

# **Defend Flood™ Series**

Installation Instructions

## **!** CAUTION

- All wiring should be done by a licensed electrician in accordance with state codes, local codes, and National Electric Code (NEC) standards or International Electrotechnical Commission (IEC) standards.
- Improper installation may result in serious injury and void warranty.
- Contains parts and assemblies susceptible to damage by electrostatic discharge (ESD).
- Surge protective devices should be utilized for fixtures installed in environments subject to power surges outside the specified operating parameters.

#### RISK OF ELECTRIC SHOCK



- Always ensure power supply is disconnected before and during installation, maintenance and accessory fitting.
- Ensure the wire is connected to the right polarity.
- Ensure the lighting fixture is well grounded.

## RISK OF FIRE



- Use only UL approved wire for input/output connections.
- Do not operate in ambient temperatures above those indicated on the fixture nameplate.

These instructions include information for installations in hazardous locations. Be sure to follow the appropriate warnings and instructions specific to each application.

#### PRIOR TO INSTALLATION 🗥



- Verify that the entire specification on the fixture nameplate meets your requirements.
- To ensure your fixture is properly sealed, follow all torque requirements (provided below) during installation.
- Fully inspect the lighting fixture and ensure there is no damage prior to installation.
- Read the instructions completely and carefully.

Fixture name	Defend Flood Series			
<b>Product description</b>	LED Explosion-Proof Floodlight			
Compliances	UL 1598 Suitable for Wet Locations UL 844 Hazardous Locations Class I, Division 1, Groups C & D			
Rating	DFN-LO (98W); 0.81A@120V AC, 0.40A@240V AC, 0.20A@480V AC DFN-HI (165W): 1.37A@120V AC, 0.68A@240V AC, 0.34A@480V AC			
Ambient temperature	-40°C to +50°C			
T code	T5, 100°C maximum surface temperature			

#### **Ceiling Mount/ Wall Mount**

Note: To prevent ignition of Group C atmospheres, conduit runs must have a sealing fitting connected within two (2) inches of the light fixture.

- 1. Install two (2) M12 expansion bolts in the ceiling/wall. Refer to Figure 1.
- 2. For ease of installation, remove mounting harp from lighting fixture prior to installation.
- 3. Use M12 nut with flat and split washer to tighten the mounting harp to the bolt.
- 4. Use M10 screws with split washer to attach the mounting harp to the light fixture. Refer to Figure 2.



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- 5. Use M6 screws with split washer to aim and tighten the fixture in the desired angle. Refer to Figure 2.
- 6. Tighten the mounting harp to the light fixture using M10 screws.
- 7. There are three (3) ¾ inch NPT openings on the light fixture. You should only use one (1) ¾ inch NPT opening for wiring and the other openings should be plugged.
- 8. If it is difficult to pull wires out, you will need to open the back cover using a hexagon socket. Keep hardware for later use.
- **9.** Wiring: Black is line (L), white is neutral (N) and green is ground (G).
- **10.** Install the <sup>3</sup>/<sub>4</sub> inch NPT conduit.
- 11. Use torque wrench to ensure all screws/plugs/conduit are within requirement. Refer to 'Caution' section above and 'Torque Requirements' chart on page 3.

## **Back Cover Screw Sequence**

- 1. Install eight (8) M6 screws on back cover using a hexagon socket following the sequence diagram to the right.
- 2. Use corner screws to align the cover on the fixture housing (use positions 5 & 6 or 7 & 8).
- 3. Follow the sequence and torque values below.

1st round	3 kgf-cm	0.29 Nm	0.22 ft
2nd round	30 kgf-cm	2.94 Nm	2.17 ft
3rd round	110 kgf-cm	10.79 Nm	7.96 ft
4th round	120 kgf-cm	11.77 Nm	8.68 ft

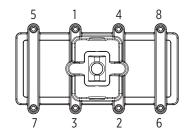


Figure 1

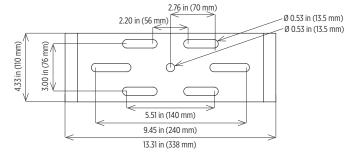
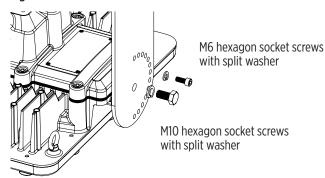


Figure 2



#### **Pendant Mount**

Note: To prevent ignition of Group C atmospheres, conduit runs must have a sealing fitting connected within two (2) inches of the light fixture.

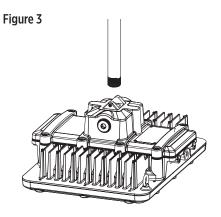
- 1. Remove the mounting harp from the lighting fixture.
- 2. Install the ¾ inch NPT pendant system (customer provided). Refer to fixture nameplate to verify product specifications and for additional installation instructions.
- 3. Pull the wires from the top opening in the back cover of the light fixture and use \(^3\)/4 inch NPT plugs in all unused openings.
- 4. If it is difficult to pull wires out, you will need to open the back cover using a hexagon socket. Keep hardware for later use.
- 5. Wiring: Black is line (L), white is neutral (N) and green is ground (G).
- **6.** Assemble the light fixture with your pendant system. Refer to Figure 3.
- 7. Tighten the M6 socket set screw to ensure fixture is secure. Refer to 'Torque Requirements' chart on Page 3 and Figure 4.

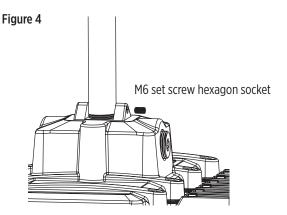


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## Wiring

- 1. Always ensure power supply is disconnected before and during installation, maintenance and accessory fitting.
- 2. Black is line (L), white is neutral (N) and green is ground (G).
- 3. Use provided connectors with locking function to connect the wires.

## **Static Electricity Protection**

After installation, use a wet cloth to wipe the lighting fixture to eliminate static electricity.

Note: A dry cloth should not be used as this will cause static electricity.

## **Eyebolt Screw**

An eyebolt screw is provided for safety cable usage during and after installation. Fixture should not be hung from eyebolt permanently.

## **Torque Requirements**

Type	Torque	Torque	Torque	Position
M10 hexagon	440 kgf-cm	43.12 Nm	31.83 ft-lb	Figure 2
M6 hexagon socket	90 kgf-cm	8.82 Nm	6.51 ft-lb	Figure 2
M6 set screw hexagon socket	50 kgf-cm	4.90 Nm	3.62 ft-lb	Figure 4
¾ inch NPT plug	150 kgf-cm	14.70 Nm	10.85 ft-lb	Figure 3

### Maintenance

Periodic maintenance and cleaning is required to keep light fixture in peak operating condition. Buildup of dirt and/or debris will diminish performance, lead to premature failure and void the fixture's warranty.

Inspect fixture monthly or (more frequently if conditions require) for dirt and debris buildup on lens and between fins of heatsink. Wash down with water as needed.

Phoenix Products LLC has taken reasonable steps to ensure that the information contained herein is accurate. While we believe the information is accurate, no warranty is made or implied. Product design and specifications are subject to change without notice.

