

Emergency Lighting and Signal Warning Lamps

Technology to improve work place safety and meet the requirements of a modern Emergency Response Fleet.



Contents

Emergency Lighting and Signal Warning Lamps

K-LED 2 Beacons.....	148
LED Rotating/Flashing Beacons.....	149
RotaLED Beacons.....	150
RotaLED Compact Beacons.....	151
KL7000LED Beacons.....	152
K-LED Rebelution Beacons.....	152
LED Highlighter Light Bars.....	153
K-LED Nano Beacons.....	154
LED Warning Lamps.....	155
LED Multi-flash Signal Lamps.....	156
DuraLED® Multi-flash Signal Lamps.....	157
DuraLED® Signal Warning Lamps.....	158
EuroLED® Signal Warning Lamps.....	158
LED Signal Warning Lamps.....	159
Revolving Beacons KL 700.....	160
Revolving Beacons Rotaflex.....	160
Pipe Mount Accessories.....	161

HELLA EMERGENCY AND SIGNAL WARNING LIGHTING

HELLA's extensive range of LED Emergency Lighting and Signal Warning Lamps provide high levels of performance and reliability for situations where a powerful warning light is required.



- Outstanding light performance
- Reduced maintenance & downtime
- Low power consumption
- Ultra long service life
- Excellent temperature management

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

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

HELLA's rotating and signal warning lamps, offer choices of signal colour, luminous intensities, flash patterns and supply voltages, providing a complete range of warning lamps to suit most applications and performance requirements.

The rotating light pattern is well recognised as a highly effective warning signal in all conditions, even in bright sunlight. Instant activation is ensured from ambient temperatures ranging from -40°C to $+60^{\circ}\text{C}$.

HELLA LED products must meet the highest quality requirements before being approved for the market.





Light output in accordance with ECE Regulation R65

ECE regulations are performance standards that are mandated in Europe and accepted by many other countries, including New Zealand.

ECE R65 relates to beacons, flashing and rotating, and requires a minimum light output as well as other mechanical and electrical tests (e.g. EMC, vibration etc).

Most of our beacons comply to ECE standards, however we supplement our range with SAE (American standards) lamps as well, which are also accepted in New Zealand.

Choose the right lamp for you

Selecting the right product is not always easy. With the online product comparison tool ELIVER, you can simulate light distribution patterns from HELLA beacons and visual warning systems in a variety of real-world scenarios.

ELIVER also provides you with all of the relevant information about performance and technical specifications.

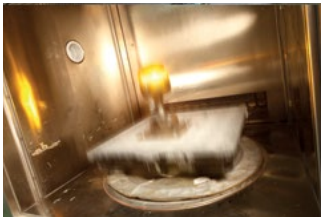
ELIVER

The unique online comparison tool for light distribution.

www.hella.com/eliver



HELLA EMERGENCY LAMPS ARE TESTED TO INTERNATIONAL STANDARDS



Vibration Test

This test simulates the behaviour of the products in harsh off-road conditions and verifies resistance to potholes, washboard road patterns and gravel roads.

A (wide band random vibration) test is used to test the mechanical endurance strength of the test specimen. The vibration frequency range extends from 10 to 1000 Hertz. In addition to vibration testing, products are subjected to a temperature overload of -40°C to +60°C.

Ingress Protection (IP ratings)

HELLA Emergency and Signal Warning Lighting contain precision electronic and mechanical components in order to achieve outstanding product performance. In order to protect these components and assure long term reliability, HELLA products are designed and tested to meet international standards on ingress protection as per IEC 60529, DIN 40050-9 or ISO 20653.

Dust Test

Entry of dust can affect the optical and mechanical operation of a lamp, potentially compromising its performance and reliability. Accordingly HELLA products are designed and tested to ensure the risk of dust ingress is minimised or eliminated. Dust-resistant products are rated at IP 5(K) X, while dust-proof products are rated at IP 6(K) X.

Water Splash Test

HELLA products that fulfil the water splash test requirement have been subjected to environmental testing designed to simulate operating conditions representing normal weather conditions. When correctly installed, heavy rain, direct splashes and water sprays up to 4 bar will have no adverse effects on the long term reliability and performance of the product. This level of protection is provided on HELLA products rated at IP X4K or above.

Temporary Immersion Test

HELLA products that fulfil the temporary immersion test requirement have been subjected to tests designed to simulate operating conditions that involve brief immersions in water such as off-road driving through a stream. This level of protection is provided on HELLA products rated at IP X7.

High-Pressure Cleaner Test

For the ultimate in water ingress protection, HELLA products that fulfil the high-pressure cleaner test requirement are able to withstand water and steam jets of up to 80°C and 100 bar that may be encountered during commercial and industrial cleaning processes. This level of protection is provided on HELLA products rated at IP X9K.

IP 6K 9K

First Digit - Second Digit

First Digit Below: Table 1

Protection against solid foreign objects and access to hazardous parts.

