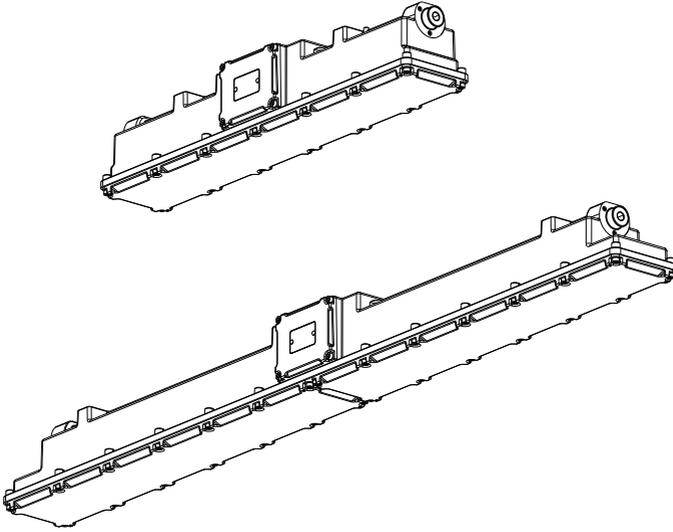


# LED Luminaires for Hazardous Locations

## Installation and Operation Instructions



**RIG-A-LITE™**  
**EX-SERIES**

8500 Hansen Rd.  
Houston, TX 77075 USA  
Tel: (713) 943-0340  
[availinfra.com/rig-a-lite/](http://availinfra.com/rig-a-lite/)



### This product comply with below standard:

IEC60079-0: 2017, 7th Edition  
IEC60079-15: 2017, 5th Edition  
IEC60079-31: 2022, 3th Edition  
EN IEC 60079-0: 2018  
EN IEC 60079-15: 2019  
EN IEC 60079-31:2024

### Applicable places are:

Gas: Zone 2  
Dust: Zone 21, 22

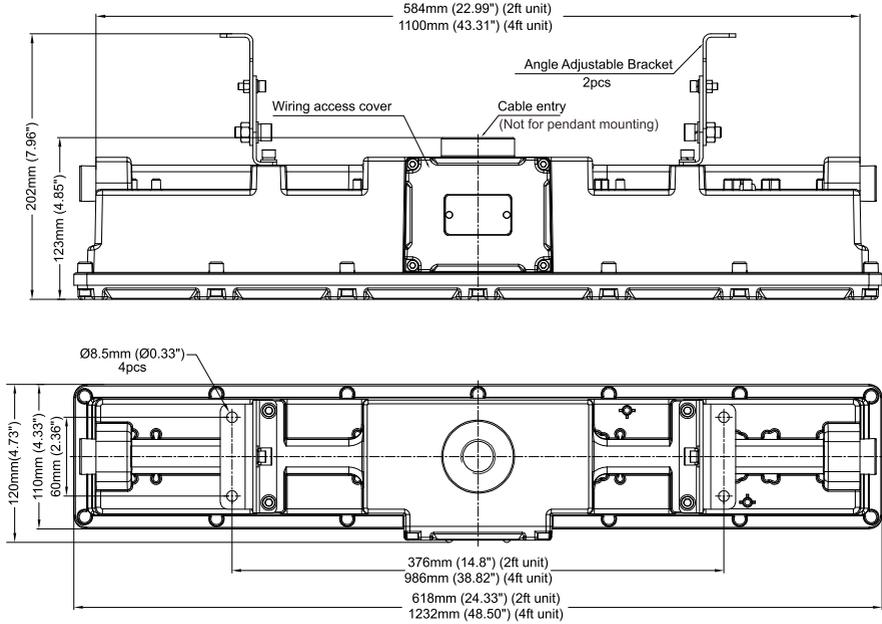
### Certifications:

IECEX:  
Ex nR IIC T6 Gc  
Ex tb IIIC T80°C Db IP66  
IECEX Certificate: IECEX CSA 24.0008X  
ATEX:  
Ex II 3G Ex nR IIC T6 Gc  
Ex II 2D Ex tb IIIC T80°C Db IP66  
ATEX Certificate: Gas:CSANe 24ATEX1002X  
Dust: CSANe 24ATEX1003X

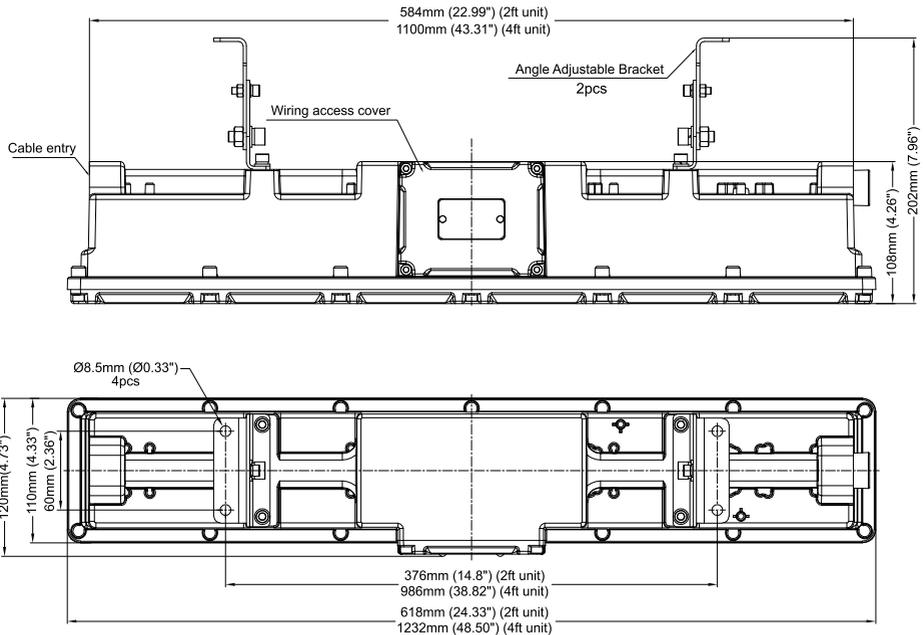
**Typical application sites are:** Chemical plant, oil and gas refineries, drilling rigs, petrochemical facilities, pulp and paper plant, foundries, waste and sewage treatment plant, pharmaceutical plant, mining, power generation, paint spray booths and where flammable vapors, gases, ignitable dusts, fibers or flying are present.

# Physical Dimensions (Unit: mm/inch)

## Cable entry from the top



## Cable entry from the side



**Notice: 2ft include: 20W, 30W, 40W, 50W; 4ft include: 60W, 70W, 80W, 100W.**

## Product Specifications

Power		20W	30W	40W	50W	60W	70W	80W	100W
Input Voltage		24-48Vac/120-277Vac/277-480Vac, 50 / 60 Hz; 18-48Vdc							
Outlook Dimensions	Ceiling Mount	618x150x202mm(24.33"x5.91"x7.96")				1232x150x202mm (48.50"x5.91"x7.96")			
	Trunnion Mount	618x120x202mm (24.33"x4.73"x7.96")				1232x120x202mm (48.50"x4.73"x7.96")			
	Pendant Mount	618x120x178mm (24.33"x4.73"x6.99")				1232x120x178mm (48.50"x4.73"x6.99")			
	Loop Mount	618x125x218mm (24.33"x4.91"x8.57")				1232x125x218mm (48.50"x4.91"x8.57")			
	Hoop Mount	618x125x225mm (24.33"x4.91"x8.84")				1232x125x225mm (48.50"x4.91"x8.84")			
	Recessed Mount	618x170x114mm (24.33"x6.69"x4.85")				1232x170x114mm (48.50"x6.69"x4.85")			
Luminaire Net Weight	Ceiling Mount	3.4kg (7.48Lbs)				5.0kg (11Lbs)			
	Trunnion Mount	3.5kg (7.7Lbs)				5.1kg (11.22Lbs)			
	Pendant Mount	3.3kg (7.26Lbs)				4.9kg (10.78Lbs)			
	Loop Mount	3.4kg (7.48Lbs)				5.0 kg (11Lbs)			
	Hoop Mount	3.5kg (7.7Lbs)				5.1kg (11.22Lbs)			
	Recessed Mount	3.4kg (7.48Lbs)				5.0kg (11Lbs)			
Emergency model	EM Wattage & EM time	20W 1.5h or 10W 3h (Input Voltage: 120-277Vac, 50 / 60 Hz)							
	Battery Capacity	6.4V 6000mAh							
Working Temperature		-40°C to + 55°C (-40°F to +131°F) (Only 20W/30W/40W/60W/70W/80W) -40°C to + 45°C (-40°F to +113°F) (Only 50W) -40°C to + 40°C (-40°F to +104°F) (Only 100W) 0°C to +55°C (32°F to +131°F) (Only Emergency model 20W/30W/40W/60W/70W/80W) 0°C to +45°C (32°F to +113°F) (Only Emergency model 50W) 0°C to +40°C (32°F to +104°F) (Only Emergency model 100W)							
Storing Temperature		-40°C to +70°C (-40°F to +158°F)							

\* The tolerance for weight is  $\pm 6\%$ .

## Luminaire Shipping Packing List

Name	QTY
EXA06 Series Luminaire	1 pc
EXA06 Series Installation and operation instructions	1 pc
EU Declaration-of-conformity	1 pc

## Model Description

EXA 06-XXX-X-XX-XXX-XX-X-XX

Options: EM=Emergency Battery; DM=Dimmable; ED=Emergency Battery & Dimmable

Mounting Style: C=Ceiling Mount; T=Trunnion Mount; P=Pendant Mount

L=Loop Mount; H=Hoop Mount; R=Recessed Mount

Diffusion Material: CP=Clear Polycarbonate; DP=Diffused Polycarbonate

Beam Distribution: 000=120°(No lens)

001=F01601; 002=F01602; 003=F01603; 004=F01604; 005=F01605; 006=F01606

008=F01608; 009=F01609; 010=F01610; 011=F01611; 012=F01612; 013=F01613

CCT(K): 20=2000; ... ; 65=6500; Re=Red; Gr=Green; Bl=Blue; Am=Amber

Voltage: U=120-277Vac, 50/60Hz; D=18-48Vdc; D1=24-48Vac, 50/60Hz; V=277-480Vac, 50/60Hz

Lamp Wattage: 020=20W; 030=30W; 040=40W; 050=50W; 060=60W; 070=70W; 080=80W; 100=100W

Lamp Code: 06

Series constant: EXA-Hazardous

# Installation and Operation Instructions

## Dear Customers and Users:

Thank you very much for purchasing our product. In order to better understand how to use this product safely, please read this instruction patiently and carefully. And please keep the manual properly for future reference.

