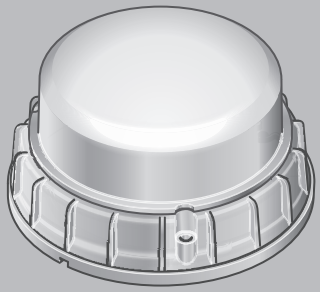


INSTALLATION INSTRUCTION
KLED 2.0

Explanation symbols

EN Correct

EN Incorrect

EN Location/Position Arrow

EN Movement Arrow

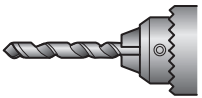
EN Warning

EN Disconnect

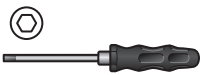
EN Connect

EN Look/See

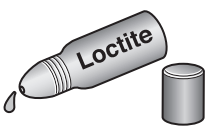
Installation tools required



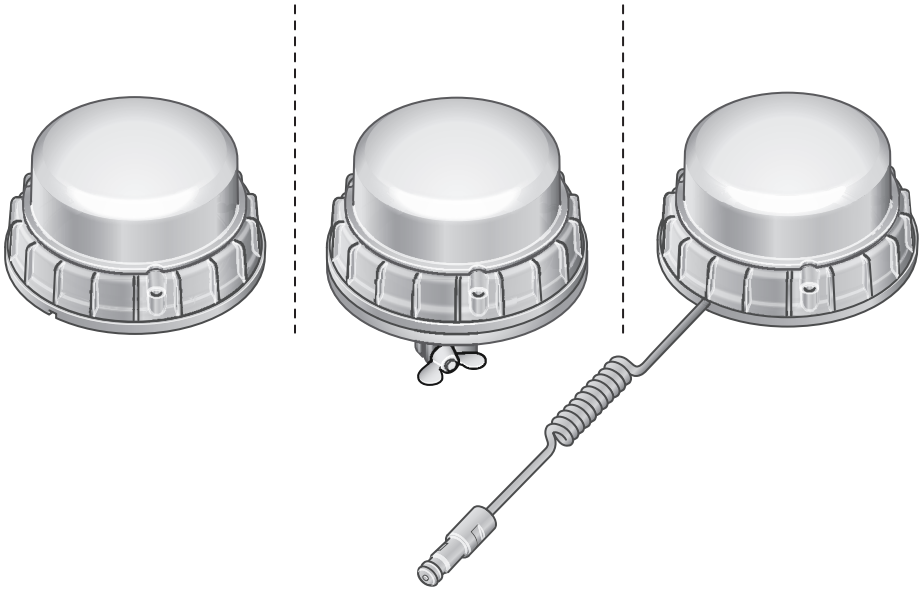
5,5 mm
8,5 mm

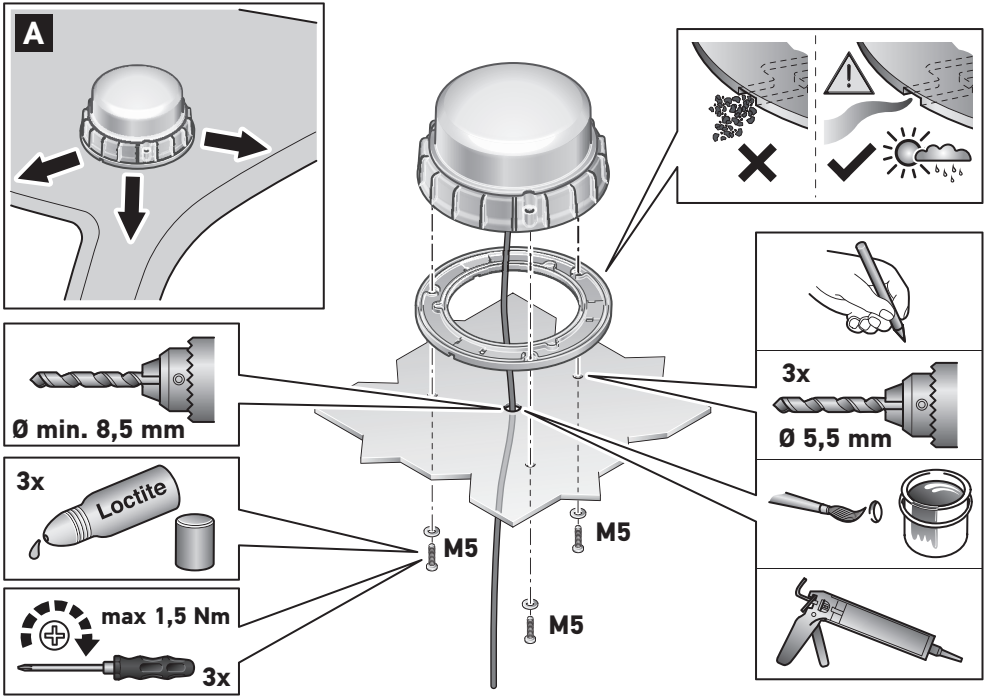


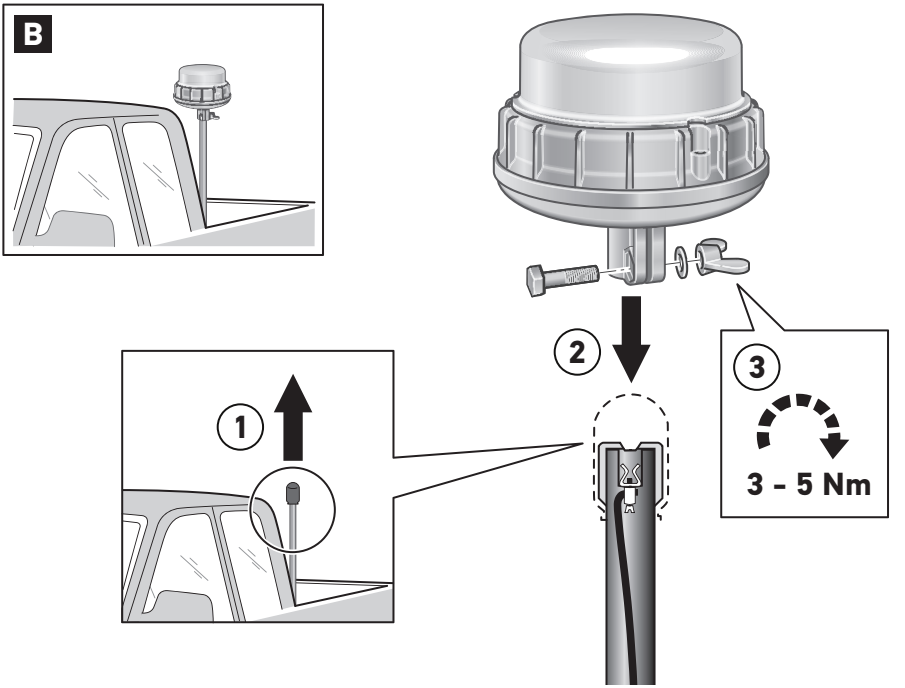
6 mm



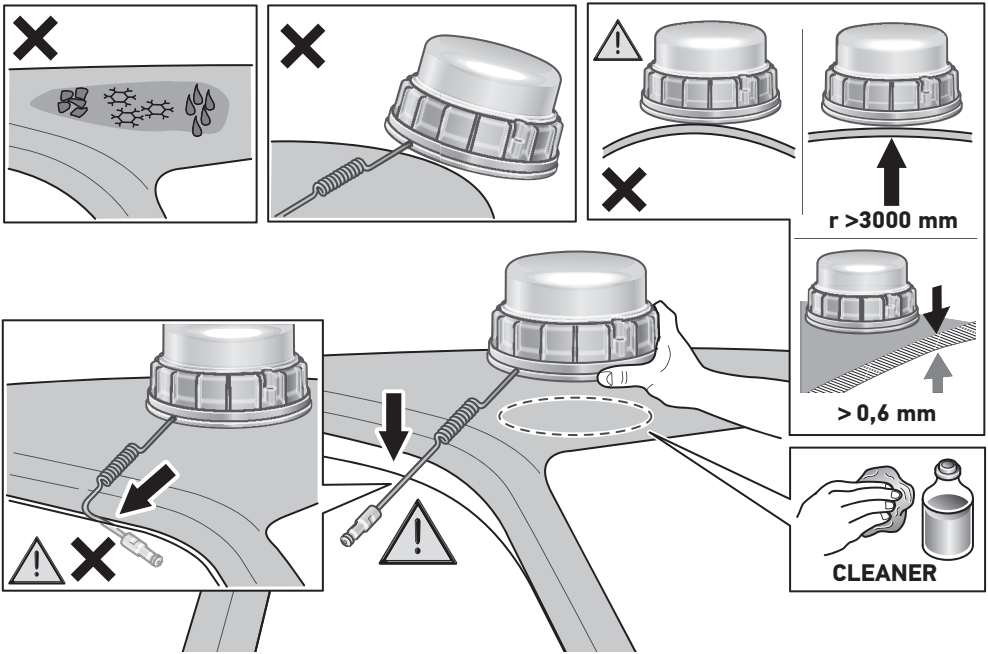
Mounting



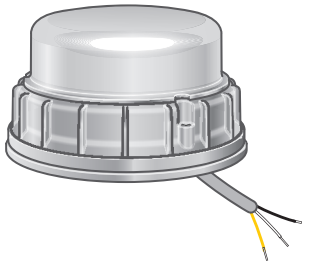

A
Ø min. 8,5 mm