Second Digit Right: Table 2

Protection against liquids.

FIRST DIGIT

0	Non-protected.
1	Protected against solid foreign objects of 50mm diameter and greater.
2	Protected against solid foreign objects of 12.5mm diameter and greater.
3	Protected against solid foreign objects of 2.5mm diameter and greater.
4	Protected against solid foreign objects of 1.0mm diameter and greater.
5	Dust-protected.
5K	Dust-protected.
6	Dust-sealed.
6K	Dust-sealed.

SECOND DIGIT

0	Non-protected.
1	Protected against drops of water falling vertically.
2	Protected against drops of water falling vertically at up to 15° from the vertical.
3	Protected against spraying water falling vertically at up to 60° from the vertical.
4	Protected against splashing water from all directions.
4K	With higher pressure.
5	Protected against jet of water from all directions.
6	Protected against powerful water jets.
6K	With higher pressure, specific for road vehicles.
7	Protected against the effects of immersion.
8	Protected against prolonged effects of immersion under pressure to specified depth.
9K	Protected against high-pressure cleaner, specific for road vehicles.

What beacon is best for which application?

There is no one beacon specific to certain applications as they are all designed to be used in multiple situations. There are a few factors to consider whenever selecting a beacon. The selection can be narrowed with the help of certain criteria. To find the right beacon for the right application, you should ask yourself the following questions before purchasing.

Where or how intensively / frequently will the beacon be used?

How frequent the beacon will be used and in which environment needs to be taken into account. If the beacon is used very frequently the advantages of LED technology such as design life, low maintenance, low power consumption will be more important than if its use is low.

What kind of warning effects do I want to achieve?

In highly populated areas you would want to draw attention of approaching vehicles to the situation/incident from a reasonable distance. In this case, we recommend using a beacon with a high warning effect. However, if the beacon isn't used frequently and in areas that don't need a high warning effect, a halogen beacon is completely sufficient.

How high is the vibration stress for beacons?

Take into account whether the vehicle will absorb some of the vibration also what kind of environment the beacon will be used in e.g. the roads it will be used on (are they smooth or rough). If needed look at beacons with a mounting attachment that will absorb some of the stress, also look at the design and materials as they may help to reduce vibration stress.

How do I want to attach the beacon to the vehicle?

The type of vehicle and position on the vehicle the beacon will be mounted on will determine which attachment will work best. There are three different mounting options to choose from – fixed, flexible pipe socket and magnetic. The different attachment variants are legally stipulated in DIN 14620.

Fixed Attachment



Flexible Pipe Socket Attachment



Magnetic Attachment



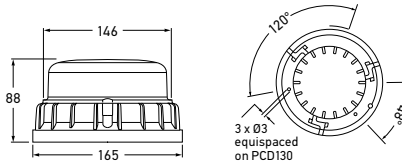
CAUTION: MOUNTING OF MAGNETIC BASE REVOLVING LAMPS

Due to HELLA being unable to control the condition of the mounting surface or the potential forces that may occur during deceleration, fitment of warning lamps with a magnetic base cannot be recommended for use on moving vehicles.



K-LED 2 Beacon - Fixed Mount

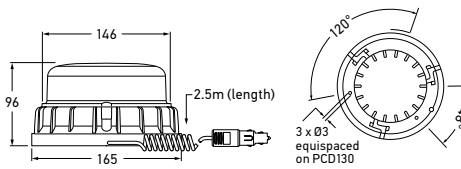
K-LED low profile beacons are the ideal choice wherever beacons risk interference with radio communications. Featuring 20 high power LEDs providing high light output for best visibility. An automatic day/night sensor adjusts brightness to avoid glare discomfort at night. 14 different flashing and 2 rotating patterns.



2XD 011 557-101	1614	AMBER
Mounting	Fixed mounting on horizontal surfaces	
Voltage	Multivolt™ for optimum brightness at input voltages from 10 to 32 volts	
Power Consumption	30W max.	
Protection	Reverse polarity and Transient Spike Circuit protection IP 67 (Protection against dust and temporary water immersion)	
Flash Rate	Simulated rotation 120rpm (2.0 Hz)	
Cable Length	Pre-wired with 150mm cable	
RF Suppression	CISPR25 Class 5	
Compliance	ECE R65/00 TA2	ECE R65 TR2 SAE J 845 Class 1

K-LED 2 Beacon - Magnetic Mount

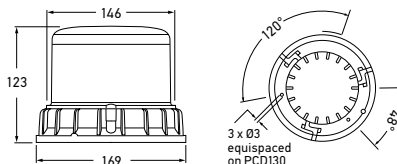
K-LED low profile beacons are the ideal choice wherever beacons risk interference with radio communications. Featuring 20 high power LEDs providing high light output for best visibility. An automatic day/night sensor adjusts brightness to avoid glare discomfort at night. 14 different flashing and 2 rotating patterns.



