The device must be mounted according to the enclosed fitting documents (e.g. sketch + Annex A). Der An- bzw. Einbau der Geräte hat nach anliegenden An- bzw. Einbauunterlagen (z. B. Skizze und Anlege A) zu erfolgen.	L-00 (E24) 5860 License plate lamp Kennzeichenleuchte parallel to road parallel zur Fahrbahn centre of reference border of illuminating surface Bezugspunkt fuer die Grenzen der leuchtenden Flaechen		 Centre of reference for the definition for illuminating surface in accordance with the Council Dire 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. Axis of reference: Parallel to the car centre line and parallel to the road. 	Kennzeichenleuchte 2 LEDs 13.5V / 28.0V 12.0V - 24.0V Kennzeichenleuchte 2 LEDs 13.5V / 28.0V 12.0V - 24.0V H Example of reference in accordance with the ECE-Regulations - No. 3, 4, 6, 7. 13.5V / 28.0V 12.0V - 24.0V H Example of reference in accordance with the ECE-Regulations - No. 3, 4, 6, 7. 13.5V / 28.0V 12.0V - 24.0V		Direction Indicator Fahrtrichtungsanzeiger 4	Stop Lamp Bremsleuchte 4	Rear Position Lamp Schlussleuchte	Light source(s): Lichtquelle(n):	Belongs to approval no.: E24 5860 Gehört zu GenMr.: Rear Position-, Stop Lamp, Direction-Indicator and Reflex Reflector for Automobile. Schluss-, Bremsleuchte, Fahrtrichtungsanzeiger und Rückstrahler für Kraltfahrzeuge. Optionally assembled with a License Plate Lamp Wahlweise zusammengebaut mit einer Kennzeichenleuchte	HELLA KGaA Hueck & Co.	
o the enclosed fittin, genden An- bzw. Einba		s illustrated. Ri I. Der Einbau des Lamp can be re kann auch 180° Sc ate Lamp can b ate Lamp can b	• the definition 1 gulation No. 48 gung der Grenzen c huss-Scheibe. Ma ahrzeuglängsachs	accordance wit E-Regelungen - N	LEDs	4 LEDs	4 LEDs	2 LEDs		E24 5860 irection-Indicator ungsanzeiger und R License Plate Lau Liner Kennzeichenle	Type: Typ:	Мо
g documents (e. g. sketch + uunterlagen (z. B. Skizze und Ar	Ansicht von vorn 96 mm	ght hand unit to be m rechten Gerätes erfolgt s otated 180° around the chritten gedreht um die E re rotated in 90° steps Schritten gedreht um di	eference for the definition for illuminating surface in <i>z</i> or ECE-Regulation No. 48 (see Annex A). <i>1 zur Bestimmung der Grenzen der leuchtenden Fläche nach</i> 76, <i>3. auf der Abschluss-Scheibe. Maße s. Anlage A.</i> Parallel to the car centre line and parallel to the road. Parallel zur Fahrzeudängsachse und parallel zur Fahrbahn.	h the ECE-Regulatior r. 3, 4, 6, 7.	13.5V / 28.0V	13.5V / 28.0V	13.5V / 28.0V	13.5V / 28.0V	Design voltage: Prüfspannung:	and Reflex Reflector vückstrahler für Kraftfahrz mp uchte	2VB 980 720	Mounting Instruction Anbauanweisung
Annex A). rlage A) zu erfolgen.	Rear position-, stopla Schluss-, Bremslicht 02 R1-S1 01 2a (E24) Reflex reflector Rueckstrahler Direction indicator Fahrtrichtungsanzeiger	iounted mirror invert priegelbiidlich. e reference axis. ezugsachse angebaut w around the referenc Bezugsachse angebau	ce in accordance wit ach 76/756 EWG bzw. E i road.	ıs - No. 3, 4, 6, 7.	12.0V - 24.0V	12.0V - 24.0V	12.0V - 24.0V	12.0V - 24.0V	Nominal voltage: Nennspannung:	for Automobile. euge.		ction g
	Rear position., stoplamp Schluss., Bremslicht 02 R1-S1 01 2a E24 A Beflex reflector Rueckstrahler Direction indicator Fahrtrichtungsanzeiger	ed. /erden. / werden.	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. reference: Parallel to the car centre line and parallel to the road. Asso: Parallel zur Fahrzeudfandsachse und parallel zur Fahrbahn.		1.0W	2.0W	2.0W	1.0W	Nominal power: Nennleistung:		Page 1 / Seite 1	LI-K Ke 廖 31485 13.01.2011
The device must be mounted according to the enclosed fitting documents (e. g. sketch + Annex A). Der An-bzw. Einbau der Geräte hat nach anliegenden An-bzw. Einbauunterlagen (z. B. Skizze und Anlege A) zu erfolgen.	parallel to attached area and perpendicularly to road parallel zur Anbringungsebene und senkrecht zur Fahrbahn		parallel to road parallel zur Fahrbahn	26 mm			%. 		<u>Side - View</u> Ansicht von der Seite	Belongs to approval no.: E24 5860 Gehört zu GenNr.: Rear Position-, Stop Lamp, Direction-Indicator and Reflex Reflector for Schluss-, Bremsleuchte, Fahrtrichtungsanzeiger und Rückstrahler für Kraftfahrzeuge Optionally assembled with a License Plate Lamp Wahlweise zusammengebaut mit einer Kennzeichenleuchte	HELLA KGaA Hueck & Co.	
ne enclosed fitting d den An- bzw. Einbauun			Fahrbahn		Reference axis	Bezugsachse	Bezugsachse	reference axis	<u>View</u> der Seite	E24 5860 irection-Indicator a ungsanzeiger und Rüc License Plate Lamp iner Kennzeichenleuci	Type: <i>Typ:</i>	Mou
-	<u>Top - View / sectio</u> Ansicht von oben / s B	Kennzeichenschild license plate	<u>Front - View</u> Ansicht von vorn	axi	eren				<u>Top - View / sect:</u> Ansicht von oben /	Belongs to approval no.: E24 5860 Gehört zu GenNr.: Rear Position-, Stop Lamp, Direction-Indicator and Reflex Reflector for Automobile. Schluss, Bremsleuchte, Fahrtrichtungsanzeiger und Rückstrahler für Kraftfahrzeuge. Optionally assembled with a License Plate Lamp Wahlweise zusammengebaut mit einer Kennzeichenleuchte	2VB 980 720	Mounting Instruction Anbauanweisung
	middle attached area Witte Anbringungsflaeche	hild		Bezugs achse			ē.	Page 2 / Seite 2	LI-K Ke 噫 31485 13.01.2011			

