

**MONTAGEANLEITUNG**

90 MM LED L4060 FERNSCHEINWERFER

**INSTALLATION INSTRUCTION**

90 MM LED L4060 DRIVING LAMPS

**INSTRUCTIONS DE MONTAGE**

90 MM LED L4060 PROJECTEURS LONGUE PORTÉE

**MONTERINGSANVISNING**

90 MM LED L4060 FJÄRRSTRÅLKASTARE

**MONTAGEHANDLEIDING**

90 MM LED L4060 VÉRSTRALERS

**INSTRUCCIONES DE MONTAJE**

90 MM LED L4060 LED FAROS DE LARGO ALCANCE

**ISTRUZIONI DI MONTAGGIO**

90 MM LED L4060 LED MODULE PROIETTORI DI PROFONDITÀ

**ASENNUSOHJE**

90 MM LED L4060 LISÄKAUKOVALOT

**DE**

Technische Änderungen vorbehalten. Das hier beschriebene System ist belüftet. In seltenen Fällen kann es durch Umgebungsbedingungen zu geringer Kondensation von Luftfeuchtigkeit an der Streuscheibe kommen. Dieses Kondensat löst sich jedoch rückstandsfrei auf und hat keine schädigenden Einflüsse.

**EN**

Subject to alteration without notice. The system described here is ventilated. In rare cases, environmental conditions may cause slight condensation of humidity on the lens. This condensation nevertheless evaporates without leaving behind any residue and has no damaging impact.

**FR**

Sous réserve de modifications techniques. Le système décrit ici est ventilé. Dans de rares cas, il peut arriver que le diffuseur soit soumis à une faible condensation par l'humidité de l'air dans des conditions ambiantes. Toutefois, ce condensat se dissout sans résidu et n'a aucun effet nocif.

**SV**

Vi reserverar oss för tekniska ändringar. Systemet som beskrivs här är ventilerat. I sällsynta fall kan omgivningsförhållanden leda till att fukt kondenseras på spridningslinsen. Kondensen försvinner utan att lämna spår och har inga skadliga effekter.

**NL**

Technische wijzigingen voorbehouden. Het hier omschreven systeem is geventileerd. In zeldzame gevallen kunnen omgevingsfactoren ertoe leiden dat er, vanwege de luchtvochtigheid, lichte condensatie op de lichtverstrooiende plaat ontstaat. Dit condensaat verdwijnt echter weer zonder sporen achter te laten en heeft geen schadelijke invloed.

**ES**

Reservadas modificaciones técnicas. El sistema aquí descrito está ventilado. En raras ocasiones, las condiciones ambientales pueden hacer que haya una baja condensación de humedad del aire en el cristal difusor. Sin embargo, este líquido de condensación se disuelve sin generar residuos y no tiene efectos perjudiciales.

**IT**

Con riserva di modifichè tecniche. Il sistema qui descritto è ventilato. In rari casi le condizioni ambientali possono comportare una bassa condensazione dell'umidità atmosferica sul diffusore di luce. Questa condensa si scioglie tuttavia priva di residui e non ha alcuni influssi dannosi.

**FI**

Oikeus teknisiin muutoksiin pidätetään. Tässä kuvailtu järjestelmä on tuulettuva. Joskus harvoin suuntauslinssin pintaan voi tiivistyä hieman kosteutta ympäristöolojen vuoksi. Tämä tiivistynyt kosteus kuitenkin poistuu jäämiä jättämättä eikä sillä ole haitallisia vaikutuksia.

**Zeichenerklärung**  
**Explanation symbols**  
**Explication des symboles**

**Symbolförklaring**  
**Legenda**  
**Aclaración de símbolos**

**Legenda**  
**Piirroksen selitys**



- (DE) Richtig  
 (EN) Correct  
 (FR) Correct  
 (SV) Rätt  
 (NL) Goed  
 (ES) Correcto  
 (IT) Giusto  
 (FI) Oikein



- (DE) Falsch  
 (EN) Incorrect  
 (FR) Incorrect  
 (SV) Fel  
 (NL) Fout  
 (ES) Erróneo  
 (IT) Sbagliato  
 (FI) Väärin



- (DE) Positionspfeil  
 (EN) Location/Position Arrow  
 (FR) Flèche de Position  
 (SV) Positionpil  
 (NL) Lokatie/Positie pijl  
 (ES) Flecha de posición  
 (IT) Freccia di posizione  
 (FI) Paikannusnuoli



- (DE) Bewegungspfeil  
 (EN) Movement Arrow  
 (FR) Flèche indiquant sens du mouvement  
 (SV) Rörelsepil  
 (NL) Richtingspijl  
 (ES) Flecha de movimiento  
 (IT) Freccia di movimento  
 (FI) Liikesuuntanuoli



- (DE) Achtung  
 (EN) Warning  
 (FR) Attention  
 (SV) Varning  
 (NL) Let op  
 (ES) Atención  
 (IT) Attenzione  
 (FI) Huomio



- (DE) Abklemmen  
 (EN) Disconnect  
 (FR) Déconnecter  
 (SV) Koppla los  
 (NL) Demonteren  
 (ES) Desconectar  
 (IT) Staccare  
 (FI) Irrota



- (DE) Verbinden  
 (EN) Connect  
 (FR) Connecter  
 (SV) Anslut  
 (NL) In elkaar  
 (ES) Conectar  
 (IT) Collegare  
 (FI) Yhdistä



- (DE) Siehe  
 (EN) Look/See  
 (FR) Voir  
 (SV) Se  
 (NL) Kijkjen naar  
 (ES) Ver  
 (IT) Vedere  
 (FI) Katso