3x
Loctite
max 1,5 Nm
3x
M5
M5
M5
3x
Ø 5,5 mm

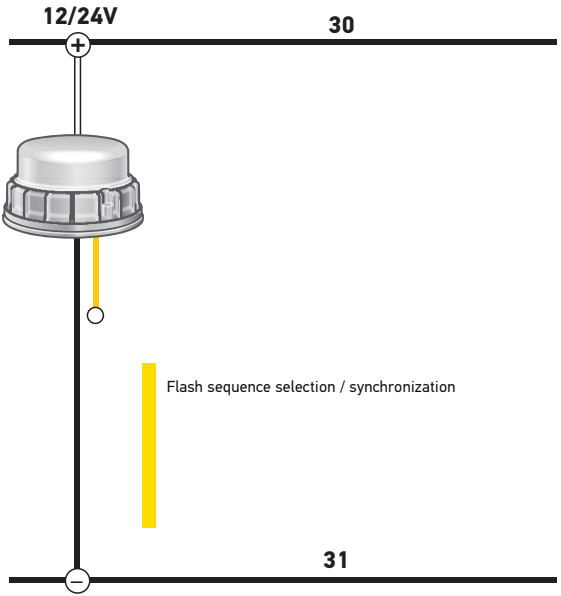

B
1
2
3
3 - 5 Nm

C **max. 200 km/h**



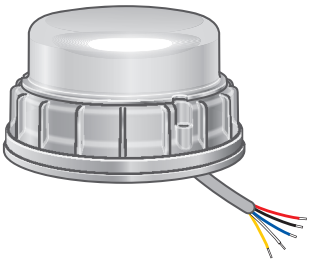
Electrical connection

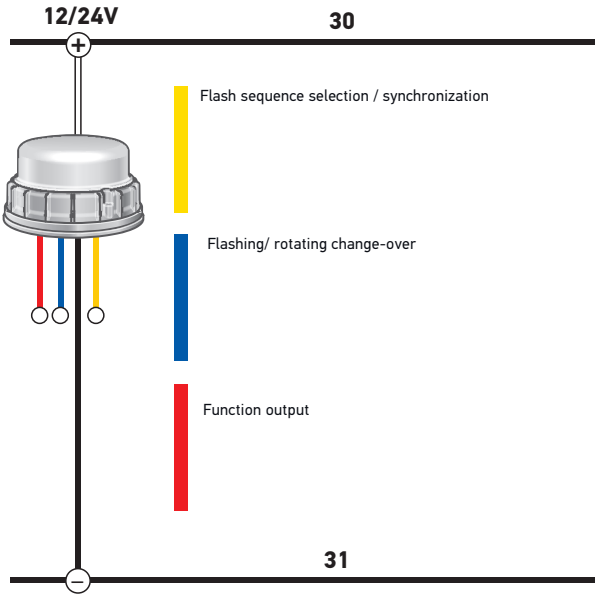




Cables not being used must be insulated.

Electrical connection





Cables not being used must be insulated.

POSSIBLE FLASH SEQUENCES

We recommend programming the lamps BEFORE mounting them on the roof!

The programming mode allows the user to select one of the 17 available flash patterns. Flash patterns 1, 2, and 4 are permissible for lamp operation in Europe only.

FLASH SEQUENCE ADJUSTMENT

1. The lamp must be put in operation (white to positive terminal (plus +), black to negative terminal (minus -)).

2. The "Synchronization" input (yellow) is connected to the positive terminal (plus +).

3. After approx. 2 seconds the flash sequence selection mode is activated, the lamp now starts flashing at approx. 1 Hz. After every flash cycle, the next flash sequence is activated, although it always starts with the first flash sequence. For example, if you want to select the 4th flash sequence, the “Select Flash Sequence” input (yellow) needs to be disconnected from positive terminal (plus +) after the 4th flash.

