



EX-FLD SERIES

EXPLOSION-PROOF LIGHT

Class I Division 2, Zone 1 & 2

INTRODUCTION

The FGE-EX-FLD12 / 14 / 22 / 24 Series Explosion-Proof Lighting is a high-power LED floodlight designed for wide-area illumination in hazardous environments. With robust aluminum construction and precision optical design, it provides powerful and uniform lighting across large industrial zones.

Certified for Class I Division 2, Zone 1 & 2, this series achieves up to 140 lm/W, offering excellent performance with minimal maintenance.

Ideal for offshore rigs, warehouses, and petrochemical plants, it supports ceiling, pendant and recessed for versatile installation.



FLD12



FLD22



FLD14



FLD24

COMPLIANCE

UL 844 Hazardous Locations
Class I Division 2, Groups A, B, C, D
Class I, Zone 2, Group IIA, IIB, IIC
UL 1598 Wet Locations
UL 924 Emergency Lighting

IECEX Certificate number: IECEX CSAE 21.0013X
Ex db ec IIC T6/T5/T4 Gc
Ex tc IIIC T80°C/T95°C/T100°C Dc

ATEX Certificate number: CSANe 23ATEX1213X
II 3GD
Ex db ec IIC T6/T5/T4 Gc
Ex tc IIIC T80°C/T95°C/T100°C Dc



LM-79

LM-80

TM-21

ISTMT

IEC

FEATURES



140lm/W

High Efficacy & Energy Saving: Up to 140 lm/W, reducing energy consumption by over 60% compared with HID fixtures.



0-10V
DIMMABLE

Smart Control Ready: Compatible with 0-10V/DALI dimming, optional microwave/infrared sensor, and emergency kit.



EMERGENCY
BACKUP

90 Minutes EM Back-up Options:
Ensuring safety and visibility during critical moments.



RELIABLE
WARRANTY

Reliable Warranty:
5 Years Warranty.

- Robust Protection:

IP66 waterproof & dustproof, IK10 impact resistance for harsh industrial environments.

- Superior Thermal Management:

Stainless steel housing, great corrosion resistance and cooling performance.

- Versatile Mounting Options:

Ceiling, pendant, and recessed for flexible installation.

- Wide Input Voltage:

AC100-277V / AC120-277V / AC20-480V, suitable for global power grids.

APPLICATIONS



Paper Mills: Providing safe and stable illumination in dust-rich environments to reduce ignition risks and support continuous operation.



Loading Dock Platforms: Delivering durable explosion-proof lighting to withstand vibration and fuel vapors for safer loading and unloading operations.



Chemical Processing Facilities: Ensuring reliable lighting in areas with volatile chemicals to maintain safety and compliance under hazardous conditions.



Coal Mine: Offering explosion-proof illumination for methane- and dust-prone mining zones to protect workers during underground operations.



Power Plants: Providing robust lighting around high-risk equipment to support safe inspection and maintenance in demanding conditions.



Heavy Industrial Facilities: Delivering long-lasting explosion-proof lighting for harsh industrial sites exposed to dust, oil mist, and mechanical impact.

