

# SAFE-EX

Explosion-proof, industrial dust and waterproof luminaires with LED modules.

**Suitable for environment with risk of explosion.**

## YOUR MAIN BENEFITS:

Permitted to be applied in Ex Zone 2, 22 areas

Robust construction, excellent impact resistance (7J)



SAFE-EX



## FIELD OF APPLICATION:

The light fitting is suitable for environments with a danger of explosion of gas, dust, and combustible fumes: explosion hazardous locations (power plants, factories, mills, army facilities, plants for processing of gases and oil ... etc.)

Thanks to the construction principles of the gasket, the closing system and the diffuser, our fixtures ensure a high grade of protection (IP66) against dust, contamination and water permeation. In accordance with their IP rating they can be widely used to illuminate dusty and humid areas with a risk of explosion both indoor and outdoor.

## TECHNICAL DESCRIPTION AND BENEFITS:

- **Housing:** It is made of flame retardant **GRP** - glass fibre reinforced polyester, suitable for 850°C glow wire test, in light grey (RAL7035) colour. The glass fibre reinforced polyester is resistant to heat and has an outstanding mechanical stability. Furthermore, it is a good electrical insulator resisting the impacts of several chemicals and weather conditions. Its stability of size and shape at changing temperatures is excellent.
- **Diffuser:** Available in **PC** - injection moulded **opalised Polycarbonate** (high mechanical strength and high heat and shock resistance)
- The **gasket** between the diffuser and the housing is available in:
  - **Non-aging Injected silicone endless foam**
- **Fixing the diffuser to the body:** With stainless steel clips.
- **Gear tray (reflector):** White powder coated steel sheet.
- **Electrical components:** High end certified electrical components designed for LED technology. For more details, please see technical data.

### Further benefits:

- Low surface temperature
- No flicker, no eye disturbance, no UV radiation
- Trouble-proof operation even at extreme ambient temperature
- Maintenance-free
- Weatherproof, tamper-proof, UV stable fixture

### Certified with protection levels:

- II 3 G Ex ec IIC T5 Gc
- II 3 D Ex tc IIIC T70°C Dc



IP66



Option:



## Main technical options

Our **opalised** diffuser made of UV-stabilized material achieves **high efficacy (up to 155 lm/W)** emitted from the luminaire. On request transparent diffuser is available.



LED

With SAFE-EX - depending on customer requirements - we can reach different levels of luminous flux **from 2500 up to 6500 lumen** with maximum efficacy of 155 lm/W. For more details please see technical data.

SAFE-EX



Labour cost-saving **fast installation** (no screwed clips). They can be opened with the proper tool only in accordance with the EU directive

Up to **3 cable glands M25** for easy installation



**No loose parts:** diffuser and gear tray are secured to the body

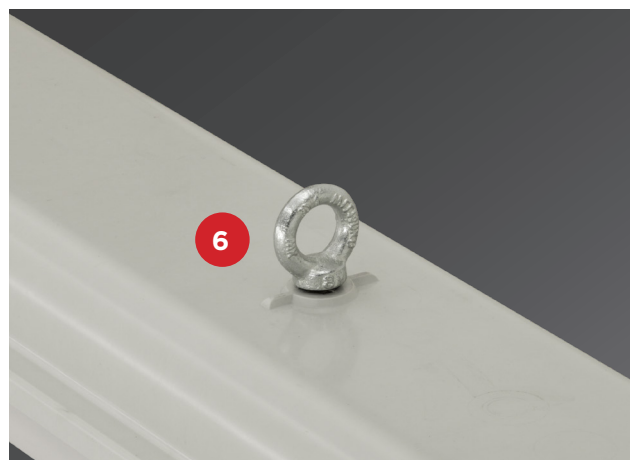
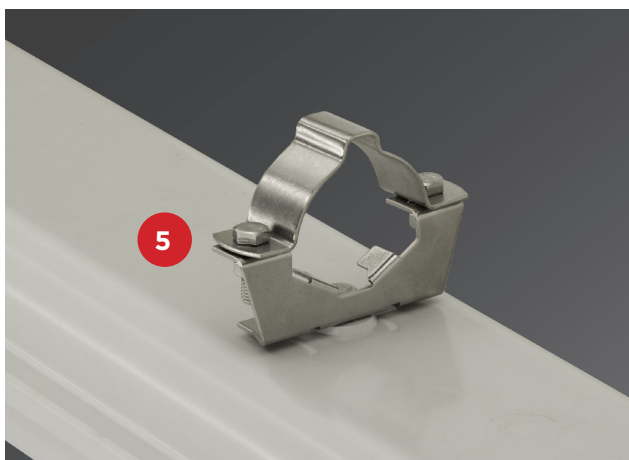
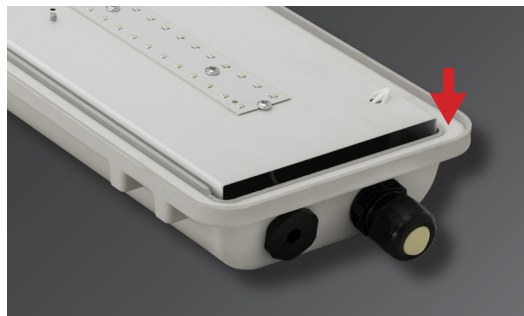