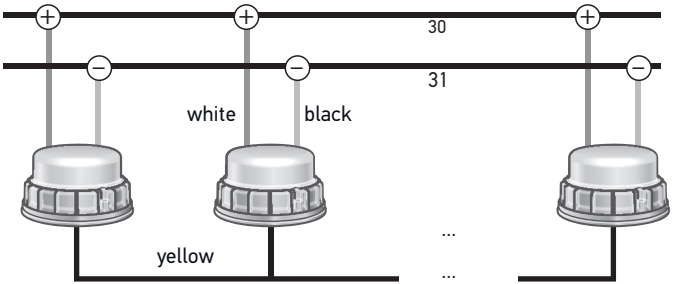
POSSIBLE FLASH SEQUENCES

1. Single flash, 2 Hz
2. Double flash, 2 Hz
3. Triple flash, 2 Hz
4. Rotating signal, 2 Hz
5. Single flash (250 ms offset versus flash sequence 1)
6. Double flash (250 ms offset versus flash sequence 2)
7. Triple flash (250 ms offset to flash sequence 2)
8. SAE, single flash, 1.42 Hz, day level (light sensor without function)
9. SAE, double flash, 1.42 Hz, day level (light sensor without function)
10. SAE, triple flash, 1.42 Hz, day level (light sensor without function)
11. SAE, quadruple flash, 1.42 Hz, day level (light sensor without function)
12. SAE, rotating flash, 1.42 Hz, day level (light sensor without function)
13. SAE, single flash, 1.42 Hz, night level (light sensor without function)
14. SAE, double flash, 1.42 Hz, night level (light sensor without function)
15. SAE, triple flash, 1.42 Hz, night level (light sensor without function)
16. SAE, quadruple flash, 1.42 Hz, night level (light sensor without function)
17. SAE, rotating flash, 1.42 Hz, night level (light sensor without function)

LAMP SYNCHRONIZATION

1. Program each lamp individually with the desired flash pattern as described in the "Programming Mode" instructions. (We recommend selecting the same flash pattern for all lamps to be synchronized.)

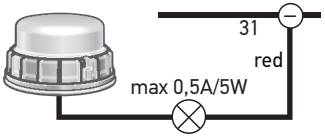
2. Connect the lamps as specified in the circuit diagram. Here, all yellow lines are connected to one another.



FUNCTION CHECK

Mandatory for all emergency vehicles (police, fire department, etc.)

The function check indicates that the lamp operates properly. In the case of a defective LED or any other malfunctions, the control lamp will go out.



APPROVAL

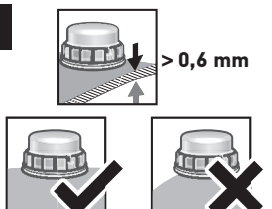
Hella rotating beacons (K-LED 2.0 Art. No. 2XD 011 557-XXX, yellow, red, blue) have been officially type-tested within the scope of ECE-R65. They need to be mounted at the highest point of the vehicle and, when the vehicle is loaded during operation, they must be vertical to the road surface. All rotating beacons are RFI suppressed and comply with VDE 0879 Part 2. They are EC-approved according to Directive 72/245 EEC in version 2006/28 EC.

ELECTRICAL CONNECTION

(fuse-protected positive line)
Use a cable cross-section of at least 1.5 mm^2,
10 slow-blow fuse.

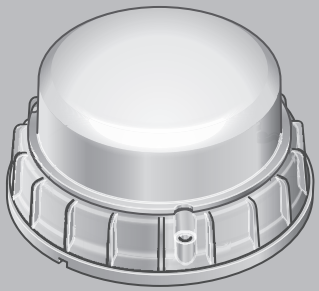
INSTALLATION

A



Select the proper position on the roof of the vehicle (see specifications). If the specified visibility (see German Road Traffic Licensing Regulations - StVZO) cannot be satisfied due to structures on the roof of the vehicle, further beacons must be mounted.
M5 screws must be used for attaching them from below. Screws, see drawing.

Technical Data	
Type approval ECE-R65 Type approval ECE-R10	
Approval	GGVSE / ADR
Rated voltage	12 V/24 V
Operating voltage	10-32 V
Total current consumption	12 V: approx. 0.85-2.5 A 24 V: approx. 0.45-1.25 A
Interference suppression class CISPR 25	Degree of interference suppression 5
Power consumption	approx. 9-30 W
Dome	PC
Operating position	upright
Protection class	IPX 9K, IP 6K
Temperature range	minus 40 °C to plus 60 °C
Reverse polarity protection	Yes
Casing	Aluminum
Interference suppression class	e1 Approval according to 72/245 EEC in version 2006/28 EC.



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