Member of the BPW Group

Plug & Play solutions for vehicle building

Modern rear end with intelligent wiring

ERMAX®

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Modern rear end with impact-resistant LED tail lights

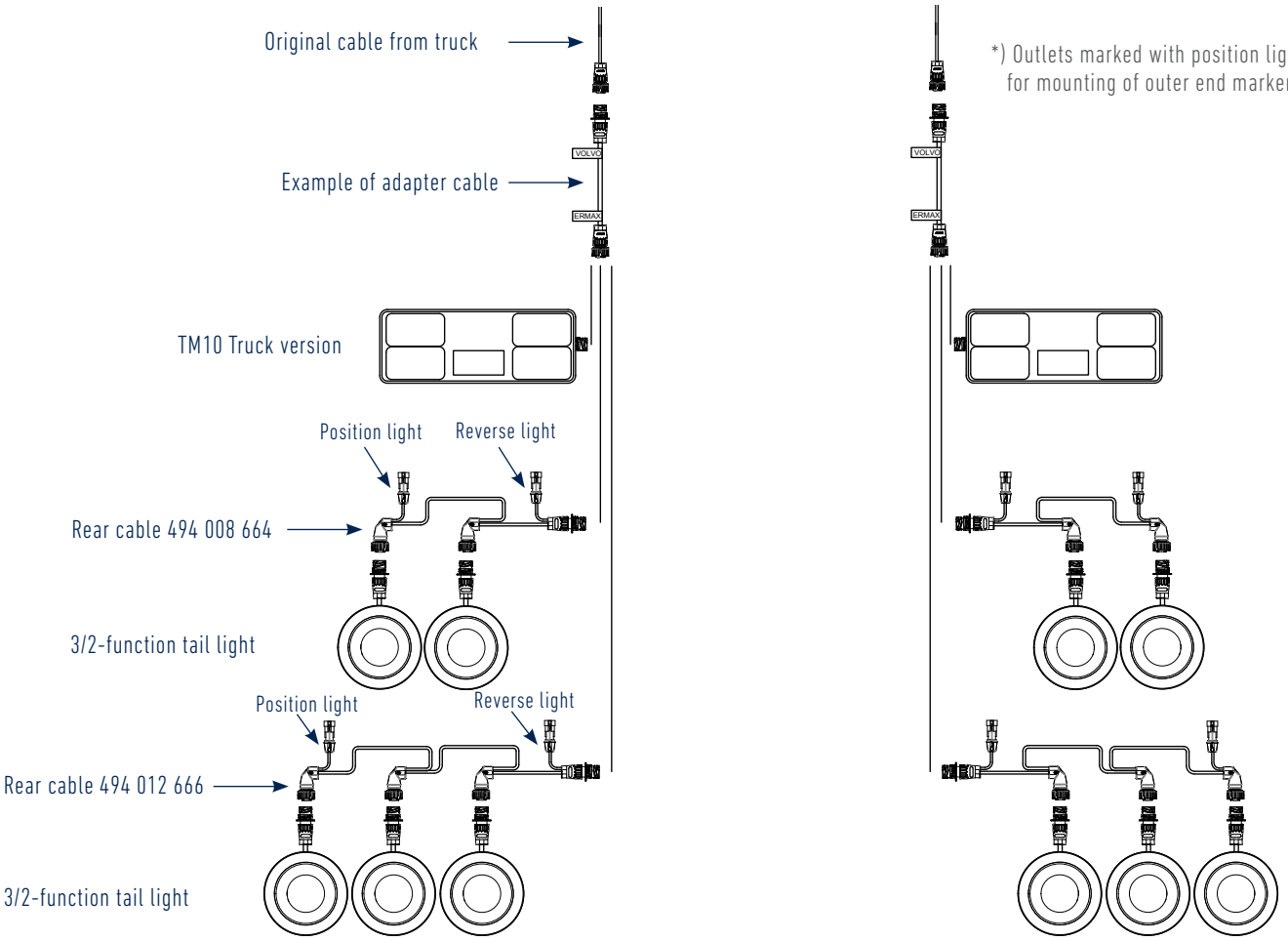
Upgrade to ERMAX tail lights – Truck version

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.

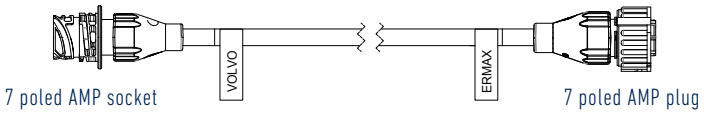
Time-saving up to 8 hours for one vehicle using the plug & play design.

Configuration – Upgrading of vehicle without junction box

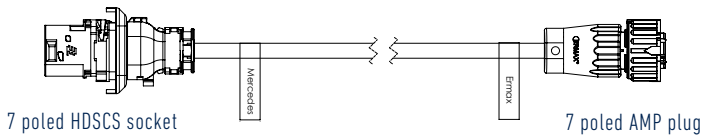


ERMAX Adapter cable

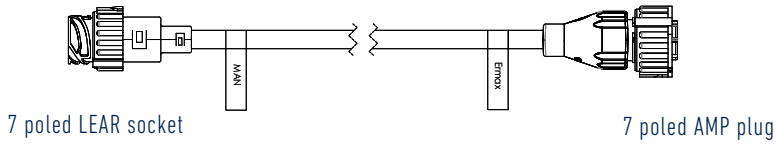
Volvo
Renault



Mercedes Benz



DAF



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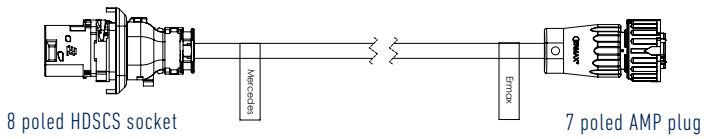


Configurations – Vehicle type and cables

Type	Adapter	Rear cable, 3/2-functions rear lighst – 2 x 3 pcs	Outer end marker lights examples (right / left)	Reversing light
Scania	not necessary	See page 4	098 241 438 / 439 (see page 18-19)	All variations with Super Seal plug can be used
Volvo / Renault	994 003 200			
Mercedes Benz	994 003 210			
MAN	994 003 220			
DAF	994 003 230			
Iveco	994 003 240			

