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## **LAMPS**

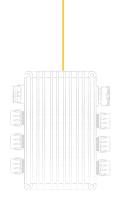
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Individual systems – satisfied customers. Since its founding in 1977, Aspöck Systems GmbH has focused on a philosophy that has made it one of the leading manufacturers in the field of lighting for the automotive industry today: The development of customised solutions for each individual customer. This flexibility is the reason for the success of Aspöck systems.

Innovative products. We see it is our obligation to create state of the art wiring and lamps, and as pioneers in this field, to also set standards. We rely on water-proof cable and plug-in systems and LED lighting for all areas of application.

Continuous growth. We have been continuously expanding our main plant in Peuerbach, Upper Austria, in recent years to include production, storage and administration areas. Every year we invest in new production facilities and test and development equipment, which is how we remain at the cutting edge of technology. At the same time, we continue to educate and train our employees in order to always be able to give you the right answer, even with more difficult questions, for example questions surrounding special regulations.



# WE BRING THE LIGHT TO THE STREETS

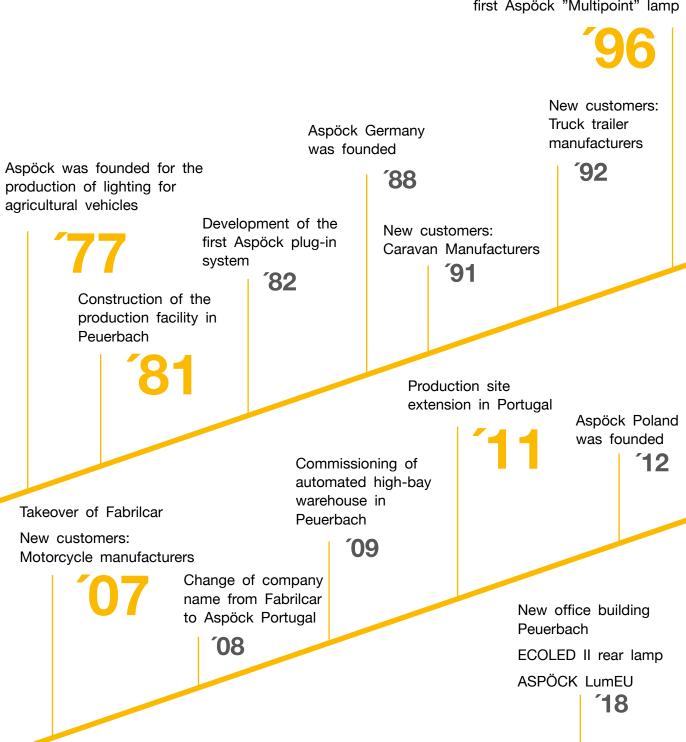




# FROM THEN TO NOW

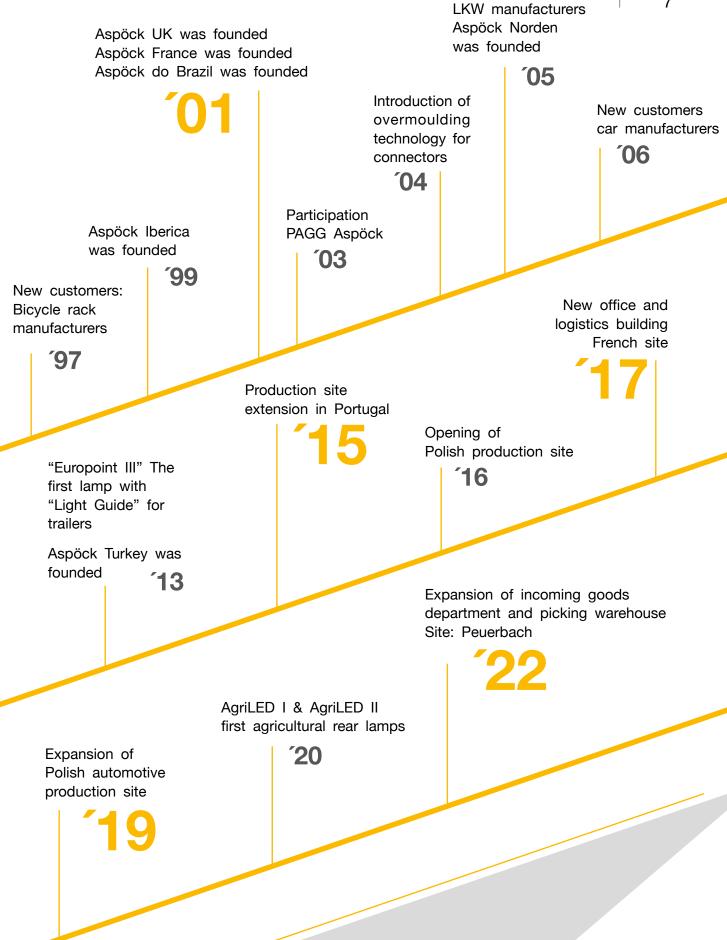
AND ON INTO THE FUTURE...

Completion of the first Aspöck "Multipoint" lamp





New customers:





# THE ASPÖCK CONNECTOR SYSTEM

The Aspöck connector system consists of 2-, 3-, 7- and 17-pin plug and socket housings. Each of these wiring systems can be used individually for all 24 V trailers. Aspöck connector systems allow easy connection to all components. All connectors are overmoulded and tested according to protection classification IP69K (jet-proof and submersible).



The 17-pin plug and socket housings connect the front supply, main cable and rear wiring as well as ensure easy integration of an additional distributor.



Aspöck rear lamps are connected to the Aspöck connector system by the 7-pin plug. These 7-pin plug and socket housings can of course be used for other additional functions.



# 3-pin ASS3 plug IP 6K9K

The 3-pin ASS3 connector enables easy and flexible mounting due to its small diameter. The ASS3 can also be used for additional 3-pin functions.



The 2-pin ASS2 plug is an advancement of the 2-pin ASS1 plug – the advantage for you is an additional bayonet lock. This enables quick and safe connection of e.g. navigation lights, side marker lamps and end-outline marker lamps as well as additional 2-pin functions.

### Press & Ready system I P&R

IP 6K9K

The P&R wiring system is another contact option characterised by quick and uncomplicated mounting on the vehicle. All Aspöck single-function lights can be equipped and connected with the P&R system.

The cables are supplied in different lengths according to requirements. These lamps can be mounted in a 2-core flat cable at any point and are already tested for function. They are totally waterproof due to silicone single-core sealing and may also be used in the transportation of hazardous goods.







## Other connector systems

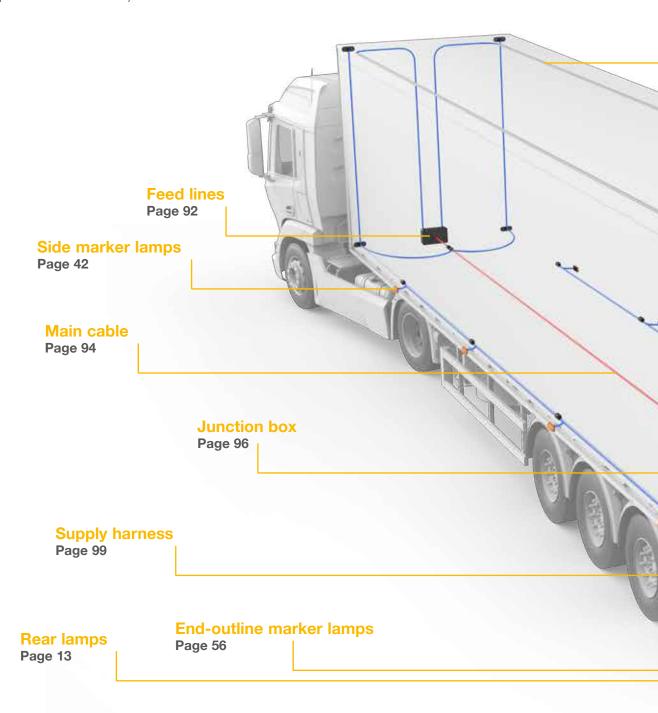
In addition to the Aspöck connector system, the Aspöck Group offers a wide range of standard connector systems which are available from stock, meaning we can offer maximum flexibility.



# **LIGHT SYSTEM**

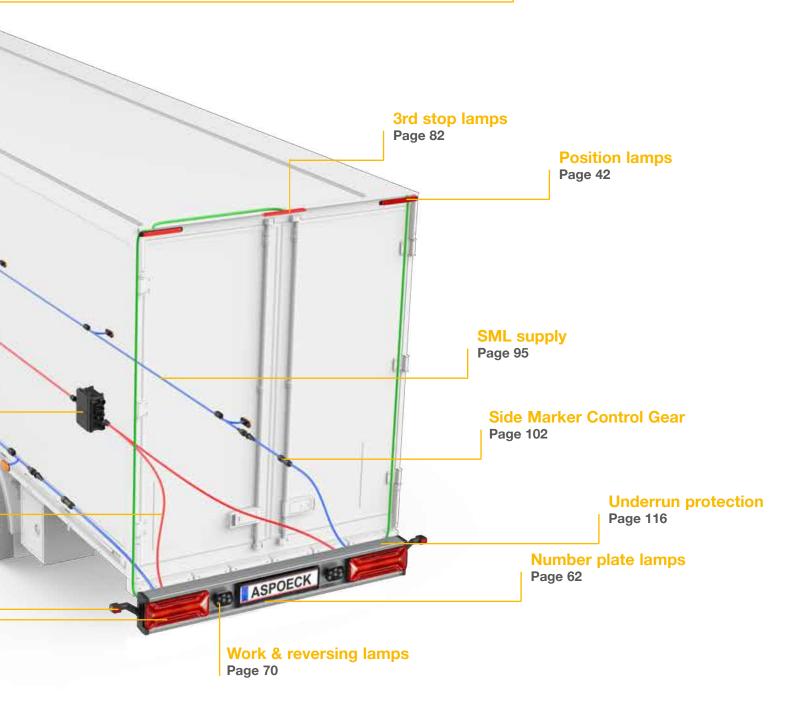
#### Aspöck lets you shine

The production of the entire light system ensures that all Aspöck components – first and foremost the lamps, but also the accessories (LCG, SMCG), the junction boxes, etc. – can be perfectly interconnected, guaranteeing maximum reliability (up to ADR and IP6K9K).





FlexLED LED strips & interior lamps Page 78



# REAR LAMPS

3-CHAMBER LAMP ECOLED ECOLED II

**MULTILED III** 

EUROPOINT III BRASPOINT 140

NUMBER PLATE LAMPS
INTERIOR LAMPS
WORK LAMPS
NUMBER PLATE HOLDERS
SIDE MARKER LAMPS
REVERSING LAMPS
LIGHT
POSITIONS LAMPS
UTLINE MARKER LAMPS
REAR LAMPS
BEACONS
ERIOR LAMPS



# **ECOLED III**

The 5-function light from Aspöck Systems









#### **PRODUCT FEATURES**

#### **INCREASED VISIBILITY**

Large Glowing Body light surfaces

#### **REAR LIGHT CROSS-CIRCUIT**

Increased safety due to separate supply of the rear light

#### **DYNAMIC DIRECTION INDICATOR**

Sequential directional indicator function

#### **ISO PULSE CAPABLE**

Direction indicator failure monitoring according to ISO 13207-1

#### **OPTIONAL CONNECTIONS**

The option of four additional 2-pin connections on the rear of the lamp

#### **INTEGRATED SMCG (Side Marker Control Gear)**

Control for flashing side marker lamps

#### **OUTLINE MARKER WITH PREDETERMINED BREAKING POINT**

In the event of damage, only the mounting bracket needs to be replaced

#### HIGH IP CLASS IP6K9K

Pressure and water resistant



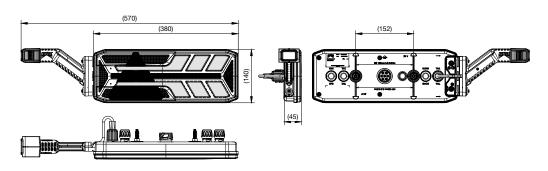


# Version ITH OUTLINE MARKER



# VersionRAILER





← PART NO.	→ PART NO.		$\bigcirc$	4,	*	ADDITION	CONNECTION
25-4123-017	25-4122-017	1/-	LED	24 V			7-pin ASS2
25-4123-027	25-4122-027	1/-	LED	24 V			7-pin ASS2 4 x 2-pin ASS2
25-4123-037	25-4122-037	1/-	LED	24 V	LED		7-pin ASS2 2 x 2-pin ASS2
25-4123-047	25-4122-047	1/-	LED	24 V			7-pin AMP
25-4123-057	25-4122-057	1/-	LED	24 V			7-pin AMP 4 x 2-pin Superseal
25-4123-067	25-4122-067	1/-	LED	24 V	LED		7-pin AMP 2 x 2-pin Superseal

# **ECOLED II**









#### **PRODUCT FEATURES**

#### LENS REPLACEABLE

Only one replacement lens, which can be used for the left or right side

#### **CAN BE USED ON BOTH SIDES**

Rear lamp rotates 180 degrees - use left or right

#### **OUTLINE MARKER WITH PREDETERMINED BREAKING POINT**

In the event of damage, only the mounting bracket needs to be replaced

#### **DYNAMIC DIRECTION INDICATOR**

Flashing light function as sequential light

#### **INCREASED VISIBILITY**

Large light surface + homogeneous light pattern

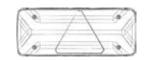
#### ISO PULSE CAPABLE

Direction indicator failure monitoring according to ISO 13207-1

#### **INTEGRATED SMCG (Side Marker Control Gear)**

Control for flashing side marker lamps

#### **DUAL VOLTAGE**



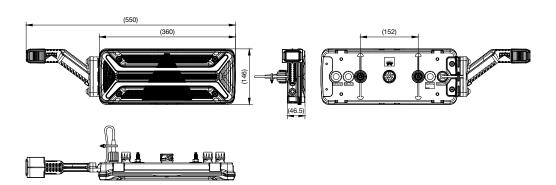


# Version



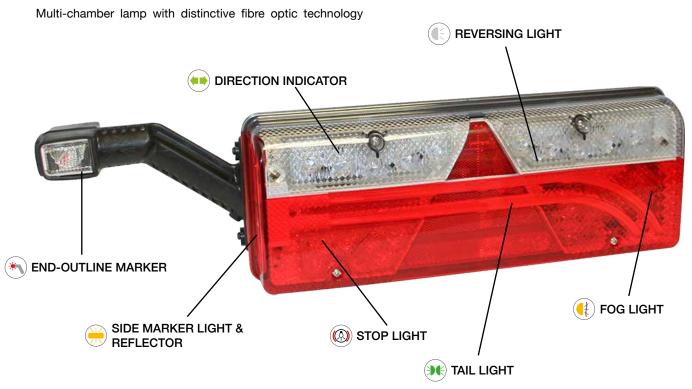
# VersionRUCK





← PART NO.	→ PART NO.		$\bigcirc$	4~	*	VERSION	ADDITION	CONNECTION
25-4121-007	25-4120-007	1/8	LED	12V 24V				7-pin ASS2
25-4121-017	25-4120-017	1/8	LED	12V 24V				7-pin ASS2 4 x 2-pin ASS2
25-4121-027	25-4120-027	1/8	LED	12V 24V	LED			7-pin ASS2 4 x 2-pin ASS2
25-4121-037	25-4121-037	1/8	LED	12V 24V				7-pin AMP
25-4121-047	25-4120-047	1/8	LED	12V 24V				7-pin AMP 4 x 2-pin Superseal
25-4121-057	25-4120-057	1/8	LED	12V 24V	LED			7-pin AMP 4 x 2-pin Superseal
25-4121-067	25-4120-067	1/8	LED	12V 24V				7-pin AMP

## **EUROPOINT III**









IP56K

Europoint III FULL LED

Europoint III Truck

#### **PRODUCT FEATURES**

#### FIBRE OPTIC TECHNOLOGY

Rear light as "light guide" for a distinctive design

#### **FLEXIBLE OUTLINE MARKER**

Option for direct mounting of an additional flexible LED end-outline marker lamp

#### **OPTIONALLY INTEGRATED SMCG (Side Marker Control Gear)**

Control for flashing side marker lamps

#### **OPTIONAL CONNECTIONS**

Optionally with four additional 2-pin connections on the rear of the lamp

#### **FULL LED + LCG**

Option of full LED rear lamp including direction indicator LCG

#### **LIGHT BULB + LED CAN BE COMBINED**

Functions in light bulb and LED hybrid technology

#### **LED REAR POSITION LAMP**

As standard







# Version IGHT BULB



← PART NO.	→ PART NO.		Q	4	*	VERSION	ADDITION	CONNECTION
25-7000-507	25-7400-507	1/10	<u>\( \bar{V} \)</u>	24 V				7-pin ASS2
25-7000-517	25-7400-517	1/10	<b>₽</b>	24 V				7-pin ASS2 4 x 2-pin ASS2
25-7020-507	25-7420-507	1/8	<b>₽</b>	24 V	LED			7-pin ASS2
25-7020-517	25-7420-517	1/8	<b>₽</b>	24 V	LED			7-pin ASS2 4 x 2-pin ASS2
25-7000-707	25-7400-707	1/10	LED	24 V				7-pin ASS2
25-7020-737	25-7420-767	1/8	LED	24 V	LED		R	7-pin ASS2
25-7000-717	25-7400-717	1/10	LED	24 V				7-pin ASS2 4 x 2-pin ASS2
25-7020-707	25-7420-707	1/8	LED	24 V	LED			7-pin ASS2
25-7000-747	25-7400-747	1/10	LED	24 V			R	7-pin ASS2
25-7020-717	25-7420-717	1/8	LED	24 V	LED			7-pin ASS2 4 x 2-pin ASS2
25-7000-757	25-7400-757	1/10	LED	24 V				7-pin AMP
25-7000-547	25-7400-547	1/10	<b>₽</b>	24 V		هـم		7-pin AMP



## **EUROPOINT II**





IP 54

#### **PRODUCT FEATURES**

#### **PARKING AND STOP LIGHT**

Fail-safe thanks to three-piece rear light & two-piece stop light

#### **FULL LED**

All functions possible in LED technology

#### REPLACEMENT LENS LEFT AND RIGHT

Spare lens can be used on both sides

#### **MODULAR LED DESIGN**

LED modules are available individually and can be replaced

#### SIDE MARKER LAMP

Including side marker lamp

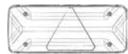
#### **OPTIONAL CONNECTIONS**

Four optional additional 2-pin connections on the rear of the lamp

#### **OPTIONAL NUMBER PLATE LIGHT**

Can be extended with number plate light downwards function



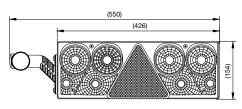




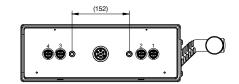
# Version GHT BULB













← PART NO.	→ PART NO.		Q	4,	*	FUNCTION	CONNECTION
25-6000-707	25-6400-707	1/11	LED	24 V			7-pin ASS2
25-6021-707	25-6421-707	1/9	<u>v</u>	24 V	LED		7-pin ASS2
25-6000-757	25-6400-757	1/11	**************************************	24 V			7-pin ASS2
25-6020-757	25-6420-757	1/9	LED	24 V	LED		7-pin ASS2
25-6000-507	25-6400-507	1/11	<b>₽</b>	24 V			7-pin ASS2
25-6001-507	25-6401-507	1/11	<b>₽</b>	24 V		<u></u>	7-pin ASS2
25-6200-507	25-6600-507	1/11	<b>₽</b>	24 V			7-pin ASS2 4 x 2-pin ASS2
25-6011-507	25-6411-507	1/11	LED	24 V		<b>T</b>	7-pin ASS2 4 x 2-pin ASS2