APPLICATION AND MOUNTING INSTRUCTIONS LED COMBINATION TRAILER LAMP STOP, REAR POSITION, NUMBER PLATE, REAR INDICATOR LAMP WITH REFLECTOR 12 / 24V DC Lens Marking and Installation Requirements This Stop / Rear Position / Number Plate / Rear Indicator Lamp with Reflector, identified by lens marking (E24) 5860 and the is logo was manufactured to comply with: ECE Regulation 3 Class IA for Retro-Reflecting Devices ECE Regulation 4 for Devices for the Illumination of Rear Registration Plates ECE Regulation 6 Category 2a for Rear Direction Indicator Lamps ECE 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. Lamps must be mounted no less than 350 mm and no more than 900 mm above the ground. • Lamps to 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. Please refer to ECE Regulation 48 for more details. Note: When mounting lamps on a trailer, additional triangular retro-reflectors (Class IIIA) are required for ECE compliance. **Top View** Side View **Rear View** <u>innnn</u>

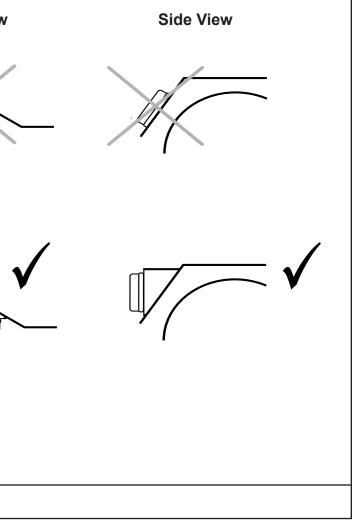
HELLA-New Zealand Limited, Auckland

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INSTRUCTION SHEET for: Part No. 2VB 980 720-4xx





INSTRUCTION SHEET for Part No. 2VB 980 720-4xx



Lamp Mounting

Drill the required number of holes through the mounting surface using the mounting frame as a template. Secure the mounting frame using low profile bolts or screws of the correct diameter. Check relevant hole diameters in the general dimension drawing below.

The mounting frame is designed so that the lamp module can be fitted with the cable exiting in one direction only. Confirm cable direction is correct before assembling the mounting frame.

Alternatively, the cable may be routed through a hole in the mounting surface. If passing the cable through a hole, ensure that there are no sharp edges to cut or chafe the cable.

Connect lamp as per wiring table below. Clip the lamp module into the mounting base ensuring that the clips have secured the lamp module. Try to keep the cable as long as possible, preferably join the cable inside a sealed cable junction box.

Wiring Colour Coding

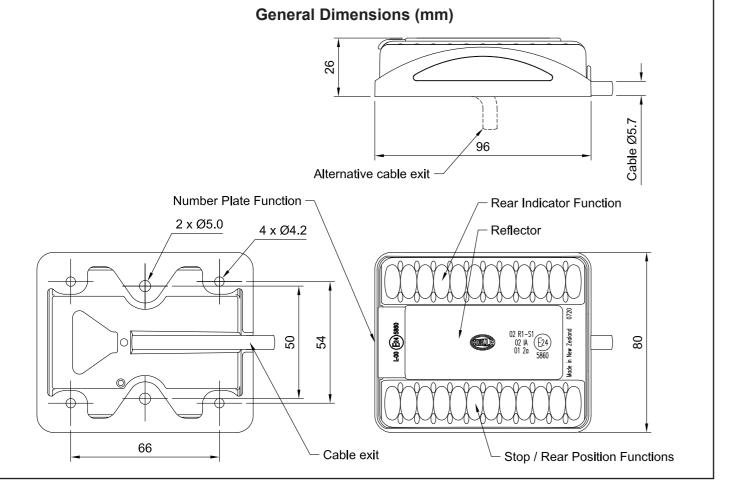
This lamp allows full light output on both 12 and 24 volt vehicles and trailers.

