

FPXL - Fidelux Explosion Proof LED Fixture Series

Product Description

Hazardous Location Explosion Proof LED Fixtures are engineered to meet your most demanding lighting needs in hazardous locations. Constructed from high pressure die-cast aluminum alloy and tempered glass, these unique HAZLOC C1D2 (Class 1 Division 2) explosion proof rated fixtures will deliver years of optimum illumination in the harshest of conditions.

Features & Benefits

- Class 1 Division 2 Rating, Group A, B, C, D, E
- Near Zero maintenance
- Lights turn on instantly without any warm-up time
- Compatible with controls and sensors for add energy savings
- Finish: Yellow
- Lens Finish Options: Clear, Frosted
- Lens Shape Options: Flat, Round
- Optional: Wire Mesh Safety Guard

Applications

Class I Location is created by the presence of flammable gases or vapors in the air in sufficient quantities to be explosive or ignitable. When these materials are found in the atmosphere, a potential for explosion exists if an electrical or other source of ignition is present.

- Petroleum refineries, and gasoline storage and dispensing areas;
- Dry cleaning plants where vapors from cleaning fluids can be present
- Aircraft hangars and fuel servicing areas
- Utility gas plants, and operations involving storage and handling of liquefied petroleum gas or natural gas.

Class II Location is created by the presence of combustible dust in the air in sufficient quantities to be explosive

- Grain elevators;
- Flour and feed mills;
- Plants that manufacture, use or store magnesium or aluminum powders;
- Producers of plastics, medicines and fireworks;
- Producers of starch or candies

Approval Listings

- UL, HAZLOC, C1D2, Class A,B,C,D,E
- Most of our products are DLC listed, qualifying them for the highest rebates. Please check individual product specs for DLC status. Refer to DLC website by clicking this link: <https://www.designlights.org>

PRELIMINARY



Performance Summary

Efficacy up to: 115 l/pw

CRI up to: 73.6 cri

CCT: 30/40/50/57K*

Dimming: Non Dim

HazLoc Rating: C1D2, Groups A, B, C, D, E

Operating Temp: -40° - +55°C Ambient

Input Voltage: 120-277vac

Operating Frequency: 50 / 60Hz

Power Factor up to: >0.99

Dimensions: 7.87" x 5.24" / 11.81" x 6.1" / 15.75" x 6.3"



FPXL Series Specification Summary

| Data Source | | | |
|----------------------------|---|--------------------------------|--------------------------------|
| Product Number | FPXL-40W | FPXL-100W | FPXL-200W |
| Efficacy l/pw: Nominal | 112 l/pw | 117 l/pw | 115 l/pw |
| Input Power Watts: Nominal | 28.06 | 100.25 | 185.2 |
| Lumens @ 3000K | 3100 | 11,700 | 21,300 |
| Lumens @ 4000K | 3100 | 11,700 | 21,300 |
| Lumens @ 5000K | 3132 | 11,701 | 21,313 |
| Lumens @ 5700K | 3132 | 11,701 | 21,313 |
| Qualifications | UL, DLC pending, 57K (No DLC) | UL, DLC pending, 57K (No DLC) | UL, DLC pending, 57K (No DLC) |
| Certifications | HAZLOC Rating, C1D2 (Group A, B, C, D, E) | | |
| THD @ 120VAC | <24.5% | <15.1% | <15% |
| CCT/Kelvin Temp Options | 3000K / 4000K / 5000K / 5700K* | 3000K / 4000K / 5000K / 5700K* | 3000K / 4000K / 5000K / 5700K* |
| Dimming | Non Dim | Non Dim | Non Dim |
| Input Voltage Options | 120-277vac | 120-277vac | 120-277vac |
| CRI | 71 cri | 73.6 cri | 72.6 cri |
| Power Factor | >0.99 | >0.94 | >0.94 |
| TM21 Lifetime Hours | L70 @ 60,000 | L70 @ 60,000 | L70 @ 60,000 |
| Operational Temperatures | -40°C to +55°C | -40°C to +55°C | -40°C to +55°C |
| Max Dimensions (in) | 7.87" x 7.87" x 5.24" | 11.81" x 11.81" x 6.1" | 15.75" x 15.75" x 6.3" |
| Total Weight | 8.8 lbs | 17.6 lbs | 25.3 lbs |
| Limited Warranty | 5 years | 5 years | 5 years |

