Harsh Enviroment 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, please read all warnings and instructions included with and on the fixture box and all fixture labels.
- Before installing, servicing, or performing routine maintenance upon this equipment, please follow these general precautions.
- Commercial installation, service and maintenance of luminaires should be performed by a qualified licensed electrician.
- DO NOT INSTALL DAMAGED PRODUCT!
- 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.

WARNING:

RISK OF ELECTRICAL SHOCK

Luminaire shall have provision for connection to threaded rigid metal conduit or other wiring methods in accordance with

National Electrical Code® (NEC®) ANSI/NFPA 70 or in the Canadian Electrical Code, Part I (CE Code, Part I) CSA C22.1.

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 systerm.

All wiring connections should be capped with UL approved wire connectors.

Luminaire must be supplied by a wiring system with an equipment grounding conductor.

Harsh Enviroment LED Luminaire

CAUTION:

RISK OF INJURY

Tightly close when energized for safety.

Do not open the luminaire after installation.

Wear gloves and safety glasses at all times when removing luminaire from carton, installing, servicing or performing maintenance.

Avoid direct eye exposure to the light source while it is on.

Properly handle small parts and destroy packing material, as these may be hazardous to children.

Model Series is suitable for use in

the following hazardous (classified) areas as

defined by the National Electrical Code (NEC)

and Canadian Electrical Code (CEC):

Hazardous Locations

Class I, Division 2, Groups A, B, C, D

Class II, Division 1, Groups E, F, G

Class II, Division 2, Groups F, G

RISK OF FIRE

Keep combustible and other materials that can burn away from luminaire and lamp/lens.

MIN 90°C SUPPLY CONDUCTORS.

Harsh Enviroment LED Luminaire

Models:

RDX-2-3-4-5-6-7-8-9-10-11

2=Wattage (80-80W,120-120W,150-150W,200-200W)

3=Voltage (100-277-100-277V AC, 347-480-347-480VAC, 120 - 120 Vac***, 208-277 - 208-277 Vac***)

4=CCT (3K-3000K,4K-4000K,5K-5000K)

5=Beam (T1-Type I*, T3-Type III*, T5-Type V, 30-30°*, 60-60°*)

6=Rating (H2 - C1D2 / C2D1 / C3, H3 – C1D2)

7=Lens (CG - Clear Glass, DG - Diffuse Glass, DLG-Drop Lens Glass, CP-Clear PC, DP-Diffuse PC)

8=Color (GRY – Grey)

9=Mounting (PDGG – Pendant & Ceiling**, YKE - Yoke,

JB01: 1.5” (1.9” OD) and 2” (2 3/8” OD) NPT-threaded Slip-Fit Junction box,

JB02-P: 1.5” (1.9” OD) and 2” (2 3/8” OD) NPT-threaded Slip-Fit Junction box + Sensor (120V)

JB03-P: 1.5” (1.9” OD) and 2” (2 3/8” OD) NPT-threaded Slip-Fit Junction box + Sensor (208-277V)

JB04: 1.5” (1.9” OD) and 2” (2 3/8” OD) Non-threaded Slip-Fit Junction box,

JB05-P: 1.5” (1.9” OD) and 2” (2 3/8” OD) Non-threaded Slip-Fit Junction box + Sensor (120V),

JB06-P: 1.5” (1.9” OD) and 2” (2 3/8” OD) Non-threaded Slip-Fit Junction box + Sensor (208-277V))

10=Optional Suffix - Production Code (Blank – Standard, BAA - Buy American Act)

11=CRI (BLANK - 80 CRI Standard, CRI70 - 70 CRI, CRI90 - 90 CRI*)

* T1, T3, 30°, 60° Optic available with Clear Glass and Clear PC Option, Only CRI90 expects longer leadtime

** No accessory required for Pendant & Ceiling Mount

** For mounting options: Stanchion / WALL, Acessories ordered separately

*** 120V AC only forJB02-P and JB05-P; 208-77V AC only for JB03-P and JB06-P.

Harsh Enviroment LED Luminaire

Operating characteristic:

