

Lightbar systems



Lightbar systems

- Highest safety through perfection

Today, Hänsch lightbar systems are an essential piece of equipment for the police, fire brigade and rescue services' vehicles. A maximum warning effect is achieved by using the latest lighting technology, thus increasing safety for all traffic users. All lightbar systems are available in a variety of lengths and designs. They are modular and feature a wide range of functions.



reddot award 2017
winner

DBS 5000



reddot design award
winner 2013

DBS 4000



DBS 2000/3000 LED



Divided DBS 975 LED

DBS 5000

Winner of the *reddot design award*, the DBS 5000 warning system combines modern design, a versatile range of functions and powerful LED lighting technology. The optimum warning effect attracts the attention of road users and ensures additional safety when in operation. The low-profile design not only ensures low air resistance and reduced noise, but also makes it possible to access destinations where clearance height is an issue.




reddot award 2017
winner

Customisable

- fitted using a modular system
- easily adaptable to individual needs

Aerodynamic housing

- low wind resistance and reduced noise levels
- low-profile design

Variety of mounting options

- fast and easy mounting options for flat or curved vehicle roofs
- vehicle-specific carrier systems offer additional mounting options

Maximum warning effect

- state-of-the-art lighting technology
- automatic day/night switching

Easy operation

- digital control via CAN447 or FireCAN
- converters for analogue control available

Variety of lengths

- lengths: 700, 1100, 1200, 1400, 1600 or 1800 mm



RANGE OF FUNCTIONS AVAILABLE

- infrared LED (helicopter recognition)
- LED command vehicle light (GREEN)
- direction indicator (turning light)*
- day/night switching (automatic)
- working light
- undercarriage loudspeaker to support public address
- alley lights: 0° or 20° tilt
- additional flashers
- power flash
- rear warning system
- traffic advisor (special approval required)
- convoy function (control required)
- integration of compressor horns possible
- also available with clear lamp domes

*CAN447 requires an I/O-Box to feed in the signals

Also available with examination in accordance with ICAO type C.
Further information can be found on page 96.

Technical data:	
Designation:	DBS 5000
Voltage:	12 V / 24 V
Flash frequency:	> 2 Hz (beacon)
Average power consumption:	from 4 A (at 12 V)
Lengths:	700, 1100, 1200, 1400, 1600, 1800 mm
Depth:	285 mm
Height:	63 mm
Weight:	from 5.1 kg
Material:	lamp dome: PC / cover glass: PMMA / housing: aluminium
Type of protection:	IP5K4K / IPX9K
Homologation: (Germany and international)	
Light according to ECE-R 65:	TB2 (E) 00 4446
EMC according to ECE-R 10:	(E) 10R-05 7981
Direction indicator: Light according to ECE-R 6:	01 1 (E) 4453 (front) / 01 2a (E) 4453 (rear)
Rear warning system: Light according to ECE-R 65:	XA1 (E) 00 4471
Power flash: light according to TA13a:	~ K 1427

DBS 5000

Lamp dome

- clear
- blue
- red

Cover profile

Main beacon with function monitoring, optional:

- direction indicator
- helicopter recognition
- command vehicle light

Alley lights

- lighting for the surrounding area (20°)
- search light (0°)



Cover glass

- white
- blue
- clear
- blue transparent

LED modules (middle section)

- working light
- additional flasher
- rear warning system
- power flash

Basic lightbar

Possible lengths		
700, 1100, 1200, 1400, 1600, 1800 mm		
Main beacon (HKL)		
Function		
Main beacon (blue)		<ul style="list-style-type: none"> • high-power LEDs with wide angle lenses • class 2 homologation with automatic day/night switching • integrated function monitoring • flash pattern: strobe flash • optional: signal light: command vehicle light green, fourfold on the main beacons (flashing) • optional: helicopter recognition, fourfold, infrared rotating, for night vision devices • optional: direction indicator, front and rear, in the main beacons* • also available with clear lamp domes
Control module (KM)		
Function		
Digital control		<ul style="list-style-type: none"> • serial control by 2-wire cable for CAN447 control units (e.g. BE 300, HBE 300) • compatibility of other control units on request
FireCAN		<ul style="list-style-type: none"> • serial control for FireCAN control units
Analogue control		<ul style="list-style-type: none"> • converters for analogue control available • analogue control via signal line • for limited range of functions (compatibility on request)
Roof mounting		
Function		
	Rubber mouldings	<ul style="list-style-type: none"> • for flat or curved vehicle roofs
	Mounting brackets	<ul style="list-style-type: none"> • universal and various vehicle-specific models available



*CAN447 requires an I/O-Box to feed in the signals


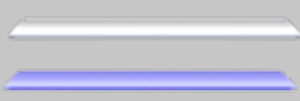
DBS 5000

Electrical connection	
Function	
Cable outlet	<ul style="list-style-type: none"> • cable outlet, passenger side: standard • cable outlet, driver side • separate cable outlet (power supply and signal line are laid separately) • vehicle-specific electrical connections on request

Options

Acoustics		
Function		Possible for
Undercarriage loudspeaker	<ul style="list-style-type: none"> • undercarriage loudspeaker directed towards the rear and/or the front for public address • external amplifier and cable harness required 	<ul style="list-style-type: none"> • 12 V • 24 V
Martin compressor system	<ul style="list-style-type: none"> • external Martin compressor with 4 diaphragm acoustic horns, mounted on the lightbar 	<ul style="list-style-type: none"> • 12 V • 24 V

