

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, SS 304 (optional SS 316)
Bracket	: Hot-dip galvanized steel (optional SS 304 or SS 316)
Sealing (O-ring)	: Silicone

Product Features

Luminous efficacy	: 115-125 lm/W
Colour temperature	: Standard 5,700 K (daylight) (optional 2,700 K; 3,000 K; 3,500 K; 4,000 K; 5,000 K; 6,500 K etc.)
Colour Rendering Index (Ra)	: ≥ 80
Chip	: LUXEON 5050 - LumiLEDs (optional Cree, Bridgelux, Nichia)
Beam angle	: Average 115-120° without lens with lens 40-100 W; 60° 110-150 W; 30°, 60°, 90° (other beam angle, please specify)

Fixture Life

- L70 - Rated lifetime of 60,000 hours at ambient temperatures of 85°C.
- L80 - Rated lifetime of 43,318 hours at ambient temperatures of 85°C.
- L90 - Rated lifetime of 20,534 hours at ambient temperatures of 85°C.



Ceiling mounting



Wall mounting



Technical Data

Hazardous Area	Gas	Dust
Zones	2	21 & 22
Equipment Group/Category	Ex nR IIC 3G	Ex tb IIIC T85°C Db
Symbol of Protection	Ex nR IIC T6 Gc	Ex tb IIIC T85°C Db
Certificate	TÜV CY 16 ATEX 0205812X	
Conformity to Standards	EN IEC 60079-0, EN IEC 60079-15, EN IEC 60079-31, EN 60598-1	
Ambient Temperature	-20°C to +55°C	
Index of Protection	IP66/ IK08	

Entry Threads	Ceiling; 2x M20x1.5, 2x M25x1.5, 2x 1/2" NPT or 2x 3/4" NPT Bracket; 2x M20x1.5, 2x M25x1.5, 2x 1/2" NPT or 2x 3/4" NPT Wall; 4x M20x1.5, 4x M25x1.5, 4x 1/2" NPT or 4x 3/4" NPT Pendant; 1x 1/2" NPT or 1x 3/4" NPT Stanchion; 1-1/4" NPT
Mounting	Ceiling, Wall, Pendant or Stanchion mounting
Connection	L, N and PE ; for 1-4 mm² cable (Through wiring system with an extra terminal block for cable connection at both ends.)
Rated Voltage	110-240 V AC, 50/60 Hz, P.F. ≥ 0.95

Catalogue Number Logic

NFDR - ■ ■ ■ ■ □ - □ □ □							
Series	LED power (see ordering requirement table below)	Mounting type		Entry threads		Accessories	
C	Ceiling	S30	Stanchion, 30 degree Angle	M1	M20x1.5	G Guard	
C1	Steel Bracket	S90	Stanchion, 90 degree Angle	M2	M25x1.5		
P	Pendant			N1	1/2" NPT		
W	Wall			N2	3/4" NPT		

Ordering Requirements

Cat. No.	LED power	Voltage	Temp. Class (for zone 2)		Max. Surface Temp.* (for zone 21 & 22)	
			Ta 40°C	Ta 55°C	Ta 40°C	Ta 55°C
NFDR-40 □ - □ □ □	40 W	110-240 V AC, 50/60 Hz	T6	T6	T85°C	T85°C
NFDR-60 □ - □ □ □	60 W					
NFDR-80 □ - □ □ □	80 W					
NFDR-100 □ - □ □ □	100 W					
NFDR-120 □ - □ □ □	120 W					
NFDR-150 □ - □ □ □	150 W					

Steel bracket mounting (U-shaped)



Pendant mounting



Stanchion mounting ; 30 degree angle



Stanchion mounting ; 90 degree angle



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.

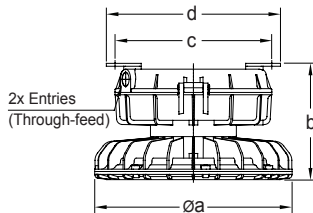
Lighting: LED Lighting Fixture, NFDR Series

Restricted Breathing and Dust protection by enclosure

Zone 2 – 21 & 22

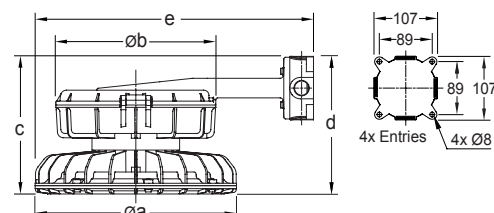
Dimensions

Ceiling mounting



Cat. No.	Dimensions in mm				Approx. weight (kg)
	Øa	b	c	d	
NFDR-40C-□□○ to 80C-□□○	235	221	190	210	7.0
NFDR-100C-□□○ to 150C-□□○	340	201	270	300	8.3