TM10 LED Truck version
098 216 508 / 509

TM10 Hybrid Truck Version
098 216 408 / 409

Option: The cable canbe lead at the side of the mounting foot

TM5 3-function
098 212 101 / 102

TM5 2-function
098 255 101 / 102

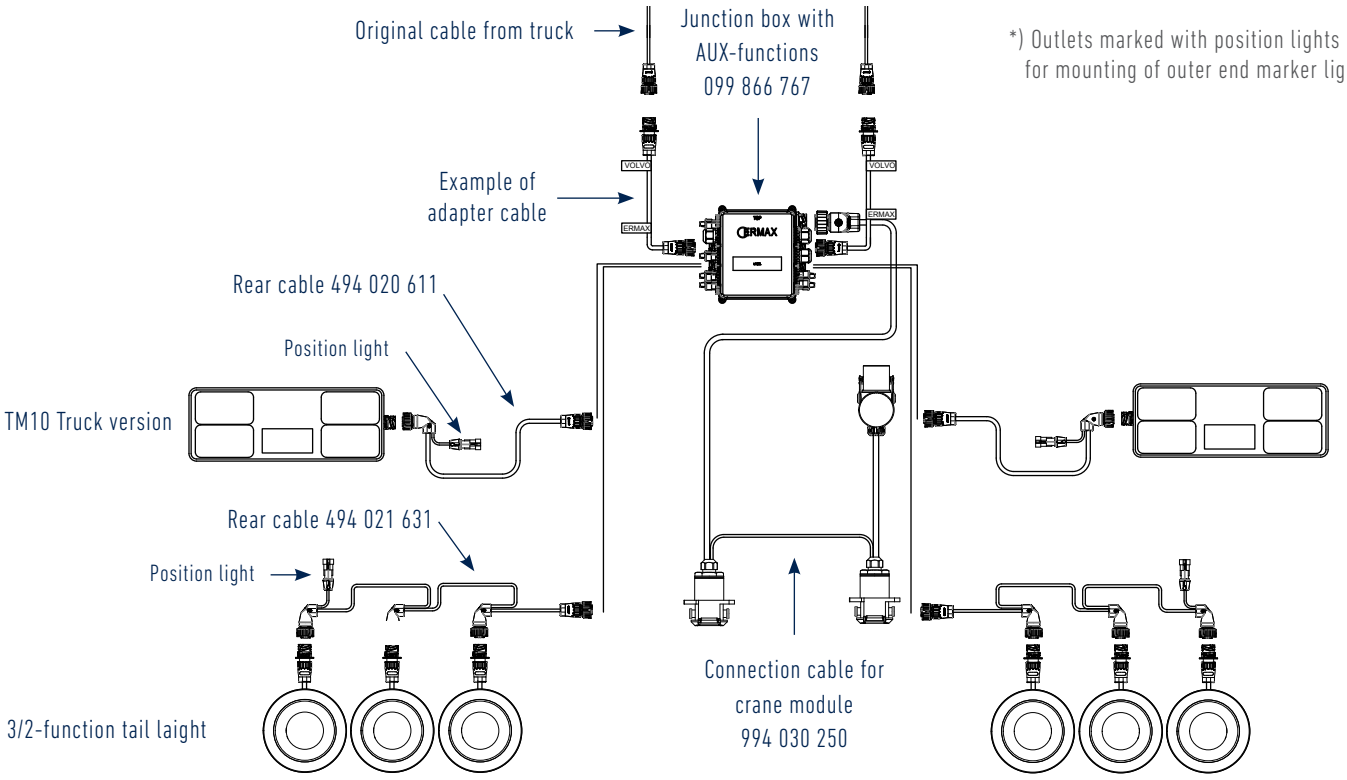
Plug & Play solution - with junction box and AUX functions

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 design.

Configuration – Upgrading of vehicle with junction box



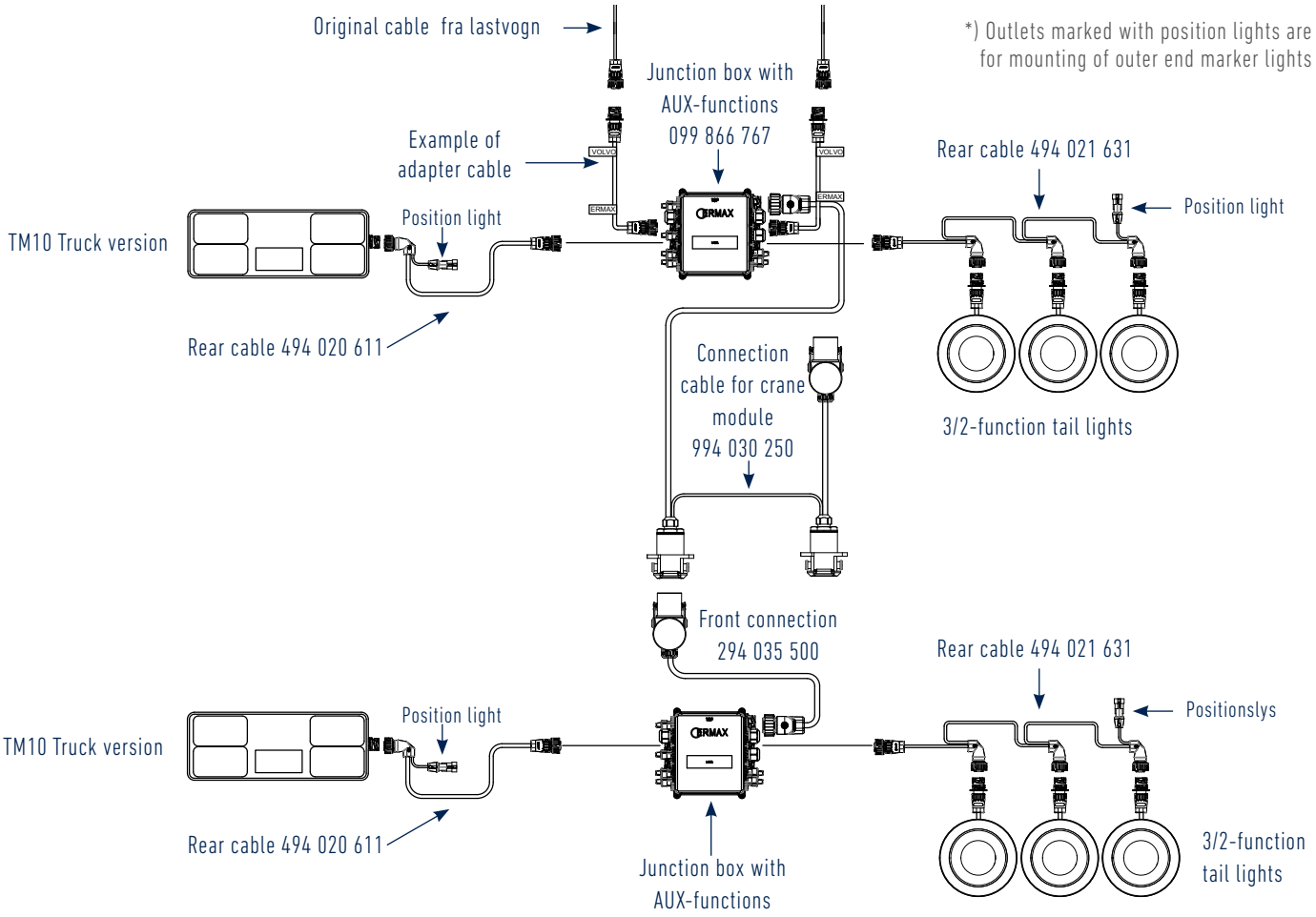
Plug & Play solution - with crane module

