/A ECE	E24 5919																																																																																																																																																																																																																																																																																																																																																																																																														
1FA 996 197-151	996 197-15	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE	E1 4517	HKG	E1 4517																																																																																																																																																																																																																																																																																																																																																																																																												
1FA 996 197-181	997 197-18																																																																																																																																																																																																																																																																																																																																																																																																																				
1405	003014-09	1/00	Reversing Lamp	R1221	P21W	RL*1405*A	15131	911-351-53	8703R23																																																																																																																																																																																																																																																																																																																																																																																																												
1430-H	959070-50	1/00	Reversing Lamp	LED	N/A LED	RL*1430-H*A	36417	959-150-10	9060																																																																																																																																																																																																																																																																																																																																																																																																												
1430-V	959070-55					RL*1430-V*A	36418																																																																																																																																																																																																																																																																																																																																																																																																														
1433	959820-00	1/00	Reversing Lamp	LED	N/A LED	RL*1433*A	33190	959-149-69	9020																																																																																																																																																																																																																																																																																																																																																																																																												
1446-H	959041-30	1/00	Reversing Lamp	LED	N/A LED	RL*1446-H*A	CTA-035980	959-149-95	9040																																																																																																																																																																																																																																																																																																																																																																																																												
1446-V	959041-40					RL*1446-V*A	CTA-036243																																																																																																																																																																																																																																																																																																																																																																																																														
