

GLL LED linear lighting fixture

GRP lighting fixture for zone 1/21



Lighting fixture type GLL is a GRP linear LED luminaire available in normal and emergency version. It is an explosion protected item intended for use in surface industries (group IIC and IIIC), in areas where, during the normal activities, explosive atmospheres caused by gases, vapours, mists and/or air/dust mixtures are likely to occur.

It has been designed to be capable of functioning in conformity with the operational parameters and ensures a high level of protection. It is used to illuminate operating and storage facilities in potentially explosive areas, and may be deployed in Zones 1, 2 as well as 21 and 22.

The luminaire with type of protection “Ex db eb mb tb” is available in a 2-strip LED version. For the electrical connection, three holes are provided to house the cable glands or blanking plugs, approved for the explosion protected area (“Ex eb” – M25x1.5), whereby two of these holes are sealed with blanking plugs in the factory. As standard, the luminaire is designed for internal through-wiring. The electrical connection of entry and exit lines is possible on opposite sides. Emergency version is available with battery kit which provides autonomy of 180 minutes. Diverse mounting accessories make it possible to install the luminaire with wall or ceiling mounting, pole mounting or pendant mounting.

Reference standards

Directive 2014/34/EU	
Execution (normal version)	Tamb max +53 °C Ⓜ II 2G Ex db eb mb IIC T5 Gb Ⓜ II 2D Ex tb IIIC T85°C Db IP66 Tamb max +60 °C Ⓜ II 2G Ex db eb mb IIC T4 Gb Ⓜ II 2D Ex tb IIIC T85°C Db IP66
Execution (emergency version)	Tamb +47°C Ⓜ II 2G Ex db eb mb IIC T5 Gb Ⓜ II 2D Ex tb IIIC T85°C Db IP66 Tamb +54,8°C Ⓜ II 2G Ex db eb mb IIC T4 Gb Ⓜ II 2D Ex tb IIIC T85°C Db IP66
Rules of compliance	EN/IEC 60079-0; EN/IEC 60079-1; EN/IEC 60079-7; EN/IEC 60079-18; EN/IEC 60079-31
EC Type-Examination Certificate	INERIS 21 ATEX 0029X
Protection degree	IP66
Ambient temperature	-20 °C ÷ +60 °C (normal version) -20 °C ÷ +54,8 °C (emergency version)
Other available certificates	IECEX: IECEX INE 21.0056X

Mechanical characteristics

Body	glass fiber reinforced polyester resin self-extinguishing acc. to UL94
Diffuser	U/V resistant polycarbonate
Closing clips	stainless steel AISI 316L
Gaskets	silicon rubber suitable for high temperatures and resistant to environments conditions
Internal reflector	white stove enamelled sheet aluminum
Cable entry	3 entries dia. 25mm (2 on t.b. side + 1 on opposite) 2 polyamide cable gland M25 2 polyamide stopping plugs M25

Installation

hazardous areas - Zone 1 / 2 (Gases) - Zone 21 / 22 (Dusts)

Classification

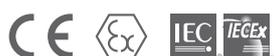
Group II - Category 2G 2D

Electrical characteristics

Power supply	220-240 Vac electronic driver 50/60 Hz (normal/emergency version) 176-280 Vdc electronic driver (normal version only)
Inrush current	5 A for 1000 µs
Input surge protection	normal version: 4 kV emergency version: 4 kV on driver 1 kV (L-N) on inverter 2 kV (L-N-PE) on inverter
Lamp source	SEOUL MID POWER LED - SERIES 3030C CRI 80, CCT 5700K. Lifetime: > 54.000 hours L80B20 @ta40 Efficiency 204 lm/W
Optic	symmetrical beam vertex at 120 deg approx
Internal wiring	Through wiring on request (1f, 3f) High-temperature resistant silicon rubber insulation cables
Terminals	spring type suitable up to 4 mm² cables loop-in / loop-out connections provided
Emergency unit	emergency unit composed of inverter charger and Ni-Cd battery pack 4 A/h 6.0V autonomy 180 min. LED power-on indicating lamp provided - (inverter) 220÷240V 50/60Hz
Green LED status lamp	ON: charging mode / emergency kit functioning correctly OFF: emergency mode / emergency kit not functioning

