

The new LED lighting fixtures EVL series has been developed with the aim of redefining the concepts of compactness, versatility and ease of installation thanks to high intensity and efficiency LED plates. The EVL series consists of four lighting fixtures sizes and represents the LED alternative for all those areas where it was normal to use lighting fixtures with discharge lamps of low and medium power greater than 400W. The body, made of aluminium alloy, is equipped with fins that act as a heat sink allowing a fast and effective dispersion of heat generated by the normal operation of the LED. The geometric conformation of the cooling fins was also designed with the objective of minimizing the deposit of combustible dust, allowing the self-cleaning of the lighting fixture by air or water present in the environment. Furthermore, thanks to the absence of UV emission, there is no ionization of the air particles around the lighting fixture, an intrinsic characteristic of LED technology which limits the attraction of dust and insects. The design of the lamp body, in addition to being functional to the duration of the system, gives the equipment very high light efficiency. The electrical connection is easier thanks to a 'Ex e' terminal housing which allows the entry with a 'Ex e' cable gland (no barrier). In addition, an opposed plugged hole permits the through wiring connection.

**Application sectors:** 















Oil refineries

Chemical and es petrochemical plants

Onshore plants

Offshore plants

Onshore plants

Perimeter lighting

Oil loading/ unloading jetties

#### **CERTIFICATION DATA**

| Classification:           | Group II  | Category 2        | 2GD           |   |  |  |
|---------------------------|---|-------------------|---------------|---|--|--|
| Installation: EN 60079.14 | zone 1 - zone 2 (Gas)   | zone 21 - zone    | 22 (Dust)     |   |  |  |
| Marking:                  | C€ 0722 ऒ II 2GD Ex db 6  | eb op is IIC T Gb | - Ex tb op is | IIIC T°C Db                                   |  |  |
| Certification:            | ATEX EPT 19 ATEX 3  | _                 |               | cation data contact<br>antideflagrantigce.com |  |  |
|                           |   |                   | FN 60070-7-   | 2015 FN 60079-28- 2015                        |  |  |
| Standards:                | CENELEC EN 60079-0: 2018, EN 60079-1: 2014, EN 60079-7: 2015, EN 60079-28: 2015 EN 60079-31: 2014 and EUROPEAN DIRECTIVE 2014/34/UE IEC 60079-0: 2017, IEC 60079-1: 2014, IEC 60079-28: 2015, IEC 60079-31: 2013, IEC 60079-7: 2015 |                   |               |   |  |  |
| Ambient temperature:      |   | -40°C +6          | 0°C           |   |  |  |
| Degree of protection:     |   | IP66              |               |   |  |  |

<sup>\*</sup> For ambient temperature +60°C see "EVL series selection chart" a pagina 26.





MECHANICAL FEATURES ORIGINAL PRODUCT

Body:

Low copper content aluminium alloy fitted with cooling fins for better heat dissipation

Shock and temperature resistant tempered glass sealed with aluminium ring

Gaskets: Acid, hydrocarbon and high temperature resistant silicone

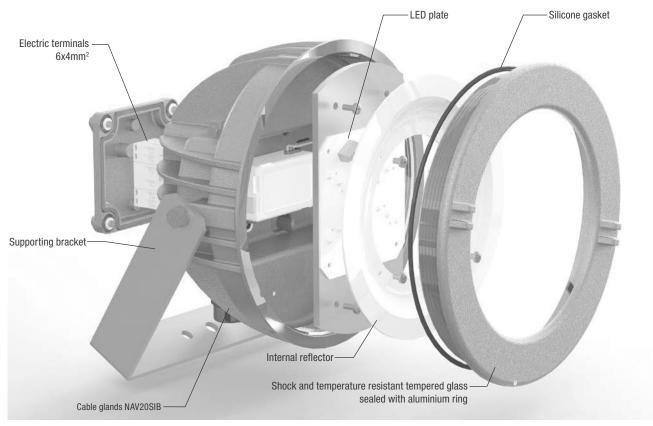
Supporting bracket: Stainless steel 316L
Bolts and screws: Stainless steel

