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## WIRING AND LIGHTING SYSTEM FOR 24 V TRAILERS

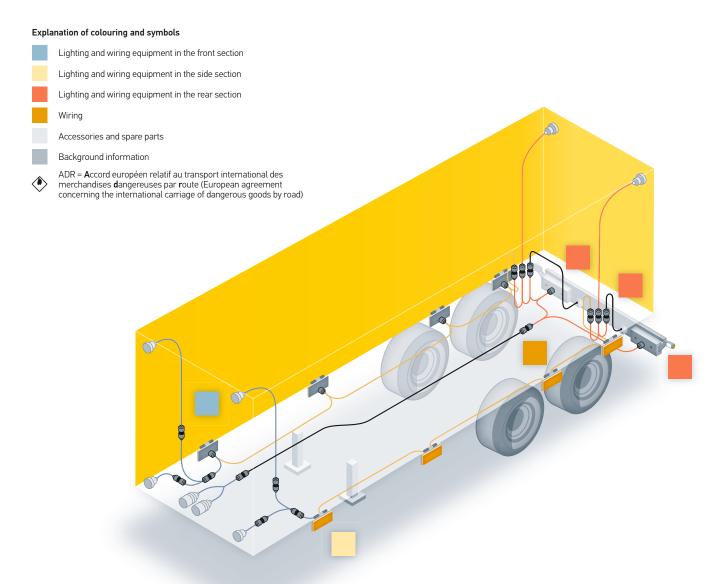
## EasyConn and EasyConn NextGeneration

The EasyConn lighting and wiring system was developed specially for 24 V trailers to combine cost effectiveness with a high level of flexibility. For example, the modular system allows additional worklights beyond the scope of the standard system to be attached. It also enables a distributor to be mounted, although this is no longer an essential requirement. The system is approved for vehicles in accordance with GGVS/ADR.

#### SUPERSEAL / DIN bayonet system

For even greater flexibility while maintaining the same quality standards, use the SUPERSEAL/DIN bayonet system from HELLA when assembling, retrofitting, or converting the lighting system for your trailer.

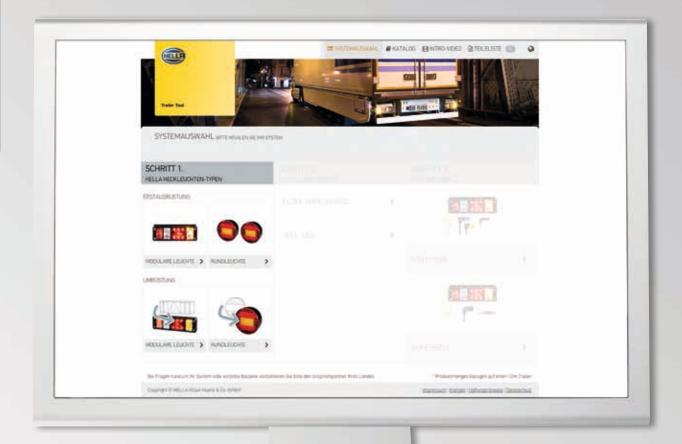
The wiring system makes it quick and easy to connect new products to various systems that are already present. This not only saves time and increases flexibility, but also minimizes storage costs for the aftermarket, for garages, and for fleet operators.





# Interactive configuration of trailer lighting from HELLA:

# The HELLA Trailer Tool



www.hella.com/trailertool

The new Trailer Tool from HELLA provides a wide range of information on lighting and wiring systems. The configurator also makes system selection considerably easier.

The configurator can be used to select a corresponding rear lamp type according to whether a trailer is to be equipped or converted. In this example, 2 lamp types are available to choose from – rectangular and round modular design lamps.

Combined with the corresponding light source (bulb, hybrid, or full LED) and wiring system (EasyConn Next

Generation, SUPERSEAL DIN bayonet system), the user is provided with a corresponding system proposal. The matching accessories are also listed.

The user can learn more about the wiring and lighting products from product information, animated videos, and mounting instructions.



Also available on your mobile device:

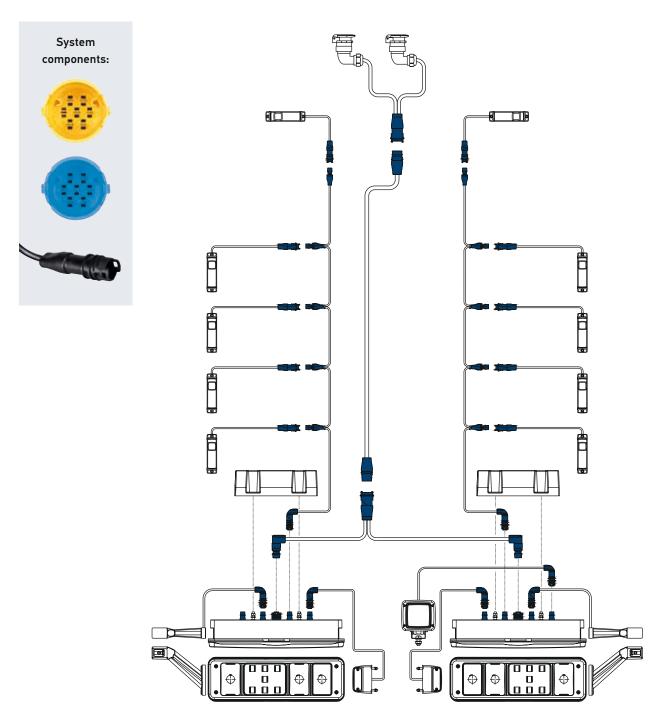
www.hella.com/trailertool



# EasyConn NextGeneration system

The modular hybrid rear lamp takes over the distributor function for all the lighting functions required according to the German road traffic registration ordinance StVZO. These are strictly separated from other special lighting and auxiliary functions by a dedicated distributor circuit. This provides the advantage of a cost-effective, easy to install lighting system with a modular structure as well as simple subsequent expansion of the standard system with additional EasyConn components and other lighting and special functions. The fail-safe performance level is very high.

An extension for lighting and special functions is only possible using an additional intermediate adapter. As the number of interfaces increases, so does the danger of the entire lighting system failing. If improperly executed, each intervention increases the failure probability of the entire system.

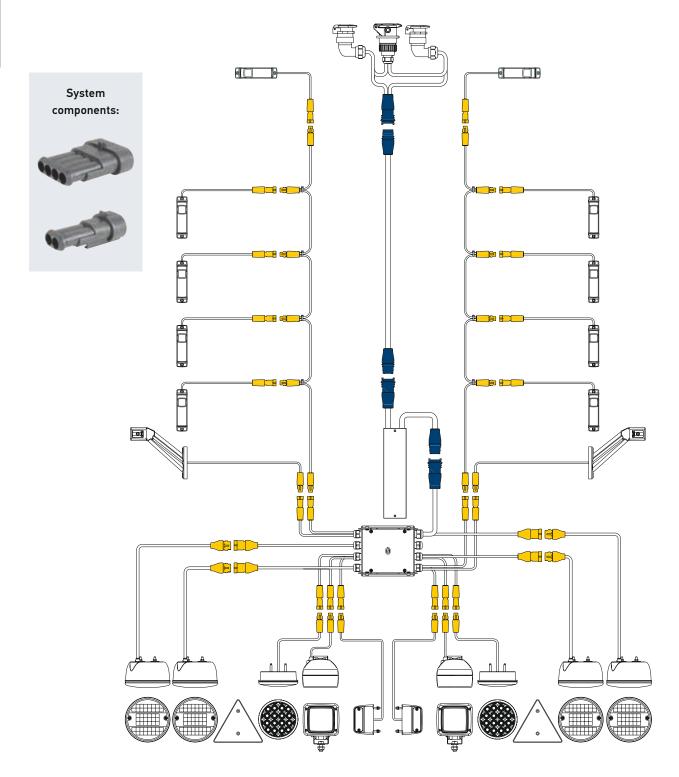




# SUPERSEAL system

The SUPERSEAL plug connections from the HELLA EasyConn NextGeneration range are suitable for particularly challenging environmental conditions thanks to their high degree of protection of IP 6K9K. The outstanding product features of this established system include maximum protection against external influences (e.g. ingress of water and dust), a reliable electrical connection, and the high quality standards of the original equipment.

The 15-pin central main cables in wiring are still treated as a constituent part of the proven EasyConn system. The SUPERSEAL system is particularly used in conjunction with round lamps featuring 2-pin or 4-pin connectors.

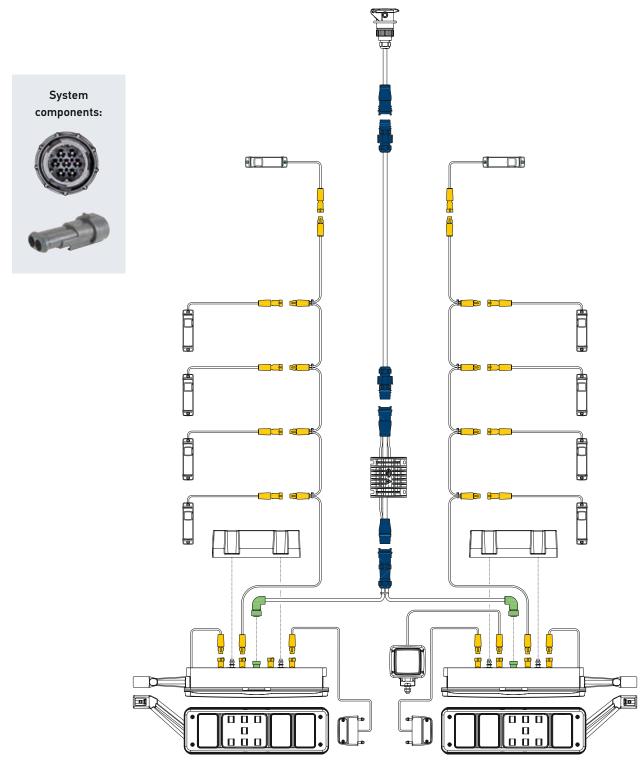




# SUPERSEAL DIN bayonet system

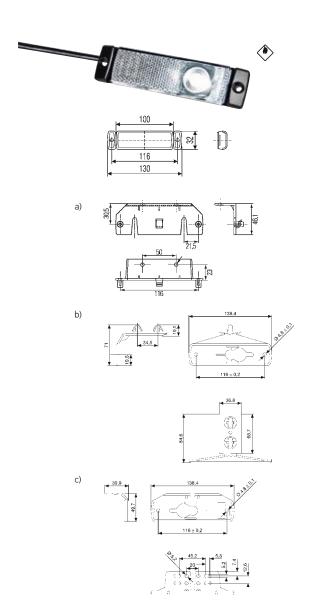
For the expansion of SUPERSEAL plug connections, a DIN bayonet is used for 7-pin connectors. The 15-pin central main cables in wiring are still treated as a constituent part of the proven EasyConn system. This provides customers with even greater flexibility when assembling, retrofitting, or converting the lighting system for their trailer.

The wiring system makes it quick and easy to connect new products to various systems that are already present. This not only saves time and increases flexibility, but also minimises storage costs for the aftermarket, for garages, and for fleet operators.











#### LED position light with reflex reflector

For horizontal and vertical mounting, with 1 white LED, white light, black housing, and black plastic base plate. With horizontal mounting, the LED field must point to the outer edge of the vehicle. With vertical mounting, the LED field may point upward or downward. The light is fixed using the lateral mounting holes (for B4.2 screws) or using a bracket (must be ordered separately). Degree of protection IP AKSK. separately). Degree of protection IP 6K9K.

With 500 mm cable	2PG 008 645-971 <sup>1)</sup>
With 1,000 mm cable	2PG 011 422-091 <sup>1)</sup>
With 5,000 mm cable	2PG 008 645-961 <sup>1)</sup>

With EasyConn connector housing (2-pin) and cellular rubber seal for sealing the light, EasyConn connector, and 2 mounting holes. 24 V / 0.9 W, current consumption = approx. 0.04 A

With 1.300 mm cable	2PG 008 645-3312)

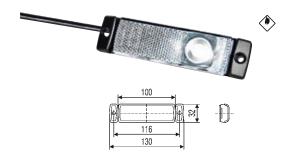
With quick link coupling including clamping piece for contact with a 2-wire flat cable, with cellular rubber seal for sealing the light, ADR/GGVS tested.

24 V / 0.9 W, current consumption = approx. 0.04 A

With 300 mm cable	2PG 008 645-631 <sup>3)</sup>
With 1,300 mm cable	2PG 008 645-541 <sup>3)</sup>
With 5,000 mm cable	2PG 008 645-641 <sup>3)</sup>

#### Accessories

a) Bracket	8HG 160 409-002
b) Bracket	8HG 340 413-001
c) Bracket	8HG 340 489-001





#### LED position light with reflex reflector

24 V position light with reflector, for horizontal mounting, with 1 white LED, white light, black housing, and black plastic base plate.

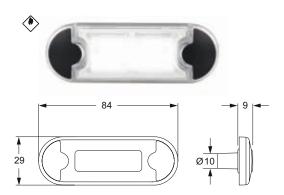
The light is fixed using the lateral mounting holes (for B4.2 screws) or using a bracket (must be ordered separately).

Degree of protection IP 6K9K.

With 450 mm cable and AMP SUPERSEAL connector

2PG 008 645-8311)



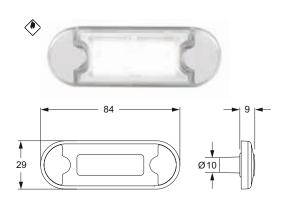




#### LED position light, installation

Multi-voltage 9-33 V position light, with 2 white LEDs and black screw caps, for horizontal and vertical mounting, active electronics, EMC and ADR/GGVS tested. Operating temperature from  $-40^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$  and power consumption of 0.5 W, degree of protection IP 6K7 and IP 6K9K, fixed using 2 x 0.5 mm screws. Approved according to HELLA standard 67101, class 1.2, 2.2, 3.2, 4.1, 5.1, 6.1, 7.2, 10.2, 11.2.

500 mm cable	2PF 959 855-2011)
2,500 mm cable	2PF 959 855-241 <sup>1)</sup>





#### LED position light, installation

Multi-voltage 9-33 V position light, with 2 white LEDs and white screw INJUSTICE OF THE LEGAL WITH 2 White LEDs and white screw caps along with polished stainless steel decorative ring, for horizontal and vertical mounting, active electronics, EMC and ADR/GGVS tested. Operating temperature from  $-40^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$  and power consumption of 0.5 W, degree of protection IP 6K7 and IP 6K9K, fixed using 2 x 0.5 mm screws. Approved according to HELLA standard 67101, class 1.2, 2.2, 3.2, 4.1, 5.1, 6.1, 7.2, 10.2, 11.2.

500 mm cable 2PF 959 855-2511)



Accessories for light series 2PF 959 855-...

Polished stainless steel decorative ring	9AB 959 685-201
White end caps	9HD 980 858-018

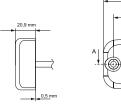


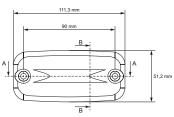














#### LED position light with reflex reflector

24 V position light with 2 LEDs, dimensions 111.3 x 51.2 x 20.9 mm, for horizontal mounting with 2 x 5.8 mm holes. Operating temperature from -40°C to +50°C, power consumption 0.5 W, passive electronics, ADR/GGVS tested, tested to HELLA standard 67101 class 6.3. IP protection class IP 6K9K.

With 500 mm cable	2PG 345 600-4011)
With 5,000 mm cable	2PG 345 600-4111)







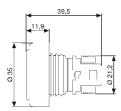
#### LED position light, mounted

For horizontal mounting, with 1 white LED, white light, clear lens, and black housing. Multi-voltage 10-33 V.

Approved for vehicles in accordance with GGVS/ADR and ECE.

With 500 mm cable	2PF 959 570-202 1)
With 5,000 mm cable	2PF 959 570-212 1)







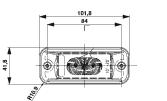
#### LED position light, installation

 $24\,V$  round recessed luminaire, with 2 white LEDs, clear lens, without reflex reflector, diameter 35 mm, depth 39.5 mm, of which 11.9 mm is surface-

Black rubber housing with fins, simple press-in installation in vehicles with wall thicknesses of 3-10 mm, 24 V/0.9 W.

EasyConn central connector (2-pin) without cable 2PF 340 825-001<sup>1)</sup>









#### LED position light, installation

24 V, for horizontal mounting, with 2 white power top LEDs, clear lens, with rubber housing, soft rubber seal, 2 holes for fastening screws, light contact via  $6.3\ mm$  flat receptacles mounted on  $6.3\ mm$  blade terminals.

For mounting position 10-20°, without cable	2PF 009 514-001 <sup>1)</sup>
For mounting position 20-30°, without cable	2PF 009 514-011 <sup>1)</sup>



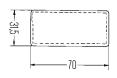


<sup>=</sup> ADR / GGVS tested
\* Please see the note on pages 72 to 75 regarding LED direction indicators and LED light failure monitor.



## REFLEX REFLECTORS







#### Reflex reflector

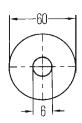
Reflex reflector made from clear PMMA material, with clear PMMA base plate and self-adhesive tape.

