



MORE THAN JUST A SIDE APPEARANCE.

GIFAS linear lighting and handrail systems ensure efficient LED lighting and make your property a real eye-catcher. More visibility and safety that makes passers-by feel happier on public walkways is just one of the advantages that come with the wall, ceiling and handrail lighting from GIFAS.

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LaneLED INOX42

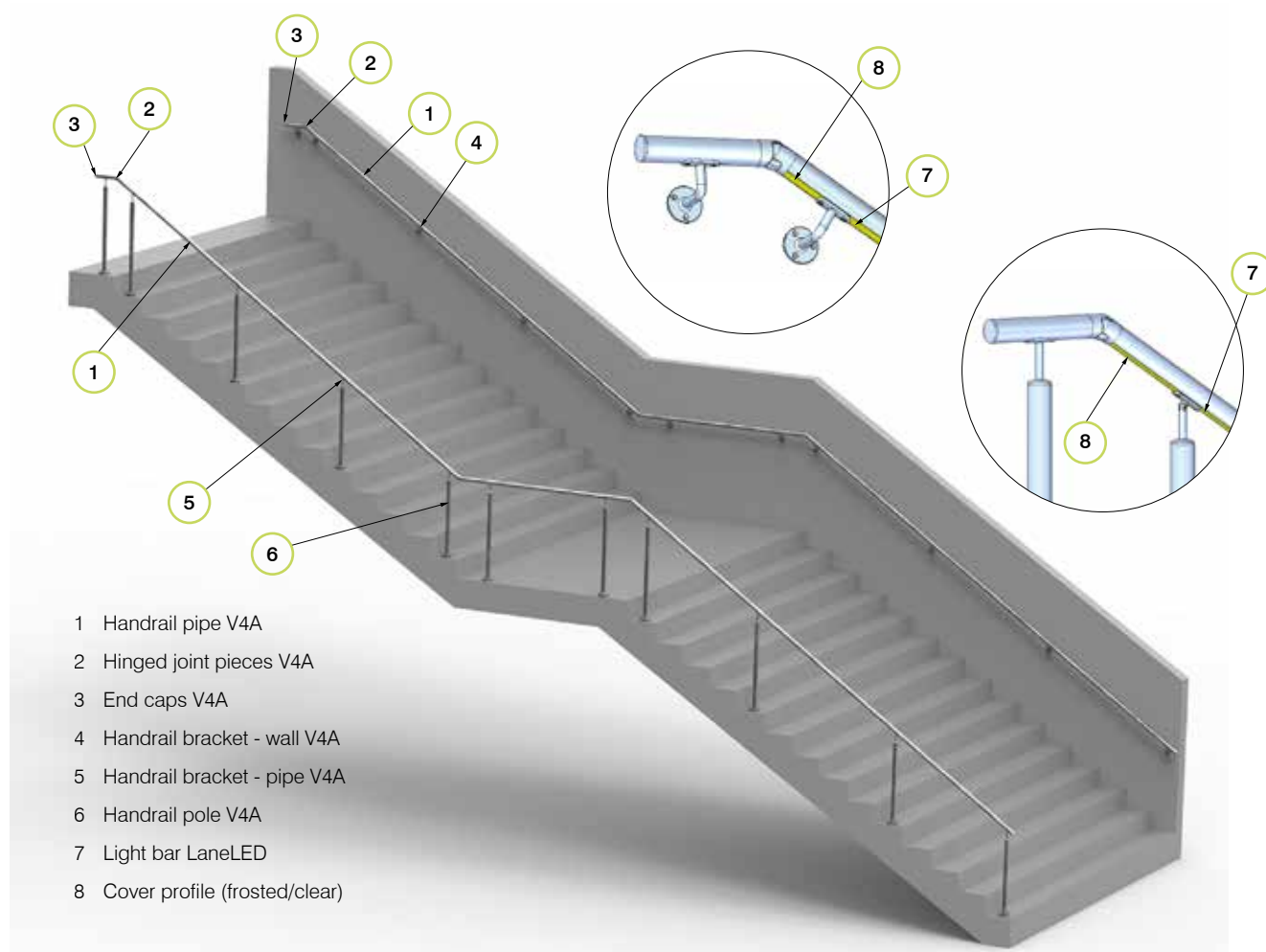


LaneLED INOX handrail-system



LED-equipped handrails for outdoor and indoor applications (balcony handrails, stairway handrails and terrace handrails) which can very easily be assembled on classic handrail posts using special pipe sections. The pipe brackets and adapters allow an inner cable guide with the GIFAS-developed connection cabling.

The large number of individual elements of the modular system enables the needs-based provision for many different installation locations (wall, railings, etc.). All metal components are V4A-quality, with a protection class of IP67.



- 1 Handrail pipe V4A
- 2 Hinged joint pieces V4A
- 3 End caps V4A
- 4 Handrail bracket - wall V4A
- 5 Handrail bracket - pipe V4A
- 6 Handrail pole V4A
- 7 Light bar LaneLED
- 8 Cover profile (frosted/clear)