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 design.

Configuration - Upgrading of vehicle with crane module without connection to trailer



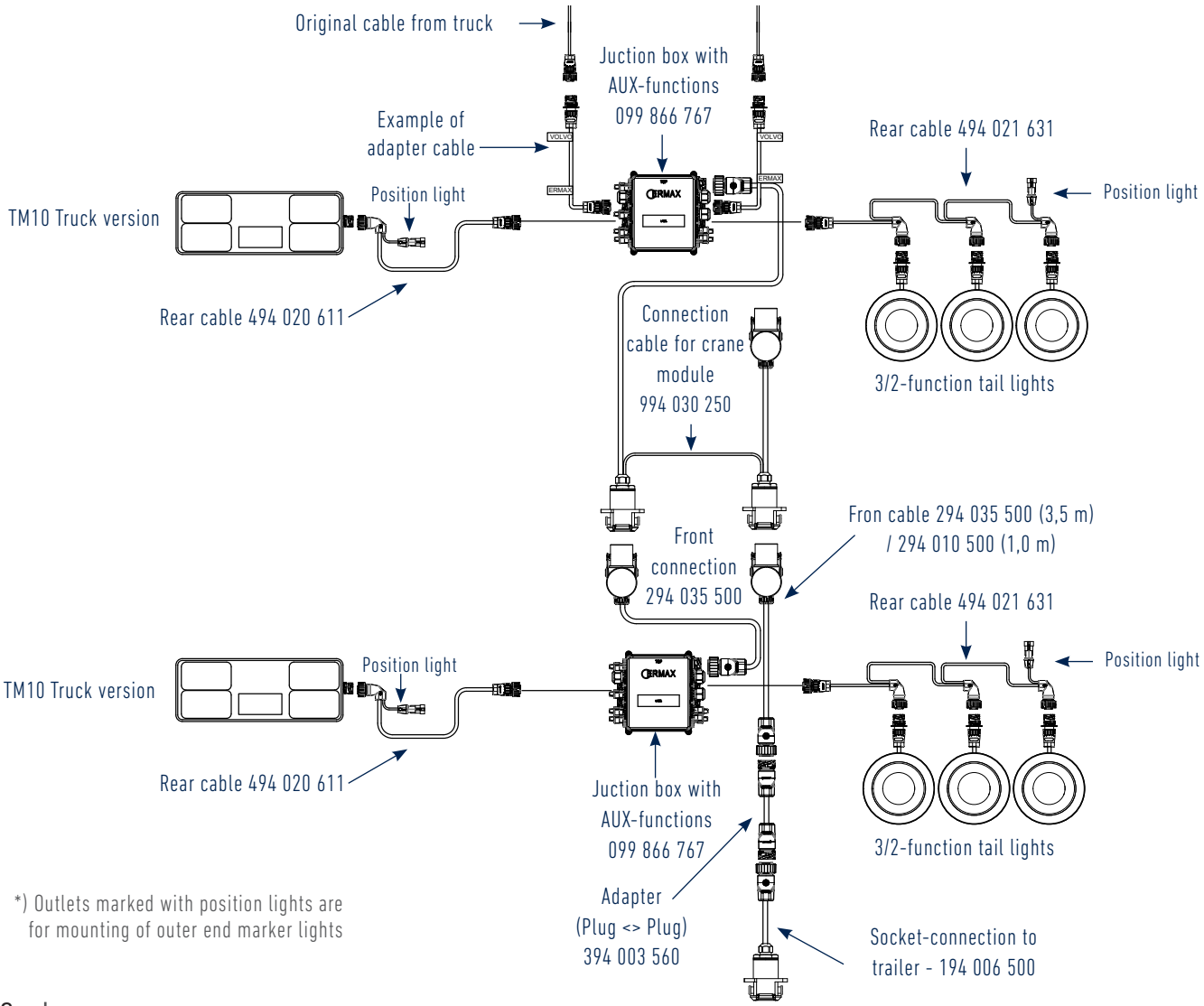
Plug & Play solution - with crane module and connection to trailer

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 design.

Configuration - Upgrading of vehicle with crane module and socket connection for trailer on the crane module



*) Outlets marked with position lights are for mounting of outer end marker lights

Plug & Play solutions from Ermax

- Developed for the technically easier and time-saving mounting

Time-saving and easy mounting

Length reduction, stripping, use of cable shoes 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.

Junction box with many possibilities

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

In other words – here is the possibility to use all pre-configurated ISO012098 connections (pin 9-15). This might be functions as working lights, warning lights, beacons or common power supply..

By using Super Seal sockets or cable connectors all functions are available.
By solutions for crane module it is necessary that the tail lights are connected to the connection box, thus the tail lights thus can be connected to the crane module

2 poled Super Seal plugs

7 poled AMP 1.5 plugs

15 poled Ermax Bayonet plugs

TM10 tail light hybrid & full-LED for Truck

The flexible light for every application

The modern and impact-resistant tail light from Ermax with long-lasting advantages

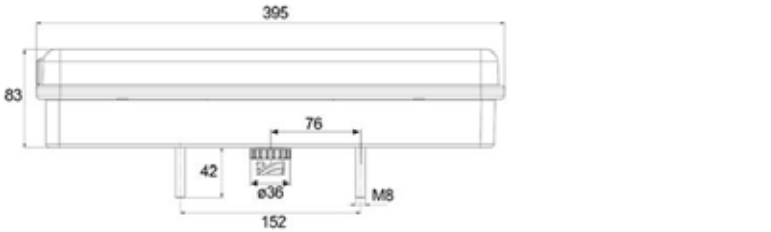
The TM10 7-function tail light from Ermax is available in two versions: As a hybrid version for an innovative design and as full-LED being the most economical solution. Both versions can be used for truck and trailer creating a uniform look at both the truck and the trailer .

