# LED-Spot round Interior light

# Brief information



LED and bulb technology
Fixed and adjustable
With ambient CELIS<sup>®</sup> ring

# Technical details

### Power LED with dimming function

Optimum light output thanks to the combination of Power LED and precision reflector. Service life at least 50,000 hours. The electronics have a dimming function.

## Precision reflector

The light of the Power LED is focused and enables illumination with an extremely high light output (43 Ix at a distance of 1 m).

## Clear lens

Requires a clean finish within the light, since reflector, LED and the optional CELIS® light-transmitter ring are visible.

## **CELIS®** light-transmitter ring

This technology, which is used exclusively by Hella, stands out through the special design for indirect ambient lighting. This creates a relaxed atmosphere in the vehicle.

## • Frame

Sturdy, durable and impact-resistant (plastic: ABS). Available in the following colours: white, black, silver and gold.





# LED lighting technology

As the innovative leader in supplying original equipment for the automotive industry, Hella is setting new benchmarks in interior lighting with LED technology.

## An overview of the advantages of modern LED lighting technology:

#### Extremely low energy consumption

Through the combination of efficient light-emitting diodes (LEDs) and precision lenses, the Hella LED interior lights provide almost as much light per watt as conventional bulbs and halogen lights, although they only consume a quarter of the energy (Hella LED spotlight: 17.2 Ix/W; bulb spotlight: 21.8 Ix/W).

## No light source replacement, no preventative maintenance and an extremely long service life

LEDs are semiconductor components

and thus do not have any breakable filaments. In addition, LEDs are absolutely resistant to impact and vibration. This guarantees lighting and safety in every situation. Furthermore, the service life of LEDs is approx. 50,000 operating hours and thus exceeds the vehicle's lifetime.

# Dimming function and ambient CELIS<sup>®</sup> light-transmitter ring

A dimming function is integrated into the electronics of all LED spotlights from Hella. In addition, all the items are available with ambient CELIS<sup>®</sup> light-transmitter ring, which is used for indirect lighting and thus creates a relaxed atmosphere in the vehicle.

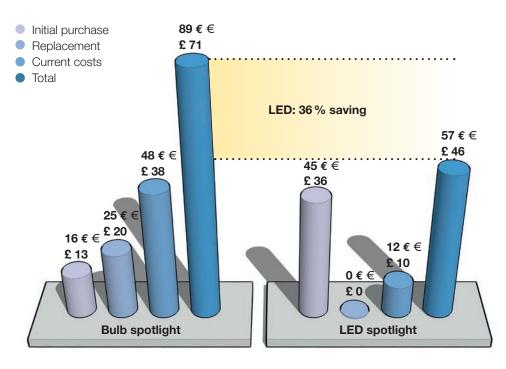
### LED Multivolt<sup>™</sup> technology

Multivolt<sup>™</sup> circuits keep the light power constant over a voltage range of 10 to 31 volts. This makes it possible to use the same Hella interior lights both for 12-volt and 24-volt applications. Multivolt<sup>™</sup> also compensates for the fluctuations in voltage which arise due to the use of long cables, plugconnections, and within the vehicle electric system. Furthermore, Hella Multivolt<sup>™</sup> circuits are protected from polarity reversal and voltage peaks, providing absolute safety even when battery voltage is low.



LED		50.000 h	2.5 watts	43 lx
Bulb/	2.000 h		10 watts	218 lx
halogen	Service life		Energy consumption	Light output (at a distance of 1 m)