**Zeichenerklärung**  
**Explanation symbols**  
**Explication des symboles**

**Symbolförklaring**  
**Legenda**  
**Aclaración de símbolos**

**Legenda**  
**Piirroksen selitys**



- (DE)** Fernlicht
- (EN)** High beam
- (FR)** Feu de route
- (SV)** Helljus
- (NL)** Grootlicht
- (ES)** Luz de largo alcance
- (IT)** Luce abbagliante
- (FI)** Kaukovalo



- (DE)** Tagfahrlicht
- (EN)** Daytime running light
- (FR)** Feu de jour
- (SV)** Varselljus
- (NL)** Dagrijverlichting
- (ES)** Luz de conducción diurna
- (IT)** Luce di marcia diurna
- (FI)** Päiväajovalo



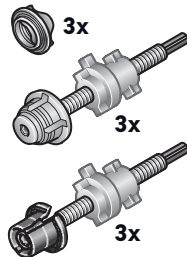
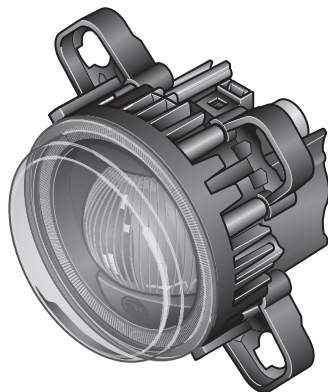
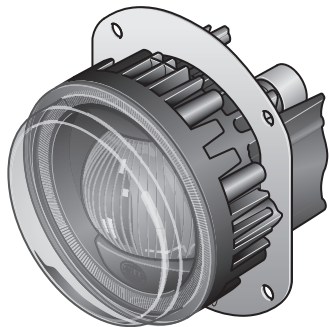
- (DE)** Positionslicht
- (EN)** Position light
- (FR)** Feu de position
- (SV)** Positionsljus
- (NL)** Positielicht
- (ES)** Luz de posición
- (IT)** Luce di posizione
- (FI)** Seisontavalo



**Lieferumfang**  
**Scope of delivery**  
**Fourniture**

**Leveransomfattning**  
**Leveringsomvang**  
**Alcance de suministro**

**Contenuto della confezione**  
**Toimituksen sisältö**



**1FO 011 988-021**



**1FO 011 988-121**



**1FO 011 988-031**



**1FO 011 988-131**



Zubehör  
Accessories  
Accessories

Tillbehör  
Toebehoren  
Accessorios

Accessori  
Lisätarvikkeet

**1FO 011 988-021/ -031  
-121/ -131**



**8JA 202 231-002**



**8KW 863 933-013 (50x)**



**9GD 863 952-022**  
(0,35 - 0,5 mm)

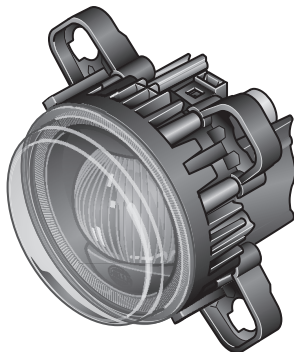


**9GD 863 952-012**  
(0,75 mm)



**9GD 863 952-002 (50x)**

**1FO 011 988-121/ -131**



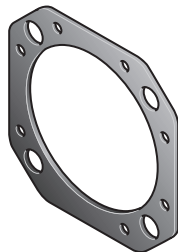
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**1FO 011 988-131**



**9AH 169 580-011**

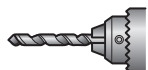
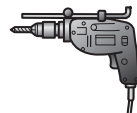
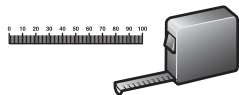


**9AH 254 228-001**

**Benötigte Montagewerkzeuge**  
Installation tools required  
Outils de montage requis

**Nödvändiga monteringsverktyg**  
Benodigde montagewerktuigen  
Herramientas de montaje necesarias

**Attrezzi necessari per il montaggio**  
Tarvittavat asennustyökalut



**3,5 mm**  
**5 mm**  
**6,5 mm**



**14 mm**  
**16 mm**  
**17 mm**  
**24 mm**



**SW 10**



**Torx 20**

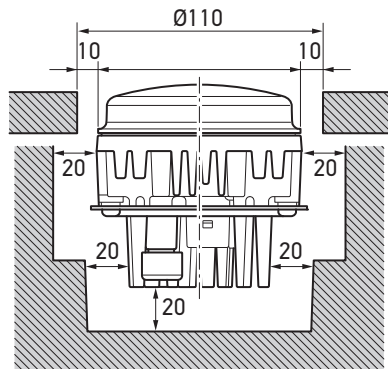
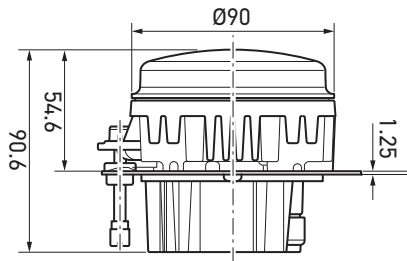


