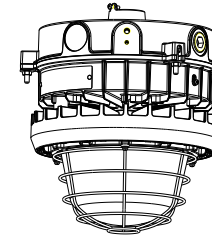
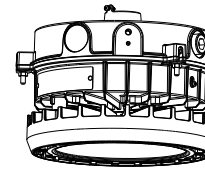


# LED Luminaires for Hazardous Locations

## Installation and Operation Instructions



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:

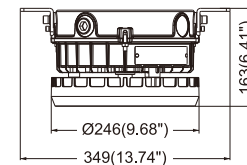
IECEx:  
Ex nR IIC T6/T5 Gc  
Ex tb IIIC T80/T95°C Db IP66  
IECEx Certificate: IECEx CSAE 24.0067X  
ATEX:  
Ex II 3G Ex nR IIC T6/T5 Gc  
Ex II 2D Ex tb IIIC T80/T95°C Db IP66  
ATEX Certificate: Gas: CSANe 24ATEX1296X  
Dust: CSANe 24ATEX1297X

**Typical application sites are:** Oil and gas refineries, drilling rigs, petrochemical facilities, food and beverage facilities, platforms, loading docks, tunnels, indoor/outdoor spotlighting, outdoor wall and stanchion mounted general area lighting, and where flammable vapors, gases, ignitable dusts, fibers or flyings are present.

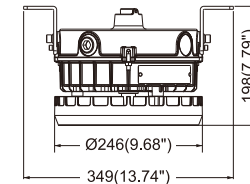
## Physical Dimensions (Flat glass) (Unit: mm/inch)

### Power:30/40/50/60/75W

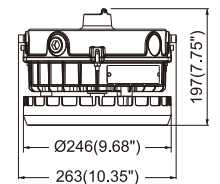
#### Ceiling Mount (1)



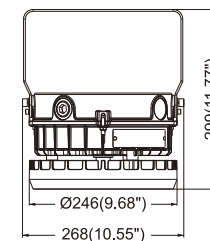
#### Ceiling Mount (2)



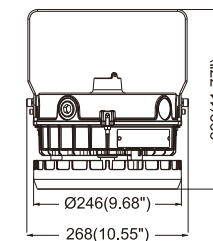
#### Pendant Mount



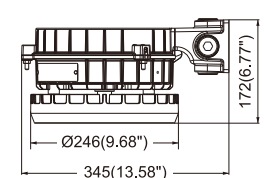
#### Trunnion Mount



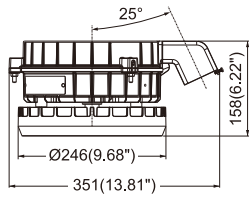
#### Pendant & Trunnion Mount



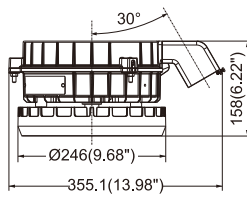
#### Wall Bracket Mount



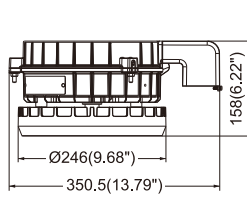
**25°Stanchion Mount**



**30°Stanchion Mount**



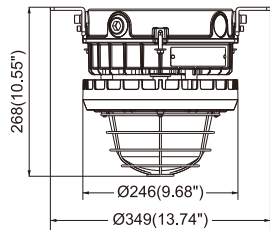
**90°Stanchion Mount**



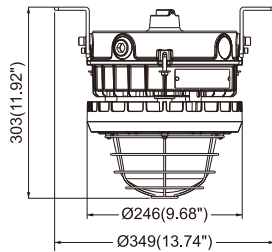
## Physical Dimensions (Curved glass) (Unit: mm/inch)

**Power:30/40/50/60/75W**

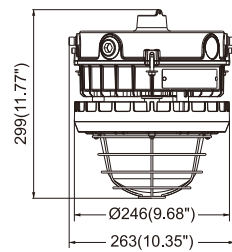
**Ceiling Mount (1)**



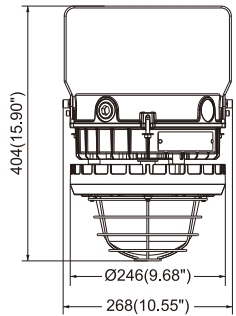
**Ceiling Mount (2)**



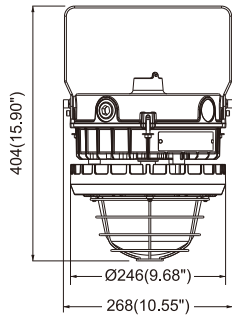
**Pendant Mount**



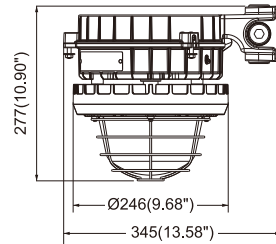
**Trunnion Mount**



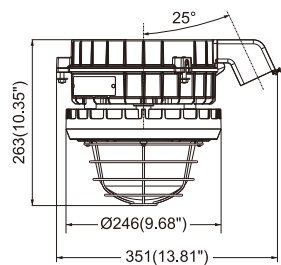
**Pendant & Trunnion Mount**



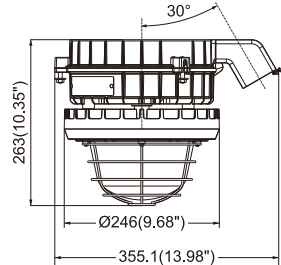
**Wall Bracket Mount**



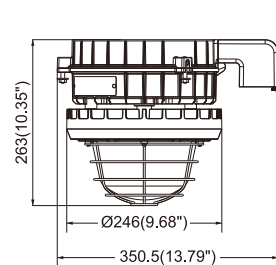
**25°Stanchion Mount**



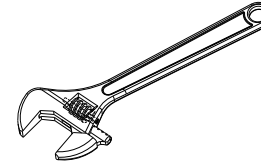
**30°Stanchion Mount**



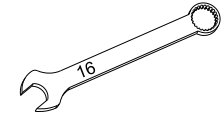
**90°Stanchion Mount**



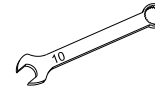
## Tools that may be used during installation



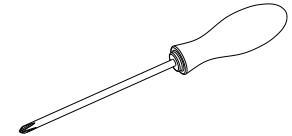
**Adjustable wrench**



**Bayonet wrench**



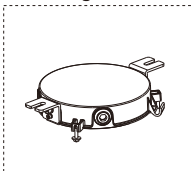
**Bayonet wrench**



**Cross screwdriver**

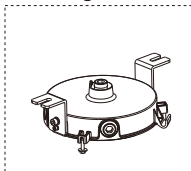
## Accessory

### Ceiling Mount 1



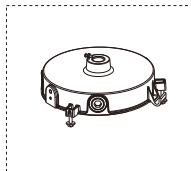
Dimension: 349x239x57mm  
Surface Treatment: Powder coating  
Code: MK-EXA10-02

