



Technology with Vision

HELLA NEW ZEALAND CATALOGUE V15



AGRICULTURE



MINING



INTERIOR/EXTERIOR



EMERGENCY & SAFETY



SAFETY DAYLIGHTS™

Transport Lighting, Safety Lighting & Accessories

Expertly Designed and Precision Manufactured

Welcome to HELLA New Zealand's Automotive Catalogue

A comprehensive range of innovative road transport lighting, safety lighting and accessories for the transport sector.

Since the launch of our first LED automotive signal lamps in 1990, HELLA design and commitment to excellence continues to set new standards. HELLA's innovative solutions have become the benchmark for the road transport industry with lamps to suit the most demanding environmental conditions.

When you select a HELLA LED based product you know that functional safety, quality and long term product durability are guaranteed.

You have our promise that as a local designer and developer, manufacturer and service provider we will stand behind our products.



HELLA-New Zealand Limited

81-83 Ben Lomond Crescent
Pakuranga, Auckland, New Zealand
PO Box 51-427, Auckland 2140
New Zealand

Head Office:

Tel: +64 (0) 9 577 0000

Sales/Customer Service:

Tel: 09 577 0366

Fax: 09 576 8202

nzsales@hella.co.nz

www.hella.co.nz

CONTENTS



Page 14



Page 122



Page 204



Page 342

INTRODUCTION	2-13
MARKER & SIGNAL	14-87
LED SAFETY DAYLIGHTS™	88-101
HEADLAMPS & INSERTS	102-121
FOG & DRIVING LAMPS	122-151
WORK LAMPS	152-181
EMERGENCY LIGHTING & SIGNAL WARNING LAMPS	182-203
INTERIOR/EXTERIOR LIGHTING	204-231
RELAYS & FLASHERS	232-251
ACCESSORIES	252-325
HELLA WORKSHOP	326-339
HELLA BEAMSETTERS	340-341
AUTOMOTIVE BULBS	342-373
3RD EDITION ADR REFERENCE GUIDE	374-386
INDEX BY PART NUMBER	387-396



HELLA WORLDWIDE

A TRULY GLOBAL BUSINESS



HELLA GmbH & Co. KGaA was founded in Lippstadt, Germany in 1899 to develop and manufacture lighting and electronic components and systems for the automotive industry. The company has grown to be one of the top forty automotive suppliers in the world, and is listed as one of the 100 largest German industrial companies.

Represented in some 35 countries, HELLA employs over 38,000 staff across 125 design, manufacturing and sales facilities. HELLA continues to grow with almost 7,000 people working in research and development. Due to entrepreneurial boldness and foresight, developing innovative products and processes, a committed workforce and by a customer-focused approach, HELLA is one of the most important innovation drivers in the market.

Original equipment supplier to over 165 world leading vehicle manufacturers...

Today HELLA is a trusted supplier and development partner of many of the world's leading manufacturers of passenger cars, commercial vehicles and special purpose vehicles.



Volkswagen
Audi, BMW
Mercedes Benz
Aston Martin
Porsche



Iveco, Volvo
Kenworth
Scania
Daimler



Caterpillar
Komatsu
John Deere
Manitou



Iveco
Man
Scania

HELLA-New Zealand Limited

For nearly 45 years HELLA New Zealand has adopted the entrepreneurial spirit of its founders and developed into a LED lighting technology company with comprehensive in-house design and manufacturing capabilities.

HELLA-New Zealand Limited was founded in 1973 to manufacture, market and distribute automotive products within New Zealand.

Today the company designs and manufactures innovative lighting products across two sites in Auckland and Waihi for the global commercial transport, automotive and marine industries. 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 Auckland facilities have been occupied since 1980 covering some 7500m² and providing state of the art highly automated manufacturing capabilities. 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.

HELLA New Zealand is a respected partner and supplier of choice for automotive manufacturers and commercial transport fleets in New Zealand and around the world.



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

TESTED PROVEN TRUSTED

HELLA New Zealand strives to provide world-class products and services that contribute to the safety of the automotive and transport industry through enhanced vision and visibility.

HELLA is a leading edge designer and manufacturer of energy efficient, durable lighting products that always meet customer expectations for innovative design and quality.

Andrew Mills - Managing Director, HELLA New Zealand



Customer Service

HELLA's dedicated customer services team provide 'best fit' solutions based on sound professional knowledge and experience. With access to a wide global database within the HELLA Group, Customer Service is the recommended first stop for customer enquiries.



Dedicated team focused on quality products and customer service.

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 these 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 a revolutionary optical grade Polyamide which offers an unbeatable combination of properties. Because of these qualities 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 our 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.



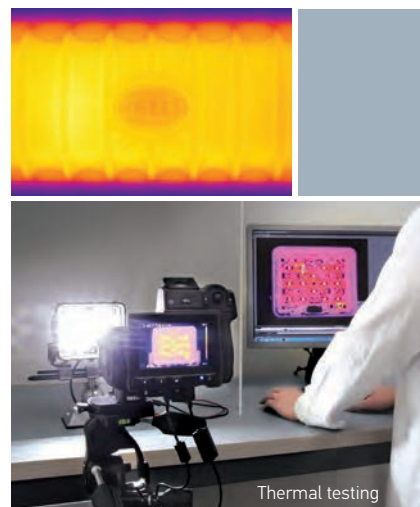
As illustrated using a DuraLED® lamp with many years of active high mileage road use can be refurbished to pristine near new condition.

Thermally Conductive Polymer

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.

A lamp housing made from thermally conductive plastic works much the same as a metal housing. The innovative ceramic based plastic 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 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.

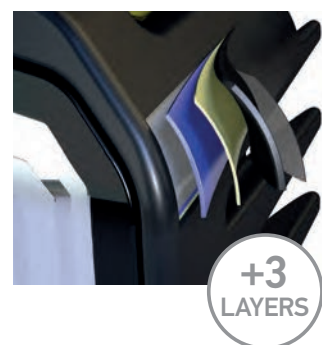


Thermal testing

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 172.





HELLA MEANS QUALITY OPERATIONAL EXCELLENCE

At HELLA New Zealand we're passionate about quality, down to the smallest detail.

Our ultimate goal is to achieve zero failures and this uncompromising approach means that each of our products will continue to deliver superior performance year after year.

Operational excellence is what we pride ourselves on ensuring each individual product is designed and manufactured to industry best practises.

Andrew Mills
Managing Director, HELLA New Zealand

HELLA New Zealand products are developed to the latest international standards and best practice principles, ensuring designs that are ahead of the competition in terms of durability, performance, and efficiency.

Combining superior design and operational excellence, HELLA New Zealand's Fit and Forget philosophy means that our customers can rest easy when they choose our products knowing they are getting the very best that will not let them down.

Taking Quality to Extremes

Before a new HELLA design is passed for production and sale, it has to pass stringent endurance tests. Every HELLA product is subjected to countless hours of rigorous testing where a range of extreme conditions are simulated.

In use, products must perform reliably at both high and low temperatures, as well as high levels of humidity. To ensure they withstand these challenges we use climate chambers where products are subjected to temperatures of -40°C to 60°C, as well as rapid temperature fluctuations.

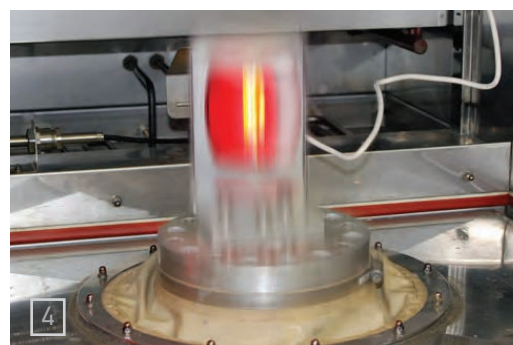
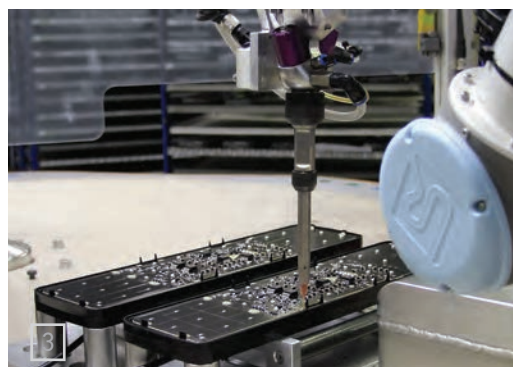
Moisture ingress is one of the biggest contributors to LED lighting product failure, therefore correct sealing of LED lamps is essential in ensuring a long lifespan of the product. HELLA have developed cutting edge automated robotic gluing systems that ensure consistent gluing and sealing.

Vibrations and jolts are part of everyday life for vehicle parts and can be a major cause of failure. Our punishing vibration tests subject products to constant vibration across a range of frequencies in all orientations. Impact testing is also used to ensure mechanical shock resistance.

International Standards

HELLA continually strives for improvements in daily operations in order to ensure each individual product is made to the highest standards.

HELLA New Zealand is certified to the international quality and environmental standards ISO 9001 and ISO 14001 for the design, manufacture and sale of automotive lighting and signalling equipment, marine navigation lighting, general lighting, LED based lighting and associated electronic control units, opto-electronic based printed circuit board assemblies, optical products and plastic components.



- 1: Electronic testing.
- 2: Simulating extreme environmental conditions.
- 3: Automated gluing process.
- 4: Vibration testing.

FIT AND FORGET BY DESIGN



Fit and Forget by Design is not just a marketing slogan, it is a philosophy adopted by our design team in 1998 when HELLA New Zealand designed our first DuraLED® signal lamp for the commercial transport sector.

To create lamps that will function faultlessly for the vehicle life and beyond requires dedication to excellence and the most rigorous, verified test regime. Extensive consultation with our most discerning industry partners was conducted, followed by months of field tests before the first DuraLED® was ever sold to a customer.

Over two decades the same team of dedicated perfectionists have continuously improved the latest designs from ongoing research and market experience.

Material selection, LEDs, optics, drive electronic, circuit protection, design of the sealing geometries, rigidity versus deliberate flexibility of the mounting system all work in harmony to create a product of truly lasting value and safe operation.

Fit and Forget by Design is your peace of mind of purchasing a product which is designed to stand the test of time, without compromise.



Designed and tested for guaranteed reliability and performance.



Expertly designed and precision manufactured for visibility and safety on New Zealand roads.



HELLA New Zealand Warranty

Standing Behind Our Product

Warranty

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 of 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 Five-Year Warranty unless otherwise specified.**
- **Micro Light Bars MLB Series 3 Years Warranty**
- **Inspection lamps 2 years Warranty**
- **All other products carry a One-Year Warranty**

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

The majority of the LED based lighting products in this catalogue were designed and manufactured in New Zealand. Ever since HELLA New Zealand started designing LED transport lighting in 1990 we have adopted a no compromise Fit and Forget by Design philosophy. This philosophy as well as our dedication to on-going research and adoption of new technology ensures that our products continue to set the bench mark in performance, 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 HELLA Dealer 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.

General Disclaimer

The illustrations, information and specifications presented and referred to in this catalogue were correct at the date of printing. However HELLA New Zealand reserves the right, subject to all applicable laws, at any time, at its discretion and without notice to discontinue or change the specifications or design of any product referred to herein.

© 2018 HELLA-New Zealand Limited.

The illustrations, information and specifications contained within this catalogue remain the property of HELLA-New Zealand Limited. Any unauthorised copying or distribution of this material outside the catalogue, is prohibited without prior approval. Designed and printed in New Zealand.

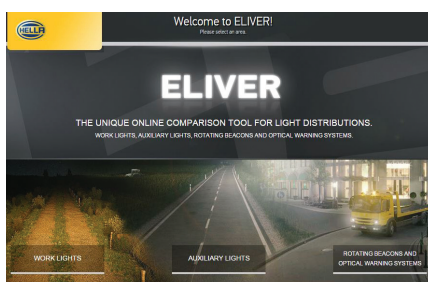


HELLA ONLINE TAKE ADVANTAGE OF ONLINE SERVICES

The HELLA Online Services website is the ultimate resource for all things HELLA

www.hella.com/online-services/en/

- Comparison Tools
- Configurator Tools
- Product Information
- Calculators
- Microsites
- Catalogues
- Mobile Apps
- Media Database
- Social Media



www.hella.co.nz



www.hellamarine.com



www.safetydaylights.com



www.facebook.com/HELLA.NZ



<http://goo.gl/uVF4Jy>



HELLA CONTACT MAN

A TWO DAY INTENSIVE TRAINING COURSE

The HELLA Contact Man Course is designed to provide insight into the world of HELLA New Zealand. Come experience HELLA technology.



WHO SHOULD ATTEND?

- Sales & Product Managers
- Counter Sales Staff
- Warehouse Staff
- Sales Representatives
- Warehouse Managers
- Supervisors

WHAT WILL I LEARN?

- Technological advances in automotive lighting
- HELLA design, manufacturing and testing processes
- Key sales points of HELLA LED products

HOW MUCH DOES IT COST?

- HELLA offers this course free of charge
- Overnight accommodation is provided by HELLA for 'out of town' participants
- Lunch and dinner provided

As a pioneer in LED lighting solutions HELLA's experienced staff are happy to share their knowledge and train people in the automotive industry.

The training course is a comprehensive 2-day course focused on HELLA New Zealand's product development, design, manufacture, and testing procedures. Combining a seminar style teaching method and complete factory tour, attendees are given an overview of HELLA technology over the span of the course.

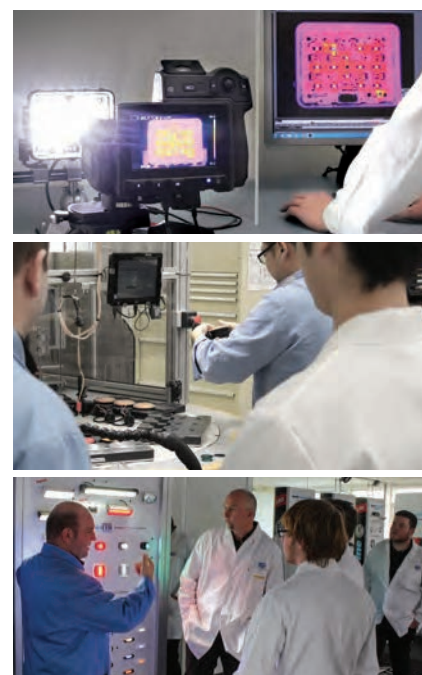
Each participant will receive a detailed course manual, giveaways, HELLA information folder and a certificate for completing the course. HELLA provides lunch for two days and dinner on day 1, plus overnight accommodation and breakfast for 'out of town' participants.

Your company provides travel to and from the course.

The course is constantly kept up to date with new products, technological advances and is run by our 2 experienced course facilitators with over 55 years HELLA experience between them.

HELLA is dedicated to enhancing industry knowledge, and offers this course free of charge.

HELLA can tailor the Contact Man Training Course to suit individual customer requirements.



For more information go to www.hella.co.nz or email contactman@hella.co.nz

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 157 for more information about RFCommSafe™ technology.

TECHNICAL PRODUCT LOGOS

Your guide to understanding the technical product logos found throughout this catalogue.



DuraLED® Lifetime Warranty
HELLA New Zealand's industry leading guarantee for quality and reliability. Refer to page 19.



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 157.



UV Resistant
Designed to withstand exposure to severe ultraviolet light without fading or embrittlement. Refer to page 4.



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 4



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 12.



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 20.



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

The range of HELLA Marker and Signal Lamps have been accepted as the most advanced lighting solution for commercial vehicles.



Contents

Marker and Signal Lamps

Quick Reference Product Guide.....	16-17	LED Strip Marker and Signal.....	60
DuraLED® Lifetime Warranty.....	18-19	LED High Level Brake Lamps.....	61
HELLA Compatibility Solution.....	20-21	LED Recess Mount Marker.....	62
DuraLED®	22-25	LED Surface Mount Marker.....	63
DuraLED® Combi Lamps.....	26-29	Rear Bulb Combination.....	65-66
DuraLED® Marker Lamps.....	30-38	Designline Bulb Lamps.....	67-69
EuroLED® Rear Lamps.....	39	Bulb 76mm Round.....	70
LED Number Plate Lamps.....	40-41	Bulb 84 x 84mm Square.....	71
LED Combination Lamps.....	42-45	66mm Module Marker and Signal.....	72-73
Jumbo-S LED Lamps.....	46-47	Direction Indicator Lamps.....	74-75
Designline LED Modules.....	48-49	Number Plate Lamps.....	76
Jumbo LED Modules.....	50	Spare Parts for End of Line Products.....	77
110mm Round LED.....	51-52	Reflectors.....	78-79
83mm Round LED.....	53-55	Accessories.....	80-87
LED Surface Mount Strip Lamps.....	56-59		

QUICK REFERENCE PRODUCT GUIDE

LED COMBINATION LAMPS



PAGE 26 PAGE 28 PAGE 29 PAGE 43 PAGE 47 PAGE 49



PAGE 44 PAGE 55 PAGE 59

LED SINGLE FUNCTION LAMPS



PAGE 22 PAGE 46 PAGE 48 PAGE 50



PAGE 39 PAGE 52 PAGE 54 PAGE 56 PAGE 60 PAGE 61

LED MARKER LAMPS



PAGE 32 PAGE 34 PAGE 36 PAGE 38



PAGE 30 PAGE 40 PAGE 62 PAGE 63

BULB LAMPS



PAGE 65



PAGE 65



PAGE 66



PAGE 66



PAGE 67



PAGE 68



PAGE 69



PAGE 70



PAGE 71



PAGE 72



PAGE 73



PAGE 74



PAGE 74



PAGE 74



PAGE 75



PAGE 75



PAGE 75



PAGE 76



PAGE 76



PAGE 76



PAGE 76

REFLECTORS



PAGE 78



PAGE 78



PAGE 79

ACCESSORIES



PAGE 80



01 GRILAMID® LENS

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



03 FIT & FORGET

Expertly designed and
precision manufactured.



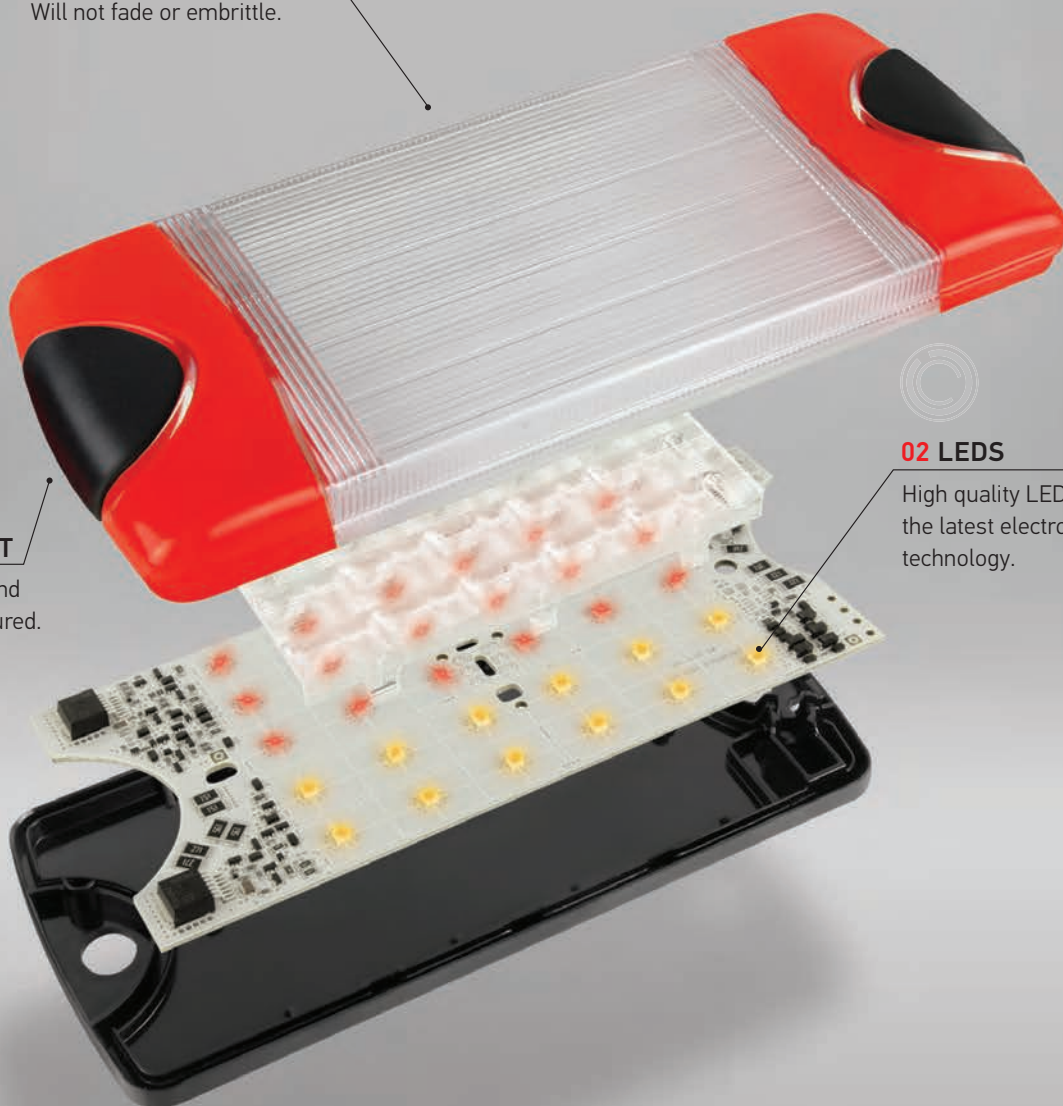
02 LEDS

High quality LEDs &
the latest electronic
technology.



04 RELIABILITY

Continuous improvement
& strenuous testing for an
ultra long operating life.



DURALED® BUILT TO LAST

HELLA's growing range of DuraLED® lamps, incorporating the latest LED technology, have proven to be the superior economic and environmental choice for transport operators in New Zealand. DuraLED® has a track record to last the distance. The first DuraLED® lamps were supplied in 1998, some 20 years ago and are still in use today.

Fully sealed against dust and moisture to International Protection Standards IP 6K6/IP 6K7, and compliant with current ADR (Australian Design Rules). As a result, these lamps are approved for use in New Zealand and Australia.

Once again following market demand, we now offer a range of selected models of DuraLED® lamps with moulded-in-Deutsch (DT) Connectors.

HELLA's innovative DuraLED® lamps are designed for use on trucks, buses, caravans, emergency vehicles and speciality applications.



HELLA is proud to stand behind the DuraLED® range with an industry leading Lifetime Warranty

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.



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.

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.

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. Currently ISO has members from 162 countries and 3,368 technical bodies working to a 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.





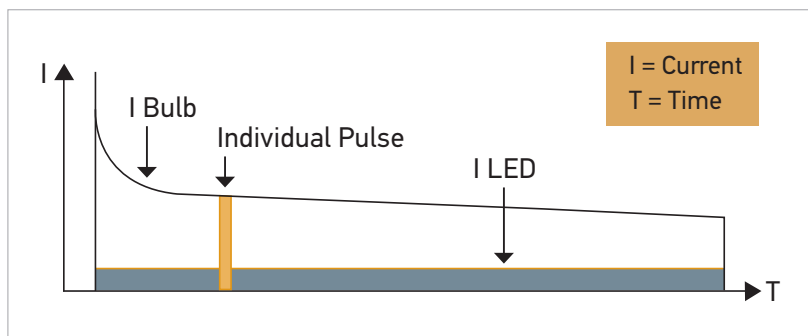
ISO 13207-1 Standard

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.



P/N 2391



P/N 2133-CS



P/N 2378-CS
P/N 2378-DTCS



P/N 2431-CS



P/N 2151-HCS
P/N 2151-VCS

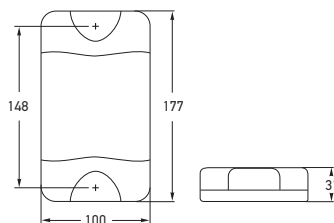


P/N 2146-HCS
P/N 2161-CS

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.



Part Number	2330-V
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 80 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.



Part Number	2151-V		
	2151-VCS		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	2151-V 2151-VCS	6W 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	2151-V: 2151-VCS:	ADR 6/00: Cat 2a E24 5850	ECE R6/01 ISO 13207-1

See page 20 for further information on HCS Technology and ISO 13207-1.

DuraLED® Reversing Lamp

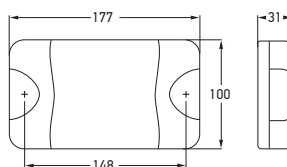
DuraLED® reversing lamp for trucks, buses, caravans and trailers.



Part Number	1430-V
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

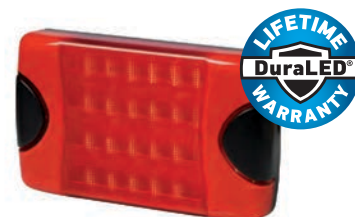


Part Number	2330-H		
	2330-HBL		BLISTER PACK
	2330-HBULK		PACK OF 4
	2330-HSS		SUPER SEAL
Mounting	Surface mount with mounting bushes supplied. Suitable for horizontal mounting.		
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.		
Power Consumption	Stop: 6W	Rear position: 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 80 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.



P/N 2330-HBL

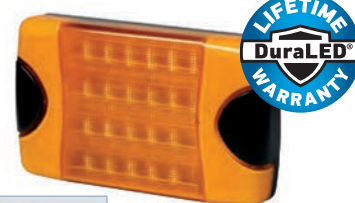


Part Number	2151-H		
	2151-HBL		BLISTER PACK
	2151-HBULK		PACK OF 4
	2151-HCS		HCS TECHNOLOGY
	2151-HSS		SUPER SEAL
Power Consumption	2151-H/...-HBL/...-HBULK/...-HSS	6W	2151-HCS 4W
Compliance	2151-H/...-HBL/...-HBULK/...-HSS: ADR 6/00: Cat 2a 2151-HCS: E24 5850 ECE R6/01 ISO 13207-1		

Other specifications as per P/N 2330-H. See page 20 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.



P/N 2151-HBL



Part Number	1430-H		
	1430-HBL		BLISTER PACK
	1430-HSS		SUPER SEAL
Power Consumption	4W		
Compliance	ADR 1/00	E24 5850	ECE R23/00

Other specifications as per P/N 2330-H. Reversing lamps are not designed for continuous operation.

DuraLED® Reversing Lamp

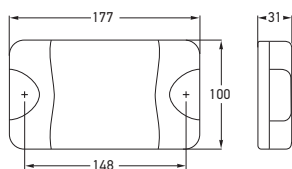
DuraLED® reversing lamp for trucks, buses, caravans and trailers.




P/N 1430-HBL

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.




Part Number	2330	
	2330-BULK	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 80 for DuraLED® accessories.

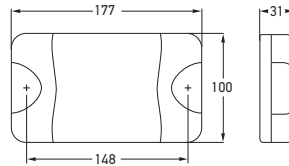
DuraLED® Rear Direction Indicator Lamp

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



Part Number	2151	
	2151-BULK	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




Part Number	2331-BULK	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 80 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.



Part Number	2152-BULK	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.	
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

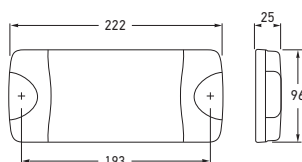
DuraLED® combination lamp featuring Ultra Wide Visibility Optics for significantly improved side visibility and Enhanced Definition Technology (EDT). Suitable for commercial vehicles and boat trailers. Shockproof and fully sealed to withstand water submersion and high-pressure washing. Optic appears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



P/N 2378-BL



Ultra slim height of only 25mm.



Part Number	2378		
	2378-BL		BLISTER PACK
	2378-BULK		PACK OF 12
	2378-CS		HCS TECHNOLOGY
	2378-6M		6M CABLE
	2378-6MBULK		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	P/Ns 2378/...-BL/...-BULK/...-CS Pre-wired with 2.5m of sheathed multi-core cable P/Ns 2378-6M/...-6MBULK 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 (2378-CS only) ECE R7/02
See page 80 for DuraLED® accessories. See page 20 for further information on HCS Technology and ISO 13207-1.			

COMBI-S LAMP FUNCTIONS



Stop

Rear position

Rear direction indicator

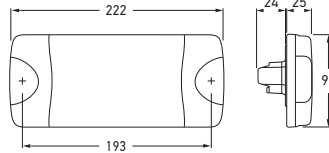
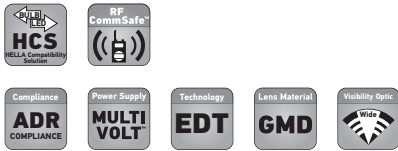
DuraLED® Combi-S Trailer Lighting Kit

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



Part Number	2378-TP	
Kit Contents	Each trailer lamp kit contains:	
2 x 2378	DuraLED® Combi-S stop/rear position and rear direction indicator lamp with 6m sheathed multi-core cable.	
2 x 2923	Red retro reflector	
1 x 2559	LED number plate lamp with 5m sheathed multi-core cable.	
1 x 4921	7 pole flat plug	

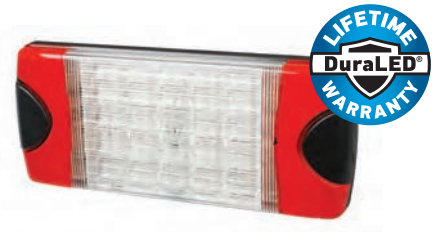




Part Number	2378-DT		
	2378-DTCS		HCS TECHNOLOGY
Mounting	Surface mount with mounting bushes supplied. Suitable for horizontal or vertical mounting.		
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.		
Power Consumption	Stop: 5W Rear position: 1W	Rear direction indicator: 5W Night: 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	4963-P 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 (2378-DTCS only) ECE R7/02
See page 20 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

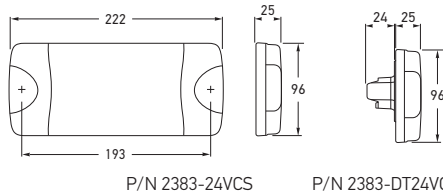
DuraLED® combination lamp featuring Ultra Wide Visibility Optics for significantly improved side visibility and Enhanced Definition Technology (EDT). Night light function allows illumination of the rear position lamp independently from the remaining marker lamps on the vehicle, resulting in low power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





P/N 4963-P
Not included with lamp.



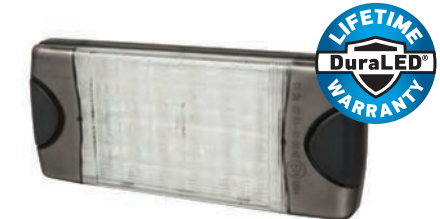
Rear view showing DT connector that allows application of self-adhesive heat shrink.



Part Number	2383-24VCS			HCS TECHNOLOGY
	2383-DT24VCS (DT Connector)			HCS TECHNOLOGY
Mounting	Surface mount with mounting bushes supplied. Suitable for horizontal mounting.			
Voltage	24V			
Power Consumption	Stop:	3W	Reverse:	3W
	Rear position:	1W	Night (2383-DT24VCS only):	1W
	Rear direction indicator:	3W		
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable (except DT versions).			
Compliance	 5894	ISO 13207-1		
	ECE R6/01	ECE R7/02	ECE R23/00	
Other specifications as per P/N 2378-DT.				

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.



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

COMBINATION LAMP FUNCTIONS



Stop Rear position Rear direction indicator Reverse

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

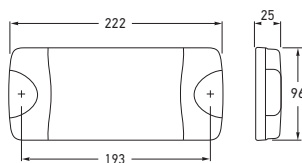
DuraLED® combination lamp with 34cm² red retro reflector which features Enhanced Definition Technology (EDT). Suitable for light commercial and boat trailers. Shockproof and fully sealed to withstand water submersion and high-pressure washing.



P/N 2377-BL



Ultra slim height of only 25mm.



Part Number	2377		
	2377-BL		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 80 for DuraLED® accessories.			

COMBI-R LAMP FUNCTIONS



Stop







Rear position

Rear direction indicator

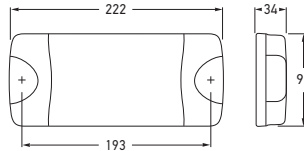
DuraLED® Combi-R Trailer Lighting Kit

A complete Fit and Forget solution for trailers or caravans.



						
						
Part Number	2377-TP					
Kit Contents	Each trailer lamp kit contains:					
2 x 2377	DuraLED® Combi-R stop/rear position and rear direction indicator lamp with retro reflector and 6m sheathed multi-core cable.					
1 x 2559	LED number plate lamp with 5m sheathed multi-core cable.					
1 x 4921	7 pole flat plug					





Part Number	2380		
	2380-BL		BLISTER PACK
	2380-BULK		PACK OF 12
	2380-GMD		GRILAMID® LENS
	2381		NO REVERSE
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: 1W	Rear direction indicator: 4W Reverse: 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.		
Compliance	ADR 1/00 E24 5870	ADR 6/00: Cat 2a ECE R6/01	ADR 49/00 ECE R7/02 ECE R23/00

See page 80 for DuraLED® accessories.

COMBINATION LAMP FUNCTIONS



Stop Rear position Rear direction indicator Reverse

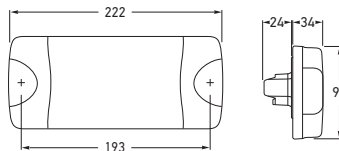
DuraLED® Combi Stop/Rear Position/Rear Direction Indicator/Reversing Lamp

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



P/N 2380-BL

Part Number	2380-DT		
	2380-DTGMD		GRILAMID® LENS
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: 1W Rear direction indicator: 4W	Reverse: 3W 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)		
Lens Material	High impact and chemical resistant Grilamid® lens. P/N 2380-DTGMD only.		
Accessory	4963-P	6 pole DT plug, wedge and 6 contacts.	
Compliance	ADR 1/00 E24 5870	ADR 6/00: Cat 2a ECE R6/01	ADR 49/00 ECE R7/02 ECE R23/00



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

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



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



P/N 4963-P
Not included with lamp.

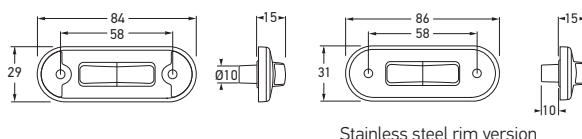
DuraLED® Flush Mount Side Marker Lamp

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.



P/N 2083

P/N 2083S



Stainless steel rim version



Part Number	2083	
	2083-BULK (Pack of 16)	
	2083S	POLISHED STAINLESS STEEL RIM
	2083S-BULK (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	9.2310.09-BULK 95968500	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 81-82 for DuraLED® marker lamp accessories.

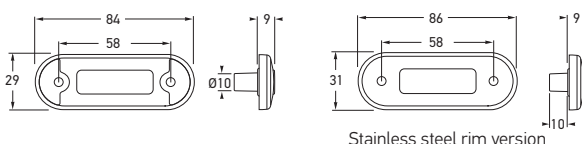
DuraLED® Flush Mount Front Position/End Outline Lamp

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.






P/N 2059

P/N 2059S



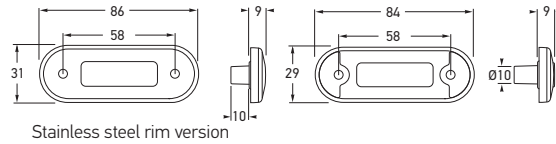
Stainless steel rim version






Part Number	2059 	
	2059-BULK (Pack of 16)	
	2059S 	POLISHED STAINLESS STEEL RIM
	2059S-BULK (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	9.2310.09-BULK 95968500	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 81-82 for DuraLED® marker lamp accessories.

Ultra slim design
Featuring a thickness of just 9mm



Stainless steel rim version

Part Number	2060		
	2060-BULK (Pack of 16)		
	2060S		POLISHED STAINLESS STEEL RIM
	2060S-BULK (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	9.2310.09-BULK 95968500	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 81-82 for DuraLED® marker lamp accessories.

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.



P/N 2060S



Ultra slim design
Featuring a thickness of just 9mm



Part Number	2310	POLISHED STAINLESS STEEL RIM
	2310-BULK (Pack of 16)	
	2310S	
	2310S-BULK (Pack of 16)	

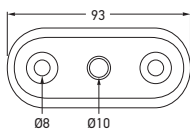
Other specifications as per P/N 2060



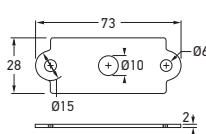
P/N 2310S

DuraLED® Flush Mount Rear Position/End Outline Lamp

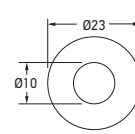
Red flush mount rear position or rear end outline LED lamp with optional stainless steel rim. Featuring a low profile ultra durable Grilamid® nylon lens for extreme impact, UV, chemical and stress resistance. Optic appears clear until illuminated.



P/N 9GD 958 028-001



P/N 9GD 980 867-507



P/N 9GD 980 867-007

Part Number	9GD 980 867-007	ROUND SEAL
	9GD 980 867-507	RECTANGULAR SEAL
	9GD 958 028-001	CURVED SEAL

DuraLED® Flush Mount Gaskets



P/N 9GD 980 867-007



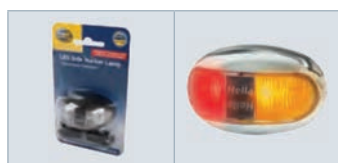
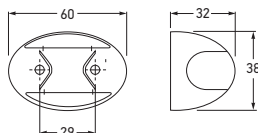
P/N 9GD 980 867-507



P/N 9GD 958 028-001




DuraLED® Side Marker Lamp

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



P/N 2053

P/N 2053CHROME

Part Number	2053		
	2053-BULK		PACK OF 4
	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	9.2053.08	Black nylon housing	
Compliance	ADR 45/01		
See pages 81-82 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.



Part Number	2053-GMD	
	2053-GMDBULK	PACK OF 4
Mounting	Surface mount.	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	<1W	
Protection	As per P/N 2053.	
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	9.2053.08	Black nylon housing
Lens Material	High impact and chemical resistant Grilamid® lens	
Compliance	ADR 45/01	

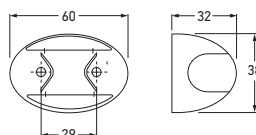
**DuraLED® Cab Marker/Supplementary
Side Direction Indicator Lamp (Cat. 5)**



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



Part Number	2026	
	2026-BULK	PACK OF 4
Mounting	Surface mount.	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	<1W	
Protection	As per P/N 2053.	
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	9.2053.08	Black nylon housing
Compliance	ADR 6/00: Cat 5	ADR 45/01

MARKER AND SIGNAL LAMPS





Part Number	2054	
	2054-BULK	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	9.2053.08	Black nylon housing
Lens Material	High impact and chemical resistant Grilamid® lens	
Compliance	ADR 49/00 	

See pages 81-82 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.





Part Number	2051	
	2051-BULK	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 P/N 2054.	
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	9.2053.08	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.



Part Number	2307	
	2307-BULK	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 P/N 2054.	
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	9.2053.08	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

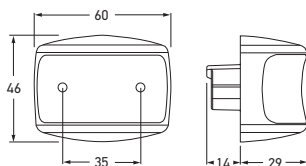
Heavy duty red/amber LED side marker lamp with DT connector and nylon housing. Featuring ultra durable Grilamid® nylon lens for extreme impact, UV, chemical and stress resistance. Optic appears clear until illuminated.




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



P/N 4960-P
Not included with lamp.




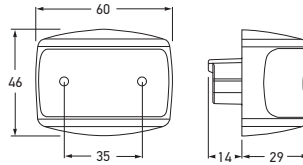
Part Number	2073	
	2073-BULK	PACK OF 8
Mounting	Surface mount. Suitable for horizontal mounting.	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	<1W	
Protection	Reverse polarity protection. Fully sealed against dust, high-pressure washing and temporary water immersion.	
Spare Parts	4960-P 2 pole DT plug, wedge and 2 contacts 9.1557.05 2.0m sheathed cable with DT plug 9.2073.09 Black nylon housing 9.2073.11 White nylon housing	
Lens Material	High impact and chemical resistant Grilamid® lens	
Compliance	ADR 45/01 	


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.



Part Number	2076	
	2076-BULK	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. Fully sealed against dust, high-pressure washing and temporary water immersion.	
Spare Parts	4960-P 2 pole DT plug, wedge and 2 contacts 9.1557.05 2.0m sheathed cable with DT plug 9.2073.09 Black nylon housing 9.2073.11 White nylon housing	
Lens Material	High impact and chemical resistant Grilamid® lens	
Compliance	ADR 6/00: Cat 5 ADR 45/01 	




Part Number	2074	
	2074-BULK	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. Fully sealed against dust, high-pressure washing and temporary water immersion.	
Spare Parts	4960-P 2 pole DT plug, wedge and 2 contacts 9.1557.05 2.0m sheathed cable with DT plug 9.2073.09 Black nylon housing 9.2073.11 White 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.




Part Number	2071	
	2071-BULK	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. Fully sealed against dust, high-pressure washing and temporary water immersion.	
Spare Parts	As per P/N 2074	
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.



Part Number	2312	
	2312-BULK	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. Fully sealed against dust, high-pressure washing and temporary water immersion.	
Spare Parts	As per P/N 2074	
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.



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.

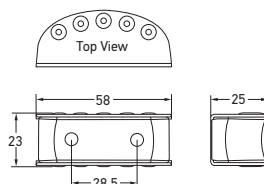





P/N 2058

P/N 2058P



P/N 2058



Part Number	2058		MATT FINISH
	2058-BULK (Pack of 4)		
	2058P		POLISHED FINISH
	2058P-BULK (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. Fully sealed against dust, high-pressure washing 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 Parts	9.2058.09 Stainless steel housing 9.2058.10 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.

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

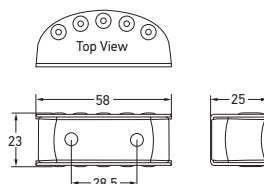
Heavy duty LED cab marker or supplementary side direction indicator lamp with stainless steel housing. Featuring ultra durable Grilamid® nylon lens for extreme impact, UV, chemical and stress resistance. Optic appears clear until illuminated.



Part Number	2027		MATT FINISH
	2027-BULK (Pack of 4)		
	2027P		POLISHED FINISH
	2027P-BULK (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. Fully sealed against dust, high-pressure washing 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 Parts	9.2058.09 Stainless steel housing 9.2058.10 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

**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.



P/N 2061

Part Number	2061	MATT FINISH
	2061-BULK (Pack of 4)	
	2061P	POLISHED FINISH
	2061P-BULK (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. Fully sealed against dust, high-pressure washing 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 Parts	9.2058.09 Stainless steel housing 9.2058.10 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 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.



Part Number	2062	MATT FINISH
	2062-BULK (Pack of 4)	
	2062P	POLISHED FINISH
	2062P-BULK (Pack of 4)	

Other specifications as per P/N 2061.

**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.



Part Number	2311	MATT FINISH
	2311-BULK (Pack of 4)	
	2311P	POLISHED FINISH
	2311P-BULK (Pack of 4)	

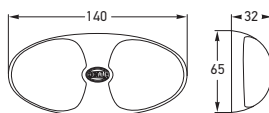
Other specifications as per P/N 2061.



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 75 for function category details.



P/N 2031-BL



Part Number	2031
	2031-BL  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	3W
Protection	Reverse polarity and 5000 watt Transient Voltage Suppressor (TVS) Fully sealed against dust, high-pressure washing and temporary water immersion.
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.
Spare Part	9.2366.17 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.



P/N 2033-BL




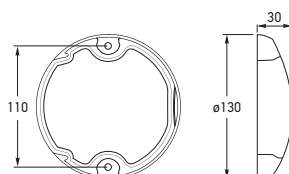
Part Number	2033
	2033-BL  BLISTER PACK
Mounting	Surface mount with mounting bushes supplied.
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.
Power Consumption	3W
Protection	Reverse polarity and 5000 watt Transient Voltage Suppressor (TVS) Fully sealed against dust, high-pressure washing and temporary water immersion.
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.
Spare Part	9.2366.17 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.



Part Number	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) Fully sealed against dust, high-pressure washing and temporary water immersion.
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.
Spare Part	9.2366.17 Screw boss kit
Lens Material	Polycarbonate.
Compliance	ADR 49/00 



Part Number	2366		
	2366-BL		BLISTER PACK
	2366-BULK		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 83 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.



P/N 2366-BL

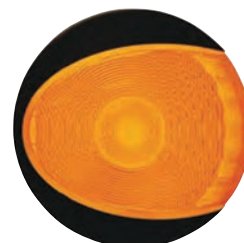


Part Number	2133		
	2133-BL		BLISTER PACK
	2133-BULK		PACK OF 12
	2133-CS		HCS TECHNOLOGY
Mounting	Surface mount with mounting bushes supplied.		
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.		
Power Consumption	2.5W		
Protection	As per P/N 2366.		
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.		
Compliance	ADR 6/00: Cat 2a (E4) 10208 ECE R6/01 ISO 13207-1 (2133-CS only)		

See page 20 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.



P/N 2133-BL

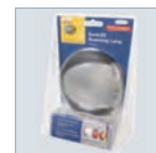


Part Number	1433		
	1433-BL		BLISTER PACK
	1433-BULK		PACK OF 12
Mounting	Surface mount with mounting bushes supplied.		
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.		
Power Consumption	2.5W		
Protection	As per P/N 2366.		
Cable Length	Pre-wired with 2.5m of sheathed 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.



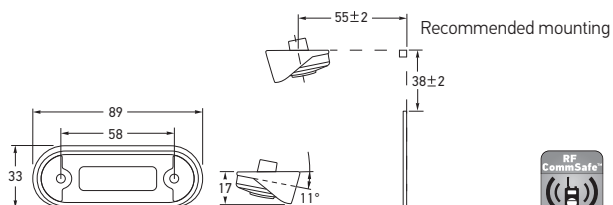
P/N 1433-BL


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.



P/N 8HG 958 029-001

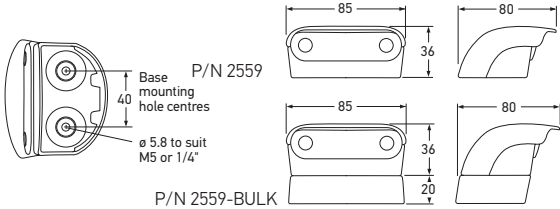


Part Number	2560		
	2560-BULK		PACK OF 16
Mounting	Surface mount.		
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.		
Power Consumption	0.5W		
Protection	Reverse polarity protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and 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	9.2310.09-BULK 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





LED Number Plate Lamp

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

Part Number	2559		PACK OF 8
	2559-BULK		
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	9.2559.02	LED insert	
	9.5240.30	Black caps	
	9.2559.08	Mounting spacer - black	
	9.2559.09	Mounting kit - black	
	9.2559.19	Mounting kit - white	
Compliance	ADR 48/00	ECE R4/00	



Mounting spacer
P/N 9.2559.08

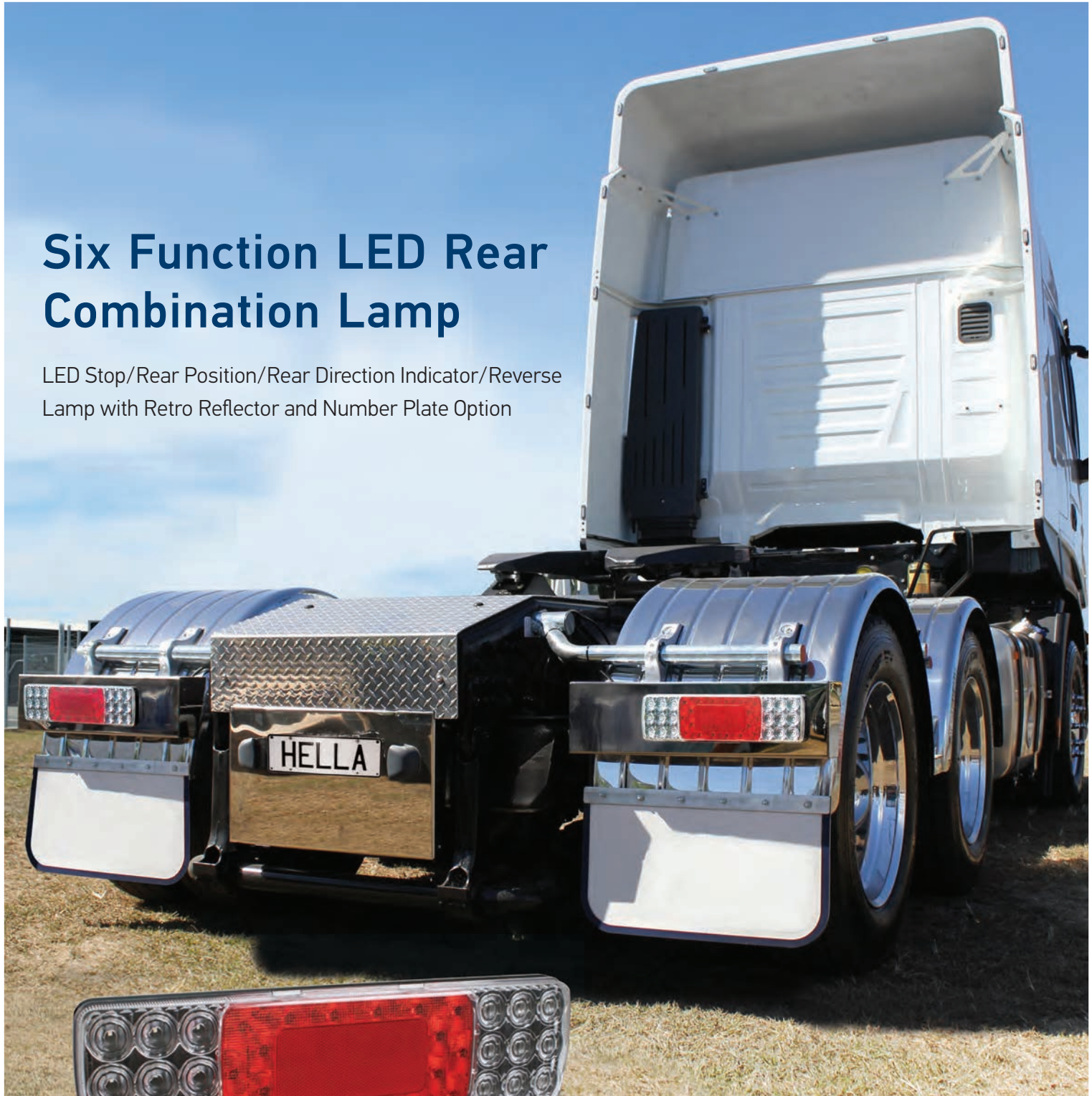


P/N 2559



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.

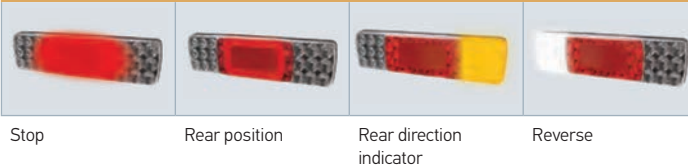


Combination Lamp with Attractive Retail Packaging

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.

<div><div><div>RF CommSafe</div><div></div></div><div><div>Compliance</div><div>ADR COMPLIANCE</div></div><div><div>Power Supply</div><div>MULTI VOLT</div></div><div><div>Technology</div><div>EDT</div></div><div><div>Visibility Optic</div><div></div></div><div><div>HELLA Compatibility Solution</div><div></div></div></div>		<div></div>	
Part Number	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	9.2391.08	Mounting pack	
Compliance	ADR 1/00 ADR 6/00: Cat 2a ADR 47/00 ADR 49/00 ISO 13207-1		
See page 20 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.



P/N 2391

<div><div>Compliance</div><div>Power Supply</div><div>Technology</div><div>Visibility Optic</div><div>HCS</div><div>RF CommSafe™</div></div> <div><div>ADR COMPLIANCE</div><div>MULTI VOLT</div><div>EDT</div><div>Wide Area</div><div>HELLA Compatibility Solution</div><div>RF CommSafe™</div></div>			
Part Number	2392L		LEFT HAND SIDE
	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	9.2391.08	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 20 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.



P/N 2392L

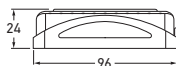
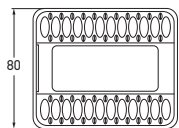
LED Stop/Rear Position/ Rear Direction Indicator Lamp



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.



P/N 9.2394.09
Mounting spacer (Not
included with lamp)

P/N 2394



Part Number	2394			
	2394-BULK			PACK OF 18
	2394-6M			
	2394-6MBULK			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	2394 2394-6M	Pre-wired with 0.5m of sheathed multi-core cable. Pre-wired with 6m of sheathed multi-core cable.		
Spare Parts	9.2394.08 9.2394.09	Mounting base 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



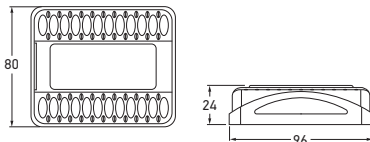


Stop

Rear direction
indicator

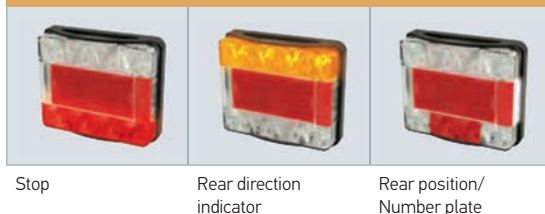
Rear position



MARKER AND SIGNAL LAMPS

<div><div>Compliance</div><div>Technology</div><div>Power Supply</div><div>Lens Material</div><div>RF CommSafe</div></div>			
Part Number	2395		
	2395-BULK		PACK OF 18
	2395-6M		
	2395-6MBULK		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	2395	Pre-wired with 0.5m of sheathed multi-core cable.	
	2395-6M	Pre-wired with 6m of sheathed multi-core cable.	
Spare Parts	9.2394.08	Mounting base	
	9.2394.09	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 

TRAILER LAMP FUNCTIONS



Stop

Rear direction indicator

Rear position/Number plate


P/N 9.2394.09
Mounting spacer (Not included with lamp)


P/N 2395


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

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.



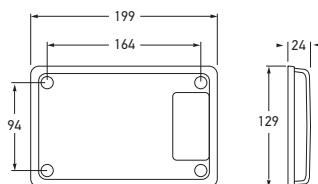
<div><div>Compliance</div><div>Technology</div><div>Power Supply</div><div>Lens Material</div><div>RF CommSafe</div></div>		<div><div>ADR COMPLIANCE</div><div>EDT</div><div>MULTI VOLT</div><div>GMD</div><div>RF CommSafe</div></div>	
Part Number	2395-TP		
Lens Material	High impact and chemical resistant Grilamid® lens		
Kit Contents	Each trailer lamp kit contains: 1 x 2394 Stop/rear position/rear direction indicator lamp with reflex reflector. 1 x 2395 Stop/rear position/rear direction indicator/Number plate lamp function with reflex reflector. 8 x Connectors Crimp connectors with heat shrink insulation. (P/N 8231S)		

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.



P/N 2361-BL



Part Number	2361	
	2361-BL	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 84 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.



P/N 2161-BL



Part Number	2161	
	2161-BL	BLISTER PACK
	2161-CS	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 P/N 2361.	
Cable Length	Pre-wired with 200mm of cable.	
Compliance	ADR 6/00: Cat 2a	ADR 47/00 ISO 13207-1 (2161-CS only)

See page 20 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.



P/N 1461-BL



Part Number	1461	
	1461-BL	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	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.

Compliance
ADR
COMPLIANCE

Power Supply
MULTI
VOLT

Technology
EDT

HCS
HELLA Compatibility
Solution

RF
CommSafe™

Part Number	2429-CS	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 84 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 20 for further information on HCS Technology and ISO 13207-1).

RF
CommSafe™

Compliance
ADR
COMPLIANCE

Power Supply
MULTI
VOLT

Technology
EDT

HCS
HELLA Compatibility
Solution

Part Number	2430-CS	HCS TECHNOLOGY
Mounting	As per P/N 2429-CS.	
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 P/N 2429-CS.	
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 20 for further information on HCS Technology and ISO 13207-1).

Compliance
ADR
COMPLIANCE

Power Supply
MULTI
VOLT

Technology
EDT

HCS
HELLA Compatibility
Solution

Part Number	2431-CS	HCS TECHNOLOGY
Mounting	As per P/N 2429-CS.	
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 P/N 2429-CS.	
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 20 for further information on HCS Technology and ISO 13207-1).

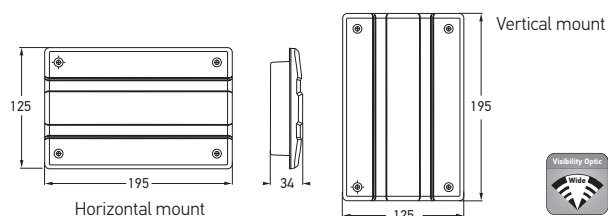
techfeedback@hella.co.nz


www.hella.co.nz

47

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.




Part Number	2332-H24	HORIZONTAL
	2332-V24	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 84 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.




Part Number	2146-H24	HORIZONTAL
	2146-V24	VERTICAL
	2146-HCS (Incorporates HCS Technology)	HORIZONTAL
	2146-VCS (Incorporates HCS Technology)	VERTICAL
Mounting	Recess mount.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	P/Ns 2146-H24/2146-V24: 6W P/Ns 2146-HCS/2146-VCS: 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 (2146-HCS/...VCS only) 	

See page 20 for further information on HCS Technology and ISO 13207-1.

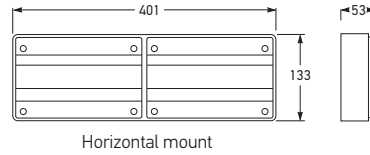
Designline LED Module Reversing Lamp

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.



Part Number	1446-H	HORIZONTAL
	1447L (High performance - Left hand side)	
	1447R (High performance - Right hand side)	
	1446-V	VERTICAL
Mounting	Recess mount.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	P/Ns 1446-H/1446-V: 4W P/Ns 1447L/1447R: 7W	
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.



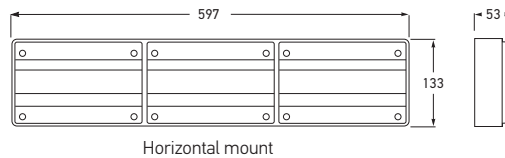
Designline LED Double Module Stop/Rear Position/Rear Direction Indicator Lamp

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.



Part Number	2426-H	HORIZONTAL
	2426-V	VERTICAL
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	9.2422.09	Double housing
Compliance	ADR 6/00: Cat 2a	ADR 49/00

See page 84 for Designline accessories.



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.



Part Number	2427-H	HORIZONTAL
	2427-V	VERTICAL
Mounting	Surface mount.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	Stop: 6W x2 Rear position: 2W x 2 Rear direction indicator: 6W	
Cable Length	Pre-wired with 2m of multi-core cable.	
Spare Part	9.2423.09	Triple housing
Compliance	ADR 6/00: Cat 2a	ADR 49/00



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

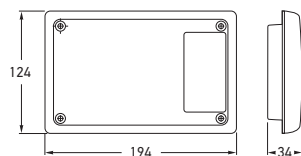



Part Number	2428-H	HORIZONTAL
	2428-V	VERTICAL
Mounting	Surface mount.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	Stop: 6W Rear position: 2W Rear direction indicator: 6W Reverse: 4W	
Cable Length	Pre-wired with 2m of multi-core cable.	
Spare Part	9.2423.09	Triple housing
Compliance	ADR 1/00	ADR 6/00: Cat 2a ADR 49/00

Reversing lamps are not designed for continuous operation.

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.




Part Number	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 

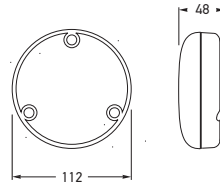
See page 84 for Designline accessories.

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.



Part Number	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 



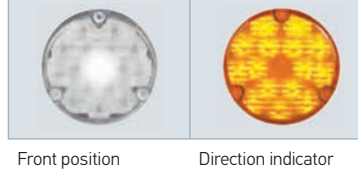
110mm Round LED Front Direction Indicator Lamp - Amber Lens

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



Part Number	2135LED	BLACK BASE
	2105	MODULE
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



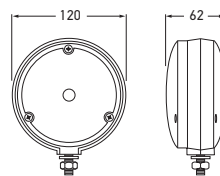
110mm Round LED Front Position/ Front Direction Indicator Lamp - Clear Lens

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



Part Number	2131-CS	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 20 for further information on HCS Technology and ISO 13207-1. Diagram as per P/N 2135LED



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.



Part Number	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 P/N 2135LED	
Cable Length	Pre-wired with 200mm of cable.	
Spare Part	2105 110mm Round LED Front Direction Indicator Lamp - Amber Lens	
Compliance	ADR 6/00: Cat 1	
See page 75 for function category details.		

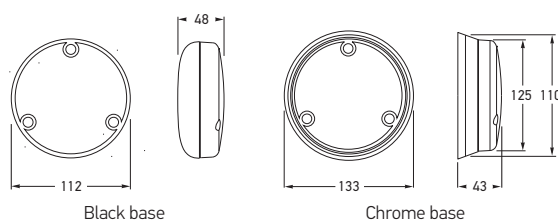
110mm Round LED Stop/ Rear Position Lamp

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.



P/N 2367

P/N 2365



Part Number	2359	CHROME BASE
	2367	BLACK BASE
	2365	MODULE
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



P/N 2167

P/N 2165



Part Number	2159	CHROME BASE
	2167	BLACK BASE
	2165	MODULE
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 P/N 2359.	
Cable Length	Pre-wired with 200mm of cable.	
Compliance	ADR 6/00: Cat 2a	

See page 20 for further information on HCS Technology and ISO 13207-1.

110mm Round LED Reversing Lamp



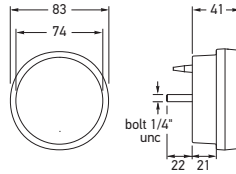
P/N 1467

P/N 1465



Part Number	1459	CHROME BASE
	1467	BLACK BASE
	1465	MODULE
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 P/N 2359.	
Cable Length	Pre-wired with 200mm of cable.	
Compliance	ADR 1/00	


Reversing lamps are not designed for continuous operation.



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.



Part Number	2108-GMD			12 VOLT
	2108-GMD24V			24 VOLT
Mounting	Surface mount. Single bolt 1/4" stainless UNC thread. Nut and washer supplied.			
Power Consumption	P/N 2108-GMD		P/N 2108-GMD24V	
	Safety DayLights™:	4W	4W	
	Front position:	1W	1W	
	Front direction indicator:	3W	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 2.5m of sheathed multi-core cable.			
Lens Material	High impact and chemical resistant Grilamid® lens			
Compliance	ADR 6/00: Cat 1 E24 5854	ADR 49/00 ECE R6/01	ADR 76/00 ECE R7/02	ECE R87/00 

See page 84 for mounting accessories. See page 99 for Safety DayLight™ Versions

83MM LAMP FUNCTIONS



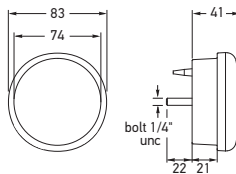
LED Safety DayLights™

Front position

Front direction indicator

83mm Round LED Front Direction Indicator Lamp

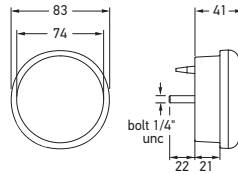
Compact, low profile LED front direction indicator fitted with amber polycarbonate lens. Fully sealed to withstand high-pressure washing.



Part Number	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.



P/N 2390 Rear position P/N 2390-BL

Part Number	2390	
	2390-BL	BLISTER PACK
	2390-BULK	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 84 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.



P/N 2130-BL

Part Number	2130	
	2130-BL	BLISTER PACK
	2130-BULK	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 P/N 2390.	
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

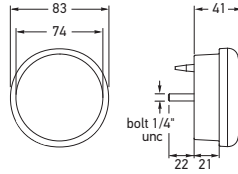
83mm diameter LED reversing lamp with single bolt mount.



P/N 1490-BL

Part Number	1490	
	1490-BL	BLISTER PACK
	1490-BULK	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 P/N 2390.	
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.



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

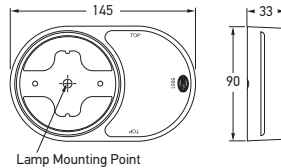
83mm diameter LED stop, rear position and rear direction indicator lamp with single bolt mount.



P/N 2399-BL

Part Number	2399		
	2399-BL		BLISTER PACK
	2399-BULK		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 E9 1538	ADR 49/00 ECE R6/01	ECE R7/02

Contact HELLA for 24 volt HCS version. See page 84 for mounting accessories.



Red Retro Reflector Base

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



Part Number	2934H	HORIZONTAL
	2934V	VERTICAL
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.



Part Number	2399-TP	
Kit Contents	Each trailer lamp kit contains: 2 x 2399 Combination stop/rear position and rear direction indicator lamp with 6m cable 2 x 2934H Red retro reflector base – horizontal mount 1 x 2559 LED number plate lamp 1 x 4921 7 pole flat plug	



LED Front Direction Indicator Lamp - Surface Mount

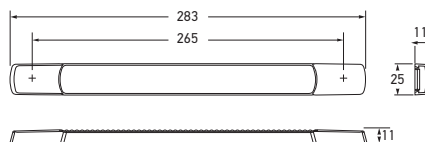
Surface mount LED front direction indicator lamp that is designed with an ultra wide visibility optic for significantly improved side visibility. Featuring a low profile, ultra durable Grilamid® nylon lens for extreme impact, UV, chemical and stress resistance. Optic appears clear until illuminated.









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



P/N 2109-BL

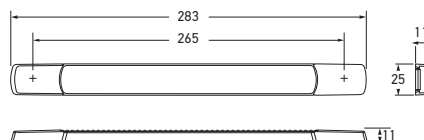


Part Number	HORIZONTAL MOUNT			
	2109		12 VOLT	
	2109-BL (Blister Pack)			
	2109-24V		24 VOLT	
	2109-24VBL (Blister Pack)			
	VERTICAL MOUNT			
	2109V		12 VOLT	
	2109V-BL (Blister Pack)			
	2109V-24V		24 VOLT	
	2109V-24VBL (Blister Pack)			
Mounting	Suitable for horizontal and vertical mounting with 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	9.2652.09 9.1009.09 9.1009.10	White screw caps (Pack of 4) Charcoal screw caps (Pack of 4) Chrome plated screw caps (Pack of 4)		
Compliance	ADR 6/00: Cat 1	Horizontal  5869	Vertical  5890	ECE R6/01
See page 59 for surface mount strip lamp screw caps.				

MOUNTING DIAGRAMS

P/N 2109/...-24V	P/N 2109V/...-24V
Horizontal mount: +/- 45° rotation around lamp (and vehicle) axis	Vertical mount: +/- 45° rotation around lamp (and vehicle) axis

MARKER AND SIGNAL LAMPS



Part Number	5245	12 VOLT
	5245-24V	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	9.2652.09 White screw caps (Pack of 4) 9.1009.09 Charcoal screw caps (Pack of 4) 9.1009.10 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.



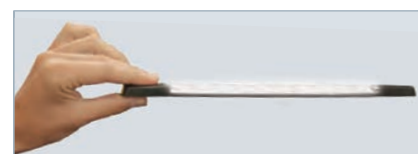
Part Number	HORIZONTAL MOUNT		
	1468		12 VOLT
	1468-BL (Blister Pack) 		
	1468-24V		24 VOLT
	1468-24VBL (Blister Pack) 		
	VERTICAL MOUNT		
	1468V		12 VOLT
	1468V-24V		24 VOLT
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable. (Blister packs with 0.5m cable)		
Compliance	Horizontal  0027	Vertical  0028	ECE R23/00

Other specifications as per P/N 5245.

Reversing lamps are not designed for continuous operation.

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

P/N 5245/...-24V	P/N 5245/...-24V	P/N 1468/...-24V	P/N 1468V/...24V
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



P/N 1468-BL

LED Stop/Rear Position Lamp - Surface Mount

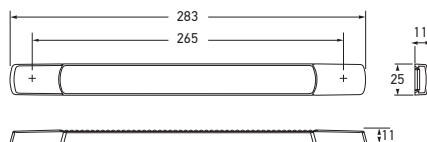
Surface mount LED stop/rear position lamp that features Enhanced Definition Technology (EDT) and is designed with an ultra wide visibility optic for significantly improved side visibility. Featuring a low profile, ultra durable Grilamid® nylon lens for extreme impact, UV, chemical and stress resistance.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





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



P/N 2318-BL



Part Number	2318	12 VOLT		
	2318-BL (Blister Pack)			
	2318-24V	24 VOLT		
	2318-24VBL (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

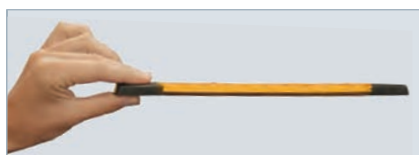


Stop

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.



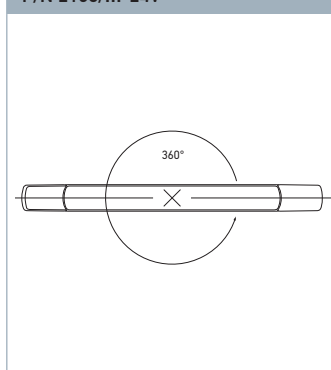
P/N 2168-BL



Part Number	2168	12 VOLT
	2168-BL (Blister Pack) 	
	2168-24V	24 VOLT
	2168-24VBL (Blister Pack) 	
Mounting	Suitable for horizontal and vertical mounting. See diagram.	
Power Consumption	3W	
Protection	As per P/N 2318	
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	 5891 ECE R6/01

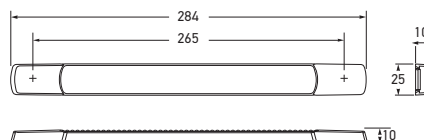
MOUNTING DIAGRAM

P/N 2168/...-24V



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

MARKER AND SIGNAL LAMPS



Part Number	2375-12V	12 VOLT
	2375-24V	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	9.2652.09 White screw caps (Pack of 4) 9.1009.09 Charcoal screw caps (Pack of 4) 9.1009.10 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 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

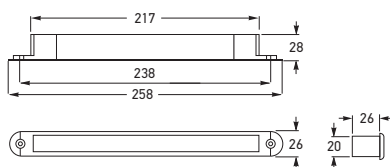
Surface Mount Strip Lamp - Screw Caps

SURFACE MOUNT STRIP LAMP SCREW CAPS		
Part Number	Colour	Quantity
9.1009.09	CHARCOAL	PACK OF 4
9.2652.09	WHITE	
9.1009.10	CHROME PLATED	



LED Stop/Rear Position Lamp

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



Part Number	2334-12V	12 VOLT
	2334-24V	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.	
Spare Part	9.5243.05	Gasket
Compliance	ADR 49/00	

LED Rear Direction Indicator Lamp

Amber LED strip lamp suitable for coaches and buses.



Part Number	2156-12V	12 VOLT
	2156-24V	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.	
Spare Part	9.5243.05	Gasket
Compliance	ADR 6/00: Cat 2a	

LED High Level Brake Lamp

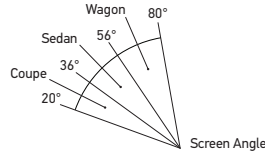
Strip LED lamp designed for rear spoiler applications. Clear lens version optic appears clear until illuminated.



P/N 5243-CLEAR



Part Number	RED LENS	CLEAR LENS	
	5243	5243-CLEAR	12 VOLT
	5243-24V	5243-24VCLEAR	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.		
Spare Part	9.5243.05	Gasket	
Compliance	ADR 49/00: Cat S3	E4 02 7547	ECE R7/02



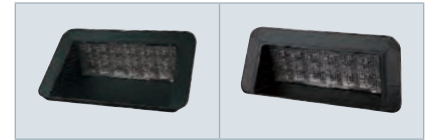
LED High Level Brake Lamp

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

Part Number	5237 (Coupe)	20° - 36°	12 VOLT
	5238 (Sedan)	37° - 56°	
	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		

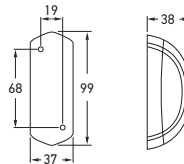
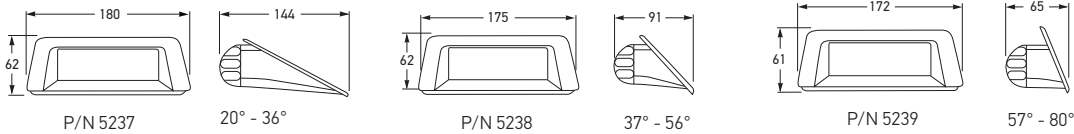


P/N 5237
Shown illuminated



P/N 5238

P/N 5239



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.

Part Number	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	

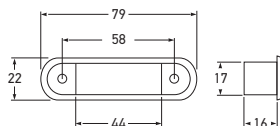





LED Recess Mount Front Position/ End Outline Lamp

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



P/N 2055

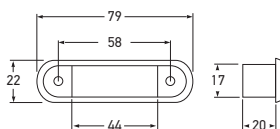




Part Number	2055			
	2055-BULK			PACK OF 4
Mounting	Two hole recess mount. Suitable for horizontal or vertical mounting.			
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.			
Power Consumption	<1W			
Protection	Reverse polarity protection. IP 6K6 (Protection against dust and high-pressure 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	 0054	ECE R7/02	

See page 86 for spare parts and accessories.

LED Recess Mount Front End Outline Lamp

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

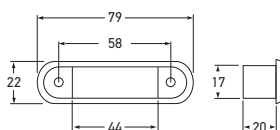




Part Number	2056		
	2056-BULK	PACK OF 4	
Mounting	Suitable for horizontal mounting.		
Compliance	ADR 49/00		

Other specifications as per P/N 2055. See page 86 for spare parts and accessories.

LED Recess Mount Cab Marker Lamp

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

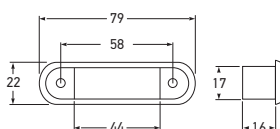


Part Number	2057		
	2057-BULK	PACK OF 4	
Mounting	Suitable for horizontal mounting.		
Compliance	ADR 45/01		

Other specifications as per P/N 2055. See page 86 for spare parts and accessories.

LED Recess Mount Rear Position/ End Outline Lamp

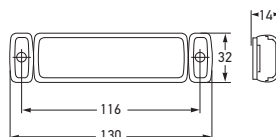
Red rear end outline lamp or rear position LED
lamp. Optic appears clear until illuminated.



Part Number	2308		
	2308-BULK	PACK OF 4	
Compliance	ADR 49/00	E4 02 7597	ECE R7/02

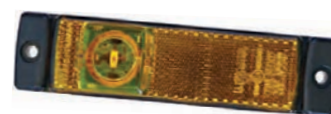
Other specifications as per P/N 2055. See page 86 for spare parts and accessories.

MARKER AND SIGNAL LAMPS

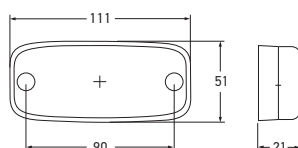


LED Side Marker Lamp - Amber

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



Part Number	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

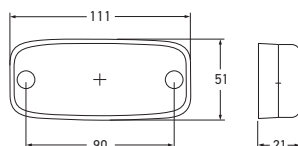


LED Side Marker Lamp - Amber

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



Part Number	2PS 345 600-001		12 VOLT	
	2PS 345 600-011		24 VOLT	
Power Consumption	12V DC	0.7W	24VDC	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

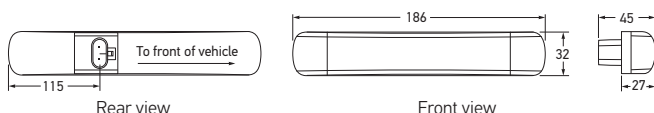


LED Rear Position Lamp - Red

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



Part Number	2305		12 VOLT	
	2306		24 VOLT	
Power Consumption	12V DC	0.5W	24V DC	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

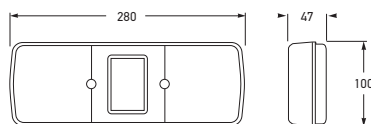
Part Number	2BM 011 788-051		12 VOLT
	2BM 011 788-041		24 VOLT
Mounting	Horizontal surface mount via adhesive strip		
Power Consumption	4W		
Protection	Reverse polarity IP 6K9 (Protection against dust and high-pressure/steam jet cleaning)		
Spare Parts	4982-P	2 Pin super seal plug	
Compliance	E11 7506	ECE R6/01 Cat.6	
The lamp features an adhesive strip and is attached by pressing on to the vehicle.			



LED TRUCK AND TRAILER LIGHTING

SUPERIOR SAFETY AND RELIABILITY



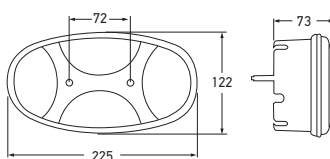


Stop/Rear Position/Rear Direction Indicator Lamp with Retro Reflector

Suitable for insulated earth circuits.
Shallow body. Retro reflector area 32cm².



Part Number	2397			12 VOLT
	2397-BULK (Pack of 10)			
	2397-24V			24 VOLT
	2397-24VBULK (Pack of 10)			
Mounting	Surface mount.			
Bulbs to Suit	12V		24V	
	Stop:	K1221	K2421	
	Rear position:	L125	L245	
	Rear direction indicator:	K1221	K2421	
Spare Part	9.2397.01	Lens		
Compliance	ADR 6/00: Cat 2a	ADR 47/00	ADR 49/00	



Stop/Rear Position/Rear Direction Indicator/Reversing Lamp

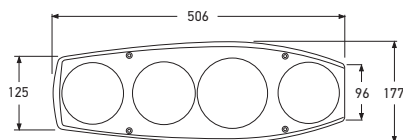
Suitable for light trailer, agricultural and construction vehicles.



Part Number	2VP 343 640-027			RIGHT HAND SIDE
	2VP 343 640-037			LEFT HAND SIDE
Mounting	Surface mount. Suitable for horizontal or vertical mounting.			
Bulbs to Suit	12V	24V		
	Stop:	R1221	R2421	
	Rear position:	G1210	G2410	
	Rear direction indicator:	R1221	R2421	
	Reversing:	R1221	R2421	
Compliance	E17 0303	ECE R6/01	ECE R7/02	ECE R23/00

Stop/Rear Position/Rear Direction Indicator/Reversing Lamp

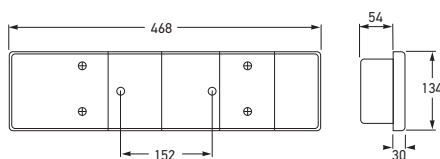
For mobile homes. With reversing light and round reflector.



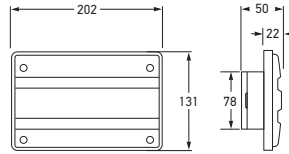
Part Number	2VP 341 419-127	RIGHT HAND SIDE
	2VP 341 419-137	LEFT HAND SIDE
Mounting	Horizontal flush mount into body.	
Bulbs to Suit	12V	24V
	Stop/Rear position: S1221/5V	S2421/5V
	Rear direction indicator: R1221	R2421
	Reversing: R1221	R2421
Compliance	(E4) 9836	ECE R6/01
		ECE R7/02
		ECE R23/00
		ECE R3/02

Rear Combination Lamp to suit MAN 93-03/Scania 88-96

Combination rear lamp with stop, rear position, reversing, rear direction indicator, rear fog functions and reflex reflector.



Part Number	2VP 008 204-061				
Mounting	Two bolt mount (bolts supplied).				
Bulbs to Suit		12V	24V		
	Stop:	R1221	R2421		
	Rear position:	G125 x 3	G245 x 3		
	Rear direction indicator:	R1221	R2421		
	Reversing:	R1221	R2421		
	Fog:	R1221	R2421		
Spare Part	9EL 152 889-001		Lens and gasket		
Compliance	(E4) 9808 ECE R6/01	(E4) 9810 ECE R7/02	(E4) 3178 ECE R 23/00	(E4) 4060 ECE R3/02	ECE R38/00



Designline Stop/Rear Position Lamp with Retro Reflector

Single bulb holder. Suitable for insulated earth circuits. Reflector area 35cm².



Part Number	2321	12 VOLT
	2321-24V	24 VOLT
Mounting	Recess mount with 78 x 145mm opening. Suitable for horizontal or vertical mounting.	
Bulbs to Suit	12V	S1221/5V
	24V	S2421/5V
Compliance	ADR 47/00	ADR 49/00



Designline Rear Direction Indicator Lamp

Single bulb holder. Suitable for insulated earth circuits.



Part Number	2145	12 VOLT
	2145-24V	24 VOLT
Mounting	Recess mount with 78 x 145mm opening. Suitable for horizontal or vertical mounting.	
Bulbs to Suit	12V	R1221
	24V	R2421
Compliance	ADR 6/00: Cat 2a	



Designline Reversing Lamp

Single bulb holder. Suitable for insulated earth circuits.



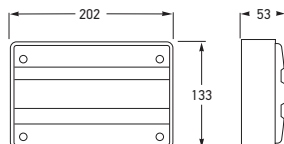
Part Number	2046	12 VOLT
	2046-24V	24 VOLT
Mounting	Recess mount with 78 x 145mm opening. Suitable for horizontal or vertical mounting.	
Bulbs to Suit	12V	R1221
	24V	R2421
Compliance	ADR 1/00	

SPARE PARTS FOR DESIGNLINE RECESS MOUNT LAMPS

9.2320.01	Red lens
9.2144.01	Amber lens
9.2041.01	Clear lens
9.2043.05	Lens or base gasket
9.2046.09-BULK	Housing
9.2320.08	Double contact bulb holder (includes 12V bulb)
9.2320.08-24V	Double contact bulb holder (includes 24V bulb)

Designline Stop/Rear Position Lamp with Retro Reflector

Single bulb holder. Suitable for insulated earth circuits. Reflector area 35cm².



