

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**

Option:

**1F****3F**

FIELD OF APPLICATION:

Thanks to the construction principles of gasket, closing system and 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 venting plug or 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-, the 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-, glass fibre reinforced polyester has very good temperature resistance, mechanical stability, furthermore it is a good electrical insulator, it resists the impacts of several chemicals and the impacts of 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 modul mounting positions according to Zhaga standards or customized.

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

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. Feel free to choose from our two types of slightly different diffuser designs.



A the **original** diffuser design



B the **modified oval** variant



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In the interest of **LED board protection** 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

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

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

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**. Details see: Technical data.

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



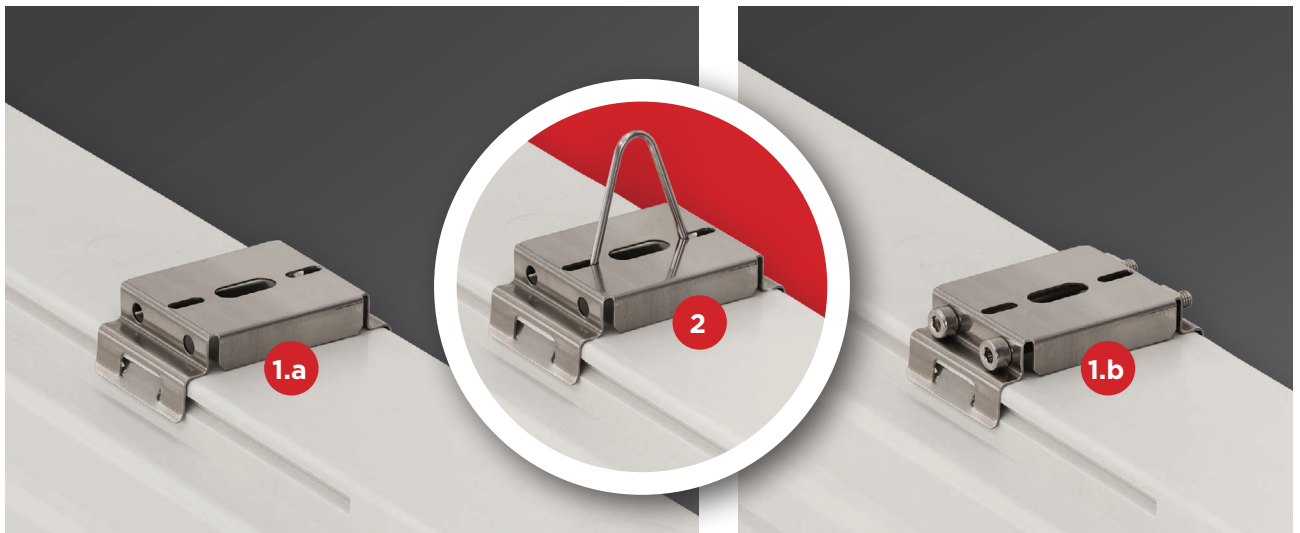
OPTIONS FOR CABLE ENTRY:

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):

1. 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, **position 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)

* EPREL data base is available at <https://eprel.ec.europa.eu/screen/product/lightsources/xxxxxxx> (where the xxxxxx have to be substituted by the reference number given in the last coloumn)

Products with 5 years warranty	Power (W)	Lum. total luminous flux emitted (lm)		Lum. efficacy (lm/W)		CCT (Kelvin)	CRI	Lifetime L70B50 (Ta=60°C)	Lifetime L80B10 (Ta=60°C)	A (mm)	B (mm)	Weight (kg)	EEI	Light source* (reference)
		PMMA	PC	PMMA	PC									
870 Philips Fortimo HV6 HF with Philips driver														
870 4ft (1200mm)	59	n.a.	8200	n.a.	138	4000	>80	>100.000 h	>64.000 h	1174	700±76	2	C	893529
870 5ft (1500mm)	70	n.a.	9800	n.a.	141	4000	>80	>100.000 h	>64.000 h	1454	1000±76	2,2	C	893525 893529



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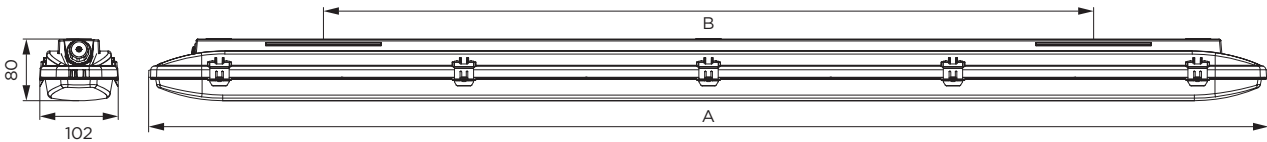
Further options:



On request:



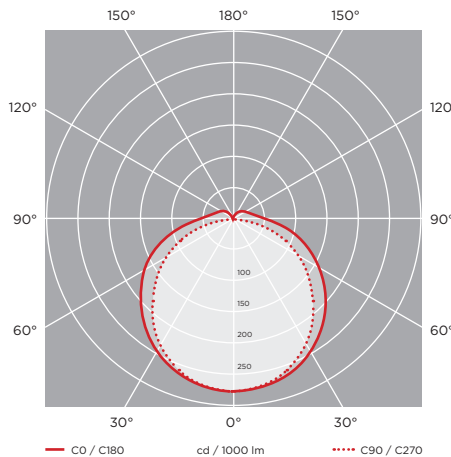
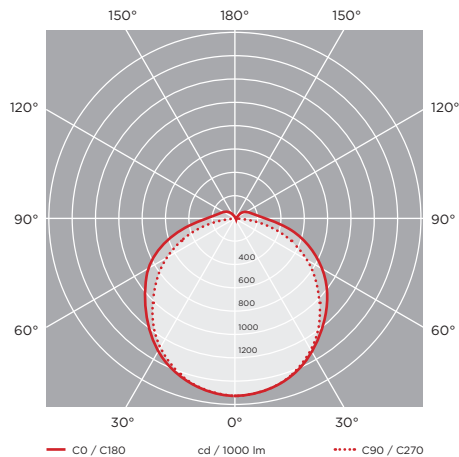
Schematic drawing with main dimensions



Photometric curves:

870-Inspire +/-, opal PC, 4ft, Philips Fortimo HV6 HF, 59W, 8200 lm

870-Inspire +/-, opal PC, 5ft, Philips Fortimo HV6 HF, 70W, 9800 lm



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