LL-SR-1621

Helvar Components

Strain Relief Series

- Innovative accessory that enables independent installation of 16 or 21 mm high metal case LED drivers
- Suitable for model with or without NFC antenna
- Easy installation
- Sturdy structure, compatible with cables of different thickness
- Available in white *(product code 5596300. MOQ 20 pcs)*

CE

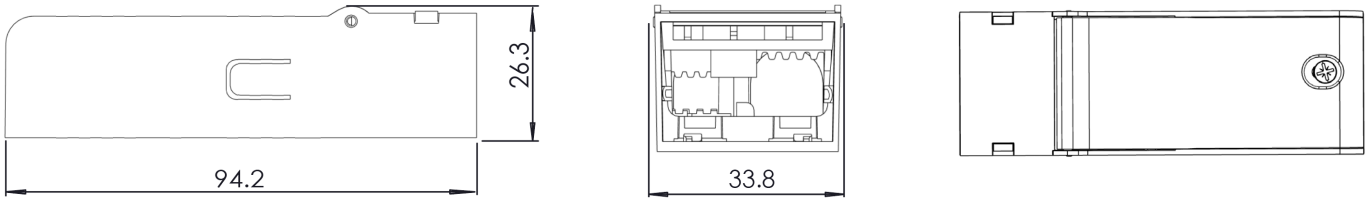
PACKAGE CONTENTS

One set of LL-SR-1621 strain relief consists of the following parts:

- Strain relief with lid that can be opened and closed
- Extra part for 16 mm LED driver fitment
- One screw (3x14 mm)
- One sticker bearing the ⧈ symbol per two strain reliefs *(for Class II drivers, see page 3)*

The LL-SR-1621 products are packed and sold in bags of 20 strain reliefs each. When installing the products, please make sure to have two strain reliefs available per each driver - one bag has parts for **10 LED drivers**.

DIMENSIONS



Tolerance for dimensions ± 0,1 mm

MATERIALS AND CONDITIONS

Material Specifications

Material type	Polycarbonate
Fire retardant	Yes
Colour	White

Mechanical, Operating & Storage Conditions

Driver cross-section dimensions	16/21 x 30 mm
Cable diameter	4 - 12.5 mm
Ambient temperature range	-20...+40 °C*
Storage temperature range	-40...+80 °C
Assembly temperature range	+5...+30 °C

Do not store in wet or humid environment!

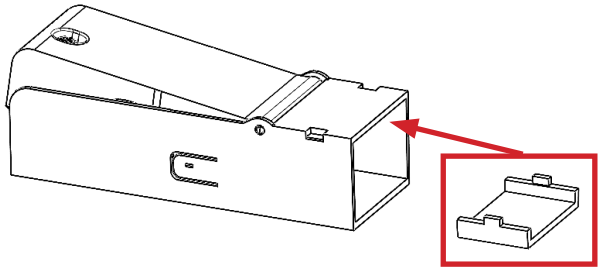
*Unless otherwise stated in the driver datasheet (for independent installation). Note! Tc max temperature of the driver shall not be exceeded.

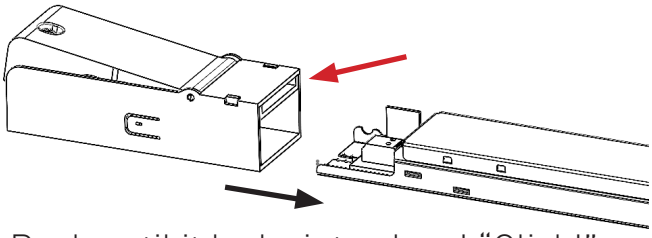
Conformity & Standards

Luminaires - Part 1: General requirements and tests	IEC 60598-1 EN 60598-1
Luminaires. Part 2: Particular requirements. Section One: Fixed general purpose luminaires	IEC 60598-2-1 EN 60598-2-1

Compliant with relevant EU directives, CE marked, RoHS/REACH compliant

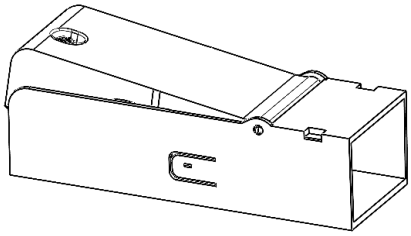
For 16 mm LED drivers

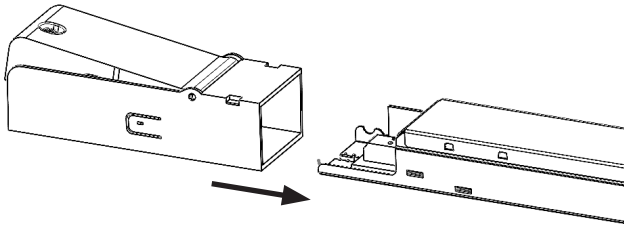




Push until it locks into place! “Click!”