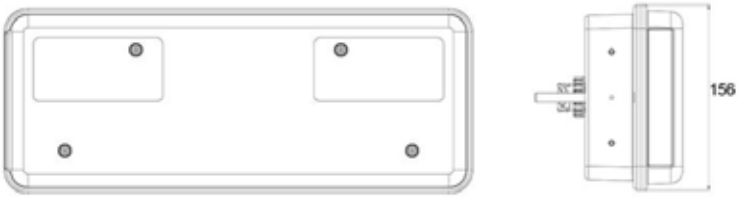
Hybrid version - with modern position light and license plate light in LED and other functions with bulb technology. The hybrid tail lights can be converted into full-LED according to customer needs due to the modular design.

Full-LED – the economical solution with a minimum of wear and a long life-time.

Hybrid

Full-LED





AMP socket placed in the back

Description

Lens:	Impact resistant polycarbonate
Housing:	Polypropylen (PP)
Dimension:	390 x 155 x 80 mm
Bolt hole distance:	152 mm / M8
IP-Rating:	IP54

Wide range of applications - All inclusive

Highlights

- Unbreakable - Impact-resistant lens made of polycarbonate
- Hybrid or full-LED
- Eternal Light™ - newest LED technology
- Durability - Long life with the newest LED technology and high vibration resistance
- Applicable for truck and trailer
- Ideal for inloaders (well-bed trailers) with upright mounting
- Certified according to all relevant standards and regulations in Europe

Eternal Light™

Functions

Type	Operation voltage	Right → Left ←	Position	Stop	Dir. indicator	Reverse	Rear fog	Side marker	Reflex reflector	License plate	Outer en marker	Connection 7 pole AMP 1.5 socket Direction:	Article No.
Hybrid	24V	→			✓							Rear	**098 216 408**
Hybrid	24V	←			✓							Rear	**098 216 409**
Hybrid	24V	→			✓					✓		Rear	**098 216 410**
Hybrid	24V	←			✓					✓		Rear	**098 216 411**
Full-LED	24V	→			✓							Rear	**098 216 508**
Full-LED	24V	←			✓							Rear	**098 216 509**
Full-LED	24V	→			✓					✓		Rear	**098 216 510**
Full-LED	24V	←			✓					✓		Rear	**098 216 511**

TM5 tail light full-LED

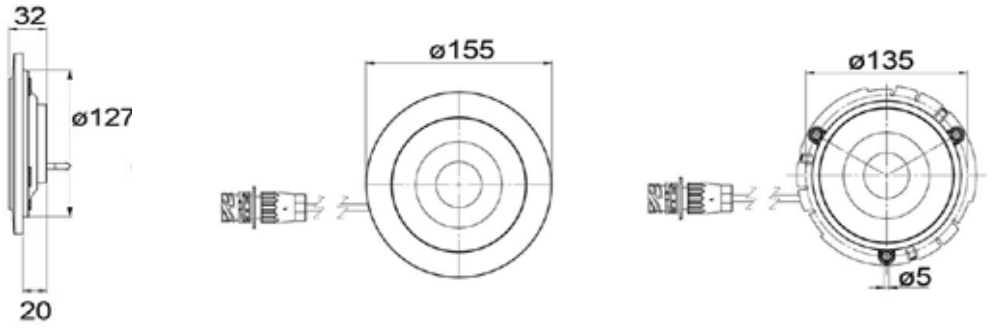
Space saving – ultra thin build-in depth

Unsurpassed durability and impact-resistant lens of polycarbonate

The TM5 Eternal Light® tail light is ultra-thin and the mounting thus easy and flexible.
The light distribution is unique for heavy-duty vehicles – lmade like the softly stroked light, which is known from passenger cars, and gives a high visibility and modern light distribution.

Pos. 1

Pos. 2



Description

Tail light with Eternal Light™ technology - for built-in

Lens:	Impact resistant polycarbonate
Housing:	Impact resistant polycarbonate
Dimension:	Ø155 x 32 mm
Built-in:	Ø127 mm
Mounting holes:	3 stk Ø4,5 mm i 120° fordelt i Ø135 mm
IP-Rating:	IP67

Wide range of applications - All inclusive

Highlights

- Unbreakable - Impact-resistant lens made of polycarbonate
- Full-LED
- Increased visibility - Eternal Light® technology
- Ultra slim-line for optimal integration in underrun protection bar - maximum built-in flexibility
- Twist mounted chrome ring - easy maintenance
- Certified according to all relevant standards and regulations in Europe

Functions

Operation voltage	Position Stop Dir. indicator	Reverse Rear fog	Connection	Cable length	Outlet Super Seal	Pos.	Article No.
12/24V	✓		7 pole AMP 1.5 socket	300 mm		1	**098 212 102**
12/24V		✓	7 pole AMP 1.5 socket	300 mm		2	**098 255 102**
12/24V		✓	7 pole AMP 1.5 socket	1.200 mm	200 mm cable with Super Seal socket for Reverse alarm / Reverse light	2	**098 255 104**

Spare parts

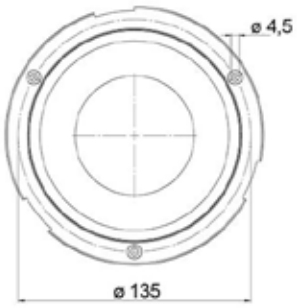
Chrome ring	**098 292 215**

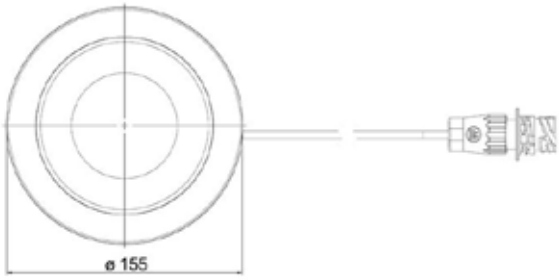
TM7 Tail lights full-LED

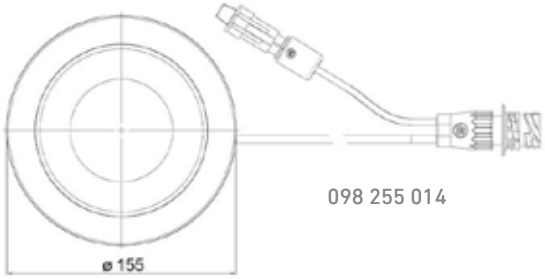
Space saving - low built-in depth

Pos. 1

Pos. 2







098 255 014

Description

Lens:	PMMA
Housing:	ABS
Dimension:	Ø155 x 43.2 mm
Bolt hole distance:	45 mm / M6
Built-in:	Ø127 mm
Mounting holes:	3 stk Ø4,5 mm i 120° fordelt i Ø135 mm
IP-Rating:	IP69K