Rated voltage	power	Model	Ambient Temp
100-277Vac	80W	RDX-80-100-277	-40℃~+65℃
	120W	RDX-120-100-277	
	150W	RDX-150-100-277	-40℃~+60℃
	200W	RDX-200-100-277	-40℃~+55℃
347-480Vac	80W	RDX-80-347-480	-40℃~+65℃
	120W	RDX-120-347-480	
	150W	RDX-150-347-480	-40℃~+60℃
	200W	RDX-200-347-480	-40℃~+55℃
120Vac	80W	RDX-80-120	-40℃~+65℃
	120W	RDX-120-120	
	150W	RDX-150-120	-40℃~+60℃
	200W	RDX-200-120	-40℃~+55℃
208-277Vac	80W	RDX-80-208-277	-40℃~+65℃
	120W	RDX-120-208-277	
	150W	RDX-150-208-277	-40℃~+60℃
	200W	RDX-200-208-277	-40℃~+55℃

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General Wiring Diagram

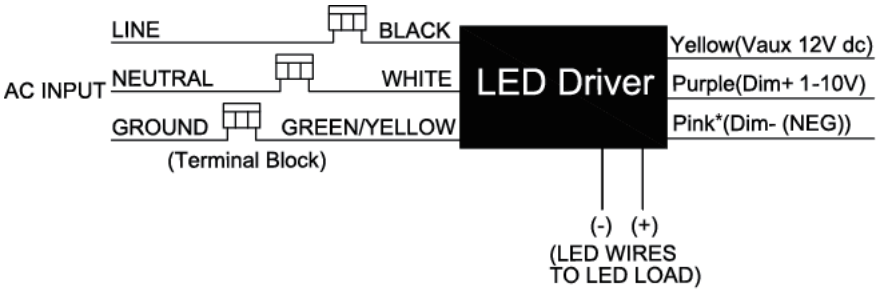
CAUTION: Turn off electrical power at fuse or circuit breaker box before wiring luminaire to the power supply.

All units must be individually connected to the AC supply.

Black = Line

White = Neutral

Green = Ground



Dimming control wire: Yellow =Vaux 12V dc

Purple = Dim+ 1~10V input

Pink*= Dim-(NEG)

* You might receive the lead in grey from a previous version.

Installation & Operation

Electrical Connection

1. Loosen the three pcs of M6 hexagon bolts of Tank Cover at torque value 6 N-m.
2. The thread of entry hole of Tank is 3/4" NPT. Connect the Tank to suitable conduit.
3. Inset the wire from outside through the conduit and the entry hole of Tank, and then connect to terminal block.
4. Wire the branch circuit as follows:

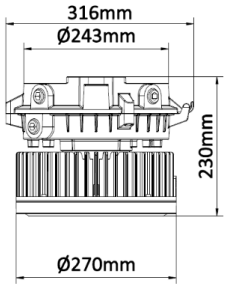
   Black-wire connects to Line

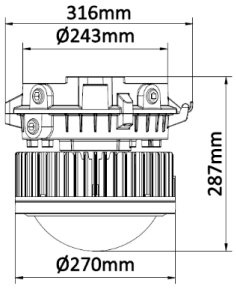
   White-wire connects to Neutral

   Green-wire connects to Ground
5. Re-attach the Driver Cover and tighten it by three pcs of M6 hexagon bolts of Driver Cover at torque value 6 N-m.
6. Check the tightness of conduit and Driver Cover.

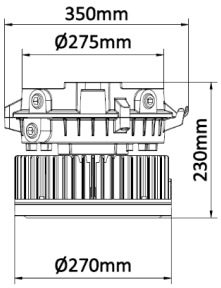
Harsh Enviroment LED Luminaire

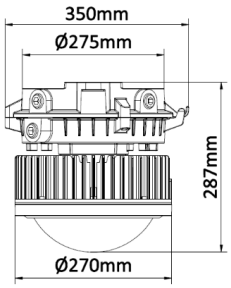
Product Size:





100-277Vac\347-480Vac\120Vac\208-277Vac

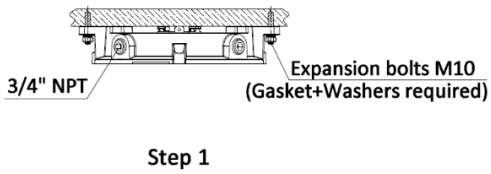




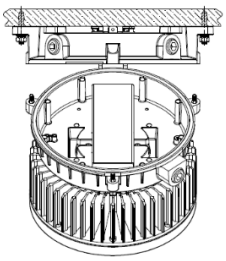
347-480Vac

Installation:

