



Advantages:

- high quality power LED of CREE Lighting,
- possibility of connecting stripes in chains,
- safe low operating voltage,
- easy installation,
- wide range of available colours.
-

Applications:

- indoor lighting,
- general illumination,
- decorative and accenting illumination.
- light chains.

Technical data¹⁾

LED Stripe	Colour	Number of LEDs	Advisable power type	Operating voltage [V]		Operating current [mA] max	Power [W] max	Viewing angle ²⁾ [°]	Wavelength [nm] typ.	Luminous flux [lm] typ. (I = 350mA)	Luminous flux [lm] typ. (I = max)
				min	max						
LEDIS 9XR ROY	Royal blue	9	Current	30,6	36	700	23,4	100	460	2295 mW	3420 mW
LEDIS 9XR BLU	Blue	9	Current	30,6	36	700	23,4	100	470	135	225
LEDIS 9XR CYN	Cyan	9	Current	30,6	36	700	23,4	100	505	405	684
LEDIS 9XR GRN	Green	9	Current	30,6	36	700	23,4	100	525	468	792
LEDIS 9XR AMB	Amber	9	Current	20,7	27	350	8,1	100	590	378	378
LEDIS 9XR RDO	Red Orange	9	Current	20,7	27	700	15,3	100	615	441	747
LEDIS 9XR RED	Red	9	Current	20,7	27	700	15,3	100	630	360	612

¹⁾ All data concern particular module. Values of each parameters are average values and in particular copy they can be differ than in the table above.

²⁾ Maximum angle at which LED intensity value is 50% of maximum intensity, observed at mechanical axis of LED.

Qualities:

- very high luminous flux thanks to 9 LEDs,
- stripes optimized for driving by impulse constant current power supplies,
- parallel connecting with no need for extra wires,
- module prepared for length adjustment thanks to three break sections – lengths available: 14 or 29 cm,
- excellent thermal flow,
- possibility of brightness regulation thanks to PWM with drivers produced by LEDIKO,
- light is emitting orthogonally to plate surface.

Tolerated work parameters¹⁾

LED Stripe	Operating temperature [°C]		Voltage DC [V]	Reverse voltage [V]	Junction temperature [°C]
	min	max	max	max	max
LEDIS 9XR ROY	-40	85	36	45	145
LEDIS 9XR BLU	-40	85	36	45	145
LEDIS 9XR CYN	-40	85	36	45	145
LEDIS 9XR GRN	-40	85	36	45	145
LEDIS 9XR AMB	-40	85	27	45	145
LEDIS 9XR RDO	-40	85	27	45	145
LEDIS 9XR RED	-40	85	27	45	145

¹⁾ Table of physical work parameters, that must not be exceeded because of possibility of lifetime reduction or permanent damage of LED module.

Drawing and mechanical dimensions

Shape: rectangle, stripe

Dimensions: length 440mm, width 10,8mm

Height: 5,4mm

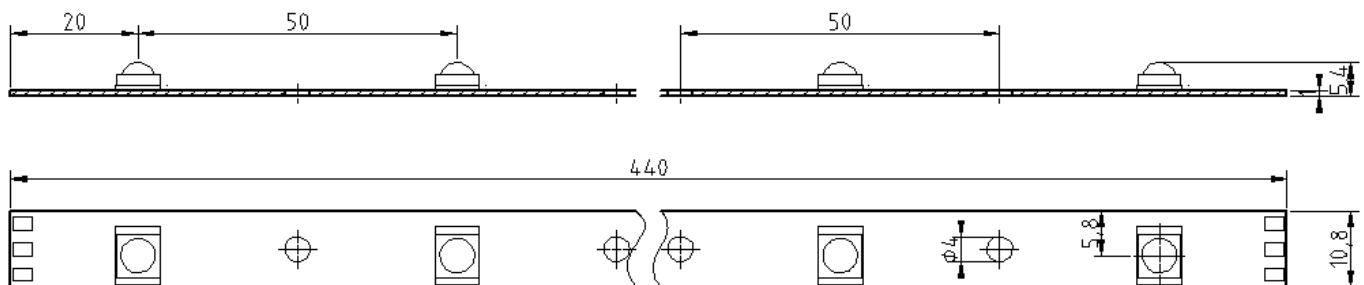


Fig. 1. LEDIS 9XR.

Safety information

1. Stripes must not be weighed down mechanically to work safely.
2. Montage elements must not destroy LEDs or paths on the plate.
3. Stripes have no short circuit, overcharge and thermal protection.
It is absolutely necessary for LED power circuits to have such protections.
4. Stripes installation (with driving circuits) must be in accordance with all electric and safety standards.
5. It is necessary to keep proper polarization of driving voltages. Wrong polarization could cause LED damage.
6. During installation it is important to remember about influence of electrostatic charge. Before installation charges should be neutralized by touching metal parts of grounded elements (e.g. copper pipe, tap, etc.).
7. It is recommended to keep chip temperature below 85°C. In order to draw heat away from LED junction external radiators can be used. Parameters and dimensions of radiator can be computed using proper equations. Each application, depending on number of LEDs, power, montage and many other parameters, need to be processed separately. LEDIKO provides optimal solutions for each customer.
8. LEDs have not corrosion resistant elements. User should provide safe work conditions of circuit. LEDIKO products do not fall within complaint on the basis of damages caused by humidity and chemical conditions.
9. LEDIKO stripes are not appropriate to use direct outdoor or in conditions that may damage electric parts (e.g. low or high temperature, humidity, chemical conditions). In such applications it is necessary to use special package.
10. Package should fulfill such requirements:
 - optical transparency from light emitted side,
 - UV protection (in case of sun light exposure),
 - drawing heat away, to keep safe work of circuit,
 - heat produced by LED resistance,
 - low transmission in all climate conditions.

