


INSTRUCTION SHEET
for: **2SB 959 060-20x / 2331-BULK**



ADR - APPLICATION AND
MOUNTING INSTRUCTIONS

DuraLED[®] LED STOP/TAIL LAMP WITH POLYCARBONATE LENS

Multivolt 9 - 33 volts

Lens Marking and ADR 13/00 Installation Requirements

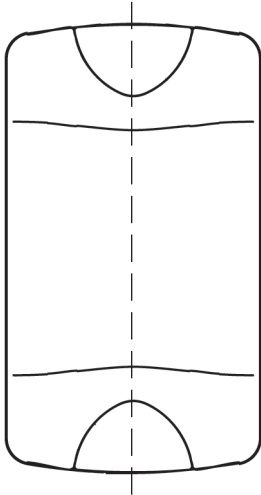
This lamp module, identified by lens marking 9060, with red lens was manufactured to comply with:
ADR 49/00 Rear Position (Side) / Stop Lamps.

- A tolerance of +/-3° applies on all mounting details.
- Lamp module mounting plane must be vertical to the ground
- Lamp module reference axis must be parallel to the vehicle longitudinal axis
- Lamp module centre line must be horizontal or vertical to the ground (see diagram below)
- Lamp module must be visible from 45° inboard and 80° outboard, as well as from 15° above and below the horizontal axis
- Lamp is approved to be mounted horizontally or vertically.

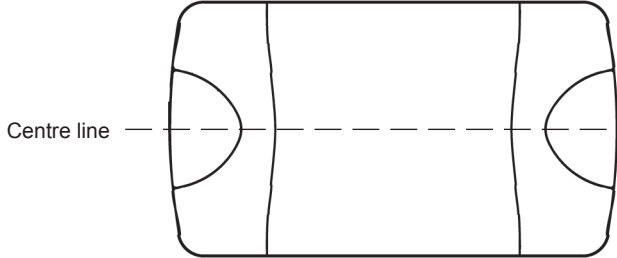
Notes: Please refer to ADR 13/00 for more details.

Lamp does not include a reflex reflector.

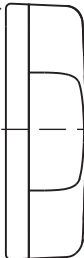
Centre line



Centre line




Lamp module mounting plane



Reference Axis

LENS IDENTIFICATION NUMBER: 9060

| CATALOGUE NUMBER | ENGINEERING NUMBER | CRN NUMBER | COMPLIANCE NUMBER | ADR 51/00 GLOBE | ADR APPLICABLE |
|------------------|--------------------|--------------------------------|----------------------------|---|----------------------------|
| 2331-BULK | 2SB 959 060-20 | 42558 / 42560 42559 / 42561 | 8-2330-H-17 8-2330-V-17 | N/A LED | ADR 49/00 |
| AMENDMENTS | | | | ADR COMPLIANCE VERIFIED  | ISSUE DATE: 07/1998 |
| 05/2010 | 07/2010 | | | | |
| | | | | | 959 149-02 |

Hella-New Zealand Limited, Auckland.

959 149-02 / 05.19

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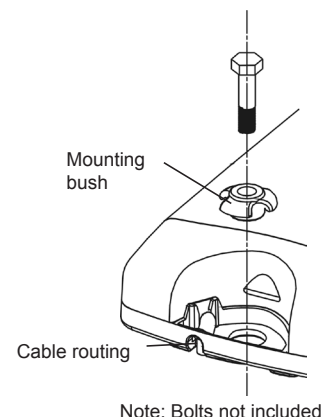
Installation

Screw Cap Removal

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

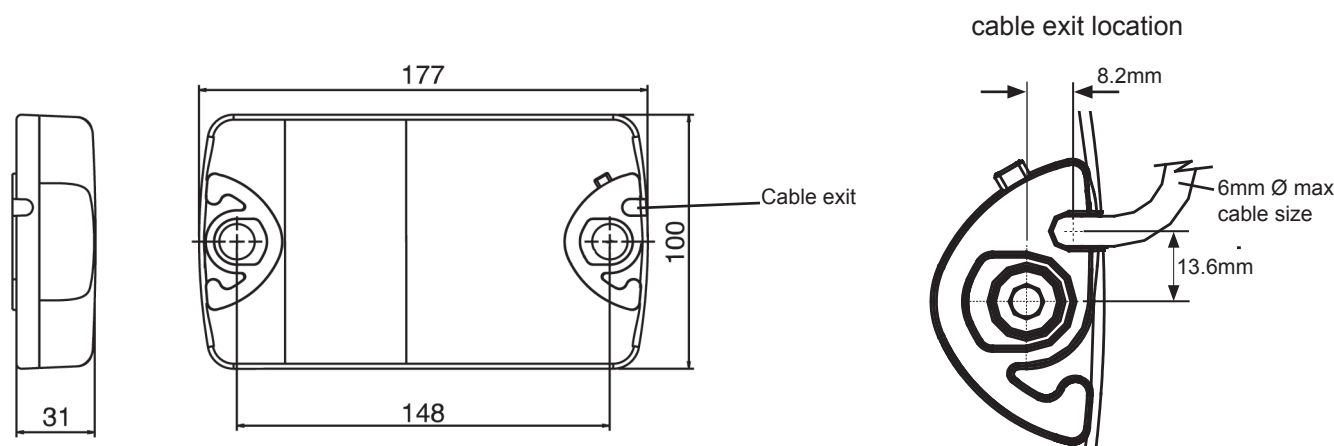
Surface Mounting

- Drill two holes up to 6.5mm Ø at 148mm 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 to cut or chafe the cable.
- Alternatively, cable can be routed through the end of the base.
- Connect cable as per chart below.
- Clip the screw caps on securely until flush with the lamp surface



Note: When mounting lamp units side by side allow a gap of 5mm to ensure screw cap removal.

General Dimensions (in millimetres)



Wiring Colour Coding

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

| Colour | Connect to | Power Consumption |
|--------|------------|-------------------|
| White | Earth (-) | - |
| Red | Stop (+) | 6 watts |
| Brown | Tail (+) | 1 watt |
| Blue | Park (+) | 1 watt |

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

Important Notes for the 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 the 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.

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 technical requirements for the application of the Regulatory Compliance Mark (RCM).

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 up to severity level 3 of ISO 7637-2 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.

