

Value Flex Eco – VFEG1 Data Sheet



Technical Operating Data

Product	Color	No. of LEDs	Voltage [V DC]*	Power [W]*	Current [A]*	Radiance Angle [°]*	Wavelength Color Temp [K]*	Lum. Flux [lm]*
VFEG1-FLX-300-827-10000-DC	White	414	24	41.4	1.725	120	2700 K	3000
VFEG1-FLX-300-830-10000-DC	White	414	24	41.4	1.725	120	3000 K	3300
VFEG1-FLX-300-865-10000-DC	White	414	24	41.4	1.725	120	6500K	3400

*) All Data are related to the entire module.

Due to the special conditions of the manufacturing processes of LED the typical data of technical parameters can only reflect statistical figures and do not necessarily correspond to the actual parameters of each single product which could differ from the typical data.

Technical Features

- Size of printed circuit board (L x W x H):
9939 mm x 8 mm x 1.7 mm
- Size of smallest unit (L x W):
144 mm x 8 mm
- The maximum LED pitch is 24 mm
- Entire Module consists of 414 LEDs
- Connection possible at the reel end or at the cut points
- Linear LED strip on flexible printed circuit board with self-adhesive tape on the back allow for easy mounting
- Up to 35,000 h lifetime for Tc < 50 °C.
- Accessories:
 - **Value Flex Track** in 150mm and 1000mm are available for mounting use.
 - **SLIMCONNECTsystem Flex** in stand alone 2-pin and with 2 wires version for inter modules connection or terminal connection at the cut points respectively.

Benefits

- Energy saving low-power LED flexible strip for decorative, shelf and hospitality lighting.
- Self-adhesive tape on the back for easy and fast installation.
- Consistent colour provides fine and comfort light output.
- Pre-wired flex module true plug and play, simple and fast installation.

Applications

- Hospitality lighting for hotels, commercial buildings and retail shops.
- Cove lighting and accent lighting for hotel lobby, guest rooms, commercial building lobby, hospitals, libraries and offices.
- Shelf lighting for retails and supermarkets.
- Under-cabinet lighting for offices, commercials and residential use etc.

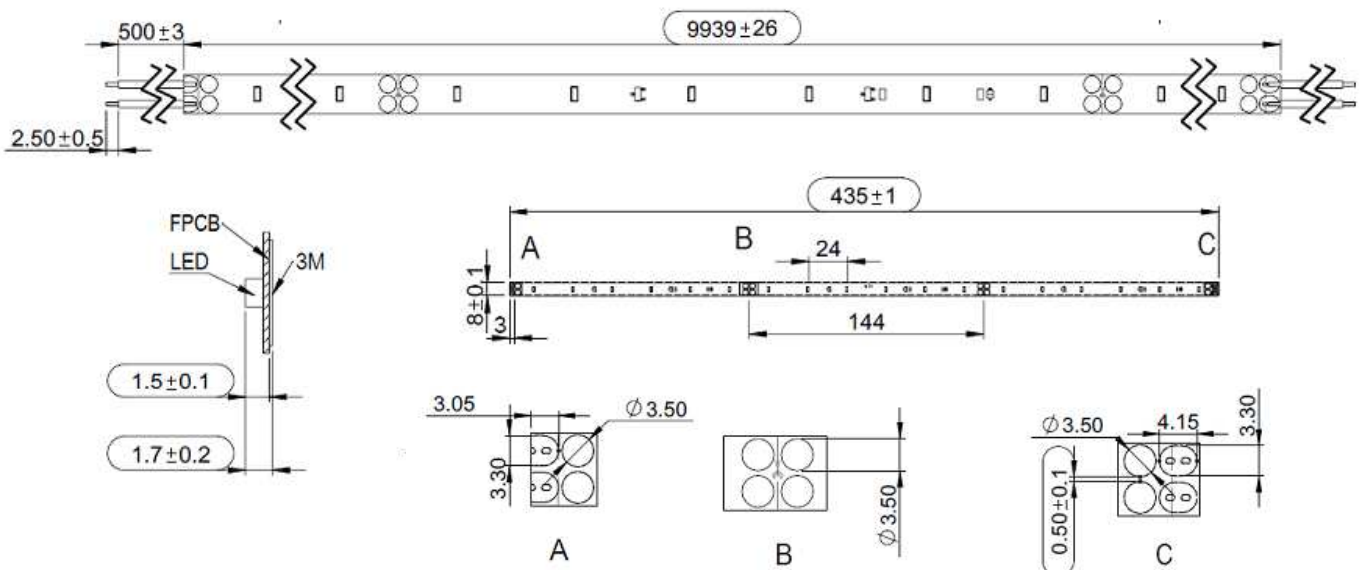
Minimum / Maximum Ratings

Product	Operating Temperature at Tc-Point [°C]*	Storage Temperature [°C]*	Voltage Range [V dc]*	Reverse Voltage [V dc]*
VFEG1-FLX-300-827-10000-DC	-10 ... 50	-20 ... 65	23 ... 25	25
VFEG1-FLX-300-830-10000-DC	-10 ... 50	-20 ... 65	23 ... 25	25
VFEG1-FLX-300-865-10000-DC	-10 ... 50	-20 ... 65	23 ... 25	25

*) Exceeding maximum ratings for operating and storage temperature will reduce expected life time or destroy the LED Modules.
 Exceeding maximum ratings for operating voltage will cause hazardous overload and will likely destroy the LED Modules.
 The temperature of the LED modules must be measured at the Tc-point according to EN60598-1 in a thermally constant status with a temperature sensor or a temperature sensitive label.

