



LIGHTING SYSTEMS

Flexible solutions for commercial vehicles

CONTENTS

Introduction - Ermax Lighting Systems	4
Overview and introduction to plug connections	6
Overview plug type, designation & dimension	8
Contact allocation	11
Material- and symbols explanation	14
Tail lights	15
License plate lights	67
Outer end marker lights	73
Marker lights - position & side markers	81
Rear underrun protection bar	89
Reflex reflectors	105
Interior lighting	109
Reverse- and working lights	113
Rear reverse alarm	127
Warning lights	129
Warning beacons	133
SIMAC solutions	143
Cables	147
Wide load marker signs	191
Accessories, cable	199
Junction box	203
Electronic control box	219
Plugs and sockets	227
Cable configuration	235

ERMAX® - YOUR PARTNER FOR COMPLETE LIGHTING SYSTEMS

ERMAX A/S

- develops, manufactures and distributes a wide range of products within lighting, junction boxes and cable systems for commercial vehicles and industrial applications.

A unique set-up with a combination of our factory in Denmark and licensed production with our own tools at a number of selected and exclusively certified partners worldwide, offers an extensive, highly competitive and qualitative range of products.

The Brand - ERMAX®

Founded in 1948 the Ermax® lighting technology has been manufactured for the automotive industry for almost 7 decades.

Ermax is the partner, when it comes to understanding and fulfilling the needs of lighting; with tail lights, warning lights, beacons, side markers or work lights – nowadays bulb, LED as well as in hybrid technologies. These lighting components are being offered within a complete solution concept of ADR approved

cables and, where required, junction boxes as well as mounting hardware. All cable sets are configured with multiple connector types to ensure the best lifetime service ability.

Why Ermax® Lighting Systems ?

Partnership through quality, reliability and competence.

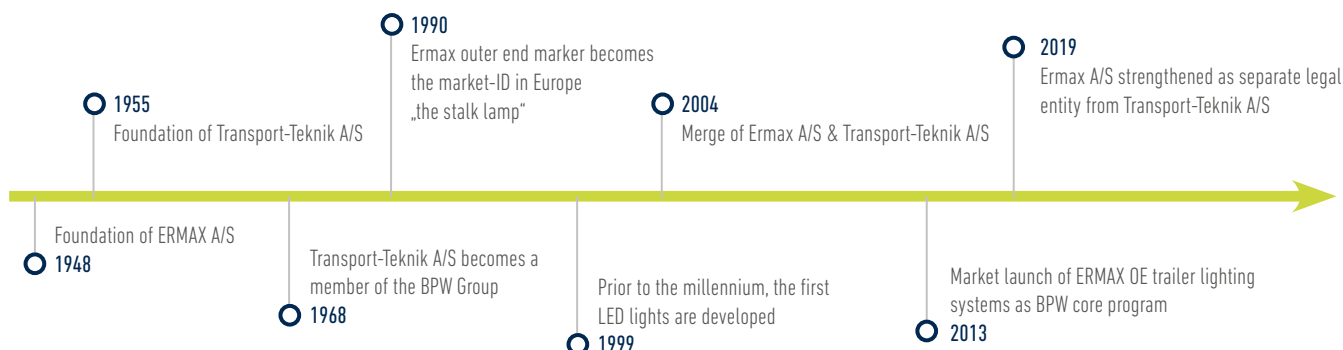
Our competence in partnering with you, is our extensive experience in being an OEM partner with quality and on time delivery as daily focus to ensure expectations and execution match entirely with your requirements.

All our products hold the necessary certifications for E-marking, IP-protection, ADR-approval and design predecions to ensure exclusive design and durability as well as non-violation of patents.

With reliable and planned processes you will reach your goal safely with us as partner.



ERMAX A/S, Kolding, Denmark



DISTRIBUTION NETWORK WORLDWIDE

Always close to you

As a member of the BPW Group, which operates worldwide, we have an unique sales and distribution network with local offices and support for the benefit of all of our business partners.



SOLUTIONS - AS INDIVIDUAL AS YOUR TASKS AND REQUIREMENTS

As ERMAX customer you will achieve the following

- High quality for every area
- Vehicle-customised solutions
- Focus at the newest technology and innovative products with recognisable design
- Production companies with development
- competence under one roof
- Europe-wide after-sales-servicenent

ERMAX lighting systems

- Wide palette including cables, plugs and lights – all built according to customer requirements
- LED and SIMAC control unit built-in tail light
- ADR approved cable kits with 7 pole AMP 1.5 and Super Seal plugs
- Unbeatable, impact resistant and long life solutions

ERMAX CABLE SYSTEMS FOR 24V

Overview and introduction to plug connections

Ermac connections consist of 2 poled, 7 poled and 15 poled connections and plug connections – connections of high quality making it easy and simple to mount and maintain. These connections are used in Ermac cable- and lighting systems for trailer 24V and can be combined according to individual requirements from our customers.

All connections are re-moulded and tested according to IP Rating 69K and ADR approved.

2 poled Super Seal



2 poled Super Seal plug and socket
Make mounting of position lights, side marking lights, marking lights and other 2 poled components easy and simple.
100% waterproof

- Easy and simple mounting
- Easy change when damage on the lamp

2 poled Click-in



2 poled click-in
Makes mounting of position lights, side marking lights, marking lights and other 2 poled components easy and simple.

- Easy and simple mounting
- Fast positioning
- Time-consuming parts replacement

7 poled AMP 1.5



7 poled 1.5
Used for connecting Ermac rear lights to the cable system. The plug can be used when connecting other extra equipment as e.g. working lights

- Rounded off pin-legs
- Extremely durable connection
- Standard plug connection - usual in the market

15 poled Ermax Bayonet



15 poled bayonet /ADR

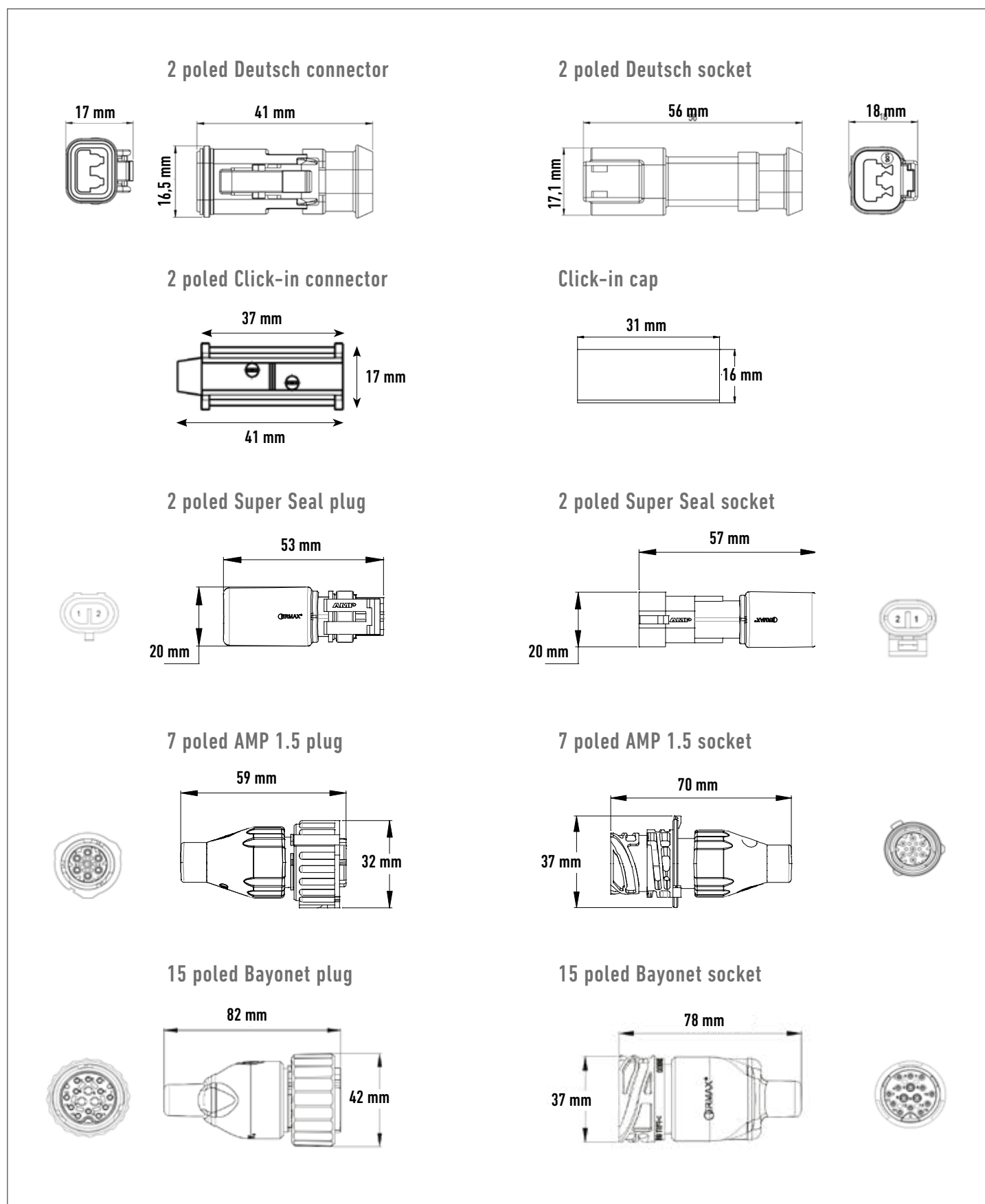
Used for connecting front box, main cable and rear cable and e.g. mounting of connection box.

- Rounded off pin-legs
- Extremely durable connection
- Standard plug connection - usual in the market

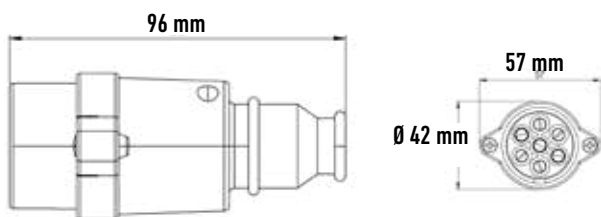
	Output from the main cable	Side marker	Position light	License plate light	Outline marker	Work light	Reverse light	Interior lighting	Tail light	Reverse light	Junctionbox	Central connection	Rear cable	Interior lighting
2 poled Super Seal	✓	✓	✓	✓	✓	✓	✓	✓			✓			
2 poled Click-in		✓	✓	✓	✓	✓	✓							✓
7 poled AMP 1.5	✓								✓	✓	✓			
15 poled Ermax Bayonet											✓	✓	✓	

OVERVIEW - PLUG CONNECTIONS FOR ERMAX OE LIGHTING SYSTEMS

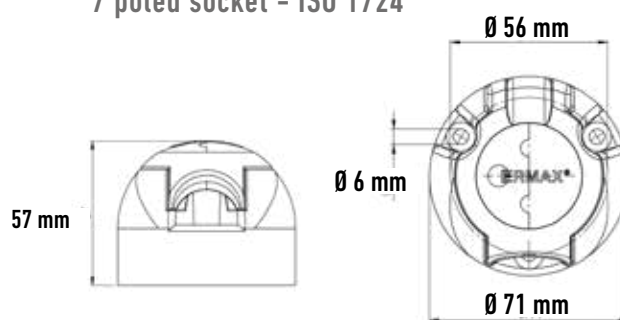
Plug type, designation and dimension



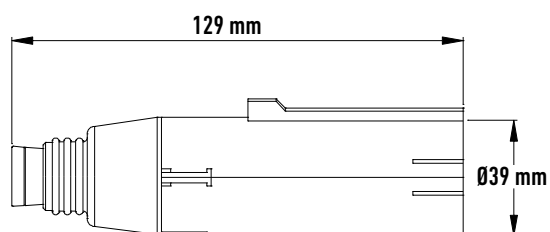
7 poled plug - ISO 1724



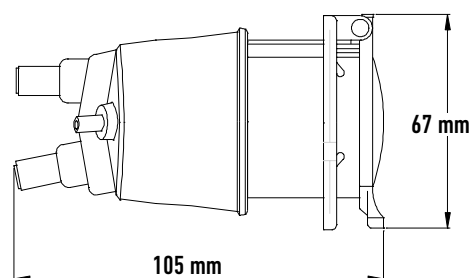
7 poled socket - ISO 1724



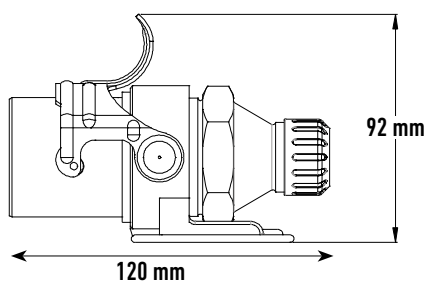
7 poled plug - ISO 3731 / ISO 1185



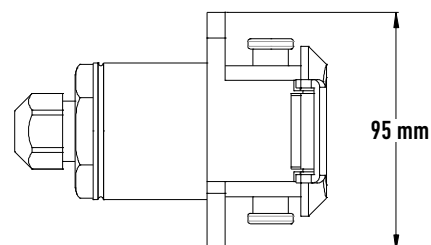
7 poled socket - ISO 3731 / ISO 1185



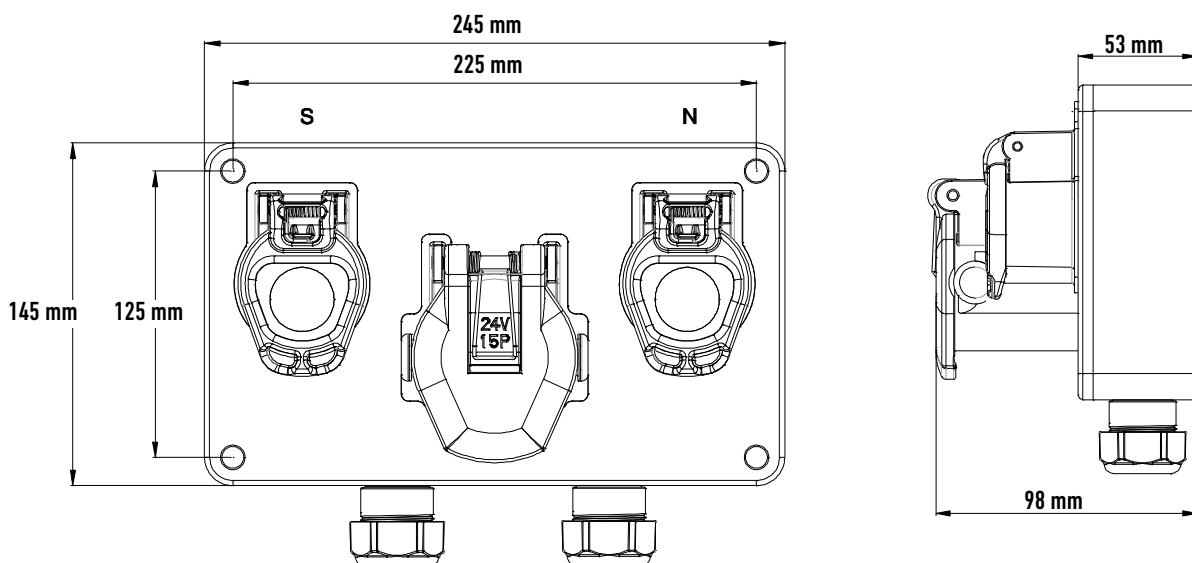
15 poled ADR plug - ISO 12098



15 poled ADR socket - ISO 12098



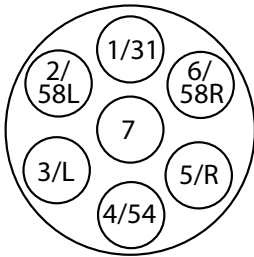
Frontbox



CONTACT ALLOCATION

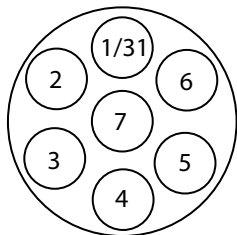


Pin configuration Type N 24V, 7 poled ISO 1185

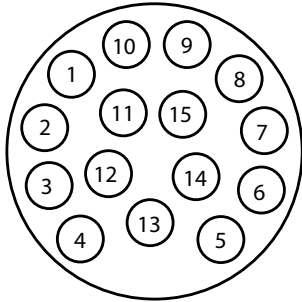
	Colour	Description	
	1 / 31	White	Ground
	2 / 58L	Black	Position light left ¹⁾
	3 / L	Yellow	Direction indicator left
	4 / 54	Red	Stop light
	5 / R	Green	Direction indicator right
	6 / 58R	Brown	Position light right ¹⁾
	7	Blue	Aux2 / Stop control for trailer

¹⁾ The license plate must be connected so that no lights of this illumination have common connection with contact 2 and 6

Pin configuration Type S 24V, 7 poled ISO 3731


	Colour	Description	
	1 / 31	White	Ground for Pin 9-15 (ISO 12098)
	2	Black	No allocation (CANH, Data communication)
	3	Yellow	Reverse light
	4	Red	Permanent power supply (+)
	5	Green	No allocation (CANL, Data communication)
	6	Brown	Aux3 / lift axle
	7	Blue	Rear fog light

Pin configuration 24V, 15 poled ISO 12098

	Colour	Description	
	1	Yellow	Direction indicator left
	2	Green	Direction indicator right
	3	Blue	Rear fog light
	4	White	Ground
	5	Black	Position light left ¹⁾
	6	Brown	Position light right ¹⁾
	7	Red	Stop light
	8	Pink	Reverse light
	9	Amber	Permanent power supply (+)
	10	Grey	Aux1 / Brake-wear sensor
	11	White/Black	Aux2 / Stop control for trailers
	12	White/Blue	Aux3 / lift axle
	13	White/Red	Ground for Pin 9-15 (ISO 12098)
	14	White/Green	CANH / Data communication
	15	White/Brown	CANL / Data communication

¹⁾ The license plate illumination must be connected so that no lights of this illumination have a common connection with contract nr. 5 and


Pin configuration Ermax 15 poled bayonet plug

	Colour	Description
	1	Black Position light left
	2	Yellow Direction indicator left
	3	Red Stop light
	4	White/Green CANH / Data communication
	5	White Ground
	6	Pink Reverse light
	7	White/ Black Aux2 / Stop control for trailers
	8	White/Red Ground for Pin 9-15 (ISO 12098)
	9	amber Permanent power supply (+)
	10	Blue Rear fog light
	11	Grey Aux1 / Brake-wear sensor
	12	White/Brown CANL / Data communication
	13	Brown Position light right
	14	White/Blue Aux3 / lift axle
	15	Green Direction indicator right


Pin configuration 7 poled AMP plug

	Colour	Description
	1	White Ground
	2	Green Position light
	3	Brown Reverse light
	4	Yellow Indicator
	5	Red Stop light
	6	Blue Rear fog light
	7	- -

Pin configuration Deutsch (DT2) plug 2 poled

	Colour	Description
	1	Blue Permanent power supply (+)
	2	Brown Ground (-)

Pin configuration Super Seal plug 2 poled

	Colour	Description
	1	Brown Ground (-)
	2	Blue Permanent power supply (+)

Material- and symbol explanation Ermax lighting

Material explanation	
PP	Polypropylene. The maximum working temperature is 80-90°C. Melting point 165°
PC	Impact resistant polycarbonat. The maximum working temperature is 135°C Melting point 300°C
PMMA	Acrylic plastic (polymethylmethacrylate) The maximum working temperature is 70-110 °C. Melting point 160°
ABS	Termoplast - Black plastic The maximum working temperature is 80-105°C

Symbol explanation	
	ECE Approved
	ECE Approved R65
	Electromagnetic test according to R10
	CE Approved
	ADR/GGVS - Approved for use on vehicles carrying dangerous goods
	Meets guidelines for the use of retro reflective safety markings on heavy vehicles
XA1 / XA2	X - Direction flashing unit A - Amber 1 - Class 1 2 - Class 2

TAIL LIGHTS



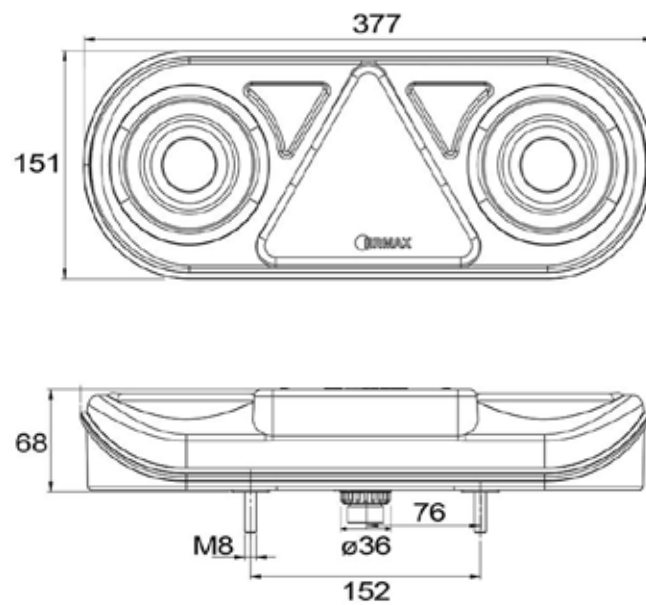
TM1 LED Tail lights 24V



Pos.1



Pos. 2



Description

Lens:	PMMA
Housing:	ABS
Dimension:	380 x 150 x 70 mm
Bolt hole distance:	152 mm / M8

TM1 LED Tail lights 24V



Operation voltage	IP Rating	Left ← Right →	Position Stop Dir. indicator Reverse Rear fog Reflex reflector	License plate	Side marker	Outer end marker	Connection 7 poled AMP socket	Pos.	Article No.
24V	IP69K	←	✓				✓	1	098 216 701 92.0000.1515
24V	IP69K	→	✓				✓	1	098 216 702 92.0000.1516
24V	IP69K	←	✓	✓	✓		✓	1	098 216 707 95.0000.0001
24V	IP69K	→	✓	✓	✓		✓	1	098 216 708 95.0000.0084
24V	IP69K	←	✓			✓	✓	2	098 216 713 92.0000.1519
24V	IP69K	→	✓			✓	✓	2	098 216 714 92.0000.1520

Spare parts



Pos. 1



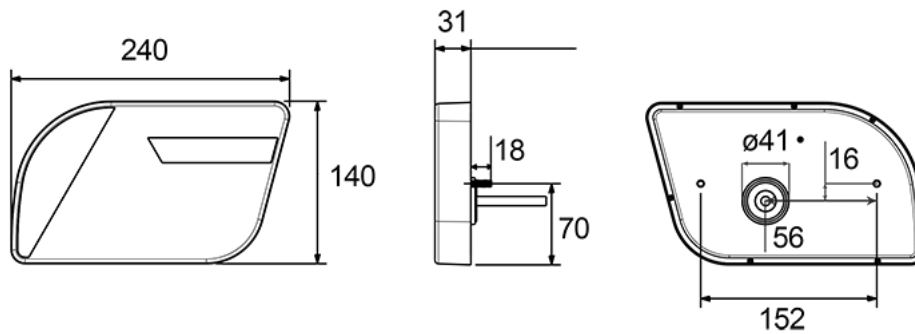
Pos. 2



Pos. 3

Protection cover for tail lights		1	098 296 710 92.0000.6877
LED Outer end marker – left		2	098 241 470 92.0000.7347
LED Outer end marker - right		3	098 241 471 92.0000.7348

TM3 LED Tail lights with Eternal Light™ 12/24V



Description

Position light with Eternal Light™

- Lens: Polycarbonate
- Housing: ABS
- Dimension: 240 x 140 x 31 mm
- Bolt distance: 152 mm / M6

*) NB - The covers 098296710 are not to be used in combination with angled 7-pin connectors.
By use of covers, please choose straight 7-pin connectors



Operating voltage	IP Rating	Left ← Right →	Position Stop Dir. indicator	Reverse Rear fog Reflex reflector	Connection	Cable length	Article No.
12/24V	IP69K	→	✓	✓	7 poled AMP socket		098 215 235 * 92.0000.5463
12/24V	IP69K	←	✓	✓	7 poled AMP socket		098 215 237 * 92.0000.5464

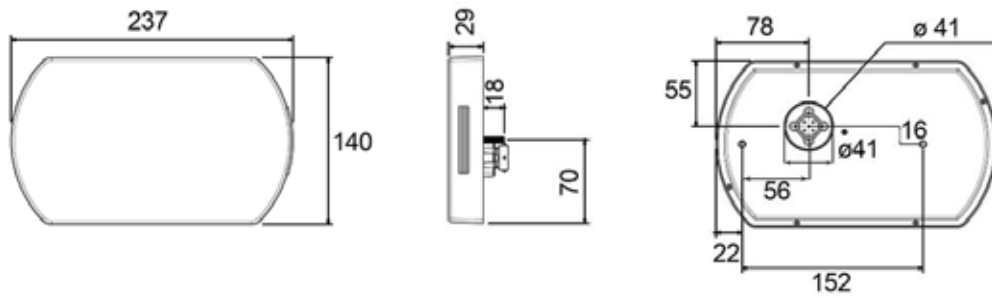
TM9 LED Tail lights 12/24V



Left



Right



Description

Lens: Polycarbonate
 Housing: ABS
 Dimension: 237 x 140 x 29 mm
 Bolt distance: 152 mm / M6

*) NB - The covers 098296710 are not to be used in combination with angled 7-pin connectors.
 By use of covers, please choose straight 7-pin connectors



Operating voltage	IP Rating	Left ← Right →	Position Stop	Reverse	Rear fog	License plate	Reflex reflector	Connection 7 poled AMP socket	Article No.
12/24V	IP69K	←	✓		✓	✓	✓	✓	098 215 171 * 92.0000.6619
12/24V	IP69K	→	✓	✓		✓	✓	✓	098 215 173 * 92.0000.6620

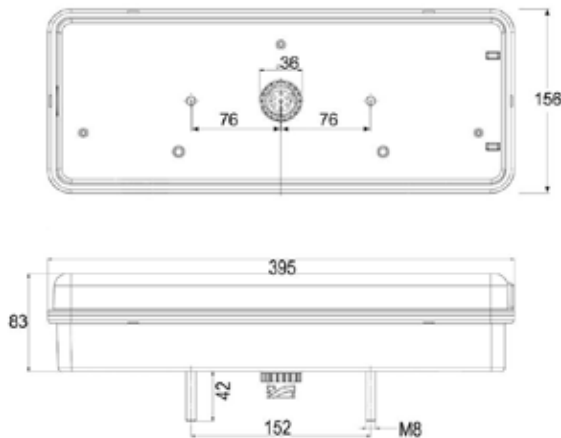
TM10 Hybrid or Full-LED Tail lights 24V - for trailer



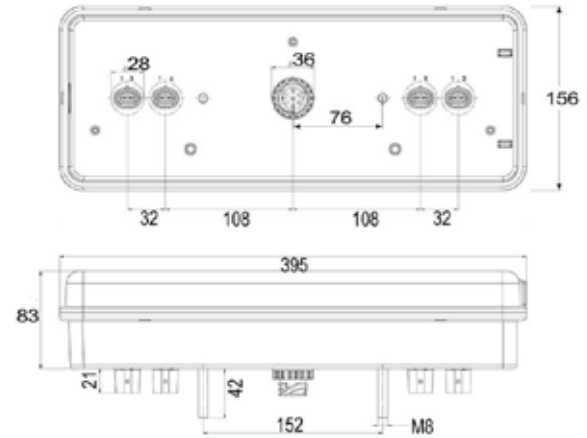
Hybrid



Full-LED

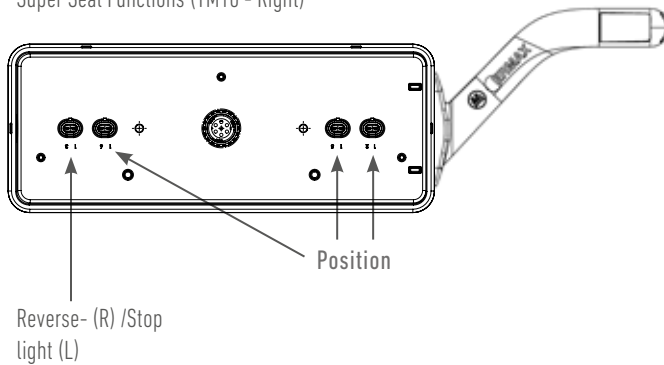


AMP socket placed at the back



AMP socket and 2x2 Super Seal placed at the back

Super Seal Functions (TM10 - Right)



Ex: TM10 with outer end marker light, screw mounted on the side
098 216 430 / 431
098 216 530 / 531

Description

Lens:	Impact resistant polycarbonate
Housing:	Polypropylen (PP)
Dimension:	390 x 155 x 80 mm
Bolt distance:	152 mm / M8

*) Super Seal Functions for 3 x Position light, 1 x Stop (L) & Reverse (R)

Outer end marker (098 241 438 / 098 241 439 (R/L)) with 300 mm connection cable and Super Seal plug are mounted at the side of the tail light. This allows the outer end marker to be connected to the tail lights or the rear cable with the Super Seal connection.



TM10 Hybrid or Full-LED Tail lights 24V - for Trailer



Type	Operating voltage	IP Rating	Right → Left ←	Position Stop Dir. indicator Reverse Rear fog Side marker Reflex reflector	License plate	Outer end marker	Connection 7 poled AMP socket Direction:	2x2 Super Seal Placed at the back*	Article No.
Hybrid	24V	IP54	→	✓			Rear		098 216 400 92.0000.6367
Hybrid	24V	IP54	←	✓			Rear		098 216 401 92.0000.6368
Hybrid	24V	IP54	→	✓	✓		Rear		098 216 402 92.0000.6369
Hybrid	24V	IP54	←	✓	✓		Rear		098 216 403 92.0000.6370
Hybrid	24V	IP54	→	✓			Rear	✓	098 216 404 92.0000.6371
Hybrid	24V	IP54	←	✓			Rear	✓	098 216 405 92.0000.6372
Full-LED	24V	IP54	→	✓			Rear		098 216 500 92.0000.6383
Full-LED	24V	IP54	←	✓			Rear		098 216 501 92.0000.6384
Full-LED	24V	IP54	→	✓	✓		Rear		098 216 502 92.0000.6385
Full-LED	24V	IP54	←	✓	✓		Rear		098 216 503 92.0000.6386
Full-LED	24V	IP54	→	✓			Rear	✓	098 216 504 92.0000.6387
Full-LED	24V	IP54	←	✓			Rear	✓	098 216 505 92.0000.6388
Full-LED	24V	IP54	→	✓	✓		Rear	✓	098 216 506 92.0000.6389
Full-LED	24V	IP54	←	✓	✓		Rear	✓	098 216 507 92.0000.6390
Full-LED	24V	IP54	→	✓		45° (Long)	Rear	✓	098 216 530 92.0000.7790
Full-LED	24V	IP54	←	✓		45° (Long)	Rear	✓	098 216 531 92.0000.7791

Spare parts TM10 Hybrid or Full-LED Tail lights 24V - trailer



Pos. 1



Pos. 2



Pos. 3

Spare parts / Accessories

Lens, Right	1	098 296 354 92.0000.6640
Lens, Left	1	098 296 355 92.0000.6641
Protection cover for tail light	2	098 296 710 92.0000.6877
LED Outer end marker 12/24V, Right - 300 mm connection cable with Super Seal plug	3	098 241 438 92.0000.6355
LED Outer end marker 12/24V, Left - 300 mm connection cable with Super Seal plug	3	098 241 439 92.0000.6356

TM11 LED Tail lights 12/24V

Tail light for Standard vehicles

Modern light- and LED-Technology

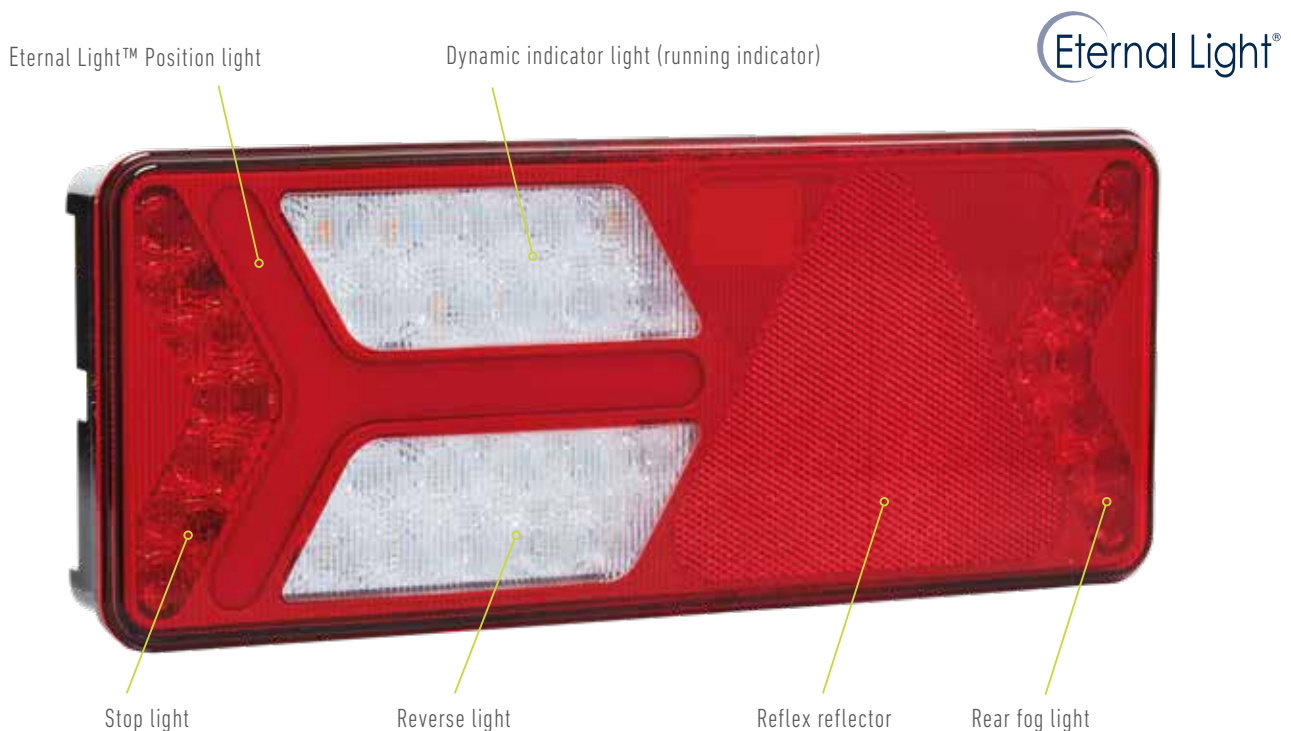
The compact and modern 7-function tail light from ERMAX

As highlights the full-LED tail light from Ermax offers a thin design, modern dynamic indicator light, impact-resistant lens and integration of all legal control units.

The intelligent and up to date control unit of the Ermax TM11 makes the universal connection of the tail light to any truck wanted possible – without failure warnings. This is also valid for the indicator failure control – and the brake light control.

The indicator light function in the side markers, lights simultaneously with the tail light according to ECE 48. This function is fully integrated in the TM11 tail light.

Superior durability, modern functionality and a modern design, come together in the Ermax TM11 tail light and making it a real highlight.



Highlights

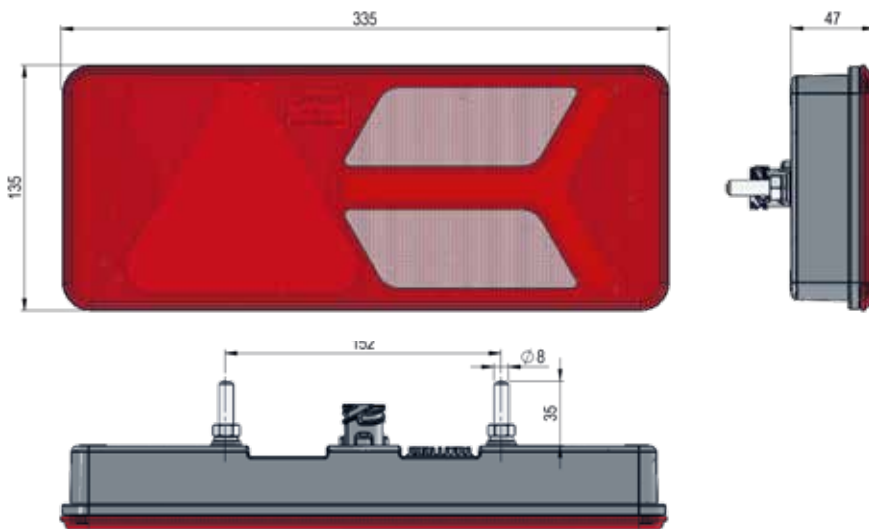
- Unbreakable - Impact resistant lens of polycarbonat
- Multi voltage 12/24V
- Modern dynamic indicator light (running indicator)
- Built-in indicator failure control according to ECE 48 - compatibel with all brands and year of EU Trucks*
- Built-in stop light failure control according to ECE 48 - compatibel with all brands and year of EU Trucks*
- Built-in control of flashing side marker lights (SIMAC®) according to ECE 48 supp. 06 (Since nov. 2017)
- Certified in accordance with all relevant standards and regulations in Europe

* Stand 2018

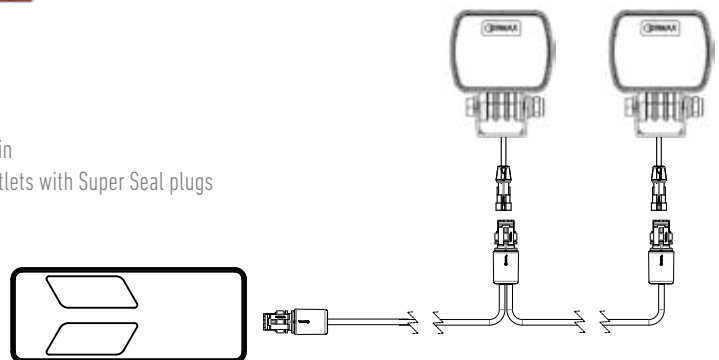
TM11 Tail lights 12/24V - Full-LED for trailer



Eternal Light®



Reverse light connected as a chain
- side cable with 1 inlet and 2 outlets with Super Seal plugs



2 pieces of Ermax reverse lights or work lights are allowed to be connected to an Ermax tail light (Max 52W)

Description

Lens:	Impact resistant polycarbonate
Direction indicator:	Progressive direction indicator light (running indicator)
Housing:	Impact resistant polycarbonate
Dimension:	335 x 135 X 47 mm
Bolt distance:	152 mm / M8
IP Rating:	IP69K

*) Super Seal Functions for 3 x position light incl. SIMAC, 1 x Stop (L) & Reverse (R)

TM11 Tail lights 12/24V - Full-LED for trailer



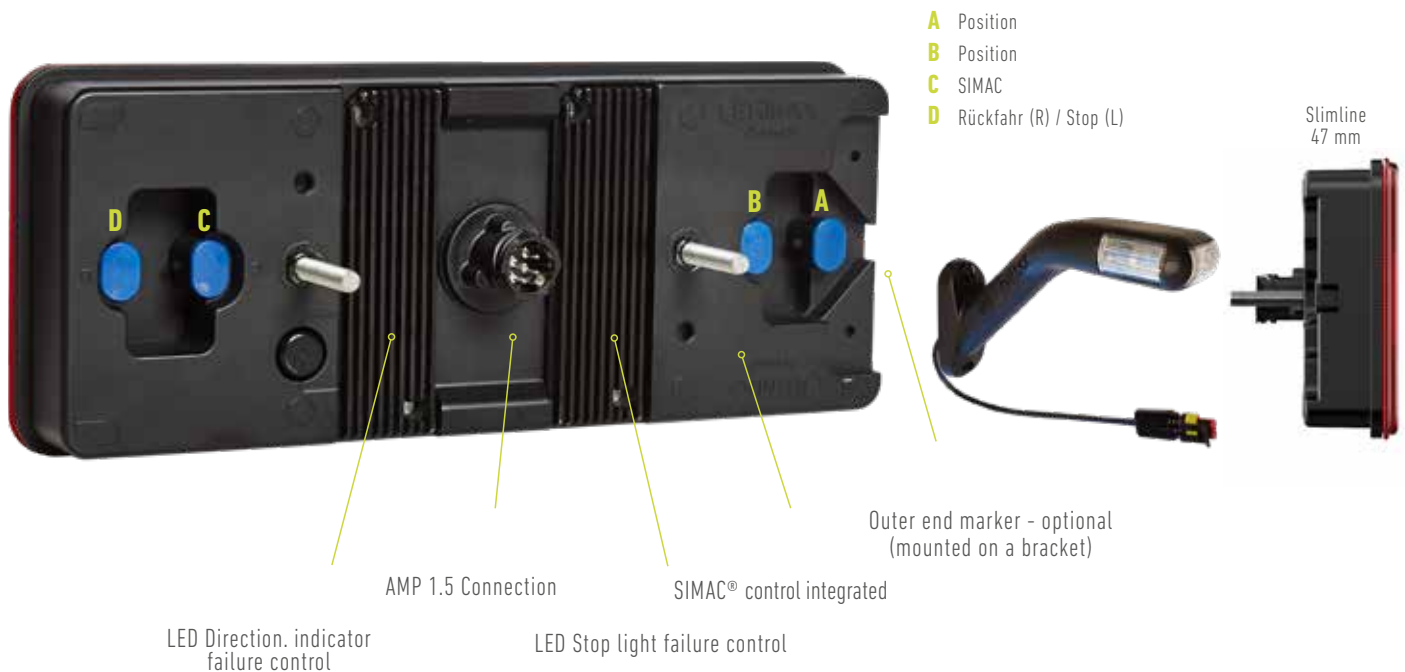
Type	Right → Left ←	Position Stop Dir. indicator Reverse Rear fog Reflex reflector	Outer end- marker	Connection 7 poled AMP socket Direction:	2x2 Super Seal Placed at the back*	SIMAC control integrated	LED control integrated	Article No.
Full-LED	→	✓	Optional	Rear	✓	✓	--	098 216 550 92.0000.7653
Full-LED	←	✓	Optional	Rear	✓	✓	--	098 216 551 92.0000.7655
Full-LED	→	✓	Optional	Rear	✓	✓	Dir. indicator light	098 216 552 92.0000.7657
Full-LED	←	✓	Optional	Rear	✓	✓	Dir. indicator light	098 216 553 92.0000.7659
Full-LED	←	✓	Optional	Rear	✓	✓	Dir. indicator- & Stop light	098 216 555 92.0000.7661
Full-LED	→	✓	300 mm		✓	✓		098 216 558 92.0000.8122
Full-LED	←	✓	300 mm		✓	✓		098 216 559 92.0000.8123

PREMIUM: 098 216 552 (R) & 098 216 555 (L) SIMAC, LED

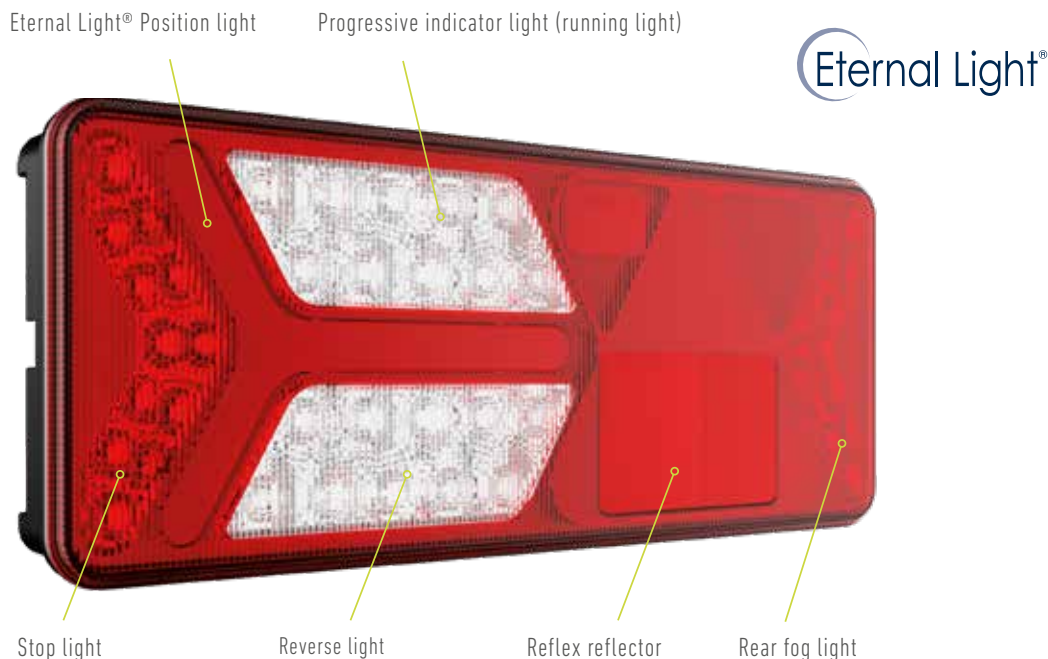
Outer end marker are optional

and can be mounted at any version afterwards

Article no. suitable for outer end marker is 098 241 448 / 098 241 449 (R/L). The outer end marker is mounted at a holder and the Super Seal plug at the outer end marker is mounted at the back of the tail light in the Super Seal socket



TM11 Tail light 12/24V - LED for Truck



Type	Right → Left ←	Position Stop Dir. indicator Reverse Rear fog Reflex reflector	Outer end marker	Connection 7 poled AMP socket Direction:	2x2 Super Seal placed at the back*	SIMAC control integrated	LED control integrated	Article no.
------	-------------------------	---	------------------	---	--	--------------------------------	------------------------------	-------------

LED	→	✓	Optional	Rear	✓	✓	Optional	098 216 570 92.0000.8181
LED	←	✓	Optional	Rear	✓	✓	Optional	098 216 571 92.0000.8182

LED failure control for monitoring of direction indicator and/or stop light is optional

Some vehicles can be reprogrammed to use LED tail light, whereas other vehicles do not offer this facility. In these cases, using ERMAX LED failure control, it is possible to achieve the correct settings, and still meet all regulations.

The truck version of ERMAX TM11 tail lights is already prepared for integrating the LED failure control of the direction indicator and stop light functions. One LED failure control unit (098298149) pr. lighting function should be mounted in each of the ERMAX TM11 tail lights. One unit for direction indicator light, if the direction indicator light is not recognized by the truck. Two units, if both lighting functions are not recognized by the truck.



+



LED control for direction indicator and stop light

LED control unit for direction indicator and stop light (098298149)
- mounted in the back of the TM11 lygten

Spare parts & Accessories TM11 Tail lights 12/24V



Pos. 1



Pos. 2



Pos. 3



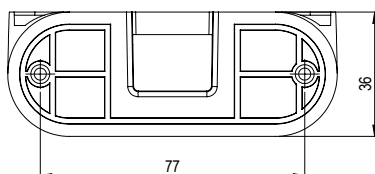
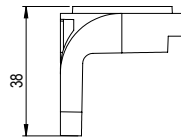
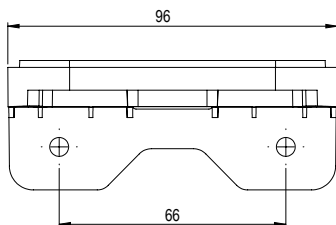
Pos. 4



Pos. 5

Holder of plastic, angled, for outer end marker Delivered with 4 pcs. stainless torx screws. Mounting hole distance: 77 mm	1	098 292 610 92.0000.7668
LED outer end marker 12/24V, Right - 300 mm connection cable with Super Seal plug	2	098 241 448 92.0000.6355
LED outer end marker 12/24V, Left - 300 mm connection cable with Super Seal plug	2	098 241 449 92.0000.6356
Protection cover for tail light	3	098 296 710 92.0000.6877
Cover of LED control - For covering of SLD connection at TM11 Tightens and protects contacts for SLD-unit	4	098 296 700 92.0000.7670
LED-Control unit 12/24V for TM11 Tail light built-in For monitoring direction indicator or stop light. One unit per function is needed For mounting at the back of the housing light. Connection with 3 x spring-loaded contacts	5	098 298 149 92.0000.7671

Pos. 1



Unique design – and rather cool

Modern technology and design combined

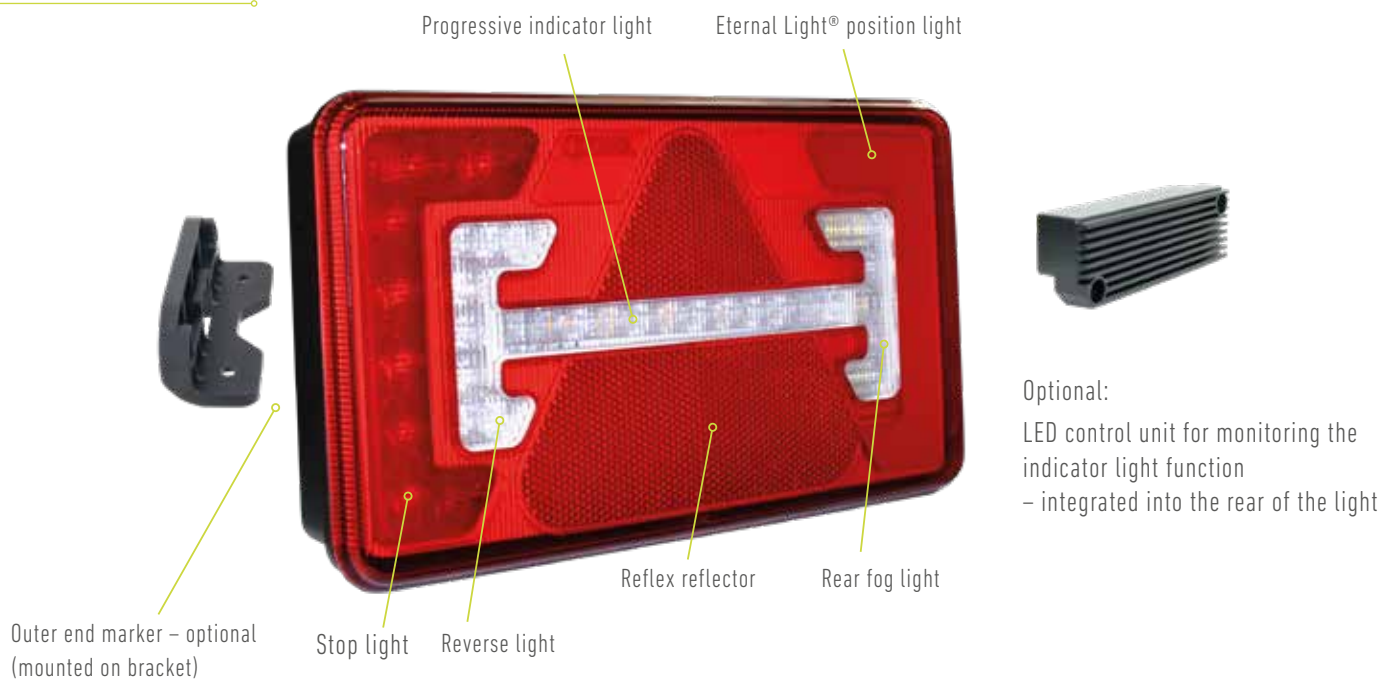
ERMAX TM12 LED tail light is the market's most compact tail light with a built-in LED control unit. The design is based on the newest light and LED technology, and meets the toughest standards in terms of technique, quality and functionality.

The TM12 tail light is developed with 100% LED technology and with a unique, harmonious design – with white optics on the rear fog light function as well as a long modern, dynamic indicator light. Likewise, the Eternal Light® technology is used in the TM12 tail light, whereby a soft, homogeneous and traffic-safe light-picture is obtained.

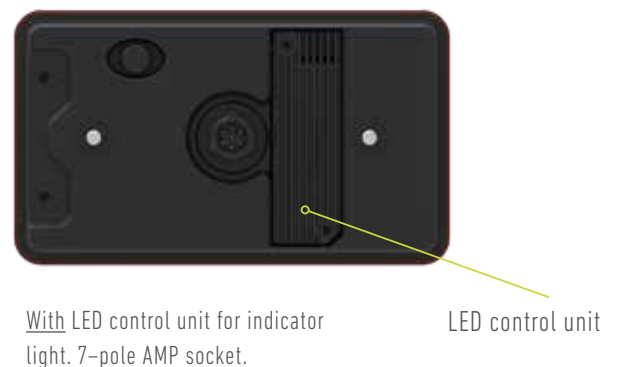
Due to the compact size, the TM12 tail light is particularly suitable for vehicles with limited mounting or installation space.



TM12 – left tail light



Rear variants



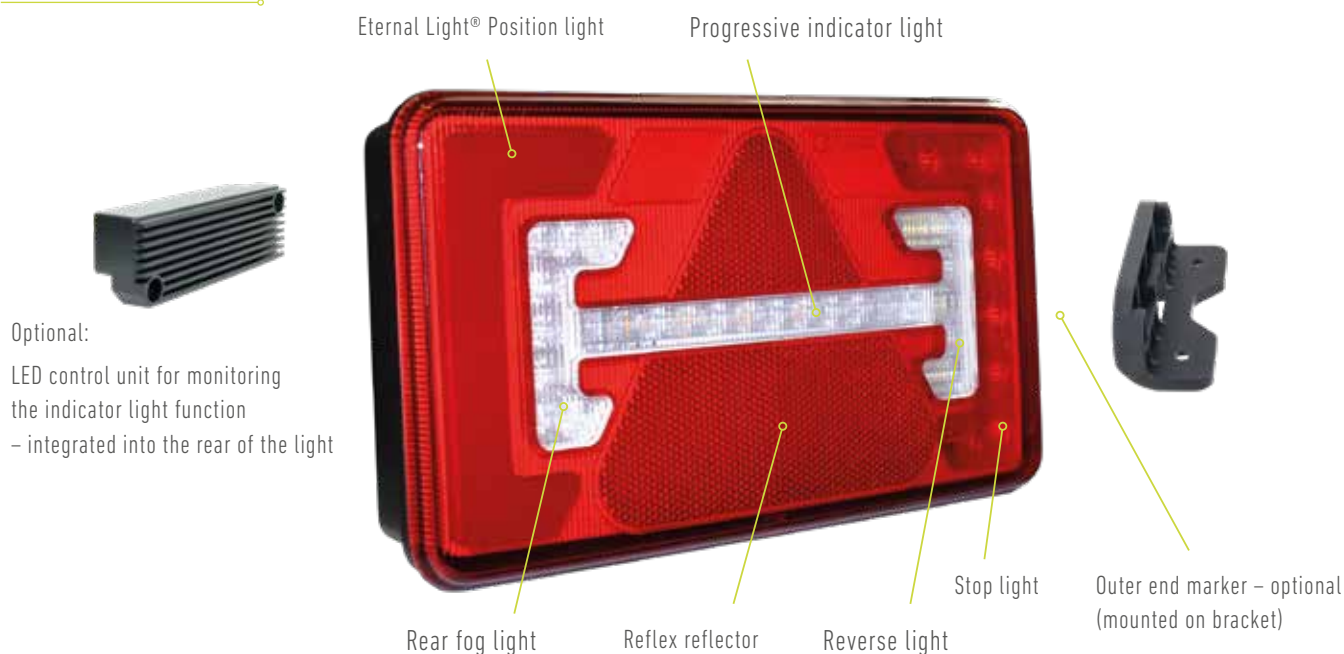
Compact rear light with integrated control unit

Solves many challenges

Highlights

- Housing and lens made of highly resistant polycarbonate
- ERMAX patented position light – Eternal Light® – for optimum traffic safety
- Dynamic indicator light
- Integrated multi-volt 12/24V LED control for monitoring of indicator light function, both ISO 13207 and older vehicles according to ECE R48 (optional)
- Compact – especially suitable for vehicles with limited installation space
- Can be used for both trailer and truck – uniform look
- The market's only tail light with adjustable IP69K license plate light
- ECE-, EMC- and ADR-certified
- IP69K rating

TM12 – right tail light



TM12 tail light – TRUCK variant



Variants and functions

For every purpose

TM12 tail light	RH → LH ←	5-pole socket / M6 bolts	7-pole AMP socket / M8 bolts	Position Stop	Dynamic indicator	Reverse	Rear fog	Reflex reflector	License plate	LED indicator failure control	Artikel no.
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15-pole front connection (ISO12098)

	→		✓	✓	✓	✓	△				098 216 620 92.0000.8087
	←		✓	✓	✓	✓	△				098 216 621 92.0000.8088
	→		✓	✓	✓	✓	△		✓		098 216 622 92.0000.8089
	←		✓	✓	✓	✓	△		✓		098 216 623 92.0000.8090

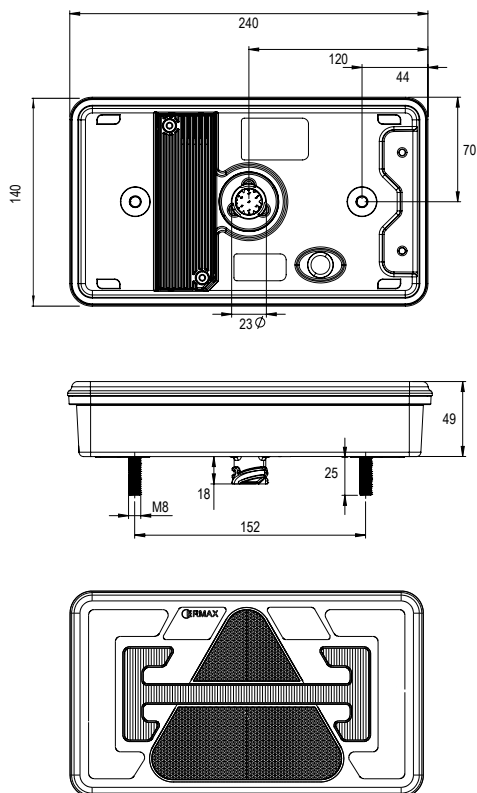
Truck variant

	→		✓	✓	✓	✓	□				098 216 630 92.0000.8090
	←		✓	✓	✓	✓	□				098 216 631 92.0000.8091

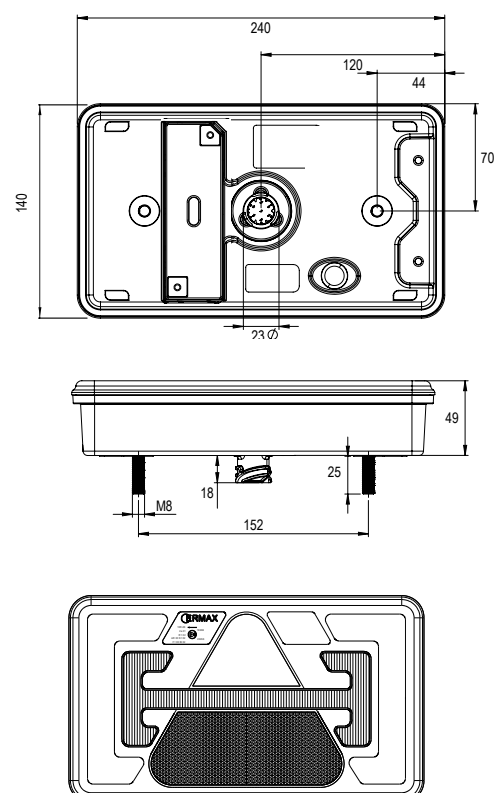
NOTE: Variants with 5-pin connector - see our agricultural catalogue.

Drawings and dimensions

TM12 trailer variant with 7-pole socket without license plate light



TM12 TRUCK variant with 7-pole socket (without license plate light)



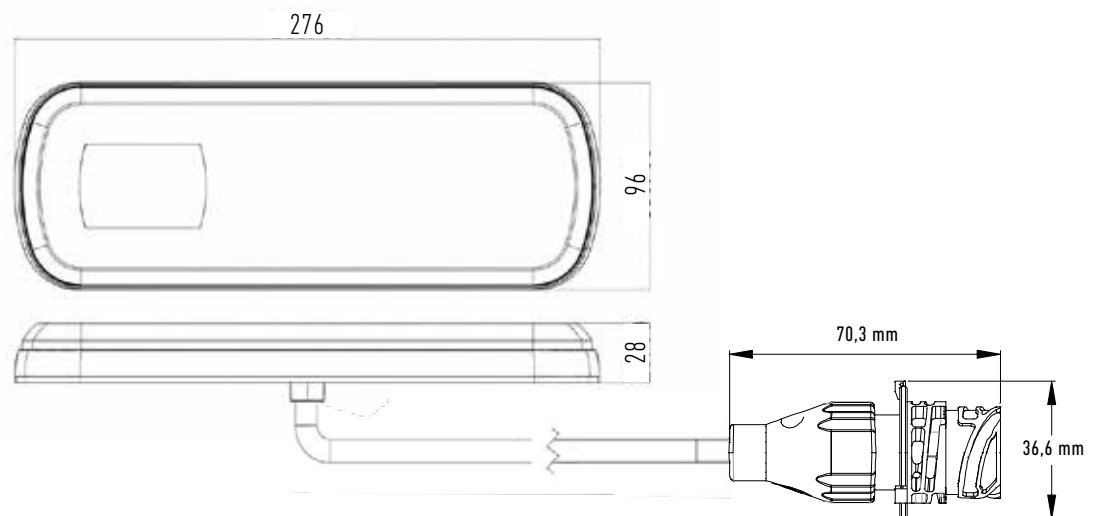
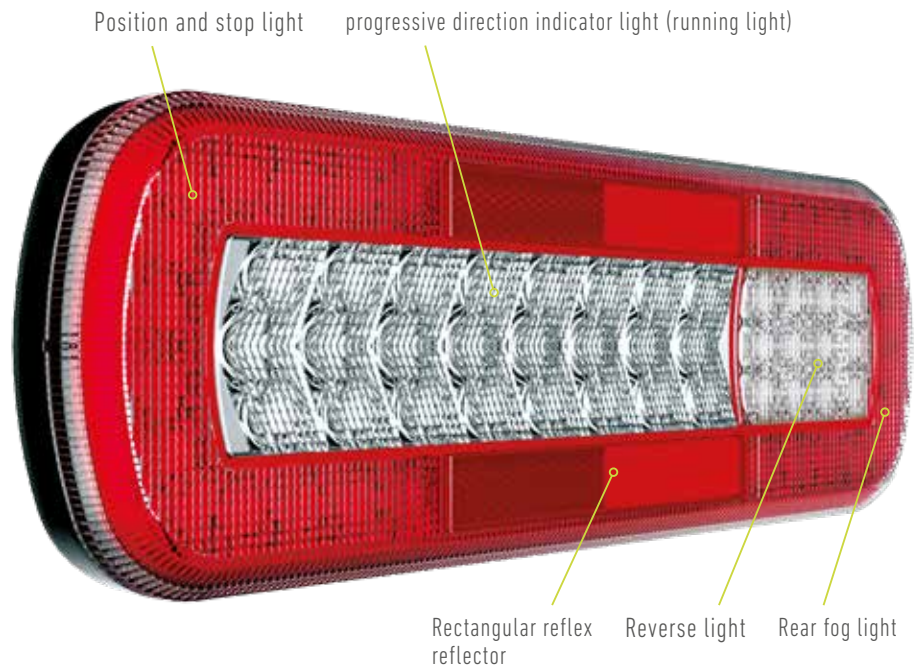
Spare parts and accessories



Spare parts and accessories

Bracket, angled, made of plastic – for mounting of outer end marker light Supplied with 2 pcs. stainless Torx screws – bolt hole distance of 77 mm	1	098 292 610 92.0000.7668
LED outer end marker light 12/24V, right / left – 300 mm connection cable with Super Seal plug	2	098 241 218 92.0000.7490
LED outer end marker light 12/24V, right – 300 mm connection cable with Super Seal plug	3	098 241 448 92.0000.7050
LED outer end marker light 12/24V, left – 300 mm connection cable with Super Seal plug	3	098 241 449 92.0000.7051
Protection cover, plastic, for tail light – bolt hole distance of 152 mm	4	098 296 705 xx.xxxx.xxxx
Protection cover – to be used on the TM12 tail light if the LED control unit is removed Tightens and protects the contacts of the LED control unit	5	098 296 700 92.0000.7670
LED control unit 12/24V for mounting on TM12 tail light for controlling of the indicator light Connection with 3 spring loaded contacts	6	098 298 149 92.0000.7671

TM15 LED Tail light 12/24V



Description

Lens:	Impact resistant polycarbonate
Direction indicator:	Dynamic direction indicator light(running light)
Housing:	Impact resistant polycarbonate
Dimension:	283 x 100 x 29 mm
Bolt distance:	152 mm / M8
Working temperature:	-40°C - +65°C
IP Rating:	IP69K

Consumption per lighting function

Position light:	0,6W
Stop light:	3,1W
Direction indicator light:	3,1W
Reverse light:	2,8W
Rear fog light:	3,6W

TM15 LED Tail light 12/24V



Type	Right → Left ←	Position Stop Progressive dir. indicator Reverse Rear fog Rectangular reflex reflector	Connection	Cable length	Article no.
LED	→ ←	✓	7 poled AMP socket	300 mm	098 216 590 92.0000.8048

TM15 Tail light LED

Smart, modern 6 function tail light for trucks with dynamic direction indicator light
Long slim design with many LEDs which gives a beautiful and modern light pattern



Is possible to combine with the new TM14 lighting series

A classic new developed

The newest technology – integrated LED failure control

The classic ERMAX TM4 LED tail light is well-known and has been used on vehicles all over Europe for many years. Due to new vehicle technology challenges with the light function recognition, ERMAX has new developed the classic TM4 LED tail light. The new TM4 tail light now meets the highest demands in the areas of technique, quality and functionality.