On Request Accessories

- Pole mounting kit complete with stainless steel hardware
- Ceiling mounting kit complete with stainless steel hardware
- Pendant mounting kit complete with stainless steel hardware
- Wall/Structure mounting kit complete with stainless steel hardware
- Electronic ballast with voltage supply different than standard



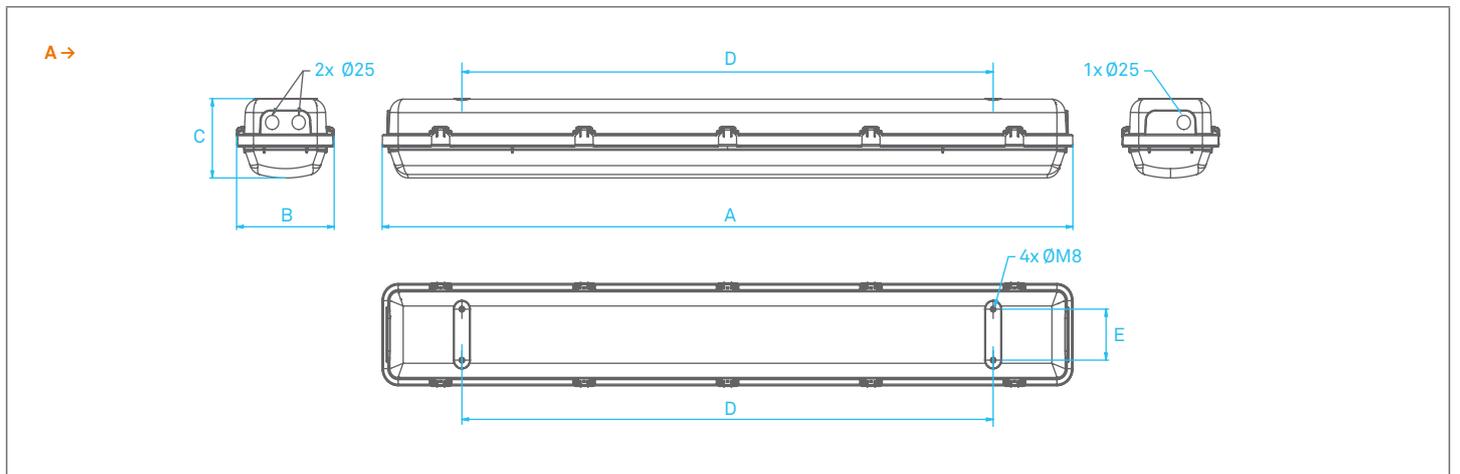
Technical data

CODE	Lamp type	Temperature Class (Gas)	Temperature Class (Dusts)	Number of PCB LED	Actual output (Lm)	Effic. [lm/W]	Power [W]	Emergency unit autonomy
Led lighting fixtures - Power supply 220 ÷ 240 VAC 50/60 Hz								
GLL-08800	Power LED	T5 / Tamb max +53 °C T4 / Tamb max +60 °C	T 85 °C / Tamb max +60 °C	2 x 44 LED	5442	111.00	49	-
GLLE-08800	Power LED	T5 / Tamb max +47 °C T4 / Tamb max +54,8 °C	T85 °C / Tamb max +54,8 °C	2 x 44 LED	5442 (line power) 633 (emer. unit)	105.00	52	180 min.

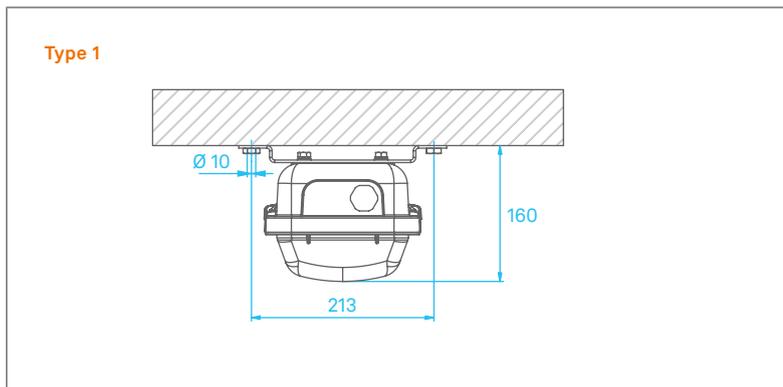
Technical features

CODE	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	Weight [kg]	Cable entry	Detail
GLL-08800	1300	184	140	1000	90	7,7	3 x 25mm dia.	A
GLLE-08800						9,7		

