



Lumistrips

DATASHEET

MULTIBAR3090 NICHIA LED STRIP NEUTRAL WHITE CRI90
4000K 890LM 24V 44 LEDS 50CM BAR

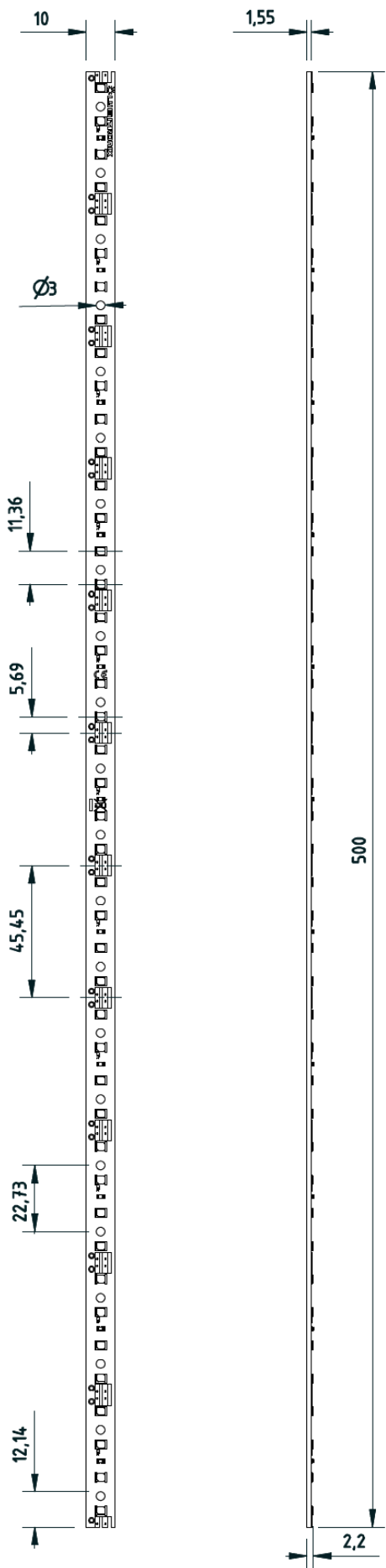
SKU: 50859



MULTIBAR3090 NICHIA LED STRIP NEUTRAL WHITE CRI90 4000K 890LM 24V 44 LEDS 50CM BAR

Article number (SKU)		50859	
Product name		Multibar3090 Nichia LED Strip neutral white CRI90 4000K 890lm 24V 44 LEDs 50cm bar	
Classification		Professional	
Model identifier (equivalent models)		Multibar 44	
Photometric data (at TJ = 65°C, ± 10%)			
Light color		Pure White	
Binning		3-Step MacAdam	
Color temperature (K)		4000 K	
Dominant wavelength (nm)			
Luminous flux (lm)		890 lm	1780 lm/m
Radiant power (mW)			
CRI (Ra)		>90	
Efficiency (lm/W)		137 lm/W	
Beam angle FWHP		120°	
Lifetime L80B10C1 (h)		>60000 h	
Photometric code		940/339	
Electrical data (at TJ = 65°C, ± 10%) (reference settings)			
Operating mode		Constant voltage	
Voltage (V)		24 V	
Current (mA)		270 mA	
Power (W)		6.47 W	13 W/m
Standby power consumption (W)		0 W	
Dimmable		Yes	
Dimensions / Mechanical data		Metric units	Imperial units
Length		500 mm	19.65"
Width		10 mm	0.393"
Height		22 mm	0.865"
Number of LEDs (pcs)		44 pcs	
Weight (g)		168 g	
Heat dissipation		Yes, no cooling necessary	
Temperatures			
Operating temperature at Tc		-40 to +85 °C	
Ambient temperature		-40 to +50 °C	
Storage temperature		-40 to +100 °C	
Approvals / Certifications			
CE / RoHS / Reach		Yes	
EN 62471 Risk group		RG0	
Energy efficiency class		D	
Mains voltage luminous efficacy (lm/W)		143 lm/W	
Version			
Date		29. July 2022	

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WARRANTY INFO



This LED Strip has 5 years commercial warranty. Please refer to <https://www.lumistrips.com/lumistrips-en-warranty> for warranty terms.