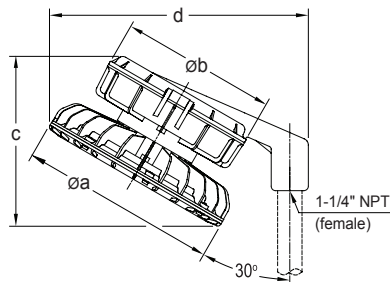
Wall mounting



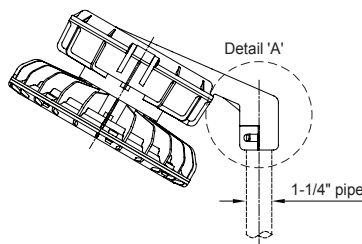
Cat. No.	Dimensions in mm					Approx. weight (kg)
	Øa	Øb	c	d	e	
NFDR-40W-□□○ to 80W-□□○	235	190	217	254	378	7.0
NFDR-100W-□□○ to 150W-□□○	340	270	195	232	470	8.3

Stanchion Mounting ; 30 degree angle

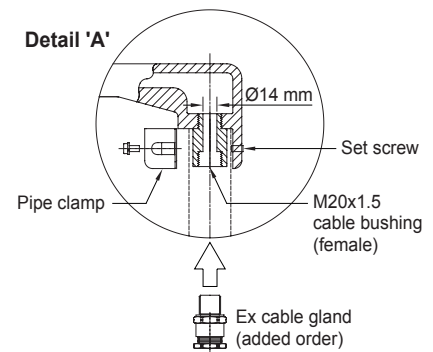
Conduit type (standard)



Cable type (pipe clamp)



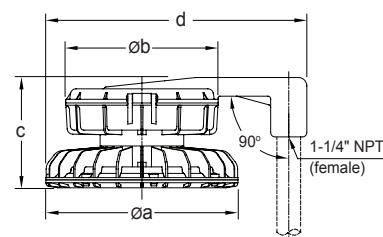
Detail 'A'



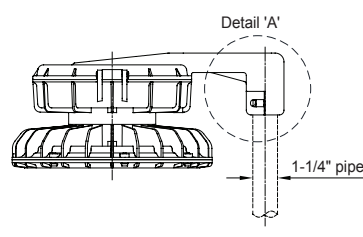
Cat. No.		Dimensions in mm				Approx. weight (kg)
Conduit type	Cable type	Øa	Øb	c	d	
NFDR-40S30-○ to 80S30-○	NFDR-40S301-○ to 80S301-○	235	190	265	377	7.0
NFDR-100S30-○ to 150S30-○	NFDR-100S301-○ to 150S301-○	340	270	292	446	8.3

Stanchion mounting ; 90 degree angle

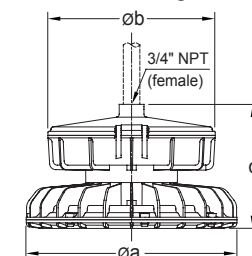
Conduit type (standard)



Cable type (Pipe clamp)



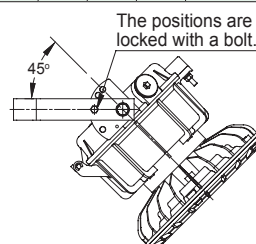
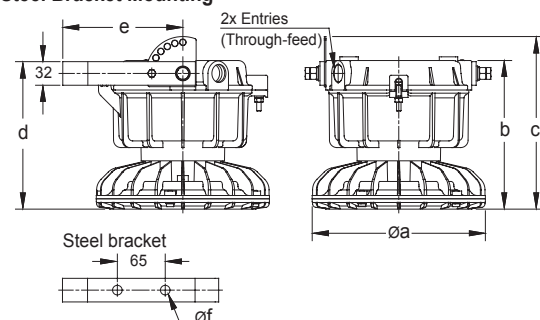
Pendant mounting



Cat. No.	Dimensions in mm.			Approx. weight (kg)
	Øa	Øb	c	
NFDR-40P-N2 ○ to 80P-N2 ○	235	190	222	7.0
NFDR-100P-N2 ○ to 150P-N2 ○	340	270	200	8.3

Cat. No.		Dimensions in mm				Approx. weight (kg)
Conduit type	Cable type	Øa	Øb	c	d	
NFDR-40S90-○ to 80S90-○	NFDR-40S901-○ to 80S901-○	235	190	217	367	7.0
NFDR-100S90-○ to 150S90-○	NFDR-100S901-○ to 150S901-○	340	270	195	462	8.3

Steel Bracket Mounting



Cat. No.	Dimensions in mm					
	Øa	b	c	d	e	Øf
NFDR-40C1-□□○ to 80C1-□□○	235	202	234	200	163	2x Ø13
NFDR-100C1-□□○ to 150C1-□□○	340	195	223	189	193	3x Ø13