

# LFED

- Zone 1, 2, 21, 22
- Group IIB+H<sub>2</sub>
- LED lighting
- Aluminium casing
- Tempered front glass

**'Ex op is'**  
safe optical radiation



## 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.

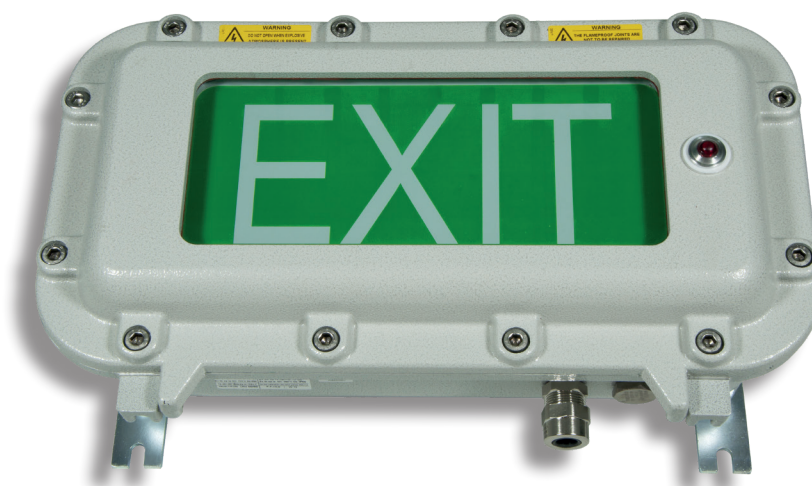
### Sectors of application:



### CERTIFICATE DATA

Classification:	Group II	Category 2GD		
Installation: EN 60079.14	zone 1 - zone 2 (Gas)	zone 21 - zone 22 (Dust)		
Marking:	CE 0722 Ex II 2GD Ex db op is IIB+H <sub>2</sub> T6 Gb - Ex tb op is IIIC T72°C Db IP 66			
Certificate:	ATEX EPT 18 ATEX 2969 X	For all IEC Ex and TR CU certificate data, download the certificate from <a href="http://www.cortemgroup.com">www.cortemgroup.com</a>		
	IEC Ex SEV 18.0018X			
	TR CU AVAILABLE			
Standards:	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 IEC 60079-0: 2017, IEC 60079-1: 2014, IEC 60079-28: 2015, IEC 60079-31: 2013 European Directive 2006/95 Low voltage European Directive 2004/108 Electromagnetic compatibility European Directive 2003/108 WEEE European Directive 2011/64 RoHS			
Temperature class:	 72°C (T6)			
Ambient temperature:	 Normal -60°C +60°C	 With emergency -40°C +60°C		
Degree of protection:	IP66			

## LFED emergency lighting fixture



ORIGINAL PRODUCT

### 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 PLG11B 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 mm <sup>2</sup> , jumpered terminal board suitable for in-out
Emergency unit:	Electronic inverter 110/240 Vac 50/60 Hz, 110-270 Vdc. Batteries Ni/Cd or Ni/Mh
Cabling:	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.

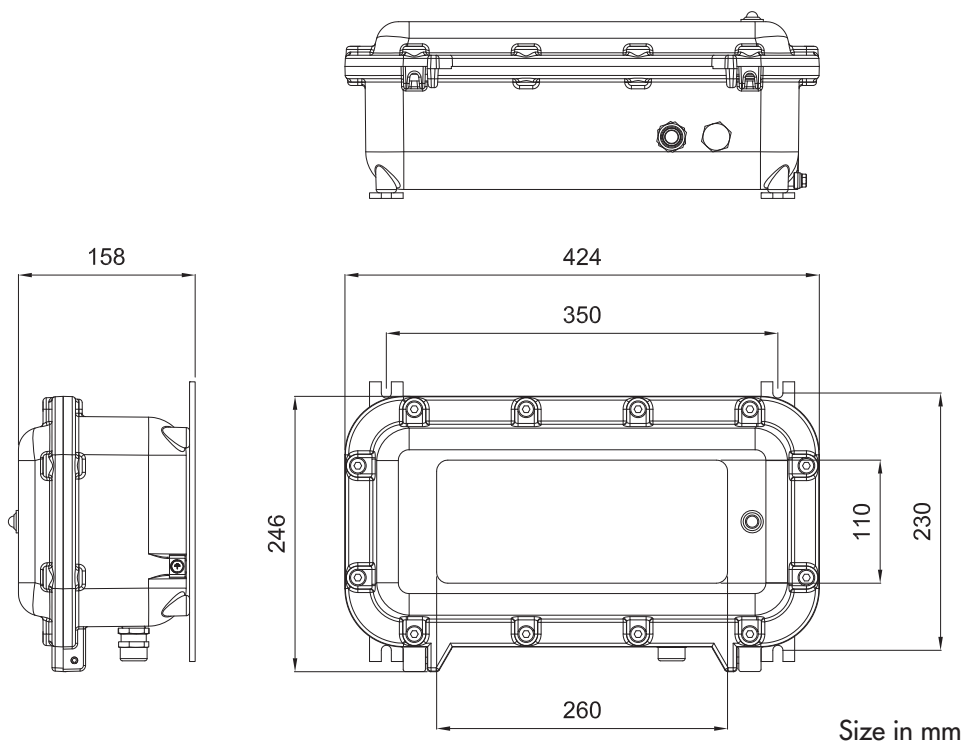
NOTE: the technical and electrical data may change without prior warning owing to continuous developments in LED technology.

### 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.

# LFED emergency lighting fixture

## DIMENSIONAL DRAWING








## CODES

**LFED - 112**

1 strip - 12 W

**Operation**  
empty = normal  
E = emergency only  
N = normal + emergency

**Pictogram**  
empty =  (EXIT)  
/S =  (exit left)  
/D =  (exit right)  
/G =  (exit straight ahead)  
/T =  (transparent)

**Battery capacity**  
empty = 2.5 Ah  
2 = 2 Ah  
31 = 3.1 Ah

### Sample order code



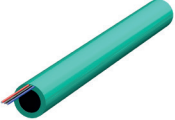

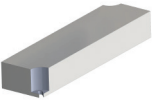

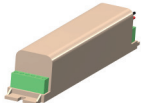










**LFED-112N/G31**  
Normal + emergency version lighting fixture, with exit straight ahead pictogram, with 3.1 Ah batteries.

### DO NOT FORGET TO ORDER THE ACCESSORIES

**Example:** Type of fixture LFED- 112N/S31 + Cable gland (additional) NAV20SIB + Other (see legend) 



## LFED emergency lighting fixture

ILLUSTRATION	DESCRIPTION	MODEL	FEATURES	CODE	LEGEND
	LED strip light		LED module (not resined)	LTT8350	
	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	
	Electronic power unit		110-295 Vac 156-277 Vdc	LEDDLFE-112	
	LED inverter		110/240 Vac 50/60 Hz 110/270 Vdc	INVERTER/LED/1	
	Single LED		Colour: red	M-0487/920	
	Fastening bracket		Material: galvanized steel	K2-237	
	O-ring between body and lid		Material: red silicone	K2-131/1S	
	Cable gland	ISO M20	std. cable range: 6,3÷11,6	NAV20SIB	 

### INTERNAL VIEW