Part Number	2320	12 VOLT
	2320-24V	24 VOLT
Mounting	Surface mount. Suitable for horizontal or vertical mounting.	
Bulbs to Suit	12V 24V	S1221/5V S2421/5V
Compliance	ADR 47/00	ADR 49/00

Designline Rear Direction Indicator Lamp

Single bulb holder. Suitable for insulated earth circuits.



Part Number	2144	12 VOLT
	2144-24V	24 VOLT
Mounting	Surface mount. Suitable for horizontal or vertical mounting.	
Bulbs to Suit	12V 24V	R1221 R2421
Compliance	ADR 6/00: Cat 2a	

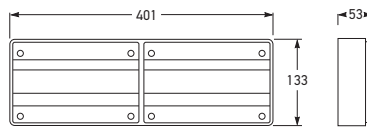
Designline Reversing Lamp

Single bulb holder. Suitable for insulated earth circuits.



Part Number	2041	12 VOLT
	2041-24V	24 VOLT
Mounting	Surface mount. Suitable for horizontal or vertical mounting.	
Bulbs to Suit	12V 24V	R1221 R2421
Compliance	ADR 1/00	

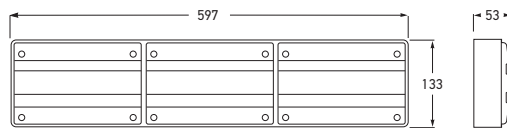
MARKER AND SIGNAL



Part Number	2422		12 VOLT
	2422-24V		24 VOLT
Mounting	Surface mount. Suitable for horizontal or vertical mounting.		
Bulbs to Suit	12V	24V	
	Stop/rear position: S1221/5V Rear direction indicator: R1221	S2421/5V R2421	
Compliance	ADR 6/00: Cat 2a	ADR 47/00	ADR 49/00

Designline Stop/Rear Position/
Rear Direction Indicator Lamp
with Retro Reflector

Suitable for insulated earth circuits.



Part Number	2423		12 VOLT
	2423-24V		24 VOLT
Mounting	Surface mount. Suitable for horizontal or vertical mounting.		
Bulbs to Suit	12V	24V	
	Stop/rear position: S1221/5V Rear direction indicator: R1221	S2421/5V R2421	
Compliance	ADR 6/00: Cat 2a	ADR 47/00	ADR 49/00

Designline Stop/Rear Position/
Rear Direction Indicator Lamp
with Retro Reflector

Suitable for insulated earth circuits.



Part Number	2424		12 VOLT
	2424-24V		24 VOLT
Mounting	Surface mount. Suitable for horizontal or vertical mounting.		
Bulbs to Suit	12V	24V	
	Stop/rear position: S1221/5V Rear direction indicator: R1221 Reversing: R1221	S2421/5V R2421 R2421	
Compliance	ADR 1/00	ADR 6/00: Cat 2a	ADR 47/00 ADR 49/00

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

Suitable for insulated earth circuits.

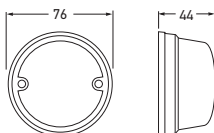


SPARE PARTS FOR DESIGNLINE SURFACE MOUNT LAMPS

9.2320.01	Red lens
9.2144.01	Amber lens
9.2041.01	Clear lens
9.2043.05	Lens gasket
9.2041.09-BULK	Single Module Housing
9.2422.09	Double Module Housing
9.2423.09	Triple Module Housing

Stop Lamp

Single bulb holder.



Part Number	2303	
Bulbs to Suit	12V	K1221
	24V	K2421
Compliance	ADR 49/00	

Front Direction Indicator Lamp

Single bulb holder.



Part Number	2100	
Bulbs to Suit	12V	K1221
	24V	K2421
Compliance	ADR 6/00: Cat 1a	

Front Position/End Outline Lamp

Single bulb holder.



Part Number	2000	
Bulbs to Suit	12V	L125
	24V	L245
Compliance	ADR 49/00	

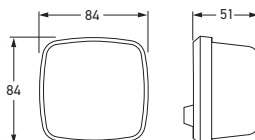
Reversing Lamp

Single bulb holder.



Part Number	1407	
Bulbs to Suit	12V	K1221
	24V	K2421
Compliance	ADR 1/00	

MARKER AND SIGNAL



Stop/Rear Position/Number Plate Lamp

Suitable for insulated earth circuits.

Part Number	2384			
Bulbs to Suit	12V		24V	
	Stop: Rear position/Number plate: L125		R1221 R2421 L245	
Compliance	ADR 48/00 ECE R4/00	ADR 49/00 ECE R7/02	(E1) 31 453	(E1) 53 210



Rear Direction Indicator Lamp

Part Number	2147			
Bulbs to Suit	12V		R1221	
	24V		R2421	
Compliance	ADR 6/00: Cat 2a	(E1) 32 619	ECE R6/01	



Front Direction Indicator Lamp

Part Number	2148			
Bulbs to Suit	12V		R1221	
	24V		R2421	
Compliance	ADR 6/00: Cat 1a	(E1) 32 661	ECE R6/01	



Front Position/End Outline Lamp

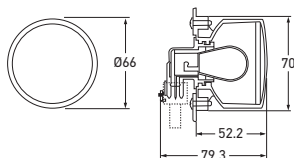
Part Number	2064			
Bulbs to Suit	12V		L125	
	24V		L245	
Compliance	ADR 49/00	(E1) 11 793	ECE R7/02	



Reversing Lamp

Part Number	1405			
Bulbs to Suit	12V		R1221	
	24V		R2421	
Compliance	ADR 1/00	(E1) 8703	ECE R23/00	





The lamp features a reflector with a high quality facet pattern and a clear lens. Optimised light output, making applications behind outer cover lenses possible.

Mounting

Mounting depth of 80mm. The standard version is designed to be mounted with a screw fitting from the rear. If required the lamp can be fitted from the front using an optional mounting plate. Simplified electrical connection via a two or three pin plug (not supplied).

Stop/Rear Position Lamp



Part Number	2SB 009 001-061	
Bulb to Suit	12V 24V	S1221/5V S2421/5V
Compliance	(E4) 7613	ECE R7/02

Rear Direction Indicator Lamp



Part Number	2BA 009 001-001	
Bulb to Suit	12V 24V	RY1221 RY2421
Compliance	(E4) 6546	ECE R6/01

Front Direction Indicator Lamp



Part Number	2BA 009 001-071	
Bulb to Suit	12V 24V	RY1221 RY2421
Compliance	(E4) 6546	ECE R6/01

Front Position Lamp

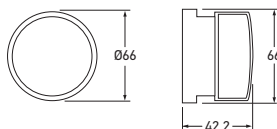


Part Number	2PF 009 001-081	
Bulb to Suit	12V 24V	S1221/5V S2421/5V
Compliance	(E4) 7613	ECE R7/02

Reversing Lamp



Part Number	2ZR 009 001-011	
Bulb to Suit	12V 24V	R1221 R2421
Compliance	(E4) 23 255	ECE R23/00



Part Number	8RA 009 001-031	
Mounting	Mounting depth of 43mm. The standard version is for screw fitting from behind. If required the reflector can be fitted from the front using an optional mounting plate.	
Compliance	E4 3189	ECE R3/02

Rear Reflex Reflector

This reflector is designed to match the clear glass lamps. All the accessories and holders can be used.



66mm Accessories

Accessories to suit 66mm lamps.

Part Number	DESIGN RING FOR 66MM MODULES (OPTIONAL)	
	9HB 161 122-007	SILVER
Mounting	Pushes over front of 66mm lamp and locks into place.	
Part Number	MOUNTING PLATE	
	9XD 161 119-007	BLACK
Mounting	For front mounting of 66mm lamps.	
Part Number	TWO POLE PLUG (WITH TERMINALS AND SEALS)	
	8JD 156 150-807	
To Suit	2BA 009 001-001/...071 and 2ZR 009 001-011	
Part Number	THREE POLE PLUG (WITH TERMINALS AND SEALS)	
	8JD 162 581-802	
To Suit	2SB 009 001-061 and 2PF 009 001-081	



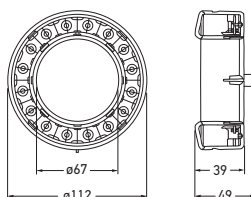
P/N 9HB 161 122-007



P/N 9XD 161 119-007



P/N 8JD 156 150-807



Part Number	2SB 009 362-021	12 VOLT
	DESIGN RING FOR LED RING LAMP (OPTIONAL)	
	9HB 163 085-012	CHROME
Mounting	Screw mount from rear. Design ring pushes over front of 112mm lamp and locks into place.	
Voltage	12V	
Current Draw	Stop: 2.3W Rear position: 0.1W	
Cable Length	Pre-wired with 250mm of cable and 3 pole super seal socket.	
Compliance	E4 7746	ECE R7/02

LED Ring Stop/Rear Position Lamp - 12 Volt

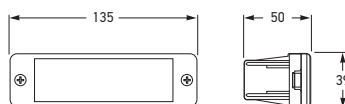
LED ring lamp suitable for use with 60mm lamps, 16 LEDs for rear position function and 8 LEDs for stop function. Clear lens.



P/N 9HB 163 085-012

Front Direction Indicator Lamp (Cat. 1)

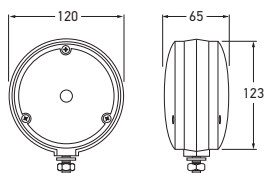
Universal flush mount front direction indicator lamp ideal for coach or bull-bar applications.



Part Number	2101	
Mounting	Flush mount. Suitable for left and right hand mounting.	
Bulbs to Suit	12V 24V	R1221 R2421
Compliance	ADR 6/00: Cat 1	

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

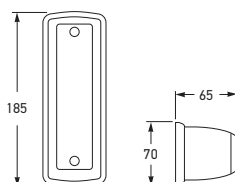
Double-sided direction indicator lamp.



Part Number	2127	
Mounting	Single bolt mount.	
Bulbs to Suit	12V 24V	R1221 R2421
Additional Function	Supplementary side direction indicator lamp where 12V (G125) or 24V (G245) bulbs are used.	
Compliance	ADR 6/00: Cat 1 ADR 6/00: Cat 5	

Supplementary Side Direction Indicator Lamp (Cat. 6)

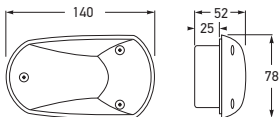
Single bulb holder.



Part Number	2142	
Mounting	Surface mount	
Bulbs to Suit	12V 24V	R1221 R2421
Compliance	ADR 6/00: Cat 6	

DIRECTION INDICATOR LAMPS

MARKER AND SIGNAL



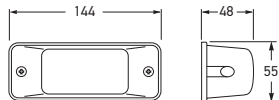
Supplementary Side Direction Indicator Lamp (Cat. 6)

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



P/N 2155-24V

Part Number	2155 (Clear lens)		12 VOLT
	2155-24V (Amber lens)		24 VOLT
Bulbs to Suit	12V 24V	RY1221 R2421	
Spare Part	9.2155.05	Wiring harness set	
Compliance	ADR 6/00: Cat 6		
Arrow on lens must face direction of travel.			

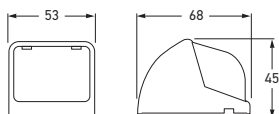


Supplementary Side Direction Indicator Lamp (Cat. 6)

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



Part Number	2153		LEFT HAND SIDE
	2154		RIGHT HAND SIDE
Mounting	Surface mount.		
Bulbs to Suit	12V 24V	R1221 R2421	
Compliance	ADR 6/00: Cat 6		
Arrow on lens must face direction of travel.			



Front Position/Front End Outline Lamp - White

Fitted with polycarbonate lens and single bulb holder.



Part Number	2066		
Mounting	Surface mount.		
Bulbs to Suit	12V 24V	G1210 G2410	
Compliance	ADR 49/00	(E1) 32 /691	ECE R7/02

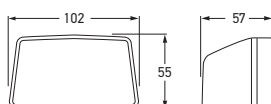
ADR CATEGORIES OF DIRECTION INDICATORS

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.

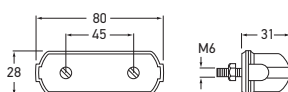
Refer to page 336 for ADR reference guide.

Number Plate Lamp



Part Number	2553		12 VOLT
	2553-24V		24 VOLT
Bulbs to Suit	12V 24V	G1210 G2410	
Compliance	ADR 48/00	(E) 22819	ECE R4/00

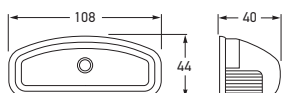
Number Plate Lamp



Part Number	2555		
Mounting	Two bolt mount.		
Bulbs to Suit	12V 24V	L125 L245	
Compliance	ADR 48/00	(E) 12815	ECE R4/00
Two lamps required for ADR compliance.			

Number Plate Lamp

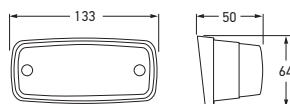
Fitted with two bulb holders.



Part Number	2557		12 VOLT
	2557-24V		24 VOLT
Bulbs to Suit	12V 24V	HL124 x 2 HL244 x 2	
Compliance	ADR 48/00		

Reversing Lamp

Reversing lamp with single bulb holder. For 24V applications, please install bulb P/N R2421



Part Number	1413		12 VOLT
Bulbs to Suit	12V 24V	R1221 R2421	
Compliance	ADR 48/00	(E) 8708	ECE 23/00

Part Number	JUMBO LAMP SPARE PARTS	
	9.2319.01	RED LENS
	9.2143.01	AMBER LENS
	9.2043.01	CLEAR LENS



To suit P/N 2143

To suit P/N 2043



To suit P/N 2319

Part Number	STOP/REAR POSITION/REAR DIRECTION INDICATOR/ NUMBER PLATE LAMP SPARE PART	
	9.2396.01	RED/AMBER LENS



To suit P/N 2396

Part Number	STOP/REAR POSITION/REAR DIRECTION INDICATOR SPARE PART	
	9.2368.01	RED LENS



To suit P/N 2368

Part Number	SIDE MARKER LAMP SPARE PARTS	
	9.2006.01	RED LENS
	9.2006.02	AMBER LENS



To suit P/N 2006

Part Number	MARKER LAMP SPARE PARTS	
	9.2042.01	RED/AMBER LENS



To suit P/N 2042

Part Number	MARKER LAMP SPARE PARTS	
	9.2304.01	RED LENS
	9.2140.01	AMBER LENS
	9.2141.01	CLEAR LENS



To suit P/N 2140

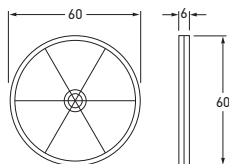
To suit P/N 2141



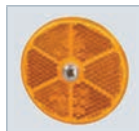
To suit P/N 2304

Retro Reflectors

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



P/N 2915



P/N 2916



P/N 2917



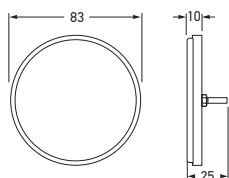
P/N 2915-BL

Part Number	2915		RED
	2915-1 (Self adhesive)		
	2915-BL (Blister pack - 2 pack)		
	2916		AMBER
	2916-1 (Self adhesive)		
	2917		WHITE
	2917-1 (Self adhesive)		

Compliance ADR 47/00 ECE R3/02

Retro Reflector - Red

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



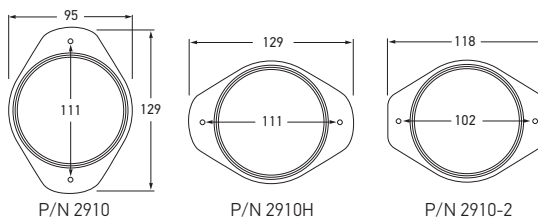
Part Number	2902
Mounting	Single bolt mount.
Compliance	ADR 47/00

Retro Reflector - Red

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



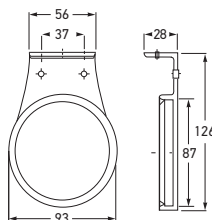
P/N 2910



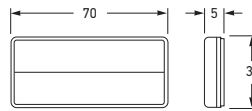
Part Number	2910 (Red)		VERTICAL
	2910H (Red)		HORIZONTAL
	2910-2 (Red - Metal surround)		VERTICAL OR HORIZONTAL
Mounting	Two hole surface mount.		
Compliance	ADR 47/00		

Retro Reflector - Red

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



Part Number	2930		
	2930-BULK		PACK OF 32
Mounting	Right angled base with two holes for optional surface mount.		
Compliance	ADR 47/00		



Part Number	2919		AMBER
	2920		RED
	2920-BL (Blister pack - 2 pack)		
	2920-BULK (Pack of 20)		
	2921		WHITE

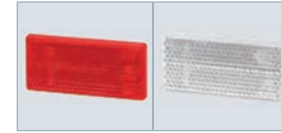
Compliance ADR 47/00

Retro Reflectors

70 x 31.5mm self adhesive, 18cm².



P/N 2919

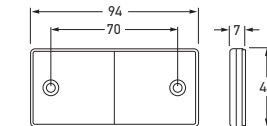
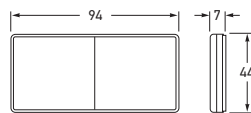


P/N 2920

P/N 2921



P/N 2920-BL



P/N 2923-2 - Two bolt holes

Part Number	2922		AMBER
	2922-2 (Two bolt holes)		RED
	2923		
	2923-BL (Blister pack - 2 pack)		
	2923-BULK (Pack of 20)		
	2923-2 (Two bolt holes)		
	2923-2BL (Two bolt holes, Blister pack - 2 Pack)		
	2923-2BULK (Two bolt holes - Pack of 20)		
	2924		WHITE

Compliance ADR 47/00 ECE R3/02

Retro Reflectors

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



P/N 2922-2

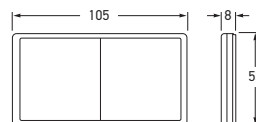


P/N 2923

P/N 2924



P/N 2923-BL

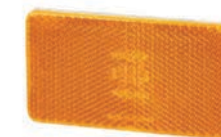


Part Number	2925		AMBER
	2926		RED
	2926-BULK (Pack of 100)		
	2926-BL (Blister pack - 2 Pack)		
	2927		WHITE

Compliance ADR 47/00

Retro Reflectors

105 x 55mm self adhesive, 50cm².



P/N 2925



P/N 2926

P/N 2927



P/N 2926-BL

DuraLED® Accessories

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



P/N 9.2330.15



P/N 9.2330.11



P/N 9.2378.11-BULK



P/N 9.2378.15-BULK



P/N 9.2330.17



P/N 98071900



P/N 98071901

SCREW CAPS - DURALED®

Part Number	Colour	Quantity
9.2330.10	RED	PACK OF 4
9.2330.11	WHITE	
9.2330.12	BLUE	
9.2330.13	GREEN	
9.2330.14	YELLOW	
9.2330.15	BLACK	
9.2330.16	AMBER	



P/N 9.2330.10



P/N 9.2330.12



P/N 9.2330.13



P/N 9.2330.14



P/N 9.2330.16

SCREW CAPS - DURALED® COMBI-S/COMBI-R

Part Number	Colour	Quantity
9.2377.08	GREY	SINGLE
9.2378.08	BLACK	
9.2378.10-BULK	RED	PACK OF 4
9.2378.11-BULK	WHITE	
9.2378.12-BULK	BLUE	
9.2378.13-BULK	GREEN	
9.2378.14-BULK	YELLOW	
9.2378.15-BULK	BLACK	
9.2378.16-BULK	AMBER	



P/N 9.2378.10-BULK



P/N 9.2378.12-BULK



P/N 9.2378.13-BULK



P/N 9.2378.14-BULK



P/N 9.2378.16-BULK

SCREW BOSS

9.2330.17	PACK OF 4
-----------	-----------

MOUNTING SPACERS - DURALED® COMBI

98071900	BLACK
98071901	WHITE

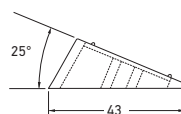
Mounting spacer allows lamps to be surface mounted with the cable exiting any side of the spacer, or through the centre.

MARKER AND SIGNAL

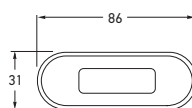
SHROUDS - DURALED® SURFACE MOUNT		
Part Number	Colour	Quantity
9.2053.08 (Nylon)	BLACK	SINGLE
9.2053.08-BULK (Nylon)	BLACK	PACK OF 4
9.2053.10-BULK	RED	
9.2053.11-BULK	WHITE	
9.2053.12-BULK	BLUE	
9.2053.13-BULK	GREEN	
9.2053.14-BULK	YELLOW	
9.2053.15-BULK	AMBER	
9.2053.20-BULK	CHROME PLATED	



P/N 9.2053.10-BULK P/N 9.2053.12-BULK P/N 9.2053.13-BULK P/N 9.2053.14-BULK P/N 9.2053.15-BULK



ANGLE MOUNT - DURALED® SURFACE MOUNT		
9.2053.07	BLACK	SINGLE



RIMS - DURALED® FLUSH MOUNT MARKER AND SIGNAL/LED WIDE RIM COURTESY LAMPS		
Part Number	Colour	Material
95968600	BLACK	PLASTIC
95968601	WHITE	
95968500	POLISHED	316 STAINLESS STEEL
95968506	SATIN CHROME PLATED	

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



95968500

95968506

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.



P/N 9.2053.08



P/N 9.2053.11-BULK



P/N 9.2053.20-BULK



P/N 95968600



P/N 95968601

DuraLED® Marker Lamp Accessories



P/N 9.2310.09-BULK



P/N 9.2310.16-BULK



P/N 9.2310.11-BULK

SCREW CAPS - DURALED® FLUSH MOUNT

Part Number	Colour	Quantity
9.2310.09-BULK	BLACK	PACK OF 4
9.2310.10-BULK	RED	
9.2310.11-BULK	WHITE	
9.2310.12-BULK	BLUE	
9.2310.13-BULK	GREEN	
9.2310.14-BULK	YELLOW	
9.2310.15-BULK	AMBER	
9.2310.16-BULK	GREY	

Pack sizes of 50 available upon request.



P/N 9.2310.10-BULK

P/N 9.2310.12-BULK

P/N 9.2310.13-BULK

P/N 9.2310.14-BULK

P/N 9.2310.15-BULK

DuraLED® DT Marker and Signal Lamp Accessories



P/N 9.2073.09



P/N 9.2073.11

DURALED® DT MARKER LAMP HOUSING

Part Number	Colour	Quantity
9.2073.09	BLACK	SINGLE
9.2073.11	WHITE	



P/N 9.2058.10



P/N 9.2058.09

DURALED® HEAVY DUTY MARKER STAINLESS STEEL HOUSING

9.2058.09	POLISHED	SINGLE
9.2058.10		

DT Marker and Signal Lamp Connectors



P/N 4963-P

DT PLUG, WEDGE AND CONTACTS

4960-P	2 POLE
4963-P	6 POLE



P/N 4960-P

COVERS		
Part Number	Colour	Quantity
9.2366.08	BLACK	SINGLE
9.2366.11	WHITE	

SCREW BOSS		
9.2366.17	WHITE	PACK OF 4

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

EuroLED® Accessories

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



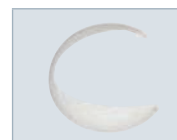
P/N 9.2366.08



P/N 9.2366.17



P/N 8HG 959 952-012



P/N 9.2366.11



P/N 8HG 959 952-002

Part Number
9.2391.08

LED Combination Lamp Mounting Pack

Mounting pack to suit LED combination lamp P/Ns 2391, 2392L and 2392R.



Part Number	
9.2394.08	FRAME
9.2394.09	15MM SPACER

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

LED Combination Trailer Lamp Accessories

To suit LED combination lamp P/Ns 2394 and 2395.



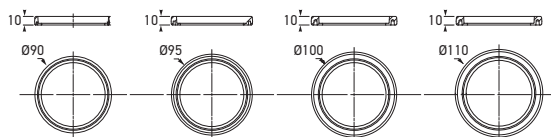
P/N 9.2394.09



P/N 9.2394.08

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.



Part Number	Diameter
98069600	90MM O.D
98069620	95MM O.D
98069640	100MM O.D
98069660	110MM O.D

Jumbo-S Accessories

Accessories for the Jumbo-S LED lamp range.



MOUNTING GASKET BASE, SPACERS AND 1 1/4" SCREWS

Part Number	Quantity
9.2361.08	SINGLE
Allows Jumbo-S lamps to be surface mounted.	

SCREW CAPS AND 1" SCREWS

9.2361.09	SET OF 4
-----------	----------

Designline/Jumbo-S/Jumbo Accessories

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



HOUSING - SINGLE, DOUBLE AND TRIPLE MODULE

Part Number	MODULE
9.2041.09-BULK	SINGLE
9.2422.09	DOUBLE
9.2423.09	TRIPLE

SPARE PLASTIC CAPS

Part Number	Colour	Quantity
9.5240.30	BLACK	PACK OF 50

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

MOUNTING KIT		
Part Number	Colour	Quantity
9.2559.09	BLACK	SINGLE
9.2559.19	WHITE	

Suits all narrow rim LED courtesy lamps.



P/N 9.2559.19

MOUNTING SPACER AND EXTENDED SCREW BOSSES		
9.2559.08	BLACK	SINGLE

Suits LED Number Plate Lamp, Part No. 2559.

Included in every LED Number Plate Bulk Pack, Part No. 2559-BULK.



P/N 9.2559.08

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



P/N 8HG 958 029-001

SURFACE MOUNT STRIP LAMP SCREW CAPS		
Part Number	Colour	Quantity
9.1009.09	CHARCOAL	PACK OF 4
9.2652.09	WHITE	
9.1009.10	CHROME PLATED	

Surface Mount Strip Lamp - Screw Caps



LED Number Plate Lamp Accessories

Mounting kit for Number Plate lamp P/N 2559. Includes a housing, cover, screw bosses, screws and screw caps. One mounting kit is required per lamp.



P/N 9.2559.09

Marker and Courtesy Lamp Gaskets

Gaskets for narrow and wide rim LED courtesy lamps. Curved mount gasket (P/N 9GD 959 515-207) is designed to suit 64mm (2.5") pipes. Flexibility allows this particular gasket to suit a variety of curve radii.



P/N 9GD 959 515-127



P/N 9GD 959 515-207



P/N 9GD 959 517-007

NARROW RIM (LAMP WIDTH 22MM)

Part Number	Material	Quantity
9GD 959 515-127	RUBBER	PACK OF 4
9GD 959 515-207 (Curved mount)	RUBBER	

WIDE RIM (LAMP WIDTH 29MM)

9GD 959 517-007	CLOSE CELL FOAM	PACK OF 4
-----------------	-----------------	-----------

DuraLED® Flush Mount Gaskets



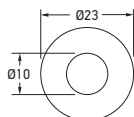
P/N 9GD 980 867-007



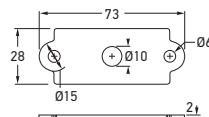
P/N 9GD 958 867-507



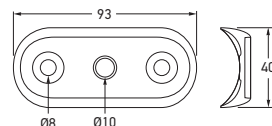
P/N 9GD 958 028-001



P/N 9GD 980 867-007



P/N 9GD 958 867-507



P/N 9GD 958 028-001

Part Number	9GD 980 867-007	ROUND SEAL
	9GD 980 867-507	RECTANGULAR SEAL
	9GD 958 028-001	CURVED SEAL

Strip Lamp Gaskets

Gaskets for narrow and wide rim strip lamps.



P/N 9.5243.05



P/N 9GD 959 155-507

NARROW RIM (LAMP WIDTH 26MM)

Part Number	Material	Quantity
9.5243.05	RUBBER	SINGLE

WIDE RIM (LAMP WIDTH 33MM)

9GD 959 155-507	CLOSE CELL FOAM	PACK OF 10
-----------------	-----------------	------------

DESIGN RING FOR 60MM MODULES (OPTIONAL)	
Part Number	Colour
9HB 161 122-007	SILVER

60mm Accessories

Accessories to suit 60mm lamps.



P/N 9HB 161 122-007
Pushes over front of 60mm lamp and locks into place.

MOUNTING PLATE	
Part Number	Colour
9XD 161 119-007	BLACK



P/N 9XD 161 119-007
For front mounting of 60mm lamps.

TWO POLE PLUG (WITH TERMINALS AND SEALS)	
Part Number	
8JD 156 150-807	



P/N 8JD 156 150-807

THREE POLE PLUG (WITH TERMINALS AND SEALS)	
Part Number	
8JD 162 581-802	

DESIGN RING FOR LED RING LAMP (OPTIONAL)	
Part Number	Colour
9HB 163 085-012	CHROME



P/N 9HB 163 085-012
Design ring pushes over front of 112mm lamp and locks into place.



LED Safety DayLights™

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



Contents

LED Safety DayLights™

LED Safety DayLights™ Kit - Easy-Fit.....	94
LED Safety DayLights™ Kit - 15°	94
LED Safety DayLights™ Kit - 30°	95
LED Safety DayLights™ Kit - Recess Mount.....	96
LED Safety DayLights™ - Compact Mount.....	96
LED Safety DayLights™ Kit - Surface Mount.....	97
LED Safety DayLights™ DuraLED®	97
LED Safety DayLights™ Kit - Rectangular	98
LED Safety DayLights™ 83mm.....	99
Safety DayLights™ Smart Controllers.....	100
Safety DayLights™ Dual Function Controllers.....	101

BE SAFE BE SEEN

HELLA LED SAFETY DAYLIGHTS™



- Enhanced visibility to road users & pedestrians
- Compact design with intense white light output
- Easy fit installation

What are Hella Safety DayLights™?

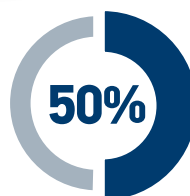
Safety DayLights™ are forward facing signal lamps that significantly enhance the visibility of your vehicle during daylight hours to prevent vehicle crashes by 'accidental oversight'.

Safety DayLights™ are a "never forget" safety enhancement. They 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.

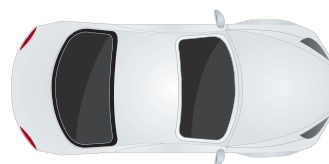
Why Install Hella Safety DayLights™?

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

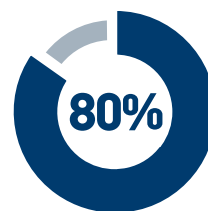
Equally frightening is almost not noticing another vehicle approaching due to an inconspicuous vehicle colour, the low sun casting harsh shadows or sun strike. Any single one of these 'fright seconds' has the potential to end in a tragic outcome and become a number in the road toll statistics.



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

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.

Low Beam Headlamps



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

HELLA LED Safety DayLights™



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



Your Company Vehicle is Your Workplace

With the new Health & Safety at Work legislation in place, injuries from accidents involving taxis, company cars, courier vans, trucks or buses can now have serious consequences. The legislation places significant emphasis on risk assessment and active risk reduction.

One effective way to reduce the risk of a bus, truck, van or company car, being accidentally overlooked during daylight hours is the use of Safety DayLights™. Many later model vehicles are now fitted with Safety DayLights™ as standard safety equipment.

The cost to install or specify this 'Be Safe Be Seen' lighting addition is small considering the statistical risk of serious injury or worse due to your vehicle being accidentally overlooked.

- Improve staff safety on the road
- Low cost, ideal for fleet operators
- Low power consumption
- LED means no bulb replacement





MINIMISING ENVIRONMENTAL IMPACT

HELLA LED Safety DayLights™ are a durable, environmentally-friendly investment into road safety.

Energy Efficiency

HELLA LED Safety DayLights™ use less than 5 watts per pair, equating to 95% less energy than the dipped headlamps of your vehicle.

- Q** Why is a safer light using so much less energy?
- A** LED Safety DayLights™ are designed to direct light at other road users and not onto the road in front of the vehicle as dipped beam headlamps do.
- Q** Will this save me petrol compared to using my headlamps?
- A** Studies have shown that the average family car will save as much as 0.2 litres of petrol per 100km. For the entire New Zealand fleet this equates to a reduced environmental impact of over 100,000 tons per year of CO₂ emissions.
- Q** What about my headlamp bulbs?
- A** Using highly effective Safety DayLights™ instead of your dipped beam headlamps, will of course also extend the life of your valuable headlamp bulbs.

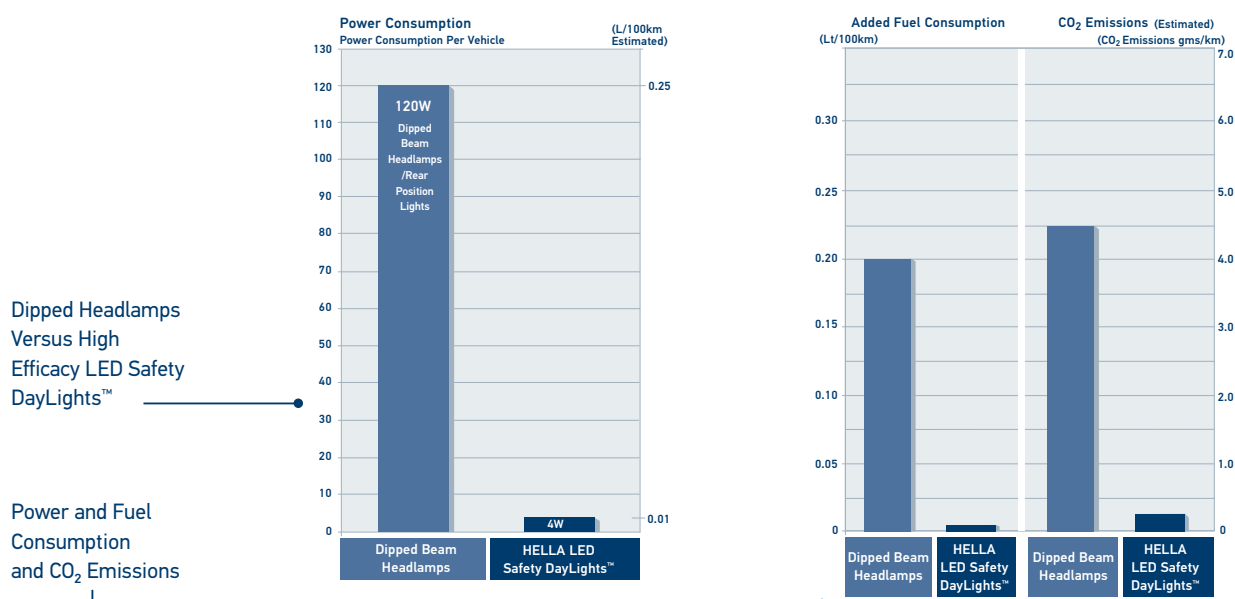
Cost Benefit Calculator

www.safetydaylights.com/nz/savings-calculator/



See for yourself the benefits such as fuel savings and CO₂ emissions by using the online calculator.

www.safetydaylights.com/nz/savings-calculator/



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).

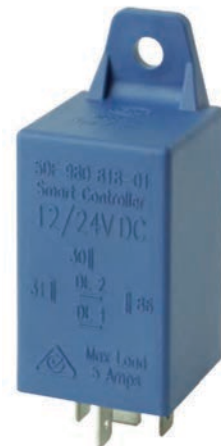
See page 100 for product details.

Version	P/Ns
Standard	3091
Advanced*	3090

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



P/N 3091



P/N 3090



Designed to simplify installation saving time and install costs.



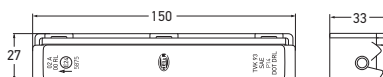
For more information about the Safety DayLights™ Smart Controller and the full product range of Safety DayLights™ please visit

www.safetysdaylights.com





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.



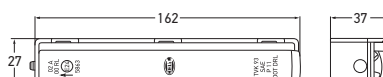
P/N 5636-BL

Part Number	5636			12 VOLT
	5636-BL (Blister Pack) 			
	5636-24V			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.			
Spare Parts	1013 1013-24V	Single lamp 12V Single lamp 24V		
Lens Material	High impact acrylic.			
Compliance	ADR 76/00	 5875	ECE R87/00	
Kit Contents	5636/5636-24V 2 x LED Safety DayLights™ 2 x Mounting brackets 6 x Mounting screws 1 x Changeover relay 1 x Instruction sheet		5636-BL 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 101 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.



P/N 5630-BL

Part Number	5630		12 VOLT
	5630-BL (Blister Pack)		
	5630-24V		24 VOLT
	5630-24VBL (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	 5863	ECE R87/00
Kit Contents	5630/5630-24V 2 x LED Safety DayLights™ 2 x Mounting brackets 6 x Mounting screws 1 x Changeover relay 1 x Instruction sheet	5630-BL/5630-24VBL 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 101 for front position relay option.



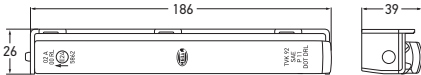
Compliance

ADR COMPLIANCE

Certified

ECE CERTIFIED

RF CommSafe™



Part Number	5631		12 VOLT
	5631-BL (Blister Pack)		
	5631-24V		
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	5862	ECE R87/00
Kit Contents	<div><div>5631/5631-24V</div><div>2 x LED Safety DayLights™</div><div>2 x Mounting brackets</div><div>6 x Mounting screws</div><div>1 x Changeover relay</div><div>1 x Instruction sheet</div></div> <div><div>5631-BL</div><div>2 x LED Safety DayLights™</div><div>2 x Mounting brackets</div><div>6 x Mounting screws</div><div>1 x Advanced smart controller relay</div><div>1 x Terminal kit</div><div>1 x Instruction sheet</div></div>		

See page 101 for front position relay option.

LED Safety DayLights™ Kit - 30°

A lens angle of 30 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.



P/N 5631-BL

BE SAFE

BE SEEN

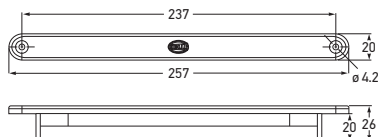
HELLA LED SAFETY DAYLIGHTS™



SAFETY DAYLIGHTS™

LED Safety DayLights™ Kit - Recess Mount

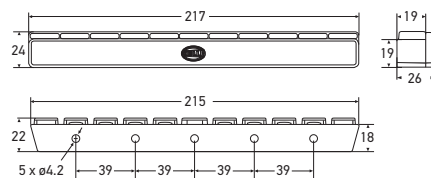
Recess mount strip lamp, flush mounted for a professional finish. Features low power consumption, reverse polarity protection, and a durable Grilamid® lens to protect against impact damage.



Part Number	5618	12 VOLT
	5618-24V	24 VOLT
Mounting	Recess mount. 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 multi-core cable.	
Spare Parts	1005 Single lamp 12V 1005-24V Single lamp 24V	
Lens Material	High impact and chemical resistant Grilamid® lens	
Compliance	ADR 76/00 E24 0001 ECE R87/00	
Kit Contents	2 x LED Safety DayLights™ 4 x Screw caps and mounting screws 1 x Changeover relay 1 x Instruction sheet	

LED Safety DayLights™ - Compact Mount

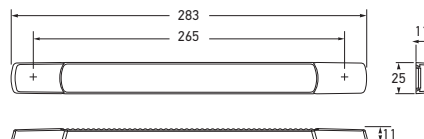
Strip lamp which clips into a separate mounting bracket for ease of installation. This lamp is ECE certified and is supplied with a mounting bracket and screws. The lens is made of durable Grilamid® to protect against impact damage, and the lamps feature reverse polarity protection.






Part Number	1008	12 VOLT
	1008-24V	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 and chemical resistant Grilamid® lens	
Compliance	ADR 76/00 E24 0001 ECE R87/00	



Mounting bracket

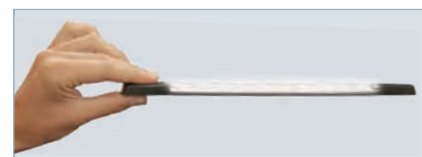


Part Number	5619 (Horizontal Mount - Kit)		12 VOLT
	5619V (Vertical Mount - Kit)		
	1009-BL (Horizontal Mount - Blister Pack) 		
	5619-24V (Horizontal Mount - Kit)		24 VOLT
	5619V-24V (Vertical Mount - Kit)		
	1009-24VBL (Horizontal Mount - Blister Pack) 		
Mounting	Suitable for horizontal (H) or vertical (V) 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. Blister pack is pre-wired with 0.5m of sheathed multi-core cable.		
Spare Parts	1009	Single lamp 12V (Horizontal mount)	
	1009-24V	Single lamp 24V (Horizontal mount)	
	1009V	Single lamp 12V (Vertical mount)	
	1009V-24V	Single lamp 24V (Vertical mount)	
	9.2652.09	White screw caps (Pack of 4)	
	9.1009.09	Charcoal screw caps (Pack of 4)	
	9.1009.10	Chrome plated screw caps (Pack of 4)	
Lens Material	High impact and chemical resistant Grilamid® lens		
Compliance	ADR 76/00	 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 101 for front position relay option.

LED Safety DayLights™ Kit - Surface Mount

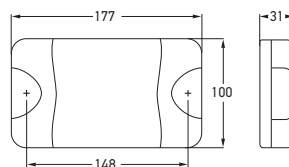
Surface mount LED Safety DayLights™ designed to fit flat-fronted vehicles. Comes either as a single lamp, or as a kit. The lamp is ADR compliant and features a Grilamid® lens to protect against impact damage.



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



P/N 1009-BL (Single)



Part Number	1003
Mounting	Surface mount with mounting bushes supplied. Suitable for horizontal mounting.
Voltage	Multivolt™ for optimum brightness at input voltage from 9 to 33 volts.
Power Consumption	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 2.5m of sheathed multi-core cable.
Lens Material	High impact and chemical resistant Grilamid® lens
Compliance	ADR 76/00
See page 80 for DuraLED® accessories.	

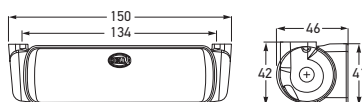
DuraLED® Safety DayLights™





LED DuraLED® Safety DayLights™ for trucks, commercial vehicles and buses.



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).



Part Number	5617			
	5617-OE			
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	1004	Single lamp (with 0.5m of multi-core cable)		
Cable Length	5617	Pre-wired with 0.5m of multi-core cable.		
	5617-OE	Pre-wired with 2.5m of multi-core cable.		
Lens Material	High impact and chemical resistant Grilamid® lens			
Compliance	ADR 76/00	 0002	ECE R87/00	



P/N 5617

Wiring harness and super seal connectors.

P/N 5617 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

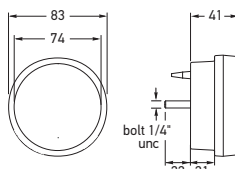


P/N 5617-OE

P/N 5617-OE Kit Contents:

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

LED SAFETY DAYLIGHTS™



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™. P/N 1007-24V also features a front position function.

Part Number	1006	12 VOLT
	1007-24V (Includes Front Position Lamp)	24 VOLT
Mounting	Surface mount. Single bolt 1/4" stainless UNC thread. Nut and washer supplied.	
Power Consumption	Safety DayLights™: 4W Front position: 1W (P/N 1007-24V 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	P/Ns 1006/1007-24V: ADR 76/00 E24 5854 ECE R87/00 P/N 1007-24V also: ADR 49/00 ECE R7/02	

See page 84 for mounting accessories.

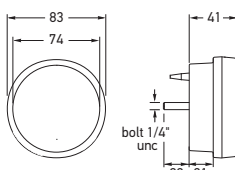


83MM LAMP FUNCTIONS



LED Safety
DayLights™

Front position
(P/N 1007-24V 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.

Part Number	2108-GMD	12 VOLT												
	2108-GMD24V	24 VOLT												
Mounting	Surface mount. Single bolt 1/4" stainless UNC thread. Nut and washer supplied.													
Power Consumption	<table border="1"> <thead> <tr> <th></th><th>P/N 2108-GMD</th><th>P/N 2108-GMD24V</th></tr> </thead> <tbody> <tr> <td>Safety DayLights™:</td><td>3W</td><td>4W</td></tr> <tr> <td>Front position:</td><td>1W</td><td>1W</td></tr> <tr> <td>Front indicator:</td><td>4W</td><td>4W</td></tr> </tbody> </table>			P/N 2108-GMD	P/N 2108-GMD24V	Safety DayLights™:	3W	4W	Front position:	1W	1W	Front indicator:	4W	4W
	P/N 2108-GMD	P/N 2108-GMD24V												
Safety DayLights™:	3W	4W												
Front position:	1W	1W												
Front indicator:	4W	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 2.5m of sheathed multi-core cable.													
Lens Material	High impact and chemical resistant Grilamid® lens													
Compliance	ADR 6/00: Cat 1 ADR 49/00 ADR 76/00 E24 5854 ECE R6/01 ECE R7/02 ECE R87/00													

See page 84 for mounting accessories.



83MM LAMP FUNCTIONS



LED Safety
DayLights™

Front position

Front direction
indicator

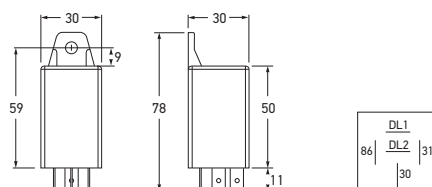
Safety DayLights™ Smart Controller - Advanced*

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.

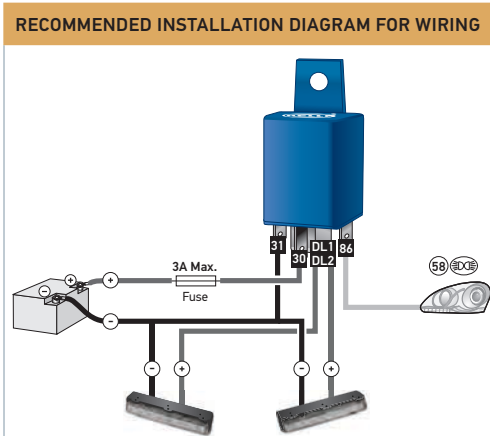
The smart controller monitors the voltage supply from the battery and will automatically switch the Safety DayLights™ on when the engine is started, and automatically switch them off when the headlamps are activated, or the engine is turned off.

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



Part Number	3090
	3090-BULK
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™ (+)

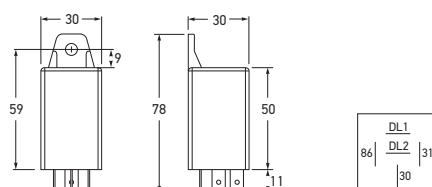


Safety DayLights™ Smart Controller - Standard

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.

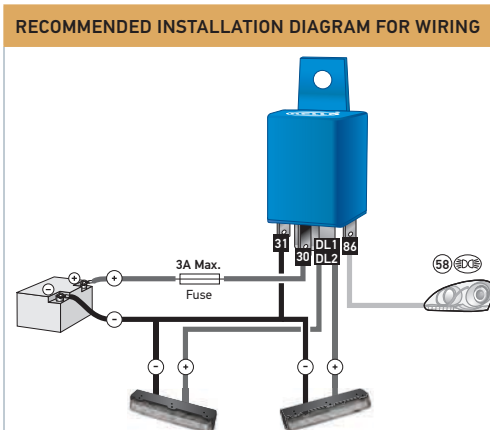
The Safety DayLights™ Smart Controller can be wired directly to the positive terminal of the battery, which saves the difficult and often time consuming task of finding the ignition feed.

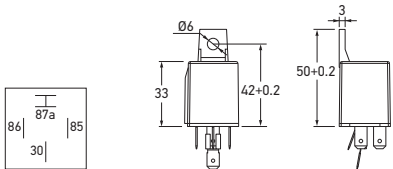
The smart controller monitors the voltage supply from the battery and will automatically switch the Safety DayLights™ on when the engine is started, and automatically switch them off when the headlamps are activated, or the engine is turned off.



Part Number	3091
	3091-BULK
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™ (+)





Part Number	9.5630.03	12 VOLT
	9.5636.03	
	9.5630.04	24 VOLT
	9.5636.04	

To Suit	12 Volt	
	P/N 9.5630.03	P/Ns 1009, 5619, 5630, 5631
	P/N 9.5636.03	P/N 5636
	24 Volt	
	P/N 9.5630.04	P/Ns 1009-24V, 5619-24V, 5630-24V, 5631-24V
	P/N 9.5636.04	P/N 5636-24V

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

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





Headlamps and Inserts

HELLA has manufactured headlamp systems for more than 100 years. The durability and reliability of HELLA products has made HELLA a world leader in headlamp technology.



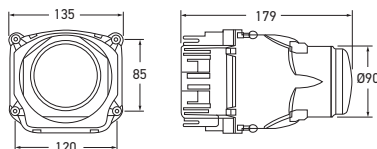
Contents

Headlamps and Inserts

90mm Bi-LED Headlamps.....	104
90mm Bi-Halogen Headlamps.....	105
90mm LED Headlamps.....	106
90mm LED Fog Lamps.....	107
90mm Universal Headlamps.....	108-109
7" Round LED Headlamps.....	110-111
7" Round Headlamps.....	112-113
5 ¾" Round Headlamps.....	114-115
Rectangular Headlamps & Housings.....	116-117
DAF/Scania HeadLamps.....	118
BMW/139mmØ HeadLamps.....	119
Universal Headlamps.....	120
Headlamp Accessories.....	121

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.

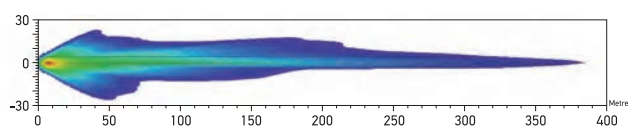


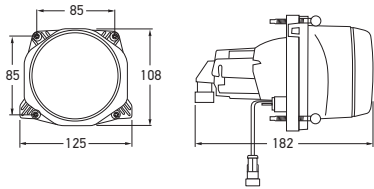
Part Number	1032-G2	
Mounting	3 point mount, screw adjusters included.	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	High beam:	30W
	Low beam:	20W
Protection	IP 6K4K (Protection against dust and high-pressure water splash) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Connection	4 pole DT socket	
Spare Parts	4962-P 9.1029.12	4 pole DT plug kit (included) Mounting frame
Compliance	(E) 4209 Ref. 12.5 ECE R112/01	



P/N 9.1029.12

P/N 1032-G2 High Beam distance. (m)





Bi-Halogen 90mm H7 High/Low Beam Headlamp

Compact H7 Low/High Beam headlamp. Pattern-free hardened glass lens and Free-Form (FF) cast aluminium reflector. Excellent light output and extremely homogeneous illumination with virtually no scatter. Straight-forward installation with 3 pre-mounted adjustment screws on the vehicle body. Matching connectors included.

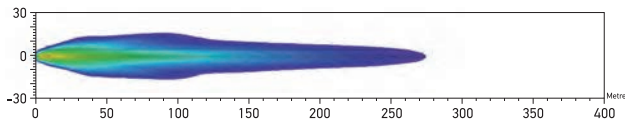
Part Number	1LL 009 998-011		12 VOLT
	1LL 009 998-051		24 VOLT
Bulbs to Suit	12V 24V	CA1255 CA2470	
Spare Parts	9.1029.11 9.1534.05	Mounting frame Bulb connector	
Compliance	(E) 2484		



P/N 9.1029.11

P/N 9.1534.05

High Beam distance. (m)



Headlamp Adjusters

Headlamp Adjusters

Adjuster to suit 90mm headlamps.

Part Number	15297700		PACK OF 3
	25416300		PACK OF 3
To Suit	P/N 15297700 P/N 25416300	Suits 14mm Ø mounting holes Suits 17mm Ø mounting holes	



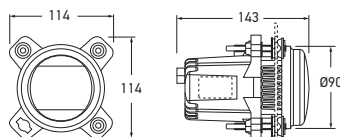
P/N 15297700




P/N 25416300

LED 90mm Low Beam

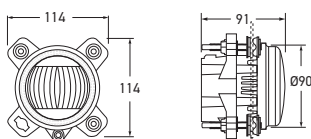
LED low beam featuring a generous spread of light. Low power consumption and ultra long life equates to economical running costs compared to a bulb lamp. Exceptional white light output and extremely homogeneous illumination for reduced driver strain which means greater safety. Complete with 3 screw adjusters.




Part Number	1ML 012 488-011	
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	25416300 9.1029.11 4988-P 4988-DT	Adjusters (3, included) Mounting frame (not included) 4 pole FEP plug kit 4 pole FEP to DT adaptor
Compliance	(E) 4090	ECE R112/01 

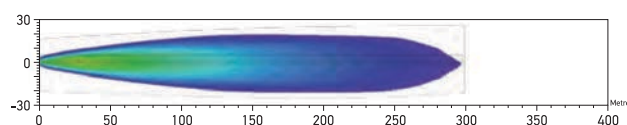
LED 90mm High Beam

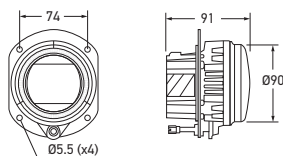
LED high beam featuring a generous spread of light. Low power consumption and ultra long life equates to economical running costs compared to a bulb lamp. Exceptional white light output and extremely homogeneous illumination for reduced driver strain which means greater safety. Complete with 3 screw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



Part Number	1F0 011 988-121	
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	25416300 9.1029.11 4988-P 4988-DT	Adjusters (3, included) Mounting frame (not included) 4 pole FEP plug kit 4 pole FEP to DT adaptor
Compliance	(E) 3831 Ref. 12.5	ECE R112/01 

LED 90mm High Beam distance. (m)





Part Number	1N0 011 988-001		
	1N0 011 988-011 (Daytime Running Lamp/Front Position)		
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)		
Spare Parts	4988-P 4988-DT	4 pole FEP plug kit 4 pole FEP to DT adaptor	
Compliance	Fog: ECE 3831 Daytime Running Lamp: ECE R87/00 Front Position: ECE R7/02	ECE R19/03 	

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.



P/N 1N0 011 988-011 LAMP FUNCTIONS



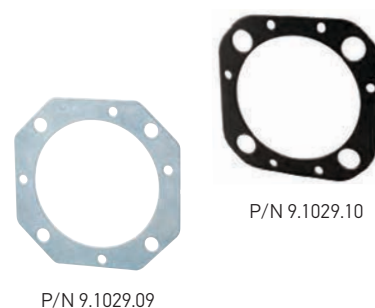
Daytime running lamp

Front position

Part Number	9.1029.09 (Mounting frame)	
	9.1029.10 (Mounting frame)	
	9.1029.11 (Mounting frame)	
	9.1029.12 (Mounting frame)	
	4988-P (4 pole FEP plug kit)	
	4988-DT (4 pole FEP to DT adaptor)	
To Suit	P/N 4988-P P/N 4988-DT P/N 9.1029.09 P/N 9.1029.10 P/N 9.1029.11 P/N 9.1029.12	P/Ns 1ML 012 488-011/1F0 011 988-12 /1N0 011 988-001/...-011 P/Ns 1ML 012 488-011/1F0 011 988-12 /1N0 011 988-001/...-011 P/Ns 1029-24V and 1030-24V P/Ns 1029H1-24V and 1030H1-24V P/Ns 1ML 012 488-011/1F0 011 988-121 P/Ns 1032-G2

90mm Headlamp Plugs, Adaptors and Mounting Frames

Spare parts to suit 90mm headlamps

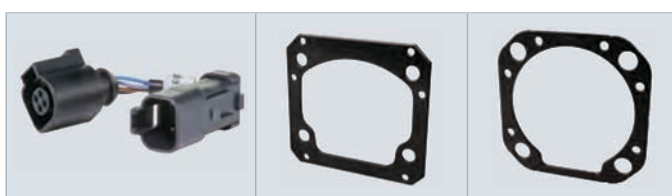


P/N 9.1029.09

P/N 9.1029.10



P/N 4988-P



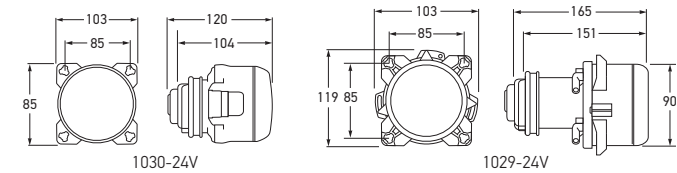
P/N 4988-DT

P/N 9.1029.12

P/N 9.1029.11

H7 Headlamp - 24 Volt

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



Part Number	1029-24V	LOW BEAM
	1030-24V	HIGH BEAM
Bulbs to Suit	12V	24V
	Low/High Beam: CA1255	CA2470
	Position: HL124	HL244
Spare Parts	15297700	Headlamp adjuster (Pack of 3)
	9GH 152 654-007	Rear cap
	8JD 156 150-807	Two pole plug with terminals and seals for position lamp
	9.1029.09	Mounting frame
Compliance	(E1) 917	



P/N 1030-24V



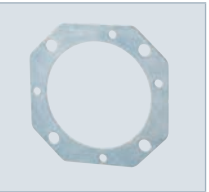
P/N 15297700



P/N 9GH 152 654-007

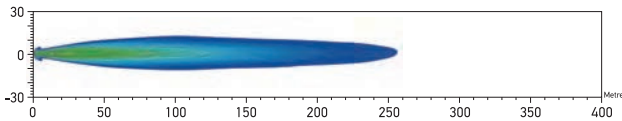


P/N 8JD 156 150-807



P/N 9.1029.09

P/N 1030-24V High Beam distance. (m)



Certified

ECE

CERTIFIED

Bulb Included

24V

BULB INC

85

114

85

160

92

90

113

85

85

96

113

90

P/N 1029H1-24V

P/N 1030H1-24V

Part Number	1029H1-24V	LOW BEAM
	1030H1-24V	HIGH BEAM
Bulbs to Suit	Low/High Beam:	12V C1255
	Position:	24V C2470 HL124 HL244
Spare Parts	25416300	Headlamp adjuster (Pack of 3)
	9GH 152 654-007	Rear cap
	8JD 156 150-807	Two pole plug with terminals and seals for position lamp
	9.1029.10	Mounting frame
Compliance	(E) 2397	

H1 Headlamp - 24 Volt

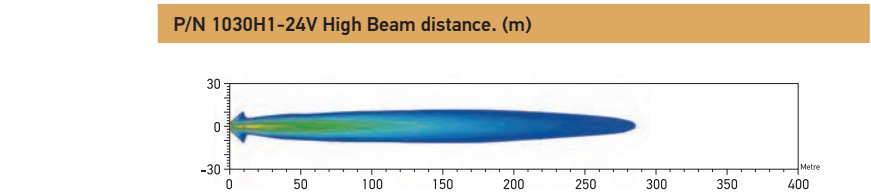
H1 headlamps with die cast aluminium reflector and hardened glass lens.



P/N 9.1029.10	P/N 8JD 156 150-807	P/N 9GH 152 654-007	P/N 25416300



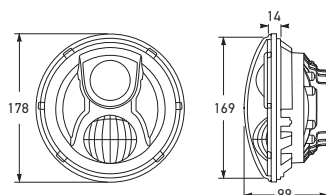
P/N 1030H1-24V










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 1058LED 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.



Part Number	1056LED				
Mounting	Retrofit 178 Ø (7") headlamps				
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.				
Power Consumption	High Beam:	35W			
	Low Beam:	25W			
Light Output	High Beam:	1150 lumen			
	Low Beam:	750 lumen			
Protection	Reverse polarity protection. IP 67 (Protection against dust and high pressure water jets)				
Connection	3 PIN "H4" type male plug (100mm cable)				
Housing Material	Die-cast Aluminum				
Lens Material	Coated polycarbonate				
Compliance	ECE R112/01	Ref. 12.5		7581	
Part Number	1058LED (Daytime Running Lamp/Front Position)				
Power Consumption	High Beam:	35W			
	Low Beam:	25W			
	Daytime Running Lamp:	15W (1058LED version only)			
	Front Position:	2W (1058LED version only)			
Cable Length	P/N 1058LED has 2 additional 100mm pre-wired cables with male blade terminals for front position and daytime running lamp functions.				
Compliance	ECE R112/01	Ref. 12.5		6081	ECE R87/00 ECE R7/02 
Other specifications as per P/N 1056LED					



P/N 1056LED



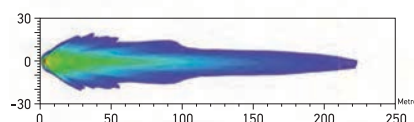
P/N 1058LED

P/N 1058LED LAMP FUNCTIONS

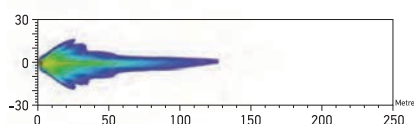


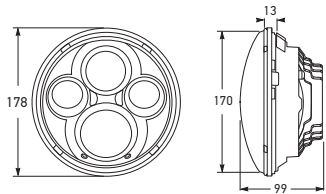
Daytime Running Lamp Front position

1056LED/1058LED High Beam distance. (m)



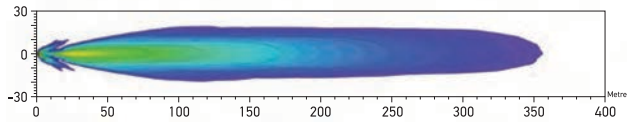
1056LED/1058LED Low Beam distance. (m)





Part Number	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 Aluminum
Lens Material	Coated polycarbonate
Compliance	E4 7501 ECE R112/01 Ref. 30

1358LED High Beam distance. (m)

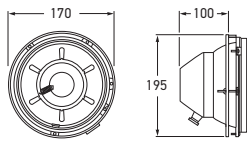


7" Round LED Headlamp - High Beam

The 1358LED lamp 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.



Part Number	1016	HEADLAMP HOUSING
	1017	CHROME RIM



7" (178mm) Headlamp Housing

Headlamp housing and chrome rim for halogen or sealed beams and inserts 7" (178mm) in diameter. Fully sealed steel cowl, complete with adjusting mechanism for vertical and horizontal alignment, sealing gasket, stainless steel retaining rim and 3 pin wiring harness with separate park lamp connection. Ideal for truck, bus or body builders. Suits Mercedes, Kenworth, Mack, White etc. Outer chrome rim (P/N 1017) to suit headlamp housing P/N 1016.

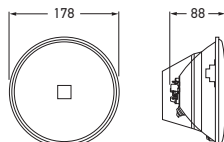


P/N 1016
Headlamp housing

P/N 1017
Chrome rim

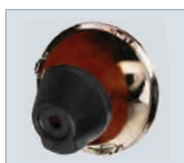
7" (178mm) H4 Halogen High/Low Beam Insert

Semi-sealed headlamp with sealing cap.



Part Number	1056		
Bulbs to Suit	Headlamp:	12V	24V
		XD1260/55	XD2475/70
Compliance	E4 53		

Where front position lamp is required, use P/N 1058.



Rear view

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

Semi-sealed headlamp with front position lamp bulb holder (includes P/N HL124 bulb) and sealing boot.



Part Number	1058		
Bulbs to Suit	Headlamp:	12V	24V
		XD1260/55	XD2475/70
	Front position:	HL124	HL244
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.



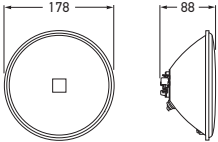
Part Number	1058HD		
Bulbs to Suit	Headlamp:	12V	24V
		XD1260/55	XD2475/70
	Front position:	HL124	HL244
Compliance	E4 53		



Rear view



Part Number	9.1358.01	
Bulbs to Suit	12V	YC1255
	24V	YC2470
Compliance	E1 14529	

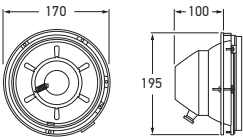


7" (178mm) H3 Halogen Driving Lamp Insert

Suitable for use as high beam headlamp in most 178mm round headlamp carriers (eg. P/N 1016).



Part Number	1016	HEADLAMP HOUSING
	1017	CHROME RIM



7" (178mm) Headlamp Housing

Headlamp housing and chrome rim for halogen or sealed beams and inserts 7" (178mm) in diameter. Fully sealed steel cowl, complete with adjusting mechanism for vertical and horizontal alignment, sealing gasket, stainless steel retaining rim and 3 pin wiring harness with separate park lamp connection. Ideal for truck, bus or body builders. Suits Mercedes, Kenworth, Mack, White etc. Outer chrome rim (P/N 1017) to suit headlamp housing P/N 1016.

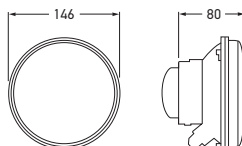


P/N 1016
Headlamp housing

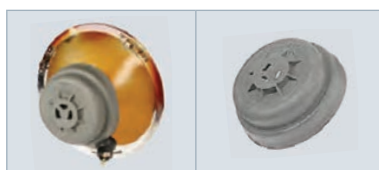
P/N 1017
Chrome rim

5 ¾" (146mm) H4 Halogen High/Low Beam Insert

Semi-sealed headlamp with front position lamp bulb holder (includes P/N HL124 bulb) and sealing boot. Suitable for dual headlamp systems.



Part Number	1055		
Bulbs to Suit		12V	24V
	Headlamp:	XD1260/55	XD2475/70
	Front position:	HL124	HL244
Spare Parts	13839700	Front position bulb holder	
	9GH 126 647-011	Sealing boot	
Compliance	(E1) 17031		



Rear view

Sealing boot

5 ¾" (146mm) 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.



Part Number	1055HD		
Bulbs to Suit	Headlamp:	12V	24V
	Front position:	XD1260/55 HL124	XD2475/70 HL244
Compliance	E1 17031		



Rear view

5 ¾" (146mm) H1 Halogen Low Beam Insert

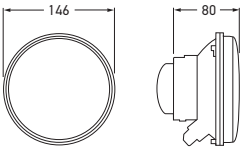
Low beam insert with front position lamp bulb holder and sealing boot. Suitable for dual headlamp systems.



Part Number	1054		
Bulbs to Suit		12V	24V
	Headlamp:	C1255	C2470
	Front position:	HL124	HL244
Spare Part	9GH 113 763-001	Sealing boot	
Compliance	(E) 7076		



Rear view



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

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



Part Number	1053		
Bulbs to Suit	Headlamp:	12V C1255	24V C2470
Spare Part	9GH 113 763-001	Sealing boot	
Compliance	(E1) 14464		
Earth terminal is a 'Post' (bullet) type connection.			



Rear view

Sealing boot

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

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



Part Number	1040		
Bulbs to Suit	Headlamp:	12V	24V
		C1255	C2470
Spare Part	9GH 113 763-001	Sealing boot	

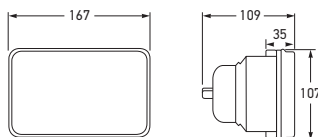


Rear view

Sealing boot

165 x 100mm H4 Halogen High/Low Beam Insert

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



Part Number	1044		
Bulbs to Suit		12V	24V
	Headlamp:	XD1260/55	XD2475/70
	Front position:	HL124	HL244
Spare Part	9FF 126 444-001	Front position bulb holder	
Compliance	Ⓔ 7197		



Rear view

165 x 100mm H4 Halogen High/Low Beam Insert

Semi-sealed headlamp with sealing boot and wiring adaptor.



Part Number	1042		
Bulbs to Suit	Headlamp:	12V XD1260/55	24V XD2475/70
Spare Part	9GH 126 647-011	Sealing boot	
Compliance	(E) 7197		



Rear view



Sealing boot

165 x 100mm H1 Halogen High Beam Insert

Semi-sealed headlamp with sealing cap.



Part Number	1041		
Bulbs to Suit	Headlamp:	12V C1255	24V C2470
Compliance	(E) 24504		



Rear view



Part Number	1043		
Bulbs to Suit	Headlamp:	12V	24V
	Front position:	XD1260/55 HL124	XD2475/70 HL244
Spare Parts	13839700 96H 126 647-011	Front position bulb holder Sealing boot	
Compliance	(E1) 17009	(E1) 17119	

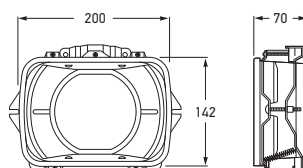
200 x 142mm H4 Halogen High/Low Beam Insert

Semi-sealed headlamp with front position lamp bulb holder (includes P/N HL124 bulb).



Rear view

Sealing boot

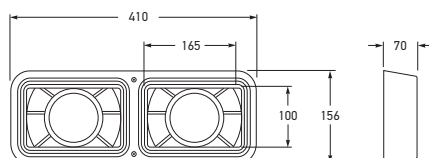


Rectangular Headlamp Housing

Suits 200 x 142mm rectangular headlamp units (P/N 1043). Ideal for truck, bus or body builders.



Part Number	1024
-------------	------



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.



Part Number	1025	
Spare Part	9.1025.07	Chrome plated outer rim

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



Part Number	HEADLAMP (H1/H7)	
	1LJ 247 046-071	LH
	1LJ 247 046-081	RH
Bulbs to Suit	Low Beam: CA2470 High Beam: C2470	
Compliance	E1 1134	

Scania Headlamp, P94 - T164
(series 4) 95-04, P230 - T470 04-on

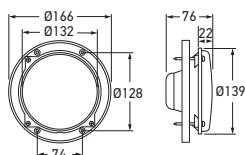


Part Number	HEADLAMP (H4)	
	1LG 007 150-111	LH
	1LG 007 150-121	RH
Bulbs to Suit	Headlamp: XD2475/70 Indicator: R2421 Position: G2410	
Spare Parts	9ES 144 433-031 Lens, left 9ES 144 434-031 Lens, right 9EL 145 103-011 Lens for indicator - left 9EL 145 104-011 Lens for indicator - right	
Compliance	E1 111	E4 276

5-Series (E39) 09/00 - 06/04



Part Number	HEADLAMP (H7/H7) WITH ELECTRIC LEVELLER	
	1LL 008 053-591	LH
	1LL 008 053-601	RH
Bulbs to Suit	Headlamp: CA1255 x 2 Indicator: RY1221 Position: YL1210	
Spare Part	9DX 153 746-011	Position lamp bulb holder
Compliance	E1182	



Part Number	1L3 996 002-221		
	1L3 996 002-411 (with Front Position)		
Bulbs to Suit	Headlamp: XD1260/55 Front Position: HL124	12V XD2475/70 HL244	24V XD2475/70 HL244
Compliance	E12 20005		

139mmØ H4 headlamp with Frame



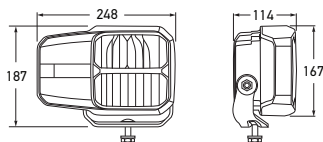
P/N 1L3 996 002-221



P/N 1L3 996 002-411

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

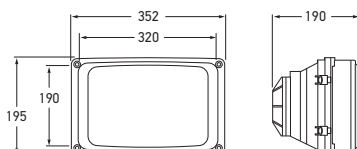
Combination headlamp with all functions in LED technology. For horizontal mounting, with die-cast aluminum housing, lens made of scratch-resistant polycarbonate, with 6-pin DEUTSCH connector, light functions: low and high beam, position light and indicator.



Part Number	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	4963-P 6 pole DT plug, wedge and 6 contacts	
Compliance	(E1) 4079 ECE R112/01 Ref. 12.5 ECE R6/01 ECE R7/02	

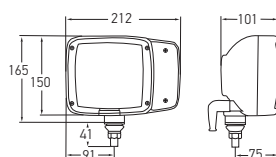
H4 Halogen High/Low Beam Headlamp Assembly

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.



Part Number	1027		
Mounting	Simple four point mounting.		
Bulbs to Suit		12V	24V
	Headlamp:	XD1260/55	XD2475/70
	Front position:	HL124	HL244
Spare Parts	9.1027.01	Clear lens	
	9.1027.02	Reflector	
	9.1027.04	Sealing cap	
Compliance	Ⓔ 17016		

External Headlamp



Part Number	HEADLAMP (H7/H3)	
	1LA 993 975-071	LH
	1LA 993 975-081	RH
Bulbs to Suit	Dipped Beam: CA2470 Main Beam: YC2470 Indicator: R2421 Position: HL244	
Protection	IP X9K (Protection against high pressure steam/jet cleaning)	
Spare Parts	1LA 990 185-011 Light unit 9EL 990 186-001 Lens for indicator lamp, front 9EL 990 186-101 Lens for indicator lamp, rear	
Accessories	8JD 008 151-051 Socket for AMP plug connector	
Compliance	(E4) 9496	



8JD 008 151-051

Part Number	4972-H1	H1
	4972-H4	H4
	4972-H7	H7

Bulb Connectors

Plug with pre-installed leads and crimp connectors (H1 and H7). Adapts to original wiring by crimp connector and heat shrink insulator, H4 version with 200mm leads (no connectors).



P/N 4972-H7

P/N 4972-H1

Part Number	5DV 007 760-631	12 VOLT
	5DV 007 810-171	24 VOLT
To Suit	Bulb P/Ns D2S and D2R.	

HID Gas Discharge (G3) Power Pack



Part Number	5DV 008 855-001	12 VOLT
	5DV 008 856-001	24 VOLT
To Suit	Bulb P/Ns D1S and D1R.	

HID Gas Discharge (G4) Power Pack



Part Number	5DD 008 319-501	12/24 VOLT
To Suit	Bulb P/Ns D2S and D2R	

HID Gas Discharge Ignitor





Fog and Driving Lamps

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



Contents

Fog and Driving Lamps

LED Light Bar 470	128-129
LED Light Bar 350	130-131
LED Light Bar Accessories	132-133
LED Rallye 4000	134
LED Rallye 4000 Compact	135
Rallye 4000	136-137
Rallye 4000 Compact	138
Rallye 3003 Compact	139
Comet FF 450	140
Comet FF 500	141
Comet FF 550	142
Comet 450	143
Comet 500	144
Comet 550	145
Comet 100	146
Comet 200	147
Comet 300	148
Micro DE Fog Lamp	149
FF 50	150
FF 75	151

HELLA LED LIGHT BARS

OUTSTANDING LIGHT PERFORMANCE



Outstanding light performance & sleek design makes the road legal
HELLA LED Light Bars the preferred choice in driving lights.

HELLA's range of award winning LED light bars guarantee powerful illumination and unmatched reliability. The sleek low profile housings are expertly designed and precision manufactured using ultra-durable materials to ensure long life and value for money for professional and recreational drivers.

As a manufacturer of world leading state of the art light technology, HELLA's relentless dedication to continuously improve the latest designs is shown in the unique range of LED Light Bars. HELLA's range of light bars stand out due to their light weight, revolutionary non-corrosive housing and flexible mounting system for numerous applications.

For a peace of mind Fit & Forget solution, all HELLA LED Light Bars are covered by an extensive 5 year warranty.



LED Light Bar 470



LED Light Bar 350
SEMA Global Media
Awards Winner 2016



What sets HELLA LED Light Bars apart from the rest?

01 High Performance LEDs

Durable high performance automotive grade LEDs and precision optics give the light bar superior illumination on and off-road.

All LEDs are required to pass the rigorous AEC-Q101 qualification defined by the Automotive Electronics Council as a "Stress Test for Qualification for Integrated Circuits or Discrete Semiconductors."

Testing to AEC-Q101 requires the LED to pass a harsh regime of stress tests including extreme high and low temperature cycles, humidity, vibration and mechanical shock. These tests are designed to ensure the LED is capable of handling the unique and harsh requirements of automotive applications.

High quality, precision optics produce a strongly defined and "tight" beam pattern. This enables accurate aiming of the beam, maximising distance and reducing scattered light which can cause off angle glare and unwanted reflections while driving.

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

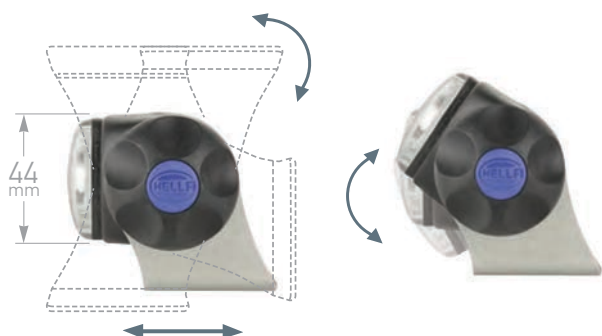
High efficacy LEDs reduce power consumption and minimise heat generated by the lamp making them efficient and safe to touch.



02 Low Profile Mounting System

The HELLA LED Light Bar has a much lower profile than traditional light bars, this allows more flexibility in where the lamp can be mounted. The aerodynamic design results in less disturbance to the air flow so that the vehicle's cooling and performance are not adversely affected if the lamp is mounted in front of a radiator grille.

The heavy duty bracket will suit most vehicle installations. Easy to mount and adjust, therefore ideal for numerous applications. Made of 316 stainless steel, it is ultra durable and non corrosive.



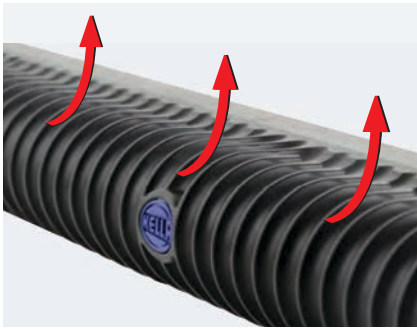
03 Dust and Waterproof

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

IP 6K7 (Protection against dust and temporary water immersion)

IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)

04 Intelligent Design Features



Expertly designed and precision manufactured for the toughest of outdoor conditions.

The LED Light Bar housing has been purposely designed with a wavy contour to optimise vertical rapid heat dissipation, making the lamp more thermally efficient.

The wavy contour is easy to clean as there are no cavities which can be clogged with dirt, unlike traditional light bars with a horizontal fin design.



Housing design incorporates an easy to clean profile.

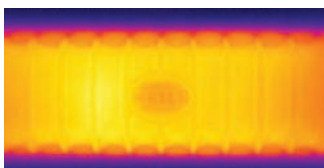


“Road legal HELLA LED Light Bars, the preferred choice in driving lights.”

05 Outstanding Material Choice

New revolutionary ceramic plastic materials 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 means complete corrosion resistance. This is especially important in demanding environmental conditions where lights are constantly exposed to the elements and sometimes temporarily submerged.

The innovative ceramic based plastic transfers the heat generated by the LEDs and electronics to the outside of the lamp body, thereby lowering the thermal stress on the internal components. This ensures a long service life with minimal degradation of the light output.



Thermal image showing heat evenly transferred across the lamp. For more information refer to page 5.

06 Light Weight

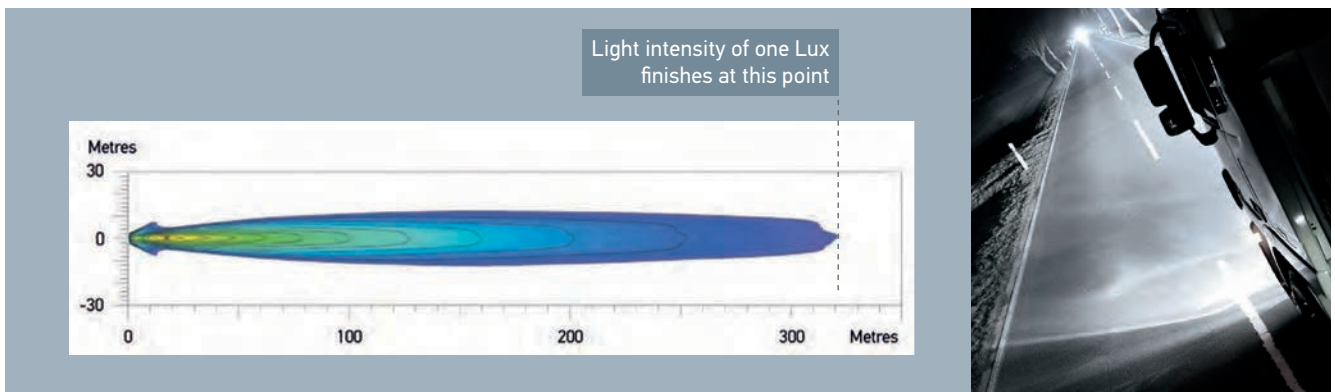


Lamps with thermally conductive plastic are up to 60% lighter than comparable metal bodied lamps. The much lower mass significantly reduces the stress on mounting points in high vibration and shock applications.

When mounting on ATVs and off-road vehicles, weight is an important factor. Compared to many heavier lights in the market, HELLA's Light Bars have little impact on the original vehicles all-important weight distribution.

MEASURING DISTANCE IN LIGHT

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



The colour shades represent the distance in metres from the lamps. The dark blue shade indicates an illumination level of one Lux (320 metres in the shown diagram). 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.

Pencil Beam

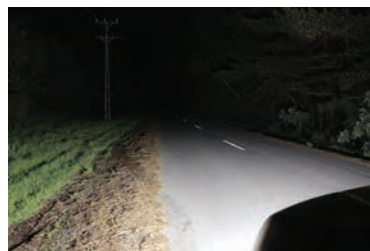
The pencil beam driving light is designed for maximum long-range illumination, providing improved visibility of objects and traffic situations at great distance. This beam type is recommended for off-road vehicles where objects at a far distance must be recognised early to give the driver time to decide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



Example of Pencil Beam for long distance illumination

Spread Beam

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



Example of Spread Beam for 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.

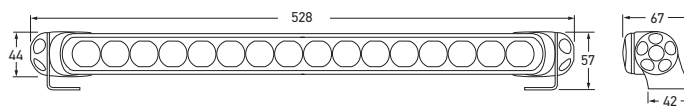
HELLA Fog Lamps are equipped with specially designed reflectors, which evenly illuminate the width of the road, providing you with a wide path of light for clearer visibility in close range to the vehicle. Particularly suitable for any vehicle driving through humid or moist areas where fog, rain or snow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







LED Light Bar 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 streamline 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.



