

LFP2000S -G5-940-05 L1

LINEARlight FLEX Uniformity Protect | – LED modules for professional and industrial applications



Product family features

- 24 V LED strips flexible and cuttable, 50 mm cut unit, with superior optically graded silicone encapsulation
- Available variants: 800 lm/m 1200 lm/m 2000 lm/m / CRI Ra: 95+ 90+ and 80+
- Up to 60,000 h L90/B10 with SDT technology, tested acc. to IEC 62717 on real LED strips
- Stable light flux over length: active constant current regulators (ICs), PWM safe
- Embedded automatic quick protection against accidental miswiring up to 25 V
- Fully PWM dimmable from zero up to 2.5 kHz, audible noise free, suitable for quite places
- Excellent ESD protection of up to 8 kV in air or 4 kV in contact (acc. to IEC 61547)
- Designed, engineered and manufactured and tested in Italy (ISO9001, ISO 17025, ACCREDIA, VDE)
- Salt-mist atmosphere resistant (acc. to IEC 60068-2-52, highest severity)
- UV radiation resistant (acc. to ISO 4892-2) / Mixed flowing gas corrosion resistant (IEC 60068-2-60)

Product family benefits

- Color uniformity better than 2 SDCM on the entire LED strip and between strips
- Light stability over time typically 1 SDCM, tested acc. to IEC 62717 @ 6,000 h
- LED lifetime acc.to IES LM-80 and IES TM-21 standards, and also internal OSRAM LAB tests
- Reliable photometric parameters according to IES LM-79, EN13032-4 and CIE S 025
- Accurate description of the color rendition of the light source acc. to IES TM-30-15
- Excellent robustness: single reel manufacturing technology (no solder joints on strip)
- Vibration-resistant for stationary installations acc. to IEC60068-2-6 and IEC60068-2-64
- Flicker and stroboscopic effect-free acc. to IEC TR 61547-1 and IEC TR 63158
- Tested by accredited Product Qualification Lab. ISO9001, ISO 17025, ACCREDIA, VDE
- Easy mounting on many smooth surfaces thanks to self-adhesive tape at the back



Technical data

Electrical data

| | |
|---------------------------------------------------|-----------|
| Nominal voltage | 24.0 V |
| Type of current | DC |
| Nominal wattage per meter | 18.5 W |
| Rated wattage | 92.50 W |
| Input voltage range | 23...25 V |
| Accidental reverse input voltage protection up to | 25 V |

Photometrical data

| | |
|--------------------------------------|---------------------|
| Light color LED | White |
| Color rendering index Ra | 90 |
| Luminous flux per meter | 2000 lm |
| Total useful luminous flux | 10000 lm |
| Luminous efficacy | 132 lm/W |
| Standard deviation of color matching | ≤3 sdc _m |
| Light color (designation) | 4000 K |
| Color temperature | 4000 K |

Light technical data

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|---------------------|---------|
| LED pitch | 7.14 mm |
| Beam angle | 120 ° |
| Starting time | 0.0 s |
| Warm-up time (60 %) | 0.00 s |

LED module information

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

Dimensions & weight



| | |
|---------------------------------|---------------------|
| Length | 5000 mm |
| Length – smallest unit | 50.0 mm |
| Width | 11.1 mm |
| Height | 4.50 mm |
| Cable length | 500.0 |
| Product weight | 319.00 g |
| Cable cross-section, input side | 0.5 mm ² |

Colors & materials

| | |
|----------------|----------|
| Cover material | Silicone |
|----------------|----------|

Temperatures & operating conditions

| | |
|--------------------------------------------|----------------------------|
| Performance temp. acc. to IEC 62717 | 40 °C |
| Temperature range in operation at Tc point | -30...80 °C ¹⁾ |
| Ambient temperature range | -30...+50 °C ²⁾ |
| Temperature range at storage | -40...+85 °C |

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

²⁾ Rated ambient temp. 25°C/Providing that temperature at Tc point is below max value during operation/Temperature ramping for environmental testing acc. to IEC 62717, 1K/min