The design and build-in measures of the TM4 tail light have not been changed. Quite NEW is, however, the possibility of getting the tail light with integrated LED failure control for monitoring the direction indicator light and the stop light. This means that the vehicle is able to control the light functions according to ECE regulations.

The integrated LED failure control offers many advantages, as it supports both the ISO 13207 cold test and the state-of-the-art LED monitoring.

TM4 LED Tail light



The integrated LED failure control will solve many challenges

Highlights

- LED tail light with integrated LED control for monitoring the indicator and stop light in accordance with ECE 58.
- Use of a technology that is not only limited to ISO 13207 but also takes over the monitoring of older and new vehicles*.
- Control of flashing side marker lights (SIMAC®) by using rear cable with incorporated SIMAC®.
- Space-saving and fewer interfaces in the wiring harness, as no external control units / control boxes are required.
- Easy and quick mounting. Cost-saving due to reduction of mounting time and no maintenance.
- Classic design which can easily be combined with other existing lights.
- Possibility of a unique red-white-red design.
- D-approval and thus suitable for double mounting.
- IP69K rating of the LED unit (the tail light IP54K).
- ECE-, EMC- and ADR certified.

* Applies to all well-known brands in EU countries from 11/2009

Convincing technology

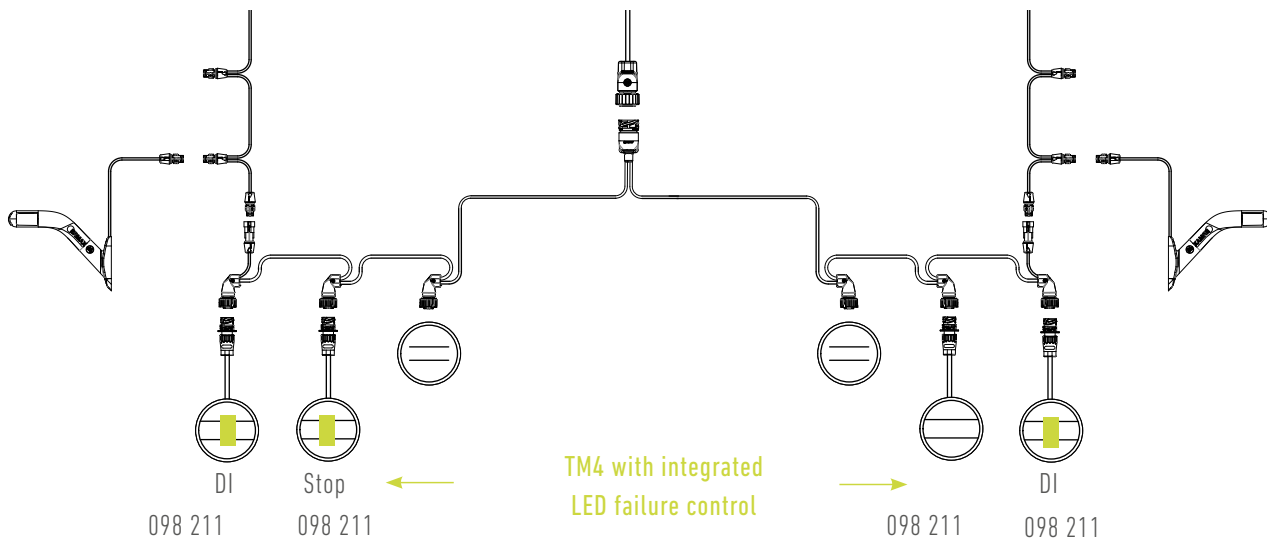
The best choice

The newest technology for monitoring and control of LED light functions

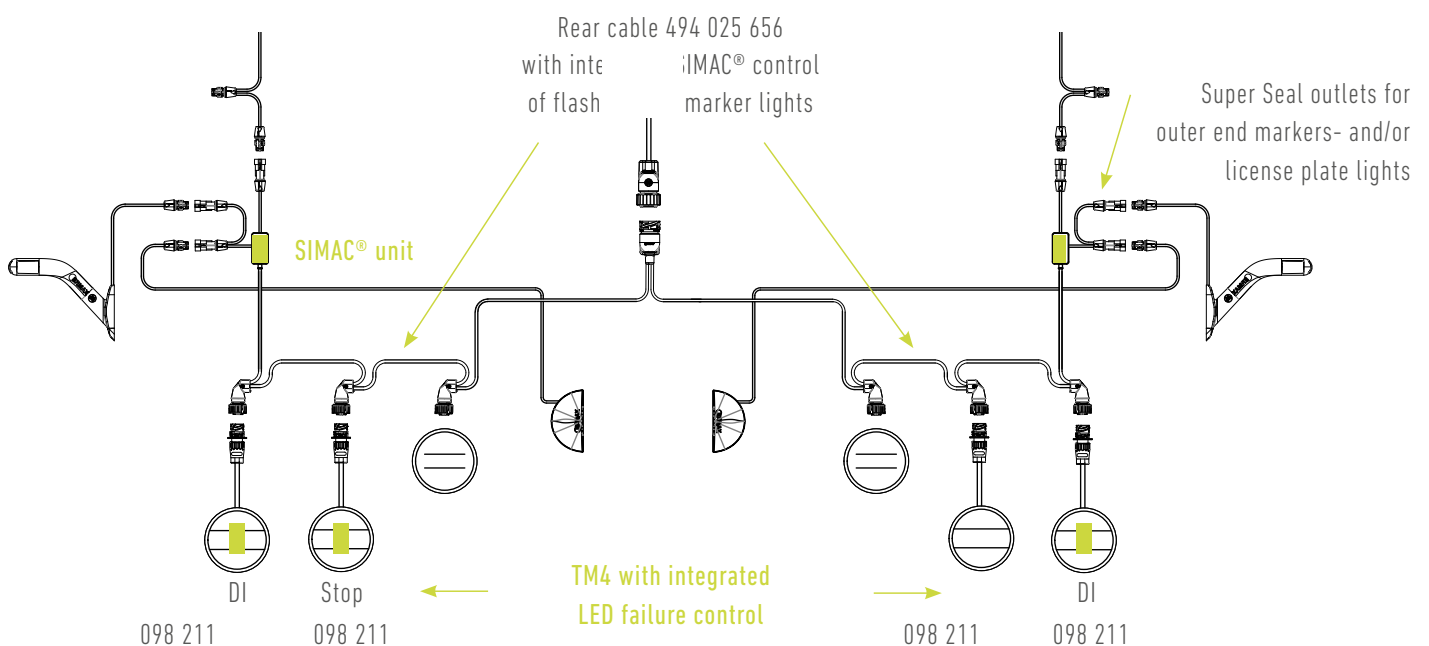
Using the newest technology in the ERMAX TM4 tail light enables integrated LED control to monitor the indicator and stop light function. If control of flashing side marker lamps SIMAC are needed ERMAX offers several innovative solutions, which can be connected easily and intelligently as a part of the cable system or as a plug-in solution.

- The integrated LED control in the tail light for monitoring the indicator and stop light functions, using a technology which is not limited to ISO 13207 and thus can be used for all vehicle* according to ECE R48.
- Intelligent control of the flashing side marker lights SIMAC® according to ECE R48 integrated in the rear cable.

Cable system with LED failure control for direct indicator and stop light function - integrated in the TM4 tail lights



Cable system with LED failure control for direct indicator and stop light function integrated in the TM4 tail lights - and SIMAC® in the rear cable



Variants & functions

for every use



TM4 LED tail light Surface mounting	Voltage	Position Stop Indicator	Reverse	Rear fog	Connection	D-approval	LED control integrated	Article No.
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Classic design - with D approval

	24V	✓			Cable lead through rubber grommet	✓		098 211 340 92.0000.8382
	24V	✓			300 mm cable with 7 pole AMP socket	✓		098 211 342 92.0000.8384
	24V	✓			Cable lead through rubber grommet	✓	Direct indicator light	098 211 341 92.0000.8383
	24V	✓			300 mm cable with 7 pole AMP socket	✓	Direct indicator light	098 211 343 92.0000.8385
	24V	✓			300 mm cable with 7 pole AMP socket	✓	Stop light	098 211 344 92.0000.8386

Classic design - without D approval

	12/24V	✓			Cable lead through rubber grommet			098 212 442 92.0000.6937
	12/24V	✓			300 mm cable with 7 pole AMP socket			098 212 436 92.0000.8255

Unique red-white-red design - with D approval

	12/24V	✓			Cable lead through rubber grommet	✓		098 212 345 92.0000.7553
	12/24V	✓			300 mm cable with 7 pole AMP socket	✓		098 211 362 92.0000.8389
	24V	✓			Cable lead through rubber grommet	✓	Direct indicator light	098 211 361 92.0000.8388
	24V	✓			300 mm cable with 7 pole AMP socket	✓	Direct indicator light	098 211 363 92.0000.8390
	24V	✓			300 mm cable with 7 pole AMP socket	✓	Stop light	098 211 364 92.0000.8391

Variants & functions

for every use



TM4 LED tail light Surface mounting	Voltage	Position Stop Indicator	Reverse	Rear fog	Connection	D-approval	LED control integrated	Article No.
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Combination rear light - reversing and rear fog - without D approval

	12/24V		✓	✓	Cable lead through rubber grommet			098 255 340 92.0000.8308
	12/24V		✓	✓	300 mm cable with 7 pole AMP socket			098 255 342 92.0000.8309

Single-function rear light - reversing and rear fog - without D approval

	24V		✓		Cable lead through rubber grommet			098 256 343 92.0000.7204
	12/24V		✓		300 mm cable with 7 pole AMP socket			098 256 336 92.0000.8257
	12/24V			✓	Cable lead through rubber grommet			098 257 349 92.0000.1608
	12/24V			✓	300 mm cable with 7 pole AMP socket			098 257 336 92.0000.8258

Material description

Lens:	PMMA
Housing:	PP
Measure:	Ø140 x 80 mm
Bolt distance:	45 mm / M6
Working temperature:	-40°C - +65°C
IP-Rating:	IP54 (LED-Einheit: IP69K)

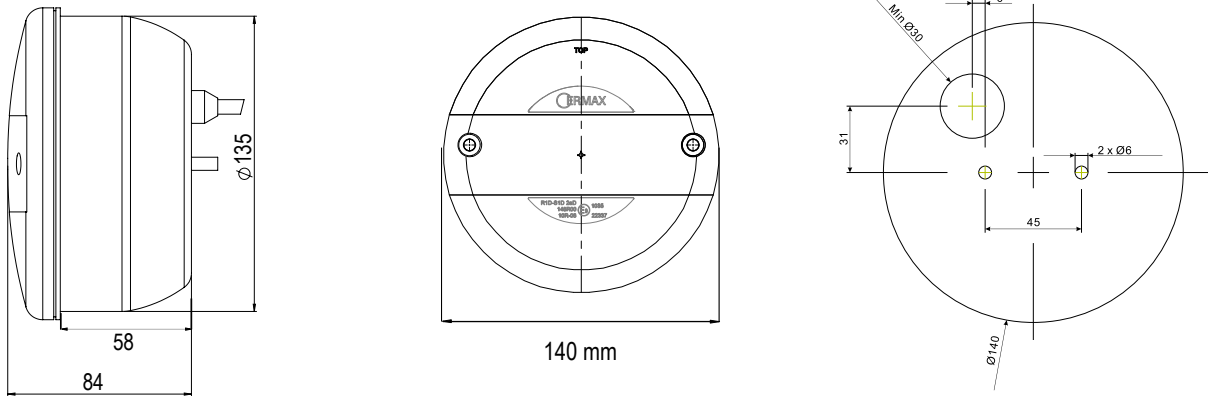
LED failure control on functions that are not preconfigured

The ERMAX TM4 tail light is pre-configured to monitor a specific light function as described above.

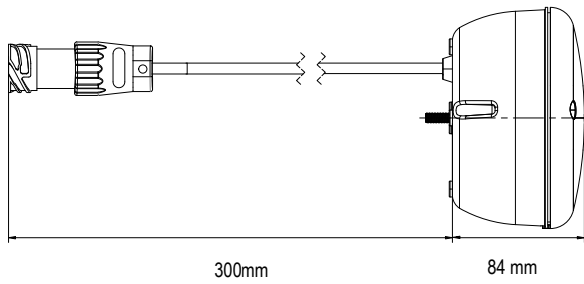
If monitoring of a different light function is required, this can be changed by changing a pair of plug connections. Information can be found on page 7.

Drawings, measure and spare parts

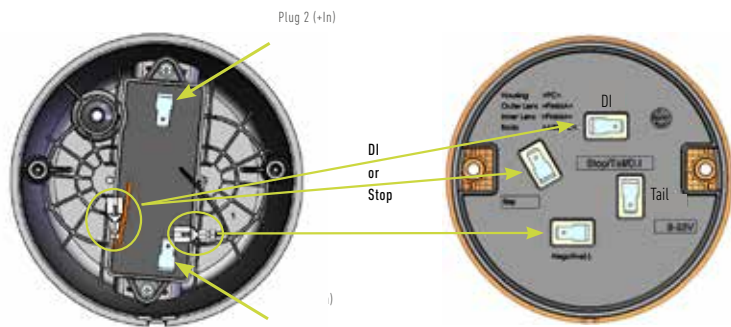
TM4 LED tail light with rubber grommet



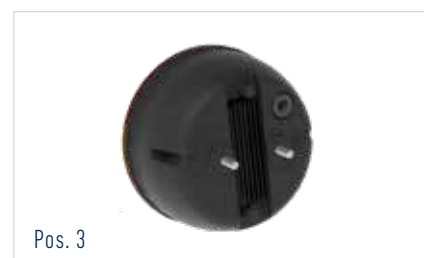
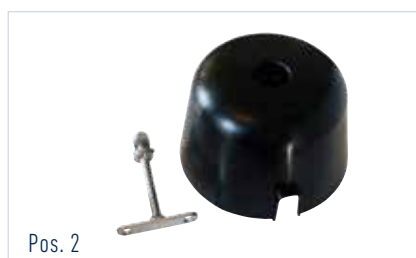
TM4 LED tail light with 300 mm connection cable with 7 pole AMP socket



LED failure control on functions that are not preconfigured



Spare parts and accessories



Chrome ring and built-in kit	1	098 292 360 92.0000.1668
Protection cover for tail light	2	098 296 720 92.0000.1681
TM4 housing with LED failure control unit 24V, cable lead through rubber grommet, for monitoring the direct indicator or stop light function	3	098 298 114 92.0000.8426

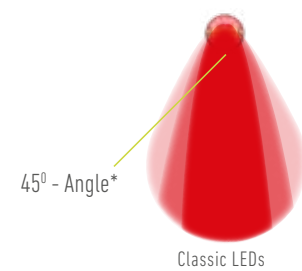
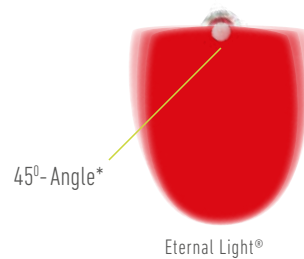
TM5 LED Tail lights with Eternal Light® and chrome ring 12/24V (Built-in)

The highlights of the ERMAX TM5 tail light in full LED are a modern and recognizable design with Eternal Light® light function for almost every application - both on the trailer and on the truck.

Due to its slim design and ultra-thin installation depth, the TM5 LED tail light is ideal for integration in an underrun protection bar.

Eternal Light®

Position light Eternal Light®



Highlights

- Impact-resistant lens made of polycarbonate
- Can be used for trailer and truck
- Ultra Slimline-Design - Maximum installation flexibility
- Chrome ring is screwed mounted - easy to replace
- ERMAX patented position light – Eternal Light®
- Compatible with the intelligent ERMAX LED failure control and the SIMAC control unit according to ECE 48 regulations
- Certified according to all relevant standards and regulations in Europe

Light technology Eternal Light® – increases road safety

ERMAX Eternal Light® light technology is designed for the best possible SAFETY when driving. It offers the best possible homogeneous light function and has various advantages based on test results.

- Eternal Light® lighting technology – is perceived by other road users earlier than classic LEDs lights or bulb lights.
- Contributes to reducing the number of accidents in connection with changing lanes and right turns.
- Soft visuality when platooning.
- Prevents fatigue in case of long-lasting impact and thus also accidents.

TM5 LED Tail lights with Eternal Light™ and Chrome ring 12/24V (Built-in)



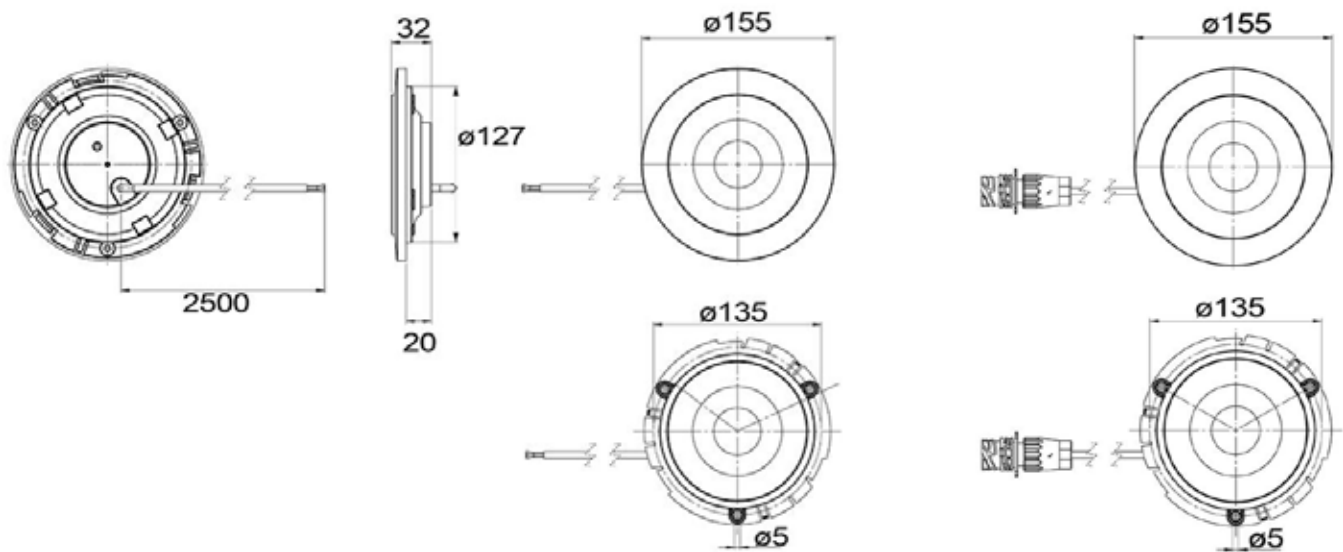
Eternal Light®



Pos. 1



Pos. 2

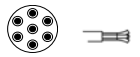


Description

Tail light with Eternal Light™ technology - for Built-in
Ultra thin installation depth

Lens:	Impact resistant polycarbonate
Housing:	Impact resistant polycarbonate
Dimension:	$\varnothing 155 \times 32$ mm
Built-in:	$\varnothing 127$ mm
Bolt distance:	3 pcs $\varnothing 4,5$ mm in 120° spread in $\varnothing 135$ mm
Working temperature:	$-40^\circ\text{C} - +65^\circ\text{C}$
IP Rating:	IP69K

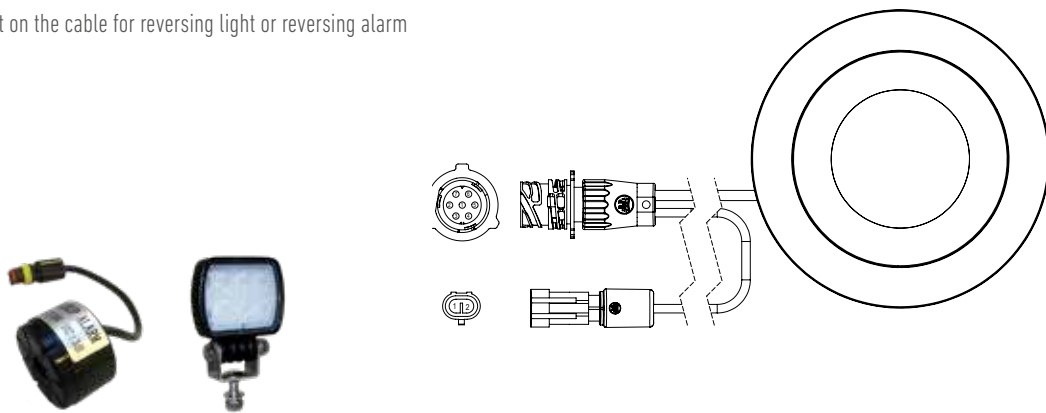
TM5 LED Tail lights with Eternal Light™ and Chrome ring 12/24V (Built-in)



Operation voltage	IP Rating	Position Stop Dir. indicator	Reverse Rear fog	Connection	Cable length	Outlet Super Seal	Pos.	Article No.
12/24V	IP69K	✓		Open end	2500 mm		1	098 212 101 <i>92.0000.5868</i>
12/24V	IP69K	✓		7 poled AMP socket	300 mm		1	098 212 102 <i>92.0000.5869</i>
12/24V	IP69K		✓	Open end	2500 mm		2	098 255 101 <i>92.0000.5875</i>
12/24V	IP69K		✓	7 poled AMP socket	300 mm		2	098 255 102 <i>92.0000.5876</i>
12/24V	IP69K		✓	7 poled AMP 1.5 socket	1.200 mm	200 mm cable with Super Seal socket for Reverse alarm / Reverse light	2	098 255 104 <i>92.0000.7479</i>

098 255 104

- with outlet Super Seal socket on the cable for reversing light or reversing alarm



Spare parts



Chrome ring

098 292 215
92.0000.6639

TM6 LED Tail lights 12/24V (Surface mounting)



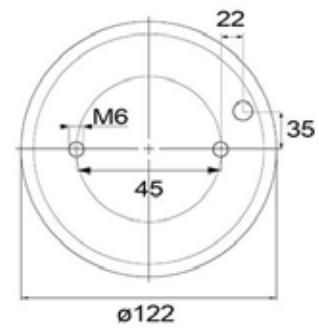
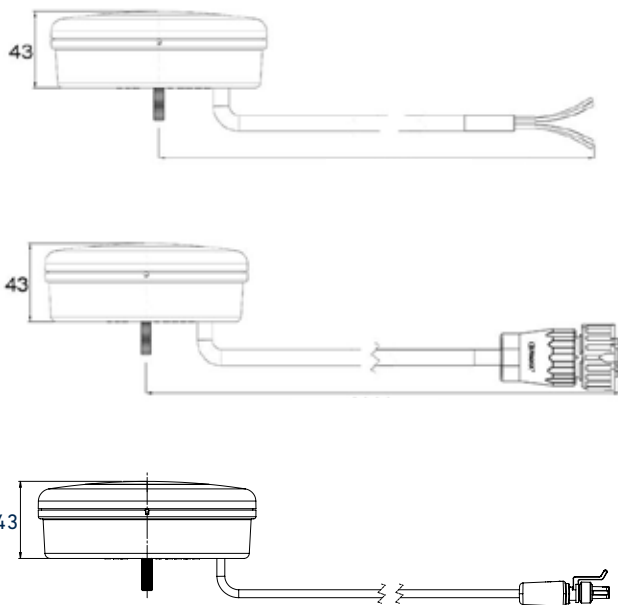
Pos. 1



Pos. 2



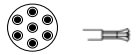
Pos. 3



Description

Lens:	PMMA
Housing:	ABS
Dimension:	Ø122 x 43.2 mm
Bolt distance:	45 mm / M6
Working temperature:	-40°C - +65°C
IP Rating:	IP69K

TM6 LED Tail lights 12/24V (Surface mounting)



Operation voltage	IP Rating	Position Stop	Dir. indicator	Reverse	Rear fog	Cable length	Connection	Pos.	Article No.
12/24V	IP69K	✓	✓			2.500 mm	Open end	1	098 212 022 92.0000.5732
12/24V	IP69K	✓	✓			2.000 mm	7 poled AMP 1.5 plug	1	098 212 027 92.0000.1491
12/24V	IP69K	✓	✓			200 mm	7 poled AMP 1.5 socket	1	098 212 028 92.0000.1492
12/24V	IP69K	✓				2.500 mm	Open end	3	098 212 122 92.0000.5733
12/24V	IP69K			✓	✓	2.500 mm	Open end	2	098 255 022 92.0000.5734
12/24V	IP69K			✓	✓	2.000 mm	7 poled AMP 1.5 plug	2	098 255 027 92.0000.1584
12/24V	IP69K			✓	✓	200 mm	7 poled AMP 1.5 socket	2	098 255 028 92.0000.1585
12/24V	IP69K				✓	1.000 mm	2 poled Super-Seal plug	3	098 257 027 92.0000.1606

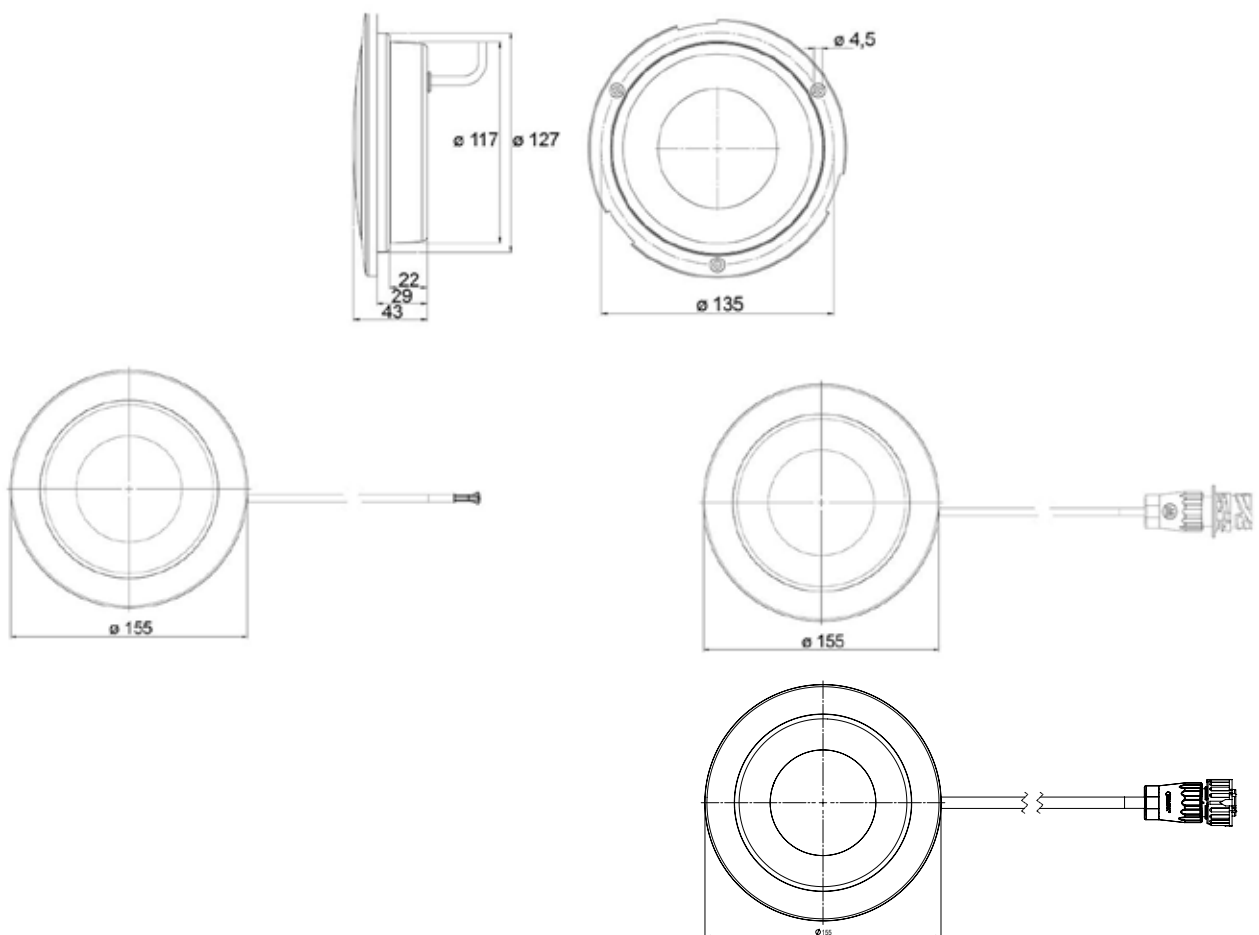
TM7 LED Tail lights 12/24V (Built-in)



Pos. 1



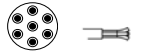
Pos. 2



Description

Lens:	PMMA
Housing:	ABS
Dimension:	Ø155 x 43.2 mm
Bolt distance:	45 mm / M6
Built-in:	Ø127 mm
Mounting holes:	3 pcs Ø4,5 mm in 120° spread in Ø135 mm
Working temperature:	-40°C - +65°C

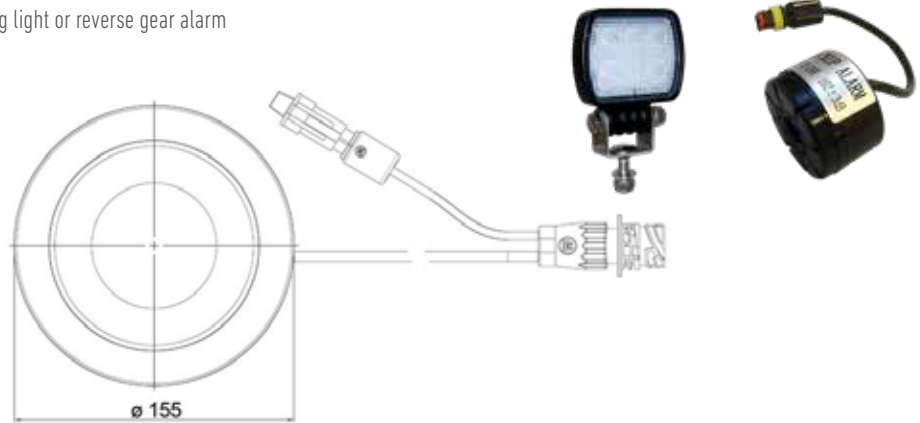
TM7 LED Tail lights 12/24V (Built-in)



Operation voltage	IP Rating	Position Stop Dir. indicator	Reverse Rear fog	Cable length	Connection	Outlet Super Seal	Pos.	Article No.
12/24V	IP69K	✓		2.500mm	Open end		1	098 212 002 92.0000.7475
12/24V	IP69K	✓		300 mm	7 poled AMP 1.5 socket		1	098 212 008 92.0000.7476
12/24V	IP69K	✓		2.000 mm	7 poled AMP 1.5 plug		1	098 212 017 92.0000.0012
12/24V	IP69K		✓	2.000 mm	7 poled AMP 1.5 plug		2	098 255 017 95.0000.0013
12/24V	IP69K		✓	200 mm	7 poled AMP 1.5 socket		2	098 255 018 95.0000.0014
12/24V	IP69K		✓	2.500 mm	Open end		2	098 255 002 95.0000.0014
12/24V	IP69K		✓	1.000 mm	7 poled AMP 1.5 socket	200 mm cable with Super Seal socket for Reverse alarm / - Reverse light	2	098 255 014 95.0000.0014

098 255 104

- with outlet Super Seal socket on the cable for reversing light or reverse gear alarm



Spare parts



Chrome ring Ø155 mm	098 292 216 92.0000.5702
Black ring Ø155 mm	098 292 217 92.0000.9278

TM16 LED tail light for built-in - 24V

Modern design, function and technology combined

The new round 3 and 2 function TM16 LED tail light from ERMAX

The TM16 tail light serie features a unique, homogeneous design with a black background which highlights the homogeneous red tail light function in its 3 horizontal stripes. A pretty cool design combined with impact-resistant lens and housing, chrome-ring, the option of progressive direction indicator light and variants with ISO 13207 LED monitoring on the direction indicator light.

The serie also offers individual vehicle styling with a huge range of options, and can be used on both trucks and trailers.

The ERMAX TM16 LED built-in tail light is designed based on the latest lighting- and LED technologies and meets the toughest requirements for technology, quality and functionality.



Position-, stop- and direction indicator light



Position-, stop- and progressive direction indicator light



Fog- and reversing light



Position-, fog- and reversing light

ERMAX TM16 - why?

- 1 Unique design**
 Built-in light in modern, compact design, with black background. Homogeneous position light with 3 stripes, with Eternal Light function.
- 2 Long lifetime and durability.**
 Strong, impact-resistant lens and housing made of polycarbonate.
- 3 Two direction indicator functions**
 Option of standard direction indicator function or modern progressive direction indicator light.
- 4 Chrome-ring**
 Hides screws, gives a modern look. Also available in gloss black.
- 5 Compatible with all tractor units**
 Variants with ISO13207 LED monitoring on indicator light as standard - or ERMAX LED control box for monitoring indicator light as plug-in.
- 6 D-approval when double-mounting.**
 Facilitates ECE compliant double mounting of tail lights as a single unit.
- 7 Flexible connection options**
 Connection with open-end or 7 pole AMP plug connection. Fog/rear light available with outlets for extra reversing lights.
- 8 First class, approved quality - 3 year warranty**
 All products are subject to our strict quality criteria and test methods to be able to guarantee high product quality.

Individual styling

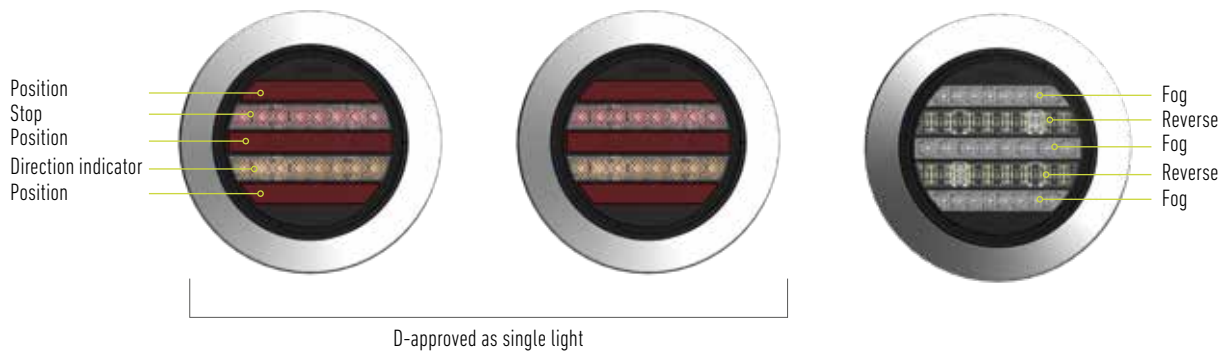
Design the "rear" according to taste and needs

Flexibility

The ERMAX TM16 is ideal for individual styling of a vehicle and has many application possibilities - both on trailer as on truck.

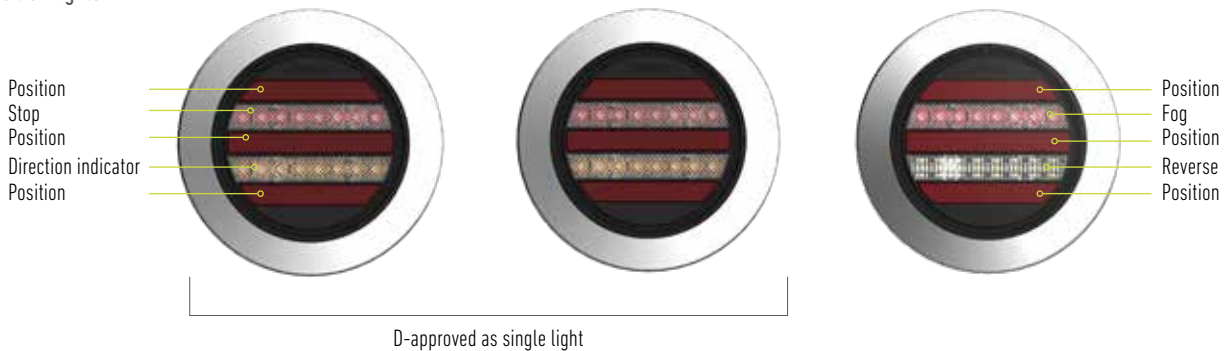
TM16 tail lights can be fitted horizontally and vertically and as high-mounted lights, and with the various connection options, fits perfectly with the ERMAX standard cable system.

Traditional mounting is ECE compliant



Uniform look - all functions

ECE compliance without other rear-facing position lights



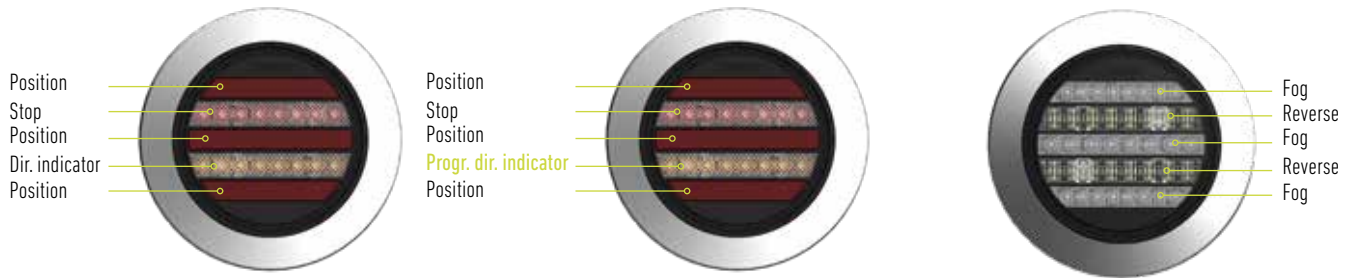
Dynamic direction indicator in 3 function light

No ECE compliance



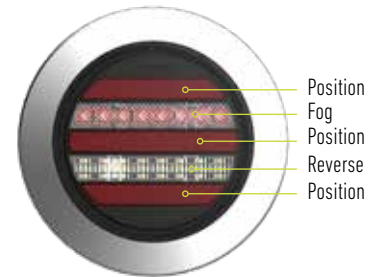
TM16 LED tail light for built-in - 24V

Variants without ISO 13207



Technical specifications:

- Lens and housing: Impact-resistant polycarbonate
- Voltage: 24V
- Build-in measurements: Ø112.5 mm
- Bolt hole distance: 3 x Ø4.5 mm at 120° divided in Ø130 to Ø135 mm
- Working temperature: -40°C - +65°C
- IP rating: IP6K9K
- Approvals: ECE, EMC and ADR (see D-approval below)



Voltage	Right → Left ←	Position	Stop	Dir. indicator traditional	Dir. indicator progressive	Reverse Fog	Connection	Cable length	Outlet Super Seal	D-approved	Item no.
24V	→ ←	✓	✓	✓			Open end	2,500 mm		✓	098 211 201
24V	→ ←	✓	✓	✓			7 pole AMP socket	300 mm		✓	098 211 202
24V	→	✓	✓		✓		Open end	2,500 mm			098 211 210
24V	←	✓	✓		✓		Open end	2,500 mm			098 211 211
24V	→	✓	✓		✓		7 pole AMP socket	300 mm			098 211 212
24V	←	✓	✓		✓		7 pole AMP socket	300 mm			098 211 213
24V	→ ←					✓	Open end	2,500 mm			098 255 201
24V	→ ←					✓	7 pole AMP socket	300 mm			098 255 202
24V	→ ←					✓	7 pole AMP socket	1,000 mm	200 mm cable with Super Seal socket		098 255 204
24V	→	✓				✓	Open end	2,500 mm			098 255 210 *
24V	←	✓				✓	Open end	2,500 mm			098 255 211 *
24V	→	✓				✓	7 pole AMP socket	300 mm			098 255 212 *
24V	←	✓				✓	7 pole AMP socket	300 mm			098 255 213 *
24V	→	✓				✓	7 pole AMP socket	1,000 mm	200 mm cable with Super Seal socket		098 255 214 *
24V	←	✓				✓	7 pole AMP socket	1,000 mm	200 mm cable with Super Seal socket		098 255 215 *

* NB: The reason for a right and left variant is, that the fog light is reduced on the right and left side of the light respectively, meaning it can be mounted close to the rear light and still maintain the mandatory 100 mm distance between stop and fog lights.

TM16 LED tail light for built-in - 24V

Variants with ISO 13207 - Indicator monitored by integrated ISO13207 pulse system



Voltage	Right → Left ←	Position	Stop	Dir. indicator traditional	Dir. indicator progressive	Reverse Fog	Connection	Cable length	D-approved	Item no.
24V	→ ←	✓	✓	✓			Open end	2,500 mm	✓	098 211 231
24V	→ ←	✓	✓	✓			7 pole AMP socket	300 mm	✓	098 211 232
24V	→	✓	✓		✓		Open end	2,500 mm		098 211 240
24V	←	✓	✓		✓		Open end	2,500 mm		098 211 241
24V	→	✓	✓		✓		7 pole AMP socket	300 mm		098 211 242
24V	←	✓	✓		✓		7 pole AMP socket	300 mm		098 211 243



Example with gloss black ring

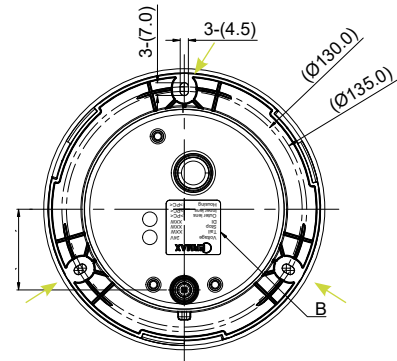
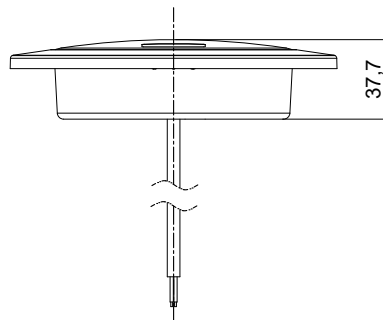
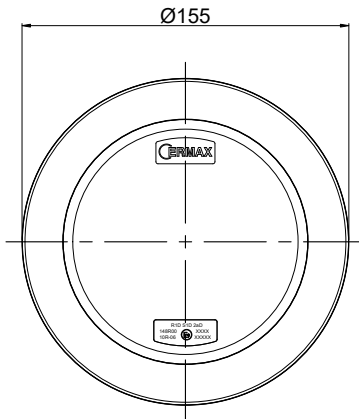
Spare parts

Chrome-ring Ø155 mm	098 292 216
Gloss black ring Ø155 mm - can replace the chrome ring	098 292 217

TM16 LED tail light for built-in - 24V

Technical details and dimensions

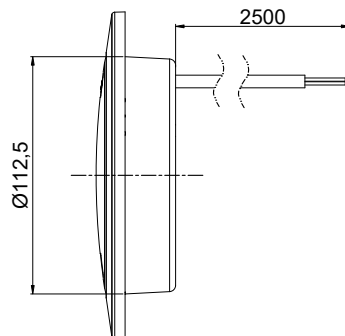
Dimensions



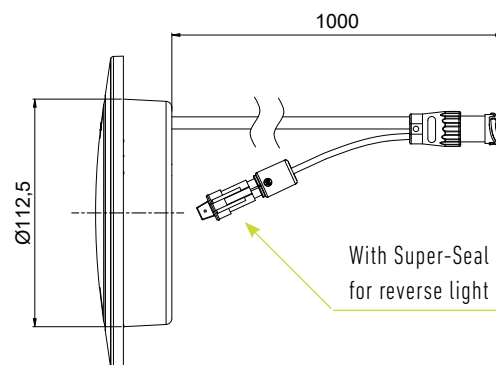
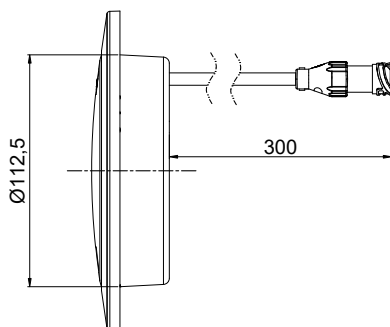
Can be mounted at 120° divided on
Ø130 to Ø135

Connection open-end:

- White: Minus (-)
- Green: Position
- Amber: Direction indicator
- Red: Stop



Connection to 7 pole AMP socket



With Super-Seal socket outlet on cable
for reverse light or reversing alarm

Technical specifications:

- Strong, impact-resistant polycarbonate lens and housing
- 24V
- Dimensions for built-in - Ø112.5 mm
- Bolt hole distance - 3 x Ø4.5 mm at 120° divided on Ø130 to Ø135 mm
- Working temperature -40°C - +65°C
- IP rating: IP6K9K
- ECE, EMC and ADR approved (D-approval, see table on next page)

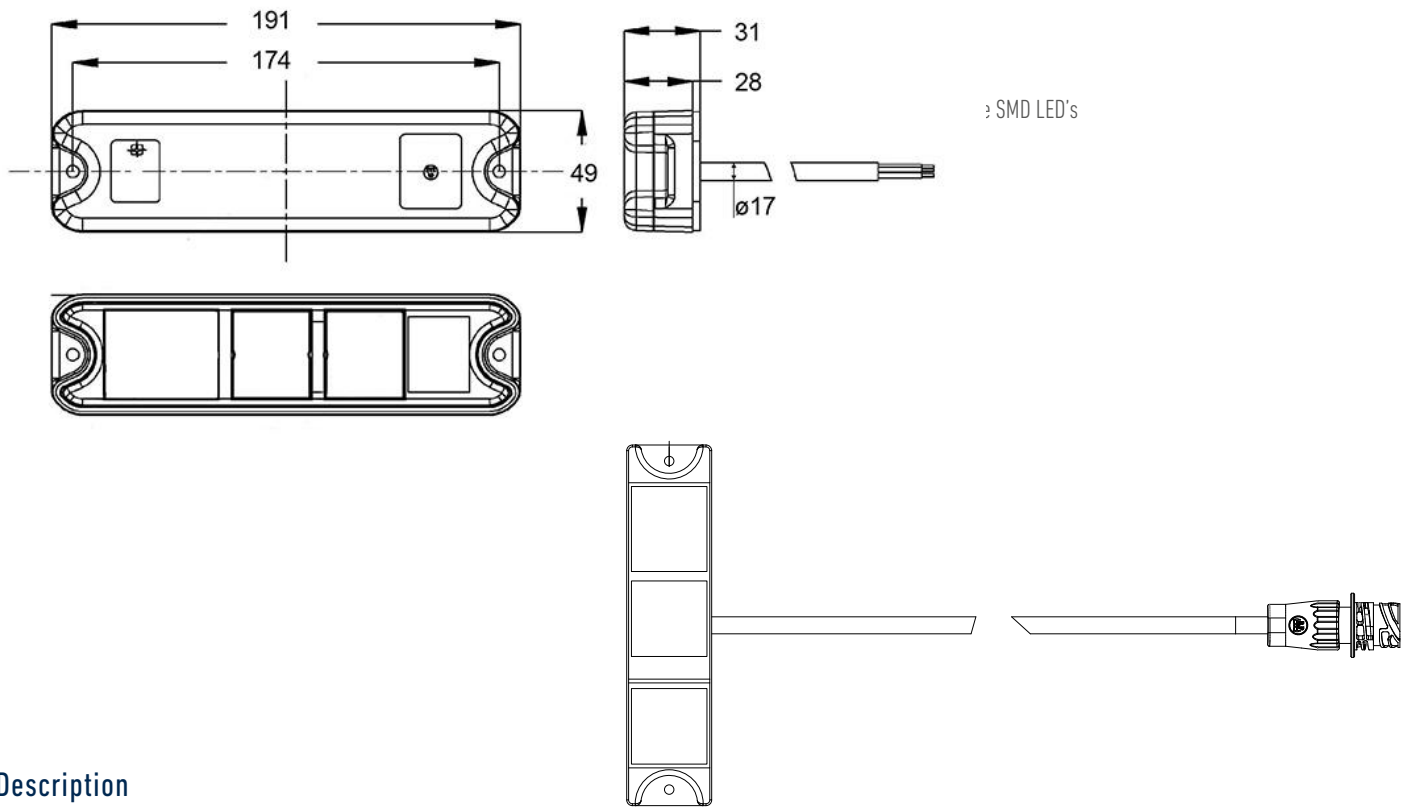
TM8 LED Tail lights 12/24V



Pos. 1

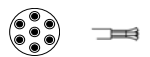


Pos. 2



Description

Lens: PMMA
 Housing: ABS
 Dimension: 191 x 49,4 x 30 mm
 Bolt distance: 174 mm / M5



Operating voltage	IP Rating	Position Stop Dir. indicator	Reverse Rear fog	Reflex reflector	Cable length	Connection	Pos.	Article No.
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12/24V	IP69K	✓		✓	200 mm	7 poled AMP 1.5 socket	1	098 212 274 92.0000.1500
12/24V	IP69K		✓	✓	200 mm	7 poled AMP 1.5 socket	2	098 255 274 92.0000.1587

TM13 LED Tail light 12/24V

Small and slim design

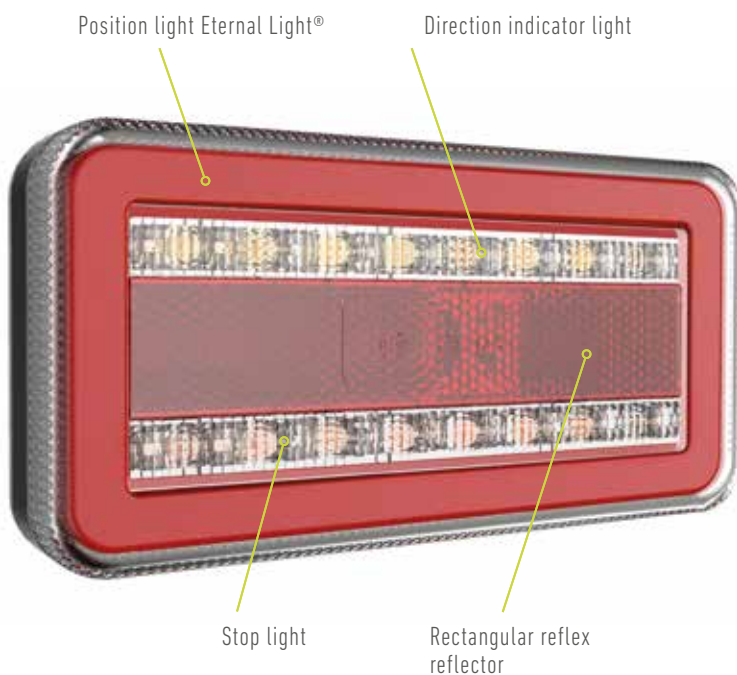
The perfect solution if the installation place is limited

The new ERMAX TM13 4-functions tail light in full-LED offers highlights as small, slimline and modern design for almost any application – for trailer as well as truck.

The TM13 LED tail light is due to its compact size and its slim design all-round useable and especially suitable for narrow build-in measures.

Recognizable design with Eternal Light®, newest light and LED technology and high quality are united in the ERMAX TM13 tail light – and makes the new TM13 tail light to another ERMAX innovation within lighting for heavy vehicles.

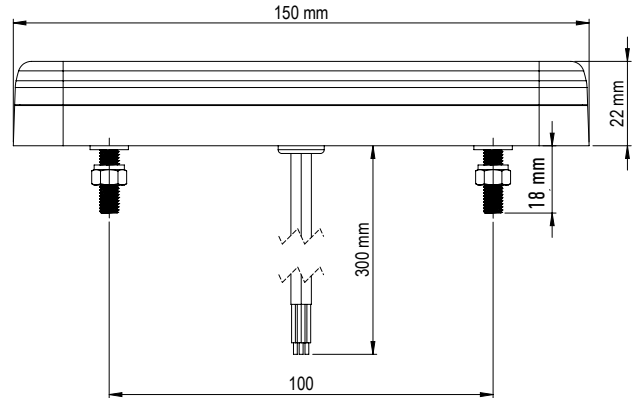
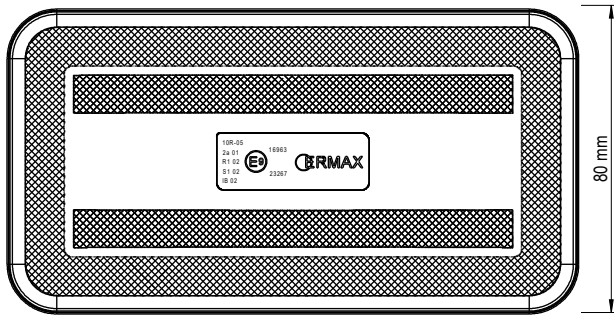
Eternal Light®



Highlights

- Applicable for trailer and truck
- Slimline-design - the perfect solution for limited build-in dimensions
- Suitable for high mounting
- ERMAX patented position light – Eternal Light®
- Compatible with the intelligent ERMAX LED failure control and the SIMAC®-control unit according to ECE 48 regulation
- Certified according to all relevant standards and regulations in Europe

TM13 LED Tail light 12/24V



OBS: IF ONLY VERTICAL MOUNTING, A SEPARATE LEGAL REFLECTOR MUST BE MOUNTED



Description

- Lens: Polycarbonate
- Housing: Polycarbonate and ABS
- Dimension: 150 x 80 x 22 mm
- Bolt distance: 100 mm / M5
- Working temperature: -40°C - +65°C
- IP Rating: IP69K

Type	Operation voltage	Right → Left ♦	Position Stop Dir. indicator Rectangular reflex reflector	Connection	Cable length	Article no.
LED	12/24V	→ ←	✓	Open end	300 mm cable, 4 core	098 212 170 92.0000.8007
LED	12/24V	→ ←	✓	Open end	2.500 mm cable, 4 core	098 212 171 92.0000.8008
LED	12/24V	→ ←	✓	7 poled AMP Steckdose	300 mm cable	098 212 172 92.0000.8009
LED	12/24V	→ ←	✓	4 poled Deutsch socket (DT4)	300 mm cable	098 212 173 92.0000.8010

TM14 LED Slim-Line Tail light 12/24V

Individual styling with TM14 Slim-line

The perfect solution for limited space

The ERMAX TM14 Slim-Line lighting series is ideal for individual modern styling of a vehicle and can be used for both surface mounting and built-in. The TM14 Slim-Line series is in full LED and offers highlights as a narrow, slim-line and modern design suitable for almost all applications – on the trailer as well as on the truck.

Due to the size and the slim design, there are many applications possibilities – especially where there are limited and narrow mounting surfaces.

The TM14 Slim-Line light can be mounted vertically, horizontally, and as high-mounted light – and fits with the various connection possibilities optimally with ERMAX' present cable system.

The stop light can also with advantage be use as high-mounted 3. stop light.



Position and / or stop light



Direct indicator light as standard or with dynamic direct indicator light

Truck styled with TM14 position lights



Highlights

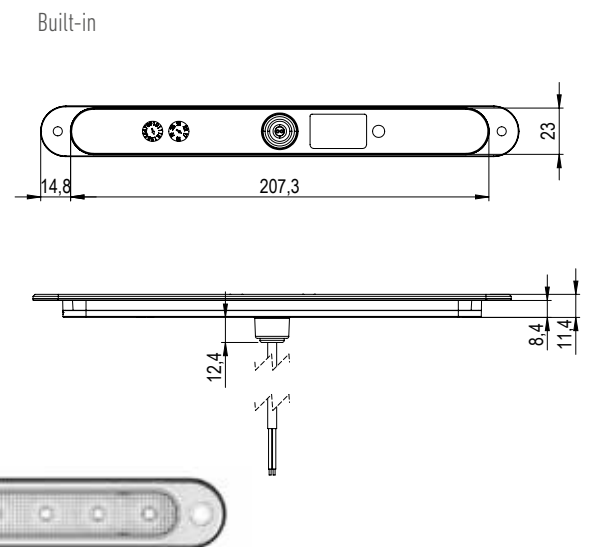
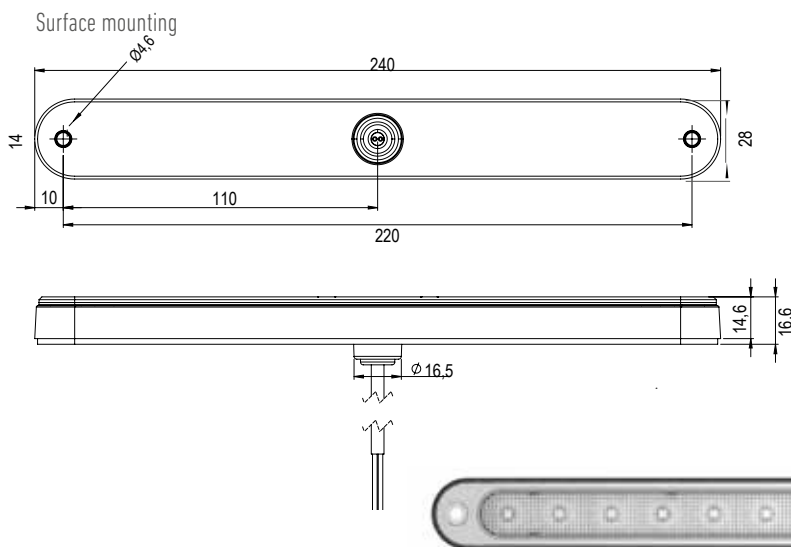
- Slim and modern design for practically any application
- Applicable for trailer and truck
- Time saving mounting with 2 poled or 3 poled Super Seal connection
- 5 m Open end versions for long wiring
- Especially suitable for vehicles with limited mounting space
- Various applications – surface mounting, built-in, horizontal and vertical mounting and as high-mounted light
- Ideal as high-mounted 3. stop light.
- Certified according to all relevant standards and regulations in Europe

TM14 LED Slim-line - Flexible and individual styling possibilities

Design the "rear end" according to needs and demands



Position of more lights underneath each other means more effect of the nice, modern and dynamic direction indicator light



OBS - See all variants, connection possibilities and description on next page

TM14 LED Tail light 12/24V - Slim-line



Description

Lens: Impact resistant polycarbonate
 Housing: Impact resistant polycarbonate
 Dimension
 Surface mounting: 240 x 28 x 16,6 mm
 Built-in: 208 x 23 x 8,4 mm
 Bolt distance: 220 mm / Ø4,6
 Working temperature: -40°C til +65°C
 IP Rating: IP69K

Consumption per lighting function

Positions light: 0,6W
 Stop light: 2,0W
 Direction indicator light: 0,9W
 Dynamic direction indicator light : 4,0W

* Bi-polar connection

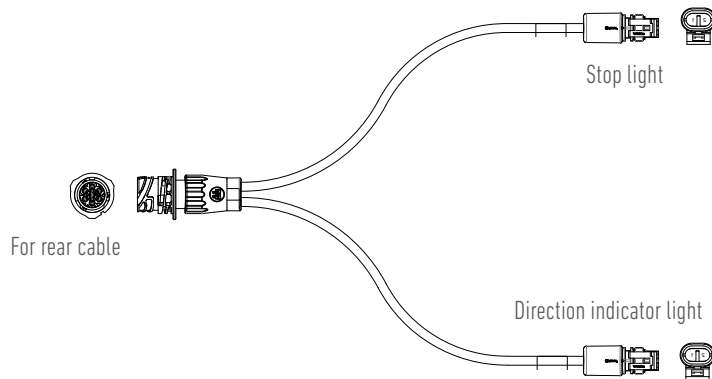
Operat- ingvolt- age	Right → Left ←	Position	Stop	Dir. indica- tor	Dynamic dir. indicator "NEW"	Connection	Cable length	Pin-configuration / wire color pr. function	Article no.
12/24V	→ ←	✓	✓			3 poled Super Seal socket	300 mm	1 = Ground 2 = Position light 3 = Stop light	098 212 250 92.0000.8077
12/24V	→ ←	✓	✓			Open end	5.000 mm - 3 core	Brown = Ground Blue = Position Yellow/green= Stop	098 212 252 92.0000.8078
12/24V	→ ←	✓				2 poled Super Seal socket	300 mm		098 200 250 92.0000.8069
12/24V	→ ←	✓				Open end	5.000 mm - 2 core	Brown = Ground Blue= Position light	098 200 252 92.0000.8070
12/24V	→ ←		✓			2 poled Super Seal socket	300 mm		098 203 250 92.0000.8071
12/24V	→ ←		✓			Open end	5.000 mm - 2 core	Brown = Ground Blue = Stop	098 203 252 92.0000.8072
12/24V	→ ←			✓		2 poled Super Seal socket	300 mm		098 222 250 92.0000.8093
12/24V	→ ←			✓		Open end	5.000 mm - 2 core	Brown = Ground Blue = Dir. indicatir	* 098 222 252 92.0000.8094
12/24V	→ ←				✓	2 poled Super Seal socket	300 mm		* 098 222 260 92.0000.8095
12/24V	→ ←				✓	Open end	5.000 mm - 2 core	Brown = Ground Blue = Dir. indicator	* 098 222 262 92.0000.8096

TM14 LED Tail light 12/24V - Slim-line

Accessories - Adapter cable for installation of TM14 Slim-Line to rear cable (see detailed description in the section "cables universal")

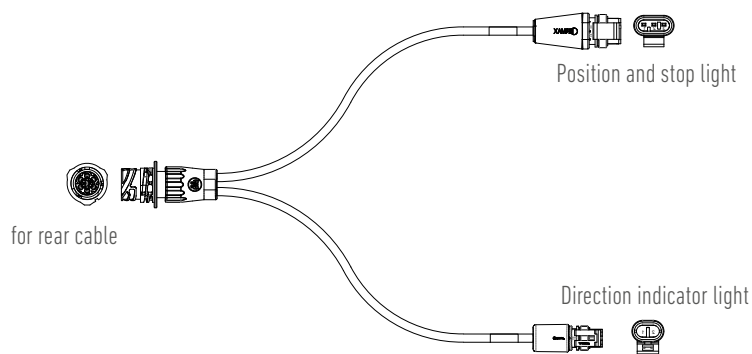
994 003 282 - Adapter cable 300 mm,

7 poled AMP socket > 2 x Super Seal plug with outlet for stop- and direction indicator light



994 003 285 - Adapter cable 300 mm,

7 poled AMP socket > 1 x 3 poled Super Seal plug with outlet for position and stop light + 1 x 2 poled super seal plug with outlet for direction indicator light



Compact and Slim Design - Integrated work- or reverse light

The Ermax Top light 4 functions tail light in LED and with intergrated work- or reverse light, offers as high light a small, slim and modern design for almost all application - on the trailer as well as on the truck.