Dimensions 31.5 mm x 70 mm. Approved for ECE and SAE.

With self-adhesive tape

8RA 004 412-011





#### Reflex reflector

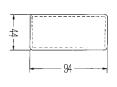
Red reflex reflector made from PMMA material, with white base plate and self-adhesive tape.

With diameter of 60 mm and height of 6.5 mm. Approved for ECE.

With self-adhesive tape

8RA 002 014-291







#### Reflex reflector

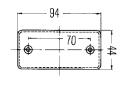
White reflex reflector with white base plate and self-adhesive tape.

Dimensions 44 mm x 94 mm. Tested to HELLA standard 67001 class 2. Approval for ECE and SAE.

With self-adhesive tape

8RA 003 326-051







#### Reflex reflector

White reflex reflector, with white base plate for screw fastening with 2 x  $4.3\ mm$  screw holes.

Dimensions 44 mm x 94 mm. Tested to HELLA standard 67001 class 2. Approved for ECE.

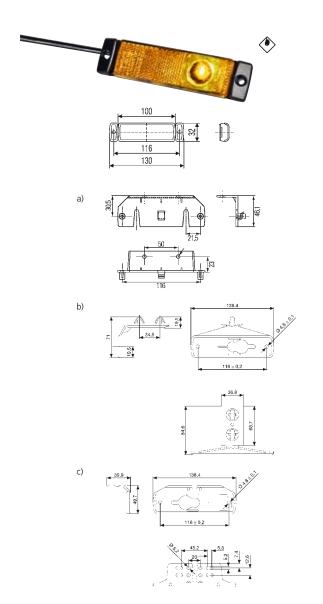
Screw fastening

8RA 003 326-021





## SIDE MARKER LIGHTS





#### LED side marker light with reflex reflector

For horizontal or vertical mounting, with 1 amber LED, amber lens, amber light, black housing, with cellular rubber seal for sealing the light and 2 holes for fastening screws B4.2, or via a bracket (ordered separately). Degree of protection IP 6K9K.

With horizontal mounting, the optical field must point to the outer edge of the  $\cdots$ vehicle.

Mounting 24 V/1.2 W, current consumption = approx. 0.05 A

Horizontal mounting With 1,500 mm cable	2PS 008 645-001 <sup>1)</sup>
Vertical mounting With 1,500 mm cable	2PS 008 645-991 <sup>1)</sup>

For horizontal mounting With EasyConn connector housing (2-pin)

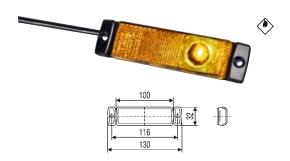
With 300 mm cable	2PS 008 645-301 <sup>2)</sup>
With 1,300 mm cable	2PS 008 645-311 <sup>2)</sup>
With 2,000 mm cable	2PS 008 645-361 <sup>2)</sup>

For horizontal mounting
With quick link wiring for contacting a 2-wire flat cable, complete with clamping piece, bidirectional and ADR/GGVS tested.

With 300 mm cable	2PS 008 645-611 <sup>3)</sup>
With 1,300 mm cable	2PS 008 645-621 <sup>3)</sup>

#### Accessories

a) Bracket	8HG 160 409-002
b) Bracket	8HG 340 413-001
c) Bracket	8HG 340 489-001





#### LED side marker light with reflex reflector

For horizontal mounting, with 1 amber LED, amber lens, amber light, black housing, with cellular rubber seal for sealing the light and 2 holes for fastening screws B4.2, or via a bracket (ordered separately). Degree of protection IP 6K9K. Approved for ECE and SAE.

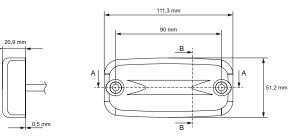
With horizontal mounting, the optical field must point to the outer edge of the vehicle.

With 450 mm cable and AMP SUPERSEAL connector	2PS 008 645-891 <sup>1)</sup>
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# SIDE MARKER LIGHTS







#### LED side marker light with reflex reflector

With 2 LEDs, in 12 V and 24 V, with light guide, passive electronics, and ADR/GGVS tested. Mounting with 5.8 mm screw holes. Operating temperature -40°C to +50°C and degree of protection IP 6K9K. Power consumption 0.6 W/12 V and 1.2 W/24 V.

Dimensions 111.3 x 51.2 x 20.9 mm. Tested to HELLA standard 67001 class 6.3. Approved for ECE.

24 V, with 500 mm cable, open cable ends	2PS 345 600-011 <sup>1)</sup>
24 V, with 500 mm cable, with bracket and open cable ends	2PS 345 600-071 <sup>1)</sup>
24 V, with 5,500 mm cable, with bracket angled toward rear, 6.3 mm flat receptacles	2PS 345 600-091 <sup>2)</sup>
24 V, with 4,000 mm cable, AMP SUPERSEAL connector	2PS 345 600-041 <sup>3)</sup>
24 V, with 4,000 mm cable, with bracket angled toward rear, AMP SUPERSEAL connector	2PS 345 600-021 <sup>3)</sup>
24 V, with 4,500 mm cable, AMP SUPERSEAL connector	2PS 345 600-051 <sup>3)</sup>
24 V, with 4,500 mm cable, with bracket angled toward rear, AMP SUPERSEAL connector	2PS 345 600-031 <sup>3)</sup>
24 V, with 2,000 mm cable, AMP 2-pin, striped ends in Y	2PS 345 600-101 <sup>1) 2)</sup>
24 V, with 2,000 mm cable, bracket angled toward rear, AMP 2-pin, striped ends in Y	2PS 345 600-111 <sup>1) 2)</sup>

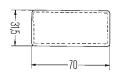






## REFLEX REFLECTORS







#### Reflex reflector

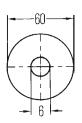
Amber reflex reflector with clear PMMA base plate and self-adhesive tape.

Dimensions 31.5 mm x 69 mm. Approved for ECE and SAE.

With self-adhesive tape

8RA 004 412-001





#### Reflex reflector

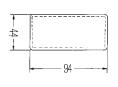
Amber reflex reflector made from PMMA material, with white base plate and self-adhesive tape.

With diameter of 60 mm and height of 6.5 mm. Approved for ECE.

With self-adhesive tape

8RA 002 014-301







#### Reflex reflector

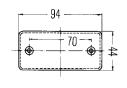
Amber reflex reflector with white base plate and self-adhesive tape.

Dimensions 44 mm x 94 mm. Tested to HELLA standard 67001 class 2. Approval for ECE and SAE.

With self-adhesive tape

8RA 003 326-041







#### Reflex reflector

Amber reflex reflector, with white base plate for screw fastening with 2 x 4.3 mm screw holes.

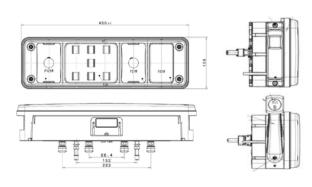
Dimensions 44 mm x 94 mm. Tested to HELLA standard 67001 class 2. Approved for ECE.

Screw fastening

8RA 003 326-011













#### Full LED rear lamp

Modular multi-function rear lamp 24 MD for horizontal mounting, clear lens, with pulse for direction indicator failure monitor.

Tail light/stop light with 7 red LEDs, direction indicator with 7 amber LEDs,

Tail light/stop light with 7 red LEDs, direction indicator with 7 amber LEDs, reversing light with 6 white LEDs, rear fog light with 7 red LEDs, clearance light 1 red LED, side marker reflex reflector light 2 amber LEDs.

Tail light: 24 V/0.02 W, current consumption = 0.01 A Stop light: 24 V/20 W, current consumption = 0.83 A Direction indicator: 24 V/3 W, current consumption = 0.13 A Reversing light: 24 V/2.5 W, current consumption = 0.10 A Rear fog light: 24 V/1.2 W, current consumption = 0.10 A Clearance light: 24 V/1.2 W, current consumption = 0.05 A Side marker light: 24 V/1 W, current consumption = 0.04 A

IP protection classes: Light IP 5K4K, LED modules IP 6K9K

Full LED tail light/triangular reflex reflector/stop light, direction indicator, rear fog light, and reversing light

Left (amber)	2VP 340 960-011*1)
Right (blue)	2VP 340 960-021*1)

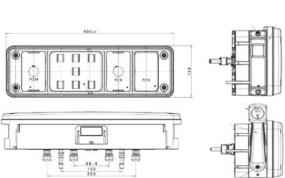
Full LED tail light/triangular reflex reflector/stop light, direction indicator, rear fog light, reversing light, and clearance light with side marker light in rubber arm

Left (amber)	2VP 340 960-111*1)
Right (blue)	2VP 340 960-121*1)

Full LED tail light/triangular reflex reflector/stop light, direction indicator, rear fog light and reversing light with DIN bayonet AMP connector (7-pin) and 4 x AMP SUPERSEAL (2-pin) for connecting various functions.

Left	2VP 340 960-271*2)
Right	2VP 340 960-281*2)







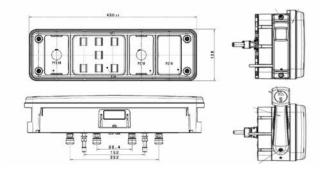
#### LED hybrid rear lamp

Modular multi-function rear lamp ML 24 for horizontal mounting with the functions: tail light, triangular, stop light, direction indicator, reversing light, and rear fog light. Rubber arm with the functions: clearance/side marker reflex reflector light. With DIN bayonet AMP connector (7-pin) and 4 x AMP SUPERSEAL (2-pin) for connecting various functions. Tail/stop light, clearance/side marker reflex reflector light in LED.

Left, without rubber arm	2VP 340 961-411 <sup>1)</sup>
Left, with rubber arm	2VP 340 961-431 <sup>1)</sup>
Right, without rubber arm	2VP 340 961-421 <sup>1)</sup>
Right, with rubber arm	2VP 340 961-441 <sup>1)</sup>









#### LED hybrid rear lamp

Modular multi-function rear lamp ML 24 for horizontal mounting, tail/stop light always in LED, all other functions possible with bulb or retrofit to LED.

Functions: LED tail light/triangular reflex reflector, stop light, direction indicator,
rear fog light, reversing light with bulb

Hybrid, left (amber)	2VP 340 961-011 <sup>1)</sup>
Hybrid, right (blue)	2VP 340 961-021 <sup>1)</sup>
Functions: LED tail light/triangular reflex reflector, LED direction indicator, and reversing light with bulb	rear fog light, stop light,
Hybrid, left (amber)	2VP 340 961-0311)
Hybrid, right (blue)	2VP 340 961-041 <sup>1)</sup>
Functions: LED tail light/triangular reflex reflector, LED light, direction indicator, rear fog light, and reversing light,	
Hybrid, left (amber)	2VP 340 961-111 <sup>1)</sup>
Hybrid, right (blue)	2VP 340 961-121 <sup>1)</sup>
Functions: LED tail light/triangular reflex reflector, stop and reversing light with bulb, rear fog light and clearan LED in rubber arm	
Hybrid, left (amber)	2VP 340 961-1311)
Hybrid, right (blue)	2VP 340 961-141 <sup>1)</sup>
Functions: LED tail light/stop light, triangular reflex ref with bulb, rear fog light, reversing light, clearance/side LED in rubber arm	
Hybrid, left (amber)	2VP 340 961-151 <sup>1)</sup>
Hybrid, right (blue)	2VP 340 961-161 <sup>1)</sup>
Functions: LED tail light/triangular reflex reflector, stop	

light, direction indicator, rear fog light, and reversing light with bulb

2VP 340 961-2111) 2VP 340 961-2211)



#### EasyConn NextGeneration retrofit kit

Hybrid, left (amber)

Hybrid, right (blue)

Consists of 1x 2VP 340 961-11 and -12, 1x 2KA 010 278-07, 1x drilling template, 2 x protection cover 8XS 340 092-01, 8 x cap 9HV 340 812-007, 2 x 3 m connection cable for the distributor box, with installation guide and mounting instructions on CD, additional information for device description. Replacement for 9XX 340 369-00 with distributor box. Distributor box can be ordered separately.

	9XX 340 369-011
LED upgrade module for trailer light 2VP 340 961	
For tail light/stop light	9DW 178 904-001
For direction indicator	9DW 178 909-001
For reversing light	9DW 178 909-011
For rear fog light	9DW 178 909-021
Lens, modular rear lamp	
Lens with 4 fastening screws for left/right, GL and LED, for trailer light 2VP 340 960 and 2VP 340 961	9EL 183 432-001
Protection cover	
When mounting the trailer lights 2VP 340 960 and 2VP 340 961, the protection cover is an essential requirement.	8XS 340 092-011

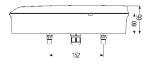




<sup>=</sup> ADR / GGVS tested
\* Please see the note on pages 72 to 75 regarding LED direction indicators and LED light failure monitor.













#### EasyConn I multi-function rear lamp

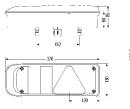
Tail light/triangular reflex reflector/stop light/direction indicator/fog light/back-up light with integrated 24 V bulbs, with integrated vibration dampers and EasyConn central connector (7-pin). Tail light fitted with double bulbs.

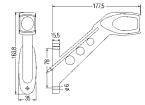
Right (blue)	2VP 340 930-001 <sup>1)</sup>
Left (amber)	2VP 340 930-011 <sup>1)</sup>

Tail light/triangular/stop light/direction indicator/fog light/back-up light and side marker reflex reflector light with integrated 24 V bulbs, with integrated vibration dampers and EasyConn central connector (7-pin). Tail light fitted with double bulbs.

Right (blue)	2VP 340 930-021 <sup>1)</sup>
Left (amber)	2VP 340 930-031 <sup>1)</sup>











#### Hybrid EasyConn I multi-function rear lamp

Tail light/triangular/stop light/direction indicator/fog light/back-up light with integrated 24 V bulbs, with integrated vibration dampers and EasyConn central connector (7-pin). 2 x tail light function, each with 2 red LEDs. Degree of protection IP 54.

24 V/1 W, current consumption for LED tail light = 0.04 A  $\,$ 

Right (blue, without rubber arm)	2VP 340 932-001*1)
Left (amber, without rubber arm)	2VP 340 932-011*1)

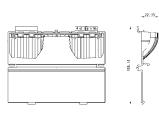
With clearance light and side marker light in rubber arm. 2 white LEDs for position light, 1 red LED for clearance light, and 2 amber LEDs for side marker light.

24 V/1.5 W, current consumption = 0.05 A

Right (blue)	2VP 340 934-101*1)
Left (amber)	2VP 340 934-111*1)







### EasyConn I LED retrofit set

For converting the tail light function from bulb technology to LED technology. For EasyConn tail lights fitted with bulbs (2VP 340 930-... and 2VP 340 931-...)

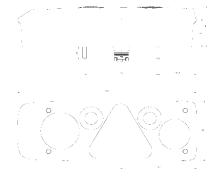
The set consists of 2 reflectors, 1 for the right light and 1 for the left light, with 1 circuit board each, including 4 red LEDs and adapter cable to connect to the bulb holder. The circuit board is seawater-resistant. Simply click the module into the reflector. The 2 lugs are used to fix the module flush to the surface. The type approval number is embossed visibly in the right-hand lug. At the same time, the type approval number of the bulb variant is covered by the lugs.

24 V/1 W, current consumption = approx. 0.04 A

Set, 24 V 9XX 340 173-801









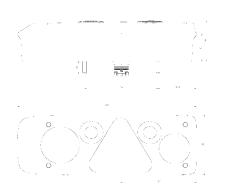
#### Hybrid EasyConn II multi-function rear lamp

Tail light/triangular reflex reflector/stop light/direction indicator/fog light/back-up light with integrated 24 V bulbs. With EasyConn central connector (7-pin), LED tail light function behind the triangular reflex reflector with 10 red LEDs.

24 V/2 W, current consumption = 0.08 A

Right (blue)	2VP 340 942-001*1)
Left (amber)	2VP 340 942-011*1)







### Hybrid EasyConn II multi-function rear lamp

Tail light/triangular reflex reflector/stop light/direction indicator/fog light/back-up light with integrated 24 V bulbs. With EasyConn central connector (7-pin), LED tail light function behind the triangular reflex reflector with 10 red LEDs.

24 V/2 W, current consumption = 0.08 A

With rubber arm in LED, with integrated 24 V bulbs and EasyConn central connector (7-pin).

2 white LEDs for position light 1 red LED for clearance light 2 amber LEDs for side marker light

24 V/1.5 W, current consumption = 0.05 A

Right (blue)	2VP 340 940-101*1)
Left (amber)	2VP 340 940-111*1)

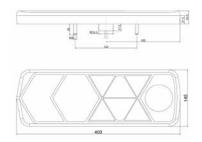




<sup>=</sup> ADR / GGVS tested
\* Please see the note on pages 72 to 75 regarding LED direction indicators and LED light failure monitor.









#### Full LED rear lamp

Tail light/triangular reflex reflector, stop light/direction indicator/back-up light for horizontal mounting, with 500 mm cable and EasyConn connector housing (7-pin), tightly glued lens, clear on outside, reflex reflector red on inside, with pulse for direction indicator failure monitor, degree of protection IP 6K9K.