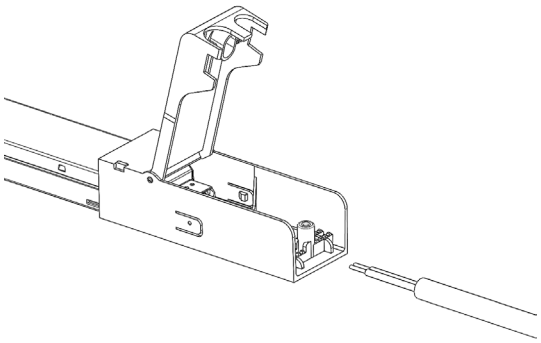
For 21 mm LED drivers



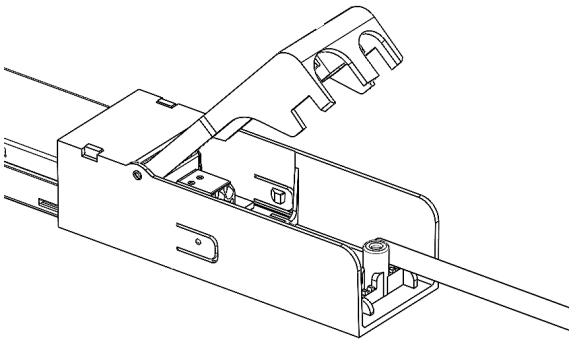


Push until it locks into place! “Click!”

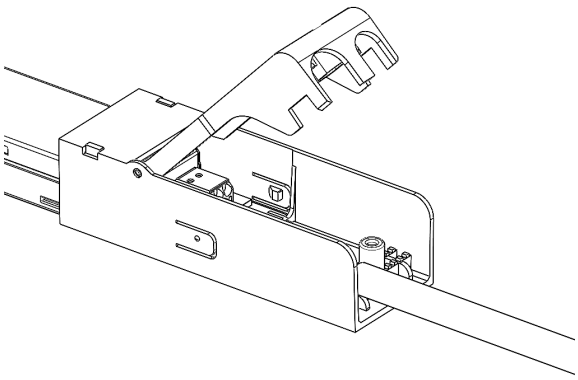
Wiring



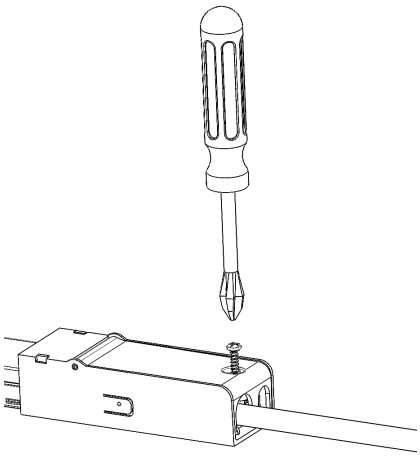
1. Connect the wires to the correct terminals



2. a) Put cables with diameter of **4 mm - 7.5 mm** into the **smaller** slot.



2. b) Put cables with diameter of **8 mm - 12.5 mm** into the **bigger** slot.



3. Tighten the screw.

Application considerations

LL-SR-1621 strain reliefs enable the independent installation of Helvar Components metal case LED drivers. The usage of the strain reliefs with a Helvar Components built-in driver is covered by our CE declaration. Possible ENEC certification of the driver does not extend to independent use, unless otherwise stated in the driver datasheet and/or certificate. Please always take specific requirements into account before installing and using the strain reliefs.

ASSEMBLY INSTRUCTIONS

Please refer to separate Installation guide, available on product website's Download & Links section, for instructions of how to install the LL-SR-1621 strain reliefs to the driver.

