DISCOVER ...

... Municipal Vehicles.

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FORVIA

HELLA

DISCOVER ...

... the World of Municipal Solutions by FORVIA HELLA.

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POWERFUL PRODUCT RANGE

Municipal vehicles are on duty around the clock to keep the roads safe. It is not uncommon for them to be in use for up to 13 hours and to have to withstand adverse environmental conditions. This presents an enormous challenge for man and material. However, with the products from FORVIA HELLA, you can face this challenge in the best possible way. Our powerful products provide not only outstanding illumination and excellent warning effects, but they also impress with their robustness and their durability!

More information with just one click!

For more product information, simply move your mouse pointer over the desired product in the brochure and click to go to the appropriate details page at **hella.com/soe**.

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DISCOVER ...

... a Strong Partnership.

WE PIONEER TECHNOLOGY FOR MOBILITY EXPERIENCES
THAT MATTER TO PEOPLE.

FLEXIBLE SOLUTIONS

Special applications for special vehicles – visionary design at the cutting edge of technology

PASSION

A strong partner for commercial vehicles, construction machinery and the world of agriculture

INNOVATIVE PRODUCTS

Technology, process know-how and quality expertise from the automotive industry

The listed, internationally positioned automotive supplier FORVIA HELLA focuses on the commonly shared values of excellence, quality and customer satisfaction. The coming together of FORVIA and HELLA has created the world's seventh largest automotive supplier, whose products can be found in every second car. A partnership that can draw on many years of OE expertise and thus makes it possible to offer tailor-made solutions in OE quality. FORVIA HELLA understands the unique challenges and individual requirements of the industry and uses its extensive experience to provide high-quality products and first-class service.

DISCOVER ...

... the Road to Sustainability.

IN A WORLD WHERE SUSTAINABILITY IS BECOMING INCREASINGLY IMPORTANT, IT IS TIME TO TAKE ON RESPONSIBILITY.

ENVIRONMENT

Now it is time as a company to take action and reverse the current trend. At FORVIA HELLA, we have formulated clear goals leading to sustainable change:

- An ambitious target: by 2025 neutrality for our own CO_2 emissions (Scope 1 and 2)
- From 2045 net zero target for CO_2 emissions
- Focus on products with ecological design, sustainable materials, energy efficiency solutions and circular economy
- Zero-emission solutions with strong expertise in the fields of electric and hydrogen mobility

CORPORATE CULTURE

As a responsible employer, FORVIA HELLA promotes gender diversity and inclusion and works hard to attract talent.

As a learning organisation, FORVIA HELLA promotes employee training and employee development.

FORVIA HELLA is committed on the ground to education, mobility and the environment in a responsible and future-oriented way.

CORPORATE GOVERNANCE

FORVIA HELLA is committed to strong and sustainable corporate governance with a focus on compliance and ethical values.

A safe working environment for all employees is firmly anchored in the company's values.

FORVIA HELLA paints a convincing picture with its responsible supply chains based on sustainable partners and suppliers.

CO_2 NEUTRALITY IS AT THE HEART OF OUR STRATEGY.

DISCOVER ...

... High Quality Standards.

QUALITY FIRST!

Prior to their market launch, all products undergo intensive testing so that they will be able to withstand the most demanding conditions. Our strict test procedures, which are in accordance with FORVIA HELLA's own standard 67001, guarantee the high quality that you can certainly rely on.

IMMERSION AND PRESSURE TIGHTNESS TEST

FORVIA HELLA LED products have a high level of tightness so that no water can penetrate the devices.

DUST TEST

FORVIA HELLA LED products are very dustproof so that sensitive components are protected from dust contamination.

SPLASHING WATER TEST

FORVIA HELLA LED products are splashwater-proof.

HEAT, MOISTURE AND COLD TESTS

FORVIA HELLA LED products resist strong temperature fluctuations and changing levels of humidity.

HIGH-PRESSURE CLEANER TEST

FORVIA HELLA LED products can be easily cleaned using a high-pressure cleaner.

VIBRATION TEST

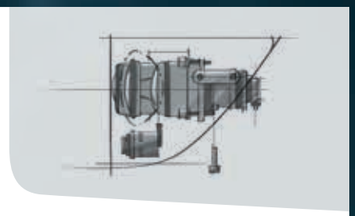
FORVIA HELLA LED products offer guaranteed high resistance to vibrations.

DISCOVER ...

... Intelligent Performance.

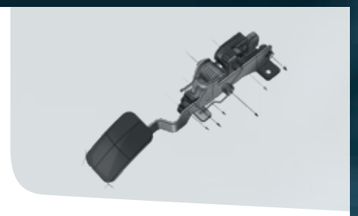
THE FUTURE NEEDS SOLUTIONS – FORVIA HELLA DEVELOPS THEM.

For decades we have been consistently bringing efficient and revolutionary features to the road.
Not only do our technologies set standards, they also shape and influence them.



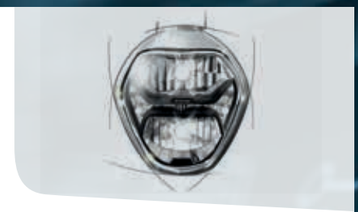
STANDARD PRODUCTS

- Ready-to-use products
- Diverse and comprehensive product selection



SEMI-CUSTOMISED PRODUCTS

- Specific concepts for design and functionality
- Integration of customised components
- Modular systems



FULLY CUSTOMISED PRODUCTS

- Innovation in technology, styling and / or design
- Integration of pioneering trends
- Specific expertise
- Many years of experience

OUR LIGHT TUNNEL – UNIQUE IN EUROPE – 140 M LONG, 11 M WIDE

The FORVIA HELLA Light Tunnel in Lippstadt/Germany is a place of innovation and technical mastery. With its impressive size, it enables the carrying out of detailed light tests that mirror real-life conditions. This is where diffusion, light colour, light distribution and homogeneity of the light are meticulously tested for customer projects and in-house developments. Discover the world of FORVIA HELLA and experience the fascinating interaction of light and technology.

DISCOVER ...

... our target groups.

Waste collection vehicles

Waste collection vehicles have evolved into highly specialised technological showcases over the past few years. Equipped with state-of-the-art safety systems, they ensure that waste generated is disposed of every day as quickly as possible, in an environmentally friendly and quiet manner, and with the utmost efficiency.

By developing innovative and high-quality technology in lighting, electronics and electrics, FORVIA HELLA has made a small but significant contribution to this. Highly modern LED work lamps ensure an optimum view when vehicles are manoeuvring and turn darkness into daylight for the disposal team. FORVIA HELLA LED rotating beacons achieve the best possible safety for workers and warn road users from a distance that this vehicle wants a clean environment.

1 **K-LED 2.0**
Page 19

2 **Ultra Beam LED Generation 1**
Page 39

3 **Q90 LED compact**
Page 35

4 **Compact full-LED rear lamp 328 630**
Page 78

5 **Corner Module 270**
Page 30

Street cleaning vehicles

They have a very versatile range of applications. They are used for cleaning pavements, pedestrianised zones, roads, runways or even industrial warehouses. They often appear from nowhere on the road, clean at lightening speed and disappear again just as quickly. They ensure inner cities are kept clean and sweep all sorts of road surfaces from little narrow alleyways to large public spaces or airports.

FORVIA HELLA lighting technology helps ensure that no piece of waste is missed and the drivers always have optimum visibility, regardless of where they are sweeping. FORVIA HELLA sensors allow precise measurement of vehicle characteristics so that problems can be recognised at an early stage. FORVIA HELLA switches facilitate the quick and easy operation of all functions.

1 **Rota LED**
Page 22

2 **Module 70 LED Generation 5**
Page 42

3 **Intelligent battery sensor**
Page 91

4 **Shapeline tail-stop lamp, wing**
Page 71

5 **90 mm LED module**
from page 52

Winter maintenance vehicles

The drivers don't usually get to enjoy idyllic winter landscapes. When they are on the move, they need to take great care: because usually the temperature is below freezing, visibility is poor, and there is a high risk of black ice and heavy snowfall. They often start work in the early hours just before dawn and usually work until late in the evening or night. There is no question that winter maintenance vehicles such as snow ploughs play an important role in keeping roads, footpaths, airports and also many other public and private spaces safe.

Such situations not only put a great strain on the people involved, but also on the materials used. FORVIA HELLA has been a partner of leading winter maintenance vehicle manufacturers for many years and tries to support the work in this sector as much as possible with high-quality and innovative products. This is because reliability, safety, and robustness are more important for winter maintenance vehicles than for those in virtually any other sector. FORVIA HELLA products are checked down to the last detail throughout the entire manufacturing process, and are subjected to the most demanding requirements, meaning that drivers can confidently rely on the FORVIA HELLA light system.

1 **K-LED Rebelution**
Page 19

2 **BST warning lamp**
Page 31

3 **Q90 LED compact**
Page 35

4 **LED combination lamp C240**
Page 60

5 **Full-LED rear lamp Coluna**
Page 80

Maintenance vehicles

They carry out safety checks and survey roads, crash barriers or paths. Wherever they stop, something needs to be done urgently. Despite usually being painted in a conspicuous colour, drivers approaching too quickly often don't notice them. In this scenario, the only way to provide more safety is to use the best warning systems. FORVIA HELLA has been a reliable partner for rotating beacons and other warning systems for many years now. FORVIA HELLA work lamps ensure optimum visibility, even during the hours of darkness.

1 **Modular Lightbar**
Page 28

2 **K-LED 1.2**
Page 20

3 **BST warning lamp**
Page 31

4 **Q90 LED compact**
Page 35

5 **Power Beam S-series**
Page 36

Baggage tugs

Compact, robust, and special. This is how you can describe the large number of baggage trucks used at airports around the world. They ensure that luggage gets on the right aircraft or to the right passenger every day while always keeping to a tight schedule. Safety at airports is given top priority. FORVIA HELLA warning systems ensure the highest level of warning effectiveness so that vehicles can be seen at all times. Headlamps and work lamps ensure an optimum view while vehicles are being driven and when work is carried out around the vehicle.

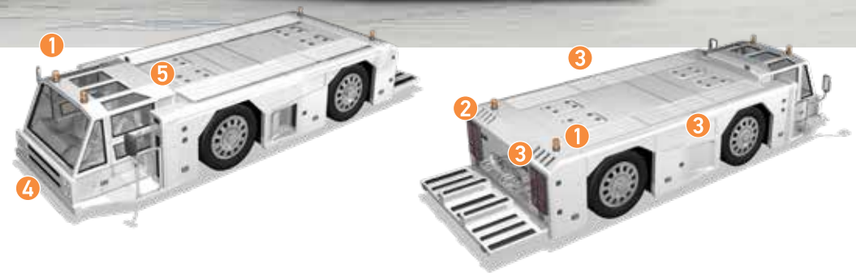
1 **K-LED Nano Airport**
Page 20

2 **Shapeline tail-stop lamp**
Page 71

3 **Q90 LED compact**
Page 35

4 **Module 70 LED Generation 3.2**
Page 38

5 **90 mm LED module**
from page 52



Aircraft tugs

They are powerhouses, moving unimaginable masses with great precision, and yet they often go unnoticed. They are operational for thousands of hours per year, which is only possible with top quality products. FORVIA Hella lighting technology makes an important contribution towards safety when it comes to airport vehicles. It stands for top quality, a high signalling effect and minimum energy consumption. FORVIA HELLA lighting systems mean that you are working at the highest safety level with a reliable partner.

1 **K-LED 2.0 Airport**
Page 19

2 **Shapeline tail-stop lamp, wing**
Page 71

3 **Power Beam S-series**
Page 36

4 **LED combination lamp C140**
Page 59

5 **Intelligent battery sensor**
Page 91

Towing vehicles

They mostly work on roads in fast-moving traffic and where not much notice is taken of other road users. They rescue vehicles on motorways, blind corners, or country roads with fast-moving traffic. It's a job that can only be done safely by people with nerves of steel, a lot of expertise, and optimum equipment. FORVIA HELLA products help to achieve a maximum amount of safety for people and for the materials involved because in such situations it is important to be able to fully rely on the lighting equipment used.

1 **K-LED Blizzard**
Page 22

2 **BST warning lamp**
Page 31

3 **Module 70 LED Generation 5**
Page 42

4 **Module 70 S-series**
Page 36

Sewer cleaning vehicles

Equipped with the latest technology, sewer cleaning vehicles are used to clean and inspect sewers. They are particularly deployed when sewers become blocked because of deposits or some form of contamination. Various cleaning devices are used to eliminate smaller materials in liquid, paste-like or solid form.

FORVIA HELLA supports this work by providing high-quality and innovative products: with the help of work lamps, better visibility is achieved for the teams involved – not only around the vehicle, but also inside the sewers. State-of-the-art warning systems on the vehicle increase the safety factor and warn other road users from a distance about the cleaning work being carried out.

1 **K-LED 1.2**
Page 20

2 **Module 50 LED**
Page 35

3 **Full-LED rear lamp Coluna**
Page 80

4 **BST warning lamp**
Page 31

5 **Ultra Beam LED Generation I**
Page 39

Warning lamps

FORVIA HELLA warning lamps with a strong warning effect tell other road users: Please take care – work is being carried out around the vehicle.

They enable maximum safety for the user and for third parties thanks to their intensive warning effect. This safety is achieved by the optimum light bundling and distribution, by the resulting high range and also the very high light intensity.

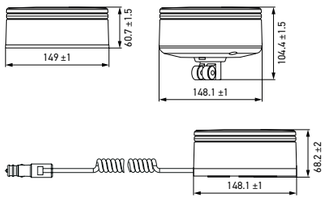
You can rely one hundred per cent on our warning lamps: FORVIA HELLA warning lamps are characterised by outstanding quality in how they are made and by their stability – and their long lifetime proves it!

Beacon light functions

Flashing Rotating

BEACONS

Go to the product video

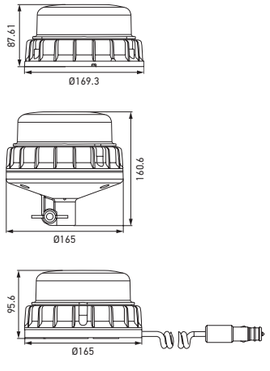


K-LED Rebelution

LED, light function: flashing or rotating, light colour: amber, designer beacon with minimal innovative light-emitting surface, -40°C to +60°C

Operating voltage range	Multi-voltage (10 – 32 V)
Protection class	IP 6K7, IP 6K9K
Approved	ECE-R65 TA1, ECE-R10, ADR / GGVSEB
Compliant	SAE J845 Class 2; rotating: CISPR 25 Class 3, flashing: CISPR 25 Class 5

2XD 455 255-001[1)]	Fixed surface mounting, flashing
2RL 455 256-001[1)]	Fixed surface mounting, rotating
2XD 455 255-011[2)]	Flexible pipe socket mounting, flashing
2RL 455 256-011[2)]	Flexible pipe socket mounting, rotating
2XD 455 255-021[3)]	Magnet mounting, flashing
2RL 455 256-021[3)]	Magnet mounting, rotating
	Accessories
8HG 863 302-021	Pipe socket adapter



K-LED 2.0

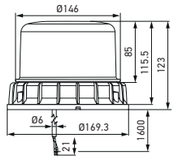
LED, light function: flashing and rotating, two brightness levels, day and night mode, compact and robust design, -40°C to +60°C

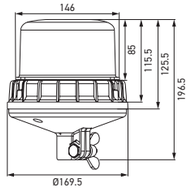
Operating voltage range	Multi-voltage (10 – 32 V)
Protection class	IP 67, IP X9K
Approved	ECE-R65 TA2, TA1, TR1, ECE-R10, ADR / GGVSEB
Compliant	SAE J845 Class 1, CISPR 25 Class 5

	Fixed surface mounting[1)]
2XD 011 557-101	Amber dome, silver base plate
2XD 011 557-841	Amber dome, black base plate
2XD 011 557-121	Red dome, silver base plate
2XD 011 557-701	Amber dome, silver base plate, airport version*
	Pipe socket mounting[2)]
2XD 011 557-201	Amber dome, silver base plate
2XD 011 557-811	Amber dome, black base plate
2XD 011 557-221	Red dome, silver base plate
2XD 011 557-901	Amber dome, silver base plate, airport version*
	Magnet mounting[3)]
2XD 011 557-301	Amber dome, silver base plate
2XD 011 557-321	Red dome, silver base plate
	Accessories
9GD 856 863-001	Rubber base, wedge-shaped
8HG 005 436-041	Pipe socket adapter

Other colours are available on request.

* Tested in accordance with ICAO Annex 14 (Low intensity, Type C)



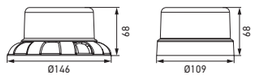


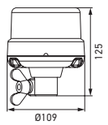
K-LED 1.2

LED, light function: flashing or rotating, double light system for a larger light-emitting surface, -40°C to +60°C

Operating voltage range	Multi-voltage (10 – 30 V)
Protection class	IP 6K7, IP 6K9K
Approved	ECE-R65 TA1, ECE-R10, ADR / GGVSEB
Compliant	RCM, SAE J845 Class 2, CISPR 25 Class 5
	Fixed surface mounting[1)]
2RL 012 983-301	Amber dome, rotating
2XD 012 984-301	Amber dome, flashing
	Pipe socket mounting[2)]
2RL 012 983-401	Amber dome, rotating
2XD 012 984-401	Amber dome, flashing
	Accessories
8HG 005 436-041	Pipe socket adapter

Other colours are available on request.





K-LED Nano

LED, light function: flashing, dome: amber, high degree of tightness thanks to complete sealing, vibration and impact resistant, -40°C to +60°C

Operating voltage range	Multi-voltage (10 – 32 V)
Protection class	IP 6K7, IP 6K9K
Approved	ECE-R65 TA1, ECE-R10, ADR / GGVSEB
Compliant	SAE J845 Class 1, RCM, CISPR 25 Class 5
2XD 066 146-001[1)]	Fixed surface mounting
2XD 086 146-041[1)]	Fixed surface mounting, ICAO airport version*
2XD 066 146-011[2)]	Flexible pipe socket mounting
On request[3)]	Fixed surface mounting, Slim variant

* Tested in accordance with ICAO Annex 14 (Low intensity, Type C)

DISCOVER ...

... the K-LED Nano.

COMPACT DESIGN – EXCELLENT LIGHT INTENSITY

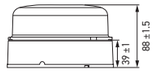
The K-LED Nano is the smallest beacon in the FORVIA HELLA range to date. Despite its very compact dimensions, it generates a long-range, amber warning signal with a flashing light. This means that the universal beacon, even with its very small surface area, provides suitable warning lighting and increases the safety level.

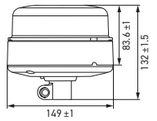
SMALL BUT MIGHTY

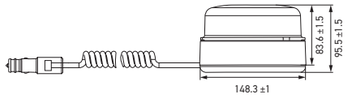
THREE TYPES OF MOUNTING – SO VERSATILE

The K-LED Nano is available in two versions, one variant for fixed surface mounting and one offering flexible pipe socket mounting. Thanks to their vibration and impact resistance, all variants are suitable for a wide range of applications.

