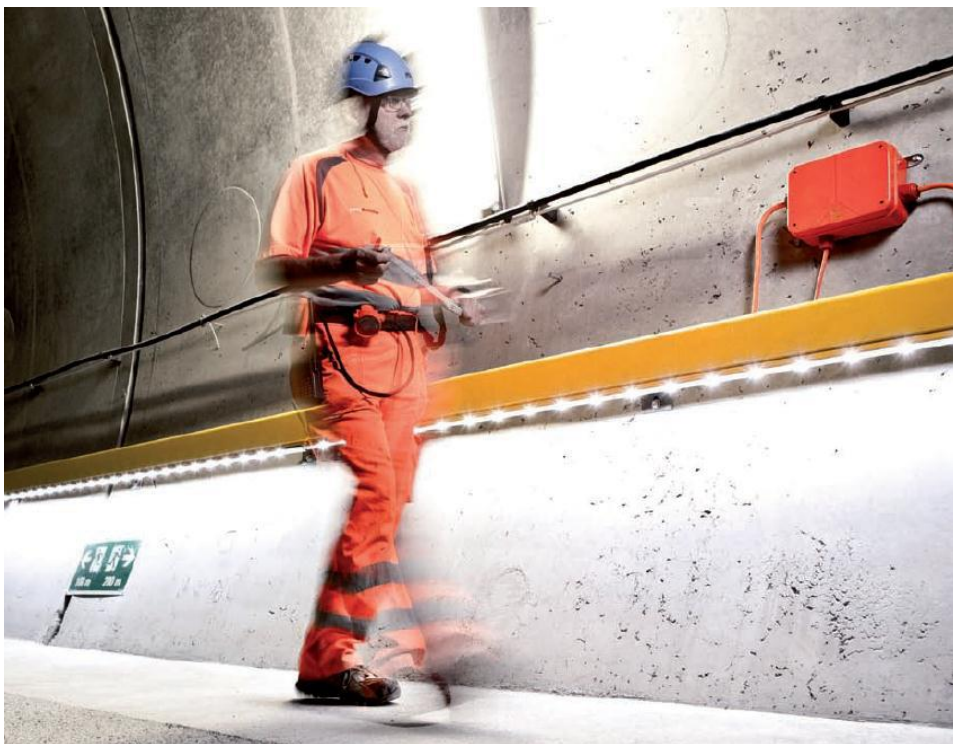


LaneLED GFK redundant dual line snap

Installations instructions



VERSION	MODIFICATIONS
1.0	First edition
1.1	Editorial changes
0719	Titel added with snap

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1 General information

1.1 Marking concept for hazards and hints

Hazard

Hazardous situation which will cause serious injury or even death if it is not prevented.

Caution

Hazardous situation which could cause slight to moderate injury if it is not prevented.

Hint

Indicates information which does not concern personal injury, e.g. hints in respect of material damage.

Protective measures

Increase safety by applying a protective measure.

1.2 Responsibilities of the operator

- Make sure that this document is always kept in a safe place in a legible form together with the product.
- Read these instructions carefully before first start-up of the product.
- This product has been developed and produced exclusively for the use indicated in these documents. Every other use, which is not mentioned explicitly, could affect the intactness of the product and/or could constitute a source of danger.
- The manufacturer rejects any liability for damage which has been caused by incorrect or non-intended use of the product.
- In countries, which do not belong to the European Community, the national legal reference regulations as well as the standards and regulations applicable in these countries have to be observed for warranty of a corresponding safety level.
- The installation has to be carried out according to the applicable regulations.
- The manufacturer assumes no liability for inexperienced execution of installation as well as deformations which may occur during operation.
- The electric power supply has to be switched off before executing any action on the installation.
- Exclusively original parts of the manufacturer shall be used for maintenance. Maintenance work may be carried out by qualified staff only.
- All procedures, which are not explicitly mentioned by the manufacturer in the instructions, are not permitted.
- The packing material must not be stored within the reach of children as it could be a potential source of danger.

2 Introduction

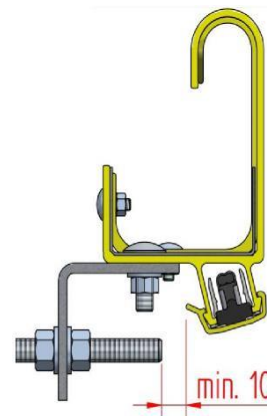
To ensure proper installation, the following steps and notes must be complied with under all circumstances. Only this way can it be ensured that the product will work to complete satisfaction.

