EWL-../.. series LED floodlights



EWL series LED floodlight combines a light and compact design with improved performance and reliability over time in terms of safety, efficiency and energy saving guaranteeing a lifespan of 20 years of constant high quality illumination. The EWL series is suitable for installation in all those areas defined as hazardous due to the presence of gases and explosive dusts such as Zones 1, 2, 21 and 22. The universal steel mounting bracket and base comply with all application requirements. Unlike the rest of the market that offers a modification of LEDs inside old lighting fixtures, the EWL series has been specifically designed to meet the technical requirements of LEDs. In effect, the body of the lamp acts as a heat dissipater for the LED plate meaning that more powerful lighting can be installed without causing any deterioration of the actual LEDs. The protective shockproof glass plate is resistant to high temperatures and ensures that light emissions do not pollute the surrounding environment. The LED board is positioned in a separate "chamber" housing the electronic power supply system and this in turn is separated by an "Ex e" terminal box housing that is used to connect the lighting fixture to the electronic power supply system through a cable gland with an Ex (non barrier) O-ring as specified in EN/IEC 60079-14. The fact that discharge lamps containing mercury are not used in hazardous areas makes these light fixtures eco-compatible and they have a no cost environmental impact in the event of recycling. LED lights can be fitted with a lens that changes their photometric properties meaning that the same lamp body can replace a traditional discharge lamp lighting fixture (RLEE series). A further advantage in using EWL series LED fixtures lies in the knowledge that the degree of illumination will never just fade. If one LED fails, the others keep on working and when the lamp is turned on, the light reaches its maximum level instantly.

Application sectors:



refineries



Chemical and petroplants



Anti light pollution



Offshore plants



Onshore plants



Perimeter lighting

Oil loading/ unloading **jetties**

CERTIFICATION DATA

Classification: Group II Category 2GD

Installation: EN 60079.14

zone 1 - zone 2 (Gas)

zone 21 - zone 22 (Dust)

Marking:

C€ 0722 €x> II 2GD Ex db eb op is IIC T.. Gb - Ex tb IIIC T..°C Db IP66

Certification:

Standards:

ATEX CML 16 ATEX 1348

CML 16.0118 **IEC Ex**

AVAILABLE TR CU

All IEC Ex, TR CU and INMETRO

INMETRO DNV 14.0153

CENELEC EN 60079-0: 2012 A11 COR1: 2013, EN 60079-1: 2014, EN 60079-7: 2015, EN 60079-31: 2014, EN 60079-28: 2015 and EUROPEAN DIRECTIVE 2014/34/UE IEC 60079-0: 2011, IEC 60079-1: 2014-06, IEC 60079-28: 2015, IEC 60079-31: 2013,

IEC 60079-7: 2015

European Directive 2006/95 Low voltage

European Directive 2004/108 Electromagnetic compatibility

European Directive 2003/108 WEEE Waste electrical and electronic equipment

European Directive 2011/64 RoHS

Class temperature:

85°C (T6)





Ambient temperature







Degree of protection:

IP66

EWL-../.. series LED floodlights







ORIGINAL PRODUCT

MECHANICAL FEATURES

Body: Glass face: Gaskets:

Supporting bracket: Bolts and screws:

Entries:
Coating:

Corrosion Resistance

Low copper content aluminium alloy fitted with cooling fins for better heat dissipation Shock and temperature resistant tempered glass sealed with aluminium ring

Acid, hydrocarbon and high temperature resistant silicone

Stainless steel 316L Stainless steel

2 x ISO M20 entries. Floodlight kit with PLG1IB plug and cable gland

Polyester coating Ral 7035 (Light grey)

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

tests)

Optical systems:



- Model: Strip Lenses
- High efficiency
- Vibration resistant
- Material: Optical PC, polycarbonate for optoelectronic components
- Manufactured with NJCTM (No Joint Construction) technology, i.e. the
 elimination of the collimator applied to the lens thus ensuring perfect mating
 of the LED and the lens. Perfect collimation is guaranteed by the positioning
 and hot riveting of the lugs to provide direct fixing to the LED
- Three different light emission angles

ACCESSORIES AVAILABLE / SPECIAL REQUESTS

Rated voltage: 12 Vdc, 24 Vdc, 48 Vdc (example code EWL-100/40/24)

Dimmer: (code EWL-80/10/D)

