Operating Instructions

Hazardous Location Lighting _ Hammer FEL-H Series

HazLoc LED Luminaire

General Safety Information

- To reduce the risk of death, personal injury or property damage from fire, electric shock, falling parts, cuts/abrasions, and other hazards, read all warnings and instructions included with and on the luminaire box and all luminaire labels.
- Before installing, servicing, or performing routine maintenance upon this equipment, follow these general precautions.
- Commercial installation, service and maintenance of luminaires should be performed by a qualified licensed electrician.
- DO NOT INSTALL DAMÁGED PRODUCT!
- This luminaire is intended to be connected to a properly installed and grounded UL listed junction box.
- Make sure that the supply voltage is the same as the luminaire voltage.
- Do not install where the marked operating temperatures exceed the ignition temperatures of the hazardous atmosphere.
- Do not operate in ambient temperatures above those indicated on the luminaire nameplate.
- All gasket seals must be clean and undamaged.

CID1 Model



CID2 Model

Picture is for illustration purposes only. Your model may vary

WARNING:

RISK OF ELECTRICAL SHOCK

- Turn off electrical power at fuse or circuit breaker box before wiring luminaire to the power supply.
- Turn off the power when you perform any maintenance.
- Verify that supply voltage is correct by comparing it with the luminaire label information.
- Make sure all electrical and grounded connections in accordance with the National Electrical
 Code and any applicable local code requirements and Hazloc requirements and suitable for wiring system..
- All wiring connections should be capped with UL approved wire connectors.
- Luminaire must be supplied by a wiring system with an equipment grounding conductor.

CAUTION:

RISK OF INJURY

- Wear gloves and safety glasses at all times when removing luminaire from carton, installing, servicing or performing maintenance.
- Avoid direct eve exposure to the light source while it is on.
- Account for small parts and destroyed packing material, as these may be hazardous to children.

CAUTION:

RISK OF FIRE

- Keep combustible and other materials that can burn away from luminaire and lamp/lens.
- MIN 90°C SUPPLY CONDUCTORS.

Environmental Ratings

Suitable for wet location / OUTSIDE TYPE (SALT WATER) IP66 & IP67 / IK10 (PC) / IK08 (Glass) / 5G vibration

Compliances

UL 844 UL 1598 / 8750 UL 1598A CSA C22.2 No.137-M1981 CSA C22.2 No.250.0 CSA C22.2 No.250.13 Model NJZ-FEL-H Series is suitable for use in the following hazardous (classified) areas as defined by the National Electrical Code (NEC) and Canadian Electrical Code (CEC):

Models with Glass lens

Class I, Div 1, Groups B, C and D Class I, Div 2, Groups A, B, C, D Class II, Div 1, Groups E, F, G Class III

(suitable for locations having deposits of readily combustible paint residues)

Models with PC lens

Class I, Div 2, Groups A, B, C, D Class II, Div 1, Groups E, F, G Class III

Refer to the luminaire nameplate for specific classification information, maximum ambient temperature suitability and corresponding operating temperature (T-Code).

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```
Models: NJZ-FEL-H-3-4-5-6-7-8-9-10
3=Power
( 21 - 21W, 40 - 40W, 50 - 50W, 60 - 60W )
4=Voltage
   V01–120-277 Vac (for luminaires rated 21W, 40W and 60W)
V04 – 347-480 Vac (for luminaires rated 50W)
5=LED Color temperature
( RZ - 5000K; RL-4000K; RN-3000K; RD-2700K )
6=LED diffuser type
T2 - Type II LED diffuser;
   T3 - Type III LED diffuser;
   T5 - No LED diffuser (no optic )
7=HAZLOC Rating
   (1 - CID1, CID2, CIID1; 25 - CID2, CIID1)
8=Lens type
   TG – Clear glass;FG – Frosted glass; FP – Frosted Polycarbonate (PC)
9=Mount type
   P - Pendant mount with 3/4" NPT conduit openings
  U - U-Bracket trunnion mount with 3/4" NPT conduit openings

JB - Ceiling (Not for luminaires marked for Class I, Division 1)