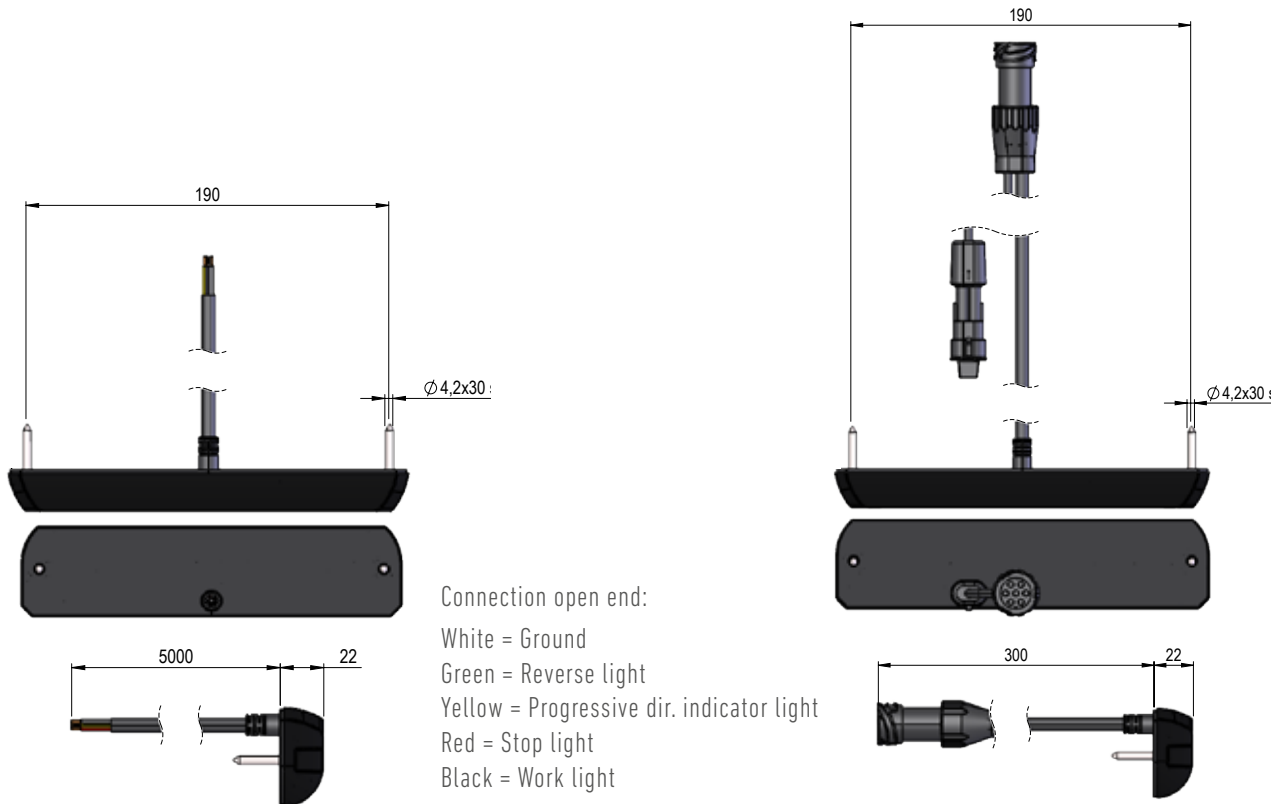
The Ermax Top light LED tail light is due to its size and slim design applicable for many purposes, especially for where there are limited and narrow mounting surfaces. High-mounted in order to use the work light function - or mounted in a height of max. 1.200 mm to use the reverse light function.



High lights

- Slim and compact design - Optimal as high-mounted tail lights
- Intergrated work- or reverse light
- Progressive direction indicator light
- Impact-resistant lens made of Polycarbonate
- Ideal as high-mounted light for use as work light in order to lighten up the work area in th rear end of the trailer or truck
- Especially suitable for vehicles with limited mounting surfaces
- Certified according to all relevant standards and regulations in Europe

LED Tail light 12/24 with intergrated reverse- or work light



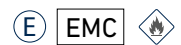
Description

Lens: Impact resistant polycarbonate
 Housing: Impact resistant polycarbonate with backplate of aluminium
 Dimension: 210 x 50 x 20 mm
 Bolt distance: 190 mm / M4
 Working temperature: -40°C - +65°C
 IP-Rating: IP69K

Consumption per function

Position light: 0,6W
 Stop light: 2,7W
 Progressive dir. indicator: 2,5W
 Work- / Reverse light: 10W

Obs - approved as reverse light with installation height of max. 1.200 mm



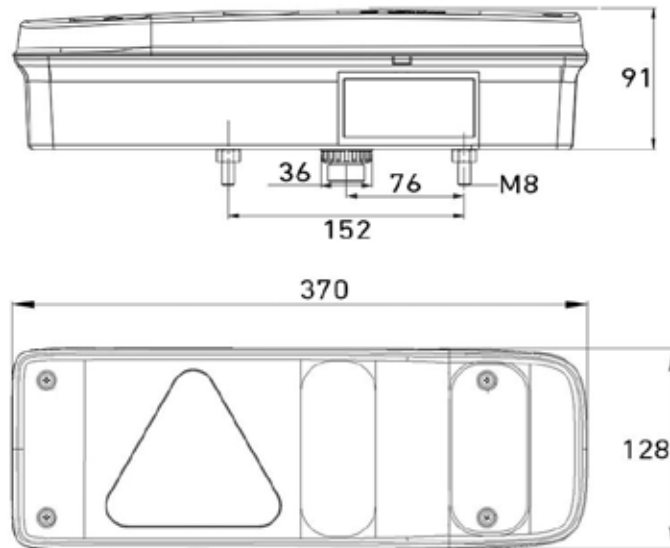
Type	Right → left ←	Position Stop Progressive dir. indicator	Work light / Reverse light * Lumen theoretical/ effektive	Connection and cable length	Article no.
LED	→	✓	950 / 730 Lumen	5.000 mm cable open end	098 212 240 92.0000.8073
LED	←	✓	950 / 730 Lumen	5.000 mm cable open end	098 212 241 92.0000.8074
LED	→	✓	950 / 730 Lumen	300 mm cable with 7 poled AMP socket 300 mm cable with 2 poled Super Seal socket	098 212 242 92.0000.8075
LED	←	✓	950 / 730 Lumen	300 mm cable with 7 poled AMP socket 300 mm cable with 2 poled Super Seal socket	098 212 243 92.0000.8076

TM2 **HYBRID** Tail lights 24V

Pos. 1



Pos. 2

TM2 **HYBRID** Variant

- Tail light TM2 Hybrid with position light as LED
- With Osram Truckstar pro HD bulb on stop, direction indicator, reverse- and rear fog light

Description

Lens:	PMMA
Housing:	PP
Dimension:	370 x 128 x 91 mm
Bolt distance:	152 mm / M8

TM2 Tail lights 24V - HYBRID

Type	IP Rating	Left ← Right →	Position Stop Dir. indicator	Reverse Rear fog Reflex reflector	License plate	Side marker	Outer end marker	Connection 7 poled AMP 1.5 socket	Pos.	Article No.
Hybrid	IP54	←	✓	✓				✓	1	098 216 251 92.0000.9306
Hybrid	IP54	→	✓	✓				✓	1	098 216 252 92.0000.9307
Hybrid	IP54	←	✓	✓			45° Long (LED)	✓	2	098 216 265 92.0000.9308
Hybrid	IP54	→	✓	✓			45° Long (LED)	✓	2	098 216 266 92.0000.9309

Spare parts & Accessories TM2 HYBRID Tail lights, 24V



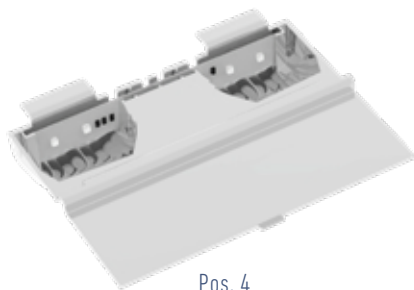
Pos. 1



Pos. 2



Pos. 3



Pos. 4

Pos. 5

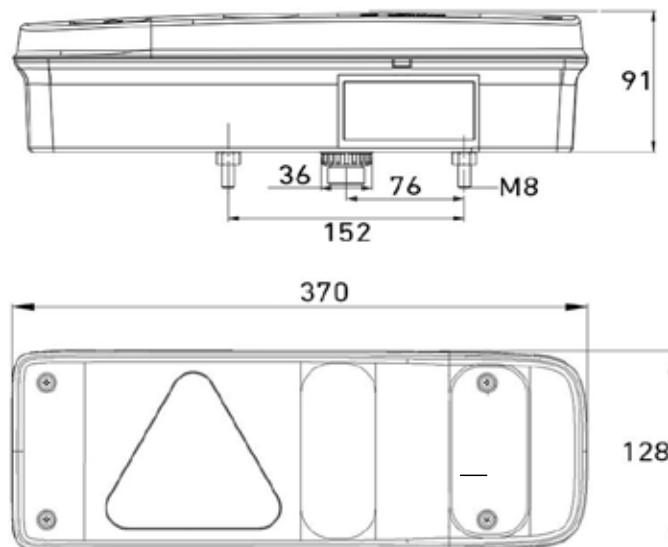


Pos. 6



Lens, left, with 4 screws	1	098 296 351 92.0000.1679
Lens, right, with 4 screws	1	098 296 352 92.0000.1680
Protection cover for tail light	2	098 296 710 92.0000.6877
LED Outer and marker, left - 500 mm connection cable open end	3	098 241 427 92.0000.1560
LED Outer and marker, right - 500 mm connection cable open end	3	098 241 428 92.0000.1561
Bulb 24V 5W HD, BA15s - for position light	4	098 296 250 92.0000.5884
Bulb 24V 21W amber HD, BAU15s - with amber lens for clear direction indicator light	5	091 624 078 92.0000.5885
Bulb 24V 21W HD, BA15s - for stop- and rear fog light	6	091 624 071 92.0000.5882

TM2 GL bulb or Hybrid Tail lights 24V



Description

Lens:	PMMA
Housing:	PP
Dimension:	370 x 128 x 91 mm
Bolt distance:	152 mm / M8

TM2 GL Tail lights 24V - bulb or Hybrid



Type	IP Rating	Left ← Right →	Position Stop Dir. indicator	Reverse Rear fog Reflex	License plate	Side marker	Outer end marker	Connection 7 poled AMP 1.5 socket	Pos.	Article No.
Bulb	IP54	←	✓	✓				✓	1	098 216 351
Bulb	IP54	→	✓	✓				✓	1	098 216 352
Bulb	IP54	←	✓	✓		✓		✓	1	098 216 353
Bulb	IP54	→	✓	✓		✓		✓	1	098 216 354
Bulb	IP54	←	✓	✓	✓			✓	1	098 216 355
Bulb	IP54	→	✓	✓	✓			✓	1	098 216 356
Bulb	IP54	←	✓	✓	✓	✓		✓	1	098 216 357
Bulb	IP54	→	✓	✓	✓	✓		✓	1	098 216 358
Bulb	IP54	←	✓	✓			45° Long (LED)	✓	2	098 216 365
Bulb	IP54	→	✓	✓			45° Long (LED)	✓	2	098 216 366
Bulb	IP54	←	✓	✓	✓		45° Long (LED)	✓	2	098 216 367
Bulb	IP54	→	✓	✓	✓		45° Long (LED)	✓	2	098 216 368

Spare parts & Accessories TM2 GL Tail lights bulb, 24V



Pos. 1



Pos. 2

Pos. 2



Pos. 3



Pos. 4



Pos. 5



Pos. 6

Lens, left, with 4 screws	1	098 296 351 92.0000.1679
Lens, right, with 4 screws	1	098 296 352 92.0000.1680
Protection cover for tail light	2	098 296 710 92.0000.6877
LED Outer end marker, left - 500 mm connection cable open end	3	098 241 427 92.0000.1560
LED Outer end marker, right - 500 mm connection cable open end	3	098 241 428 92.0000.1561
Bulb 24V 5W HD, BA15s - for position light	4	091 624 075 92.0000.5884
Bulb 24V 21W amber HD, BAU15s - with amber lens for clear direction indicator light	5	091 624 078 92.0000.5885
Bulb 24V 21W HD, BA15s - for stop- and rear fog light	6	091 624 071 92.0000.5882

TM1 GL - Tail lights bulb



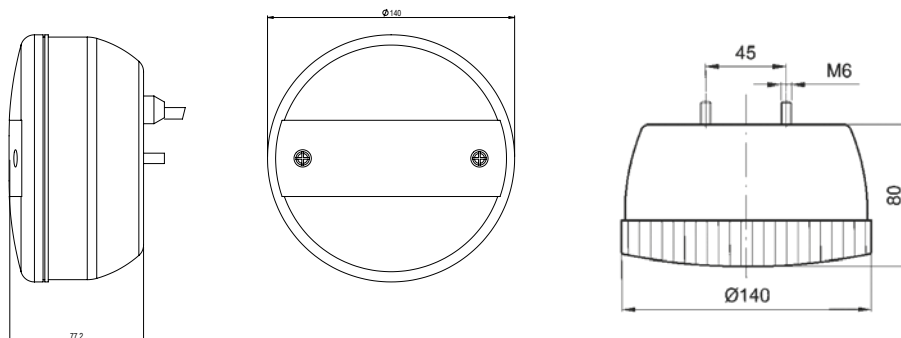
Pos. 1

Pos. 2

Pos. 3

Pos. 4

**) 098212354 with HD bulb *) Version with H3 bulb - have no E-Approval



Description

Tail lights bulb - Pos. 1, 3 and 4 is delivered without bulb

Lens: PMMA
 Housing: ABS
 Dimension: Ø140 mm x 80 mm
 Bolt distance: 45 mm / M6



Operating voltage	IP Rating	Position	Stop	Dir. indicator	Reverse	Reverse - H3 bulb	Rear fog	License plate	Connection	Pos.	Article No.
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12/24V	IP54	✓	✓	✓					Cable lead through rubber grommet	1	098 212 352 92.0000.1504
12/24V	IP54	✓	✓	✓				✓	Cable lead through rubber grommet	1	098 212 356 92.0000.1505
12/24V	IP54	✓	✓	✓					7 poled AMP 1.5 socket	2	098 212 354** 92.0000.8307
12/24V	IP54	✓	✓	✓					7 poled AMP 1.5 socket	2	098 212 351 92.0000.1503
12/24V	IP54				✓	✓			Cable lead through rubber grommet	3	098 256 040* 92.0000.1591
12/24V	IP54						✓		Cable lead through rubber grommet	4	098 256 050 92.0000.1593

Spare parts TM1 GL - Tail lights bulb



Pos. 1



Pos. 2



Pos. 3



Pos. 4



Pos. 5



Pos. 6



Pos. 7

Lens for position light with 2 screws and 1 sealing Suitable for 098 212 352 / 356 / 351	1	098 292 354 92.0000.5735
Lens, transparent for reverse light Suitable for 098 256 040	2	098 292 242 92.0000.5891
Chrome ring and built-in kit	3	098 292 360 92.0000.1668
Protection cover for reverse light	4	098 296 720 92.0000.1681
Bulb 24V 5W HD BA15s - for position light	5	091 624 075 92.0000.5884
Bulb 24V 21W HD BA15s - for stop- and rear fog	6	091 624 071 92.0000.5882
Halogen headlight H3, bulb 24V 70W H3, PK22s	7	091 324 003 92.0000.5881

LICENSE PLATE LIGHT



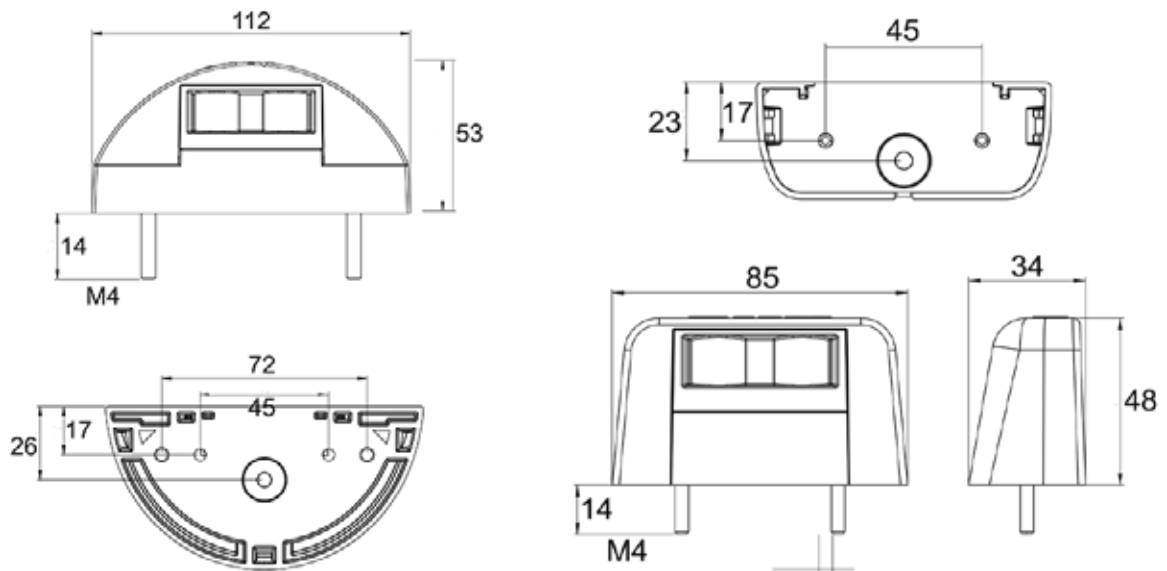
LED License plate light 12/24V



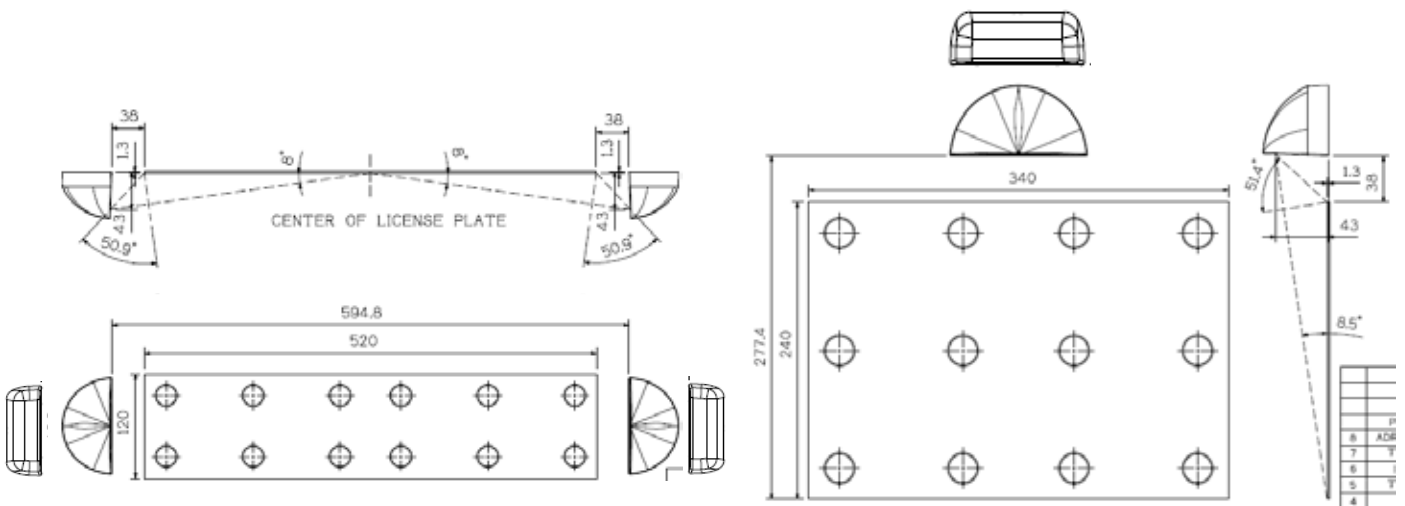
Pos. 1



Pos. 2



Both types are Certified for the application as shown:



LED License plate light 12/24V

Description

Lens: PMMA
Housing: ABS

Half-round design

Dimension: 112 x 57 x 53 mm
Bolt distance: 45 mm or 72 mm / M4

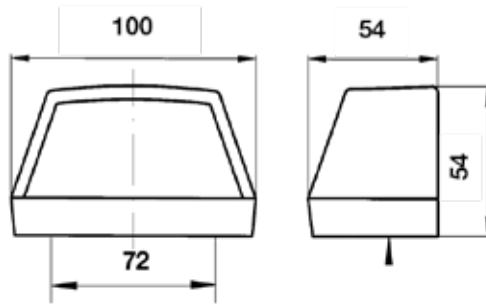
Square design

Dimension: 85 x 34 x 48 mm
Bolt distance: 45 mm / M4

Operating voltage	IP Rating	Connection	Cable length	Bolt hole distance	LED	Pos.	Article No.
12/24V	IP54	Click-in 1,5 mm ²	500 mm	45 / 72 mm	2	1	098 254 330 92.0000.6550
12/24V	IP54	Click-in 1,5 mm ²	500 mm	45 mm	2	2	098 254 340 92.0000.6554
12/24V	IP54	Click-in 1,5 mm ²	1.500 mm	45 / 72 mm	2	1	098 254 332 92.0000.6551
12/24V	IP54	Click-in 1,5 mm ²	1.500 mm	45 mm	2	2	098 254 342 92.0000.6555
12/24V	IP54	Super Seal Steckdose	500 mm	45 / 72 mm	2	1	098 254 334 92.0000.6552
12/24V	IP54	Super Seal Steckdose	500 mm	45 mm	2	2	098 254 344 92.0000.6556
12/24V	IP54	Super Seal plug	1.200 mm	45 / 72 mm	2	1	098 254 335 92.0000.7168
12/24V	IP54	Super Seal plug	1.200 mm	45 mm	2	2	098 254 345 92.0000.7169
12/24V	IP54	Super Seal plug	2.000 mm	45 / 72 mm	2	1	098 254 350 92.0000.7913
12/24V	IP54	Open end	2.500 mm	45 / 72 mm	2	1	098 254 336 92.0000.6553
12/24V	IP54	Open end	2.500 mm	45 mm	2	2	098 254 346 92.0000.6557
12/24V	IP54	Cable lead through rubber grommet	--	45 / 72 mm	2	1	098 254 338 92.0000.7557
12/24V	IP54	Cable lead through rubber grommet	--	45 mm	2	2	098 254 348 92.0000.7007

LED diode unit: IP69K capability

LED License plate light 12/24V



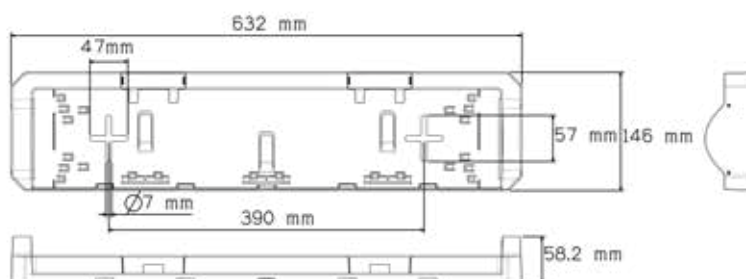
Description

Lens: PMMA
 Housing: ABS
 Dimension: 100 x 54 x 54 mm
 Bolt distance: 72 mm / M4

Operating voltage	IP Rating	Light source	Connection	Cable length	Bolt distance	Article no.
24V	IP67	LED	Cable lead through rubber grommet	---	72 mm	098 254 167 92.0000.6054
24V	IP67	LED	Click-In	500 mm	72 mm	098 254 251 92.0000.6508

LED license plate carrier 24V

Ⓔ EMC




Description

Dimensions: L x B x H: 625 x 145 x 55 mm

Bolt distance: 445-535 mm / Ø7 mm

Material: Black ABS

Consumption: 0,8W

Operating voltage	Light source	Connection	Cable length	Bolt distance	ADR	Artikel-Nr.
24V	LED	Click-In	500 mm	445-535 mm / Ø7		098 254 324 92.0000.1583
24V	LED	Super-Seal-Stecker	1800 mm	445-535 mm / Ø7		098 254 326 92.0000.9182

Clips for license plate carrier



Clips for license plate carrier. 2 clips are needed for each license plate carrier.

098 292 300
92.0000.9259

OUTER END MARKER LIGHT



LED Outer end marker light (45°) 12/24V

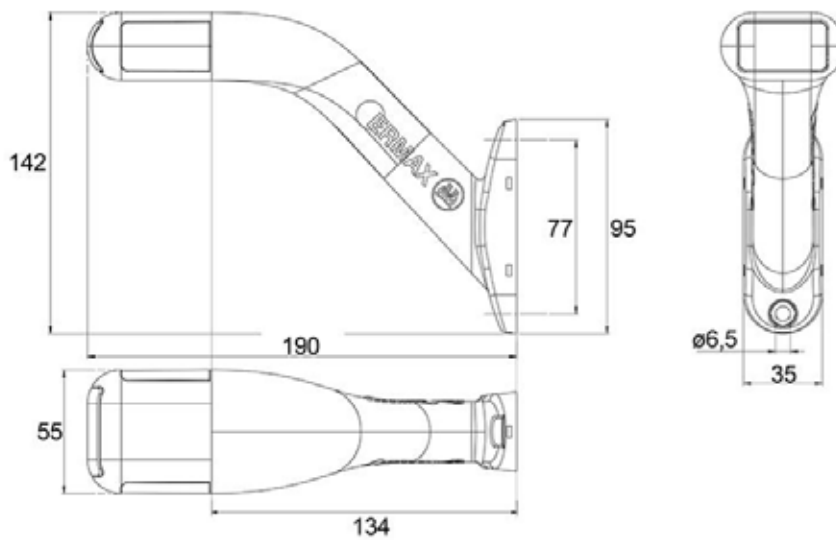


Pos. 1



Pos. 2

Possibility of having the cable at the side of the mounting foot



Description

With clear lens - lighting red, amber and white

- Lens: Impact resistant polycarbonate
- Housing: Rubber
- Bolt distance: 77 mm / Ø 6,5

LED Outer end marker light (45°) 12/24V

Left ← Right →	Operating voltage	IP Rating	Connection	Cable length	Light colour	Pos.	Article No.
←	12/24V	IP69K	Click-in 1,5 mm ²	1.500 mm	red / white / amber	1	098 241 422 95.0000.0005
→	12/24V	IP69K	Click-in 1,5 mm ²	1.500 mm	red / white / amber	1	098 241 423 95.0000.0006
←	12/24V	IP69K	Super Seal socket	1.500 mm	red / white / amber	1	098 241 425 95.0000.0086
→	12/24V	IP69K	Super Seal socket	1.500 mm	red / white / amber	1	098 241 426 95.0000.0087
←	12/24V	IP69K	Open end	1.500 mm	red / white / amber	1	098 241 427 92.0000.1560
→	12/24V	IP69K	Open end	1.500 mm	red / white / amber	1	098 241 428 92.0000.1561
←	12/24V	IP69K	Open end	5.000 mm	red / white / amber	1	098 241 429 92.0000.1562
→	12/24V	IP69K	Open end	5.000 mm	red / white / amber	1	098 241 430 92.0000.1563
→	12/24V	IP69K	Super Seal plug	300 mm	red / white / amber	1	098 241 448 92.0000.7050
←	12/24V	IP69K	Super Seal plug	300 mm	red / white / amber	1	098 241 449 92.0000.7051



Suitable for mounting on flat surfaces, with the possibility of having the cable at the side of the mounting foot. Also there is the possibility to connect the outer end marker to the tail lights or the rear cable with Super Seal connection

→	12/24V	IP69K	Super Seal plug	300 mm	red / white / amber	2	098 241 438 92.0000.6355
←	12/24V	IP69K	Super Seal plug	300 mm	red / white / amber	2	098 241 439 92.0000.6356

LED Outer end marker light 12/24V



Description

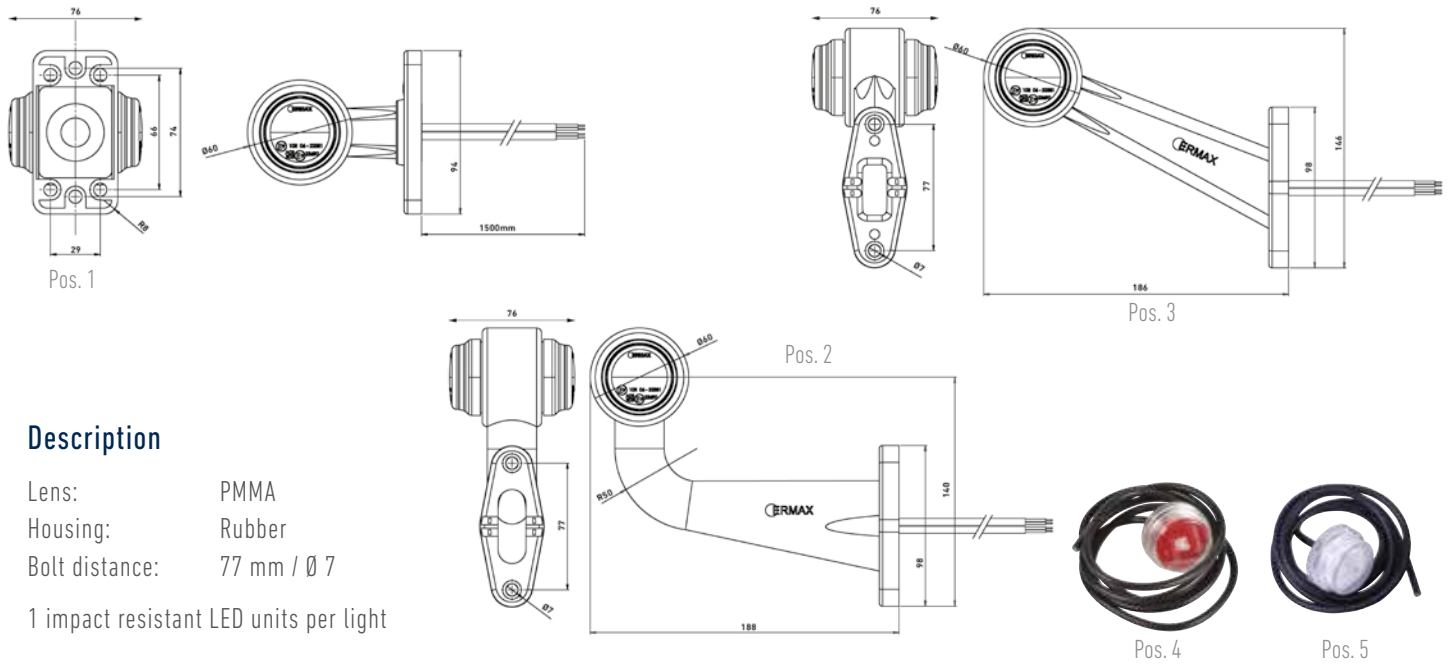
With clear lens - lighting red, amber and white

- Lens: Impact resistant polycarbonat
- Housing: Rubber
- Bolt distance: 77 mm / Ø 6,5

Left ← Right →	Operating voltage	IP Rating	Connection	Cable length	Light colour	Article No.
-------------------------	-------------------	-----------	------------	--------------	--------------	-------------

← →	12/24V	IP69K	Super Seal socket	500 mm	red / white / amber	098 241 205 92.0000.5870
← →	12/24V	IP69K	Super Seal socket	1.500 mm	red / white / amber	098 241 215 92.0000.5872
← →	12/24V	IP69K	Click-in 1,5 mm ²	1.500 mm	red / white / amber	098 241 211 92.0000.5871
← →	12/24V	IP69K	Open end	1.500 mm	red / white / amber	098 241 216 92.0000.5873
← →	12/24V	IP69K	Open end	5.000 mm	red / white / amber	098 241 217 92.0000.5874
← →	12/24V	IP69K	Super Seal plug	300 mm	red / white / amber	098 241 218 92.0000.7490

LED Outer end marker light 12/24V - Classic 1



Description

Lens: PMMA
 Housing: Rubber
 Bolt distance: 77 mm / Ø 7
 1 impact resistant LED units per light

Left ← Right →	Operating voltage	IP Rating	Connection	Cable length	Light source	Light color	Pos.	Article no.
← →	12/24V	IP67	Super Seal socket	500 mm	1 LED	red / white	1	098 241 005 92.0000.9066
← →	12/24V	IP67	Open end	1.500 mm	1 LED	red / white	1	098 241 000 92.0000.9065
← →	12/24V	IP67	Open end	1.500 mm	1 LED	red / white	2	098 241 050 92.0000.9067
← →	12/24V	IP67	Super Seal socket	500 mm	1 LED	red / white	2	098 241 055 92.0000.9068
← →	12/24V	IP67	Super Seal plug	300 mm	1 LED	red / white	2	098 241 056 90.0000.9069
← →	12/24V	IP67	Open end	1.500 mm	1 LED	red / white	3	098 241 090 92.0000.9070

Spare parts

LED - red unit with 1.250 mm connection cable	4	098 291 001 92.0000.9077
LED - clear unit with 1.250 mm connection cable	5	098 291 000 92.0000.9076

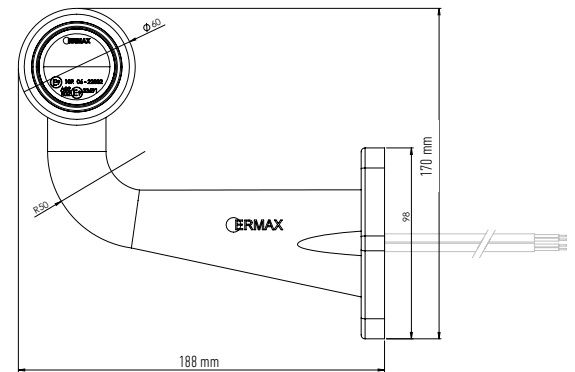
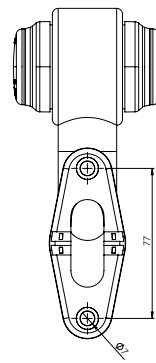
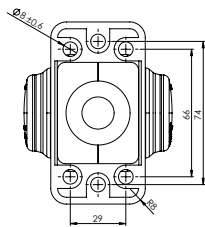
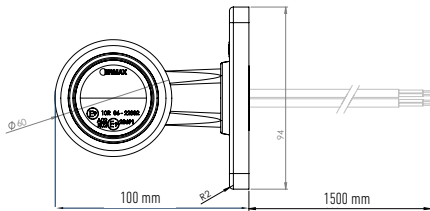
Outer end marker light LED 12/24V - Classic 2



Pos. 1



Pos. 2



Description

Lens: PMMA
 Housing: Rubber
 Bolt distance Pos 1: 74 mm / 2 x Ø7 + 66 mm / 4 x Ø7
 Bolt distance Pos 2: 77 mm / 2 x Ø7

2 impact resistance LED units per light



Left ← Right →	Light source	IP Rating	Operating voltage	Connection	Cable length	Light color	Pos.	Article no.
← →	LED	IP67	12/24V	Open end	1500 mm	red / white	1	098 241 600 92.0000.9071
← →	LED	IP67	12/24V	Open end	1500 mm	red / white	2	098 241 650 92.0000.9072

Spare parts

Rubber grommet for 098 241 014	4	098 291 119
LED unit, red	5	098 291 031 92.0000.9079
LED unit, white	6	098 291 030 92.0000.9078

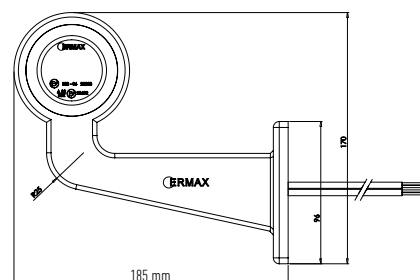
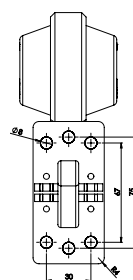
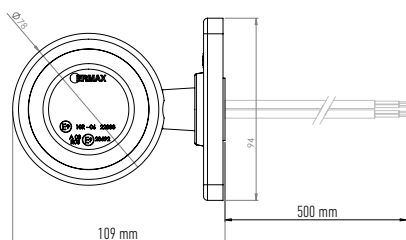
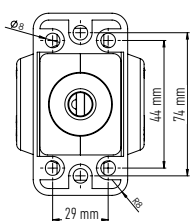
Outer end marker light / Direction indicator light LED 12/24V - Classic XL



Pos 1



Pos 2



Description

Lens: PMMA

Housing: Rubber

Bolt distance Pos 1: 74 mm / 2 x Ø8 + 64 mm / 4 x Ø8

Bolt distance Pos 2: 75 mm / 2 x Ø8 + 67 mm / 4 x Ø

2 variants - short straight variant (possible to turn 360°) - angled variant 45°

2 impact resistant LED units in each outer end marker light - 6 LEDs per LED unit



Pos. 5



Pos. 6



Pos. 7



Left ← Right →	Light source	IP Rating	Operating voltage	Connection	Cable length	Light color	Pos	Article no.
← →	LED	IP67	12/24V	Open end	500 mm	red / white	1	098 241 800 92.0000.9073
← →	LED	IP67	12/24V	Open end	2500 mm	red / white	1	098 241 802 92.0000.9243
← →	LED	IP67	12/24V	Super Seal plug	500 mm	red / white	1	098 241 805 92.0000.9238
← →	LED	IP67	12/24V	Open end	500 mm	red / white	2	098 241 850 92.0000.9074
← →	LED	IP67	12/24V	Open end	2500 mm	red / white	2	098 241 852 92.0000.9220
← →	LED	IP67	12/24V	Super Seal plug	500	red / white	2	098 241 855 92.0000.9239

Spare parts

LED unit, red (outer end marker light)	5	098 291 041 92.0000.9080
LED unit, white (outer end marker light)	6	098 291 040 92.0000.9081
Rubber grommet for 098 221 076	7	098 291 119

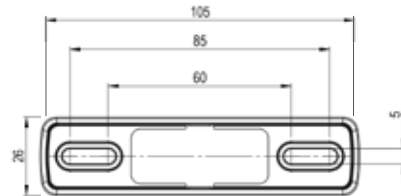
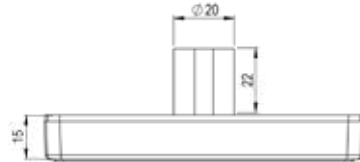
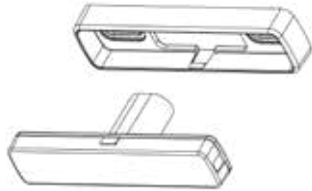
POSITION SIDE & MARKERS



LED Side marker 12/24V



Standard frame - with Super Seal socket



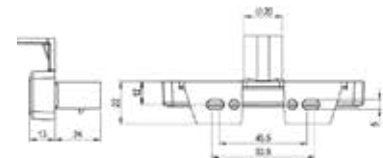
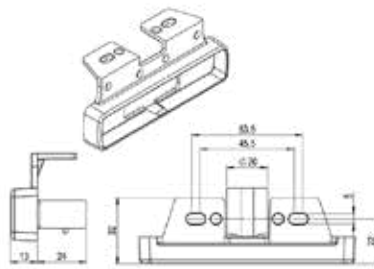
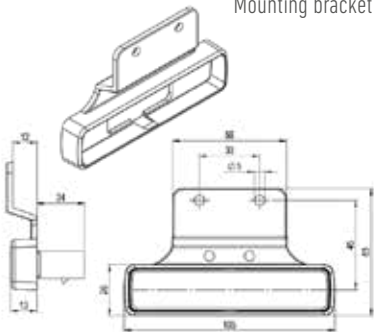
Mounting bracket straight



Backwards 90°



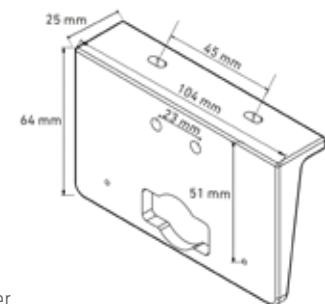
Forwards 90°




- Mounting without visible screws
- 2 LED
- 4 Mounting variants
- 3 cable versions
- IP69K Rating



Universal Rubber holder



Description

LED Side marker- and position light
 2 LED and with reflex reflector
 IP69K rating

Lens:	PMMA
Housing:	ABS
Frame:	PP
Dimension:	B105 x H26 x T13 mm (standard frame)
Variable hole distance:	60-85 mm

LED Side marker 12/24V

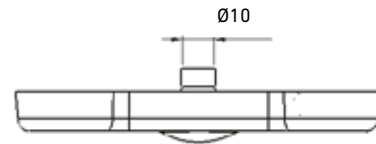
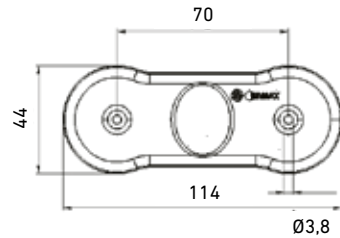
Mounting bracket	Connection	Cable length	Operating voltage	Side marker amber	Position lights White	Position lights Red
Standard frame	Super Seal socket	---	12/24V	098 221 726 92.0000.6011	098 230 726 92.0000.6028	098 204 726 92.0000.6005
Straight	Super Seal socket	----	12/24V	098 221 742 92.0000.6018		
90° bracket backwards	Super Seal socket	----	12/24V	098 221 748 92.0000.6021		
90° bracket forwards	Super Seal socket	----	12/24V	098 221 756 92.0000.6024		
Standard frame	Super Seal socket	500 mm	12/24V	098 221 727 92.0000.7969		
90° bracket backwards	Super Seal socket	1.500 mm	12/24V	098 221 745 92.0000.7958		
Standard frame	Super Seal plug	5.000 mm	12/24V		098 230 736 92.0000.8139	
Standard frame	Click-in	500 mm	12/24V	098 221 720 92.0000.6008	098 230 720 92.0000.6024	098 204 720 92.0000.6002
Standard frame	Click-in	1.500 mm	12/24V	098 221 722 92.0000.6009	098 230 722 92.0000.6025	098 204 722 92.0000.6003
Standard frame	Click-in	5.000 mm	12/24V	098 221 724 92.0000.6010	098 230 724 92.0000.6026	098 204 724 92.0000.6004
Straight mounting bracket	Click-in	1.500 mm	12/24V	098 221 740 92.0000.6017		
90° bracket backwards	Click-in	500 mm	12/24V	098 221 744 92.0000.6019		
90° bracket backwards	Click-in	1.500 mm	12/24V	098 221 746 92.0000.6020		
90° bracket forwards	Click-in	500 mm	12/24V	098 221 752 92.0000.6022		
90° bracket forwards	Click-in	1.500 mm	12/24V	098 221 754 92.0000.6023		
Standard frame	Open end	500 mm	12/24V	098 221 730 92.0000.6012		
Standard frame	Open end	2.500 mm	12/24V	098 221 732 92.0000.6013	098 230 732 92.0000.6030	098 204 732 92.0000.6006
Standard frame	Open end	5.000 mm	12/24V	098 221 734 92.0000.6014	098 230 734 92.0000.6031	098 204 734 92.0000.6007
Standard Rahmen	Super Seal Stecker	5.000	12/24V		098 230 736 92.0000.7523	

Spare parts

Standard frame	098 292 700 92.0000.6032
Mounting bracket, straight, hole distance 30 mm	098 292 701 92.0000.6033
Mounting bracket - 90° bracket backwards, hole distance 30-55 mm	098 292 702 92.0000.6034
Mounting bracket - 90° bracket forwards, hole distance 30-55 mm	098 292 703 92.0000.6035
Universal rubber holder- 90° bracket backwards, hole distance 45-55 mm	098 292 629 92.0000.7559

*1 This article no. is not in stock - are only produced at customer specification in larger quantities

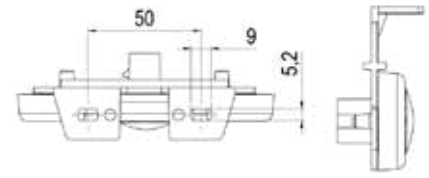
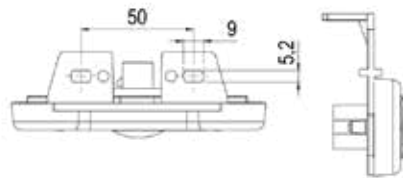
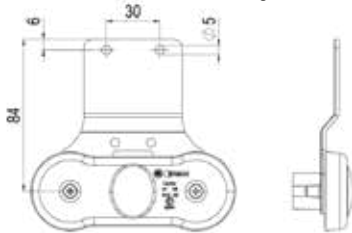
LED Side marker - 12/24V



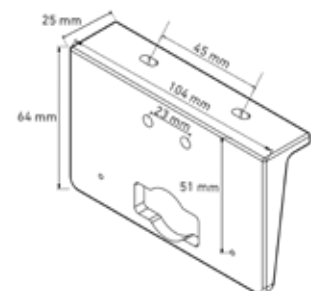
Mounting bracket Straight

Rear 90°

Forwards 90°



- Standardized mounting
- 2 LEDs
- 4 Mounting-variants
- 4 cable-versions
- IP69K Rating



Universal rubber bracket

Description

LED Side marker- and position light
 2 LEDs and with reflex reflector
 Mounting srew with Ø4 must be used
 Lens: PMMA
 Housing: ABS
 Frame: PP
 Dimension: B114 x H44 x T16 mm
 Hole distance: 70 mm
 IP69K rating

LED Side marker - 12/24V

Mounting bracket	Connection	Cable length	Operating voltage	Side marker amber	Position lights White	Position lights Red
Without mounting bracket	Super Seal socket	- - -	12/24V	098 221 620 <i>95.0000.0091</i>	098 230 401 <i>95.0000.0089</i>	098 204 501 <i>95.0000.0090</i>
Straight mounting bracket	Super Seal socket	- - -	12/24V	098 221 630 <i>92.0000.1533</i>		
90° bracket backwards	Super Seal socket	- - -	12/24V	098 221 640 <i>95.0000.0093</i>	098 230 430 <i>92.0000.1549</i>	
90° bracket forwards	Super Seal socket	- - -	12/24V	098 221 650 <i>92.0000.1536</i>		
Without mounting bracket	Super Seal socket	500 mm	12/24V	098 221 635 <i>92.0000.6867</i>		
Without mounting bracket	Super Seal socket	1.500 mm	12/24V	098 221 628 <i>92.0000.5374</i>	098 230 428 <i>92.0000.5375</i>	
90° bracket forwards	Super Seal socket	1.500 mm	12/24V	098 221 664 <i>92.0000.5354</i>		
90° bracket backwards	Super Seal socket	1.500 mm	12/24V	098 221 662 <i>92.0000.5353</i>		
Without mounting bracket	Super Seal plug	2.500 mm	12/24V		098 230 418 <i>92.0000.9228</i>	
Without mounting bracket	Super Seal plug	5.000 mm	12/24V	098 221 627 <i>92.0000.5781</i>		
Without mounting bracket	Super Seal plug	10.000 mm	12/24V	098 221 629 <i>92.0000.5782</i>	098 230 431 <i>92.0000.5783</i>	
Without mounting bracket	Click-in	500 mm	12/24V	098 221 621 <i>92.0000.1528</i>	098 230 405 <i>92.0000.1545</i>	098 204 502 <i>92.0000.1486</i>
Without mounting bracket	Click-in	1.500 mm	12/24V	098 221 622 <i>92.0000.1001</i>	098 230 415 <i>95.0000.0004</i>	098 204 503 <i>92.0000.1487</i>
Without mounting bracket	Click-in	5.000 mm	12/24V	098 221 623 <i>92.0000.1529</i>	098 230 450 <i>92.0000.1550</i>	098 204 504 <i>92.0000.1458</i>
Straight mounting bracket	Click-in	500 mm	12/24V	098 221 631 <i>92.0000.1534</i>		
90° bracket backwards	Click-in	500 mm	12/24V	098 221 641 <i>92.0000.1007</i>		
90° bracket backwards	Click-in	1.500 mm	12/24V	098 221 642 <i>92.0000.1535</i>		
90° bracket forwards	Click-in	500 mm	12/24V	098 221 651 <i>92.0000.1537</i>		
90° bracket forwards	Click-in	1.500 mm	12/24V	098 221 652 <i>95.0000.0017</i>		
Without mounting bracket	Open end	500 mm	12/24V	098 221 624 <i>92.0000.1530</i>	098 230 420 <i>92.0000.1546</i>	098 204 505 <i>92.0000.1489</i>
Without mounting bracket	Open end	1.500 mm	12/24V	098 221 625 <i>92.0000.1531</i>	098 230 425 <i>92.0000.1547</i>	
Without mounting bracket	Open end	2.500 mm	12/24V			098 204 506 <i>92.0000.5531</i>
Without mounting bracket	Open end	5.000 mm	12/24V	098 221 626 <i>92.0000.1532</i>	098 230 427 <i>92.0000.1548</i>	098 204 507 <i>92.0000.1490</i>

Spare parts LED Side marker - 12/24V



Pos. 1 - Straight



Pos. 2 - Rear 90°



Pos. 3 - Forwards 90°



Pos. 4



Pos. 5



Pos. 6



Pos. 7



Pos. 8



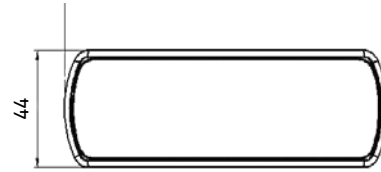
Example with Pos. 7 + 8

Mounting bracket, straight, bolt distance 30 mm	1	098 292 622 92.0000.1671
Mounting bracket - 90° bracket backwards,, bolt distance 30-55 mm	2	098 292 620 92.0000.1669
Mounting bracket - 90° bracket forwards, bolt distance 30-55 mm	3	098 292 621 92.0000.1670
Gasket - 10 pcs packing unit, black rubber	4	098 292 626 92.0000.1672
Rivet - 20 pcs packing unit, black plastic, Ø4 mm	5	098 291 602 92.0000.1663
Rivet - 100 pcs packing unit, black plastic, Ø4 mm	5	098 291 610 92.0000.1665
Mounting bracket, rubber, for mudwingholders. Usable with Ermax sider marker light	6	098 292 627 92.0000.7559
Universal rubber bracket - 90° bracket backwards, bolt distance 45-55 mm	7	098 292 629 92.0000.7446
Mounting bracket, rubber, for mudwingholders. Usable with Ermax position light	8	098 292 628 92.0000.7446

LED Side marker 12/24V



Flat mounting - Without mounting bracket



Backwards 90°



Pos. 1

Description

LED Side marker- and position light - Bi-polarity
4 light diodes and with reflex reflector

- Lens: PMMA
- Housing: PP
- Dimension: B122 x H44 x T17 mm (without mounting bracket)
- Variable hole distance: 65 - 90 mm

Mounting bracket	Connection	Cable length	Operating voltage	IP Rating	Position White	Side marker amber	Position Red
Flat mounting	Open end	500 mm	12/24V	IP67	098 230 601 92.0000.1551	098 221 601 92.0000.1523	098 203 601 92.0000.1481
Flat mounting	Open end	5.000 mm	12/24V	IP67	098 230 605 92.0000.1552	098 221 605 92.0000.1524	098 203 605 92.0000.1482
Flat mounting	Open end	10.000 mm	12/24V	IP67		098 221 610 92.0000.1525	
90° bracket backwards	Open end	500 mm	12/24V	IP67		098 221 611 92.0000.1526	

Spare parts

Protective body, steel plate, untreated	Suitable for flat mounting lights	Pos. 1	098 291 917 92.0000.9457
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REAR UNDERRUN PROTECTION BAR



The strong solution at the market

Individually adapted for optimal use

Certified production

In Denmark, ERMAX assembles the complete rear underrun protection bar solutions at own production facilities in Denmark according to the "Kraftfahr Bundesamt" certified "Conformity of Production". Each variant of the rear underrun protection bar is individually adapted. This ensures optimal positioning of the lights and perfect cable structure. This saves weight and increases the life time of the components, makes installation easier and at the same time guarantees a short and reliable delivery time.

Highlights

- Connection via one interface and 8 T-bolts
- Fully anodized rear underrun protection bar - can also be laquered
- Integration of
 - LED failure control on direct indicator and stop light
 - SIMAC® control
 - Junction box
- Certified according to all relevant standards (ECE R58 Rev. 02 or ECE 58 Rev. 03) and regulations in Europe
- Weight optimized
- TM5, TM10, TM11 and TM16 with impact resistant lens made of polycarbonate



High-quality Design - various applications

ERMAX produces two different rear underrun protection bar profiles - one with the approval according to ECE R58-02 and one according to the new regulation ECE R58-03. The versions of the ERMAX rear underrun protection bar consist of five design variants.

The different versions are available with the following options: LED failure control, SIMAC control (flashing side marker lights), with plugs or with junction box. You will find information about the various types on the following pages.

All variants are supplied with a protection cover over the junction box or over the connectors of the tail lights.



TM4



TM5 - Polycarbonate



TM7



TM16 - Polycarbonate

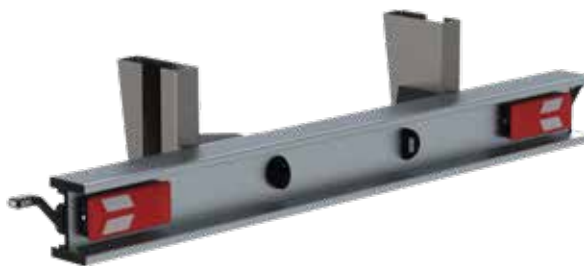


TM11 - Polycarbonate

Distances and dimensions

Legal requirements ECE R58 revision 3

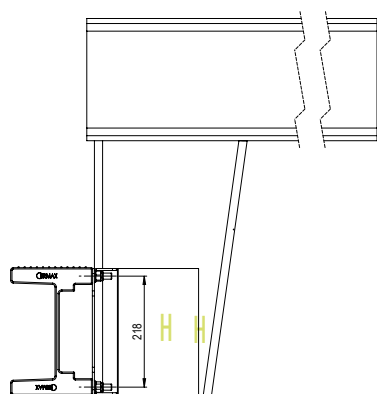
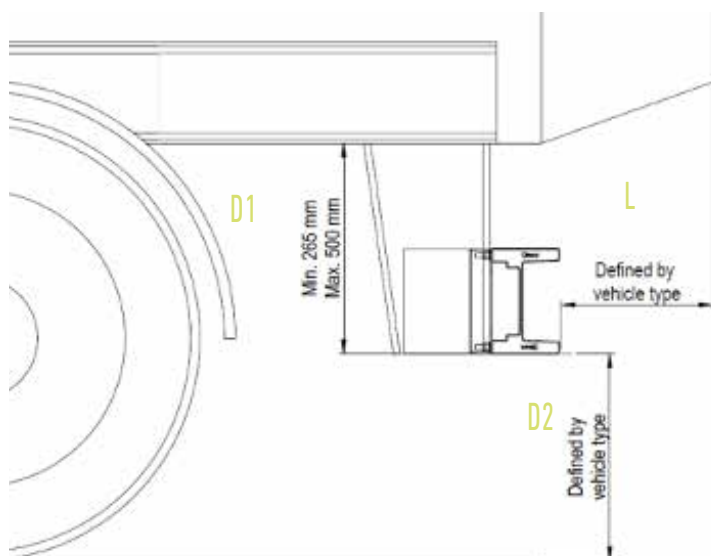
Since the rear underrun protection bar is a safety solution, it is governed by strict legal requirements. This increases safety for both the driver and other road users. That is why there are also legal requirements and safety clearances about where the underrun protection bar has to be placed on the vehicle.



The new ERMAX rear underrun protection bar with

- Total weight of only 28 kg
- Mounting brackets of 8 kg

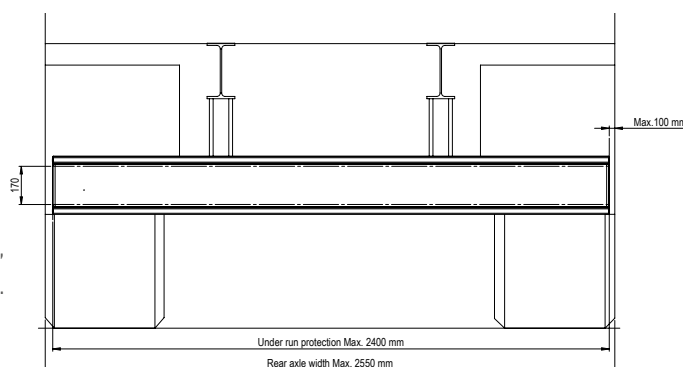
meets the new requirements according to ECE R58-03.



The side engagement of the rear underrun protection bar must be 0 - 100 mm, and must be the same size on both sides.

- L Maximum permissible overhang**
300 mm (R58.03)
400 mm (R58.02)
- D1 Permissible height of the consoles**
Minimum 265 mm (R58-02 / R58-03)
Maximum 500 mm (R58-02 / R58-03)
- D2 Maximum permissible ground clearance (vehicle not loaded)**
450 mm (R58-03)
550 mm (R58-02)
- H Permissible minimum profile height of the underrun protection bar**
120 mm (R58-03)
100 mm (R58-02)

The permissible dimensions can vary depending on the vehicle category and chassis type.



Impressive technology

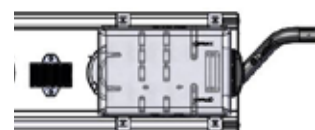
Individual solutions as required

There are various designs of the rear underrun protection bar solutions from ERMAX. These designs consist of various components with innovative solutions and control units - offering a very flexible rear underrun protection bar customized for the individual vehicle and needs.

The following control units and solutions are integrated in the ERMAX rear underrun protection bar.

LED failure control

- Built-in intelligent control for monitoring and failure report of LED tail lights according to ECE R48 – for indicator and stop functions.
 - The use of a technology which is NOT limited to ISO13207 and therefore suitable for all vehicles*.
 - Facilitates the overall assembly of the vehicle significantly - no additional parts required.
- * Valid for all known brands in the EU countries from 11/2019.



SIMAC® Control system - flashing side marker lights

- Intelligent control of flashing side marker lights SIMAC® according to ECE R48.
- Strong contribution to increasing road safety.
- Facilitates the overall assembly of the vehicle significantly - no additional parts required.

Junction box / Plug connections

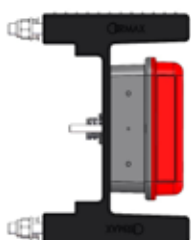
- ERMAX offers the classical solution with junction box where all cables from the lights are led into the box without external plugs.
- As an alternative solution ERMAX offers a solution with AMP and Super-Seal plugs connected behind the lights. This makes the direct access possible and thus a faster replacement by e.g. collision damages of a light.



Always a safe choice no matter what light

- Due to the form of the profile – not only from the back – but also from the front, the lights are safely placed and thus protected from the front and rear side.
- Due to the over and underlying profiles the lights are protected against most collisions.

Examples ECE R58-3



TM10 Tail light



TM11 Tail light



TM5 Tail light



TM4 Tail light

Optimal use

Long-term quality installation

All plugs are designed to meet IP69K for use at the rear of the vehicle.

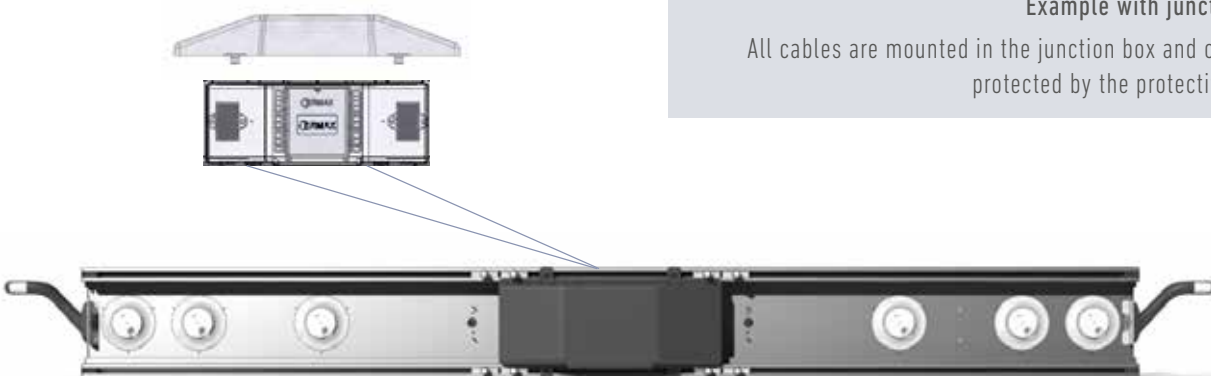
In order not just to secure a long-lasting functionality but also a long-lasting protected installation, every system with plugs also has a cover solution.

For solutions with junction box, a protective cap is mounted over the box.



Example with plugs behind the lights.

All plug connections are mounted under the protection cover and thus optimally protected.



Example with junction box.

All cables are mounted in the junction box and optimally protected by the protective cover.