Montage  
Mounting  
Montage Général

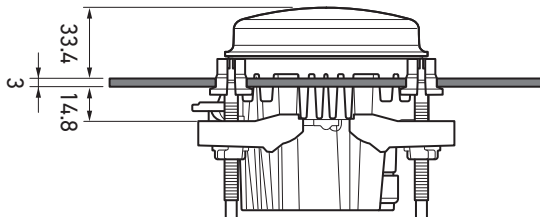
Montering  
Montage  
Montaje

Montaggio  
Asennus

**1FO 011 988-021/ -031**

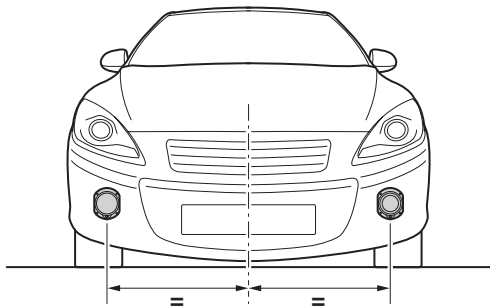


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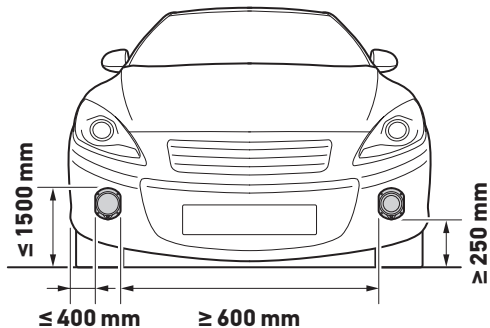
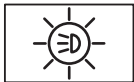


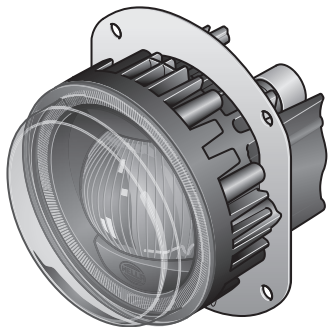


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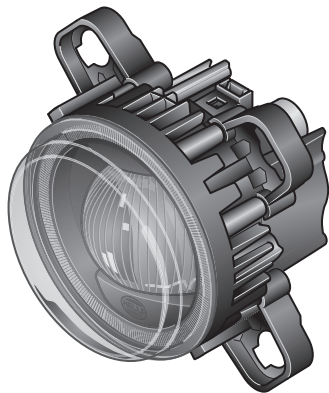


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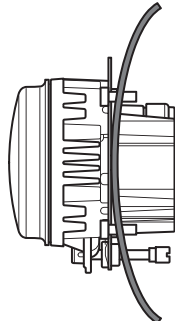
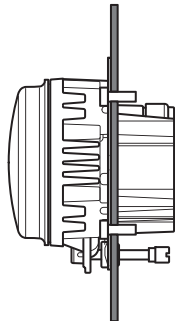
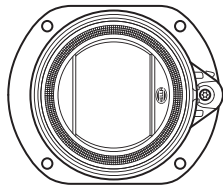
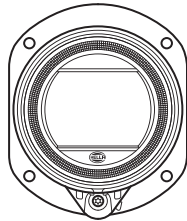
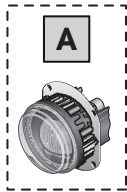


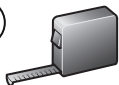
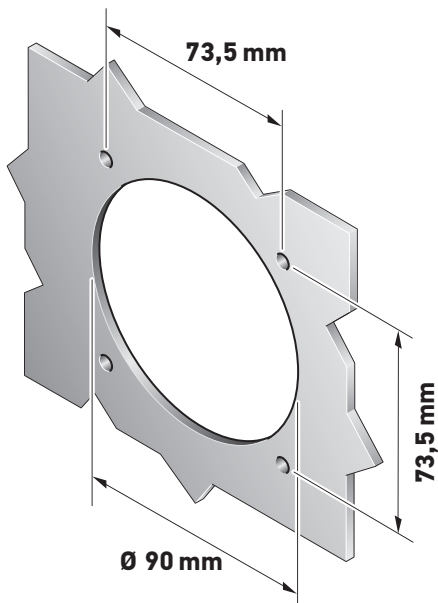


**A**  11 - 13



**B**  14 - 25



**A****1****2****3****4****5****6****7**

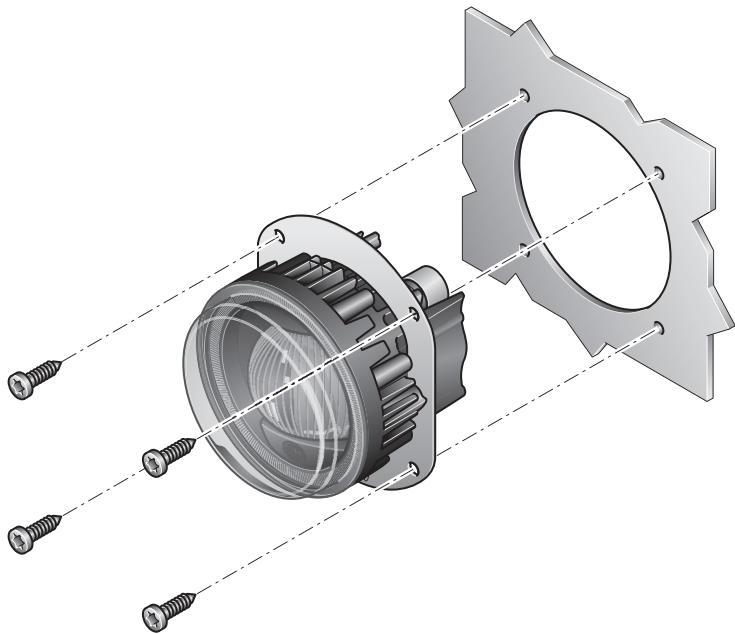
73,5 mm

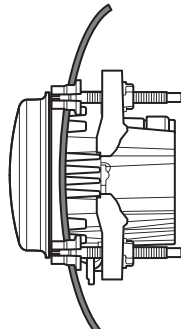
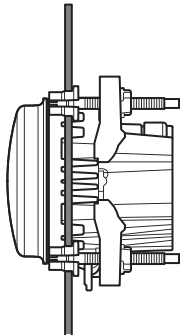
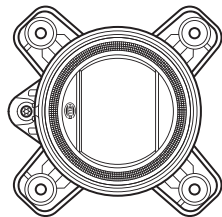
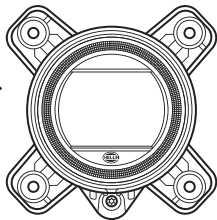
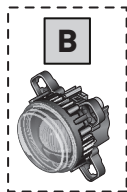
73,5 mm