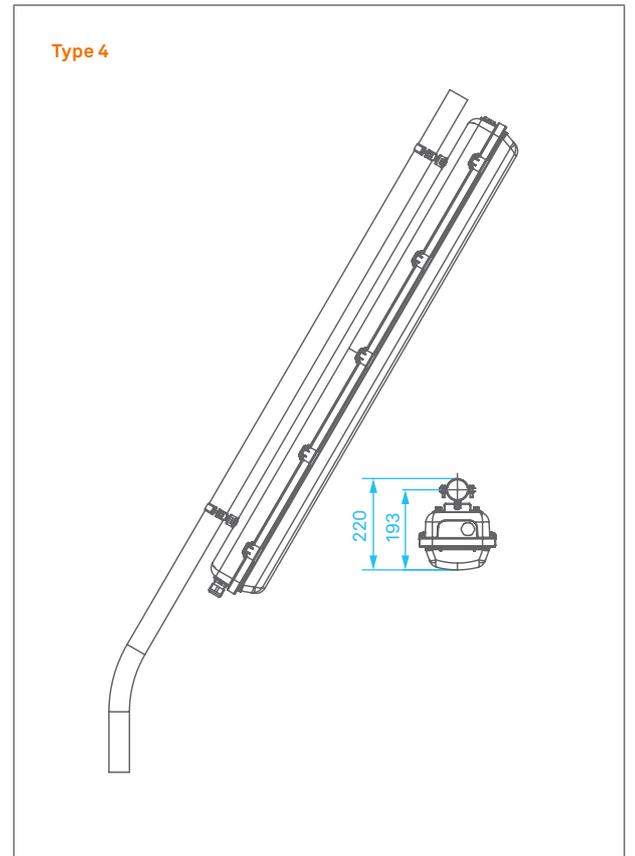
Reference details



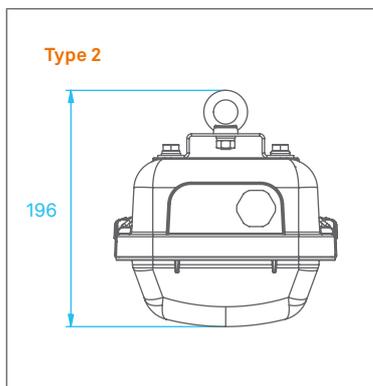
Ceiling mounting



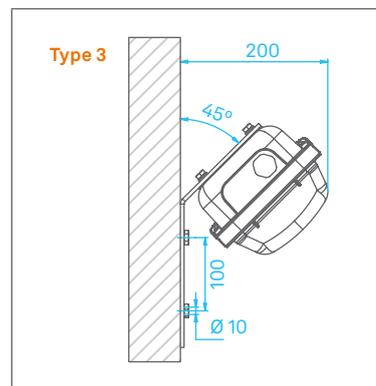
Pole mounting. Assembling detail with pole (typical)