1447L	959041-37	1/00	Reversing Lamp	LED	N/A LED	1447*RV*C	CTA-045662	958-780-84	9040																																																																																																																																																																																																																																																																																																																																																																																																												
1447R	959041-36																																																																																																																																																																																																																																																																																																																																																																																																																				
1461	980762-01	1/00	Reversing Lamp	LED	N/A LED	RL*1461*A	CTA-045442	958-780-72	0760																																																																																																																																																																																																																																																																																																																																																																																																												
		47/00	Retro Reflector (Red/Rear)	N/A	N/A	RE*2161*A	45633																																																																																																																																																																																																																																																																																																																																																																																																														
1465	959930-00	1/00	Reversing Lamp	LED	N/A LED	RL*1465*A	CTA-035981	959-150-04	9930																																																																																																																																																																																																																																																																																																																																																																																																												

HELLA Part No.	Engineering Drawing No.	ADR No.	Function	Bulb(s)	Bulb Type	HELLA Ref. or ECE	FORS Ref: CRN/CTA or ECE	Instruction Sheet No.	Lamp Identification
1467	959930-11	1/00	Reversing Lamp	LED	N/A LED	RL*1465*A	CTA-035981	959-150-18	9930
1468	980889-00	1/00	Reversing Lamp	LED	N/A LED	N/A ECE	E24 23R-0027	958-315-25	0880D
1468-24V	980889-20	1/00	Reversing Lamp	LED	N/A LED	N/A ECE	E24 23R-0027	958-315-25	
1468V	980889-10	1/00	Reversing Lamp	LED	N/A LED	N/A ECE	E24 23R-0028	958-315-26	0880E
1468V-24V	980889-30	1/00	Reversing Lamp	LED	N/A LED	N/A ECE	E24 23R-0028	958-315-26	
1490	959010-50	1/00	Reversing Lamp	LED	N/A LED	RL*1490*A	36253	959-150-16	9010
1547LED-RE	996376-09	1/00	Reversing Spotlamp	LED	N/A LED	N/A ECE	00 E1 3902	HFA 460 845-18 / 04.14 & Refer ADR 13/00	003902
1551LED-RE	996188-12	1/00	Reversing Spotlamp	LED	N/A LED	N/A ECE	00 E1 3249	HFA 460 845-15 / 02.12 & Refer ADR 13/00	003249
1563LED-RE	996284-50	1/00	Reversing Spotlamp	LED	N/A LED	N/A ECE	00 E1 4576	HFA 460 845-20 / 11.16 & Refer ADR 13/00	004576
2026 & HM2026 & HM2026D	959660-30	45/01	Cab Marker Lamp	LED	N/A LED	9560-CRN-06A	CTA-050133	959-149-17 / 05.19	9560
		6/00: Cat 5	Supp. Side Direction Indicator Lamp			9560-CRN-45A	50134		
						95602CRN-45A	50135		
						95602CRN-06A	50136		
2027	980660-10	45/01	Cab Marker Lamp	LED	N/A LED	CM*2027*A	42856	980-703-13	6600
2027P		6/00: Cat 5	Supp. Side Direction Indicator Lamp			SDI*2027*A	42857		
2031	959700-00	6/00: Cat 5	Supp. Side Direction Indicator Lamp	LED	N/A LED	SDI*2031*A	CTA-030768	959-149-55	9700
2033	959700-20	45/01	Side Marker Lamp	LED	N/A LED	SM*2033*A	CTA-031432	959-149-58	9700
2043	910663-09	1/00	Reversing Lamp	R1221	P21W	RL*2043*A	15111	911-351-75	R.D.68158
2046 & 2046PC	958607-02	1/00	Reversing Lamp	R1221	P21W	RL*2046*A	15329	911-352-89	HNZ01