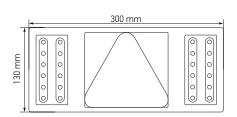
Tail light: 15 red LEDs, 24 V/0.7 W, current consumption = approx. 0.03 A Stop light: 15 red LEDs, 24 V/5 W, current consumption = approx. 0.21 A Direction indicator: 15 amber LEDs, 24 V/3 W, current consumption = approx. 0.125 A Reversing light: 1 white LED, 24 V/5.5 W, current consumption = approx. 0.23 A

Left light with additional outlet from EasyConn connector housing (7-pin) to a 500 mm long cable with 2-pin EasyConn female connector housing for attaching a rear fog light.

Left (amber), triangular reflex reflector	2VP 340 950-011*1)
Right (blue), only with connection (7-pin), triangular reflex reflector	2VP 340 950-021*1)
With cable (5-pin) and 6.3 mm flat receptacles	
Left (amber), with 1,550 mm cable	2VP 340 950-031*2)
Right (blue), with 2,500 mm cable	2VP 340 950-041*2)















#### "COLUNA" full LED rear lamp

Full LED 5-chamber light with tail light, stop light, direction indicator, rear fog light, and reversing light. With triangular reflex reflector for horizontal mounting on 24 V trailers. 12 white LEDs for tail light function arranged as a light curtain. With fastening bolts from the rear. With pulse for direction indicator failure monitor.

Tail light: 12 red LEDs 24 V/2.8 W, current consumption = 0.12 A Stop light: 6 red LEDs 24 V/2 W, current consumption = 0.08 A Direction indicator: 6 amber LEDs 24 V/3.8 W, current consumption = 0.16 A Rear fog light: 6 red LEDs, 2.4 W = 0.1 A Reversing light: 6 white LEDs, 5.6 W = 0.23 A

1,000 mm cable with EasyConn connector (7-pin)

2VP 345 900-011*1)
2VP 345 900-021*1)
P (7-pin)
2VP 345 900-091*2)
2VP 345 900-101*2)
2VP 345 900-131*3)
2VP 345 900-141*3)







#### DuraLED rear lamp

Tail light, stop light for horizontal and vertical mounting, with 24 red LEDs of which 16 LEDs for stop light, clear lens, 2,500 mm cable with stripped ends. Degree of protection IP 6K6 and IP 6K7. Multi-voltage 9 - 33 V.

24 V/8.5 W, current consumption = 0.35 A  $\,$ 

Horizontal	2SB 980 606-201 <sup>1)</sup>
Vertical	2SB 980 606-701 <sup>1)</sup>





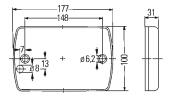
#### DuraLED rear lamp

Direction indicator for horizontal and vertical mounting, with 24 amber LEDs, clear lens, 2,500 mm cable with stripped ends. Degree of protection IP 6K6 and IP 6K7. Multi-voltage 9-33 V. With pulse for direction indicator failure monitor.

24 V/4 W, current consumption = 0.17 A

Horizontal	2BA 980 607-201*1)
Vertical	2BA 980 607-701*1)







#### DuraLED rear lamp

Back-up light for horizontal and vertical mounting, with 24 white LEDs, clear lens, 2,500 mm cable with stripped ends. Degree of protection IP 6K6 and IP 6K7. Multi-voltage 9-33 V.

24 V/4 W, current consumption = 0.17 A

Horizontal	2ZR 980 605-201 <sup>1)</sup>
Vertical	2ZR 980 605-701 <sup>1)</sup>

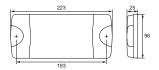




<sup>=</sup> ADR / GGVS tested
\* Please see the note on pages 72 to 75 regarding LED direction indicators and LED light failure monitor.









#### Full LED rear lamp DuraLED Combi

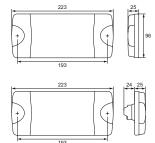
Multi-function rear lamp with only 25 mm installation height, for horizontal mounting. With the tail light reflex reflector, stop light, and direction indicator functions, with 2,500 mm cable, protection class IP 6K9K.

Tail light/stop light 8 red LEDs 24 V/5 W, current consumption = 0.21 A Direction indicator 8 amber LEDs 24 V/4 W, current consumption = 0.17 A

Dual-voltage 12/24 V Without pulse for indicator failure monitor	2VA 980 710-0611)
MD 24 With pulse for indicator failure monitor	2VA 980 710-301*1)











#### Full LED rear lamp DuraLED Combi

Multi-function rear lamp with only 25 mm installation height, for horizontal and vertical mounting. With tail light, stop light, and direction indicator functions. Protection class IP 6K9K. In the connector variant, 1 pin is intended for the parking light.

Stop light with 18 red LEDs = 3 rows each with 6 LEDs, of which the centre row = 6 LEDs with reduced light output for tail light 24 V/6 W, current consumption = 0.25 A

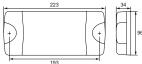
Direction indicator with 12 amber LEDs = 2 rows each with 6 LEDs 24 V/5 W, current consumption = 0.22 A

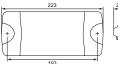
Parking light (from tail light) 6 red LEDs 24 V/1 W, current consumption = 0.04 A

With 2,500 mm cable	2SD 980 613-211 <sup>1)</sup>
With DEUTSCH connector (6-pin)	2SD 980 602-211 <sup>2)</sup>













#### Full LED rear lamp DuraLED Combi

 $\label{eq:Multi-function} \mbox{ Multi-function rear lamp with 34 mm installation height, for horizontal mounting.}$ 

With 2,500 mm cable or DEUTSCH connector (6-pin). Dual-voltage: 12 V/24 V. With tail light/stop light, direction indicator, and reversing light functions. In the connector variant, 1 pin is intended for the parking light. Protection class IP 6K7

Without pulse for indicator failure monitor.

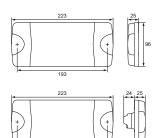
Tail light/stop light 12 red LEDs 24 V/6 W, current consumption = 0.25 A

Direction indicator 12 amber LEDs 24 V/4 W, current consumption = 0.17 A

Reversing light 6 white LEDs 24 V/3 W, current consumption = 0.13 A

With 2,500 mm cable	2SK 980 603-503 <sup>1)</sup>
With DEUTSCH connector (6-pin)	2SK 980 615-001 <sup>2)</sup>









## Full LED rear lamp DuraLED Combi

Multi-function rear lamp with 25 mm installation height, for horizontal mounting. With 2,500 mm cable or DEUTSCH connector (6-pin). MD 24 variants. With tail light/stop light, direction indicator, and reversing light functions. In the connector variant, 1 pin is intended for the parking light. Protection class of cable variant = IP 6K7, connector variant = IP 6K9K.

With pulse for direction indicator failure monitor.

Tail light/stop light 12 red LEDs 24 V/4 W, current consumption = 0.17 A

Direction indicator 12 amber LEDs 24 V/3 W, current consumption = 0.13 A

Reversing light 6 white LEDs 24 V/3 W, current consumption = 0.13 A

With 2,500 mm cable	2SK 980 613-501*1)
With DEUTSCH connector (6-pin)	2SK 980 602-501*2)

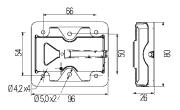




<sup>=</sup> ADR / GGVS tested
\* Please see the note on pages 72 to 75 regarding LED direction indicators and LED light failure monitor.











#### Full LED rear lamp

Multi-function light for horizontal and vertical mounting; the light can also be rotated by 180°. Tail light/reflex reflector/stop light/direction indicator, dual-voltage 12/24 V, with cable or DEUTSCH connector. Without pulse for direction indicator failure monitor, degree of protection IP 6K9K.

Tail light with 2 red LEDs 24 V/1 W, current consumption = 0.04 A Stop light with 4 red LEDs 24 V/2 W, current consumption = 0.08 A Direction indicator with 4 amber LEDs 24 V/2 W, current consumption = 0.08 A

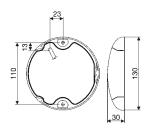
With 500 mm cable	2VA 980 720-001 <sup>1)</sup>
With 150 mm cable and DEUTSCH connector (4-pin)	2VA 980 720-017 <sup>2)</sup>

Can be mounted horizontally and rotated by 180°, with licence plate lighting for 370 mm x 120 mm and 520 mm x 120 mm plates. For illuminating a licence plate from right and left, 1 light of each of the types 2VB 980 720-401 and -501 must be used.

2VB 700 720-401 and -301 must be used.

Direction indicator at bottom, licence plate light on right 2VB 980 720-501 <sup>1)</sup>	Direction indicator at top, licence plate light on left	2VB 980 720-401 <sup>1)</sup>
		2VB 980 720-501 <sup>1)</sup>









#### Full LED rear lamp EuroLED

For horizontal mounting, cast in one piece with black base plate, electrical connection through 2,500 mm long cable, multi-voltage 9-33 V.

For horizontal mounting with 2,500 mm long cable, multi-voltage 9-33 V, protection class IP 6K6 and IP 6K7.

Tail light/stop light with 1 red LED (24 V / 2.5 W, current consumption = 0.10 A) Rear fog light with 1 red LED (24 V / 4 W, current consumption = 0.17 A) Reversing light with 1 white LED (24 V / 2.5 W, current consumption = 0.10 A)

Tail light / stop light Red lens, with 1 red LED	2SB 959 821-601*2)
Rear fog light Red lens, with 1 red LED	2NE 959 821-201*1)
Back-up light White lens, with 1 white LED	2ZR 959 820-601*1)







#### Full LED rear lamp

Tail light/stop light/direction indicator for horizontal mounting with 500 mm cable, with active thermal management, with pulse for direction indicator failure monitor, degree of protection IP 6K9K.

Tail light with 1 red LED (24 V / 2 W, current consumption = 0.8 A) Stop light with 1 red LED (24 V / 3 W, current consumption = 0.13 A) Direction indicator with 2 amber LEDs (24 V / 4 W, current consumption = 0.17

Multi-voltage 9-32 V	2SD 344 100-1011)*
Chrome ring with angle bracket for installation	9XD 997 909-801





#### Full LED tail light/stop light/direction indicator

For mounting, 24 LEDs, with 500 mm cable group, multi-voltage 9-32 V, protection class IP 6K9K.

Tail light 1 W, stop light 2 W, direction indicator 2 W 24 V, current consumption = approx. 0.2 A

With pulse f	or direction indicator	failure monitor and
with active t	hermal management	t .

Clear lens	2SD 344 200-001 <sup>1)*</sup>
Red/clear lens	2SD 344 200-0711)*
Without pulse for direction indicator failure monitor and	

with passive thermal management

Red/clear lens	2SD 344 200-311 <sup>1)</sup>
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#### Full LED tail light/stop light

For mounting, 24 LEDs, with 500 mm cable group, multi-voltage 9-32 V, protection class IP 6K9K.

With	active	therma	manag	jement
T-010	L- + 1 14	I - 4 11 -	-L-+ 2 141	10111

Tail light 1 W, stop light 3  $\overline{W}$  24 V, current consumption = approx. 0.17 A

Clear lens	2SB 344 200-0211)*
Red lens	2SB 344 200-081 <sup>1)</sup> *

With passive thermal management Tail light 1 W, stop light 5 W / 24 V, current consumption = approx.  $0.25 \, \text{A}$ 

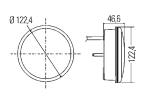
24 V, clear lens	2SB 344 200-3211)
24 V, red lens	2SB 344 200-331 <sup>1)</sup>





<sup>=</sup> ADR / GGVS tested
\* Please see the note on pages 72 to 75 regarding LED direction indicators and LED light failure monitor.







Clear lens

#### Full LED direction indicator

For mounting, 24 amber LEDs, with 500 mm cable group, multi-voltage 9-32 V, degree of protection IP 6K9K

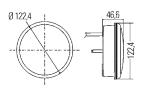
With pulse for direction indicator failure monitor and with active thermal management 24 V/3 W, current consumption = approx. 0.13 A

Without pulse for direction indicator failure monitor and with passive thermal management 24 V/2 W, current consumption = approx. 0.08 A

Clear lens 2BA 344 200-2411)\*

2BA 344 200-0311)\*







#### Full LED back-up light

For mounting, 24 white LEDs, with 500 mm cable group, clear lens, multivoltage 9-32 V, protection class IP 6K9K.

24 V/2 W, current consumption = approx. 0.08 A

Clear lens 2ZR 344 200-0511)\*





## Full LED rear fog light

For mounting, 24 white LEDs, with 500 mm cable group, multi-voltage 9-32 V, protection class IP 6K9K.

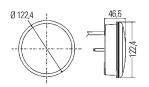
24 V/2 W, current consumption = approx. 0.08 A

Clear lens	2NE 344 200-0611)*
Red lens	2NE 344 200-0911)*









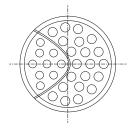
#### Full LED rear fog light/back-up light

Combination light with clear lens for mounting on right and left. Light can be mounted with 180° rotation. 9 red LEDs for rear fog light = 2.8 W 21 white LEDs for reversing light = 5 W

24 V/7.8 W, current consumption = 0.33 A

With 0.5 m cable

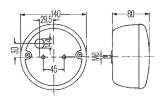
2NR 344 169-461\*1)











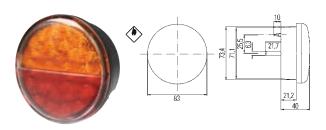
## Full LED rear lamp

Tail light/stop light/direction indicator with 2,000 mm cable and 4-pin SUPERSEAL connector. Without pulse for direction indicator failure monitor, degree of protection IP 6K9K.

Tail light with 12 red LEDs (24 V / 0.5 W, current consumption = 0.02 A) Stop light with 24 red LEDs (24 V / 2 W, current consumption = 0.08 A) Direction indicator with 24 amber LEDs (24 V / 3 W, current consumption = 0.13

A) Suitable ECU 5DS 009 552-031

2SD 340 685-0511)





#### Full LED rear lamp

Tail light/stop light/direction indicator with clear cover lens for mounting, with pulse for direction indicator failure monitor, degree of protection IP 6K7K.

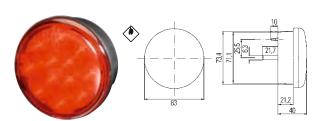
24 V/5 W, current consumption = approx. 0.21 A

2SD 959 010-401\*1)





<sup>=</sup> ADR / GGVS tested
\* Please see the note on pages 72 to 75 regarding LED direction indicators and LED light failure monitor.



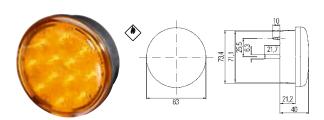


#### Full LED tail light/stop light

Tail light/stop light for mounting with red lens, tail light/stop light with 12 red LEDs with 2,500 mm cable, degree of protection IP 6K7K.

24 V/4 W, current consumption = approx. 0.17 A

2SB 959 010-301\*1)



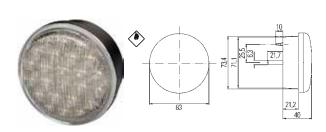


#### Full LED direction indicator

For mounting with amber lens, with 12 amber LEDs, with 2,500 mm cable, with pulse for direction indicator failure monitor, degree of protection IP 6K7K.

24 V/3 W, current consumption = approx. 0.13 A

2BA 959 011-301\*1)



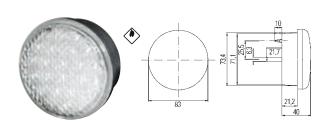


### Full LED back-up light

For mounting with clear lens, with 24 white LEDs and 2,500 mm cable, degree of protection IP 6K7K.

24 V/4 W, current consumption = approx. 0.17 A

2ZR 959 010-501\*1)





#### Full LED rear fog light

For mounting with clear lens, with 24 red LEDs and 2,500 mm cable, degree of protection IP 6K7K.

24 V/3 W, current consumption = approx. 0.13 A

2NE 959 011-501\*1)



## TAIL LIGHTS





#### LED tail light with reflex reflector

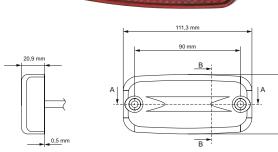
Can also be used as a clearance light with a reflex reflector, for horizontal or vertical mounting, with 1 red LED, red light, red lens, black housing, and 2 holes for fastening screws B4.2. Possible to mount using a bracket (must be ordered separately).

24 V/1.2 W, current consumption = approx. 0.05 A

With horizontal mounting, the LED field must point to the outer edge of the vehicle. With vertical mounting, the LED field may point upward or downward.

With 500 mm cable	2TM 008 645-9511)*
With 5,000 mm cable	2TM 008 645-9411)*
With 5,000 mm cable and 2-pin EasyConn connector housing	2TM 008 645-351 <sup>2)*</sup>
With 300 mm cable, with quick link coupling including clamping piece for contacting a 2-wire flat cable	2TM 008 645-651 <sup>3)*</sup>
With 5,000 mm cable, with quick link coupling including clamping piece for contacting a 2-wire flat cable	2TM 008 645-661 <sup>3)*</sup>







#### LED tail light with reflex reflector

Tail light with 2 LEDs, in 12 V and 24 V, with light guide, passive electronics, and ADR/GGVS tested, mounting via 5.8 mm screw holes.