2XD 011 557-301	1614MAG	AMBER
Mounting	Magnetic mounting on horizontal surfaces	
Voltage	Multivolt™ for optimum brightness at input voltages from 10 to 32 volts	
Power Consumption	30W max.	
Protection	Reverse polarity and Transient Spike Circuit protection IP 67 (Protection against dust and temporary water immersion)	
Flash Rate	Simulated rotation 120rpm (2.0 Hz)	
Cable Length	Spiral cable extends to 2.5m	
RF Suppression	CISPR25 Class 5	
Compliance	ECE R65/00 TA2	ECE R65 TR2 SAE J 845 Class 1

Caution: Mounting of Magnetic Base Revolving Lamps

Due to HELLA being unable to control the condition of the mounting surface or the potential forces that may occur during deceleration, fitment of warning lamps with a magnetic base cannot be recommended for use on moving vehicles.



**LED DuraRAY 4.0
Rotating/Flashing Beacon**

Heavy duty LED beacon with the choice of 16 rotating or flashing patterns, and also includes a light sensor for day/night operation. Excellent light output and rugged design makes for one of the toughest LED beacons on the market. Suitable for harsh and demanding conditions, such as mining.

2XD 012 985-001	AMBER		
Mounting	Fixed mounting on horizontal surfaces		
Voltage	Multivolt™ for optimum brightness at input voltages from 10 to 30 volts		
Power Consumption	Up to 32W		
Protection	Reverse polarity and Transient Spike Circuit protection IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)		
Flash Rate	16 selectable flash pattern including rotating		
Cable Length	Pre-wired with 1.5m cable		
RF Suppression	CISPR25 Class 5		
Compliance	ECE R65/00 TA1	ECE R10	SAE J845 Class 1

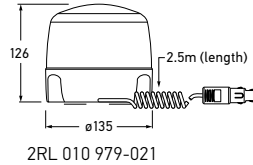
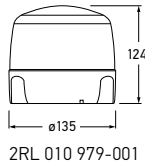


SELECTABLE PATTERN	FLASHING SEQUENCE (FS)
1	Single flash 2 Hz
2	Double flash 2 Hz (ECE)
3	Triple flash 2 Hz
4	Rotation 2 Hz 120rpm (ECE)
5	Single flash 2 Hz (250ms offset to FS1)
6	Double flash 2 Hz (250ms offset to FS2)
7	Triple flash 2 Hz (250ms offset to FS3)
8	Single flash 1.4 Hz SAE

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

RotaLED Beacons

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



2RL 010 979-001	1611 (Fixed Mount)	AMBER
2RL 010 979-021	1613 (Magnetic Mount)	
Mounting	Fixed mount: Upright, fixed mounting on horizontal surfaces. Magnetic mount: Magnetic mounting on horizontal surfaces.	
Voltage	Multivolt™ for optimum brightness at input voltages from 10 to 32 volts	
Power Consumption	10W	
Protection	IP 5KX (Protection against dust) IP X4K (Protection against splashing water from all directions. With higher pressure) IP X9K (Protection against high-pressure cleaner, specific for road vehicles)	
Flash Rate	Simulated rotation 120-133rpm (2.0-2.2 Hz)	
Cable Length	2RL 010 979-001	Pre-wired with 120mm cable
	2RL 010 979-021	Spiral cable extends to 2.5m
RF Suppression	CISPR25 Class 5	
Compliance	ECE R65/00 TA1	ECE R10



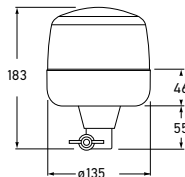
2RL 010 979-021

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.



2RL 010 979-011	1612	AMBER
Mounting	Pipe Mounting. Tubular base incorporates connection plug. Must be used in conjunction with connecting piece 8HG 002 365-001, or other HELLA 2-pole beacon mounts.	
Voltage	Multivolt™ for optimum brightness at input voltages from 10 to 32 volts	
Power Consumption	10W	
Protection	Same as 2RL 010 979-001 above	
Flash Rate	Simulated rotation 120-133rpm (2.0-2.2 Hz)	
Cable Length	Pre-wired with 120mm cable	
Accessories	8HG 002 365-001	2 Pole beacon mount - Pipe
	8HG 006 294-011	2 Pole beacon mount - Flat mount
	8HG 006 294-111	2 Pole beacon mount - Flat angle mount
	8HG 006 294-051	2 Pole beacon mount - Threaded mount
RF Suppression	CISPR25 Class 5	
Compliance	ECE R65/00 TA1	ECE R10

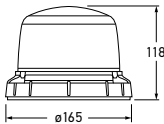


8HG 002 365-001

8HG 006 294-011

8HG 006 294-111

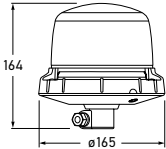
8HG 006 294-051



2XD 013 979-001	AMBER		
Mounting	Fixed mounting on horizontal surfaces.		
Voltage	Multivolt™ for optimum brightness at input voltages from 10 to 30 volts		
Power Consumption	10W		
Protection	Reverse polarity and transient spike circuit protection IP 67 (Protection against dust and temporary water immersion) IP X9K (Protection against high-pressure cleaner, specific for road vehicles)		
Flash Rate	124 +/- 10 per minute, double flash		
Cable Length	Pre-wired with 150mm cable		
RF Suppression	CISPR25 Class 5		
Compliance	ECE R65/00 TA1	ECE R10	SAE J845 Class 1

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.