### Ceiling Mount 2



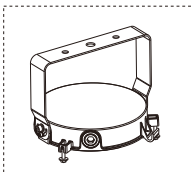
Dimension: 349x239x92mm  
Surface Treatment: Powder coating  
Code: MK-EXA10-01

### Pendant Mount



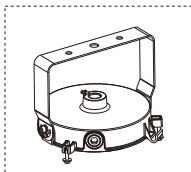
Dimension: 276x276x88mm  
Surface Treatment: Powder coating  
Code: MK-EXA10-03

### Trunnion Mount



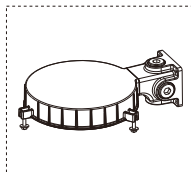
Dimension: 268x239x186mm  
Surface Treatment: Powder coating  
Code: MK-EXA10-05

### Pendant & Trunnion Mount



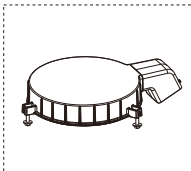
Dimension: 268x239x186mm  
Surface Treatment: Powder coating  
Code: MK-EXA10-04

### Wall Bracket Mount



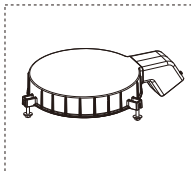
Dimension: 345x276x88mm  
Surface Treatment: Powder coating  
Code: MK-EXA10-06

### 25° Stanchion Mount



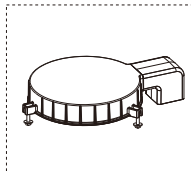
Dimension: 351x276x73.1mm  
Surface Treatment: Powder coating  
Code: MK-EXA10-07

### 30° Stanchion Mount



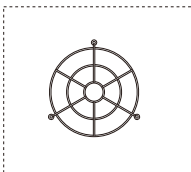
Dimension: 355.1x276x77.5mm  
Surface Treatment: Powder coating  
Code: MK-EXA10-08

### 90° Stanchion Mount



Dimension: 350.5x276x83mm  
Surface Treatment: Powder coating  
Code: MK-EXA10-09

### Wire Guard



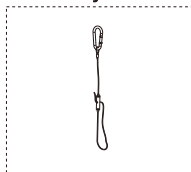
Dimension: 214.5x214.5x6mm  
Surface Treatment: Powder coating  
Code: BC-EXA10-01

### Curved wire guard



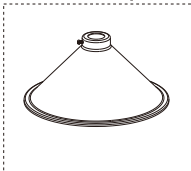
Dimension: 214.5x214.5x102mm  
Surface Treatment: Powder coating  
Code: BC-EXA10-02

### Safety cable



Buckle size: Ø4x40 mm  
Cable length : 2m  
Material : SUS304  
Color: Natural color  
Code: SL-EXA10-01

### Cone Top



Dimension: 237.9x237.9x113.6mm  
Surface Treatment: Powder coating  
Code: AD-EXA10-01

## Product Specifications

Power		30W	40W	50W	60W	75W
Input Voltage		18-48Vdc / 190-315Vdc / 120-277Vac, 50 / 60 Hz				
Outlook Dimensions	Ceiling Mount(1)	349x246x163mm(13.74"x9.68"x6.41") (Flat glass) / 349x246x268mm(13.74"x9.68"x10.55") (Curved glass)				
	Ceiling Mount(2)	349x246x198mm(13.74"x9.68"x7.79") (Flat glass) / 349x246x303mm(13.74"x9.68"x11.92") (Curved glass)				
	Pendant Mount	263x246x197mm(10.35"x9.68"x7.75") (Flat glass) / 263x246x299mm(10.35"x9.68"x11.77") (Curved glass)				
	Trunnion Mount	268x246x299mm(10.55"x9.68"x11.77") (Flat glass) / 268x246x404mm(10.55"x9.68"x15.90") (Curved glass)				
	Pendant&Trunnion Mount	268x246x299mm(10.55"x9.68"x11.77") (Flat glass) / 268x246x404mm(10.55"x9.68"x15.90") (Curved glass)				
	Wall Bracket	345x246x172mm(13.58"x9.68"x6.77") (Flat glass) / 345x246x277mm(13.58"x9.68"x10.90") (Curved glass)				
	25° Stanchion Mount	351x246x158mm(13.81"x9.68"x6.22") (Flat glass) / 351x246x263mm(13.81"x9.68"x10.35") (Curved glass)				
	30° Stanchion Mount	355.1x246x158mm(13.98"x9.68"x6.22") (Flat glass) / 355.1x246x263mm(13.98"x9.68"x10.35") (Curved glass)				
	90° Stanchion Mount	350.5x246x158mm(13.79"x9.68"x6.22") (Flat glass) / 350.5x246x263mm(13.79"x9.68"x10.35") (Curved glass)				
Luminaire Net Weight	Ceiling Mount(1)	4.2kg (9.26Lbs)(Flat glass) / 5.4kg (11.9Lbs)(curved glass)				
	Ceiling Mount(2)					
	Pendant Mount	3.9kg (8.6Lbs)(Flat glass) / 5.1kg (11.24Lbs)(curved glass)				
	Trunnion Mount	4.4kg (9.7Lbs)(Flat glass) / 5.6kg (12.35Lbs)(curved glass)				
	Pendant&Trunnion Mount					
	Wall Bracket	4.4kg (9.7Lbs)(Flat glass) / 5.6kg (12.35Lbs)(curved glass)				
	25° Stanchion Mount	4kg (8.82Lbs)(Flat glass) / 5.3kg (11.68Lbs)(curved glass)				
	30° Stanchion Mount	4.1kg (9.04Lbs)(Flat glass) / 5.4kg (11.9Lbs)(curved glass)				
	90° Stanchion Mount					
Emergency model	EM Wattage & EM time	12W 1.5h or 6W 3h (Input Voltage: 120-277Vac, 50 / 60 Hz)				
	Battery Capacity	6.4V 4300mAh				
Working Temperature		-40°C to +65°C (-40°F to +149°F) (Only 30W/40W/50W) -40°C to +60°C (-40°F to +140°F) (Only 60W/75W) 0°C to +50°C (32°F to +122°F) (Only Emergency model 30W/40W/50W/60W/75W)				
Storing Temperature		-40°C to +70°C (-40°F to +158°F)				

\* The tolerance for weight is ±6%.

