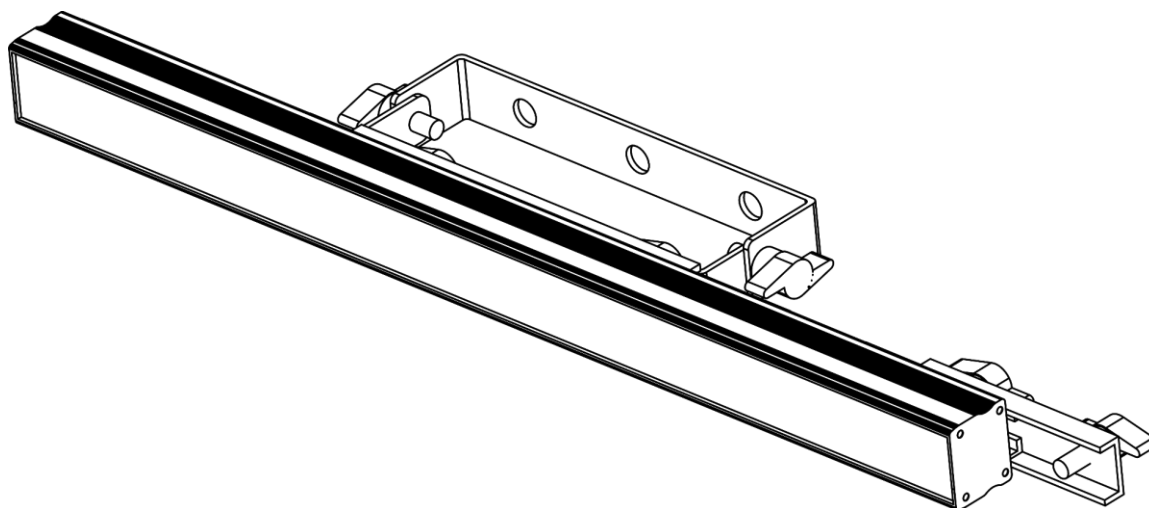




**MANUAL**



**ENGLISH**

**Pixelstrip 20**

**V1**

**Order code: 44501**

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## Warning



**For your own safety, please read this user manual carefully  
before your initial start-up!**

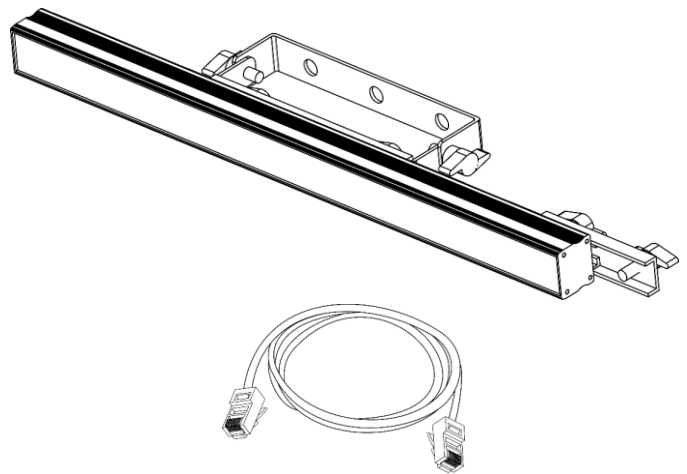


### Unpacking Instructions

Immediately upon receiving this product, carefully unpack the carton and check the contents to ensure that all parts are present, and have been received in good condition. Notify the dealer immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture will be returned in the original factory box and packing.

### Your shipment includes:

- Showtec Pixelstrip 20
- CAT-5 data cable (1,3 m)
- User manual



**CAUTION!**  
**Keep this device away from rain and moisture!**  
**Unplug mains lead before opening the housing!**



### Safety Instructions

Every person involved with the installation, operation and maintenance of this device has to:

- be qualified
- follow the instructions of this manual



**CAUTION! Be careful with your operations.**  
**With a dangerous voltage you can suffer  
a dangerous electric shock when touching the wires!**



Before the initial start-up, please make sure that there is no damage caused by transportation. Should there be any, consult your dealer and do not use the device.

To maintain perfect condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes contained in this manual.

