

# EXENC-L

- Zone 2, Zone 21-22
- Low installation costs
- Locking system operated by hexagonal-head tool
- High quality electrical components

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

*Resin body  
reinforced polyester*

*Fixing Brackets*

*Transparent hood  
in polycarbonate*

*High luminous  
intensity LED*

*Locking system operated by  
hexagonal-head tool*

*Connection terminals*



*Strips made with Cortem  
LED strips*



# EXENC-L series lighting fixtures for LED strips “industrial series”

EXENC-L series lighting fixtures with LED strips can be installed in hazardous industrial plant units designated as Zone 2 and Zone 21-22. A careful research of the materials and the choice of the most performing electrical components give to EXENC-L, in addition to a considerable duration, greater safety in all environments where a high protection against corrosion, dust, water and humidity is required.

They can be installed in both outdoor and indoor industrial environments such as refineries, petrochemical plants, rubber producing plants, paper mills, tunnels, galleries and, in general, in all those production processes where environmental conditions would deteriorate any other material and put the safety of the operating environment at risk. Lighting fixture EXENC-L have been designed for loop-in, loop-out connection, reducing installation costs and thus avoiding the use of junction boxes.

## Application sectors:



Offshore plants



Farm applications



Onshore plants



Low temperatures



Chemical and petrochemical plants



Waste water purification



Distillation industry



Painting plants

## CERTIFICATION DATA

### Classification:

Group II

Category 3GD/2D

### Installation: EN 60079.14

zone 2 (Gas)

zone 21-22 (Polveri)

### Marking:

CE Ex II 3GD Ex nA IIC T4 Gc - Ex tc IIIC T...°C Dc IP 66

CE 0722 Ex II 2D Ex tb IIIC T4°C Db - Ex tb op is IIIC T...°C Db IP66

### Certification:

ATEX CML 18 ATEX 3073X

3GD

ATEX CML 18 ATEX 4072X

2D

IEC Ex CML 18.0044X

INMETRO DVN 19.0018 X

All IEC Ex and INMETRO certification data can be downloaded at [www.cortemgroup.com](http://www.cortemgroup.com)

### Standards:

CENELEC EN60079-0: 2012+A11:2013, EN60079-28: 2015, EN60079-15: 2010, EN 60079-31: 2014 and EUROPEAN DIRECTIVE 2014/34/UE.

IEC60079-0:2011, IEC60079-15:2010, IEC60079-28:2015, IEC60079-31: 2013

European Directive 2006/95 Low voltage

European Directive 2004/108 Electromagnetic compatibility

European Directive 2003/108 WEEE Waste electrical and electronic equipment

European Directive 2011/64 RoHS

### Class temperature:



55°C (T4)

62°C (T4)

62°C (T4)

### Ambient temperature:



-20°C +47°C

-40°C +47°C  
(ONLY FOR NORMAL VERSION)

### Degree of protection:

IP66

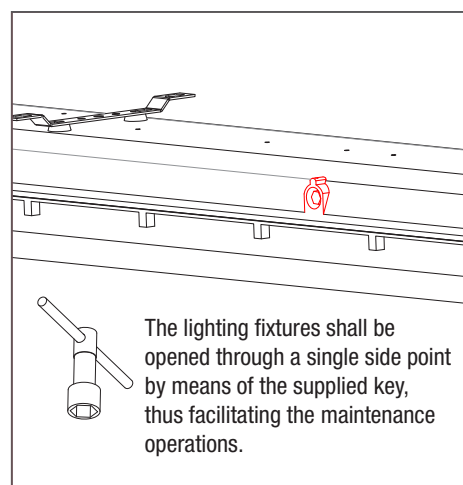
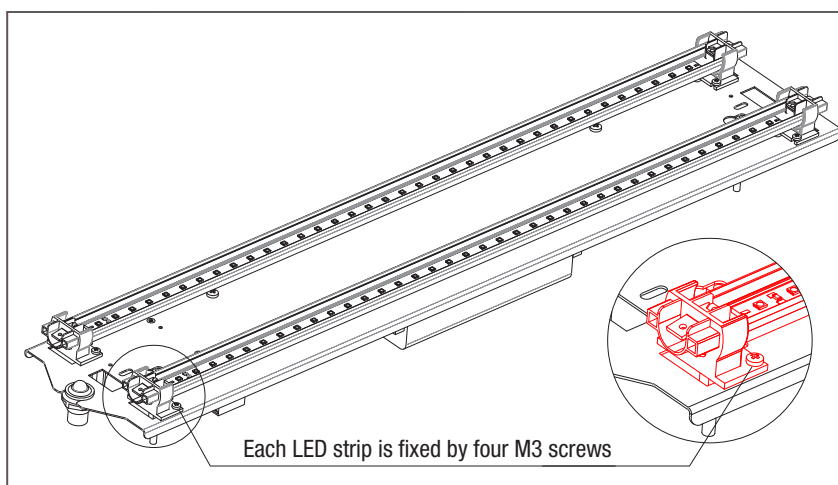
## EXENC-L series lighting fixtures for LED strips “industrial series”



