CHASSIS BUILDING

Flexible solutions with Plug & Play

ERMAX ®

Material- and symbol explanation Ermax lighting

Material explanation	
PMMA	Acrylic plastic (polymethylmethacrylate) Maximum working temperature: 70-110 °C Melting point: 160°.
PP	Polypropylene Maximum working temperature: 80-90 °C Melting point: 165°
PC	Impact resistant polycarbonate Maximum working temperature: 135 °C Melting point: 300 °C.
ABS	Thermoplast - Black plastic Maximum working temperature: 80-105 °C.

Symbol explanation	
E	ECE approved
ECE R65	ECE Approved R65
EMC	Electromagnetic test according to R10
CE	CE Approved
⬦	ADR/GGVS - Approved for use on vehicles carrying dangerous goods
ECE 104	Meets guidelines for the use of retro reflective safety markings on heavy vehicles
XA1 / XA2	X - Direction indicator unit A - Amber 1 - Class 1 2 - Class 2

Contents

Contents, continued

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-predection, ADR-approval and design predections 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

1955 Foundation of Transport-Teknik A/S

1990 ERMAX outer end marker becomes the market-ID in Europe "The stalk light"

2004 Merge of ERMAX A/S and Transport-Teknik A/S

2019 ERMAX strengthened as seperate legal entity from Transport Teknik A/S

Foundation of ERMAX A/S
1948

Transport-Teknik A/S becomes a menber of the BPW Group
1968

Prior to the millennium, the first LED lights are developed
1999

Market launch of ERMAX OE trailer lighting systems as BPW core program
2013

DISTRIBUTION NETWORK WORLDWIDE

Always close to you

As a memeber 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 our business partners.

EUROPE
Belgium
Denmark
Germany
Finland
France
Greece
Great Britain
Ireland
Italy
Lithuania
Netherlands
Norway
Austria
Poland
Portugal
Russia
Sweden
Switzerland
Spain
Czech Republic
Turkey
Ukraine
Hungary
Belarus

ASIA
China
India
Japan
Singapore
Thailand

Australia
Australia
New Zealand

AFRICA
South Africa

SOLUTIONS - AS INDIVIDUAL AS YOUR TASKS AND REQUIREMENTS

As ERMAX customer you will achieve the following:
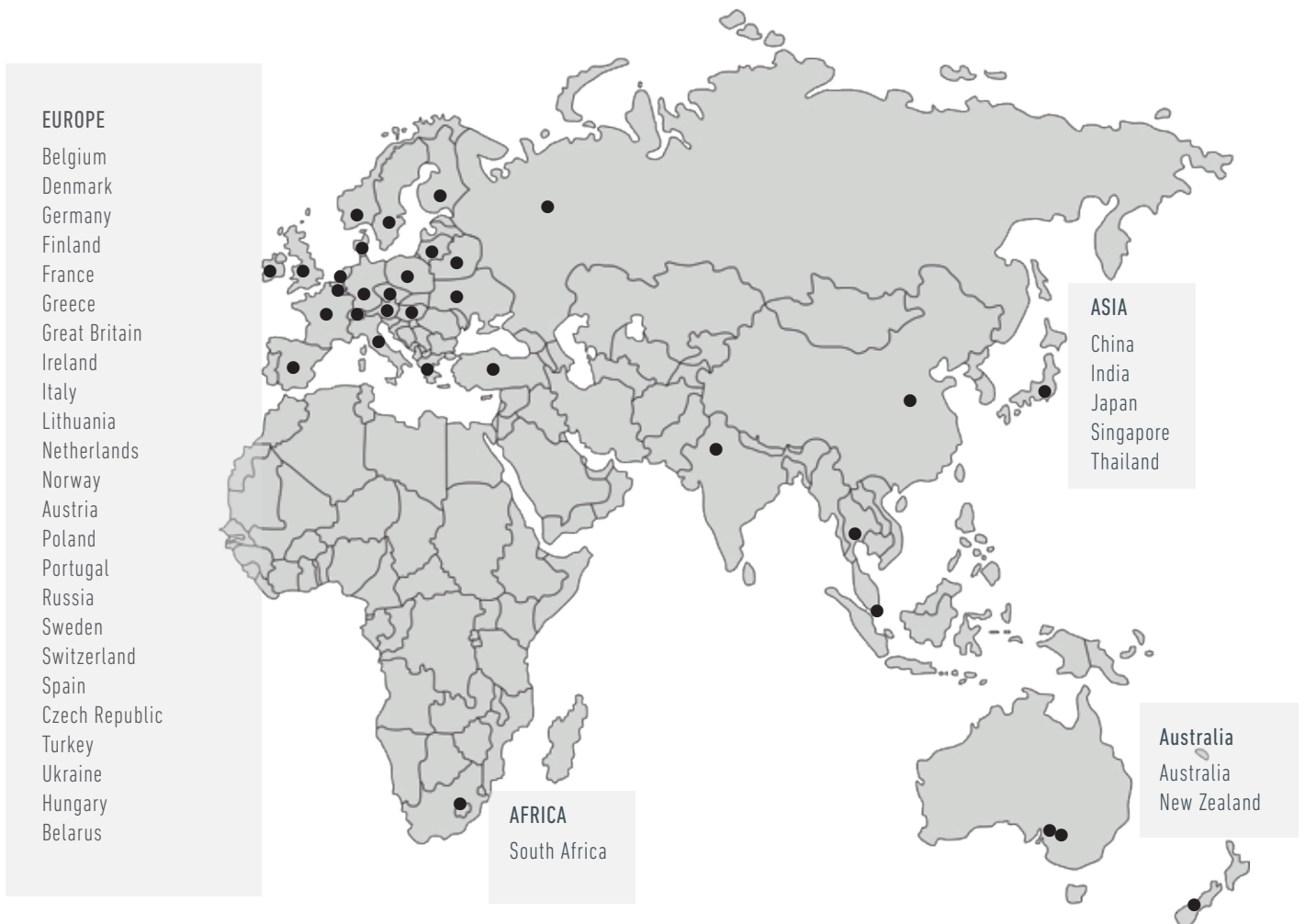
> High quality for every area

> Vehicle-customised solutions

> Focus at the newest technology and innovative products with recognizable design

> Production company with development competences under one roof

> European after-sales service network

ERMAX lighting systems:

> Wide palette including cables, plugs and lights - all according to customer requirements

> LED and SIMAC control unit built in tail light

> Eternal Light® -increasing trafic safety

> ADR approved cable kits with 7 poled AMP 1.5 and Super Seal plugs

> Unbeatable, impact resistant and long life solutions

ERMAX CABLE SYSTEMS FOR 24V

OVERVIEW AND INTRODUCTION TO PLUG CONNECTION

ERMAX connections consist of 2, 3, 4, 7 and 15 poled plugs and sockets connections– all of high quality and easy and simpel to mount and maintain. These connections types are used in all ERMAX cables and lighting systems for truck and trailer 24V.

All ERMAX connection are remoulded, which ensures a high quality and long life solution. cables, plugs and sockets are ADR approved and tested according to IP rating 69K.

Super Seal connection

Super Seal sockets and plugs (respectively 2, 3 and 4 poled) make mounting of e.g. position lights, side marker lights, outer end marker lights and work lights easy, reliable and simple.

> Easy and simple mounting

> Easy replacement of light component in case of damage

> Extremely duable and long life connection

Click-in connection

2 poled Click-in makes mounting of position lights, side marker lights, outer end marker lights and other 2 poled components easy and simple.

> Easy and simpe mounting

> Fast positioning

> Time-consuming parts replacement

Deutsch (DT) connection

Deutsch sockets and plugs - (respectively 2 and 4 poled) make mounting of e.g. position lights, side marker lights, outer end marker lights and work lights easy, reliable and simple.

> Easy and simple mounting

> Easy replacement of light component in case of damage

> Extremely duable and long life connection

Overview of dimension and pin configuration of all Ermax connections can be found in the last section of this catalogue

7 and 4 poled AMP 1.5 connection

7 and 4 poled AMP 1.5 connections are used to connect ERMAX tail lights to the cable system. It can also be used to connect other extra components to the system.

> Rounded off pin-legs and bayonet lock ring

> Extremely durable connection

> Standard plug connection- commonly known in the market

15 poled ERMAX Bayonet connection

15 poled ERMAX bayonet connection is used to connect front cable, main cable and rear cable as well as in the case of mounting a junction box.

> Rounded off pin-legs and bayonet lock ring

> Extremely durable connection

> Standard plug connection- commonly known in the market

	Outlet from main cable	Side marker light	Position light	License plate light	Outer end marker light	Work light	Reverse lgiht	interior lighting	Tail light	Reverse light	Junction box	Main cable	Rear cable
2 poled Super Seal	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		
2 poled Click-in		✓	✓	✓	✓	✓	✓	✓					
2 poled Deutsch (DT)						✓	✓						
7 poled AMP 1.5	✓								✓	✓	✓		✓
15 poled ERMAX Bayonet											✓	✓	✓

Plug & Play solution for vehicle building
Modern rear end with intelligent wiring

ERMAX ®

Plug & Play solution from Ermax
Developed for the technical and more simple and time-saving installation

ERMAX Plug & Play upgrading kit with many advantages and opportunities

> A pre-assembled cable set makes a direct plug & play mounting of plugs, cables and ERMAX Eternal Light® tail lights

> Possibility for flexible connections for e.g. extra position light, outlets for reverse light and reverse gear alarm, without interferring with the exsisting wiring

> Higher quality and safety when connecting the cables with the plug & play solutions

> Time-saving up to 8 hours for a standard vehicle - and even bigger time-saving with customized solutions
>   - plug & play installation of plugs, cables and lights
>   - Junction box with Super Seal sockets or cable glands for all lighting fuctions

> Secure and documentable installation

> No change of liability in warranty obligations, as existing wiring will not be opened

> Easy to replace damaged parts

> All fuctions are accessible with either Super Seal sockets or cable glands

> The Standard upgrading kits are packed individually in a box - Simple and effective

Time-saving and easy mounting

Length reduction, stripping, use of blade receptacles etc. will be eliminated with this development from Ermax. A finished pre-assembled cable system means a plug & play solution of cable, plug and lights for vehicle building or rebuilding – meaning a time-saving and flexible mounting.

Ermax offers plug connections consisting of 2, 7 or 15-poled plugs and sockets – plug connections all of very high quality – mounting and maintenance are easily made. Ermax plug connections are being used in all our lighting systems for 24V heavy vehicles and trailer systems. All parts are easily mounted, process secured and time-saving.

The plug connections are remoulded which ensures high quality and a long life-time. Cables and plugs are ADR approved and tested according to IP Rating 69K protection.

| 2 and 3 poled Super Seal connection | 4 and 7 poled AMP 1.5 connection | 15 poled Ermax Bayonet connection |

ERMAX ®

Junction box for Plug & Play time-saving solution

Junction box with many possibilities

With Ermax junction box integrated in the cable system you will have all the AUX functions normally found in a trailer.


Junction box - Universal

Junction box - for crane module

In other words – here is the possibility to use all pre-configured ISO12098 connections (pin 9-15). This could be functions as e.g. working lights, warning lights, beacons or power supply.

All functions are available by using Super Seal sockets or cableglands

For the crane module solution, it is mandatory that the tail lights are connected in the junction box, as the tail lights can thus be passed on to the crane module.
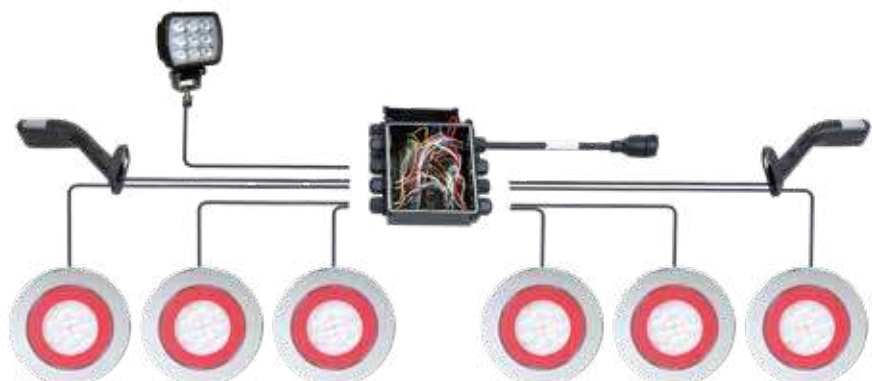
Plug & Play configuration - Time-saving mounting
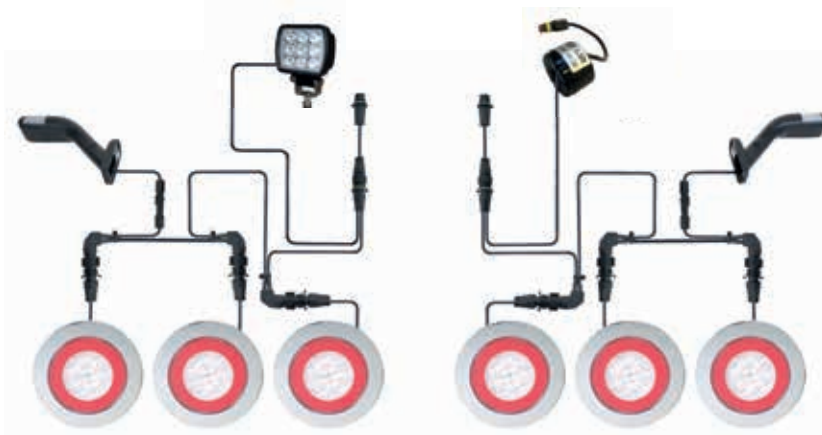
Open end configuration - Time-demanding mounting

Junction box - Open end
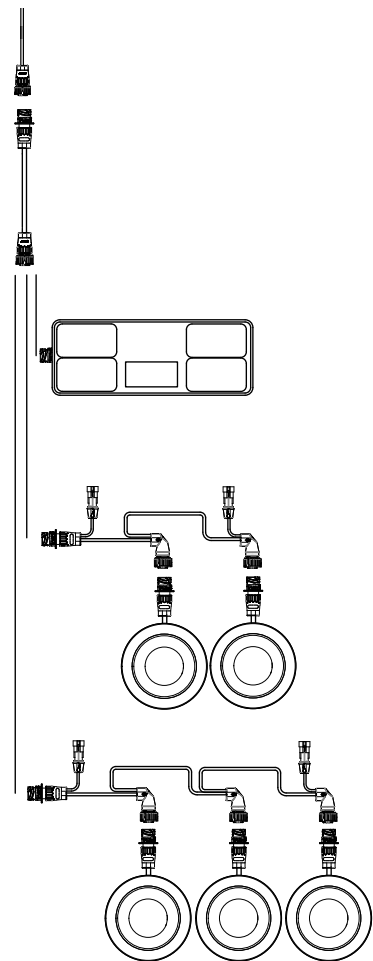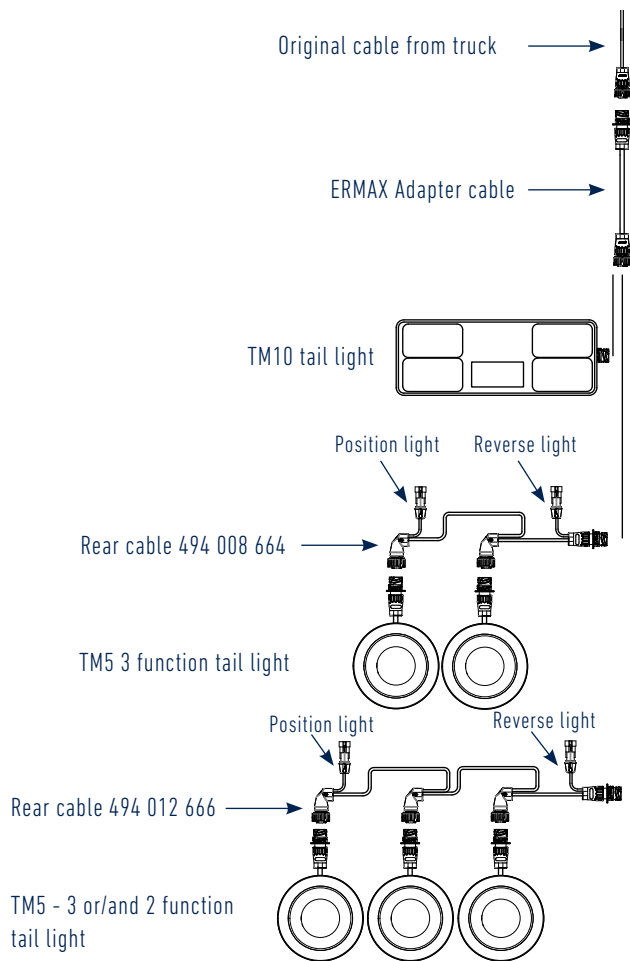
Plug & Play solutions - without junction box

ERMAX LED tail lights with time-saving mounting – directly integrated in the vehicle

A finished pre-assembled cable set makes a direct plug & play mounting of plugs, cables and ERMAX Eternal Light tail lights (TM5 and TM10) possible.

Time-saving up to 8 hours for one vehicle using the plug & play solution.

Configuration - Upgrading of vehicle <u>without junction box</u>

Original cable from truck

ERMAX Adapter cable

TM10 tail light

Position light   Reverse light

Rear cable 494 008 664

TM5 3 function tail light

Position light   Reverse light

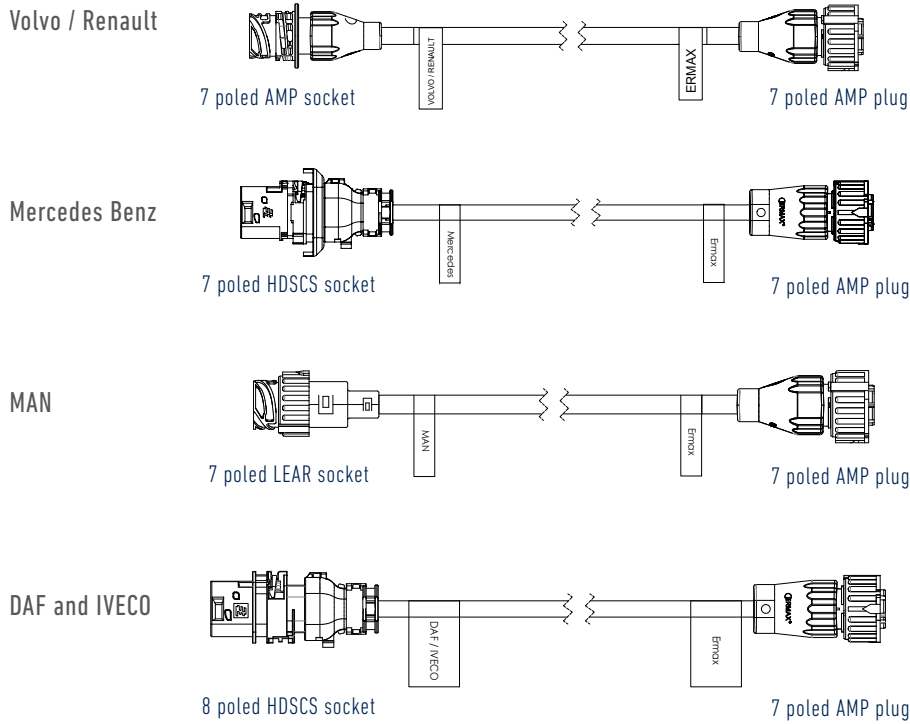Rear cable 494 012 666

TM5 - 3 or/and 2 function tail light

*) Outlets marked with position light are for connection of outer end marker light

See section "Tail lights" for other variations of ERMAX tail lights

ERMAX ®

ERMAX Adapter cable

Volvo / Renault

7 poled AMP socket — 7 poled AMP plug

Mercedes Benz

7 poled HDSCS socket — 7 poled AMP plug

MAN

7 poled LEAR socket — 7 poled AMP plug

DAF and IVECO

8 poled HDSCS socket — 7 poled AMP plug

Configuration – Vehicle type and cables

Type	Adapter	Rear cable, 3/2 function tail light – 2 x 3 pcs.	Outer end marker lights example (right / left)	Reverse light
Scania	not necessary	see previous page or the following section "tail lights"	098 241 438 / 439 (for other variants see section "outer end marker light")	All variations with Super Seal plug can be used
Volvo / Renault	994 003 200			
Mercedes Benz	994 003 210			
MAN	994 003 220			
DAF and Iveco	994 003 230			

TM10 LED tail light
098 216 508 / 509

TM10 Hybrid tail light
098 216 408 / 409

Option: The cable can be lead through the side of the mounting foot

TM5 3 function
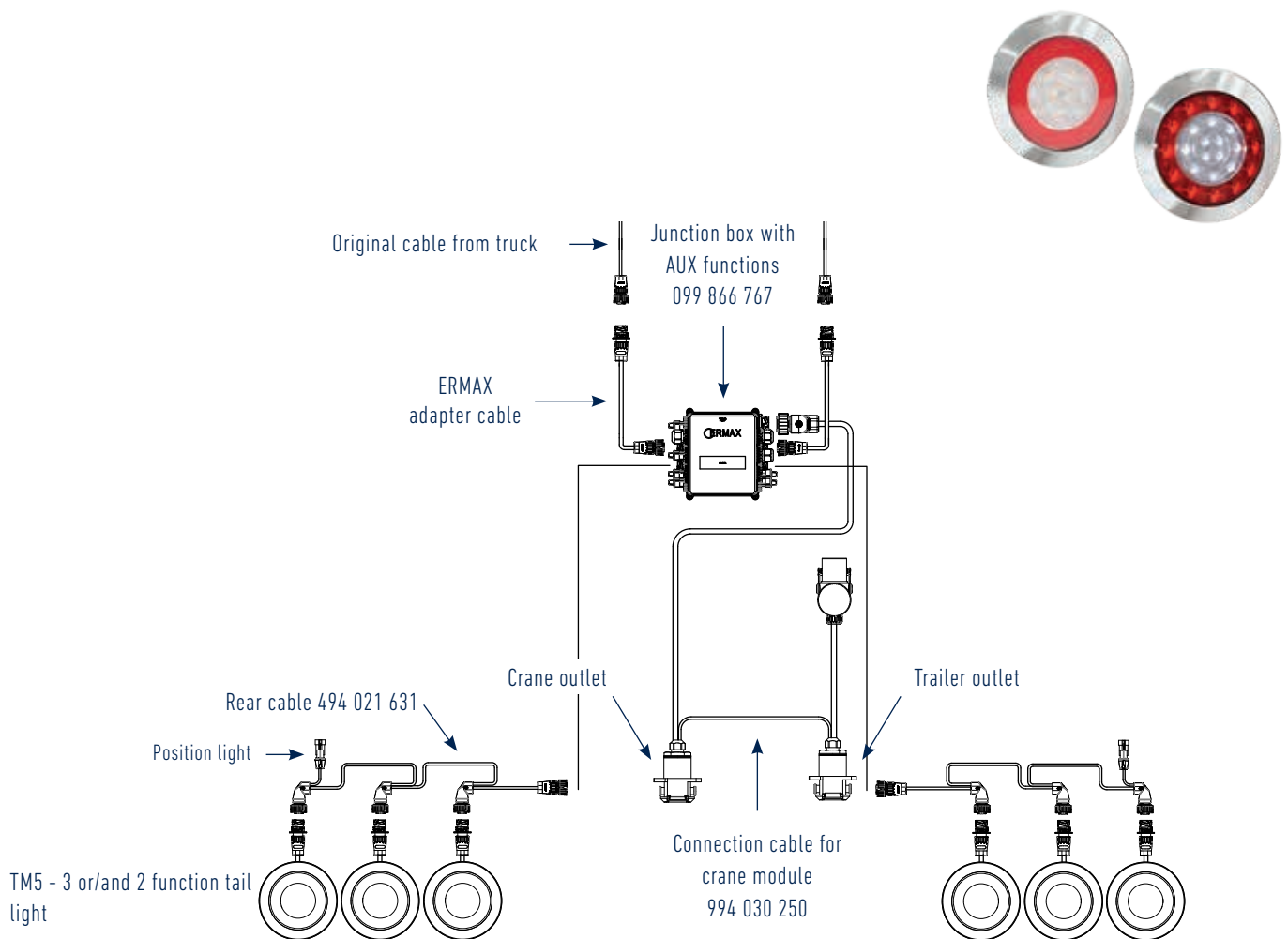098 212 102

TM5 2 function
098 255 102

ERMAX®

Plug & Play solutions - with junction box and AUX-functions

ERMAX LED tail lights with time-saving mounting – directly integrated in the vehicle

A finished pre-assembled cable set makes a direct plug & play mounting of plugs, cables and ERMAX Eternal Light tail lights (TM5 and TM10) possible – a solution making many AUX functions / connections possible by means of junction box and further plugs.
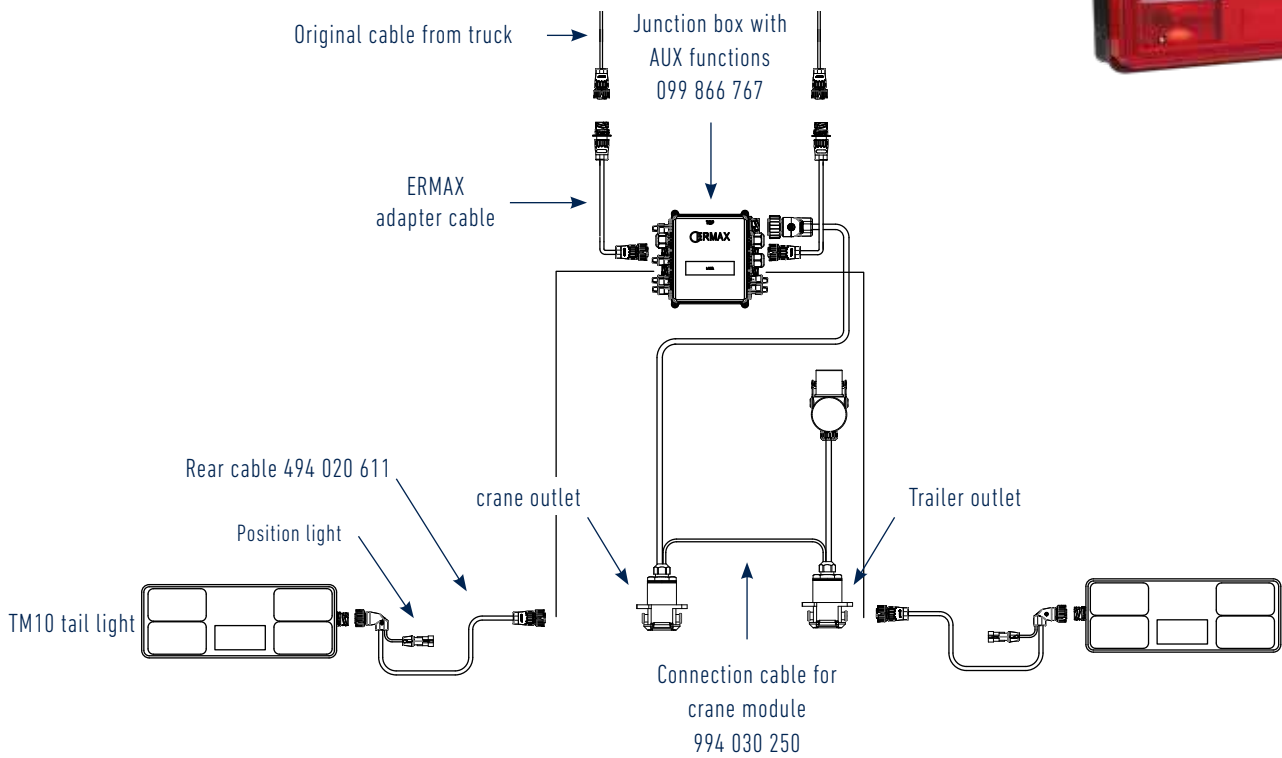
Time-saving up to 8 hours for one vehicle using the plug & play solution.

Configuration - Upgrading of vehicle <u>with junction box</u>, prepared for crane module

Original cable from truck

Junction box with AUX functions
099 866 767

ERMAX adapter cable

Crane outlet

Trailer outlet

Rear cable 494 021 631

Position light

Connection cable for crane module
994 030 250

TM5 - 3 or/and 2 function tail light

See section "Tail lights" for other variations of ERMAX tail lights

*) Outlets marked with position light are
     for connection of outer end marker light

Original cable from truck → Junction box with
AUX functions
099 866 767

ERMAX
adapter cable →

Rear cable 494 020 611

crane outlet

Trailer outlet

Position light

TM10 tail light

Connection cable for
crane module
994 030 250

*) Outlets marked with position light are
for connection of outer end marker light

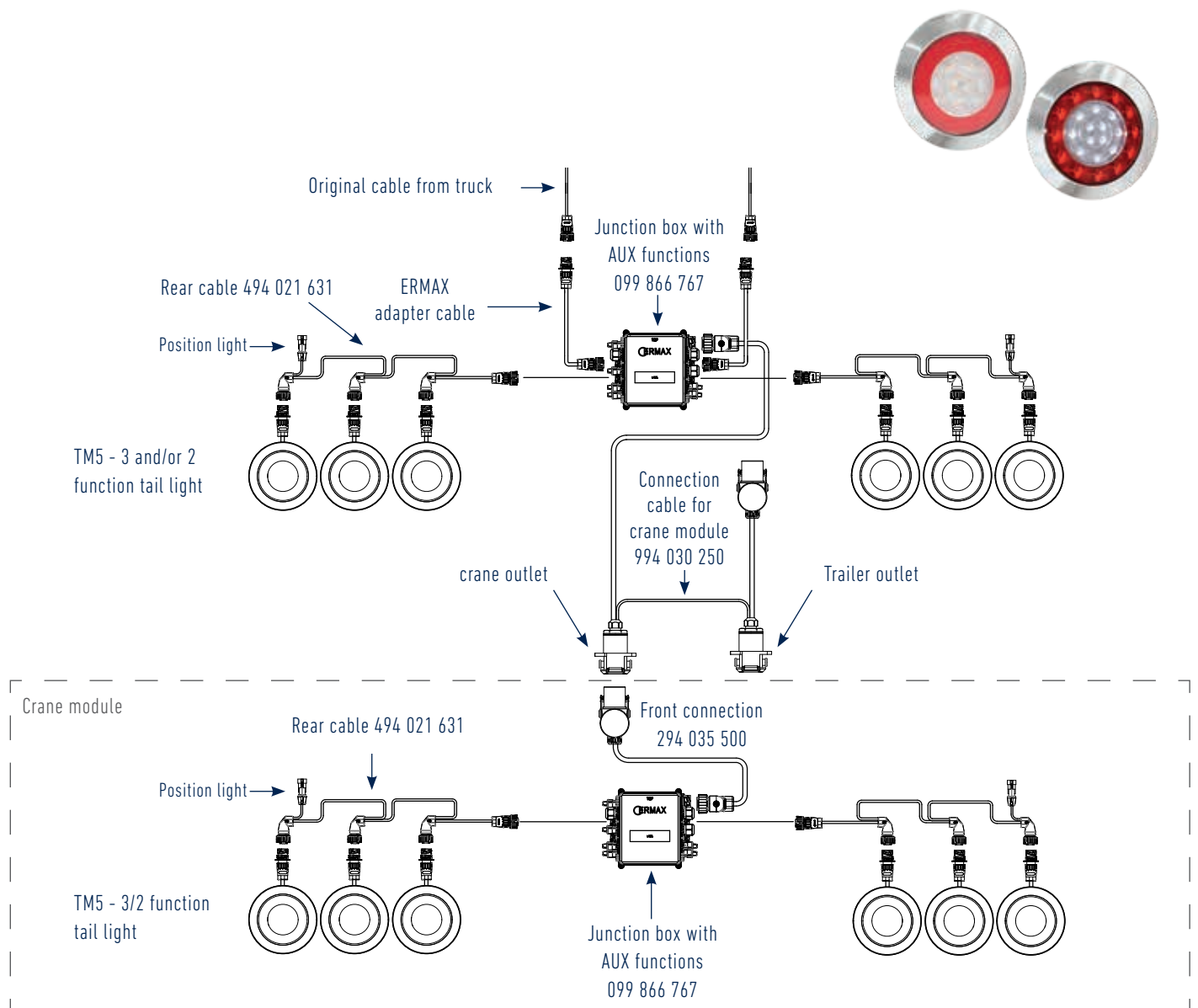See section "Tail lights" for other variations of Ermax tail lights"

ERMAX®

Plug & Play solutions – with crane module

ERMAX LED tail lights with time-saving mounting – directly integrated in the vehicle

A finished pre-assembled cable set makes a direct plug & play mounting of plugs, cables and ERMAX Eternal Light tail lights (TM5 and TM10) possible – a solution making many AUX functions / connections possible by means of junction box and further plugs.
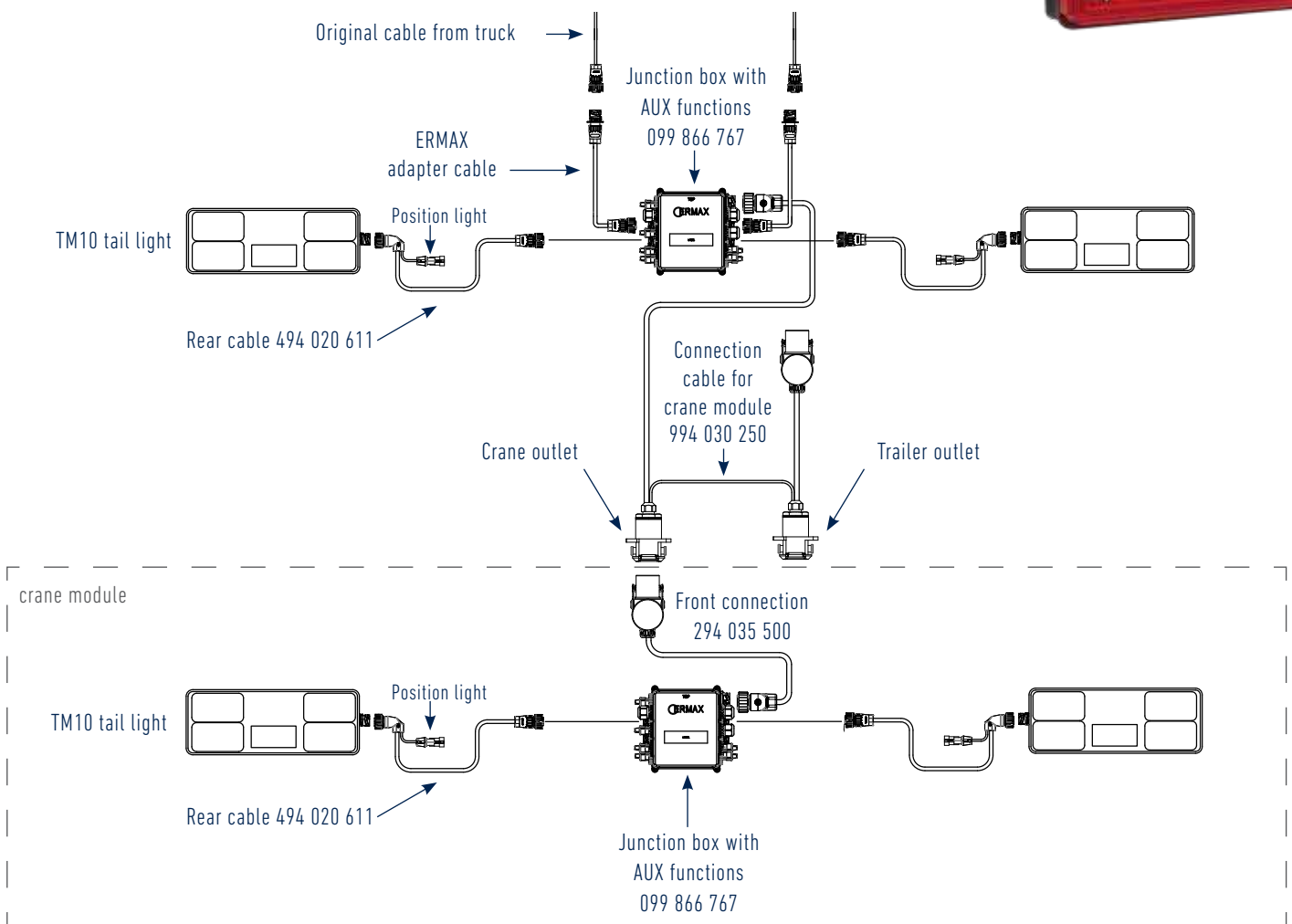
Time-saving up to 8 hours for one vehicle using the plug & play solution.

Configuration – Upgrading of vehicle with junction box, incl. crane module without connection to trailer

Original cable from truck →

Junction box with
AUX functions
099 866 767

Rear cable 494 021 631

ERMAX
adapter cable →

Position light →

TM5 - 3 and/or 2
function tail light

Connection
cable for
crane module
994 030 250

crane outlet

Trailer outlet

Crane module

Rear cable 494 021 631

Front connection
294 035 500

Position light →

TM5 - 3/2 function
tail light

Junction box with
AUX functions
099 866 767

*) Outlets marked with position light are
for connection of outer end marker light

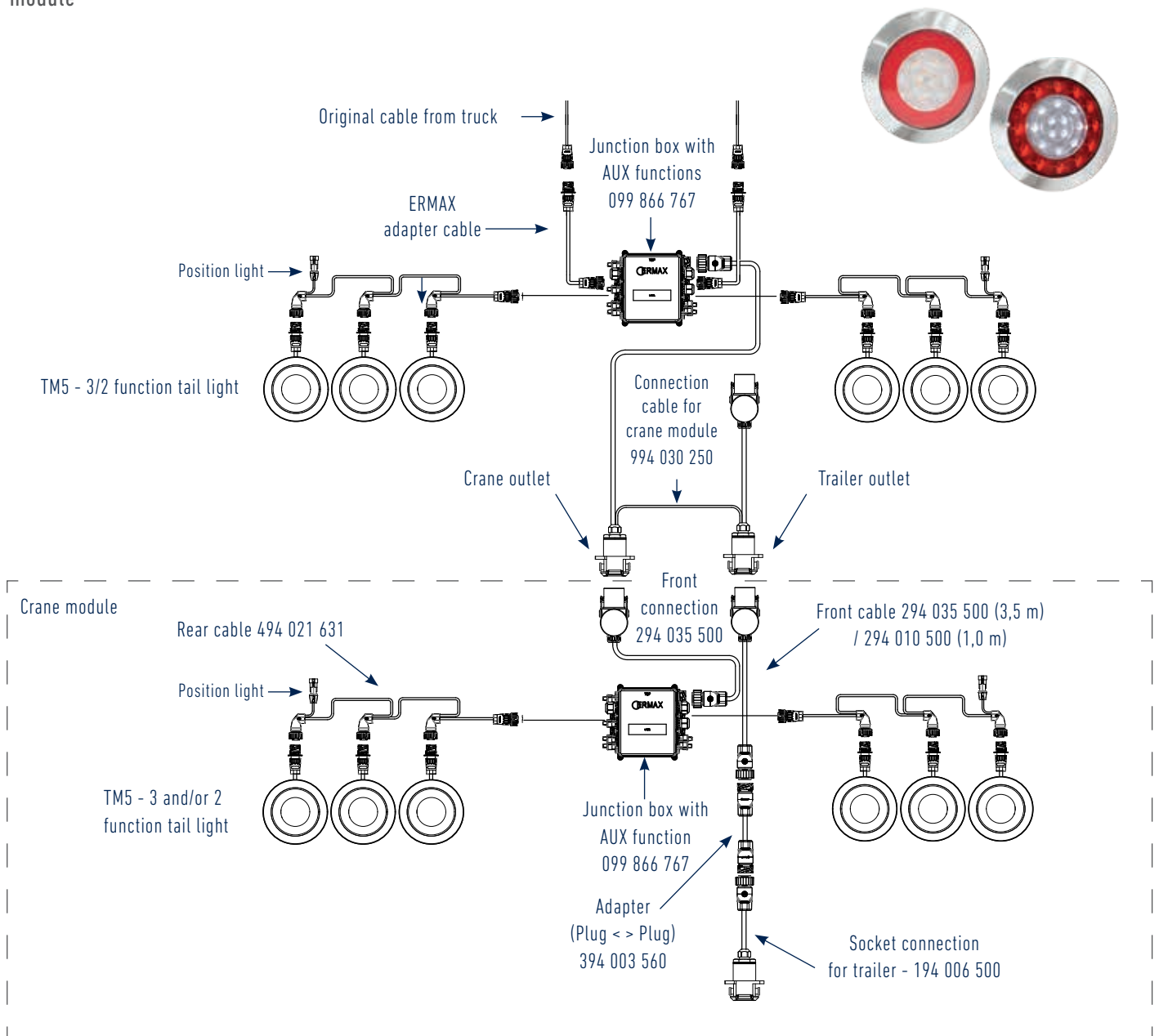See section "Tail lights" for other variations of ERMAX tail lights

ERMAX®

Original cable from truck

Junction box with
AUX functions
099 866 767

ERMAX
adapter cable

TM10 tail light

Position light

Rear cable 494 020 611

Connection
cable for
crane module
994 030 250

Crane outlet

Trailer outlet

crane module

Front connection
294 035 500

TM10 tail light

Position light

Rear cable 494 020 611

Junction box with
AUX functions
099 866 767

*) Outlets marked with position light are
   for connection of outer end marker light

See section "Tail lights" for other variations of Ermax tail lights

Plug & Play solution – with crane module and connection to trailer

ERMAX LED tail lights with time-saving mounting – directly integrated in the vehicle

A finished pre-assembled cable set makes a direct plug & play mounting of plugs, cables and ERMAX Eternal Light tail lights (TM5 and TM10) possible – a solution making many AUX functions / connections possible by means of junction box and further plugs.

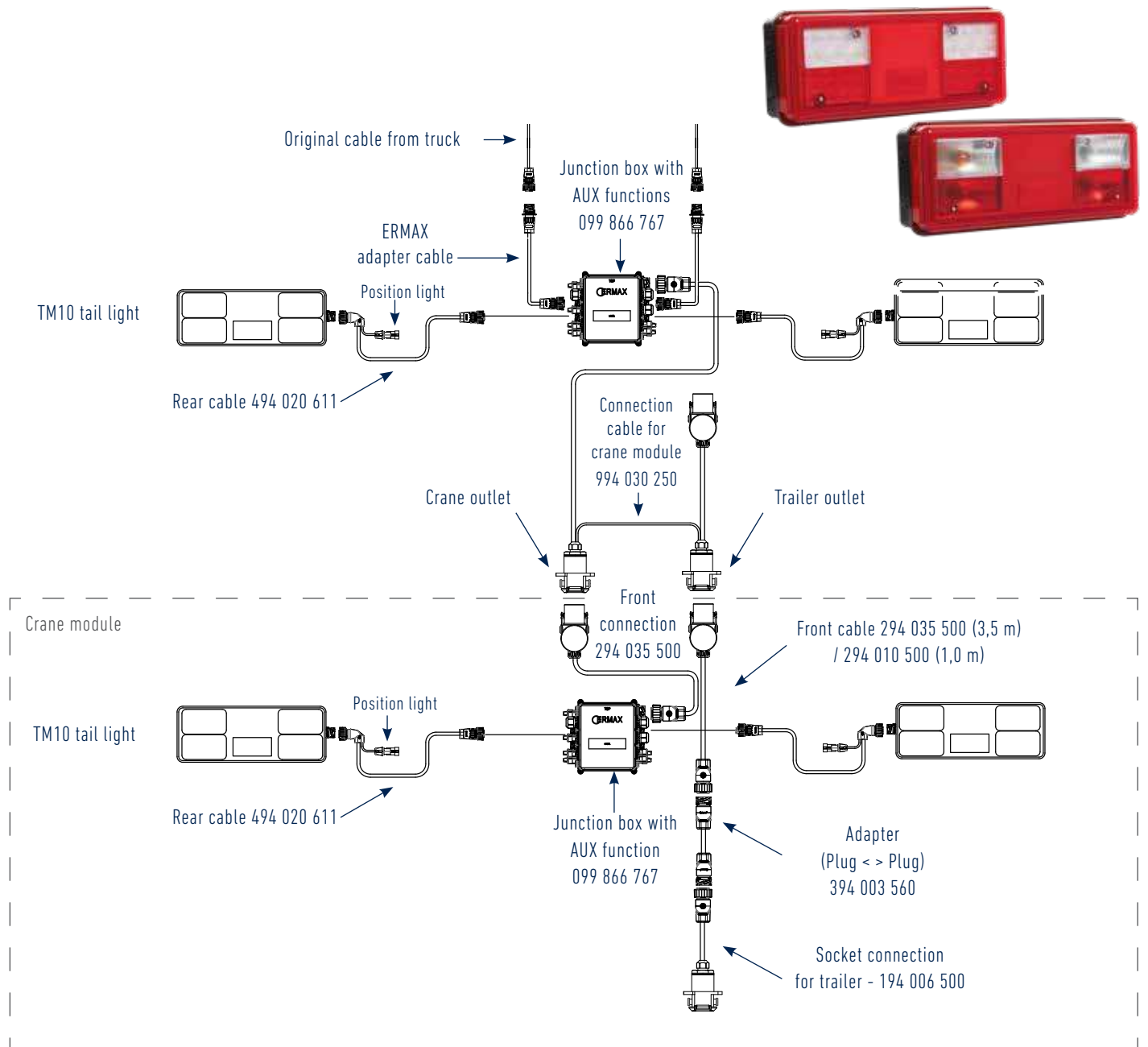Time-saving up to 8 hours for one vehicle using the plug & play solution.

Configuration - Upgrading of vehicle with junction box, incl. crane module and socket connection for trailer to the crane module

Original cable from truck

Junction box with
AUX functions
099 866 767

ERMAX
adapter cable

Position light

TM5 - 3/2 function tail light

Connection
cable for
crane module
994 030 250

Crane outlet

Trailer outlet

Crane module

Rear cable 494 021 631

Position light

Front
connection
294 035 500

Front cable 294 035 500 (3,5 m)
/ 294 010 500 (1,0 m)

TM5 - 3 and/or 2
function tail light

Junction box with
AUX function
099 866 767

Adapter
(Plug < > Plug)
394 003 560

Socket connection
for trailer - 194 006 500

*) Outlets marked with position light are
for connection of outer end marker light

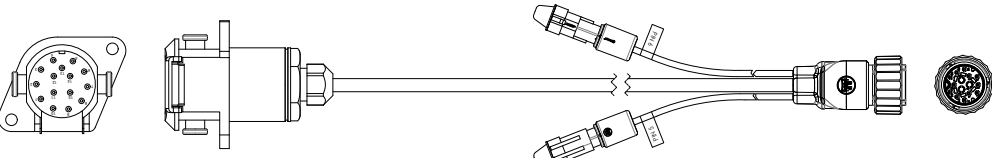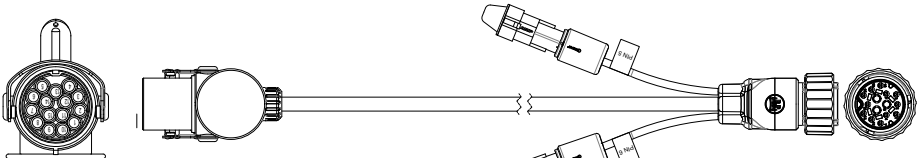See section "Tail lights" for other variations of ERMAX tail lights

Original cable from truck

Junction box with
AUX functions
099 866 767

ERMAX
adapter cable

Position light

TM10 tail light

Rear cable 494 020 611

Connection
cable for
crane module
994 030 250

Crane outlet

Trailer outlet

Crane module

Front
connection
294 035 500

Front cable 294 035 500 (3,5 m)
/ 294 010 500 (1,0 m)

Position light

TM10 tail light

Rear cable 494 020 611

Junction box with
AUX function
099 866 767

Adapter
(Plug < > Plug)
394 003 560

Socket connection
for trailer – 194 006 500

*)   Outlets marked with position light are
     for connection of outer end marker light

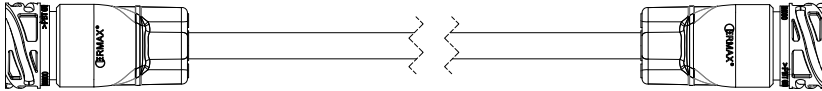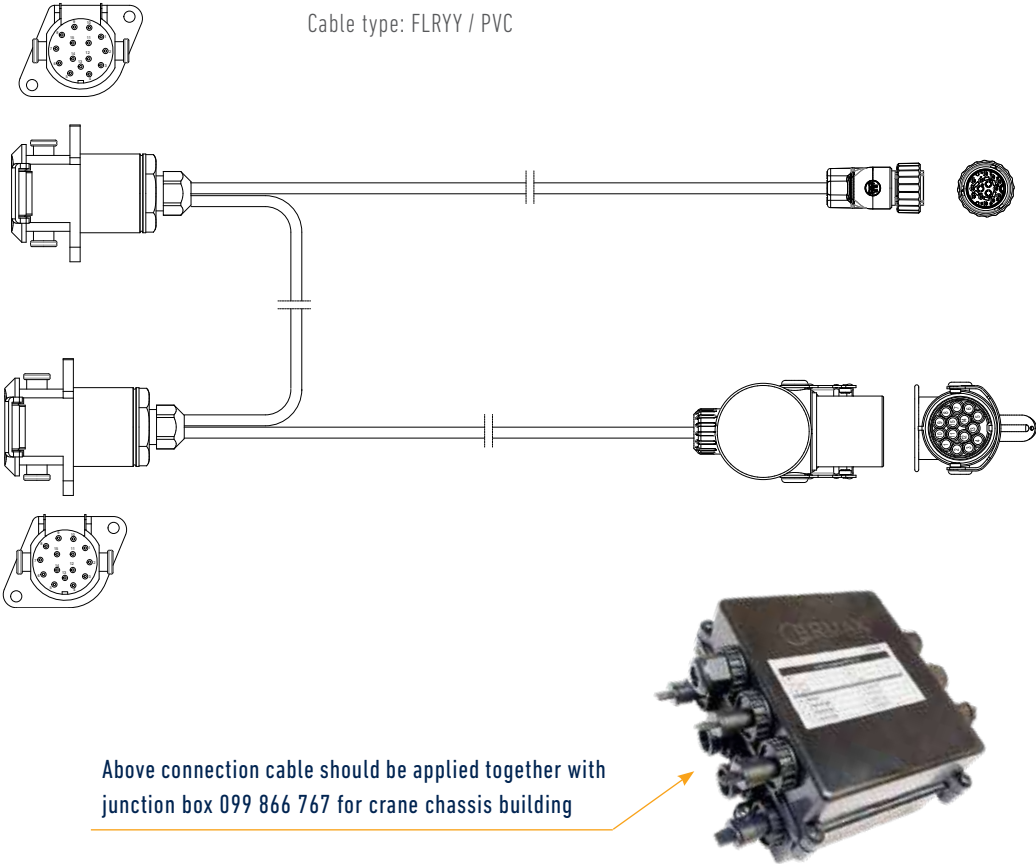See section "Tail lights" for other variations of Ermax tail lights

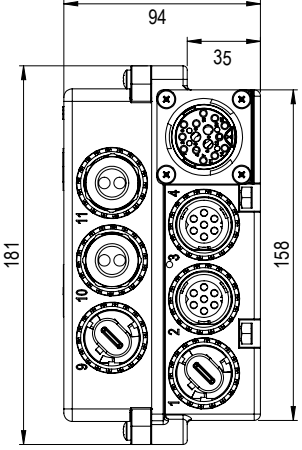## Crane module chassis building – Front cable
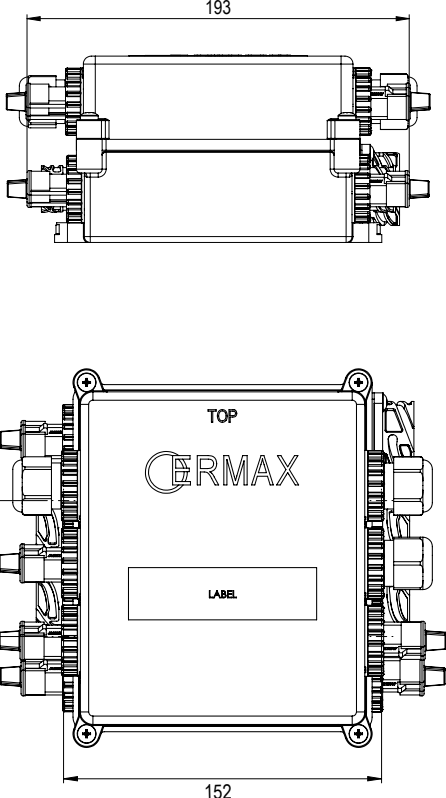
	Application / Description	Article No.
	Front cable with 15 poled socket, straight ISO Standard: 12098 With Ermax bayonet plug Conductor cross-section: 12x1 mm² + 3x2,5 mm² Cable type: FLRYY / PVC	
	15 core cable 600 mm	194 006 500

	15 core cable 600 mm 2x2 poled outlet with Super Seal socket ISO 12098 pin 5 position left + pin 6 position right	194 006 501

Easy to connect additional position lights by using the 2 poled Super Seal outlets

	Front cable with 15 poled plug, straight ISO Standard: 12098 With Ermax Bayonet plug Conductor cross-section: 12x1 mm² + 3x2,5 mm² Cable type: FLRYY / PVC	
	15 core cable 1.000 mm	294 010 500
	15 core cable 3.500 mm	294 035 500
	15 core cable 4.800 mm	294 048 500

	15 core cable 4.800 mm 2x2 poled outlets with Super Seal sockets ISO 12098 pin 5 left postion + pin 6 right position	294 048 501

Easy to connect additional position lights by using the 2 poled Super Seal outlets

Crane module chassis building – Main cable adapter & connection cable

Application / Description	Article No.
Main cable Adapter 15 poled Ermax bayonet plug > plug Conductor cross-section: 12x1 mm^2+3x2,5 mm^2 Cable type: FLRYY / PVC **15 core 300 mm**	394 003 560
Connection cable for crane chassis building ISO12098 plug > 2 x ISO12098 socket + 15 poled Ermax bayonet plug ISO12098 plug with 500 mm 15 poled cable for ISO12098 socket (trailer connection) 1.000 mm 7 poled cable for ISO12098 socket (connection for crane module) 1.500 mm 15 poled cable with 15 poled Ermax plug for junction box. Applies in connection with junction box 099866767 Conductor cross-section: 15 core cable : 12 x 1,0 mm^2 + 3 x 2,5mm^2 7 core cable : 7 x 1,0mm^2 Cable type: FLRYY / PVC	994 030 250

Above connection cable should be applied together with junction box 099 866 767 for crane chassis building

ERMAX®

Junction box crane module – chassis building

Application / Description	Article No.

Junction box
for crane module chassis building
(in connection with coil cable 994 030 250)

Black plastic housing
IP Rating: IP 67

High cover – Connection possibilities:

Inlet:
1 x 15 poled Ermax bayonet socket

Outlet:
4 x 7 poled AMP socket (Pos. 2, 3, 6, 7)
3 x Cable through rubber grommet 2 x ø5,5 mm (Pos. 10, 11, 14)
1 x Super Seal socket, position light right (Pos. 5)
1 x Super Seal socket, position light left (Pos. 1)
1 x Super Seal socket, reverse (Pos. 8)
1 x Super Seal socket, AUX1 (Pos. 12)
1 x Super Seal socket, AUX2 (Pos. 9)
1 x Super Seal socket, AUX3 (Pos. 13)

The vehicle's original tail light functions should be connected to
the juction box with e.g. an adapter cable with 7 poled AMP socket.
Tail lights should be connected to 7 poled AMP sockets.
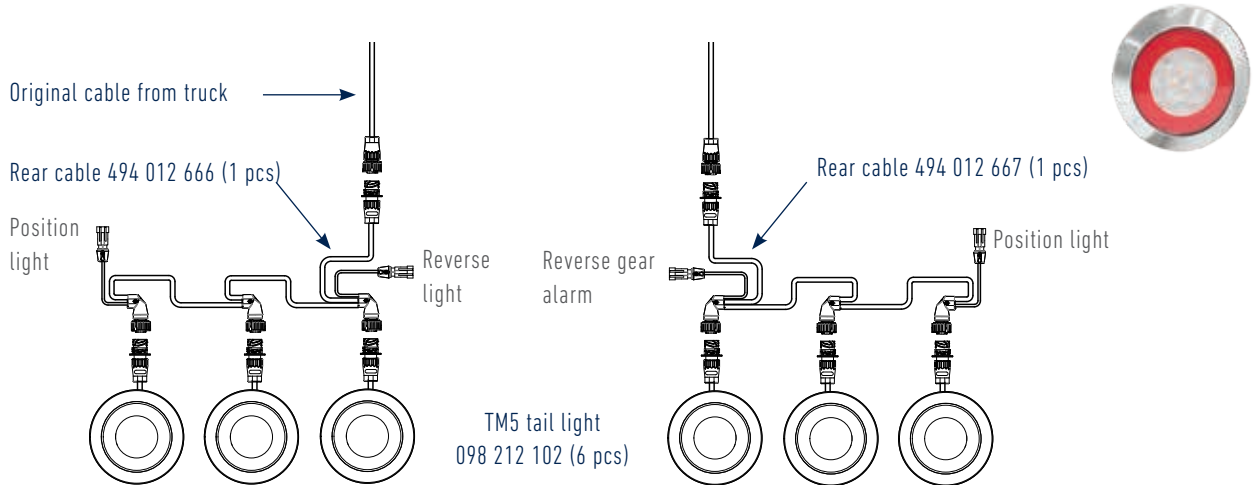
099 866 767

Plug & Play solutions for SCANIA

ERMAX ®

ERMAX®

SCANIA – Plug & Play solution TM5 LED tail light

A complete upgrading kit from ERMAX with LED tail lights and time-saving mounting - directly integrated on the vehicle

A pre-assembled cable set enables a direct plug & play mounting of plug, cables and ERMAX Eternal Light® tail lights (TM5, TM10 and TM11) – a solution with opportunity for flexible connections of e.g. position lights, reverse light and reverse gear alarm, all without opening the exsisting wiring on the truck. In addition to this high quality solution, a significant time-saving on the vehicle is achieved by using this plug & play solution.

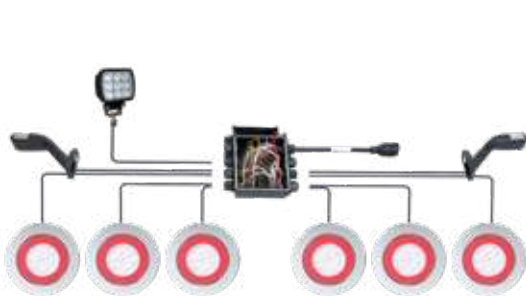| STANDARD upgrading kit with TM5 tail light 3 function	Article no. TM091050010

Original cable from truck

Rear cable 494 012 666 (1 pcs)

Position light

Reverse light

Reverse gear alarm

Rear cable 494 012 667 (1 pcs)

Position light

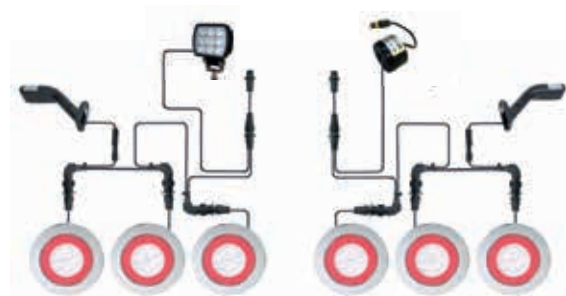TM5 tail light
098 212 102 (6 pcs)

OBS – It is possible to disconnect the reverse gear alarm from the truck, if rear cable 494 016 667 is installed in connection with the external reverse gear alarm.

ERMAX Plug & Play upgrading kit with many advantages and opportunities

> Time-saving up to 8 hours
  - plug & play installation of plugs, cables and lights
  - Junction box with Super Seal sockets or cable glands for all lighting fuctions

> Secure and documentable installation

> No change of liability in warranty obligations, as existing wiring will not be opened

> Easy to replace damaged parts

> All fuctions are accessible with either Super Seal sockets or cable glands

> The Standard upgrading kits are packed individually in a box - Simple and effective

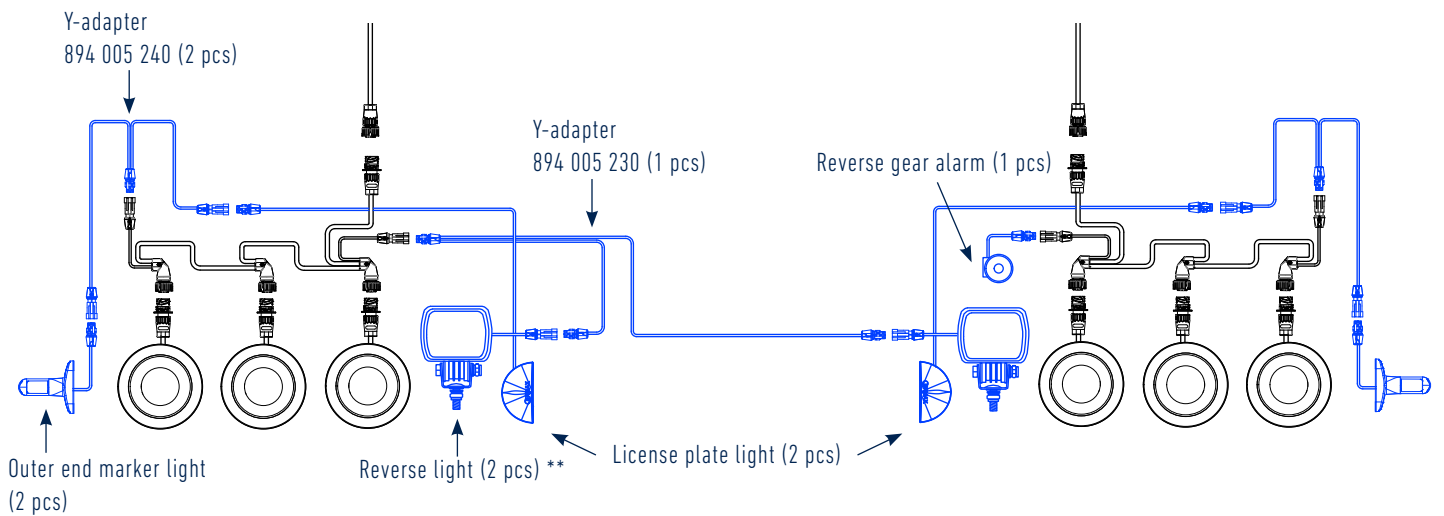Time demanding installation with juction box and open end solution
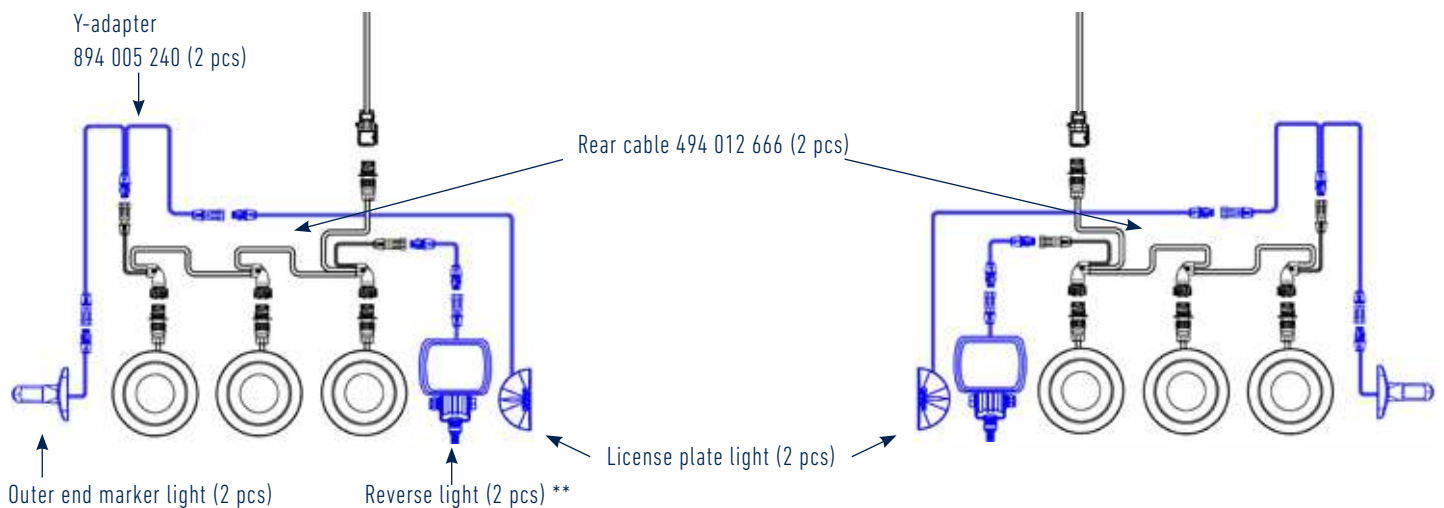
Plug & Play mounting - Time-saving

ERMAX®

Drawing of complete lighting system with various options of functions

> Option to integrate more lighting functions if needed

> Outlet for reverse light and/or reverse gear alarm from the rear cable

> Easy and time-saving mounting, also for retrofitting

Components marked with blue on below drawing are possible options in relation to the standard kit TM091050010 on previous page.
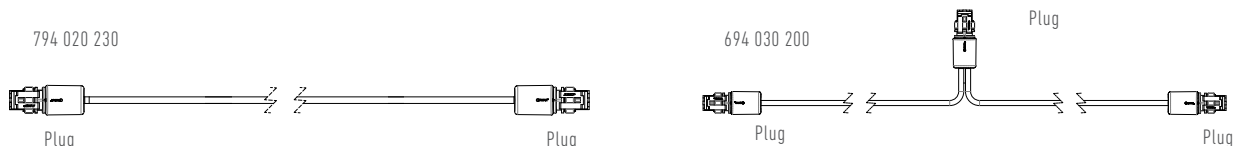

Y-adapter
894 005 240 (2 pcs)

Y-adapter
894 005 230 (1 pcs)

Reverse gear alarm (1 pcs)

Outer end marker light
(2 pcs)

Reverse light (2 pcs) **

License plate light (2 pcs)

Drawing of rear cable 494 012 666 with outlet for reverse light, mounted on both sides of the vehicle (without reverse gear alarm)

Y-adapter
894 005 240 (2 pcs)

Rear cable 494 012 666 (2 pcs)

Outer end marker light (2 pcs)

Reverse light (2 pcs) **

License plate light (2 pcs)

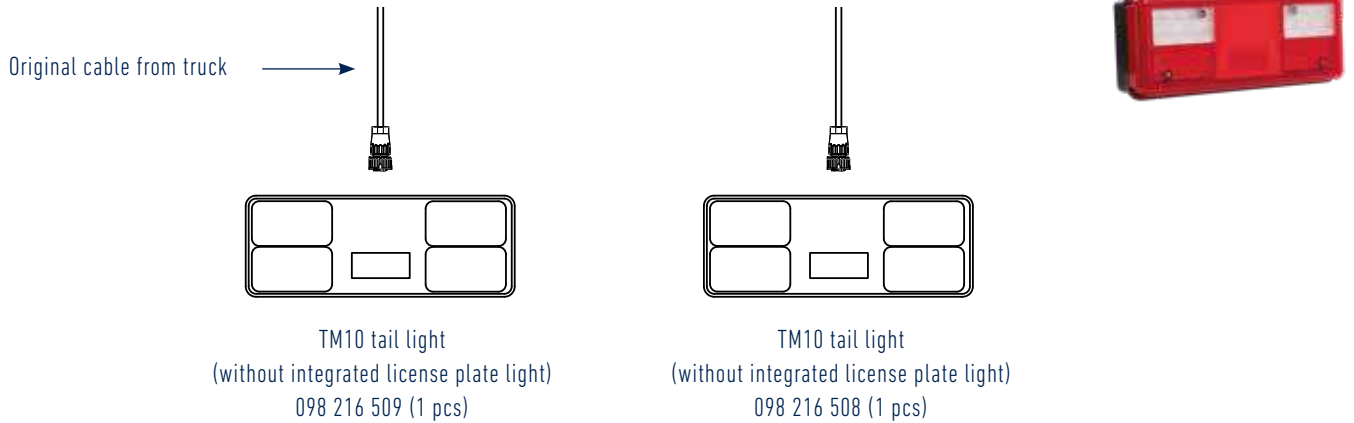OBS** Connection of reverse lights to rear cable 494 012 666

- Is possible by applying Y-adapter 894 005 230 or by applying both the Y-adapter and extension cable (as shown on above drawing). The alternativ could be the extension cable with Super Seal plug 794 020 230 or 694 030 200 as shown below. More lenghts are available.

794 020 230

Plug

Plug

694 030 200

Plug

Plug

Plug

ERMAX®

SCANIA – Plug & Play solution TM10 LED tail light

STANDARD upgrading kit with TM10 tail light 6–function	Article no. TM091050015

Original cable from truck

TM10 tail light
(without integrated license plate light)
098 216 509 (1 pcs)

TM10 tail light
(without integrated license plate light)
098 216 508 (1 pcs)

Complete lighting system Standard TM091050015 with various options – without reverse gear alarm

Components marked with blue on below drawing are possible options in relation to the standard kit TM091050015 as shown above.
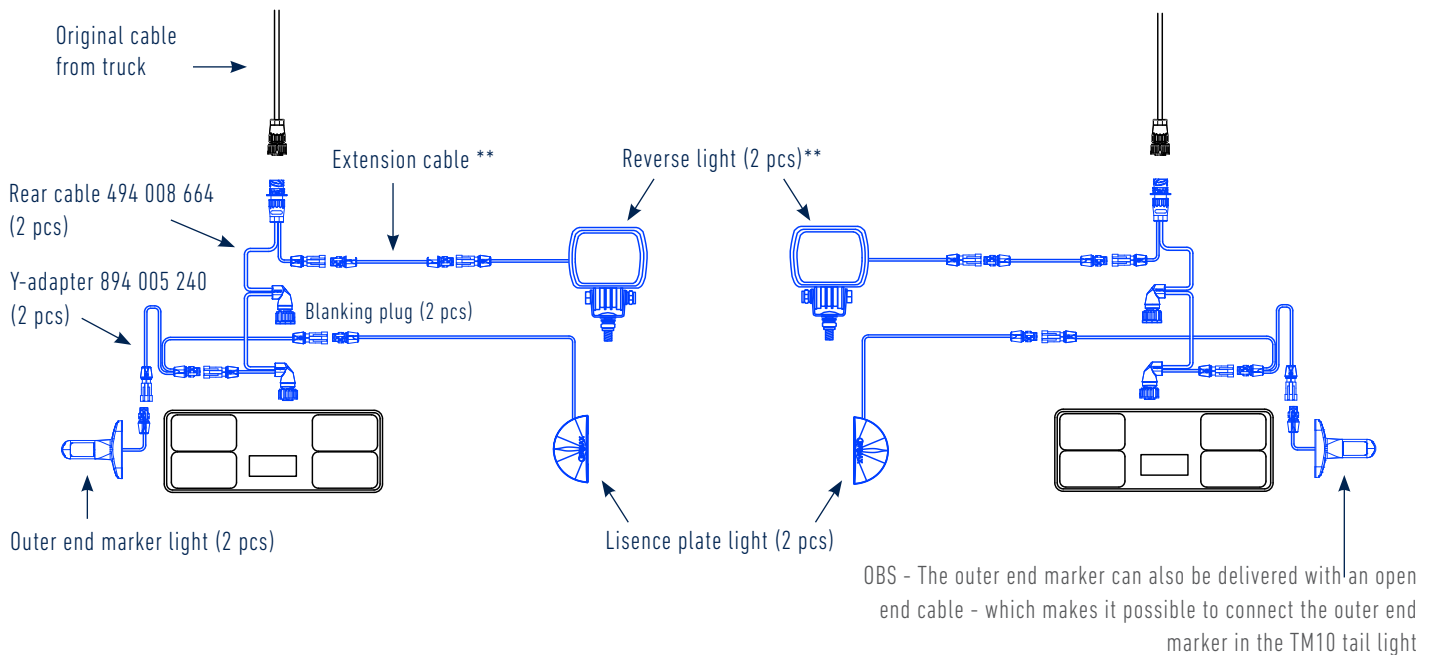
Original cable
from truck

Extension cable **

Reverse light (2 pcs)**

Rear cable 494 008 664
(2 pcs)

Y-adapter 894 005 240
(2 pcs)

Blanking plug (2 pcs)

Outer end marker light (2 pcs)

Lisence plate light (2 pcs)

OBS - The outer end marker can also be delivered with an open
end cable - which makes it possible to connect the outer end
marker in the TM10 tail light

OBS** Connection of reverse lights to rear cable 494 012 664

- is possible by applying the Y-adapter 894 005 230 (as shown on above drawing) or by applying the extension cable with Super Seal plug
794 020 230 or 694 030 200 as shown below. More lengths are available.
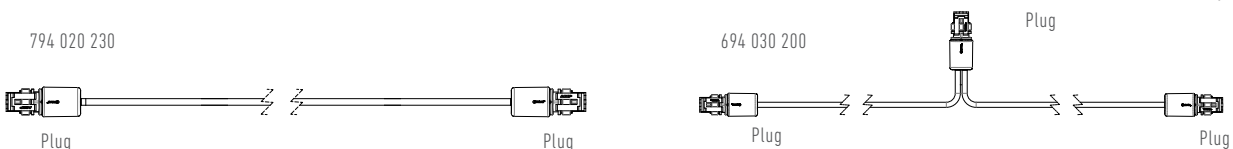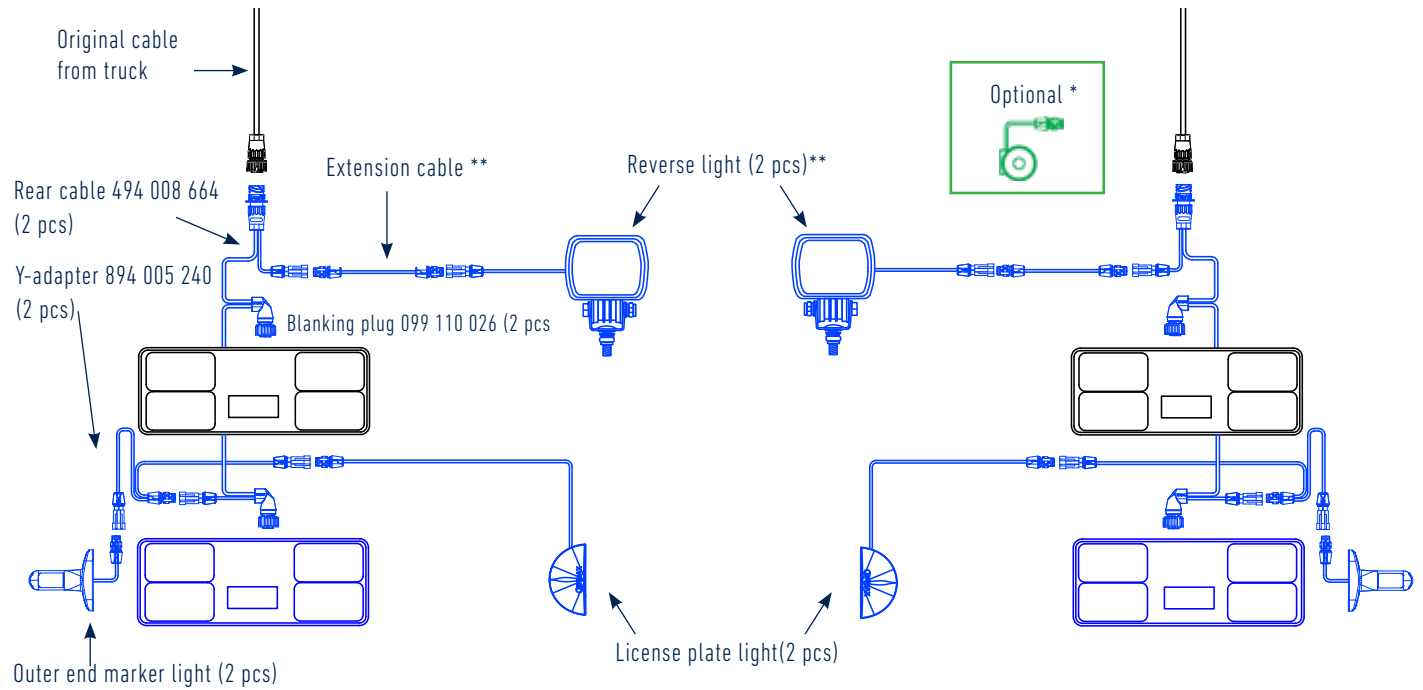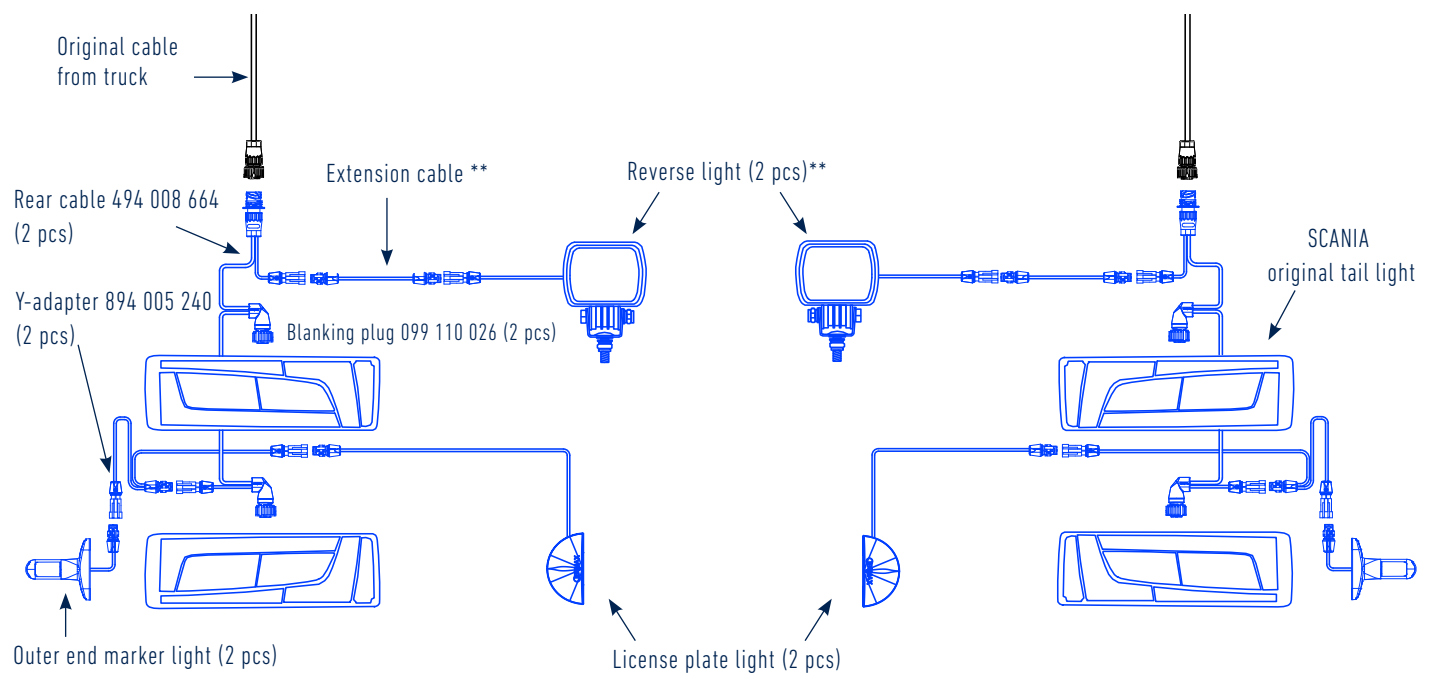
794 020 230

Plug

Plug

694 030 200

Plug

Plug

Plug

Double lighting installation with TM10 tail lights – alternatively original SCANIA tail lights with various options of lighting functions

Reverse gear alarm *

Rear cable 494 012 667 should be mounted in the right side of the vehicle, where to the reverse gear alarm should be connected, if it is required to control and mute the reverse alarm from the truck. The third lighting connection should be blinded with blanking plug 099 110 025
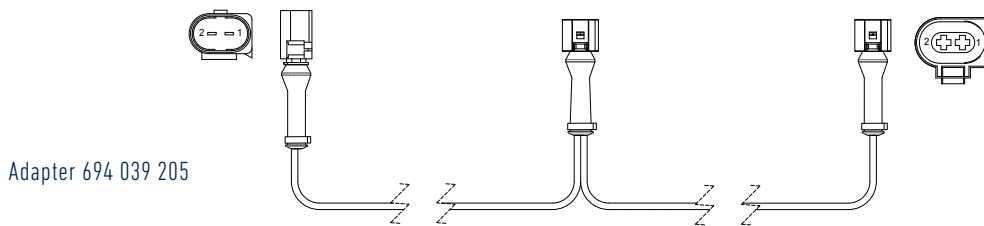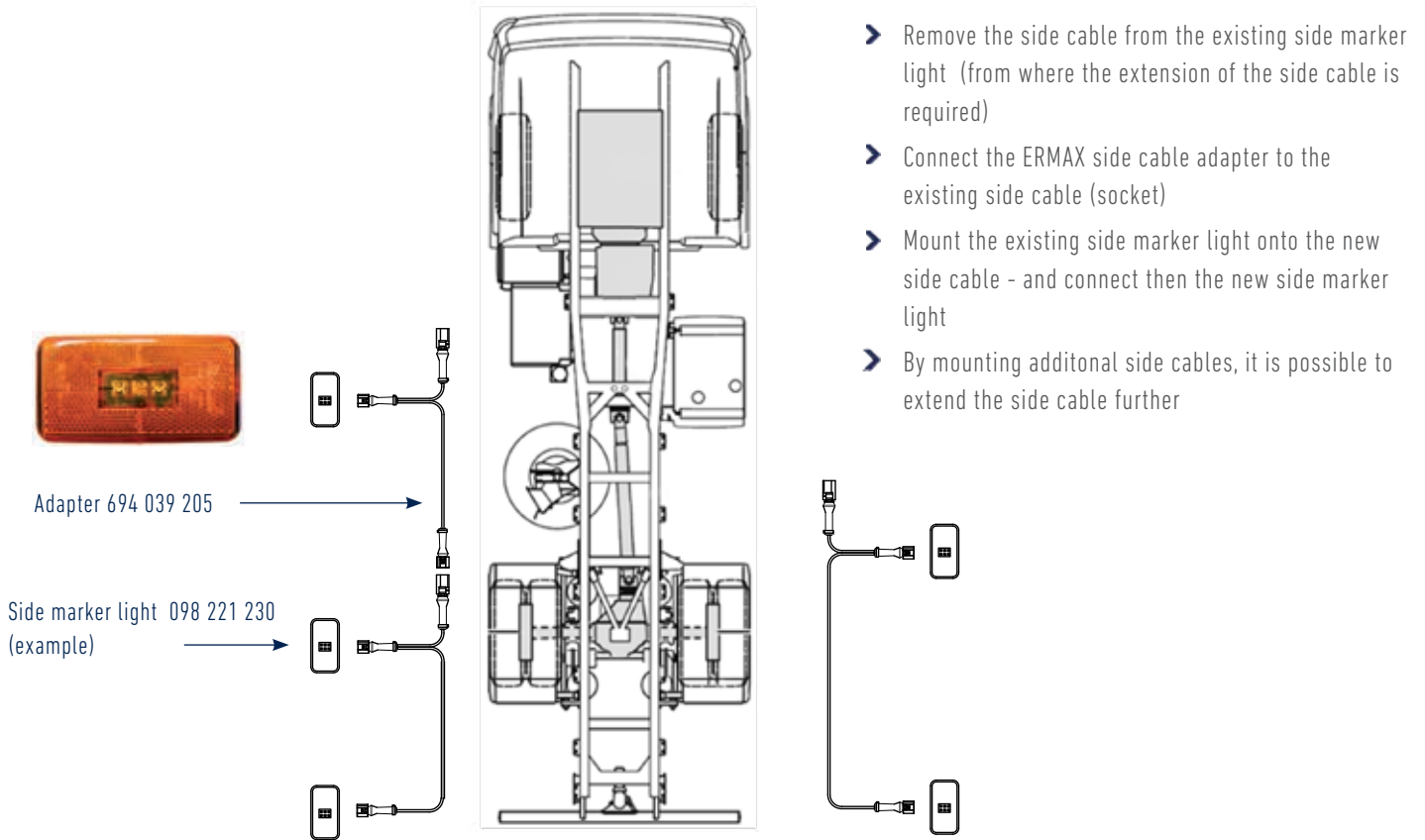
Original cable
from truck

Optional *

Rear cable 494 008 664
(2 pcs)

Extension cable **

Reverse light (2 pcs)**

Y-adapter 894 005 240
(2 pcs)

Blanking plug 099 110 026 (2 pcs

License plate light(2 pcs)

Outer end marker light (2 pcs)

Double lighting installation with original SCANIA tail lights

Original cable
from truck

Rear cable 494 008 664
(2 pcs)

Extension cable **

Reverse light (2 pcs)**

SCANIA
original tail light

Y-adapter 894 005 240
(2 pcs)

Blanking plug 099 110 026 (2 pcs)

Outer end marker light (2 pcs)

License plate light (2 pcs)

Plug & Play installation of additional side marker light

It is possible to install additional side marker lights (orginals) with the ERMAX side cable adapter with MCP2 plug
– Easy and simple, also for retrofittings

> Remove the side cable from the existing side marker light (from where the extension of the side cable is required)

> Connect the ERMAX side cable adapter to the existing side cable (socket)

> Mount the existing side marker light onto the new side cable - and connect then the new side marker light

> By mounting additonal side cables, it is possible to extend the side cable further

Adapter 694 039 205

Side marker light 098 221 230 (example)

Adapter 694 039 205

Side cable – Adapter		
SCANIA		

Connection:	3900 mm -1 x inlet with MCP2 socket 2 x outlet with MCP2 plug
Distance between plugs:	1 x 200 mm + 1 x 3.700 mm
Conductor cross-se-ction:	2 x 0,5 mm^2
Cable type	FLRYY / PVC
Approval	ADR
Article no.	694 039 205

Pin configuration - 2 poled Super Seal plug		
Position	Color	Function
1	Brown	Ground (–)
2	Blue	Position

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Lighting options for lighting systems with TM5 and TM10 tail lights

Outer end marker light LED
Long or short model
300 mm cable with Super Seal plug

Article no.	
098 241 448 (RH)	098 241 218 (RH/LH)
098 241 449 (LH)	

License plate light LED
Half-round or square model
1200 mm cable with Super Seal plug

Article no.	
098 254 335	098 254 345

Reverse light LED
300 mm cable with Super Seal socket **
Approved as reverse light with 30^0 or 35^0 angling by vertical mounting *

Article no.		
098 256 255	098 174 265	098 174 275
Lumen: 650 / 300	Lumen: 1.600 / 1.200	Lumen: 2.400 / 1.800
	* 30^0 angling	* 35^0 angling

Reverse gear alarm
250 mm cable with
Super Seal plug

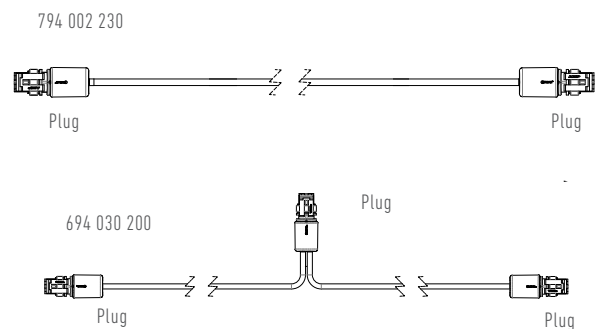| Article no. |
|---|
| 090 450 350 |

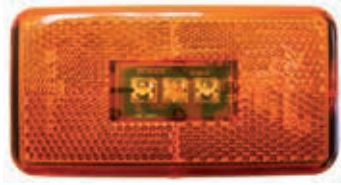**** Connection of reverse lights to rear cable 494 012 664**

- Is possible by applying the Y-adapter 894 005 230 or extension cable with Super Seal plug 794 002 230 or 694 030 200 as shown below. More lengths are available.