Please consider that damages caused by manual modifications to the device are not subject to warranty.

This device contains no user-serviceable parts. Refer servicing to qualified technicians only.

**IMPORTANT:**

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the device.

- Never remove warning or informative labels from the unit.
- Never leave any cables lying around.
- Never place any material over the LEDs.
- Never look directly into the light source.
- Never use the device during thunderstorms, unplug the device immediately.
- Do not switch the device on and off in short intervals, as this will reduce the device's life.
- Do not touch the device's housing bare-handed during its operation. Allow the fixture to cool for at least 5 minutes before handling.
- Do not open the device and do not modify the device.
- Do not shake the device. Avoid brute force when installing or operating the device.
- Only use the device indoors, avoid contact with water or other liquids.
- Only operate the fixture after having checked if the housing is firmly closed and all screws are tightly fastened.
- Only operate the device after having familiarized with its functions.
- Avoid flames and do not put close to flammable liquids or gases.
- Always keep the housing closed while operating.
- Always allow a free air space of at least 50 cm around the unit for ventilation.
- Always disconnect power from the mains, when device is not used or before cleaning! Only handle the data cable holding it by the plug. Never pull out the plug by tugging the data cable.
- Make sure that the device is not exposed to extreme heat, moisture or dust.
- If device was dropped or struck, disconnect mains power supply immediately. Have a qualified engineer inspect for safety before operating.
- If the device has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your device. Leave the device switched off until it has reached room temperature.
- If the LEDs are obviously damaged, they need to be replaced to prevent their functions from being impaired, due to cracks or deep scratches.
- If your Showtec device fails to work properly, discontinue the use immediately. Pack the unit securely (preferably in the original packing material), and return it to your Showtec dealer for service.
- For adult use only. The fixture must be installed beyond the reach of children. Never leave the unit running unattended.
- The user is responsible for correct positioning and operating of the Pixelstrip. The manufacturer will not accept liability for damages caused by the misuse or incorrect installation of this device.
- This device falls under protection class I. Therefore it is essential to connect the yellow/green conductor to earth.
- Repairs, servicing and electric connection must be carried out by a qualified technician.
- WARRANTY: Till one year after date of purchase.

**Operating Determinations**

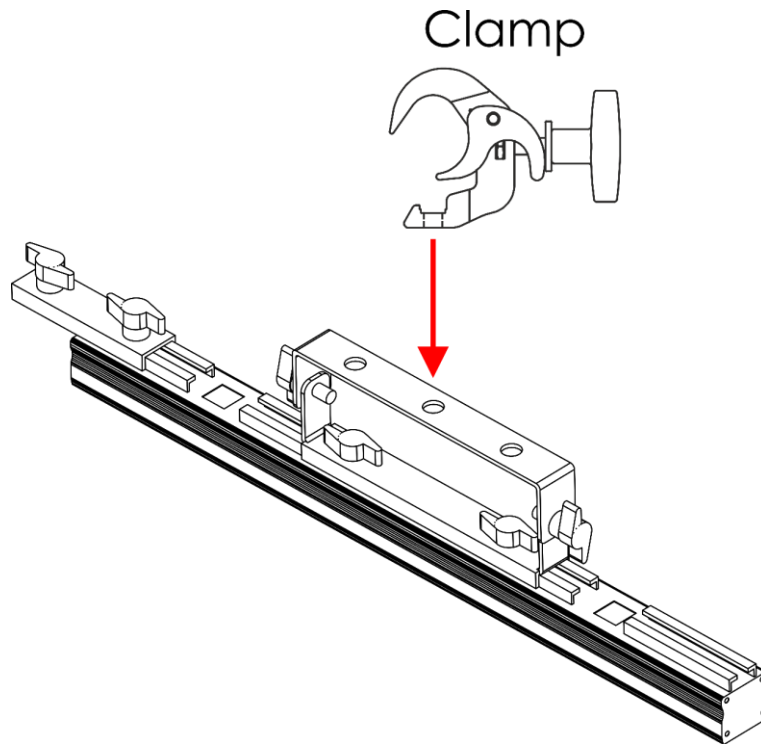
- This device is not designed for permanent operation. Consistent operation breaks will ensure that the device will serve you for a long time without defects.
- The minimum distance between light output and the illuminated surface must be bigger than 1 meter.
- In order to eliminate wear and improve the device's lifespan, during periods of non-use, completely disconnect from power source via breaker or by unplugging.
- The maximum ambient temperature  $t_a = 40\text{ °C}$  must never be exceeded.
- The relative humidity must not exceed 50 % with an ambient temperature of  $40\text{ °C}$ .
- If this device is operated in any other way, than the one described in this manual, the product may suffer damages and the warranty becomes void.
- Any other operation may lead to dangers like short-circuit, burns, electric shock, crash etc.