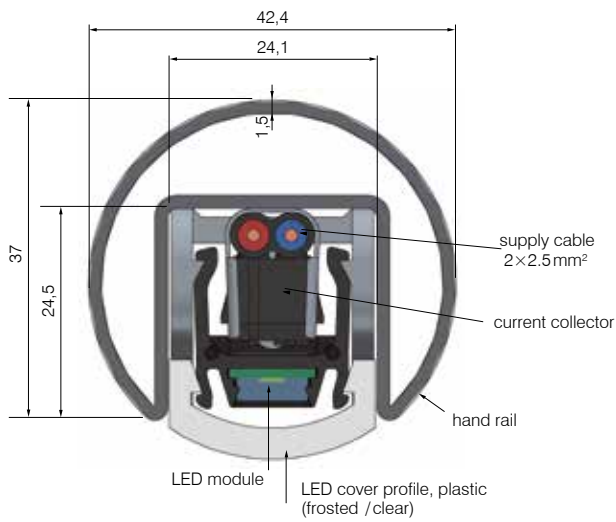
LaneLED INOX handrail-system

Handrail LaneLED INOX42

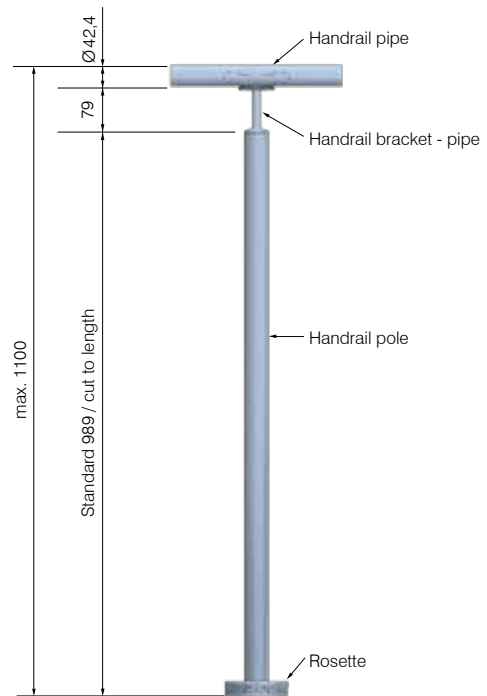
The GIFAS handrail profile is the carrier element for the LaneLED INOX42. The profile and the various fastening and connecting items are designed and coordinated in a way that ensures the electric supply with the cable.

Mechanical properties

Metal components	Stainless steel V4A
Outer diameter	42.4mm
Profile wall thickness	1.5mm
Profile surface	Radial grinding (Korn 240)
Profile length	2500mm / 5000mm
Types of installation	Pipe connection plate / Wall bracket / Handrail pole



Construction plan handrail pole

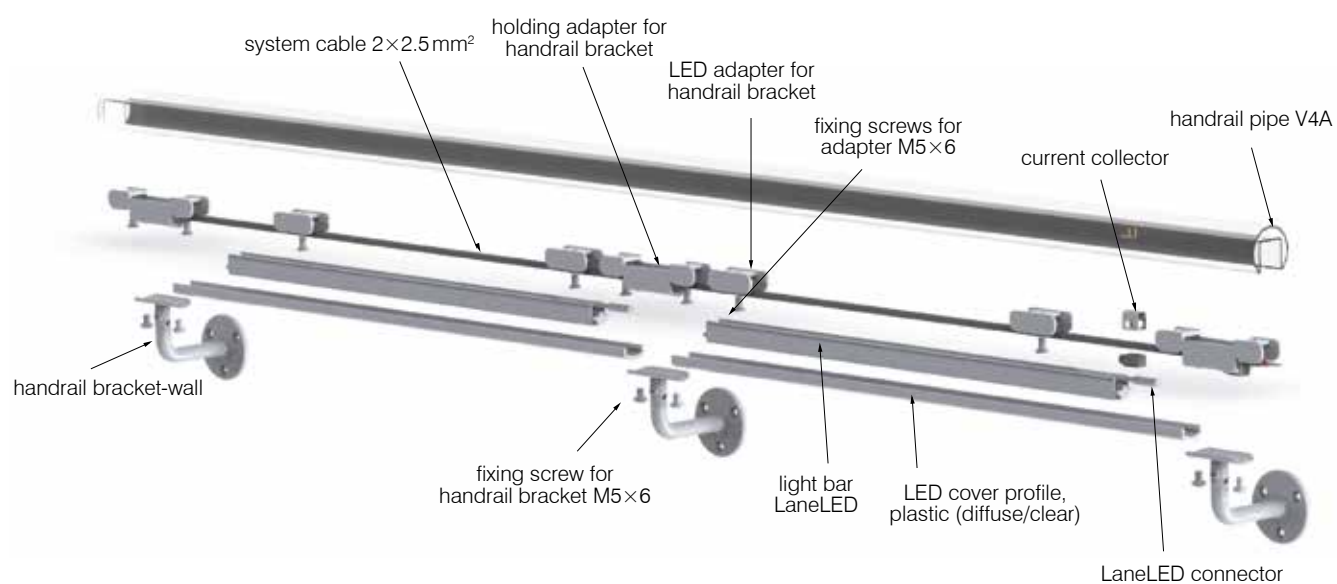
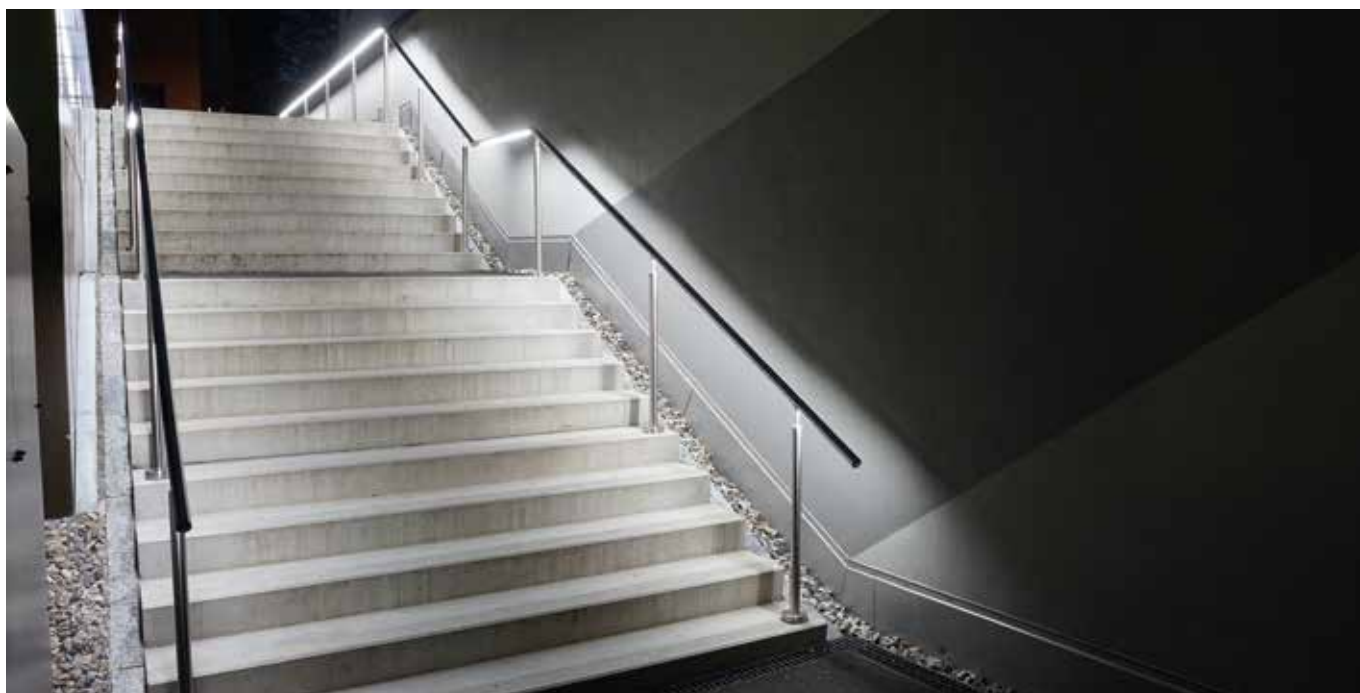


