CEAG Products Explosion protected floodlights

CROUSE-HINDS SERIES

PXLED - Power Floodlight Series for Hazardous Areas Explosion-protected LED floodlight series for Zone 1, 2, 21 and 22





Ex-Floodlight PXLED

(Ex-Zone 1, 2, 21 and 22)

Lighting under harsh conditions

The new modular LED floodlight series PXLED is suited for nearly every kind of lighting task in hazardous areas, including applications in On- and Offshore, heavy industrial, chemical, petrochemical, oil and gas, pharmaceuticals, shipyards, dockyards, power generation, paper mills and wastewater treatment indoor and outdoor with potentially explosive areas under harsh conditions like vibrations, dust, moisture or corrosive atmospheres and extreme temperatures. The PXLED comes with a standard U-shaped mounting bracket for ceiling and wall mounting

Replacement of conventional light fittings up to 600 W

With a luminous flux from 5,000 Im up to 32.000 Im this floodlight series can be used to replace nearly every floodlight with conventional light sources with an equivalent power consumption from 70 W up to 600 W.

High efficient LED technology

High efficient power LED module with 110 Lumen/Watt enables up to 70 % energy-cost savings compared to conventional HID lamp.

Safety first

All PXLED multi-module floodlights from size 10L to 30L are equipped with a multichannel LED driver. This driver provides for each LED-module a separate power channel circuit. Even if one circuit fails, all other LED-modules are still working.

Modular design - just use the size you need

Thanks to the modular design of the PXLED series you can exactly choose the lumen output you need. There is no need to over/underdesign your lighting project. Six sizes are available from nominal 5.000 lm to more than 30.000 lm with a stepwide of 5000 lm.

Easy to install

A stainless steel swivel bracket with adjustable setting angle allows an easy alignment of the floodlight. A fixing screw



secures the alignment. The swivel bracket provides up to 5 Ø13 mm fixing holes for a safe assembly. Together with two cable gland a large terminal compartment in Ex-e design allows cost saving through-wiring without additional terminal boxes.

The used Ex-e terminals can



clamp up to 6 mm² wiring. Internal and external PE-terminals allows nearly all cabling



technique.





Features

- High efficiency: up to110 lm/W
- Operating temperature -50 °C up to +55 °C
- Suitable for Explosion Group IIC / IIIC environment
- Broad range of light output from 5,000 lm up to 32,000 lm
- Wide and narrow beam pattern
- Long lifetime
- Ex-e compartment for driver & terminal for easy installation and maintenance

Features and Product details

PXLED for Ex-Zone 1, 2, 21 and 22

Designed for long lifetime

High ambient temperatures can drive the LED chip-temperature into a not permissible range. This would reduce the life-span of the LEDs tremendously. Eaton provides an enclosure design with large cooling pipes and a innovated heat reduction



design.

Tests done under the worst test conditions have shown that the LED-chip temperature is always below critical values. The designed life span for the LED (L80) is more than 60,000 h even at +55°C ambient temperature The Eaton-LED driver is especially designed for the harsh conditions of hazardous environments. According to EN 61000-4-5 an electronic device must withstand a surge pulse of 1 kV between L- N, our LED driver is designed to withstand 4 kV between L- N and L, N - PE.



All electronic components with self-heating are over dimensioned to ensure a maximum maintenance-free period. The driver has an own Ex-certification "q" and is mounted within the Ex-e compartment.

In the very unlikely cause of an driver failure this unit can be changed separately from the floodlight.

Light distribution for various applications

Beside the various lumen output packages different light distributions can be realized with the PXLED-series.