MANUFACTURING INFO



This LED strip is **made in Germany**, at a flex production line that uses the innovative manufacturing technology of plasma direct metallization, to turn flexible substrates into electrical conductive and solderable circuit boards, even those that before have not been suitable for an assembly with electronic components.



LED strip made in reel-to-reel manufacturing, a production method that offers many advantages, from delivering custom designs without the error of soldering to the use of new base materials that make new designs possible, with easier handling, installation and transportation.

Reel-to-reel production

Multiple advantages. New opportunities.



Endless products possible without error-prone soldering



New base materials such as PET, polyimide, paper etc.



Fast and automated processing on large production lines



Less residual material due to the processing of large roll lengths



Easier handling and installation thanks to self-adhesive backside



Savings potentials in logistics and warehousing



Design advantages in comparison to rigid boards



Higher functional density: dimensions and weight of components lower

Our professional LED Strips and Modules use LEDs from market leaders

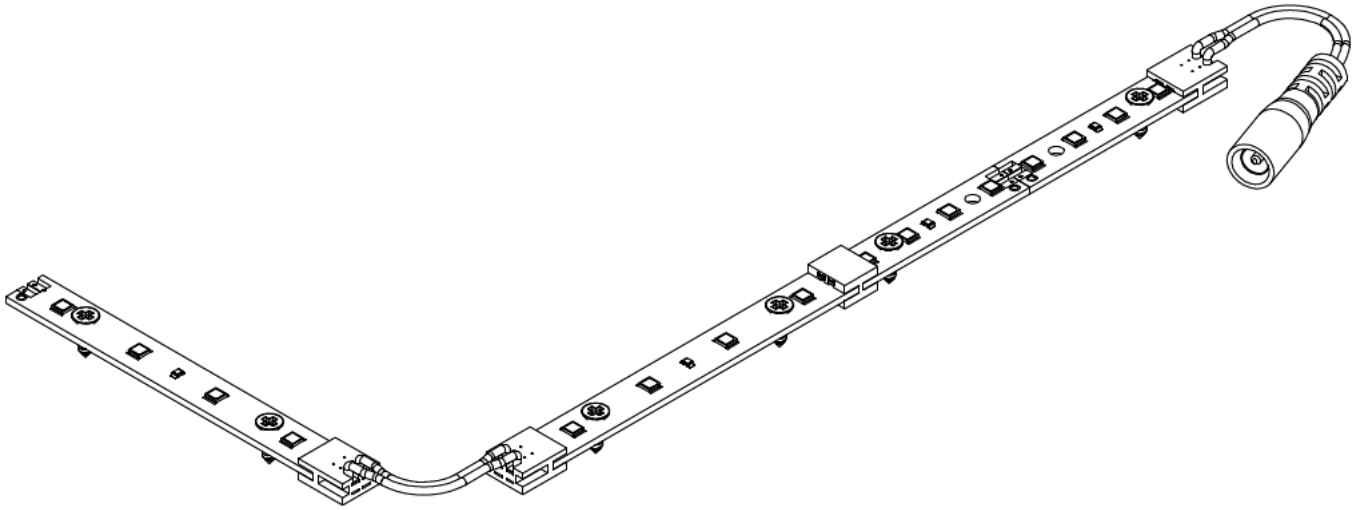
We develop and produce our LED strips at a state of the art facility in Germany, with the highest quality standards and by using only LEDs from market leaders such as Nichia, Samsung or Toshiba.