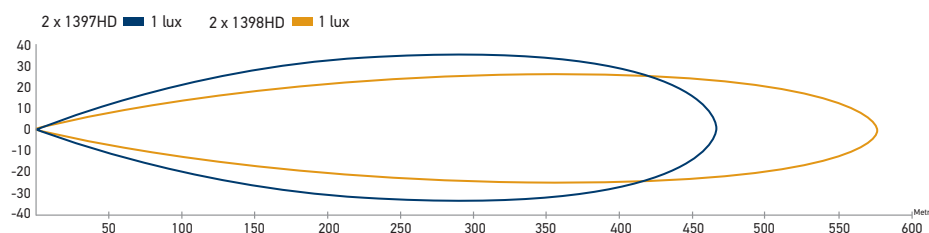
Part Number	1397HD (High beam)		REF. 25
	1398HD (Pencil beam)		REF. 37.5
Mounting	Upright or pendant.		
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.		
Power Consumption	35W		
Maximum Luminous Intensity	1397HD: 113,000 candela 1398HD: 166,000 candela		
Protection	Reverse 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	
	1397HD:  0012	R112/01	Ref. 25
	1398HD:  0013	R112/01	Ref. 37.5
Contents	1 x LED Light Bar 470	2 x HD mounting brackets	1 x Instruction booklet

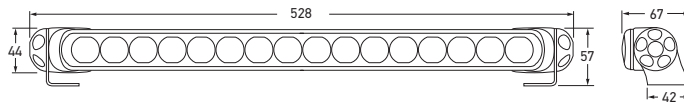


Mounting brackets can be positioned to suit most vehicle installations.

HD single mounting bracket - Disassembled view

LED Light Bar 470 Beam Pattern distance (m)





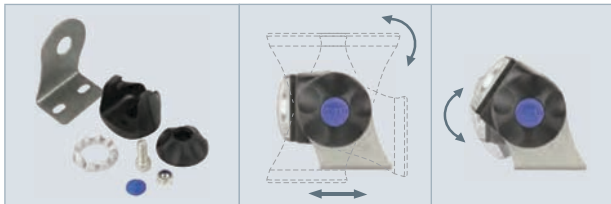
Part Number	1599HD (Close Range and Long Range)	COMBI
Mounting	Upright or pendant.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	Combined: 36W Close/Long Range: 18W	
Maximum Luminous Intensity	77,000 candela	
Max. Light Output	2200 lumen	
Protection	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	8032 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 - Protective cover	
Compliance		
Contents	1 x LED Light Bar 470 2 x HD mounting brackets 1 x Instruction booklet	

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.

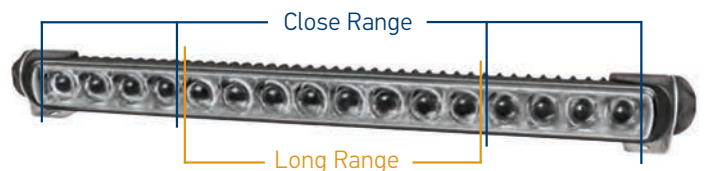
Only 1kg of weight means less stress on mounting locations, the low profile design will not restrict cooling airflow when fitted to the front of a vehicle - which can be a problem with larger lights. Don't be fooled by its size though, this light bar certainly punches above its weight with its long distance 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 for easy installation and flexibility for 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.

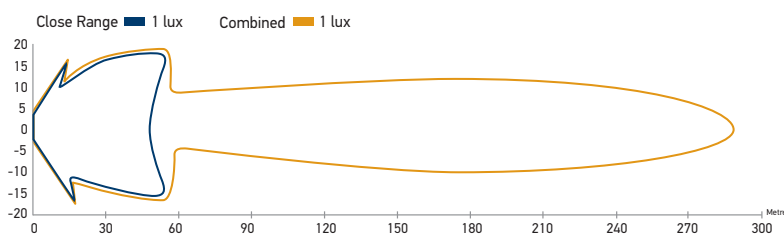


HD single mounting bracket
- Disassembled view

Mounting brackets can be positioned to suit most vehicle installations.



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



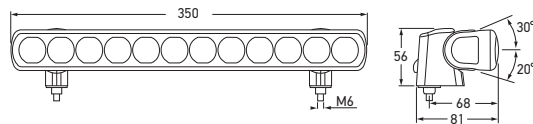
NOTE:
A work lamp must be switched independently of headlamps when mounted on a vehicle.









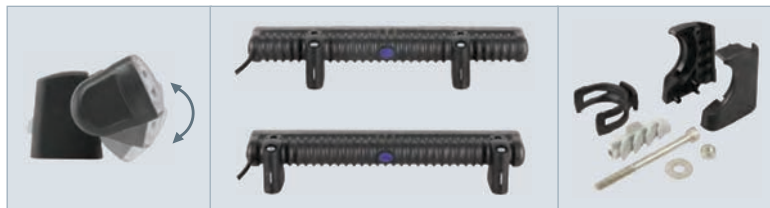
P/N 8032
Number plate bracket light bar 470 - Mounted upright or pendant (Depending on your vehicle)

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 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.

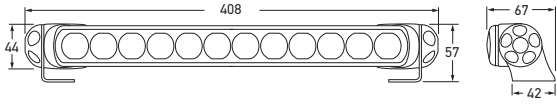








Part Number	1395 (High Beam)			REF. 20
	1396 (Pencil Beam)			REF. 30
Mounting	Upright or pendant.			
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.			
Power Consumption	25W			
Maximum Luminous Intensity	1395: 96,000 candela 1396: 145,000 candela			
Protection	Reverse 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.			
Compliance	 2909	R10/04		
	1395:  0008	R112/01	Ref. 20	
	1396:  0009	R112/01	Ref. 30	
Contents	1 x LED Light Bar 350	2 x Plastic mounting brackets	1 x Instruction booklet	

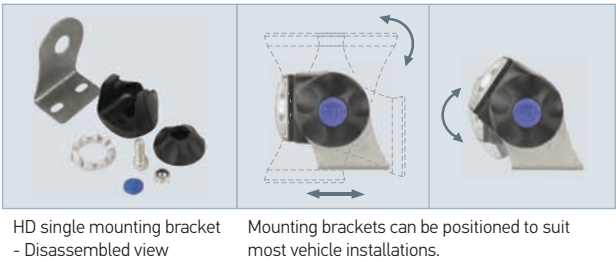


Plastic single mounting
bracket - Disassembled
view

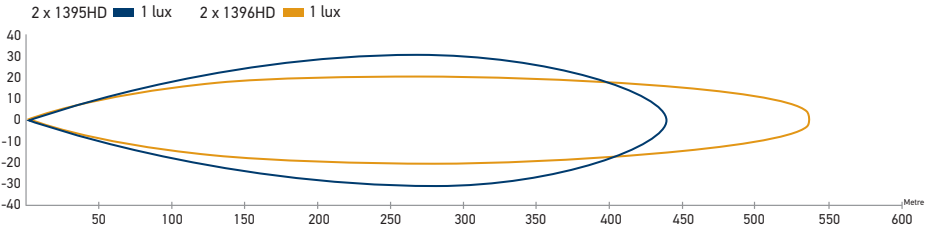


<div><div>Certified ECE CERTIFIED</div><div>Power Supply MULTI VOLT</div><div>Housing CORROSION PROOF</div></div> <div></div>			
Part Number	1395HD (High Beam)		REF. 20
	1396HD (Pencil Beam)		REF. 30
Mounting	Upright or pendant.		
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.		
Power Consumption	25W		
Maximum Luminous Intensity	1395HD: 96,000 candela 1396HD: 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.		
Compliance		2909	R10/04 
	1395HD: 	0008	R112/01 Ref. 20
	1396HD: 	0009	R112/01 Ref. 30
Contents	1 x LED Light Bar 350	2 x HD mounting brackets	1 x Instruction booklet

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



LED Light Bar 350 Beam Pattern distance (m)



LED Light Bar 350
- 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).

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.

FOG AND DRIVING

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.



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



LED LIGHT BAR 350 COVERS

Part Number	8XS 958 336-021	CLEAR
	8XS 958 336-031	AMBER
	8XS 958 336-111	BLACK

To suit the LED Light Bar 350 range.



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



LED LIGHT BAR 470 COVERS

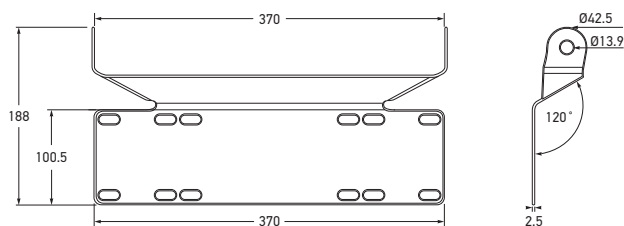
Part Number	8XS 958 337-021	CLEAR
	8XS 958 337-031	AMBER
	8XS 958 337-111	BLACK

To suit the LED Light Bar 470 range.

LED Light Bar Number Plate Brackets

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

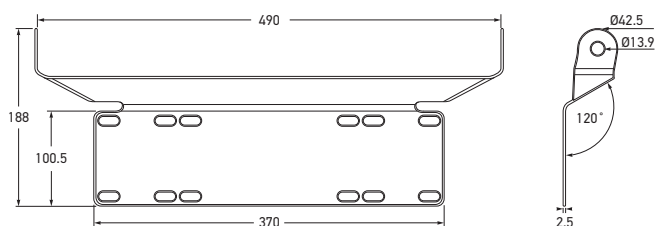
Depending on your vehicle the light bar can be mounted upright or pendant.

Number Plate Bracket
Light Bar 350Number Plate Bracket
Light Bar 470

NUMBER PLATE BRACKET LIGHT BAR 350

Part Number	8030
-------------	------

To suit the LED Light Bar 350 Work Lamp Range.
Suits standard New Zealand, Australian and European number plates.

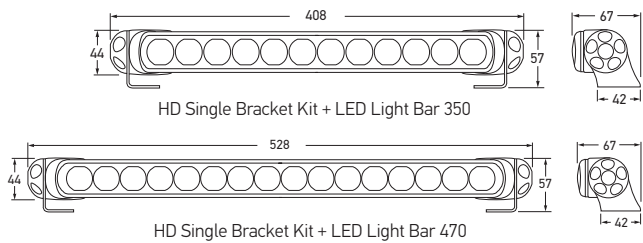


NUMBER PLATE BRACKET LIGHT BAR 470

Part Number	8032
-------------	------

To suit the LED Light Bar 470 Work Lamp Range.
Suits standard New Zealand, Australian and European number plates.

FOG AND DRIVING LAMPS



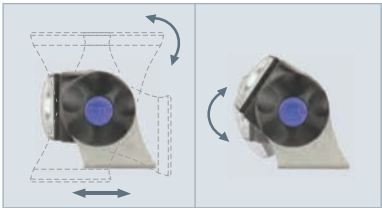
LED Light Bar
- HD Single Bracket Kit

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.

Part Number	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	



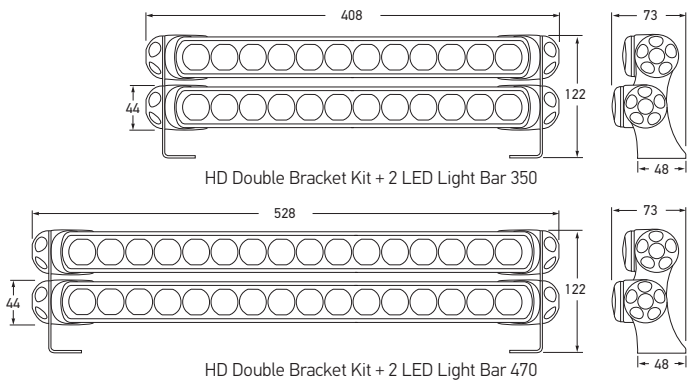
HD Single Bracket Kit + LED Light Bar 350



Mounting brackets can be positioned to suit most vehicle installations.



FOG AND DRIVING



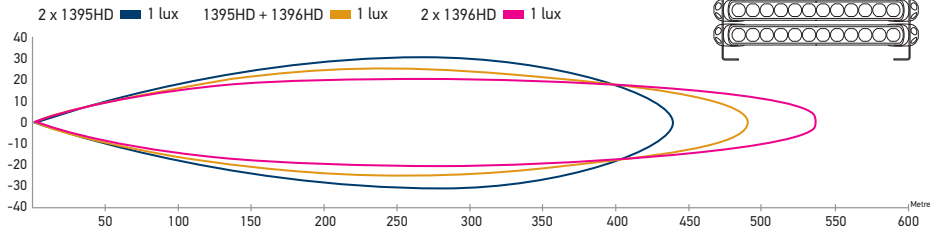
LED Light Bar
- HD Double Bracket Kit

Part Number	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	



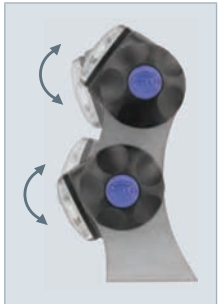
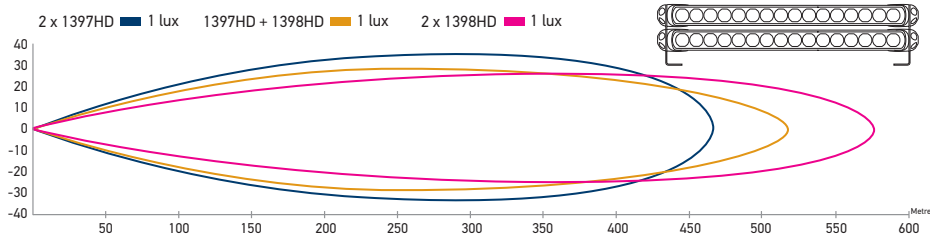
Beam Patterns - Beam distance (m)

LED LIGHT BAR 350



HD Double Bracket Kit + 2 LED Light Bar 350

LED LIGHT BAR 470



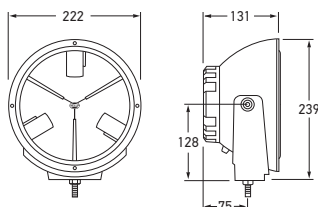
Mounting brackets allow rotation of Light Bar.

LED Luminator Spread Beam Driving Lamp

Equipped with innovative triple high-boost reflectors and state-of-the-art LED technology for all lighting functions, Luminator LED driving lamps deliver long lasting and extremely powerful light output, achieving an intense and consistent long-range illumination that is very similar to daylight, without harsh contrasts. Complete with clear cover P/N 8141.

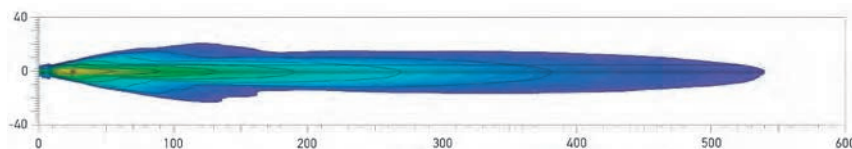


Front view showing position lamp



Part Number	1389	SPREAD BEAM
Mounting	Upright or pendant.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	Driving lamp: 30W Position lamp: 1W	
Protection	IP 5K4K (Protection against dust and high-pressure splashing water) IP X9K (Protection against high-pressure cleaner, specific for road vehicles) Not suitable for submersion	
Spare Part	9.1389.01	Driving lamp lens, reflector and LED light source.
Compliance	Ⓔ 3161	Ref: 50

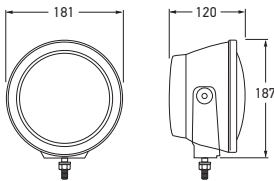
LED Luminator Spread Beam distance (m)



Rallye 4000 Accessories



Part Number	8127	PROTECTIVE COVER
	8141	CLEAR PROTECTIVE COVER
	8126	PROTECTIVE GRILLE
Spare Parts	9.1389.01	LED lamp lens and reflector



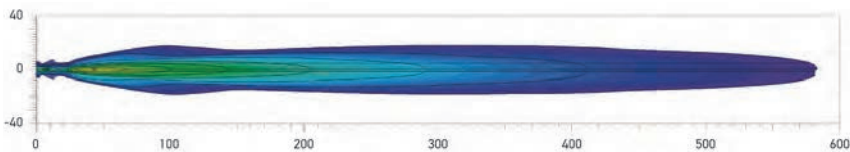
LED Luminator Compact Spread Beam Driving Lamp

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



Part Number	1394	SPREAD BEAM
Mounting	Upright or pendant.	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems	
Power Consumption	Driving lamp:	11W
Spare Part	9.1394.01	Driving lamp lens, reflector and LED light source.
Compliance	(E) 3738	Ref: 45

LED Luminator Compact Spread Beam distance (m)



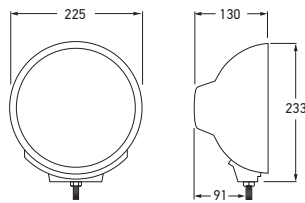
Part Number	8120	PROTECTIVE COVER
	8163	CLEAR PROTECTIVE COVER
Spare Parts	9.1389.01	LED lamp lens and reflector

Rallye 4000 Accessories



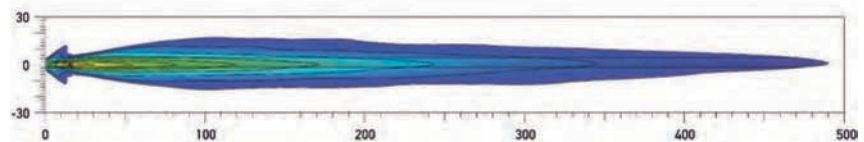
Rallye 4000 Spread Beam Driving Lamp

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 P/N 8125.



Part Number	1366	SPREAD BEAM
Mounting	Upright.	
Power Consumption	Driving lamp: 55W Position lamp: 5W	
Bulbs to Suit	Driving lamp: 12V C1255 24V C2470 Position lamp: W125 W245	
Spare Part	9.1366.02	Spread beam insert (clear lens)
Compliance	(E) 1928 Ref: 37.5	

Rallye 4000 Spread Beam distance (m)



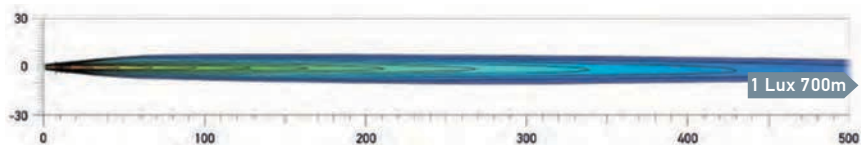
Rallye 4000 Pencil Beam Driving Lamp

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 P/N 8125.

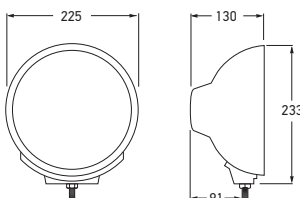


Part Number	1365	PENCIL BEAM
Mounting	Upright.	
Power Consumption	55W	
Bulbs to Suit	12V C1255 24V C2470	
Spare Part	9.1365.02	Pencil beam insert

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



Part Number	8125	PROTECTIVE COVER
	8141	CLEAR PROTECTIVE COVER
	8126	PROTECTIVE GRILLE
Spare Parts	9.1165.01 Fog lamp insert 9.1365.02 Pencil beam insert 9.1366.01 Spread beam insert (optic lens) 9.1366.02 Spread beam insert (clear lens) 9.1366C.01 Spread beam insert with Celis position lamp 9.1366C.01BL Spread beam insert (blue lens) 9.1365.05 Wiring loom 9.1365.06 Knurled screw set (2) 9.1365.07 Black retaining rim 9.1366C.07 Chrome retaining rim	



Rallye 4000 Chrome Spread Beam Driving Lamp

The Rallye 4000 spread beam driving lamp features clear glass optics and chrome plated zinc die-cast metal housing. Complete with protective cover P/N 8125 and Allen keys.



Part Number	1366CHROME	SPREAD BEAM
Mounting	Upright.	
Power Consumption	Driving lamp: 55W Position lamp: 5W	
Bulbs to Suit	Driving lamp: 12V C1255CB Position lamp: W125	24V C2470 W245
Spare Parts	9.1366.02 9.1366C.07	Spread beam insert Chrome retaining rim
Compliance	(E) 1928	Ref: 37.5



Rallye 4000 Chrome Spread Beam Driving Lamp with Celis Position Light

The Rallye 4000 spread beam driving lamp with clear glass optics and integrated Celis LED circular guide position light. Chrome plated zinc die-cast metal housing.



Front view showing Celis ring

Part Number	1366C	SPREAD BEAM
Mounting	Upright.	
Power Consumption	Driving lamp: 55W Position lamp: 5W	
Bulbs to Suit	Driving lamp: 12V C1255CB Position lamp: W125	24V C2470 W245
Spare Parts	9.1366C.01 9.1366C.07	Spread beam insert with Celis position lamp Chrome retaining rim
Compliance	(E) 1753	Ref: 17.5
Celis operates on either 12V or 24V		



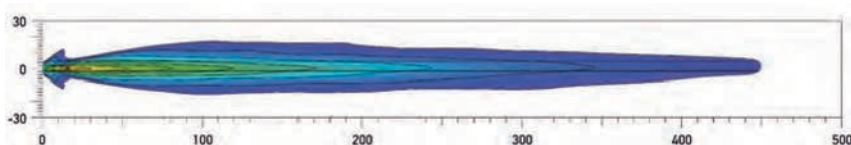
Rallye 4000 Chrome Spread Beam Driving Lamp

The Rallye 4000 spread beam driving lamp features blue clear glass optics and chrome plated zinc die-cast metal housing. Suitable for colourless bulbs only.



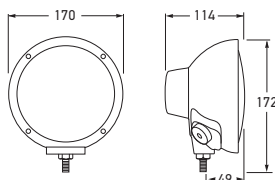
Part Number	1366C-BLUE	SPREAD BEAM
Mounting	Upright.	
Power Consumption	Driving lamp: 55W Position lamp: 5W	
Bulbs to Suit	Driving lamp: 12V C1255 Position lamp: W125	24V C2470 W245
Spare Parts	9.1366C.01BL 9.1366C.07	Spread beam insert with blue lens Chrome retaining rim
Compliance	(E) 2254	Ref: 17.5

Rallye 4000 Spread Beam distance (m)



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.

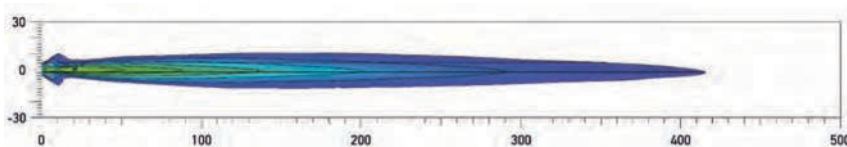


Part Number	1378		SPREAD BEAM
	1378CHROME		
Mounting	Upright.		
Power Consumption	55W		
Bulbs to Suit	12V 24V	C1255 C2470	
Spare Part	9.1378.01	Spread beam insert	
Compliance	Ⓔ 1901	Ref: 37.5	



P/N 1378CHROME

Rallye 4000 Compact Spread Beam distance (m)



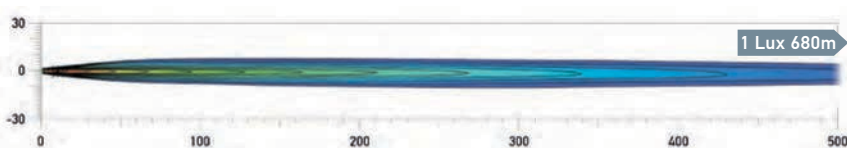
Rallye 4000 Compact Pencil Beam Driving Lamp

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



Part Number	1380		PENCIL BEAM
Mounting	Upright.		
Power Consumption	55W		
Bulbs to Suit	12V 24V	C1255 C2470	
Spare Part	9.1380.01	Pencil beam Insert	

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



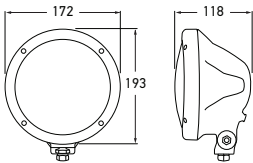
Rallye 4000 Compact Accessories



P/N 8115

P/N 8155

Part Number	8155	CLEAR PROTECTIVE COVER	
	8115	PROTECTIVE COVER	
Spare Parts	9.1365.06 9.1378.01 9.1380.01 9.1178.01	Knurled screw set (2) Spread beam insert Pencil beam Insert Fog lamp insert	



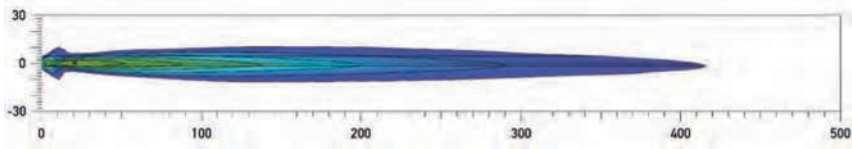
Rallye 3003 Compact Spread Beam Driving Lamp

Rallye 3003 compact spread beam driving lamp, with Clear Free-Form (FF) reflector lens design and high boost reflector.

Part Number	1369	SPREAD BEAM
Mounting	Upright.	
Power Consumption	55W	
Bulbs to Suit	12V	C1255
	24V	C2470
Spare Part	9.1378.01	Spread beam insert
Compliance	E1 1901	Ref: 37.5



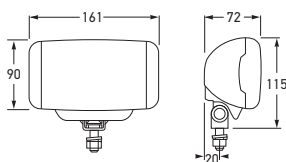
Rallye 3003 Compact Spread Beam distance (m)



FOG AND DRIVING

Comet FF 450 Spread Beam Driving Lamp

H3 spread beam with black plastic housing.
Complete with protective cover
P/N 8XS 186 530-012.



Part Number	1324	SPREAD BEAM
Mounting	Upright or pendant.	
Power Consumption	55W	
Bulbs to Suit	12V 24V	YC1255 YC2470
Spare Part	9.1324.01	Driving lamp insert
Compliance	E1 3221 Ref: 12.5	

Comet FF 450 Spotlight distance (m)



Comet FF 450 Fog Lamp

H3 fog lamp with black plastic housing.
Complete with protective cover
P/N 8XS 186 530-012.

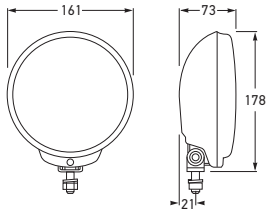


Part Number	1124	FOG BEAM
Mounting	Upright or pendant.	
Power Consumption	55W	
Bulbs to Suit	12V 24V	YC1255 YC2470
Spare Part	9.1124.01	Fog lamp insert
Compliance	E1 3221	

Protective Covers



Part Number	8XS 186 530-012	PROTECTIVE COVER
	8156	CLEAR PROTECTIVE COVER



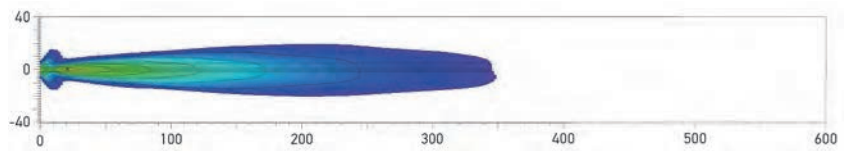
Comet FF 500 Spread Beam Driving Lamp

H3 spread beam with black plastic housing.
Complete with protective cover
P/N 8XS 186 531-012.



Part Number	1325	SPREAD BEAM
Mounting	Upright.	
Power Consumption	55W	
Bulbs to Suit	12V 24V	YC1255 YC2470
Spare Part	9.1325.01	Driving lamp insert
Compliance	(E1) 3222	Ref: 17.5

Comet FF 500 Spotlight distance (m)



Comet FF 500 Fog Lamp

H3 fog lamp with black plastic housing.
Complete with protective cover
P/N 8XS 186 531-012.



Part Number	1125	FOG BEAM
Mounting	Upright.	
Power Consumption	55W	
Bulbs to Suit	12V 24V	YC1255 YC2470
Spare Part	9.1125.01	Fog lamp insert
Compliance	(E1) 3222	

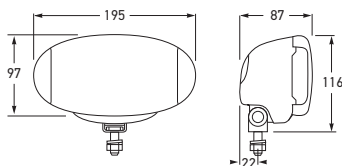
Part Number	8XS 186 531-012	PROTECTIVE COVER
	8157	CLEAR PROTECTIVE COVER

Protective Covers



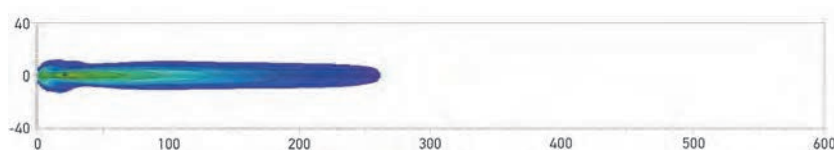
Comet FF 550 Spread Beam Driving Lamp

H3 spread beam with black plastic housing.
Complete with protective cover
P/N 8XS 186 532-012.



Part Number	1326	SPREAD BEAM
Mounting	Upright or pendant.	
Power Consumption	55W	
Bulbs to Suit	12V 24V	YC1255 YC2470
Spare Part	9.1326.01	Driving lamp insert
Compliance	(E1) 3223 Ref: 12.5	

Comet FF 550 Spotlight distance (m)



Comet FF 550 Fog Lamp

H3 fog lamp with black plastic housing.
Complete with protective cover
P/N 8XS 186 532-012.

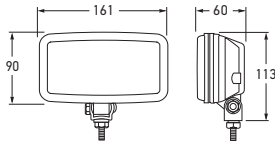


Part Number	1126	FOG BEAM
Mounting	Upright or pendant.	
Power Consumption	55W	
Bulbs to Suit	12V 24V	YC1255 YC2470
Spare Part	9.1126.01	Fog lamp insert
Compliance	(E1) 3223	

Protective Covers



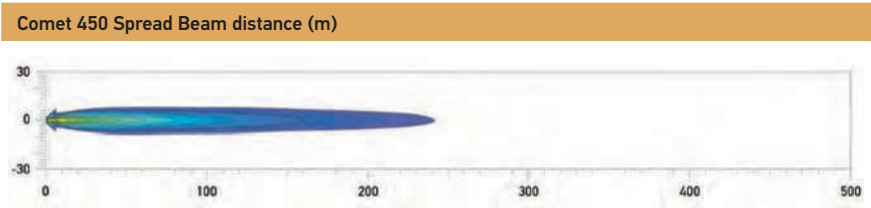
Part Number	8XS 186 532-012	PROTECTIVE COVER
	8158	CLEAR PROTECTIVE COVER



Comet 450 Spread Beam Driving Lamp

Spread beam driving lamp with hardened glass lens and tough plastic body. Supplied with protective cover, Part No. 8123.

Part Number	1310	SPREAD BEAM
Mounting	Upright or pendant.	
Power Consumption	55W	
Bulbs to Suit	12V 24V	YC1255 YC2470
Spare Part	9.1310.01	Driving lamp insert
Compliance	(E) 44442	Ref: 17.5



Part Number	1110	FOG BEAM
Mounting	Upright or pendant.	
Power Consumption	55W	
Bulbs to Suit	12V 24V	YC1255 YC2470
Spare Part	9.1110.01	Fog lamp insert
Compliance	(E) 18227	

Comet 450 Fog Lamp

Fog lamp with hardened glass lens and tough plastic body. Supplied with protective cover, Part No. 8123.



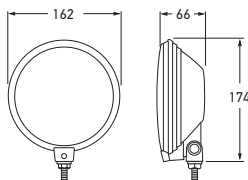
Part Number	8123	PROTECTIVE COVER
	8136	CLEAR PROTECTIVE COVER

Comet 450 Accessories



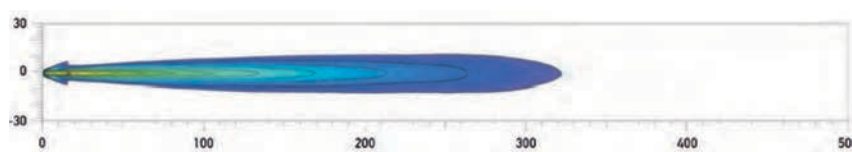
Comet 500 Spread Beam Driving Lamp

Spread beam driving lamp with hardened glass lens and tough plastic body. Supplied with protective cover, Part No. 8121.



Part Number	1308	SPREAD BEAM
Mounting	Upright.	
Power Consumption	55W	
Bulbs to Suit	12V 24V	YC1255 YC2470
Spare Part	9.1308.01	Driving lamp insert
Compliance	(E1) 44404	Ref: 37.5

Comet 500 Spotlight distance (m)



Comet 500 Fog Lamp

Fog lamp with hardened glass lens and tough plastic body. Supplied with protective cover, Part No. 8121.



Part Number	1108	FOG BEAM
Mounting	Upright.	
Power Consumption	55W	
Bulbs to Suit	12V 24V	YC1255 YC2470
Spare Part	9.1108.01	Fog lamp insert
Compliance	(E1) 18213	

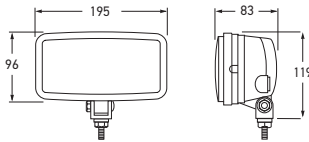
Comet 500 Accessories



P/N 8121

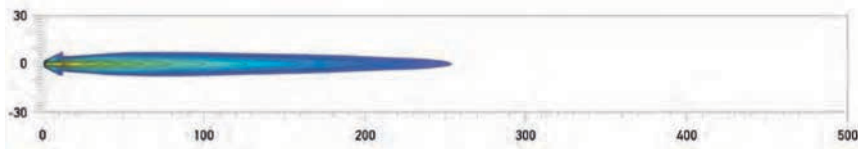
P/N 8137

Part Number	8121	PROTECTIVE COVER
	8137	CLEAR PROTECTIVE COVER



Part Number	1309		SPREAD BEAM
Mounting	Upright or pendant.		
Power Consumption	55W		
Bulbs to Suit	12V 24V	YC1255 YC2470	
Spare Part	9.1309.01	Driving lamp insert	
Compliance	ⒺI 44410	Ref: 17.5	

Comet 550 Spread Beam distance (m)



Comet 550 Spread Beam Driving Lamp

Spread beam driving lamp with hardened glass lens and tough plastic body. Supplied with protective cover, Part No. 8122.



FOG AND DRIVING



Part Number	1109		FOG BEAM
Mounting	Upright or pendant.		
Power Consumption	55W		
Bulbs to Suit	12V	YC1255	
	24V	YC2470	
Compliance	Ⓔ 18216		

Comet 550 Fog Lamp

Fog beam driving lamp with hardened glass lens and tough plastic body. Supplied with protective cover, Part No. 8122.



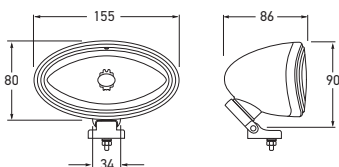
Comet 550 Accessories

Part Number	8122	PROTECTIVE COVER
	8138	CLEAR PROTECTIVE COVER



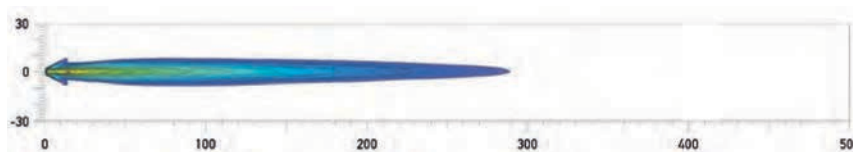
Comet 100 Spread Beam Driving Lamp

Spread beam driving lamp with modern clear hardened glass lens. The innovative Free-Form (FF) technology ensures concentrated light output.



Part Number	1312		SPREAD BEAM
Mounting	Upright or pendant.		
Power Consumption	55W		
Bulbs to Suit	12V	YC1255	
	24V	YC2470	
Spare Part	9.1312.01	Driving lamp insert	
Compliance	Ⓔ 651	Ref: 17.5	

Comet 100 Spread Beam distance (m)

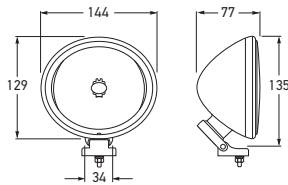


Comet 100 Fog Lamp

Fog beam lamp with modern clear hardened glass lens. The innovative Free-Form (FF) technology ensures concentrated light output.



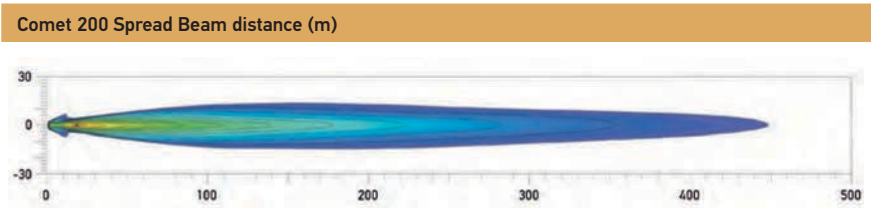
Part Number	1112		FOG BEAM
Mounting	Upright or pendant.		
Power Consumption	55W		
Bulbs to Suit	12V	YC1255	
	24V	YC2470	
Compliance	Ⓔ 650		



Comet 200 Spread Beam Driving Lamp

Spread beam driving lamp with modern clear hardened glass lens. The innovative Free-Form (FF) technology ensures concentrated light output.

Part Number	1313	SPREAD BEAM
Mounting	Upright.	
Power Consumption	55W	
Bulbs to Suit	12V	YC1255
	24V	YC2470
Spare Part	9.1313.01	Driving lamp insert
Compliance	E1 646	Ref: 37.5



FOG AND DRIVING



Part Number	1113	FOG BEAM
Mounting	Upright or pendant.	
Power Consumption	55W	
Bulbs to Suit	12V	YC1255
	24V	YC2470
Spare Part	9.1113.01	Fog lamp insert
Compliance	E1 645	

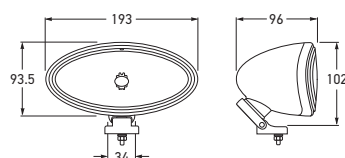
Comet 200 Fog Lamp

Fog beam lamp with modern clear hardened glass lens. The innovative Free-Form (FF) technology ensures concentrated light output.



Comet 300 Spread Beam Driving Lamp

Spread beam driving lamp with modern clear hardened glass lens. The innovative Free-Form (FF) technology ensures concentrated light output.



Part Number	1314		SPREAD BEAM
Mounting	Upright or pendant.		
Power Consumption	55W		
Bulbs to Suit	12V	YC1255	
	24V	YC2470	
Spare Part	9.1314.01	Driving lamp insert	
Compliance	(E) 649	Ref: 17.5	

Comet 300 Spread Beam distance (m)

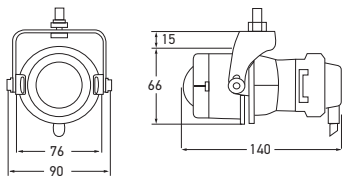


Comet 300 Fog Lamp

Fog beam lamp with modern clear hardened glass lens. The innovative Free-Form (FF) technology ensures concentrated light output.



Part Number	1114		FOG BEAM
Mounting	Upright or pendant.		
Power Consumption	55W		
Bulbs to Suit	12V	YC1255	
	24V	YC2470	
Compliance	(E1) 648		



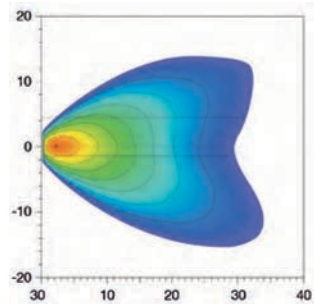
Micro DE Fog Lamp

Micro DE high performance compact fog lamp featuring a focused glass lens and modern Free-Form (FF) reflector. HELLA's smallest auxiliary lamp is ideal for front spoilers. Housing and reflector made from magnesium.



Part Number	1115	FOG BEAM
Mounting	Upright or pendant. Ideal for installations in or below front apron or front spoilers with limited mounting space. Standard mounting bracket and pre-assembled wiring harness included.	
Power Consumption	55W	
Bulbs to Suit	12V 24V	YC1255 YC2470
Spare Part	9.1115.08	Mounting bracket
Compliance	E1 877	

Micro DE Fog Beam distance (m)



Part Number	9.1115.08	MOUNTING BRACKET
-------------	-----------	------------------

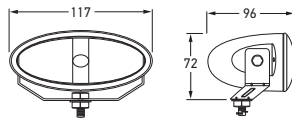
Fog Lamp - Mounting Bracket

Adjustable mounting bracket to suit Micro DE lamps.



FF 50 Spread Beam Driving Lamp

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



Part Number	1322	SPREAD BEAM
Mounting	Upright or pendant.	
Power Consumption	55W	
Bulb to Suit	CA1255	
Compliance	(E1) 1210 Ref: 12.5	

FF 50 Spread Beam distance (m)



FF 50 Fog Lamp

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

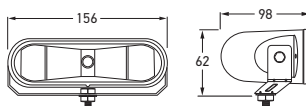


Part Number	1122	FOG BEAM
Mounting	Upright or pendant.	
Power Consumption	55W	
Bulb to Suit	CA1255	
Compliance	(E1) 1209	

FF 50 Clear Protective Cover



Part Number	8147
-------------	------



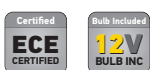
Part Number	1323	SPREAD BEAM
Mounting	Upright or pendant.	
Power Consumption	55W	
Bulb to Suit	CA1255	
Compliance	(E) 1212 Ref: 12.5	

FF 75 Spread Beam Driving Lamp

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



FF 75 Spread Beam distance (m)



Part Number	1123	FOG BEAM
Mounting	Upright or pendant.	
Power Consumption	55W	
Bulb to Suit	CA1255	
Compliance	(E) 1211	

FF 75 Fog Lamp

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



FF 75 Clear Protective Cover

Part Number	8148
-------------	------





Work Lamps

Effective and efficient mobile lighting can increase productivity and staff safety.



Contents

Work Lamps

DuraLED® WL550	158	LED Ultra Beam	168
DuraLED® WL750	158	LED Ultra Beam Gen II	169
DuraLED® WL1300	159	LED AS3000 RFCommSafe™	170
LED BL350	160	LED Module 90	171
LED Light Bar 470 - Combi	161	LED RokLUME 380	172-173
LED BL470	162-163	LED HypaLUME	174-176
LED Module 50	164	LED BL350 - 110/230V AC	177
LED Q90 Compact	164	LED Reverse	178
LED M70	165	Halogen Ultra Beam	179
LED Module 70 Gen IV	165	Halogen Picador	179-180
LED Power Beam 1500	166	Spare Parts and Accessories	181
LED Power Beam 1800	167		

SUPERIOR LIGHTING FOR WORKING AREAS

The superior performance of HELLA LED work lamps is recognised by industry worldwide, with the largest agriculture and construction equipment manufacturers now specifying HELLA LED lighting as original equipment.



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

01

Highly Efficient Light Output

Highly 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.

02

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.

03

Long Service Life

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

04

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".

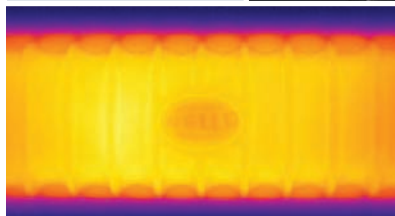
The lumen ratings of all HELLA work lamps are always based on values obtained from measuring actual lamps. The lumen values correspond to the light that is actually emitted from the work lamp. HELLA LED work lamps emit their full output in ambient temperatures of up to 50°C.

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.



Plastic ceramic materials offer many benefits including outstanding thermal performance.

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 plastic works much the same as a metal housing. The innovative ceramic based plastic 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.



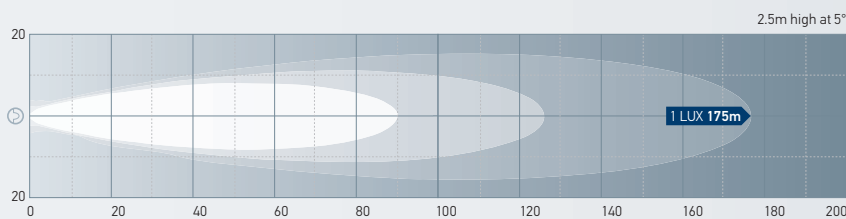
HELLA LED work lamps are designed and tested to provide efficient and effective illumination and an ultra long service life.

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).

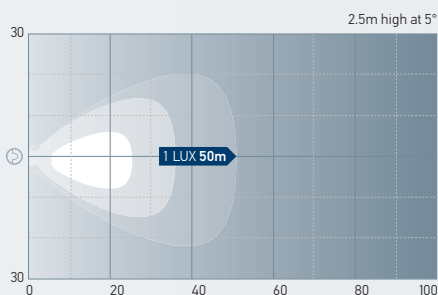


Isolux Lighting Diagram

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

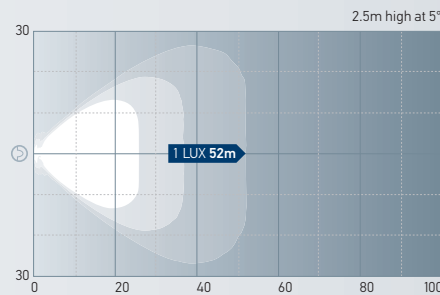
Close Range

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 call up the respective light range diagram or download brief information about the product as a PDF at any time.

Visit www.hella.com/eliver and try it yourself.



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.

As electronic devices such as LED lamps become more common, so does the risk of unintended electromagnetic interference (EMI) that can have adverse effects on other 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.



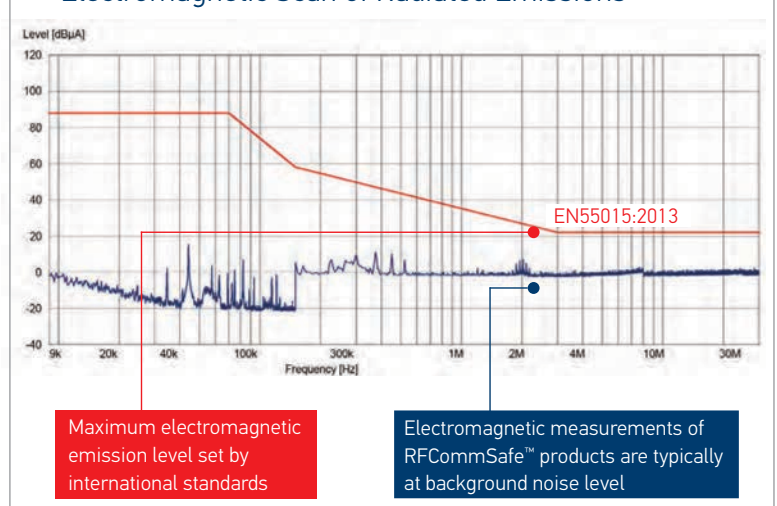
Designed for safety in emergency and industrial applications.

RFCommSafe™ lamps are not susceptible to radiation from other devices



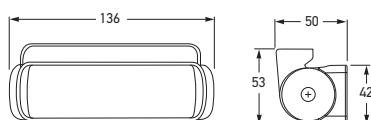
RFCommSafe™ products are used by the New Zealand Fire Service

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.



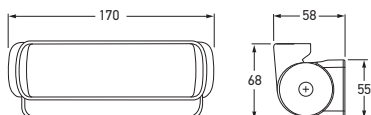
Dual Intensity:
Switch Control



Part Number	98057310	CLOSE RANGE
	98057330	LONG 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	

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



Part Number	98095023	CLOSE RANGE
	98095003	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 P/N 98057310	
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.	
Lens Material	High impact and chemical resistant Grilamid® lens	
Compliance	CE	

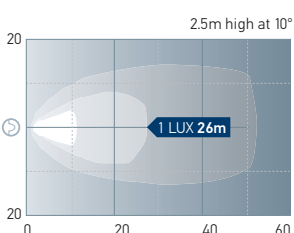


Easy adjustment
without tools.

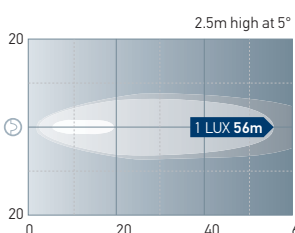
Completely sealed
lamp/cable entry.

BEAM PATTERNS

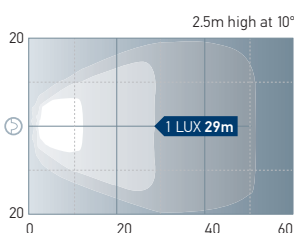
WL550 - Close Range



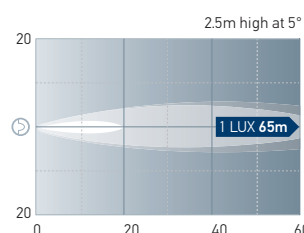
WL550 - Long Range

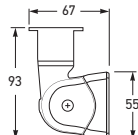
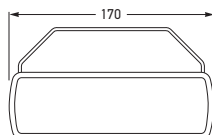


WL750 - Close Range



WL750 - Long Range

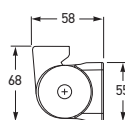
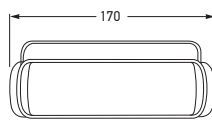




Part Number	98074025	CLOSE RANGE
	98074060	LONG RANGE
	98074051	FLOOD
Mounting	Upright or pendant.	
Voltage	24V	
Power Consumption	14W	
Light Output	900 lumen	
Protection	Reverse polarity and voltage spike protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection 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 RCommSafe™ LED Work Lamp - 24V DC

LED work lamp developed with RCommSafe™ 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.



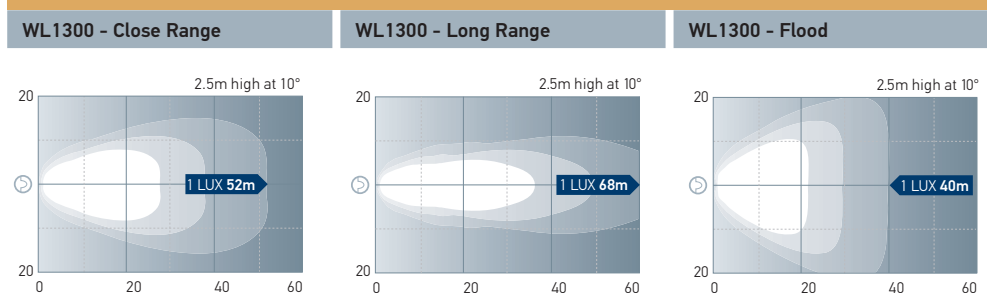
Part Number	98074032	CLOSE RANGE
	98074022	LONG RANGE
	98074002	FLOOD
Mounting	Upright or pendant.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	High intensity mode: 18W Low intensity mode: 2W	
Light Output	1500 lumen	
Protection	Reverse polarity 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	

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.



BEAM PATTERNS

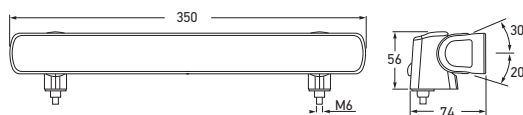


BL350 LED Work Lamp

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.



Dual Intensity:
Switch Control



Part Number	1GJ 958 040-551	CLOSE RANGE
	1GJ 958 040-601	LONG RANGE
	1GJ 958 040-501	FLOOD
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	CE 	

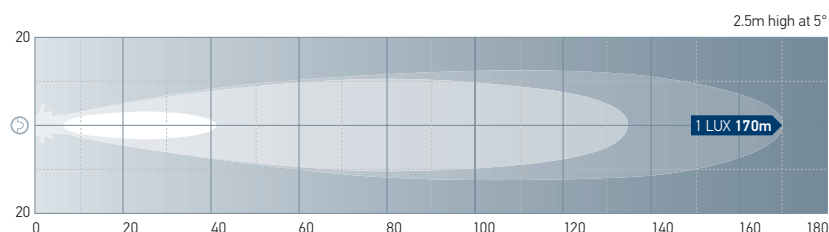


Single plastic bracket - disassembled view

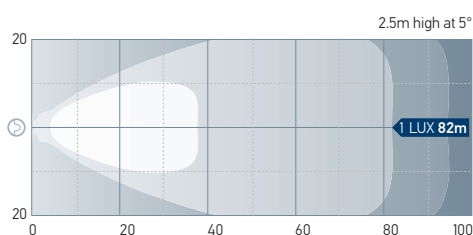
Mounting brackets allow rotation of work lamp

BEAM PATTERNS

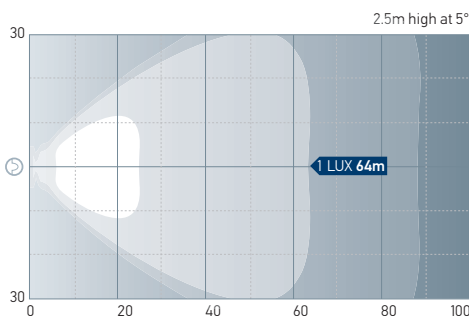
BL350 - Long Range

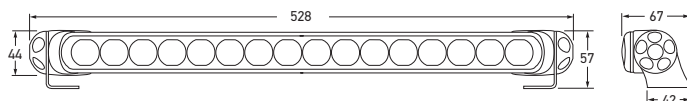


BL350 - Close Range



BL350 - Flood





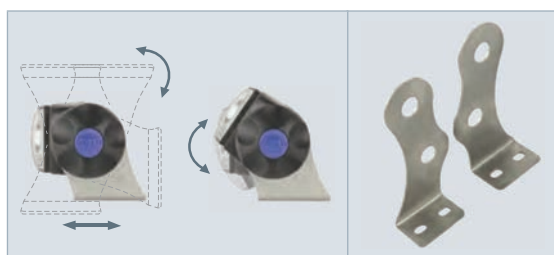
Part Number	1599HD (Close Range and Long Range)	COMBI
Mounting	Upright or pendant.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	Combined: 36W Close/Long Range: 18W/18W	
Maximum Luminous Intensity	77,000 candela	
Actual Light Output	2200 lumen	
Protection	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	8032 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 - Protective cover	
Compliance		

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.

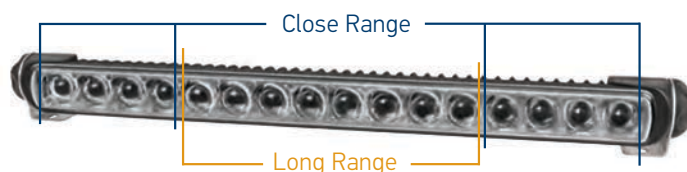
Only 1kg of weight means less stress on mounting locations, the low profile design will not restrict cooling airflow when fitted to the front of a vehicle - which can be a problem with larger lights. Don't be fooled by its size though, this light bar certainly punches above its weight with its long distance 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 for easy installation and flexibility for 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.



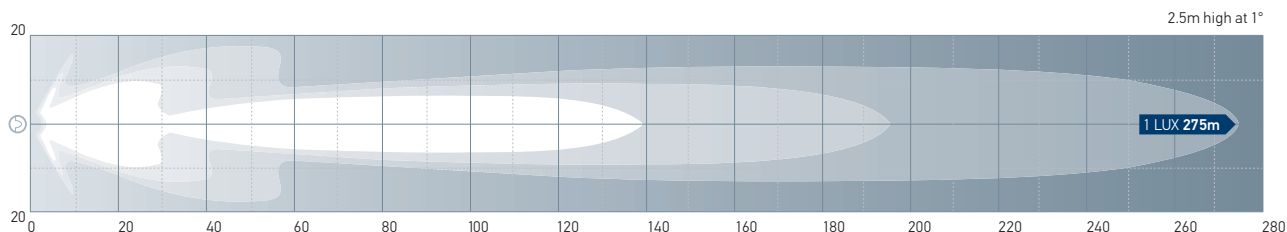
Mounting brackets can be positioned to suit most vehicle installations.

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

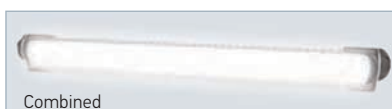
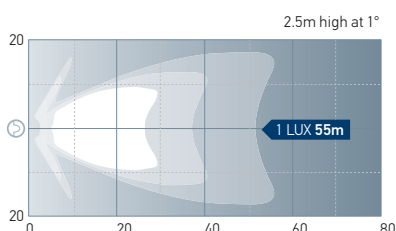


BEAM PATTERNS

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



Combi Light Bar 470 - Close Range



Combined



Long Range



Close Range

NOTE:

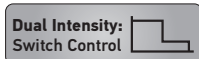
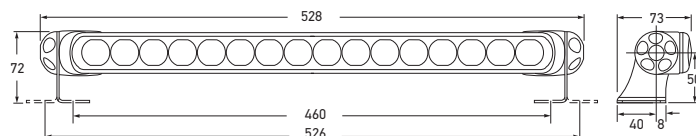
A work lamp must be switched independently of headlamps when mounted on a vehicle.

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 for easy installation and flexibility for 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.



Part Number	1GJ 958 130-621	CLOSE RANGE
	1GJ 958 130-651	LONG 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	CE	



P/N 1GJ 958 130-621
Close Range



P/N 1GJ 958 130-651
Long Range

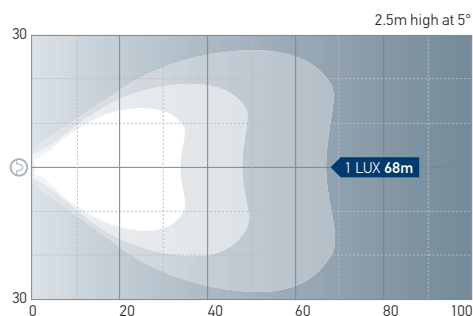


8HG 958 128-811
HD double mount
stainless steel feet

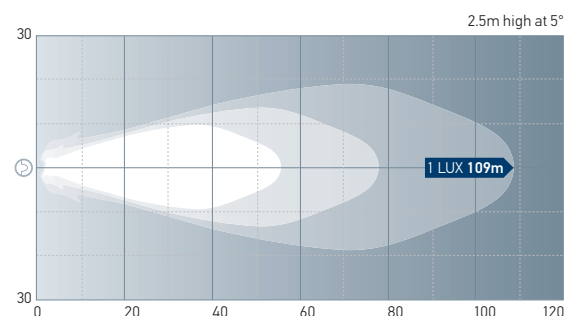
HD stainless steel mounting
brackets allow 360° rotation
of work lamp.

BEAM PATTERNS

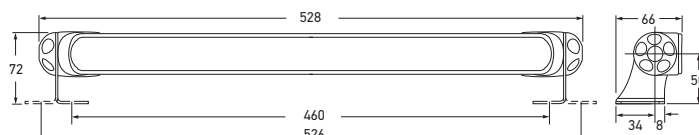
BL470 - Close Range



BL470 - Long Range



WORK LAMPS



Part Number	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	CE	

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.



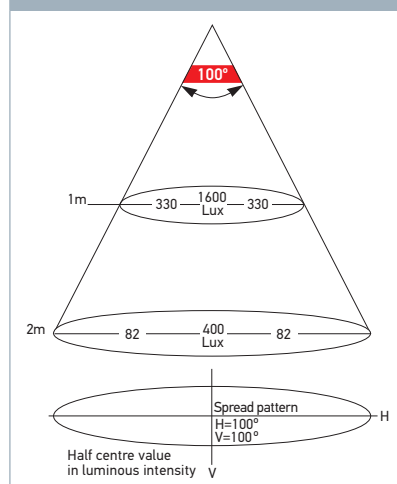
HD stainless steel mounting brackets allow 360° rotation of work lamp.

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



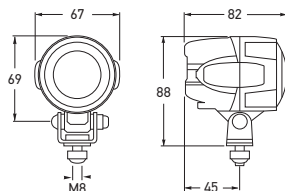
ILLUMINATION CHART

BL470 - Diffuse Flood



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.

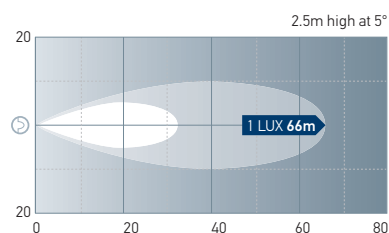
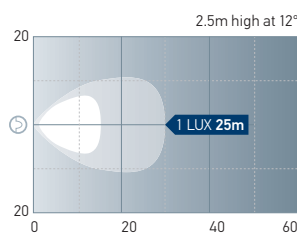


Part Number	1560	CLOSE RANGE
	1560-LR	LONG RANGE
Mounting	Upright.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	15W	
Actual Light Output	800 lumen	
Protection	Reverse polarity protection. IP 6K8 (Protection against dust and prolonged water immersion) 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	9.1557.05	Plug and lead 0.75mm²
Compliance	E ECE R10	

BEAM PATTERNS

Module 50 - Close Range

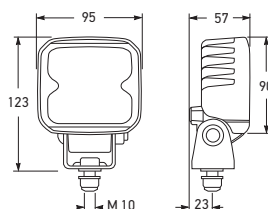
Module 50 - Long Range



P/N 1560-LR

Q90 Compact LED Work Lamp

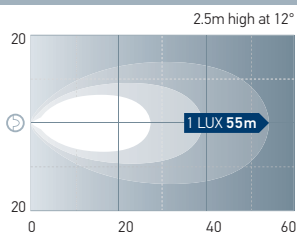
The Q90C LED is a robust LED work lamp in a universal, attractive design. The innovative thermally conductive synthetic material housing also features cooling fins which ensure the required heat dissipation from the 4 high-power LEDs. The Q90C LED offers the advantage of complete corrosion resistance.



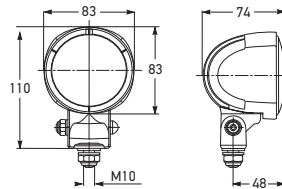
Part Number	1563C	CLOSE RANGE
Mounting	Upright or pendant.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	16W	
Actual Light Output	1200 lumen	
Protection	Reverse polarity protection. IP 6K7 (Protection against dust and temporary water immersion) IP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

BEAM PATTERN

Q90 - Close Range



WORK LAMPS



Part Number	1547-LED	CLOSE RANGE
Mounting	Upright or pendant.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
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 2m of sheathed cable.	
Compliance	(E) CE	

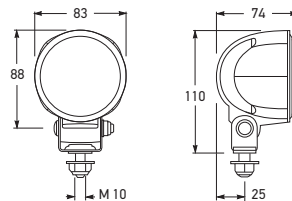
Part Number	CLOSE RANGE LED WORK LAMP - EXTENDED VOLTAGE	
	1547-LEDEV	CLOSE RANGE
Voltage	Multivolt™ for optimum brightness at input voltages from 10 to 100 volts.	
Actual Light Output	600 lumen	
Other specifications as per P/N 1547-LED		

M70 LED Work Lamp - Close Range

M70 LED Multivolt™ work lamp features 4 high performance white LEDs providing consistent close range illumination and lamp protection with 12 or 24V systems. High-sheen metallised Free-Form (FF) reflector and clear glass lens. Housed in an impact resistant aluminium die-cast housing, fully sealed for an ultra long service life in demanding high vibration environments.



WORK LAMPS



Part Number	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 2m of sheathed twin core cable.	
Compliance	(E) ECE R10	

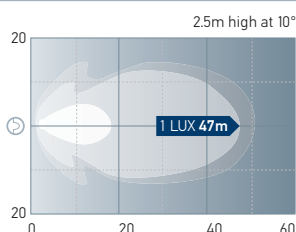
Module 70 LED Gen IV Work Lamp

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.

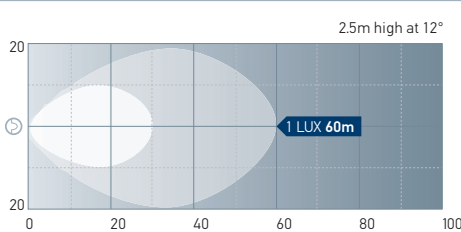


BEAM PATTERNS

M70 - Close Range

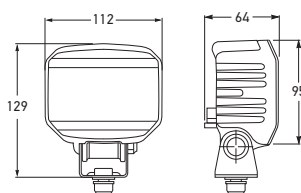


M70 Gen IV - Close Range



Power Beam 1500 LED Work Lamp

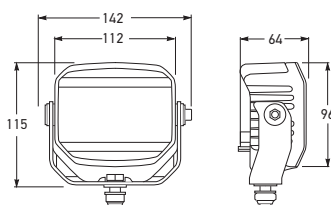
Premium LED work lamp with aluminium housing. Light output rated at 1300 lumen.



Part Number	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	9.1557.05	Plug and lead 0.75mm²
Compliance	(E) ECE R10	

Power Beam 1500 LED Work Lamp - Heavy Duty

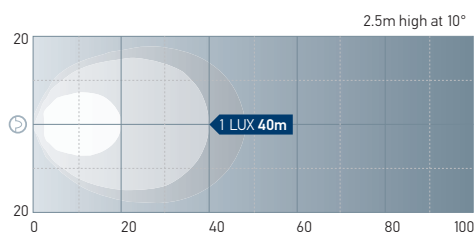
Premium heavy duty LED work lamp with aluminium housing. Light output rated at 1300 lumen.



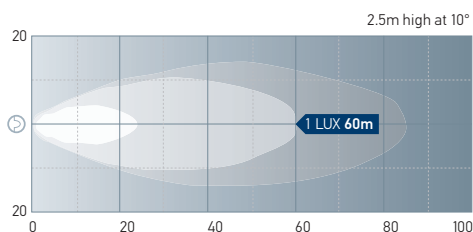
Part Number	1557-HD	CLOSE RANGE
	1557-HDLR	LONG RANGE
Mounting	Upright or pendant.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	22W	
Actual Light Output	1300 lumen	
Protection	Reverse polarity protection. IP 6K7 (Protection against dust and temporary 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	9.1557.05	Plug and lead 0.75mm²
Compliance	(E) ECE R10	

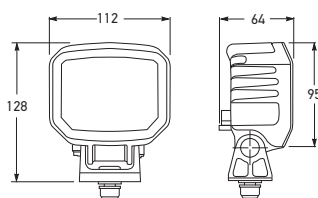
BEAM PATTERNS

Power Beam 1500 - Close Range



Power Beam 1500 - Long Range





Power Beam 1800 LED Work Lamp

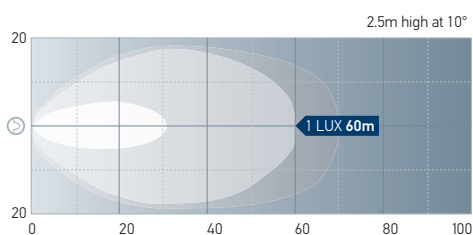
Premium LED work lamp with a light output rated at 1850 lumen. RFCommSafe™ ensures no interference with radios and other electronic components.



Part Number	12 VOLT	24 VOLT	
	1561-12V	1561-24V	CLOSE RANGE
Mounting	Upright or pendant.		
Power Consumption	36W		
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)		
Cable Length	Pre-wired with 2m of sheathed twin core cable and DT plug.		
Spare Part	9.1557.05	Plug and lead 0.75mm ²	
Compliance	Ⓔ ECE R10		

BEAM PATTERNS

Power Beam 1800 - Close Range



DISCOVER ELIVER

The unique online comparison tool for light distribution.



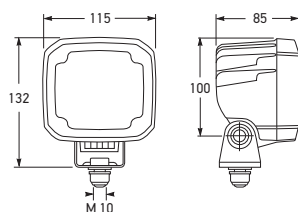
With ELIVER, you can easily compare work lamps online – and get a realistic idea of the light yield.

Get the right light for your everyday work.

www.hella.com/eliver

Ultra Beam LED Work Lamp

The Ultra Beam LED offers high light output in a practical design, meaning that it can be used anywhere thanks to its compact dimensions. The light output is a powerful 2,200 lumens with a power consumption of only 30W. The light is distributed by a specially developed multifaceted reflector, thus ensuring homogeneous illumination.



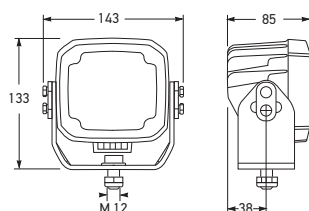
P/N 1562-BL

P/N 1562-LR

Part Number	1562	CLOSE RANGE
	1562-BL (Blister pack)	
	1562-LR	LONG RANGE
Mounting	Upright or pendant.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	30W	
Actual Light Output	2200 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	9.1557.05	Plug and lead 0.75mm²
Compliance	E ECE R10	

Ultra Beam LED Work Lamp - Heavy Duty

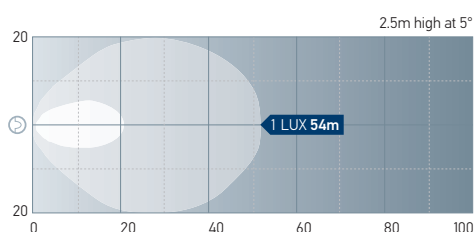
The Ultra Beam LED work lamp - heavy duty offers all the outstanding properties of the 1562 with an additional heavy duty bracket suitable for heavy duty use.



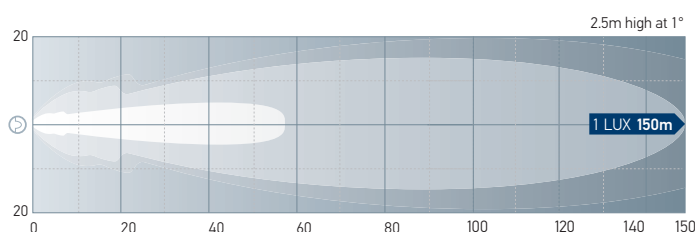
Part Number	1562-HD	CLOSE RANGE
Other specifications as per P/N 1562		

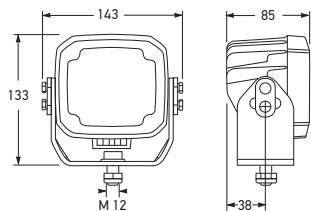
BEAM PATTERNS

Ultra Beam - Close Range



Ultra Beam - Long Range





Ultra Beam Gen II LED Work Lamp

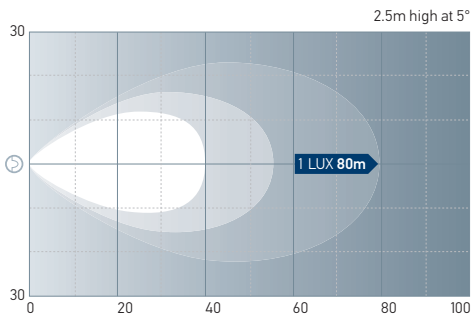
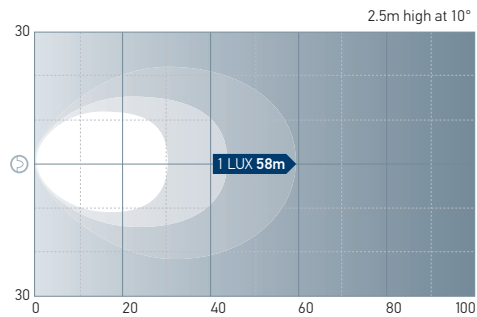
The Ultra Beam LED Gen II can replace even the Xenon work lights without any problems. The light is distributed by a specially developed multifaceted reflector, thus ensuring homogeneous illumination. Despite the enormous light yield, the Ultra Beam LED Gen II is efficient, using just 56 watts.

Part Number	1566-HD	CLOSE RANGE
	1566-HDLR	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	9.1557.05	Plug and lead 0.75mm²
Compliance	(E) ECE R10	



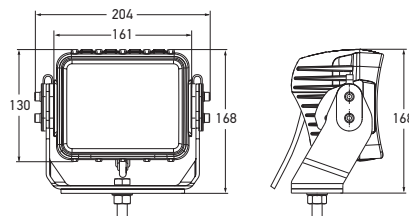
P/N 1566-HDLR

BEAM PATTERNS	
Ultra Beam Gen II - Close Range	Ultra Beam Gen II - Long Range



AS3000 RFCommSafe™ LED Work Lamp - Heavy Duty

The AS3000 is a high output, compact and versatile heavy duty work lamp for use on mining machinery developed with RFCommSafe™ Technology. A multi-adjustable bracket ensures accurate, stable aiming in high vibration environments. Option of three light patterns, long range, close range or flood. 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.



Dual Intensity:
Switch Control



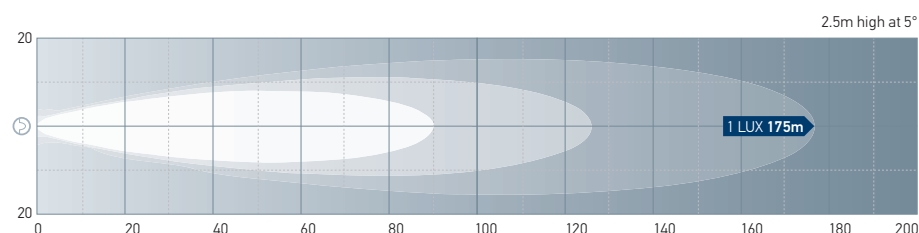
Part Number	12 VOLT		24 VOLT	
	1GA 958 060-401		1GA 958 060-011	CLOSE RANGE
	1GA 958 060-501		1GA 958 060-111	LONG RANGE
	1GA 958 060-601		1GA 958 060-201	FLOOD
Mounting	Upright or pendant.			
Power Consumption	12V	24V		
	High intensity mode:	45W	45W	
	Low intensity mode:	20W	12W	
Actual Light Output	3000 lumen			
Protection	Reverse polarity and voltage spike protection. IP 6K7 (Protection against 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				



P/N 1GA 958 060-501
Long Range

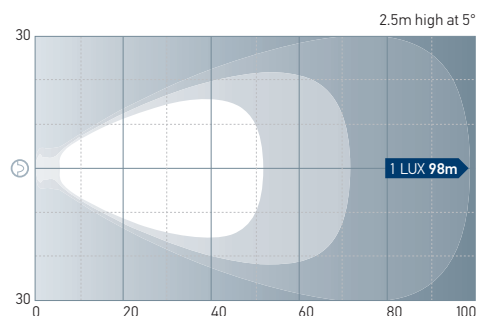
BEAM PATTERNS

AS3000 RFCommSafe™ - Long Range



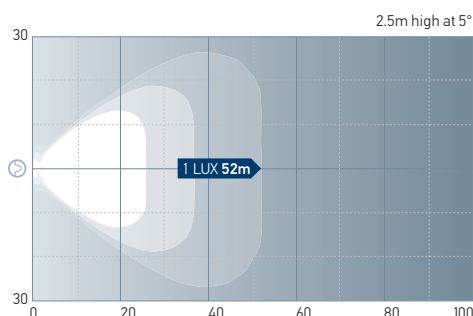
P/N 1GA 958 060-401
Close Range

AS3000 RFCommSafe™ - Close Range



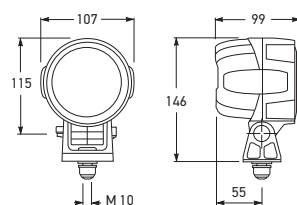
P/N 1GA 958 060-601
Flood

AS3000 RFCommSafe™ - Flood



Rear view

WORK LAMPS



Part Number	1564	CLOSE RANGE
	1564-LR	LONG RANGE
Mounting	Upright or pendant.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	36W	
Actual Light Output	3400 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 2.0m of sheathed cable with DT plug.	
Spare Part	9.1557.05	Plug and lead 0.75mm ²
Compliance	(E) ECE R10	

Module 90 LED Work Lamp

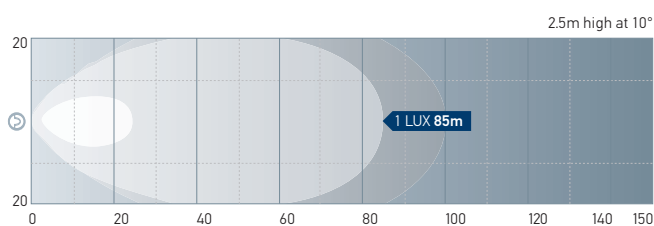
The Module 90 LED is a robust work lamp in a universal, attractive design. The black aluminium housing features cooling fins which ensure the required heat dissipation from the 4 high-power LEDs. In addition, temperature sensors protect the work lamp from overheating. The light is distributed by a specially developed, multifaceted reflector, thus ensuring homogeneous illumination.



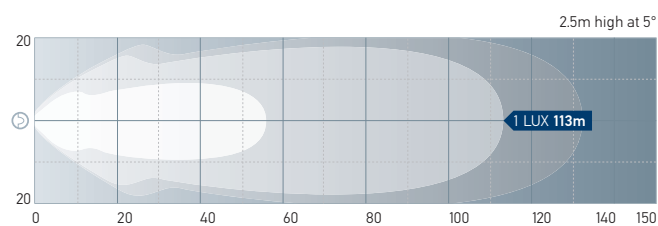
P/N 1564-LR

BEAM PATTERN

Module 90 - Close Range



Module 90 - Long Range

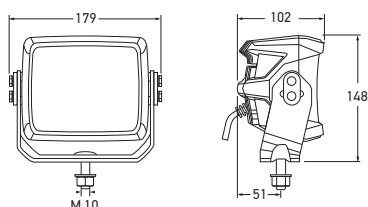


RokLUME 380 LED Work Lamp - Close Range

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.



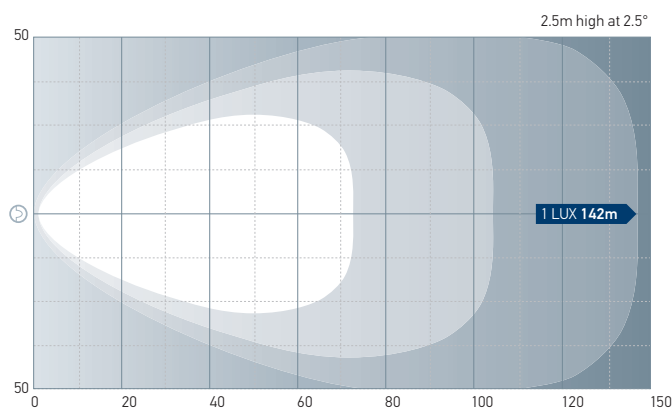
RokLUME 380
- Back view



Part Number	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	

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.



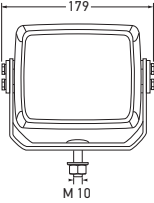
Voltage

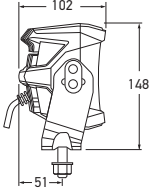
24V


HD MOUNT

Bracket

STAINLESS STEEL

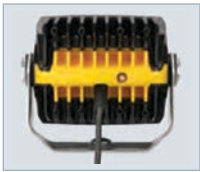




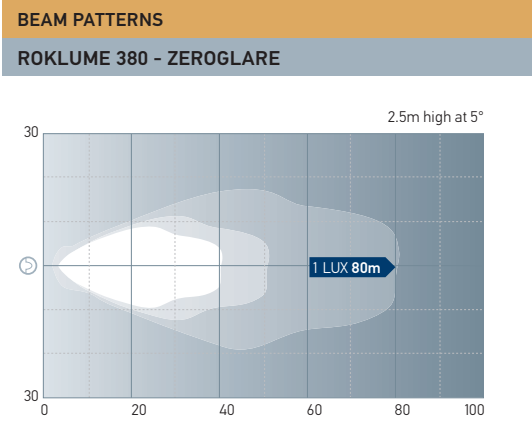
Part Number	1GA 996 197-001	CLOSE RANGE
Mounting	Upright or pendant.	
Voltage	20-32V	
Power Consumption	84W	
Protection	Reverse polarity and voltage spike protection. IP 6K8 (Protection against dust and prolonged water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Housing	NanoSafe Technology: 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



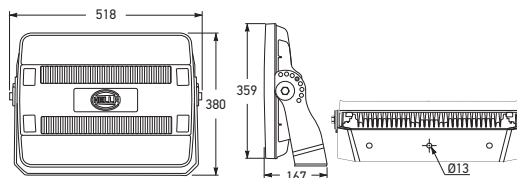
ZEROGLARE Technology

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.



HypaLUME 48V DC RFCommSafe™ LED Flood Light - Heavy Duty

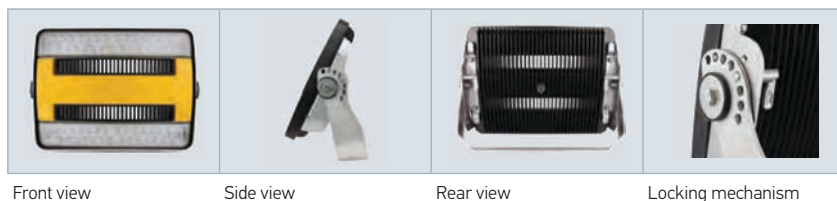
The 48V DC RFCommSafe™ HypaLUME has been designed for applications where high output lighting in extreme environments is required. The lamp produces a net output of 28,000 lumens whilst only consuming 300W. The LEDs have a colour temperature of 5700K to provide a near daylight work environment that is optimal for fatigue avoidance and high alertness. The LED driver electronics ensure light output remains stable over a wide range of voltage variations. The built-in soft start feature eliminates a high in-rush current at start up. 48V DC HypaLUME is designed to RFCommSafe™, ultra low emission (EMC) requirements surpassing International Standards by a wide margin.