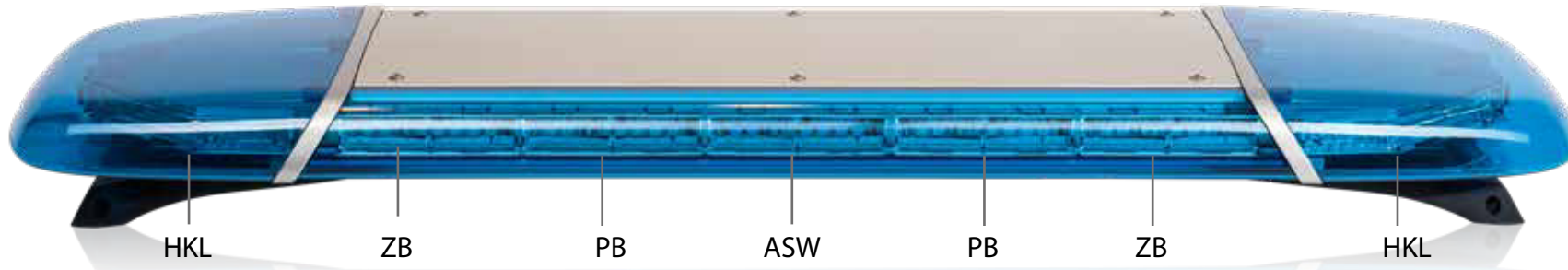
Alley lights (side lights)			
Function			Possible for
	Lighting for surrounding area	<ul style="list-style-type: none"> • colour: white • tilt angle: 20° • mounted in pairs (left and right) 	<ul style="list-style-type: none"> • 12 V • 24 V
	Search lights	<ul style="list-style-type: none"> • colour: white • without tilt angle • mounted in pairs (left and right) 	<ul style="list-style-type: none"> • 12 V • 24 V

Cover glass		
Description		
	Cover glass in full colour: <ul style="list-style-type: none"> • white (RAL 9010) • blue (RAL 5017) 	
	Cover glass, transparent: <ul style="list-style-type: none"> • clear • blue transparent 	<ul style="list-style-type: none"> • clear or tinted transparent cover glass • required when middle modules are mounted

Middle modules

Options - front mounting

Configuration example



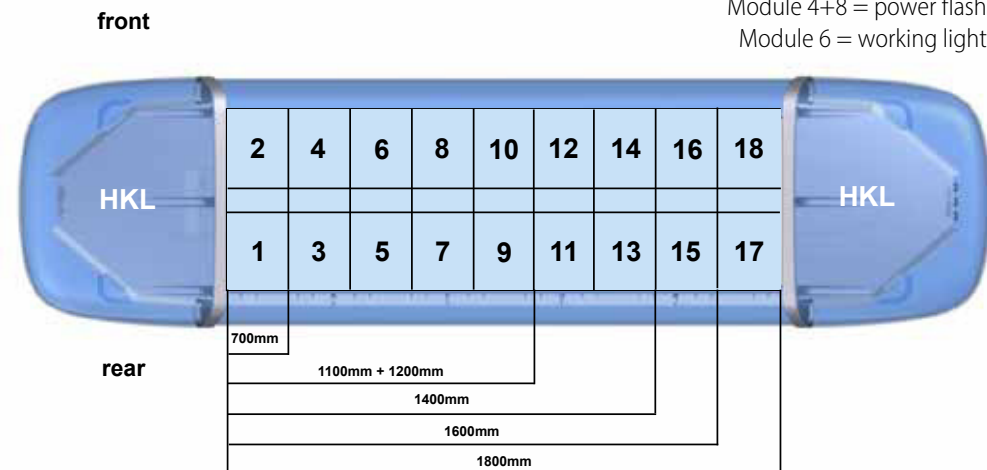
Overview of module slots

Configuration example for 1100 mm:

- Module 2+10 = additional flashers
- Module 4+8 = power flash
- Module 6 = working light



Additional flasher (ZB), working light (ASW) and power flash (PB)*	
Function	
Additional flashers (pair) max. 3 pairs, depending on the length	<ul style="list-style-type: none"> • a module consists of 9 blue LEDs in the reflector housing • directional • synchronisation with respective main flasher • reduced in night mode
Working light (0°) (up to 4 pcs. per lightbar)	<ul style="list-style-type: none"> • 9 white LEDs in the reflector housing • selectable mounting position • 1500 lumens
Power flash	<ul style="list-style-type: none"> • a module consists of 9 blue LEDs in the reflector housing • directional • optimised for distance effect
*max. 6 modules possible	



