

LED

# 870-INSPIRE +/-

High-end dust and waterproof luminaires with LED modules.

**Professional quality suitable for wide application**

**2-in-1: Error-free functioning at extreme ambient temperature**

### YOUR MAIN BENEFITS:

A professional luminaire adapted for **extremely high and extremely low** ambient temperatures. (Ta: -30 to +60 °C) for wide usage, that fulfils the strongest quality requirements.

CE

870-INSPIRE +/-



IP66

### FIELD OF APPLICATION:

Thanks to the construction principles of the gasket, the closing system and the diffuser our LED 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 spaces with dusty and humid environments. Thanks to its **enhanced temperature resistance**, 870-Inspire +/- is especially suitable for applications, where **error-free functioning at high and low ambient temperature** is desired (industrial plants, cold stores, in countries with subtropic climate...etc.) When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions. Under 0°C the application of a venting plug or a venting cable gland is necessary.

### TECHNICAL DESCRIPTION AND BENEFITS:

■ **Housing:** Available with **PC or GRP** body, in light grey (RAL7035) colour.

In case of PC: It is made of flame retardant **injection moulded polycarbonate (PC)** - suitable for 850°C glow wire test, too. Polycarbonate has very high mechanical strength and allows us to reach an excellent shock resistance. In case of GRP: It is made of flame retardant **GRP - glass fibre reinforced polyester** - on request suitable for 850°C glow wire test, too. The glass fibre reinforced polyester has a very good temperature resistance and 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). Thanks to its **enhanced impact resistance**, 870-Inspire +/- is especially suitable for applications, where a **high IK impact rating** at extreme ambient temperature is required.

#### Further benefits:

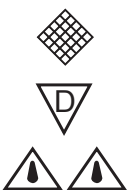
- **Extremely high light transmissivity (up to 90%)**
- **Homogenous, well-balanced light dispersing** (no shadows)
- **Keeping the usual, well-known features of the diffuser** such as chemical and heat resistance, mechanical features, **UV stabilization** etc.
- **Universal width** (no single and twin) **simplifies the light calculation.**

■ The **gasket** between the diffuser and housing is **injected silicone-based endless foam.**

■ **Fixing the diffuser to the body:** With **stainless steel** clips.

■ **Gear tray** (reflector): **The gear tray is integrated into the diffuser** thus enabling a **cost-efficient and user-friendly installation** even **without disassembling** the luminaire. White powder coated steel sheet, the LED module mounting positions according to Zhaga standards or customized.

■ **Electrical components:** The adequate power supply is ensured with the electronic driver.



Option:



## Main technical options

Our new **opalised** diffuser made of UV-stabilized material achieves an **outstanding light transmissivity up to 90%**. This great light permeability offers **high efficacy (up to 141 lm/W)** emitted from the luminaire.



To protect the **LED board**, the **gear tray is integrated into the diffuser** thus enabling a **cost-efficient and user-friendly quick installation** even without disassembling the luminaire.

The **stainless steel clips** stay in their position during installation and can be released by bare hands.

Compatible with all optional accessories and smart solutions

**870-INSPIRE +/-**

**Extra-long (double) lifetime of the driver**, high luminous flux even at extreme ambient temperatures are your benefits.

**Installation friendly** construction: The **strap** ensures the suspension of the gear tray and the diffuser during installation.

In order to optimise the thermal management of the luminaire at high ambient temperatures, the driver is fixed to the gear tray with a **heat sink plate**. Thus heat sensitive LED components function properly **up to Ta +60 °C**.

The **gear tray**, made of white powder coated steel sheet according to **Zhaga** standards, is **integrated into the diffuser**. With 870-Inspire +/- - depending on customer requirements - we can reach different levels of luminous flux **up to 9800 lumen** with maximum **efficacy of 141 lm/W**. For more details please see technical data.

The injected **silicone-based 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 IP67.