Dimensions 111.3 x 51.2 x 20.9 mm Power consumption 0.6 W/12 V, 1.2 W/24 V Operating temperature -40°C to +50°C Protection class IP 6K9K Tested to HELLA standard 67001 class 6.3 Approved for ECE

500 mm cable 2TM 345 60	00-311 <sup>1)</sup>
-------------------------	----------------------





51.2 mm

#### LED tail light, mounting

Multi-voltage 8-28 V, LED tail light with 2 red LEDs, with black housing and red lens, approved for ECE and CCC

With 500 mm cable	2XA 959 560-401 <sup>1)</sup>
With 5,000 mm cable	2XA 959 560-411 <sup>1)</sup>

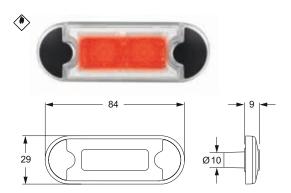




<sup>=</sup> ADR / GGVS tested
\* Please see the note on pages 72 to 75 regarding LED direction indicators and LED light failure monitor.



## **CLEARANCE LIGHTS**

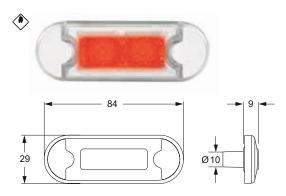




#### LED clearance light

Multi-voltage 9-33 V tail light, with 2 red LEDs and black screw caps, for horizontal and vertical mounting, active electronics, EMC and ADR/GGVS tested. Operating temperature from -40°C to +60°C and power consumption of 0.5 W, degree of protection IP 6K7 and IP 6K9K, fixed using 2 x 0.5 mm screws. Approved according to HELLA standard 67101, class 1.2, 2.2, 3.2, 4.1, 5.1, 6.1, 7.2, 10.2, 11.2.

500 mm cable	2XS 959 855-4011)
2,500 mm cable	2XS 959 855-4411)





#### LED clearance light

Multi-voltage 9-33 V tail light, with 2 red LEDs and white screw caps, for horizontal and vertical mounting, active electronics, EMC and ADR/GGVS tested. Operating temperature from  $-40^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$  and power consumption of 0.5 W, degree of protection IP 6K7 and IP 6K9K, fixed using 2 x 0.5 mm screws. Approved according to HELLA standard 67101, class 1.2, 2.2, 3.2, 4.1, 5.1, 6.1, 7.2, 10.2, 11.2.

500 mm cable **2XS 959 855-451**<sup>1)</sup>



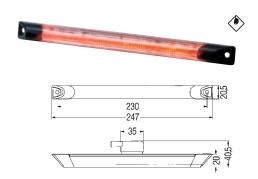
#### Accessories

Accessories for light series 2PF 959 855-...

Chromated stainless steel frame 85 mm x 30 mm	9AB 959 685-201
White end caps	9HD 980 858-018



## **CLEARANCE LIGHTS**



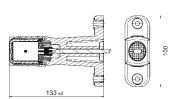
#### LED tail light/clearance light

For horizontal or vertical mounting on trailers and semi-trailers with box, with 2 red LEDs, clear lens, with grommet, base plate and caps made from grey plastic, with prism rod as a light exit element. 2 holes, Ø 5.4 mm, for fastening screws.

24 V/1.4 W, current consumption = approx. 0.06 A

Without cable	2XS 008 078-001





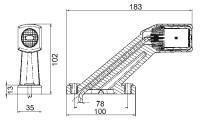


#### LED clearance light

LED rubber arm clearance light with 4 LEDs, short mounting Side marker light, position light, clearance light Operating temperature -40°C to +50°C, degree of protection IP 6K9K, power consumption 24 V/1.8 W

6.3 mm flat receptacles	
With 3,000 mm cable, right	2XS 011 768-0611)
With 3,000 mm cable, left	2XS 011 768-0711)
With 500 mm cable and EasyConn connector (2-pin)	
90° angled	2XS 011 768-011 <sup>2)</sup>
Not angled	2XS 011 768-021 <sup>2)</sup>
With 500 mm cable and quick link connector	2XS 011 768-0013)







## LED clearance light

LED rubber arm clearance light with 4 LEDs, horizontal mounting Side marker light, position light, clearance light Operating temperature -40°C to +50°C, degree of protection IP 6K9K, power consumption 24 V/1.8 W

With 500 mm cable and EasyConn connector (2-pin)	
Right	2XS 011 769-0211)
Left	2XS 011 769-0111)



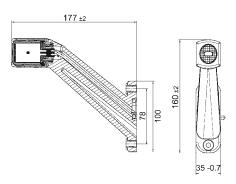


<sup>=</sup> ADR / GGVS tested
\* Please see the note on pages 72 to 75 regarding LED direction indicators and LED light failure monitor.



# **CLEARANCE LIGHTS**





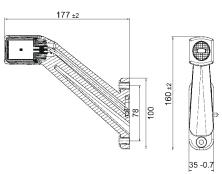


#### LED clearance light

LED rubber arm clearance light with 4 LEDs, vertical mounting Side marker light, position light, clearance light Operating temperature -40°C to +50°C, degree of protection IP 6K9K, power consumption 24 V/1.8 W

With 3,000 mm cable and 6.3 mm flat receptacles	
Right	2XS 011 744-0411)
Left	2XS 011 744-031 <sup>1)</sup>
With 500 mm cable and EasyConn connector (2-pi	n), 90°
Right	2XS 011 744-021 <sup>2)</sup>
Left	2XS 011 744-011 <sup>2)</sup>
With 500 mm cable and quick link connector	, ,
Right	2XS 011 744-0813)
Left	2XS 011 744-0713)







#### LED clearance light

LED rubber arm clearance light with 4 LEDs, vertical mounting Side marker light, position light, clearance light Operating temperature -40°C to +50°C, degree of protection IP 6K9K, power consumption 24 V/1.8 W

With 150 mm cable and open cable	e ends
Right	2XS 011 744-161 <sup>1)</sup>
Left	2XS 011 744-171 <sup>1)</sup>
With 500 mm cable and EasyConn	connector (2-pin)
Right	2XS 011 744-101 <sup>2)</sup>
Left	2XS 011 744-111 <sup>2)</sup>
With 800 mm cable and AMP SUPE	ERSEAL connector (2-pin)
Right	2XS 011 744-201 <sup>3)</sup>
Left	2XS 011 744-211 <sup>3)</sup>



## REFLEX REFLECTORS



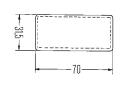


#### LED additional stop lamp

 $24\ V$  LED additional stop lamp, with red PMMA Plexiglas lens, with screw fastening and ECE type tested

2DA 343 106-011<sup>1)</sup> Open cable ends







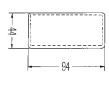
#### Reflex reflector

Red reflex reflector with clear PMMA base plate and self-adhesive tape.

Dimensions 31.5 mm x 70 mm Approved for ECE and SAE

With self-adhesive tape 8RA 004 412-021





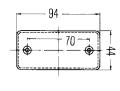


#### Reflex reflector

For horizontal or vertical surface mounting.

With self-adhesive tape 8RA 003 326-031







#### Reflex reflector

Red reflex reflector, with white base plate for horizontal or vertical mounting Dimensions 44 mm x 94 mm Tested to HELLA standard 67001 class 2

8RA 003 326-001 Screw fastening

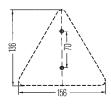


= ADR / GGVS tested
\* Please see the note on pages 72 to 75 regarding LED direction indicators and LED light failure monitor.



# REFLEX REFLECTORS



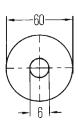


#### Reflex reflector

2 holes, Ø 6 mm, for fastening screws, type-tested, red

Screw fastening 8RA 002 020-001





#### Reflex reflector

With diameter of 60 mm and height of 6.5 mm Approved for ECE

With self-adhesive tape 8RA 002 014-281







# Reflex reflector

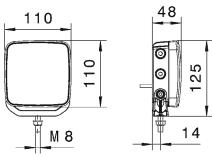
Triangular reflex reflector with round exterior shape, type tested, red

With self-adhesive tape	8RA 343 220-007
With 2 holes for fastening screws	8RA 343 220-017



# **REVERSING LIGHTS**







#### LED reversing light Repulse

With 1 LED Voltage 9-32 V

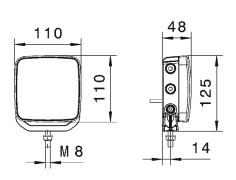
Light output (measured): 320 lumens Power requirement: 5 watts Colour temperature: 5,500 kelvins

Colour temperature: 5,500 Kelvins
Multi-voltage
Polarity reversal protection
Overvoltage protection
IP 6K9K/IP 67 (high pressure cleaning resistant/immersion resistant)
ECE-R10 and ECE-R23 approval
Mounting: upright and pendant
Bracket width 86 mm

Surrounding bracket for upright, pendant, and rear mounting

With 3,500 mm cable and 6.3 mm flat receptacles	2ZR 012 456-021 <sup>1)</sup>
With 1,000 mm cable and EasyConn connector (2-pin)	2ZR 012 456-011 <sup>2)</sup>
With 2,000 mm cable and AMP SUPERSEAL connector (2-pin)	2ZR 012 456-001 <sup>3)</sup>







## LED reversing light Repulse Pro

With 3 LEDs Voltage 9-32 V Light output (measured): 900 lumens Power requirement: 11 watts

Colour temperature: 5,500 kelvins

Multi-voltage Polarity reversal protection

Overvoltage protection IP 6K9K/IP 67 (high pressure cleaning resistant/immersion resistant) ECE-R10 and ECE-R23 approval

Mounting: upright and pendant Bracket width 86 mm

Surrounding bracket for upright, pendant, and rear mounting

6.3 mm flat receptacles With 3,500 mm cable	2ZR 012 456-221 <sup>1)</sup>
EasyConn connector (2-pin) With 1,000 mm cable	2ZR 012 456-211 <sup>2)</sup>
AMP SUPERSEAL connector (2-pin) With 2,000 mm cable	2ZR 012 456-2013)





<sup>=</sup> ADR / GGVS tested
\* Please see the note on pages 72 to 75 regarding LED direction indicators and LED light failure monitor.



# **REVERSING LIGHTS**





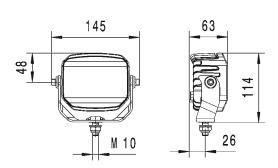
#### Module 70 gen. III reversing light

Voltage 9-33 V
Light output (measured): 800 lumens
Power requirement: 13 watts
Colour temperature: 6,500 kelvins
Multi-voltage
Polarity reversal protection
Overvoltage protection
Thermal management
IP 6K9K/IP 67 (high pressure cleaning resistant/immersion resistant)
ECE-R10 and ECE-R23 approval
High-quality aluminium housing
CoroSafe coating
Connection: 2,000 mm cable
Mounting: upright and pendant
Bracket width 36 mm

Close-range illumination

2ZR 996 376-0911)







## Power Beam 1000 reversing light

Voltage 9-33 V
Light output (measured): 850 lumens
Power requirement: 18 watts
Colour temperature: 6,500 kelvins
Multi-voltage
Polarity reversal protection
Overvoltage protection
Thermal management
IP 6K9K/IP 67 (high pressure cleaning resistant/immersion resistant)
ECE-R10 and ECE-R23 approval
High-quality aluminium housing
CoroSafe coating
Connection: DT connector
Mounting: upright and pendant
Bracket width 116 mm

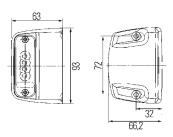
Close-range illumination

2ZR 996 188-1211)



# LICENCE PLATE LIGHTS







#### LED licence plate light

For mounting on the right or left next to the licence plate ( $520 \times 120$  mm), only 1 light needed for illumination. Clear lens, with 4 LEDs, black plastic housing, 2 fastening screws M5 x 35.

24 V/1 W, current consumption = approx. 0.04 A

With housing	2KA 010 278-021
With housing, 2,000 mm cable, and 6.3 mm flat receptacles	2KA 010 278-031 <sup>1)</sup>
With housing, 500 mm cable, and EasyConn connector	2KA 010 278-051 <sup>2)</sup>
With housing, 2,000 mm cable, and AMP SUPERSEAL connector	2KA 010 278-081 <sup>3)</sup>





# LED licence plate light

LED licence plate light, with 2 LEDs Multi-voltage 9-32 V Dimensions: 67 x 93 x 63 (L x H x W) EMC approval, class 3 Operating temperature -40°C to +85°C Degree of protection IP 5K9K Tested to HELLA standard 67101 class 5.1

With 2,000 mm cable and 6.3 mm flat receptacles	2KA 012 271-031
With 500 mm cable and EasyConn connector	2KA 012 271-0511)
With 500 mm cable and quick link connector	2KA 012 271-041 <sup>2)</sup>
With 1,300 mm cable and SUPERSEAL connector	2KA 012 271-061 <sup>3)</sup>
With 1,300 mm cable and EasyConn connector, angled	2KA 012 271-071
With 2,000 mm cable and SUPERSEAL connector	2KA 012 271-081 <sup>3)</sup>

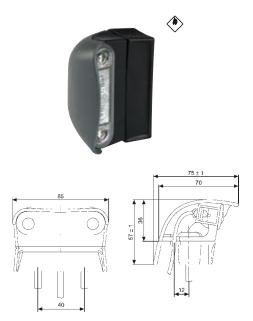




<sup>=</sup> ADR / GGVS tested
\* Please see the note on pages 72 to 75 regarding LED direction indicators and LED light failure monitor.



# LICENCE PLATE LIGHTS





1)

#### LED licence plate light

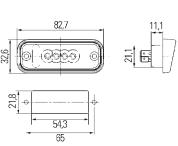
For mounting on the left and the right next to the licence plate (520 x 120 mm), with 2 white LEDs, clear lens, housing and base made from black plastic, bulb holder with vibration damping, with 2 caulked screws, multi-voltage 10-33 V.

24 V/0.5 W, current consumption = approx. 0.02 A

With 500 mm cable and EasyConn connector (2-pin)

2KA 959 640-6611)







## LED licence plate light

For installation above the licence plate (520 x 120 mm), 2 lights required to illuminate the licence plate, degree of protection: IP 6K9K.

24 V/1 W, current consumption = approx. 0.04 A

With frame, without cable, and blade terminal 6.3 x 0.8 mm

2KA 010 278-0111)









For customer-specific wiring requirements (customised fittings) for connection to the EasyConn system. Including cable ties and the respective number  $(2,7, or\ 15)$  of contacts (blade terminals or flat receptacles).

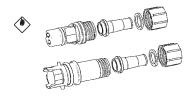
Suitable for the following HELLA cables:

2-pin, cable FLRYY (2 x 1 mm²)	8KL 340 009-001
4-pin, wiring harness (1 mm²)	8KL 340 403-011
2-pin, wiring harness (0.5 mm²)	8KL 340 055-021
7-pin, cable FLRYY (6 x 1.0 mm² / 1 x 1.5 mm²)	8KL 340 412-001
7-pin, wiring harness (2.5 mm²)	8KL 340 054-001
10-pin, wiring harness (2.5 mm²)	8KL 340 093-011
15-pin, cable FLRYY (12 x 1.0 mm² / 3 x 2.5 mm²)	8KL 340 059-001



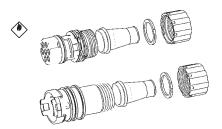
SUPERSEAL plug housing set

2-pin	8KW 744 806-801
4-pin	8KW 744 808-801



EasyConn connector/EasyConn mating connector With EasyConn female connector housing (2-pin) (mating connector for 2-pin EasyConn connector housing)

Diameter: 19.5 mm	9XX 340 879-001
Diameter: 24.5 mm	9XX 340 882-001



EasyConn connector/EasyConn mating connector With EasyConn female connector housing (7-pin) (mating connector for 7-pin EasyConn connector housing)

Diameter: 28.0 mm	9XX 340 880-001
Diameter: 33.0 mm	9XX 340 883-001



EasyConn connector/EasyConn mating connector With EasyConn connector set (15-pin, male) With EasyConn connector set (15-pin, female)

Diameter: 39.0 mm	9XX 340 981-001
Diameter: 44.0 mm	9XX 340 984-001





## Cable

Flat cable, with 2 x 1.5 mm cross section.

8KL 340 050-001



#### Cable

Flat cable, with 2 x 1.5 mm cross section, 8,000 mm cable length, and 2 x retractable end caps.

8KL 998 228-021



#### Cable

Round cable, with 2 x 1 mm cross section, 250 mm cable length with open end, and quick link connector incl. clamping piece.

8KA 998 229-011



#### Cable

With 6,000 mm cable length, 2 x 1.0 mm cross section, and AMP SUPERSEAL pin housing over-molded.

8KA 340 954-001







#### Cable

With 2,000 mm cable length, 2 x 1.0 mm cross section, DEUTSCH connector, bush housing (2-pin), and open end.