TECHNICAL PARAMETERS

CEILING, PENDANT MOUNTING

Product Model	FLD12	FLD14	FLD22	FLD24
Electrical Performance				
Wattage	15/20/25/30/35/40/50W	15/20/25/30/35/40/50/60/70/80/90/100W	15/20/25/30/35/40/50/60/70/80/90/100W	15/20/25/30/35/40/50/60/70/80/90/100/120/150/180/200W
Input Voltage	AC120-277V/AC200-480V (Class I, Division 2); AC100-277V (Zone 2/22)			
Frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz
Power Factor (PF)	>0.9	>0.9	>0.9	>0.9
Surge Protection	10KV	10KV	10KV	10KV
THD	<20%	<20%	<20%	<20%
Optical Performance				
Luminous Efficacy	140lm/W	140lm/W	140lm/W	140lm/W
Luminous Flux	2,100-7,000lm	2,100-14,000lm	2,100-14,000lm	2,100-28,000lm
CCT	2700K/3000K/4000K/5000K/5700K/6500K			
CRI	Ra>70	Ra>70	Ra>70	Ra>70
Beam Angle	120°	120°	120°	120°
Unified Glare Rating (UGR)	20	20	20	20
Reliability				
Lifetime	>100,000h	>100,000h	>100,000h	>100,000h
Operating Temperature	-40 ~ +60°C	-40 ~ +60°C	-40 ~ +60°C	-40 ~ +60°C
Storage Temperature	-40 ~ +70°C	-40 ~ +70°C	-40 ~ +70°C	-40 ~ +70°C
Ingress Protection	IP66	IP66	IP66	IP66
Impact Resistance	IK10	IK10	IK10	IK10
Control				
Dimming	0-10V Dimming	0-10V Dimming	0-10V Dimming	0-10V Dimming
Sensor	-	-	-	-
Communication Protocol	-	-	-	-
Emergency Kit	-	-	-	-
Mechanical				
Housing Material	AL6063 (standard); SUS304/SUS316/SPCC (optional)			
Lens Material	PC/Glass (Notice: Glass diffuser comes with wire guard part for safety)			
Coating	White	White	White	White
Net Weight	8kg	19kg	20kg	29kg
Dimensions	605x275x120mm	275x1215x120mm	605x605x120mm	605x1215x120mm
Warranty	5 Years	5 Years	5 Years	5 Years

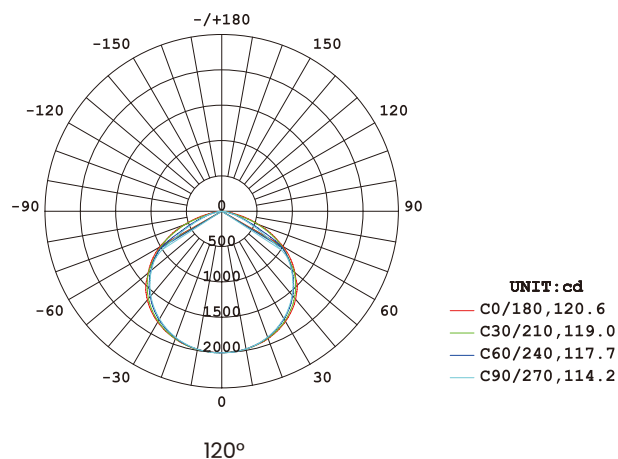
RECESSED INSTALLATION

Product Model	FLD12	FLD14	FLD22	FLD24
Electrical Performance				
Wattage	15/20/25W	15/20/25/30/35/40/50/60W	15/20/25/30/35/40/50/60W	15/20/25/30/35/40/50/60/70/80/90/100/110/120W
Input Voltage	AC120~277V/AC200~480V (Class I, Division 2); AC100~277V (Zone 2/22)			
Frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz
Power Factor (PF)	>0.9	>0.9	>0.9	>0.9
Surge Protection	10KV	10KV	10KV	10KV
THD	<20%	<20%	<20%	<20%
Optical Performance				
Luminous Efficacy	140lm/W	140lm/W	140lm/W	140lm/W
Luminous Flux	2,100~3,500lm	2,100~8,400lm	2,100~8,400lm	2,100~16,800lm
CCT	2700K/3000K/4000K/5000K/5700K/6500K			
CRI	Ra>70	Ra>70	Ra>70	Ra>70
Beam Angle	120°	120°	120°	120°
Unified Glare Rating (UGR)	20	20	20	20
Reliability				
Lifetime	>100,000h	>100,000h	>100,000h	>100,000h
Operating Temperature	-40 ~ +60°C	-40 ~ +60°C	-40 ~ +60°C	-40 ~ +60°C
Storage Temperature	-40 ~ +70°C	-40 ~ +70°C	-40 ~ +70°C	-40 ~ +70°C
Ingress Protection	IP66	IP66	IP66	IP66
Impact Resistance	IK10	IK10	IK10	IK10
Control				
Dimming	0-10V dimming optional	0-10V dimming optional	0-10V dimming optional	0-10V dimming optional
Sensor	-	-	-	-
Communication Protocol	-	-	-	-
Emergency Kit	-	-	-	-
Mechanical				
Housing Material	AL6063 (standard); SUS304/SUS316/SPCC (optional)			
Lens Material	PC/Glass (Notice: Glass diffuser comes with wire guard part for safety)			
Coating	White	White	White	White
Net Weight	7kg	16kg	16kg	22kg
Dimensions	605x275x120mm	275x1215x120mm	605x605x120mm	605x1215x120mm
Warranty	5 Years	5 Years	5 Years	5 Years

