83 mm 3-function lamp
LED daytime running light / indicator / position light

- 83 mm-LED combination lamp (with 3 functions)
- 24 V model
- Ideal for lorries, buses and motor-caravans

Product Features

High water resistance
Tested according to DIN Norm IP 6K6 and IP 6K7 (dust-tight, protected against high-pressure water and brief submersion).

Overvoltage protection
Overvoltage protection ensures that the lamp is not damaged even with voltage peaks (ISO 7637).

Installation
A central bolt including an anti-twist protection allows practical attachment.

LED lighting technology
The high-performance LEDs offer an excellent signal effect with very low power consumption (Indicator function: 4 W, Position light: 1 W, Daytime running light: 4 W).

Long service-life with low current consumption
"Fit and Forget": with innovative LED technology means the light has a long life with low energy consumption.

Lens
Acrylic lens for improved UV-resistance and impact strength.
**Daytime running light**

**Current legislation situation concerning daytime running light**

The subject of daytime running light is becoming more and more important in Europe and overseas. Transport ministries, automobile clubs and motorists have recognised the great safety advantage offered by this lighting system. As of February 2011, all new vehicles (commercial vehicles as of the middle of 2012) must be equipped with daytime running lights.

**Benefits of driving with daytime running lights**

- Automatic activation/deactivation due to a changeover relay
- Optimum recognisability in road traffic with lights on during the day
- The special signal effect of daytime running lights can be recognised better in daytime traffic than normal low beam, which leads to further protection against serious accidents.
- Goes easy on the normal lighting equipment*
- No increase in fuel consumption*
- Reduction of pollutant emissions*

* compared with driving with the low beam on

![Fig.: Comparison of the two systems: low beam and daytime running light](image_url)

**Comparison of the performance of bulb-based and LED light**

Example: 83 mm combination lamp

- Daytime running light
- Position light
- Indicator
- Total

(Specifications in Watts)

- Bulb-based light
  - Daytime running light: 16
  - Position light: 3
  - Indicator: 4
  - Total: 23

- LED-based light
  - Daytime running light: 9
  - Position light: 1
  - Indicator: 4
  - Total: 14

*about 78% saving in power consumption*
### Technical data

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type approval</strong></td>
<td>5854 Indicator ECE-Reg. No. 6</td>
</tr>
<tr>
<td></td>
<td>Position light ECE-Reg. No. 7</td>
</tr>
<tr>
<td></td>
<td>Daytime running light ECE-Reg. No. 87</td>
</tr>
<tr>
<td><strong>Functions</strong></td>
<td>Indicator, position light, daytime running light (the integrated electronics are set so that the daytime running light is dimmed when the indicator flashes)</td>
</tr>
<tr>
<td><strong>Failure check</strong></td>
<td>Indicator function is n-1 conform</td>
</tr>
<tr>
<td></td>
<td>(If an LED fails, the indicator function is suppressed.) To comply with the ECE-regulation no. 48, the vehicle system must control the power consumption and warn the driver if the indicator fails.</td>
</tr>
<tr>
<td></td>
<td>See: Hella cold query relay 5DS 980 810-00</td>
</tr>
<tr>
<td><strong>Specification</strong></td>
<td>Hella standard 67001 Class 10</td>
</tr>
<tr>
<td><strong>Power consumption of bulb</strong></td>
<td>Indicator: 4 W</td>
</tr>
<tr>
<td></td>
<td>Position light: 1 W</td>
</tr>
<tr>
<td></td>
<td>Daytime running light: 4 W</td>
</tr>
<tr>
<td><strong>Operating voltage</strong></td>
<td>24 VDC **</td>
</tr>
<tr>
<td><strong>Overvoltage protection</strong></td>
<td>At a voltage of over 35 Volt, the lamp is switched off</td>
</tr>
<tr>
<td><strong>Voltage peak protection</strong></td>
<td>according to ISO 7637</td>
</tr>
<tr>
<td><strong>Operational safety thanks to polarity reversal protection</strong></td>
<td>yes (up to -1000 V)</td>
</tr>
<tr>
<td><strong>Operating temperature</strong></td>
<td>-40 °C to +60 °C</td>
</tr>
<tr>
<td><strong>Protection class</strong></td>
<td>IP 6K6 and IP 6K7</td>
</tr>
<tr>
<td><strong>EMC approval</strong></td>
<td>03 1962</td>
</tr>
<tr>
<td><strong>Service life</strong></td>
<td><em>Fit and Forget</em> vehicle life</td>
</tr>
<tr>
<td><strong>Attachment</strong></td>
<td>1 central bolt including an anti-twist protection</td>
</tr>
</tbody>
</table>

** Operation of the light with AC voltage or synchronised DC voltage is not permitted! The individual light functions may only be operated with a vehicle fuse of max. 3 A (per lamp). If there is a control unit that limits the current in the vehicle equalling the above-mentioned specification, an extra fuse for the lamp is not needed.

### Technical drawing

Optional accessory:
Adapter ring 90 mm
## Range overview

<table>
<thead>
<tr>
<th>Product photo</th>
<th>Part number</th>
<th>Specification</th>
<th>PU</th>
</tr>
</thead>
</table>
| ![Product photo](image1) | 2BE 980 690-101 | Scope of supply:  
1 x 83 mm-LED 3-function lamp (pre-wired with 2.5 m long shielded 4-wire cable) | 1  |
| ![Product photo](image2) | 9GD 980 696-001 | Optional accessory: Adapter ring 90 mm  
The adapter ring serves to replace a 90 mm lamp with an 83 mm lamp. This means that vehicles that previously used a 90 mm lamp from Hella can now easily use the 83 mm lamp. | 1  |

## Application example

![Bus](image3)