Dimmable:
Internal Dimmer



Part Number	1GJ 011 872-221	CLOSE RANGE
	1GJ 011 872-231	LONG RANGE
	1GJ 011 872-241	EXTRA WIDE
Mounting	Upright or pendant.	
Voltage	Optimum brightness at input voltages from 46 to 53 volts.	
Power Consumption	300W max. (6.25 @ 48V DC)	
Actual Light Output	28,000 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	
Soft Start (PIN 3)	Reduces start-up inrush ramp-up (100% brightness in 4 seconds)	
Connection	4 Pin Deutsch plug	
Lens Material	High impact and chemical resistant Grilamid® lens	
Accessory	8KB 958 304-001 1m of sheathed cable - 4 Pin Deutsch plug	
Compliance	CE FC	



Front view

Side view

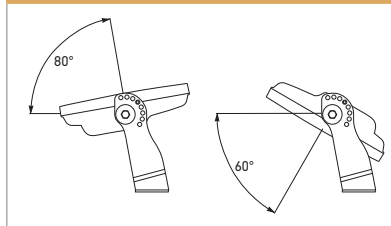
Rear view

Locking mechanism



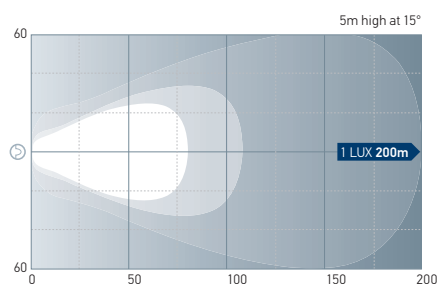
Accessory Cable - P/N 8KB 958 304-001

Lamp can be rotated 140°

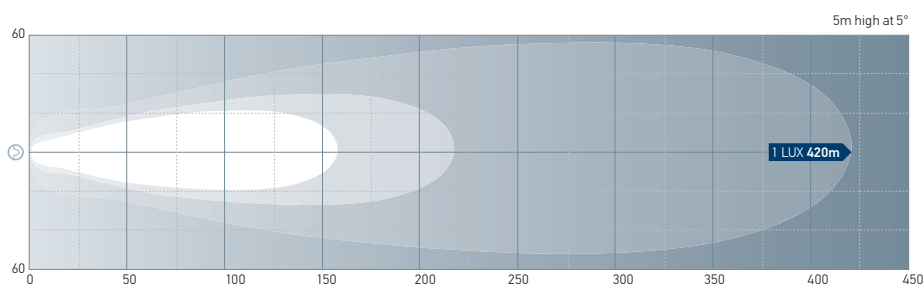


BEAM PATTERNS

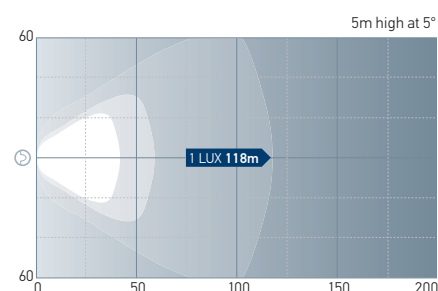
HypaLUME 48V DC - Close Range

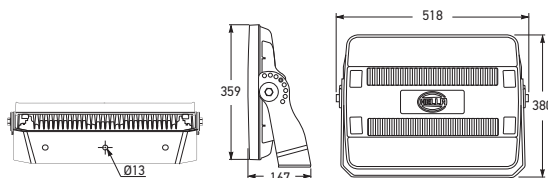


HypaLUME 48V DC - Long Range

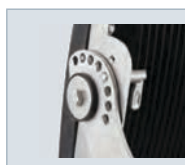


HypaLUME 48V DC - Extra Wide





Part Number	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		



Locking mechanism



Rear view



Side view



Front View

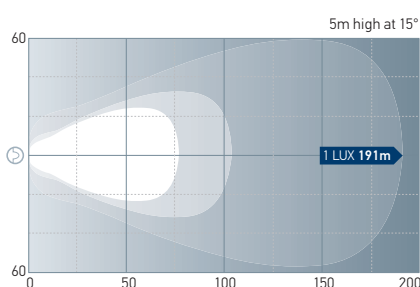
HypaLUME 24/48V DC LED Flood Light - Heavy Duty

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.

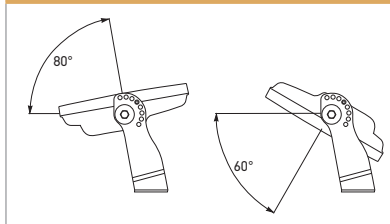


BEAM PATTERNS

HypaLUME 24/48V DC - Close Range

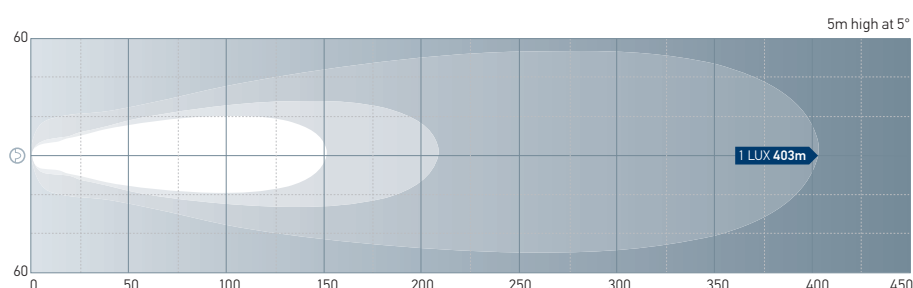


Lamp can be rotated 140°

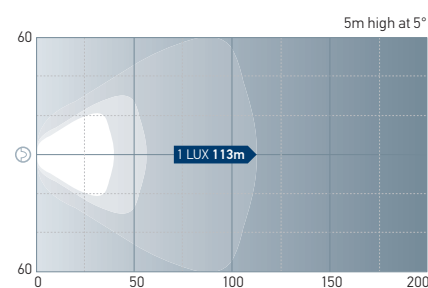


Supplied with 1.8m of easy plug-in sheathed cable

HypaLUME 24/48V DC - Long Range

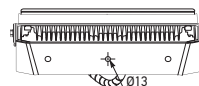
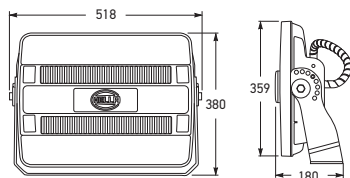


HypaLUME 24/48V DC - Extra Wide



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.



Part Number	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	



Front view



Side view



Rear view

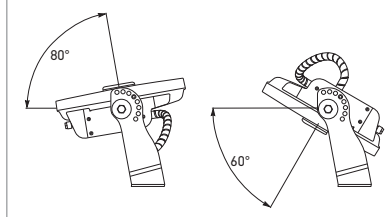


Locking mechanism



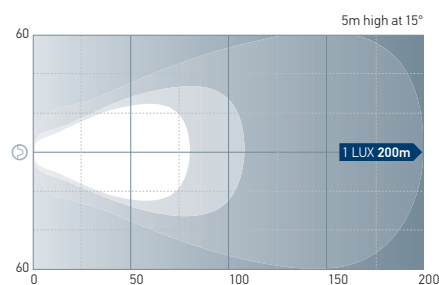
Supplied with 2.0m of easy plug-in sheathed cable.

Lamp can be rotated 140°

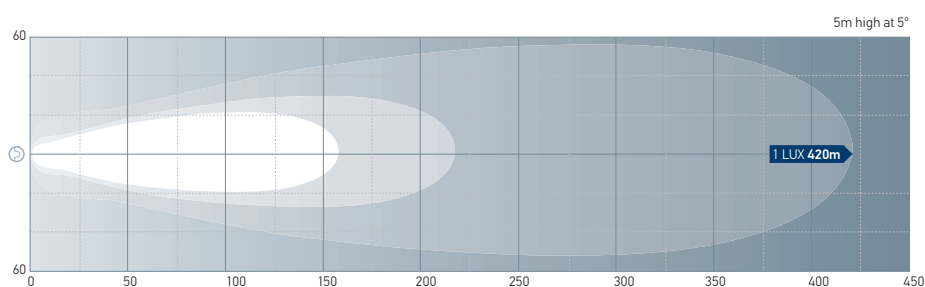


BEAM PATTERNS

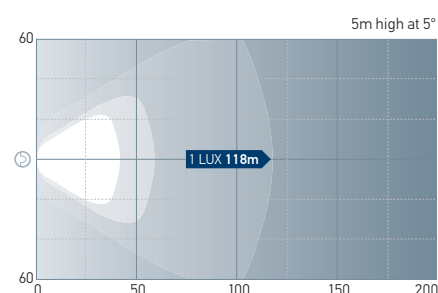
HypaLUME 110/130V AC - Close Range



HypaLUME 110/130V AC - Long Range



HypaLUME 110/130V AC - Extra Wide



WORK LAMPS

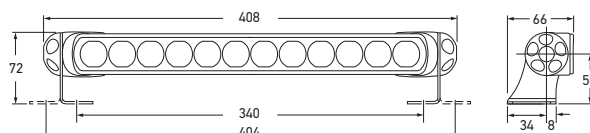
Dimmable: PWM 10-100%

Dimmable: Analog DC Input

Lens Material
GMD

Housing
CORROSION PROOF

Bracket
STAINLESS STEEL



Part Number	BLACK BASE		WHITE BASE	
	1GJ 958 084-101		1GJ 958 084-111	CLOSE RANGE
	1GJ 958 084-201		1GJ 958 084-211	LONG RANGE
	1GJ 958 084-001		1GJ 958 084-011	FLOOD
Mounting	Upright or pendant.			
Voltage	90 to 305V AC			
Power Consumption	Maximum 26W Lamp and LED Driver 0.10A @ 240V AC			
Actual Light Output	2200 lumen			
Operating Temperature	LED Driver: -35 to 70°C LED Lamp: -40 to 40°C			
LED Driver Protection	Short circuit, over current, over voltage, over temperature. IP 67 (Protection against dust and temporary water immersion)			
LED Lamp Protection	IP 66 (Protection against dust and high pressure water jets) 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			
Spare Parts	8HG 958 128-811 HD double mount stainless steel feet (One pair)			
Compliance	AS/NZS 60598.2.1			

BL350 LED Work Lamp - 110/230V AC

The lamp features a revolutionary ceramic based, non corrosive, thermally conductive housing and a high performance impact resistance Grilamid® lens. With those properties, the work lamp is ideal for rough outdoor applications, e.g. pool areas, seaside applications, alley ways, car parks etc.

The waterproof, maintenance free and hermetically sealed lamp is also dimmable, either by 0-10V DC dimming control, resistance or pulse width modulation (not supplied). A flexible, adjustable mounting system ensures easy installation to suit a wide range of applications.

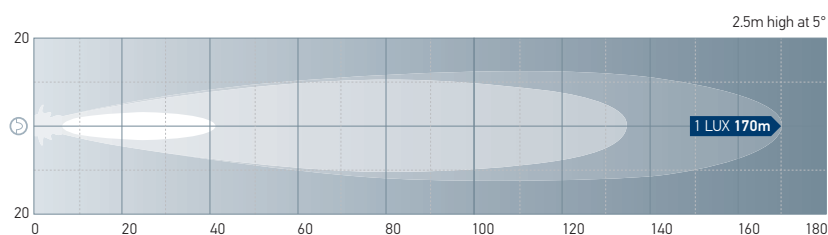


P/N 1GJ 958 084-011 - White Housing

WORK LAMPS

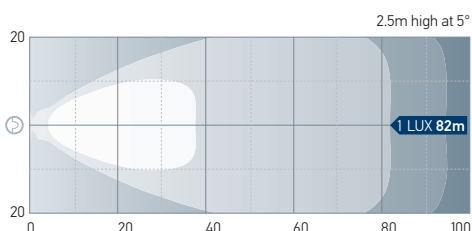
BEAM PATTERNS

BL350 110/230V AC - Long Range

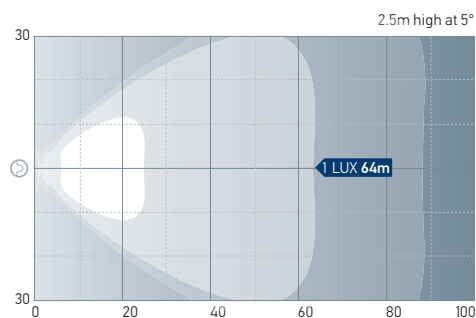


HD stainless steel mounting brackets allow 360° rotation of work lamp.

BL350 110/230V AC - Close Range



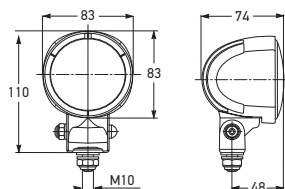
BL350 110/230V AC - Flood



LED Driver

M70 LED Reversing Lamp

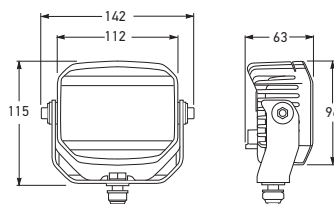
M70 LED Multivolt™ reversing lamp features 4 high performance white LEDs providing consistent close range illumination and lamp protection with 12 or 24V systems. Housed in an impact resistant aluminium die-cast housing, fully sealed for an ultra long service life in demanding high vibration environments.



Part Number	1547-RE		
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 2m of sheathed cable.		
Compliance	Ⓔ 3902	ECE R10	ECE R23

Power Beam 1000 LED Reversing Lamp - Heavy Duty

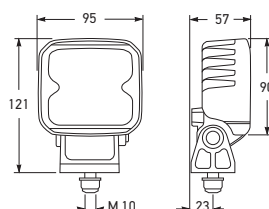
LED reversing lamp features 6 LEDs providing consistent illumination with 12 or 24V systems. Reversing lights in particular are exposed to the rigors of water, salts and stones. CoroSafe technology offers the new Power Beam 1000 reversing light optimum protection from corrosion. Its grey powder-coated aluminium housing is treated with special chemical processes so that it can withstand the toughest conditions.



Part Number	1551-RE		
Mounting	Upright or pendant. Lamp inclination of 25° downwards.		
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.		
Power Consumption	14W		
Light Output	850 lumen		
Protection	Reverse polarity and Transient Voltage Suppressor (TVS). IP 6K8 (Protection against dust and prolonged water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)		
Cable Length	Supplied with 2.5m of sheathed twin core cable and DT plug.		
Spare Part	9.1549.05	Plug and lead	
Compliance	Ⓔ 3249	ECE R10	ECE R23

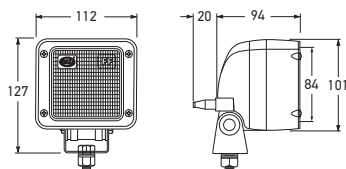
Q90 Compact LED Reversing Lamp

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.



Part Number	1563C-RE		
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 P/N 1547-RE		
Cable Length	Supplied with 500mm of cable		
Compliance	Ⓔ ECE R10	Ⓔ 4576	ECE R23

WORK LAMPS



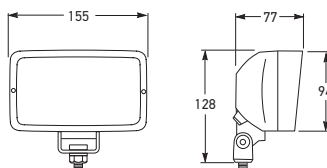
Part Number	1533	12 VOLT
	1533-24V	24 VOLT
	1533-DT24V (With Deutsch DT plug)	
Mounting	Upright, side or pendant mounting through swivelling the lamp unit 90°. U-shape four point fixing bracket with M10 screw for mounting on horizontal and vertical surfaces.	
Power Consumption	12V 55W/35W	24V 70W
Bulbs to Suit	12V YC1255	24V YC2470
Protection	IP 6K4K (Protection against dust and water splash) IP X9K (Protection against high-pressure jets)	
Spare Parts	9.1533.01 9.1533.05 9.1533.08 9.1530.07 9.1549.05	Insert Plug and lead Pedestal bracket Stainless steel bracket Deutsch plug and 2.5m of sheathed cable (DT)
Not suitable for 100W bulbs.		

Close Range Halogen Work Lamp

Halogen work lamp with Free-Form (FF) reflector for uniform close range illumination. Made of die-cast aluminium. Glass lens bonded with reflector to be dust and moisture-proof. Shock-proof plastic housing. External wiring connection. DT version with 2 pin Deutsch rear plug.



WORK LAMPS



Part Number	1519	12 VOLT
	1519-24V	24 VOLT
Mounting	Upright or pendant.	
Power Consumption	12V - 55W 24V - 70W	
Bulbs to Suit	12V YC1255 24V YC2470	
Protection	IP 5K4K (Protection against dust and water splash)	
Spare Part	9.2859.02	FF insert
Not suitable for 100W bulbs.		

Close Range Halogen Work Lamp

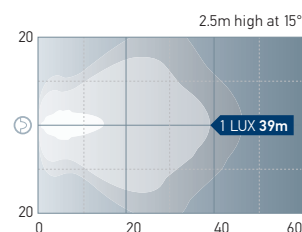
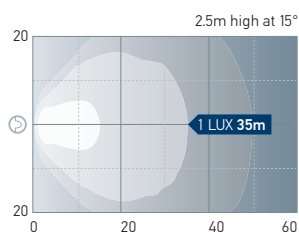
Halogen work lamp with black fibre reinforced ABS housing and Free-Form (FF) reflector for close range, uniform illumination.



BEAM PATTERNS

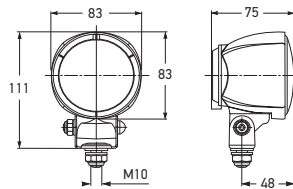
P/N 1533 - Close Range Halogen

P/N 1519 - Close Range Halogen



Close Range Halogen Work Lamp

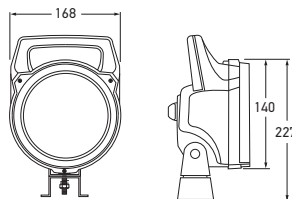
Compact Halogen work lamp with a Free-Form (FF) brilliant round reflector. The non-patterned lens reduces light scatter and provides close range uniform illumination of the work area. Reflector made from die-cast aluminium. The lamp's ingenious bracket design allows it to be swivelled 360°, as well as the normal lateral adjustment.



Part Number	1547	12 VOLT
	1547-24V	24 VOLT
Mounting	P/Ns 1547 and 1547-24V suitable for upright mounting with M10 fixing screw.	
Power Consumption	12V - 55W 24V - 70W	
Bulbs to Suit	12V 24V	YC1255 YC2470
Protection	IP 5K9K (Protection against dust and high-pressure/steam jet cleaning)	
Not suitable for 100W bulbs.		

Long Range Halogen Work Lamp

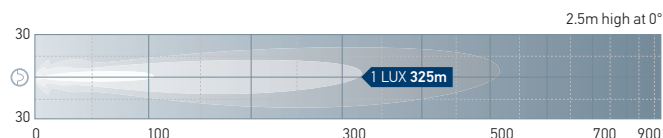
Work lamp with handle and switch. Black fibre-glass reinforced plastic housing with extended edge to protect lens.



Part Number	1512	12 VOLT
Mounting	Full swivel four point fixing bracket for mounting on flat or slightly curved surfaces	
Power Consumption	55W	
Bulbs to Suit	YC1255	
Protection	IP 5K4K (Protection against dust and water splash)	
Spare Parts	9.1511.01 9.1511.06 9.1511.08 9.1512.01 9.1513.01	Close range insert On-off rotary switch Mounting bracket assembly Long range insert Combination range insert
Not suitable for 100W bulbs.		

BEAM PATTERN

P/N 1512 - Long Range Halogen



WORK LAMPS

Stainless Steel Bracket Assembly

Upper and lower stainless steel bracket and lamp mounting bolt. Suitable for 42mm wide lamp mounts.



Part Number	STAINLESS STEEL BRACKET ASSEMBLY
	9.1530.07
To Suit	42mm wide lamp mount.

Ultra Beam Pipe Socket Base

Suitable for applications that require a removable work lamp.



Part Number	ULTRA BEAM PIPE SOCKET BASE
	9.1531.08
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 P/Ns 8007, 8007FM, 8007RA and 8008.
To Suit	42mm wide lamp mount.

Part Number	PEDESTAL BRACKET
	9.1533.08
Pedestal swivel bracket to suit most work lamps.	



Part Number	PLASTIC BRACKET
	9.1564.08
To Suit	42mm wide lamp mount.



Part Number	PLUG AND LEAD
	9.1533.05 (AMP - 2 pin plug and 150mm cable)
To Suit	P/N 1533



Part Number	SPIRAL CABLE COMPLETE PLUG
	9.1520.07 (Plug and 2m extendable sheathed cable)
To Suit	P/Ns 1520, 1521, 1522, 1523, 1524 and 1525.



Part Number	2 PIN DEUTSCH PLUG AND LEAD TO SUIT LED AND HID WORK LAMPS	
	9.1557.05 (2m of sheathed cable)	0.75mm ²
	9.1549.05 (2.5m of sheathed cable)	1.25mm ²
To Suit	LED and HID work lamp P/Ns 1551, 1551-RE, 1556, 1557 and 1559.	



Emergency Lighting and Signal Warning Lamps

A comprehensive range of products that improve work place safety and meet the requirements of a modern Emergency Response Fleet.



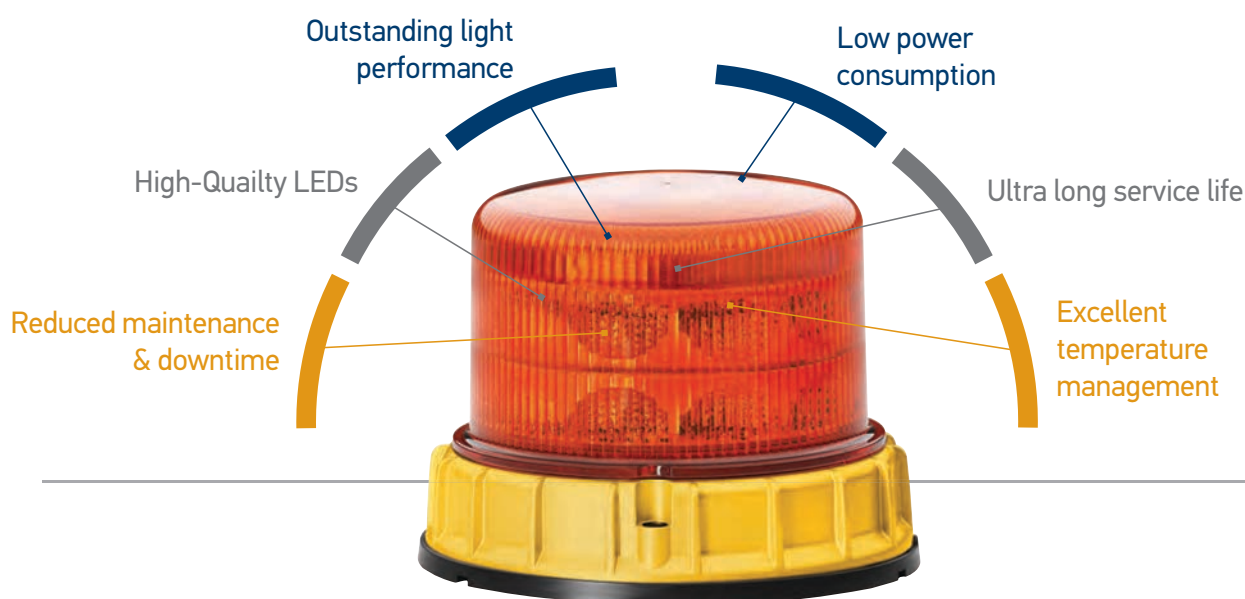
Contents

Emergency Lighting and Signal Warning Lamps

K-LED Beacons	188
LED Rotating/Flashing Beacons	189
RotaLED Beacons	190-191
KL7000LED Beacons	192
LED Highlighter Light Bars	193
LED Multi-flash Signal Lamps	194
DuraLED® Multi-flash Signal Lamps	195
LED Signal Warning Lamps	196-197
Revolving Beacons KL 700	198
Revolving Beacons KL 7000	199
Revolving Beacons Rotaflex/Rotafix	200
Strobe Beacon Firebolt Plus	201
Pipe Mount Accessories	202
Revolving Beacon Spare Parts	203

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.



LED is the most desired light technology by emergency services due to the many features it offers: ultra-long service life, low power consumption, outstanding light performance, reduced downtime and maintenance requirements.

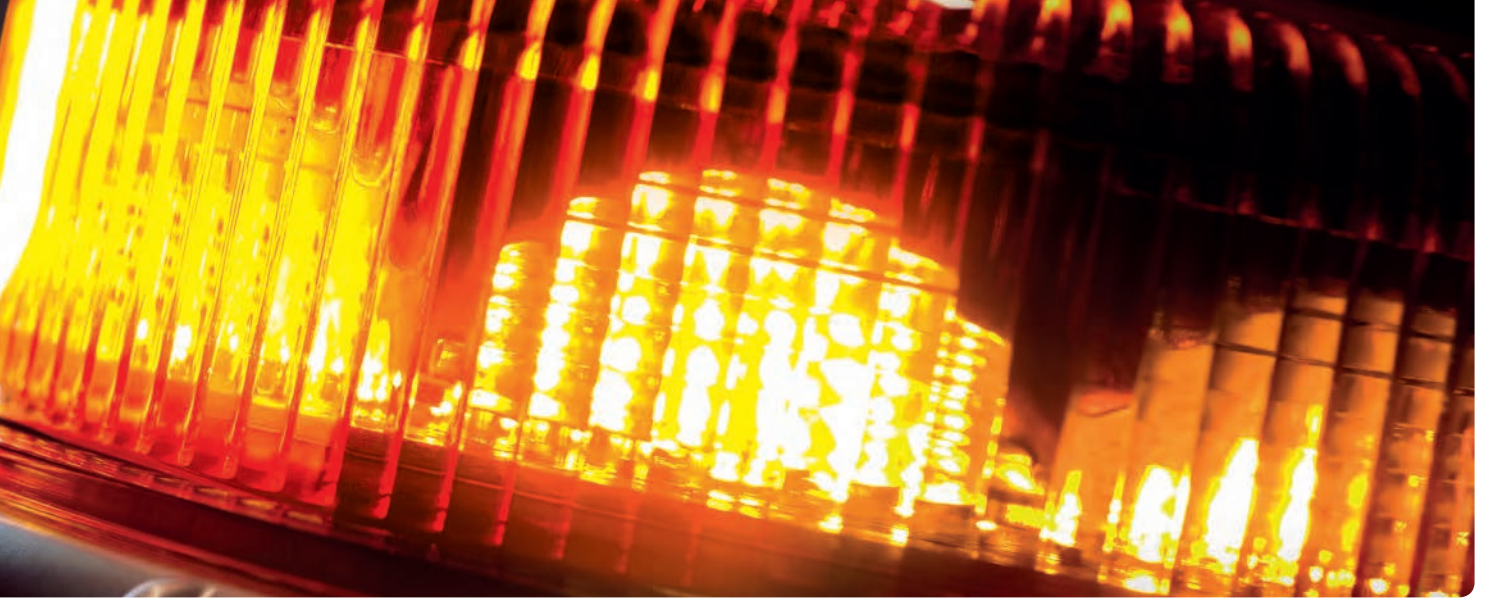
Quality materials and robust construction are combined to handle demanding and harsh environments. High-quality components, advanced technology and no moving parts offer extremely long design life. LEDs are solid state components and thus demonstrate a considerable higher vibration resistance compared 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.

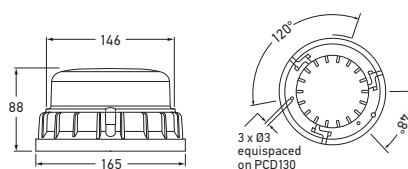


K-LED 2 Beacon - Fixed Mount

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.



P/N 1616

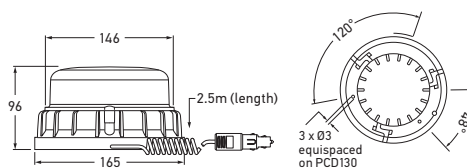


Part Number	1614	AMBER
	1616	RED
Mounting	Fixed mounting on horizontal surfaces	
Voltage	Multivolt™ for optimum brightness at input voltages from 10 to 32 volts	
Power Consumption	30W max.	
Protection	Reverse polarity and Transient Spike Circuit protection IP 67 (Protection against dust and temporary 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.



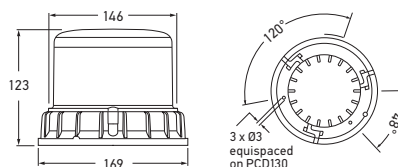
Part Number	1614-MAG	AMBER
Mounting	Magnetic mounting on horizontal surfaces	
Voltage	Multivolt™ for optimum brightness at input voltages from 10 to 32 volts	
Power Consumption	30W max.	
Protection	Reverse polarity and Transient Spike Circuit protection IP 67 (Protection against dust and temporary water 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.

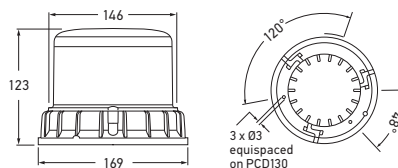
EMERGENCY LIGHTING AND SIGNAL WARNING LAMPS



Part Number	2RL 012 983-001	AMBER
Mounting	Fixed mounting on horizontal surfaces	
Voltage	Multivolt™ for optimum brightness at input voltages from 10 to 30 volts	
Power Consumption	20W max.	
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	Simulated rotation 120rpm (2.0 Hz)	
Cable Length	Pre-wired with 1.5m cable	
RF Suppression	CISPR25 Class 5	
Compliance	ECE R65/00 TA1 ECE R10 SAE J845 Class 1	

LED UltraRAY 2.0 Rotating Beacon

Heavy duty LED beacon 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.



Part Number	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	

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.



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

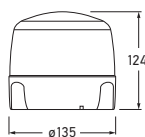
SELECTABLE PATTERN	FLASHING SEQUENCE (FS)
9	Double flash 1.4 Hz SAE
10	Triple flash 1.4 Hz SAE
11	Quad flash 1.45 Hz SAE
12	Rotating signal 1.4 Hz 84rpm SAE
13	Single flash 1.4 Hz SAE (250ms offset to FS8)
14	Double flash 1.4 Hz SAE (250ms offset to FS9)
15	Triple flash 1.4 Hz SAE (250ms offset to FS10)
16	Quad flash 1.4 Hz SAE (250ms offset to FS11)

RotaLED Beacons

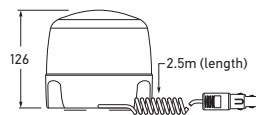
RotaLED Beacon, with the latest LED technology provides an optimum signal image with low power consumption featuring rotating LED light function. The combination of thermal management and optics in one module makes a remarkably compact design possible. Impact and dirt resistant Polycarbonate lens.



P/N 1613




P/N 1611



P/N 1613



Part Number	1611 (Fixed Mount)	AMBER	
	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	P/N 1611: Pre-wired with 120mm cable P/N 1613: Spiral cable extends to 2.5m		
RF Suppression	CISPR25 Class 5		
Compliance	ECE R65/00 TA1		ECE R10

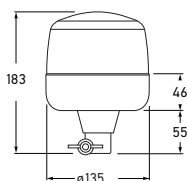


Caution: Mounting of Magnetic Base Revolving Lamps

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.

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.



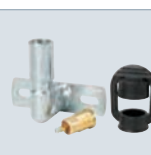
Part Number	1612	AMBER
Mounting	Pipe Mounting. Tubular base incorporates connection plug. Must be used in conjunction with connecting piece P/N 8007, or other HELLA 2-pole beacon mounts.	
Voltage	Multivolt™ for optimum brightness at input voltages from 10 to 32 volts	
Power Consumption	10W	
Protection	Same as P/N 1611 above	
Flash Rate	Simulated rotation 120-133rpm (2.0-2.2 Hz)	
Cable Length	Pre-wired with 120mm cable	
Accessories	8007 2 Pole beacon mount - Pipe 8007FM 2 Pole beacon mount - Flat mount 8007RA 2 Pole beacon mount - Flat angle mount 8008 2 Pole beacon mount - Threaded mount	
RF Suppression	CISPR25 Class 5	
Compliance	ECE R65/00 TA1 ECE R10	



P/N 8007



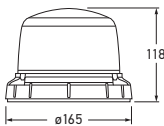
P/N 8007FM



P/N 8007RA



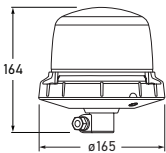
P/N 8008



Part Number	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 2

RotaLED Compact Beacon
- Fixed 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.



Part Number	2XD 013 979-011	AMBER
Mounting	Tubular base incorporates connection plug. Must be used in conjunction with P/N 8007: 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 P/N 1611 above	
Flash Rate	124 +/- 10 per minute, double flash.	
Cable Length	Pre-wired with 150mm cable	
Accessories	8007 2 Pole beacon mount - Pipe 8007FM 2 Pole beacon mount - Flat mount 8007RA 2 Pole beacon mount - Flat angle mount 8008 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.

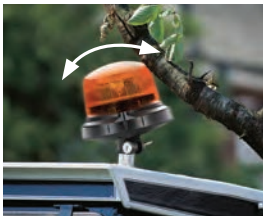


P/N 8007

P/N 8007FM

P/N 8007RA

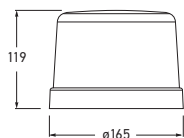
P/N 8008




Extremely flexible pipe mount
rubber base mechanism

KL7000LED Beacon - Fixed Mount

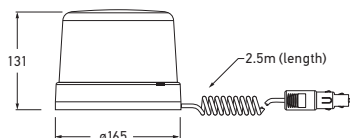
KL7000LED Beacon, with the latest LED technology provides an optimum signal image with low power consumption featuring rotating LED light function. The combination of thermal management and optics in one module makes a remarkably compact design possible. Impact and dirt resistant PMMA lens.




Part Number	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 

KL7000LED Beacon - Magnetic Mount

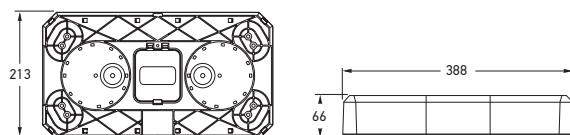
KL7000LED Beacon, with the latest LED technology provides an optimum signal image with low power consumption featuring rotating LED light function. The combination of thermal management and optics in one module makes a remarkably compact design possible. Impact and dirt resistant PMMA lens.



Part Number	1610	AMBER
Mounting	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	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.



Part Number	12 VOLT	24 VOLT	
	454201A	454201A-24V	AMBER
	454201R	454201R-24V	RED
	454201B		BLUE
Part Number	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 Bars

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 P/N 454205A) can be wired together, or to other devices for a completely synchronized warning system.



P/N 454201R

P/N 454201B

Part Number	454201AMAG	AMBER
Flash Rate	20 user selectable flash patterns.	
Current Draw	12V - 5.0A max.	
Compliance	SAE J845 Class 1	
HELLA does not recommend the magnetic base version for use on a moving vehicle (see page 188).		

LED Highlighter™ Mini Light Bars - Magnetic Mount 12 Volt

Highlighter™ magnet mount model includes a cigarette lighter plug and built-in ON-OFF switch that makes them simple to install and just as simple to operate. Incorporated into the top of the LED dome is an innovative magnet select feature that enables users to quickly and easily select from more than 20 flash patterns using a simple magnet.



Magnet view

Part Number	LENSES (SINGLE)	
	9.454201.05 (Clear)	

LED Highlighter™ Mini Light Bars Accessories

Part Number	MOUNTING KITS/BRACKETS	
	454217 (Mount Riser 52mm)	454218 (Mount Flat 12mm)
	452341 (Magnetic Mount Kit)	9.454201.07 (Highlighter base)



P/N 452341

P/N 9.454201.07



P/N 9.454201.05

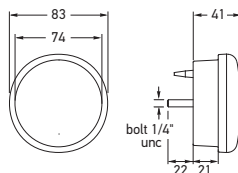


P/N 454217

P/N 454218

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.



P/N 95901145

P/N 95901160

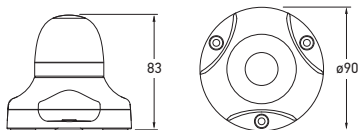
P/N 95901165

Part Number	95901140	RED
	95901145	AMBER
	95901160	BLUE
	95901165	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 84 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.



P/N 98091120

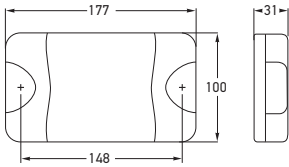
P/N 98091140



P/N 98091160

P/N 98091170

Part Number	98091100	WHITE
	98091120	GREEN
	98091140	RED
	98091160	AMBER
	98091170	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).		



Part Number	95903701	RED
	95903711	AMBER
	95903761	BLUE
	95903781	GREEN
	95903791	WHITE
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 J845 Class 1 (Red and amber versions) ECE R10	
See pages 80 for DuraLED® accessories.		

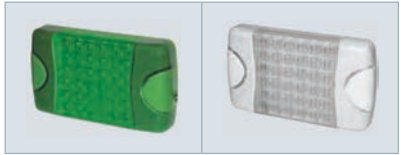
DuraLED® Multi-flash Signal Warning Lamp

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.



P/N 95903711

P/N 95903761

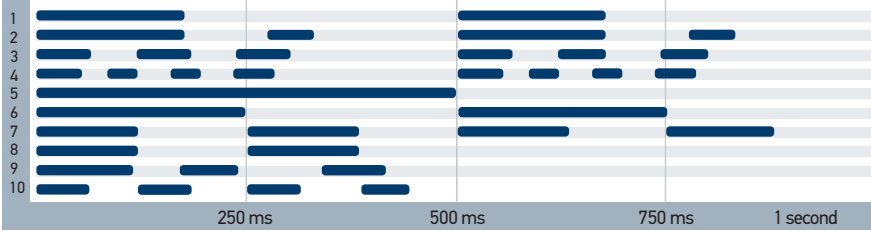


P/N 95903781

P/N 95903791

HELLA MULTI-FLASH LAMP OPERATING MODES

Selectable Flash Patterns

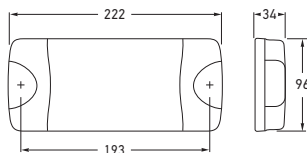
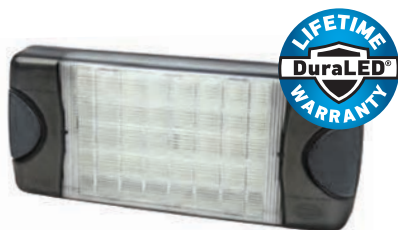



Flashing Options

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.



Part Number	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

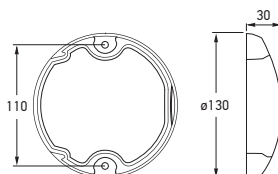
Green/Go

EuroLED® Signal Warning Lamp - 24 Volt

Low profile signal warning LED lamp featuring Ultra Wide Visibility Optics for significantly improved side visibility.

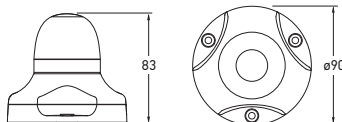


P/N 95902181



Part Number	95902081	RED
	95902181	AMBER
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 P/N 3040. See page 83 for EuroLED® accessories.



Part Number	98091004	WHITE
	98091024	GREEN
	98091044	RED
	98091064	AMBER
	98091074	BLUE

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 194 for multi-flash versions. This lamp requires an external flasher unit such as P/N 3040.	

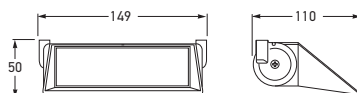
LED 360° Warning Lamp

Multi-purpose LED 360° warning lamp with Grilamid® lens available in four signal colours and white. Optics appear clear until illuminated.



LED Dash Mount Signal Lamp - 12 Volt

Inconspicuous LED warning lamp with an unobtrusive and aesthetic design allowing for permanent fitment, making it an ideal supplement to revolving or strobe lamps attached to the vehicle roof. Optic appears clear until illuminated in amber signal colour.



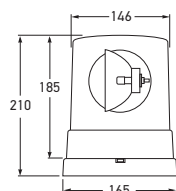
Part Number	95913610	AMBER
Mounting	Dash mount.	
Voltage	12V	
Power Consumption	3W	
Cable Length	Pre-wired with 2.5m of multi-core cable.	

This lamp requires an external flasher unit such as P/N 3040.



Revolving Beacon KL 700

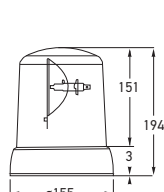
KL 700 high performance revolving beacon. The halogen bulb is replaced from the rear of the reflector eliminating the need to touch the highly polished reflector surface. Twin belt drive ensures a smooth and quiet operation.



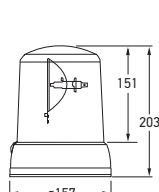
P/N 1653

Part Number	12 VOLT		24 VOLT	
	1724		1722	AMBER
			1721	RED
			1720	BLUE
Power Consumption	12V - 55W 24V - 70W			
Rotation	160rpm			
RF Suppression	VDE 0879, Class 3, FM 5.			
Bulbs to Suit	12V 24V	C1255 C2470		
Protection	IP 5K4K (Protection against dust and water splashing with increased pressure) IP X9K (Protection against high-pressure/steam jet cleaning)			
Spare Parts	1653 Magnetic mounting kit 9.1717.01 ● Blue lens 9.1718.01 ● Red lens 9.1719.01 ● Amber lens (no optic lens) 9.1724.01 ● Amber lens with optics 9.1723.01 ● Green lens 9.1725.01 ● Violet lens 9.1737.91 Two drive belts			
Compliance	ECE R65/00			
HELLA does not recommend the magnetic base version for use on a moving vehicle (see page 188). See page 203 for spare part images.				

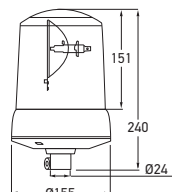
EMERGENCY LIGHTING AND SIGNAL WARNING LAMPS



P/N 1728



P/N 1729



P/N 1735

Part Number	12 VOLT	24 VOLT	
	1728	1728-24V	AMBER
	1726	1726-24V	BLUE



Part Number	12/24 VOLT	
	1729 (Magnetic mount)	AMBER
	1735 (Flexibase mount)	
Current Draw	12V 24V	5.5A 3.5A
Power Consumption	12V - 55W 24V - 70W	
Rotation	160rpm	
RF Suppression	Conducted Class 5 (CISPR25).	
Protection	IP 5K4K (Protection against dust and water splashing with increased pressure) IP X9K (Protection against high-pressure/steam jet cleaning)	
Bulbs to Suit	12V 24V	C1255 C2470
Spare Parts	9.1726.01 ● Blue lens 9.1727.01 ● Red lens 9.1728.01 ● Amber lens 9.1737.91 Two drive belts 8007 2 Pole beacon mount - Pipe 8007FM 2 Pole beacon mount - Flat mount 8007RA 2 Pole beacon mount - Flat angle mount 8008 2 Pole beacon mount - Threaded mount	
Compliance	ECE R65/00	e1 1740

HELLA does not recommend the magnetic base version for use on a moving vehicle (see page 188).
See page 203 for spare part images.



P/N 8007

P/N 8007FM

P/N 8007RA

P/N 8008

Revolving Beacon KL 7000

KL 7000 high performance revolving beacon with light values well above the minimum requirements. All KL 7000 beacons can be operated on 12 or 24V by changing the bulb. The halogen bulb is replaced from the rear of the reflector eliminating the need to touch the highly polished reflector surface. A twin belt drive ensures a smooth and quiet operation.



P/N 1726

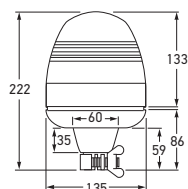


P/N 1729

P/N 1735

Rotaflex Revolving Beacon - Amber

Rotaflex revolving beacon with polycarbonate lens and flexible rubber base.



Part Number	1730	12 VOLT
	1731	24 VOLT
Mounting	Tubular base incorporates connection plug. Must be used in conjunction with connecting piece P/N 8007, 8007FM, 8007RA or 8008.	
Power Consumption	12V - 55W 24V - 70W	
Rotation	160rpm	
RF Suppression	Conducted Class 5 (CISPR 25).	
Bulbs to Suit	12V 24V	C1255 C2470
Protection	IP 5K4K (Protection against dust and water splashing with increased pressure) IP X9K (Protection against high-pressure/steam jet cleaning)	
Spare Parts	9.1730.01 ● Amber polycarbonate lens 8007 2 Pole beacon mount - Pipe 8007FM 2 Pole beacon mount - Flat mount 8007RA 2 Pole beacon mount - Flat angle mount 8008 2 Pole beacon mount - Threaded mount	
Compliance	ECE R65/00	2181



P/N 8007

P/N 8007FM

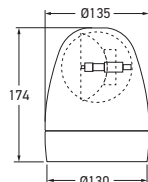


P/N 8007RA

P/N 8008

Rotafix Revolving Beacon - Amber

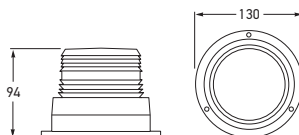
Rotafix revolving beacon with polycarbonate lens and rubber base.



P/N 1733

Part Number	12 VOLT	24 VOLT
	1732	1732-24V
	1733	1733-24V MAGNETIC MOUNT
Mounting	Fixed base or with magnetic attachment.	
Power Consumption	12V - 55W 24V - 70W	
Rotation	160 +/- 30rpm	
RF Suppression	Conducted Class 5 (CISPR 25).	
Bulbs to Suit	12V 24V	C1255 C2470
Protection	IP 5K4K (Protection against dust and water splashing with increased pressure) IP X9K (Protection against high-pressure/steam jet cleaning)	
Spare Parts	9.1730.01 ● Amber polycarbonate lens	
Compliance	ECE R65/00	2181

HELLA does not recommend the magnetic base version for use on a moving vehicle (see page 188).



Part Number	1656	RED
	1657	AMBER
	1663	GREEN
Voltage	Multivolt™ 12-72V	
Current Draw	0.24 - 0.04A	
Power Consumption	2 Watts, 2 Joules	
Flash Rate	60 +/- 10 per minute	
Protection	IP 55 (Protection against dust and water jets)	
Bulb to Suit	XN000	Strobe tube (see page 373)
Spare Parts	8027	Magnetic mounting kit
	9.1655.01	● Blue lens
	9.1656.01	● Red lens
	9.1657.01	● Amber lens
	9.1663.01	● Green lens
Compliance	SAE J845 Class 3	

HELLA does not recommend the magnetic base version for use on a moving vehicle (see page 188).

Firebolt Plus Strobe Beacon -12-72 Volts

The Firebolt Plus strobe features a 2 joule power supply that works from 12 to 72V. Modular construction incorporates a powerful replaceable strobe tube and vibration resistant circuit board. The unit also features a tough impact-resistant polycarbonate lens and base. Applications include fork-lift, electric vehicles, industrial trucks and equipment. Supplied with enclosed base and all necessary mounting hardware (mounts with three bolts).



P/N XN000

Part Number	8027	KIT
Description	Complete Magnetic Mounting Kit to allow quick and secure attachment on vehicle roof. Kit includes magnetic base (82mm dia.), spiral cable (extendable to 2m) and 2-pole plug for the cigarette lighter socket.	
Height	11mm	
Suits	All Firebolt Plus Series Strobe Lamps.	

Magnetic Mounting Kit - Firebolt Plus



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 acceleration and deceleration, fitment of warning lamps with a magnetic base cannot be recommended for use on moving vehicles.

Pipe Mount for Beacons

Pipe mount system. Connecting pieces suitable for applications that require removable Beacons or Work lamps.



2 POLE BEACON MOUNT - PIPE
Part Number
8007



2 POLE BEACON MOUNT - FLAT MOUNT
Part Number
8007FM



2 POLE BEACON MOUNT - FLAT ANGLE MOUNT
Part Number
8007RA



2 POLE BEACON MOUNT - THREADED
Part Number
8008



PIPE MOUNT FOR BEACONS - Ø165MM
Part Number
8HG 005 436-011
Suits P/Ns 1614, 1724

KL 700 AND KL 710 ACCESSORIES		
Part Number	9.1737.91	TWO DRIVE BELTS
	1653	MAGNETIC MOUNTING KIT

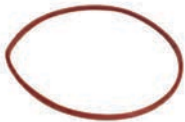


P/N 9.1737.91



P/N 1653
Magnetic mounting kit

KL JUNIOR PLUS ACCESSORIES		
Part Number	9.1797.91	DRIVE BELT





Interior/Exterior Lighting

HELLA's extensive range of ultra reliable LED products are designed to produce superior illumination for interior/exterior applications.



Contents

Interior/Exterior Lighting

EuroLED® Interior Lamps.....	210
EuroLED® Down Lights.....	211-215
CargoLED Series.....	215
DuraLED® White.....	216-219
LED Strip.....	220-222
LED Courtesy.....	224-227
DuraLED® Work Lamps.....	228-229
Map Reading Lamps.....	230
LED Wall Mount Lamp.....	231

LED LIGHTING TECHNOLOGY - ENERGY EFFICIENT ILLUMINATION

HELLA LED based luminaires are sophisticated opto-electronic devices designed to enhance an interior by adding functionality, increased energy efficiency and offer long term durability.

LED based lighting has many advantages over traditional incandescent bulbs including significantly reduced power consumption, increased reliability, a reduction in radiated heat, longer life and less maintenance.

But it's important to know 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. Most owners will agree that purchasing products that do not fit the purpose, or that need to be replaced, is a waste of time and money.

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 use the latest LED 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 so many LED options available 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. Over the last decade Lumen ratings have increased significantly as the technology has developed. However this can be confusing as many companies choose to list 'Raw' lumen figures rather than the more realistic 'Effective' lumens.

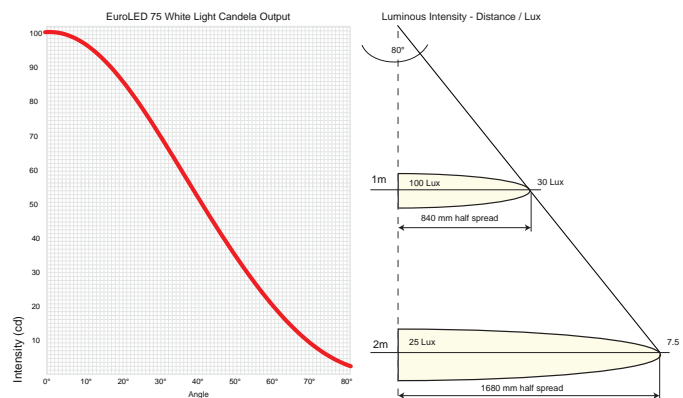
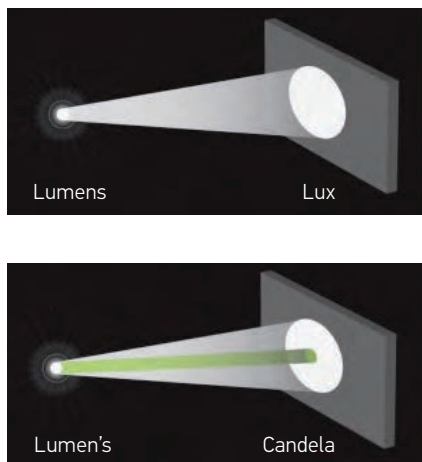
Raw Lumens are a measure of the theoretical output of a light and is calculated by multiplying the theoretical rated output of the LEDs by the number of LEDs in the lamp.

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 is a measure of 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 losses this can result in up to 50% decrease in actual output and usable light. $800 \text{ raw lumens} \text{ minus } 50\% \text{ losses} = 400 \text{ Effective Lumens.}$



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 AND COLOUR RENDERING INDEX (CRI)

When white LED lighting first became available it gained a reputation for appearing ‘cold’ and ‘blue’ due to the phosphorous coating technology. However today’s devices can rival traditional incandescent light sources for colour and ambience.

LED colours set the tone and feel 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.

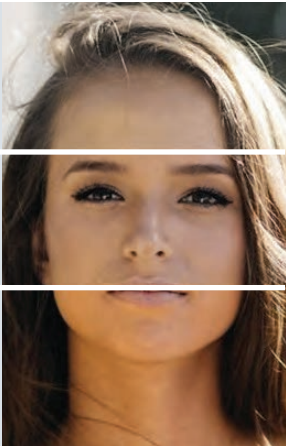
Warm white is suggested for interior spaces as it adds life and vibrancy to people and objects. It is considered more flattering to skin tones or fabrics and makes food look fresh and attractive.

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.

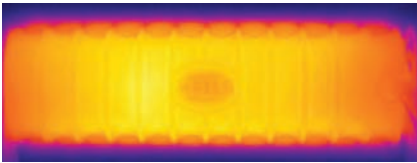
All HELLA LED chips are selected from tight specification bins to ensure that lamps are the same brightness and colour temperature grade. This ensures a room full of lights will all have the same appearance e.g. colour temperature and intensity.

Colour Rendering Index - CRI	
CRI: 50-70 Fair	
CRI: 70-80 Good	
CRI: 80-90 Excellent	

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.

Examples of different LED manufacturers and methods of sealing lamps.



DIMMABLE LOGOS WHAT DO THEY MEAN?

Logos used throughout the Interior/Exterior section to help quick referencing of important product features are explained below.



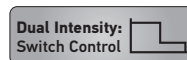
Light intensity is reduced as the DC input voltage is reduced below the lamps specified operating voltage.



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.



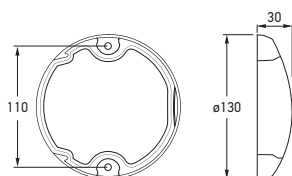
Light intensity can be switched between 100% and a lower level factory pre-set value, usually via an additional cable input supplied with the lamp using a positive feed from the DC power supply within the lamps operating voltage range.

EuroLED® 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.



P/N 2JA 959 950-561



Part Number	BLACK SHROUD	WHITE SHROUD	
	2JA 959 950-551	2JA 959 950-561	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 Mounting spacer - Black 8HG 959 952-012 Mounting spacer - White 9.2366.08 EuroLED® Cover - Black 9.2366.11 EuroLED® Cover - White 9.2366.17 Screw boss kit - Pack of 4		
Compliance	CE		

EuroLED® Lamp

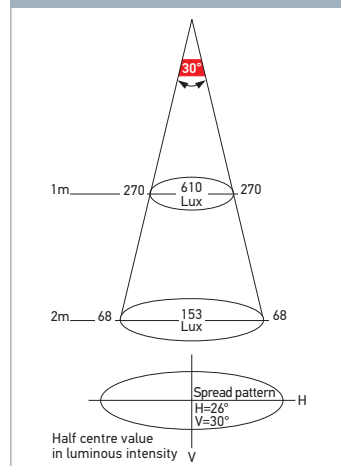
White LED lamp with clear lens. Provides ultra long service life and is shock and vibration proof. Includes a black and a white rim. No switching or dimming.

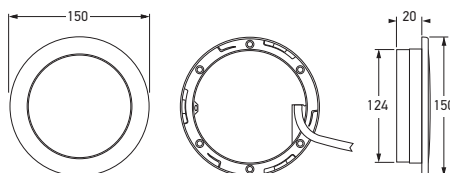


Part Number	95982050	WHITE
Mounting	Two hole surface mount with mounting bushes supplied.	
Voltage	Multivolt™ for optimum brightness at input voltage from 9 to 33 volts.	
Power Consumption	4W	
Protection	Reverse polarity and transient spike circuit protection. IP 6K6 (Protection against dust and high-pressure 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 Mounting spacer - Black 8HG 959 952-012 Mounting spacer - White 9.2366.08 EuroLED® Cover - Black 9.2366.11 EuroLED® Cover - White 9.2366.17 Screw boss kit - Pack of 4	
Compliance	CE	

ILLUMINATION CHART

EuroLED® Interior Lamps

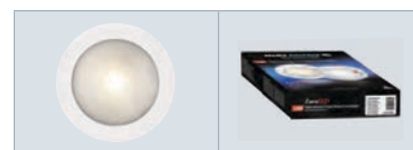




Part Number	WHITE PLASTIC RIM	POLISHED STAINLESS STEEL RIM	
	2JA 980 631-501	2JA 980 631-511	WHITE
	2JA 980 631-601	2JA 980 631-611	WARM WHITE
Mounting	Recess mount, 124mm diameter hole. Surface mount via optional spacer.		
Voltage	Multivolt™ for optimum brightness at input voltage from 9 to 33 volts.		
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® 150 Down Lights

White or Warm White LED lamp with clear lens. Provides ultra long service life and is shock and vibration proof.



P/N 2JA 980 631-601

Packaging



Part Number	WHITE PLASTIC RIM	POLISHED STAINLESS STEEL RIM	
	2JA 980 630-501	2JA 980 630-511	WHITE
	2JA 980 630-601	2JA 980 630-611	WARM 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 - Single Colour

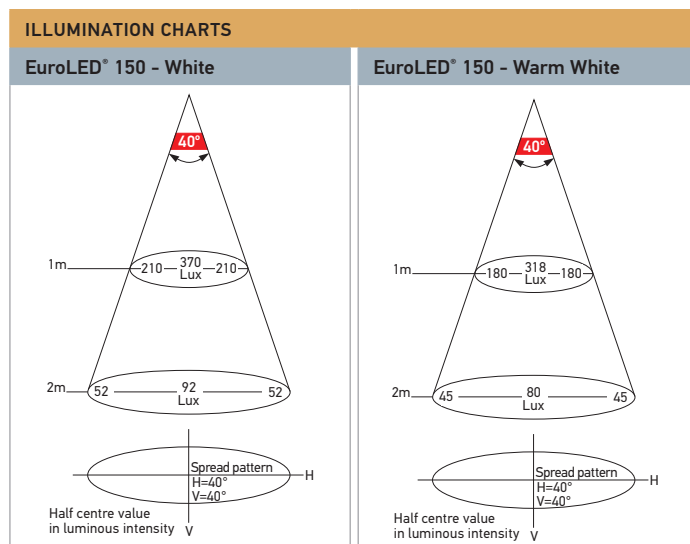
White or Warm White LED lamp with touch switching and clear lens. Touch the white pad to turn on and the black pad to turn off. Provides ultra long service life and is shock and vibration proof.



P/N 2JA 980 630-601

Packaging

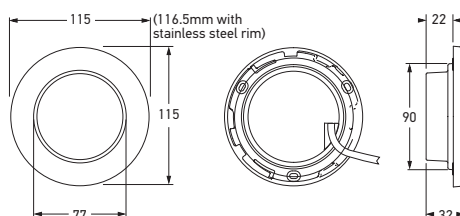
INTERIOR/EXTERIOR



Sealed cable entry

EuroLED® 115 Down Lights - With White Spacer

Round LED high intensity down lights offering class leading efficiency and durability. Supplied with white or polished stainless steel rim to suit.



Dimmable:
PWM 10-100%

Power Supply
MULTI VOLT



P/N 2JA 980 820-101 Sealed cable entry

Part Number	WHITE PLASTIC RIM		POLISHED STAINLESS STEEL RIM	
	2JA 980 820-001		2JA 980 820-011	WHITE
	2JA 980 820-101		2JA 980 820-111	WARM WHITE
Mounting	Recess mount, 90mm diameter hole. Surface mount via optional spacer.			
Voltage	Multivolt™ for optimum brightness at input voltage from 10 to 33 volts.			
Power Consumption	4.5W			
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® 115 Down Lights - With White Spacer and Switch

Round LED high intensity down lights offering class leading efficiency and durability. Supplied with white or polished stainless steel rim to suit.

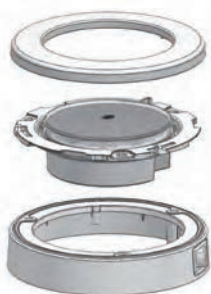
Dimmable:
PWM 10-100%

Power Supply
MULTI VOLT



P/N 2JA 980 828-111 Packaging

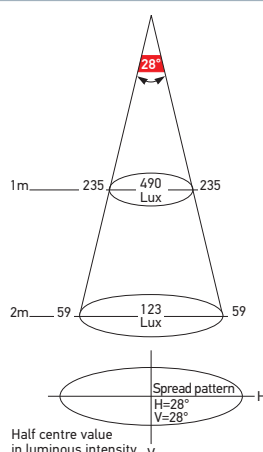
Part Number	WHITE PLASTIC RIM		POLISHED STAINLESS STEEL RIM	
	2JA 980 828-001		2JA 980 828-011	WHITE
	2JA 980 828-101		2JA 980 828-111	WARM WHITE
Mounting	Recess mount, 90mm diameter hole. Surface mount via spacer.			
Voltage	Multivolt™ for optimum brightness at input voltage from 10 to 33 volts.			
Power Consumption	4.5W			
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			



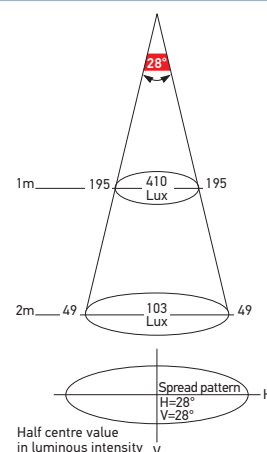
EuroLED® 115 Down Lights with switch, expanded view.

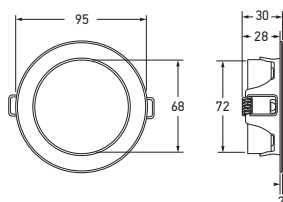
ILLUMINATION CHART

EuroLED® 115 - White



EuroLED® 115 - Warm White





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.



Part Number	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

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

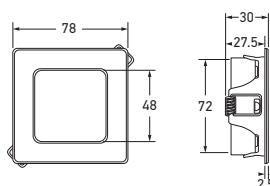


Warm White

Red - Secondary colour



Blue - Secondary colour

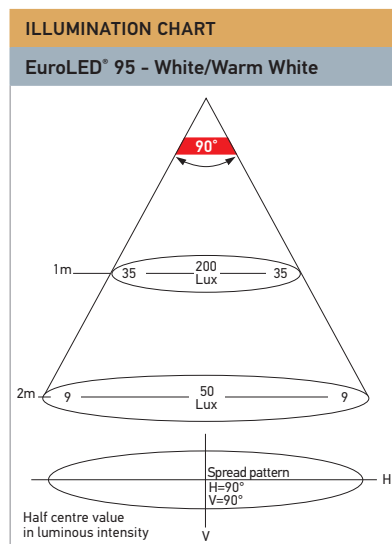


EuroLED® 95 Gen 2 Square Down Lights - Recess Mount With Spring Clip

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.

Part Number	2JA 958 340-511		WHITE
	2JA 958 340-601		WHITE/RED
	2JA 958 340-611		WHITE/BLUE
	2JA 958 340-521		WARM WHITE
	2JA 958 340-621		WARM WHITE/RED
	2JA 958 340-631		WARM WHITE/BLUE

Specifications as per P/N 2JA 958 340-011 above.



Warm White

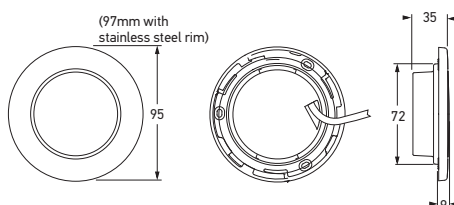
Red - Secondary colour



Blue - Secondary colour

EuroLED® 95 Down Lights - Recess Mount

Round LED high intensity down lights offering class leading efficiency and durability. Supplied with white or polished stainless steel rim to suit.




Dimmable:
PWM 10-100%

Power Supply
MULTI VOLT

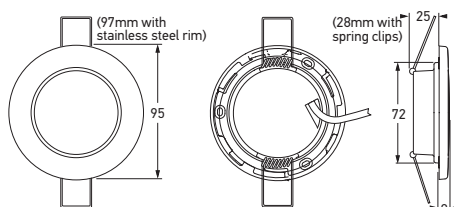


P/N 2JA 980 940-111 Packaging

Part Number	WHITE PLASTIC RIM	POLISHED STAINLESS STEEL RIM	
	2JA 980 940-001	2JA 980 940-011	WHITE
	2JA 980 940-101	2JA 980 940-111	WARM WHITE
Mounting	Recess mount, 72mm diameter hole. Screw mount.		
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® 95 Down Lights - Recess Mount With Spring Clip

Round LED high intensity down lights offering class leading efficiency and durability. Supplied with white or polished stainless steel rim to suit.




Dimmable:
PWM 10-100%

Power Supply
MULTI VOLT



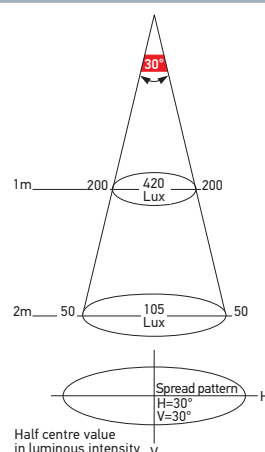
P/N 2JA 980 940-311 Packaging

Part Number	WHITE PLASTIC RIM	POLISHED STAINLESS STEEL RIM	
	2JA 980 940-201	2JA 980 940-211	WHITE
	2JA 980 940-301	2JA 980 940-311	WARM WHITE
Mounting	Recess mount, 72mm diameter hole. Spring clip.		
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 		

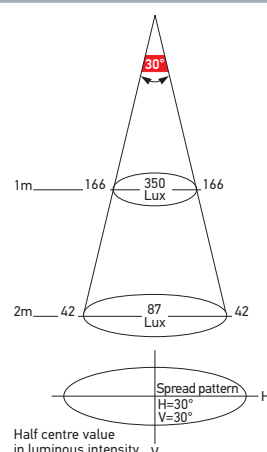
INTERIOR/EXTERIOR

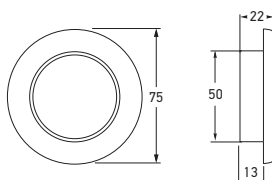
ILLUMINATION CHART

EuroLED® 95 - White




EuroLED® 95 - Warm White





	12 VOLT DC	24 VOLT DC	
Part Number	2JA 958 110-031	2JA 958 110-131	WHITE
	2JA 958 109-031	2JA 958 109-131	WARM WHITE

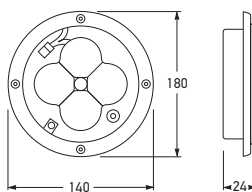
Mounting	Recess mount, 50mm diameter hole.		
Voltage	12V DC or 24V DC		
Power Consumption	<3W		
Protection	IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high pressure/steam jet cleaning)		
Cable Length	Pre-wired with 130mm of cable		
Supplied Rims	95950590 95950585	Black plastic rim - EuroLED® 95 White plastic rim - EuroLED® 95	
Compliance			
Additional rims and housings are available see page 227.			

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.



P/N 2JA 958 109-031 Black and white supplied plastic rims



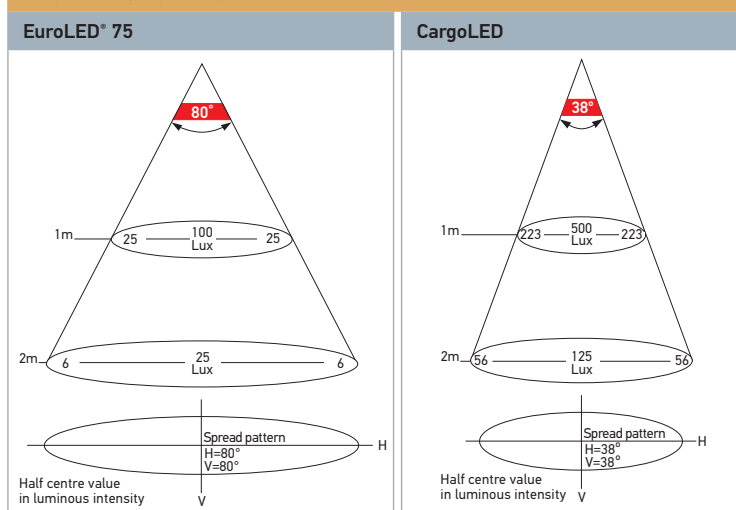
Part Number	2604	WHITE
Mounting	Flush Mount	
Voltage	Multivolt™ for optimum brightness at input voltage from 9 to 32 volts.	
Power Consumption	6W	
Temperature Range	-40°C to +60°C	
Protection	Fully sealed against dust and moisture to IP 69	
Cable Length	Pre-wired with 310mm of sheathed multi-core cable.	
Accessories	9.2604.05	CargoLED mounting spacer
Compliance		

CargoLED Interior Lamp - Recess Mount

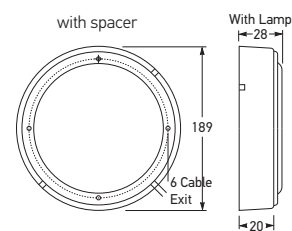
CargoLED interior lamp features dust-proof housing that is made from high quality aluminium and ABS ensuring maximum durability and long service life, even in extremely cold or humid environments. Fully sealed to withstand high-pressure washing.



ILLUMINATION CHARTS



P/N 9.2604.05
CargoLED mounting spacer

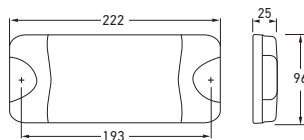


DuraLED® Combi-S 50 White LED Lamp

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 980 629-001



Part Number	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		



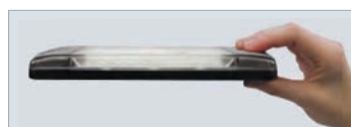
Ultra slim height of only 25mm.

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.



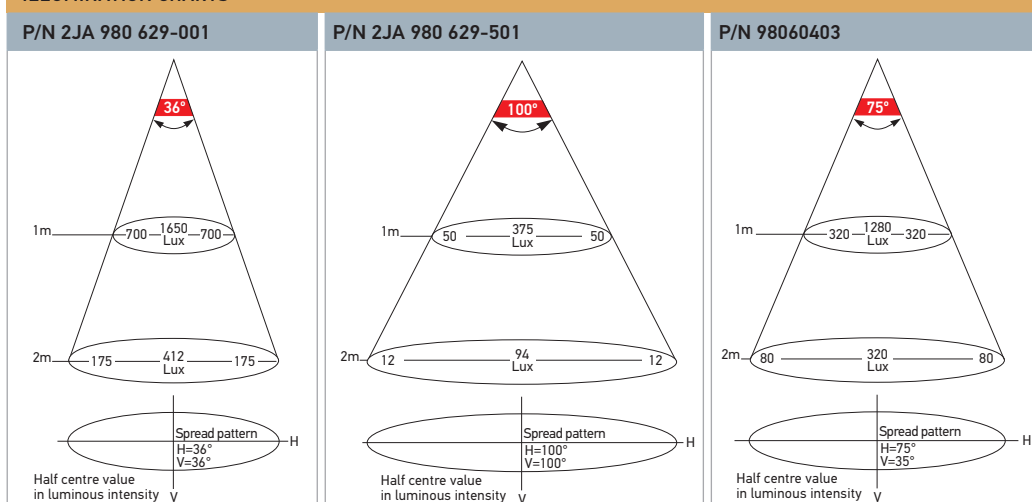
Part Number	98060403	WIDE SPREAD
Mounting	Two hole surface mount with mounting bushes supplied.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	<12W	
Protection	As per P/N 2JA 980 629-501 above.	
Cable Length	Pre-wired with 2.5m of cable.	
Lens Material	High impact and chemical resistant Grilamid® lens	
Compliance		

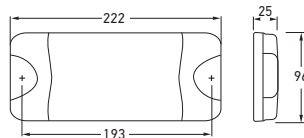


Ultra slim height of only 25mm.



ILLUMINATION CHARTS





Part Number	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.



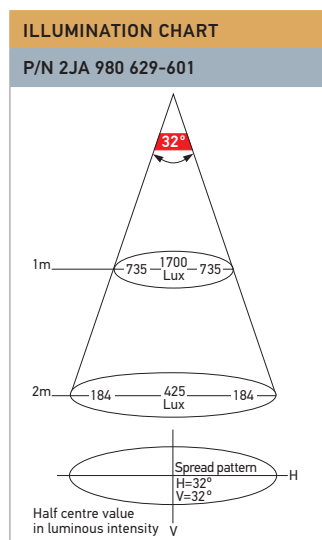
Ultra slim height of only 25mm.



Rear view showing DT Connector

Part Number	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

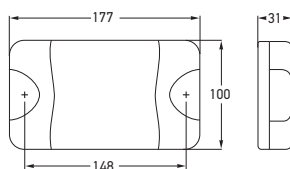


DuraLED® White 36 LED Lamp

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.



P/N 9593721



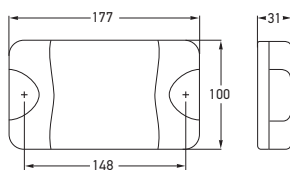
Part Number	WHITE LENS	CHARCOAL LENS	
	95903720	95903721	SPREAD
Mounting	Two hole surface mount with mounting bushes supplied.		
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.		
Power Consumption	<9W		
Protection	Reverse polarity and transient spike circuit protection. 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 80 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.



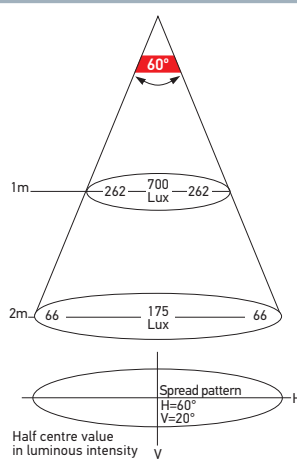
P/N 2JA 959 037-511



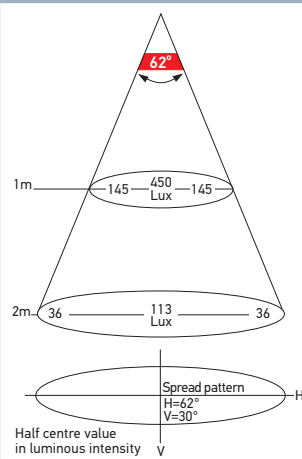
Part Number	2JA 959 037-501	DIFFUSED
	2JA 959 037-511	SPREAD
Mounting	Two hole surface mount with mounting bushes supplied.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	<9W	
Protection	See DuraLED® White 36 LED Lamp above.	
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.	
Lens Material	Acrylic	
Compliance	CE	

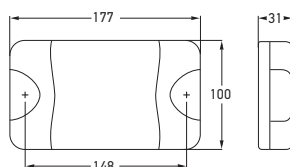
ILLUMINATION CHARTS

DuraLED® 36 LED - Spread



DuraLED® 36 LED - Diffused





Part Number	98060801	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 80 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.



Part Number	95970010 95970400 (Includes switch)	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

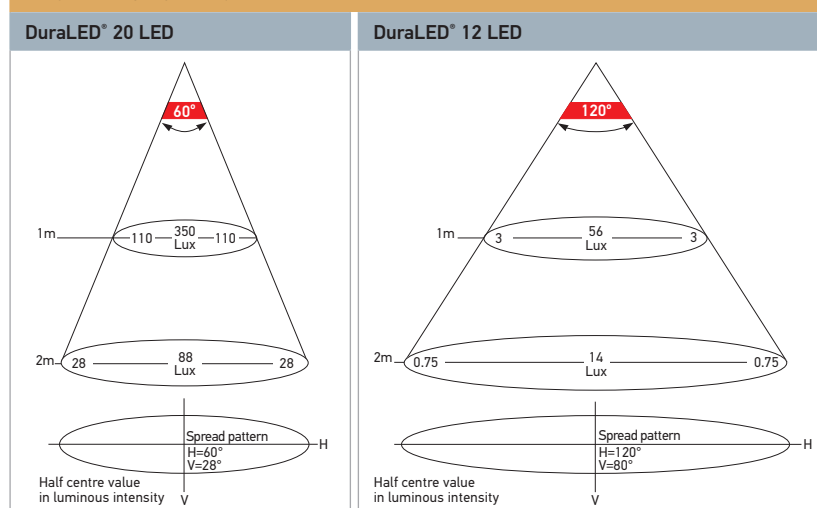
White high brightness LED lamp. Exceptional light output, incorporating high efficacy electronics and LEDs resulting in low power consumption (<3 watts) and low heat. The lamp is fully sealed against dust and moisture ingress.



P/N 95970400

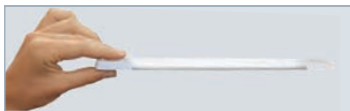
INTERIOR/EXTERIOR

ILLUMINATION CHARTS

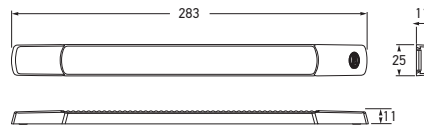


LED Interior/Exterior Strip Lamp - Surface Mount

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.



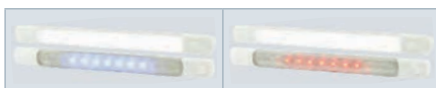
Ultra slim height of only 11mm.



Part Number	12 VOLT DC	24 VOLT DC	
	2652	2652-24V	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	9.2652.09	White screw caps (MOQ 4)	
	9.1009.09	Charcoal screw caps (MOQ 4)	
	9.1009.10	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.

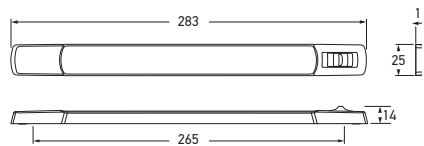


2JA 958 121-011
White/Blue

2JA 958 121-001
White/Red



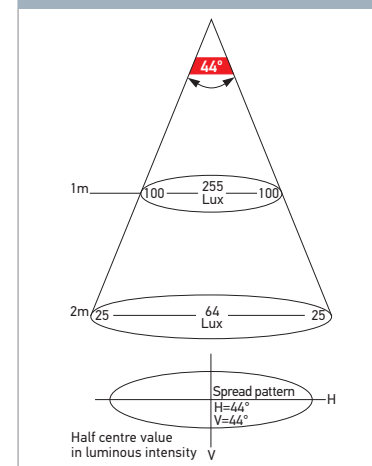
Ultra slim height of only 11mm.



Part Number	12 VOLT DC	24 VOLT DC	
	2652-SW	2652-SW24V	WHITE
	2JA 958 121-011	2JA 958 121-411	WHITE/BLUE
	2JA 958 121-001	2JA 958 121-401	WHITE/RED
Mounting	Surface mount.		
Power Consumption	White function: <3W Colour function: <1W		
Protection	As per P/N 2652		
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	9.2652SW.09 9.2652SW.10	1 White switch screw cap + 1 white standard screw cap 1 Charcoal switch screw cap + 1 charcoal standard screw cap	
Note: P/N 2652-SW/ ...-24V includes charcoal and white screw caps. 2JA 958 121-xxx include white screw caps only.			

ILLUMINATION CHART

P/Ns 2652/...-xxx/2JA 958 121-xxx



LED Material

GMD

RF CommSafe

Dimmable:

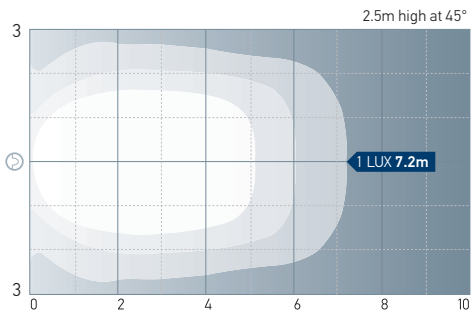
Analog DC Input

Part Number	12 VOLT DC	24 VOLT DC	
	98087900	98087910	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	9.2652.09 9.1009.09 9.1009.10 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 85 for surface mount strip lamp screw caps.

ILLUMINATION CHART

P/Ns 98087900/...10



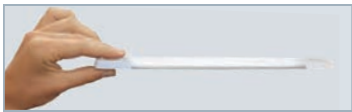
LED Awning Lamp - Surface Mount

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.



P/N 8HG 958 000-021

P/N 8HG 958 000-011



Ultra slim height of only 11mm.

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.

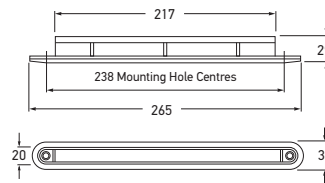
One Lux represents the intensity of the light of a full moon (under clear atmospheric conditions) or just sufficient light by which to read a newspaper.

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.



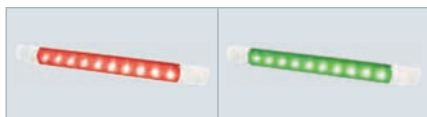
P/N 2641HB



Part Number	12 VOLT DC		24 VOLT DC	
	2641-12V		2641-24V	WHITE
	2641HB		2641HB-24V	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.			
Spare Part	9GD 959 155-507		Gasket	

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.

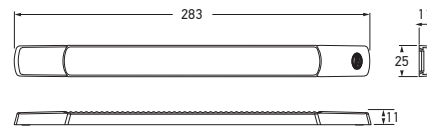


P/N 2JA 980 881-602

P/N 2JA 980 881-802



Ultra slim height of only 11mm.



Part Number	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	9.2652.09	White screw caps (MOQ 4)		
	9.1009.09	Charcoal screw caps (MOQ 4)		
	9.1009.10	Chrome plated screw caps (MOQ 4)		
See page 85 for surface mount strip lamp screw caps.				

ILLUMINATION CHARTS

P/Ns 2641/2641-24V	P/Ns 2641HB/2641HB-24V



*HELLA LED Luminaires
provide superior quality
lighting solutions for
Interior/Exterior lighting.*

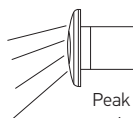


LED Wide Rim Rectangular Courtesy Step Lamp

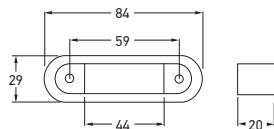
Wide rim, flush mount, courtesy step lamp with either white, red, green or blue LEDs. Optic appears clear until illuminated.



P/N 95968060



Peak light output is projected down at 30°

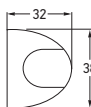
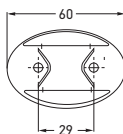


12/24 VOLT (CLEAR LENS)		
Part Number	95968080	WHITE
	95968070	RED
	95968090	GREEN
	95968060	BLUE
Mounting	Recess mount.	
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.	
Power Consumption	<1W	
Protection	Reverse polarity protection. IP 6K6 (Protection against dust and high-pressure water jets) IP 6K7 (Protection against dust and temporary water immersion)	
Cable Length	Pre-wired with 120mm of cable.	
Compliance	CE	

See page 81 and 86 for spare parts and accessories.

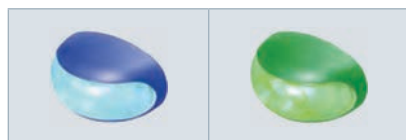
DuraLED® Surface Mount Courtesy Lamp

Blue, white or green LED courtesy lamps. Optic appears clear until illuminated.