2XD 013 979-011	AMBER		
Mounting	Tubular base incorporates connection plug. Must be used in conjunction with 8HG 002 365-001: 2 pole beacon mount - pipe, or other HELLA 2-pole beacon mounts.		
Voltage	Multivolt™ for optimum brightness at input voltages from 10 to 30 volts.		
Power Consumption	10W		
Protection	Same as 2RL 010 979-001		
Flash Rate	124 +/- 10 per minute, double flash.		
Cable Length	Pre-wired with 150mm cable		
Accessories	8HG 002 365-001	2 Pole beacon mount - Pipe	
	8HG 006 294-011	2 Pole beacon mount - Flat mount	
	8HG 006 294-111	2 Pole beacon mount - Flat angle mount	
	8HG 006 294-051	2 Pole beacon mount - Threaded mount	
RF Suppression	CISPR25 Class 5		
Compliance	ECE R65/00 TA1	ECE R10	SAE J845 Class 2

RotaLED Compact Beacon - Pipe Mount

A high performance LED beacon offering a double flash signal and 360° warning effect which provides ultimate attention in many applications. The impact-resistant dome and no moving parts provide maximum reliability. The flexible pipe mount softens impacts and minimises the risk of damage thanks to its special design.

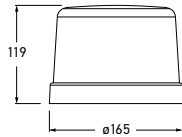


Extremely flexible pipe mount rubber base mechanism

EMERGENCY & SIGNAL

KL7000LED Beacon - Fixed Mount

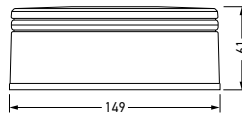
KL7000LED Beacon, with the latest LED technology provides an optimum signal image with low power consumption featuring rotating LED light function. The combination of thermal management and optics in one module makes a remarkably compact design possible. Impact and dirt resistant PMMA lens.



2RL 011 484-001	1608	AMBER
Mounting	Upright, fixed mounting on horizontal surfaces.	
Voltage	Multivolt™ for optimum brightness at input voltages from 10 to 32 volts.	
Power Consumption	10W	
Protection	IP 5KX (Protection against dust) IP X4K (Protection against splashing water from all directions. With higher pressure) IP X9K (Protection against high-pressure cleaner, specific for road vehicles)	
Flash Rate	Simulated rotation 120-133rpm (2.0-2.2 Hz)	
Cable Length	Pre-wired with 120mm cable	
RF Suppression	CISPR25 Class 5	
Compliance	ECE R65/00 TA1	ECE R10

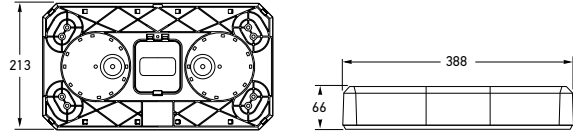
K-LED Rebelution LED Warning Beacon - Fixed Mount

K-LED low profile beacons are the ideal choice wherever beacons risk interference with radio communications. Featuring 20 high power LEDs providing high light output for best visibility. An automatic day/night sensor adjusts brightness to avoid glare discomfort at night. 14 different flashing and 2 rotating patterns.



2RL 455 256-001	Rotating	AMBER
2XD 455 255-001	Flashing	AMBER
Mounting	Surface Mount	
Voltage	12/24V	
Power Consumption	Rotating: 13 Watts Flashing: 38 Watts	
Protection	IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Cable Length	150mm cable	
Lens Material	Polycarbonate	
Housing	Aluminium	
RF Suppression	ECE-R10: 058840 Rotating: CISPR 25 Class 3 Flashing: CISPR 25 Class 5	
Compliance	ECE-R65 TA1 (E1)	

EMERGENCY & SIGNAL



12 VOLT		24 VOLT		
2RL 980 310-001	454201A	2RL 980 310-021	454201A24V	AMBER
2RL 980 310-031	454205A (Economy Version - 12 Volt)			AMBER
Flash Rate	20 user selectable flash patterns.			
Current Draw	12V - 5.0A max. 24V - 3.0A max.			
Compliance	SAE J845 Class 1			

LED Highlighter™ Mini Light Bar

The Highlighter™ LED Mini Light Bar combines the high performance ROC™ (Reliable On-board Circuitry) with the high efficiency Solaris™ reflector design. The innovative reflector design offers uniform 360° light distribution, which means no dark spots or shadows. Highlighter™ units (except economy 2RL 980 310-031) can be wired together, or to other devices for a completely synchronized warning system.



