



**ADR - APPLICATION AND MOUNTING INSTRUCTIONS**

ADR 49/00 Amber Front End-Outline Marker Lamp

**DuraLED® FRONT END-OUTLINE MARKER LAMP**  
Multivolt (Suitable for 12 and 24 volt systems)

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

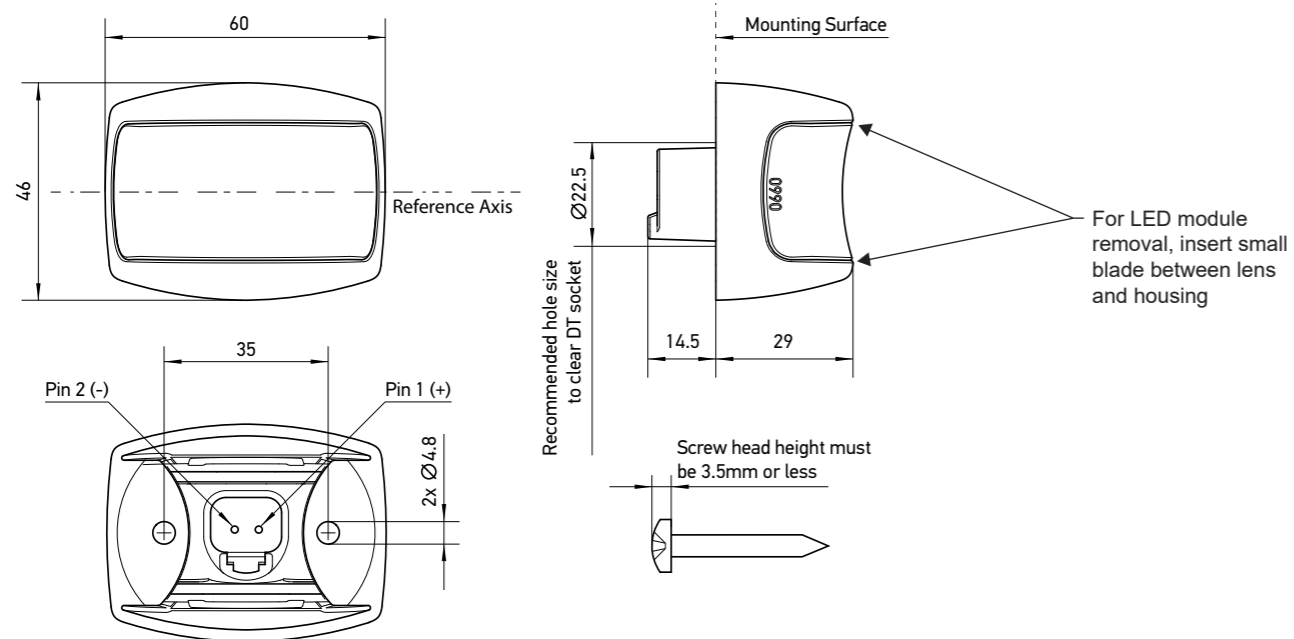
This Marker Lamp, identified by lens marking 0990 and the HELLA logo was manufactured to comply with ADR 49/00 Front End-Outline Lamps (Trailers only).

