

# LFED emergency lighting fixture

The explosion-proof LFED series emergency lighting fixtures are designed for lighting and identifying emergency exits or escape routes in the event of danger. The LFED series consists of low copper content aluminium alloy casing, a tempered glass window printed with a pictogram and a resin LED strip light positioned at the distance required to guarantee 'Ex op is' protection. The emergency versions are fitted with a high-brightness LED indicator light that monitors battery operation and notifies the user in the event of a fault. It switches on automatically if there is a power failure, and lasts between 3 and 5 hours depending on the capacity of the chosen batteries.

The red LED switches off to indicate that the batteries need replacing either because of a fault in the emergency circuit or because they are flat.

Sectors of application:

















**Petroleum** refineries

petrochemical facilities

Chemical and Tanker loading/Tanker loading/Passageways unloading unloading areas areas

Emergency exits

Stair handrails

Perimeter zone lighting

### **CERTIFICATE DATA**

Ambient temperature:

Degree of protection:

Classification: Group II Category 2GD zone 21 - zone 22 (Dust) Installation: EN 60079.14 zone 1 - zone 2 (Gas) CE 0722 (EX) II 2GD Ex db op is IIB+H, T6 Gb - Ex tb op is IIIC T72°C Db IP 66 Marking: Certificate: **EPT 18 ATEX 2969 X ATEX** For all IEC Ex and TR CU certificate data, download the certificate from **IEC Ex SEV 18.0018X** TR CU **AVAILABLE** CENELEC EN 60079-0: 2012+A11: 2013, EN 60079-1: 2014, EN 60079-28: 2015, EN 60079-31: 2014, and EUROPEAN DIRECTIVE 2014/34/EU Standards: IEC 60079-0: 2017, IEC 60079-1: 2014, IEC 60079-28: 2015, IEC 60079-31: 2013 European Directive 2004/108 Electromagnetic compatibility European Directive 2012/19/UE, 2002/96/CE, 2003/108/CE WEEE European Directive 2011/65/UE RoHS Temperature class: 72°C (T6)

<u>With emergency</u>

40°C +60°C

**IP66** 

Normal

60°C +60°C

# LFED emergency lighting fixture





#### **MECHANICAL FEATURES**

Body and lid: Low copper content aluminium alloy

Front glass: Tempered, resistant to high temperatures and shocks

Gasket: Silicone resistant to acids, hydrocarbons and high temperatures

Screws, bolts and nuts: Stainless steel

Fastening brackets: Electrogalvanized steel

Entry points: 2 entry points ISO 20. Fixture complete with a PLG1IB plug and NAV20SIB cable gland

Coating: Polyester RAL 7035 (Light grey)

Resistenza alla corrosione: The STANDARD of the aluminium alloy used by Cortem has passed the tests required by

standards EN60068-2-30 (hot-humid cycles) and EN60068-2-11 (salt fog test).

#### **ELECTRICAL FEATURES**

Autonomy in emergency

mode: 2 Ah: 3 hours

2.5 Ah: 4 hours 3.1 Ah: 5 hours

**Rated voltage:** Normal operation only: 110-277 Vac / 156-277 Vdc

Emergency operation only: 110-240 Vac / 110-240 Vdc Normal + emergency operation: 110-240 Vac /156-240 Vdc

Rated frequency: 50/60 Hz

Connection:

Directly to the terminal board L, N, Pe cross sec. 4 mm², jumpered terminal board suitable for in-out Electronic inverter 110/240 Vac 50/60 Hz, 110-270 Vdc. Batteries Ni/Cd or Ni/Mh

Cabling:

Directly to the terminal board L, N, Pe cross sec. 4 mm², jumpered terminal board suitable for in-out Electronic inverter 110/240 Vac 50/60 Hz, 110-270 Vdc. Batteries Ni/Cd or Ni/Mh

Silicone rubber cables with braided fibreglass protection for high temperatures

Charge level: High-brightness LED indicator light, consumption 20 mA, showing the battery charge level for

emergency versions.

NOTE: the technical and electrical data may change without prior warning owing to continuous developments in LED technology.

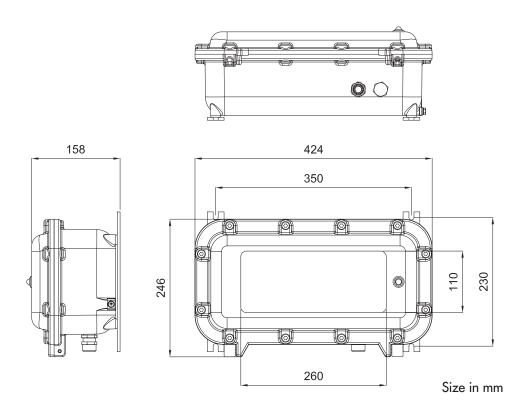
#### **ACCESSORIES UPON REQUEST / SPECIAL REQUESTS**

Additional cable gland for in-out connection.

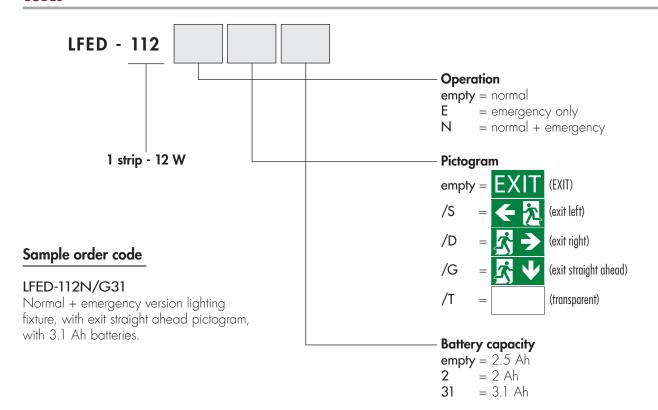
Pictogram on request.

External polyester coating in a different colour or internal anti-condensation coating.

## **DIMENSIONAL DRAWING**



#### **CODES**



## DO NOT FORGET TO ORDER THE ACCESSORIES

Example:

Type of fixture LFED- 112N/S31

Cable gland (additional) NAV20SIB

Other (see legend)



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ILLUSTRATION	DESCRIPTION	MODEL	FEATURES	CODE	LEGEND
	LED strip light		LED module (not resined)	LTT8350	SPARE PART
	Battery		Nickel-cadmium 2 Ah	BATT2AH/NC/BA	
			Nickel-cadmium 2.5 Ah	BATT2.5AH/NC/BA	
			Nickel-metal hydride 3.1 Ah	BATT3.1AH/NM/BA	
II.	Electronic power unit		110-295 Vac 156-277 Vdc	LEDDLFED-112	SPARE PART
	LED inverter		110/240 Vac 50/60 Hz 110/270 Vdc	INVERTER/LED/1	SPARE PART
<b>L</b>	Single LED		Colour: red	M-0487/920	SPARE PART
7	Fastening bracket		Material: galvanized steel	K2-237	SOALE PART
	O-ring between body and lid		Material: red silicone	K2-131/1S	SPARE PART
	Cable gland	ISO M20	std. cable range: 6,3÷11,6	NAV20SIB	ACCESSORY SPARE PART

