



**it's cool to be safe**  
*explosion proof solution for the global market*



**Supermec**  
explosion proof electrical equipment



## FL - FLL - FLP

FL - FLL - FLP series floodlights are normally used in the chemical and petrochemical plants, off-shore platforms, refineries and any other industry where hazardous atmospheres (gas and combustible dust) are potentially present. The whole range has been designed to meet the main requirements of illumination of working areas.



## Function

FL series floodlights have a symmetric optic and are equipped with a complete range of control gears as Metal Halide, High Pressure sodium, and Induction so to satisfy different illumination requirements . FLL and FLP series floodlights are equipped with LED granting the same illumination performance of conventional corresponding model but with the advantages typical of this technology such:

- long-life duration (maintenance free)
- energy saving
- lower T classification allowing to be used with larger range of gases and dusts inside hazardous areas
- good performance with vibrations due to LED solid-state light source
- wide voltage range (AC 100 - 277 V) not influenced by voltage fluctuations and good electromagnetic compatibility

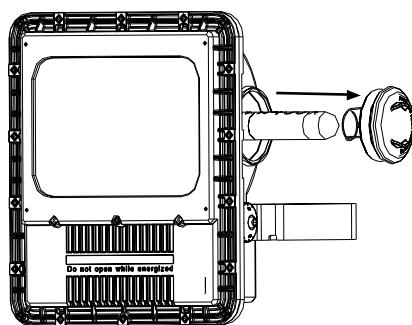
## Construction

The materials used to manufacture the FL, FLL and FLP series floodlights have been studied to grant the maximum protection against the highly-corrosive agents present in these industries:

- body and cover in copper-free aluminium
- external epoxy powder coating
- window in thermoresistant glass sealed with auto-leveling silicone
- gasket on covers in silicone granting an IP66 protection level
- screws in stainless steel
- one cable entry M25x1.5 on bottom side of Ex e terminal integrated box to allow a loop-in loop-out installation (models FL and FLL)
- Ex e terminal integrated box to allow a direct installation on pole (model FLP)
- all the light fittings are equipped, as standard, with one cable gland and one stopping plugs in nickel-plated brass, IECEx/Atex certified. Other materials or combinations are available on request

Special attention has been dedicated to reduce the heating:

the external back-side of housing is fully provided with cooling ribs to facilitate the heat outflow.



*FL model is provided with a side cover to facilitate the substitution of the internal bulb.*

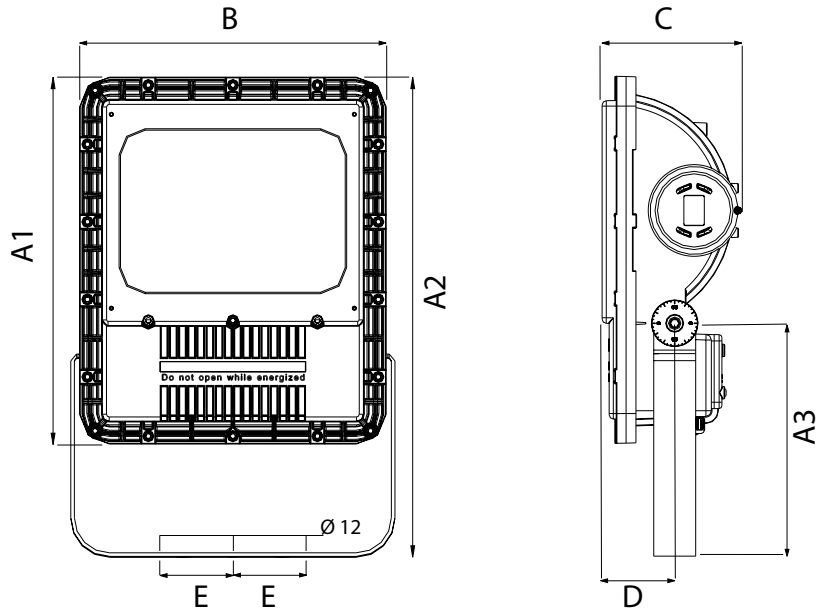
## Protection

certificate number:	IECEX CML 17.0174X	CML 17 ATEX 1319X
marking:	⊕ II 2GD Ex db ebop is IIB T3 / T4 / T5 Gb	Ex tb op is IIIC T85°C ~ T165°C Db
ambient temperature:	-20°C +40°C / +55°C	-
degree of protection:	IP66	
conformity:	Directive ATEX 2014/34/EU	
standards:	IEC60079-0 / IEC60079-1 / IEC60079-7 / IEC60079-28 / IEC60079-31 EN60079-0 / EN60079-1 / EN60079-7 / EN60079-28 / EN60079-31	
category:	suitable for Zone 1 – 2 (gas) and Zone 21 – 22 (dust)	