The classic LED look

Functions							
Operation voltage	Position Stop Dir. indicator	Reverse Rear fog	Cable length	Connection	Outlet Super Seal	Pos.	Article No.
12/24V	✓		300 mm	7 pole AMP 1.5 socket		1	**098 212 008**
12/24V	✓		2.000 mm	7 pole AMP 1.5 socket		1	**098 212 017**
12/24V		✓	2.000 mm	7 pole AMP 1.5 socket		2	**098 255 017**
12/24V		✓	200 mm	7 pole AMP 1.5 socket		2	**098 255 018**
12/24V		✓	1.200 mm	7 pole AMP 1.5 socket	200 mm cable with Super Seal socket for Reverse alarm / Reverse light	2	**098 255 014**

Spare parts

Chrome ring Ø155 mm	**098 292 216**

TM4 tail lights full-LED

The classic 3-chamber Hamburger light

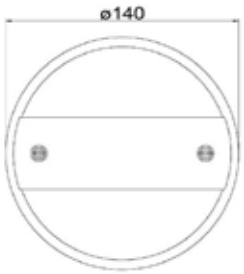
Pos. 1

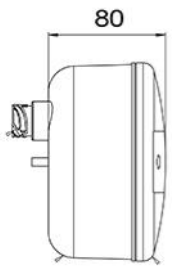
Pos. 2

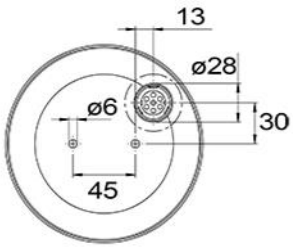
Pos. 3

Pos. 4

Pos. 5







7 poled AMP 1.5 connection

E EMC

Description

Lens:	PMMA
Housing:	PP
Dimension:	Ø140 x 80 mm
Bolt hole distance:	45 mm / M6
IP-Rating:	IP54
LED diode unit:	IP69K rating

The classic look

Functions							
Operation voltage	Position Stop Dir. indicator	Reverse	Rear fog	Connection	D Approval	Pos.	Article No.
24V	✓			7 pole AMP 1.5 socket	✓	1	**098 212 346**
12/24V	✓			7 pole AMP 1.5 socket		1	**098 212 446**
12/24V	✓			7 pole AMP 1.5 socket		2	**098 212 349**
24V		✓		7 pole AMP 1.5 socket		3	**098 256 346**
24V			✓	7 pole AMP 1.5 socket		4	**098 257 346**
12/24V		✓	✓	7 pole AMP 1.5 socket		5	**098 255 346**

Accessories

Pos. 1

Pos. 2

Chrome ring and built-in kit	1	**098 292 360**
Protection cover for tail light	2	**098 296 720**

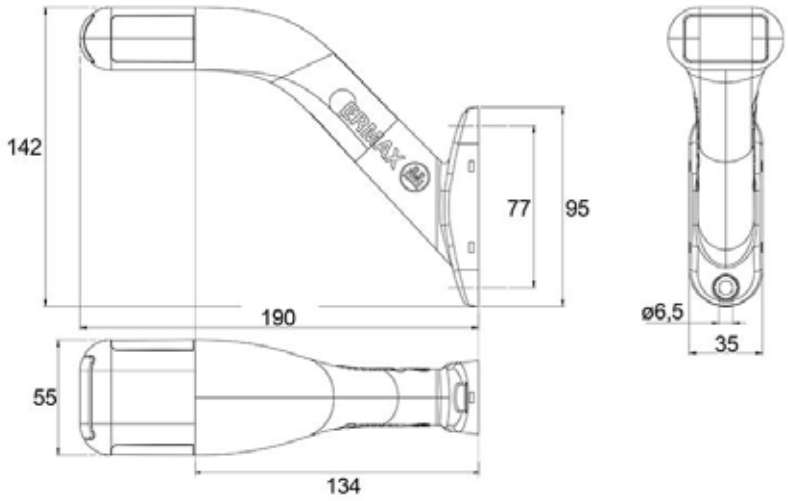
Outer end marker light LED (45⁰)

Modern design

Pos. 1

Pos. 2

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



Description

With clear lens - lighting red, white and amber

Lens:	Impact resistant polycarbonate
Housing:	Rubber
Bolt hole distance:	77 mm / Ø 6,5
IP-Rating:	IP69K

Connection directly at the rear of the tail light

Functions						
Right ← Left →	Operation voltage	Connection	Cable length	Light - colour	Pos.	Article No.
←	12/24V	Super Seal socket *	1.500 mm	red / white / amber	1	**098 241 425**
→	12/24V	Super Seal socket *	1.500 mm	red / white / amber	1	**098 241 426**
→	12/24V	Super Seal socket	300 mm	red / white / amber	1	**098 241 448**
←	12/24V	Super Seal socket	300 mm	red / white / amber	1	**098 241 449**

*) Connection: Extension cable 794 002 230 - Super Seal socket > Super Seal socket - 200 mm

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

→	12/24V	Super Seal socket	300 mm	red / white / amber	2	**098 241 438**
←	12/24V	Super Seal socket	300 mm	red / white / amber	2	**098 241 439**

Pos. 2

LED Reverse lights and Work lights

Easy maintenance

Various connection varations

ERMAX work lights are available with various connection variations – connection cable with Open-End, Super Seal socket or "Deutsch" socket.

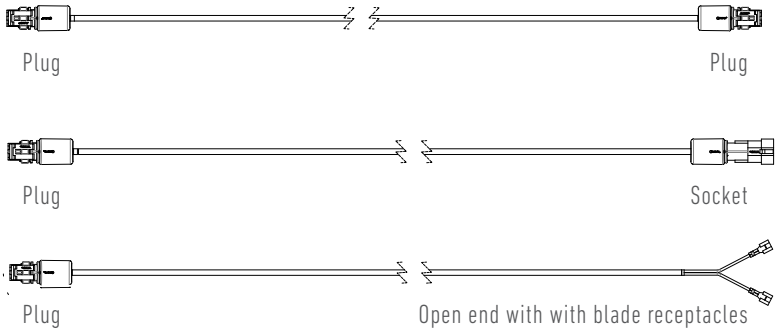
For connector variants, Ermax always offers a standard cable length of 300 millimeters to the first plug connection. The cable length can be adjusted according to need by means of standard extension cable or adapter cable. This ensures optimum ease of maintenance.