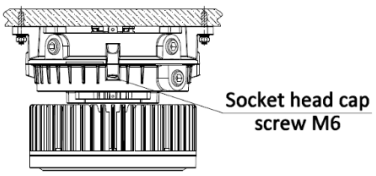
1. Ceiling



Step 1



Step 2



Step 3

Step 1: Mark and drill desired location on mounting surface. Secure the hood with 4 (M10) expansion bolts (not provided) directly to a structural member; thread onto a NPT 3/4 inch conduit.

Step 2: Hang the fixture onto the hinge hook of the hood. Connect supply wires to luminaire wire leads (or Wago connectors provided).

Step 3: Close driver housing, making sure that all wires are safely inside driver. Tighten three captive closing screw (M6) to (6 N-m).

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

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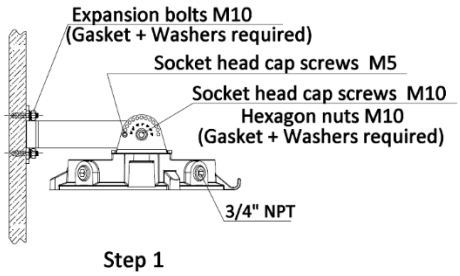
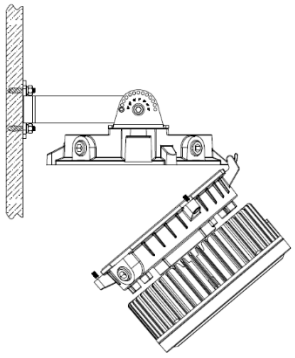
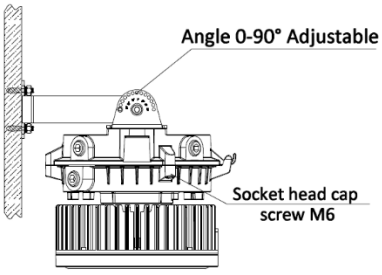
2. Bracket



Step 1



Step 2



Step 3

Step 1: Secure the bracket and hood with 4 (M10) expansion bolts (not provided) directly to a structural member; make sure the hinge is located as marked, See Figure 1a.

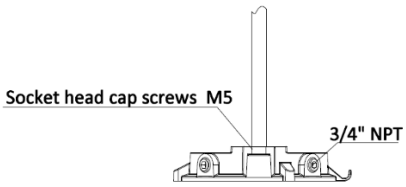
Adjust the angle (6x15°) of the bracket and fix the position with M5 screws (provided).

Step 2: Hang the fixture onto the hinge hook of the hood Connect supply wires to luminaire wire leads (or Wago connectors).

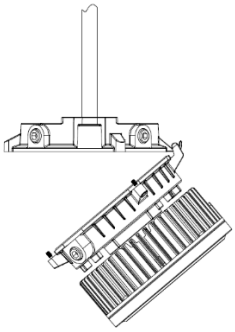
Step 3: Close driver housing, making sure that all wires are safely inside driver. Tighten three captive closing screw (M6) to (6 N-m).

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

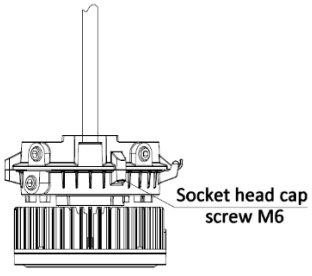
3. Pendant



Step 1



Step 2



Step 3

Step 1: Thread the pendant hood onto the NPT 3/4 inch conduit. Tighten the M5 set-screw.

Step 2: Hang the fixture onto the hinge hook of the hood Connect supply wires to luminaire wire leads (or Wago connectors).

Step 3: Close driver housing, making sure that all wires are safely inside driver. Tighten three captive closing screw (M6) to (6 N-m).