!
We would be happy to assist you with the planning!

LaneLED INOX42



LaneLED INOX handrail-system







Assortment

A wide range of needs can be covered with the basic range. The range listed here is not exhaustive. Ask us, we have the right solution!




Handrail pipe

Item no.	Description	View
297108	LaneLED INOX42, handrail-pipe LED, V4A-1.4401, Ø 42.4x1,5 mm, length 1000 mm, brushed	
297109	LaneLED INOX42, handrail-pipe LED, V4A-1.4401, Ø 42.4x1,5 mm, length 2500 mm, brushed	
297110	LaneLED INOX42, handrail-pipe LED, V4A-1.4401, Ø 42.4x1,5 mm, length 5000 mm, brushed	
297124	LaneLED INOX42, handrail-pipe round, V4A-1.4401, Ø 42.4x1,5 mm, length 2500 mm, brushed	
297125	LaneLED INOX42, handrail-pipe round, V4A-1.4401, Ø 42.4x1,5 mm, length 5000 mm, brushed	

Pipe connector


Item no.	Description	View
860417	LaneLED INOX42, hinged joint piece LED, V4A-1.4401, Ø 42.4x1,5 mm, 25-55° down, brushed	
860418	LaneLED INOX42, hinged joint piece LED, V4A-1.4401, Ø 42.4x1,5 mm, 25-55° upwards, brushed	
860427	LaneLED INOX42, pipe connector LED, V4A-1.4401, Ø 42.4x1,5 mm, B=6 mm, brushed	
860424	LaneLED INOX42, pipe-hinged joint piece, V4A-1.4401, Ø 42.4x1,5 mm, 0-70°, H=30 mm, brushed	

End pieces

Item no.	Description	View
860419	LaneLED INOX42, end piece LED, V4A-1.4401, Ø 42.4x1,5 mm, H=4 mm, brushed	
860425	LaneLED INOX42, end piece, round V4A-1.4401, Ø 42.4x2,0 mm, H=4 mm, brushed	
860620	LaneLED INOX42, end bow, V4A-1.4401, Ø 42.4x2,0 mm, 90°, L=81 mm, brushed	

*Further versions on request


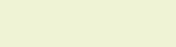
Wall flange

Item no.	Description	View
860428	LaneLED INOX42, wall flange LED, V4A-1.4401, Ø 42.4/ D=90/ H=30 mm, brushed	




Handrail bracket

Item no.	Description	View
860450	LaneLED INOX42, handrail bracket wall system cable, V4A-1.4401, Ø 42,4/ W=75/ H=50 mm, brushed	
860426	LaneLED INOX42, handrail bracket wall, V4A-1.4401, Ø 42,4/ W=75/ H=50 mm, brushed	
860434	LaneLED INOX42, handrail bracket wall hinge, V4A-1.4401, Ø 42,4/ W=75/ H=50 mm, brushed	
860449	LaneLED INOX42, handrail bracket pipe system cable, V4A-1.4401, Ø 42,4/ H=79 mm, brushed	
860432	LaneLED INOX42, handrail bracket pipe, V4A-1.4401, Ø 42,4/ H=79 mm, brushed	
860433	LaneLED INOX42, handrail bracket pipe hinge, V4A-1.4401, Ø 42,4/ H=79 mm, brushed	
860430	LaneLED INOX42, handrail pole, V4A-1.4401, Ø 42,4x2,0 mm, H=989 mm, brushed, incl. flange	
860431	LaneLED INOX42, rosette for pole, V4A-1.4401, Ø 110 mm, H=27 mm, brushed	

Cover

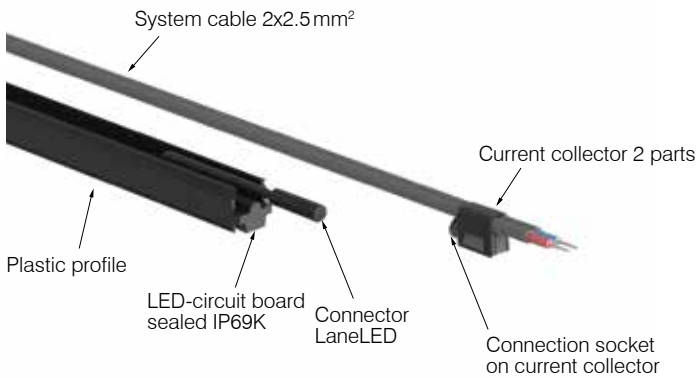
Item no.	Description	View
860557	LaneLED INOX42, cover profile clear LED, plastic, length 1600 mm	
860558	LaneLED INOX42, cover profile frosted, plastic, length 1600 mm (45% decrease in luminous flux due to satin finishing)	