ORIGINAL PRODUCT

### MECHANICAL FEATURES

|                                  |                                                                                                                                                                                |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Body:</b>                     | Black shock and UV resistant fibreglass reinforced anti-static polyester resin                                                                                                 |
| <b>Diffuser:</b>                 | Transparent polycarbonate, shock and UV resistant                                                                                                                              |
| <b>Protected opening system:</b> | Sliding system operated by a hexagonal socket (for safety reasons, the fixture cannot be opened without the tool)                                                              |
| <b>Gasket:</b>                   | Acid/hydrocarbon resistant expanded silicone                                                                                                                                   |
| <b>Inner frame/reflector:</b>    | White painted steel                                                                                                                                                            |
| <b>Bolts and screws:</b>         | Stainless steel                                                                                                                                                                |
| <b>Entries:</b>                  | 2 x Ø25.5 entries (suitable for ISO M25 threads). Lighting fixture kit contains 1 x model PLG2ILXE7 plugs and 1 x model NAVP25IXE-XEU25LDS cable glands for non-armoured cable |
| <b>Mounting:</b>                 | Two steel brackets                                                                                                                                                             |



### ELECTRICAL FEATURES

|                         |                                                                                                                     |
|-------------------------|---------------------------------------------------------------------------------------------------------------------|
| <b>Ballast:</b>         | Electronic                                                                                                          |
| <b>Rated voltage:</b>   | 220-240 Vac/dc                                                                                                      |
| <b>Rated frequency:</b> | 50/60 Hz                                                                                                            |
| <b>Connection:</b>      | Connected directly to terminal board L N, Pe section 4 mm <sup>2</sup> terminal board with jumpers for input-output |
| <b>Emergency unit:</b>  | Electronic inverter 220/240V, 50/60Hz. Batteries Ni/Cd, 4 Ah or 7 Ah, 6 V                                           |
| <b>Wiring:</b>          | Silicone rubber cables with glass braid insulation for high temperatures                                            |