Go to the product video



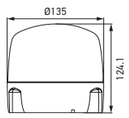


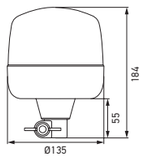


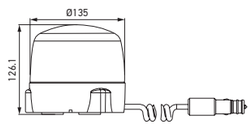
K-LED Blizzard

LED, light function: flashing, light colour: amber, dome: transparent, synchronisation of up to 4 beacons possible, -40°C to +60°C

Operating voltage range	Multi-voltage (10 – 30 V)
Protection class	IP 6K7, IP 6K9K
Approved	ECE-R65 TA1, ECE-R10, ADR / GGVSEB
Compliant	SAE J845 Class 1, CISPR 25 Class 5
2XD 012 980-001[1)]	Fixed surface mounting
2XD 012 980-011[2)]	Flexible pipe socket mounting
2XD 012 980-021[3)]	Magnet mounting
	Accessories
8HG 863 302-021	Pipe socket adapter







Rota LED

LED, light function: flashing or rotating, -40°C to +60°C

Operating voltage range	Multi-voltage (10 – 30 V)
Protection class	IP 5K4K, IP X9K
Approved	ECE-R65 TA1, ECE-R10, ADR / GGVSEB
Compliant	SAE J845 Class 2, CISPR 25 Class 5
	Fixed surface mounting[1)]
2RL 010 979-001	Amber dome, rotating
2XD 012 878-001	Amber dome, flashing
	Flexible pipe socket mounting[2)]
2RL 010 979-011	Amber dome, rotating
2XD 012 878-011	Amber dome, flashing
	Magnet mounting[3)]
2RL 010 979-021	Amber dome, rotating
2XD 012 878-021	Amber dome, flashing
	Accessories
9EL 181 506-001	Dome, amber (polycarbonate)

Other colours are available on request.

DISCOVER ...

... the K-LED Blizzard.

STRONGER, MORE ROBUST, MORE COST-EFFECTIVE.

The K-LED Blizzard incorporates state-of-the-art LED technology and a lot of FORVIA HELLA expertise. The double flash signal of the highly efficient amber LEDs is generated without any moving parts and it maximises the warning effect. Up to four beacons can be synchronised with each another. With no moving parts and an extremely robust design,the K-LED Blizzard is extremely resistant and long-lasting. It is dustproof, resistant to high-pressure jet cleaning and can even withstand temporary immersion in water.

STRONG AND ROBUST

VARIANTS FOR EVERY KIND OF APPLICATION

Depending on the variant, it can have fixed surface mounting, magnetic mounting or it can be attached by means of a pipe socket. With the flexible pipe socket variant, strong impacts are effectively cushioned and the beacon automatically returns to its original position.

DISCOVER ...

... RotaLED Compact.

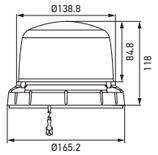
COMPACT, STRONG, VERSATILE

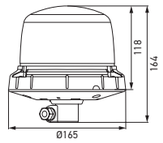
The FORVIA HELLA Rota LED Compact is the compact LED successor generation to the Rotafix, Rotaflex and Rota Compact. With a strong warning effect and its small dimensions, it is maintenance-free and resistant to wear thanks to long-lasting LED technology. The amber, impact-resistant polycarbonate dome makes it ideal for tough conditions. The beacon is dustproof, waterproof, it can be briefly submersed in water and it is resistant to high-pressure jet cleaning. It boasts flexible mounting and is available in flashing and rotating variants.

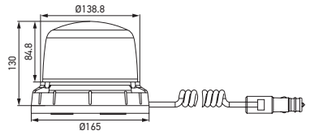
LONG LIFE RELIABILITY

ROBUST AND FLEXIBLE

The flexible variant is mounted quickly and easily using a pipe socket.
It absorbs strong impacts and thus reduces the risk of damage.
The beacon is always returned to the optimum position.







RotaLED Compact	
LED, light function: flashing or rotating, -40°C to + 60°C	
Operating voltage range	Multi-voltage (9 – 30 V)
Protection class	IP 6K7, IP 6K9K
Approved	ECE-R65 TA1, ECE-R10, ADR / GGVSEB
Compliant	SAE J845 Class 2, CISPR 25 Class 5
	Fixed surface mounting[1]
2XD 013 979-001	Amber dome, flashing
2RL 014 979-001	Amber dome, rotating
	Flexible pipe socket mounting[2]
2XD 013 979-011	Amber dome, flashing
2RL 014 979-011	Amber dome, rotating
	Magnet mounting[3]
2XD 013 979-021	Amber dome, flashing
2RL 014 979-021	Amber dome, rotating
	Accessories
8HG 223 805-011	Pipe socket adapter
8HG 006 294-171	Angled socket pipe

Other colours are available on request.

Product Photo	Description	Part Number	PU
	Socket pipe to weld on, straight, 100 mm long, with rubber stopper and socket in accordance with DIN 14620	1-pin **8HG 002 365-001** 2-pin **8HG 006 294-101**	1
	Socket pipe with screw-on base plate, total height 126 mm, with rubber stopper and socket, in accordance with DIN 14620	1-pin **8HG 006 294-011** 2-pin **On request**	1
	Angled socket pipe with base plate for lateral screw attachment, clearance 90 mm, height 100 mm including rubber stopper, socket, 2 x hexagon screws M8 x 35, 2 x hexagon nuts M8, 2 x spring washers compliant with DIN 14620	1-pin **8HG 006 294-021** 2-pin **8HG 006 294-221**	1
	Angled socket pipe with base plate for lateral screw attachment, clearance 120 mm, height 105 mm including rubber stopper, 2 x hexagon screws M8 x 35, 2 x hexagon nuts M8, 2 x spring washers compliant with DIN 14620 Particularly suitable for RotaLED Compact 2XD 013 979-011 / 2RL 014 979-011	1-pin **8HG 006 294-171** 2-pin **On request**	1
	Angled socket pipe with base plate for lateral screw attachment, clearance 50 mm, height 100 mm including rubber stopper, socket, 2 x hexagon screws M8 x 35, 2 x hexagon nuts M8, 2 x spring washers compliant with DIN 14620	1-pin **8HG 006 294-111** 2-pin **On request**	1
	Socket pipe for angled screw-on surfaces, beacon adjustable parallel to the road, height approx. 105 mm, with rubber stopper, socket, 2 x hexagon screws M8 x 35, 2 x hexagon nuts M8, 2 x spring washers in accordance with DIN 14620	1-pin **8HG 006 294-031** 2-pin **8HG 006 294-141**	1
	Socket pipe with screw mounting, height approx. 100 mm, with rubber stopper and socket compliant with DIN 14620	1-pin **8HG 006 294-051** 2-pin **8HG 006 294-091**	1
	Socket pipe with 2 screw holes for surface mounting to the cab rear, with telescopic bracket, total height approx. 1000 mm, can be shifted up to 700 mm, with rubber stopper and socket, compliant with DIN 14620	1-pin **8HG 006 294-041** 2-pin **On request**	1
	Socket pipe for welding on, straight, height 100 mm Compatible with 8HG 002 365-001 / -8HG 006 294-101	**8HG 096 531-007**	2
	Socket pipe, straight, with screw-on base plate, total height 126 mm; compatible with 8HG 006 294-011 / -121	**8HG 096 531-107**	2
	Socket pipe, angled, with base plate for lateral screwing, clearance 50 mm; compatible with 8HG 006 294-111 / -211	**8HG 096 531-127**	2

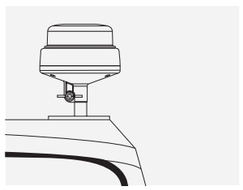
Product Photo	Description	Part Number	PU
	2-pin socket with cover, with 2 flat connector connections 6.3 mm	**8JB 004 777-001*** **8JB 004 777-002***	5 1
	2-pin round socket with ground contact, with 2 flat connector connections 6.3 mm	**8JB 862 757-001*** **8JB 862 757-007***	1 24
	2-pin 6-edge SW20 socket with ground contact, with 2 flat connector connections 6.3 mm	**8JB 862 757-027***	1 / 24
	2-pin socket with cover, with 300 mm cable 2.5 mm² and 2 flat connector connections 6.3 mm	**8JB 001 946-101***	1
	2-pin light alloy socket with cover and 1 screw connection, ground at the housing	**8JB 001 946-021***	10
	2-pin socket with cover and 2 flat connector connections 6.3 mm	**8JB 004 123-031***	1
	1-pin round socket with oval-head screw M4 x 8	**8JB 850 434-011***	10
	1-pin socket with cover	**8JB 001 946-011***	10
	Rubber stopper /cap in accordance with DIN 14620	**9GH 096 532-001** **9GH 096 532-007**	10 200

* Sockets are in accordance with DIN ISO 4165; installation opening: Ø 18.5 mm, switchboard thickness max. 7 mm

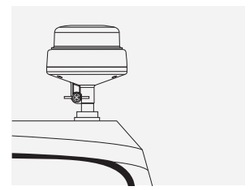
MOUNTING EXAMPLES

Find out here about the various kinds of mounting for beacons and how these beacons can be installed safely and efficiently with diverse accessories.

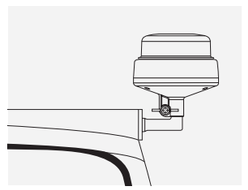
Bracket with screw attachment



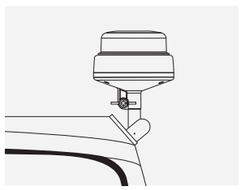
Bracket with thread



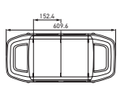
Angle bracket



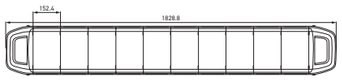
Variable bracket



Go to the product video



609.6 mm, 2 centre modules



1,828.8 mm, 10 centre modules

Modular Lightbar

LED, double or triple flash pattern, control unit with visual feedback available, with 4,000 mm cable with open end, bracket included in scope of delivery

Operating voltage range	Multi-voltage (10 – 30 V)
Protection class	IP 6K4K, IP X9K
Approved	ECE R65 Class 2, ECE R148, ECE R10
Compliant	RCM, CISPR 25 Class 3

	2 centre modules – 609.6 mm
2RL 014 567-071	① 66 W, including on/off switch
	5 centre modules – 1,066.8 mm
2RL 014 567-011	② 80 W, including wired control unit
2RL 014 567-061	③ 80 W, including wireless control unit
	6 centre modules – 1,219.2 mm
2RL 014 607-011	④ 105 W, including wired control unit
2RL 014 567-081	⑤ 86 W, including on/off switch
	7 centre modules – 1,371.6 mm
2RL 014 567-021	⑥ 90 W, including wired control unit
2RL 014 567-151	⑦ 90 W, including on/off switch
	8 centre modules – 1,524 mm
2RL 014 607-051	⑧ 125 W, including wired control unit
2RL 014 567-091	⑨ 88 W, including on/off switch
2RL 014 567-101	⑩ 96 W, including on/off switch
2RL 014 567-131	⑪ 110 W, including wireless control unit
	9 centre modules – 1,676.4 mm
2RL 014 567-141	⑫ 101 W, including on/off switch
2RL 014 607-061	⑬ 119 W, including wired control unit
	10 centre modules – 1,828.8 mm
2RL 014 567-111	⑭ 90 W, including on/off switch
2RL 014 567-121	⑮ 106 W, including on/off switch
2RL 014 607-071	⑯ 124 W, including wired control unit

Application examples

5 centre modules

Front side and rear side

Side panel with amber warning light

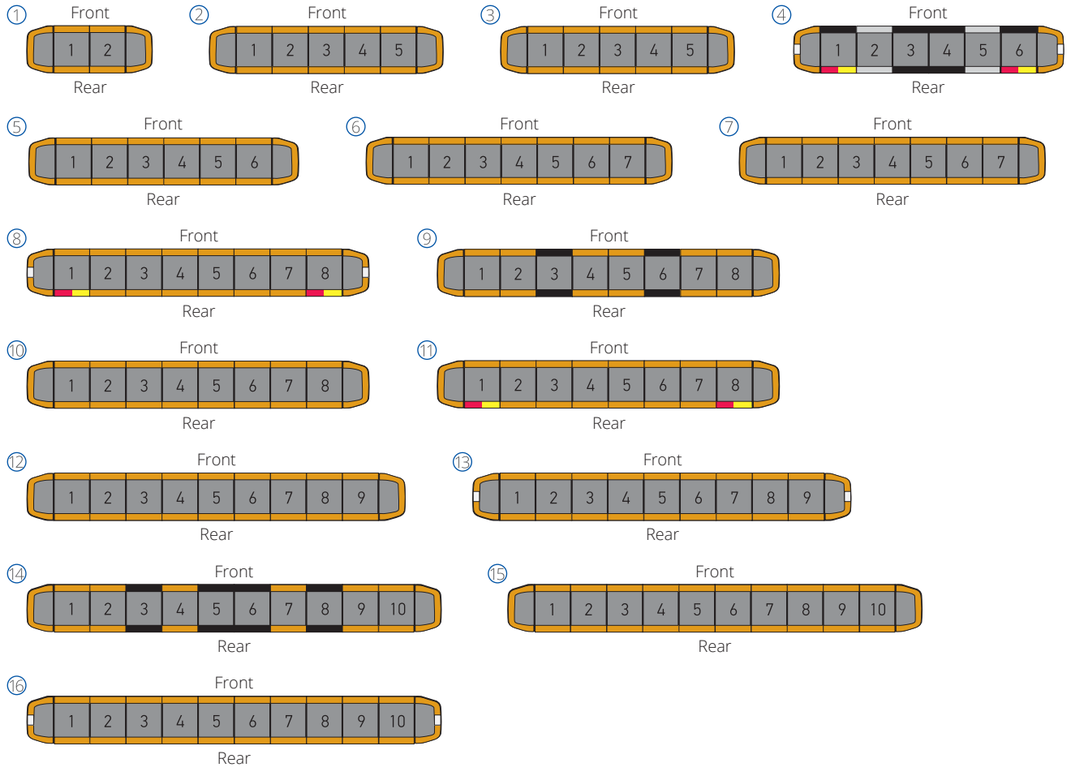
6 centre modules

Front side

Rear side

Side panel with amber warning light and alley light

Modular Lightbar – overview of centre modules and light functions



Black cover

Tail-stop-direction indicator module

Amber warning light

"Take down" work light

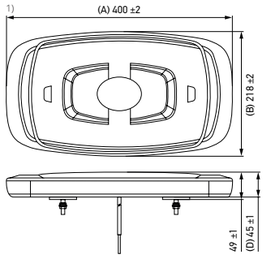
Alley light

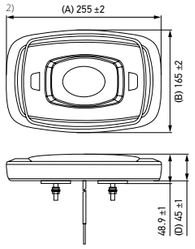
Operation

Control unit, wired 9SX 863 535-101
This control unit is connected to the modular Lightbar via a cable. It is only suitable for the standard base and is included in the scope of delivery of the relevant product configurations.

Control unit, wireless 9SX 863 535-201
This control unit is connected to the modular Lightbar wirelessly via Bluetooth and requires the product to be Bluetooth compatible. It is included in the scope of delivery of the relevant configuration.

On/off switch 9SX 863 535-001
Upon request, it is possible to operate the Lightbar with a toggle switch. This is only suitable for toggling a single light function (amber warning light). One of the toggle switches is used to turn the light function on and off, the other changes the flashing pattern.





Micro/Mini Lightbar

LED, light function: flashing and rotating, amber warning signal for clear and amber cover lens, as screw variant with 500 mm cable, as magnetic variant with 2,500 mm cable

Operating voltage range	Multi-voltage (10 – 30 V)
Protection class	IP 67, IP 69K
Approved	ECE-R65 TA1, ECE-R10
Compliant	CISPR 25 Class 3

	Micro Lightbar[1)]
2RL 014 566-001	Screw mounting, clear cover lens
2RL 014 566-011	Bracket mounting, clear cover lens
2RL 014 566-021	Magnet mounting, clear cover lens
2RL 014 566-201	Screw mounting, amber cover lens
2RL 014 566-211	Bracket mounting, amber cover lens
2RL 014 566-221	Magnet mounting, amber cover lens
	Mini Lightbar[2)]
2RL 014 565-001	Screw mounting, clear cover lens
2RL 014 565-011	Bracket mounting, clear cover lens
2RL 014 565-021	Magnet mounting, clear cover lens
2RL 014 565-201	Screw mounting, amber cover lens
2RL 014 565-211	Bracket mounting, amber cover lens
2RL 014 565-221	Magnet mounting, amber cover lens

Other variants also available with SAE conformity.

