LFD400T -G2-827-10

LINEARlight FLEX Diffuse Top | LED modules for professional and industrial applications

Product family features

- Diffused light lines without visible spots
- Flexible and cuttable module to support design freedom
- Long operational length per single power feed up to 10 m
- Ideal for luminaire designs
- Extra strong self-adhesive backside for easy mounting
- 24 V technology for easy dimensioning
- Recommended in system use with OPTOTRONIC®
- Increased reliability due to single piece reel-to-reel technology
- Dimmable with PWM technology

Product family benefits

- IP66/IP68 protection with high performance silicone
- Reliable connection over long periods of time: IP66/67 connector with built-in protection against liquids penetrating through the wires into the LED strip
- Outdoor use possible: UV and salt mist resistant (UV acc. to ISO 4892-2 - Method A, salt mist acc. to IEC 60068-2-52 severity 1)

Areas of application

- Individual and customized luminaires
- Organic shaped luminaires
- Architectural Integration – e.g. coves, walls
- Object integration – e.g. handrails
- Signage and illuminated advertising

Technical data

Electrical data

Nominal voltage	24.0 V
Type of current	DC
Nominal wattage per meter	7.3 W
Rated wattage	73.00 W
Input voltage range	23…25 V
Accidental reverse input voltage protection up to	25 V

Photometrical data

Color rendering index Ra	80
Luminous flux per meter	560 lm
Luminous efficacy	77 lm/W
Light color (designation)	2700 K
Color Temperature	2900

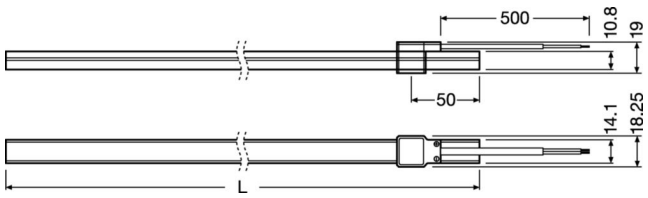
Light technical data

LED pitch	7.14 mm
Beam angle	120 °
Starting time	0 s
Warm-up time (60 %)	0 s

LED module information

Number of LEDs per meter	140
Number of LEDs per smallest unit	7

Dimensions & weight



Length	10000 mm
Length – smallest unit	50.0 mm
Width	14.1 mm
Height	10.8 mm
Product weight	1900.00 g
Cable cross-section, input side	0.5 mm²

Colors & materials

Cover material	Silicone

Temperatures & operating conditions

Temperature range in operation at Tc point	-30…75 °C [1)]
Ambient temperature range	-30…+50 °C
Temperature range at storage	-30...+75 °C

1) Exceeding the maximum ratings will reduce expected life time or destroy the LED strip.

Lifespan

Rated lamp life time	60000 h
Number of switching cycles	>30000

Additional product data

ID of contained light source	LS_TRV_286422

Capabilities

Lowest bending radius	100 mm
Self-adhesive	Yes
With connection set	Yes
Lowest bending radius	100 mm

Certificates & standards

Standards	CE / ENEC / EAC / UL/CSA Recognized / UKCA
Type of protection	IP66 / IP68
Energy efficiency class of the contained light source	F

Logistical data

Commodity code	85395100000

Environmental information

Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACh)	
Date of Declaration	31-03-2026
Primary Article Identifier	4062172273770 | 6937186136589
Declaration No. in SCIP database	In work
SCIP_STATUS	In work
SCIP_ID	

Ecodesign regulation information:

- This product is considered to be a "containing product" in the sense of Regulations (EU) 2019/2020 and (EU) 2019/2015.
- Tolerances of the reported values, are according to LED Modules Performance standard IEC/EN 62717.
- In general, the replacement of the contained light sources without permanent damage to the product with the use of common available tools is possible in the final application when they can be dismantled from the installation environment and substituted for the necessary number of light sources restoring its full electrical/mechanical/thermal/optical functionality by means of a professional installer.In the contrary, and limited to the LINEARlight Flex Diffuse, LINEARlight Rigid Finesse, GINO LED Flex Diffuse and LUMINENT Milky product families, the contained light source is an integrated part of the containing product and its removal can only be done by causing a permanent damage to the containing product due to its tight mechanical, electrical, optical, thermal interaction and/or environmental protection with or from the containing product. Therefore, a replacement of the light source with the use of common available tools is not justified.
- Dismantling of light sources from containing products at end of life: Containing products with light sources which are scalable in length can be cut to the length of the contained light source and if applicable mechanically detached from protective and/or optical covers. Containing products shall be separated from building material and/or from other additional mounting accessories by means of a professional installer.Separate control gear and light sources must be disposed of at certified disposal companies in accordance with Directive 2012/19/EU (WEEE) in the EU and with Waste Electrical and Electronic Equipment (WEEE) Regulations 2013 in the UK. For this purpose, collection points for recycling centres and take-back systems (CRSO) are available from retailers or private disposal companies, which accept separate control gear and light sources free of charge. In this way, raw materials are conserved and materials are recycled.