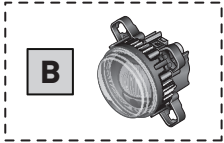



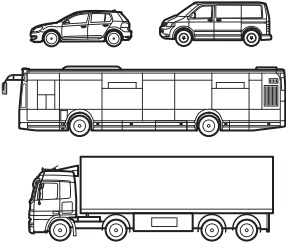

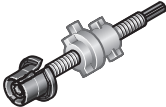

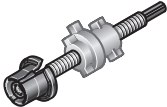

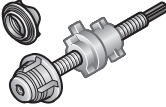
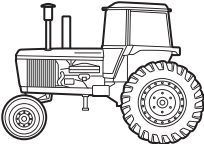

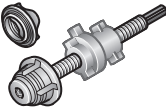


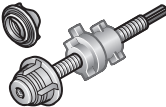
Ø 90 mm



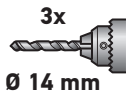
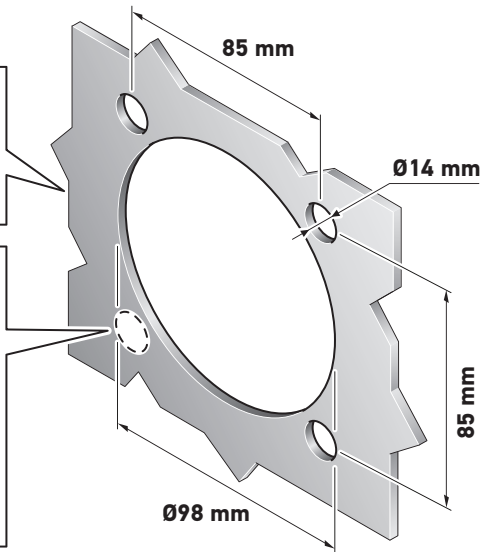
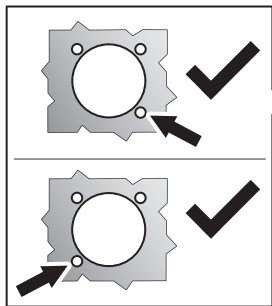
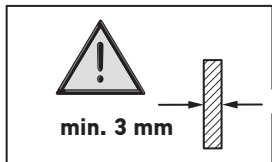
A



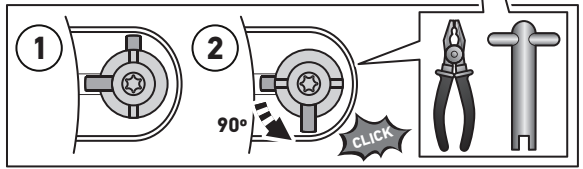
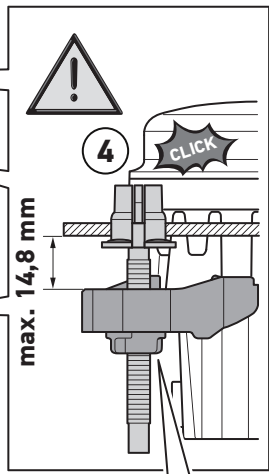
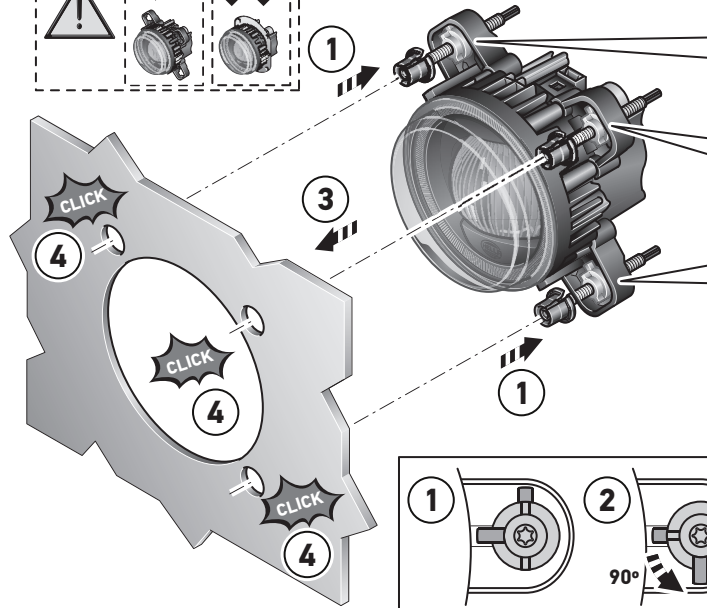
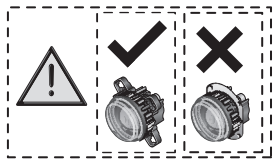


		 <p>9AH 169-580-011</p>	 <p>9AH 254-228-001</p>
	<p><b>B1</b></p>  <p><b>16-17</b></p> 	<p><b>B3</b></p>  <p><b>20-22</b></p> 	<p><b>B4</b></p>  <p><b>23-25</b></p> 
	<p><b>B2</b></p>  <p><b>18-19</b></p> 		<p><b>B4</b></p>  <p><b>23-25</b></p> 

**B1**



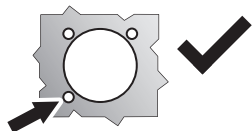
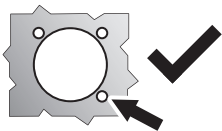
B1