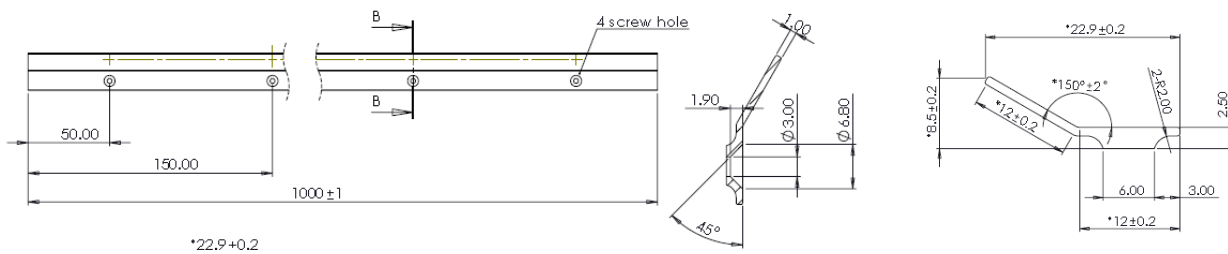
Dimensions

Value Flex Eco



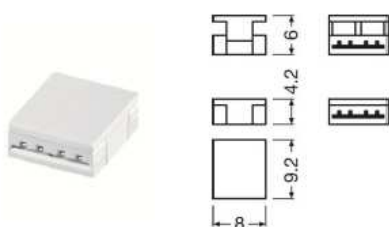
Accessories

Value Flex Track 150mm/1000mm

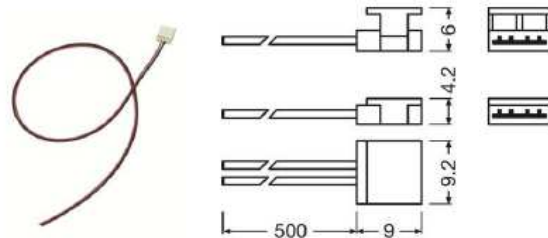


SLIMCONNECTsystem Flex

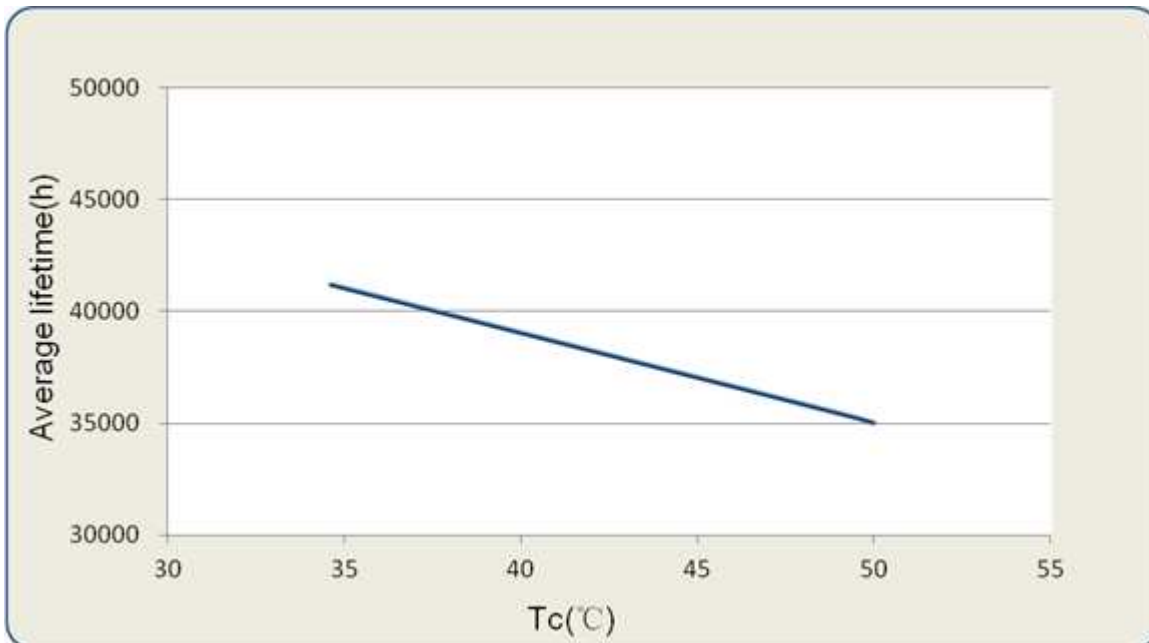
LF-CONN Flex SC



LF-2PIN Flex SC



Average Lifetime (lumen maintenance) over Tc (case temperature)



Safety Information

- The LED module itself and all its components must not be mechanically stressed.
- Assembly must not damage or destroy conducting paths on the circuit board.
- To avoid mechanical damage, the LED modules should be attached securely to the intended substrate. Heavy vibration should be avoided.