DBS 5000

Middle modules

Options - rear mounting

Configuration example



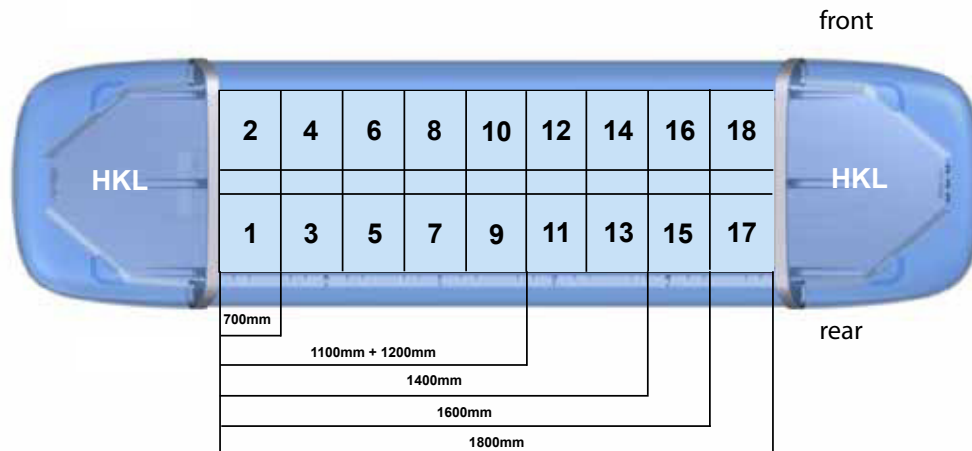
Overview of module slots

Configuration example for 1100 mm:

- Module 1+9 = additional flashers
- Module 3+7 = rear warning system
- Module 5 = working light



driving direction



Additional flasher (ZB), working light (ASW), rear warning system (HWS) * and traffic advisor (VLE)	
Function	
Additional flashers (pair) max. 3 pairs, depending on the length	<ul style="list-style-type: none"> a module consists of 9 blue LEDs in the reflector housing directional synchronisation with respective main flasher reduced in night mode
Working light (0°) (up to 4 pcs. per lightbar)	<ul style="list-style-type: none"> 9 white LEDs in the reflector housing selectable mounting position 1500 lumens
Rear warning system (2, 4 or 6 modules possible)	<ul style="list-style-type: none"> a module consists of 9 amber LEDs in the reflector housing directional available only in pairs (mounted left and right)
Traffic advisor (special approval required)	<ul style="list-style-type: none"> consists of 5 or 6 middle modules with 9 amber LEDs each directional flashing sequences possible including flash pattern for rear warning system
*max. 6 modules possible	

Special function

Convoy

- "convoy front" switches the rear part of the main beacon (HKL) and the rear additional flasher (ZB) off in order not to blind the following traffic
- "convoy rear" switches the front part of the main beacon (HKL) and the front additional flasher (ZB) off in order not to blind the traffic travelling ahead
- the control unit has to support the "convoy" function



DBS 5000

can switch between blue and amber

The bicoloured lightbar system DBS 5000 can be switched between blue and amber.

The blue warning signal is used to clear a path on the way to the destination.

The beacon can be switched to amber at the destination in order to act as a warning signal to secure the area.



PRODUCT FEATURES:

- can switch between blue and amber
- both colours are homologated according to ECE-R 65
- blue: can be used to indicate the right-of-way while driving
- amber: can be used as a warning signal at the destination
- blue additional flasher
- amber additional flasher
- direction indicator*
- working light
- alley lights
- rear warning system (amber)
- power flash (blue)
- day/night switching
- partially integration of compressor horns possible
- installation of undercarriage loudspeakers possible

*CAN447 requires an I/O-Box to feed in the signals

Also available with examination in accordance with ICAO type C.
Further information can be found on page 96.

Technical data:	
Designation:	DBS 5000
Voltage:	12 V / 24 V
Flash frequency:	> 2 Hz (beacon)
Average power consumption:	from 4 A (at 12 V)
Lengths:	700, 1100, 1200, 1400, 1600, 1800 mm
Depth:	285 mm
Height:	63 mm
Weight:	from 5.1 kg
Material:	lamp dome: PC / cover glass: PMMA / housing: aluminium
Type of protection:	IP5K4K / IPX9K
Homologation: (Germany and international)	
Light according to ECE-R 65:	TB2 (E1) 00 4446 / TA2 (E1) 00 4447
EMC according to ECE-R 10:	(E1) 10R-05 7981
Direction indicator: Light according to ECE-R 6:	01 1 (E1) 4453 (front) / 2a 01 (E1) 4453 (rear)
Rear warning system: Light according to ECE-R 65:	XA1 (E1) 00 4471
Power flash: light according to TA 13a:	~ K 1427

DBS 4000

Winner of the *reddot design award*, the DBS 4000 warning system combines modern design, a versatile range of functions and powerful LED lighting technology. A highly effective warning effect attracts the attention of road users and ensures additional safety when in operation. Thanks to the wide range of functions to choose from, the DBS 4000 can be adapted to suit any application.



reddot design award
winner 2013

Customisable:

- fitted using a modular system
- easily adaptable to individual needs

Aerodynamic housing

- low wind resistance and reduced noise levels

Variety of mounting options

- fast and easy mounting options for flat or curved vehicle roofs
- vehicle-specific carrier systems offer additional mounting options

Maximum warning effect

- state-of-the-art lighting technology
- automatic day/night switching

Easy operation

- analogue or digital control using the CANBus protocol, based on the CAN open Standard 447 or FireCAN

Variety of lengths

- lengths: 1100, 1200, 1400, 1600, 1800 or 2000 mm
- divided version: 2x 430 mm (24V)

