



Front lighting

- LED Clearance and marker light for 24 V applications
- Available in 2 lens angle versions to suit all installations
- LED upgrade of the bulb series 002 747 and 961167

### Product features



#### Power Top LED

Optimum luminous efficiency through the combination of Power TOP-LEDs and precision lens. Service lives of 30,000 hours can be achieved, thus 20 times longer than a normal bulb.

#### Sturdy lens

Improved shock resistance through the use of PC (polycarbonate) as a lens material. Damage due to trees/branches is reduced and maintenance costs are minimised.

#### Precision optics

The light of the Power-TOP-LEDs is distributed by the optics in the lens and produces an intense signalling effect.

#### Light resistant to high-pressure cleaning

The printed circuit board is tightly sealed with the LEDs in the lens (IP 69) - LEDs are controlled by passive 24 V electronics. The light is resistant to high-pressure cleaning up to 130 bar, the installation opening is sealed by a soft rubber base with triple sealing ribs.

#### Electrical connection

Contacting takes place with two 6.3 mm flat receptacles – directly to the blade-terminal tabs of the printed circuit board.



# LED lighting technology

As a leader in innovation in the field of automotive original equipment, Hella sets standards through LED lighting technology.

**The advantages of modern LED lighting technology:**

## Extremely low energy consumption

Through the combination of efficient light-emitting diodes (LEDs) and precision optics, the Hella position light achieves the legally prescribed light distribution – and does so with 90 % less power in comparison with bulb-based lights!

## LED upgrade

No-one can afford downtime! Particularly in the case of trucks, it is very awkward to replace a defective bulb. Many users are therefore changing over to LED products.

Easy conversion of bulb-based versions **2PF 002 747** and **2PF 961 167** is possible with our LED position light. Thanks to two product variants, it can be used universally and in the widest range of body inclinations.

## Market potential for conversion

These vehicles are currently on the road with the old bulb-based version, and the clearance light can be upgraded using the LED version.

## No light-source replacement, no maintenance and extremely long service life through optimum thermal management

To extend the service life of the light, the LEDs for the position light are placed on temperature-optimized printed circuit boards. This avoids the LEDs overheating at extremely high temperatures. This thermal management leads to a maximisation of service life – even in adverse operating conditions. Depending on environmental conditions, 30,000 hours and more can be achieved.



**LED position light for cabin roof inclinations**

2PF 009 514-001	10° – 20°
2PF 009 514-011	20° – 30°



**2PF 002 747-...**  
**2PF 961 167-...**

Customer	Series	Model year
DAF	F 65	01/93 → 02/98
	F 75, F 85	01/92 → 02/98
	65 CF, 75 CF, 85 CF	02/98 → 12/00
	X 65, X 75, X 85	01/91 → 02/01
	F 65 – F 85	03/01 → 09/07
	XF 95	01/91 → 09/02
	XF 95/105	10/02 → 12/07
Mercedes Benz	1013 – 3850 (NG)	08/73 → 08/88
	1222 – 4850 (MK, SK)	07/87 → 09/96
	Actros MP3	03/08 → 07/11
Neoplan	Cityliner N116 – Spaceliner N117	10/83 → 08/87
	Low-floor bus N4010	
	Low-floor bus N4014	

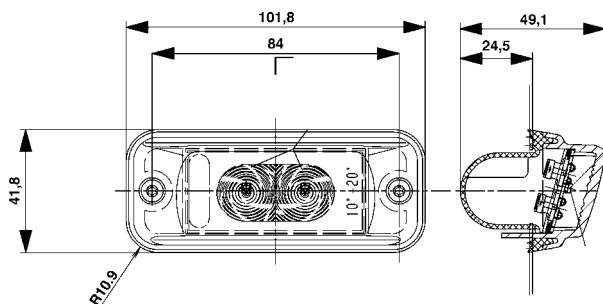
## Product benefit of LED position light

- As a result of the long service life of the LEDs, it is no longer necessary to replace the bulbs, particularly useful where the cab roof is concerned. No more struggling with ladders etc. - the LED position light will most likely last the life of the truck!
- With protective class IP 6K9K, the LED position light is resistant to high-pressure cleaning. The bulb-based version has just IP 5K4K.
- With identical dimensions, the LED position light **2PF 009 514** can easily be used to replace the existing bulb-based versions **2PF 002 747** and **2PF 961 167**.

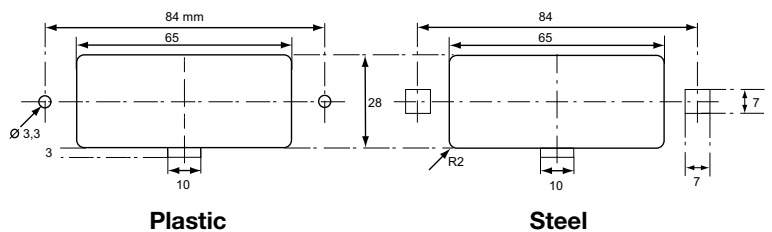
# Technical details

Technical data	LED position light		Bulb-based version
			
Part number	2PF 009 514-001	2PF 009 514-011	2PF 961 167-021
Lighting function	Position light		
Application	Marker/ clearance light front		
Light source	2 LEDs		1 bulb C 5 W
Voltages	24 V		12 V oder 24 V
Power consumption	0.5 W		5 W
Homologation	E1 2300		E1 31446
Length	102 mm		
Width	42 mm		
Installation depth	23 mm		
Screw distance	84 mm		
max. tightening torque	2,0 Nm		
suitable fastening screws (not in the scope of supply)	Pan-head tapping screw ST 4.2 x 22 or PT 5 x 25 TORX		
Inclination of the light aperture in relation to the mounting surface	10° – 20°	20° – 30°	10° – 30°
Permissible inclination of the light aperture in relation to the road	70° – 80°	60° – 70°	60° – 80°

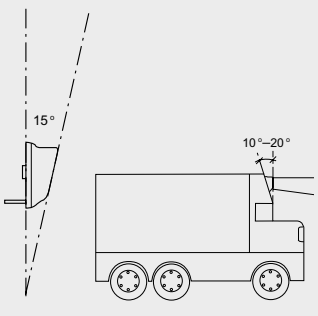
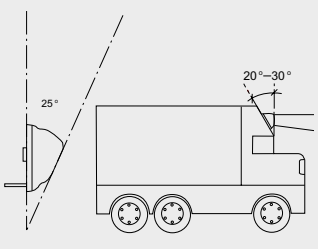
## Technical drawing



## Installation



## Range overview

Drawing	Part number	Description	suitable for inclination of the mounting surface	Type approval	Packaging unit
	2PF 009 514-001	LED position light, for flush-mounting, 24 V	10° – 20°	ECE	1
	2PF 009 514-011	LED position light, for flush-mounting, 24 V	20° – 30°	ECE	1

## Application example