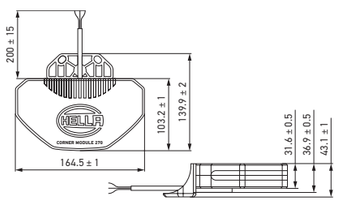
Integration

Bracket mounting

Corner Module 270

LED, light function: flashing, amber cover lens, wide-angle coverage of at least 270° when using two modules and 360° when using four modules, can be installed as integration in the vehicle body or as a surface-mounted product, with 200 mm cable with open cable ends

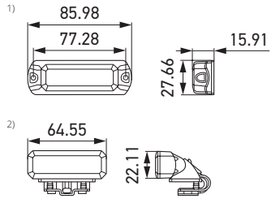
Operating voltage range	Multi-voltage (9 – 32 V)
Protection class	IP 6K7, IP 6K9
Approved	ECE-R65 HTA 1
Compliant	CISPR 25 Class 5
2XD 455 355-001	Set consisting of 2 modules



Application examples

Integration

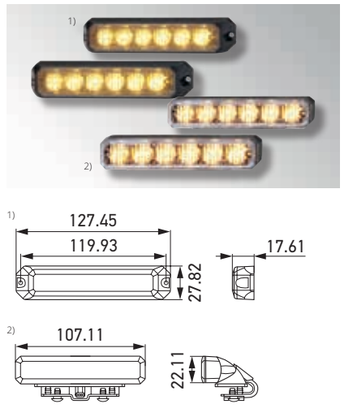
Bracket mounting



BST warning lamp (3 LEDs)

LED, light function: flashing, with five flashing patterns; scope of delivery: 2 pieces

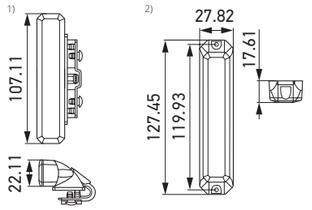
Operating voltage range	Multi-voltage (11 – 30 V)
Protection class	IP X7
Approved	ECE-R10, ECE-R65 XA1, XB1, XR1
Compliant	CISPR 25 Class 3
2XD 014 561-201[1)]	Fixed surface mounting, amber
2XD 014 561- 401[2)]	Bracket mounting, amber



BST warning lamp (6 LEDs)

LED, light function: flashing, with five flashing patterns, scope of delivery: 2 pieces

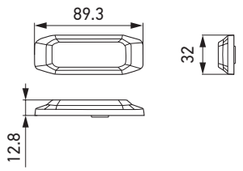
Operating voltage range	Multi-voltage (11 – 30 V)
Protection class	Standard: IP 6K4K, IP 6K9K Day/night mode: IP X7
Approved	ECE-R10 Standard: ECE R65 XA1, XB1, XR1 Day/night mode: ECE R65 XA2, XB2, XR2
Compliant	Standard: CISPR 25 Class 5 Day/night mode: CISPR 25 Class 3
2XD 012 160-851[1)]	Fixed surface mounting, amber
2XD 014 560-201[1)]	Fixed surface mounting, amber, day/night mode
2XD 012 160-861[2)]	Bracket mounting, amber
2XD 014 560-401[2)]	Bracket mounting, amber, day/night mode



BST-V warning lamp (6 LEDs)

LED, light function: flashing, with five flashing patterns, scope of delivery: 2 pieces

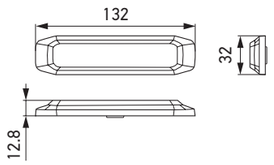
Operating voltage range	Multi-voltage (11 – 30 V)
Protection class	IP 6K4K, IP 6K9K
Approved	ECE-R10, ECE-R65 XA1, XB1, XR1
Compliant	CISPR 25 Class 5
2XD 012 160-951[1)]	Fixed surface mounting, amber
2XD 012 160-961[2)]	Bracket mounting, amber



BST-Slim warning lamp (3 LEDs)

LED, light function: flashing, with five flashing patterns, fixed surface mounting, scope of delivery: 2 pieces

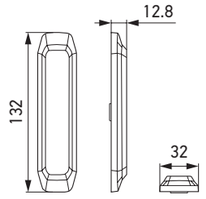
Operating voltage range	Multi-voltage (11 – 30 V)
Type approval	ECE-R65 XA1
Protection class	IP X7, IP X9K
Approved	ECE-R10, ECE-R65 XA1, XB1, XR1
Compliant	CISPR 25 Class 5
2XD 014 563-201	Amber, ECE
2XD 014 563-401	Amber, SAE



BST-Slim warning lamp (6 LEDs)

LED, light function: flashing, with five flashing patterns, fixed surface mounting, scope of delivery: 2 pieces

Operating voltage range	Multi-voltage (11 – 30 V)
Protection class	IP X7, IP X9K
Approved	ECE-R10, ECE-R65 XA2, XB2, XR2
Compliant	CISPR 25 Class 5
2XD 014 562-201	Amber, day/night mode, ECE
2XD 014 562-401	Amber, day/night mode, SAE

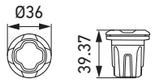


BST-V-Slim warning lamp (6 LEDs)

LED, light function: flashing, with five flashing patterns, fixed surface mounting, scope of delivery: 2 pieces

Operating voltage range	Multi-voltage (11 – 30 V)
Protection class	IP X7, IP X9K
Approved	ECE-R10, ECE-R65 XA2, XB2, XR2
Compliant	CISPR 25 Class 5
2XD 014 592-201	Amber, day/night mode, ECE
2XD 014 592-401	Amber, day/night mode, SAE

Without mounting ring



With mounting ring

BST-Round warning lamp

LED, light function: flashing, various flashing patterns, integrated day/night mode, fixed surface mounting, scope of delivery: 2 light modules, one ballast and 2 mounting rings

Operating voltage range	Multi-voltage (11 – 30 V)
Protection class	IP 6K4K, IP 6K9K
Approved	ECE-R10, ECE-R65 XA1
Compliant	SAE J845 Class 1, CISPR 25 Class 3
2XD 014 564-211	Amber, ECE
2XD 014 564-401	Amber, SAE

Work lamps

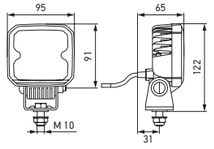
Working at night or very early in the morning while it is still dark is no problem – providing you have the right kind of lamp to work with!

FORVIA HELLA work lamps generate the appropriate illumination of the working area for use in every field of application. They have been specifically developed to illuminate as large an area as possible with a soft transition area at the edge.

Work lamps can be used in the most varied of areas and environments.

So that every move is right, even in the dark:
See more, work more precisely and work more safely – FORVIA HELLA work lamps.

< 1,250 LM



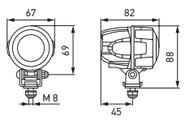
Q90 LED compact

LED, 12 V and 24 V, 6,500 K, housing: heat-conductive plastic, bracket: aluminium, cover lens: plastic, - 40 °C to +50 °C, IP 6K9K, IP 6K7, upright and pendant surface mounting

Operating voltage range	Multi-voltage (9 – 32 V)
Power consumption	15 W
Light output	1,200 lm
Approved	ECE R10, ADR/GGVSEB (variants with DEUTSCH DT connector)
Compliant	RCM

1GA 996 284-001 [1)]	Close-range illumination, 500 mm cable
1GA 996 284-081 [1)]	Close-range illumination, 150 mm cable and DEUTSCH DT connector
1GA 996 284-011 [1)]	Long-range illumination, 500 mm cable
1GA 996 284-091 [1)]	Long-range illumination, 150 mm cable and DEUTSCH DT connector
1GA 996 284-137 [2)]	Close-range illumination, 2,000 mm cable, red lens

As reverse lamp 2ZR 996 284-501 (see page 87).



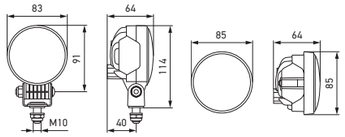
Module 50 LED

LED, 12 V, 24 V and 42 V, 6,500 K, housing: die-cast aluminium, cover lens: plastic, - 40 °C to +50 °C, IP 6K9K, IP 6K7, DEUTSCH DT connector

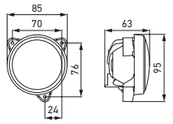
Operating voltage range	Multi-voltage (9 – 48 V)
Power consumption	15 W
Light output	800 lm
Approved	ECE-R10
Compliant	RCM

1G0 995 050-001 [1)]	Close-range illumination, upright surface mounting
1G0 995 050-011 [1)]	Close-range illumination, pendant surface mounting
1G0 995 050-021 [2)]	Long-range illumination, upright surface mounting

Go to the product video



Surface mounting | Flush mounting



3-point flush mounting

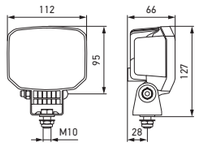
Module 70 S-series

LED, 12 V and 24 V, 6,500 K, housing: heat-conductive plastic, cover lens: plastic, -40 °C to +85 °C (overheating protection), IP 6K7, IP 6K9K, upright and pendant surface mounting or flush mounting, DEUTSCH DT connector

Operating voltage range	Multi-voltage (9 – 32 V)
Power consumption	I: Ø 11.2 W (12 V), Ø 11.6 W (24 V); II: Ø 17 W (12 V and 24 V)
Light output	I: Ø 1,150 lm; II: Ø 1,850 lm
Approved	ECE-R10, ADR / GGVSEB
Compliant	RCM, CISPR 25 Class 5 (12 V) and Class 4 (24 V)
	I
1G0 996 776-001[1]	Close-range illumination, surface mounting
1G0 996 776-011	Long-range illumination, surface mounting
1G0 996 776-107[3]	Close-range illumination, flush mounting
1G0 996 776-117	Long-range illumination, flush mounting
1G0 996 776-081*	Black, close-range illumination, surface mounting
1G0 996 776-091* [5]	Black, long-range illumination, surface mounting
	II
1G0 996 776-201[2]	Close-range illumination, surface mounting
1G0 996 776-211	Long-range illumination, surface mounting
1G0 996 776-307[4]	Close-range illumination, 3-point flush mounting
1G0 996 776-317	Long-range illumination, 3-point flush mounting
1G0 996 776-401*	Black, close-range illumination, surface mounting
1G0 996 776-411* [6]	Black, long-range illumination, surface mounting

* available soon.

Go to the product video



S-series Power Beam

LED, 12 V and 24 V, 6,500 K, housing: heat-conductive plastic, cover lens: plastic, -40 °C to +85 °C (overheating protection), IP 6K7, IP 6K9K, upright and pendant surface mounting, DEUTSCH DT connector

Operating voltage range	Multi-voltage (9 – 32 V)
Power consumption	I: Ø 11.2 W (12 V), Ø 11.6 W (24 V); II: Ø 17 W (12 V and 24 V)
Light output	I: Ø 1,150 lm; II: Ø 1,850 lm
Approved	ECE-R10, ADR / GGVSEB
Compliant	RCM, CISPR 25 Class 5 (12 V) and Class 4 (24 V)
	I
1GA 996 588-001[1]	Close-range illumination
1GA 996 588-011	Long-range illumination
1GA 996 588-041[2]	Diffuse flood illumination
	II
1GA 996 588-201[3]	Close-range illumination
1GA 996 588-211	Long-range illumination
1GA 996 588-271[2]	Diffuse flood illumination
1GA 996 588-401*	Black, close-range illumination
1GA 996 588-411* [4]	Black, long-range illumination

* available soon.

DISCOVER ...

... the S-series.

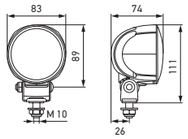
PROVEN MODELS – OPTIMISED PERFORMANCE

The LED work lamps of the S-series add optimised variants with outstanding lumen-watt performance at an excellent price-performance ratio to the proven work lamp product families from FORVIA HELLA: Module 70, Power Beam, Module 90, Ultra Beam and Oval 100.

A WIDE RANGE OF OPTIONS – FOR EVERY APPLICATION

Thanks to the different designs, illumination and light output variants, the S-series offers the right work lamp for every requirement.

SIMPLE, STEADY, STREAMLINED

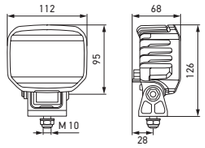


Module 70 LED Generation 3.2

LED, 12 V and 24 V, 6,500 K, housing: die-cast aluminium, cover lens: plastic, - 40 °C to +50 °C, IP 6K9K, IP 6K8, upright and pendant surface mounting

Operating voltage range	Multi-voltage (9 – 32 V)
Power consumption	20 W
Light output	1,800 lm
Approved	ECE-R10
Compliant	RCM

1G0 996 576-031	Close-range illumination, 2,000 mm cable, metal bracket
1G0 996 576-041	Close-range illumination, DEUTSCH DT connector, metal bracket with swivel base
1G0 996 576-001	Long-range illumination, 2,000 mm cable, metal bracket
1G0 996 576-011	Long-range illumination, DEUTSCH DT connector, metal bracket with swivel base

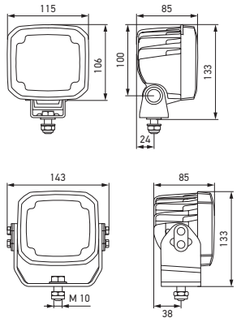


Power Beam 1800 compact

LED, 12 V and 24 V, 6,500 K, housing: heat-conductive plastic, bracket: glass-fibre reinforced plastic, cover lens: plastic, - 40 °C to +50 °C, IP 6K9K, IP 6K8, upright and pendant surface mounting, DEUTSCH DT connector

Operating voltage range	Multi-voltage (10.5 – 32 V)
Power consumption	26 W
Light output	1,850 lm
Approved	ECE-R10, ADR / GGVSEB
Compliant	RCM

1GA 996 488-001[1)]	Close-range illumination
1GA 996 488-011[2)]	Long-range illumination



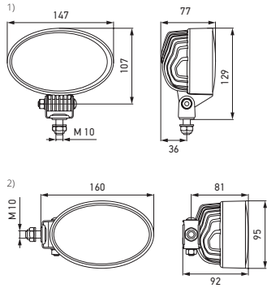
With heavy duty bracket

Ultra Beam LED Generation 1

LED, 12 V and 24 V, 6,500 K, housing: die-cast aluminium, cover lens: plastic, - 40 °C to +50 °C, IP 6K9K, IP 6K8, DEUTSCH DT connector

Operating voltage range	Multi-voltage (9 – 32 V)
Power consumption	30 W
Light output	2,200 lm
Approved	ECE-R10, ADR / GGVSEB
Compliant	RCM

1GA 995 506-001[1)]	Close-range illumination, swivel base, upright surface mounting
1GA 995 506-011	Close-range illumination, swivel base, pendant surface mounting
1GA 995 506-081[2)]	Close-range illumination, heavy duty bracket, upright and pendant surface mounting
1GA 995 506-031[3)]	Long-range illumination, swivel base, upright and pendant surface mounting

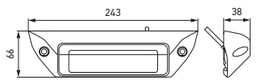


Oval 100 S-series

LED, 12 V and 24 V, 6,500 K, housing: heat- conductive plastic, cover lens: impact-resistant plastic, bracket: stainless steel, - 40 °C to +85 °C (overheating protection), IP 6K7, IP 6K9K, upright and pendant surface mounting or lateral mounting, DEUTSCH DT connector

Operating voltage range	Multi-voltage (9 – 32 V)
Power consumption	Ø 17 W (12 V and 24 V)
Light output	Ø 1,850 lm
Approved	ECE-R10
Compliant	RCM, CISPR 25 Class 5 (12 V) and Class 4 (24 V)

1GA 996 861-001[1)]	Close-range illumination, upright and pendant surface mounting
1GA 996 861-011[1)]	Long-range illumination, upright and pendant surface mounting
1GA 996 861-031[2)]	Close-range illumination, lateral mounting, left
1GA 996 861-051[2)]	Long-range illumination, lateral mounting, left
1GA 996 861-041[2)]	Close-range illumination, lateral mounting, right
1GA 996 861-061[2)]	Long-range illumination, lateral mounting, right

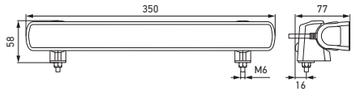


FMS Base / Prime

LED, 12 V and 24 V, 6,500 K, housing: die-cast aluminium, CoroSafe coating, cover lens: plastic, - 40 °C to +50 °C, IP 6K9K, IP 6K8, flat surface mounting on vehicle wall, 500 mm cable

Operating voltage range	Multi-voltage (9 – 32 V)
Power consumption	FMS Base: 14 W; FMS Prime: 28 W
Light output	FMS Base: 1,200 lm; FMS Prime: 2,500 lm
Approved	ECE-R10, ADR / GGVSEB
Compliant	RCM

	FMS Base, extra-wide illumination
1GB 996 098-001	Housing colour, black
	FMS Prime, extra-wide illumination
1GB 996 098-011	Housing colour, black

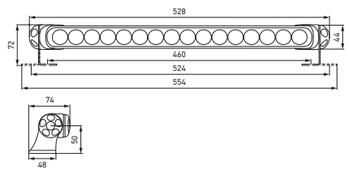


LED Light Bar 350

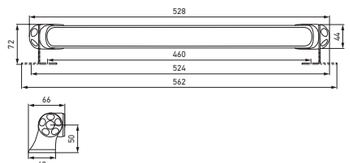
LED, 12 V and 24 V, 5,000 K, housing: heat-conductive plastic, cover lens: plastic, - 40 °C to + 60 °C, IP 6K9K, IP 6K7, upright and pendant surface mounting, 2,500 mm cable

Operating voltage range	Multi-voltage (9 – 33 V)
Power consumption	25 W
Light output	2,200 lm
Approved	ECE-R10
Compliant	RCM

1GJ 958 040-501	Close-range illumination



Close-range illumination and long-range illumination



Diffuse flood

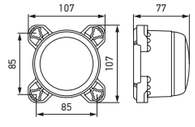
LED Light Bar 470

LED, 12 V and 24 V, 5,000 K, housing: heat-conductive plastic, cover lens: heavy duty Grilamid®, -40 °C to +60 °C, IP 6K9K, IP 6K7, upright and pendant surface mounting, 2,500 mm cable

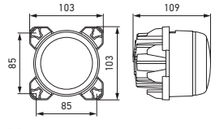
Operating voltage range	Multi-voltage (9 – 33 V)
Power consumption	Close-range, long-range and diffuse flood: 36 W (100 %) / 4 W (10 %)
Light output	Close-range and long-range: 2,800 lm (100 %) / 280 lm (10 %); diffuse flood: 3,600 lm (100 %) / 360 lm (10 %)
Approved	ECE-R10
Compliant	RCM

1GJ 958 130-621[1)]	Close-range illumination
1GJ 958 130-651[2)]	Long-range illumination
1GJ 958 130-521[3)]	Diffuse flood illumination

Go to the product video



II



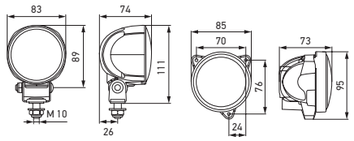
IV

Module 90 S-series

LED, 12 V and 24 V, 6,500 K, housing: plastic (II) or die-cast aluminium (IV), cover lens: plastic, - 40 °C to +85 °C (overheating protection), IP 6K9K, IP 6K7, flush mounting, DEUTSCH DT connector

Operating voltage range	Multi-voltage (9 – 32 V)
Power consumption	II: Ø 17 W (12 V and 24 V) IV: Ø 39 W (12 V), Ø 37.5 W (24 V)
Light output	II: Ø 1,850 lm IV: Ø 4,000 lm
Approved	ECE-R10
Compliant	RCM, CISPR 25 Class 5 (12 V and 24 V)

	II
1G0 996 463-007[1)]	Close-range illumination
1G0 996 463-017[2)]	Long-range illumination
	IV
1G0 996 463- 407[3)]	Close-range illumination
1G0 996 463- 417[4)]	Long-range illumination



Surface mounting Flush mounting

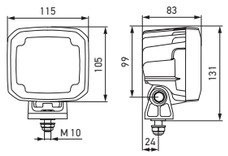
Module 70 LED Generation 5

LED, 12 V and 24 V, 6,500 K, housing: die-cast aluminium, cover lens: plastic, - 40 °C to +85 °C (overheating protection), IP 6K9K, IP 6K8, 2,000 mm cable

Operating voltage range	Multi-voltage (9 – 32 V)
Power consumption	28,5 W
Light output	3,300 lm
Approved	ECE-R10
Compliant	RCM, CISPR 25 Class 5 (12 V and 24 V)

1G0 996 476-001[1)]	Close-range illumination, upright and pendant surface mounting
1G0 996 476-121[3)]	Close-range illumination, flush mounting
1G0 996 476-011[2)]	Long-range illumination, upright and pendant surface mounting
1G0 996 476-041	Long-range illumination, flush mounting
1G0 996 476-031	Extra-wide illumination, upright and pendant surface mounting
1G0 996 476-131	Extra-wide illumination, flush mounting

Go to the product video



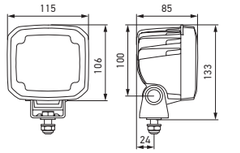
Ultra Beam S-series

LED, 12 V and 24 V, 6,500 K, housing: die-cast aluminium, cover lens: plastic, -40 °C to +85 °C (overheating protection), IP 6K9K, IP 6K8, upright and pendant surface mounting, DEUTSCH DT connector

Operating voltage range	Multi-voltage (9 – 32 V)
Power consumption	Ø 39 W (12 V), Ø 37.5 W (24 V)
Light output	Ø 4,400 lm
Approved	ECE-R10, ADR / GGVSEB
Compliant	RCM, CISPR 25 Class 5 (12 V and 24 V)

1GA 995 706-001[1)]	Close-range illumination
1GA 995 706-011[2)]	Long-range illumination
1GA 995 706-401*	Black, close-range illumination
1GA 995 706-411* [3)]	Black, long-range illumination

* available soon.