		49/00	Front Position Lamp or Front End Outline Lamp	G125	R5W	FP*2046*A	15352		
2051 & HM2051 & HM2051D	959570-30	49/00	Front End Outline Lamp	LED	N/A LED	FE0*2051*A	CTA-025032	959-149-19	9560
2051GMD	959570-10	49/00	Front End Outline Lamp	LED	N/A LED	FE0*2051X*A	CTA-040676	959-150-79	9560
2053 & 2053PC & HM2053PC & HM2053PCD & 2053GMD	959660-50	45/01	Side Marker Lamp	LED	N/A LED	SM*2053*A	CTA-024743	959-149-16	9560
2054 & HM2054 & HM2054D	959570-40	49/00	Front Position Lamp or Front End Outline Lamp	LED	N/A LED	N/A ECE	A 02 E24 0051	959-149-25	A 02 E24 0051
2054GMD	959570-50	49/00	Front Position Lamp or Front End Outline Lamp	LED	N/A LED	FP*2054X*A	CTA-040677	959-150-80	9560
2055	959590-40	49/00	Front Position Lamp or Front End Outline Lamp	LED	N/A LED	N/A ECE	A 02 E24 0054	959-149-26	A 02 E24 0054
2056	959590-30	49/00	Front End Outline Lamp	LED	N/A LED	FE0*2056*A	CTA-027380	959-149-38	9590
2057	959650-00	45/01	Cab Marker Lamp	LED	N/A LED	CM*2057*A	CTA-027432	959-149-42	9650
2058	980660-00	45/01	Side Marker Lamp	LED	N/A LED	SM*2058*A	CTA-041597	980-703-13	6600
2058P	980660-02								
2059	980855-01	49/00	Front Position Lamp or Front End Outline Lamp	LED	N/A LED	FP*2059*A	45233	958-780-67	0855
2059S	980855-02								
2060	980855-20	49/00	Front End Outline Lamp	LED	N/A LED	FE0*2060*A	CTA-045630	958-780-70	0855
2060S	980855-21								
2061	980660-20	49/00	Front Position Lamp or Front End Outline Lamp	LED	N/A LED	2061*FP*C	CTA-046857	958-780-95	6600
2061P	980660-21								
2062	980660-22	49/00	Front End Outline Lamp	LED	N/A LED	2062*FEOM*C	CTA-046858	958-780-96	6600
2062P	980660-30								
2064	003014-07	49/00	Front Position Lamp or Front End Outline Lamp	L125	C5W	FP*2064*A	15177	911-351-77	11793R7
2066	006679-00	49/00	Front Position Lamp or Front End Outline Lamp	G1210	R10W	FP*2066*A	15253	911-351-79	0121691
2071	980990-40	49/00	Front End Outline Lamp	LED	N/A LED	2071*FEOM*C	CTA-045943	958-780-90	0990
2073	980990-00	45/01	Side Marker Lamp	LED	N/A LED	2073*SML*C	CTA-045809	958-780-87	0990
2074	980990-20	49/00	Front Position Lamp or Front End Outline Lamp	LED	N/A LED	2074*FEOM*C	45944	958-780-89	0990

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HELLA Part No.	Engineering Drawing No.	ADR No.	Function	Bulb(s)	Bulb Type	HELLA Ref. or ECE	FORS Ref: CRN/CTA or ECE	Instruction Sheet No.	Lamp Identification
2076	980990-10	45/01	Cab Marker Lamp			2076*ECM*C	CTA-045810		
		6/00: Cat 5	Supp. Side Direction Indicator Lamp	LED	N/A LED	2076*SDI*C	45811	958-780-88	0990
2083	980868-04	45/01	Side Marker Lamp	LED	N/A LED	2083*SM*C	CTA-047116	958-315-32	0868
2083S	980868-06								
2086	980868-30	6/00: Cat 5	Supp. Side Direction Indicator Lamp	LED	N/A LED	2086-CRN-06A	CTA-049890	460-965-06	8983
2086S	980868-32								
2101	002939-17	6/00: Cat 1	Front Direction Indicator Lamp	R1221	P21W	DI*2101*A	29439	911-353-58	32710
2107	959011-10	6/00: Cat 1	Front Direction Indicator Lamp	LED	N/A LED	DI*2107*A	CTA-041601	980-703-19	9010
2107CLR	959011-11					DI*2107C*A	CTA-041609		
2108-GMD	980691-11	6/00: Cat 1	Front Direction Indicator Lamp	LED	N/A LED	N/A ECE	E24 5854	980-703-70	0690
2108-GMD24V	980690-00	49/00	Front Position Lamp	LED	N/A LED	N/A ECE	E24 5854	980-703-29	0690
		76/00	Daytime Running Lamp						
2109	980888-30	6/00: Cat 1	Front Direction Indicator Lamp	LED	N/A LED	2109*FDI*C	46349	958-315-01	0880
2109-24V	980888-40					210924H*DI*C	46348		
2109V	980888-50	6/00: Cat 1	Front Direction Indicator Lamp	LED	N/A LED	2109V*FDI*C	46347	958-315-20	0880B
2109V-24V	980888-60					210924V*DI*C	46346		
2110-12V	980819-30	6/00: Cat 5	Front Direction Indicator Lamp	LED	N/A LED	12V-CRN-06A	CTA-049241	958-315-80	0880C
		49/00	Front Position Lamp			12V-CRN-49C	49263		
2110-24V	980819-40	6/00: Cat 5	Front Direction Indicator Lamp	LED	N/A LED	12V-CRN-06A	CTA-049252	958-315-80	0880C
		49/00	Front Position Lamp			12V-CRN-49C	49264		
2127	900763-29	6/00: Cat 1 & 6/00: Cat 5	Front Direction Indicator Lamp and Supp. Side Direction Indicator Lamp	R1221	P21W	FL*2127*A	15272	911-351-99	R.D.10833
		6/00: Cat 5	Supp. Side Direction Indicator Lamp	G125	R5W	FL*2127*B	15301		