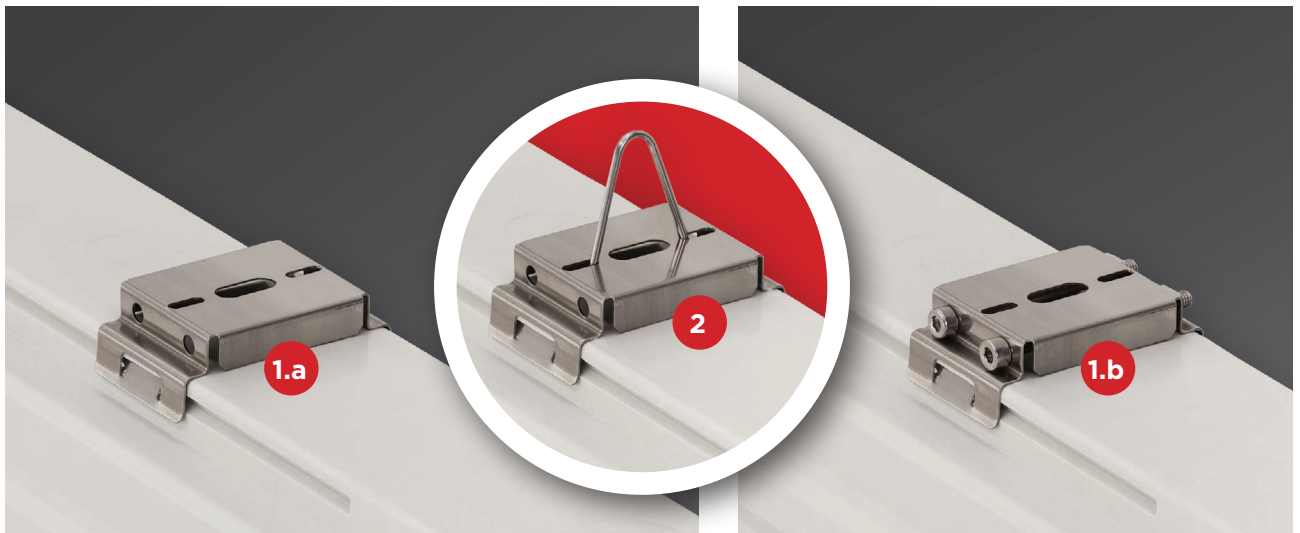
**OPTIONS FOR CABLE ENTRY:**

In case of **standard version** a **venting cable gland** is applied



The **Rapid Connector** enables the electrical connection **without disassembling** the luminaire. In case of throughwiring version, with the usage of **rapid connectors on the two ends**, a **venting plug** is applied.

Thanks to the **venting cable gland** or the **venting plug** the **condensation of the humidity** inside the luminaire can be **avoided**.



**Ways of installing** (options):

With **strengthened** (0,6 mm) stainless steel mounting brackets.  
 1.a They are easy-to-install onto the **ceiling or the wall** (in horizontal position).  
 1.b In case of vertical positioning, **fixing screws** keep the mounting brackets tight avoiding the luminaire from sliding.

2. **Suspension** on chains, wire ropes etc. with stainless steel mounting brackets and **with hooks**.  
**Easy installation:** Adjustable distance of the mounting brackets (they can be positioned laterally on the housing)

## Technical data (extract)

The \*EPREL database is available at <https://eprel.ec.europa.eu/screen/product/lightsources/xxxxxxx> (where the xxxxxx has to be substituted by the reference number given in the last column)

