



Lighting: LED High Bay Lighting Fixture, DFDR Series

Flameproof/ Increased Safety and Dust protection by enclosure

Zone 1 & 2 – 21 & 22

Application

The DFDR series are suitable for zone 1 & 2 Ex-gas and zone 21 & 22 Ex-dust hazardous area, such as chemical, petrochemical, platforms, shipyard, electric power, loading docks, wastewater treatment etc.

Specification

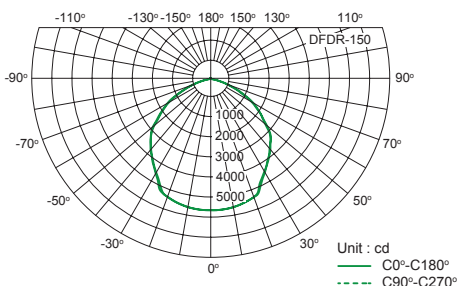
- Body material** : Marine grade copper-free aluminium alloy with polyester powder coated, RAL 7032 (grey)
(optional offshore painting-acrylic polyurethane coating)
- Lens** : Heat and high impact resistant clear glass (4J impact)
- Bolts** : Stainless steel, SUS 304 (optional SUS 316)
- Bracket** :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



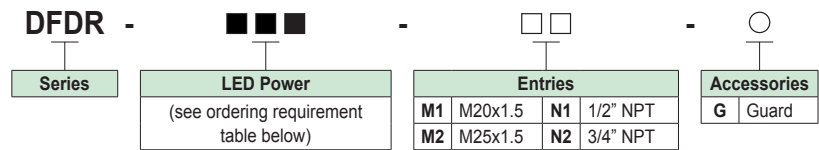
Complete photometrics, please contact us.

Technical Data

Hazardous Area	Gas	Dust
Zones	1 & 2	21 & 22
Equipment Group/Category	Ex II 2G	Ex II 2D
Symbol of Protection	Ex db e IIB T6/T5 Gb	Ex tb IIIC T85°C/ T95°C Db
Certificate No.	LCIE 17 ATEX 3031X IECEx LCIE 17.0040X	
Conformity to standards	EN 60079-0:2012/A11:2013, EN 60079-1:2014, EN 60079-7:2007, EN 60079-31:2014 IEC 60079-0:2011, IEC 60079-1:2014-06, IEC 60079-7:2006-07, IEC 60079-31:2013	
Ambient Temperature	-20°C to +50°C	
Index of Protection	IP66/ IK10	

Entries	2- M20x1.5, 2- M25x1.5 (1-stopping plug) or 2- 1/2" NPT, 2- 3/4" NPT (1-stopping plug)
Mounting	Bracket mounting
Connection	L, N and PE ; for 1-4mm. ² cable (Through wiring system with an extra terminal block for cable connection at both ends.)
Rated Voltage	110-240V.ac 50/60Hz., THDi < 20%, P.F. ≥ 0.95

Catalogue Number Logic

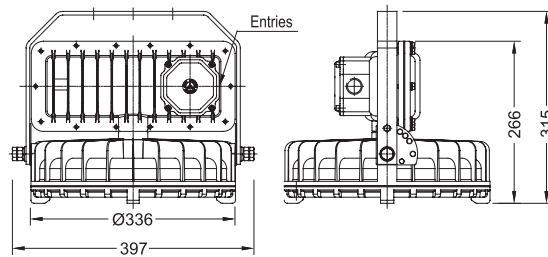


Ordering Requirements

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	
DFDR-100-□□-○	100W.	110-240V.ac	T6	T5	T85°C	T95°C	14.5
DFDR-120-□□-○	120W.	50/60Hz.					
DFDR-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 higher surface temperature.

Dimension



Diagram

LED unit on PCB