The fully configured underrun protection bar can be installed via just one interface (without SIMAC) - through the pre-assembled rear cable with 15-pin bayonet socket together with 8 T-bolts. **Simple and time-optimized.**

Rear underrun protection bar with TM5 tail lights

Unbeatable durability

- Space-saving – ultra slim built-in depth of the TM5 tail lights
- Unsurpassed durability - impact resistant lens made of polycarbonate
- Increased traffic security – Eternal Light technology



Measure (WxDxH): 2780 (2400 mm without OEM) x 120 x 250 mm

Variant - ECE R58-02

Article no.	Type	Junction box	SIMAC	LED failure control	
				Direct indicator	Stop
098 258 100 92.0000.7588	LED	-	-	-	-
098 258 110 92.0000.7589	LED	-	-	✓	-
098 258 130 92.0000.7591	LED	-	✓	✓	-
098 258 140 92.0000.7592	LED	✓	-	-	-
098 258 150 92.0000.7593	LED	✓	-	✓	-
098 258 160 92.0000.7594	LED	✓	✓	-	-
098 258 170 92.0000.7595	LED	✓	✓	✓	-

Measure (WxDxH): 2780 (2400 mm without OEM) x 160 x 252 mm

Variant - ECE R58-03

Article no.	Type	Junction box	SIMAC	LED failure control	
				Direct indicator	Stop
098 259 100 92.0000.8262	LED	-	-	-	-
098 259 110 92.0000.8263	LED	-	-	✓	-
098 259 130 92.0000.8264	LED	-	✓	✓	-
098 259 140 92.0000.8265	LED	✓	-	-	-
098 259 150 92.0000.8266	LED	✓	-	✓	-
098 259 155 92.0000.8267	LED	✓	-	✓	✓
098 259 170 92.0000.8268	LED	✓	✓	✓	-
098 259 175 92.0000.8269	LED	✓	✓	✓	✓

Rear underrun protection bar with TM7 tail lights

Classical solution

- Compact round lights with a chrome look
- Easy mounting
- Classical LED look



Measure (WxDxH): 2780 (2400 mm without OEM) x 120 x 250 mm

Variant - ECE R58-02

Article no.	Type	Junction box	SIMAC	LED failure control	
				Direct indicator	Stop
098 258 200 92.0000.7596	LED	-	-	-	-
098 258 210 92.0000.7597	LED	-	-	✓	-
098 258 230 92.0000.7599	LED	-	✓	✓	-
098 258 240 92.0000.7600	LED	✓	-	-	-
098 258 250 92.0000.7601	LED	✓	-	✓	-
098 258 260 92.0000.7602	LED	✓	✓	-	-
098 258 270 92.0000.7603	LED	✓	✓	✓	-

Measure (WxDxH): 2780 (2400 mm without OEM) x 160 x 252 mm

Variant - ECE R58-03

Article no.	Type	Junction box	SIMAC	LED failure control	
				Direct indicator	Stop
098 259 200 92.0000.8270	LED	-	-	-	-
098 259 210 92.0000.8271	LED	-	-	✓	-
098 259 230 92.0000.8272	LED	-	✓	✓	-
098 259 240 92.0000.8273	LED	✓	-	-	-
098 259 250 92.0000.8274	LED	✓	-	✓	-
098 259 255 92.0000.8275	LED	✓	-	✓	✓
098 259 270 92.0000.8276	LED	✓	✓	✓	-
098 259 275 92.0000.8277	LED	✓	✓	✓	✓

Rear underrun protection bar with TM16 tail lights

Solution with D approval

- Modern round lights with a chrome look
- Easy mounting
- Unique Design



Measure (WxDxH): 2780 (2400 mm without OEM) x 160 x 252 mm

Variant - ECE R58-03

Article no.	Typ	Verteilerbox	SIMAC	LED Ausfallkontrolle	
				Blink	Stop
098 259 340 92.0000.9511	LED	✓	-	-	-
098 259 350 92.0000.9512	LED	✓	-	✓	-
098 259 370 92.0000.9513	LED	✓	✓	✓	-

Rear underrun protection bar with TM10 tail lights

Unbeatable durability

- Unsurpassed durability - impact resistant lens made of polycarbonate
- Increased traffic security – Eternal Light technology
- As full LED or hybrid



Measure (WxDxH): 2780 (2400 mm without OEM) x 100 x 250 mm

Variant - ECE R58-02

Article no.	Type	SIMAC	LED failure control	
			Direct indicator	Stop
098 258 300 <i>92.0000.7524</i>	Hybrid ▲	–	NA	NA
098 258 320 <i>92.0000.7720</i>	Hybrid ▲	✓	NA	NA
098 258 400 <i>92.0000.7494</i>	LED	– *	– *	– *

Measure (WxDxH): 2780 (2400 mm without OEM) x 160 x 252 mm

Variant - ECE R58-03

Article no.	Type	SIMAC	LED failure control	
			Direct indicator	Stop
098 259 320 <i>92.0000.8278</i>	Hybrid ▲	✓	NA	NA
098 259 450 <i>92.0000.8279</i>	LED	– *	– *	– *

▲ Position light, side marker light and license plate light as LED

* Failure control at the underrun protection bar with TM10 LED tail lights

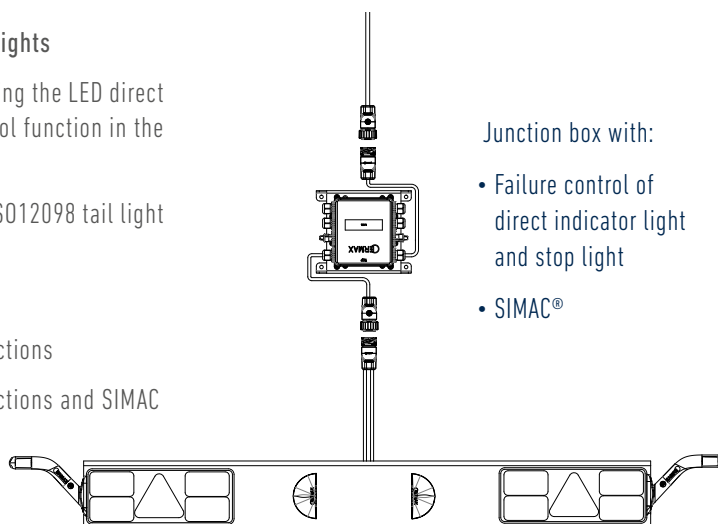
The combined LED control boxes from ERMAX offer the possibility of using the LED direct indicator light and stop light failure control as well as the SIMAC control function in the lighting installation.

The LED control boxes also have function as a junction box, where all ISO12098 tail light functions can be achieved.

There are 2 variants of the junction box:

098 298 160 - LED failure control of direct indicator and stop light functions

098 298 170 - LED failure control of direct indicator and stop light functions and SIMAC



Junction box with:

- Failure control of direct indicator light and stop light
- SIMAC®

Rear underrun protection bar with TM11 tail lights

Unsurpassed full LED functionality

- Unsurpassed durability - impact resistant lens made of polycarbonate
- Increased traffic security – Eternal Light technology
- High reliability - LED failure control optional and SIMAC integrated



Measure (WxDxH): 2780 (2400 mm without OEM) x 120 x 250 mm

Variant - ECE R58-02

Article no.	Type	SIMAC	LED failure control	
			Direct indicator	Stop
098 258 520 <i>92.0000.7876</i>	LED	✓	-	-
098 258 530 <i>92.0000.7877</i>	LED	✓	✓	-
098 258 580 <i>92.0000.7878</i>	LED	✓	✓	✓

Measure (WxDxH): 2780 (2400 mm without OEM) x 160 x 252 mm

Variant - ECE R58-03

Article no.	Type	SIMAC	LED failure control	
			Direct indicator	Stop
098 259 520 <i>92.0000.8280</i>	LED	✓	-	-
098 259 530 <i>92.0000.8281</i>	LED	✓	✓	-
098 259 580 <i>92.0000.8282</i>	LED	✓	✓	✓

With the TM11 tail light the Ermax rear bumper has a real all-rounder on board: further to the standard functions the TM11 also has an optional LED indicator failure control and a flash function for the side marker lights (SIMAC) integrated in the light housing – mounting will never be easier!



TM11 LED



LED control unit "Snap-in"



SIMAC control "Snap-in"

Rear underrun protection bar with TM4 tail lights

A classic - new developed

- Classical elegant design - new developed
- LED failure control and SIMAC integrated



Integrated LED failure control for monitoring the direction indicator function and stop light function



Measure (WxDxH): 2780 (2400 mm without OEM) x 160 x 252 mm

Variant - ECE R58-03

* With D-approval

Article no.	Type	Junction box	SIMAC	LED failure control	
				Direct indicator	Stop
098 259 075 * 92.0000.9297	LED	✓	✓	✓	✓
098 259 095 ** 92.0000.9298	LED	✓	✓	✓	✓

** The triangular reflectors must be installed separately

Underrun protection bar with TM2 tail lights

- Tail light with bulb - the remaining lights are LED
- Easy mounting



Measure (WxDxH): 2780 (2400 mm without OEM) x 120 x 250 mm

Variant - ECE R58-02

Article no.	Type	SIMAC	LED failure control	
			Direct indicator	Stop
098 258 635 92.0000.6694	Bulb	NA	NA	NA

Measure (WxDxH): 2780 (2400 mm without OEM) x 160 x 252 mm

Variant - ECE R58-03

Article no.	Type	SIMAC	LED failure control	
			Direct indicator	Stop
098 259 635 92.0000.1611	Bulb	NA	NA	NA

Rear underrun protection bar ECE R58-02

Anodized - without lights

Anodized aluminium - 3 variants packed individually in a cardboard box or pallet packaging.

End caps and T-bolts must be ordered separately.



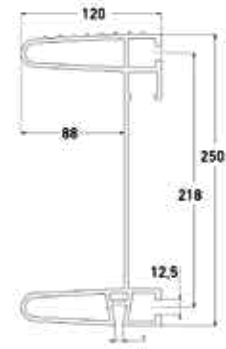
Pos 1



Pos 2



Pos 3



Pos 4



Pos 5

Variant - ECE R58-02

Article no.	Pos	Variant type	Drilling	Packaging
098 259 000 <i>92.0000.6649</i>	1	Without drilling	-	Individually (1 pcs)
098 258 000 <i>92.0000.7128</i>	2	For built-in lights (TM5, TM7)	6 x Ø135 mm	
098 258 001 <i>92.0000.7122</i>	3	For 7-function lights (TM10, TM11)	2 x Ø44 mm, 8 x Ø30 mm	

OBS.
End caps and T-bolts must be ordered separately

Article no.	Pos	Description	Packaging
098 299 610 <i>92.0000.6561</i>	4	End cap, plastic (2 pcs. per underrun protection bar)	Bag with 2 pcs.
099 110 004 <i>92.0000.8285</i>	5	T-bolts (4 pcs. per underrun protection bar)	Bag with 4 pcs.

Rear underrun protection bar ECE R58-03

Anodized - without lights

Anodized aluminium - 4 variants packed individually in a cardboard box or pallet packaging.

End caps and T-bolts must be ordered separately.



Variant - ECE R58-03

Article no.	Pos	Variant type	Drilling	Packaging
098 259 005 92.0000.8259	1	Without drilling	-	Individually (1 pcs)
098 259 006 92.0000.8260	2	For built-in lights (TM5, TM7)	6 x Ø135 mm	
098 259 007 92.0000.8261	3	For 7-function lights (TM10, TM11)	2 x Ø44 mm, 8 x Ø30 mm	
098 259 008 * 92.0000.9153	4	For surface mounted lights (TM4)	16 x Ø7 mm, 8 x Ø28/20 mm	
099 259 005 92.0000.8310	1	Without drilling	-	Pallet 15 pcs
099 259 006 92.0000.8311	2	For built-in lights (TM5, TM7)	6 x Ø135 mm	
099 259 007 92.0000.8313	3	For 7-function lights (TM10, TM11)	2 x Ø44 mm, 8 x Ø30 mm	
099 259 008 * 92.0000.9154	4	For surface mounted lights (TM4)	16 x Ø7 mm, 8 x Ø28/20 mm	

OBS.
End caps and T-bolts must be ordered separately

Article no.	Pos	Description	Packaging
099 299 616 92.0000.8286	4	End cap, plastic (2 pcs. per underrun protection bar)	Bag with 2 pcs.
099 299 615 92.0000.8211	4	End cap, plastic (2 pcs. per underrun protection bar)	40 pcs.
099 110 004 92.0000.8285	5	T-bolts (8 pcs. per underrun protection bar)	Bag with 4 pcs .

Spare parts and accessories ECE R58-01



The consoles mentioned in the certificate (pos. 1) are mounted at the chassis frame. The associated reinforcement brackets (pos. 2) must be used for specific widths of the chassis frame according to the guidance in the certificate.

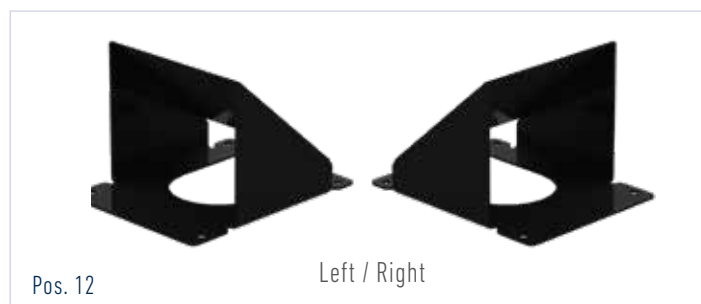
Consoles as well as reinforcement brackets are offered from ERMAX as accessories, but may also be produced by the vehicle manufacturer, provided that the technical instructions in the certificate are followed exactly.



Spareparts and accessories

	Pos.	Artikelnummer
Console - Square profile for welding on the chassis frame	1	098 299 620 92.0000.7251
Reinforcement bracket - Left side 098 299 602 / right side 098 292 603 A frame width between 840-1250 requires 2 pcs. By use of these reinforcement brackets, additional 4 T-bolts will be needed. (099 110 004)	2	098 299 602 92.0000.6559 098 299 603 92.0000.6560
End cap, plastic - Bag with 2 pcs. (2 pieces per underrun protection bar are needed)	3	098 299 610 92.0000.6561
T-bolt M12x55 mm with square head - Bag with 4 pcs. (4 pieces per underrun protection bar are needed)	4	099 110 004 92.0000.8285
Stainless steel angle bracket for fixation of marker lamps for light bar	5	098 299 605 92.0000.6731
Square shaped clamp: 25x25x5 mm / Thickness: 1 mm bags of 10 pcs.	6	098 299 612 92.0000.7215
Type approval label	7	099 110 001 92.0000.6702
Cover for junction box for underun protection bar. Plastic	8	098 299 617 92.0000.8284
Base plate for rear underrun protection bar with TM5/TM7. Plastic	9	098 299 608 92.0000.7674
Cover for base plate. For rear bumper with TM5/TM7. To be used with base plate 098299608	10	098 299 609 92.0000.7674

Spare parts and accessories ECE R58-03



The consoles mentioned in the certificate (pos. 1) are mounted at the chassis frame. The associated reinforcement brackets (pos. 2) must always be present.

Consoles as well as reinforcement brackets are offered from ERMAX as accessories, but may also be produced by the vehicle manufacturer, provided that the technical instructions in the certificate are followed exactly.

Depending upon the width of the chassis frame (distances between the consoles) the reinforcement brackets must be placed inside or outside the consoles in order to support the underrun protection bar.

According to the certificate, the consoles may also be integrated in the chassis.



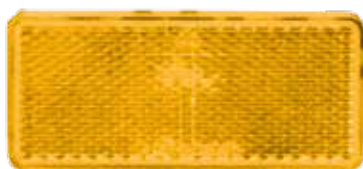
Pos. 14

Pos. 15

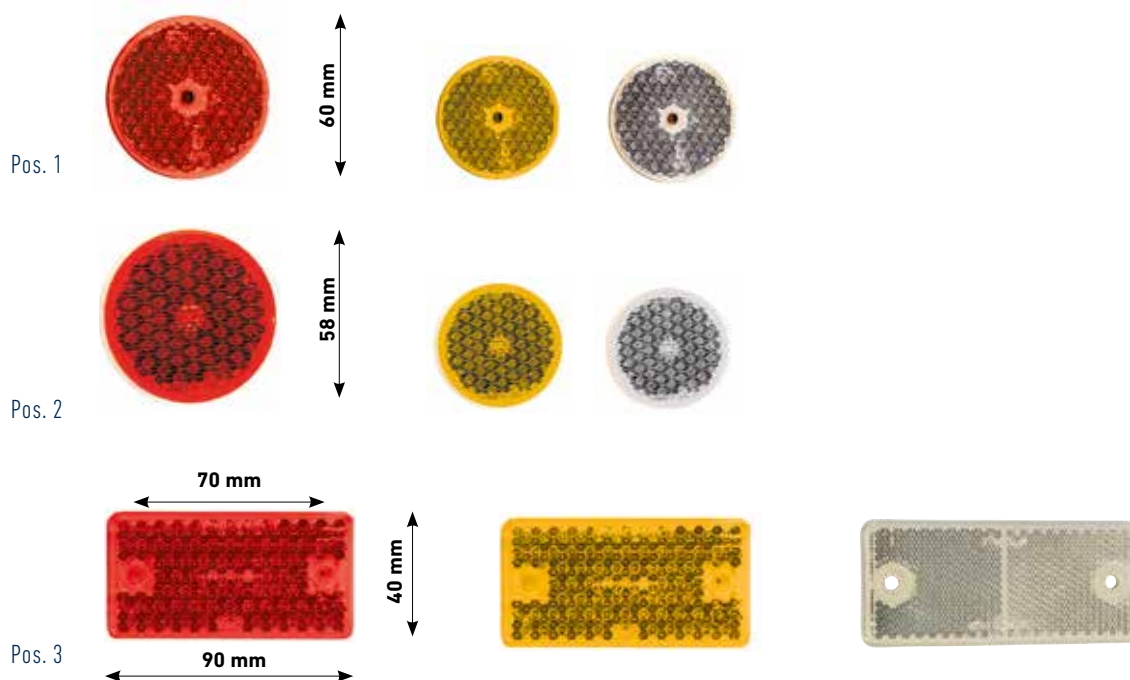
Spareparts and accessories

	Pos.	Artikelnummer
Console 1 - Profile for welding on the chassis frame	11	099 299 623 92.0000.8288
Console 2 - Profile for welding on the chassis frame.	11	099 299 622 92.0000.8287
Reinforcement bracket - left / right (1 pcs) Frame distance 1250-1450 mm : The reinforcement brackets must be installed on the inside of the consoles. Frame distance 980-1249 mm : The reinforcement brackets must be mounted on the outside of the consoles. 4 x 099 110 004 T-bolts M12 x 55 mm are needed for each bracket / totally 8 pcs.	12	099 299 625 92.0000.8289
End cap, plastic - Bag with 2 pcs (2 pieces per underrun protection bar are needed)	14	099 299 616 92.0000.8286
T-bolt M12x55 mm with square head - Bag with 4 pcs. (8 pieces per underrun protection bar are needed)	4	099 110 004 92.0000.8285
Stainless steel angle bracket for fixation of marker lamps for light bar	5	098 299 605 92.0000.6731
Type approval label	15	099 110 002
Cover for junction box for underun protection bar. Plastic	8	098 299 617 92.0000.8284
Base plate for rear underrun protection bar with TM5/TM7. Plastic	9	098 299 608 92.0000.7674
Cover for base plate. For rear bumper with TM5/TM7. To be used with base plate 098299608	10	098 299 609 92.0000.7674

REFLEX REFLECTOR

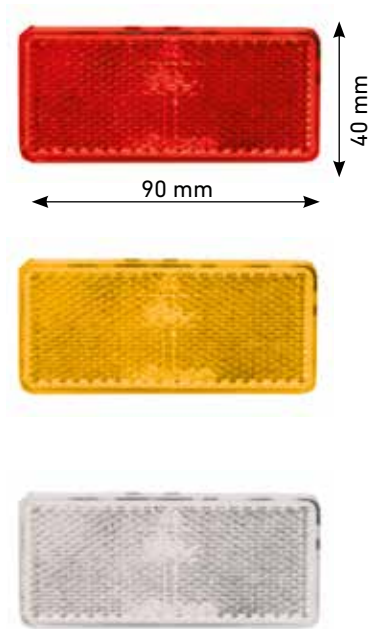


Reflex reflector with and without self-adhesive back

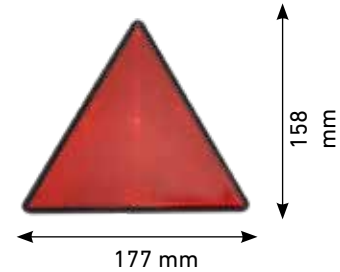


Colour	Dimension	Hole/screw	Self-adhesive	Packing unit	Pos.	Article No.
Red	Ø60 mm	Ø 6,3 mm		10 pcs	1	098 261 060 92.0000.1613
Yellow	Ø60 mm	Ø 6,3 mm		10 pcs	1	098 261 062 92.0000.1614
White	Ø 60 mm	Ø 6,3 mm		10 pcs	1	098 261 064 92.0000.1615
Red	Ø58 mm		✓	10 pcs	2	098 262 061 92.0000.1616
Yellow	Ø58 mm		✓	10 pcs	2	098 262 063 92.0000.1617
White	Ø58 mm		✓	10 pcs	2	098 262 065 92.0000.1618
Red	90 x 40 mm	Ø 4,3 mm		10 pcs	3	098 264 120 92.0000.1619
Yellow	90 x 40 mm	Ø 4,3 mm		10 pcs	3	098 264 122 92.0000.1620
White	90 x 40 mm	Ø 4,3 mm		10 pcs	3	098 264 124 92.0000.1621
Red	90 x 40 mm	Ø 4,3 mm	✓	10 pcs	3	098 265 130 92.0000.1622
Yellow	90 x 40 mm	Ø 4,3 mm	✓	10 pcs	3	098 265 132 92.0000.1623
White	90 x 40 mm	Ø 4,3 mm	✓	10 pcs	3	098 265 134 92.0000.1624

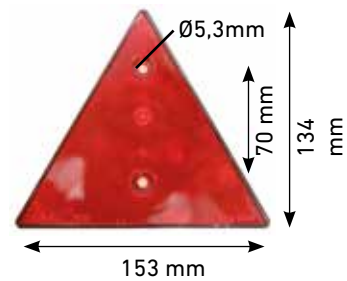
Reflex reflector



Pos. 1



Pos. 2



Pos. 3

Colour	Dimension	Loch/screw	Self-adhesive	Packing unit	Pos.	Article No.
Red	90 x 40 mm		✓	10 pcs	1	098 265 140 92.0000.1625
Yellow	90 x 40 mm		✓	10 pcs	1	098 265 142 92.0000.1626
White	90 x 40 mm		✓	10 pcs	1	098 265 144 92.0000.1627
Red	177 x 158 mm	2 x M5		1 pcs	2	098 267 605 92.0000.7236
Black rear plate						
Red	158 x 140 mm	Ø 5,3 mm		10 pcs	3	098 267 610 92.0000.1050

Reflex marker boards for trailers

ECE Reg. 70.01



Pos. 1

1130 x 200 mm



Pos. 2

565 x 200 mm



Pos. 3



285 x 200 mm

Aluminum	Self-adhesive foil	Packing unit	Pos.	Article No.
1130 x 200 mm		1 pcs	1	098 269 417 92.0000.7999
	1130 x 200 mm	1 pcs	1	098 269 412 92.0000.1634
565 x 200 mm		2 pcs	2	098 269 419 92.0000.8000
	565 x 200 mm	2 pcs	2	098 269 414 92.0000.1636
285 x 200 mm		4 pcs	3	098 269 421 92.0000.8001
	285 x 200 mm	4 pcs	3	098 269 416 92.0000.1638

Contour marking

ECE 104



Colour	Self-adhesive contour marking, for rigid sides	Packing unit	Article No.
Red 	50 m x 55 mm	50 meter per roll	098 269 200 92.0000.1632
White 	50 m x 55 mm	50 meter per roll	098 269 204 92.0000.1009

INTERIOR LIGHTING

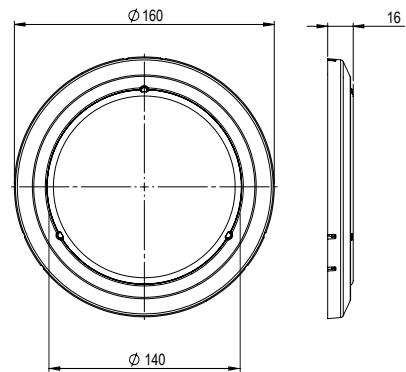


LED interior lights - Surface mounting and Built-in

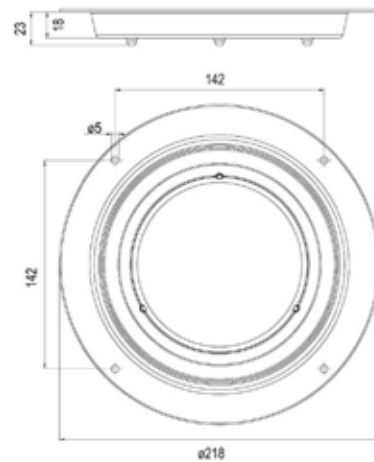
EMC



Surface mounting



Built-in



Description

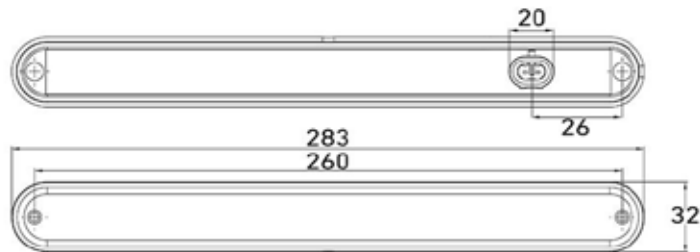
- Lens: Impact resistant polycarbonat
- Housing: Impact resistant polycarbonat
- Mounting holes: 4 pcs Ø5 mm - Ø201 mm (Built-in)
- Depth: 18 mm
- Mounting holes: 3 pcs Ø3,8 mm - Ø138 mm (Surface mounting)

Lighting	IP-Rating	Lumen	Dimension	Operating voltage	Surface mounting	Built-in	Connection	Article No.
LED	IP67	294	Ø160 x 15,7 mm	12/24V	✓		1.500 mm cable with Click-in	098 274 070 92.0000.6612
LED	IP67	294	Ø160 x 15,7 mm	12/24 V	✓		2.500 mm cable with Open end	098 274 071 92.0000.6613
LED	IP67	294	Ø218 x 20 mm	12/24V		✓	1.500 mm cable with Click-in	098 274 072 92.0000.6614
LED	IP67	294	Ø218 x 20 mm	12/24 V		✓	2.500 mm cable with Open end	098 274 073 92.0000.6615

Spare parts

Bowl for LED interior light, Dimension: : Built-in Ø175 mm, outside Ø218 mm	098 291 070 92.0000.6671
---	------------------------------------

LED interior lights - Surface mounting or Built-in



Description

Lens: PMMA
 Housing/holder: Polypropylen (PP)
 Bolt distance: 260 mm

Lighting	IP-Rating	Lumen	Dimension	Operating voltage	Surface mounting	Built-in	Connection	Article No.
LED	IP67	60	283 x 24 x 32 mm	24V	✓	✓	500 mm cable with Super Seal socket	098 274 725 92.0000.6558

REVERSE- & WORK LIGHTS

Lumen specification

The reversing lights in the following section are specified with a theoretical and an effective lumen.

The theoretical lumen is the calculated lumen of the light source

The effective lumen is the light measured outside the lens.



Standard product programme with large flexibility

Compact design, universally applicable and various connection possibilities

ERMAX reversing lights and work lights are available in 3 design types with different light performances / lumen.



LED Reverse light

Lumen:
Theoretical 650 / Effective 300



LED Work light

Lumen:
Theoretical 800 / Effective 600



LED Work light

Lumen:
Theoretical 1600 / Effective 1200

Approved as reversing light (ECE -R23) with 30° angling by vertical mounting



LED Work light

Lumen:
Theoretical 2400 / Effective 1800

Approved as reversing light (ECE -R23) with 35° angling by vertical mounting.



This type is also available with handle and on/off switch.



LED Reverse light

Lumen:
Theoretical 3.200 / Effective 2.400

Universally applicable

Mounting options

ERMAX working lights have a compact design with measures meaning that they can be mounted in a very narrow place. The compact design and symmetric light distribution give a large degree of flexibility when mounting. The work lights can be standing, hanging, rear or side mounted.

Mounting options ERMAX work lights



Standing



Hanging



Side



Rear



Easy maintenance

Various connection variations

ERMAX work lights are available with various connection variations – connection cable with Open end, Super Seal socket or “Deutsch” socket.

For connector variants, Ermax always offers a standard cable length of 300 millimeters to the first plug connection. The cable length can be adjusted according to need by means of standard extension cable or adapter cable. This ensures optimum ease of maintenance.

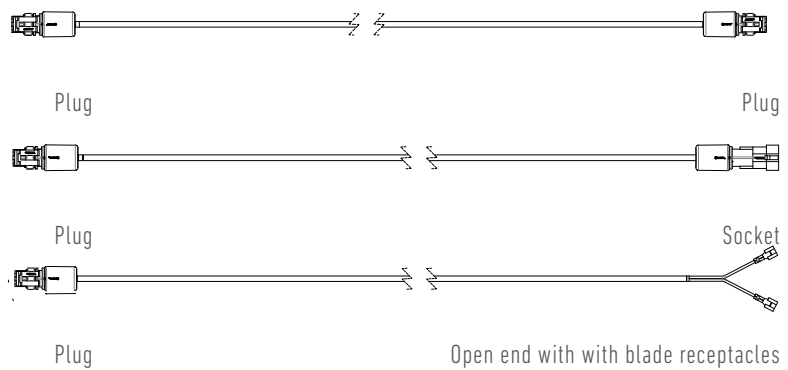
The large variety of cable solutions ensures the best installation without having to adjust the cable length (see page 23-27).

Connection / Extension possibilities ERMAX work lights

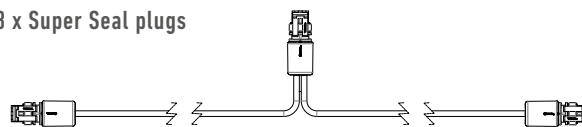


Super Seal socket

Extension cable with Super Seal connection

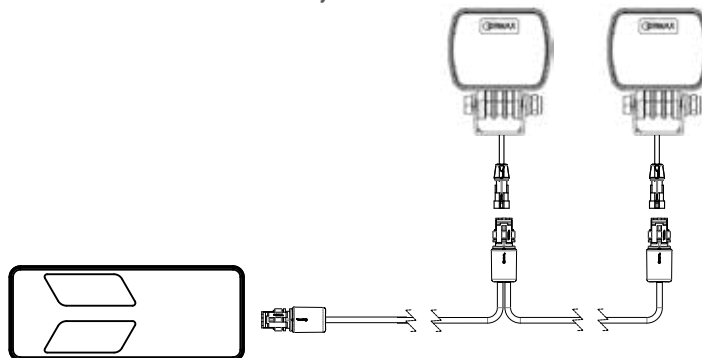


Y-Adapter with 3 x Super Seal plugs



Reverse light connected as a chain

-connected by a side cable with 1 inlet and 2 outlets with Super Seal plugs



2 pieces of Ermax reverse lights or work lights are allowed to be connected to an Ermax tail light (Max 52W)

Technical features ERMAX reverse lights and work lights

Technical specifications - Common to all variants

- Impact-resistant lens made of polycarbonate
- Housing made of aluminium, black lacquer (anti corrosion layers)
- Mounting bracket made of stainless steel, AISI 304 quality
- Mounting bolts M8 / 30 mm
- Multivolt 12/24V
- Working temperature -40 °C bis +65 °C
- Flood light pattern
- Colour temperature 6.500 °Kelvin
- Protection class IP69K
- Overheating and reverse polarity protection
- ADR and EMC/R10 approved
- ECE-R23 approved

Advantages of the newest LED light technology

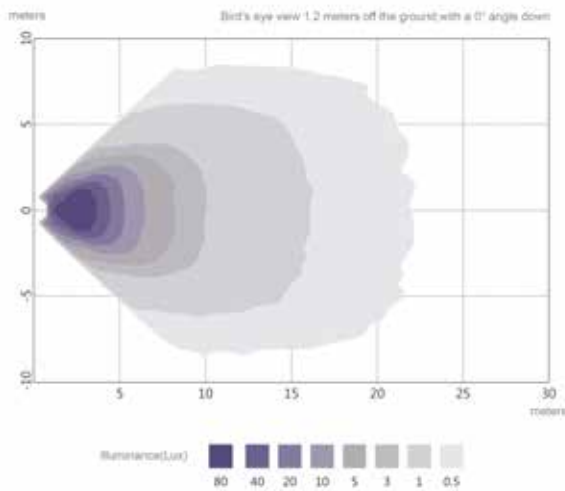
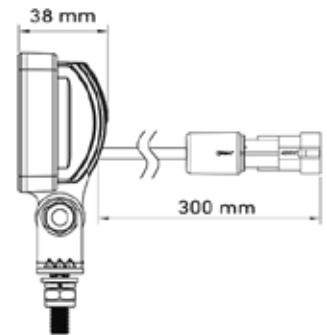
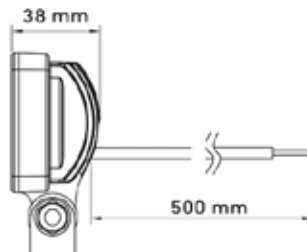
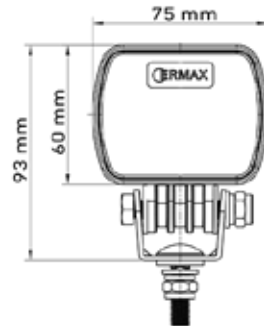
- which are optimally utilised in the Ermax reverse lights and work lights

The advantages of the newest LED technology, which are optimally utilised in the ERMAX reverse lights and work lights - result in a product with a very high quality and extremely long life - and thus cost-effectiveness, which is a real highlight.

- High light output
- Extremely long lifetime
- 100% water & dustproof
- Low power consumption
- Maintenance free
- High shock and vibration resistance
- Effective heat conduction
- Increased profitability



Reverse Light - Housing made of Aluminium
Theoretical Lumen 650



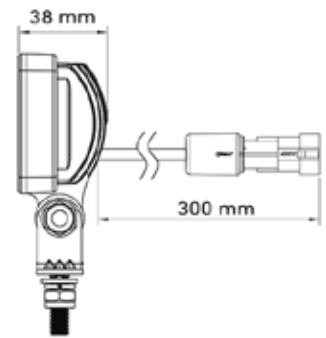
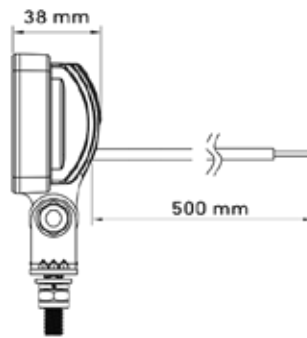
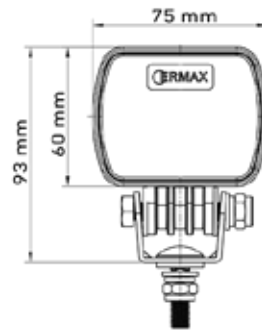
bird's eye view 1,2 meter above the ground with an incline angle of 0°



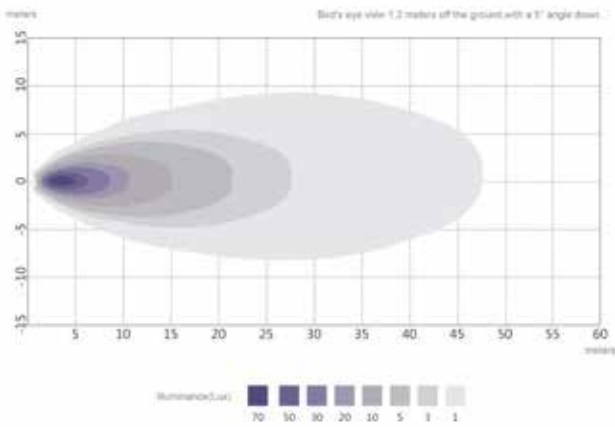
Operating voltage	Energy consumption	Connection	Cable length	Light source	Lumen Theoretical / effective	Light pattern	Article No.
12/24V	6,5 W	Open end	500 mm	6 x high-powered LED	650 / 300	Flood	098 256 250 92.0000.7834
12/24V	6,5 W	Super Seal plug	1000 mm	6 x high-powered LED	650 / 300	Flood	098 256 254 92.0000.8171
12/24V	6,5 W	Super Seal socket	300 mm	6 x high-powered LED	650 / 300	Flood	098 256 255 92.0000.7835

Work Lights LED - Housing made of Aluminium

Theoretical Lumen 800



Illumination

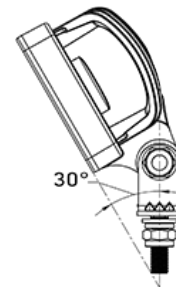
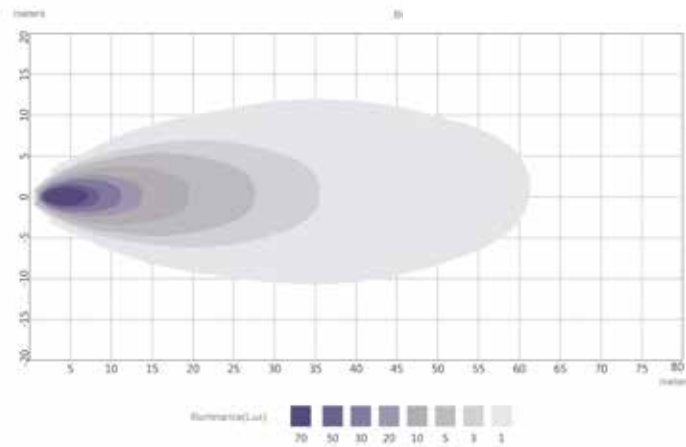
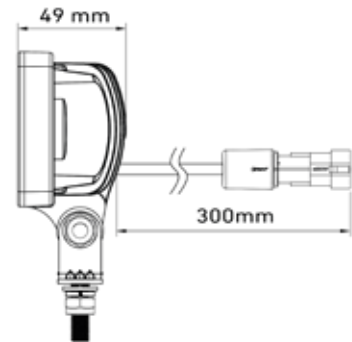
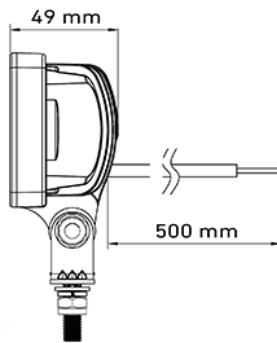
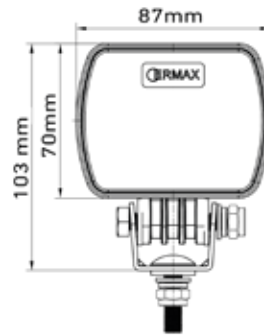


Bird's eye view 1,2 meter above the ground with an incline angle of 5°



Operating voltage	Energy consumption	Connection	Cable length	Light source	Lumen Theoretical / effective	Light pattern	Article No.
12/24V	8 W	Open end	500 mm	6 x high-powered LED	800 / 600	Flood	098 174 250 92.0000.7825
12/24V	8 W	Super Seal plug	1000 mm	6 x high-powered LED	800 / 600	Flood	098 174 254 92.0000.8172
12/24V	8 W	Super Seal socket	300 mm	6 x high-powered LED	800 / 600	Flood	098 174 255 92.0000.7826

Work Lights LED - Housing made of Aluminium
Theoretical Lumen 1.600



Approved as reverse light
- with 30° tilt when vertical mounted

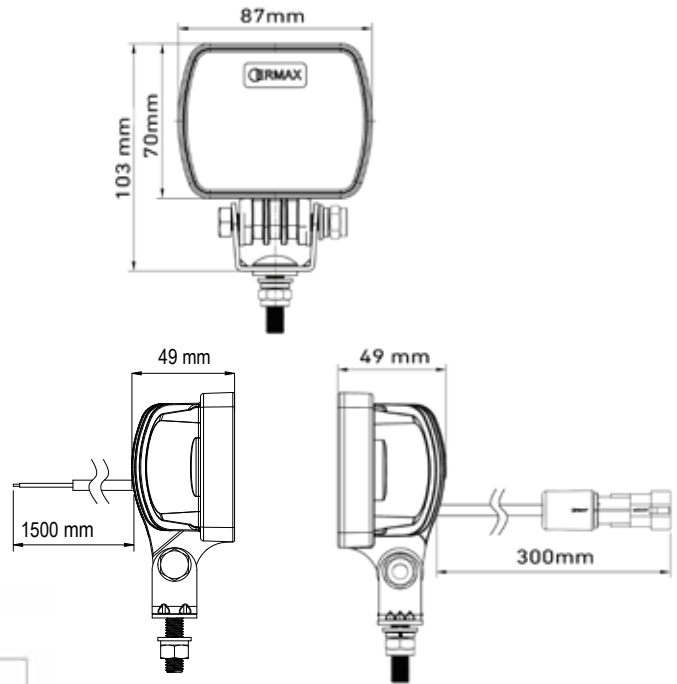
Bird's eye view 1,2 meter above the ground with an incline angle of 5°



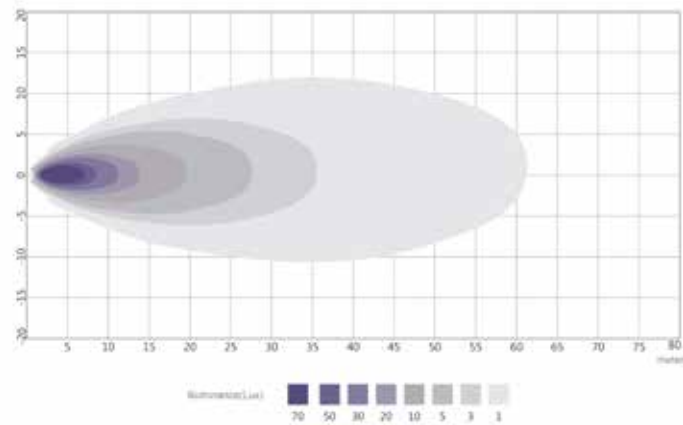
Operating voltage	Energy consumption	Connection	Cable length	Light source	Lumen Theoretical / effective	Light pattern	Article No.
12/ 24 V	16 W	Open end	500 mm	9 high-powered LED	1600 / 1200	Flood	098 174 260 92.0000.7827
12 / 24 V	16 W	Super Seal plug	1.000 mm	9 high-powered LED	1.600 / 1.200	Flood	098 174 264 92.0000.8168
12/ 24 V	16 W	Super Seal socket	300 mm	9 high-powered LED	1600 / 1200	Flood	098 174 265 92.0000.7828
12 / 24 V	16 W	Integrated Deutsch (DT2) socket	--	9 high-powered LED	1.600 / 1.200	Flood	098 174 267 92.0000.8064

LED Work Lights – Housing made of plastic

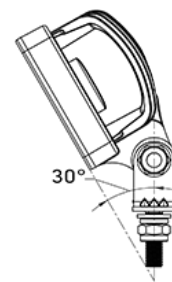
Lumen: 1.600



Illumination



Bird's eye view 1.2 metres above the ground with an incline angle of 5°



Approved as reversing light
- with 30° tilt when vertically-mounted

- Particularly suitable for use in highly corrosive environments
- Housing material: Thermally conductive plastic



Operating voltage	Energy consumption	Connection	Cable length	Light source	Lumen Theoretical / effective	Light pattern	Article No.
12 / 24 V	16 W	Open end	1.500 mm	9 high-powered-LEDs	1.600 / 1.200	Flood	098 174 290 92.0000.9414
12 / 24 V	16 W	Super Seal plug	6.000 mm	9 high-powered-LEDs	1.600 / 1.200	Flood	098 174 293 92.0000.9415
12 / 24 V	16 W	Super Seal socket	300 mm	9 high-powered-LEDs	1.600 / 1.200	Flood	098 174 295 92.0000.9416
12 / 24 V	16 W	Integrated Deutsch (DT2) socket	--	9 high-powered-LEDs	1.600 / 1.200	Flood	098 174 297 92.0000.9417

Work Lights LED - Housing made of Aluminium

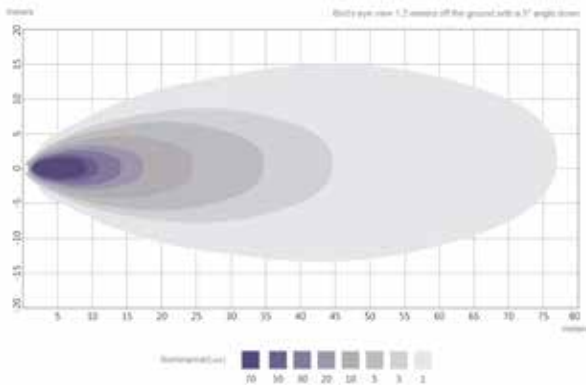
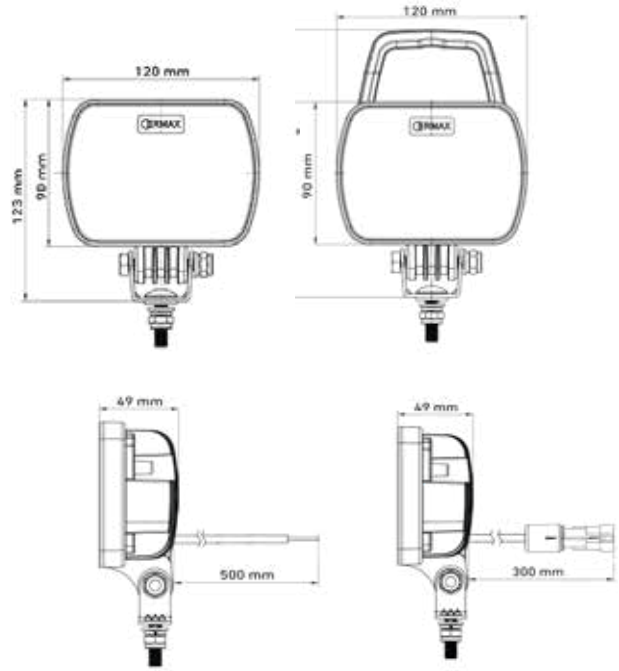
Theoretical Lumen 2.400



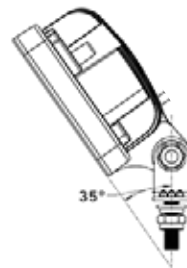
Pos. 1
Without on/off switch



Pos. 2
With bracket and on/
off switch



Bird's eye view 1,2 meter above the ground with an incline angle of 5°



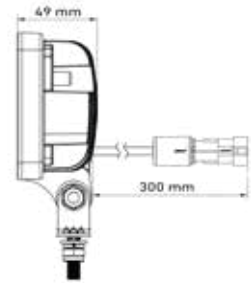
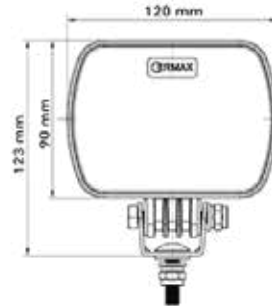
Approved as reverse light
- with 35° tilt when vertical mounted



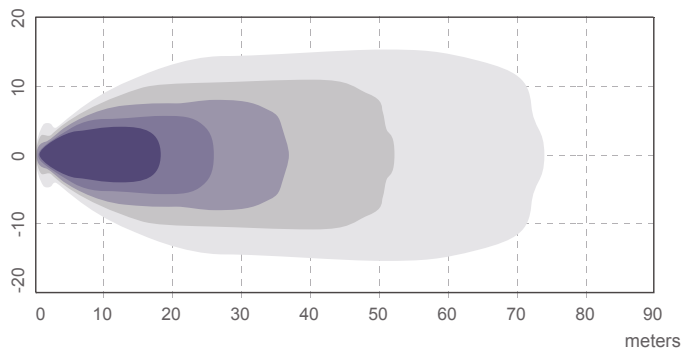
Operating voltage	Energy consumption	Connection	Cable length	Light source	Lumen Theoretical / effective	Light pattern	Pos.	Article No.
12/24V	25 W	Open end	500 mm	12 high-powered LED	2.400 / 1.800	Flood	1	098 174 270 92.0000.7830
12 / 24 V	25 W	Super Seal plug	1.000 mm	12 high-powered LED	2.400 / 1.800	Flood	1	098 174 274 92.0000.8170
12/24V	25 W	Super Seal socket	300 mm	12 high-powered LED	2.400 / 1.800	Flood	1	098 174 275 92.0000.7831
12 / 24 V	25 W	Integrated Deutsch (DT) socket	---	12 high-powered LED	2.400 / 1.800	Flood	1	098 174 277 92.0000.8066
12/24V	25 W	Super Seal socket - with handle & switch	300 mm	12 high-powered LED	2.400 / 1.800	Flood	2	098 174 279 92.0000.7833

Work Lights LED - Housing made of Aluminium

Theoretical Lumen: 3.200



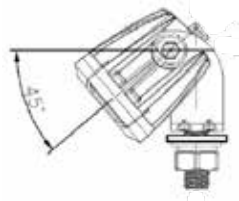
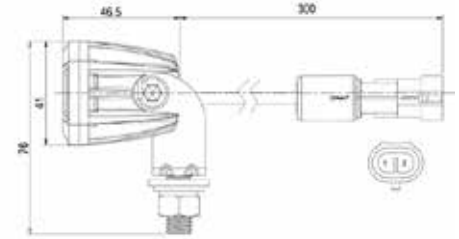
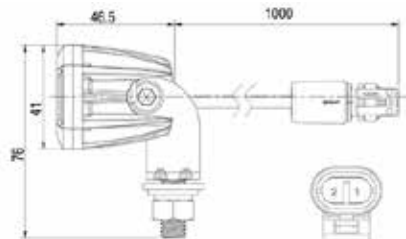
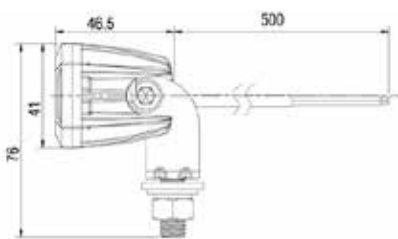
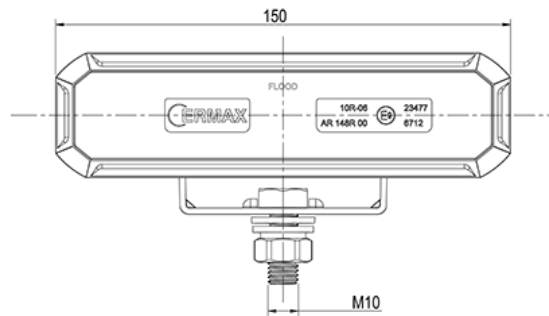
meters Bird's eye view 1.2 meters off the ground , with a 5° angle down



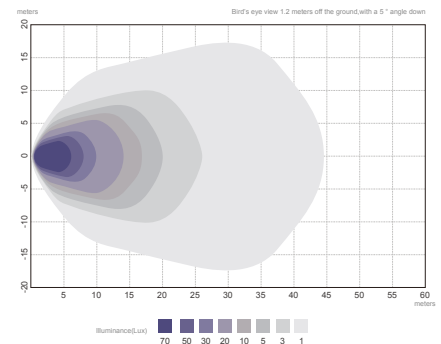
Operating voltage	Energy consumption	Connection	Cable length	Light source	Lumen Theoretical / effective	Light pattern	Pos.	Article No.
12 / 24 V	25 W	Super Seal socket	300 mm	12 LEDs	3.200 / 2.400	Flood	1	098 174 285 92.0000.8067
12 / 24 V	24 W	Integrated Deutsch (DT) socket	---	12 LEDs	3.200 / 2.400	Flood	2	098 174 287 92.0000.8068

LED work light 12/24V - 6 diodes

Theoretical Lumen: 2.700



Light pattern



Approved as reverse light with tilt angle mounted vertically

Description

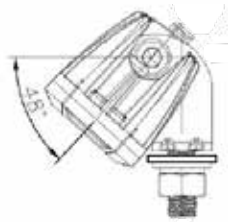
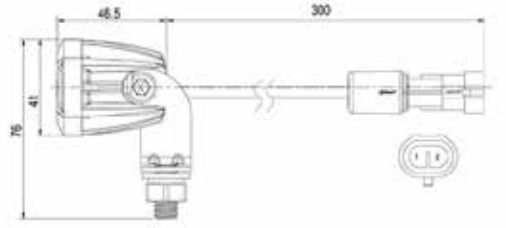
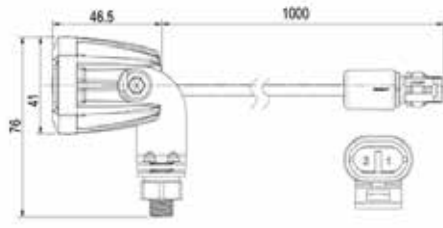
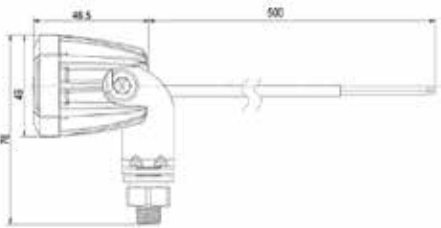
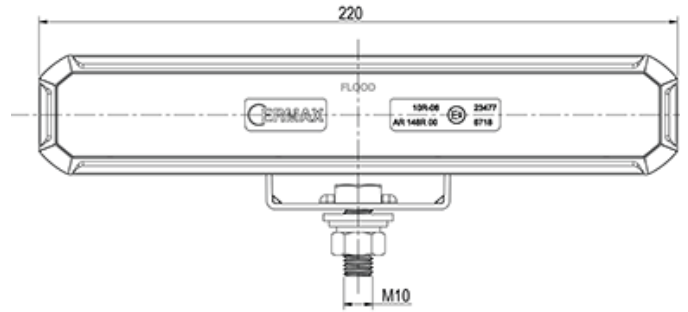
Lens:	Impact-resistant polycarbonate	Working temperature:	-40°C to + 65°C
Housing:	Aluminium	IP Rating:	IP6K9K
Colour temperature:	6500K	Mounting bracket in stainless steel with polycarbonate washer	
Dimensions, W x H x D:	150 x 41 x 46 mm	Wire colours:	
Light height, total:	54 mm	Brown = minus	
Bolt size:	22 mm/M10	Blue = +	
Width bracket:	63 mm		



Voltage	Consumption	Connection	Cable length	Light source	Lumen, theoretical/effective	Light pattern	Item no.
12/24 V	30 W	Open end	500 mm	6 High Power LEDs	2.700 / 2.000	Flood	098 174 360
12/24 V	30 W	Super-Seal plug	1,000 mm	6 High Power LEDs	2.700 / 2.000	Flood	098 174 364
12/24 V	30 W	Super-Seal socket	300 mm	6 High Power LEDs	2.700 / 2.000	Flood	098 174 365
12/24 V	30 W	Integrated Deutsch (DT2) socket	--	6 High Power LEDs	2.700 / 2.000	Flood	098 174 367

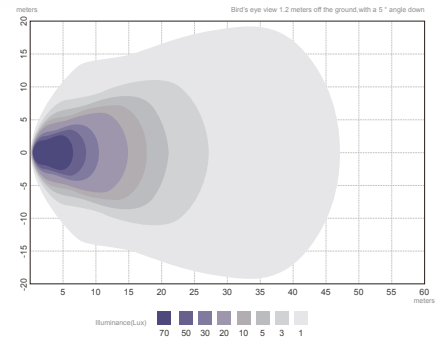
LED work light 12/24V - 8 diodes

Theoretical Lumen: 3.600



Approved as reverse light with tilt angle mounted vertically

Light pattern



Description

Lens:	Impact-resistant polycarbonate	Working temperature:	-40°C to + 65°C
Housing:	Aluminium	IP Rating:	IP6K9K
Colour temperature:	6500K	Mounting bracket in stainless steel with polycarbonate washer	
Dimensions, W x H x D:	220 x 41 x 46 mm	Wire colours:	
Light height, total:	54 mm	Brown = minus	
Bolt size:	22 mm/M10	Blue = +	
Width bracket:	63 mm		

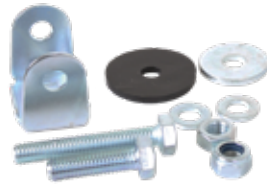


Voltage	Consumption	Connection	Cable length	Light source	Lumen, theoretical/effective	Light pattern	Item no.
12/24 V	40 W	Open end	500 mm	8 High Power LEDs	3.600 / 2.700	Flood	098 174 380
12/24 V	40 W	Super-Seal plug	1,000 mm	8 High Power LEDs	3.600 / 2.700	Flood	098 174 384
12/24 V	40 W	Super-Seal socket	300 mm	8 High Power LEDs	3.600 / 2.700	Flood	098 174 385
12/24 V	40 W	Integrated Deutsch (DT2) socket	--	8 High Power LEDs	3.600 / 2.700	Flood	098 174 387

Plug connections – spare parts and accessories

ERMAX Reverse Lights & Work Lights

The ERMAX plug connector accessory programme offers solutions for almost any application. Matching mount brackets can also be found in our programme.



Pos. 1



Pos. 2



Pos. 3



Pos. 4



Pos. 5



Pos. 6



Pos. 7



Pos. 8



Pos. 9

Mounting bracket for 37 mm light fixation - Kit set with	1	098 296 174 92.0000.7115
Super Seal plug 2 poled, Diameter yellow seal Ø 1,8 - 2,4 mm, Blade receptacle 0,5 - 1,0 mm ²	2	099 110 019 92.0000.1686
Super Seal socket 2 pole, Diameter yellow seal Ø 1,8 - 2,4 mm, Blade receptacle 0,5 - 1,0 mm ²	3	099 110 018 92.0000.1685
Rubber grommet for 2 pole Super Seal plug	4	099 110 712 92.0000.1687
T-coupling for 2 pole Super Seal plug (3 sockets)	5	099 111 415 92.0000.1692
Blanking plug for 2 pole Super Seal socket - black plastic	6	099 110 028 92.0000.0004
Blanking plug for 2 pole Super Seal plug - black plastic	7	099 110 029 92.0000.0023
Deutsch (DT) plug, with blade receptacles 0,75-2,0 mm ²	8	098 291 690 92.0000.6493
Deutsch (DT) socket, with blade terminals 0,75-2,0 mm ²	9	099 111 043 92.0000.8141

REAR REVERSE ALARM



Rear reverse alarm



Description

Housing: Black ABS with galvanized mounting bracket
 Cyklus: 60/min
 Distance mounting holes: 22 mm (Hole Ø 5,2 mm)

IP Rating	Sound outlet	Frequency range	Consumption	Operating voltage	Dimension	Connection	Article No.
IP54	102 dB	2,6 kHz	10W	12/24V	58,8 x 37 mm	250 mm cable with Super Seal plug	090 450 350 92.0000.6857

WARNING LIGHTS



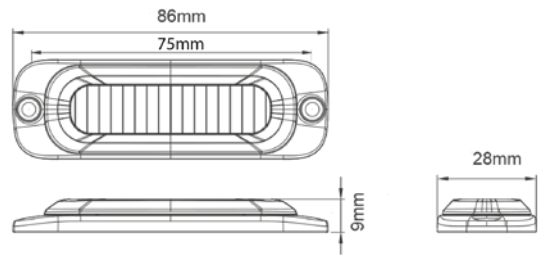
LED Warning lights - Surface mounting

XA1 ECE R65 EMC R10

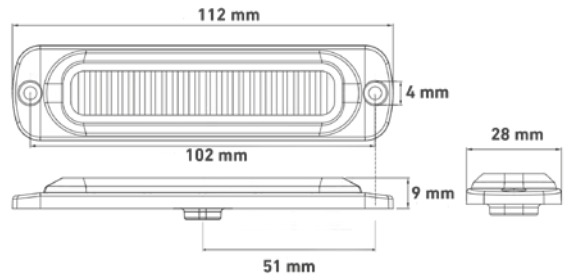


Pos. 1

Pos. 2



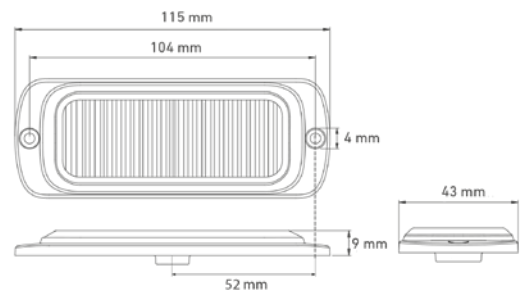
Pos. 3



Pos. 4



Pos. 5



Pos. 6

Description

Lens: Impact resistant clear polycarbonate
 Housing: Impact resistant aluminum
 Working temperature: -30°C to +80°C

Approved for horisontial mounting

Build-in- and programming instructions are available at: www.ermaxonline.dk

Indica- torcolour	Operating voltage	IP Rating	Connection	Cable length	Bolt distance	Dimension	Light source	Flash pattern	Pos.	Article No.
	12/24V	IP69K	Open end	2500 mm	77 mm	86 x 9 x 28 mm	3 x LED	12	1	098 286 444 92.0000.6897
	12/24V	IP69K	Super Seal socket	250 mm	77 mm	86 x 9 x 28 mm	3 x LED	12	2	098 286 445 92.0000.7205
	12/24V	IP69K	Open end	2500 mm	102 mm	112 x 9 x 28 mm	6 x LED	19	3	098 286 446 92.0000.6898
	12/24V	IP69K	Super Seal socket	250 mm	102 mm	112 x 9 x 28 mm	6 x LED	19	4	098 286 447 92.0000.9505
	12/24V	IP69K	Open end	2500 mm	104 mm	115 x 9 x 43,4 mm	12 x LED	25	5	098 286 448 92.0000.6899
	12/24V	IP69K	Super Seal socket	250 mm	104 mm	115 x 9 x 43,4 mm	12 x LED	25	6	098 286 449 92.0000.7558

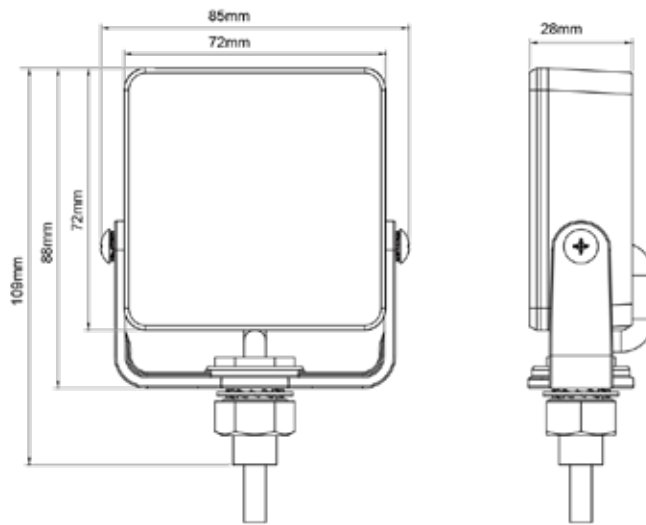
LED Warning lights

ECE R65

EMC R10



Pos. 1



Description

Lens: Impact resistant clear polycarbonate
 Housing: Aluminum
 Working temperature: -30°C to +80°C

Build-in- and programming instructions are available at: www.ermaxonline.dk

Indica- torcolour	Operating voltage	IP Rating	Connection	Cable length	Mounting	Dimension	Light source	Flash pattern	Article No.
	12/24V	IP69K	Open end	120 mm	U-shaped mounting bracket with ø13mm hole	72 x 72 x 28 mm	4 x LED	5	098 286 290 92.0000.6762

WARNING BEACONS



Small, compact and long durability

3 flash patterns all with R65 approval and CISPR 25 class 3 - **PREMIUM**

The new warning light from ERMAX

The warning light with LED technology convinces with a modern design and robust construction. The compact design of the series is suitable for all kinds of heavy vehicles, guaranteeing visibility and safety.

Whether single flash, double flash or rotating light, all 3 flash patterns can be set in compliance with R65 – unique in Europe!

The mounting possibilities are either surface mounting or pole mounting/DIN. The warning lights are available with orange or transparent lens.

