LED taillight/stoplight/indicator and reversing light 980 605/980 606/980 607

Brief Information

- *Rectangular LED lights for horizontal and vertical surface-mounting*
- *Multi-voltage 9–33 V*
- *Long service life with low current consumption*

Product features

High water resistance
Tested to Hella norm IP 6K6 and IP 6K7, guarantees the light is absolutely water resistance.

Reverse polarity protection
The lamp does not suffer any damage if the poles are connected incorrectly.

LED lighting technology
Homogenous illumination and a very good signaling effect is achieved by combining efficient light emitting diodes (LEDs) and precision optics. LED lights from Hella are fully sealed and maintenance-free!

Long service life and low energy consumption
A long service life is achieved for the light thanks to innovative LED technology and competent thermal management. Low energy consumption and no maintenance costs ‚Fit and Forget' make this product the perfect environmentally friendly light.

Indicator failure check
Thanks to the system patented by Hella for monitoring indicators, this light can be used in accordance with the ECE-R48 requirement.

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

LED lighting technology

As an innovative leader in the supply of automotive original equipment Hella is setting standards with LED lighting products, too.

The advantages of modern LED lighting technology at a glance:

Extremely low energy consumption
Through the combination of efficient light-emitting diodes (LEDs) and precision optics, the Hella signal lamps achieve the legally prescribed light distribution - and do so using about 70 % less power in comparison with bulb-based lamps!

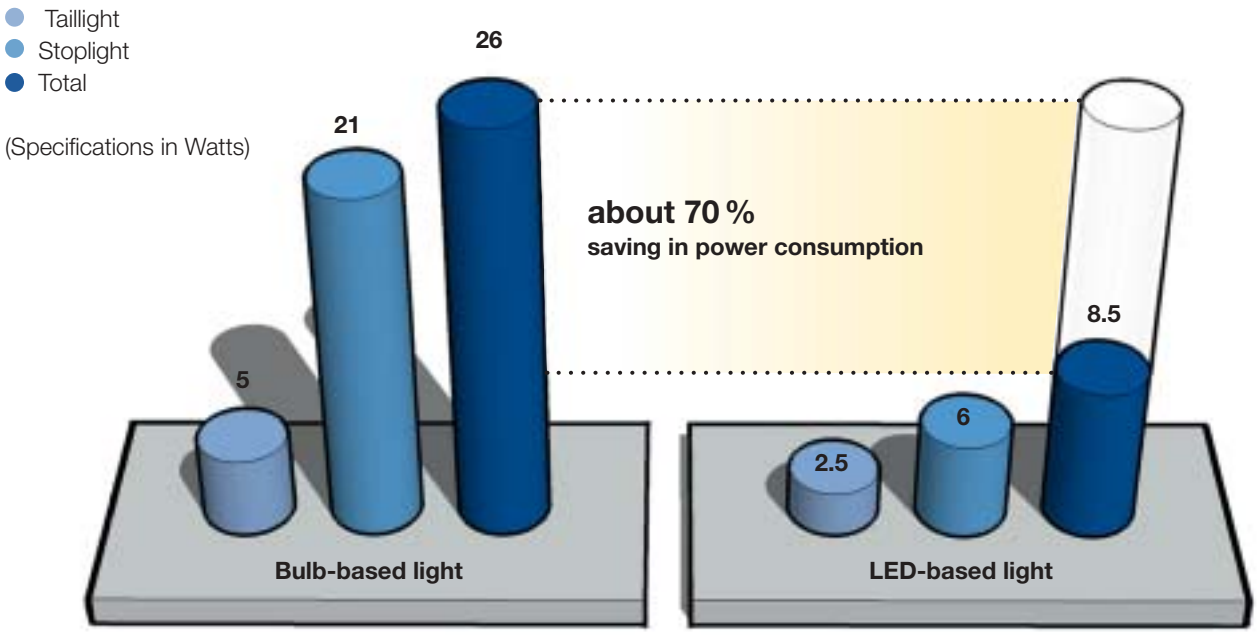
No light source replacement, no servicing and extremely long service life thanks to competent thermal management
To extend the light's service life, all the components have been matched optimally in terms of temperature. This prevents LED overload in the event of high ambient temperatures. Thanks to the use of 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.