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

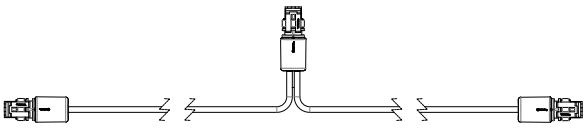
Connection / Extension possibilities ERMAX work lights

Super Seal socket

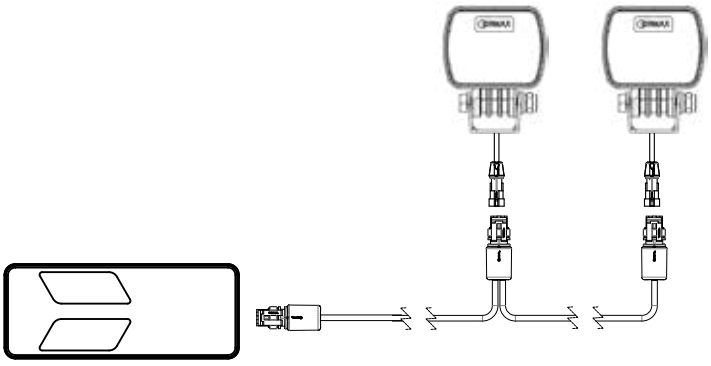
Extension cable with Super Seal connection



Y-Adapter with 3 x Super Seal plugs



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



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

Technical features ERMAX reverse lights and work lights

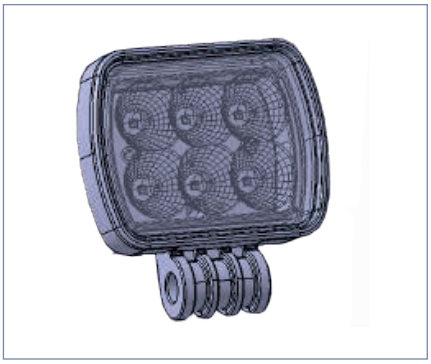
Technical specifications - Common to all variants

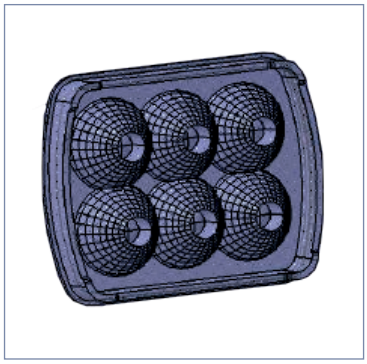
- Impact-resistant lens made of polycarbonate
- Housing made of aluminium, black lacquer (anti corrosion layers)
- Mounting bracket made of stainless steel, AISI 304 quality
- Mounting bolts M8 / 30 mm
- Multivolt 12/24V
- Working temperature -40 °C bis +65 °C
- Flood light pattern
- Colour temparature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

Advantages of the newest LED light technology
- which are optimally utilised in the Ermax reverse lights and work lights

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

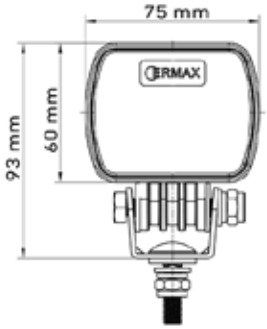
- High light output
- Extremely long lifetime
- 100% water & dustproof
- Low power consumption
- Maintenance free
- High shock and vibration resistance
- Effective heat conduction
- Increased profitability

