# Interior Lights Spots Design/Flat flush-fitting

# Brief Information



- LED-Technology
- Flush-fitting variant with a depth of only 14 mm
- Surface-mounted variant with a design height of only 22 mm
- With ambient CELIS® ring

## Product features



### Installation frame

The matching installation frame is included as part of the light.

### Central control unit

A specially designed control unit is required for the connection of the interior light spots; this is included as part of the set. There are two versions for different application cases.

### **Power-LED**

Optimum light output thanks to the combination of Power-LEDs and precision reflector. Service life min. 50,000 hours.

### · Precision reflector

The light of the Power-LED is focused and makes illumination possible with extremely high light output despite low design height.

### Clear lens

Makes clean processing necessary inside the light, since reflector, LED and the optional CELIS® light guide ring are visible.

### CELIS® light guide ring (available as an option)

This technology, used exclusively by Hella, stands out thanks to its special design for indirect, ambient lighting. It thus creates a relaxed atmosphere in the vehicle. The CELIS® light guide ring is available in the colours warm-white, blue, red and orange.

### Frame

Particularly shatterproof and impact-resistant (plastic: ABS). Available in the following colours: white, black and silver. In addition, metal frames for special application cases are available in stainless glossed and polished material.



# LED lighting technology

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

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

### **Extremely low energy consumption**

Thanks to the combination of efficient LEDs and precision optics, Hella's LED interior lights provide almost as much light per Watt as conventional bulbs and halogen lights, despite only needing a quarter of the power.

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

LEDs are semi-conductor components, which means they do not have a fragile filament. 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 about 50,000 operating hours, thus exceeding the overall mileage performance of any vehicle.

### Ambient CELIS® light guide ring

All the items are optionally available with ambient CELIS® light guide ring which is used for indirect lighting and thus creates a relaxed atmosphere in the vehicle.

# Technical specifications

Technical specification central control unit				
Input voltage	9-32 V			
Output voltage	5 V/3 A			
Number of circuits	max. 8 SpotLEDs in 1 or 2 dimmer circuits			
Electrical power consumption	1–16 W			
IP protective class	30			
Connection	Screw connections			
Dimensions	97 x 97 x 21 mm			

# Technical drawing

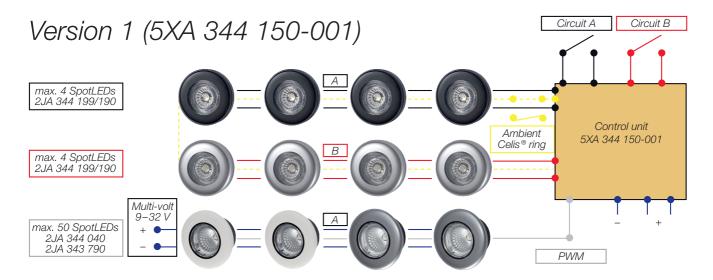
# Application examples





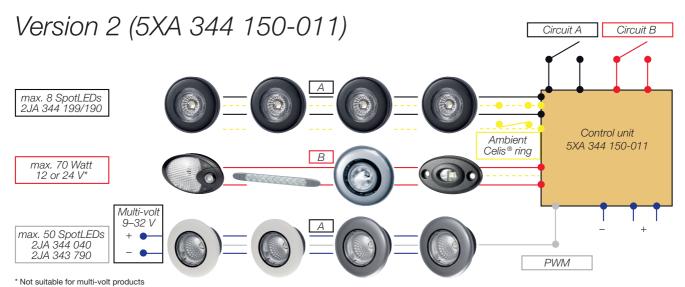


# Connection diagrams central control unit



### Version 1:

The central control unit has two circuits with a max. supply voltage of 5 V. Each of these circuits can be used to trigger and dim a maximum of 4 SpotLEDs of the series 2JA 344 199 or 190. In addition, the user has the possibility of triggering up to 50 further standard SpotLEDs of the series 2JA 344 040 and 2JA 343 790 through pulse width modulation. For this purpose, the standard SpotLEDs have to be supplied with separate voltage from 9-32 V, in order to be switched on and off and dimmed through circuit A.



