#### **INSTRUCTION SHEET**

# for: 2BE 980 819-xxx / 2110



# ADR - APPLICATION AND MOUNTING INSTRUCTIONS

# LED FRONT DIRECTION INDICATOR / FRONT POSITION LAMP

**12V DC Only 24V DC Only** 2110-12V 2110-24V

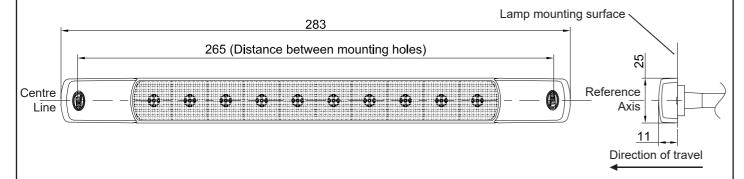
# Lens Marking and ADR 13/00 Installation Requirements

This lamp module, identified by lens marking 0880 C, with clear lens was manufactured to comply with ADR 6/00 Category 1 Front Direction Indicator Lamps ADR 49/00 Front Position (Side) Lamps

- A tolerance of +/-3° applies on all mounting details.
- Lamp module mounting surface must be vertical to the ground and facing to the front.
- Lamp module reference axis must be parallel to the vehicle longitudinal axis.
- Lamp must be visible from 45° inboard and 80° outboard, as well as from 15° above and below the horizontal axis.
- Two lamp modules are required per vehicle.
- Lamp modules must not be mounted less than 350 mm and more than 1500 mm above the ground.
- Lamp modules 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 or vertically.

Notes: Please refer to ADR 13/00 for more details.

# General Dimensions (mm)



# **Product Contents**

Description	2110-12V	2110-24V
LED Front DI/PO Lamp with 3.0 m cable	x1	x1
Screw Cap	x2	x2
Mounting Screw	x2	x2
Application and Mounting Instructions	x1	x1

PART NUMBER	CTA NUMBER	ADR 51/00 GLOBE	LENS IDENTIFICATION NO.
2110-12V 2BE 980 819-3xx 980.819-3xx	CTA-049241	N/A	0880 C
2110-24V 2BE 980 819-4xx 980.819-4xx	CTA-049252	LED	

# Hella-New Zealand Limited, Auckland

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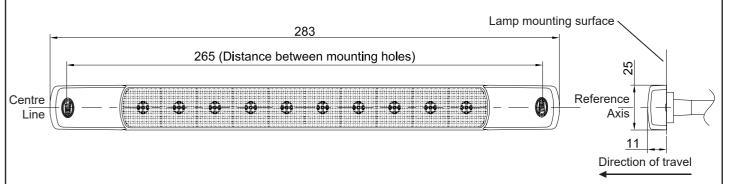
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Hella-New Zealand Limited, Auckland

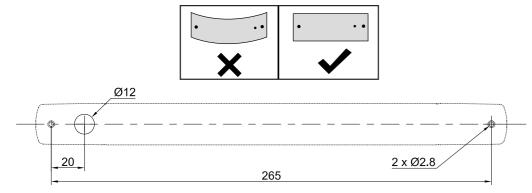
958 315-80 / 02.21 958 315-80 / 02.21

# INSTRUCTION SHEET for: 2BE 980 819-xxx / 2110



# **Mounting Instructions**

Lamp must be mounted horizontally or vertically on a flat surface with no curvature.



- · See previous page and drawing above for correct positioning of the lamp module.
- Drill two 2.8 mm Ø mounting holes at 265 mm centres through the mounting surface to allow fitment of the lamp. A hole size of Ø12 mm is required for the cable and spigot backplate to pass through.
- When passing the cable through the hole, ensure there are no sharp edges to cut or chafe the cable. Connect the wires as per the table below and test that the lamp functions correctly.
- Using the mounting screws tighten the lamp to the mounting surface (Maximum torque 1.5Nm).
- Fit screw cans

Note: Do not overtighten the mounting screws in the plastic lens.

If it is necessary to remove the screw caps, lever them out with a small flat head screw driver.

#### Wiring Instructions

- 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.

Wire Colour	Connect to	Power Consumption
White	Earth (-)	-
Yellow	Front Direction Indicator (+)	3 watts
Blue	Front Position (+)	<1 watt

Note: Lamp must be protected by a fuse rated at 3 amperes maximum.

#### 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, an indicator globe has failed or 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 LED signal and marker lamps to a continuous (unmodulated) 12V or 24V power supply to ensure safe light operation.

# **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.

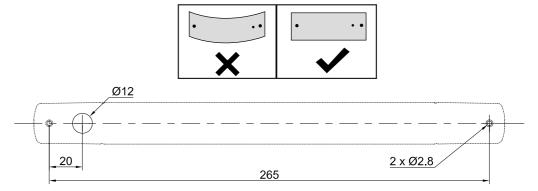
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