AMBIENT TEMPERATURE

Type	T Code	Ambient Temperature
Class I, Division 2	T4/T100°C	-40°C to +60°C
Normal for Zone 2	T6/T80°C	-40°C to +45°C
	T5/T95°C	-40°C to +55°C
	T4/T100°C	-40°C to +60°C
	T6/T80°C	-10°C to +45°C
Emergency for Zone 2	T5/T95°C	-10°C to +55°C
	T4/T100°C	-10°C to +60°C

PHOTOMETRICS

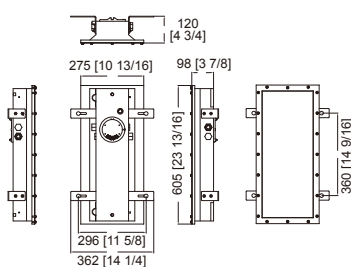


MECHANICAL DIMENSIONS

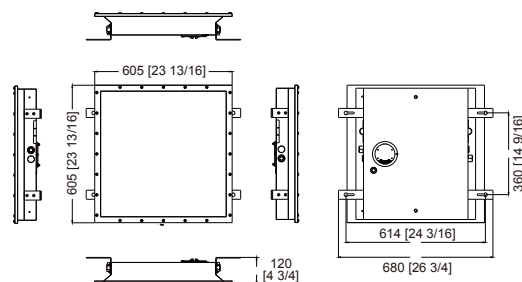
Product Model	FLD12	FLD14	FLD22	FLD24
Wattage	15/20/25/30/35/40/50W	15/20/25/30/35/40/50/ 60/70/80/90/100W	15/20/25/30/35/40/50/ 60/70/80/90/100W	15/20/25/30/35/40/50/60/70/ 80/90/100/120/150/180/200W
Outer box (L*W*H)	700x350x175mm(27.6"x13.8"x6.9")	1320x350x175mm(52"x13.8"x6.9")	700x680x175mm(27.6"x26.8"x6.9")	1320x680x175mm(52"x26.8"x6.9")
Q'ty/Ctn	1pc	1pc	1pc	1pc
N.W./Ctn	8kg/17.6lbs	19kg/41.8lbs	20kg/44lbs	29kg/63.8lbs
G.W./Ctn	9kg/19.8lbs	20kg/44lbs	21kg/46.3lbs	30kg/66.1lbs
Remarks	0.7M cable	0.7M cable	0.7M cable	0.7M cable

CEILING, PENDANT MOUNTING

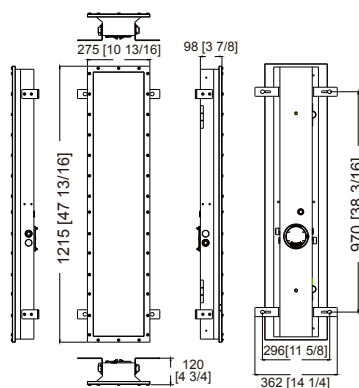
EX-xxxW FLD12*YZD



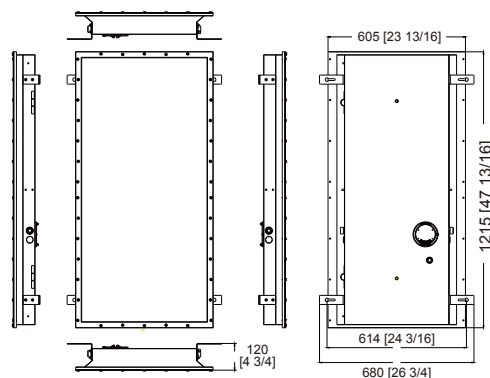
EX-xxxW FLD22*YZD



EX-xxxW FLD14*YZD

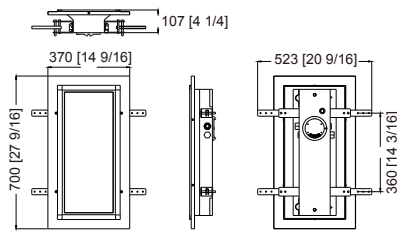


EX-xxxW FLD24*YZD

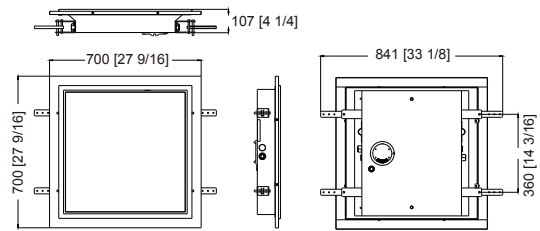


RECESSED INSTALLATION (OUTER FRAME INCLUDED)