- **Nichia** is the LED market leader, with over 25% market share and decades of experience. Nichia researchers invented the blue and white LED production technology, also receiving the Nobel Prize for this achievement. Nichia LEDs are the **most efficient** (200 lm / w efficacy), durable (> 100,000 hours) and are also available with unique technologies such as **Optisolis**, CRI98+ natural light spectrum and **Rsp0a**, special white light for horticulture.
- **Samsung** is in the top 10 of global LED manufacturers and a well-known brand, renowned for the high performance of its products combined with the competitive price
- **Toshiba** is a Japanese conglomerate with a history of more than a century, now specialized in semiconductors, electronics and hardware, with nearly 20,000 employees and an annual turnover of 40 billion USD. Toshiba has built the TRI-R technology and built the LED chips used in **SunLike CRI97+ LEDs** produced by Seoul Semiconductor in South Korea. With the new **SunLike™ TRI-R™** technology from Toshiba-SSC (Seoul Semiconductor) and our strips and modules you can always enjoy a natural light source with the light spectrum very close to the sun.
- **Seoul Semiconductor** is in the top 10 of global LED manufacturers and renowned for innovation, durability and competitive price

Our strips have high quality components and professional support:

- We use LEDs from top brands and have superior designs
- We offer **professional support** for lighting projects
- The PCBs use high quality materials for best resistance, current flow and heat transfer
- Performance values in this datasheet match those in real world applications
- Function perfectly at high temperatures that would destroy many other strips

CONNECTION OF LED STRIP



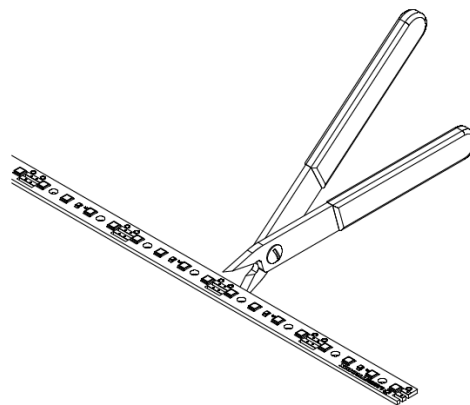
The Multibar easy to use plug-fit system allows the strips to be connected into long light strips with evenly spaced LEDs. No soldering is required.

The available connectors, sold separately, are:

- Direct connector (SKU 54003)
- Connectors with 6 / 100 / 500 cm cable (SKU 54004 / 54008 / 54009)
- Connectors with power supply adapter 30 / 100 / 500 cm (SKU 54005 / 54010 / 54011)
- Spacers set of 4 for installation on hard surfaces

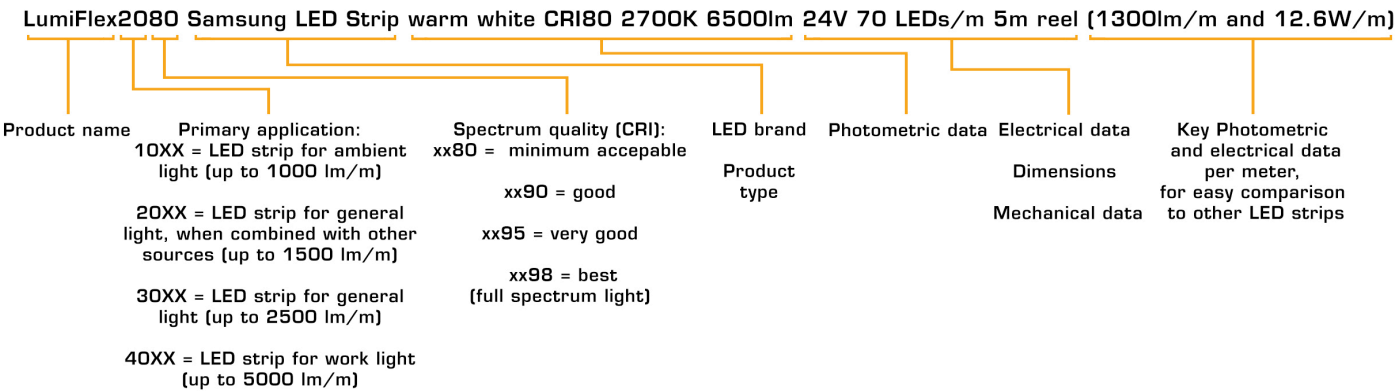
In this way, up to 9 meters of MultiBar LED bars can be connected to each other. Connectors are compatible with Alubar profiles SKU 54915 / 54910 / 38809