2128	900763-30	6/00: Cat 1	Front Direction Indicator Lamp	R1221	P21W	FL*2128*A	15273	911-352-00	R.D.10833
		6/00: Cat 5	Supp. Side Direction Indicator Lamp	G125	R5W	SDI*2128*A	15306		
2128LED	959932-30	6/00: Cat 1	Front Direction Indicator Lamp	LED	N/A LED	DI*2105M*A	CTA-036805	959-150-25	9930
2129	900763-31	6/00: Cat 1 & 6/00: Cat 5	Front Direction Indicator Lamp and Supp. Side Direction Indicator Lamp	FD1221	P21W (DC)	DI*2129*A	15304	911-352-76	R.D.10833
		6/00: Cat 5	Supp. Side Direction Indicator Lamp	GD125	R5W (DC)	DI*2129*B	15305		
2130	959011-00	6/00: Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	DI*2130*A	30649	959-149-50	9010
2133	959822-00	6/00: Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	DI*2133*A	33191	959-149-71	9020
2133CS	959822-60								
2133-24V	959021-00	6/00: Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	DI*2133-24V*A	30442	959-149-53	9020
2135 & 2135PC	900739-10	6/00: Cat 1	Front Direction Indicator Lamp	K1221	C21W	FL*2135*A	15270	911-352-02	10833
		49/00	Front End Outline Lamp	L125	C5W	FEO*2135*A	25578		
2135LED	959932-31	6/00: Cat 1	Front Direction Indicator Lamp	LED	N/A LED	DI*2105M*A	CTA-036805	959-150-26	9930
2138	959031-00	6/00: Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	12V Horiz	CTA-044203	958-780-39	9030
						24V Horiz	44204		
						12V Vert	44205		
24V Vert	44209								
		47/00	Retro Reflector (Red/Rear)	N/A	N/A	RE*2317*A-1	22948		
2143	910663-08	6/00: Cat 2a	Rear Direction Indicator Lamp	R1221	P21W	DI*2143*A	15110	911-352-07	R.D.68158
		49/00	Front End Outline Lamp	G125	R5W	FEO*2143*A	25523		
2144LED-H	2144LED-H	6/00: Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	DI*2146-H*A	CTA-0034498	959-149-30	9040
2146-H	959041-10	6/00: Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	DI*2146-H*A	CTA-026179	959-149-30	9040
2146-HCS	959041-51					DI*2146-H24*A	CTA-034498	959-150-57	
2146-H24	959041-50					DI*2146-V*A	CTA-026180	959-149-88	
2146-V	959041-20					DI*2146-VCS*A	CTA-040650	959-149-30	
2146-VCS	959041-71					DI*2146-V24*A	CTA-036718	959-150-57	
2146-V24	959041-70					DI*2146-V24*A	CTA-036718	959-149-88	
2147	003014-01	6/00: Cat 2a	Rear Direction Indicator Lamp	R1221	P21W	FL*2147*A	15168	911-352-11	32619R6
		49/00	Front End Outline Lamp	G125	R5W	FEO*2147*A	25759		

HELLA Part No.	Engineering Drawing No.	ADR No.	Function	Bulb(s)	Bulb Type	HELLA Ref. or ECE	FORS Ref: CRN/CTA or ECE	Instruction Sheet No.	Lamp Identification		
2148	003014-11	6/00: Cat 1	Front Direction Indicator Lamp	R1221	P21W	FL*2148*A	15170	911-352-12	32661R6		
		49/00	Front End Outline Lamp	G125	R5W	FEO*2148*A	25761				
2150	005603-00	6/00: Cat 1 & 6/00: Cat 5	Front Direction Indicator Lamp and Supp. Side Direction Indicator Lamp	R1221	P21W	FL*2150*A	15172	911-352-14	6R0142748		
		49/00	Front End Outline Lamp	G125	R5W	FEO*2150*A	25763				
2151	959070-00	6/00: Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	12V Horiz 24V Horiz 12V Vert 24V Vert	CTA-044206 44192 44193 44194	958-780-37	9060		
2151-H	959070-35	6/00: Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	FL*2151-H*A	CTA-036420	959-150-11	2a 01 E24 5850		
2151-HCS	980607-00					FL*2151-V*A	CTA-036421			9060	
2151-V	959070-25					DI*2151-VCS*A	2a 01 E24 5850			959-150-56	2a 01 E24 5850
2151-VCS	980607-50										
2153	006692-01	6/00: Cat 6	Supp. Side Direction Indicator Lamp	R1221	P21W	SDI*2153*B	30495	911-353-69	52621		
2154	006692-02	6/00: Cat 6	Supp. Side Direction Indicator Lamp	R1221	P21W	SDI*2154*B	30497	911-353-70	52621		
2155	008355-00	6/00: Cat 6	Supp. Side Direction Indicator Lamp	R1221	P21W	SDI*2155*A	30498	911-353-71	1059		
2155CLR	008355-01	6/00: Cat 6	Supp. Side Direction Indicator Lamp	RY1221	PY21W	SDI*2155CLR*A	E1 011848	911-353-71	1848		
2156	959075-50	6/00: Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	DI*2156*A	CTA-026483	959-149-28	9074		
2156-24V	959075-00	6/00: Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	DI*2156-24V*A	CTA-026104	959-149-29	9074		
2161	980761-01	6/00: Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	DI*2161*A	CTA-045443	958-780-73	0760		
		47/00	Retro Reflector (Red/Rear)	N/A	N/A	RE*2161*A	45633				