### ACCESSORIES AVAILABLE / SPECIAL REQUESTS

Additional UNI2LXE7SDS cable gland for unarmoured cable

# EXENC-L series selection chart

## Single and double strip

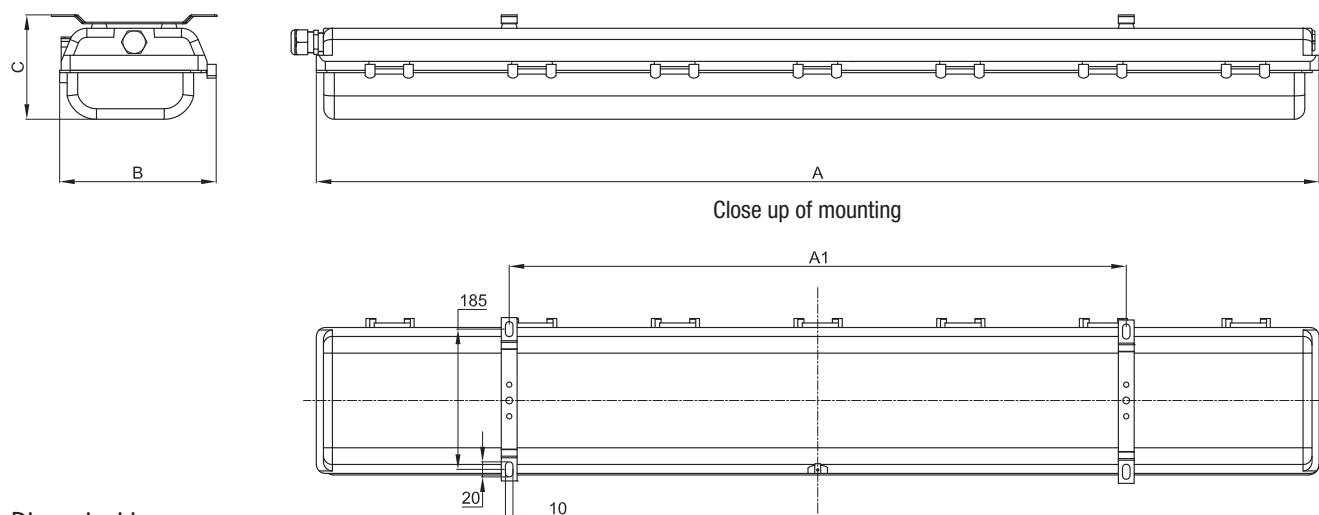
| Code       | Dimensions mm |     |     |     | Power Supply        | LED strips n° | Watt* | Weight kg |  |
|------------|---------------|-----|-----|-----|---------------------|---------------|-------|-----------|-------------------------------------------------------------------------------------|
|            | A             | B   | C   | A1  |                     |               |       |           |                                                                                     |
| EXENC-101L | 802           | 206 | 160 | 642 | 220-240 Vac 50-60Hz | 1             | 13    | 4,2       | 855x245x180                                                                         |
| EXENC-201L | 802           | 206 | 160 | 642 | 220-240 Vac 50-60Hz | 2             | 26    | 4,7       | 855x245x180                                                                         |
| EXENC-102L | 1400          | 206 | 160 | 800 | 220-240 Vac 50-60Hz | 1             | 25    | 7,4       | 1425x245x180                                                                        |
| EXENC-202L | 1400          | 206 | 160 | 800 | 220-240 Vac 50-60Hz | 2             | 52    | 7,9       | 1425x245x180                                                                        |

\* Actual values measured at 230V

## Single and double strip with emergency unit

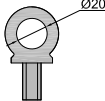
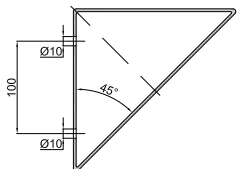
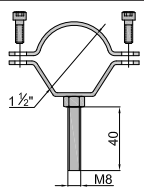
| Code          | Dimensions mm |     |     |     | Operating type   | LED strips n° | Battey Ah | Discharge time minutes | Watt | Weight kg |  |
|---------------|---------------|-----|-----|-----|------------------|---------------|-----------|------------------------|------|-----------|-------------------------------------------------------------------------------------|
|               | A             | B   | C   | A1  |                  |               |           |                        |      |           |                                                                                     |
| EXENC-201LEF4 | 802           | 206 | 160 | 642 | normal+emergency | 2             | 4         | 180'                   | 26   |           | 855x245x180                                                                         |
| EXENC-202LEF4 | 1400          | 206 | 160 | 800 | normal+emergency | 2             | 4         | 120'                   | 52   |           | 1425x245x180                                                                        |
| EXENC-201LEF7 | 802           | 206 | 160 | 642 | normal+emergency | 2             | 7         | 240'                   | 26   |           | 855x245x180                                                                         |
| EXENC-202LEF7 | 1400          | 206 | 160 | 800 | normal+emergency | 2             | 7         | 240'                   | 52   |           | 1425x245x180                                                                        |
| EXENC-101LEF4 | 802           | 206 | 160 | 642 | normal+emergency | 1             | 4         | 180'                   | 13   |           | 855x245x180                                                                         |
| EXENC-102LEF4 | 1400          | 206 | 160 | 800 | normal+emergency | 1             | 4         | 120'                   | 25   |           | 1425x245x180                                                                        |
| EXENC-101LEF7 | 802           | 206 | 160 | 642 | normal+emergency | 1             | 7         | 240'                   | 13   |           | 855x245x180                                                                         |
| EXENC-102LEF7 | 1400          | 206 | 160 | 800 | normal+emergency | 1             | 7         | 240'                   | 25   |           | 1425x245x180                                                                        |
| EXENC-101LEE4 | 802           | 206 | 160 | 642 | only emergency   | 1             | 4         | 180'                   | 13   |           | 855x245x180                                                                         |
| EXENC-102LEE4 | 1400          | 206 | 160 | 800 | only emergency   | 1             | 4         | 120'                   | 25   |           | 1425x245x180                                                                        |
| EXENC-101LEE7 | 802           | 206 | 160 | 642 | only emergency   | 1             | 7         | 240'                   | 13   |           | 855x245x180                                                                         |
| EXENC-102LEE7 | 1400          | 206 | 160 | 800 | only emergency   | 1             | 7         | 240'                   | 25   |           | 1425x245x180                                                                        |