# **ECOPOINT II**

The compact 5-function light







#### **PRODUCT FEATURES**

#### **VARIOUS MOUNTING OPTIONS**

Can be mounted horizontally / vertically (only for Ecopoint II LED without triangle)

#### **MODULAR LED DESIGN**

LED modules are available individually and can be replaced

#### **DIFFERENT MODELS**

Available for trucks and trailers

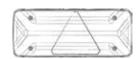
#### **LED TECHNOLOGY**

New and reliable design through the use of LEDs

#### **OPTIONAL CONNECTIONS**

Four optional additional 2-pin connections on the rear of the lamp





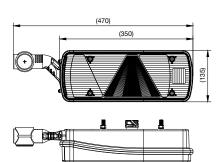


# Version

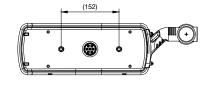












← PART NO.	→ PART NO.		$\bigcirc$	4,	*	VERSION	ADDITION	CONNECTION
25-2801-707	25-2901-707	1/8	LED	24 V				7-pin ASS2
25-2860-707	25-2960-707	1/8	LED	24 V				7-pin ASS2
25-2800-507	25-2900-507	1/8	<b>₽</b>	24 V				7-pin ASS2
25-2810-507	25-2910-507	1/6	<b>₽</b>	24 V	<b>₽</b>		<b>X</b>	7-pin ASS2
25-2800-517	25-2900-517	1/8	<b>₽</b>	24 V				7-pin ASS2 2 x 2-pin ASS2
25-2810-517	25-2910-517	1/6	<u>\( \bigvert \) \( \text{\text{\$\color{1}{2}\$}} \)</u>	24 V	<b>\( \sqrt{1} \)</b>		<b>X</b>	7-pin ASS2 2 x 2-pin ASS2

# **MULTILED III**

Compact LED rear lamp with Glowing Body technology









IP 56

#### **PRODUCT FEATURES**

#### **INCREASED VISIBILITY**

Larger light surfaces for the rear & stop light functions

#### **MODERN TECHNOLOGY**

Innovative Glowing Body Technology for rear light

#### LENS REPLACEABLE

Only one replacement lens, which can be used for the left or right side

#### **DYNAMIC DIRECTION INDICATOR**

Sequential directional indicator function

#### ISO pulse capable

Direction indicator failure monitoring according to ISO 13207-1

#### **INTEGRATED SMCG (Side Marker Control Gear)**

Control for flashing side marker lamps

#### **DUAL VOLTAGE**





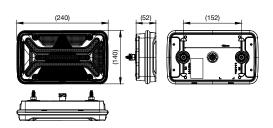


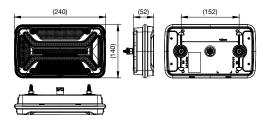
# Version







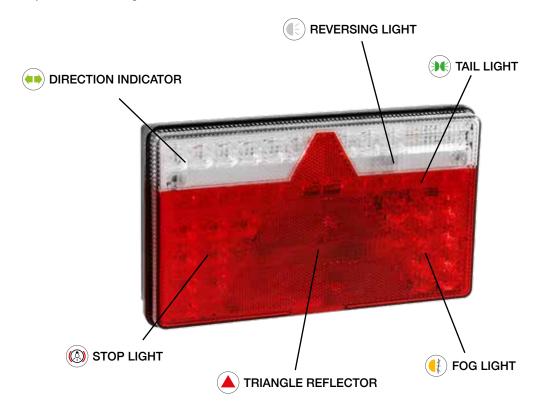




← PART NO.	→ PART NO.		Q	4	VERSION	ADDITION	CONNECTION
24-8931-007	24-8930-007	1/8	LED	12V 24V		ISO 13207-1	7-pin ASS2
24-8931-017	24-8930-017	1/8	LED	12V 24V		ISO 13207-1	7-pin ASS2 2 x 2-pin ASS2
24-8931-027	24-8930-027	1/8	LED	12V 24V		ISO 13207-1	7-pin AMP 2 x 2-pin ASS2
24-8931-047	24-8930-047	1/8	LED	12V 24V		ISO 13207-1	7-pin AMP
24-8931-037	24-8930-037	1/8	LED	12V 24V		ISO 13207-1	7-pin AMP 2 x 2-pin ASS2
24-8931-057	24-8930-057	1/8	LED	12V 24V		ISO 13207-1	7-pin AMP 2 x 2-pin Superseal
24-8931-067	24-8930-067	1/8	LED	12V 24V		ISO 13207-1	7-pin AMP 2 x 2-pin Superseal
24-8931-077	24-8930-077	1/8	LED	12V 24V		ISO 13207-1	7-pin AMP
24-8931-087	24-8930-087	1/8	LED	12V 24V		ISO 13207-1	7-pin AMP 2 x 2-pin ASS2

# **MULTILED II**

The compact 5-function light







#### **PRODUCT FEATURES**

#### **FULL LED**

All functions in LED

#### TWO CONSTRUCTION DEPTHS

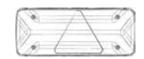
Available in two different depths (flat and high)

#### **NUMBER PLATE LIGHTING**

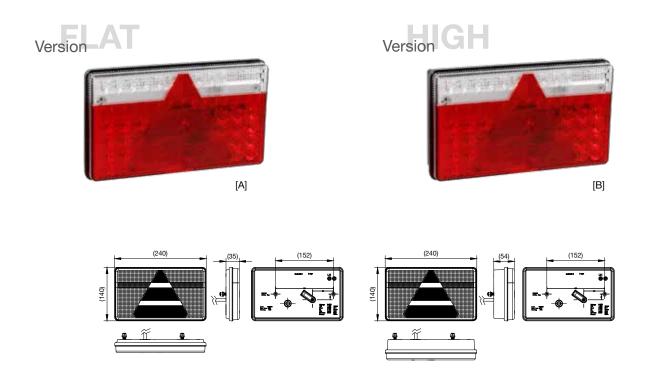
Optional number plate light

#### **DUAL VOLTAGE**









← PART NO.	→ PART NO.		$\bigcirc$	4,	VERSION	FUNCTION	CONNECTION	CABLE
35-0201-007	35-0202-007	1/20	LED	12V 24 V	[A]		Open end	0.50 m
35-0201-037	35-0202-037	1/-	LED	12V 24 V	[A]		7-pin ASS2 male	0.50 m
35-0201-047	35-0202-047	1/10	LED	12V 24 V	[A]		7-pin AMP male	0.50 m
35-0203-007	35-0204-007	1/20	LED	12V 24 V	[B]		Open end	0.50 m
35-0203-037	35-0204-037	1/10	LED	12V 24 V	[B]		7-pin ASS2 male	0.50 m
35-0203-047	35-0204-047	1/-	LED	12V 24 V	[B]		7-pin AMP male	0.50 m
35-0203-057	35-0204-057	1/20	LED	12V 24 V	[B]	(K)	Open end	0.50 m
35-0203-087	35-0204-087	1/-	LED	12V 24 V	[B]	(K)	7-pin ASS2 male	0.50 m
35-0203-097	35-0204-097	1/-	LED	12V 24 V	[B]	(K)	7-pin AMP male	0.50 m
35-0203-107	35-0204-107	1/20	LED	12V 24 V	[B]	(K)	Open end	0.50 m
35-0203-137	35-0204-137	1/10		12V 24 V	[B]	(K)	7-pin ASS2 male	0.50 m
35-0203-147	35-0204-147	1/-	LED	12V 24 V	[B]	(K)	7-pin AMP male	0.50 m

## **MULTIPOINT V**

The compact multi-chamber light





IP 54

#### **PRODUCT FEATURES**

#### **DESIGN**

Compact multi-chamber light with PG screw connection

#### STURDY DESIGN

Built-in damping against vibrations

#### **LED FUNCTIONS**

Stop and rear light modular in LED

#### **DUAL VOLTAGE**

← PART NO.	→ PART NO.		$\Diamond$	4~	ADDITION	CONNECTION	CABLE
34-8605-007	34-8806-007	1/-	LED (A)	24 V		7-pin ASS2	0.90 m
34-8505-007	5-007 34-8706-007		LED (A)	24 V		7-pin ASS2	2.50 m



# **ECOLED II**

#### FULL LED REAR LAMP WITH GLOWING BODY TECHNOLOGY



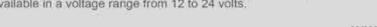
The interchangeable lens can be used for the left and right lamp, which likewise applies to the entire tail light when turned 180 degrees.



In comparison to the predecessor models, the visibility of the ECOLED II has also received a definite ASPOCK upgrade. It features a large light area, uniform light pattern plus sequential light in a dynamic indicator.

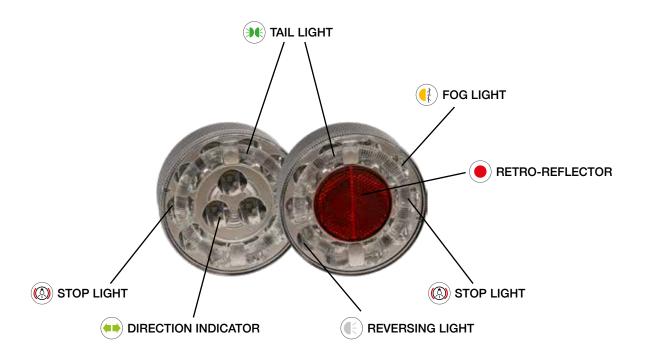


Resistant to pressure, water, bases and acids, the rugged tail light features a low installation height and is available in a voltage range from 12 to 24 volts.



# **BRASPOINT 98**

The tiny multi-function rear lamp







#### **PRODUCT FEATURES**

#### **FULL LED**

All functions in LED

#### FIBRE OPTIC TECHNOLOGY

Rear light as "light guide" for a distinctive design

#### **COMPACT ROUND DESIGN**

Ideal for limited space

#### **CAN BE COMBINED AS REQUIRED**

All lamps can be combined according to your requirements

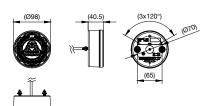
#### **DUAL VOLTAGE**

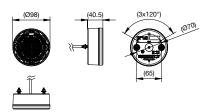








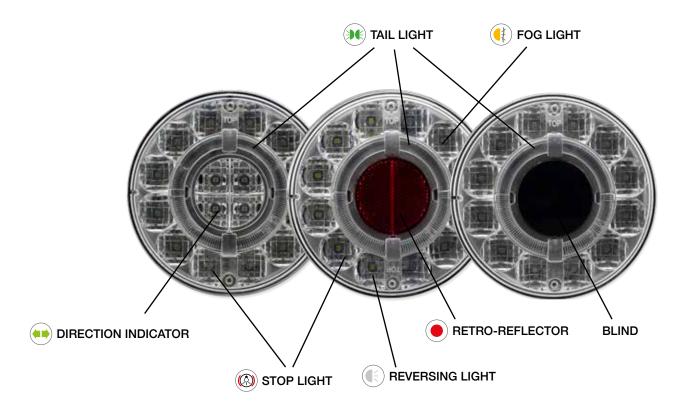




← → PART NO.		$\Diamond$	4,	FUNCTIONS	ADDITION	CONNECTION	CABLE
33-9200-007	1/-		12V 24 V			Open end	0.50 m
33-9200-017	1/-	LED	12V 24 V	<b>(1)</b>		Open end	7.00 m
00 0007 057	47	(TEO)	12V			7-pin ASS2	0.50 m
33-9207-057	1/-	ED	24 V			7-pin ASS2	0.20 m
33-8100-107	1/-	LED	12V 24 V		$\leftrightarrow$	Open end	0.50 m
33-8107-057	1/-	LED	12V 24 V			7-pin ASS2	0.50 m
33-8100-007	1/-	LED	12V 24 V			Open end	0.50 m
33-8107-007	1/-	LED	12V 24 V			7-pin ASS2	0.50 m

# **BRASPOINT 140**

Three lamps - many options







#### **PRODUCT FEATURES**

#### **FULL LED**

All functions in LED

#### FIBRE OPTIC TECHNOLOGY

Rear light as "light guide" for a distinctive design

#### **CAN BE COMBINED AS REQUIRED**

All lamps can be combined according to your requirements

#### **DUAL VOLTAGE**







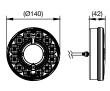
















← → PART NO.		$\Diamond$	4,	FUNCTIONS	CONNECTION	CABLE
33-8100-207	1/35	LED	12V 24 V		Open end	0.50 m
33-8107-037	1/20	LED	12V 24 V		7-pin ASS2	0.50 m
33-9200-207	1/35	LED	12V 24 V		Open end	0.50 m
33-8107-027	1/20	LED	12V 24 V		7-pin ASS2	0.50 m
33-9207-067	1/20	LED	12V		7-pin ASS2	0.50 m
33-9207-067	1720		24 V		7-pin ASS2	0.20 m

# **3-CHAMBER LAMP LED**

The round rear lamp in full LED





IP 54

#### **PRODUCT FEATURES**

#### **FULL LED**

All functions in LED

#### **HIGHLY DIVERSE VARIANTS**

Enabled through special wiring solutions

#### **CAN BE COMBINED AS REQUIRED**

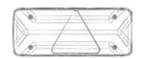
All lamps can be combined according to your requirements

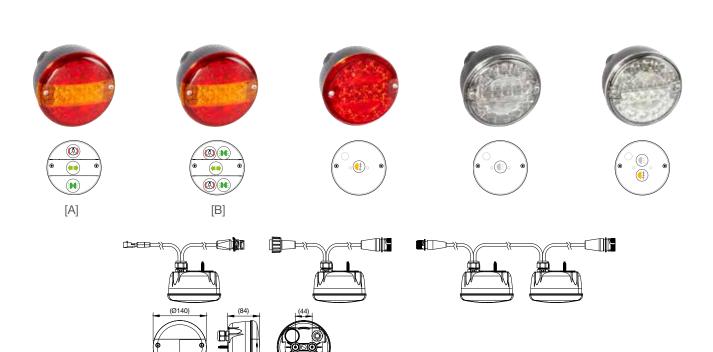
#### **OPTIONALLY AVAILABLE AS DUAL VOLTAGE**

For 12 & 24 volt applications

#### **SPACE-SAVING ALTERNATIVE**

Using flat housing





← PART NO.	→ PART NO.		$\bigcirc$	4,	FUNCTIONS	ADDITION	CONNECTION	CABLE
33-8403-047	33-8402-047	1/10	ED	12V 24V		(A)	PG 11 screw connection, open end	
33-8405-097	33-8406-097	1/10		12V 24V		(A)	7-pin ASS2	0.50 m
33-84	07-017	1/10	LED	24 V			7-pin ASS2	0.15 m
33-04	07-017	1/10	LED	24 V		[A]	7-pin ASS2 Q	0.15 m
33-8403-037	33-8402-037	1/-		12V 24V	2x 2x 2x	<b>(B)</b>	PG 11 screw connection, open end	
33-8405-087	33-8406-087	1/3	LED	12V 24V	2x 2x 2x	(B)	7-pin ASS2	0.50 m
37-84	07-007	1/10	LED	24 V	<b>(</b> ‡)		2-pin ASS2	1.50 m
37-84	07-017	1/1	LED	24 V	<b>(</b> ‡)		7-pin ASS2	0.15 m
38-84	07-007	1/-	LED	24 V			2-pin ASS2	1.50 m
38-81	07-067	1/-	LED	24 V			7-pin ASS2	0.15 m
32-70	00-707	1/-	LED	24 V	<b>(‡) (5</b> )		7-pin ASS2	1.50 m
39-70	07-007	1/10	LED	24 V	<b>(‡) (5</b> )	00	7-pin ASS2	0.15 m

# **3-CHAMBER LAMP II**

Three lamps - many options





#### **PRODUCT FEATURES**

#### TRADITIONAL DESIGN

Popular and well-known light pattern

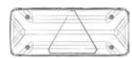
#### **FLEXIBLE PROCUREMENT**

High availability of spare parts

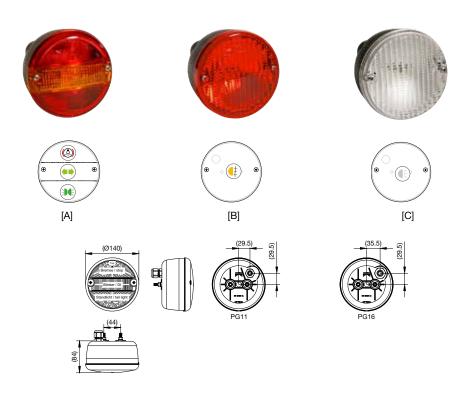
#### **HIGHLY DIVERSE VARIANTS**

Enabled through special wiring solutions





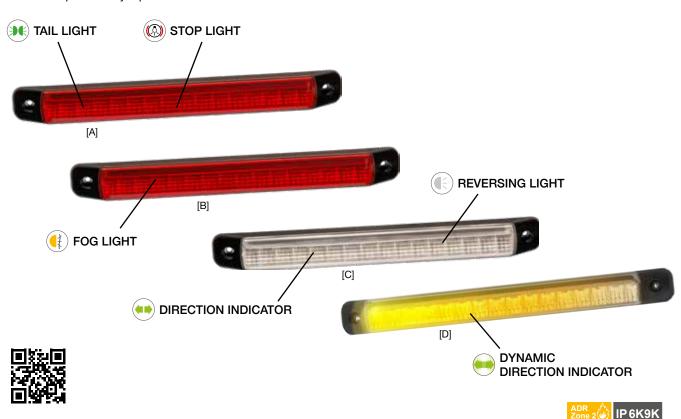




← PART NO.	→ PART NO.		$\bigcirc$	4~	FUNCTIONS	VERSION	CONNECTION		CABLE
33-8205-037	33-8206-037 1/- 24 V (A) (A) (A)		[A]	7-pin ASS2	ď	0.50 m			
33-6203-037	33-6200-037	1/-	¥	24 V		[A]	7-pin ASS2	Q	0.30 m
33-8205-087	33-8206-097	1/10		24 V		[0]	7-pin ASS2	ď	1.50 m
33-6203-067	33-8200-091	1/10	¥	24 V		[A]	7-pin ASS2	Q	1.50 m
37-80	07-137	1/-	<u> </u>	24 V	<b>(</b> ‡)	[B]	2-pin ASS2		0.25 m
37-800	07-167	-/-	<b>V</b>	24 V	<b>(</b> ‡)	[B]	2-pin ASS2		1.20 m
37-800	07-197	1/-	<b>₽</b>	24 V	<b>(</b> ‡)	[B]	2-pin ASS2		3.00 m
38-800	38-8007-137		<b>₽</b>	24 V		[C]	2-pin ASS2		0.25 m
38-8007-147		-/-	<b>₽</b>	24 V		[C]	2-pin ASS2		3.00 m
38-8007-157		-/-	<u> </u>	24 V	<b>(</b> \frac{1}{2}	[C]	2-pin ASS2		1.20 m