## Warnings:

1. The product can be connected to a power supply of 120-277Vac, 50/60Hz or 18-48Vdc or 24-48Vac, 50/60Hz or 277-480Vac, 50/60Hz, as specified on the label on the product.
2. DO NOT dismantle, modify or replace any internal electronic components. If you have any confusion during installation, please contact local dealer or contact us directly.
3. Please be sure to turn off the power before installation, maintenance or any other actions that may touch the light.
4. DO NOT install the lights on the surface that is easy to be damaged and deformed.
5. Under no circumstances can this light be covered with thermal insulation or any other similar materials.
6. If emergency or abnormality occurs, please cut off the power firstly and contact your local dealer as soon as possible.
7. The product is suitable for both indoor and outdoor use.
8. Any installation and maintenance must be performed by certified electricians only.
9. Do not use this luminaire on an ungrounded circuit, otherwise it can cause a fatal electric shock.
10. Do not look directly at the LEDs when energized.
11. For emergency lighting, replacement of battery packs is not allowed.
12. The product is suitable for conductor cross section of 1.0mm<sup>2</sup> (18AWG) ~ 4mm<sup>2</sup> (12AWG).

## Safety Installation Guides

It's very important to cut off the power before removing the fixtures. Also, installer needs to be a qualified electrician. Remember, cut off power for at least 5 minutes then operate the removal.

### ● On-site installing

This manual is to provide the user with professional installation information, because the lamp is used in dangerous areas, so the qualified electrician is required. The cable entry is NPT thread or metric thread (See the nameplate for details), cable entry must be installed with certified cable gland or blanking plug.

### ● Use and setting-up

All wires need to be tested for proper connection and safe installation before use. In order to avoid the risk of electrical damage and installation safety problem, these jobs must be performed by a qualified electrician.

### ● Assembling and dismantling

Installer needs to read the instruction carefully before processing the assembling. Please feel free to contact the manufacturer if there is confusion during the installation.

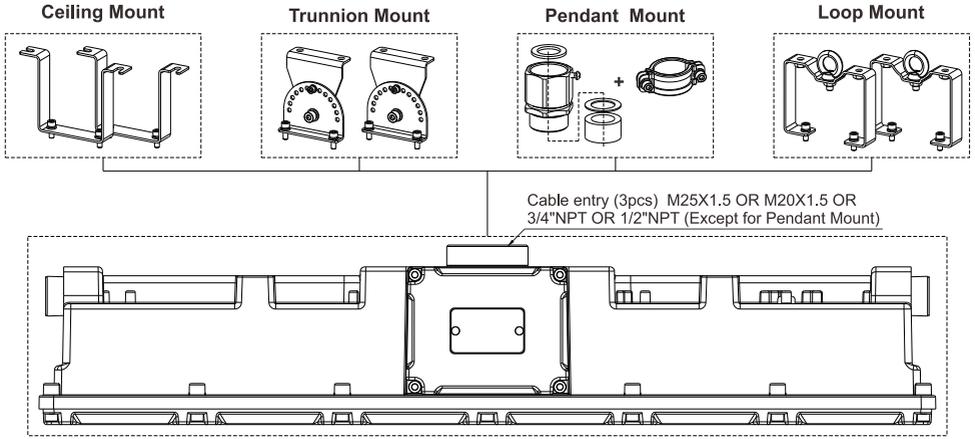
### ● Training instructions for a safe use

Regards the wiring diagram please refers to installation detailed instruction below. Normally, brown (or black) wire connects to live wire, blue (or white) to nature wire, green with yellow (or green) strips to the grounding.

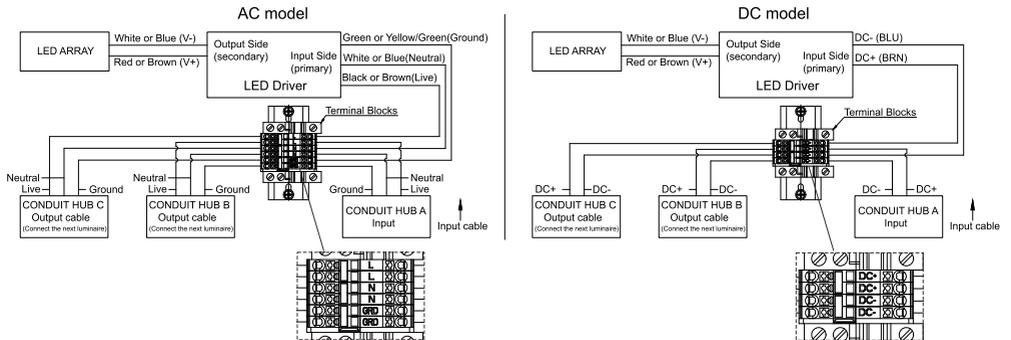
## Special conditions for safe use:

- i. The **EXA06** series LED luminaires for Hazardous Locations shall be mounted only in accordance with manufacturer's instructions.
- ii. The non-metallic enclosures may generate an ignition-capable level of electrostatic charges under certain extreme conditions. The user should ensure that the equipment is not installed in a location where it may be subjected to external conditions (such as high-pressure steam) which might cause a build-up of electrostatic charges on non-conducting surfaces. Additionally, cleaning of the equipment should be done with a damp cloth.
- iii. All cable entry holes shall be fitted of either suitably approved cable glands or suitably approved stopping plugs that is suitable for the application.
- iv. As part of the re-lamping procedure the gaskets are to be checked and replaced if found to be degraded.
- v. Clean the luminaire regularly to prevent dust accumulation.
- vi. The luminaire shall only be used in locations where there is a low risk of mechanical impact.
- vii. The cable gland supplied at the top of main shell of Pendant mounting luminaire as an integral part of the enclosure assembly only are passing the clamping tests with the values reduced to 25% of these required in Clause A.3.1.1 of IEC 60079-0:2017, the end user shall provide additional clamping of the cable to ensure that pulling is not transmitted to the terminations.

# Wiring Diagram (Cable entry from the top)

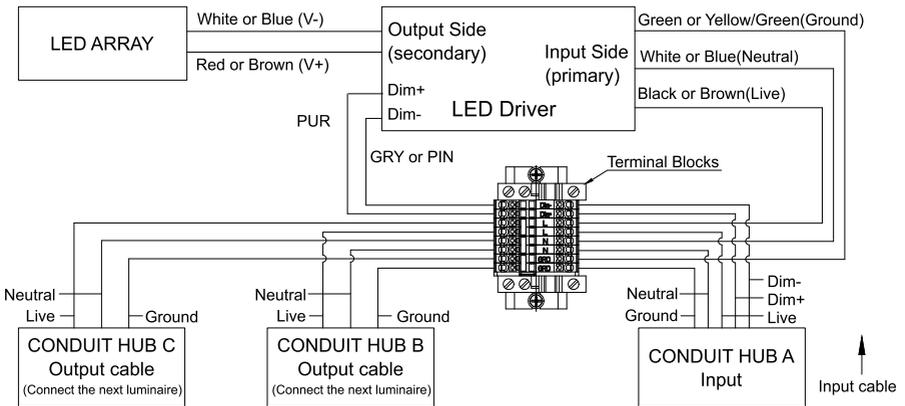


## Non-Dimmable



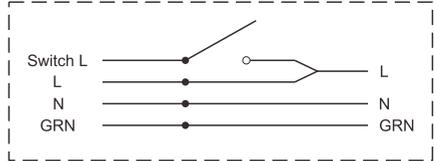
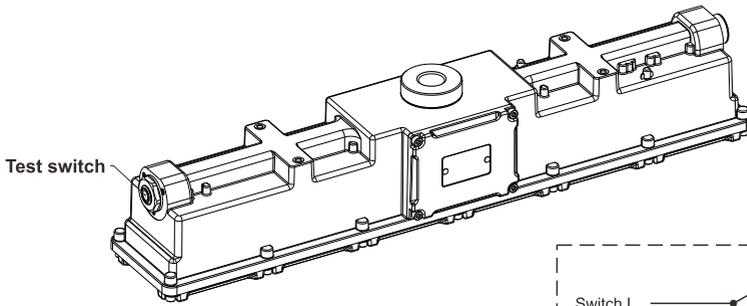
Notice: 1. The input AC voltage is below 50V, which is a safe voltage and does not need to be grounded.  
 2. CONDUIT HUB B can be used for interconnect luminaire and should be blocked with plugs when not in use.

## Dimmable



Notice: CONDUIT HUB B can be used for interconnect luminaire and should be blocked with plugs when not in use.

# Emergency

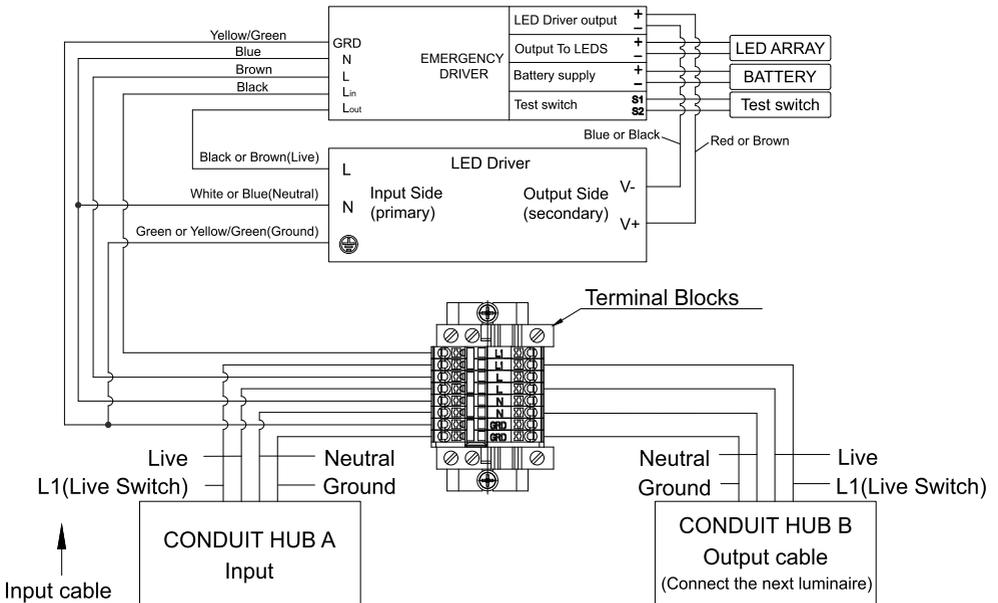


## Test switch with LED indicator:

**Test switch:** When the mains is connected, the emergency power module will work. If the test switch is pressed, the emergency power module will enter the emergency mode. If the switch is released, the lamp will enter the normal mains working mode, and the emergency power module will enter the charging mode.