SN25 - Stanchion 25° (1-1/4" or 1-1/2" NPT, (Not for luminaires marked for Class I, Division 1)

SN90 - Stanchion 90° (1-1/4" or 1-1/2" NPT, (Not for luminaires marked for Class I, Division 1)
   WL25 - Wall 25°(Not for luminaires marked for Class I, Division 1)
   WL90 - Wall 90° (Not for luminaires marked for Class I, Division 1)"
10= Color of enclosure
      (GR= "gray"; BL= "black"; WT= "white"; BZ = "bronze")
```

Operating characteristic:

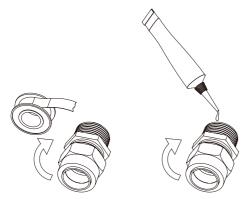
| | Power | Model | Ambient Temp. | | |
|------------------|-------|-----------------|--|---|--|
| Rated voltage: I | | | Class I , Division 1, Groups B, C, D Class I, Division 2, Groups A, B, C, D | Class II, Division 1, Groups E, F, G | |
| | 21W | FEL-H-21 Series | -40°C (-40°F) ~+65°C (149°F) | 65°C (149°F) | |
| 120-277 Vac | 40W | FEL-H-40 Series | | | |
| | 60W | FEL-H-60 Series | -40°C (-40°F) ~+64°C (147.2°F) | 64℃ (147.2°F) | |
| 347-480 Vac | 50W | FEL-H-50 Series | -40°C (-40°F) ~+65°C (149°F) | 65℃ (149℉) | |

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HazLoc LED Luminaire

NPT Assembly Instructions:

STEP 1: Inspect port and fitting to ensure that both are free of contaminants and excessive burrs and nicks. **STEP 2:** Apply a stripe of an anaerobic liquid pipe sealant around the male threads leaving the first two threads uncovered. If no liquid sealant is available, wrap Teflon tape (width of 12.7mm and thickness of 0.1mm) 2.5- 3 turns in a clockwise direction, viewed from the pipe end, leaving the rest two threads uncovered.

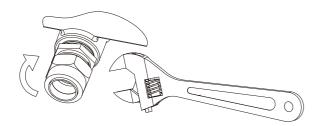


CAUTION: Teflon tape and some pipe sealants are destructive to hydraulic components. Always use extreme caution and follow manufacturer's recommendations for proper application of any sealant in order to prevent contamination.

STEP 3: Screw finger tight into the port



STEP 4: Wrench tighten the fitting to the correct Turns Past Finger Tight position. A properly assembled fittings total thread engagement should be 3.5 to 6 turns.



CAUTION: Never back off an installed pipe fitting to achieve proper alignment. Loosening installed pipe fittings will corrupt the seal and contribute to leakage and failure. (*Applicable standard: ASME B1.20.1-2013)

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HazLoc LED Luminaire

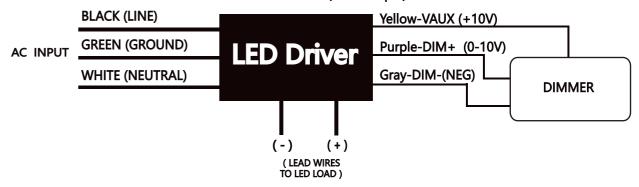
Wiring

CAUTION: Turn off electrical power at fuse or circuit breaker box before wiring luminaire to the power supply.

Connecting panels to AC source supply: All units must be individually connected to the AC supply.

Black = Line
White = Neutral
Green = Ground

Dimming control wire: GRAY(NEG)
PURPLE(0~10V Input)
YELLOW(+10V Output)



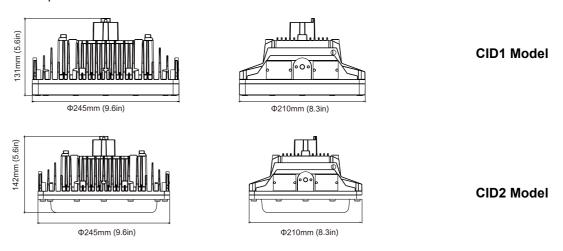
Installation

Note:

- 1. The minimum length of all integral luminaire field wiring leads provided is 18 inches (457.2 mm) extended outside of the field wiring conduit opening for all mounting means. All wiring connections are to be made outside of the luminaire without opening or disassembling of any parts of the luminaire enclosure and mounting means.
- 2. For luminaire with trunnion mount bracket "Mounting Orientation Lens Facing Down 0°~90° From Vertical Only".
- 3. The dimming wire and brunch circuit should be separated in different wiring compartment.

Electrical Connection:

- 1. Connect field supply wires to luminaire wire leads (or Wago connectors).
- 2. Wire per wiring diagram and per required electrical codes.