794 002 230

Plug   Plug

694 030 200

Plug

Plug   Plug

TM10 Tail light LED
License plate light integrated in the bottom of the tail light

Article no.
098 216 511 (LH)
098 216 510 (RH)

Side marker light SCANIA

Side marker light LED 24V	Sidemarkeringslygter LED 24V
Scania R/5	Scania 4

Description:	Orange, plastic housing with 3 LEDs and reflector
Surface mounting:	Horizontal / vertical
Connection:	2.050 mm cable with 2 poled AMP plug
Dimension:	110 x 55 mm
Approval:	ECE, EMC, IP67
Suitable for:	0 173 74 13
	0 144 38 84
	0 144 6359
	2 000 390
	2 052 119
	2 080 828

Article no.	098 221 230

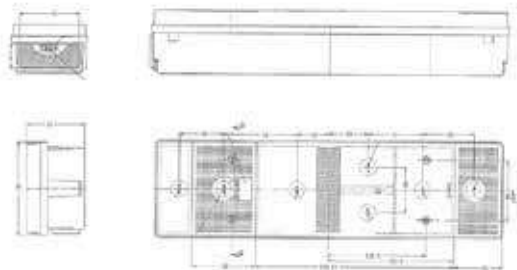|	
Description:	Orange, plastic housing with 4 LEDs and metal clips
Built-in:	Horizontal - mounting depth 35 mm
Connection:	2.050 mm cable with open end
Dimension:	104 x 54 mm
Approval:	ECE, EMC, IP67
Suitable for:	1471599

Article no.	098 221 245

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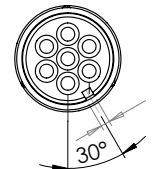# Tail lights bulb

Pos 1

Pos 2

(E) EMC

36.2

30°

A:
Cable lead through rubber grommet

B:
7 poled socket with 6 active pins (s) side mounting
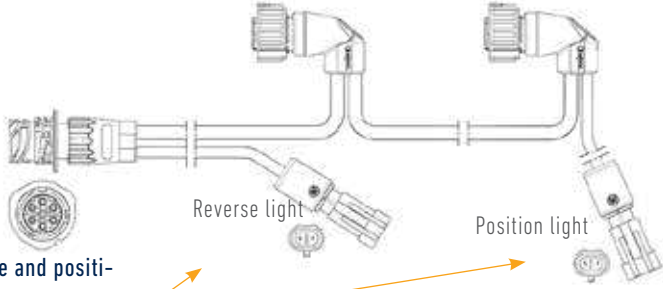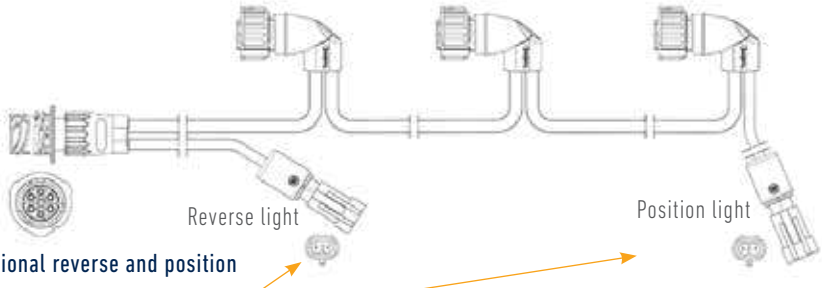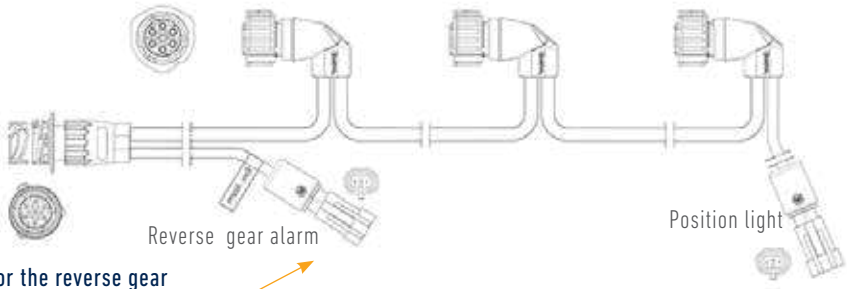
C:
7 poled socket with 6 active pins (s) side mounting

D:
7 poled socket with 6 active pins (s) side mounting
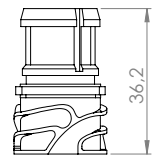
Lens: PMMA
Housing: Black plastic
Wired and 2 bulb holders, vibration absorber
Pos 1 - Dimension: 465 x 130 x 83 mm
Pos 2 - Dimension: 516 x 130 x 83 mm
Mounting holes: 152/160 mm
IP Rating: IP54

Functions

Application	Lens	Left ← Right →	Position	Stop	Dir. indicator	Reverse	Rear fog	Side marker	License plate	Square reflex reflector	Connection	Suitable for	Pos	Article no.
Scania 3, >1996	098 292 793	←	✓		✓			✓	✓	✓	A	1365 963	1	**098 212 963**
Scania 3, >1996	098 292 793	→	✓		✓			✓		✓	A	1365 964	1	**098 212 964**
Scania 4, 1996 >	098 293 163	←	✓		✓			✓	✓	✓	A	1436 867	2	**098 213 161**
Scania 4, 1996 >	098 293 163	→	✓		✓			✓		✓	A	1436 868	2	**098 213 171**
Scania R	098 293 163	←	✓		✓			✓	✓	✓	B (s)	1498102	2	**098 213 163**
Scania R	098 293 163	→	✓		✓			✓		✓	B (s)	1498103	2	**098 213 162**
Scania R	098 293 163	←	✓		✓			✓	✓	✓	C (s)	1392387	2	**098 213 168**
Scania R	098 293 163	→	✓		✓			✓		✓	C (s)	1392374	2	**098 213 167**
Scania P, G, R 2006–	098 293 163	←	✓		✓			✓		✓	D (s)	1792374	2	**098 213 177**
Scania P, G, R 2006–	098 293 163	→	✓		✓			✓	✓	✓	D (s)	1792375	2	**098 213 178**

Spare parts

Lens reflex reflector insert for side marker - for 098 212 963 / 964 / 969 / 970		098 292 959

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Rear cable

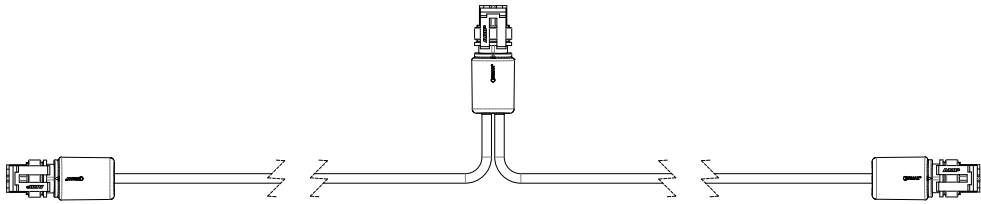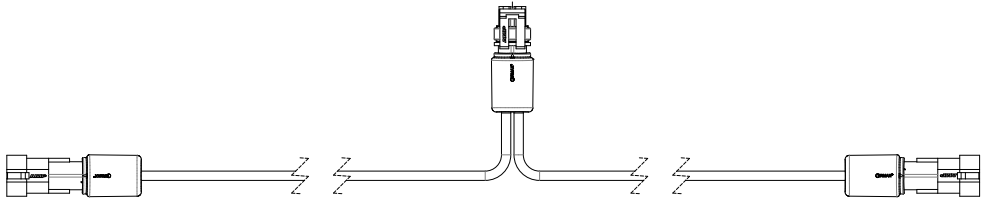|	Application / Description	Article no.
	Rear cable 6 core – single, chain AMP 1,5 socket, straight > 2 x AMP 1,5 plug, angled Conductor cross-section: 6x1 mm^2 / 2x1 mm^2 Cable type: FLRYY / PVC **6 core 800 mm** With 2 x 2 poled outlet with Super Seal for position light and reverse light Reverse light Position light Easy to connect additional reverse and position lights with 2 poled Super Seal outlets	494 008 664
	Rear cable 6 core – single, chain AMP 1,5 socket, straight > 3 x AMP 1,5 plug, angled Conductor cross-section: 6x1 mm^2 / 2x1 mm^2 Cable type: FLRYY / PVC **6 core 1.200 mm** With 2 x 2 poled outlet with Super Seal for position light and reverse light Reverse light Position light Easy to connect additional reverse and position lights with 2 poled Super Seal outlets	494 012 666
	6 core 1.200 mm With 2 x 2 poled outlet with Super Seal for position light and reverse gear alarm OBS. Pin no. 7 in the 7 poled AMP plug, is for the reverse gear alarm Reverse gear alarm Position light Possibility for outlet for the reverse gear alarm, which can be disconnected manually from the truck	494 012 667

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Extension cable (For additional lenghts - see section " cables universal")

Application / Description	Article no.
Extension cable, 2 core	**35**
Super Seal plug > Super Seal plug	
Conductor cross-section: 2x1 mm^2	
Cable type: FLRYY / PVC	
200 mm	794 002 230
500 mm	794 005 230
1.000 mm	794 010 230
1.500 mm	794 015 230

Extension cable, 2 core – chain	
1 inlet + 2 outlets with Super Seal plug	
Conductor cross-section: 2x0,5 mm^2	
Cable type: FLRYY / PVC	
3.000 mm	694 030 200
Distance between plugs: 1x1.700 mm + 1x1.300 mm	
4.200 mm	694 042 200
Distance between plugs: 1x1.200 mm + 1x3.000 mm	
5.300 mm	694 053 200
Distance between plugs: 1x300 mm + 1x5.000 mm	

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Y-adapter cable

	Application / Description	Article no.
	Y-adapter cable, 2 core 3 x Super Seal plug Conductor cross-section: 2x1 mm^2 Cable type: FLRYY / PVC **2 x 500 mm** **2 x 2.000 mm**	 894 005 230 894 020 230
	Y-adapter cable, 2 core 1 x Super Seal plug + 2 x Super Seal socket Conductor cross-section: 2x1 mm^2 Cable type: FLRYY / PVC **2 x 500 mm**	 894 005 240

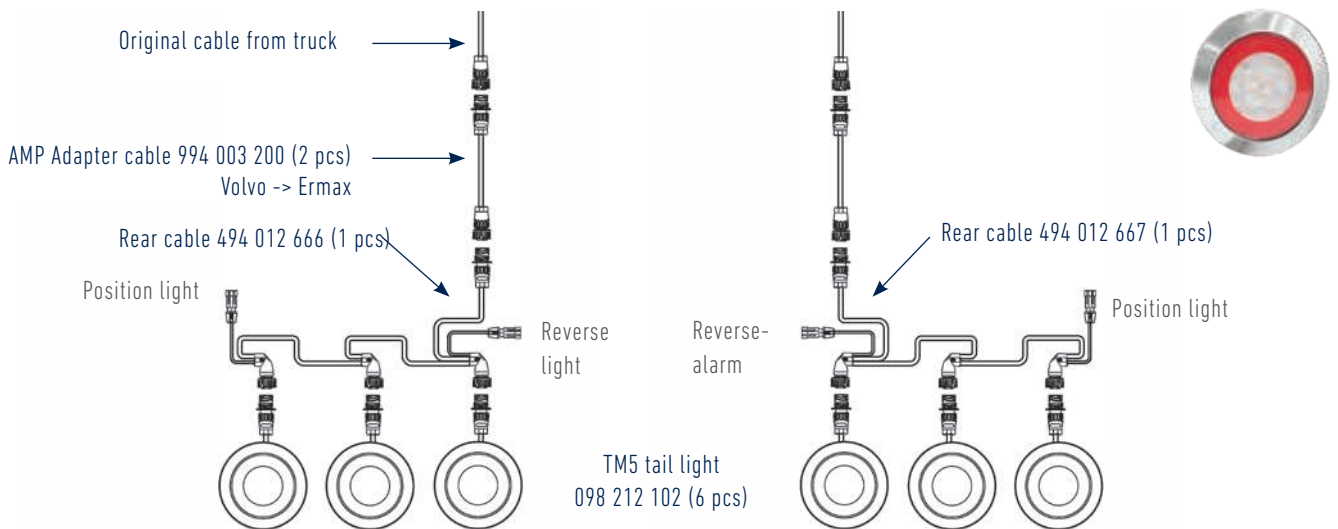# Plug & Play solutions for VOLVO

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VOLVO – Plug & Play solution TM5 LED tail light

A complete upgrading kit from ERMAX with LED tail lights and time-saving mounting - directly integrated on the vehicle

A pre-assembled cable set enables a direct plug & play mounting of plug, cables and ERMAX Eternal Light® tail lights (TM5, TM10 and TM11) – a solution with opportunity for flexible connections of e.g. position lights, reverse light and reverse gear alarm, all without opening the exsisting wiring on the truck. In addition to this high quality solution, a significant time saving on the vehicle is achieved by using this plug & play solution.
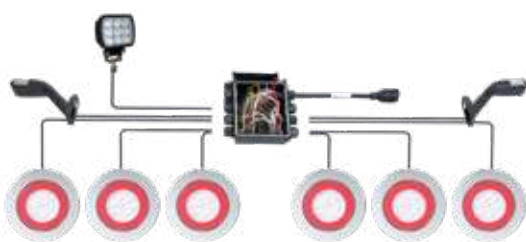
STANDARD upgrading kit with TM5 tail light 3-function	Article no. TM091050020

Original cable from truck

AMP Adapter cable 994 003 200 (2 pcs)
Volvo -> Ermax

Rear cable 494 012 666 (1 pcs)

Rear cable 494 012 667 (1 pcs)

Position light

Position light

Reverse light

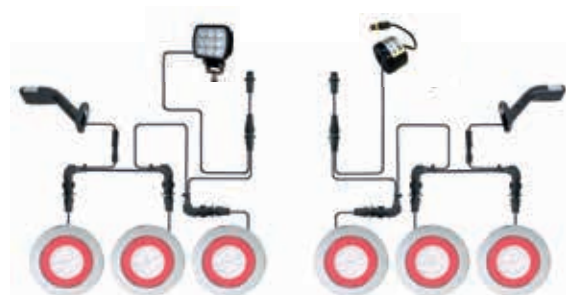Reverse-alarm

TM5 tail light
098 212 102 (6 pcs)

OBS - It is possible to disconnect the reverse gear alarm from the truck, if rear cable 494 016 667 is installed in connection with the external reverse gear alarm.

ERMAX Plug & Play upgrading kit with many advantages and opportunities

❯ Time-saving up to 8 hours
- plug & play installation of plugs, cables and lights
- Junction box with Super Seal sockets or cable glands for all lighting fuctions

❯ Secure and documentable installation

❯ No change of liability in warranty obligations, as existing wiring will not be opened

❯ Easy to replace damaged parts

❯ All fuctions are accessible with either Super Seal sockets or cable glands

❯ The Standard upgrading kits are packed individually in a box - Simple and effective

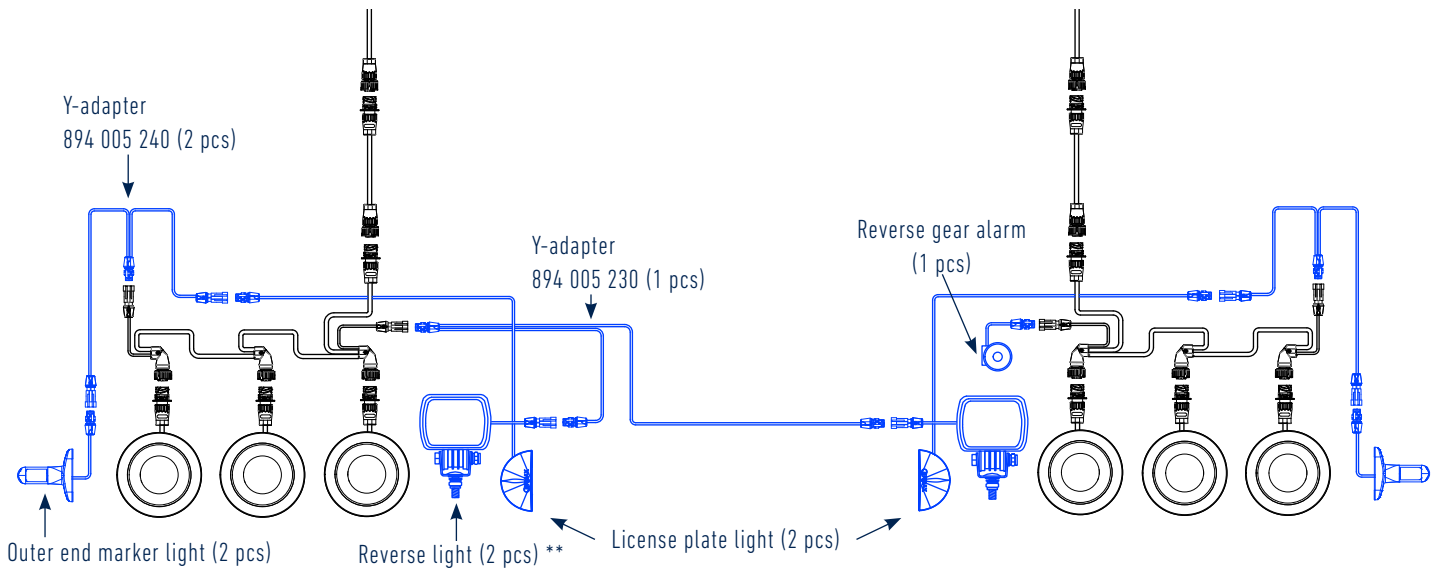Time demanding installation with juction box and open end solution ✖
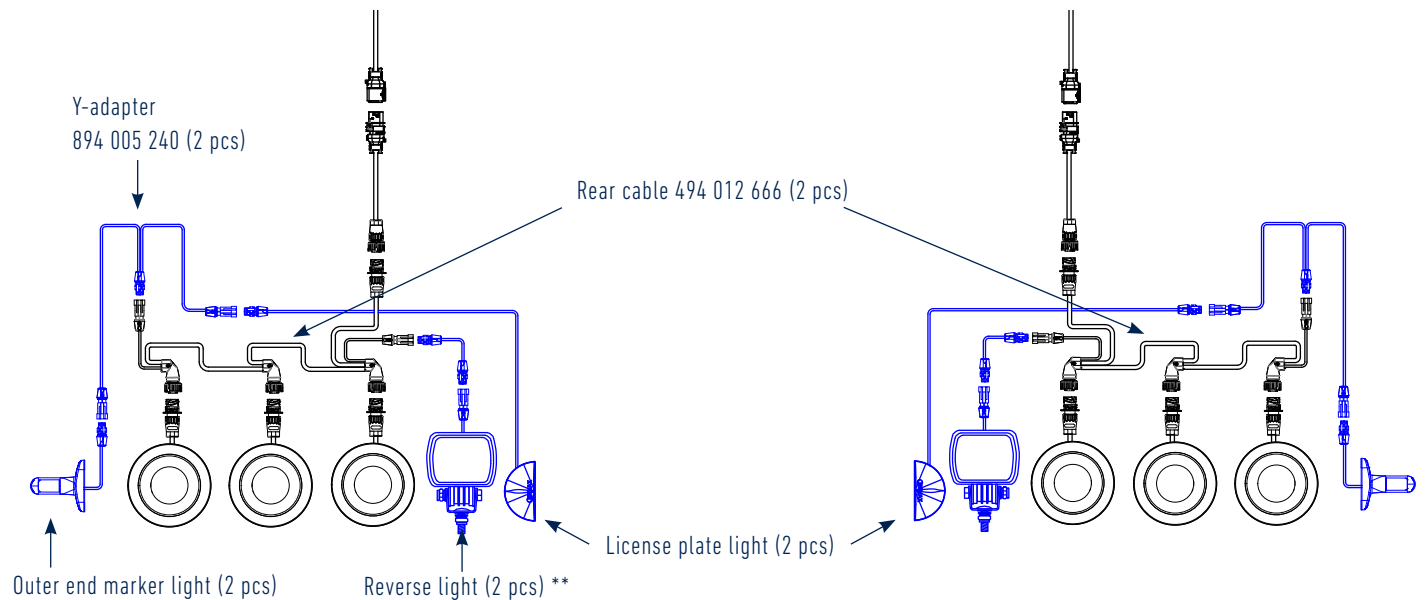
Plug & Play mounting - Time-saving ✔

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Drawing of complete lighting system with various options of functions

> Option to integrate more lighting functions if needed
> Outlet for reverse light and/or reverse gear alarm from the rear cable
> Easy and time-saving mounting, also for retrofitting

Components marked with blue on below drawing are possible options in relation to the standard kit TM091050020 shown on previous page.
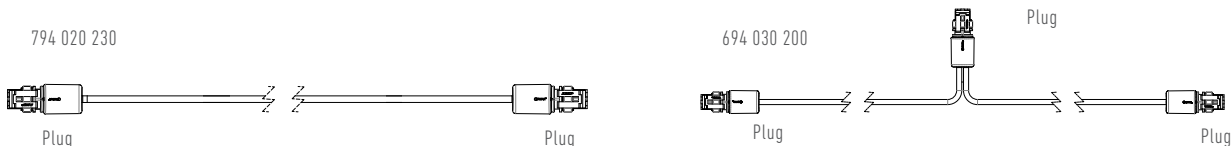

Y-adapter
894 005 240 (2 pcs)

Y-adapter
894 005 230 (1 pcs)

Reverse gear alarm
(1 pcs)

Outer end marker light (2 pcs)

Reverse light (2 pcs) **

License plate light (2 pcs)

Drawing of rear cable 494 012 666 with outlet for reverse light, mounted on both sides of the vehicle (without reverse gear alarm)

Y-adapter
894 005 240 (2 pcs)

Rear cable 494 012 666 (2 pcs)

Outer end marker light (2 pcs)

Reverse light (2 pcs) **

License plate light (2 pcs)

OBS** Connection of reverse lights to rear cable 494 012 666

- Is possible by applying Y-adapter 894 005 230 or by applying both the Y-adapter and extension cable (as shown on above drawing). The alternativ could be the extension cable with Super Seal plug 794 020 230 or 694 030 200 as shown below. More lenghts are available.
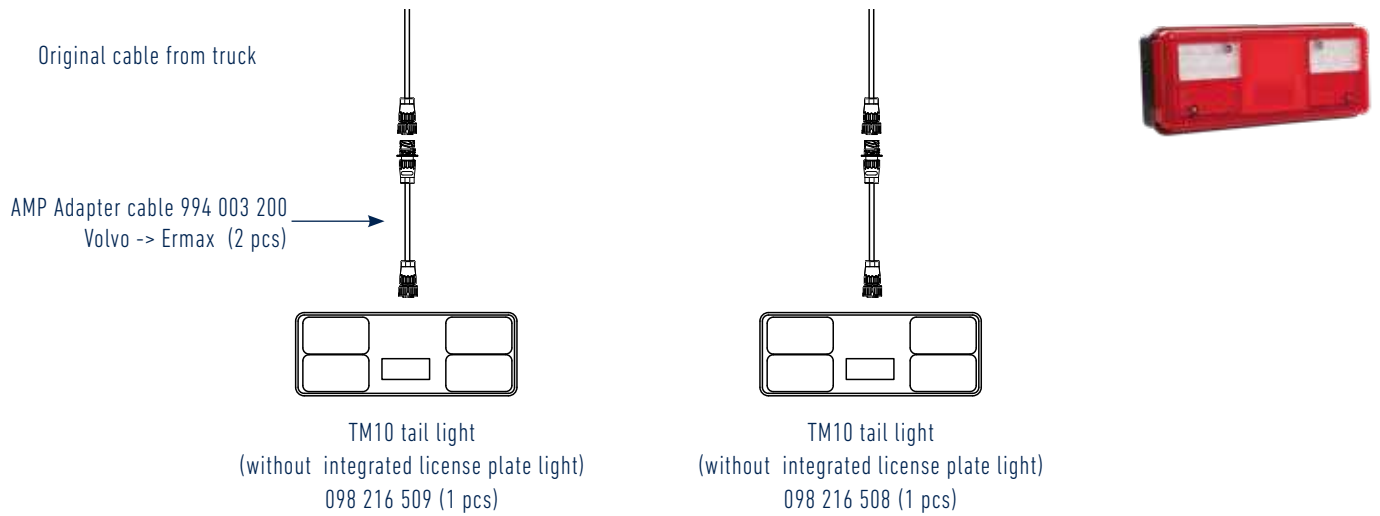
794 020 230

Plug   Plug

694 030 200

Plug

Plug   Plug

ERMAX®

VOLVO- Plug & Play solution TM10 LED tail light

STANDARD upgrading kit with TM10 tail light 6-function	Article no. TM091050025

Original cable from truck

AMP Adapter cable 994 003 200
Volvo -> Ermax (2 pcs)

TM10 tail light
(without integrated license plate light)
098 216 509 (1 pcs)

TM10 tail light
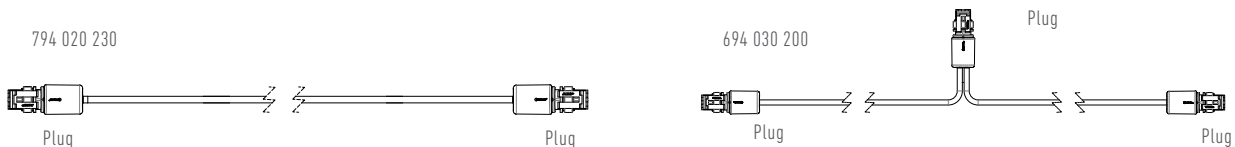(without integrated license plate light)
098 216 508 (1 pcs)

Complete lighting system Standard TM091050025 with various options – without reverse gear alarm

Components marked with blue on below drawing are possible options in relation to the standard kit TM091050025 as shown above.

Original cable from truck

Extension cable **

Reverse light (2 pcs)**

Rear cable 494 008 664 (2 pcs)

Y-adapter 894 005 240 (2 pcs)

Blanking plug (2 pcs)

Outer end marker light (2 pcs)

License plate light (2 pcs)

OBS - The outer end marker can also be delivered with an open end cable - which makes it possible to connect the outer end marker in the TM10 tail light

OBS** Connection of reverse lights to rear cable 494 012 664

– is possible by applying the Y-adapter 894 005 230 (as shown on above drawing) or by applying the extension cable with Super Seal plug 794 020 230 or 694 030 200 as shown below. More lengths are available.
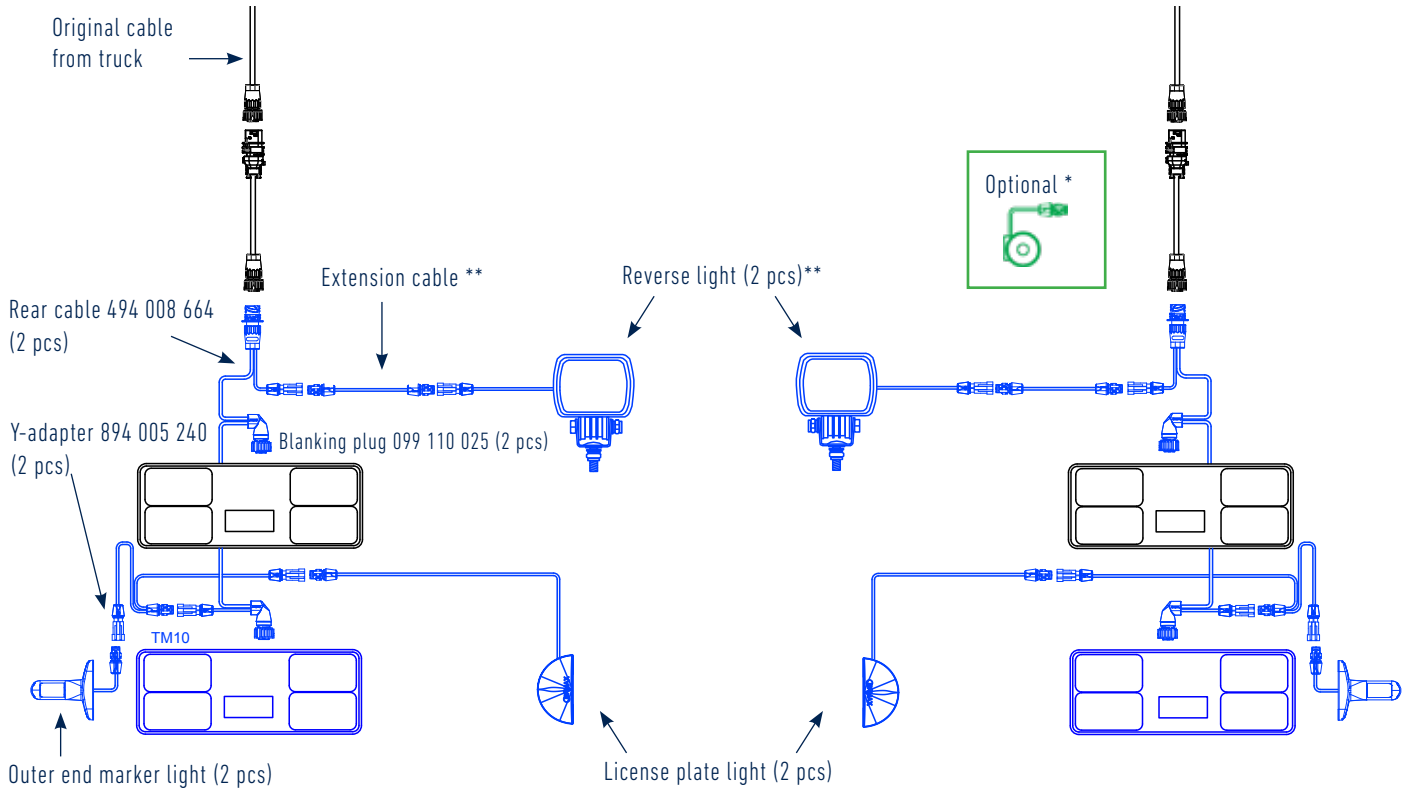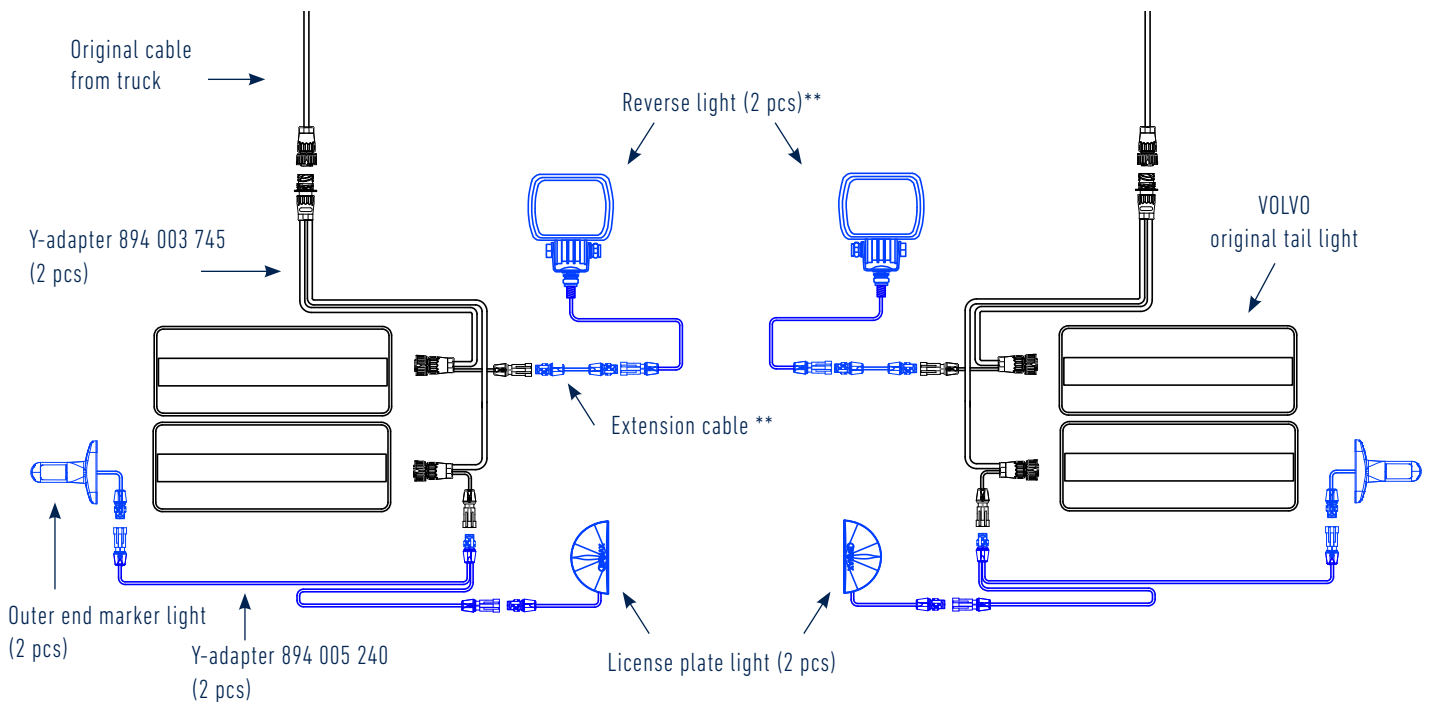
794 020 230

Plug

Plug

694 030 200

Plug

Plug

Plug

Plug

Double lighting installation with TM10 tail lights – alternatively original VOLVO tail lights with various options of lighting functions

Reverse gear alarm *

Rear cable 494 012 667 should be mounted in the right side of the vehicle, where to the reverse gear alarm should be connected, if it is required to control and mute the reverse alarm from the truck. The third lighting connection should be blinded with blanking plug 099 110 025
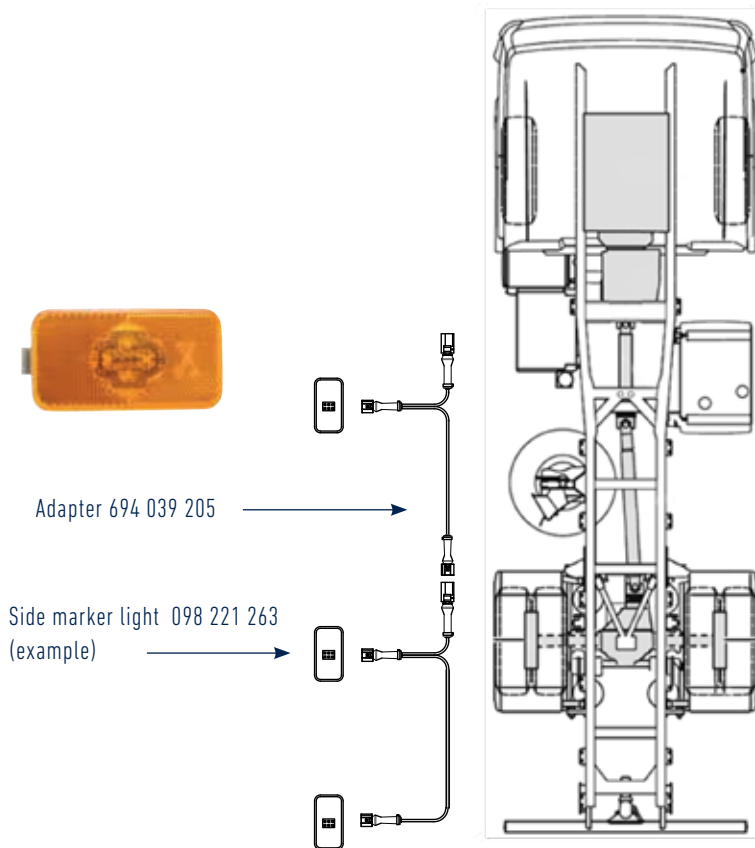
Original cable from truck

Extension cable **

Reverse light (2 pcs)**

Optional *

Rear cable 494 008 664 (2 pcs)

Y-adapter 894 005 240 (2 pcs)

Blanking plug 099 110 025 (2 pcs)

TM10

Outer end marker light (2 pcs)

License plate light (2 pcs)

Double lighting installation with original VOLVO tail lights

Original cable from truck

Reverse light (2 pcs)**

VOLVO original tail light

Y-adapter 894 003 745 (2 pcs)

Extension cable **

Outer end marker light (2 pcs)

Y-adapter 894 005 240 (2 pcs)

License plate light (2 pcs)

Plug & Play installation of additional side marker light

It is possible to install additional side marker lights (orginals) with the ERMAX side cable adapter with MCP2 plug

- Easy and simple, also for retrofittings

> Remove the side cable from the existing side marker light (from where the extension of the side cable is required)

> Connect the ERMAX side cable adapter to the existing side cable (socket)

> Mount the existing side marker light onto the new side cable - and connect then the new side marker light

> By mounting additonal side cables, it is possible to extend the side cable further

Adapter 694 039 205

Side marker light 098 221 263 (example)
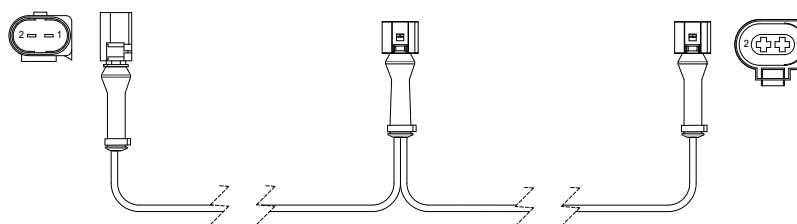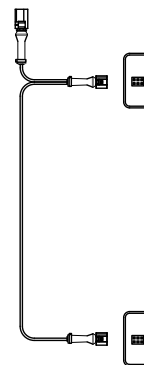
Side cable – Adapter
VOLVO

Connection:	3900 mm -1 x inlet with MCP2 socket 2 x outlet with MCP2 plug
Distance between plug:	1 x 200 mm + 1 x 3.700 mm
Conductor cross-section:	2 x 0,5 mm^2
Cable type:	FLRYY / PVC
Approval:	ADR

Article no.	694 039 205

Pin configuration - 2 poled Super Seal plug		
Position	Color	Function
1	Brown	Ground (–)
2	Blue	Position

ERMAX ®

Lighting options for lighting systems with TM5 and TM10 tail lights

Outer end marker light LED

Long or short model
300 mm cable with Super Seal plug

Article no.

098 241 448 (RH)	098 241 218 (RH/LH)
098 241 449 (LHV)	

License plate light LED

Half-round or square model
1200 mm cable with Super Seal plug

Article no.

098 254 335	098 254 345

Reverse light LED

300 mm cable with Super Seal socket **
Approved as reverse light with 30^0 or 35^0 angling by vertical mounting *

Article no.

098 256 255	098 174 265	098 174 275
Lumen: 650 / 300	Lumen: 1.600 / 1.200	Lumen: 2.400 / 1.800
	* 30^0 angling	* 35^0 angling

Reverse gear alarm

250 mm cable with
Super Seal plug

Article no.

090 450 350

TM10 Tail light LED

License plate light integrated in
the bottom of the trail light

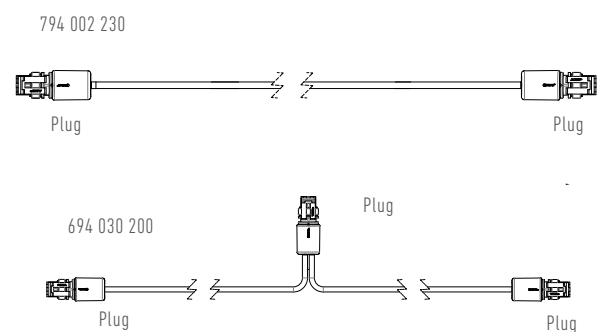### Article no.

098 216 511 (LH)

098 216 510 (RH)

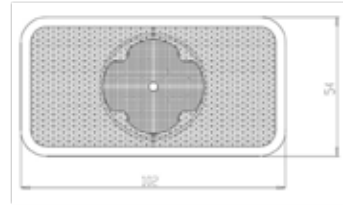** Connection of reverse lights to rear cable 494 012 664

- Is possible by applying the Y-adapter 894 005 230 or extension cable
with Super Seal plug 794 002 230 or 694 030 200 as shown below.
More lengths are available.

794 002 230

Plug   Plug

Plug

694 030 200

Plug   Plug

Side marker light VOLVO

Side marker light LED 24V

VOLVO

Description:	Orange, plastic housing with 3 LEDs - without reflex reflector
Surface mounting:	Horizontal / vertical - mounting depth 35 mm
Connection:	Integrated 2 poled AMP plug
Dimension:	104 x 54 mm
Approval:	ECE, IP67
Suitable for:	20398660
Article no.	098 221 263

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Tail lights, bulb

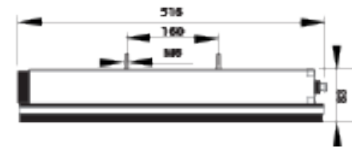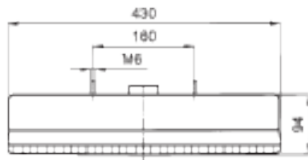Ⓔ EMC

Pos 1

Pos 2

Pos 3

Housing

A

8 poled connection plug

B

6 poled connection plug
(Volvo plug)

C

7 poled socket with
6 active pins
(s) Side mounting

Lens: PMMA

Housing: Black plastic

Wired and 2 bulb holders for rear light, vibration absorber

Pos 1 - Dimension: 430 x 124 x 94 mm

Pos 2 - Dimension: 465 x 130 x 80 mm
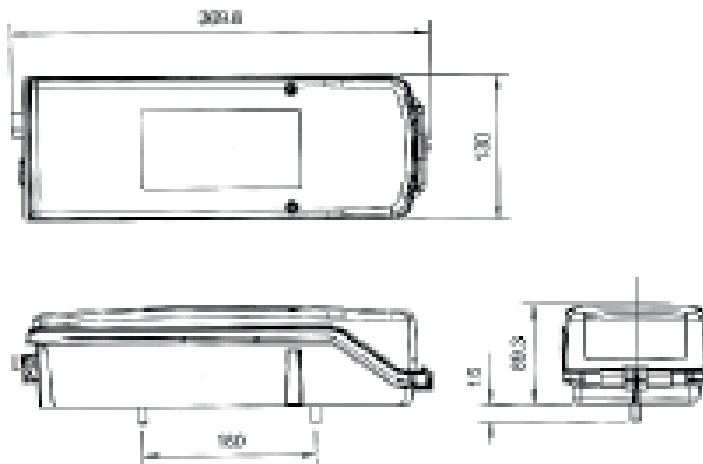
Pos 3 - Dimension: 516 x 130 x 83 mm

Bolt distance: 160 mm

IP Rating: IP54

Functions												
Application	Lens, spare part	Left ← Right →	Position	Stop	Dir. indicator	Reverse	Rear fog	Side marker	License plate	Square reflex reflector	Connection	Suitable for	Pos	Article no.
Volvo F, FL & FS > 7/1993	098 292 715	←			✓				✓		A	1620 476	1	**098 212 711**
Volvo F, FL & FS > 7/1993	098 292 715	→			✓						A	1620 477	1	**098 212 721**
Volvo F, FL & FH 8 /1993 > 7 /1998	098 292 793	←			✓			✓	✓	✓	B	8191 747	2	**098 214 465**
Volvo F, FL & FH 8 /1993 > 7 /1998	098 292 793	→			✓			✓		✓	B	8191 748	2	**098 214 475**
Volvo F, FM & FH 8 /1998 >	098 293 163	←			✓			✓	✓	✓	C (s)	3981 455	3	**098 213 141**
Volvo F, FL & FH 8/1998	098 293 163	→			✓			✓		✓	C (s)	3981 456	3	**098 213 151**

Spare parts		
Lens reflex reflector insert for side marker light – For: 098 214 465 / 475		098 292 959

ERMAX®

Tail lights, bulb

(E) EMC

A

7 poled DIN bayonet connection
(s) Side mounting

Wired and 2 bulb holders for rear light

Lens: PMMA
Housing: Black plastic
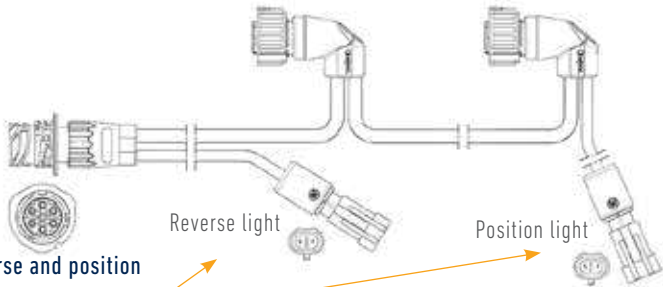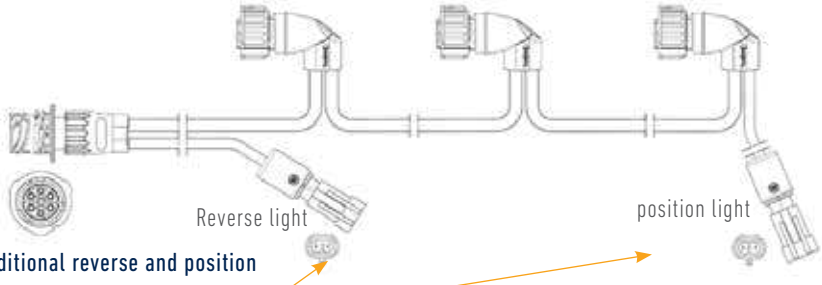Dimension: 370 x 130 x 90 mm
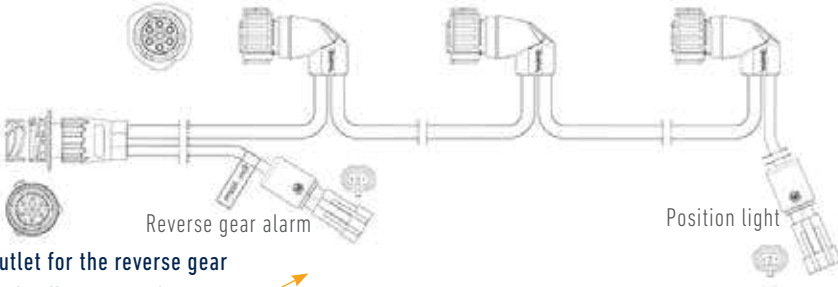Bolt distance: 165 mm
IP Rating: IP54

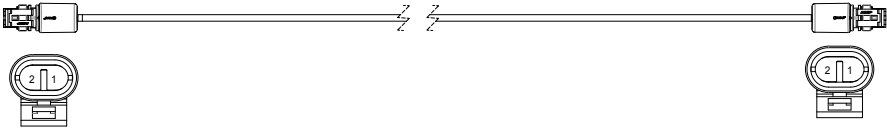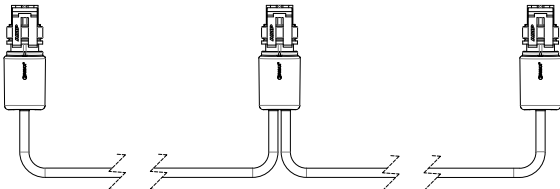| Fucntions												
Application	Lens, spare part	Left ← Right →	Position	Stop	Dir. indicator	Reverse	Rear fog	Side marker	License plate	Square reflex reflector	Connection	Suitable for / Article no.
Volvo FL & FM, 2002 >	098 294 442* 198 294 442	→		✓				✓	✓	✓	A (s)	2042 5729 2050 7624 / **198 214 445**
Volvo FL & FM, 2002 >	098 294 442* 198 294 442	←		✓				✓		✓	A (s)	2042 5728 2050 7623 / **198 214 450**

ERMAX®

Rear cable

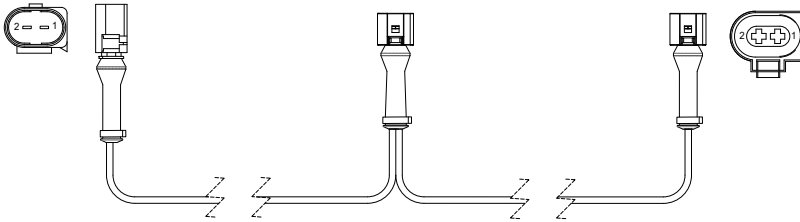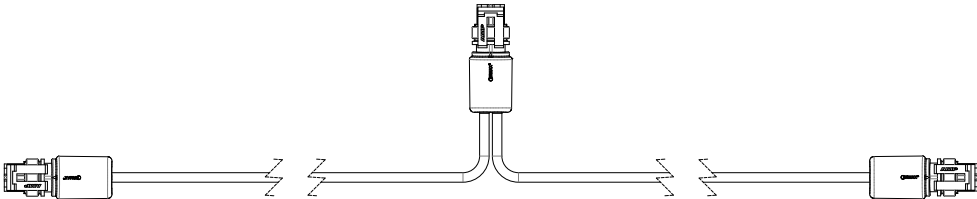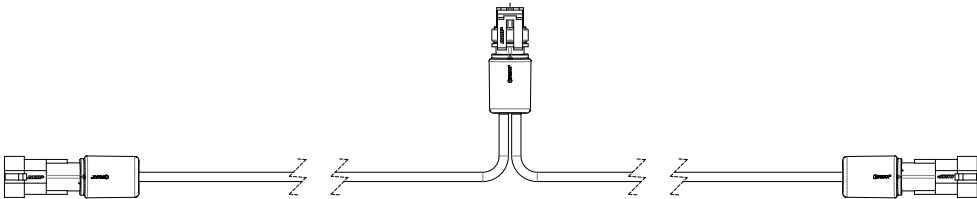| Application / Description	Article no.
Rear cable 6 core – single, chain AMP 1,5 socket, straight > 2 x AMP 1,5 plug, angled Conductor cross-section: 6x1 mm^2 / 2x1 mm^2 Cable type: FLRYY / PVC **6 core 800 mm** With 2 x 2 poled outlet with Super Seal for position light and reverse light Reverse light Position light Easy to connect additional reverse and position lights with 2 poled Super Seal outlets	494 008 664
Rear cable 6-core – single, chain AMP 1,5 socket, straight > 3 x AMP 1,5 plug, angled Conductor cross-section: 6x1 mm^2 / 2x1 mm^2 Cable type: FLRYY / PVC **6 core 1.200 mm** With 2 x 2 poled outlet with Super Seal for position light and reverse light Reverse light position light Easy to connect additional reverse and position lights with 2 poled Super Seal outlets	494 012 666
6 core 1.200 mm With 2 x 2 poled outlet with Super Seal for position light and reverse alarm OBS: Pin no. 7 in the 7 poled AMP plug is for the reverse gear alarm Reverse gear alarm Position light Possibility for outlet for the reverse gear alarm, which can be disconnected manually from the truck	494 012 667

ERMAX ®

Extension cable (For additional lenghts - see section " cables universal")

Application / Description	Article no.
Extension cable, 2 core	
Super Seal plug > Super Seal plug	
Conductor cross-section: 2x1 mm^2	
Cable type: FLRYY / PVC	
200 mm	794 002 230
500 mm	794 005 230
1.000 mm	794 010 230
1.500 mm	794 015 230

Extension cable, 2 core –chain	
1 inlet + 2 outlets with Super Seal plug	
Conductor cross-section: 2x0,5 mm^2	
Cable type: FLRYY / PVC	
3.000 mm	694 030 200
Distance between plugs: 1x1.700 mm + 1x1.300 mm	
4.200 mm	694 042 200
Distance between plugs: 1x1.200 mm + 1x3.000 mm	
5.300 mm	694 053 200
Distance between plugs: 1x300 mm + 1x5.000 mm	

Side cable VOLVO / Y-adapter cable (Universal)

Application / Description	Article no.
Side cable, 2 core – chain (Volvo) For extension of original cable for side marker lights 1 x inlet with MCP2 socket 2 x outlet with MCP2 plug Conductor cross-section: 2x0,5 mm^2 Cable type: FLRYY / PVC **3.900 mm** Distance between plugs: 1 x 200 mm + 1 x 3.700 mm	694 039 205
Y–adapter cable, 2 core 3 x Super Seal plug Conductor cross-section: 2x1 mm^2 Cable type: FLRYY / PVC **2 x 500 mm** **2 x 2.000 mm**	894 005 230 894 020 230
Y–adapter cable, 2 core 1 x Super Seal plug + 2 x Super Seal socket Conductor cross-section: 2x1 mm^2 Cable type: FLRYY / PVC **2 x 500 mm**	894 005 240

ERMAX ®

Adapter cable – VOLVO

Application / Description	Article no.
Adapter cable, 7 core – for connection af Ermax tail lights 7 poled AMP plug (Ermax) <> 7 poled AMP socket (Volvo) Conductor cross-section: 7x1 mm^2 Cable type: FLRYY / PVC **300 mm**	994 003 200

Volvo connection :
1 : Ground
2 : Dir. indicator
3 : Stop
4 : Position
5 : Reverse
6 : Rear fog
7 : = 7 in ERMAX

Y–adapter cable, 7 core 2x2 poled outlet (200 mm) with Super Seal socket for position and reverse light. Conductor cross-section: 7x1,0 mm^2 / 2 x 1,0 mm^2. Cable type: FLRYY / PVC **2 x 300 mm** For connection af an additional tail light on the Volvo truck.	894 003 745

Easy to connect additional tail lights by applying the plug & play adapter cable

OBS: The 7 core rear cable makes it possible to manually disconnect the reverse alarm from the truck

Adapter cable – VOLVO

	Application / Description	Article no.
	Y-adapter cable, 7 core	**51**
	6 core 3700 mm cable with 7-poled AMP plug >	
	7 poled AMP socket > 900 mm cable with 7-poled AMP plug	
	Conductor cross-section: 6 x 1,0 mm^2 og 7 x 1,0 mm^2	
	Cable type: FLRYY / PVC	
	3.700 mm (Suitable for 21781011)	894 037 744

OBS: **Easy to connect additional tail lights** by applying the plug & play adapter cable

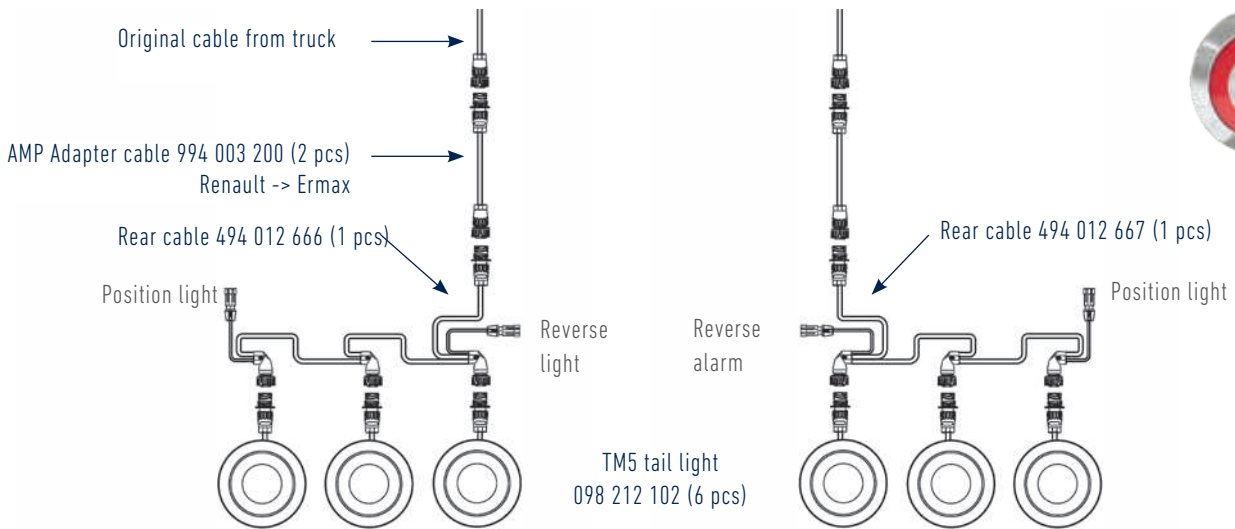# Plug & Play solutions for RENAULT

ERMAX ®

RENAULT - Plug & Play solution TM5 LED tail light

A complete upgrading kit from ERMAX with LED tail lights and time-saving mounting - directly integrated on the vehicle

A pre-assembled cable set enables a direct plug & play mounting of plug, cables and ERMAX Eternal Light® tail lights (TM5, TM10 and TM11) – a solution with opportunity for flexible connections of e.g. position lights, reverse light and reverse gear alarm, all without opening the exsisting wiring on the truck. In addition to this high quality solution, a significant time saving on the vehicle is achieved by using this plug & play solution.
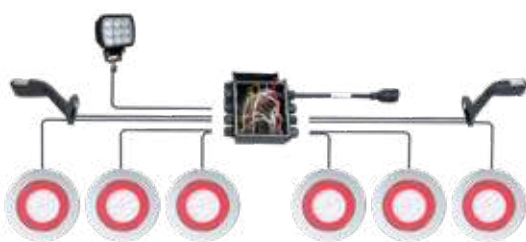
STANDARD upgrading kit with TM5 tail light 3-function	Article no. TM091050020

Original cable from truck

AMP Adapter cable 994 003 200 (2 pcs)
Renault -> Ermax

Rear cable 494 012 666 (1 pcs)

Rear cable 494 012 667 (1 pcs)

Position light

Position light

Reverse light

Reverse alarm

TM5 tail light
098 212 102 (6 pcs)

OBS - It is possible to disconnect the reverse gear alarm from the truck, if rear cable 494 016 667 is installed in connection with the external reverse gear alarm.

ERMAX Plug & Play upgrading kit with many advantages and opportunities

> Time-saving up to 8 hours
>> - plug & play installation of plugs, cables and lights
>> - Junction box with Super Seal sockets or cable glands for all lighting fuctions

> Secure and documentable installation

> No change of liability in warranty obligations, as existing wiring will not be opened

> Easy to replace damaged parts

> All fuctions are accessible with either Super Seal sockets or cable glands

> The Standard upgrading kits are packed individually in a box - Simple and effective

Time demanding installation with juction box and open end solution ✗

Plug & Play mounting - Time-saving ✓

Drawing of complete lighting system with various options of functions

> Option to integrate more lighting functions if needed

> Outlet for reverse light and/or reverse gear alarm from the rear cable

> Easy and time-saving mounting, also for retrofitting

Components marked with blue on below drawing are possible options in relation to the standard kit TM091050020 on previous page.

Y-adapter
894 005 240 (2 pcs)

Y-adapter
894 005 230 (1 pcs)

Reverse alarm (1 pcs)

Outer end marker light (2 pcs)

Reverse light (2 pcs) **

License plate light(2 pcs)

Drawing of rear cable 494 012 666 with outlet for reverse light, mounted on both sides of the vehicle (without reverse gear alarm)

Y-adapter
894 005 240 (2 pcs)

Rear cable 494 012 666 (2 pcs)

Outer end marker light (2 pcs)

Reverse light (2 pcs) **

License plate light(2 pcs)

OBS** Connection of reverse lights to rear cable 494 012 666

- Is possible by applying Y-adapter 894 005 230 or by applying both the Y-adapter and extension cable (as shown on above drawing). The alternativ could be the extension cable with Super Seal plug 794 020 230 or 694 030 200 as shown below. More lenghts are available.

794 020 230

Plug   Plug

694 030 200

Plug

Plug   Plug

ERMAX®

RENAULT – Plug & Play solution TM10 LED tail light

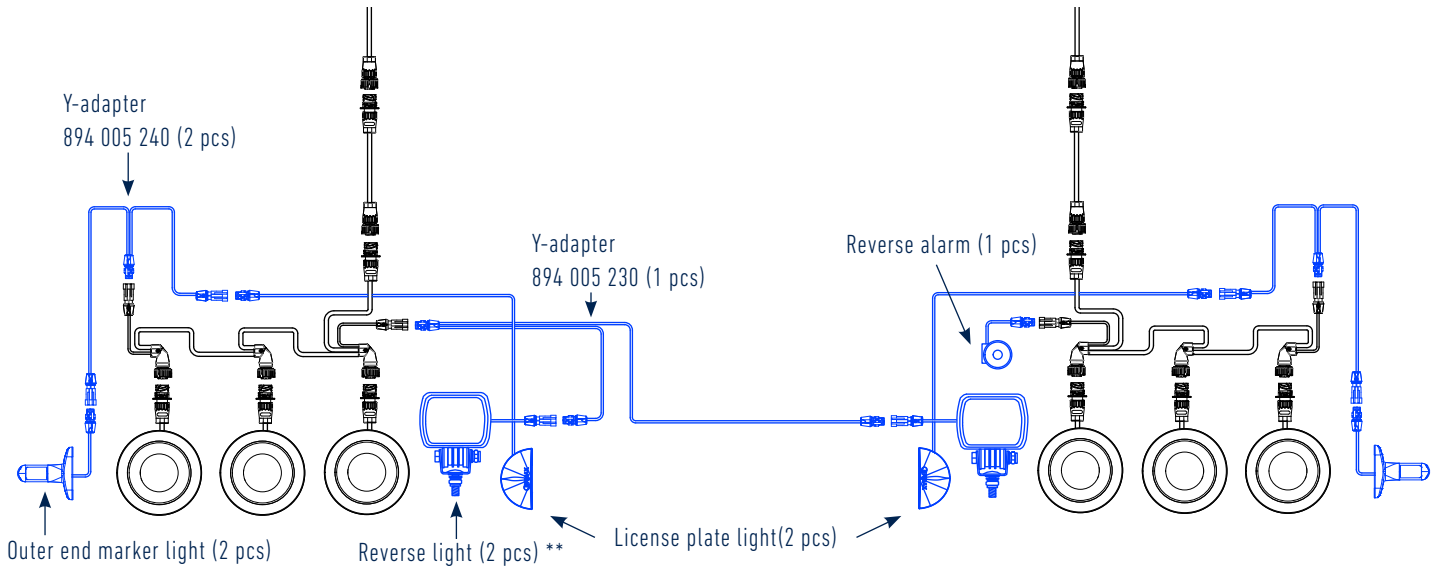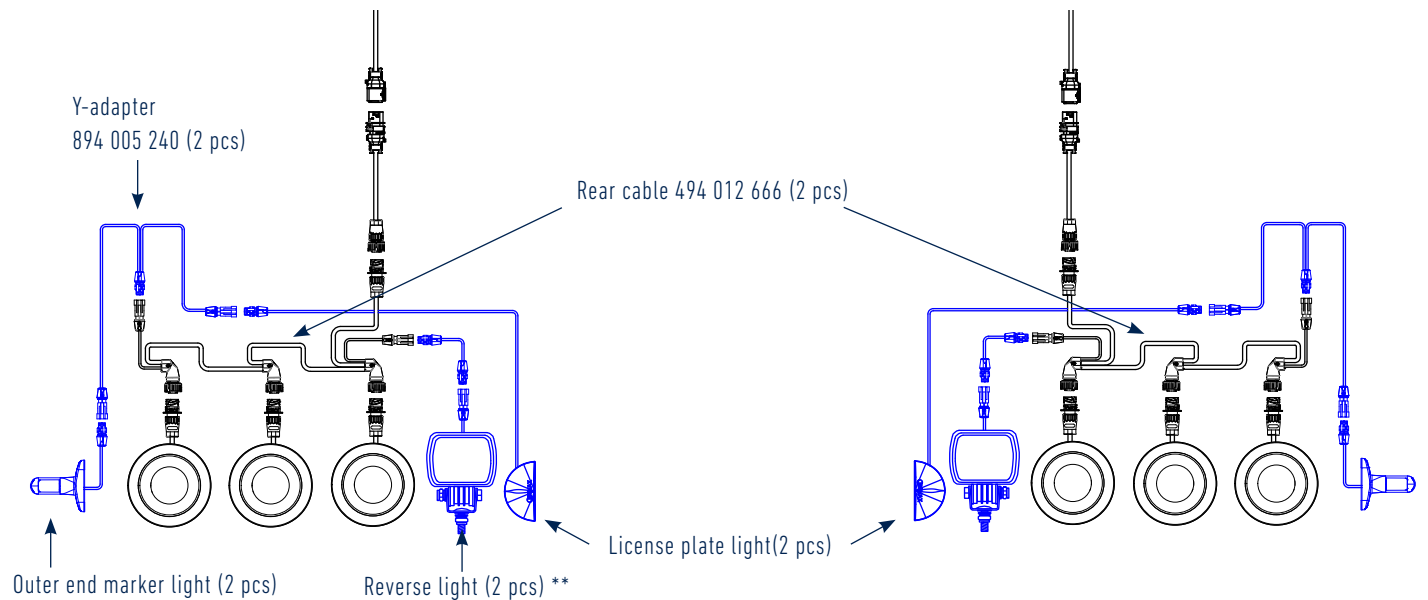| STANDARD upgrading kit with TM10 tail light 6-function	Article no. TM091050025

Original cable from truck

AMP Adapter cable 994 003 200
Renault -> Ermax (2 pcs)

TM10 tail light
(without integrated license plate light)
098 216 509 (1 pcs)

TM10 tail light
(without integrated license plate light)
098 216 508 (1 pcs)

Complete lighting system Standard TM091050025 with various options – without reverse gear alarm

Components marked with blue on below drawing are possible options in relation to the standard kit TM091050025 as shown above.

Original cable
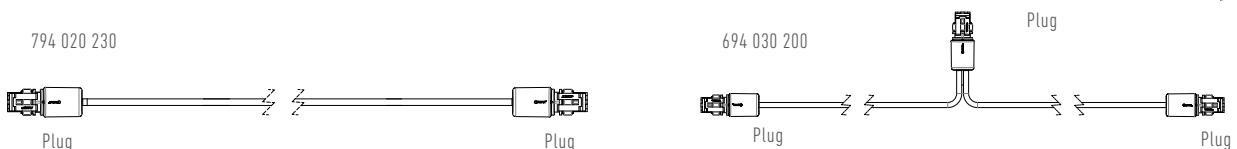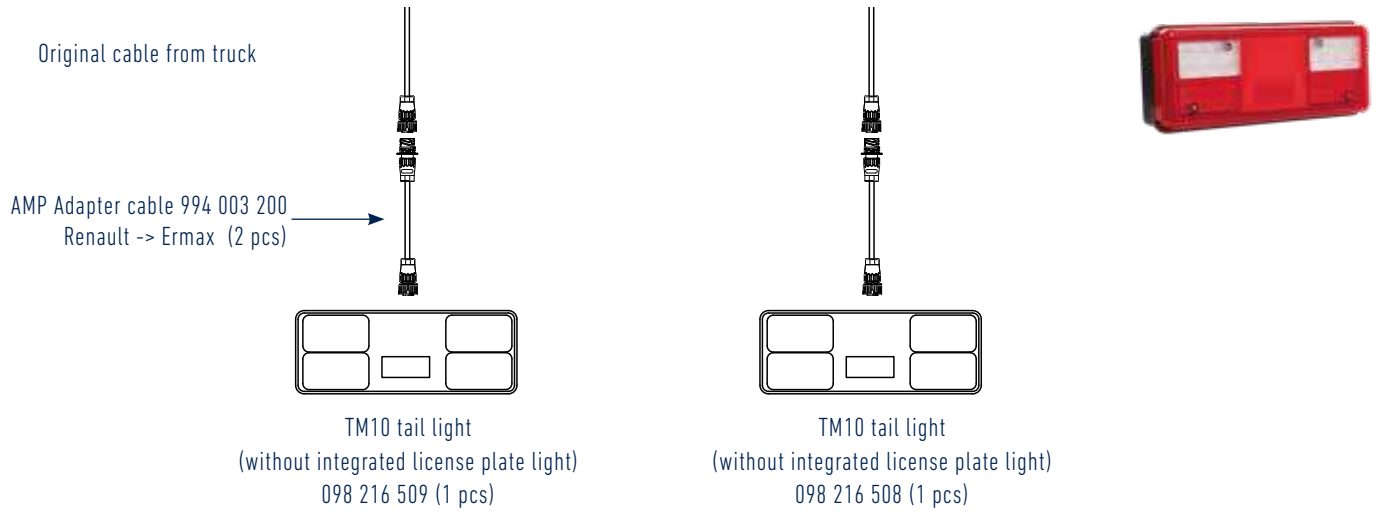from truck

Extension cable **

Reverse light (2 pcs)**

Rear cable 494 008 664
(2 pcs)

Y-adapter 894 005 240
(2 pcs)

Blanking plug (2 pcs)

Outer end marker light (2 pcs)

License plate light (2 pcs)

OBS - The outer end marker can also be delivered with an open
end cable - which makes it possible to connect the outer end
marker in the TM10 tail light

OBS** Connection of reverse lights to rear cable 494 012 664

– is possible by applying the Y-adapter 894 005 230 (as shown on above drawing) or by applying the extension cable with Super Seal plug
794 020 230 or 694 030 200 as shown below. More lengths are available.