**LED indicator:** LED indicator can indicate charging or non-charging status.

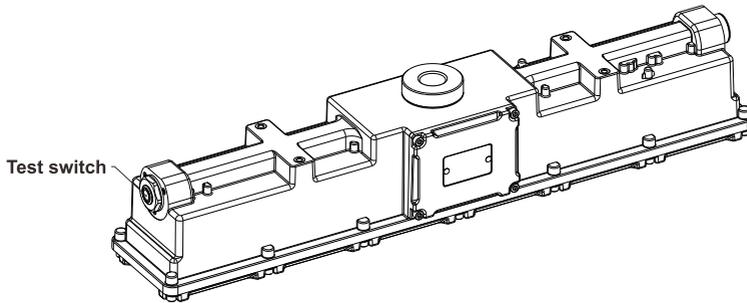
When the battery is connected and there is mains power, the LED indicator lights up green, indicating that it is charging or fully charged; When the battery is not connected or there is no mains power supply or the emergency mode is working, the LED indicator is off.



## Notice:

1. L1 (black wire) can be connected to a live wire switch (also called a normally-closed switch). When there is power, after turning off this switch (disconnect the live wire), the fixture would be off, but the battery is still in charging mode, and indicator would turn green. When the power is disconnected, the fixture would enter emergency mode.
2. When there is no need to connect the Live Switch, L1 (black wire) and L (brown wire) could be connected together.
3. CONDUIT HUB B can be used for interconnect luminaire and should be blocked with plugs when not in use.

## Emergency + Dimmable



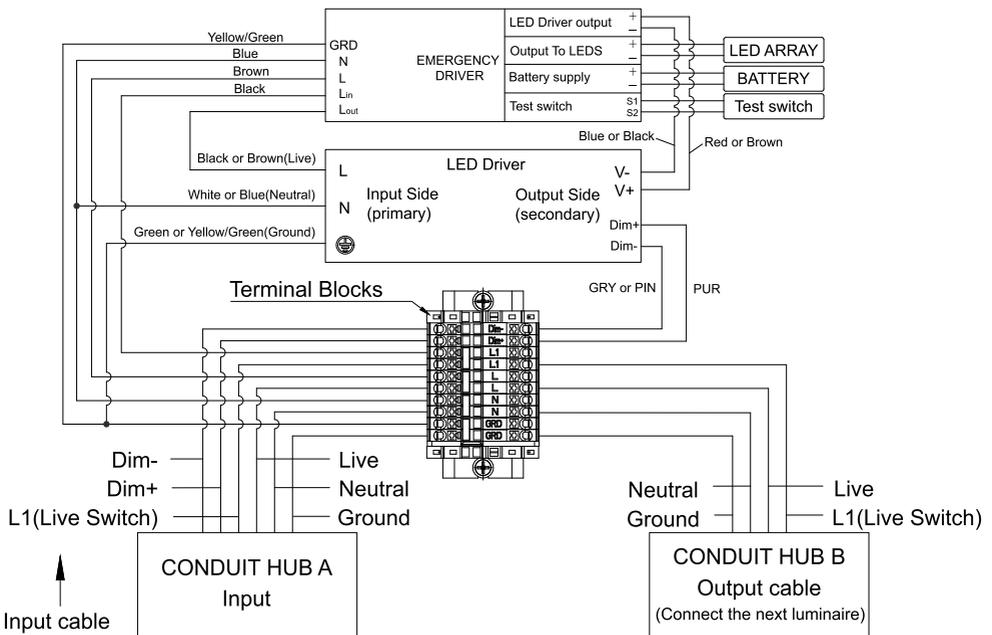
Test switch

Test switch with LED indicator:

Test switch: When the mains is connected, the emergency power module will work. If the test switch is pressed, the emergency power module will enter the emergency mode. If the switch is released, the lamp will enter the normal mains working mode, and the emergency power module will enter the charging mode.

LED indicator: LED indicator can indicate charging or non-charging status.

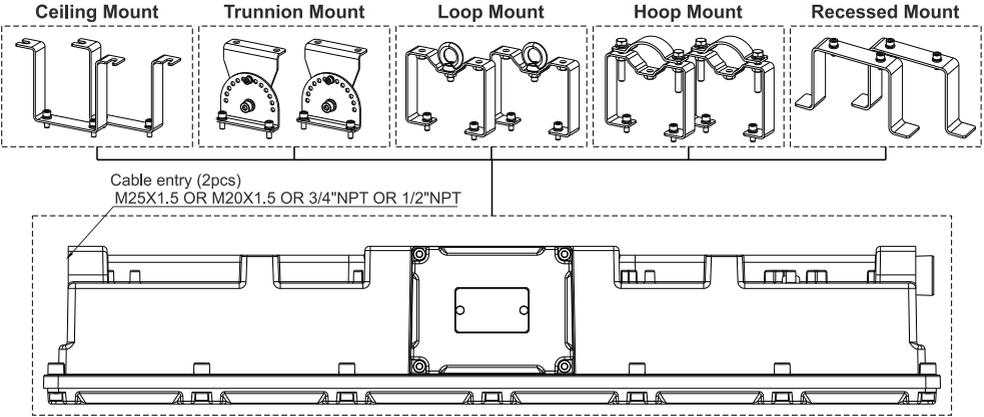
When the battery is connected and there is mains power, the LED indicator lights up green, indicating that it is charging or fully charged; When the battery is not connected or there is no mains power supply or the emergency mode is working, the LED indicator is off.



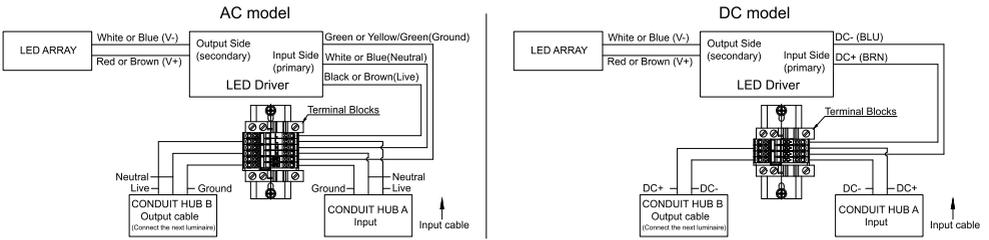
### Notice:

1. L1 (black wire) can be connected to a live wire switch (also called a normally-closed switch). When there is power, after turning off this switch (disconnect the live wire), the fixture would be off, but the battery is still in charging mode, and indicator would turn green. When the power is disconnected, the fixture would enter emergency mode.
2. When there is no need to connect the Live Switch, L1 (black wire) and L (brown wire) could be connected together.
3. CONDUIT HUB B can be used for Interconnect luminaire and should be blocked with plugs when not in use.

# Wiring Diagram (Cable entry from the side)

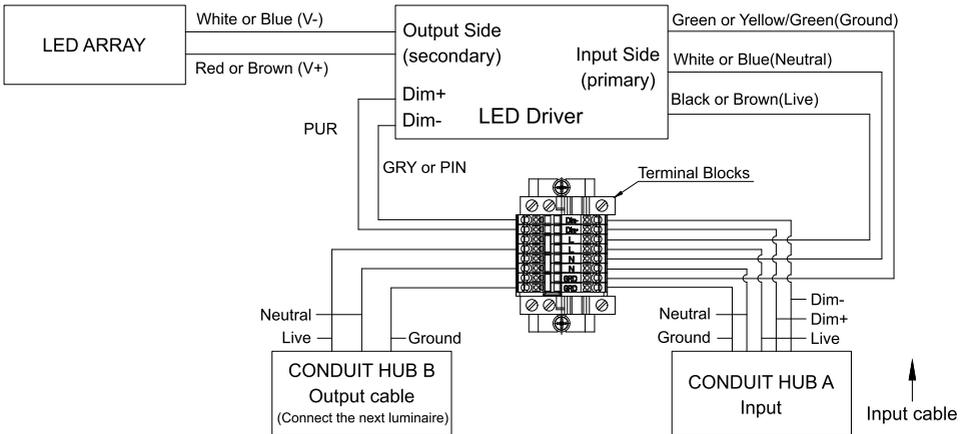


## Non-Dimmable



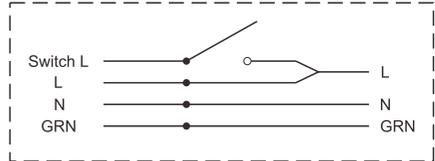
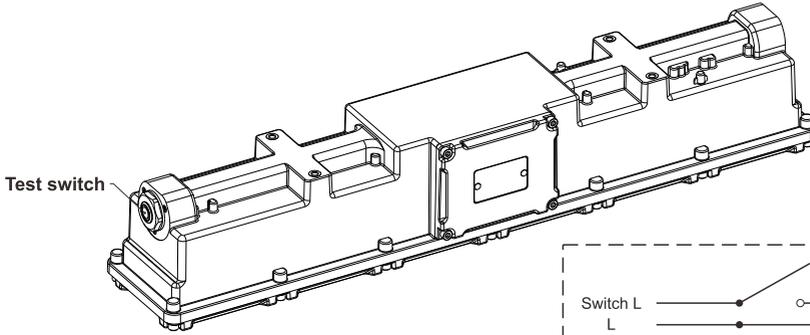
Notice: 1. The input AC voltage is below 50V, which is a safe voltage and does not need to be grounded.  
 2. CONDUIT HUB B can be used for interconnect luminaire and should be blocked with plugs when not in use.

## Dimmable



Notice: CONDUIT HUB B can be used for interconnect luminaire and should be blocked with plugs when not in use.

## Emergency

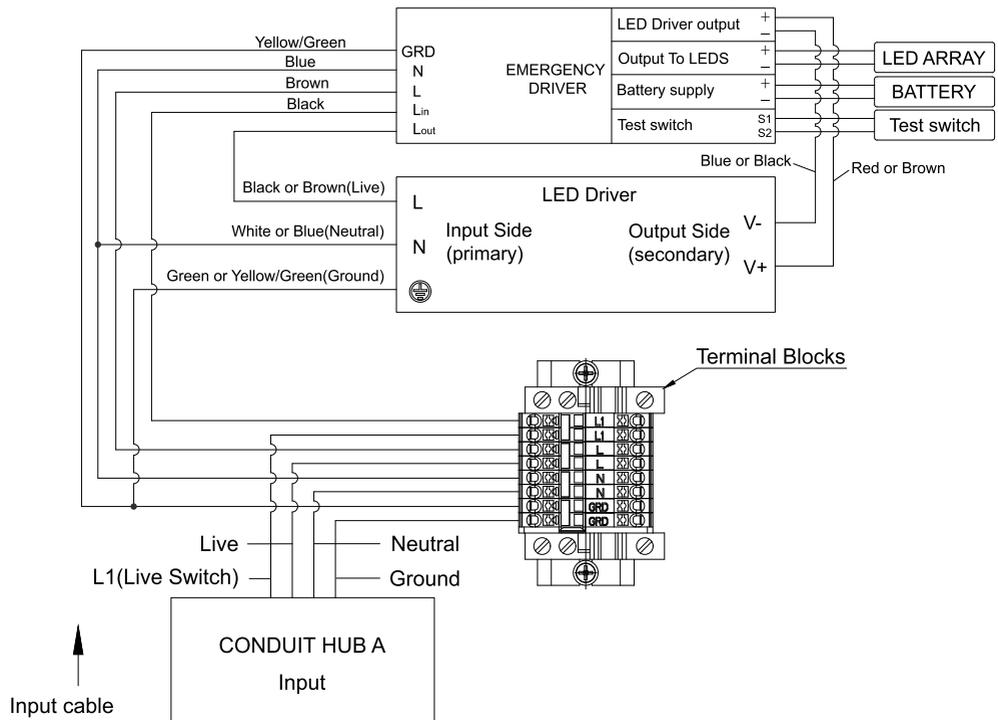


### Test switch with LED indicator:

**Test switch:** When the mains is connected, the emergency power module will work. If the test switch is pressed, the emergency power module will enter the emergency mode. If the switch is released, the lamp will enter the normal mains working mode, and the emergency power module will enter the charging mode.