## Cost comparison between bulb and LED spotlight

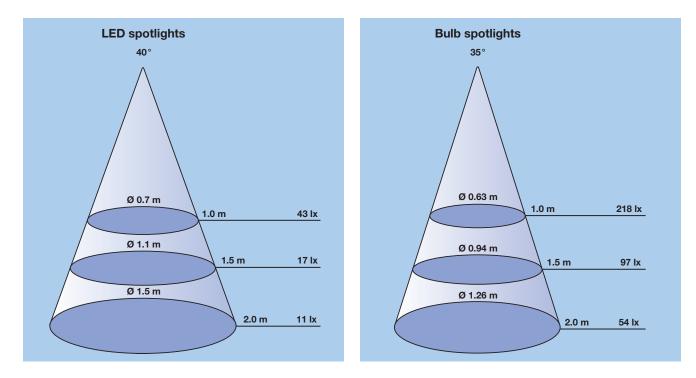


#### **Basis for calculation:**

Service life: 25,000 operating hours. Replacement:  $1,00 \notin \Sigma 0.80$  per bulb. plus  $1,00 \notin \Sigma 0.80$  per piece. (time required for procurement and replacement) Current costs:  $0,19 \notin \Sigma 0.15$  per kWh. Figures rounded off.

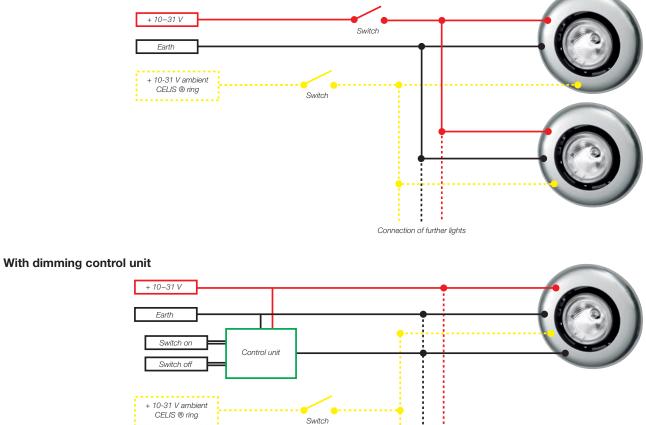


# Light distribution



# Connection diagrams





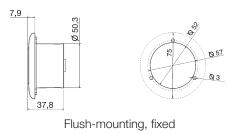
Connection of further lights

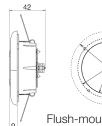
# Technical drawings, installation openings and overview of range

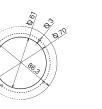
## LED spotlights

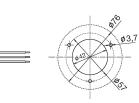
Colour of the LEDs: warm-white. Mounting: choice of either screw or spring-clamp attachment (surface-mounting, fixed: screw attachment only). Multi-voltage 10-31 V Current consumption spotlight at 12 V/2.5 W = approx. 0.20 A. Packaging unit 1. Further cover colours (e.g. real-wood look) or ambient CELIS<sup>®</sup> light-transmitter ring (e.g. blue, red) on request.

Cover	Flush-mounting, fixed	Flush-mounting, adjustable	Flush-mounting, adjustable with white, ambient CELIS® ring	Surface-mounting, fixed
	2JA 344 040-701	2JA 343 790-301	2JA 343 790-701	2JA 344 190-001*
	2JA 344 040-711	2JA 343 790-311	2JA 343 790-711	2JA 344 190-011*
	2JA 344 040-721	2JA 343 790-341	2JA 343 790-741	2JA 344 190-021*
	2JA 344 040-731*	2JA 343 790-351*	2JA 343 790-751*	2JA 344 190-031*









Flush-mounting, adjustable

Surface-mounting, fixed

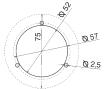
## **Bulb spotlights**

Mounting: Screw attachment (flush-mounting, fixed), either screw or spring-clamp attachment (flush-mounting, adjustable). 12 V/5 W halogen bulb. Packaging unit 1. Further cover colours (e.g. real-wood look) available on request.

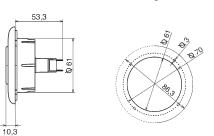
Cover	Flush-mounting, fixed	Flush-mounting, adjustable	
	2JA 343 985-001	2JA 343 795-001	
	2JA 343 985-011	2JA 343 795-011	
	2JA 343 985-041	2JA 343 795-021	
	2JA 343 985-021*	2JA 343 795-031*	

\* available from 2nd quarter of 2009





Flush-mounting, fixed



Flush-mounting, adjustable



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