2161-CS	980761-02	6/00: Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	DI*2161*A	CTA-045443	958-780-74	0760		
		47/00	Retro Reflector (Red/Rear)	N/A	N/A	RE*2161*A	45633				
2165	959932-50	6/00: Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	DI*2165-*B	CTA-036056	959-150-06	9930		
2167	959932-71	6/00: Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	DI*2165-*B	CTA-036056	959-150-22	9930		
2168	980888-00	6/00: Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	DI*2168*A	46435	958-315-02	0880C		
2168-24V	980888-20	6/00: Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	DI*2168-24V*A	46434				
2305	345600-30	49/00	Rear Position Lamp or Rear End Outline Lamp	LED	N/A LED	N/A ECE	R02-E24 5881	Refer ADR 13/00	R02-E24 5881		
		47/00	Retro Reflector (Red/Rear)	N/A	N/A						
2306	345600-31	49/00	Rear Position Lamp or Rear End Outline Lamp	LED	N/A LED	N/A ECE	R02-E24 5881	Refer ADR 13/00	R02-E24 5881		
		47/00	Retro Reflector (Red/Rear)	N/A	N/A						
2307 & HM2307 & HM2307D	959560-40	49/00	Rear Position Lamp or Rear End Outline Lamp	LED	N/A LED	RP*2307*A	25009	959-149-18	02 7574		
2307GMD	959560-10	49/00	Rear Position Lamp or Rear End Outline Lamp	LED	N/A LED	RP*2307X*A	CTA-040680	959-150-81	9560		
2308	959 610-40	49/00	Rear Position Lamp or Rear End Outline Lamp	LED	N/A LED	N/A ECE	E4 7R 02 7597	959-149-20	E4 7R 02 7597		
2309	959700-30	49/00	Rear Position Lamp or Rear End Outline Lamp	LED	N/A LED	RR*2309*A	CTA-031431	959-149-59	9700		
2310	980855-30	49/00	Rear Position Lamp or Rear End Outline Lamp	LED	N/A LED	RR*2310*A	CTA-045631	958-780-71	0855		
2310S	980855-31										
2311	980660-40	49/00	Rear Position Lamp or Rear End Outline Lamp	LED	N/A LED	2311*RP*C	CTA-046859	958-780-71	6600		
2311P	980660-42										
2312	980990-60	49/00	Rear Position Lamp or Rear End Outline Lamp	LED	N/A LED	2312*REOM*C	45945	958-780-91	0990		
2314 & 2314PC	900739-11	49/00	Rear Position / Stop Lamp	L125/K1221	C5W/ C21W	RR*2314*A	15316	911-352-83	10833		
2315	900741-22					RR*2315*A	15310	911-352-84			
2317	959030-00	47/00	Retro Reflector (Red/Rear)	N/A	N/A	RE*2317*A-1	22948	959-149-05	9030		
		49/00	Rear Position : Horizontal	LED	N/A LED	RP*2317H*A	CTA-042577				
		49/00	Stop : Horizontal	LED	N/A LED	ST*2317H*A	42579				
		49/00	Rear Position : Vertical	LED	N/A LED	RP*2317V*A	42578				
		49/00	Stop : Vertical	LED	N/A LED	ST*2317V*A	42582				

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HELLA Part No.	Engineering Drawing No.	ADR No.	Function	Bulb(s)	Bulb Type	HELLA Ref. or ECE	FORS Ref: CRN/CTA or ECE	Instruction Sheet No.	Lamp Identification
2318	980887-00	49/00	Stop Lamp	LED	N/A LED	SL*2318*A	46360	958-780-99	0880C
			Rear Position Lamp			RP*2318*A	CTA-046351		
2318-24V	980887-20	49/00	Stop Lamp	LED	N/A LED	SL*2318-24V*A	46361	958-780-99	0880C
			Rear Position Lamp			RP*2318-24V*A	CTA-046353		
2319	910664-02	47/00	Retro Reflector (Red/Rear)	N/A	N/A	RE*2319*A	15149	911-352-16	013051
		49/00	Rear Position / Stop Lamp	S1221/5V	P21W/5W	RR*2319*A	15151		
2321 & 2321PC	958606-00	47/00	Retro Reflector (Red/Rear)	N/A	N/A	RE*2321*A	15327	911-352-91	HNZ01
		49/00	Rear Position / Stop Lamp	S1221/5V	P21W/5W	RR*2321*A	15328		
2325	003014-05	49/00	Rear Position Lamp or Rear End Outline Lamp	L125	C5W	RR*2325*A	15252	911-352-21	0131418
2330	959060-00	49/00	Rear Position: Horizontal	LED	N/A LED	RP*2330H1*A	CTA-042558	959-149-00	9060
			Stop: Horizontal			ST*2330H1*A	42650		
			Rear Position: Vertical			RP*2330V1*A	42559		
			Stop: Vertical			ST*2330V1*A	42561		
2330-H	959-060-35	49/00	Stop Lamp	LED	N/A LED	SL*2330-H*A	36428	959-150-12	9060
			Rear Position Lamp			RP*2330-H*A	CTA-036426		
2330-V	959-060-25	49/00	Stop Lamp	LED	N/A LED	SL*2330-V*A	36429	959-150-12	9060
			Rear Position Lamp			RP*2330-V*A	36427		
2332-H24	959040-5x	49/00	Stop Lamp	LED	N/A LED	SL*2332-H24*A	34509	959-149-87	9060
			Rear Position Lamp			RP*2332-H24*A	CTA-034502		
2332-V24	959040-70	49/00	Stop Lamp	LED	N/A LED	SL*2332-V24*A	36722	959-149-87	9060
			Rear Position Lamp			RP*2332-V24*A	CTA-036721		
2334	959074-50	49/00	Stop Lamp	LED	N/A LED	SL*2334*A	26486	959-149-27	9074