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

**Front 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

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



PART NUMBER	CTA NUMBER	ADR 51/00 GLOBE	LENS IDENTIFICATION NO.
2071 2PF 980 990-4xx 980.990-4xx	CTA-045943	N/A LED	0990

HELLA-New Zealand Limited, Auckland



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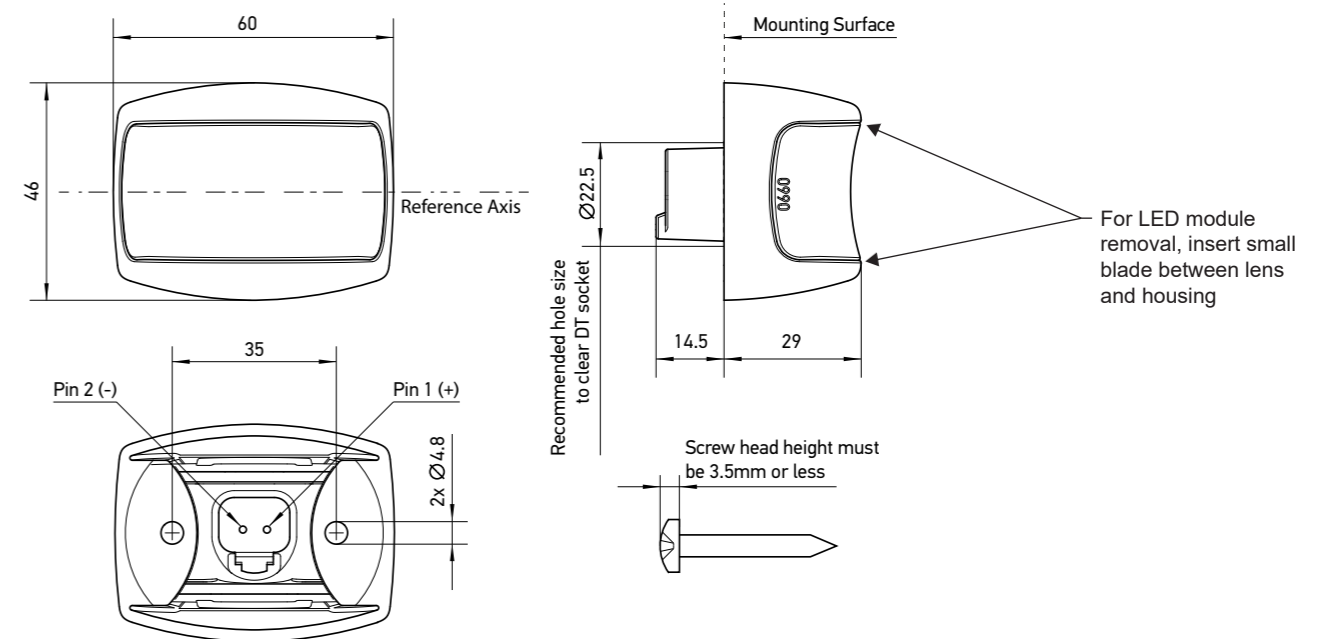
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INSTRUCTION SHEET

for: **2PF 980 990-40x / 2071 / 2071-BULK**



**Lamp Mounting Instructions**

- Lamp should be mounted on a flat surface.
- The housing may be used as a template for the mounting holes. Do not mount the lamp where damage is likely to be sustained due to tie-downs and other securing devices.
- Drill two holes up to Ø5 mm at 35mm centres.
- A minimum hole size of Ø22.5 mm is required for the Deutsch 2-way socket in the backplate.
- Mount the housing using Ø4 mm screws or bolts with maximum head height of 3.5mm (not included).
- Prepare the lamp cable (not supplied) using the correct plug connector (Deutsch P/N DT06-2S), wedge (Deutsch P/N W2S) and terminals (Deutsch P/N 0462-201-16141). These Deutsch parts can be purchased separately as a kit (HELLA P/N 4960-P / 8JA 959 736-811).
- Push the LED module firmly into the housing until it snaps into position.

**LED Module Instructions**

The LED module is securely fastened to prevent dislodging in service, and removal would not normally be required. If it becomes necessary to remove the module, insert a small blade on both sides of the LED module and the housing at the correct position and prise the module free from the housing (See diagram over page).

Note: The LED module is fully sealed and has no serviceable components.

**Wiring Colour Coding**

The LED lamp is multi voltage capable for optimum brightness in 12 and 24 Volt systems. 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.

Pin No.	Connect to	Power Consumption
1	Positive (+)	< 1W
2	Earth (-)	-

**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 HELLA recommends to wire pairs of LED side 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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