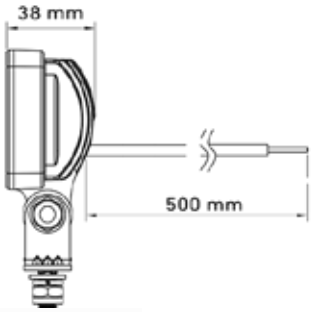


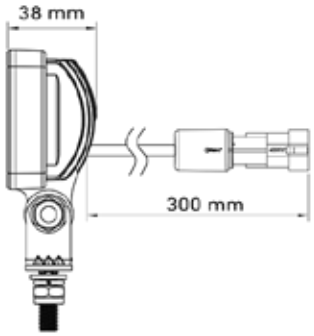


Reverse Light

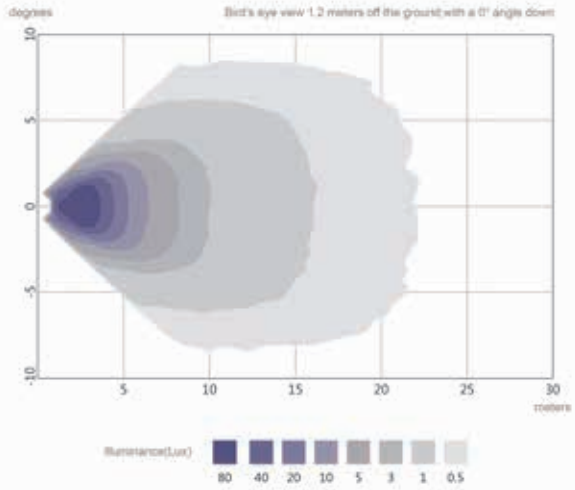
Effective Lumen 300







Illumination



Bird's eye view 1,2 meter above the ground with an incline angle of 5^0

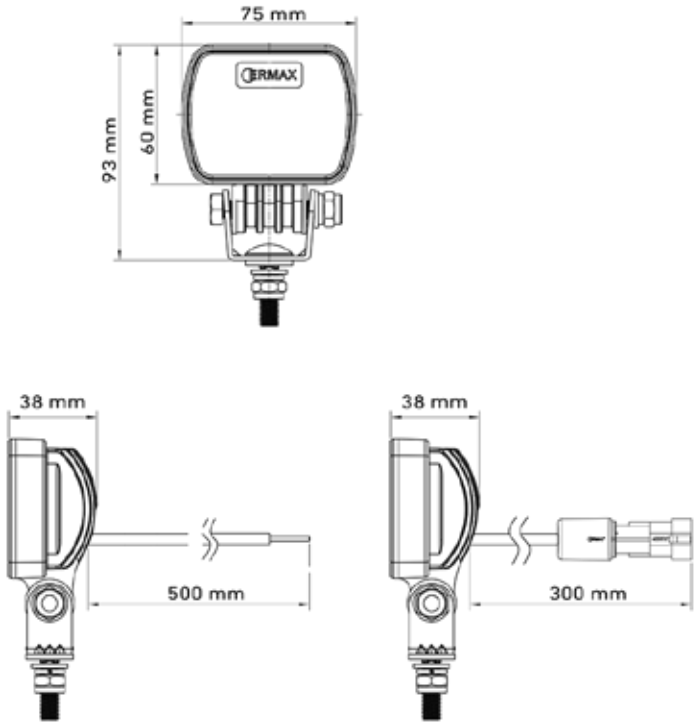
Functions

EMC

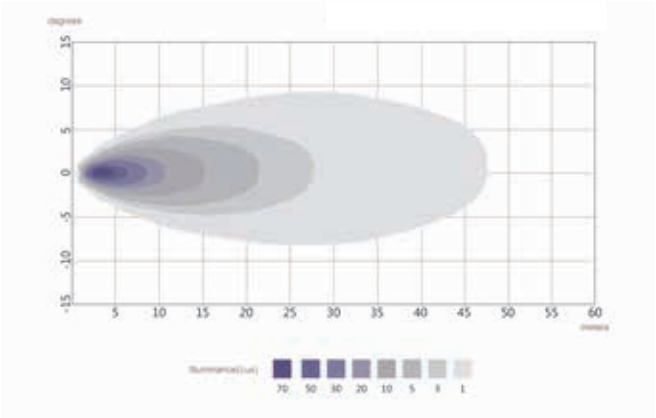
Operating voltage	Energy consumption	Connection	Cable length	Light source	Lumen Theoretical / effective	Light pattern	Article No.
12/24V	6,5 W	Open end	500 mm	6 x high-powered LED	650 / 300	Flood	098 256 250
12/24V	6,5 W	Super Seal socket	300 mm	6 x high-powered LED	650 / 300	Flood	098 256 255

Work Lights LED

Effective Lumen 600



Illumination



Bird's eye view 1,2 meter above the ground with an incline angle of 5^0

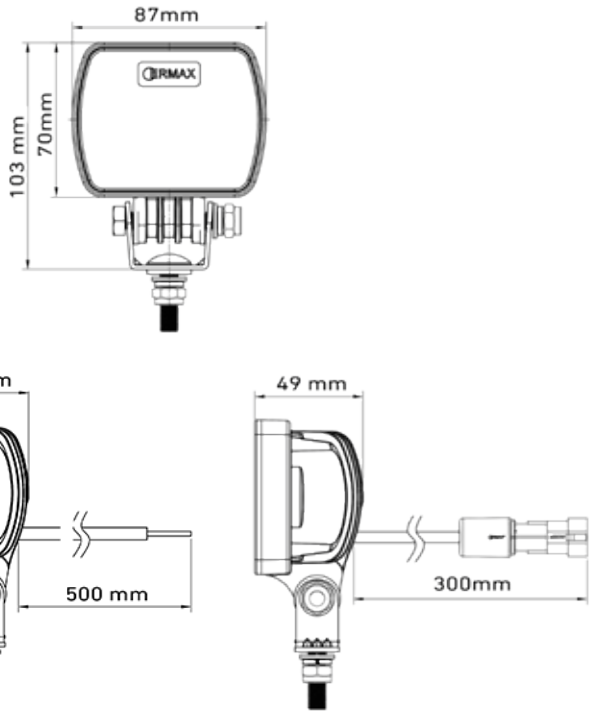
Functions

EMC

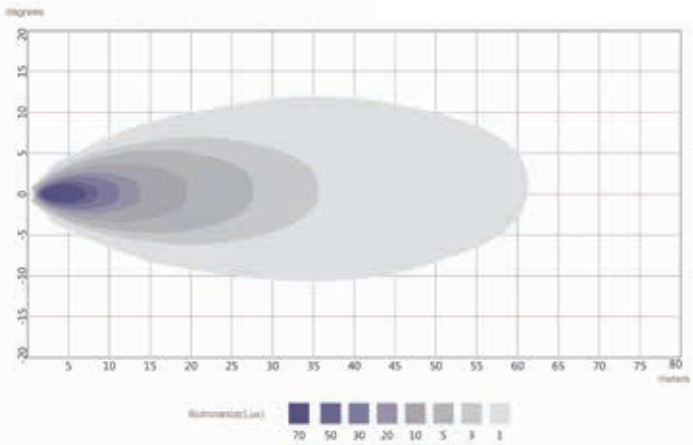
Operating voltage	Energy consumption	Connection	Cable length	Light source	Lumen Theoretical / effective	Light pattern	Article No.
12/24V	8 W	Open end	500 mm	6 x high-powered LED	800 / 600	Flood	098 174 250
12/24V	8 W	Super Seal socket	300 mm	6 x high-powered LED	800 / 600	Flood	098 174 255

Work Lights LED

Effective Lumen 1200

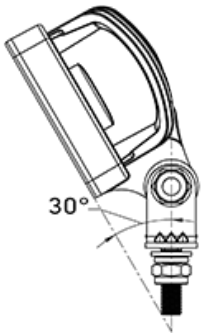


Illumination



Bird's eye view 1,2 meter above the ground with an incline angle of 5⁰

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



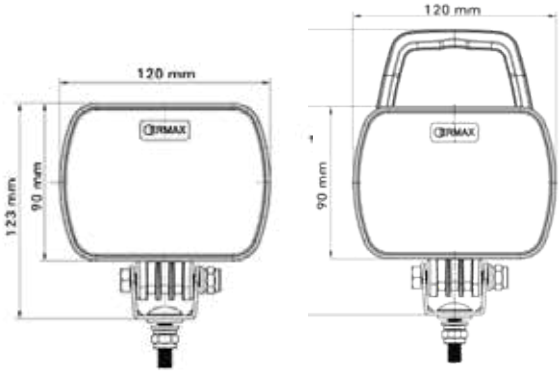
Functions							EMC
Operating voltage	Energy consump-tion	Connection	Cable length	Light source	Lumen Theoretical / effective	Light pattern	Article No.
12/24V	16 W	Open end	500 mm	9 x high-powered LED	1600 / 1200	Flood	098 174 260
12/24V	16 W	Super Seal socket	300 mm	9 x high-powered LED	1600 / 1200	Flood	098 174 265
12/24V	16 W	Deutsch (DT) socket	300 mm	9 x high-powered LED	1600 / 1200	Flood	098 174 268