**LED indicator:** LED indicator can indicate charging or non-charging status.

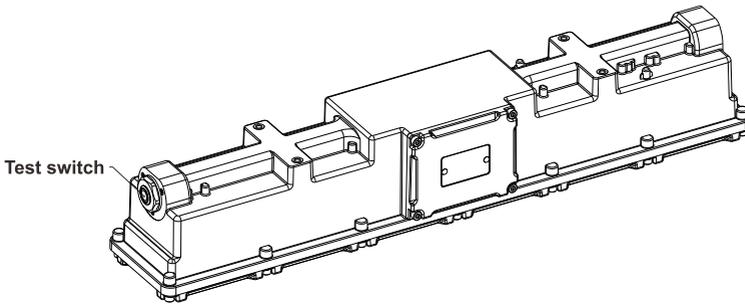
When the battery is connected and there is mains power, the LED indicator lights up green, indicating that it is charging or fully charged; when the battery is not connected or there is no mains power supply or the emergency mode is working, the LED indicator is off.



### Notice:

1. L1 (black wire) can be connected to a live wire switch (also called a normally-closed switch). When there is power, after turning off this switch (disconnect the live wire), the fixture would be off, but the battery is still in charging mode, and indicator would turn green. When the power is disconnected, the fixture would enter emergency mode.
2. When there is no need to connect the Live Switch, L1 (black wire) and L (brown wire) could be connected together.

## Emergency + Dimmable



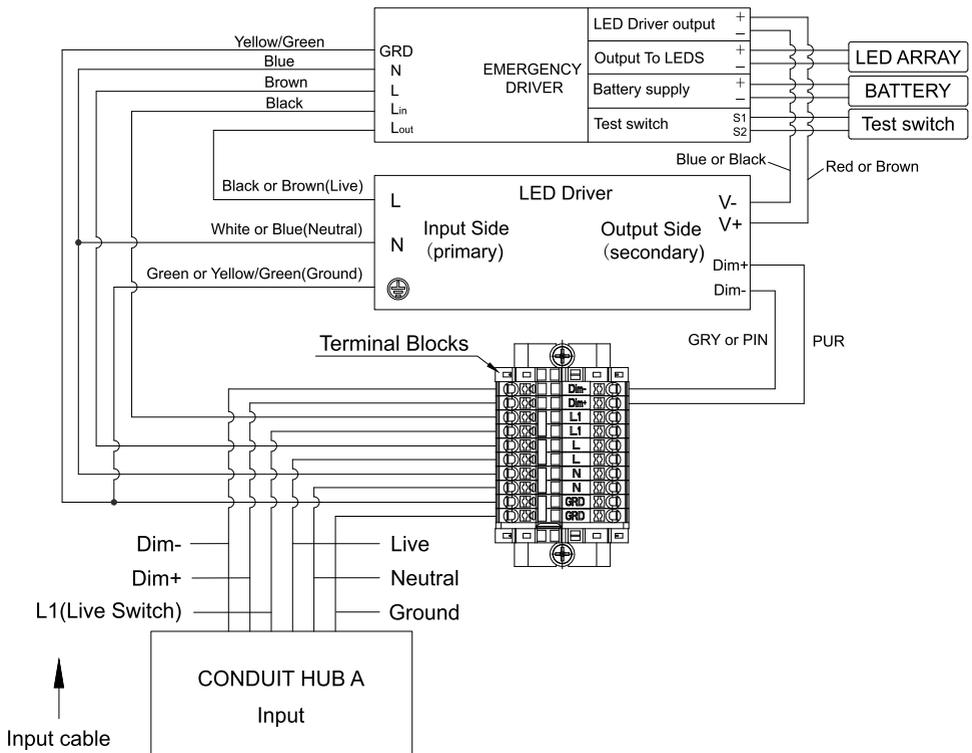
Test switch

Test switch with LED indicator:

Test switch: When the mains is connected, the emergency power module will work. If the test switch is pressed, the emergency power module will enter the emergency mode. If the switch is released, the lamp will enter the normal mains working mode, and the emergency power module will enter the charging mode.

LED indicator: LED indicator can indicate charging or non-charging status.

When the battery is connected and there is mains power, the LED indicator lights up green, indicating that it is charging or fully charged; When the battery is not connected or there is no mains power supply or the emergency mode is working, the LED indicator is off.



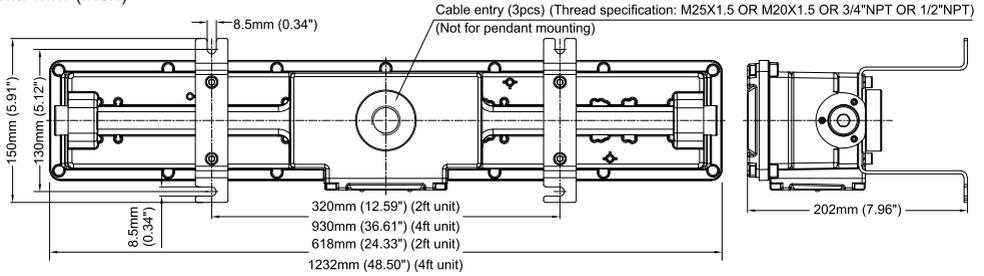
### Notice:

1. L1 (black wire) can be connected to a live wire switch (also called a normally-closed switch). When there is power, after turning off this switch (disconnect the live wire), the fixture would be off, but the battery is still in charging mode, and indicator would turn green. When the power is disconnected, the fixture would enter emergency mode.

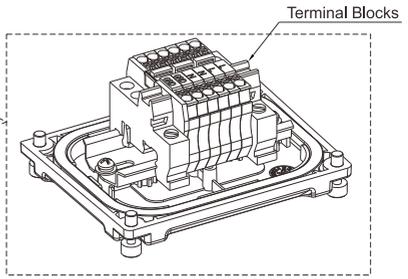
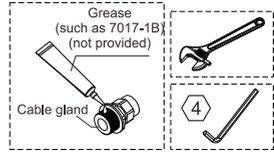
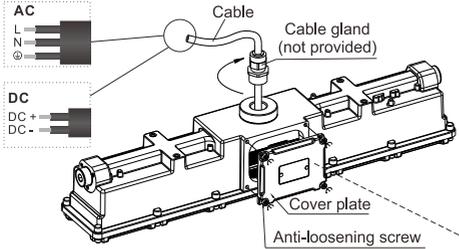
2. When there is no need to connect the Live Switch, L1 (black wire) and L (brown wire) could be connected together.

# Ceiling Mount

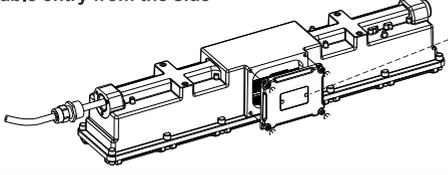
Unit: mm (inch)



## 1. Cable entry from the top



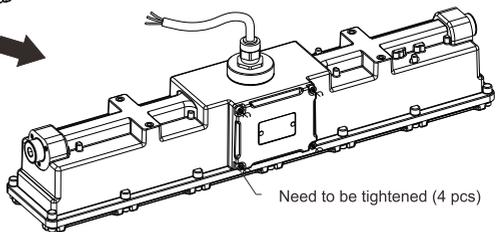
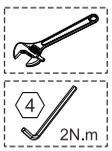
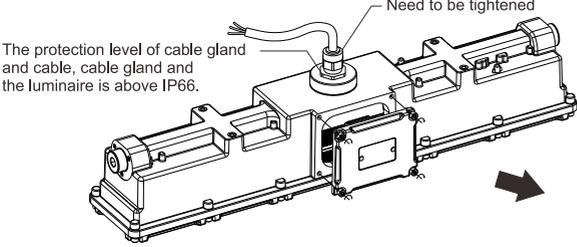
## Cable entry from the side



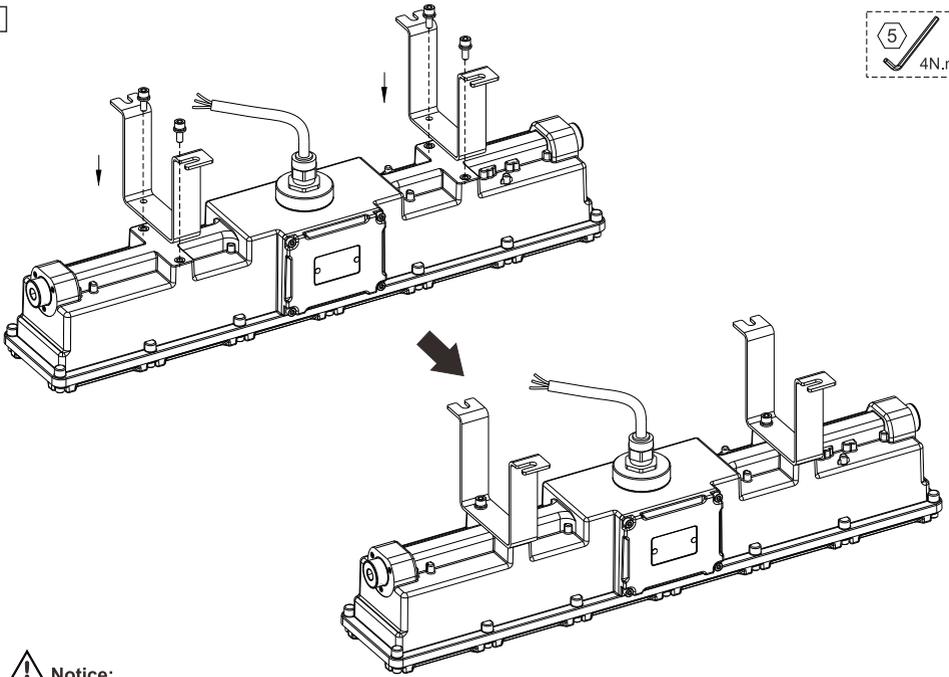
### ⚠ Notice:

1. Choose the appropriate cable and pay attention to the number of cores.
2. Choose the product that enters the line from the top or from the side according to the demand.
3. Wiring according to the wiring diagram.
4. Corrosion inhibiting grease, such as high and low temperature grease 7017-1B, may be applied to joint surfaces before assembly. It does not harden because of aging, does not contain evaporating solvent and does not cause corrosion of joint surfaces.
5. Shall use certified cable glands with suitable type of protection for installation purpose. Minimum IP66 for chosen cable glands.
6. Cable entry should be blocked with plugs when not in use.