Base for horizontal adjustment on request

Different colour temperature

EWL-../.. series LED floodlights



Electrical features	EWL-70	EWL-80 EWL-80C	EWL-801 EWL-801C	EWL-100/	
Power supply:	100-277 Vac ±10% (12 Vdc EWL-80/12) (24 Vdc EWL-80/24) (48 Vdc EWL-80/48)		220-240 Vac ±10%	100-277 Vac ±10% (12 Vdc EWL-100/12) (24 Vdc EWL-100/24) (48 Vdc EWL100/48)	
Rated frequency:	50-60 Hz ±5%	50-60 Hz ±5%	50-60 Hz ±5%	.5% 50-60 Hz ±5%	
Power consumption:	40 W	55W (65 W a 24 Vdc)	110W	188 W	
Connection:	Direct connection to terminal board L, N, Pe. Section 4mm², suitable for loop-in/loop-out				
Power factor:	>0,95 *	>0,95 *	>0,95 *	>0,95 *	
Rated current:	185 mA *	260 mA *	508 mA *	800 mA *	
Initial current:	1,55 A 2 A -		2,70 A		
Initial current/Rated current:	8	8	-	3	
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				
Over-voltage protection:	2 kV	2 kV	6 kV	2 kV	
Driver performances:	Over-Voltage protection, Over-Current protection, Short-Circuit protection				
Dimmer (on request):	10-10 V1 10-10 V1 10-10 V1		(0-10 V) or PWM or resistor		
Photometric features					
LED:	Cree XTE	Cree XTE	Cree XTE	Cree XTE	
Viewing angle:	10°, 20° o 40° depending on the lenses				
Туре:	Cool White	Cool White	Cool White	Cool White	
Group:	R4	R4 R4 R4		R4	
Colour temperature:	5700 K	5700 K 5700 K 5700 K		5700 K	
CRI:	>70	>70 >70 >70		>70	
Instant Restrike:	SI	SI	SI	SI	
L80:	> 60500	> 60500	> 60500	> 60500	
Lumen:	3700 lm	6050 lm	10100 lm	17000 lm	
Maximum light intensity:	33180 cd (EWL-70/10) 14450 cd (EWL-70/20) 5850 cd (EWL-70/40)	71000 cd (EWL-80/10) 30900 cd (EWL-80/20) 12500 cd (EWL-80/40)	118670 cd (EWL-801/10) 51680 cd (EWL-801/20) 20900 cd (EWL-801/40)	199740 cd (EWL-100/10) 86980 cd (EWL-100/20) 35180 cd (EWL-100/40)	
Overall efficiency:	85 lm/W	110 lm/W	91 lm/W	91 lm/W	

^{*} Test at 230Vac

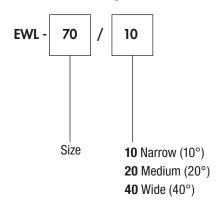
EWL-../.. series selection chart

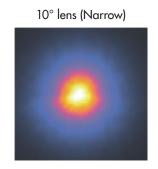


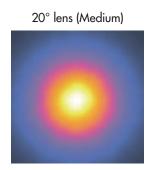
Code Lamp		p Dimensions mm		Class	Max surface temperature °C	Class	Max surface temperature °C	Weight	
oue	type	Α	В	(+40°C)	(+40°C)	(+60°C)	(+60°C)	kg	mm
EWL-70/	LED	340	215	T6	65	T6	85	6,4	290x270x330
EWL-80/	LED	343	260	T6	65	Т6	85	8,6	290x270x330
EWL-801/	LED	343	260	T6	80	T5	100	8,6	290x270x330
EWL-80C/	LED	373	260	T6	65	Т6	85	9,5	290x270x330
EWL-801C/	LED	373	260	T6	80	T5	100	9,5	290x270x330
EWL-100/	LED	484	385	Т6	80	T5	100	19,4	420x410x560