- 3. Close the driver housing, making sure that all wires are safely inside the box.
- 4. Check the tightness of conduit and Tank Cover.
- 5. Turn power on.



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HazLoc LED Luminaire

Installation options for Models with Glass lens

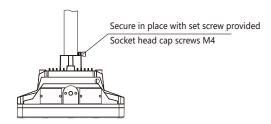
Class I, Div 1, Groups B, C and D Class I, Div 2, Groups A, B, C, D Class II, Div 1, Groups E, F, G

Class III

1. Pendant:

- Step 1. Connect field supply wires to luminaire wire leads. Wire per wiring diagram.
- Step 2. Thread the fixture onto the NPT 3/4 inch conduit. Tighten the M4 set-screw.

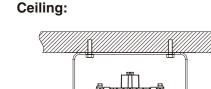
Note: All installation must refer to NJZ " NPT Assembly Instructions" to prevent water leakage.

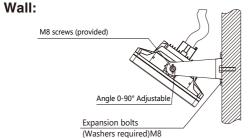


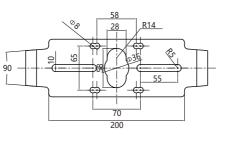
2. Ceiling & Wall (Trunnion)

- **Step 1.** Secure the bracket and fixture with appropriate fasteners directly to a structural member; Adjust the angle (18x10°) of the bracket and fix the position with M8 screws (provided).
- Step 2. Connect field supply wires to luminaire wire leads. Wire per wiring diagram.
- **Step 3.** Use the appropriate sealing fittings for safe cable termination.

Note: All installation must refer to NJZ " NPT Assembly Instructions" to prevent water leakage.





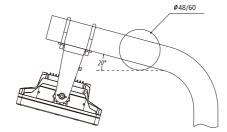


3. Pole (Pipe Clamp kit sold separately for pipe diameters of 1-7/8 in. or 2-3/8 in.)

- Step 1. Check diameter of pipe to make sure you are using the correct size clamp.
- Step 2. Place the Fixture Bracket against the installed pipes.
- Step 3. Place the clamp (U-bolts) on the pipe and fit it through the openings in the bracket.
- Step 4. Adjust fixture to desired angle. Insert and tighten the supplied locking nuts and washers to secure the clamp to the pipe.
- **Step 5.** Use the appropriate sealing fittings for safe cable termination.

Note: All installation must refer to NJZ " NPT Assembly Instructions" to prevent water leakage.

Trunnion with U bolts (Pole), (Not suitable for paint spray booth)



HazLoc LED Luminaire

Operating Instructions

Servicing

- To avoid personal injury, disconnect power to the light and allow the unit to cool down before performing 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 should be made at least once a year. Frequency of use and environment should determine this.
- The external glass should be cleaned periodically to ensure continued luminaire performance. Clean the glass with a clean, damp, non-abrasive, lint-free cloth. If this is not sufficient, use a mild soap or a liquid cleaner. Do not use an abrasive, strong alkaline or acid cleaner as damage may occur.
- Inspect the cooling fins on the luminaire to ensure that they are free of any contamination (i.e. excessive dust build-up).
 Clean with a non-abrasive cloth if needed.
- Mechanically check to make sure all parts are properly assembled.
- Electrically check to make sure that all connections are clean and tight.

Warranty

We warrant that each of our LED lighting luminaire (the "Product(s)") that are purchased while this Warranty is in effect will be free from defects in materials and workmanship for the period of time specified in the table below (the "Warranty Period"). The Warranty Period runs from the date of original purchase from its authorized distributor/dealer.