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

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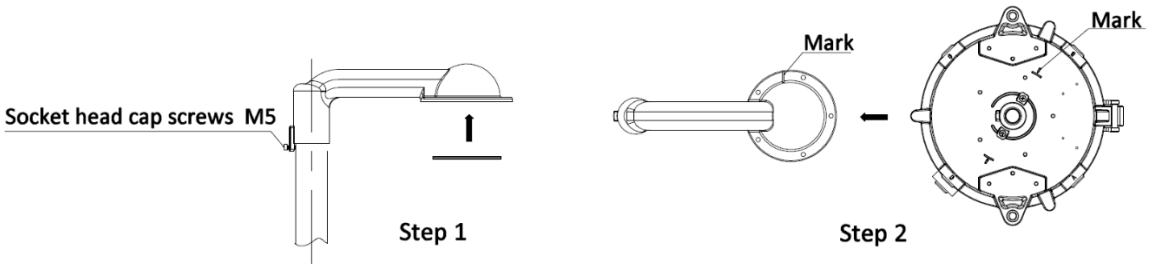
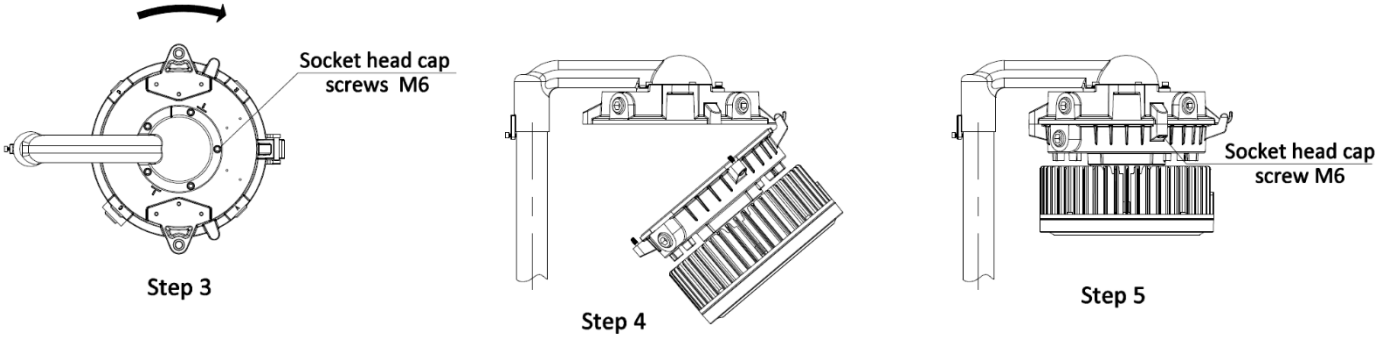
4. Stanchion 90° / Stanchion 25°



Step 1: Securely thread the adapter onto the appropriate NPT size conduit. Determine the appropriate orientation and tighten the M5 set-screw. Make sure the gasket of the adapter is properly inserted into the slot .

Step 2: Hang the whole fixture onto the adapter, align as marked.



Step 3: Rotate the fixture clockwise and secure the adapter with M6 screws (provided) to (6 N-m).

Step 4: Unscrew the hood and Connect supply wires to luminaire wire leads (or Wago connectors).

Step 5: Close driver housing, making sure that all wires are safely inside driver. Tighten three captive closing screw (M6) to (6 N-m).

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

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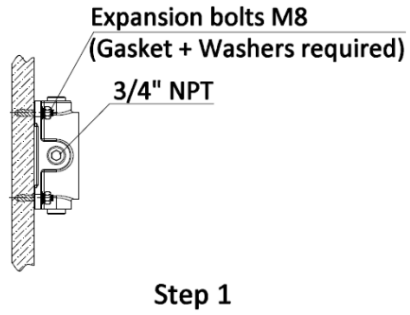
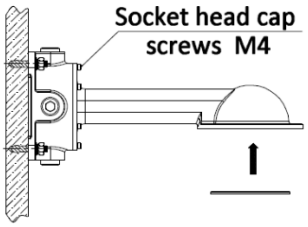
5. Wall-90° / Wall-25°