With heavy duty bracket

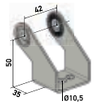
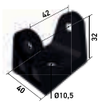
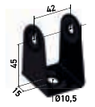
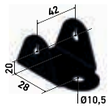
Ultra Beam LED Generation 2

LED, 12 V and 24 V, 6,500 K, housing: die-cast aluminium, cover lens: plastic, -40 °C to +85 °C (overheating protection), IP 6K9K, IP 6K8, upright and pendant surface mounting or upright surface mounting (**ZERO**GLARE), DEUTSCH DT connector

Operating voltage range	Multi-voltage (9 – 32 V)
Power consumption	50 W
Light output	Up to 4,400 lm
Approved	ECE-R10
Compliant	RCM

1GA 995 606-001[1)]	Close-range illumination, swivel base
1GA 995 606-071[2)]	Close-range illumination, heavy duty bracket
1GA 995 606-011[3)]	Long-range illumination, swivel base
1GA 995 606-081[4)]	Long-range illumination, heavy duty bracket
1GA 995 606-171[5)]	**ZERO**GLARE illumination, swivel base
1GA 995 606-021	Spot illumination, swivel base

ACCESSORIES

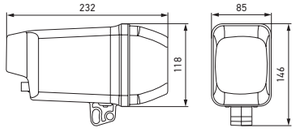
Product Photo	Description	Part Number
	Pipe-socket mounting bracket For combination with 8HG 002 365-001 socket pipe. Suitable for surface mounting with 42 mm bracket width. Electrical contacting within the pipe socket using socket in accordance with DIN 7 2 591. With AMP connector or grommet	**8HG 990 320-001**
	Mirror bracket mounting Rotating universal bracket for mounting on pipes (diameter: 15 – 25 mm). For replacement on work lamps with 36 mm or 42 mm bracket width. 36 mm bracket width	**8HG 990 263-111**
	42 mm bracket width	**8HG 990 263-131**
	Magnetic bracket, for work lamps with U-bracket. Includes 2 x magnets and fastening materials.	**8HG 004 806-001**
	Four-point mounting, made of amber chrome-plated steel	**9XD 990 298-001**
	Four-point mounting, made of stainless steel with oblong holes	**9XD 130 261-001**
	**Angle bracket**, angle mounting for work lamps with 42 mm bracket width.	**9XD 990 298-031**
	**Plastic bracket,** glass-fibre reinforced standard bracket for work lamps. 42 mm bracket width	**8HG 332 912-002**
	**Standard bracket** with extra space to the rear. 42 mm bracket width	**8HG 992 377-042**
	Oblong hole bracket, special bracket with oblong hole for mounting. 36 mm bracket width	**8HG 331 414-372**
	Forked bracket, special bracket for flat mounting. 36 mm bracket width	**8HG 994 412-372**
	**Standard bracket with eyelet**, standard bracket for extensions with restricted space to the rear. 42 mm bracket width	**8HG 994 974-002**

VISIOTECH projection technology

VISIOTECH projection technology enables greater safety and comfort in everyday work.

FORVIA HELLA lamps with VISIOTECH technology enable communication using light in order to visually highlight danger zones.

Projection technology can be used to project warning signs or symbols onto the ground. This allows the lamps to warn other drivers or passers-by, to draw attention to the area or to visually mark off certain work areas.



Projection

Projection module

LED, 12 V, 24 V and 48 V, housing: die-cast aluminium, cover lens: plastic (polycarbonate), -40 °C to +50 °C, IP 6K9K, IP 6K7, upright and pendant surface mounting possible, bracket and fastening material not included in the scope of delivery*, integrated Tyco Micro Timer including 2,000 mm cable

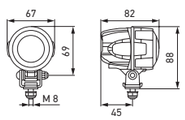
Operating voltage range	Multi-voltage (9 – 60 V)
Power consumption	27 W
Approved	ECE-R10
2XA 996 200-101	Projected symbol: danger zone traffic sign 101

* Brackets can be provided on request following evaluation of the mounting circumstances.

Demarcating a work area

Tip:
Online you can see an example of our projection system application for waste collection.

Go to the product video



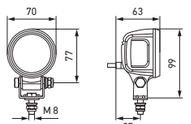
Module 50 LED Spot

LED, 12 V, 24 V and 48 V, housing: die-cast aluminium, cover lens: plastic (PA12), -40 °C to +50 °C, IP 6K9K, IP 6K7, upright and pendant surface mounting, DEUTSCH DT connector

Operating voltage range	Multi-voltage (9 – 52 V)
Power consumption	15 W
Approved	ECE-R10
Compliant	RCM

1G0 995 050-051	Projected symbol: White spot
1G0 995 050-061	Projected symbol: Blue spot
1G0 995 050-081	Projected symbol: Red spot

VISIOTECH PROJECTION TECHNOLOGY

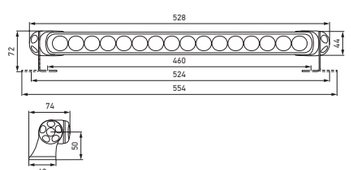


SL60 LED

LED, 12 V, 24 V and 48 V, housing: die-cast aluminium, cover lens: plastic (polycarbonate), -40 °C to +50 °C, IP 6K9K, IP 6K7, horizontal or vertical surface mounting (strip direction) as required, 500 mm cable

Operating voltage range	Multi-voltage (10 – 80 V)
Power consumption	Red: 5.5 W; blue: 7 W
Approved	ECE-R10
Compliant	RCM

1G0 996 210-001	Projected symbol: blue light strip
1G0 996 210-011	Projected symbol: red light strip



LED Light Bar 470, red

LED, 12 V and 24 V, housing: heat-conductive plastic, cover lens: heavy duty Grilamid®, -40 °C to +60 °C, IP 6K9K, IP 6K7, upright and pendant surface mounting, 2,500 mm cable

Operating voltage range	Multi-voltage (9 – 33 V)
Power consumption	25 W
Approved	ECE-R10
Compliant	RCM

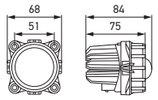
2XD 958 130-661	Projected symbol: red wide light strip

Front lighting

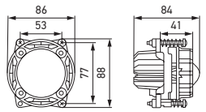
Vehicle lighting plays a crucial role in ensuring the safety of all road users, especially when it comes to those driving municipal vehicles. FORVIA HELLA has developed innovative lighting systems especially for this target group, systems which not only offer a high level of driving comfort, but also guarantee optimum illumination.

Styling is also becoming increasingly important for municipal vehicles. LEDs offer particularly exciting possibilities for breaking new ground in vehicle design. They make it possible to create a brand-specific look while at the same time increasing safety on the roads.

HEADLAMPS
60 MM MODULES



Without carrier frame

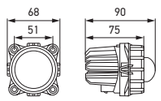


With carrier frame

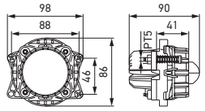
LED low beam headlamp Module 60 LED

LED, housing: die-cast aluminium, lens: glass, TYCO connector (HB3)

Operating voltage range	Single-voltage (9 – 16 V)
Protection class	IP 6K9K, IP 6K7
Approved	ECE R149 Class DS, ECE R10, FMVSS 108 (without carrier frame)
Compliant	ASABE S0608 (with carrier frame)
1TL 998 670-021	Without carrier frame
1TL 998 670-041	With carrier frame



Without carrier frame



With carrier frame

LED high beam headlamp Module 60 LED

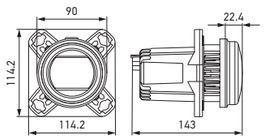
LED, housing: die-cast aluminium, lens: glass, TYCO connector (HB3)

Operating voltage range	Single-voltage (9 – 16 V)
Protection class	IP 6K9K, IP 6K7
Approved	ECE R149 Class DS, ECE R10
Compliant	ASABE S0608 (with carrier frame)
1KL 998 670-031	Without carrier frame
1KL 998 670-051	With carrier frame

UNIVERSAL HEADLAMP MODULES

For more detailed information, take a look at our brochure. Discover the complete product range of FORVIA HELLA front lighting modules together with all the important information including comprehensive details on accessories.

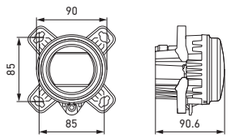
Alternatively you can also go direct and **visit us at www.hella.com/soe**.



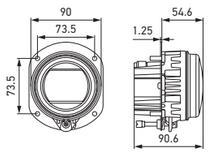
LED low beam headlamp L 4060

LED, housing: die-cast aluminium, lens: polycarbonate and polymethyl methacrylate

Operating voltage range	Multi-voltage (9 – 32 V)
Protection class	IP 5K9K, IP 5K4K
Approved	ECE R149 Class B, FMVSS 108, ECE R10
Compliant	CISPR 25 Class 4
	Low beam
1BL 012 488-001	Right-hand traffic, ECE, SAE, FEP connector
1BL 012 488-101	Right-hand traffic, ECE, SAE, DEUTSCH DT connector
1ML 012 488-011	Left-hand traffic, ECE, FEP connector
1ML 012 488-111	Left-hand traffic, ECE, DEUTSCH DT connector
	Low beam, position light and daytime running light
1BL 012 488-021	Right-hand traffic, ECE, SAE, FEP connector
1BL 012 488-121	Right-hand traffic, ECE, SAE, DEUTSCH DT connector
1ML 012 488-031	Left-hand traffic, ECE, FEP connector
1ML 012 488-131	Left-hand traffic, ECE, DEUTSCH DT connector



Without carrier frame

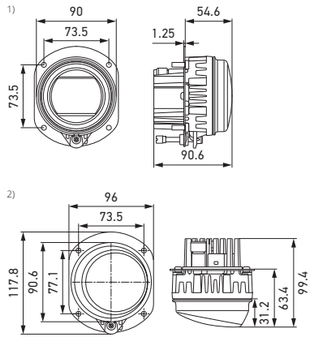


With pre-assembled carrier frame

LED high beam headlamp L 4060

LED, housing: die-cast aluminium, lens: polycarbonate and polymethyl methacrylate, FEP connector

Operating voltage range	Multi-voltage (9 – 32 V)
Protection class	IP 5K9K, IP 5K4K
Approved	ECE R149 Class B, FMVSS 108, ECE R10
Compliant	CISPR 25 Class 4
	High beam
1F0 011 988-021	With pre-assembled carrier frame
1F0 011 988-121	Without carrier frame
	High beam, position light, daytime running light
1F0 011 988-031	With pre-assembled carrier frame
1F0 011 988-131	Without carrier frame
	High beam, direction indicator light
1F0 011 988-081	With pulse generator and pre-assembled carrier frame
1F0 011 988-181	With pulse generator, without carrier frame
1F0 011 988-071	Without pulse generator, with pre-assembled carrier frame
1F0 011 988-171	Without pulse generator, without carrier frame

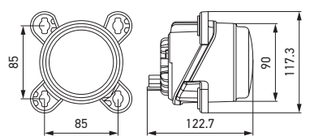


LED fog lamp L 4060

LED, housing: die-cast aluminium, lens: Polycarbonate and polymethyl methacrylate, with pre-assembled carrier frame, FEP connector

Operating voltage range	Multi-voltage (9 – 32 V)
Protection class	IP 5K9K, IP 5K4K
Approved	ECE R149 Class B, FMVSS 108, ECE R10
Compliant	CISPR 25 Class 4
	Fog light[1)]
1N0 011 988-001	Without daytime running light / position light
1N0 011 988-011	With daytime running light / position light
	Fog light, cornering light[2)]
1N0 011 988-061	Right headlamp
1N0 011 988-051	Left headlamp

Go to the product video



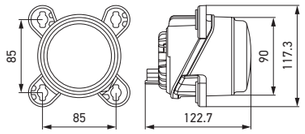
LED low beam headlamp R 80

LED, housing: plastic, cover lens: polycarbonate, reflector: plastic

Operating voltage range	Multi-voltage (9 – 32 V)
Protection class	IP 5K9K, IP 5K4K
Approved	ECE R149 Class B, FMVSS 108
1B0 015 050-001	Right-hand traffic, ECE, DEUTSCH DT connector
1M0 015 050-011	Left-hand traffic, ECE, DEUTSCH DT connector
1B0 015 050-031	SAE, DEUTSCH DT connector
1B0 015 050-101	Right-hand traffic, ECE, FEP connector
1M0 015 050-111	Left-hand traffic, ECE, FEP connector
1B0 015 050-131	SAE, FEP connector

HEADLAMPS
90 MM MODULES / ESSENTIAL

Go to the product video



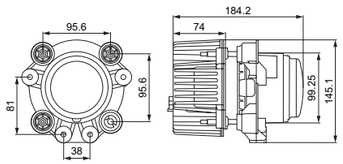
LED high beam headlamp R 80

LED, housing: plastic, cover lens: polycarbonate, reflector: plastic

Operating voltage range	Multi-voltage (9 – 32 V)
Protection class	IP 5K9K, IP 5K4K
Approved	ECE R149 Class B, FMVSS 108
1K0 015 050-021	DEUTSCH DT connector
1K0 015 050-121	FEP connector

HEADLAMPS
90 MM MODULES / PERFORMANCE

Go to the product video



Bi-LED low beam and high beam headlamp L 4565 – Performance

LED, housing: die-cast aluminium, flat cover lens, 4-pin. DEUTSCH DT connector, with "Zero Tolerance Integration"

Operating voltage range	Multi-voltage (9 – 32 V)
Protection class	IP 5K9K, IP 5K4K
Approved	ECE R149 Class B, FMVSS 108, ECE R10
Compliant	CISPR 25 Class 4 and 5
1AL 015 318-031	Right-hand traffic, ECE
1LL 015 318-041	Left-hand traffic, ECE
1AL 015 318-051	SAE

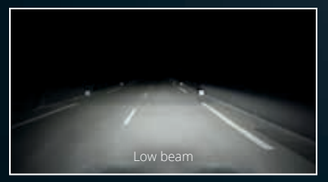
MODULE FINDER

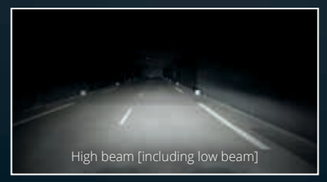
Find the right headlamp module in just a few clicks: simply use the filter to select the required criteria, such as the light function or homologation, and you will see suitable products right away.

www.hella.com/headlamp-modules

DISCOVER ...

... the L 4565 Performance.

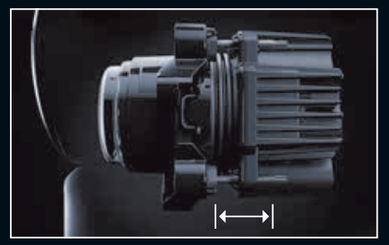




2 IN 1 –
FREEDOM IN APPLICATION AND DESIGN

Excellent low beam and high beam
light performance from one single headlamp module

FREEDOM OF DESIGN



Basic setting and headlamp levelling

NEW DESIGN FREEDOM –
"ZERO TOLERANCE INTEGRATION"

The "Zero Tolerance Integration" has turned the L 4565 Performance Bi-LED low and high beam headlamp into a veritable highlight. Easy installation thanks to fixed integration in the vehicle apron. Basic setting and headlamp levelling are carried out via the invisible rear part. The flat cover lens thus blends seamlessly into the design of the vehicle.

DISCOVER ...

... the SlimLine.

VISIONARY APPEARANCE – EDGY DESIGN!

The Bi-LED module with its sharp angles lends vehicles a modern and unusual appearance. The versatile Bi-LED module sets a strong focus on striking design while at the same time offering outstanding light output and power.

UNIQUE APPEARANCE – DUAL FUNCTION!

The SlimLine Bi-LED combines low beam and high beam functions in one single headlamp module. Resistant to vibrations, dirt and water, it copes easily with tougher demands – even in harsh environments.

SHAPE OF POWER

Bezel in blue look

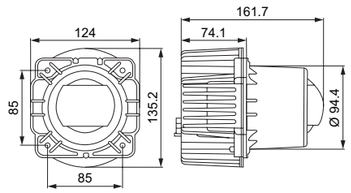
Bezel in carbon look

WIDE RANGE OF OPTIONS – INDIVIDUAL CHARACTER!

The SlimLine Bi-LED module offers a whole host of customisation options. By adding a coloured and differently shaped bezel, the lamp can be given a distinctive and completely individual appearance.

HEADLAMPS
90 MM MODULES / ESSENTIAL

Go to the product video



Bi-LED low beam and high beam headlamp L 4565 – Essential

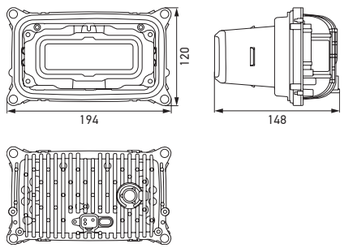
LED, housing: die-cast aluminium, 4-pin DEUTSCH DT connector

Operating voltage range	Multi-voltage (9 – 32 V)
Protection class	IP 5K9K, IP 5K4K
Approved	ECE R149 Class B, FMVSS 108, ECE R10
Compliant	CISPR 25 Class 4
1AL 015 318-001	Right-hand traffic, ECE
1AL 015 318-111	Right-hand traffic, ECE, with pre-assembled mounting set
1AL 015 318-211	Right-hand traffic, ECE, with pre-assembled mounting set, carrier frame and levelling motor component*
1LL 015 318-011	Left-hand traffic, ECE
1LL 015 318-131	Left-hand traffic, ECE, with pre-assembled mounting set
1AL 015 318-231	Left-hand traffic, ECE, with pre-assembled mounting set, carrier frame and levelling motor component*
1AL 015 318-021	SAE
1AL 015 318-151	SAE, with pre-assembled mounting set
1AL 015 318-251	SAE, with pre-assembled mounting set, carrier frame and levelling motor component*

* Levelling motor not included in scope of delivery.