Part Number	95963046	WHITE
	95963025	BLUE
	95963055	GREEN
Mounting	Two hole 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 cable.	
Compliance	CE	

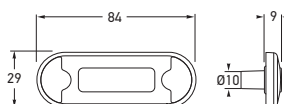
See page 81 for spare parts and accessories.



P/N 95963025

P/N 95963055

INTERIOR/EXTERIOR LIGHTING



Part Number	98085510		WHITE
	98085515		WARM WHITE
	98085525		AMBER
	98085535		RED
	98085540		BLUE
	98085550		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			

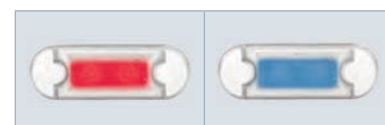
DuraLED® Flush Mount Courtesy Lamp - Low Profile

These LED courtesy lamps feature a shallow 9mm profile and completely sealed housing. Available in a range of colours. Optic appears clear until illuminated.



P/N 98085515

P/N 98085525



P/N 98085535

P/N 98085540



P/N 98085550

RIMS		
Part Number	Colour	Material
95968600	BLACK	PLASTIC
95968601	WHITE	
95968500	POLISHED	316 STAINLESS STEEL
95968506	SATIN CHROME PLATED	

SCREW CAPS		
Part Number	Colour	Quantity
9.2310.09-BULK	BLACK	PACK OF 4
9.2310.10-BULK	RED	
9.2310.11-BULK	WHITE	
9.2310.12-BULK	BLUE	
9.2310.13-BULK	GREEN	
9.2310.14-BULK	YELLOW	
9.2310.15-BULK	AMBER	
9.2310.16-BULK	GREY	



9.2310.10-BULK 9.2310.12-BULK 9.2310.13-BULK 9.2310.14-BULK 9.2310.15-BULK 9.2310.16-BULK

DuraLED® Flush Mount Courtesy Lamp Accessories

Accessory rims and screw caps for the LED flush mount courtesy lamp family.



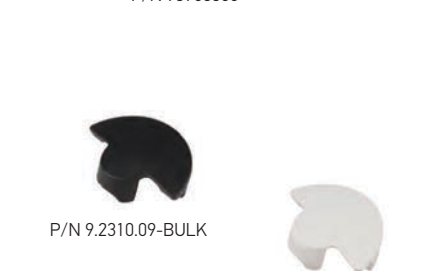
P/N 95968600

P/N 95968601



P/N 95968500

P/N 95968506

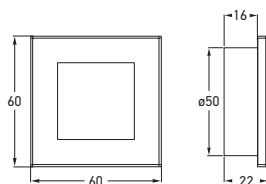


P/N 9.2310.09-BULK

P/N 9.2310.11-BULK

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 and supplied with a white and black rim. Optic appears clear until illuminated.











P/N 98059604



P/N 98059614

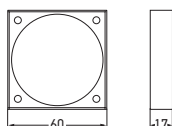
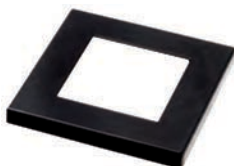
P/N 98058721

P/N 98058721

Part Number	12 VOLT DC		24 VOLT DC		
	98059604		98059614		WHITE
	98059704		98059714		WARM WHITE
	98058721		98058821		RED
	98058221		98058321		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					

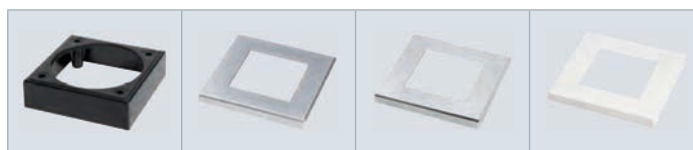
Square Courtesy Lamp Accessories

Spare rims and housings for the square courtesy lamp family. One rim is required per lamp.



SQUARE RIMS - SINGLE		
Part Number	Colour	Material
98058520	BLACK	PLASTIC
98058531	WHITE	
98058501	CHROME PLATED	
98058503	SATIN CHROME PLATED	

SQUARE HOUSING		
Part Number	Colour	Material
95999360	BLACK	PLASTIC
95999354	WHITE	

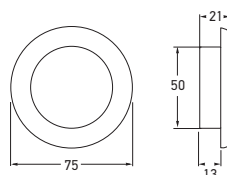


P/N 95999360

P/N 98058503

P/N 98058501

P/N 98058531



Part Number	12 VOLT DC		24 VOLT DC		
	98050051		98050151		WHITE
	98050071		98050171		WARM WHITE
	98050721		98050821		RED
	98050221		98050321		BLUE

Mounting Recess mount with 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.



P/N 98050051



P/N 98050071

P/N 98050721

P/N 98050221

ROUND RIMS - SINGLE		
Part Number	Colour	Material
95950501	CHROME PLATED	PLASTIC
95950520	BLACK	
95950550	POLISHED	316 STAINLESS STEEL
95950556	SATIN CHROME PLATED	

ROUND HOUSING		
Part Number	Colour	Material
95999310	BLACK	PLASTIC
95999311	WHITE	



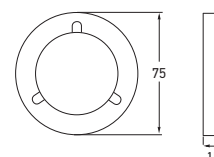
P/N 95999310

P/N 95950550

P/N 95950556

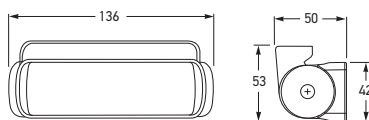
Round Courtesy Lamp Accessories

Spare rims and housings for the round courtesy lamp family. One rim is required per lamp.



DuraLED® WL200 Work Lamp - Close Range

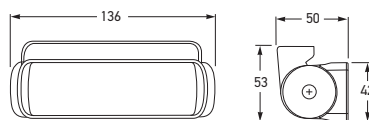
LED universal work lamp with low profile stainless steel bracket. Lamp may be mounted upright or pendant and may be adjusted vertically up or down. Totally sealed against dust and moisture and with a tough, chemical resistant Grilamid® lens.




Part Number	98067030	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

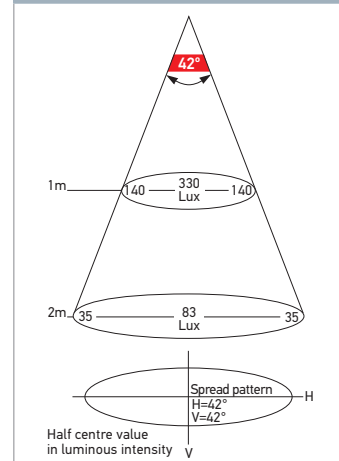
LED universal work lamp with low profile stainless steel bracket developed with RFCommSafe™ technology. RFCommSafe™ products offer superior electromagnetic compatibility (EMC) dramatically removing the risk of unintended electromagnetic interference (EMI) on sensitive devices such as radios or communication 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.

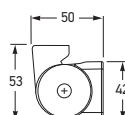
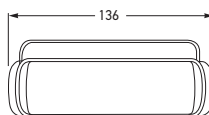



Part Number	12 VOLT	24 VOLT	
	98067038	98067062	WHITE
Mounting	Upright or pendant.		
Power Consumption	4W		
Actual Light Output	150 lumen		
Protection	Reverse polarity and voltage spike protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam 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 		

ILLUMINATION CHARTS

P/N 98067030 WL200 - Close Range

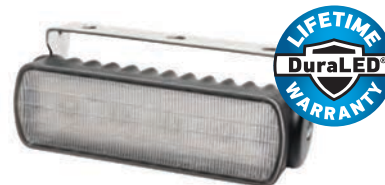
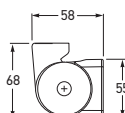
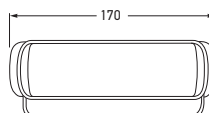



Dual Intensity:
Switch ControlPower Supply
**MULTI
VOLT**Lens Material
GMDBracket
**STAINLESS
STEEL**Housing
**CORROSION
PROOF**

Part Number	CLOSE RANGE	FLOOD	
	98057310	98057300	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.

Dual Intensity:
Switch ControlPower Supply
**MULTI
VOLT**Lens Material
GMDBracket
**STAINLESS
STEEL**Housing
**CORROSION
PROOF**

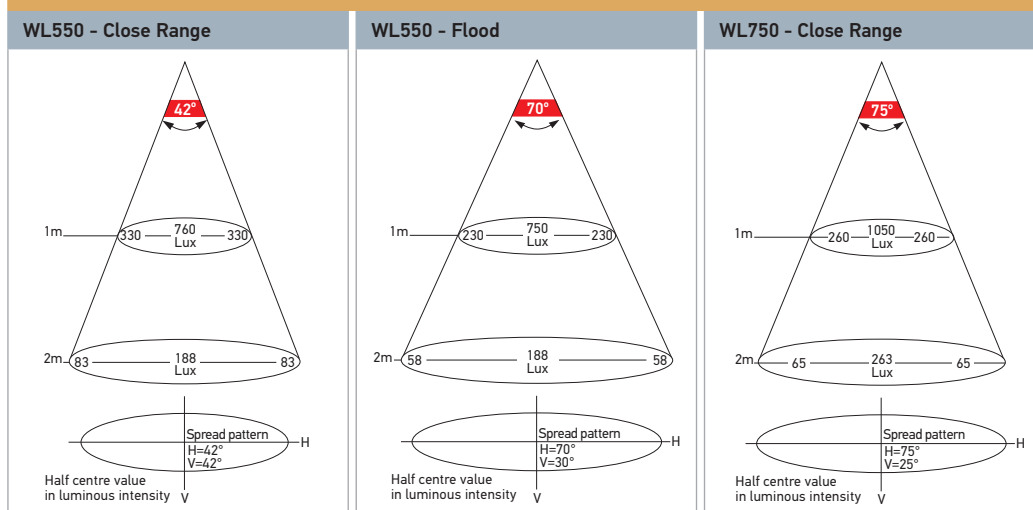
Part Number	98095003	WHITE
Mounting	Upright or pendant.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	High intensity mode: 12W (1A@12V DC/0.50A@24V DC) Low intensity mode: 2W (0.17A@12V DC/0.08A@24V DC)	
Actual Light Output	750 lumen	
Protection	Reverse 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.



ILLUMINATION CHARTS



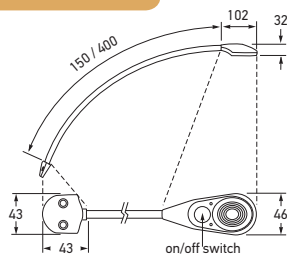
Friction mounts; easy adjustment without tools.





Completely sealed lamp/cable entry. Marine grade stainless steel bracket.

LED Flexible Map Reading Lamp

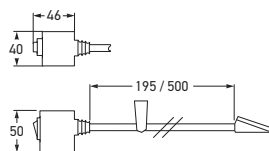
LED map reading light featuring a strong flexible shaft and an on/off switch on the lamp head. Low power consumption.





Part Number	2638		150MM ARM SIZE
	2639		400MM ARIM 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.



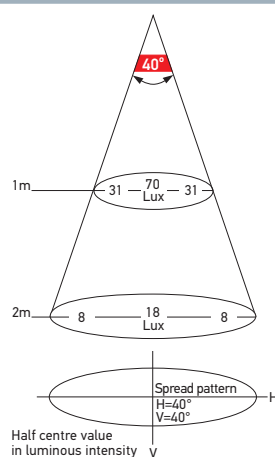
Part Number	2633		195MM ARM SIZE
	2636		500MM ARM SIZE
Mounting	Screw mount.		
Power Consumption	5W		
Bulbs to Suit	12V 24V	HL126X HL247	
Spare Parts	9EL 128 922-011 128 922 02	Red lens Clear lens	



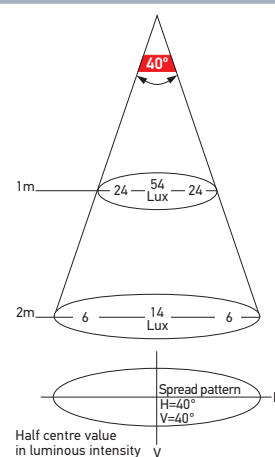
INTERIOR/EXTERIOR

ILLUMINATION CHARTS

P/Ns 2638/2639



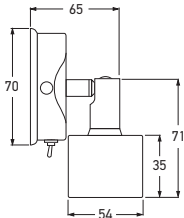
P/Ns 2633/2636



Dimmable: 
PWM 10-100%




Dimmable: 
Analog DC Input



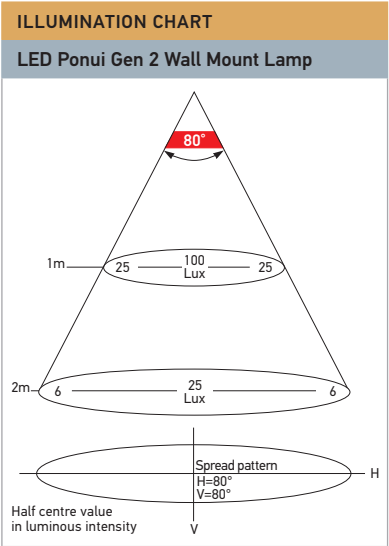
LED Ponui Gen 2 Wall Mount Lamp

LED Ponui Gen 2 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.

Part Number	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			



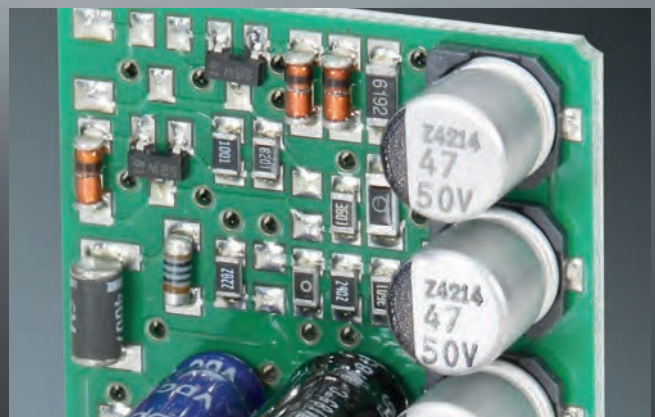
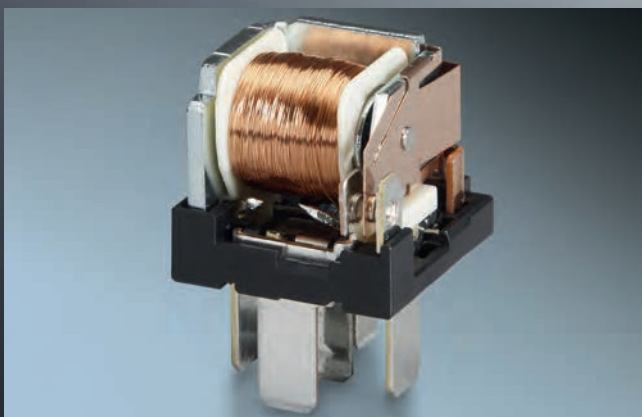
P/N 2JA 958 358-011





Relays and Flasher Units

HELLA manufactures more than 100 million units per year and thanks to optimised production, HELLA relay and flasher units consistently benchmark with the highest reliability in the industry.



Contents

Relays and Flasher Units

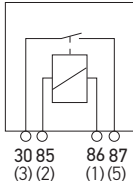
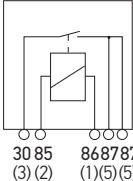
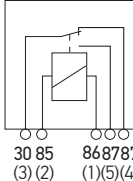
Relay Quick Reference Chart.....	235
Normally Open Relays 12 Volt.....	236
Normally Open Relays 24 Volt.....	237
Normally Open Fused Relays.....	238
High Capacity Normally Open Relays.....	239
Change-over Relays 12 Volt.....	240
Change-over Relays 24 Volt.....	241
Time Control Relays.....	242
Micro Relays/Solid State Relays.....	243
Safety DayLights™ Smart Controllers.....	244
Voltage Sensitive Relay.....	245
HCS Flasher Units 12 Volt.....	246
HCS Flasher Units 24 Volt.....	247
Electronic Flasher Units	248-251

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>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
3078	12V	4	N/O		30A	140mA	Yes	
3078R	12V	4	N/O	Resistor	50A	140mA	Yes	Terminals 30 and 87 are 9.5mm terminals
3053	12V	4	N/O	Diode	40A	170mA	Yes	
3059	12V	4	N/O	Diode	50A	210mA	Yes	Terminals 30 and 87 are 8.1mm terminals
3082	12V	5	N/O		40A	140mA	Yes	
3055	12V	5	N/O	Diode	40A	170mA	Yes	
3079	24V	4	N/O		30A	70mA	Yes	
3079R	24V	4	N/O	Resistor	30A	90mA	Yes	
3054	24V	4	N/O	Diode	22A	90mA	Yes	
3060	24V	4	N/O	Diode	30A	90mA	Yes	Terminals 30 and 87 are 8.1mm terminals
3083	24V	5	N/O		20A	70mA	No	
3056	24V	5	N/O	Diode	22A	90mA	Yes	
MINI RELAYS - NORMALLY OPEN FUSED								
3076	12V	4	N/O		25A	140mA	Yes	
3077	24V	4	N/O		15A	80mA	Yes	
MINI RELAYS - CHANGE-OVER								
3080	12V	5	N/O-N/C		30-87, 30A/30-87a, 20A	140mA	Yes	
3080R-BULK	12V	5	N/O-N/C	Resistor	3-5, 30A/3-4, 20A	140mA	Yes	
3057	12V	5	N/O-N/C	Diode	30-87, 40A/30-87a, 15A	170mA	Yes	
3081	24V	5	N/O-N/C		30-87, 20A/30-87a, 10A	70mA	Yes	
3081R-BULK	24V	5	N/O-N/C	Resistor	3-5, 20A/3-4, 10A	70mA	Yes	
3058	24V	5	N/O-N/C	Diode	30-87, 22A/30-87a, 10A	90mA	Yes	
WEATHERPROOF RELAY - CHANGE-OVER								
3080S	12V	5	N/O-N/C	Resistor	30-87, 30A/30-87a, 20A	160mA	Yes	Connector P/N 4973S
SOLID STATE RELAY - NORMALLY OPEN								
3063	12V	4	N/O		22A		No	
HIGH CAPACITY RELAYS - NORMALLY OPEN								
3084	12V	4	N/O		60A	140mA	Yes	Terminals 30 and 87 are 9.5mm terminals
3061	12V	4	N/O		180A peak (100A continuous)	380mA	Yes	Terminals 30 and 87 are M6 studs
3085	24V	4	N/O		60A	70mA	Yes	Terminals 30 and 87 are 9.5mm terminals
3062	24V	4	N/O		80A peak (60A continuous)	180mA	Yes	Terminals 30 and 87 are M6 studs
MICRO RELAY - NORMALLY OPEN								
3064	12V	4	N/O	Resistor	20A	140mA	No	Terminals 85 and 86 are 4.8mm
MICRO RELAY - CHANGE-OVER								
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								
3064L	12V	5	Latching		20A	140mA	No	Terminals 1, 2 and 6 are 4.8mm
TIME CONTROL RELAYS								
3086	12V	5	N/O-N/C	Contact opened 10A, Contact closed 20A 30min			Yes	
3087	12V	5	N/O-N/C	Contact opened 10A, Contact closed 20A 30min			Yes	
3086-24V	24V	5	N/O-N/C	Contact opened 10A, Contact closed 20A 30min			Yes	
3087-24V	24V	5	N/O-N/C	Contact opened 10A, Contact closed 20A 30min			Yes	

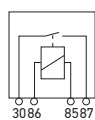
Normally Open Mini Relay



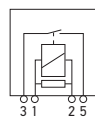
P/N 3078



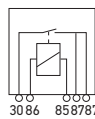
P/N 3078R



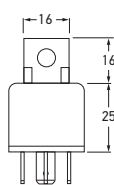
P/N 3078



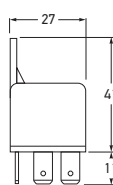
P/N 3078R



P/N 3082

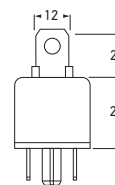


P/Ns 3078 and 3082

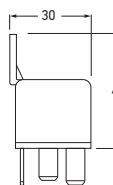


P/N 3078R

Terminals 30 and 87 are 9.5mm terminals



P/N 3078R



P/N 3082






P/N 3078



P/N 3078R



P/N 3082

Part Number	3078		4 PIN	12 VOLT
	3078-BULK (Pack of 10)			
	3078R (With resistor)			
	3082		5 PIN	
	3082-BULK (Pack of 10)			
Maximum Load	P/N 3078: 30A	P/N 3078R: 50A	P/N 3082: 40A	
Current Draw	140mA			

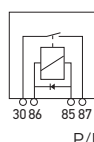
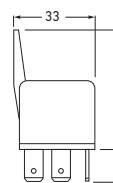
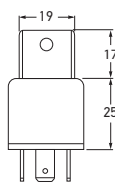
Normally Open Mini Relay with Diode



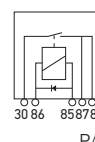
P/N 3053





P/N 3055



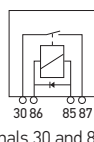
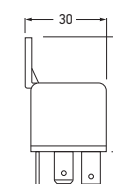
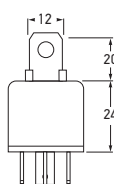
P/N 3053



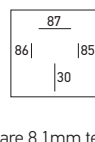
P/N 3055

Part Number	3053		4 PIN	12 VOLT
	3055		5 PIN	
Maximum Load	40A			
Protection	Diode			
Current Draw	170mA			

Normally Open Mini Relay with Diode

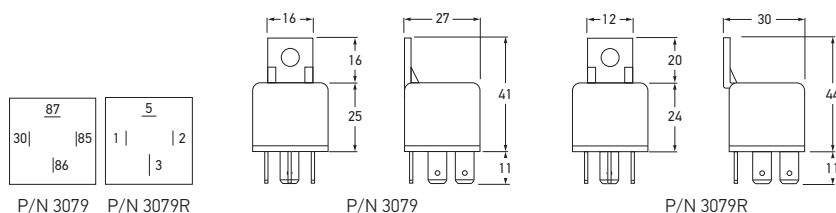




Terminals 30 and 87 are 8.1mm terminals



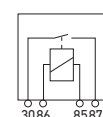
Part Number	3059	4 PIN	12 VOLT
Maximum Load	50A		
Protection	Diode		
Current Draw	210mA		

RELAYS AND FLASHER UNITS

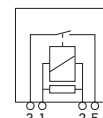


Part Number	3079 		4 PIN	24 VOLT
	3079-BULK (Pack of 10)			
	3079R (With resistor) 			
Maximum Load	30A			
Current Draw	P/N 3079:	70mA	P/N 3079R:	90mA

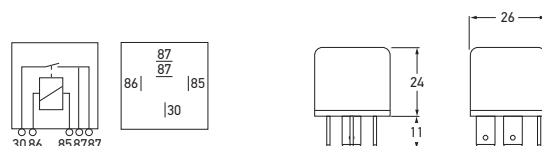
Normally Open Mini Relay



P/N 3079

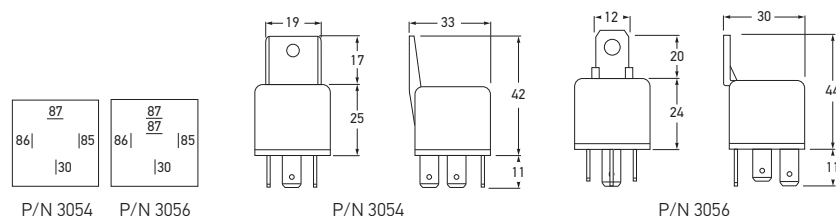




P/N 3079R



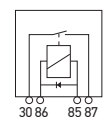
Part Number	3083	5 PIN	24 VOLT	
	3083-BULK (Pack of 10)			
Maximum Load	20A			
Current Draw	70mA			

Normally Open Mini Relay - Without Bracket

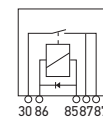


Part Number	3054		4 PIN	24 VOLT
	3056		5 PIN	
Maximum Load	22A			
Protection	Diode			
Current Draw	90mA			

Normally Open Mini Relay With Diode



P/N 3054



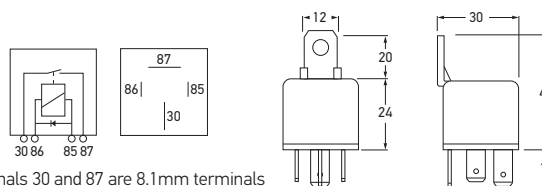
P/N 3056



P/N 3054



P/N 3056



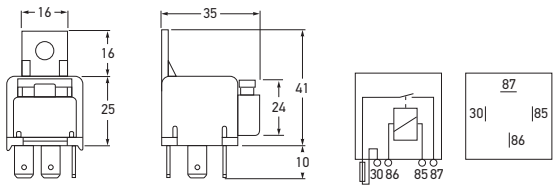
Terminals 30 and 87 are 8.1mm terminals

Part Number	3060	4 PIN	24 VOLT
Maximum Load	30A		
Protection	Diode		
Current Draw	90mA		

Normally Open Mini Relay With Diode

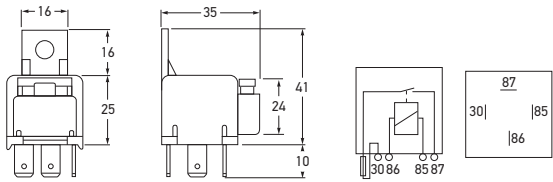


Normally Open Fused Relay
- 12 Volt



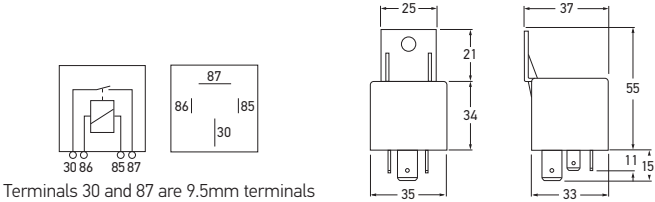
Part Number	3076		4 PIN	12 VOLT
Maximum Load	25A with 25A fuse			
Current Draw	140mA			

Normally Open Fused Relay
- 24 Volt



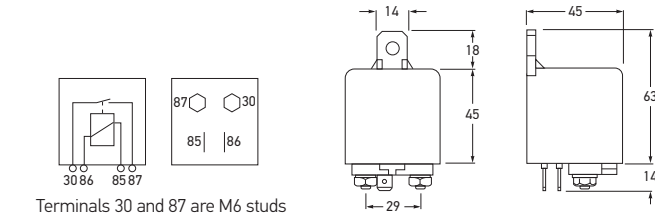
Part Number	3077		4 PIN	24 VOLT
Maximum Load	15A with 15A fuse			
Current Draw	80mA			

RELAYS AND FLASHER UNITS



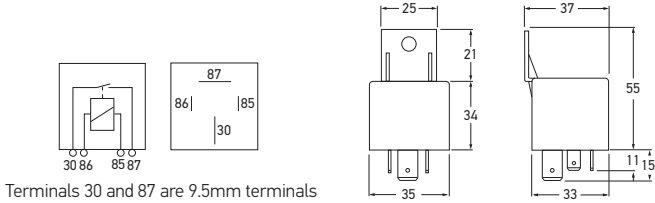
Part Number	3084	4 PIN	12 VOLT
Maximum Load	60A		
Current Draw	140mA		

High Capacity Normally Open Relay - 12 Volt



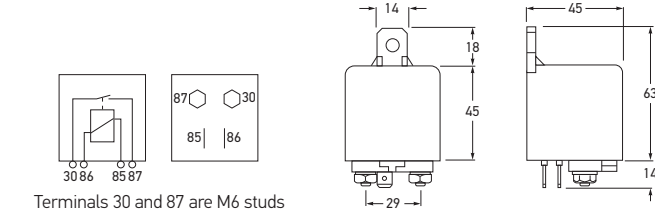
Part Number	3061	4 PIN	12 VOLT
Maximum Load	180A peak current (100A continuous)		
Current Draw	380mA		

High Capacity Normally Open Relay - 12 Volt



Part Number	3085	4 PIN	24 VOLT
Maximum Load	60A		
Current Draw	70mA		

High Capacity Normally Open Relay - 24 Volt



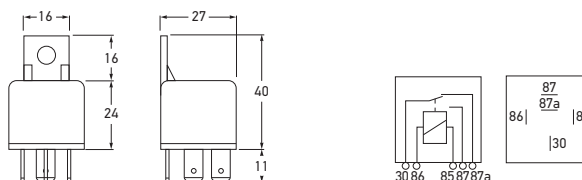
Part Number	3062	4 PIN	24 VOLT
Maximum Load	80A peak current (60A continuous)		
Current Draw	180mA		

High Capacity Normally Open Relay - 24 Volt



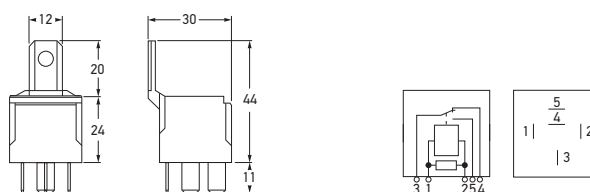
RELAYS

Change-over Relay



Part Number	3080	5 PIN	12 VOLT
	3080-BULK		
Maximum Load	30-87, 30A/30-87a, 20A		
Current Draw	140mA		

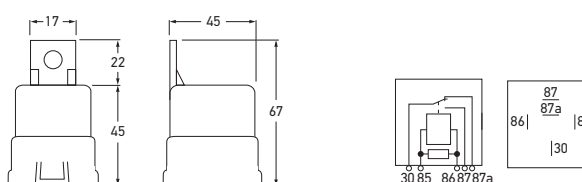
Change-over Relay with Resistor



Part Number	3080R-BULK	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).

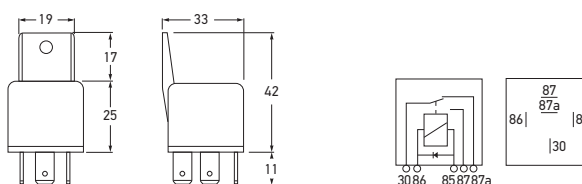


Part Number	3080S	5 PIN	12 VOLT
Maximum Load	30-87, 30A, 30-87a, 20A		
Current Draw	160mA		
Spare Part	4973S	Connector with cable	
Protection	Resistor		



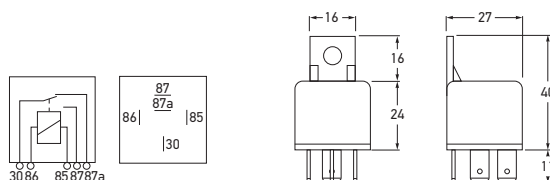
P/N 4973S

Change-over Relay with Diode



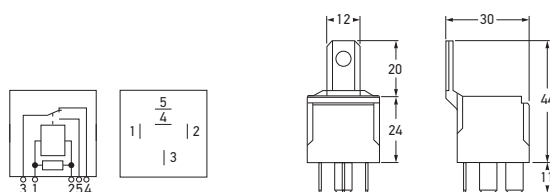
Part Number	3057	5 PIN	12 VOLT
Maximum Load	30-87, 40A/30-87a, 15A		
Protection	Diode		
Current Draw	170mA		

RELAYS AND FLASHER UNITS



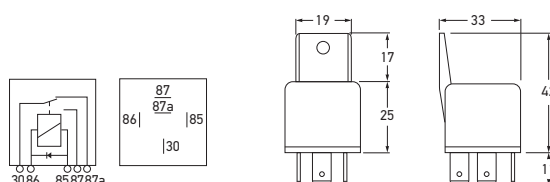
Part Number	3081	5 PIN	24 VOLT
	3081-BULK		
Maximum Load	30-87, 20A/30-87a, 10A		
Current Draw	70mA		

Change-over Relay



Part Number	3081R-BULK	5 PIN	24 VOLT
Maximum Load	3-5, 20A/3-4 10A		
Current Draw	70mA		


Change-over Relay with Resistor



Part Number	3058	5 PIN	24 VOLT
Maximum Load	30-87, 22A/30-87a, 10A		
Protection	Diode		
Current Draw	90mA		

Change-over Relay with Diode



Part Number	4973		
	4973-BULK		PACK OF 50
Mounting	Single screw mounting.		
To Suit	4 and 5 pin relays with 6.3mm flat pin connectors.		

P/Ns 3076 and 3077 are not suitable for multiple installation using this connector.

P/Ns 3076 and 3077 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 P/N 8704.

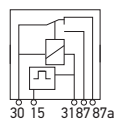
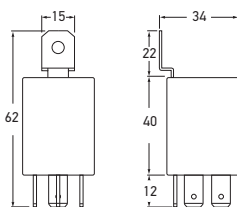



Time Control Unit with Drop-out Delay

Relay with manually adjustable drop-out delay function, 0 – 900 seconds.



Switch view



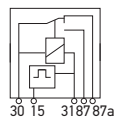
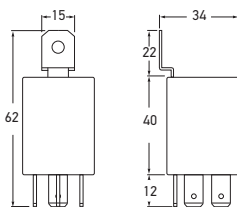
Part Number	3086		5 PIN	12 VOLT	
	3086-24V			24 VOLT	
Maximum Load	Contact opened 10A Contact closed 20A/ 30min				
Protection	IP 50 (Protection against dust)				
Switching terminal 15 starts timing.					

Time Control Unit with Pick-up Delay

Relay with manually adjustable pick-up delay function, 0 – 900 seconds.



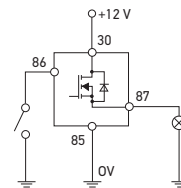
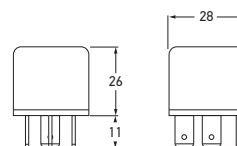
Switch view



Part Number	3087	5 PIN	12 VOLT	
	3087-24V		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.

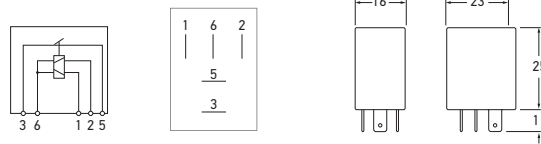


Part Number	3063	4 PIN	12 VOLT
Maximum Load	22A @ 12V		
Protection	IP 67 (Protection against dust and temporary water immersion)		

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.

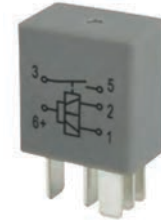
RELAYS AND FLASHER UNITS



Part Number	3064L	5 PIN	12 VOLT
Maximum Load	20A		
Current Draw	0.15A		

Latching On/Off Micro Relay

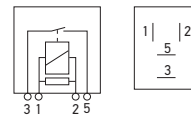
Latching relay that will remain in its open or closed state when power is removed, i.e. it will remain on or off and not automatically return to off. A negative (-) voltage pulse is required on either terminal 1 or 2 to switch on or off.



Micro Relay

Micro relay with parallel resistor. P/N 3064 features two 4.8mm and two 6.3mm blade terminal contacts (terminals 3 and 5). Change-over relay P/N 3065 features three 4.8mm and two 6.3mm blade terminal contacts (terminals 3 and 5).

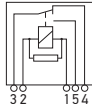

Part Number	NORMALLY OPEN		
	3064	4 PIN	12 VOLT
Maximum Load	20A @ 12V		
Protection	Resistor		

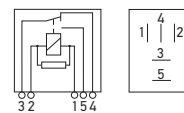


P/N 3064



P/N 3065

				
Part Number	CHANGE-OVER			
	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.				



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.

Part Number	4973-M	5 POLE
Socket	5 pole	
To Suit	P/Ns 3064, 3064L and 3065.	



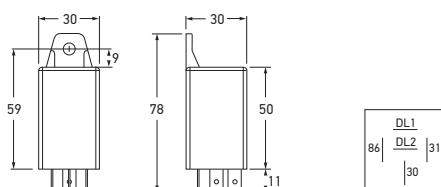
Safety DayLights™ Smart Controller - Advanced*

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.

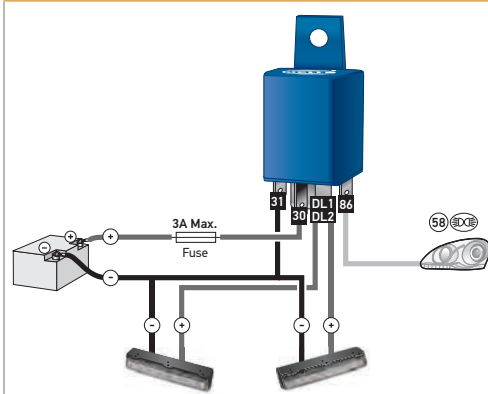
*Advanced version with vibration monitor for installation in vehicles with fuel saving alternators.



Part Number	3090
	3090-BULK
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™ (+)

RECOMMENDED INSTALLATION DIAGRAM FOR WIRING

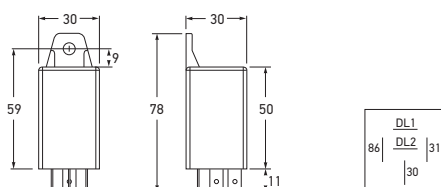


Safety DayLights™ Smart Controller - Standard

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.

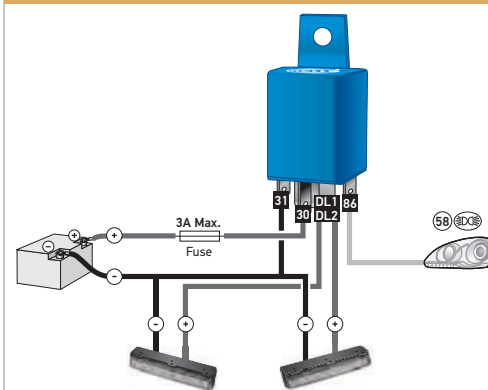
The smart controller monitors the voltage supply from the battery and will automatically switch the Safety DayLights™ on when the engine is started, and automatically switch them off when the headlamps are activated, or the engine is turned off.

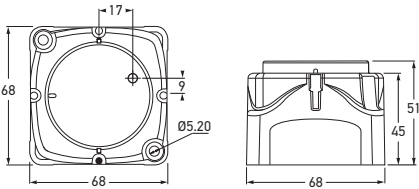


Part Number	3091
	3091-BULK
Voltage	Multivolt™, suitable for 12 and 24 volt systems.
Maximum Continuous Load	20W
To Suit	HELLA LED Safety DayLights™ range.
Features a Safety DayLights™ OFF delay of approximately 10 seconds.	

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

RECOMMENDED INSTALLATION DIAGRAM FOR WIRING

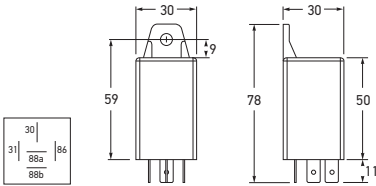




Part Number	3099
Voltage	Multivolt™, suitable for 12 and 24 volt systems.
Mounting	Recess or surface mount.
Maximum Continuous Load	140A
Termination	2 x 6mm studs

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.



Part Number	3101
	3101-BULK
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.

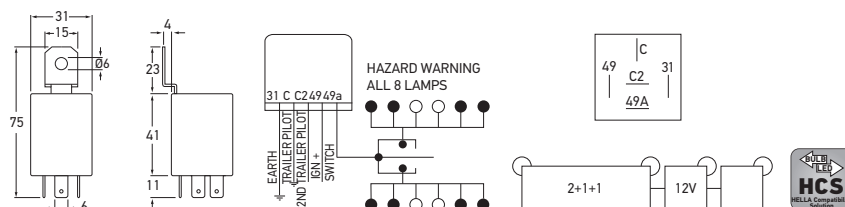


WIRING SPECIFICATIONS		PRE-SET VOLTAGE LIMITS AND OPERATION		
Terminal Number	Connect to	System Voltage	VSR turns outputs ON when	VSR turns outputs OFF when
30	Battery (+)	12V DC	Battery voltage is above 13.4V DC	Battery voltage is below 12.8V DC
31	Earth return (-)	24V DC	Battery voltage is above 26.8V DC	Battery voltage is below 25.6V DC
86	Activate (+) / Deactivate VSR (- or open)	Note	The pre-set voltage values stated above may vary by +/- 3%.	
88a & 88b	Dual outputs (+)			

The Voltage Sensitive Relay installation must be protected by a suitably rated fuse.

HCS Electronic Flasher Unit - 2+1+1

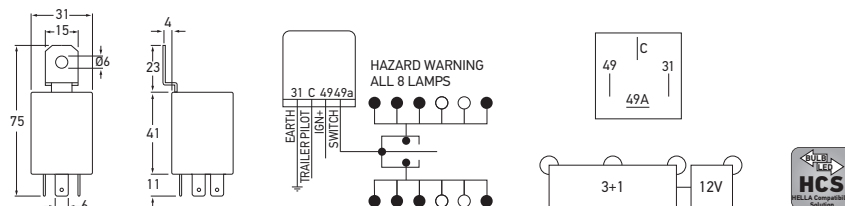
LED compatible flasher unit specifically designed for use with HCS (HELLA Compatibility Solution) LED indicator lamps. Provides stable flash rate and reliable bulb/LED lamp failure indication, for towing vehicles and trailers. Suitable to operate combinations of HCS LED and conventional 21W bulb-type lamps.



Part Number	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 20 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.

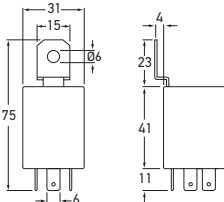
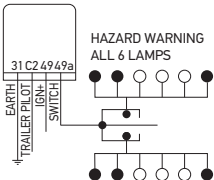
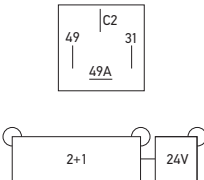



Part Number	3039	12 VOLT
Maximum Load	3+1 (8) x HCS or 21W	
Frequency	90 +/- 30 flash signals per minute for direction indication and hazard warning.	
Protection	IP 53 (Protection against dust and water spray)	
See page 20 for further information on HCS technology.		

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

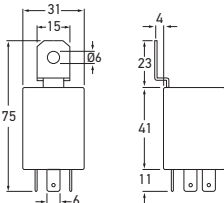
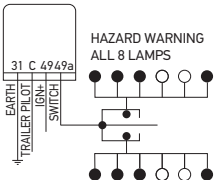
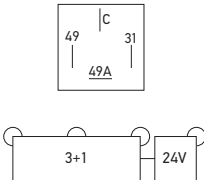



Part Number	3037	24 VOLT
Maximum Load	2+1 (6) x HCS or 21W + 0-5W	
Frequency	90 +/- 30 flash signals per minute for direction indication and hazard warning.	
Protection	IP 53 (Protection against dust and water spray)	
See page 20 for further information on HCS technology.		

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.





Part Number	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 20 for further information on HCS technology.		

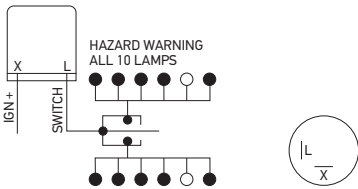
HCS Electronic Flasher Unit - 3+1

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.



High Capacity Flasher Unit

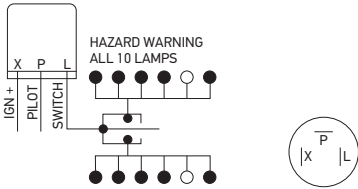
High capacity electronic flasher unit. Complete with bracket. Designed to take up to 210W loads. Reverse polarity protection, polycarbonate cover and silver contacts. Clear audible signal.



Part Number	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.



Part Number	3027	3 PIN	12 VOLT
	3028		24 VOLT
Maximum Load	1-10 x 21W		

FLASHER UNITS

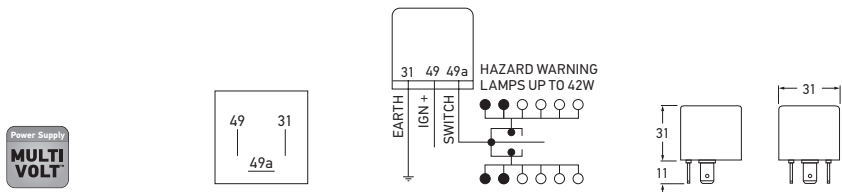
Universal Mounting Bracket

For mounting 32mm diameter HELLA flasher unit P/Ns 3026, 3027, 3028.



Part Number	8003
-------------	------

RELAYS AND FLASHER UNITS

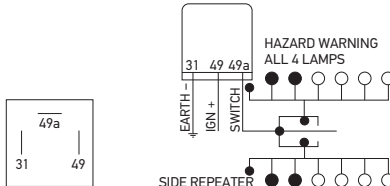


Part Number	3040	3 PIN
Voltage	9-33V DC (suitable for 12V and 24V)	
Maximum Load	42W max.	
Frequency	90 +/- 30 flash signals per minute for direction indication and hazard warning.	
Protection	IP 53 (Protection against dust and water spray)	

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.



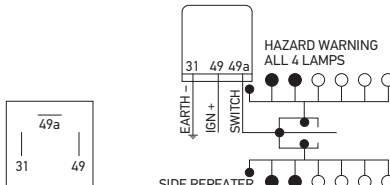


Part Number	3016	3 PIN	12 VOLT
No. of Bulbs	2(4) x 21W + 0 - 5W		

Electronic Flasher Unit

To operate 2 or 3 lamps on either side of vehicle.





Part Number	3016LED1	3 PIN	12 VOLT
	3016LED2		
No. of Bulbs	3016LED1	1(2) x 21W + 1(2)9W	
	3016LED2	1(2) x 21W + 1(2) x 5W + 1(2) x 9W	

LED Electronic Flasher Unit

Modified version of P/N 3016 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.

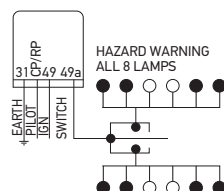


P/N 3016LED2



High Capacity Flasher Unit

Heavy duty flasher unit manufactured to take up to 200W loads.



P/N 3014

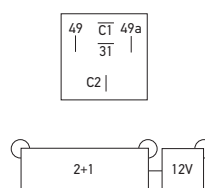
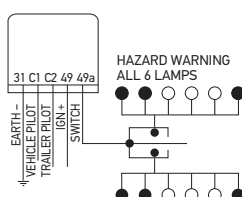


P/N 3015

Part Number	3014	4 PIN	12 VOLT
	3015		24 VOLT
Load	10-200W		

Electronic Flasher Unit - 2+1

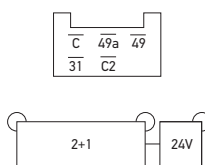
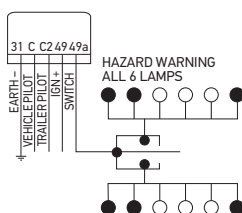
Flasher unit designed to operate 2 or 3 lamps on either side of a vehicle with caravan or trailer. Includes mounting bracket. Separate pilot lamp indicates operation of flasher lamp on the trailer.



Part Number	3017	5 PIN	12 VOLT
No. of Bulbs	2+1 (6) x 21W		

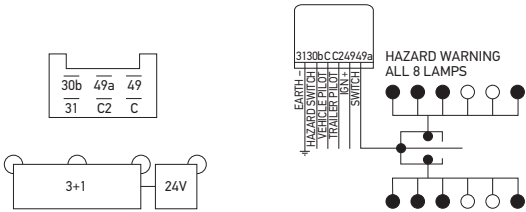
Electronic Flasher Unit - 2+1

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.



Part Number	3018	5 PIN	24 VOLT
No. of Bulbs	2+1 (6) x 21W		

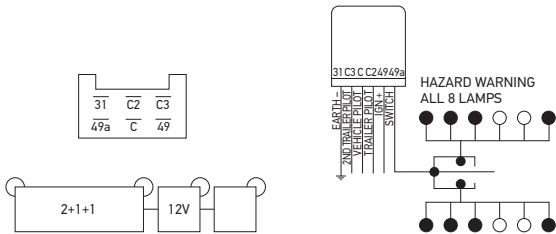
RELAYS AND FLASHER UNITS



Part Number	3032	6 PIN	24 VOLT
No. of Bulbs	3+1 (8) x 21W		

Electronic Flasher Unit - 3+1

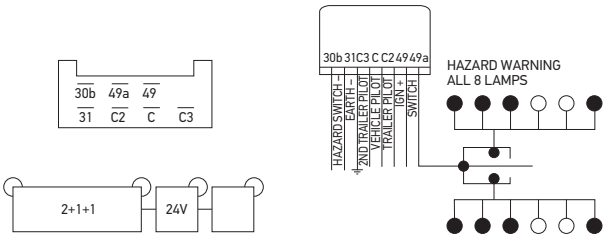
For heavy trucks with trailers. With mounting bracket. To operate 3 lamps on either side of towing vehicle, plus an additional lamp on either side of a trailer. Separate pilot lamp indicates operation of flasher lamp on the trailer.



Part Number	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.



Part Number	3034	7 PIN	24 VOLT
No. of Bulbs	2+1+1 (8) x 21W		

Electronic Flasher Unit - 2+1+1

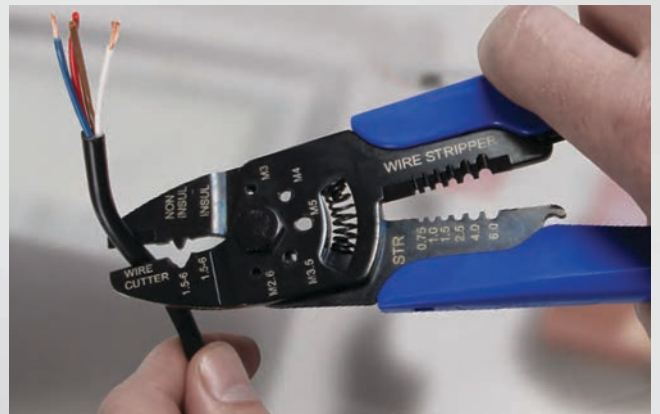
To operate 2 lamps on either side of a towing vehicle plus an additional lamp on either side of each of two trailers. Separate pilot lamps indicate operation of flasher lamps on the trailers.





Accessories

All HELLA accessory products are extensively tested for quality, durability and function prior to being offered under the HELLA brand.



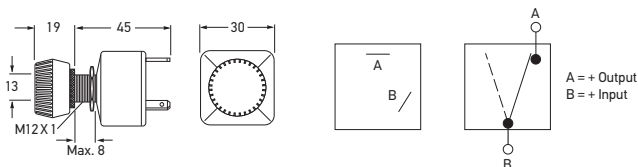
Contents

Accessories

Rotary Switches.....	254	2 Pole Plugs and Sockets.....	292-293
Toggle Switches.....	255-258	Horns.....	294-296
Rocker Switches.....	259-265	Warning and Reversing Alarms.....	297-299
Rocker Switch Accessories.....	266-267	Heavy Duty Reversing Alarms.....	300
Rocker Switch Symbols.....	268	Vacuum Pumps.....	301
Stainless Steel Push Switches.....	269	Turbo Fans/Circuit Testers.....	302
Push Switches.....	270-271	Crimping Tools.....	303
Push/Pull Switches.....	272	DT Connectors.....	304-305
Switch Panels.....	273	Super Seal Connectors.....	306-307
Battery Switches.....	274-276	Crimp Terminals/Connectors.....	308-309
Battery Selector Switches.....	277	Crimp Terminal Assortment Kits.....	310
Ignition and Starter Switches.....	278-279	Cable Connectors.....	311
Stop Lamp Switches.....	280	Insulated Crimp Terminals.....	311
Door Contact Switches.....	281	Junction Boxes.....	312
Pilot Lamps.....	282-283	Brass Connectors.....	313
Trailer Plugs and Sockets.....	284	Connectors/Insulation Tape.....	314
7 Pole Round Plugs and Sockets.....	285	Nylon Cable Ties.....	315
7 Pole Flat Plugs and Sockets.....	286	Blade Fuses.....	316-317
5/7 Pole ABS/EBS Plugs and Sockets.....	287	Fuses and Circuit Breakers.....	318
7 Pole Plugs and Sockets.....	288	Fuse Holders.....	319-320
13 Pole Plugs and Sockets.....	289	Blade Fuse Boxes.....	321-322
7/13 Pole Plugs and Sockets.....	290	Fuse Links.....	323-325
15 Pole Plugs and Sockets.....	291		

Rotary Switch - Off-On

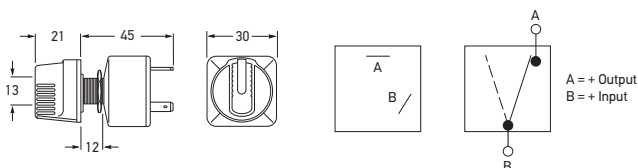
Rotary switch with round knob.



Part Number	4020	OFF-ON
Mounting	12.5mm diameter opening.	
Maximum Load	15A @ 12V 7.5A @ 24V	
Protection	IP 53 (Protection against dust and water spray)	

Rotary Switch - Off-On

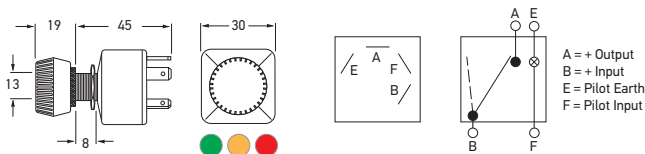
Rotary switch with flat knob.




Part Number	4021	OFF-ON
Mounting	12.5mm diameter opening.	
Maximum Load	15A @ 12V 7.5A @ 24V	
Protection	IP 53 (Protection against dust and water spray)	

Illuminated Rotary Switch, Off-On - 12 Volt

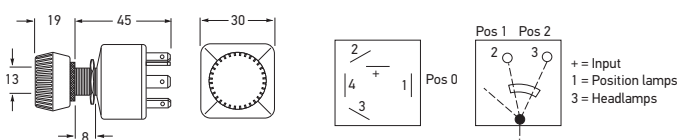
Illuminated by inbuilt 12V capillary bulb, complete with red, amber and green lenses.



Part Number	4022		OFF-ON
Mounting	12.5mm diameter opening.		
Maximum Load	15A @ 12V		
Protection	IP 53 (Protection against dust and water spray)		
Suitable for 12V only. Bulb not replaceable.			

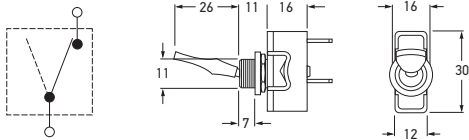
Rotary Headlamp Switch - Off-On-On

Rotary switch with round knob.



Part Number	4023	OFF-ON-ON
Mounting	12.5mm diameter opening.	
Maximum Load	23A @ 12V 11.5A @ 24V	
Protection	IP 53 (Protection against dust and water spray)	

Toggle Switch - Off-On

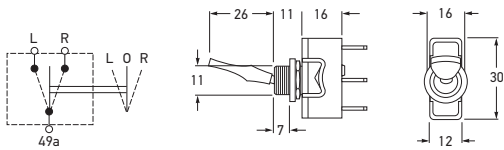


Part Number	4456	OFF-ON
Mounting	13mm diameter opening.	
For Panels	Up to 6mm thick.	
Maximum Load	15A @ 12V 7.5A @ 24V	



Toggle Switch - On-Off-On

Toggle switch, suitable for controlling direction indicator lamps.

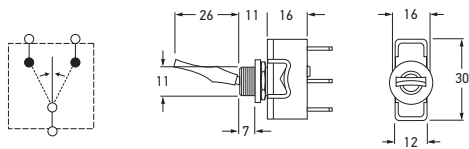


Part Number	4202	ON-OFF-ON
Mounting	13mm diameter opening.	
For Panels	Up to 6mm thick.	
Maximum Load	15A @ 12V 7.5A @ 24V	



Momentary Spring Return Switch - (On)-Off-(On)

Momentary on-off-on, spring return aerial switch. Flick toggle with spring return to centre.

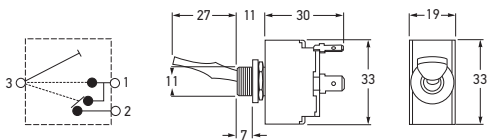


Part Number	4460	(ON)-OFF-(ON)
Mounting	13mm diameter opening.	
For Panels	Up to 6mm thick.	
Maximum Load	15A @ 12V 7.5A @ 24V	



Headlamp Switch - Off-On-On

Three position switch:
Upper = Off
Centre = Position lamps
Lower = Headlamps and position lamps



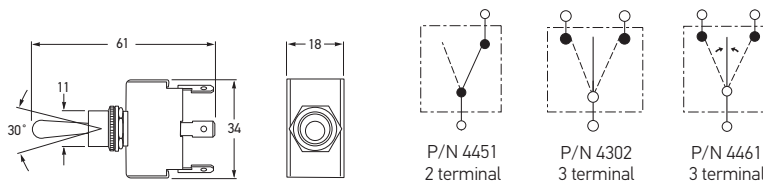
Part Number	4056	OFF-ON-ON
Mounting	13mm diameter opening.	
For Panels	Up to 6mm thick.	
Maximum Load	20A @ 12V 10A @ 24V	



Metal Shaft Toggle Switch



P/N 4451



Part Number	4451		OFF-ON
	4302		ON-OFF-ON
	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 - Off-On



Part Number	4203		OFF-ON
Mounting	12mm diameter opening.		
For Panels	Up to 5mm thick.		
Maximum Load	15A @ 12V 7.5A @ 24V		

Aircraft Style Switch Cover - Red

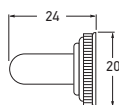
Red aircraft style switch cover to prevent accidental switch operation.



Part Number	4455		RED
To Suit	P/Ns 4451 and 4203.		

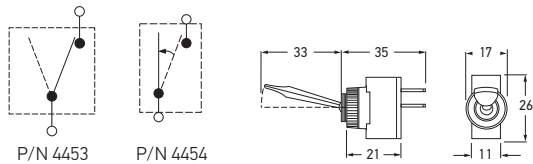
Toggle Boot



To be used with toggle switches.



Part Number	4452		
	4452-BULK		PACK OF 10
To Suit	Toggle switch P/Ns 4302, 4451 and 4461.		

Plastic Toggle Switch





Part Number	4453		OFF-ON
	4454 (Momentary spring return)		OFF-(ON)
Mounting	13mm diameter opening.		
For Panels	Up to 6mm thick.		
Maximum Load	8A @ 12V		



Illuminated Toggle Switch, On-Off-On

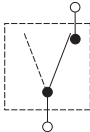
Three position latching switch for indicators. Illuminates green.




Part Number	4206			ON-OFF-ON
Mounting	19mm diameter opening.			
For Panels	Up to 2mm thick.			
Maximum Load	6A @ 12V			
Bulb to Suit	12V	292		



Pre-wired Toggle Switch - Off-On

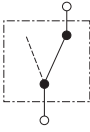



Part Number	4457		OFF-ON
Mounting	12mm diameter opening.		
For Panels	Up to 6mm thick.		
Maximum Load	6A @ 12V		



Brass Toggle Switch - Off-On

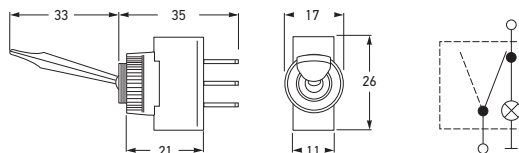
Chrome toggle and face nut. Brass construction.



Part Number	2762		OFF-ON
Mounting	11mm diameter opening.		
For Panels	Up to 6mm thick.		
Maximum Load	15A @ 12V 7.5A @ 24V		
Toggle boot P/N 4452 does not fit this switch.			







Illuminated Toggle Switch, Off-On - 12 Volt



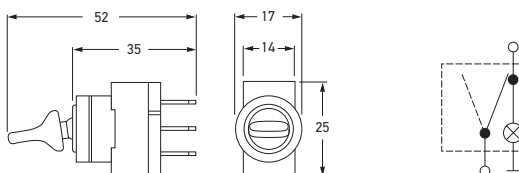
P/N 4434

P/N 4435

P/N 4436

Part Number	4433		RED
	4434		GREEN
	4435		AMBER
	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



P/N 4422

P/N 4423

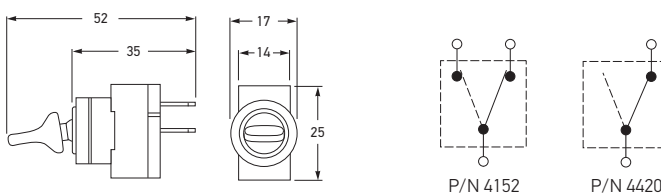
P/N 4424

Part Number	4421		RED
	4422		GREEN
	4423		BLUE
	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



P/N 4152



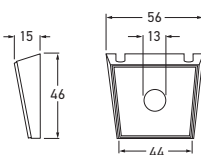
P/N 4152

P/N 4420

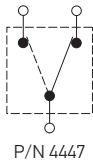
Part Number	4420		OFF-ON
	4152		ON-ON
Mounting	12.5mm diameter opening.		
For Panels	Up to 6mm thick.		
Maximum Load	10A @ 12V	5A @ 24V	

Switch Mounting Panel

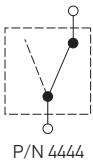
Single switch mounting panel. Plastic moulded with black grain finish.



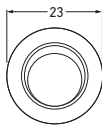
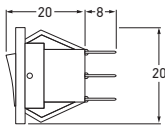
Part Number	4437		SINGLE
Mounting	12.5mm diameter opening.		



P/N 4447



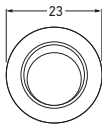
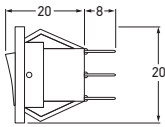
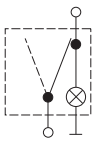
P/N 4444





Part Number	4444		OFF-ON
	4447		ON-ON
Mounting	20mm diameter opening.		
For Panels	Up to 4mm thick.		
Maximum Load	10A @ 12V		

Rocker Switch

Panel push fit.



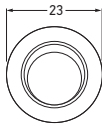
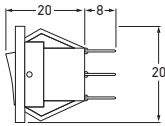
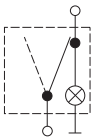
Part Number	4445		AMBER
	4446		RED
Mounting	20mm diameter opening.		
For Panels	Up to 4mm thick.		
Maximum Load	10A @ 12V		
Suitable for 12V only. Bulb not replaceable.			


Illuminated Rocker Switch, Off-On - 12 Volt

Panel push fit.



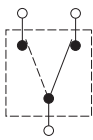
P/N 4446



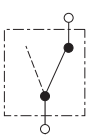
Part Number	4448		RED
Mounting	20mm diameter opening.		
For Panels	Up to 4mm thick.		
Maximum Load	10A @ 12V		
Suitable for 12V only. LED included, not replaceable.			

LED Rocker Switch, Off-On - 12 Volt

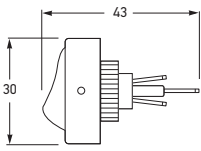
Panel push fit.



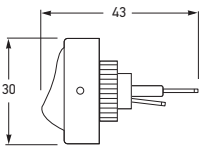
P/N 4475



P/N 4470



P/N 4475



P/N 4470



Part Number	4470		OFF-ON
	4475		ON-ON
Mounting	12mm diameter opening.		
For Panels	Up to 5mm thick.		
Maximum Load	10A @ 12V		

Rocker Switch



P/N 4470



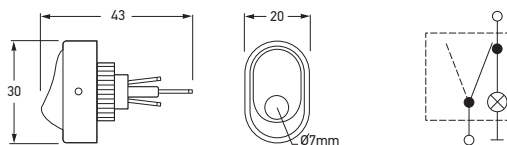
P/N 4475

Illuminated Rocker Switch, Off-On - 12 Volt



P/N 4477

P/N 4478



Part Number	4476		AMBER
	4477		GREEN
	4478		RED

Mounting 12mm diameter opening.

For Panels Up to 5mm thick.

Maximum Load 10A @ 12V

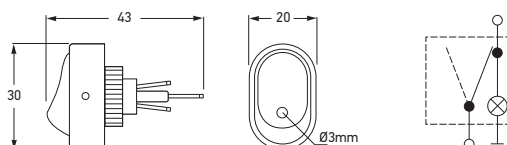
Suitable for 12V only. Bulb not replaceable.

LED Rocker Switch, Off-On - 12 Volt



P/N 4480

P/N 4481



Part Number	4479		AMBER
	4480		GREEN
	4481		RED

Mounting 12mm diameter opening.

For Panels Up to 5mm thick.

Maximum Load 10A @ 12V

Suitable for 12V only. LED included, not replaceable.

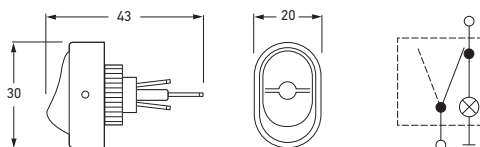
Illuminated Rocker Switch, Off-On - 12 Volt



P/N 4472

P/N 4473

P/N 4474



Part Number	4471		AMBER
	4472		BLUE
	4473		GREEN
	4474		RED

Mounting 12mm diameter opening.

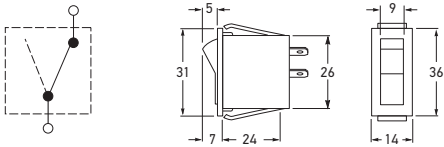
For Panels Up to 5mm thick.

Maximum Load 10A @ 12V

Suitable for 12V only. Bulb not replaceable.

Rocker Switch - Off-On

Panel push fit.

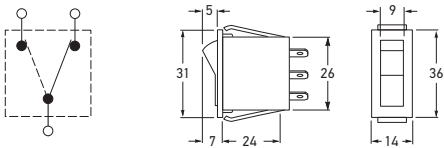


Part Number	4426		OFF-ON
Mounting	29 x 12mm opening.		
Maximum Load	10A @ 12V 5A @ 24V		



Rocker Switch - On-On

Panel push fit.

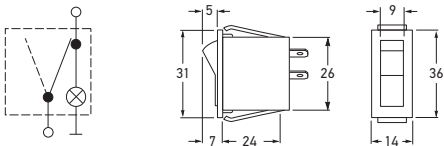






Part Number	4151		ON-ON
Mounting	29 x 12mm opening.		
Maximum Load	10A @ 12V 5A @ 24V		



Illuminated Rocker Switch, Off-On - 12 Volt

Panel push fit.



Part Number	4427		RED
	4428		GREEN
	4429		BLUE
	4430		AMBER
Mounting	29 x 12mm opening.		
Maximum Load	10A @ 12V		
Suitable for 12V only. Bulb not replaceable.			



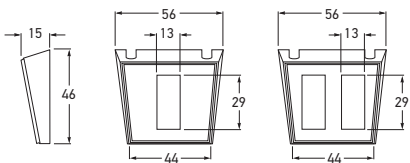
P/N 4428



P/N 4429

P/N 4430

Rocker Switch Mounting Panel

Plastic moulded with black grain finish.



Part Number	4431		SINGLE
	4432		DOUBLE
To Suit	Rocker switch P/Ns 4426, 4427, 4428, 4429, 4430 and 4151.		

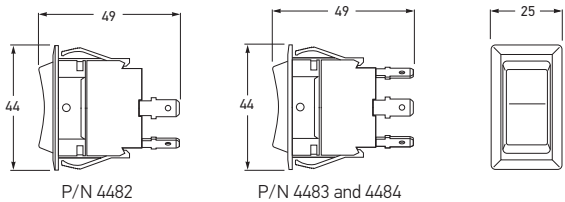





Heavy Duty Rocker Switch

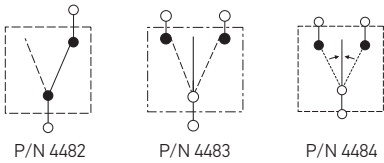
Extremely robust rocker switch featuring push-on terminals and weather resistant black plastic housing. Panel push fit.



P/N 4483

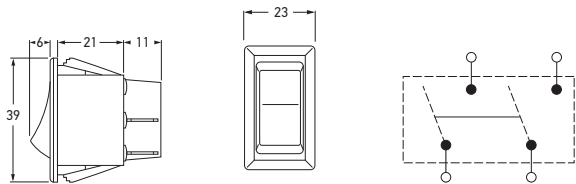



Part Number	4482		OFF-ON
	4483		ON-OFF-ON
	4484 (Momentary spring return)		(ON)-OFF-(ON)
Mounting	20 x 36mm opening.		
For Panels	Up to 4mm thick.		
Maximum Load	25A @ 12V 12.5A @ 24V		



Rocker Switch, Black
- Double Pole

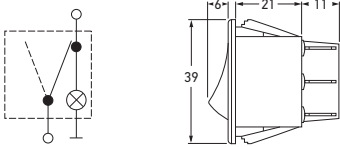
Panel push fit.





Part Number	4485		OFF-ON
Mounting	20 x 35mm opening.		
For Panels	Up to 4mm thick.		
Maximum Load	20A @ 12V (10A per pole)		

LED Illuminated Rocker Switch,
Off-On - 12 Volt

Panel push fit.



Part Number	4486A		AMBER
	4486G		GREEN
	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.			

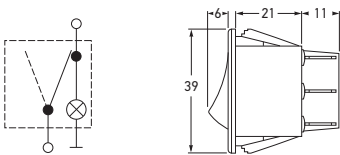






P/N 4486G

P/N 4486R

Illuminated Rocker Switch,
Off-On - 12 Volt

Panel push fit.



Part Number	4487A		AMBER
	4487B		BLUE
	4487G		GREEN
	4487R		RED
Mounting	20 x 35mm opening.		
For Panels	Up to 4mm thick.		
Maximum Load	10A @ 12V		
Suitable for 12V only. Bulb not replaceable.			



P/N 4487B

P/N 4487G

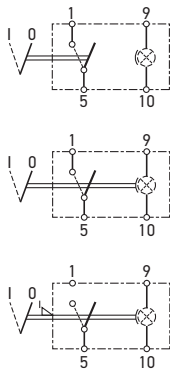
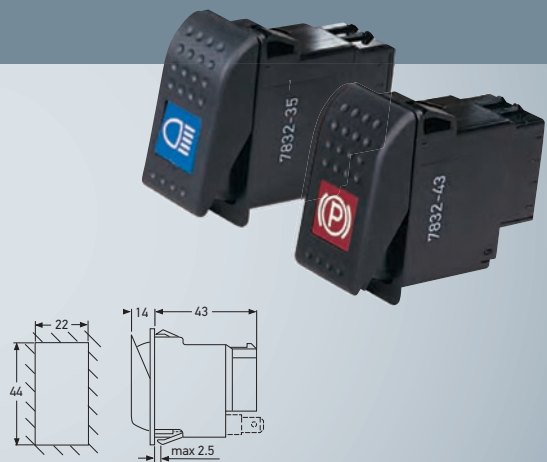
P/N 4487R

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.

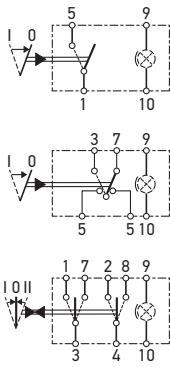
Mounting	Mounted directly to properly dimensioned opening (1 - 2.5mm thick) or by mounting panels (for more information see page 234).
Maximum Load	16A @ 12V, 8A @ 24V.

Connectors, symbols, mounts and bulb holders are to be purchased separately.



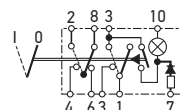
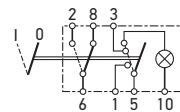
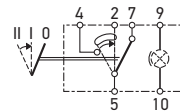
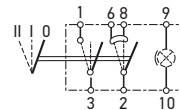
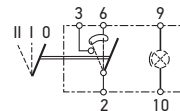
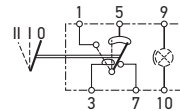
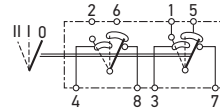
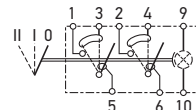
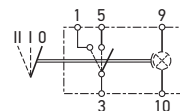
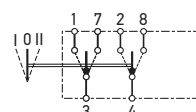
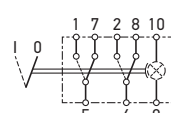
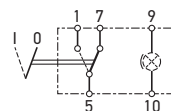
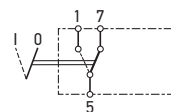
Location lamp illuminates lamp with park lights. Pilot lamp illuminates when switch is in the 'on' position.

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		



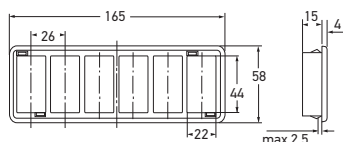
MOMENTARY SPRING RETURN SWITCHES			
6GM 007 832-191	LOCATION	Suitable for use with location light.	OFF-(ON)
6GM 007 832-221	LOCATION	Suitable for use with location light.	CHANGE-OVER
6GM 007 832-251	LOCATION	Suitable for use with location light.	(ON)-OFF-(ON)

CHANGE-OVER SWITCHES			
Part Number	Symbol	Description	Function
6FH 007 832-051		Without location light, without pilot light.	ON-ON
6FH 007 832-061	LOCATION	Suitable for use with location light.	
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 007 832-381		Without location light, without 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 007 832-461	LOCATION	Suitable for use with location light.	OFF-ON-MOMENTARY ON
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
6HH 007 832-301	PILOT LOCATION	With location light and pilot light. Includes pre-fitted 24V bulb. Hazard flasher switch.	



See page 236
for the range of
coloured symbols.

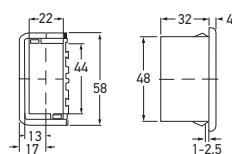
Accessories for Switches in Model Range 007 832-...



Part Number	MOUNTING PANELS	
	8HG 713 626-001 (156.1 x 48.2mm)	SIX SWITCHES
	8HG 714 504-001 (77.6 x 48.2mm)	THREE SWITCHES



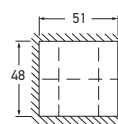
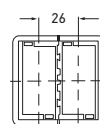
P/N 8HG 716 734-001



P/N 8HG 716 734-001



P/N 8HG 716 735-001



Part Number	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.



P/N 8HG 716 735-001



Part Number	BLANKING PLUG FOR EMPTY SWITCH APERTURES
	9HB 713 629-001

ACCESSORIES



Part Number	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	W121.2 W241.2



Side view



Part Number	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	W121.2 W241.2



9FF 713 627-011 9FF 713 627-031 (LED)

Part Number	CONNECTORS	
	8JA 713 631-001 (For switch)	8 POLE
	8JA 715 600-001 (For bulb holder)	2 POLE
	8573 (For connectors - Pack of 100)	BRASS TERMINALS



P/N 8JA 713 631-001












































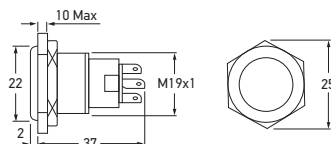
P/N 8JA 715 600-001



P/N 8573

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 714 300-191		Temperature
9XT 713 630-021	Red	Without symbol	9XT 713 630-181		Window lift
9XT 713 630-031	Yellow	Without symbol	9XT 713 630-101		Windscreen
9XT 713 630-301		Light	9XT 713 630-121		Window wiper/wash
9XT 714 300-131		Main beam	9XT 713 630-131		Windscreen wash
9XT 713 630-351		Fog lamp	9XT 713 630-231		Heated rear window
9XT 713 630-421		Work lamp front	9XT 713 630-481		Heated outside mirror
9XT 713 630-701		Work lamp rear	9XT 713 630-521		Defroster
9XT 714 300-141		Flasher lamp	9XT 713 630-461		Air horn
9XT 713 630-391		Warning lamp	9XT 713 630-291		Fresh air
9XT 713 630-511		Map lamp	9XT 713 630-681		Roof fan
9XT 713 630-491		Driving compartment lighting	9XT 713 630-201		Heater
9XT 713 630-641		Boot lighting	9XT 713 630-221		Heater fan
9XT 713 630-261		Main light	9XT 713 630-401		Fast
9XT 713 630-371		Work light	9XT 713 630-691		Slow
9XT 713 630-281		Rotating beacon	9XT 713 630-551		Front door
9XT 713 630-711		Rotating beacon	9XT 713 630-561		Rear door
9XT 714 300-181		Lubrication	9XT 713 630-621		Lower
9XT 714 300-011		Parking brake	9XT 714 300-051		Change-over tanks
Interior Lighting			Fan		
9XT 713 630-271		High	9XT 713 630-251		Fast
9XT 714 300-031		Medium	9XT 713 630-531		Slow
9XT 713 630-501		Low			



	12 VOLT	24 VOLT	
Part Number	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.

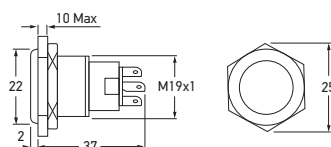


Stainless Steel Latching Switch with LED Ring - Off-On

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.



P/N 8HG 958 455-011



	12 VOLT	24 VOLT	
Part Number	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.



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.



P/N 8HG 958 455-211

	12 VOLT	24 VOLT	
Part Number	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.

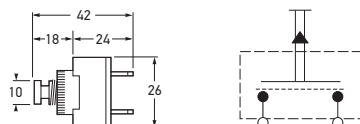



Stainless Steel Buzzer with LED Ring

Exterior durable, 304 stainless steel warning buzzer to match stainless steel switches (above). Also feature a ring of LED light.

Momentary Spring Return Switch - Off-(On)

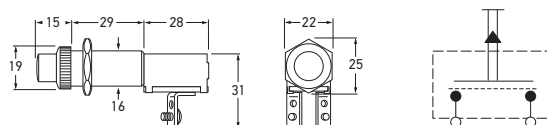
Off-momentary on push button (spring return).




Part Number	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)

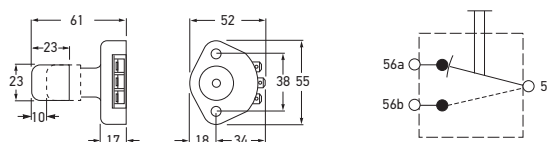
Brass construction. Chrome plated face nut and button. Off-momentary on push button (spring return).



Part Number	2763		OFF-(ON)
Mounting	16mm diameter opening.		
For Panels	Up to 25mm thick.		
Maximum Load	20A @ 12V 10A @ 24V		

Foot Operated Dipper Switch

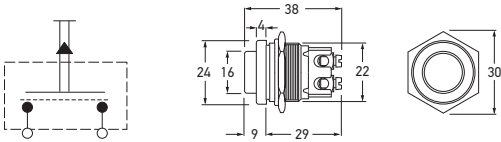
Push on terminals. Latching spring return mechanism.



Part Number	4100		ON-ON
Mounting	Surface mount.		
Maximum Load	12A @ 12V 6A @ 24V		

Momentary Spring Return Push Button Switch - Off-(On)

Off-momentary on push button (Spring return) switch.

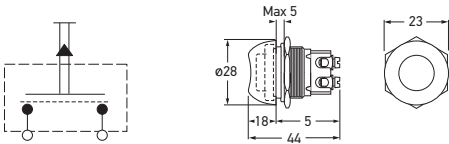



Part Number	4501	OFF-(ON)
Mounting	22mm diameter opening.	
For Panels	Up to 6mm thick.	
Maximum Load	16A @ 12V 8A @ 24V	



Momentary Spring Return Push Button Switch - Off-(On)

Water resistant push button type switch with rubber cap. Off-momentary on push button (spring return).

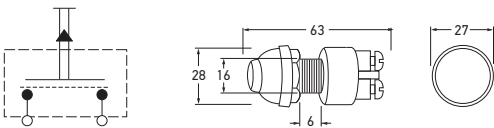


Part Number	4503		OFF-(ON)
Mounting	23mm diameter opening.		
For Panels	Up to 2mm thick.		
Maximum Load	16A @ 12V 8A @ 24V		
Do not remove rubber cap/front face nut when fitting.			



Momentary Spring Return Push Button Switch - Off-(On)

Water resistant starter switch.
Off-momentary on push button (spring return).

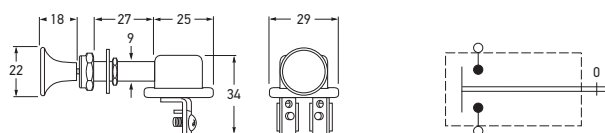


Part Number	4506	OFF-(ON)
Mounting	16mm diameter opening.	
For Panels	Up to 10mm thick.	
Maximum Load	60A @ 12V 40A @ 24V	



Brass Switch - Off-On

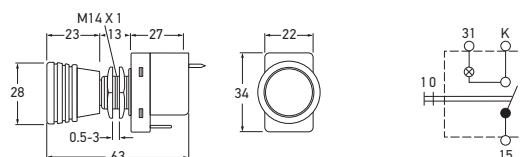
Chrome knob and face nut. Brass construction.



Part Number	2761	OFF-ON
Mounting	10mm diameter opening.	
For Panels	Up to 25mm thick.	
Maximum Load	10A @ 12V 5A @ 24V	

Illuminated Switch - Off-On

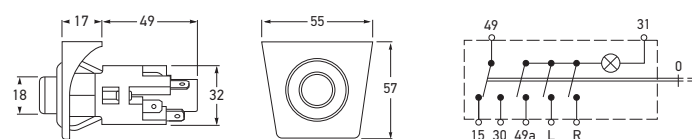
Knob incorporates red or green pilot lamp.



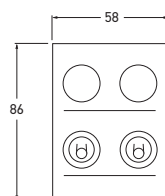
Part Number	4411	GREEN
	4412	RED
Mounting	14mm diameter opening.	
For Panels	Up to 6mm thick.	
Maximum Load	10A @ 12V 5A @ 24V	
Bulb to Suit	12V 24V	W121.2 W241.2

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.