Hint

Read all instructions before starting installation. Our sales department will be gladly available to you if you have any questions.

2.1 Installation conditions LaneLED

- To comply with the necessary operating voltage, the number of connected LaneLED light bars must be adjusted to the line length.
- The maximum line length for the number of LaneLED light bar required must be calculated for the specific installation.
- Install only in dry weather or with the installation site covered.
- For information on correct installation, protective measures and responsibilities please see the LaneLED manual.
- When mounting the GFK handrail, observe the manufacturer's provisions and instructions and the regulations for the specific installation setting (specifications for dowels and threaded rods, supporting distance, SIA standards, etc.). Ensure compliance with all applicable standards and proper technical execution of the installation.



2.2 Recommendations for efficient installation

- For efficient LaneLED mounting, we recommend using the matching auxiliary tools. They can be rented from Gifas.
- A 230V connection should be present nearby to perform the function inspection at the same time as the installation.
- To ensure the proper polarity and thus function even during installation, we recommend attaching the supply voltage of 24V DC to the flat cable during installation (you can also use a truck battery for this).
- General recommendation: Start assembly with the first LaneLED unit right next to the supply unit, flush with the start of the handrail.
- The threaded bolts for affixing the handrail must have a distance of at least 10 mm from the LaneLED light bar to avoid space conflicts when mounting.

3 Required tools

Crimping pliers mechanical Item no.860457, or electric Item no. 860456



Pliers to cut cable



Stripping pliers for flat cable diameter 2x2,5mm²



Hot-air gun



LaneLED assembly tool with rollers Item no. 138291 (GIFAS rental equipment)



LaneLED mounting hooks Item no. 137634 (GIFAS rental equipment)



24VDC battery power supply (or as in picture 2 x 12V in series)



Large utility knife



3.1 Auxiliary tool

Equipment for unreeling cable



Cable lug crimping pliers for compression joints

Screwdriver size 5 (to dismantle LaneLED in case of incorrect connection)

Headlamp, folding metre stick, measuring tape, materials/tool cart, etc.

3.2 Consumables

Shrink hose with adhesive (6mm / 2mm):

If necessary, 3M Scotch vinyl electrical tape No. 23, black:

If necessary, Raychem heat-shrinkable joint sleeves 1.5-2.5, blue:

GIFAS Item no. 010300

GIFAS Item no. 152743

GIFAS Item no. 019875

4 Installation instructions: Connection sequence of the LaneLED light bars

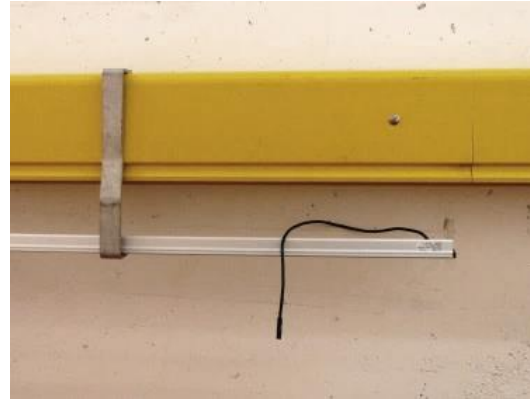
4.1 Connection current collector

First of all, lay out the 2 differently coloured Gifas flat cables over the complete length of the supply section.

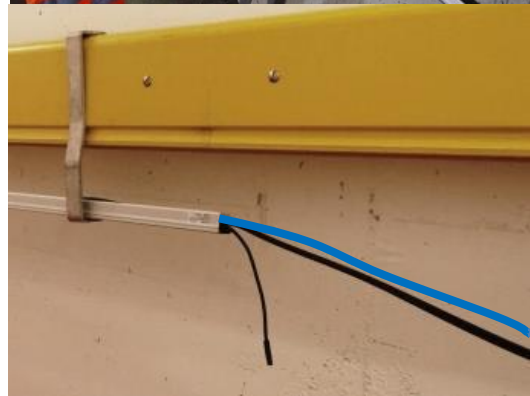
Hint

Lay the two cables in the handrail cable duct, so that the flat cables are not unnecessarily soiled and the markings remain visible.