LENSES (SINGLE)		
9EL 980 312-051	945420105	(Clear)

MOUNTING KITS/BRACKETS		
8HG 980 311-001	454217	(Mount Riser 52mm)
9XD 980 311-101	452341	(Magnetic Mount Kit)
9XD 980 311-011	454218	(Mount Flat 12mm)



9XD 980 311-101

LED Highlighter™ Mini Light Bar Accessories



9EL 980 312-051



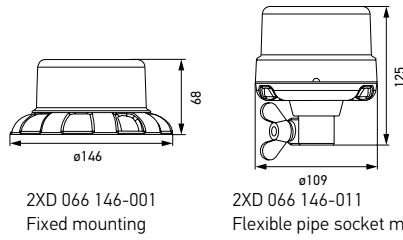
8HG 980 311-001



9XD 980 311-011

K-LED Nano Beacon - Fixed Mount

The K-LED Nano produces above-average light intensity, despite its compact dimensions. HELLA's smallest homologated beacon to date generates a long-range, flashing amber warning signal. There are two different variants suitable for fixed attachment. The standard version is characterised by a slightly curved base, which conforms to HELLA's usual 130mm diameter bolt circle mounting points. In addition, a variant with flexible pipe socket mounting is available. This shock-absorbing and vibration-damping base briefly tilts the beacon by up to 45° and cushions even strong impacts. Thanks to this option and to the beacon's completely sealed construction, the K-LED Nano can be used both in vibration-intensive and dusty environments.



2XD 066 146-001	Fixed Mounting	AMBER
2XD 066 146-011	Flexible Pipe Socket Mounting	AMBER
Mounting	Upright, fixed mounting on horizontal surfaces.	
Voltage	Multi-voltage. 12 V / 24 V	
Power Consumption	max. 19W	
Protection	IP 6K7 (Protection against dust and temporary water immersion) IP 6K9 (Protection against dust and high-pressure/steam jet cleaning)	
Flash Rate	124 +/- 10 per minute	
Cable Length	150 mm cable with 6.3 x 0.8 – 1.5 flat connector	
Accessories	8HG 002 365-001 2 Pole beacon mount - Pipe 8HG 006 294-011 2 Pole beacon mount - Flat mount 8HG 006 294-111 2 Pole beacon mount - Flat angle mount 8HG 006 294-051 2 Pole beacon mount - Threaded mount	
RF Suppression	ECE R10, CISPR 25 Class 5, RCM	
Compliance	ECE R65 TA1 005218, SAE J845 Class 1	ECE R10



2XD 066 146-011



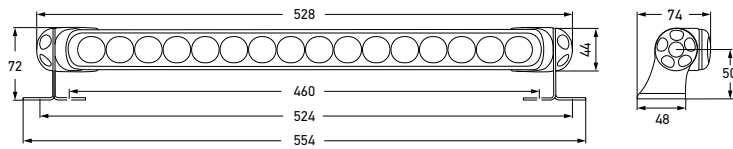
8HG 002 365-001

8HG 006 294-011

8HG 006 294-111

8HG 006 294-051

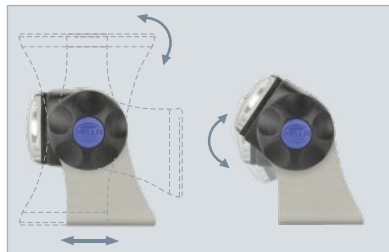
EMERGENCY LIGHTING AND SIGNAL WARNING LAMPS



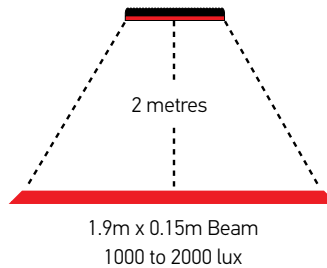
2XD 958 130-661		RED
Mounting	Upright or pendant	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	25W	
Protection	Reverse polarity and transient spike protection IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Cable Length	Pre-wired with 2.5m of tinned multi-core cable	
Lens Material	Grilamid®	
Accessories	8HG 958 128-811 HD double mount stainless steel feet (one pair)	
Compliance		

BL470R LED Warning Lamp

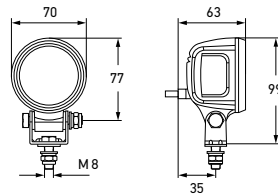
It is essential to protect employees from the potential dangers of moving machinery. The BL470R LED warning lamp features a powerful red safety strip of light that indicates a no-go zone to keep staff and pedestrians at a safe distance so ideal for use on forklifts, and earth moving equipment which need surrounding work space to be identified by a no-go line.