Notes

Values are nominal unless noted +/- 5%
Specifications change without notice

FPXL Series Product Ordering Guide

Example: FPXL-40-Y-30K-F-F-JB-WG

| Product | Finish | CCT/Color Temp | Lens Finish | Lens Type | Controls & Dimming | Voltage | Mounting Options | Accessories |
|----------|-------------------|------------------------------------|-------------|-----------|---------------------|----------------------|----------------------------------|---|
| FPXL-40 | Y (Yellow) | 30K (3000K) | C (Clear) | F (Flat) | Blank (Non Dim) STD | Blank (100-277V) STD | YM (Yoke Mount) STD | WG## (Wire Guard) available for 30, 100 185W fixtures |
| FPXL-100 | C (Custom Color)* | 40K (3500K) | F (Frosted) | R (Round) | | | JB (3 way 3/4" NPT Junction Box) | |
| FPXL-200 | | 50K (4000K) 57K (5000K)* No DLC | | | | | | |

*Special Order = Longer Lead Time

Factory Installed Options

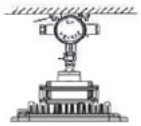
| | |
|------------|---|
| WG | Wire Guard Mesh (Size will be provided per wattage of fixture. Example: WG30, WG100, WG185) |
| C - (RAL#) | Custom Paint Colors (Need Paint #) <i>Cost based on paint selection</i> |

Factory Installed Mounting Options

| | |
|----|--|
| JB | 3 way 3/4" NPT Junction Box <i>(Specify on Ordering Bar)</i> |
| YM | Yoke/ U Mounting Bracket <i>(Comes Standard but still need to specify on ordering bar)</i> |