CUTTING INFO

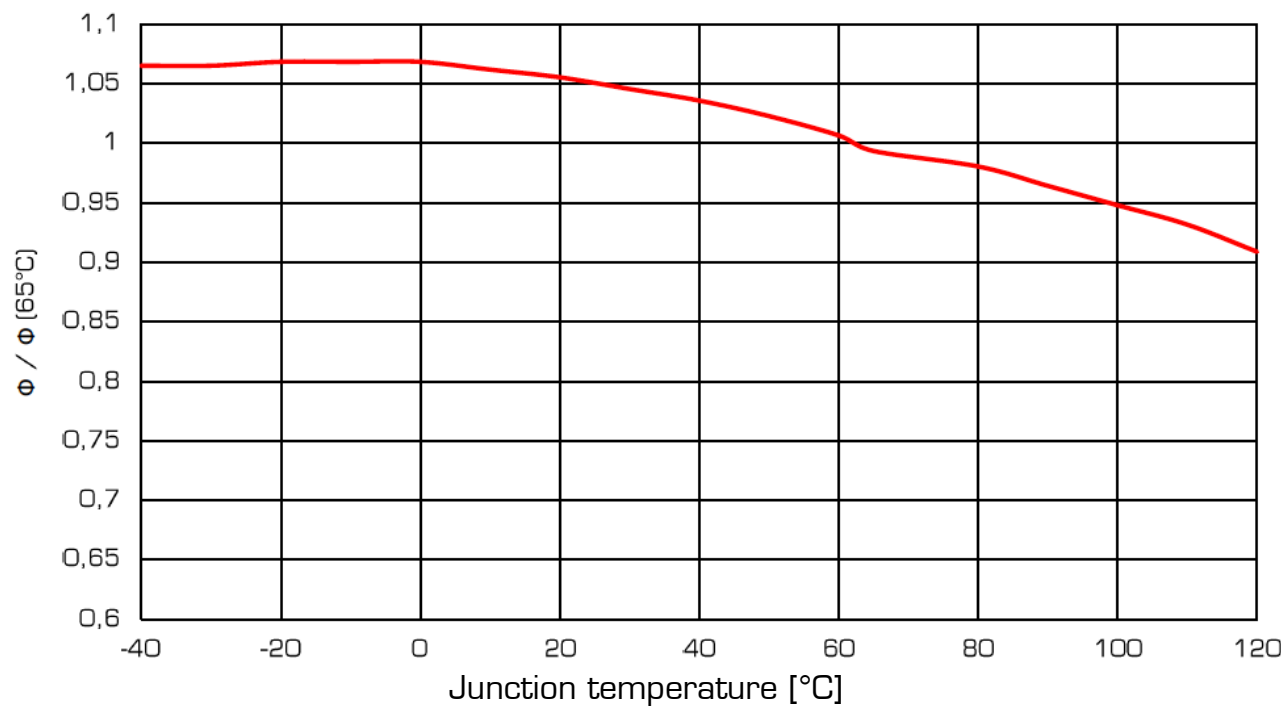


The LED strip can be separated or shortened every 45.45 mm. The connectors work on the separated parts also.

