

# Lighting: LED Floodlight (Rectangular Shape), DFDD Series

Flameproof/ Increased Safety and Dust protection by enclosure

Zone 1 & 2 – 21 & 22



## Application

The DFDD series are suitable for zone 1 & 2 Ex-gas and zone 21 & 22 Ex-dust hazardous area, such as heavy industrial, chemical, petrochemical or pharmaceutical facilities, platforms, shipyard, electric power, loading docks, wastewater treatment, paper mill.

## Specification

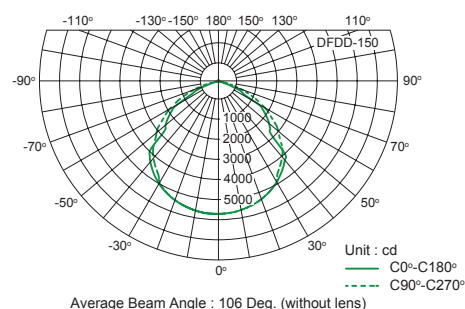
- Body material : Marine grade copper-free aluminium alloy with polyester powder coated, RAL 7032 (grey)  
(optional offshore painting-acrylic polyurethane coating)
- Lens : Heat and high impact resistant clear glass (4J impact)
- Bolts : Stainless steel, SUS 304 (optiona SUS 316)
- Bracket : Hot-dip galvanized steel (optiona SUS 304 or SUS 316)
- Sealing (O-ring) : Silicone

## LED System

- Luminous efficient : 120 lm/W
- Colour temperature : Standard 5700 K (daylight)  
(optional 3000K, 3500K, 4000K, 4500K, 5000K, 6500K etc.)
- Color Rendering Index (Ra) : ≥ 80
- Chip : LUXEON 5050 - LumiLEDs (optional Cree, Bridgelux, Nichia)
- Beam angle : Average 100° without lens  
30°, 60°, 90° with lens  
(other beam angle, please specify)
- Lifespan : >50,000 Hrs.  
(70% lumen maintenance)



## Luminous Intensity Distribution Curve

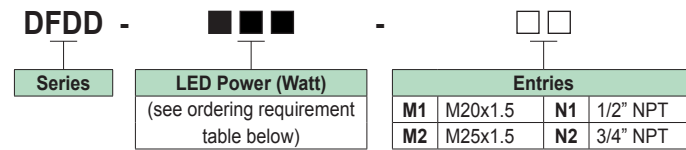


Complete photometrics, please contact us.

## Technical Data

<b>Hazardous Area</b>	<b>Gas</b>	<b>Dust</b>
<b>Zones</b>	<b>1 &amp; 2</b>	<b>21 &amp; 22</b>
<b>Equipment Group/Category</b>	⊕ II 2G	⊕ II 2D
<b>Symbol of Protection</b>	Ex de IIB T6/T5 Gb	Ex tb IIIC T85°C/ T95°C Db
<b>Certificate No.</b>	LCIE 17 ATEX 3006X IEEx LCIE 17.0017X	
<b>Conformity to standards</b>	EN 60079-0:2012/A11:2013, EN 60079-1:2007, EN 60079-7:2007, EN 60079-31:2014 IEC 60079-0:2011, IEC 60079-1:2007-04, IEC 60079-7:2006-07, IEC 60079-31:2013	
<b>Ambient Temperature</b>	-20°C to +50°C	
<b>Index of Protection</b>	IP66/ IK10	
<b>Entries</b>	1-hole standard (M20x1.5, M25x1.5, 1/2" NPT or 3/4" NPT), 2-holes are optional	
<b>Mounting</b>	Bracket mounting	
<b>Connection</b>	L, N and PE ; for 1-4mm. <sup>2</sup> cable (Through wiring system with an extra terminal block for cable connection at both ends.)	
<b>Rated Voltage</b>	110-240V.ac 50/60Hz., THDi < 20%, P.F. ≥ 0.95	