# LINEPOINT II LED

Three lamps - many options



#### **PRODUCT FEATURES**

#### **FULL LED**

All functions in LED

#### 360° MOUNTING POSITION

For direction indicator, fog and stop light as well as vehicle position lamp

#### **CAN BE COMBINED**

Double mounting is possible

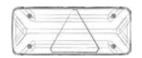
#### **HOMOGENEOUS LIGHT PATTERN**

Thanks to modern reflector technology

#### **DYNAMIC DIRECTION INDICATOR**

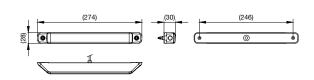
For mounting angle up to +/- 28°

#### **DUAL VOLTAGE**









← PART NO.	→ PART NO.		$\bigcirc$	4	VERSION	FUNCTIONS	ADDITION	CONNECTION	CABLE
31-923	30-007	1/-	LED	12V 24V	[A]		(980)	Open end	0.50 m
37-923	30-007	1/-	LED	12V 24V	[B]	#	(560)	Open end	0.50 m
31-923	31-007	1/-	LED	12V 24V	[B]		(550)	Open end	0.50 m
38-923	30-007	1/-	LED	12V 24V	[B]	(E)		Open end	0.50 m
38-9231-007		1/-	LED	12V 24V	[B]	(£)	$\leftrightarrow$	Open end	0.50 m
31-9231-207	31-9231-217	1/-	LED	12V 24V	[C]			Open end	0.50 m

### LINEPOINT I LED

Three lamps - many options











3-function light



#### **PRODUCT FEATURES**

#### **FULL LED**

All functions in LED

#### 90° MOUNTING POSITION

For direction indicator, rear fog and tail as well as stop light

#### **CAN BE COMBINED AS REQUIRED**

All lamps can be combined according to your requirements

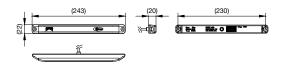
#### **DUAL VOLTAGE**





# Mounting RTICAL



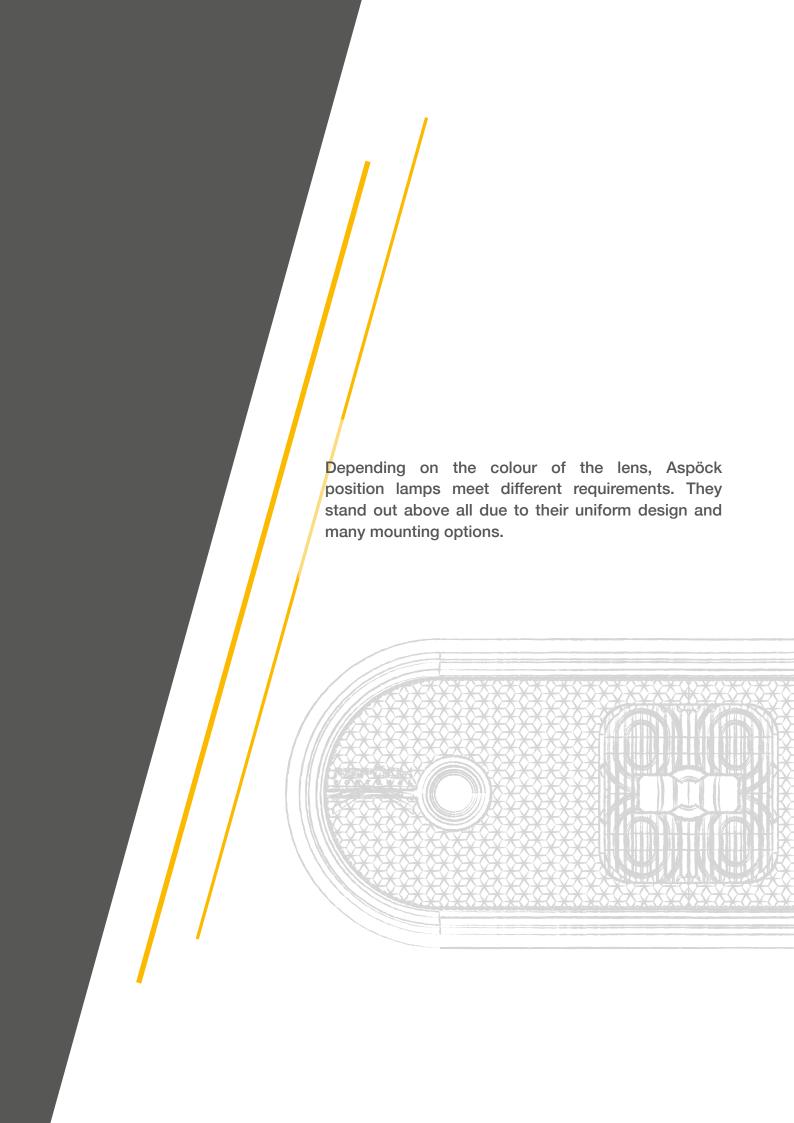


← → PART NO.		$\bigcirc$	4	VERSION	FUNCTIONS	ADDITION	CONNECTION	CABLE
31-9220-007	1/-	LED	12V 24V	[A]			Open end	0.50 m
31-9221-007	1/-	LED	12V 24V	[B]			Open end	0.50 m
37-9220-007	1/-	LED	12V 24V	[A]	<b>(</b> ‡)		Open end	0.50 m
38-9220-007	1/-	LED	12V 24V	[B]	(£)		Open end	0.50 m
31-8920-007	1/-	LED	12V 24V	[A]		$\leftrightarrow$	Open end	0.50 m
33-8914-007	1/-	LED	12V 24V	[B]			Open end	0.50 m
33-8914-017	1/-	LED	12V 24V	[B]			Open end	5.00 m
31-9207-047	1/-	LED	12V 24V	[A]			ASS3	0.50 m
31-9207-057	1/-	LED	12V 24V	[B]			ASS3	0.50 m
37-9207-017	1/-	LED	12V 24V	[A]	(‡)		ASS3	0.50 m
38-9207-017	1/-	LED	12V 24V	[B]	( <u>+</u>	<b>+</b>	ASS3	0.50 m

# POSITION LAMPS

FLATPOINT II LED
UNIPOINT II LED
POSIPOINT II LED
MONOPOINT II LED

NUMBER PLATE LAMPS
BEACONS
INTERIOR LAMPS
WORK LAMPS
NUMBER PLATE HOLDERS
SIDE MARKER LAMPS
REVERSING LAMPS
ELIGHT
POSITIONS LAMPS
UTLINE MARKER LAMPS
REAR LAMPS
BEACONS
ERIOR LAMPS
LAMPS



# **FLATPOINT II LED**

Impresses with versatile mounting options





#### **PRODUCT FEATURES**

#### STURDY CONSTRUCTION

For a long service life

#### **COMPACT DESIGN**

Thanks to flat lens & optionally integrated retro-reflector

#### **HIGHLY DIVERSE VARIANTS**

Due to different cable lengths and plug connections

#### **OPTIONALLY AVAILABLE AS DUAL VOLTAGE**





PART NO.		$\bigcirc$	4,	VERSION	FUNCTION	CONNECTION	CABLE
31-2304-017	1/100	LED	24 V	[A]		P&R	0.50 m
31-2304-037	1/100	LED	24 V	[A]		P&R	1.50 m
31-2304-097	1/-	LED	12V 24V	[A]		P&R	1.50 m
31-2307-017	1/50	LED	24 V	[A]		ASS3	1.50 m
31-2364-017	1/100	LED	24 V	[B]		P&R	0.50 m
31-2364-037	1/60	LED	24 V	[B]		P&R	1.50 m
31-2367-057	1/-	LED	24 V	[B]		ASS3	1.50 m
31-2364-087	1/100	LED	24 V	[C]		P&R	0.50 m
31-2364-107	1/100	LED	24 V	[C]		P&R	1.50 m
31-2367-037	1/50	LED	24 V	[C]		ASS3	1.50 m
31-6900-017	1/-	LED	24 V	[A]		Open end	0.50 m
31-6904-017	1/100	LED	24 V	[A]		P&R	0.50 m
31-6907-027	1/100	LED	24 V	[A]		ASS3	0.50 m
31-6904-037	1/100	LED	24 V	[A]		P&R	1.50 m
31-6904-167	1/-	LED	12V 24 V	[A]		P&R	1.50 m
31-6907-037	1/50	LED	24 V	[A]		ASS3	1.50 m
31-6904-057	1/50	LED	24 V	[A]		P&R	3.50 m
31-6904-127	1/-	LED	24 V	[A]		P&R	3.50 m
31-6404-017	1/100	LED	24 V	[A]		P&R	0.50 m
31-6404-097	1/-	LED	24 V	[A]		P&R	0.50 m
31-6404-127	1/-	LED	24 V	[A]		P&R	3.50 m

# **UNIPOINT I LED**

Extremely sturdy side marker lamps with LED technology







#### **PRODUCT FEATURES**

#### **HIGH LIGHT INTENSITY**

With low power consumption

#### SIMPLE MOUNTING

Made easy with many mounting options

#### **VERY STURDY DESIGN**

Due to the over-moulded lens and the encapsulated printed circuit board

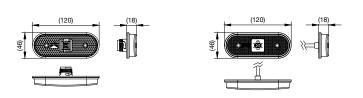
#### **HIGHLY DIVERSE VARIANTS**

Due to different cable lengths and plug connections







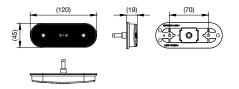


PART NO.		$\bigcirc$	4~	VERSION	FUNCTIONS	ADDITION	CONNECTION	CABLE
31-2004-017	1/100	LED	24 V	[A]		[↔]	P&R	0.50 m
31-2007-237	1/-	LED	24 V	[A]		$\leftrightarrow$	ASS3	0.50 m
31-2004-037	1/90	LED	24 V	[A]		$\leftrightarrow$	P&R	1.50 m
31-2004-107	1/-	LED	24 V	[A]			P&R	1.50 m
31-2007-247	1/50	LED	24 V	[A]		$\leftrightarrow$	ASS3	1.50 m
31-2064-017	1/60	LED	24 V	[B]		$\leftrightarrow$	P&R	0.50 m
31-2067-097	1/100	LED	24 V	[B]		$\leftrightarrow$	ASS3	0.50 m
31-2064-037	1/75	LED	24 V	[B]		$\leftrightarrow$	P&R	1.50 m
31-2067-107	1/50	LED	24 V	[B]		$\leftrightarrow$	ASS3	1.50 m
31-2064-717	1/90	LED	24 V	[C]		$\leftrightarrow$	P&R	0.50 m
31-2064-737	1/75	LED	24 V	[C]		$\leftrightarrow$	P&R	1.50 m
31-2064-217	1/90	LED	24 V	[D]		$\leftrightarrow$	P&R	0.50 m
31-2064-237	1/60	LED	24 V	[D]		$\leftrightarrow$	P&R	1.50 m
31-2064-417	1/50	LED	24 V	(E)		$\leftrightarrow$	P&R	0.50 m
31-2064-437	1/50	LED	24 V	[E]		$\longleftrightarrow$	P&R	1.50 m

# **UNIPOINT MAXX**

Extremely sturdy side marker with LED technology









#### **PRODUCT FEATURES**

#### **INCREASED SAFETY**

Better visibility along the vehicle

#### **HIGH LIGHT INTENSITY**

Displaying the maximum allowed light intensity

#### **SIMPLE MOUNTING**

Thanks to the specially designed brackets

#### **VERY STURDY DESIGN**

Due to the over-moulded lens and the encapsulated printed circuit board

#### **UNIPOINT MAXX**

PART NO.		$\Diamond$	4,	FUNCTION	ADDITION	CONNECTION	CABLE
31-2104-067	1/-	LED	24 V		$\leftrightarrow$	P&R	2.00 m





# **UNIPOINT DI**





The ECE 48 Rev. 6 regulation states that for vehicles of category O3 and O4, three additional category 5 side marker lamps must be fitted to the trailer as uniformly as possible, and must flash in synchronicity with the truck.

The aim is to significantly increase safety for all road users when turning.

The Unipoint DI directional indicator complies with this legislation. Alternatively, a SMCG can be installed in the vehicle. See description SMCG on page 102.



#### **PRODUCT FEATURES**

#### **SPACE-SAVING SYSTEM INTEGRATION**

Side marker lamp & cat. 5 blinker in one lamp

#### **IMPROVED PERCEPTION**

Using far reaching beams

PART NO.		$\bigcirc$	4,	FUNCTION	ADDITION	CONNECTION	CABLE
31-2107-017	1/50	LED	24 V			3-pin ASS3	1.50 m
31-2104-077	1/-	LED	24 V		$\leftrightarrow$	P&R	1.50 m
31-2107-007	1/-	LED	24 V		$\longleftrightarrow$	ASS3	1.50 m

# **UNIPOINT I LED**

Powerful light output and construction





#### **PRODUCT FEATURES**

#### **HIGH LIGHT INTENSITY**

With low power consumption

#### **VERY STURDY DESIGN**

Due to the over-moulded lens and the encapsulated printed circuit board

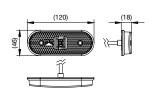
#### **HIGHLY DIVERSE VARIANTS**

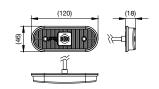
Due to different cable lengths and plug connections

#### **COMPACT DESIGN**

With optional retro-reflector integrated in the lamp







PART NO.		$\Diamond$	4~	VERSION	FUNCTION	ADDITION	CONNECTION	CABLE
31-7704-017	1/100	LED	24 V	[A]		$\leftrightarrow$	P&R	0.50 m
31-7704-097	1/-	LED	24 V	[B]	\(\frac{1}{\sqrt{1}}\)	$\leftrightarrow$	P&R	0.50 m
31-7707-107	1/50	LED	24 V	[A]		$\longleftrightarrow$	ASS3	0.50 m
31-7704-077	1/-	LED	24 V	[A]		$\longleftrightarrow$	P&R flat cables	1.00 m
31-7704-037	1/80	LED	24 V	[A]		$\leftrightarrow$	P&R	1.50 m
31-7707-117	1/50	LED	24 V	[A]		$\leftrightarrow$	ASS3	1.50 m
31-7704-227	1/50	LED	24 V	[A]			P&R	1.50 m
31-7704-057	1/60	LED	24 V	[A]		$\longleftrightarrow$	P&R	3.50 m
31-7704-127	1/-	LED	24 V	[B]		$\leftrightarrow$	P&R	3.50 m
31-7707-127	1/-	LED	24 V	[B]	\(\frac{1}{\sqrt{1}}\)	$\leftrightarrow$	ASS3	3.50 m
31-7704-087	1/60	LED	24 V	[B]		$\leftrightarrow$	P&R flat cables	4.00 m
31-7804-017	1/100	LED	24 V	[C]		$\leftrightarrow$	P&R	0.50 m
31-7804-097	1/-	LED	24 V	[D]	VIV VIX	$\leftrightarrow$	P&R	0.50 m
31-7804-077	1/-	LED	24 V	[C]		$\leftrightarrow$	P&R flat cables	1.00 m
31-7804-057	1/-	LED	24 V	[C]		<b>+</b>	P&R	3.50 m
31-7804-127	1/10	LED	24 V	[D]	NI/	<b>←</b>	P&R	3.50 m
31-7804-087	1/-	LED	24 V	[D]	VIV VIX	$\longleftrightarrow$	P&R flat cables	4.00 m

# **POSIPOINT II LED**

Simple, space-saving installation





#### **PRODUCT FEATURES**

#### **HIGH LIGHT OUTPUT**

With low power consumption

#### **DIFFERENT MOUNTING OPTIONS**

Direct installation on the vehicle or body by means of a bracket (housing)

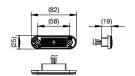
#### **SLIM DESIGN**

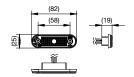
Space-saving mounting

#### **DUAL VOLTAGE**









PART NO.		$\bigcirc$	4	FUNCTION	CONNECTION	CABLE
31-7100-067	1/-	LED	12V 24V		Open end	0.50 m
31-7104-007	1/-	LED	12V 24V		P&R	0.50 m
31-7104-017	1/130	LED	12V 24V		P&R	1.50 m
31-7104-027	1/70	LED	12V 24V		P&R	1.50 m
31-7100-017	1/-	LED	12V 24V		Open end	3.50 m
31-7100-007	1/-	LED	12V 24V		Open end	5.00 m
31-7200-067	1/50	LED	12V 24V	<u> </u>	Open end	0.50 m
31-7204-007	1/100	LED	12V 24V	<u></u>	P&R	0.50 m
31-7204-017	1/-	LED	12V 24V	<u></u>	P&R	1.50 m
31-7204-027	1/-	LED	12V 24V	<u> </u>	P&R	1.50 m
31-7200-017	1/70	LED	12V 24V	<u></u>	Open end	3.50 m
31-7200-007	1/-	LED	12V 24V		Open end	3.50 m

### Accessory

PART NO.			
15-5609-107	1/-	Housing	

# **MONOPOINT II LED**

The quick solution without any screws







#### **PRODUCT FEATURES**

#### SIMPLE MOUNTING

No screws, thanks to special rubber ribs

#### **HIGH LIGHT OUTPUT**

With low power consumption

#### **SLIM DESIGN**

Space-saving mounting







PART NO.		$\bigcirc$	4~	VERSION	FUNCTION	CONNECTION	CABLE
31-6704-067	1/100	LED	12V 24 V	[A]		P&R	0.50 m
31-6704-077	1/-	LED	12V 24 V	[A]		P&R	1.50 m
31-6704-087	1/-	LED	12V 24 V	[A]		P&R	3.50 m
31-6700-027	1/20	LED	12V 24 V	[A]		Open end	3.50 m
31-6704-097	1/-	LED	12V 24 V	[B]		P&R	0.50 m
31-6704-107	1/-	LED	12V 24 V	[B]		P&R	1.50 m
31-6704-117	1/-	LED	12V 24 V	[B]		P&R	3.50 m
31-6700-037	1/20	LED	12V 24 V	[B]		Open end	3.50 m
31-6804-087	1/-	LED	12V 24 V	[C]	<u></u>	P&R	0.50 m
31-6804-067	1/-	LED	12V 24 V	[C]	<u></u>	P&R	3.50 m
31-6804-097	1/-	LED	12V 24 V	[C]		P&R cable	5.00 m
31-6800-017	1/-	LED	12V 24 V	[C]	<u> </u>	Open end	3.50 m
31-6804-077	1/-	LED	12V 24 V	[D]		P&R	3.50 m

# END-OUTLINE MARKER LAMPS

**FLEXPOINT I LED** 

SUPERPOINT IV LED
SUPERPOINT III LED
SUPERPOINT II

NUMBER PLATE LAMPS
BEACONS
INTERIOR LAMPS
WORK LAMPS
NUMBER PLATE HOLDERS
SIDE MARKER LAMPS
REVERSING LAMPS
E LIGHT
POSITIONS LAMPS
UTLINE MARKER LAMPS
REAR LAMPS
BEACONS
ERIOR LAMPS