The LED module incorporates no protection against short circuits, overload or overheating.

In order to drive OSRAM LED-Modules safely, it is absolutely necessary to operate them with an electronically stabilized power supply protecting against short circuits, overload and overheating.

For dimming applications attention should be paid to specific references in "OPTOTRONIC® Technical Guide". To also ease the luminaire/installation approval, electronic control gear for LED or LED modules must carry the CE mark.

In Europe the declarations of conformity must include the following standards:

CE: EN 61347-2-13, EN 55015, EN 61547 and EN 61000-3-2.

Also check for the mark of an independent authorized certification institute.

Please see the relevant application guides for more detailed information.

When using power supplies other than OPTOTRONIC® the following basic safety features are required, in addition to any other application specific concerns and local safety codes.

OSRAM OPTOTRONIC® electronic control gear complies to all relevant standards and guarantees safe operation.

- Installation of LED modules (with power supplies) needs to be made with regard to all applicable electrical and safety standards. Only qualified personnel should be allowed to perform installations.
- Observe correct polarity! Incorrect polarity will lead to no light emission.
- Parallel connection is highly recommended as safe electrical operation mode. Serial connection is not recommended. Unbalanced voltage drop can cause hazardous overload and damage the LED module.
- The maximum length of VFEG1 is 10M (41.4W version) with power feed at one end.
- OTe 90/220-240/24 E can contact 2 reels of VFFG1 in parallel, power feed at one end of each reel of flex and the driver is in **Class I level**.
- When mounting on metallic or otherwise conductive surfaces, there needs to be a electrical isolation at soldering points between module and the mounting surface,
- Pay attention to ESD steps when mounting the module.
- Please ensure that the power supply is of adequate power to operate the total load.
- LED modules are dimmable by means of PWM (pulse width modulation). It is recommended using the following OSRAM control gears: OPTOTRONIC® OT DIM, OT DALI DIM, OT DALI DIM LI.
- The LED module must not be operated in places which are directly exposed to water or moisture, as it is for indoor applications.
- Damage by corrosion will not be honored as a materials defect claim. It is the user's responsibility to provide suitable protection against corrosive agents such as moisture and condensation and other harmful elements.
- For applications involving exposure to humidity and dust the module must be protected by a fixture or housing with a suitable protection class.

Assembly Information

- Connection with soldering wires on un-mounted module: Do not pre-tin the solder pads but pre-tin the wires and solder for max 4s at 300 °C. Allow solder points to completely cool down before the next soldering. Prevent shear- or peel forces.
- Soldering of wires with the module mounted on a heat sink: Pre-tin solder pads and wires and solder for max 3s at 350 °C. Allow solder points to completely cool down before the next soldering. Prevent shear- or peel forces.
- The smallest unit (144 mm – 6 LEDs) can be removed by cutting with scissors between the designated solder pads.
- The mounting of the module is facilitated by means of the double-sided adhesive on the back-surface of the module. Care must be taken to provide a clean and dry mounting surface, free of oils or silicone coatings as well as dirt particle. The mounting substrate must have sufficient structural integrity. Take care to completely remove the protective backing. Once the module is appropriately positioned, press on the module with about 20N/cm² (refer to application techniques of 3M adhesive transfer tapes). In difficult cases the use of a primer may help.
- The minimum bending radius is 30 mm.

Ordering Guide

Product group	Product name	EAN 40*	S-Unit*
Value Flex Eco 2700K	VFEG1-FLX-300-827-10000-DC	4052899085183	8 pcs
Value Flex Eco 3000K	VFEG1-FLX-300-830-10000-DC	4052899085282	8 pcs
Value Flex Eco 6500K	VFEG1-FLX-300-865-10000-DC	4052899085367	8 pcs
Value Flex Track 150mm	VF-TR150	4008321867674	20 pcs
Value Flex Track 1000mm	VF-TR1000	4008321867643	20 pcs
SLIMCONNECTsystem 2 PIN	LF-2PIN Flex SC	4008321832436	10 pcs
SLIMCONNECTsystem SC	LF-CONN Flex SC	4008321832467	25 pcs

* EAN: Ordering number per single sale unit (SPQ)

* S-Unit: Modules / accessory number per shipping unit

Note: Typical performance data are subject to change without any further notice, particularly as LED technology evolves.

Sales and Technical Support

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