HEADLAMPS
SLIMLINE

Go to the product video

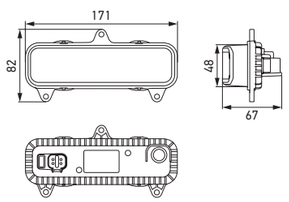


Bi-LED low beam and high beam headlamp SlimLine

LED, housing: ALGD (die-cast aluminium cooling element), 2K lens (black/transparent), 4-pin DEUTSCH DT connector (3 pins fitted), horizontal flush mounting

Operating voltage range	Multi-voltage (10 – 32 V)
Protection class	IP 6K9K, IP 6K4K
Approved	ECE R149 Class B, ECE R10, FMVSS 108
Compliant	CISPR 25 Class 5
1AL 016 330-001	Right-hand traffic, ECE
1LL 016 330-011	Left-hand traffic, ECE
1AL 016 330-021	SAE

DAYTIME RUNNING, POSITION AND DIRECTION INDICATOR LAMPS
SLIMLINE



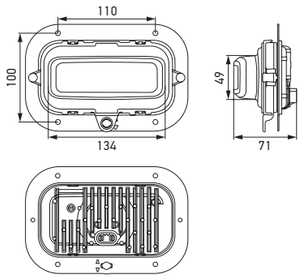
LED combination lamp SlimLine

Daytime running, position and direction indicator light, LED, housing and lens: polycarbonate

Operating voltage range	Multi-voltage (9 – 32 V)
Protection class	IP 4K9K, IP 5K9K
Approved	ECE-R148
Compliant	CISPR 25 Class 5
2BE 016 545-001	ECE, DEUTSCH DT connector
2BE 016 545-101	ECE, FEP connector
2BE 016 545-011	SAE, DEUTSCH DT connector
2BE 016 545-811*	SAE, DEUTSCH DT connector

* Double variant for vehicles with a width of more than 2,032 mm in accordance with FMVSS 108 and a direction indicator size of > 75 mm².

AUXILIARY HEADLAMPS
SLIMLINE



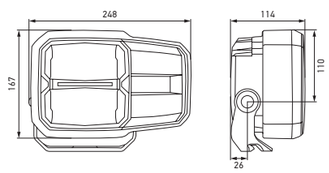
LED fog lamp with cornering light SlimLine

Fog and cornering light, LED, housing: ALU, lens: polycarbonate, with carrier frame for front and rear mounting)

Operating voltage range	Multi-voltage (9 – 32 V)
Protection class	IP 5K4K, IP 5K9K
Approved	ECE-R149, FMVSS 108, CCC
Compliant	CISPR 25 Class 4
1NL 016 340-001	With HB3 connector

More details on all products and information on accessories can be found online at **www.hella.com/soe**

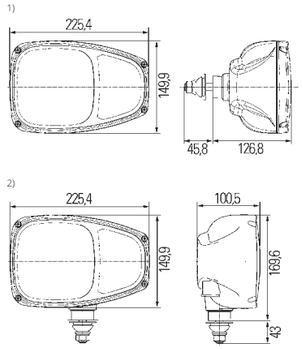
COMBINATION HEADLAMPS



LED combination headlamp C140 LED

Low beam, high beam, LED, housing: die-cast aluminium, vertical / horizontal surface mounting, 6-pin DEUTSCH DT connector

Operating voltage range	Multi-voltage (10 – 32 V)
Protection class	IP 6K9K
Approved	ECE R112 Class B, ECE R6, ECE R7, ECE R10, FMVSS 108
Compliant	SAE
1EE 996 374-001	Vertical, right-hand traffic
1EE 996 374-011	Horizontal left, right-hand traffic
1EE 996 374-021	Horizontal right, right-hand traffic

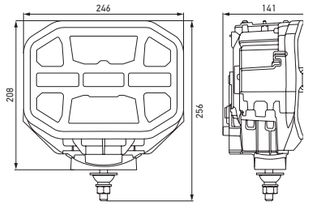


Combination headlamp C220

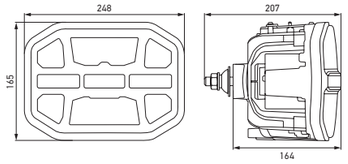
Low beam, high beam, direction indicator and position light, halogen, horizontal surface mounting, 6-pin DEUTSCH DT connector

Rated voltage	12 V or 24 V
Protection class	IP 6K9K
Approved	ECE-R112, ECE-R6, ECE-R7
1EE 996 174-211[1)]	12 V, horizontal surface mounting on left, fastening screw at rear
1EE 996 174-221[1)]	12 V, horizontal surface mounting on the right, fastening screw at rear
1EE 996 174-251[2)]	12 V, horizontal surface mounting on left, fastening screw at the bottom
1EE 996 174-261[2)]	12 V, horizontal surface mounting on the right, fastening screw at the bottom

Go to the product video



Upright mounting



Central mounting

LED combination headlamp C240

Low beam, high beam, daytime running light, position light, direction indicator light at front and on side (Cat. 5), LED, housing: PBT GF30, surface mounting, 6-pin DEUTSCH DT connector

Operating voltage range	Multi-voltage (9 – 32 V)
Protection class	IP 6K9K
Approved	ECE-R10, FMVSS 108 ECE performance: ECE R149 Class B, ECE R148 ECE Essential: ECE R149 Class CS, ECE R148
Compliant	CISPR 25 Class 5
	ECE – Essential (with symmetrical light distribution)
1SF 328 550-011	Central mounting, left
1SF 328 550-021	Central mounting, right
1SF 328 550-031	Upright mounting, left
1SF 328 550-041	Upright mounting, right
1SF 328 550-491	Cat. 5 with daytime running light, central mounting, left
1SF 328 550-501	Cat. 5 with daytime running light, central mounting, right
	ECE – Performance (with asymmetrical light distribution)
1EF 328 550-131	Right-hand traffic, central mounting, left
1EF 328 550-141	Right-hand traffic, central mounting, right
1EF 328 550-151	Right-hand traffic, upright mounting, left
1EF 328 550-161	Right-hand traffic, upright mounting, right
1EF 328 550-231	Right-hand traffic, Cat. 5 with daytime running light, upright mounting, left
1EF 328 550-241	Right-hand traffic, Cat. 5 with daytime running light, upright mounting, right
1LF 328 550-251	Left-hand traffic, central mounting, left
1LF 328 550-261	Left-hand traffic, central mounting, right
1LR 328 550-271	Left-hand traffic, upright mounting, left
1LR 328 550-281	Left-hand traffic, upright mounting, right
1LF 328 550-351	Left-hand traffic, Cat. 5 with daytime running light, upright mounting, left
1LF 328 550-361	Left-hand traffic, Cat. 5 with daytime running light, upright mounting, right
	SAE – FMVSS
1EF 328 550-371	Central mounting, left
1EF 328 550-381	Central mounting, right
1EF 328 550-391	Upright mounting, left
1EF 328 550-401	Upright mounting, right
1EF 328 550-471	Cat. 5 with daytime running light, upright mounting, left
1EF 328 550-481	Cat. 5 with daytime running light, upright mounting, right

DISCOVER ...

... the C240 LED.

DISTINCTIVE DESIGN – ROBUST IN APPLICATION

With its extraordinary appearance, the C240 meets all requirements for a modern and impressive vehicle design. Its robustness, impact resistance and vibration resistance make it the ideal combination headlamp – even for the toughest working conditions.

6 IN 1 – CONVINCING FUNCTION AND TECHNOLOGY

The C240 LED combination headlamp combines all important lighting functions in a single lamp: low beam, high beam, position light, daytime running light and direction indicator light to the front and side (Cat. 5). The 100% LED technology in combination with the excellent thermal management ensures a long service life.

COOL COMBINED

Low beam and position light

Low beam, position light and high beam

Daytime running light

SAE direction indicator light

ECE direction indicator light

Side direction indicator light (Cat. 5)

DISCOVER ...

... the CircLED 90.

HIGHLY EFFICIENT – WITH A MODERN, DISTINCT SHAPE

The stunning shape of the CircLED 90 combination lamp with its particularly light weight and minimal installation depth enables effortless mounting. Thanks to state-of-the-art technology, it makes the road shine in an impressively homogeneous light.

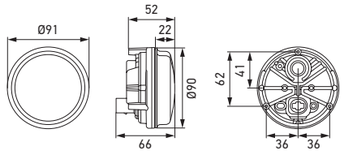
COMPACT AND CLEAN

Daytime running light | Position light | Direction indicator light

THREE LIGHT FUNCTIONS – SIMPLY COMPACT

CircLED 90 – daytime running light, position light and direction indicator light in one module. In combination with a Bi-LED low beam and high beam headlamp, five light functions are operated with just two modules.

Go to the product video

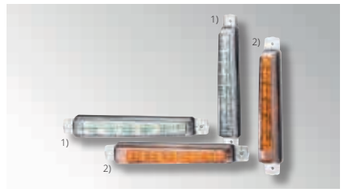


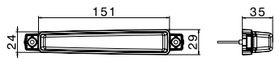
LED combination lamp CircLED 90

Daytime running, position and direction indicator light, LED, particularly lightweight and compact module, housing and lens: polycarbonate, fastening by means of screws and an additional carrier frame from back or from front

Operating voltage range	Multi-voltage (9-32 V)
Protection class	IP 5K9K, IP 5K4K
Approved	ECE-R148, ECE-R10, FMVSS 108, CCC
Compliant	CISPR 25 Class 5*
2BE 016 540-001	Daytime running, position and direction indicator lamp, ECE, FEP connector
2BE 016 540-011	Daytime running, position and direction indicator lamp, ECE, DEUTSCH DT connector
2BE 016 540-031	Daytime running, position and direction indicator lamp, SAE, DEUTSCH DT connector
2PT 016 540-111	Daytime running and position lamp, ECE / SAE, DEUTSCH DT connector
2BE 016 540-211	Position and direction indicator lamp, ECE, DEUTSCH DT connector
2BE 016 540-231	Position and direction indicator lamp, SAE, DEUTSCH DT connector

* In some frequency ranges CISPR 25 Class 3.





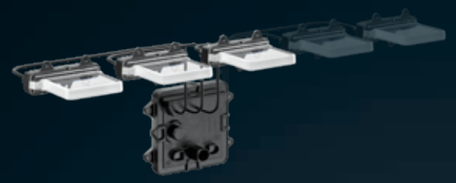
LED direction indicator and position lamp

LED, for horizontal or vertical surface mounting, lens: clear or amber, with 400 mm cable with open ends

Operating voltage range	Single-voltage (9 – 16 V or 16 – 32 V)
Protection class	IP 6K9K
Approved	ECE-R6, ECE-R10
	[1] Position lamp
2PF 012 846-401	12 V, horizontal
2PF 012 846-411	12 V, vertical
2PF 012 846-601	24 V, horizontal
2PF 012 846-611	24 V, vertical
	[2] Direction indicator with pulse for direction indicator failure control
2BA 012 846-001	12 V, horizontal
2BA 012 846-011	12 V, vertical
2BA 012 846-201	24 V, horizontal
2BA 012 846-211	24 V, vertical
	[2] Direction indicator
2BA 012 846-021	12 V, horizontal
2BA 012 846-221	24 V, horizontal

DISCOVER ...

... the LEDayFlex III.



FLEXIBLE MODULARITY – UNLIMITED STYLE!

The modular light system promises maximum design and technological freedom:
it is possible to choose between three to five LEDayFlex III modules for each side of the vehicle.
The highly personalised options for arranging the modules give every lamp a distinctive look.

UNLIMITED STYLE

THIRD GENERATION – TRIPLE FUNCTION!

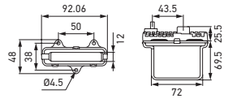
The lamp has three LED light functions: daytime running, position and direction indicator light [also with wiper function]. But the real highlight is that all three functions have impressive, innovative EdgeLight technology.

STRIKING APPEARANCE – CUTTING EDGE DESIGN!

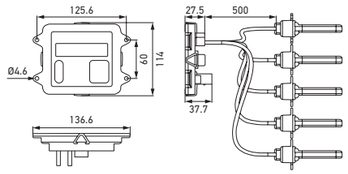
The outstanding LEDayFlex III modules are strongly compelling. Whether horizontal, vertical or diagonal, flexible alignment options give each headlamp a strong individual character.*

* Please observe the relevant country-specific legal requirements and guidelines for motor vehicles as shown in the installation instructions.

Go to the product video



Module



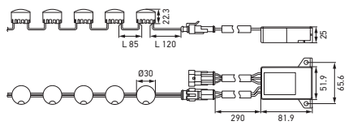
Control unit

LED combination lamp LEDayFlex III

Daytime running, position and direction indicator light, LED, housing: polycarbonate, lens: PMMA, integrated fastening clips and screws

Operating voltage range	Multi-voltage (9 – 32 V)
Protection class	IP 5K4K, IP 5K9K
Approved	ECE-R148, ECE-R10
Compliant	CISPR 25 Class 5*
2BE 016 400-301	3 modules, FEP connector
2BE 016 400-341	3 modules, DEUTSCH DT connector
2BE 016 400-401	4 modules, FEP connector
2BE 016 400-411	4 modules, direction indicator light with wiper function (left), FEP connector
2BE 016 400-421	4 modules, direction indicator light with wiper function (right), FEP connector
2BE 016 400-501	5 modules, FEP connector

* In some frequency ranges CISPR 25 Class 4.



LED daytime running and position lamp set LEDayFlex

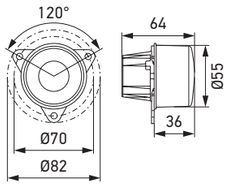
LED, housing: black aluminium, lens: plastic (PMMA), the entire lamp chain is attached to the individual modules, there are threads for two screws on each individual module, allowing the module to be flexibly positioned and mounted, including fixed AMP SUPERSEAL connector, sheathed cable, approx. 29 cm long

Operating voltage range	Multi-voltage (9 – 32 V)
Protection class	IP 6K7, IP 6K9K
Approved	ECE-R7, ECE-R87, ECE-R148, ECE-R10
Compliant	SAE
	Daytime running light
2PT 010 458-701	5 modules
2PT 010 458-721	6 modules
2PT 010 458-741	7 modules
2PT 010 458-761	8 modules
	Daytime running light, position light
2PT 010 458-711	5 modules
2PT 010 458-731	6 modules
2PT 010 458-751	7 modules
2PT 010 458-771	8 modules
	Accessories
8KA 165 959-001	Wiring harness

Photo: Aebi Schmidt Holding AG

Photo: Aebi Schmidt Holding AG

DAYTIME RUNNING, POSITION AND DIRECTION INDICATOR LAMPS



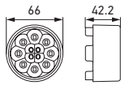
LED direction indicator 55 mm

LED, for front flush mounting, lens: clear with pattern, 500 mm cable with open ends

Rated voltage	12 V or 24 V
Protection class	IP 6K9K
Approved	ECE-R10

2BA 011 172-001*	Without pulse for direction indicator failure control, 12 V
2BA 011 172-401*	Without pulse for direction indicator failure control, 24 V
2BA 011 172-011*	With pulse for direction indicator failure control, 12 V
2BA 011 172-411*	With pulse for direction indicator failure control, 24 V

* ECE: Distance < 40 mm from the low beam headlamp / fog lamp



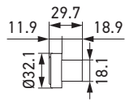
LED position lamp 66 mm

LED, for flush mounting, lens: clear, 500 mm cable with open ends

Rated voltage	12 V or 24 V
Protection class	IP 5K9K
Approved	ECE-R7
Compliant	SAE

2PF 009 001-421	12 V
2PF 009 001-521	24 V

DAYTIME RUNNING, POSITION AND DIRECTION INDICATOR LAMPS

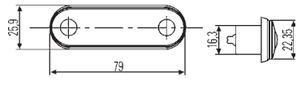


LED position lamp 340 825

LED, for flush mounting, lens: clear, housing: plastic, with adhesive film for sticking to the bodywork

Rated voltage	12 V or 24 V
Protection class	IP 5KX
Approved	ECE-R7, ECE-R6

2PF 340 825-041	12 V, 2-pin 150 mm cable with open ends
2PF 340 825-057	24 V, 2-pin with 500 mm cable and 2-pin AMP SUPERSEAL connector



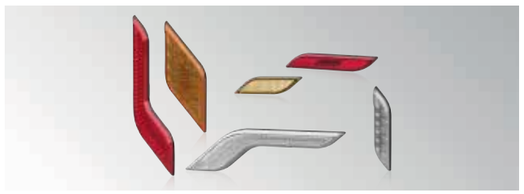
LED position lamp

LED, flush mounting horizontal / vertical, lens: clear, with 500 mm cable

Operating voltage range	Multi-voltage (9 – 33 V)
Protection class	IP 6K6, IP 6K7
Approved	ECE-R7, ECE-R10, ADR / GGVSEB

2PF 959 590-202	Position lamp

DESIGN YOUR LIGHT – WITH SHAPELINE!



STYLE DESIGN

TECH DESIGN

The variety and range of shapes and the various combination options paired with a technically optimised product design make the Shapeline lamp series a true innovation in the field of vehicle lighting!

SHAPELINE BROCHURE

The complete product range in one brochure. Comprehensive product information covering all aspects of the Shapeline series will help you to select the right lamps for your purpose. You will also find the current brochure at:

www.hella.com/shapeline

SHAPELINE
VERSATILE MODULE COMBINATIONS

Our Shapeline range offers you countless mounting and combination options. Thanks to the modular product range, these lamps can be combined in virtually every conceivable constellation. Simply configure your individual lighting design.

EXAMPLE OF REAR VIEW

Tail-stop lamp, Wing

Homologation	ECE
Number of LEDs	30
Connectors & wiring	3-pin AMP SUPERSEAL integrated

2SB 013 399-031

Rear fog lamp

Homologation	ECE / SAE
Number of LEDs	12
Connectors & wiring	3-pin AMP SUPERSEAL integrated (with 2-pin function)

2NE 013 345-031

Direction indicator, Slim

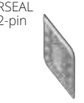
Homologation	ECE
Number of LEDs	6
Connectors & wiring	2-pin AMP SUPERSEAL integrated

2BA 013 332-051

Reverse lamp

Homologation	ECE / SAE
Number of LEDs	4
Connectors & wiring	3-pin AMP SUPERSEAL integrated (with 2-pin function)

2ZR 013 345-131



Side marker lamp, amber

Homologation	ECE / SAE
Number of LEDs	3
Connectors & wiring	AMP SUPERSEAL, 250 mm cable, overmoulded

2PS 013 305-011

DESIGN FREEDOM IN JUST ONE CLICK

With the Shapeline online configurator from FORVIA HELLA, you, too, can become your own lighting designer: in a few clicks, you can design your individualised lights for the front, side and rear of your vehicle – and you'll see the results applied to a realistic car outline straight away.

www.hella.com/shapeline

All information about the product range can be found in the **Shapeline brochure** at: **www.hella.com/shapeline**

SHAPELINE MODULE OVERVIEW

The modular Shapeline product range of FORVIA HELLA offers a variety of diverse light functions that can be put together in individual constellations. All lamps are available in two different designs: in the classic straight-lined Shapeline Tech design and in the curved dynamic Shapeline Style design.

