

SFDL LED - SFDEL LED

Floodlights for LED lamps



Description

With its high protection class IP66, the SFD series of floodlights for potentially explosive atmospheres in Zones 1, 2 as well as 21 and 22 is suitable for lighting large areas and buildings where there are rough ambient conditions.

This lighting series is the ideal solution for medium and high suspension heights, especially for offshore oil and gas production installations, in industrial, chemicals and petrochemicals installations, for pipelines and refineries.

The lighting series is designed with type of protection “Ex d” and “Ex de” (with convenient connection space). The lamps with. As more efficient lighting technology has been developed, the SFD light series has also become available with high performance LED modules with power consumption 179 W to a maximum 245 W and provide high illumination intensity. These are ideal for replacing high pressure lamps and keep costs down due to their low energy consumption and long service life. For the electrical connection threaded holes, are provided on the floodlight to house the cable glands or blanking plugs, approved for the explosion protected area (“Ex d” – 1x ¾" NPT / “Ex de” – 2 x M20 x 1.5). An adjustable swivel bracket is available for wall and ceiling mounting.

Installation

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

Classification

Group II - Category 2G 2D

Reference standards

| Directive 2014/34/EU | |
|---------------------------------|---|
| Execution | Ⓜ II 2 G Ex db IIB + H2 T6...T4 Gb or Ⓜ II 2 G Ex db eb IIB + H2 T6...T4 Gb Ⓜ II 2 D Ex tb IIIC T85 °C...T135 °C Db |
| Rules of compliance | EN/IEC 60079-0; EN/IEC 60079-1; EN/IEC 60079-7; EN/IEC 60079-31 |
| EU Type-Examination Certificate | INERIS 01 ATEX 0018 |
| Protection degree | IP66 |
| Impact resistance | IK10 |
| Rules of compliance | EN 62262/A1 |
| Ambient temperature | -20 °C ÷ +60 °C |
| Other available certificates | IECEX: IECEX INE 15.0003X ECASEX: 23-06-22481/Q23-06-048569/NB0002 |

Mechanical characteristics

| | |
|-------------|---|
| Body | marine grade copper free aluminium |
| Diffuser | tempered front glass |
| Support | adjustable type hot dip galvanized steel |
| Painting | external epoxy powders grey RAL-9006 COLOUR |
| Screws | external stainless steel |
| Gaskets | silicon rubber |
| Cable entry | ¾" NPT (Ex d version) / ISO-M25 (Ex de version) |

Electrical characteristics

| | |
|------------------------|--|
| Power supply | 100 - 277 Vac electronic driver 5 0/60 Hz 141 - 273 Vdc electronic driver with NTC thermal sensor on PCB |
| Input surge protection | DM 6KV, CM 10KV |
| Lamp type | LUXEON 5050 / LUMILEDS CRI 70, CCT 5700 K. Lifetime: 60.000 hours L80 B20 @ta60 |
| Inrush current | SFDL/SFDEL 40 : 81,5 A -220 Vac for 0.848 ms SFDL/SFDEL 48 : 73,5 A -220 Vac for 1.340 ms SFDL/SFDEL 56 : 73,5 A -220 Vac for 1.340 ms |
| Internal wiring | high-temperature resistant silicon rubber insulation cables |
| Terminals | suitable up to 2,5 sq/mm cables |
| Optic | with symmetrical lens vertex at 65 deg |

On Request Accessories

- External painting colour on request
- Threaded cable entry different than standard