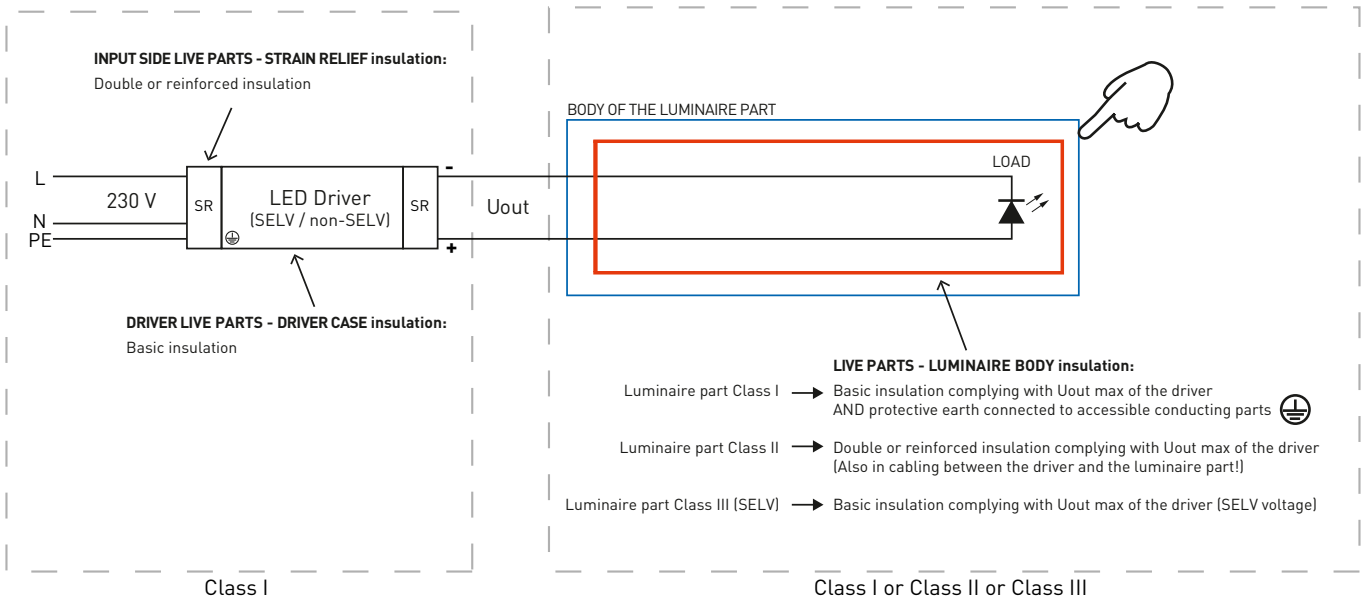
Protection class of the LED driver

CLASS I DRIVERS

LED drivers of protection class I have basic insulation between live electrical parts and accessible parts of the driver. In addition to this, they always have protective earth (PE) terminal/cable, to which the electrically conductive casing components are connected. Protective earth conducts in such a way that accessible parts can't become live in case of the basic insulation fails.

When installing Class I drivers independently with LL-SR-1621 strain reliefs, PE terminal of the driver must be connected to protective earth conductor. In addition to this, the operating conditions of the driver in independent installation may never exceed the specifications as per the product datasheet.

Required insulations illustrated in the figure below. It is always the integrator's responsibility to ensure that the combination of the driver and the luminaire part complies with the relevant standards (e.g. IEC / EN 60598-1).



Note: The combination is Class I, even though Class II or Class III luminaire parts are used!

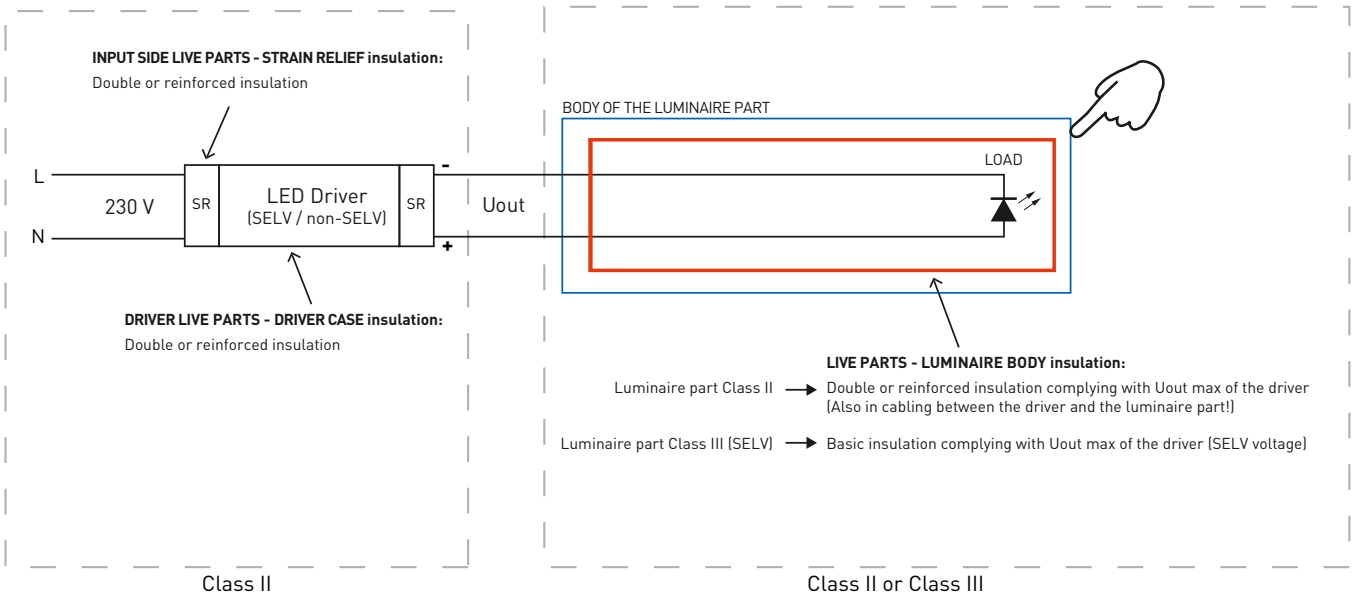
LIMITATION OF LIABILITY. ALWAYS CHECK AND FOLLOW EXACT REGULATIONS FROM LATEST RELEVANT IEC/EN STANDARDS.