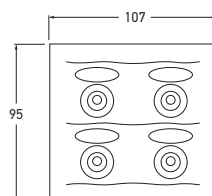
Part Number	5227	OFF-ON
Mounting	29mm diameter opening.	
Maximum Load	7A @12V	
For Panels	Up to 3mm thick.	
Bulbs to Suit	12V 24V	J122 J243



Part Number	2687	2 X OFF-ON
Voltage	Multivolt™, suitable for 12 and 24 volt systems.	
Housing	Impact resistant plastic.	
Maximum Load	20A @ 12V	

Micro Switch Panel - LED Backlight

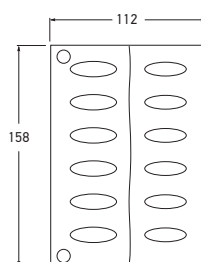
Micro switch panel modules can be added together horizontally or vertically giving numerous installation options. Each module also has red and green LED backlighting. Circular labels allow vertical, horizontal, left or right mounting.



Part Number	2690 (4 way)	OFF-ON
	2691 (6 way)	
Housing	Impact resistant plastic.	
Switches	4 or 6 off-on toggle switches.	
Maximum Load	20A @ 12V	

Compact Switch Panel

Splash proof switch panel protected with neoprene rubber boots. Inline fuse holders with fuses behind panel.



Part Number	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	

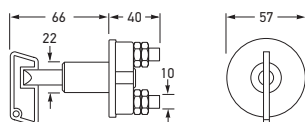
Switch Panel, LED Backlight

Splash proof switch panel featuring LED backlit labels. Protected by neoprene rubber boots. Removable cover plate over switches conceals screws.



Battery Master Switch

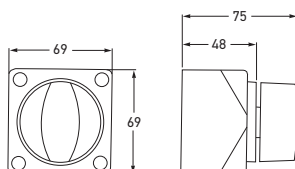
Suitable for cars and medium sized trucks.
Complete with removable key. For interrupting circuits (prevents theft and short circuit).



Part Number	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	4652	Spare key
Switch not designed for Marine applications.		

Battery Master Switch

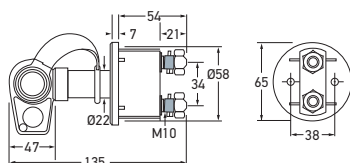
Suitable for cars and medium sized trucks.
Complete with removable key.



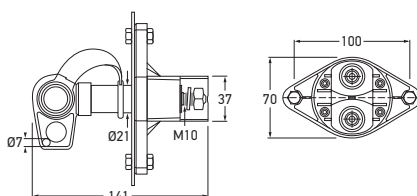
Part Number	4640	OFF-ON
Mounting	Recess or surface mount.	
Maximum Load	12/24V	1250A for up to 10 seconds
Maximum Continuous Load	12/24V	275A
Termination	2 x M10 studs.	
Spare Part	4641	Spare key

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.



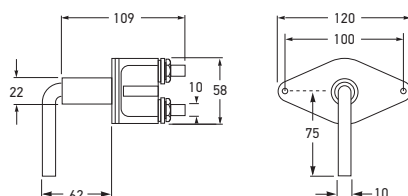
Part Number	4649	OFF-ON
Mounting	22mm diameter opening.	
Maximum Load	24V	2000A for 5 seconds
Maximum Continuous Load	12/24V	250A
Termination	2 x M10 studs.	
Protection	IP 65 (Protection against dust and water jets)	



Part Number	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

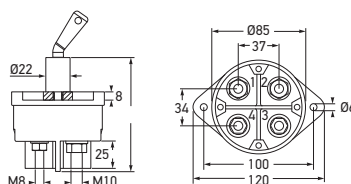
Suitable for trucks and other commercial machinery, with a high continuous rating of 500 amps. Provides effective protection against theft and fire in case of accidents. With sealing cap when not in use which doubles as a key holder.



Part Number	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 50mm² lead connected with ring-type terminals.
Termination	2 x M10 studs.	
Protection	IP X4 (Protection against water splashing)	
Spare Part	4654	Spare key
Switch not designed for Marine applications.		

Heavy Duty Battery Master Switch

For trucks, buses and earth moving equipment. Complete with removable key.



Part Number	4658	OFF-ON
Mounting	22mm diameter opening.	
Maximum Load	24V	2 x 2500A for 10 seconds
Maximum Continuous Load	24V	2 x 500A
Termination	2 x M10 / 2 x M8 studs.	
Protection	IP 67	

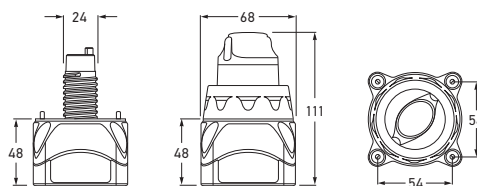
Battery Master Switch - Dual Circuit

The dual circuit battery switch can be either used to cut off two independent battery supplies at once or to interrupt the power and earth circuits together for total isolation.



Battery Master Switch - Threaded Collar

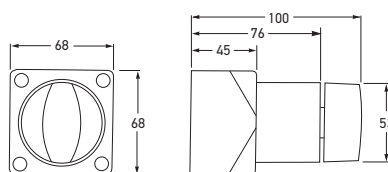
Battery master switch with threaded collar. Suitable for cars and medium sized trucks. Complete with removable key, labelled handle and removable back cover. For interrupting circuits (prevents theft and short circuit).



Part Number	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

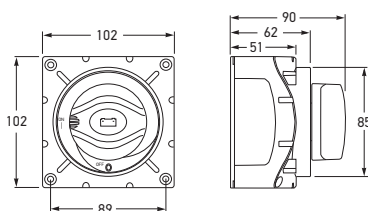
Battery switch with tin-plated copper studs and nuts. Can be operated manually or remotely with a separate switch (not supplied). Suitable for mounting alongside battery reducing cable lengths to starter motor. Complete with removable key and 3 way DTM plug.



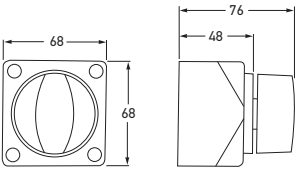
Part Number	4724	OFF-ON
Mounting	Recess or surface mount. 53mm diameter opening.	
Voltage	12/24V	
Power Consumption	2W @ 12V when operating, 0.25W static.	
Maximum Load	12/24V	1250A for up to 10 seconds.
Maximum Continuous Load	12/24V	275A
Termination	2 x 10mm studs.	
Cable Length	500mm	

Heavy Duty Battery Master Switch

For commercial use. Features sliding contact for self cleaning.



Part Number	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)	

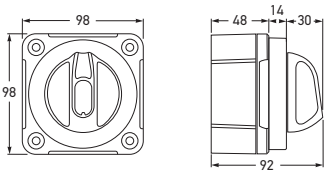


Part Number	4723	OFF-B1-BOTH-B2
Mounting	Recess or surface mount.	
Maximum Load	12/24V	1000A for up to 10 seconds.
Maximum Continuous Load	12/24V	200A
Termination	3 x 5/16" studs.	
Protection	IP 56 (Protection against solid foreign objects up to 1mm and powerful water jets)	



Battery Selector Switch

Battery switch to select either from two power sources or combine together. Will also isolate from the power sources.



Part Number	4771	OFF-B1-BOTH-B2
Mounting	Recess or surface mount. 92mm diameter opening.	
Maximum Load	12/24V	1500A for 10 seconds
Maximum Continuous Load	12/24V	400A
Termination	3 x 10mm studs.	
Protection	IP 66 (Protection against dust and high pressure washing)	

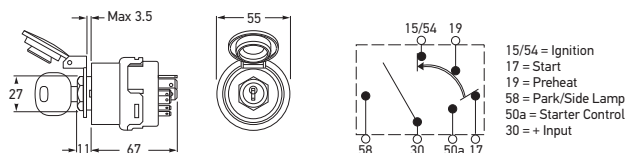


Battery Selector Switch

Battery switch to select either from two power sources or combine together. Will also isolate from the power sources.

Diesel Pre-heating Starter Switch

Pre-heating starter switch supplied with two keys. Key removes in park and off.

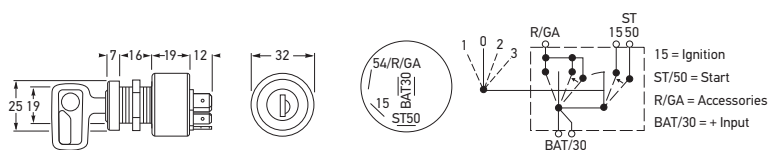


Part Number	4005
Mounting	27mm diameter opening.
For Panels	Up to 3.5mm thick.
Function	5 position switch (park, off, driving, pre-heat, start).

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

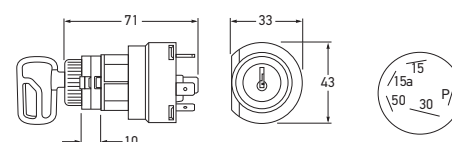
Switch with spring loaded return.
Supplied with two keys.



Part Number	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 Silica 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.



Part Number	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

Two keys supplied. Start-lockout mechanism to prevent accidental engagement of starter.



Part Number	4009	22MM SHAFT
	4010	18MM SHAFT
Mounting	4009 22.5mm diameter opening 4010 18.5mm diameter opening	
For Panels	Up to 19mm thick.	
Maximum Load	@12V ignition 25A, start 50A, accessory 20A.	
Function	Four position switch (accessory, off, ignition, start).	

Ignition and Starter Switch

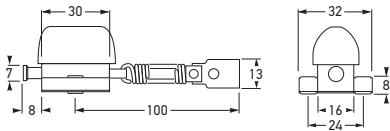
Four position switch with spring loaded return.
Four screw terminals.



Part Number	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)	

Stop Lamp Switch - Off-On

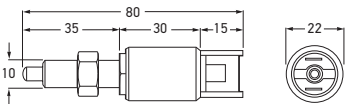
Normally open, contacts are closed when tension is applied to the spring. Complete with splash proof rubber cap. Brake linkage clamp 6mm diameter.



Part Number	4560	OFF-ON
Maximum Load	10A @ 12V 5A @ 24V	

Stop Lamp Switch - On-Off

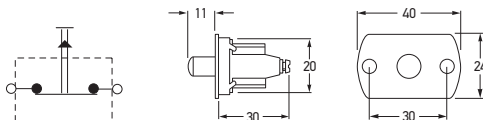
Thread M10 x 1.25. Suits most Japanese vehicles.




Part Number	4562	ON-OFF
Maximum Load	10A @ 12V	

Door Contact Switch - On-Off

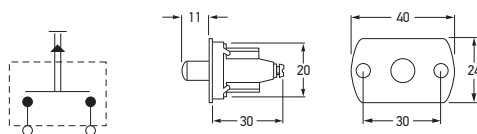
Switch closes circuit if door is opened.




Part Number	4550		ON-OFF
Mounting	21mm diameter opening.		
Maximum Load	2A @ 12V 1A @ 24V		

**Door Contact Switch - Off-On**

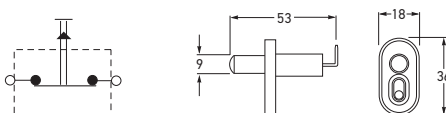
Switch opens circuit if door is opened.
May be used as safety cut-off switch.




Part Number	4551		OFF-ON
Mounting	21mm diameter opening.		
Maximum Load	2A @ 12V 1A @ 24V		

**Door Contact Switch - On-Off**

Switch closes circuit if door is opened.
Corrosion proof black plastic. Rubber seal.
Push-on terminal.

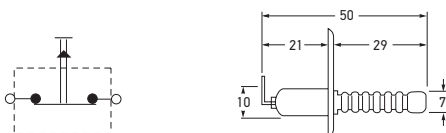



Part Number	4553		ON-OFF
Mounting	12mm diameter opening and screw.		
Maximum Load	3.5A @ 12V		

Plunger automatically adjusts to door gap on initial operation.

**Door Contact Switch - On-Off**

Extended arm which may be cut to length to suit opening.

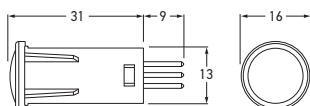


Part Number	4554		ON-OFF
Mounting	10mm diameter opening and screw.		
Maximum Load	5A @ 12V		



Pilot Lamp - 12 Volt





Panel push fit pilot lamp with non-replaceable bulb. See over the next page for function descriptions.



P/N 2709

P/N 2710

P/N 2711

Part Number	2708		RED
	2709		GREEN
	2710		BLUE
	2711		AMBER

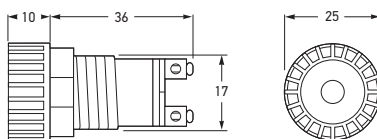
Mounting 12.5mm diameter opening.





Voltage 12V

Suitable for 12V only. Bulb not replaceable.

Pilot Lamp

Pilot lamp utilizing bayonet based bulb for use under heavy duty conditions. See over the next page for function descriptions.



Part Number	2712		RED
	2713		GREEN
	2714		BLUE
	2715		AMBER

Mounting 17mm diameter opening.

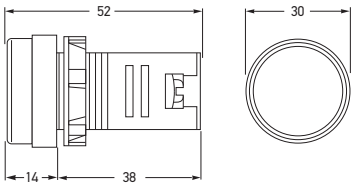
Bulbs to Suit 12V H122
24V H242













P/N 2713

P/N 2714

P/N 2715



Part Number	2716		RED
	2716-24V		
	2717		GREEN
	2717-24V		
	2718		AMBER
	2718-24V		
	2719		WHITE
	2719-24V		
	2720		BLUE
	2720-24V		
Mounting	22mm diameter opening.		
For Panels	Up to 38mm thick.		
Voltage	12V or 24V AC/DC		
Protection	IP 65 (Protection against dust and water jets) when installed.		

LED Pilot Lamp

Heavy duty multi-chip LED pilot lamp featuring shock-resistant one-piece construction for long service life and polycarbonate lens. See below for function descriptions.



P/N 2717

P/N 2718

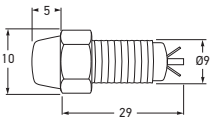






P/N 2719

P/N 2720

LED Pilot Lamp, Chrome Body - 12 Volt

Pilot lamp featuring chrome body and available in four colour variants. See below for function descriptions.



Part Number	2721		RED
	2722		GREEN
	2723		BLUE
	2724		AMBER
Mounting	8mm diameter opening.		
For Panels	Up to 10mm thick.		
Suitable for 12V only. LED included, not replaceable.			



P/N 2722

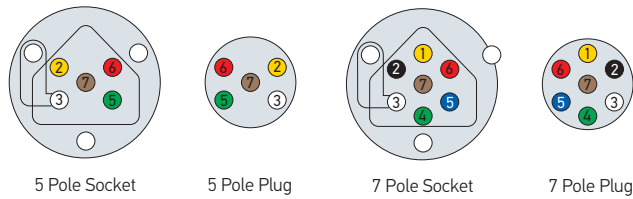
P/N 2723

P/N 2724

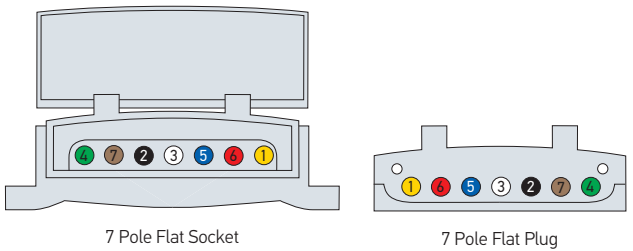
RED	Ignition, handbrake and hazard warning lamps
GREEN	Indicator lamps
BLUE	Main beam and auxiliary headlamps
AMBER	Fog lamps

Trailer Connector
Wiring Specifications

Cable Entry View



Front View



5 POLE CONNECTOR WIRING SPECIFICATIONS	
Terminal Number	Connect to
2	Left-hand flasher lamps
3	Earth return
5	Right-hand flasher lamps
6	Stop lamps
7	Rear position, number plate and clearance lamps

7 POLE CONNECTOR WIRING SPECIFICATIONS	
Terminal Number	Connect to
1	Left-hand flasher lamps
2	Reversing lamps
3	Earth return
4	Right-hand flasher lamps
5	Service brakes (or Auxiliary)
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.

Trailer Plug Holder

Minimises potential damage to plug,
to suit P/Ns 4902 and 4911.



Part Number	8000
Mounting	Simple screw mounting on caravan/trailer drawbar or any convenient location.


Trailer Socket Bracket

Zinc plated steel. To suit P/Ns 4901 and 4912.



Part Number	8022
-------------	------

ACCESSORIES


Part Number	4901 	
	4901X	
Maximum Load	16A @ 12V with 1.5mm ² cable (total). 25A @ 12V with 2.5mm ² cable (total).	
Accessory	9.4901.05 Gasket with cable exit	

7 Pole Plastic Socket

Black plastic socket with removable contact set.
P/N 4901X with disconnecting contact for rear fog or rear parking sensors.




P/N 9.4901.05

Part Number	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.




Part Number	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.




Part Number	4911 	
	4911-BULK	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.



Part Number	4912 	
	4912-BULK	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.



Part Number	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	

7 Pole Round 12V Spiral Cable



7 Pole Flat Socket

Impact resistant, UV stabilised plastic
spring loaded lid. Nickel plated contacts
for excellent electrical performance.



Part Number	4920	
	4920-BULK	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.



Part Number	4921	
	4921-BULK	PACK OF 50
Maximum Load	20A @ 12V (total) 10A @ 24V (total)	

Flat Trailer Plug Holder

Flat plug holder to suit P/N 4921.



Part Number	8009	
	8009-BULK	PACK OF 20

5/7 Pole ABS Socket

Made of black fibreglass reinforced nylon.

Part Number	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.



Crimp terminals

5/7 Pole ABS Plug

Made of black fibreglass reinforced nylon.

Part Number	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.	



Crimp terminals

Plug-in Socket Tester - 24V

Designed for testing ABS sockets.

Part Number	8PD 004 508-031
-------------	-----------------



ABS/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.

Part Number	8KA 007 648-001 (ABS)	5 PIN
	8KA 007 648-021 (EBS)	7 PIN
Cable	5 Pin 7 Pin	3 x 1.5mm ² + 2 x 4.0mm ² 5 x 1.5mm ² + 2 x 4.0mm ²
Cable Length	Up to 4.0m	



7 Pole Heavy Duty Metal Socket with Screw Terminals



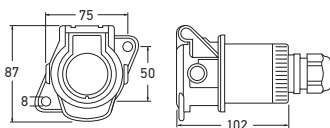
Part Number	4907	SOCKET
Maximum Load	15A @ 24V with 1.5mm ² cable (total) 20A @ 24V with 2.5mm ² cable (total)	
Cable	Suitable for cable 9.5 - 12.5mm in diameter.	
Compliance	ISO 1185	

7 Pole Heavy Duty Metal Plug with Screw Terminals



Part Number	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	

7 Pole EBS Socket with Screw Terminals - 12 Volt

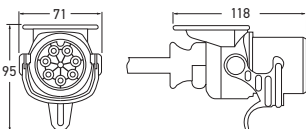


Part Number	8JB 011 895-001	SOCKET
Outer Cable Diameter	Suitable for cable diameter measuring 9 - 16mm	
Max. Cable Size	Up to 6mm ² per pole	
Compliance	ISO 7638-2	



7 pole configuration

7 Pole EBS Plug with Screw Terminals - 12 Volt



Part Number	8JA 011 896-001	PLUG
Outer Cable Diameter	Suitable for cable diameter measuring 11 - 13mm	
Max. Cable Size	Up to 6mm ² per pole	
Compliance	ISO 7638-2	

13 Pole (7 + 6) WeST Socket

Part Number	8JB 005 949-031	SOCKET
Maximum Load	15A @ 12V with 1.5mm² cable (Total)	
Compliance	ISO 11446	
Note: Can be used with standard 7 pole plugs.		



13 Pole (7 + 6) WeST Plug

Part Number	8JA 005 951-061	PLUG
Maximum Load	15A @ 12V with 1.5mm² cable (Total)	
Cable	Suitable for 11.5 - 14.0 mm in diameter.	
Compliance	ISO 11446	



13 Pole Socket



Part Number	8JB 005 949-001	SOCKET
Maximum Load	16A @ 24V with 1.5mm ² cable (total) 25A @ 24V with 2.5mm ² cable (total)	
Compliance	ISO 11446	

13 Pole Plug



Part Number	8JA 005 951-001	PLUG
Maximum Load	16A @ 24V with 1.5mm ² cable (total) 25A @ 24V with 2.5mm ² 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.



Part Number	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.	



Part Number	8JA 008 969-001
Maximum Load	16A @ 12V (total)
To suit late model vehicles with 13 pole plugs to standard round 7 pole.	



Part Number	8JA 005 952-005
Maximum Load	16A @ 12V (total)
To suit late model vehicles with 13 pole plugs to standard flat 7 pole, 250mm long.	

Part Number	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.



Part Number	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.



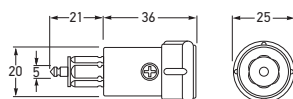
Part Number	8KA 007 648-041
Cable	12 x 1.5mm ² plus 3 x 2.5mm ² leads.
Cable Size	4m (stretched).

Parking Socket for EBS Plugs

Part Number	8HG 007 647-001
Mounting	54mm diameter opening

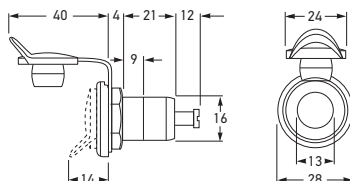


2 Pole Plug

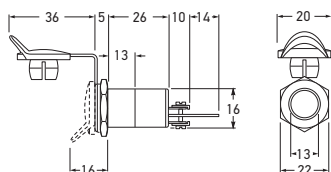


Part Number	4914	PLUG
Maximum Load	16A @ 12V 8A @ 24V	
Sockets to Suit	P/Ns 4915, 4916, 4917 and 4918.	

2 Pole Socket with Cover

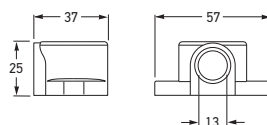


Part Number	4915	SOCKET
Mounting	19mm diameter opening.	
Maximum Load	16A @ 12V 8A @ 24V	

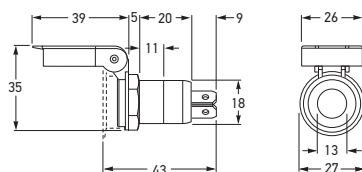
2 Pole Socket with Cover
- Insulated Earth

Part Number	4916	SOCKET
Mounting	19mm diameter opening.	
Maximum Load	16A @ 12V 8A @ 24V	

2 Pole Surface Mount Socket



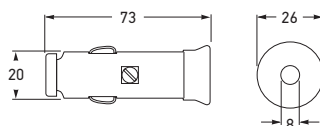
Part Number	4917	SOCKET
Mounting	Surface mount.	
Maximum Load	16A @ 12V 8A @ 24V	

2 Pole Socket with Metal Earth
Tab and Cover

Part Number	4918	SOCKET
Mounting	22mm diameter opening.	
Maximum Load	16A @ 12V 8A @ 24V	

2 Pole Power Plug

Suitable for standard cigarette sockets.

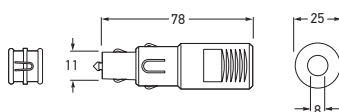


Part Number	4950	PLUG
Maximum Load	8A @ 12V 4A @ 24V	
Socket to Suit	4943-R	



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).

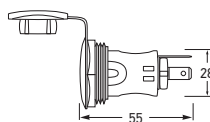


Part Number	4952	PLUG
Maximum Load	8A @ 12V	
Sockets to Suit	P/Ns 4915, 4916, 4917, 4918 and 4943-R.	



2 Pole Power Socket

2 pole lighter size power socket with protective cover for connection of a variety of electrical accessories.

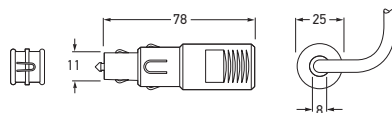


Part Number	4943-R	SOCKET
Maximum Load	15A @ 12V	



2 Pole Power Socket - Twin DIN Output

Twin Power Socket featuring two DIN 1465 output sockets for connection of accessories. Plugs into standard vehicle cigarette lighter sockets. Primary lighter plug connection features a removable extension piece allowing the unit to also plug into DIN 2 pole sockets if required.

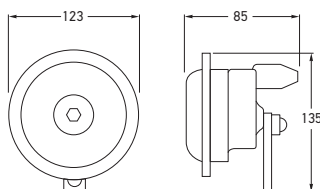


Part Number	4939	SOCKET
Maximum Load	10A @ 12V	



Super Tone Horn - Set of 2

Traffic blaster, generates a penetrating strong tone. Robust housing in a first-class design with striking grille. P/N 6037 also suitable for off-road use.



P/N 6036

Part Number	6036 (2 Horns)		12 VOLT
	6037 (2 Horns)		
	6037-24V (2 Horns)		24 VOLT
Power Consumption	6036	66W x 2	
	6037	78W x 2	
	6037-24V	84W x 2	
Frequency	P/N 6036	300/500Hz	
	P/N 6037/6037-24V	375/500Hz	
Sound Level	118dB		



P/N 6037

Rear view



6036 Packaging



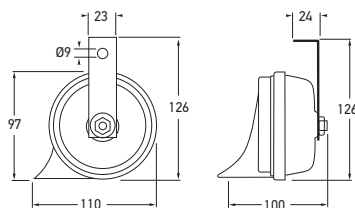
6037/...-24V Packaging

Twin Tone Scroll Horn - Set of 2

Includes 12 volt relay.



Packaging



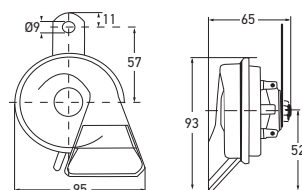
Part Number	6004 (2 Horns)		12 VOLT
Power Consumption	72W x 2		
Voltage	12V		
Frequency	High Tone	500Hz	
	Low Tone	400Hz	
Sound Level	Combined 110dB @ 2.0m		

Twin Tone Scroll Horn - Set of 2

Galvanised metal housing and plastic trumpet. Safe from corrosion.







Packaging



Part Number	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		

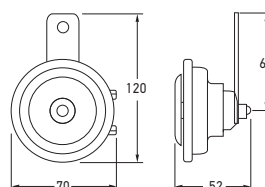
Low and High Tone Disc Horns

Single bolt mount. 92mm diameter.

Part Number	LOW TONE		HIGH TONE	
	6001		6003	
	6002		6020	
Power Consumption	72W			
Frequency	Low tone	335Hz	High tone	435Hz
Sound Level	110dB @ 2.0m			



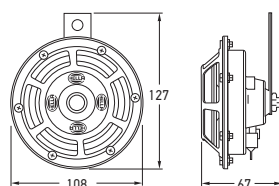
P/N 6003




S70 Compact Horn

Single bolt mount.

Part Number	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	

Sharp Tone Horn Set - M26S
- Set of 2

Single bolt mount.

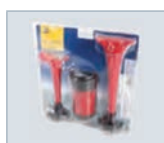
Part Number	6028 (2 Horns)		12 VOLT
Power Consumption	30W		
Voltage	12V		
Protection	IP X4K (Protection against high pressure water splash)		
Frequency	420Hz		
Sound Level	112dB @ 2m		
Connector	Male blade terminals		
Compliance	ECE R28		



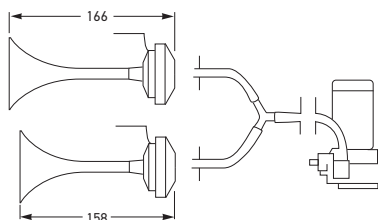
Packaging

Dual Trumpet Air Horn Kit

Installation accessories included.



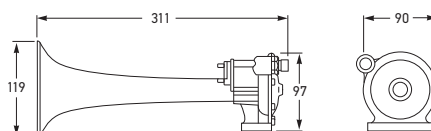
Blister packaging



Part Number	6014	12 VOLT
	6027	24 VOLT
Mounting	Installation accessories included.	
Current Draw	20A @ 12V 10A @ 24V	
Frequency	840/795Hz	
Sound Level	117dB	
Operating Pressure	110Kpa (16psi)	

Compressed Air Operated Horn

Ideal for trucks and buses. Grey shock-proof and corrosion resistant trumpet. This horn is designed to operate directly from the truck's air supply via the existing horn-button or separate switch.



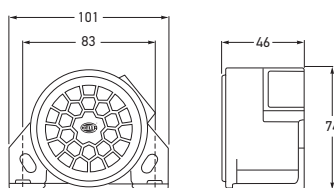
Part Number	6025	12 VOLT
	6026	24 VOLT
Power Consumption	36W @ 12V, 48W @ 24V	
Frequency	400Hz	
Sound Level	118dB (at 2.0m)	
Operating Pressure	620-860Pa (90 - 125psi)	
Air Tube: 10mm internal diameter.		

Multivolt™ Reversing Alarm and Signal Horn

Heavy duty reversing alarm with integrated, dual-tone signal horn. Reverse polarity and transient voltage spike protection.



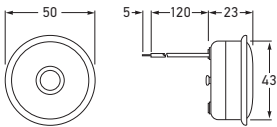
P/N 6041





Part Number	6012	12-24 VOLT
Mounting	Integrated universal mounting bracket for upright, pendant or surface mounting.	
Current Draw	0.3A	
Frequency	Back-up alarm 100 - 1500Hz High Tone 1000 - 1500Hz Low Tone 80Hz (+/- 37%)	
Sound Level	102 +/- 4dB at 1.2m	
Temperature Range	-40°C to + 85°C	
Protection	IP 66 (Protection against dust and high pressure washing)	
Spare Part	6041	Activating switch
Compliance	SAE J994 Type F	

Warning Buzzer

Piercing continuous sound. Suitable for a variety of applications e.g. headlamp, oil, handbrake, indicator, temperature, door close/open, brake fluid, etc.

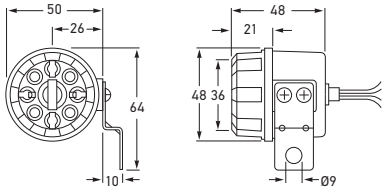



Part Number	6021 		12 VOLT
	6022 		24 VOLT
Power Consumption	6W		
Current Draw	12V 24V	Less than 50mA Less than 25mA	
Sound Level	85dB		



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.



Part Number	6023		12-36 VOLT
Current Draw	Less than 50mA.		
Sound Level	89 +/- 2dB (at 1.2m)		



Activating Switch

Single direction. Off-on switch. Suits all reversing alarms and buzzers.

Part Number	6041	OFF-ON
Mounting	Adjacent to the gear shift lever or linkage.	
Protection	IP 55 (Protection against dust and water jets)	

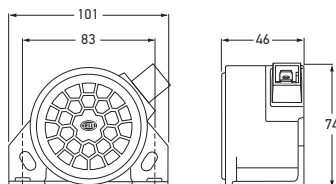


Heavy Duty Reversing Alarm

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.



P/N 9.6008.06



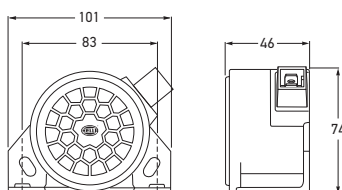
Part Number	6009	97dB
	6010	107dB
Mounting	Integrated universal mounting bracket for upright, pendant or surface mounting.	
Voltage	12-24V	
Current Draw	P/N 6009 P/N 6010	0.2A 0.3A
Frequency	60 signals per minute (± 20%).	
Sound Level	P/N 6009 P/N 6010	97 ± 4dB @ 1.2m 107 ± 4dB @ 1.2m
Temperature	Operating range -40°C to 85°C.	
Protection	IP 66 (Protection against dust and high pressure washing)	
Spare Part	9.6008.06	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.

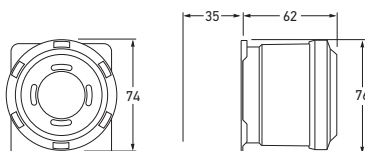


P/N 9.6008.06



Part Number	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	9.6008.06	Plug and lead
Compliance	SAE J994	

ACCESSORIES



Part Number	6042	87dB
	6043	97dB
	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	P/N 6042	87dB @ 1.2m
	P/N 6043	97dB @ 1.2m
	P/N 6044	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.



P/N 6042



P/N 6043

P/N 6044



Part Number	6050-SA	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.



Part Number	6051	92dB
	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	P/N 6051	92 ± 4dB @ 1.2m
	P/N 6052	97 ± 4dB @ 1.2m
Other specifications as P/N 6050-SA		

Broadband Reversing Alarm

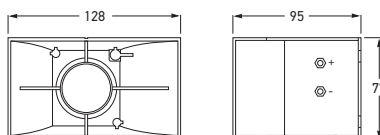
Reversing alarm with multi-frequency broadband sound.



Reversing Alarm

Reactor heavy duty reversing and warning alarm automatically adjusts to changing noise environments. State-of-the-art, solid-state electronics self-adjust to a minimum of 5dB above surrounding noise levels, thus reducing irritation, complaints and hearing impairment.

Reactor alarms feature integral universal mounting brackets and high impact ABS plastic resin housing and are totally environmentally sealed in epoxy to guard against moisture, dirt and vibration.



Part Number	6047	82-107dB AUTO
Mounting	Universal mounting brackets.	
Voltage	12-48V	
Current draw	Less than 0.25A	
Frequency	80 signals per minute.	
Sound level	82 to 107dB @ 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.



Part Number	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.

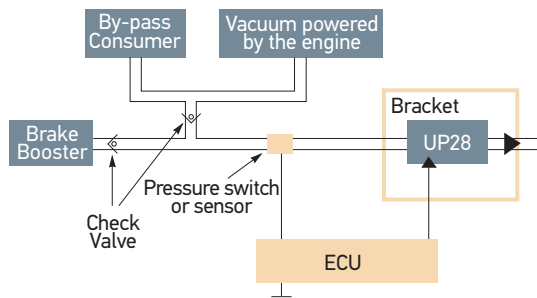


Part Number	6049	107/112dB MANUAL
Mounting	Universal mounting brackets.	
Voltage	12-24V	
Current draw	Less than 0.8A	
Frequency	80 signals per minute.	
Sound level	107 or 112dB @ 1.2m	
Temperature	-40°C to 77°C	
Protection	IP 55 (Protection against dust and water jets)	
Compliance	SAE J994	

Reactor alarms comply with SAE J994 requirements and OSHA regulations.

Part Number	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



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.

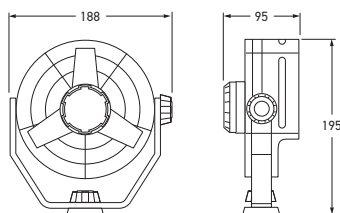
The UP28 is installed parallel to the main combustion engine. The UP28 sucks in filtered air via the brake booster and flexible pipes. To enable accurate pressure measurement by the control unit, non-return pressure valves are installed (see diagram). The electric contact between the UP28 and the control 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 effect 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.



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.



Part Number	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.



Part Number	7013
Bulb to suit	24V (M243)
Suits	6, 12 and 24V applications

Anti-Freeze Tester

Professional tester for measuring the freezing point of the water in automobile cooling systems. The new suction system design prevents bubbles from forming and keeps water from flowing back.

Part Number	7037
Measuring Tolerance	Less than +/- 1%.
Does not measure Glycol concentration. Measures freezing point depression of Glycol-based coolant.	



ACCESSORIES



Part Number	CRIMPING TOOL - INSULATED TERMINALS
	8271

Specially designed for the handyman and hobbyist, a useful crimping tool that cuts cable, strips cable insulation and crimps all popular insulated terminals.



Part Number	CRIMPING TOOL - INSULATED TERMINALS
	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.



Part Number	CRIMPING TOOL - INSULATED TERMINALS
	8273

Adjustable ratchet mechanism and spring release ensures a perfect crimp every time for insulated terminals.



Part Number	CRIMPING TOOL - NON-INSULATED TERMINALS
	8274

Adjustable ratchet mechanism and spring release ensures a perfect crimp every time for open barrel non-insulated terminals.



Part Number	CRIMPING TOOL - DT TERMINALS
	8275

Specially designed crimping tool with multiple jaws for an even crimp of DT terminals. See pages 272-273 for DT connectors.



Part Number	CRIMPING TOOL - SUPER SEAL TERMINALS
	8298

Crimping tool designed for use with super seal connector terminals. See pages 274-275 for super seal connectors.



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, 1.9mm in diameter.

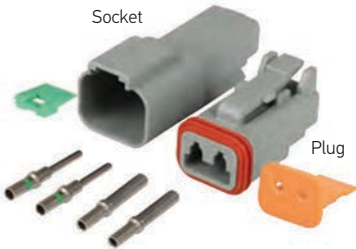
Maximum Load	13A - all contacts	
Spare Parts	9.4960.01	Small I.D. female contact to suit plug
	9.4960.02	Small I.D. male contact to suit socket
	9.4960.03	Large I.D. female contact to suit plug
	9.4960.04	Large I.D. male contact to suit socket
	9.4960.05	Sealing plug



Small I.D. = 1.6mm diameter. Large I.D. = 1.9mm diameter. Plug and socket kits come complete with terminals and seals.

2 Pole Plug and Socket

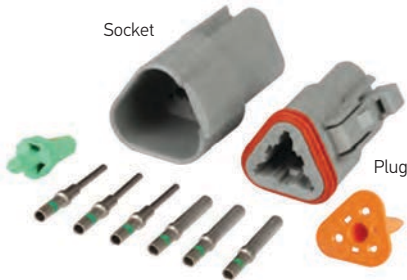
Supplied with 4 solid copper crimp contacts
and 2 locking wedges. Bulk pack supplied
with 2 pole connectors and contacts to suit.



Part Number	2 POLE PLUG AND SOCKET	
	4960	
	2 POLE PLUG	
	4960MF	PACK OF 10
	2 POLE SOCKET	
	4960FM	PACK OF 10
	2 POLE PLUG KIT	
	4960-P	

3 Pole Plug and Socket

Supplied with 6 solid copper crimp contacts
and 2 locking wedges.



Part Number	4961
-------------	------

4 Pole Plug and Socket

Supplied with 8 solid copper crimp contacts
and 2 locking wedges.

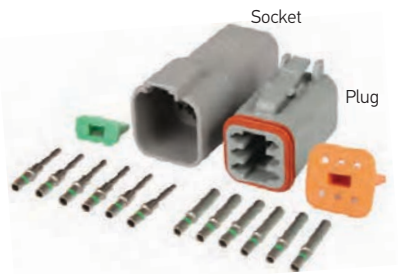


Part Number	4962
-------------	------

Part Number	4963
	6 PIN PLUG KIT
	4963-P

6 Pole Plug and Socket

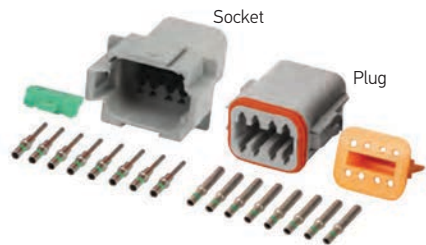
Supplied with 12 solid copper crimp contacts and 2 locking wedges.



Part Number	4964
-------------	------

8 Pole Plug and Socket

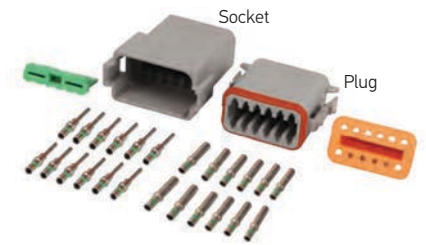
Supplied with 16 solid copper crimp contacts and 2 locking wedges.



Part Number	4965
-------------	------

12 Pole Plug and Socket

Supplied with 24 solid copper crimp contacts and 2 locking wedges.

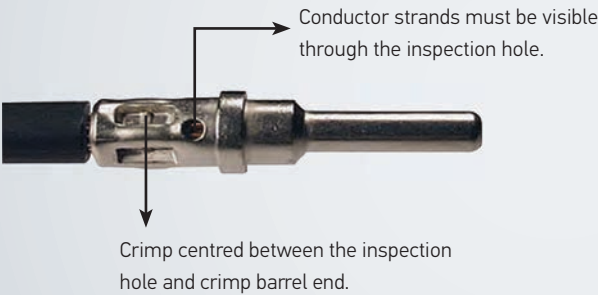


Part Number	CRIMPING TOOL - DT TERMINALS
	8275

Specially designed crimping tool with multiple jaws for an even crimp of DT terminals. See pages 306-307 for DT connectors.



A PROPER CRIMP



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.



P/N 4981-P



P/N 4981-S

1 POLE PLUG AND SOCKET		
Part Number	4981-P (Pack of 4)	PLUG
	4981-S (Pack of 4)	SOCKET



P/N 4982-P



P/N 4982-S

2 POLE PLUG AND SOCKET		
Part Number	4982 (Kit)	PLUG AND SOCKET
	4982-P (Pack of 4)	PLUG
	4982-S (Pack of 4)	SOCKET

Spare Part 9.4982.05 Rubber sealing boot – cable support



P/N 4983-P



P/N 4983-S

3 POLE PLUG AND SOCKET		
Part Number	4983 (Kit)	PLUG AND SOCKET
	4983-P (Pack of 3)	PLUG
	4983-S (Pack of 3)	SOCKET

Spare Part 9.4983.05 Rubber sealing boot – cable support



P/N 4984-P



P/N 4984-S

4 POLE PLUG AND SOCKET		
Part Number	4984 (Kit)	PLUG AND SOCKET
	4984-P (Pack of 3)	PLUG
	4984-S (Pack of 3)	SOCKET



P/N 4985-P



P/N 4985-S

5 POLE PLUG AND SOCKET		
Part Number	4985-P (Pack of 2)	PLUG
	4985-S (Pack of 2)	SOCKET



P/N 4986-P



P/N 4986-S

6 POLE PLUG AND SOCKET		
Part Number	4986-P (Pack of 2)	PLUG
	4986-S (Pack of 2)	SOCKET

Part Number	4980		
Contents	5 of each connector, plug and socket		
	100	9.4980.02	Socket terminals
	100	9.4980.04	Plug terminals
	100	9.4980.06	Yellow seals
	100	9.4980.09	Red cavity plugs

Super Seal Connector Kit

Kit contains a variety of super seal connectors.



Part Number	FEMALE TERMINALS FOR PLUG - PACK OF 50	
	9.4980.01	0.35 - 0.50mm ² CABLE
	9.4980.02	0.50 - 1.50mm ² CABLE



Part Number	MALE TERMINALS FOR SOCKET - PACK OF 50	
	9.4980.03	0.35 - 0.50mm ² CABLE
	9.4980.04	0.50 - 1.50mm ² CABLE



Part Number	SEALS FOR PLUG/SOCKET - PACK OF 50	
	9.4980.05	GREEN SEAL
	9.4980.06	YELLOW SEAL
	9.4980.07	RED SEAL
	9.4980.09	RED CAVITY PLUG (NO HOLE)



To Suit	P/N 9.4980.05	Cable insulation 1.2 - 1.6mm diameter
	P/N 9.4980.06	Cable insulation 1.7 - 2.4mm diameter
	P/N 9.4980.07	Cable insulation 2.5 - 3.3mm diameter
	P/N 9.4980.09	Red cavity plug (no hole)

Part Number	RUBBER SEALING BOOT - CABLE SUPPORT	
	9.4982.05	
	9.4983.05	

To Suit	P/N 9.4982.05	2 pin connector
	P/N 9.4983.05	3 pin connector



Part Number	SUPER SEAL TOOLS	
	9.4980.20	CONTACT EXTRACTION TOOL
	9.4980.21	SECONDARY LOCK TOOL

Extraction tools for the popular super seal range of connectors, to assist in disassembly if required.



Part Number	CRIMPING TOOL - SUPER SEAL TERMINALS	
	8298	

Crimping tool designed for use with super seal connector terminals.





P/N 8200
Blister pack shown



P/N 8500
Bulk pack shown



PUSH-ON FEMALE TERMINALS				
Part Number	Type	Quantity Per Pack	Size	Cable
8200	BLISTER PACK	20	6.3mm	2.5 to 3mm cable 0.75 to 1.13mm ² cable
8500	BULK PACK	100		
8201	BLISTER PACK	20	6.3mm	4mm cable. 1.84mm ² cable
8501	BULK PACK	100		
8202	BLISTER PACK	15	6.3mm	5 to 6mm cable 2.9 to 4.59mm ² cable
8502	BULK PACK	100		
8203	BLISTER PACK	12	9.5mm	
8503	BULK PACK	100		
FULLY INSULATED FEMALE TERMINALS				
8204	BLISTER PACK	12	6.3mm	2.5 to 3mm cable 0.75 to 1.13mm ² cable
8504	BULK PACK	100		
8205	BLISTER PACK	12	6.3mm	4mm cable. 1.84mm ² cable
8505	BULK PACK	100		
PUSH-ON 2-WAY MALE AND FEMALE TERMINALS				
8210	BLISTER PACK	15	6.3mm	2.5 to 3mm cable 0.75 to 1.13mm ² cable
8510	BULK PACK	100		
8211	BLISTER PACK	12	6.3mm	4mm cable. 1.84mm ² cable
8511	BULK PACK	100		
8212	BLISTER PACK	15	6.3mm	
8512	BULK PACK	100		
BLADE MALE TERMINALS				
8213	BLISTER PACK	15	6.3mm	2.5 to 3mm cable 0.75 to 1.13mm ² cable
8513	BULK PACK	100		
8214	BLISTER PACK	12	6.3mm	4mm cable. 1.84mm ² cable
8514	BULK PACK	100		
8215	BLISTER PACK	10	6.3mm	5 to 6mm cable 2.9 to 4.59mm ² cable
8515	BULK PACK	100		
BULLET SINGLE MALE CONNECTORS				
8220	BLISTER PACK	12		2.5 to 3mm cable 0.75 to 1.13mm ² cable
8520	BULK PACK	100		
8221	BLISTER PACK	14		4mm cable. 1.84mm ² cable
8521	BULK PACK	100		
BULLET SINGLE FEMALE CONNECTORS				
8222	BLISTER PACK	12		2.5 to 3mm cable 0.75 to 1.13mm ² cable
8522	BULK PACK	100		
8223	BLISTER PACK	14		4mm cable. 1.84mm ² cable
8523	BULK PACK	100		

CABLE CONNECTORS					
Part Number	Type	Quantity Per Pack	Size	Cable	
8230	BLISTER PACK	15		2.5 to 3mm cable 0.75 to 1.13mm ² cable	
8530	BULK PACK	100			
8231	BLISTER PACK	15		4mm cable. 1.84mm ² cable	
8531	BULK PACK	100			
8232	BLISTER PACK	10		5 to 6mm cable 2.9 to 4.59mm ² cable	
8532	BULK PACK	100			
QUICK CONNECT CABLE CONNECTORS					
8235	BLISTER PACK	15			
8535	BULK PACK	50			
With the use of pliers, connects splices and insulates 0.75 to 1.13mm ² (2.5 to 3mm) cable.					
EYE TERMINALS					
8240	BLISTER PACK	25	4.3mm	2.5 to 3mm cable 0.75 to 1.13mm ² cable	
8540	BULK PACK	100			
8241	BLISTER PACK	20	5mm		
8541	BULK PACK	100			
8242	BLISTER PACK	15	6.3mm		
8542	BULK PACK	100			
8243	BLISTER PACK	20	5mm	4mm cable. 1.84mm ² cable	
8543	BULK PACK	100			
8244	BLISTER PACK	20	6.3mm		
8544	BULK PACK	100			
8245	BLISTER PACK	15	8.4mm		5 to 6mm cable 2.9 to 4.59mm ² cable
8545	BULK PACK	100			
8246	BLISTER PACK	12	6.3mm		
8546	BULK PACK	100			
8247	BLISTER PACK	12	8.4mm		
8547	BULK PACK	100			
8248	BLISTER PACK	10	9.5mm		
8548	BULK PACK	100			
NON-INSULATED BRASS LUCAR TERMINAL - WITH LOCK TAB					
8573	BULK PACK	100	6.3mm	1.84mm ² cable	



Insulated Terminal Assortment

Pack of 16 and 31 popular HELLA connectors/terminals.



Part Number	8280		PACK OF 16
	8281		PACK OF 31

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.



Part Number	8282		
Contents	A quantity of 12 complete packs.		
Part Number	Description	Quantity	
8200	Push-on female terminal	20	
8201	Push-on female terminal	20	
8202	Push-on female terminal	15	
8203	Push-on female terminal	12	
8210	Push-on 2-way male and female terminal	15	
8211	Push-on 2-way male and female terminal	12	
8230	Cable connector	15	
8231	Cable connector	15	
8232	Cable connector	10	
8241	Eye terminal	20	
8244	Eye terminal	20	
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 P/N 8272.



Part Number	8284		
Contents	16 types of HELLA connectors/terminals.		
Part Number	Description	Quantity	
8200	Push-on female terminal	50	
8201	Push-on female terminal	50	
8204	Fully Insulated female terminal	50	
8205	Fully Insulated female terminal	50	
8213	Blade male terminal	50	
8214	Blade male terminal	50	
8220	Bullet single male connector	50	
8221	Bullet single male connector	50	
8222	Bullet single female connector	50	
8223	Bullet single female connector	50	
8230	Cable connector	50	
8231	Cable connector	50	
8235	Quick connect cable connector	50	
8241	Eye terminal	50	
8244	Eye terminal	50	
8247	Eye terminal	50	
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
8204S	BLADE RECEPTACLES	RED	0.5 - 1mm ²	To suit blade terminals 6.3 x 0.8mm. Fully insulated.
8205S		BLUE	1.5 - 2.5mm ²	
8200S	BLADE RECEPTACLES	RED	0.5 - 1mm ²	To suit blade terminals 6.3 x 0.8mm.
8201S		BLUE	1.5 - 2.5mm ²	
8213S	BLADE TERMINALS	RED	0.5 - 1mm ²	Size of blade terminal 6.3 x 0.8mm.
8214S		BLUE	1.5 - 2.5mm ²	
8240S	RING CONNECTORS	RED	0.5 - 1mm ²	To suit M4 pins.
8236S		BLUE	1.5 - 2.5mm ²	
8241S	RING CONNECTORS	RED	0.5 - 1mm ²	To suit M5 pins.
8243S		BLUE	1.5 - 2.5mm ²	
8249S		YELLOW	4 - 6mm ²	
8244S	RING CONNECTORS	BLUE	1.5 - 2.5mm ²	To suit M6 pins.
8246S		YELLOW	4 - 6mm ²	
8245S	RING CONNECTORS	BLUE	1.5 - 2.5mm ²	To suit M8 pins.
8247S		YELLOW	4 - 6mm ²	
8230S	BUTT CONNECTORS	RED	0.5 - 1mm ²	Cable to cable connection
8231S		BLUE	1.5 - 2.5mm ²	
8232S		YELLOW	4 - 6mm ²	

Heat Shrink Insulated Crimp
Connectors - Pack of 100

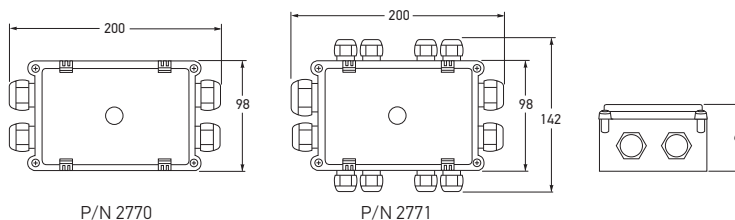
Part Number	Type	Colour	Cable Size	Description
8530S	BUTT CONNECTORS	RED	0.5 - 1mm ²	Cable to cable connection
8531S		BLUE	1.5 - 2.5mm ²	
8532S		YELLOW	4 - 6mm ²	



P/N 8531S
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.



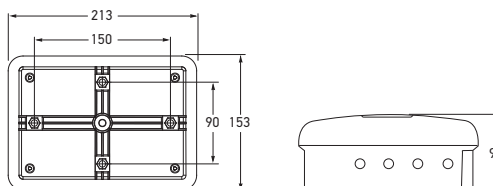
Part Number	2770	4 OUTLETS
	2771	12 OUTLETS
Fittings	2770 2771	4 x Ø13mm 1 x Ø17mm + 3 x Ø13mm + 8 x Ø10mm
Protection	IP 69K (Protection against dust and high pressure/steam jet cleaning)	
Plug Cartridge	14 separate connection groups.	



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.



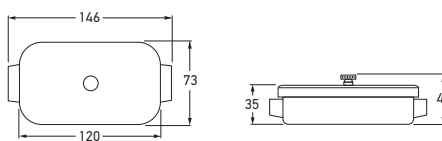
Part Number	2755
-------------	------



Open view

Cable Junction Box

8 Screw connections.



Part Number	2757
-------------	------

Cable Suitable for medium cable up to 6mm² cross-sectional area.

Cable Junction Box

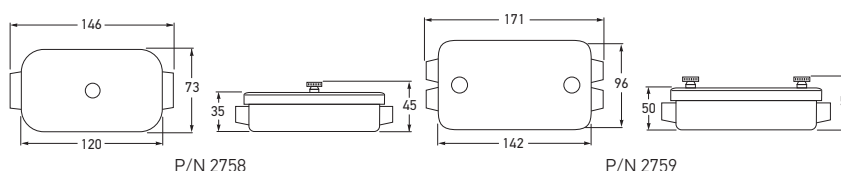
8 pole, 8 double flat plug connection.



P/N 2759



P/N 2758

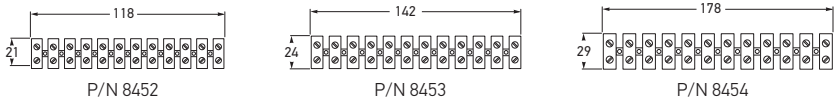


Part Number	2758	
	2759	

To Suit P/N 2758 P/N 2759 Suitable for medium cable up to 6mm² cross-sectional area. Suitable for heavy cable up to 10mm² cross-sectional area.

Cable Connectors

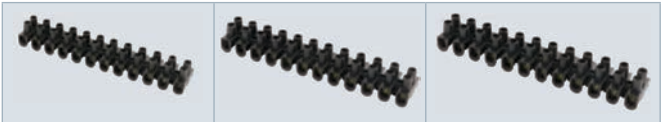
Strip of 12 brass connectors. Flexible plastic.



Part Number	8455	CABLES UP TO 2.5MM (0.75MM2)
	8452	CABLES UP TO 3MM (1.13MM2)
	8453	CABLES UP TO 4MM (2.90MM2)
	8454	CABLES UP TO 6MM (4.59MM2)



P/N 8455



P/N 8452

P/N 8453

P/N 8454

Part Number	4991	1 POLE
	4992	2 POLE
	4993	3 POLE
	4994	4 POLE
	4995	6 POLE
	4996	8 POLE
Max. Load	10A per terminal.	
Max. Cable Size	2.0mm ²	

Connector Kits

White connector kits. Includes brass terminals.



P/N 4992

P/N 4993

P/N 4994

P/N 4995

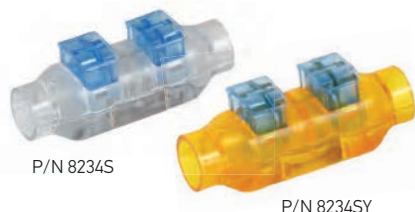
P/N 4996



CoolSplice Sealed Connector

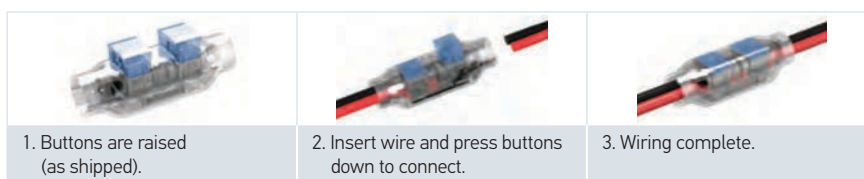
This connector can easily make a permanent wire-to-wire cable termination. Designed for single use, it allows for positive and negative conductors in the same connector (2 in and 2 out, and insulated from each other).

Both sides can be terminated separately and independently from each other, making the connector suitable on a pig-tail. No special tools are required, a standard pair of pliers will do.

The CoolSplice connector is UL and KEMA approved. It is recommended that the connector is housed inside an enclosure if used outdoors.



Part Number	8234S Clear (0.82mm ²)		PACK OF 4
	8234SY Yellow (0.50 mm ²)		
Conductors	2 in - 2 out.		
Max. Insulation Size	7.4mmØ		
Max. Current	8234S	5A	8234SY 3.5A
Protection	IP 65 (Protection against dust and water jets) IP 67 (Protection against dust and temporary water immersion)		



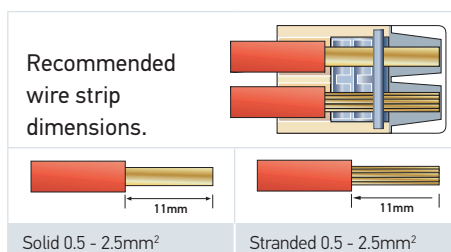
Push-in Wire Connectors

Push-in wire connectors used for fast, easy and reliable connection and distribution of cables and conductors. The cables are commonly connected together inside the connector.

Available in 2, 4 and 6 pole versions and colour coded for easy identification, these connectors are suitable for a wide variety of applications. They are made from non-corrosive materials and are recommended for use in a clean and dry environment to prevent corrosion.



Part Number	8250-2 (2 Pole)	PACK OF 8
	8250-4 (4 Pole)	PACK OF 6
	8250-6 (6 Pole)	PACK OF 4
Cable	Suitable for cable 0.5mm ² - 2.5mm ² cross-sectional area.	
Max. Current	24A @ 24V	



Insulation Tape - Black

Black insulation tape. Made from lead free PVC. Suitable for fine wire, cables and applications requiring non-corrosive tape.

Part Number	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.

Part Number	8320	48MM X 30M
-------------	------	------------



Nylon Cable Ties

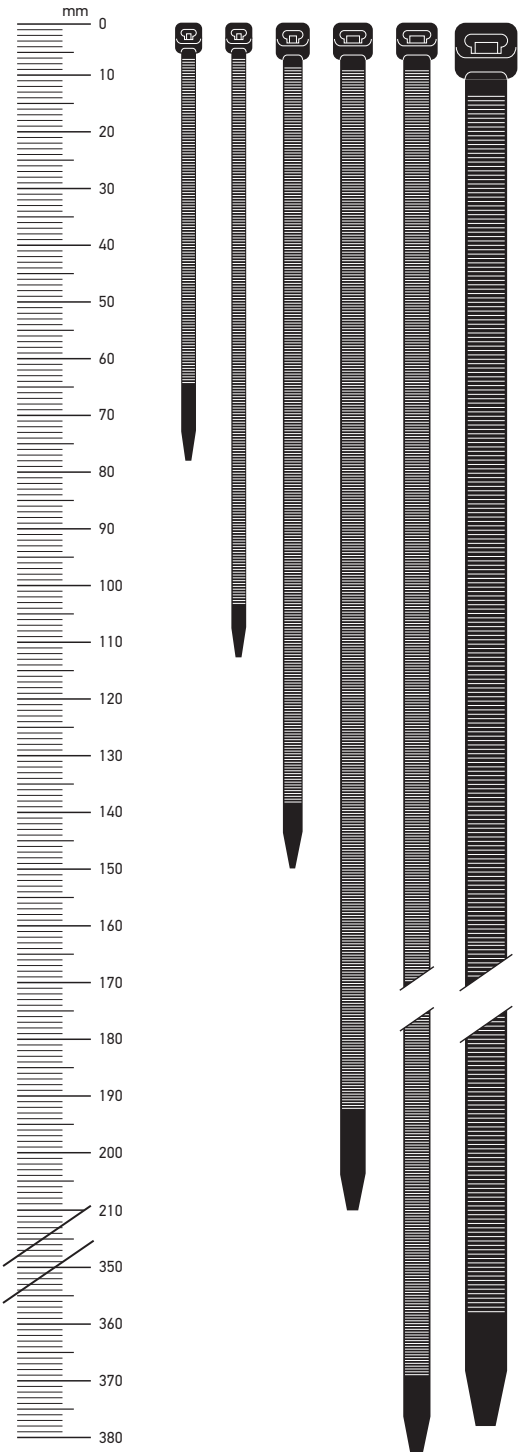
100% 6/6 nylon cable ties. Very flexible locking latch. Bell-mouthed head allows easier threading than previous ties. Strongest possible locking power without damaging the serrations of the tie. Quick fastening and simple locking mechanism. Black ties are UV resistant.



WHITE CABLE TIES (100 PER PACK)		
Part Number	Length	Width
8343	143mm	3.2mm
8344	191mm	4.8mm
8345	368mm	4.8mm



BLACK UV RESISTANT CABLE TIES				
Quantity 10 Per Pack	Quantity 100 Per Pack	Quantity 1000 Per Pack	Length	Width
	8341UV		80mm	2.5mm
	8342UV	8342UV-BULK	103mm	2.5mm
	8343UV	8343UV-BULK	147mm	3.2mm
8334UV	8344UV	8344UV-BULK	208mm	4.6mm
8335UV	8345UV	8345UV-BULK	390mm	4.8mm
8336UV	8346UV	8346UV-BULK	380mm	7.6mm



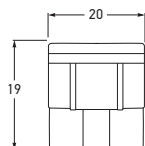
Standard Blade Fuses (ATS)

- Pack of 10



P/N 8770

P/N 8771



P/N 8772

P/N 8773

P/N 8774



P/N 8775

P/N 8776

P/N 8777

Part Number	8770		PURPLE	3A
	8771		TAN	5A
	8772		BROWN	7.5A
	8773		RED	10A
	8774		BLUE	15A
	8775		YELLOW	20A
	8776		WHITE	25A
	8777		GREEN	30A

Motorist Fuse Assortment (ATS)

- Pack of 10

10 popular blade fuses – ideal for the glove box.



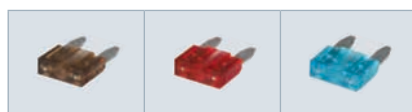
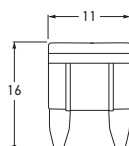
Part Number	8779	
Contents	1 x 7.5A 2 x 10A 2 x 15A 2 x 20A 2 x 25A 1 x 30A	

Mini Blade Fuses (ATN) - Pack of 10



P/N 8770MINI

P/N 8771MINI



P/N 8772MINI

P/N 8773MINI

P/N 8774MINI



P/N 8775MINI




P/N 8776MINI

P/N 8777MINI

Part Number	8770MINI		PURPLE	3A
	8771MINI		TAN	5A
	8772MINI		BROWN	7.5A
	8773MINI		RED	10A
	8774MINI		BLUE	15A
	8775MINI		YELLOW	20A
	8776MINI		WHITE	25A
	8777MINI		GREEN	30A

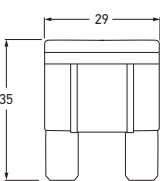
Low Profile Blade Fuses (ATT)
- Pack of 10










Part Number	8770LP		PURPLE	3A
	8771LP		TAN	5A
	8772LP		BROWN	7.5A
	8773LP		RED	10A
	8774LP		BLUE	15A
	8775LP		YELLOW	20A
	8776LP		WHITE	25A
	8777LP		GREEN	30A



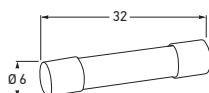
Maxi Blade Fuses (ATM)
- Single Pack



Part Number	8790		YELLOW	20A
	8791		GREEN	30A
	8792		ORANGE	40A
	8793		RED	50A
	8794		BLUE	60A
	8796		BROWN	70A
	8795		WHITE	80A

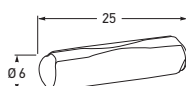


Glass Fuses (3AG) - Pack of 5



Part Number	8755		3 AMP
	8756		5 AMP
	8757		7.5 AMP
	8754		10 AMP
	8758		15 AMP
	8759		20 AMP
	8760		25 AMP
	8761		30 AMP

Ceramic Fuses - Pack of 5



Part Number	8750		8 AMP
	8753		16 AMP
	8751		25 AMP



P/N 8751

P/N 8753

Circuit Breakers - Standard Blade Fuse Replacement

Compact single pole, heavy duty thermal circuit breakers with push-to-reset mechanism and separate (colour coded) manual release for extra low voltage wiring systems on all types of vehicles and marine craft. Fitted with blade terminals for plug-in mounting and retaining clips and ribs for increased pull-out force and vibration resistance. Ideal replacement for blade fuses in heavy duty applications.



Part Number	8736	PURPLE	3A
	8737	GREEN	6A
	8738	RED	10A
	8739	BLUE	15A
	8740	YELLOW	20A
	8741	WHITE	25A

Voltage

Max. 28V (Min. 10V)



P/N 8737

P/N 8738



P/N 8739

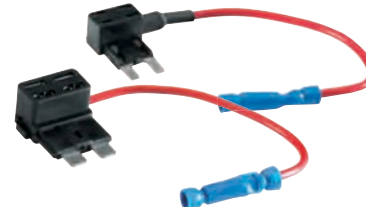
P/N 8740

P/N 8741

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).

Part Number	8701		MINI
	8703		STANDARD/ATS
To Suit	Mobile phones, stereos, amplifiers, navigation systems and fridges.		



Pre-wired Blade Fuse Holders

Part Number	8713		MINI
	8714		STANDARD
	8715		MAXI



P/N 8714


P/N 8715

Pre-wired Glass Fuse Holders

Part Number	8765 (Black)		MAX. 30A
	8766 (White)		MAX. 10A



Glass Fuse Holder - Panel Mount

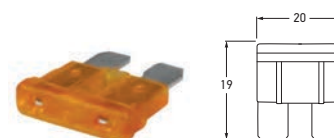
Part Number	8768		SOLDER TERMINALS
	8769		PUSH-ON TERMINALS
Mounting	15mm diameter opening.		



P/N 8769

Single Blade Fuse Holder

Several holders may be joined together or mated with P/N 4973 (relay holder). Comes complete with 2 terminals.

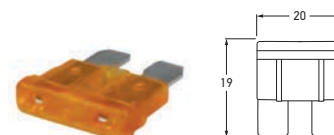
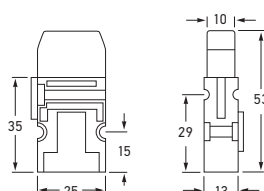


Standard Blade Fuses (ATS) Fuse Type

Part Number	8704
Cable	Suitable for cable up to 2.5mm ² cross sectional area.
Fuse Type	Standard Blade Fuses (ATS)
See page 316 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.



Standard Blade Fuses (ATS) Fuse Type

Part Number	8718
Cable	Suitable for cable up to 2.90mm ² cross sectional area.
Fuse Type	Standard Blade Fuses (ATS)
See page 316 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.



Part Number	8719
Cable	Suitable for cable up to 1.84mm ² cross sectional area.

Single Maxi Blade Fuse Holder

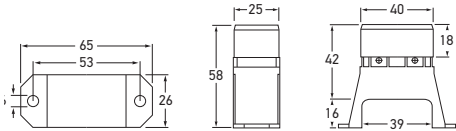
Splash-proof fuse holder with plastic cover. For loads up to 60A. Complete with 2 sets of terminals, set one for 2.5 - 6mm² and set two for 5 - 10mm².



Part Number	8707
Cable	Suitable for cables up to 2.5mm ² - 10mm ² cross sectional area.
Fuse Type	Maxi Blade Fuses (ATM)
See page 317 for full listing of Maxi Blade Fuses (ATS)	

Blade Fuse Box - 4 Fuses

Black plastic housing with transparent snap-fit lid. Flat plug connections.

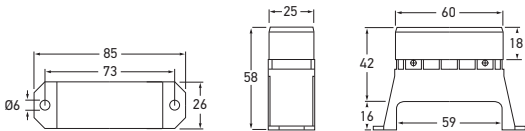


Part Number	8720	SIDE CONNECTORS
	8720-S	
Number of Fuses	4	
Fuse Type	2 x 10A 2 x 15A	



Blade Fuse Box - 6 Fuses

Black plastic housing with transparent snap-fit lid. Flat plug connections.

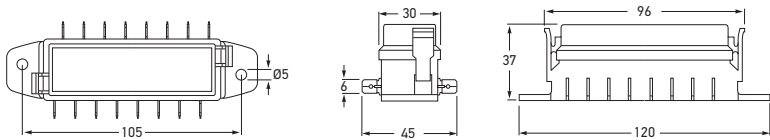


Part Number	8721	SIDE CONNECTORS
	8721-S	
Number of Fuses	6	
Fuse Type	3 x 10A 3 x 15A	



Blade Fuse Box - 8 Fuses

Black plastic housing with transparent snap-fit lid. Flat plug connections.

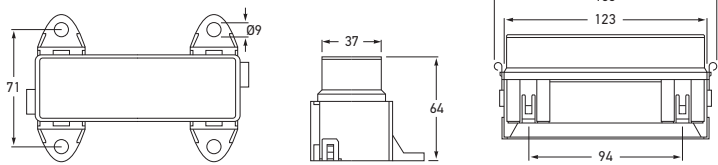


Part Number	8722	SIDE CONNECTORS
	8722-S	
Number of Fuses	8	
Fuse Type	4 x 10A 4 x 15A	



Blade Fuse Box - 16 Fuses

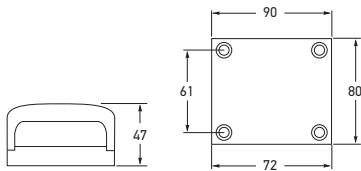
16-way fuse box featuring black plastic housing with secondary locks, transparent cover and sealing gasket. Supplied with mounting brackets.



Part Number	8724
Number of Fuses	16
Fuse Type	6 x 10A 6 x 15A 2 x 20A 2 X 25A

Blade Fuse Box - 6 Fuses

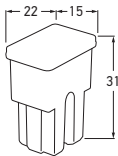
Black plastic housing with transparent snap-fit lid and 6.3mm male blade terminals. 5mm diameter stud input. Complete with 2 spare fuse holders and label set.



Part Number	8725
Number of Fuses	6
Fuse Type	3 x 10A 3 x 15A

Fusible Link - Female

Female plug-in fuse link.



Part Number	8790-FLFS		LIGHT BLUE	20A
	8791-FLFS		PINK	30A
	8792-FLFS		GREEN	40A
	8793-FLFS		RED	50A
	8794-FLFS		YELLOW	60A
	8795-FLFS		BROWN	70A
	8796-FLFS		BLACK	80A
	8797-FLFS		BLUE	100A



P/N 8790-FLFS

P/N 8797-FLFS



P/N 8791-FLFS

P/N 8792-FLFS

P/N 8793-FLFS

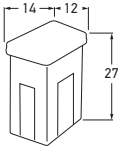
P/N 8794-FLFS








P/N 8795-FLFS

P/N 8796-FLFS

Mini Fusible Link - Female

Female mini plug-in fuse link.



Part Number	8790-FLFE		LIGHT BLUE	20A
	8791-FLFE		PINK	30A
	8792-FLFE		GREEN	40A
	8793-FLFE		RED	50A
	8794-FLFE		YELLOW	60A
	8795-FLFE		BROWN	70A
	8796-FLFE		BLACK	80A



P/N 8790-FLFE

P/N 8791-FLFE



P/N 8792-FLFE

P/N 8793-FLFE

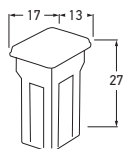
P/N 8794-FLFE

P/N 8795-FLFE

P/N 8796-FLFE

Mini Fusible Link - Female

Mini female plug-in fuse link.



P/N 8790-FLFM

P/N 8797-FLFM

Part Number	8790-FLFM		LIGHT BLUE	20A
	8791-FLFM		PINK	30A
	8792-FLFM		GREEN	40A
	8793-FLFM		RED	50A
	8794-FLFM		YELLOW	60A
	8795-FLFM		BROWN	70A
	8796-FLFM		BLACK	80A
	8797-FLFM		BLUE	100A



P/N 8791-FLFM

P/N 8792-FLFM

P/N 8793-FLFM

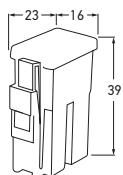
P/N 8794-FLFM

P/N 8795-FLFM

P/N 8796-FLFM

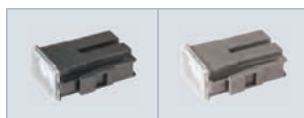
Fusible Link with Lock Tab - Female

Female plug-in fuse link with lock.



P/N 8792-FLMKP

Part Number	8792-FLMKP		RED	45A
	8794-FLMKP		BLACK	65A
	8796-FLMKP		GREY	75A

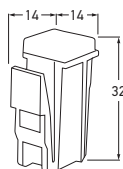


P/N 8794-FLMKP

P/N 8796-FLMKP

Mini Fusible Link with Lock Tab - Female

Mini female plug-in fuse link with lock.

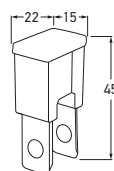


P/N 8790-FLMNP

Part Number	8790-FLMNP		BROWN	25A
	8791-FLMNP		GREEN	30A



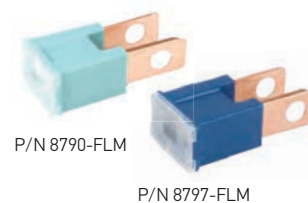
P/N 8791-FLMNP



Fusible Link - Male

Male bolt-in fuse link.

Part Number	8790-FLM		LIGHT BLUE	20A
	8791-FLM		PINK	30A
	8792-FLM		GREEN	40A
	8793-FLM		RED	50A
	8794-FLM		YELLOW	60A
	8795-FLM		BROWN	70A
	8796-FLM		BLACK	80A
	8797-FLM		BLUE	100A
	8798-FLM		WHITE	120A

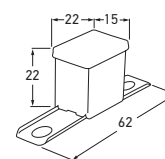
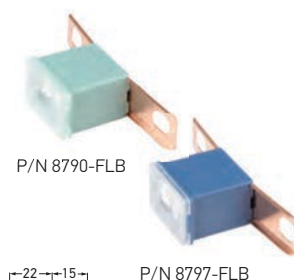


P/N 8791-FLM P/N 8792-FLM P/N 8793-FLM P/N 8794-FLM P/N 8795-FLM P/N 8796-FLM P/N 8798-FLM

Part Number	8790-FLB		LIGHT BLUE	20A
	8791-FLB		PINK	30A
	8792-FLB		GREEN	40A
	8793-FLB		RED	50A
	8794-FLB		YELLOW	60A
	8795-FLB		BROWN	70A
	8796-FLB		BLACK	80A
	8797-FLB		BLUE	100A
	8798-FLB		WHITE	120A

Fusible Link, Male - L-Type Long

Male L-type fuse link with long leg.

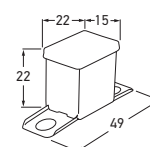
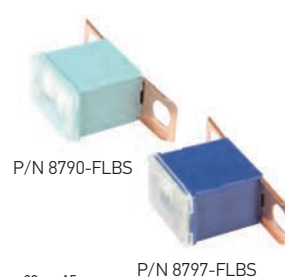


P/N 8791-FLB P/N 8792-FLB P/N 8793-FLB P/N 8794-FLB P/N 8795-FLB P/N 8796-FLB P/N 8798-FLB

Part Number	8790-FLBS		LIGHT BLUE	20A
	8791-FLBS		PINK	30A
	8792-FLBS		GREEN	40A
	8793-FLBS		RED	50A
	8794-FLBS		YELLOW	60A
	8795-FLBS		BROWN	70A
	8796-FLBS		BLACK	80A
	8797-FLBS		BLUE	100A
	8798-FLBS		WHITE	120A

Fusible Link, Male - L-Type Short

Male L-type fuse link with short leg.



P/N 8791-FLBS P/N 8792-FLBS P/N 8793-FLBS P/N 8794-FLBS P/N 8795-FLBS P/N 8796-FLBS P/N 8798-FLBS



HELLA Workshop

HELLA offers a comprehensive range of high quality inspection lamps and testing equipment that is designed to meet the needs of discerning do-it-yourself and professional technicians.



Contents

HELLA Workshop

LED Inspection Lamp - Unipen Gen II.....	328
LED Inspection Lamp - Slim.....	329
LED Inspection Lamp - Mini Slim.....	329
LED Inspection Lamp - I-View.....	330
LED Inspection Lamp - Miniform.....	330
LED Inspection Lamp - Mini Mag.....	331
LED Inspection Lamp - Mag 3 Gen II.....	331
LED Inspection Lamp - Uniform Gen III.....	332
LED Inspection Lamp - UV-Form.....	332
LED Work Lamp - Uni Max.....	333
LED Work Lamp - Nova 3K C+R.....	334
LED Work Lamp - Nova 5K C+R.....	335
LED Work Lamp - Nova 10K.....	335
LED Work Lamp - Nova Tripod.....	336
LED Work Lamp - Nova Accessories.....	337
LED Flash Torch Series - Flash Pen R.....	338
LED Flash Torch Series - 12V Flashlight.....	338
LED Hand Held Spot Lamps.....	339
HELLA Beamsetters.....	341

HELLA LED Inspection Lamps have been designed with the workshop in mind.

With high power efficient LEDs providing evenly spread natural light; a range of styles designed for a variety of situations; and construction to last – HELLA Inspection Lamps will become your most valued workplace tool.

- High power LEDs.
- Easy to use.
- Impact and shock resistant.
- Natural light – colour similar to daylight.
- Low current consumption, high efficacy.
- Strong, sturdy and resistant to water, oil and chemicals.



LED Inspection Lamp - Unipen Gen II

The Unipen Gen II has been upgraded with modified back clip for better grip in pockets and IP65 rating. Unipen has a powerful and completely uniform illumination which is ideal for a working light. Furthermore Unipen has a high power LED top light that gives Unipen a powerful flashlight function. Unipen's flexible lamp head tilts up to 180 degrees. Unipen is supplied with a strong built-in magnet for easy positioning in the workspace and a pocket clip. The small and handy shape of the Unipen makes it perfect to always have "on hand".



Part Number	2XM 910 602-011	
Light Output	Main:	100 lumen for up to 2.5 hours.
	Spot (top):	50 lumen for up to 2.5 hours.
Light Performance	Main:	160 lux @ 0.5m
	Spot (top):	485 lux @ 0.5m
Temperature Range	-10° to +40°C	
Protection	IP 65	
Dimensions	156mm x 27mm x 18mm	
Battery	3.7V/750 mAh Li-ion rechargeable. 3 hour charging time via USB.	
Spare Part	2XM 910 529-141	1m USB cable
Compliance		

Includes 1m USB cable. Note charger not included.



Strong built-in magnet



180° flexible head

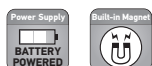


Top spot light



1m USB cable
P/N 2XM 910 529-141

1m USB cable is also compatible with other LED Inspection Lamps listed:
Slim/Mini Slim/I-View/
Miniform/MiniMag/Mag 3/
Uniform Gen III/UV Form/
Uni Max




Adjustable lamp



Hook for hanging



Magnetic mounting

Part Number	2XM 910 414-011	
Light Output	Stage1:	250 lumen for up to 5 hours.
	Stage2:	500 lumen for up to 2.5 hours.
	Spot:	100 lumen for up to 2.5 hours.
Light Performance	Stage1:	400 lux @ 0.5m
	Stage2:	800 lux @ 0.5m
	Spot:	4800 lux @ 0.5m
Temperature Range	-10° to +40°C	
Protection	IP 30	
Dimensions	310mm x 45mm x 33mm	
Battery	3.8V/2800 mAh Li-ion rechargeable. 4.5 hour charging time.	
Compliance		
Includes 1m USB cable and 240V charger.		



3-in-1: LED Inspection Light, Work Light and Flashlight.

1m USB cable
P/N 2XM 910 529-141

240V charger

LED Inspection Lamp - Slim

Slim LED inspection lamp is not only one of the most compact on the market, but it also offers 3 lamps in 1, with two brightness settings for ultimate versatility. When open, the lamp is an ideal inspection light, perfect for getting into the most inaccessible locations. Folded in half, the lamp can be used as a traditional hand-held work light. When required the inspection lamp can also be used as a powerful flashlight with a handy, comfortable grip. In the folded state, the lamp is reduced to pocket size - compact and portable to take with you everywhere.




Adjustable lamp



Hook for hanging



Magnetic mounting

Part Number	2XM 910 414-021	
Light Output	Stage1:	100 lumen for up to 5 hours.
	Stage2:	200 lumen for up to 2.5 hours.
	Spot:	100 lumen for up to 3 hours.
Light Performance	Stage1:	150 lux @ 0.5m
	Stage2:	400 lux @ 0.5m
	Spot:	5200 lux @ 0.5m
Temperature Range	-10° to +40°C	
Protection	IP 30	
Dimensions	242mm x 41mm x 30mm	
Battery	3.7V/1200 mAh Li-ion rechargeable. 3 hour charging time.	
Compliance		
Includes 1m USB cable and 240V charger.		



3-in-1: LED Inspection Light, Work Light and Flashlight.

1m USB cable
P/N 2XM 910 529-141

240V charger

LED Inspection Lamp - Mini Slim

Mini Slim LED inspection lamp is not only one of the most compact on the market, but also offers 3 lamps in 1, with two brightness settings for ultimate versatility. When open, the lamp is an ideal inspection light, perfect for getting into the most inaccessible locations. Folded in half, the lamp can be used as a traditional hand-held work light. When required the inspection lamp can also be used as a powerful flashlight with a handy, comfortable grip. In the folded state, the lamp is reduced to pocket size - compact and portable to take with you everywhere.



LED Inspection Lamp - I-View

The I-VIEW lights up the entire work space and not just the area the lamp is pointed at, the inspection lamp is designed for professional end users. Once the sensor setting is activated the lamp may be turned on and off by simply waving your hand in front of the lamp - even when wearing gloves.

The lightweight ergonomically designed inspection headlamp features a light output of 200lm on the high and 100lm on the low setting. By using the latest battery technology, there is simply no need for extra battery supplies, making your job more efficient.