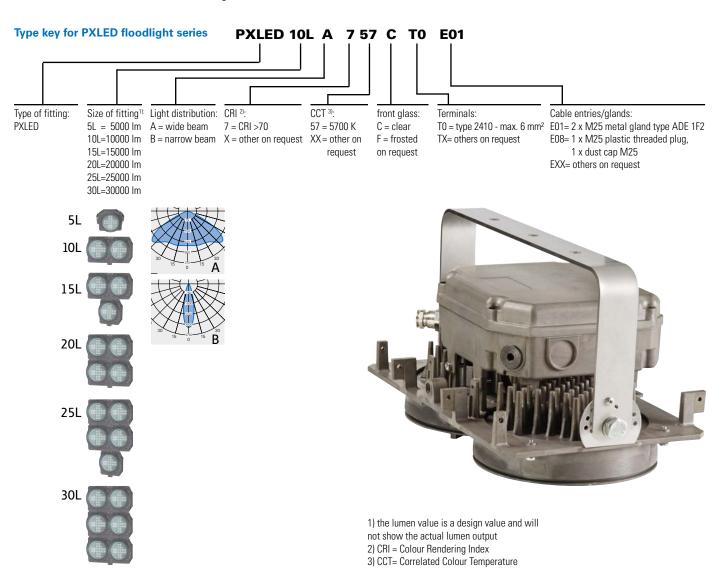
A wide beam pattern as well as a narrow beam pattern is realized by the use of special designed lens caps for the LEDs. With a light transmission factor of more that 90 % we are able to offer a system efficiency of more than 110 Im/W.



wide beam lens caps



narrow beam lens caps

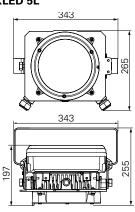


Ordering details PXLED for Ex-Zone 1, 2, 21 and 22

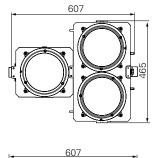
Ordering details PXLED

	Туре	Lamp / illuminant	Light distribution	Description / Power	Cable glands	Order No
	PXLED 5L B 757 C E01	LED system	narrow beam	LED floodlight with	2 x M25 metal cable gland ADE 1F2 for Ø 10 - 17 mm	1 3042 110 001
	PXLED 5L B 757 C E08	5.386 lm		swivel bracket 49 W	1 x M25 treaded plug, 1 x dust cap M25	1 3042 110 008
	PXLED 5L A 757 C E01	LED system	wide beam	LED floodlight with swivel bracket 49 W	2 x M25 metal cable gland ADE 1F2 for Ø 10 - 17 mm	1 3042 111 001
	PXLED 5L A 757 C E08	5.207 lm			1 x M25 treaded plug, 1 x dust cap M25	1 3042 111 008
	PXLED 10L B 757 C E01	2 LED systems	narrow beam	LED floodlight with swivel bracket 98 W	2 x M25 metal cable gland ADE 1F2 for Ø 10 - 17 mm	1 3042 210 001
	PXLED 10L B 757 C E08	10.772 lm			1 x M25 treaded plug, 1 x dust cap M25	1 3042 210 008
	PXLED 10L A 757 C E01	2 LED systems	wide beam	LED floodlight with swivel bracket 98 W	2 x M25 metal cable gland ADE 1F2 for Ø 10 - 17 mm	1 3042 211 001
	PXLED 10L A 757 C E08	10.414 lm			1 x M25 treaded plug, 1 x dust cap M25	1 3042 211 008
	PXLED 15L B 757 C E01	3 LED systems	narrow beam	LED floodlight with swivel bracket 147 W	2 x M25 metal cable gland ADE 1F2 for Ø 10 - 17 mm	1 3042 310 001
	PXLED 15L B 757 C E08	16.158 lm			1 x M25 treaded plug, 1 x dust cap M25	1 3042 310 008