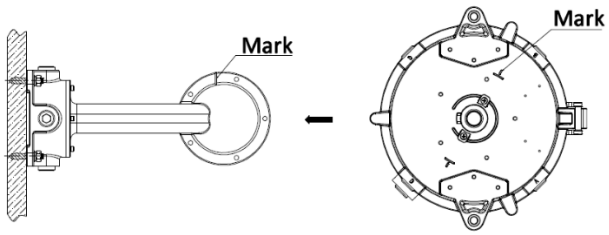
Step 1



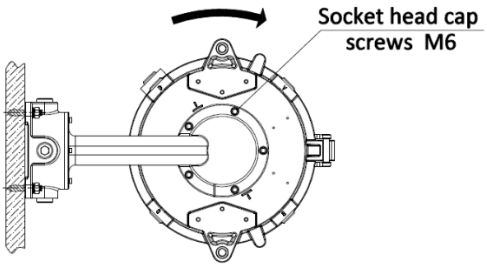
Step 2

Step 1: Mark and drill desired location on mounting surface, Secure the junction box (provided) with 4 (M8) expansion bolts (not provided) directly to a structural member； thread onto a NPT 3/4 inch conduit.

Step 2: Pull field wiring into the wall mount adapter. Secure the adapter with 6 (M4) screws (provided) directly to the junction box; Make sure the gasket of the adapter is properly inserted into the slot.



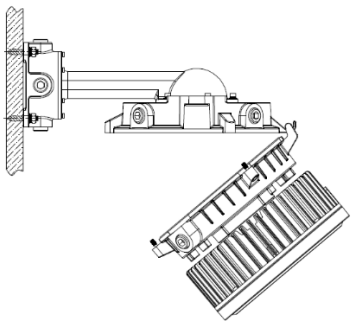
Step 3



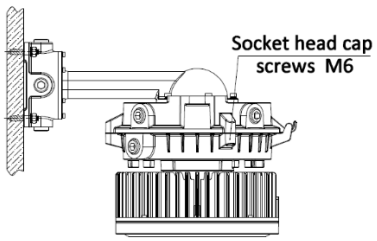
Step 4

Step 3: Hang the whole fixture onto the adapter, align as marked.

Step 4: Rotate the fixture clockwise and secure the adapter with M6 screws (provided) to (6 N-m).



Step 5



Step 6

Step 5: Unscrew the hood and Connect supply wires to luminaire wire leads (or Wago connectors).

Step 6: Close driver housing, making sure that all wires are safely inside driver. Tighten three captive closing screw (M6) to (6 N-m).

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

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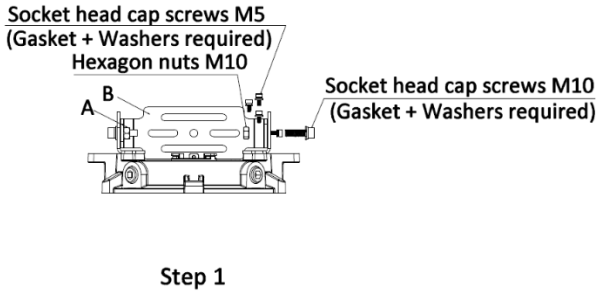
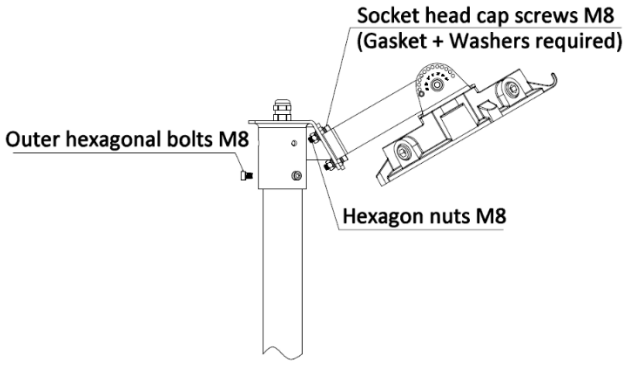
6. Stanchion slip fitter(Straight Pole)



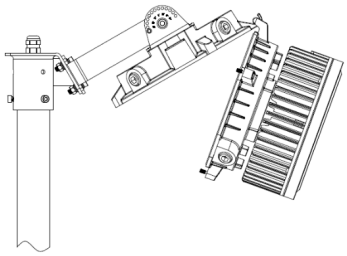
Step 1



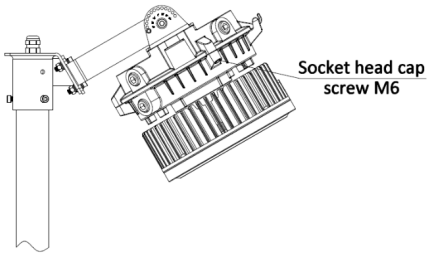
Step 2

Step 1: Mount the U-bracket part A and B combination on the drive cover with M5 screws and M10 screws & nuts, adjust the angle of the bracket (12x15°) and lock it with M5 screws.