Adapter

Item no.	Description	View
860411	LaneLED INOX42, adapter LED, V4A-1.4401, 23,5x50 mm, frosted	
860410	LaneLED INOX42, adapter holder, V4A-1.4401, 23,5x114 mm, frosted (for handrail supports without hinge)	
860572	LaneLED INOX42, adapter holder, V4A-1.4401, 23,5x114 mm, frosted (for handrail supports without hinge)	

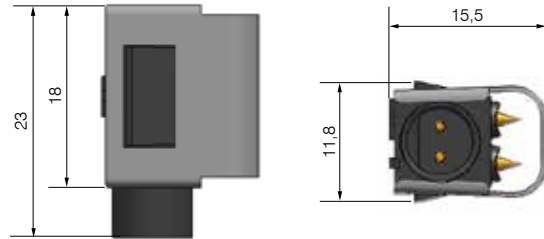
LaneLED INOX handrail-system

View of electrical components



Current collector

For the electrical supply, each individual LaneLED is connected via the current collector - freely attachable to the 2x2.5mm² flat cable. The cable socket on the pantograph or the connecting cable with plug of the LaneLED (IP69K connection) serves as an interface.



Installation instruction

The current collectors are to be installed with a special tool. The mechanical pressing tongs can be provided on request on loan.



The LaneLED light bar from GIFAS is the basic element for the illuminated handrail. The other parameters of the LaneLED are carefully determined.

Input voltage	21-32VDC
Light bar	Typ 11 (190mm / 560mm / 928mm / 1482mm)
Light colour	3000K / 4400K / 5800K
Beam angle	120°
Protection category	IP69K
Protection class	III
Shock resistance	IK10
Service life	50000h [L70/B10]
System cable	2x2.5mm ² black (Internal flat cable CU-tinned with copper, EPR/EPR)
Cover	clear / frosted (L 1600mm)
Mounting type	Standard 30° offset

Redundant version with two independent lighting circuits on request!

Structure of LaneLED

Structure of LaneLED

The carrier profile of the LaneLED light bar consists of a special profile made of plastic with special mechanical and chemical properties.

A flexible and divisible LED strip is inserted from below and worked into the plastic profile with a 2K potting compound. The potting leads to the high degree of protection of IP69K.

In the upper part of the profile (between the cross struts) there is space for the cable routing including the current connector. The internal system cable is therefore well protected against vandalism.

Technical data

Input voltage	12-30VDC or via mains unit 230VAC, 24VDC (also available in 24VAC on request)
Power supply	24VDC 500mA 12VDC 950mA
Light source	5x3W PowerLEDs
Light colour	6350-7000K
Beam angle	Spot 10° Medium 38°
Protection category	IP54 (without connector power supply)
Protection class	III
Temperature operating range	-25°C to +45°C
Surface temperature:	max. 55°C
Housing	Aluminium die casting, black coated
Weight	500g
Dimensions (WxHxD)	108x67x82mm (light)

Power supplies

Suitable power supplies for LaneLED INOX handrails can be found on page 277.

LaneLED INOX handrail-system

Technical data LaneLED – light comparison measurements

The right light for every application! Below is an overview of the values that can be achieved with the LaneLED light strips.

Basic

The LaneLED in the handrail at a height of 100 cm via a 2 m wide staircase gives the following values in terms of illuminance.

LaneLED light bar type 11, 3000K, IP69K, 21-32VDC, 400Lux-95cm

Item no.	Length mm	Number LED	Power W	Power mA	Light lm
860550	190	6	2	80	120
860551	560	18	6	240	360
860552	928	30	10	400	600
860553	1482	48	16	640	960

LaneLED light bar type 11, 4400K, IP69K, 21-32VDC, 400Lux-95cm

Item no.	Length mm	Number LED	Power W	Power mA	Light lm
860445	190	6	2	80	120
860446	560	18	6	240	360
860447	928	30	10	400	600
860448	1482	48	16	640	960

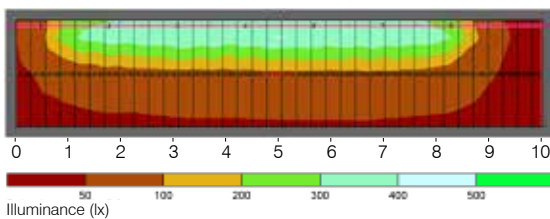
LaneLED light bar type 11, 5800K, IP69K, 21-32VDC, 400Lux-95cm

Item no.	Length mm	Number LED	Power W	Power mA	Light lm
860388	190	6	2	80	120
860389	560	18	6	240	360
860390	928	30	10	400	600
860420	1482	48	16	640	960

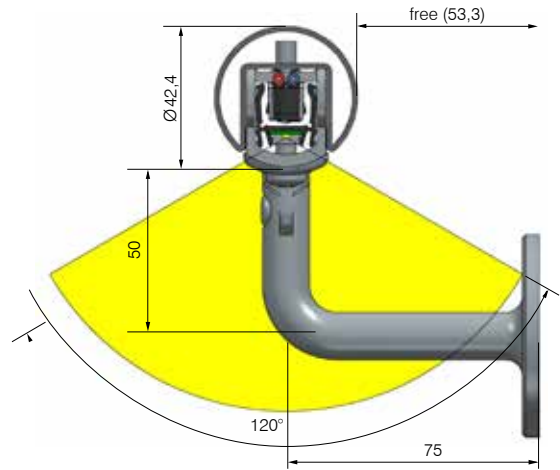
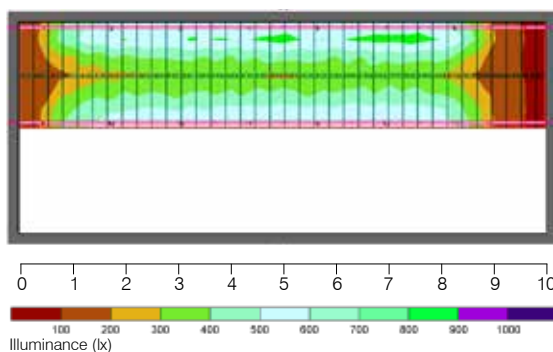
Maximum length possible with LaneLED type 11 to 50m per feed with 30V DC.