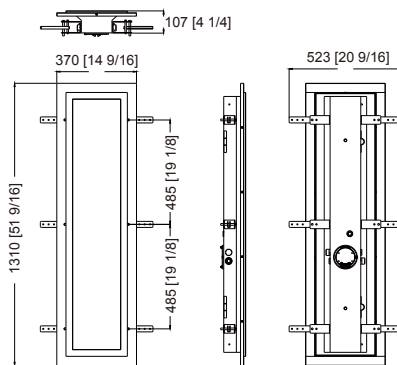
EX-xxxW FLD12*YZD



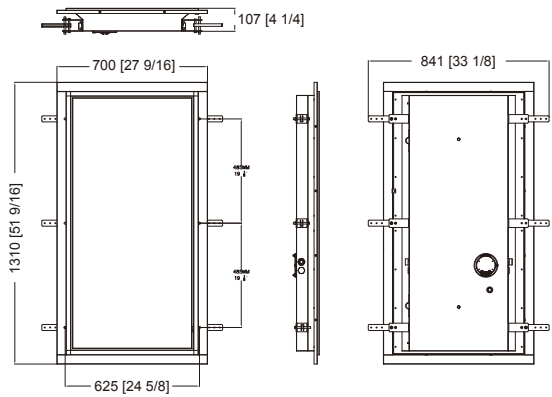
EX-xxxW FLD22*YZD



EX-xxxW FLD14*YZD

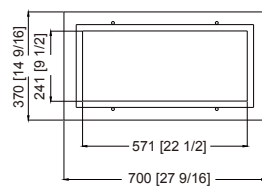


EX-xxxW FLD24*YZD

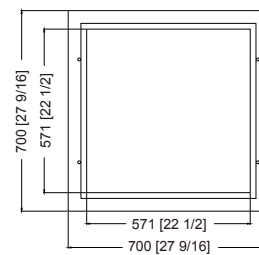


RECESSED INSTALLATION (OUTER FRAME ONLY)

