(	Mounting instruction Anbauanweisung	<b>L-DL-FSCT</b> 29.04.2014	(È)	<b>Mounting instruction</b> Anbauanweisung	L-DL-FSCT 29.04.2014
HELLA KGaA Hueck & Co.	<b>Τγρ:</b> 2VA 980 710	Page 1 / 2 Seite 1 / 2	HELLA KGaA Hueck & Co.	Туре: 2VA 980 710 Тур:	Page 2 / 2 Seite 2 / 2
Belongs to approval no.: E24 5882 Genon zu GenNr.:	382		Belongs to approval no.: E24 5882 Genort zu GenNr.:	182	
Rear Position-, Stop Lamp ,Rear Dir Schluss-, Bremsleuchte ,hinterer Fahrtrich	Rear Position-, Stop Lamp ,Rear Direction Indicator and Reflex Reflector for Automobile. Schluss-, Bremsleuchte ,hinterer Fahrtrichtungsanzeiger und Rückstrahler Kraltfahrzeuge.	ile.	Frc Trademark Ansic/	Front View Ansicht von vorn 1. Roar Direction Indicator Hinterer Fahrtrichtungsanzeigen	Side View Ansicht von der Seite
Light source(s): Lichtauelle(n);	Test voltage: Nominal voltage: Prülspannung: Nennspannung:	Nominal power: Nennleistung:			
1 Rear Direction Indicator Hinterer Fahrtrichtungsanzeiger 8	8 LEDs 13.5V or / oder 28V 12V or / oder 24V	4W	2	H 20 02 1 H 20 0 H 2	
œ	8 LEDs 13.5V or / oder 28V 12V or / oder 24V	4W	96		
2 Rear Position Lamp 4 Schlussleuchte	4 LEDs 13.5V or / oder 28V 12V or / oder 24V	1W	0710	A Charles axis	THE
$\mathcal{H} = \frac{\text{Centre of reference in acco}}{\text{Bezugspunkt nach den ECE-Re}}$	Centre of reference in accordance with the ECE-Regulations-No.: 3, 6 and 7. Bezugspunkt nach den ECE-Regelungen-Nr.: 3, 6 und 7.		Centre of reference border of illuminating surface Bezugspunkt für die Grenzen	3. Rear Reflex Reflector Hinterer Rückstrahler 2. Rear Position-Stop Lamp	<b>0</b> 2
Centre of reference for the definition for illuminatin. <b>F</b> = 76/756 EEC or ECE-Regulation No. 48 (see Annex A Bezugspunkt zur Bestimmung der Grenzen der leuchtenden Markierung s. auf der Abschluss-Scheibe. Maße s. Anlage A.	Centre of reference for the definition for illuminating surface in accordance with the Council Directive 76/756 EEC or ECE-Regulation No. 48 (see Annex A). Bezugspunkt zur Bestimmung der Grenzen der leuchtenden Fläche nach 76/756 EWG bzw. ECE-Regelung Nr. 48. Markierung s. auf der Abschluss-Scheibe. Maße s. Anlage A.	ith the Council Directive . ECE-Regelung Nr. 48.		Schluss-Bremsleuchte Parallel to road Parallel zur Fahrbahn	
Axis of reference: Parallel to the c Bezugsachse: Parallel zur Fahrze	Parallel to the car centre line and parallel to the road. Parallel zur Fahrzeuglängsachse und parallel zur Fahrbahn.		Anstein Anstein		
The lamp can be rotated 180° around the reference axis. Die Leuchte kann auch 180° gedreht um die Bezugsachse angebaut warden	nd the reference axis. die Bezugsachse angebaut warden.				
For left- and right hand mounting. Für links- und rechtsseitigen Embau.				223	
			Bear Ansicht Intervention Dervention Intervention Derve	View von hinten 12/24V DC Stop e Forth (-) o Stop o Indictor - Indictor	Corradia Corradia Contractor Con