## FL

push button / pilot light units

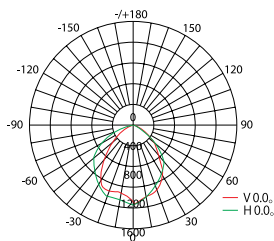


overall dimensions

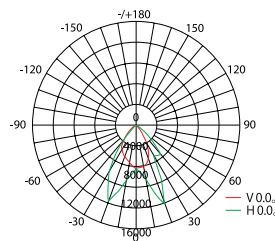
code	A1	A2	A3	B	C	D	E
FL	520	680	330	460	198	93	70

Code	Lampholder	Watt	220VAC	230VAC	240VAC	100 - 277 VAC	220 - 240 VAC	230 - 240 VAC	50 Hz	60 Hz	50/60 Hz	Current (A)	Power Factor	Temperature Class			
														Ta ≤ +40°C	Ta ≤ +55°C		
FL 85 Q	-	85					X	X	X			< 0.39	> 0.98	T5	T85°C	T4	T100°C
FL 250 M	E40	250	X	X	X			X	X	X		< 1.7	≥ 0.85	T3	T150°C	T3	T165°C
FL 400 M	E40	400	X	X	X			X	X	X		< 2.4	≥ 0.85	T3	T195°C	-	-
FL 250 S	E40	250	X	X	X			X	X	X		< 2.2	≥ 0.85	T3	T150°C	T3	T165°C
FL 400 S	E40	400	X	X	X			X	X	X		< 2.9	≥ 0.85	T3	T185°C	-	-

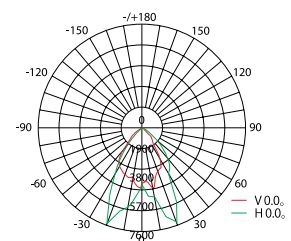
## Polar Diagrams



FL 85 Q



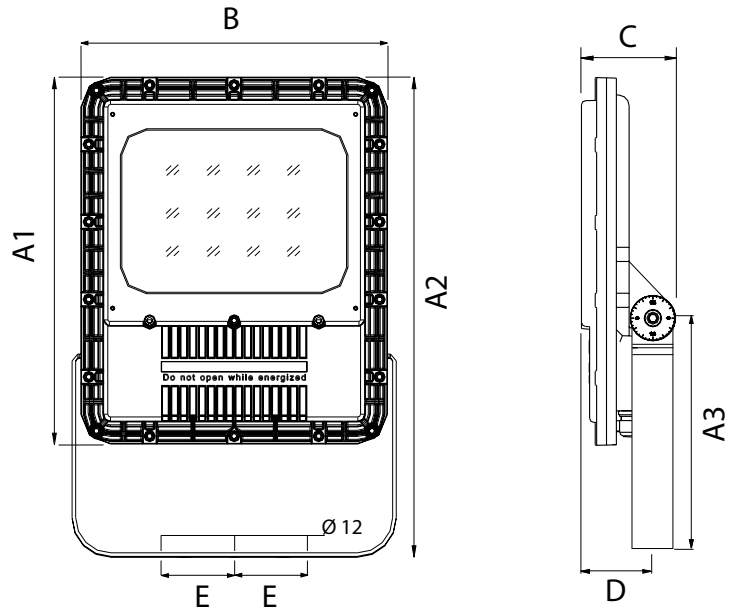
FL 400 S



FL 250 S

## FLL

push button / pilot light units

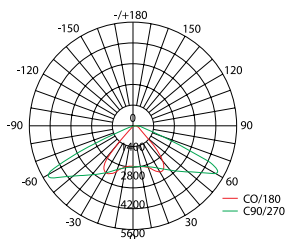


overall dimensions

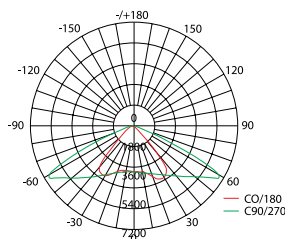
code	A1	A2	A3	B	C	D	E
FLL	520	680	330	460	135	93	70

