



BRIEF INFORMATION

LED rear lamp 55 mm

- › Optimal signal image with low power consumption thanks to LED technology
- › Ideal for use in heavy construction machinery
- › Modular, in 12 V and 24 V for installation

PRODUCT FEATURES

Upgrade to LED

Current filament bulb versions and combinations with LED ring modules can easily be changed over to LED.

Indicator failure check

The patented FORVIA HELLA monitoring system for direction indicators allows the lights to be used in line with the requirements of ECE-R 48.

Reverse-polarity protected

The lights are protected against damage caused by incorrect connections.

Sealed to withstand high-pressure cleaning

Tested to FORVIA HELLA standard 67101, IP 6K9K, protected against high-pressure / steam cleaning

High vibration resistance

The lights are tested in accordance with FORVIA HELLA standard 67101 class 4.1. The high level of vibration resistance makes this product ideal for use in heavy construction machinery.

Long service life

The LED technology provides an optimum signal image with low power consumption.

LED LIGHTING TECHNOLOGY

As an innovation leader in the field of automotive original equipment, FORVIA HELLA is now setting new standards in LED lighting technology.

The benefits of modern LED lighting technology at a glance:

Extremely low energy consumption

The combination of efficient light emitting diodes (LEDs) and precision optics enables FORVIA HELLA combination rear lights to meet the legally required level of light distribution while using 67% less power than filament bulb lamps.

No light source replacement, no servicing and extremely long service life thanks to competent thermal management

All the components have been optimised in terms of temperature and are matched to each other in order to extend the light's service life. This prevents the LEDs overheating at extremely high ambient temperatures. Thanks to the use of top-quality LEDs and good thermal management, these products have been designed with a service life as long as that of the vehicle, and are thus a convincing, economical and eco-friendly "Fit and Forget" solution.

Indicator failure check

The direction indicators are monitored by the electronics system, which generates current pulses for the direction indicator input at defined points in time. For each indicator pulse, the upstream flasher within the vehicle electric system expects to receive the pulse after 100 ms - for at least 20 ms. If components or LEDs in the direction indicator are faulty, the electronics do not receive the pulse and recognise the fault. This ensures that the driver is always informed of any direction indicator failures and meets the legal requirements of the ECE Regulation. The following ballast units are suitable for just about any intended use: 5DS 009 552-001/-011.

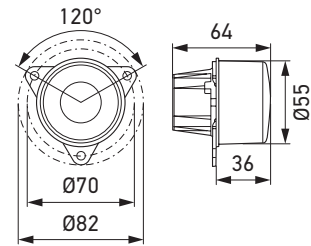


TECHNICAL DETAILS





Technical data

| | | |
|---------------------------|---|-------------------------------|
| Rated voltage | 12 V or 24 V | |
| Current consumption | Tail light | 12 V: 0.02 A 24 V: 0.003 A |
| | Stoplight | 12 V: 0.08 A 24 V: 0.03 A |
| | Front direction indicator | 12 V: 0.4 A 24 V: 0.2 A |
| | Rear direction indicator | 12 V: 0.09 A 24 V: 0.004 A |
| | Rear fog light | 12 V: 0.21 A 24 V: 0.08 A |
| | Position light front | 12 V: 0.08 A 24 V: 0.07 A |
| | Reverse light | 12 V: 0.17 A 24 V: 0.05 A |
| | Power consumption | Tail light |
| Stoplight | | 12 V: 0.9 W 24 V: 0.7 W |
| Front direction indicator | | 12 V: 4.8 W 24 V: 4.8 W |
| Rear direction indicator | | 12 V: 1.1 W 24 V: 0.8 W |
| Rear fog light | | 12 V: 2.5 W 24 V: 1.9 W |
| Position light front | | 12 V: 1.0 W 24 V: 1.7 W |
| Reverse light | | 12 V: 2.0 W 24 V: 1.1 W |
| Light function | | Front direction indicator |
| | Rear direction indicator | 6 yellow LEDs |
| | Tail light | 6 red LEDs |
| | Stoplight | 6 red LEDs |
| | Rear fog light | 6 red LEDs |
| | Position light front | 6 white LEDs |
| Reverse light | 6 white LEDs | |
| Temperature range | -40 °C to +60 °C | |
| Protection class | IP 6K9K | |
| Approved | ECE, CCC | |
| Protection | Polarity reversal protection, direction indicator failure control | |
| Specification | FORVIA HELLA standard 67101, class 4.1 | |
| Mounting | Using three screws, hole Ø 5.5 mm | |
| Connection | 500 mm lead with open ends | |

Dimensional sketch



PROGRAM OVERVIEW

| Product photo | Voltage | Function | Installation | Approved | Part Number | PU |
|---|--------------|--|--------------|----------|--|--------------|
|  With heat sink | 12 V 24 V | Direction indicator, active electronics | front | - | 2BA 011 172-001/-007 2BA 011 172-401/-407 | 1/20 1/20 |
| | 12 V 24 V | Direction indicator with pulse for DI failure control, active electronics | front | - | 2BA 011 172-011/-017 2BA 011 172-411/-417 | 1/20 1/20 |
| | 12 V 24 V | Position light | front | ECE-R7 | 2PF 011 172-111/-117 2PF 011 172-511/-517 | 1/20 1/20 |
|  With heat sink | 12 V 24 V | Direction indicator, active electronics Direction indicator, passive electronics | rear | ECE-R6 | 2BA 011 172-021/-027 2BA 011 172-421/-427 | 1/20 1/20 |
| | 12 V 24 V | Direction indicator with pulse for DI failure control, active electronics | rear | ECE-R6 | 2BA 011 172-031/-037 2BA 011 172-431/-437 | 1/20 1/20 |
| | 12 V 24 V | Tail light, passive electronics | rear | ECE-R7 | 2SA 011 172-041/-047 2SA 011 172-441/-447 | 1/20 1/20 |
| | 12 V 24 V | Stop light, passive electronics | rear | ECE-R7 | 2DA 011 172-061/-067 2DA 011 172-461/-467 | 1/20 1/20 |
|  With heat sink | 12 V 24 V | Rear fog light, passive electronics | rear | ECE-R38 | 2NE 011 172-081/-087 2NE 011 172-481/-487 | 1/20 1/20 |
|  With heat sink | 12 V 24 V | Reversing light, passive electronics | rear | ECE-R23 | 2ZR 011 172-101/-107 2ZR 011 172-501/-507 | 1/20 1/20 |

Accessories



Chrome-plated trim
8XU 008 405-031



LED position light
2PF 008 405-051 (24 V) / -061 (12 V)
LED tail light / stop light
2SB 008 405-091 (24 V) / -101 (12 V)
LED tail light
2SA 008 405-011 (24 V) / -021 (12 V)



Reflectors
8RA 008 405-001

Example combinations of LED module and ring

Series 011 172

All modules
2BA 011 172-00/-01
2BA 011 172-40/-41

2DA 011 172-06
2DA 011 172-46

2BA 011 172-02/-03
2BA 011 172-42/-43

Series 008 405

8RA 008 405-00 / 8XU 008 405-03

2PF 008 405-06 12 V
2PF 008 405-05 24 V

2SA 008 405-02 12 V
2SA 008 405-01 24 V

2SB 008 405-10 12 V
2SB 008 405-09 24 V

The individual light functions of the LED may only be operated with a vehicle fuse of max. 3A.
When converting the direction indicator functions (24 V, front and rear) from filament bulb to LED, please use the SDS 009 552- ballast.