Junction Box Mount

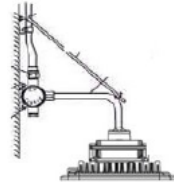
A. Ceiling Mount



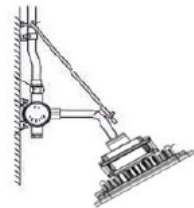
B. Drop Mounting



C. Wall Mount

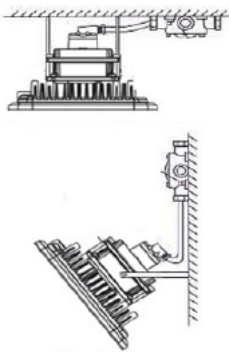


D. Wall Mount

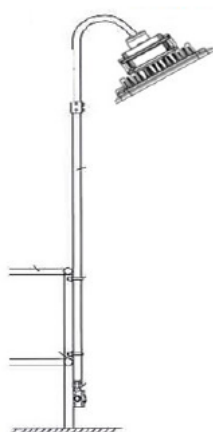


Yoke/U Mounting Options

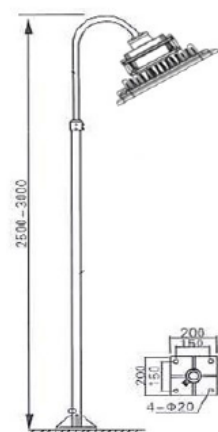
E. Yoke/U Mounting Options



F. Pole Mount

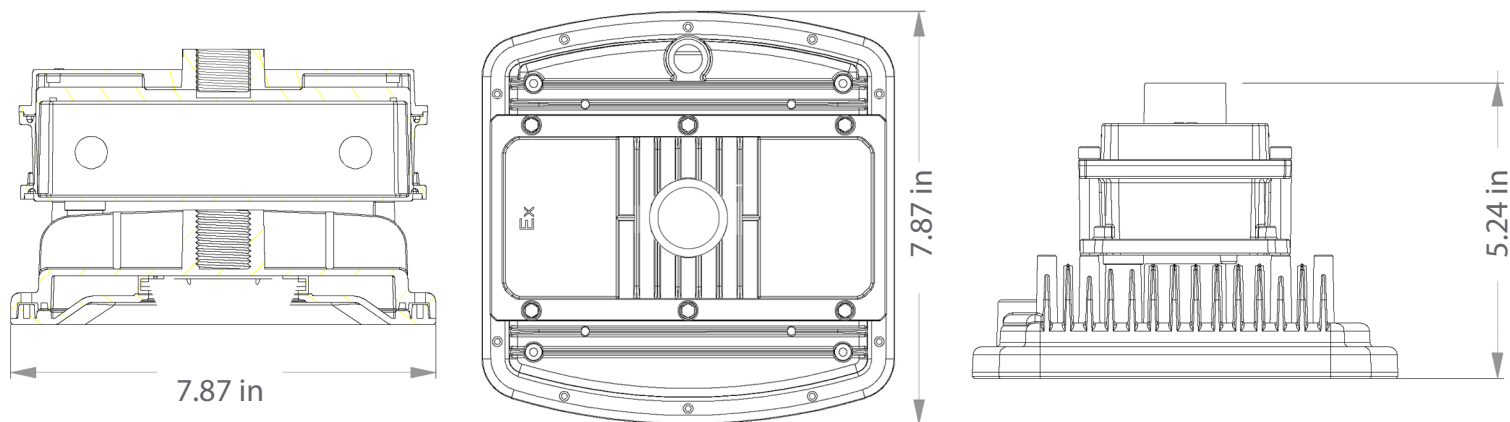


G. Pole Mount

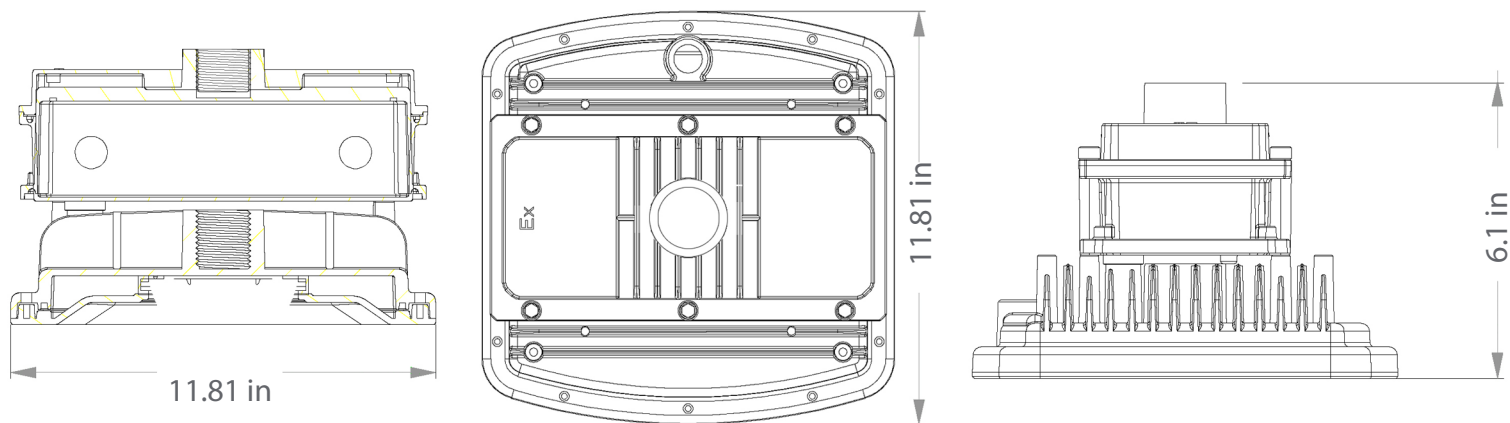


Dimensions

FPXL-40W

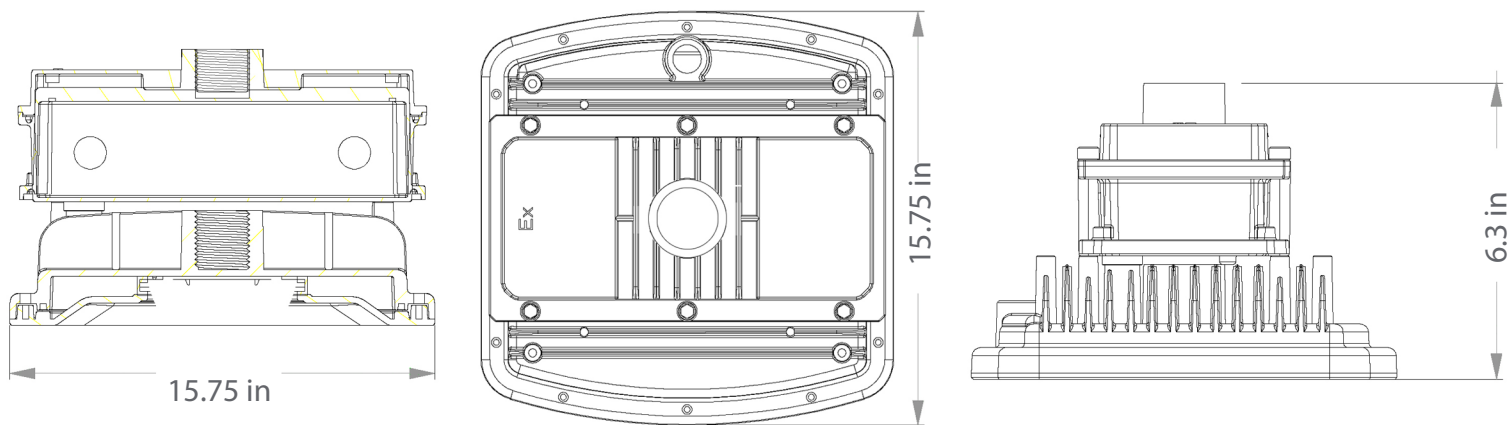