Pendant mounting

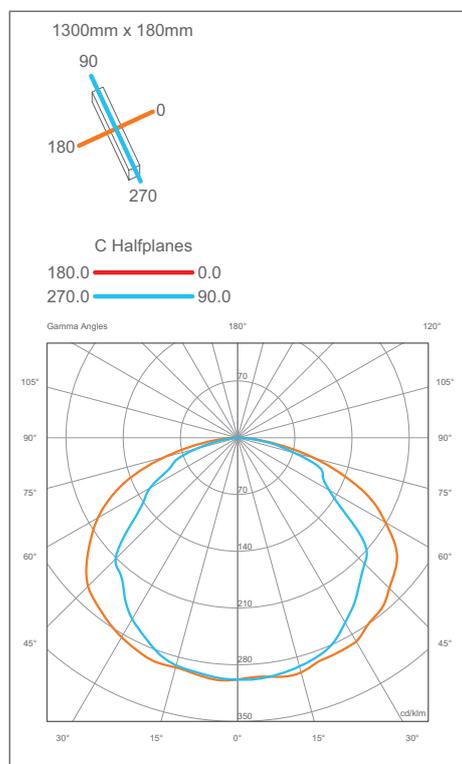


Wall/structure mounting



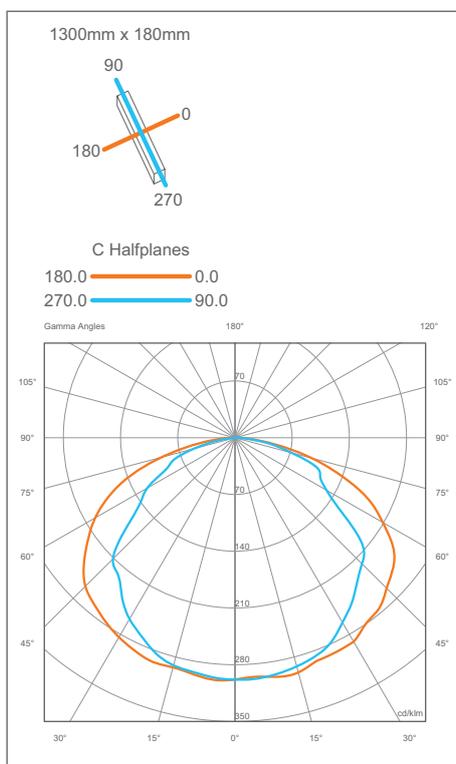
GLL Polar diagrams – photometric data

GLL-08800



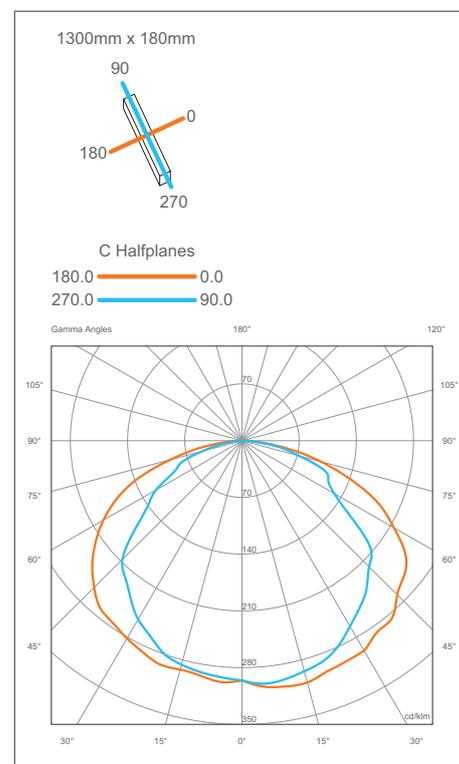
Luminaire Flux	5442 lm
Luminaire Power	49.00 W
Efficacy	111.06 lm/W
Maximum value	367.27 cd/klm
Position	C=55.00 G=55.00

GLLE-08800 - normal mode



Luminaire Flux	5442 lm
Luminaire Power	52.00 W
Efficacy	104.65 lm/W
Maximum value	367.27 cd/klm
Position	C=55.00 G=55.00

GLLE-08800 - emergency mode



Luminaire Flux	634 lm
Luminaire Power	0.00 W
Efficacy	-
Maximum value	375.11 cd/klm
Position	C=55.00 G=55.00

On request accessories

CODE	Description	Installation	Material
KITFL#66000	Ceiling mounting kit C/W hardware	type 1	Stainless steel
KITFL#67000	Eye-bolts mounting kit C/W hardware	type 2	Galvanized steel
KITFL#68000	Wall mounting kit C/W hardware	type 3	Galvanized steel
KITFL#69000	Pole mounting kit Ø 1½" C/W hardware	type 4	Stainless steel

REMARK:

Due to the development of the national and international specifications and of the technology, the above technical characteristics showed on this bulletin can be considered as binding on our confirmation only.