*You endanger your own safety and the safety of others!*

**Rigging**

Please follow the European and national guidelines concerning rigging, trussing and all other safety issues.

*Improper installation can cause serious injuries and/or damage of property!*



**Fig. 01**

The Pixelstrip 20 can be mounted to any kind of truss with a clamp.



### **Return Procedure**

Returned merchandise must be sent prepaid and in the original packing, call tags will not be issued. Package must be clearly labeled with a Return Authorization Number (RMA number). Products returned without an RMA number will be refused. Highlite will not accept the returned goods or any responsibility. Call Highlite 0031-455667723 or mail [offersales@highlite.com](mailto:offersales@highlite.com) and request an RMA prior to shipping the fixture. Be prepared to provide the model number, serial number and a brief description of the cause for the return. Be sure to properly pack fixture, any shipping damage resulting from inadequate packaging is the customer's responsibility. Highlite reserves the right to use its own discretion to repair or replace product(s). As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

**Note: If you are given an RMA number, please include the following information on a piece of paper inside the box:**

- 01) Your name
- 02) Your address
- 03) Your phone number
- 04) A brief description of the symptoms

### **Claims**

The client has the obligation to check the delivered goods immediately upon delivery for any shortcomings and/or visible defects, or perform this check after our announcement that the goods are at their disposal. Damage incurred in shipping is the responsibility of the shipper; therefore the damage must be reported to the carrier upon receipt of merchandise.

It is the customer's responsibility to report and submit claims with the shipper in the event that a fixture is damaged due to shipping. Transportation damage has to be reported to us within one day after receipt of the delivery.

Any return shipment has to be made post-paid at all times. Return shipments must be accompanied with a letter defining the reason for return shipment. Non-prepaid return shipments will be refused, unless agreed otherwise in writing.

Complaints against us must be prepared in writing or sent by fax within 10 working days after receipt of the invoice. After this period complaints will not be handled anymore.

Complaints will only then be considered if the client has so far complied with all parts of the agreement, regardless of the agreement from which the obligation is resulting.

## Description of the Device

### Features

The Pixelstrip 20 is designed to be operated with the Pixel Controller.

- Light source: 20 x SMD5050 RGB LEDs (0,3 W)
- Pixel pitch: 25 mm
- Maximum cable length: 10 m (CAT-5/CAT-6) from the Pixel Controller to the Pixelstrip
- Maximum output length: 4 m per output/16 m per Pixel Controller
- Connections: RJ45 connectors IN/OUT
- Front cover: Black frosted
- Housing: Metal
- Color: Black
- IP rating: IP20
- Operating temperature: From -5 °C to +40 °C
- Dimensions: 500 x 37 x 100 mm (LxWxH)
- Weight: 0,88 kg



**The Pixelstrip 20 is designed to be operated together with the Pixel Controller.**

**Note:** The Pixelstrip 20 is delivered without the Pixel Controller. You need to purchase it separately.

[44502](#) – Pixelstrip 40 (100 cm)