This series is E-approved according to ECE R65 and also approved with CISPR 25 class 3 and ADR - and due to the high degree of electromagnetic compatibility the warning light can be placed anywhere.



Surface mounting



Pole mounting/DIN



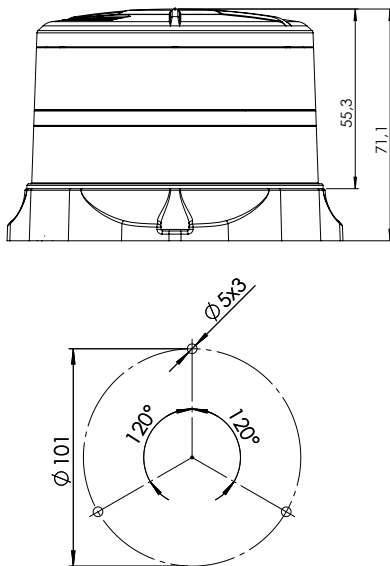
ERMAX warning lights - Why ?

- 1 Newest light and LED technology**
Small and powerful, long durability and an optimum signal picture with a small power consumption..
- 2 Unique design**
Unique reflection design with clear lens and very strong light.
- 3 Long lifetime and durability**
Impact-resistant lens of polycarbonate and housing top of aluminium.
- 4 3 Flash Patterns approved**
All 3 flash patterns with high warning effect are ECE R65 compliant - unique in Europe
- 5 Unique availability**
The compact design offers flexibility in mounting.
- 6 Absorb vibrations**
The flexible pipe socket avoids damages to the lights by impact or collision.
- 4 2 warning signals**
Choose between flashing warning signal or rotating warning signal.
- 6 First-class approved quality**
All products go through our strict quality criteria and testing methods to ensure the high product quality.

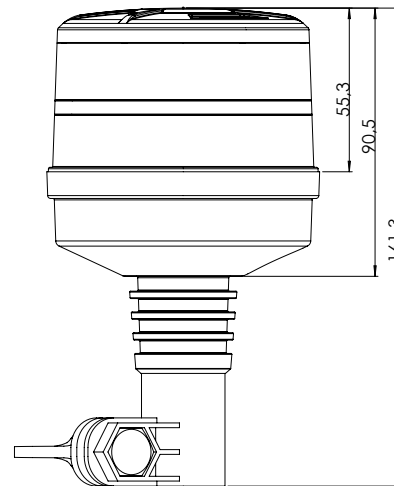
LED Warning lights 12/24V

Technical details - Premium variants with 3 flash patterns, R65 approval and CISPR 25 class 3

Surface mounting



Pole mounting/DIN



Description - Surface mounting

Lens:	Impact resistant polycarbonate
Housing:	Impact resistant polycarbonate
Housing top:	Aluminium
Sealing:	EVA
Light colour:	Amber
Measures Ø x H:	Ø115 x 71 mm
Hole pattern:	Ø101 mm / 3 x 87 mm / Ø4,5 mm
Working temperature:	-40°C to +65°C
IP-Rating:	IP6K9K

Description - Pole mounting/DIN

Lens:	Impact resistant polycarbonate
Housing:	TPE
Housing top:	Aluminium
Light colour:	Amber
Measures Ø x H:	Ø91 x 161 mm
Working temperature:	- 40°C to +65°C
IP-Rating:	IP6K9K

Radio interference (CISPR 25): Klasse 3



Mounting	Colour light lens	Connections	Measures	Voltage	Consumption - Max	Flash pattern	Artikel no.
Surface	Transperent glass	500 mm cable open-end Ø6 mm, 3 x 0,75 mm ²	Ø115 x 71 mm	10-30V	27W	3 (R65) Single 480 ms Double 400 ms Rotating 400 ms	098 287 200
Surface	Amber glass	500 mm cable open-end Ø6 mm, 3 x 0,75 mm ²	Ø115 x 71 mm	10-30V	27W		098 287 205
Pole (DIN)	Transperent glass	Integrated plug in the socket, DIN 4165	Ø91 x 161 mm	10-30V	27W		098 287 230
Pole (DIN)	Amber glass	Integrated plug in the socket, DIN 4165	Ø91 x 161 mm	10-30V	27W		098 287 235

Spareparts

Seal - Suitable for 098 287 200 + 098 287 205 without adapter ring

098 295 250

Wenn more flash patterns are needed

10 flash patterns - 1 flash pattern with R65 approval - STANDARD

These 4 variants have similar characteristics as the premium types – the only difference is that this series has a cover of polycarbonate instead of aluminium and has 10 different flash patterns – of these 1 flash pattern with R65 approval.

The warning lights are available with orange or transparent lens and the mounting possibilities are either surface mounting or pole mounting/DIN, and the series are ADR approved. The two types for surface mounting are delivered with an adapter for Ø130 mm hole configuration.



Surface mounting



Adapter ring

10 flash patterns

- ___ Single flash 480ms (Reg. 65 approved)
- ___ Single flash 800ms
- ___ Double flash 400ms
- ___ Double flash 800ms
- ___ Triple flash
- ___ Quad flash
- ___ ISO-fase flash 400ms
- ___ ISO-fase flash 800ms
- ___ Rotating 400ms
- ___ Rotating 800ms



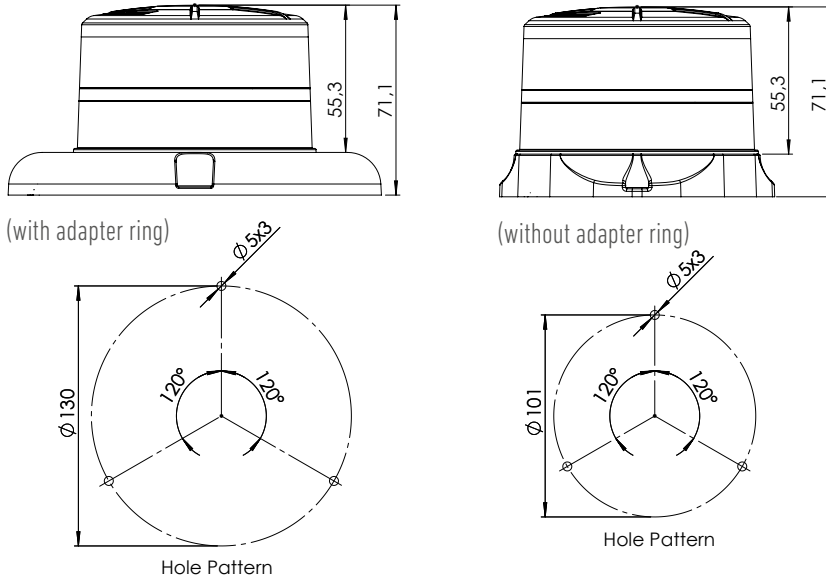
Pole mounting/DIN



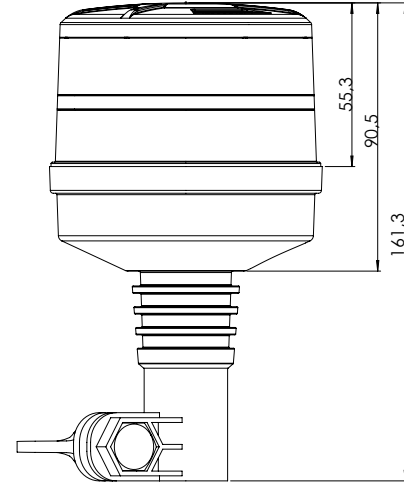
LED Warning lights 12/24V

Technical details - **Standard** variants with 10 flash patterns

Surface mounting



Pole mounting/DIN



Description - Surface mounting with adapter ring

Lens: Impact resistant polycarbonate
 Housing: Impact resistant polycarbonate
 Housing top: Impact resistant polycarbonate
 Sealing: EVA
 Light colour: Amber
 Measures Ø x H: Ø140 x 71 mm
 Hole pattern: Ø130 mm / 3 x 112 mm / Ø4,5 mm
 Working temperature: -40°C to +65°C
 IP-Rating: IP6K9K

Description - Pole mounting/DIN

Lens: Impact resistant polycarbonate
 Housing: TPE
 Housing top: Impact resistant polycarbonate
 Light colour: Amber
 Measures Ø x H: Ø91 x 161 mm
 Working temperature: -40°C to +65°C
 IP-Rating: IP6K9K

ECE R65 EMC

Mounting	Colour light lens	Connections	Measures	Voltage	Consumption	Flash pattern	Artikel no.
Surface	Transperent glass	500 mm cable open-end Ø6 mm, 3 x 0,75 mm ²	Ø140 x 71 mm	10-30V	23W	See opposite page	098 287 250
Surface	Amber glass	500 mm cable open-end Ø6 mm, 3 x 0,75 mm ²	Ø140 x 71 mm	10-30V	23W		098 287 255
Pole (DIN)	Transperent glass	Integrated plug in the socket, DIN 4165	Ø91 x 161 mm	10-30V	23W		098 287 280
Pole (DIN)	Amber glass	Integrated plug in the socket, DIN 4165	Ø91 x 161 mm	10-30V	23W		098 287 285

Spareparts

The adapter ring makes it possible to adapt the LED beacon to mounting holes Ø130 mm - Measurements, Ø x H: Ø140 x 16 mm Bolt distance: Ø130 mm / 3 x 112 mm / Ø4,5 mm Material: Polycarbonate	098 292 640
Seal - Suitable for 098 287 250 + 098 287 255 with adapter ring	098 295 251
Seal - Suitable for 098 287 250 + 098 287 255, if adapter ring is not used	098 295 250

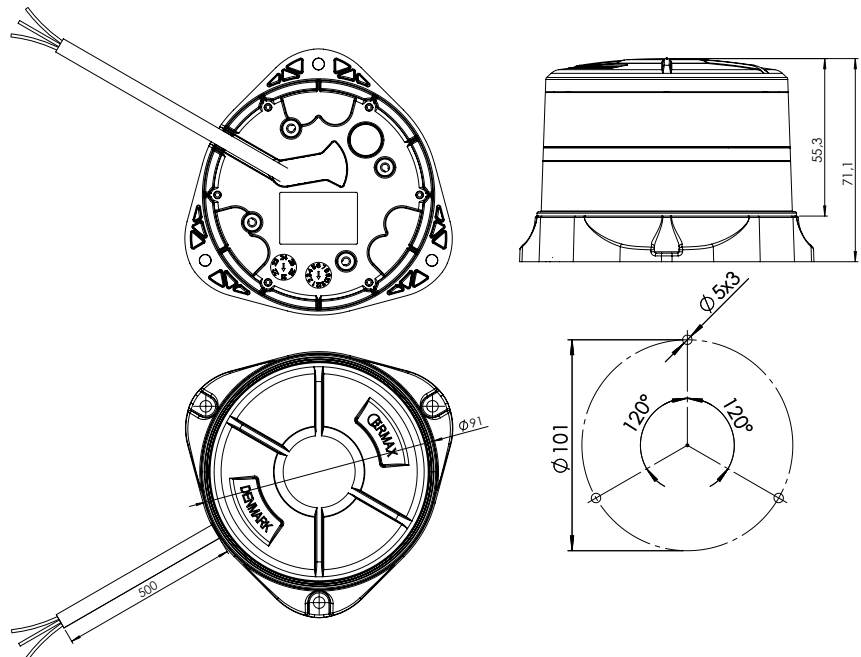
LED Warning lights 12/24V

Technical details and flash pattern selection

Surface mounting

Connection:

- Red: Permanent power supply (+)
- Black: Ground (-)
- Yellow: Choose flash pattern / synchronizing



Choose flash pattern - Surface mounting

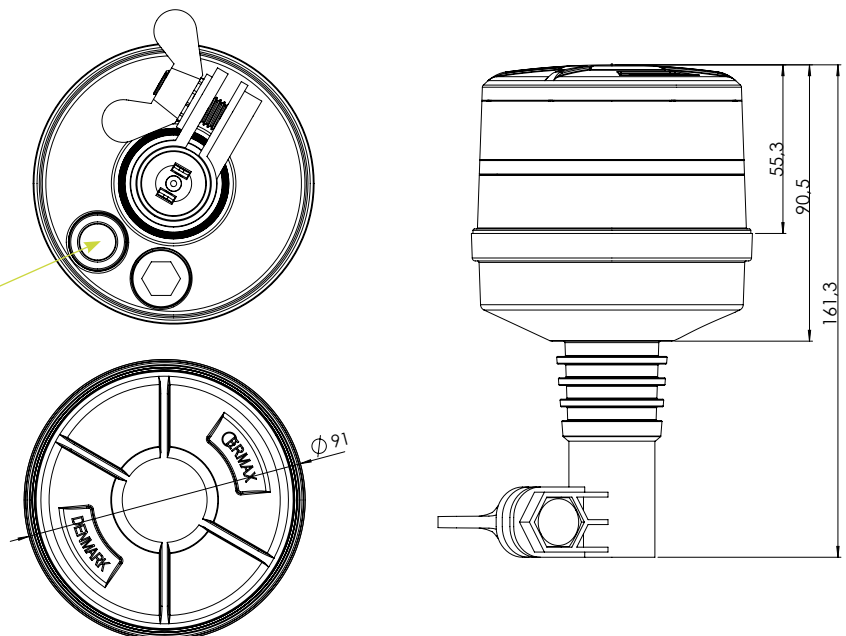
Apply yellow cable to +, hold briefly (0.5-2 sec) and select flash pattern.

To synchronize more lights, all lights must be adjusted to the same flash pattern. Then all yellow cables will be connected to each other.

If the yellow cable is placed at + for more than 2 seconds, the light return to flash pattern 1.

Pole mounting/DIN

Press the bottom in order to change the light pattern



Choose flash pattern - Pole mounting/DIN

To choose flash pattern, press the red bottom shortly (0.5 – 2 sec).

If pressed at the red bottom for more than 2 seconds, the light return to flash pattern 1.

LED Warning beacons 12-24V - ECE REG.65



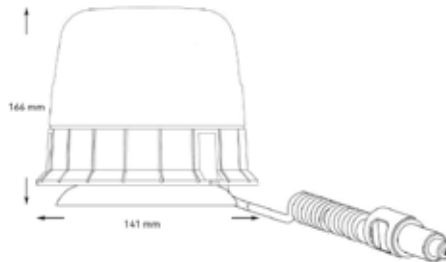
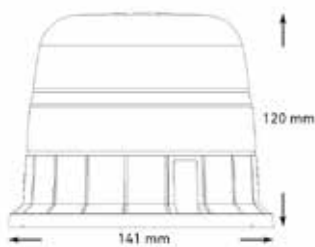
Pos. 1



Pos. 2



Pos. 3



Description

Lens: Polycarbonate
 Housing: Compound thermoplastic
 Working temperature: -40°C - +60°C
 Color: Amber

Mounting	IP Rating	Connection	Dimension	Operating voltage	Consumption	Pos.	Article No.
Firm surface mounting	IP69	150 mm cable Open end	Ø141 x 120 mm	12/24V	9W	1	098 287 400 92.0000.6599
Magnetic base	IP56	Coil cable with plug	Ø141 x 166 mm	12/24V	9W	2	098 287 420 92.0000.6601
For mounting bushes	IP69	Integrated plug in Socket	Ø128 x 125 mm	12/24V	9W	3	098 287 410 92.0000.6600

LED Warning beacons 12-24V - ECE REG.65

E ECE R65 EMC



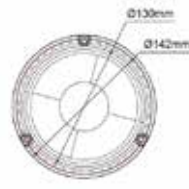
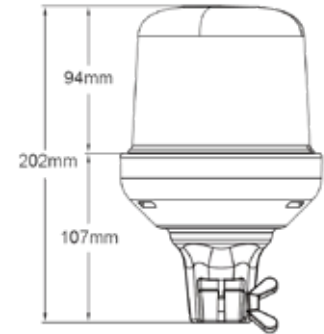
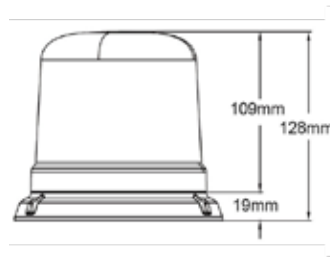
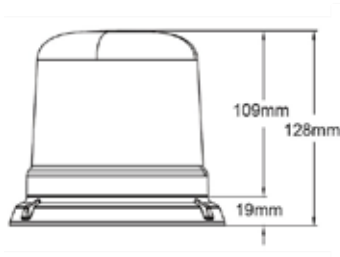
Pos. 1



Pos. 2



Pos. 3



Description.

Lens: Polycarbonate
 Housing: Polycarbonate
 Working temperature: -30°C to +65°C
 LED units: 10 x 3W
 Color: Amber

Installation- and programming instructions at: www.ermaxonline.dk

Mounting	IP Rating	Connection	Dimension	Operating voltage	Consumption (depending on f lash patterns)	Flash pattern	Pos.	Article No.
Firm mounting	IP66	400 mm cable Open end	Ø142 x 128 mm	12/24V	21-42W	11	1	098 287 938 92.0000.6451
Magnet	IP66	Coil cable with plug	Ø142 x 128 mm	12/24V	21-42W	11	2	098 287 940 92.0000.6452
For mounting bushes	IP66	Integrated plug in Socket	Ø130 x 202 mm	12/24V	21-42W	11	3	098 287 936 92.0000.6450

LED Warning beacons 12-24V - ECE REG.65

E ECE R65 EMC



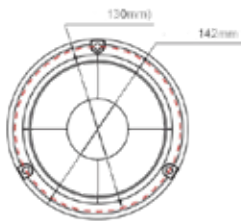
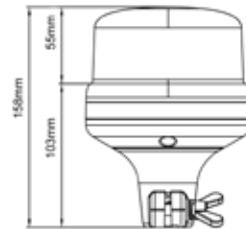
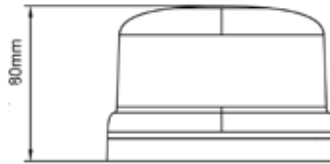
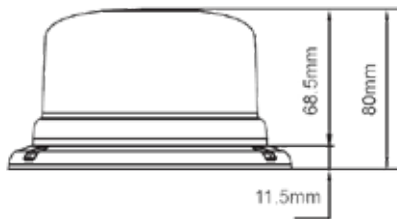
Pos. 1



Pos. 2



Pos. 3



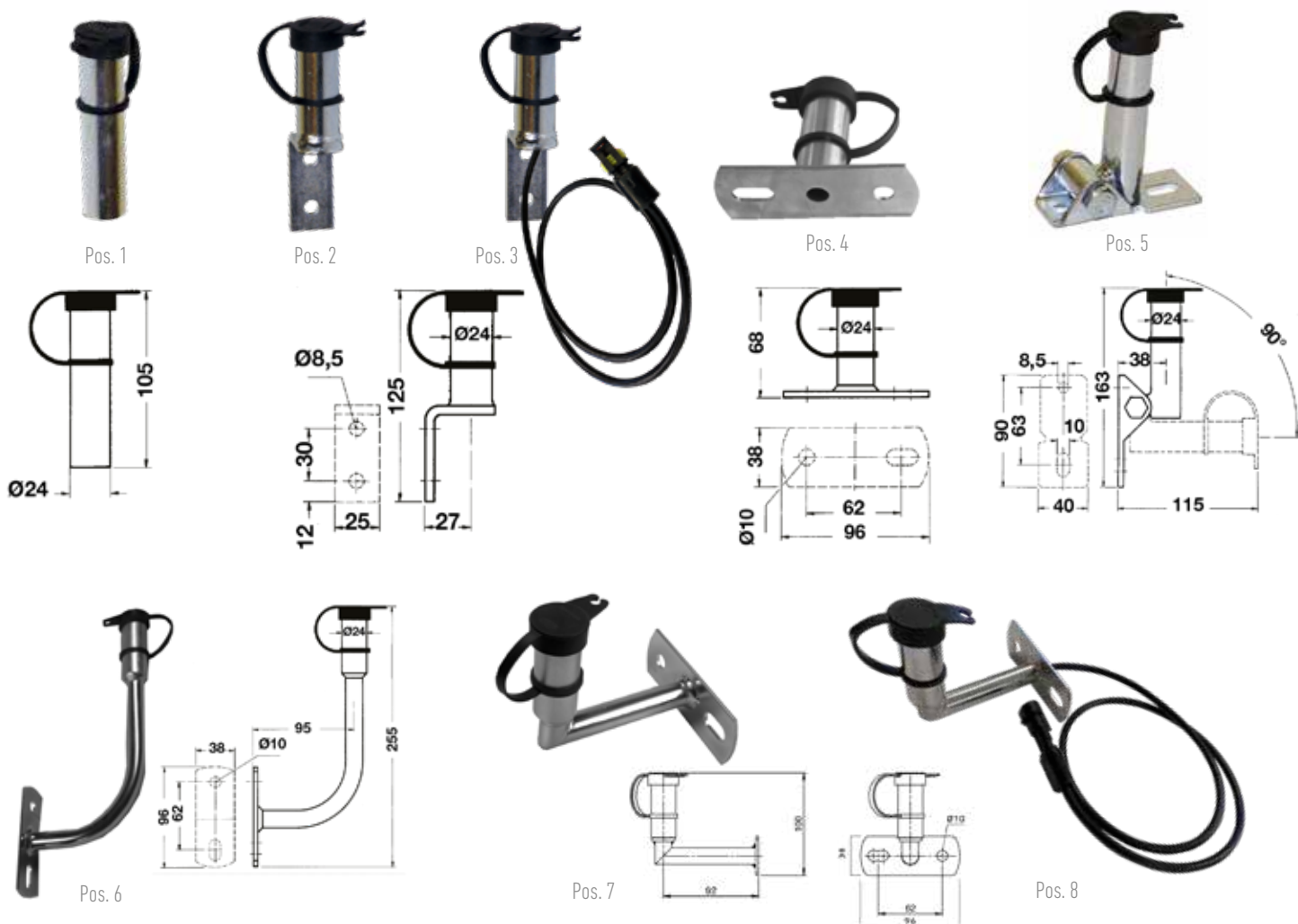
Description

Lens: Polycarbonate
 Housing: Polycarbonate
 Working temperature: -30°C to +65°C
 LED units: 8 x 3W
 Color: Amber

Installation- and programming instructions at: www.ermasonline.dk

Mounting	IP Rating	Connection	Dimension	Operating voltage	Consumption (depending on flash patterns)	Flash pattern	Pos.	Article No.
Firm mounting	IPX5	400 mm cable Open end	Ø142x 80 mm	12/24V	15-30W	11	1	098 287 944 92.0000.6454
Magnetic base	IPX5	Coil cable with plug	Ø142 x 80 mm	12/24V	15-30W	11	2	098 287 946 92.0000.6455
For mounting bushes	IPX5	Integrated plug in Socket	Ø130 x 158 mm	12/24V	15-30W	11	3	098 287 942 92.0000.6453

Mounting equipment for Warning beacons



Galvanized steel tube and with protection cap

DIN Norm	Form	Mounting	Dimension	Connection	Cable	Pos.	Article No.
DIN 72 591	Straight	-	Ø24 x 105 mm	2 poled socket	--	1	098 295 561
DIN 72 591	Straight	Angled bracket	Ø24 x 125 mm	2 poled socket	--	2	098 295 562
DIN 72 591	Straight	Angled bracket	Ø24 x 125 mm	2 poled socket	900 mm cable with Super Seal plug	3	098 295 595
DIN 72 591	Straight	Flush mounting	Ø24 x 128 mm	2 poled socket	--	4	098 295 564
DIN 72 591	Straight	adjustable bracket	Ø24 x 115 mm	2 poled socket	--	5	098 295 567
DIN 72 591	90° angled	Flush mounting	Ø24 x 255 mm	2 poled socket	--	6	098 295 565
DIN 72 591	90° angled	Flush mounting	Ø24 x 100 mm	2 poled socket	--	7	098 295 583
DIN 72 591	90° angled	Flush mounting	Ø24 x 100 mm	2 poled socket	800 mm cable with Super Seal socket	8	098 295 585

SIMAC[®] Solutions

Control of flashing side marker lights



The ERMAX solution is called SIMAC®

Compliant to legislation with unique flexibility

Control of flashing side marker lights ECE 48 since November 2017

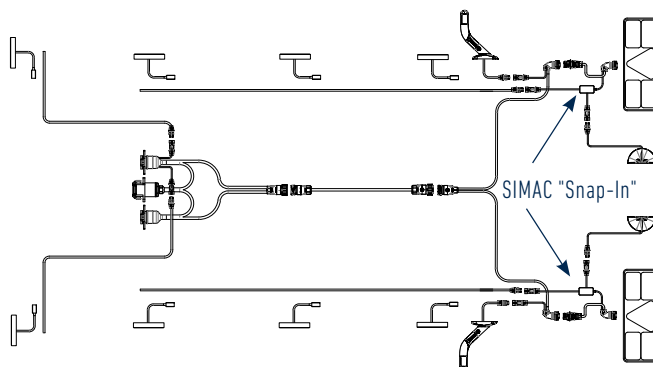
With the ECE regulation No. 48 (Changes series 06) it is prescribed that the side marker lights must flash synchronously and simultaneously with the direction indicators (in the tail light) – this is mandatory for vehicles – class 03 and 04 - being homologated after November 18 2017.

Ermac SIMAC® ensures the compliance with the legislation
 – we will advise the optimal application

SIMAC: side marker light Control

SIMAC "Snap-In" Modul

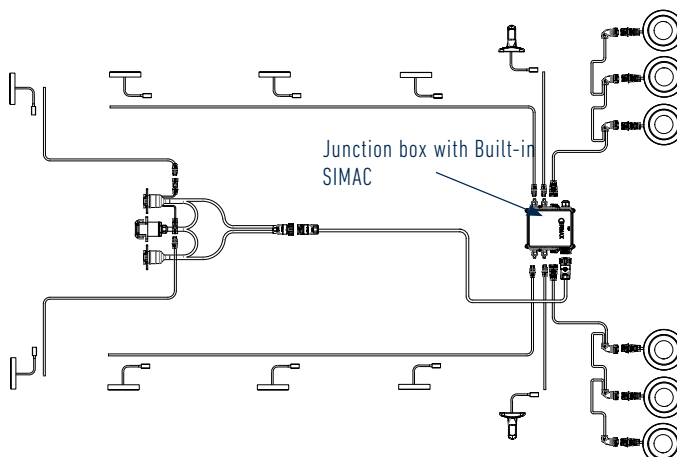
- Ideal for any application, even in retrofit
- The flexible solution in order to keep an existing kit configuration almost unchanged



Product information in the cable section

SIMAC integrated in the junction box

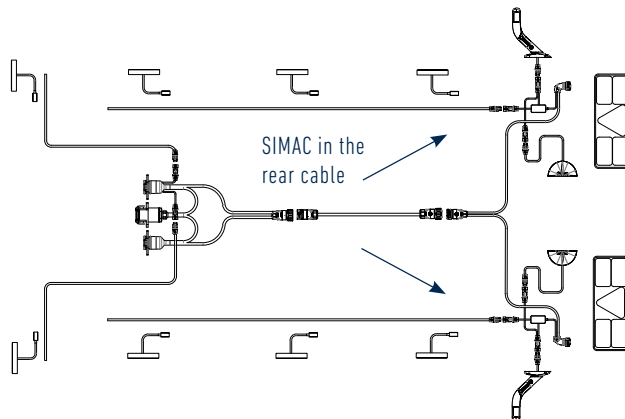
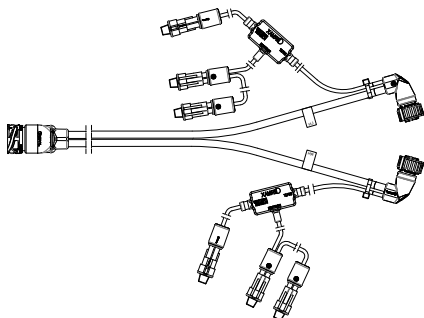
- Mounted in a secure and protected position with ideal plug connection to the system
- The best possible solution especially when 3 & 2 function lights are being used



Product information in the junction box section

SIMAC integrated in the rear cable

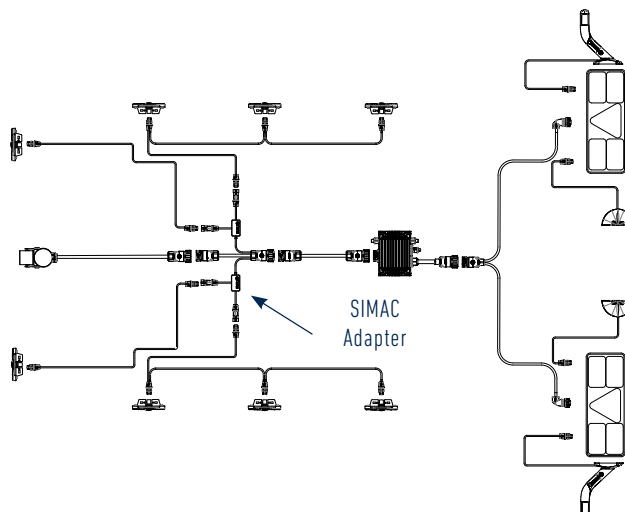
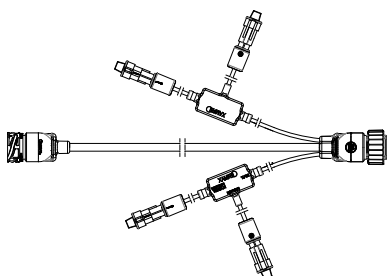
- Optimised design for easy mounting
- Ideal for the lean high-volume solution



Product information in the cable section

SIMAC as adapter in the main cable

- Allows mounting of side cables from front to back
- Recommendable when a LED control box is used in the cable system



Product information in the cable section

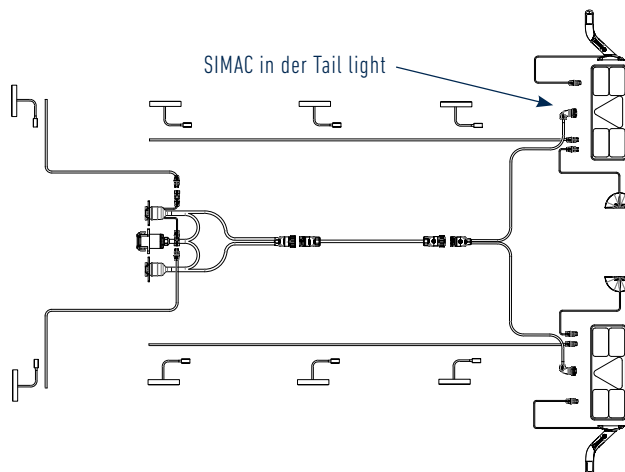
SIMAC in der tail light integrated

- The easy and ideal solution without external modules
- No further parts or components needed



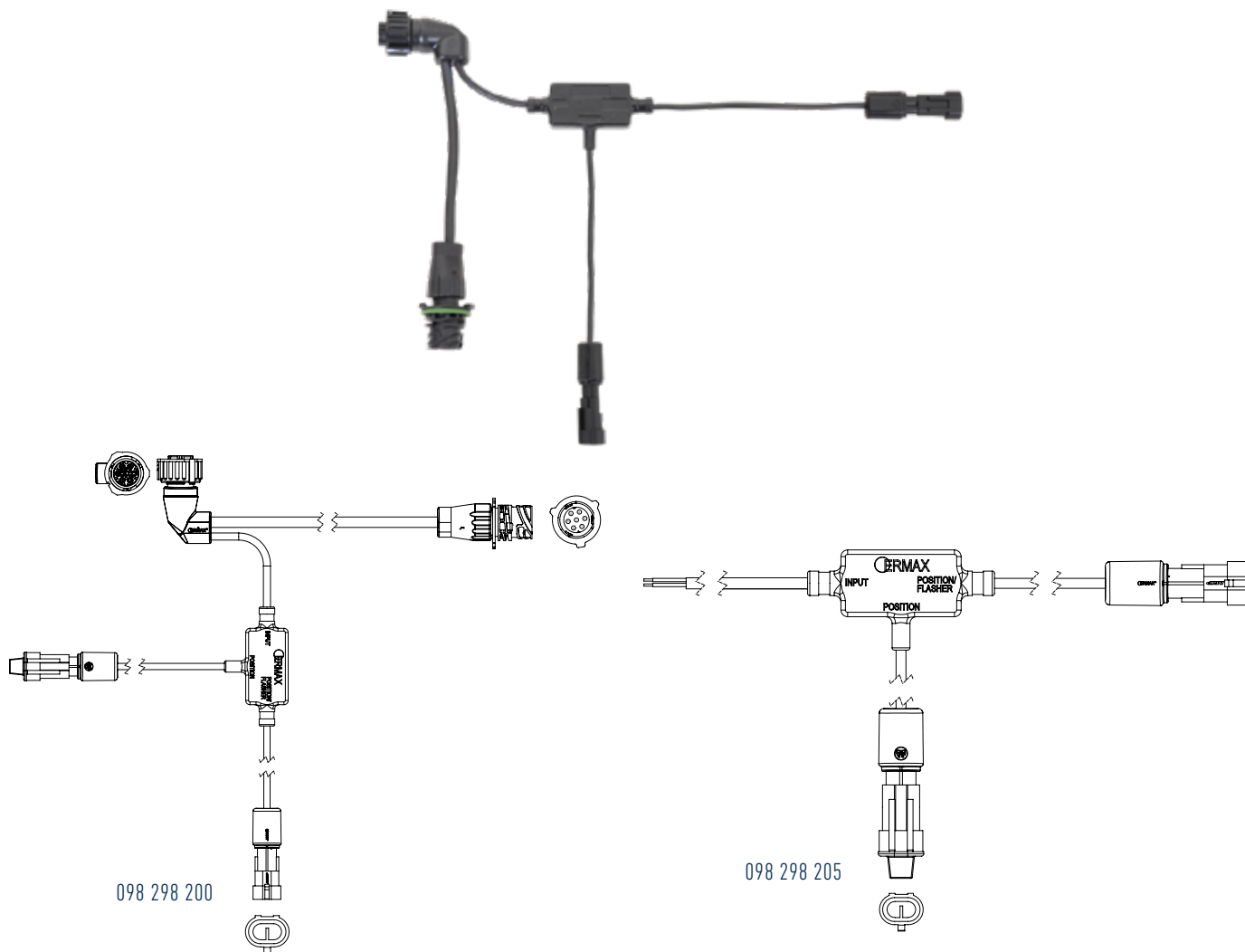
TM10 LED

TM11 LED



Product information in the TM10 tail light section

SIMAC - Side marker control unit



Controlling the side marker lights. By activating the direction indicator, the side marker light will flash simultaneously. To be connected between rear cable and tail light. With connections for outer end marker light (permanent position light) and for side marker chain. One unit for each side is required.

IP Rating	Inlet	Outlet	Operating Voltage	Article No.
IP67	1x7 poled AMP socket + 1x7 Poled AMP plug	1x Super Seal socket of 200 mm cable for permanent position light 1x Super Seal socket of 200 mm cable for side marker chain.	12/24V	098 298 200 92.0000.6918
IP67	3 core Open end cable Ground: White Position: Green Dir. indicator: Yellow	1x Super Seal socket of 200mm cable for permanent position light 1x Super Seal socket of 200mm cable for side marker chain.	12/24V	098 298 205 92.0000.6919

CABLES



Front cable



Application/ Description

Article No.

Front cable with 15 poled socket, straight

ISO Standard: 12098

With Ermax bayonet plug

Conductor cross-section: $12 \times 1 \text{ mm}^2 + 3 \times 2,5 \text{ mm}^2$

Cable type: FLRY / PVC

15 core cable 600 mm
socket, straight

15 core cable 6000 mm
socket, straight

15 core cable 13.000 mm
socket, straight

15 core cable 15.000 mm
socket, straight

194 006 500

92.0000.0002

194 060 500

92.0000.6165

194 130 500

92.0000.1699

194 150 500

92.0000.7483



Front cable with 15 poled socket, angled

15 core cable 7.500 mm
socket, angled

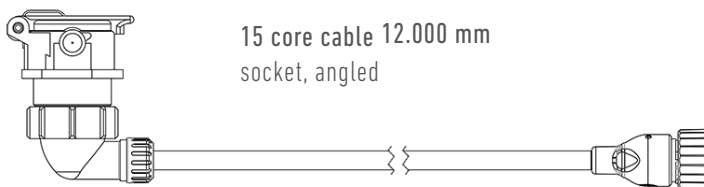
15 core cable 12.000 mm
socket, angled

194 075 500

92.0000.5922

194 120 500

92.0000.6252



SIMAC Friendly

Front cable with 15 poled socket, straight

2x2 core outlet with Super Seal socket ISO 12098 pin

5 position left + pin 6 position right

ISO Standard: 12098

Conductor cross-section: $12 \times 1 \text{ mm}^2 + 3 \times 2,5 \text{ mm}^2$

With Ermax bayonet plug

Cable type: FLRY / PVC

15 core cable 600 mm
socket, straight

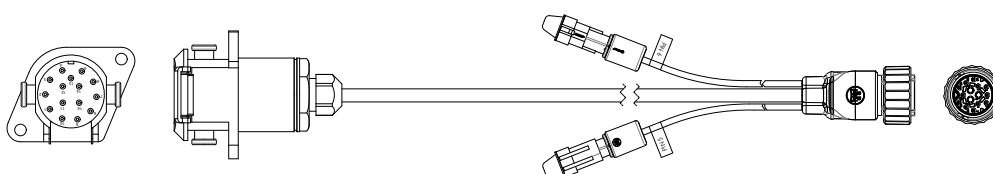
15 core cable 7000 mm
socket, straight

194 006 501

92.0000.1696

194 070 501

92.0000.xxxx



Front cable



Application/ Description

Article No.

Front cable with 15 poled plug, straight

ISO Standard: 12098

With Ermax bayonet plug

Conductor cross-section: $7 \times 1 \text{ mm}^2 + 2 \times 2,5 \text{ mm}^2$

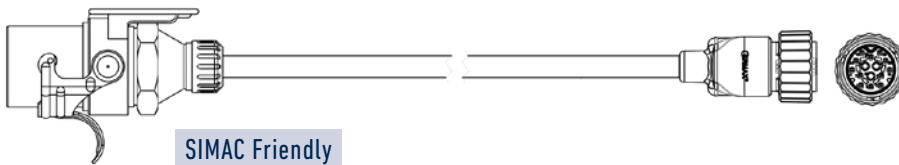
Cable type: FLRY / PVC

9 core cable 1.000 mm

Pin-Nr. 9 connected to pin 12 (ISO 12098 Aux 3)

9 core cable 4.800 mm

Pin-Nr. 9 connected to pin 12 (ISO 12098 Aux 3)



SIMAC Friendly

This front cable is SIMAC Friendly in connection with adapter 394 003 504

294 010 100

92.0000.6170

294 048 100

92.0000.0029

Front cable with 15 poled plug, straight

ISO Standard: 12098

With Ermax bayonet plug

Conductor cross-section: $12 \times 1 \text{ mm}^2 + 3 \times 2,5 \text{ mm}^2$

Cable type: FLRY / PVC

15 core cable 1.000 mm

15 core cable 4.800 mm

15 core cable 7.000 mm



SIMAC Friendly

2x2 core outlet with Super Seal socket, pin ISO 12098 5 left position + pin 6 right position.

294 010 500

92.0000.7676

294 048 500

92.0000.0025

294 070 500

92.0000.6512

15 core cable 3.500 mm

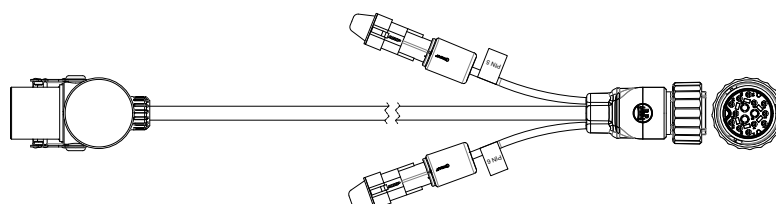
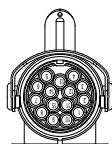
294 035 501

92.0000.6541

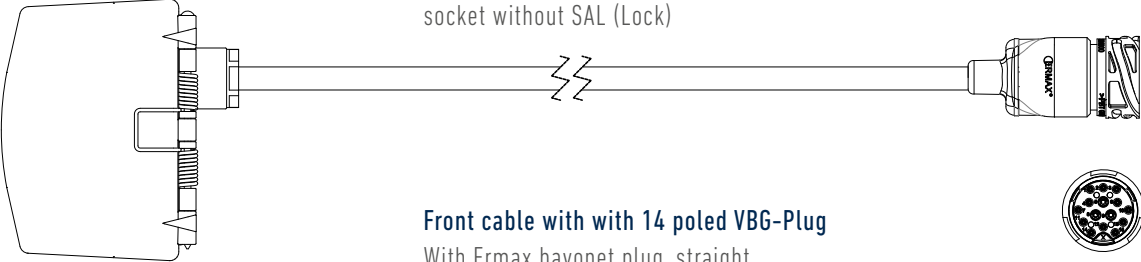
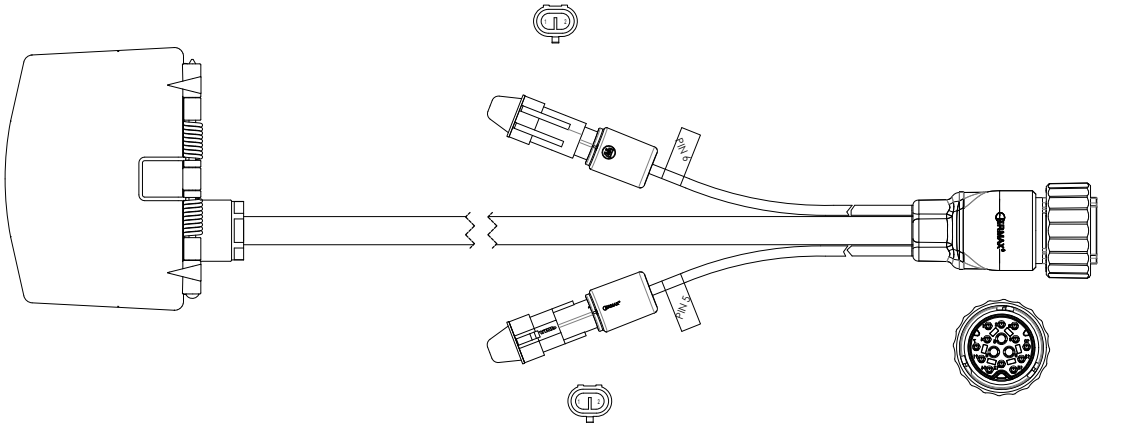
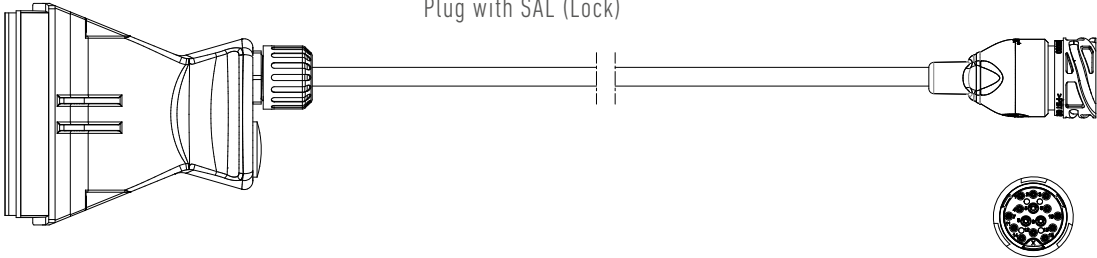
15 core cable 4.800 mm

294 048 501

92.0000.6468



Front cable

	Application/ Description	Article No.
	<p>Front cable with 14 poled VBG-socket With Ermax bayonet plug, straight Conductor cross-section: $12 \times 1 \text{ mm}^2 + 3 \times 2,5 \text{ mm}^2$ Cable type: FLRY / PVC</p> <p>15 core cable 400 mm socket without SAL (Lock)</p>	<p>194 004 490 92.0000.6714</p>
	<p>Front cable with with 14 poled VBG-Plug With Ermax bayonet plug, straight Conductor cross-section: $12 \times 1 \text{ mm}^2 + 3 \times 2,5 \text{ mm}^2$ Cable type: FLRY / PVC</p> <p>15 core cable 4.800 mm Plug with SAL (Lock)</p>	<p>294 048 491 92.0000.6274</p>
	<p>Front cable with 14 poled 15 VBG-plug Ermax bayonet plug, straight Conductor cross section: $12 \times 1 \text{ mm}^2 + 3 \times 2,5 \text{ mm}^2$</p> <p>15 core 4800 mm Plug with SAL (Lock)</p>	<p>294 048 493 92.0000.7732</p>

Front cable

Application/ Description	Article No.
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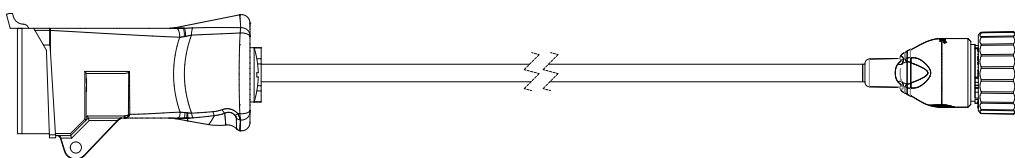
Front cable with 14 poled VBG-plug

With Ermax bayonet plug, straight
 Conductor cross-section: 12x1 mm² + 3x2,5 mm²
 Cable type: FLRYY / PVC

SIMAC Friendly

15 core cable 4.800 mm
 Plug with SAL (Lock)

294 048 491
 92.0000.6274

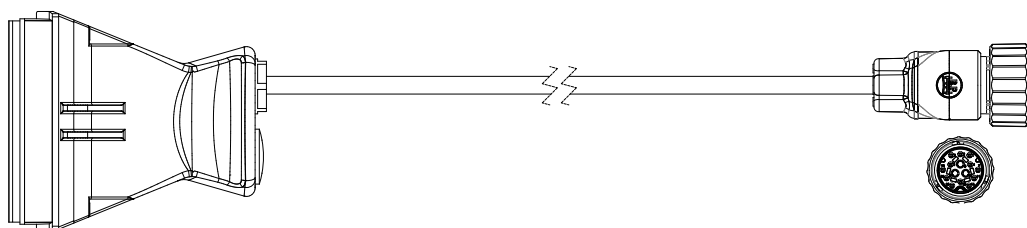


Front cable with with 14 poled VBG-Plug

With Ermax bayonet plug, straight
 Conductor cross-section: 12x1 mm² + 3x2,5 mm²
 Cable type: FLRYY / PVC

15 core cable 4.800 mm
 Plug with SAL (Lock)

294 048 493
 92.0000.7732



Front cable

Application/ Description

Article No.

Front cable with 2x7 poled socket, straight

ISO Standard: 1185 + 3731

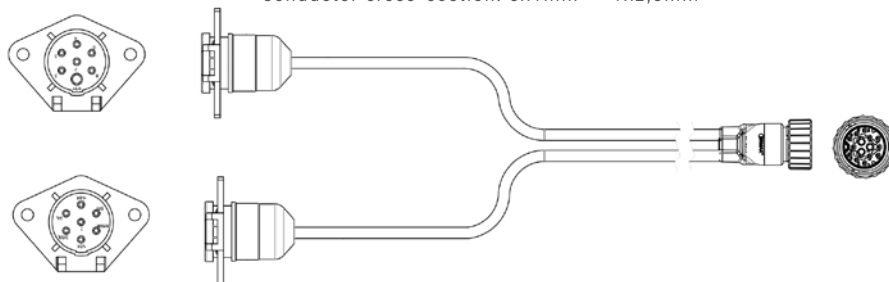
With Ermax bayonet plug

Cable type: FLRYY / PVC

Pin-Nr.11 in Ermax bayonet plug not connected
(Aux 1 / brake wear sensor)

14 core (2x7 core) cable 600 mm

Conductor cross-section: $6 \times 1 \text{mm}^2 + 1 \times 2,5 \text{mm}^2$



194 006 430

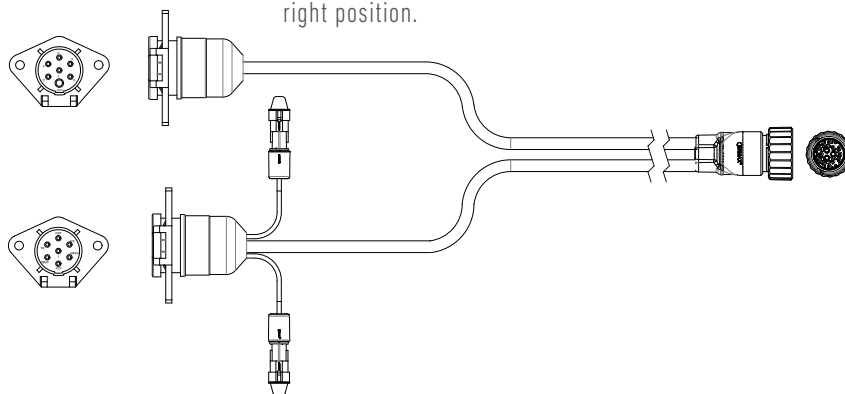
92.0000.1695

SIMAC Friendly

14 core (2x7 core) cable 600 mm

Conductor cross-section: $6 \times 1 \text{mm}^2 + 1 \times 2,5 \text{mm}^2$

2x2 core outlet with Super Seal socket, ISO 12098 pin 5 left position + pin 8 right position.



194 006 433

92.0000.5376

Front cable with 2x7 poled socket, straight

ISO Standard: 1185 + 3731

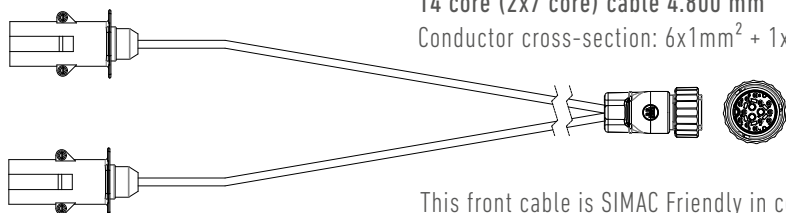
With Ermax bayonet plug

Cable type: FLRYY / PVC

Pin-Nr.11 in Ermax bayonet plug not connected
(Aux 1 / brake wear sensor)

14 core (2x7 core) cable 4.800 mm

Conductor cross-section: $6 \times 1 \text{mm}^2 + 1 \times 2,5 \text{mm}^2$



SIMAC Friendly

This front cable is SIMAC Friendly in connection with adapter 394 003 504

294 048 430

92.0000.1700

Front cable

Application/ Description

Article No.

Front cable with 15+2x7 poled socket, straight

ISO Standard: 12098 + 1185 + 3731

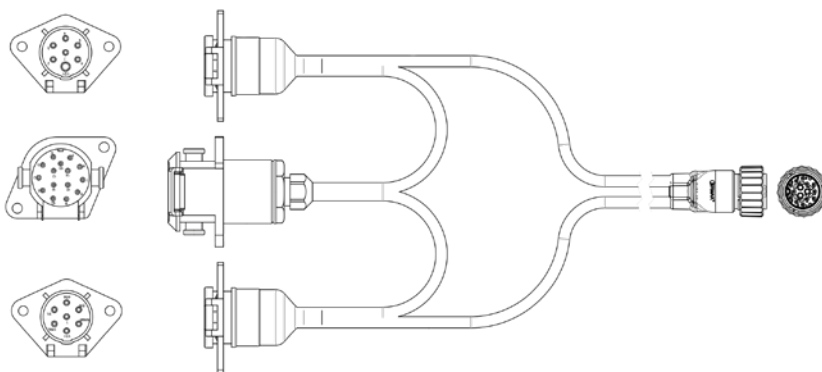
With Ermax bayonet plug

Cable type: FLRY / PVC

Pin-Nr.11 in Ermax bayonet plug not connected

14 core (2x7 core) cable 600 mm

Conductor cross-section: 6x1mm² + 1x2,5mm²



194 006 410

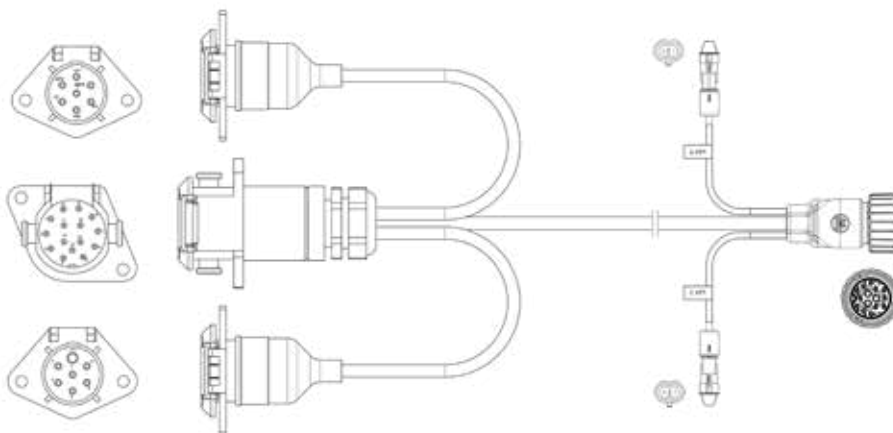
92.0000.0033

SIMAC Friendly

15 core + 2x7 core cable - 600 mm

Conductor cross-section: 12x1 mm²+3x2,5 mm²

With 2x2 poled outlet with Super Seal socket pin 5+6 LH+RH position



194 006 511

92.0000.7953

Front cable

Application/ Description	Article No.
--------------------------	-------------

Frontbox with 15+2x7 poled socket, straight

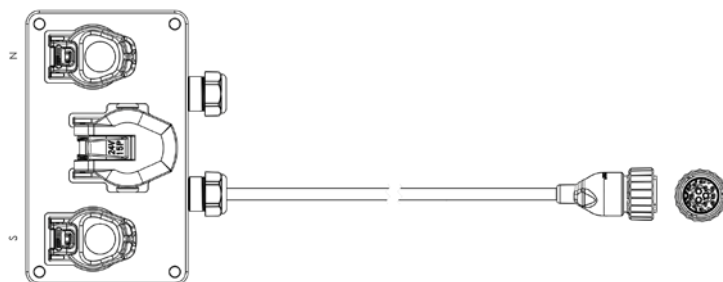
ISO Standard: 12098 + 1185 + 3731

With Ermax bayonet plug

Cable type: FLRY / PVC

15 core cable 600 mm

Conductor cross-section: $12 \times 1 \text{ mm}^2 + 3 \times 2,5 \text{ mm}^2$



194 006 570

92.0000.1697

SIMAC Friendly

Frontbox with 15+2x7 poled socket

2x2 core outlet with Super Seal socket, ISO 12098

pin 5 left position + pin 6 right position.

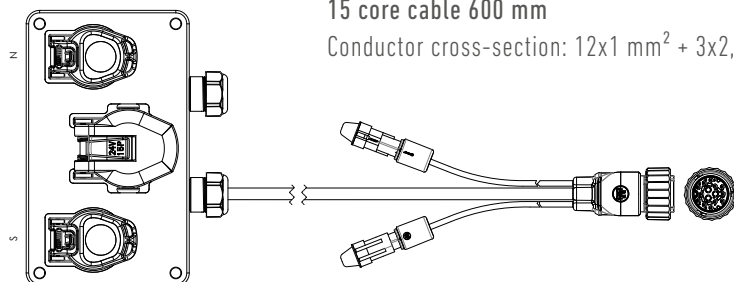
ISO Standard: 12098 + 1185 + 3731

With Ermax bayonet plug

Cable type: FLRY / PVC

15 core cable 600 mm

Conductor cross-section: $12 \times 1 \text{ mm}^2 + 3 \times 2,5 \text{ mm}^2, 2 \times 1 \text{ mm}^2$



194 006 571

92.0000.1698

Spare parts / Accessories



Pos. 1



Pos. 2

Rubber grommet for front screw connection in frontbox. Suitable for 099865050, 194006570 and 194006571	1	099 110 230 92.0000.7046
Rubber grommet for front screw connection in frontbox. Suitable for 099865050, 194006570 and 194006571	2	099 110 231 92.0000.7047

Main cable



Application/ Description

Article No.

Main cable

Ermac bayonet plug > socket
 Conductor cross-section: 8x1 mm²+1x2,5 mm²
 Cable type: FLRY / PVC
 Pin-Nr. 9 connected to pin 12 (ISO 12098 Aux 3)

9 core 4.000 mm

9 core 6.000 mm

9 core 7.000 mm

9 core 9.000 mm

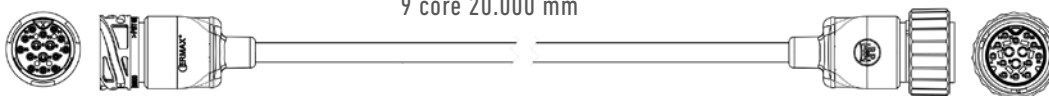
9 core 10.000 mm

9 core 13.000 mm

9 core 15.000 mm

9 core 17.000 mm

9 core 20.000 mm



394 040 100
92.0000.5382

394 060 100
92.0000.1704

394 070 100
92.0000.1708

394 090 100
92.0000.1709

394 100 100
92.0000.5385

394 130 100
92.0000.0031

394 150 100
92.0000.1721

394 170 100
92.0000.6986

394 200 100
92.0000.5914

Main cable

Ermac bayonet plug > socket
 Conductor cross-section: 12x1 mm²+3x2,5 mm²
 Cable type: FLRY / PVC

15 core 2.000 mm

15 core 7.000 mm

15 core 8.000 mm

15 core 9.000 mm

15 core 11.000 mm

15 core 13.000 mm

15 core 15.000 mm



394 020 500
92.0000.6236

394 070 500
92.0000.6236

394 080 500
92.0000.6513

394 090 500
92.0000.0021

394 110 500
92.0000.6045

394 130 500
92.0000.0000

394 150 500
92.0000.0034

Main cable



Application/ Description

Article No.

Main cable

Ermac bayonet plug > socket

Conductor cross-section: 8x1 mm²+1x2,5 mm² / 2x1 mm²

Cable type: FLRYY / PVC

9. core is connected to pin 12 (ISO 12098 Aux 3)

2x2 poled outlet with Super Seal socket (ISO 12098 Pin 7 stop / Pin 12 lift axle Aux 3)

9 core 9.000 mm 2x2 poled Aux. Pin 7+12 rear

394 090 101

92.0000.1710

9 core 13.000 mm 2x2 poled Aux. Pin 7+12 rear

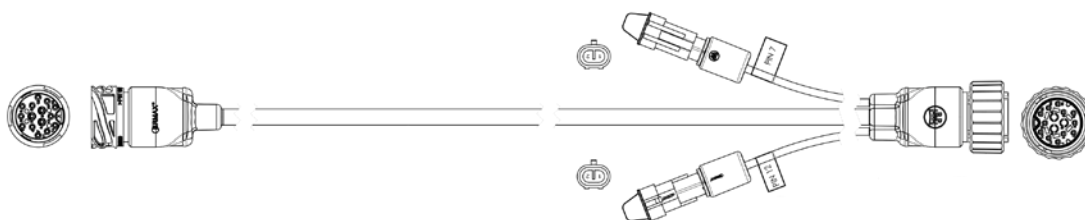
394 130 101

92.0000.1715

9 core 15.000 mm 2x2 poled Aux. Pin 7+12 rear

394 150 101

92.0000.1722



Main cable

Ermac bayonet plug > socket

Conductor cross-section: 8x1 mm²+1x2,5 mm² / 2x1 mm²

Cable type: FLRYY / PVC

9. core is connected to pin 12 (ISO 12098 Aux 3)

2x2 poled outlet with Super Seal socket (ISO 12098 Pin 8 reverse light / Pin 12 lift axle Aux 3)

9 core 6.000 mm 2x2 poled Aux. Pin 8+12 rear

394 060 102

92.0000.5384

9 core 9.000 mm 2x2 poled Aux. Pin 8+12 rear

394 090 102

92.0000.1711

9 core 13.000 mm 2x2 poled Aux. Pin 8+12 rear

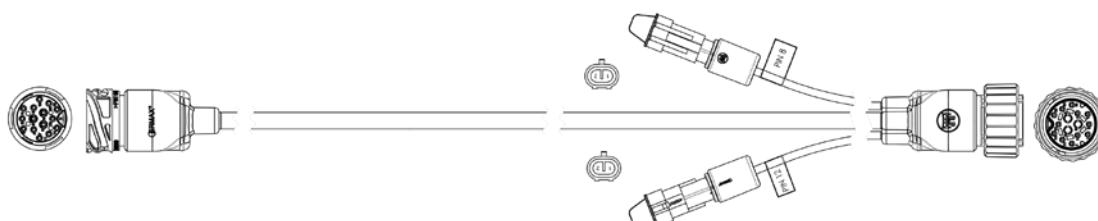
394 130 102

92.0000.1716

9 core 15.000 mm 2x2 poled Aux. Pin 8+12 rear

394 150 102

92.0000.1723



Main cable



Application/ Description

Article No.

Main cable

Ermac bayonet plug > socket

Conductor cross-section: $8 \times 1 \text{ mm}^2 + 1 \times 2,5 \text{ mm}^2 / 2 \times 1 \text{ mm}^2$

Cable type: FLRY / PVC

2x2 poled outlet with Super Seal socket (ISO 12098 pin 8 reverse light / pin 9 permanent positive)

9 core 9.000 mm 2x2 poled Aux. pin 8+9 rear

394 090 105

92.0000.1712

9 core 13.000 mm 2x2 poled Aux. pin 8+9 rear

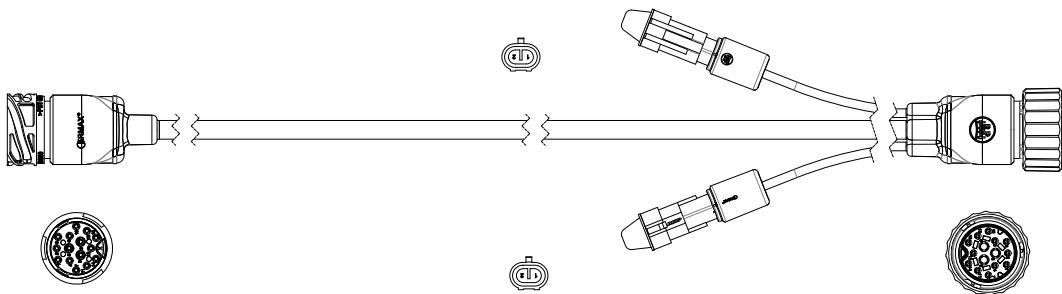
394 130 105

92.0000.1717

9 core 15.000 mm 2x2 poled Aux. pin 8+9 rear

394 150 105

92.0000.1724



Main cable

Ermac bayonet plug > socket

Conductor cross-section: $8 \times 1 \text{ mm}^2 + 1 \times 2,5 \text{ mm}^2$ and $6 \times 1 \text{ mm}^2 + 1 \times 2,5 \text{ mm}^2$

Cable type: FLRY / PVC

with 7 core outlet and 7 poled AMP 1.5 plug

9 core 300 mm

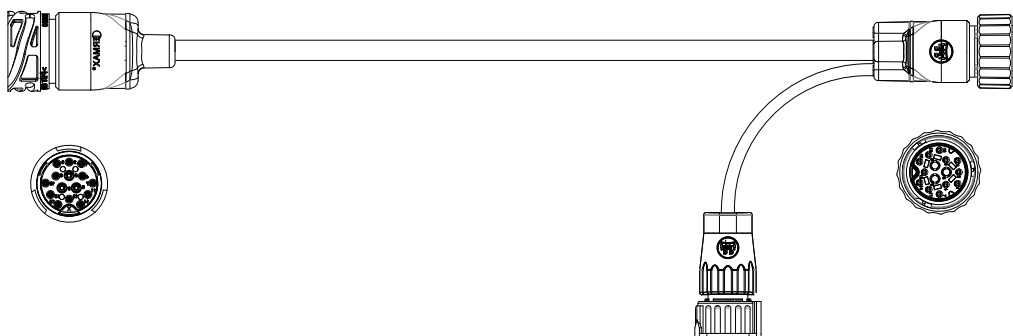
394 003 107

92.0000.9171

9 core 6.000 mm

394 060 107

92.0000.6883



Main cable



Application/ Description

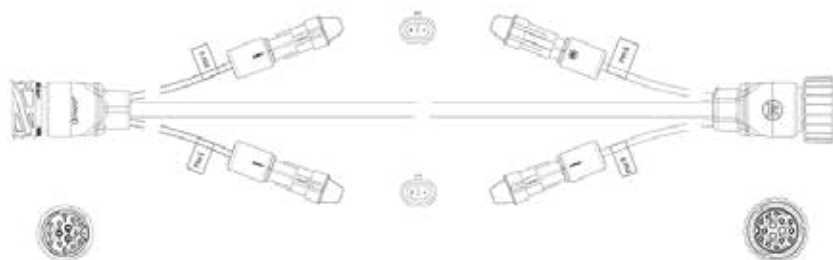
Article No.

