

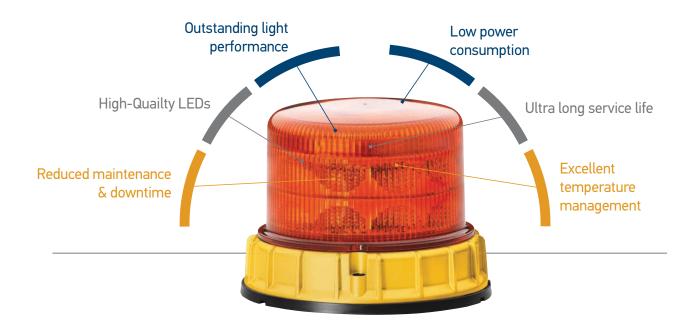
Contents

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 $+60^{\circ}$ 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 $+60^{\circ}\text{C}$.

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.



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

186

SECOND DIGIT

- 0 Non-protected.
- 1 Protected against drops of water falling vertically.
- 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.

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

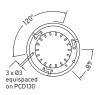
K-LED low profile beacons are the ideal choice wherever beacons risk interference with radio communications. Featuring 20 high power LEDs providing high light output for best visibility. An automatic day/night sensor adjusts brightness to avoid glare discomfort at night. 14 different flashing and 2 rotating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





P/N 1616







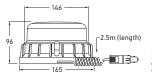
Part Number	1614	AMBER	
Part Number	1616	RED	
Mounting	Fixed mounting on horizontal surfaces		
Voltage	Multivolt™ for optimum brightness at input voltages from 10 to 32 volts		
Power Consumption	30W max.		
Protection	Reverse polarity and Transient Spike Circuit protection IP 67 (Protection against dust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

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.







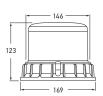


Part Number	1614-MAG	AMBER	
Mounting	Magnetic mounting on horizontal surfaces		
Voltage	Multivolt™ for optimum brightness at input voltages fro	m 10 to 32 volts	
Power Consumption	30W max.		
Protection	Reverse polarity and Transient Spike Circuit protection IP 67 (Protection against dust and temporary 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	45 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.

Heavy duty LED beacon includes a light sensor for day/night operation. Excellent light



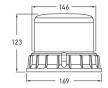


Part Number	2RL 012 983-001		AMBER
Mounting	Fixed mounting on horizontal surfaces		
Voltage	Multivolt™ for optimum brightness at input voltages from 10 to 30 volts		
Power Consumption	20W max.		
Protection	Reverse polarity and Transient Spike Circuit protection IP 6K7 (Protection against dust and temporary 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 Cla	ass 1	&

EMERGENCY LIGHTING AND SIGNAL WARNING LAMPS



Power Supply MULTI VOLT





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	<u>&</u>	

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

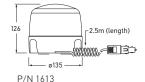
RotaLED Beacon, with the latest LED technology provides an optimum signal image with low power consumption featuring rotating LED light function. The combination of thermal management and optics in one module makes a remarkably compact design possible. Impact and dirt resistant Polycarbonate lens.





P/N 1613







Part Number	1611 (Fixed Mount)	AMPER
Part Number	1613 (Magnetic Mount)	AMBER
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 t	to 32 volts
Power Consumption	10W	
Protection	IP 5KX (Protection against dust) IP X4K (Protection against splashing water from all directions. IP X9K (Protection against high-pressure cleaner, specific for	J 1
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 c	able extends to 2.5m
RF Suppression	CISPR25 Class 5	
Compliance	ECE R65/00 TA1	<u>&</u>

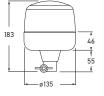
Caution: Mounting of Magnetic Base Revolving Lamps

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.







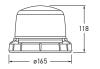


Part Number	1612		AMBER	
Mounting		Pipe Mounting. Tubular base incorporates connection plug. Must be used in conjunction with connecting piece P/N 8007, or other HELLA 2-pole beacon mounts.		
Voltage	Multivolt™ for	optimum brightness at input voltages from 10 to 3	32 volts	
Power Consumption	10W			
Protection	Same as P/N	N 1611 above		
Flash Rate	Simulated rotation 120-133rpm (2.0-2.2 Hz)			
Cable Length	Pre-wired wi	th 120mm cable		
Accessories	8007 8007FM 8007RA 8008	2 Pole beacon mount - Pipe 2 Pole beacon mount - Flat mount 2 Pole beacon mount - Flat angle mount 2 Pole beacon mount - Threaded mount		
RF Suppression	CISPR25 Clas	ss 5		
Compliance	ECE R65/00	TA1 ECE R10	<u> </u>	



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	<u>&</u>

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.





P/N 8007





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 3	30 volts.		
Power Consumption	10W	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	<u>&</u>		

P/N 8007RA

P/N 8007FM

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

P/N 8008

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.







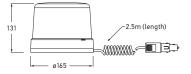
Part Number	1608	AMBER	
Mounting	Upright, fixed mounting on horizontal surfaces.		
Voltage	Multivolt™ for optimum brightness at input voltages from 10 to	32 volts.	
Power Consumption	10W		
Protection	IP 5KX (Protection against dust) IP X4K (Protection against splashing water from all directions. With 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	<u>&</u>	

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.



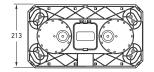




Part Number	1610	AMBER
Mounting	Magnetic mounting on horizontal surfaces.	
Voltage	Multivolt™ for optimum brightness at input voltages from 10 to 32 volts.	
Power Consumption	10W	
Protection	IP 5KX (Protection against dust) IP X4K (Protection against splashing water from all directions. With higher pressure) 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	<u>&</u>

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.