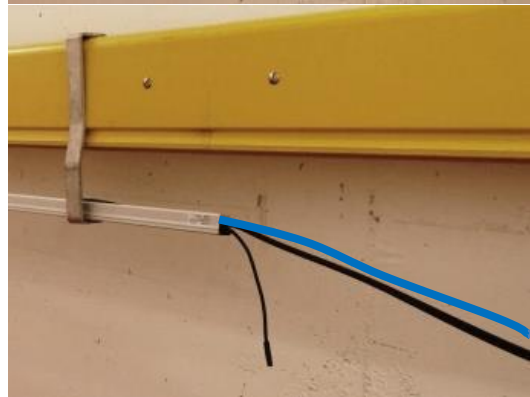
Use mounting hooks to attach the LaneLED light bar to the EBO GFK handrail



Insert the 2 flat cables into the LaneLED unit from the bottom



Carry out the redundant assignment of two differently coloured flat cables on Line 1 and Line 2. Line 1 is executed with a black flat cable and Line 2 with a blue flat cable in our example



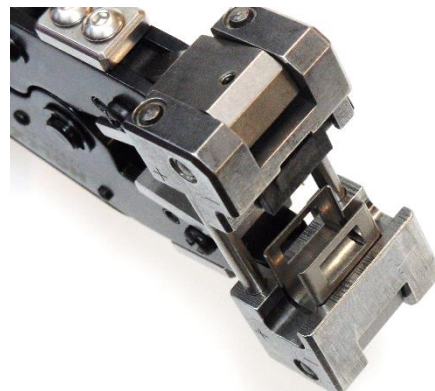
Use special crimping pliers to press the first current collector, which is assigned to Line 1 on the right-hand side of the light bar, on a black flat cable.

Use special crimping pliers to press the second current collector, which is assigned to Line 2 on the left-hand side of the light bar, on e.g. a blue flat cable.

Hint

Provide a current collector at a distance of approximately 20cm from the end of the LaneLED light bar. Mount the contact element with the plug side pointing towards the middle of the LaneLED light bar.

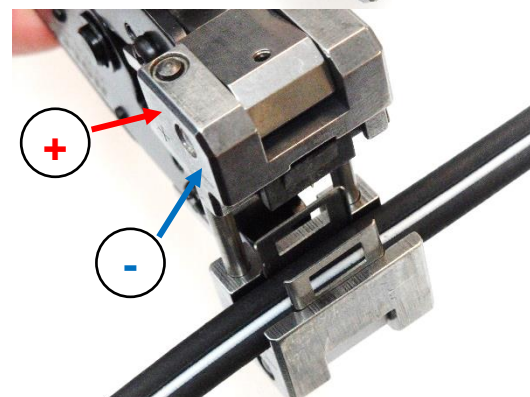
Insert the metal bracket in the bottom jaw of the pliers and the contact element in the top jaw.



Insert the flat cable upright in the metal bracket and turn until it lies flat in the bracket.

Hint

The negative terminal (white marking) must be aligned against the front of the pliers and also coincide with + and – markings on the sides of the pliers. Now actuate the crimping pliers.



With the white marking at the top, push the LaneLED connection cable into the current collector up to the stop. If the flat cable was connected to the 24VDC power supply beforehand, the LaneLED light bar should now be lit.



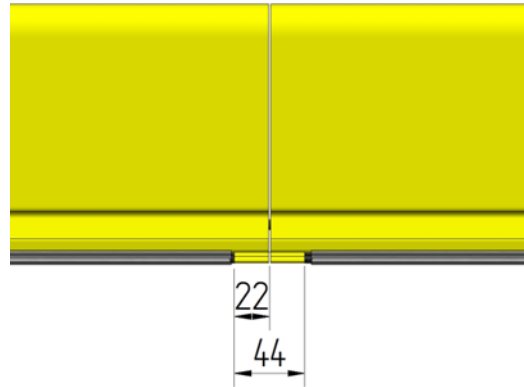
Now carry out the work described in steps 1-3 for the second side with a blue flat cable.

Place the LaneLED connection cable and both flat cables in an aluminium profile.