Main cable

4x2 poled Aux with Super Seal socket (ISO 12098 pin 8 reverse light / pin 9 permanent positive, pin 5 left position / 6 right position)
 Ermax bayonet plug > socket
 Cable type: FLRYY / PVC

9 core 9.000 mm

Conductor cross-section: $8 \times 1 \text{ mm}^2 + 1 \times 2,5 \text{ mm}^2 + 2 \times 1 \text{ mm}^2$



394 090 115

92.0000.5360

Main cable / Intermediate / Adapter

Ermax bayonet plug > socket
 Conductor cross-section: $12 \times 1 \text{ mm}^2 + 3 \times 2,5 \text{ mm}^2 / 2 \times 1 \text{ mm}^2$
 Cable type: FLRYY / PVC
 Pin-Nr. 9 connected to pin 12 (ISO 12098 Aux 3)
 2x2 poled outlet with Super Seal socket (ISO 12098)

15 core 300 mm 2x2 poled Aux. Pin 7+12 rear
 Pin 7 stop / Pin 12 lift axle Aux 3)

394 003 501

92.0000.1701

15 core 300 mm 2x2 poled Aux. Pin 8+12 rear
 Pin 8 reverse light / Pin 12 lift axle Aux 3)

394 003 502

92.0000.1702

15 core 300 mm 2x2 poled Aux. Pin 8+9 rear
 Pin 8 reverse light / Pin 9 permanent positive

394 003 505

92.0000.6087

15 core 300 mm 2x2 poled Pin 5+6 (Position R/L)
 Pin 5 position left / Pin 6 position right

394 003 504

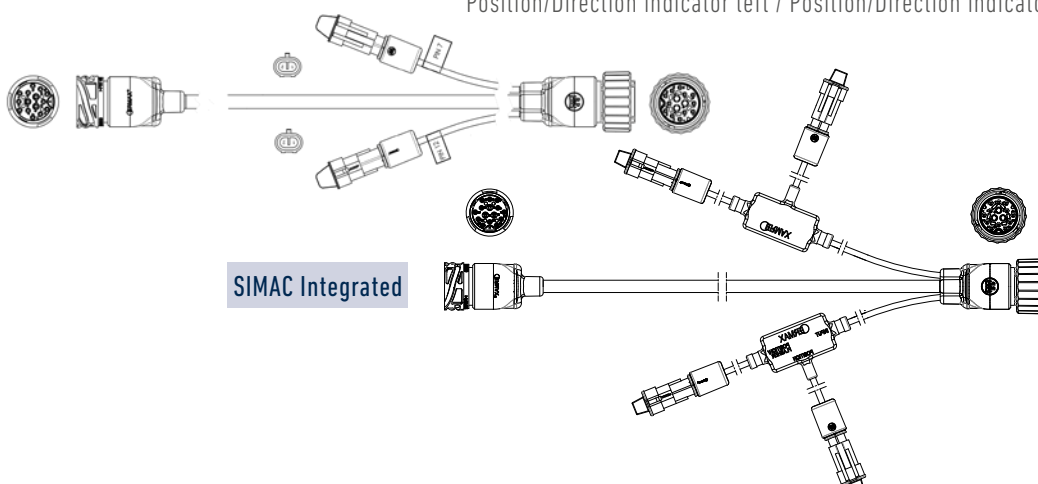
92.0000.7042

SIMAC Integrated

15 core 300 mm 2xSIMAC (Position R/L)
 Pin 5 position left / Pin 6 position right
 Position/Direction indicator left / Position/Direction indicator right

394 003 506

92.0000.7481



Main cable



Application/ Description

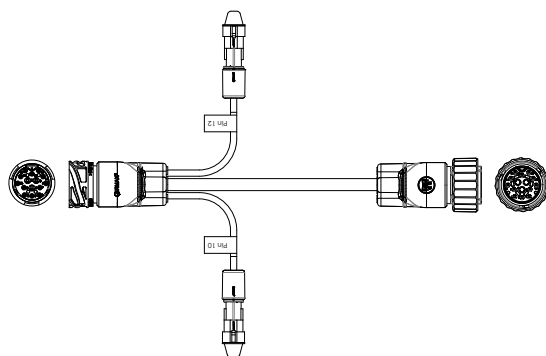
Article No.

Main cable (Adapter)

Ermac bayonet plug > socket
 2x2 poled outlet with Super Seal socket (ISO 12098 Pin 10 brake-wear sensor / Pin 12 lift axle Aux 3)
 2x2 poled Aux. pin 10+12 rear
 Cable type: FLRY Y / PVC

15 core 300 mm

Conductor cross-section: $12 \times 1 \text{ mm}^2 + 3 \times 2,5 \text{ mm}^2 / 2 \times 1 \text{ mm}^2$



394 003 530

92.0000.5359

Main cable (Adapter) 15 core 300 mm

Ermac bayonet plug > socket
 Conductor cross-section : $12 \times 1,0 \text{ mm}^2 + 3 \times 2,5 \text{ mm}^2 / 2 \times 1,0 \text{ mm}^2$
 Cable type : FLRY Y / PVC

15 core 300 mm 4x2 poled outlet with Super Seal socket

ISO12098 Pin 9, Pin 10, Pin 11, Pin 12

Front : AUX2 and AUX3

Rear : AUX1 and permanent positive 24V

394 003 526

92.0000.6086

15 core 300 mm 4x2 poled outlet with Super Seal socket

ISO12098 Pin 7, Pin 8, Pin 10, Pin 12

Front : AUX1 and AUX3

Rear : Stop- and reverse light

394 003 533

92.0000.6086

15 core 2000 mm 4x2 poled outlet with Super Seal socket

ISO12098 Pin 7, Pin 8, Pin 10, Pin 12

Front : AUX1 and AUX3

Rear : 7 stop light + 8 reversing light

394 020 533

92.0000.6687

15 core 300 mm 4x2 poled outlet with Super Seal socket

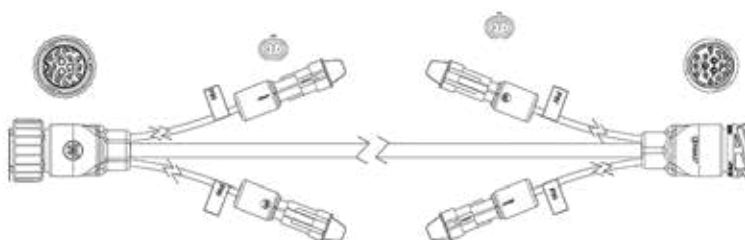
ISO12098 Pin 9, Pin10, Pin 11, Pin 12, Pin14, Pin 15

Front : permanent positive and AUX3

Rear : AUX1, AUX2 and CAN H, CAN L

394 003 534

92.0000.7005



Main cable



Application/ Description

Article No.

Main cable (Adapter)

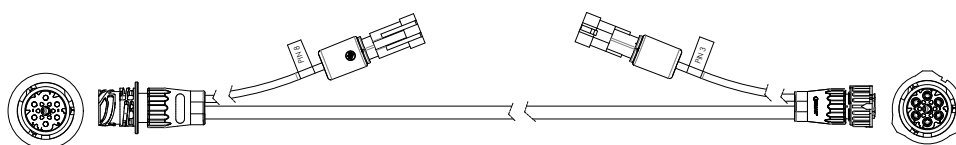
AMP 1,5 Plug > socket

2x2 poled outlet with Super Seal socket (ISO 12098 pin 8 reverse light / pin 3 rear fog light)

Cable type: FLRY / PVC

7 core 300 mm 2x2 poled aux. pin 8+3

Conductor cross-section: $6 \times 1 \text{ mm}^2 + 1 \times 2,5 \text{ mm}^2 / 2 \times 1 \text{ mm}^2$



394 003 001

92.0000.5358

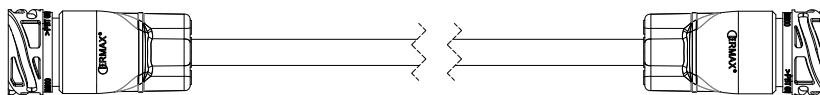
Main cable (Adapter)

Ermac bayonet socket > socket

Cable type: FLRY / PVC

15 core 300 mm

Conductor cross-section: $12 \times 1 \text{ mm}^2 + 3 \times 2,5 \text{ mm}^2$



394 003 560

92.0000.5359

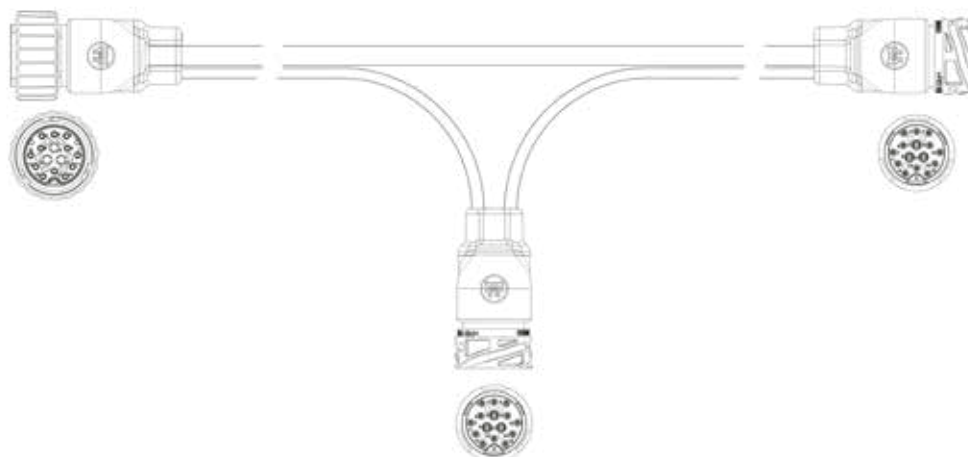
Main cable (Adapter)

Ermac bayonet socket > socket

Cable type: FLRY / PVC

15 core 300 mm

Conductor cross-section: $8 \times 1,0 \text{ mm}^2 + 1 \times 2,5 \text{ mm}^2 + 7 \times 1,0 \text{ mm}^2$



394 003 160

92.0000.7816

Main cable



Application/ Description

Article No.

Main cable, Open end

Ermax bayonet socket > Open end with blade receptacles 6,3x0,8 mm

Conductor cross-section: 12x1 mm² + 3x2,5 mm²

Cable type: FLRY Y / PVC

For mounting in junction box

15 core 500 mm

394 005 551

92.0000.0032

15 core 6.000 mm

394 060 551

92.0000.1705

15 core 9.000 mm

394 090 551

92.0000.0030

15 core 13.000 mm

394 150 551

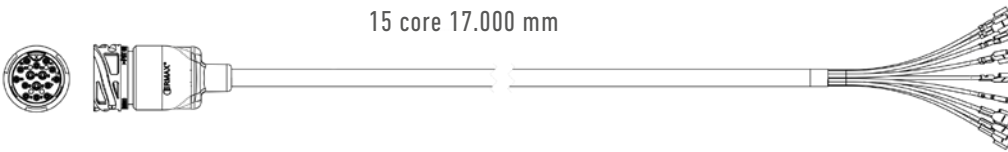
92.0000.1725

15 core 15.000 mm

15 core 17.000 mm

394 170 551

92.0000.7272

**Main cable, Open end (Front cable)**

Open end with blade receptacles 6,3x0,8 mm > Ermax bayonet plug

Conductor cross-section: 12x1 mm² + 3x2,5 mm²

Cable type: FLRY Y / PVC

For mounting front box / plug

15 core 600 mm

394 006 571
92.0000.1703

15 core 6.000 mm

394 060 571
92.0000.1706

15 core 9.000 mm

394 090 571
92.0000.1713

15 core 13.000 mm

394 130 571
92.0000.1719

15 core 15.000 mm

394 150 571
92.0000.1726

Rear cable



Application/ Description

Article No.

Rear cable

Ermac bayonet socket > 2xAMP-1.5-plug, angled

Cable type: FLRY / PVC

2x6 core 2.500 mm

Conductor cross-section: 6x1 mm²

2x6 core 2.500 mm

With 2x2 poled outlet for side marker light

Conductor cross-section: 6x1 mm² / 2x1 mm²

SIMAC Integrated

2x6 core 2.500 mm

With SIMAC-Function integrated and 4x2 poled outlet for position light

494 025 600

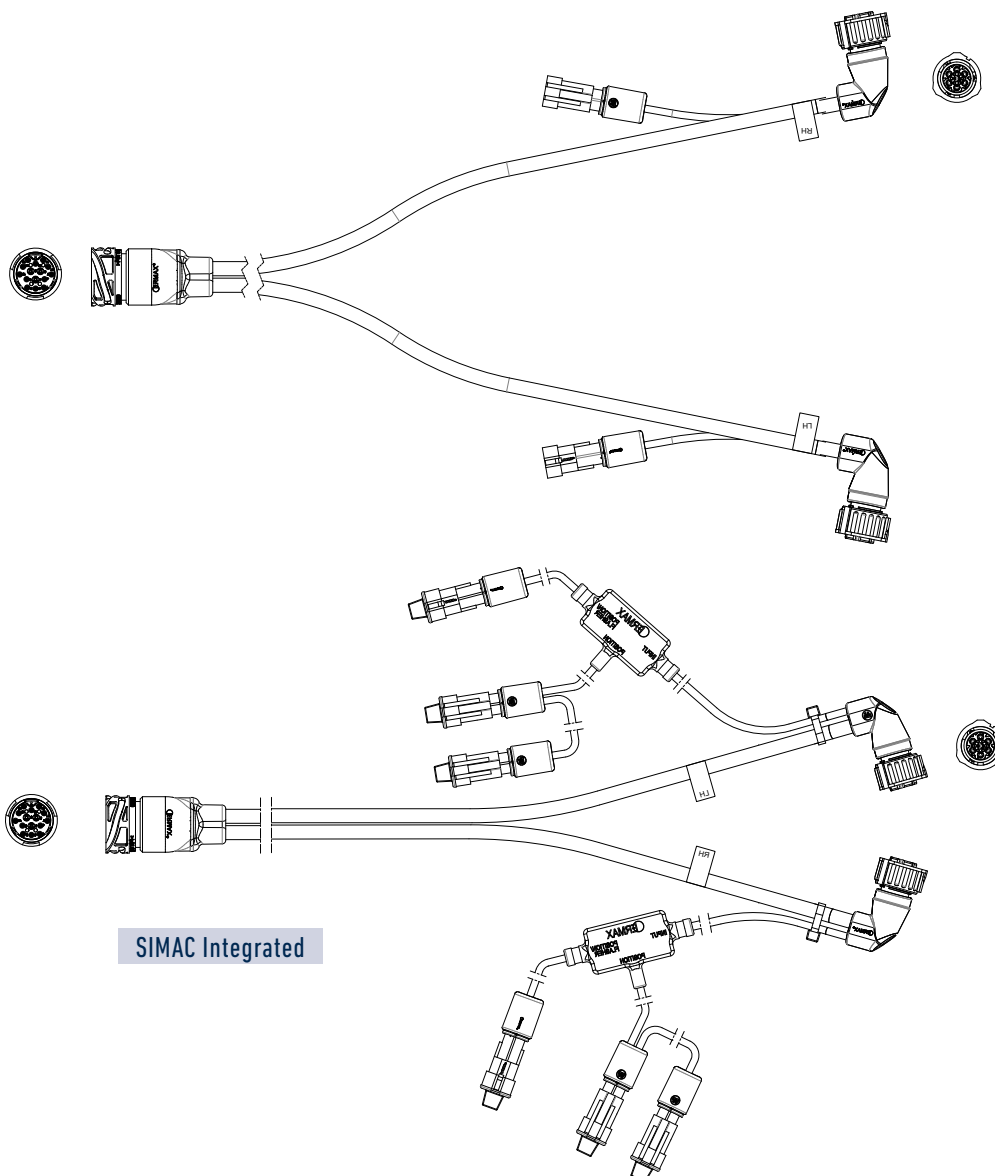
92.0000.1737

494 025 601

92.0000.1738

494 025 651

92.0000.7403



Rear cable



Application/ Description

Article No.

Rear cable

Ermac bayonet socket > 2xAMP 1.5 plug, straight

Cable type: FLRY Y / PVC

2x6 core 2.500 mm

Conductor cross-section: 6x1 mm²

494 025 602

92.0000.1739

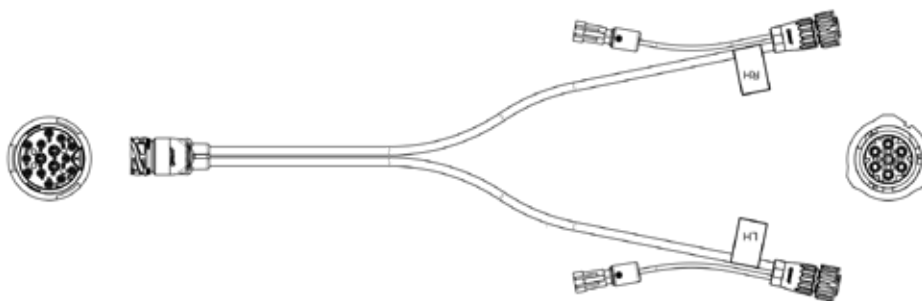
2x6 core 2.500 mm

With 2x2 poled outlet with Super Seal socket for side marker light

Conductor cross-section: 6x1 mm² / 2x1 mm²

494 025 603

92.0000.1740



Rear cable, chain

Ermac bayonet socket > 2x2 AMP 1.5 plug, angled

Conductor cross-section: 6x1 mm² / 2x1 mm²

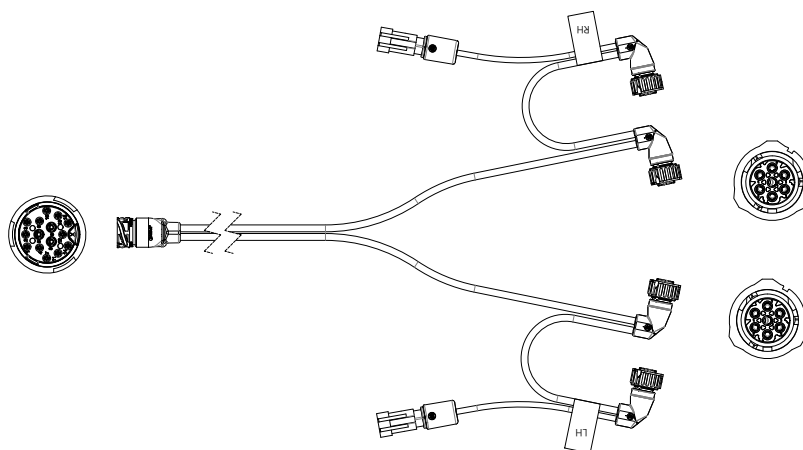
Cable type: FLRY Y / PVC

2x6 core 2.500 mm

With 2x2 poled outlet with Super Seal socket for side marker light

494 025 604

92.0000.1741



Rear cable



Application/ Description

Article No.

Rear cable

Ermax bayonet socket > 2x1 AMP 1.5 plug, angled

Conductor cross-section: 6x1 mm² / 2x0,5 mm²

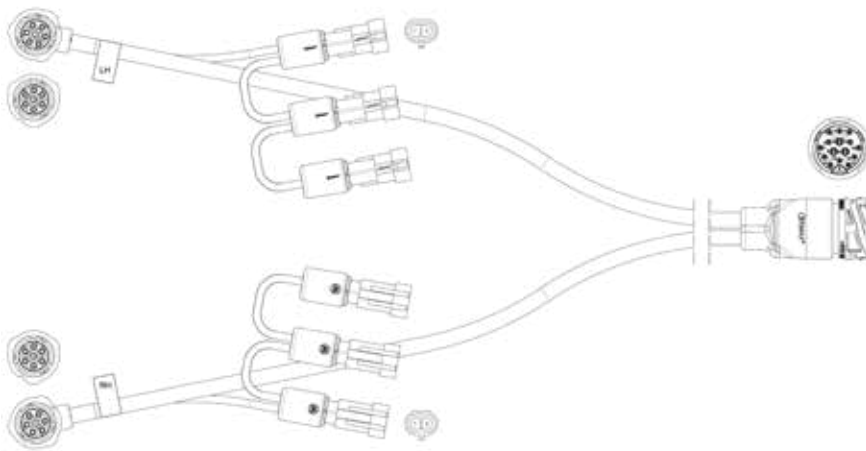
Cable type: FLRY / PVC

2x6 core 2.500 mm

With 2x3 pcs 2-poled outlet with Super Seal socket for side marker light

494 025 607

92.0000.7710



Rear cable

Application/ Description	Article No.
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Rear cable, chain

Ermac bayonet socket > 2x3 AMP 1.5 plug, angled

Conductor cross-section: 6x1 mm² / 2x1 mm²

Cable type: FLRYY / PVC

2x6 core 2.500 mm

With 2x2 poled outlet with Super Seal socket for side marker light

SIMAC Integrated

2x6 core 2.500 mm

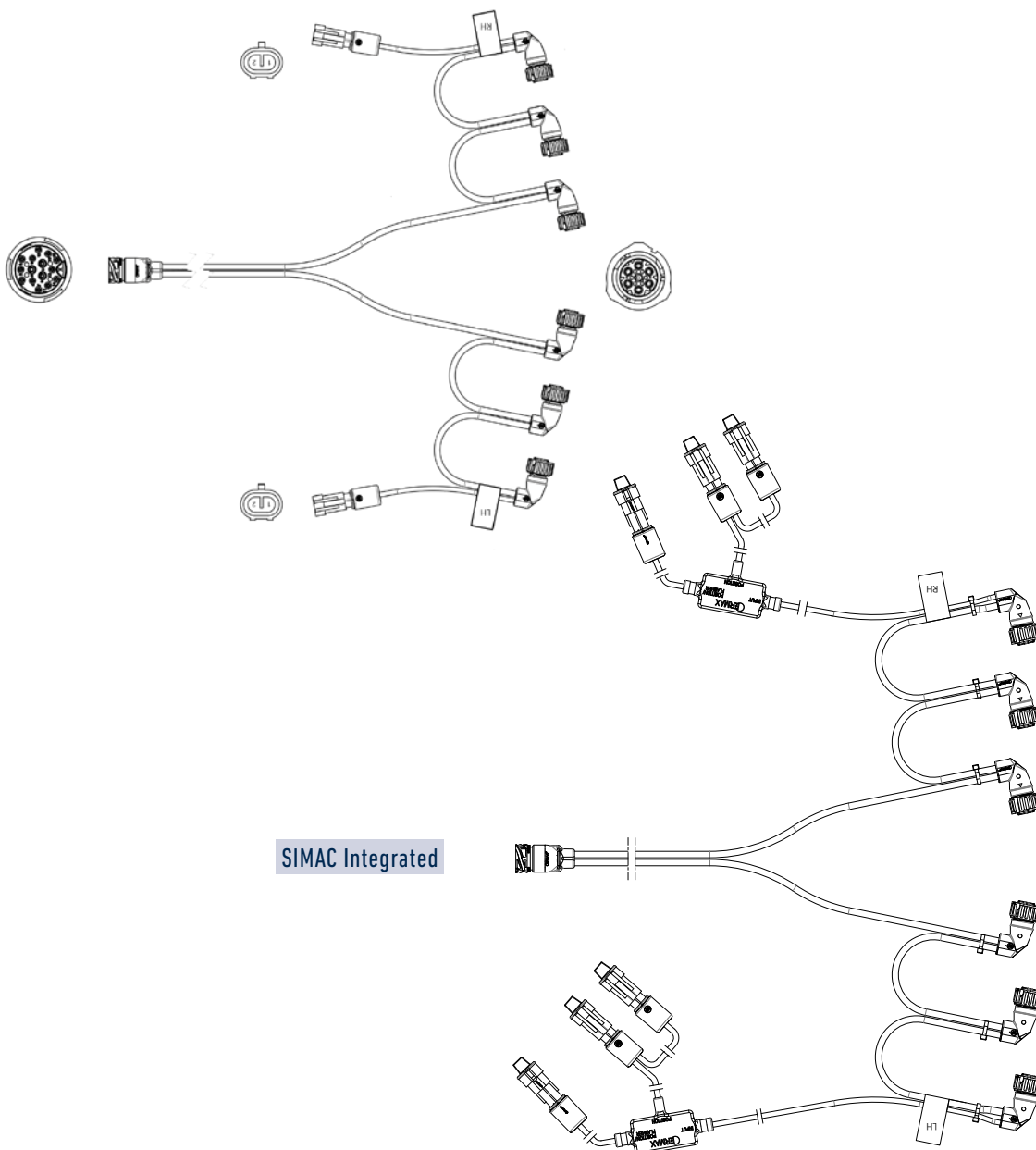
With SIMAC-Function integrated and 4x2 poled outlet for position light

494 025 606

92.0000.1016

494 025 656

92.0000.7404



Rear cable



Application/ Description

Article No.

Rear cable, chain

Ermax bayonet socket > 2x4 AMP 1.5 plug, angled

Conductor cross-section: 6x1 mm² / 2x1 mm²

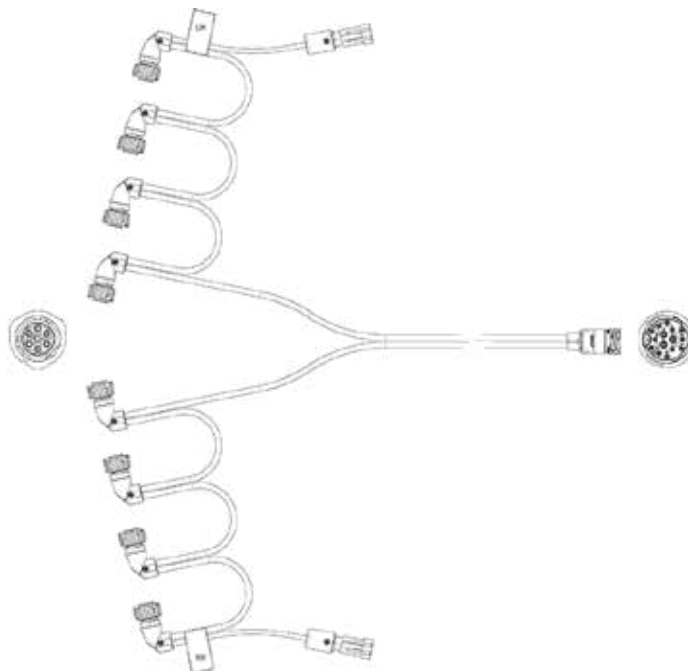
Cable type: FLRYY / PVC

2x6 core 2.900 mm

With 2x2 poled outlet with Super Seal socket for side marker light

494 029 608

92.0000.6340



Rear cable



Application/ Description

Article No.

Rear cable, single

AMP-1.5 plug, straight > AMP-1.5 plug, angled

Cable type: FLRY Y / PVC

For mounting in Ermax junction box

6 core 1.500 mm

Conductor cross-section: 6x1 mm²

494 015 610

92.0000.5386

6 core 2.000 mm

Conductor cross-section: 6x1 mm²

494 020 610

92.0000.0038

6 core 2.000 mm

With 2 poled outlet for side marker light

Conductor cross-section: 6x1 mm² / 2x1 mm²

494 020 611

92.0000.1735

6 core 2.500 mm

Conductor cross-section: 6x1 mm²

494 025 610

92.0000.5389

6 core 2.000 mm

With 2 poligem outlet for side marker light

Conductor cross-section: 6x1 mm² / 2x1 mm²

494 025 611

92.0000.5390

6 core 3.000 mm

Conductor cross-section: 6x1 mm²

494 030 610

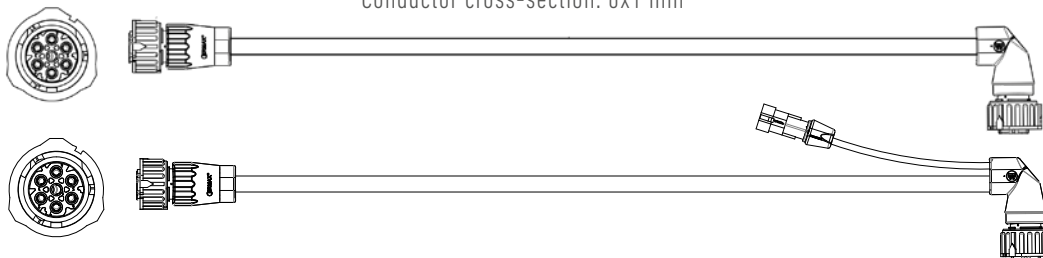
92.0000.1742

6 core 5.000 mm

Conductor cross-section: 6x1 mm²

494 050 610

92.0000.1744



Rear cable, single

AMP 1.5 plug, straight > AMP 1.5 plug, straight

Cable type: FLRY Y / PVC

6 core 5.000 mm

Conductor cross-section: 6x1 mm²

494 050 612

92.0000.1745

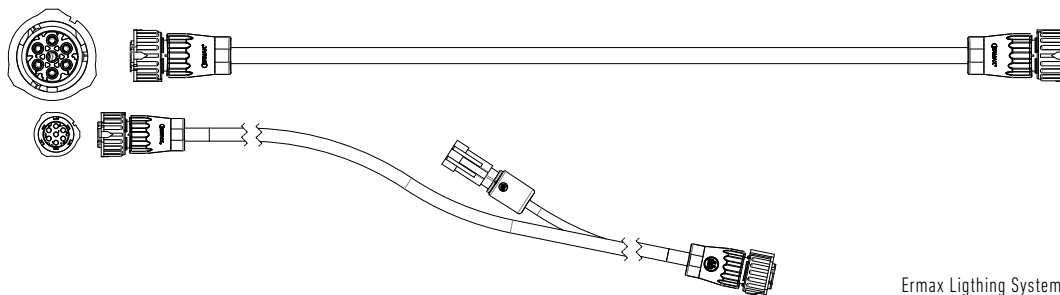
6 core 2.500 mm

With 2 poled outlet with "Super Seal" socket for side marker light

Conductor cross-section: 6x1 mm² / 2x1 mm²

494 025 613

92.0000.5391



Rear cable



Application/ Description

Article No.

Rear cable, single, chain

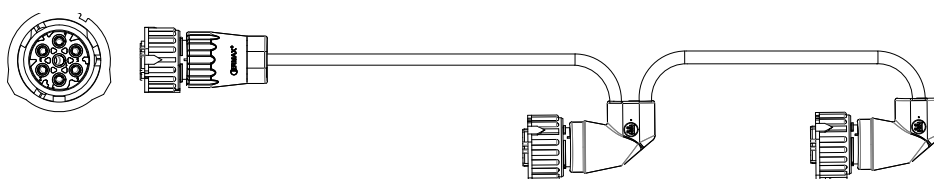
AMP 1,5-socket > 2xAMP-1.5 plug, angled

Cable type: FLRY Y / PVC

For mounting in Ermax junction box

6 core 2.100 mm

Conductor cross-section: 6x1 mm²



494 021 620

92.0000.1736

Rear cable, single, chain

AMP 1,5 plug, straight > 3xAMP-1.5 plug, angled

Cable type: FLRY Y / PVC

For mounting in Ermax junction box

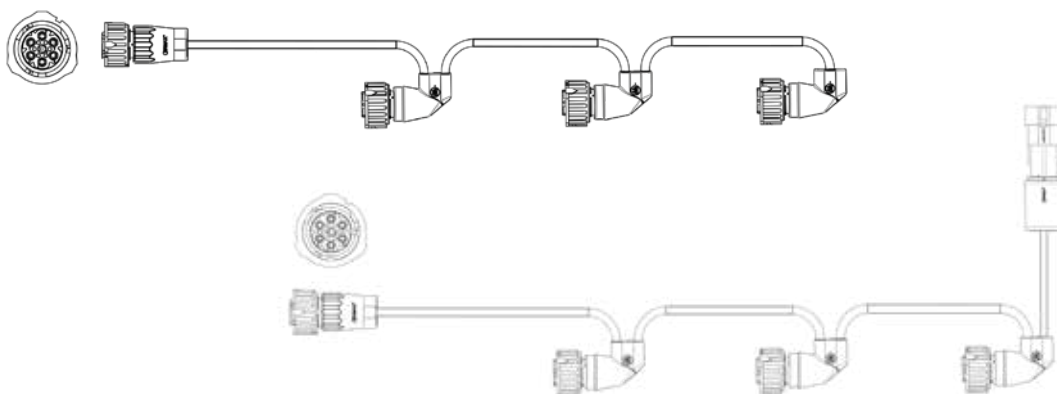
6 core 2.100 mm

Conductor cross-section: 6x1 mm²

6 core 2.100 mm

With 2 poled outlet with Super Seal socket for side marker light

Conductor cross-section: 6x1 mm² / 2x0,5 mm²



494 021 630

92.0000.1012

494 021 631

92.0000.7850

Heckkabel



Anwendung / Beschreibung

Artikel-Nr.

Rear cable, single, chain

AMP 1,5-socket > 4xAMP-1.5 plug, angled

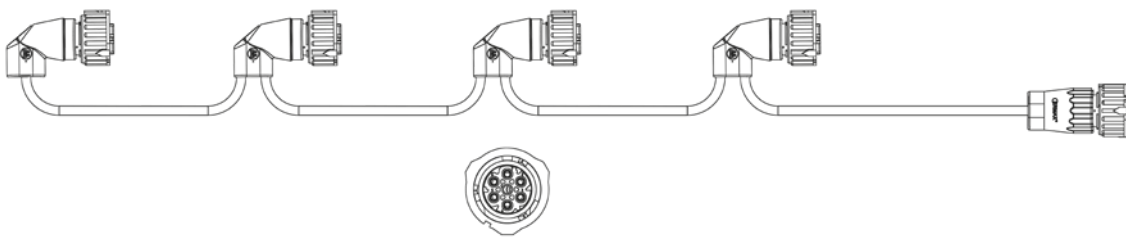
Cable type: FLRYY / PVC

For mounting in Ermax junction box

6 core 3.000 mm

Conductor cross-section: 6x1 mm²**494 030 642**

92.0000.6039

**MARK:** No stop light in plug 2**Rear cable, single, chain**

Open end with blade receptacles 6,3 x 0.8 mm > 3 x AMP 1.5 plug, angled.

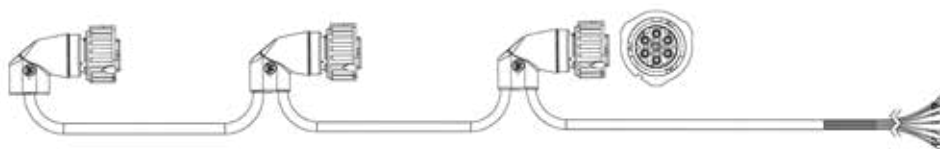
Distance between plugs: 400 mm

Cable type: FLRYY / PVC

6 core 2.100 mm

Conductor cross-section: 6x1 mm²**494 021 657**

92.0000.5892



Rear cable



Application/ Description

Article No.

Rear cable, single, Open end

Open end with blade receptacles 6,3x0,8 mm > AMP 1,5 plug, angled
 Cable type: FLRY / PVC
 For mounting in junction box

6 core 1.800 mm

Conductor cross-section: 6x1 mm²

494 015 651

92.0000.5387

6 core 1.800 mm

Conductor cross-section: 6x1 mm²

494 018 651

92.0000.1731

6 core 1.800 mm

With 2 poled outlet with Super Seal socket for side marker light
 Conductor cross-section: 6x1 mm² / 2x1 mm²

494 018 652

92.0000.1732

6 core 3.000 mm

Conductor cross-section: 6x1 mm²

494 030 651

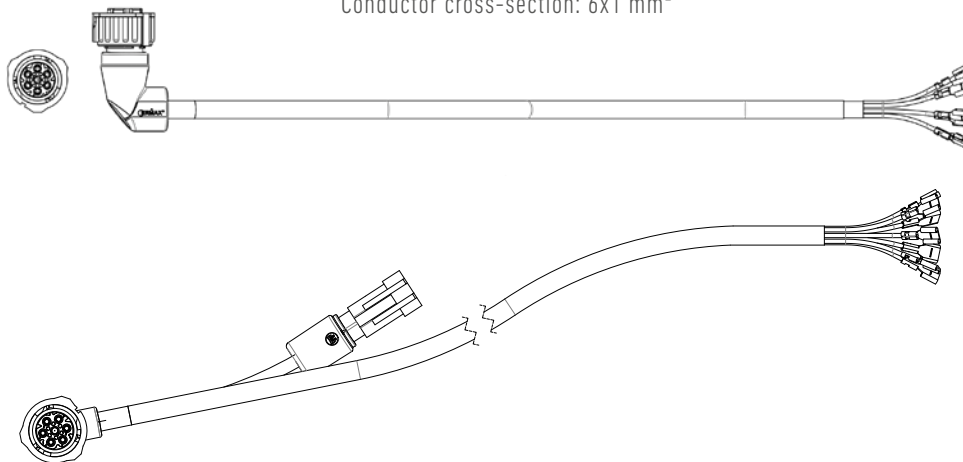
92.0000.5392

6 core 5.500 mm

Conductor cross-section: 6x1 mm²

494 055 651

92.0000.7148



Rear cable, single, Open end

Open end with blade receptacles 6,3x0,8 mm > AMP 1.5 plug, straight
 Conductor cross-section: 6x1 mm²
 For mounting in Junction box
 Cable type: FLRY / PVC

6 core 1.500 mm

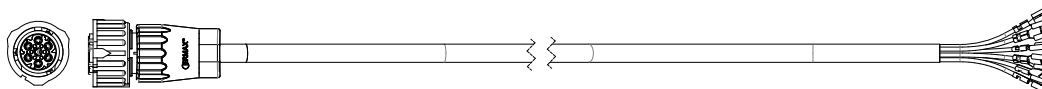
494 015 653

92.0000.1730

6 core 3.000 mm

494 030 653

92.0000.1743



Rear cable



Application/ Description

Article No.

Rear cable, single, Open end (for 3 Functions light)

Open end with blade receptacles 6,3x0,8 mm > AMP 1,5 plug, straight

Cable type: FLRY Y / PVC

4 core 2.000 mm

Conductor cross-section: 3x1 mm² + 1x2,5 mm²

4 core 5.500 mm

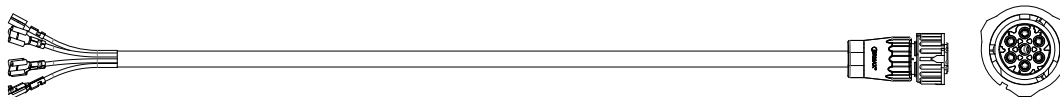
Conductor cross-section: 3x1 mm² + 1x2,5 mm²

494 020 453

92.0000.1734

494 055 453

92.0000.5723



Rear cable

AMP 1.5 socket > 2xAMP 1.5 plug

For connection with tail light right and left

Functions: Position-, stop- and dir. indicator light

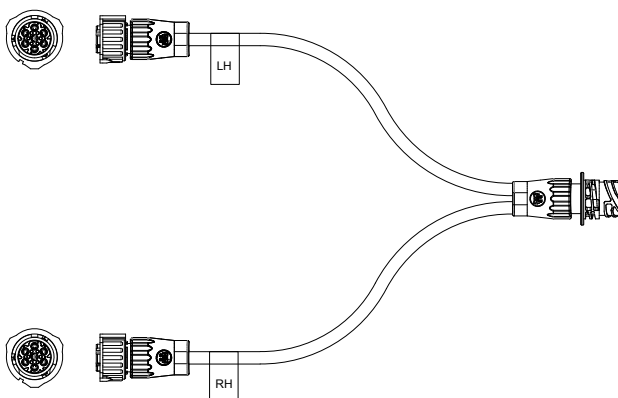
Cable type: FLRY Y / PVC

2x4 core 1.500 mm

Conductor cross-section: 3x1mm² + 1x2,5 mm²

494 015 420

92.0000.5362



Rear cable / Y-adapter



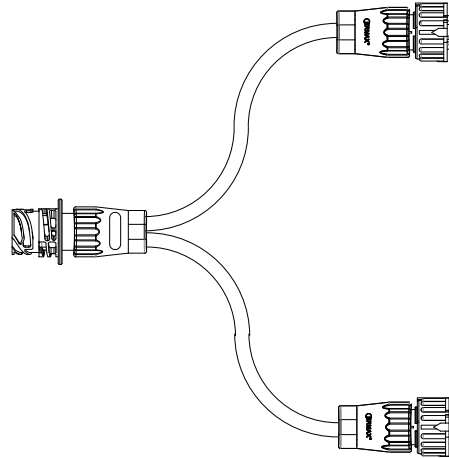
Application/ Description

Article No.

Y-Adapter cable kabel

1 x AMP 1.5 socket, straight > 2 x AMP 1.5 plug, straight

Cable type: FLRY / PVC

6 core 2 x 500 mmConductor cross-section: $5 \times 1 \text{ mm}^2 + 1 \times 2,5 \text{ mm}^2$ **894 005 640**

92.0000.1778

Y-Adapter cable

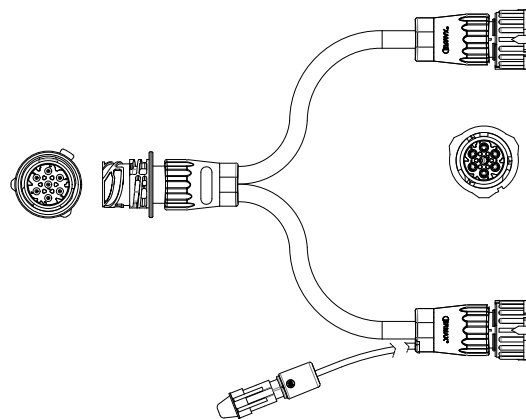
1 x AMP 1,5 plug + 2 x AMP 1,5 socket

Conductor cross-section: $5 \times 1 \text{ mm}^2 + 1 \times 2,5 \text{ mm}^2 / 2 \times 1 \text{ mm}^2$

Cable type: FLRY / PVC

6 core 2 x 300 mm

with 1x2 core outlet (200 mm) with Super Seal socket for position-, or side marker light

**894 003 641**

92.0000.5727

Cable for side marker



Application/ Description

Article No.

Side cable, flat

with Super Seal plug

Conductor cross-section: 2x1,5 mm²

Cable type: FLYYF

2.000 mm for Click-in System

594 020 000

92.0000.7387

4.000 mm for Click-In System

594 040 000

92.0000.5394

7.000 mm for Click-In System

594 070 000

92.0000.1746

9.000 mm for Click-In System

594 090 000

92.0000.0006

10.000 mm for Click-In System

594 100 000

92.0000.5395

13.000 mm for Click-In System

594 130 000

92.0000.0001

15.000 mm for Click-In System

594 150 000

92.0000.1002

17.000 mm for Click-In System

594 170 000

92.0000.1747

18.000 mm for Click-In System

594 180 000

92.0000.1748

19.000 mm for Click-In System

594 190 000

92.0000.1749

21.000 mm for Click-In System

594 210 000

92.0000.5396



Cable for side marker



Application/ Description

Article No.

Side cable, chain

Suitable as extension cable for side cable chains

1 x inlet with Super Seal socket + 2 x outlet with Super Seal plug

Conductor cross-section: 2x0,5 mm²

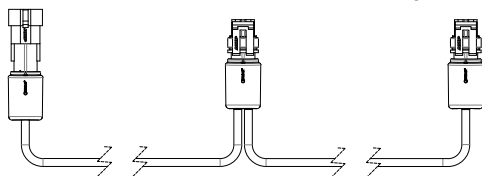
Cable type: FLRYY / PVC

3.900 mm

distance between socket/Plug: 1x200 mm + 1x3700 mm

5200 mm

distance between socket/Plug: 1 x 200mm + 1 x 5000 mm



694 039 201

92.0000.1752

694 052 201

92.0000.6094

Side cable, chain

1 x inlet + 2 x outlet with Super Seal plug

Conductor cross-section: 2x0,5 mm²

Cable type: FLRYY / PVC

3.000 mm

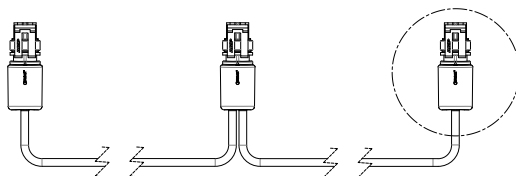
dDistance between plugs: 1x1700 mm + 1x1300 mm

4.200 mm

distance between plugs: 1x1200 mm + 1x3000 mm.

5.300 mm

distance between plugs: 1x300 mm + 1x5000 mm.



694 030 200

92.0000.5399

694 042 200

92.0000.6046

694 053 200

92.0000.6074

Side cable, chain

1 x inlet Open end with blade receptacles 6,3x0,8 mm > + 3 x outlet with Super Seal plug

Conductor cross-section: 2x0,5 mm²

Cable type: FLRYY / PVC

600 mm

Distance between Open end and plug: 250 mm +200 mm + 200 mm



694 006 350

92.0000.1750

Cable for side marker



Application/ Description

Article No.

Side cable, chain

1 x inlet + 3 x outlet with Super Seal plug

Conductor cross-section: 2x0,5 mm²

Cable type: FLRY / PVC

2.500 mm

distance between plugs: 500 mm + 1500 mm + 500 mm

694 025 300

92.0000.5398

3.200 mm

distance between plugs: 500 mm + 1700 mm + 1000 mm

694 032 300

92.0000.5924

4.000 mm

distance between plugs: 1000 mm + 2000 mm + 1000 mm

694 040 300

92.0000.5400

8.000 mm

distance between plugs: 2000 mm + 2000 mm + 4000 mm

694 080 300

92.0000.5402

9.400 mm

distance between plugs: 2000 mm + 3700 mm + 3700 mm

694 094 300

92.0000.6636

11.500 mm

Abstand zwischen Steckern: 1500 mm + 5000 mm + 5000 mm

694 115 300

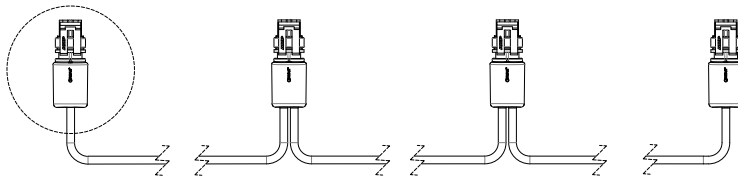
92.0000.6544

13.500 mm

distance between plugs: 4100 mm + 3900 mm + 5500 mm

694 135 300

92.0000.7060



Cable for side marker



Application/ Description

Article No.

Side cable, chain

1 x inlet and 4 x outlet with Super Seal plug
 Conductor cross-section: 2x0,5 mm²
 Cable type: FLRYY / PVC.

800 mm

distance between plugs: 200 mm

11.700 mm

distance between plugs: 1200 mm + 500 mm + 5000 mm + 5000 mm

12.400 mm

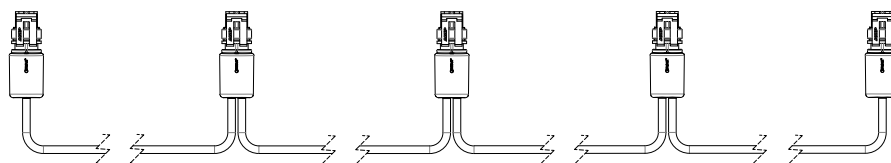
distance between plugs: 3200 mm + 2800 mm + 3200 mm + 3200 mm

17.500 mm

distance between plugs: 7000 mm - 3500 mm - 3500 mm - 3500 mm

19.500 mm

distance between plugs: 9000 mm - 3500 mm - 3500 mm - 3500 mm



694 008 400

92.0000.1751

694 117 400

92.0000.6079

694 124 400

92.0000.6079

694 175 400

92.0000.6637

694 195 400

92.0000.5799

Side cable, chain

1 x inlet + 5 x outlet with Super Seal plug
 Conductor cross-section: 2x0,5 mm²
 Cable type: FLRYY / PVC

15.100 mm

distance between plugs: 2x3200 mm + 2x4000 mm 1x700 mm

18.200 mm

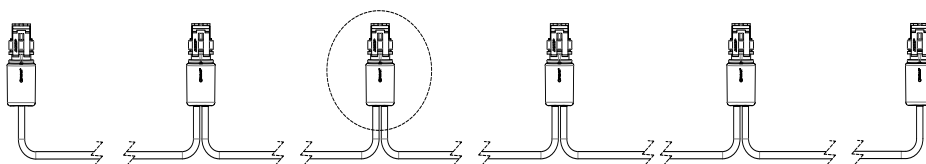
distance between plugs: 1x4200 mm + 1x4150 mm + 1x4100 mm + 1x5000 mm + 1x750 mm mm

22.500 mm

distance between plugs: 1x9000 mm + 3x3500 mm + 1x3000 mm

23.100 mm

distance between plugs: 1x6600 mm + 1x6100 mm + 1x5400 mm + 1x4500 mm + 1x500 mm



694 151 500

92.0000.5925

694 182 500

92.0000.6638

694 225 500

92.0000.6581

694 231 500

92.0000.6581

Cable for side marker



Application/ Description

Article No.

Side cable, chain

1 x inlet + 6 x outlet with Super Seal plug
 Conductor cross-section: 2x0,5 mm²
 Cable type: FLRYY / PVC

11.500 mm

distance between plugs: 1x1500 mm + 2x2400 mm
 1x2500 mm, 1x1700 mm, 1x1000 mm

16.200 mm

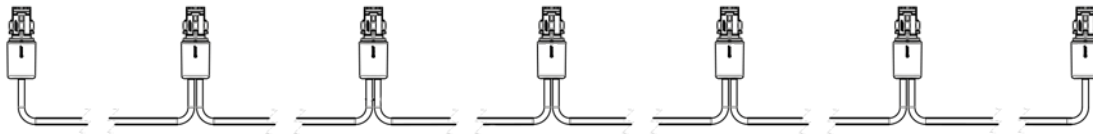
distance between plugs: 1x1200 mm + 5x3000 mm

17.500 mm

distance between plugs: 2x1500 mm + 1x4000 mm + 3x 3500 mm

20.500 mm

distance between plugs: 1x2000 mm + 5x3700 mm

**694 115 600**

92.0000.6987

694 162 600

92.0000.0026

694 175 600

92.0000.6580

694 205 600

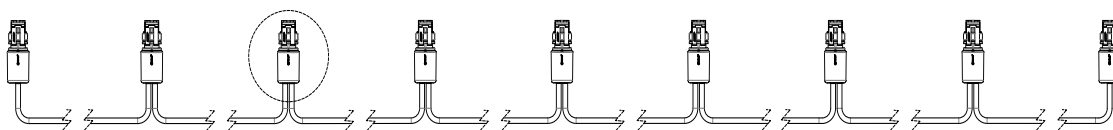
92.0000.0039

Side cable, chain

1 x inlet + 8 x outlet with Super Seal plug
 Conductor cross-section: 2x0,5 mm²
 Cable type: FLRYY / PVC

31.500 mm

distance between plugs: 1x7500 mm + 6x3500 mm + 1x3000 mm

**694 315 800**

92.0000.6623

Extension cable



Application/ Description

Article No.

Extension cable, 2 core

Super Seal socket > Super Seal plug

Conductor cross-section: 2x1 mm²

Cable type: FLRYY / PVC

1.000 mm

794 010 200

92.0000.0005

1.500 mm

794 015 200

92.0000.0040

2.000 mm

794 020 200

92.0000.7799

3.000 mm

794 030 200

92.0000.0024

4.000 mm

794 040 200

92.0000.0024

5.000 mm

794 050 200

92.0000.0022

6.000 mm

794 060 200

92.0000.5407

15.000 mm

794 150 200

92.0000.6704



Extension cable



Application/ Description

Article No.

Extension cable, 2 core

Super Seal plug > Super Seal plug

Conductor cross-section: 2x1 mm²

Cable type: FLRY Y / PVC

200 mm

794 002 230

92.0000.5364

500 mm

794 005 230

92.0000.5365

1.000 mm

794 010 230

92.0000.1758

1.500 mm

794 015 230

92.0000.1763

2.000 mm

794 020 230

92.0000.5405

2.500 mm

794 025 230

92.0000.5406

3.000 mm

794 030 230

92.0000.1769

5.000 mm

794 050 230

92.0000.1774

6.000 mm

794 060 230

92.0000.1774

7.500 mm

794 075 230

92.0000.5408

10.000 mm

794 100 230

92.0000.5410

11.500 mm

794 115 230

92.0000.5412

15.000 mm

794 150 230

92.0000.5413



Extension cable



Application/ Description

Article No.

Extension cable, 2 core

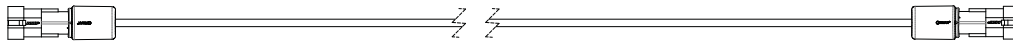
Super Seal socket > Super Seal socket

Conductor cross-section: 2x1 mm²

Cable type: FLRYY / PVC

1.500 mm**794 015 240**

92.0000.5404

**Extension cable, 2 core**

Super Seal plug > Open end with blade receptacles

6,3 x 0,8 mm

Conductor cross-section: 2x1 mm²

Cable type: FLRYY / PVC

500 mm

794 005 251

92.0000.1754

1.000 mm

794 010 251

92.0000.1759

1.500 mm

794 015 251

92.0000.1764

2.000 mm

794 020 251

92.0000.1767

2.500 mm

794 025 251

92.0000.9240

4.000 mm

794 040 251

92.0000.1773

6.000 mm

794 060 251

92.0000.1775

8.000 mm

794 080 251

92.0000.1776

10.500 mm

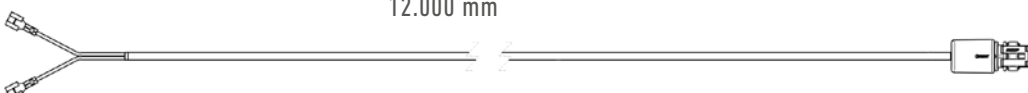
794 105 251

92.0000.5411

12.000 mm

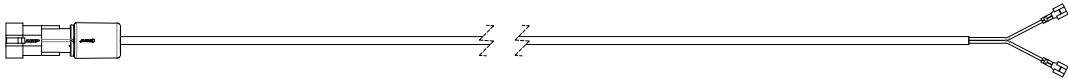
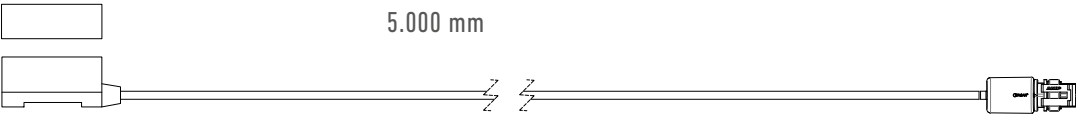
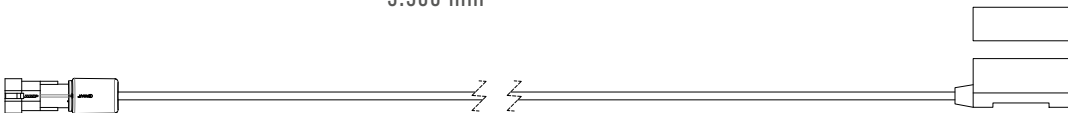
794 120 251

92.0000.9241



Extension cable



	Application/ Description	Article No.
	<p>Extension cable, 2 core Click-In adapter > Super Seal plug Conductor cross-section: 2x1 mm² Cable type: FLRYY / PVC</p> <p>500 mm 1.000 mm 1.500 mm 4.000 mm</p> 	<p>794 005 261 92.0000.1755</p> <p>794 010 261 92.0000.5403</p> <p>794 015 261 92.0000.1765</p> <p>794 040 261 92.0000.6351</p>
	<p>Extension cable, 2 core Super Seal socket > Open end with blade receptacles 6,3 x 0,8 mm Conductor cross-section: 2x1 mm² Cable type: FLRYY / PVC</p> <p>500 mm 1.500 mm 2.500 mm 3.500 mm 5.000 mm</p> 	<p>794 005 220 92.0000.1753</p> <p>794 015 220 92.0000.1762</p> <p>794 025 220 92.0000.6514</p> <p>794 035 220 92.0000.1770</p> <p>794 050 220 92.0000.6515.</p>
	<p>Extension cable, 2 core Click-In adapter > Super Seal socket Conductor cross-section: 2x1 mm² Cable type: FLRYY / PVC</p> <p>500 mm 1.500 mm 3.500 mm</p> 	<p>794 005 270 92.0000.1756</p> <p>794 015 270 92.0000.1766</p> <p>794 035 270 92.0000.1771</p>

Extension cable



Application/ Description

Article No.

Extension cable 2 core DT2, 1500 mm

2-pin Deutsch connector (DT) plug > Open End

Conductor cross section: 2x1 mm²

Cable type: FLRYY /PVC

1.500 mm

794 015 255
92.0000.8292

2.500 mm

794 025 255
92.0000.8240



Extension cable 2 core

Conductor cross section: 2 x 1 mm²

Type: FLRYY / PVC

2000 mm

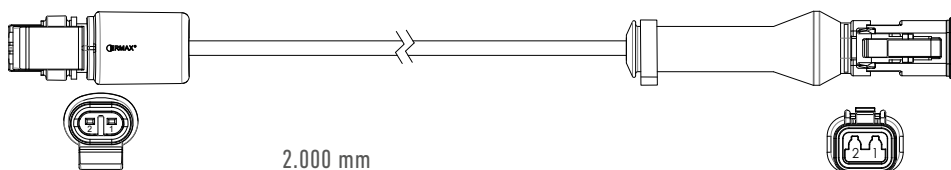
Super Seal plug > DT plug

Connection:

Super Seal plug pin 1 > DT plug pin 2

Super Seal plug pin 2 > DT plug pin 1

794 020 210
92.0000.9319



2.000 mm

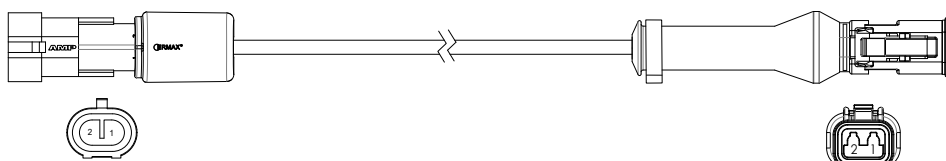
Super Seal plug > DT plug

Connection:

Super Seal plug pin 1 > DT plug pin 2

Super Seal plug pin 2 > DT plug pin 1

794 020 215
92.0000.9320



Extension cable



Application/ Description

Article No.

Extension cable, 6 core

AMP 1.5 socket, straight > AMP 1.5 plug, straight
 Conductor cross-section: 5x1mm²+1x2,5mm²
 Cable type: FLRYY / PVC

6 core 3.500 mm

794 035 600
 92.0000.7266

6 core 5.000 mm

794 050 600
 92.0000.6476

6 core 6.000 mm

794 060 600
 92.0000.7362

6 core 12.500 mm

794 125 600
 92.0000.5366



Extension cable, 7 core

Conductor cross-section: 6x1 mm² + 1x2,5 mm²
 Cable type: FLRYY / PVC

1.000 mm

AMP 1.5 socket, straight > AMP 1.5 plug, straight

794 010 700
 92.0000.1760

1.000 mm

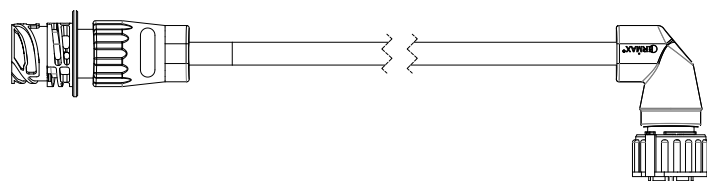
AMP 1.5 socket, > AMP 1.5 plug angled

794 010 701
 92.0000.1761

2.000 mm

AMP 1.5 socket, straight > AMP 1.5 plug, straight

794 020 700
 92.0000.1768



Extension cable



Application/ Description

Article No.

Extension cable, 7 coreConductor cross-section: $6 \times 1 \text{ mm}^2 + 1 \times 2,5 \text{ mm}^2$

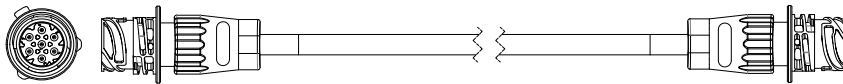
Cable type: FLRYY / PVC

300 mm

AMP 1,5 socket, straight > AMP 1,5 socket, straight

794 003 740

92.0000.6303



Y-Adapter cable



Application/ Description

Article No.