## DIMENSIONAL DRAWINGS



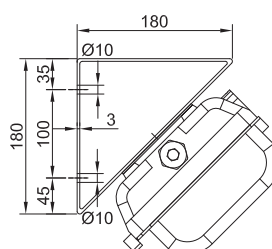
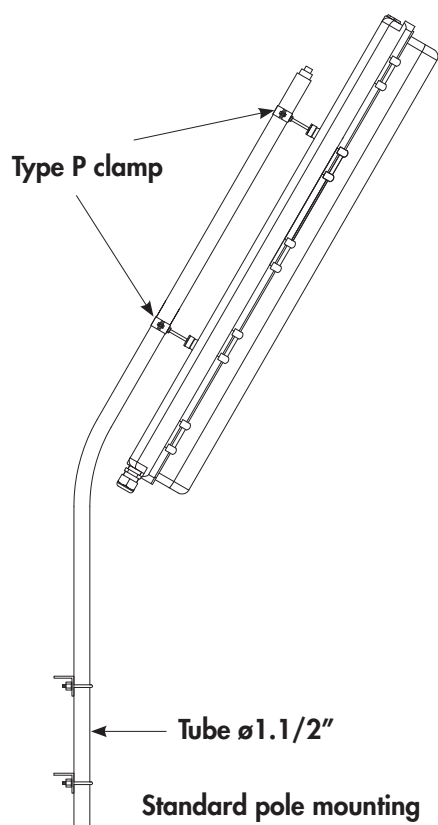
Dimensioni in mm

## EXENC-L series Accessories and spare parts available on request

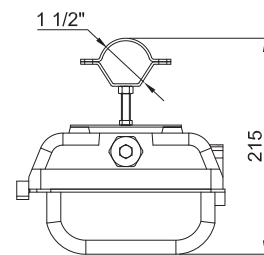
| ILLUSTRATION                                                                                          | DESCRIPTION                                                        | MODEL                    | FEATURES                                                               | CODE                      | KEY                                                                                                                                                                     |
|-------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|--------------------------|------------------------------------------------------------------------|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                      | Tige                                                               | Length:<br>250 mm        | Material:<br>stainless steel                                           | BRF8MIN/250<br>+<br>G-992 |   |
|                      | Eyebolt                                                            |                          | Material:<br>galvanised steel                                          | G0F-8<br>+<br>G-992       |   |
|                      | Type D bracket<br>complete with screws                             |                          | Material<br>bracket: galvanised<br>steel<br>screws: stainless<br>steel | G-0611/1                  |   |
|  | Type P bracket                                                     |                          | Material:<br>galvanised steel                                          | G-0480<br>+<br>G-992      |   |
|                     | LED strips                                                         | EXENC-101L<br>EXENC-201L | Linear LED module                                                      | LTT36700N                 |                                                                                     |
|                                                                                                       |                                                                    | EXENC-102L<br>EXENC-202L |                                                                        | LTT72700N                 |                                                                                                                                                                         |
|                    | Electronic power supply                                            | EXENC-101L               | 230 V<br>50/60 Hz                                                      | LEDDEXEN202CL             |                                                                                    |
|                                                                                                       |                                                                    | EXENC-201L               |                                                                        |                           |                                                                                                                                                                         |
|                                                                                                       |                                                                    | EXENC-102L               |                                                                        |                           |                                                                                                                                                                         |
|                                                                                                       |                                                                    | EXENC-202L               |                                                                        |                           |                                                                                                                                                                         |
|                    | Battery pack                                                       |                          | 4Ah 6V NiCd                                                            | BATT4AH/D                 |                                                                                    |
|                                                                                                       |                                                                    |                          | 7Ah 6V NiCd                                                            | BATT7AH/D                 |                                                                                                                                                                         |
|                    | Electronic inverter                                                |                          | 110/240V 50/60Hz                                                       | INVERTER/LED/1            |                                                                                    |
|                    | Non-armoured cable gland complete with rubber, gasket and lock nut | ISO M25x1,5              | Ex e II IP 66/67<br>(std. range cavo 10÷18)                            | NAV25IXE-XEU25LDS         |                                                                                    |
|                    | Plug with gasket and lock nut                                      | ISO M25x1,5              | Ex e II IP 66/67                                                       | PLG2ILXE7                 |                                                                                    |