Handrail height 100cm, stair width 2m, beam angle handrail 0°

One-sided



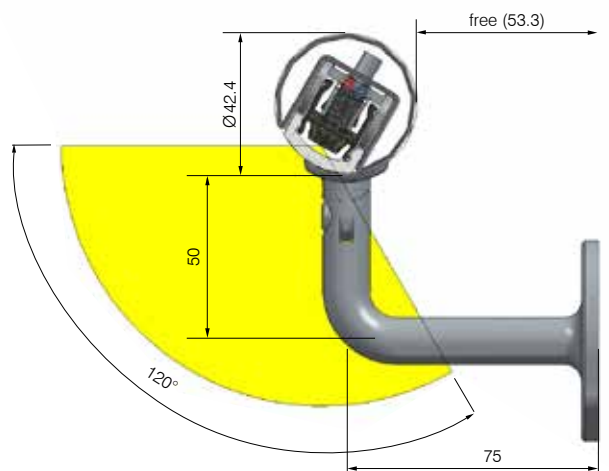
On both sides



New installation type “30° offset” (optional light distribution)

By using a new pipe connector, the light distribution can be inclined by 30° compared to the standard mounting type. The illumination of the pathway is thus optimized and any unwanted lighting areas (for example in the wall area) can be minimized.

This increases the efficiency of use. The tilt angle was chosen so that there are no undesirable glare effects. The connecting pipe can be integrated directly into the modular system as a mounting element (for pipe adapter, wall adapter or post adapter). The system cable can also be routed through. This ensures quick and sensible installation. Existing handrail systems can easily be retrofitted with this 30° replacement adapter.



LaneLED WALL



LaneLED WALL



LaneLED WALL – universally applicable surface mounted LED lighting for diverse applications

LaneLED WALL is a complete system that is easy to assemble. The range of applications is very diverse.

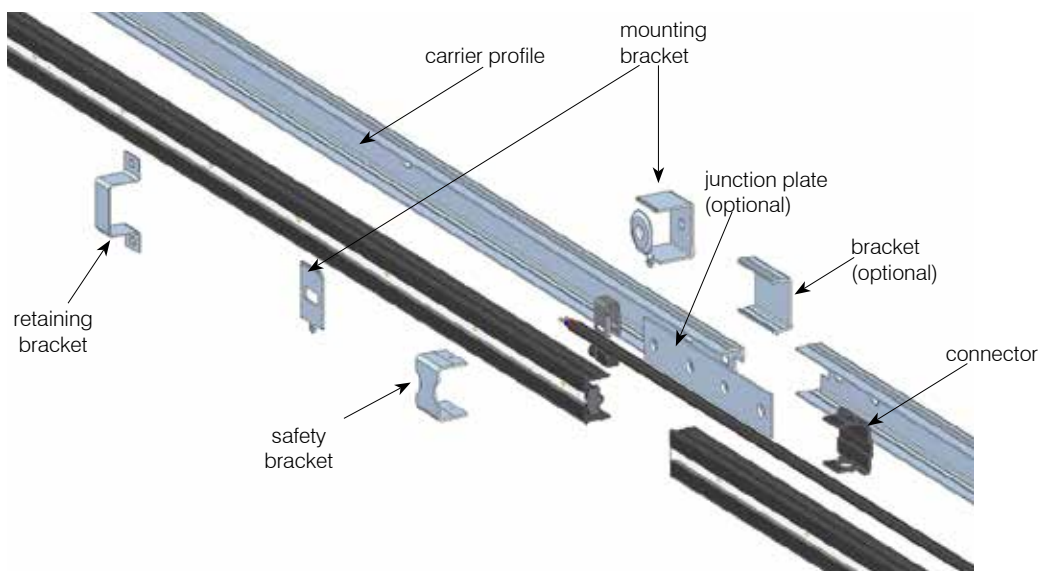
The main feature of LaneLED WALL is its compact and small structure and the excellent luminous efficiency. Installation and assembly are carried out in tight spaces - wherever there is little space available. The smallest possible dimensions, and an inconspicuous installation as a result. LaneLED WALL is mounted on the wall or the ceiling. The mounting dependent on the situation. The installation can also be carried out in niches.

Applications

- Emergency exit illumination in road, metro and railway tunnels
- Train stations, waiting halls or shelters
- General illumination of railway stations, waiting halls or shelters
- Emergency escape route lighting in metro and railway tunnel
- Marking of emergency exits (green LaneLED)
- Ceiling mounting for power station, cavern tunnels and escape and working tunnels with low headroom
- Bridge illumination
- Walkway illumination

Your advantages

- Simple and fast assembly thanks to the practical clicking/connection system
- Replacement of a LaneLED light bar in 2 minutes
- Flame-retardant, halogen-free and self-extinguishing
- Various lighting options thanks to different LED light bars
- Optimised for maintenance because of plug-in/click-in-system
- Comprehensive support with light voltage drop calculations and planning documents
- High-quality, long-lasting materials
- Safe system operation due to safety-low voltage
- Vandal-proof execution possible (by use of appropriate components)
- Long segments even possible for high light outputs
- Individual and project-related consultation



LaneLED WALL

LaneLED light bar

The light bar LaneLED is the base element for the illuminated handrails LaneLED GFK and LaneLED WALL. The appropriate type is selected depending on the requirements of the operator, whereas the desired average luminance is the most important specification. The other parameters of the LaneLED are carefully defined. The carrier profile of the LaneLED WALL light bar consists of a special synthetic profile with special characteristics for mechanical and chemical strains. A flexible and separable LED strip is inserted from below and incorporated into the profile with 2K casting compound. The encapsulation leads to the high protection class of IP69K. There is room for the cable guide and the current collector in the upper part of the profile (in between the flanks).