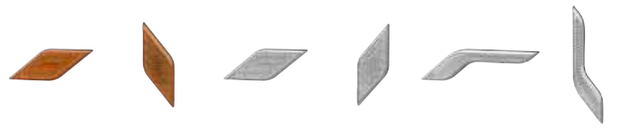
FRONT

Style	Tech
POSITION LAMPS	
2PF 013 324-... 2PF 013 325-... 2PF 013 325-... 2PF 013 326-... 2PF 013 326-...	2PF 013 323-...
REFLEX REFLECTOR	
8RA 013 347-...	8RA 013 403-...
DIRECTION INDICATORS	
2BA 013 334-... 2BA 013 334-... 2BA 013 335-... 2BA 013 335-...	2BA 013 330-... 2BA 013 398-...
DAYTIME RUNNING AND POSITION LAMPS	
2PT 014 627-...	

SIDE

DIRECTION INDICATORS	
2BM 013 338-... 2BM 013 339-...	2BM 013 336-... 2BM 013 337-... 2BM 013 337-...
REFLEX REFLECTOR	
8RA 013 347-...	8RA 013 403-...
CLEARANCE LAMPS	
	2XS 013 327-...
SIDE MARKER LAMPS	
2PS 013 305/6-... 2PS 013 305-... 2PS 013 307-... 2PS 013 307-...	2PS 013 300/2-... 2PS 013 300-... 2PS 013 303-... 2PS 013 303-...
	2PS 013 301/2-... 2PS 013 301-... 2PS 013 304-... 2PS 013 304-...

REAR

Style	Tech
POSITION LAMPS	
2SA 013 324-...	2SA 013 323-...
TAIL-STOP LAMPS	
2SB 013 342-... 2SB 013 342-... 2SB 013 399-...* 2SB 013 399-...* 2SB 013 343-... 2SB 013 343-...	2SB 013 341-...
DIRECTION INDICATORS	
 2BA 013 331-... 2BA 013 331-... 2BA 013 331-... 2BA 013 331-... 2BA 013 333-... 2BA 013 333-...	2BA 013 330-... 2BA 013 330-...
2BA 013 332-...* 2BA 013 332-...*	
TAIL-STOP-DIRECTION INDICATOR LAMPS	
2SD 013 342-... 2SD 013 342-...	2SD 013 341-...
REVERSE LAMPS	
2ZR 013 345-... 2ZR 013 345-... 2ZR 013 401-... 2ZR 013 401-... 2ZR 013 401-...	2ZR 013 344-...
REAR FOG LAMPS	
2NE 013 345-... 2NE 013 345-... 2NR 013 345-... 2NR 013 345-... 2NE 013 343-... 2NE 013 343-... 2NE 013 343-...	2NE 013 344-... 2NR 013 344-...
REFLEX REFLECTOR	
8RA 013 402-... 8RA 013 347-...	8RA 013 403-...

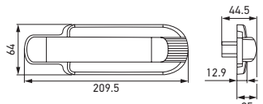
* PWM/AAG compatible and with MD12 (ECE).

Side lighting

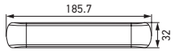
Every day, side marker lamps contribute towards road safety because it is these markings that make it easy to detect the entire vehicle: even in the dark.

The side marker lamps from FORVIA HELLA offer you durability, a high luminosity and quick installation or mounting.

DIRECTION INDICATORS

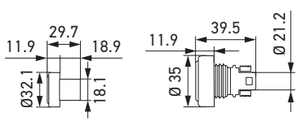


With bezel

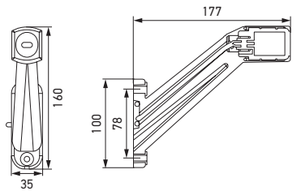


Without bezel

LED auxiliary direction indicator lamp, Cat. 6	
LED, for horizontal surface mounting, lens: clear, can be used with or without frame	
Operating voltage range	Single-voltage (9 – 16 V or 16 – 32 V)
Protection class	IP 6K9K
Approved	ECE R6, ECE R10 (for -011, -051)
	With black bezel, direct screw connection
2BM 011 788-011	12 V, with 2-pin AMP SUPERSEAL
2BM 011 788-001	24 V, with 2-pin AMP SUPERSEAL
2BM 011 788-021	24 V, with 500 mm cable with open ends
	Without bezel, self-adhesive
2BM 011 788-051	12 V, with 2-pin AMP SUPERSEAL
2BM 011 788-041	24 V, with 2-pin AMP SUPERSEAL
2BM 011 788-061	24 V, with 500 mm cable with open ends



LED auxiliary direction indicator lamp, Cat. 5	
LED, for flush mounting, lens: amber, screwed, with 2-pin AMP SUPERSEAL	
Operating voltage range	Single-voltage (9 – 16 V)
Protection class	IP 6K6K
Approved	ECE-R7
2BM 340 825-211	12 V, rubber housing
2BM 340 825-311	12 V, plastic housing



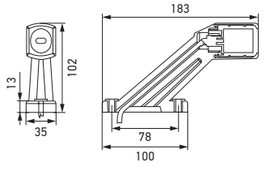
LED rubber arm clearance lamp

LED, with integrated side marker lamp, for surface mounting, vertical installation

Rated voltage	12 V and 24 V
Protection class	IP 6K9K
Approved	ECE-R7, ECE-R91, ECE-R10, ADR / GGVSEB

2XS 011 744-101	EasyConn 2-pin Female connector housing, right, with 500 mm cable
2XS 011 744-111	EasyConn 2-pin Female connector housing, left, with 500 mm cable
2XS 011 744-071	Quicklink connector, left, with 500 mm cable
2XS 011 744-081	Quicklink connector, right, with 500 mm cable
2XS 011 744-051	AMP SUPERSEAL connector, left, with 2,000 mm cable
2XS 011 744-061	AMP SUPERSEAL connector, right, with 2,000 mm cable
2XS 011 744-031	Flat receptacle 6.3 mm, left, with 3,000 mm cable
2XS 011 744-041	Flat receptacle 6.3 mm, right, with 3,000 mm cable

Other variants available on request.



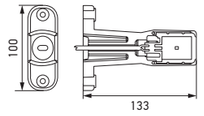
LED rubber arm clearance lamp

LED, with integrated side marker lamp, for surface mounting, horizontal installation

Rated voltage	12 V and 24 V
Protection class	IP 6K9K
Approved	ECE-R7, ECE-R91, ECE-R10, ADR / GGVSEB

2XS 011 769-011	EasyConn 2-pin Female connector housing, left, with 500 mm cable
2XS 011 769-021	EasyConn 2-pin Female connector housing, right, with 500 mm cable
2XS 011 769-091	Quicklink connector, left, with 670 mm cable
2XS 011 769-101	Quicklink connector, right, with 670 mm cable

Other variants available on request.



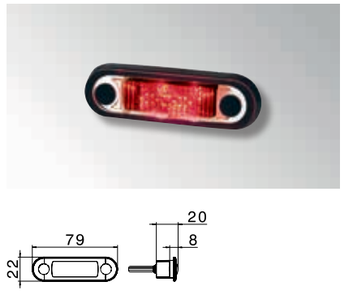
LED rubber arm clearance lamp

LED, with integrated side marker lamp, for surface mounting, short version

Rated voltage	12 V and 24 V
Protection class	IP 6K9K
Approved	ECE-R7, ECE-R91, ECE-R10, ADR / GGVSEB

2XS 011 768-021	EasyConn 2-pin Female connector housing, with 500 mm cable
2XS 011 768-001	Quicklink connector, with 500 mm cable
2XS 011 768-031	AMP SUPERSEAL connector, with 2,000 mm cable
2XS 011 768-061	Flat receptacle 6.3 mm, right, with 3,000 mm cable
2XS 011 768-071	Flat receptacle 6.3 mm, left, with 2,000 mm cable
2XS 011 768-117	DEUTSCH DT connector, 2-pin, with 485 mm cable

Other variants available on request.

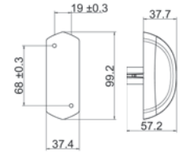


LED clearance lamp

LED, for horizontal or vertical flush mounting, lens; clear, can be used as clearance or tail lamp

Operating voltage range	Multi-voltage (8 – 28 V)
Protection class	IP 6K6, IP 6K7
Approved	ECE-R7, ECE-R10, ADR / GGVSEB

2XA 959 790-401	500 mm cable, with caps
2XA 959 790-411	5,000 mm cable, with caps



LED clearance lamp

LED, position light, with black base plate, lens: red/clear, for vertical surface mounting

Rated voltage	12 V or 24 V
Protection class	IP 6K9K
Approved	ECE-R7, ADR / GGVSEB

2XS 205 020-001	12 V screw mounting, AMP SUPERSEAL
2XS 205 020-041	12 V screw mounting, 500 mm cable
2XS 205 020-121	12 V, rubber pendulum, AMP SUPERSEAL
2XS 205 020-011	24 V screw mounting, AMP SUPERSEAL
2XS 205 020-051	24 V screw mounting, 500 mm cable
2XS 205 020-131	24 V, rubber pendulum, AMP SUPERSEAL

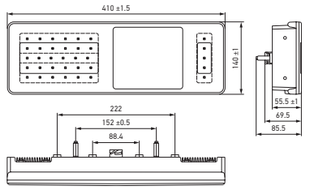
Rear lighting

You can be confident when next deploying your municipal and special vehicles. Rear lamps from FORVIA HELLA impress with their clear design and top quality, and they guarantee optimum visibility of your vehicle. In this particular area, manufacturers are making ever greater use of the many options that offer LEDs combined with optical systems. Our rear combination lamps also contribute towards a vehicle's branding and visual appearance.

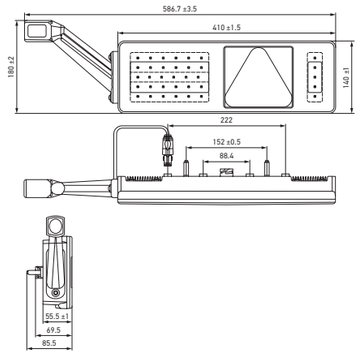
When you select our product highlights, you will be making the perfect choice. Our many years of development experience in this area will make sure of that.

MULTI-FUNCTION LAMPS

Go to the product video



Truck version

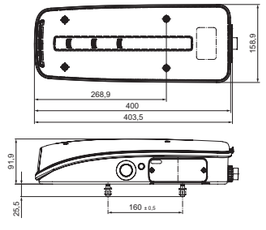


Trailer version

Full-LED rear lamp 340 970

LED, tail light, stop light, direction indicator light, reverse light and rear fog light, reflex reflector, housing: PC-ABS, external lens: polycarbonate (PC), with M8 fastening bolt, central 7-pin DIN bayonet connector, 2-pin AMP SUPERSEAL connector for auxiliary lighting functions

Operating voltage range	Single-voltage (18 – 32 V)
Protection class	IP 6K9K
Approved	ECE-R148, ECE-R150, ECE-R10, ADR / GGVSEB
	1) Truck version, left / right, without rubber arm
2VP 340 970-701	24 V, direction indicator light flashing
2VP 340 970-711	24 V, direction indicator light wiping
	2) Trailer version, with rubber arm
2VP 340 970-031	24 V, direction indicator light flashing, left
2VP 340 970-041	24 V, direction indicator light flashing, right
2VP 340 970-331	24 V, direction indicator light wiping, left, with electronics for flashing side marker lamps
2VP 340 970-341	24 V, direction indicator light wiping, right, with electronics for flashing side marker lamps
2VP 340 970-431	24 V, direction indicator light flashing with load simulation (direction indicator light and stop light), left, with electronics for flashing side marker lamps
2VP 340 970-441	24 V, direction indicator light flashing, with load simulation (direction indicator light and stop light), right, with electronics for flashing side marker lamps
2VP 340 970-531	24 V, direction indicator light wiping, with load simulation (direction indicator light and stop light), left, with electronics for flashing side marker lamps
2VP 340 970-541	24 V, direction indicator light wiping, with load simulation (direction indicator light and stop light), right, with electronics for flashing side marker lamps

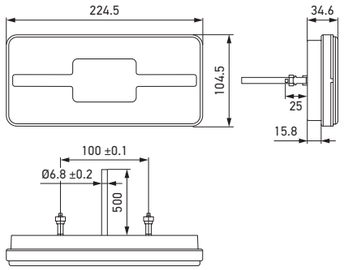


Full-LED rear lamp

LED, tail light, stop light, direction indicator light, reverse light, rear fog light, side marker and licence plate light, DIN (bayonet) centred at the rear, 152 mm hole pattern, lens optics: Glowing Body C optics, fully metallised reflector, wiping direction indicator light

Operating voltage range	Single-voltage (18 – 32 V)
Protection class	IP 5K4K, IP X9K
Approved	ECE-R10, ECE-R148, ADR / GGVSEB
2VD 012 381-351	24 V, left, integrated licence plate light
2VP 012 381-361	24 V, right
2VP 012 381-381	24 V, right, integrated backup and warning alarm
	Spare parts
9EL 208 551-001	Lens

Go to the product video

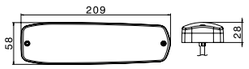


Compact full-LED rear lamp 328 630

LED, tail light, stop light, direction indicator light, reverse light and rear fog light, including reflex reflector, tail light with "Glowing Body" technology, wiping direction indicator light, external lens: polycarbonate

Operating voltage range	Multi-voltage (9 – 32 V)
Protection class	IP 6K9K
Approved	ECE-R148, ECE-R10, ADR / GGVSEB
2VP 328 630-011	Horizontal, surface mounting side on right or left*, with wiping direction indicator light, 500 mm cable with open ends
2VP 328 630-031	Horizontal, surface mounting side on right or left*, with wiping direction indicator light, 150 mm cable and AMP SUPERSEAL connector
2VP 328 630-041	Horizontal, surface mounting side right or left*, with wiping direction indicator light, 280 mm cable and DEUTSCH DT connector
2VP 328 630-021	Vertical, surface mounting side on right or left, with flashing direction indicator light, 500 mm cable with open ends

* The lamp can be rotated 180°, making it suitable for left or right surface mounting.



LED rear lamp LeanLED

LED, tail light, stop light, direction indicator light, with pulse for direction indicator failure control, lens: clear, for horizontal or vertical surface mounting

Operating voltage range	Multi-voltage (9 – 32 V)
Protection class	IP 6K9K
Approved	ECE-R10, ECE-R148
2SD 343 910-001	With 500 mm cable and open ends
2SD 343 910-027	With integrated 4-pin AMP connector
2SD 343 910-057	With 100 mm cable and 4-pin DEUTSCH DT connector

DISCOVER ...

... the Compact full-LED rear lamp.

ROBUST AND COMPACT DESIGN FOR TOUGH DEMANDS

Safety features can look this good: the compact full-LED rear lamp 328 630 offers fascinating new design options and five light functions that are 100 per cent based on reliable LED technology. In addition to its compact design, the full-LED rear lamp impresses with its robust design, which can cope with the highest demands.

TAIL LIGHT IN "GLOWING BODY" TECHNOLOGY

The tail light of the full LED rear lamp, which consists of two flat, homogeneous light strips, is a real eye-catcher.

SAFETY IN STYLE

Tail light

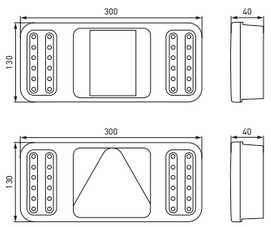
Stop light

Reverse light

Rear fog light

Direction indicator light

MULTI-FUNCTION LAMPS



Full-LED rear lamp Coluna

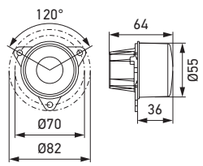
LED, tail light, stop light, direction indicator light, rear fog light and reverse light, with rectangular or triangular reflex reflector, horizontal or vertical surface mounting (with triangular reflex reflector only horizontal)

Operating voltage range	Single-voltage (9 – 16 V or 18 – 32 V)
Protection class	IP 6K9K
Approved	ECE-R10, ECE-R148, ADR / GGVSEB

	12 V version for trucks with rectangular reflex reflector
2VP 345 900-401	With pulse*, front mounting, 500 mm cable with open ends
2VP 345 900-441	With pulse*, front mounting, 3,000 mm cable with 6.3 mm flat receptacles
2VP 345 900-421	With pulse*, rear mounting, 500 mm cable with open ends
2VP 345 900-461	With pulse*, rear mounting, 3,000 mm cable with 6.3 mm flat receptacles
2VP 345 900-411	Without pulse*, front mounting, 500 mm cable with open ends
2VP 345 900-451	Without pulse*, front mounting, 3,000 mm cable with 6.3 mm flat receptacles
2VP 345 900-431	Without pulse*, rear mounting, 500 mm cable with open ends
2VP 345 900-471	Without pulse*, rear mounting, 3,000 mm cable with 6.3 mm flat receptacles
	24 V version for trucks with rectangular reflex reflector
2VP 345 900-201	With pulse*, front mounting, 500 mm cable with open ends
2VP 345 900-241	With pulse*, front mounting, 3,000 mm cable with 6.3 mm flat receptacles
2VP 345 900-221	With pulse*, rear mounting, 500 mm cable with open ends
2VP 345 900-261	With pulse*, rear mounting, 3,000 mm cable with 6.3 mm flat receptacles
2VP 345 900-281	With pulse*, rear mounting, 250 mm cable with bayonet closure and 7-pin AMP connector
2VP 345 900-211	Without pulse*, front mounting, 500 mm cable with open ends
2VP 345 900-251	Without pulse*, front mounting, 3,000 mm cable with 6.3 mm flat receptacles
2VP 345 900-231	Without pulse*, rear mounting, 500 mm cable with open ends
2VP 345 900-271	Without pulse*, rear mounting, 3,000 mm cable with 6.3 mm flat receptacles

* For direction indicator failure control

REAR LAMP MODULES

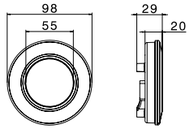


LED rear lamp 55 mm

LED, tail light, stop light, direction indicator light, rear fog light or reverse light, for flush mounting, lens: clear with pattern, 500 mm cable with open ends, passive electronics (except: -021, -031, -431: active electronics)

Rated voltage	12 V or 24 V
Protection class	IP 6K9K
Approved	ECE-R10 ECE-R7 (2SA 011 172-041 / -441, 2DA 011 172-061 / -461), ECE-R6 (2BA 011 172-021 / -421 / -031 / -431), ECE-R38 (2NE 011 172-081 / -481), ECE-R23 (2ZR 011 172-101/ -501)

2SA 011 172-041	12 V, tail lamp
2SA 011 172-441	24 V, tail lamp
2DA 011 172-061	12 V, stop lamp
2DA 011 172-461	24 V, stop lamp
2BA 011 172-021	12 V, direction indicator, without pulse for direction indicator failure control
2BA 011 172-421	24 V, direction indicator, without pulse for direction indicator failure control
2BA 011 172-031	12 V, direction indicator, with pulse for direction indicator failure control
2BA 011 172-431	24 V, direction indicator, with pulse for direction indicator failure control
2NE 011 172-081	12 V, rear fog lamp
2NE 011 172-481	24 V, rear fog lamp
2ZR 011 172-101	12 V, reverse lamp
2ZR 011 172-501	24 V, reverse lamp

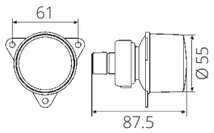


LED ring modules 98 mm

LED, tail light, tail/stop light, position light or reflex reflector, for flush mounting, lens: clear