Mounting brackets can be positioned to suit most vehicle installations.



EMERGENCY & SIGNAL



1G0 996 210-011		RED
1G0 996 210-001		BLUE
Voltage	Multivolt™ for optimum brightness at input voltages from 10 to 80 volts.	
Power Consumption	Red: 5.5W Blue: 7W	
Protection	Reverse polarity and transient spike protection IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)	
Cable Length	500mm cable	
Lens Material	Polycarbonate	
Housing	Aluminium Die Cast	
Compliance	ECE-R10	

SL60 LED Warning Lamp

The SL60 LED warning lamp has a special lens optic that focuses the light rays into a horizontal or vertical line that appears on the ground, day and night. This warning symbol not only alerts vehicles and pedestrians about an approaching vehicle or a potentially dangerous working area, the lines can also facilitate vehicle navigation. The SL60 LED warning lamp is available with red or blue projection line.

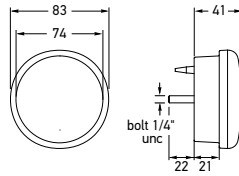


1G0 996 210-011

1G0 996 210-001

LED 83mm Round Multi-flash Signal Lamp

83mm diameter round LED signal lamps with single bolt mount for emergency vehicles. The HELLA multi-flash range of warning lamps have 10 programmable flash modes and can be synchronised to flash alternately or in unison.



2XD 959 011-452 2XD 959 011-602 2XD 959 011-652

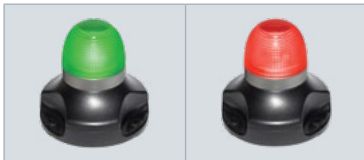
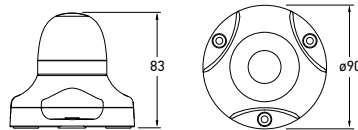
2XD 959 011-402	RED
2XD 959 011-452	AMBER
2XD 959 011-602	BLUE
2XD 959 011-652	GREEN

Mounting	Single bolt 1/4" stainless UNC thread. Nut and washer supplied.
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.
Power Consumption	6W continuous (less in flashing modes).
Protection	Reverse polarity and voltage spike protection. IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high-pressure/steam jet cleaning)
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.
Compliance	ECE R10

See page 66 for mounting accessories.

LED 360° Multi-flash Signal Lamp

Multi-purpose LED 360° warning lamp with clear Grilamid® lens, available in four signal colours and white. The HELLA multi-flash range of warning lamps have 10 programmable flash modes and can be synchronised to flash alternately or in unison. Optic appears clear until illuminated.



2XD 980 911-202 2XD 980 911-402



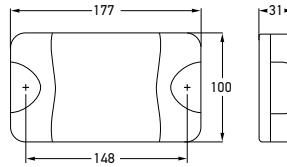
2XD 980 911-602 2XD 980 911-702

2XD 980 911-002	WHITE
2XD 980 911-202	GREEN
2XD 980 911-402	RED
2XD 980 911-602	AMBER
2XD 980 911-702	BLUE

Mounting	Upright mounting with three point mount.
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.
Power Consumption	Less than 5W (less in flashing modes).
Protection	Reverse polarity and voltage spike protection. IP 67 (Protection against dust and temporary water immersion)
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.
Lens Material	High impact and chemical resistant Grilamid® lens
Compliance	ECE R10

Lamps shown illuminated (left).

EMERGENCY LIGHTING AND SIGNAL WARNING LAMPS



2XD 959 037-012	RED
2XD 959 037-112	AMBER
2XD 959 037-612	BLUE
2XD 959 037-812	GREEN

Mounting	Two hole surface mount with mounting bushes supplied.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	9W continuous (less in flashing modes).	
Protection	Reverse polarity and 5000 watt Transient Voltage Suppressor (TVS) IP 6K6 (Protection against dust and high-pressure water jets) IP 6K7 (Protection against dust and temporary water immersion)	
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.	
Compliance	SAE J595 Class 1 (Red and amber versions)	ECE R10

See pages 62 for DuraLED® accessories.

DuraLED® Multi-flash Signal Warning Lamp

Multivolt™ warning lamps for emergency vehicles. The HELLA multi-flash range of warning lamps have 10 programmable flash modes and can be synchronised to flash alternately or in unison.