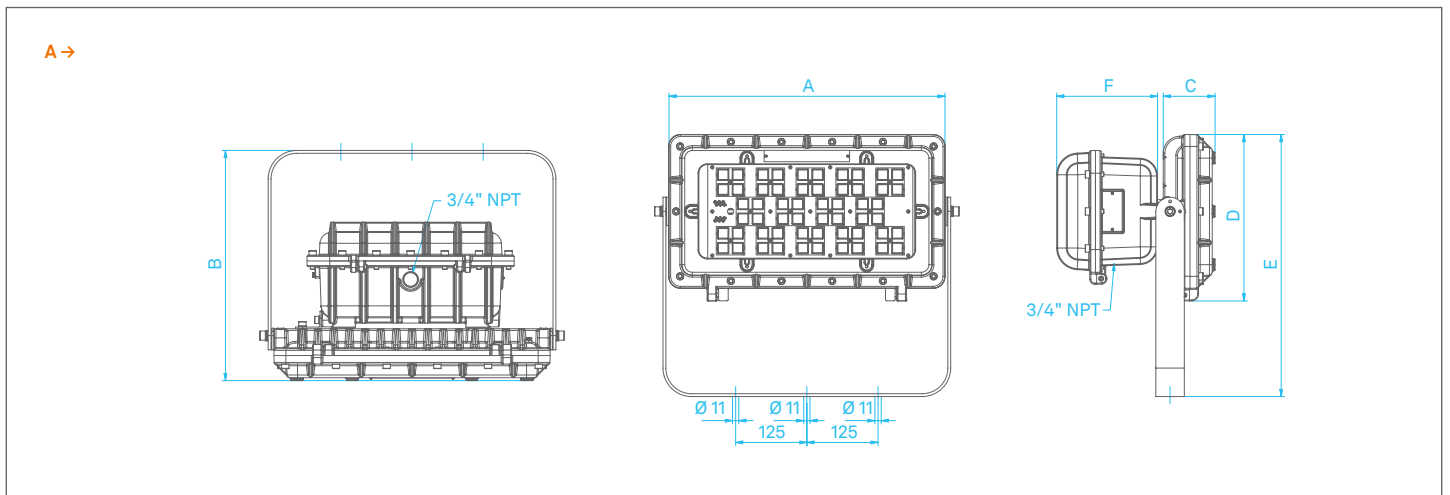
Technical data

| CODE | Nom. Power PCB LED | Temperature Class (Gas) | Temperature Class (Dusts) | Nominal output (lm) | Effic. [lm/W] | Total power | Cable entry size | Detail |
|---|-----------------------|----------------------------|------------------------------|------------------------|------------------|----------------|---------------------|--------|
| Floodlights for LED lamp - Power supply 100-277 VAC - 50/60 Hz | | | | | | | | |
| SFDL-040 LED | 168 W | T6 (Ta = -20 °C / +40 °C) | T 85 °C | 19020 | 106.30 | 179 W | 1 x ¾" NPT | A |
| SFDEL-040 LED | | T6 (Ta = -20 °C / +48 °C) | T 85 °C | | | | 2 x ISO-M25 | B |
| SFDL-048 LED | 202 W | T5 (Ta = -20°C / +40°C) | T 100 °C | 22640 | 107.80 | 210 W | 1 x ¾" NPT | A |
| SFDEL-048 LED | | T5 (Ta = -20°C / +50°C) | T 100 °C | | | | 2 x ISO-M25 | B |
| SFDL-056 LED | 235 W | T5 (Ta = -20°C / +40°C) | T 100 °C | 26410 | 107.80 | 245 W | 1 x ¾" NPT | A |
| SFDEL-056 LED | | T5 (Ta = -20°C / +50°C) | T 100 °C | | | | 2 x ISO-M25 | B |