## Luminaire Shipping Packing List

Name	QTY
EXA10 Series luminaire	1 pc
EXA10 Series Installation and operation instructions	1 pc
EU Declaration-of-conformity	1 pc

## Model description

Model description:

EXA 10-XXX-X-XX-XXX-XX-X-XX

- Options: WG=Wire guard; EM=Emergency Battery; DM=Dimmable; ED=Emergency Battery & Dimmable
- AP=Adjustable Power; CT=Cone Top
- Mounting Style: C=Ceiling mount; T=Trunnion Mount; P=Pendant Mount; M= Pendant & Trunnion Mount
- W=Wall Bracket; S=25° Stanchion Mount; X=30° Stanchion Mount; V=90° Stanchion Mount
- Diffusion Material: CG=Flat clear glass; GG=Curved grille glass
- Beam Distribution: 000=120°(No lens); 020=T10701(Type I); 021=T10703(Type III)
- 022=T10706(60°); 023=T10707(90°)
- CCT(K): 20=2000; ...; 65=6500; Re=Red; Gr=Green; Bl=Blue; Am=Amber
- Voltage: U=120-277Vac, 50/60Hz; D=18-48Vdc; D<sub>2</sub>=190-315Vdc;
- Lamp Wattage: 030=30W; 040=40W; 050=50W; 060=60W; 075=75W
- Lamp Code: 10
- Series constant: EXA-Hazardous

## Installation and Operation Instructions

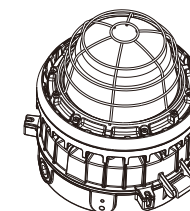
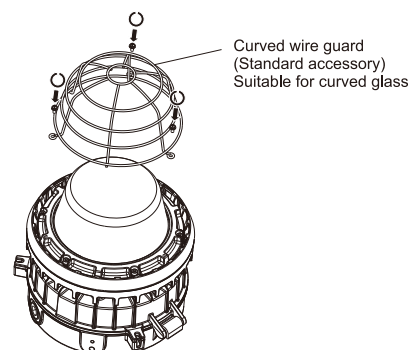
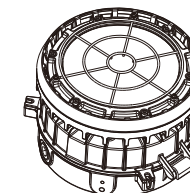
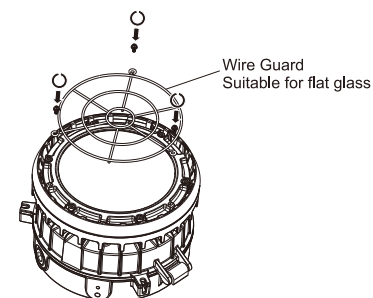
### Dear Customers and Users:

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.

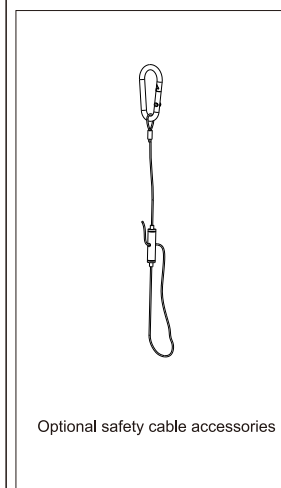
### Warnings:

1. The product can be connected to a power supply of 120-277Vac 50/60Hz;190-315Vdc; 18-48Vdc 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. Please do not touch the light while it is working.
8. Any installation and maintenance must be performed by certified electricians only.
9. Do not open the enclosure when the light is working.
10. Do not use this luminaire on an ungrounded circuit, otherwise it can cause a fatal electric shock.
11. Do not look directly at the LEDs when energized.
12. For emergency lighting, replacement of battery packs is not allowed.
13. The product is suitable for conductor cross section of 1.0mm<sup>2</sup> (18AWG) ~ 4mm<sup>2</sup> (12AWG).