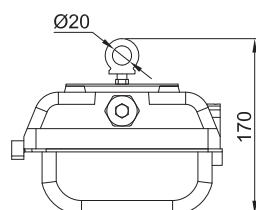
# Installation and mounting methods EXENC-L series



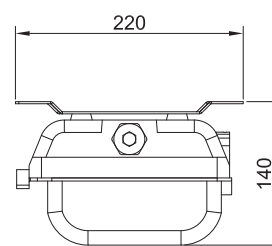
45° angle mounting  
TYPE "D"



Mounting with 1.1/2"  
metal clamps TYPE "P"



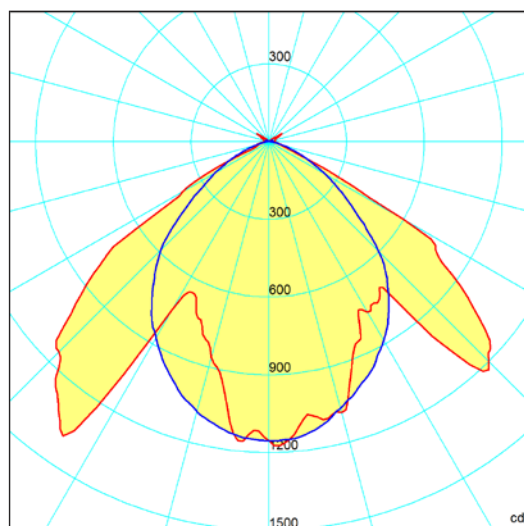
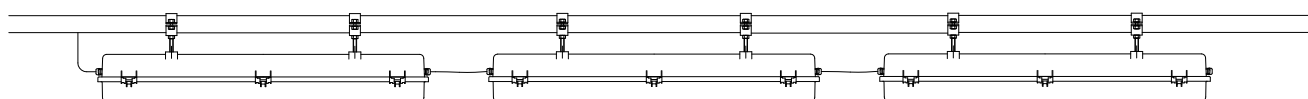
Pendant mounting with  
eyebolt TYPE "O"



Low ceiling mounting with  
clamp TYPE "U"  
(Brackets included)

Dimensions in mm

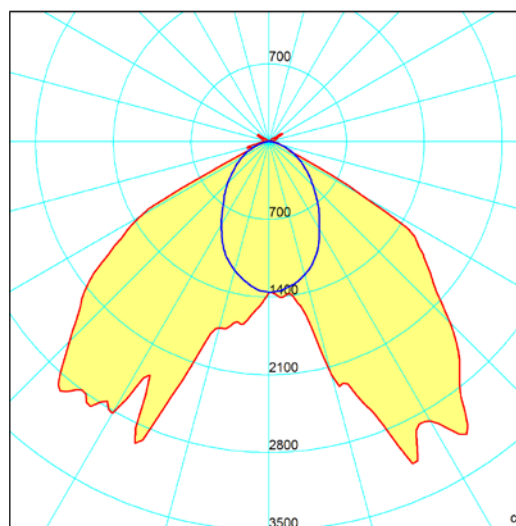
## Loop-in loop-out connections for simple and fast installation



**EXENC-201L**

Lumen: 3200 lm

Maximom light intensity: 1386 cd



**EXENC-202L**

Lumen: 7383 lm

Maximom light intensity: 3205 cd

On Cortem Group web site you can download .LDT and .IES lighting data files for the design and simulation of lighting levels in 2D and 3D, rendering and ray tracing.

— = plane 90270  
— = plane 0180