CLASS II DRIVERS

LED drivers of protection class II have double or reinforced insulation between live electrical parts and accessible parts of the driver.

When installing Class II drivers independently with LL-SR-1621 strain reliefs, the accessible parts of both the cabling and the luminaire part must have double or reinforced insulation from the live parts. Only when the driver has isolated SELV output, those may be basic isolated according to Uout max of the driver (SELV voltage). In addition to this, the operating conditions of the driver in independent installation may never exceed the specifications as per the product datasheet.

Required insulations illustrated in the figure below. It is always the integrator's responsibility to ensure that the combination of the driver and the luminaire part complies with the relevant safety standards (e.g. IEC / EN 60598-1).



Note: The combination is Class II, even though Class III luminaire parts are used!

Because of the regulations, the Class II drivers designed for built-in usage, marked with symbol ◎ (double ring) , must be marked with the symbol of ▣ (double square) when fitted with accessories making it suitable for independent installation.

Thus, when installing the LL-SR-1621 strain reliefs to Class II Helvar Components drivers marked with the symbol ◎ the sticker bearing the symbol ▣ must be attached to the driver case or strain reliefs.

Do not use the stickers with Class I drivers!

Attach the sticker, when using the LL1x2130-SR strain relief with the following drivers:			
LL25SE-CC-150-500-NFC	LL25SE-DA-120-500	LL35SE-CC-250-850-NFC	LL35SE-DA-250-850
LL50SE-CC-350-1400-NFC	LL50SE-DA-100-1400	LL50iC-DA-100-1200	LL50iC-FD-100-1200
LL50SE-FD-100-1400			

LIMITATION OF LIABILITY. ALWAYS CHECK AND FOLLOW EXACT REGULATIONS FROM LATEST RELEVANT IEC/EN STANDARDS.

Thermal considerations

The LL-SR-1621 strain reliefs are designed and tested to comply with the luminaire standard EN 60598-1:2015 where applicable, and the metal case LED drivers are designed and tested as built-in components, complying the relevant standards when used properly. When combining the strain reliefs and drivers for independent installation of the drivers, it is always the responsibility of the integrator to ensure that the combination complies with the relevant standards (e.g. IEC / EN 60598-1).

Thermal design of the luminaire system is important for the safety, reliability and lifetime of the system. Datasheets give guidelines what range of ambient temperature is recommended for the driver in built-in and in independent usage, but in both environments it it always the responsibility of the integrator to ensure that the Tc point temperature does not exceed the Tc max temperature specified in the product datasheet.

Installation, mechanical and chemical considerations

- Do not assemble the LL-SR-1621 strain reliefs into place in cold environments (<5 °C)
- When installing the strain reliefs, refer to the installation instructions in this datasheet
- The protection class of the final installation must be adequate for the application
- While handling the strain reliefs avoid excess mechanical stress or pressure applied to them
- Avoid dropping of the strain reliefs
- Mechanical modifications (drilling, milling, sawing or cutting of the strain reliefs) are not permitted

Chemical substances may cause damage to the LL-SR-1621 strain reliefs.
Avoid materials and substances containing:
- Acetone, ketones, ethers, and aromatic and chlorinated hydrocarbons
- Aqueous or alcoholic alkaline solutions, ammonia gas and its solutions and amines

Do not expose LL-SR-1621 strain reliefs to steamy environments.