Y-Adapter cable, 2 core

Conductor cross-section: 2x1 mm²

Cable type: FLRY Y / PVC

2 x 500 mm

1 x Super Seal socket + 2 x Super Seal plug

894 005 200

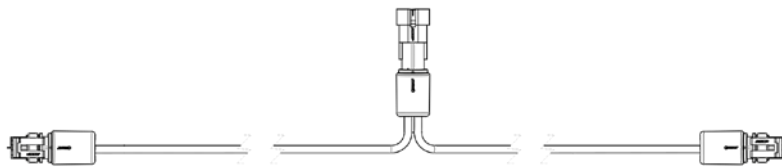
92.0000.0027

2 x 1.000 mm

1 x Super Seal socket + 2 x Super Seal plug

894 010 200

92.0000.1779



Y-Adapter cable, 2 core

Conductor cross-section: 2x1 mm²

Cable type: FLRY Y / PVC / PVC

2 x 500 mm

3 x Super Seal plug

894 005 230

92.0000.1777

2 x 2000 mm

3 x Super Seal plug

894 020 230

92.0000.6988

2 x 3000 mm

3 x Super Seal plug

894 030 230

92.0000.6989

2 x 4000 mm

3 x Super Seal plug

894 040 230

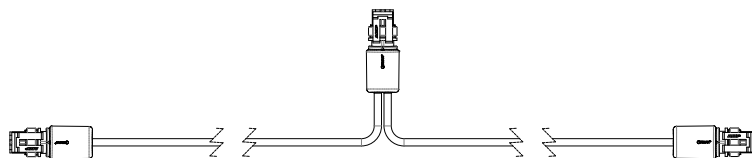
92.0000.5414

2 x 6000 mm

3 x Super Seal plug

894 060 230

92.0000.6348



Y-Adapter cable, 2 core

Conductor cross-section: 2x1 mm²

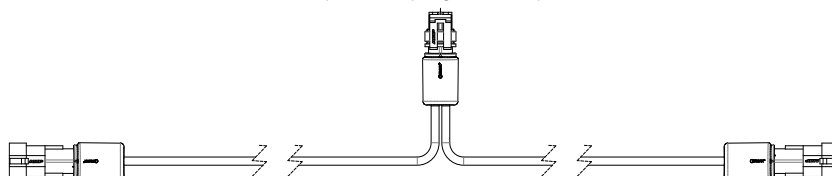
Cable type: FLRY Y / PVC

2 x 500 mm Super Seal socket

1 x Super Seal plug + 2 x Super Seal socket

894 005 240

92.0000.5367



Y-Adapterkabel



Application/ Description

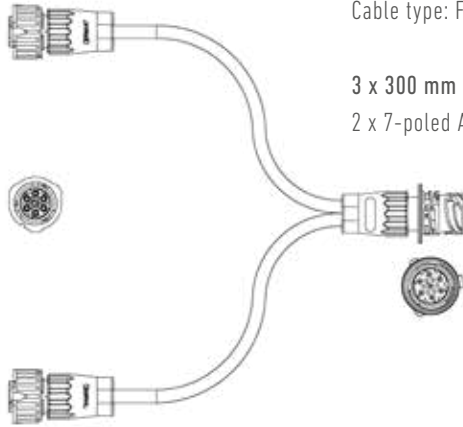
Article No.

Y-Adapter cable, 7 corerConductor cross-section: $7 \times 1 \text{ mm}^2$

Cable type: FLRYY / PVC

3 x 300 mm

2 x 7-poled AMP plug > 1 x 7-poled AMP 1,5 socket

**894 003 740**

92.0000.8131

Y-Adapter cable, 7 corerConductor cross-section: $5 \times 1 \text{ mm}^2 + 1 \times 2,5 \text{ mm}^2$

Cable type: FLRYY / PVC

2 x 500 mm

2 x 7-poled AMP plug > 1 x 7-poled AMP 1,5 socket

894 005 640

92.0000.1778

Y-Adapter cable, 6 corer

For connection of one extra tail lamp.

Conductor cross section: $5 \times 1 \text{ mm}^2 + 1 \times 2,5 \text{ mm}^2 / 2 \times 1 \text{ mm}^2$

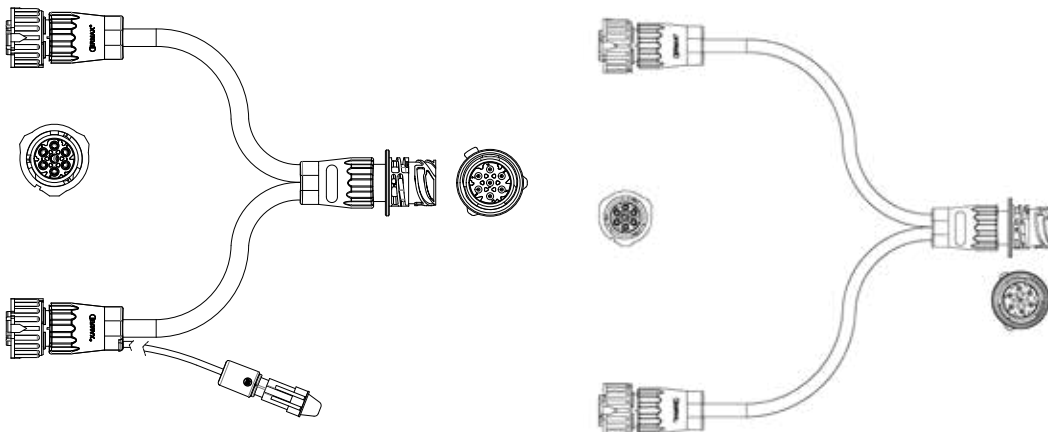
Cable type: FLRYY./PVC

2 x 300 mm

1 x AMP 1,5 Plug, straight + 2 x AMP 1,5 socket, straight with 1x2 core outlet (200 mm) with Super Seal socket for position- or side marker light

894 003 641

92.0000.5727



Adapter cable



Adapter cable for Ermax tail lights
Cable type: FLRY / PVC

Connection	Cable length	Conductor cross-section		Pos	Article No.
Aspöck ASS2 7 poled socket > 7 poled AMP 1.5 bayonet plug, angled	200 mm	5x1 mm ² + 1x2,5 mm ²	Left	1	994 002 062 92.0000.6289
Aspöck ASS2 7 poled socket > 7 poled AMP 1.5 bayonet plug, angled	200 mm	5x1 mm ² + 1x2,5 mm ²	Right	1	994 002 063 92.0000.6290
Hella 7 poled plug > 7 poled AMP 1.5 bayonet plug	300 mm	6x1 mm ²	Left / Right	2	994 003 064 92.0000.7678
Hella 15 poled plug > Ermax 15 poled bayonet plug	200 mm	12x1 mm ² + 3x2,5 mm ²	---	3	994 002 151 92.0000.7677
Aspöck ASS3 17 poled plug > Ermax 15 poled bayonet plug	200 mm	12x1 mm ² + 3x2,5 mm ²	---	4	994 002 150 92.0000.6721

Coil cable



Application/ Description

Article No.

Coil cable

Open end > Open end

Outer diameter: Ø 28 mm

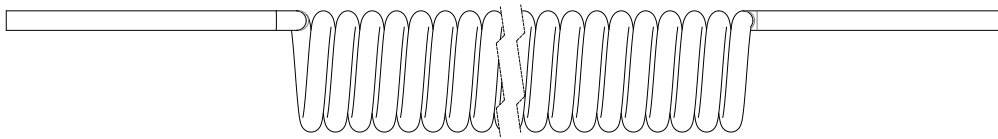
Number of coils: 64

Cable type: PUR

Conductor cross-section: 3x1mm²

3.000 mm

3 core

**994 030 390**

92.0000.5369

Coil cable

AMP 1.5 plug > socket

Outer diameter: Ø 35 mm

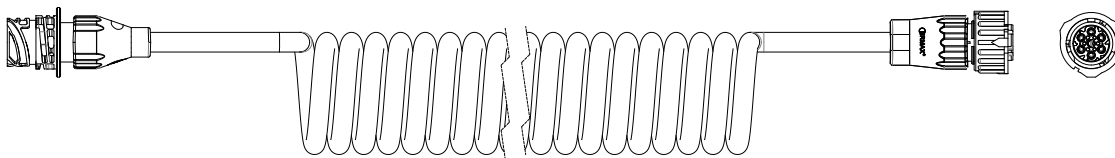
Number of coils: 52

Cable type: PUR

Conductor cross-section: 6x1mm²+1x2,5mm²

3.500 mm

7 core

**994 035 700**

92.0000.1784

Coil cable

Application/ Description

Article No.

Coil cable

Open end > Open end

Conductor cross-section: $7 \times 1 \text{mm}^2 + 2 \times 2,5 \text{mm}^2$

Number of coils: 26

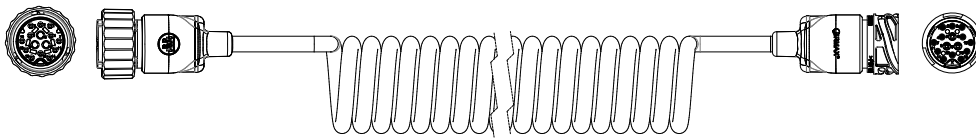
Inside diameter: $\varnothing 50 \text{ mm}$

3.500 mm

9 core

994 035 990

92.0000.1787

**Coil cable**

Ermax bayonet plug > socket

Conductor cross-section: $12 \times 1 \text{mm}^2 + 3 \times 2,5 \text{mm}^2$

Number of coils: 23

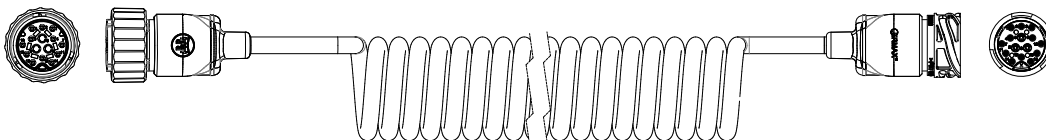
Inside diameter: $\varnothing 65 \text{ mm}$

4.000 mm

15 core

994 040 151

92.0000.1790

**Coil cable**

15-poled AMP plug ARD approved

Conductor cross-section: $12 \times 1 \text{mm}^2 + 3 \times 2,5 \text{mm}^2$ Outer diameter: $\varnothing 66 \text{ mm}$

4.000 mm

15 core

994 165 813

92.0000.7312



Coil cable



Application/ Description

Article No.

Coil cable ABS

with socket ISO 7638-1

Conductor cross-section: $2 \times 4 \text{ mm}^2 + 3 \times 1,5 \text{ mm}^2$

5-poled

Inside diameter: $\varnothing 22 \text{ mm}$ Outer diameter: $\varnothing 48 \text{ mm}$

4.000 mm

5 core

**090 195 440**

92.0000.7564

Coil cable

7 poled ESB with socket, ISO 7638-1

Conductor cross-section: $2 \times 1,5 \text{ mm}^2 + 2 \times 4,0 \text{ mm}^2 + 3 \times 1,5 \text{ mm}^2$ Inside diameter: $\varnothing 22 \text{ mm}$ Outer diameter: $\varnothing 48 \text{ mm}$

3.500 mm

7 core

**090 195 835**

92.0000.6953

Coil cable

7 poled ESB with socket, ISO 7638-1

Conductor cross-section: $2 \times 1,5 \text{ mm}^2 + 2 \times 4,0 \text{ mm}^2 + 3 \times 1,5 \text{ mm}^2$ Inside diameter: $\varnothing 22 \text{ mm}$ Outer diameter: $\varnothing 48 \text{ mm}$

4000 mm

7 core

**090 195 840**

92.0000.7565

WIDE LOAD MARKER SIGNS



WIDE LOAD MARKER SIGN - Complete Kit-Set

Standardised Security

Ermac have 2 Series of wide load marker sign kits making it possible to deliver standardised solutions covering almost every need. One Proff series and one ADR series.

The wide load marker signs – built of standard parts from the Ermac programme – are easy to mount and connect, and secure a simple operation and operational reliability in the daily work.

Both series are built up with a electro galvanized holder and a square pipe for fastening at the vehicle. The wide load marker sign has 3 flexible outer end marker lights mounted with red, white and orange light. The lights are made of rubber and the LED light module is made of impact resistant polycarbonate which resists a tough environment and handling in the daily work.

The Proff series has a pipe piece (ISO 72591) for mounting and connecting of the warning light. The connection to the wide load marker signs are made by means of a 7-poled ISO 1724 socket. Thus, a standard coil cable ISO 1724 (e.g. Ermac article number 090 180 165) can be used for connection at the vehicle. It is a commercially available cable and not a special cable, which means that defective or approaching cables can be replaced quickly = shorter service life in case of defects.

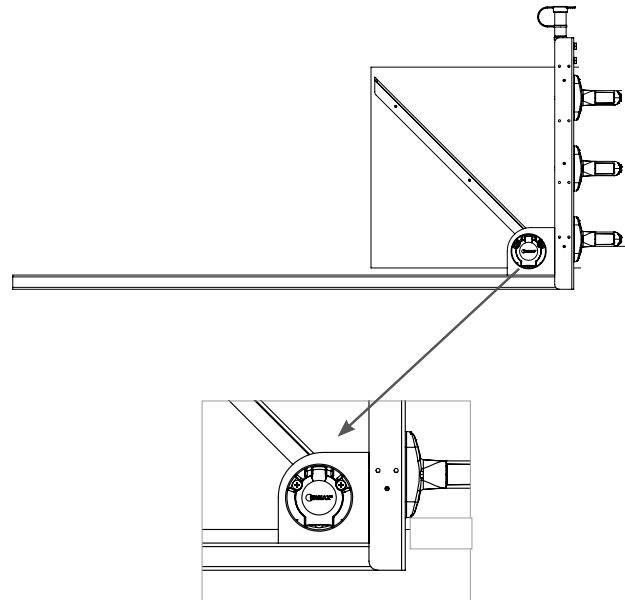
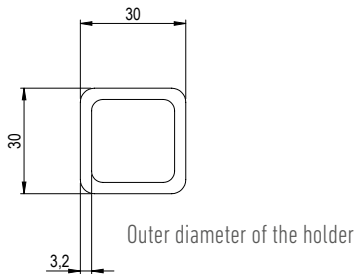
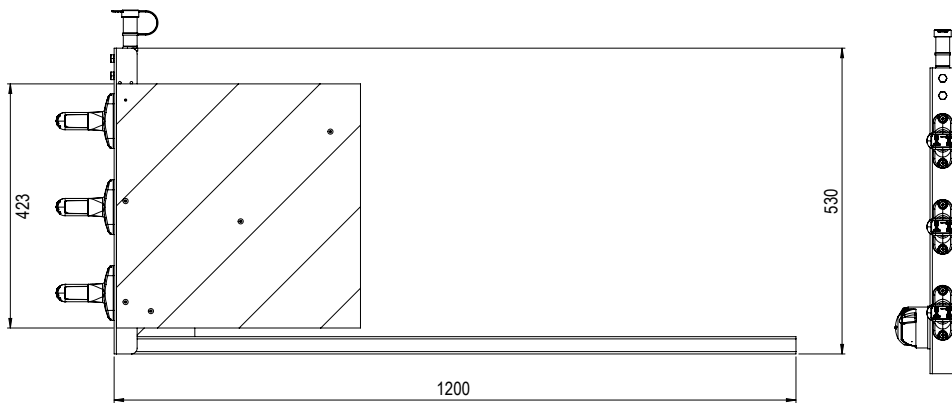
The ADR series is connected by means of a Super Seal plug, and the series is thus ADR approved in its basis configuration. Only the mounting of the warning light – due to the open plugs in the appurtenant connecting pipe – cannot be ADR approved.

For this series a coil cable (e.g. article number 994 030 300) can be used, which is connected to a corresponding Super Seal connection at the vehicle, which opens the possibility for mounting of further lights.



Wide load marker signs - Proff Series

- with 7 poled ISO 1724 connection or 3 poled connection

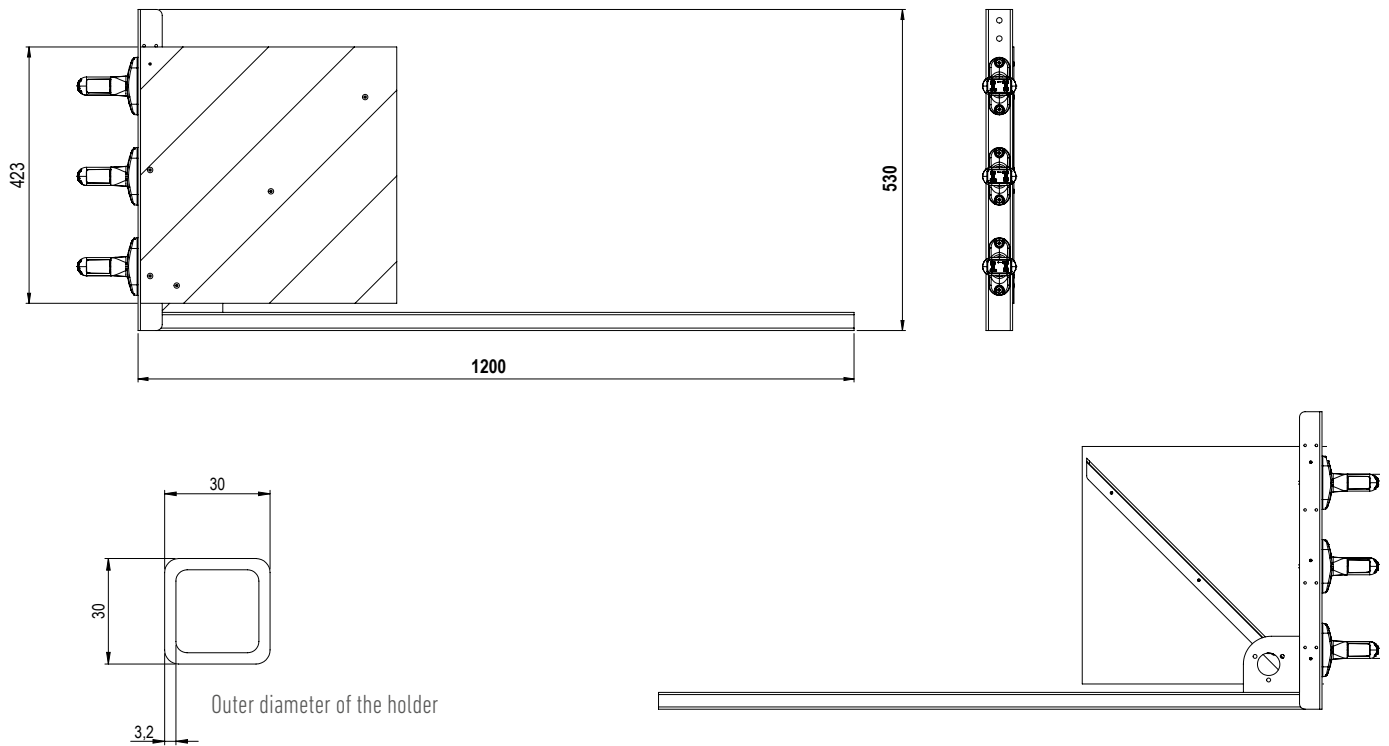


Wide load marker sign mounted with

- Warning sign board 423 x 423 mm
- 3 pcs outer end marker lights
- Mounting bracket for warning beacons
- Plug connection through ISO1724 socket

Placement	Dimension (L x B)	Material	Connection	Article No.	Connection	Article No.
Rear - left	1.200 x 530 mm	Hot-galvanized	7 poled socket ISO 1724	098 269 800 92.0000.7608	3 poled socket	098 269 801
Rear - right	1.200 x 530 mm	Hot-galvanized	7 poled socket ISO 1724	098 269 805 92.0000.7609	3 poled socket	098 269 806
Front - left	1.200 x 530 mm	Hot-galvanized	7 poled socket ISO 1724	098 269 810 92.0000.7610	3 poled socket	098 269 811
Front - right	1.200 x 530 mm	Hot-galvanized	7 poled socket ISO 1724	098 269 815 92.0000.7611	3 poled socket	098 269 816
Complete set consisting of the above 4 Wide load marker signs				098 269 820 92.0000.7612		098 269 821

Wide load marker signs - ADR Series



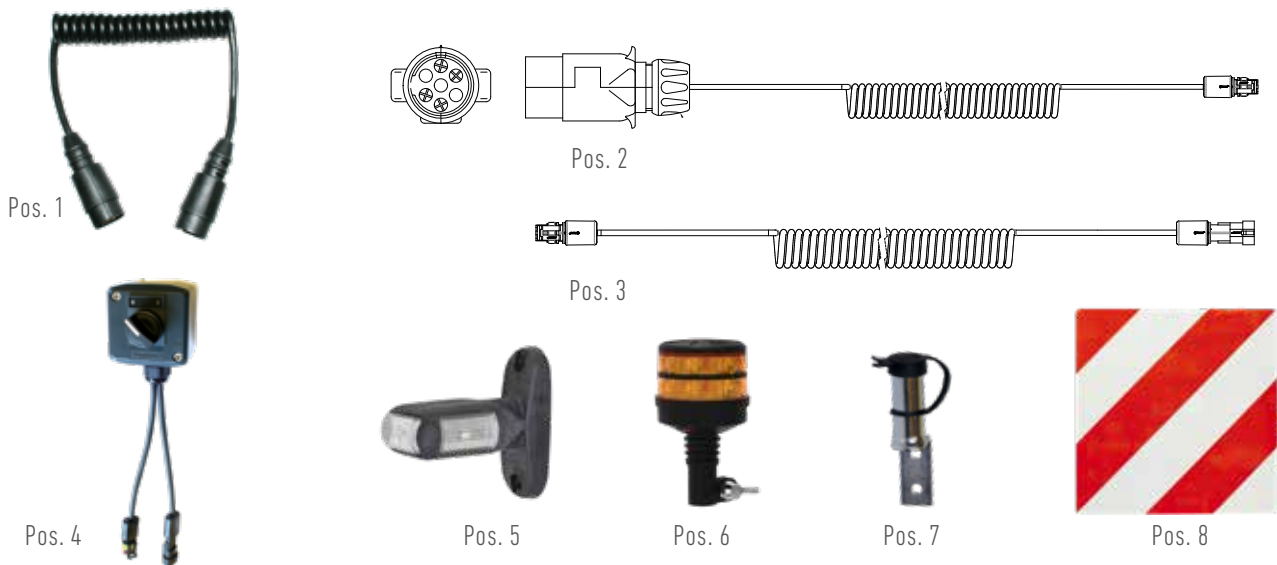
Wide load marker sign mounted with

- Warning sign board 423 x 423 mm
- 3 pcs outer end marker lights
- Connection with Super Seal socket

Placement	Dimension (L x B)	Material	Connection	Article No.
Rear - left	1.200 x 530 mm	Hot-galvanized	Super Seal socket	098 269 830 92.0000.7613
Rear - right	1.200 x 530 mm	Hot-galvanized	Super Seal socket	098 269 835 92.0000.7614
Front - left	1.200 x 530 mm	Hot-galvanized	Super Seal socket	098 269 840 92.0000.7615
Front - right	1.200 x 530 mm	Hot-galvanized	Super Seal socket	098 269 845 92.0000.7616

Complete kit of 4 Wide load marker signs consisting of 098 269 830 + 835 + 840 + 845	098 269 850 92.0000.7617
---	------------------------------------

Wide load marker signs - Spare parts (S) & Accessories (A)



Proff Series	S / A	Pos.	
Coil cable 2x7 poled 1.500 mm - with ISO 1724 plug > ISO 1724 plug	A	1	090 180 165 92.0000.7731
Coil cable 3 poled 1.500 mm - with ISO 1724 plug > Super Seal plug	A	2	994 015 335 92.0000.7528
Coil cable 3 poled 3.000 mm - with ISO 1724 plug > Super Seal plug	A	2	994 030 335 92.0000.7469
On/off switch with 2x200 mm connection cable with Super Seal socket > plug	A	4	992 942 150 92.0000.5368
LED outer end marker - with 300 mm connection cable with Super Seal plug	S	5	098 241 218 92.0000.7490
Warning light LED 12-24V with for mounting bushes (see section with warning lights)	S	6	098 287 285 92.0000.9334
Mounting bracket, angled (no ADR approval)	S	7	098 295 562 92.0000.1674
Warning sign board - DIN 30710 one-sided aluminum, dimension: 423 x 423 (Right)	S	8	098 269 124 92.0000.7952
Warning sign board - DIN 30710 one-sided aluminum, dimension: 423 x 423 (Left)	S	8	098 269 126 92.0000.8100

Spare parts for ISO 1724 plug - see the section with plugs & sockets

ADR Series	S / A	Pos.	
Coil cable 3.000 mm - with Super Seal plug > Super Seal socket	A	3	994 030 300 92.0000.1782
On / off switch with 2x200 mm connection cable with Super Seal socket > plug	A	4	992 942 150 92.0000.5368
LED outer end marker - with 300 mm connection cable with Super Seal plug	S	5	098 241 218 92.0000.7490
Warning light LED 12-24V with for mounting bushes (see section with warning lights)	A	6	098 287 942 92.0000.6453
Mounting bracket, angled (no ADR approval)	A	7	098 295 562 92.0000.1674
Warning sign board - DIN 30710 one-sided aluminum, dimension: 423 x 423 (Right)	S	8	098 269 124 92.0000.7952
Warning sign board - DIN 30710 one-sided aluminum, dimension: 423 x 423 (Left)	S	8	098 269 126 92.0000.8100

Wide load marker signs - Accessories

Application/ Description

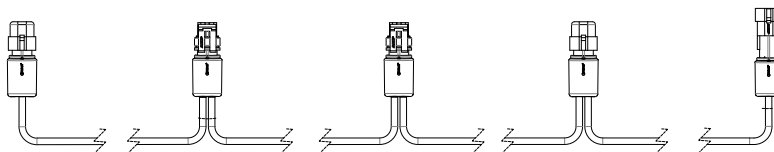
Article No.

Side cable, chain



1 x inlet with Super Seal socket and 4 x outlet with Super Seal plug
 Conductor cross-section: 2x1 mm²
 Cable type: FLRY Y / PVC.

800 mm
 distance between plugs: 200 mm



694 008 401
 92.0000.5397

Connection cable

Socket 7 core ISO 1724 > Super Seal socket, 2 core
 Conductor cross-section: 2x1mm²
 Cable type: FLRY Y / PVC
 Outlets on 7 core plug:
 Ground (pin L/1), R. Pos.(pin 58R/5), L. Pos. (pin 58L/7)

1.500 mm
 2 core

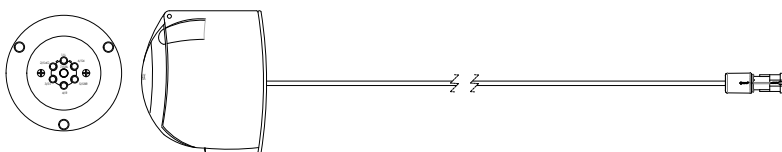
994 015 240
 92.0000.1780

Connection cable

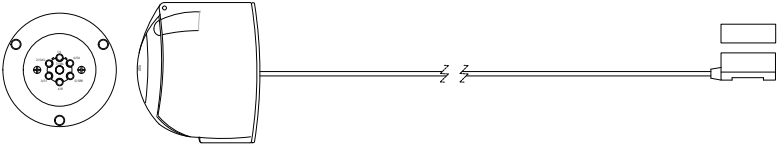


Socket 7 core ISO 1724 > Super Seal socket, 2 core
 Conductor cross-section: 2x1mm²
 Cable type: FLRY Y / PVC
 Outlets on 7 core socket:
 Ground (pin 31/3), RH. Pos. (pin 58R/5), LH. Pos (pin 58L/7).

1.500 mm
 2 core

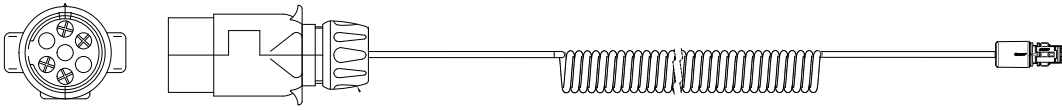


994 015 245
 92.0000.7984



Wide load marker signs - Accessories

Application/ Description	Article No.
<p>Connection cable Socket 7 core ISO 1724 > Click-In adapter, 2 core Conductor cross-section: 2x1mm² Cable type: FLRYY / PVC Outlets on 7 core plug: Ground (pin L/1), R. Pos.(pin 58R/5), L. Pos. (pin 58L/7)</p> <p>1.500 mm 2 core</p>	<p>994 015 270 92.0000.1781</p>
<p>Connection cable Socket 7 core ISO 1724 > Click-In adapter, 2 core Conductor cross-section: 2x1mm² Cable type: FLRYY / PVC Outlets on 7 core plug: Ground (Pin 31/3), R. Pos (Pin 58R/5), L. Pos. (Pin 58L/7)</p> <p>1.500 mm 2 core</p>	<p>994 015 275 92.0000.7903</p>
	
<p>Coil cable</p> <p>Super Seal plug, 2 core > Super Seal socket, 2 core Conductor cross-section: 3x1mm² Pin 2(+) connected to 2 coil cables Number of coils: 64</p> <p>1.500 mm 2 core</p> <p>3.000 mm 2 core</p>	<p></p> <p>994 015 300 92.0000.7627</p> <p>994 030 300 92.0000.1782</p>
	

Wide load marker signs - Accessories

	Application/ Description	Article No.
	<p>Coil cable 3 core Plug 7 core ISO 1724 > Super Seal plug, 2 core Conductor cross-section: 3x1mm² Number of coils: 64</p> <p>3.000 mm Outlets on 7 core plug: Ground (pin L/1), R. pos. (pin 58R/5), L. pos. (pin 58L/7)</p> <p>1.500 mm Outlets on 7 core plug: Ground (pin 31/3), R. Pos. (pin 58R/5), L. Pos. (pin 58L/7)</p> <p>3.000 mm Outlets on 7 core plug: Ground (pin 31/3), R. Pos. (pin 58R/5), L. Pos. (pin 58L/7).</p>	<p>994 030 330 92.0000.1783</p> <p>994 015 335 92.0000.7528</p> <p>994 030 335 92.0000.7469</p>
		
	<p>Coil cable 2x7 poled, 12V Made of PUR with plastic plugs ISO 1724 Outer diameter: Ø 40 mm Conductor cross section: 6x1,0 + 1x1,5 mm²</p> <p>1.500 mm Outlets on 7 core plugw</p>	<p>090 180 165 92.0000.7627</p>
	<p>On / off switch 2 x 200 mm connection cable With Super Seal socket > plug.</p>	<p>992 942 150 92.0000.5368</p>



ACCESSORIES



Cable rolls



Pos. 1








Pos. 2

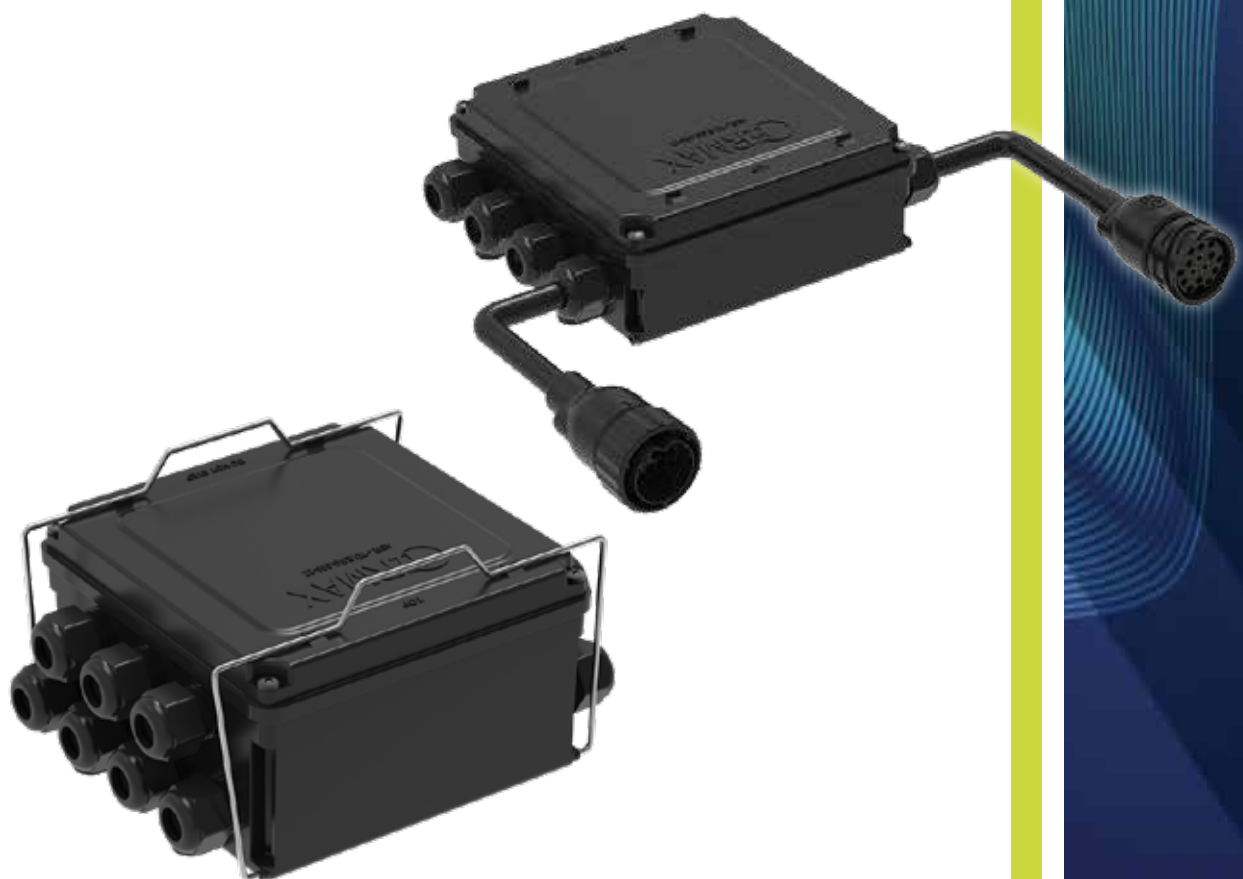
Cable material	Core	Spool	Cable type	Approval	Conductor cross-section	Pos.	Article No.
Plastic	2 core	50 M	FLRYY / PVC	ADR	2 x 0,5 mm ²	1	099 897 220 92.0000.7606
Plastic	2 core	50 M	FLRYY / PVC	ADR	2 x 1,0 mm ²	1	099 897 226 92.0000.6663
Plastic Side cable, flat for Click-in	2 core	100 m	FLYYF / PVC	ADR	2 x 1,5 mm ²	1	099 897 611 92.0000.1694
Plastic	3 core	50 M	FLRYY / PVC	ADR	3 x 1,5 mm ²	2	099 897 032 92.0000.6655
Plastic	4 core	50 m	FLRYY / PVC	ADR	4 x 1,0 mm ²	2	099 897 045 92.0000.6656
Plastic	4 core	50 M	FLRYY / PVC	ADR	4 x 1,5 mm ²	2	099 897 049 92.0000.6657
Plastic	5 core	50 m	FLRYY / PVC	ADR	5 x 1,0 mm ²	2	099 897 055 92.0000.6658
Plastic	7 core	100 m	FLRYY / PVC	ADR	7 x 1,0 mm ²	2	099 897 076 92.0000.6659
Plastic	7 core	50 M	FLRYY / PVC	ADR	7 x 1,5 mm ²	2	099 897 079 92.0000.6660
Plastic	7 core	50 m	FLRYY / PVC	ADR	6 x 1,0 + 1 x 2,5 mm ²	2	099 897 081 92.0000.6661
Plastic	13 core	25 M	FLRYY / PVC	ADR	10 x 1,5 + 3 x 2,5 mm ²	2	099 897 134 92.0000.6662
Plastic	15 core	50 m	FLRYY / PVC	ADR	12 x 1,0 + 3 x 2,5 mm ²	2	099 897 299 92.0000.1693
Plastic	15 core	50 m	FLRYY / PVC	ADR	12 x 1,5 + 3 x 2,5 mm ²	2	099 897 296 92.0000.6664

Accessories



	Application/ Description	Article No.
	<p>Plate grip for Click-In System For cable with Click-in system Flexible and uncomplicated assembly</p>	<p>099 859 970 92.0000.1011</p>
	<p>Click-In cable 1,5 mm² with Open end</p> <p>0,5 Meter</p> <p>1,5 Meter</p> <p>3,5 Meter</p>	<p>794 005 280 92.0000.1757</p> <p>794 015 280 92.0000.1051</p> <p>794 035 280 92.0000.1772</p>
	<p>Cap for Click-In cable 1,5 mm² 10 pcs bag</p>	<p>098 291 950 92.0000.5793</p>
	<p>Adapter - Dual Click-in For connecting two flat cables Fit for 1,5 mm² flat cable Must be mounted With 2 pcs 098 291 950 clamps</p> <p>Dimension: 68x15 x 22,1 x 15,4 mm</p>	<p>099 110 032 92.0000.7116</p>
	<p>End plug for flat cable for Click-in Fit for 1,5 mm² flat cable</p> <p>Dimension: Ø15 x 35 mm</p>	<p>099 110 031 92.0000.5490</p>

JUNCTION BOX



Junction Boxes

Standardized solutions for optimal configuration

The 3 standard series are well-suited for the following applications:

Universal Junction Box

The universal junction box is without pre-configured connections and cable exits and thus universal for various applications.

The cable entries are prepared for different cable dimensions and can – if needed – be replaced with other cabling sizes, Super Seal sockets or 7 poled AMP sockets.

Pass-through Junction Box

The pass-through junction box has 15 poled plug and socket and is placed between the main cable and the rear cable. All functions are available in the junction box and can by means of the cable entries be safely connected.

According to need the cable entries can be replaced with Super Seal sockets or 7poled sockets.

Rear connection Junction Box

This junction box is connected at the end of the main cable and has connections or cable for the tail lights. Further there is connection to all functions through pre-configured sockets or cable entries.

Your advantages with the Ermax solutions:

- Unique flexibility due to fast and easy replacement of cable entries and sockets (Super Seal and 7 poled AMP sockets)
- Time-saving and easy built-in of the junction box due to pre-cabling
- Various free cable entries for universal use
- 2 sizes are available. Connection to terminal plate or terminal block.
- Locking braze to hold the cover can be retrofitted.



UNIVERSAL JUNCTION BOX



PASS-THROUGH JUNCTON BOX



REAR CONNECTION BOX

Junction box Standard program - overview

Box Type	Cover	Inlet	Outlet	Connection - Cable gland	Integrated SIMAC control	Article No.
Universal-Box	Low	Cable gland with grommet Ø13-11 mm	--	1 x Cable gland with grommet Ø7-11 mm 2 x Cable gland with grommet Ø4-6 mm 4 x Cable gland with grommet 2 x Ø5,5 mm		099 864 100 92.0000.9385
	High	Cable gland with grommet Ø13-11 mm	--	4 x Cable gland with grommet Ø7-11 mm 8 x Cable gland with grommet Ø4-6 mm 1 x Cable gland with grommet 2 x Ø5,5 mm		099 864 500 92.0000.9386
Pass-through Box	Low	15 poled Ermax bayonet socket with 500 mm cable	15 poled Ermax bayonet plug with 500 mm cable	1 x 2 pin Super Seal socket for positions light, right 1 x 2 pin Super Seal socket for positions light, left 2 x Cable gland with grommet Ø4-6 mm 2 x Cable gland with grommet 2 x Ø5,5 mm		099 864 151 92.0000.9379
	Low	15 poled Ermax bayonet socket with 500 mm cable	15 poled Ermax bayonet plug with 500 mm cable	2 x Cable gland with grommet Ø4-6 mm 4 x Cable gland with grommet 2 x Ø5,5 mm		099 864 150 92.0000.9378
	High	15 poled Ermax bayonet socket with 500 mm cable	15 poled Ermax bayonet plug with 500 mm cable	6 x Cable gland with grommet Ø4-6 mm 6 x Cable gland with grommet 2 x Ø5,5 mm		099 864 550 92.0000.9383
Rear connection box	Low	15 poled Ermax bayonet socket with 500 mm cable	--	1 x 7 pin AMP socket for right tail light 1 x 7 pin AMP socket for left tail light 1 x 2 pin Super Seal socket for right position light 1 x 2 pin Super Seal socket for left position light 1 x 2 pin Super Seal socket for reverse light 1 x 2 pin Super Seal socket for rear fog light 1 x Cable gland with grommet 2 x Ø5,5 mm		099 864 110 92.0000.9376
	High	15 poled Ermax bayonet socket with 500 mm cable	--	1 x 7 pin AMP socket for right tail light 1 x 7 pin AMP socket for left tail light 1 x 2 pin Super Seal socket for right position light 1 x 2 pin Super Seal socket for left position light 1 x 2 pin Super Seal socket for reverse light 1 x 2 pin Super Seal socket for rear fog light 1 x 2 pin Super Seal socket for stop light 1 x 2 pin Super Seal socket for AUX 3 1 x Cable gland with grommet 2 x Ø5,5 mm 2 x Cable gland with grommet Ø4-6 mm 2 x Cable gland with grommet Ø7-10 mm		099 864 510 92.0000.9381
	Low	15 poled Ermax bayonet socket with 500 mm cable	2 x 7 pin AMP plug for tail light, right + left	2 x Cable gland with grommet 2 x Ø5,5 mm 2 x Cable gland with grommet 2 x Ø4-6 mm 1 x Cable gland with grommet 2 x Ø7-10 mm		099 864 113 92.0000.9377
	High	15 poled Ermax bayonet socket with 500 mm cable	--	1 x 2 pin Super Seal socket for right position light 1 x 2 pin Super Seal socket for left position light 3 x Cable gland with grommet Ø4-6 mm 8 x Cable gland with grommet 2 x Ø5,5 mm		099 864 501 92.0000.9380
	High	15 poled Ermax bayonet socket with 500 mm cable	2 x 3 7-poliger AMP plug for tail light, right + left	1 x 2 pin Super Seal socket for position light, right 1 x 2 pin Super Seal socket for position light, left 1 x 2 pin Super Seal socket for stop light 1 x 2 pin Super Seal socket for reverse light 1 x 2 pin Super Seal socket for rear fog light 1 x 2 pin Super Seal stikdåse med AUX 3 2 x Cable gland with grommet Ø7-11 mm 2 x Cable gland with grommet Ø4-6 mm 1 x Cable gland with grommet 2 x Ø5,5 mm		099 864 531 92.0000.9382
	High	15 poled Ermax bayonet socket with 500 mm cable	--	2 x 2 pin Super Seal socket with right/left SIMAC 7 x Cable gland with grommet 2 x Ø5,5 mm 2 x Cable gland with grommet Ø4-6 mm 2 x Cable gland with grommet Ø7-10 mm	SIMAC	099 869 501 92.0000.9384
	High	15 poled Ermax bayonet socket with 1.500 mm cable	--	2 x 2 pin Super Seal socket for left and right position light 2 x 2 pin Super Seal socket for left and right SIMAC 1 x 2 pin Super Seal socket for reverse light 1 x 2 pin Super Seal socket for fog light 1 x 2 pin Super Seal socket for stop light 2 x Cable gland with grommet Ø4-6 mm 4 x Cable gland with grommet 2 x Ø5,5 mm	SIMAC	099 869 506 92.0000.xxxx

Universal Junction box

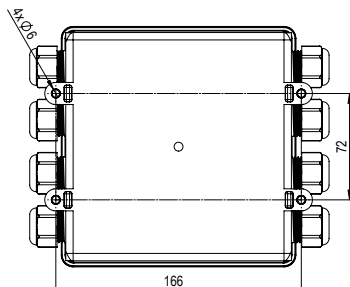
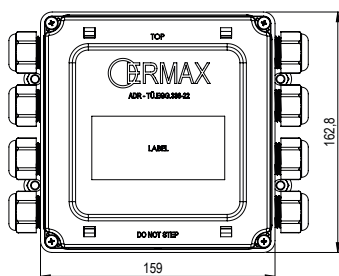
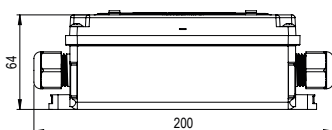
Application/ Description

Article No.

Junction box Housing of black polycarbonate IP Rating: IP69K

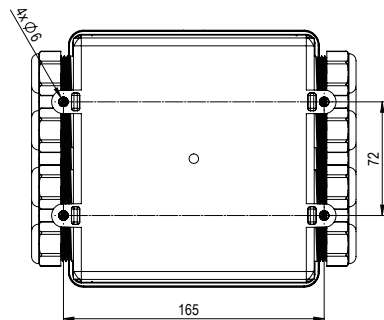
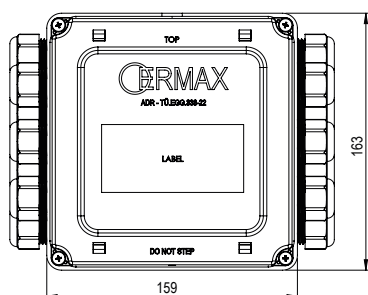
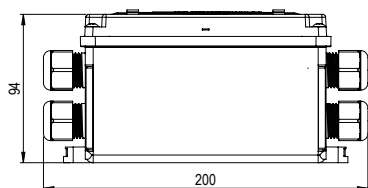
Low version - Connections:

- Connection: 1 x Cable gland with grommet Ø11-13 mm
 1 x Cable gland with grommet Ø7-11 mm
 2 x Cable gland with grommet Ø4-6 mm
 4 x Cable gland with grommet 2 x Ø5,5 mm



High version - Connections:

- Connection: 1 x Cable gland with grommet Ø11-13 mm
 4 x Cable gland with grommet Ø7-11 mm
 8 x Cable gland with grommet Ø4-6 mm
 1 x Cable gland with grommet 2 x Ø5,5 mm



099 864 100
92.0000.9385

099 864 500
92.0000.9386

Pass-through Junction box

Application/ Description

Article No.

Junction box with cable Housing of black polycarbonate IP Rating: IP69K

Low version - Connections:

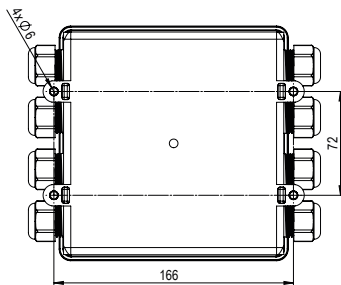
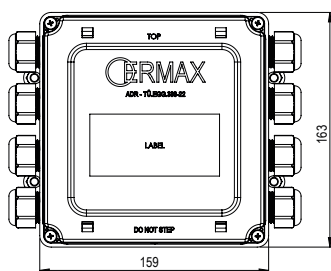
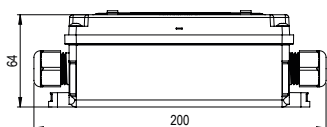
Inlet: 15 pin Ermax socket, 500 mm cable

Outlet: 15 pin Ermax plug, 500 mm cable

Connection: 1 x 2 pin Super Seal socket for positions light, right
1 x 2 pin Super Seal socket for positions light, left
2 x Cable gland with grommet \varnothing 4-6 mm
2 x Cable gland with grommet 2 x \varnothing 5,5 mm

099 864 151

92.0000.9379



Pass-through Junction box

Application/ Description

Article No.

Junction box with cable Housing of black polycarbonate IP Rating: IP69K

Low version - Connections:

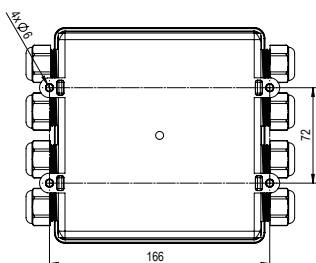
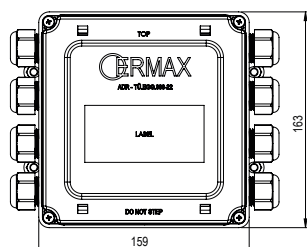
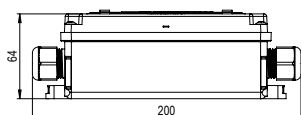
Inlet: 15 pin Ermax socket, 500 mm cable

Outlet: 15 pin Ermax plug, 500 mm cable

Connection: 2 x Cable gland with grommet \varnothing 4-6 mm
4 x Cable gland with grommet 2 x \varnothing 5,5 mm

099 864 150

92.0000.9378



High version - Connections:

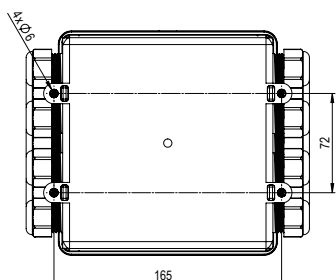
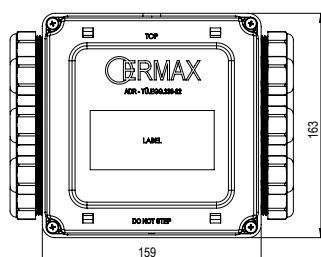
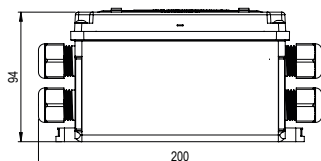
Inlet: 15 pin Ermax socket, 500 mm cable

Outlet: 15 pin Ermax plug, 500 mm cable

Connection: 6 x Cable gland with grommet \varnothing 4-6 mm
6 x Cable gland with grommet 2 x \varnothing 5,5 mm

099 864 550

92.0000.9383



Rear connection Junction box

Application/ Description

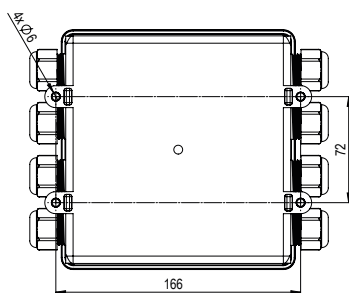
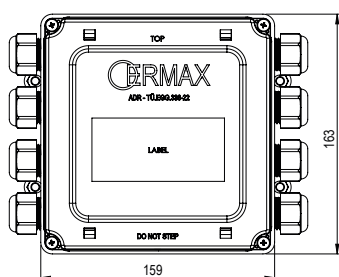
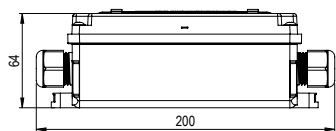
Article No.

Junction box
Housing of black polycarbonate
IP Rating: IP69K

Low version - Connections:

Inlet: 15-polige Ermax Steckdose, 500 mm Kabel

Connection: 1 x 7 pin AMP socket for right tail light
 1 x 7 pin AMP socket for left tail light
 1 x 2 pin Super Seal socket for right position light
 1 x 2 pin Super Seal socket for left position light
 1 x 2 pin Super Seal socket for reverse light
 1 x 2 pin Super Seal socket for rear fog light
 1 x Cable gland with grommet 2 x Ø5,5 mm



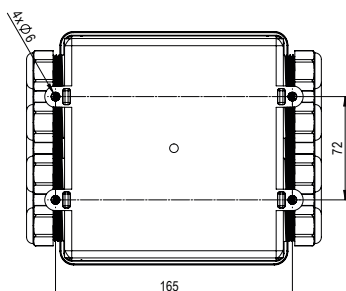
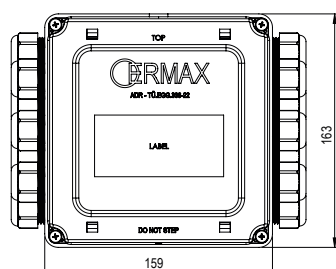
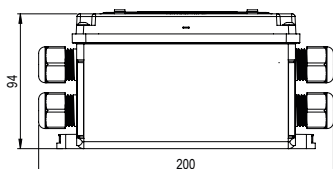
099 864 110

92.0000.9376

High version - Connections:

Inlet: 15-polige Ermax Steckdose, 500 mm Kabel

Connection: 1 x 7 pin AMP socket for right tail light
 1 x 7 pin AMP socket for left tail light
 1 x 2 pin Super Seal socket for right position light
 1 x 2 pin Super Seal socket for left position light
 1 x 2 pin Super Seal socket for reverse light
 1 x 2 pin Super Seal socket for rear fog light
 1 x 2 pin Super Seal socket for stop light
 1 x 2 pin Super Seal socket for AUX 3
 1 x Cable gland with grommet 2 x Ø5,5 mm
 2 x Cable gland with grommet Ø4-6 mm
 2 x Cable gland with grommet Ø7-10 mm



099 864 510

92.0000.9381

Rear connection Junction box



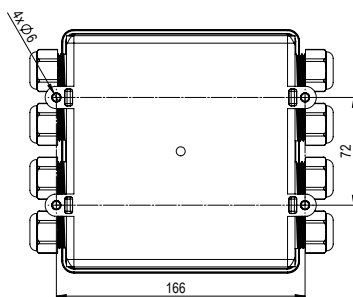
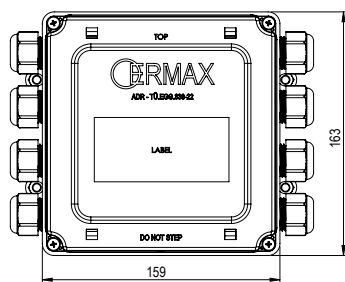
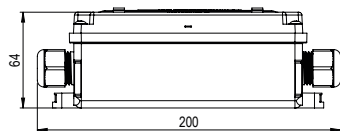
Application/ Description

Article No.

Junction box with cable Housing of black polycarbonate IP Rating: IP69K

Low version - Connections:

- Inlet: 15 pin Ermax socket, 500 mm cable
- Outlet: 1 x 7 pin AMP plug on 1300mm cable for right tail light
1 x 7 pin AMP plug on 1300mm cable for left tail light
- Connection: 2 x Cable gland with grommet 2 x Ø5,5 mm
2 x Cable gland with grommet 2 x Ø4-6 mm
1 x Cable gland with grommet 2 x Ø7-10 mm



099 864 113
92.0000.9377

Rear connection Junction box



Application/ Description

Article No.

Junction box with cable
Housing of black polycarbonate
IP Rating: IP69K

High version - Connections:

Inlet: 15 pin Ermax socket, 500 mm cable

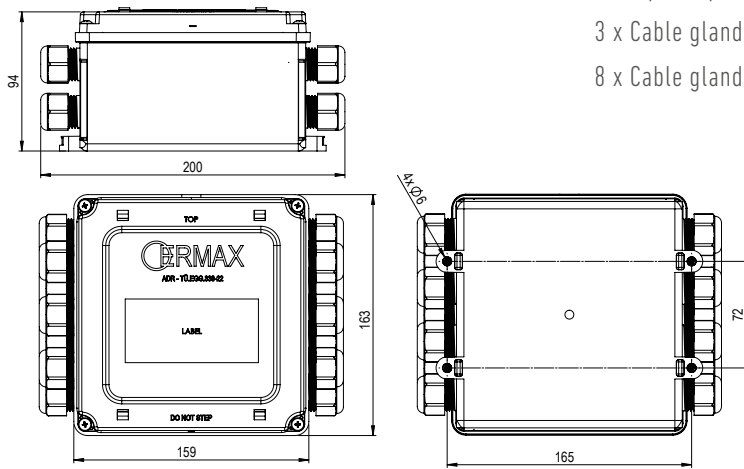
Connection: 1 x 2 pin Super Seal socket for right position light

1 x 2 pin Super Seal socket for left position light

3 x Cable gland with grommet Ø4-6 mm

8 x Cable gland with grommet 2 x Ø5,5 mm

099 864 501
 92.0000.9380



Rear connection Junction box

Application/ Description

Article No.

Junction box with cable Housing of black polycarbonate IP Rating: IP69K

High version - Connections:

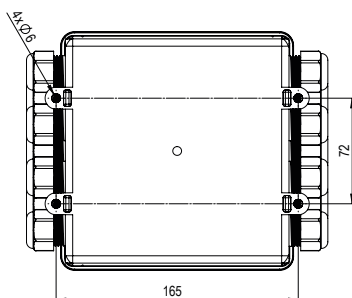
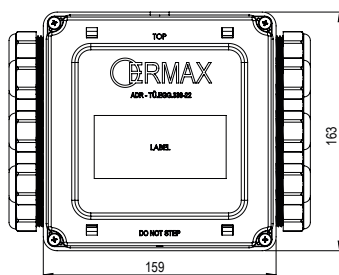
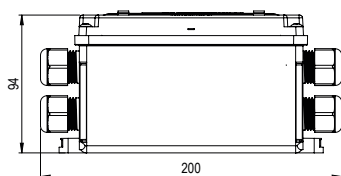
Inlet: 15 pin Ermax socket, 1500 mm cable

Outlet: 2 x 3 7-pin AMP plug, angled - 2100 mm cable for tail light
RH +LH

Connection: 1 x 2 pin Super Seal socket for position light, right
1 x 2 pin Super Seal socket for position light, left
1 x 2 pin Super Seal socket for stop light
1 x 2 pin Super Seal socket for reverse light
1 x 2 pin Super Seal socket for rear fog light
1 x 2 pin Super Seal stikdåse med AUX 3
2 x Cable gland with grommet Ø7-11 mm
2 x Cable gland with grommet Ø4-6 mm
1 x Cable gland with grommet 2 x Ø5,5 mm

099 864 531

92.0000.9382



Rear connection Junction box with SIMAC

Application/ Description

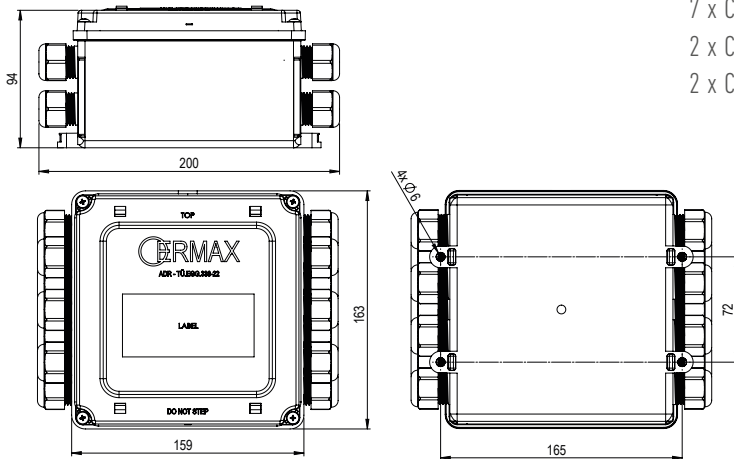
Article No.

Junction box with cable with SIMAC
Housing of black polycarbonate
IP Rating: IP69K

High version - Connections:

Inlet: 15 pin Ermax socket, 500 mm cable

Connection: 2 x 2 pin Super Seal socket with right/left SIMAC,
 7 x Cable gland with grommet 2 x Ø5,5 mm
 2 x Cable gland with grommet Ø4-6 mm
 2 x Cable gland with grommet Ø7-10 mm



099 869 501

92.0000.9384

Rear connection Junction box with SIMAC

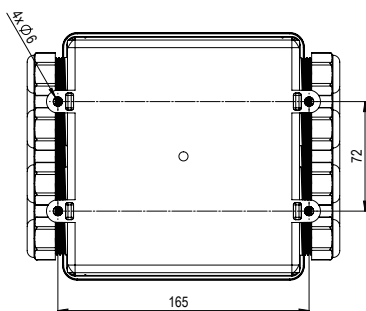
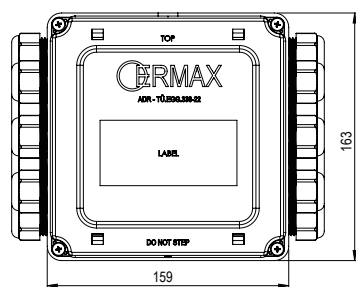
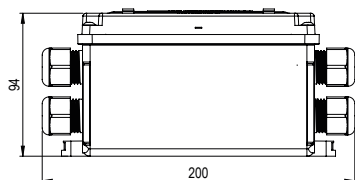
Application/ Description

Article No.

Junction box with cable with SIMAC Housing of black polycarbonate IP Rating: IP69K

High version - Connections:

- Inlet: 15 pin Ermax socket, 1500 mm cable
- Connection: 2 x 2 pin Super Seal socket for left and right position light
- 2 x 2 pin Super Seal socket for left and right SIMAC
- 1 x 2 pin Super Seal socket for reverse light
- 1 x 2 pin Super Seal socket for fog light
- 1 x 2 pin Super Seal socket for stop light
- 2 x Cable gland with grommet Ø4-6 mm
- 4 x Cable gland with grommet 2 x Ø5,5 mm



099 869 506

92.0000.xxxx

Universal box

Application/ Description

Article No.