# **SUPERPOINT IV LED**

Universal application across different versions







#### **PRODUCT FEATURES**

#### **RESISTANT DESIGN**

Flexible mounting arm in different versions

#### **HIGH LIGHT OUTPUT**

With low power consumption

#### LED END-OUTLINE MARKER LAMP

With a clear design

#### **HIGHLY DIVERSE VARIANTS**

Due to different brackets, cable lengths and plug connections

#### **INCLUDING SIDE MARKER LAMP**

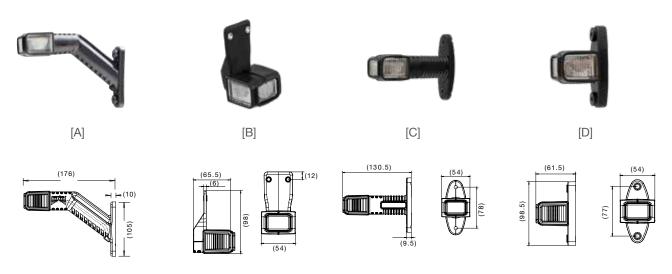
Either in orange or red

#### **DUAL VOLTAGE**









← PART NO.	→ PART NO.		Q	4,	VERSION	ADDITION	CONNECTION	CABLE
31-3104-007	31-3104-017	1/50	LED	12V 24 V	[A]		P&R	2.00 m
31-3105-017	31-3106-017	1/50	LED	12V 24 V	[A]		ASS2	0.50 m
31-3105-007	31-3106-007	1/50	LED	12V 24 V	[A]		ASS2	2.00 m
31-3104-087	31-3104-097	1/-	LED	12V 24 V	[B]		P&R	2.00 m
31-3104-047	31-3104-057	1/-	LED	12V 24 V	[C]		P&R	2.00 m
31-3104-067	31-3104-077	1/-	LED	12V 24 V	[D]		P&R	2.00 m

# **SUPERPOINT III LED**

Powerful form and light performance





#### **PRODUCT FEATURES**

#### MANY MOUNTING OPTIONS

Due to a large selection of brackets

#### **HIGH LIGHT OUTPUT**

With low power consumption

#### SAME ITEM CAN BE USED ON BOTH SIDES

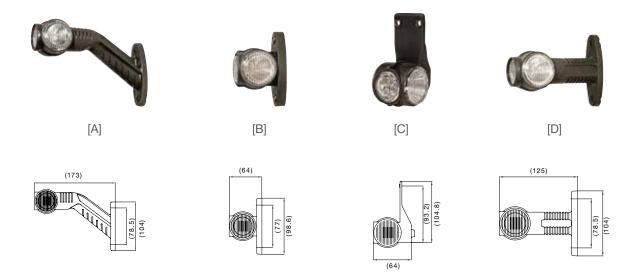
For bracket version [B] and [D]

#### **DURABLE DESIGN**

Break-proof, weather-resistant and flexible material







PART NO.	→ PART NO.		Q	4~	VERSION	ADDITION	CONNECTION	CABLE
31-3304-047	31-3304-057	1/50	LED	24 V	[A]		P&R	1.25 m
31-3304-067	31-3304-077	1/-	LED	24 V	[A]		P&R	1.25 m
31-3305-127	31-3306-127	1/-	LED	24 V	[A]		ASS3	1.25 m
31-3305-017	31-3306-017	1/-	LED	24 V	[A]		ASS2	1.75 m
31-3303-007	31-3302-007	1/25	LED	24 V	[A]		Open end	4.00 m
31-3303-017	31-3302-017	1/-	LED	24 V	[A]		Open end	4.00 m
31-33	64-007	1/50	LED	24 V	[B]		P&R	1.50 m
31-3360-007		1/25	LED	24 V	[B]		Open end	4.00 m
31-3364-017		1/-	LED	24 V	[B]		P&R	1.50 m
31-3360-017		1/-	LED	24 V	[B]		Open end	4.00 m
31-3364-057	31-3364-057 31-3364-027		LED	24 V	[C]		P&R	1.50 m
31-3365-017	31-3366-027	1/-	LED	24 V	[C]		Open end	4.00 m
31-3364-047	31-3364-037	1/-	LED	24 V	[C]		P&R	1.50 m
31-3365-027	31-3366-017	1/-	LED	24 V	[C]		Open end	4.00 m
31-3304-087		1/-	LED	24 V	[D]		P&R	1.25 m
31-3307-017		1/50	LED	24 V	[D]		ASS2	1.75 m
31-3307-007		1/-	LED	24 V	[D]		ASS2	1.75 m
31-3300-247		1/40	LED	24 V	[D]		Open end	4.00 m

# NUMBER PLATE LAMPS

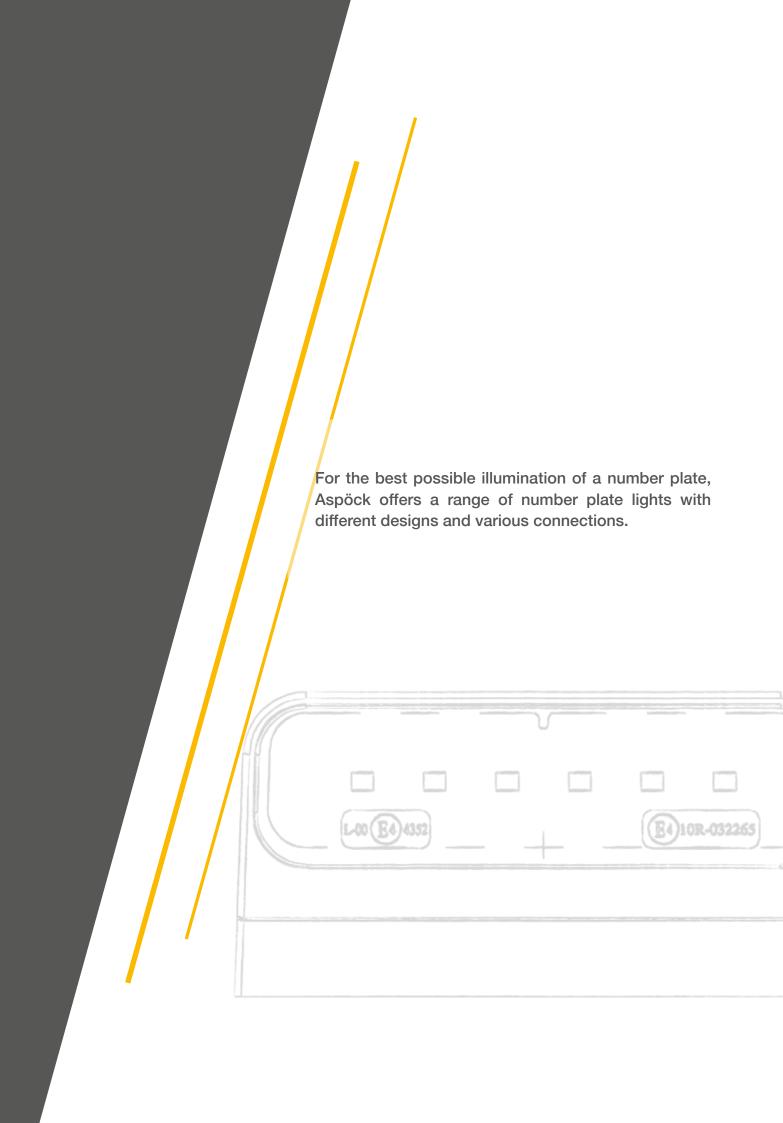
FLEXLED
REGPOINT II LED

REGPOINT I LED
REGPOINT I

NUMBER PLATE LAMPS
BEACONS
INTERIOR LAMPS
WORK LAMPS
UMBER PLATE HOLDERS
BIDE MARKER LAMPS

E LIGHT
POSITIONS LAMPS
UTLINE MARKER LAMPS
REAR LAMPS
JBER PLATE LAMPS
BEACONS
TO DO LAMBS

LAMPS DED DI ATE HOLDEDS



# **REGPOINT II LED**

Two designs for maximum flexibility







#### **PRODUCT FEATURES**

#### SIMPLE MOUNTING

Thanks to installed bolts

#### **HIGHLY DIVERSE VARIANTS**

Due to different cable lengths and plug connections

#### **HIGH LIGHT OUTPUT**

With low power consumption

#### SINGLE MOUNTING POSSIBLE

Through use of the raised version with base

#### **DUAL VOLTAGE**





# Version NGLE MOUNTING

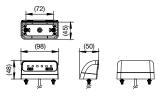
# Version OUBLE MOUNTING

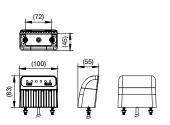












PART NO.		$\Diamond$	4,	VERSION	MOUNTING	CONNECTION	CABLE
36-3804-007	1/100	LED	12V 24V	[A]	-	P&R	0.50 m
36-3804-017	1/50	LED	12V 24V	[A]		P&R	2.00 m
36-3806-007	1/50	LED	12V 24V	[A]	-	ASS2	0.50 m
36-3805-007	1/25	LED	12V 24V	[A]	-	ASS2	2.00 m
36-3810-007	1/50	LED	12V 24V	[A]	-	ASS3	0.50 m
36-3864-007	1/-	LED	12V 24V	[B]		P&R	0.50 m
36-3864-017	1/50	LED	12V 24V	[B]		P&R	2.00 m
36-3867-017	1/-	LED	12V 24V	[B]		ASS2	0.50 m
36-3867-027	1/50	LED	12V 24V	[B]		ASS2	2.00 m
36-3865-007	1/-	LED	12V 24V	[B]		ASS3	0.50 m

# **REGPOINT I & REGPOINT I LED**

A wide range with practical application





#### **PRODUCT FEATURES**

#### SIMPLE MOUNTING

Thanks to installed bolts

#### **HIGHLY DIVERSE VARIANTS**

Due to different cable lengths and plug connections

#### HIGH LIGHT OUTPUT FOR LED

With low power consumption



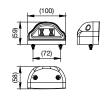












PART NO.		$\bigcirc$	4~	MOUNTING	CONNECTION	CABLE
36-3604-007	1/-	LED	24 V		P&R	0.50 m
36-3604-017	1/80	LED	24 V		P&R	1.00 m
36-3604-027	1/40	LED	24 V		P&R	3.50 m
36-3607-007	1/-	LED	24 V		ASS2	0.50 m
36-3607-017	1/50	LED	24 V		ASS2	1.00 m
36-3607-027	1/40	LED	24 V		ASS2	3.50 m
36-3004-017	1/100	•	24 V	00	P&R	0.50 m
36-3004-027	1/100	<b>₽</b>	24 V	00	P&R	1.00 m
36-3004-057	1/-	<b>₽</b>	24 V		P&R	3.50 m
36-3007-007	1/90	<b>₽</b>	24 V	00	ASS2	0.50 m
36-3007-057	1/50	<b>₽</b>	24 V	00	ASS2	1.00 m
36-3007-047	1/20	<b>₽</b>	24 V	00	ASS2	2.50 m
36-3007-397	1/90	<b>₽</b>	24 V	00	ASS3	0.50 m

# FLEXLED NUMBER PLATE HOLDER

Innovative quick mounting and locking system











#### **PRODUCT FEATURES**

#### LOCKING SYSTEM WITH QUICK CLAMPING

Quick and easy number plate change

#### **SMART QUICK-MOUNTING SYSTEM**

Simple mounting of the holder on the vehicle

#### FOR ALL EU NUMBER PLATES

Suitable for 110 and 120 mm height

#### **ADR-APPROVED**

Tested for zone 2

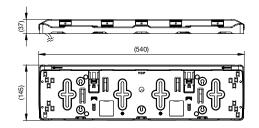
#### **HOMOGENEOUS ILLUMINATION**

Thanks to integrated FlexLED strip











PART NO.		$\Diamond$	4~	CONNECTION	CABLE
36-3704-107	1/-	LED	24 V	Open end	0.50 m
36-3704-197	1/-	LED	24 V	Open end	1.50 m
36-3704-147	1/-	LED	24 V	P&R	0.50 m
36-3704-117	1/-	LED	24 V	P&R	1.50 m
36-3704-137	1/-	LED	24 V	ASS2	0.50 m
36-3704-177	1/-	LED	24 V	ASS2	1.50 m
36-3704-157	1/-	LED	24 V	Superseal	0.50 m
36-3704-187	1/-	LED	24 V	Superseal	1.50 m

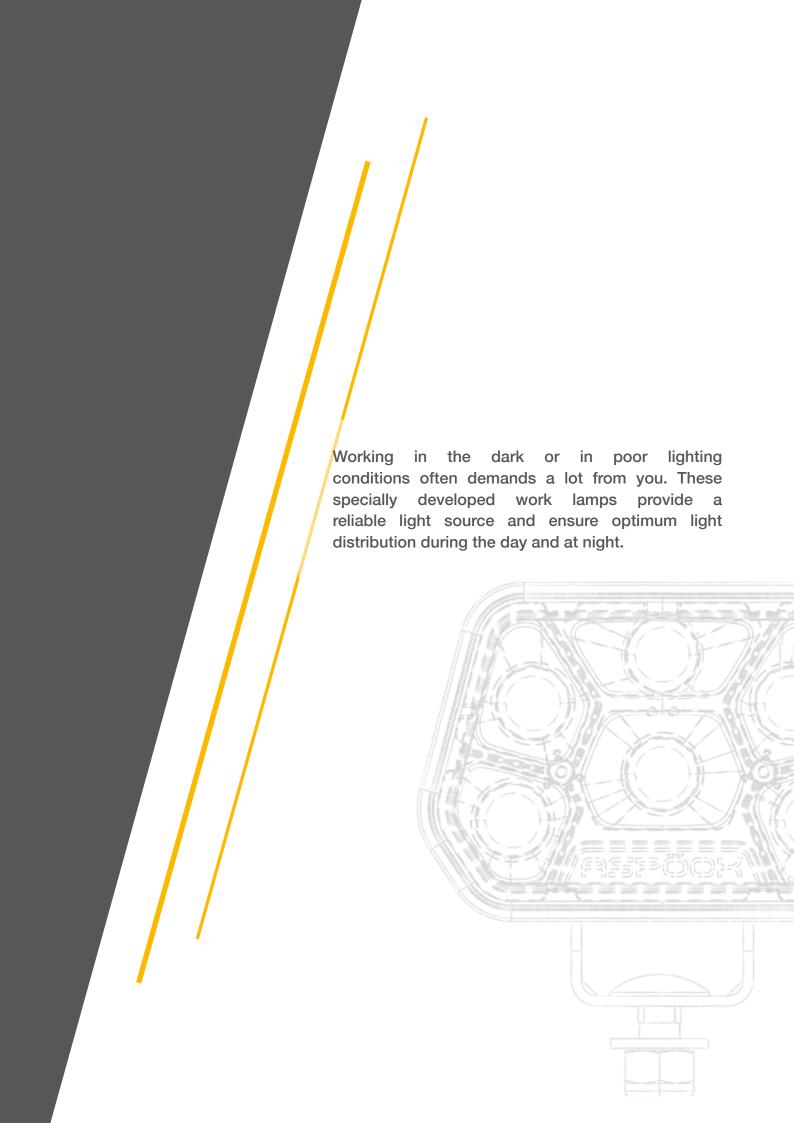
#### **ACCESSORY**

PART NO.		DESCRIPTION
15-5300-427	1/100	Mounting clip

# WORK & REVERSING LAMPS

# WORKPOINT II 1000 WORKPOINT II 1500 WORKPOINT II 3000

NUMBER PLATE LAMPS
BEACONS
INTERIOR LAMPS
WORK LAMPS
NUMBER PLATE HOLDERS
SIDE MARKER LAMPS
REVERSING LAMPS
E LIGHT
POSITIONS LAMPS
OUTLINE MARKER LAMPS
REAR LAMPS
BEACONS
ERIOR LAMPS
LAMPS
LAMPS



# **WORKPOINT II 3000**

LED work lamp & reversing light with large adjustment angle





#### **PRODUCT FEATURES**

#### **HIGH EFFICIENCY**

Due to >95 lumens/watt

#### LARGE VERTICAL SWIVEL RANGE

From -67° to +127°

#### **LIGHT AND COMPACT**

A weight of only 660 grams

#### LIGHT COLOUR SIMILAR TO DAYLIGHT

5700 Kelvin

#### HOMOLOGATED REVERSING LIGHT

According to ECE R23

#### **EXCELLENT CORROSION RESISTANCE**

Powder-coated aluminium heat sink

#### **OPTIMAL LIGHT DISTRIBUTION**

With innovative optics

#### **HIGH-QUALITY MATERIALS**

Bracket and screws are made of stainless steel

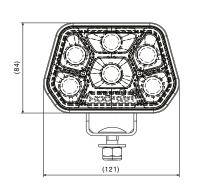
#### **DUAL VOLTAGE**

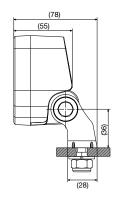


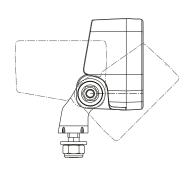












PART NO.		$\bigcirc$	4,	DESCRIPTION	LUMEN	CONNECTION	CABLE
28-8524-037	1/16	LED	12V 24 V	20° beam angle	3000	DT on housing	-
28-8524-047	1/16	LED	12V 24 V	60° beam angle	3000	DT on housing	-
38-8524-037	1/16	LED	12V 24 V	20° beam angle	3000	Open end	1.50 m
38-8524-047	1/16	LED	12V 24 V	60° beam angle	3000	Open end	1.50 m

### **ACCESSORY**

PART NO.		DESCRIPTION	CONNECTION
14-4302-227	1/-	Omega bracket	
69-0236-017	1/-	Extension for DT version	3.00 m open end
69-0236-007	1/-	Extension for DT version	5.00 m open end

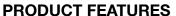
## **WORKPOINT II 1500**

Compact LED work & reversing light with high efficiency











Due to >125 lumens/watt

### LARGE VERTICAL SWIVEL RANGE

From -35° to +100°

### **LIGHT AND COMPACT**

A weight of only 560 grams

### LIGHT COLOUR SIMILAR TO DAYLIGHT

5700 Kelvin

### **HOMOLOGATED REVERSING LIGHT**

According to ECE R23

### **EXCELLENT CORROSION RESISTANCE**

Powder-coated aluminium heat sink

### **OPTIMAL LIGHT DISTRIBUTION**

With innovative optics

### **HIGH-QUALITY MATERIALS**

Bracket and screws are made of stainless steel

### **DUAL VOLTAGE**

For 12 & 24 volt applications





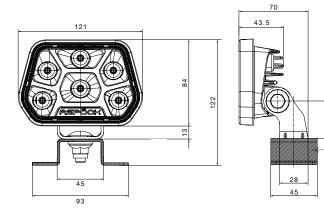








Omega bracket as optional accessory



PART NO.		$\Diamond$	4,	DESCRIPTION	LUMEN	CONNECTION	CABLE
28-8524-007	1/24	LED	12V 24 V	60° beam angle	1500	DT on housing	-
38-8524-007	1/24	LED	12V 24 V	60° beam angle	1500	Open end	1.50 m
38-8524-057	1/24	LED	12V 24 V	60° beam angle	1500	ASS2	1.50 m