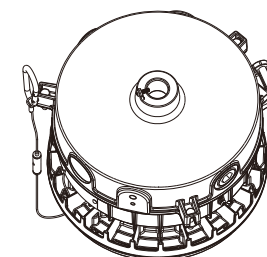
## Wire Guard Mount



## Accessory Mount

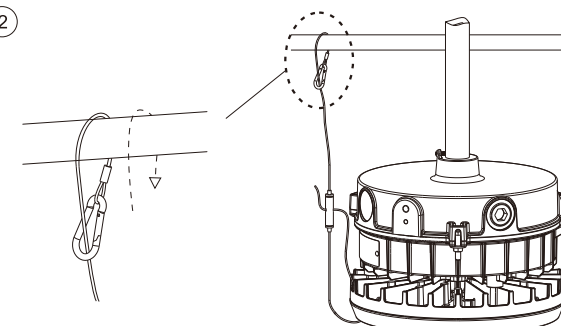


①

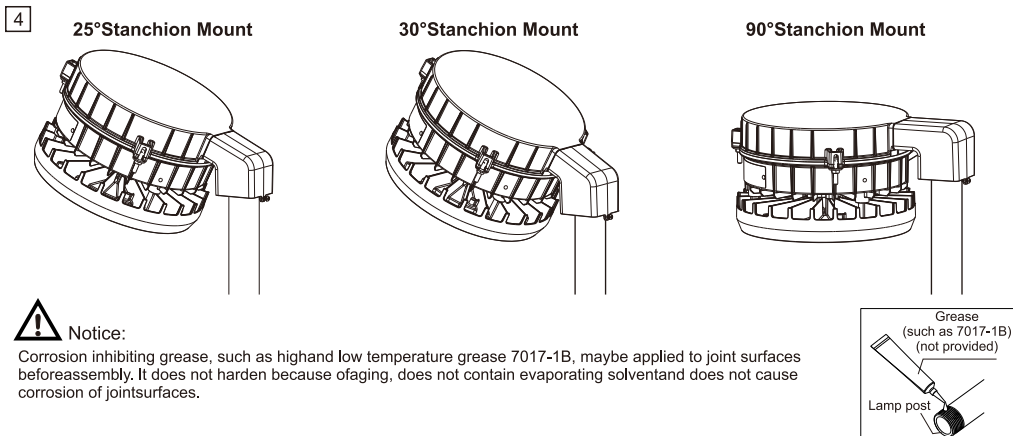


To thread the safety cable through the radiator

②

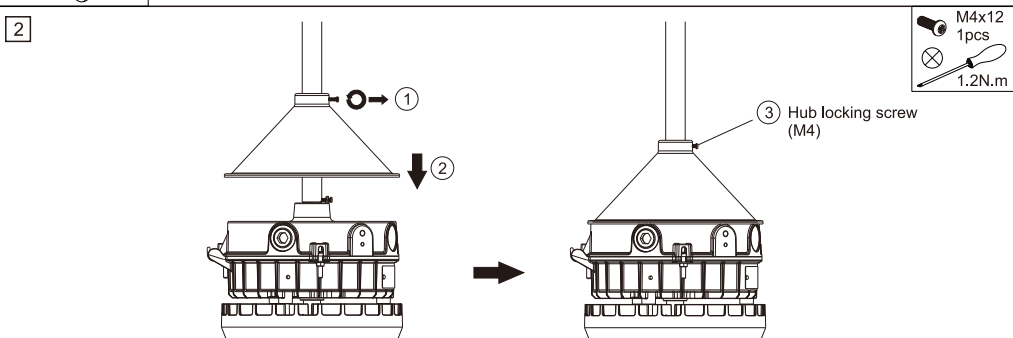
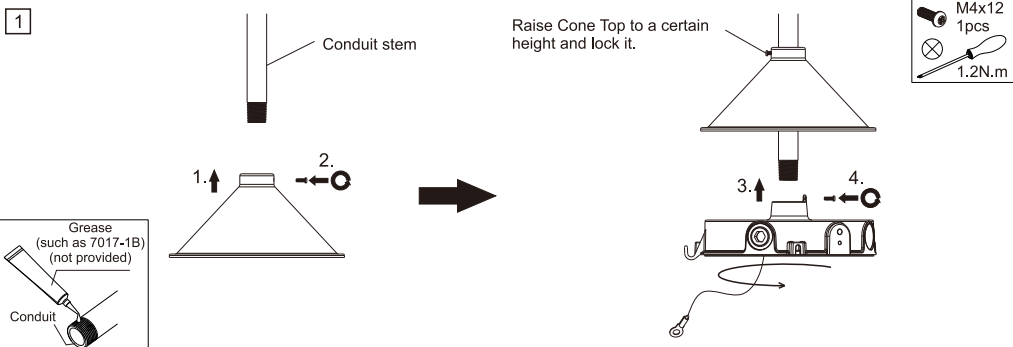
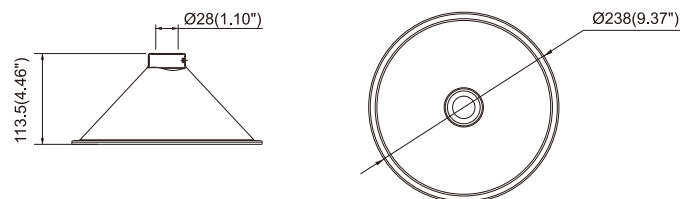






## Accessory Mount

### Cone Top Unit: mm(inch)



This conical cover is an optional accessory that can be installed on top of the pendant to prevent dust accumulation. Please refer to "Pendant Mount" for detailed installation steps.

## 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 hazardous areas, 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

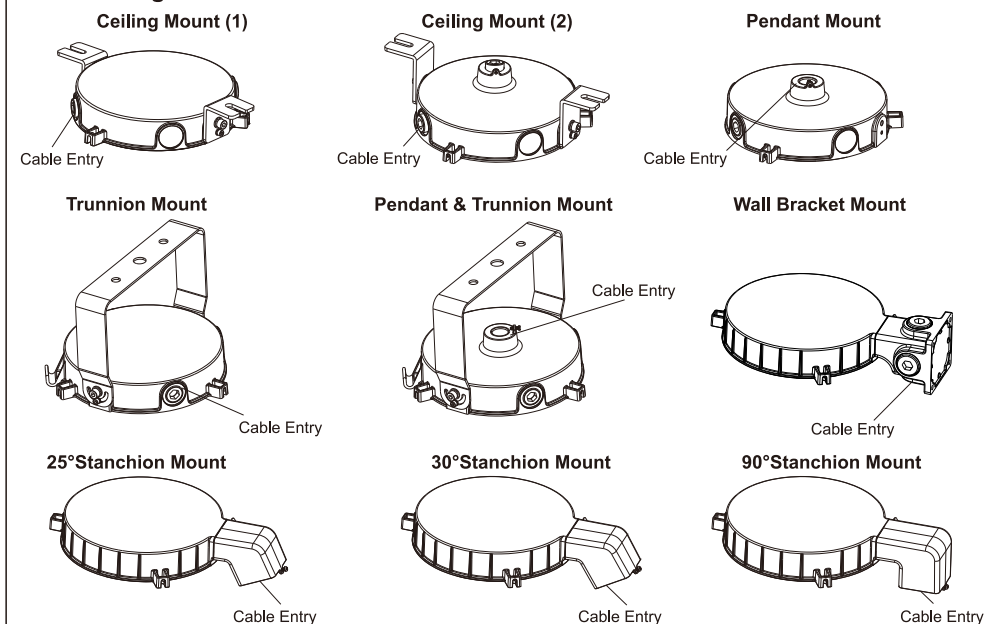
Regards the wiring diagram please refers to installation detailed instruction below. Normally, brown (or black) wire connects to live wire, blue (or white) to nature wire, green with yellow (or green) strips to the grounding.

### Special conditions for safe use:

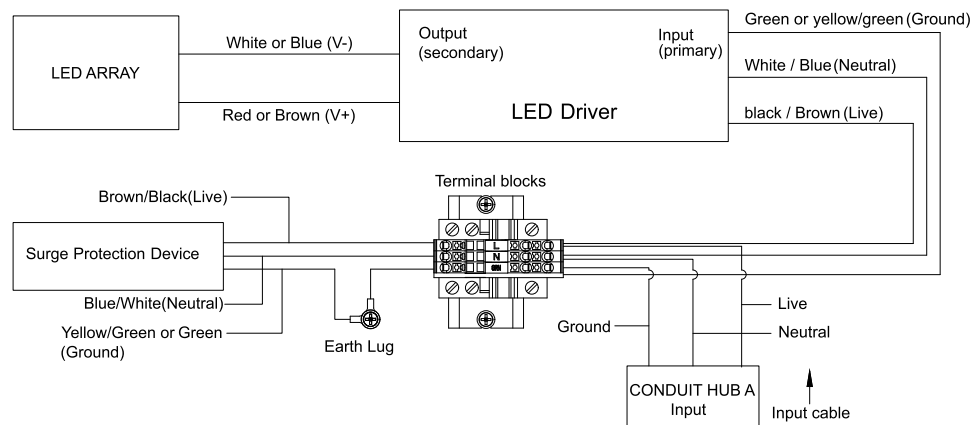
- The EXA10 series LED luminaires for Hazardous Locations shall be mounted only in accordance with manufacturer's instructions.
- The aluminium alloy enclosures with a non-metallic coating featuring a non-conducting powder coat may generate an ignition-capable level of electrostatic charges under certain 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.
- All cable entry holes shall be fitted of either suitably approved cable glands or suitably approved stopping plugs that is suitable for the application.
- As part of the re-lamping procedure the gaskets are to be checked and replaced if found to be degraded. Contact the manufacturer for information on the gaskets
- Clean the luminaire regularly to prevent dust accumulation.
- The luminaire with curved grille glass shall only be used in locations where there is a low risk of mechanical impact.
- Under rated conditions, the cable entry point could reach a temperature exceeding 70°C and the branching point could reach a temperature of 80°C; this shall be considered when installing only cable glands and cables that have temperature rating 90°C shall be used.
- The test switch on the enclosure shall not be operated in the hazardous area.