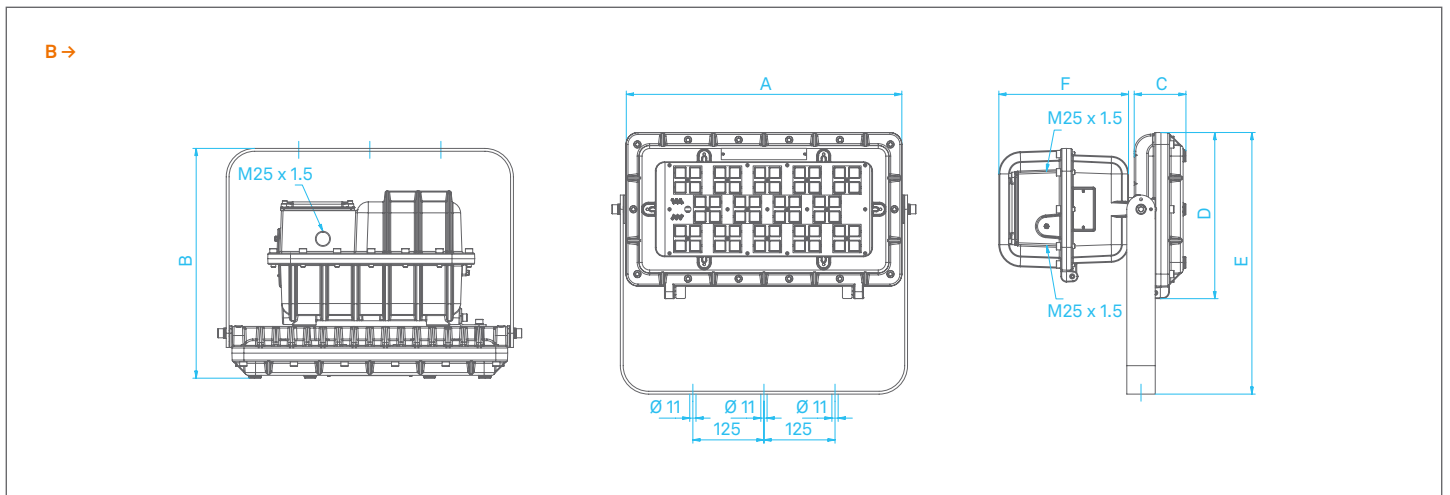
Technical features

| CODE | A [mm] | B [mm] | C [mm] | D [mm] | E [mm] | F [mm] | Weight [Kg] | Cable entry | Detail |
|---------------|--------|--------|--------|--------|--------|--------|-------------|-------------|--------|
| SFDL-040 LED | 485 | 390 | 100 | 292 | 462 | 190 | 25,00 | 1 x ¾" NPT | A |
| SFDL-048 LED | | | | | | | | | |
| SFDL-056 LED | | | | | | | | | |
| SFDEL-040 LED | 485 | 390 | 100 | 292 | 462 | 240 | 26,00 | 2 x ISO-M25 | B |
| SFDEL-048 LED | | | | | | | | | |
| SFDEL-056 LED | | | | | | | | | |

Reference details

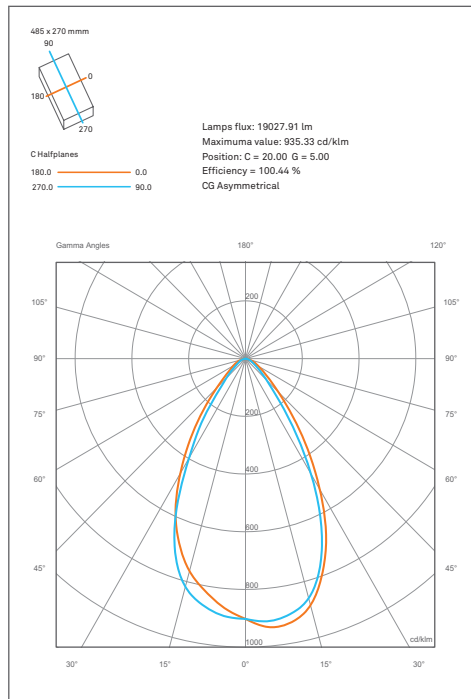


Reference details

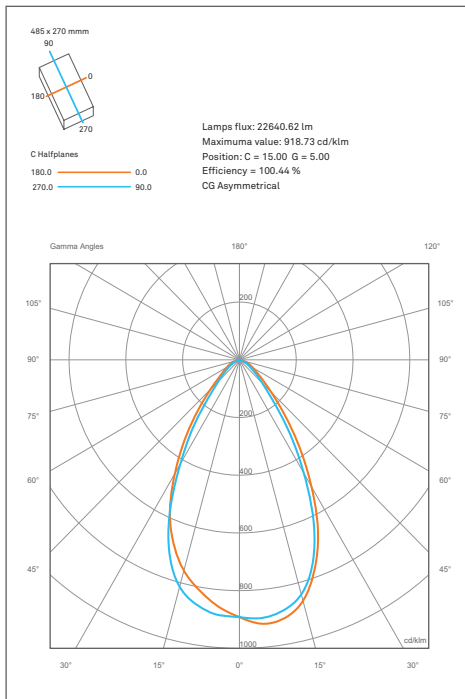


SFDL Polar diagrams – photometric data

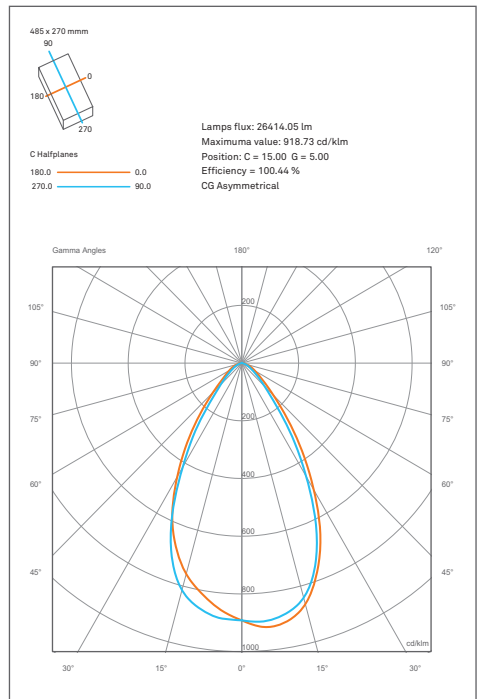
SFDL-04400



SFDL-04800



SFDL-05600



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.