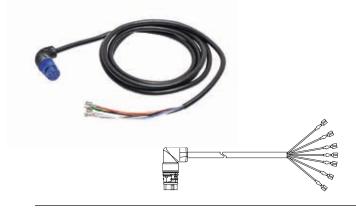
8KA 340 038-131



#### Cable

With 8,000 mm cable length or 12,000 mm cable length (over-molded), 2 x 1.5 mm cross section, flat cable, AMP SUPERSEAL connector (2-pin), and retractable end cap.

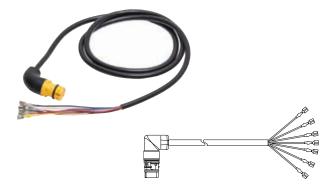
8,000 mm cable length	8KA 340 038-201
12,000 mm cable length	8KA 340 038-221



#### Cable

With 1,550 mm or 2,550 mm cable length, 6 x 1.0 mm and 1 x 1.5 mm cross section, EasyConn female connector housing (7-pin) over-molded, and 7 x 2.8 mm contacts.

2,550 mm cable length **8KA 340 826-201** 

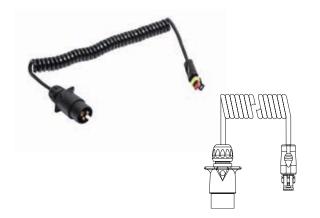


## Cable

With 1,550 mm or 2,550 mm cable length, 6 x 1.0 mm and 1 x 1.5 mm cross section, EasyConn female connector housing (7-pin) over-molded, and 7 x 2.8 mm contacts.

1,550 mm cable length **8KA 340 826-211** 



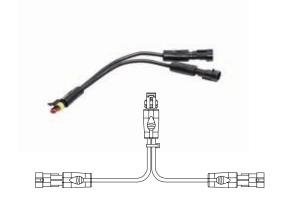


#### Cable

With 250 mm cable length (approx. 1,200-1,500 mm working length), coiled cable, 2 x 1.0 mm cross section, connector (3-pin) over-molded, and AMP SUPERSEAL connector (2-pin) over-molded.

250 mm cable length

8KA 340 712-001

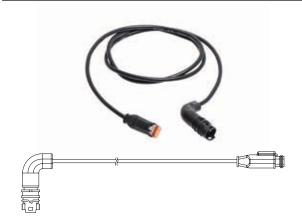


#### Cable adapter "Y"

With 150 mm cable length, 2 x 1.0 mm cross section, AMP SUPERSEAL pin housing (2 x 2-pin) over-molded, and AMP SUPERSEAL bush housing (1 x 2-pin) over-molded.

150 mm cable length

8KA 340 859-041



#### Cable

With 1,300 mm cable length, 2 x 1.0 mm cross section, EasyConn connector housing (2-pin) over-molded, and DEUTSCH connector (2-pin).

1,300 mm cable length

8KA 340 854-121



#### Cable

With 6,000 mm cable length, 2 x 1.0 mm cross section, EasyConn connector housing (2-pin) over-molded, and open end.

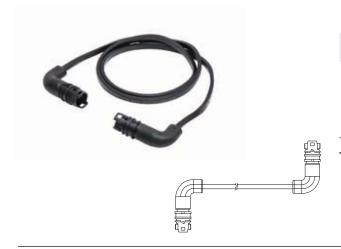
6,000 mm cable length

8KA 340 854-101



= ADR / GGVS tested





#### Cable

With 1,000 mm cable length, 2 x 1.5 mm cross section, EasyConn connector housing (2 x 2-pin) over-molded.

1,000 mm cable length

8KA 340 899-101



#### Cable

With 10,000 mm cable length, 2 x 1.5 mm cross section, EasyConn connector housing (2 x 2-pin) over-molded, and female connector housing (2-pin) over-molded.

10,000 mm cable length

8KA 340 899-111



#### Cable

With 2,000 mm cable length, 2 x 1.0 mm cross section, EasyConn connector housing over-molded (male), and EasyConn female connector housing over-molded (female).

2,000 mm cable length

8KA 340 899-121



## Main power supply cable

With 100 mm cable length, 12 x 1.5 mm and 3 x 2.5 mm cross section, EasyConn female connector housing (2 x 15-pin) over-molded.

100 mm cable length

8KA 340 815-121





#### Main power supply cable

With 15,500 mm cable length, 12 x 1.0 mm and 3 x 2.5 mm cross section, EasyConn service set II female connector housing (2 x 15-pin).

8KA 340 815-601



#### Main power supply cable

With 16,500 mm cable length, 8 x 1.0 mm and 2 x 2.5 mm cross section, EasyConn female connector housing (2 x 15-pin) over-molded.

8KA 340 816-041



## Main power supply cable

With 15,000 mm cable length, 8 x 1.0 mm and 2 x 2.5 mm cross section, EasyConn service set II female connector housing (2 x 15-pin) with 500 mm cable DIN bayonet outlet (4-pin).

8KA 340 817-361



#### Main power supply cable

With 100 mm cable length, 12 x 1.5 mm and 3 x 2.5 mm cross section, 2 x 15-pin EasyConn connector housing over-molded.

8KA 340 900-021







#### EasyConn flat cable

Supply cable (2 x 1.5 mm²) for connecting side marker lights to reflex reflectors and position lights via quick link wiring or incision clamping technology, with EasyConn female connector housing (2-pin) and retractable end cap.

6,000 mm	8KA 340 822-071
10,000 mm	8KA 340 822-081



#### Main power supply cable 15-wire

 $12\times1.0~mm^2/3\times2.5~mm^2,$  with 2 EasyConn female connector housings (15-pin), pre-fitted and over-molded, without additional outlets.

15,500 mm	8KA 340 815-001
10,000 mm	8KA 340 815-011
12,000 mm	8KA 340 815-021



## Main power supply cable 10-wire

 $8\times1.0\ mm^2/2\times2.5\ mm^2$  , with 2 EasyConn female connector housings (15-pin), pre-fitted and over-molded, without additional outlets.

9,000 mm long	8KA 340 816-001
12,000 mm long	8KA 340 816-011



#### Main supply cable 15-wire with outlets

 $(12\times1.0~mm^2/3\times2.5~mm^2)$  with 2 EasyConn female connector housings (15-pin), pre-fitted and over-molded. 1-4 outlets (each 300 mm long) possible with EasyConn female connector housing (2-pin, for auxiliary functions such as reversing light or stop light). The pin assignment of the EasyConn female connector housing (2-pin) can be specified individually on request. Colour coding depends on the respective function.

15,000 mm long, with two 300 mm long outlets with 2-pin EasyConn female connector housing (1 x brown for tail light, right/ 1 x black for tail light, left)

8KA 340 817-011





#### Front adapter for semi-trailers

Front adapter cable 2 x 7-wire with 15-pin EasyConn connector housing, 7-N socket DIN ISO 1185 (cable 3 x 2.5 mm² / 4 x 1.5 mm²) 7-S socket DIN ISO 3731 (cable 7 x 1.5 mm²) Suitable for the main supply cables from the series 8KA 340 815-..., 8KA 340 816-..., and 8KA 340 817-...

1,700 mm	8KA 340 818-001
600 mm	8KA 340 818-011



#### Front adapter

With 2 x 1,700 mm cable length, 4 x 1.5 mm, 3 x 2.5 mm, and 7 x 1.5 mm cross section, 1x 7-N ISO 1185, 1 x 7-S ISO 3731, and EasyConn connector housing (1 x 15-pin) over-molded.

8KA 340 818-021



## Front adapter for trailers

GGVS tested front adapter cable 2 x 7-wire with EasyConn connector housing (15-pin), 7-N connector DIN ISO 1185 (cable 3 x 2.5 mm² / 4 x 1.5 mm²), 7-S connector DIN ISO 3731 (cable 7 x 1.5 mm²) Suitable for the main supply cables from the series 8KA 340 815-..., 8KA 340 816-..., and 8KA 340 817-...

3,500 mm	8KA 340 841-001
6,000 mm	8KA 340 841-021



#### Front adapter for semi-trailers

Front adapter cable 15-wire (12 x 1.0 mm²/3 x 2.5 mm²) With EasyConn connector housing (15-pin), socket (15-pin) DIN ISO 12098. Suitable for the main supply cables from the series 8KA 340 815-..., 8KA 340 816-..., and 8KA 340 817-...

600 mm	8KA 340 842-001
1,700 mm	8KA 340 842-011











#### Front adapter for trailers

Front adapter cable 15-wire ( $12 \times 1.0 \text{ mm}^2/3 \times 2.5 \text{ mm}^2$ ) with EasyConn connector housing (15-pin), connector (15-pin) DIN ISO 12098. Suitable for the main supply cables from the series 8KA 340 815-..., 8KA 340 816-..., and 8KA 340 817-...

3,500 mm	8KA 340 843-001
4,500 mm	8KA 340 843-011
6,000 mm	8KA 340 843-021





#### Front adapter

With 3,500 mm cable length, 12 x 1.0 mm and 3 x 2.5 mm cross section, ISO 12098 connector (1 x 15-pin), and EasyConn connector set II (1 x 15-pin).

8KA 340 843-101

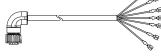




## Intermediate adapter

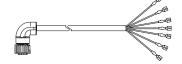
With 3,050 mm cable length, 6 x 1.0 mm and 1 x 1.5 mm cross section, 1 x DIN bayonet (7-pin) over-molded, and 7 x 6.3 mm contacts.

8KA 340 928-201



## Intermediate adapter

With 3,050 mm cable length, 6 x 1.0 mm and 1 x 1.5 mm cross section, 1 x DIN bayonet (7-pin) over-molded, and 7 x 6.3 mm contacts.



8KA 340 928-211





#### Intermediate adapter

Y adapter cable 2-wire ( $2\times0.5~\text{mm}^2$ ) with EasyConn female connector housing (2-pin), and two 150 mm long outlets with 1 EasyConn connector housing (2-pin) and 1 EasyConn female connector housing (2-pin)

8KA 340 859-001



#### Intermediate adapter

Y adapter cable 2-wire (2 x  $0.5~\text{mm}^2$ ) with EasyConn female connector housing (2-pin), and two 150 mm long outlets each with 1 EasyConn female connector housing (2-pin)

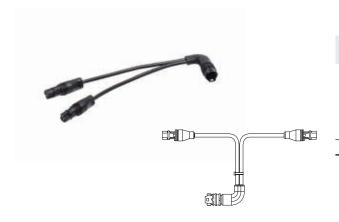
8KA 340 859-011



## Intermediate adapter

With 2 x 150 mm cable length, 2 x 1.0 mm cross section, AMP SUPERSEAL bush housing (2 x 2-pin), and AMP SUPERSEAL pin housing (1 x 2-pin) overmolded.

8KA 340 859-021



#### Intermediate adapter

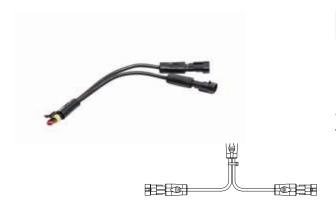
With 2 x 150 mm cable length, 2 x 1.0 mm cross section, AMP SUPERSEAL female connector housing (2 x 2-pin) over-molded, and AMP SUPERSEAL connector housing (1 x 2-pin) over-molded.

8KA 340 859-031





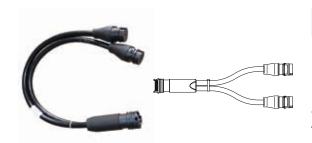




#### Intermediate adapter

With 2 x 150 mm cable length, 2 x 1.0 mm cross section, AMP SUPERSEAL pin housing (2 x 2-pin) over-molded, and AMP SUPERSEAL bush housing (1 x 2-pin) over-molded.

8KA 340 859-041



#### Intermediate adapter

With 500 mm cable length,  $12\times1.5$  mm and  $3\times2.5$  mm cross section, EasyConn connector housing (1 x 15-pin) over-molded, and EasyConn female connector housing (2 x 15-pin) over-molded.

8KA 340 864-011



## Intermediate adapter

Adapter cable 15-wire ( $12 \times 1.0 \text{ mm}^2/3 \times 2.5 \text{ mm}^2$ ), 500 mm long. With EasyConn connector housing (15-pin) and EasyConn female connector housing (15-pin). 1-4 outlets (each 300 mm long) possible with EasyConn connector housing (2-pin, for auxiliary functions such as reversing light or stop light). The pin assignment of the EasyConn female connector housing (2-pin) can be specified individually on request. Colour coding depends on the respective function.

With 2 outlets (each 300 mm long) on the side of the EasyConn female connector housing (15-pin), each with 1 EasyConn connector housing (2-pin) (1 x red for stop light, 1 x purple for reversing light)

8KA 340 846-001



#### Rear adapter

Rear adapter cable with EasyConn connector housing (15-pin). Suitable for the main supply cables from the series 8KA 340 815-..., 8KA 340 816-..., and 8KA 340 817-...

With two 7-wire cables (6 x 1.0 mm²/1 x 1.5 mm²), each 1,300 mm long, outlet to 2 EasyConn female connector housings (7-pin, for rear lamps). Also featuring 3 EasyConn connector housings per side (2-pin, e.g. for licence plate lights, rubber arm lights, and SMLR chains), connected using 3 cables (2 x 0.5 mm²) per side, with a cable length of 500 mm between the individual connector housings.

8KA 340 819-001





## Rear adapter

With 2,500 mm and 1,500 mm cable length, 6 x 1.0 mm and 1 x 1.5 mm cross section, EasyConn female connector housing (2 x 7-pin) over-molded.

8KA 340 819-191



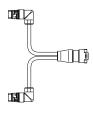
#### Rear adapter

With 2 x 3,000 mm cable length, 6 x 1.0 mm and 1 x 1.5 mm cross section, EasyConn connector housing (1 x 15-pin) over-molded, EasyConn female connector housing (2 x 7-pin) over-molded, each with EasyConn connector housing (2-pin) outlet with 3,000 mm cable length over-molded.

8KA 340 819-121







#### Rear adapter

With 2 x 3,000 mm cable length, 6 x 1.0 mm and 1 x 1.5 mm cross section, EasyConn connector housing (1 x 15-pin) over-molded, with EasyConn female connector housing (2 x 7-pin) over-molded.

8KA 340 819-211



#### Rear adapter

With 2 x 3,000 mm cable length, 6 x 1.0 mm and 1 x 1.5 mm cross section, EasyConn connector housing (1 x 15-pin) over-molded, with EasyConn female connector housing (2 x 7-pin) over-molded, and 1 x 1,500 mm flat cable outlet.

8KA 340 819-231

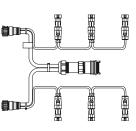


## Rear adapter

With 2 x 2,000 mm cable length, 6 x 1.0 mm and 1 x 1.5 mm cross section, EasyConn connector set II (15-pin), and DIN bayonet (2 x 7-pin) over-molded.

8KA 340 819-421





#### Rear adapter

With 2,000 mm cable length, 6 x 1.0 mm and 1 x 1.5 mm cross section, EasyConn connector set II (15-pin) with DIN bayonet (2 x 7-pin) and 3 x AMP SUPERSEAL connector outlet each with 500 mm cable length over-molded.

8KA 340 819-431





#### Wiring harness

With 24 V connector (ISO 12098) for trailers with tarpaulin or box. With 14-wire (11 x 1.5 mm², 3 x 2.5 mm²), with connector (15-pin).

Suitable for main supply cables 8KA 340 815-... and 8KA 340 817-... as well as connectors (15-pin, DIN ISO 12098).

3,500 mm length

8KA 340 031-001



#### Helical cable

Adapter cable, 8-wire ( $7 \times 1 \text{ mm}^2/1 \times 2.5 \text{ mm}^2$ ), with EasyConn connector housing (15-pin) and EasyConn female connector housing (15-pin), pre-fitted and over-molded. Can be used as an adapter cable between the main supply cable and the rear or front adapter cable.

3,000 mm long (working length) spiral cable

8KA 340 845-031



## Adapter

Adapter cable with 1,000 mm cable length and EasyConn female connector housing (2-pin) for connecting to the EasyConn system, other cable end with AMP connector (2-pin).

1,000 mm **8KA 340 852-051** 



#### Adapter

Adapter cable with 6,000 mm cable length, 2 x 1.0 mm cross section, EasyConn female connector housing (2-pin).

6,000 mm **8KA 340 852-021** 







# CONNECTION SETS AND PLUG SETS



#### Connection set

For 2-wire flat cable or round cable. Suitable for combination distributor 8JE 340 060-... and for 2-wire flat cable 8KL 340 050-...

2-pin 9XX 340 220-001



#### Connection set

For 2-wire round cable. 1 connection set for LED side marker light with reflex reflector 2PS 340 001-... and 1 connection set for combination distributor 8JE 340 060-...

2-pin 9XX 340 220-011



#### Connection set

For 2-wire flat cable or round cable. Suitable for combination distributor 8JE 340 060-... and for 2-wire flat cable 8KL 340 050-...

2-pin 9XX 340 220-021



## Connection set fittings

For 2-wire round cable. For connection of 10 LED side marker lights 2PS 340 001-... Suitable for combination distributor 8JE 340 060-...