Robust construction, excellent **impact resistance (7J)**



In order to optimize the thermal management and the error free functioning even under tough conditions **branded components** have been selected

The injected **silicone gasket** with enhanced resistance ensures a **maximum** chemical and weather **resistance** even under tough conditions. This endless foam sealing ensures the high IP protection up to IP66.



#### Ways of installing:

1. With galvanized **suspension brackets** distance to the ceiling **15mm**
2. With galvanized **suspension brackets** distance to the ceiling **40mm**
3. With galvanized **ceiling brackets C-shape**

4. With galvanized **mounting accessory for 45° angle**
5. With galvanized **pipe clamp**
6. With galvanized **eye bolt**

Powder-coated versions are available upon request.

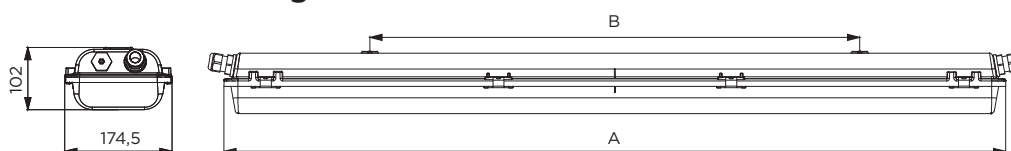
## Technical data (extract)

| Products with a 5-year warranty                                                                                 | Power (W) | Luminare total luminous flux - emitted (lm) PC | Lum. efficacy (lm/W) PC | CRI | Lifetime L80B10 (Ta=55°C) | L80B10 (Ta=45°C)<br>Lifetime L90B10 (Ta=55°C) | A (mm) | B (mm) | Weight (kg) | EEL |
|-----------------------------------------------------------------------------------------------------------------|-----------|------------------------------------------------|-------------------------|-----|---------------------------|-----------------------------------------------|--------|--------|-------------|-----|
| <b>ATEX LED system - ZONE2 with ATEX Hadler driver ZONE 2 (CCT: 4000K, on request other CCTs are available)</b> |           |                                                |                         |     |                           |                                               |        |        |             |     |
| 2ft (600mm)                                                                                                     | 18        | 2700                                           | 150                     | >80 | > 102 000 h               | > 75 000 h                                    | 670    | 400    | 2,4         | C   |
| 4ft (1200mm)                                                                                                    | 19        | 2800                                           | 150                     | >80 | > 102 000 h               | > 75 000 h                                    | 1278   | 800    | 4,9         | C   |
| 4ft (1200mm)                                                                                                    | 36        | 5500                                           | 152                     | >80 | > 102 000 h               | > 75 000 h                                    | 1278   | 800    | 4,9         | C   |
| 4ft (1200mm)                                                                                                    | 44        | 6600                                           | 150                     | >80 | > 102 000 h               | > 75 000 h                                    | 1278   | 800    | 4,9         | C   |

On request:



## Schematic drawing with main dimensions



## Photometric curves:

SAFE-EX, ATEX LED system - ZONE 2,  
ATEX Hadler driver ZONE 2, 36W, 5500lm, PC