The light bar LaneLED completely ready for connection (pluggable), not including assembly materials (system cable and current collector).

Mechanical components

The LaneLED light strips are to be inserted into the support profile. The support profile is fastened to the appropriate surface. Other components serve different configuration options, such as: B. 45 ° assembly or increase the vandalism security.

System components

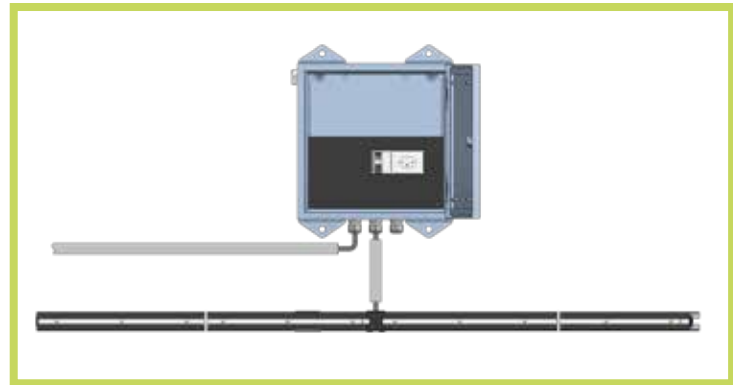
Each individual LaneLED is connected to the power supply via the current collector and is freely attachable to the flat cable 2x2.5mm² (crimping tool for current collector).

Power supply

The electric power supply of the LaneLED light bar is ensured through power supplies that are individually installed into the main or sub-distribution or that are directly built into the housing on site. (housing in hard rubber, polycarbonate or steel)

The supply of 21-32 VDC (nominal power 24VDC) is usually provided by a power supply 230 VAC – different output sizes are available! (In each case depending on the total lighting length and the performance of the desired LED light output).

According to customer requirements, the power supply can also be installed anywhere in a distributor or in a socket.



Lighting components
LaneLED light bar in special plastic profile, incl. electrical supply



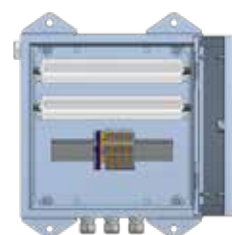
Mechanical components
wall mounting, bracket and accessories V4A, connector and angle parts



System components
system cable
current collector



Supply components
supply unit
mains unit
cable and line



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We would be happy to assist you with the planning!

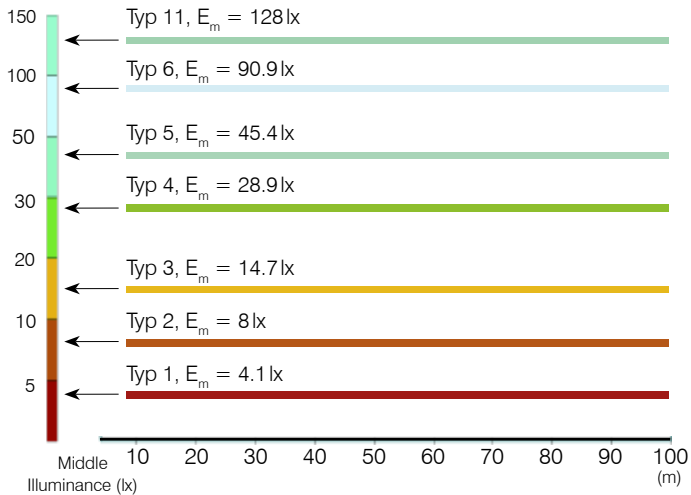
LaneLED WALL

LaneLED WALL

Technical data LaneLED - light strips

The right light for every application! Below is an overview of the values that can be achieved with the LaneLED type 1 to 11 light strips.

Maintenance factor: 1 (new value)
 Mounting point height: 95 cm (wall-mounted)
 Escape route width: 1 m



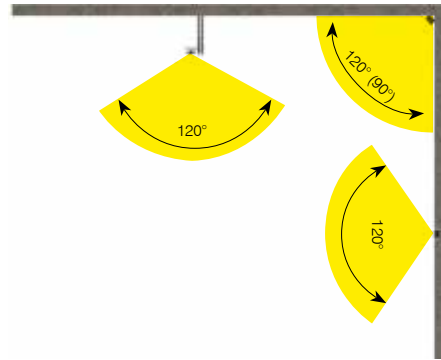
Assortment Standard 21 - 32VDC

Item no. 3000K	Item no. 4400K	Item no. 5800K	Number LED	Power W	Power mA	Length mm	Light lm
Type 11							
860546	860538	860542	6	2	80	188	120
860547	860539	860543	18	6	240	558	360
860548	860540	860544	30	10	400	926	600
860549	860541	860545	48	16	640	1479	960
Type 6							
	860529		12	3	120	372	192
	860530		36	9	360	1110	576
Type 5							
	860397		12	1.5	60	372	96
	860398		36	4.5	180	1110	288
Type 4							
	860526		12	1	40	372	64
	860527		36	3	120	1110	192
Type 3							
	860394		12	0.5	20	372	32
	860395		36	1.5	60	1110	96
Type 1							
	860391		12	0.12	5	372	8
	860392		36	0.36	15	1110	24

Further versions on request

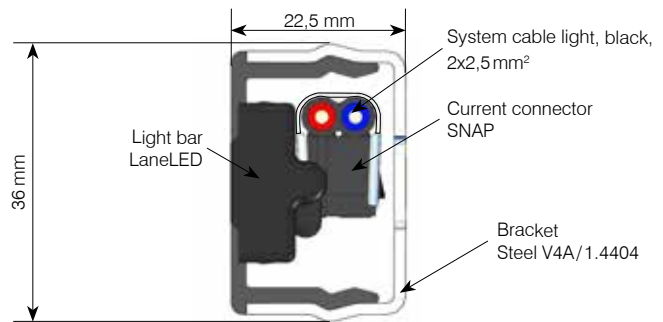
Illumination

Light cone with 120° radiation. Illumination depending on the placement.