FPXL-100W



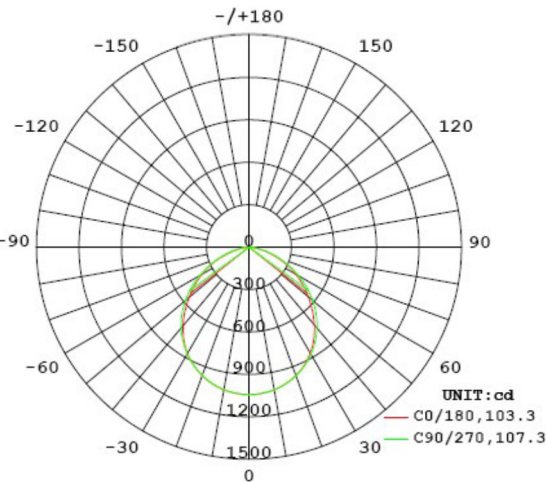
Dimensions

FPXL-200W

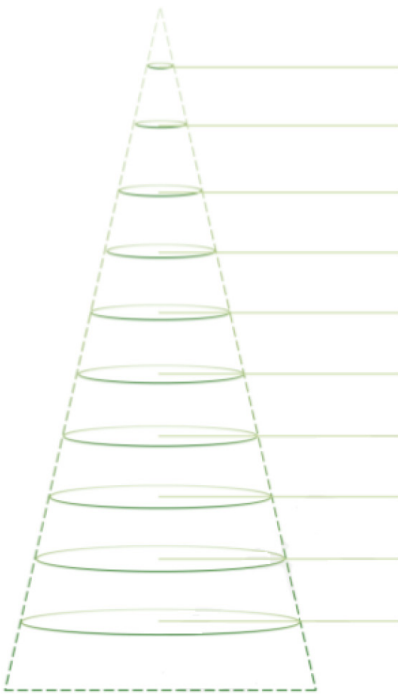


FPXL Series Photometric Data

FPXL-40W



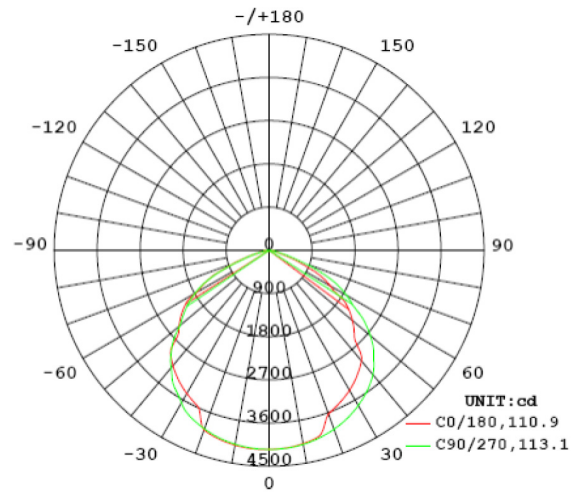
| Luminous Intensity Distribution | | |
|---------------------------------|---------------------------------------|--|
| | Beam Angle (50% I _{max}) | Field Angle (10% I _{max}) |
| C0/180 | 103.3 | 152.9 |
| C45/225 | 106.6 | 153.8 |
| C90/270 | 107.3 | 155.8 |
| C135/315 | 106.5 | 153.5 |
| AVG | 105.9 | 154.0 |