Additional product information

- Some LED modules are equipped with a self-adhesive tape for attaching the LED module to suitable materials, such as aluminum profiles, which must be clean and free of oil or silicone coatings, as well as other dirt/dust particles. The adhesive tape is intended for single use and if removed may damage the material to which it is stuck and the LED module itself, which must then be scrapped. Use the adhesive tape when the installation material temperature is in the 18 °C...35 °C range. Complete adhesion takes up to 72 h.
- LED modules are designed for static installations in accordance with IPC 6013C – Use A. Take material vibrations, repetitive torsion, and elongation/compression into account.
- If the operating environment covers a broad temperature range (e.g. outdoor applications) and the operating length is longer than 2 m, the use of adequate mounting surfaces is required. The use of an additional thicker adhesive tape between LED module and mounting surface is also recommended in order to absorb the stress of any mismatch in expansion. Assure enough space for module expansion with increasing temperature.
- The manufacturer is not responsible for damage due to chemical corrosion. The user must provide suitable protection against corrosive agents such as moisture and condensation and any other harmful elements/compounds. Make certain to avoid corrosive atmospheres. According to the current state of LED technology, hydrogen sulfide (H2S) causes accelerated corrosion which leads to shortened lifetime or premature failure. Sources of H2S may be rubber, foam rubber, soft-foam tapes, rubber-based sealing, natural sources (e.g. sulfur springs), etc. To avoid H2S from sulfur-vulcanized rubber use silicon-based materials or peroxide-crosslinked rubber instead. Follow the recommendations in the material datasheet of the rubber supplier.
- IP00 LED modules, as manufactured, have no conformal coating and therefore offer no inherent protection against corrosion. Conformal coating treatment is possible, however materials must be selected properly in order to avoid product damage or impaired performance; the user must also completely seal the cut parts (ends/edges).
- For applications involving exposure to humidity and dust the module must be protected by a fixture or housing with a suitable IP protection class.
- Consult Inventronics Technical Service for further advice.
- Only a qualified electrician may install the module.
- Handle with care and ensure that there is no mechanical product damage, including damage to invisible internal electronics parts.
- Exceeding maximum operating and storage temperature ratings can reduces the expected lifetime or even destroy the LED module. The temperature of the LED module must be measured at the Tc-point in accordance with EN 60598-1 under steady-state conditions, considering the worst case; drive all channels at 100 % power. Refer to the product drawing for the exact location of the Tc-point.
- Exceeding the maximum ratings for the operating voltage causes hazardous overload and will likely destroy the LED module.
- Installation of LED modules and connection to the power supply must comply with all applicable electrical and safety standards.
- Observe correct polarity and wiring diagrams! Incorrect polarity or wrong wiring can cause unpredictable permanent damage or even failure of the product.
- Never exceed the maximum operable length, including daisy-chaining connections.
- Always ensure electrical isolation between the LED module and the mounting surface, especially in the vicinity of connections or cut ends.
- IP00 LED modules are ESD-sensitive; take adequate precautions during installation and operation of the products.
- Use only SELV LED drivers in accordance with applicable lighting standards and LED module ratings. In order to safely operate Inventronics LED modules it is necessary to supply them with an electronically stabilized power supply providing protection against short circuits, overload and overheating. To simplify the approval process of the luminaire/installation, the electronic power supplies control gear for LED modules must bear the CE and ENEC marking. In Europe the Declarations of Conformity must include at least the following standards: EN 61347-2-13, EN 55015, EN 61547 and EN 61000-3-2. ENEC certification will be based on EN 61347-2-13 and EN 62384. Inventronics OPTOTRONIC® LED drivers comply with all relevant standards and guarantee safe operation; see the relevant brochure for more detailed information about Inventronics OPTOTRONIC®.
- Avoid installations in rural and urban areas with high industrial activity and heavy traffic (higher than class than 4C1 according IEC 60721-3) and as well as installation in spa, areas with chlorine atmosphere, direct exposure to blown sand.