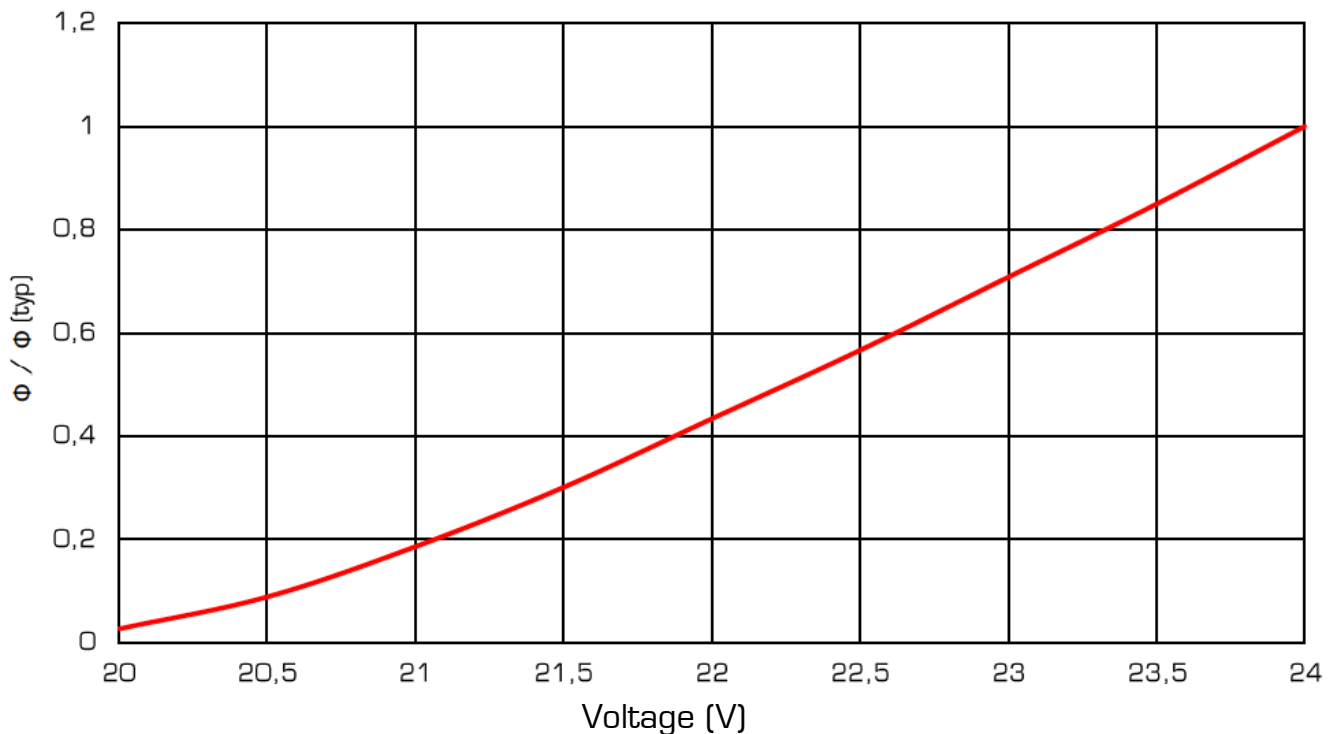
LED STRIP PRODUCT NAME EXPLAINED



LUMINOUS FLUX vs. TEMPERATURE



LUMINOUS FLUX vs. Voltage



Due to the special conditions in the production process of LEDs, the specified values are statistical averages. The individual LED may deviate from them.

The LED modules and all their components must not be mechanically stressed.

Avoid undue claw action, e.g. by screwing or excessive bending.

The LED modules must not come into contact with aggressive chemical substances, either in operation or in storage.

The installation of the module (with the operating device) must be carried out in compliance with all applicable electrical and safety standards.

Pay attention to standard ESD precautions when installing the modules.

- The components on the LED modules must not be subjected to mechanical stress.
- The conductive paths on the boards must not be damaged or interrupted by the installation.
- Store and operate the LED modules only at a final humidity of 10% to 60%.

Our LED modules are not protected against overload, overtemperature and short-circuit currents. To operate the modules safely and reliably, it is therefore necessary to use an electronically stabilized power supply unit in which these

in which these safety functions are already integrated. If other power supplies than the ones distributed by us are used, the following protective

the following protective measures must be ensured on the power supply side:

MINIMUM REQUIREMENTS FOR POWER SUPPLIES: Short circuit protection - Overload protection - Overtemperature protection

- The installation of LED modules may only be carried out in compliance with all applicable regulations and standards by an authorized electrician.



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This LED strip can be purchased via the following websites:

www.ledrise.eu / www.lumistrips.com