### **ACCESSORY**

PART NO.		DESCRIPTION	CONNECTION
14-4302-227	1/-	Omega bracket	
69-0236-017	1/-	Extension for DT version	3.00 m open end
69-0236-007	1/-	Extension for DT version	5.00 m open end

## **WORKPOINT II 1000**

Compact design, flexible use









### **PRODUCT FEATURES**

### **HIGH EFFICIENCY**

Due to >100 lumens/watt

### LARGE VERTICAL SWIVEL RANGE

From -40 $^{\circ}$  to +110 $^{\circ}$ 

### LIGHT COLOUR SIMILAR TO DAYLIGHT

5700 Kelvin

### **LIGHT AND COMPACT**

A weight of only 412 grams

### **HOMOLOGATED REVERSING LIGHT**

According to ECE R23

### **CORROSION RESISTANT & HEAT DISSIPATING**

Due to thermally conductive plastic

### **OPTIMAL LIGHT DISTRIBUTION**

With innovative optics

### **HIGH-QUALITY MATERIALS**

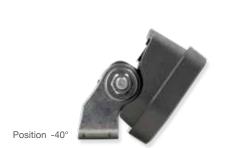
Bracket and screws are made of stainless steel

### **DUAL VOLTAGE**

For 12 & 24 volt applications

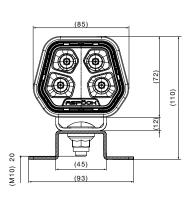


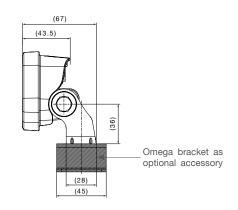












PART NO.		$\Diamond$	4,	DESCRIPTION	LUMEN	CONNECTION	CABLE
28-8524-017	1/24	LED	12V 24 V	60° beam angle	1000	DT on housing	-
38-8524-017	1/24	LED	12V 24 V	60° beam angle	1000	Open end	1.50 m
38-8524-067	1/24	LED	12V 24 V	60° beam angle	1000	ASS2	1.50 m

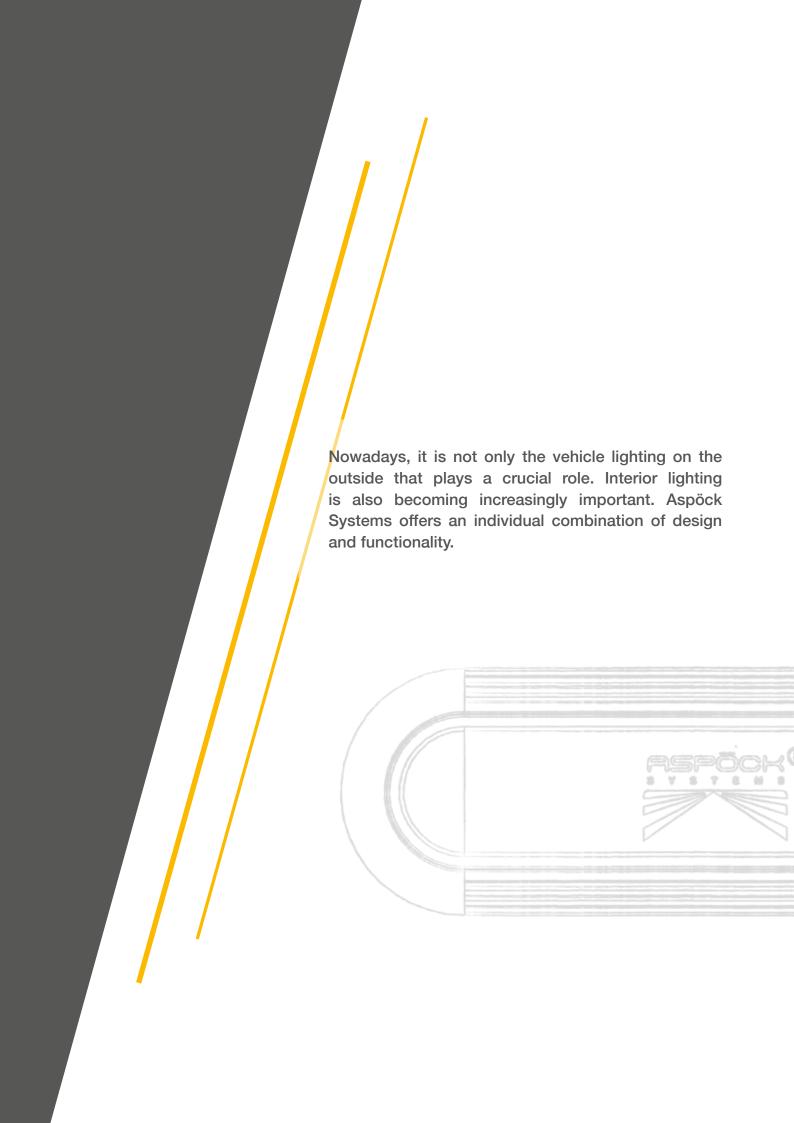
### **ACCESSORY**

PART NO.		DESCRIPTION	CONNECTION
14-4302-227	1/-	Omega bracket	
69-0236-017	1/-	Extension for DT version	3.00 m open end
69-0236-007	1/-	Extension for DT version	5.00 m open end

# FLEXLED STRIPS & INTERIOR LAMPS

FLEXLED
INPOINT III LED

NUMBER PLATE LAMPS
BEACONS
INTERIOR LAMPS
WORK LAMPS
NUMBER PLATE HOLDERS
SIDE MARKER LAMPS
REVERSING LAMPS
REVERSING LAMPS
LIGHT
POSITIONS LAMPS
UTLINE MARKER LAMPS
REAR LAMPS
BEACONS
BEACONS
ERIOR LAMPS
LAMPS





## **ASPÖCK FLEXLED LED STRIPS**

### FlexLED - light strips with a design factor

Future-proof LED technology merged with sleek design - when it comes to innovative vehicle lighting, appearance plays an important role alongside safety. Aspöck FlexLED has picked up on this trend and combined it with a system solution. Whether in the passenger compartment or in the loading area, Aspöck Systems offers you the perfect solution for your vehicle.

The LED strips are divided into the following categories and are available in the respective sizes depending on the category:

FlexLED Kelvin

Work and ambient lighting

FlexLED ECE



Rear light, 3rd brake light, position lamp

FlexLED Monochrome



Status display and special lighting

FlexLED small



FlexLED medium





### **CHARACTERISTICS**



classification





Electromagnetic compatibility







Can be homologated

Shock and vibration-resistant

Resistant to chemicals





## **FLEXLED KELVIN**

LED strips, ideal for work and ambient lighting







### **PRODUCT FEATURES**

### **USE: WORK & AMBIENT LIGHTING**

Optimised light distribution ensures reduced shadows in working areas

### **GLARE-FREE LIGHT SOURCE**

Due to the linear light emission

### **INTEGRATION IN VEHICLE STRUCTURAL COMPONENTS**

Perfect illumination for the interior and exterior of the vehicle

### LIGHT COLOUR: WARM WHITE TO COLD WHITE

2700 Kelvin to 6000 kelvin

### **DIFFERENT LIGHT OUTPUTS**

From 270 lumens/m to 1500 lumens/m

### STURDY DESIGN

Vibration, shock and chemical resistant

### **CASTING TRANSPARENT OR DIFFUSE**

Depending on the area of application and requirement



## **ECE LIGHT FUNCTIONS**

Approved in line with ECE REG 48



Side marker lamp for truck trailers



Position lamp for truck trailers



3rd stop lamp and position lamps for truck trailers



### **PRODUCT FEATURES**

### **AVAILABLE IN LARGE PROFILE**

For homogeneous light emission and elegant cold design

### STURDY DESIGN

Vibration, shock and chemical resistant

### **CUSTOMISED SOLUTIONS**

Customised lengths for every lighting function

### **AVAILABLE IN ALL ECE COLOURS**

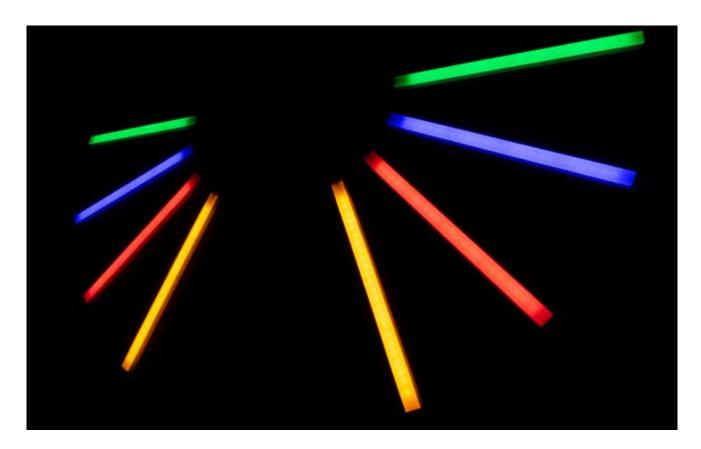
Red, yellow, white





## **FLEXLED MONOCHROME**

LED strips, ideal for status and special lighting







### **PRODUCT FEATURES**

### HIGH LIGHT PERFORMANCE

Using single-colour LEDs

### **POWERFUL STATUS DISPLAYS**

Thanks to freely selectable colour combinations

### AVAILABLE IN SMALL, MEDIUM AND LARGE

Enables universal use



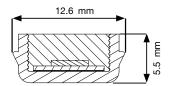
## **PRODUCT VERSIONS**

The LED strips are available in the following sizes, depending on the product category



### **FLEXLED SMALL**

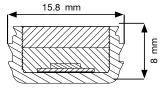
For a length up to 15 m Compact & space-saving Small bend radius of 10 cm





### **FLEXLED MEDIUM**

Can be used with profiles The multi purpose LED strip Small bend radius of 15 cm For a lenght up to 5 m

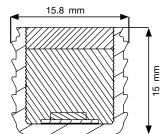




### **FLEXLED LARGE**

Designed for homologisable lighting functions Diffuse casting for homogeneous light emission Sturdy design

For a lenght up to 5 m Small bend radius of 20 cm



## **FLEXLED PROFILE**

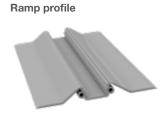
Easy attachment due to medium mounting profiles

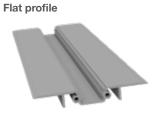




Interior lighting for truck trailers / mounting with corner profile









End cover

PART NO.	DESCRIPTION	COLOUR	LENGTH
14-4230-677	Mounting bracket corner profile medium	Grey RAL 7035	1.00 m
14-4130-647	Mounting bracket corner profile medium	Black RAL 9005	1.00 m
14-4230-657	Mounting bracket ramp profile medium	Grey RAL 7035	1.00 m
14-4230-627	Mounting bracket ramp profile medium	Black RAL 9005	1.00 m
14-4230-667	Mounting bracket flat profile medium	Grey RAL 7035	1.00 m
14-4230-637	Mounting bracket flat profile medium	Black RAL 9005	1.00 m
15-5250-737	LED strip cover	Transparent	1.00 m
15-5250-747	LED strip cover	Diffuse	1.00 m
15-5250-757	LED strip blind zone end cover	Grey RAL 7035	1.00 m
15-5250-767	LED strip blind zone end cover	Black RAL 9005	1.00 m



## **INPOINT III LED**

The optimum interior light for multiple applications







### **PRODUCT FEATURES**

### **LONG LIFE SPAN**

Thanks to sturdy construction

### **OPTIMAL WORK LIGHT**

Light colour 6000 kelvin

### **HIGH LIGHT OUTPUT**

With low power consumption

### **THREE VERSIONS**

Optionally with switch or motion sensor

### **DUAL VOLTAGE**

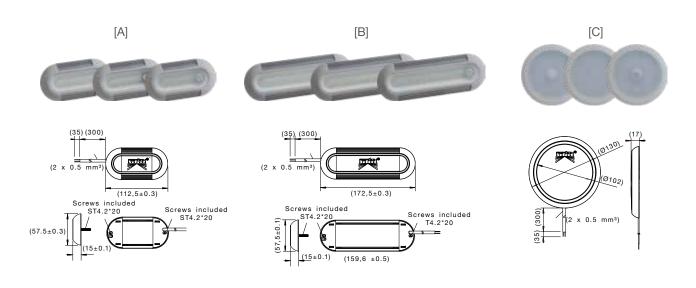
For 12 & 24 volt applications

### **MODERN LOOK**

Lens in frosted optics







PART NO.		$\Diamond$	4	VERSION	ADDITION	LUMEN	CONNECTION	CABLE
39-8900-157	1/-	LED	12V 24V	[A]	ІР 6К9К	700 lumens	Open end	0.30 m
39-8900-207	1/-	LED	12V 24V	[A] with motion sensor	IP67	700 lumens	Open end	0.30 m
39-8900-257	1/-	LED	12V 24V	[A] with switch	IP6K9K	700 lumens	Open end	0.30 m
39-8900-007	1/-	LED	12V 24V	[B]	IP6K9K	1,400 lumens	Open end	0.30 m
39-8900-057	1/-	LED	12V 24V	[B] with motion sensor	IP 67	1,400 lumens	Open end	0.30 m
39-8900-107	1/-	LED	12V 24V	[B] with switch	IP6K9K	1,400 lumens	Open end	0.30 m
39-8900-307	1/-	LED	12V 24V	[C]	IP6K9K	2,200 lumens	Open end	0.30 m
39-8900-357	1/-	LED	12V 24V	[C] with motion sensor	IP 67	2,200 lumens	Open end	0.30 m
39-8900-401	1/-	LED	12V 24V	[C] with switch	IP6K9K	2,200 lumens	Open end	0.30 m

# WIRING & JUNCTION BOXES

SML FEED LINE

DISTRIBUTOR XL

ASS DISTRIBUTOR

MAIN CABLES

P&R FLAT CABLES

FEED LINES

SOCKET DISTRIBUTOR

NUMBER PLATE LAMPS
BEACONS
INTERIOR LAMPS
WORK LAMPS
NUMBER PLATE HOLDERS
SIDE MARKER LAMPS
REVERSING LAMPS
REVERSING LAMPS
UTLINE MARKER LAMPS
REAR LAMPS
BEACONS
ERIOR LAMPS
LAMPS





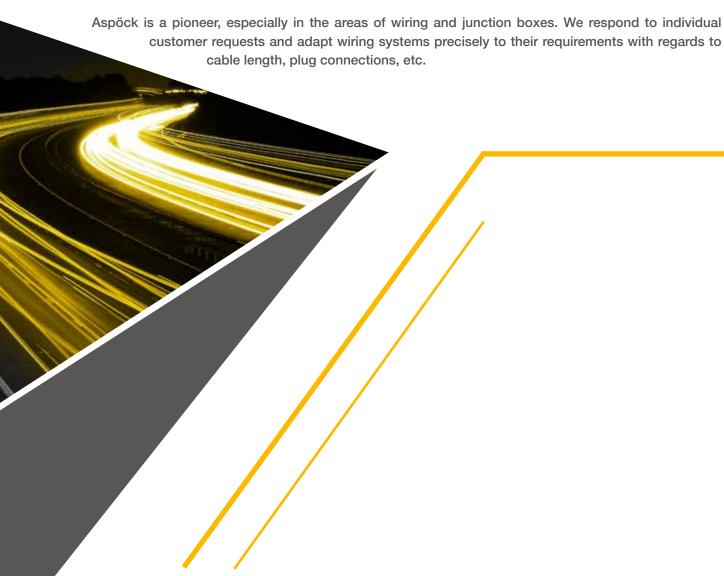
# ASPÖCK WIRING & LIGHT SYSTEMS

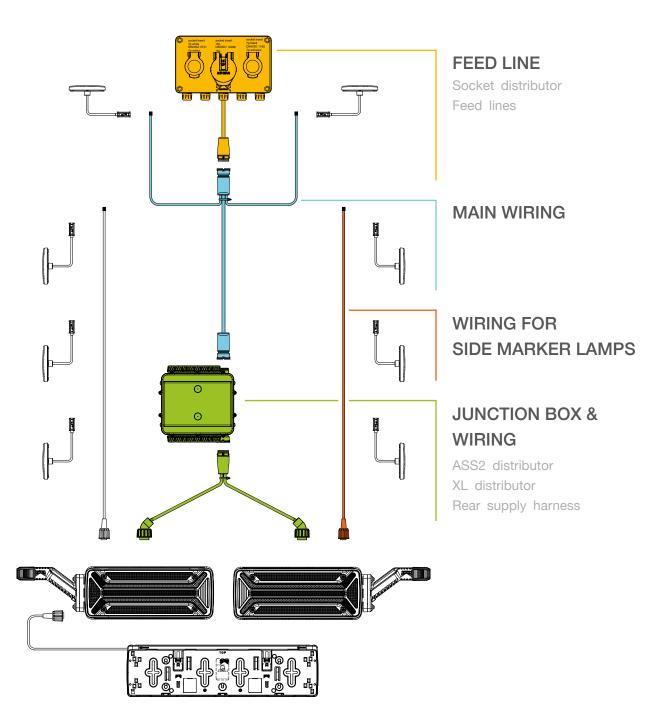
### The heart of every vehicle - the wiring.

It provides the connection that makes the lamps shine in the first place.

That is why Aspöck Systems offers a wide range of standard wiring systems for all of the segments that are available to our customers directly from the warehouse, from ADR cables to cables for electronic applications (BUS).

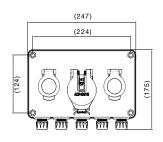
But what would a cable be without a proper connection? There is a wide variety of connector systems available for connecting the cables to various system components. An outstanding example is the ASPÖCK connector system (ASS) developed in-house.

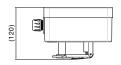




## **3-SOCKET JUNCTION BOX**







PART NO.		DESCRIPTION	CABLE
76-7037-007	1/-	Socket 15-pin ISO 12098 + socket ISO 1185 & 3731 (N+S) ASS3 15-pin female connector	0.60 m
76-7069-007	1/-	Socket 15-pin ISO 12098 + socket ISO 1185 & 3731 (N+S) ASS3 15-pin female connector	Direct connection

### This makes the 3-compartment socket distributor permissible for ADR Zone 2:

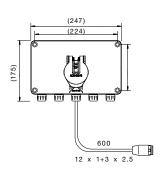
To make the socket distributor compatible with ADR travel, you must use the ADR safety caps for the ISO 1185 and ISO 3731 sockets.