Current connector Typ SNAP

For the electrical supply, each individual LaneLED WALL is connected via the current connector - freely attachable to the 2x2.5mm² flat cable (special pliers).



View: sectional profile with current connector

Equipment

Item no.	Description
281474	LED, system cable light, black, 2x2.5 mm ² , flat cable CU-tinned, EPR/EPR
860120	LED, current connector SNAP 2P 42V-5A, V2A-1,4310, (needed spec. pliers 860457)
860457	LaneLED crimping pliers for current connector SNAP



Crimping pliers, item no. 860467 (can be provided on loan)

!
 Redundant version with two independent lighting circuits on request!

Redundancy

The LaneLED batten luminaire has two independent lighting circuits that are supplied separately. This ensures that if one lighting circuit fails (power supply failure, wire breakage, electronic defect, etc.), the LaneLED batten luminaire is still 50% functional.

Assortment Redundant 21 - 32VDC

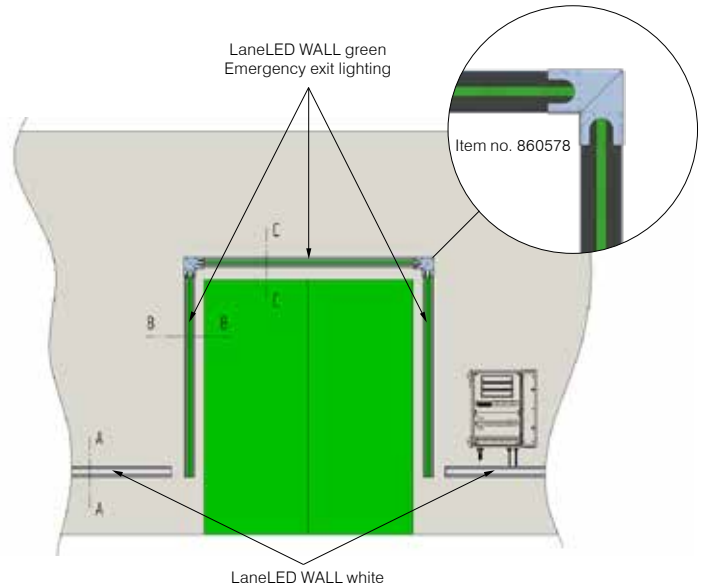
Item no. 4400K	Number LED	Power W	Power mA	Length mm	Light lm
Typ 6					
860535	12	3	120	347	192
860536	36	9	360	1112	576
Typ 5					
860406	12	1.5	60	374	96
860407	36	4.4	180	1112	288
Typ 4					
860532	12	1	40	374	64
860533	36	3	120	1112	192
Typ 3					
860403	12	0.5	20	374	32
860404	36	1.5	60	1112	96
Typ 2					
860400	12	0.24	10	374	16
860401	36	0.72	30	1112	48

Further versions on request

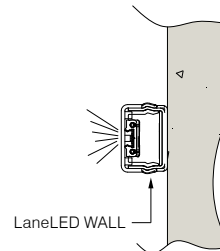
LaneLED WALL green

Door surround with flat angle

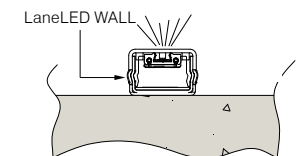
Attachment directly to the tunnel wall with a 90 ° flat angle (vertical installation):



Cut A-A/C-C:



Cut B-B:



LaneLED WALL green, 21 - 32VDC

Item no.	Length mm	Number LED	Power W	Power mA	Light lm
860569	372	12	3	120	190
860570	1110	36	9	360	570
860571	2956	96	24	960	1520

Further versions on request

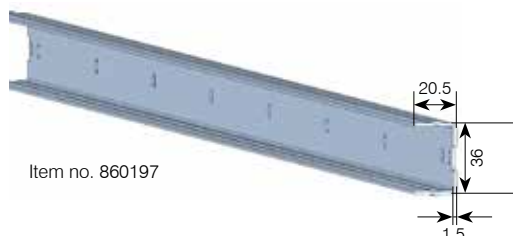
LaneLED WALL



LaneLED WALL system structure

Carrier profile – steel V4A, 1.4404, cold rolled

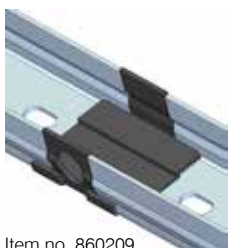
The carrier profile is mandatory for all installation variants. The light bar is inserted by using the click function. The support profile can be attached directly (without additional accessories) to the wall / ceiling.



Item no. 860197

Connector – plastic black/steel V4A 1.4404

The connector is used for clean guidance during the transition from carrier profile to carrier profile. It is inserted into the carrier profile in the longitudinal direction during the assembly process in order to cleanly take the next profile.



Item no. 860209



Item no. 860455

Protection bar – plastic black/steel V4A 1.4404

The protection bar is attached from the front each time the profile is changed (light).



Item no. 860210



Item no. 860586

End cap – plastic black respectively steel V4A 1.4404

The end cap serves as a clean "line end". It is placed on the light profile at the beginning and end of a strand. Available in plastic or steel.



Item no. 860208

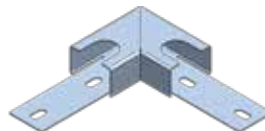


Item no. 860458



Item no. 860577

90° flat angle



Item no. 860578

Holding devices – steel V4A 1.4404

With the various holding devices, the profile system can be used for a wide variety of applications, instead of directly mounting the support profile on the substrate, and can be designed to be vandal-proof if required.