We will repair, or at our option, replace the defective product (exterior finish, housing and heat sinks, lens, LED engine, power supply) during the standard warranty period. This warranty applies only to the repair or replacement of the product and only when the product is properly handled, installed and maintained according to our instructions.

This warranty excludes defects resulting from improper installation, acts of God, fire, vandalism or civil disturbances, power surges or improper power supply, and corrosive environment installations.

This warranty does not cover equipment, systems or components from other manufacturers that the Purchaser uses in conjunction with the Product. Any repair, alteration or modification of the Product, including replacement of Product components with components of other manufacturers will void the warranty in its entirety.

| Product | Which Model Nos. are Covered by this Warranty | Warranty Period |
|-------------------------------|--|--------------------|
| Explosion-protected Luminaire | NJZ-FEL-H Series | Five (5) Years |

Operating Instructions

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INSTALLATION CHECKLIST

- 1. Verify if the steel pipe or cord grip are installed to at least five (5) full threads into the conduit entries of the fixture.
- 2. Verify field supply wires to luminaire per wiring diagrams and all electrical connections are tightened.
- 3. Follow NJZ " NPT Assembly Instructions" to prevent water leakage.



HazLoc LED Luminaire

Operating Instructions

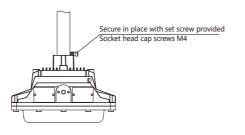
Installation options for Models with PC or Glass lens

Class I, Div 2, Groups A, B, C, D Class II, Div 1, Groups E, F, G Class III

1. Pendant:

- Step 1. Connect field supply wires to luminaire wire leads. Wire per wiring diagram.
- Step 2. Thread the fixture onto the NPT 3/4 inch conduit. Tighten the M4 set-screw.

Note: All installation must refer to NJZ " NPT Assembly Instructions" to prevent water leakage.

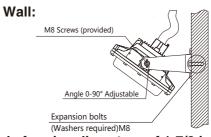


2. Ceiling & Wall (Trunnion)

- **Step 1.** Secure the bracket and fixture with appropriate fasteners directly to a structural member; Adjust the angle (18x10°) of the bracket and fix the position with M8 screws (provided).
- **Step 2.** Connect field supply wires to luminaire wire leads. Wire per wiring diagram.
- **Step 3.** Use the appropriate sealing fittings for safe cable termination.

Note: All installation must refer to NJZ " NPT Assembly Instructions" to prevent water leakage.

Ceiling:

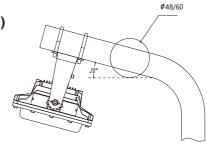


3. Pole (Pipe Clamp kit sold separately for pipe diameters of 1-7/8 in. or 2-3/8 in.)

- **Step 1.** Check diameter of pipe to make sure you are using the correct size clamp.
- Step 2. Place the Fixture Bracket against the installed pipes.
- **Step 3.** Place the clamp (U-bolts) on the pipe and fit it through the openings in the bracket.
- **Step 4.** Adjust fixture to desired angle. Insert and tighten the supplied locking nuts and washers to secure the clamp to the pipe.
- **Step 5.** Use the appropriate sealing fittings for safe cable termination.

Note: All installation must refer to NJZ " NPT Assembly Instructions" to prevent water leakage.

Trunnion with U bolts (Pole)



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Hazardous Location Lighting _ Hammer FEL-H Series

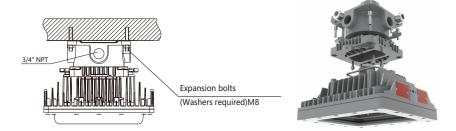
HazLoc LED Luminaire

4. Ceiling

- **Step 1.** Mark and drill desired location on mounting surface. Secure the ceiling junction box with 4 (M8) expansion bolts (not provided) directly to a structural member. Thread onto a NPT 3/4 inch conduit. Route wiring from conduit through ceiling junction box to desired location.