## 2.



3.

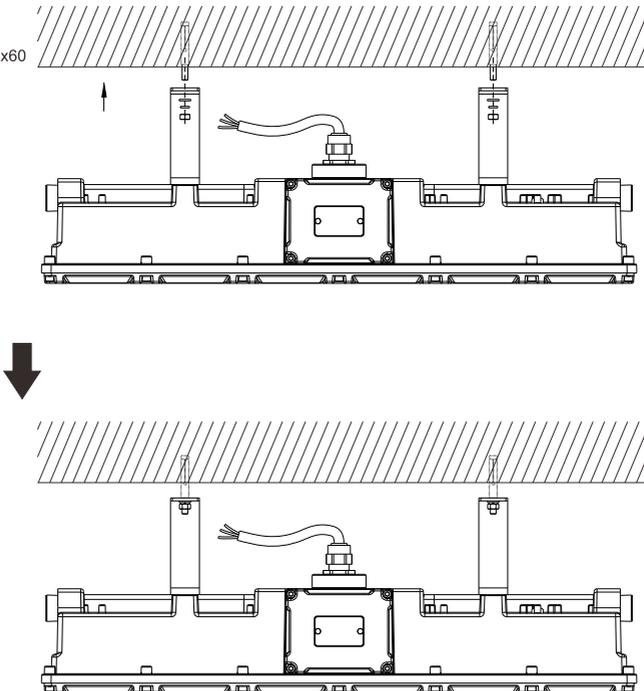
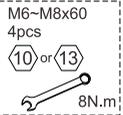


**Notice:**

If the product has already assembled this accessory, please ignore this step.

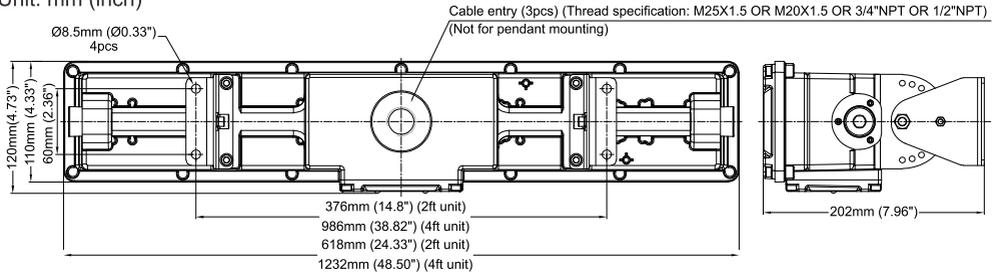
4.

Recommended  
Expansion screws: M6~M8x60  
(not provided)

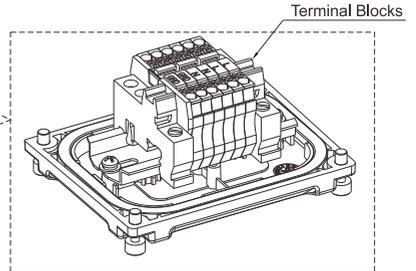
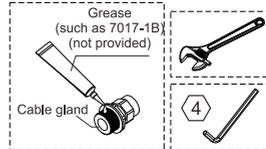
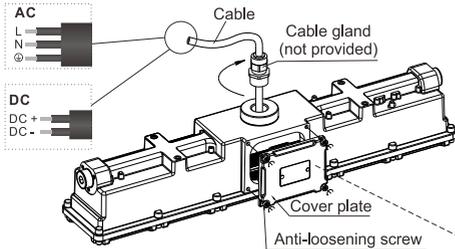


# Trunnion Mount

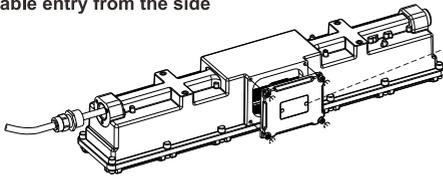
Unit: mm (inch)



## 1. Cable entry from the top



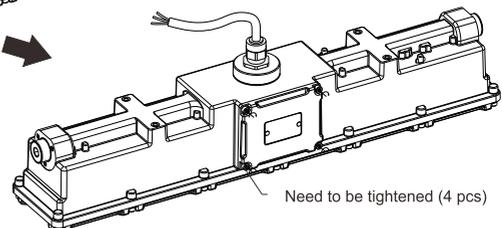
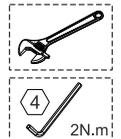
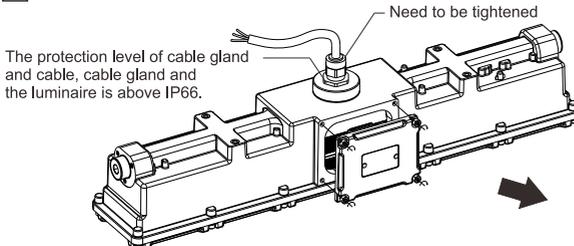
## Cable entry from the side



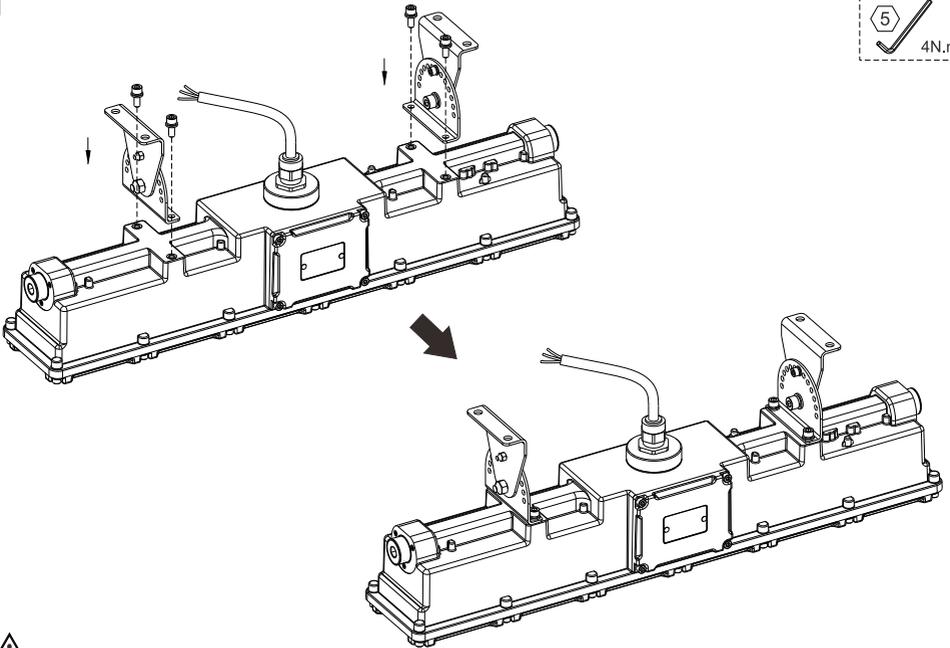
### ⚠ Notice:

1. Choose the appropriate cable and pay attention to the number of cores.
2. Choose the product that enters the line from the top or from the side according to the demand.
3. Wiring according to the wiring diagram.
4. Corrosion inhibiting grease, such as high and low temperature grease 7017-1B, may be applied to joint surfaces before assembly.  
It does not harden because of aging, does not contain evaporating solvent and does not cause corrosion of joint surfaces.
5. Shall use certified cable glands with suitable type of protection for installation purpose. Minimum IP66 for chosen cable glands.
6. Cable entry should be blocked with plugs when not in use.

## 2.



3.

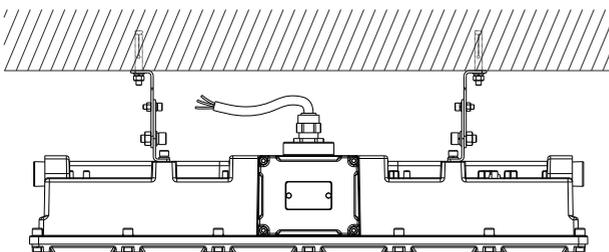
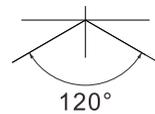
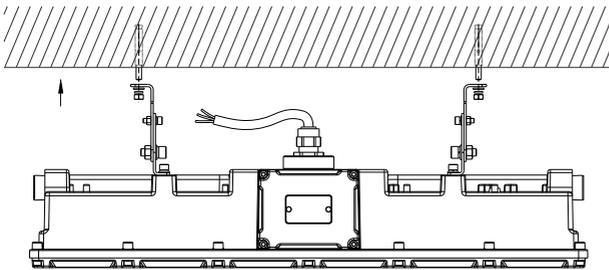
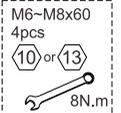


**Notice:**

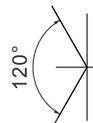
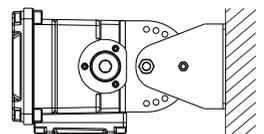
1. Pay attention to the installation direction of the bracket.
2. If the product has already assembled this accessory, please ignore this step.

4.

Recommended  
Expansion screws: M6-M8x60  
(not provided)

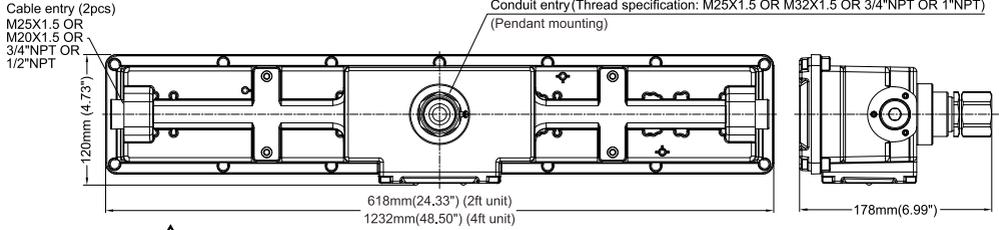


Wall mounting



# Pendant Mount

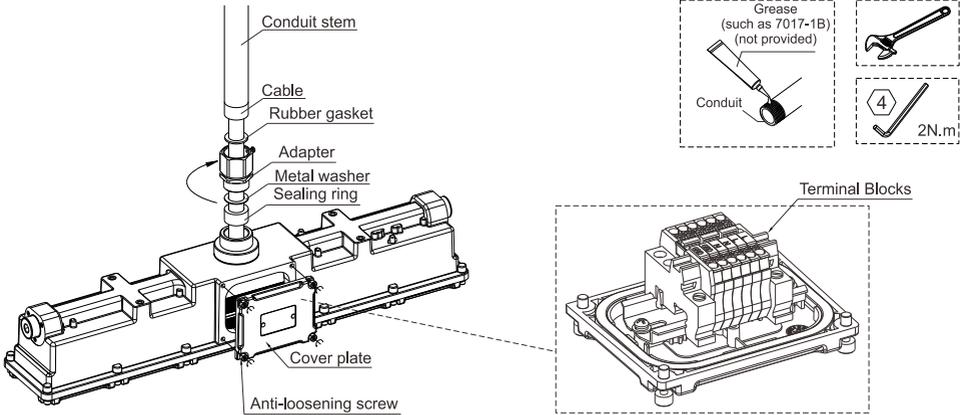
Unit: mm (inch)



**⚠ Notice:**

1. Conduit entry is M32X1.5 or 1"NPT, suitable for cables with an outer diameter of 15-19.
2. Conduit entry is M25X1.5 or 3/4"NPT, suitable for cables with an outer diameter of 8-12.