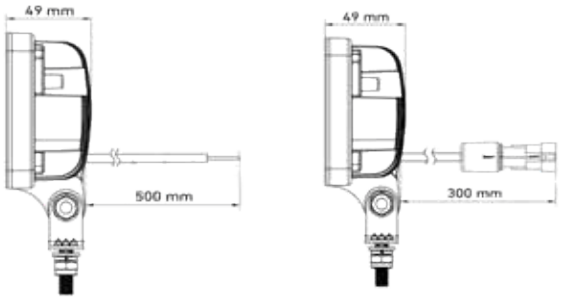
Work Lights LED

Effective Lumen 1800

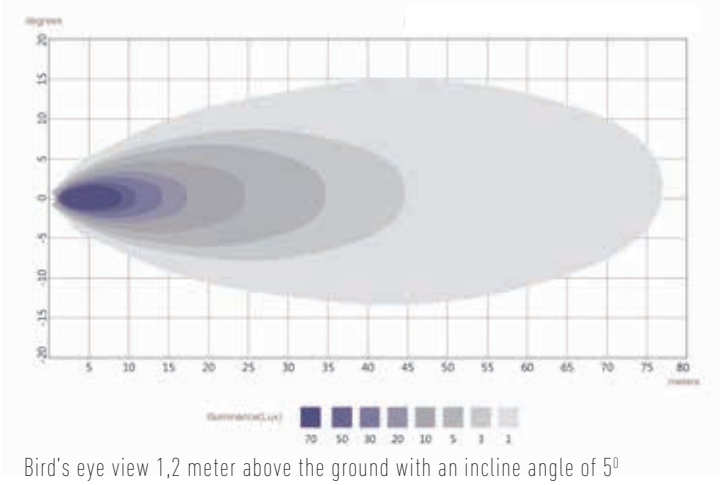
Pos. 1

Pos. 2
With bracket and on/ off switch



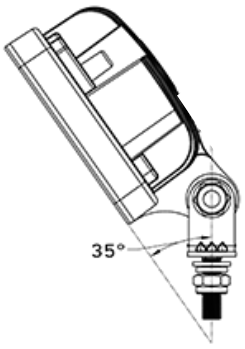


Illumination



Bird's eye view 1,2 meter above the ground with an incline angle of 5⁰

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



Functions

EMC

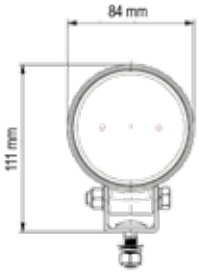
Operating voltage	Energy consumption	Connection	Cable length	Light source	Lumen Theoretical / effective	Light pattern	Pos.	Article No.
12/24V	25 W	Open end	500 mm	12 x high-powered LED	2400 / 1800	Flood	1	098 174 270
12/24V	25 W	Super Seal socket	300 mm	12 x high-powered LED	2400 / 1800	Flood	1	098 174 275
12/24V	25 W	Deutsch (DT) socket	300 mm	12 x high-powered LED	2400 / 1800	Flood	1	098 174 278
12/24V	25 W	Super Seal socket - with handle & switch	300 mm	12 x high-powered LED	2400 / 1800	Flood	2	098 174 279

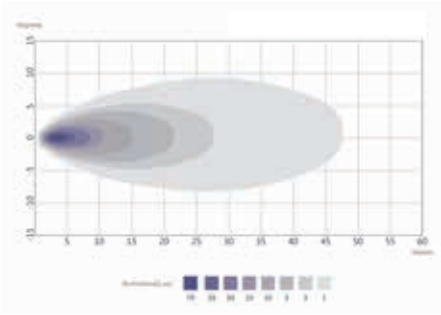
Addition to a strong family

Further types of ERMAX work lights

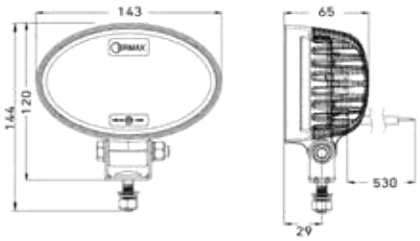
Illumination

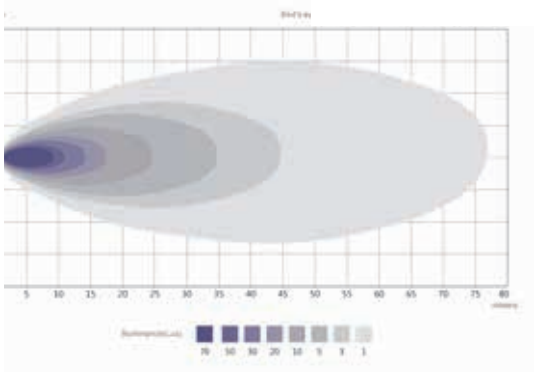
Pos. 1



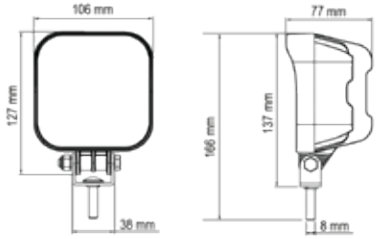


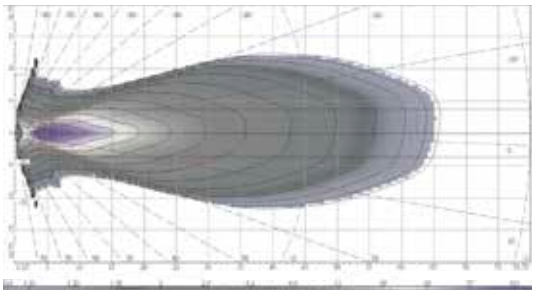
Pos. 2





Pos. 3





Functions								EMC
Operating voltage	Energy consumption	Connection	Cable length	Light source	Lumen Theoretical / effective	Light pattern	Pos.	Article No.
12/24V	12 W	Open end	500 mm	4 x LED	100 / 600	Flood	1	098 174 080
12/24V	24 W	Open end	500 mm	8 x LED	2000 / 1400	Flood	2	098 174 095
12/24V	25 W	Open end	1650 mm	4 x LED	3200/ 2200	Flood	3	098 174 149

Brands of the BPW Group:

October 2019 - Version 1.2

ERMAX®

"Light Made Heavy Duty"

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