Angle: 105.9° Flux out: 1958.0 lm

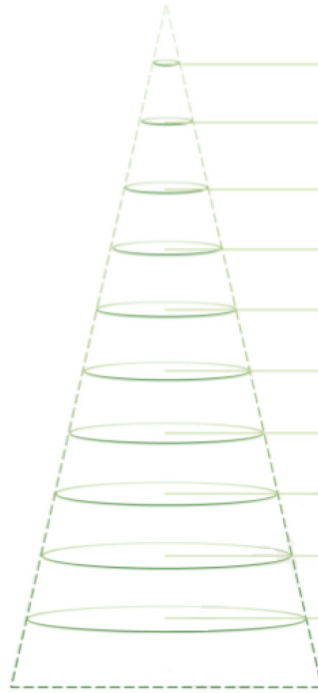
| Height (ft) | Diameter (inch) | Eavg (lx) | E _{max} (lx) |
|-------------|-----------------|-----------|-----------------------|
| 1.64 | 51.97 | 1416.0 | 4173.0 |
| 3.28 | 103.94 | 353.9 | 1043.0 |
| 4.92 | 156.30 | 157.3 | 463.6 |
| 6.56 | 208.27 | 88.5 | 260.8 |
| 8.20 | 260.63 | 56.6 | 166.9 |
| 9.84 | 312.60 | 39.3 | 115.9 |
| 11.48 | 364.96 | 28.9 | 85.2 |
| 13.12 | 416.93 | 22.1 | 65.2 |
| 14.76 | 469.30 | 17.5 | 51.5 |
| 16.4 | 521.26 | 14.2 | 41.7 |

FPXL Series Photometric Data



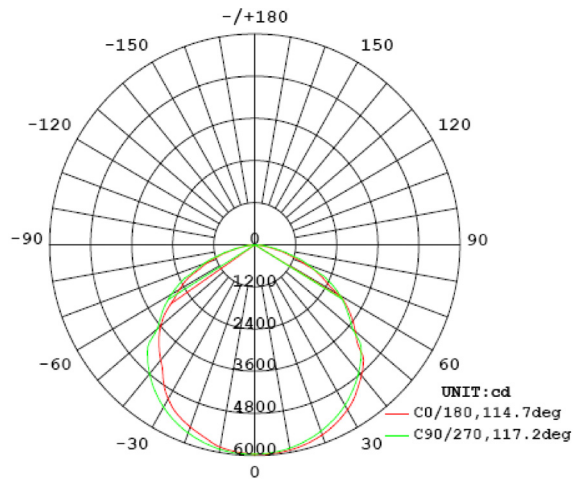
| Luminous Intensity Distribution | | |
|---------------------------------|---------------------------------------|--|
| | Beam Angle (50% I _{max}) | Field Angle (10% I _{max}) |
| C0/180 | 110.9 | 145.0 |
| C45/225 | 112.6 | 147.7 |
| C90/270 | 113.1 | 146.9 |
| C135/315 | 112.4 | 147.8 |
| AVG | 112.3 | 146.9 |