Universal box with clamp straps and plug cartridge
Housing of black polycarbonate
IP Rating: IP69K

High version - Connections:

Additional inlets/outlets:

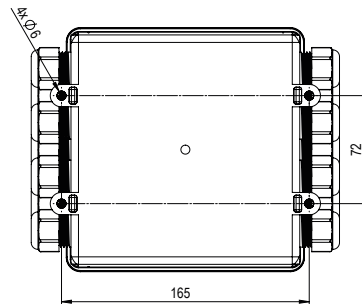
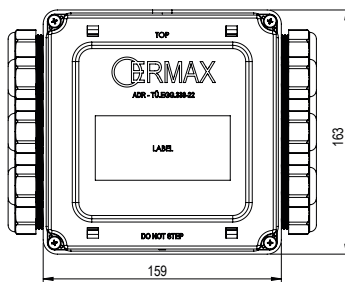
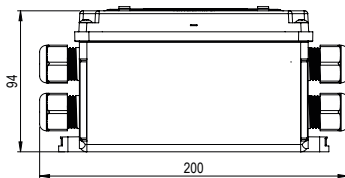
1 x Cable gland with grommet \varnothing 11-13 mm

6 x Cable gland with grommet \varnothing 4-6 mm

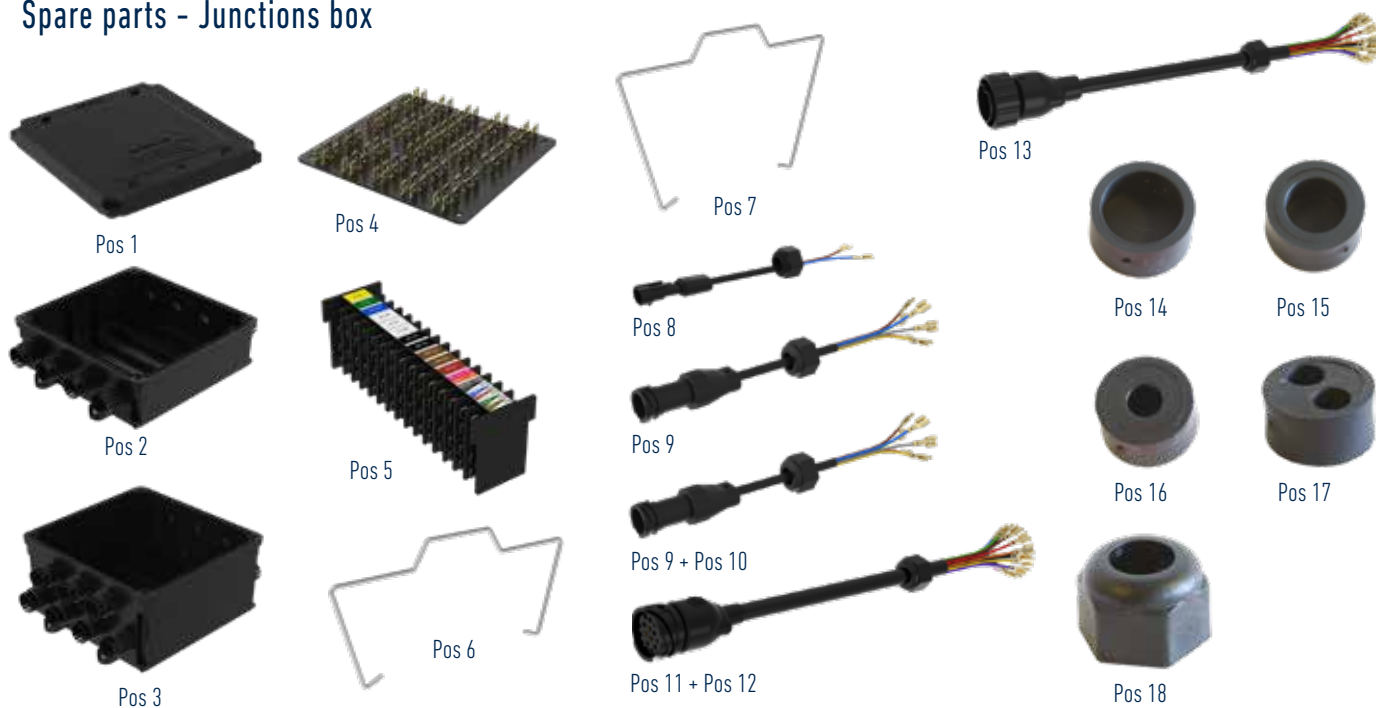
7 x Cable gland with grommet 2 x \varnothing 5,5 mm

099 864 651

92.0000.9371



Spare parts - Junctions box



Spareparts / Accessories Ermax Junction box

Cover for junction box. Incl. Screws. Suitable for both the low and high version of the junction box. Measurements (H x W x L): 18 x 153 x 157 mm	1	099 110 800
Cover for junction box. Incl. Screws. Suitable for both the low and high version of the junction box. Measurements (H x W x L): 18 x 153 x 157 mm	2	099 110 801
Junction box, high version - without cover and cable glands. 14 cable inlets (without nuts and rubber grommets) 5 mounting grooves for self-tapping screws in the bottom.	3	099 110 802
Terminal board for junction box with 104 terminals. Suitable for both low and high version of the junction box. Incl. screws for installation.	4	099 110 803
Terminal cartridge for junction box, removable with 120 terminals.	5	099 110 804
Locking brace for junction box, low version. The locking brace is used to keep the cover in place on the junction box. 2 pcs per box is needed. Material: Stainless steel.	6	099 110 805
Locking brace for junction box, high version. The locking brace is used to keep the cover in place on the junction box. 2 pcs per box is needed. Material: Stainless steel.	7	099 110 806
Connection cable 300mm with Super Seal socket for junction box. Mounted with grommet 2 x Ø5,5 mm and nut for junction box. 200 mm stripped wire with blade receptacles.	8	099 110 820
Connection cable 300 mm with 7 pole AMP socket for junction box (6 x 1 mm ²). Mounted with grommet 2 x Ø4-6 mm and nut for junction box. 200 mm stripped wire with blade receptacles.	9	099 110 870
Connection cable 300 mm with 7 pole AMP socket for junction box (6 x 1 mm ² + 1 x 2,5 mm ²). Mounted with grommet 2 x Ø4-6 mm and nut for junction box. 200 mm stripped wire with blade receptacles.	10	099 110 875
Connection cable 700 mm with 15 pole Ermax socket for junction box. Mounted with grommet 2 x Ø11-13 mm and nut for junction box. 200 mm stripped wire with blade receptacles.	11	099 110 880
Connection cable 1700 mm with 15 pole Ermax socket for junction box. Mounted with grommet 2 x Ø11-13 mm and nut for junction box. 200 mm stripped wire with blade receptacles.	12	099 110 881
Connection cable 700 mm with 15 pole Ermax plug for junction box. Mounted with grommet 2 x Ø11-13 mm and nut for junction box. 200 mm stripped wire with blade receptacles.	13	099 110 885
Rubber sealing for cablegland housing in junction box Ø16/Ø13-11 mm	14	099 110 207
Rubber sealing for cablegland housing in junction box, Ø16/Ø10-7 mm	15	099 110 208
Rubber sealing for cablegland housing in junction box, Ø16/Ø6-4 mm	16	099 110 209
Rubber sealing for cablegland housing in junction box, Ø16/2 xØ5,5 mm	17	099 110 210
Nut for cablegland housing	18	099 110 206

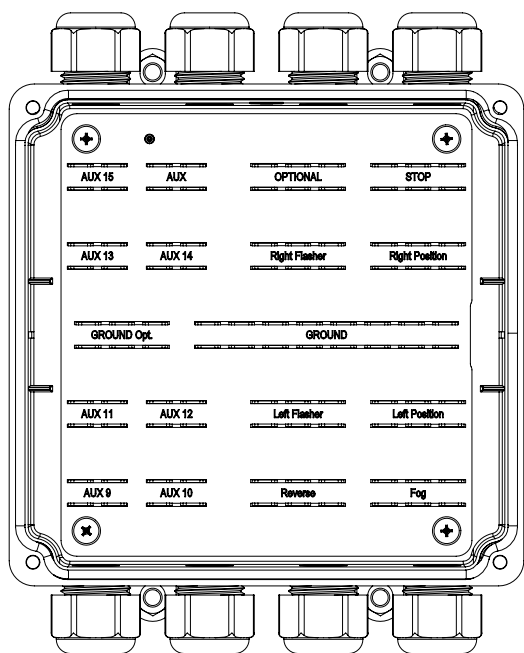
Spare parts Junction box (Old version - Generation 1)



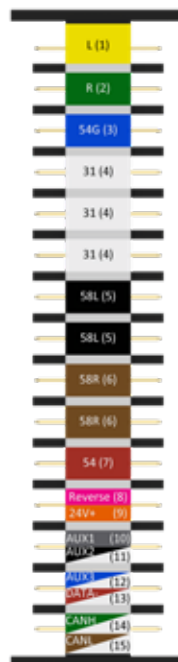
Junction box without cover and connection, 8 x connection possibilities, 158 x 143 mm	1	099 110 200 92.0000.6562
Cover for junction box, low version, 158 x 143 x 18 mm	2	099 110 201 92.0000.6563
Cover for junction box, high version, 158 x 143 x 45 mm	3	099 110 202 92.0000.6564
Seal for inlet-/outlet in junction box, Ø34 x Ø23 x 3 mm	4	099 110 203 92.0000.6565
Bayonet-ring for inlet / outlet	5	099 110 204 92.0000.6566
Cable gland M22/2,0	6	099 110 205 92.0000.6567
Nut for cable gland	7	099 110 206 92.0000.6568
Rubber blind for cable gland Ø13-11 mm	8	099 110 207 92.0000.6569
Rubber blind for cable gland, Ø11-7 mm	9	099 110 208 92.0000.6570
Rubber blind, for inlet / outlet - for cable Ø6-4 mm	10	099 110 209 92.0000.6571
Rubber blind for cable gland, Ø5,5 mm x 2	11	099 110 210 92.0000.6572
Super Seal socket with black and white (-) cable	12	099 110 211 92.0000.6573
7 poled AMP 1.5 socket	13	099 110 212 92.0000.6574
Heating cable (resistor) 24V with cable shoe - 5W. Length: 545 mm	14	093 865 125 92.0000.1466

Pin assignment

Connection ISO 12098 pin numbers / Number of spade terminals 6.3 x 0.6 mm



Terminal plate

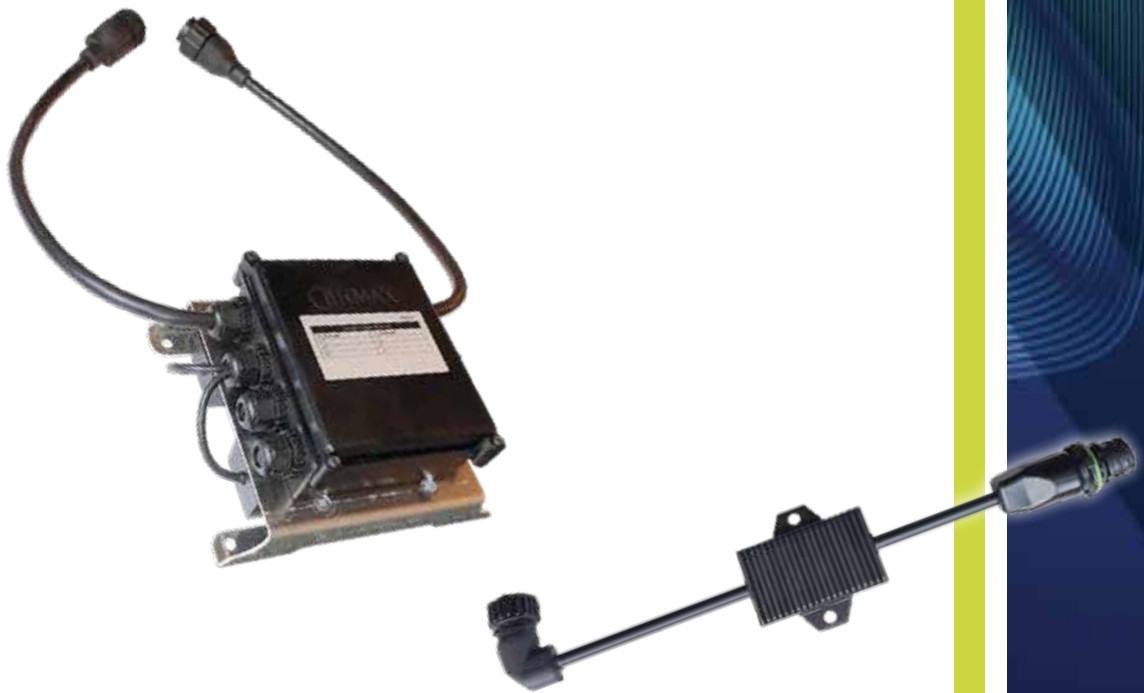


Terminal block



	Position	Description	Pieces available on terminal plates	Pieces available on terminal block
ISO 12098	1	Left indicator	6 pcs.	8 pcs.
	2	Right indicator	6 pcs.	8 pcs.
	3	Rear fog light	6 pcs.	8 pcs.
	4	Mass (-)	16 pcs.	21 pcs.
	5	Left position	6 pcs.	14 pcs.
	6	Right position	6 pcs.	14 pcs.
	7	Brake light	6 pcs.	8 pcs.
	8	Reversing light	6 pcs.	4 pcs.
	9	Power supply, continuous positive	4 pcs.	4 pcs.
	10	AUX 1, wear display	4 pcs.	4 pcs.
	11	AUX 2, brake control for trailer	4 pcs.	4 pcs.
	12	AUX 3, lifting axle	4 pcs.	4 pcs.
	13	Mass for PINs 9-15 (ISO12098)	4 pcs.	4 pcs.
	14	CANH - data communication	4 pcs.	4 pcs.
	15	CANL - data communication	4 pcs.	4 pcs.
Additional groups		Mass (-) optional	6 pcs.	--
		AUX Optional	4 pcs.	--
		Optional	6 pcs.	--

ELECTRONIC CONTROL UNITS



Electronic control boxes - applications

Light failure control



Failure at an indicator must for vehicles with a permission for driving in public traffic be shown optically or acoustically. This regulation is valid for all EU countries (EU Regulation 48 Art. 6.55.8).

If there is a surveillance of the brake light at the pulling vehicle there must also be a failure indicator for the brake lights.

As a LED light has a very low consumption there might be problems with the failure control at certain trucks. The low consumption is estimated as failure of the light control and shown as a failure.

Using the ERMAX LED control box the LED tail lights are tested and a resistance for indicator and stop function is mounted.

Should the consumption of the LED fall to below 10 mA (LED light or connections are defect) the resistance is disconnected, and the failure will be shown at the dashbord in the driver's cab according to the regulation.

Disclaimers:

A failure control device must not have any influence on the vehicle mileage log book of the trucks, and therefore Ermax cannot grant an overall guarantee that the application will work perfectly at all trucks.

Intelligent LED Control Units for monitoring and failure control of LED tail lights

No worries - suitable for all types of vehicles regardless of the truck

ERMAX LED Control units Generation 2.0 - Compatible with all truck brands*

The new ERMAX LED control units are compatible with the older monitoring technologies as well as with the new ISO13207 standard for failure control. This means, that all known vehicles and trucks regardless of production year* can communicate with the new ERMAX LED failure control units - generation 2.0 - no matter which truck a trailer is combined with.



LED Control unit 24V, universal
- suitable for all tail lights functions



LED Control unit 24V,
for both directions indicator - and stop light functions



LED Control unit 24V,
for both directions indicator- and stop light functions
- are integrated in the tail lights TM11 and TM12



LED Control box 24V,
for direction indicator- and stop light functions as well as
junction box (also version with integrated SIMAC®)

Highlights

* Valid for all known brands within EU as of 12/2020

- ERMAX LED Control units are compatible with all brands and building-year of trucks produced in EU*, meaning, that a trailer with ERMAX LED failure control can be combined with all towing vehicles, old as new
- Use a technology which is NOT limited to ISO13207 and therefore suitable for all vehicles*
- Easy and flexible built-in of the small compact variants due to the long cables, meaning that they can either be mounted directly behind the tail lights or mounted further ahead at the front under the vehicle
- The combined control unit for main cable installation combines both monitoring of the light functions, SIMAC® and at the same time function as a junction box
- The new Generation 2.0 LED failure control technology is already used as an integrated part of the ERMAX tail lights TM10, TM11 og TM12
- Approvals: ADR, EMC-R10



TM10 LED tail light



TM11 LED tail light

TECHNICAL SPECIFICATIONS

LED Control Unit 24V Generation 2.0 – Failure control LED tail lights

ERMAX LED Control Units Generation 2.0 – Applications

Ermac LED control units Generation 2.0 technology is already used today in several variants in order to solve the known problems concerning light monitoring.

Generation 2.0 LED control units monitor the direction indicator light function and / or the stop light function, and ensure full failure control, when LED tail lights are used at the trailer. In case of light failure, the light monitoring system at the truck is activated according to the regulation ECE 48.

The small compact LED control unit with AMP plug connections is easily mounted in front of the tail light in the right or left side. One variant monitors the direction indicator light function (098 298 146) and can be combined with the variant which monitors the stop light function (098 298 148).

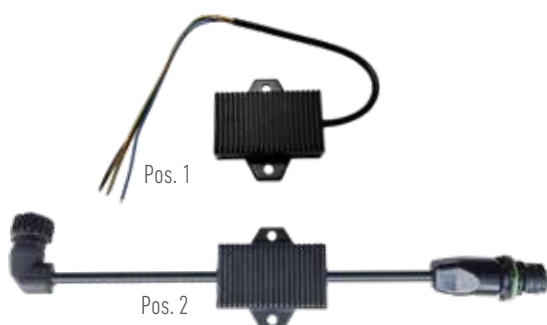
If no AMP plugs are used, a universal variant with Open-end can be used for all tail light functions (one unit per function – 098 298 144).

By a complete ERMAX lighting installation the easiest variant to use, is the combined control box, which monitors both direction indicator- and stop-light functions (098 298 160). This is also available in a variant with SIMAC® (control of flashing side marker lights) (098 298 170) and both variants function also as a junction box, where all tail light functions can be reached.



Failure control function	Inlet	Outlet	Dimension (Control unit)	Distance mounting holes	Pos.	Article No.
Universal - for all tail light functions (one unit per function)	--	400 mm cable with Open-end	120 x 52 x 30 mm	70 mm / Ø8,5 mm	1	098 298 144
Indicator light	850 mm cable with 7-poled AMP socket	600 mm cable with 7-poled AMP plug	120 x 52 x 30 mm	70 mm / Ø8,5 mm	2	098 298 146
Stop light	1.800 mm cable with 7-poled AMP socket	1.500 mm cable with 7-poled AMP plug	120 x 52 x 30 mm	70 mm / Ø8,5 mm	2	098 298 148
Indicator- and stop light (one unit per function)	Mounting at the back of the housing of TM11 og TM12 Connection with 3 spring-loaded contact pins		118 x 38 x 25 mm	-	3	098 298 149
Indicator- and stop light and also junction box*	500 mm cable with 15-poled Ermac bayonet socket	500 mm cable with 15-poled Ermac bayonet plug	285 x 270 x 170 mm	250 x 240 mm / 4 x Ø8,5mm	4	098 298 160
Indicator- and stoplight, SIMAC and junction box*	500 mm cable with 15-poled Ermac bayonet socket	500 mm cable with 15-poled Ermac bayonet plug	285 x 270 x 170 mm	250 x 240 mm / 4 x Ø8,5mm	4	098 298 170

* The LED Control box 098 298 160 and 098 298 170 functions as junction box and give the possibility to reach outlets of all ISO12098 light connections.

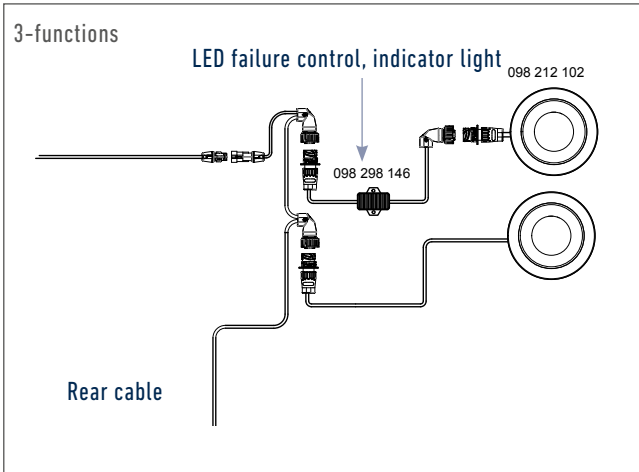


TECHNICAL SPECIFICATIONS

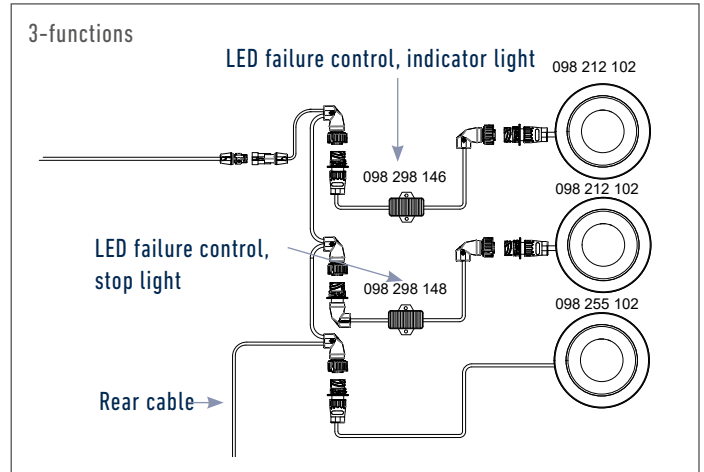
LED Control Unit 24V Generation 2.0 - Failure control LED tail lights

Examples of applications

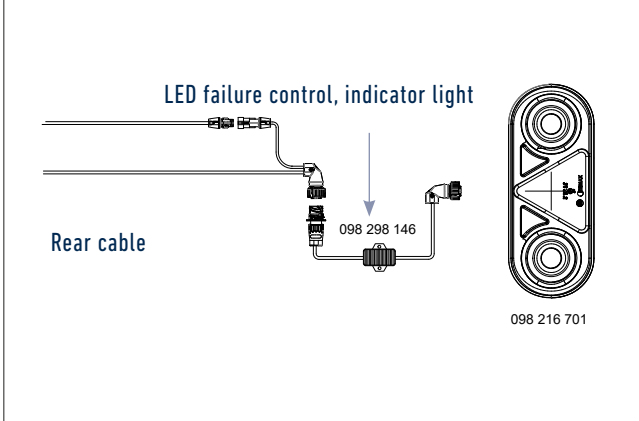
Ex: Configuration with failure control of indicator light



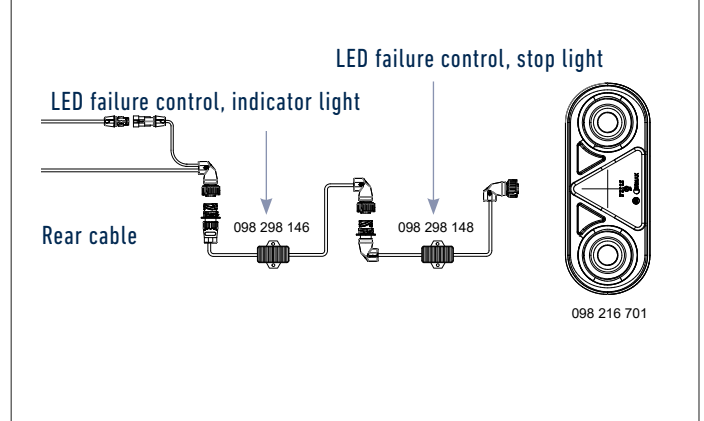
Ex: Configuration with failure control of indicator- & stop light



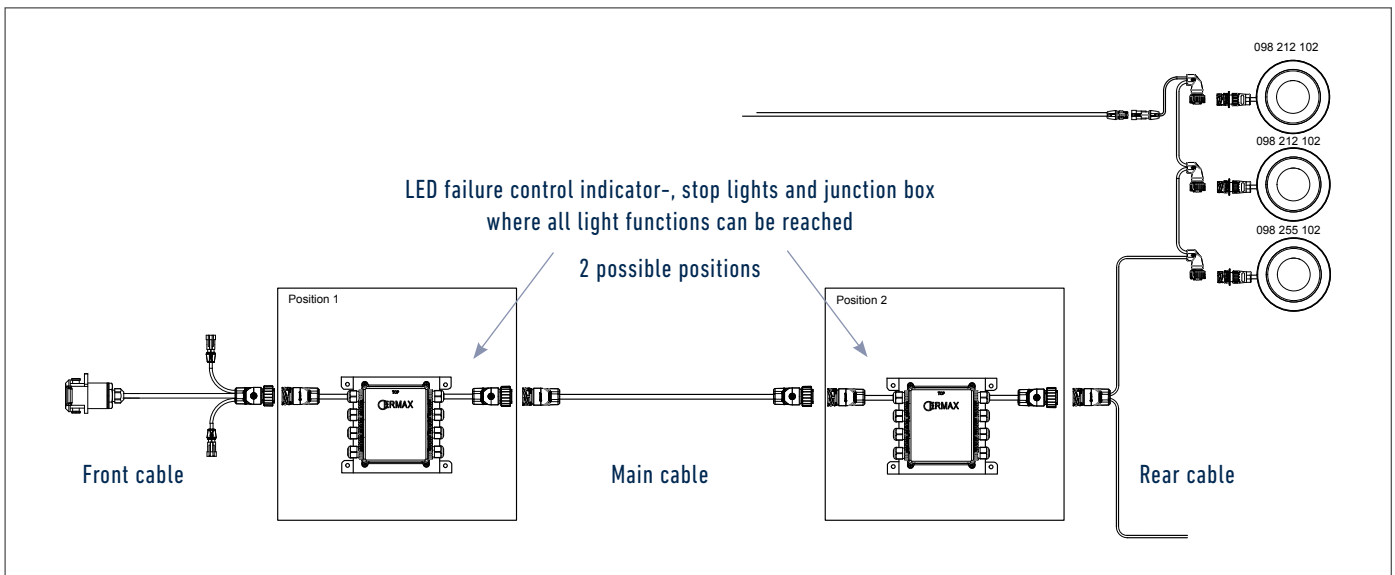
7-functions



7-functions



Ex: Configuration with failure control of indicator- & stop light - and junction box function

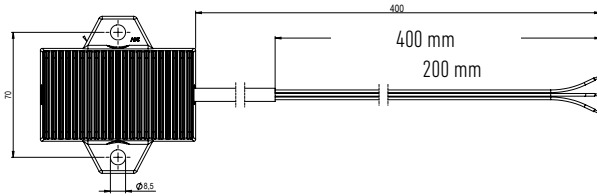


TECHNICAL SPECIFICATIONS

LED Control Unit 24V Generation 2.0 - Failure control LED tail lights

Drawings / Dimensions

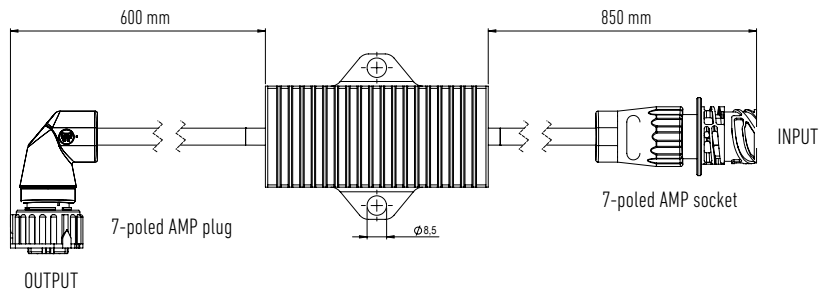
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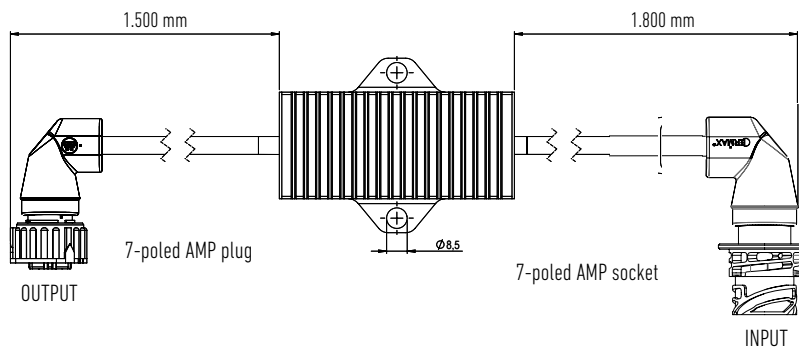
Contact assignment

Position	Colour	Function	Description
1	Brown	Ground	Minus
2	Blue	Input	Switch / Relay
3	Yellow - Green	Output	Tail light / light functions

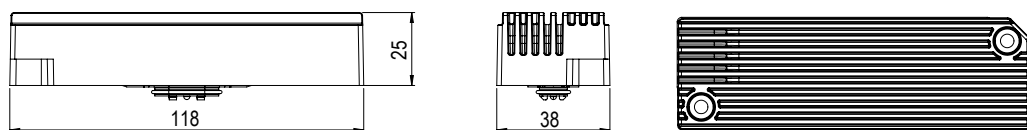
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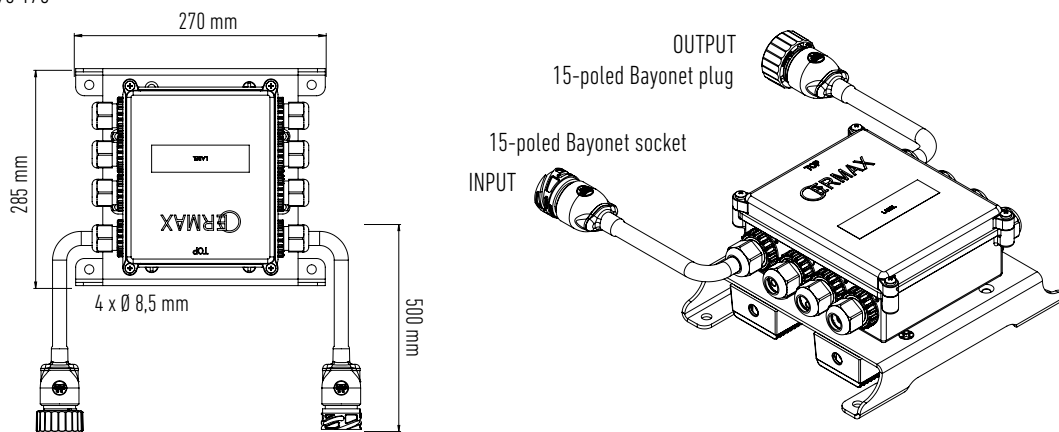
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098 298 149



098 298 160 / 098 298 170



Application overview - Vehicle brands and models

Vehicle-information				Variant of ERMAX LED control unit, which is usable*	
Vehicle brand	Type	Model	ISO13207	LED Control unit Gen. 1.0	LED Control unit Gen. 2.0
DAF	All	-		✓	✓
Iveco	All	-		✓	✓
MAN	F2000	-2000		✓	✓
	L2000	-2000		✓	✓
	M2000	-2000		✓	✓
	TG-A	2000-2007		✓	✓
	TG-L	2005-2017		✓	✓
	TG-L	2017-	✓		✓
	TG-M	2005-2016		✓	✓
	TG-M	2016-	✓		✓
	TG-S	2007-2016		✓	✓
	TG-S	2016-	✓		✓
	TG-X	2007-2016		✓	✓
Mercedes	Actros	1995-2015		✓	✓
	Actros	2015-	✓		✓
	Antos	2012-2016		✓	✓
	Antos	2016-	✓		✓
	Atego	1998-2017		✓	✓
	Atego	2017-	✓		✓
	Arocs	2013-2016		✓	✓
	Arocs	2016-	✓		✓
	Axor	2002-2017		✓	✓
	Axor	2017	✓		✓
	SK	1989-1998		✓	✓
Renault	All	-		✓	✓
Scania	92, 112, 142			✓	✓
	93, 113, 123, 143			✓	✓
	94, 114, 124, 144, 164	1995-2005		✓	✓
	P, R, T Series	2004-2017		LED Control unit not necessary	
	P, R, T Series	2018-	✓		✓
	G-Series	2007-		LED Control unit not necessary	
Volvo	FH I	1993-2012		✓	✓
	FH II	2012-		LED Control unit not necessary	
	FL I	1986-1999		✓	✓
	FL II	1999-2013		✓	✓
	FL II	2013-		LED Control unit not necessary	
	FM I	1998-2001		✓	✓
	FM II	2001-2010		✓	✓
	FM II	2010-		LED Control unit not necessary	

PLUGS & SOCKETS



Loose plugs



Plug type	Yellow Rubber grommet	Pol	Cable shoe	Red end Position-Rubber grommet	Pos.	Article No.
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Super Seal plug	Ø 1,8 - 2,4 mm	2	Plug grommet 0,5 - 1,0 mm ²		1	099 110 019 92.0000.1686
Super Seal socket	Ø 1,8 - 2,4 mm	2	Plug 0,5 - 1,0 mm ²		2	099 110 018 92.0000.1685
Super Seal plug with blind seals	Ø 1,8 - 2,4 mm	2	10 pcs. pr. plastic bag		3	099 110 024 92.0000.9057
Super Seal plug incl. blanking plug	Ø 1,8 - 2,4 mm	3	Plug grommet 0,5 - 1,0 mm ²	✓	4	099 111 102 92.0000.1690
Super Seal socket incl. blanking plug	Ø 1,8 - 2,4 mm	3	Plug grommet 0,5 - 1,0 mm ²	✓	5	099 111 103 92.0000.1691
Super Seal plug	Ø 1,8 - 2,4 mm	4	Plug grommet 0,5 - 1,0 mm ²	✓	6	099 111 032 92.0000.7567
Super Seal socket	Ø 1,8 - 2,4 mm	4	Plug grommet 0,5 - 1,0 mm ²	✓	7	099 111 026 92.0000.7566

Accessories

Rubber grommet for 2 poled Super Seal plug					8	099 110 712 92.0000.1687
Rubber grommet for 3 poled Super Seal plug					9	099 110 713 92.0000.1688
Rubber grommet for 4 poled Super Seal plug					10	099 110 714 92.0000.1689
T-coupling for 2 poled Super seal plug (3 sockets)					11	099 111 415 92.0000.1692
Blanking plugs for 2 poled Super Seal socket - black plastic					12	099 110 028 92.0000.0004
Blanking plugs for 2 poled Super Seal plug - black plastic					13	099 110 029 92.0000.0023
Blanking plugs for 3 poled Super Seal plug - black plastic					14	099 110 039 92.0000.7987
Blanking plugs for 15 poled Bajonet socket						099 110 025 92.0000.8191

Loose plugs & blanking plugs



Plug type	Pol	Rund Plug grommet	Blue* Rubber grommet	White Rubber grommet	Clear Position-Rubber grommet	Pos.	Article No.
AMP 1.5 socket Straight	4	1,0-2,5mm ²	Ø1,2-2,1 mm (Yellow)			1	099 110 468 92.0000.7746
AMP 1.5 plug Angled	4	0,5-1,0 mm ²	Ø1,2-2,1 mm (Grey)		✓	2	099 110 469 92.0000.7747
AMP 1,5 plug Straight	7	0,5 - 1,0 mm ² 1,0 - 2,5 mm ²	Ø 1,2 - 2,1 mm	Ø 2,2 - 3,0 mm	✓	3	099 111 481 92.0000.1791
AMP 1,5 plug angled	7	0,5 - 1,0 mm ² 1,0 - 2,5 mm ²	Ø 1,2 - 2,1 mm	Ø 2,2 - 3,0 mm	✓	4	099 111 485 92.0000.1792
AMP 1,5 socket Straight	7	0,5 - 1,0 mm ² 1,0 - 2,5 mm ²	Ø 1,2 - 2,1 mm	Ø 2,2 - 3,0 mm	✓	5	099 111 541 92.0000.6456

Accessories

Rubber grommet for 7- and 4-poled AMP plug/socket - with cable inlet Ø5,8 mm	6	099 110 715 92.0000.7691
Rubber grommet for 7- and 4-poled AMP plug/socket - With 2 x cable inlets Ø5,8 mm	7	099 110 716 92.0000.7692
Rubber grommet for 7- and 4-poled AMP plug/socket - With 2 x cable inlets - 1 x Ø5,8 mm / 1 x 5,5x3,3 mm for side cable	8	099 110 717 92.0000.7693
Blanking plugs for 7 poled AMP-socket Black plastic	9	099 110 023 92.0000.9279
Blanking plugs for 7 poled AMP plug with bayonet gland Black plastic	10	099 110 026 92.0000.6201
Blanking plugs for 15 pole bayonet socket	11	099 110 025 92.0000.8191

7 poled plugs & sockets ISO 1185 N



Pos. 1



Pos. 2



Pos. 3



Pos. 4



Pos. 5

ISO Norm	Plug type	Pol	Material	Flat plug connection	Cable outlet	Pos.	Article No.
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1185	Socket	7	Plastic-housing with Alu-cover	6,3 x 0,8 mm	Rubber seal for cable Ø: 1 x 5,6-9,8 mm, End open 1 x 5,6-9,8 mm, End closed 1 x 5,6 mm, End closed	1	090 257 127 92.0000.6174
1185	Socket	7	Plastic-housing with Alu-cover	Dual Flat plug 6,3 x 0,8 mm	Rubber seal for cable Ø: 1 x 5,6-9,8 mm, End open 1 x 5,6-9,8 mm, End closed 1 x 5,6 mm, End closed	1	090 257 130 92.0000.7869
1185	Socket	7	Aluminum	6,3 x 0,8 mm	Rubber seal for cable Ø 9,5-12,5	2	090 257 134 92.0000.6175
1185	Plug	7	Plastic	6,3 x 0,8 mm	Rubber grommet for cable Ø7 mm	3	090 257 721 92.0000.6178
1185	Plug	7	Aluminum	6,3 x 0,8 mm	Gland and rubber blind	4	090 257 716 92.0000.6176
1185	Plug	7	Aluminum	Schraub Connection	Gland and rubber blind	5	090 257 715 92.0000.7321

7 poled plugs & sockets ISO 3731 S



ISO Norm	Plug type	Pol	Material	Flat plug connection	Cable outlet	Pos.	Article No.
3731	Socket	7	Plastic-housing with Alu-cover	6,3 x 0,8 mm	Rubber seal for cable Ø: 1 x 5,6-9,8 mm, End open 1 x 5,6-9,8 mm, End closed 1 x 5,6 mm, End closed	1	090 257 123 92.0000.6173
3731	Socket	7	Plastic-housing with Alu-cover	Dual Flat plug 6,3 x 0,8 mm	Rubber seal for cable Ø: 1 x 5,6-9,8 mm, End open 1 x 5,6-9,8 mm, End closed 1 x 5,6 mm, End closed	1	090 257 131 92.0000.7870
3731	Socket	7	Aluminum	6,3 x 0,8 mm	Rubber seal for cable Ø 9,5-12,5	2	090 257 118 92.0000.7322
3731	Plug	7	Plastic	6,3 x 0,8 mm	Rubber grommet for cable Ø7 mm	3	090 257 725 92.0000.6179
3731	Plug	7	Aluminum	6,3 x 0,8 mm	Gland and rubber blind	4	090 257 719 92.0000.6177
3731	Plug	7	Aluminum	Schraub Connection	Gland and rubber blind	5	090 257 718 92.0000.7322

7 poled plugs & sockets ISO 1724



Pos 1



Pos 2



Pos 4



Pos 5



Pos 6

ISO Norm	Plug type	Pol	Material	Connection	Operation voltage	Consumption	Rubber cover	Pos	Article No.
1724	socket	7	Plastic	Screw	12V	20A		1	090 147 328 92.0000.7176
1724	socket	7	Plastic	Flat plug	12V	20A		2	090 147 329 92.0000.7800
1724	Plug	7	Plastic	Screw	12V	20A	✓	4	090 147 727 92.0000.7802
1724	Plug	7	Plastic	Screw	12V	20A		5	090 147 716* 92.0000.7814
1724	Plug	7	Plastic	Screw	12V	20A	✓	6	090 147 717 92.0000.7801

Spare parts

Flat flange gasket for socket 090 147 328/329	090 147 912
Socket holder	090 147 939
* 090 147 716 – with cable gland + rubber grommet for one or two cables	

15 poled plugs & sockets ISO 12098



Pos. 1



Pos. 2



Pos. 3



Pos. 4



Pos. 5



Pos. 6



ISO Norm	Plug type	Pol	Material	Cable gland	Crimp Contact	Pos.	Article No.
12098	socket	15	Plastic	For cable Ø 12,0-18,0 mm	3 x 2,5 mm ² 12 x 1,0 - 1,5 mm ²	1	090 265 404 92.0000.6180
12098	socket	15	Plastic	For cable Ø 12,0-18,0 mm	3 x 2,5 mm ² 12 x 1,0 - 1,5 mm ²	2	090 265 405 92.0000.6181
12098	Plug	15	Plastic	For cable Ø 12,0-18,0 mm	3 x 2,5 mm ² 12 x 1,0 - 1,5 mm ²	3	090 265 606 92.0000.6182
12098	socket	15	Plastic	For cable Ø 7,0-12,0 mm	Screw-connection	1	090 265 407 92.0000.7371
12098	Plug	15	Plastic	For cable Ø 12,0-18,0 + 7,0-12,0 mm	Screw-connection	3	090 265 608 92.0000.7372

Accessories / Spare parts

Contact (Male) for socket , crimping. 1,0 mm ² - 1,5 mm ² - ISO 4091 / 7638/ 12098	4	090 190 181 92.0000.9192
Contact (Male) for socket, crimping 2,5 mm ² - ISO 4091 / 7638/ 12098	4	090 190 182 92.0000.9193
Contact (Male) for socket, crimping 4,0 mm ² - ISO 4091 / 7638/ 12098	4	090 190 184 92.0000.9194
Contact (Male) for socket, crimping 6,0 mm ² - ISO 4091 / 7638/ 12098	4	090 190 186 92.0000.9195
Contact for plug (female), crimping. 1,0 mm ² - 1,5 mm ² - ISO 4091 / 7638/ 12098	5	090 190 191 92.0000.9196
Contact for plug (female), crimping. 2,5 mm ² - ISO 4091 / 7638/ 12098	5	090 190 192 92.0000.9197
Contact for plug (female), crimping. 4,0 mm ² - ISO 4091 / 7638/ 12098	5	090 190 194 92.0000.9198
Contact for plug (female), crimping. 6,0 mm ² - ISO 4091 / 7638/ 12098	5	090 190 196 92.0000.9199
Mounting angle for ABS socket	6	090 198 918 92.0000.8153

14 poled plugs & sockets VBG



Pos. 1



Pos. 2



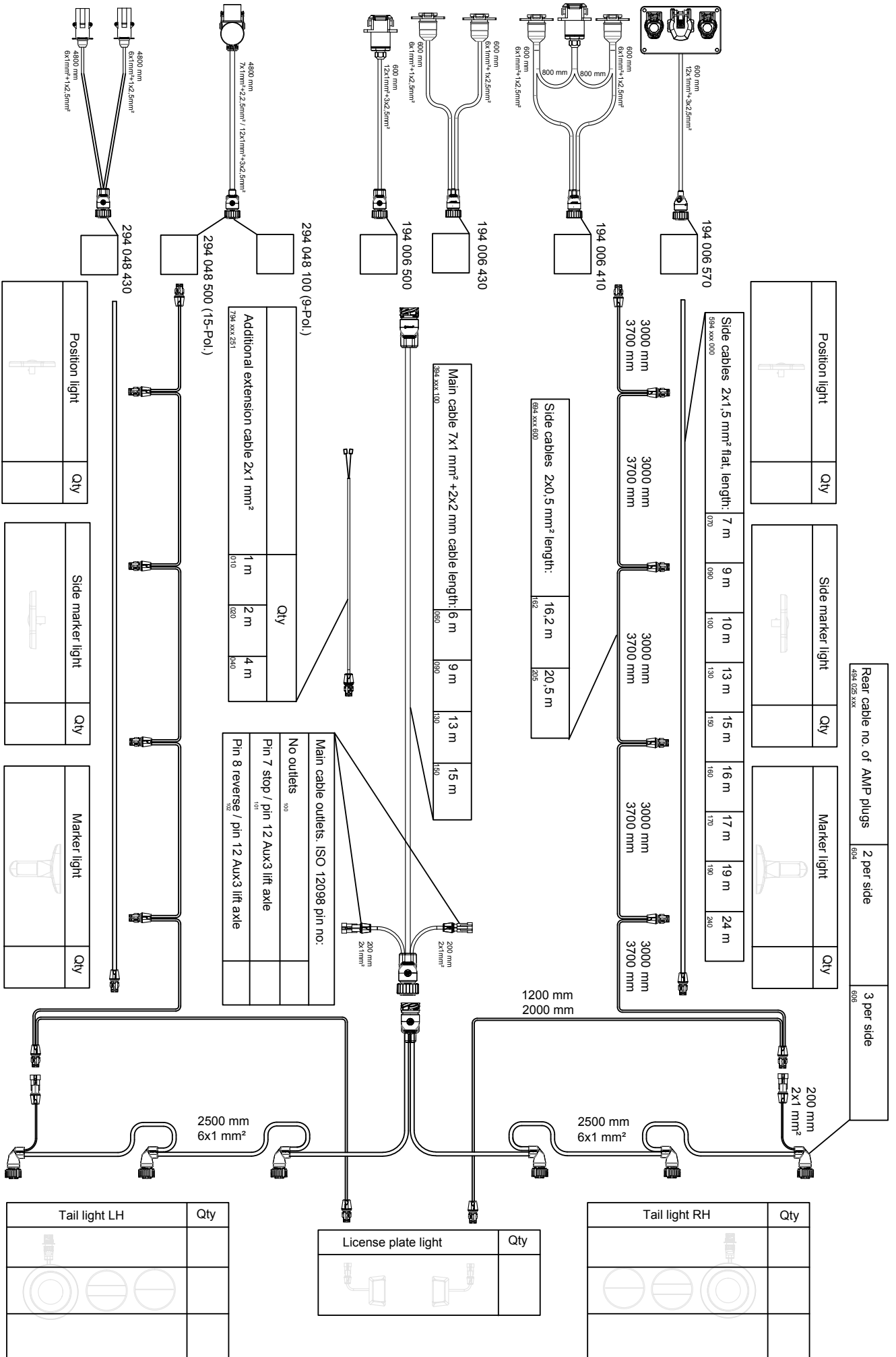
Pos. 3

SAL	Plug type	Pol	Material	Cable gland	Crimp Contact	Pos.	Article No.
--	Socket	14	Plastic	For cable Ø 10,5-15,0 mm	Pin 1 & 2 - 9,5 mm 2 5A Einzelpin - 6,5 mm 15 A Doppelpin - 6,5 mm 15 A	1	090 166 290 92.0000.6180
--	Plug	14	Plastic	For cable Ø 10,5-15,0 mm	Pin 1 & 2 - 9,5 mm 2 5A Einzelpin - 6,5 mm 15 A Doppelpin - 6,5 mm 15 A	2	090 166 360 92.0000.6653
SAL	Plug	14	Plastic	For cable Ø 10,5-15,0 mm	Pin 1 & 2 - 9,5 mm 2 5A Einzelpin - 6,5 mm 15 A Doppelpin - 6,5 mm 15 A	3	090 166 361 92.0000.6654

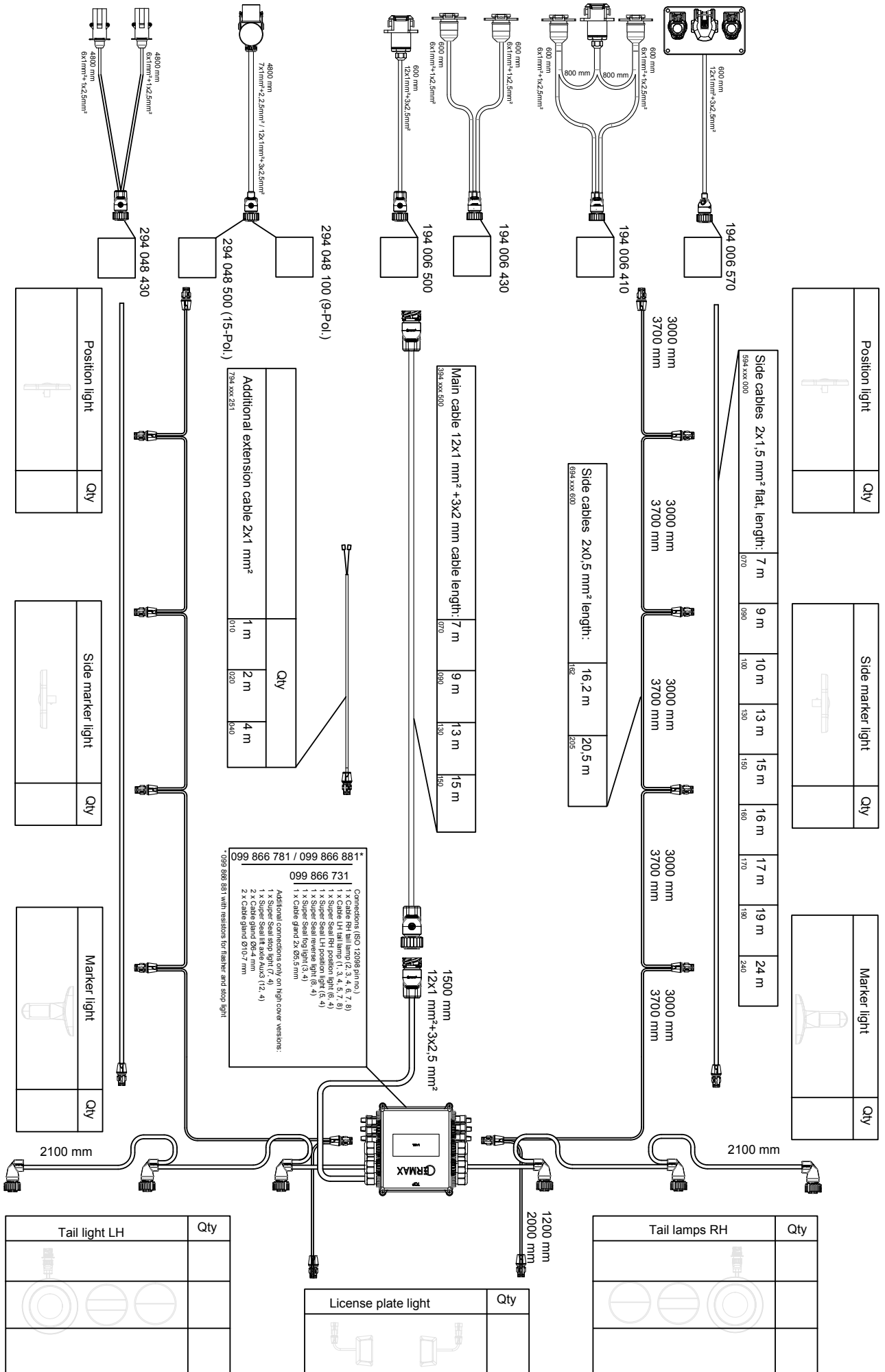
CONFIGURATION

Complete lighting systems

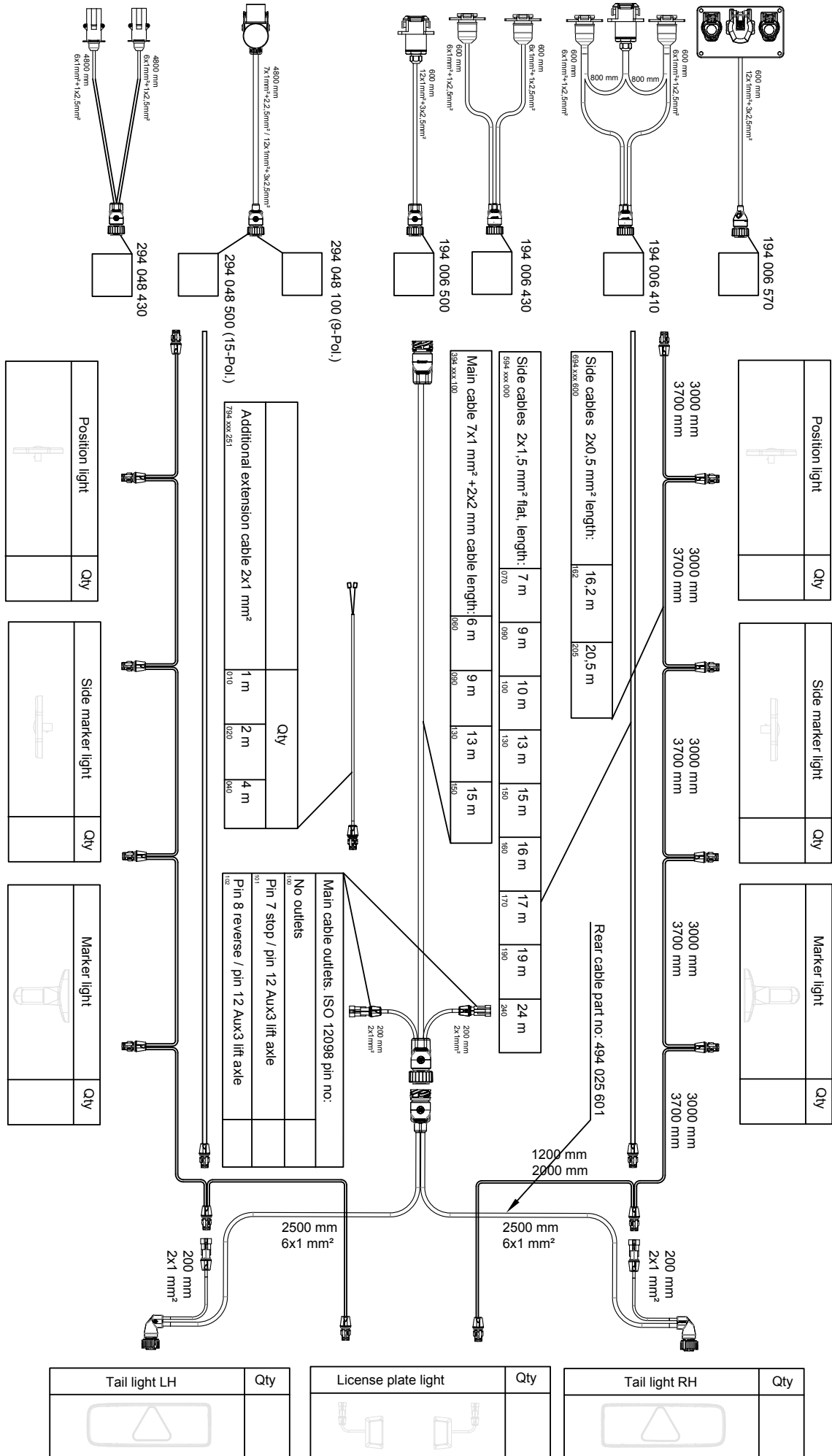


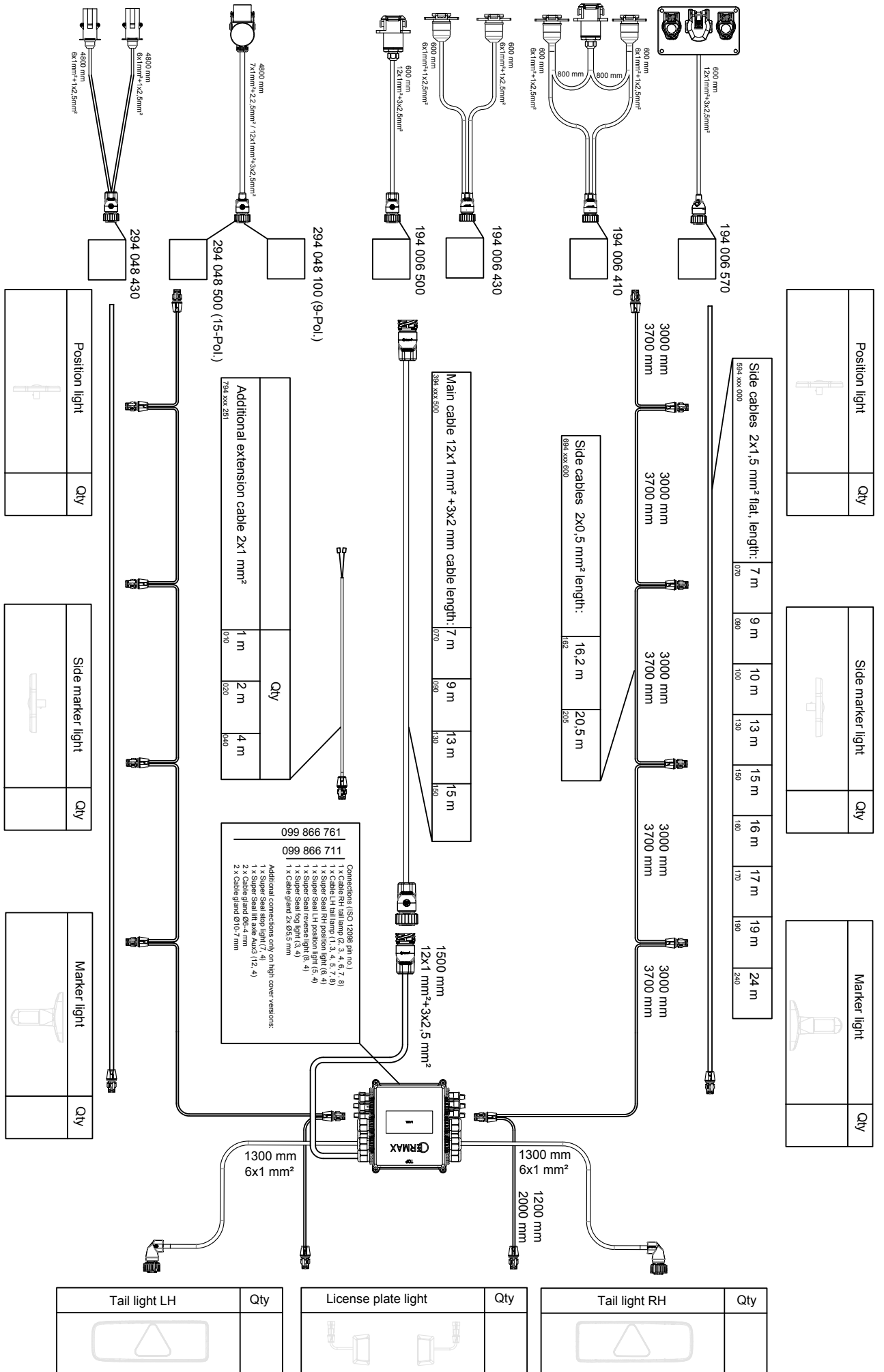


With Simac unit for flashing side marker light (Final drawing will be corrected with LH+RH outputs on front connection)

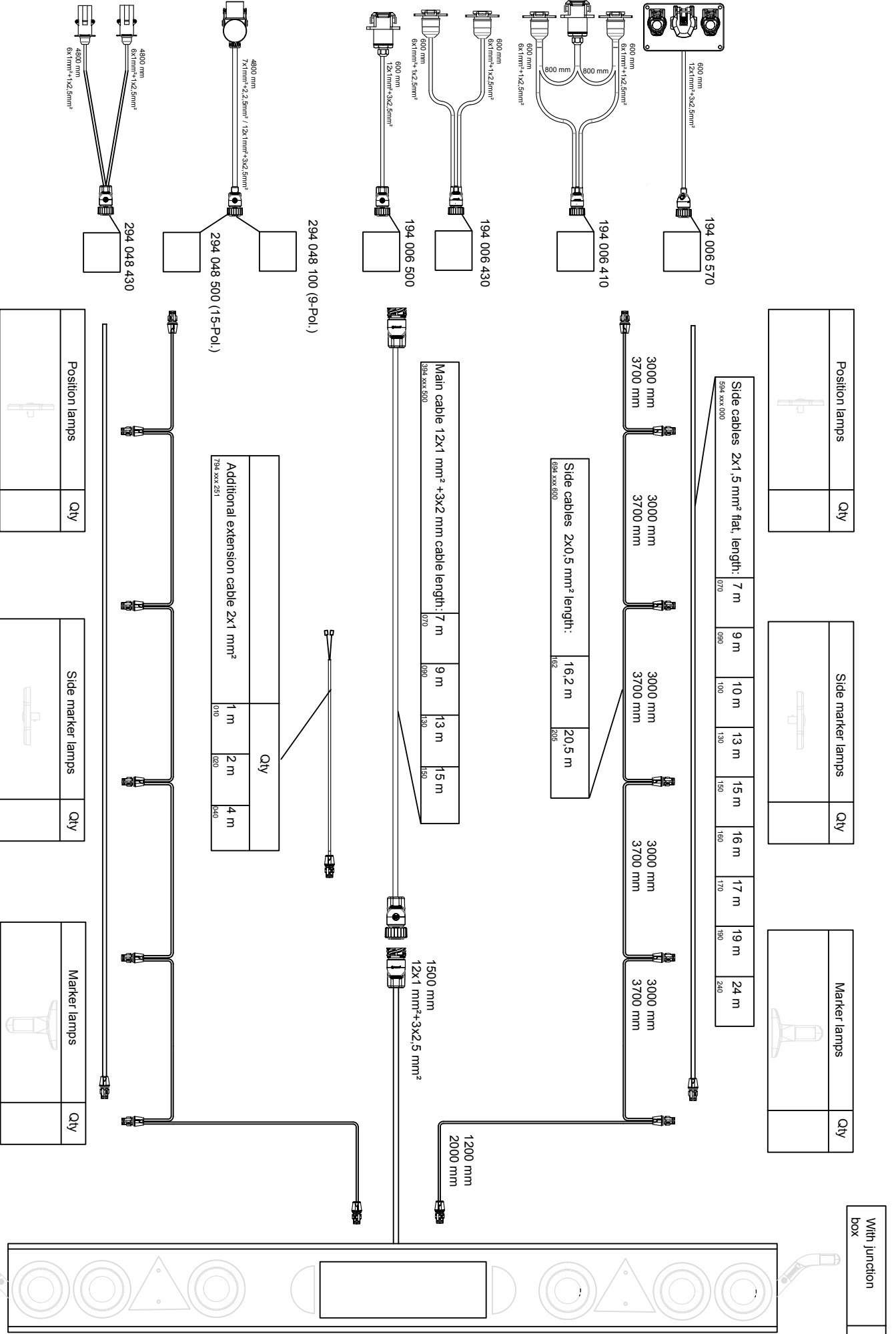


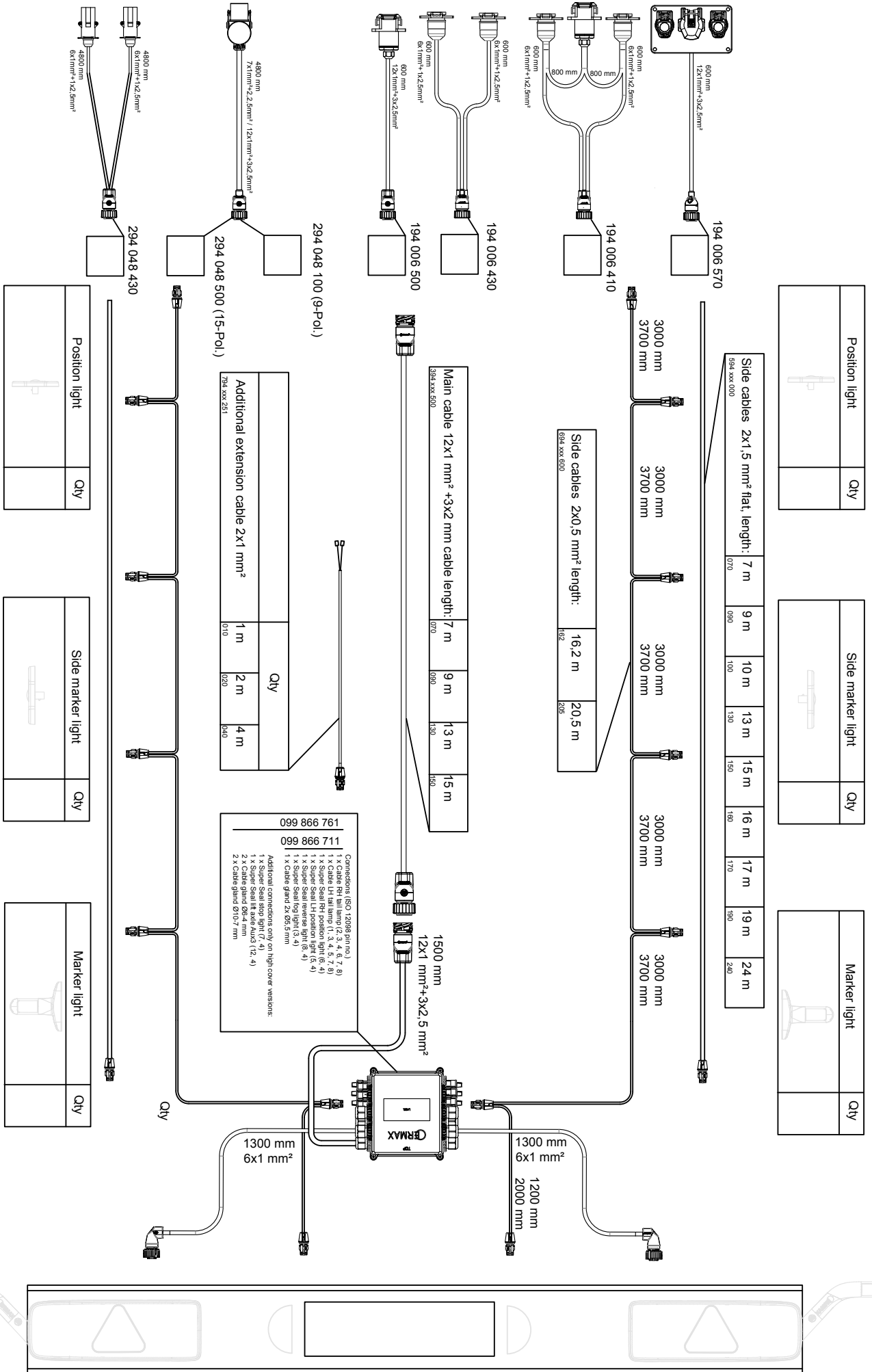
With Simac unit for flashing side marker light.
(Final drawing will be corrected with LH+RH outputs on front connection)





With Simrac unit for flashing side marker light.
 (Final drawing will be corrected with LH+RH outputs
 on front connection)





With Simac unit for flashing side marker light.
(Final drawing will be corrected with LH+RH outputs on front connection)

Brands of the BPW Group:



ERMAX®

HBN-Teknik A/S

HESTAL®

idem
telematics

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ERMAX®

ERMAX A/S
Vranderupvej 2 • DK-6000 Kolding
Tel. +45 3969 6800 • www.ermax.dk