2-pin 9XX 340 220-801



#### Connection set

Suitable for combination distributor 8JE 340 060-..., as spare part for rear lamps with 6-wire cable and connector, and for junction box 8JE 340 061-...

6-pin 9XX 340 222-001

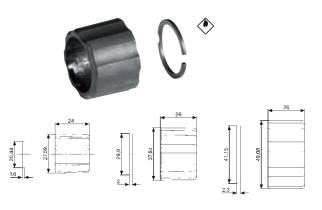


# CONNECTION SETS AND PLUG SETS



#### Connection set

15-pin connection set for main supply cable. Suitable for combination distributor 8JE 340 060-... and front distributor 8JE 340 165-001 and as spare part for the following cables: 8KA 340 010-..., 8KA 340 020-..., 8KA 340 021-..., 8KA 340 030-..., and 8KA 340 031-...



#### Fuse sets

For the additional securing of EasyConn plug connectors under a high tensile load with mechanical seal and union nut.

EasyConn connector housing, 2-pin (VPE 20)	9XX 340 876-007
EasyConn connector housing, 7-pin (VPE 10)	9XX 340 877-007
EasyConn connector housing, 15-pin (VPE 5)	9XX 340 878-007



## Сар

For female connector housing, for airtight sealing of any EasyConn female connector housing that is not required  $\,$ 

EasyConn female connector housing, 2-pin (VPE 20) 9HV 340 812-007



## Plug sets

For connector housing, for airtight sealing of any EasyConn connector housing that is not required with an 0-ring  $\,$ 

EasyConn connector housing, 2-pin (VPE 20)	9XX 340 870-007
EasyConn connector housing, 7-pin (VPE 10)	9XX 340 871-007
EasyConn connector housing, 15-pin (VPE 5)	9XX 340 872-007

#### Spare parts

Quick link clamping piece	8KW 998 602-002
Retractable end cap with cable diameter up to a maximum of 11 mm (7-pin)	9GS 340 051-001

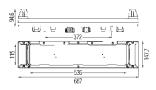






# **DISTRIBUTORS**



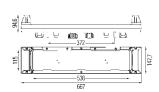


#### Combination distributor

For connecting all light technology functions (24 V) to the rear end. With licence plate light and holder part for 520 mm x 120 mm licence plates. With black cover at front and rear and a socket (6-pin) for additional lighting functions, terminal 9-15 interior lamp, worklight, rotating beacon.

8JE 340 060-001



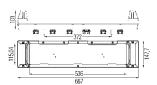


#### Combination distributor

For connecting all light technology functions (24 V) to the rear end. With licence plate light and holder part for 520 mm x 120 mm licence plates. With black cover at front and rear and a socket (6-pin) for additional lighting functions, terminal 9-15 interior lamp, worklight, rotating beacon.

8JE 340 060-011



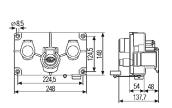


#### Combination distributor

EasyConn combination distributor with integrated licence plate lighting for holding the licence plate. With EasyConn connections (1 x15-pin, 5 x 7-pin, and 6 x 2-pin) for all lighting technology functions. With separately protected lighting circuits.

8JE 340 060-251





#### Combination distributor

For connecting the technical lighting functions of the trailer. With 3 sockets on the front: (24-N socket, 7-pin, according to DIN ISO 1185, and 24-S socket, 7-pin, according to DIN ISO 3731, and 15-pin socket according to DIN ISO 12098) as input module for trailers and semi-trailers with or without tarpaulin. On the rear with 1 x 15-pin bush, suitable for main supply cable 8KA 340 010-241 or adapter 8KA 340 010-251 with 2 x 2-pin bush for optional connection of side marker lights/position lamps/clearance lights, secured with 2 flat fuses (2 A).

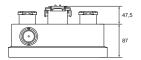
Front mounting

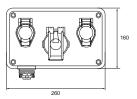
8JE 340 165-001



# **DISTRIBUTORS**







#### Front distributor for semi-trailers

For direct connection to the EasyConn system, with 3 combined sockets (1 x socket DIN ISO 12098, 1 x 7-N socket DIN ISO 1185, and 1 x 7-S socket DIN ISO 3731) and 1 EasyConn connection (15-pin, for the main power supply).

8JE 340 898-021





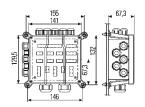
#### Front distributor for semi-trailers

For direct connection to the EasyConn system, with 3 combined sockets (1 x socket DIN ISO 12098, 1 x 7-N socket DIN ISO 1185, and 1 x 7-S socket DIN ISO 3731), an EasyConn connection (15-pin, for the main power supply), and 2 sealed M16 screwed cable glands.

Distributor box for front connection

8JE 340 898-001





#### Distributor box

With screwed cable glands as an alternative to 8JE 340 060-001.

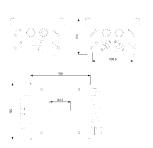
Can be electrically contacted and installed universally using 6.3 x 0.8 mm flat receptacles:

1 flat plug strip with 14 terminals, 6 flat plug strips with 6 terminals, and 8 flat plug strips with 4 terminals.

Populated with 12 screwed cable glands: 10 x clamping range 3.5-10 mm, 2 x clamping range 9-18 mm.

8JE 340 151-001





#### Distributor box

With 1 EasyConn connection (15-pin, for the main supply), EasyConn connections ( $2 \times 7$ -pin, for rear lamps), EasyConn connections ( $8 \times 2$ -pin, e.g. for side marker lights, licence plate lights, clearance lights, or special function), and  $4 \times M20$  screwed cable glands, fully wired via pin block.

8JE 340 867-011



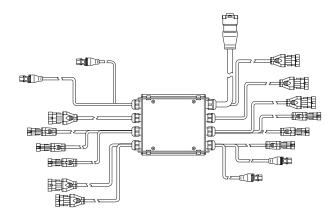
# **DISTRIBUTORS**



#### Distributor box

For round modules: AMP SUPERSEAL (2-pin), AMP SUPERSEAL (4-pin), or EasyConn (2-pin)

8JE 340 867-091

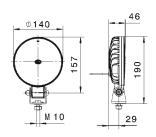






# **WORKLIGHTS**





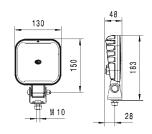


#### Worklight AP 700/1200/1800 LED

Close-range illumination, light output (measured): 700 / 1,200 / 1,800 lumens, power requirement: 16 / 22 / 30 watts, colour temperature: 5,700° kelvins, multi-voltage, polarity reversal protection, overvoltage protection, thermal management, IP 6K9K / IP 6K7 (high pressure cleaning resistant /immersion resistant), ECE-R10 approval, connection: 300 mm cable, mounting: upright and pendant, bracket width: 42 mm, round design, recommended tilt angle: 12°.

AP 700 LED, voltage: 10-16 V	1G4 012 722-001 <sup>1)</sup>
AP 1200 LED, voltage: 9-33 V	1G4 011 722-001 <sup>1)</sup>
AP 1800 LED, voltage: 9-33 V	1G4 013 722-001 <sup>1)</sup>





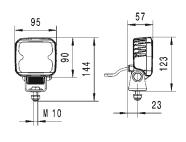


#### Worklight AP 1200 LED

Voltage: 9-33 V, light output (measured): 1,200 lumens, power requirement: 22 watts, colour temperature: 5,700° kelvins, multi-voltage, polarity reversal protection, overvoltage protection, thermal management, IP 6K9K / IP 6K7 (high pressure cleaning resistant/immersion resistant), ECE-R10 approval, connection: 300 mm cable, mounting: upright and pendant, bracket width: 42 mm, square design, recommended tilt angle: 12°.

Close-range illumination	1GA 011 720-041 <sup>1)</sup>







#### Worklight Q90 LED

Voltage: 9-33 V, light output (measured): 1,200 lumens, power requirement: 25 watts, colour temperature: 6,500° kelvins, multi-voltage, polarity reversal protection, overvoltage protection, thermal management, IP 6K9K / IP 6K8 (high pressure cleaning resistant/immersion resistant), ECE-R10 approval, connection: 500 mm cable, mounting: upright and pendant, bracket width: 42 mm, recommended tilt angle: 12° near, far: 5°

Close-range illumination	1GA 996 283-001 <sup>1)</sup>
Long-range illumination	1GA 996 283-011 <sup>1)</sup>



# **BEACONS**



#### Beacon 7000 LED

Cost-effective, quick upgrade from halogen to LED using the existing technical basis – you can simply use your existing wiring! The KL 7000 LED stands out thanks to its rotating LED light function without moving parts, the flat and compact design, and the mounting solutions suitable for any purpose.

- → Maintenance-free
   → Smooth, robust dome
   → Optimal thermal management Optimal thermal management Extremely long service life Multi-voltage 10-32 V

Fixed attachment	2RL 011 484-001
Flexible pipe-socket mounting	2RL 011 484-011
Magnetic mounting bracket	2RL 011 484-021



#### Rota LED beacon

The Rota LED with rotating LED light function impresses with its high level of efficiency, its flat and compact design, and rotating LED light function. Due to the shock absorbing rubber foot, it is highly resilient against vibration and thus perfectly suited for challenging applications.

- → LED beacon with ECE-R65 approval and rotating warning signal
   → High vibration resistance and extremely robust
   → Extremely efficient
   → Multi-voltage 10-32 V

Fixed attachment	2RL 010 979-001
Flexible pipe-socket mounting	2RL 010 979-011
Magnetic mounting bracket	2RL 010 979-021



#### K-LED 2.0 beacon

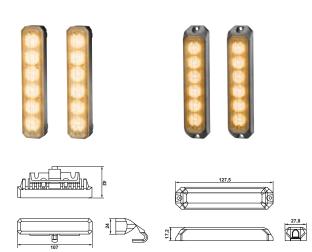
The new HELLA K-LED 2.0 ensures the best possible warning effect and thus optimum safety, as it automatically illuminates 2.3 times brighter during the day than it does at night. It is also the first HELLA beacon where you can choose between rotating or flashing warning signals by pressing a switch or by means of programming. This offers you the right warning signal for any

- → 2 levels (ECE R-65): Beacon with light sensor for automatic switching between day and night mode, for ultimate warning effectiveness
   → Functional safety: The first HELLA beacon to meet the requirements of
- → Extremely robust and highly compact
   → Multi-voltage 10-32 V

Fixed attachment	2XD 011 557-101
Flexible pipe-socket mounting	2XD 011 557-201
Magnetic mounting bracket	2XD 011 557-301



# WARNING LIGHTS





#### BST-V front flashers

The BST-V flashing headlights for vertical mounting make an impression thanks to their flat and compact design. The 2 different housing variants allow straightforward and flexible mounting in almost any installation situation. In addition to the continuous light function, a total of 4 flashing patterns can be set as either synchronous or alternating signals.

- → ECE-R65 type approval, incl. approved triple flash (amber)
   → Various flashing patterns
   → Flat, compact design enables straightforward mounting
   → BST-V can be synchronised with 2 or more units

Fixed attachment	2XD 012 160-951 <sup>1)</sup>
Bracket mounting	2XD 012 160-961 <sup>1)</sup>





#### LED lifting platform direction indicator

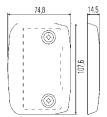
 $24\,\text{V}$  LED lifting platform light with  $2\,\text{x}$  LED. With clear lens and amber LEDs.

Power consumption 8 W Current consumption = 0.33 A ECE type tested

190 mm cable and open cable end

2BA 009 204-0511)







#### LED lifting platform direction indicator

24 V LED light with 12 amber LEDs. Zinc housing, mounting with 2 x M6 screws.

IP protection class IP 5K9K Power consumption 2.8 W Current consumption = 0.12 A ECE type tested

2,600 mm cable and open cable end

2BA 008 260-0011)



# WARNING LIGHTS



#### Hazard warning light model 3003 ACCU

When the engine is running, the rechargeable battery is charged through contacts in the charging bracket. Automatic voltage switchover to match vehicle electrical system 12/24 V, operating time 40 hours in flashing mode or 7 hours as worklight, charging bracket and lead-gel rechargeable battery included in the scope of supply.

2XW 007 146-011 Type tested



#### Hazard warning light model 3003

With fixing bracket (for battery operation through 5 mono cells, not included in the scope of supply)

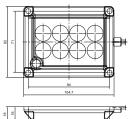
2XW 007 146-001 Type tested



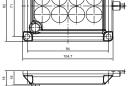


# **ACCESSORIES**









#### LED interior light

Optimum luminous yield due to the use of 8 power LEDs with a service life of at least 50,000 hours. Homogenous illumination with approx. 145 lux at centre and approx. 125 lux at a distance of 0.6 m from the centre in all directions. Clear lens made from polycarbonate. Screw mounting as mounting variant. An installation frame also allows use as a mounting variant. Ideal for flat installation conditions (16 mm). Multi-voltage circuits keep the light output constant within a voltage range of 10-31 V. This allows the same HELLA LED interior lamp to be used for both 12 V and 24 V applications.

2,400 mm cable With movement sensor	2JA 012 557-001 <sup>1)</sup>
3,400 mm cable Without movement sensor	2JA 012 557-011 <sup>2)</sup>







#### LED indicator failure control

For 24 V trailer, with a 15-pin EasyConn connector housing on one side and a 15-pin EasyConn female connector housing on the other side. No separate voltage supply required. Degree of protection IP 6K9K, with EMC approval

24 V direction indicator ECU	5DS 009 552-001





#### LED indicator failure control

24 V operating voltage 18-32 V, polarity reversal protection voltage 28 V, on-board voltage input for flasher unit left / right 24 V, operating temperature -40°C to +50°C, extended operating temperature\* -40°C to +80°C, storage temperature -40 to +90°C

24 V direction indicator ECU

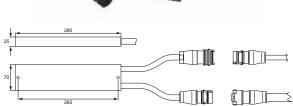
5DS 009 552-011<sup>1)</sup>

\* Simulation of the bulb is deactivated for thermal reasons if the temperature exceeds 50°C.



# **ACCESSORIES**





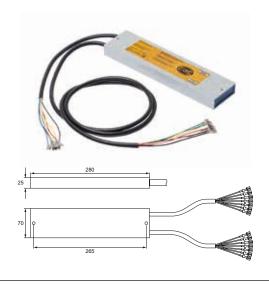


#### LED indicator failure control

For 24 V range, with a 15-pin EasyConn connector housing on one side and a 15-pin female connector housing on the other side, plus a 1,300 mm cable length per plug connection,  $12\times1.5+3\times2.5$  mm cross section, GGVS/ADR tested, degree of protection IP 6K9K.

24 V direction indicator ECU

5DS 009 552-041





#### LED indicator failure control

For 24 V range, 1,500 mm cable length, with 6.3 mm flat receptacles and 300 mm cable length, with 6.3 mm flat receptacles, each with 7 x 1 + 1 x 2.5 mm cross section, degree of protection IP 6K9K, GGVS / ADR tested.

24 V direction indicator ECU

5DS 009 552-031<sup>1)</sup>





## LED flasher unit

Universal flasher unit without failure monitor, operating voltage: 9-33 V, rated power of direction flashers: 42 W, rated power of warning flashers: 42 W, operating temperature range:  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ , without bracket, pin diagram: BG1, protection class: IP 54 according to ISO 20653.

12/24 V, LED flasher unit

4JZ 177 846-001





#### Female connector housing, 9-pin

For holding 2.8 mm and 6.3 mm flat receptacles, for use side-by-side, operating voltage: 12/24 V, operating temperature range: -40°C to +85°C, with bracket

8JA 003 526-001



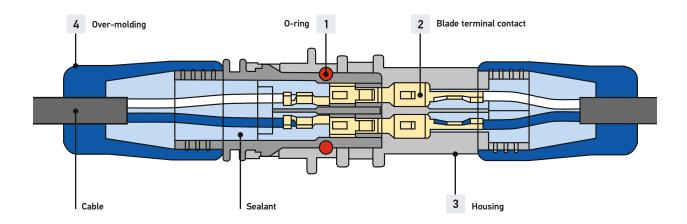
# THE CONNECTOR SYSTEM THE TECHNOLOGY BEHIND IT.

#### The connectors

The EasyConn connector system is made up of 2, 7, and 15-pin connector housings and female connector housings. Their diameters have been significantly reduced – for even easier mounting on trailers.

In future, use the modular "EasyConn" wiring and lighting system from HELLA to implement flexible wiring for  $24\ V$  trailers.

## Cross section of a 2-pin EasyConn plug connection



- O-ring
  The O-rings on the female connector housing are replaceable and guarantee a high level of leak tightness.
- 2 Contacts
  A 2.8 mm blade terminal system is used for contacting.
  The flat receptacles have an additional steel spring for safe contacting. The load is around 25 amps (constant current).
- The housing is made from impact-proof plastic (PBT) and is cast using a low-pressure method which means the contacts are fixed floating.
- Over-molding
  The housing and the sheathed cable are over-molded using
  TPE in a second work cycle. This means double the safety.



The plug connections are tested in compliance with degree of protection  $\bf IP~6K9K$  and guarantee absolute leak tightness.