**B2**



min. 3 mm

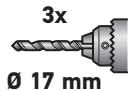
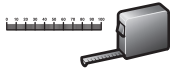


85 mm

Ø17 mm

85 mm

Ø98 mm



B2



1

3

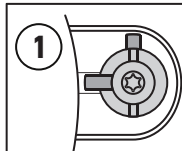
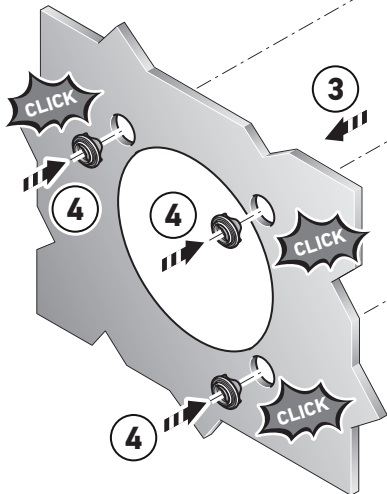
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4

CLICK

max. 14,8 mm



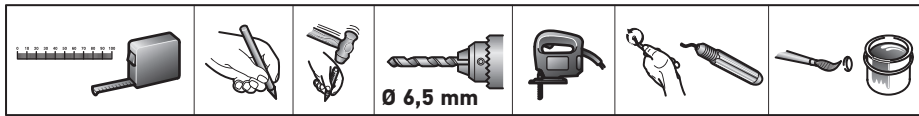
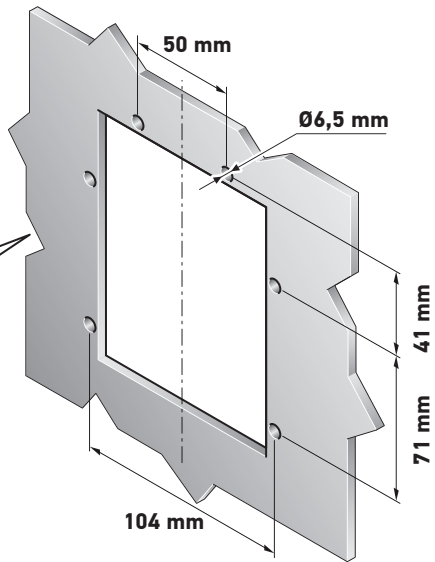
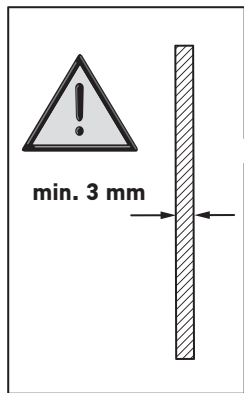
2

90°

CLICK

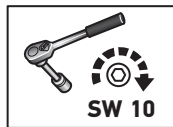
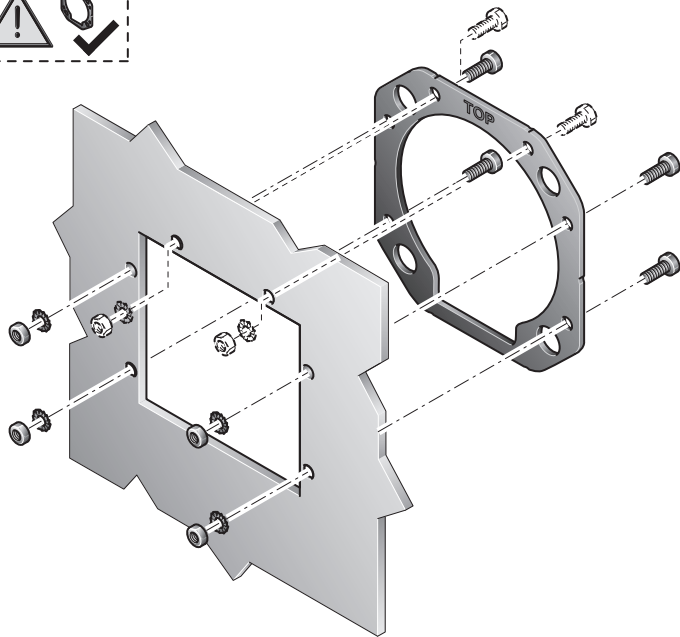