## Catalogue Number Logic

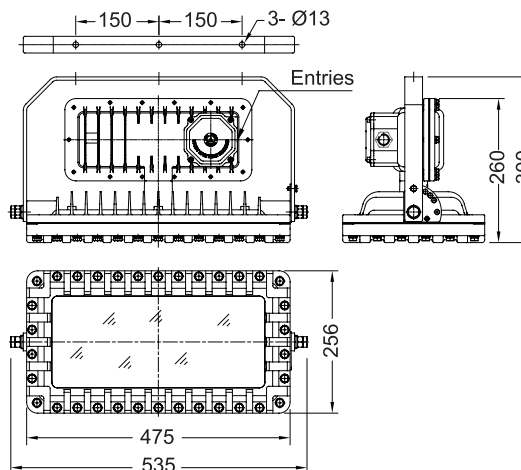


## Ordering Requirements

Cat. No.	LED Power	Voltage	Temp. Class (for zone 1 & 2)		Max. Surface Temp.* (for zone 21 & 22)		Approx. Weight (kgs.)
			Ta 40°C	Ta 50°C	Ta 40°C	Ta 50°C	
DFDD-100-□□	100W.	110-240V.ac	T6	T5	T85°C	T95°C	16.0
DFDD-120-□□	120W.	50/60Hz.					
DFDD-150-□□	150W.						

Remark \* : The maximum surface temperatures are specified for dust free condition. The dust layer which may cover around the lighting fixture will cause to higher surface temperature.

## Dimension



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## 2-Lighting fixtures combine together

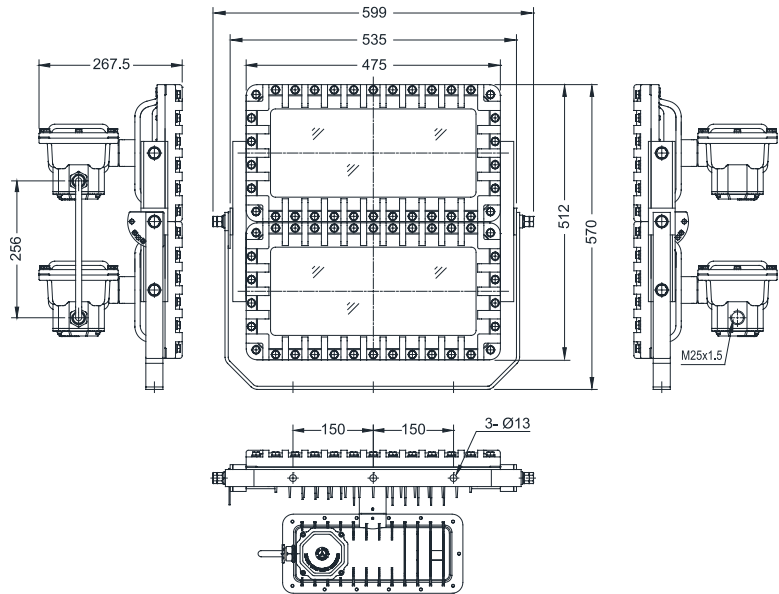


## Ordering Requirements

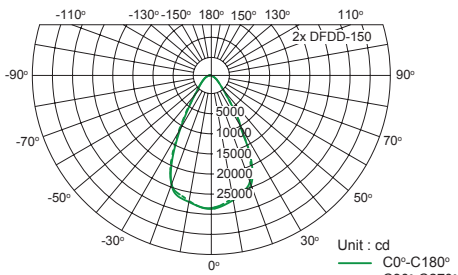
Cat. No.	LED Power	Voltage	Temp. Class (for zone 1 & 2)		Max. Surface Temp.* (for zone 21 & 22)		Approx. Weight (kgs.)
			Ta 40°C	Ta 50°C	Ta 40°C	Ta 50°C	
2x DFDD-100-□□	200W.	110-240V.ac	T6	T5	T85°C	T95°C	35.0
2x DFDD-120-□□	240W.	50/60Hz.					
2x DFDD-150-□□	300W.						

Remark \* : The maximum surface temperatures are specified for dust free condition. The dust layer which may cover around the lighting fixture will cause to higher surface temperature.

## Dimension



## Luminous Intensity Distribution Curve



Average Beam Angle : 59 Deg. (with lens)

Complete photometrics, please contact us.

## Diagram

LED unit on PCB

