



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.

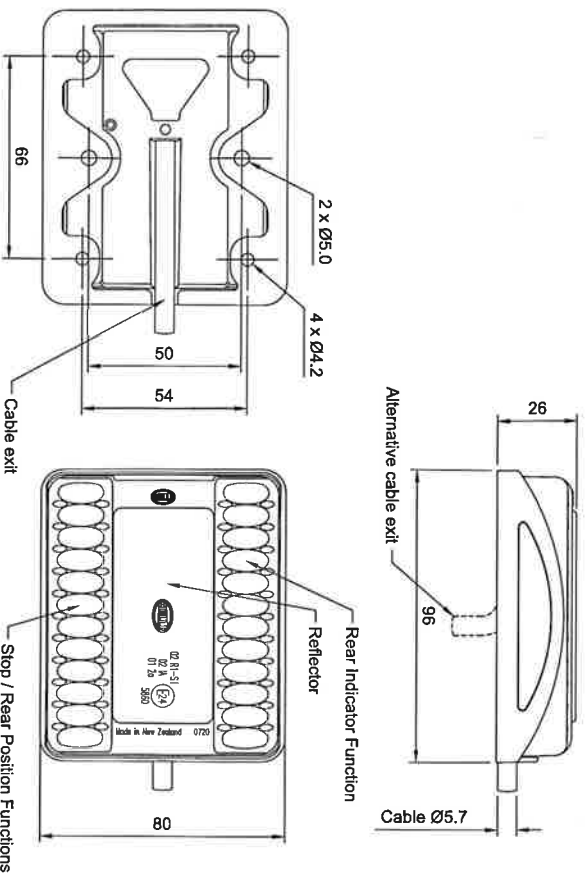
LED modules are polarity conscious. Reverse polarity will not damage this product but will inhibit its function.

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 (+)	1 watt
Blue	Rear Indicator (+)	2 watts

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

General Dimensions (mm)



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 the European Union Directive 2004/104/EC.

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.

INSTRUCTION SHEET
for **Part No. 2VA 980 720-0xx**



APPLICATION AND
MOUNTING INSTRUCTIONS

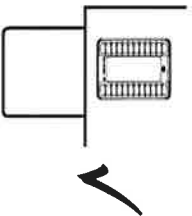
**LED REAR COMBINATION LAMP
STOP, REAR POSITION, REAR INDICATOR LAMP WITH REFLECTOR
12 / 24V DC**

Lens Marking and Installation Requirements

- This Stop / Rear Position / Rear Indicator Lamp with Reflector, identified by lens marking was manufactured to comply with:
- ECE Regulation 3 Class 1A for Retro-Reflecting Devices
 - 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 or vertically.
 - 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.

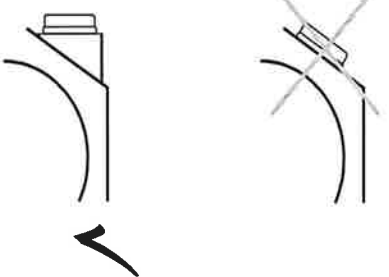
Rear View



Top View



Side View



Mounting Instruction
Anbauanweisung

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HELLA KGaA Hueck & Co.
Typ: 2VB 980 720
Belongs to approval no.: E24 8860

Light source(s): Leuchtmittel:	Design voltage: Nennspannung:	Nominal voltage: Nennspannung:	Nominal power: Nennleistung:
Rear Position Lamp 2 LEDs	13,5V / 28,0V	12,0V - 24,0V	1,0W
Stop Lamp 4 LEDs	13,5V / 28,0V	12,0V - 24,0V	2,0W
Direction Indicator Fahrlichtanzeiger	13,5V / 28,0V	12,0V - 24,0V	2,0W
License Plate Lamp 2 LEDs	13,5V / 28,0V	12,0V - 24,0V	1,0W