794 020 230

Plug

Plug

694 030 200

Plug

Plug

Plug

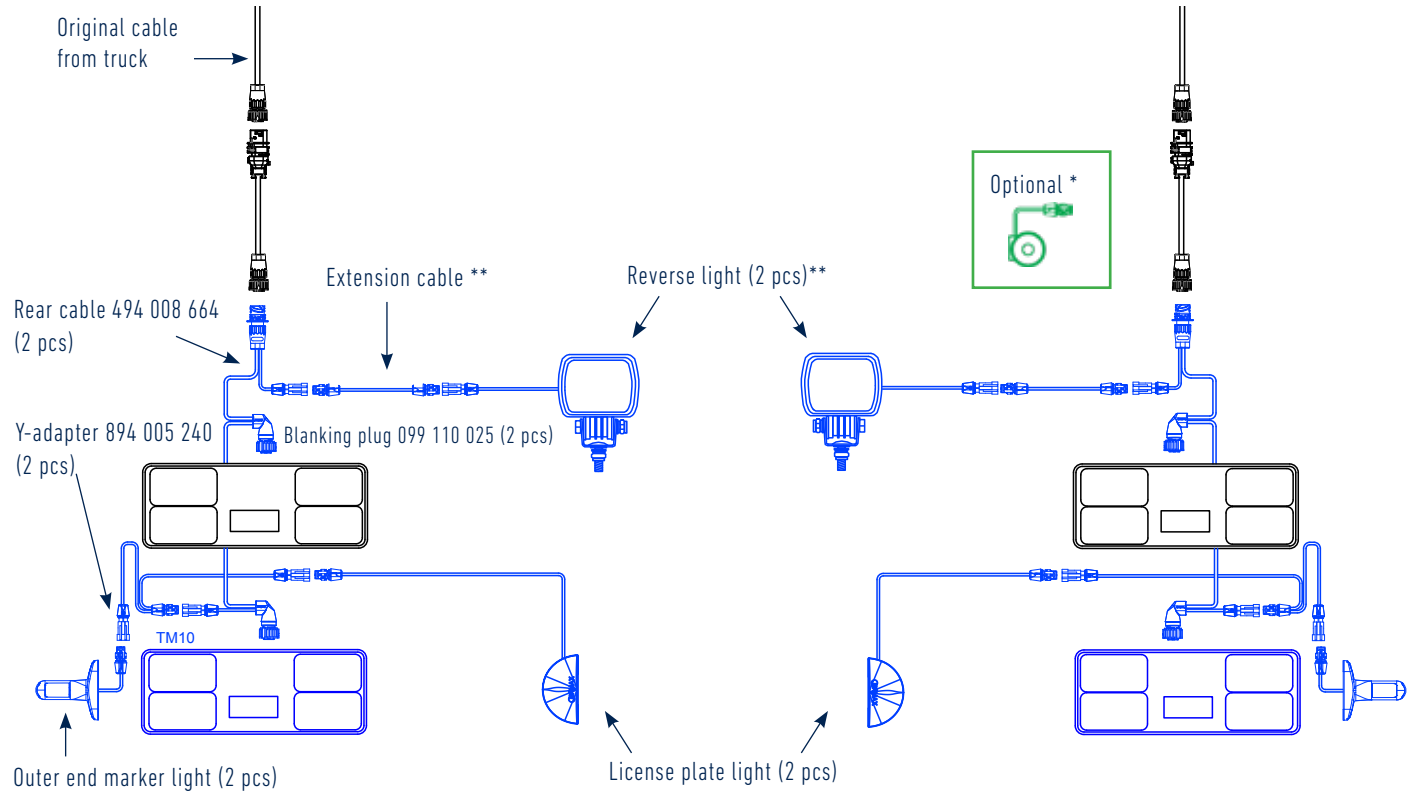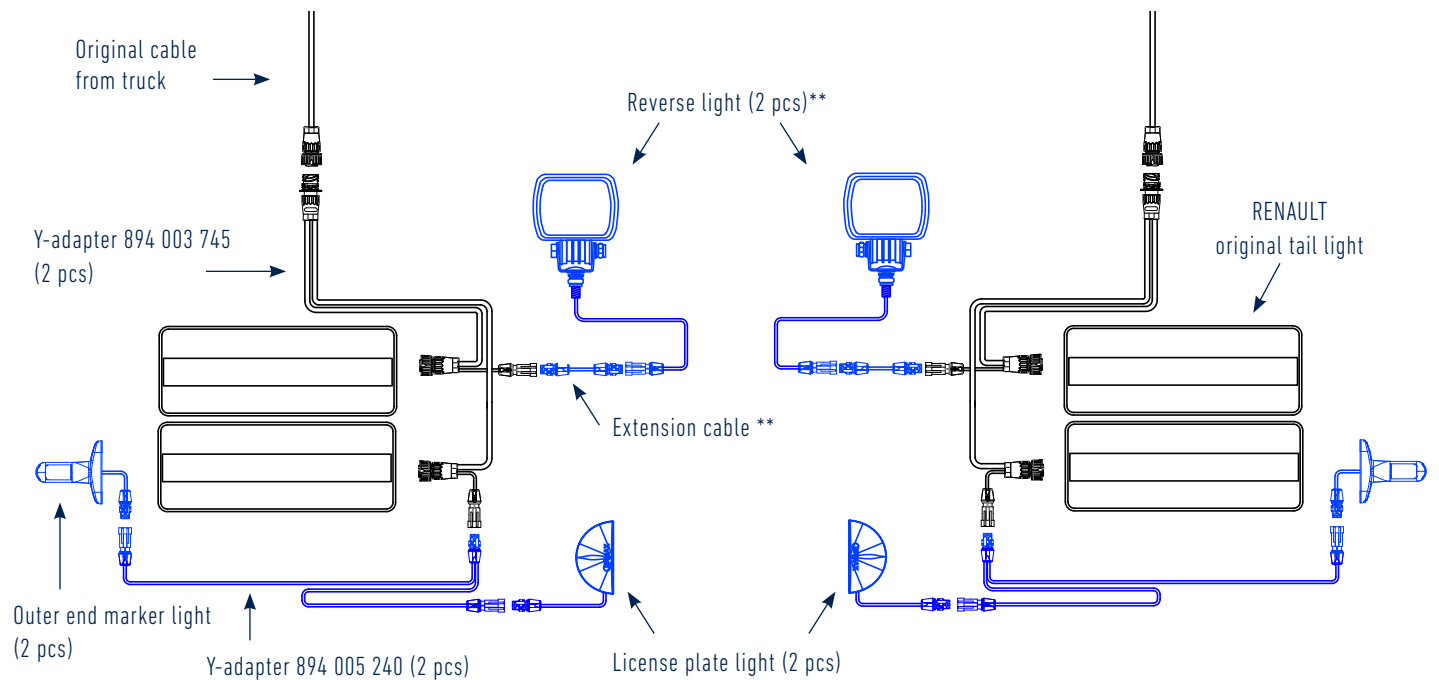## Double lighting installation with TM10 tail lights – alternatively original VOLVO tail lights with various options of lighting functions

Reverse gear alarm *

Rear cable 494 012 667 should be mounted in the right side of the vehicle, where to the reverse gear alarm should be connected, if it is required to control and mute the reverse alarm from the truck. The third lighting connection should be blinded with blanking plug 099 110 025

Original cable
from truck

Optional *

Extension cable **

Reverse light (2 pcs)**

Rear cable 494 008 664
(2 pcs)

Y-adapter 894 005 240
(2 pcs)

Blanking plug 099 110 025 (2 pcs)

TM10

Outer end marker light (2 pcs)

License plate light (2 pcs)

Double lighting installation with orginal RENAULT tail lights

Original cable
from truck

Reverse light (2 pcs)**

Y-adapter 894 003 745
(2 pcs)

RENAULT
original tail light

Extension cable **

Outer end marker light
(2 pcs)

Y-adapter 894 005 240 (2 pcs)

License plate light (2 pcs)

ERMAX®

Plug & Play installation of additional side marker light

It is possible to install additional side marker lights (orginals) with the ERMAX side cable adapter with MCP2 plug
- Easy and simple, also for retrofittings

> Remove the side cable from the existing side marker light (from where the extension of the side cable is required)

> Connect the ERMAX side cable adapter to the existing side cable (socket)

> Mount the existing side marker light onto the new side cable - and connect then the new side marker light

> By mounting additonal side cables, it is possible to extend the side cable further

Adapter 694 039 205

Side marker light 098 221 263 (example)

Side cable – Adapter		
RENAULT		

Connection:	3900 mm -1 x inlet with MCP2 socket	
	2 x outlet with MCP2 plug	
Distance between plugs:	1 x 200 mm + 1 x 3.700 mm	
Conductor cross-section:	2 x 0,5 mm²	
Cable type:	FLRYY / PVC	
Approval:	ADR	
Article no.	694 039 205	

Pin-configuration - 2 poled Super Seal plug		
Position	Color	Function
1	Brown	Ground (–)
2	Blue	Position

ERMAX®

Lighting options for lighting systems with TM5 and TM10 tail lights

Outer end marker light LED	License plate light LED

Outer end marker light LED

Long or short model
300 mm cable with Super Seal plug

Article no.	
098 241 448 (RH)	098 241 218 (RH/LH)
098 241 449 (LH)	

License plate light LED

Half-round or square model
1200 mm cable with Super Seal plug

Article no.	
098 254 335	098 254 345

Reverse light LED

300 mm cable with Super Seal socket **
Approved as reverse light with 30^0 or 35^0 angling by vertical mounting *

Article no.		
098 256 255	098 174 265	098 174 275
Lumen: 650 / 300	Lumen: 1.600 / 1.200	Lumen: 2.400 / 1.800
	* 30^0 angling	* 35^0 angling

Reverse gear alarm

250 mm cable with
Super Seal plug

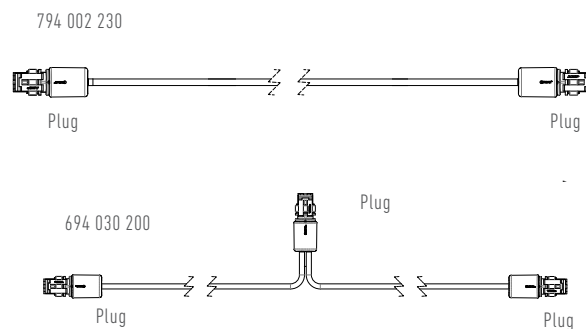| Article no. |
|---|
| 090 450 350 |

TM10 Tail light LED

License plate light integrated in
the bottom of the trail light

Article no.
098 216 511 (LH)
098 216 510 (RH)

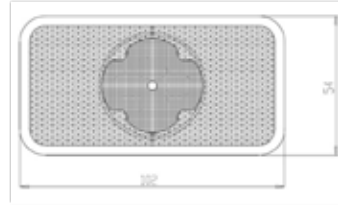** Connection of reverse lights to rear cable 494 012 664

- Is possible by applying the Y-adapter 894 005 230 or extension cable
with Super Seal plug 794 002 230 or 694 030 200 as shown below.
More lengths are available.

794 002 230

Plug   Plug

Plug

694 030 200

Plug   Plug

Side marker light RENAULT

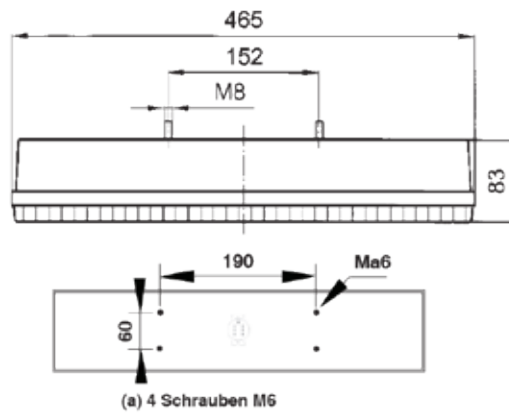| Side marker light LED 24V |
| --- |

RENAULT

Description:	Orange, plastic housing with 3 LEDs - without reflex reflector
Surface mounting:	Horizontal / vertical - mounting depth 35 mm
Connection:	Integrated 2 poled AMP plug
Dimension:	104 x 54 mm
Approval:	ECE, IP67
Suitable for:	20398660
Article no.	**098 221 263**

ERMAX®

Tail lights, blub

(E) [EMC]

A

7 poled
socket with 6 active pins
(Side mounting)

Wired and 2 bulb holders for rear light, vibration absorber
Lens: PMMA
Housing: Black plastic
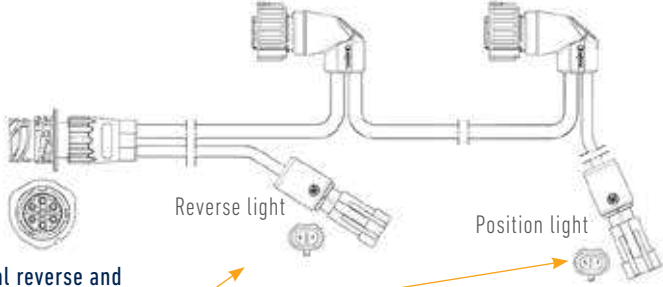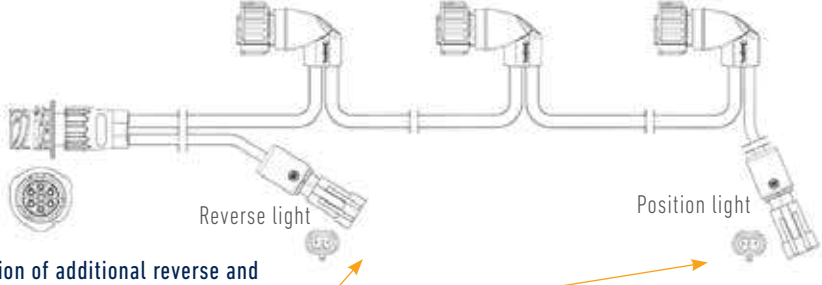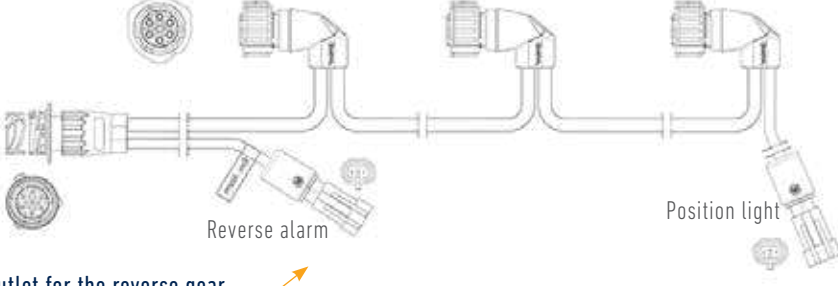Dimension: 465 x 130 x 83 mm
Bolt distance: 152 mm
IP54 rating

Functions												
Application	Lens (spare part)	Left ← Right →	Position Stop	Dir. indicator	Reverse	Rear fog	Side marker	License plate	Square reflex refelctor	Connection	Suitable for	Article no.
Renault	098 292 793	←	✓				✓		✓	A (s)	5001847584 / 86	**098 212 956**
Renault	098 292 793	→	✓		✓		✓	✓	✓	A	5001847585 / 87	**098 212 957**
Spare part												
Side marker insert												**098 292 959**

ERMAX®

Rear cable

Application / Description	Article no.
Rear cable 6 core – single, chain 7-polet AMP 1,5 socket, straight > 2 x AMP 1,5 plug, angled Conductor cross-section: 6x1 mm^2 / 2x1 mm^2 Cable type: FLRYY / PVC **6 core 800 mm** With 2 x 2 poled outlet with Super Seal for position light and reverse light	494 008 664

Reverse light

Position light

Easy connection of additional reverse and
position lights with 2 poled Super Seal outlets

Rear cable 6 core – single, chain 7-polet AMP 1,5 socket, straight > 3 x AMP 1,5 plug, angled Conductor cross-section: 6x1 mm^2 / 2x1 mm^2 Cable type: FLRYY / PVC **6 core 1.200 mm** With 2 x 2 poled outlet with Super Seal for position light and reverse light	494 012 666

Reverse light

Position light

Easy connection of additional reverse and
position lights with 2 poled Super Seal outlets

6 core 1.200 mm With 2 x 2 poled outlet with Super Seal for positionlight and reverse alarm OBS: Pin no. 7 in the 7 poled AMP plug is for the reverser gear alarm	494 012 667

Reverse alarm

Position light

Possibility for outlet for the reverse gear
alarm, which can be disconnected
manually from the truck

ERMAX ®

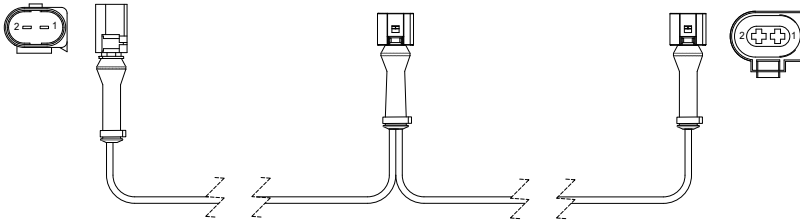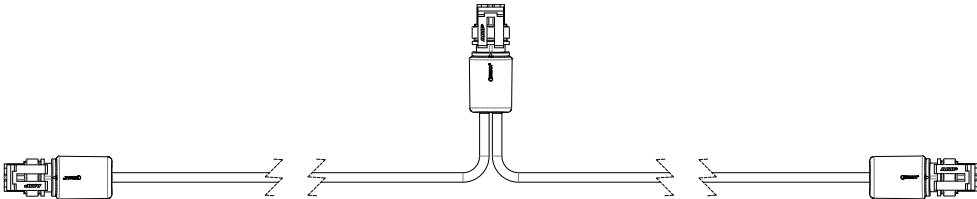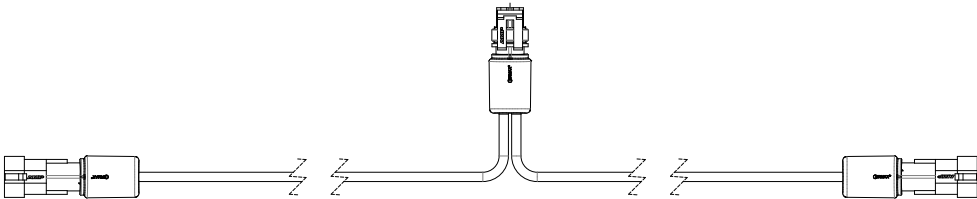Extension cable (For additional lenghts - see section " cables universal")

Application / Description	Article no.
Extension cable, 2 core	**63**
Super Seal plug > Super Seal plug	
Conductor cross-section: 2x1 mm^2	
Cable type: FLRYY / PVC	
200 mm	794 002 230
500 mm	794 005 230
1.000 mm	794 010 230
1.500 mm	794 015 230

Extension cable, 2 core – chain	
1 inlet + 2 outlets with Super Seal plug	
Conductor cross-section: 2x0,5 mm^2	
Cable type: FLRYY / PVC	
3.000 mm	694 030 200
Distance between plugs: 1x1.700 mm + 1x1.300 mm	
4.200 mm	694 042 200
Distance between plugs: 1x1.200 mm + 1x3.000 mm	
5.300 mm	694 053 200
Distance between plugs: 1x300 mm + 1x5.000 mm	

ERMAX®

Side cable RENAULT / Y-adapter cable (Universal)

Application / Description	Article no.
Side cable, 2 core – chain (Volvo) For extension of original cable for side marker lights 1 x inlet with MCP2 socket 2 x outlets with MCP2 plug Conductor cross-section: 2x0,5 mm^2 Cable type: FLRYY / PVC **3.900 mm** Distance between plugs: 1 x 200 mm + 1 x 3.700 mm	694 039 205
Y-adapter cable, 2 core 3 x Super Seal plug Conductor cross-section: 2x1 mm^2 Cable type: FLRYY / PVC **2 x 500 mm** **2 x 2.000 mm**	894 005 230 894 020 230
Y-adapter cable, 2 core 1 x Super Seal plug + 2 x Super Seal sockets Conductor cross-section: 2x1 mm^2 Cable type: FLRYY / PVC **2 x 500 mm**	894 005 240

ERMAX®

Adapter cable – RENEAULT

Application / Description	Article no.
Adapter cable, 7 core – for connection af Ermax tail lights 7-polet AMP plug (Ermax) <> 7-polet AMP socket (Renault) Conductor cross-section: 7x1 mm² Cable type: FLRYY / PVC **300 mm**	**65** 994 003 200
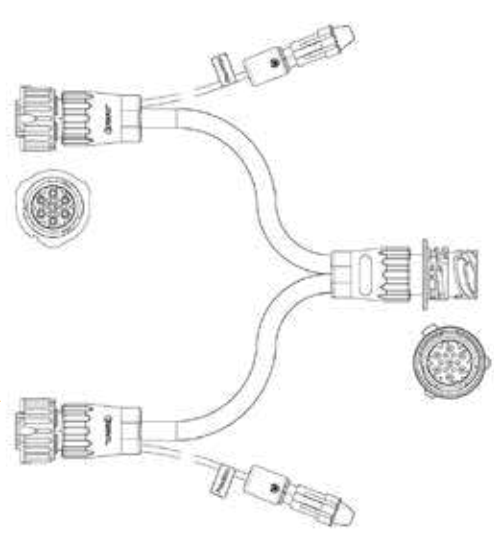
Renault connection :
1 : Ground
2 : Dir. indicator
3 : Stop
4 : Position
5 : Reverse
6 : Fog
7 : = 7 in ERMAX

RENAULT

ERMAX

Y–adapter cable, 7–core

2x2 poled outlet (200 mm) with Super Seal socket for position and reverse light.

Conductor cross-section: 7x1,0 mm² / 2 x 1,0 mm².
Cable type: FLRYY / PVC
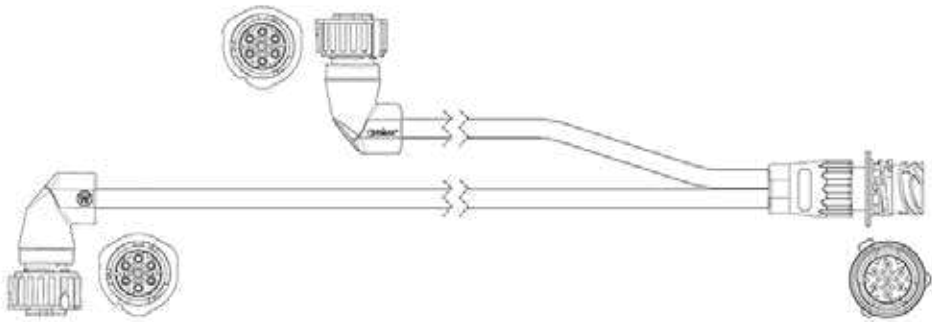
2 x 300 mm
For connection of an additional tail light on the Renault truck.

894 003 745

Easy to connect an additional tail light by applying the plug & play adapter cable

OBS: The 7 core rear cable makes it possible to manually disconnect the reverse gear alarm from the truck

ERMAX®

Adapter cable – RENAULT

	Application / Description	Article no.
66	Y-adapter cable, 7 core 6 core 3700 mm cable with 7 poled AMP plug > 7 poled AMP socket > 900 mm cable with 7 poled AMP plug Conductor cross-section: 6 x 1,0 mm^2 og 7 x 1,0 mm^2 Cable type: FLRYY / PVC **3.700 mm**	894 037 744

OBS: **Easy to connect an additional tail light** by applying the plug & play adapter cable

Plug & Play solutions for MERCEDES

ERMAX ®

MERCEDES - Plug & Play solution TM5 LED tail light

A complete upgrading kit from ERMAX with LED tail lights and time-saving mounting - directly integrated on the vehicle

A pre-assembled cable set enables a direct plug & play mounting of plug, cables and ERMAX Eternal Light® tail lights (TM5, TM10 and TM11) – a solution with opportunity for flexible connections of e.g. position lights, reverse light and reverse gear alarm, all wit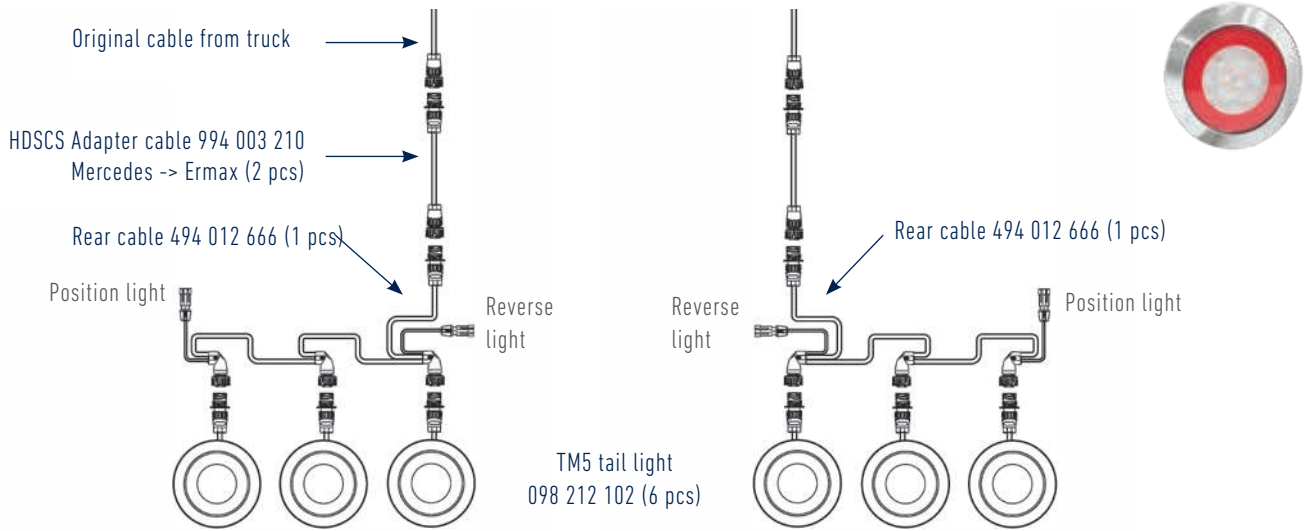hout opening the exsisting wiring on the truck. In addition to this high quality solution, a significant time saving on the vehicle is achieved by using this plug & play solution.

STANDARD upgrading kit with TM5 tail light 3-function	Article no. TM091050030

Original cable from truck

HDSCS Adapter cable 994 003 210
Mercedes -> Ermax (2 pcs)

Rear cable 494 012 666 (1 pcs)

Rear cable 494 012 666 (1 pcs)

Position light

Position light

Reverse
light

Reverse
light

TM5 tail light
098 212 102 (6 pcs)

ERMAX Plug & Play upgrading kit with many advantages and opportunities

› Time-saving up to 8 hours
- plug & play installation of plugs, cables and lights
- Junction box with Super Seal sockets or cable glands for all lighting fuctions

› Secure and documentable installation

› No change of liability in warranty obligations, as existing wiring will not be opened

› Easy to replace damaged parts

› All fuctions are accessible with either Super Seal sockets or cable glands

› The Standard upgrading kits are packed individually in a box - Simple and effective

Time demanding installation with juction box and open
end solution

Plug & Play mounting - Time-saving

Drawing of complete lighting system with various options of functions

❯ Option to integrate more lighting functions if needed

❯ Outlet for reverse light and/or reverse gear alarm from the rear cable

❯ Easy and time-saving mounting, also for retrofitting

Components marked with blue on below drawing are possible options in relation to the standard kit TM091050030 as shown on previous page

Drawing of rear cable 494 012 666 with outlet for reverse light, mounted on both sides of the vehicle (without reverse gear alarm)

Y-adapter
894 005 240 (2 pcs)

Rear cable 494 012 666 (2 pcs)

License plate light (2 pcs)

Outer end marker light (2 pcs)

Reverse light (2 pcs) **

OBS** Connection of reverse lights to rear cable 494 012 666

- Is possible by applying Y-adapter 894 005 230 or by applying both the Y-adapter and extension cable (as shown on above drawing). The alternativ could be the extension cable with Super Seal plug 794 020 230 or 694 030 200 as shown below. More lenghts are available.

794 002 230

Plug

Plug

694 030 200

Plug

Plug

Plug

ERMAX®

MERCCEDES – Plug & Play solution TM10 LED tail light

STANDARD upgrading kit with TM10 tail light 6-function	Article no. TM091050035

Original cable from truck

AMP Adapter cable 994 003 210
Mercedes -> ERMAX (2 pcs)

TM10 tail light
(Without integrated license plate light)
098 216 509 (1 pcs)

TM10 tail light
(Without integrated license plate light)
098 216 508 (1 pcs)

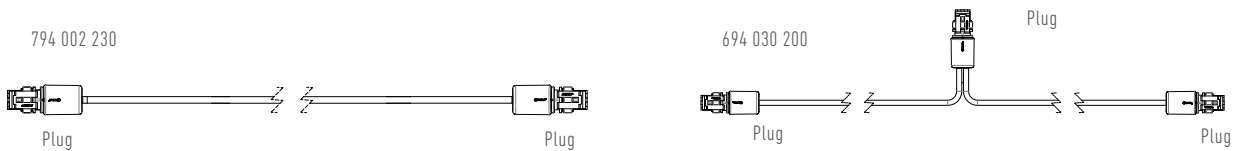### Complete lighting system Standard TM091050035 with various options – without reverse gear alarm

Components marked with blue on below drawing are possible options in relation to the standard kit TM091050035 as shown above.
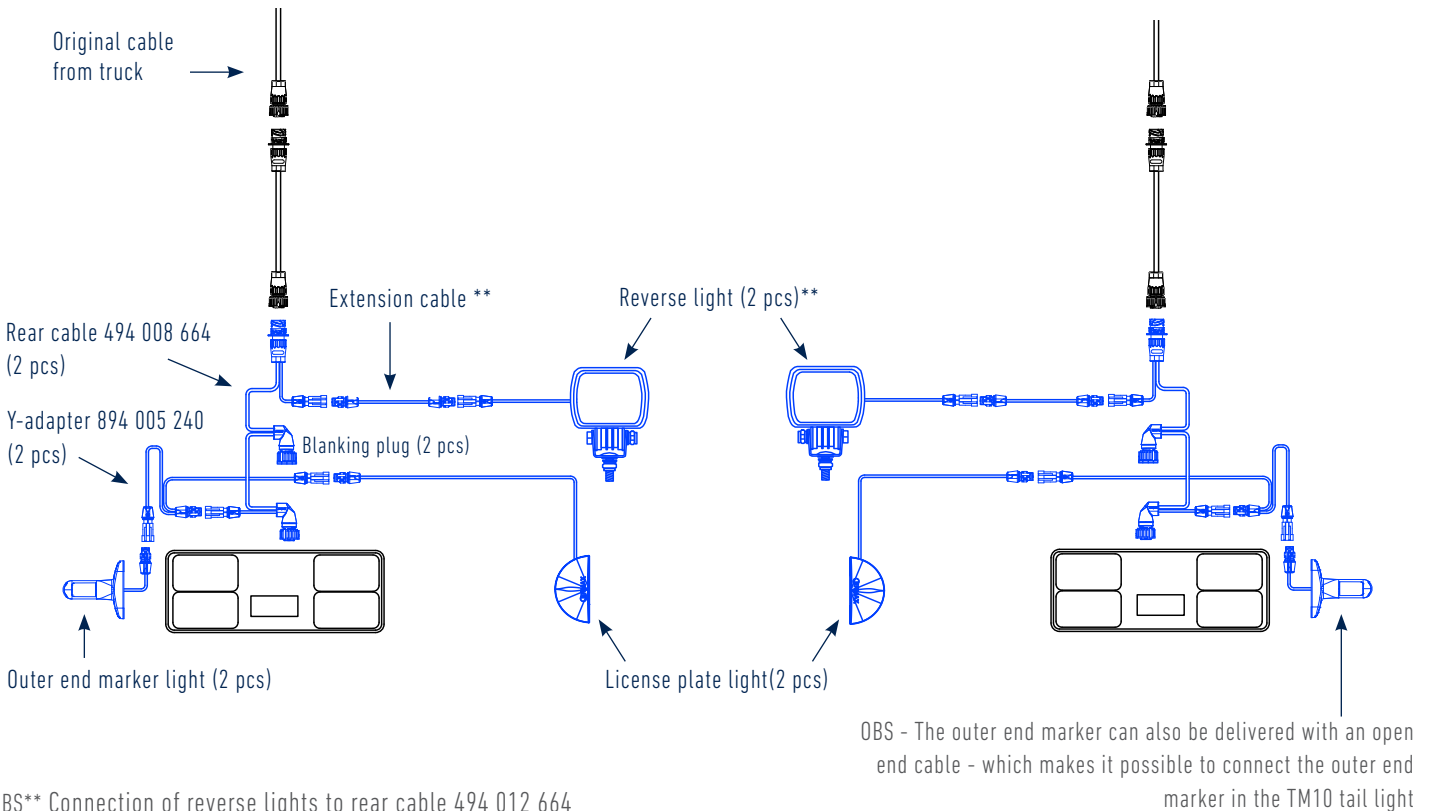
Original cable
from truck

Extension cable **

Reverse light (2 pcs)**

Rear cable 494 008 664
(2 pcs)

Y-adapter 894 005 240
(2 pcs)

Blanking plug (2 pcs)

Outer end marker light (2 pcs)

License plate light(2 pcs)

OBS - The outer end marker can also be delivered with an open
end cable - which makes it possible to connect the outer end
marker in the TM10 tail light

OBS** Connection of reverse lights to rear cable 494 012 664
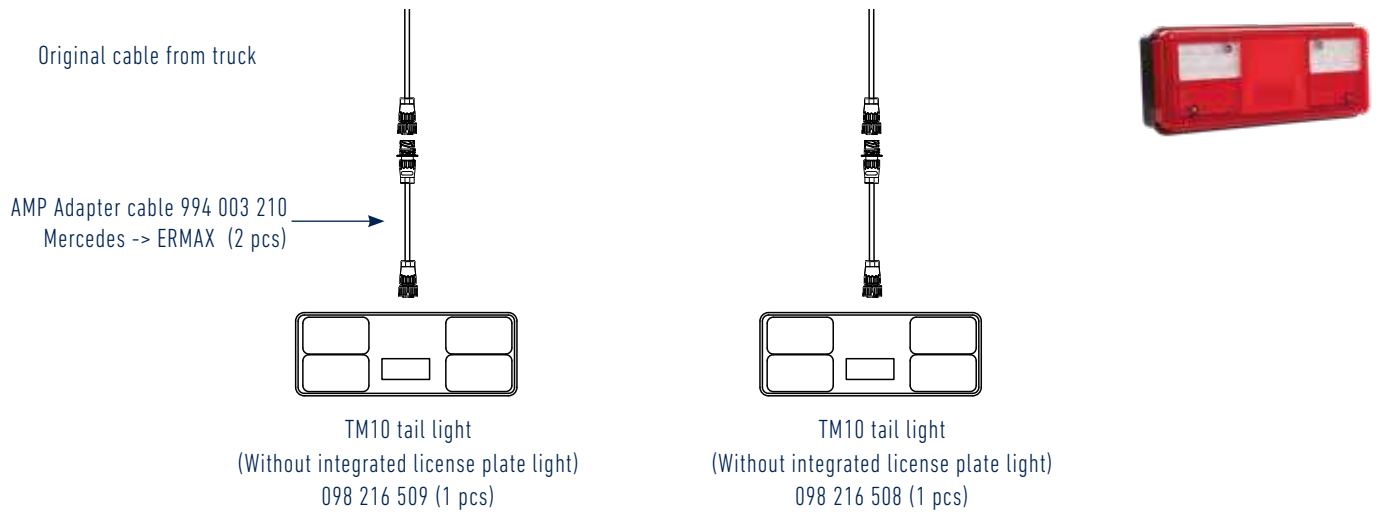
- Is possible by applying Y-adapter 894 005 230 or by applying both the Y-adapter and extension cable (as shown on above drawing). The alternativ could be the extension cable with Super Seal plug 794 020 230 or 694 030 200 as shown below. More lenghts are available.

794 020 230

Plug

Plug

694 030 200

Plug

Plug

Plug

Double lighting installation with TM10 tail lights with various options of functions

Original cable from truck

Extension cable **

Reverse light (2 pcs)**

Rear cable 494 008 664 (2 pcs)

Y-adapter 894 005 240 (2 pcs)

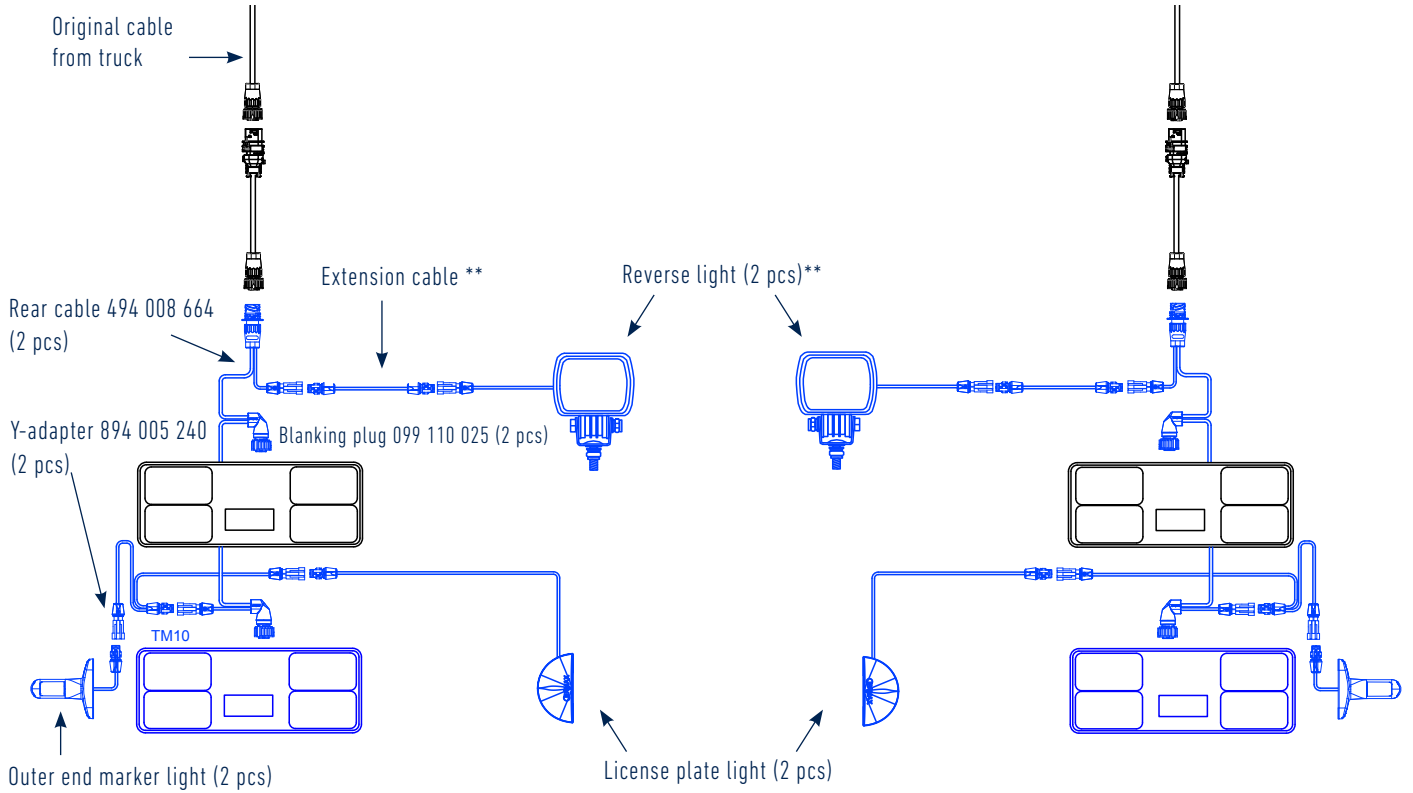Blanking plug 099 110 025 (2 pcs)

TM10

Outer end marker light (2 pcs)
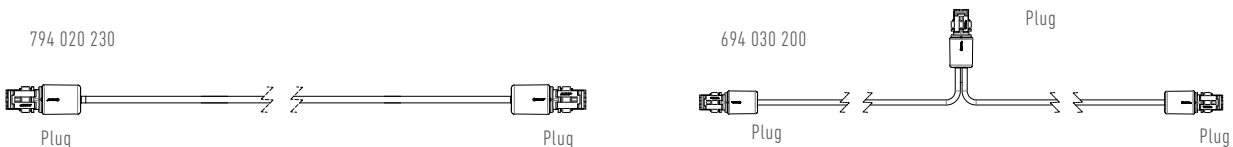
License plate light (2 pcs)

Double installation with original MERCEDES tail lights

Original cable from truck

Y-adapter 994 003 290 (2 pcs)

Reverse light (2 pcs)**

Y-adapter 994 003 212 (2 pcs)

MERCEDES original tail light

Extension cable **

Outer end marker light (2 pcs)

Y-adapter 894 005 240 (2 pcs)

License plate light (2 pcs)
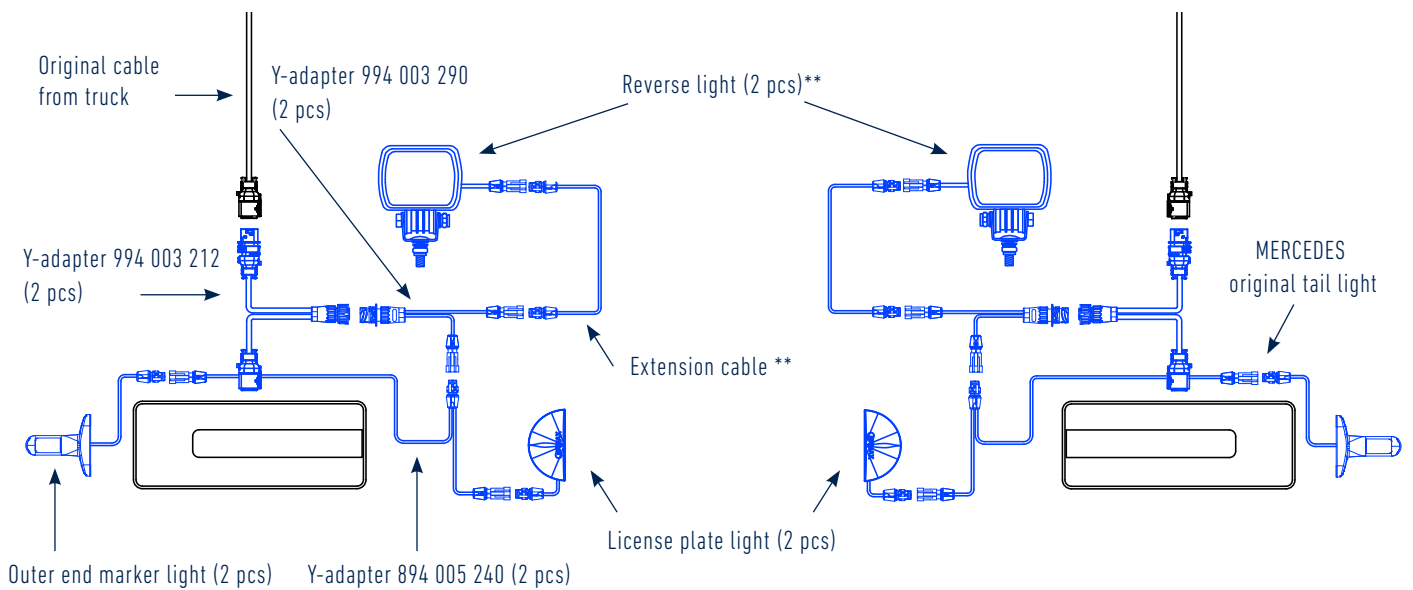
Plug & Play installation of work lights in front of the truck

It is possible to install work lights with the 4 poled AMP plug placed in front of the truck by using the ERMAX adapter

- Easy and simple, also for retrofittings

Adapter 994005116
(2 pcs)
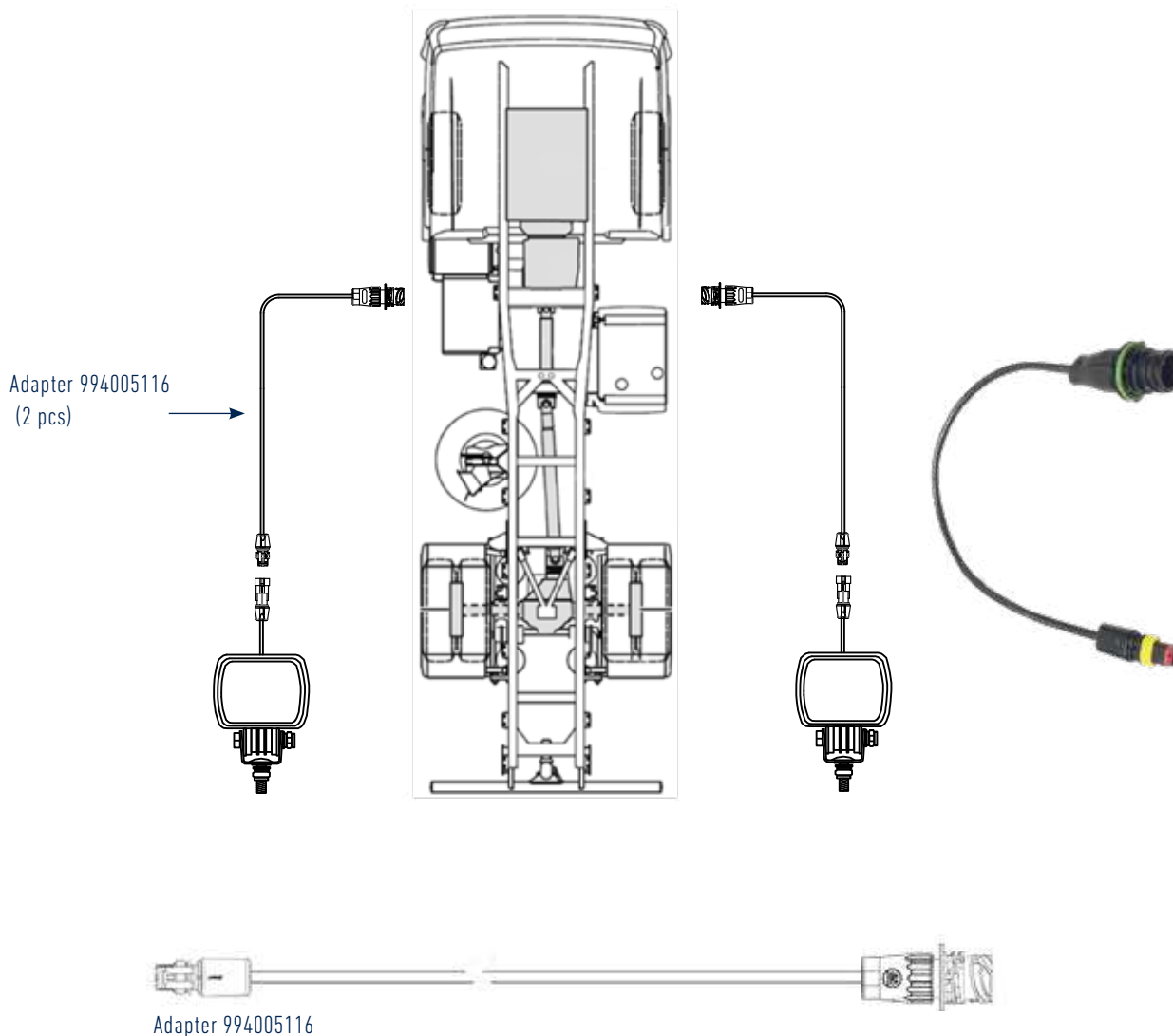
Adapter 994005116

Adapter cable	
MERCEDES	
Connection:	500 cable with Super Seal plug > 4 polet AMP socket
Conductor cross-se-ction:	2 x 1 mm^2
Cable type:	FLRYY / PVC
Approval:	ADR
Article no.:	994 005 116

Pin configuration - 2 poled Super Seal plug		
Position	Color	Function
1	Brown	Ground (–)
2	Blue	Plus (+)

| Pin configuration - 4 poled AMP plug		
Position	Color	Function
1	Blue	Plus (+)
2	Brown	Ground (–)
3	-	(Not connected)
4	-	(Not connected)

Plug & Play installation of additional side marker lights

It is possible to install additional side marker lights (orginals) with the ERMAX side cable adapter with MCP2 plug
- Easy and simple, also for retrofittings

> Remove the side cable from the existing side marker light (from where the extension of the side cable is required)

> Connect the ERMAX side cable adapter to the existing side cable (socket)

> Mount the existing side marker light onto the new side cable - and connect then the new side marker light

> By mounting additonal side cables, it is possible to extend the side cable further

Adapter 694 039 205

Side marker light 098 221 357
(exsample)
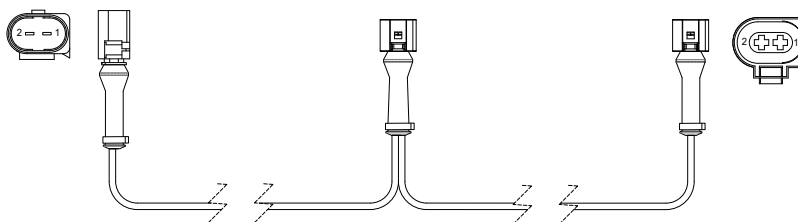
Side cable – Adapter		
MERCEDES		

Connection:	3900 mm -1 x inlet with MCP2 socket
	2 x outlets with MCP2 plug
Distance between plugs:	1 x 200 mm + 1 x 3.700 mm
Conductor cross-section:	2 x 0,5 mm²
Cable type:	FLRYY / PVC
Approval:	ADR

Article no.	694 039 205

Pin configuration - 2 poled Super Seal plug		
Position	Color	Function
1	Brown	Ground (–)
2	Blue	Position

ERMAX®

Lighting options for lighting systems with TM5 and TM10 tail lights

Outer end marker light LED

Long or short model
300 mm cable with Super Seal plug

Article no.	
098 241 448 (LH)	098 241 218 (H/V)
098 241 449 (RH)	

License plate light LED

Half-round or square model
1200 mm cable with Super Seal plug

Article no.	
098 254 335	098 254 345

Reverse light LED

300 mm cable with Super Seal socket **
Approved as reverse light with 30^0 or 35^0 angling by vertical mounting *

Article no.		
098 256 255	098 174 265	098 174 275
Lumen: 650 / 300	Lumen: 1.600 / 1.200	Lumen: 2.400 / 1.800
	* 30^0 angling	* 35^0 angling

Reverse gear alarm

250 mm cable with
Super Seal plug

Article no.
090 450 350

TM10 Tail light LED

The license plate light is integrated in the bottom of the tail light
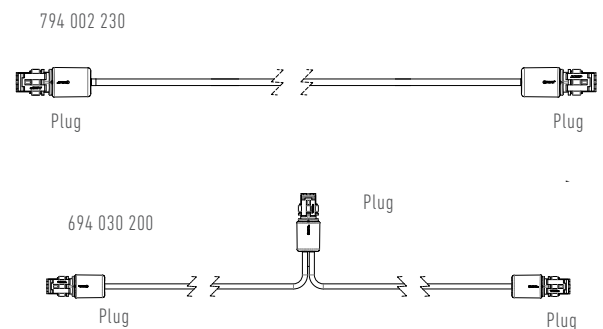
Article no.
098 216 511 (V)
098 216 510 (H)

** Connection of reverse lights to rear cable 494 012 664

- Is possible by applying the Y-adapter 894 005 230 or extension cable with Super Seal plug 794 002 230 or 694 030 200 as shown below. More lengths are available
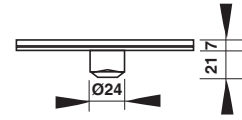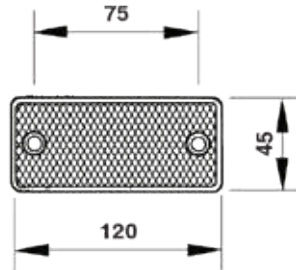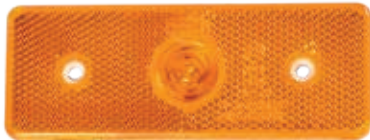
794 002 230

Plug   Plug

694 030 200   Plug

Plug   Plug

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Side marker lights MERCEDES

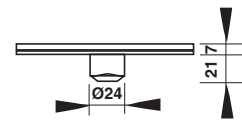| Side marker light LED 24V		E

Mercedes

Description:	PMMA Lens and plastic housing - 1 LED and with reflex reflector
Surface mounting:	Horizontal - mounting depth 21 mm
Connection:	200 mm cable open end
Dimension:	120 x 45 x 7 mm
Bolt distance:	75 mm
Approval:	ECE, IP67
Suitable for:	0005447211, 0005445211
Article no.	**098 221 354**

Side marker light LED 24V		E

Mercedes

Description:	PMMA Lens and plastic housing - 1 LED and with reflex reflector
Surface mounting:	Horizontal
Connection:	600 mm connection cable with 2 poled AMP JPT plug
Dimension:	120 x 45 x 7 mm
Bolt distance:	75 mm
Approval:	ECE, IP67
Suitable for:	A 000 544 49 11
Article no.	**910 221 827**

ERMAX®

Side marker lights MERCEDES

| Side marker light LED 12/24V | Ⓔ |

Mercedes

Description:	PMMA Lens and plastic housing with sealed cable outlet - 4 LEDs and with reflex reflector
Surface mounting:	Horizontal / vertical - mounting depth 35 mm
Connection:	200 mm cable open end (sealed cable outlet)
Dimension:	110 x 41 x 9 mm
Bolt distance:	75 mm
Approval:	ECE, IP67
Suitable for:	A 002 820 8856
Article no.	**098 221 222**

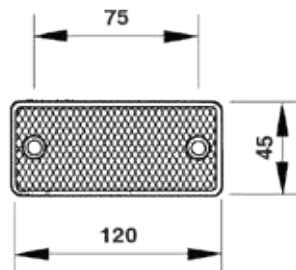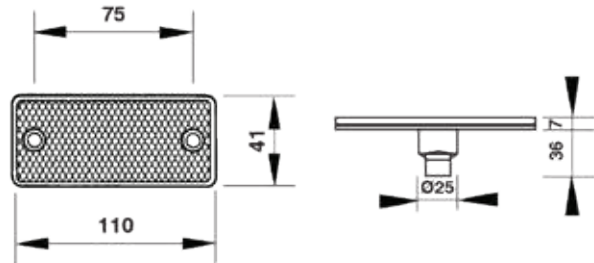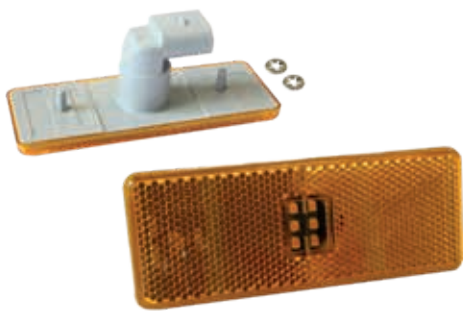| Side marker light LED 12/24V | Ⓔ |

Mercedes
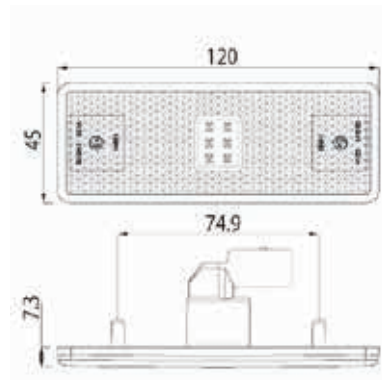
Description:	PMMA Lens and plastic housing - 4 LEDs and with reflex reflector
Surface mounting:	Horizontal / vertical - mounting depth 37 mm
Connection:	See the part numbers below for connection possibilities
Dimension:	120 x 45 x 9 mm
Bolt distance:	75 mm
Approval:	ECE, IP67
Suitable for:	000 544 72 11, 000 544 54 11, 000 544 52 11, 375 544 02 11
Article no.	**098 221 353** – 100 mm cable open end / **098 221 357** – with 2 poled MCP2 connection plug

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Tail lights, bulb

E EMC

Pos 1

Pos 2

524

138

200   M8x20

83

a)

465 mm   138

b)

200   M8

Connection:

A

6 poled socket

B

7 poled socket
with 6 active pins

C
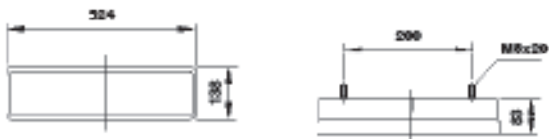
7 poled socket,
(s) Side mounting

D

7 poled socket
with 6 active pins,
(s) Side mounting

Wired and with bulb holder vibration absorber
Lens: PMMA
Housing: Black plastic
Bolt distance: 200 mm

Pos 1 -   Dimension: 524 x 138 x 83 mm
            Connection cable: 1200 mm
Pos 2a - Dimension: 465 x 138 x 90 mm
Pos 2b - Dimension: 525 x 138 x 85

Functions

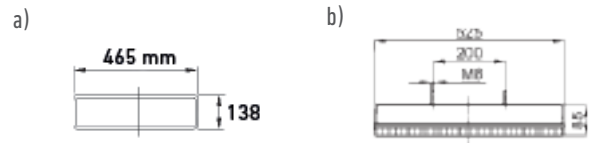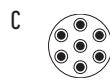| Application	Lens (spare part)	IP Rating	Left ← Right →	Position, Stop, DI	Reverse	Rear fog	Side marker	License plate	square refelx reflector	Connection	Suitable for	Pos	Article no.
Mercedes Benz MK & SK 10 / 94 >	098 293 323	IP54	←	✓	✓	✓	✓	✓	✓	A	001 540 17 70	1	098 213 341
Mercedes Benz MK & SK 10 / 94 >	098 293 333	IP54	→	✓	✓	✓	✓		✓	A	001 540 20 70	1	098 213 351
Mercedes Benz Atego	098 293 363	IP54	←	✓	✓	✓	✓	✓	✓	B	002 544 53 03 003 544 56 03	2a	098 213 381
Mercedes Benz Atego	098 293 363	IP54	→	✓	✓	✓	✓		✓	B	003 544 52 03 003 544 55 03	2a	098 213 391
Mercedes Benz Atego & Actros	098 293 323	IP54	←	✓	✓	✓	✓	✓	✓	C (s)	001 540 62 70	2b	098 213 346
Mercedes Benz Atego & Actros	098 293 333	IP54	→	✓	✓	✓	✓		✓	D (s)	001 540 63 70	2b	098 213 356

Part numbers from original manufactures are for reference purpose only and may not be used in offers or other material

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Tail lights, bulb

(E) EMC

A ⊏▷
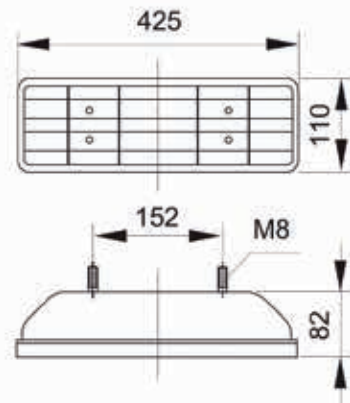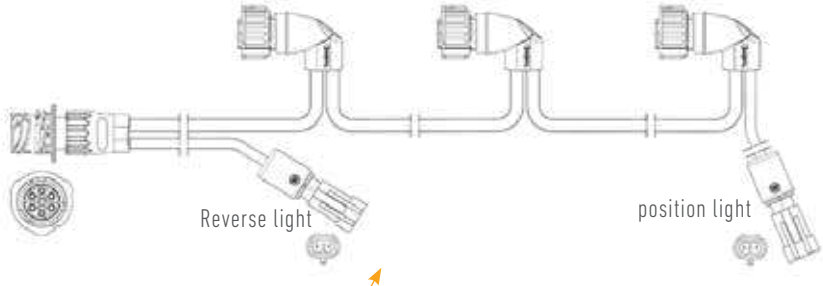
Connection:
Cable lead through rubber grommet

425

110

152   M8

82

With bulb holder vibration absorber
Lens: PMMA
Housing: Black plastic
Dimension: 425 x 110 x 82 mm
Bolt distance: 152 mm
IP-Rating: 54

Functions

Application	Lens (spare part)	Left ← Right →	Position	Stop	Dir. indicator	Reverse	Rear fog	License plate	Connection	Suitable for	Article no.
Mercedes Benz T1-2, TN, LN1	098 293 513	←		✓			✓	✓	A	A 002 544 07 03	098 213 511
Mercedes Benz T1-2, TN, LN1	098 293 513	←		✓			✓		A	A 002 544 09 03	098 213 516
Mercedes Benz T1-2, TN, LN1	098 293 523	→		✓	✓				A	A 002 544 08 03	098 213 521

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Rear cable

Application / Description	Article no.
Rear cable 6 core – single, chain AMP 1,5 socket, straight > 2 x AMP 1,5 plug, angled Conductor cross-section: 6x1 mm^2 / 2x1 mm^2 Cable type: FLRYY / PVC **6 core 800 mm** With 2 x 2 poled outlet with Super Seal for position light and reverse light	494 008 664

bak-lys

positionslys

Easy to connect additional reverse and position lights
with 2 poled Super Seal outlets

Application / Description	Article no.
Rear cable 6 core – single, chain AMP 1,5 socket, straight > 3 x AMP 1,5 plug, angled Conductor cross-section: 6x1 mm^2 / 2x1 mm^2 Cable type: FLRYY / PVC **6 core 1.200 mm** With 2 x 2 poled outlet with Super Seal for positions light and reverse light	494 012 666

Reverse light

position light

Easy to connect additional reverse and
position lights with 2 poled Super Seal outlets

Extension cable (For additional lenghts - see section " cables universal")

Application / Description	Article no.
Extension cable, 2 core	
Super Seal plug > Super Seal plug	
Conductor cross-section: 2x1 mm^2	
Cable type: FLRYY / PVC	
200 mm	794 002 230
500 mm	794 005 230
1.000 mm	794 010 230
1.500 mm	794 015 230

Application / Description	Article no.
Extension cable, 2 core – chain	
1 inlet + 2 outlets with Super Seal plug	
Conductor cross-section: 2x0,5 mm^2	
Cable type: FLRYY / PVC	
3.000 mm	694 030 200
Distance between plugs: 1x1.700 mm + 1x1.300	
4.200 mm	694 042 200
Distance between plugs: 1x1.200 mm + 1x3.000	
5.300 mm	694 053 200
Distance between plugs: 1x300 mm + 1x5.000	

ERMAX®

Side cable Mercedes Benz / Y-adapter cable (Universal)

Application / Description	Article no.
Side cable, 2 core – chain (MB)	**81**
For extension of original cable for side marker lights 1 x inlet with MCP2 socket 2 x outlets with MCP2 plug	
Conductor cross-section: 2x0,5 mm^2	
Cable type: FLRYY / PVC	
3.900 mm	694 039 205
Distance between plugs: 1 x 200 mm + 1 x 3.700 mm	

Side cable to extend the original cable
for side marker lights

Y-adapter cable, 2 core	
3 x Super Seal plug Conductor cross-section: 2x1 mm^2 Cable type: FLRYY / PVC	
2 x 500 mm	894 005 230
2 x 2.000 mm	894 020 230

Y–adapter cable, 2 core	
1 x Super Seal plug + 2 x Super Seal socket Conductor cross-section: 2x1 mm^2 Cable type: FLRYY / PVC	
2 x 500 mm	894 005 240

ERMAX®

Adapter cable - Mercedes Benz

	Application / Description	Article no.
Mercedes connection : 1 : Position 2 : Rear fog 3 : Ground 4 : Direction indicator 5 : Reverse 6 : Stop 7 : = 7 in ERMAX	**Adapter cable, 7 core – for connection af Ermax tail lights** 7 poled AMP plug (ERMAX) <> 7 poled HD SCS socket (MB) Conductor cross-section: 7x1 mm^2 Cablet type: FLRYY / PVC 300 mm	994 003 210
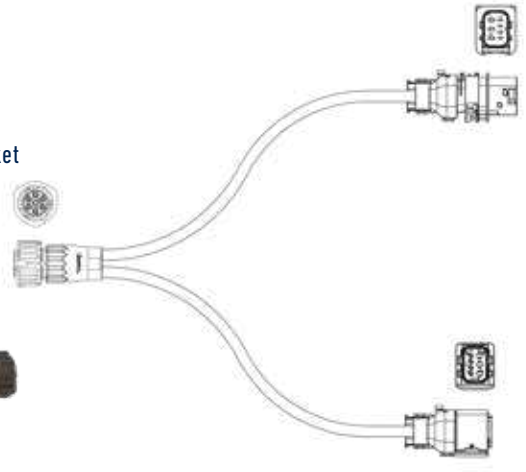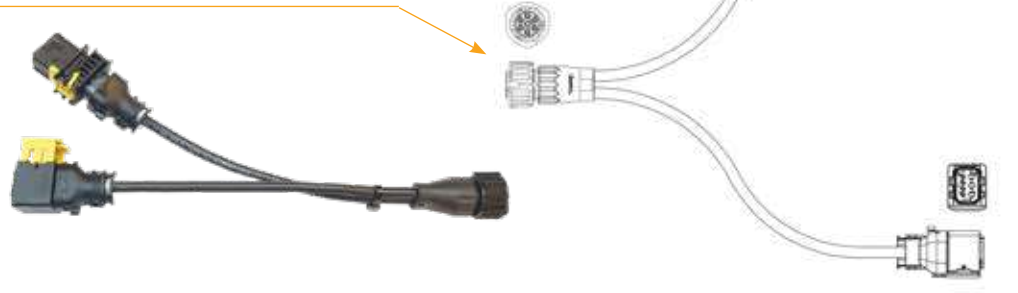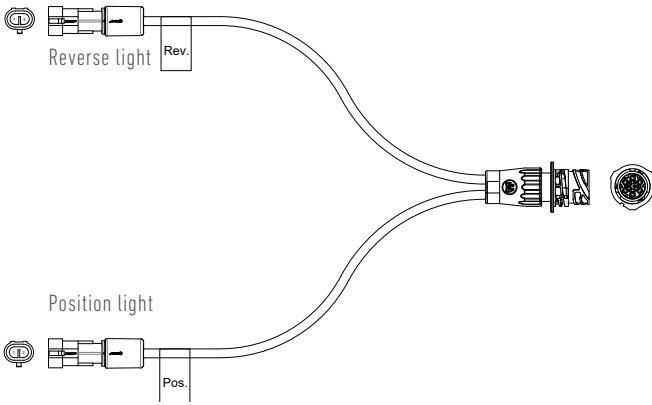
Adapter cable, 4 core – Mercedes Benz 2 poled Super Seal plug > 4 poled AMP socket. Conductor cross-section: 2x1 mm^2 Cable type: FLRYY / PVC 500 mm	994 005 116
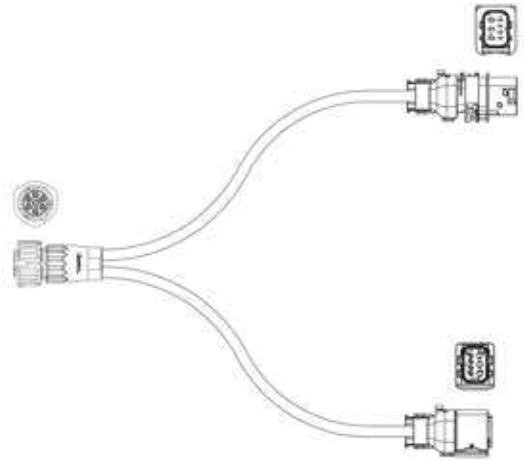
Pin configuration – 2 poled Super Seal plug		
Position	Color	Function
1	Brown	Ground (–)
2	Blue	Permanent power supply (+)

Pin configuration – 4 poled AMP plug		
Position	Color	Function
1	Blue	Permanent power supply (+)
2	Brown	Ground (–)
3	–	(not connected)
4	–	(not connected)

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Adapter cable – Mercedes Benz

	Application / Description	Article no.

Pin configuration HD SCS :
1 = Position
2 = Rear fog
3 = Ground
4 = Direction indicator
5 = Reverse
6 = Stop
7 = Not used

Adapter cable, 7 core – Mercedes > Mercedes – complementary part for 994 003 290

7 poled HD SCS prop (MB) <> 7 poled HD SCS socket (MB)
Conductor cross-section: 7x1 mm^2
Cable type: FLRYY / PVC

300 mm

994 003 212

Possibility to connect all functions via the 7 poled AMP socket

Pin configuration 7poled AMP socket:
1 = Ground (-)
2 = Position
3 = Reverse

Pin configuration super seal socket:
1 = Ground (-)
2 = Reverse / Position

Adapter cable, 7 poled – complementary part for 994003212

7 poled AMP socket > 2 x super seal socket with outlet for position and reverse light
Conductor cross-section: 2x0,5 mm^2
Cable type: FLRYY / PVC

300 mm

Reverse light

Rev.

Position light

Pos.

994 003 290

OBS: It is possible to install reverse and position light with the adapter 994 003 290 via the Super Seal outlets, for vehicles with original lighting mounted,

Reverse light

Rev.

994 003 290

position light

Pos.

994 003 212

ERMAX®

Application / Description		Article no.

Pin configuration HD SCS :

1 = Position
2 = Rear fog
3 = Ground
4 = Direction indicator
5 = Reverse
6 = Stop
7 = AUX

Possibility to connect all functions via the 7 poled AMP socket

AUX (pin 7) is used for the license plate light in the left side of the vehicle and for the reverse gear alarm in the right side of the vehicle.

Adapter cable, 7 core – Mercedes > Mercedes – complementary part for 994 003 290

7 poled HD SCS prop (MB) <> 7 poled HD SCS socket (MB)
Conductor cross-section: 7x1 mm^2
Cable type: FLRYY / PVC

300 mm

994 003 213

Plug & Play solutions for MAN
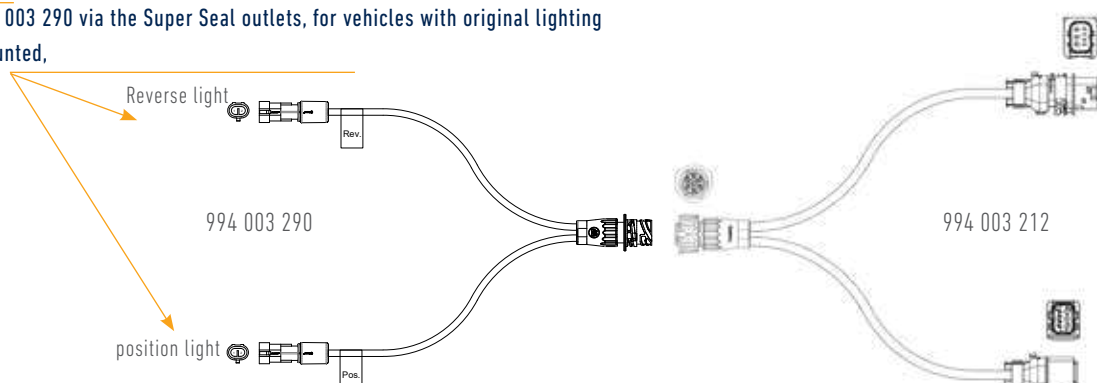
ERMAX ®

ERMAX ®

MAN – Plug & Play solution TM5 LED tail light

A complete upgrading kit from ERMAX with LED tail lights and time-saving mounting – directly integrated on the vehicle

A pre-assembled cable set enables a direct plug & play mounting of plug, cables and ERMAX Eternal Light® tail lights (TM5, TM10 and TM11) – a solution with opportunity for flexible connections of e.g. position lights, reverse light and reverse gear alarm, all without opening the exsisting wiring on the truck. In addition to this high quality solution, a significant time saving on the vehicle is achieved by using this plug & play solution.

STANDARD upgrading kit with TM5 tail light 3-function	Article no. TM091050040

Original cable from truck

HDSCS Adapter cable 994 003 220
MAN -> Ermax (2 pcs)

Rear cable 494 012 666 (1 pcs)

Position light

Reverse light

Rear cable 494 012 666 (1 pcs)

Reverse light

Position light

TM5 tail light
098 212 102 (6 pcs)

ERMAX Plug & Play upgrading kit with many advantages and opportunities

> Time-saving up to 8 hours
  - plug & play installation of plugs, cables and lights
  - Junction box with Super Seal sockets or cable glands for all lighting fuctions

> Secure and documentable installation

> No change of liability in warranty obligations, as existing wiring will not be opened

> Easy to replace damaged parts

> All fuctions are accessible with either Super Seal sockets or cable glands

> The Standard upgrading kits are packed individually in a box - Simple and effective

Time demanding installation with juction box and open end solution ❌

Plug & Play mounting - Time-saving ✅

Drawing of complete lighting system with various options of functions

> Option to integrate more lighting functions if needed

> Outlet for reverse light and/or reverse gear alarm from the rear cable

> Easy and time-saving mounting, also for retrofitting

Components marked with blue on below drawing are possible options in relation to the standard kit TM091050040 as shown on previous page

Drawing of rear cable 494 012 666 with outlet for reverse light, mounted on both sides of the vehicle (without reverse gear alarm)

Y-adapter
894 005 240 (2 pcs)

Rear cable 494 012 666 (2 pcs)

Outer end marker light (2 pcs)

Reverse light (2 pcs) **

License plate light (2 pcs)

OBS** Connection of reverse lights to rear cable 494 012 666

 - Is possible by applying Y-adapter 894 005 230 or by applying both the Y-adapter and extension cable (as shown on above drawing). The alternativ could be the extension cable with Super Seal plug 794 020 230 or 694 030 200 as shown below. More lenghts are available.

794 020 230

Plug

Plug

694 030 200

Plug

Plug

Plug

MAN – Plug & Play solution TM10 LED tail light

STANDARD upgrading kit with TM10 tail light 6-function   Article no. TM091050045

Original cable from truck

AMP Adapter cable 994 003 220
MAN -> Ermax (2 pcs)

TM10 tail light
(without integrated license plate light)
098 216 509 (1 pcs)

TM10 tail light
(without integrated license plate light)
098 216 508 (1 pcs)

Complete lighting system Standard TM091050045 with varius options – without reverse alarm

Components marked with blue on below drawing are possible options in relation to the standard kit TM091050045 as shown above.

Original cable
from truck

Extension cable **

Reverse light (2 pcs)**

Rear cable 494 008 664
(2 pcs)

Y-adapter 894 005 240
(2 pcs)

Blanking plug (2 pcs)

Outer end marker light (2 pcs)

License plate light (2 pcs)

OBS - The outer end marker can also be delivered with an open
end cable - which then makes it possible to connect the outer
end marker in the TM10 tail light

Double lighting installation with TM10 tail lights with various options of functions

Original cable
from truck

Extension cable **

Reverse light (2 pcs)**

Rear cable 494 008 664
(2 pcs)

Y-adapter 894 005 240
(2 pcs)

Blanking plug 099 110 025 (2 pcs)

TM10

Outer end marker light (2 pcs)

License plate light (2 pcs)

OBS** Connection of reverse cable to rear cable 494 012 664

- Is possible by applying Y-adapter 894 005 230 or by applying both the Y-adapter and extension cable (as shown on above drawing). The alternativ could be the extension cable with Super Seal plug 794 020 230 or 694 030 200 as shown below. More lenghts are available.

794 020 230

Plug

Plug

Plug

694 030 200

Plug

Plug

Plug

ERMAX®

Lighting options for lighting systems with TM5 and TM10 tail lights

Outer end marker light LED		License plate light LED	
Long or short model		Half-round or square model	
300 mm cable with Super Seal plug		1200 mm cable with Super Seal plug	
Article no.		Article no.	
098 241 448 (RH)	098 241 218 (RH/LH)	098 254 335	098 254 345
098 241 449 (LH)			

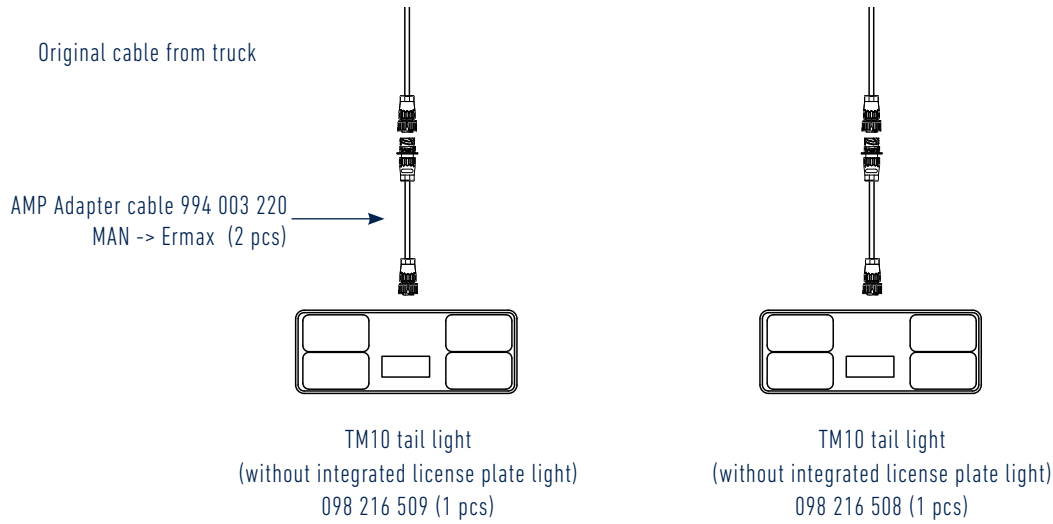| Reverse light LED			Reverse gear alarm
300 mm cable with Super Seal socket **			250 mm cable with
Approved as reverse light with 30^0 or 35^0 angling by vertical mounting *			Super Seal plug
Article no.			Article no.
098 256 255	098 174 265	098 174 275	090 450 350
Lumen: 650 / 300	Lumen: 1.600 / 1.200	Lumen: 2.400 / 1.800	
	*30^0 angling	* 35^0 angling	

TM10 Tail light LED

The license plate light is integrated in the bottom of the tail light

Article no.