Lifespan

| | |
|-----------------------------------------|---------|
| Rated lamp life time | 60000 h |
| Nominal lamp life time | 60000 h |
| Lumen main.fact.at end of nom.life time | 0.70 |
| Number of switching cycles | 15000 |

Additional product data

| | |
|------------------------------|---------------|
| ID of contained light source | LS_TRV_285999 |
|------------------------------|---------------|

Product datasheet

Capabilities

| | |
|-----------------------|-------|
| Dimmable | Yes |
| Lowest bending radius | 50 mm |
| Self-adhesive | Yes |
| With connection set | No |
| With end piece | No |

Certificates & standards

| | |
|-------------------------------------------------------|----------------|
| Energy consumption | 102 kWh/1000h |
| Standards | CE/UL/ENEC/EAC |
| Type of protection | 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 | 13-03-2023 |
| Primary Article Identifier | 4062172304436 |
| Declaration No. in SCIP database | In work |





Equipment / Accessories

- Flexessories: a complete set of aluminum channels with diffusers and lenses
- Connectors: quick-and-easy toolless installation with SLIMCONNECTsystem G2
- Drivers and dimmers: wide selection of OPTOTRONIC 24 V DALI, DMX and BLE
- Check for more detailed information the specification sheets in the download section

Download Data

| File | |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
|  | User instruction LINEARlight FLEX Protect Uniformity LFP800S-G5 LFP1200S-G5 LFP2000S-G5 |
|  | Product Datasheet LINEARlight FLEX Protect Uniformity L1 Specification Sheet (EN) |
|  | Brochures Light is freedom of design (EN) |

Product datasheet

| | |
|-----------------------------------------------------------------------------------|------------------------------------------------------|
|  | Certificates LF(P)-Uniformity CB 181120 |
|  | Certificates VDE ENEC CERTIFICATE 40052516 160823 |
|  | Eulumdat LFP2000S-G5-940-05 C_ldt |
|  | IES data LFP2000S-G5-940-05 C_IES |

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.

Logistical Data

| Product code | Product description | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Volume | Gross weight |
|---------------|------------------------|------------------------------|--------------------------------------|-----------------------|--------------|
| 4062172304436 | LFP2000S -G5-940-05 L1 | Shipping carton box 8 | 365 mm x 286 mm x 366 mm | 38.21 dm ³ | 6770.00 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.

Accessories Optional

| Product description | Accessory name | Accessory code |
|------------------------|-------------------------------|-----------------|
| LFP2000S -G5-940-05 L1 | ENDCAP -IP67 KIT 10PCS | ▶ 4062172176552 |
| LFP2000S -G5-940-05 L1 | JUMPER -FLEX-IP67-2P KIT 5PCS | ▶ 4062172176576 |

Product datasheet

| | | |
|------------------------|---------------------------------|-----------------|
| LFP2000S -G5-940-05 L1 | CONN-FLEX -IP67-2P KIT 5PCS | ▶ 4062172176590 |
| LFP2000S -G5-940-05 L1 | LTS-SLIMTRACK -2000 KIT 5 PCS | ▶ 4062172207300 |
| LFP2000S -G5-940-05 L1 | CONN-FLEX -IP67-2P-300 KIT 5PCS | ▶ 4062172230162 |
| LFP2000S -G5-940-05 L1 | FX-QMS-G1 -TU15H6-300 | ▶ 4052899448865 |
| LFP2000S -G5-940-05 L1 | FX-QMS-G1 -TU15H6W3-300 | ▶ 4052899448889 |
| LFP2000S -G5-940-05 L1 | FX-QMS-G1 -TU16H12W3-300 | ▶ 4052899448988 |
| LFP2000S -G5-940-05 L1 | FX-QMS-G1 -TU16H12-300 | ▶ 4052899448964 |
| LFP2000S -G5-940-05 L1 | FX-QMS-G1 -TU16H12LS-300 | ▶ 4052899449046 |

Disclaimer

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