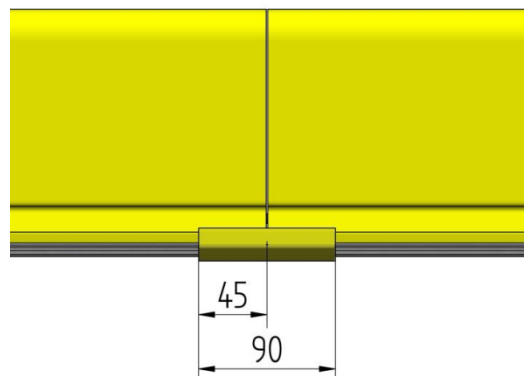
4.2 Latch LaneLED light bar into the handrail

Latch LaneLED light bar into the handrail.
Insert the LaneLED light bar into the GFK profile 22 mm from the handrail end until it latches noticeably.

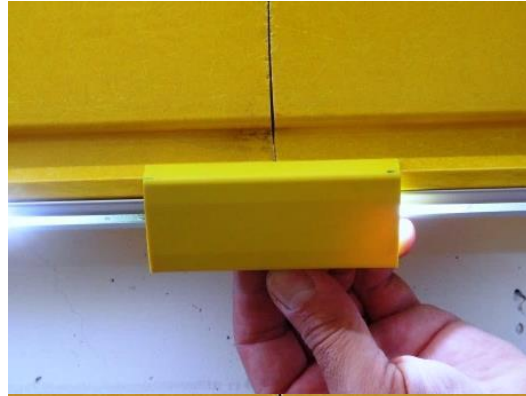


Attach protective bracket

Install the protective bracket on both sides of the LaneLED profile between the individual LaneLED units.



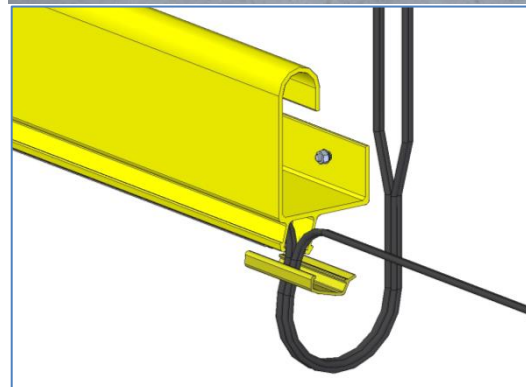
To do so, apply the protective bracket with the grip tab against the tunnel wall and push up until it latches noticeably.



Protective bracket at cable insertion

Hint

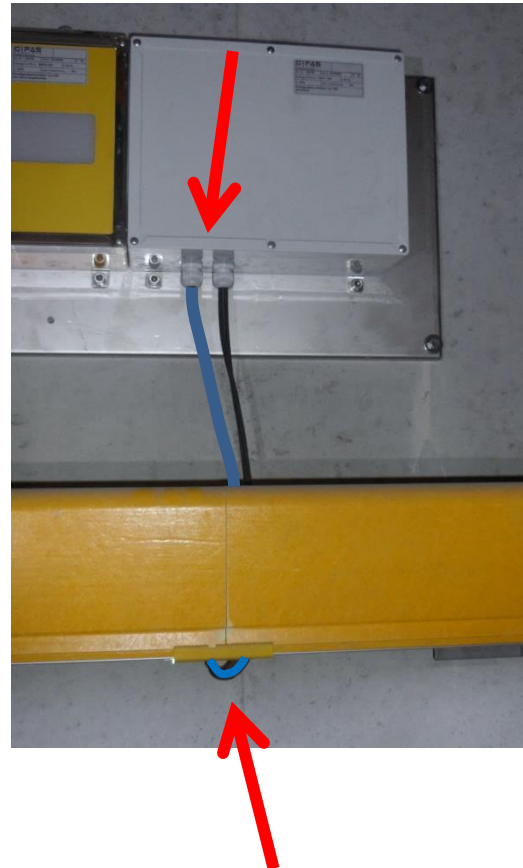
Push the cable through the bore in the protective bracket before connecting it to the supply unit.



Hint

Ideally place the infeed into the GFK handrail and the ends of the LaneLED light bar right under the supply unit.

End with a function check of the LaneLED.



4.3 Finishing the flat cable ends

The cable end must be isolated against moisture

i Hint

The cable end must be cut cleanly, no loose wires.
Do not use common adhesive tape.