098 216 511 (LH)

098 216 510 (RH)

** Connection of reverse lights to rear cable 494 012 664

- Is possible by applying the Y-adapter 894 005 230 or extension cable with Super Seal plug 794 002 230 or 694 030 200 as shown below. More lengths are available

794 002 230

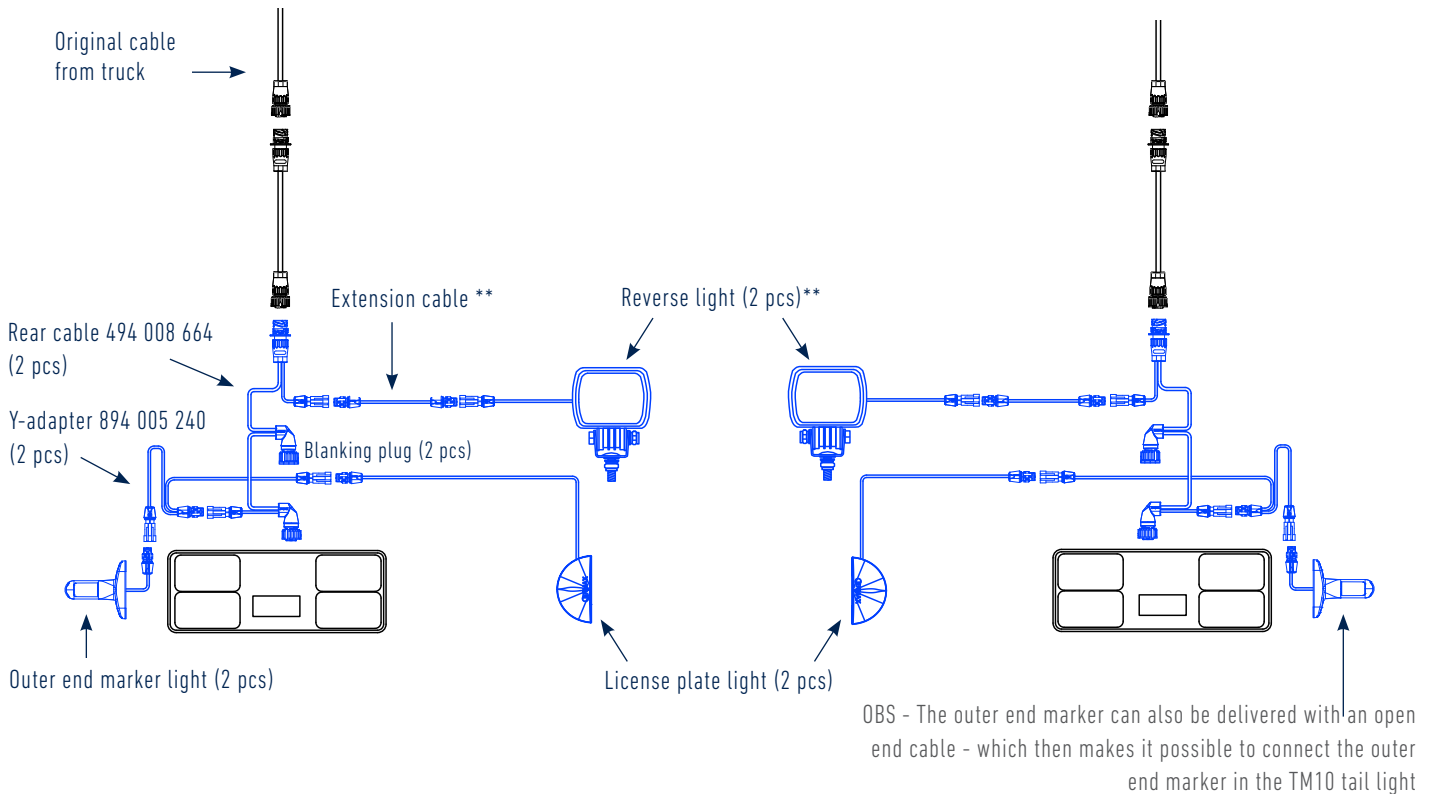Plug   Plug

Plug

694 030 200

Plug   Plug

ERMAX ®

Side marker light MAN

Side marker light LED 24V	E

MAN

75

45

120

21 7

Ø24

Description:	PMMA Lens and plastic housing – LED and with reflex reflector
Surface mouting:	Horizontal
Connection:	600 mm connections cable with 2 poled AMP JPT plug
Dimension:	120 x 45 x 7 mm
Bolt distance:	75 mm
Approval:	ECE, IP67
Suitable for:	81.25260 6095
Article no.	**910 221 826**

E

ERMAX®

Tail lights, bulb

(E) | EMC

465
152
M8
83
190   Ma6
60
(a) 4 Schrauben M6
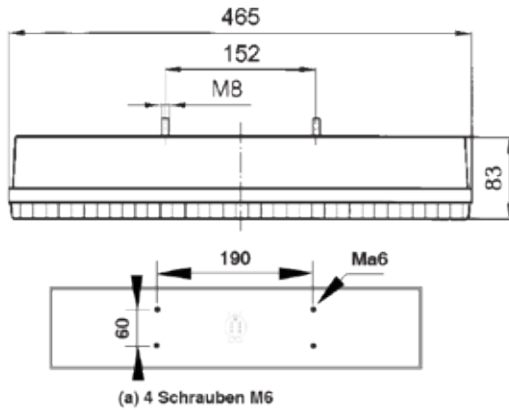
Connection:

A

8 poled socket
with 6 active pins

B

7 poled AMP
socket with 6 active pins

2 bulb holders with vibration absorber
Lens: PMMA
Housing: Black plastic
Dimension: 465 x 130 x 83 mm
Bolt distance: 152 mm
IP Rating: IP64

Functions

Application	Lens (spare part)	Left ← Right →	Position	Stop	Dir. indicator	Reverse	Rear fog	Side marker	License plate	Square reflex reflector	Connection	Suitable for	Article no.
MAN	098 292 793	← →	✓	✓	✓				✓	A	81 25228 6024	**098 212 951**
MAN	098 292 793	←	✓	✓	✓		✓	✓	A	81 25228 6025	**098 212 952**
MAN	098 292 793	← →	✓	✓	✓	✓		✓	A	-	**098 212 953**
MAN	098 292 793	← →	✓	✓	✓	✓	✓	✓	A	-	**098 212 954**
MAN TG-A	098 292 793	←	✓	✓	✓	✓		✓	B	81 25225 6524	**098 212 956**
MAN TG-A	098 292 793	→	✓	✓	✓	✓		✓	B	81 25225 6523	**098 212 957**

Spare parts	
6 poled bayonet plug for 098 212 953 / 954	**098 292 775**
Side marker insert	**098 292 959**

ERMAX®

Tail lights, bulb

(E) [EMC]

Connection: **A**

Cable lead through rubber grommet

2 bulb holders with vibration absorber
Lens: PMMA
Housing: Black plastic
Dimensioner: 345 x 135 x 75 mm
Bolt distance: 152 mm
IP Rating: IP64
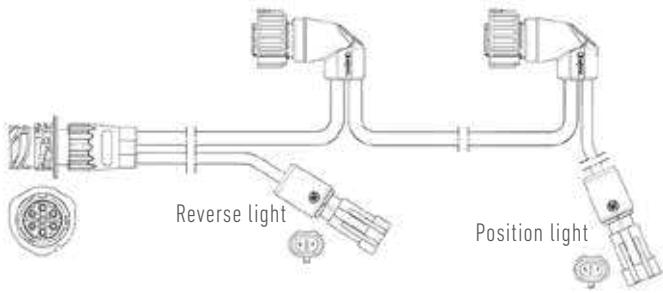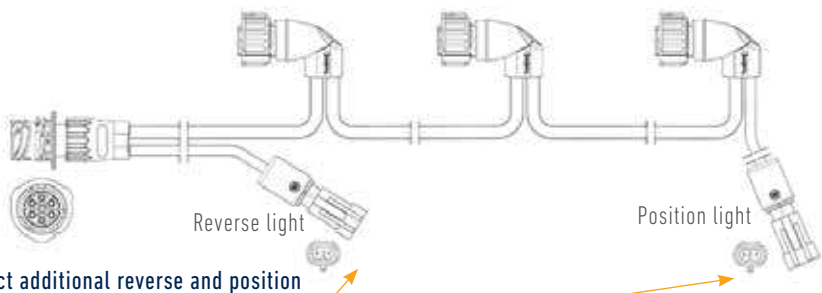
Functions										
Application	Lens (Spare part)	Left ← Right →	Position Stop Dir. indicator	Reverse	Rear fog	Square reflex reflector	Connection	suitable for	Article no.
MAN	098 292 753	←	✓	✓	✓	✓	A	81.25225.6141	**098 212 756**
MAN	098 292 753	→	✓	✓	✓	✓	A	81.25225.6198	**098 212 761**

ERMAX®

Rear cable

Application / Description	Article no.
Rear cable 6 core – single, chain AMP 1,5 socket, straight > 2 x AMP 1,5 plug, angled Conductor cross-section: 6x1 mm² / 2x1 mm² Cable type: FLRYY / PVC **6 core 800 mm** With 2 x 2 poled outlet with Super Seal for position light and reverse light	494 008 664

Reverse light

Position light

Easy to connect additional reverse and position lights with 2 poled Super Seal outlets

Application / Description	Article no.
Rear cable 6 core – single, chain AMP 1,5 socket, straight > 3 x AMP 1,5 plug, angled Conductor cross-section: 6x1 mm² / 2x1 mm² Cable type: FLRYY / PVC **6 core 1.200 mm** With 2 x 2 poled outlet with Super Seal for position light and reverse light	494 012 666

Reverse light

Position light

Easy to connect additional reverse and position lights with 2 poled Super Seal outlets

ERMAX®

Extension cable (For additional lenghts - see section " cables universal")

Application / Description	Article no.
Extension cable, 2 core	**95**
Super Seal plug > Super Seal plug	
Conductor cross-section: 2x1 mm^2	
Cable type: FLRYY / PVC	
200 mm	794 002 230
500 mm	794 005 230
1.000 mm	794 010 230
1.500 mm	794 015 230

Extension cable, 2 core – chain	
1 inlet + 2 outlets with Super Seal plug	
Conductor cross-section: 2x0,5 mm^2	
Cable type: FLRYY / PVC	
3.000 mm	694 030 200
Distance between plugs: 1x1.700 mm + 1x1.300	
4.200 mm	694 042 200
Distance between plugs: 1x1.200 mm + 1x3.000	
5.300 mm	694 053 200
Distance between plugs: 1x300 mm + 1x5.000	

ERMAX®

Y-adapter cable (Universal)

	Application / Description	Article no.
	Y–adapter cable, 2 core 3 x Super Seal plug Conductor cross-section: 2x1 mm^2 Cable type: FLRYY / PVC **2 x 500 mm** **2 x 2.000 mm**	 894 005 230 894 020 230

	Y–adapter cable, 2 core 1 x Super Seal plug + 2 x Super Seal socket Conductor cross-section: 2x1 mm^2 Cable type: FLRYY / PVC **2 x 500 mm**	 894 005 240

MAN connection :	Adapter cable, 7 poled - for connection of Ermax tail lights	
1 : Ground 2 : Position 3 : Reverse 4 : Direction indicator 5 : Stop 6 : Rear fog 7 : NC	7 poled AMP plug (ERMAX) <> 7 poled LEAR socket (MAN) Conductor cross-section: 7x1 mm^2 Cable type: FLRYY / PVC 300 mm	 994 003 220

Plug & Play solutions for DAF

ERMAX ®

DAF - Plug & Play solution TM5 LED tail light

A complete upgrading kit from ERMAX with LED tail lights and time-saving mounting - directly integrated on the vehicle

A pre-assembled cable set enables a direct plug & play mounting of plug, cables and ERMAX Eternal Light® tail lights (TM5, TM10 and TM11) – a solution with opportunity for flexible connections of e.g. position lights, reverse light and reverse gear alarm, all without opening the exsisting wiring on the truck. In addition to this high quality solution, a significant time saving on the vehicle is achieved by using this plug & play solution.

STANDARD upgrading kit with TM5 tail light 3-function	Article no. TM091050050

Original cable from truck

HDSCS Adapter cable 994 003 230 (2 pcs)
(DAF -> Ermax)

Rear cable 494 012 666 (1 pcs)

Position light

Reverse light

Reverse alarm

Rear cable 494 012 668 (1 pcs)

Position light

TM5 tail light
098 212 102 (6 pcs)

OBS - It is possible to disconnect the reverse alarm from the truck, if rear cable 494 016 667 is installed in connection with the external reverse gear alarm.

ERMAX Plug & Play upgrading kit with many advantages and opportunities

> Time-saving up to 8 hours
>> - plug & play installation of plugs, cables and lights
>> - Junction box with Super Seal sockets or cable glands for all lighting fuctions

> Secure and documentable installation

> No change of liability in warranty obligations, as existing wiring will not be opened

> Easy to replace damaged parts

> All fuctions are accessible with either Super Seal sockets or cable glands

> The Standard upgrading kits are packed individually in a box - Simple and effective

Time demanding installation with juction box and open end solution

Plug & Play mounting - Time-saving

Drawing of complete lighting system with various options of functions

> Option to integrate more lighting functions if needed

> Outlet for reverse light and/or reverse gear alarm from the rear cable

> Easy and time-saving mounting, also for retrofitting

Components marked with blue on below drawing are possible options in relation to the standard kit TM091050050 as shown on previous page

Y-adapter
894 005 240 (2 pcs)

Y-adapter
894 005 230 (1 pcs)

Reverse alarm (1 pcs)

Outer end marker light (2 pcs)

Reverse light (2 pcs) **

License plate light (2 pcs)

Drawing of rear cable 494 012 666 with outlet for reverse light, mounted on both sides of the vehicle (without reverse gear alarm)

Y-adapter
894 005 240 (2 pcs)

Rear cable 494 012 666 (2 pcs)

Outer end marker light (2 pcs)

Reverse light (2 pcs) **

License plate light (2 pcs)

OBS** Connection of reverse lights to rear cable 494 012 666

- Is possible by applying Y-adapter 894 005 230 or by applying both the Y-adapter and extension cable (as shown on above drawing). The alternativ could be the extension cable with Super Seal plug 794 020 230 or 694 030 200 as shown below. More lenghts are available.

794 020 230

Plug

Plug

694 030 200

Plug

Plug

Plug

DAF – Plug & Play solution TM10 LED tail light

STANDARD upgrading kit with TM10 tail light 6-function   Article no. TM091050055

Original cable from truck

HDSCS Adapter cable 994 003
230 DAF -> ERMAX (2 pcs)

TM10 tail light
(Without integrated license plate light)
098 216 509 (1 pcs)

TM10 tail light
Without integrated license plate light)
098 216 508 (1 pcs)

Complete lighting system Standard TM091050055 with various options – without reverse gear alarm

Components marked with blue on below drawing are possible options in relation to the standard kit TM091050055 as shown above.

Original cable
from truck

Extension cable **

Reverse light (2 pcs)**

Rear cable 494 008 664
(2 pcs)

Y-adapter 894 005 240
(2 pcs)

Blanking plug (2 pcs)

Outer end marker light (2 pcs)

License plate light (2 pcs)

OBS – The outer end marker can also be delivered with an open
end cable – which makes it possible to connect the outer end
marker in the TM10 tail light

Double lighting installation with TM10 tail lights with various options of functions

Reverse gear alarm *

Rear cable 494 012 667 should be mounted in the right side of the vehicle, where to the reverse gear alarm should be connected, if it is required to control and mute the reverse alarm from the truck. The third lighting connection should be blinded with blanking plug 099 110 025

Original cable
from truck

Extension cable **

Reverse light (2 pcs)**

Optional *

Rear cable 494 008 664
(2 pcs)

Y-adapter 894 005 240
(2 pcs)

Blanking plug 099 110 025 (2 pcs)

TM10

Outer end marker light (2 pcs)

License plate light (2 pcs)

OBS** Connection of reverse lights to rear cable 494 012 664

- is possible by applying the Y-adapter 894 005 230 (as shown on above drawing) or by applying the extention cable with Super Seal plug 794 020 230 or 694 030 200 as shown below. More lengths are available.

794 020 230

Plug

Plug

694 030 200

Plug

Plug

Plug

Plug

ERMAX ®

Lighting options for lighting systems with TM5 and TM10 tail lights

Outer end marker light LED
Long or short model
300 mm cable with Super Seal plug

Article no.	
098 241 448 (RH)	098 241 218 (RH/LH)
098 241 449 (LH)	

License plate lightLED
Half-round or square model
1200 mm cable with Super Seal plug

Article no.	
098 254 335	098 254 345

Reverse light LED
300 mm cable with Super Seal socket **
Approved as reverse light with 30^0 or 35^0 tilt vertical mounting *

Article no.		
098 256 255	098 174 265	098 174 275
Lumen: 650 / 300	Lumen: 1.600 / 1.200	Lumen: 2.400 / 1.800
	* 30^0 angling	* 35^0 angling

Reverse gear alarm
250 mm cable with
Super Seal plug

Article no.
090 450 350

TM10 Tail light LED

License plate light is integrated in the bottom of the light

Article no.
098 216 511 (LH)
098 216 510 (RH)

Connection of reverse lights to rear cable 494 012 664

- Is possible by applying the Y-adapter 894 005 230 or extension cable with Super Seal plug 794 002 230 or 694 030 200 as shown below. More lengths are available.

794 002 230

Plug   Plug

694 030 200   Plug

Plug   Plug

Side marker light DAF

Side marker light LED 12/24V
DAF

Description:	Orange lens of PMMA and plastic housing with 3 LEDs - with reflex reflector
Surface mounting:	Horizontal
Connection:	200 mm cable with 2 poled Super Seal socket
Dimension:	130 x 32 x 7 mm
Bolt distance:	90 mm
Approval:	ECE, SM1, IP67
Suitable for:	1697119
Article no.	098 221 263
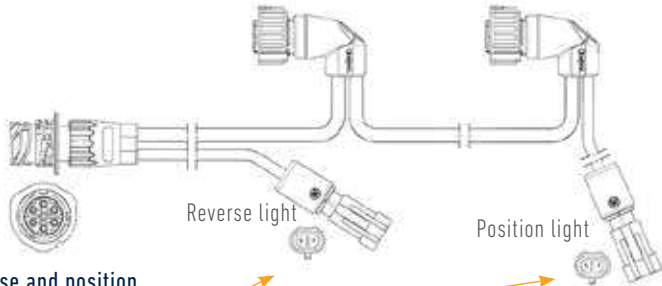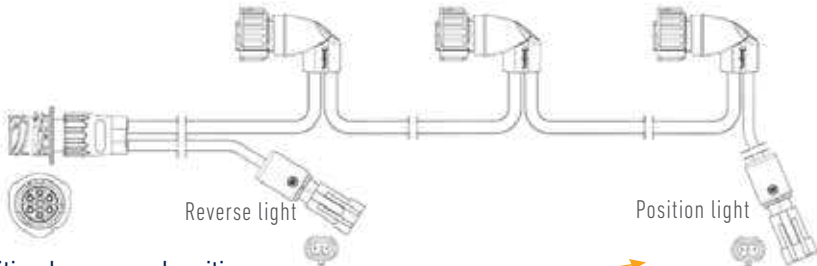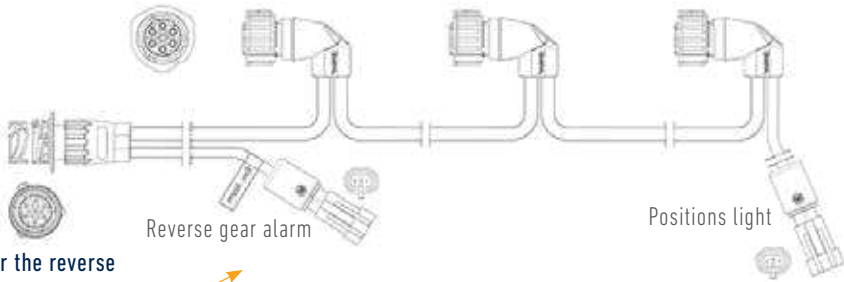
ERMAX®

Tail lights, bulb

(E) | EMC |


```
465
152
M8
                                    83
190        Ma6
60
Connection:
(a) 4 Schrauben M6
```

Connection:

A   B

8 poled socket   7 poled socket
with 6 active pins   with 6 active pins

2 bulb holders with vibration absorber
Lens: PMMA
Housing: Black plastic
Dimensioner: 465 x 130 x 83 mm
Bolt distance: 152 mm
IP Rating: IP64

Functions													
Application	Lens (spare part)	Left ← Right →	Position	Stop	Sir. indicator	Reverse	Rear fog	Side marker	License plate	Square reflex reflector	Connection	Suitable for	Article no.
DAF	098 292 793	← →		✓	✓	✓	✓			✓	A	-	098 212 953
DAF	098 292 793	← →		✓	✓	✓	✓	✓		✓	A	-	098 212 954
DAF 95/95XF	098 292 793	→		✓	✓	✓	✓			✓	B	128 4212	098 212 806
DAF 95/95XF	098 292 793	←		✓	✓	✓	✓	✓		✓	B	128 4211	098 212 807
Spare parts													
6 poled bayonet plug for 098 212 953 / 954													098 292 775
Side marker insert													098 292 959

ERMAX ®

Rear cable

	Application / Description	Article no.
	Rear cable 6 core – single, chain	
	7-polet AMP 1,5 socket, straight > 2 x AMP 1,5 plug, angled	
	Conductor cross-section: 6x1 mm^2 / 2x1 mm^2	
	Cable type: FLRYY / PVC	
		494 008 664
	6 core 800 mm	
	With 2 x 2 poled outlet with Super Seal for position light and reverse light	

Reverse light

Position light

Easy to connect additional reverse and position lights with 2 poled Super Seal outlets

	Rear cable 6 core – single, chain	
	7-polet AMP 1,5 socket, straight > 3 x AMP 1,5 plug, angled	
	Conductor cross-section: 6x1 mm^2 / 2x1 mm^2	
	Cable type: FLRYY / PVC	
		494 012 666
	6 core 1.200 mm	
	With 2 x 2 poled outlet with Super Seal for position light and reverse light	

Reverse light

Position light

Easy to connect additional reverse and position lights with 2 poled Super Seal outlets

	6 core 1.200 mm (DAF)	494 012 668
	With 2 x 2 poled outlet with Super Seal for position light and reverse alarm pin no. 7 in the 7 poled AMP plug in the reverse alarm	

Reverse gear alarm

Positions light

Possibility for outlet for the reverse gear alarm, which can be disconnected manually from the truck

Extension cable / Y-adapter cable (Universal) (For additional lenghts - see section " cables universal")

Application / Description	Article no.
Extension cable, 2 core	
Super Seal plug > Super Seal plug	
Conductor cross-section: 2x1 mm^2	
Cable type: FLRYY / PVC	
200 mm	794 002 230
500 mm	794 005 230
1.000 mm	794 010 230
1.500 mm	794 015 230

Extension cable, 2 core – chain	
1 inlet + 2 outlets with Super Seal plug	
Conductor cross-section: 2x0,5 mm^2	
Cable type: FLRYY / PVC	
3.000 mm	694 030 200
Distance between plugs: 1x1.700 mm + 1x1.300	
4.200 mm	694 042 200
Distance between plugs: 1x1.200 mm + 1x3.000	
5.300 mm	694 053 200
Distance between plugs: 1x300 mm + 1x5.000	

Y–adapter cable, 2 core	
1 x Super Seal plug + 2 x Super Seal socket	
Conductor cross-section: 2x1 mm^2	
Cable type: FLRYY / PVC	
2 x 500 mm	894 005 240

ERMAX®

Y-adapter cable (Universal)

Application / Description	Article no.
Y-adapter cable, 2 core	
3 x Super Seal plug	
Conductor cross-section: 2x1 mm^2	
Cable type: FLRYY / PVC	
2 x 500 mm	894 005 230
2 x 2.000 mm	894 020 230

Adapter-cable DAF

	Application / Description	Article no.
DAF connection :	**Adaptercable, 7–polet – for connection af Ermax tail lightr**	
1 : Ground		
2 : Aux (Right applies as gound for reverse gear alarm)	7 poled AMP plug (Ermax) <> 8 poled HDSCS socket (DAF)	
3 : Not Connected	Conductor cross-section: 7x1 mm^2	
4 : Rear fog	Cable type: FLRYY / PVC	
5 : Position		
6 : Reverse	**300 mm**	994 003 230
7 : Direction indicator		
8 : Stop		

DAF / IVECO

Ermax

Plug & Play solutions for IVECO

ERMAX ®

ERMAX ®

IVECO - Plug & Play solution TM5 LED tail light

A complete upgrading kit from ERMAX with LED tail lights and time-saving mounting - directly integrated on the vehicle

A pre-assembled cable set enables a direct plug & play mounting of plug, cables and ERMAX Eternal Light® tail lights (TM5, TM10 and TM11) – a solution with opportunity for flexible connections of e.g. position lights, reverse light and reverse gear alarm, all without opening the exsisting wiring on the truck. In addition to this high quality solution, a significant time saving on the vehicle is achieved by using this plug & play solution.

STANDARD upgrading kit with TM5 tail light 3-function	Article no. TM091050050

Original cable from truck

HDSCS Adapter cable 994 003 230 (2 pcs)
IVECO -> Ermax

Rear cable 494 012 666 (1 pcs)

Rear cable 494 012 668 (1 pcs)

Position light

Position light

Reverse light

Reverse alarm

TM5 tail light
098 212 102 (6 pcs)

OBS - It is possible to disconnect the reverse a gear alarm from the truck, if rear cable 494 016 667 is installed in connection with the external reverse gear alarm.

ERMAX Plug & Play upgrading kit with mnay advantages and opportunities

> Time-saving up to 8 hours
- plug & play installation of plugs, cables and lights
- Junction box with Super Seal sockets or cable glands for all lighting fuctions

> Secure and documentable installation

> No change of liability in warranty obligations, as existing wiring will not be opened

> Easy to replace damaged parts

> All fuctions are accessible with either Super Seal sockets or cable glands

> The Standard upgrading kits are packed individually in a box - Simple and effective

Time demanding installation with juction box and open end solution ✗

Plug & Play mounting - Time-saving ✓

Drawing of complete lighting system with various options of functions

> Option to integrate more lighting functions if needed

> Outlet for reverse light and/or reverse gear alarm from the rear cable

> Easy and time-saving mounting, also for retrofitting

Components marked with blue on below drawing are possible options in relation to the standard kit TM091050050 as shown on previous page

Y-adapter
894 005 240 (2 pcs)

Y-adapter
894 005 230 (1 pcs)

Reverse alarm (1 pcs)

Outer end marker light (2 pcs)

Reverse light (2 pcs) **

License plate light (2 pcs)

Drawing of rear cable 494 012 666 with outlet for reverse light, mounted on both sides of the vehicle (without reverse gear alarm)

Y-adapter
894 005 240 (2 pcs)

Rear cable 494 012 666 (2 pcs)

Outer end marker light (2 pcs)

Reverse light (2 pcs) **

License plate light (2 pcs)

OBS** Connection of reverse lights to rear cable 494 012 666

- Is possible by applying Y-adapter 894 005 230 or by applying both the Y-adapter and extension cable (as shown on above drawing). The alternativ could be the extension cable with Super Seal plug 794 020 230 or 694 030 200 as shown below. More lenghts are available.

794 020 230

Plug

Plug

694 030 200

Plug

Plug

Plug

IVECO – Plug & Play solution TM10 LED tail light

STANDARD upgrading kit with TM10 tail light 6-function   Article no. TM091050055

Original cable from truck

HDSCS Adapter cable 994 003
230 IVECO -> Ermax (2 pcs)

TM10 tail light
(without integrated license plate light)
098 216 509 (1 pcs)

TM10 tail light
(without integrated license plate light)
098 216 508 (1 pcs)

Complete lighting system Standard TM091050055 with various options – without reverse gear alarm

Components marked with blue on below drawing are possible options in relation to the standard kit TM091050055 as shown above.

Original cable
from truck

Extension cable **

Reverse light (2 pcs)**

Rear cable 494 008 664
(2 pcs)

Y-adapter 894 005 240
(2 pcs)

Blanking plug (2 pcs)

Outer end marker light (2 pcs)

License plate light (2 pcs)

OBS – The outer end marker can also be delivered with an open
end cable - which makes it possible to connect the outer end
marker in the TM10 tail light

Drawing of complete lighting system with various options of functions

Reverse gear alarm *

Rear cable 494 012 667 should be mounted in the right side of the vehicle, where to the reverse gear alarm should be connected, if it is required to control and mute the reverse alarm from the truck. The third lighting connection should be blinded with blanking plug 099 110 025

Original cable
from truck

Rear cable 494 008 664
(2 pcs)

Extension cable **

Reverse light (2 pcs)**

Optional *

Y-adapter 894 005 240
(2 pcs)

Blanking plug 099 110 025 (2 pcs)

TM10

Outer end marker light (2 pcs)

License plate light (2 pcs)

OBS** Connection of reverse lights to rear cable 494 012 664

- is possible by applying the Y-adapter 894 005 230 (as shown on above drawing) or by applying the extention cable with Super Seal plug 794 020 230 or 694 030 200 as shown below. More lengths are available.

794 020 230

Plug

Plug

694 030 200

Plug

Plug

Plug

Lighting options for lighting systems with TM5 and TM10 tail lights

Outer end marker light LED		License plate light LED	
Long or short model 300 mm cable with Super Seal plug		Half-round or square model 1200 mm cable with Super Seal plug	
Article no.		Article no.	
098 241 448 (RH) 098 241 449 (LH)	098 241 218 (RH/LH)	098 254 335	098 254 345

Reverse light LED			Reverse gear alarm
300 mm cable with Super Seal socket ** Approved as reverse light with 30⁰ or 35⁰ angling by vertical mounting *			250 mm cable with Super Seal plug
Article no.			Article no.
098 256 255 Lumen: 650 / 300	098 174 265 Lumen: 1.600 / 1.200 * 30⁰ angling	098 174 275 Lumen: 2.400 / 1.800 * 35⁰ angling	090 450 350

** Connection of reverse lights to rear cable 494 012 664

- Is possible by applying the Y-adapter 894 005 230 or extension cable with Super Seal plug 794 002 230 or 694 030 200 as shown below. More lengths are available.

TM10 Tail light LED
License plate light integrated in the bottom of the tail light
Article no.
098 216 511 (LH) 098 216 510 (RH)

794 002 230

Plug   Plug

694 030 200   Plug

Plug   Plug

ERMAX®

Tail lights, bulb

(E) EMC

465

152

M8

83

190   Ma6

60

(a) 4 Schrauben M6

Connection: **A**   **B**

8 poled socket   7 poled socket
with 6 active pins   with 6 active pins

2 bulb holders with virabtion absorber
Lens: PMMA
Housing: Black plastic
Dimensioner: 465 x 130 x 83 mm
Bolt distance: 152 mm
IP Rating: IP64

Functions

Application	Lens (spare part)	Left ← Right →	Position Stop Dir. indicator	Reverse	Rear fog	Side marker	License plate	Square reflex reflector	Connection	Suitable for	Article no.
Iveco	098 292 793	← →	✓	✓	✓	✓		✓	A	-	098 212 953
Iveco	098 292 793	← →	✓	✓	✓	✓	✓	✓	A	-	098 212 954
Iveco	098 292 793	→	✓	✓	✓	✓		✓	B	9946 3242	098 212 961
Iveco	098 292 793	←	✓	✓	✓	✓	✓	✓	B	9946 3244	098 212 962

Spare parts

6 poled bayonet plug for 098 212 953 / 954	098 292 775
Side marker insert	098 292 959

ERMAX®

Tail lights, bulb

(E) EMC

300
190
M6
80

Connection:

A
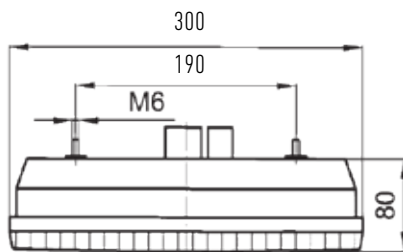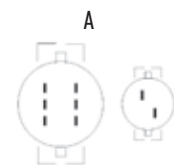
6+2 poled connection
(OLSA-plug)

D

Cable seal
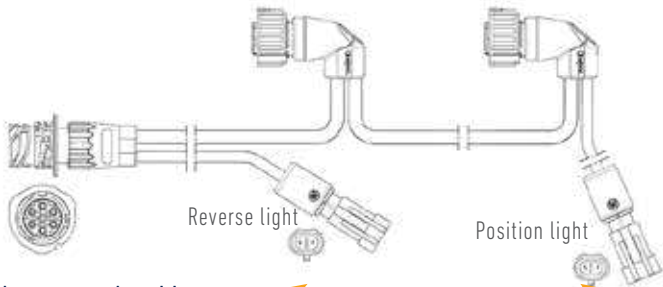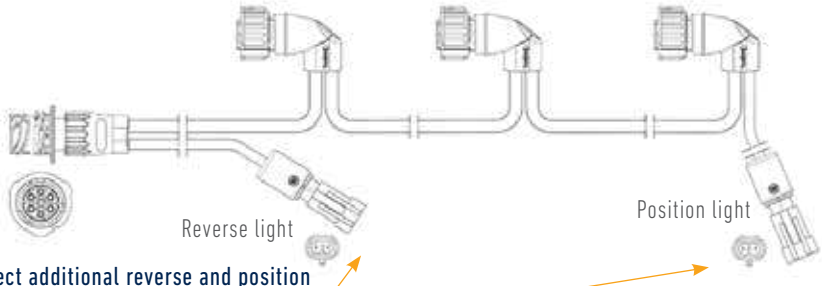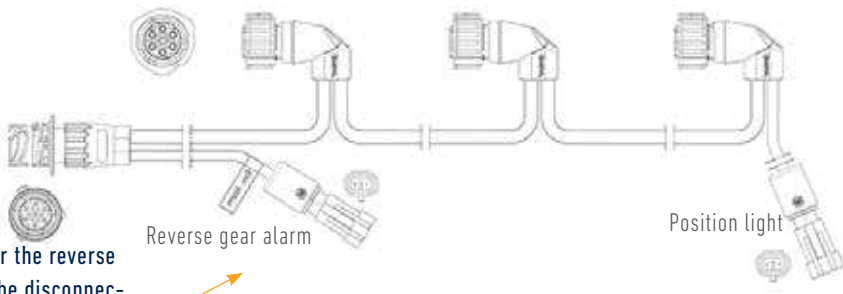
2 bulb holders
Lens: PMMA
Housing: Black plastic
Dimensioner: 300 x 128 x 80 mm
Bolt distance: 190 mm
IP Rating: IP64

Functions

Application	Lens (spare part)	Left ← / Right →	Position	Stop	Dir. indicator	Reverse	Rear fog	Square reflex reflector	Connection	Suitable for	Article no.
Iveco	098 292 842	→		✓		✓		✓	D	-	**098 212 836**
Iveco	098 292 847	←		✓			✓	✓	D	-	**098 212 838**
Iveco Eurocargo	098 292 842	→		✓		✓		✓	A	98424051	**098 212 830**
Iveco Eurocargo	098 292 847	←		✓			✓	✓	A	98424052	**098 212 835**

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Rear cable

	Application / Description	Article no.
	Rear cable 6 core – single, chain AMP 1,5 socket, straight > 2 x AMP 1,5 plug, angled Conductor cross-section: 6x1 mm^2 / 2x1 mm^2 Cable type: FLRYY / PVC **6 core 800 mm** With 2 x 2 poled outlet with Super Seal for position light and reverse light Reverse light · Position light Easy to connect additional reverse and position lights with 2 poled Super Seal outlets	494 008 664
	Rear cable 6 core – single, chain AMP 1,5 socket, straight > 3 x AMP 1,5 plug, angled Conductor cross-section: 6x1 mm^2 / 2x1 mm^2 Cable type: FLRYY / PVC **6 core 1.200 mm** With 2 x 2 poled outlet with Super Seal for position light and reverse light Reverse light · Position light Easy to connect additional reverse and position lights with 2 poled Super Seal outlets	494 012 666
	6 core 1.200 mm (IVECO) With 2 x 2 poled outlet with Super Seal for position light and reverse light pin no. 7 in the 7 poled AMP plug is for the reverse gear alarm Reverse gear alarm · Position light Possibility for outlet for the reverse gear alarm, which can be disconnec- ted manually from the truck	494 012 668
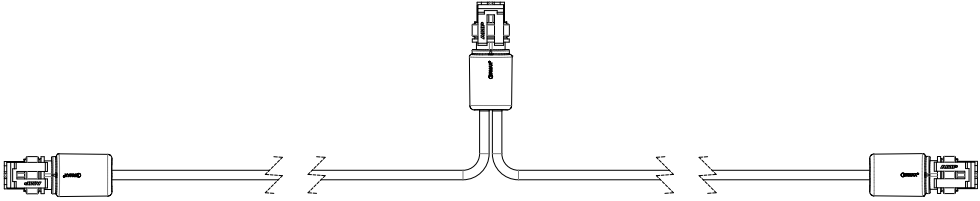
ERMAX®

Extension cable / Y-adapter cable (Universal) (For additional lenghts - see section " cables universal")

Application / Description	Article no.
Extension cable, 2 core	
Super Seal plug > Super Seal plug Conductor cross-section: 2x1 mm^2 Cable type: FLRYY / PVC	
200 mm	794 002 230
500 mm	794 005 230
1.000 mm	794 010 230
1.500 mm	794 015 230
Extension cable, 2 core – chain	
1 inlet + 2 outlets with Super Seal plug Conductor cross-section: 2x0,5 mm^2 Cable type: FLRYY / PVC	
3.000 mm Distance between plugs: 1x1.700 mm + 1x1.300	694 030 200
4.200 mm Distance between plugs: 1x1.200 mm + 1x3.000	694 042 200
5.300 mm Distance between plugs: 1x300 mm + 1x5.000	694 053 200
Y–adapter cable, 2 core	
1 x Super Seal plug + 2 x Super Seal socket Conductor cross-section: 2x1 mm^2 Cable type: FLRYY / PVC	
2 x 500 mm	894 005 240

ERMAX®
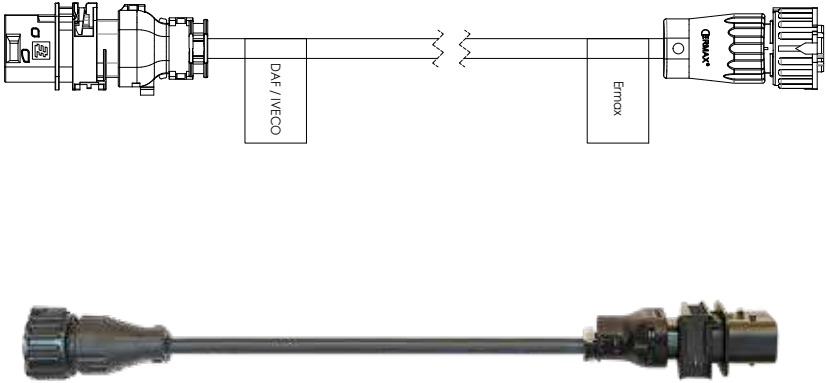
Y-adapter cable (Universal)

	Application / Description	Article no.
	Y-adapter cable, 2 core	
	3 x Super Seal plug Conductor cross-section: 2x1 mm^2 Cable type: FLRYY / PVC	
	2 x 500 mm	894 005 230
	2 x 2.000 mm	894 020 230

Adapter cable IVECO

	Application / Description	Article no.
IVECO connection : 1 : Ground 2 : Aux (Right should be used as ground for reverse alarm) 3 : Not Connected 4 : Rear fog 5 : Position 6 : Reverse 7 : Direction indicator 8 : Stop	**Adapter cable, 7 core – for connection af ERMAX tail light** 7 poled AMP plug (Ermax) <> 8 poled HDSCS socket (DAF) Conductor cross-section: 7x1 mm^2 Cable type: FLRYY / PVC **300 mm**	994 003 220

DAF / IVECO

Ermax

Time-saving standard solutions

Inspiration & guidance
Lighting / LED failure control unit

ERMAX®

ERMAX®

TM5 tail light and "Kit-Kat" position lights

- "Kit-Kat" position lights in a modern slim set-up without visible screws.

"Kit-Kat" position light

Warning light with Super Seal socket

TM5 Tail light:
Eternal Light® technology
Lens: Impact resistant polycarbonate

Warning light with 3 or 12 LEDs
With Super Seal socket
- Time-saving og easy mounting

Plug & Play – Easy and time-saving

> Simple and easy mounting

> Time-saving up to 8 hours
  - plug & play mounting of plugs, cables and lights
  - connection of extenstion cable 794 060 251 to existing wiring

> Mounting of position light with Super Seal side cable

> Flexible and fast

Extension cable 794 030 200
(1 pcs)

Y-adapter 894 005 200
(1 pcs)

Warning light 098 286 445 (2
pcs)

Side marker light
098 204 722
(pcs. as needed)

Side cable click-in
e.g. 4.000 mm
594 040 000 (2 pcs)

Main cable 394 060 171
6.000 mm
(1 pcs)

Extension cable 794 060 251
6.000 mm
(1 pcs)
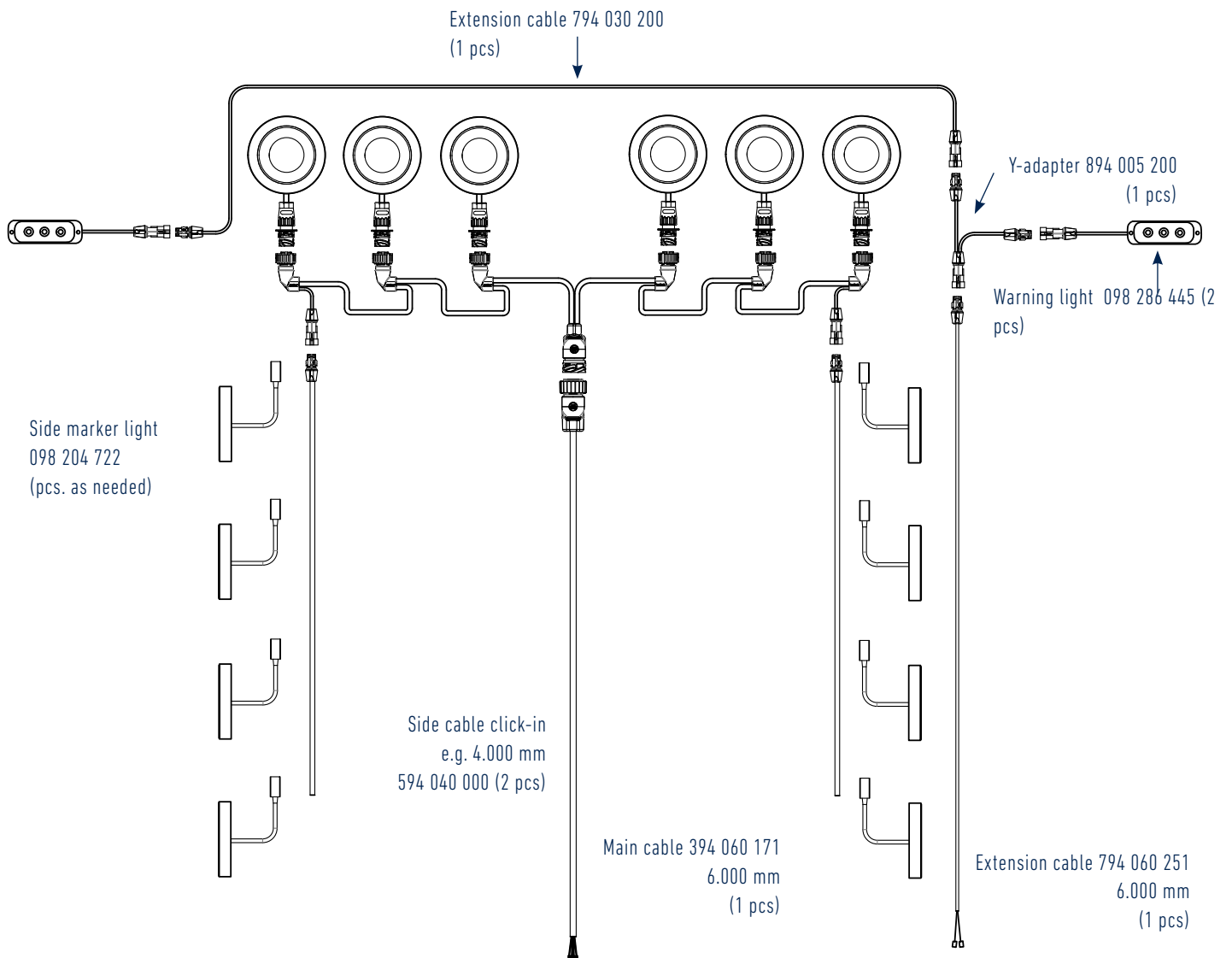
"Kit-Kat" sider marker and position lights

- Mounting without visible screws

- 2 LEDs

- With reflex reflector

See all variants and part numbers at the end of this section

ERMAX®

TM15 tail light and "Slim-line" position lights

- Slim-Line position lights in a modern narrow set-up with 6 LEDs

"Slim-Line" position light

Warning light with Super Seal socket

TM15 Tail light:
Dynamic direction indicator light
Lens: impact resistant polycarbonate

Warning light with 3 or 12 LEDs
With Super Seal socket
- Time-saving og easy mounting

ERMAX®

Open end mounting of "Slim-line" position lights

> Simple and easy mounting

> Time-saving up to 4 hours
  - plug & play mounting of plugs, cables and lights
  - connection of extenstion cable 794 060 251 to existing wiring

> Mounting of position light with open end in junction box

Same configuration is possible with
TM5 tail light

Extension cable 794 030 200, 3.000 mm (1 pcs)

Y-adapter 894 005 200
(1 pcs)

Rear cable 494 025 601 (1 pcs)

Warning light 098 286 445
(2 pcs)

Side marker light
098 200 426
(pcs. as needed)

Main cable 394 060 171
6.000 mm
(1 pcs)

Extension cable 794 060 251
6.000 mm
(1 pcs)
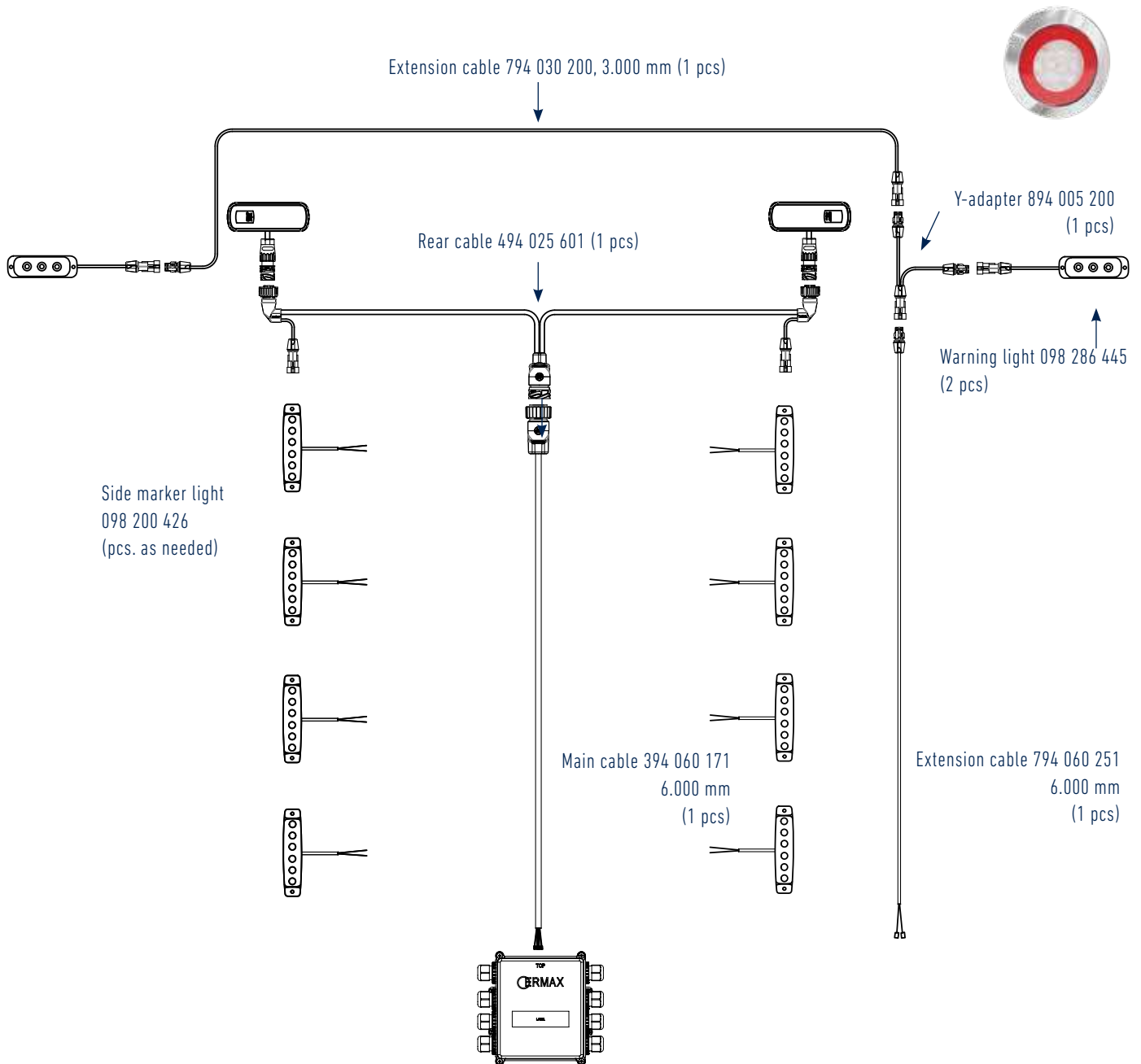
"SLIM-LINE" sider marker and position lights

- Small modern slim-line light

- 6 LEDs

- 12/24V

See all variants and part numbers at the end of this section

TM5 tail light and TM14 position lights

- TM14 position lights i a slim and long modern design with 10 LEDs - length 240 mm

TM14 position light

Warning light with Super Seal socket

TM5 Tail light:
Eternal Light® technology
Lens: Impact resistant polycarbonate

Warning light with 3 or 12 LEDs
With Super Seal socket
- Time-saving og easy mounting
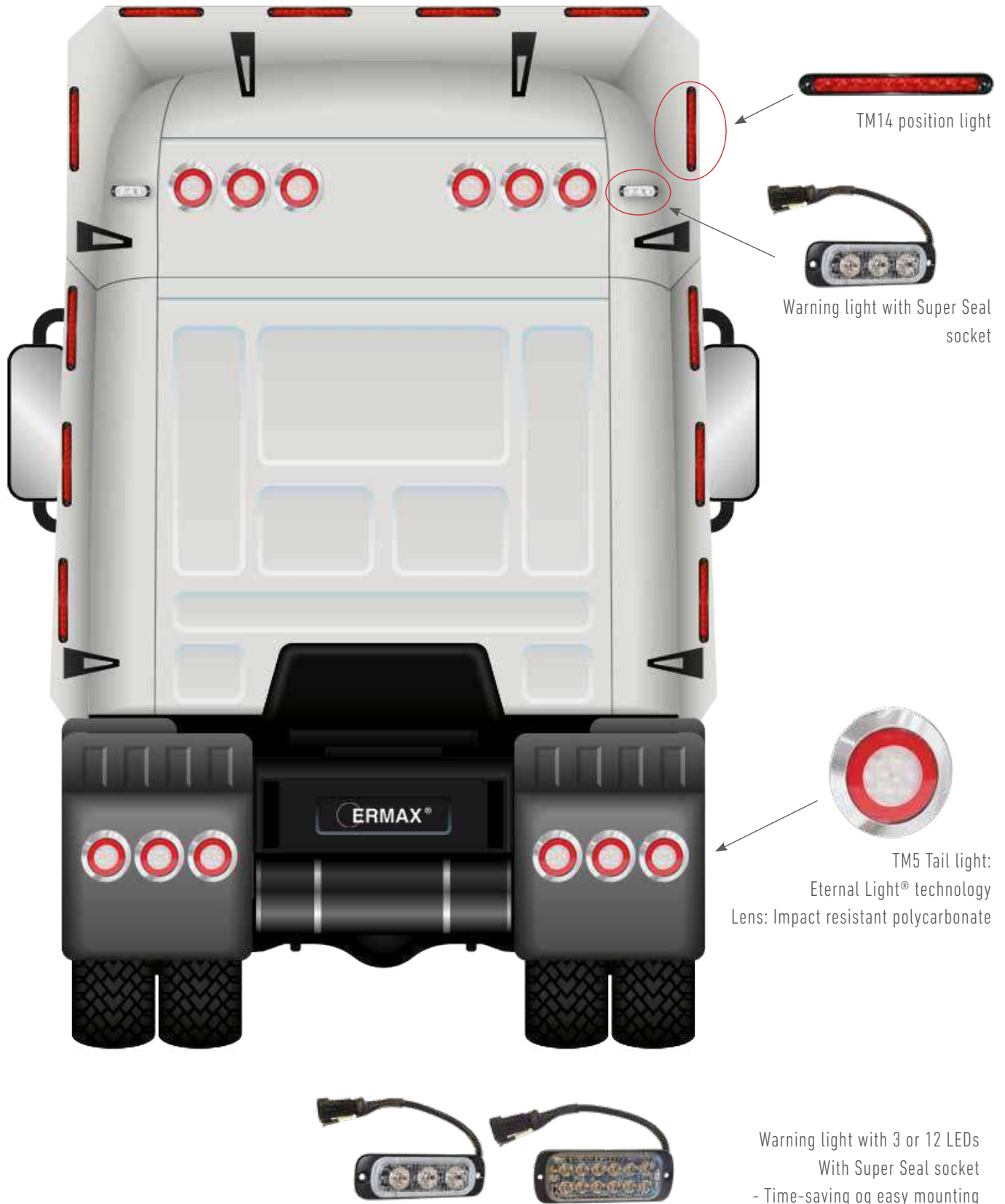
Modern and elegant look

> Simple and flexible mounting

> Time-saving up to 8 hours
> - plug & play mounting of plugs, cables and lights
> - connection of extenstion cable 794 060 251 to existing wiring

> Possible to high-mount the light in the rear end of the vehicle e.g. in combination with the direction indicator from the same lighting series

Extension cable 794 030 200
(1 pcs)

Y-adapter 894 005 200
(1 pcs)

Side marker light
098 202 250
(pcs as needed)

Warning light 098 286 445
(2 pcs)

Side cable chain (2 pcs)
e.g. 694 124 400
(for four lights)

Main cable 394 060 171,
6.000 mm
(1 pcs)

Extension cable 794 060 251
(1 pcs)
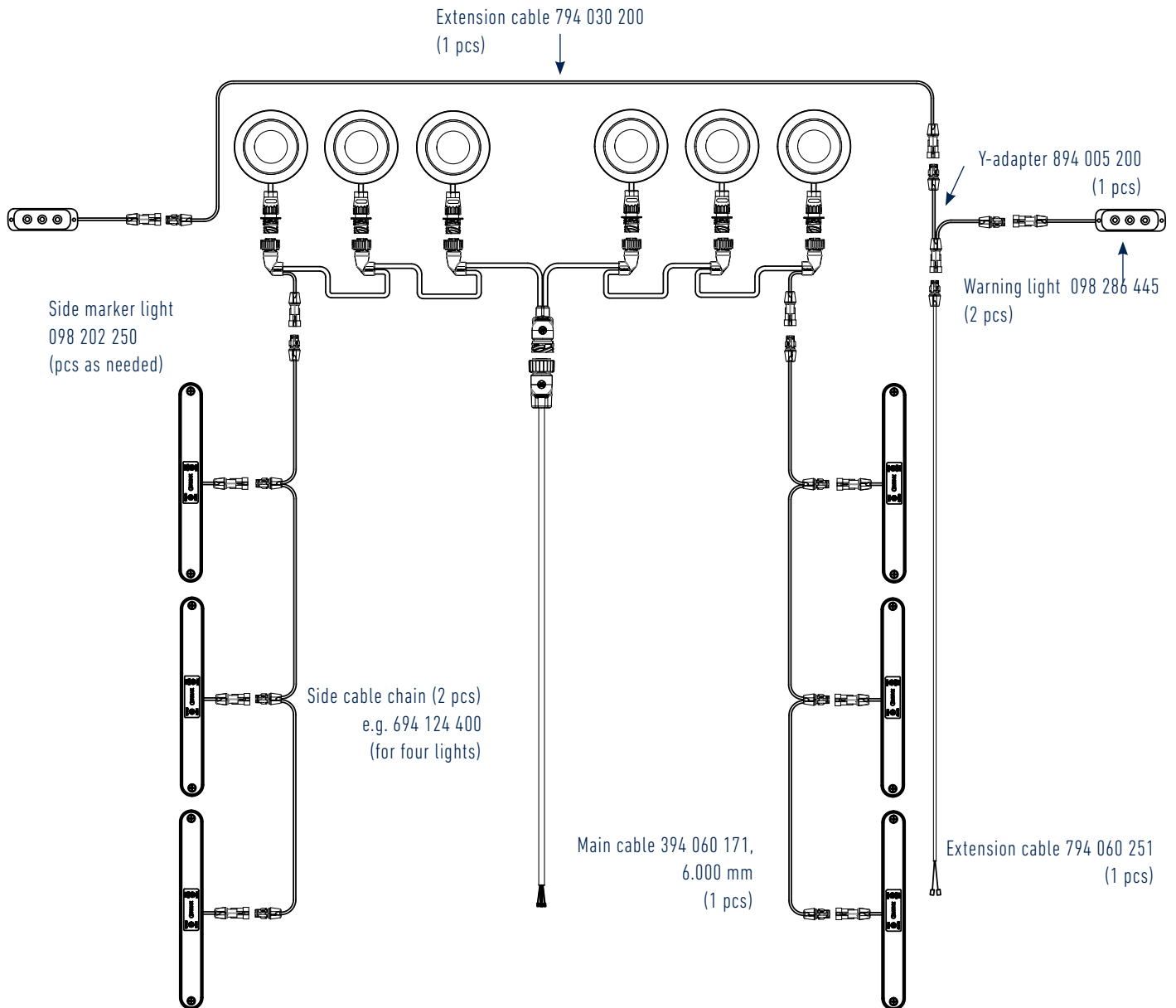
TM14 Tail light - A series with various installation opportunities

- Housing and Lens made of impact resistant polycarbonate

- 10 LEDs

- different variants with direction indicator, dynamic direction indicator, stop and position light

See all variants and part numbers in the section "Tail light TM14"

Marker lights MULTI-VOLTAGE - based on needs and demands

Ideal for retrofittings, when many lights are needed

> LED side marker and position lights 12/24V

> Various designs and connection possibilities

> Large flexibility

Marker lights LED 12/24V

Ⓔ
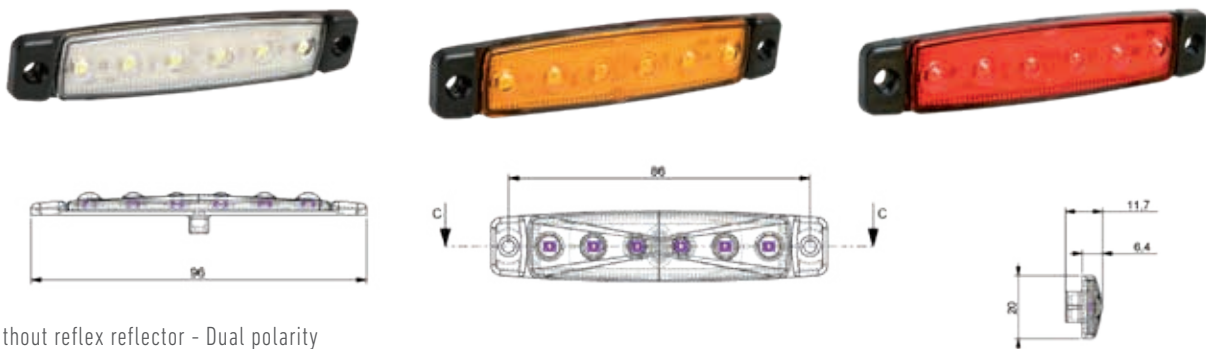
6 LEDs without reflex reflector - Dual polarity

Dimension with mounting bracket: 96 x 20 x 6,4 mm
Bolt distance: 86 mm
IP Rating: IP67

OBS - Maximum 2⁰ bending on the mounting surface (Flat surface mounting)

Functions								
Mounting bracket	Connection	Cable length	Operating voltage	LEDs		Position white	Side marker Orange	Position Red
Surface mount	Open end	350 mm	12V/24V	6 LED's		098 230 423	098 221 423	098 200 423
Surface mount	Open end	5.000 mm	12V/24V	6 LED's			098 221 426	098 200 426

ERMAX®

Side marker light LED 12/24V

Ⓔ
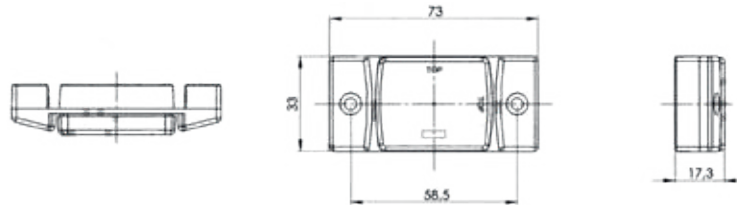
3 LEDs without reflex reflextor

Dimension with mounting bracket: 73 x 35 x 17,3 mm

Bolt distance: 58,5 mm

IP Rating: IP68

Functions							
Mounting bracket	Connection	Cablel length	Operating voltage	LEDs	Position White	Side marker Orange	Position Red
Straight mounting	Open end	400 mm	12/24V	3 LEDs	098 231 833	098 221 833	098 201 833

Position light LED 12/24V

Ⓔ 🔥

Pos 1

Pos 2

Ø30.4 mm

18.6 mm

Ø21.5 mm
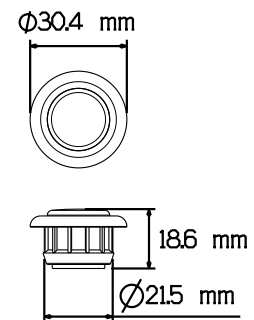
Dimension: Ø30,4 x 18,6 mm

IP Rating: IP69

Functions						
Surface mounting	Connection	Cable length	Operating voltage	LEDs	Position white	Position Red
Horizontal / Vertical	Click-in	500 mm	12/24V	1 LED	098 230 105	098 204 105
Horizontal / Vertical	Click-in	1.500 mm	12/24V	1 LED	098 230 115	098 204 115
Horizontal / Vertical	Click-in	3.500 mm	12/24V	1 LED	098 230 135	098 204 135

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

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

ERMAX LED control units Generation 2.0 – Compatibel with all truck brands*

The new ERMAX LED control units are compatible with older monitoring technologies as well as with the new ISO13207 standard for failure contol. 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.

ERMAX 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

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

Upgrading from OEM LED tail light to ERMAX LED tail light

For most new trucks, all tail lights functions are monitored and the driver is alerted, if a tail light failure occurs. Replacing an original LED tail light with an ERMAX tail light, is usually a simple and problem free process. The vehicle is programmed to recognize the very limited consumption of the LED tail lights, and the monitoring of the light will not be affected.

Upgrade to

OEM LED tail light

ERMAX TM11 LED tail light

No additonal LED failure control unit is necessary

Upgrading from bulb tail light to ERMAX TM11 LED tail light

There is a risk that the truck may perceive the low-consumption LED-tail lights as a defective bulb, when upgrading from a bulb tail light to a LED tail light.

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 dicrection indicator light , if the direction indidcator light is not recgonized by the truck. Two units, if both lighting functions are not recognized by the truck.

Upgrade to

+

OEM bulb -tail light

ERMAX TM11 LED tail light

As needed - LED control unit for direction indicator light and stop lightlys

LED control unit (098298149) - mounted on the back of the TM11 tail light

Intelligent LED failure control

Upgrading from a bulb tail light to ERMAX TM5, TM7 or TM10 LED tail light

It is possible to connect 1 or 2 loose LED failure control units in series between the rear cable and tail light by using the pre-mounted standard 7 poled AMP plug, when mounting the ERMAX LED tail lights TM5, TM7 or TM10 Truck-version. One module for direction indicator light (098 298 146) and one module for stop light (098 298 148) are needed for each side of the truck.

TM5 LED Eternal Light

TM7 LED

TM10 Truck LED

3/2 functions tail light

LED failure control, indicator light

098 298 146

Rear cable →

3/2 functions tail light

LED failure control, indicator light

098 298 146

LED failure control, stop light

098 298 148

Rear cable →

7 functions tail light

LED failure control, indicator light

Rear cable

098 298 146

7 functions tail light

LED failure control, stop light

LED failure control, indicator light

Rear cable

098 298 146

098 298 148

Intelligent LED failure control

Monitoring of LED tail lights using junction box and LED control units pr. lighting function

In cases where other functions than direction indicator and stop light needs monitoring, it is possible to use the ERMAX universal junction box (099866700), in which the LED failure control units (098298144) are connected to the functions, which needs monitoring. One LED failure control unit per function is needed for each side.

For a complete Ermax lighting installtion, the most optimal solution is to install a combined junction box ie. 099 866 700 mounted on a steel plate, on which it is possible to install up to five LED control units. This variant works simultaneously as junction box, in which all lighting functions can be accessed.

099866700
ERMAX Junction box - Universal

098298144
Universal - For all tail light functions
1 unit pr. function pr. tail light is needed

OUTPUT
15 poled Bayonet plug

15 poled Bayonet socket
INPUT
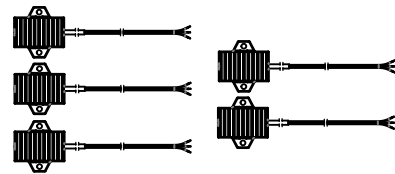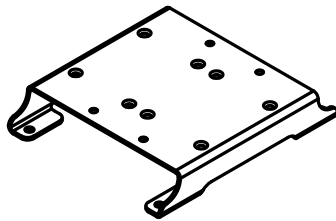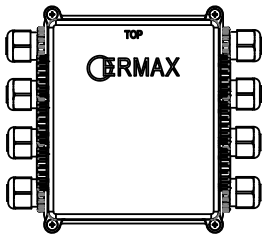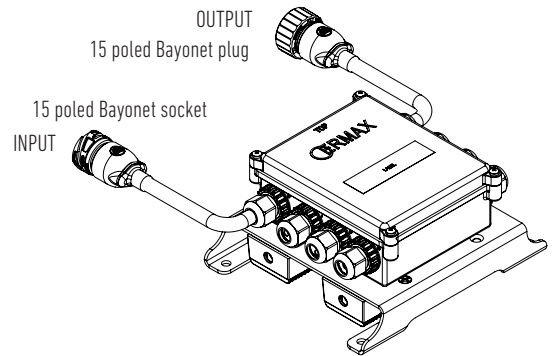
099298 144
Max.5 pcs. per junction box

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*Valid for all known brands within EU as of 03/2020

Highlights ERMAX LED failure control unit Generation 2.0

❯ 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 new Generation 2.0 LED failure control technology is already used as an integrated part of the Ermax tail lights TM10, TM11 and TM12

❯ Approvals: ADR and EMC-R10

TM10 LED tail light

TM11 LED tail light

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		✓	✓
	TG-X	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	

Part numbers from original manufactures are for reference purpose only and may not be used in offers or other material

TAIL LIGHTS
TRUCK

ERMAX ®

ERMAX ®

Eternal Light®
The best choice

ERMAX Eternal Light® offers the newest light and LED technology, and is designed for the best possible safety when driving.

The Eternal Light® technology offers the best possible homogeneous light function and has various advantages based on test results.

Eternal Light®

THE ERMAX EFFECT

14x

more powerful light *

*compared to classic LED light

Increased traffic safety

Eternal Light® lighting technology – is perceived by other road users - motorists and cyclists - earlier than classic LEDs lights or bulb lights. Contributes to reducing the number of accidents in connection with changing lanes and right turns

* Eternal light® is 14 x stronger compared to classic LED light with an 45^0 angle.

Soft visuality when platooning

Classical LED light is very directional, whereas Eternal light® has a more soft and homogeneous light pattern, which prevents tiredness when exposed for a long time, and thereby prevents accidents

Example of the light pattern with Eternal Light® and classic LED light:

* 45^0 angle

Eternal Light®

* 45^0 angle

classic LED
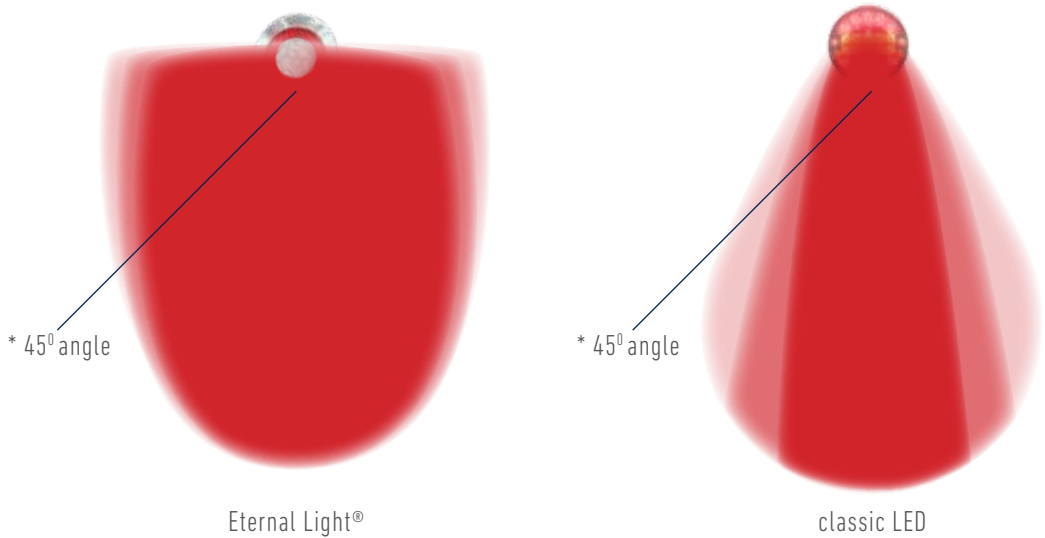
ERMAX tail light with Eternal Light®

| TM10 | TM11 | TM12 | TM13 | TM5 |

ERMAX®

Overview – truck tail light LED

Opportunity for installation of LED control unit

Tail light 24V LED	LED contol unit integrated in the tail light		LED control unit
	Dir. indicator	Stop light	Seperate mounting
TM 10 Tail light 24V LED (* OBS - see note) Lens: Impact resistant polycarbonate Housing: Polypropylen (PP) Connection: 7 poled AMP socket integrated (rear or side) IP-Rating: IP54	✗	✗	✓ (For both direction indicator and stop light)
TM 11 Tail light 12/24V LED (* OBS - see note) Lens: Impact resistant polycarbonate Housing: Impact resistant polycarbonate Connection: 7 poled AMP socket integrated (rear or side) IP-Rating: IP69K	✓ Optional	✓ Optional	(not necessary)
TM 15 Tail light 12/24V LED Lens: Impact resistant polycarbonate Housing: Impact resistant polycarbonate Connection: 300 mm cable med 7 poled AMP socket IP-Rating: IP69K	✗	✗	✓ (For both direction in-dicator and stop light)
TM 12 Tail light 12/24V LED Lens: Impact resistant polycarbonate Housing: Impact resistant polycarbonate Connection: 7 poled AMP socket integreret (rear) IP-Rating: IP69K	✓	✗	✓ (for stop light)

* OBS:It is furthermore possible to mount additional external LED control fo the position, rear fog and reverse light for TM 11 and TM10

ERMAX®

Tail light 24V LED

	LED contol unit integrated in the tail light		LED control unit
	Dir. indicator	Stop light	Seperate mounted
TM 13 Tail light 12/24V LED Lens: Impact resistant polycarbonate Housing: Polycarbonate and ABS Connection: 7 poled AMP socket (300 mm cable) /Open end / DT4 IP-Rating: IP69K	✗	✗	✓ (For both direction indicator and stop light)
TM 5 Tail light 12/24V LED Lens: Impact resistant polycarbonate Housing: Impact resistant polycarbonate Connection: Cable med 7 poled AMP socket / Open end IP-Rating: IP69K	✗	✗	✓ (For both direction indicator and stop light)
TM 14 Tail light 12/24V LED Lens: Impact resistant polycarbonate Housing: Impact resistant polycarbonate Connection: Cable with 2 or 3 poled Super Seal / Open end IP-Rating: IP69K	✗	✗	✓ ((For both direction indicator and stop light), and separate for position light)
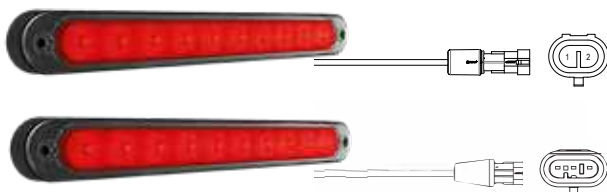
LED control unit (loose component)

098 298 144	098 298 146	098 298 148
Universal - suitable for all tail light functions (one unit pr. function)	Control unit for direction indicator light	Control unit for stop light

ERMAX®

TM 10 LED tail light 24V - Hybrid or LED

Eternal Light®

E EMC

Unbeatable

Hybrid

LED

395

83

76

42

ø36

M8

152

156
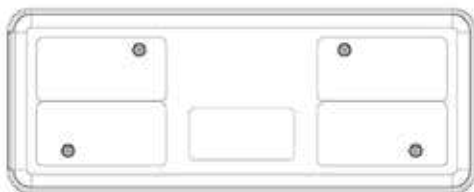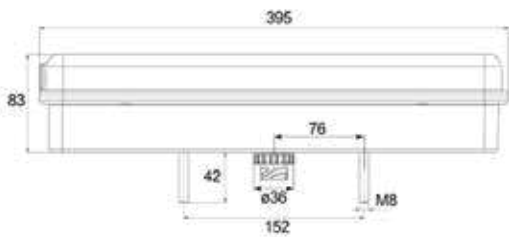
AMP socket placed at the back

395

156

152 M8

42

83

395
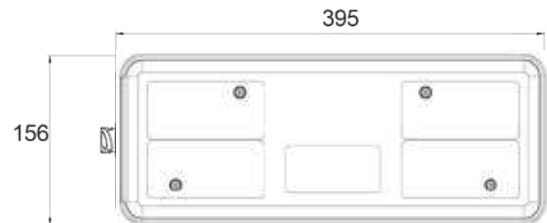
AMP socket placed on the side

Description

Lens:	Impact resistant polycarbonate
Housing:	Polypropylen (PP)
Dimension:	390 x 155 x 80 mm
Bolt distance:	152 mm / M8
Working temperature:	-40°C - +65C°
IP-Rating:	IP54

ERMAX ®

TM 10 LED tail light 24V – Hybrid or LED

Type	Operation voltage	Right → Left ←	Postion	Stop	Dir. indicator	Reverse	Rear fog	Side marker reflex reflector	License plate	Outer end marker	Connection 7 poled AMP 1.5 socket Direction:	Article no.
Hybrid	24V	→			✓						Rear	098 216 408
Hybrid	24V	←			✓						Rear	098 216 409
Hybrid	24V	→			✓						Side	098 216 412
Hybrid	24V	←			✓						Side	098 216 413
Hybrid	24V	→			✓				✓		Side	098 216 414
Hybrid	24V	←			✓				✓		Side	098 216 415
Fuld-LED	24V	→			✓						Rear	098 216 508
LED	24V	←			✓						Rear	098 216 509
LED	24V	→			✓				✓		Rear	098 216 510
LED	24V	←			✓				✓		Rear	098 216 511
LED	24V	→			✓						Side	098 216 512
LED	24V	←			✓						Side	098 216 513
LED	24V	→			✓				✓		Side	098 216 514
LED	24V	←			✓				✓		Side	098 216 515

Spare parts & Accessories for TM 10 tail light 24V

Pos. 1

Pos. 2

Spare parts / Accessories

Lens, Right	1	098 296 354
Lens, Left	1	098 296 355
Protection cover for tail light	2	098 296 710

TM 13 Tail light LED
- ideal as a top-mounted tail light
(see description in the following
section about tail lights)

TM11 LED Tail light 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.

With ERMAX TM11 Truck tail light it is possible to integrate LED control for direction indicator light and/ or stop light. The technology used, is not limited to the ISO13207 and therefore works on all vehicles*.

The handling - according to ECE 48 - of the flashing function in the side marker lights at the same time as the direction indicator light in the tail light, is of course also fully integrated in the TM11 tail light.

High durability, modern functionalities and unique design - all united in the ERMAX TM11 tail light and thanks to the cost-effectiveness, a real highlight.

Eternal Light® Position light   Dynamic indicator light (running light)

Eternal Light®

Stop light   Reverse light   Reflex reflector   Rear fog light

Highlights

> Unbreakable - Impact resistant lens of polycarbonate

> Multi voltage 12/24V

> Modern dynamic indicator light (running light)

> Built-in LED control for direction indicator light and stop light according to ECE 48 - compatibel with all brands and year of EU trucks*

> Built-in control of side marker light (SIMAC®) according to ECE 48 supp. 06 (since Nov. 2017)

> Control of position, rear fog and reverse light is possible

> Certified in accordance with all relevant standards and regulations in Europe

Stand 05.2020
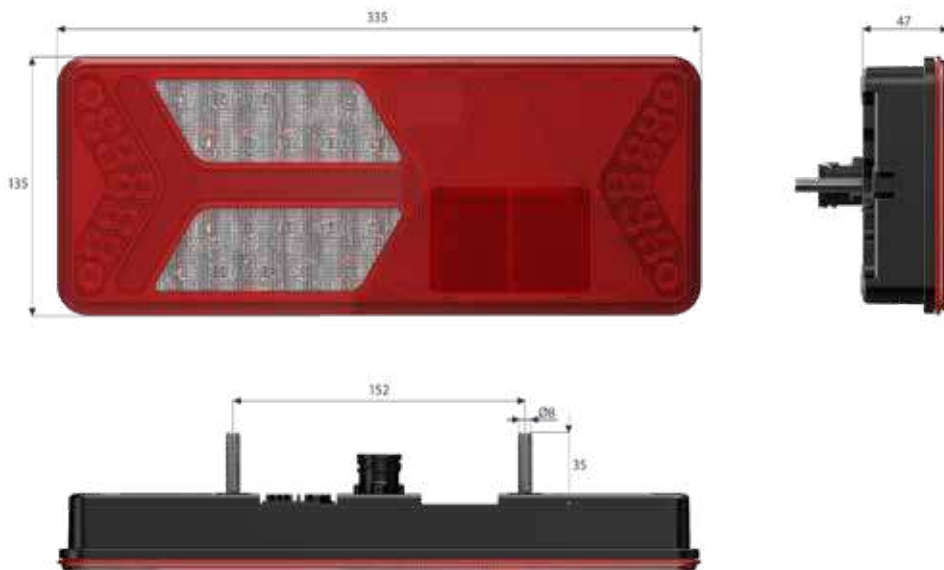
ERMAX®

TM 11 Tail light 12/24V – LED

E EMC

Eternal Light®

Unbeatable

Description

Lens: Impact resistant polycarbonate
Direction indicator: Dynamic direction indicator light (running light)
Housing: Impact resistant polycarbonate
Dimension: 335 x 135 X 47 mm
Bolt distance: 152 mm / 35 mm M8
Working temperature: -40°C - +65C°
IP Rating: IP69K

*⁾ Super Seal functions for 3 x position light incl. SIMAC, 1 x stop light (RH) & reverse light (LH)

TM 11 Tail light 12/24V - LED

Functions										
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
LED	←	✓	Optional	Rear	✓	✓	Optional	098 216 571

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 dicrection indicator light , if the direction indidcator light is not recgonized 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

Outer end marker light are optional

The suitable outer end marker light for the TM11 tail ligth is 098 241 218 (RH/LH) short model and for long/angled model 098 241 448 / 098 241 449 (RH/LH). The outer end marker light is mounted on the bracket placed on the side of the tail light, and the Super Seal plug from the outer end marker light is mounted at the back of the tail light in the Super Seal socket.