| Products with a 5-year warranty                       | Power (W) | Lum. total luminous flux emitted (lm) |       | Lum. efficacy (lm/W) |     | CCT (Kelvin) | CRI | Lifetime L80B10 (Ta=50°C) | Lifetime L90B10 (Ta=50°C) | A (mm) | B (mm)  | Weight (kg) | EEI | Light source* (reference) |
|---|-----------|---------------------------------------|-------|----------------------|-----|--------------|-----|---------------------------|---------------------------|--------|---------|-------------|-----|---------------------------|
|   |           | PMMA                                  | PC    | PMMA                 | PC  |              |     |                           |                           |        |         |             |     |                           |
| <b>870 Philips Fortimo HV6 HF with Philips driver</b> |           |                                       |       |                      |     |              |     |                           |                           |        |         |             |     |                           |
| 870 4ft (1200mm)                                      | 59        | n.a.                                  | 8700  | n.a.                 | 147 | 4000         | >80 | >64.000 h                 | >50.000 h                 | 1174   | 700±76  | 2           | C   | 893529                    |
| 870 5ft (1500mm)                                      | 70        | n.a.                                  | 10400 | n.a.                 | 148 | 4000         | >80 | >64.000 h                 | >50.000 h                 | 1454   | 1000±76 | 2,2         | C   | 893525<br>893529          |

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| <b>870 Philips Fortimo HV6 HF with Philips driver</b> |           |                                       |      |                      |     |              |     |                           |                           |        |         |             |     |                           |
| 870 4ft (1200mm)                                      | 51        | n.a.                                  | 7400 | n.a.                 | 145 | 4000         | >80 | >64.000 h                 | >50.000 h                 | 1174   | 700±76  | 2           | C   | 893529                    |
| 870 5ft (1500mm)                                      | 56        | n.a.                                  | 9500 | n.a.                 | 153 | 4000         | >80 | >64.000 h                 | >50.000 h                 | 1454   | 1000±76 | 2,2         | C   | 893525<br>893529          |

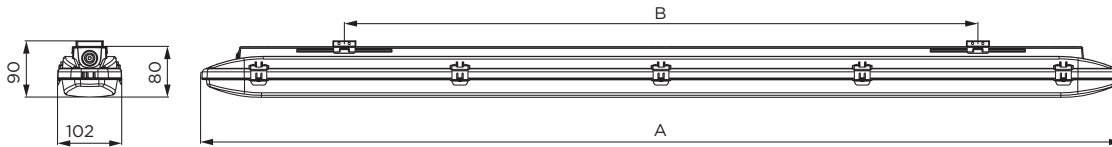
Further options:



On request:



## Schematic drawing with main dimensions



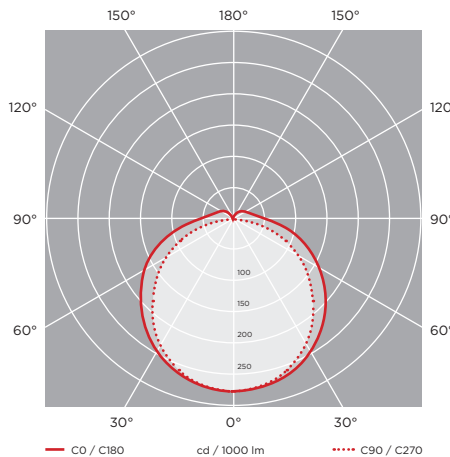
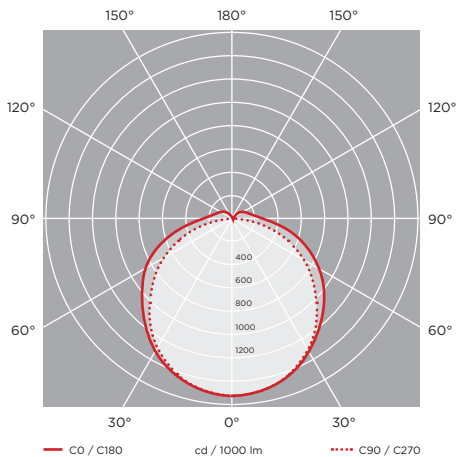
## Photometric curves:

870-Inspire +/- 4ft 1200mm

Philips Fortimo HV6 HF, 59W, 8700lm, PC

870-Inspire +/- 5ft 1500mm

Philips Fortimo HV6 HF, 56W, 9500lm, PC



Luminaire customisation and the options of advanced controls are presented on page 5

