

LED

# 870-INSPIRE GRP

High-end dust and waterproof luminaires with LED modules.

**Synergy of art and technology**  
**Inspiring design in professional quality.**

## YOUR MAIN BENEFITS:

**Gear tray integrated into the diffuser**

**Cost efficient** and user-friendly **installation** even without disassembling the luminaire



IP66



Option:

IP67



1F

3F



850°C

## 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.

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, as well as the silicone gasket is recommended.

## TECHNICAL DESCRIPTION AND BENEFITS:

■ **Housing:** It is made of flame retardant **GRP** - glass fibre reinforced polyester (on request suitable for 850°C glow wire test too), in light grey (RAL7035) colour. 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) **or in Acrylic** - injection moulded **opalised PMMA** (unique non-aging properties, high chemical resistance).

### 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 the housing is available in two versions:

- **Injected silicone-based endless foam**
- **Non-aging PU** (polyurethane) **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 160 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

LED

870-INSPIRE GRP

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

Icons: Signal, Sun/Moon, Wi-Fi, PoE

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

In order to **optimize the thermal management** of the luminaire and to **maximize the lifetime of the LED modules**, the driver is placed into the body without direct contact to the gear tray.

The **gear tray**, made of white powder coated steel sheet according to **Zhaga** standards, is **integrated into the diffuser**. With 870-Inspire GRP - depending on customer requirements - we can reach different levels of luminous flux from 2700 up to 14000 lumen with maximum **efficacy of 160 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 IP67.



#### OPTIONS FOR CABLE ENTRY:

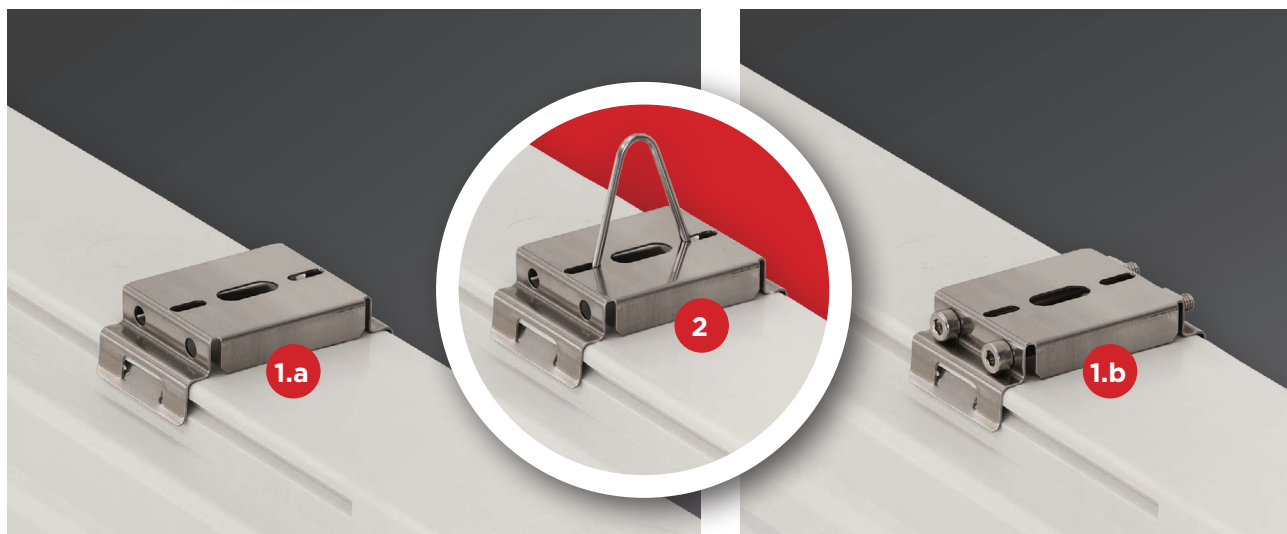
IP66 grommet



Cable gland



The **Rapid Connector** enables the electrical connection **without disassembling** the luminaire.



#### 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, **special screws** keep the mounting brackets tight avoiding the luminaire from sliding.

**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 column)

Products with 5 years warranty	Power (W)	Lum. total luminous flux emitted (lm)		Lum. efficacy (lm/W)		CCT (Kelvin)	CRI	Lifetime L70B50 (Ta=45°C)	Lifetime L80B10 (Ta=45°C)	A (mm)	B (mm)	Weight (kg)	EEI	Light source* (reference)
		PMMA	PC	PMMA	PC									

### Lumnium EU 130 with Osram driver

870 4ft (1200mm)	24	3400	3150	142	131	4000	>80	>72 000 h**	>50 000 h**	1174	700±76	2	D	802364
870 5ft (1500mm)	30	4300	4000	143	133	4000	>80	>72 000 h**	>50 000 h**	1454	1000±76	2,2	D	734821
870 4ft (1200mm)	37	5200	4800	140	130	4000	>80	>72 000 h**	>50 000 h**	1174	700±76	2	D	734862
870 5ft (1500mm)	51	7000	6500	137	128	4000	>80	>72 000 h**	>50 000 h**	1454	1000±76	2,2	D	734813