PART NO.		DESCRIPTION
15-5280-154	1/-	2-piece safety caps for sockets ISO 1185 and ISO 3731







PART NO.		DESCRIPTION	CABLE
76-7072-007	1/-	Socket 15-pin ISO 12098 ASS3 15-pin female connector	0.60 m



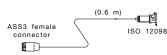


## **FEED LINES**



PART NO.		DESCRIPTION	CABLE
58-6647-007	1/-	Socket 15-pin ISO 12098 + socket ISO 1185 & 3731 (N+S)	0.60 m





PART NO.		DESCRIPTION	CABLE
53-6768-007	1/-	Socket 15-pin ISO 12098	0.60 m



PART NO.		DESCRIPTION	CABLE
58-6649-007	1/-	Socket ISO 1185 & 3731 (N+S)	0.60 m



PART NO.		DESCRIPTION	CABLE
53-1667-037	1/-	Plug 15-pin ISO 12098	4.80 m

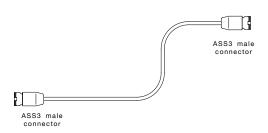


PART NO.		DESCRIPTION	CABLE
58-6024-017	1/-	Plug ISO 1185 & 3731 (N+S)	4.80 m

## **MAIN CABLES**

Main cable with 17-pin ASS3 connection, ADR version



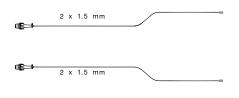


PART NO.		DESCRIPTION	CABLE	
65-1003-007	1/-	2 x ASS3 15-pin male connector	6 x 1.00 mm <sup>2</sup> + 2 x 2.50 mm	9.00 m
65-1003-017	1/-	2 x ASS3 15-pin male connector	6 x 1.00 mm <sup>2</sup> + 2 x 2.50 mm <sup>2</sup>	12.50 m
65-1003-027	1/-	2 x ASS3 15-pin male connector	6 x 1.00 mm <sup>2</sup> + 2 x 2.50 mm <sup>2</sup>	15.00 m
65-1005-007	1/-	2 x ASS3 15-pin male connector	7 x 1.00 mm <sup>2</sup> + 1 x 1.50 mm <sup>2</sup> + 2 x 2.50 mm <sup>2</sup>	9.00 m
65-1005-017	1/-	2 x ASS3 15-pin male connector	7 x 1.00 mm <sup>2</sup> + 1 x 1.50 mm <sup>2</sup> + 2 x 2.50 mm <sup>2</sup>	12.50 m
65-1005-027	1/-	2 x ASS3 15-pin male connector	7 x 1.00 mm <sup>2</sup> + 1 x 1.50 mm <sup>2</sup> + 2 x 2.50 mm <sup>2</sup>	15.00 m
65-1007-007	1/-	2 x ASS3 15-pin male connector	12 x 1.00 mm <sup>2</sup> + 3 x 2.50 mm <sup>2</sup>	9.00 m
65-1007-017	1/-	2 x ASS3 15-pin male connector	12 x 1.00 mm <sup>2</sup> + 3 x 2.50 mm <sup>2</sup>	12.50 m
65-1007-027	1/-	2 x ASS3 15-pin male connector	12 x 1.00 mm <sup>2</sup> + 3 x 2.50 mm <sup>22</sup>	15.00 m



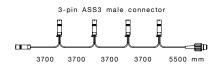
## **SML WIRING**





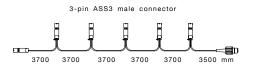
PART NO.		DESCRIPTION	CABLE		
68-7503-047	1/-	ASS2 2-pin female connector (YL/GN)	P&R flat cable 2 x 1.50 mm² (ADR)	WH	10.00 m
68-7503-007	1/-	ASS2 2-pin female connector (YL/GN)	P&R flat cable 2 x 1.50 mm² (ADR)	WH	13.00 m
68-7502-367	1/-	ASS2 2-pin female connector (YL/GN)	P&R flat cable 2 x 1.50 mm² (ADR)	YL/GN	13.00 m
68-7503-017	1/-	ASS2 2-pin female connector (YL/GN)	P&R flat cable 2 x 1.50 mm² (ADR)	WH	15.00 m
68-7503-177	1/-	ASS2 2-pin female connector (YL/GN)	P&R flat cable 2 x 1.50 mm² (ADR)	WH	16.00 m
68-7503-027	1/-	ASS2 2-pin female connector (YL/GN)	P&R flat cable 2 x 1.50 mm² (ADR)	WH	17.00 m
68-7502-377	1/-	ASS2 2-pin female connector (YL/GN)	P&R flat cable 2 x 1.50 mm² (ADR)	YL/GN	17.00 m





PART NO.		DESCRIPTION	CABLE
87-1284-007	1/-	ASS2 2-pin female connector (BL) + 5 x ASS3 2-pin	2 x 1.00 mm² (ADR) 1 x 5.50 m + 4 x 3.70 m





PART NO.		DESCRIPTION	CABLE
87-1285-007	1/-	ASS2 2-pin female connector (BL) + 6 x ASS3 2-pin	2 x 1.00 mm <sup>2</sup> (ADR) 1 x 3.50 m + 5 x 3.70 m

## JUNCTION BOX XL

With improved sealing and an innovative diaphragm ventilation system







### **PRODUCT FEATURES**

### **IMPROVED OVERVIEW**

Larger design compared to ASS1

### INNOVATIVE DIAPHRAGM VENTILATION SYSTEM

Prevents negative pressure or overpressure in the junction box

### HIGHER LEAK TIGHTNESS CLASS IP56K

Due to the improved sealing system between cover and housing

### **OPTIONAL SPECIAL FUNCTIONS**

E.g. relays, SMCG, fuses & diodes, due to integrated relay bases and brackets

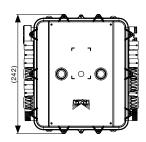
### BETTER MAINTENANCE AT CUSTOMER SITE

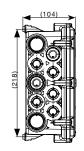
Option for more organised cable routing

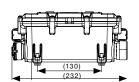












PART NO.		DESCRIPTION
76-5203-007	1/-	Distributor box XL Standard + ASS3

## **ASS1 JUNCTION BOX**

Safe & simple handling



### TIME-SAVING AND LIGHTER INSTALLATION

Pre-wiring possible

### **SAFE & SIMPLE HANDLING**

No need to open the junction box – IP54 tightness guaranteed

### **FUNCTIONS EXPANDABLE**

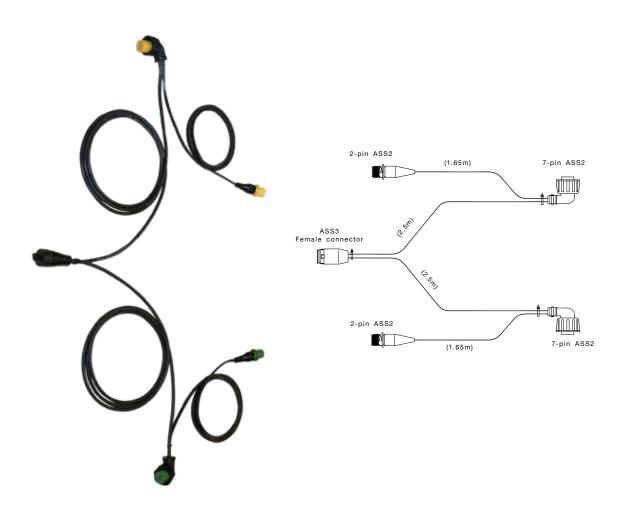
Free inputs on the housing cover serve as reserve inputs

PART NO.		DESCRIPTION	OUTLETS
76-5123-007	1/-	Connections: 1 x ASS3 15-pin female connector; 1 x ASS3 15-pin male connector	Not assigned
76-6430-007	1/-	Connections: 1 x ASS3 15-pin female connector on 1.50 m 15-pin cable; 2 x ASS2 7-pin female connector (YL/GN) on 1.30 m 7-pin cable	Rear light left + rear light right
76-5123-117	1/-	Connections: 1 x ASS3 15-pin female connector	SMCG left & right
76-6430-267	1/-	Connections: 1 x ASS3 15-pin female connector on 1.50 m 15-pin cable	SMCG left & right + Rear light left + rear light right



## **REAR SUPPLY HARNESS**

Connector ASS3 15-pin female connector / 2x ASS2 7-pin female connector



PART NO.		DESCRIPTION	CABLE	
68-4800-007	1/-	No 2-pin outlet	2 x 2.50 m	2 x 7 x 1 mm²
68-4983-007	1/-	Outlets: 2 x ASS2 2-pin male connector (YL/GN)	2 x 2.50 m + 2 x 1.70 m	2 x 7 x 1 mm <sup>2</sup> + 2 x 2 x 1.50 mm <sup>2</sup> (P&R)
68-4855-007	1/-	Outlets: 1 x P&R flat cable	2 x 3.00 m + 1 x 1.00 m	2 x 7 x 1 mm <sup>2</sup> + 1 x 2 x 1.50 mm <sup>2</sup> (P&R)
68-4888-007	1/-	Outlets: 2 x SMCG + ASS2 2-pin male connector (YL/GN)	2 x 2.50 m + 2 x 0.70 m	2 x 7 x 1 mm <sup>2</sup> + 2 x 0.75 mm <sup>2</sup>

## ACCESSORIES

SMCG
ERD
REVERSING WARNING DEVICE
LCG - LED CONTROL GEAR
RDC PREMIUM
SMARTLINK

**CONTOUR MARKINGS** 

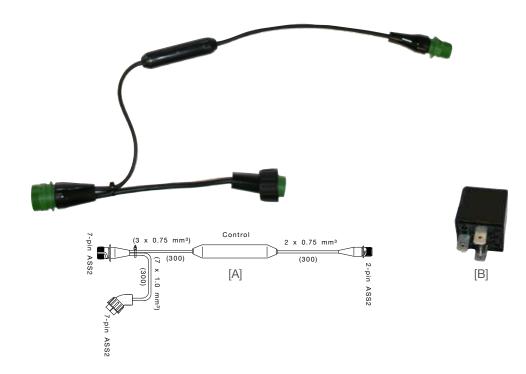
**EXPANSIONS** 

NUMBER PLATE LAMPS
BEACONS
INTERIOR LAMPS
WORK LAMPS
NUMBER PLATE HOLDERS
SIDE MARKER LAMPS
REVERSING LAMPS
LIGHT
POSITIONS LAMPS
UTLINE MARKER LAMPS
REAR LAMPS
BEACONS
ERIOR LAMPS
LAMPS

To ensure the greatest possible safety on the roads, your lighting and wiring solutions often need additional accessories.

## **SMCG - SIDE MARKER CONTROL GEAR**

Control for side marker lamps





### **PRODUCT FEATURES**

### **SOLUTION FOR REVISED LEGISLATION ECE 48 REV. 6**

Side marker lamps must flash along with the indicator

### A LOGICAL APPROACH

Avoids additional fitting of at least three category 5 flashing lights

### **UNCOMPLICATED MOUNTING**

Simple installation or retrofitting on vehicle

### PROTECTION AGAINST SHORT-CIRCUIT AND OVERTEMPERATURE

Due to integrated electronic circuit

The SMCG – Side Marker Control Gear – is the control for the flashing side marker lamp (SML). It was developed as a solution for the revised ECE 48 to Rev. 6 legislation. This regulation states that the side marker lamps on vehicles of class O3 and O4 must flash in coordination with the indicator of the truck. The focus is on significantly increasing safety for all road users when turning (see pictures on the right side).

Aspöck Systems offers individual solutions for the control of the SML that avoid the installation of at least three additional category 5 lamps:

### Solution 1 – SMCG cable version

This separate wiring with included circuitry provides a cost-effective connection of the rear lamp via the adapter to the side marker lamp.

### Solution 2 - SMCG relay version

This electronic flasher circuit in a relay [B] is designed for installation in an Aspöck junction box or in an Aspöck rear lamp (Europoint III, Europoint II and Ecopoint II).







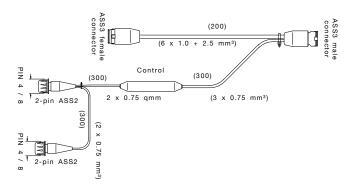
Flashing side marker lamps along the truck trailer are a important safety factor for other road users.

PART NO.		DESCRIPTION	VERSION
75-0331-007	1/-	SMCG right + left	[A]
75-0328-007	1/-	SMCG right	[A]
75-0329-007	1/-	SMCG left	[A]
68-4888-007	1/-	Supply harness with SMCG right + left	[A]
76-6430-267	1/-	Rear distributor with SMCG right + left	[A]
12-3970-557	1/-	SMCG relay	[B]

## **ERD - ELECTRONIC REVERSING DEVICE**

The electronic control for reversing lights







### **PRODUCT FEATURES**

### FOR ADDITIONAL REVERSE LIGHTS ON VEHICLE

Required for additional lamps in line with ECE REG 48

### **HIGH LOAD CURRENT**

Can handle up to max. 8 amps

### **UNCOMPLICATED MOUNTING**

Simple installation or retrofitting on vehicle

### **SOLUTION FOR LEGAL PROVISION ECE R48 6.4.7**

Logical switching of reversing light and rear light

PART NO.		DESCRIPTION
75-0341-007	1/-	ERD - reversing light control

## **REVERSING ALARMS**

Higher safety when reversing



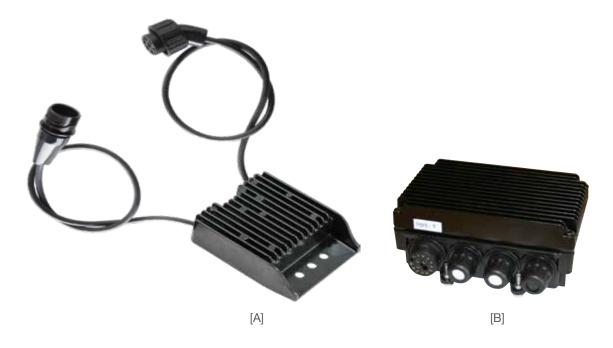
### **PULSATING SIGNAL TONE**

Sound level 98 dB at 1 m

PART NO.		DESCRIPTION	VERSION
75-0000-007	1/-	1.20 m cable and 2-pin ASS1 connector, IP68	[A]
75-0100-007	1/-	3.50 m cable open end, IP68	[A]
75-0002-007	1/-	1.20 m cable open end, IP54	[A]
12-3922-004	1/-	Installation version for Europoint I & Europoint III	[B]
12-3922-014	1/-	Installation version for Europoint II	[B]

## **LCG - LED CONTROL GEAR**

No LED yet? No problem!







### **PRODUCT FEATURES**

### LED CONTROL DEVICE

Monitoring of LED direction indicator function

### **SOLUTION FOR NON-LED-COMPATIBLE LAMPS**

Current matching of LED lamps to those of non-LED-compatible trucks

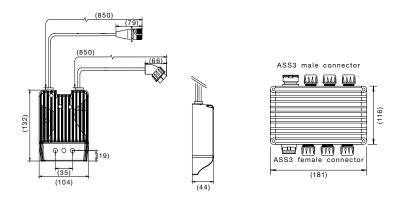
### **UNCOMPLICATED MOUNTING**

Quick and simple retrofitting in existing Aspöck light system/rear lamp

With regard to the minimal power consumption of LED lamps compared to incandescent lamps, problems with the light bulb malfunction control can occur during operation of older towing vehicles. The reason for this is that the low power consumption of LED lamps is often interpreted by towing vehicles as a failure of the lighting function.

This ballast unit (LCG) adapts the electrical properties of LED lamps to the needs of truck & trailers that are not yet LED-compatible. It also monitors the light function according to legal regulations (current adjustment and failure control as well as overcurrent shutdown).

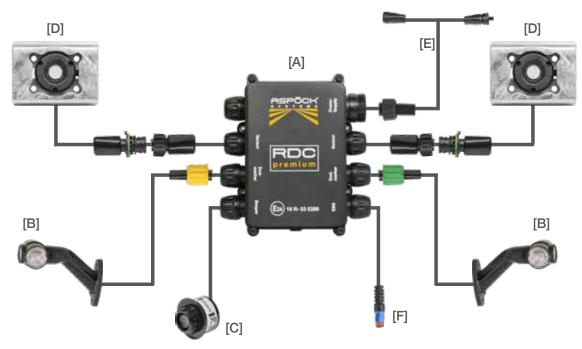
	LCG 1 - V2	LCG 2	
	60		
PART NO.	75-0300-107	75-0310-007	75-0309-007
$H_{\vee}$	24 V	24 V	24 V
TRAILER DETECTION			
LED FAILURE MONITORING			
CURRENT ADJUSTMENT			
REQUIRED QUANITY PER VEHICLE	2	1	1
COMPATIBLE WITH	Aspöck rear lamps without integrated LCG	Aspöck rear lamps without integrated LCG	Aspöck rear lamps with integrated LCG for direction indicator



PART NO.		DESCRIPTION	VERSION
75-0300-107	1/-	LCG 1 - V2 with 7-pin ASS2 connection for Aspöck rear lamp	[A]
75-0310-007	1/-	LCG 2 with blinker monitoring + 17-pin ASS3 connection	[B]
75-0309-007	1/-	LCG 2 without blinker monitoring + 17-pin ASS3 connection	[B]

## RDC - RAMP DISTANCE CONTROL PREMIUM

Ramp approach aid using ultrasonic sensors





### **PRODUCT FEATURES**

### RAMP APPROACH AID FOR TRUCK TRAILERS AND SEMI-TRAILERS

Makes approaching ramps easier with acoustic and optical warning signals

### **EBS CONNECTION**

Optional link to the braking system

### **HIGHER SAFETY**

For the vehicle and the objects behind the vehicle

### **COST SAVINGS**

Avoids collisions that could result in damage

### **UNCOMPLICATED MOUNTING**

Simple installation or retrofitting on vehicles with plug-and-play

Damage, along with enormous repair costs, often occurs when approaching ramps. Thanks to the **Aspöck RDC premium ramp approach aid**, the driver can approach the target in the background with both auditory and visual assistance when reversing.

The system activates automatically at a distance of less than three metres and a speed of less than 10 km/h, and outputs a warning by means of a beeping signal and flashing end-outline marker lamps. Finally, the trailer brakes automatically just before the ramp until it comes to a complete stop.