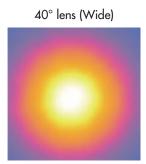
Order code example

Examples of illumination diagrams on the horizontal plane

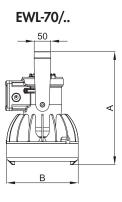


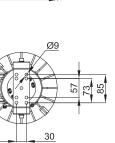




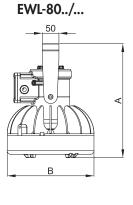


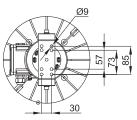
DIMENSIONAL DRAWING

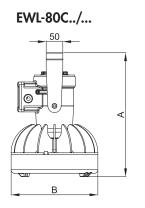


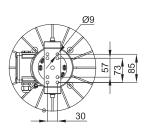


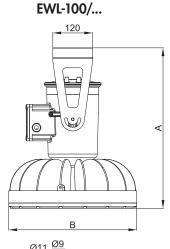
Dimensions in mm

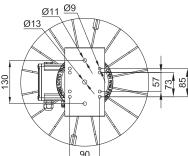












EWL-../.. Accessories and spare parts available on request



ILLUSTRATION	DESCRIPTION	MODEL	FEATURES	CODE	KEY	
	Base for horizontal adjustment	EWL-70 EWL-80	Material:	G-161	SOME PACT	
	Swivel base for horizontal adjustment	EWL-100	aluminium RAL 7035	G-326 G-327		
	Supporting bracket	EWL-70 EWL-80	Material: stainless steel AISI316L	G-750	SPARE PART	
UU	Supporting bracket	EWL-100	Material: stainless steel AISI316L	G-753	SPARE PART	
	Cable gland	ISO M20	std. range cable 6,3÷11,6		SPARE PART	
	Power supply circuit	EWL-70	220 - 240 Vac	RV-40LED	SPARE PART	
		EWL-80	120 - 240 Vac 120 - 370 Vdc 50-60 Hz	RSLD070-45		
		EWL-80/24	24 Vdc	RT-70LED		
		EWL-801	220 - 240 Vac	LEDDEVL80/2		
		EWL-100	100 - 240 Vac 120 - 370 Vdc 50-60 Hz	HLG-185H-C700B		
		EWL-100/24	24 Vdc	RT-240LED		
	Front ring with glass	EWL-70		G70-0556	SPARE PART	
		EWL-80	Aluminium ring Borosilicate glass face	G80-0556		
	5	EWL-100	9	G100-0556		

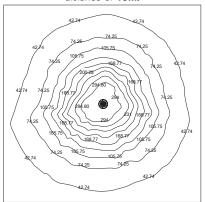
Example Peak Cd equivalents

EWL-70/40 (40W)	EWL-80/40 (55W)	EWL-801/40 (110W)	EWL-100/40 (188W)
250W HIM/(HPSV)	400W HIM/(HPSV)	>600W HIM/(HPSV)	1000W HIM/(HPSV)
400W Hg	1.5x400W Hg	1000W Hg	>1000W Hg
500W INC	1.5x500W INC	>1000W INC	2x1000W INC

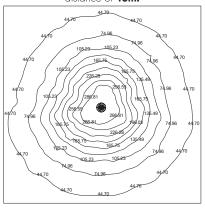
Isolux diagrams



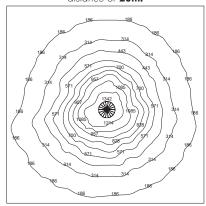
EWL-70/10 illumination on the floor expressed in lux in a room 5m x 5m with the floodlight perpendicular placed at a distance of **10m.**



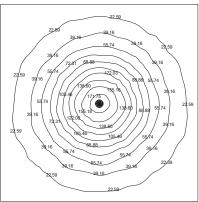
EWL-80/10 illumination on the floor expressed in lux in a room 5m x 5m with the floodlight perpendicular placed at a distance of **13m.**



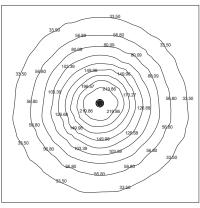
EWL-100/10 illumination on the floor expressed in lux in a room 5m x 5m with the floodlight perpendicular placed at a distance of **20m.**



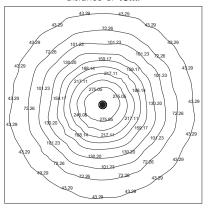
EWL-70/20 illumination on the floor expressed in lux in a room 6m x 6m with the floodlight perpendicular placed at a distance of **8m.**



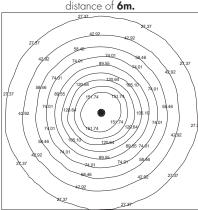
EWL-80/20 illumination on the floor expressed in lux in a room 7m x 7m with the floodlight perpendicular placed at a distance of **10m.**



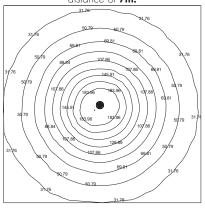
EWL-100/20 illumination on the floor expressed in lux in a room 10m x 10m with the floodlight perpendicular placed at a distance of **15m**.



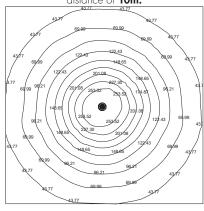
EWL-70/40 illumination on the floor expressed in lux in a room 6m x 6m with the floodlight perpendicular placed at a



EWL-80/40 illumination on the floor expressed in lux in a room 8m x 8m with the floodlight perpendicular placed at a distance of **7m.**



EWL-100/40 illumination on the floor expressed in lux in a room 10m x 10m with the floodlight perpendicular placed at a distance of **10m.**



Photometric diagrams