FPXL-100W



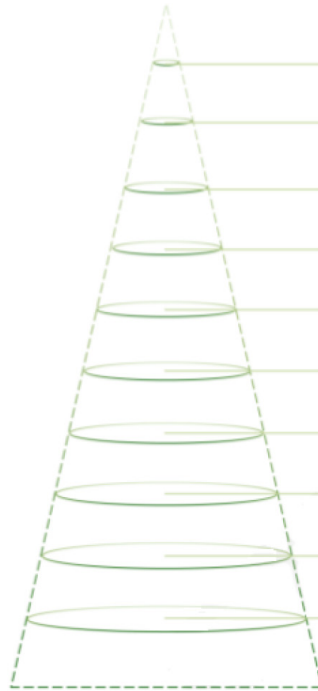
Angle: 112.3° Flux out: 8968.0 lm

| Height (ft) | Diameter (inch) | Eavg (lx) | E _{max} (lx) |
|-------------|-----------------|-----------|-----------------------|
| 1.64 | 58.66 | 4816.0 | 16609.0 |
| 3.28 | 117.32 | 1204.0 | 4152.0 |
| 4.92 | 175.98 | 535.1 | 1845.0 |
| 6.56 | 234.65 | 301.0 | 1038.0 |
| 8.20 | 293.31 | 192.6 | 664.4 |
| 9.84 | 351.97 | 133.8 | 461.4 |
| 11.48 | 410.63 | 98.3 | 339.0 |
| 13.12 | 469.29 | 75.3 | 259.5 |
| 14.76 | 527.95 | 59.5 | 205.1 |
| 16.4 | 586.61 | 48.2 | 166.1 |



| Luminous Intensity Distribution | | |
|---------------------------------|---------------------------------------|--|
| | Beam Angle (50% I _{max}) | Field Angle (10% I _{max}) |
| C0/180 | 114.7 | 155.9 |
| C45/225 | 115.8 | 156.4 |
| C90/270 | 117.2 | 158.1 |
| C135/315 | 116.1 | 156.3 |
| AVG | 115.95 | 156.68 |

FPXL-200W



Angle: 116.0° Flux out: 13574.0 lm

| Height (ft) | Diameter (inch) | Eavg (lx) | E _{max} (lx) |
|-------------|-----------------|-----------|-----------------------|
| 1.64 | 62.99 | 6748.0 | 23864.0 |
| 3.28 | 125.98 | 1687.0 | 5966.0 |
| 4.92 | 188.98 | 749.8 | 2652.0 |
| 6.56 | 251.97 | 421.8 | 1491.0 |
| 8.20 | 314.96 | 269.9 | 954.5 |
| 9.84 | 377.95 | 187.5 | 662.9 |
| 11.48 | 440.94 | 137.7 | 487.0 |
| 13.12 | 503.94 | 105.4 | 372.9 |
| 14.76 | 566.93 | 83.3 | 294.6 |
| 16.4 | 629.93 | 67.5 | 238.6 |

FPXL Series Installation Instructions

For all FPXL Series Mounting

WARNING:

To avoid the risk of fire, or electric shock this product should be installed, inspected, and maintained by a qualified electrician only. Installation should be completed by an individual familiar with the construction and operation of the luminaire. Installation of luminaire must be in accordance with national and local building and electrical codes.

Safety Warning: To avoid electric shock: Be certain electrical power is OFF before and during installation and maintenance. Luminaire must be supplied by a wiring system with an equipment grounding conductor.

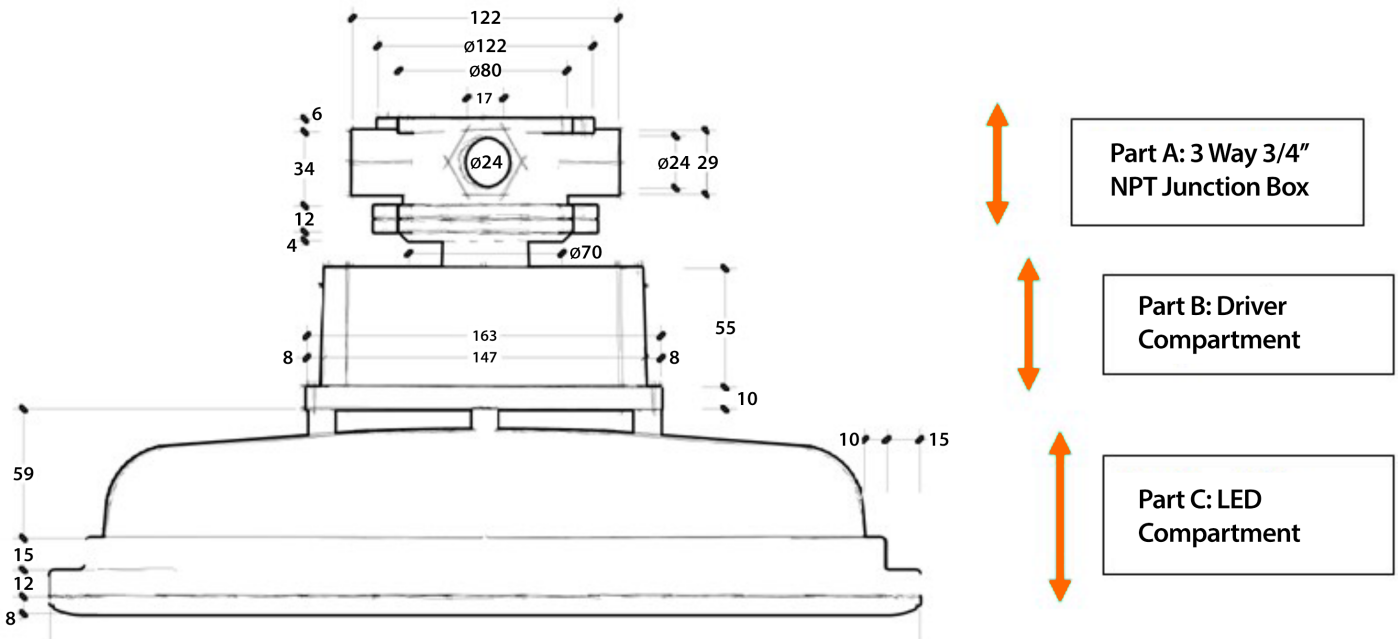
To avoid burning hands: Make sure lens and housing are cool when performing maintenance.