B3

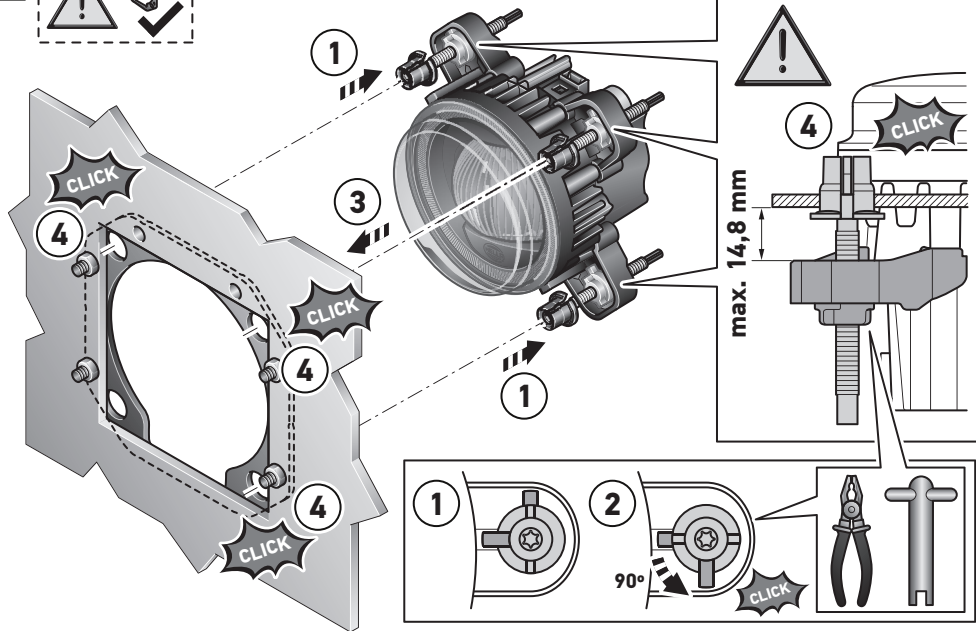




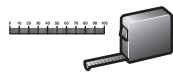
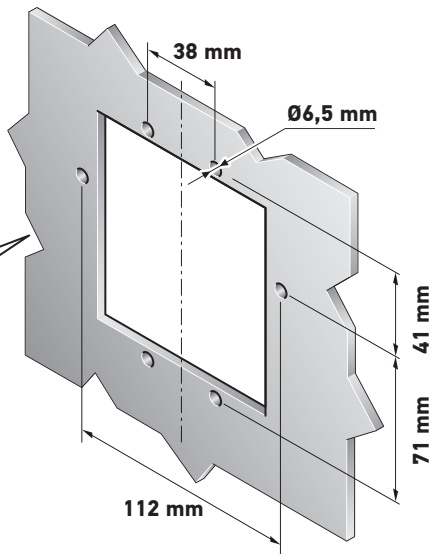
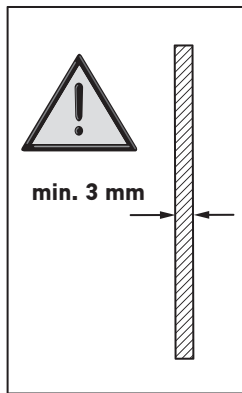
B3



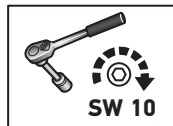
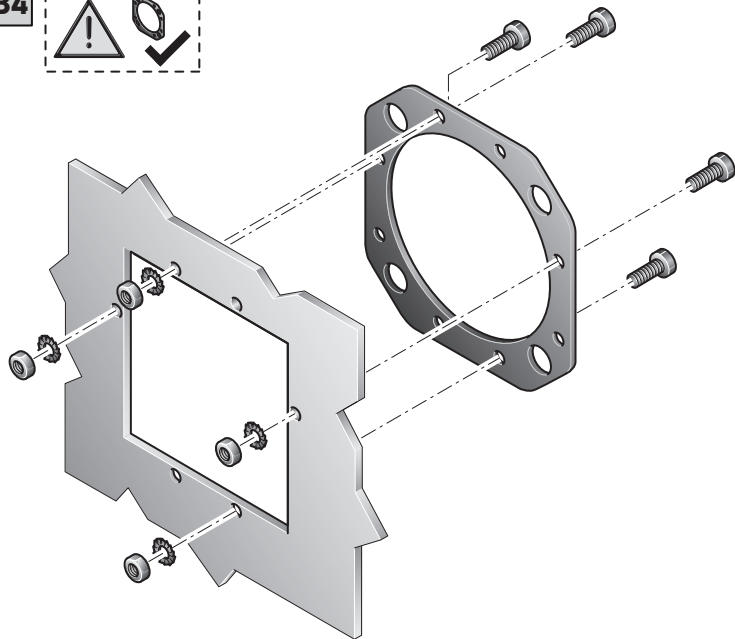
B3



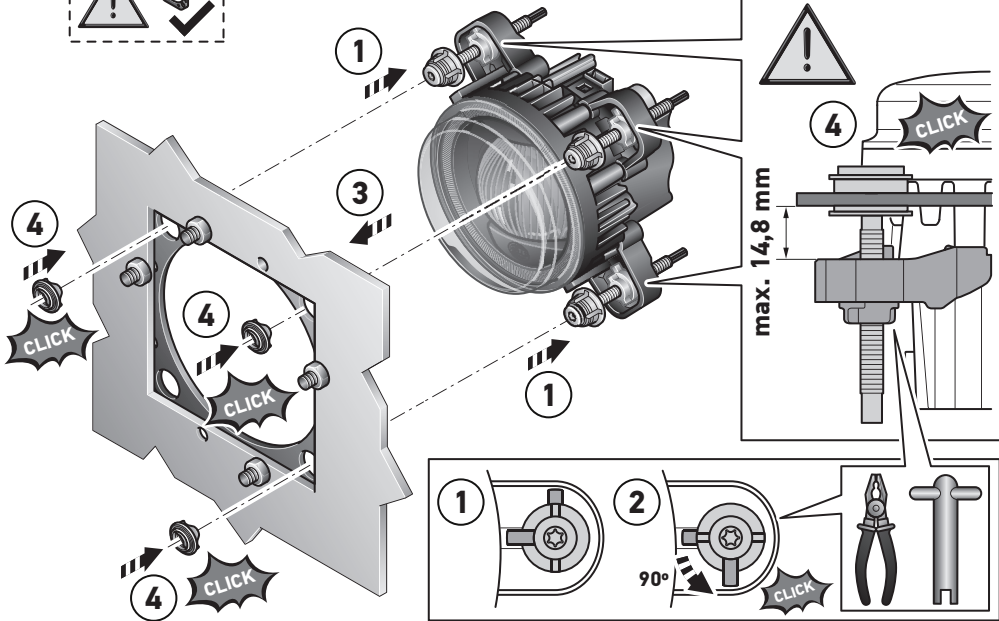
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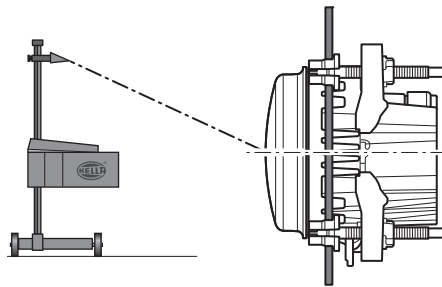
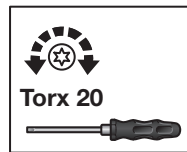
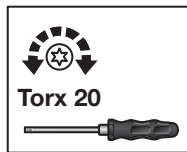
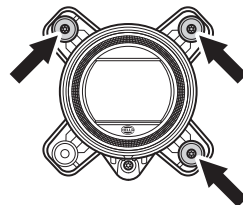
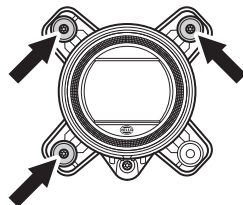
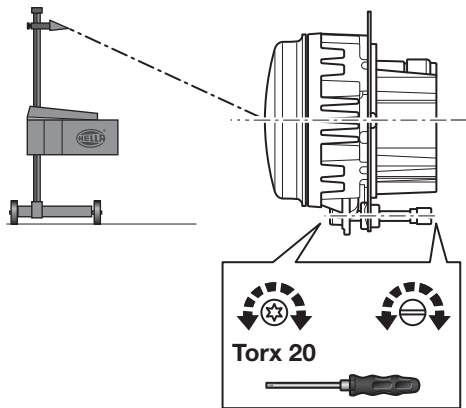
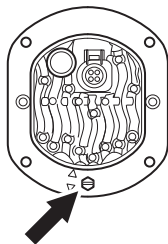
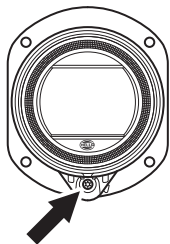