LED modules 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				
White	Earth (-)	-				
Red	Stop (+)	2 watts				
Brown	Rear Position / Number Plate (+)	1 watt				
Blue	Rear Indicator (+)	2 watts				

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



Important Notes for Installer and Vehicle Owner

Introduction

This LED lamp offers many advantages over conventional bulb lamps. Significantly reduced power consumption, ultra long life, fully sealed construction and high tolerance to shock and vibration makes this LED lamp the ideal choice for boat and small / medium sized trailers.

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 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.

Protection against damage due to voltage spikes

This LED lamp is protected against damage from positive voltage spikes caused by events such as load dump conditions specified in ISO 7637.

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.

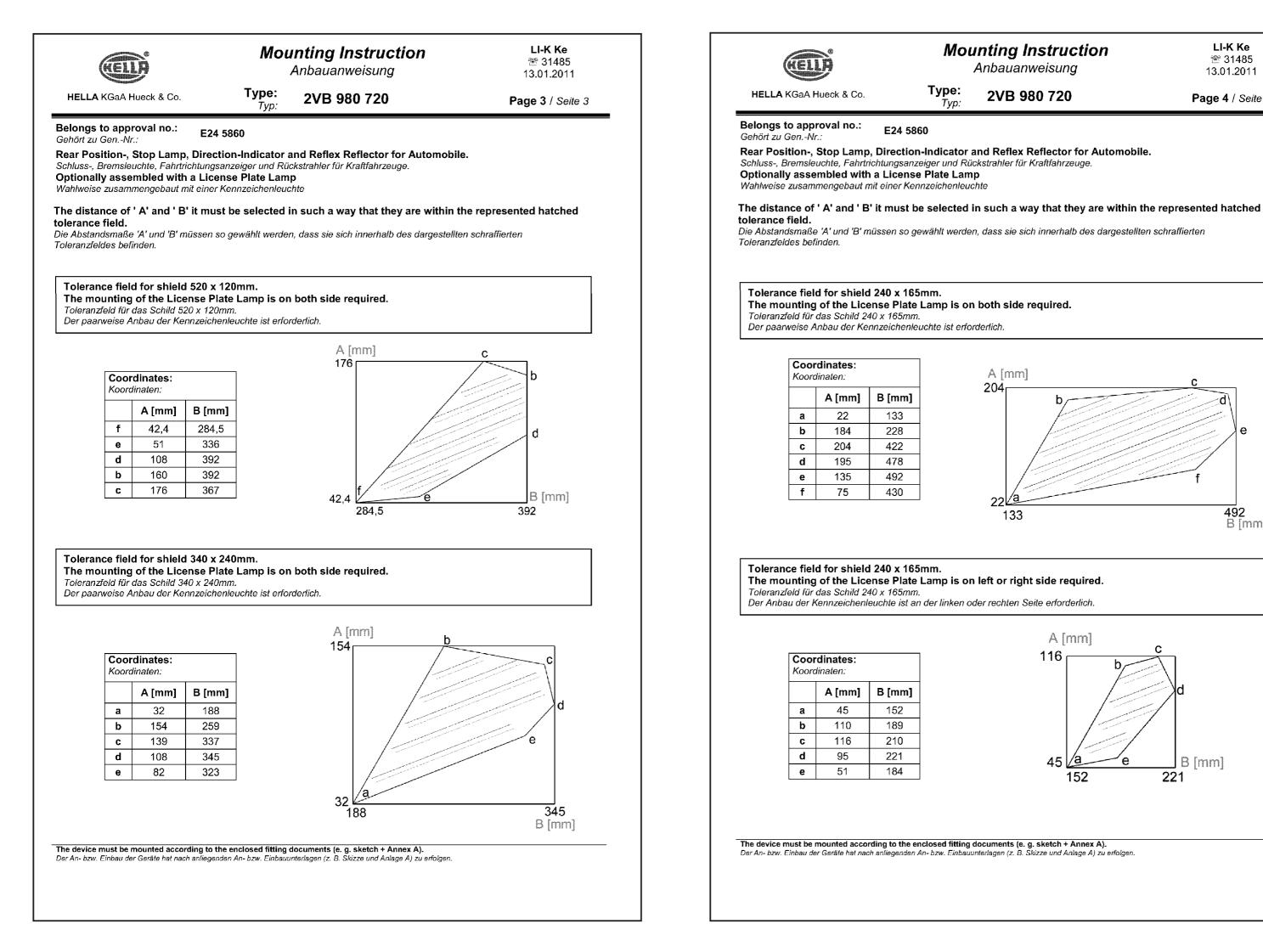
The cornerstone to the success of our products is our no compromise *Fit and Forget - by Design* philosophy which is incorporated into every step of the product life cycle.

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







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