PART NO.		DESCRIPTION
99-3010-251	1/-	RDC Premium Haldex with metal buffer
99-3010-241	1/-	RDC Premium Haldex without metal buffer
99-3010-201	1/-	RDC Premium Knorr TEBS G2.1 Premium with metal buffer
99-3010-221	1/-	RDC Premium Knorr TEBS G2.1 Premium without metal buffer
99-3010-291	1/-	RDC Premium Knorr TEBS G2.2 Premium with metal buffer
99-3010-281	1/-	RDC Premium Knorr TEBS G2.2 Premium without metal buffer

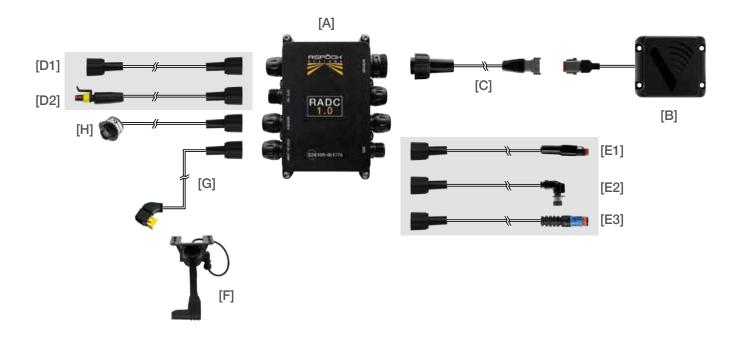
#### **RDC - INDIVIDUAL PARTS & ACCESSORIES**

PART NO.		DESCRIPTION
76-6425-107	1/-	RDC distributor box Haldex [A]
76-6425-207	1/-	RDC distributor box Knorr [A]
31-3306-047	1/-	URL Superpoint III LED right, with 2.10 m cable [B]
31-3305-047	1/-	URL Superpoint III LED left, with 2.10 m cable [B]
75-0001-007	1/-	Reversing beeper [C]
75-0201-617	1/-	RDC sensor with metal buffer [D]
75-0204-117	1/-	RDC sensor without metal buffer
65-6003-01 <b>7</b>	1/-	Connection cable 3.00 m [E]
65-6003-007	1/-	Connection cable 8.00 m [E]
68-0049-017	1/-	EBS connection cable Haldex 7.00 m [F]
68-0111-007	1/-	EBS connection cable Knorr TEBS G2.1 P. 3.00 m [F]
69-0078-017	1/-	EBS connection cable Knorr TEBS G2.2 P. 3.00 m [F]



### **RADC 1.0 - RADAR DISTANCE CONTROL 1.0**

Ramp approach aid using radar technology



#### **PRODUCT FEATURES**

#### RAMP APPROACH AID FOR TRUCK TRAILERS AND SEMI-TRAILERS

Facilitates ramp approach when reversing

#### **INCREASED SAFETY**

Large monitoring area up to 3 x 10 m behind the vehicle

#### **UNCOMPLICATED MOUNTING**

Simple installation or retrofitting on vehicle

#### **NEW TECHNOLOGY**

Only one sensor is required

#### **CAN BE CONFIGURED**

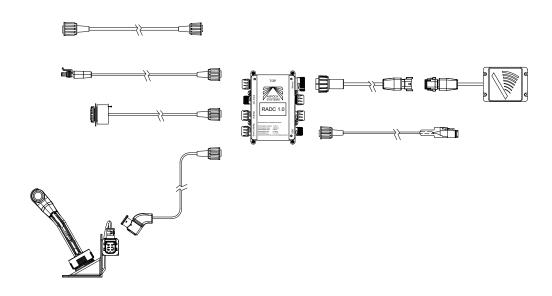
Freely adjustable detection zones

#### **REGARDLESS OF THE WEATHER**

Works despite fog, heavy rain or snowfall

#### **COST SAVINGS**

Thanks to the avoidance of collision damage



PART NO.		DESCRIPTION
76-5158-007	1/-	RADC 1.0 distributor box [A]
75-0213-047	1/-	RADC sensor W2.4m/L3.0m [B]
65-1512-007	1/-	RADC sensor connection cable 3.00 m [C]
68-0076-007	1/-	RADC connection cable ASS2 3.00 m [D1]
68-0070-007	1/-	RADC Superseal connection cable 6.00 m [D2]
69-0078-027	1/-	RADC Knorr EBS Connection 6.00 m DT [E1]
68-0002-337	1/-	RADC Knorr EBS Connection 6.00 m DT - 1 pin [E1]
78-7013-007	1/-	RADC Wabco/ZF EBS Connection 4.00 m [E2]
68-0049-017	1/-	RADC Haldex EBS Connection 7.00 m [E3]
39-9093-007	1/-	RADC status light [F]
69-6268-007	1/-	RADC status lights connection cable [G]
75-0001-007	1/-	Reversing beeper [H]

### **SMARTLINK**

The easy way to expand multiple functions





#### **PRODUCT FEATURES**

#### SIMPLE MOUNTING

By means of mounting holes

#### **VARIOUS DESIGN OPTIONS**

Production of customised variants

#### **COMPACT DESIGN**

Distribution of functions in the smallest possible space

#### **SIMPLE APPLICATION**

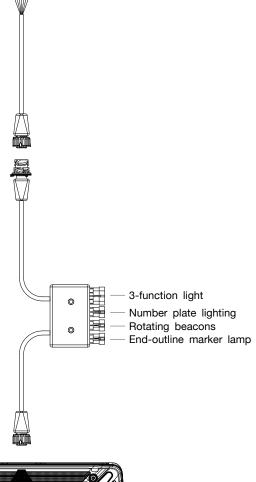
"Plug and Play" capable between lamps and rear supply cable

The Smartlink is a compact solution for distributing a wide range of functions between the supply line and various consumers, e.g. single- or multi-function lamps. That means it is possible to expand a rear lamp with additional lighting functions in just a few steps.

To do this, simply remove the plug from the rear light and attach the Smart Link adapter with its additional four slots. An additional tail light, stop light, reversing light or flashing light can now be connected and mounted.

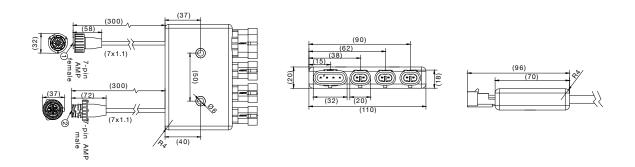








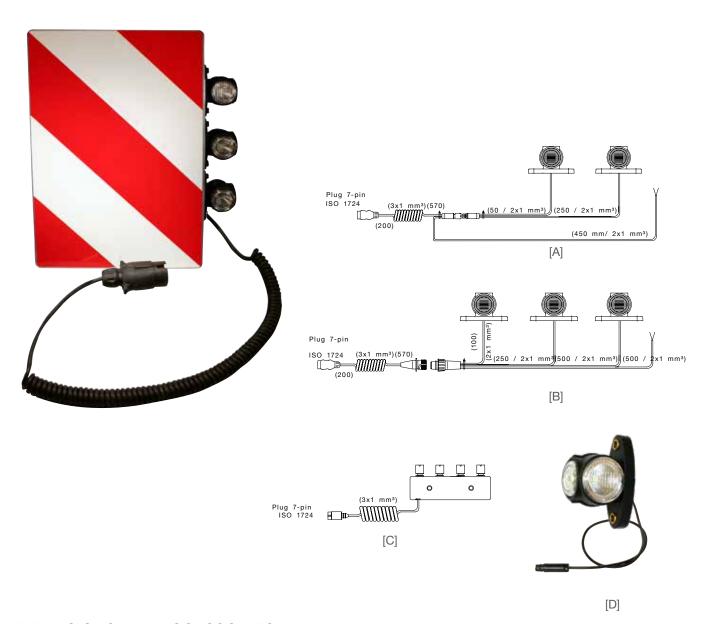
Application example



PART NO.		DESCRIPTION	OUTLETS
76-9035-027	1/-	Connectors: AMP 7-pin male connector; AMP 7-pin female connector	1 x 3-pin & 3 x 2-pin Superseal
76-9035-037	1/-	Connections: 1.50 m 7-pin cable open end; 0.50 m 7-pin cable open end	1 x 3-pin & 3 x 2-pin Superseal
76-9039-007	1/-	Connections: ASS2 7-pin male connector; ASS2 7-pin female connector	1 x 3-pin & 3 x 2-pin Superseal
76-9034-007	1/-	Connections: 4-pin DT male connector	3 x 2-pin DT male connector

### **EXPANSIONS**

For extra-wide vehicles



#### **EXPANSIONS AND ACCESSORIES**

PART NO.		DESCRIPTION	
58-1955-007	1/-	Expansion with 2 pieces Superpoint III LED, with additional outlet for rotating light	[A]
58-1957-007	1/-	Expansion with 3 pieces Superpoint III LED, with additional outlet for rotating light	[B]
76-9023-007	1/-	3-pin connector with coiled cable	[C]
31-3307-087	1/-	Superpoint III LED 3-pin ASS3 connection suitable for 76-9023-007	[D]



### **CONTOUR MARKINGS**

The easy way to improve vehicle visibility





#### **PRODUCT FEATURES**

#### **SPECIAL ADHESIVE LAYER**

Fast and easy to adhere without loss of material

#### **REFLECTIVE PROPERTIES**

Approved according to EU regulations for reflective materials on trucks and trailers

#### **SPECIAL MATERIAL COMPOSITION**

This makes the product thin, flexible and very tear-resistant

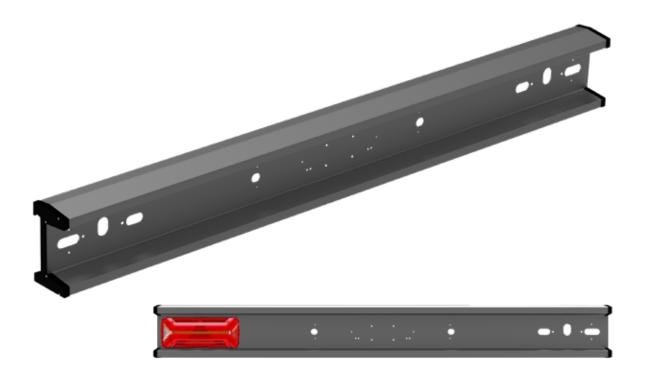
#### **ACRYLIC STRUCTURE**

The acrylic top layer provides excellent stability

PART NO.	DESCRIPTION
15-5990-007	50.80 mm x 50 m white
15-5990-107	50.80 mm x 50 m yellow
15-5990-207	50.80 mm x 50 m red
15-5990-407	For curtain sider 50.80 mm x 50 m white
15-5990-507	For curtain sider 50.80 mm x 50 m yellow
15-5990-607	For curtain sider 50.80 mm x 50 m red

### **UNDERRUN PROTECTION**

Underrun protection according to UNECE regulation no. 58 Rev. 03





#### **PRODUCT FEATURES**

#### **INCREASED SAFETY**

Protects smaller vehicles from driving under in the event of collisions

#### **IMPROVED GEOMETRY**

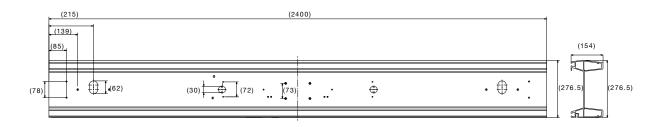
Can handle up to 180 kN

#### **OPTIONAL NEW HOLE PATTERN VERSIONS**

For combination rear lamps with distribution function

#### **LOWER COSTS**

Due to pre-mounted wiring



#### **UNDERRUN PROTECTION**

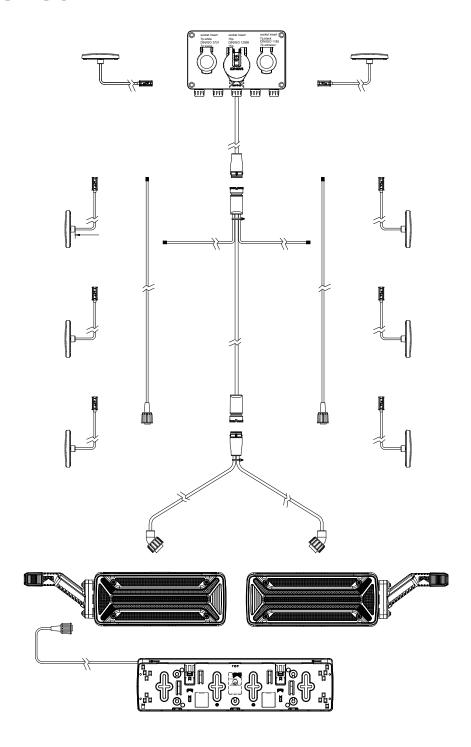
PART NO.		DESCRIPTION
97-1103-011	25	Underrun protection according to ECE58 R03, anodised aluminium, for 3-chamber lamp, 2,400 mm
97-1104-011	25	Underrun protection according to ECE58 R03, anodised aluminium, for 5-chamber lamp, 2,400 mm
97-1105-011	25	Underrun protection according to ECE58 R03, anodised aluminium, undrilled, 2,400 mm
97-1106-011	25	Underrun protection according to ECE58 R03, anodised aluminium, standard, 2,400 mm
97-1107-011	25	Underrun protection according to ECE58 R03, aluminium white, undrilled, 2,400 mm

# WIRING SOLUTIONS

NUMBER PLATE LAMPS
BEACONS
INTERIOR LAMPS
WORK LAMPS
NUMBER PLATE HOLDERS
SIDE MARKER LAMPS
REVERSING LAMPS
REVERSING LAMPS
LIGHT
POSITIONS LAMPS
OUTLINE MARKER LAMPS
REAR LAMPS
BEACONS
ERIOR LAMPS
LAMPS
LAMPS
BER PLATE HOLDERS

The right wiring is the be-all and end-all for a fully functional vehicle. Aspöck Systems offers marketdriven solutions that can be individually adapted to the customer's requirements.

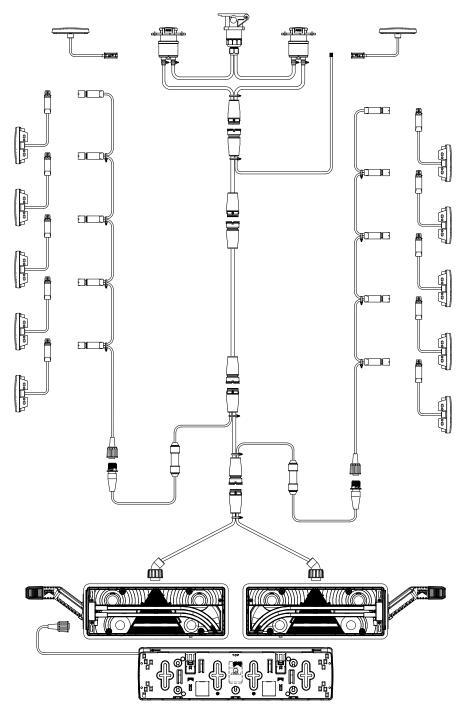
## STANDARD WIRING WITH SMCG



#### **NOTES**



## STANDARD WIRING WITH FLASHING SIDE MARKER LAMPS



NOTES		

# MOUNTING REGULATIONS

REAR LIGHTING
SIDE LIGHTING
FRONT LIGHTING

NUMBER PLATE LIGHTS
ROTATING BEACONS
PLUG-IN DIAGRAM
WORK LAMPS
NUMBER PLATE HOLDERS
SIDE MARKER LAMPS
REVERSING LIGHTS
E LIGHT
NAVIGATION LIGHTS
UTLINE MARKER LAMPS
REAR LAMPS
REAR LAMPS
REAR LAMPS
REAR LIGHTS
BEACONS
ERIOR LIGHTS



## MOUNTING REQUIREMENTS

#### For trailers according to ECE regulation R48

Aspöck Systems has summarised and presented the most important legal mounting regulations for the optimum fitting or retrofitting of a trailer with rear, front and side lighting. Due to the changing legal regulations at irregular intervals, Aspöck does not assume any warranty for possible deviations.

#### Vehicle classes:

O1 trailer up to 0.75 t | O2 trailer over 0.75 t up to 3.5 t | O3 trailer over 3.5 t up to 10 t | O4 trailer over 10 t

### **REAR LIGHTING - TRAILER**

Attachment ECE-R48 § 6.10.1	Mandatory for all trailers. Category R, R1 or R2.
Quantity ECE-R48 § 6.13.2	2 pieces, 2 additional possible on O2, O3 and O4 vehicles if no end-outline marker lamps are mounted.
Colour ECE-R48 § 5.15	Red
Mounting width ECE-R48 § 6.10.4.1	Max. 400 mm from the outermost point of the vehicle width. This does not apply to the additional vehicle positio lamps. Min. 600 mm between both tail lights, but min. 400 mm for vehicle widths < 1,300 mm.
Mounting height ECE-R48 § 6.10.4.2	Min. 350 mm, max. 1,500 mm (exception: 2,100 mm only if the vehicle geometry does not allow mounting below 1,500 mm and if no 2 additional vehicle position lamps are fitted). Mounting height of the additional vehicle position lamps: Min. 600 mm above the mandatory vehicle position lamps.
Geom. viewing angle ECE-R48 § 6.10.5	Horizontal 45° inside to 80° outside. Vertical ±15°, but with mounting height < 750 mm also 5° downwards. Optionall with an attachment height of 2,100 m also 5° upwards
Electrical circuit ECE-R48 § 6.10.7	Must be designed so that the front position, tail, side marker lamps and number plate lights can only be switche on and off simultaneously.
Switch-on control ECE-R48 § 6.10.8	Mandatory. It must be combined with the control device for the front position lamps.
Other regulations ECE-R48 § 6.10.9	Unless end-outline marker lamps are fitted, 2 additional front position and vehicle position lamp may be fitted to a trailers of categories O2, O3, O4.





STOP LAMP ECE-R48 § 6.7 AND ECE-R7		
Attachment ECE-R48 § 6.7.1	Mandatory for all trailers. Category S1 or S2.	
Quantity ECE-R48 § 6.7.2	2 pieces. Except if stop lamps in category S3 or S4 are installed, two additional stop lamps in category S1 or S2 can be installed to vehicle classes O2, O3 and O4.	
Colour ECE-R48 § 5.15	Red	
Mounting width ECE-R48 § 6.7.4.1	For all trailers min. 600 mm between both stop lamps, but min. 400 mm for vehicle widths < 1,300 mm.	
Mounting height ECE-R48 § 6.7.4.2	Min. 350 mm, max. 1,500 mm (exception: 2,100 mm, only if the vehicle geometry does not allow for an installation of less than 1,500 mm and 2 additional stop lamps are not installed). Position in height of the additional stop lamps: min. 600 mm above the mandatory stop lamps.	
Geom. viewing angle ECE-R48 § 6.7.5	Horizontal $\pm$ 45°. Vertical $\pm$ 15°, but for a position in height of < 750 mm also 5° downwards. Optionally with a position in height of 2,100 mm also 5° upwards.	
Electrical circuit ECE-R48 § 6.7.7	Must shine when the brake is pressed.	
Switch-on control ECE-R48 § 6.7.8	Optional, however, a tell-tale indicating failure is mandatory if required by the component regulation. If there is one, only as an operating tell-tale in the shape of a non-flashing warning lamp that lights up in the event of a fault.	
Other regulations ECE-R48 § 6.7.9	The distance between the stop lamp and each rear fog lamp must be ≥ 100 mm.	
ECE-R7 § 6.1  Category S1 (constant) = light intensity min. 60 cd, single lamp max. 260 cd, type "D" lamp max. 130 cd  Category S2 (variable) = light intensity min. 60 cd, single lamp max. 730 cd, type "D" lamp max. 365 cd		

REAR DIRECTIONAL IN	NDICATOR ECE-R48 § 6.5 AND ECE-R6	
Attachment ECE-R48 § 6.5.1	Mandatory for all trailers. Category 2a or 2b.	
Quantity ECE-R48 § 6.5.2	2 pieces, additionally 2 optional ones at O2-, O3- and O4 vehicles	
Colour ECE-R48 § 5.15	Yellow	
Mounting width ECE-R48 § 6.5.4.1	Max. 400 mm from the outermost point of the vehicle width. This does not apply to the additional blinkers. Min. 600 mm between both blinkers, but min. 400 mm for vehicle widths < 1,300 mm.	
Mounting height ECE-R48 § 6.5.4.2	Min. 350 mm, max. 1,500 mm (exception: 2,100 mm only if the vehicle geometry does not allow mounting below 1,500 mm and if no 2 additional vehicle position lamps are fitted). Mounting height of the additional blinkers: Min. 600 mm above the mandatory blinkers.	
Geom. viewing angle ECE-R48 § 6.5.5	Horizontal 45° inside to 80° outside. Vertical ±15°, but with mounting height < 750 mm also 5° downwards. Optionally with an attachment height of 2,100 m also 5° upwards.	
Electrical circuit ECE-R48 § 6.5.7	The illumination must be independent of other lamps. They must be illuminated and extinguished on the same side of the vehicle by the same controls. They must flash synchronously.	
Switch-on control ECE-R48 § 6.13.8	Mandatory. The function control is mandatory for the front and rear directional indicators. Vehicles equipped to tow a trailer must be equipped with a special function control for the directional indicators of the trailer, unless any malfunction of one of the directional indicators of the vehicle chain can be read off the control device of the towing vehicle. A functional check is not required for the two additional directional indicators on trailers.	
ECE-R6 (6.1)  Category 2a (constant) = light intensity min. 50 cd, single lamp max. 500 cd, type "D" lamp max. 250 cd  Category 2b (variable) = light intensity min. 50 cd, single lamp max. 1,000 cd, type "D" lamp max. 500 cd		



## **REAR LIGHTING - TRAILER**

REVERSING LIGHT ECE-R48 § 6.4 AND ECE-R23	
Attachment ECE-R48 § 6.4.1	Mandatory for all trailers of vehicle classes O2, O3 and O4. Permitted for trailers of vehicle category O1.
Quantity ECE-R48 § 6.4.2	1 piece mandatory, a 2nd piece permissible for trailers < 6 m. 2 pieces prescribed for trailers > 6 m and 2 additional permissible*
Colour ECE-R48 § 5.15	White
Mounting width ECE-R48 § 6.4.4.1	No regulation
Mounting height ECE-R48 § 6.4.5	Min. 250 mm, max. 1,200 mm.
Geom. viewing angle ECE-R48 § 6.4.5	1 lamp: Horizontal ± 45°. 2 lamps: Horizontal 30° inwards to 45° outwards. Vertical 15° upwards, to 5° downwards.
Electrical circuit ECE-R48 § 6.4.7	Only switched on when reverse gear is engaged and the vehicle is ready to drive. For the optional reversing lights, special conditions apply in § 6.4.7.2.
Switch-on control ECE-R48 § 6.4.8	Permissible
* Mounting of the two optional reversing lights also permitted on the side of the vehicle.	