[44510](#) – Pixel Controller

### Optional accessories

[44504](#) – Acrylic Flat Cover Milky for Pixelstrip 20

[44506](#) – Acrylic Dome Cover White for Pixelstrip 20

### Overview

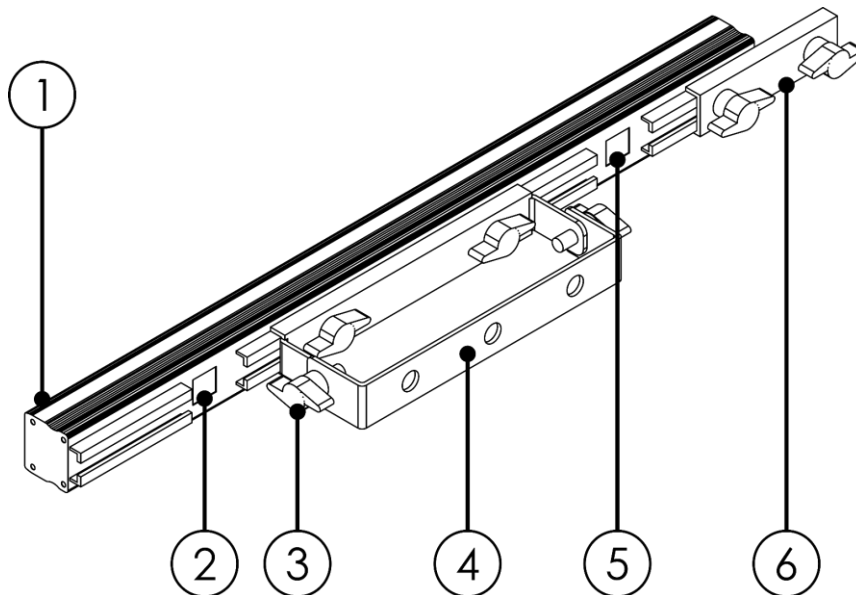


Fig. 02

- 01) 20 x SMD5050 RGB LEDs (0,3 W)
- 02) RJ45 data connector IN
- 03) Adjustment screw
- 04) Mounting bracket with inclination screw
- 05) RJ45 data connector OUT
- 06) Connection bracket

## Installation

Remove all packing materials from the Pixelstrip 20. Check if all foam and plastic padding is removed. Connect all cables.

**Do not supply power before the whole system is set up and connected properly.**

**Always disconnect from electric mains power supply before cleaning or servicing.**

**Damages caused by non-observance are not subject to warranty.**

## Setup and Operation

Follow the directions below, as they pertain to your preferred operation mode.

### Connecting Multiple Pixelstrips

01) Place multiple Pixelstrips next to each other.

02) Loosen the adjustment screws on the connection bracket **(06)**.

03) Connect the Pixelstrips and slide the connection bracket **(06)** onto the rail on the next Pixelstrip.

04) Tighten the adjustment screws on the connection bracket **(06)**.

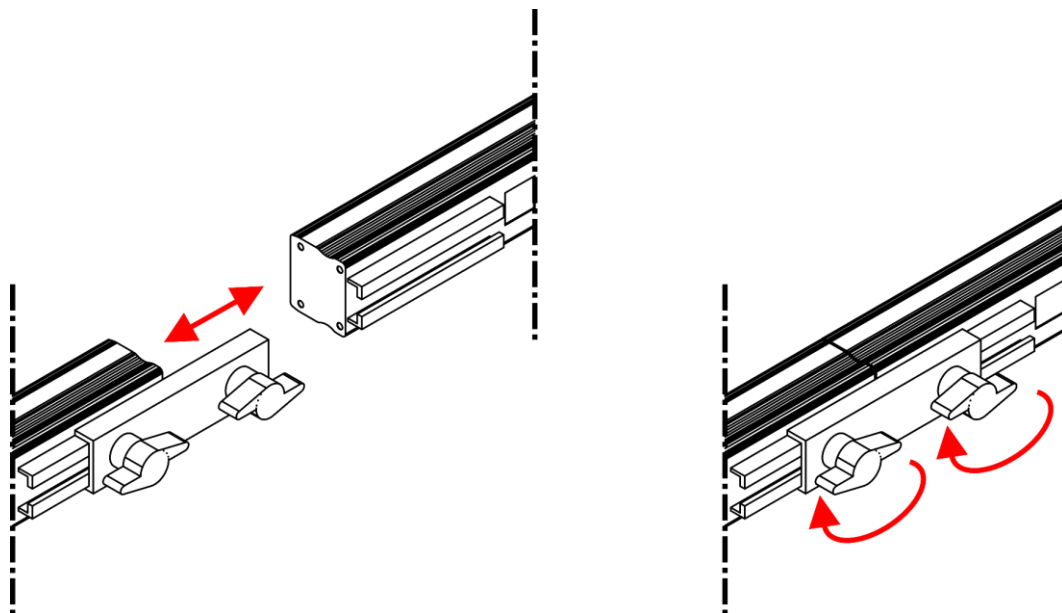


Fig. 03

### Connecting the Pixelstrip to the Pixel Controller

In order to connect the Pixelstrip to the Pixel Controller, follow the directions and examples from the user manual of the Pixel Controller (44510).