## Wiring Diagram (One cable entry)

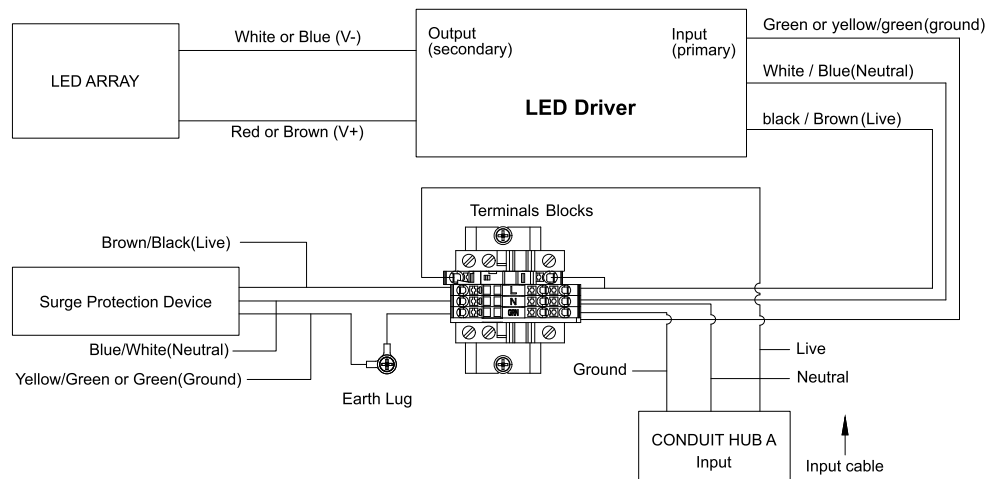
### One cable gland



## Non-Dimmable



## Dimmable



## Emergency

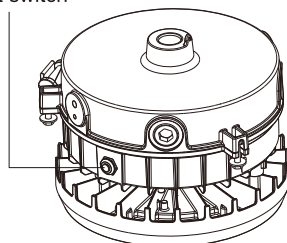
Test switch with LED indicator:

**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.

**NOTE:** During normal operation, this switch is not used.

Test switch

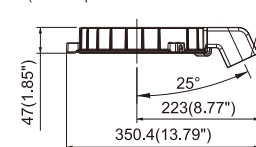


## Stanchion Mount

Unit: mm(inch)

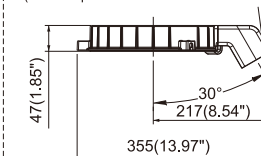
### 25°Stanchion Mount

Cable entry (1pc)  
(Thread specification: 1-1/4"NPT OR 1-1/2"NPT)



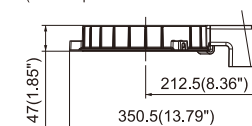
### 30°Stanchion Mount

Cable entry (1pc)  
(Thread specification: 1-1/4"NPT OR 1-1/2"NPT)

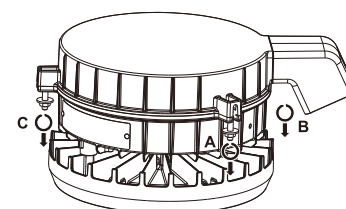


### 90°Stanchion Mount

Cable entry (1pc)  
(Thread specification: 1-1/4"NPT OR 1-1/2"NPT)

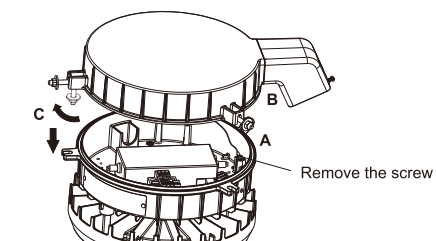


1



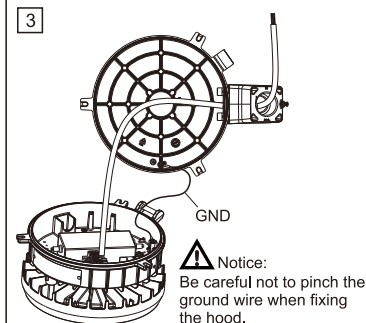
Unscrew the A, B, C three screws on the power box counterclockwise

2

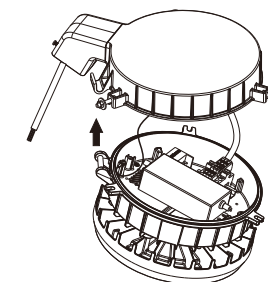


Pull up the three screws A, B, and C, and remove the power box downwards

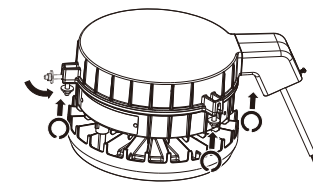
3



① Connect the ground wire to the hood

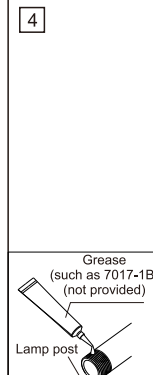


② After securing the hood, close the power box

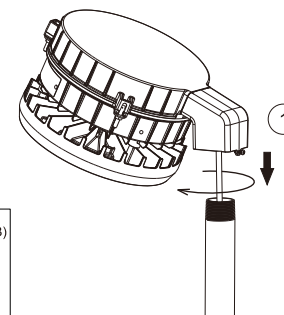


③ Tighten the three screws on the power box

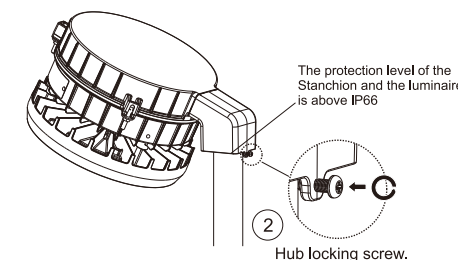
4



Lamp post



1

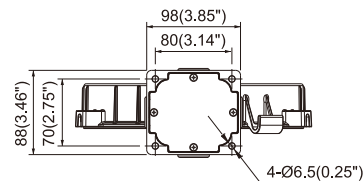
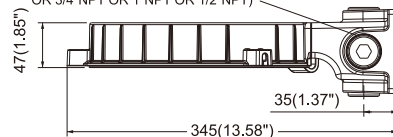


Hub locking screw.