2XD 959 037-112

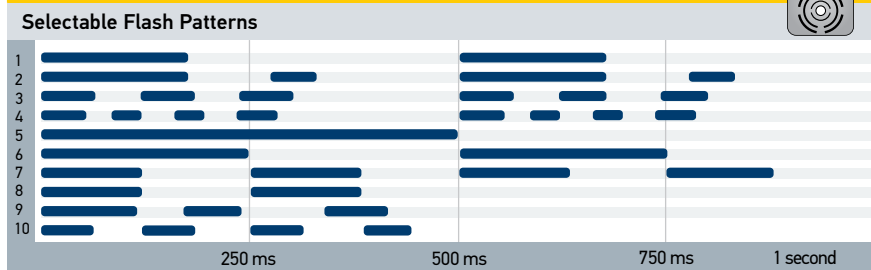
2XD 959 037-612



2XD 959 037-812

EMERGENCY & SIGNAL

HELLA MULTI-FLASH LAMP OPERATING MODES

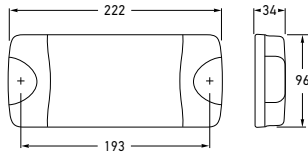


Flashing Options	
Steady state	Lamp operates as a continuous ON signal
Independent flash	Lamp operates from an external flashing system
Flash state	Lamp operates in the flash mode preselected by the user
Blitz state	Lamp operates in a burst of quad flashes (pattern 4)

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

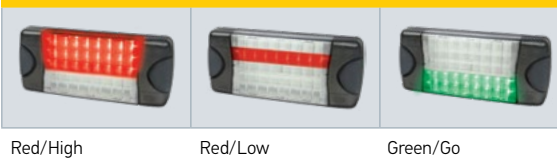
DuraLED® Combi Red/Green Signal Warning Lamp

This DuraLED® red/green signal warning lamp is designed as a stop/go lamp to signal when it is safe or dangerous to approach and/or work on a vehicle. The red signal has two outputs, either 1.5W or 6W, allowing the lamp to function even for long periods (e.g. overnight) without draining batteries. It is completely sealed, UV, impact and shock resistant, ensuring an ultra-long service life.



2XA 959 050-321	RED/GREEN
Mounting	Surface mount with mounting bushes supplied.
Voltage	Multivolt™ for optimum brightness in 12 and 24 volt systems.
Power Consumption	Red: 1.5W/6W Green: 3W
Protection	Reverse polarity and transient spike circuit protection. IP 6K6 (Protection against dust and high-pressure water jets) IP 6K7 (Protection against dust and temporary water immersion)
Cable Length	Pre-wired with 6.0m of sheathed multi-core cable.
Lens Material	High impact and chemical resistant Grilamid® lens
Compliance	
Note: Light output suitability is at the discretion of the installer.	

COMBI LAMP FUNCTIONS



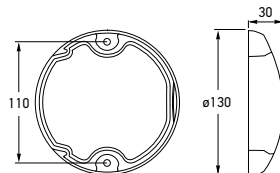
Red/High

Red/Low

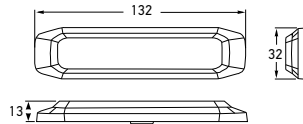
Green/Go

EuroLED® Signal Warning Lamp - 24 Volt

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



2XD 959 020-812	RED
Mounting	Two hole surface mount with mounting bushes supplied.
Voltage	20-28V
Power Consumption	5W
Protection	Reverse polarity and Transient Spike Circuit protection. IP 6K6 (Protection against dust and high-pressure water jets) IP 6K7 (Protection against dust and temporary water immersion)
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.
Compliance	ECE R10
This lamp requires an external flasher unit such as 4JZ 177 846-001. See page 65 for EuroLED® accessories.	



2XD 014 562-401	AMBER
Mounting	Surface mount
Voltage	Multivolt™ for optimum brightness at input voltages from 11-30V DC
Power Consumption	Max 17W
Protection	IPX7 IPX9K
Cable Length	250mm
Compliance	ECE-R10, CISPR 25 Class 5 SAE J595 Class 1 Amber

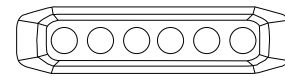
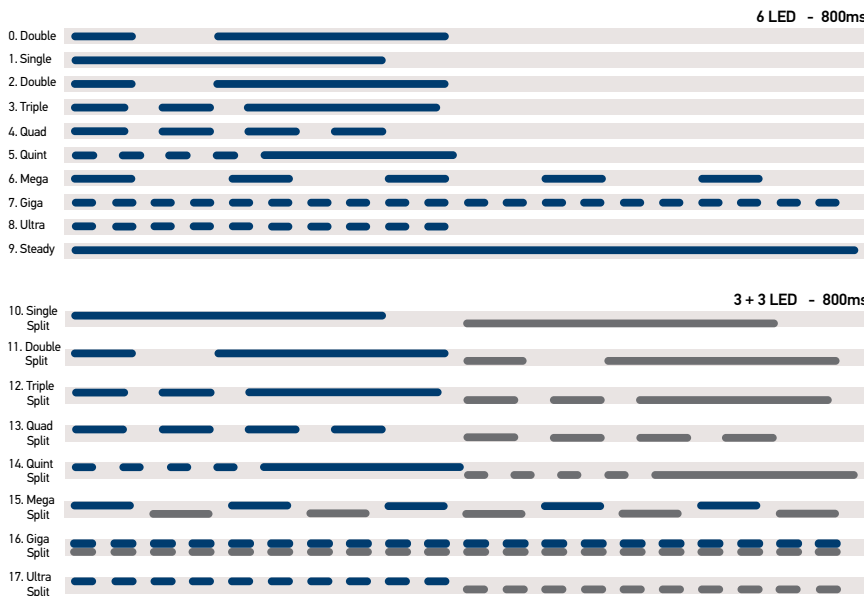
Multi-flash Slim 6 LED Amber Warning Lamp