Download Data

File		
IES data	Compressed	►LFD400T-G2-827-10-IES
Product Datasheet	PDF	►LINEARlight_FLEX_DIFFUSE_G2_TOP_SpecSheet
Eulumdat	Compressed	►LFD400T-G2-827-10-ldt
User instruction	PDF	►LINEARlight FLEX DIFFUSE TOP SIDE

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
6937186136589 INVENTRONICS	LFD400T -G2-827-10	Shipping carton box 4 Pieces	519 x 167 x 525 mm	45.50 dm³	3120.00 g

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit

Disclaimer

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.

Accessories Optional

Product description	Accessory name	Accessory code
LFD400T -G2-827-10	FX-LFDM -G1-BT-17H11	►6937186126566
LFD400T -G2-827-10	FX-LFDM -G1-BTL-17H11E9	►6937186126580
LFD400T -G2-827-10	FX-LFDM -G1-TT-16H16-200	►6937186126627
LFD400T -G2-827-10	FX-LFDM -G1-TTL-16H11W10-200	►6937186126641
LFD400T -G2-827-10	FX-DCS -G1-CM2PF-IP67-500-X5	►6937186139733
LFD400T -G2-827-10	FX-DCS -G1-CM2PJ-IP67-0190-X5	►6937186139757
LFD400T -G2-827-10	FX-DCS -G1-CM2PF-IP67-TOPKIT5	►6937186139771
LFD400T -G2-827-10	FX-DCS -G1-CM2PJ-IP67-TOPKIT5	►6937186139795
LFD400T -G2-827-10	FX-DCS -G1-GL-25	►6937186139818
LFD400T -G2-827-10	FX-DCS -G1-ECT-KIT20	►6937186139832
LFD400T -G2-827-10	FX-QMS-G1 -BMZI-DIV1	►6937186148483
LFD400T -G2-827-10	FX-LFDM -G1-BT-17H11	►4052899452480
LFD400T -G2-827-10	FX-LFDM -G1-BT-17H11	►6937186126566
LFD400T -G2-827-10	FX-LFDM -G1-BTL-17H11E9	►4052899452510
LFD400T -G2-827-10	FX-LFDM -G1-BTL-17H11E9	►6937186126580
LFD400T -G2-827-10	FX-DCS -G1-CM2PF-IP67-500-X5	►4052899451971
LFD400T -G2-827-10	FX-DCS -G1-CM2PF-IP67-500-X5	►6937186139733
LFD400T -G2-827-10	FX-DCS -G1-CM2PF-IP67-TOPKIT5	►4052899451995
LFD400T -G2-827-10	FX-DCS -G1-CM2PF-IP67-TOPKIT5	►6937186139771
LFD400T -G2-827-10	FX-DCS -G1-CM2PJ-IP67-0190-X5	►4052899452039
LFD400T -G2-827-10	FX-DCS -G1-CM2PJ-IP67-0190-X5	►6937186139757
LFD400T -G2-827-10	FX-DCS -G1-CM2PJ-IP67-TOPKIT5	►4052899452053
LFD400T -G2-827-10	FX-DCS -G1-CM2PJ-IP67-TOPKIT5	►6937186139795
LFD400T -G2-827-10	FX-DCS -G1-ECT-KIT20	►4052899452107
LFD400T -G2-827-10	FX-DCS -G1-ECT-KIT20	►6937186139832
LFD400T -G2-827-10	FX-DCS -G1-GL-25	►4052899452244
LFD400T -G2-827-10	FX-DCS -G1-GL-25	►6937186139818
LFD400T -G2-827-10	FX-LFDM -G1-TT-16H16-200	►4052899544949
LFD400T -G2-827-10	FX-LFDM -G1-TT-16H16-200	►6937186126627
LFD400T -G2-827-10	FX-LFDM -G1-TTL-16H11W10-200	►4052899544963
LFD400T -G2-827-10	FX-LFDM -G1-TTL-16H11W10-200	►6937186126641