

Instalight LN N24 symmetrical

Safety instructions

Electrical devices may only be mounted and connected by electrically skilled persons. Serious injuries, fire or property damage possible. Please read and follow manual fully. Fire hazard. Do not connect the LED luminaires to the mains voltage. The LED lamps will be destroyed.

The LED luminaire is a device of protection class III. During installation and cable routing, comply with the regulations and standards which apply for SELV.

Do not bend LED luminaire. This can cause damage.

Unsealed shrink connection with soiled connecting cable. Before mounting the shrink tubing, clean connecting cables thoroughly and degrease.

Only the manufacturer may exchange the connect-ing cable.

To reduce the risk of strangulation, the flexible cabling

connected to this luminaire must be effectively secured

to the wall when the cabling is in hand reach These instructions are an integral part of the product, and must remain with the end customer.

Device components

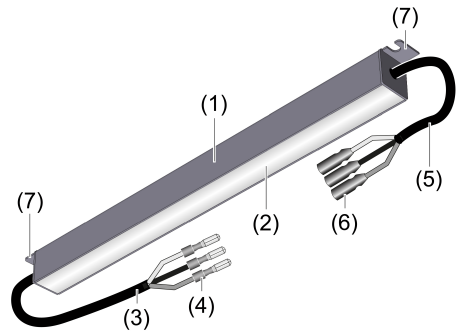


Figure 1

- (1) Luminaire housing (Stainless Steel)
- (2) Light output (encapsulation)
- (3) Input cable
- (4) Free cable end
- (5) Output cable
- (6) Fixing lug

- (15) Labelling of beam direction and input cable

Function

Intended use

- Grouted LED light insert in stainless-steel housing with integrated LEDTRIX interface and constant current regulation
- Power supply via external power supply unit DC 28 V SELV
- Mounting indoors or outdoors (IP67)
- Universal mounting in groove with a dimension
- of at least 24x24.5 mm (WxH)
Design lengths: 460 / 785 / 1110 / 1435 mm.
Designs with input cable right and with input cable left

Light technology

Symmetrical light distribution with a beam angle of 70° (±35°). The light flux and light colour vary according to the LED luminaire version and can be found on the appropriate datasheets on the Internet at www.instalighting.de.

Lamps

Maintenance free high-performance LED lamp with integrated power supply unit. The lamp cannot be replaced.

Information for electrically skilled persons

Fitting and electrical connection

Mounting the LED luminaires

- Use stainless steel screws only for the mounting (ø 6 mm).
- The connection lines must be shortened according to the mounting distance. For greater distances use connection set for ex-tending (see accessories).

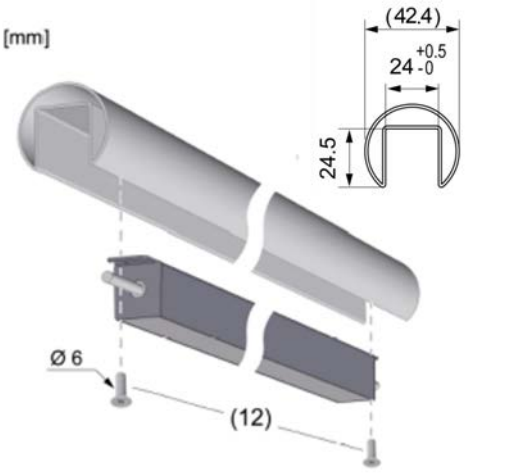


Figure 3: Mounting the luminaire

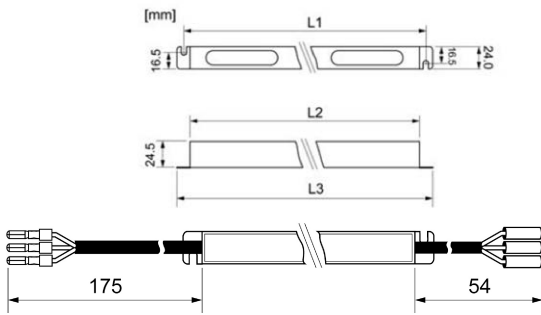


Figure 4: Dimensioned drawing

Length overview

L1 (mm)	L2 (mm)	L3 (mm)
370	355	385
695	680	710
1020	1005	1035
1345	1330	1360

- In the mounting base material (e.g. handrail), prepare a groove according to drawing (Figure 3).
- Prepare boreholes in the groove for the fastening of the luminaires. Observe dimensioned drawing for the distance of the boreholes (Figure 4).

- Fasten LED luminaire with stainless steel screws (12) in the groove (Figure 3).

Connecting LED light inserts – General notes

WARNING!
Unsealed shrink connection with soiled connecting cable.
Before mounting the shrink tubing, clean connecting cable thoroughly and degrease.