 $\mathbf{6K} = \text{dustproof}, \ \mathbf{9K} = \text{resistant to high pressure/steam cleaning}$ 

# EasyConn CONNECTOR SYSTEM

Straightforward connection of all components with process reliability.



#### 2-pin connector

The 2-pin EasyConn connector housing and female connector housing make it possible to connect e.g. SMLR, positon lights, and clearance lights as well as 2-pin auxiliary functions.



#### 7-pin connector

Rear lamps are connected to the EasyConn system using the 7-pin connector housing and female connector housing.



## 15-pin connector

The 15-pin EasyConn connector housing and female connector housing connect the front adapter, the main supply cable, and the rear adapter to one another.



## Service sets

2-pin, 7-pin, and 15-pin service sets are available for integrating customer-specific lights or assemblies in the EasyConn system as well as for retrofitting EasyConn components.

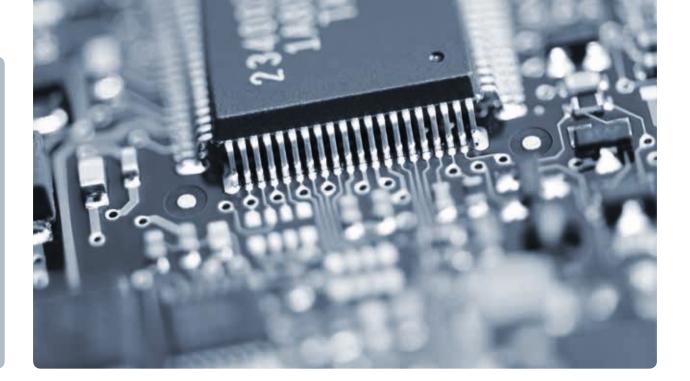


- Simply connect the coupling to the flat cable.
- ightarrow Fix with the clamping piece.
- → Press together with the mounting pliers.
- → Finished.

## Quick link wiring: flexible and secure mounting

The quick link wiring system is a further contact option that stands out thanks to fast and straightforward installation. Lamps fitted with HELLA quick link wiring consist of a cable with a coupling. The cables are delivered in different lengths depending on requirements. These lights can contact a 2-wire flat cable in any place. They may also be used for dangerous goods transport (GGVS / ADR).





# LED LIGHT FAILURE MONITOR AND CORRECT ELECTRICAL CONNECTION

#### Regulation in all ECE states

In the case of vehicles approved for use on public roads, the direction indicators must be monitored: The failure of a direction indicator must be indicated visually or acoustically in the vehicle. This applies in all ECE states. This means possible direction indicator failure must be monitored by the vehicle. Manufacturers use different procedures for this. The failure monitors currently in use cannot detect simple LED lights and indicate a fault.

Operation of the LED light with alternating voltage or clocked direct voltage is not permitted. The individual light functions may only be operated with a vehicle-mounted fuse of max. 3 A.

Due to the low watt output of LED lights, which are distinctly different from a bulb variant, problems can arise in the bulb failure monitor when operating various traction vehicles.

As checking of the direction indicators is required by law, we recommend operating the light only in conjunction with the direction indicator ECU from HELLA.

In addition, further light functions are detected by some towing vehicles. This is a vehicle comfort function which is not required by legislation and does not release drivers from their obligation to perform a visual check to establish that the lighting equipment is working. Here, too, false diagnosis can occur on account of the low power levels involved (instrument cluster in the driver's cab indicates light failure although the function is working).

In case of false diagnosis during operation of your towing vehicle type, as described above, please contact the towing vehicle manufacturer.



### HAZARDOUS GOODS ORDINANCE

GGVSEB (previously GGVS) refers to the hazardous goods ordinance for roads, railways, and inland waterways. This ordinance implements the European Parliament and Council Directive 2008 / 68 / EC of September 24, 2008 on the inland transport of hazardous goods. Worklights with this mark are approved for installation on conveyances that must comply with the provisions of GGVSEB / ADR.

## IP PROTECTION CLASSES - BUY WITH CONFIDENCE

How well is a product protected from environmental influences? Worklights are exposed to e.g. dust and water. The IP degree of protection states how resilient the product is. The classes are determined according to DIN 40 050 Part 9. HELLA worklights are designed for various protection classes:

### Degree of protection IP 5K4K

Dust may only penetrate to such an extent that function and safety are not impaired. Water that is sprayed from every direction at increased pressure against the housing must not have any damaging effect; water pressure approx. 4 bar.

### Degree of protection IP 5K9K

Dust may only penetrate to such an extent that function and safety are not impaired. Water that is directed against the housing during high-pressure/steam-jet cleaning must not have any damaging effect; water pressure approx. 100 bar.

### Degree of protection IP 6K4K

Dust must not penetrate. Water that is sprayed from every direction at increased pressure against the housing must not have any damaging effect; water pressure approx. 4 bar.

### Degree of protection IP 67 / IP 6K7

Dust must not penetrate. No water may penetrate, even if the device is submersed for some time.

### Degree of protection IP 6K8

Dust must not penetrate. Protection against continuous immersion.

### Degree of protection IP 6K9K

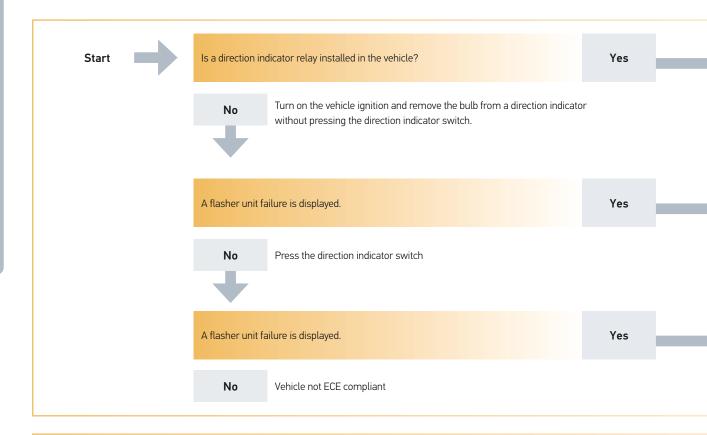
Dust must not penetrate. Water that is directed against the housing during high-pressure/steam-jet cleaning must not have any damaging effect; water pressure approx. 100 bar.



You can find further information about the HELLA quality criteria at: www.hella.com/quality



# THE RIGHT SOLUTION FOR YOUR VEHICLE ELECTRONICS



### **UNIVERSAL SOLUTION**

for 24 V vehicle electrical systems

### **ISO 13207-1 SOLUTION**

for 24 V vehicle electrical systems



Solution 1: LED flasher unit

	24 V			
Operating voltage	18-32 V			
Functional voltage	20-28 V			
Operating temperature	-40° to +85°C			
Degree of protection	IP 53 (contacts underneath)			
	LED flasher units 2+1+1 (12 V)			

2 direction indicators on the vehicle/tractor vehicle 1 direction indicator on a maximum of 2 optional

**LED flasher units 2+1 (24 V)** 2 direction indicators on the vehicle/tractor vehicle 1 direction indicator on optional trailer

4DM 009 492-001



Solution 2: Simulation device for the check control

	24 V			
Operating voltage	18-32 V			
Rated current	1,5 A			
Operating temperature	-40° to +85°C			
Degree of protection	IP 54 (contacts underneath)			
	Simulation device			
	5DS 009 602-001			



Replace the existing flasher unit with an LED flasher unit from HELLA with an ISO pin basis



1 flasher unit required per vehicle. Any possible combination of bulbs and HELLA LED direction indicators is permitted: from a full package with bulbs through mixed variants to a full package with LED lights. Bulbs or HELLA LED direction indicators are also permitted on trailers.

### Solution 2:

Using simulation device for check control

One simulation device is required per LED light.



### Solution 3:

Using LED direction indicator ECU

 $2\ LED$  direction indicators can be monitored per vehicle using 1 simulation device. (Only 1 simulation device can be used per vehicle.)



### Solution 3:

Using LED direction indicator ECU



### Solution 4:

By performing monitoring in compliance with ISO 13207-1 in the vehicle manufacturer's vehicle electrical system.





### Solution 3: Direction indicator ECU Universal solution

	24 V
Operating voltage	18-32 V
Polarity reversal protection voltage	- 28 V
On-board voltage input Flasher unit left/right	24 V
Operating temperature	-40 to +50°C
Extended operating temperature*	-40 to +80°C
Storage temperature	-40 to +90°C
With flat receptacles	5DS 009 552-011
For EasyConn connectors	5DS 009 552-001

 $<sup>^{\</sup>star}$  Simulation of the bulb is deactivated for thermal reasons if the temperature exceeds 50  $^{\circ}\text{C}.$ 



### Solution 4:

**Light ECU** with integrated monitoring of the failure pulse according to ISO 13207-1

In future, vehicle manufacturers' light ECUs will be able to check the failure pulse in a standardised and unified manner in accordance with ISO 13207-1.

Interim solutions 1 to 3 are therefore unnecessary, as communication takes place directly with the direction indicators. HELLA recommends this solution.

Since not every vehicle currently has its own vehicle electrical system, this solution must be integrated.

Manufacturer	0E number	HELLA part no.	Manufacturer	0E number	HELLA part no.
AUWÄRTER	11025442	8RA 003 326-041	DOLL	7169639	2KA 010 278-051
AUWÄRTER	11052379	2XW 007 146-001	DOLL	7169910	2RL 010 979-001
AUWÄRTER	11052386	2XW 007 146-001	DOLL	7177329	2SB 959 010-301
AUWÄRTER	14009006	8RA 003 326-021	DOLL	7211088	2XS 011 768-061
AUWÄRTER	1503.082.00	8RA 003 326-011	DOLL	8178011	8RA 003 326-031
AUWÄRTER	1503.700.00	8RA 003 326-011	DOLL	8998019	2TM 008 645-351
AUWÄRTER	1503.700.10	8RA 003 326-041			
AUWÄRTER	1503.700.50	8RA 003 326-021	FLIEGL	215928	5DS 009 552-011
AUWÄRTER	1503.706.00	8RA 003 326-041			
AUWÄRTER	1505.548.00	8JA 003 526-001	FRUEHAUF	L-SA0078-005	8KA 340 859-001
AUWÄRTER	1508.023.01	8JA 003 526-001	FRUEHAUF	L-SA0078-006	8KA 340 859-011
AUWÄRTER	2602.105.00	2XW 007 146-001	FRUEHAUF	L-SA0078-007	8KA 340 864-011
AUWÄRTER	2602.119.01	2XW 007 146-001	FRUEHAUF	L-SA0080-006	2VP 340 950-011
AUWÄRTER	635-WBL001	2XW 007 146-001	FRUEHAUF	L-SA0080-007	2VP 340 961-011
AUWÄRTER	825-BL011	2BA 008 260-001	FRUEHAUF	L-SA0080-009	2VP 340 960-111
AUWÄRTER	825-BRL011	2DA 343 106-011	FRUEHAUF	L-SA0080-999	8XS 340 092-011
AUWÄRTER	825-PL008	2XA 959 560-401	FRUEHAUF	L-SA0081-006	2VP 340 950-021
AUWÄRTER	826-RS003	8RA 003 326-011	FRUEHAUF	L-SA0081-007	2VP 340 961-021
AUWÄRTER	826-RS004	8RA 003 326-041	FRUEHAUF	L-SA0081-009	2VP 340 960-121
AUWÄRTER	826-RS008	8RA 003 326-031	FRUEHAUF	L-SA0083-001	2PS 008 645-301
			FRUEHAUF	L-SA0083-002	2PS 008 645-361
DOLL	7082495	8RA 003 326-041	FRUEHAUF	L-SA0085-002	2PG 008 645-961
DOLL	7098886	2PG 008 645-631	FRUEHAUF	L-SA0086-001	2TM 008 645-351
DOLL	7100402	8KA 340 842-011	FRUEHAUF	L-SA0087-002	8KA 340 819-001
DOLL	7100403	8KA 340 843-001	FRUEHAUF	L-SA0088-001	8KA 340 818-001
DOLL	7100404	8KA 340 818-001	FRUEHAUF	L-SA0088-002	8KA 340 841-001
DOLL	7100405	8KA 340 841-001	FRUEHAUF	L-SA0088-011	8KA 340 842-011
DOLL	7100407	8KA 340 859-001	FRUEHAUF	L-SA0088-012	8KA 340 843-001
DOLL	7100423	2VP 340 930-031	FRUEHAUF	L-SA0088-013	8KA 340 843-011
DOLL	7100424	2VP 340 930-021	FRUEHAUF	L-SA0089-004	8KA 340 815-011
DOLL	7100427	2PS 008 645-311	FRUEHAUF	L-SA0089-005	8KA 340 815-001
DOLL	7100428	2PG 008 645-331	FRUEHAUF	L-SA0092-001	9HV 340 812-007
DOLL	7100429	8HG 160 409-002	FRUEHAUF	L-SA0092-002	9XX 340 870-007
DOLL	7100430	9HV 340 812-007	FRUEHAUF	L-SA0094-001	9XX 340 882-001
DOLL	7100431	9XX 340 870-007	FRUEHAUF	L-SA0094-002	9XX 340 879-001
DOLL	7100432	9XX 340 871-007	FRUEHAUF	L-SA0111-001	5DS 009 552-001
DOLL	7100433	9XX 340 872-007	FRUEHAUF	L-SA0126-001	9DW 178 909-011
DOLL	7100435	9XX 340 882-001	FRUEHAUF	L-SA0126-002	9DW 178 909-021
DOLL	7100439	8RA 004 412-001	FRUEHAUF	L-SA0126-003	9DW 178 909-001
DOLL	7100445	8RA 004 412-011	FRUEHAUF	L-SW0010-002	2XA 959 560-411
DOLL	7100446	8KA 340 859-011	FRUEHAUF	L-SX0036-001	8RA 002 020-001
DOLL	7100448	9XX 340 879-001	FRUEHAUF	L-SX0311-010	2NE 959 821-201
DOLL	7100457	2PS 008 645-301	FRUEHAUF	L-SX0352-001	2XS 008 078-001
DOLL	7100460	2TM 008 645-951			
DOLL	7107400	2BA 008 260-001	KÄSSBOHRER	2 118 070 001 3	8JE 340 060-001
DOLL	7108224	9XX 340 883-001	KÄSSBOHRER	8.689.025.000.0	8RA 002 010-011
DOLL	7108225	9XX 340 880-001	KÄSSBOHRER	8.689.032.000	8RA 002 020-001
DOLL	7110468	8RA 343 220-017			
DOLL	7110470	5DS 009 552-001	KEMPF	23723	8RA 002 020-001
DOLL	7115114	2VP 340 934-111	KEMPF	32123	9XD 997 909-801
DOLL	7115115	2VP 340 934-101	KEMPF	34486	8RA 004 412-011
DOLL	7115883	8KA 340 819-001	KEMPF	35536	2XA 959 560-411
DOLL	7115913	8RA 004 412-021	KEMPF	71239	9XX 340 879-001
DOLL	7122890	9XX 340 173-801	KEMPF	73684	2PG 008 645-631
DOLL	7133470	2KA 010 278-031	KEMPF	73738	2PS 008 645-611
DOLL	7136622	2PS 008 645-611	KEMPF	77916	9XX 340 882-001
DOLL	7140789	8KL 340 050-001	KEMPF	78292	9XX 340 883-001