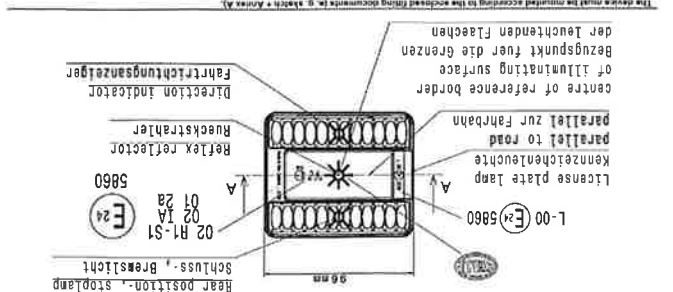
Light sources must be mounted according to the enclosed fitting documents (E, A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, AA, AB, AC, AD, AE, AF, AG, AH, AI, AJ, AK, AL, AM, AN, AO, AP, AQ, AR, AS, AT, AU, AV, AW, AX, AY, AZ, BA, BB, BC, BD, BE, BF, BG, BH, BI, BJ, BK, BL, BM, BN, BO, BP, BQ, BR, BS, BT, BU, BV, BW, BX, BY, BZ, CA, CB, CC, CD, CE, CF, CG, CH, CI, CJ, CK, CL, CM, CN, CO, CP, CQ, CR, CS, CT, CU, CV, CW, CX, CY, CZ, DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, DK, DL, DM, DN, DO, DP, DQ, DR, DS, DT, DU, DV, DW, DX, DY, DZ, EA, EB, EC, ED, EE, EF, EG, EH, EI, EJ, EK, EL, EM, EN, EO, EP, EQ, ER, ES, ET, EU, EV, EW, EX, EY, EZ, FA, FB, FC, FD, FE, FF, FG, FH, FI, FJ, FK, FL, FM, FN, FO, FP, FQ, FR, FS, FT, FU, FV, FW, FX, FY, FZ, GA, GB, GC, GD, GE, GF, GG, GH, GI, GJ, GK, GL, GM, GN, GO, GP, GQ, GR, GS, GT, GU, GV, GW, GX, GY, GZ, HA, HB, HC, HD, HE, HF, HG, HH, HI, HJ, HK, HL, HM, HN, HO, HP, HQ, HR, HS, HT, HU, HV, HW, HX, HY, HZ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, IK, IL, IM, IN, IO, IP, IQ, IR, IS, IT, IU, IV, IW, IX, IY, IZ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, JK, JL, JM, JN, JO, JP, JQ, JR, JS, JT, JU, JV, JW, JX, JY, JZ, KA, KB, KC, KD, KE, KF, KG, KH, KI, KJ, KK, KL, KM, KN, KO, KP, KQ, KR, KS, KT, KU, KV, KW, KX, KY, KZ, LA, LB, LC, LD, LE, LF, LG, LH, LI, LJ, LK, LL, LM, LN, LO, LP, LQ, LR, LS, LT, LU, LV, LW, LX, LY, LZ, MA, MB, MC, MD, ME, MF, MG, MH, MI, MJ, MK, ML, MM, MN, MO, MP, MQ, MR, MS, MT, MU, MV, MW, MX, MY, MZ, NA, NB, NC, ND, NE, NF, NG, NH, NI, NJ, NK, NL, NM, NN, NO, NP, NQ, NR, NS, NT, NU, NV, NW, NX, NY, NZ, OA, OB, OC, OD, OE, OF, OG, OH, OI, OJ, OK, OL, OM, ON, OO, OP, OQ, OR, OS, OT, OU, OV, OW, OX, OY, OZ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, PK, PL, PM, PN, PO, PP, PQ, PR, PS, PT, PU, PV, PW, PX, PY, PZ, QA, QB, QC, QD, QE, QF, QG, QH, QI, QJ, QK, QL, QM, QN, QO, QP, QQ, QR, QS, QT, QU, QV, QW, QX, QY, QZ, RA, RB, RC, RD, RE, RF, RG, RH, RI, RJ, RK, RL, RM, RN, RO, RP, RQ, RR, RS, RT, RU, RV, RW, RX, RY, RZ, SA, SB, SC, SD, SE, SF, SG, SH, SI, SJ, SK, SL, SM, SN, SO, SP, SQ, SR, SS, ST, SU, SV, SW, SX, SY, SZ, TA, TB, TC, TD, TE, TF, TG, TH, TI, TJ, TK, TL, TM, TN, TO, TP, TQ, TR, TS, TT, TU, TV, TW, TX, TY, TZ, UA, UB, UC, UD, UE, UF, UG, UH, UI, UJ, UK, UL, UM, UN, UO, UP, UQ, UR, US, UT, UU, UV, UW, UX, UY, UZ, VA, VB, VC, VD, VE, VF, VG, VH, VI, VJ, VK, VL, VM, VN, VO, VP, VQ, VR, VS, VT, VU, VV, VW, VX, VY, VZ, WA, WB, WC, WD, WE, WF, WG, WH, WI, WJ, WK, WL, WM, WN, WO, WP, WQ, WR, WS, WT, WU, WV, WW, WX, WY, WZ, XA, XB, XC, XD, XE, XF, XG, XH, XI, XJ, XK, XL, XM, XN, XO, XP, XQ, XR, XS, XT, XU, XV, XW, XX, XY, XZ, YA, YB, YC, YD, YE, YF, YG, YH, YI, YJ, YK, YL, YM, YN, YO, YP, YQ, YR, YS, YT, YU, YV, YW, YX, YY, YZ, ZA, ZB, ZC, ZD, ZE, ZF, ZG, ZH, ZI, ZJ, ZK, ZL, ZM, ZN, ZO, ZP, ZQ, ZR, ZS, ZT, ZU, ZV, ZW, ZX, ZY, ZZ.

HELLA KGaA Hueck & Co.
Typ: 2VB 980 720
Belongs to approval no.: E24 8860

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Mounting of the left hand unit is illustrated. Right hand unit to be mounted mirror inverted.
Einbau des linken Gerätes dargestellt. Der Einbau des rechten Gerätes erfolgt spiegelbildlich.
The version with License Plate Lamp can be rotated 180° around the reference axis.
Die Version mit Kennzeichenschild kann auch 180° Schrägung gedreht um die Bezugsachse angebau werden.
The version without License Plate Lamp can be rotated in 90° around the reference axis.
Die Version ohne Kennzeichenschild kann auch in 90° Schrägung gedreht um die Bezugsachse angebau werden.



Mounting Instruction
Anbauanweisung

HELLA KGaA Hueck & Co.
Typ: 2VB 980 720
Belongs to approval no.: E24 8860

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