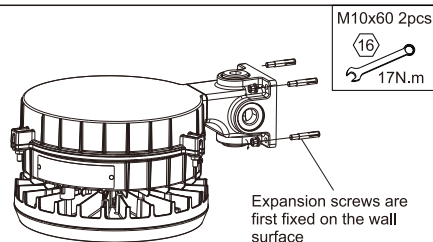
## Wall Bracket Mount

Unit: mm(inch)

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

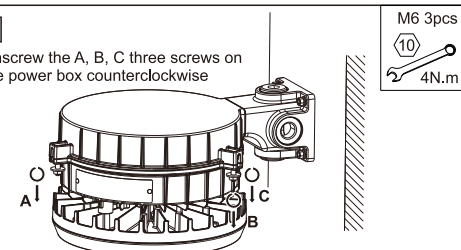


1

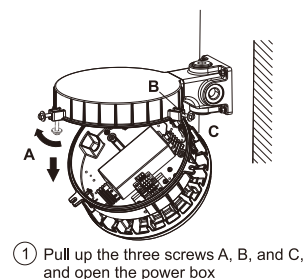


2

Unscrew the A, B, C three screws on the power box counterclockwise



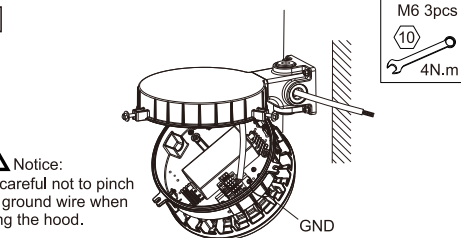
3



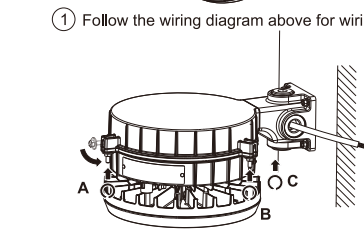
4

**Notice:**  
Be careful not to pinch the ground wire when fixing the hood.

① Follow the wiring diagram above for wiring

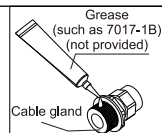


② After closing the power box, tighten the three screws



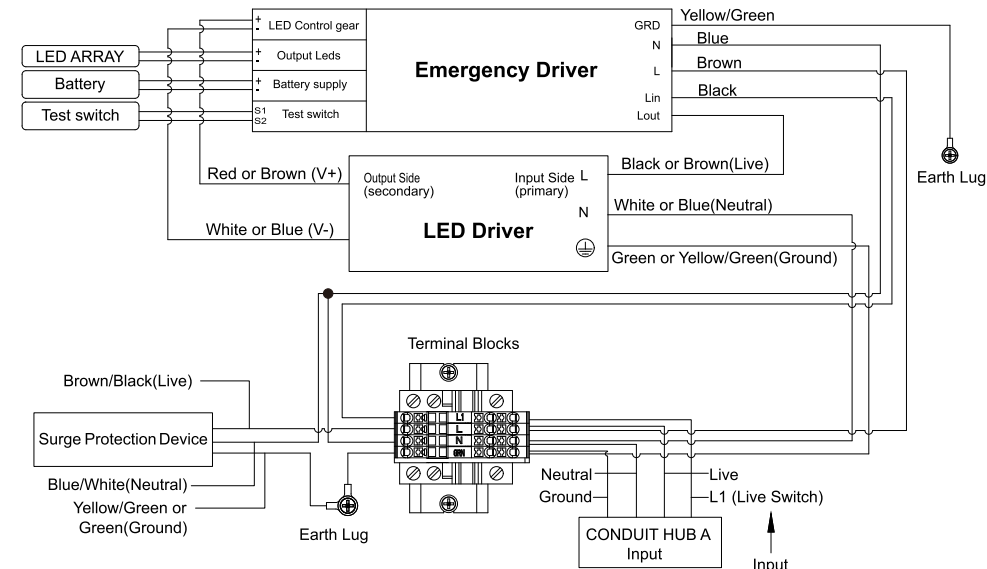
5

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



**Notice:**

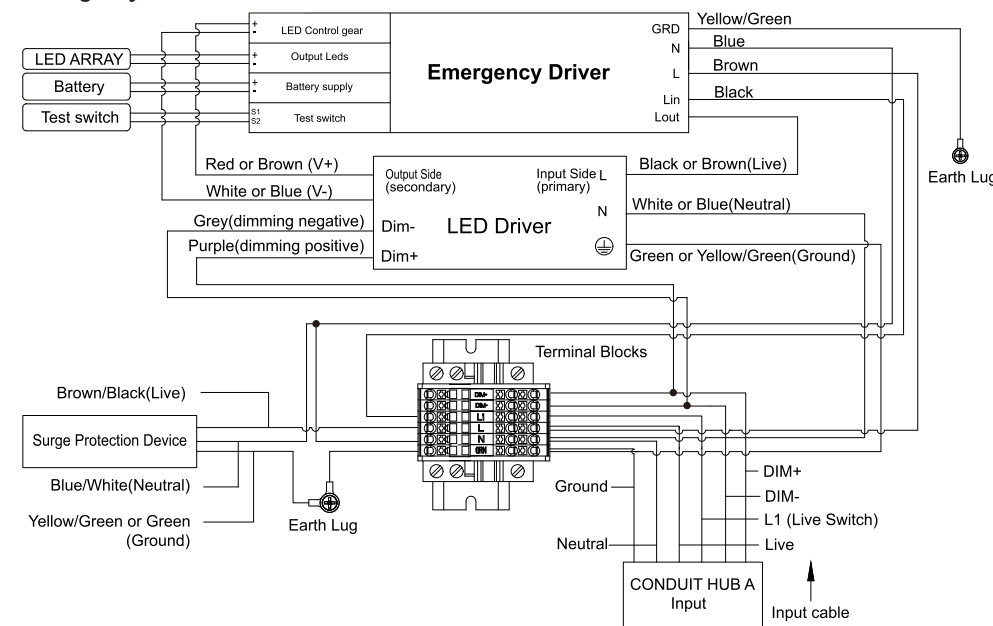
1. Choose the appropriate cable and pay attention to the number of cores.
2. Choose the product that enters the line from the top or from the side according to the demand.
3. Wiring according to the wiring diagram.
4. Corrosion inhibiting grease, such as high and low temperature grease 7017-1B, may be 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. Conduit entry should be blocked with plugs when not in use.



Note:

1. L1 (black wire) can be connected to a live switch (also called a normally closed switch). When this switch is turned off but there is mains power, The battery is still in charging mode, the indicator light will turn green, and when mains power is disconnected, the lamp will enter emergency mode.
2. When there is no need to connect the live switch, L1 (black wire) and L (brown wire) can be connected together.

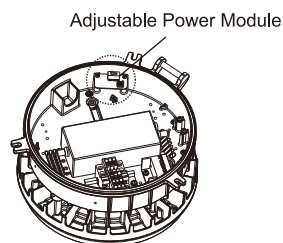
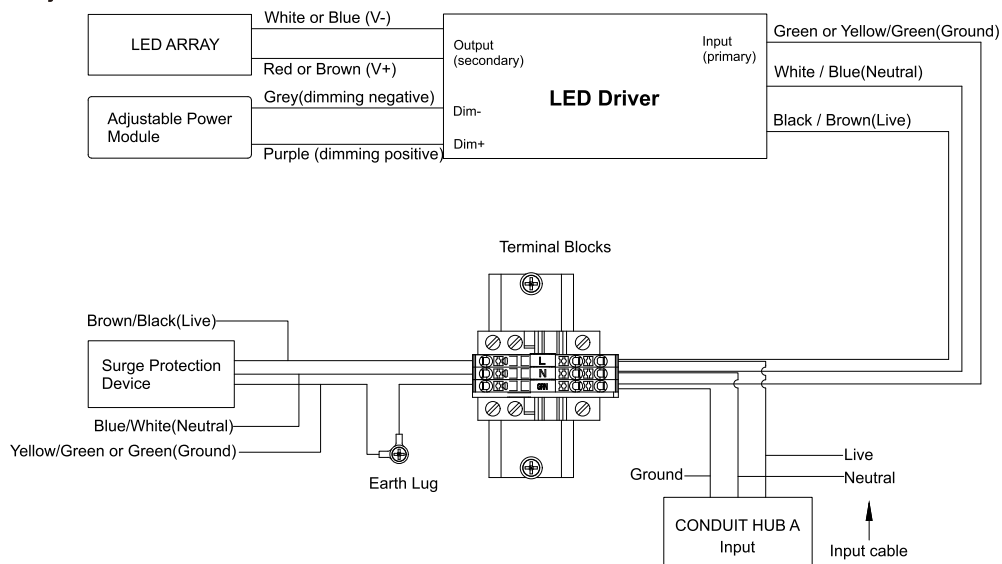
## Emergency + Dimmable