WARNING!
Improper routing may damage the connect-ing cable.
When routing the cable, comply with the minimum bend radius.

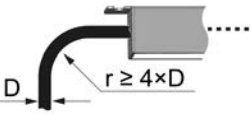


Figure 5: Minimum bend radius of the connection cable

- Use the LED connection set to connet the cables (see accessories)
 - Use system power supply unit "SNT ELI 0-120 W" for the power supply (see accessories).
 - Use DMX-PWM converter for dimming the lu-minaires (see accessories).
 - Observe the maximum number of LED lu-minaires per chain (see dimensioning).
 - Insulate all electrical connections using the en-closed shrink tubing.
- Connect the LED luminaires according to the circuit diagram (Figure 6).

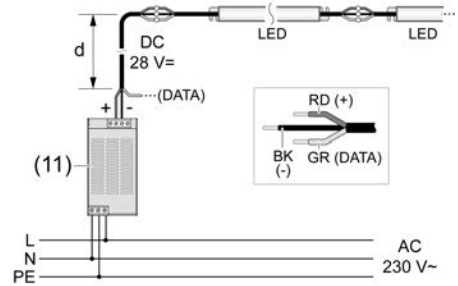


Figure 6: Circuit diagram

- (11) Power supply unit SNT ELI 0-120 W (see ac-cessories)
- d = Length of the supply line (see dimensioning)

Connection assignment

Wire colour	Connection
Red (RD)	+ 28 V
Black (BK)	0 V (GND)
Grey (GR)	Data*

*) The data connection is optional. The LED luminaire can be electrically combined with components of the LEDTRIX® system, but does not react to LEDTRIX® control signals. When combined with LEDTRIX® components, the LED luminaire may not be dimmed.

Dimensioning

The following table shows the maximum number of connectable LED luminaires when powered with a power supply "SNT ELI 0-120 W". All values apply to a direct linking of the luminaires and a supply line with a cross-section of 1.0 mm².

When the cross-section is doubled, the length of the supply line can also be doubled, without reducing the number of connectable LED luminaires.

Dimensioning with SNT ELI 0-120 W and supply line (d) with cross-section 3x1.0 mm²

Length of the lu-minaire:	350 mm	1005 mm
d = 5 m	29×	13×
d = 10 m	25×	11×
d = 20 m	21×	9×
d = 30 m	18×	7×

Linking LED lamps

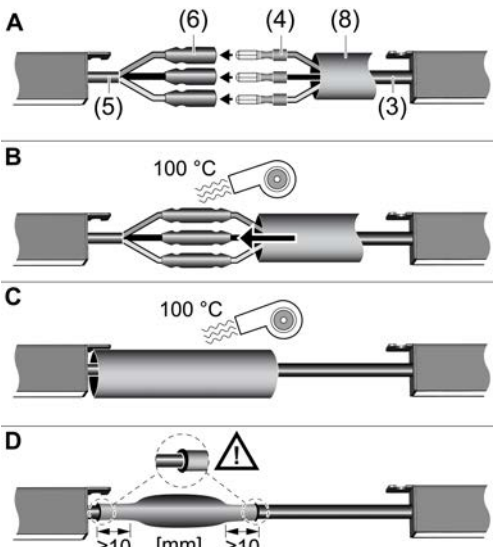


Figure 7: Linking LED lamps

Precondition: the LED lamps are installed.

- **A:** To connect the LED lamps Use the connection set (see accessories). Connect the connectors to the line ends using a tool.
- **B:** Shrink small shrink tubing onto the plug sleeves (6) using a hot air pistol (100 °C). Afterwards, push the large shrink tubing (8) onto the output cable (5).
- **C:** Shrink large shrink tubing (8) onto the con-ector using a hot air pistol (100 °C).
- **D:** Continue the shrinking process until the ad-hesive escapes on both sides and seals the cable sheath tightly. The coverage of shrink tubing and cable sheath must be at least 10 mm on both sides after the shrinking process.
- Repeat step **A-D** until the LED luminaires are completely linked.

Sealing output cable of the last LED luminaire

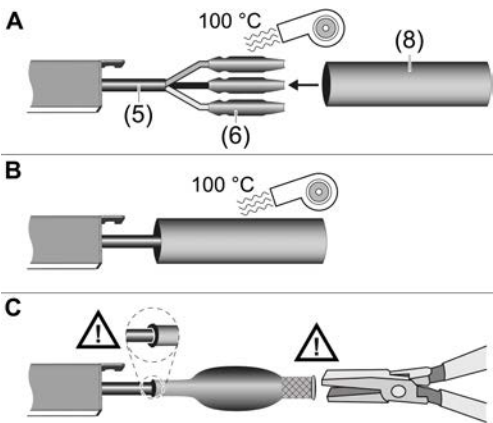


Figure 8: Sealing output cable of the last LED lu-minaire

Precondition: No additional LED luminaires need be connected to the chain anymore.