- **Step 2.** Use the provided 4 (M6) hexagon socket screws with torque value (8 N-m.) to fix the adapter onto ceiling junction box. Make sure the gasket (a) is properly inserted into the slot.
- Step 3. Connect field supply wires to luminaire wire leads. Wire per wiring diagram.
- **Step 4.** Making sure that all wires are safely inside ceiling junction box. Make sure the gasket (b) is properly inserted into the slot. Tighten the fixture onto the adapter with four captive closing screw (M6) to (8 N-m).

Note: All installation must refer to NJZ " NPT Assembly Instructions" to prevent water leakage.

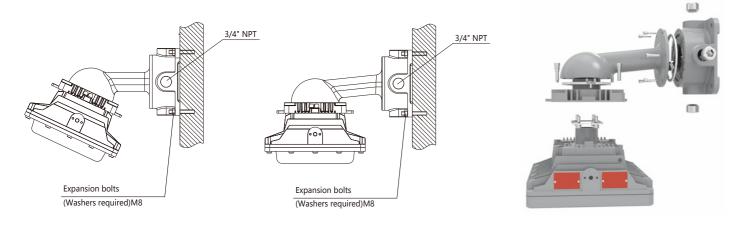
Ceiling:



5. Wall 25° / Wall 90°

- **Step 1.** Mark and drill desired location on mounting surface. Secure the wall mount box with 4 (M8) expansion bolts (not provided) directly to a structural member. Thread onto a NPT 3/4 inch conduit. Route wiring from conduit through wall mount box to desired location.
- **Step 2.** Use the provided 4 (M6) hexagon socket screws with torque value (8 N-m.) to fix the adapter onto ceiling junction box. Make sure the gasket (a) is properly inserted into the slot.
- **Step 3.** Connect field supply wires to luminaire wire leads. Wire per wiring diagram.
- **Step 4.** Making sure that all wires are safely inside ceiling junction box. Make sure the gasket (b) is properly inserted into the slot. Tighten the fixture onto the adapter with four captive closing screw (M6) to (8 N-m).

Note: All installation must refer to NJZ " NPT Assembly Instructions" to prevent water leakage.



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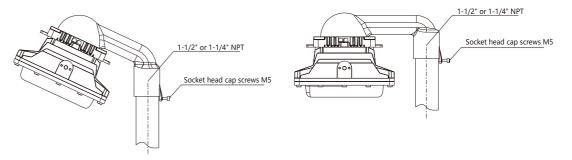
HazLoc LED Luminaire

Operating Instructions

6. Stanchion 25° / Stanchion 90°

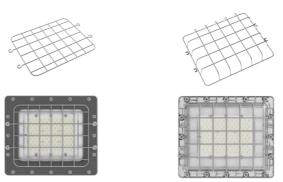
- Step 1. Securely thread the stanchion adapter onto the appropriate NPT size conduit. Determine the appropriate orientation and tighten the (M5) set-screw. Make sure the gasket (a) is properly inserted into the slot. Route wiring from conduit through stanchion adapter to desired location.
- **Step 2.** Use the provided 4 (M6) hexagon socket screws with torque value (8 N-m.) to fix the connecting adapter onto stanchion adapter. Make sure the gasket of the wall mount box is properly inserted into the slot.
- **Step 3.** Connect field supply wires to luminaire wire leads. Wire per wiring diagram. Make sure that all wires are safely inside stanchion adapter.
- **Step 4.** Make sure the gasket (b) is properly inserted into the slot. Tighten the fixture onto the adapter with four captive closing screw (M6) to (8 N-m).

Note: All installation must refer to NJZ " NPT Assembly Instructions" to prevent water leakage.



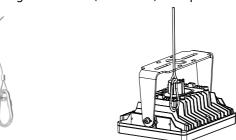
WIRE GUARD INSTALLATION (kit sold separately)

- **Step 1.** Loosen the 4 (M6) hexagon socket head cap screws of the lens cover with torque value 7 N-m.
- Step 2. Locate and center the guard to the outside of the fixture housing with the (4x) clips aligned with the holes of the screws.
- Step 3. Install and tighten the 4 (M6) screws through the mounting clips and into the housing screw holes as shown in torquing to (7 N-m).



SAFETY CABLE INSTALLATION (kit sold separately)

- **Step 1.** Install Secondary Retention Cable to secure location per standards.
- Step 2. Secure Carabiner through thru-holes (Dia-12mm) on top of fixture.



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