	12 VOLT	24 VOLT	
Part Number	454201A	454201A-24V	AMBER
Part Number	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).		







Magnet view

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.



	LENSES (SINGLE)
Part Number	9.454201.05 (Clear)

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

LED Highlighter™ Mini Light Bars Accessories

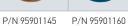


LED 83mm Round Multi-flash Signal Lamp

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.

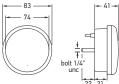








P/N 95901165









	95901140	RED
	95901145	AMBER
Part Number	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











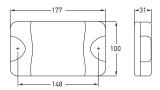




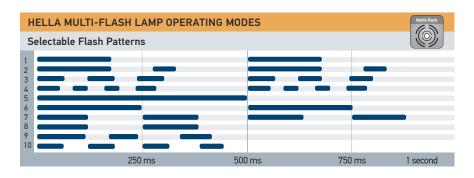
	98091100	WHITE
	98091120	GREEN
Part Number	98091140	RED
	98091160	AMBER
	98091170	BLUE
Mounting	Upright mounting with three point mount.	
Voltage	Multivolt™ for optimum brightness at input voltages from 9 to 33 volts.	
Power Consumption	Less than 5W (less in flashing modes).	
Protection	Reverse polarity 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).		

EMERGENCY LIGHTING AND SIGNAL WARNING LAMPS





	95903701	RED
	95903711	AMBER
Part Number	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)	
See pages 80 for DuraLED® accessories.		



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® 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.





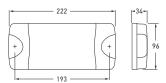


P/N 95903781 P/N 95903791

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.	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	<u>&</u>		
Note: Light output suitability is at the discretion of the installer.			

COMBI LAMP FUNCT	IONS	
of the first term of the second	The second	
Red/High	Red/Low	Green/Go

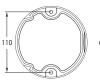
EuroLED° Signal Warning Lamp - 24 Volt

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





P/N 95902181









Part Number	95902081	RED	
Part Number	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.			

Power Supply MULTI VOLT







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.



	98091004	WHITE	
	98091024	GREEN	
Part Number	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.			

149

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.		

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.



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





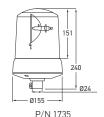
	12 VOLT		24 VOLT	
B . N . I	1724		1722	AMBER
Part Number			1721	RED
			1720	BLUE
Power Consumption	12V - 55W 24V - 70W			
Rotation	160rpm			
RF Suppression	VDE 0879, Class 3, I	FM 5.		
Bulbs to Suit	12V 24V	C1255 C2470		
Protection	IP 5K4K (Protection against dust and water splashing with increased pressure) 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			
HELL A does not recommend the magnetic base version for use on a moving vehicle (see page 188)				

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	172

	1/10/1/20	1/11/2/	1/14/1/55
art Number	12 VOLT	24 VOLT	
	1728	1728-24V	AMBER
	1726	1726-24V	BLUE

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.



Pa

BULB



	1		
	12/24 VOLT		
Part Number	1729 (Magnetic mount)		AMBER
	1735 (Flexibas	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 9.1727.01 9.1728.01 9.1737.91 8007 8007FM 8007RA 8008	 Blue lens Red lens Amber lens Two drive belts 2 Pole beacon mount - Pipe 2 Pole beacon mount - Flat mount 2 Pole beacon mount - Flat angle mount 2 Pole beacon mount - Threaded mount 	
Compliance	ECE R65/00	e1 1740	







P/N 1726





P/N 1729

P/N 1735









P/N 8007 P/N 8007

P/N 8007FM

P/N 8007RA

P/N 8008

Rotaflex Revolving Beacon

- Amber

Rotaflex revolving beacon with polycarbonate lens and flexible rubber base.





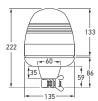
P/N 8007 P/N 8007FM





P/N 8007RA

P/N 8008





BULB

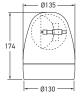
Part Number	1730	12 VOLT		
Part Number	1731		24 VOLT	
Mounting	Tubular base incorporates connection plug. Must be used in conjunction with connecting piece P/N 8007, 8007FM, 8007RA or 8008.			
Power Consumption	12V - 55W 24V - 70W	12. 30.1		
Rotation	160rpm			
RF Suppression	Conducted Class 5 (CISPR 25).			
Bulbs to Suit	12V C1255 24V 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	e1 2181		

Rotafix Revolving Beacon - Amber

Rotafix revolving beacon with polycarbonate lens and rubber base.







	12 VOLT	24 VOLT	
Part Number	1732	1732-24V	
	1733	1733-24V	MAGNETIC MOUNT
Mounting	Fixed base or with magnetic att	achment.	
Power Consumption	12V - 55W 24V - 70W		
Rotation	160 +/- 30rpm		
RF Suppression	Conducted Class 5 (CISPR 25).		
Bulbs to Suit	12V C1255 24V 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		

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

e1 2181

ECE R65/00

Compliance







	1656	RED	
Part Number	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 n 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

Magnetic Mounting Kit - Firebolt Plus

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



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



POLE BEACON MOUNT - THREADED

Part Number

8008



PIPE MOUNT FOR BEACONS - Ø165MN

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	





KL JUNIOR PLUS ACCESSORIES		
Part Number	9.1797.91	DRIVE BELT