DBS 4000



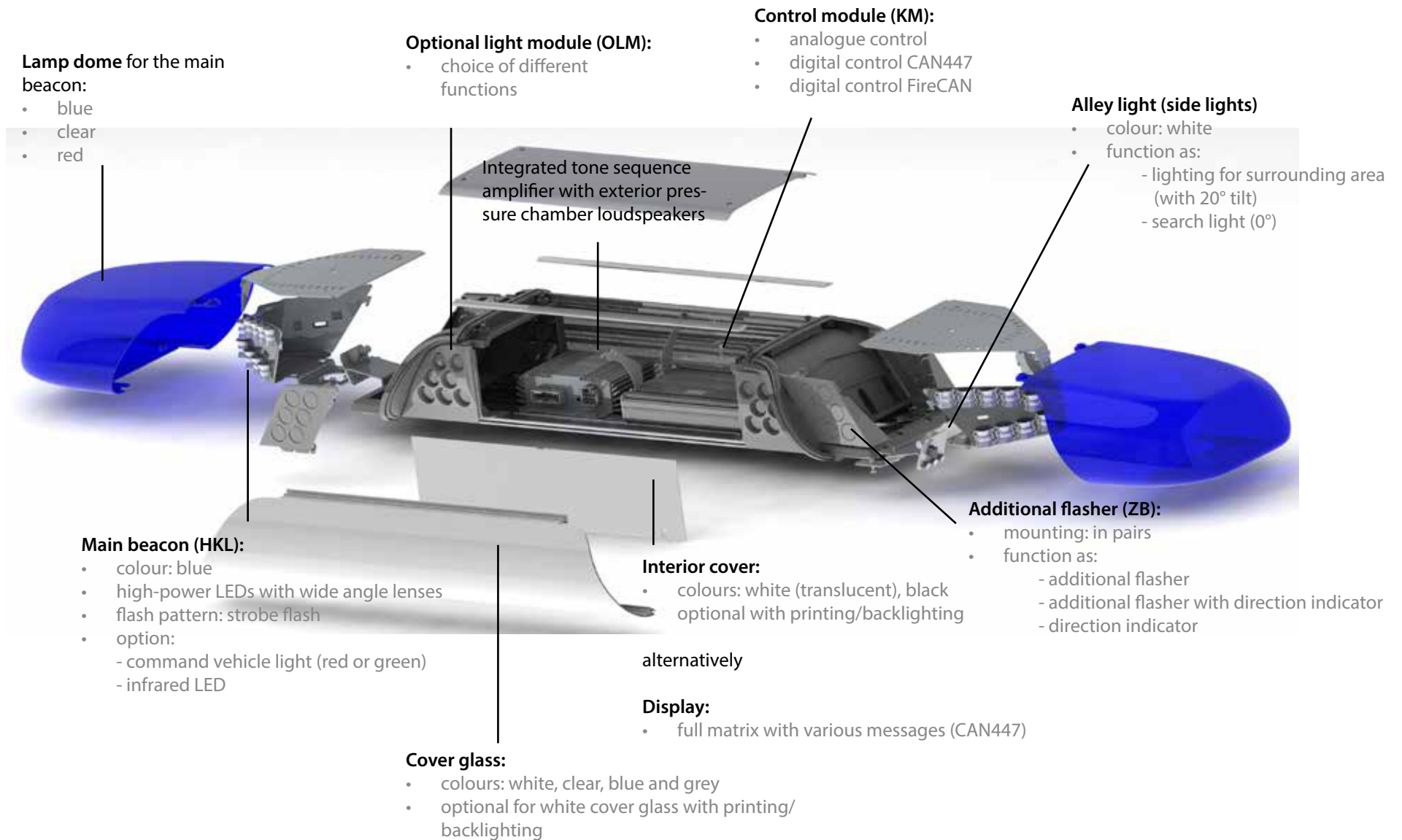
RANGE OF FUNCTIONS AVAILABLE

- infrared LED (helicopter recognition)
- traffic advisor (special approval required)
- convoy function (control required)
- command vehicle light (red or green)
- integrated compressor system
- direction indicator (turning light)
- working light
- alley lights: 0° or 20° tilt
- additional flashers
- rear warning system
- power flash
- take down flash
- undercarriage loudspeaker to support public address
- tone sequence system (TFA 614/624)
- cover glass printing
- full matrix display
- day/night switching (automatic)
- tube adapter in the top possible
- also available with clear lamp dome

Also available with examination in accordance with ICAO type C.
Further information can be found on page 94.

Technical data:

Designation:	DBS 4000
Voltage:	12 V / 24 V
Flash frequency:	> 2 Hz (beacon)
Average power consumption:	from 4 A (at 12 V)
Lengths:	1100, 1200, 1400, 1600, 1800, 2000 mm divided: 2x 430 mm (24V)
Depth:	300 mm
Height:	135 mm
Weight:	from 9 kg
Material:	lamp dome: PC / cover glass: PMMA / housing: aluminium
Type of protection:	IP5K4K / IPX9K
Homologation: (Germany and international)	
Light according to ECE-R 65:	TB2 (E1) 00 3111
EMC according to ECE-R 10:	(E1) 10R-05 6209
Take down flash: light according to TA 13b:	~ K 1020
Direction indicator: light according to ECE-R 6	01 2a (E1) 3800 (rear) / 1 01 (E1) 3822 (front)
Power flash: light according to TA 13a:	~ K 809
RWS: light according to TA 20:	~ K 810



DBS 4000

Basic lightbar

Possible lengths
1100, 1200, 1400, 1600, 1800 and 2000 mm/divided: 2x 430 mm (24V)