Entries: 2 x ISO M20 entries. Fixture kit with plug and barrier cable gland Polyester coating Ral

Coating: 7035 (Light grey)

Corrosion Resistance: The STANDARD of the aluminium alloy used by manufacturer has passed the tests required by EN60068-2-30 (hot/humid cycles) and EN60068-2-11 (salt mist tests)

#### **EXPLODED DIAGRAM OF EVL-070 LIGHTING FIXTURE**

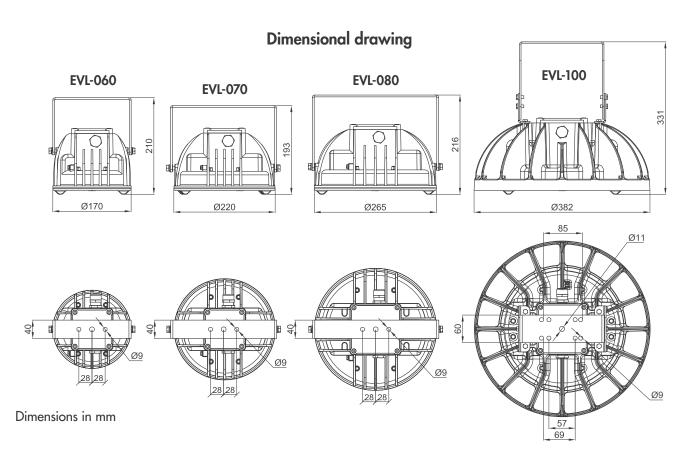




### **EVL** series selection chart

| Code       | Maximum<br>permitted | Class / Max surface temp. °C |            |            | Lumen    | Maximum<br>light | Overall    | Weight |             |
|------------|----------------------|------------------------------|------------|------------|----------|------------------|------------|--------|-------------|
| 0040       | power value          | TA=+40°C                     | TA=+50°C   | TA=+60°C   | Lumon    | intensity        | efficiency | kg     | mm          |
| EVL-060030 | 30 W                 | T6 / 85°C                    | T5 / 100°C | T5 / 100°C | 2778 lm  | 1179 cd          | 94,8 lm/W  | 3,5    | 215x205x170 |
| EVL-060040 | 40 W                 | T6 / 85°C                    | T5 / 100°C | T5 / 100°C | 3992 lm  | 1527 cd          | 97,9 lm/W  | 3,5    | 215x205x170 |
| EVL-060050 | 50 W                 | T5 / 100°C                   | N/A        | N/A        | 4643 lm  | 1765 cd          | 92,1 lm/W  | 3,5    | 215x205x170 |
| EVL-070050 | 50 W                 | T5 / 100°C                   | T5 / 100°C | T4 / 135°C | 6332 lm  | 2130 cd          | 120,1 lm/W | 5,2    | 250x235x165 |
| EVL-070060 | 60 W                 | T5 / 100°C                   | T5 / 100°C | T4 / 135°C | 7259 lm  | 2458 cd          | 118,9 lm/W | 5,2    | 250x235x165 |
| EVL-070070 | 70 W                 | T5 / 100°C                   | N/A        | N/A        | 7852 lm  | 2659 cd          | 110,3 lm/W | 5,2    | 250x235x165 |
| EVL-070080 | 80 W                 | T5 / 100°C                   | N/A        | N/A        | 8237 lm  | 2801 cd          | 103,5 lm/W | 5,2    | 250x235x165 |
| EVL-080080 | 80 W                 | T5 / 100°C                   | T5 / 100°C | T4 / 135°C | 8461 lm  | 2900 cd          | 105,8 lm/W | 7,2    | 290x290x170 |
| EVL-080090 | 90 W                 | T4 / 135°C                   | T4 / 135°C | T4 / 135°C | 9466 lm  | 3296 cd          | 105,2 lm/W | 7,2    | 290x290x170 |
| EVL-080100 | 100 W                | T4 / 135°C                   | N/A        | N/A        | 10315 lm | 3586 cd          | 103,2 lm/W | 7,2    | 290x290x170 |
| EVL-080110 | 110 W                | T4 / 135°C                   | N/A        | N/A        | 11266 lm | 3831 cd          | 102,4 lm/W | 7,2    | 290x290x170 |
| EVL-080120 | 120 W                | T4 / 135°C                   | N/A        | N/A        | 11603 lm | 4019 cd          | 98,3 lm/W  | 7,2    | 290x290x170 |
| EVL-100140 | 140 W                | T4 / 135°C                   | T4 / 135°C | T4 / 135°C | 15260 lm | 5213 cd          | 111,4 lm/W | 11,2   | 385x385x250 |
| EVL-100160 | 160 W                | T4 / 135°C                   | T4 / 135°C | T4 / 135°C | 17535 lm | 6032 cd          | 109,2 lm/W | 11,2   | 385x385x250 |
| EVL-100180 | 180 W                | T4 / 135°C                   | T4 / 135°C | T4 / 135°C | 18535 lm | 6635 cd          | 103,0 lm/W | 11,2   | 385x385x250 |
| EVL-100200 | 200 W                | T4 / 135°C                   | N/A        | N/A        | 20123 lm | 7156 cd          | 101,4 lm/W | 11,2   | 385x385x250 |
| EVL-100220 | 220 W                | T4 / 135°C                   | N/A        | N/A        | 21818 lm | 7595 cd          | 100,1 lm/W | 11,2   | 385x385x250 |