Mounting directions:

1. LED stripes must be connected to power supply in accordance with all electric and safety standards. Before switching power on it is always required to check all the electric connections and make sure that power supply has proper electric parameters.
2. It is very important to mount stripe to the element which helps to draw heat away (e.g. aluminium plate, radiator). In case of montage using screws, some separators (silicone, mica, silicone paste or other material that conduct heat) are needed between radiator and substrate of the stripe. Such a separator needs to be used, because it helps to transfer heat from the substrate to the radiator and makes LED work conditions better. Stripe can also be mounted to the radiator using special glue or tape, which conduct heat.
3. Depends on the power of power supply it is important to use radiator with proper thermal resistance. When power supply is 1W per LED, radiator should have maximum thermal resistance at a level of 4K/W, it corresponds e.g. aluminium sheet, 2 mm thickness and 225cm² area (e.g. 5cm side flat bar).
4. Mount with two M3 screws (hole diameter $\varnothing 3,1\text{mm}$), head diameter up to 6 mm. Between plate with LEDs and surface where stripe is mounted should be effective thermal contact. Stripe can also be mounted to the surface using special glue or tape, which conduct heat.
5. Connection is made by two wires (in serial or parallel connection) or by three wires in serial – parallel connection. There are some examples below.

Connection details

Examples below show a way of connection a single LEDIS 5XR stripe with current supply(Fig. 2.) and connecting a few stripes in parallel(Fig. 3.).

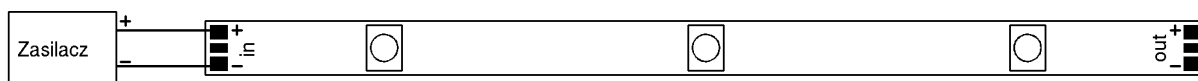


Fig. 2. Single LEDIS 5XR stripe basic connection.

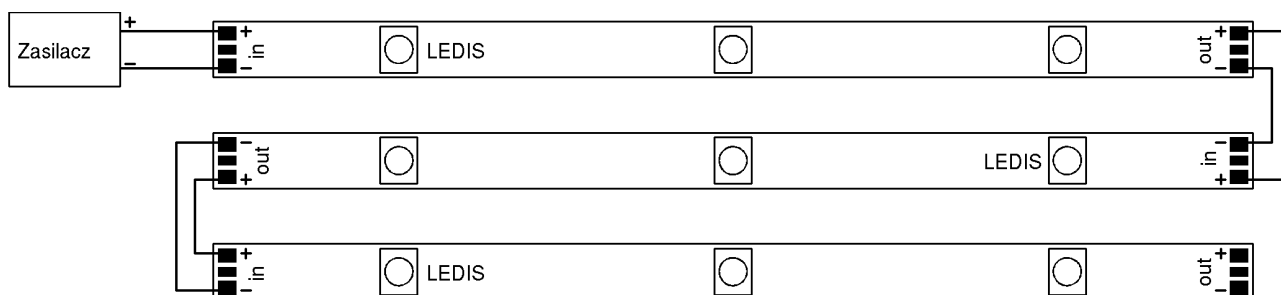


Fig. 3. Three LEDIS XR5 stripes connected in parallel with a single power supply.

Notice: Choice of power supply type(current/voltage) depends on inner stripe connections and should be consulted with LEDIKO.

Order particulars

LED Stripe	Colour	Wavelength	Typ. luminous flux (350mA)
LEDIS 9XR ROY	Royal blue	460 nm	2295 mW
LEDIS 9XR BLU	Blue	470 nm	135 lm
LEDIS 9XR CYN	Cyan	505 nm	405 lm
LEDIS 9XR GRN	Green	525 nm	468 lm
LEDIS 9XR AMB	Amber	590 nm	378 lm
LEDIS 9XR RDO	Red Orange	615 nm	441 lm
LEDIS 9XR RED	Red	630 nm	360 lm

When placing an order please write:

1. Name and surname of orderer,
2. Company name,
3. Company Tax Identification Number,
4. Address of company or private address for individual customers,
5. City and post code,
6. Index of elements: number of elements, product code.

Welcome to contact us and place orders.
Phone: +48 71 79 85 785

www.lediko.com



Notice: "LEDIKO Walendowski i Wilanowski" Sp.J. stipulate the information in this document is subject to change without notice.