Main beacon (HKL)	
Function	
Main beacon (blue)	<ul style="list-style-type: none"> high-power LEDs with wide angle lenses class 2 homologation with automatic and manual day/night switching integrated function monitoring flash pattern: strobe flash optional: signal light: command vehicle light red or green, fourfold, on the main beacons (flashing) optional: helicopter recognition, fourfold, infrared rotating, for night vision devices also available with clear lamp dome



Control module (KM)	
Function	
Analogue control	<ul style="list-style-type: none"> for alarm pull-twist switch, individual switch and various common analogue control units (e.g. BE 200 or BE 600)
Digital control	<ul style="list-style-type: none"> serial control by 2-wire cable for CAN447 control units (e.g. BE 300, HBE 300) compatibility of other control units on request
FireCAN	<ul style="list-style-type: none"> serial control for FireCAN control units

Function	
Rubber mouldings	<ul style="list-style-type: none"> for flat or curved vehicle roofs
Mounting brackets	<ul style="list-style-type: none"> universal and various vehicle-specific models available
Flat sealing	<ul style="list-style-type: none"> for flat vehicle roofs

Electrical connection	
Function	
Cable outlet	<ul style="list-style-type: none"> cable outlet, passenger side: standard cable outlet, driver side separate cable outlet (power supply and signal line are laid separately)

Options

Acoustics	
Function	
TFA 614	<ul style="list-style-type: none"> integrated tone sequence amplifier with one external pressure chamber loudspeaker DKL 604 or DKL 804
TFA 624	<ul style="list-style-type: none"> integrated tone sequence amplifier with two external pressure chamber loudspeakers DKL 604 or DKL 804
Undercarriage loudspeaker (UKL)	<ul style="list-style-type: none"> undercarriage loudspeaker to the rear and/or to the front for the support of public address with integrated or exterior amplifier (combination with TFA 624 only in CAN447)
Martin compressor system	<ul style="list-style-type: none"> integrated or external Martin compressor with 4 diaphragm acoustic horn, mounted on the lightbar. Additional information on page 56.

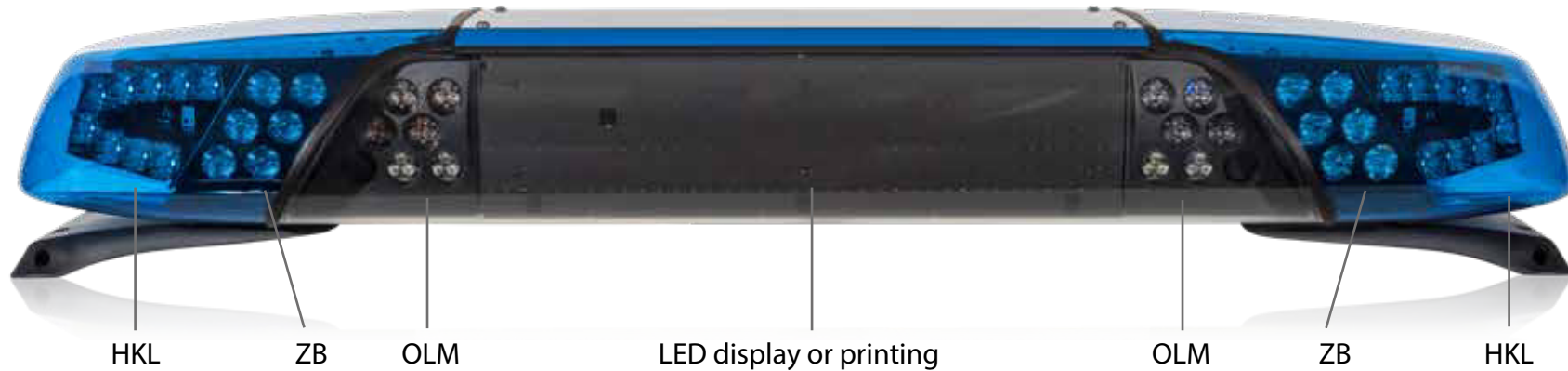
Alley lights (side lights)		
Function		
	Lighting for surrounding area	<ul style="list-style-type: none"> colour: white tilt angle: 20° mounted in pairs (left and right)
	Search lights	<ul style="list-style-type: none"> colour: white without tilt angle mounted in pairs (left and right)

Display and printing	
Function	
Cover glass (colours: white, clear, blue and grey)	<ul style="list-style-type: none"> standard: white without printing optional: white with printing (backlighting possible) optional: clear without printing (interior cover or display required), a clear cover glass is mandatory when OLMs are used
Interior cover (colours: white and black)	<ul style="list-style-type: none"> standard: white without printing optional: white with printing optional: black without printing
Display	<ul style="list-style-type: none"> various messages possible with digital control module

DBS 4000

Options - front mounting

Configuration example



Additional flashers			
Function			Possible for
ZB	Additional flashers (pair)	<ul style="list-style-type: none"> • consist of 12 blue LEDs • directional • synchronisation with respective main flasher • deactivated in night mode 	<ul style="list-style-type: none"> • 12 V • 24 V
ZB	Additional flashers with direction indicator (pair)	<ul style="list-style-type: none"> • consist of 6 blue and 8 amber LEDs • directional • additional flasher: deactivated in night mode; synchronisation with respective main flasher • direction indicator: function as direction indicator or hazard warning light (synchronisation with vehicle direction indicator required) 	<ul style="list-style-type: none"> • 12 V
ZB	Direction indicators (pair)*	<ul style="list-style-type: none"> • consist of 8 amber LEDs • directional • function as direction indicator or hazard warning light (synchronisation with vehicle direction indicator required) 	<ul style="list-style-type: none"> • 12 V