Standard Lamp



I-View Lamp



Part Number	2XM 910 601-001
Light Output	LO - 100 lumen for up to 6 hours. HI - 200 lumen for up to 3 hours.
Light Performance	LO - 300 lux @ 0.5m HI - 500 lux @ 0.5m
Temperature Range	-10° to +40°C
Protection	IP 65 (Protection against dust and water jets)
Dimensions	105mm x 52mm x 43mm
Battery	3.8V/1600 mAh Li-polymer. 4 hour charging time.
Compliance	
Includes 1m USB cable and 240V charger.	



Touchless sensor switch on/off technology

1m USB cable
P/N 2XM 910 529-141

240V charger

LED Inspection Lamp - Miniform

Multifunctional pocket sized rechargeable LED inspection lamp. Features a strong magnetic base, retractable swivel hook and a flexible 180° head for powerful uniform lighting at any angle. Complete with 240V charger.



Part Number	2XM 910 415-001
Light Output	Stage 1: 55 lumen for up to 5 hours Stage 2: 110 lumen for up to 2.5 hours
Light Performance	Stage 1: 130 lux @ 0.5m Stage 2: 260 lux @ 0.5m
Temperature Range	-10° to +40°C
Protection	IP 20
Dimensions	120mm x 60mm x 13mm 120mm x 60mm x 25mm (with belt Clip / hook)
Battery	3.7V/1000 mAh Li-ion rechargeable. 2.5 hour charging time.
Compliance	
Includes 1m USB cable and 240V charger.	



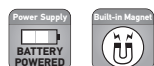
Retractable swivel hook




Strong built-in magnet base and 180° flexible head

1m USB cable
P/N 2XM 910 529-141

240V charger



Part Number	2XM 910 413-021	
Light Output	Main:	120 lumen for up to 4 hours.
	Spot (top):	50 lumen for up to 4 hours.
Light Performance	Main:	280 lux @ 0.5m
	Spot (top):	800 lux @ 0.5m
Temperature Range	-10° to +40°C	
Protection	IP 20	
Dimensions	202mm x 40mm x 28mm	
Battery	3.7V/1200 mAh Li-ion rechargeable. 3 hour charging time.	
Compliance		
Includes 1m USB cable. Note charger not included.		



1m USB cable
P/N 2XM 910 529-141



Top spot light



Retractable hook and
strong built-in magnet




180° Flexible Head



LED Inspection Lamp - Mini Mag

The Mini Mag comprises an extremely powerful, rechargeable LED work light and flashlight in one. Containing the latest high performance LED technology this inspection lamp is a must have. The new and modern design of the Mini Mag provides an ergonomic and user-friendly grip. The strong built-in magnetic holder and retractable suspension hook allows you to place the Mini Mag anywhere. The 180° flexible lamp head makes lighting those hard to see areas a lot easier.



Part Number	2XM 910 413-011	
Light Output	Main:	250 lumen for up to 3 hours.
	Spot (top):	150 lumen for up to 3 hours.
Light Performance	Main:	500 lux @ 0.5m
	Spot (top):	1500 lux @ 0.5m
Temperature Range	-10° to +40°C	
Protection	IP 20	
Dimensions	270mm x 62mm x 41mm	
Battery	3.7V/2200 mAh Li-ion rechargeable. 4 hour charging time.	
Compliance		
Includes 1m USB cable and 240V charger.		



1m USB cable
P/N 2XM 910 529-141



240V charger



Top spot light



Retractable hook and
strong built-in magnet



180° Flexible Head




LED Inspection Lamp - Mag 3 Gen II

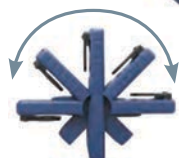
High power rechargeable LED inspection lamp and torch. Features 3 strong magnets, 2 swivel hooks, and a 180° flexible head for powerful lighting at any angle. Complete with 240V charger.

LED Inspection Lamp - Uniform Gen III

Rechargeable LED inspection lamp featuring rubber housing, intelligent battery indicator, swivel hook and magnetic-based charging unit. Delivers a powerful and uniform light output. Complete with 240V charger.



Part Number	2XM 910 412-011	
Light Output	Main:	150/300 lumen for up to 6/3 hours.
	Spot (top):	150 lumen for up to 3 hours.
Light Performance	Main:	200/500 lux @ 0.5m
	Spot (top):	2000 lux @ 0.5m
Temperature Range	-10° to +40°C	
Protection	IP 65 (Protection against dust and water jets)	
Dimensions	190mm x 60mm x 32mm	
Battery	3.7V/2200 mAh Li-ion rechargeable. 4 hour charging time.	
Compliance		
Includes 1m USB cable and 240V charger.		



180° Flexible Head



Retractable hook



Strong built-in magnet



Top spot light



Shown in charger

1m USB cable
P/N 2XM 910 52a9-141

240V charger

LED UV-Form

The rechargeable LED UV-Form is a universal indispensable work light and UV detection in one, with powerful 1.5W UV-light on the top it is a suitable replacement for special UV detection lights. The ultraviolet light is intended for leak detection in air-conditioning systems by means of trace elements. Also useful for leak detection of larger, complex refrigeration/freezing appliances, process-cooling systems, heat pump systems etc.

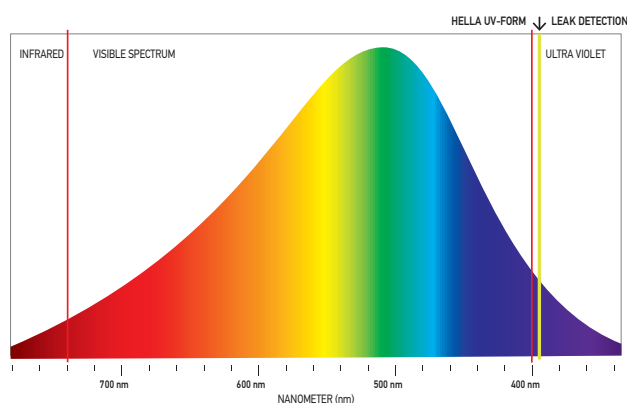


Part Number	2XM 910 606-001	
Light Output	Main:	150 lumen for up to 3 hours.
	Spot (top):	UV for up to 3 hours.
Light Performance	Main:	340 lux @ 0.5m
	Spot (top):	UV
Temperature Range	-10° to +40°C	
Protection	IP 20	
Dimensions	157mm x 59mm x 23mm	
Battery	3.7V/1600 mAh Li-ion rechargeable. 3 hour charging time.	
Compliance		
Safety Note	Do not operate UV light without eye protection.	

Includes 1m USB cable and 240V charger.

1m USB cable
P/N 2XM 910 529-141


240V charger

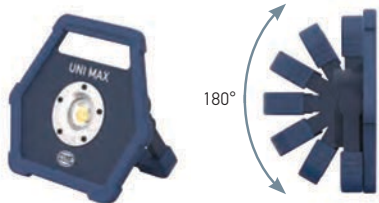


180° Flexible Head

Retractable hook and
strong built-in magnet



Part Number	2XM 910 605-001	
Light Output	Stage 1:	450 lumen for up to 5 hours
	Stage 2:	900 lumen for up to 2.5 hours
Light Performance	Stage 1:	650 lux @ 0.5m
	Stage 2:	1300 lux @ 0.5m
Temperature Range	-10° to +40°C	
Protection	IP 54	
Dimensions	196mm x 187mm x 43mm	
Battery	3.7V/4400 mAh Li-ion rechargeable. 6 hour charging time.	
Compliance		
Includes 1m USB cable. Note charger not included.		



The Uni Max features an adjustable stand that can rotate 180° so the lamp can be placed in different positions to obtain the desired light angle.



Built-in power bank with USB outlet to charge your mobile devices. USB phone charger not included.



1m USB cable
P/N 2XM 910 529-141



Uni Max can also be wall hung via the hole in the stand



Compact and light weight, the Uni Max is designed with an integrated handle to conveniently hand carry.

LED Work Lamp - Uni Max

A new cost effective rechargeable LED universal flood lamp that is small in size, but large in features and light output. The lamp is remarkably slim (only 41mm), with a maximum light output of 900lm and a 50% setting of 450lm for longer battery charge run time. An extremely useful feature is Uni Max's built-in power bank with USB outlet to charge your mobile devices. Uni Max is suitable for many applications including camping, boating on the worksite or left in the toolbox for when you really need a dependable flood light.

LED Work Lamps – Functional and Durable

HELLA is now introducing a completely new generation of Nova work lamps, the best, most sturdy and highly unique COB LED work lights for the professional market.

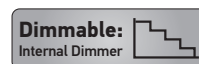
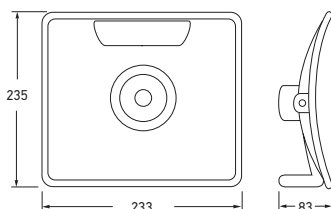
With high-power efficient LEDs providing diffused natural light; a range of styles designed for a variety of situations; and construction to last – HELLA Work Lamps will become your most valued workplace tool.


- Easy to use.
- Lifetime of at least 50,000 hours
- Resistant to shocks and blows
- Natural light – colour similar to daylight.
- Low current consumption, high efficacy.
- Strong, sturdy and resistant to water, oil and chemicals.



LED Work Lamp - Nova 3K C+R

The Nova (3K C+R) is a universal all-round work lamp, and can operate either on batteries or 240V input (DUAL SYSTEM) providing you endless application possibilities and able to endure the rough, wet and dirty environments, and can be used indoors or outdoors under all kinds of weather conditions. The new light dimmer function makes it possible to adjust the light to five different light levels. Featuring the latest LED technology, the new Nova LED work lamps deliver extremely high light output, with a uniform and completely even illumination. An intelligent display for battery capacity and remaining operating time is available on the rear of the lamp. The CRI value is close to daylight, and the Nova housing is made of robust die cast aluminium, and is resistant to shocks and vibration.

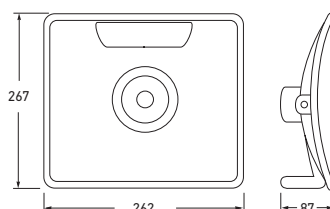



Part Number	2XM 910 426-101		
Voltage	100-240V AC - 50/60Hz		
Light Output	3000 lumen @ 100% 750 lumen @ 25%	2250 lumen @ 75% 300 lumen @ 10%	1500 lumen @ 50%
Light Performance	5000 lux @ 0.5m for up to 14 hours		
Power Consumption	26W		
Temperature Range	-10° to +40°C		
Protection	IP 67 (Protection against dust and water splash)		
Battery	11.1V/4400 mAh Li-ion rechargeable 2 hour charging time.		
Cable Length	Pre-wired with 5m of cable (2x0.75 mm² H05RN-F)		
Spare Part	2XM 910 529-081	C + R car adaptor	
Compliance			



Rear view

C + R car adaptor
P/N 2XM 910 529-081


Dimmable:
Internal Dimmer


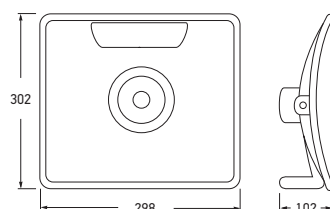
Part Number	2XM 910 426-111		
Voltage	100-240V AC - 50/60Hz		
Light Output	5000 lumen @ 100% 1250 lumen @ 25%	3750 lumen @ 75% 500 lumen @ 10%	2500 lumen @ 50%
Light Performance	8000 lux @ 0.5m up to 12 hours		
Power Consumption	42W		
Temperature Range	-10° to +40°C		
Protection	IP 67 (Protection against dust and water splash)		
Battery	11.1V/5200 mAh Li-ion rechargeable 2 hour charging time.		
Cable Length	Pre-wired with 5m of cable (2x0.75 mm² H05RN-F)		
Spare Part	2XM 910 529-081	C + R car adaptor	
Compliance			


 C + R car adaptor
P/N 2XM 910 529-081

Rear view

LED Work Lamp - Nova 5K C+R

The Nova (5K C+R) is a universal all-round work lamp, and can operate either on batteries or 240V input (DUAL SYSTEM) providing you endless application possibilities and able to endure the rough, wet and dirty environments, and can be used indoors or outdoors under all kinds of weather conditions. The new light dimmer function makes it possible to adjust the light to five different light levels. Featuring the latest LED technology, the new Nova LED work lamps deliver extremely high light output, with a uniform and completely even illumination. An intelligent display for battery capacity and remaining operating time is available on the rear of the lamp. The CRI value is close to daylight, and the Nova housing is made of robust die cast aluminium, and is resistant to shocks and vibration.


Dimmable:
Internal Dimmer


Part Number	2XM 910 426-121		
Voltage	100-240V AC - 50/60Hz		
Light Output	10000 lumen @ 100% 2500 lumen @ 25%	7500 lumen @ 75% 1000 lumen @ 10%	5000 lumen @ 50%
Light Performance	16000 lux @ 0.5m		
Power Consumption	84W		
Temperature Range	-10° to +40°C		
Protection	IP 67 (Protection against dust and water splash)		
Cable Length	Pre-wired with 5m of cable (3x1 mm² H05RN-F)		
Compliance			

Includes wireless light control: *via App on smart devices.



Rear view

LED Work Lamp - Nova 10K

Nova 10K is the most powerful workshop lamp in the market, upholding 10000 lumen and making it a universal all-round work lamp for the most challenging lighting operations in every working environment. Able to endure the rough, wet and dirty environment at the construction site, and can be used indoors and for outdoor work under all kinds of weather conditions. The new light dimmer function makes it possible to adjust the light into five different levels. With the integrated wireless light control feature you can easily control up to four work lamps. The light control also makes it possible to turn on/off the lamp and adjust the light output to suit the work task in question. The wireless application is perfect when working with one or more hard-to-reach lamps, for example positioned on the HELLA Tripod.



Nova Tripod

The HELLA Tripod is designed to meet any working situation where flexible illumination is key. Extendable from 1.35m to 3m, the tripod offers complete flexibility to position the work lamp into the required height and angle.

The tripod is made of durable powder coated steel and a welded steel mounting cap (10mm thread) ensures the durability of the universal tripod stand. When not in use the tripod is compact with a weight of 6kg.

Streamlined in both design and construction, the HELLA Tripod can be applied for both indoor and outdoor use. To increase safety when in use, work lamp cables can be stored in the safety clips placed on each of the tripods legs. This tripod fits all Nova work lamps.

Part Number	2XM 910 529-101	
Weight	6kg	
Dimensions	1080 x 140 x 130 mm	
Spare Parts	2XM 910 529-111	Top-Knob of Tripod
	2XM 910 529-121	Side-Knob of Tripod



360° locking system for a firm grip




Top-Knob of Tripod
P/N 2XM 910 529-111 Side-Knob of Tripod
P/N 2XM 910 529-121

Dual Bracket

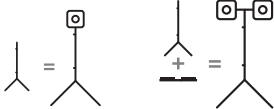
The Dual bracket is made for positioning of two lamps. The bracket is compatible with the new and previous generations of Nova lamps.

Part Number	2XM 910 529-051 (Dual Bracket)
Dimensions	25 x 25 x 600 mm



Dual Bracket

Single and Dual tripod configurations






Universal Nova Bracket

This universal bracket is designed to mount all sizes of previous generation Nova lamps on to the new tripod.

Part Number	2XM 910 529-091 (Universal Nova Bracket)
-------------	--






Magnetic Mounting Bracket

This universal bracket is designed to mount all sizes of previous generation Nova lamps on to the new tripod.

Part Number	2XM 910 529-061 (Magnetic Mount)
Dimensions	260 x 60 x 50 mm




Magnetic Mount



Scaffolding Mounting Bracket

This bracket is specially designed to fix Nova lamps on scaffolding. The mount can be attached to any round object ø40-50 mm. This bracket is of same sturdy quality as standard fittings for scaffolding. The lamp can be tilted to the desired position in the mount and the installation is extremely flexible. This bracket is only compatible with the new generation of Nova lamps.

Part Number	2XM 910 529-071 (Scaffolding Bracket)
Dimensions	170 x 105 x 60 mm



LED Flash Pen R

The Flash Pen R is very sturdy and of extraordinary high quality designed for the professional user. It has focus function for concentrated and focused light beam offering an extremely bright light output of 100 lumen. Light output reaches up to 90m. Flash Pen R features a sturdy and durable aluminium housing with a good ergonomic grip for a firm hold. Supplied with clip for the chest pocket. The flashlight can easily be recharged by the enclosed USB cable.



Part Number	2XM 910 416-011
Light Output	100 lumen for up to 2 hours.
Light Performance	500-800 lux @ 0.5m. Light reaches up to 90m.
Temperature Range	-10° to +40°C
Protection	IP 30
Dimensions	19mm x 160mm
Battery	3.7V/1100 mAh Li-ion rechargeable. 4 hour charging time.
Compliance	



USB cable

Adjustable
Beam Focus and
charging point

Clip for chest pocket

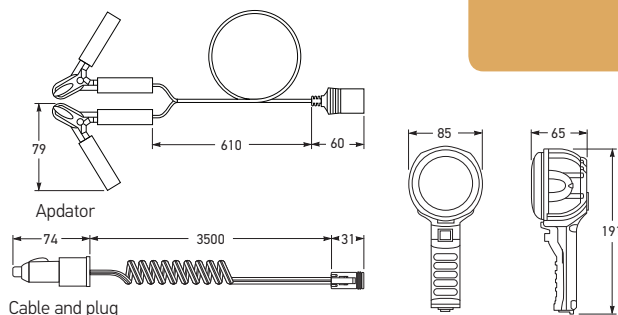
LED Pocket Sized Flashlight

The small LED Flashlight is compact and designed to have in the pocket and always at hand when needed. The flashlight is easily charged on the fly, you just plug it directly into the DC Power socket in your car, without the need of charger device, cable, or batteries! The LED Flashlight provides an extremely bright light output of 130 lumen, and the light output reaches up to 100m. By means of the focus function you can vary the beam angle from 10° to 70°, from concentrated and focused light beam angle to long-distance light.

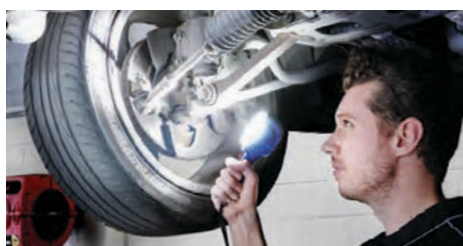


Part Number	2XM 910 603-001
Voltage	10-28V DC (Suitable for 12V and 24V power socket)
Light Output	130 lumen for up to 1 hour.
Light Performance	900-8000 lux @ 0.5m.
Temperature Range	-10° to +40°C
Viewing Angle	10° - 70°
Protection	IP 30
Dimensions	Ø30mm x 105mm
Battery	3.7V/550 mAh Li-ion rechargeable. Recharges using DC power socket. 2 hour charging time.
Compliance	





Part Number	1520LED	LONG RANGE
	1521LED	MEDIUM RANGE
Voltage	10-16 V	
Power Consumption	35W	
Light Output	1350 lumen	
Compliance		



Battery clips to power socket adaptor (Supplied)

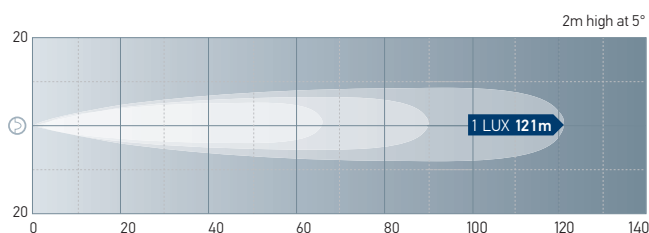


HELLA Bag (Supplied)

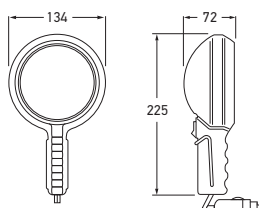
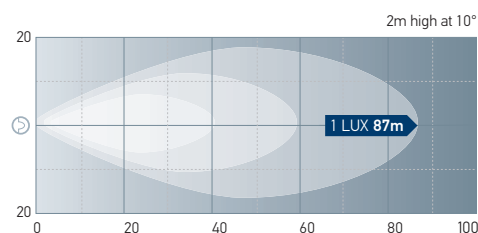


BEAM PATTERNS

Long Range



Medium Range



Part Number	LONG RANGE HAND HELD SPOT LAMP	
	1520 (On-Off Switch)	BLUE
	1524 (On-Off Momentary Switch)	BLACK
Voltage	12V sealed beam included.	
Power Consumption	100W	
Spare Parts	1089 9.1520.06 9.1524.06 9.1520.07	Sealed beam Switch - on-off Switch - momentary Spiral cable



P/N 9.1524.06



P/N 9.1520.06

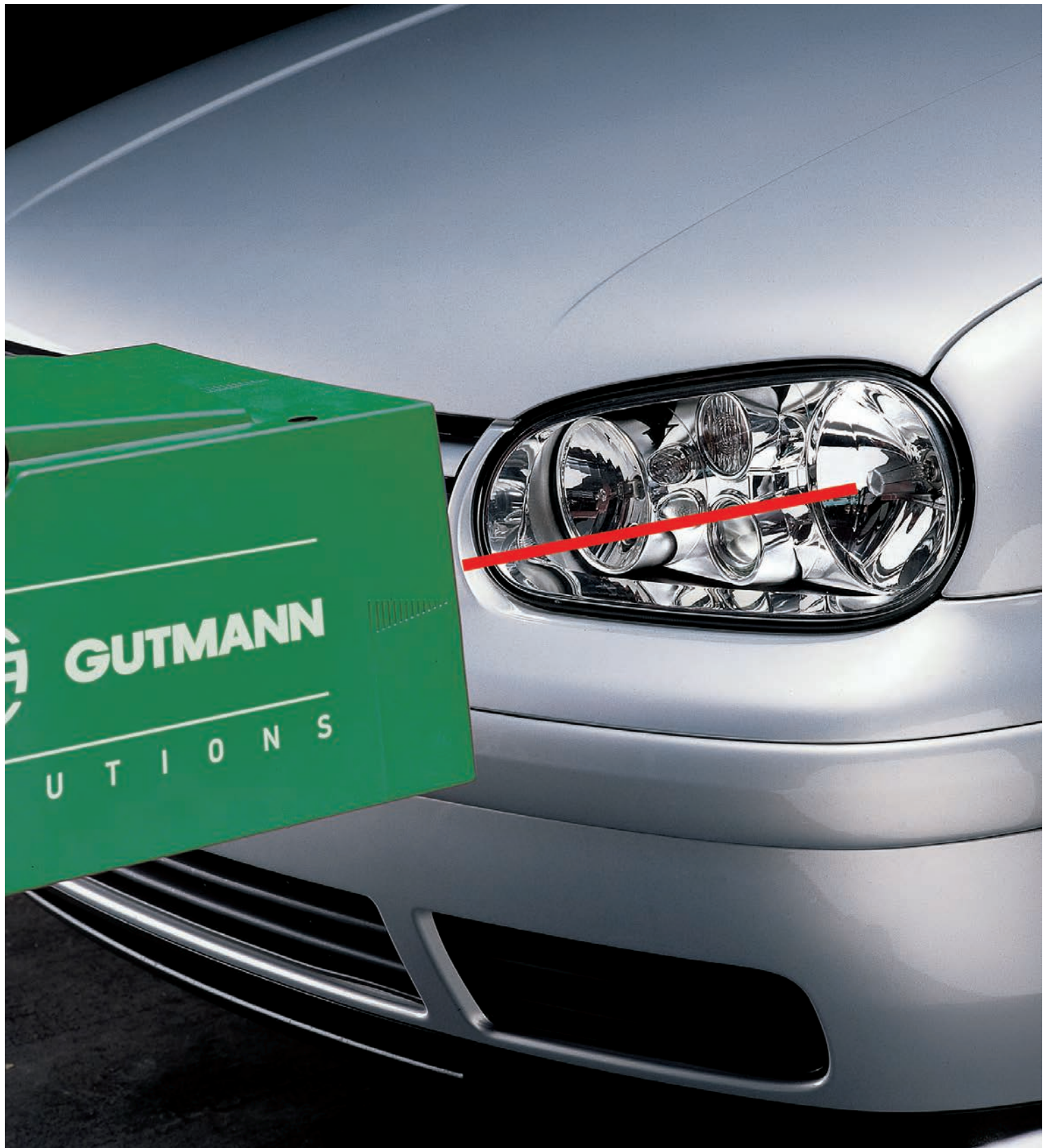
Hand Held Spot Lamp

Blue (P/N 1520) hand held long range spot lamp range. Includes plug, spiral cable (extendable to 2m) and on-off switch. Black (P/N 1524) hand held long range spot lamp range. Includes plug, spiral cable (extendable to 2m) and momentary pressure contact on-off switch.



P/N 1520

P/N 1524



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. Unit features sturdy base, large viewing screen and a combination volt and light output meter. Easy height adjustment.

Features include:

- Wide band sight aligner.
- Combination volt and light output meter.
- Sturdy base.
- Large viewing screen.
- Easy height adjustment.
- Spare parts availability.

HELLA Beamsetter

Standard Beamsetter with digital voltage and lux readings.

Part Number	SEG 700L
	SEG 700DLX (Includes laser sight aligner)

Digital indication of illuminance.





Automotive Bulbs

HELLA's automotive bulbs are renowned for their uncompromising adherence to the highest quality and safety standards.



Contents

Automotive Bulbs

Quick Reference Bulb Guides.....	348-351
Xenon Gas Discharge Bulbs (HID).....	352-353
Halogen Bulbs - H4.....	354
Halogen Bulbs - H7.....	355
Halogen Bulbs - H1.....	356
Halogen Bulbs - H3/H2.....	357
Halogen Bulbs - H8/H9.....	358
Halogen Bulbs - H10/H11.....	359
Halogen Bulbs - HB3/HB4/H1R2.....	360
Halogen Bulbs - H15/H16.....	361
Halogen Bulbs - 800 Series.....	362
Halogen and Headlamp Bulbs.....	363
Signal and Marker Bulbs.....	364-371
Halogen/Interior/Special Bulbs.....	372
Fluorescent/Strobe Tubes.....	373



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.

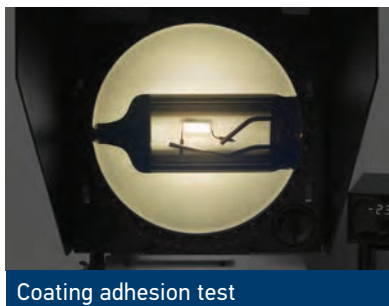
To avoid failing a Warrant/Certificate of Fitness inspection, all lighting equipment must comply with the law and meet approved standards.

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.

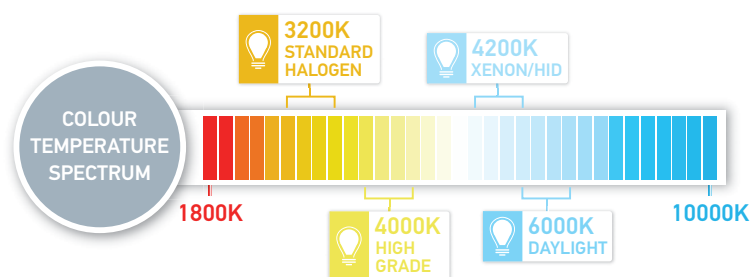


COLOUR TEMPERATURE EXPLAINED

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.

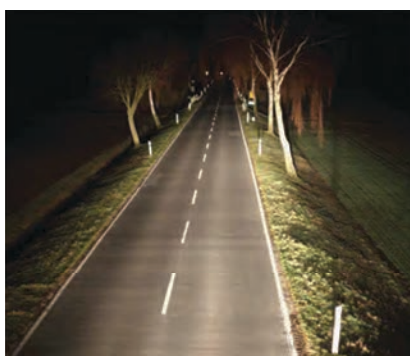
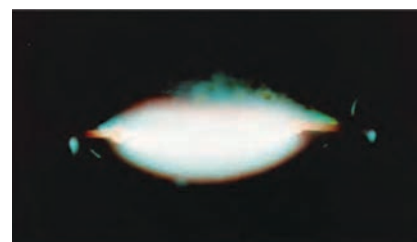
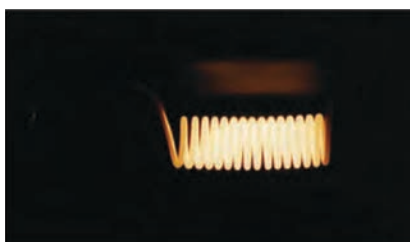
If ignition attempts are unsuccessful, the Xenon bulb should be checked by swapping it with one from the other headlight and the process tried again. If no ignition attempt is carried out, the fuse should be checked.

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.

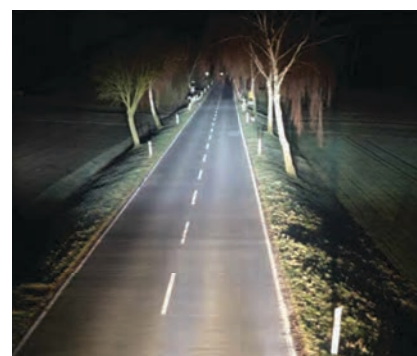
Conversion kits (HID and LED)

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 <http://www.nzta.govt.nz> and ('Get your lights right')

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.
--	---	--	---

QUICK REFERENCE BULB GUIDE

HALOGEN HEADLAMP BULBS

H1



PAGE 356

H2



PAGE 357

H3



PAGE 357

H4



PAGE 354

H7



PAGE 355

H8



PAGE 358

H9



PAGE 358

H10



PAGE 359

H11



PAGE 359

H15



PAGE 361

H16



PAGE 361

HB3



PAGE 360

HB4



PAGE 360

HIR2



PAGE 360

XENON GAS DISCHARGE BULBS

800 SERIES



PAGE 362

D1



PAGE 353

D2



PAGE 352

D3



PAGE 353

D4



PAGE 352

CONVENTIONAL SIGNAL AND MARKER BULBS

BAYONET



PAGE 364

WEDGE



PAGE 368

FESTOON



PAGE 370

PLASTIC



PAGE 365

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		Voltage	Power Consumption	Base	Page
	H1	C1255CB		12V	55W	P14.5s	356
	H3	YC1255CB		12V	55W	PK22s	357
	H4	XD1260/55CB		12V	60/55W	P43t	354
	H7	CA1255CB		12V	55W	PX26d	355
	H11	CG1255CB		12V	55W	PGJ19-2	359
	HB3	CB1265CB		12V	65W	P20d	360
	HB4	CC1255CB		12V	55W	P22d	360
	T4W	HL124BV		12V	4W	BA9s	367
	W5W	W125BV		12V	5W	W2.1 x 9.5d	369

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	D2R-5K		12/24V	35W	P32d-3	352
	D2S	D2S-5K		12/24V	35W	P32d-3	352
	D1S	D1S-5K		12/24V	35W	PK32d-2	353



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		Voltage	Power Consumption	Base	Page
	H1	C1255LL		12V	55W	P14.5s	356
	H3	YC1255LL		12V	55W	PK22s	357
	H4	XD1260/55LL		12V	60/55W	P43t	354
	H7	CA1255LL		12V	55W	PX26d	355
	R5W	G125LL		12V	5W	BA15s	366
	C5W	L125LL		12V	5W	SV8.5-8	370
	P21W	R1221LL		12V	21W	BA15s	364
	P21/5W	S1221/5VLL		12V	21/5W	BAY15d	365
	W5W	W125LL		12V	5W	W2.1 x 9.5d	369
	894	CF1237-894		12V	37.5W	PGJ13	362
	898	CF1237-898		12V	37.5W	PGJ13	362



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		Voltage	Power Consumption	Base	Page
	H1	C1255X		12V	55W	P14.5s	356
	H3	YC1255X		12V	55W	PK22s	357
	H4	XD1260/55X		12V	60/55W	P43t	354
	H7	CA1255X		12V	55W	PX26d	355
	H11	CG1255X		12V	55W	PGJ19-2	359



XENON ULTRA (XU) - UP TO + 60% BRIGHTER




Xenon Ultra bulbs take lighting even further by providing up to 60% more light on the road than a standard headlamp bulb while emitting a 10-20m longer beam.

UPGRADE BULBS							
Bulb	Category	Part Number		Voltage	Power Consumption	Base	Page
	H1	C1255XU		12V	55W	P14.5s	356
	H4	XD1260/55XU		12V	60/55W	P43t	354
	H7	CA1255XU		12V	55W	PX26d	355



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		Voltage	Power Consumption	Base	Page
	D1S	D1SUP		12V/24V	35W	P32d-2	353
	D2S	D2SUP		12V/24V	35W	PK32d-2	352

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 PLUS (UP) - UP TO + 110% 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 110% 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		Voltage	Power Consumption	Base	Page
	H1	C1255UP		12V	55W	P14.5s	356
	H3	YC1255UP		12V	55W	PK22s	357
	H4	XD1260/55UP		12V	60/55W	P43t	354
	H7	CA1255UP		12V	55W	PX26d	355
	HB3	CB1265UP		12V	65W	P20d	360
	HB4	CC1255UP		12V	55W	P22d	360
	H11	CG1255UP		12V	55W	PGJ19-2	359



ULTRA MAX (UM) - UP TO + 130% 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 130% 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		Voltage	Power Consumption	Base	Page
	H4	XD1260/55UM		12V	60/55W	P43t	354
	H7	CA1255UM		12V	55W	PX26d	355



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

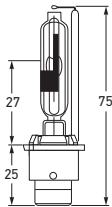
UPGRADE BULBS							
Bulb	Category	Part Number		Voltage	Power Consumption	Base	Page
	H1	C2470TS		24V	70W	P14.5s	356
	H3	YC2470TS		24V	70W	PK22s	357
	H4	XD2475/70TS		24V	75/70W	P43t	354
	H7	CA2470TS		24V	70W	PX26d	355
	H11	CG2470TS		24V	70W	PGJ19-2	359
	P21/5W	S2421/5-TS		24V	21/5W	BAY15d	365
	R5W	G245-TS		24V	5W	BA15s	366
	R10W	G2410-TS		24V	10W	BA15s	366
	T4W	HL244-TS		24V	4W	BA9s	367
	P21W	R2421-TS		24V	21W	BA15s	364
	PY21W	RY2421-TS		24V	21W	BAU15s	364




P/N D2R



P32d-3



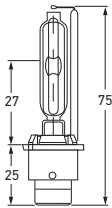
D2 - COLOUR MATCH BULBS					
Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
D2R	12/24V	35W	P32d-3	D2R	
D2R-5K	 12/24V	35W	P32d-3	D2R	





P/N D2S



P32d-2



D2S	12/24V	35W	P32d-2	D2S	
D2SUP	 12/24V	35W	P32d-2	D2S	
D2S-5K	 12/24V	35W	P32d-2	D2S	

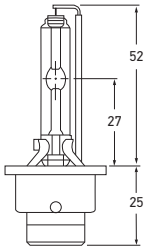
See page 347 for further information on colour match bulbs (5K).
See page 121 for information on power packs and ballast leads.



P/N D4S



P32d-5



D4S					
Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
D4S	12/24V	35W	P32d-5	D4S	

BASE CODING (VIEWED FROM TOP SIDE)



P32d-2



P32d-3

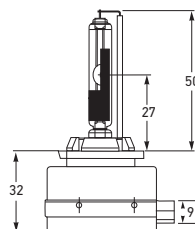


P32d-5

AUTOMOTIVE BULBS



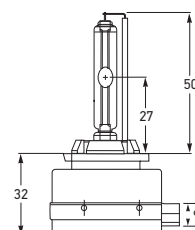
PK32d-3





P/N D1R

D1					
Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
D1R	12/24V	35W	PK32d-3	D1R	


P32d-2
P/N D1S/D1SUP

P32d-2
P/N D1S-5K


P/N D1S

D1S	12/24V	35W	PK32d-2	D1S	
D1SUP	 12/24V	35W	PK32d-2	D1S	
D1S-5K	 12/24V	35W	PK32d-2	D1S	

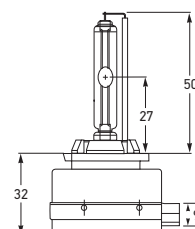
See page 121 for information on power packs and ballast leads.



P/N D1S-5K



PK32d-5



P/N D3S

D3S					
Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
D3S	12/24V	35W	PK32d-5	D3S	

BASE CODING (VIEWED FROM TOP SIDE)



PK32d-2



PK32d-3



PK32d-5



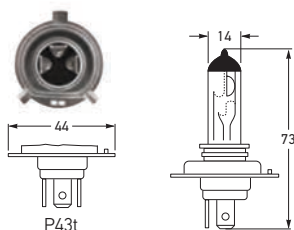
P/N XD1260/55UP



P/N XD1260/55XU



P/N XD2475/70



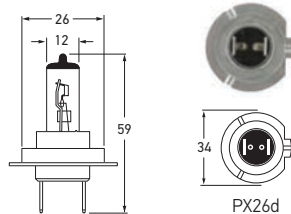
HALOGEN BULBS - H4 12 VOLT

Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
XD1260/55	12V	60/55W	P43t	H4	
XD1260/55-BULK	12V	60/55W	P43t	H4	
XD1260/55LL	12V	60/55W	P43t	H4	
XD1260/55X	12V	60/55W	P43t	H4	
XD1260/55X-BULK	12V	60/55W	P43t	H4	
XD1260/55XU	12V	60/55W	P43t	H4	
XD1260/55UP	12V	60/55W	P43t	H4	
XD1260/55UM	12V	60/55W	P43t	H4	
XD1260/55CB	12V	60/55W	P43t	H4	
XD12100/90	12V	100/90W	P43t		
XD12100/90-BULK	12V	100/90W	P43t		

HALOGEN BULBS - H4 24 VOLT

Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
XD2475/70	24V	75/70W	P43t	H4	
XD2475/70-BULK	24V	75/70W	P43t	H4	
XD2475/70TS	24V	75/70W	P43t	H4	
XD2475/70TSBULK	24V	75/70W	P43t	H4	
XD24100/90	24V	100/90W	P43t		
XD24100/90-BULK	24V	100/90W	P43t		

Bulk packs supplied in single cartons.



HALOGEN BULBS - H7 12 VOLT					
Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
CA1255	12V	55W	PX26d	H7	
CA1255-BULK	12V	55W	PX26d	H7	
CA1255LL	12V	55W	PX26d	H7	
CA1255X	12V	55W	PX26d	H7	
CA1255XU	12V	55W	PX26d	H7	
CA1255UP	12V	55W	PX26d	H7	
CA1255UM	12V	55W	PX26d	H7	
CA1255CB	12V	55W	PX26d	H7	

HALOGEN BULBS - H7 24 VOLT					
Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
CA2470	24V	70W	PX26d	H7	
CA2470-BULK	24V	70W	PX26d	H7	
CA2470TS	24V	70W	PX26d	H7	
CA2470TS-BULK	24V	70W	PX26d	H7	

Bulk packs supplied in single cartons.



P/N CA1255UP



P/N CA2470TS



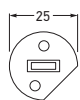
P/N C1255



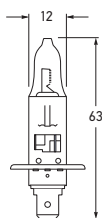
P/N C1255UP



P/N C1255CB



P14.5s



HALOGEN BULBS - H1 12 VOLT

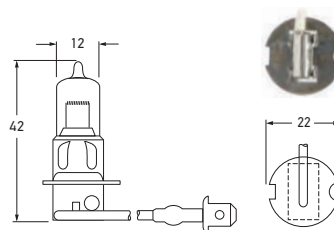
Part Number		Voltage	Power Consumption	Base	ADR 51/00 Category	
C1255		12V	55W	P14.5s	H1	
C1255-BULK		12V	55W	P14.5s	H1	
C1255LL		12V	55W	P14.5s	H1	
C1255X		12V	55W	P14.5s	H1	
C1255XU		12V	55W	P14.5s	H1	
C1255UP		12V	55W	P14.5s	H1	
C1255CB		12V	55W	P14.5s	H1	
C12100		12V	100W	P14.5s		

HALOGEN BULBS - H1 24 VOLT

Part Number		Voltage	Power Consumption	Base	ADR 51/00 Category	
C2470		24V	70W	P14.5s	H1	
C2470-BULK		24V	70W	P14.5s	H1	
C2455		24V	55W	P14.5s		
C2455-BULK		24V	55W	P14.5s		
C2470TS		24V	70W	P14.5s	H1	
C2470TS-BULK		24V	70W	P14.5s	H1	
C24100		24V	100W	P14.5s		
C24100-BULK		24V	100W	P14.5s		

Bulk packs supplied in single cartons.

AUTOMOTIVE BULBS



P/N YC1255UP

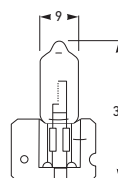
HALOGEN BULBS - H3 12 VOLT					
Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
YC1255	12V	55W	PK22s	H3	
YC1255-BULK	12V	55W	PK22s	H3	
YC1235	12V	35W	PK22s		
YC1255LL	12V	55W	PK22s	H3	
YC1255X	12V	55W	PK22s	H3	
YC1255UP	12V	55W	PK22s	H3	
YC1255CB	12V	55W	PK22s	H3	
YC12100	12V	100W	PK22s		
YC12100-BULK	12V	100W	PK22s		

HALOGEN BULBS - H3 24 VOLT					
Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
YC2470	24V	70W	PK22s	H3	
YC2470-BULK	24V	70W	PK22s	H3	
YC2455	24V	55W	PK22s		
YC2455-BULK	24V	55W	PK22s		
YC2470TS	24V	70W	PK22s	H3	
YC2470TS-BULK	24V	70W	PK22s	H3	
YC24100	24V	100W	PK22s		
YC24100-BULK	24V	100W	PK22s		

Bulk packs supplied in single cartons.



P/N YC2470TS



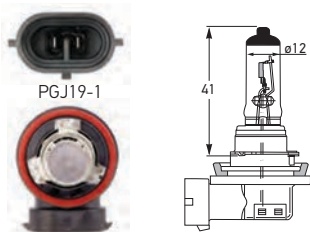
HALOGEN BULBS - H2					
Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
CD1255	12V	55W	X511	H2	
CD2470	24V	70W	X511	H2	



P/N CD2470



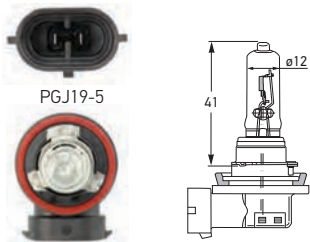
P/N CE1235



HALOGEN BULBS - H8					
Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
CE1235	12V	35W	PGJ19-1	H8	

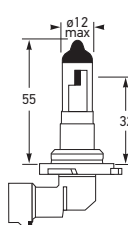


P/N CF1265



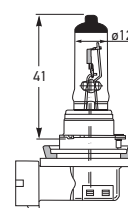
HALOGEN BULBS - H9					
Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
CF1265	12V	65W	PGJ19-5	H9	

AUTOMOTIVE BULBS



P/N CH1242

HALOGEN BULBS - H10					
Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
CH1242	12V	42W	PY20d	H10	



P/N CG1255

HALOGEN BULBS - H11					
Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
CG1255	12V	55W	PGJ19-2	H11	
CG1255X	12V	55W	PGJ19-2	H11	
CG1255UP	12V	55W	PGJ19-2	H11	
CG1255CB	12V	55W	PGJ19-2	H11	
CG2470	24V	70W	PGJ19-2	H11	
CG2470TS	24V	70W	PGJ19-2	H11	



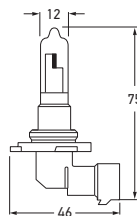
P/N CG1255UP



P/N CG1255CB



P/N CB1265UP

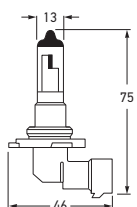


HALOGEN BULBS - HB3 (9005)

Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
CB1265	12V	65W	P20d	HB3	
CB1265UP	12V	65W	P20d	HB3	
CB1265CB	12V	65W	P20d	HB3	



P/N CC1255UP

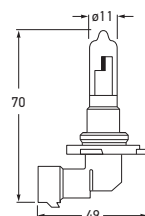


HALOGEN BULBS - HB4 (9006)

Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
CC1255	12V	55W	P22d	HB4	
CC1255UP	12V	55W	P22d	HB4	
CC1255CB	12V	55W	P22d	HB4	

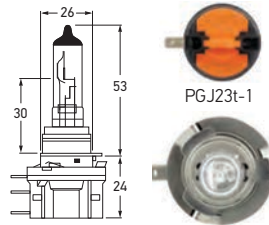


P/N CI1255




HALOGEN BULBS - H1R2

Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
CI1255	12V	55W	PX22d	H1R2	

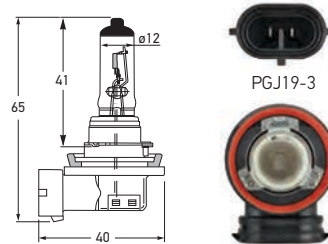


DAYTIME RUNNING LAMP AND FOG LAMP BULB - H15

Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
XH1215/55	12V	15/55W	PGJ23t-1	H15	



P/N XH1215/55



HALOGEN BULBS - H16

Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
CF1219	12V	19W	PGJ19-3	H16	

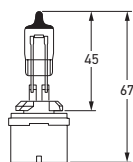


P/N CF1219

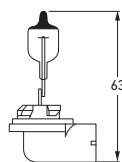
1.



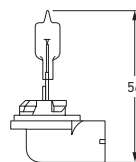
P/Ns CF1237-862,
CF1237-894, CF1250-886,
CF1227-889.



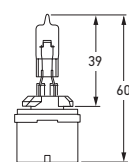
P/N CF1227-880



P/N CF1227-881



P/N CF1227-889



P/N CF1227-890

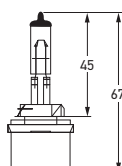
HALOGEN BULBS - 800 SERIES

Part Number	Picture	Voltage	Power Consumption	Base	ADR 51/00 Category	
CF1227-880	4	12V	27W	PG13	880	
CF1227-881	2	12V	27W	PGJ13	881	
CF1227-889	1	12V	27W	PGJ13	889	
CF1227-890	3	12V	27W	PG13	890	

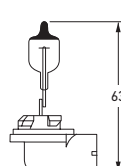
2.



P/Ns CF1227-881,
CF1227-H27W/2, CF1237-896,
CF1237-898.



P/N CF1227-H27W/1



P/N CF1227-H27W/2

CF1227-H27W/1	4	12V	27W	PG13	H27W/1	
CF1227-H27W/2	2	12V	27W	PGJ13	H27W/2	

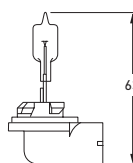
3.



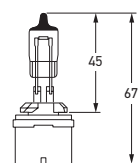
P/N CF1250-885



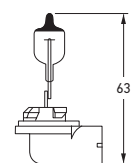
P/Ns CF1227-890



P/N CF1237-862/894



P/N CF1237-893



P/N CF1237-896/898

CF1237-862	1	12V	37.5W	PGJ13	862	
CF1237-893	4	12V	37.5W	PG13	893	
CF1237-894	1	12V	37.5W	PGJ13	894	
CF1237-896	2	12V	37.5W	PGJ13	896	
CF1237-898	2	12V	37.5W	PGJ13	898	

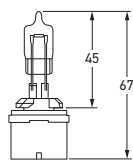
4.



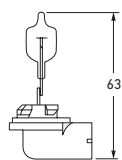
P/Ns CF1227-880,
CF1227-H27W/1,
CF1237-893.



Figures 3 and 4
configuration

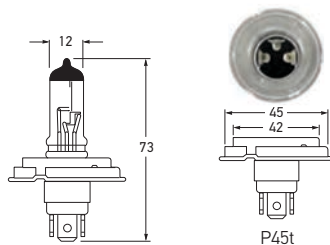


P/N CF1250-885



P/N CF1250-886

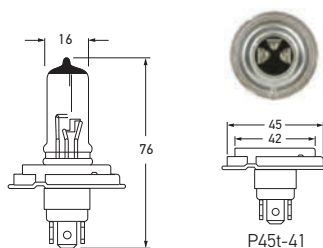
CF1250-885	3	12V	50W	PG13	885	
CF1250-886	1	12V	50W	PGJ13	886	



HALOGEN HEADLAMP BULBS					
Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
XE1260/55	12V	60/55W	P45t-41		
XE2475/70	24V	70/75W	P45t-41		



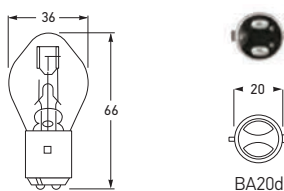
P/N XE1260/55



HEADLAMP BULBS					
Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
A1245/40	12V	45/40W	P45t-41	R2	
A2455/50	24V	55/50W	P45t-41	R2	



P/N A1245/40



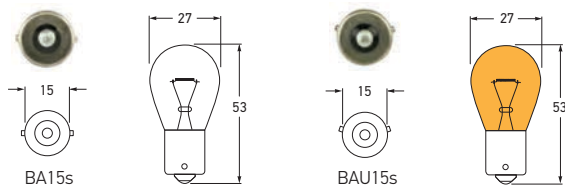
B1245/40	12V	45/40W	BA20d		
----------	-----	--------	-------	--	--



P/N B1245/40



P/N R1221



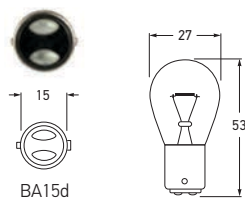
BAYONET INDICATOR AND STOP LAMP BULBS

Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
R1221	12V	21W	BA15s	P21W	
R1221-BULK	12V	21W	BA15s	P21W	
R1221LL	12V	21W	BA15s	P21W	
RY1221	12V	21W	BAU15s	PY21W	
RY1221-BULK	12V	21W	BAU15s	PY21W	
R2418	24V	18W	BA15s		
R2421	24V	21W	BA15s	P21W	
R2421-BULK	24V	21W	BA15s	P21W	
R2421-TS	24V	21W	BA15s	P21W	
RY2421	24V	21W	BAU15s	PY21W	
RY2421-TS	24V	21W	BAU15s	PY21W	

Bulk bulbs (other than Halogen) are sold in packs of 10.



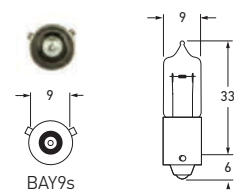
P/N FD1221



FD1221	12V	21W	BA15d	P21W	
--------	-----	-----	-------	------	--

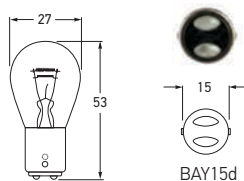


P/N RQ1221



BAYONET HALOGEN INDICATOR AND STOP LAMP BULBS

Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
RQ1221	12V	21W	BAY9s	H21W	
RQ2421	24V	21W	BAY9s	H21W	



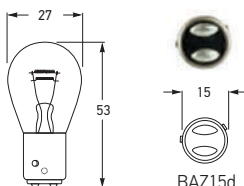
BAY15d



P/N S1221/5V

BAYONET STOP AND TAIL LAMP BULBS					
Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
S1221/5V	12V	21/5W	BAY15d	P21/5W	
S1221/5V-BULK	12V	21/5W	BAY15d	P21/5W	
S1221/5VLL	12V	21/5W	BAY15d	P21/5W	
S2421/5V	24V	21/5W	BAY15d	P21/5W	
S2421/5V-BULK	24V	21/5W	BAY15d	P21/5W	
S2421/5-TS	24V	21/5W	BAY15d	P21/5W	

Bulk bulbs (other than Halogen) are sold in packs of 10.

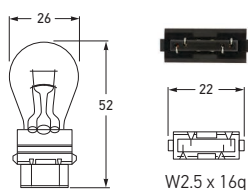


BAZ15d



P/N SZ1221/4

BAYONET EUROPEAN STOP AND TAIL LAMP BULBS					
Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
SZ1221/4	12V	21/4W	BAZ15d	P21/4W	



W2.5 x 16q

PLASTIC BASED BULBS					
Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
WP1227	12V	27W	W2.5 x 16d	P27W	
WP1227/7	12V	27/7W	W2.5 x 16q	P27/7W	
WPA1227/7	12V	27/7W	W2.5 x 16q	PY27/7W	



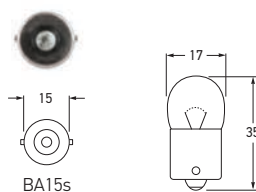
P/N WP1227/7



P/N WPA1227/7



P/N G125



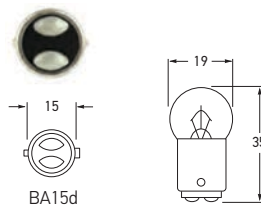
REAR POSITION, MARKER AND CLEARANCE BULBS

Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
G125	12V	5W	BA15s	R5W	
G125-BULK	12V	5W	BA15s	R5W	
G125LL	12V	5W	BA15s	R5W	
G1210	12V	10W	BA15s	R10W	
G1210-BULK	12V	10W	BA15s	R10W	
G245	24V	5W	BA15s	R5W	
G245-BULK	24V	5W	BA15s	R5W	
G245-TS	24V	5W	BA15s	R5W	
G2410	24V	10W	BA15s	R10W	
G2410-BULK	24V	10W	BA15s	R10W	
G2410-TS	24V	10W	BA15s	R10W	

Bulk bulbs (other than Halogen) are sold in packs of 10.

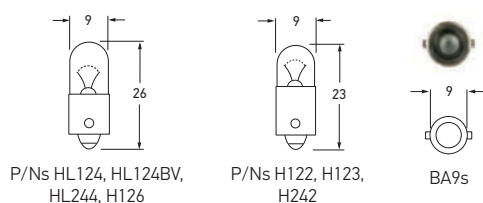


P/N GD125



GD125	12V	5W	BA15d	R5W	
GD245	24V	5W	BA15d	R5W	

AUTOMOTIVE BULBS



PILOT/DASH BULBS						
Part Number	Picture	Voltage	Power Consumption	Base	ADR 51/00 Category	
HL124	1	12V	4W	BA9s	T4W	
HL124-BULK	1	12V	4W	BA9s	T4W	
HL124BV	2	12V	4W	BA9s	T4W	
HL244	1	24V	4W	BA9s	T4W	
HL244-BULK	1	24V	4W	BA9s	T4W	
HL244-TS	1	24V	4W	BA9s	T4W	
HL247	1	24V	7W	BA9s		

H122	3	12V	2W	BA9s		
H123	3	12V	3W	BA9s		
H123-BULK	3	12V	3W	BA9s		
H126	1	12V	6W	BA9s		
H126-BULK	1	12V	6W	BA9s		
H242	1	24V	2W	BA9s		
H242-BULK	1	24V	2W	BA9s		

Bulk bulbs (other than Halogen) are sold in packs of 10.

1.



P/N HL124

2.



P/N HL124BV

3.



P/N H122

LED RETROFITS					
Part Number	Voltage	Power Consumption	Base		
HLLED124	12V	1W	BA9s		
HLLED124-WW	12V	1W	BA9s		

Not for use in marker and signal lamps. WW = warm white (4000°K).



P/N HLLED124



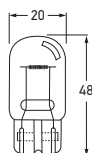
P/N CAP1221



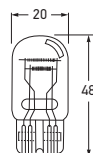
P/N CAPY1221



W3 x 16d



W3 x 16d



W3 x 16q

WEDGE BASE BULBS

Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
CAP1221	12V	21W	W3 x 16d	W21W	
CAP1221-BULK	12V	21W	W3 x 16d	W21W	
CAPY1221	12V	21W	W3 x 16d	WY21W	
CAP1221/5	12V	21/5W	W3 x 16q	W21/5W	
CAP1221/5-BULK	12V	21/5W	W3 x 16q	W21/5W	

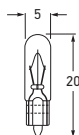
Bulk bulbs (other than Halogen) are sold in packs of 10.



P/N WBL122

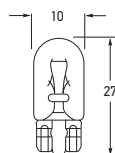


W2 x 4.6d



W121.2	12V	1.2W	W2 x 4.6d	
W121.2-BULK	12V	1.2W	W2 x 4.6d	
WBL122	12V	2W	W2 x 4.6d	
WS122	12V	2W	W2 x 4.6d	
W241.2	24V	1.2W	W2 x 4.6d	
W241.2-BULK	24V	1.2W	W2 x 4.6d	
WS242	24V	2W	W2 x 4.6d	

Bulk bulbs (other than Halogen) are sold in packs of 10.



W2.1 x 9.5d



P/N W122



P/N W125BV



P/N WY125



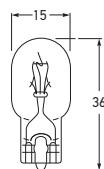
P/N W1216



P/N WLED125

WEDGE BASE BULBS					
Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
W122	12V	2W	W2.1 x 9.5d		
W123	12V	3W	W2.1 x 9.5d	W3W	
W125	12V	5W	W2.1 x 9.5d	W5W	
W125-BULK	12V	5W	W2.1 x 9.5d	W5W	
W125LL	12V	5W	W2.1 x 9.5d	W5W	
W125BV	12V	5W	W2.1 x 9.5d	W5W	
WY125	12V	5W	W2.1 x 9.5d	WY5W	
W242-BULK	24V	2W	W2.1 x 9.5d		
W243	24V	3W	W2.1 x 9.5d	W3W	
W245	24V	5W	W2.1 x 9.5d	W5W	
W245-BULK	24V	5W	W2.1 x 9.5d	W5W	

Bulk bulbs (other than Halogen) are sold in packs of 10.



W2.1 x 9.5d

WS1212	12V	12W	W2.1 x 9.5d		
W1216	12V	16W	W2.1 x 9.5d	W16W	
W1221	12V	21W	W2.1 x 9.5d		

LED RETROFITS					
Part Number	Voltage	Power Consumption	Base		
WLED125	12V	1W	W2.1x9.5d		
WLED125-WW	12V	1W	W2.1x9.5d		

Not for use in marker and signal lamps. WW = warm white (4000°K).



P/N K1221



P/N K2410



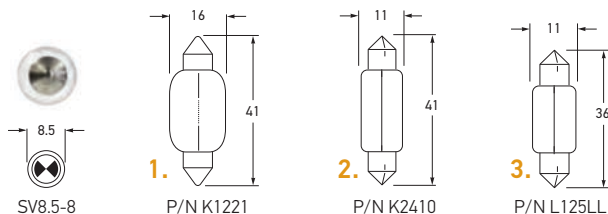
P/N L125LL



P/N M123



P/N N1210

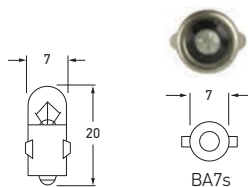


FESTOON BULBS

Part Number	Diagram	Voltage	Power Consumption	Base	ADR 51/00 Category	
K1210	2	12V	10W	SV8.5-8		
K1210-BULK	2	12V	10W	SV8.5-8		
K1221	1	12V	21W	SV8.5-8	C21W	
K1221-BULK	1	12V	21W	SV8.5-8	C21W	
K2410	2	24V	10W	SV8.5-8		
K2410-BULK	2	24V	10W	SV8.5-8		
K2421	1	24V	21W	SV8.5-8		
K2421-BULK	1	24V	21W	SV8.5-8		
L125	3	12V	5W	SV8.5-8	C5W	
L125-BULK	3	12V	5W	SV8.5-8	C5W	
L125LL	3	12V	5W	SV8.5-8	C5W	
L1210	3	12V	10W	SV8.5-8		
L245	3	24V	5W	SV8.5-8	C5W	
L245-BULK	3	24V	5W	SV8.5-8	C5W	
L2410	3	24V	10W	SV8.5-8		
L2410-BULK	3	24V	10W	SV8.5-8		
M123	8	12V	3W	SV7-8		
M123-BULK		12V	3W	SV7-8		
M243		24V	3W	SV7-8		
M243-BULK		24V	3W	SV7-8		
N1210	8.5	12V	10W	SV8.5-8		
N1210-BULK		12V	10W	SV8.5-8		

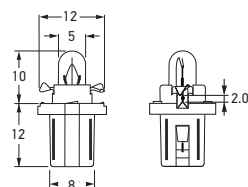
Bulk bulbs (other than Halogen) are sold in packs of 10.

AUTOMOTIVE BULBS



P/N J122

MINIATURE BULBS					
Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
J122	12V	2W	BA7s		
J243	24V	3W	BA7s		



P/N WD121.2-BULK

DASHBOARD BULBS					
Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
WD121.2-BULK	12V	1.2W	B8.5d		
WD241.2-BULK	24V	1.2W	B8.5d		

Bulk bulbs (other than Halogen) are sold in packs of 10.

LED RETROFITS					
Part Number	Voltage	Power Consumption	Base		
LLED125	12V	1W	SV8.5-8		
LLED125-WW	12V	1W	SV8.5-8		

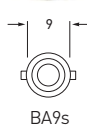
Not for use in marker and signal lamps. WW = warm white (4000°K).



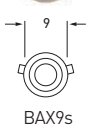
P/N LLED125



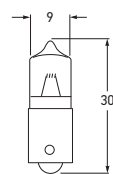
P/N YL125



BA9s



BAX9s



HALOGEN/INTERIOR BULBS

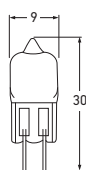
Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
YL125	12V	5W	BA9s		
YL126	12V	6W	BAX9s	H6W	
YL1210	12V	10W	BA9s		
YL1220	12V	20W	BA9s		



P/N YM1210



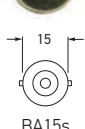
G4



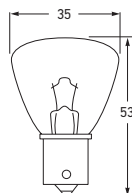
YM125	12V	5W	G4		
YM1210	12V	10W	G4		
YM1220	12V	20W	G4		
YM2410	24V	10W	G4		
YM2420	24V	20W	G4		



P/N U1245



BA15s



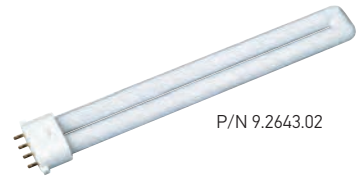
SPECIAL BULBS FOR EMERGENCY FLASHER AND REVOLVING LAMPS

Part Number	Voltage	Power Consumption	Base	ADR 51/00 Category	
U1245	12V	45W	BA15s		
U2445	24V	45W	BA15s		

FLUORESCENT TUBES			
Part Number	Voltage	Power Consumption	To Suit
9.2642.02	12/24V	7W	P/Ns 2642 and 2642-24V
9.2643.02	12/24V	11W	P/Ns 2643 and 2643-24V
TL8W/336J	12/24V	8W	P/Ns 2644 and 2644-24V



P/N 9.2642.02



P/N 9.2643.02



P/N TL8W/336J

STROBE TUBES				
Part Number	Voltage	Power Consumption	Base	To Suit
XN000	12-72V	2 Joules	Circuit Board	Firebolt
XN451	12-48V	8 Joules	Circuit Board	Pulsator 451



P/N XN000



P/N XN451

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 Ref.	A.D.R. No.	Function
2550	001384-28	48/00	Number Plate Lamp
2551	001384-29	48/00	Number Plate Lamp
2553	951068-02	48/00	Number Plate Lamp
2554	950921-00	48/00	Number Plate Lamp
2555	001389-10	48/00	Number Plate Lamp

3. Look up the part number on the chart on page 378 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 378). HELLA provides specific ADR related lamp orientation and mounting requirements to enable customers requiring ADR compliance to simply quote the relevant CRN 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

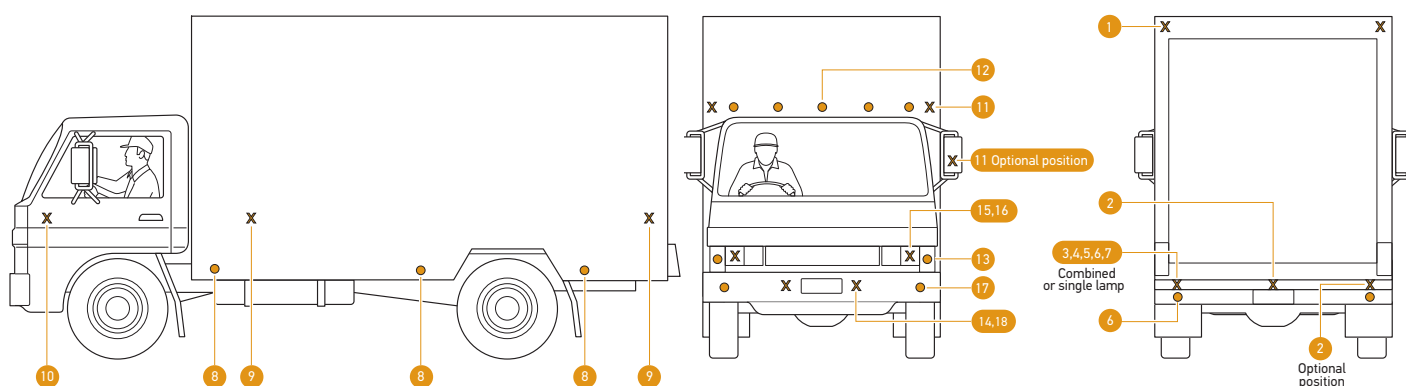
SIDE

- 8 ADR 47/00 Side Retro Reflectors
- 9 ADR 45/01 or 74/00 Side Markers
- 10 ADR 6/00 Supplementary Side Direction Indicators

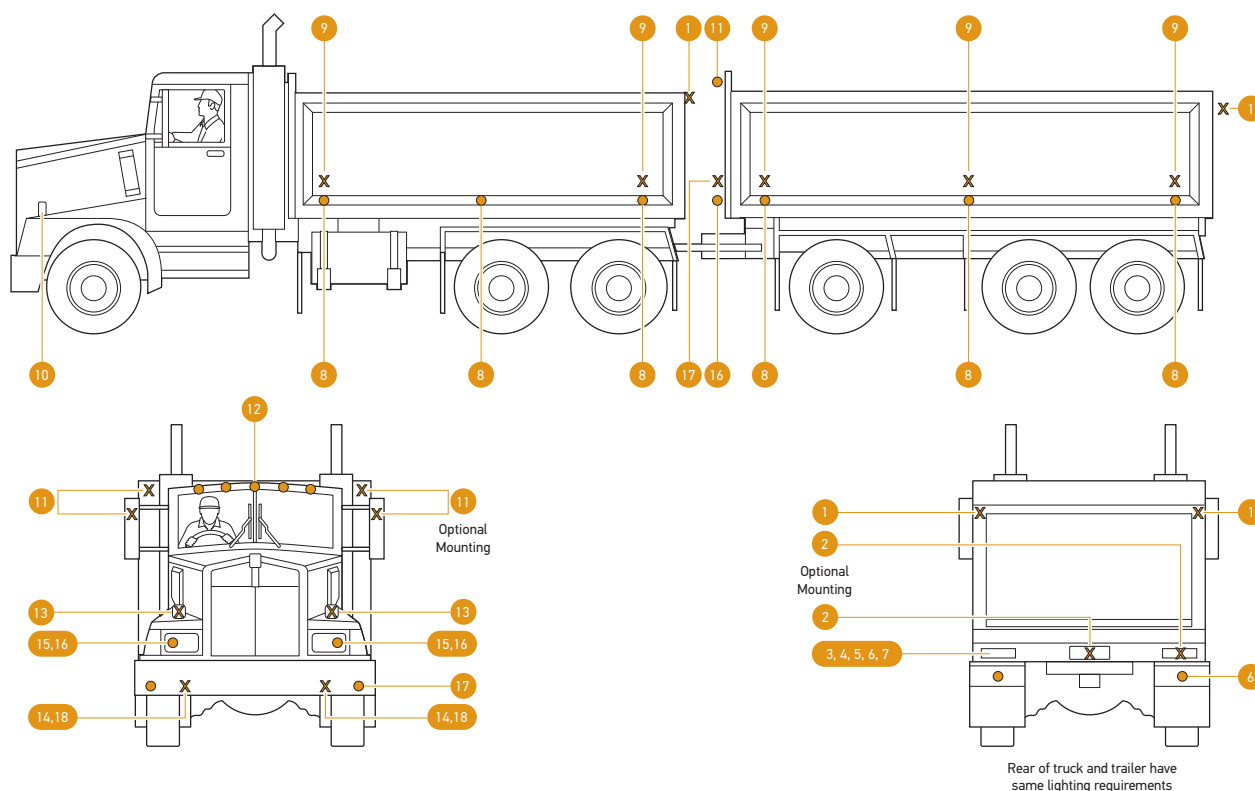
FRONT

- 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)

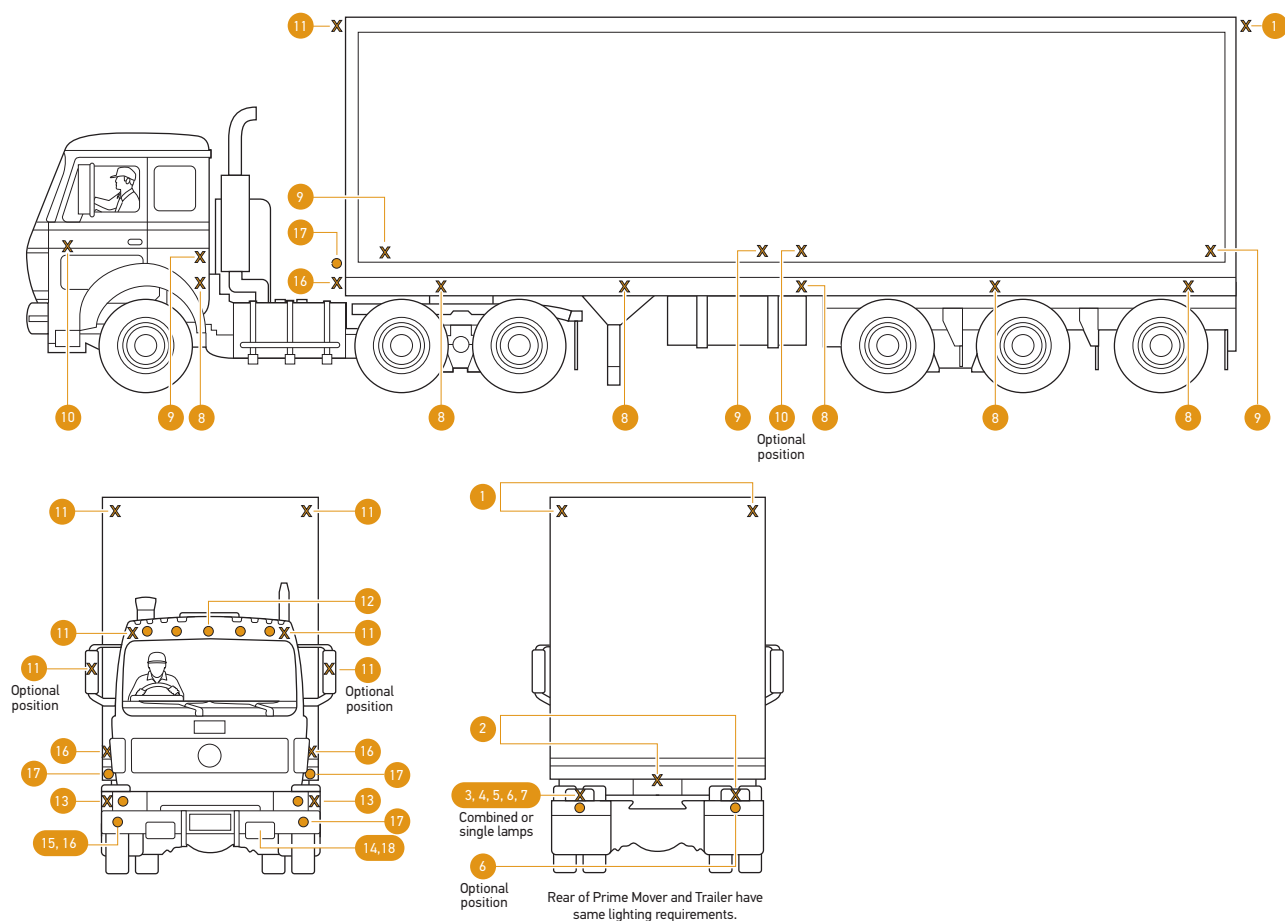
SMALL TRUCK



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

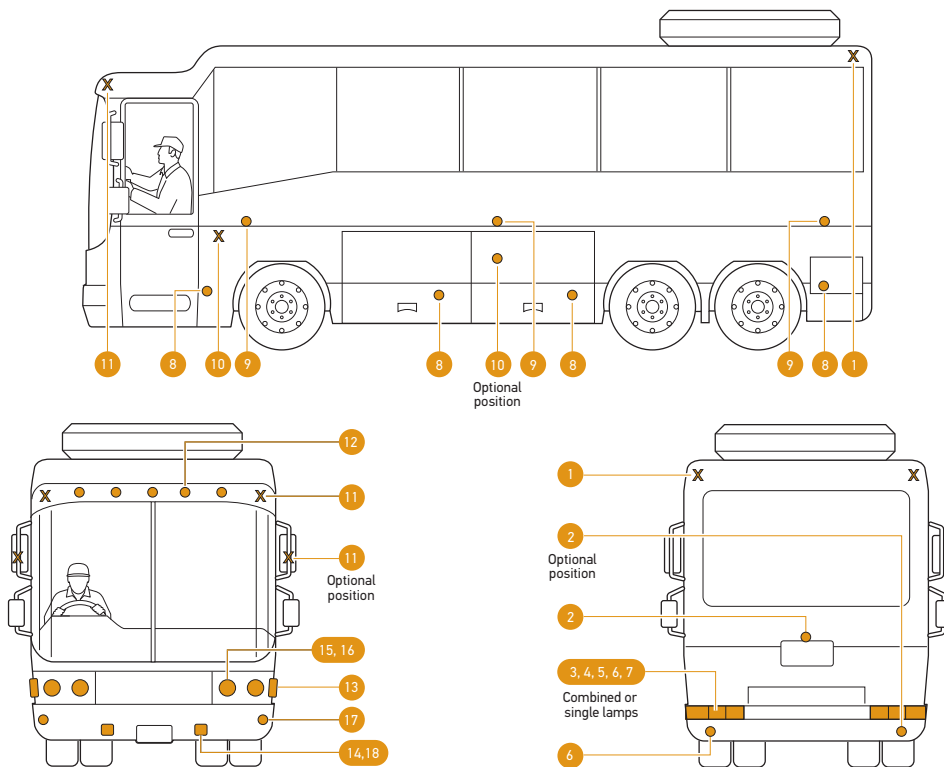
SIDE

- 8 ADR 47/00 Side Retro Reflectors
- 9 ADR 45/01 or 74/00 Side Markers
- 10 ADR 6/00 Supplementary Side Direction Indicators

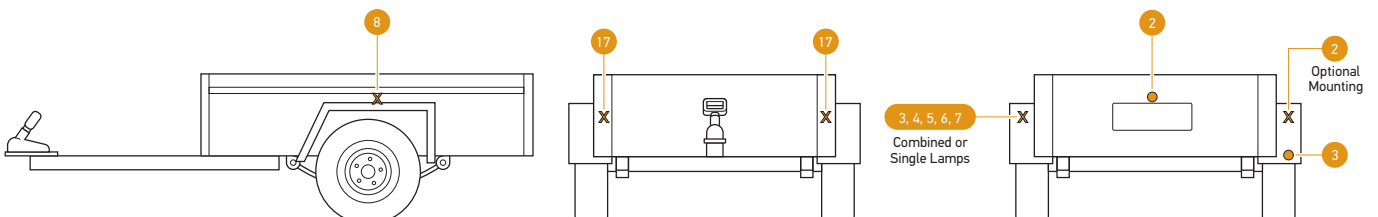
FRONT

- 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)

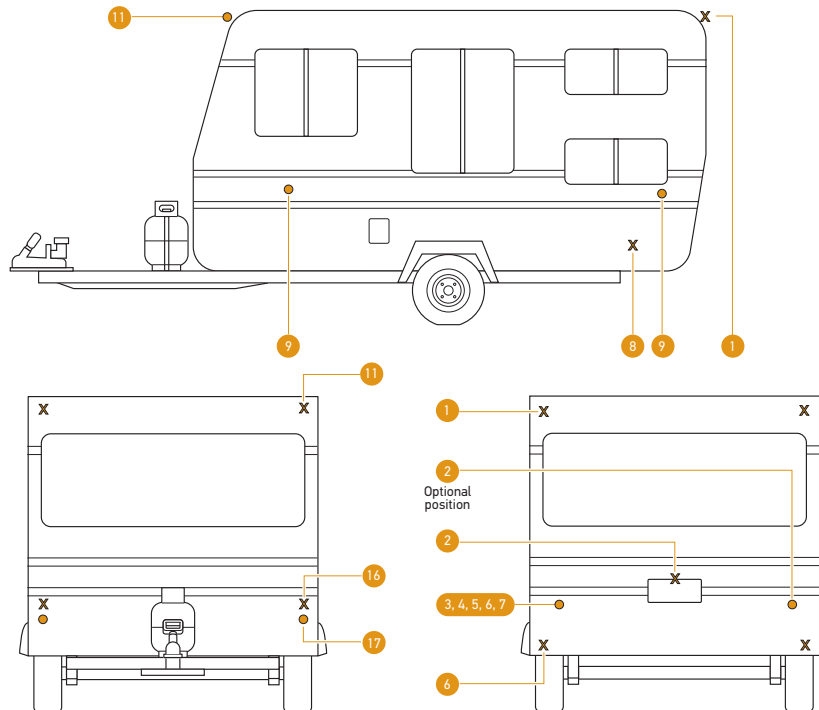
COACH



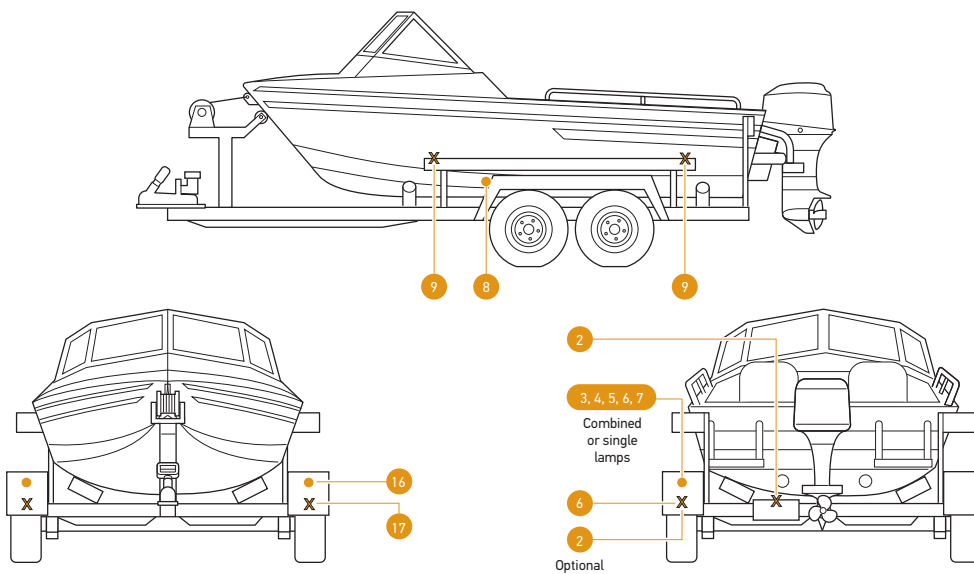
SMALL TRAILER



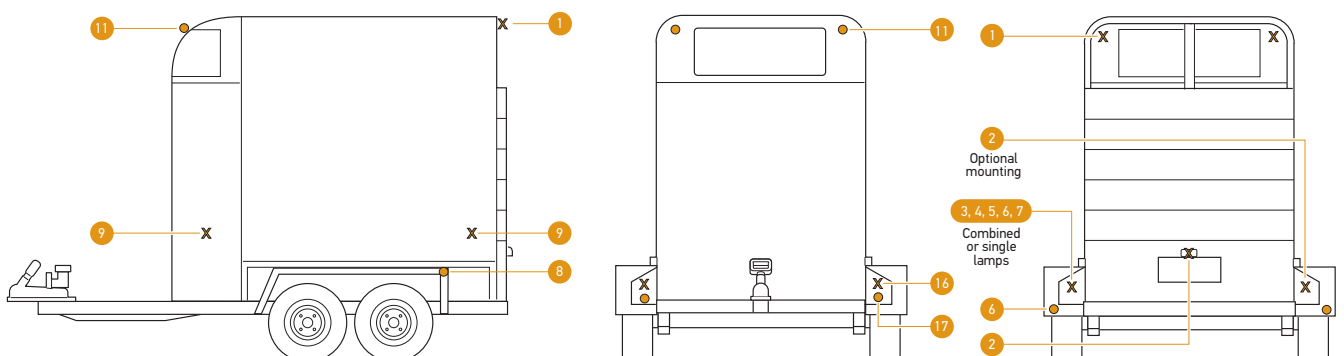
CARAVAN



BOAT TRAILER



HORSE FLOAT



HELLA Part No.	Engineering Drawing No.	ADR No.	Function	Bulb(s)	Bulb Type	HELLA Ref. or ECE	FORS Ref: CRN or ECE	Instruction Sheet No.	Lamp Identification
1000	012614-00	76/00	Daytime Running Lamp	R1221	P21W	DRL*1000*B	27424	911-353-51	RL 008701
1001	950957-00	6/00:Cat 1	Front Direction Indicator Lamp	R1221	P21W	FL*1001*A	15230	911-351-00	016086 (Turn Signal) 17031R20 (Headlamp)
		46/00	Headlamp	XD1260/55	H4	HL*1001*A	15232		
		49/00	Front Position Lamp	HL124	T4W	FP*1001*A	15231		
1003	980608-50	76/00	Daytime Running Lamp	LED	N/A LED	DRL*1003*A	41607	980-703-11	9060
1004	980670-00 980670-80	76/00	Daytime Running Lamp	LED	N/A LED	N/A ECE	E24 87R-000002	980-703-10	E24 0002 (0670)
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
		49/00	Front Position Lamp	LED	N/A LED	FP*1006*A	42762		
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	45962	958-780-92	0880 B
1009V-24V	980880-50					1009V-24V*DRL*C	45965	958-780-92	
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		
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
1054	114178-00	46/00	Headlamp	C1255	H1	HL*1054*A	15092	911-351-15	7076R8
		49/00	Front Position Lamp	HL124	T4W	FP*1054*A	15093		
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		
1056LED	958307-00	46/00	Headlamp	LED	N/A LED	N/A ECE	HCR PL 01 E11 12.5 7581	958-315-63	01 E11 12.5 7581
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 6081	958-315-63	00 E11 12.5 6081
		49/00	Front Position Lamp						
		76/00	Daytim Running Lamp						
1108	005750-64	50/00	Front Fog Lamp	YC1255	H3	FF*1108*A	15137	911-351-30	18213R19
1109	005700-42	50/00	Front Fog Lamp	YC1255	H3	FF*1109*A	15134	911-351-31	18216R19
1110	005860-20	50/00	Front Fog Lamp	YC1255	H3	FF*1110*A	15218	911-351-32	18227
1111	006300-07	50/00	Front Fog Lamp	YC1255	H3	FF*1111*A	15255	911-351-33	18231
1112	007891-00	50/00	Front Fog Lamp	YC1255	H3	FF*1112*A	21581	911-353-28	02 B 650 E1
1113	007893-00	50/00	Front Fog Lamp	YC1255	H3	FF*1113*A	21577	911-353-30	02 B 645 E1
1114	007892-00	50/00	Front Fog Lamp	YC1255	H3	FF*1114*A	21492	911-353-32	02 B 648 E1
1115	008090-00	50/00	Front Fog Lamp	YC1255	H3	FF*1115*A	28414	911-353-38	02 B E1 877
1118	008773-03	50/00	Front Fog Lamp	CA1255	H7	FF*1118*A	31991	911-353-83	1689
1122	008283-00	50/00	Front Fog Lamp	CA1255	H7	FF*1122*A	26829	911-353-45	021209
1123	008284-00	50/00	Front Fog Lamp	CA1255	H7	FF*1123*A	26830	911-353-47	021211
1124	001951-10	50/00	Front Fog Lamp	YC1255	H3	N/A ECE	03B E1 3221	HKG 460 845-16 & Refer ADR 13/00	E1 3221 R19