#### Itivolt (Suitable for 12 and 24 volt systems) atures Include: DuraLED<sup>®</sup> Combi = Fully sealed and submersible DuraLED<sup>®</sup> Combi Stop, Rear Position, Direction Indicator and Reflector functions in a single lamp **DuraLED<sup>®</sup> Combi** = Vibration and shock resistant DuraLED<sup>®</sup> Combi = Ultra long service life

**DuraLED<sup>®</sup> Combi** = Ultra fast response time

### ens Marking and Installation Requirements

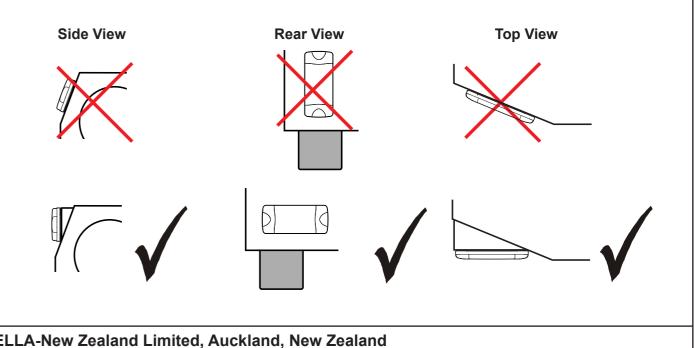
Stop / Rear Position / Rear Indicator Lamp with Reflector, identified by lens marking (£24) 5882 and the and was manufactured to comply with:

E Regulation 3 Class IA for Retro-Reflecting Devices E Regulation 6 Category 2a for Rear Direction Indicator Lamps E Regulation 7 for Rear Position (Side) / Stop Lamps

- Lamp mounting surface must be vertical to the ground, and at right angles to the longitudinal axis of the vehicle.
- Lamp must be visible from 45° inboard and 80° outboard, as well as from 15° above and below the horizontal axis.
- At least two lamps are required.
- Lamps must not be mounted less than 350 mm and more than 1200 mm above the ground.
- Lamps must be mounted within 400 mm of the widest point of the vehicle and no closer than 600 mm together.
- Lamp is approved to be mounted horizontally only.

ase refer to ECE Regulation 48 for more details.

te: When mounting lamps on a trailer, additional triangular retro-reflectors (Class IIIA) are required for ECE pliance.



# **INSTRUCTION SHEET** for: 2VA 980 710-xxx



# **APPLICATION AND MOUNTING INSTRUCTIONS** IraLED<sup>®</sup> Combi STOP / TAIL / INDICATOR LAMP with REFLECTOR

- **DuraLED<sup>®</sup> Combi** = Lens made from advanced Grilamid<sup>®</sup> material with enhanced impact and chemical resistance DuraLED<sup>®</sup> Combi = Reverse polarity protected
- DuraLED<sup>®</sup> Combi
- DuraLED<sup>®</sup> Combi
- = Low power consumption = Enhanced transient spike protection

## INSTRUCTION SHEET for: 2VA 980 710-xxx



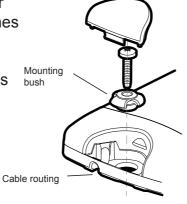
#### Lamp Mounting Instruction

#### **Screw Cap Removal**

Carefully insert a small flat blade screwdriver between the cap and the lens and pull towards the lens, the cap will clip off. To install the cap push in by hand until the top is flush with the lens.