			Rear Position Lamp			RP*2334*A	CTA-026484		
2334-24V	959074-00	49/00	Stop Lamp	LED	N/A LED	SL*2334-24V*A	26152	959-149-27	9074
			Rear Position Lamp			RP*2334-24V*A	CTA-026151		
2361	980760-01	49/00	Stop Lamp	LED	N/A LED	ST*2361*A	45634	958-780-75	0760
			Rear Position Lamp			RP*2361*A	CTA-045632		
		47/00	Retro Reflector (Red/Rear)			N/A	N/A		
2365	959931-00	49/00	Stop Lamp	LED	N/A LED	ST*2365*B	CTA-036250	959-150-05	9930
			Rear Position Lamp			RP*2365*B	36078		
2366	959821-00	49/00	Stop Lamp	LED	N/A LED	SL*2366*A	33196	959-149-70	9020
			Rear Position Lamp			RP*2366*A	33198		
2366-24V	959020-00	49/00	Stop Lamp	LED	N/A LED	SL*2366-24V*A	30445	959-149-52	9020
			Rear Position Lamp			RP*2366-24V*A	30443		
2367	959931-11	49/00	Stop Lamp	LED	N/A LED	ST*2365*B	36250	959-150-20	9930
			Rear Position Lamp			RP*2365*B	36078		
2375-12V	980819-00	6/00: Cat 2a	Rear Direction Indicator Lamp				E24 6R-01 5902		
2375-24V	980819-22	49/00	Stop Lamp	LED	N/A LED	N/A ECE	E24 7R-01 5902	958-315-70	0880H
			Rear Position Lamp						
2377	980710-01	6/00: Cat 2a	Rear Direction Indicator Lamp			2377*RDI*C	45253	958-780-66	0710
		49/00	Stop Lamp	LED	N/A LED	2377*ST*C	45256		
			Rear Position Lamp			2377*RP*C	45254		
		47/00	Retro Reflector (Red/Rear)	N/A	N/A	2377*RR*C	45255		
2378	980613-00	6/00: Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	2378*RDI*C	45258	958-780-63	
2378-CS	980613-20		Stop Lamp			2378*ST*C	45260	958-780-64	0710
2378DT	980602-00	49/00	Rear Position Lamp	LED	N/A LED	2378*RP*C	45259	958-780-65	
2378DTCS	980602-20		Rear Position Lamp			2378*07*RP*C	45257	958-780-68	
HM2380	980603-51	49/00	Stop Lamp			SL*2380*A	43632	958-780-05	9050
HM2380D	980603-52		Rear Position Lamp	LED	N/A LED	RP*2380*A	43631	958-780-05	9050
HM2380DT	980615-02	1/00	Reversing Lamp	LED	N/A LED	RL*2380*A	43628	958-780-35	9050

HELLA Part No.	Engineering Drawing No.	ADR No.	Function	Bulb(s)	Bulb Type	HELLA Ref. or ECE	FORS Ref: CRN/CTA or ECE	Instruction Sheet No.	Lamp Identification	
2VP 015 074-001	015074-00	47/00	Retro Reflector (Red/Rear)	N/A	N/A	12V-DURA-47A	50198			
2VP 015 074-101	015074-10	47/00	Retro Reflector (Red/Rear)	N/A	N/A	12V-DURA-47B	50198			
2VP 015 075-001	015075-00	6/00: Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	12V-DURA-06A	50201			
2VP 015 075-101	015075-10	6/00: Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	24V-DURA-06A	50204	460-965-10	0710	
		49/00	Stop/Rear Position Lamp	LED	N/A LED	12V-DURA-49A	50200			
		49/00	Stop/Rear Position Lamp	LED	N/A LED	24V-DURA-49A	50203			
		1/00	Reversing Lamp	LED	N/A LED	12V-DURA-01A	50199			
		1/00	Reversing Lamp	LED	N/A LED	24V-DURA-01A	50202			
		2383-24VCS	980613-51	6/00: Cat 2a	Rear Direction Indicator Lamp					
2383-DT24VCS	980602-51	49/00	Stop Lamp	LED	N/A LED	N/A ECE	E24 7R-025894	958-315-27	0710	
		49/00	Rear Position Lamp							
		1/00	Reversing Lamp				E24 23R-005894			
2384	003014-14	48/00	Licence Plate Lamp	L125	C5W	LP*2384*A	15175			
		49/00	Rear Position / Stop Lamp	L125/R1221	C5W/P21W	RR*2384*A	15167	911-352-30	231453	
2390	959010-00	49/00	Stop Lamp			SL*2390*A	30651	959-149-51	9010	
			Rear Position Lamp	LED	N/A LED	RP*2390*A	30650			
2391	980980-00	1/00	Reversing Lamp			2391*RV*C	45251			
		6/00: Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	2391*RDI*C	CTA-045258	958-780-58	0980	
		49/00	Stop Lamp			2391*ST*C	45262			
		49/00	Rear Position Lamp			2391*RP*C	45261			
47/00	Retro Reflector (Red/Rear)	N/A	N/A	2391*RR*C	45250					
2392L	980980-01	1/00	Reversing Lamp	LED	N/A LED	2392*RV*C	CTA-0045263			
2392R	980980-02	6/00: Cat 2a	Rear Direction Indicator Lamp				2392*RDI*C	45264	958-780-59	0980
		49/00	Stop Lamp	LED	N/A LED	2392*STC	45268			
			Rear Position Lamp			2392*RP*C	45265			
		47/00	Retro Reflector (Red/Rear)	N/A	N/A	2392*RR*C	45266			
		48/00	Licence Plate Lamp	N/A	N/A	2392*LP*C	CTA-045263			
2394	980720-00	6/00: Cat 2a	Rear Direction Indicator Lamp				DI*2394*B	CTA-042034	980-703-20	0720
		49/00	Stop Lamp	LED	N/A LED	SL*2394*A	42037			
		49/00	Rear Position Lamp			RP*2394*A	42036			
		47/00	Retro Reflector (Red/Rear)	N/A	N/A	2395*RR*C	46508			