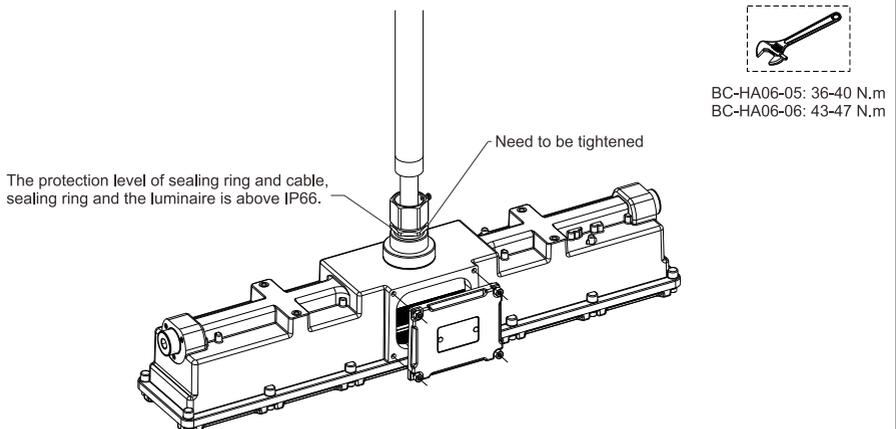
1.



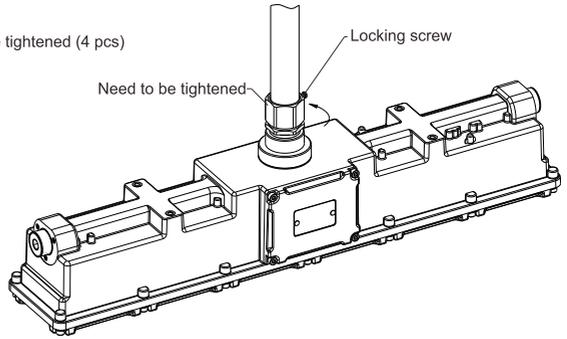
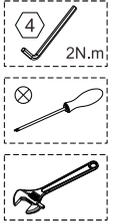
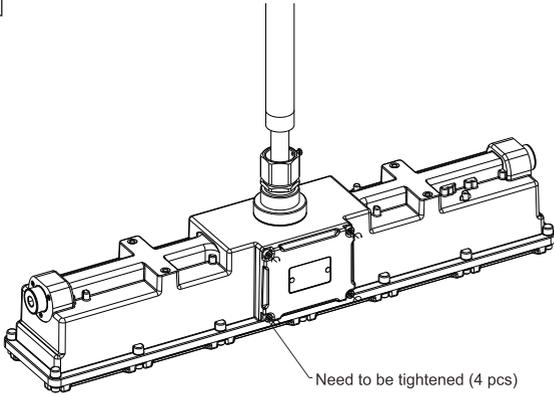
**⚠ Notice:**

1. Choose the appropriate cable and pay attention to the number of cores.
2. Conduit entry matches cable size.
3. Wiring according to the wiring diagram.
4. Corrosion inhibiting grease, such as high and low temperature grease 7017-1B, may be applied to joint surfaces before assembly. It does not harden because of aging, does not contain evaporating solvent and does not cause corrosion of joint surfaces.
5. Shall use certified cable glands with suitable type of protection for installation purpose. Minimum IP66 for chosen cable glands.
6. Cable entry should be blocked with plugs when not in use.

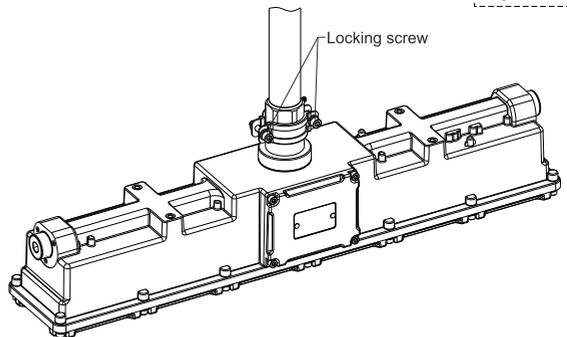
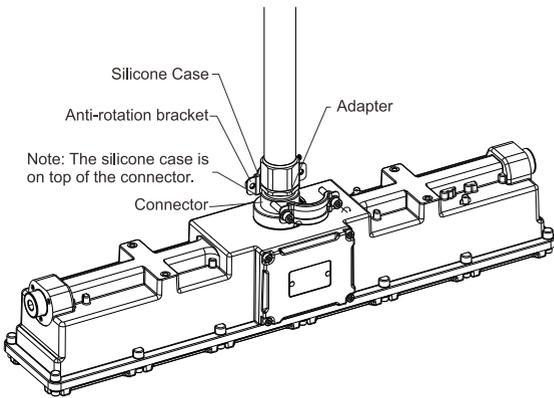
2.



3.

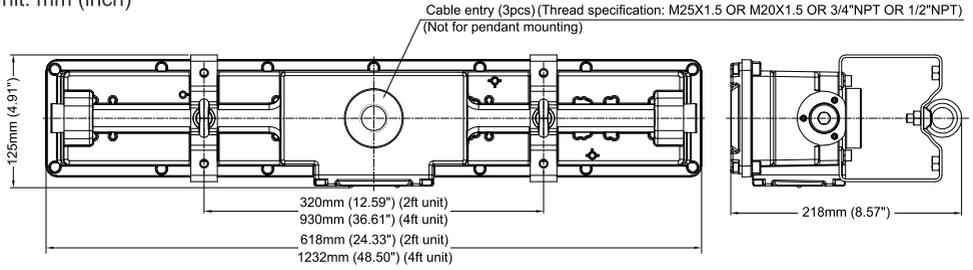


4.

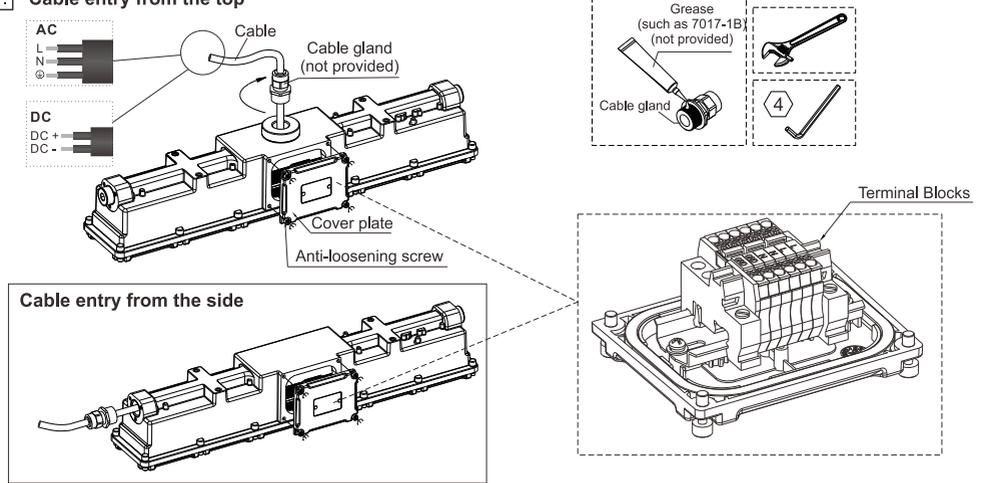


# Loop Mount

Unit: mm (inch)



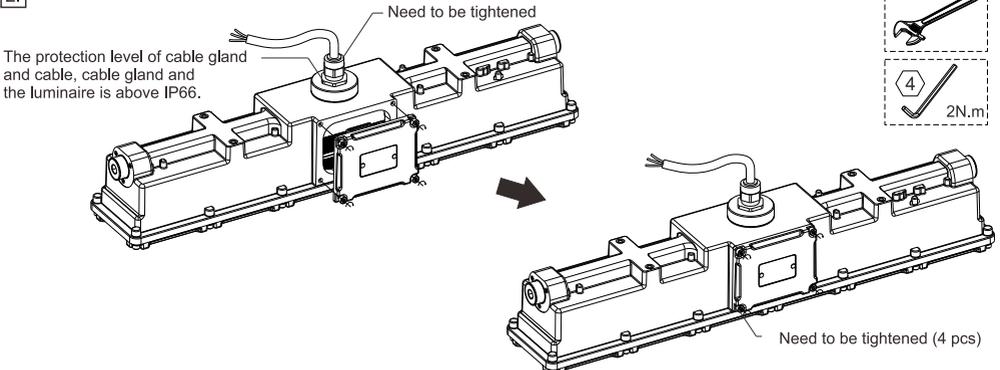
## 1. Cable entry from the top



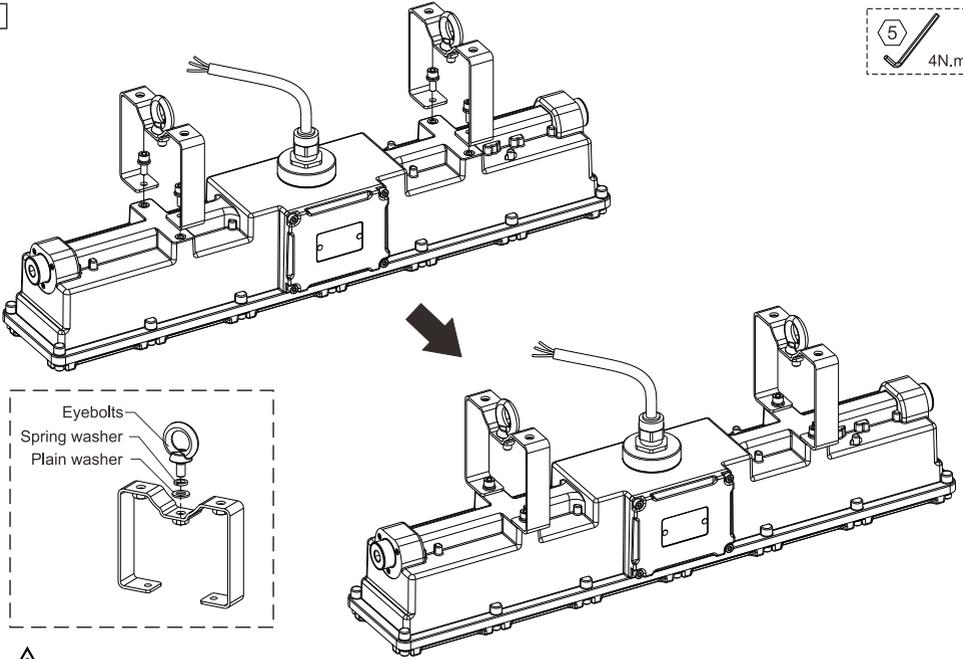
### ⚠ Notice:

1. Choose the appropriate cable and pay attention to the number of cores.
2. Choose the product that enters the line from the top or from the side according to the demand.
3. Wiring according to the wiring diagram.
4. Corrosion inhibiting grease, such as high and low temperature grease 7017-1B, may be applied to joint surfaces before assembly. It does not harden because of aging, does not contain evaporating solvent and does not cause corrosion of joint surfaces.
5. Shall use certified cable glands with suitable type of protection for installation purpose. Minimum IP66 for chosen cable glands.
6. Cable entry should be blocked with plugs when not in use.