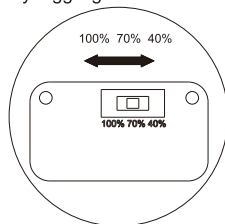
Note:

1. L1 (Live Switch) 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 (Live Switch) and L could be connected together.

## Adjustment Power



Adjust the power by percentage by toggling the switch

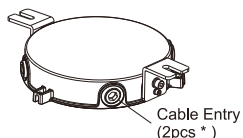


Notice:

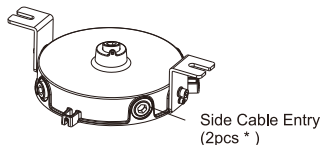
It is very important not to open the upper enclosure to adjust the power module while the luminaire is operating, powered on, or in an explosive gas environment.

## Wiring Diagram (Two or more cable entry)

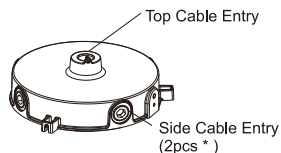
Ceiling Mount (1)



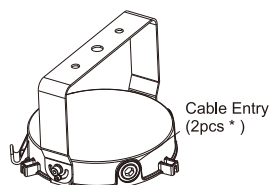
Ceiling Mount (2)



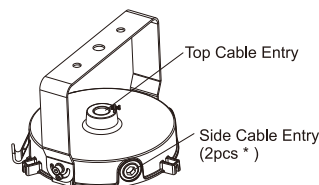
Pendant Mount



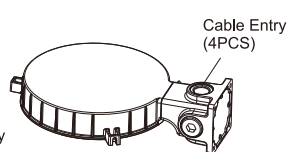
Trunnion Mount



Pendant & Trunnion Mount



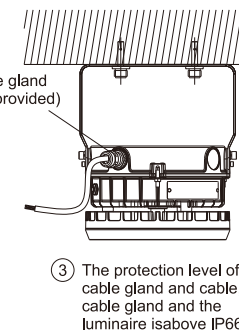
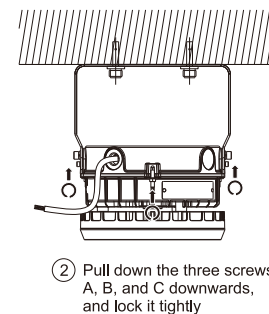
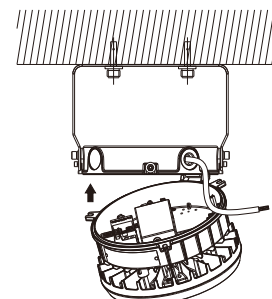
Wall Bracket Mount



\* The standard configuration includes two cable entries. If three cable entries are required, please specify this when placing order.

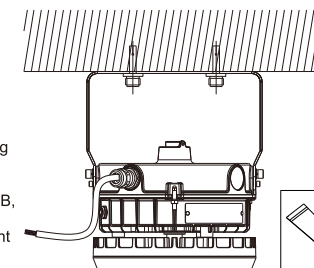
6

M6 3pcs  
10  
4N.m



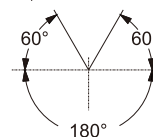
Notice:

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. Conduit entry should be blocked with plugs when not in use.

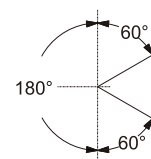
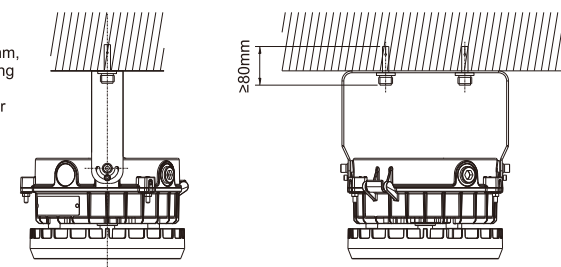


7

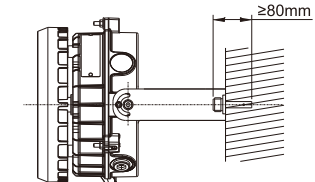
For Wall Mount or Ceiling Mount on cement surface: Drill two holes with 14 mm diameter on the mounting surface and spaced 126 mm apart. Using two M10-12 mm, length 80-120 mm expansion bolts with flat washer, spring washer and nut to fix the luminaire to the mounting surface. (Expansion bolts with flat washer, spring washer and nut are not provided)



Notice: For Class II and III installations only, luminaire mounting range is limited to lens down to horizontal.



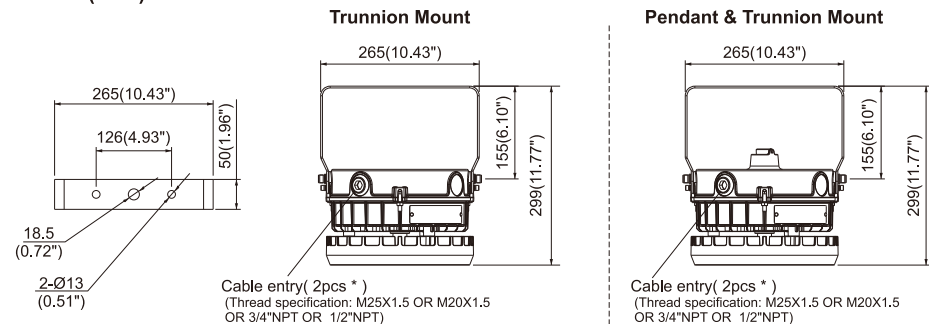
Notice: For Class II and III installations only, luminaire mounting range is limited to lens down to horizontal.