2395	980720-40	6/00: Cat 2a	Rear Direction Indicator Lamp				DI*2395*B	CTA-042030	980 703-21	0720
		49/00	Stop Lamp	LED	N/A LED	SL*2395*C	42179			
			Rear Position Lamp			RP*2395*C	42178			
		47/00	Retro Reflector (Red/Rear)	N/A	N/A	2395*RR*C	46508			
48/00	Licence Plate Lamp	LED	N/A LED	LP*2395*C	42175					
2399	959010-20	6/00: Cat 2a	Rear Direction Indicator Lamp				DI*2399*A	37114	959-150-30	9010
		49/00	Stop Lamp	LED	N/A LED	SL*2399*A	37116			
			Rear Position Lamp			RP*2399*A	37115			
2419	003184-03	6/00: Cat 2a	Rear Direction Indicator Lamp	R1221	P21W	FL*2419*A	15160	911-352-42	7R0153253	
		49/00	Rear Position / Stop Lamp	G1210/R1221	R10W/P21W	RR*2419*A	15161			
2420	003184-10	6/00: Cat 2a	Rear Direction Indicator Lamp	R1221	P21W	FL*2420*A	15223	911-352-43	7R0153253	
		48/00	Licence Plate Lamp	G1210	R10W	LP*2420*A	15159			
		49/00	Rear Position / Stop Lamp	G1210/R1221	R10W/P21W	RR*2420*A	15222			
2422	958562-00	6/00: Cat 2a	Rear Direction Indicator Lamp	R1221	P21W	DI*2422*A	15320	911-352-81	HNZ01	
		47/00	Retro Reflector (Red/Rear)	N/A	N/A	RE*2422*A	15324			
		49/00	Rear Position / Stop Lamp	S1221/5V	P21W/5W	RR*2422*A	15323			
2423	958616-00	6/00: Cat 2a	Rear Direction Indicator Lamp	R1221	P21W	DI*2423*A	15338	911-352-92	HNZ01	
		47/00	Retro Reflector (Red/Rear)	N/A	N/A	RE*2423*A	15339			
		49/00	Rear Position / Stop Lamp	S1221/5V	P21W/5W	RR*2423*A	15340			
2424	958616-01	6/00: Cat 2a	Rear Direction Indicator Lamp	R1221	P21W	DI*2424*A	15342	911-352-93	HNZ01	
		47/00	Retro Reflector (Red/Rear)	N/A	N/A	RE*2424*A	15343			
		49/00	Rear Position / Stop Lamp	S1221/5V	P21W/5W	RR*2424*A	15344			
		1/00	Reversing Lamp	R1221	P21W	RL*2424*A	15341			

3RD EDITION ADR REFERENCE GUIDE

HELLA Part No.	Engineering Drawing No.	ADR No.	Function	Bulb(s)	Bulb Type	HELLA Ref. or ECE	FORS Ref: CRN/CTA or ECE	Instruction Sheet No.	Lamp Identification
2426-H	959-040-801	6/00: Cat 2a	Rear Direction Indicator Lamp			DI*2146-H24*A	CTA-034498	959-149-88	9040
		49/00	Stop Lamp	LED	N/A LED	SL*2332-H24*A	34509	959-149-87	
		49/00	Rear Position Lamp			RP*2332-H24*A	CTA-034502		
2426-V	959-040-901	6/00: Cat 2a	Rear Direction Indicator Lamp			DI*2146-V24*A	CTA-036718	959-149-88	9040
		49/00	Stop Lamp	LED	N/A LED	SL*2332-V24*A	36722	959-149-87	
		49/00	Rear Position Lamp			RP*2332-V24*A	CTA-036721		
2427-H	959-040-811	6/00: Cat 2a	Rear Direction Indicator Lamp			DI*2146-H24*A	CTA-034498	959-149-88	9040
		49/00	Stop Lamp	LED	N/A LED	SL*2332-H24*A	34509	959-149-87	
		49/00	Rear Position Lamp			RP*2332-H24*A	CTA-034502		
2428-H	959-041-811	1/00	Reversing Lamp			RL*1446-H*A	CTA-035980	959-149-95	9040
		6/00: Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	DI*2146-H24*A	CTA-034498	959-149-88	
		49/00	Stop Lamp			SL*2332-H24*A	34509	959-149-87	
		49/00	Rear Position Lamp			RP*2332-H24*A	CTA-034502		
2428-V	959-041-911	1/00	Reversing Lamp			RL*1446-V*A	CTA-036243	959-149-95	9040
		6/00: Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	DI*2146-V24*A	CTA-036718	959-149-88	
		49/00	Stop Lamp			SL*2332-V24*A	36722	959-149-87	
		49/00	Rear Position Lamp			RP*2332-V24*A	CTA-036721		
2429	980760-80	6/00: Cat 2a	Rear Direction Indicator Lamp			DI*2161*A	CTA-045443		0760
2429-CS	980761-80	49/00	Stop Lamp	LED	N/A/LED	ST*2361*A	45634	958-780-73/74	
		47/00	Rear Position Lamp			RP*2361*A	CTA-045632	958-780-75	
2430	980760-80	6/00: Cat 2a	Rear Direction Indicator Lamp			DI*2161*A	CTA-045443	958-780-73/74	0760
2430-CS	980761-80	49/00	Stop Lamp	LED	N/A/LED	ST*2361*A	45634	958-780-75	
		47/00	Rear Position Lamp			RP*2361*A	CTA-045632		
2430DTCS	980761-94	47/00	Retro Reflector (Red/Rear)	N/A	N/A	RE*2161*A	45633		
		47/00	Retro Reflector (Red/Rear)	N/A	N/A	RE*2161*A	45633		
2431	980760-82	6/00: Cat 2a	Rear Direction Indicator Lamp			DI*2161*A	CTA-045443	958-780-73/74	0760
2431-CS	980761-82	49/00	Stop Lamp	LED	N/A/LED	ST*2361*A	45634	958-780-75	
		49/00	Rear Position Lamp			RP*2361*A	CTA-045632		
2431DTCS	980761-95	1/00	Reversing Lamp			RL*1461*A	CTA-045442	958-780-72	
		47/00	Retro Reflector (Red/Rear)	N/A	N/A	RE*2161*A	45633		
2553	951068-02	48/00	Licence Plate Lamp	G1210	R10W	LP*2553*A	15150	911-352-47	E1 22819