	PXLED 15L A 757 C E01	3 LED systems	wide beam	LED floodlight with swivel bracket 147 W	2 x M25 metal cable gland ADE 1F2 for Ø 10 - 17 mm	1 3042 311 001
	PXLED 15L A 757 C E08	15.621 lm			1 x M25 treaded plug, 1 x dust cap M25	1 3042 311 008
	PXLED 20L B 757 C E01	4 LED systems	narrow beam	LED floodlight with swivel bracket 196 W	2 x M25 metal cable gland ADE 1F2 for Ø 10 - 17 mm	1 3042 410 001
	PXLED 20L B 757 C E08	21.544 lm			1 x M25 treaded plug, 1 x dust cap M25	1 3042 410 008
	PXLED 20L A 757 C E01	4 LED systems	wide beam	LED floodlight with swivel bracket 196 W	2 x M25 metal cable gland ADE 1F2 for Ø 10 - 17 mm	1 3042 411 001
	PXLED 20L A 757 C E08	20.828 lm			1 x M25 treaded plug, 1 x dust cap M25	1 3042 411 008
	PXLED 25L B 757 C E01	5 LED systems	narrow beam	LED floodlight with swivel bracket 245 W	2 x M25 metal cable gland ADE 1F2 for Ø 10 - 17 mm	1 3042 510 001
	PXLED 25L B 757 C E08	26.930 lm			1 x M25 treaded plug, 1 x dust cap M25	1 3042 510 008
	PXLED 25L A 757 C E01	5 LED systems	wide beam	LED floodlight with swivel bracket 245 W	2 x M25 metal cable gland ADE 1F2 for Ø 10 - 17 mm	1 3042 511 001
	PXLED 25L A 757 C E08	26.035 lm			1 x M25 treaded plug, 1 x dust cap M25	1 3042 511 008
	PXLED 30L B 757 C E01	6 LED systems	narrow beam	LED floodlight with swivel bracket 294 W	2 x M25 metal cable gland ADE 1F2 for Ø 10 - 17 mm	1 3042 610 001
	PXLED 30L B 757 C E08	32316 lm			1 x M25 treaded plug, 1 x dust cap M25	1 3042 610 008
	PXLED 30L A 757 C E01	6 LED systems	wide beam	LED floodlight with	2 x M25 metal cable gland ADE 1F2 for Ø 10 - 17 mm	1 3042 611 001
	PXLED 30L A 757 C E08	31242 lm		swivel bracket 294 W	1 x M25 treaded plug, 1 x dust cap M25	1 3042 611 008