The Multi-flash Slim Signal Warning Lamp offers 18 different flash patterns, compliant to SAE J595 Class 1 – being the brightest class, and is suitable for on road use. The lamps are Multivolt™ so may be used on 12 or 24V vehicles. The 6 high power LEDs produce an optimum signalling effect via the high-quality precision lens. An additional optional feature is night mode, wired into the headlamp circuit, which dims the lamp to ½ output so not to dazzle or create blinding glare.

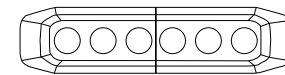


HELLA MULTI-FLASH LAMP OPERATING MODES

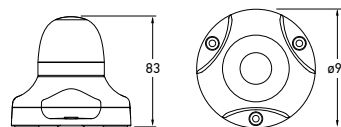
Signal Warning Lamp - 18 Flash Patterns



6 LED



6 LED Split
3 + 3



2XA 980 910-442	RED
Mounting	Upright mounting with three point mount.
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.
Power Consumption	5W
Protection	Reverse polarity and voltage spike protection. IP 67 (Protection against dust and temporary water immersion)
Cable Length	Pre-wired with 2.5m of sheathed multi-core cable.
Lens Material	High impact and chemical resistant Grilamid® lens
Compliance	ECE R10
See page 156 for multi-flash versions. This lamp requires an external flasher unit such as 4JZ 177 846-002.	

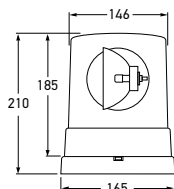
LED 360° Warning Lamp

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



Revolving Beacon KL 700 - Amber

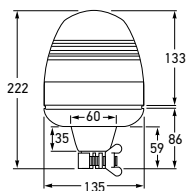
The halogen bulb is replaced from the rear of the reflector eliminating the need to touch the highly polished reflector surface. Twin belt drive ensures a smooth and quiet operation.



2RL 905 143-001	1724	12 VOLT
Power Consumption	12V - 55W	
Rotation	160rpm	
RF Suppression	VDE 0879, Class 3, FM 5.	
Bulbs to Suit	12V	8GH 002 089-122
Protection	IP 5K4K (Protection against dust and water splashing with increased pressure) IP X9K (Protection against high-pressure/steam jet cleaning)	
Spare Parts	9EL 856 418-021 ● Amber lens with optics	
Compliance	ECE R65/00	
HELLA does not recommend the magnetic base version for use on a moving vehicle (see page 147).		

**Rotaflex Revolving Beacon
- Amber**

Rotaflex revolving beacon with polycarbonate lens and flexible rubber base.



2RL 006 846-001	1730	12 VOLT
2RL 006 846-011	1731	24 VOLT
Mounting	Tubular base incorporates connection plug. Must be used in conjunction with connecting piece 8HG 002 365-001, 8HG 006 294-011, 8HG 006 294-111 or 8HG 006 294-051.	
Power Consumption	12V - 55W 24V - 70W	
Rotation	160rpm	
RF Suppression	Conducted Class 5 (CISPR 25).	
Bulbs to Suit	12V	8GH 002 089-122 24V 8GH 002 089-281
Protection	IP 5K4K (Protection against dust and water splashing with increased pressure) IP X9K (Protection against high-pressure/steam jet cleaning)	
Spare Parts	8HG 002 365-001 2 Pole beacon mount - Pipe 8HG 006 294-011 2 Pole beacon mount - Flat mount 8HG 006 294-111 2 Pole beacon mount - Flat angle mount 8HG 006 294-051 2 Pole beacon mount - Threaded mount	
Compliance	ECE R65/00	e1 2181



8HG 002 365-001

8HG 006 294-011



8HG 006 294-111

8HG 006 294-051

Pipe Mount for Beacons

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

2 POLE BEACON MOUNT - PIPE	
8HG 002 365-001	8007



2 POLE BEACON MOUNT - FLAT MOUNT	
8HG 006 294-011	8007FM



2 POLE BEACON MOUNT - FLAT ANGLE MOUNT	
8HG 006 294-111	8007RA



2 POLE BEACON MOUNT - THREADED	
8HG 006 294-051	8008



PIPE MOUNT FOR BEACONS - Ø165MM	
8HG 005 436-011	
Suits	2RL 905 143-001, 2XD 011 557-101