Rated voltage	12 V or 24 V
Protection class	IP 5K9K
Approved	ECE R7, ECE R3 (only 8RA 008 405-001)

2SA 008 405-021[1)]	Tail lamp, 12 V
2SA 008 405-011[1)]	Tail lamp, 24 V
2SB 008 405-101[1)]	Tail-stop lamp, 12 V
2SB 008 405-091[1)]	Tail-stop lamp, 24 V
8XU 008 405-031[2)]	Chromium-plated cover
8RA 008 405-001[3)]	Reflex reflector

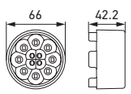


Rear lamp 55 mm

Halogen, for flush mounting

Rated voltage	12 V or 24 V
Approved	ECE-R7 (2SA 008 221-127, 2XA 008 221-021, 2DA 008 221-167) ECE-R38 (2NE 008 221-031 / -137) ECE-R6 (2BA 008 221-041 / -147) ECE-R23 (2ZR 008 221-051 / -157)
Compliant	SAE*
	Lens: red
2SA 008 221-127	Tail lamp, with mounted 12 V/5 W bulb, ECE
2XA 008 221-021	Tail lamp or stop lamp, without bulb, ECE
2DA 008 221-167	Stop lamp, with mounted 12 V/21 W bulb, ECE
2NE 008 221-031	Rear fog lamp, without bulb, ECE
2NE 008 221-137	Rear fog lamp, with mounted 12 V/21 W bulb, ECE
	Lens: grey
2BA 008 221-041	Direction indicator, without bulb, ECE
2BA 008 221-147	Direction indicator, with mounted amber 12 V/21 W bulb, ECE
2ZR 008 221-051	Reverse lamp, without bulb, SAE
2ZR 008 221-157	Reverse lamp, with mounted 12 V/21 W bulb, SAE
	Accessories
8KA 152 134-007	Wiring harness with grommet
9GT 137 236-007	Grommet separate

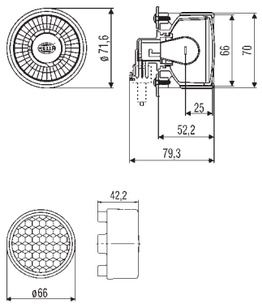
* SAE: For vehicles < 2,032 mm width and > 2,031 mm width



LED rear lamp 66 mm

LED, housing: APEC plastic, lens: clear, can be mounted from behind or from the front (with optional adapter ring), AMP connector

Rated voltage	12 V and 24 V
Protection class	IP 5K9K
Approved	ECE-R10, CCC ECE-R7 (2SB 009 001-401) ECE-R6 (2BA 009 001-411 /-431)
Compliant	SAE
2SB 009 001-401	Tail-stop lamp
2BA 009 001-411	Tail lamp, without pulse
2BA 009 001-431	Tail lamp, with pulse



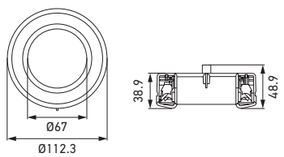
Macro reflex reflector

Rear lamps 66 mm

Halogen, housing: APEC plastic, with mounted bulbs, including design ring, for flush mounting

Rated voltage	12 V or 24 V
Protection class	IP 5K9K
Approved	ECE-R7 (2DA 009 001-057 / -147, 2SA 009 001-137, 2SB 009 001-067 / -157) ECE-R38 (2NE 009 001-027 / -127) ECE-R6 (2BA 009 001-007 / -191 / -107) ECE-R23 (2ZR 009 001-017 / -117)
Compliant	SAE*
	Lens: red
2DA 009 001-057[1)]**	12 V, stop lamp, ECE
2DA 009 001-147[1)]**	24 V, stop lamp, ECE
2SA 009 001-137[1)]**	24 V, tail lamp, ECE
2SB 009 001-067[1)]**	12 V, tail-stop lamp, ECE
2SB 009 001-157[1)]**	24 V, tail-stop lamp, ECE
2NE 009 001-027[1)]	12 V, rear fog lamp, ECE, SAE
2NE 009 001-127[1)]	24 V, direction indicator with ECE approval for double lamps
8RA 009 001-037[4)]	12 V, Macro reflex reflector, ECE, SAE
	Lens: grey
2BA 009 001-007[2)]**	12 V, direction indicator, ECE
2BA 009 001-191[3)]**	12 V, direction indicator, with Silver Vision bulb, ECE
2BA 009 001-107[2)]**	24 V, direction indicator, ECE
2ZR 009 001-017[3)]	12 V, reverse lamp, ECE, SAE
2ZR 009 001-117[3)]	24 V, reverse lamp, ECE, SAE

* SAE: For vehicles < 2,032 mm width and > 2,031 mm width
** ECE approval as double lamps.

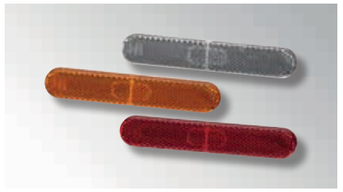


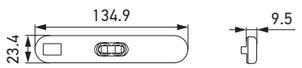
LED rear lamp ring module 112 mm

LED, tail-stop light, innovative EdgeLight technology, mounting by means of 3 x PT4 screws and adapter ring, 250 mm cable with 3-pin AMP SUPERSEAL connector

Rated voltage	12 V or 24 V
Protection class	IP 6K9K
Approved	ECE-R10, ECE-R7
2SB 009 362-301	12 V, red lens
2SB 009 362-311	12 V, clear lens
2SB 009 362-321	24 V, red lens
2SB 009 362-331	24 V, clear lens

REFLEX REFLECTOR

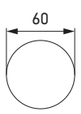




Reflex reflector

For horizontal or vertical surface mounting, self-adhesive

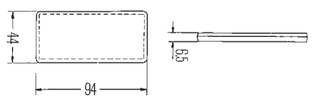
Approved	ECE-R3
8RA 009 226-137	Red
8RA 009 226-127	Amber
8RA 009 226-117	White



Reflex reflector

Self-adhesive, effective reflecting surface 22 cm², with plastic base plate

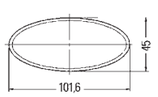
Approved	ECE-R3
8RA 002 014-281	Red
8RA 002 014-301	Amber
8RA 002 014-291	White



Reflex reflector

For horizontal or vertical surface mounting, self-adhesive, effective reflecting surface 29 cm², with plastic base plate

Approved	ECE-R3
8RA 003 326-031	Red
8RA 003 326-041	Amber
8RA 003 326-051	White

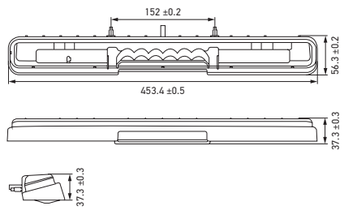


Reflex reflector

For horizontal or vertical surface mounting, self-adhesive

Approved	ECE-R3
8RA 343 160-007	Red
8RA 343 160-027	Amber
8RA 343 160-017	White

LICENCE PLATE LAMPS



LED licence plate module with rear fog light 340 980

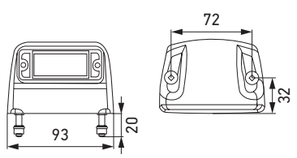
LED, licence plate and rear fog light, for central positioning at rear of vehicle, screw mounting, 3-pin AMP SUPERSEAL

Operating voltage range	Single-voltage (9 – 16 V or 18 – 32 V)
Protection class	IP 6K9K, IP 6K7
Approved	ECE-R10, ECE-R148
2NE 340 980-017	12 V, white housing, 175 mm cable
2NE 340 980-007	24 V, black housing, 1,600 mm cable

Licence plate holder with integrated LED licence plate lamp 329 280

LED, licence plate light, housing: PMMA / PC/ PP, screw fixing (screws not included in scope of delivery), 2-pin AMP SUPERSEAL, 1,500 mm cable

Operating voltage range	Single-voltage (18 – 32 V)
Protection class	IP 5K9K
Approved	ECE-R148, ECE-R10, ADR / GGVSEB
Compliant	CISPR 25 Class 3
2KA 329 280-017	Licence plate light

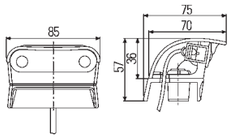


LED licence plate lamp

LED, for surface mounting left and right, screw fixing

Operating voltage range	Multi-voltage (9 – 32 V)
Protection class	IP 5K9K
Approved	ECE-R3, ECE-R10, ADR / GGVSEB
2KA 012 271-031	6.3 mm flat receptacles with 2,000 mm cable
2KA 012 271-041	Quick Link connector with 500 mm cable
2KA 012 271-051	EasyConn connector (straight) with 500 mm cable
2KA 012 271-071	EasyConn connector (2-pin 90°) with 1,300 mm cable
2KA 012 271-081	AMP SUPERSEAL connector (overmoulded), with 2,000 mm cable

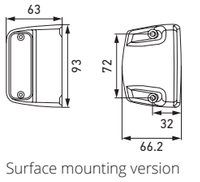
LICENCE PLATE LAMPS



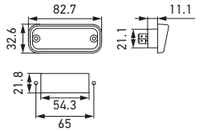
LED licence plate lamp

LED, for surface mounting left and right, 2,500 mm cable

Operating voltage range	Multi-voltage (9 – 32 V)
Protection class	IP 6K6, IP 6K7
Approved	ECE-R4, ECE-R10, ADR / GGVSEB
2KA 959 640-601	Licence plate lamp



Surface mounting version



Flush mounting version

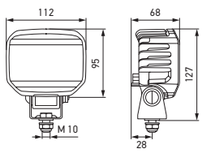
LED licence plate lamp

LED, flush mounting or surface mounting, 6.3 mm flat connector

Operating voltage range	Single-voltage (9 – 16 V or 16 – 32 V)
Protection class	IP 6K9K
Approved	ECE-R4, ECE-R10, ADR / GGVSEB
	Licence plate size 520 x 120 mm
2KA 010 278-311[2)]	12 V, flush mounting*, with bezel and 6.3 x 0.8 mm flat receptacles
2KA 010 278-011[2)]	24 V, flush mounting*, with bezel and 6.3 x 0.8 mm flat receptacles
2KA 010 278-321[1)]	12 V, surface mounting**, with housing and 6.3 x 0.8 mm flat receptacles
2KA 010 278-021[1)]	24 V, surface mounting**, with housing and 6.3 x 0.8 mm flat receptacles
	Large licence plate 340 x 240 mm or 280 x 200 mm
2KA 010 278-411[2)]	12 V, flush mounting*, with bezel and 6.3 x 0.8 mm flat receptacles
2KA 010 278-421[1)]	12 V, surface mounting**, with housing and 6.3 x 0.8 mm flat receptacles
2KA 010 278-121[1)]	24 V, surface mounting**, with housing and 6.3 x 0.8 mm flat receptacles

* 2 lamps required above the licence plate.
** 1 lamp required to the right or left of the licence plate.

REVERSE LAMPS

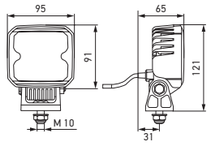


Power Beam 1000 compact reverse lamp

LED, close-range illumination, 5,000 K, 1,000 lm, 12 W, housing: impact-resistant plastic, lens: plastic, upright and pendant surface mounting, DEUTSCH DT connector

Operating voltage range	Multi-voltage (10.5 – 32 V)
Protection class	IP 6K9K, IP 6K7
Approved	ECE-R23, ECE-R10, ADR / GGVSEB
Compliant	RCM
2ZR 996 188-521	Reverse lamp

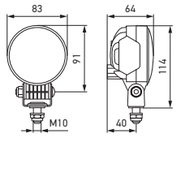
REVERSE LAMPS



Q90 LED compact reverse lamp

LED, close-range illumination, 5,000 K, 1,200 lm, 15 W, housing: heat-conductive plastic, bracket: plastic, lens: plastic, surface mounting upright and pendant

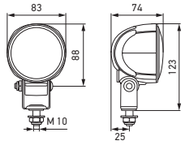
Operating voltage range	Multi-voltage (9 – 33 V)
Protection class	IP 6K7, IP 6K9K
Approved	ECE-R23, ECE-R10, ADR / GGVSEB (2ZR 996 284-511)
2ZR 996 284-501	2,000 mm cable
2ZR 996 284-511	500 mm cable, DEUTSCH DT connector



Module 70 S-series reverse lamp

LED, extra-wide illumination, 5,000 K, Ø 1,150 lm, Ø 11.2 W (12 V), Ø 11.6 W (24 V), housing: plastic, lens: plastic, bracket: stainless steel, upright and pendant surface mounting, DEUTSCH DT connector

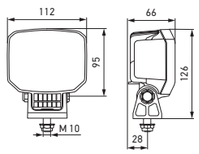
Operating voltage range	Multi-voltage (9 – 32 V)
Protection class	IP 6K7, IP 6K9K
Approved	ECE-R10, ECE-R148, ADR / GGVSEB
Compliant	RCM, CISPR 25 Class 5 (12 V) and Class 4 (24 V)
2ZR 996 776-501	Reverse lamp



Module 70 LED Generation 3 reverse lamp

LED, extra-wide illumination, 5,000 K, 800 lm, 13 W, housing: grey powder-coated aluminium, upright and pendant surface mounting, 2,000 mm cable

Operating voltage range	Multi-voltage (9 – 32 V)
Protection class	IP 6K7, IP 6K9K
Approved	ECE-R10, ECE-R23
2ZR 996 376-091	Reverse lamp



Power Beam S-series reverse lamp

LED, extra-wide illumination, 5,000 K, Ø 1,150 lm, Ø 11.2 W (12 V) and Ø 11.6 W (24 V), housing: plastic, lens: plastic, bracket: glass-fibre reinforced plastic, upright and pendant surface mounting, DEUTSCH DT connector

Operating voltage range	Multi-voltage (9 – 32 V)
Protection class	IP 6K7, IP 6K9K
Approved	ECE-R10, ECE-R148, ADR / GGVSEB
Compliant	RCM, CISPR 25 Class 5 (for 12 V), CISPR 25 Class 4 (for 24 V)
2ZR 996 588-501	Reverse lamp

Interior lighting

FORVIA HELLA offers interior lighting for various vehicle applications and vehicle types. Thanks to the constantly increasing performance of white and coloured LEDs, new applications are becoming possible – not only in the functional sector, but also in the decorative sector of interior lighting.

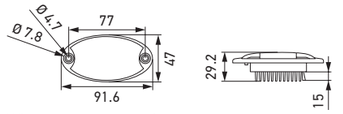
The extremely low power consumption compared with bulbs and the almost unlimited service life of the lamps are, of course, decisive arguments in favour of using this modern technology.

CEILING AND STEP LAMPS

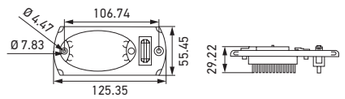
LED interior lamp

LED, surface mounting, illuminance in 1 m: 160 lx

Operating voltage range	Single-voltage (10.8 – 15 V or 21.6 – 30 V)
Protection class	IP 40
Colour temperature	4,000 K (neutral white)
Temperature range	- 40 °C to +60 °C
2JA 007 373-301	12 V, with switch
2JA 007 373-321	12 V, without switch
2JA 007 373-311	24 V, with switch
2JA 007 373-331	24 V, without switch



Without bezel and switch

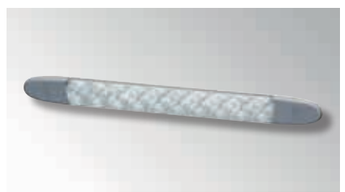


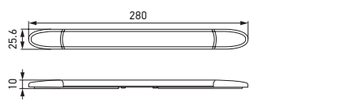
With bezel and switch

LED interior lamp Mini OvalLED

LED, housing: black, made of impact-resistant and UV-resistant plastic (ABS), lens: crystal-clear Plexiglas (PMMA), screw mounting or flush mounting, 150 mm cable, illuminance in 1 m: Standard 14.5 lx, Power 54 lx

Operating voltage range	Single-voltage (9 – 16 V or 16 – 32 V)
Protection class	IP 6K9K (without bezel), IP 40 (with bezel)
Colour temperature	5,400 K (white)
Temperature range	- 40 °C to +60 °C
	Without bezel and switch
2JA 343 570-011	12 V, ambient lighting red, Power (G-LEDs)
2JA 343 570-117	12 V, ambient lighting blue, Power (G-LEDs)
2JA 343 570-001	24 V, ambient lighting red, Power (G-LEDs)
	With bezel and switch
2JA 343 570-051	12 V, ambient lighting red, Power (G-LEDs)
2JA 343 570-157	12 V, ambient lighting blue, Power (G-LEDs)
2JA 343 570-041	24 V, ambient lighting red, Power (G-LEDs)
2JA 343 570-061	24 V, ambient lighting red, Standard (E-LEDs)

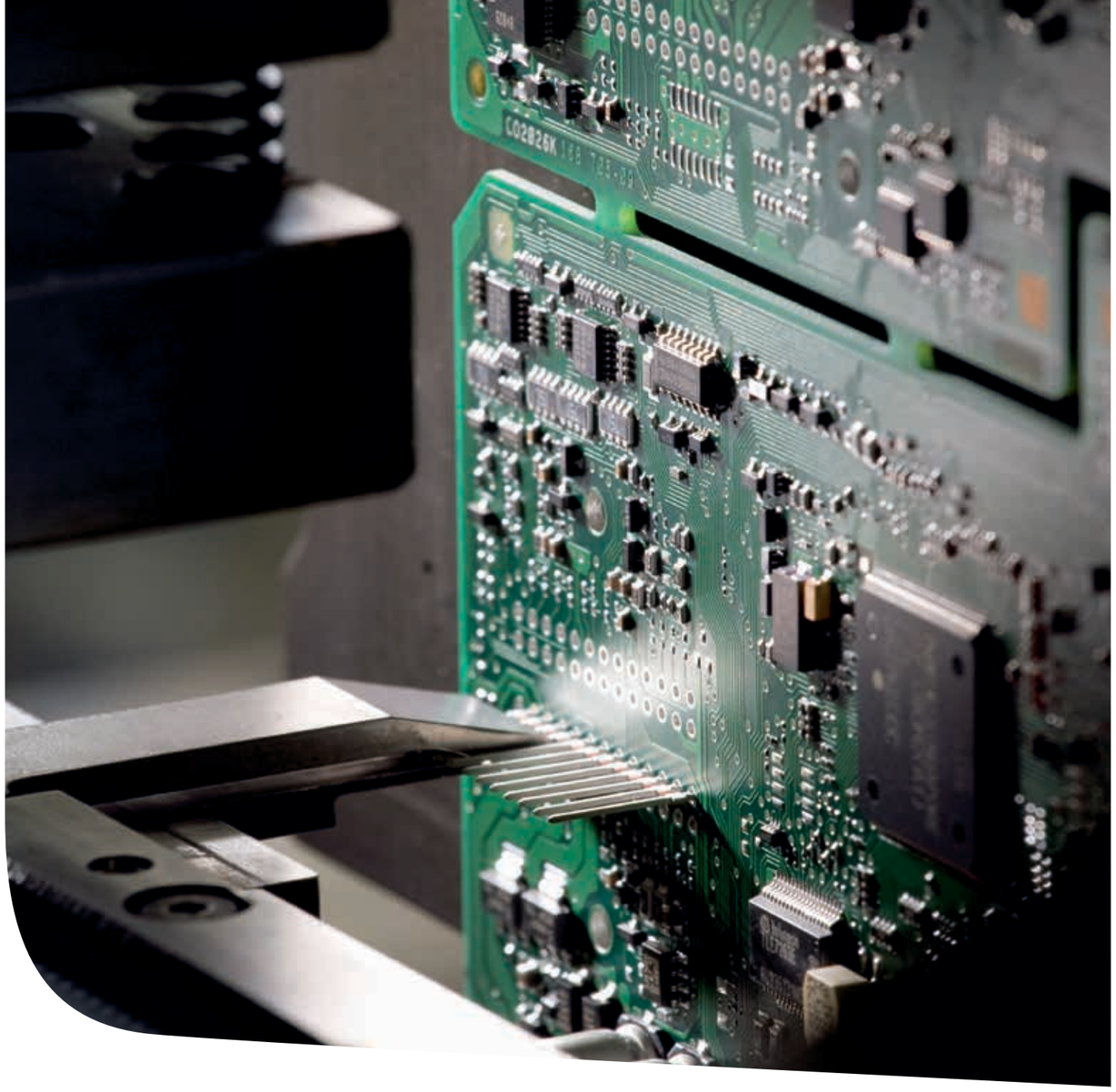




LED interior lamp

LED, housing: plastic (ABS), lens: clear plastic, surface mounting, permanently bonded to grey base plate, 1,000 mm cable

Operating voltage range	Single-voltage (9 – 16 V or 16 – 32 V)
Protection class	IP 6K9K
Colour temperature	4,000 K (neutral white)
Temperature range	- 40 °C to +60 °C
2JA 343 606-001	12 V, white light colour, grey housing colour
2JA 343 606-011	24 V, white light colour, grey housing colour



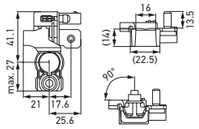
Electrics & Electronics

FORVIA HELLA is one of the first ports of call in the global supplier industry not just for lighting technology but also for electronic components.