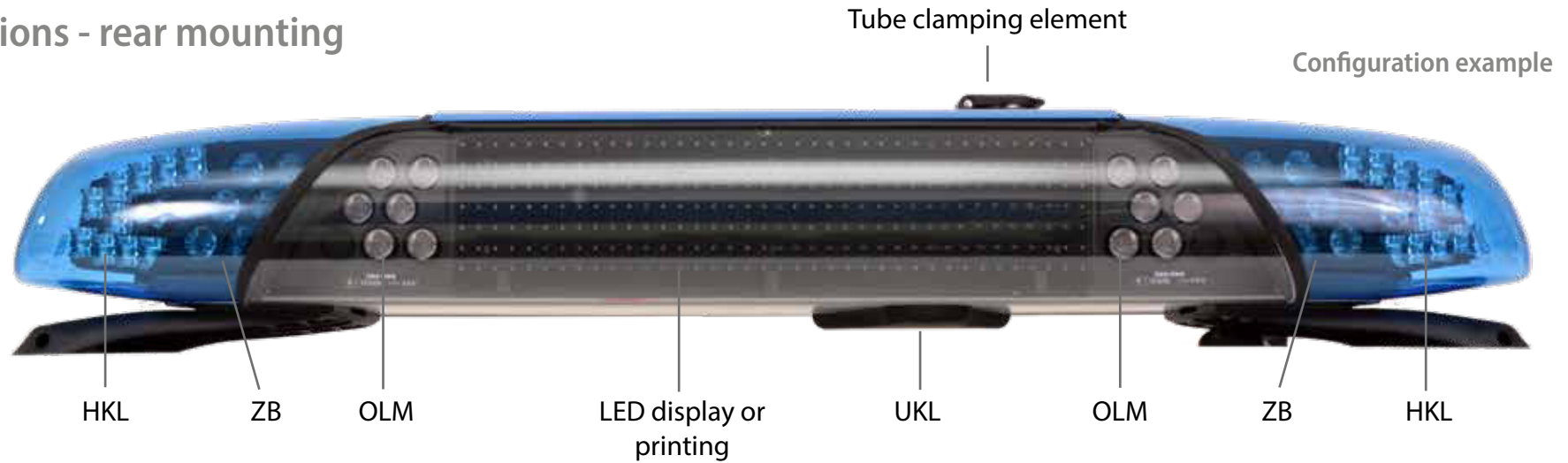
*CAN447 requires an I/O-Box to feed in the signals

Options - front mounting

Optional light module (OLM)			
Function			Possible for
OLM	Power flash (PB)	<ul style="list-style-type: none"> consists of 3 blue triple lenses (9 LEDs) standard: mounted left (driver side) optional: additional PB on the right (passenger side) 	<ul style="list-style-type: none"> 12 V 24 V
OLM	Take down flash (AHB)	<ul style="list-style-type: none"> allowed only in conjunction with display consists of one red triple-lens (3 LEDs) standard: mounted left (driver side) optional: additional AHB on the right (passenger side) 	<ul style="list-style-type: none"> 12 V
OLM	Working light (ASW)	<ul style="list-style-type: none"> consists of 3 white LEDs per module standard: mounted right (passenger side) an additional unit can be mounted on the left side (driver side) as an option light value: <ul style="list-style-type: none"> - 600 lumens - 1000 lumens - 1500 lumens (each with a 15° tilt angle) 	<ul style="list-style-type: none"> 12 V 24 V 12 V
OLM	Power flash (PB) and take down flash (AHB)	<ul style="list-style-type: none"> see description of "power flash" and "take down flash" 	<ul style="list-style-type: none"> 12 V
OLM	Power flash (PB) and working light (ASW)	<ul style="list-style-type: none"> see description of "power flash" and "working light" 	<ul style="list-style-type: none"> 12 V 24 V
OLM	Power flash (PB), take down flash (AHB) and working light (ASW)	<ul style="list-style-type: none"> see description of "power flash", "take down flash" and "working light" light intensity: 600 or 1500 lumens 	<ul style="list-style-type: none"> 12 V
OLM	Take down flash (AHB) and working light (ASW)	<ul style="list-style-type: none"> see description of "take down flash" and "working light" light intensity: 600 or 1500 lumens 	<ul style="list-style-type: none"> 12 V

DBS 4000

Options - rear mounting



Additional flashers			Possible for
Function			
ZB	Additional flashers (pair)	<ul style="list-style-type: none"> • consist of 12 blue LEDs • directional • synchronisation with respective main flasher • deactivated in night mode 	<ul style="list-style-type: none"> • 12 V • 24 V
ZB	Additional flasher with direction indicator* (pair)	<ul style="list-style-type: none"> • consists of 6 blue and 8 amber LEDs • directional • additional flasher: deactivated in night mode; synchronisation with respective main flasher • direction indicator: function as direction indicator or hazard warning light (synchronisation with vehicle direction indicator required) 	<ul style="list-style-type: none"> • 12 V
ZB	Direction indicators (pair)*	<ul style="list-style-type: none"> • consist of 8 amber LEDs • directional • function as direction indicator or hazard warning light (synchronisation with vehicle direction indicator required) 	<ul style="list-style-type: none"> • 12 V