Item no. 860323



Item no. 860585

45° mounting bracket



Item no. 860579

Item no.	Description
860197	LaneLED WALL, carrier profile, 36x20mm, L= 2950mm steel, V4A, 1.4404
860209	LaneLED WALL, black connector with cable entry plastic, UL94-V0, halogen-free
860455	LaneLED WALL, connector with 4 bores, steel, V4A, 1.4404
860210	LaneLED WALL, protection bar black, plastic, UL94-V0, halogen-free
860586	LaneLED WALL, protection bar, steel V4A,1.4404
860208	LaneLED WALL, end cap black, plastic, UL94-V0, halogen-free
860458	LaneLED WALL, end cap, steel, V4A, 1.4404
860323	LaneLED WALL, retaining bracket, steel, V4A, 1.4404
860585	LaneLED WALL, mounting bracket, short, steel, V4A, 1.4404
860578	flat angle 90°, steel, V4A, 1.4404
860577	LaneLED WALL, end cap with bore, steel, V4A, 1.4404
860579	LaneLED WALL, mounting bracket 45°, steel, V4A, 1.4404
292656	LaneLED WALL, blank cover, L=2950mm

LaneLED power supply

Power supply

The electric power supply of the LaneLED light bar is ensured through power supplies that are individually installed into the main or sub-distribution or that are directly built into the housing on site. (housing in hard rubber, polycarbonate or steel)

The supply of 21-32 VDC (nominal power 24VDC) is usually provided by a power supply 230 VAC – different output sizes are available! (In each case depending on the total lighting length and the performance of the desired LED light output).

According to customer requirements, the power supply can also be installed anywhere in a distributor or in a socket.



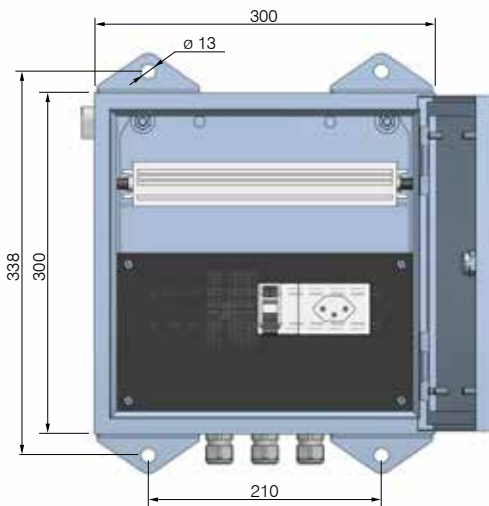
Distributor housing

Corresponding distributor housings can be found in Chapter 01 Wall distributors. We would be happy to advise you on the selection and assembly.

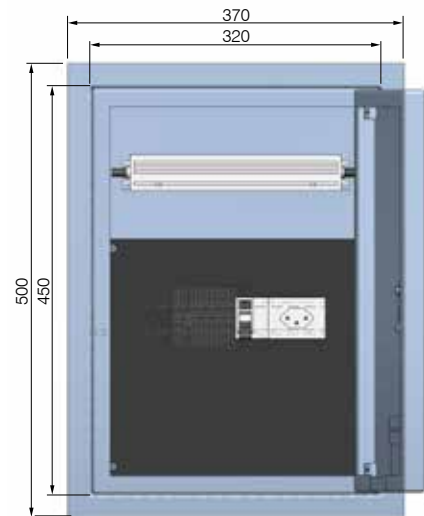
Recommended control gear

Item no.	Description	Input	Output	Power
293274	Netzteil	230VAC	30VDC / 1.3A	40W
295042	Netzteil	230VAC	36VDC / 6.7A	240W
293515	Netzteil	230VAC	36VDC DIMM / 6.7A	240W
293836	Netzteil	230VAC	30VDC / 20A	600W

Example: surface power supply



Example: flush-mounted mains supply



LaneLED INOX42



Access city centre, Crans Montana



Health centre, Stein



Pedestrian bridge, Wecker



Bahnhof, Sembranch



Pedestrian bridge, Wecker

LaneLED INOX42



Hospital, Erlangen



Swimming park, St. Gallen



Hospital, Erlangen

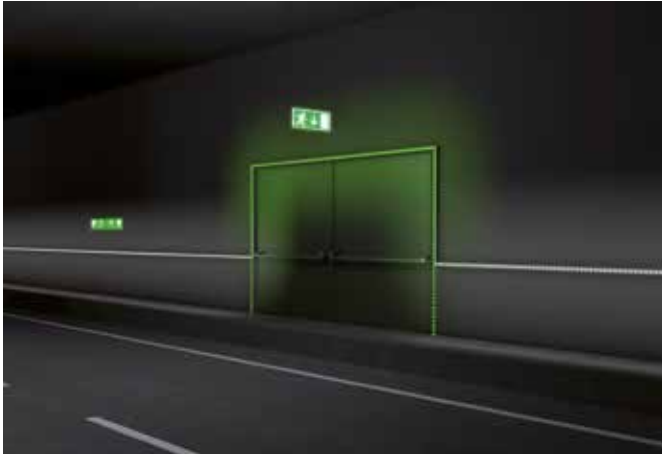


Cemetery access, Glis



Museum Charlie Chaplin

LaneLED WALL



Road tunnels, signalling of escape routes



Station handling and waiting area



Bicycle, pedestrian and driveway lighting



Railway station, Sembranch
(Underpass: LaneLED WALL, Stairs: LaneLED INOX42)



Ceiling lighting for railway station

LaneLED WALL



Railway station, Sembranch
(Underpass: LaneLED WALL, Stairs: LaneLED INOX42)



Parking garage, Troistorrents



Footbridge, Brügg



Lighting underpass, Weiden



Lighting underpass, Oberkirch

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