To avoid product degradation: Make sure the wire supply voltage is the same as the luminaire supply. Use proper supply wiring as specified on the luminaire nameplate. Avoid use in environments containing sulfur, chlorine or other halides, methyl acetate or ethyl acetate, cyanoacrylates, glycol ether, formaldehyde or butadiene.

Notes: Instructions do not cover all details and all possible product configurations. Do not restrict luminaire ventilation. Ensure LED luminaire is not covered with material that will prevent convection or conduction cooling. Ensure LED luminaire has the correct polarity before installation. Avoid exposing wiring to metal edges and sharp objects.

Maintenance: Perform visual, electrical and mechanical inspections on a regular basis. The environment and frequency of use should determine this. However it is recommended that checks be made at least once a year. Electrically check to make sure that all connections are clean and tight. Mechanically check that all parts are properly assembled.

Installation Instructions



- Fixture is equipped with the U bracket
- Connection outlet conduit size: 3/4" NPT
- Conduit and pole are not included in products
- All installations must be conducted by qualified electrician

FPXL Series Installation Instructions

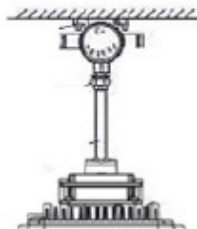
Mounting Options

Junction Box Mount

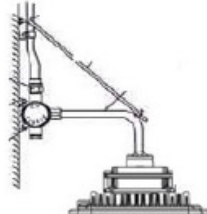
A. Ceiling Mount



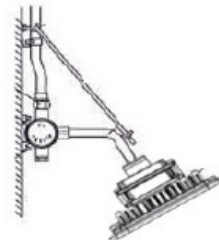
B. Drop Mounting



C. Wall Mount

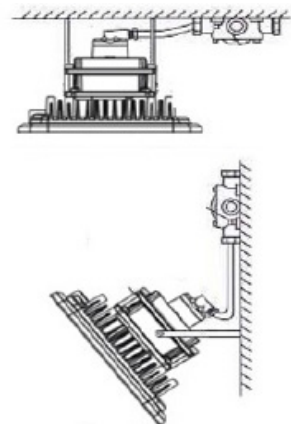


D. Wall Mount

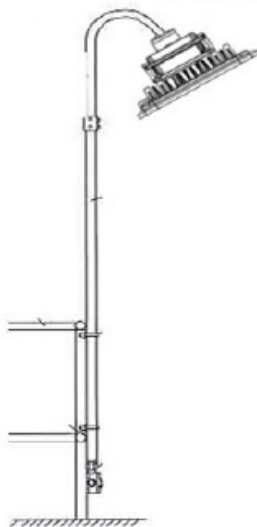


Yoke/U Mounting Options

E. Yoke/U Mounting Options



F. Pole Mount



G. Pole Mount