*CAN447 requires an I/O-Box to feed in the signals

Options - rear mounting

Optional light module (OLM)			
Function			Possible for
OLM	Working light (ASW)	<ul style="list-style-type: none"> consists of 3 white LEDs per module standard: mounted right (passenger side) an additional unit can be mounted on the left side (driver side) as an option light value: <ul style="list-style-type: none"> - 600 lumens - 1000 lumens - 1500 lumens (each with a 15° tilt angle) 	<ul style="list-style-type: none"> 12 V 24 V 12 V
OLM	Rear warning system (RWS)	<ul style="list-style-type: none"> consists of 12 amber LEDs available only in pairs (mounted left and right) 	<ul style="list-style-type: none"> 12 V 24 V

A combination of both OLM options is not possible. The working lights can only be combined with the LED rear warning system type 40 pico LED.

RWS type 40 pico LED			
Function			
RWS 40 pico LED*		<ul style="list-style-type: none"> one lamp body consists of 8 LEDs lamp body: <ul style="list-style-type: none"> - 1100 mm: 2 lamp bodies - 1200 mm: 2 lamp bodies - 1400 mm: 3 lamp bodies - 1600 mm: 4 lamp bodies - 1800 mm: 5 lamp bodies - 2000 mm: 5 lamp bodies: rear-facing lights can also be integrated as OLMs 	<ul style="list-style-type: none"> 12 V 24 V

* not combinable with OLM RWS

DBS 4000

Options

Special functions	
Helicopter recognition	<ul style="list-style-type: none"> • 4 integrated infrared LEDs • allows recognition by night vision devices • rotating flash pattern
Traffic advisor (VLE)*	<ul style="list-style-type: none"> • consists of 6 amber LED modules with 3 LEDs each • for rear mounting • choice of different flash patterns (warning function, RWS function) or traffic advisor function (arrow stick function)
Convoy function	<ul style="list-style-type: none"> • "convoy front" switches the rear part of the main beacon (HKL) and the rear additional flasher (ZB) off, in order to not blind the following traffic • "convoy rear" switches the front part of the main beacon (HKL) and the front additional flasher (ZB) off, in order to not blind the traffic travelling ahead • requires the appropriate control unit
Option with tube clamping element	<ul style="list-style-type: none"> • a clamping element can also be attached to mount a beacon on a tube
Signal light	<ul style="list-style-type: none"> • red or green, quadruple on the main beacons • flashing
Integrated compressor system	<ul style="list-style-type: none"> • diaphragm acoustic horns mounted on the DBS 4000 • additional functions (e.g. RWS type 40 pico LED, VLE, etc.) possible only from a lightbar length of 1600 mm • no backlighting available in any of the lengths
* no homologation as RWS, special approval required for traffic advisor	

DBS 4000

can switch between blue and amber

The bicoloured lightbar system DBS 4000 LED can switch between blue and amber.

The blue warning signal is used to clear a path on the way to the destination.

The beacon can be switched to amber at the destination in order to act as a warning signal to secure the area.



PRODUCT FEATURES:

- can switch between blue and amber
- both colours are homologated according to ECE-R 65
- blue: can be used to indicate the right-of-way while driving
- amber: can be used as a warning signal at the destination
- optional: integration of additional flashers to reinforce the respective warning effect
- blue additional flasher to the front and/or the rear possible
- amber additional flasher to the front and/or the rear possible

Also available with examination in accordance with ICAO type C.
Further information can be found on page 94.

Technical data:	
Designation:	DBS 4000
Voltage:	12 V / 24 V
Flash frequency:	> 2 Hz (beacon)
Average power consumption:	from 4 A (at 12 V)
Lengths:	1100, 1200, 1400, 1600, 1800, 2000 mm
Depth:	300 mm
Height:	135 mm
Weight:	from 9 kg
Material:	lamp dome: PC / cover glass: PMMA / housing: aluminium
Type of protection:	IP5K4K / IPX9K
Homologation: (Germany and international)	
Light according to ECE-R 65:	TB2 (E1) 00 3111 / TA2 (E1) 00 3111
EMC according to ECE-R 10:	(E1) 10R - 05 6209

DBS 2000 LED

The DBS 2000 LED warning system offers a wide selectable range of functions and powerful LED lighting technology in a solid housing. A maximum warning effect attracts the attention of road users and ensures additional safety when in operation. The integration of a pressure chamber loudspeaker completes the lightbar design.