**B4**



B4

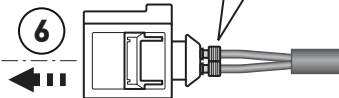
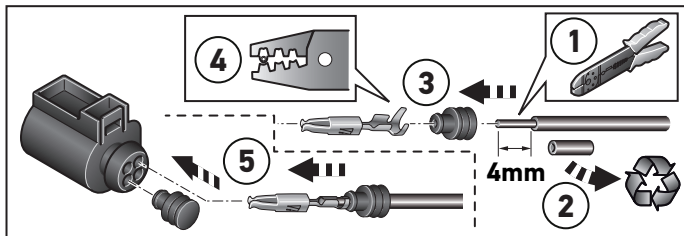
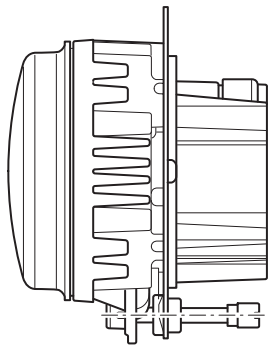




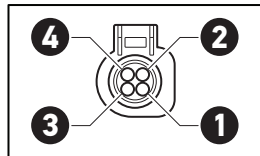
**Elektrischer Anschluss**  
**Electrical connection**  
**Branchement électrique**

**Elektrisk anslutning**  
**Elektrische aansluiting**  
**Conexión eléctrica**

**Collegamento elettrico**  
**Osaluettelo**



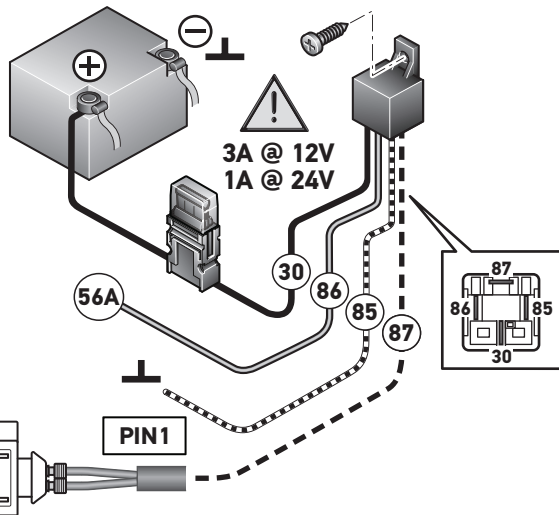
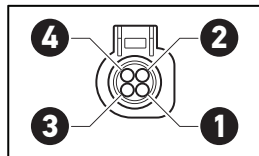
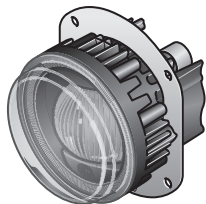
- |            |  |            |
|------------|--|------------|
| <b>1</b> = |  | <b>56A</b> |
| <b>2</b> = |  | <b>58</b>  |
| <b>3</b> = |  | <b>31</b>  |
| <b>4</b> = |  | <b>15</b>  |



**Elektrischer Anschluss**  
**Electrical connection**  
**Branchement électrique**

**Elektrisk anslutning**  
**Elektrische aansluiting**  
**Conexión eléctrica**

**Collegamento elettrico**  
**Osaluuttelo**





**FR FRANÇAIS**

Respecter les directives et les dispositions légales de chaque pays applicables aux véhicules automobiles lors du montage des projecteurs !

**ES ESPAÑOL**

¡Siempre deberán respetarse las disposiciones y directrices legales propias de cada país relacionadas con el montaje de los faros en los vehículos!

**DE DEUTSCH**

Die jeweiligen landesspezifischen gesetzlichen Vorgaben und Richtlinien für Kraftfahrzeuge, sind bei der Montage der Scheinwerfer zu beachten!