LED Multivolt-technology
Multivolt- circuits stabilise the light output over a voltage range of 9 to 33 volts. This makes it possible to use the same Hella signal lights for both 12 and 24 volt applications. In addition, Multivolt also compensates for voltage fluctuations which arise through the use of long cables, plug-type connections within the vehicle electric system. In addition, Hella Multivolt- circuits are protected from inverse polarity and voltage peaks – even at low battery voltages.

Indicator failure check
The indicator function is monitored by the electronics. It produces a current pulse for the indicator input;
this current pulse is generated at a defined point in time. For every flashing pulse, the flasher unit ballast in the vehicle electric system demands this pulse for at least 107 ms every 100 ms. If components or LEDs of the indicator function are defective, this is detected by the electronics: the pulse is absent. This way, the driver is always informed about the indicator failure. This is important for the legally prescribed indicator failure detection (in accordance with ECE regulation).
The following three ballasts cover almost all applications:
5 DS 009 552- ...
5 DS 009 602- ...
4 DW 009 492- ...

Comparison of the performance of bulb-based and LED light

Example taillight/stoplight

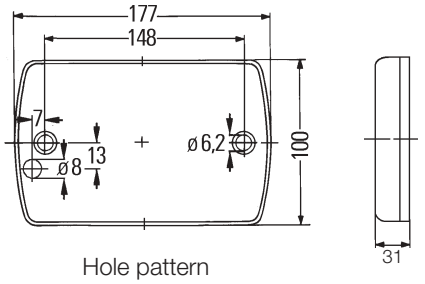


Technical details

Technical data

Type approval	ECE, E24 5850, GGVS/ADR
Functions	**Taillight/stoplight:** Taillight 24 red LEDs of which 16 LEDs form the stoplight **Indicator:** 24 yellow LEDs **Reversing light:** 24 white LEDs
Failure check	HCS self-monitoring integrated in the indicator
Specification	Hella standard 67001 Class 10
Current consumption	Taillight: 2.5 W Stoplight: 6 W Indicator: 4 W Reversing light: 4 W
Operating voltage	9–33 Volt DC
Overvoltage protection	5,000 W TVS (according to ISO 7637)
Polarity reversal protection	yes (up to -1000 V)
Operating temperature	-40 °C to +60 °C
Protection class	IP 6K6/IP 6K7
EMC approval	Taillight/stoplight e4 03 1828 Indicator e4 03 1830 Reversing light e4 03 1828
Service life	min. 30,000 h* (* depending on the ambient temperature)
Fastening	2 holes for screw attachment

Technical drawing



Hole pattern

Cable colours	Function
white	Minus (-)
red	Stoplight
brown	Taillight
Yellow	Reversing light
blue	Indicator

Range overview

Product photo	Part number	For surface-mounting	Specification	Type approval	PU
	**2SB 980 606-201**	horizontal	Tail/stoplight, 24 red LEDs, Multi-voltage 9 - 33 V Clear lens, 2,500 mm cable with stripped ends	ECE, E24 5850 GGVS/ADR	1
	2SB 980 606-701	vertical			
	**2BA 980 607-201**	horizontal	Indicator, 24 yellow LEDs, Multi-voltage 9 - 33 V Clear lens, 2,500 mm cable with stripped ends	ECE, E24 5850 GGVS/ADR	1
	2BA 980 607-701	vertical			
	**2ZR 980 605-201**	horizontal	Reversing light, 24 white LEDs, Multi-voltage 9 - 33 V Clear lens, 2,500 mm cable with stripped ends	ECE, E24 5850 GGVS/ADR	1
	2ZR 980 605-701	vertical			

The individual light functions may only be operated with a vehicle fuse of max. 3A.

Application example

Hella KGaA Hueck & Co.
Rixbecker Straße 75
59552 Lippstadt, Germany

Tel.: +49 2941 38-0
Fax: +49 2941 38-7133
Internet: www.hella.com