**The maximum length of your setup must not exceed 16 meters per controller (max. 4 meters per output)!**



It is possible to combine the Pixelstrip 20 (44501) and the Pixelstrip 40 (44502), if the 4-meter setup length limit is observed.

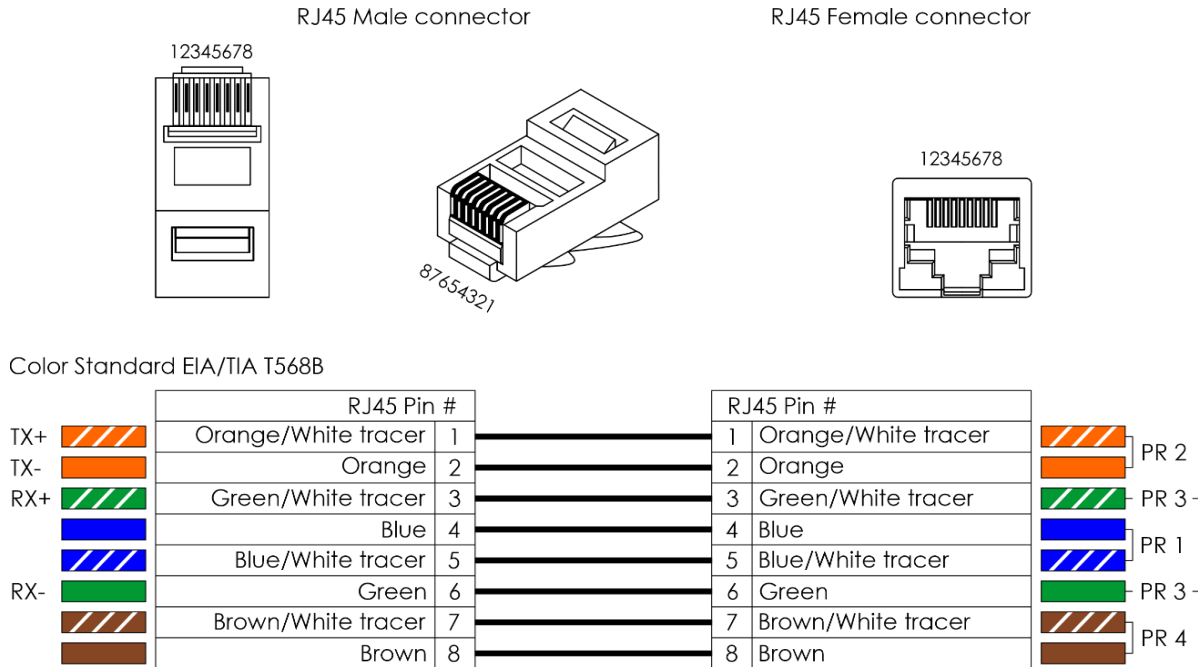


**How To Make a Data Cable**

A standard ETHERNET cable can be used to replace the data cable required to transmit the data.

**Please follow the instructions below in order to create an extra network cable.**

Take a standard network cable (CAT-5/ 5E /6) and connect it to the RJ45 connector, as shown in Fig. 04. The wires should now be colored as follows:



**Fig. 04**

**Software for controlling**

In combination with Arkaos or DMT Software, you are able to play videos over the Pixel Controller. You only have to connect all the Pixelstrips and run your software.

[50180](#)

Arkaos LED Master

An all-in-one solution to run LED light shows for everyone. Originally designed around KlingNet, this fast and easy application will take your LED show to the next level.



[102101](#)

Arkaos Media Master Express 5.0

The latest update of the successful media server software.

[102201](#)

Arkaos Media Master Pro 5.0

PRO DMX video software for lighting designers.