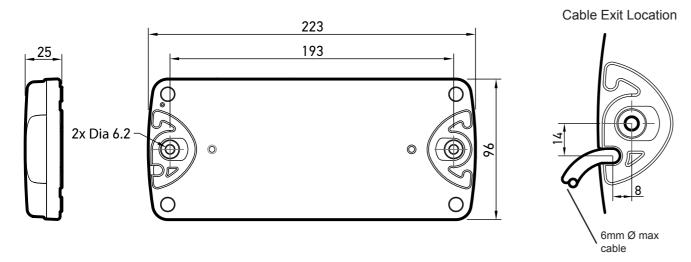
#### Surface Mounting

- Drill two holes up to 6.5mm Ø at 193mm centres. 6mm Ø screws or bolts are recommended to mount the lamp using the mounting bushes provided.
- Lamp should be mounted on a flat surface.
- If passing the cable through a hole, ensure there are no sharp edges bush to cut or chafe the cable. Alternatively, cable can be routed through the end of the base.
- Connect lamp as per chart below.
- Try to keep the cable as long as possible, preferably join the cable inside a sealed cable junction box.
- Clip the screw caps on securely until flush with the lamp surface.



Note: Bolts not included

#### General Dimensions (in millimetres)



#### Wiring Colour Coding

Lamp is polarity conscious. The reversal of the polarity will not damage this product but will inhibit its function.

HELLA recommends wire connections be soldered, and heat shrink tubing applied to seal the joint.

Colour	Connect to	Power Consumption
White	Earth (-)	-
Red	Stop (+)	4 watts
Brown	Rear Position (+)	1 watt
Blue	Indicator (+)	4 watts

**NB:** Lamp must be protected by a fuse rated at 5 amperes maximum.

# **Important Notes for Installer and Vehicle Owner**

#### Introduction

Multivolt LED signal and marker lamps offer many advantages over conventional bulb lamps. Significantly reduced power consumption, ultra long life and high tolerance to shock and vibration make LED lamps the ideal choice for the commercial transport industry, where the cost of ownership versus the initial purchase price of the product is well understood.

#### Compatibility to existing electrical systems

It is important for the installer to ascertain the compatibility of the low power consumption LED lamps with the electrical and/or electronic systems of the complete vehicle, including trailers. In most cases the reduced power consumption is beneficial by imposing less demands on the entire electrical system. For certain functions some electrical systems rely on a set power consumption for monitoring whether, for example, a trailer is connected.

Operation of this lamp using alternating current or modulated direct voltage will cause premature light failure. HELLA recommends connecting ADR or ECE certified Multivolt LED signal and marker lamps to a continuous (unmodulated) 12V or 24V power supply to ensure safe light operation.

#### Electromagnetic Compatibility (EMC)

This Multivolt LED lamp is an electronic device. The electrical circuits contain components that suppress possible interference, both emission as well as susceptibility, to the limits prescribed in UNECE Vehicle Regulation No. 10.

To avoid false signals or interference, it is standard practice that sensitive instrumentation such as ABS and Tachometers etc. are provided with direct earths.

#### Protection against damage due to voltage spikes

This Multivolt LED lamp is protected against damage from positive voltage spikes caused by events such as load dump conditions specified in ISO 7637 and contains a Transient Voltage Suppressor (TVS) designed to withstand a pulse of up to 5000 Watts.

The lamp is protected against reverse polarity connection and negative voltage spikes of up to 1000 volts.

#### **Electric Welding**

Electric Welding may damage the LED lamps. For LED lamps, HELLA recommends the negative connection to be wired isolated from the vehicle chassis. If the lamp uses the chassis as the earth return it is recommended that this earth return is disconnected during electric welding.

# FIT AND FORGET - BY DESIGN

Congratulations, the product you have selected comes from HELLA - a world leader in LED lighting design.

Following the launch of the first LED automotive signal lamps in 1990, HELLA Design and Innovation continues to set new standards. HELLA innovative solutions have been incorporated into millions of lamps, engineered and tested to the most stringent standards, to suit the most demanding environmental conditions.

The cornerstone to the success of our products is our no compromise Fit and Forget - by Design philosophy which is incorporated into every step of the product life cycle.

In a world consuming finite resources at an ever faster rate, Fit and Forget - by Design is the right environmental choice that also makes perfect economic sense to customers that consider the total life cycle Cost of Ownership.

For general comments about Hella's products please contact us on E-mail at techfeedback@hella.co.nz