### Version 2:

The central control unit also has two circuits. One circuit works with a supply current of max. 5 V which can be used to trigger and dim a maximum of 8 SpotLEDs of the series 2JA 344 199 or 190. The 2nd circuit is supplied with the identical input voltage as the central control unit (e. g. 12 V or 24 V). Interior lights using bulb and LED technology can be connected to this circuit. However, the electrical power consumption is restricted to max. 70 W.

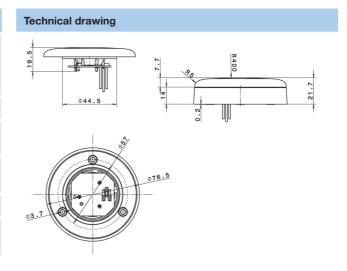
With this version, too, the user has the possibility of triggering up to 50 further standard SpotLEDs of the series 2JA 344 040 and 2JA 343 790 through pulse width modulation. For this purpose, the standard SpotLEDs have to be supplied with separate voltage from 9–32 V, in order to be switched on and off and dimmed through circuit A.

Note: The respective installation instructions must always be heeded when installing the SpotLEDs and the central control units.



# Technical details

Technical data	
Installation	Either as a flat flush-fitting spot (installation depth: 14 mm) or as a surface-mounted spot with frame (total design height: 22 mm)
Voltage	5 V
Light source	Warm-white Power-LED + poss. ambient LED
Electrical power consumption	1.5 W
IP protective class	20
Cables	$3 \times 0.75$ mm <sup>2</sup> (Length: 500 mm), $2 \times 0.75$ mm <sup>2</sup> (without CELIS <sup>®</sup> )



# Range overview

### Individual packaging

comprising 1 SpotLED, 1 coloured light frame, 1 coloured installation frame, 1 sealing ring for flush-fitting

Panel	Fix, without CELIS®	CELIS® warm-white	CELIS <sup>®</sup> blue	CELIS <sup>®</sup> red	CELIS <sup>®</sup> orange
White	2JA 344 199-001	2JA 344 199-101	2JA 344 199-201	2JA 344 199-301	2JA 344 199-351
Black	2JA 344 199-011	2JA 344 199-111	2JA 344 199-211	2JA 344 199-311	2JA 344 199-361
Silver	2JA 344 199-021	2JA 344 199-121	2JA 344 199-221	2JA 344 199-321	2JA 344 199-371

### Set packaging

comprising 4 SpotLEDs, 4 coloured light frames, 4 coloured installation frames, 4 sealing rings for installation, 1 central control unit

Panel	Fix, without CELIS®	CELIS <sup>®</sup> warm-white	CELIS <sup>®</sup> blue	CELIS <sup>®</sup> red	CELIS® orange
White	2JA 344 190-001	2JA 344 190-101	2JA 344 190-201	2JA 344 190-301	2JA 344 190-351
Black	2JA 344 190-011	2JA 344 190-111	2JA 344 190-211	2JA 344 190-311	2JA 344 190-361
Silver	2JA 344 190-021	2JA 344 190-121	2JA 344 190-221	2JA 344 190-321	2JA 344 190-371

### **Accessories**

Accessories			Plastic frame with sharp edges			
	Metal frame		Black	9AB 344 057-001 (round)	9AB 344 058-001 (square)	
	polished stainless	9AB 959 505-501	White	9AB 344 057-011 (round)	9AB 344 058-011 (square)	
	glossed stainless	9AB 959 505-561	Silver	9AB 344 057-021 (round)	9AB 344 058-021 (square)	

Waterproof SpotLEDs (IP protective class: 66) are available in individual and set packaging on request.



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