## 2.



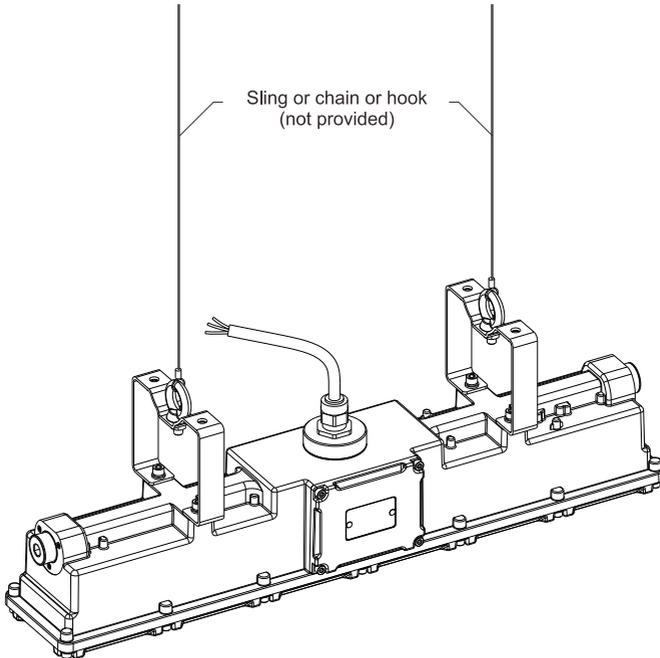
3.



**Notice:**

If the product has already assembled this accessory, please ignore this step.

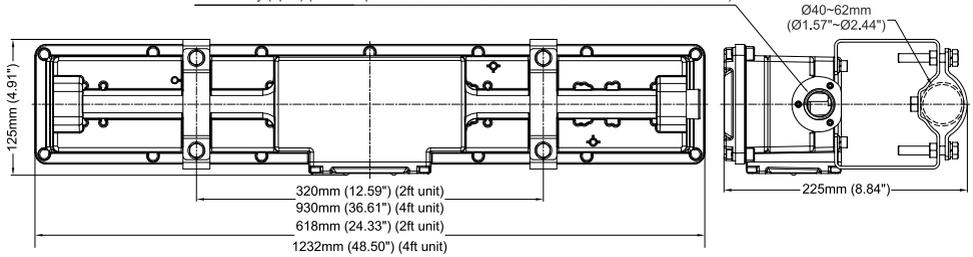
4.



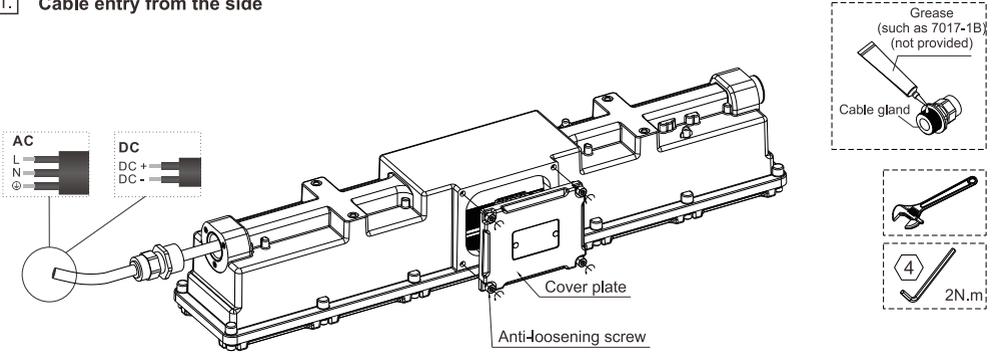
# Hoop Mount

Unit: mm (inch)

Cable entry (2pcs) (Thread specification: M25X1.5 OR M20X1.5 OR 3/4"NPT OR 1/2"NPT)



## 1. Cable entry from the side

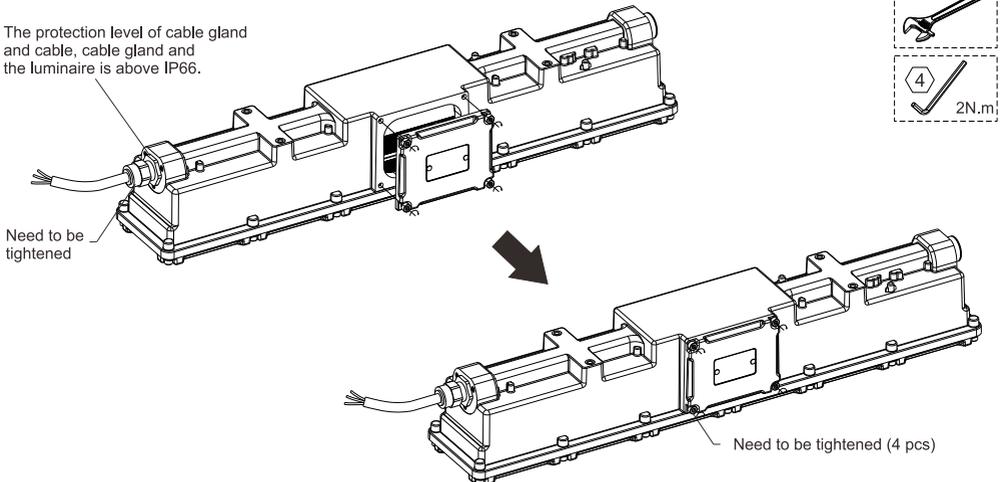


### ⚠ Notice:

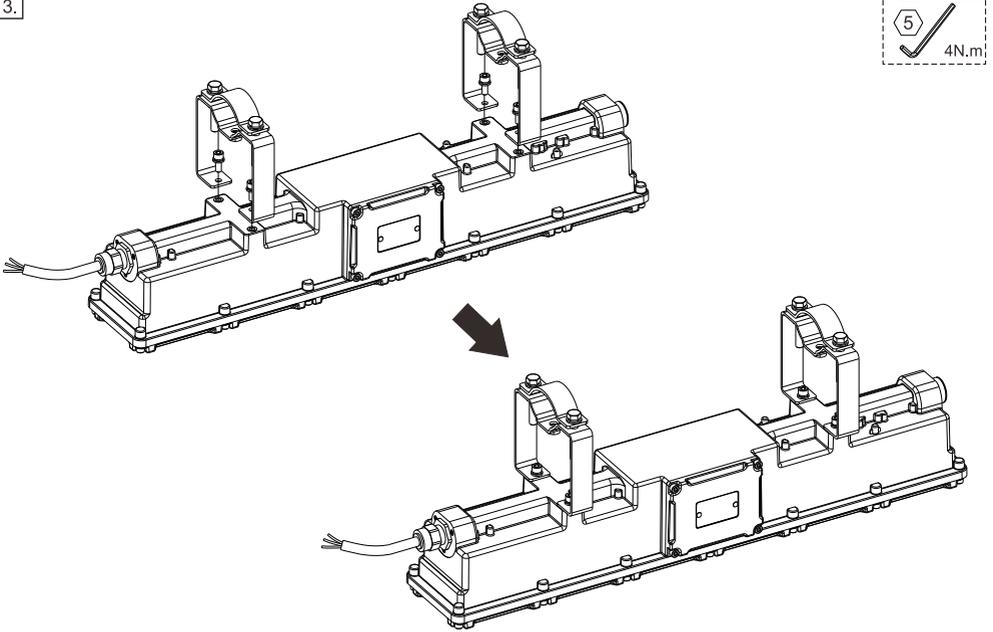
1. Choose the appropriate cable and pay attention to the number of cores.
2. Wiring according to the wiring diagram.
3. Corrosion inhibiting grease, such as high and low temperature grease 7017-1B, may be applied to joint surfaces before assembly. It does not harden because of aging, does not contain evaporating solvent and does not cause corrosion of joint surfaces.
4. Shall use certified cable glands with suitable type of protection for installation purpose. Minimum IP66 for chosen cable glands.
5. Cable entry should be blocked with plugs when not in use.

## 2.

The protection level of cable gland and cable, cable gland and the luminaire is above IP66.



3.

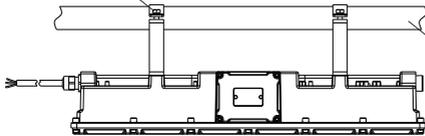


**Notice:**

If the product has already assembled this accessory, please ignore this step.

4.