- **A:** Shrink small shrink tubing onto the plug sleeves (6) using a hot air pistol (100 °C). Af-terwards, push the large shrink tubing (8) onto the output cable (5) and allow approx. 4 cm to protrude.
- **B:** Shrink large shrink tubing (8) using a hot air blower at a temperature of approx. 100 °C until this seals the cable sheath of the output cable tightly.
- **C:** Press shrink tubing firmly together in warm state on the open side using flat pliers until the adhesive escapes and seals the opening com-pletely.

Connecting the first LED luminaire to the supply line (Standard luminaire + adapter cable)

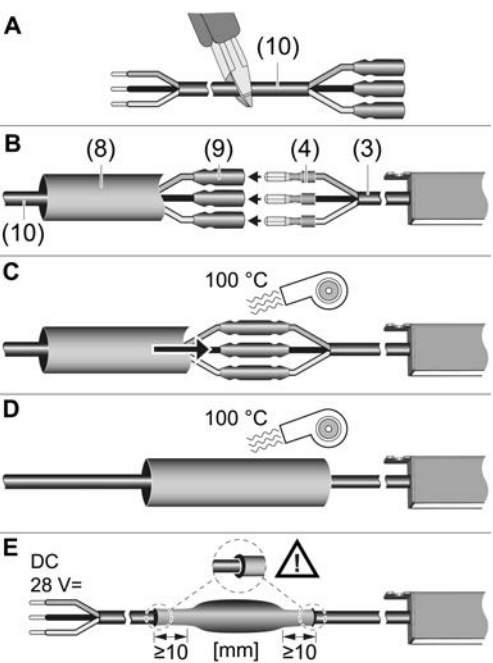


Figure 9: Connecting the first LED luminaire to the supply line (Standard luminaire + adapter cable)

Precondition: The output cable of the last LED lu-minaire in the chain is sealed.

Use connection set to connect the supply line of standard luminaires (see accessories).

- **A:** Shorten adapter cable (10) from the connec-tion set to the required length.
- **B:** Push the large shrink tubing (8) onto the ad-apter cable (10). Then, push the small shrink tubing (9) onto the plug sleeves (6) and con-nect round connectors of the adapter cable (10) and input cable (3) together until they lock noticeably into place.
- **C:** Shrink small shrink tubing onto the con-ector using a hot air pistol (100 °C). After-wards, push the large shrink tubing centrally over the connector.
- **D:** Shrink large shrink tubing (8) onto the con-ector using a hot air pistol (100 °C).
- **E:** Continue the shrinking process until the ad-hesive escapes on both sides and seals the cable sheath tightly. The coverage of shrink tubing and cable sheath must be at least 10 mm on both sides after the shrinking process.
- Strip adapter cable and connect to the supply line.
- The electrical connection of the supply line and adapter cable must be carried out by the cus-tomer so as to meet the requirements for double or reinforced insulation as well as de-gree of protection IP67.

Connecting the first LED luminaire to the supply line (special luminaire with long input cable)

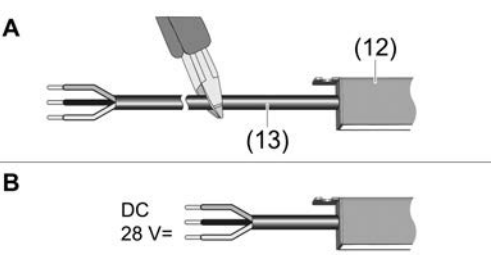


Figure 10: Connecting the first LED luminaire to the supply line (special luminaire with long input cable)

Precondition: The output cable of the last LED lu-minaire in the chain is sealed.

A special luminaire with a longer input cable is available for installation environments in which a connector has no space near the luminaire. The electrical connection is then made further away from the luminaire without a connector.

- **A:** Shorten input cable (13) of the special lu-minaire (12) to the required length.

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Operating instructions

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- **B:** Strip input cable and connect to the supply line.
- The electrical connection of the supply line and adapter cable must be carried out by the cus-tomer so as to meet the requirements for double or reinforced insulation as well as de-gree of protection IP67.

Technical data

Rated voltage	DC 28 V =
Power consumption per metre	7.2 W
Degree of protection	IP 67
Protection class	III
Ambient temperature	-20...+45 °C
Storage/transport tem-perature	-25 ... +60 °C

Accessories

Connection kit IP67 28V	Art. no. 58928011
DMX-PWM converter	Art. no. 59701090
SNT ELI 0-120W / 28V	Art. no. 58916023
Connection set	Art. no. 58928012

Warranty

We reserve the right to make technical and formal changes to the product in the interest of technical progress.

We provide a warranty as provided for by law.

Please send the unit postage-free with a description of the defect to our central customer service office:

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