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 or ECE	Instruction Sheet No.	Lamp Identification
1125	001952-10	50/00	Front Fog Lamp	YC1255	H3	N/A ECE	03B E1 3222	HKG 460 845-16 & Refer ADR 13/00	E1 3222 R19
1126	001953-10	50/00	Front Fog Lamp	YC1255	H3	N/A ECE	03B E1 3223	HKG 460 845-16 & Refer ADR 13/00	E1 3223 R19
1304	956327-01	46/00	High Beam Headlamp	CD1255	H2	HL*1304*A	15115	911-351-40	24462R8
1307	956329-01	46/00	High Beam Headlamp	YC1255	H3	HL*1307*A	15121	911-351-42	24556R8
1308	005750-10	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	005860-23	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
1311-BLUE	006300-26								
1312	007891-01	46/00	High Beam Headlamp	YC1255	H3	HL*1312*A	21582	911-353-29	17.5 E1 651 04 HR
1313	007893-02	46/00	High Beam Headlamp	YC1255	H3	HL*1313*A	21515	911-353-31	37.5 E1 646 04 HR
1314	007892-01	46/00	High Beam Headlamp	YC1255	H3	HL*1314*A	21484	911-353-33	17.5 E1 649 04 HR
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
1358LED	958307-02	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE	E11 30 01 7501	958-315-65	E11 30 01 7501
1366C-BLUE	007560-32	46/00	High Beam Headlamp	C1255	H1	HL*1376HB*A	36324	911-355-08	1928
		49/00	Front Position Lamp	W125	W5W	FP*1376HB*A	36325		
1366C	007560-21	46/00	High Beam Headlamp	C1255	H1	HL*1377*A	32429		1753
		49/00	Front Position Lamp	LED	N/A LED	FP*1377*A	32433		
1369	010119-01	46/00	High Beam Headlamp	C1255	H1	HL*1378*A	33671	HKG 460 719-11 & Refer ADR 13/00	00 1901
1378	009094-02	46/00	High Beam Headlamp	C1255	H1	HL*1378*A	33671	911-353-94	00 1901
1378CHROME	009094-03								
1379C	009094-04	46/00	High Beam Headlamp	C1255	H1	HL*1379*A	34093	911-353-95	02 1901
		49/00	Front Position Lamp	LED	N/A LED	FP*1379*A	34098		
1382	009094-141	77/00	High Beam Headlamp	XN4001	D1S	HL*1382*B	36044	911-355-07	02 2087
1384	009094-311	77/00	High Beam Headlamp	XN4001	D1S	N/A ECE	E1 002087	HKG 460 818-21 & Refer ADR 13/00	E1 002087
1389	011002-001	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE	HR PL 01 50 E1 3967	HKG 460 818-26 & Refer ADR 13/00	E1 3967
		49/00	Front Position Lamp	LED	N/A LED	N/A ECE	PL 02 A E1 3161		
1394	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
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	958 130-12	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE	E24 10R- 01 0012	460 881-51	E24 25 0012
1398HD	958 130-02	46/00	High Beam Headlamp	LED	N/A LED	N/A ECE	E24 10R-01 0013	460 881-51	E24 37.5 0013
1405	003014-09	1/00	Reversing Lamp	R1221	P21W	RL*1405*A	15131	911-351-53	8703R23
1407	901227-70	1/00	Reversing Lamp	K1221	C21W	RL*1407*A	15201	911-351-55	905972
1413	002694-00	1/00	Reversing Lamp	R1221	P21W	RL*1413*A	15129	911-351-57	8708R23
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		

HELLA Part No.	Engineering Drawing No.	ADR No.	Function	Bulb(s)	Bulb Type	HELLA Ref. or ECE	FORS Ref: CRN or ECE	Instruction Sheet No.	Lamp Identification
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	35980	959-149-95	9040
1446-V	959041-40	1/00	Reversing Lamp	LED	N/A LED	RL*1446-V*A	36243		
1447L	959041-37	1/00	Reversing Lamp	LED	N/A LED	1447*RV*C	45662	958-780-84	9040
1447R	959041-36	1/00	Reversing Lamp	LED	N/A LED	1447*RV*C	45662		
1459	959930-12	1/00	Reversing Lamp	LED	N/A LED	RL*1465*A	35981	959-150-19	9930
1461	980762-01	1/00	Reversing Lamp	LED	N/A LED	RL*1461*A	45442	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	35981	959-150-04	9930
1467	959930-11	1/00	Reversing Lamp	LED	N/A LED	RL*1465*A	35981	959-150-18	
1468	980889-00	1/00	Reversing Lamp	LED	N/A LED	N/A ECE	E24 23R-00027	958-315-25	0880D
1468-24V	980889-20								
1468V	980889-10								
1468V-24V	980889-30	1/00	Reversing Lamp	LED	N/A LED	N/A ECE	E24 23R-00028	958-315-26	0880E
1490	959010-50	1/00	Reversing Lamp	LED	N/A LED	RL*1490*A	36253	959-150-16	9010
1547-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
1551-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
1563C-RE	996284-50	1/00	Reversing Spotlamp	LED	N/A LED	N/A ECE	00 E1 4576		004576
2000	901227-24	49/00	Front Position Lamp or Front End Outline Lamp	L125	C5W	FP*2000*A	15243	911-351-58	910001
2026	959660-30	45/01	Cab Marker Lamp	LED	N/A LED	CM*2026*A	25025	959-149-17	9560
		6/00:Cat 5	Supp. Side Direction Indicator Lamp			SDI*2026*A	25725		
2027	980660-10	45/01	Cab Marker Lamp	LED	N/A LED	CM*2027*A	42856	980-703-13	6600
2027P	980660-12	6/00:Cat 5	Supp. Side Direction Indicator Lamp			SDI*2027*A	42857		
2029	900139-01	45/01	Side Marker Lamp	L125	C5W	SM*2029*A	15143	911-351-69	910049
2030	900139-02	6/00:Cat 5	Supp. Side Direction Indicator Lamp	L125	C5W	FL*2030*A	15146	911-351-70	910049
2031	959700-00	6/00:Cat 5	Supp. Side Direction Indicator Lamp	LED	N/A LED	SDI*2031*A	30768	959-149-55	9700
2033	959700-20	45/01	Side Marker Lamp	LED	N/A LED	SM*2033*A	31432	959-149-58	9700
2041	958583-02	1/00	Reversing Lamp	R1221	P21W	RL*2041*A	15325	911-352-82	HNZ01
2042	905055-01	45/01	Side Marker Lamp	M123	N/A Type M123	SM*2042*A	15192	911-351-74	910089
2046	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	959570-10	49/00	Front End Outline Lamp	LED	N/A LED	FEO*2051X*A	40676	959-150-79	9560
2053 & 2053-GMD 2053PC	959660-50	45/01	Side Marker Lamp	LED	N/A LED	SM*2053*A	24743	959-149-16	9560
2054	959570-50	49/00	Front Position Lamp	LED	N/A LED	FP*2054*A	25912	959-150-80	02 7575
			Front End Outline Lamp			N/A ECE	A 02 E24 0051		A 02 E24 0051
2055	959590-40	49/00	Front Position Lamp	LED	N/A LED	N/A ECE	E4 02 7597	959-149-26	E4 02 7597
			Front End Outline Lamp				A 02 E24 0054		A 02 E24 0054
2056	959590-30	49/00	Front End Outline Lamp	LED	N/A LED	FEO*2056*A	27380	959-149-38	9590
2057	959650-00	45/01	Cab Marker Lamp	LED	N/A LED	CM*2057*A	27432	959-149-42	9650
2058	980660-00	45/01	Side Marker Lamp	LED	N/A LED	SM*2058*A	41597	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	FEO*2060*A	45630	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*RP*C	46857	958-780-95	6600
2061P	980660-22								
2062	980660-30	49/00	Front End Outline Lamp	LED	N/A LED	2062*FEOM*C	46858	958-780-96	6600
2062P	980660-32								
2063	900741-25	49/00	Front Position Lamp or Front End Outline Lamp	L125	C5W	FP*2063*A	15282	911-351-76	10833

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 or ECE	Instruction Sheet No.	Lamp Identification
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
2067	006679-01	45/01	Cab Marker Lamp	G125	R5W	CM*2067*A	15361	911-353-23	TV25
		49/00	Front End Outline Lamp	G125	R5W	FE0*2067*A	15360		
2071	980990-40	49/00	Front End Outline Lamp	LED	N/A LED	2071*FE0M*C	45943	958-780-90	0990
2073	980990-00	45/01	Side Marker Lamp	LED	N/A LED	2073*SML*C	45809	958-780-87	0990
2074	980990-20	49/00	Front Position Lamp or Front End Outline Lamp	LED	N/A LED	2074*FE0M*C	45944	958-780-89	0990
2076	980990-10	45/01	Cab Marker Lamp	LED	N/A LED	2076*ECM*C	45810	958-780-88	0990
		6/00:Cat 5	Supp. Side Direction Indicator Lamp			2076*SDI*C	45811		
2077	901227-06	6/00:Cat 5	Supp. Side Direction Indicator Lamp	L125	C5W	DI*2077*A	15204	911-351-80	910001
		49/00	Front End Outline Lamp	L125	C5W	FE0*2077*A	25617		
2078	901227-23	49/00	Rear Position Lamp or Rear End Outline Lamp	L125	C5W	RR*2078*A	15250	911-351-81	910001
2083	980868-04	45/01	Side Marker Lamp	LED	N/A LED	2083*SM*C	47116	958-315-32	0868
2083S	980868-06								
2100	901227-04	6/00:Cat 1	Front Direction Indicator Lamp	K1221	C21W	FL*2100*A	15212	911-351-88	910001
2101	002939-17	6/00:Cat 1	Front Direction Indicator Lamp	R1221	P21W	DI*2101*A	29439	911-353-58	32710
2105	959932-20	6/00:Cat 1	Front Direction Indicator Lamp	LED	N/A LED	DI*2105M*A	36805		9930
2106-CS	959932-13	6/00:Cat 1	Front Direction Indicator Lamp	LED	N/A LED	N/A ECE	1 01 E24 5851	959-150-92	1 01 E24 5851
		49/00	Front Position Lamp	LED	N/A LED	N/A ECE	A 02 E24 5851		A 02 E24 5851
2107	959011-10	6/00:Cat 1	Front Direction Indicator Lamp	LED	N/A LED	DI*2107*A	41601	980-703-19	9010
2107CLR	959011-11	6/00:Cat 1	Front Direction Indicator Lamp	LED	N/A LED	DI*2107C*A	41609		
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		980-703-29	
		76/00	Daytime Running Lamp	LED	N/A LED	N/A ECE			
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	6/00:Cat 1	Front Direction Indicator Lamp	LED	N/A LED	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	6/00:Cat 1	Front Direction Indicator Lamp	LED	N/A LED	210924V*DI*C	46346		
2126	905626-04	6/00:Cat 1 & 6/00:Cat 5	Front Direction Indicator Lamp and Supp. Side Direction Indicator Lamp	R1221	P21W	FL*2126*A	15271	911-351-98	905628
		6/00:Cat 5	Supp. Side Direction Indicator Lamp	G125	R5W	FL*2126*B	15300		
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	36805	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
2131-CS	959932-15	6/00:Cat 1	Front Direction Indicator Lamp	LED	N/A LED	N/A ECE	1 01 E24 5851	980-703-03	1 01 E24 5851
		49/00	Front Position Lamp	LED	N/A LED	N/A ECE	A 02 E24 5851		A 02 E24 5851
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	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	FE0*2135*A	25578		
2135LED	959932-31	6/00:Cat 1	Front Direction Indicator Lamp	LED	N/A LED	DI*2105M*A	36805	959-150-26	9930
2136	900741-21	6/00:Cat 1	Front Direction Indicator Lamp	K1221	C21W	FL*2136*A	15211	911-352-03	10833
		49/00	Front End Outline Lamp	L125	C5W	FE0*2136*A	25579		
2138	959031-00	6/00:Cat2a	Rear Direction Indicator Lamp	LED	N/A LED	12V Horiz	44203	958-780-25	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		

HELLA Part No.	Engineering Drawing No.	ADR No.	Function	Bulb(s)	Bulb Type	HELLA Ref. or ECE	FORS Ref: CRN or ECE	Instruction Sheet No.	Lamp Identification		
2142	905141-02	6/00:Cat 1 & 6/00:Cat 5	Front Direction Indicator Lamp and Supp. Side Direction Indicator Lamp	R1221	P21W	FL*2142*C	15318	911-352-06	53174		
		6/00:Cat 5	Supp. Side Direction Indicator Lamp	G125	R5W	FL*2142*B	15203				
		6/00:Cat6	Supp. Side Direction Indicator Lamp	R1221	P21W	FL*2142*D	30062				
2144	958583-00	6/00:Cat 2a	Rear Direction Indicator Lamp	R1221	P21W	DI*2144*A	15319	911-352-86	HNZ01		
		49/00	Front End Outline Lamp	G125	R5W	FEO*2144*A	25576				
2145	958607-00	6/00:Cat 2a	Rear Direction Indicator Lamp	R1221	P21W	DI*2145*A	15330	911-352-90	HNZ01		
		49/00	Front End Outline Lamp	G125	R5W	FEO*2145*A	25577				
2146-H	959041-10	6/00:Cat2a	Rear Direction Indicator Lamp	LED	N/A LED	DI*2146-H*A	26179	959-149-30	9040		
2146-HCS	959041-51					DI*2146-H24*A	34498	959-150-57			
2146-H24	959041-50							959-149-88			
2146-V	959041-20					DI*2146-V*A	26180	959-149-30			
2146-VCS	959041-71					DI*2146-VCS*A	40650	959-150-57			
2146-V24	959041-70					DI*2146-V24*A	36718	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				
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	44206	958-780-24	9060		
2152	959070-20					24V Horiz	44192	959-149-03			
						12V Vert	44193				
						24V Vert	44194				
						FL*2151-H*A	36420			959-150-11	
2151-H	959070-35										2a 01 E24 5850
2151-HCS	980607-00					FL*2151-V*A	36421	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			
2155-24V	008355-00	6/00:Cat 6	Supp. Side Direction Indicator Lamp	R2421	P21W	SDI*2155*A	30498	911-353-71	1059		
2155	008355-01			RY1221	PY21W	SDI*2155CLR*A	E1 011848		1848		
2156	959075-50	6/00:Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	DI*2156*A	26483	959-149-28	9074		
2156-24V	959075-00			LED	N/A LED	DI*2156-24V*A	26104	959-149-29			
2159	959932-72	6/00:Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	DI*2165*B	36056	959-150-23	9930		
2161	980761-01	6/00:Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	DI*2161*A	45443	958-780-73	0760		
2165	959932-50	6/00:Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	DI*2165-B	36056	959-150-06	9930		
2167	959932-71	6/00:Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	DI*2165-B	36056	959-150-22	9930		
2167-CS	959932-53					N/A ECE	2a 01 E24 0023	980-703-05	2a 01 E24 0023		
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					DI*2168-24V*A	46434				
2BM 011 788-041	011788-04	6/00:Cat 6	Supp. Side Direction Indicator Lamp	LED	N/A LED	N/A ECE	E11 6R-017506		E11 7506		
2BM 011 788-051	011788-05										
2303	901227-19	49/00	Stop Lamp	K1221	C21W	RR*2303*A	15249	911-352-15	910001		
2305	963639-30	49/00	Rear Position Lamp or Rear End Outline Lamp	LED	N/A LED	RP*2305*A	24962	Refer ADR 13/00	9808		
		47/00	Retro Reflector (Red/Rear)	N/A	N/A	RE*2305*B	25036				
2306	963639-31	49/00	Rear Positon Lamp or Rear End Outline Lamp	LED	N/A LED	RP*2305*A	24962	Refer ADR 13/00	9808		
		47/00	Retro Reflector (Red/Rear)	N/A	N/A	RE*2305*B	25036				
2307	959560-10	49/00	Rear Positon Lamp or Rear End Outline Lamp	LED	N/A LED	RP*2307X*A	40680	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	31431	959-149-59	9700		
2310	980855-30	49/00	Rear Position Lamp or Rear End Outline Lamp	LED	N/A LED	RR*2310*A	45631	958-780-71	0855		
2310S	980855-31										

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 or ECE	Instruction Sheet No.	Lamp Identification
2311	980660-40	49/00	Rear Position Lamp or Rear End Outline Lamp	LED	N/A LED	2311*RP*C	46859	958-780-97	6600
2311P	980660-42								
2312	980990-60	49/00	Rear Positon Lamp or Rear End Outline Lamp	LED	N/A LED	2312*REOM*C	45945	958-780-91	0990
2314	900739-11	49/00	Rear Position / Stop Lamp	L125/K1221	C5W/C21W	RR*2314*A	15316	911-352-83	10833
2315	900741-22	49/00	Rear Position / Stop Lamp	L125/K1221	C5W/C21W	RR*2315*A	15310	911-352-84	10833
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 : Horiz	LED	N/A LED	RP*2317H*A	42577		
			Stop : Horiz			ST*2317H*A	42579		
			Rear Position : Vert			RP*2317V*A	42578		
			Stop : Vert			ST*2317V*A	42582		
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	46351		
2318-24V	980887-20	49/00	Stop Lamp	LED	N/A LED	SL*2318-24V*A	46361		
			Rear Position Lamp			RP*2318-24V*A	46353		
2320	958582-00	47/00	Retro Reflector (Red/Rear)	N/A	N/A	RE*2320*A	15322	911-352-80	HNZ01
		49/00	Rear Position / Stop Lamp	S1221/5V	P21W/5W	RR*2320*A	15321		
2321	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		
2324	006679-02	49/00	Rear Position Lamp or Rear End Outline Lamp	G1210	R10W	RR*2324*A	15251	911-352-20	0131470
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 Horiz	LED	N/A LED	RP*2330H1*A	42558	959-149-00	9060
2331	959060-20	49/00	Stop : Horiz	LED	N/A LED	ST*2330H1*A	42560	959-149-02	
			Rear Position : Vert			RP*2330V1*A	42559		
			Stop : Vert			ST*23301*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	36426		
2330-V	959-060-25	49/00	Stop Lamp	LED	N/A LED	SL*2330-V*A	36429		
			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	9040
			Rear Position Lamp			RP*2332-H24*A	34502		
2332-V24	959040-70	49/00	Stop Lamp	LED	N/A LED	SL*2332-V24*A	36722		
			Rear Position Lamp			RP*2332-V24*A	36721		
2334-12V	959074-50	49/00	Stop Lamp	LED	N/A LED	SL*2334*A	26486	959-149-27	9074
			Rear Position Lamp			RP*2334*A	26484		
2334-24V	959074-00		Stop Lamp	LED	N/A LED	SL*2334-24V*A	26152		
			Rear Position Lamp			RP*2334-24V*A	26151		
2359	959931-12	49/00	Stop Lamp	LED	N/A LED	ST*2365*B	36250	959-150-21	9930
			Rear Position Lamp			RP*2365*B	36078		
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			45632			
		47/00	Retro Reflector (Red/Rear)	N/A	N/A	RE*2161*A	45633		
2365	959931-00	49/00	Stop Lamp	LED	N/A LED	ST*2365*B	36250	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		
2368	900807-01	6/00:Cat 2a	Rear Direction Indicator Lamp	K1221	C21W	FL*2368*A	15278	911-352-26	69079
		47/00	Retro Reflector (Red/Rear)	N/A	N/A	RE*2368*B	15279		
		48/00	Licence Plate Lamp	L1210	N/A	LP*2368*B	15289		
		49/00	Rear Position / Stop Lamp	L1210/K1221	N/A/C21W	RR*2368*B	16361		

HELLA Part No.	Engineering Drawing No.	ADR No.	Function	Bulb(s)	Bulb Type	HELLA Ref. or ECE	FORS Ref: CRN or ECE	Instruction Sheet No.	Lamp Identification
2377	980710-01	6/00:Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	2377*RD1*C	45253	958-780-66	0710
		49/00	Stop Lamp			2377*ST*C	45256		
			Rear Position Lamp			2377*RP*C	45254		
		47/00	Retro Reflector (Red/Rear)			2377*RR*C	45255		
2378	980613-00	6/00:Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	2378*RD1*C	45258	958-780-63	0710
2378-CS	980613-20	49/00	Stop Lamp	LED	N/A LED	2378*ST*C	45260	958-780-64	
2378-DT	980602-00	49/00	Rear Position Lamp	LED	N/A LED	2378*RP*C	45259	958-780-65	
2378-DTCS	980602-20					2378*DT*RP*C	45257	958-780-68	
2379	959050-00	6/00:Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	DI*2379*A	30916	959-149-47	
2379-GMD		49/00	Stop Lamp			SL*2379*A	30919		
2379-CS	959050-40	49/00	Rear Position Lamp	LED	N/A LED	RP*2379*A	30917	959-150-55	
	959050-41								
2380	980603-50	6/00:Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	DI*2380*A	43630	958-780-05	9050
2380-GMD	980603-55	49/00	Stop Lamp	LED	N/A LED	SL*2380*A	43632		
2380-DT	980615-01	49/00	Rear Position Lamp	LED	N/A LED	RP*2380*A	43631	958-780-35	
2380-DTGMD	980615-05	1/00	Reversing Lamp	LED	N/A LED	RL*2380*A	43628		
2383-24VCS	980613-51	6/00:Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	N/A ECE	E24 6R-015894	958-315-28	
2383-DT24VCS	980602-51	49/00	Stop Lamp	LED	N/A LED	N/A ECE	E24 7R-025894	958-315-27	
		49/00	Rear Position Lamp				E24 7R-025894		
		1/00	Reversing Lamp				E24 23R-005894		
2384	003014-14	48/00	Licence Plate Lamp	L125	C5W	LP*2384*A	15175	911-352-30	231453
		49/00	Rear Position / Stop Lamp	L125/R1221	C5W/P21W	RR*2384*A	15167		
2390	959010-00	49/00	Stop Lamp	LED	N/A LED	SL*2390*A	30651	959-149-51	9010
			Rear Position Lamp			RP*2390*A	30650		
2391	980980-00	1/00	Reversing Lamp	LED	N/A LED	2391*RV*C	45251	958-780-58	0980
		6/00:Cat 2a	Rear Direction Indicator Lamp			2391*RD1*C	45248		
		49/00	Stop Lamp			2391*ST*C	45262		
			Rear Position Lamp			2391*RP*C	45261		
		47/00	Retro Reflector (Red/Rear)			N/A	N/A		
2392L	980980-01	1/00	Reversing Lamp	LED	N/A LED	2392*RV*C	45267	958-780-59	0980
2392R	980980-02	6/00:Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	2392*RD1*C	45264		
		49/00	Stop Lamp			2392*ST*C	45268		
			Rear Position Lamp			2392*RP*C	45265		
		47/00	Retro Reflector (Red/Rear)			N/A	N/A		
48/00	Licence Plate Lamp	LED	N/A LED	2392*LP*C	45263				
2394	980720-00	6/00:Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	DI*2394*B	42034	980-703-20	0720
		49/00	Stop Lamp			SL*2394*A	42037		
			Rear Position Lamp			RP*2394*A	42036		
		47/00	Retro Reflector (Red/Rear)			N/A	N/A		
2395	980720-40	6/00:Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	DI*2395*B	42030	980-703-21	0720
		49/00	Stop Lamp			SL*2395*C	42179		
			Rear Position Lamp			RP*2395*C	42178		
		47/00	Retro Reflector (Red/Rear)			N/A	N/A		
48/00	Licence Plate Lamp	LED	N/A LED	LP*2395*C	42175				
2396	905002-01	6/00:Cat 2a	Rear Direction Indicator Lamp	K1221	C21W	FL*2396*A	15239	911-352-31	54519
		48/00	Licence Plate Lamp	L125	C5W	LP*2396*A	15280		
		49/00	Rear Position / Stop Lamp	L125/K1221	C5W/C21W	RR*2396*A	15238		
2397	905168-00	6/00:Cat 2a	Rear Direction Indicator Lamp	K1221	C21W	FL*2397*A	15258	911-352-32	953811
		47/00	Retro Reflector (Red/Rear)	N/A	N/A	RE*2397*A	15261		
		49/00	Rear Position / Stop Lamp	L125/K1221	C5W/C21W	RR*2397*A	15265		
2399	959010-20	6/00:Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	DI*2399*A	37114	959-150-30	9010
		49/00	Stop Lamp			SL*2399*A	37116		
			Rear Position Lamp			RP*2399*A	37115		
2400	910036-01	6/00:Cat 2a	Rear Direction Indicator Lamp	R1221	P21W	FL*2400*A	15260	911-352-34	953811
		47/00	Retro Reflector (Red/Rear)	N/A	N/A	RE*2400*A	15262		
		48/00	Licence Plate Lamp	G1210	R10W	LP*2400*A	15263		
		49/00	Rear Position / Stop Lamp	G1210/R1221	R10W/P21W	RR*2400*A	15267		

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 or ECE	Instruction Sheet No.	Lamp Identification
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		
2426-H	959-040-801	6/00:Cat2a	Rear Direction Indicator Lamp	LED	N/A LED	DI*2146-H24*A	34498	959-149-88	9040
		49/00	Stop Lamp			SL*2332-H24*A	34509	959-149-87	
		49/00	Rear Position Lamp			RP*2332-H24*A	34502		
2426-V	959-040-901	6/00:Cat2a	Rear Direction Indicator Lamp	LED	N/A LED	DI*2146-V24*A	36718	959-149-88	9040
		49/00	Stop Lamp			SL*2332-V24*A	36722	959-149-87	
			Rear Position Lamp			RP*2332-V24*A	36721		
2427-H	959-040-811	6/00:Cat2a	Rear Direction Indicator Lamp	LED	N/A LED	DI*2146-H24*A	34498	959-149-88	9040
		49/00	Stop Lamp			SL*2332-H24*A	34509	959-149-87	
			Rear Position Lamp			RP*2332-H24*A	34502		
2427-V	959-040-911	6/00:Cat2a	Rear Direction Indicator Lamp	LED	N/A LED	DI*2146-V24*A	36718	959-149-88	9040
		49/00	Stop Lamp			SL*2332-V24*A	36722	959-149-87	
			Rear Position Lamp			RP*2332-V24*A	36721		
2428-H	959-041-811	1/00	Reversing Lamp	LED	N/A LED	RL*1446-H*A	35980	959-149-95	9040
		6/00:Cat2a	Rear Direction Indicator Lamp			DI*2146-H24*A	34498	959-149-88	
		49/00	Stop Lamp			SL*2332-H24*A	34509	959-149-87	
			Rear Position Lamp			RP*2332-H24*A	34502		
2428-V	959-041-911	1/00	Reversing Lamp	LED	N/A LED	RL*1446-V*A	36243	959-149-95	9040
		6/00:Cat2a	Rear Direction Indicator Lamp			DI*2146-V24*A	36718	959-149-88	
		49/00	Stop Lamp			SL*2332-V24*A	36722	959-149-87	
			Rear Position Lamp			RP*2332-V24*A	36721		
2429	980760-80	6/00:Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	DI*2161*A	45443	958-780-73/74	0760
2429-CS	980761-80	49/00	Stop Lamp			ST*2361*A	45634		
			Rear Position Lamp			RP*2361*A	45632	958-780-75	
2430	980760-81	47/00	Retro Reflector (Red/Rear)	N/A	N/A	RE*2161*A	45633		
2430-CS	980761-81	6/00:Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	DI*2161*A	45443	958-780-73/74	0760
		49/00	Stop Lamp			ST*2361*A	45634		
			Rear Position Lamp			RP*2361*A	45632	958-780-75	
2431	980760-82	47/00	Retro Reflector (Red/Rear)	N/A	N/A	RE*2161*A	45633		
2431-CS	980761-82	6/00:Cat 2a	Rear Direction Indicator Lamp	LED	N/A LED	DI*2161*A	45443	958-780-73/74	0760
		49/00	Stop Lamp			ST*2361*A	45634		
			Rear Position Lamp			RP*2361*A	45 632	958-780-75	
		1/00	Reversing Lamp			RL*1461*A	45442	958-780-72	
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
2557	900967-03	48/00	Licence Plate Lamp	HL124	T4W (2 Pieces)	LP*2557*A	15207	911-352-50	4151
2558	004525-00	48/00	Licence Plate Lamp	L125	C5W (2 Pieces)	LP*2558*A	15326	911-352-85	22861
2559	959640-30	48/00	Licence Plate Lamp	LED	N/A LED	LP*2559H*A	41602	980-703-00	9640
2560	980869-00	48/00	Licence Plate Lamp	LED	N/A LED	2560*LP*C	46799	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
2910	900913-04	47/00	Retro Reflector (Red/Rear)	N/A	N/A	RE*2910*A	15182	911-352-53	0231290
2915	002014-43	47/00	Retro Reflector (Red/Rear)	N/A	N/A	N/A ECE	E24 3R 0200300	911-352/3-55/50	020030
2916	002014-25	47/00	Retro Reflector (Amber/Side)	N/A	N/A	N/A ECE	E24 3R 0200300	911-352/3-56/48	020030
2917	002014-44	47/00	Retro Reflector (White/Front)	N/A	N/A	N/A ECE	E24 3R 0200300	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

HELLA Part No.	Engineering Drawing No.	ADR No.	Function	Bulb(s)	Bulb Type	HELLA Ref. or ECE	FORS Ref: CRN or ECE	Instruction Sheet No.	Lamp Identification
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	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	E1 0221395
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
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	38243	959-150-34	5651
2934-V	980565-50					RE*2934-V*A	38244		5655
5237	959190-12	49/00 Cat S3	Centre High Level Brake Lamp	LED	N/A LED	BL*5237*B	15350	911-352-64A	523
5238	959191-12	49/00 Cat S3	Centre High Level Brake Lamp	LED	N/A LED	BL*5238*B	15349	911-352-65A	523
5239	959192-12	49/00 Cat S3	Centre High Level Brake Lamp	LED	N/A LED	BL*5239*B	15351	911-352-66A	523
5242	006631-00	49/00 Cat S3	Centre High Level Brake Lamp	W1221	W16W	BL*5242*A	15290	911-352-08	5242
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	0880 A
5245-24V	980887-40					5245*24*ST*C	45935		
5617 & 5617-OE	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	45965	958-780-98	
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		

1	PAGE				
1003.....	97	1125.....	141	1468-24V.....	57
1004.....	98	1126.....	142	1468-24VBL.....	57
1005.....	96	128 922 02.....	230	1468-BL.....	57
1005-24V.....	96	1308.....	144	1468V.....	57
1006.....	99	1309.....	145	1468V-24V.....	57
1007-24V.....	99	1310.....	143	1490.....	54
1008.....	96	1312.....	146	1490-BL.....	54
1008-24V.....	96	1313.....	147	1490-BULK.....	54
1009.....	97	1314.....	148	1512.....	180
1009-24V.....	97	1322.....	150	1519.....	179
1009-24VBL.....	97	1323.....	151	1519-24V.....	179
1009-BL.....	97	1324.....	140	1520.....	339
1009V.....	97	1325.....	141	1520LED.....	339
1009V-24V.....	97	1326.....	142	1521LED.....	339
1013.....	94	1358LED.....	111	1524.....	339
1013-24V.....	94	1365.....	136	15297700.....	105, 108
1016.....	111, 113	1366.....	136	1533.....	179
1017.....	111, 113	1366C.....	137	1533-24V.....	179
1024.....	117	1366C-BLUE.....	137	1533-DT24V.....	179
1025.....	117	1366CHROME.....	137	1547.....	180
1027.....	120	1369.....	139	1547-24V.....	180
1029-24V.....	108	1378.....	138	1547-LED.....	165
1029H1-24V.....	109	1378CHROME.....	138	1547-LEDEV.....	165
1030-24V.....	108	1380.....	138	1547-RE.....	178
1030H1-24V.....	109	13839700.....	114, 117	1551-RE.....	178
1032-G2.....	104	1389.....	134	1557.....	166
1040.....	115	1394.....	135	1557-HD.....	166
1041.....	116	1395.....	130	1557-HDLR.....	166
1042.....	116	1395HD.....	131	1560.....	164
1043.....	117	1396.....	130	1560-LR.....	164
1044.....	116	1396HD.....	131	1561-12V.....	167
1053.....	115	1397HD.....	128	1561-24V.....	167
1054.....	114	1398HD.....	128	1562.....	168
1055.....	114	1405.....	71	1562-BL.....	168
1055HD.....	114	1407.....	70	1562-HD.....	168
1056.....	112	1413.....	76	1562-LR.....	168
1056LED.....	110	1430-H.....	23	1563C.....	164
1058.....	112	1430-HBL.....	23	1563C-RE.....	178
1058HD.....	112	1430-HSS.....	23	1564.....	171
1058LED.....	110	1430-V.....	22	1564-LR.....	171
1089.....	339	1433.....	39	1566-HD.....	169
1108.....	144	1433-BL.....	39	1566-HDLR.....	169
1109.....	145	1433-BULK.....	39	1567.....	165
1110.....	143	1446-H.....	48	1599HD.....	129, 161
1112.....	146	1446-V.....	48	1608.....	192
1113.....	147	1447L.....	48	1610.....	192
1114.....	148	1447R.....	48	1611.....	190
1115.....	149	1459.....	52	1612.....	190
1122.....	150	1461.....	46	1613.....	190
1123.....	151	1461-BL.....	46	1614.....	188
1124.....	140	1465.....	52	1614-MAG.....	188
		1467.....	52	1616.....	188
		1468.....	57	1653.....	198, 203
				1656.....	201
				1657.....	201
				1663.....	201
				1720.....	198
				1721.....	198
				1722.....	198
				1724.....	198
				1726.....	199
				1726-24V.....	199
				1728.....	199
				1728-24V.....	199
				1729.....	199
				1730.....	200
				1731.....	200
				1732.....	200
				1732-24V.....	200
				1733.....	200
				1733-24V.....	200
				1735.....	199
				1F0 011 988-121.....	106
				1GA 958 060-011.....	170
				1GA 958 060-111.....	170
				1GA 958 060-201.....	170
				1GA 958 060-401.....	170
				1GA 958 060-501.....	170
				1GA 958 060-601.....	170
				1GA 996 197-001.....	173
				1GA 996 197-011.....	172
				1GJ 011 872-221.....	174
				1GJ 011 872-231.....	174
				1GJ 011 872-241.....	174
				1GJ 011 872-501.....	175
				1GJ 011 872-511.....	175
				1GJ 011 872-521.....	175
				1GJ 958 040-501.....	160
				1GJ 958 040-551.....	160
				1GJ 958 040-601.....	160
				1GJ 958 084-001.....	177
				1GJ 958 084-011.....	177
				1GJ 958 084-101.....	177
				1GJ 958 084-111.....	177
				1GJ 958 084-201.....	177
				1GJ 958 084-211.....	177
				1GJ 958 130-521.....	163
				1GJ 958 130-621.....	162
				1GJ 958 130-651.....	162
				1GJ 958 334-011.....	176
				1GJ 958 334-021.....	176
				1GJ 958 334-031.....	176
				1L3 996 002-221.....	119
				1L3 996 002-411.....	119
				1LA 990 185-011.....	120
				1LA 993 975-071.....	120

1LA 993 975-081.....	120	2059S.....	30	2138.....	50	2311P-BULK.....	37
1LE 996 374-031.....	120	2059S-BULK.....	30	2142.....	74	2312.....	35
1LE 996 374-041.....	120	2060.....	31	2144.....	68	2312-BULK.....	35
1LG 007 150-111.....	118	2060-BULK.....	31	2144-24V.....	68	2317.....	50
1LG 007 150-121.....	118	2060S.....	31	2145.....	67	2318.....	58
1LJ 247 046-071.....	118	2060S-BULK.....	31	2145-24V.....	67	2318-24V.....	58
1LJ 247 046-081.....	118	2061.....	37	2146-H24.....	48	2318-24VBL.....	58
1LL 008 053-591.....	119	2061-BULK.....	37	2146-HCS.....	21, 48	2318-BL.....	58
1LL 008 053-601.....	119	2061P.....	37	2146-V24.....	48	2320.....	68
1LL 009 998-011.....	105	2061P-BULK.....	37	2146-VCS.....	48	2320-24V.....	68
1LL 009 998-051.....	105	2062.....	37	2147.....	71	2321.....	67
1ML 012 488-011.....	106	2062-BULK.....	37	2148.....	71	2321-24V.....	67
1NO 011 988-001.....	107	2062P.....	37	2151.....	24	2330.....	24
1NO 011 988-011.....	107	2062P-BULK.....	37	2151-BULK.....	24	2330-BULK.....	24
		2064.....	71	2151-H.....	23	2330-H.....	23
		2066.....	75	2151-HBL.....	23	2330-HBL.....	23
		2071.....	35	2151-HBULK.....	23	2330-HBULK.....	23
		2071-BULK.....	35	2151-HCS.....	21, 23	2330-HSS.....	23
2000.....	70	2073.....	34	2151-HSS.....	23	2330-V.....	22
2026.....	32	2073-BULK.....	34	2151-V.....	22	2331-BULK.....	25
2026-BULK.....	32	2074.....	35	2151-VCS.....	21, 22	2332-H24.....	48
2027.....	36	2074-BULK.....	35	2152-BULK.....	25	2332-V24.....	48
2027-BULK.....	36	2076.....	34	2153.....	75	2334-12V.....	60
2027P.....	36	2076-BULK.....	34	2154.....	75	2334-24V.....	60
2027P-BULK.....	36	2083.....	30	2155.....	75	2359.....	52
2031.....	38	2083-BULK.....	30	2155-24V.....	75	2361.....	46
2031-BL.....	38	2083S.....	30	2156-12V.....	60	2361-BL.....	46
2033.....	38	2083S-BULK.....	30	2156-24V.....	60	2365.....	52
2033-BL.....	38	2100.....	70	2159.....	52	2366.....	39
2041.....	68	2101.....	74	2161.....	46	2366-BL.....	39
2041-24V.....	68	2105.....	51	2161-BL.....	46	2366-BULK.....	39
2046.....	67	2107.....	53	2161-CS.....	21, 46	2367.....	52
2046-24V.....	67	2108-GMD.....	53, 99	2165.....	52	2375-12V.....	59
2051.....	33	2108-GMD24V.....	53, 99	2167.....	52	2375-24V.....	59
2051-BULK.....	33	2109.....	56	2168.....	58	2377.....	28
2053.....	32	2109-24V.....	56	2168-24V.....	58	2377-BL.....	28
2053-BULK.....	32	2109-24VBL.....	56	2168-24VBL.....	58	2377-TP.....	28
2053CHROME.....	32	2109-BL.....	56	2168-BL.....	58	2378.....	26
2053-GMD.....	32	2109V.....	56	2303.....	70	2378-6M.....	26
2053-GMDBULK.....	32	2109V-24V.....	56	2305.....	63	2378-6MBULK.....	26
2054.....	33	2109V-24VBL.....	56	2306.....	63	2378-BL.....	26
2054-BULK.....	33	2109V-BL.....	56	2307.....	33	2378-BULK.....	26
2055.....	62	2127.....	74	2307-BULK.....	33	2378-CS.....	21, 26
2055-BULK.....	62	2128LED.....	51	2308.....	62	2378-DT.....	27
2056.....	62	2130.....	54	2308-BULK.....	62	2378-DTCS.....	21, 27
2056-BULK.....	62	2130-BL.....	54	2309.....	38	2378-TP.....	26
2057.....	62	2130-BULK.....	54	2310.....	31	2380.....	29
2057-BULK.....	62	2131-CS.....	51	2310-BULK.....	31	2380-BL.....	29
2058.....	36	2133.....	39	2310S.....	31	2380-BULK.....	29
2058-BULK.....	36	2133-BL.....	39	2310S-BULK.....	31	2380-DT.....	29
2058P.....	36	2133-BULK.....	39	2311.....	37	2380-DTGMD.....	29
2058P-BULK.....	36	2133-CS.....	21, 39	2311-BULK.....	37	2380-GMD.....	29
2059.....	30	2135LED.....	51	2311P.....	37	2381.....	29
2059-BULK.....	30						

2383-24VCS.....	27	2636.....	230	2915-BL.....	78	2JA 958 340-621.....	213
2383-DT24VCS.....	27	2638.....	230	2916.....	78	2JA 958 340-631.....	213
2384.....	71	2639.....	230	2916-1.....	78	2JA 958 358-001.....	231
2390.....	54	2641-12V.....	222	2917.....	78	2JA 958 358-011.....	231
2390-BL.....	54	2641-24V.....	222	2917-1.....	78	2JA 958 358-201.....	231
2390-BULK.....	54	2641HB.....	222	2919.....	79	2JA 958 358-211.....	231
2391.....	21, 43	2641HB-24V.....	222	2920.....	79	2JA 959 037-501.....	218
2392L.....	43	2652.....	220	2920-BL.....	79	2JA 959 037-511.....	218
2392R.....	43	2652-24V.....	220	2920-BULK.....	79	2JA 959 950-551.....	210
2394.....	44, 45	2652-SW.....	220	2921.....	79	2JA 959 950-561.....	210
2394-6M.....	44	2652-SW24V.....	220	2922.....	79	2JA 980 629-001.....	216
2394-6MBULK.....	44	2687.....	273	2922-2.....	79	2JA 980 629-501.....	216
2394-BULK.....	44	2690.....	273	2923.....	26, 79	2JA 980 629-601.....	217
2395.....	45	2691.....	273	2923-2.....	79	2JA 980 630-501.....	211
2395-6M.....	45	2692.....	273	2923-2BL.....	79	2JA 980 630-511.....	211
2395-6MBULK.....	45	2708.....	282	2923-2BULK.....	79	2JA 980 630-601.....	211
2395-BULK.....	45	2709.....	282	2923-BL.....	79	2JA 980 630-611.....	211
2395-TP.....	45	2710.....	282	2923-BULK.....	79	2JA 980 631-501.....	211
2397.....	65	2711.....	282	2924.....	79	2JA 980 631-511.....	211
2397-24V.....	65	2712.....	282	2925.....	79	2JA 980 631-601.....	211
2397-24VBULK.....	65	2713.....	282	2926.....	79	2JA 980 631-611.....	211
2397-BULK.....	65	2714.....	282	2926-BL.....	79	2JA 980 820-001.....	212
2399.....	55	2715.....	282	2926-BULK.....	79	2JA 980 820-011.....	212
2399-BL.....	55	2716.....	283	2927.....	79	2JA 980 820-101.....	212
2399-BULK.....	55	2716-24V.....	283	2930.....	78	2JA 980 820-111.....	212
2399-TP.....	55	2717.....	283	2930-BULK.....	78	2JA 980 828-001.....	212
2422.....	69	2717-24V.....	283	2934H.....	55	2JA 980 828-011.....	212
2422-24V.....	69	2718.....	283	2934V.....	55	2JA 980 828-101.....	212
2423.....	69	2718-24V.....	283	2AA 713 628-021.....	267	2JA 980 828-111.....	212
2423-24V.....	69	2719.....	283	2AA 713 628-031.....	267	2JA 980 881-402.....	222
2424.....	69	2719-24V.....	283	2AA 713 628-041.....	267	2JA 980 881-502.....	222
2424-24V.....	69	2720.....	283	2BA 009 001-001.....	72	2JA 980 881-602.....	222
2426-H.....	49	2720-24V.....	283	2BA 009 001-071.....	72	2JA 980 881-702.....	222
2426-V.....	49	2721.....	283	2BM 011 788-041.....	63	2JA 980 881-802.....	222
2427-H.....	49	2722.....	283	2BM 011 788-051.....	63	2JA 980 881-902.....	222
2427-V.....	49	2723.....	283	2JA 958 109-031.....	215	2JA 980 940-001.....	214
2428-H.....	49	2724.....	283	2JA 958 109-131.....	215	2JA 980 940-011.....	214
2428-V.....	49	2755.....	312	2JA 958 110-031.....	215	2JA 980 940-101.....	214
2429-CS.....	47	2757.....	312	2JA 958 110-131.....	215	2JA 980 940-111.....	214
2430-CS.....	47	2758.....	312	2JA 958 121-001.....	220	2JA 980 940-201.....	214
2431-CS.....	21, 47	2759.....	312	2JA 958 121-011.....	220	2JA 980 940-211.....	214
25416300.....	105, 106, 109	2761.....	272	2JA 958 121-401.....	220	2JA 980 940-301.....	214
2553.....	76	2762.....	257	2JA 958 121-411.....	220	2JA 980 940-311.....	214
2553-24V.....	76	2763.....	270	2JA 958 340-011.....	213	2PF 009 001-081.....	72
2555.....	76	2766.....	279	2JA 958 340-021.....	213	2PS 008 645-001.....	63
2557.....	76	2770.....	312	2JA 958 340-101.....	213	2PS 008 645-011.....	63
2557-24V.....	76	2771.....	312	2JA 958 340-111.....	213	2PS 345 600-001.....	63
2559.....	26, 28, 41, 55	2902.....	78	2JA 958 340-121.....	213	2PS 345 600-011.....	63
2559-BULK.....	41	2910.....	78	2JA 958 340-131.....	213	2RL 012 983-001.....	189
2560.....	40	2910-2.....	78	2JA 958 340-511.....	213	2SB 009 001-061.....	72
2560-BULK.....	40	2910H.....	78	2JA 958 340-521.....	213	2SB 009 362-021.....	73
2604.....	215	2915.....	78	2JA 958 340-601.....	213	2VP 008 204-061.....	66
2633.....	230	2915-1.....	78	2JA 958 340-611.....	213	2VP 341 419-127.....	66

INDEX BY PART NUMBER

2VP 341 419-137.....	66	3040.....	249	4009.....	279	4475.....	259
2VP 343 640-027.....	65	3053.....	236	4010.....	279	4476.....	260
2VP 343 640-037.....	65	3054.....	237	4020.....	254	4477.....	260
2XA 959 050-321.....	196	3055.....	236	4021.....	254	4478.....	260
2XD 012 985-001.....	189	3056.....	237	4022.....	254	4479.....	260
2XD 013 979-001.....	191	3057.....	240	4023.....	254	4480.....	260
2XD 013 979-011.....	191	3058.....	241	4056.....	255	4481.....	260
2XM 910 412-011.....	332	3059.....	236	4100.....	270	4482.....	262
2XM 910 413-011.....	331	3060.....	237	4151.....	261	4483.....	262
2XM 910 413-021.....	331	3061.....	239	4152.....	258	4484.....	262
2XM 910 414-011.....	329	3062.....	239	4202.....	255	4485.....	262
2XM 910 414-021.....	329	3063.....	242	4203.....	256	4486A.....	263
2XM 910 415-001.....	330	3064.....	243	4206.....	257	4486G.....	263
2XM 910 416-011.....	338	3064L.....	243	4302.....	256	4486R.....	263
2XM 910 426-101.....	334	3065.....	243	4411.....	272	4487A.....	263
2XM 910 426-111.....	335	3076.....	238	4412.....	272	4487B.....	263
2XM 910 426-121.....	335	3077.....	238	4420.....	258	4487G.....	263
2XM 910 529-051.....	337	3078.....	236	4421.....	258	4487R.....	263
2XM 910 529-061.....	337	3078-BULK.....	236	4422.....	258	4501.....	271
2XM 910 529-071.....	337	3078R.....	236	4423.....	258	4503.....	271
2XM 910 529-081.....	334, 335	3079.....	237	4424.....	258	4506.....	271
2XM 910 529-091.....	337	3079-BULK.....	237	4426.....	261	4507.....	270
2XM 910 529-101.....	336	3079R.....	237	4427.....	261	452341.....	193
2XM 910 529-111.....	336	3080.....	240	4428.....	261	454201A.....	193
2XM 910 529-121.....	336	3080-BULK.....	240	4429.....	261	454201A-24V.....	193
2XM 910 529-141.....	328	3080R-BULK.....	240	4430.....	261	454201AMAG.....	193
2XM 910 601-001.....	330	3080S.....	240	4431.....	261	454201B.....	193
2XM 910 602-011.....	328	3081.....	241	4432.....	261	454201R.....	193
2XM 910 603-001.....	338	3081-BULK.....	241	4433.....	258	454201R-24V.....	193
2XM 910 605-001.....	333	3081R-BULK.....	241	4434.....	258	454205A.....	193
2XM 910 606-001.....	332	3082.....	236	4435.....	258	454217.....	193
2XS 205 020-041.....	61	3082-BULK.....	236	4436.....	258	454218.....	193
2ZR 009 001-011.....	72	3083.....	237	4437.....	258	4550.....	281
		3083-BULK.....	237	4444.....	259	4551.....	281
		3084.....	239	4445.....	259	4553.....	281
		3085.....	239	4446.....	259	4554.....	281
		3086.....	242	4447.....	259	4560.....	280
		3086-24V.....	242	4448.....	259	4562.....	280
		3087.....	242	4451.....	256	4640.....	274
		3087-24V.....	242	4452.....	256	4641.....	274
		3090.....	93, 100, 244	4452-BULK.....	256	4648.....	275
		3090-BULK.....	100, 244	4453.....	257	4649.....	274
		3091.....	93, 100, 244	4454.....	257	4650.....	274
		3091-BULK.....	100, 244	4455.....	256	4652.....	274
		3099.....	245	4456.....	255	4653.....	275
		3101.....	245	4457.....	257	4654.....	275
		3101-BULK.....	245	4460.....	255	4658.....	275
				4461.....	256	4720.....	276
				4470.....	259	4722.....	276
				4471.....	260	4723.....	277
				4472.....	260	4724.....	276
				4473.....	260	4771.....	277
				4474.....	260	4901.....	285

3 PAGE

3014.....	250
3015.....	250
3016.....	249
3016LED1.....	249
3016LED2.....	249
3017.....	250
3018.....	250
3026.....	248
3027.....	248
3028.....	248
3032.....	251
3033.....	251
3034.....	251
3036.....	246
3037.....	247
3038.....	247
3039.....	246

4 PAGE

4005.....	278
4008.....	278
4008HD.....	278

4901X.....	285	4985-S.....	306
4902.....	285	4986-P.....	306
4907.....	288	4986-S.....	306
4908.....	288	4988-DT.....	106, 107
4909.....	285	4988-P.....	106, 107
4911.....	285	4991.....	313
4911-BULK.....	285	4992.....	313
4912.....	285	4993.....	313
4912-BULK.....	285	4994.....	313
4914.....	292	4995.....	313
4915.....	292	4996.....	313
4916.....	292		
4917.....	292		
4918.....	292		
4920.....	286	5227.....	272
4920-BULK.....	286	5237.....	61
4921.....	26, 28, 55, 286	5238.....	61
4921-BULK.....	286	5239.....	61
4939.....	293	5243.....	60
4943-R.....	293	5243-24V.....	60
4950.....	293	5243-24VCLEAR.....	60
4952.....	293	5243-CLEAR.....	60
4960.....	304	5245.....	57
4960FM.....	304	5245-24V.....	57
4960MF.....	304	5617.....	98
4960-P.....	34, 35, 82, 304	5617-OE.....	98
4961.....	304	5618.....	96
4962.....	304	5618-24V.....	96
4962-P.....	104	5619.....	97
4963.....	305	5619-24V.....	97
4963-P.....	27, 29, 82, 120, 305	5619V.....	97
4964.....	305	5619V-24V.....	97
4965.....	305	5630.....	94
4972-H1.....	121	5630-24V.....	94
4972-H4.....	121	5630-24VBL.....	94
4972-H7.....	121	5630-BL.....	94
4973.....	241	5631.....	95
4973-BULK.....	241	5631-24V.....	95
4973-M.....	243	5631-BL.....	95
4973S.....	240	5636.....	94
4980.....	307	5636-24V.....	94
4981-P.....	306	5636-BL.....	94
4981-S.....	306	5DD 008 319-501.....	121
4982.....	306	5DV 007 760-631.....	121
4982-P.....	63, 306	5DV 007 810-171.....	121
4982-S.....	306	5DV 008 855-001.....	121
4983.....	306	5DV 008 856-001.....	121
4983-P.....	306		
4983-S.....	306		
4984.....	306		
4984-P.....	306		
4984-S.....	306		
4985-P.....	306		

5 PAGE

6 PAGE

6004.....	294
6005.....	294
6009.....	298
6010.....	298
6012.....	296
6013.....	298
6014.....	296
6020.....	295
6021.....	297
6022.....	297
6023.....	297
6025.....	296
6026.....	296
6027.....	296
6028.....	295
6029.....	295
6036.....	294
6037.....	294
6037-24V.....	294
6041.....	296, 297
6042.....	299
6043.....	299
6044.....	299
6047.....	300
6048.....	300
6049.....	300
6050-SA.....	299
6051.....	299
6052.....	299
6EH 007 832-011.....	264
6EH 007 832-021.....	264
6EH 007 832-041.....	264
6FH 007 832-051.....	265
6FH 007 832-061.....	265
6FH 007 832-101.....	265
6FH 007 832-161.....	265
6GM 007 832-191.....	264
6GM 007 832-221.....	264
6GM 007 832-251.....	264
6HH 007 832-281.....	265
6HH 007 832-301.....	265
6RH 007 832-351.....	265
6RH 007 832-377.....	265
6RH 007 832-381.....	265
6RH 007 832-391.....	265
6RH 007 832-411.....	265
6RH 007 832-441.....	265
6RH 007 832-461.....	265

7 PAGE

7013.....	302
7037.....	302

8 PAGE

8000.....	284
8003.....	248
8007.....	190, 191, 199, 200, 202
8007FM.....	190, 191, 199, 200, 202
8007RA.....	190, 191, 199, 200, 202
8008.....	190, 191, 199, 200, 202
8009.....	286
8009-BULK.....	286
8022.....	284
8027.....	201
8030.....	132
8032.....	128, 129, 132, 161
8115.....	138
8120.....	135
8121.....	144
8122.....	145
8123.....	143
8125.....	136
8126.....	134, 136
8127.....	134
8136.....	143
8137.....	144
8138.....	145
8141.....	134, 136
8147.....	150
8148.....	151
8155.....	138
8156.....	140
8157.....	141
8158.....	142
8163.....	135
8200.....	308, 310
8200S.....	311
8201.....	308, 310
8201S.....	311
8202.....	308, 310
8203.....	308, 310
8204.....	308, 310
8204S.....	311
8205.....	308, 310
8205S.....	311
8210.....	308, 310
8211.....	308, 310
8212.....	308
8213.....	308, 310
8213S.....	311
8214.....	308, 310
8214S.....	311
8215.....	308
8220.....	308, 310
8221.....	308, 310

8222.....	308, 310	8343UV-BULK.....	315	8719.....	320	8777MINI.....	316
8223.....	308, 310	8344UV.....	315	8720.....	321	8779.....	316
8230.....	309, 310	8344UV-BULK.....	315	8720-S.....	321	8790.....	317
8230S.....	311	8345.....	315	8721.....	321	8790-FLB.....	325
8231.....	309, 310	8345UV.....	315	8721-S.....	321	8790-FLBS.....	325
8231S.....	45, 311	8345UV-BULK.....	315	8722.....	321	8790-FLFE.....	323
8232.....	309, 310	8346UV.....	315	8722-S.....	321	8790-FLFM.....	324
8232S.....	311	8346UV-BULK.....	315	8724.....	322	8790-FLFS.....	323
8234S.....	314	8452.....	313	8725.....	322	8790-FLM.....	325
8234SY.....	314	8453.....	313	8736.....	318	8790-FLMNP.....	324
8235.....	309, 310	8454.....	313	8737.....	318	8791.....	317
8236S.....	311	8455.....	313	8738.....	318	8791-FLB.....	325
8240.....	309	8500.....	308	8739.....	318	8791-FLBS.....	325
8240S.....	311	8501.....	308	8740.....	318	8791-FLFE.....	323
8241.....	309, 310	8502.....	308	8741.....	318	8791-FLFM.....	324
8241S.....	311	8503.....	308	8750.....	318	8791-FLFS.....	323
8242.....	309	8504.....	308	8751.....	318	8791-FLM.....	325
8243.....	309	8505.....	308	8753.....	318	8791-FLMNP.....	324
8243S.....	311	8510.....	308	8754.....	318	8792.....	317
8244.....	309, 310	8511.....	308	8755.....	318	8792-FLB.....	325
8244S.....	311	8512.....	308	8756.....	318	8792-FLBS.....	325
8245.....	309	8513.....	308	8757.....	318	8792-FLFE.....	323
8245S.....	311	8514.....	308	8758.....	318	8792-FLFM.....	324
8246.....	309	8515.....	308	8759.....	318	8792-FLFS.....	323
8246S.....	311	8520.....	308	8760.....	318	8792-FLM.....	325
8247.....	309, 310	8521.....	308	8761.....	318	8792-FLMKP.....	324
8247S.....	311	8522.....	308	8765.....	319	8793.....	317
8248.....	309	8523.....	308	8766.....	319	8793-FLB.....	325
8249S.....	311	8530.....	309	8768.....	319	8793-FLBS.....	325
8250-2.....	314	8530S.....	311	8769.....	319	8793-FLFE.....	323
8250-4.....	314	8531.....	309	8770.....	316	8793-FLFM.....	324
8250-6.....	314	8531S.....	311	8770LP.....	317	8793-FLFS.....	323
8271.....	303	8532.....	309	8770MINI.....	316	8793-FLM.....	325
8272.....	303, 310	8532S.....	311	8771.....	316	8794.....	317
8273.....	303	8535.....	309	8771LP.....	317	8794-FLB.....	325
8274.....	303	8540.....	309	8771MINI.....	316	8794-FLBS.....	325
8275.....	303, 305	8541.....	309	8772.....	316	8794-FLFE.....	323
8280.....	310	8542.....	309	8772LP.....	317	8794-FLFM.....	324
8281.....	310	8543.....	309	8772MINI.....	316	8794-FLFS.....	323
8282.....	310	8544.....	309	8773.....	316	8794-FLM.....	325
8284.....	310	8545.....	309	8773LP.....	317	8794-FLMKP.....	324
8298.....	303, 307	8546.....	309	8773MINI.....	316	8795.....	317
8312.....	314	8547.....	309	8774.....	316	8795-FLB.....	325
8320.....	314	8548.....	309	8774LP.....	317	8795-FLBS.....	325
8343.....	315	8573.....	267, 309	8774MINI.....	316	8795-FLFE.....	323
8344.....	315	8701.....	319	8775.....	316	8795-FLFM.....	324
8334UV.....	315	8703.....	319	8775LP.....	317	8795-FLFS.....	323
8335UV.....	315	8704.....	320	8775MINI.....	316	8795-FLM.....	325
8336UV.....	315	8707.....	320	8776.....	316	8796.....	317
8341UV.....	315	8713.....	319	8776LP.....	317	8796-FLB.....	325
8342UV.....	315	8714.....	319	8776MINI.....	316	8796-FLBS.....	325
8342UV-BULK.....	315	8715.....	319	8777.....	316	8796-FLFE.....	323
8343UV.....	315	8718.....	320	8777LP.....	317	8796-FLFM.....	324

8796-FLFS.....	323	8JB 005 949-001.....	290	9.1165.01.....	136	9.1726.01.....	199
8796-FLM.....	325	8JB 005 949-031.....	289	9.1178.01.....	138	9.1727.01.....	199
8796-FLMKP.....	324	8JB 007 242-011.....	291	9.1308.01.....	144	9.1728.01.....	199
8797-FLB.....	325	8JB 007 242-021.....	291	9.1309.01.....	145	9.1730.01.....	200
8797-FLBS.....	325	8JB 007 645-021.....	287	9.1310.01.....	143	9.1737.91.....	198, 199, 203
8797-FLFM.....	324	8JB 007 645-031.....	287	9.1312.01.....	146	9.1797.91.....	203
8797-FLFS.....	323	8JB 011 895-001.....	288	9.1313.01.....	147	9.2006.01.....	77
8797-FLM.....	325	8JD 008 151-051.....	120	9.1314.01.....	148	9.2006.02.....	77
8798-FLB.....	325	8JD 156 150-807.....	73, 87, 108, 109	9.1324.01.....	140	9.2041.01.....	67, 69
8798-FLBS.....	325	8JD 162 581-802.....	73, 87	9.1325.01.....	141	9.2041.09-BULK.....	69, 84
8798-FLM.....	325	8KA 004 797-021.....	285	9.1326.01.....	142	9.2042.01.....	77
8EV 003 361-002.....	302	8KA 007 648-001.....	287	9.1358.01.....	113	9.2043.01.....	77
8EV 003 361-012.....	302	8KA 007 648-021.....	287	9.1365.02.....	136	9.2043.05.....	67, 69
8EV 003 361-022.....	302	8KA 007 648-041.....	291	9.1365.05.....	136	9.2046.09-BULK.....	67
8HG 005 436-011.....	202	8KA 958 360-001.....	217	9.1365.06.....	136, 138	9.2053.07.....	81
8HG 007 647-001.....	291	8KA 958 361-001.....	217	9.1365.07.....	136	9.2053.08.....	32, 33, 81
8HG 713 626-001.....	266	8KA 958 363-001.....	217	9.1366.01.....	136	9.2053.08-BULK.....	81
8HG 714 504-001.....	266	8KB 958 304-001.....	174	9.1366.02.....	136, 137	9.2053.10-BULK.....	81
8HG 716 734-001.....	266	8PD 004 508-031.....	287	9.1366C.01.....	136, 137	9.2053.11-BULK.....	81
8HG 716 735-001.....	266	8RA 009 001-031.....	73	9.1366C.01BL.....	136, 137	9.2053.12-BULK.....	81
8HG 958 000-011.....	221	8TG 009 428-087.....	301	9.1366C.07.....	136, 137	9.2053.13-BULK.....	81
8HG 958 000-021.....	221	8XS 186 530-012.....	140	9.1378.01.....	138, 139	9.2053.14-BULK.....	81
8HG 958 029-001.....	40, 85	8XS 186 531-012.....	141	9.1380.01.....	138	9.2053.15-BULK.....	81
8HG 958 053-801.....	160	8XS 186 532-012.....	142	9.1389.01.....	134, 135	9.2053.20-BULK.....	81
8HG 958 128-811.....	129, 161, 162, 163, 177	8XS 958 336-021.....	132	9.1394.01.....	135	9.2058.09.....	36, 37, 82
8HG 958 139-071.....	129, 161	8XS 958 336-031.....	132	9.1511.01.....	180	9.2058.10.....	36, 37, 82
8HG 958 139-841.....	133	8XS 958 336-111.....	132	9.1511.06.....	180	9.2073.09.....	34, 35, 82
8HG 958 139-851.....	133	8XS 958 337-021.....	129, 132, 161	9.1511.08.....	180	9.2073.11.....	34, 35, 82
8HG 958 455-001.....	269	8XS 958 337-031.....	129, 132, 161	9.1512.01.....	180	9.2140.01.....	77
8HG 958 455-011.....	269	8XS 958 337-111.....	129, 132, 161	9.1513.01.....	180	9.2141.01.....	77
8HG 958 455-101.....	269			9.1520.06.....	339	9.2143.01.....	77
8HG 958 455-111.....	269			9.1520.07.....	181, 339	9.2144.01.....	67, 69
8HG 958 455-201.....	269			9.1524.06.....	339	9.2155.05.....	75
8HG 958 455-211.....	269			9.1530.07.....	179, 181	9.2304.01.....	77
8HG 958 455-301.....	269	9.1009.09.....	56, 57, 59, 85, 97, 220, 221, 222	9.1531.08.....	181	9.2310.09-BULK.....	30, 31, 40, 82, 225
8HG 958 455-311.....	269	9.1009.10.....	56, 57, 59, 85, 97, 220, 221, 222	9.1533.01.....	179	9.2310.10-BULK.....	82, 225
8HG 958 456-001.....	269	9.1025.07.....	117	9.1533.05.....	179, 181	9.2310.11-BULK.....	82, 225
8HG 958 456-101.....	269	9.1027.01.....	120	9.1533.08.....	179, 181	9.2310.12-BULK.....	82, 225
8HG 959 952-002.....	83, 210	9.1027.02.....	120	9.1534.05.....	105	9.2310.13-BULK.....	82, 225
8HG 959 952-012.....	83, 210	9.1027.04.....	120	9.1549.05.....	178, 179, 181	9.2310.14-BULK.....	82, 225
8JA 005 951-001.....	290	9.1029.09.....	107, 108	9.1557.05.....	34, 35, 164, 166, 167, 168, 169, 171, 181	9.2310.15-BULK.....	82, 225
8JA 005 951-061.....	289	9.1029.10.....	107, 109	9.1564.08.....	181	9.2310.16-BULK.....	82, 225
8JA 005 952-001.....	290	9.1029.11.....	105, 106, 107	9.1655.01.....	201	9.2319.01.....	77
8JA 005 952-005.....	290	9.1029.12.....	104, 107	9.1656.01.....	201	9.2320.01.....	67, 69
8JA 007 241-021.....	291	9.1108.01.....	144	9.1657.01.....	201	9.2320.08.....	67
8JA 007 241-031.....	291	9.1110.01.....	143	9.1663.01.....	201	9.2320.08-24V.....	67
8JA 007 644-041.....	287	9.1113.01.....	147	9.1717.01.....	198	9.2330.10.....	80
8JA 007 644-051.....	287	9.1115.08.....	149	9.1718.01.....	198	9.2330.11.....	80
8JA 008 969-001.....	290	9.1124.01.....	140	9.1719.01.....	198	9.2330.12.....	80
8JA 011 896-001.....	288	9.1125.01.....	141	9.1723.01.....	198	9.2330.13.....	80
8JA 713 631-001.....	267	9.1126.01.....	142	9.1724.01.....	198	9.2330.14.....	80
8JA 715 600-001.....	267			9.1725.01.....	198	9.2330.15.....	80

INDEX BY PART NUMBER

9.2330.16.....	80	9.4980.21.....	307	98050321.....	227	98095003.....	158, 229
9.2330.17.....	80	9.4982.05.....	306, 307	98050721.....	227	98095023.....	158
9.2361.08.....	84	9.4983.05.....	306, 307	98050821.....	227	9DX 153 746-011.....	119
9.2361.09.....	84	9.5240.30.....	41, 84	98057300.....	229	9EL 128 922-011.....	230
9.2366.08.....	83, 210	9.5243.05.....	60, 86	98057310.....	158, 229	9EL 145 103-011.....	118
9.2366.11.....	83, 210	9.5630.03.....	101	98057330.....	158	9EL 145 104-011.....	118
9.2366.17.....	38, 83, 210	9.5630.04.....	101	98058221.....	226	9EL 152 889-001.....	66
9.2368.01.....	77	9.5636.03.....	101	98058321.....	226	9EL 990 186-001.....	120
9.2377.08.....	80	9.5636.04.....	101	98058501.....	226	9EL 990 186-101.....	120
9.2378.08.....	80	9.6008.06.....	298	98058503.....	226	9ES 144 433-031.....	118
9.2378.10-BULK.....	80	95901140.....	194	98058520.....	226	9ES 144 434-031.....	118
9.2378.11-BULK.....	80	95901145.....	194	98058531.....	226	9FF 126 444-001.....	116
9.2378.12-BULK.....	80	95901160.....	194	98058721.....	226	9FF 713 627-001.....	267
9.2378.13-BULK.....	80	95901165.....	194	98058821.....	226	9FF 713 627-011.....	267
9.2378.14-BULK.....	80	95902081.....	196	98059604.....	226	9FF 713 627-031.....	267
9.2378.15-BULK.....	80	95902181.....	196	98059614.....	226	9GD 958 028-001.....	31, 86
9.2378.16-BULK.....	80	95903701.....	195	98059704.....	226	9GD 959 155-507.....	86, 222
9.2391.08.....	43, 83	95903711.....	195	98059714.....	226	9GD 959 515-127.....	86
9.2394.08.....	44, 45, 83	95903720.....	218	98060403.....	216	9GD 959 515-207.....	86
9.2394.09.....	44, 45, 83	95903721.....	218	98060801.....	219	9GD 959 517-007.....	86
9.2396.01.....	77	95903761.....	195	98067030.....	228	9GD 980 867-007.....	31, 86
9.2397.01.....	65	95903781.....	195	98067038.....	228	9GD 980 867-507.....	31, 86
9.2422.09.....	49, 69, 84	95903791.....	195	98067062.....	228	9GH 113 763-001.....	114, 115
9.2423.09.....	49, 69, 84	95913610.....	197	98069600.....	84	9GH 126 647-011.....	114, 116, 117
9.2559.02.....	41	95950501.....	227	98069620.....	84	9GH 152 654-007.....	108, 109
9.2559.08.....	41, 85	95950520.....	227	98069640.....	84	9GH 958 748-007.....	45
9.2559.09.....	41, 85	95950550.....	227	98069660.....	84	9HB 161 122-007.....	73, 87
9.2559.19.....	41, 85	95950556.....	227	98071900.....	80	9HB 163 085-012.....	73, 87
9.2604.05.....	215	95950585.....	215	98071901.....	80	9HB 713 629-001.....	266
9.2642.02.....	373	95950590.....	215	98074002.....	159	9MK 726 759-831.....	287
9.2643.02.....	373	95963025.....	224	98074022.....	159	9MK 726 762-831.....	287
9.2652.09.....	56, 57, 59, 85, 97, 220, 221, 222	95963046.....	224	98074025.....	159	9XD 161 119-007.....	73, 87
9.2652SW.09.....	220	95963055.....	224	98074032.....	159	9XT 713 630-001.....	268
9.2652SW.10.....	220	95968060.....	224	98074051.....	159	9XT 713 630-011.....	268
9.2859.02.....	179	95968070.....	224	98074060.....	159	9XT 713 630-021.....	268
9.454201.05.....	193	95968080.....	224	98085510.....	225	9XT 713 630-031.....	268
9.454201.07.....	193	95968090.....	224	98085515.....	225	9XT 713 630-101.....	268
9.4901.05.....	285	95968500.....	30, 31, 81, 225	98085525.....	225	9XT 713 630-121.....	268
9.4960.01.....	304	95968506.....	81, 225	98085535.....	225	9XT 713 630-131.....	268
9.4960.02.....	304	95968600.....	81, 225	98085540.....	225	9XT 713 630-181.....	268
9.4960.03.....	304	95968601.....	81, 225	98085550.....	225	9XT 713 630-201.....	268
9.4960.04.....	304	95970010.....	219	98087900.....	221	9XT 713 630-221.....	268
9.4960.05.....	304	95970400.....	219	98087910.....	221	9XT 713 630-231.....	268
9.4980.01.....	307	95982050.....	210	98091004.....	197	9XT 713 630-251.....	268
9.4980.02.....	307	95999310.....	227	98091024.....	197	9XT 713 630-261.....	268
9.4980.03.....	307	95999311.....	227	98091044.....	197	9XT 713 630-271.....	268
9.4980.04.....	307	95999354.....	226	98091064.....	197	9XT 713 630-281.....	268
9.4980.05.....	307	95999360.....	226	98091074.....	197	9XT 713 630-291.....	268
9.4980.06.....	307	98050051.....	227	98091100.....	194	9XT 713 630-301.....	268
9.4980.07.....	307	98050071.....	227	98091120.....	194	9XT 713 630-351.....	268
9.4980.08.....	307	98050151.....	227	98091140.....	194	9XT 713 630-371.....	268
9.4980.09.....	307	98050171.....	227	98091160.....	194	9XT 713 630-391.....	268
9.4980.20.....	307	98050221.....	227	98091170.....	194	9XT 713 630-401.....	268

9XT 713 630-421.....	268
9XT 713 630-461.....	268
9XT 713 630-481.....	268
9XT 713 630-491.....	268
9XT 713 630-501.....	268
9XT 713 630-511.....	268
9XT 713 630-521.....	268
9XT 713 630-531.....	268
9XT 713 630-551.....	268
9XT 713 630-561.....	268
9XT 713 630-621.....	268
9XT 713 630-641.....	268
9XT 713 630-681.....	268
9XT 713 630-691.....	268
9XT 713 630-701.....	268
9XT 713 630-711.....	268
9XT 714 300-011.....	268
9XT 714 300-031.....	268
9XT 714 300-051.....	268
9XT 714 300-131.....	268
9XT 714 300-141.....	268
9XT 714 300-181.....	268
9XT 714 300-191.....	268
9XT 714 300-201.....	268

A PAGE

A1245/40.....	363
A2455/50.....	363

B PAGE

B1245/40.....	363
---------------	-----

C PAGE

C12100.....	356
C1255.....	356
C1255-BULK.....	356
C1255CB.....	356
C1255LL.....	356
C1255UP.....	356
C1255X.....	356
C1255XU.....	356
C24100.....	356
C24100-BULK.....	356
C2455.....	356
C2455-BULK.....	356
C2470.....	356
C2470-BULK.....	356
C2470TS.....	356
C2470TS-BULK.....	356
CA1255.....	355

CA1255-BULK.....	355
CA1255CB.....	355
CA1255LL.....	355
CA1255UM.....	355
CA1255UP.....	355
CA1255X.....	355
CA1255XU.....	355
CA2470.....	355
CA2470-BULK.....	355
CA2470TS.....	355
CA2470TS-BULK.....	355
CAP1221.....	368
CAP1221/5.....	368
CAP1221/5-BULK.....	368
CAP1221-BULK.....	368
CAPY1221.....	368
CB1265.....	360
CB1265CB.....	360
CB1265UP.....	360
CC1255.....	360
CC1255CB.....	360
CC1255UP.....	360
CD1255.....	357
CD2470.....	357
CE1235.....	358
CF1219.....	361
CF1227-880.....	362
CF1227-881.....	362
CF1227-889.....	362
CF1227-890.....	362
CF1227-H27W/1.....	362
CF1227-H27W/2.....	362
CF1237-862.....	362
CF1237-893.....	362
CF1237-894.....	362
CF1237-896.....	362
CF1237-898.....	362
CF1250-885.....	362
CF1250-886.....	362
CF1265.....	358
CG1255.....	359
CG1255CB.....	359
CG1255UP.....	359
CG1255X.....	359
CG2470.....	359
CG2470TS.....	359
CH1242.....	359
CI1255.....	360

D PAGE

D1R.....	353
D1S.....	353

D1S-5K.....	353
D1SUP.....	353
D2R.....	352
D2R-5K.....	352
D2S.....	352
D2S-5K.....	352
D2SUP.....	352
D3S.....	353
D4S.....	352

F PAGE

FD1221.....	364
-------------	-----

G PAGE

G1210.....	366
G1210-BULK.....	366
G125.....	366
G125-BULK.....	366
G125LL.....	366
G2410.....	366
G2410-BULK.....	366
G2410-TS.....	366
G245.....	366
G245-BULK.....	366
G245-TS.....	366
GD125.....	366
GD245.....	366

H PAGE

H122.....	367
H123.....	367
H123-BULK.....	367
H126.....	367
H126-BULK.....	367
H242.....	367
H242-BULK.....	367
HL124.....	367
HL124-BULK.....	367
HL124BV.....	367
HL244.....	367
HL244-BULK.....	367
HL244-TS.....	367
HL247.....	367
HLLED124.....	367
HLLED124-WW.....	367

J PAGE

J122.....	371
J243.....	371

K PAGE

K1210.....	370
K1210-BULK.....	370
K1221.....	370
K1221-BULK.....	370
K2410.....	370
K2410-BULK.....	370
K2421.....	370
K2421-BULK.....	370

L PAGE

L1210.....	370
L125.....	370
L125-BULK.....	370
L125LL.....	370
L2410.....	370
L2410-BULK.....	370
L245.....	370
L245-BULK.....	370
LLED125.....	371
LLED125-WW.....	371

M PAGE

M123.....	370
M123-BULK.....	370
M243.....	370
M243-BULK.....	370

N PAGE

N1210.....	370
N1210-BULK.....	370

R PAGE

R1221.....	364
R1221-BULK.....	364
R1221LL.....	364
R2418.....	364
R2421.....	364
R2421-BULK.....	364
R2421-TS.....	364
RQ1221.....	364
RQ2421.....	364
RY1221.....	364
RY1221-BULK.....	364
RY2421.....	364
RY2421-TS.....	364

S PAGE

S1221/5V.....	365
S1221/5V-BULK.....	365
S1221/5VLL.....	365
S2421/5-TS.....	365
S2421/5V.....	365
S2421/5V-BULK.....	365
SEG 700DLX.....	341
SEG 700L.....	341
SZ1221/4.....	365

T PAGE

TL8W/336J.....	373
----------------	-----

U PAGE

U1245.....	372
U2445.....	372

W PAGE

W121.2.....	368
W121.2-BULK.....	368
W1216.....	369
W122.....	369
W1221.....	369
W123.....	369
W125.....	369
W125-BULK.....	369
W125BV.....	369
W125LL.....	369
W241.2.....	368
W241.2-BULK.....	368
W242-BULK.....	369
W243.....	369
W245.....	369
W245-BULK.....	369
WBL122.....	368
WD121.2-BULK.....	371
WD241.2-BULK.....	371
WLED125.....	369
WLED125-WW.....	369
WP1227.....	365
WP1227/7.....	365
WPA1227/7.....	365
WS1212.....	369
WS122.....	368
WS242.....	368
WY125.....	369

X PAGE

XD12100/90.....	354
XD12100/90-BULK.....	354
XD1260/55.....	354
XD1260/55-BULK.....	354
XD1260/55CB.....	354
XD1260/55LL.....	354
XD1260/55UM.....	354
XD1260/55UP.....	354
XD1260/55X.....	354
XD1260/55X-BULK.....	354
XD1260/55XU.....	354
XD24100/90.....	354
XD24100/90-BULK.....	354
XD2475/70.....	354
XD2475/70-BULK.....	354
XD2475/70TS.....	354
XD2475/70TSBULK.....	354
XE1260/55.....	363
XE2475/70.....	363
XH1215/55.....	361
XN000.....	373
XN451.....	373

Y PAGE

YC12100.....	357
YC12100-BULK.....	357
YC1235.....	357
YC1255.....	357
YC1255-BULK.....	357
YC1255CB.....	357
YC1255LL.....	357
YC1255UP.....	357
YC1255X.....	357
YC24100.....	357
YC24100-BULK.....	357
YC2455.....	357
YC2455-BULK.....	357
YC2470.....	357
YC2470-BULK.....	357
YC2470TS.....	357
YC2470TS-BULK.....	357
YL1210.....	372
YL1220.....	372
YL125.....	372
YL126.....	372
YM1210.....	372
YM1220.....	372
YM125.....	372
YM2410.....	372
YM2420.....	372

Hella marine



Fit and Forget LED Lighting



Proven worldwide in the toughest conditions to give you complete peace of mind.

Hella marine lighting combines the latest LED technology, sophisticated electronics and quality materials to provide outstanding reliability and energy efficiency, meaning one less thing for you to worry about on the water.



Navigation Lamps • Floodlights
• Interior/Exterior Lighting • Courtesy Lighting
• Utility Lighting

www.hellamarine.com

**SLEEK, POWERFUL
& ULTRA DURABLE**

HELLA-New Zealand Limited

Head Office: 81-83 Ben Lomond Crescent
Pakuranga, PO Box 51-427
Auckland 2140, New Zealand

Head Office:

Tel: +64 (0) 9 577 0000

Sales/Customer Service:

Tel: 09 577 0366

Fax: 09 576 8202

nzsales@hella.co.nz

www.hella.co.nz

924 999 939-967



HELLA LED LIGHT BARS

Outstanding light performance & sleek design makes the road legal HELLA LED Light Bars the preferred choice in driving lights.



- Road legal with ECE approval
- High performance automotive grade LEDs
- Light weight thermal conductive plastic housing
- Impact and UV resistant lens
- Highly adaptable mounting system
- 5 year warranty

DESIGNED & MANUFACTURED IN NEW ZEALAND