Slim line 47 mm

Outer end marker light - optional (mounted on a bracket)

Super Seal connections
3 x Position light incl. SIMAC®
1 x Reverse light (RH) & Stop light (LH)

7 poled AMP 1.5 connection

LED direction indicator light failure control (optional)

SIMAC® control integrated

LED stop light failure control (optional)

ERMAX ®

Spare parts & Accessories TM 11 LED Tail light 12/24V

Pos. 1

Pos. 2

Pos. 3

Pos. 4

Pos. 5

Pos. 6

Spare parts & Accessories

Holder of plastic, angled, for outer end marker light Delivered with 4 pcs. stainless torx screws. Bolt distance: 77 mm	1	098 292 610
LED outer end marker light 12/24V, Right/Left - 300 mm connection cable with Super Seal plug	2	098 241 218
LED outer end marker light 12/24V, Right - 300 mm connection cable with Super Seal plug	2	098 241 448
LED outer end marker light 12/24V, Left - 300 mm connection cable with Super Seal plug	3	098 241 449
Protection cover for tail light	4	098 296 710
Cover of LED control - For covering of SLD connection at TM11 Tightens and protects contacts for SLD-unit	5	098 296 700
LED control unit 12/24V for TM11 tail light built-in For monitoring direction indicator and stop light. One unit per function is needed For mounting at the back of the housing. Connection with 3 x spring-loaded contacts	6	098 298 149

ERMAX®

TM 12 LED tail light 12/24 V

(E) [EMC]

Unique design- and rather cool

6 function light which provides the best possible light in all kind of weather

The new ERMAX TM12 tail light is based on the newest light and LED technology, and meets the toughest standards in term of technique, quality and functionality.

TM12 tail light has a unique and modern design, and due to the compact size, the TM12 tail light is particulary suitable for vehicles with limited mounting or installation space. It is furthermore possible to integrate a LED control unit for direction indicator light in the TM12 tail light.

Unique desing, the newest light and LED technology, long durability and highest quality all united in the TM12 tail light to a wide range of vehicles - and thanks to the cost-effectiveness, a real highlight.

Eternal Light®

Left tail light   Stop light   Position light Eternal Light®

Outer end marker light
- optional (mounted on bracket)

Rear fog light   Dynamic indicator light (runnig light)

Reflex refelctor   Reverse light

Optional
LED control unit for monitoring direction indicator light function - integrated into the rear end of the tail light
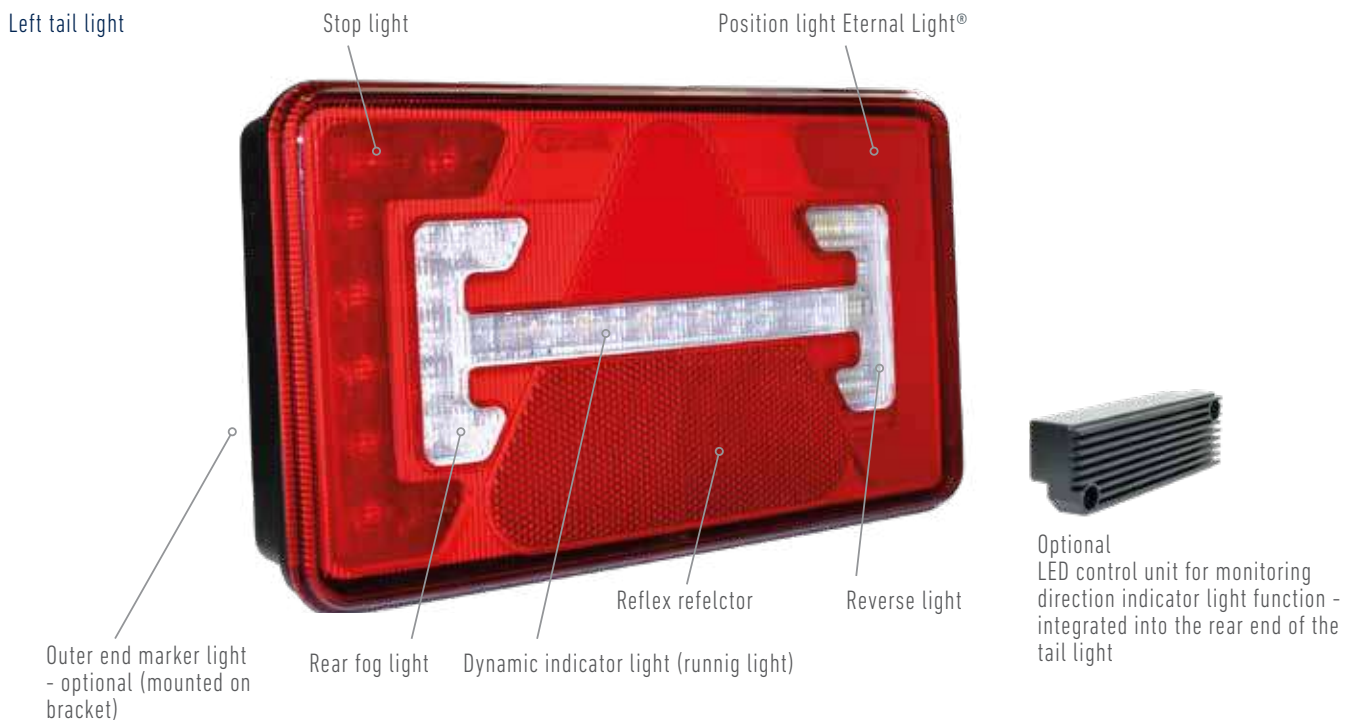
Highlights

> Housing and Lens made of highly resistant polycarbonate

> Multivolt 12/24V

> ERMAX patented position light - Eternal Light® – for optimum traffic safety

> Modern dynamic direction indicator light function (running light)

> Integrated LED control unit for direction indicator light according to ECE 48 (optional)

> The outer end marker light can be mounted directly on the bracket – with pre-defined breaking point

> ECE, EMC and ADR certified – with IP69K rating
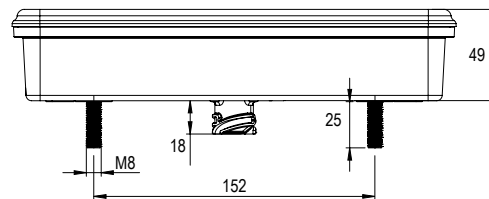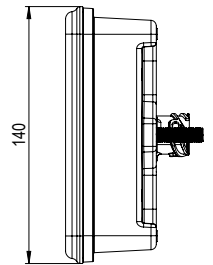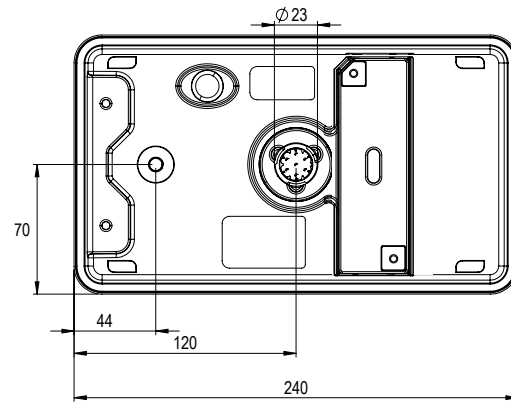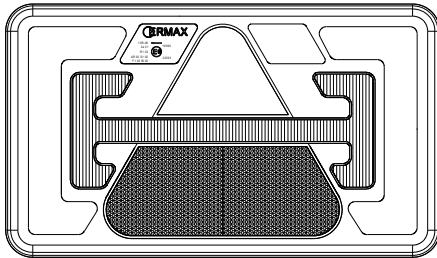
ERMAX®

TM 12 Tail light 12/24V – LED

E   EMC

Left

Right

Ø 23

70

44

120

240

140

49

25

18

M8

152

Description

Lens:	Impact resistant polycarbonate
Direction indicator:	Dynamic direction indicator light (running light)
Housing:	Impact resistant polycarbonate
Dimension:	240 x 140 X 49 mm
Bolt distance:	152 mm / 35 mm M8
Working temperature:	-40°C – +65C°
IP Rating:	IP69K

Type	Right → Left ←	Position	Stop	Dynamic dir. indicaotr	Reverse	Rear fog	Reflex reflector	Outer end marker	Connection 7 poles AMP socket Direction:	LED control unit Dir. indicator	Article no.
LED	→	✓	✓	✓	✓		✓	Optional	Rear	Optional	098 216 630
LED	←	✓	✓	✓	✓		✓	Optional	Rear	Optional	098 216 631

Spare parts and Accessories TM 12 LED Tail light 12/24V

Pos. 1   Pos. 2   Pos. 3

Pos. 5   Pos. 6

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
LED outer end marker light 12/24V, Right/Left - 300 mm connections cable with Super Seal plug	2	098 241 218
Protection cover, plastic, tail light	4	098 296 710/705
Protection cover - to be used on the TM12 tail light if the LED control unit is removed. Tightens and proctects the contacts of the LED control unit.	5	098 296 700
LED control unit 12/24V for mouting on the TM12 tail light for controlling the indicator light. (one unit pr. tail light is needed). Integrated into the rear of the TM12 tail light. Connection with 3 spring-loaded contacts.	6	098 298 149
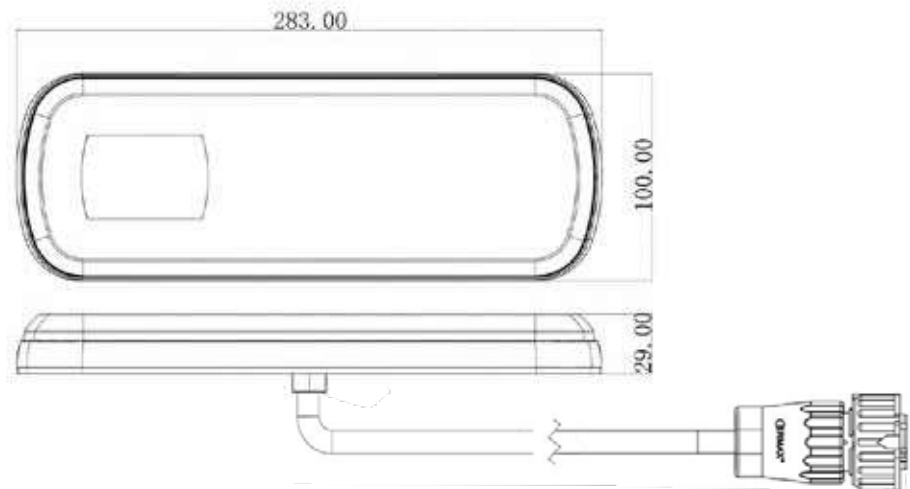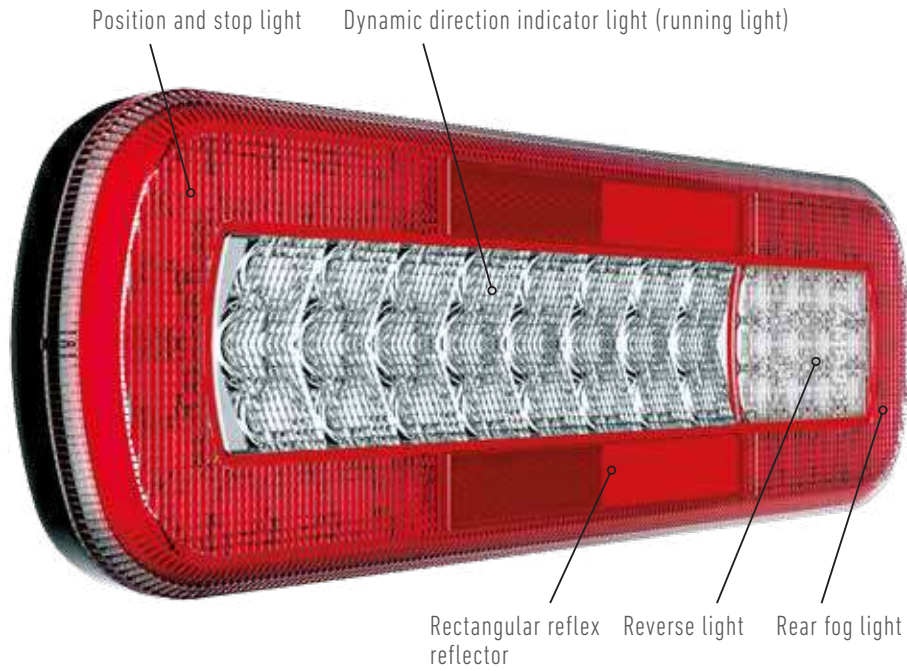
ERMAX®

TM 15 Tail light 12/24V – LED

Ⓔ EMC

Position and stop light   Dynamic direction indicator light (running light)

Rectangular reflex reflector   Reverse light   Rear fog light

283.00

100.00

29.00

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 – +65C°
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

ERMAX®

TM 15 Tail light 12/24V – LED

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

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 beautifull and modern light pattern

Is posible to combine with the new TM14 lighting series
- see description in the following sections with tail lights

ERMAX®

TM 13 Tail light 12/24V - LED

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®

Position light Eternal Light®   Direction indicator light
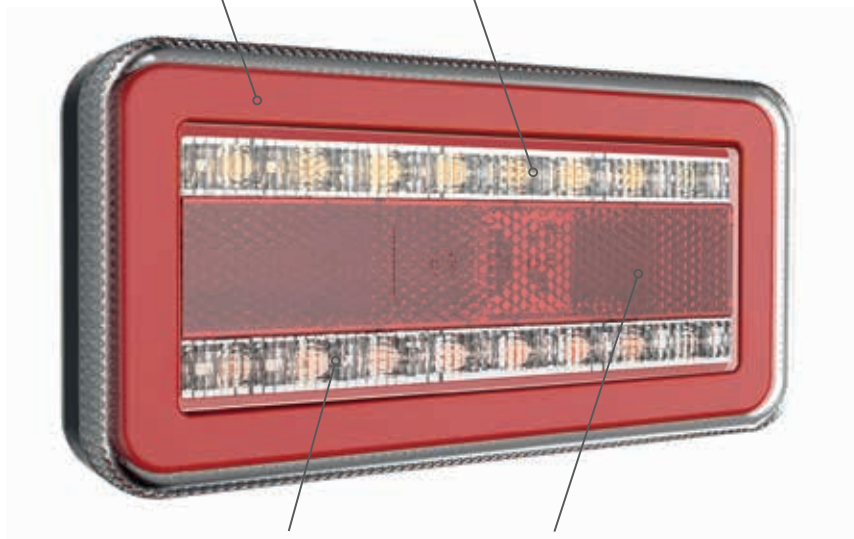
Stop light   Rectangular reflex reflector

Highlights

- Applicable for trailer and truck
- Slimline-design - the perfect solution for limited build-in dimensions
- Suitable for high mounting
- ERMAX patented postion 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

ERMAX®

TM 13 Tail light 12/24V – LED

150 mm

22 mm

18 mm

300 mm

100

80 mm
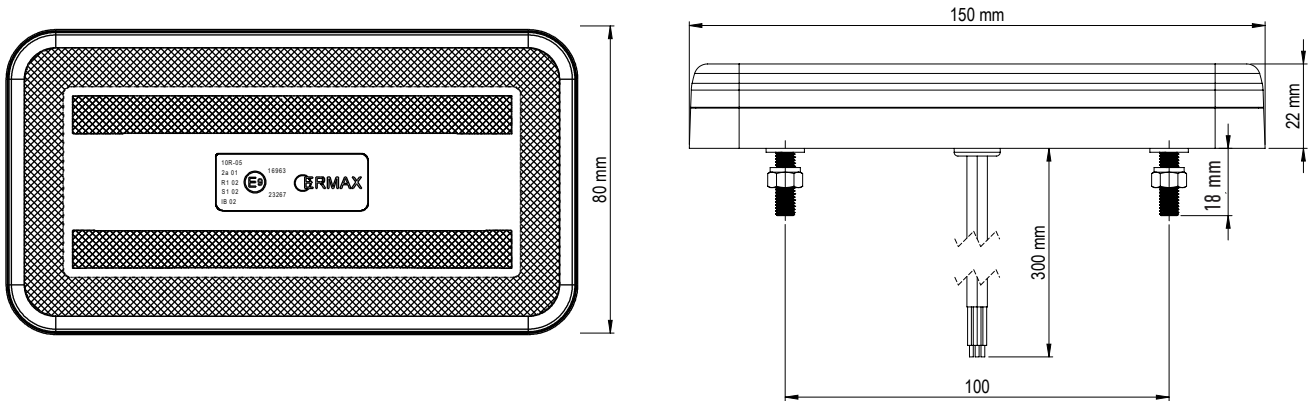
OBS: If only vertical mounting, a separate legal reflector must be mounted

Description

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

Functions

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

ERMAX ®

TM 4 Tail light 12/24V - LED (Surface mounting)

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

Classical design
- newest technology

Unique
red-white-red design

Integrated
LED failure control

The integrated LED failuere 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
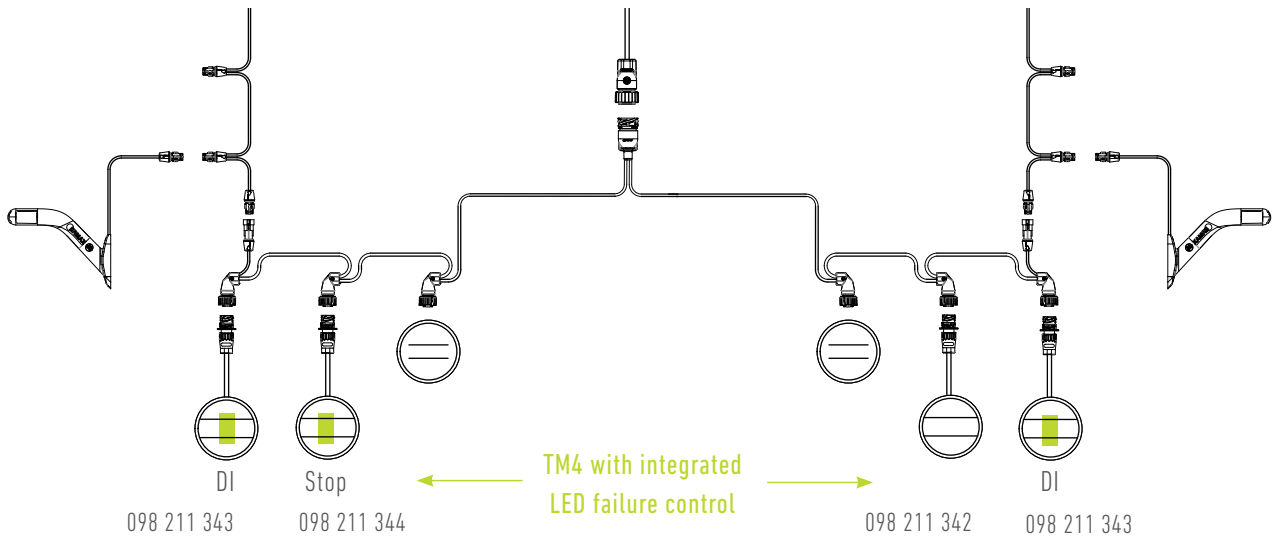
TM 4 Tail light 12/24V - LED (Surface mounting)

Concinving technology – The best choice

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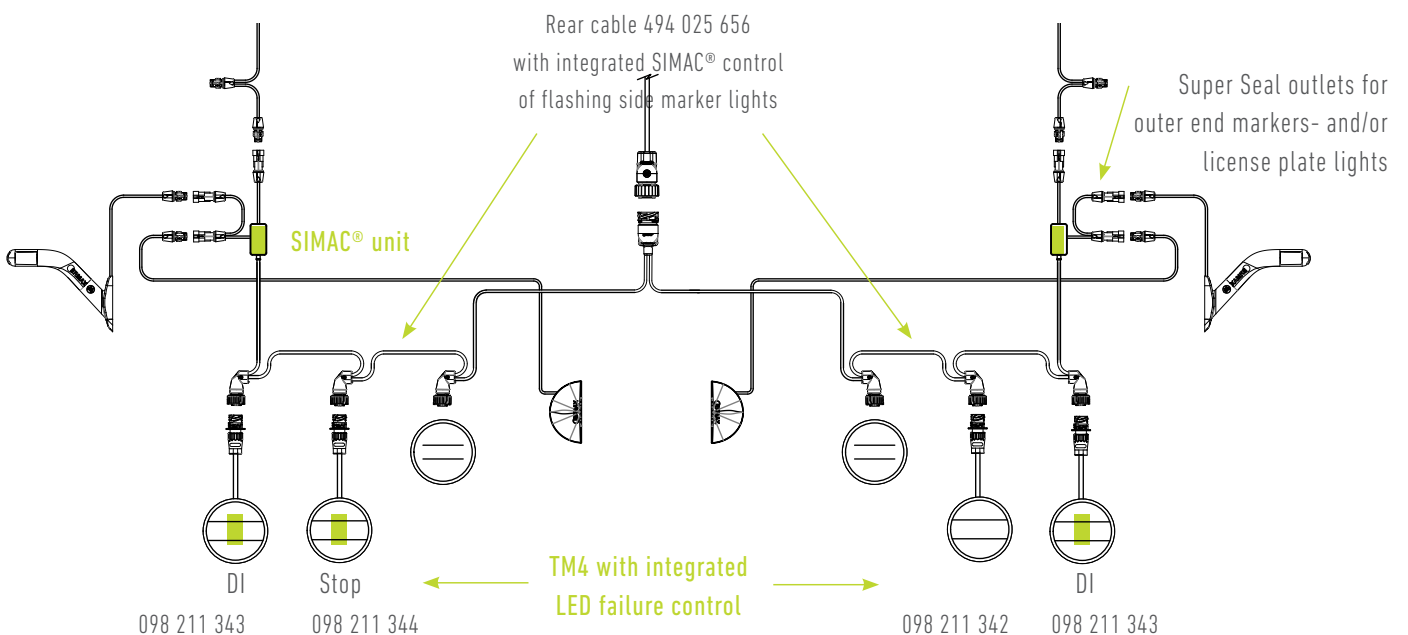
Using the newest technology in the ERMAX TM4 tail light enables integrated LED control to monitor the indicator and stop light function. If control of flashing side marker lamps SIMAC are needed ERMAX offers several innovative solutions, which can be connected easily and intelligently as a part of the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

DI
098 211 343

Stop
098 211 344

TM4 with integrated
LED failure control

098 211 342

DI
098 211 343

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

Rear cable 494 025 656
with integrated SIMAC® control
of flashing side marker lights

Super Seal outlets for
outer end markers- and/or
license plate lights

SIMAC® unit

DI
098 211 343

Stop
098 211 344

TM4 with integrated
LED failure control

098 211 342

DI
098 211 343

ERMAX®

TM 4 Tail light 12/24V - LED (Surface mounting)
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.
Classic design - with D-approval								
	24V	✓			Cable lead through rubber grommet	✓		098 211 340
	24V	✓			300 mm cable with 7 poled AMP socket	✓		098 211 342
	24V	✓			Cable lead through rubber grommet	✓	Direct indicator light	098 211 341
	24V	✓			300 mm cable with 7 poled AMP socket	✓	Direct indicator light	098 211 343
	24V	✓			300 mm cable with 7 poled AMP socket	✓	Stop light	098 211 344
Classic design - without D-approval								
	12/24V	✓			Cable lead through rubber grommet			098 212 442
	12/24V	✓			300 mm cable with 7 poled AMP socket			098 212 436
Unique red-white-red design - with D-approval								
	12/24V	✓			Cable lead through rubber grommet	✓		098 212 345
	12/24V	✓			300 mm cable with 7 poled AMP socket	✓		098 212 339
	24V	✓			Cable lead through rubber grommet	✓	Direct indicator light	098 211 361
	24V	✓			300 mm cable with 7 poled AMP socket	✓	Direct indicator light	098 211 363
	24V	✓			300 mm cable with 7 poled AMP socket	✓	Stop light	098 211 364

ERMAX®

TM 4 Tail light 12/24V - LED (Surface mounting)
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.
Combination rear light - reversing and rear fog - without D approval								
	12/24V		✓	✓	Cable lead through rubber grommet			098 255 340
	12/24V		✓	✓	300 mm cable with 7 poled AMP socket			098 255 342
Single-function rear light - reversing and rear fog - without D approval								
	24V		✓		Cable lead through rubber grommet			098 256 343
	12/24V		✓		300 mm cable with 7 poled AMP socket			098 256 336
	12/24V			✓	Cable lead through rubber grommet			098 257 349
	12/24V			✓	300 mm cable with 7 poled AMP socket			098 257 336

Material description

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

ERMAX®

TM 4 Tail light 12/24V - LED (Surface mounting)

Rear underrun protection bar with TM4 tail lights

According to ECE R58 revision 3

➤ Classical elegant design – new developed

➤ LED failure control and SIMAC® integrated

➤ Also possible in the unique red and white design

"NEW"

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

098 259 075

098 259 095

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

| Variant – ECE R58-03	Type	Junction box	SIMAC	LED failure control Dir. indicator light	Stop light	Article no.
	LED	✓	✓	✓	✓	098 259 075 *
	LED	✓	✓	✓	✓	098 259 095 **

* With D approval

** The triangular refelctors must be mounted separately

ERMAX®

TM 4 Tail light 12/24V - LED (Surface mounting)

Drawings, measure and spare parts

TM4 LED tail light with rubber grommet

Ø135

58

84

140 mm

Min Ø30

6

31

2 x Ø6

45

Ø140
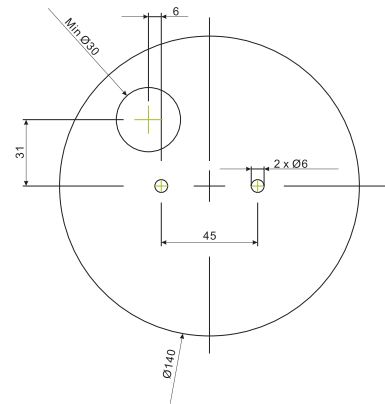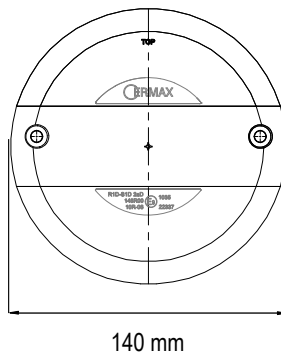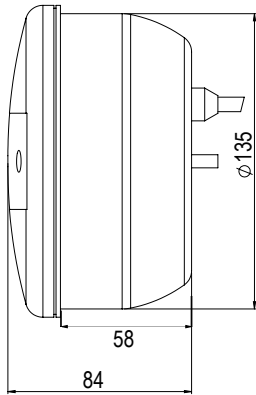
TM4 LED tail light with 300 mm connection cable with 7 pole AMP socket
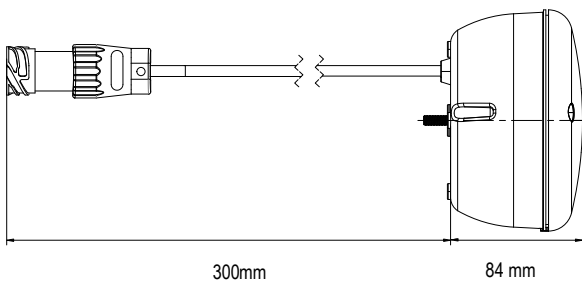
300mm

84 mm

LED failure control on functions that are not preconfigured

PLug 2 (+In)

DI
or
Stop

DI

Stop/Tail/DLK

Tail

Plug 1 (-In)

Spare parts and accessories

Pos. 1

Pos. 2

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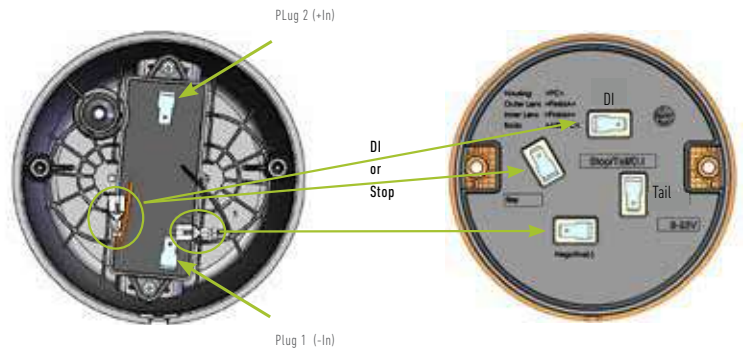
Chrome ring and built-in kit	1	098 292 360
Protection cover for tail light	2	098 296 720
TM4 housing with LED failure control unit 24V, cable lead through rubber grommet, for monitoring the direct indicator or stop light function	3	098 298 114

ERMAX ®

TM 5 Tail light LED with Eternal Light® and chrome ring 12/24V (Built-in)

E   EMC

Unbeatable

Pos. 1

Pos. 2
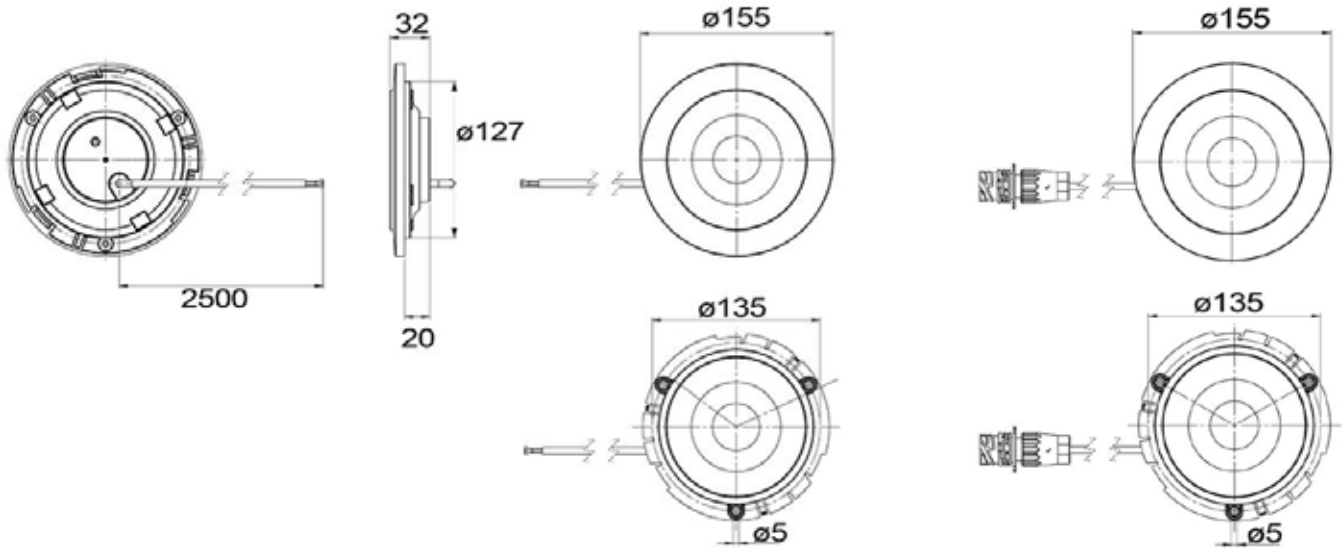
Description

Position light with Eternal Light® technology
Ultra thin surface installation depth

Lens:	Impact resistant polycarbonate
Housing:	Impact resistant polycarbonate
Dimension:	Ø155 x 32 mm
Built-in:	Ø127 mm
Bolt distance:	3 pcs Ø4,5 mm with 120º spread
	in Ø135 mm
IP Rating:	IP69K

ERMAX®

TM 5 Tail light LED with Eternal Light® and chrome ring 12/24V (Built-in)

Functions

Operating voltage	Position Stop Dir. indicator	Reverse Rear fog	Cable length	Connection	Outlet Super Seal	Pos.	Article no.
12/24V	✓		2500 mm	Open end		1	098 212 101
12/24V	✓		300 mm	7 poled AMP 1.5 socket		1	098 212 102
12/24V		✓	2500 mm	Open end		2	098 255 101
12/24V		✓	300 mm	7 poled AMP 1.5 socket		2	098 255 102
12/24V		✓	1.000 mm	7 poled AMP 1.5 socket	200 mm cable with Super Seal socket for reverse gear alarm or reverse light	2	098 255 104

Spare parts

Chrome ring	098 292 215

Installation of additional reverse light or reverse gear alarm to 098 255 014

The reverse gear alarm or reverse light can if needed, easily be connected by using the reverse light 098 255 104, which has extra outlets with Super Seal socket

300 mm cable
with Super Seal socket **

098 256 255

250 mm cable
with Super Seal plug

090 450 350
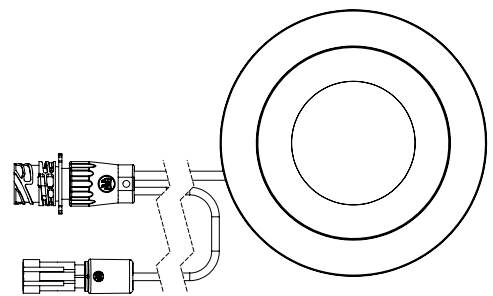
098 255 104

** Installation of reverse light to reverse and fog light 098 255 014

- possible by using the Y-adapter 894 005 230 or alternatively the extension cable with Super Seal plug
794 020 230 or 694 030 200 as shown below. More lengths are available.

794 020 230

Plug   Plug

694 030 200

Plug

Plug   Plug

ERMAX®

TM 6 Tail light LED 12/24V (Built-in)

E EMC
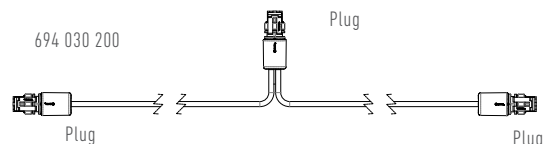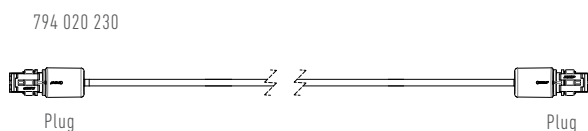
Pos. 1

Pos. 2
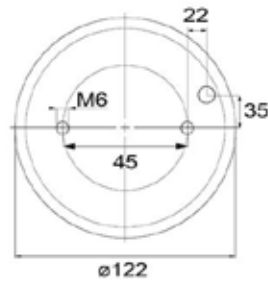
Description

Lens:	PMMA
Housing:	ABS
Dimension:	Ø122 x 43.2 mm
Bolt distance:	45 mm / M6
IP Rating:	IP69K

ERMAX®

TM 6 Tail light LED 12/24V (Built-in)

Operating voltage	Position Stop Dir. indicator	Reverse Rear fog	Connection	Cable length	Pos.	Article no.
Functions						
12/24V	✓		2.500 mm	Open end	1	098 212 022
12/24V	✓		2.000 mm	7 poled AMP 1.5 plug	1	098 212 027
12/24V	✓		200 mm	7 poled AMP 1.5 socket	1	098 212 028
12/24V		✓	2.500 mm	Open end	2	098 255 022
12/24V		✓	2.000 mm	7 poled AMP 1.5 plug	2	098 255 027
12/24V		✓	200 mm	7 poled AMP 1.5 socket	2	098 255 028

ERMAX®

TM 7 Tail light LED 12/24V (Built-in)

(E) EMC

Pos. 1

Pos. 2

ø 4,5

ø 117 ø 127

22
29
43

ø 135

ø 155

ø 155

098 255 014

ø 155

Description

Lens:	PMMA
Housing:	ABS
Dimension:	Ø155 x 43.2 mm
Buitl-in:	Ø127 mm
Bolt distance:	3 pcs. Ø4,5 mm with 120° spread in Ø135 mm
IP Rating:	IP69K

ERMAX®

TM 7 Tail light LED 12/24V (Built-in)

Functions

Operating voltage	Position Stop Dir. indicator	Reverse Rear fog	Cable length	Connection	Outlet Super Seal	Pos.	Article no.
12/24V	✓		2.500 mm	Open end		1	098 212 002
12/24V	✓		300 mm	7 poled AMP 1.5 socket		1	098 212 008
12/24V	✓		2.000 mm	7 poled AMP 1.5 plug		1	098 212 017
12/24V		✓	2.000 mm	7 poled AMP 1.5 plug		2	098 255 017
12/24V		✓	200 mm	7 poled AMP 1.5 socket		2	098 255 018
12/24V		✓	2.500 mm	Open end		2	098 255 002
12/24V		✓	1.200 mm	7 poled AMP 1.5 socket	200 mm cable with Super Seal socket for reverse alarm or reverse light	2	098 255 014

Spar parts

Chrome ring Ø155 mm		098 292 216

Installation of additional reverse light or reverse gear alarm to 098 255 014

The reverse gear alarm or reverse light can if needed, easily be connected by using the reverse light 098 255 104, which has extra outlets with Super Seal socket

300 mm cable
with Super Seal socket **

098 256 255

250 mm cable
with Super Seal plug

090 450 350

ø 155
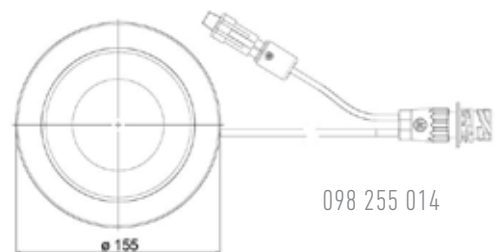
098 255 014

** Installation of reverse light to reverse and rear fog light 098 255 014

- possible by using the Y-adapter 894 005 230 or alternatively the extension cable with Super Seal plug 794 020 230 or 694 030 200 as shown below. More lengths are available.

794 020 230

Plug

Plug

694 030 200

Plug

Plug

Plug

ERMAX®

TM8 LED Tail light 12/24V

E EMC
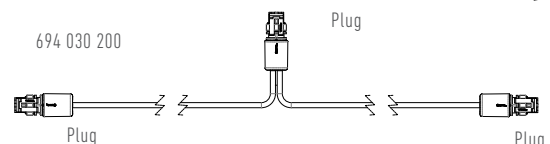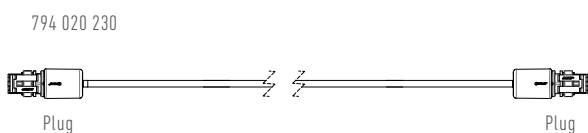
Pos. 1

With 8 red and 6 yellow SMD LEDs

Pos. 2

With 8 red and 9 white SMD LEDs
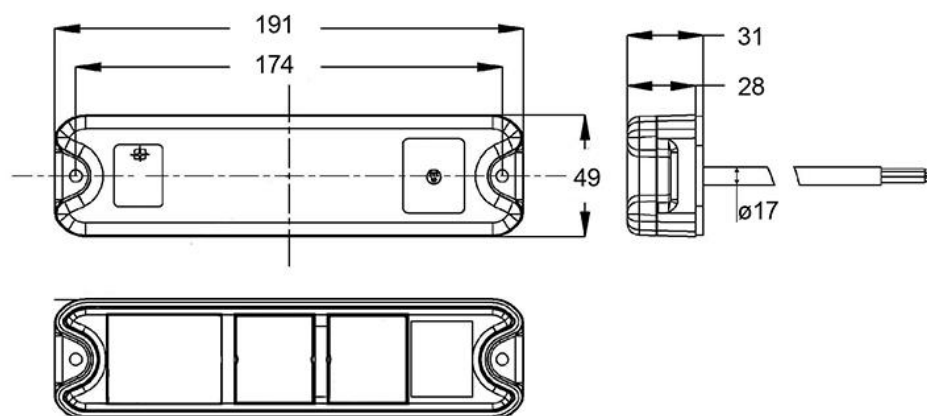
Description

Lens: PMMA
Housing: ABS
Dimension: 191 x 49 x 30 mm
Bolt distance: 174 mm / M5
IP-Rating: IP69K

ERMAX®

TM8 LED Tail light 12/24V

Functions										
Operating voltage	Positin	Stop Dir. indicator	Reverse	Rear fog	Reflex reflector	Cable length	Connection	Pos.	Article no.
12/24V	✓				✓	200 mm	7 poled AMP 1.5 socket	1	**098 212 274**
12/24V		✓	✓	✓	✓	200 mm	7 poled AMP 1.5 socket	2	**098 255 274**

ERMAX®

Tail light LED 12/24V - **ERMAX Square-Line**

EMC (E)

Pos. 1

Pos. 2

Pos. 3 – Placed in front of the vehicle

24 mm

104 mm

94 mm
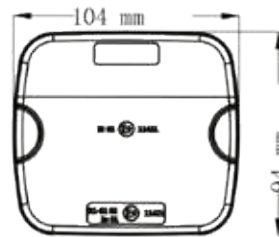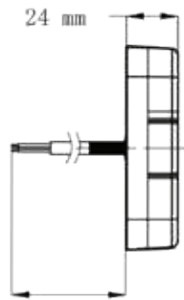
Description

Lens: PMMA
Housing: ABS
Dimension: 105 mm x 95 mm x 25 mm
Bolt distance: 90 mm
IP Rating: IP67

Incl. cover for mounting

Functions										
Operating voltage	Position Stop	Dir. indicator	Position front	Reverse	Rear fog	Cable length	Connection	Pos	Article no.	
12/24V	✓	✓				150 mm	Open end	1	098 212 470	
12/24V				✓	✓	150 mm	Open end	2	098 255 470	
12/24V		✓	✓			150 mm	Open end	3	098 222 470	

ERMAX®

Flexible and individual installation opportunities with **ERMAX Squareline**

Design the rear end of the truck based on needs and demands

Type 1
Classic

Type 2
Slim Classic

Type 3
Wide Classic

Type 4
Arrow

Type 5
Wide arrow

Type 6
Square

Type 7
Vertical

Type 8
Semi Vertical

OBS: If only vertical mounting, a separate legal reflector must be mounted

TM14 Slim-Line Tail light 12/24V – full LED

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 indiacator 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

ERMAX®

TM14 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
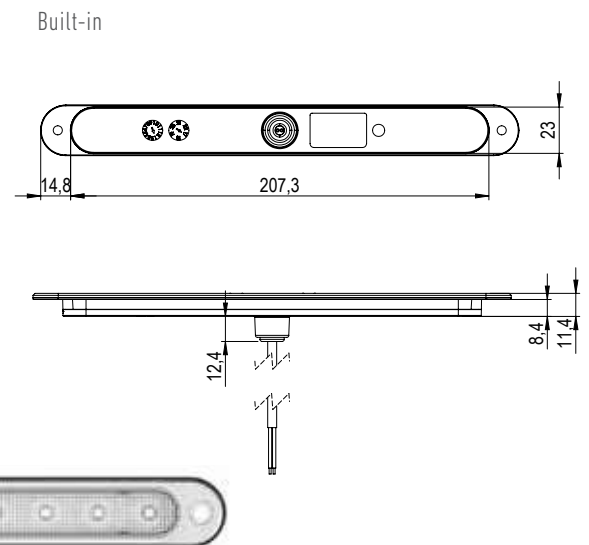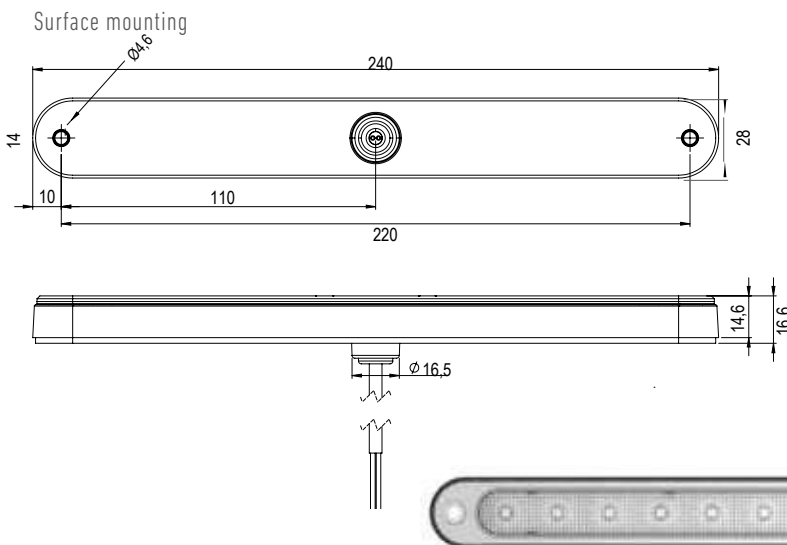
Surface mounting

Built-in

ERMAX®

TM 14 Tail light LED 12/24V - Slim-line

(E) EMC ⬙

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 +65C°
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

Functions

Operation voltage	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
12/24V	→ ←	✓	✓			Open end	5.000 mm - 3 core	Brown = Ground Blue = Position Yellow/green= Stop	098 212 252
12/24V	→ ←	✓				2 poled Super Seal socket	300 mm		098 200 250
12/24V	→ ←	✓				Open end	5.000 mm - 2 core	Brown = Ground Blue= Position light	098 200 252
12/24V	→ ←		✓			2 poled Super Seal socket	300 mm		098 203 250
12/24V	→ ←		✓			Open end	5.000 mm - 2 core	Brown = Ground Blue = Stop	098 203 252
12/24V	→ ←			✓		2 poled Super Seal socket	300 mm		098 222 250
12/24V	→ ←			✓		Open end	5.000 mm - 2 core	Brown = Ground Blue = Dir. indicatir	* 098 222 252
12/24V	→ ←				✓	2 poled Super Seal socket	300 mm		* 098 222 260
12/24V	→ ←				✓	Open end	5.000 mm - 2 core	Brown = Ground Blue = Dir. indicator	* 098 222 262

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

Stop light

For rear cable

Direction indicator light
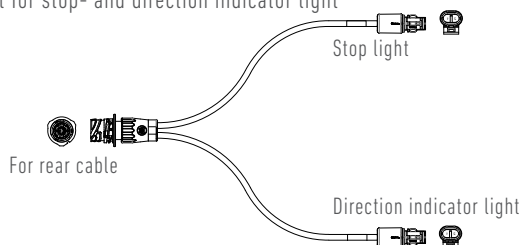
994 003 285 – Adapter cable 300 mm,

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

Position and stop light

for rear cable

Direction indicator light

LICENSE PLATE LIGHTS

ERMAX ®

License plate light LED 12/24V

Pos. 1

Pos. 2

Both types are certified for the application as shown:

CENTER OF LICENSE PLATE

ERMAX®
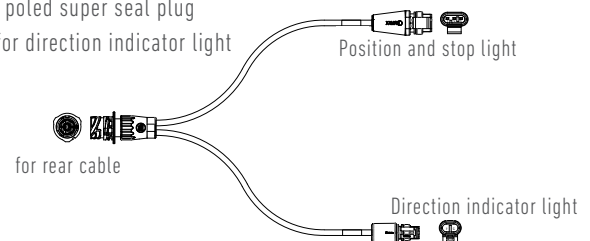
License plate light LED 12/24V

Description

Lens:	PMMA
Housing:	ABS

Half-round design:
Dimension:	112 x 57 x 53 mm
Bolt distance:	45 mm oder 72 mm / M4

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

Functions

Operating voltage	IP-Rating	Connection	Cable length	Bolt distance	LED	Pos.	Article no.
12/24V	IP54	Click-in 1,5 mm^2	500 mm	45 / 72 mm	2	1	098 254 330
12/24V	IP54	Click-in 1,5 mm^2	500 mm	45 mm	2	2	098 254 340
12/24V	IP54	Click-in 1,5 mm^2	1.500 mm	45 / 72 mm	2	1	098 254 332
12/24V	IP54	Click-in 1,5 mm^2	1.500 mm	45 mm	2	2	098 254 342
12/24V	IP54	Super Seal socket	500 mm	45 / 72 mm	2	1	098 254 334
12/24V	IP54	Super Seal socket	500 mm	45 mm	2	2	098 254 344
12/24V	IP54	Super Seal plug	1.200 mm	45 / 72 mm	2	1	098 254 335
12/24V	IP54	Super Seal plug	1.200 mm	45 mm	2	2	098 254 345
12/24V	IP54	Super Seal plug	2.000 mm	45 / 72 mm	2	1	098 254 350
12/24V	IP54	Open end	2.500 mm	45 / 72 mm	2	1	098 254 336
12/24V	IP54	Open end	2.500 mm	45 mm	2	2	098 254 346
12/24V	IP54	Cable lead through rubber grommet	--	45 / 72 mm	2	1	098 254 338
12/24V	IP54	Cable lead through rubber grommet	--	45 mm	2	2	098 254 348

IP-Rating LED unit: IP69K

ERMAX®

License plate light LED12/24V

(E)
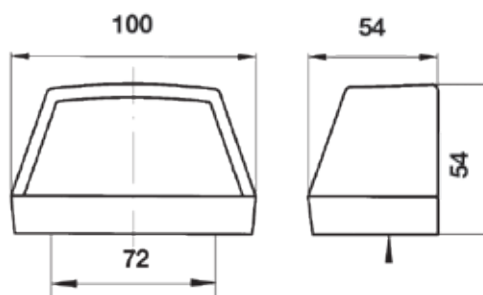
Description

With red position light due to the colored housing

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

Functions						
Operationg 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
24V	IP67	LED	Click-In	500 mm	72 mm	098 254 251

OUTER END MARKER LIGHTS

ERMAX®

Outer end marker light LED (45⁰) 12/24V – Cobra

(E) EMC

Pos. 1

Pos. 2

Possibility of having the cable at the side
of mounting foot

142

190

77

95

55

134

ø6,5

35
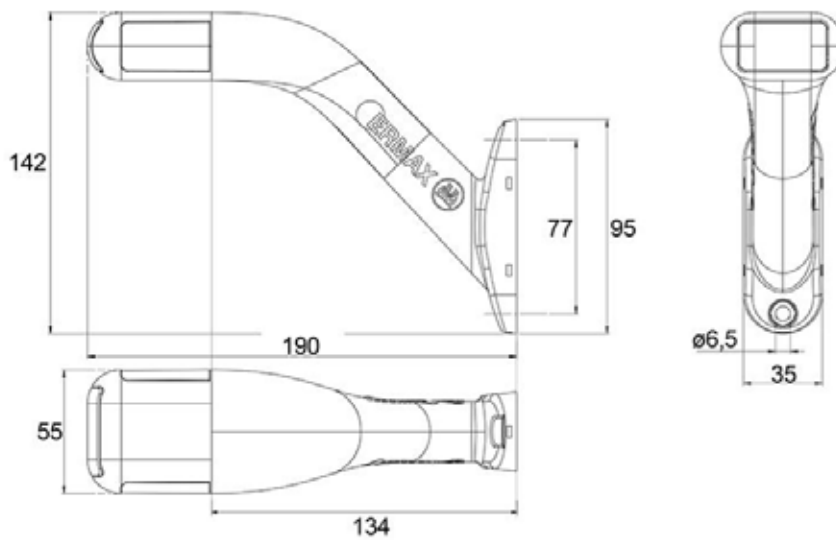
Description

With clear lens - lighting red, amber, white
Lens: Impact resistant polycarbonate
Housing: Rubber
Bolt distance: 77 mm / Ø 6,5

ERMAX ®

Outer end marker light LED (45⁰) 12/24V

Functions							
Left ← Right →	Operating voltage	IP Rating	Connection	Cable length	Light color	Pos.	Article no.
←	12/24V	IP69K	Click-in 1,5 mm²	1.500 mm	red / white / amber	1	098 241 422
→	12/24V	IP69K	Click-in 1,5 mm²	1.500 mm	red / white / amber	1	098 241 423
←	12/24V	IP69K	Super Seal socket	1.500 mm	red / white / amber	1	098 241 425
→	12/24V	IP69K	Super Seal socket	1.500 mm	red / white / amber	1	098 241 426
←	12/24V	IP69K	Open end	1.500 mm	red / white / amber	1	098 241 427
→	12/24V	IP69K	Open end	1.500 mm	red / white / amber	1	098 241 428
←	12/24V	IP69K	Open end	5.000 mm	red / white / amber	1	098 241 429
→	12/24V	IP69K	Open end	5.000 mm	red / white / amber	1	098 241 430
→	12/24V	IP69K	Super Seal plug	300 mm	red / white / amber	1	098 241 448
←	12/24V	IP69K	Super Seal plug	300 mm	red / white / amber	1	098 241 449

Pos. 2

Suitable for mounting on flat surface, 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
←	12/24V	IP69K	Super Seal plug	300 mm	red / white / amber	2	098 241 439

ERMAX®

Outer end marker light LED 12/24V – short Cobra

(E) [EMC]

Description

With clear lense - lighting red, amber and white
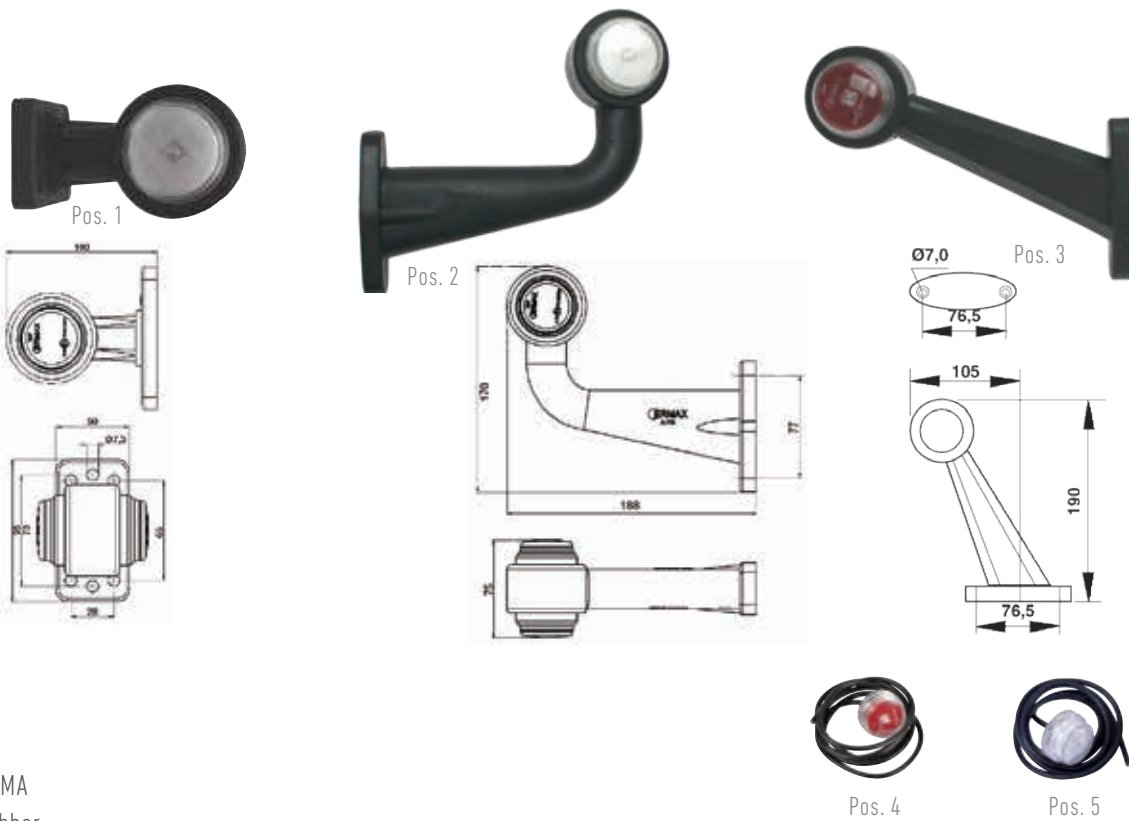Lens: Impact resistant polycarbonate
Housing: Rubber
Bolt distance: 77 mm / Ø 6,5

Functions						
Left ← Right →	Operation voltage	IP Rating	Connection	Cable length	Light color	Article no.
← →	12/24V	IP69K	Super Seal socket	500 mm	red / white / amber	098 241 205
← →	12/24V	IP69K	Super Seal socket	1.500 mm	red / white / amber	098 241 215
← →	12/24V	IP69K	Click-in 1,5 mm²	1.500 mm	red / white / amber	098 241 211
← →	12/24V	IP69K	Open end	1.500 mm	red / white / amber	098 241 216
← →	12/24V	IP69K	Open end	5.000 mm	red / white / amber	098 241 217
← →	12/24V	IP69K	Super Seal plug	300 mm	red / white / amber	098 241 218

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

Ⓔ

Pos. 1

Pos. 2

Pos. 3

Ø7,0

76,5

105

190

76,5

Pos. 4

Pos. 5

Description

Lens:	PMMA
Housing:	Rubber
Bolt distance:	77 mm / Ø 7

Functions

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

Spare parts

LED – red unit with 1.250 mm connection cable	4	098 291 012
LED – clear unit with 1.250 mm connection cable	5	098 291 016

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

E
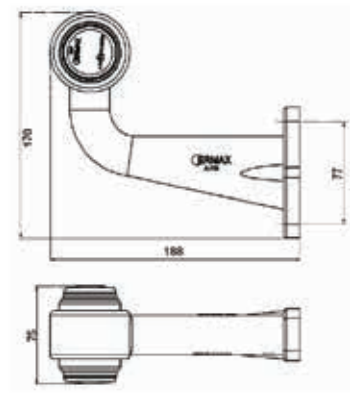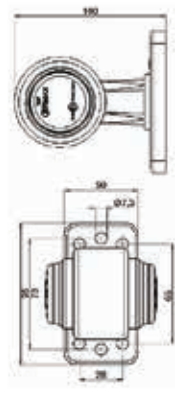
Pos. 1

Pos. 2

Description

Lens:	PMMA
Housing:	Rubber
Bolt distance Pos 1:	77 mm
Bolt distance Pos 2:	77 mm
Bolt distance Pos 3:	77 mm

2 impact resistance LED units per light

Pos. 4

Pos. 5

Pos. 6

Functions

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
← →	LED	IP67	12/24V	Open end	1500 mm	red / white	2	098 241 650

Spare parts

Rubber grommet for 098 241 014	4	098 291 119
LED unit, red	5	098 291 015
LED unit, white	6	098 291 031

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

Pos 1

Pos 2

Pos. 3

Pos. 4

Description

Lens: PMMA
Housing: Rubber
2 variants – short straight variant (possible to turn 360º) - angled variant 45º
2 impact resistant LED units in each outer end marker light - 6 LEDs per LED unit

Pos. 5

Pos. 6

Pos. 7

Pos. 8

Functions – outer end marker light

Left ← Right →	Light source	IP Rating	Operation voltage	Connection	Cable length	Light color	Pos	Article no.
← →	LED	IP67	12/24V	Open end	500 mm	red / white	1	098 241 800
← →	LED	IP67	12/24V	Open end	2500 mm	red / white	1	098 241 802
← →	LED	IP67	12/24V	Open end	500 mm	red / white	2	098 241 850
← →	LED	IP67	12/24V	Open end	2500 mm	red / white	2	098 241 852

Functions – direction indicator light

Left ← Right →	Light source	IP Rating	Operation voltage	Connection	Cable length	Light color	Pos	Article no.
← →	LED	IP67	12/24V	Open end	1.500 mm	amber	3	098 221 800
← →	LED	IP67	12/24V	Open end	1.500 mm	amber	4	098 221 077

Spare parts

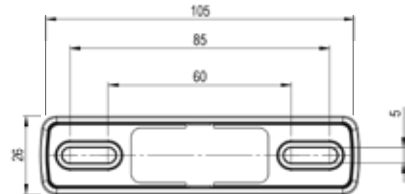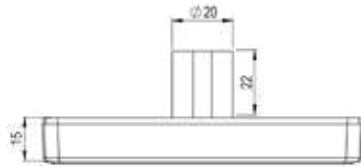|	Pos	Article no.
LED unit, red (outer end marker light)	5	098 291 041
LED unit, white (outer end marker light)	6	098 291 040
LED unit, amber	7	098 291 066
Rubber grommet for 098 221 076	8	098 291 119
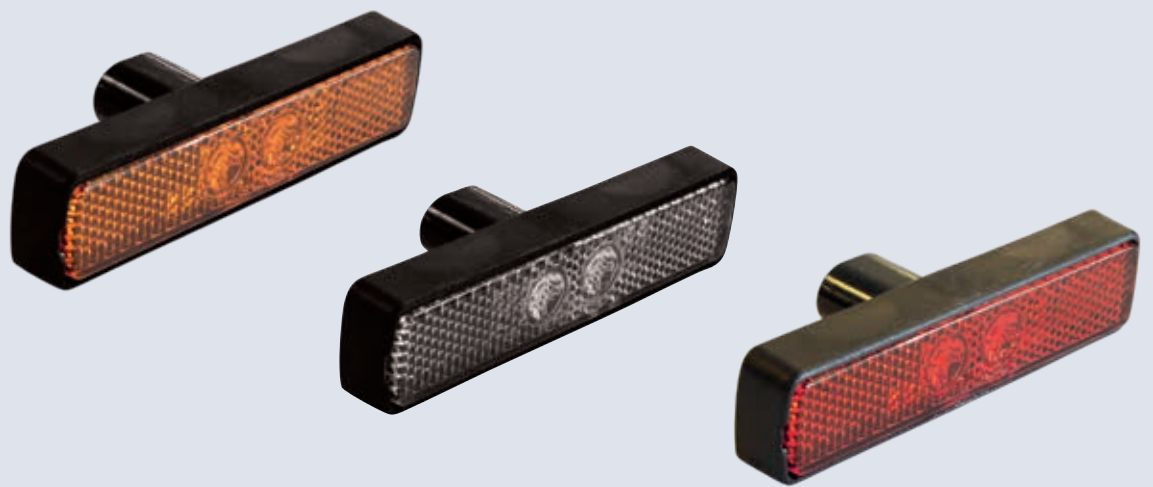
POSITION & SIDE MARKER LIGHTS

ERMAX®

Positions and side marker lights LED – 12/24V

E EMC

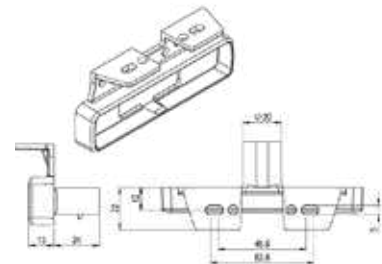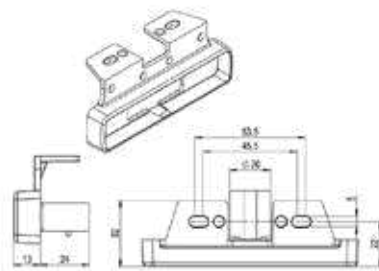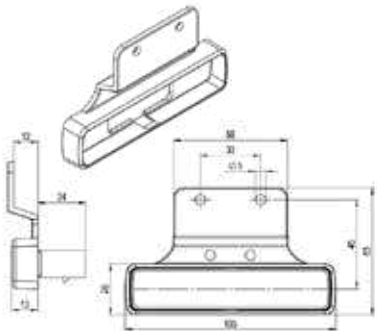Standard frame with Super Seal socket
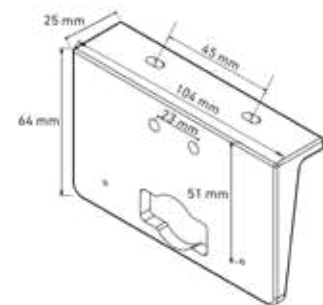

Mounting bracket straight

90⁰ bracket backwards

90⁰ bracket forwards

> Mounting without visible screws
> 2 LEDs
> 4 mounting variants
> 3 cable versions
> IP69K Rating

Universal rubber holder

Beskrivelse

2 LEDs og reflex reflector

Lens:	PMMA
Housing:	ABS
Bracket/frame:	PP
Dimension with standard frame:	105 x 26 x 13 mm
Variable bolt distance:	60-85 mm
IP Rating:	IP69K

Positions and side marker lights LED – 12/24V

Functions						
Mounting bracket	Connection	Cable length	Operating voltage	Side marker Amber	Position light White	Position light Red
Standard frame	Super Seal socket	---	12/24V	**098 221 726**	**098 230 726**	**098 204 726**
Straight	Super Seal socket	----	12/24V	**098 221 742**		
90° backwards	Super Seal socket	----	12/24V	**098 221 748**		
90° forwards	Super Seal socket	----	12/24V	**098 221 756**		
Standard frame	Super Seal socket	500 mm	12/24V	**098 221 727**		
90° backwards	Super Seal socket	1.500 mm	12/24V	**098 221 745**		
Standard frame	Super Seal plug	5.000 mm	12/24V		**098 230 736**	
Standard frame	Click-in	500 mm	12/24V	**098 221 720**	**098 230 720**	**098 204 720**
Standard frame	Click-in	1.500 mm	12/24V	**098 221 722**	**098 230 722**	**098 204 722**
Standard frame	Click-in	5.000 mm	12/24V	**098 221 724**	**098 230 724**	**098 204 724**
straight	Click-in	1.500 mm	12/24V	**098 221 740**		
90° backwards	Click-in	500 mm	12/24V	**098 221 744**		
90° backwards	Click-in	1.500 mm	12/24V	**098 221 746**		
90° forwards	Click-in	500 mm	12/24V	**098 221 752**		
90° forwards	Click-in	1.500 mm	12/24V	**098 221 754**		
Standard frame	Open end	500 mm	12/24V	**098 221 730**		
Standard frame	Open end	2.500 mm	12/24V	**098 221 732**	**098 230 732**	**098 204 732 ***
Standard frame	Open end	5.000 mm	12/24V	**098 221 734**	**098 230 734**	**098 204 734**
Standard frame	Super Seal socket	500 mm	12/24V	098 221 7274		
Standard frame	Super Seal plug	2.500 mm	12/24V		**098 230 728**	
Standard frame	Super Seal plug	5.000 mm	12/24V		**098 230 736**	

Spare parts		
Standard frame		098 292 700
Mounting bracket, straight, bolt distance 30 mm		098 292 701
Mounting bracket – 90° backwards, bolt distance 30-55 mm		098 292 702
Mounting brakcet – 90° forwards, bolt distance 30-55 mm		098 292 703
Universal rubber holder – 90° backwards, bolt distance 45-55 mm		098 292 629

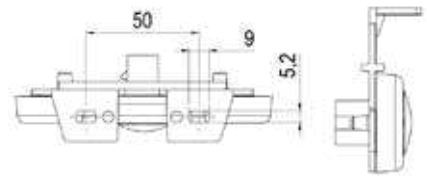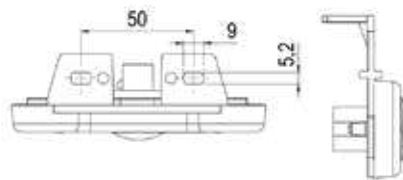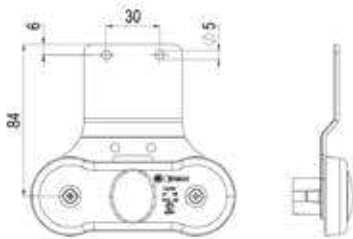## Positions and side marker lights LED - 12/24V

E EMC

16

70

44

114

Ø3,8

Ø10
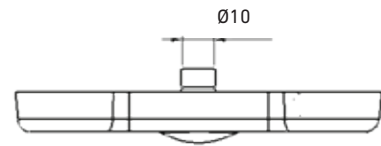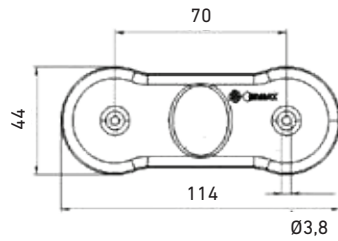
Mounting bracket straight

90° bracket backwards

90° bracket forwards

30   Ø5

6

84

50   9   5,2

50   9   5,2

> Standard mounting
> 2 LEDs
> 4 mounting variants
> 4 cable versions
> IP69K Rating

Universal rubber holder

25 mm   45 mm
104 mm
64 mm   22 mm
51 mm
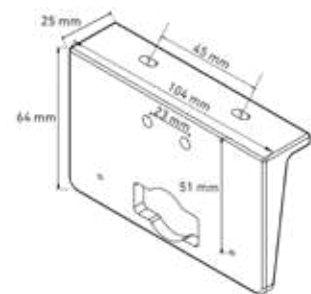
Description

2 LEDs og reflex reflector

Lens:	PMMA
Housing:	ABS
Mounting bracket:	PP
Dimension with standard frame:	114 x 44 x 16 mm
Bolt distance:	70 mm
IP Rating:	IP69K

Screws for mounting should be Ø4 mm

Positions and side marker lights LED - 12/24V

Functions						
Mounting bracket	Connection	Cable length	Operating voltage	Side marker Amber	Position light White	Position light Red
Without mounting bracket	Super Seal socket	- - -	12/24V	098 221 620	098 230 401	098 204 501
Straight	Super Seal socket	- - -	12/24V	098 221 630		
90° backwards	Super Seal socket	- - -	12/24V	098 221 640	098 230 430	
90° forwards	Super Seal socket	- - -	12/24V	098 221 650		
Without mounting bracket	Super Seal socket	500 mm	12/24V	098 221 635		
Without mounting bracket	Super Seal socket	1.500 mm	12/24V	098 221 628	098 230 428	
90° forwards	Super Seal socket	1.500 mm	12/24V	098 221 664		
Without mounting bracket	Super Seal plug	2.500 mm	12/24V		098 230 418	
Without mounting bracket	Super Seal plug	5.000 mm	12/24V	098 221 627		
Without mounting bracket	Super Seal plug	10.000 mm	12/24V	098 221 629	098 230 431	
90° backwards	Super Seal socket	1.500 mm	12/24V	098 221 662		
90° forwards	Super Seal socket	1.500 mm	12/24V	098 221 664		
Without mounting bracket	Click-in	500 mm	12/24V	098 221 621	098 230 405	098 204 502
Without mounting bracket	Click-in	1.500 mm	12/24V	098 221 622	098 230 415	098 204 503
Without mounting bracket	Click-in	5.000 mm	12/24V	098 221 623	098 230 450	098 204 504
Straight	Click-in	500 mm	12/24V	098 221 631		
90° backwards	Click-in	500 mm	12/24V	098 221 641		
90° backwards	Click-in	1.500 mm	12/24V	098 221 642		
90° forwards	Click-in	500 mm	12/24V	098 221 651		
90° backwards	Click-in	1.500 mm	12/24V	098 221 652		
Without mounting bracket	Open end	500 mm	12/24V	098 221 624	098 230 420	098 204 505
Without mounting bracket	Open end	1.500 mm	12/24V	098 221 625	098 230 425	
Without mounting bracket	Open end	2.500 mm	12/24V			098 204 506
Without mounting bracket	Open end	5.000 mm	12/24V	098 221 626	098 230 427	098 204 507

Spare parts positions and side marker lights LED - 12/24V

Function

Pos. 1 - Straight

Pos. 2 - Backwards 90^0

Pos. 3 - Forwards 90^0

Pos. 4

Pos. 5

Pos. 6

Pos. 7

Pos. 8

Example with position light . 7 + 8

Spare parts	Pos.	
Mounting bracket, straight, bolt distance 30 mm	1	098 292 622
Mounting bracket - 90° backwards, bolt distance 30-55 mm	2	098 292 620
Mounting bracket - 90° forwards, bolt distance 30-55 mm	3	098 292 621
Seal - black rubber - 10 pcs per packing unit	4	098 292 626
Rivet Ø4 mm, black plastic - 20 pcs per packing unit	5	098 291 602
Rivet Ø4 mm, black plastic - 100 pcs per packing unit	5	098 291 610
Universal rubber bracket - 90° backwards, bolt distance 45-55 mm	6	098 292 629
Mounting bracket, rubber, for mudwingholders. Usuable with Ermax front position marker	7	098 292 627
Mounting bracket, rubber, for mudwingholders. Usuable with Ermax front position marker	8	098 292 628

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Positions and side marker lights LED - 12/24V 9-33V

(E)

Flat mounting - without mounting bracket

17 | 122 | 44
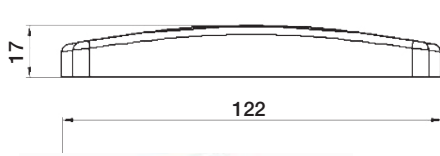
Backwards 90⁰

Pos 1

4 LEDs and reflex reflector
Lens:	PMMA
Housing:	PP
Dimension without bracket:	122 x 44 x 17 mm
Variable bolt distance:	65 - 90 mm
IP Rating:	IP67

Dual-polarity

Functions

Mounting bracket	Connection	Cable length	Operating voltage	Light source	Position White	Side marker Amber	Position Red
Flat mounting	Open end	500 mm	9-33V	4 x LED	098 230 601	098 221 601	098 203 601
Flat mounting	Open end	5.000 mm	9-33V	4 x LED	098 230 605	098 221 605	098 203 605
Flat mounting	Open end	10.000 mm	9-33V	4 x LED		098 221 610	
90° backwards	Open end	500 mm	9-33V	4 x LED		098 221 611	

Spare parts

Seal		098 291 606
Protective housing in stainless steel - suitable for flat mounted position and side marker lights	Pos 1	098 291 912

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Positions and side marker lights LED - 12/24V

(E) SM1

Pos 1
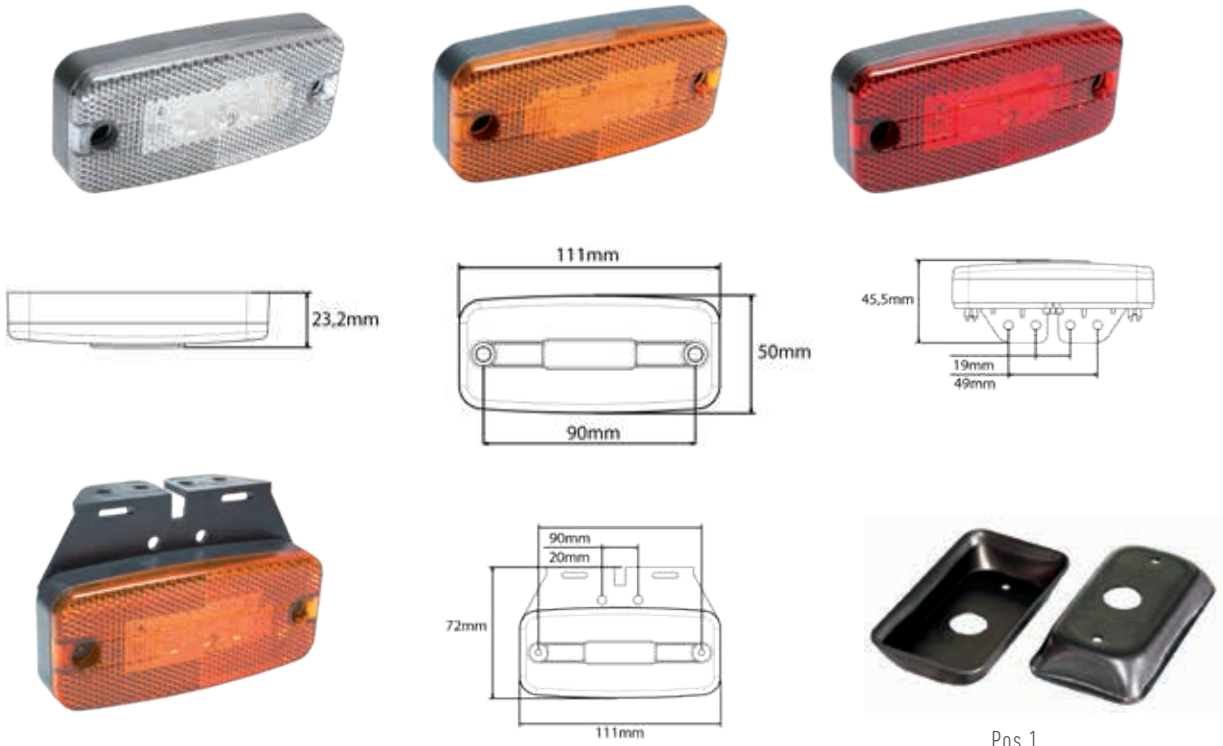
3 LEDs and reflex reflector

Lens: PMMA
Housing: Black plastic
Dimension: Without bracket 111 x 50 x 23,2 mm
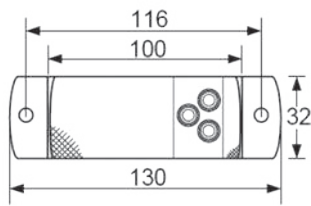Bolt distance: 90 mm
IP Rating: P67

Functions

Mounting bracket	Connection	Cable length	Operating voltage	Light source	Position White	Side marke Amber	Position Red
Flat mounting	Open end	500 mm	12/24V	3 LEDs	098 230 960	098 221 940	098 200 950
Flat mounting	Open end	5.000 mm	12/24V	3 LEDs	098 230 961	098 221 941	098 200 951
Flat mounting	Open end	10.000 mm	12/24V	3 LEDs	098 230 964	098 221 944	098 200 954
90° backwards	Open end	500 mm	12/24V	3 LEDs		098 221 942	
90° backwards	Open end	5.000 mm	12/24V	3 LEDs		098 221 943	

Spare parts

Angled bracket with rivet		098 291 949
Protective housing, steel plate, untreated - suitable for flat mounted position and side marker lights	Pos 1	098 291 907
Protective housing in galvanized steel plate - suitable for flat mounted position and side marker lights	Pos 1	098 291 906
Gasket		098 291 311

Positions and side marker lights LED - 12/24V

Ⓔ SM1

Pos 1

3 LEDs without reflex reflector

Lens: PMMA

Housing: Black plastic
Dimension: Without bracket B x H x D: 130 x 32 x 7 mm
Bolt distance: 90 mm
IP Rating: IP67

Functions								
Surface mounting	Connection	Cable length	Operating voltage	Light source	Position White	Side marker Amber	Position Red
Horizontal	Open end	500 mm	12/24V	3 LEDs	098 231 873		098 201 873
Horizontal	Open end	1.500 mm	12/24V	3 LEDs		098 221 874	
Horizontal	Open end	5.000 mm	12/24V	3 LEDs	098 231 875	098 221 876	098 201 875
Horizontal	Open end	10.000 mm	12/24V	3 LEDs		098 221 896	
Vertical	Open end	1.500 mm	12/24V	3 LEDs		098 221 884	

Spare parts			
Angled bracket forwards 90⁰		Pos 1	098 291 278

REAR UNDERRUN PROTECTION BAR

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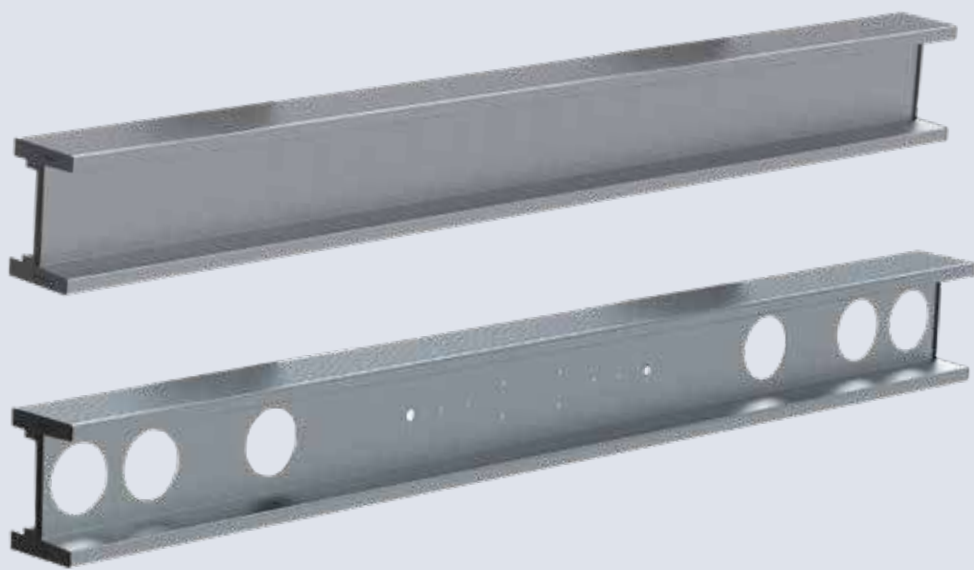
Rear underun protection bar without lights ECE58-02 or ECE58-03

Packaging

The underrun protection bar can also be supplied in an anodized version with or without holes - without lights.