Open up the strands of the flat cable along a length of 5cm.

i Hint

Use a large blade for this. Cut on a hard, level surface

Do not damage the strand insulation when cutting.



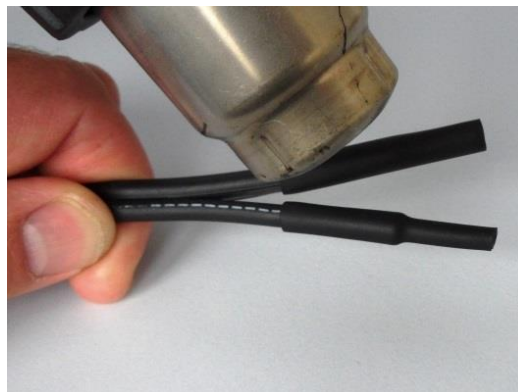
Insulate every strand separately.

Cut 2 x 5 cm shrink hose to size.

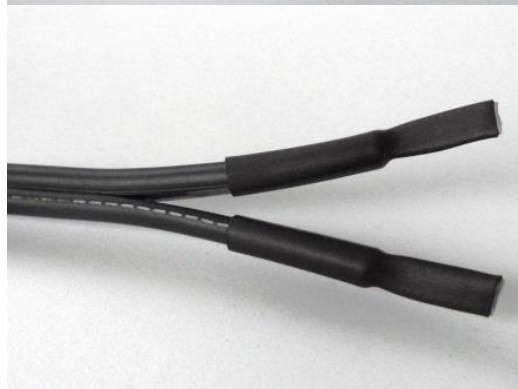
Use shrink hose with inner adhesive.

Shrink hose (6 mm/2 mm): GIFAS Item no. 010300

Shrink with hot-air gun (shrink temperature 110°C).

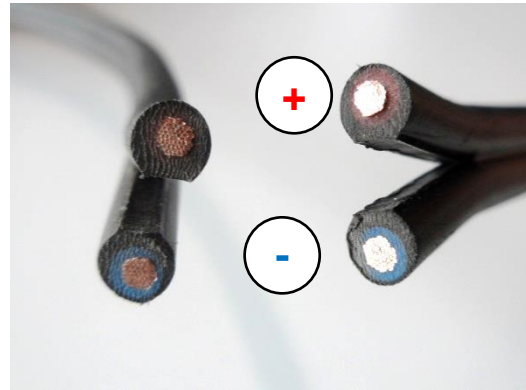


Compress shrink hose ends while still hot.



4.4 Connecting/repairing the flat cable

Connect wires with the same polarity



Cut apart the wires of both flat cables to a length of 5 cm.

Hint

Use a large utility knife for this purpose.
Cut on a hard, flat surface

Do not harm the wire insulation when cutting



Strip the wires

Hint

No loose wires



Crimp the compression joints.

Use waterproof compression joints with inner adhesive.

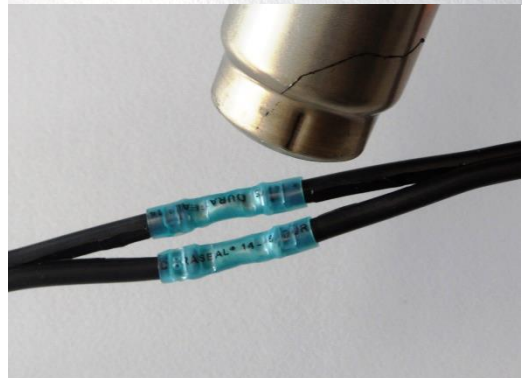
Heat-shrinkable joint sleeves 2.5mm²: GIFAS Item no. 019875



Crimp the second side of the compression joint



Heat with hot-air gun until the insulation shrinks (shrink temperature 110°C)



4.5 Isolation of flat cables

A current collector that is installed incorrectly or in the wrong location will leave 2 small holes in the flat cable that must be insulated against moisture.

Isolation of the holes

Hint

For this purpose, use self-welding insulation tape

Insulation tape: GIFAS Item no. 152743

Manufacturer's designation: 3M Scotch vinyl electrical tape No. 23, black, (19 mm/19.4 m)

Done



5 Service

5.1 Service addresses

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5.2 Imprint

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