REAR FOG LAMP E CE	-R48 § 6.11 AND ECE-R38
Attachment ECE-R48 § 6.11.1	Mandatory for all trailers. Category F, F1 or F2.
Quantity ECE-R48 § 6.13.2	1 or 2 pieces
Colour ECE-R48 § 5.15	Red
Mounting width ECE-R48 § 6.11.4.1	No regulation
Mounting height ECE-R48 § 6.11.4.2	Min. 250 mm, max. 1,000 mm or if built together with other function max. 1,200 mm.
General mounting information ECE-R48 § 6.11.4.1	With 1 rear fog lamp: Left of centre = right-hand traffic, right of centre = left-hand traffic. Mounting in the centre is permissible.
Geom. viewing angle ECE-R48 § 6.11.5	Horizontal ± 25°. Vertical ± 5°.
Electrical circuit ECE-R48 § 6.11.7	Switch-on only when low beam, high beam or fog lights are switched on.
Switch-on control ECE-R48 § 6.11.8	Mandatory. An independent, non-flashing indicator light.
Other regulations ECE-R48 § 6.11.9	The distance to the stop light must be > 100 mm. The rear fog lamp of the towing vehicle can switch off automatically if a trailer is coupled and its rear fog lamp is switched on as a result.
ECE-R38 § 6.1 Category F, F1 (constant) = I	ight intensity min. 150 cd, max. 300 cd Category F2 (variable) = light intensity min. 150 cd, max. 840 cd

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NUMBER PLATE LIGHT ECE-R48 § 6.8 AND ECE-R4					
Attachment ECE-R48 § 6.15.1	Mandatory for all trailers.				
Quantity ECE-R48 § 6.8.2	1 or more				
Colour ECE-R48 § 5.15	White				
Mount of the number plate ECE-R48 § 6.8.3	so that the numbers are illuminated.				
Electrical circuit ECE-R48 § 6.8.7	Must be designed so that the front position, number plate, tail and side marker lamps can only be switched on off simultaneously.  Permitted. If a control device is used, its function must be fulfilled by the control device prescribed for the f position and vehicle position lamps.				
Switch-on control ECE-R48 § 6.8.8					

REAR RETRO-REFLEC	TOR ECE-R48 § 6.15 AND ECE-R3			
Attachment ECE-R48 § 6.15.1	Mandatory for all trailers.			
Quantity ECE-R48 § 6.15.2	Min. 2 pieces			
Colour ECE-R48 § 5.15	Red			
Shape ECE-R48 § 6.15	Triangle			
Mounting scheme ECE-R48 § 6.15.3	The tip of the triangle must point upwards.			
Mounting width ECE-R48 § 6.15.4.1	Max. 400 mm from the outermost point of the vehicle width. Min. 600 mm between both retro-reflectors, but min. 400 mm for vehicle widths < 1,300 mm.			
Mounting height ECE-R48 § 6.15.4.2	Min. 250 mm, max. 900 mm, max. 1,200 mm if integrated in other lamps (exception: 1,500 mm)*.			
Geom. viewing angle ECE-R48 § 6.15.5	Horizontal ± 30°. Vertical ±15°, but with mounting height < 750 mm 5° downwards.			
Other regulations ECE-R48 § 6.15.9	The illuminating surface of the retro-reflector may be integrated in any other rear light.			
* An exception is only possil	ble if the vehicle geometry does not allow for normal mounting.			

REAR END-OUTLINE M	IARKER LAMP ECE-R48 § 6.13 AND ECE-R7			
Attachment ECE-R48 § 6.13.1	Mandatory for trailers > 2.1 m wide. Permitted for trailers > 1.8 m to Ì 2.1 m wide. Category R, R1, R2, RM1 or RM2.			
Quantity ECE-R48 § 6.13.2	2 pieces, optionally 2 additional end-outline marker lamp possible			
Colour ECE-R48 § 5.15	Red			
Mounting width ECE-R48 § 6.13.4.1	As far out as possible, max. 400 mm from the outermost point of the vehicle width.			
Mounting height ECE-R48 § 6.13.4.2	As high as possible. Optional and prescribed with the greatest possible distance.			
Geom. viewing angle ECE-R48 § 6.13.5	Horizontal 80° outwards. Vertical 5° above and 20° below the horizontal.			
Electrical circuit ECE-R48 § 6.13.7	Must be designed so that the front position, tail, side marker lamps and number plate lights can only be switched on and off simultaneously.			
Switch-on control ECE-R48 § 6.13.8	Permitted. If a control device is used, its function must be fulfilled by the control device prescribed for the front position and vehicle position lamps.			
Other regulations ECE-R48 § 6.13.9	The rear red and the front white end-outline marker lights may be combined in one lamp, provided that the installation regulations and viewing angle ranges are complied with. Distance between end-outline marker lamp and vehicle position lamp min. 200 mm.			
ECE-R7 § 6.1 Category R, R1, RMI (constant) = light intensity min. 4 cd, single lamp max. 17 cd, type "D" lamp max. 8.5 cd Category R2, RM2 (variable) = light intensity min. 4 cd, single lamp max. 42 cd, type "D" lamp max. 21 cd				



## **SIDE LIGHTING - TRAILER**

SIDE RETRO-REFLECTOR ECE-R48 § 6.17 AND ECE-R3					
Attachment ECE-R48 § 6.17.1	Mandatory for all trailers.				
Quantity ECE-R48 § 6.17.2	See length attachment				
Colour ECE-R48 § 5.15	Yellow				
Shape ECE-R48 § 6.17	Not triangular				
Mounting height ECE-R48 § 6.17.4.2	Min. 250 mm, max. 900 mm, max. 1,200 mm if integrated in other lamps (exception: 1,500 mm).				
Length attachment ECE-R48 § 6.17.4.3	The reflector furthest forward must not be more than 3 m from the foremost point of the vehicle. Max. 3 m between the individual retro-reflectors (exception: 4 m). Max. distance from rear 1 m. Min. 1 retro-reflectors in the middle third.				
Geom. viewing angle ECE-R48 § 6.17.5	Horizontal ± 45°. Vertical ±10°, but with mounting height < 750 mm 5° downwards.				
Other regulations ECE-R48 § 6.17.9	The illuminating surface of the retro-reflector may be integrated in any other side lamp.				

Attachment ECE-R48 § 6.18.1	Mandatory for trailers > 6 m length. Permitted for trailers < 6 m length.
Quantity ECE-R48 § 6.18.2	See length attachment
Colour ECE-R48 § 5.15	Front yellow, rear yellow (in combination with the rear lamp red also possible).
Mounting height ECE-R48 § 6.18.4.2	No regulation
Mounting height ECE-R48 § 6.11.4.2	Min. 250 mm, max. 1,500 mm (exception: 2,100 mm)*.
Length attachment ECE-R48 § 6.18.4.3	Front side marker lamp max. 3 m from the front, rearmost side marker lamp max. 1 m from the rear, max. 3 r between the individual side marker lights (exception: 4 m). Min. 1 in the front and / or rear third. For vehicle length $\leq$ 6 m, alternatively min. 1 in the middle third.
Geom. viewing angle ECE-R48 § 6.18.5	Horizontal ± 45°, ± 30° for optional side marker lamps. Vertical ±10°, but with mounting height < 750 mm 5° down wards.
Electrical circuit ECE-R48 § 6.18.8	No regulation
Switch-on control ECE-R48 § 6.18.8	Mandatory. If used, its function must be fulfilled by the control device prescribed for the front position and vehicl position lamps.
Other regulations ECE-R48 § 6.18.9	The illuminating surface of the retro-reflector may be integrated in the side marker lamp. The maximum mountin- height of the retro-reflector must be observed. The rear side marker lamp must be yellow if it flashes together wit the rear directional indicator.

Category SM1 (use on all vehicle classes) = light intensity min. 4 cd, max. 25 cd





## **FRONT LIGHTING - TRAILER**

FRONT RETRO-REFLE	CTOR ECE-R48 § 6.16 AND ECE-R3		
Attachment ECE-R48 § 6.16.1	Mandatory for all trailers.		
Quantity ECE-R48 § 6.16.2	Min. 2 pieces, optionally 2 additional		
Colour ECE-R48 § 5.15	White / Colourless		
Shape ECE-R48 § 6.16	Not triangular		
Mounting width ECE-R48 § 6.16.4.1	Max. 150 mm, min. 600 mm between both retro-reflectors, but min. 400 mm for vehicle widths $<$ 1,300 mm.		
Mounting height ECE-R48 § 6.16.4.2	Min. 250 mm, max. 900 mm, (exception: 1,500 mm).		
Geom. viewing angle ECE-R48 § 6.16.5	Horizontal 10° inwards and 30° outwards. Additional retro-reflectors can help with the horizontal values. Vertical ±10°, but at mounting height < 750 mm 5° downwards.		
Other regulations ECE-R48 § 6.16.9	The illuminating surface of the retro-re- flector may be integrated in any other front light.		

FRONT POSITION LAM	P ECE-R48 § 6.9 AND ECE-R7
Attachment ECE-R48 § 6.9.1	Mandatory for trailers > 1.6 m wide. Permitted for trailers i 1.6 m wide.
Quantity ECE-R48 § 6.9.2	2 pieces
Colour ECE-R48 § 5.15	White
Shape ECE-R48 § 6.16	Not triangular
Mounting width ECE-R48 § 6.9.4.1	Max. 150 mm from the outermost point of the vehicle width. Min. 600 mm between both front position lamps, but min. 400 mm for vehicle widths < 1,300 mm.
Mounting height ECE-R48 § 6.9.4.2	Min. 250 mm, max. 1,500 mm (exception: 2,100 mm only for trailers from categories O1 and O2 or if max. 1,500 mm is not possible for other trailers).
Geom. viewing angle ECE-R48 § 6.9.5	Horizontal 5° inwards and 80° outwards. Vertical $\pm 15^\circ$ , but with mounting height < 750 mm also 5° downwards.
Other regulations ECE-R48 § 6.16.9	The illuminating surface of the retro-reflector may be integrated in any other front light.
Electrical circuit ECE-R48 § 6.9.7	Must be designed so that the front position, tail, side marker lamps and number plate lights can only be switched on and off simultaneously. May be switched off during flashing.
Switch-on control ECE-R48 § 6.9.8	Mandatory. The indicator light must not flash. Not required if the instrument panel lighting system can only be switched on simultaneously with the front position lamps.

FRONT END-OUTLINE	MARKER LAMP ECE-R48 § 6.13 AND ECE-R7
Attachment ECE-R48 § 6.13.1	Mandatory for trailers $>$ 2.1 m wide. Permitted for trailers $>$ 1.8 m wide to $\le$ 2.1 m wide. Category A or AM
Quantity ECE-R48 § 6.13.2	2 pieces, optionally 2 additional permitted
Colour ECE-R48 § 5.15	White
Mounting width ECE-R48 § 6.13.4.1	Max. 400 mm from the outermost point of the vehicle width.
Mounting height ECE-R48 § 6.13.4.2	As high as possible.
Geom. viewing angle ECE-R48 § 6.13.5	Horizontal 80° outwards, vertical 5° above and 20° below the horizontal.
Electrical circuit ECE-R48 § 6.13.7	Must be designed so that the front position, tail, side marker lamps and number plate lights can only be switche on and off simultaneously.
Switch-on control ECE-R48 § 6.13.8	Permitted. If a control device is used, its function must be fulfilled by the control device prescribed for the from position and vehicle position lamps.
Other regulations ECE-R48 § 6.13.9	The front white and the red end-outline marker light may be combined in one lamp, provided that the installation regulations and viewing angle ranges are complied with. Distance between end-outline marker lamp and front position lamp min. 200 mm.

## APPENDIX

# PLUG-IN DIAGRAM PICTOGRAM OVERVIEW

NUMBER PLATE LIGHTS
ROTATING BEACONS
PLUG-IN DIAGRAM
WORK LAMPS
NUMBER PLATE HOLDERS
SIDE MARKER LAMPS
REVERSING LIGHTS
E LIGHT
NAVIGATION LIGHTS
UTLINE MARKER LAMPS
REAR LAMPS
IBER PLATE LIGHTS
G BEACONS
ERIOR LIGHTS
LAMPS

Always good to know! Which connections does which lamp have? What is the meaning of the pictograms used? This information can be found on the following pages.



## **PLUG-IN DIAGRAM**

### Standard plug-in diagram for contact assignment

Contact assignment	Colour (Deviation possible due to dif-	DIN NO.	17-pin ASS3	15-pin Bayonet Distribu- ISO connector tor ASS1 12098 15-pin	7-pin Bayonet ASS1/2 ISO connector 7-pin 1185 7-pin BLACK GREY	7-pin Bayonet ASS1/2 ISO connector 7-pin 3731 7-pin white white		
Electrical circuit function	ferent cable types)							
Blinker left	YL	L	1	1	3	-		
Blinker right	GN	R	2	2	5	-		
Rear fog light	BL	"S"54g	3	3	-	7		
Ground	WH	31	4	4	1	-		
Tail light left	BL	58L	5	5	2	-		
Tail light right	BR	58R	6	6	6	-		
Stop light	RD	54	7	7	4	-		
Reversing light	GR	"S"L	8	8	-	3		
General power supply (+)	BR/BL	"S"54	9	9	-	4		
Wear display	BR/RD	-	10	10	-	-		
Spring-loaded display	YL/BL	54g	11	11	11 7 -			
Axle lift	RS	"S"58R	12	12 - 6		6		
Ground for electronic control units	WH/BL	"S"31	13	13	-	1		
Data cable	VI	"S"58L	14	14 -		2		
Data cable	OR	"S"R	15	15	-	5		
Free	VI/GN	-	16	-				
Free	OR/BL	-	17			-		
Live	Various	-	-	-	-	-		





Contact assignment	Colour (Deviation	DIN NO.	Bayonet ASS1/2 connector 7-pin 8-pin BL YL, GN	Bayonet connector 5-pin BLACK		or 7-pin BLACK connector 2		connector 2-pin BL, 2-pin BL, YL, GN	2-pin BL, 12098		ISO 11446 13-pin	ASS3 3-pin
Electrical circuit function	possible due to dif- ferent cable types)		0 pm 22	Bayonet con- nector 5-pin YELLOW (left)	Bayonet con- nector 5-pin GREEN (right)	YL, GN	24V		12V			
Blinker left	YL	L	1	BL	-	-	3	1	1	-		
Blinker right	GN	R	4	-	BL	-	5	4	4	-		
Rear fog light	BL	"S"54g	2	S	-	-	9	(2)	2	-		
Ground	WH	31	3	31	31	1	1	3	3	1		
Tail light left	BL	58L	7	UR	-	-	2	7	7	-		
Tail light right	BR	58R	5	-	UR	-	6	5	5	-		
Stop light	RD	54	6	BR	BR	-	4	6	6	-		
Reversing light	GR	"S"L	8	-	S	-	8	-	8	-		
General power supply (+)	BR/BL	"S"54	-	-	-	-	10	-	9	-		
Wear display	BR/RD	-	-	-	-	-	-	-	10	-		
Spring-loaded display	YL/BL	54g	-	-	-	-	7	(2)	*	-		
Axle lift	RS	"S"58R	-	-	-	-	13	-	-	-		
Ground for electronic control units	WH/BL	"S"31	-	-	-	-	-	-	13	-		
Data cable	VI	"S"58L	-	-	-	-	11	-	-	-		
Data cable	OR	"S"R	-	-	-	-	12	-	-	-		
Free	VI/GN	-	-	-	-	-	-	-	-	-		
Free	OR/BL	-	-	-	-	-	-	-	-	-		
Live	Various	-	-	-	-	2	-	-	-	2/3		

NOTES		





## PICTOGRAM OVERVIEW

	Packaging unit
+	Left
<b>→</b>	Right
$\bigcirc$	Illuminant
4	Volt
<b>₽</b>	Light bulb
LED	LED
	Directional indicator
	Directional indicator right
	Directional indicator left
	Dynamic directional indicator, right
	Dynamic directional indicator, left
	SMCG (control of flashing side marker lamps)
R ICG	With integrated flashing LCG
	Rear light
	Stop light
<b>(</b> ‡)	Rear fog lamp
	Reversing light
	Triangular reflector
	Navigation light
	Side marker lamp
	Without side marker lamp
	Front position lamp rear
	Front position lamp

	Red, white, orange
	Black, white, orange
*	End-outline marker lamp
	Retro-reflector red
	Retro-reflector white
€	Number plate light
ð	Male
Q	Female
	Trailer version
	Truck version
$\leftrightarrow$	Horizontal mounting
	Vertical mounting
	360° mounting possible
ADR Zone 2	ADR zone 2
IP xx	IP xx protection class
ISO 13207-1	ISO pulse

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