<sup>\*\*</sup> Item currently not available







| Electrical features                  | EVL-060   | EVL-070  | EVL-080  | EVL-100  |  |
|--------------------------------------|---|--|--|--|--|
| Power supply:                        | 120-277 Vac   | 120-277 Vac  | 120-277 Vac  | 120-277 Vac  |  |
| Rated frequency:                     | 50-60 Hz ±5%  | 50-60 Hz ±5%   | 50-60 Hz ±5%   | 50-60 Hz ±5%   |  |
| D *                                  | 030 30 W<br>040 40 W  | 050 50 W<br>060 60 W                                 | 080 80 W<br>090 90 W   | 140 140 W<br>160 160 W   |  |
| Power consumption*:                  | 050 50 W  | <b>070</b> 70 W<br><b>080</b> 80 W                   | 100 100 W<br>110 110 W<br>120 120 W                                | 180 180 W<br>200 200 W<br>220 220 W                                |  |
| Connection:                          | Direct connection to terminal board L, N, Pe. Section 4mm², suitable for loop-in/loop-out |  |  |  |  |
| Power factor:                        | >0,93   | >0,95  | >0,97  | >0,96  |  |
| Rated current:                       | 030 140 mA<br>040 180 mA<br>050 220 mA  | 050 230 mA<br>060 270 mA<br>070 310 mA<br>080 360 mA | 080 350 mA<br>090 400 mA<br>100 440 mA<br>110 490 mA<br>120 530 mA | 140 640 mA<br>160 710 mA<br>180 800 mA<br>200 890 mA<br>220 970 mA |  |
| EMC (electromagnetic compatibility): | EN 55015, EN 61547, IEC 61000-3-2, IEC 61000-3-3, IEC 61000-4                             |  |  |  |  |
| THD (total harmonic distortion):     | <15% 100-240 Vac  |  |  |  |  |
| Protección de sobretensiones:        | 2 kV  | 2 kV   | 6 kV   | 2 kV   |  |
| Driver performances:                 | Over-Voltage protection, Over-Current protection, Short-Circuit protection                |  |  |  |  |
| Dimmer (on request):                 | (0-10 V)<br>or PWM or resistor  | (0-10 V)<br>or PWM or resistor                       | (0-10 V)<br>or PWM or resistor                                     | (0-10 V)<br>or PWM or resistor                                     |  |
| Photometric features                 |   |  |  |  |  |
| LED Multichip:                       | High power LED  | High power LED                                       | High power LED   | High power LED   |  |
| Viewing angle:                       | 120°  | 120°   | 120°   | 120°   |  |
| Colour temperature:                  | <i>57</i> 00 K  | 5700 K   | <i>5</i> 700 K   | 5700 K   |  |
| CRI:                                 | >70   | >70  | >70  | >70  |  |
| Instant Restrike:                    | SI  | SI   | SI   | SI   |  |
| L80:                                 | > 63500 h   | > 60500 h  | > 61000 h  | > 60000 h  |  |
|                                      |   |  |  |  |  |