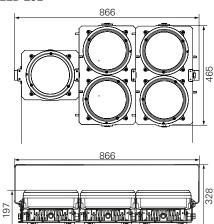


PXLED 15L

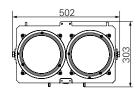


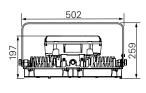


PXLED 25L



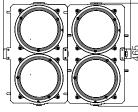
PXLED 10L





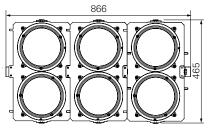


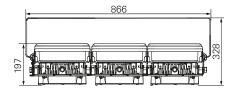
PXLED 20L





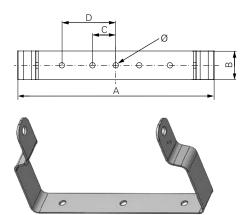
PXLED 30L





Dimensions in mm

Swivel bracket



Swivel bracket for PXLED - Dimensions						
Dimensions in mm	А	В	С	D	ø	
PXLED 05	343	50	120	-	13	
PXLED 10	476	50	120	-	13	
PXLED 15	606	50	120	-	13	
PXLED 20	606	50	120	-	13	
PXLED 25	858	50	120	270	13	
PXLED 30	858	50	120	270	13	

Technical data, Polar curve,

PXLED for Ex-Zone 1, 2, 21 and 22

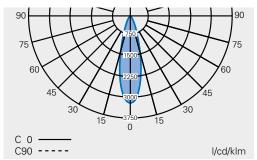
Technical data

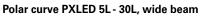
	PXLED 5L	PXLED 10L	PXLED 15L	PXLED 20L	PXLED 25L	PXLED 30L		
Type Examination Certificate	applied for							
IECEx Certificate of conformity	applied for							
Marking accd. 2014/34/EU	🐵 II 2 G Ex db eb op is q IIC T4 Gb/ 🐵 II 2 D Ex tb op is IIIC T100°C Db							
Marking accd. to IECEx	Ex db eb op is q IIC T4 Gb/ Ex tb op is IIIC T100°C Db							
Permissible ambient temperature	-50 °C up to +55 °C							
LED lifetime L80	>200,000 h @ 25 °C / 60,000 h @ +55 °C							
Driver lifetime C10	>100,000 h @ 25 °C / 60,000 h @ +55 °C							
Rated voltage	110 - 277 V AC / 120 - 277 V DC							
Rated current ¹)	0.24 A	0.48 A	0.72 A	0.96 A	1.20 A	1.44 A		
Frequency	0/50 - 60 Hz							
Power factor cos φ ¹)	≥ 0.95							
Circuit	Electronic driver	Electronic driver						
Protection class	I							
Light colour / CRI	5700 K / $R_a > 70$ (c	5700 K / R _a >70 (other colours on request)						
Enclosure colour	dark grey							
Connecting terminals	6 poles standard (L, L1, L2, L3, N, PE / up to 6 mm ² / others on request)							
Enclosure material	Anodized copper-free Aluminium							
Weight	9,9 kg	14,4 kg	24,3 kg	28,7 kg	38,5 kg	41,1 kg		
Cable glands / gland plates / enclosure drilling	2 x M25 metal thread nickel plated (E01) or 1 x M25 threaded plug + 1 x M25 dust cap (E08) (others on request)							
Degree of protection accd. to EN 60529	IP66/67							
Protective cover / protective bowl	Toughened glass, clear (frosted on request)							
Swivel bracket	AiSi 316L stainless steel							
1) Typical value at 220 V								

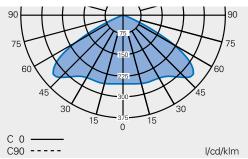
¹) Typical value at 230 V

Polar curve

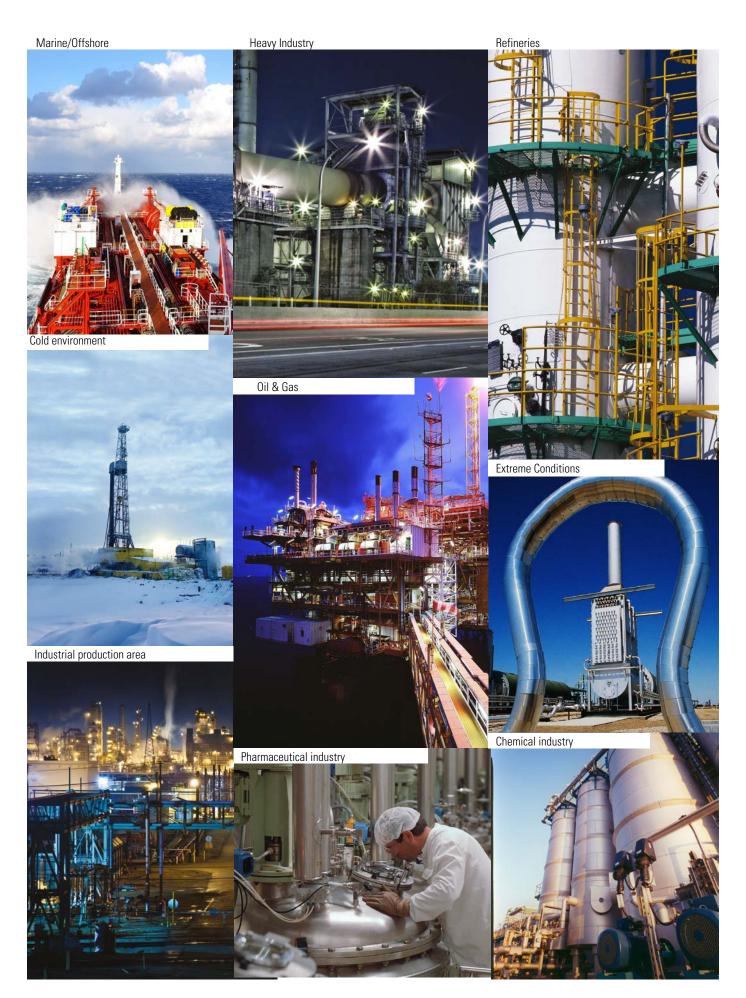
Polar curve PXLED 5L - 30L, narrow beam







One for all applications PXLED Application





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