Code	Lampholder	Watt										Current (A)	Power Factor	Temperature Class			
			220VAC	230VAC	240VAC	100 - 277 VAC	220 - 240 VAC	230 - 240 VAC	50 Hz	60 Hz	50/60 Hz			Ta ≤ +40°C	Ta ≤ +55°C	Ta ≤ +40°C	Ta ≤ +55°C
FLL 120 L	-	120				X					X	< 0.85	≥ 0.95	T5	T90°C	T4	T105°C
FLL 160 L	-	160				X					X	< 0.85	≥ 0.95	T5	T90°C	T4	T105°C
FLL 200 L	-	200				X					X	< 0.85	≥ 0.95	T5	T90°C	T4	T105°C

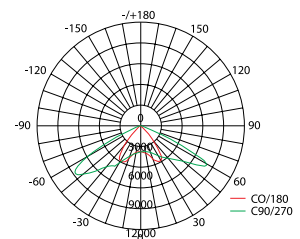
## Polar Diagrams



FLL 120 L



FLL 160 L

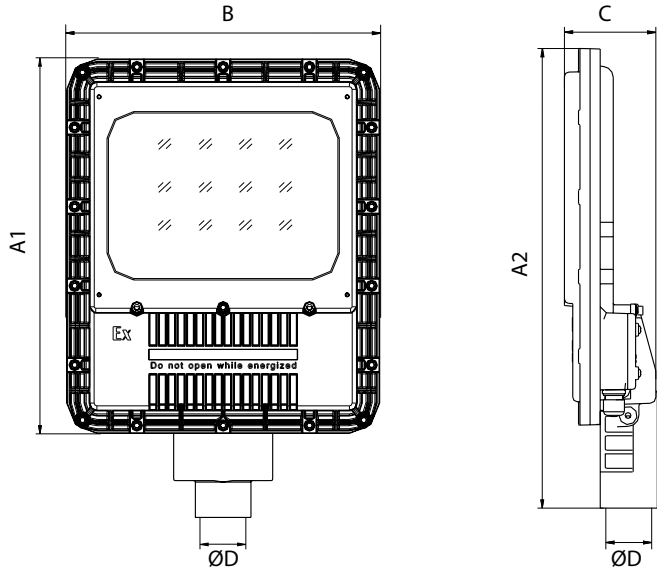


FLL 200 L



## FLP

push button / pilot light units

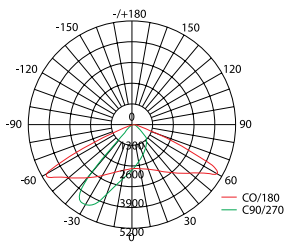


### overall dimensions

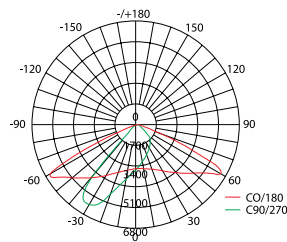
code	A1	A2	B	C	ØD
FLP	520	635	460	128	62

Code	Lampholder	Watt								Current (A)	Power Factor	Temperature Class				
			220VAC	230VAC	240VAC	100 - 277 VAC	220 - 240 VAC	230 - 240 VAC	50 Hz			60 Hz	50/60 Hz	Ta ≤ +40°C		Ta ≤ +55°C
FLP 120 L	-	120				X				X	< 0.85	≥ 0.95	T5	T90°C	T4	T105°C
FLP 160 L	-	160				X				X	< 0.85	≥ 0.95	T5	T90°C	T4	T105°C
FLP 200 L	-	200				X				X	< 0.85	≥ 0.95	T5	T90°C	T4	T105°C

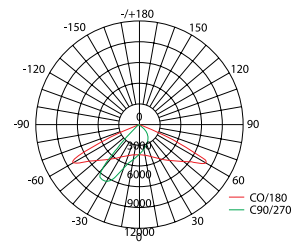
## Polar Diagrams



FLP 120 L



FLP 160 L



FLP 200 L