<sup>\*</sup> Test at 230Vac

#### ACCESSORIES AVAILABLE / SPECIAL REQUESTS

CRI values higher
Dimmer
Different colour temperature
U bolt for pole mounting
Eyebolt
Cover with direct connection for pole





| ILLUSTRATION | DESCRIPTION              | MODEL              | FEATURES   | CODE           | KEY                    |  |
|--------------|--------------------------|--------------------|--|----------------|------------------------|--|
| Q            | Pendant<br>eyebolt       | Ø interno 20       | Material:<br>galvanised steel                      | GOF-8          | ACCESSORY SPART PART   |  |
| W. W.        | U bolt for pole mounting | Poste<br>Ø1 1/2"   | Material:<br>stainless steel 316L                  | UBD5S          | ACCESSIGNAT SPARE PART |  |
|              | Cover with direct        | EVL-060<br>EVL-070 | Material:<br>aluminium alloy<br>with threaded hole | B-498          | SPARE PART             |  |
|              | connection for<br>pole   | EVL-080<br>EVL-100 | 3/4" NPT (Different threads on request)            | B-499          |                        |  |
|              |                          | EVL-060            |  | G-764IN        | STATE PART             |  |
|              |                          | EVL-070            | Material:  | G-765IN        |                        |  |
|              | Supporting bracket       | EVL-080            | stainless steel 316L                               | G-766IN        |                        |  |
|              |                          | EVL-100            |  | G-827          |                        |  |
|              | Power supply             | EVL-060030         | 120-277 Vac  | LEDDEVL060/2   | SPARE PART             |  |
|              |                          | EVL-060040         |  | LEDDEVL060/2/1 |                        |  |
|              |                          | EVL-060050         |  | LEDDEVL060/2   |                        |  |
|              |                          | EVL-070050         | 120-277 Vac  | LEDDEVL070/1   |                        |  |
|              |                          | EVL-070060         |  | LEDDEVL070/1/2 |                        |  |
|              |                          | EVL-070070         |  | LEDDEVL070/1/3 |                        |  |
|              |                          | EVL-070080         |  | LEDDEVL080/4/1 |                        |  |
|              |                          | EVL-080080         |  | LEDDEVL080/4   |                        |  |
|              |                          | EVL-080090         |  | LEDDEVL080/4/2 |                        |  |
|              |                          | EVL-080100         |  | LEDDEVL080/4/3 |                        |  |
|              |                          | EVL-080110         |  | LEDDEVL080/5/1 |                        |  |
|              |                          | EVL-080120         |  | LEDDEVL080/5/2 |                        |  |
|              |                          | EVL-100140         |  | LEDDEVL100/1/1 |                        |  |
|              |                          | EVL-100160         | 120-277 Vac  | LEDDEVL100/1   |                        |  |
|              |                          | EVL-100180         |  | LEDDEVL100/1/2 |                        |  |
|              |                          | EVL-100200         |  | LEDDEVL100/1/3 |                        |  |
|              |                          | EVL-100220         |  | LEDDEVL100/1/4 |                        |  |
|              | Cable gland              | ISO M20            | std. range cable<br>6,3÷11,6                       | NAV20SIB       | SPARE PART             |  |
|              |                          | EVL-060            |  | G60-0587       |                        |  |
|              | Front ring with glass    | EVL-070            | Aluminium ring                                     | G70-0587       | STANK PART             |  |
|              |                          | EVL-080            | Borosilicate glass<br>face                         | G80-0587       |                        |  |
|              |                          | EVL-100            | Ide  | G100-0587      |                        |  |