### Lumnium EU PRO 160 with Osram driver

870 4ft (1200mm)	22	3450	3200	157	145	4000	>80	>72 000 h	>50 000 h	1174	700±76	2	C	803878
870 5ft (1500mm)	27	4200	3900	157	144	4000	>80	>72 000 h	>50 000 h	1454	1000±76	2,2	C	734800
870 4ft (1200mm)	32	5000	4600	158	144	4000	>80	>72 000 h	>50 000 h	1174	700±76	2	C	803933
870 5ft (1500mm)	44	7000	6500	160	146	4000	>80	>72 000 h	>50 000 h	1454	1000±76	2,2	C	734760

### Lumnium EU PRO 160 with Osram DIP Switch driver

870 4ft (1200mm)	19	3000	3000	162	150	4000	>80	>72 000 h	>50 000 h	1185	700±78	2	C	803933
	23	3700	3700											
	27	4500	4500											
	32	5200	5200											
870 5ft (1500mm)	25	4100	4100	163	152	4000	>80	>72 000 h	>50 000 h	1477	1000±78	2,2	C	734760
	32	5200	5200											
	38	6200	6200											
	44	7200	7200											

\*\* The application of through-wiring may influence the Ta. Max.

Products with 5 years warranty	Power (W)	Lum. total luminous flux emitted (lm)		Lum. efficacy (lm/W)		CCT (Kelvin)	CRI	Lifetime L70B50 (Ta=35°C)	Lifetime L80B10 (Ta=35°C)	A (mm)	B (mm)	Weight (kg)	EEI	Light source* (reference)
		PMMA	PC	PMMA	PC									

### Lumnium EU PRO 140 HF with Philips driver

870 4ft (1200mm)	61	8300	7700	136	126	4000	>80	>72 000 h	>50 000 h	1174	700±76	2	D	734708
870 5ft (1500mm)	77	10400	9600	135	125	4000	>80	>72 000 h	>50 000 h	1454	1000±76	2,2	D	734742

### Philips Fortimo HV6

870 4ft (1200mm)	60	8800	8100	146	136	4000	>80	>100 000 h	>64 000 h	1174	700±76	2	C	893529
870 5ft (1500mm)	75	11000	10100	146	134	4000	>80	>100 000 h	>64 000 h	1454	1000±76	2,2	C	893525 893529

### Philips Fortimo HV6 HF 3klm/ft

870 4ft (1200mm)	74	11300	10500	152	142	4000	>80	>100 000 h	>64 000 h	1174	700±76	2	C	893537
870 5ft (1500mm)	92	14000	12900	152	141	4000	>80	>100 000 h	>64 000 h	1454	1000±76	2,2	C	893533 893537

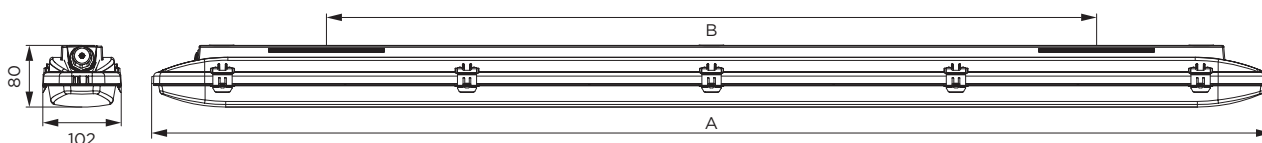
Further options:



On request:

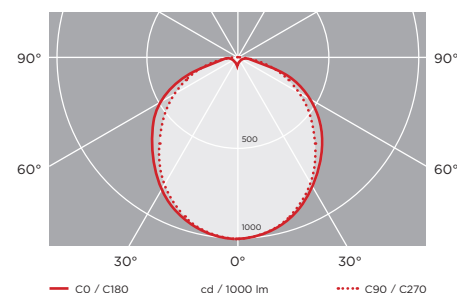


## Schematic drawing with main dimensions

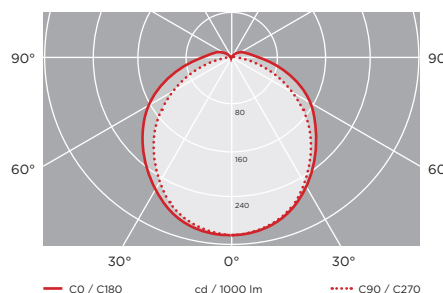


## Photometric curves:

870-Inspire GRP, 4ft, Lumnium EU 130, 24W, 3400 lm



870-Inspire GRP, 5ft, Lumnium EU PRO 140 HF 77W, 10400lm



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