

Lighting: LED High Bay Lighting Fixture, DFDR1 Series

Flameproof/ Increased Safety and Dust protection by enclosure

Zone 1 & 2 – 21 & 22

Application

The DFDR1 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)
- Lens : Heat and high impact resistant clear glass (4J impact)
- Bolts : Stainless steel, SUS 304
- Bracket : Hot-dip galvanized steel
- Sealing gasket : Silicone
- Guard : Stainless steel

LED System

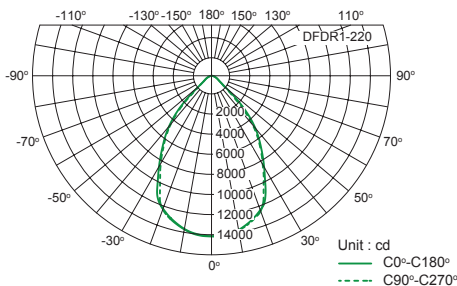
- Luminous efficient : 110 lm/W
- Colour temperature : 5700 K (cool white)
- Color Rendering Index (Ra) : >70
- Chip : CREE
- Beam angle : 65°, 100°

Option (specify)

- Body : Offshore painting (Acrylic polyurethane coating)
- Bolts : Stainless steel, SUS 316
- Bracket : Stainless steel, SUS 316
- Colour temperature : 3000K, 3500K, 4000K, 4500K, 5000K, 6500K or others
- Color Rendering Index (Ra) : >80
- Others beam angle of lens



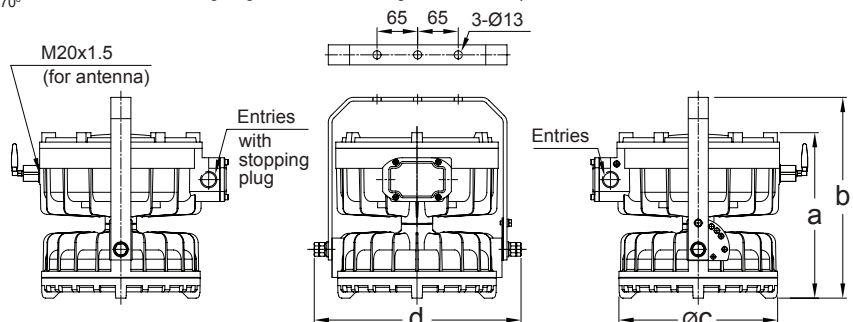
Luminous Intensity Distribution Curve



Complete photometrics, please contact us.

Dimension

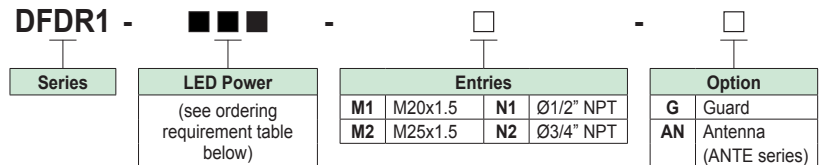
LED Power	Dimension in mm.			
	a	b	øc	d
30W. to 90W.	273	306	254	314
100W.	265	321	254	331
110W. to 240W.	278	329	338	401



Technical Data

Hazardous Area	Gas	Dust
Zones	1 & 2	21 & 22
Equipment Group/Category	Ex db II 2G	Ex tb II 2D
Symbol of Protection	Ex db eb IIC T6..T4 Gb	Ex tb IIIC T85°C..T135°C Db IP66
Certificate	LOM 21 ATEX 1018 X	
Conformity to standards	EN IEC 60079-0:2018, EN 60079-1:2014, EN 60079-7:2015/A1:2018, EN 60079-31:2014	
Ambient Temperature	-20°C to +60°C	
Index of Protection	IP66	
Entries	2x M20x1.5, 2x M25x1.5, 2x Ø1/2" NPT or 2x Ø3/4" NPT with 1-stopping plug	
Mounting	Bracket mounting	
Connection	L, N and E ; 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 60 °C	Ta 40 °C	Ta 60 °C	
DFDR1-30 - □ - □	30W.	110-240V.ac 50/60Hz.	T6	T6	T85°C	T85°C	10.5
DFDR1-40 - □ - □	40W.						
DFDR1-50 - □ - □	50W.						
DFDR1-60 - □ - □	60W.						
DFDR1-70 - □ - □	70W.						
DFDR1-80 - □ - □	80W.		T5	T4	T100°C	T135°C	
DFDR1-90 - □ - □	90W.						
DFDR1-100 - □ - □	100W.						
DFDR1-110 - □ - □	110W.						
DFDR1-120 - □ - □	120W.						
DFDR1-130 - □ - □	130W.	T5	T4	T100°C	T135°C		
DFDR1-140 - □ - □	140W.						
DFDR1-150 - □ - □	150W.						
DFDR1-160 - □ - □	160W.						
DFDR1-170 - □ - □	170W.						
DFDR1-180 - □ - □	180W.	T5	T4	T100°C	T135°C		
DFDR1-190 - □ - □	190W.						
DFDR1-200 - □ - □	200W.						
DFDR1-210 - □ - □	210W.						
DFDR1-220 - □ - □	220W.						
DFDR1-230 - □ - □	230W.						
DFDR1-240 - □ - □	240W.						

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.