Customisable:

- fitted using a modular system
- easily adaptable to individual needs

Variety of mounting options

- fast and easy mounting options for flat or curved vehicle roofs
- vehicle-specific carrier systems offer additional mounting options

Maximum warning effect

- state-of-the-art lighting technology

Easy operation

- analogue control

Variety of lengths

- lengths: 920, 1090, 1250, 1370, 1400, 1600, 1800 and 2000 mm

DBS 2000 LED



RANGE OF FUNCTIONS AVAILABLE

- rear warning system
- power flash
- integrated compressor system
- LED display
- tone sequence system (integrated or exterior)
- cover glass with individual printing
- day/night switching (via signal line)

<i>Technical data:</i>	
Designation:	DBS 2000 LED
Voltage:	12 V / 24 V
Flash frequency:	> 2 Hz (Quadro-flash)
Average power consumption:	12 V: approx. 6 A/ 24 V: approx. 3 A
Lengths:	920, 1090, 1250, 1370, 1400, 1600, 1800, 2000 mm
Depth:	230 mm
Height:	155 mm
Material:	lamp dome: PC/housing: aluminium
Weight:	from 9.0 kg
Type of protection:	IP5K4K / IPX9K
<i>Homologation: (Germany and international)</i>	
Light according to ECE-R 65:	TB1 (E1) 00 2314 / TB2 (E1) 00 3247
LED power flash: light according to TA13a:	~ K 471
EMC according to ECE-R 10:	(E1) 10R-05 4465

DBS 2000 LED

Basic lightbar

Possible lengths:	
920, 1090, 1250, 1370, 1400, 1600, 1800, 2000 mm	
Main beacon (HKL)	
Function	
Main beacon (blue)	<ul style="list-style-type: none"> high-power LEDs with wide angle lenses (homologation according to ECE R-65) blue lamp dome made of polycarbonate; housing made of aluminium with function monitoring
Roof mounting	
Function	
Rubber mouldings	<ul style="list-style-type: none"> for flat or curved vehicle roofs
Mounting brackets	<ul style="list-style-type: none"> various vehicle-specific versions available
Flat seal	<ul style="list-style-type: none"> for flat vehicle roofs
Acoustics	
Function	
Tone sequence system	<ul style="list-style-type: none"> type 614: integrated tone sequence amplifier with one integrated or external pressure chamber loudspeaker DKL 604 type 624: integrated tone sequence amplifier with two integrated or external pressure chamber loudspeakers DKL 604
Martin compressor system	<ul style="list-style-type: none"> integrated or external Martin compressor with 4 diaphragm acoustic horn, installed on the lightbar. Additional information on page 56.
Display and printing	
Function	
<ul style="list-style-type: none"> standard: white housing with white front and rear light covers optional: coating according to customer request optional: printing according to customer request (please indicate text!) optional: with takedown display 	
Rear warning system (RWS)	Power flash (PB)
Function	Function
<ul style="list-style-type: none"> one lamp body consists of 8 LEDs for rear protection, mounted in pairs 	<ul style="list-style-type: none"> consists of 8 blue LEDs excellent distance effect max. 2 lamp bodies

Divided DBS 975 LED

The warning system divided DBS 975 LED offers a wide variety of functions as well as a high-power LED technique in a solid housing. The maximum warning effect assures increased attention of the road users and provides additional safety in an emergency. The low profile makes sure the vehicle can also reach destinations with low clearance.



Customisable

- fitted using a modular system
- easily adaptable to individual needs

Variety of mounting options

- fast and easy mounting options for flat or curved vehicle roofs
- vehicle-specific carrier systems offer additional mounting options

Maximum warning effect

- state-of-the-art lighting technology
- day/night switching (optional)

Easy operation

- analogue control

Variety of lengths

- lengths: 2x 350, 400, 650 oder 750 mm

Divided DBS 975



RANGE OF FUNCTIONS AVAILABLE

- additional flasher
- working lights
- alley lights
- power flash
- day/night switching (class 2)

<i>Technical data:</i>	
Designation:	Divided DBS 975
Voltage:	12 V / 24 V
Flash frequency:	> 2 Hz (quadro flash)
Average power consumption:	12 V: approx. 6 A / 24 V: ca. 3 A
Lengths:	2x in 350, 400, 650 and 750 mm
Depth:	260 mm
Height:	95 mm
Weight:	from 8.2 kg
Type of protection:	IP5K4K
<i>Homologation: (Germany and international)</i>	
Light according to ECE-R 65:	TB1 (E1) 00 2332 - (blue) / TB2 (E1) 00 2798 - (blue - class 2)
EMC according to ECE-R 10:	(E1) 10R-05 4465
Power flash: light according to TA 13a:	~ K 471
Direction indicator according to ECE-R 6:	01 2a (E1) 2532 (rear)

Basic lightbar

Possible length:
2x 350, 400, 650 or 750 mm

Main beacon (HKL)	
Function	
Main beacon (blue)	<ul style="list-style-type: none"> high-power LEDs with wide angle lenses (homologation according to ECE-R 65) blue lamp dome made of polycarbonate; housing made of aluminium

Roof mounting	
Function	
Rubber mouldings	<ul style="list-style-type: none"> for flat or curved vehicle roofs
Mounting brackets	<ul style="list-style-type: none"> universal and various vehicle-specific models available
Flat sealing	<ul style="list-style-type: none"> for flat vehicle roofs

Options

Rear warning system (RWS)	
Function	
<ul style="list-style-type: none"> one lamp body consists of 8 LEDs for rearward security mounted in pairs 	

Power flash (PB)	
Function	
<ul style="list-style-type: none"> consists of 8 blue LEDs excellent long-distance effect max. 2 lamp bodies 	

Additional flasher	
Function	
<ul style="list-style-type: none"> mounted in pairs (left and right)* can be installed to the front and/or the rear 	
*two or more pairs additional flashers require day/night switching	

Working lights	
Function	
<ul style="list-style-type: none"> can be installed to the front and/or the rear consists of 4 white LEDs per lamp body 	