Manufacturer	0E number	HELLA part no.	Manufacturer	0E number	HELLA part no.
KEMPF	79694	9XX 340 880-001	KÖGEL	6603275	8JE 340 151-001
KEMPF	96312	8KA 340 842-011	KÖGEL	6603527	8KA 340 859-011
KEMPF	96314	8KA 340 819-001	KÖGEL	6603528	2BA 008 260-001
KEMPF	96317	2PS 008 645-301	KÖGEL	6603599	8KA 340 818-011
KEMPF	96325	9XX 340 870-007	KÖGEL	6604568	2VP 340 940-101
KEMPF	96372	8KA 340 818-001	KÖGEL	6604569	2VP 340 940-111
KEMPF	96373	8KA 340 859-011	KÖGEL	6604938	8KA 340 819-121
KEMPF	96375	8KA 340 819-001	KÖGEL	6609687	2VP 340 942-001
KEMPF	96377	9HV 340 812-007	KÖGEL	6609688	2VP 340 942-011
KEMPF	97176	8HG 160 409-002	KÖGEL	700015935	9XX 340 220-801
KEMPF	97722	8KA 340 815-001	KÖGEL	76232	8RA 003 326-041
KEMPF	97758	8KA 340 852-051	KÖGEL	79727	8RA 003 326-011
KEMPF	97844	8RA 004 412-001	KÖGEL	80069349	8RA 003 326-031
KEMPF	99227	8KA 340 843-011	KÖGEL	80329410	8KL 340 050-001
KEMPF	99530	8KA 340 859-001	KÖGEL	80333476	9XX 340 222-001
KEMPF	101579	5DS 009 552-001	KÖGEL	80333481	9XX 340 220-001
KEMPF	102059	2TM 008 645-941	KÖGEL	80333483	9XX 340 223-001
KEMPF	102117	9XX 340 871-007	KÖGEL	88304287	2KA 010 278-031
KEMPF	102121	2VP 340 950-011	KÖGEL	88304949	8JE 340 151-001
KEMPF	102392	2DA 343 106-011	KÖGEL	88306413	8KA 340 815-001
KEMPF	102393	2VP 340 932-011	KÖGEL	88306414	8KA 340 819-121
KEMPF	102394	2VP 340 932-001	KÖGEL	88306415	2KA 010 278-051
KEMPF	102494	2KA 010 278-051	KÖGEL	88306418	9XX 340 870-007
KEMPF	105105	2PS 008 645-897	KÖGEL	88306423	8KA 340 859-001
			KÖGEL	88306424	8KA 340 842-011
KÖGEL	309425	8RA 004 412-011	KÖGEL	88306428	9XX 340 173-801
KÖGEL	313644	8RA 004 412-001			
KÖGEL	326738	8KL 340 050-001	KRONE	0303463/0	8JA 003 526-001
KÖGEL	329410	8KL 340 050-001	KRONE	0924533/0	8RA 002 010-011
KÖGEL	329412	8KL 340 050-001	KRONE	09245330/0	8RA 002 010-011
KÖGEL	333476	9XX 340 222-001	KRONE	0942729/0	8RA 003 326-011
KÖGEL	333481	9XX 340 220-001	KRONE	0944104/0	8RA 003 326-031
KÖGEL	333483	9XX 340 223-001	KRONE	0944105/0	8RA 003 326-041
KÖGEL	61101009	8JE 340 867-011	KRONE	0944106/0	8RA 003 326-051
KÖGEL	61107340	9XX 340 871-007	KRONE	200824590	2RL 010 979-011
KÖGEL	61108853	2VP 340 950-021	KRONE	270000940	8RA 003 326-001
KÖGEL	61108854	2VP 340 950-011	KRONE	270114840	8RA 003 326-031
KÖGEL	61113561	9XX 340 880-001	KRONE	270114850	8RA 003 326-051
KÖGEL	61113867	9XX 340 879-001	KRONE	270140670	8RA 002 014-281
KÖGEL	61115527	9HV 340 812-007	KRONE	4501.7063	2TM 008 645-951
KÖGEL	61131914	2PG 008 645-641	KRONE	500944104	8RA 003 326-031
KÖGEL	61300780	2NE 959 011-501	KRONE	500944105	8RA 003 326-041
KÖGEL	6602845	8KA 340 816-041	KRONE	500944106	8RA 003 326-051
KÖGEL	6602861	8KA 340 842-001	KRONE	505814052	2XS 008 078-001
KÖGEL	6603058	8KA 340 822-071	KRONE	505816704	8RA 003 326-011
KÖGEL	6603173	9XX 340 883-001	KRONE	505819077	8KA 340 841-001
KÖGEL	6603175	9XX 340 877-007	KRONE	505819078	8KA 340 843-001
KÖGEL	6603176	9XX 340 878-007	KRONE	505819079	8KA 340 818-011
KÖGEL	6603177	9XX 340 880-001	KRONE	505819080	8KA 340 842-001
KÖGEL	6603178	9XX 340 876-007	KRONE	505819081	8KA 340 816-001
KÖGEL	6603179	9XX 340 872-007	KRONE	505819086	2PS 008 645-311
KÖGEL	6603185	9XX 340 882-001	KRONE	505819087	2PG 008 645-331
KÖGEL	6603186	9XX 340 879-001	KRONE	505821870	2VP 340 950-031
KÖGEL	6603221	8KW 998 602-002	KRONE	505821871	2VP 340 950-041
KÖGEL	6603222	9XX 340 870-007	KRONE	505822220	2TM 008 645-951
KÖGEL	6603223	9HV 340 812-007	KRONE	505822445	5DS 009 552-011
KÖGEL	6603224	9XX 340 871-007	KRONE	515011922	2KA 010 278-031



Manufacturer	0E number	HELLA part no.	Manufacturer	0E number	HELLA part no.
KRONE	515012259	8KL 340 059-001	REISCH	5017624	5DS 009 552-001
KRONE	515032148	2DA 343 106-011	REISCH	5017727	8KL 340 050-001
KRONE	515032406	2VP 340 960-011	REISCH	5017860	2VP 340 950-011
KRONE	515032407	2VP 340 960-021	REISCH	5017861	2VP 340 950-021
KRONE	515032409	2VP 340 960-111	REISCH	5019173	2TM 008 645-651
KRONE	515032410	2VP 340 960-121	REISCH	5019493	2VP 340 961-011
KRONE	515032430	2VP 340 961-111	REISCH	5019494	2VP 340 961-021
KRONE	515032444	2VP 340 961-011	REISCH	5019495	8XS 340 092-011
KRONE	515032445	2VP 340 961-021	REISCH	5019692	9DW 178 909-001
KRONE	515032451	2VP 340 961-121	REISCH	5019693	9DW 178 909-011
KRONE	515035742	8XS 340 092-011	REISCH	5019694	9DW 178 909-021
KRONE	515040507	9XX 340 870-007	REISCH	5019771	9EL 183 432-001
KRONE	515042982	9HV 340 812-007	REISCH	5019956	2VP 340 960-011
KRONE	515048532	2TM 008 645-941	REISCH	5019957	2VP 340 960-021
KRONE	515068787	8KW 744 806-801			
KRONE	550015113	8HG 160 409-002	SCHMITZ CARGOBULL	060704	8RA 002 020-001
KRONE	550016158	9EL 183 432-001	SCHMITZ CARGOBULL	060709	8RA 003 326-001
KRONE	550016462	9DW 178 909-001	SCHMITZ CARGOBULL	060712	8RA 003 326-041
KRONE	550016463	9DW 178 909-011	SCHMITZ CARGOBULL	060870	8RA 004 412-001
KRONE	550016464	9DW 178 909-021	SCHMITZ CARGOBULL	061806	8RA 004 412-011
KRONE	550016465	9DW 178 904-001	SCHMITZ CARGOBULL	061807	8RA 003 326-041
KRONE	5809357/0	8RA 003 326-001	SCHMITZ CARGOBULL	062769	8JE 340 060-011
KRONE	5814052/0	2XS 008 078-001	SCHMITZ CARGOBULL	063035	9XX 340 220-021
KRONE	5816704/0	8RA 003 326-011	SCHMITZ CARGOBULL	063049	9XX 340 220-001
KRONE	5819086/0	2PS 008 645-311	SCHMITZ CARGOBULL	063050	9XX 340 222-001
KRONE	5819087/0	2PG 008 645-331	SCHMITZ CARGOBULL	063051	9XX 340 223-001
KRONE	745017054	2PG 008 645-971	SCHMITZ CARGOBULL	063602	2XS 008 078-001
KRONE	745017063	2TM 008 645-951	SCHMITZ CARGOBULL	063728	8JE 340 060-001
			SCHMITZ CARGOBULL	063857	8JE 340 060-011
MONARK	098 294 294	9XX 340 222-001	SCHMITZ CARGOBULL	064168	8KL 340 055-021
			SCHMITZ CARGOBULL	1-FZELEK0086	8RA 002 020-001
NÄRKO	2172505310	2VP 340 930-021	SCHMITZ CARGOBULL	1-FZELEK0087	8RA 003 326-041
NÄRKO	2172505321	2VP 340 930-031	SCHMITZ CARGOBULL	1028	8RA 003 326-011
			SCHMITZ CARGOBULL	1034100	8KA 340 859-001
REISCH	5002281	8RA 004 412-001	SCHMITZ CARGOBULL	1042274	2PF 340 825-001
REISCH	5008046	8RA 002 020-001	SCHMITZ CARGOBULL	1042582	9HV 340 812-007
REISCH	5013561	8KA 340 031-001	SCHMITZ CARGOBULL	1044787	2PS 008 645-621
REISCH	5014076	2XS 008 078-001	SCHMITZ CARGOBULL	1076211	8RA 004 412-021
REISCH	5015469	8KA 340 843-011	SCHMITZ CARGOBULL	1092434	8KW 998 602-002
REISCH	5015470	8KA 340 818-011	SCHMITZ CARGOBULL	1107386	2PF 340 825-001
REISCH	5015471	8KA 340 842-001	SCHMITZ CARGOBULL	1109172	9HV 340 812-007
REISCH	5015476	8KA 340 815-011	SCHMITZ CARGOBULL	1109504	9XX 340 882-001
REISCH	5015486	2PG 008 645-331	SCHMITZ CARGOBULL	1112421	2PG 008 645-961
REISCH	5015488	2PS 008 645-301	SCHMITZ CARGOBULL	1112426	8KL 340 059-001
REISCH	5015493	8HG 160 409-002	SCHMITZ CARGOBULL	1133920	2VP 340 950-011
REISCH	5015625	9HV 340 812-007	SCHMITZ CARGOBULL	1133924	2VP 340 950-021
REISCH	5015626	2PS 008 645-311	SCHMITZ CARGOBULL	1133927	2KA 010 278-051
REISCH	5015629	9XX 340 882-001	SCHMITZ CARGOBULL	1133932	5DS 009 552-001
REISCH	5015865	9XX 340 879-001	SCHMITZ CARGOBULL	1138577	9XX 340 883-001
REISCH	5015867	9XX 340 880-001	SCHMITZ CARGOBULL	1149223	8XS 340 092-011
REISCH	5015869	9XX 340 883-001	SCHMITZ CARGOBULL	1180234	8KA 340 864-011
REISCH	5016014	2VP 340 930-001	SCHMITZ CARGOBULL	121168	9XX 340 222-001
REISCH	5016015	2VP 340 930-011	SCHMITZ CARGOBULL	121245	9XX 340 223-001
REISCH	5016018	8KA 340 859-001	SCHMITZ CARGOBULL	121251	8JE 340 060-011
REISCH	5016510	8KA 340 819-001	SCHMITZ CARGOBULL	121511	2VP 340 930-001
REISCH	5016512	8KA 340 852-051	SCHMITZ CARGOBULL	121512	2VP 340 930-011
REISCH	5016524	9XX 340 870-007	SCHMITZ CARGOBULL	1224191	5DS 009 552-011



Manufacturer	OE number	HELLA part no.
SCHMITZ CARGOBULL	182991	8RA 003 326-011
SCHMITZ CARGOBULL	2407	8JA 003 526-001
SCHMITZ CARGOBULL	424753	2XW 007 146-001
SCHMITZ CARGOBULL	618835	8KL 340 055-021
SCHMITZ CARGOBULL	7190	8RA 002 010-011
SCHMITZ CARGOBULL	887237	2PS 008 645-001
SCHMITZ CARGOBULL	910898	9XX 340 220-001
SCHMITZ CARGOBULL	965242	8KL 340 055-021
SCHMITZ CARGOBULL	EL0009-0001	9XX 340 220-001
SCHMITZ CARGOBULL	EL0009-0002	9XX 340 222-001
SCHMITZ CARGOBULL	EL0009-0003	9XX 340 223-001
SCHMITZ CARGOBULL	EL0009-0038	8JE 340 165-001
SCHMITZ CARGOBULL	EL0009-0040	9XX 340 879-001
SCHMITZ CARGOBULL	EL0009-0041	9XX 340 880-001
SCHMITZ CARGOBULL	EL0009-0042	9XX 340 870-007
SCHMITZ CARGOBULL	EL0009-0043	9XX 340 871-007
SCHMITZ CARGOBULL	EL0010-0016	8KL 340 050-001
SCHMITZ CARGOBULL	EL0010-0019	8KL 340 009-001
SCHMITZ CARGOBULL	EL0012-0014	8KA 340 031-001
SCHMITZ CARGOBULL	EL0012-0065	8KA 340 843-011
SCHMITZ CARGOBULL	EL0012-0067	8KA 340 843-021
SCHMITZ CARGOBULL	EL0012-0068	8KA 340 818-021
SCHMITZ CARGOBULL	EL0012-0069	8KA 340 842-011
SCHMITZ CARGOBULL	EL0012-0074	8KA 340 815-011
SCHMITZ CARGOBULL	EL0012-0075	8KA 340 815-021
SCHMITZ CARGOBULL	EL0012-0077	8KA 340 815-001
SCHMITZ CARGOBULL	EL0012-0083	8KA 340 819-001
SCHMITZ CARGOBULL	EL0014-0003	8JE 340 060-001
SCHMITZ CARGOBULL	EL0014-0048	8JE 340 060-251
SCHMITZ CARGOBULL	S060870	8RA 004 412-001
SCHMITZ CARGOBULL	S061806	8RA 004 412-011
TITGEMEYER	671112005	2SB 980 606-201
TITGEMEYER	671112006	2BA 980 607-201
TITGEMEYER	671473 000	8KA 340 816-001
TITGEMEYER	671865.000	2TM 008 645-941
TITGEMEYER	675.078.000	8XS 340 092-011
TITGEMEYER	675011 000	2VP 340 950-021
TITGEMEYER	675021 000	2VP 340 950-011
TITGEMEYER	675050000	2VP 340 961-121
TITGEMEYER	675052000	2VP 340 961-221
TITGEMEYER	675054000	2VP 340 960-121
TITGEMEYER	675060000	2VP 340 961-111
TITGEMEYER	675062000	2VP 340 961-211
TITGEMEYER	675064000	2VP 340 960-111
TITGEMEYER	675070000	9EL 183 432-001
TITGEMEYER	675072000	9DW 178 909-001
TITGEMEYER	675074000	9DW 178 909-011
TITGEMEYER	675076000	9DW 178 909-021
TITGEMEYER	675116.005	2KA 010 278-051
TITGEMEYER	675234000NN	2XS 011 768-001
TITGEMEYER	675235000NN	2XS 011 768-011
TITGEMEYER	675365.003	2PS 008 645-611
TITGEMEYER	675365.013	2PS 008 645-621
TITGEMEYER	675366.000	8HG 160 409-002
TITGEMEYER	675390.100	8KA 340 822-081
TITGEMEYER	675397 000	8KL 340 050-001

Manufacturer	0E number	HELLA part no.
TITGEMEYER	675397 001	8KL 340 050-001
TITGEMEYER	675399 000	8KW 998 602-002
TITGEMEYER	675460.003	2PG 008 645-631
TITGEMEYER	675460.050	2PG 008 645-641
TITGEMEYER	675565.050	2TM 008 645-661
TITGEMEYER	675762 000	8JE 340 151-001
TITGEMEYER	675770 000	8JE 340 165-001
TITGEMEYER	675814.000	8KA 340 846-001
TITGEMEYER	675817.000	9HV 340 812-007
TITGEMEYER	675818.000	9XX 340 870-007
TITGEMEYER	675826000	8KA 340 864-011
TITGEMEYER	675831 000	8KA 340 819-001
TITGEMEYER	675834.000	8KA 340 859-001
TITGEMEYER	675837.000	5DS 009 552-001
TITGEMEYER	675842.006	8KA 340 818-011
TITGEMEYER	675842.017	8KA 340 818-001
TITGEMEYER	675842.017	8KA 340 842-011
TITGEMEYER	675852.006	8KA 340 842-001
TITGEMEYER	675852.017	8KA 340 842-011
TITGEMEYER	675872.035	8KA 340 841-001
TITGEMEYER	675872.060	8KA 340 841-021
TITGEMEYER	675880 035	8KA 340 031-001
TITGEMEYER	675882.035	8KA 340 843-001
TITGEMEYER	675882.060	8KA 340 843-021
TITGEMEYER	675902 000	9XX 340 220-001
TITGEMEYER	675903000	9XX 340 222-001
TITGEMEYER	675914.000	9XX 340 882-001
TITGEMEYER	675916.000	9XX 340 879-001
TITGEMEYER	675918.000	9XX 340 883-001
TITGEMEYER	675920.000	9XX 340 880-001
TITGEMEYER	675936000	9XX 340 876-007
TITGEMEYER	675940000	9XX 340 877-007
TITGEMEYER	675944000	9XX 340 878-007
TITGEMEYER	679 007	8RA 003 326-041
TITGEMEYER	679001	8RA 003 326-011
TITGEMEYER	679001.000	8RA 003 326-011
TITGEMEYER	967071.00	8KA 340 816-001
TITGEMEYER	967071.000	8KA 340 816-001
WIELTON	M0500000101	01/4 0/0 010 001
WIELTON	M0702020401	8KA 340 818-001
WIELTON	M0702020402	8KA 340 842-001
WIELTON	M07020212	8KA 340 841-021
WIELTON	M07020213	8KA 340 843-021
WIELTON	M0703020203	2PG 008 645-631







### Website trailer

Informative, compact, interactive. Here, you can find everything you need to know about products and technologies for commercial use.

www.hella.com/trailer



### **Trailer Tool**

In only 3 steps, the HELLA Trailer Tool takes you from the light to the technology selection and finally to your individual system proposal. Including application scenarios, detailed system description, and product recommendations.

www.hella.com/trailertool





### Worklight configurator

Which worklight is the right choice for your application? The HELLA online configurator will provide you with suitable product suggestions including all the relevant information about the product.

www.hella.com/worklight-configurator



### ELIVER - the light comparison tool

This online tool allows you to compare many HELLA worklights and beacons on the basis of their illumination in a realistic environment.



≇ www.hella.com/eliver

NOTES	



# NOTES