**Data Cabling**

To link fixtures together, you must obtain data cables. You can purchase DAP Audio certified DMX cables directly from a dealer/distributor or construct your own cable. If you choose to create your own cable, please use data-grade cables that can carry a high quality signal and are less prone to electromagnetic interference.

**DAP Audio PC Interface Cables**

- CAT-5 cable 7,6 mm Matte blue PVC. **Order code** FL55150 (1,5 m), FL553 (3 m), FL556 (6 m), FL5510 (10 m), FL5515 (15 m), FL5520 (20 m).
- CAT-6 cable (recommended for best data transfer). **Order code** FL563 (3 m), FL566 (6 m), FL5610 (10 m), FL5615 (15 m), FL5640 (40 m).

## Maintenance

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The operator has to make sure that safety-related and machine-technical installations are to be inspected by an expert after every year in the course of an acceptance test.

The operator has to make sure that safety-related and machine-technical installations are to be inspected by a skilled person once a year.

The following points have to be considered during the inspection:

- 01) All screws used for installing the device or parts of the device have to be tightly connected and must not be corroded.
- 02) There may not be any deformations on housings, fixations and installation spots.
- 03) The electric power supply cables must not show any damages or material fatigue.

The Pixelstrip 20 requires almost no maintenance. However, you should keep the unit clean. Disconnect the mains power supply, and then wipe the housing with a damp cloth. Do not immerse in liquid. Do not use alcohol or solvents.

Keep connections clean. Disconnect electric power, and then wipe the data connections with a damp cloth. Make sure connections are thoroughly dry before linking equipment or supplying electric power.

## Troubleshooting

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This troubleshooting guide is meant to help solve simple problems.

If a problem occurs, carry out the steps below in sequence until a solution is found. Once the unit operates properly, do not carry out following steps.

### No Light

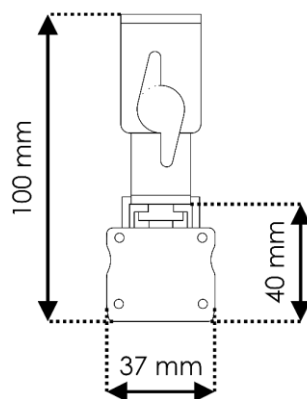
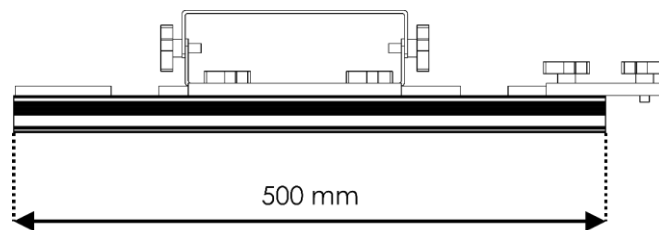
If the Pixelstrip does not operate properly, refer servicing to a technician.

Suspect three potential problem areas as: the power supply, the LEDs and the controller.

- 01) Power supply. Check if the Pixel Controller is plugged into an appropriate power supply.
- 02) The LEDs. Return the device to your Showtec dealer.
- 03) The controller. Refer to the user manual of the Pixel Controller.
- 04) If all of the above appears to be O.K., plug the unit in again.
- 05) If you are unable to determine the cause of the problem, do not open the Pixelstrip, as this may damage the unit and the warranty will become void.
- 06) Return the device to your Showtec dealer.

## Product Specifications

Model:	Showtec Pixelstrip 20
Dimensions:	500 x 37 x 100 mm (LxWxH)
Weight:	0,88 kg
Light source:	20 x SMD5050 RGB LEDs (0,3 W)
Pixel pitch:	25 mm
Maximum cable length:	10 m (CAT-5/CAT-6) from the Pixel Controller to the Pixelstrip
Maximum output length:	4 m per output/16 m per Pixel Controller
Connections:	RJ45 connectors IN/OUT
Front cover:	Black frosted
Housing:	Metal
Color:	Black
IP rating:	IP20
Max. ambient temperature $t_a$ :	From -5 °C to +40 °C
Max. housing temperature $t_B$ :	70 °C
<b>Minimum distance:</b>	
Minimum distance from flammable surfaces:	0,5 m
Minimum distance to lighted object:	1 m



Design and product specifications are subject to change without prior notice.



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