Step 2: Attach the bracket with driver cover to the pole mount bracket with M8 screws & nuts, then the pole mount bracket is snapped into the upper end of the strut, which is NPT 2″ (2.375″ pole OD) , and locked with M8 bolts.



Step 3



Step 4

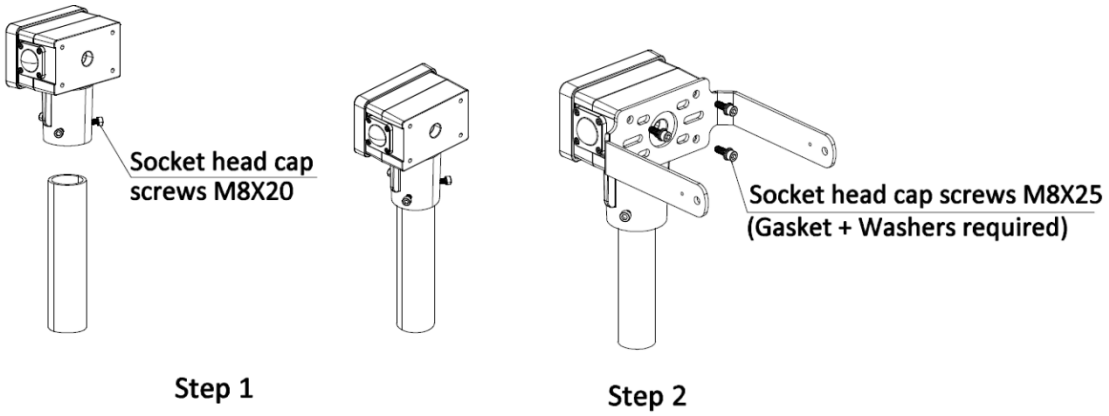
Step 3: Hang the fixture onto the hinge hook of the hood. Connect field supply wires to luminaire wire leads (or Wago connectors) according to the wiring diagram.

Step 4: Close driver housing, making sure that all wires are safely inside driver. Tighten three captive closing screws (M6) to (6 N-m).

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

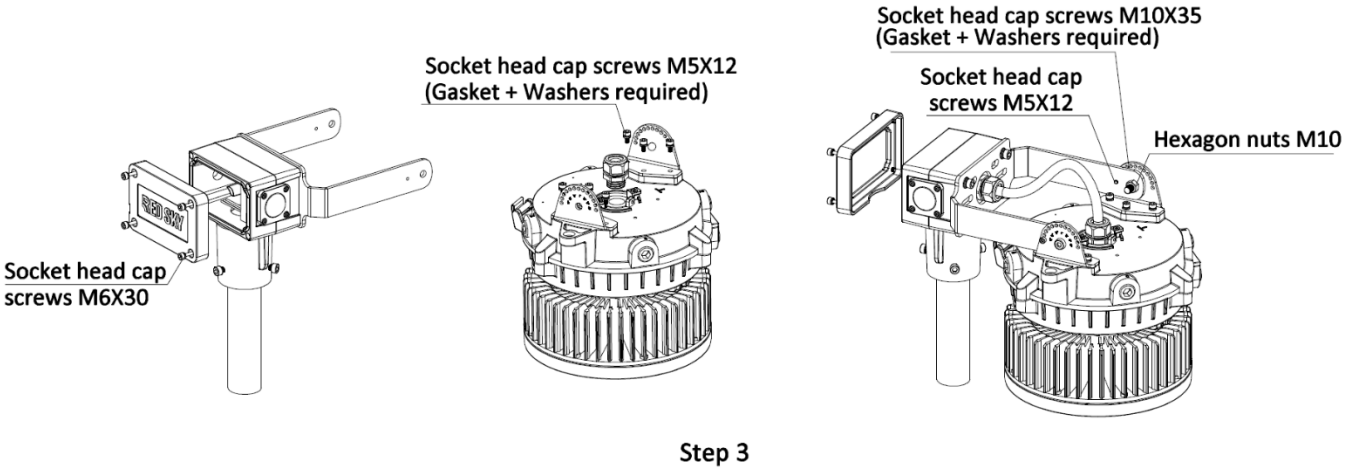
Harsh Enviroment LED Luminaire

7. Junction Box



Step 1: The junction box is connected to the pole and locked with 3 (M8X20) bolts to ensure that the junction box is centered and installed at the top of the pole.

