



**ADR - APPLICATION AND MOUNTING INSTRUCTIONS**  
ADR 49/00 Rear End-Outline Marker Lamp  
ADR 49/00 Rear Position (Side) Lamp

**REAR END-OUTLINE MARKER LAMP AND REAR POSITION (SIDE) LAMP**

**Lens Marking and ADR 13/00 Installation Requirements**

This lamp, identified by lens marking R A (E4) 02 7597 and the HELLA logo was manufactured to comply with ADR 49/00 Rear End-Outline Lamps / Rear Position (Side) Lamps

- A tolerance of +/-3 degrees applies on all mounting details.
- Lamp mounting surface must be vertical to the ground and be square to the vehicle longitudinal axis
- Lamp reference axis can be horizontal or vertical.

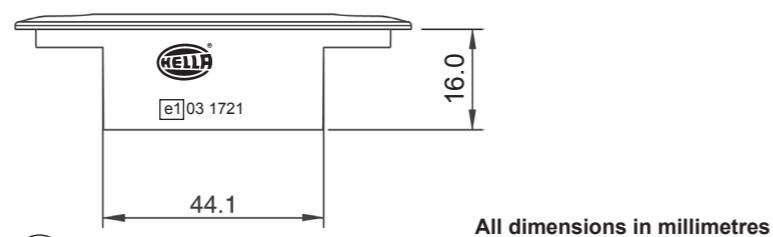
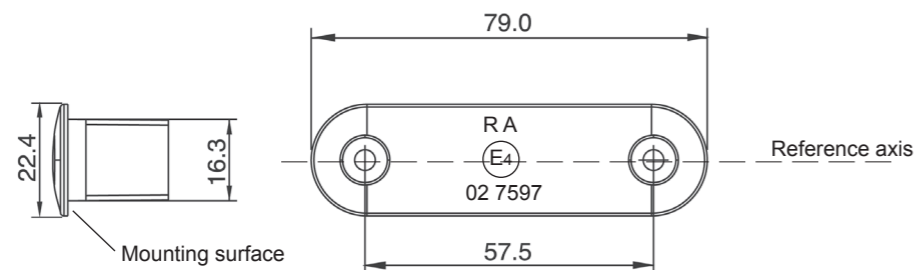
**Rear End-Outline Marker Lamp**

- Lamp must be visible between  
Horizontal angle: 0° inwards (parallel with vehicle axis) and 80° outwards  
Vertical angle: 5° above and 20° below the horizontal

**Rear Position (Side) Lamp**

- Lamp must be visible between  
Horizontal angle: 45° inwards and 80° outwards  
Vertical angle: 15° above and below the horizontal

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



Note: Lamp may be mounted in the horizontal or vertical position.

LENS IDENTIFICATION NUMBER: R A (E4) 02 7597

All dimensions in millimetres

CATALOGUE NUMBER	ENGINEERING NUMBER	CRN / ECE NUMBER	COMPLIANCE NUMBER	ADR 51/00 GLOBE	ADR APPLICABLE
2308	2XA 959 790-40	ECE R E4 02 7597	ECE R E4 02 7597	N/A LED	ADR 49/00 ECE R 7/01
AMENDMENTS			ADR COMPLIANCE VERIFIED <i>[Signature]</i>	ISSUE DATE:	
07/04	10/08			10/00	
					959 149-34

HELLA-New Zealand Limited, Auckland



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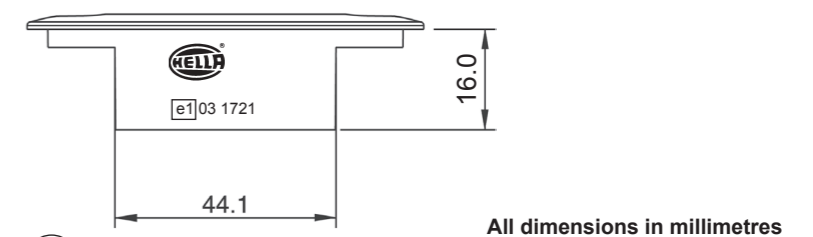
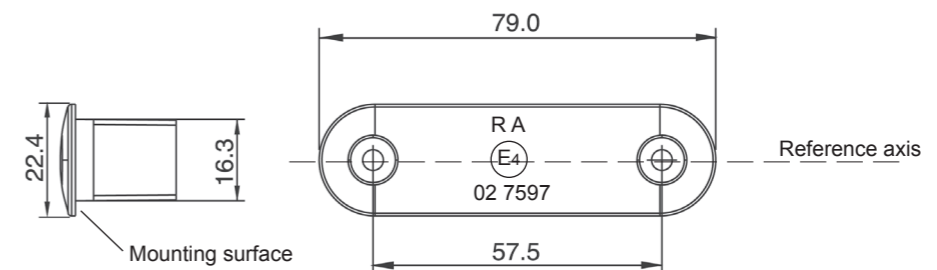
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INSTRUCTION SHEET  
for: **2BA 959 610-4xx / 2308 / 2308-BULK**



**Lamp Mounting Instructions**

Ensure the lamp is mounted on a flat surface with the gasket provided. The lens may be used as a template for themounting holes. Mount the lamp and fit screw caps into the mounting hole recesses of the lens.

Note: Lamp is fully sealed and has no serviceable components. If it is necessary to remove the screw caps, use a pin.

**Wiring Colour Coding**

The marker lamp is multi voltage capable allowing full light output between 8 and 28 volts. LED lamps are polarity conscious. Reverse 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
Black	Earth (-)	-
Red	Positive(+)	0.4 watts @ 12 volts 0.8 watts @ 24 volts

**NB:** Lamp must be protected by a fuse rated at 2 amperes maximum.

**Energy saving recommendation for 24 volt systems**

To derive the full benefit of the low power consumption (0.4 watts), HELLA recommends to wire pairs of marker lamps in series.

**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.

**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](mailto:techfeedback@hella.co.nz)

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