2555	001389-10	48/00	Licence Plate Lamp	L125	C5W	LP*2555*A	15156	911-352-49	12815R4
2559	959640-00	48/00	Licence Plate Lamp	LED	N/A LED	LP*2559S*A	CTA-042545	959-149-35	9590
2559-1	959640-30	48/00	Licence Plate Lamp	LED	N/A LED	LP*2559H*A	CTA-041602	980-703-00	9640
2560	980869-00	48/00	Licence Plate Lamp	LED	N/A LED	2560*LP*C	CTA-046799	958-315-24	0855
2902	002016-11	47/00	Retro Reflector (Red/Rear)	N/A	N/A	RE*2902*A	15180	911-352-51	0231290
2915	002014-23	47/00	Retro Reflector (Red/Rear)	N/A	N/A	N/A/ECE	E243R020030	911-352/3-55/50	020030
2916	002014-25	47/00	Retro Reflector (Amber/Side)	N/A	N/A	N/A/ECE	E243R020030	911-352/3-56/48	020030
2917	002014-24	47/00	Retro Reflector (White/Front)	N/A	N/A	N/A/ECE	E243R020030	911-352/3-57/49	020030
2919	004412-00	47/00	Retro Reflector (Amber/Side)	N/A	N/A	RE*2919*A	15233	911-352/3-58/48	02338
2920	004412-02	47/00	Retro Reflector (Red/Rear)	N/A	N/A	RE*2920*A	15294	911-352/3-70/50	02338
2921	004412-01	47/00	Retro Reflector (White/Front)	N/A	N/A	RE*2921*A	15293	911-352/3-71/49	02338
2922	003326-04	47/00	Retro Reflector (Amber/Side)	N/A	N/A	RE*2922*A	15237	911-352/3-59/48	0292031
2922-2/200	003326-01	47/00	Retro Reflector (Amber/Side)	N/A	N/A	N/A/ECE	E1 02 21395 R 3	911-352/3-59/48	0292031
2923	003326-03	47/00	Retro Reflector (Red/Rear)	N/A	N/A	RE*2923*A	15296	911-352/3-72/50	0292031
2923-2BULK	003326-00	47/00	Retro Reflector (Red/Rear)	N/A	N/A	N/A/ECE	E1 02 21395 R 3	HKG & ADR13/00	E1 0221395
2924	003326-05	47/00	Retro Reflector (White/Front)	N/A	N/A	RE*2924*A	15295	911-352/3-73/49	0292031
2924-2BULK	003326-02	47/00	Retro Reflector (White/Front)	N/A	N/A	N/A/ECE	E1 02 21395 R 3	HKG & ADR13/00	E1 0221395
2925	004713-00	47/00	Retro Reflector (Amber/Side)	N/A	N/A	RE*2925*A	15234	911-352/3-60/48	02353
2926	342007-10	47/00	Retro Reflector (Red/Rear)	N/A	N/A	RE*2926*A	15298	911-352/3-74/50	02353
2927	342007-20	47/00	Retro Reflector (White/Front)	N/A	N/A	RE*2927*A	15297	911-352/3-75/49	02353
2934-H	980565-10	47/00	Retro Reflector (Red/Rear)	N/A	N/A	RE*2934-H*A	CTA-038243	959-150-34	5651

HELLA Part No.	Engineering Drawing No.	ADR No.	Function	Bulb(s)	Bulb Type	HELLA Ref. or ECE	FORS Ref: CRN/CTA or ECE	Instruction Sheet No.	Lamp Identification
2934-V	980565-50	47/00	Retro Reflector (Red /Rear)	N/A	N/A	RE*2934-V*A	CTA-038244	959-150-34	5655
5237	959190-12	49/00: Cat S3	Centre High Level Brake Lamp	LED	N/A LED	BL*5237*B	CTA-015350	911-352-64A	523
5238	959191-12	49/00: Cat S3	Centre High Level Brake Lamp	LED	N/A LED	BL*5238*B	CTA-015349	911-352-65A	523
5239	959192-12	49/00: Cat S3	Centre High Level Brake Lamp	LED	N/A LED	BL*5239*B	CTA-015351	911-352-66A	523
5243	959071-53	49/00: Cat S3	Centre High Level Brake Lamp	LED	N/A LED	8-5243-08	23071	959-089-01	27547
5245	980887-30	49/00: Cat S3	Centre High Level Brake Lamp	LED	N/A LED	5245*12*ST*C	45934	958-780-83	0880A
5245-24V	980887-40	49/00: Cat S3	Centre High Level Brake Lamp	LED	N/A LED	5245*24*ST*C	45935		
5608	009496-81	76/00	Daytime Running Lamp	LED	N/A LED	DRL*5608*B	39475	911-355-16	2344
5613	008283-01	46/00	High Beam Headlamp	CA1255	H7	HL*1322*A	26822	911-353-44	041210
5617	980670-00	76/00	Daytime Running Lamp	LED	N/A LED	N/A ECE	E24 87R- 000002	980-703-10	E24 0002 (0670)
5618	980680-80	76/00	Daytime Running Lamp	LED	N/A LED	N/A ECE	E24 87R- 000001	980-703-12	E24 0001 (0680)
5618-24V	980680-85							980-703-24	
5619	980880-80	76/00	Daytime Running Lamp	LED	N/A LED	DRL*1009*A	44200	958-780-26	0880
5619-24V	980880-85					DRL*1009-24V*A	44202		
5619V	980880-90	76/00	Daytime Running Lamp	LED	N/A LED	1009V*DRL*C	45962	958-780-98	0880 B
5619V-24V	980880-95					1009V-24V*DRL*C	CTA-045965		
5630	980860-84	76/00	Daytime Running Lamp	LED	N/A LED	N/A ECE	E24 87R-005863	958-780-18	E24 5863
5630-24V	980860-87								
5631	980850-84	76/00	Daytime Running Lamp	LED	N/A LED	N/A ECE	E24 87R-005862	958-780-19	E24 5862
5631-24V	980850-87								
5636	980970-80	76/00	Daytime Running Lamp	LED	N/A LED	DRL*1013*A	44776	958-780-52	0970
5636-24V	980970-85					DRL*1013-24V*A	44783		
9.1358.01	002659-07	46/00	High Beam Headlamp	YC1255	H3	HL*1358*A	15112	911-351-50	14529

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