Packaging as single in a box or as a pallet packaging.

The different variants can be found on the following pages.

Only available as ECE R58-03

Safe delivery

Delivery in a maximally padded packaging, which ensures a safe and optimal transportation.

individually
- packed as a single box

Pallet packaging

- ECE58-02 with 25 pieces
- ECE58-03 with 20 pieces

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Rear underrun protection bar ECE R58-02

Anodized - without lights

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

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	1	Without drilling	-	Individually (1 pcs)
	098 258 000	2	For built-in lights (TM5, TM7)	6 x Ø135 mm	
	098 258 001	3	For 7- functions lights (TM10, TM11)	2 x Ø44 mm, 8 x Ø30 mm	

	Article no.	Pos	Variant type	Drilling	Packaging
	098 259 000-Bulk	1	Without drilling	-	Pallet 25 pcs

	Article no.	Pos	Description	Packaging
OBS. End caps and T-bolts must be ordered separately	098 299 610	4	End caps, plastic (2 pcs per rear underrun protection bar)	Bag with 2 pcs
	099 110 004	5	T-blots (4 pcs per rear underrun protection bar)	Bag with 4 pcs

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Rear underrun protection bar ECE R58-03

Anodized - without lights

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

End caps and T-bolts must be ordered separately.

Pos 1

Pos 2

Pos 3

Pos 4

160
89
218
250
12,5
7,4

Pos 5   Pos 6

* If 2 x 4 TM4 lights are to be mounted, an additional hole (right) for the cable from the rear light must be drilled.

Variant - ECE R58-03

Article no.	Pos	Variant type	Drilling	Packaging
098 259 005	1	Without drilling	-	Individually (1 pcs)
098 259 006	2	For built-in lights (TM5, TM7)	6 x Ø135 mm	
098 259 007	3	For 7- functions lights (TM10, TM11)	2 x Ø44 mm, 8 x Ø30 mm	
098 259 008 *	4	For surface mounted lights (TM4)	16 x Ø7 mm, 8 x Ø28/20 mm	

Article no.	Pos	Variant type	Drilling	Packaging
099 259 005	1	Without drilling	-	Pallet 20 pcs
099 259 006	2	For built-in lights (TM5, TM7)	6 x Ø135 mm	
099 259 007	3	For 7- functions lights (TM10, TM11)	2 x Ø44 mm, 8 x Ø30 mm	
099 259 008 *	4	For surface mounted lights (TM4)	16 x Ø7 mm, 8 x Ø28/20 mm	

	Article no.	Pos	Description	Packaging
OBS. End caps and T-bolts must be ordered separately	099 299 616	5	End caps, plastic (2 per rear underrun protection bar)	Bag with 2 pcs
	099 299 615	5	End caps, plastic (2 per rear underrun protection bar)	40 pcs
	099 110 004	6	T-bolts (8 per rear underrun protection bar)	Bag with 4 pcs

Spare parts and accessories
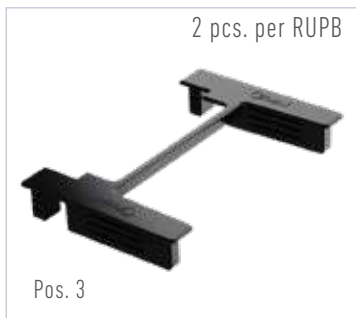
ECE R58-02

Pos. 1

Left   Right
Pos. 2

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 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 instruction in the certificate are followed exactly.

2 pcs per RUPB

Pos. 3

4 pcs per RUPB *

Pos. 4

* When using reinforcement brakcet, 8 pcs. has to be used

Spare parts and accessories	Pos.	Article no.
Console - Square profile for welding on the chassis frame	1	098 299 620
Reinforcement brakcet - Left 098 299 602 / right 098 299 603 A frame width between 840-1250 mm requires 2 pcs By use of these reinforcement brackets, additional 4 T-bolts will be needed (099 110 004)	2	098 299 602 099 299 603
End caps. plastic - Bag with 2 pcs. (2 pcs. per rear underrun protection bar is needed)	3	098 299 610
T-bolt M12 x 55 mm with square head - Bag with 4 pcs. (4 pcs. per rear underrun protection bar is needed)	4	099 110 004

Spare parts and accessories

ECE R58-03

Pos. 1
Console 1   Console 2

Pos. 2
Left / Right

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

Depending upon the width of the chassis frame (distance between the consoles) the reinforcement brackets must be placed inside or outside the consoles in order to support the rear underrun protectio bar.
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 instruction in the certificate are followed exactly.

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

2 pcs. per RUPB

Pos. 3

8 pcs. per RUPB

Pos. 4

Spare parts and accessories	Pos.	Article no.
Console 1. Profile for welding on the chassis frame	1	099 299 623
Console 2. Profile for welding on the chassis frame	1	099 299 622
Reinforcement bracket - Left / Right (1 pcs.) Frame width 1250-1450mm : The reinforcement brackets must be installed on the inside of the consoles Frame width 980-1249mm : 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 / in total 8 pcs.	2	099 299 625
End caps, plastic - Bag with 2 pcs. (2 pcs. per rear underrun protection bar are needed)	3	099 299 616
T-bolt M12x55mm with square head - Bag with 4 pcs. (8 pcs. per rear underrun protection bar are needed)	4	099 110 004

REVERSE & WORK LIGHT

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

ERMAX ®

ERMAX ®

Standard product programme with a large flexibility

Compact design, universally applicable and various connection possibilities

ERMAX reversing lights and work lights are avaiable in 3 design types with different light performance / lumen

LED Reverse light

Lumen:
Theoretical 650 / effective 300

LED Work light

Lumen:
Theoretical 800 / effective 600

LED Work light

Lumen:
Theoretical 1.600 / effective 1.200

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

LED Work light

Lumen:
Theoretical 2.400 / effective 1.800

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

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

Universally applicable

Mounting options

ERMAX working light have a compact design with meaures that they can be mounted in a very narrow place. The compact design and symmetric light destribution 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 varations

ERMAX work lights are available with various connection variations - connection cable with open end, Super Seal or Deutsch socket.

For connections variants, ERMAX always offers a standard cable length of 300 milimeters 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 soulations ensures the best installation without having to adjust the cable lenght (see section with cables for all available cable lengths)

Connection / Extension possibilities ERMAX work lights

Super Seal socket

Extension cable with Super Seal plug or Deutsch DT2 plug

Plug (SS)   Plug (SS)

Plug (SS)   Socket (SS)

Plug (SS)   Open end with blade receptacles

Plug (DT)   Open end
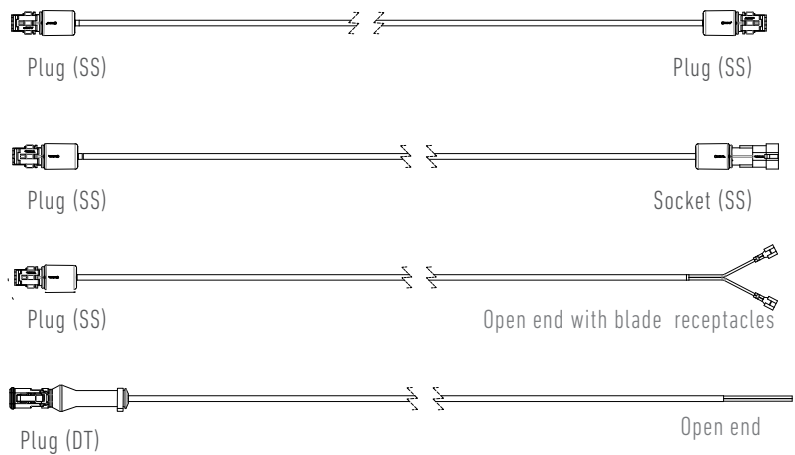
Y–Adapter with 3 Super Seal plugs
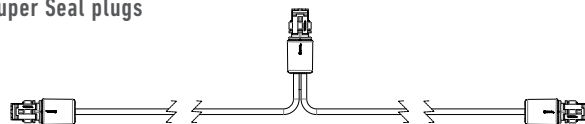
Reverse light connected as a chain
–connected by a side cable with 1 inlet and 2 outlets with Super Seal plugs
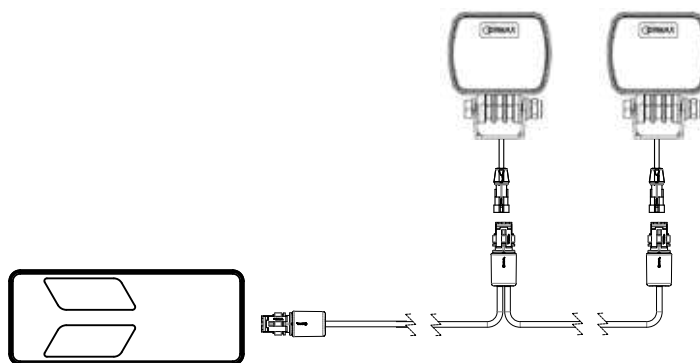
2 pcs. of ERMAX reverse lights or work lights are allowed to be connected to an ERMAX tail light (max 52 W)

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 (anto corrosion layers)

> Mounting bracket made of stainless steel, AISI 304 quality

> Mounting bolts 8 mm / 30 mm

> Multivolt 12 / 24 V

> Working temperature −40 °C til +65 °C

> Flood light pattern

> Color temperature 6.500 ^{0} Kelvin

> IP-Rating 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
> Hight shock and vibration resistance
> Effective heat conduction
> Increased profitabolity

ERMAX®

LED Reverse light
Lumen 650
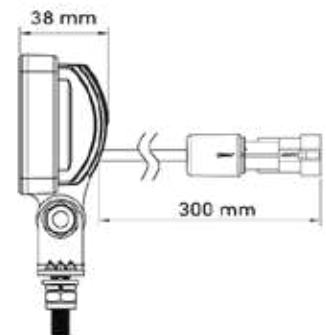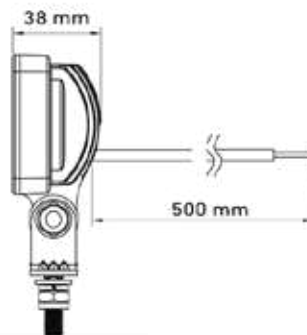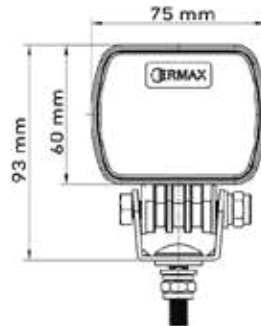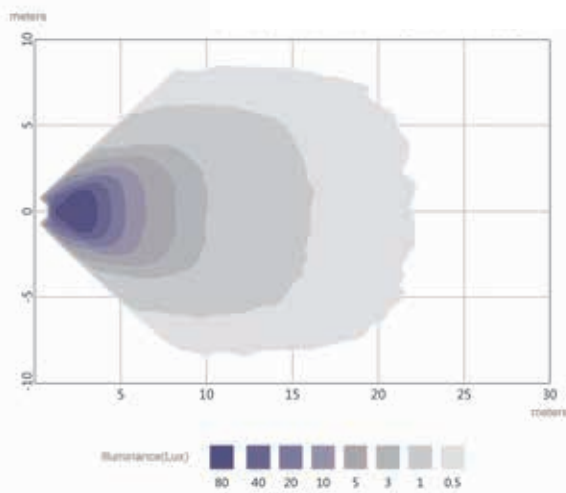
EMC

Unbeatable

75 mm

93 mm | 60 mm

ERMAX

38 mm

500 mm

38 mm

300 mm

Illumination

meters

Illuminance(Lux)

80 40 20 10 5 3 1 0.5

meters

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

Functions							
Operating voltage	Consump- tion	Connection	Cable length	Light source	Lumen, Theoretical / effective	Light pattern	Article no.
12 / 24 V	6,5 W	Open end	500 mm	6 High Power LED	650 / 300	Flood	098 256 250
12 / 24 V	6,5 W	Super Seal socket	300 mm	6 High Power LED	650 / 300	Flood	098 256 255

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LED Work light
Lumen 800
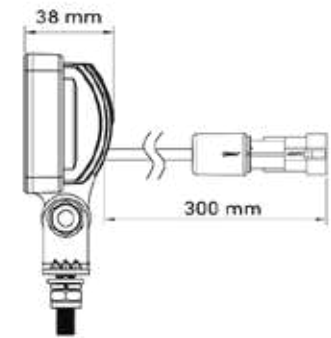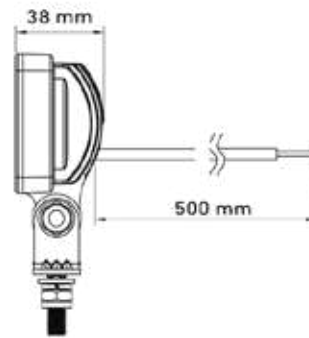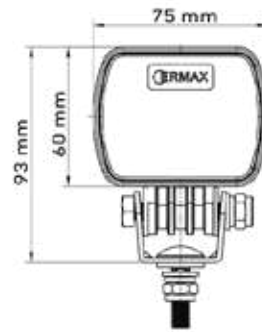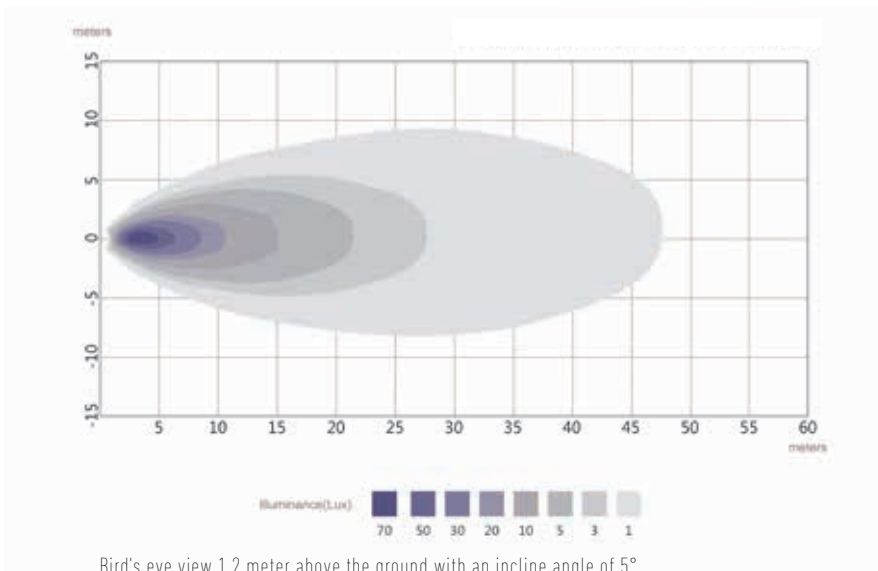
EMC

75 mm

93 mm   60 mm

Unbeatable

38 mm   38 mm

500 mm   300 mm

Illumination

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

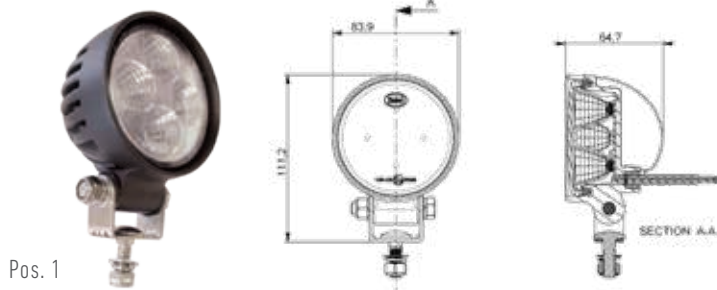| Functions							
Operating voltage	Consump-tion	Connection	Cable length	Light source	Lumen, Theoretical / effective	Light pattern	Article no.
12 / 24 V	8 W	Open end	500 mm	6 High Power LED	800 / 600	Flood	098 174 250
12 / 24 V	8 W	Super Seal socket	300 mm	6 High Power LED	800 / 600	Flood	098 174 255

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LED Work lights
Lumen 1.600
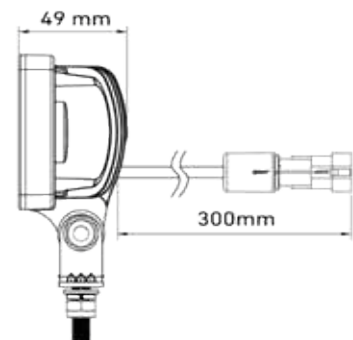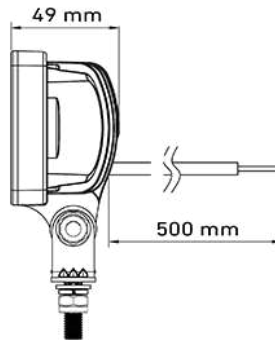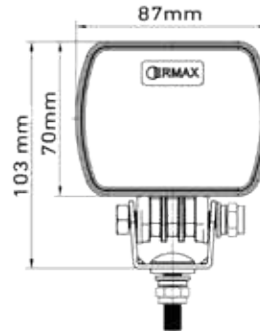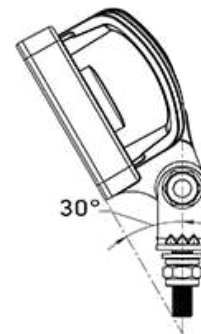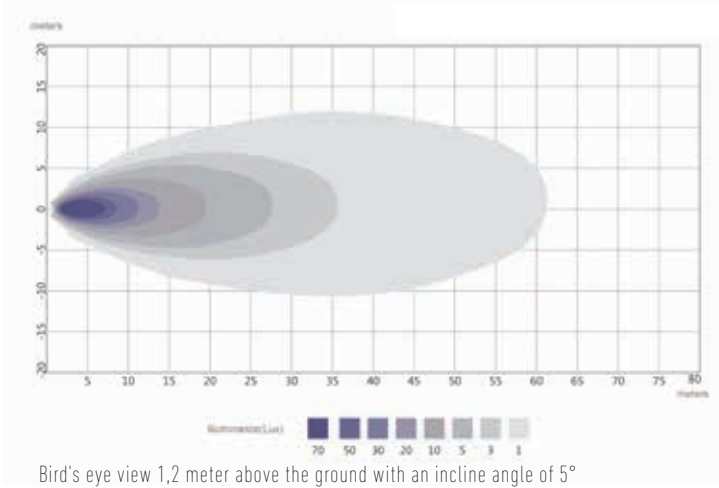
EMC

Unbeatable

87mm

103 mm

70mm

49 mm

500 mm

49 mm

300mm

Illumination

meters

Illumination(lux)
70 50 30 20 10 5 3 1

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

30°

Approved as reverse light with 30° tilt

when vertical mounted

Function							
Operating voltage	Con-sumption	Connection	Cable length	Light source	Lumen, Theoretical / effective	Light pattern	Article no.
12 / 24 V	16 W	Open End	500 mm	9 High Power LED	1.600 / 1.200	Flood	098 174 260
12 / 24 V	16 W	Super Seal plug	1.000 mm	9 High Power LED	1.600 / 1.200	Flood	098 174 264
12 / 24 V	16 W	Super Seal socket	300 mm	9 High Power LED	1.600 / 1.200	Flood	098 174 265
12 / 24 V	16 W	Integrated DT (DT) socket	--	9 High Power LED	1.600 / 1.200	Flood	098 174 267
12 / 24 V	16 W	Deutsch (DT2) Socket	300 mm	9 High Power LED	1.600 / 1.200	Flood	098 174 268

LED Work lights
Lumen 2.400
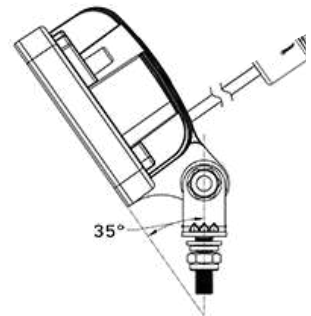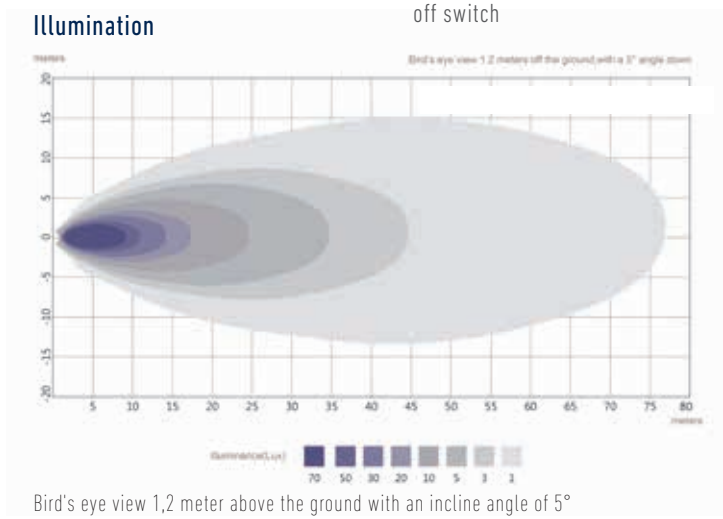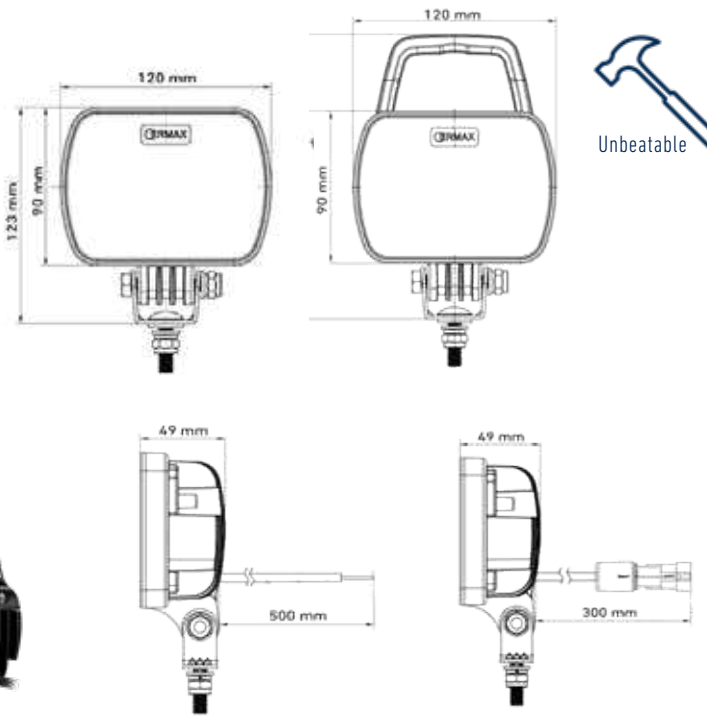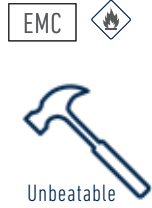
EMC

Pos. 1
Without on/off switch

Pos. 2
With bracket and of/
off switch

Unbeatable

120 mm
123 mm
90 mm

120 mm
90 mm

49 mm
500 mm

49 mm
300 mm

Illumination

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

35°

Approved as reverse light with 30° tilt

when vertical mounted

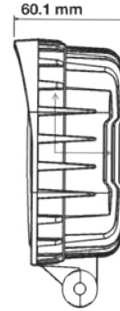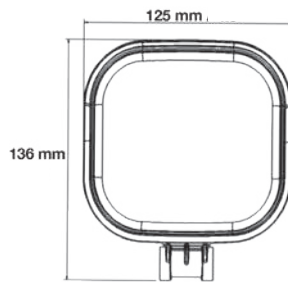| Function								
Operating voltage	Consump-tion	Connection	Cable length	Light source	Lumen, Theoretical / effective	Light pattern	Pos.	Article no.
12 / 24 V	25 W	Open end	500 mm	12 High Power LED	2.400 / 1.800	Flood	1	098 174 270
12 / 24 V	25 W	Super Seal plug	1000 mm	12 High Power LED	2.400 / 1.800	Flood	1	098 174 274
12 / 24 V	25 W	Super Seal socket	300 mm	12 High Power LED	2.400 / 1.800	Flood	1	098 174 275
12 / 24 V	25 W	Integrated DT (DT) socket	---	12 High Power LED	2.400 / 1.800	Flood	1	098 174 277
12 / 24 V	25 W	Deutsch (DT) socket	300 mm	12 High Power LED	2.400 / 1.800	Flood	1	098 174 278
12 / 24 V	25 W	Super Seal socket with handle & switch	300 mm	12 High Power LED	2.400 / 1.800	Flood	2	098 174 279

ERMAX ®

LED Work lights - Flood

EMC

Pos. 1

Illumination Flood
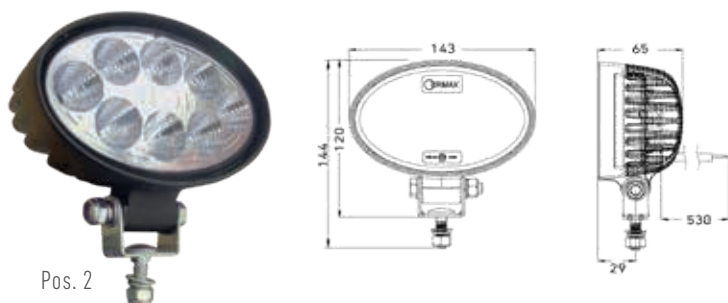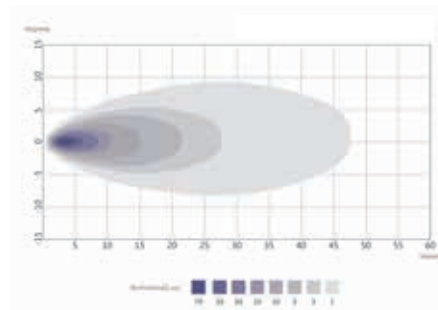
Pos. 2
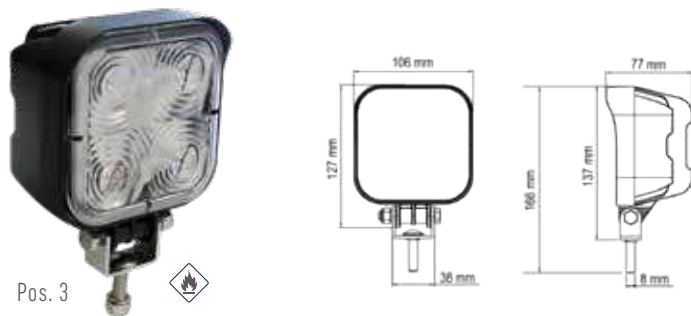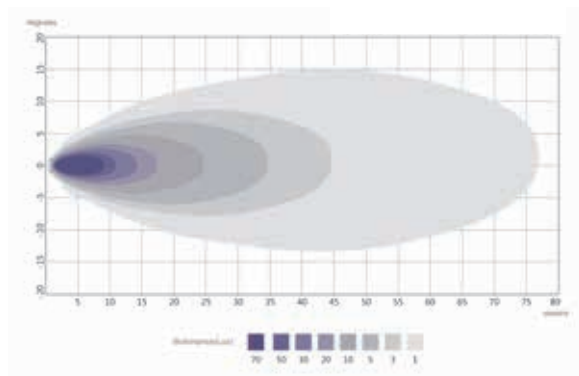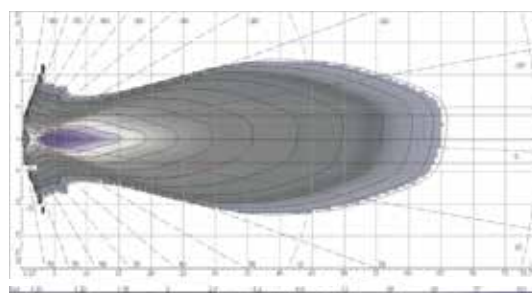
Pos. 3

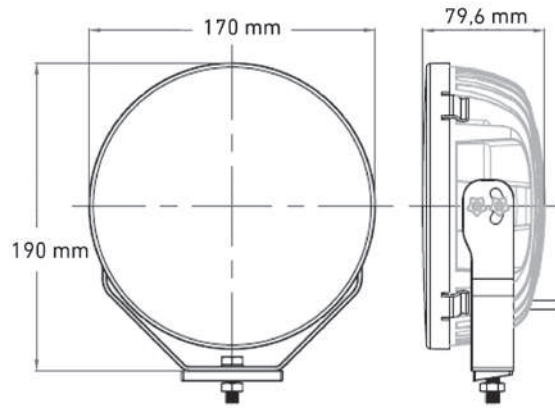| Functions								
Operating voltage	Consump-tion	Connection	Cable length	Light source	Lumen, Theoretical / effective	Light pattern	Pos.	Article no.
12 / 24 V	12 W	Open end	500 mm	4 LEDs	1.000 / 600	Flood	1	098 174 080
12 / 24 V	24 W	Open end	500 mm	4 LEDs	2.000 / 1.400	Flood	2	098 174 095
12 / 24 V	25 W	Open end	1.650 mm	4 LEDs	3.200 / 2.200	Flood	3	098 174 149

LED Work lights – Spot

EMC

125 mm

136 mm

60.1 mm

Illumination Spot:

| 0 m | 20 m | 40 m | 60 m | 80 m |
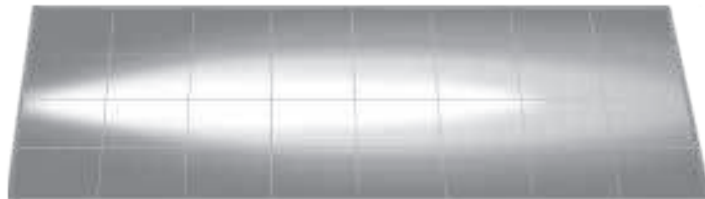
Functions								
Operating voltage	Consumption	Connection	Cable length	Light source	Lumen, Theoretical / effective	Light pattern	Pos.	Article no.
12 / 24 V	20 W	Open end	280 mm	9 LEDs	2.100 / 1.500	Spot	1	098 174 141

ERMAX®

LED Work lights
Lumen 5.600 or 9.600

EMC

Pos. 1
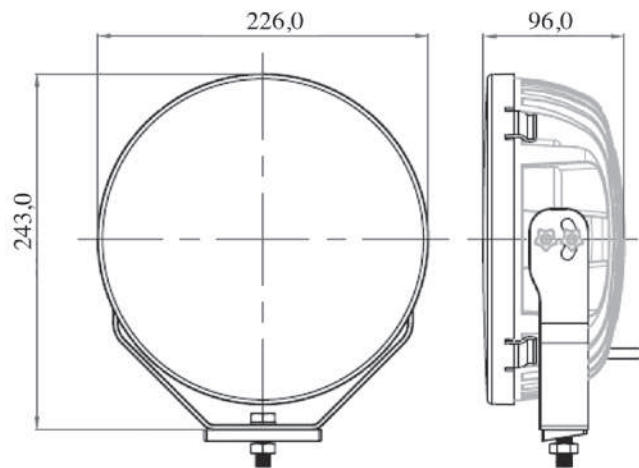
170 mm

79,6 mm

190 mm

Pos. 2

226,0

96,0

243,0

Functions								
Operating voltage	Consump-tion	Connection	Cable length	Light source	Lumen, Theoretical / effective	Light pattern	Pos.	Article no.
12 / 24 V	7 *10 W	Deutsch (DT) socket	250 mm	7 High Power LED	5.600 / 4.500	Flood	1	098 174 230
12/ 24V	12 * 10 W	Deutsch (DT) socket	250 mm	12 High Power LED	9.600 / 7.400	Flood	2	098 174 235

ERMAX ®

LED Work light Transportabel
Lumen 400

EMC

Integrated USB-charging plug

96, 5 mm

121,4 mm

103 mm
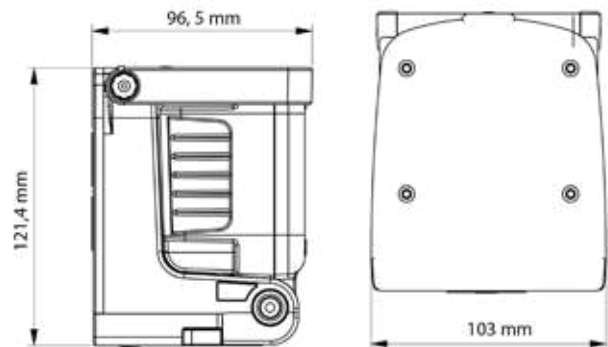
Functions							
Consump-tion	Connection	Battery consumption	Light source	Lumen, Theoretical / effective	Light pattern		Article no.
12 / 8 W	Cigarette plug/ USB charging	High brightness: 1,5 timer Low brightness : 3 timer SOS: 4 timer	4 x LED	400 / 280	Flood		098 178 150

Spare parts and Accessories for ERMAX reverse- and work lights LED

Pos. 1

Pos. 2

Pos. 3

Pos. 4

Pos. 5

Pos. 6

Pos. 7

Pos. 8

Pos. 9

Pos. 10

Spare parts and accessories		Article no.
Mounting bracket for 37 mm light fixtion - Kit set	1	098 296 174
Mounting bracket, aluminium, 31,5 x 30,5 x 17 mm. Ø 61–65 mm	2	098 295 750
Mounting bracket, aluminium, 32,5 x 31,5 x 18 mm. Ø 66–71 mm	2	098 295 752
Super Seal plug, 2 poled, yellow seal Ø 1,8–2,4 mm, blade receptacle 0,5–1,0 mm^2	3	099 110 019
Super Seal socket, 2 poled, yellow seal Ø 1,8–2,4 mm, blade receptacle 0,5–1,0 mm^2	4	099 110 018
Rubber grommet for 2 poled Super Seal plug	5	099 110 712
T-coupling for 2 poled Super Seal plug (3 sockets)	6	099 111 415
Blanking plug for 2 poled Super Seal socket – black plastic	7	099 110 028
Blanking plug for 2 poled Super Seal plug – black plastic	8	099 110 029
Deutsch plug DT2, with blade receptacle 0,75–2,0 mm^2	9	098 291 690
Deutsch socket DT2, with blade receptacle 0,75–2,0 mm^2	10	099 111 043

REVERSE GEAR ALARM

ERMAX ®

Reverse gear alarm 12/24V

Description

Made in black ABS with galvanized mounting bracket.
Should be mounted with the opening af the reverse gear alarm turning backwards or downwards
Sound: 102 dB, 2,6 kHz, 60 cyklus per minut
Bolt distance: Ø5,2 / 22 mm
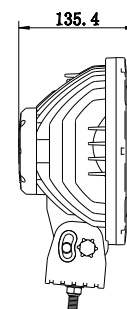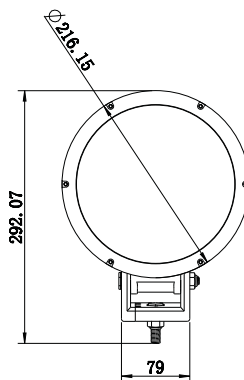Working temperature: -30 til +80 C°
IP rating: IP54

Functions							
IP Rating	Sound outlet	Frequency range	Consumption	Operating voltage	Dimension	Connection	Article no.
IP54	102 dB	2,6 kHz	10W	12/24V	Ø58,8 x 37 mm	250 mm cable with Super Seal plug	090 450 350

SPOTLIGHTS

ERMAX ®

ERMAX®

Spotlight 9" LED - 3000 Lumen

(E)   EMC

Spotlight 9" with position light

Housing: Cast aluminium
Lens: Polycarbonate

Functions

Operating voltage	IP Rating	Connection	Cable length	Dimension	Light source	Consumption	Working temperature	Article no.
12-36V	IP67	Open end	1500 mm	Ø216 x 135,4 x 292 mm	3 x CREE T6 10W 1 LED 1W	30 W	-30°C - +50°C	098 144 390

Bracket for work- and spotlights

Functions

Spare parts	Dimension	Material	Article no.
Braket for work- and spotlights	31,5 x 30,5 x 17 mm. Ø61-65 mm	Aluminium	098 295 750
Braket for work- and spotlights	32,5 x 31,5 x 18 mm. Ø66-71 mm	Aluminium	098 295 752

Light bar LED – 8.000 – 19.200 Lumen

(E) EMC

87mm

121mm

601 / 885 / 1140 / 1344 mm
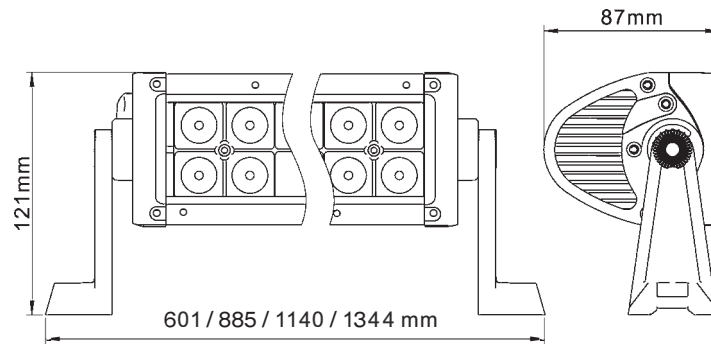
Light bar with housing in cast aluminium with transparent polycarbonate lens

The light bars are available in 4 different lengths and would be ideal as full-beam for vans and off-road vehicles

Working temperaturer: -45^0 - $+85^0$C
IP Rating: IP67

Polarity protection

Pin 1:   Positive
Pin 2:   Negative

Functions							
Operating voltage	Dimension	Lumen Theoretical / effective	Connection	Cable length	Consumption	Light pattern	Article no.
9-32V	20" LED Light bar 601 x 87 x 121mm	8.000 / 4496	Deutsch socket DT2	300 mm	120 W	Flood/spot/combo	098 144 300
9-32V	30" LED Light bar 885 x 87 x 121mm	12.000 / 6700	Deutsch socket DT2	300 mm	180 W	Flood/spot/combo	098 144 302
9-32V	40" LED Light bar 1140 x 87 x 121mm	16.000 / 9040	Deutsch socket DT2	300 mm	240 W	Flood/spot/combo	098 144 304
9-32V	50" LED Light bar 1344 x 87 x 121mm	19.200 / 10.800	Deutsch socket DT2	300 mm	288 W	Flood/spot/combo	098 144 306

WARNING LIGHTS

ERMAX®

ERMAX®

Light bar LED
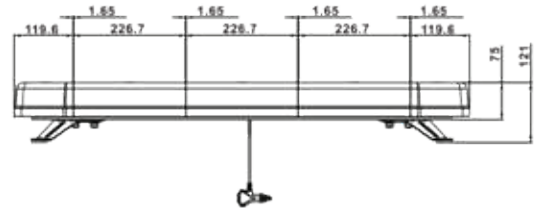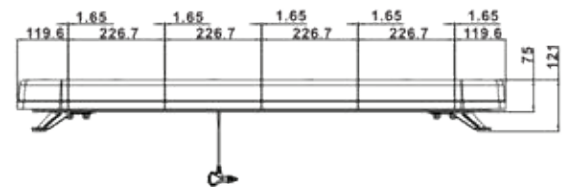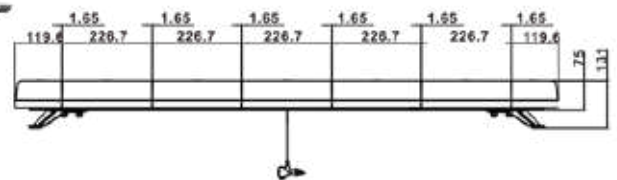
ECE R65 | EMC R10

Pos 1
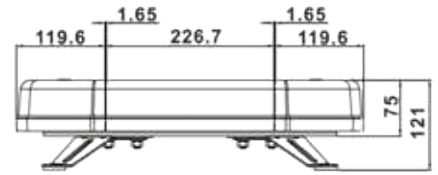
Pos 2

Pos 3

Pos 4

LED light bars for surface mounting with amber SMD LED

Housing: Impact resistant polycarbonate
Lens: Impact resistant polycarbonate, transparent lens

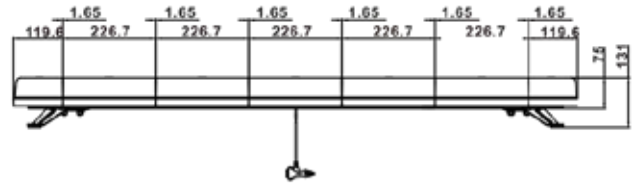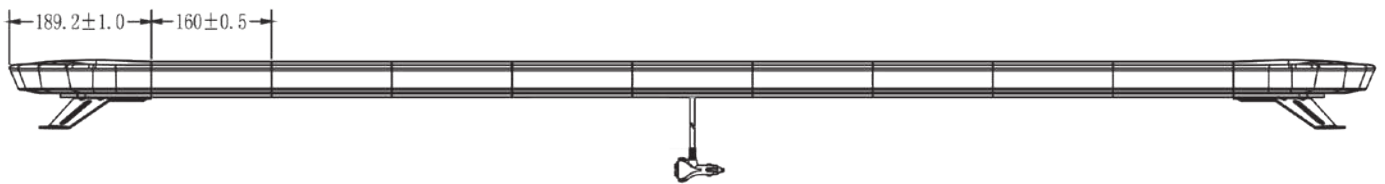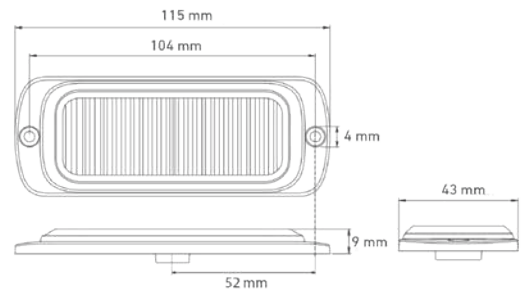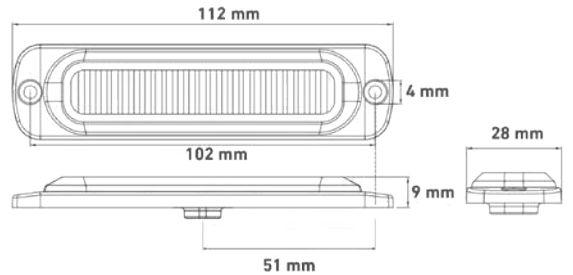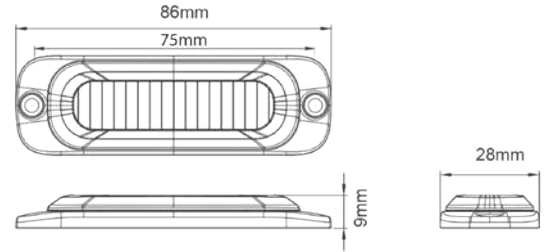Working temperature: -40°C til +65°C
IP Rating: IP67

Functions

Flash color	Operating voltage	Connection	Cable length	Consump-tion	Dimension	Light source	Flash pattern	Pos.	Article no.
	12/24V	Cigarette plug	2500 mm	52W	467 x 305 x 75 mm	68 LED	10	1	**098 285 850**
	12/24V	Cigarette plug	2500 mm	109W	931,5 x 305 x 75 mm	132 LED	10	2	**098 285 854**
	12/24V	Cigarette plug	2500 mm	127W	1148,8 x 305 x 75 mm	164 LED	10	3	**098 285 858**
	12/24V	Cigarette plug	2500 mm	140W	1378,5 x 305 x 75 mm	196 LED	10	4	**098 285 859**

ERMAX®

Light bar LED

Pos 1

Pos 2

LED light bars for surface mounting with amber SMD LED

| Housing: | Impact resistant polycarbonate |
| Lens: | Impact resistant polycarbonate, amber lens |

| Working temperature: | -40°C til +65°C |
| IP Rating: | IP67 |

Functions

Flash color	Operating voltage	Connection	Cable length	Consumption	Dimension	Light source	Flash pattern	Pos.	Article no.
	12/24V	Cigarette plug	2500 mm	140W	1378,5 x 305 x 75 mm	196 LED	10	1	098 285 808
	12/24V	Cigarette plug	5000 mm	131W	1822 x 226 x 89,5 mm	184 LED	10	2	098 285 820

ERMAX®

Warning light LED

ECE R65   EMC R10

Pos. 1

Pos. 2

86mm
75mm
28mm
9mm

Pos. 3

112 mm
4 mm
102 mm
28 mm
9 mm
51 mm

Pos. 4

115 mm
104 mm
4 mm
43 mm
9 mm
52 mm

Pos. 5

LED warning light for surface mounting. Approved for horizontal mounting
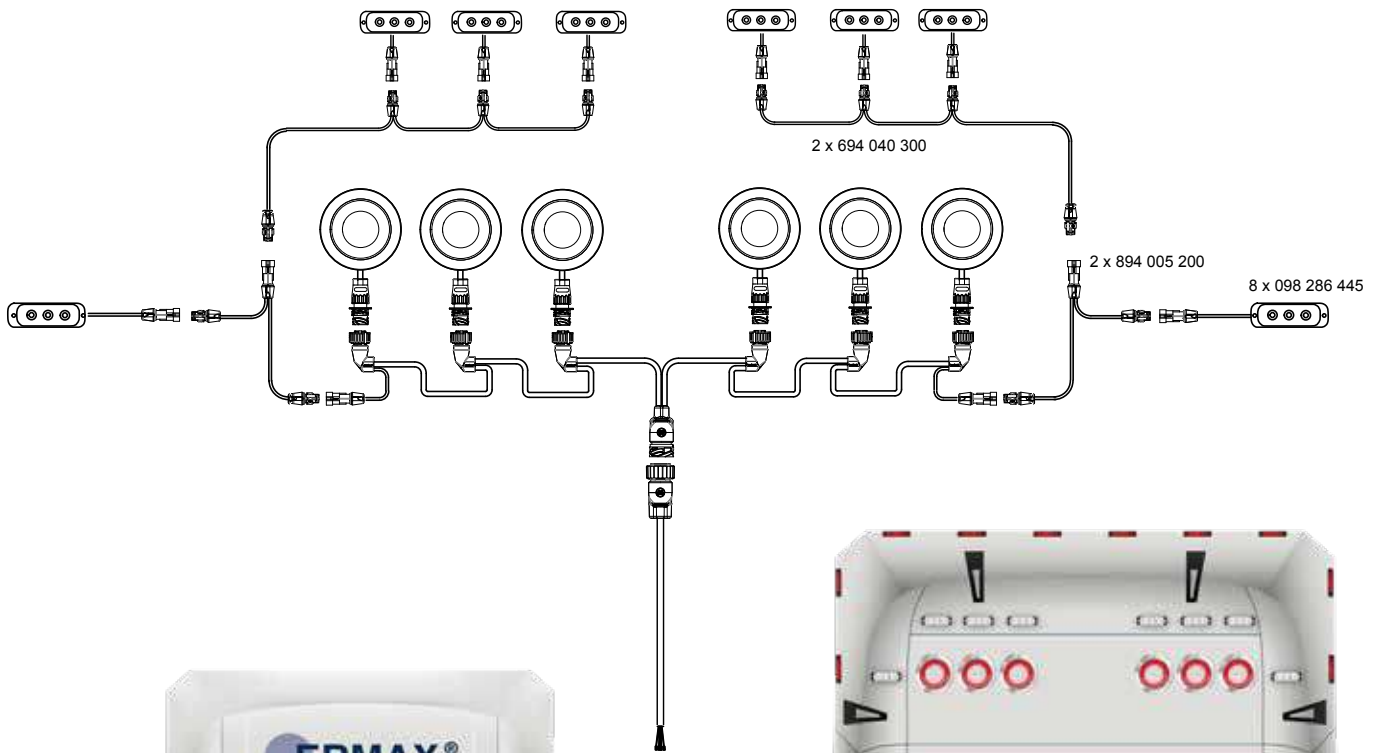
Lens: Polycarbonate, transparent lens
Housing: Aluminium
Working temperature: -30°C til +80°C

Intallation manual and programming instructions are available at www.ermaxonline.dk

Flash color	Ope-rating voltage	Approval	IP Rating	Connection	Cable length	Bolt distance	Dimension	Light source	Flash patterns	Pos	Article no.
	12/24V	XA1	IP68	Open end	2500 mm	75 mm	86 x 9 x 28 mm	3 x LED	12	1	098 286 444
	12/24V	XA1	IP69K	Super Seal socket	250 mm	77 mm	86 x 9 x 28 mm	3 x LED	12	2	098 286 445
	12/24V	XA1	IP68	Open end	2500 mm	100 mm	112 x 9 x 28 mm	6 x LED	19	3	098 286 446
	12/24V	XA2	IP68	Open end	2500 mm	104 mm	115 x 9 x 43,4 mm	12 x LED	25	4	098 286 448
	12/24V	XA2	IP69K	Super Seal socket	250 mm	104 mm	115 x 9 x 43,4 mm	12 x LED	25	5	098 286 449

Warning light LED - Quick installation with Super Seal plug connection

> Time-saving installation by using the Super Seal plug & play for extension cable / side cable chain

> Easy and flexible mounting

> Quick fault finding
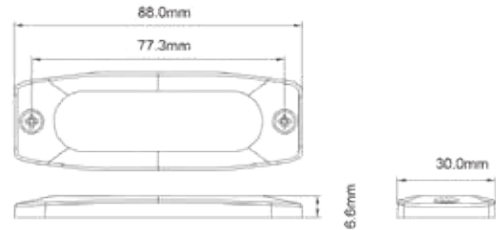
> Time-saving replacement during repair

2 x 694 040 300
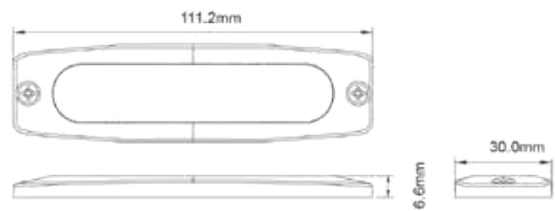
2 x 894 005 200

8 x 098 286 445

ERMAX ®
Light Made Heavy Duty

ERMAX ®

Warning light LED

EMC R10

Pos 1

88.0mm
77.3mm
30.0mm
6.6mm

Pos 2

111.2mm
30.0mm
6.6mm

Pos 3
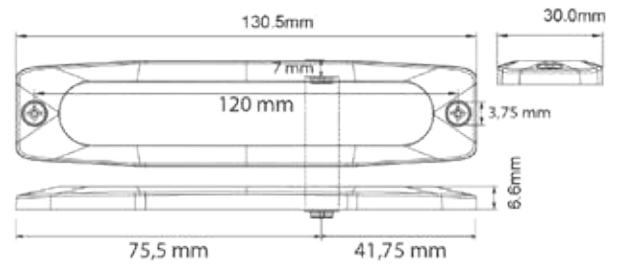
130.5mm
7 mm
120 mm
30.0mm
3.75 mm
6.6mm
75,5 mm
41,75 mm

LED warning light for surface mounting

Lens:	Polycarbonate, transparent lens
Housing:	Polycarbonate
Working temperature:	-30°C til +65°C
IP Rating:	IP68

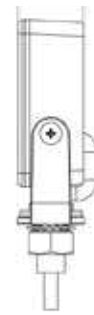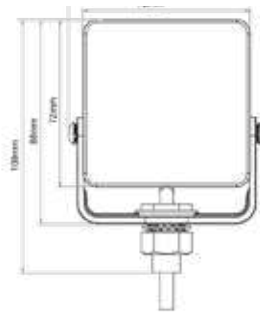Intallation manual and programming instructions are available at www.ermaxonline.dk

Functions									
Flash color	Operating voltage	Connection	Cable length	Bolt distance	Dimension	Light source	Flash patterns	Pos	Article no.
	12/24V	Open end	200 mm	77,3 mm	88 x 6,6 x 30 mm	3 x LED	12	1	098 286 410
	12/24V	Open end	200 mm	102 mm	111 x 6,6 x 30 mm	4 x LED	23	2	098 286 412
	12/24V	Open end	200 mm	122 mm	131 x 6,6 x 30 mm	6 x LED	23	3	098 286 414
	12/24V	Super Seal Socket	200 mm	122 mm	131 x 6,6 x 30 mm	6 x LED	23	3	098 286 416

Warning light LED

ECE R65   EMC R10

LED warning light - mounted with mounting bracket
U-shaped mounting bracket
Polarity protection

Lens:	Impact resistant clear polycarbonate
Housing:	Aluminium
Working temperaturer:	-30°C bis +80°C
IP Rating:	IP69K

Intallation manual and programming instructions are available at www.ermaxonline.dk

Functions								
Flash color	Operating voltage	Connection	Cable length	Bolt distance	Dimension	Light source	Flash patterns	Article no.
	10-30V	Open end	120 mm	Ø13 mm	72 x 72 x 28 mm	4 x LED	5	098 286 290

WARNING BEACONS

ERMAX®

ERMAX ®

Warning light LED 12/24V
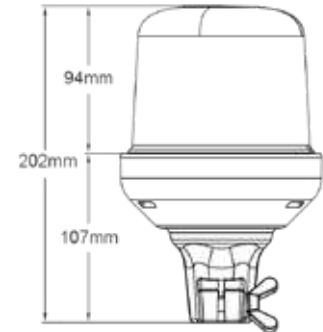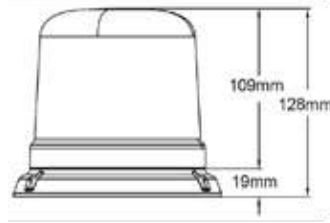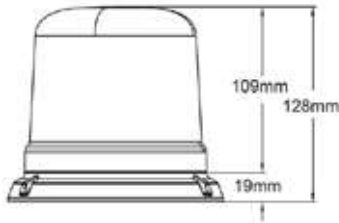
ECE R65 | EMC R10

Pos 1

Pos 2

Pos 3

Connection :

Black wire : ground (-)

Red wire : +

Yellow wire : Flash patterns

Connected to + in 1 sek = change of flash patterns

Connected to + in + >3 sek = reset

Connection:

DIN 4165

Selection/change of flash patterns via red button under the glass dome

Connection:

DIN72591

Selection/change of flash patterns via red button under the glass dome

Lens: Polycarbonate
Housing: Polycarbonate
Working temperature: -30° C til +65° C
Color :   Amber
IP Rating: IP66

Intallation manual and programming instructions are available at www.ermaxonline.dk

Functions							
Mounting	Connection	Dimension	Consumption (Depending of flash pattern)	Flash pattern	Light source	Pos	Article no.
Firm surface mounting	400 mm cable Open end	Ø142 x 128 mm	21-42 W	11	10 x 3W	1	098 287 938
Magnetic base	3000 mm coil cable with cigarette plug DIN 4165	Ø142 x 128 mm	21-42 W	11	10 x 3W	2	098 287 940
For mounting bushes	Integrated socket, DIN 4165	Ø130 x 202 mm	21-42 W	11	10 x 3W	3	098 287 936

ERMAX ®

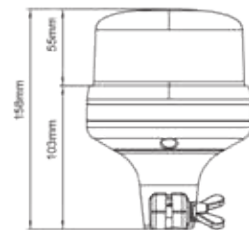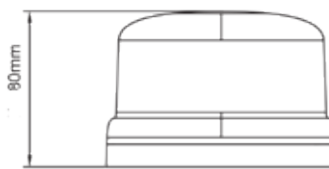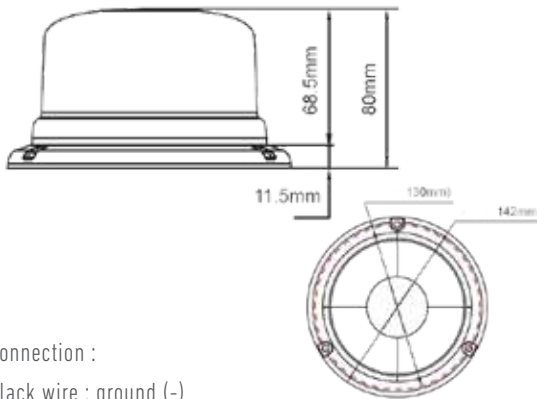## Warning light LED 12/24V

ECE R65   EMC R10

Pos 1

Pos 2

Pos 3

Connection :

Black wire : ground (-)

Red wire : +

Yellow wire : Flash patterns

Connected to + in 1 sek = change of flash patterns

Connected to + in + >3 sek = reset

Connection:
DIN 4165
Selection/change of flash patterns via red button under the glass dome

Connection:
DIN72591
Selection/change of flash patterns via red button under the glass dome

Lens: Polycarbonate
Housing: Polycarbonate
Working temperaturer: -30°C til +65°C
Color :   Amber
IP Rating: IP66

Intallation manual and programming instructions are available at www.ermaxonline.dk

Functions							
Montering	Connection	Dimension	Consumption (Depending of flash pattern)	Flash pattern	Light source	Pos	Article no.
Firm surface mounting	400 mm cable Open end	Ø142 x 80 mm	15-30 W	11	8 x 3 W	1	098 287 944
Magnetic base	3000 mm coil cable with cigarette plug DIN 4165	Ø142 x 80 mm	15-30 W	11	8 x 3 W	2	098 287 946
For mounting bushes	Integrated socket, DIN 4165	Ø130 x 158 mm	15-30 W	11	8 x 3 W	3	098 287 942

ERMAX®

Warning light LED 12/24V
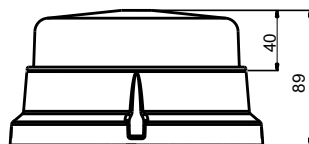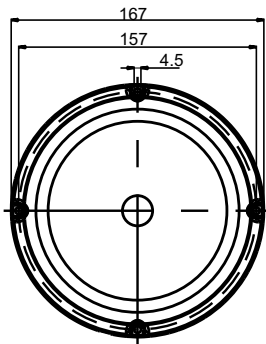
ECE R65   EMC R10

Ideal for mounting on the truck

> Surface mounted warning light with 10 flash patterns, - incl. 2 rotating flash patterns
> High visibility due to the large diameter of the warning lights
> Low model, reduces the risk of damages from surrounding objects
> Impact resistant polycarbonate

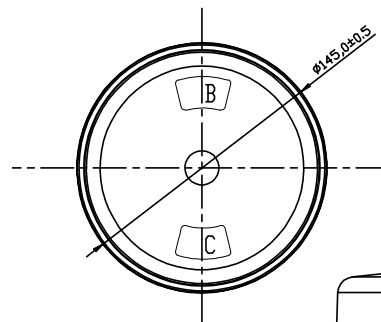Pos 1

Pos 2

Connection:

Red = +
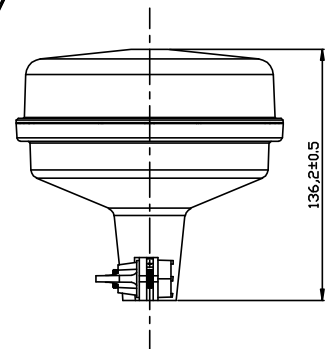
Blue = -

Flash patterns: Green to + (1sekund)

Connection:

DIN72591

Lens: Polycarbonate, transparent lens
Housing: Polycarbonate
Working temperature: -40° C til +65° C
Color :   Amber
IP Rating: IP67

Intallation manual and programming instructions are available at www.ermaxonline.dk

Functions

Color	Mounting	Connection	Dimension	Consumption (Depending of flash pattern)	Flash patterns	Light source	Pos	Article no.
	Firm surface mounting	400 mm cable Open end	Ø167 x 89 mm	18-36W	10 - 2 with rotating flash	8 x 3 W	1	098 287 330
	For mounting bushes	Integrated socket, DIN 4165	Ø145 x 136,2 mm	36W	Single 150 flashes per minut	12 x 3 W	2	098 287 340

ERMAX®

Warning light LED 12/24V

ECE R65   EMC R10

Lens: Polycarbonate, transparent lens
Housing: Polycarbonate
Working temperature: -30° C til +65° C
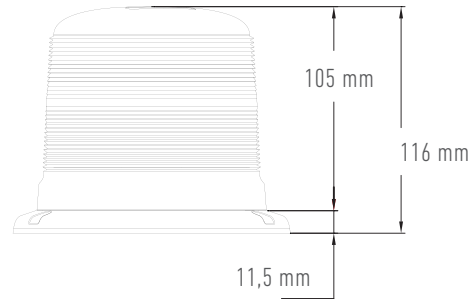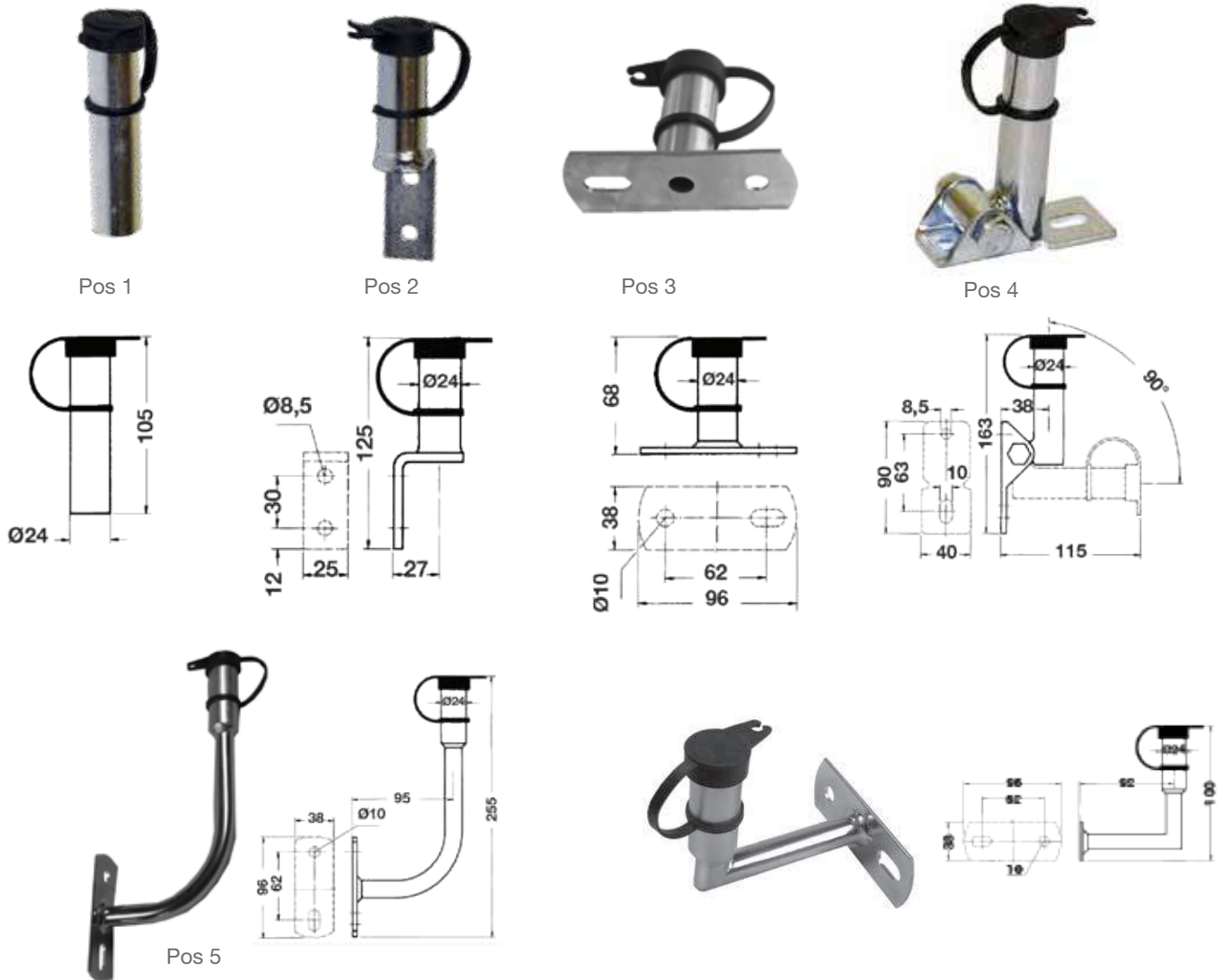Color :   Amber
IP Rating: IPX6

105 mm
116 mm
11,5 mm

Functions								
Color	Mounting	Connection	Dimension	Consumption	Flash patterns	Light source	Article no.
	Firm surface mounting	350 mm cable Open end	Ø142 x 115,8 mm	40 W	11	30 x 3W	098 287 950

ERMAX®

Mounting equipment for warning beacons

Pos 1

Pos 2

Pos 3

Pos 4

Pos 5

Galvanized steel pipes

Functions								
DIN Norm	Suitable for	Shape	Mounting	Dimension	Connection	Protection cap	Pos	Article no.
DIN 72 591	Universal	Straight	-	Ø24 x 105 mm	2 poled socket	✔	1	098 295 561
DIN 72 591	Universal	Straight	Angled mounting bracket	Ø24 x 125 mm	2 poled-socket	✔	2	098 295 562
DIN 72 591	MF 500 Serie	Straight	Flush mounting	Ø125 x 128 mm	2 poled socket	✔	3	098 295 564
DIN 72 591	Universal	Straight	Mounting bracket adjustable	Ø24 x 115	2 poled socket	✔	4	098 295 567
DIN 72 591	Valmet	90° angled	Flush mounting	Ø24 x 255 mm	2 poled socket	✔	5	098 295 565
DIN 72 591	Volvo	Straight	Horizontal Flush mounting	Ø24 x100 mm	2 poled socket	✔	6	098 295 583

ERMAX®

Mounting equipment for warning beacons

Pos 1

Pos 2

Pos 3

Pos 4
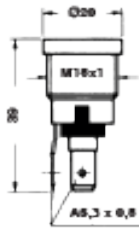
Spare parts

	Pos	Article no.
2 poled socket - DIN 72 591	1	098 295 650
2 poled socket - DIN 72 591	2	098 295 651
Protection cap	3	098 295 560
Protection cap	4	098 295 599

CAMERA SYSTEMS

ERMAX ®

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Digital wireless camera system

Ⓔ

Pos 1

Pos 2

Pos 3

Delivered with 1 camera

Functions			
	Connection up to 2 cameras	Connection up to 4 cameras	Article no.
Monitor 7" Dual-view monitor	✓		959 780 160
Monitor 7" Quad-view monitor		✓	959 780 164

Technical specificationes:

IP Rating (Camera)	IP69K
TV System	PAL / NTSC
TV lines	500
Sensors	Night / Day
Night vision distance	(12 infrared LED): approx. 10 m
Recording function	128G TF kort
Transmitting distance	120 m (barrier free)
Activating screen	Reverse gear
Operating frequency	2,4 GHz (2412-2467 MHz)
Dimension monitor (b x h x d)	182 x 122 x 26 mm
Resolution	800 x 3 (RGB) x 480
Consumption	Max. 6 watt
Encryption	MPEG4
Working temperature	-20°C - +70°C

Accessoriesr:	Pos.	
Extra camera, 10-32V, Max 250W, Resistant to vibration: 10G -Dimension: 12,5 x 10,9 mm	1	959 780 166
Mounting bracket for monitor with suction cup	2	959 780 170
Extra antenna for 959 780 160 / 959 780 164 / 959 780 166	3	959 780 168

Complete camera system with 7" TFT LCD color monitor

Ⓔ

Audio in both camera and monitor. Control box built into the monitor.
Electronic distance marks. Backlit buttons and "on screen" menu.

Functions	
	Article no.
Complete camera system – Delivered with 1 camera. 1 remote controle and cable 20 meter	959 780 003

Technical specificationes:

IP Rating	IP30
7" TFT LCD color monitor	✓
Control box	Built into the monitor
Baggrundsbelyste knapper	✓
"On Screen" display	✓
Electrical distance-mark	✓
Input	12/24 Vdc
Trigger input	3 pcs.
TV System	PAL / NTSC
Connector	3 VBV Video Inputs
Dimension monitor (b x h x d)	195 x 117 x 25 mm
Resolution	800 x RGB x 480
Consumption	18W / 1,5A
Vibration rating	4G
Shock rating	100G
Working temperature	–30 - +85°C
Approvals	CE (EN 61000-6-2: 2007 / EN 61000-6-3: 2007), ' E' Mark - (ECE Regulation 10 Rev 04), FCC - (47 CFR Part 15 Subpart B)

Monitor 7" for 3 cameras

Ⓔ

Functions	
	Article no.
Monitor 7" for 3 cameras	959 780 203

Technical specificationes:

IP Rating	IP30
"On Screen" display	✓
Input	12/24 Vdc
Trigger input	3
TV System	PAL / NTSC
Connector	3 VBV Video Inputs
Dimension (w x h x d)	195 x 117 x 25 mm
Resolution	800 x RGB x 480
Consumption	18W / 1,5A
Vibration rating	4G
Mechanical shock	100G
Working temperature	-30 - +85°C
Approvals	CE (EN 61000-6-2: 2007 / EN 61000-6-3: 2007) 'E' Mark - (ECE Regulation 10 Rev 04) FCC - (47 CFR Part 15 Subpart B)

ERMAX ®

Camera without audio – 100% water proof

(E)

Delivered with 800 mm cable

Functions								
IP Rating	Viewing angle	View	TV lines	TV System	Lens	Vibration rating	Working temperature	Article no.
IP69K	150°	Normal and mirror	420	PAL	1/3" Sharp CCD	10G	-20 – +70°C	**959 780 150**

Camera without audio – 100% water proof

(E)

Pos. 1 | Pos. 2

Delivered with 800 mm cable
With improved optics

Functions								
IP Rating	Viewing angle	View	TV lines	TV System	Lens	Working temperature	Pos.	Article no.
IP69K	120°	Normal and mirror	420	PAL	1/3" Sharp CCD	-20 til +60°C	1	**959 780 115**
IP69K	120°	Normal and mirror	420	PAL	1/3" Sharp CCD	-20 til +60°C	2	**959 780 110**

ERMAX ®

License plate camera – 100% water proof

(E)

Delivered with 800 mm cable

Functions								
IP Rating	Viewing angle	View	TV lines	TV System	Lens	Vibration rating	Working temperature	Article no.
IP69K	150°	Normal and mirror	420	PAL	1/3" Sharp CCD	10G	-20 til +70°C	959 780 140

INTERIOR LIGHTING

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Interior lights LED - Surface mounting and built-in

EMC

Surface mounting
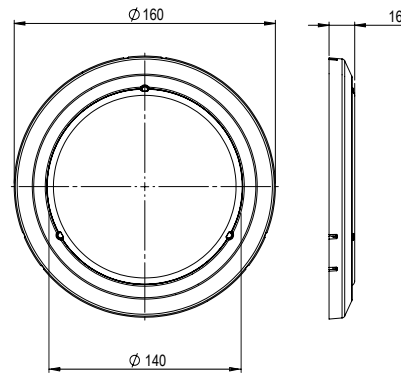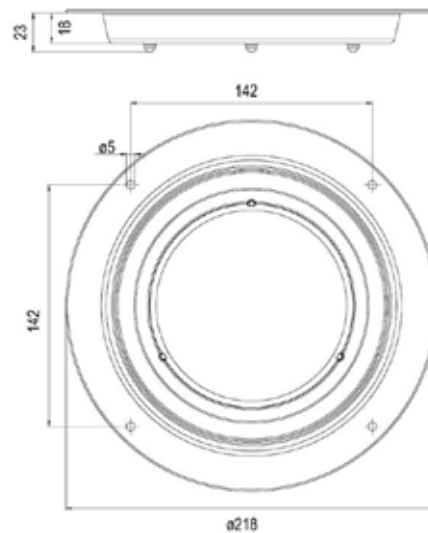
Built-in

Lens: Impact resistant polycarbonate
Housing: Impact resistant polycarbonate

Bolt distance with surface mounting: 3 pcs. Ø3,8 mm - Ø138 mm

Bolt distance with built-in: 4 pcs. Ø5 mm - Ø201 mm
Depth: 18 mm

IP-Rating: IP67

Functions							
Light source	Lumen	Dimension	Operating voltage	Surface mounting	Built-in	Connection	Article no.
LED	294	Ø160 x 15,7 mm	12/24V	✓		1.500 mm cable with click-in	098 274 070
LED	294	Ø160 x 15,7 mm	12/24 V	✓		2.500 mm cable with Open end	098 274 071
LED	294	Ø218 x 20 mm	12/24V		✓	1.500 mm cable with click-in	098 274 072
LED	294	Ø218 x 20 mm	12/24 V		✓	2.500 mm cable with Open end	098 274 073

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

Interior lights LED - Surface mounting and built-in

EMC
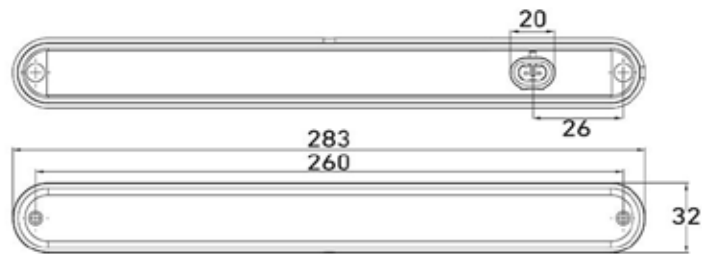
Lens: PMMA
Housing/holder: Polypropylen (PP)

Dimension: 283 x 32
Bolt distance: 260 mm
IP-Rating: IP67

| Functions							
Light souce	Lumen	Dimension	Operating voltage	Surface mounting	Built-in	Connection	Article no.
LED	60	283 x 24 x 32 mm	24V	✓	✓	500 mm Cable with Super Seal socket	098 274 725

REFLEX REFLECTOR

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Reflex reflector with and without self-adhesive back

Ⓔ

Pos 1

Pos 2

Pos 3
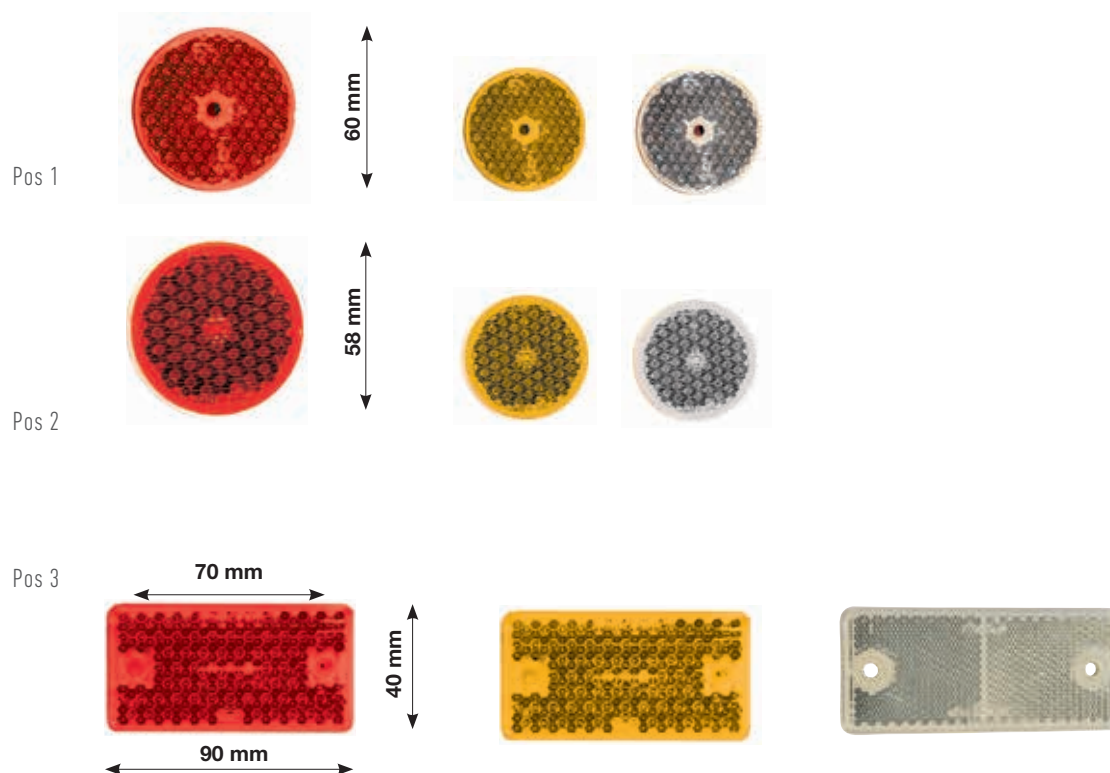
| Functions							
Color		Dimension	Hole / screw	Self-adhesive	Packing unit	Pos	Article no.
Red		Ø60 mm	Ø 6,3 mm		10 pcs	1	098 261 060
Yellow		Ø60 mm	Ø 6,3 mm		10 pcs	1	098 261 062
White		Ø 60 mm	Ø 6,3 mm		10 pcs	1	098 261 064
Red		Ø58 mm		✓	10 pcs	2	098 262 061
Yellow		Ø58 mm		✓	10 pcs	2	098 262 063
White		Ø58 mm		✓	10 pc	2	098 262 065
Red		90 x 40 mm	Ø 4,3 mm/2 x 4 mm M5		10 pcs	3	098 264 120
Yellow		90 x 40 mm	Ø 4,3 mm/2 x 4 mm M5		10 pcs	3	098 264 122
White		90 x 40 mm	Ø 4,3 mm/2 x 4 mm M5		10 pcs	3	098 264 124
Red		90 x 40 mm	Ø 4,3 mm/2 x 4 mm M5	✓	10 pcs	3	098 265 130
Yellow		90 x 40 mm	Ø 4,3 mm/2 x 4 mm M5	✓	10 pcs	3	098 265 132
White		90 x 40 mm	Ø 4,3 mm/2 x 4 mm M5	✓	10 pcs	3	098 265 134

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Reflex reflector

E

Pos 1   90 / 105 mm   40 / 48 mm

Pos 2

Pos 3

Functions							
Color		Dimension	Hole / screw	Self-adhesive	Packing unit	Pos	Article no.
Red		90 x 40 mm		✓	10 pcs	1	098 265 140
Yellow		90 x 40 mm		✓	10 pcs	2	098 265 142
White		90 x 40 mm		✓	10 pcs	3	098 265 144

Red		105 x 48 mm		✓	10 pcs	1	098 265 150
Yellow		105 x 48 mm		✓	10 pcs	2	098 265 152

Contour marking

E   ECE 104

Functions				
Color		Self-adhesive contour marking, for rigid sides	Packing unit	Article no.
Red		50 m x 55 mm	50 meter pr. roll	098 269 200
White		50 m x 55 mm	50 meter pr. roll	098 269 204

Reflex marker board truck

Pos 1

Pos 2

Pos 3

Functions				
Aluminium plate	Self-adhesive foil	Packing unit	Pos	Article no.
1130 x 132 mm		1 pcs	1	098 269 401
	1130 x 132 mm	1 pcs	1	098 269 402
565 x 132 mm		2 pcs	2	098 269 403
	565 x 132 mm	2 pcs	2	098 269 404
285 x 132 mm		4 pcs	3	098 269 405
	285 x 132 mm	4 pcs	3	098 269 406

Contrainer-reflex marking set
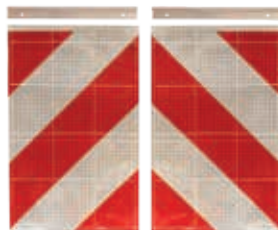
Ⓔ

Functions			
Self-adhesive foil	Self-adhesive foil	Packing unit	Article no.
700 x 140 mm - 8	140 x 140 mm - 8	1	098 269 160

Lift flag with aluminium holder

Ⓔ

To be used for tail board (side board) according to StVZO § 53b Abs
Incl. 2 pcs. aluminium holders

Functions				
Color	Dimension	Packing unit	Placement	Article no.
Red / White	400 x 250 - 2	2 pcs	Set with left and right indicator	098 269 175

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Warning signs

Pos 1

Pos 2

Pos 3

Pos 4

Pos 5

Pos 6

Functions								
DIN Norm		Dimension (L x B)	Material	Foldable	Packing unit	Placement	Pos	Article no.
DIN 11030	One-sided	423 x 423 mm	Aluminium plate	---	1	Left / Right	1	**098 269 122**
DIN 11030	One-sided	423 x 423 mm	Zinc plated steel plate	Vertical	1	Left	2	**098 269 127**
DIN 11030	One-sided	423 x 423 mm	Zinc plated steel plate	Vertical	1	Right	3	**098 269 128**
DIN 11030	Double-sided	423 x 423 mm	Zinc plated steel plate	Vertical	1	Left / Right	4	**098 269 125**
DIN 30710	One-sided	423 x 423 mm	Aluminium plate	---	1	Left / Right	1	**098 269 123**
DIN 30710	One-sided	423 x 423 mm	Aluminium plate	---	1	Right	5	**098 269 124**
DIN 30710	One-sided	423 x 423 mm	Aluminium plate	---	1	Left	6	**098 269 126**

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Reflex reflector band red/white 5 cm x 20 m

Functions			
Placement	Dimension	Self-adhesive	Article no.
Right	20 m x 5 cm	✓	098 269 205
Left	20 m x 5 cm	✓	098 269 206
Right	20 m x 10 cm	✓	098 269 207
Left	20 m x 10 cm	✓	098 269 208

Warning signs – Triangle reflex reflector

Ⓔ

130 mm

390 mm

320mm
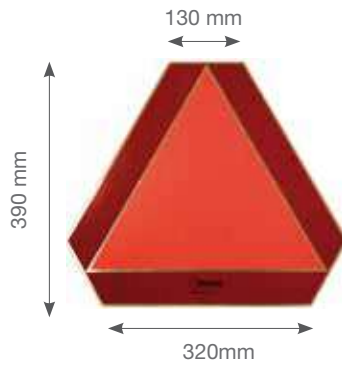
Pos. 1

Pos. 2

Pos. 3

Pos 2 - Packed in a plastic bag

Functions								
Triangle		Dimension (L x B)	Material	Packing unit	Mounting	Bolt distance	Pos	Article no.
SMV	One-sided	390 x 390 mm	Foil	1	Self-adhesive	---	1	098 269 951
SMV	One-sided	390 x 390 mm	Aluminium plate	1	Screw	153 mm	1	098 269 952
SMV	One-sided	390 x 390 mm	Red impact resistant plastic base sheet	1	Screw	153 mm	1	098 269 960

Spare parts		
Mounting bracket for tringle reflex reflector, with 2 mounting holes 6,5 mm, Length 170 mm - Packing unit: 5 pcs.	2	098 269 956
Mounting bracket for tringle reflex reflector, with 2 mounting holes 6,5 mm, Length 62 mm - Packing unit: 5 pcs.	3	098 269 957

WIDE LOAD MARKER SIGNS

ERMAX ®

WIDE LOAD MARKER SIGN – Complete kit-set

Standardise Security

Ermax 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 Ermax 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 el-galvanized holder and a square pipe for fastening at the vehicle. The wide load marker sign is mounted with 3 flexible outer end marker lights 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. Ermax 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.