One thing all our products have in common is that their quality and performance are carefully optimised to meet our customers' specific requirements.

The FORVIA HELLA electronic components have proved their worth millions of times over – and indeed frequently under adverse conditions. We develop high-quality, customised solutions to increase energy efficiency, to minimise CO_2 emissions and to improve safety and comfort.

ENERGY MANAGEMENT



Intelligent battery sensor (IBS), Global (Generation 2)

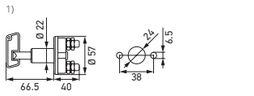
Accurate measurement of battery condition parameters: voltage, current and temperature, determining of parameters regarding condition of the battery, i.e. state of charge (SOC), state of health (SOH) and state of function (SOF). Simple electrical and mechanical integration.

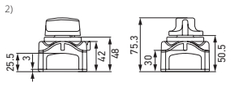
Operating voltage range	Single-voltage (6 – 18 V)
Rated voltage	12 V
Operating temperature	-40 °C to +105 °C
Max. battery capacity	500 Ah
Protection class	IP 6K9K
Continuous load current*	± 175 A
Maximum current* **	1,500 A

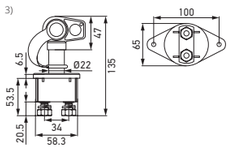
6PK 013 824-001	IBS 12 V, Generation II
9MK 230 836-007	Battery pole adapter for IBS 12 V, Generation II

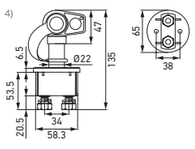
* Condition typical: Ta ≤ 105 °C; Ub = 14 V, ground cable typical: 35 mm². Other configurations on request.
** Approved for max. 500 ms.

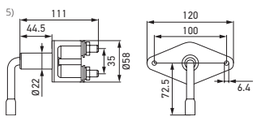
LIGHTING AND BODY COMPONENTS









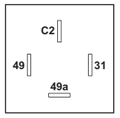


Battery isolator switch

With key, for battery and ignition current, switch key can be removed in the off position (except -071 variant), mounted using 2 M10 x 1.5 screw connections.

6EK 002 843-002[1)]	24 V / 50 A, IP X2
6EK 002 843-013[1)]	24 V / 100 A, IP X2 (connection side), IP X4 (key side), UL-certified
6EK 002 843-051[1)]	24 V / 150 A, IP X2 (connection side), IP X4 (key side)
6EK 002 843-071[2)]	24 V / 275 A, IP 56
6EK 002 843-111[3)]	24 V / 250 A, IP 69K
6EK 002 843-121[3)]	32 V / 500 A, IP 65
6EK 002 843-151[3)]	24 V / 250 A, 50x switching under load, IP 69K
6EK 002 843-131[4)]	24 V / 250 A, IP 69K
6EK 002 843-141[4)]	24 V / 250 A, 50x switching under load, IP 69K
6EK 001 559-001[5)]	24 V / 100 A, IP 56 (connection side), IP X4 (key side)

1)



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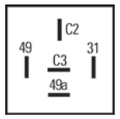


LED flasher unit

For controlling direction indicators in accordance with ISO 13207-1. For vehicles with 12 V and 24 V vehicle electrical system voltage. Any combination of bulbs and ISO LED lamps possible. Suitable for additional operation of trailer direction indicators.

Operating voltage range	Single-voltage (10.5 – 15 V or 18 – 32 V)
Rated voltage	12 V or 24 V
Operating temperature	- 40 °C to +85 °C
Protection class	IP 5K4

4DW 009 492-111[1)]	12 V, 3+1
4DN 009 492-101[2)]	12 V, 2+1+1
4DW 009 492-011[1)]	24 V, 3+1
4DM 009 492-001[1)]	24 V, 2+1

LED lamp control unit

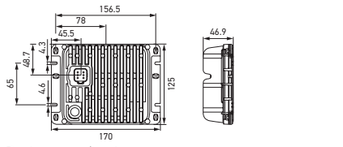
For connecting LED lamps to conventional light control units.

Basic control unit: for the statutory direction indicator failure control.

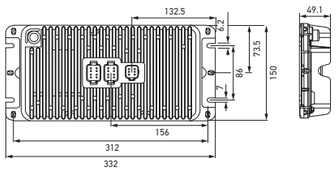
Premium control unit: for monitoring the direction indicators and stop lamps. Highest compatibility by simulating the bulb characteristics.

Operating voltage range	Single-voltage (9 – 16 V or 18 – 32 V)
Current consumption	Min. 1.4 A (12 V), 0.78 A (24 V) Max. 2 A (12 V), 0.9 A (24 V)
Rated voltage	12 V or 24 V
Operating temperature	- 40 °C to +50 °C
Protection class	IP 6K9K

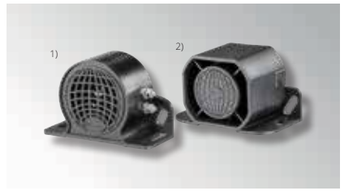
	Basic control unit
5DS 227 488-001	12 V, with 6-pin socket housing
5DS 227 488-101	24 V, with 6-pin socket housing
	Premium control unit
5DS 227 489-101	24 V, with 8-pin socket housing, 1 stop light channel



Basic control unit



Premium control unit



1)

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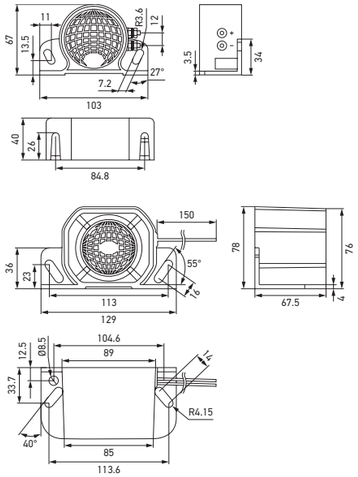


Backup and warning alarm BM10 and BM30

Penetrating, long-range alarm sound. Housing of glass-fibre reinforced nylon with integrated mounting bracket (BM30). Insulated electronics with epoxy to protect against rust, moisture and vibrations. Various options for sound pressure level for town traffic and construction environments. Optionally available with automatic adjustment to environments with changing sound levels.

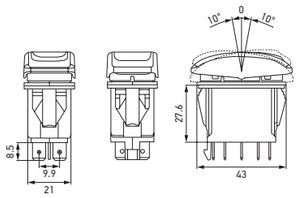
Operating voltage range	BM10: Multi-voltage (9 – 48 V), BM30: Multi-voltage (12 – 48 V)
Rated voltage	12 V and 24 V
Frequency range	700 – 2,800 Hz
Power consumption	12 W
Current consumption	Max. 0.6 A
Operating temperature	-40 °C to +85 °C
Protection class	IP 6K7
Lifetime	100 h (SAE J994)
Housing material	BM10: ABS, BM30: glass-fibre reinforced nylon
Approved	ECE-R10
Compliant	SAE J994

	BM10[1)]
3SL 009 148-177	With 2 screws, 97 dB(A) @ 1.2 m
3SL 009 148-187	With 2 screws, 107 dB(A) @ 1.2 m
3SL 009 148-197	140 mm cable with DEUTSCH DT connector, 97 dB (A) @ 1.2 m
3SL 009 148-207	140 mm cable with DEUTSCH DT connector, 107 dB (A) @ 1.2 m
	BM30[2)]
3SL 996 139-217	150 mm cable, 97 dB (A) @ 1.2 m
3SL 996 139-227	150 mm cable, 107 dB (A) @ 1.2 m
3SL 996 139-237	150 mm cable, 112 dB (A) @ 1.2 m
3SL 996 139-247	140 mm cable with DEUTSCH DT connector, 107 dB (A) @ 1.2 m
3SL 996 139-257	140 mm cable with DEUTSCH DT connector, 112 dB (A) @ 1.2 m
3SL 996 139-277	140 mm cable with DEUTSCH DT connector, 87 – 112 dB (A) @ 1.2 m

ELECTRONICS TOOL

Our electronics tool informs you quickly and clearly which electronic products FORVIA HELLA offers for special original equipment. First of all, select the relevant vehicle or area of application (drivetrain or cab). After selecting the appropriate product via mouse click, you will receive further information as well as PDFs with important information and technical data for download.
In addition, the tool provides clear animations showing how the products work.

www.hella.com/electronictool

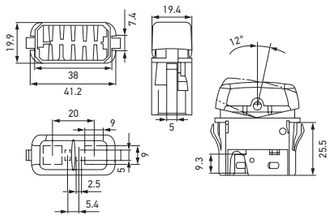


Rocker switch series 3100

The waterproof and dustproof series of rocker switches for electrical systems.

Mounting hole, without mounting frame	37.0 x 21.1 mm
Mounting hole, with mounting frame	51.3 x 48.3 mm (for two units)
Dashboard thickness for direct mounting	1.6 to 6.3 mm
Dashboard thickness with mounting frame	2.5 to 6.5 mm
Switch principle	Bridge switch
Actuation mode	Pushbutton, toggle
Protection class	IP 6K8, connector side: IP 6K6
Rated switching current, resistive load, 12 V	20 A
Rated switching current, resistive load, 24 V	15 A

On request



Rocker switch series 4100

The rocker switch series with self-cleaning micro switch is suitable for electrical and electronic systems.

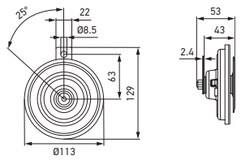
Mounting hole, without mounting frame	41.8 x 19.8 mm
Mounting hole, with mounting frame	44.1 x 22.1 mm per unit
Dashboard thickness for direct mounting	2 (± 0,3) mm
Dashboard thickness with mounting frame	3 to 4 mm
Switch principle	Micro switch with self-cleaning contacts
Actuation mode	Pushbutton, toggle
Protection class	IP 5K4
Rated switching current, resistive load, 12 V	10 A
Rated switching current, resistive load, 24 V	10 A

On request

FORVIA HELLA ROCKER SWITCH CONFIGURATOR

Configure your very own switches yourself! You can select any switch function, the rated voltage, combinations of symbols and also the matching accessories all in only a few clicks. Your choices can easily be transferred to a favourites list, printed out or sent as an online request. Your request is then processed individually on a project-specific basis. The required symbol configuration is provided and a customer-specific part number assigned.

www.hella.com/switch

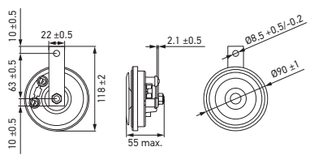


Electromechanical horn B36

Ideal for commercial vehicles. Membrane to protect against moisture penetration. Fully harmonious sound across long distances on the roads. Optimal tonal quality achieved when a high and low tone horn set is installed. Teflon seal as protection against moisture (optional). Variants with additional interference suppression available. Variants with high supply voltage range available.

Diameter	113 mm
Operating voltage range	Single-voltage (21 – 29 V or 44 – 60 V or 70 – 90 V)
Rated voltage	24 V, 48 V or 80 V
Sound pressure level at 2 m distance	115 dB (A) ± 3 dB (A)
Power consumption	72 W (24 V), 64 W (48 V), 48 W (80 V)
Current consumption	Max. 3 A (24 V), max. 1.3 A (48 V), max. 0.5 A (80 V)
Operating temperature	-40 °C to +85 °C
Protection class	IP 6K7, IP 6K5
Lifetime	100,000 cycles
Housing material	Metal
Approved	ECE R28 (only applies to 24 V horns)

3BA 002 768-382	24 V, 335 Hz, low tone, flat connector
3BA 002 768-431	24 V, 400 Hz, high tone, flat connector
3BA 002 768-777	48 V, 335 Hz, low tone, flat connector
3BA 002 768-007	80 V, 335 Hz, low tone, flat connector

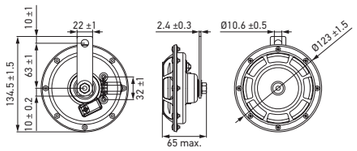


Electromechanical horn S90

Fully shaped oscillator for optimal sound propagation. Optimal size/performance ratio. Slim, matt black design with a red membrane.

Diameter	90 mm
Operating voltage range	Single-voltage (9 – 14.5 V)
Rated voltage	12 V
Sound pressure level at 2 m distance	113 dB (A)
Power consumption	42 W
Current consumption	Max. 3.5 A
Operating temperature	-40° to +90° C
Protection class	IP X9K, IP X7
Lifetime	50,000 cycles
Housing material	CRCS class EDD
Approved	ECE-R28

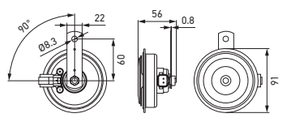
3AM 922 200-617	415 Hz, high tone, 6.3 mm flat connector
3AM 922 200-761	350 Hz, low tone, DEUTSCH DT connector
3AM 922 200-767	350 Hz, low tone, DEUTSCH DT connector



Electromechanical horn B133

Traffic blaster, produces a penetrating, powerful sound. Sturdy housing with a first-class design and a distinctive grille.

Diameter	123 mm
Operating voltage range	Single-voltage (9.5 – 15 V or 21 – 29 V)
Rated voltage	12 V or 24 V
Sound pressure level at 2 m distance	105 – 118 dB(A)
Power consumption	78 W (12 V), 84 W (24 V)
Current consumption	Max. 6.5 A (12 V), max. 3.5 A (24 V)
Operating temperature	-40 °C to +90 °C
Protection class	IP X9K, IP X7
Lifetime	50,000 cycles
Housing material	CRCS class EDD
Approved	ECE R28
	Powerful tone, with Teflon pellet, 6.3 mm splash-proof flat connector with rubber grommet
3AG 003 399-081	12 V, 375 / 500 Hz (Set)
3AG 003 399-101	24 V, 375 / 500 Hz (Set)
3AF 003 399-041	12 V, 375 Hz
3AF 003 399-051	12 V, 500 Hz
3AF 003 399-061	24 V, 375 Hz
3AF 003 399-071	24 V, 500 Hz
	Powerful tone, splash-proof, DEUTSCH DT connector
3AF 003 399-347	24 V, 375 Hz
3AF 003 399-357	24 V, 500 Hz



Electronic horn S92E

Ideal for all kinds of commercial vehicles. Long-life horn with innovative technology. Compact size and lightweight. No mechanical wear thanks to electronic design.

Diameter	92 mm
Operating voltage range	Single-voltage (11 – 15 V or 22 – 28 V)
Rated voltage	12 V or 24 V
Sound pressure level at 2 m distance	112 dB (A) ± 5 dB (A)
Power consumption	60 W (12 V), 72 W (24 V)
Current consumption	Max. 5.0 A (12 V), max. 3.0 A (24 V)
Operating temperature	-40 °C to +85 °C
Protection class	IP 6K7
Lifetime	500,000 cycles
Housing material	Metal
Approved	ECE-R10, ECE-R28
	Ideal for all kinds of commercial vehicles:
3AL 012 588-207	24 V, 300 Hz, low tone
3AL 012 588-217	24 V, 400 Hz, high tone
3AL 012 588-227	12 V, 300 Hz, low tone
3AL 012 588-237	12 V, 400 Hz, high tone

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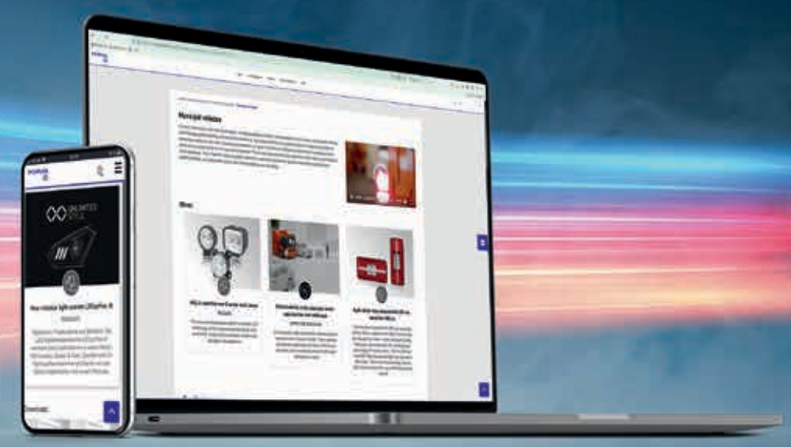
... THE FORVIA HELLA SPECIAL OE UNIVERSE.

THE FORVIA HELLA WORLDS –
WEBSITE, TOOLS AND CONFIGURATORS



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www.hella.com/municipal

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TOOLS

All these useful tools provide you with a valuable decision-making aid and they allow you to adapt the products to your individual requirements.

Our online information is designed to let you reliably and conveniently identify the latest FORVIA HELLA products and to find out about all the important details featured in our portfolio. No matter what you are looking for, we are sure to have the right part in our range!

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