**SV SVENSKA**

De rådande landsspecifika l agstaddade föreskrifter och riktlinjer för motorfordon måste följas när strålkastare monteras.

**IT ITALIANO**

Al montaggio dei proiettori, rispettare le relative prescrizioni e normative legali specifiche del Paese per autoveicoli!

**EN ENGLISH**

The relevant country-specific statutory specifications and regulations for motor vehicles must be observed when installing headlamps!

**NL NEDERLANDS**

De toepasselijke landspecifieke wettelijke vereisten en richtlijnen voor motorvoertuigen moeten bij de montage van de schijnwerpers in acht worden genomen!

**FI SUOMI**

Valoja asennettaessa on noudatettava moottoriajoneuvoja koskevia maakohtaisia lakimääräyksiä ja ohjeita.

## **DE** TECHNISCHE DATEN

Fernlicht max. 20W  
Tagfahrlicht max. 16W  
Positionslicht max. 2W  
Betriebsspannung 9-32V  
Strom im Fehlerfall < 10mA  
Absicherung pro Funktion: 3A(12V)/1A(24V)

## **SV** TEKNISKA DATA

Helljus max 20W  
Varselljus max 16W  
Positionsljus max 2W  
Driftspänning 9-32V/DC  
Ström vid defekt < 10mA  
Avsäkring per funktion: 3A(12V)/1A(24V)

## **IT** DATI TECNICI

Luce abbagliante max. 20W  
Luce di marcia diurna max. 16W  
Luce di posizione max. 2W  
Tensione di esercizio 9-32 V/c.c.  
Corrente in caso di guasto < 10mA  
Fusibile per ogni funzione: 3A(12V)/1A(24V)

## **EN** TECHNICAL DATA

High beam max. 20W  
Daytime running light max. 16W  
Position light max. 2W  
Operating voltage 9-32 V/DC  
Current in event of malfunction < 10mA  
Fuse protection per function: 3A(12V)/1A(24V)

## **NL** TECHNISCHE GEGEVENS

Grootlicht max. 20 W  
Dagrijverlichting max. 16 W  
Positielicht max. 2 W  
Bedrijfsspanning 9-32 V/DC  
Stroom in geval van een storing < 10 mA  
Beveiliging per functie: 3A (12V) / 1A (24V)

## **FI** TEKNISET TIEDOT

Kaukovalo, maks. 20 W  
Päiväajovalo, maks. 16 W  
Seisontavallo, maks. 2 W  
Käyttöjännite 9-32 V/DC  
Virta vian ilmaantuessa < 10 mA  
Sulake per toiminto: 3A (12V) / 1A (24V)

## **FR** DOCUMENT TECHNIQUE

Feu de route max. 20 W  
Feu de jour max. 16 W  
Feu de position max. 2 W  
Tension de service 9-32 V/c.c.  
Courant en cas de défaut < 10 mA  
Fusible par fonction : 3A (12V) / 1A (24V)

## **ES** DATOS TÉCNICOS

Luz de largo alcance máx. 20 W  
Luz de conducción diurna máx. 16 W  
Luz de posición máx. 2 W  
Tensión de trabajo 9-32 V/DC  
Corriente en caso de fallo < 10 mA  
Fusible para cada función: 3A(12V)/1A(24V)

**DE** Beleuchtungsanlage auf einwandfreie Funktion hin prüfen

**EN** Check that the lighting system is working perfectly

**FR** Contrôler le bon fonctionnement de l'installation d'éclairage

**SV** Kontrollera att ljussystemet fungerar felfritt

**NL** Controleer of de verlichting goed functioneert

**ES** Comprobar que el sistema de iluminación funciona impecablemente

**IT** Controllare la perfetta funzionalità dell'impianto di illuminazione

**FI** Tarkasta valaistusjärjestelmän toiminta

**DE** Bei Fragen oder Einbauproblemen, rufen Sie bitte den HELLA Kundendienst, Großhändler an oder wenden Sie sich an Ihre Werkstatt.

**EN** If you have questions or installation problems, please call the HELLA Service, wholesaler, or turn to your garage.

**FR** Pour toutes questions ou problèmes de montage, merci de contacter le service après-vente HELLA, votre distributeur ou votre garage.

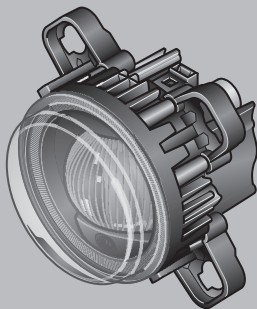
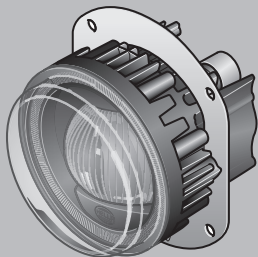
**SV** Vid frågor eller monteringsproblem, kontakta Hellas kundtjänst, återförsäljaren eller din verkstad.

**NL** In geval van vragen of montageproblemen verzoeken wij u contact met de HELLA-klantenservice, de groothandel of uw dealer op te nemen.

**ES** En caso de dudas o problemas de montaje, por favor, llame al Servicio postventa de Hella o al mayorista, o bien dirijase a su taller.

**IT** Per qualsiasi domanda o problemi di montaggio si prega di contattare il servizio assistenza o il proprio grossista HELLA oppure di rivolgersi alla propria officina.

**FI** Jos sinulla on kysymyksiä tai asennusongelmia, soita HELLA-asiakaspalvelulle tai tukkuliikkeelle tai käänny korjaamon puoleen.



**HELLA KGaA Hueck & Co.**

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[www.hella.com](http://www.hella.com)

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