ISO 1724

Wide load marker signs – Proff Series
– with 7 poled ISO 1724 connection or 3 poled connection
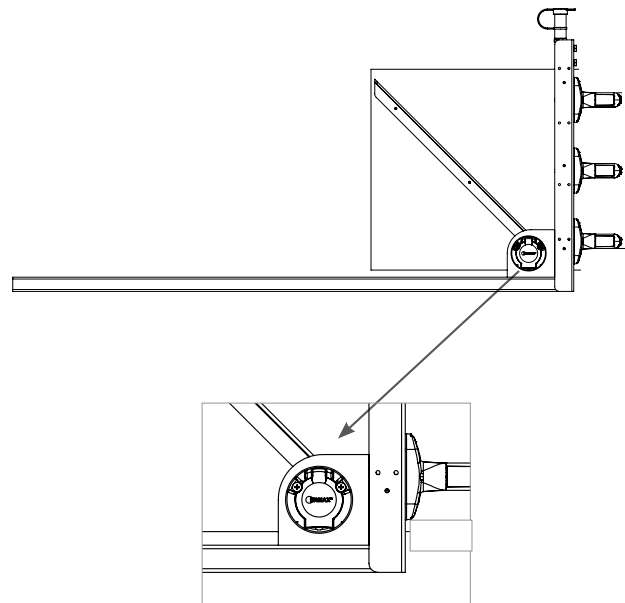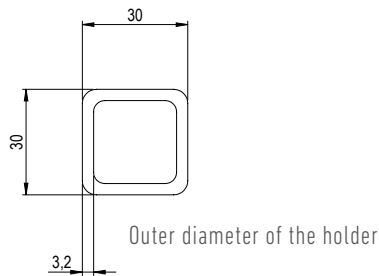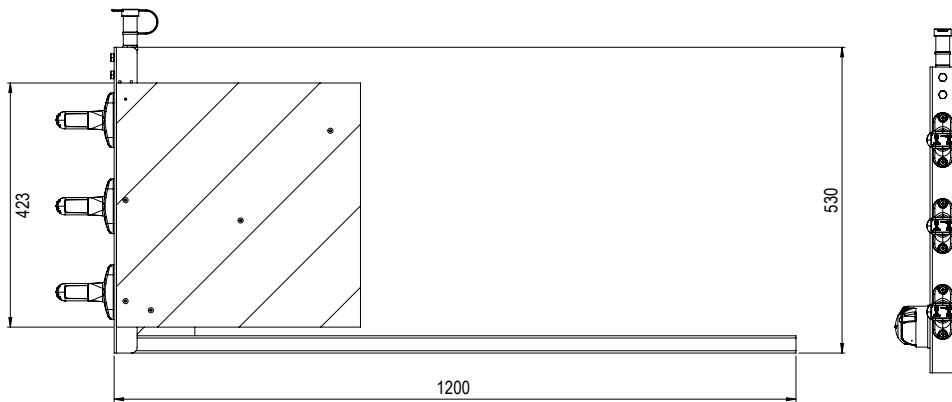
30

30

3,2

Outer diameter of the holder

423

530

1200

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 thorugh 7 poled ISO1724 socket or 3 poled socket

Functions

Placement	Dimension (L x B)	Material (frame)	Connection	Article no.	Connection	Article no.
Rear – Left	1.200 x 530 mm	Electro galvanized	7 poled socket ISO 1724	098 269 800	3 poled socket	098 269 801
Rear – Right	1.200 x 530 mm	Electro galvanized	7 poled socket ISO 1724	098 269 805	3 poled socket	098 269 806
Front – Left	1.200 x 530 mm	Electro galvanized	7 poled socket ISO 1724	098 269 810	3 poled socket	098 269 811
Front – Right	1.200 x 530 mm	Electro galvanized	7 poled socket ISO 1724	098 269 815	3 poled socket	098 269 816

Complete kit of 4 wide load marker signs				098 269 820		098 269 821

## Wide load marker signs - ADR-Series - with 2 poled Super Seal connection
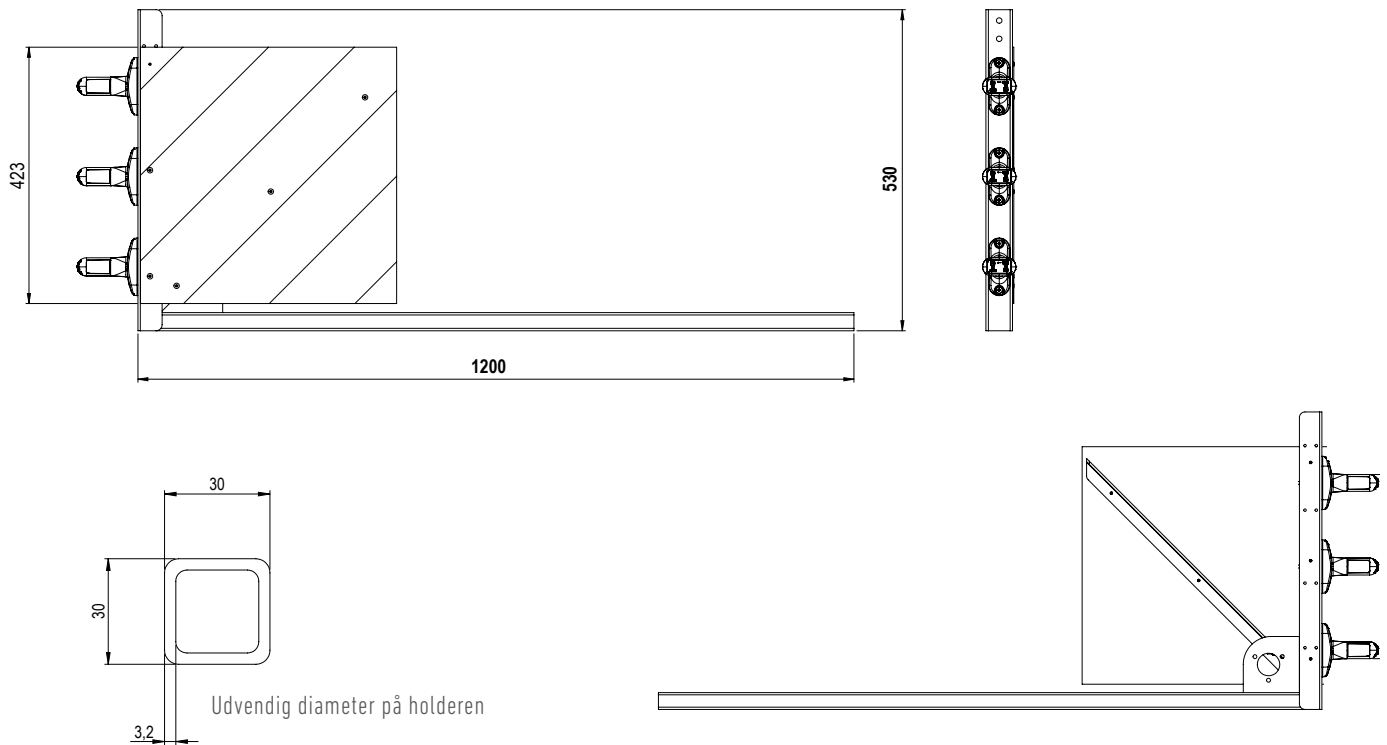
Wide load marker sign mounted with

- Warning sign board 423 x 423 mm

- 3 pcs. outer end marker lights

- Connection with 2 poled Super Seal socket

Udvendig diameter på holderen

Functions				
Placement	Dimension (L x B)	Material (frame)	Connection	Article no.
Rear - Left	1.200 x 530 mm	Electro galvanized	2 poled Super Seal socket	098 269 830
Rear - Right	1.200 x 530 mm	Electro galvanized	2 poled Super Seal socket	098 269 835
Front - Left	1.200 x 530 mm	Electro galvanized	2 poled Super Seal socket	098 269 840
Front - Right	1.200 x 530 mm	Electro galvanized	2 poled Super Seal socket	098 269 845

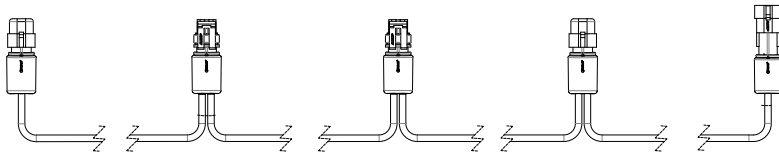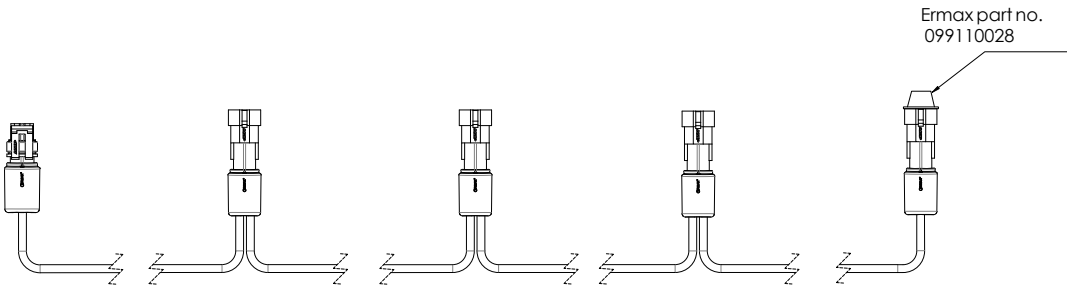|	
Compelte set of 4 wide load marker signs consisting of 098 269 830 + 835 + 840 + 845	098 269 850

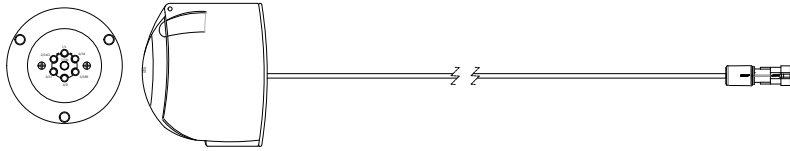## Wide load marker signs- Spare parts (S) & Accessories (A)

Pos. 1

Pos. 2

Pos. 3

Ermax part no.
099110028

Pos. 9

Pos. 4

Pos. 5

Pos. 6

Pos. 7

Pos. 8
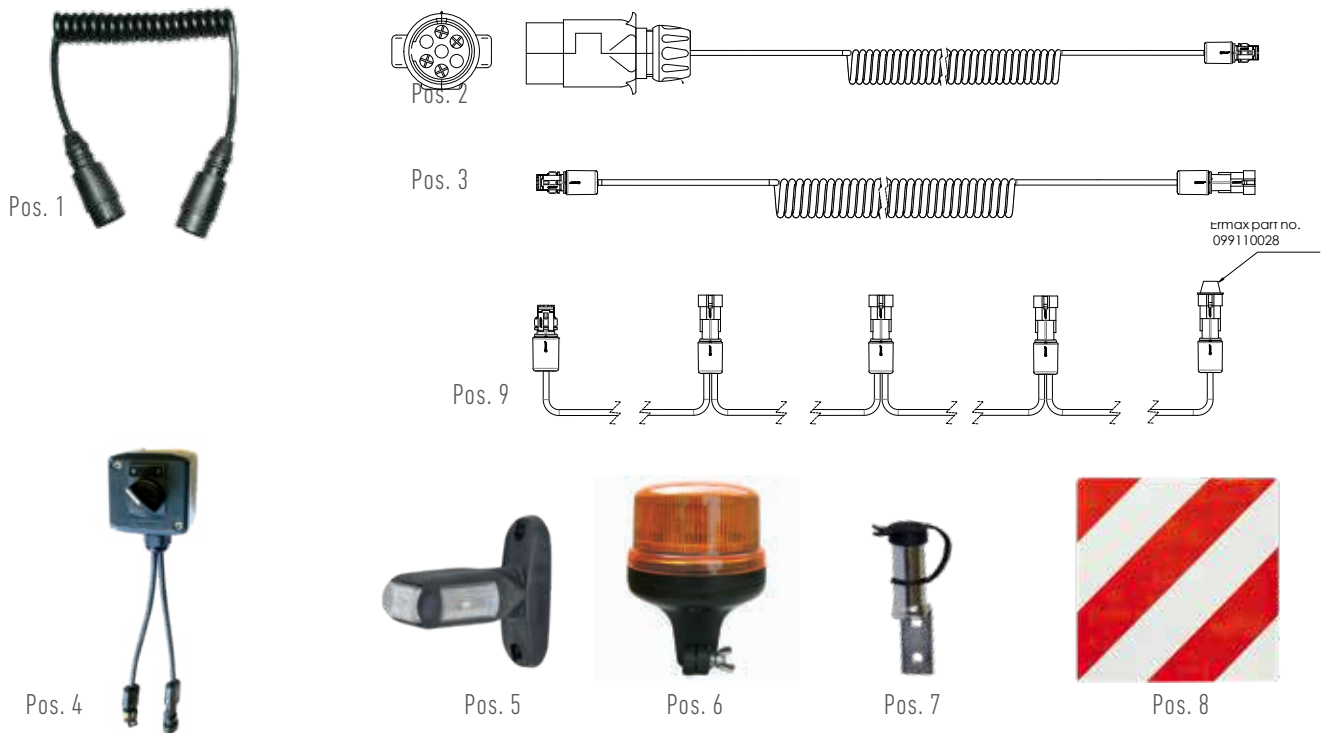
Proff-Series	S /A	Pos.	
Coil cable 2x7 poled 1.500 mm – with ISO 1724 plug > ISO 1724 plug	A	1	090 180 165
Coil cable 3 core 1.500 mm – with 7 poled ISO 1724 plug > ISO 1724 plug	A	2	994 015 335
Coil cable 3 core 3.000 mm – with 7 poled ISO 1724 plug > Super Seal plug	A	2	994 030 335
On / off switch with 2x200 mm connection cable with Super Seal socket > plug	A	4	992 942 150
LED outer end marker light - with 300 mm connection cable with Super Seal plug	S	5	098 241 218
Warning light LED 12-24V with mounting bushes (see section with warning lights)	S	6	098 287 942
Mounting bracket, angled (NOT ADR approved)	S	7	098 295 562
Warning sign board – DIN 30710, one-sided aluminium, dimension: 423 x 423 (Right / Left)	S	8	098 269 123

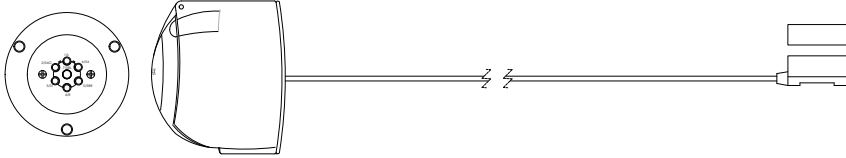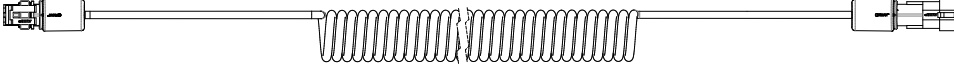Spare part for ISO 1724 plug – see section with plugs and sockets

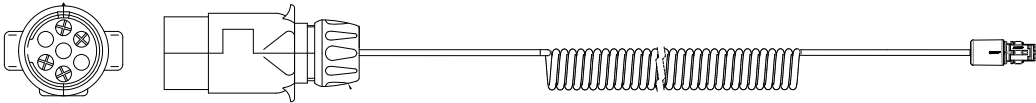| ADR-Series	S / A	Pos.	
Coil cable 2 poled 3.000 mm – with Super Seal plug > Super Seal socket	A	3	994 030 300
On / off switch with 2x200 mm connection cable with Super Seal socket > plug	A	4	992 942 150
Side cable, chain 115 mm, 1 x inlet with Super Seal plug + 4 x outlets with Super Seal socket	S	9	694 011 402
LED outer end marker light – with 300 mm connection cable with Super Seal plug	S	5	098 241 218
Warning light LED 12-24V with mounting bushes (see section with warning lights)	A	6	098 287 942
Mounting bracket, angled (NOT ADR approved)	A	7	098 295 562
Warning sign board – DIN 30710, one-sided aluminium, dimension: 423 x 423 (Right / Left)	S	8	098 269 123

ERMAX®

Wide load marker signs - Accessories

	Application / Description	Article no.
	Side cable, chain	
	1 x inlet with Super Seal socket and 4 x outlets with Super Seal plugs Conductor cross-section: 2 x1 mm² Cable type: FLRYY / PVC. **2 core, 800 mm** Distance between plugs: 200 mm	694 008 401
	Side cable, chain Cable for ADR wide load marker signs 1 x inlet with Super Seal plug and 4 x outlets with Super Seal socket Blanking plug mounted on the last socket Conductor cross-section: 2 x0,5 mm² Cable type: FLRYY / PVC. **2 core, 1150 mm** Distance between plugs: 300 mm - 300 mm - 300 mm - 250 mm	694 011 402
	Ermax part no. 099110028	
	Connection cable 2 poled, ISO 1724 Socket Socket 7 core ISO 1724 > 2 core Super Seal socket Outlets on 7 core socket: Ground (pin 31/3), Right position (pin 58R/5), Left position (pin 58L/7). Conductor cross-section: 2x1mm². Cable type: FLRYY / PVC **2 core, 1.500 mm**	994 015 245

Wide load marker signs – Accessories

	Application / Description	Article no.
	Connection cable 2 core, ISO 1724 Socket	**261**
	Socket 7 core ISO 1724 > Click-in adapter, 2 core	
	Outlets fon 7 core socket: Ground (pin 31/3), Right position (pin 58R/5), Left position (pin 58L/7).	
	Conductor cross-section: 2x1mm^2. Cable type: FLRYY / PVC	
	2 core, 1.500 mm	994 015 275
	Coil cable 2 core	
	Super Seal plug, 2 poled > Super Seal socket, 2 poled Conductor cross-section: 3x1 mm^2 Pin 2 (+) is connected in the 2 core coil cable Number of coils: 32 / 64	
	2 core, 1.500 mm	994 015 300
	2 core, 3.000 mm	994 030 300

Wide load marker signs – Accessories
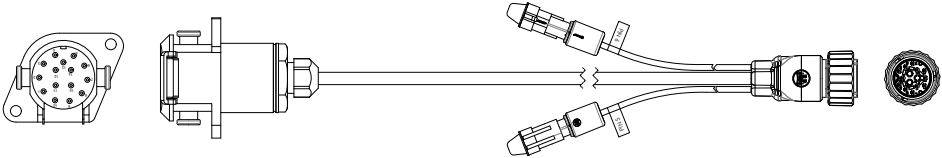
	Application / Description	Article no.
	Coil cable 3 core Plug 7 core ISO 1724 > Super Seal plug, 2 core Conductor cross-section: 3x1mm² Numbers of coils: 64 **3.000 mm** Outlet on 7 core plug: Ground (pin L/1), Right position (pin 58R/5), Left position (pin 58L/7):	994 030 330
		994 015 335
	1.500 mm Outlet on 7 core plug: Ground (pin 31/3), Right position (pin 58R/5), Left position (pin 58L/7)	
	3.000 mm Outlet on 7 core plug: Ground (pin 31/3), Right position (pin 58R/5), Left position (pin 58L/7).	994 030 335
	Coil cable 2x7 poled ISO 1724 – 12V With ISO1724 plug > ISO1724 plug Conductor cross-section: 6x1,0 mm² + 1x1,5 mm² **1.500 mm** 7 core	090 180 165
	On / off switch 2 x 200 mm connection cable. Super Seal socket > Super Seal plug	992 942 150

CABLES – UNIVERSAL
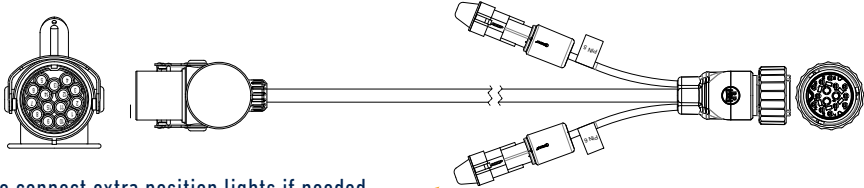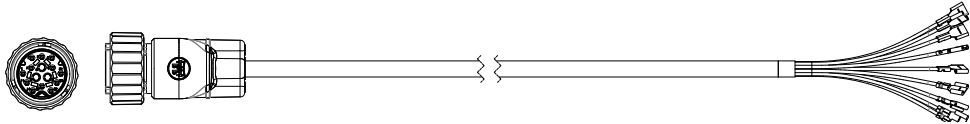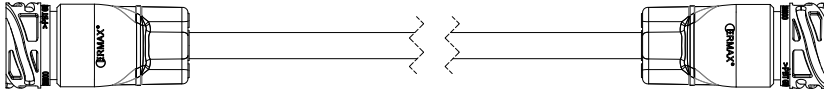
ERMAX ®

Front cable

Application / Description	Article no.
Front cable with 15 poled socket, straight	
ISO Standard: 12098 With Ermax Bayonet plug Conductor cross-section: 12x1 mm^2 + 3x2,5 mm^2 *Cable type: FLRYY / PVC*	
15 core cable 600 mm	194 006 500
15 core cable 6000 mm	194 060 500
15 core cable 7.500 mm	194 075 500

15 core cable 600 mm	194 006 501
2x2 core outlet with Super Seal socket ISO 12098	
pin 5 position Left + pin 6 position Right	

Easy to connect extra position lights if needed by using the 2 poled Super Seal outlets

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Main cable

Application / Description	Article no.
Front cable with 15 poled plug, straight	**265**
ISO Standard: 12098	
With Ermax Bayonet plug	
Conductor cross-section: 12x1 mm^2 + 3x2,5 mm^2	
Cable type: FLRYY / PVC	
15 core cable 1.000 mm	294 010 500
15 core cable 3.500 mm	294 035 500
15 core cable 4.800 mm	294 048 500

15 core cable 4.800 mm	294 048 501
2x2 core outlet with Super Seal socket ISO 12098	
pin 5 position Left + pin 6 position Right	

Easy to connect extra position lights if needed
by using the 2 poled Super Seal outlets

Main cable 9 core	
Ermax 15 poled bayonet plug > Open end with blade receptacles 6,3 x 0,8	
Conductor cross-section: 8x1 mm^2+1x2,5 mm^2	
Cable type: FLRYY / PVC	
9 core 6.000 mm	394 060 171

Main cable Adapter 15 core	
Ermax bayonet socket > socket	
Conductor cross-section: 12x1 mm^2+3x2,5 mm^2	
Cable type: FLRYY / PVC	
15 core 300 mm	394 003 560

Main cable

Application / Description	Article no.
Main cable Adapter 9 core Ermax 15 poled bayonet plug > 2 x Ermax 15 poled bayonet socket Cable length for the 15 poled outlet: 500 mm Connection for pin 13 (ISO12098) is not in the 15 poled outlet Conductor cross-section: $8x1,0 \text{ mm}^2 + 1x2,5 \text{ mm}^2 / 7x1,0 \text{ mm}^2$ Cable type: FLRYY / PVC **9 core 300 mm**	394 003 160
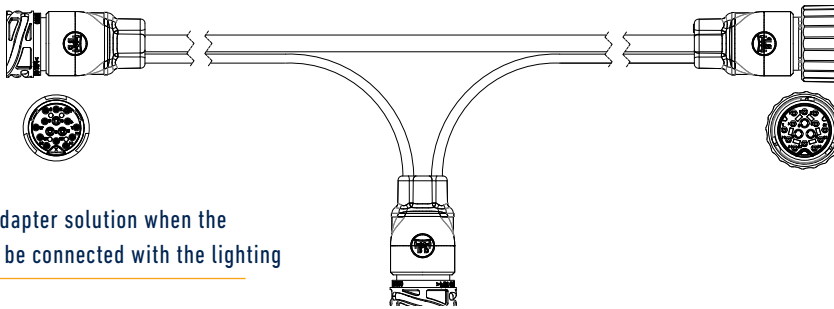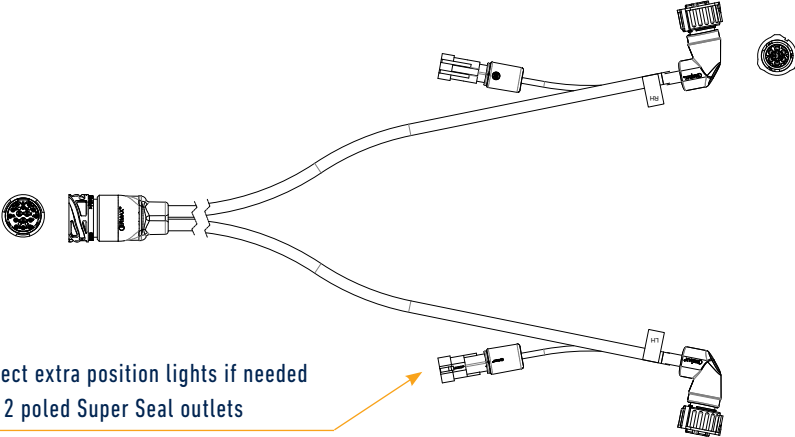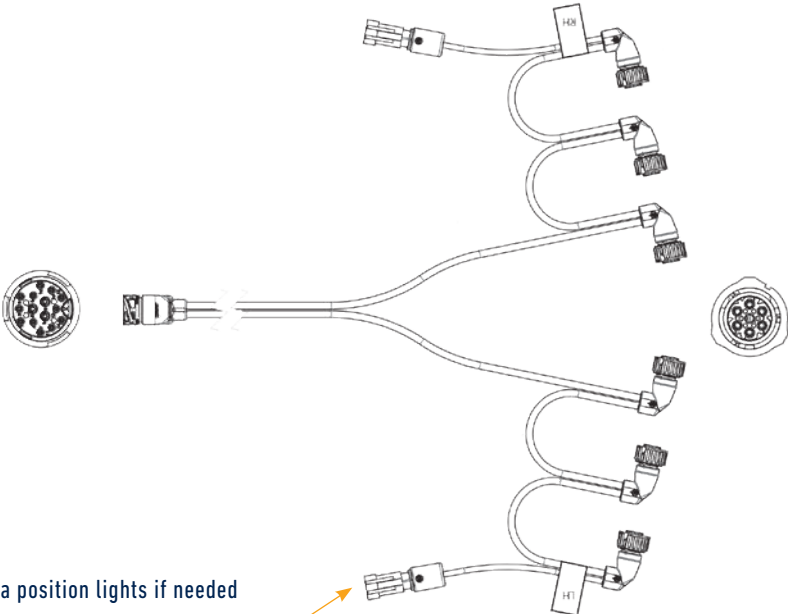
OBS: Ideal and easy adapter solution when the
forklift needs to be connected with the lighting

Main cable f.eks 394 003 160

Rear cable f.eks 494 025 600

Front cable f.eks 194 060 500

Coil cable 15 poled ISO 12098
f.eks 090 165 816
Connected to the forklift
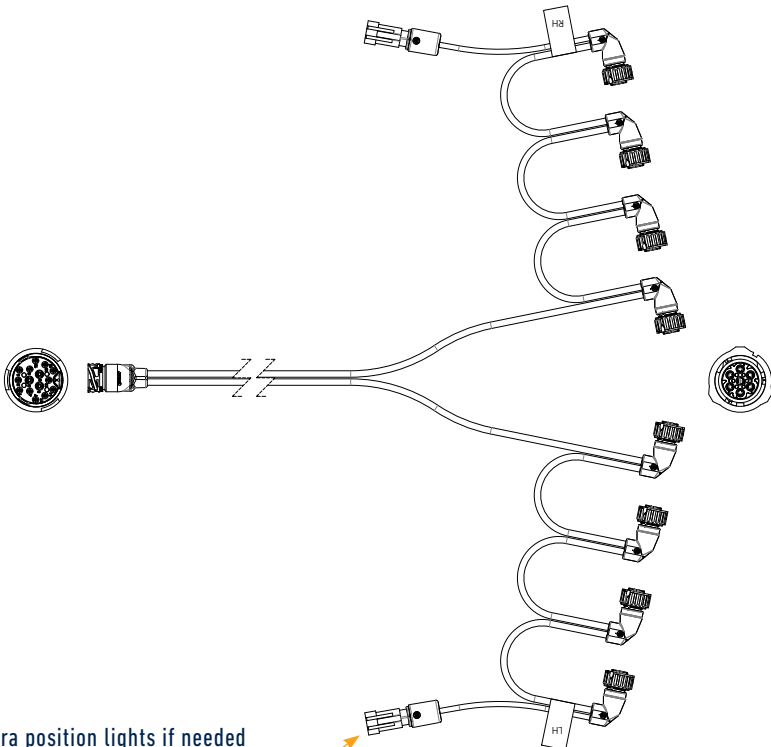
Rear cable

Application / Description	Article no.
Rear cable 2 x 6 core	
Ermax 15 poled bayonet socket > 2 x 7 poled AMP 1,5 plug, angled	
Cable type: FLRYY / PVC	
2 x 6 core 2.500 mm	**494 025 600**
Conductor cross-section: 6x1 mm^2	
2 x 6 core 2.500 mm	494 025 601
With 2 x 2 core outlet with Super Seal for the outer end marker lights	
Conductor cross-section: 6x1 mm^2 / 2x1 mm^2	

Easy to connect extra position lights if needed by using the 2 poled Super Seal outlets

Rear cable 6 core, chain 2 x 3 plug	
Ermax 15 poled bayonet socket > 2 x 3 pcs. 7 poled AMP 1,5 plug, angled	
Conductor cross-section: 6x1 mm^2 / 2x1 mm^2	
Cable type: FLRYY / PVC	
2 x 6 core 2.500 mm	494 025 606
With 2 x 2 core outlet with Super Seal for outer end marker lights	

Easy to connect extra position lights if needed by using the 2 poled Super Seal outlets

Rear cable

	Application / Description	Article no.
	Real cable 6 core, chain 2 x 4 plug Ermax 15 poled bajynet socket > 2 x 4 pcs. 7 poled AMP 1,5 plug, angled Conductor cross-section: 6x1 mm^2 / 2x1 mm^2 Cable type: FLRYY / PVC **2 x 6 core 2.900 mm** With 2 x 2 core outlet with Super Seal for the outer end marker lights	494 029 608

Easy to connect extra position lights if needed by using the 2 poled Super Seal outlets
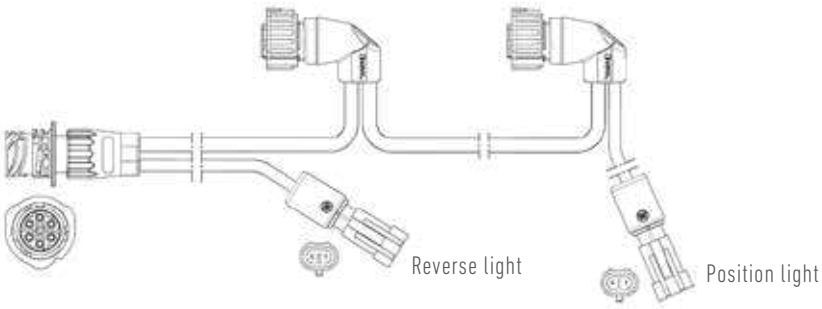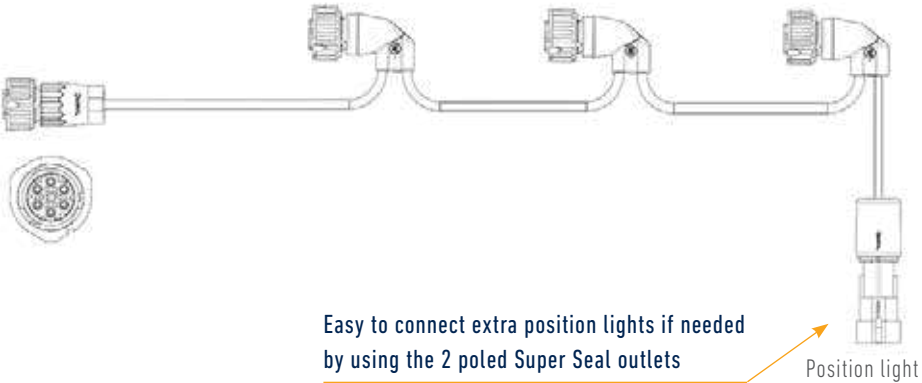
Rear cable

Application / Description	AArticle no. rtikel-nr.
Rear cable 6 core, single	**269**
7 poled AMP 1.5 plug, straight > 7 poled AMP 1.5-plug, angled	
For mounting in ERMAX junction box	
Cable type: FLRYY / PVC	
6 core 1.500 mm	494 015 610
Conductor cross-section: 6x1 mm^2	
6 core 2.000 mm	494 020 610
Conductor cross-section: 6x1 mm^2	
6 core 2.000 mm	494 020 611
With 2 poled Super Seal outlets for outer end marker lights	
Conductor cross-section: 6x1 mm^2 / 2x1 mm^2	
6 core 2.500 mm	494 025 610
Conductor cross-section: 6x1 mm^2	
6 core 2.500 mm	494 025 611
With 2 poled Super Seal outlets for outer end marker lights	
Conductor cross-section: 6x1 mm^2 / 2x1 mm^2	
6 core 3.000 mm	494 030 610
Conductor cross-section: 6x1 mm^2	
6 core 5.000 mm	494 050 610
Conductor cross-section: 6x1 mm^2	

Rear cable

Application / Description	Article no.
Rear cable 6 core – single, chain 7 poled AMP 1,5 socket, straight > 2 x 7 poled AMP 1,5 plug, angled With 2 x 2 core outlet with Super Seal for position and reverse light Conductor cross-section: 6x1 mm^2 / 2x1mm^2 Cable type: FLRYY / PVC **6 core 800 mm**	494 008 664

Reverse light

Position light

Easy to connect extra reverse and position lights if
needed by using the 2 poled Super Seal outlets

Application / Description	Article no.
Rear cable 6 core – single, chain 7 poled AMP 1,5 plug, straight > 3 x 7 poled AMP 1,5 plug, angled With 2 x 2 core outlet with Super Seal for outer end marker lights For mounting in ERMAX junction box Conductor cross-section: 6x1 mm^2 / 2x1mm^2 Cable type: FLRYY / PVC 6 core 2.100 mm	494 021 631

Easy to connect extra position lights if needed
by using the 2 poled Super Seal outlets

Position light

Rear cable

Application / Description	Article no.
Rear cable 6 core – single, chain 7 poled AMP 1,5 socket, straight > 3 x 7 poled AMP 1,5 plug, angled With 2 x 2 core outlet with Super Seal for position and reverse light Conductor cross-section: $6x1\ mm^2$ / $2x1\ mm^2$ Cable type: FLRYY / PVC **6 leder 1.200 mm**	494 012 666

Reverse light

Position light

Easy to connect extra reverse and position lights if needed by using the 2 poled Super Seal outlets

Application / Description	Article no.
Y-Adapter cable 6 core 1 x 7 poled AMP 1.5 socket, straight > 2 x 7 poled AMP 1.5 plug, straight Conductor cross-section: $5x1mm^2 + 1x2,5\ mm^2$ Cable type: FLRYY / PVC 6 core 2 x 500 mm	894 005 640
2 x 300 mm With 1x2 poled outlet (200 mm) with Super Seal socket for tail light or outer end marker light Conductor cross-section: $5x1mm^2 + 1x2,5\ mm^2$ / $2x1\ mm^2$	894 003 641

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Cable for side marker
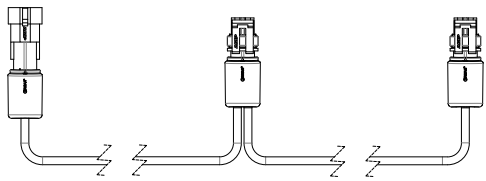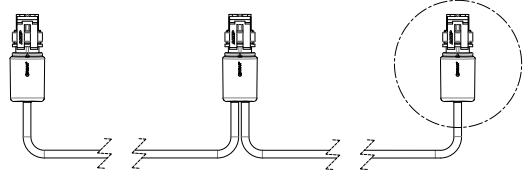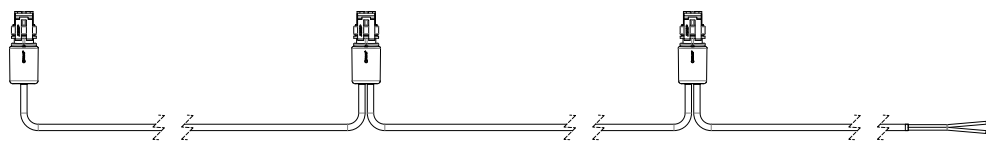
Application / Description	Article no.
Side cable, flat	
For click-in system with Super Seal plug	
Conductor cross-section: 2x1,5 mm^2	
Cable type: FLYYF	
2.000 mm for "Click-in" System	594 020 000
4.000 mm for Click-In System	594 040 000
7.000 mm for Click-In System	594 070 000
9.000 mm for Click-In System	594 090 000
10.000 mm for Click-In System	594 100 000
13.000 mm for Click-In System	594 130 000

Cable for side marker

Application / Description	Article no.
Side cable,chain	
1 x inlet with Super Seal socket + 2 x outlets with Super Seal plugs	
Conductor cross-section: 2x0,5 mm^2	
Cable type: FLRYY / PVC	
3.900 mm	
Distance between plugs: 1x200 mm + 1x3700 mm	694 039 201
5.200 mm	
Distance between plugs: 1 x 200mm + 1 x 5000 mm	694 052 201

Suitable as extension cable for
side cables with Super Seal plugs

Application / Description	Article no.
Side cable, chain	
1 x inlet + 2 x outlets with Super Seal plugs	
Conductor cross-section: 2x0,5 mm^2	
Cable type: FLRYY / PVC	
3.000 mm	694 030 200
Distance between plugs: 1x1700 mm + 1x1300 mm	
4.200 mm	694 042 200
Distance between plugs: 1x1200 mm + 1x3000 mm.	
5.300 mm	694 053 200
Distance between plugs: 1x300 mm + 1x5000 mm.	

Application / Description	Article no.
Sidecable, kæde	
1 x inlet with open end with blade receptacles 6,3x0,8 mm > + 3 x outlets with Super Seal plugs	
Conductor cross-section: 2x0,5 mm^2	
Cable type: FLRYY / PVC	
600 mm	694 006 350
Distance between plugs: 250 mm +200 mm + 200 mm	

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Cable for side marker

Application / Description	Article no.
Side cable, chain	
1 x inlet + 3 x outlets with Super Seal plugs	
Conductor cross-section: 2x0,5 mm²	
Cable type: FLRYY / PVC	
2.500 mm	694 025 300
Distance between plugs: 500 mm + 1500 mm + 500 mm	
3.200 mm	694 032 300
Distance between plugs: 500 mm + 1700 mm + 1000 mm	
4.000 mm	694 040 300
Distance between plugs: 1000 mm + 2000 mm + 1000 mm	
8.000 mm	694 080 300
Distance between plugs: 2000 mm + 2000 mm + 4000 mm	
9.400 mm	694 094 300
Distance between plugs: 2000 mm + 3700 mm + 3700 mm	
11.500 mm	694 115 300
Distance between plugs: 1500 mm + 5000 mm + 5000 mm	
13.500 mm	694 135 300
Distance between plugs: 4100 mm + 3900 mm + 5500 mm	

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Cable for side marker

Application / Description	Article no.
Side cable, chain	
1 x inlet + 4 x outlets with Super Seal plug	
Conductor cross-section: 2x0,5 mm^2	
Cable type: FLRYY / PVC.	
800 mm	694 008 400
Distance between plugs: 200 mm	
6.750 mm	694 675 400
Distance between plugs: 500 mm + 1.750 mm + 1.500 mm + 3.000 mm	
11.700 mm	694 117 400
Distance between plugs: 1.200 mm + 500 mm + 5.000 mm + 5.000 mm	
12.400 mm	694 124 400
Distance between plugs: 3.200 mm + 2.800 mm + 3.200 mm + 3.200 mm	
17.500 mm	694 175 400
Distance between plugs: 7.000 mm + 3.500 mm + 3.500 mm + 3.500 mm	
19.500 mm	694 195 400
Distance between plugs: 9.000 mm + 3.500 mm + 3.500 mm + 3.500 mm	

Application / Description	Article no.
Side cable, chain	
1 x inlet with Super Seal socket + 4 x outlets with Super Seal plugs	
Conductor cross-section: 2x1 mm^2	
Cable type: FLRYY / PVC	
	694 008 401
800 mm	
Distance between plugs: 200 mm - 200 mm - 200 mm - 200 mm	
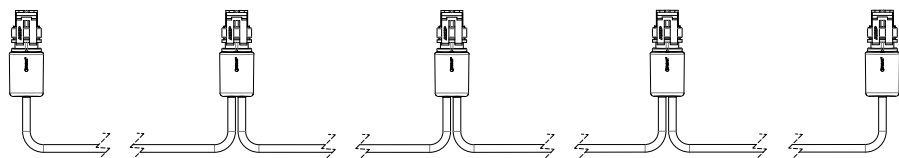
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Extension cable

Application / Description	Article no.
Extension cable, 2 core	
Super Seal socket > Super Seal plug	
Conductor cross-section: 2x1 mm^2	
Cable type: FLRYY / PVC	
1.000 mm	794 010 200
1.500 mm	794 015 200
2.000 mm	794 020 200
3.000 mm	794 030 200
4.000 mm	794 040 200
5.000 mm	794 050 200
6.000 mm	794 060 200
15.000 mm	794 150 200
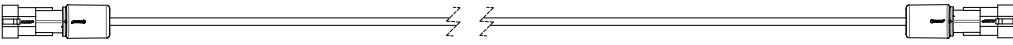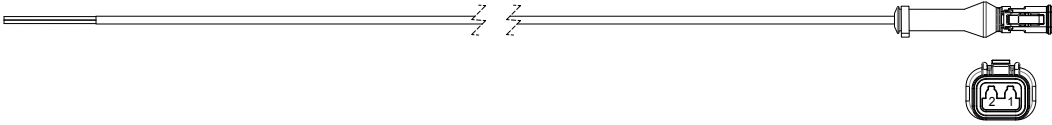
Application / Description	Article no.
Extension cable, 2 core	
Super Seal plug > Super Seal plug	
Conductor cross-section: 2x1 mm^2	
Cable type: FLRYY / PVC	
200 mm	794 002 230
500 mm	794 005 230
1.000 mm	794 010 230
1.500 mm	794 015 230
2.000 mm	794 020 230
2.500 mm	794 025 230
3.000 mm	794 030 230
5.000 mm	794 050 230
6.000 mm	794 060 230
7.500 mm	794 075 230
10.000 mm	794 100 230
11.500 mm	794 115 230
15.000 mm	794 150 230
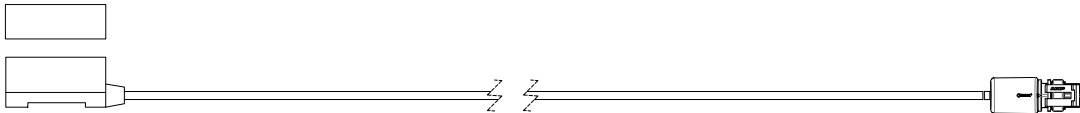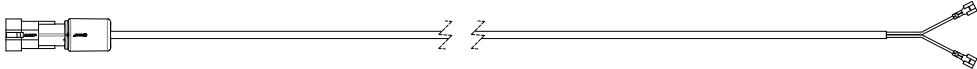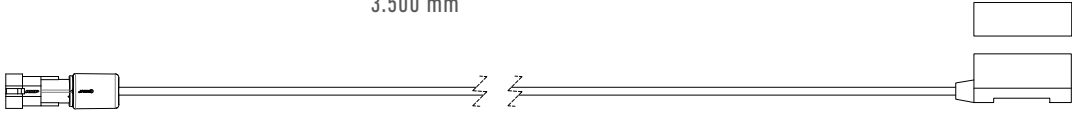
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Extension cable

Application / Description	Article no.
Extension cable, 2 core	
Super Seal socket > Super Seal socket	
Conductor cross-section: 2x1 mm²	
Cabletype: FLRYY / PVC	
1.500 mm	794 015 240

Application / Description	Article no.
Extension cable, 2 core	
Super Seal plug > Open end with blade recpetacles 6,3x0,8 mm	
Conductor cross-section: 2x1 mm²	
Cable type: FLRYY / PVC	
500 mm	794 005 251
1.000 mm	794 010 251
1.500 mm	794 015 251
2.000 mm	794 020 251
4.000 mm	794 040 251
6.000 mm	794 060 251
8.000 mm	794 080 251
10.500 mm	794 105 251

Application / Description	Article no.
Extension cable, 2 core	
2 poled Deutsch (DT2) plug > Open-end	
The open end cable is stripped 20 mm	
Conductor cross-section: 2x1 mm²	
Cable type: FLRYY / PVC	
2.500 mm	794 025 255
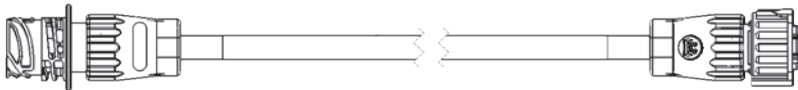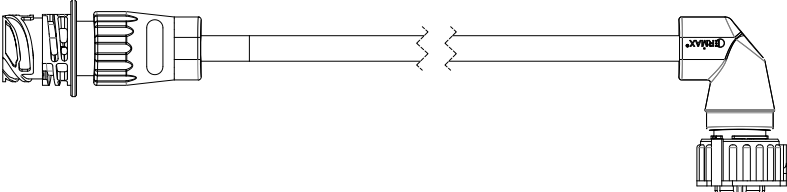
Extension cable
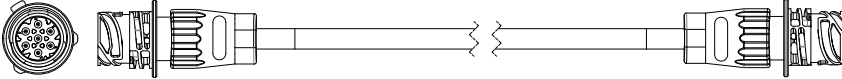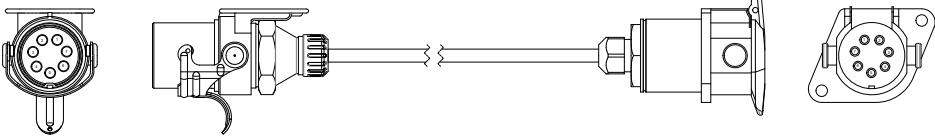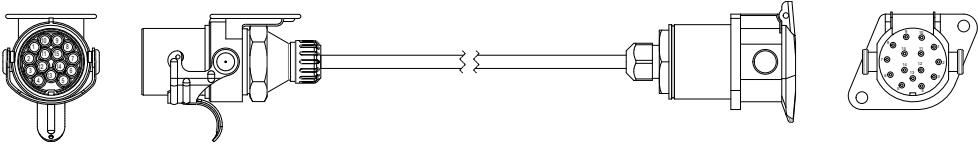
Application / Description	Article no.
Extension cable, 2 core	
Click-in adapter > Super Seal plug	
Conductor cross-section: 2x1 mm^2	
Cable type: FLRYY / PVC	
500 mm	794 005 220
1.500 mm	794 015 220
2.500 mm	794 025 220
3.500 mm	794 035 220
5.000 mm	794 050 220

Application / Description	Article no.
Extension cable, 2 core	
Super Seal socket > Open end with blade recpetacles 6,3x0,8 mm	
Conductor cross-section: 2x1 mm^2	
Cable type: FLRYY / PVC	
500 mm	794 005 261
1.000 mm	794 010 261
1.500 mm	794 015 261

Application / Description	Article no.
Extension cable, 2 core	
Click-in adapter > Super Seal socket	
Conductor cross-section: 2x1 mm^2	
Cable type: FLRYY / PVC	
500 mm	794 005 270
1.500 mm	794 015 270
3.500 mm	794 035 270

Extension cable
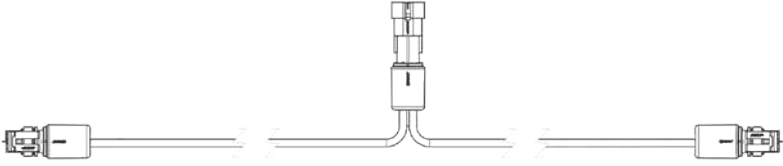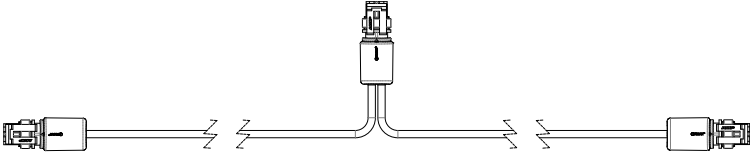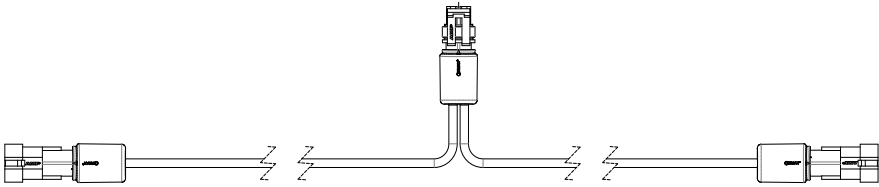
Application / Description	Article no.
Extension cable, 6 core	**279**
AMP 1.5 socket, straight > AMP 1.5 plug straight	
Conductor cross-section: 5x1mm^2+1x2,5mm^2	
Cable type: FLRYY / PVC	
5.000 mm	794 050 600
6.000 mm	794 060 600
12.500 mm	794 125 600

Extension cable, 7 core	
Conductor cross-section: 6x1 mm^2 + 1x2,5 mm^2	
Cable type: FLRYY / PVC	
1.000 mm	794 010 700
AMP 1.5 socket, straight > AMP 1.5 plug, straight	
1.000 mm	794 010 701
AMP 1.5 socket, straight > AMP 1.5 plug, angled	
2.000 mm	794 020 700
AMP 1.5 socket, straight > AMP 1.5 plug, straight	
2.000 mm	794 020 700
AMP 1.5 socket, straight > AMP 1.5 plug, straight	

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Extension cable

Application / Description		Article no.
Adapter cable, 7 core Conductor cross-section: 6x1 mm² + 1x2,5 mm² Cable type: FLRYY / PVC **300 mm** AMP 1,5 socket, straight > AMP 1,5 socket, straight		794 003 740
Extension cable EBS 7 core – ISO 7638 Conductor cross-section: 5x1,5mm² + 2x4mm² Cable type: FLRYY/PVC Not ADR-approved **1500 mm** Socket ISO 7638 > plug ISO 7638 Should be used for extension of the chassis. The cable is extended with 1500 mm from the original plug – removal of the original plug is avoided, hence time is saved		994 015 075
Extension cable 15 core – ISO 12098 Conductor cross-section: 12x1mm² + 3x2,5mm² Cable type: FLRYY/PVC Not ADR-approved **1500 mm** Socket ISO 12098 > plug ISO 12098 Should be used for extension of the chassis. The cable is extended with 1500 mm from the original plug – removal of the original plug is avoided, hence time is saved		994 015 155

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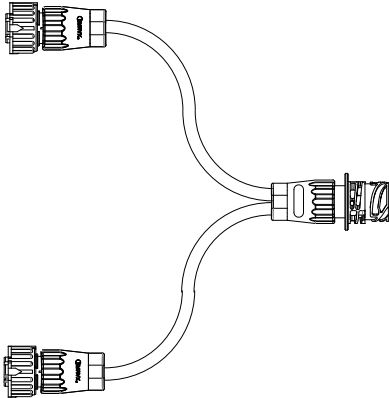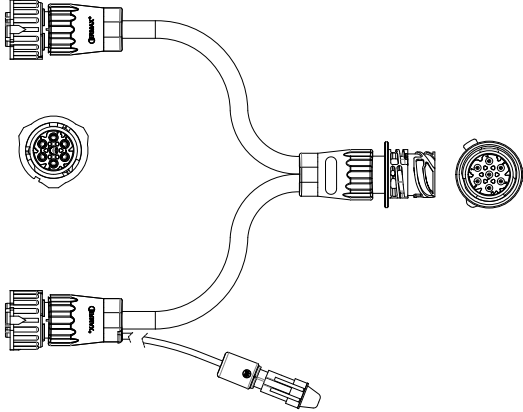
Y-Adapter cable

Application / Description	Article no.
Y-Adapter cable, 2 core Conductor cross-section: 2x1 mm^2 Cable type: FLRYY / PVC	**281**
2 x 500 mm 1 x Super Seal socket + 2 x Super Seal plug	894 005 200
2 x 1.000 mm 1 x Super Seal socket + 2 x Super Seal plug	894 010 200

Y-Adapter cable, 2 core 3 x Super Seal plug Conductor cross-section: 2x1 mm^2 Cable type: FLRYY / PVC	
2 x 500 mm	894 005 230
2 x 2000 mm	894 020 230
2 x 3000 mm	894 030 230
2 x 4000 mm	894 040 230
2 x 6000 mm	894 060 230

Y-Adapter cable, 2 core 1 x Super Seal plug + 2 x Super Seal socket Conductor cross-section: 2x1 mm^2 Cable type: FLRYY / PVC	
2 x 500 mm Super Seal socket	894 005 240
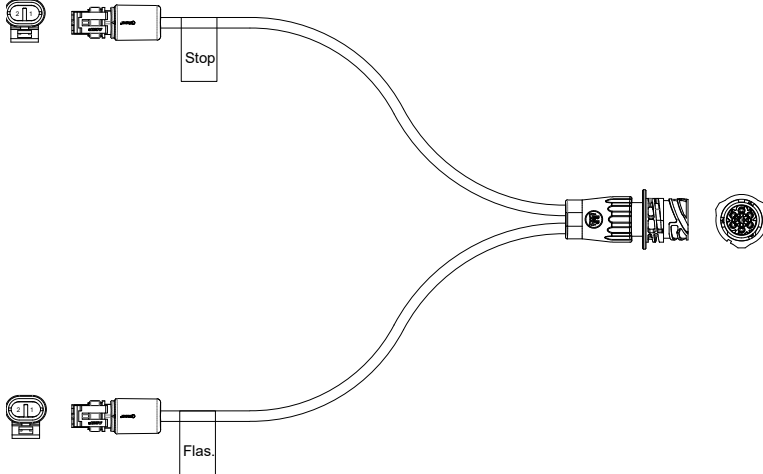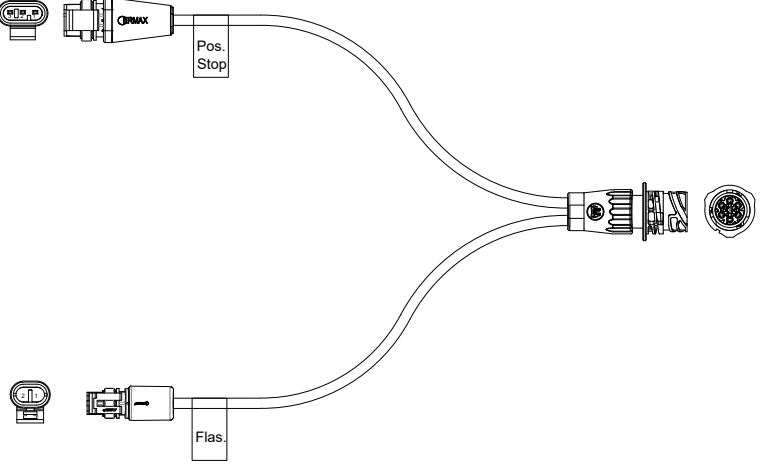
Y-Adapter cable

Application / Description	Article no.
Y-Adapter cable, 6 core 1 x AMP 1.5 socket, straight + 2 x AMP 1.5 plug, straight Conductor cross-section: 5x1mm² + 1x2,5 mm² Cable type: FLRYY / PVC **2 x 500 mm**	894 005 640

Y-Adapter cable, 6 core 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 connection of position or side marker lights Conductor cross-section: 5x1mm² + 1x2,5 mm² / 2x1 mm² Cable type: FLRYY / PVC **2 x 300 mm**	894 003 641

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Y-Adapter cable

Application / Description	Article no.
Y-Adapter cable, 7 core	**283**
7 poled AMP socket > 2 x Super Seal plug with outlet for stop and direction indicator light	
Conductor cross-section: $2 \times 0.5 \text{ mm}^2$ Cable type: FLRYY / PVC	
2 x300 mm	994 003 282

Pin configuration 7 poled AMP socket:

1 = Ground

4 = Direction indicator

5 = Stop

Pin configuration 2 poled super seal plug:

1 = Ground

2 = Stop / direction indicator

Complementary to the TM14 Slim-Line light series

Y-Adapter cable, 7 core	
Pin configuration 7 poled AMP socket: 1 = Ground 2 = Position 4 = Direction indicator 5 = Stop	7 poled AMP socket > 1 x 3 poled Super Seal plug with outlet for stop and direction indicator light + 1 x 2 poled Super Seal plug with outlet for direction indicator light Conductor cross-section: $2 \times 0.5 \text{ mm}^2$ Cable type: FLRYY / PVC	994 003 285

Pin configuration 3 poled super seal plug:

1 = Ground

2 = Position

3 = Stop

Pin configuration 2 poled super seal plug:

1 = Ground

2 = Direction indicator

Complementary to the TM14 Slim-Line light series

2 x 300 mm

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Coil cable

Application / Description	Article no.
Coil cable 9 core Open end > Open end Number of coils: 26 Inside diameter: Ø 50 mm Conductor cross-section: $7x1mm^2+2x2,5mm^2$ Cable type: PUR Working length 3.500 mm	994 035 990
Coil cable 15 core 15 poled plug ISO 12098 Inside diameter: ø 38 mm Outside diameter: Ø 66 mm Conductor cross-section: $12x1,5mm^2+3x2,5mm^2$ Cable type: PUR Working length 4.000 mm	090 165 813
Coil cable ABS 5 core Socket ISO 7638-1 Inside diameter: Ø 22 mm Outside diameter: Ø 48 mm Conductor cross-section: $2x4mm^2+3x1,5mm^2$ Cable type: PUR Working length 4.000 mm	090 195 440

Accessories

	Application / Description	Article no.
	Plate grip for Click-In system For cable with click-in system Flexible and uncomplicated assembly	099 859 970
	Click-In cable 1,5 mm² with open end 500 mm 1.500 mm 3.500 mm	794 005 280 794 015 280 794 035 280
	Cap for Click-in cable 1,5 mm² 10 pcs per plastic bag	098 291 950
	Adapter, double click-in 1,5 mm For connection of two flat cables Suitable for 1,5 mm² flat cable Must be mounted with 2 pcs. of 098 291 950 clamps (included) Dimension: 68 x15 x 22,1 x 15,4 mm	099 110 032
	Adapter, double click-in 1,5 mm For connection of two flat cables Suitable for 1,5 mm² flat cable Must be mounted with 2 pcs. of 098 291 950 clamps (not included) Dimension: 68 x15 x 22,1 x 15,4 mm.	099 110 030
	Adapter, double click-in For connection of two flat cables, 1,50 <> 0,75 mm Length: 120 mm Incl. clamps	099 110 031
	End plug for flat cable for 1,5 mm² click-in Dimension: Ø15 x 35 mm.	099 110 031

JUNCTION BOX

ERMAX ®

Junction boxes
– standardized solutions for optimal configuration

Universal Junction Box

The universal junction box is without pre-configurated connections and cable exits and is 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.

Junction box for crane modules – with many possibilities

By integrating the EEMAX junction box in the cables system, it is possible to get all AUX functions, which normally exist on a trailer.

With other words - With this junction box it is possible to use all pre-configurated ISO12098 connections (pin 9-15). E.g. for the work light, warning light or other ordinary power supply.

All functions are available by using the Super Seal socket or cable glands. For crane module solutions it is necessary that the tail lights are installed in the junction box, as the tail lights can thus be passed on to the crane module.

Your advantages with ERMAX solution:

> Unique flexibility due to fast and easy replacement of cable entries and sockets (2 poled Super Seal and 7 poled AMP sockets)

> Time-saving and easy built-in of the junction box due to pre-cabling

> Various free cables entries for universal use

> 2 sizes are available. The flat version can easily be re-built into double size

> 15 poled sockets can be integrated

Spare part overview - see the end of this section

Junction box - Universal   Junction box - Crane module

Junction box standard program – overview

 Ø13-11 mm   Ø10-7 mm   Ø6-4 mm   Ø5,5 mm x 2

Box type	Cover	Inlet	Outlet	Connection – Cable gland	Article no.
Junction box universal	Low	PG Ø13-11 mm	--	4 x Ø5,5 mm x 2 2 x Ø6-4 mm 1 x Ø10-7 mm	099 866 700
	Hight	PG Ø13-11 mm	--	1 x Ø5,5 mm x 2 8 x Ø6-4 mm 4 x Ø10-7 mm	099 866 750
Junction box Crane module	Hight	1 x 15 poled Ermax Bayonet socket	4 x 7 poled AMP socket	4 x Ø5,5 mm x 2 2 x Super Seal, Position Right / Left 1 x Super Seal, reverse 1 x Super Seal, AUX1 1 x Super Seal, AUX2 1 x Super Seal, AUX3	099 866 767

Junction box, Universal

Application / Description	Article no.
Junction box Housing of black plastic IP-Rating: IP 67	
Low cover – Connections:	099 866 700
Inlet: Cable gland Ø13-11 mm	
Cable glands: 4 x Ø5,5 mm x 2 2 x Ø6-4 mm 1 x Ø10-7 mm	
High cover – Connections:	099 866 750
Inlet: Cable gland Ø13-11 mm	
Cable glands: 1 x Ø5,5 mm x 2 8 x Ø6-4 mm 4 x Ø10-7 mm	

Low cover

Low cover

High cover
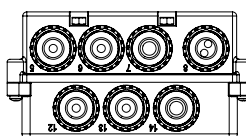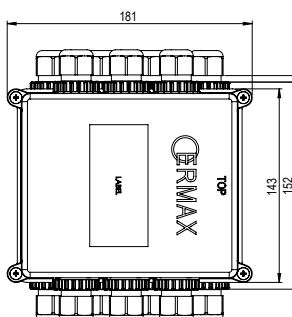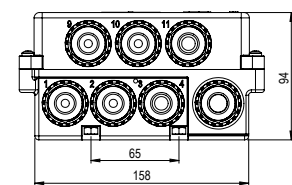
High cover

Junction box, Crane module

Application / Description	Article no.
Junction box **For crane module** **(in connection with coil cable 994 030 250)** Housing of black plastic IP-Rating: IP 67 **High cover – Connections:** **Inlet:** 1 x 15 poled Ermax Bayonet socket **Outlet:** 4 x 7 poled AMP socket (Pos. 2, 3, 6, 7) 3 x Cable glands, 2 x ø5,5 mm (Pos. 10, 11, 14) 1 x Super-Seal socket, position light Right (Pos. 5) 1 x Super-Seal socket, position light Left (Pos. 1) 1 x Super-Seal socket, reverse light (Pos. 8) 1 x Super-Seal socket, AUX1 (Pos. 12) 1 x Super-Seal socket, AUX2 (Pos. 9) 1 x Super-Seal socket, AUX3 (Pos. 13) The functions of the orginal vehicle's tail lights must be connected in the junction box, e.g. via the adapter cable to the 7 poled AMP socket. The tail lights should be connected to the 7 poled AMP socket.	**099 866 767**
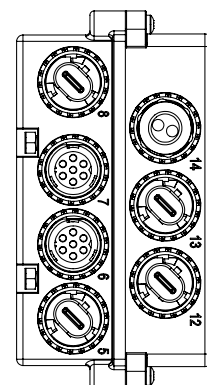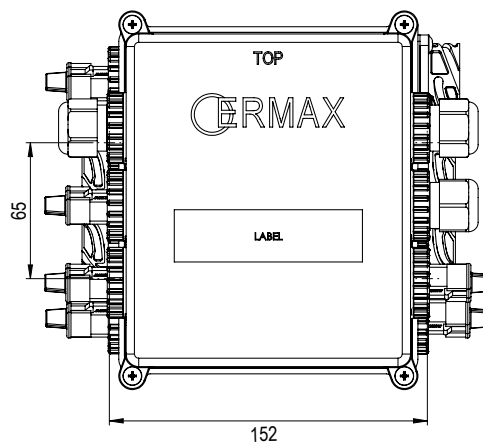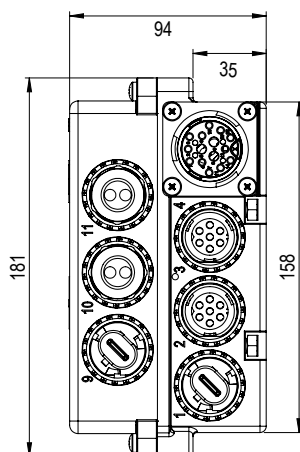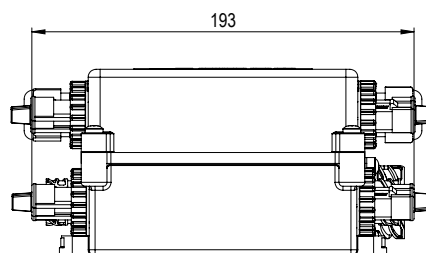
Spare parts Junction box
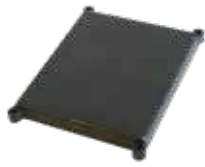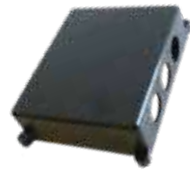
| Pos. 1 | Pos. 2 | Pos. 3 | Pos. 4 | Pos. 5 |

| Pos. 6 | Pos. 7 | Pos. 8 | Pos. 9 | Pos. 10 |

| Pos.11 | Pos. 12 | Pos. 13 | Pos. 14 |
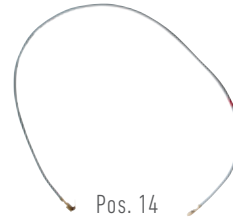
Spare parts / Accessories for the ERMAX Junction box

Junction box without cover and connections (basic model). 14 x in-/outlet. 158 x 143 mm	1	099 110 200
Cover for junction box, low model, 158 x 143 x18 mm	2	099 110 201
Cover for junction box, high model, 158 x 143 x 45 mm	3	099 110 202
Seal for in-and outlet in junction box	4	099 110 203
Bayonet ring for in- and outlet in junction box	5	099 110 204
Cable gland M22/2,0 for junction box	6	099 110 205
Nut for cable gland M22/2,0 for junction box	7	099 110 206
Rubber blind for cable gland Ø16/Ø13-11 mm for junction box	8	099 110 207
Rubber blind for cable gland Ø16/Ø7-11 mm for junction box	9	099 110 208
Rubber blind for cable gland Ø16/ø6-4 mm for junction box	10	099 110 209
Rubber blind for cable gland Ø16/2 x ø5,5 mm for junction box	11	099 110 210
Super Seal socket for mounting in the junction box. Black and white (-) wire	12	099 110 211
AMP 1,5 7 poled socket for junction box	13	099 110 212
Heating cable (resistor) 24V / 5W with blade receptacles. Length: 545 mm	14	093 865 125

Connection ISO 12098 Pin connection / Number of flat plugs 6,3 x 0,8 mm
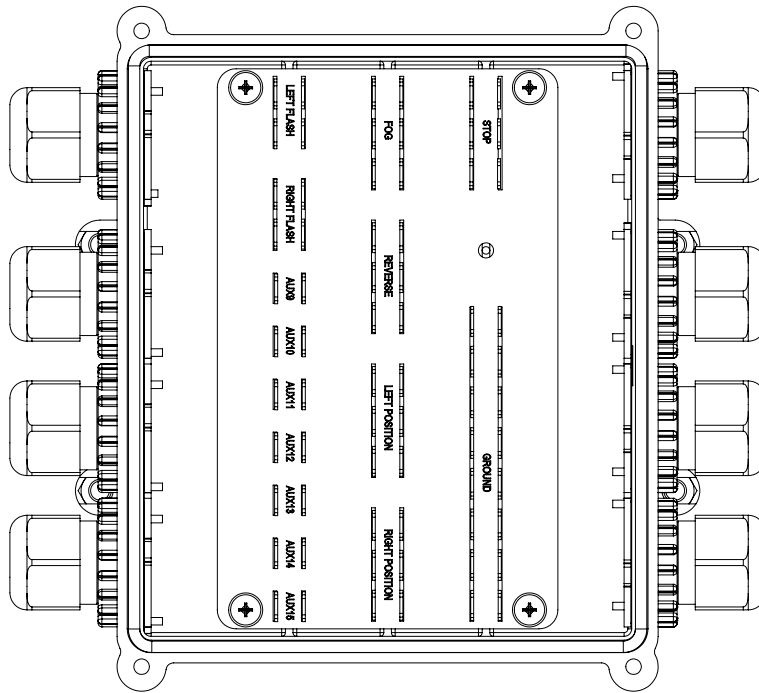
	Description	Pcs
1	Left Direction indicator light	4 pcs.
2	Right Direction indicator light	4 pcs.
3	Rear fog light	6 pcs.
4	Ground	16 pcs.
5	Left position light	6 pcs.
6	Right position light	6 pcs.
7	Stop light	6 pcs.
8	Reverse light	6 pcs.
9	Power supply. permanent positive	2 pcs.
10	Aux 1, brake-wear sensor	2 pcs.
11	Aux 2, stop control for trailers	2 pcs.
12	Aux 3, lift axle	2 pcs.
13	Ground for pin 9-15 (ISO12098)	2 pcs.
14	CANH - Data communication	2 pcs.
15	CANL - Data communication	2 pcs.