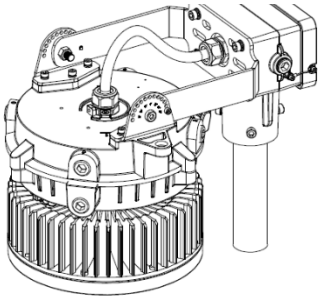
Step 2: The U-bracket is fixed to the junction box using 4(M8X25)bolts. (torque value: 8N·m).



Step 3: Open the junction box cover, insert the lead wire of the whole lamp into the junction box through the gran head, and pre-lock the whole lamp with 2(M10X35) bolts.

Step 4: Connect through WAGO terminal according to wiring instructions, adjust the length of sheath wire and installation Angle properly, close the junction box cover, and lock the 2(M10X35) bolts.

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



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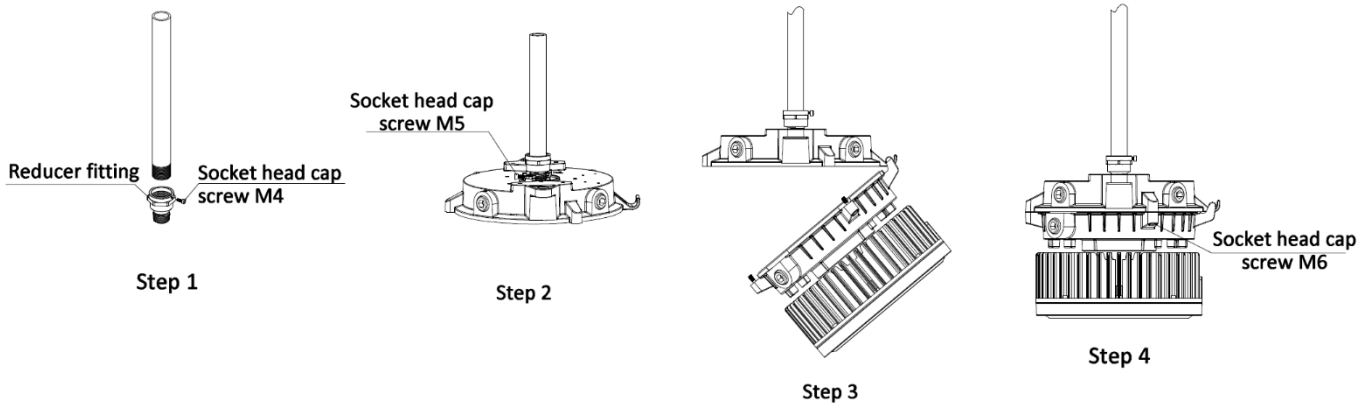
8. NPT male reducer



8-1. 1”to 3/4” NPT for Pendant

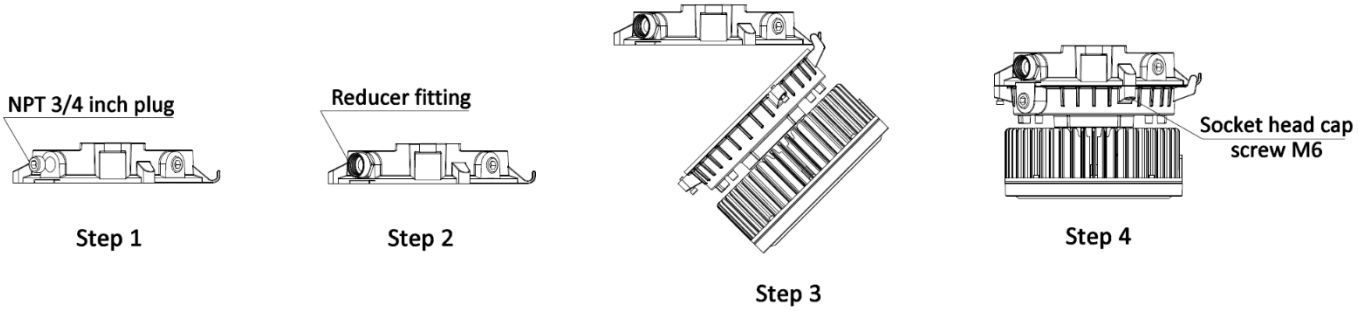
Step 1: Screw the reducer fitting into NPT 1 inch conduit, and total thread engagement should be ≥5 turns, Tighten the M4 set-screw.

