

Lighting: LED Floodlight, NFDD Series

Restricted Breathing and Dust protection by enclosure

Zone 2 – 21 & 22



Application

The NFDD marine-grade aluminum alloy floodlight, with high-performance photometrics, is designed to withstand highly corrosive environments and Zone 2 hazardous areas.

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	: Stainless steel, SS 304
Sealing (O-ring)	: Silicone

Product Features

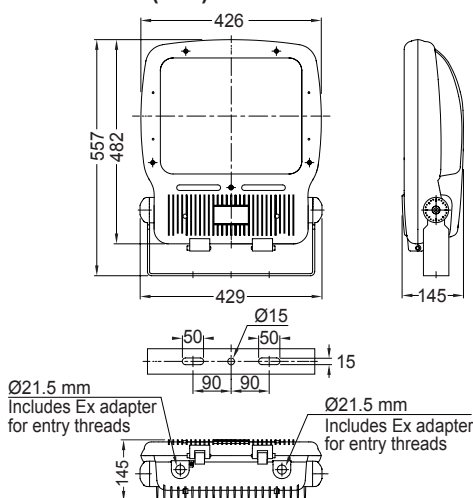
Luminous efficacy	: 149 lm/W
Colour temperature	: Standard 5,700 K (daylight) (optional 2,700 K; 3,000 K; 3,500 K; 4,000 K; 5,000 K; 6,500 K etc.)
Colour Rendering Index (Ra)	: ≥ 80
Chip	: LUXEON 5050 - LumiLEDs (optional Cree, Bridgelux, Nichia)
Beam angle	: Average 115-120° without lens 30°, 60°, 90° with lens (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.



Dimensions (mm)



Technical Data

Hazardous Area	Gas	Dust
Zones	2	21 & 22
Equipment Group/Category	Ex nR IIC T6..T4 Gc	Ex tb IIIC T85°C..T130°C Db
Symbol of Protection		
Certificate	KDB 23 ATEX 0034X IECEx KDB 23.0010X	
Conformity to Standards	EN IEC 60079-0, EN IEC 60079-15, EN IEC 60079-31 IEC 60079-0, IEC 60079-15, EN 60079-31	
Ambient Temperature	-40°C to +60°C	
Index of Protection	IP66/ IK10	
Entry Threads	2x M20x1.5, 2x M25x1.5 (1-stopping plug) or 2x 1/2" NPT, 2x 3/4" NPT (1-stopping plug)	
Mounting	Bracket mounting	
Connection	L, N and PE ; for 1-4 mm ² 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

NFDD -	Series	LED power (see ordering requirement table below)	Entry threads	Accessories
			M1 M20x1.5 N1 1/2" NPT M2 M25x1.5 N2 3/4" NPT	G Guard

Ordering Requirements

Cat. No.	LED power	Voltage	Temp. Class (for zone 2)		Max. Surface Temp.* (for zone 21 & 22)		Approx. weight (kg)
			Ta 40°C	Ta 60°C	Ta 40°C	Ta 60°C	
NFDD-100 - □ □ - □	100 W	110-240 V AC, 50/60 Hz	T6	T6	T85°C	T85°C	15.0
NFDD-110 - □ □ - □	110 W						
NFDD-120 - □ □ - □	120 W						
NFDD-130 - □ □ - □	130 W						
NFDD-140 - □ □ - □	140 W						
NFDD-150 - □ □ - □	150 W						
NFDD-160 - □ □ - □	160 W						
NFDD-170 - □ □ - □	170 W						
NFDD-180 - □ □ - □	180 W						
NFDD-190 - □ □ - □	190 W						
NFDD-200 - □ □ - □	200 W	110-240 V AC, 50/60 Hz	T5	T4	T95°C	T130°C	16.0
NFDD-210 - □ □ - □	210 W						
NFDD-220 - □ □ - □	220 W						
NFDD-230 - □ □ - □	230 W						
NFDD-240 - □ □ - □	240 W						
NFDD-250 - □ □ - □	250 W						
NFDD-260 - □ □ - □	260 W						
NFDD-270 - □ □ - □	270 W						
NFDD-280 - □ □ - □	280 W						
NFDD-290 - □ □ - □	290 W						
NFDD-300 - □ □ - □	300 W						
NFDD-310 - □ □ - □	310 W						
NFDD-320 - □ □ - □	320 W						
NFDD-330 - □ □ - □	330 W						
NFDD-340 - □ □ - □	340 W						

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.