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Junction box

Pos 1 Pos 2 Pos 3

Plastic housing

Funktions						
IP-Rating	Connection	Dimension L x B x H	Fastening	Outlet	Pos	Article no.
IP56	8 x 6 blade terminals 6,3 x 0,8 mm	155 x 100 x 50 mm	Hole Ø5,5 mm	4 outlets (2 x M20 x 1,5 + 2 x M16 x 1,5)	1	099 868 249
IP56	8 x 6 blade terminals 6,3 x 0,8 mm	155 x 130 x 50 mm	Hole Ø5,5 mm	6 outlets (2 x M20 x 1,5 + 4 x M16 x 1,5)	2	099 868 269
IP56	13 x 6 blade terminals 6,3 x 0,8 mm	245 x 170 x 70 mm	Hole Ø5,5 mm	7 outlets (1 x M25 x 1,5 + 4 x M20 x 1,5 + 2 x M16 x 1,5)	3	099 868 314

Spare parts

Cable connector – 8 poled	099 868 291
Cable connector – 13 poled	099 868 392

Seal, rubber

Functions			
For cable diameter Ø	Hole Ø	Thickness	Article no.
5-7 mm	16 mm	1-4 mm	999 876 309
7-10 mm	19 mm	1-4 mm	999 876 311
10-14 mm	23 mm	1-4 mm	999 876 316
14-20 mm	29 mm	1-4 mm	999 876 321

INSTALLATION MATERIAL & ACCESSORIES

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Cable, single wire on spole

Color		Type / Material	Operating voltage	Conductor cross-section	Length	Article no.
Black		FLY / PVC	Max. 50V	1 x 0,75 mm²	100 m	099 990 001
Red		FLY / PVC	Max. 50V	1 x 0,75 mm²	100 m	099 990 002
Brown		FLY / PVC	Max. 50V	1 x 0,75 mm²	100 m	099 990 003
Blue		FLY / PVC	Max. 50V	1 x 0,75 mm²	100 m	099 990 004
Green		FLY / PVC	Max. 50V	1 x 0,75 mm²	100 m	099 990 005
Yellow		FLY / PVC	Max. 50V	1 x 0,75 mm²	100 m	099 990 006
White		FLY / PVC	Max. 50V	1 x 0,75 mm²	100 m	099 990 007
Gray		FLY / PVC	Max. 50V	1 x 0,75 mm²	100 m	099 990 008
Orange		FLY / PVC	Max. 50V	1 x 0,75 mm²	100 m	099 990 009
Purple		FLY / PVC	Max. 50V	1 x 0,75 mm²	100 m	099 990 010
Pink		FLY / PVC	Max. 50V	1 x 0,75 mm²	100 m	099 990 019
Black		FLY / PVC	Max. 50V	1 x 0,50 mm²	100 m	099 990 021
Green		FLY / PVC	Max. 50V	1 x 0,50 mm²	100 m	099 990 025
Yellow		FLY / PVC	Max. 50V	1 x 0,50 mm²	100 m	099 990 026
White		FLY / PVC	Max. 50V	1 x 0,50 mm²	100 m	099 990 027
Orange		FLY / PVC	Max. 50V	1 x 0,50 mm²	100 m	099 990 029
Purple		FLY / PVC	Max. 50V	1 x 0,50 mm²	100 m	099 990 030
Pink		FLY / PVC	Max. 50V	1 x 0,50 mm²	100 m	099 990 031
Black		FLY / PVC	Max. 50V	1 x 1,0 mm²	100 m	099 990 051
Red		FLY / PVC	Max. 50V	1 x 1,0 mm²	100 m	099 990 052
Black		FLY / PVC	Max. 50V	1 x 1,5 mm²	100 m	099 991 101
Red		FLY / PVC	Max. 50V	1 x 1,5 mm²	100 m	099 991 102
Brown		FLY / PVC	Max. 50V	1 x 1,5 mm²	100 m	099 991 103
Blue		FLY / PVC	Max. 50V	1 x 1,5 mm²	100 m	099 991 104
Green		FLY / PVC	Max. 50V	1 x 1,5 mm²	100 m	099 991 105
Yellow		FLY / PVC	Max. 50V	1 x 1,5 mm²	100 m	099 991 106
White		FLY / PVC	Max. 50V	1 x 1,5 mm²	100 m	099 991 107
Gray		FLY / PVC	Max. 50V	1 x 1,5 mm²	100 m	099 991 108
Orange		FLY / PVC	Max. 50V	1 x 1,5 mm²	100 m	099 991 109
Black		FLY / PVC	Max. 50V	1 x 2,5 mm²	50 m	099 992 201
Red		FLY / PVC	Max. 50V	1 x 2,5 mm²	50 m	099 992 202
Brown		FLY / PVC	Max. 50V	1 x 2,5 mm²	50 m	099 992 203
Blue		FLY / PVC	Max. 50V	1 x 2,5 mm²	50 m	099 992 204
Yellow		FLY / PVC	Max. 50V	1 x 2,5 mm²	50 m	099 992 206
White		FLY / PVC	Max. 50V	1 x 2,5 mm²	50 m	099 992 207
Gray		FLY / PVC	Max. 50V	1 x 2,5 mm²	50 m	099 992 209
Black		FLY / PVC	Max. 50V	1 x 4,0 mm²	50 m	099 994 401
Red		FLY / PVC	Max. 50V	1 x 4,0 mm²	50 m	099 994 402
Black		FLY / PVC	Max. 50V	1 x 6,0 mm²	50 m	099 996 601
Red		FLY / PVC	Max. 50V	1 x 6,0 mm²	50 m	099 996 602

ERMAX ®

ADR cable

Pos 1

Pos 2

Double insulated cable - Operating voltage max. 50 Volt
Oil resistent
Working temperature: -40°C - +80°C

	Functions							
ISO norm	Color	Wore colors	Material	Conductor cross-section	Length	Unit	Pos	Article no.
DIN 72570 + ISO 6622		Red, Black	FLRYY / PVC	2 x 0,5 mm²	50 m	Spool	2	099 897 220
DIN 72570 + ISO 6622		Red, Black	FLRYY / PVC	2 x 1,0 mm²	50 m	Spool	2	099 897 226
DIN 72570 + ISO 6622		Blue, Brown, Black, Yellow-green	FLRYY / PVC	4 x 1,0 mm²	50 m	Spool	1	099 897 045
DIN 72570 + ISO 6622		Black, Brown, Blue, Yellow, Green	FLRYY / PVC	5 x 1,0 mm²	50 m	Spool	1	099 897 055
DIN 72570 + ISO 6622		Brown, Yellow, White, Red, Blue, Green, Black	FLRYY / PVC	6 x 1,0 + 1 x2,5 mm²	50 m	Spool	1	099 897 081
DIN 72570 + ISO 6622		Black, Brown, Blue, White, Red, Yellow, Green	FLRYY / PVC	7 x 1,0 mm²	100 m	Spool	1	099 897 076
DIN 72570 + ISO 6622		Blue, Red, Green, Brown, Yellow, Black, White	PUR	6 x 1,0 + 1 x 2,0 mm²	50 m	Roll	2	099 897 270
DIN 72570 + ISO 6622		Red, Green, Brown, White-Yellow, Black, Orange, Purple, Blue-white, Yellow-white	PUR	9 x 1,0 + 1 x 2,0 mm²	500 m	Spool	1	099 897 310
DIN 72570 + ISO 6622		Orange, White, White-red, Black, Yellow, Red, Green, Brown, Blue, Pink, Gray, White-black, white-blue, White-green, White-brown	FLRYY / PVC	12 x 1 mm² 3 x 2,5 mm²	50 m	Spool	1	099 897 299
DIN 72570 + ISO 6622		White, Brown	FLRYY / PVC	2 x 1,5 mm²	100 m	Spool	1	099 897 611
DIN 72570 + ISO 6622		Blue, Brown, Black	FLRYY / PVC	3 x 1,5 mm²	50 m	Spool	1	099 897 032
DIN 72570 + ISO 6622		Blue, Brown, Black, Yellow	FLRYY / PVC	4 x 1,5 mm²	50 m	Spool	1	099 897 049
DIN 72570 + ISO 6622		Blue, Brown, Black, White, Red, Green, Yellow	FLRYY / PVC	7 x 1,5 mm²	50 m	Spool	1	099 897 079
DIN 72570 + ISO 6622		Brwon, Clear, 2 x Blue, Red, Orange, Yellow, Gray, Purplet, Beige, Black, White, Green	FLRYY / PVC	10 x 1,5 + 3 x 2,5 mm²	50 m	Spool	1	099 897 134
DIN 72570 + ISO 6622		Black, Brown, Red, Pink, Gray, Yellow, Green, Blue, White, Orange, Red-White, Black-White, Brown-white, Green-white, Blueå-white	FLRYY / PVC	12 x 1,5 + 3 x 2,5 mm²	50 m	Spool	2	099 897 296

Installation cable

Operating voltage: 300 / 500V
Working temperature: -40°C til +70°C
PN-E 50525-2-11

Functions								
Color	Wire color	Material	Type	Conductor cross-section	Length	Unit	Article no.
■	Blue, Brown	PVC	H05VV-F	2 x 0,75 mm²	100 m	Spool	**099 897 303**
■	Blue, Brown, Yellow-Green	PVC	H05VV-F	3 x 0,75 mm²	100 m	Spool	**099 897 333**
■	Blue, Brown	PVC	H05VV-F	2 x 1,0 mm²	100 m	Spool	**099 897 305**
■	Blue, Brown, Yellow-Green	PVC	H05VV-F	3 x 1,0 mm²	50 m	Spool	**099 897 335**
■	Blue, Brown	PVC	H05VV-F	2 x 1,5 mm²	100 m	Spool	**099 897 307**
■	Blue, Brown, Yellow-Green	PVC	H05VV-F	3 x 1,5 mm²	50 m	Spool	**099 897 337**
■	Blue, Brown, Black, Yellow, Green	PVC	H05VV-F	4 x 1,5 mm²	50 m	Spool	**099 897 348**
	Blue, Brown, Yellow-Green	PVC	H05VV-F	3 x 2,5 mm²	50 m	Spool	**099 897 338**
■	Black, Brown, White, Yellow, Red, Green, Gray, Purple	PVC	H05VV-F	8 x 1,5 + 1 x 2,5 mm²	50 m	Box	**099 897 392**

ERMAX ®

Motor vehicle cable, round

Pos 1

Pos 2

Operating voltage: max. 60 Volt.
Material: PVC
Working temperature: -40°C - +85°C

Functions								
ISO Norm	Color	Wire color	Type	Conductor cross-section	Length	Unit	Pos	Article no.
DIN 6722		Blue, Brown	FLRYY	2 x 0,75 mm²	50 m	Spool	1	099 897 302
DIN 6722		Blue, Brown	FLRYY	2 x 1,0 mm²	50 m	Spool	1	099 897 304
DIN 6722		Blue, Brown	FLRYY	2 x 1,5 mm²	50 m	Spool	1	099 897 306
DIN 6722		Blue, Brown, Black	FLRYY	3 x 1,0 mm²	50 m	Spool	1	099 897 334
DIN 6722		Blue, Brown, Black	FLRYY	3 x 1,5 mm²	50 m	Spool	1	099 897 336
DIN 6722		Blue, Brown, Black, Yellow	FLRYY	4 x 0,5 mm2	100 m	Spool	1	099 897 340
DIN 6722		White, Brown, Red, Green	FLRYY	4 x 0,75 mm2	50 m	Spool	1	099 897 342
DIN 6722		Blue, Brwon, Black, Yellow-green	FLRYY	4 x 1,0 mm²	50 m	Spool	1	099 897 344
DIN 6722		Blue, Brown, Black, Yellow	FLRYY	4 x 1,5 mm²	50 m	Spool	1	099 897 346
DIN 6722		Blue, Brown, Black, Yellow, Green	FLRYY	5 x 0,5 mm²	100 m	Spool	1	099 897 352
DIN 6722		Blue, Brown, Black, Yellow, Green	FLRYY	5 x 0,75 mm²	100 m	Spool	1	099 897 353
DIN 6722		Blue, Brown, Black, Yellow, Green	FLRYY	5 x 1,0 mm²	50 m	Spool	1	099 897 354
DIN 6722		Blue, Brown, Black, Yellow, Green	FLRYY	5 x 1,5 mm²	50 m	Spool	1	099 897 356
DIN 6722		White, Red, Brown, Green, Yellow, Black	FLRYY	6 x 1,0 mm²	50 m	Spool	1	099 897 360
DIN 6722		White, Red, Brown, Green, Yellow, Black, Blue	FLRYY	6 x1,0 + 1 x 0,75 mm²	50 m	Roll	2	099 897 380
DIN 6722		White, Red, Brown, Green, Yellow, Black	FLRYY	7 x 0,75 mm²	100 m	Roll	2	099 897 373
DIN 6722		White, Red, Brown, Green, Yellow, Black	FLRYY	7 x 1,0 mm²	100 m	Roll	2	099 897 375
DIN 6722		White, Red, Brown, Green, Yellow, Black	FLRYY	7 x 1,5 mm²	50 m	Roll	2	099 897 378
DIN 6722		Brown, Clear, 2 x Blue, Red, Orange, Yellow, Gray, Purple, Beige, Black, White, Green	FLRYY	10 x 1,5 + 3 x 2,5 mm²	25 m	Roll	2	099 897 382
DIN 6722		Black, Brown, Red, Pink, Gray, Yellow, Green, Blue, White, Orange, Red/white, Black/White, Brown/white, Green/white, Blue/white	FLRYY	12 x 1,5 + 3 x 2,5 mm2	50 m	Roll	2	099 897 386

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Motor vehicle cable, oval

Pos 1

Pos 2

Pos 3

Pos 4

Functions									
Color	Wire color	Material	Type	Operating voltage	mm²	Length	Unit	Pos	Article no.
▮	Blue, Brown	PVC	YLYp-S	Max. 50 Volt	2 x 0,75 mm²	50 m	Spool	1	099 897 322
▮	Blue, Brown	PVC	YLYp-S	Max. 50 Volt	2 x 1,5 mm²	50 m	Spool	2	099 897 324
▮	Blue, Brown	PVC	YLYp-S	Max. 50 Volt	2 x 2,5 mm²	50 m	Spool	3	099 897 326
▮	White, Black	PVC	FLKK	Max. 50 Volt	2 x 4,0 mm²	50 m	Spool	4	099 897 330

Twin cable, flat
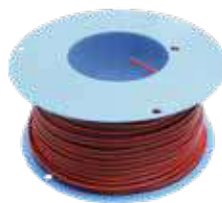
Functions								
Color		Material	Type	Operating voltage	Conductor cross-section	Length	Pos	Article no.
Red / Black	▮▮	PVC	FLZY	Max. 50V	2 x 0,4 mm²	100 m	1	099 896 804
Red / Black	▮▮	PVC	FLZY	Max. 50V	2 x 0,75 mm²	100 m	2	099 896 807
Red / Black	▮▮	PVC	FLZY	Max. 50V	2 x 1,5 mm²	100 m		099 896 815
Red / Black	▮▮	PVC	FLZY	Max. 50V	2 x 2,5 mm²	100 m	3	099 896 825

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ERMAX Cable ties

| Pos 1 | Pos 2 | Pos 3 | Pos 4 | Pos 5 | Pos 6 | Pos 7 | Pos 8 |

Working temperature: -40°C til +85°C

Color		Dimension	Self locked	Material PA6.6	Packing unit	Pos	Article no.
Black	■	100 x 2,5 mm	✓	✓	100	1	099 871 361
Transparent		150 x 3,5 mm	✓	✓	100	8	099 871 304
Black	■	150 x 3,6 mm	✓	✓	100	1	099 871 363
Black	■	190 x 3,6 mm	✓	✓	100	1	099 871 307
White		200 x 4,8 mm	✓	✓	100	2	099 871 399
Green	■	200 x 4,8 mm	✓	✓	100	5	099 871 301
Yellow	■	200 x 4,8 mm	✓	✓	100	4	099 871 379
Red	■	200 x 4,8mm	✓	✓	100	6	099 871 389
Purple	■	200 x 4,8 mm	✓	✓	100	3	099 871 349
Blue	■	200 x 4,8 mm	✓	✓	100	7	099 871 359
Black	■	290 x 4,8 mm	✓	✓	100	1	099 871 309
Transparent		390 x 4,8 mm	✓	✓	100	8	099 871 310
Black	■	390 x 4,8 mm	✓	✓	100	1	099 871 369
Black	■	710 x 7,6 mm	✓	✓	50	1	099 871 375
Black	■	580 x 12,5 mm	✓	✓	50	1	099 871 395
Black	■	1000 x 12,5 mm	✓	✓	25	1	099 871 396

ERMAX ®

Cable ties

Pos 1

Pos 2

Working temperature: -40°C til +85°C

Functions								
Color	Dimension	Max Ø for wiring harness	Self locked	Material PA6.6	Mounting head Ø	Steel locking lance	Pos	Article no.
■	215 x 4,7 mm	45 mm	✓	✓	5,4 mm			099 871 168
■	395 x 7,6 mm	102 mm	✓	✓	6,5 mm		1	099 871 175
■	91,9 x 2,3 mm	15,9 mm	✓	✓		✓	2	099 871 110
■	140 x 3,5 mm	28,6 mm	✓	✓		✓		099 871 114
■	186 x 4,6 mm	44,4 mm	✓	✓		✓		099 871 120
■	361 x 4,6 mm	102 mm	✓	✓		✓		099 871 122
■	378 x 7,0 mm	110 mm	✓	✓		✓		099 871 130

Cable ties, with loose head

Pos 1

Pos 2

Pos 3

Pos 4

Working temperature: -40°C til +85°C

Functions							
Color	Dimension	Max Ø for wiring harness	Material PA6.6	Self locked	Identification tie	Pos	Article no.
■	370 x 7,6 mm	92 mm	✓			1	099 871 170
■	375 x 7,6 mm	102 mm	✓			2	099 871 078
■	770 x 8,8 mm	225 mm	✓			3	099 871 091
	100 x 2,3 mm	22 mm	✓	✓	✓	4	099 871 165

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Cable clip
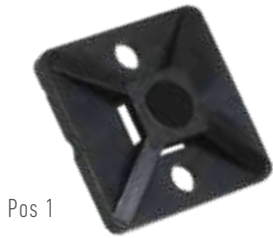
Pos 1   Pos 2   Pos 3

Working temperature: -40°C til +85°C

Functions							
Color	Dimension	Cable tie max width	Self adhesive	Material	Fastening	Pos	Article no.
■	19 x 19 mm	3,6 mm	✓	PA6.6	Undså skrue montering	1	099 871 905
	28 x 28 mm	4,8 mm	✓	PA6.6	Undså skrue montering	1	099 871 910
■	28 x 28 mm	5,4 mm	✓	PA6.6	Undså skrue montering	1	099 871 906
■		7,6 mm		PA6.6	Skrue M6	2	099 871 920
■		8,5 mm		PA6.6	Med Ø5	3	099 871 925

PLUGS & SOCKETS

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Super Seal plug - 2, 3 and 4 poled

Pos. 1

Pos. 2

Pos. 3

Pos. 4

Pos. 5

Pos. 6

Pos. 7

Pos. 8

Pos. 9

Pos. 10

Pos. 11

Pos. 12

Functions						
Plug type	Pol	Pin receptacles	Yellow rubber grommet	Red end position rubber grommet	Pos.	Article no.
Super Seal plug	2	Plug grommet 0,5 - 1,0 mm²	Ø 1,8 - 2,4 mm		1	099 110 019
Super Seal socket	2	Plug grommet 0,5 - 1,0 mm²	Ø 1,8 - 2,4 mm		2	099 110 018
Super Seal plug Incl. blanking plug	3	Plug grommet 0,5 - 1,0 mm²	Ø 1,8 - 2,4 mm	✓	3	099 111 102
Super Seal socket Incl. blanking plug	3	Plug grommet 0,5 - 1,0 mm²	Ø 1,8 - 2,4 mm	✓	4	099 111 103
Super Seal plug	4	Plug grommet 0,5 - 1,0 mm²	Ø 1,8 - 2,4 mm	✓	5	099 111 032
Super Seal socket	4	Plug grommet 0,5 - 1,0 mm²	Ø 1,8 - 2,4 mm	✓	6	099 111 026

Accessories

Rubber grommet for 2 poled Super Seal plug / socket	7	099 110 712
Rubber grommet for 3 poled Super Seal plug / socket	8	099 110 713
Rubber grommet for 4 poled Super Seal plug / socket	9	099 110 714
T-coupling for Super Seal 2 poled plug (3 sockets)	10	099 111 415
Blanking plugs for 2 poled super seal socket - Black plastic	11	099 110 028
Blanking plugs for 2 poled super seal plug - Black plastic	12	099 110 029

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Super Seal plug - 5 & 6 poled

Pos 5   Pos 6   Pos 7   Pos 8

Functions						
Plug type	Pol	Pin receptacles	Yellow rubber grommet	Red end position rubber grommet	Pos	Article no.
Super Seal plug	5	Plug grommet 0,5 - 1,0 mm^2	Ø 1,8-2,4 mm	✓	5	099 111 104
Super Seal socket	5	Plug grommet 0,5 - 1,0 mm^2	Ø 1,8-2,4 mm	✓	6	099 111 105
Super Seal plug	6	Plug grommet 0,5 - 1,0 mm^2	Ø 1,8-2,4 mm	✓	7	099 111 106
Super Seal socket	6	Plug grommet 0,5 - 1,0 mm^2	Ø 1,8-2,4 mm	✓	8	099 111 107

Spare part / Accessories	
Protection cap 4 poled, NW10	099 110 729
Protection cap 6 poled, NW10	099 110 730
Pins and seals for Super Seal plug - 20 x pins 0.75-1.5mm^2 - 20 x seals 0.75-1.5mm^2	099 111 100
Pins and seals for Super Seal plug -20 x pins, 0.75-1.5 mm^2 - 20 x seals 0.75-1.5 mm^2	099 111 101

AMP 1.5 plugs – 4 & 7 poled

Pos. 1

Pos. 2

Pos. 3

Po. 4

Pos. 5

Pos. 6

Pos. 7

Pos. 8

Pos. 9

Pos. 10

AMP 1.5 plug for cable with diameter on Ø 5,0-12 mm

Functions								
Plug type	Polyflex type	Pol	Female pins	Male pins	Diameter blue rubber grommet	Diameter white rubber grommet	Pos.	Article no.
AMP 1.5 socket, straight		4	0,5-1,0 mm²		1,2-2,1 mm (grå pakning)		1	099 110 469
AMP 1.5 plug, angled		4		1,0-2,5 mm²	Ø 1,2-2,1 mm (gul pakning)		2	099 110 468
AMP 1.5 socket, angled	Polyflex NW10	7	0,5-1,0 mm² 1,0-2,5 mm²		Ø 1,2-2,1 mm	Ø 2,2-3,0 mm	3	099 111 493
AMP 1.5 socket, angled	Polyflex NW8,5	7	0,5-1,0 mm² 1,0-2,5 mm²		Ø 1,2-2,1 mm	Ø 2,2-3,0 mm	4	099 110 617
AMP 1.5 socket, straight	Polyflex NW8,5	7	0,5-1,0 mm² 1,0-2,5 mm²		Ø 1,2-2,1 mm	Ø 2,2-3,0 mm	5	099 110 620
AMP 1.5 socket, straight		7	0,5-1,0 mm² 1,0-2,5 mm²		Ø 1,2-2,1 mm	Ø 2,2-3,0 mm	6	099 111 481
AMP 1.5 Socket, angled		7	0,5-1,0 mm² 1,0-2,5 mm²		Ø 1,2-2,1 mm	Ø 2,2-3,0 mm	7	099 111 485
AMP 1.5 Plug, straight	Polyflex NW10	7		0,5-1,0 mm² 1,0-2,5 mm²	Ø 1,2-2,1 mm	Ø 2,2-3,0 mm	8	099 111 534
AMP 1.5 Plug, straight	Polyflex NW8,5	7		0,5-1,0 mm² 1,0-2,5 mm²	Ø 1,2-2,1 mm	Ø 2,2-3,0 mm	9	099 111 490
AMP 1.5 socket, straight		7	0,5-1,0 mm² 1,0-2,5 mm²		Ø 1,2-2,1 mm	Ø 2,2-3,0 mm	10	099 111 541

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Spare parts and Accessories AMP 1.5 plugs

Pos. 1   Pos. 2   Pos. 3   Pos.4   Pos. 5
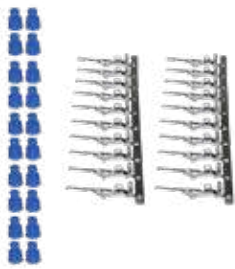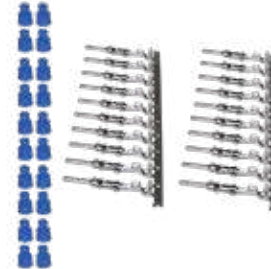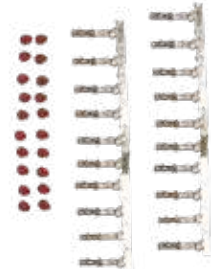
Pos. 7   Pos. 8   Pos. 9   Pos. 10

Spare parts / accessories		Article no.
Rubber grommet for 4 and 7 poled AMP Plug/socket - with cable inlet Ø5,8 mm	1	099 110 715
Rubber grommet for 4 and 7 poled AMP Plug/socket - with 2 x cable inlet Ø5,8 mm	2	099 110 716
Rubber grommet for 4 and 7 poled AMP Plug/socket - with 2 x cable inlet - 1 x Ø5,8 mm / 1 x 5,5x3,3 mm for side cable	3	099 110 717
Blanking plug for 7 poled AMP socket Black plastic	4	099 110 027
Blanking plug for 7 poled AMP plug with bayonet gland Black plastic	5	099 110 026
Nut		099 111 292
Male - pins and selas for 7 poled AMP female plug - (Plastic bag with 20 x pins; 0,5-1mm^2, 20 x seals)	7	099 111 400
Female - pins and seals for 7 poled AMP male plug - (Plastic bag with 20 x pins; 0,5-1mm^2, 20 x seals)	8	099 111 402
Male - pins and selas for 7 poled AMP female plug - (Plastic bag with 20 x pins; 1-2,5mm^2, 20 x seals)	9	099 111 602
Female - pins and seals for 7 poled AMP male plug - (Plastic bag with 20 x pins; -2,5mm^2, 20 x seals)	10	099 111 600

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Connectors

Pos. 1

Pos. 2

Pos. 3

Pos. 4

Pos. 5

Pos. 6

Pos. 7

Functions									
Application	Plug type	Pol	Female pins	Male pins	Grommet diameter	Grommet color	Extra grommet	Pos	Article no.
Iveco Cargo, Stralis, Eurotech	Plug, angled	3	0,5–1,0 mm²		Ø 1,8–2,4 mm	Yellowl/Red	Transparent	1	099 110 049
Universal	Socket, angled	4	0,5–1,0 mm²		Ø 1,2–2,1 mm	Gray	Transparent	2	099 110 469
MAN	Plug, angled	4	0,5–1,0 mm²		Ø 1,2–2,1 mm	Red/Brown	Green	3	099 110 622
MAN TG-A	Socket, straight	7	0,5–1,0 mm² 1,0–2,5 mm²		Ø 1,2–2,1 mm	Red/Brown	Red/Brown	4	099 111 648
Renault, Volvo, DAF XF 1995-2000	Socket, angled	8	0,5–1,0 mm² 1,0–2,5 mm²		Ø 1,2–2,1 mm Ø 2,2–3,0 mm	Blue White	Transparent	5	099 110 618
Universal	Socket, angled	8		0,75–1,5 mm² 1,5–2,5 mm²	Ø 1,9–3,0 mm	Red/Brown	Red/Brown	6	099 110 629
Universal	Socket, angled	10	0,5–1,0 mm²		Ø 1,8–2,4 mm	Yellow/Red	Transparent	7	099 110 647

Deutsch (DT) connector

Pos 1

Pos 2

Pos 3

Pos 4

Pos 5

Pos 6

Functions					
Plug type	Pol	Female - pins	Male- pins	Pos	Article no.
Deutsch DT2 plug	2	0,75-2,0 mm²		1	098 291 690
Deutsch DT2 socket	2		0,75-2,0 mm²	2	099 111 043
Deutsch DT4 plug	4	0,75-2,0 mm²		3	099 111 059
Deutsch DT4 socket	4		0,75-2,0 mm²	4	099 111 054
Deutsch DT6 plug	6	0,75-2,0 mm²		5	099 111 069
Deutsch DT6 socket	6		0,75-2,0 mm²	6	099 111 064

2 poled plug

Pos. 1

Pos. 2

Pos. 3

Pos. 4

Pos. 5

Pos. 6

Pos. 7

Pos. 8

Pos. 9

Functions								
Applications	Plug type	Pol	Polyflex	Female pins	Male pins	Blue grommet	Pos	Article no.
MAN	Plug, straight	2	NW4,5-8,5		0,5-1,0 mm²	Ø 1,2-2,1 mm	1	099 111 410
MAN	Plug, straight	2	NW4,5-8,5	0,5-1,0 mm²		Ø 1,2-2,1 mm	2	099 111 439
MAN F2000	Socket, straight	2	--		0,5-1,0 mm²	Ø 1,2-2,1 mm	3	099 111 444
Mercedes-Benz Actros, Atego	Socket, straight	2	--	0,5-1,0 mm²		Ø 1,2-2,1 mm	4	099 111 116
Scania, Volvo, MAN	MCP2 socket	2			0,5-1,0 mm²	Ø 1,2-2,1 mm	5	099 110 634
Scania	MCP2 plug	2	NW7,5	0,5-1,0 mm²		Ø 1,2-2,1 mm	6	099 110 635
Volvo	MCP2 plug	2	NW8,5	0,5-1,0 mm²		Ø 1,2-2,1 mm	7	099 110 636

Spare parts		
Coupling for 2 poled plug and socket - can be used for plug 099111410	8	099 111 669
Rubber grommet - can be used for 099 110 634	9	099 110 712

Connectors

Pos 1

Pos 2
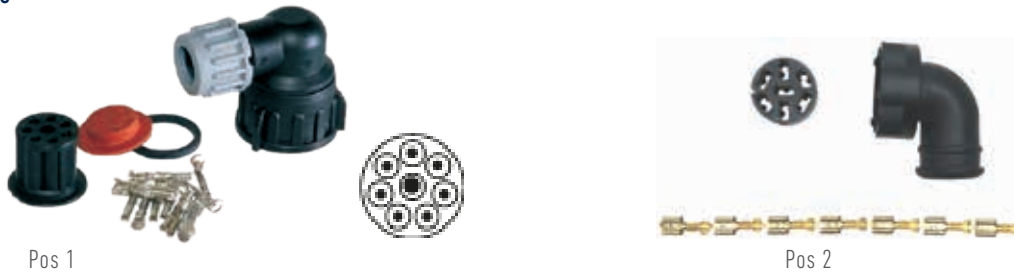
Functions			
Plug type	Suitable for tail light	Pos	Article no.
8 poled bayonet plug	098 212 951 / 952 / 953 / 954	1	**098 292 775**
7 poled plug, angled		2	**098 291 300**

2 and 3 poled plug

Pos 1

Pos 2

Pos 3

Pos 4

Pos 5

Pos 6

Pos 7

Functions								
Application	Plug type	Pol	Female- pins	Red grommet	Blue grommet	Transparent extra grommet	Pos	Article no.
Volvo FJ	Plug	2	0,5-1,0 mm²	Ø 1,8-2,4 mm			1	**099 110 658**
MAN TG-A	Plug	2	0,5-1,0 mm²	Ø 1,8-2,4 mm			2	**099 111 689**
Universal	Plug JPT 2PK1	3	0,5-1,0 mm²		Ø 1,2-2,1 mm		3	**099 110 006**
Universal	Plug JPT 2PK1 - NW4,5	2	0,5-1,0 mm²		Ø 1,2-2,1 mm		4	**099 110 386**
Renault	Plug JPT 2PK1 - NW10	2	0,5-1,0 mm²		Ø 1,2-2,1 mm		5	**099 110 741**
Universal	Plug JPT 3PK2	3	0,5-1,0 mm²		Ø 1,2-2,1 mm	✓	6	**099 110 378**

Spare parts	
Coupling 2 poled	099 111 686

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ISO 7638 – ABS / EBS 5 / 7 poled – 24V

Pos 1

Pos 2

Pos 3

Pos 4

EBS-socket with contact pins
EBS-plug with contact bushings
Coding disc with color definition
OBS: can be used for 5 and 7 pins installations

Functions

ISO Norm	Plug type	Pol	Material	Connection	Rubber grommet	Conductor cross-section	Pos	Article no.
7638	ABS/EBS socket	5/7	Reinforced composite	Crimp-terminals	Ø 9-16 mm	5x1,5mm² + 2x4,0 mm² + 2x6,0 mm²	1	090 290 075
7638	ABS/EBS socket	5/7	Reinforced composite	Screw-terminals	Ø 9-16 mm		2	090 290 077
7638	ABS/EBS plug	5/7	Reinforced composite	Crimp-terminals	Ø 9-16 mm	5x1,5mm² + 2x4,0 mm² + 2x6,0 mm²	1	090 290 071
7638	ABS/EBS plug	5/7	Reinforced composite	Screw-terminals	Ø 9-16 mm		2	090 290 073

Spare parts

Contact pins, male, for socket, for crimping. 1,0 mm² -1,5 mm². ISO 4091 / 7638/ 12098	090 190 181
Contact pins, male, for socket, for crimping. 2,5 mm². ISO 4091 / 7638/ 12098	090 190 182
Contact pins, male, for socket, for crimping. 4,0 mm². ISO 4091 / 7638/ 12098	090 190 184
Contact pins, male for socket, for crimping. 6,0 mm². ISO 4091 / 7638/ 12098	090 190 186
Contact bushings, female, for plug, or crimping. 1,0 mm² -1,5 mm². ISO 4091 / 7638/ 12098	090 190 191
Contact bushings, female, for plug, for crimping. 2,5 mm². ISO 4091 / 7638/ 12098	090 190 192
Contact bushings, female, for plug, for crimping. 4,0 mm². ISO 4091 / 7638/ 12098	090 190 194
Contact bushings, female, for plug, for crimping. 6,0mm². ISO 4091 / 7638/ 12098	090 190 196

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7 poled plug & socket ISO 1185 – Type N (24V)

Pos. 1

Pos. 2

Pos. 3

Pos. 4

Pos. 5

Functions							
ISO Norm	Plug type	Pol	Material	Flat plug connection	Cable outlet	Pos.	Article no.
1185 N	Socket	7	Plastic housing with alu-cover. Rubber sleeve of EPDM	1 pcs per pol 6,3 x 0,8 mm	Rubber seal with 3 outlet 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
1185 N	Socket	7	Plastic housing with alu-cover. Rubber sleeve of EPDM	Double flat plug 2 pcs per pol 6,3 x 0,8 mm	Rubber seal with 3 outlet 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 Rubber sleeve of EPDM	1	090 257 130
1185 N	Socket	7	Plastic housing with alu-cover. Rubber sleeve of EPDM	6,3 x 0,8 mm	Rubber seal with outlet for cable Ø: 9,5 - 12,5 mm.	2	090 257 134
1185 N	Plug	7	Plastic housing	6,3 x 0,8 mm	Cable outlet with rubber grommet Ø 7 mm	3	090 257 721
1185 N	Plug	7	Aluminium	6,3 x 0,8 mm	Cable outlet with gland and rubber blind	4	090 257 716
1185 N	Plug	7	Aluminium	Screw-terminals	Cable outlet with gland and rubber blind	5	090 257 715

7 poled plug & socket ISO 3731 – Type S (24V)

Pos. 1

Pos. 2

Pos. 3

Pos. 4

Pos. 5

Functions							
ISO Norm	Plug type	Pol	Material	Flat plug connection	Cable outlet	Pos.	Article no.
3731	Socket	7	Plastic housing with alu-cover. Rubber sleeve of EPDM	1 pcs per pol 6,3 x 0,8 mm	Rubber seal with 3 outlet 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
3731	Socket	7	Plastic housing with alu-cover. Rubber sleeve of EPDM	Double flat plug 2 pcs per pol 6,3 x 0,8 mm	Rubber seal with 3 outlet 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
3731	Socket	7	Plastic housing with alu-cover. Rubber sleeve of EPDM	6,3 x 0,8 mm	Rubber seal with cable outlet Ø: 9,5 - 12,5 mm.	2	090 257 118
3731	Plug	7	Plastic	6,3 x 0,8 mm	Cable outlet with rubber grommet Ø 7 mm	3	090 257 725
3731	Plug	7	Aluminium	6,3 x 0,8 mm	Cable outlet with gland and rubber blind	4	090 257 719
3731	Plug	7	Aluminium	Screw-terminals	Cable outlet with gland and rubber blind	5	090 257 718

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7 poled plug & socket ISO 1724

Pos 1

Pos 2

Pos 4

Pos 5

Pos 6

Pos. 1 and 2 are delivered without flat flange gasket

Functions								
ISO Norm	Plug type	Pol	Material	Connection	Operating voltage	Consump-tion	Pos	Article no.
1724	Socket	7	Plastic	Screw-terminals	12V	20A	1	090 147 328
1724	Socket	7	Plastic	Flat pin terminals	12V	20A	2	090 147 329
1724	Plug	7	Plastic	Screw-terminals max cable Ø 16mm	12V	20A	4	090 147 727
1724	Plug	7	Plastic	Screw-terminals	12V	20A	5	090 147 716*
1724	Plug	7	Plastic	Screw-terminals with grommet for cable outlet	12V	20A	6	090 147 717

Spare parts	
Flat flange gasket for socket 090 147 328/329	090 147 912
Socket holder	090 147 939
Holder for plug suitable for 090 147 727	090 147 935
* 090 147 716 – Med omløber og gummitylle for et eller to kabler.	

13 poled plug & socket ISO 4091

Pos. 1

Pos. 2

Pos. 3

ADR socket and plug with silver-plated contacts- ideal for tankers

Functions									
ISO-Norm	Plug type	Pol	Material	Connection	Conductor cross section	Operating voltage	consump-tion	Pos	Article no.
4091	Plug	13	Reinforced composite	Crimp terminals	1x2,5 mm² + 12x1,0 - 1,5 mm²	24V	20A	1	090 264 513
4091	Socket	13	Reinforced composite	Crimp terminals	1x2,5 mm² + 12x1,0 - 1,5 mm² cable outlet Ø: 7-12 mm	24V	20 A	2	090 264 311

Spare parts		
Mounting angled, zinc-plated steel, EBS / ABS	3	090 198 918

ABS / EBS Parking socket 12/24V

Functions				
ISO-Norm	Plug type	Material	ADR	Article no.
7638-1 7638-2 12098	Parking socket ABS / EBS	PA6+GF	for ADR plugs	090 190 008

15 poled plug & socket ISO 12098 - 24V

Pos. 1

Pos. 2

Pos. 3

Pos. 4

Pos. 5

Pos. 6

Pos. 7

Functions

ISO Norm	Plug type	Pol	Material	Cable gland	Crimp terminals	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
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
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
12098	Socket	15	Plastic	for cable Ø 7,0-12,0 mm	Screw-terminals	1	090 265 407
12098	Plug	15	Plastic	for cable Ø 12,0-18,0 + 7,0-12,0 mm	Screw-terminals	3	090 265 608

Spare parts / accessories

PG cable gland with 3 outlets - Suitable for plug and socket ISO12098 and ISO7638 With rubber grommet for 3 cable outlets : 1 x ø7,8 mm - 1 x ø10,0 mm - 1 x ø12,7 mm	4	090 265 000
Mounting angled, zinc-plated steel, EBS / ABS / ADR	5	090 198 918
Contact pins, male, for socket, for crimping. 1,0 mm^2 -1,5 mm^2. ISO 4091 / 7638/ 12098	6	090 190 181
Contact pins, male, for socket, for crimping. 2,5 mm^2. ISO 4091 / 7638/ 12098	6	090 190 182
Contact pins, male, for socket, for crimping. 4,0 mm^2. ISO 4091 / 7638/ 12098	6	090 190 184
Contact pins, male, for socket, for crimping. 6,0 mm^2. ISO 4091 / 7638/ 12098	6	090 190 184
Contact bushings, female, for plug, for crimping. 1,0 mm^2 -1,5 mm^2. ISO 4091 / 7638/ 12098	7	090 190 191
Contact bushings, female, for plug, for crimping. 2,5 mm^2. ISO 4091 / 7638/ 12098	7	090 190 192
Contact bushings, female, for plug, for crimping. 4,0 mm^2. ISO 4091 / 7638/ 12098	7	090 190 194
Contact bushings, female, for plug, for crimping. 6,0 mm^2. ISO 4091 / 7638/ 12098	7	090 190 194

ERMAX®

15 poled plug ISO 12098

Pos 1 + 2

ADR plug with contact bushings

Functions								
ISO Norm	Plug type	Pol	Material	Cable gland	Connection	Drifts spænding	Pos	Article no.
12098	Plug	15	Plastic	Ø 12,0-18,0 mm	3 x 2,5mm² + 12 x 1,0-1,5 mm²	24V	1	090 265 606
12098	Plug	15	Plastic	Ø: 7-12 mm + 12-18 mm	Contact bushings for screw terminals	24V	2	090 265 608

VBG plug & socket – 14 & 17 poled

Pos 1

Pos 2

Pos 3

Pos 4

MAX 25 A

Functions							
SAL (lock)	Plug type	Pol	Material	Cable gland	Crimp contact pins	Pos	Article no.
	Plug	14	Plastic	for cable Ø10,5-17,0 mm	Pin 1 & 2- 9,5 mm 25A Single pin - 6,5 mm 15A Double pin - 6,5 mm 15A	1	090 166 360
	Socket	14	Plastic	for cable Ø10,5-17,0 mm	Pin 1 & 2- 9,5 mm 25A Single pin - 6,5 mm 15A Double pin - 6,5 mm 15A	2	090 166 290
✓	Plug	14	Plastic	for cable Ø10,5-17,0 mm	Pin 1 & 2- 9,5 mm 25A Single pin - 6,5 mm 15A Double pin - 6,5 mm 15A	3	090 166 361
	Socket	17	Plastic	for cable Ø10,5-17,0 mm	Pin 1 & 2- 9,5 mm 25A Single pin - 6,5 mm 15A Double pin - 6,5 mm 15A	4	090 166 292

ERMAX®

Battery socket & plug, EURO

Pos 1

Pos 2

Pos 3

Silver-plated copper contacts

Functions							
Plug type	IP Rating	Pol	Max. load	Application	Material	Pos	Article no.
battery socket wit male-connector 35kv	IP23	2	150V DC/ 160A	Electro vehicles, forklifts	Housing in black polyamide	1	090 198 020
Battery plug	IP23	2	150V DC/ 160A	Electro vehicles, forklifts	Housing in black polyamide	2	090 198 021

Spare parts		
Handle for Euro plug	3	090 198 025

Battery plug

Pos 1

Pos 2

Pos 3

Pos 4

Silver-plated copper contacts for soldering. Only connectors of same type and color will interconnect

Functions							
Color		Plug type	Pol	Conductor cross-section	Max voltage/ A	Dimension B x L	Pos	Article no.
Gray		Plug SB 50	2	6-16mm^2	600V / 50A	35x47 mm	1	090 198 050
Red		Plug SB 50	2	6-16mm^2	600V / 50A	35x47 mm	2	090 198 051
Black		Plug SB 50	2	6-16mm^2	600V / 50A	35x47 mm	3	090 198 052
Gray		Plug SB 175	2	25-50mm^2	600V / 175A	50x78 mm	1	090 198 060
Red		Plug SB 175	2	25-50mm^2	600V / 175A	50x78 mm	2	090 198 061
Gray		Plug SB 350	2	50-70mm^2	600V / 350A	70x108 mm	1	090 198 070
Red		Plug SB 350	2	50-70mm^2	600V / 350A	70x108 mm	2	090 198 071

Spare parts		
Handle for SB 175 + 350	4	090 198 079

COIL CABLES

ERMAX ®

ERMAX®

VG 96 917 - 2 poled (24V)

Pos 1

Pos 2

Pos 3

VG 96 917 + VG 96 917
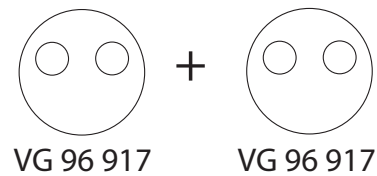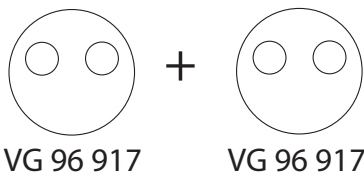
VG 96 917 + VG 96 917

With 2 poled plug with union nut
Cold, varm and weather resistant
Resistant to oil and chemicals

Functions									
Approval	Plug type	Pok	Material cable	Wokring length	Coil diameter	Conductor cross-section	Plug, spare part	Pos	Article no.
VG 96 917 E001	Plug, Black	2	Polyurethan	3500 mm	Ø65 mm	2 x 35 mm^2	090 197 308	1	**090 197 841**
VG 96 917 E001	Nato-plug Green	2	Polyurethan	4.000 mm	Ø65 mm	2 x 35 mm^2	090 197 305	2	**090 197 844**
VG 96917	Nato-plug without union nut, Green	2	Polyurethan	4.000 mm	Ø65 mm	2 x 35 mm^2	090 197 302	3	**090 197 850**

ISO 7638-1, ABS - 5 poled (24V)
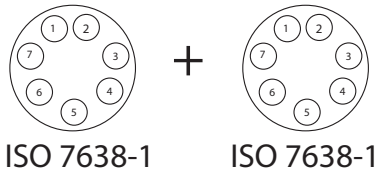
ISO 7638-1 + ISO 7638-1

Functions								
ISO Norm	Plug type	Pol	Material cable	Working length	Coil diameter	Conductor cross-section	Plug, spare part	Article no.
7638-1	Plug, plastic	5	Polyurethan	4.000 mm	Ø 22 mm	2x4,0 + 3x1,5 mm^2	090 190 001	090 195 440

ERMAX®

ISO 1185 N-type, 7 poled (24V)

Pos 1

Pos 2

ISO 1185 + ISO 1185

Functions									
ISO Norm	Plug type	Pol	Material cable	Working length	Coil diameter	Conductor cross-section	Pos	Article no.
1185	Plug, aluminium	7	Polyurethan	3.500 mm	Ø19 mm	6x1 mm² + 1x1,5 mm²	1	090 183 374
1185	Plug, aluminium	7	Polyurethan	4.500 mm	Ø19 mm	6x1 mm² + 1x1,5 mm²	1	090 183 375
1185	Plug, moulded plastic	7	Polyurethan	3.500 mm	Ø19 mm	6x1 mm² + 1x1,5 mm²	2	090 182 374
1185	Plug, moulded plastic	7	Polyurethan	4.000 mm	Ø19 mm	6x1 mm² + 1x1,5 mm²	2	090 182 376
1185	Plug, moulded plastic	7	Polyurethan	4.500 mm	Ø19 mm	6x1 mm² + 1x1,5 mm²	2	090 182 378

ISO 1185, 7 poled (24V)

Pos 1

ISO 1185 + ISO 1185

Functions									
ISO Norm	Plug type	Pol	Material cable	Working length	Coil diameter	Conductor cross-section	Pos	Article no.
1185	Plug, moulded plastic	7	Polyurethan	4.000 mm	Ø 19 mm	6x1mm² + 1x1,5mm²	1	090 182 372

ISO 1185 + ISO 1724, 7 poled (12/24V)
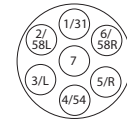
ISO 1185   +   ISO 1724
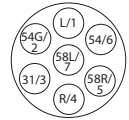
Functions							
ISO Norm	Plug type	Pol	Material cable	Working length	Coil diameter	Conductor cross-section	Article no.
1185+1724	Plug, plastic	7	Polyurethan	4.000 mm	Ø 19 mm	6x1mm² + 1x1,5mm²	090 182 370

ISO 1724, 7 poled (12V)

Pos 1	Pos 2	Pos 3
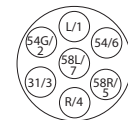
ISO 1724   +   ISO 1724
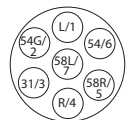
Functions								
ISO Norm	Plug type	Pol	Material cable	Working length	Coil diameter	Conductor cross-section	Pos	Article no.
1724	Plug, plastic	7	Polyurethan	1.500 mm	Ø 35 mm	6x1mm² + 1x1,5mm²	1	090 180 165
1724	Plug, plastic	7	Polyurethan	3500 mm	Ø 35 mm	6x1mm² + 1x1,5mm²	2	090 182 365
1724	Plug, aluminium	7	Polyurethan	4.000 mm	Ø 19 mm	6x1mm² + 1x1,5mm²	3	090 183 312

ISO 3731 – S-Type, 7 poled (24V)
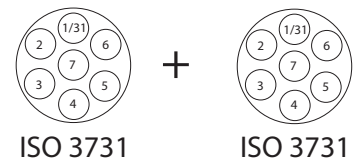
ISO 3731 + ISO 3731

Functions

ISO Norm	Plug type	Pol	Material cable	Working length	Coil diameter	Conductor cross-section	Article no.
3731	Plug, aluminium	7	Polyurethan	3.500 mm	Ø 40 mm	6x1,0 mm² + 1x1,5mm²	090 183 377

ISO 3731 – S-Type, 7 poled (24V)
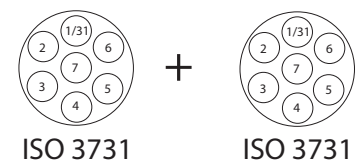
ISO 3731 + ISO 3731

Cold, varm and weather resistant
Resistant to oil and chemicals

Functions

ISO Norm	Plug type	Pol	Material cable	Working length	Coil diameter	Conductor cross-section	Article no.
3731	Plug, moulded plastic	7	Polyurethan	3.500 mm	Ø 19 mm	6x1,0mm² + 1x1,5mm²	090 183 379
3731	Plug, moulded plastic	7	Polyurethan	4.000 mm	Ø 19 mm	6x1,0mm² + 1x1,5mm²	090 183 380

ISO 7638 -1 - EBS, 7 poled (24V)
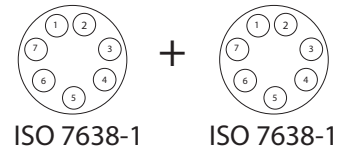
ISO 7638-1   +   ISO 7638-1

Functions									
ISO Norm	Plug type	Pol	Material cable	Working length	Coil diameter	Conductor cross-section	Socket, spare part	Article no.	
7638-1	Socket	7	Polyurethan	3500 mm	Ø 22 mm	$2x1,5+2x4,0+3x1,5$ mm^2	090 190 071	**090 195 835**	
7638-1	Socket	7	Polyurethan	4.000 mm	Ø 22 mm	$2x1,5+2x4,0+3x1,5$ mm^2	090 190 071	**090 195 840**	

ISO 12098 / 4141 - 15 poled (24V)
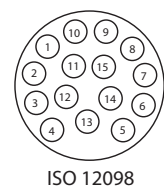
ISO 12098

Functions						
ISO Norm	Plug type	Pol	Material cable	Working length	Coil diameter	Conductor cross-section	Article no.
12098	Socket, plastic	15	Polyurethan	4.000 mm	Ø 66 mm	12x1,5kv+3x2,5 mm2	**090 165 813**

Coil cables without plugs

Color		Conductor cross-section	Working length	Coil diameter	L1 (un-coiled end of the cable)	L2 (un-coiled end of the cable)	Material	Article no.
Black		2 x 0,75 mm²	3.000 mm	Ø25	145 mm	145 mm	Polyurethan	**090 179 207**
Black		3 x 0,75 mm²	3.000 mm	Ø25	220 mm	220 mm	Polyurethan	**090 179 307**
Black		4 x 0,75 mm²	3.000 mm	Ø25	200 mm	2.000 mm	Polyurethan	**090 179 408**
Black		5 x 0,75 mm²	3.500 mm	Ø25	2.000 mm	200 mm	Polyurethan	**090 179 508**
Black		2 x 1,0 mm²	4.000 mm	Ø25	130 mm	130 mm	Polyurethan	**090 179 212**
Black		2 x 1,5 mm²	3.000 mm	Ø25	130 mm	130 mm	Polyurethan	**090 179 215**
Orange		2 x 1,5 mm²	3.000 mm	Ø35	130 mm	130 mm	Polyurethan	**090 179 216**
Black		5 x 1,5mm²	3.500 mm	Ø40	2.000 mm	200 mm	Polyurethan	**090 179 516**
Black		7 x 1,5 mm²	4.000 mm	Ø95	200 mm	200 mm	Polyurethan	**090 180 400**
Black/Red		2 x 6 mm²	3.000 mm	Ø50	220 mm	220 mm	Polyurethan	**090 179 260**
Black		4 x 6,0 mm²	4.000 mm	Ø60	300 mm	300 mm	Polyurethan	**090 179 460**
Black		6 x 0,75 + 1 x 1 mm²	5.500 mm	Ø90	180 mm	180 mm	Polyurethan	**090 180 775**
Black		7 x 0,75 + 1 x 1,5 mm²	5.500 mm	Ø40	500 mm	500 mm	Polyurethan	**090 179 807**
Black		6 x 1 + 1 x 2,5 mm²	4.500 mm	Ø40	300 mm	300 mm	Polyurethan	**090 182 452**
Black		6 x 1,0 + 1 x 2,0 mm²	3.500 mm	Ø40	180 mm	180 mm	Polyurethan	**090 182 350**
Black		6 x 1 + 1 x 2 mm²	4.000 mm	Ø40	180 mm	180 mm	Polyurethan	**090 182 400**
Black		8 x 1+1 x 2 mm²	3.500 mm	Ø48	1.500 mm	210 mm	Polyurethan	**090 179 815**
Black		10 x 1,5 + 3 x 2,5 mm²	3.000 mm	Ø65	230 mm	230 mm	Polyurethan	**090 179 963**
Black		12 x 1,5+3 x 2,5 mm²	4.000 mm	Ø65	150 mm	150 mm	Polyurethan	**090 165 806**
Black		1 x 35 mm²	4.000 mm	Ø60	200 mm	200 mm	Polyurethan	**099 898 835**
Red		1 x 35 mm²	4.000 mm	Ø60	200 mm	200 mm	Polyurethan	**099 898 836**
Black/Red		2 x 35 mm²	4.000 mm	Ø60	200 mm	200 mm	Polyurethan	**099 898 837**
Black/Red		2 x 35 mm²	3.500 mm	Ø60	200 mm	200 mm	Polyurethan	**099 898 838**

Adapter – 15 poled > 2x7 poled (24N / 24S), 12/24V

Pos 1

Pos 2

ISO 3731

ISO 12098

ISO 1185
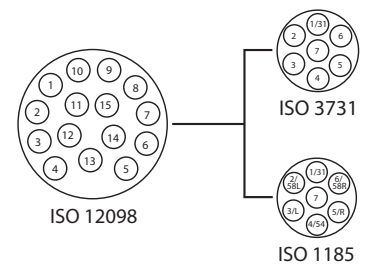
Functions							
ISO Norm		Type	Material	Length	Operating voltage	Pos	Article no.
12098 - 1185 / 3731	Adapter	15 poled > 2x7 poled 24N / 24S	Plastic	--	12/24V	1	**090 165 840**
12098 - 1185 / 3731	Adapter	15 poled > 2x7 poled 24N / 24S	Plastic	--	12/24V	2	**090 165 845**

12098 to 1185/3731 - Adapter 15 poled > 2x7 poled (24V)
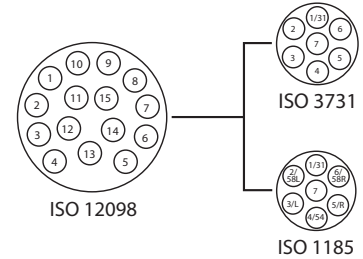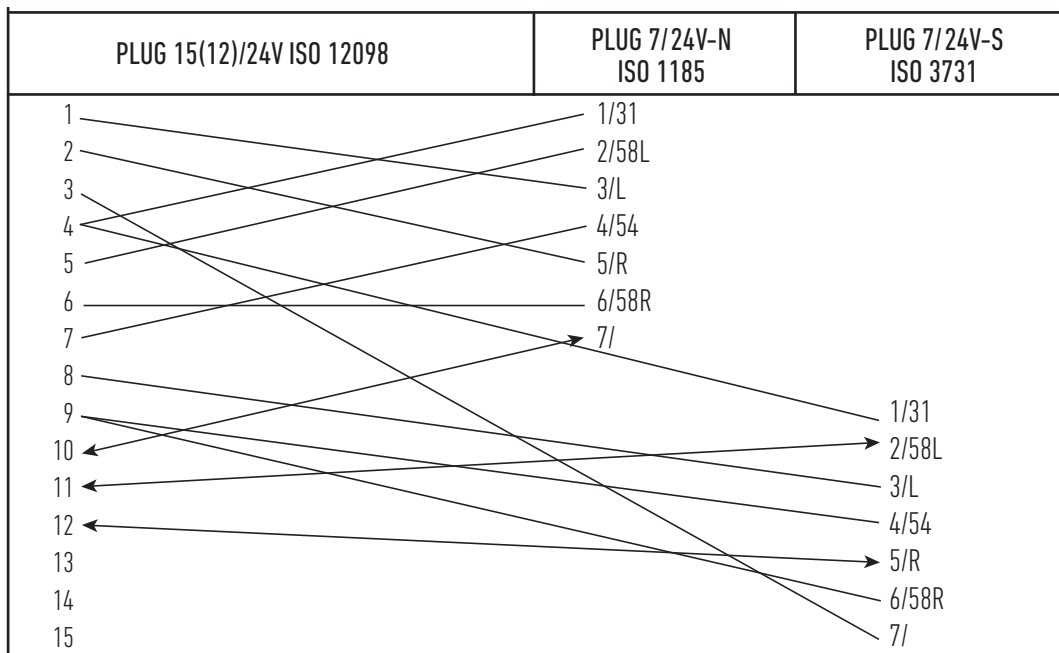
ISO 12098

ISO 3731

ISO 1185

Connection diagram

PLUG 15(12)/24V ISO 12098	PLUG 7/24V-N ISO 1185	PLUG 7/24V-S ISO 3731
1	1/31	
2	2/58L	
3	3/L	
4	4/54	
5	5/R	
6	6/58R	
7	7/	
8		1/31
9		2/58L
10		3/L
11		4/54
12		5/R
13		6/58R
14		7/
15		

Cold, varm and weather resistant

Resistant to oil and chemicals

Functions

ISO Norm	Application	Plug type	Pol	Material cable	Working length	Coil diameter	Conductor cross-section	Article no.
12098 til 1185 / 3731	Mercedes	Socket mould-ed plastic	15 poled > 2x7 poled 24N / 24S	Polyurethan	4.000 mm	Ø 14 mm	6x1,0 mm^2 + 1x1,5 mm^2	090 165 830
12098 til 1185 / 3731	Iveco Volvo	Socket mould-ed plastic	15 poled > 2x7 poled 24N / 24S	Polyurethan	2 x 4.500 mm	Ø 19 mm	6x1,0 mm^2 + 1x1,5 mm^2	090 165 834

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12098 to 1185/3731 - Adapter 15 poled > 2x7 poled(24V)

ISO 12098

ISO 3731

ISO 1185

Connection diagram

PLUG 15(12)/24V	PLUG 7/24V-N		PLUG 7/24V-S	
	Colour	Number	Colour	Number
1	White	1/31		
2	Black	2/58L		
3	Yellow	3/L		
4	Red	4/54		
5	Green	5/R		
6	Brown	6/58R		
7	Blue	7/		
8				
9			White	1/31
10			Black	2/58L
11			Yellow	3/L
12			Red	4/54
13			Green	5/R
14			Brown	6/58R
15			Blue	7/

Cold, varm and weather resistant
Resistant to oil and chemicals

Functions								
ISO Norm	Application	Plug type	Pol	Material cable	Working length	Coil diameter	Conductor cross-section	Article no.
12098 til 1185 / 3731	Scania, MAN, Mercedes, DAF	Socket moulded plastic	15 poled > 2x7 poled 24N / 24S	Polyurethan	2 x 4.000 mm	Ø 19 mm	6x1,0 mm^2 + 1x1,5 mm^2	090 165 826
12098 til 1185 / 3731	MB Actros Scania	Socket moulded plastic	15 poled > 2x7 poled 24N / 24S	Polyurethan	2 x 4.500 mm	Ø 19 mm	6x1,0 mm^2 + 1x1,5 mm^2	090 165 836

ERMAX®

12098 to 1185/3731 - Adapter 15 poled > 2x7-poled (24V)

ISO 3731

ISO 12098

ISO 1185

Connection diagram

PLUG 15(12)/24V	PLUG 7/24V–N		PLUG 7/24V–S	
	Colour	Number	Colour	Number
1	White	1/31		
2	Black	2/58L		
3	Yellow	3/L		
4	Red	4/54		
5	Green	5/R		
6	Brown	6/58R		
7	Blue	7/		
8				
9			White	1/31
10			Black	2/58L
11			Yellow	3/L
12			Red	4/54
13			Green	5/R
14			Brown	6/58R
15			Blue	7/

Cold, varm and weather resistant
Resistant to oil and chemicals

Functions							
ISO Norm	Plug type	Pol	Material cable	Working length	Coil diameter	Conductor cross-section	Article no.
12098 til 1185/3731	Socket, aluminium	15 poled > 2x7 poled 24N / 24S	PUR	4.000 mm	Ø 19 mm	6x1,0 mm^2 + 1x1,5 mm^2	090 165 822

12098 to 1185 - Adapter 15 poled > 7-poled (24V)

ISO 12098 > **ISO 1185**
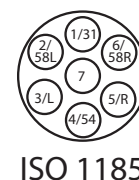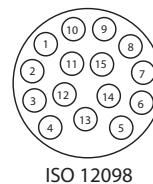
Connection diagram

PLUG 15/24V	PLUG 7/24V-N
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15

Cold, varm and weather resistant
Resistant to oil and chemicals

Functions

ISO Norm	Plug type	Pol	Material cable	Working length	Coil diameter	Conductor cross-section	Article no.
12098 til 1185	Socket, moulded plastic	15 poled > 7 poled 24N	PUR	4.500 mm	Ø 19 mm	6x1,0 mm^2 + 1x1,5 mm^2	090 165 828

ERMAX®

EBS connection cable – 7 poled (24V)

Pos 1   Pos 2

Pos 3
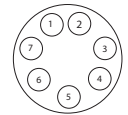
ISO 7638-1

E

	Functions								
ISO Norm	Plug type	Pol	Material cable	Working length	Conductor cross-section	Socket, spare part	Pos	Article no.
7638-1	Socket	7	Polyurethan	8 m	5x1,5 mm² + 2x4,0 mm²	090 190 075	1	**090 193 782**
7638-1	Socket	7	Polyurethan	10 m	5x1,5 mm² + 2x4,0 mm²	090 190 071	2	**090 191 800**

Spare part		
Mounting angled, zinc-plated steel, EBS / ABS	3	**090 198 918**

ISO 7638 – EBS cable – 7 poled (24V)

Double insulated. Max. 50V
Resistant to oil and chemicals
Working temperature: -40° - +80°
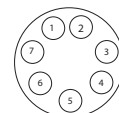
ISO 7638-1 + ISO 7638-1
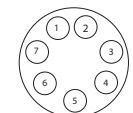
	Functions						
ISO Norm	Wire color	Material	Conductor cross-section	Cable length	Unit	Pos	Article no.
7638-1	5 x 1,5 mm²: Yellow, Brown,White,White/Green, White/Brown 2 x 4 mm²: Red, Black	Polyurethan	5 x 1,5 + 2 x 4,0 mm²	50 m	Roll	1	**099 897 274**
7638-1	5 x 1,5 mm²: Yellow, Brown,White,White/Green, White/Brown 2 x 4 mm²: Red, Black	Polyurethan	5 x 1,5 + 2 x 4,0 mm²	400 m	Roll	2	**099 897 276**

AIR BRAKE TUBES & COILS

ERMAX ®

Air brake tube

Functions					
ISO norm	Material	Color	Conductor cross-section	Meter	Article no.
DIN 74324/73378, ISO 7628	PA12	Black	4 x 1,00 mm²	25 m roll	028 950 004
DIN 74324/73378, ISO 7628	PA12	Black	5 x 1,00 mm²	25 m roll	028 950 005
DIN 74324/73378, ISO 7628	PA12	Black	6 x 1,00 mm²	25 m roll	028 960 006
DIN 74324/73378, ISO 7628	PA12	Black	6 x 1,00 mm²	100 m roll	028 960 066
DIN 74324/73378, ISO 7628	PA12	Black	8 x 1,00 mm²	25 m roll	028 960 008
DIN 74324/73378, ISO 7628	PA12	Black	8 x 1,00 mm²	100 m roll	028 960 068
DIN 74324/73378, ISO 7628	PA12	Black	10 x 1,00 mm²	25 m roll	028 960 010
DIN 74324/73378, ISO 7628	PA12	Black	10 x 1,00 mm²	200 m roll	028 950 020
DIN 74324/73378, ISO 7628	PA12	Black	10 x 1,25 mm²	25 m roll	028 960 011
DIN 74324/73378, ISO 7628	PA12	Black	9 x 1,5 mm²	25 m roll	028 950 029
DIN 74324/73378, ISO 7628	PA12	Black	10 x 1,5 mm²	25 m roll	028 960 009
DIN 74324/73378, ISO 7628	PA12	Black	10 x 1,5 mm²	100 m roll	028 950 060
DIN 74324/73378, ISO 7628	PA12	Black	11 x 1,5 mm²	25 m roll	028 950 021
DIN 74324/73378, ISO 7628	PA12	Black	12 x 1,5 mm²	25 m roll	028 960 012
DIN 74324/73378, ISO 7628	PA12	Black	12 x 1,5 mm²	100 m roll	028 950 062
DIN 74324/73378, ISO 7628	PA12	Black	12 x 1,5 mm²	200 m roll	028 950 072
DIN 74324/73378, ISO 7628	PA12	Black	15 x 1,5 mm²	25 m roll	028 960 015
DIN 74324/73378, ISO 7628	PA12	Black	15 x 1,5 mm²	100 m roll	028 960 065
DIN 74324/73378, ISO 7628	PA12	Black	15 x 2,00 mm²	25 m roll	028 950 014
DIN 74324/73378, ISO 7628	PA12	Black	16 x 2,00 mm²	25 m roll	028 960 016
DIN 74324/73378, ISO 7628	PA12	Black	18 x 2,00 mm²	25 m roll	028 960 018

AIR BRAKE TUBES AND COILS

Air brake coil

ISO norm: DIN 74324/74323/73378 – ISO 7375

Material	Working length	Number of coils	Coil diameter	Connection	Tube color			Anti bend color	Article no.
PA12	4.000 mm	22	Ø 75 mm	M16x1,5 mm	Double Red/Yellow			Red/Yellow	028 920 172
PA12	4.500 mm	24	Ø 75 mm	M16x1,5 mm	Yellow			Metal	028 920 173
PA12	4.500 mm	24	Ø 75 mm	M16x1,5 mm	Red			Metal	028 920 175
PA12	4.500 mm	24	Ø 75 mm	M22x1,5 mm	Red			Metal	028 920 176
PA12	4.500 mm	24	Ø 75 mm	M16x1,5 mm	Black/ Yellow			Yellow	028 920 177
PA12	4.500 mm	24	Ø 75 mm	M16x1,5 mm	Black/Red			Red	028 920 178
PA12	4.000 mm	22	Ø 75 mm	M18 x 1,5 mm	Red			Red	028 920 082
PA12	4.000 mm	22	Ø 75 mm	M18 x 1,5 mm	Yellow			Yellow	028 920 087
PA12	4.000 mm	22	Ø 75 mm	M18 x 1,5/M16 x 1,5 mm	Black/Red			Red	028 920 083
PA12	4.000 mm	22	Ø 75 mm	M18x1,5/M16x1,5 mm	Black/ Yellow			Yellow	028 920 088
PA12	4.000 mm	22	Ø 75 mm	M18x1,5/M16x1,5 mm	Red/Yellow			Metal	028 920 090
PA12	4.500 mm	22	Ø 75 mm	M18x1,5/M16x1,5 mm	Yellow			Yellow	028 920 089
PA12	4.500 mm	22	Ø 75 mm	M18 x1,5/M16 x 1,5 mm	Red			Metal	028 920 081
PA12	6.500 mm	22	Ø 115 mm	M12x1,5 mm	Yellow			--	028 920 168
PA12	5.500 mm	22	Ø 115 mm	M16x1,5 mm	Yellow			Metal	028 920 161
PA12	5.500 mm	22	Ø 115 mm	M16x1,5 mm	Red			Metal	028 920 165
PA12	5.500 mm	22	Ø 115 mm	M18x1,5 mm	Black/ Yellow			Yellow	028 920 169
PA12	5.500 mm	22	Ø 115 mm	M18x1,5 mm	Black/ Yellow			Red	028 920 170
PA12	5.500 mm	22	Ø 115 mm	M22x1,5 mm	Yellow			Metal	028 920 162
PA12	5.500 mm	22	Ø 115 mm	M22x1,5 mm	Red			Metal	028 920 166
PA12	6.500 mm	27	Ø 115 mm	M22x1,5 mm	Yellow			Metal	028 920 163
PA12	6.500 mm	27	Ø 115 mm	M22x1,5 mm	Red			Metal	028 920 167
PA12	4.500 mm	24	Ø 75 mm	M22x1,5 mm	Yellow			Metal	028 920 174
PA12	1.0000 mm	22	Ø 160 mm	M22x1,5 mm	Black			Yellow	028 920 160
PA12	10.000 mm	21	Ø 115 mm	M22x1,5 mm	Red			Metal	028 920 164
PA12	6.000 mm	24	Ø 115 mm	M18x1,5 mm / M16x1,5 mm	Black			Black	028 920 171

Spare parts for air brake coil

Pos 1

Pos 2

Pos 3

Pos 4

Functions

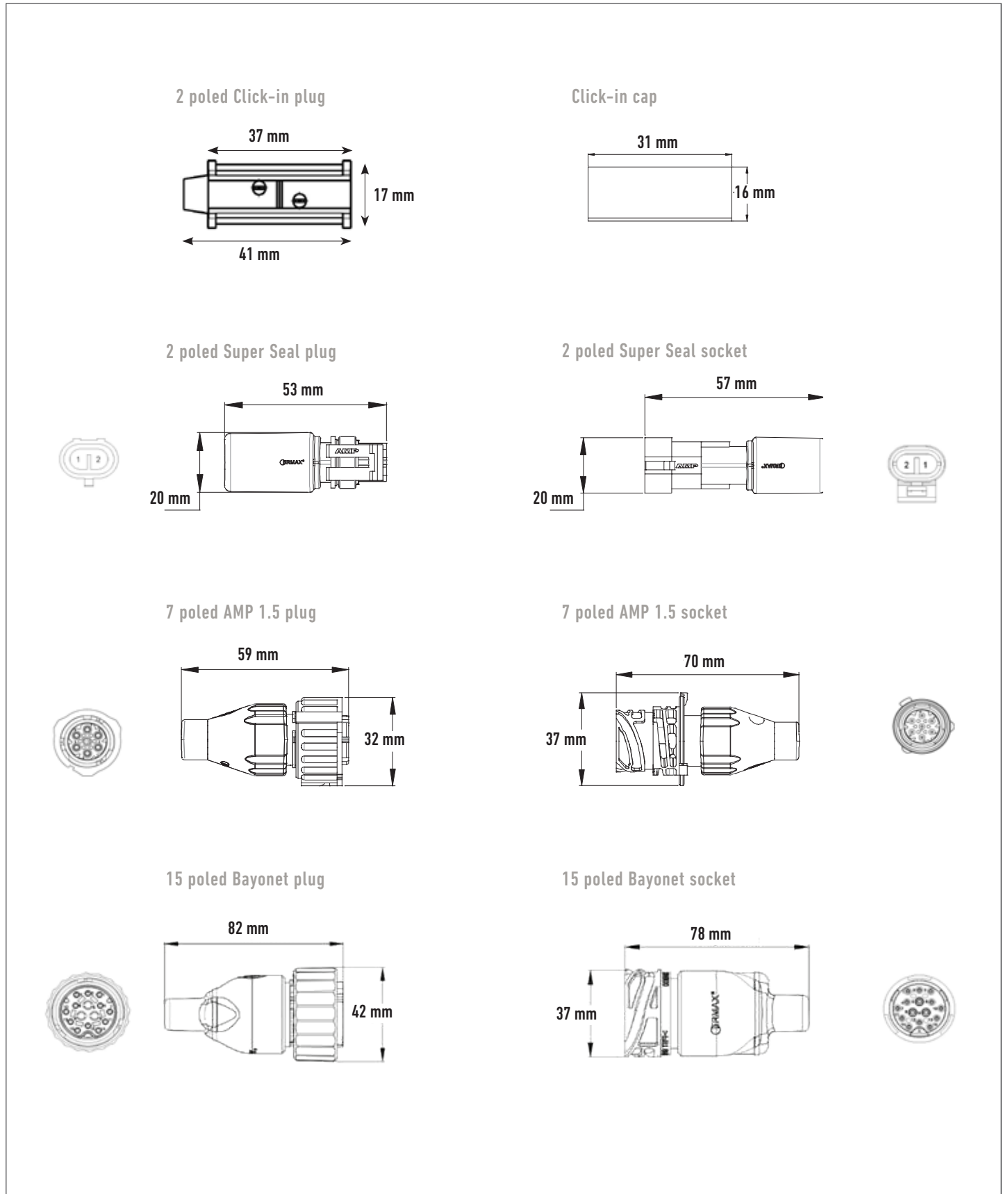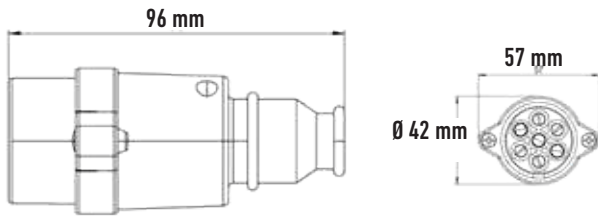| Type	Length	Suitable for air brake coild with article no.	Pos	Article no.
M18x1,5 / M16x1,5		028920081/082/083/087/088/089/090	1	028 929 805
M18x1,5 / M22x1,5		028920081/082/083/087/088/089/090	2	028 929 810
M18x1,5 / M16x1,5	34 mm	028920081/082/083/087/088/089/090	3	028 929 815
M18x1,5 / M18x1,5	34 mm	028920081/082/083/087/088/089/090	4	028 929 820

PLUG TYPE & PIN CONFIGURATION

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OVERVIEW - PLUG CONNECTION FOR ERMAX LIGHTING SYSTEMS

Plug type, designation and dimension

2 poled Click-in plug

37 mm

17 mm

41 mm

Click-in cap

31 mm

16 mm

2 poled Super Seal plug

53 mm

20 mm

2 poled Super Seal socket

57 mm

20 mm

7 poled AMP 1.5 plug

59 mm

32 mm

7 poled AMP 1.5 socket

70 mm

37 mm

15 poled Bayonet plug

82 mm

42 mm

15 poled Bayonet socket

78 mm

37 mm

7 poled plug – ISO 1724

96 mm

57 mm

Ø 42 mm

7 poled socket – ISO 1724

Ø 56 mm

Ø 6 mm

57 mm

Ø 71 mm
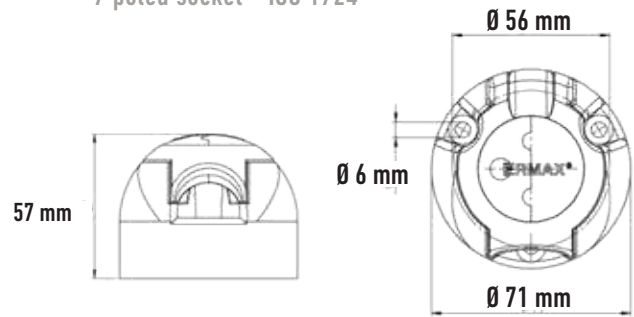
7 poled plug – ISO 3731 / ISO 1185

129 mm

Ø 39 mm
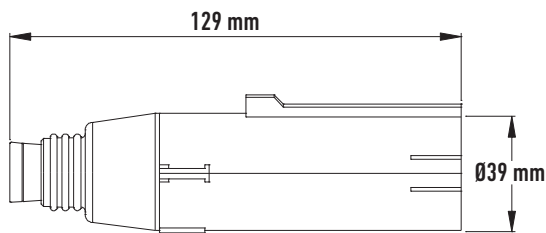
7 poled socket – ISO 3731 / ISO 1185

67 mm

105 mm
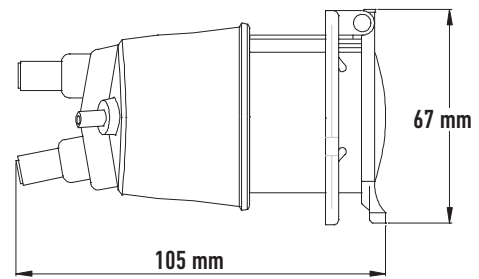
15 poled ADR plug – ISO 12098

92 mm

120 mm
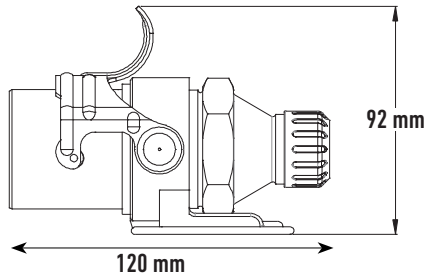
15 poled ADR socket – ISO 12098

95 mm

Frontbox

245 mm

225 mm

S

N

145 mm

125 mm

24V
15P

53 mm

98 mm
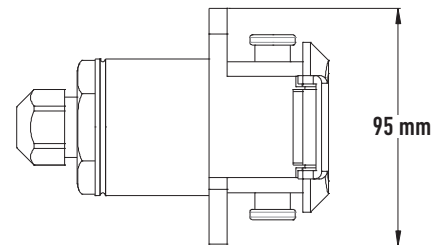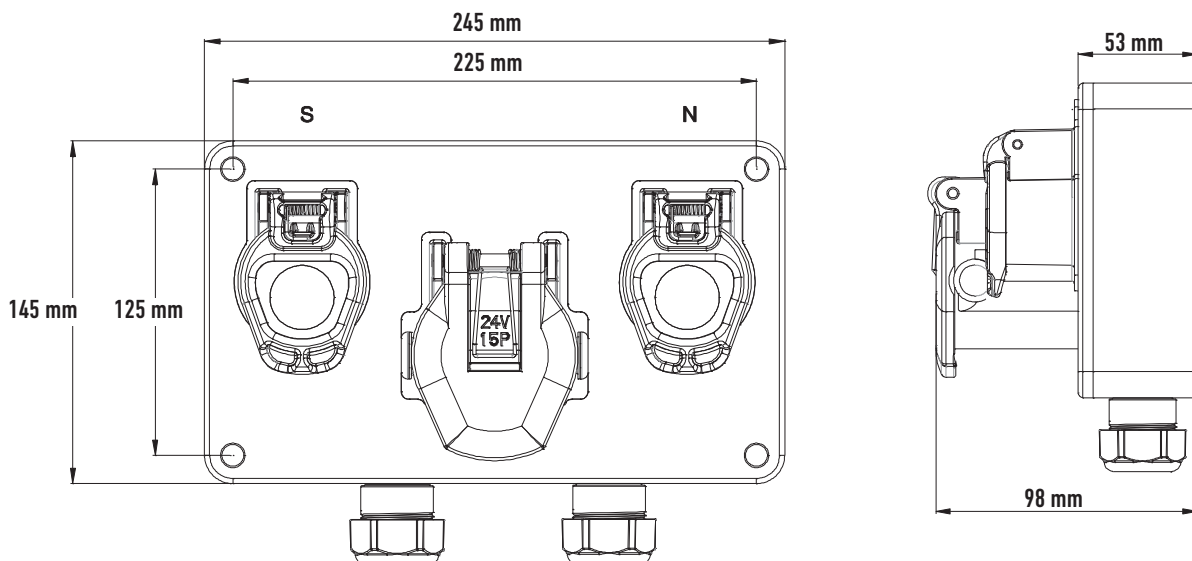
Pin configuration Type N 24V, 7 poled ISO 1185

	Color	Description
1 / 31	White	Ground (-)
2 / 58L	Black	Position and marker light Left [1]
3 / L	Yellow	Direction indicator light Left
4 / 54	Red	Stop light
5 / R	Green	Direction indicator light Right
6 / 58R	Brwon	Position and marker light Left [1]
7	Blue	Aux2 / Stop control for trailer

[1] The license plate light must be connected so that no lights of this illumination have common connection with pin 2 and 6

Pin configuration Type S 24V, 7 poled ISO 3731

	Color	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

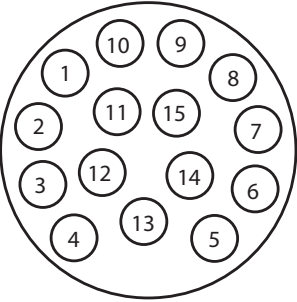## Pin configuration ABS-EBS 24V, 5/7 poled ISO 7638

	Color	Description
1	Red	Plus electro valve
2	Black	Plus electronic
3	Yelow	Minus electronic
4	Brown	Minus electro valve
5	White	Warning unit
6	White-Green	Data communication
7	White-Brown	Data communication

Pin configuration N-type 12V, 7 poled ISO 1724

	Color	Description
L / 1	Yellow	Direction indicator light Left
54G / 2	Blue	Rear fog light
31 / 3	White	Ground (-)
R / 4	Green	Direction indicator light Right
58R / 5	Brown	Position-, side markers-and license plate light, Right [1]
54 / 6	Red	Stop light
58L / 7	Black	Position-, side markers-and license plate light, Left [1]

[1] The license plate light must be connected so that no lights of this illumination have common connection with pin 5 and 7

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Pin configuration 24V, 15 poled ISO 12098

		Color	Description
	1	Yellow	Direction indicator light Left
	2	Green	Direction indicator light Right
	3	Blue	Rear fog light
	4	White	Ground (-)
	5	Black	Position and marker light Left [1]
	6	Brown	Position and marker light Right [1]
	7	Red	Stop light
	8	Pink	Reverse light
	9	Orange	Permanent power supply (+)
	10	Gray	Aux1 / Brake-wear-sensor
	11	White / Black	Aux2 / Stop control for trailer
	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 light must be connected so that no lights of this illumination have common connection with pin 5 and 7

Pin configuration Ermax 15 poled Bayonet plug

		Color	Description
	1	Black	Position and marker light Left
	2	Yellow	Direction indicator light 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 trailer
	8	White / red	Ground for pin 9-15 (ISO 12098)
	9	Orange	Permanent power supply (+)
	10	Blue	Rear fog light
	11	Gray	Aux1 / Brake-ware sensor
	12	White / brown	CANL, Data communication
	13	Brown	Position and marker light Right
	14	White / blue	Aux3 / Lift axle
	15	Green	Direction indicator light Right

Pin configuration AMP plug 7 poled

		Color	Description
	1	White	Ground (-)
	2	Green	Position light
	3	Brown	Reverse light
	4	Yellow	Direction indicator light
	5	Red	Stop light
	6	Blue	Rear fog light
	7	-	-

Pin configuration AMP plug 4 poled

		Color	Description
	1	Blue	Permanent power supply (+)
	2	Brown	Ground (-)
	3	-	(not connected)
	4	-	(not connected)

Pin configuration Super Seal plug 3 poled

		Color	Description
	1	Brown	Ground (-)
	2	Blue	Position light
	3	Yellow / Green	Stop light

Pin configuration Super Seal plug 2 poled

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

Pin configuration Deutsch (DT2) plug 2 poled

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

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