Step 2: Screw the reducer fitting into NPT3/4 inch interface on the upper of the tank cover, and total thread engagement should be ≥5 turns, Tighten the M5 set-screw.

Step 3: Hang the fixture onto the hinge hook of the hood. Connect field supply wires to luminaire wire leads (or Wago connectors) according to the wiring diagram.

Step 4: Close driver housing, making sure that all wires are safely inside driver. Tighten three captive closing screws (M6) to (6N·m).

8-2. 1”to 3/4” NPT for Yoke & Ceiling & Wall 90°



Step 1: Use the Allen wrench to remove the NPT 3/4 inch plug on tank cover.

Step 2: Screw the reducer fitting into NPT3/4 inch interface on the upper of the tank cover, and total thread engagement should be ≥5 turns.

Step 3: Hang the fixture onto the hinge hook of the hood. Connect field supply wires to luminaire wire leads (or Wago connectors) according to the wiring diagram.

Step 4: Close driver housing, making sure that all wires are safely inside driver. Tighten three captive closing screws (M6) to (6 N-m).

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

Harsh Enviroment LED Luminaire

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 lens should be cleaned periodically to ensure continued luminaire performance.Clean the lens 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.

Harsh Enviroment LED Luminaire

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, vandal-ism or civil disturbances, power surges or improper power supply, and corrosive environment installations.

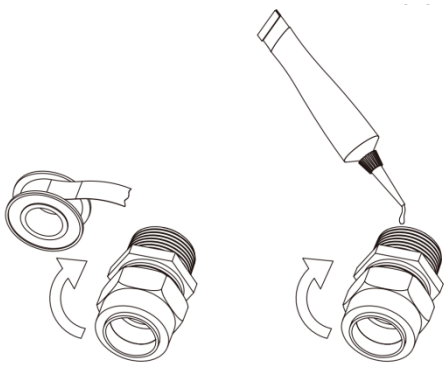
This warranty does not cover equipment, systems or components from other manufacturers that the purchaser uses in conjunction with the Product. Any repair, alteration or modification of the Product, including replacement of Product components with components of other manufacturers will void the warranty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

Product	Models Covered by Warranty	Warranty Period
Round Max Series Hazlor LED Luminarie	RDX series	Driver - 7 Years LEDS - 10 Years

Harsh Enviroment LED Luminaire

NPT Assembly Instructions* :

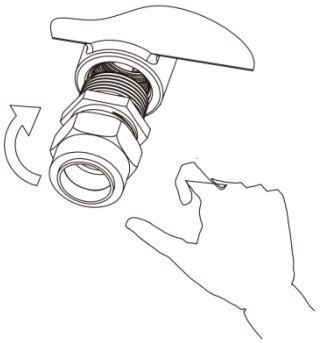
Step 1: Inspect port and fitting to ensure that both are free of contaminants and excessive burrs and nicks.



Step 2: Apply a strip 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 re two threads Uncovered.

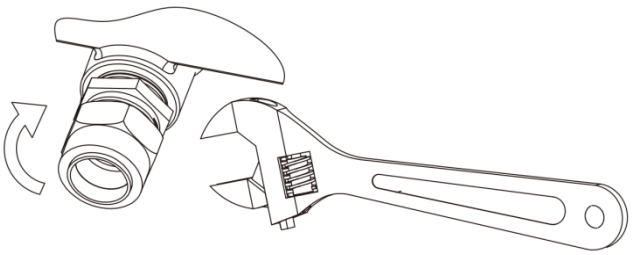
CAUTION: Teflon tape and some pipe sealants are destructive to hydraulic components. Always use extreme caution and follow manufacturer's recommendations for proper application of any sealant in order to prevent contamination.

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)