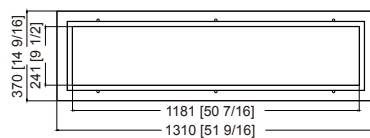
Outer Frame of FLD12



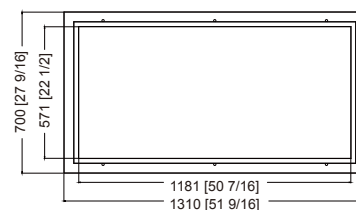
Outer Frame of FLD22



Outer Frame of FLD14



Outer Frame of FLD24

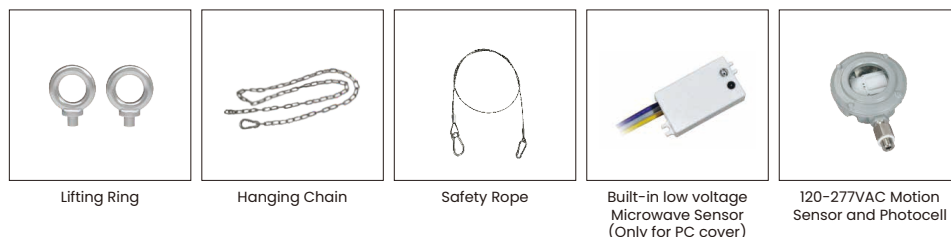


MOUNTING METHODS AND ACCESSORIES

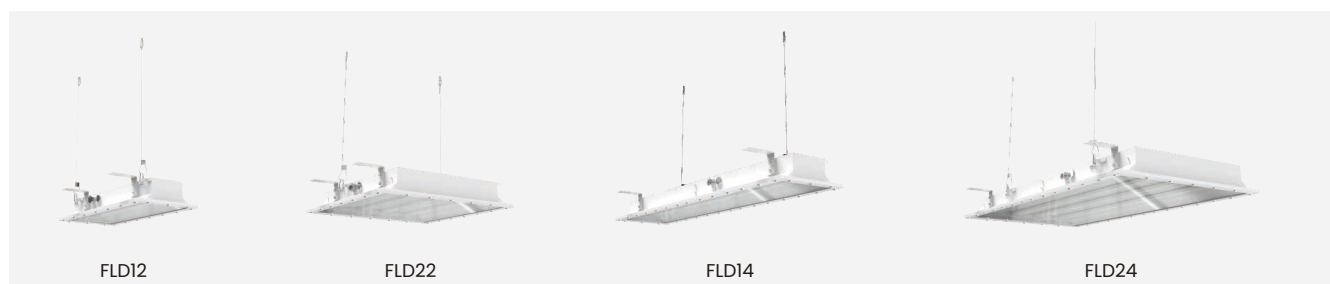
OPTION 1: PENDANT MOUNT



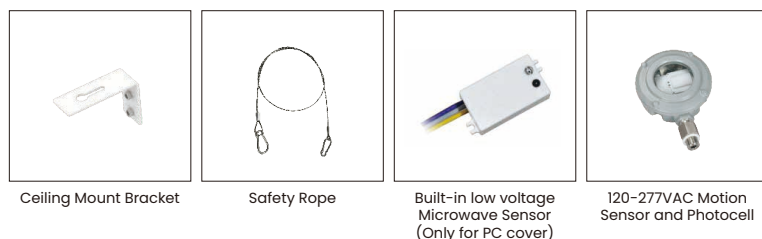
Accessories (Included in The Packaging)



OPTION 2: CEILING MOUNT



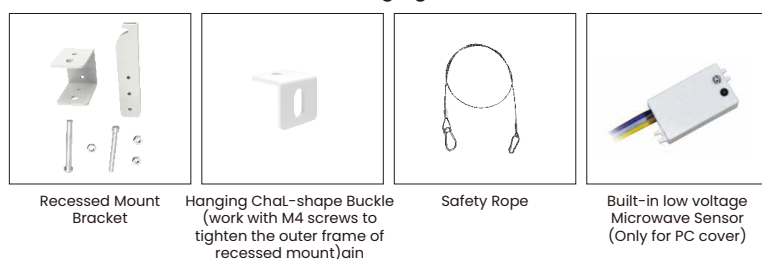
Accessories (Included in The Packaging)



OPTION 3: RECESSED INSTALLATION



Accessories (Included in The Packaging)



ORDER INFORMATION

CLASS I, DIVISION 2

EX-YY-YY-YY-Y

1 2 3 4 5 6 7 8

ZONE 2/22

EX-YY-YY-YY-YY-Y

1 2 3 4 5 6 7 8 9 10

1 EX = Explosion Proof Light

2 Wattage

15	15W
20	20W
25	25W
30	30W
35	35W
40	40W
50	50W
60	60W
70	70W
80	80W
90	90W
100	100W
110	110W
120	120W
150	150W
180	180W
200	200W

3 Shell Shape Series

FLD12	FLD12
FLD14	FLD14
FLD22	FLD22
FLD24	FLD24

4 Color Temperature

27	2700K
30	3000K
40	4000K
50	5000K
57	5700K
65	6500K

5 Dimmable

D	0-10V Dimming
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6 Overall Dimension of Housing

12	1 ft x 2 ft
22	2 ft x 2 ft
14	1 ft x 4 ft
24	2 ft x 4 ft

7 Optics

120	120°
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8 EM Back-up

(Blank)	Without EM Back-up
EM	With EM Back-up

9 Application Area

(Blank)	Zone 1
2	Zone 2

10 Options

(Blank)	0.7M cord
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WARRANTY PERIOD
**5 YEARS
WARRANTY**



WARRANTY COVERAGE
**LED LIGHT SOURCE,
DRIVER**



AFTER-SALES
SERVICE COMMITMENT
24H RESPONSE



AFTER-SALES
SERVICE COMMITMENT
72H RESOLUTION/REPLACEMENT