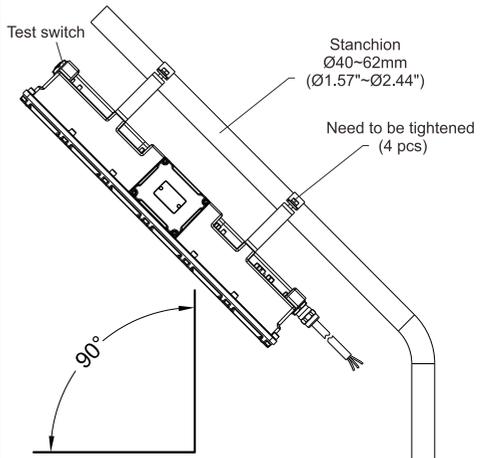
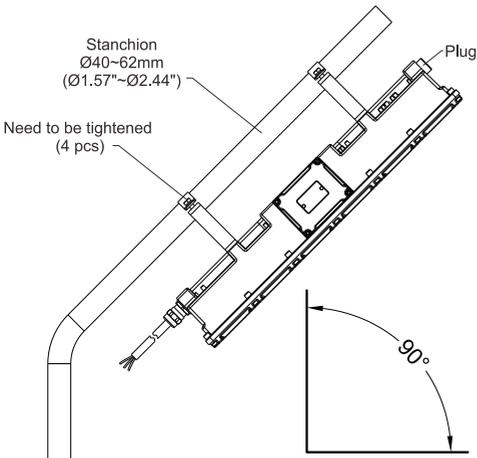
Hex Bolts: M8x50 (4 pcs)



Pipe  
Ø40-Ø62mm  
(Ø1.57"-Ø2.44")

**Non-emergency model**

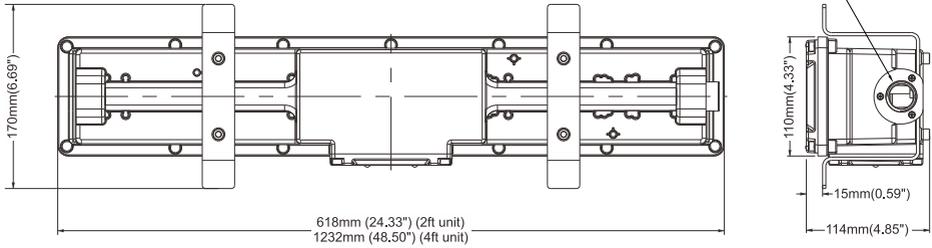
**Emergency model**



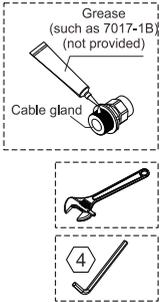
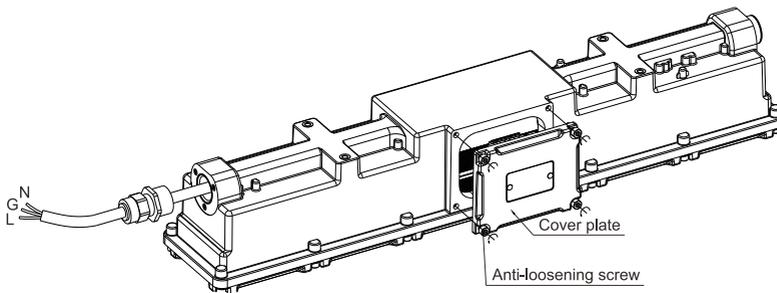
# Recessed Mount

Unit: mm (inch)

Cable entry (2pcs) (Thread specification: M25X1.5 OR M20X1.5 OR 3/4"NPT OR 1/2"NPT)



## 1. Cable entry from the side

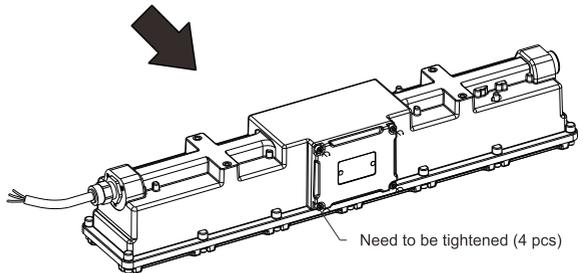
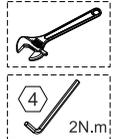
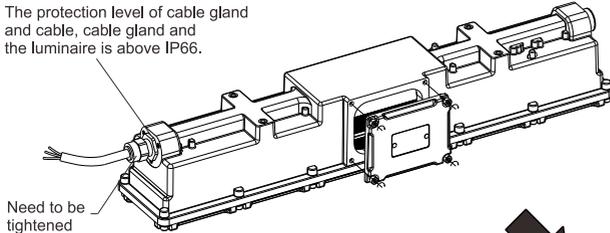


### ⚠ Notice:

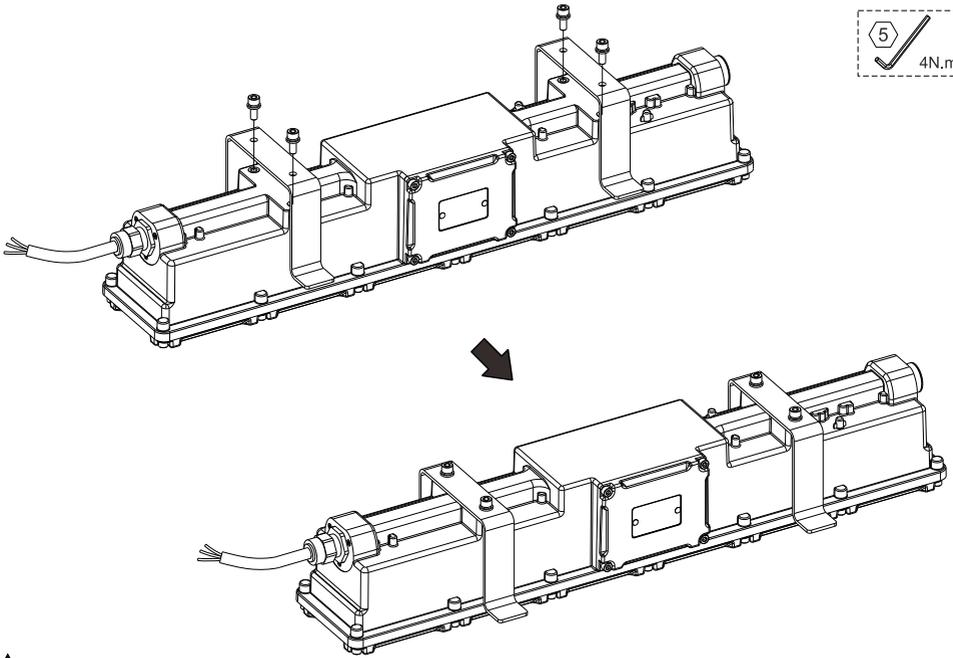
1. Choose the appropriate cable and pay attention to the number of cores.
2. Wiring according to the wiring diagram.
3. Corrosion inhibiting grease, such as high and low temperature grease 7017-1B, may be applied to joint surfaces before assembly. It does not harden because of aging, does not contain evaporating solvent and does not cause corrosion of joint surfaces.
4. Shall use certified cable glands with suitable type of protection for installation purpose. Minimum IP66 for chosen cable glands.
5. Cable entry should be blocked with plugs when not in use.

## 2.

The protection level of cable gland and cable, cable gland and the luminaire is above IP66.



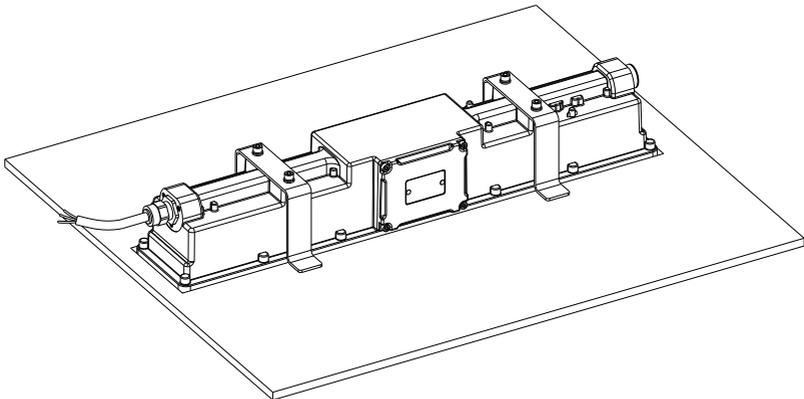
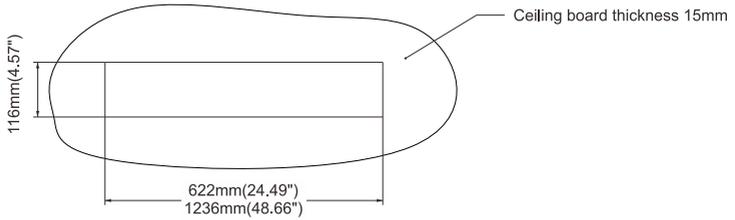
3.



**Notice:**

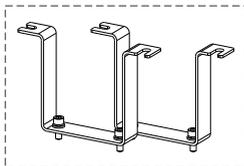
1. If the product has already assembled this accessory, please ignore this step.
2. The fixture is compatible with a ceiling thickness of 15mm. For other ceiling thicknesses, please consult us for customization.

4.



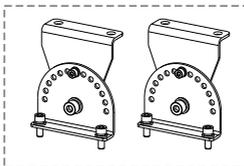
## Accessories

### Ceiling Mount



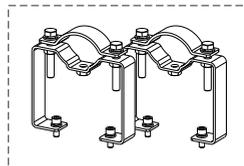
Dimension: 150\*30\*100mm  
 Surface Treatment: Powder coating  
 Color: Grey (RAL9007)  
 Code: **BC-EXA06-01**

### Trunnion Mount



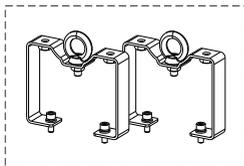
Dimension: 86\*43\*100mm  
 Surface Treatment: Powder coating  
 Color: Grey (RAL9007)  
 Code: **BC-EXA06-02**

### Hoop Mount



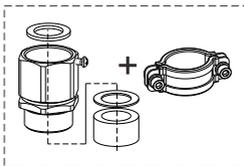
Dimension: 119\*25\*122mm  
 Surface Treatment: Powder coating  
 Color: Grey (RAL9007)  
 Code: **BC-EXA06-03**

### Loop Mount



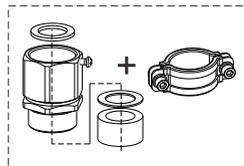
Dimension: 119\*25\*115mm  
 Surface Treatment: Powder coating  
 Color: Grey (RAL9007)  
 Code: **BC-EXA06-04**

### Pendant Mount



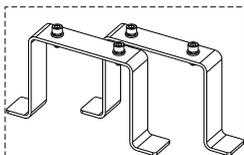
Dimension:  $\Phi 33 \times 65$ mm  
 Surface Treatment: Surface passivation  
 Color: Stainless steel color  
 Tube specification: M25X1.5 or 3/4"NPT  
 Cable outer diameter: 8-12  
 Code: **BC-EXA06-05**

### Pendant Mount



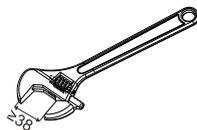
Dimension:  $\Phi 41 \times 65$ mm  
 Surface Treatment: Surface passivation  
 Color: Stainless steel color  
 Tube specification: M32X1.5 or 1"NPT  
 Cable outer diameter: 15-19  
 Code: **BC-EXA06-06**

### Recessed Mount

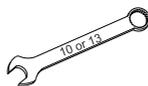


Dimension: 170\*30\*90mm  
 Surface Treatment: Powder coating  
 Color: Grey (RAL9007)  
 Code: **BC-EXA06-07**

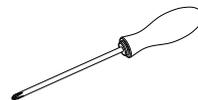
## Tools that may be used during installation



Adjustable wrench



Bayonet wrench



Bayonet wrench

4



Internal hexagonal wrench

5



Internal hexagonal wrench

10



Internal hexagonal wrench