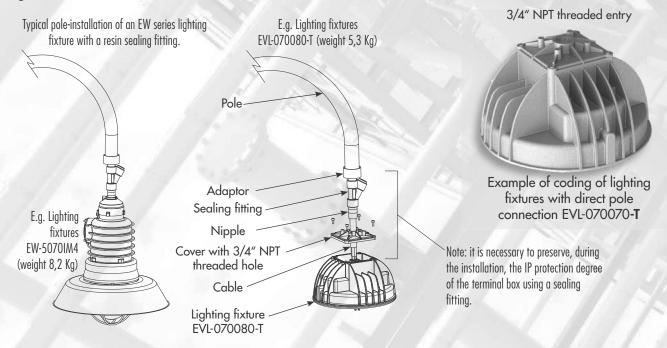
#### Obstruction lighting fixtures

The obstruction lighting fixtures are feature a LED plate and a globe of different colours: blue, red, green, amber. They can be installed in locations where obstacles, dangers are needed to be signalled and for any visual communication. They replace acoustic signals in places where they are not applicable.



#### REPLACEMENT OF OLD LIGHTING FIXTURES POLE-MOUNTED

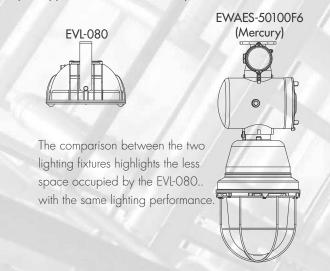
Using the lighting fixture with direct connection for pole mounting EVL-...-T series, it is possible to replace the old lighting fixtures with 3/4 "NPT or ISO 7/1 threaded entries.



Transportable version **EVL-...-PS** complete with cable 8 meters long, sockets model PY216V and plug model SPY216V. To order the transportable lighting fixture without socket and plug, omit the S in the code: **EVL-...-P**.

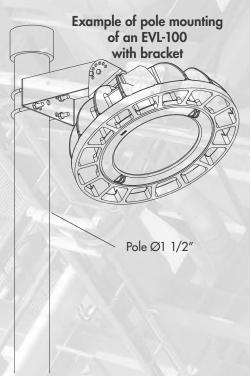


Compact size and lightweight Cheaper support structures and most space available





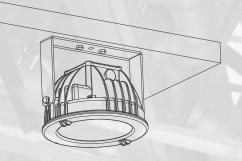
### Installation and mounting methods



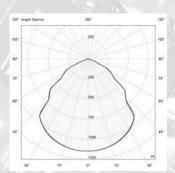
# Example of wall or structure mounting of an EVL-70



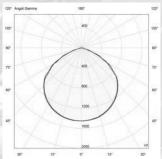
#### Example of ceiling mounting of an EVL-70



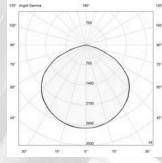
### Photometric diagrams



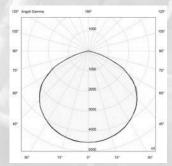
EVL-060030 Luminous flux: 2778 lm



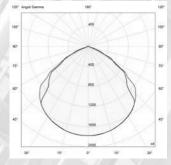
EVL-070050 Luminous flux: 6332 lm



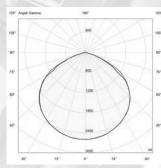
EVL-080080 Luminous flux: 8461 lm



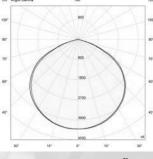
EVL-100140 Luminous flux: 15260 lm



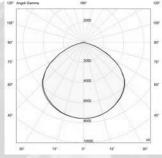
EVL-060050 Luminous flux: 4643 lm



EVL-070080 Luminous flux: 8237 lm



EVL-080120 Luminous flux: 11603 lm



EVL-100220 Luminous flux: 21818 lm

= plane 90270 = plane 0180