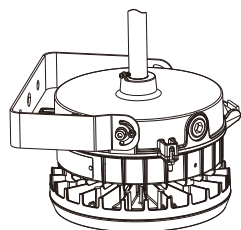


## Trunnion Mount

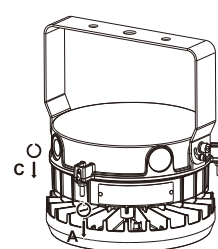
Unit: mm(inch)



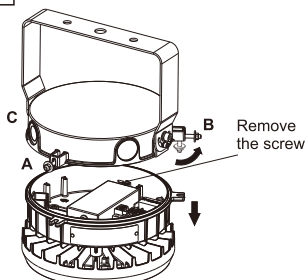
### 1 Pendant & Trunnion Mount



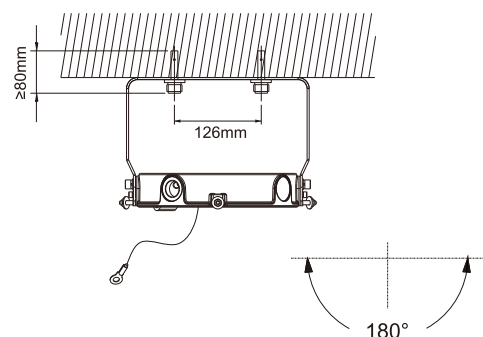
### 2 When the product requires trunnion mount



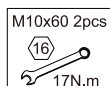
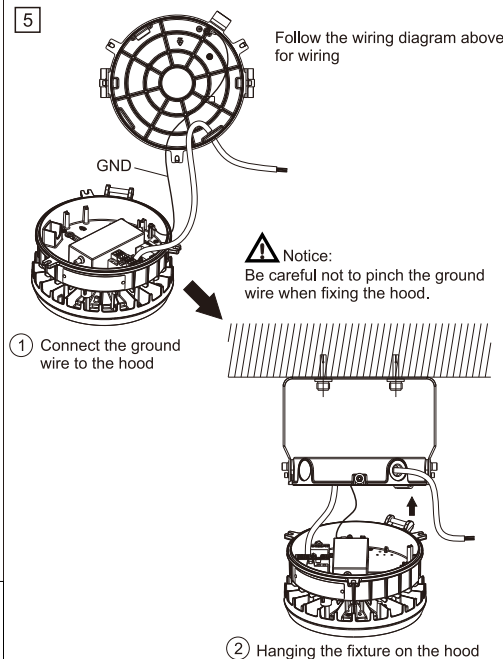
### 3



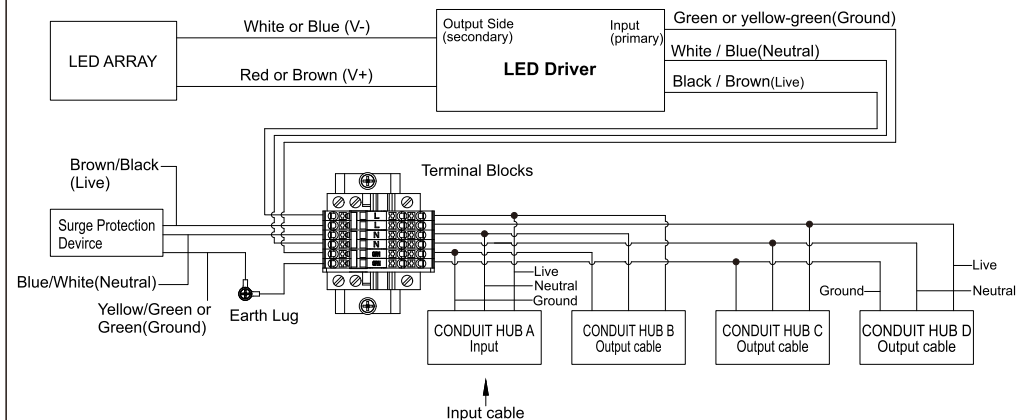
### 4



### 5

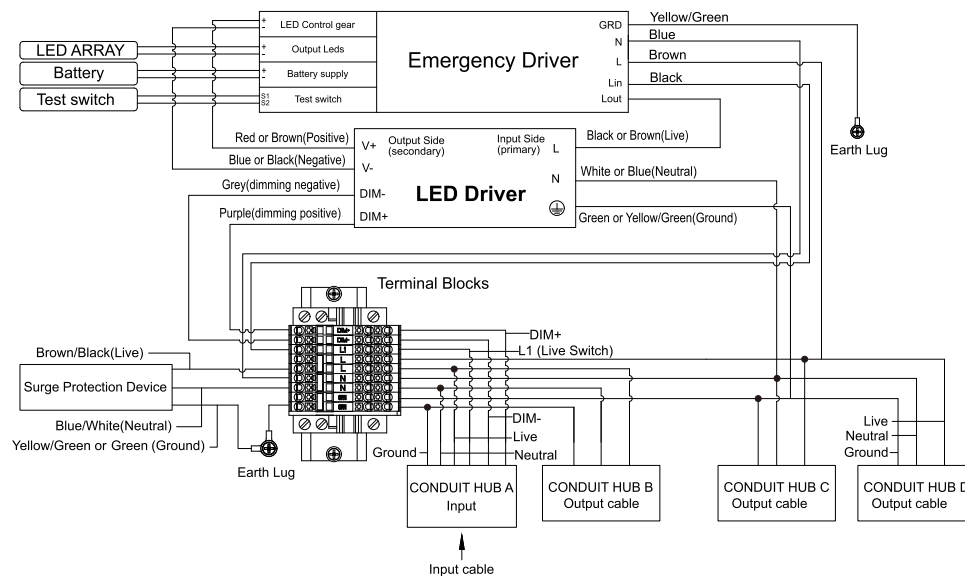


## Non-Dimmable



Note:  
1. Inlets B, C and D can be used to interconnect lamps and need to be blocked with plugs when not in use.

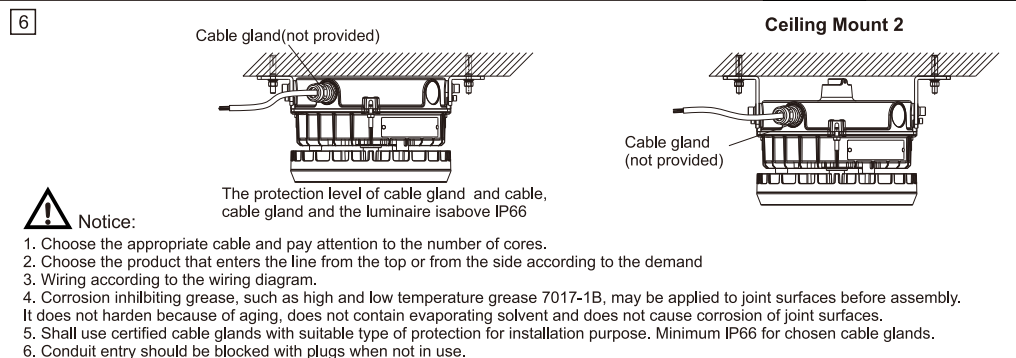
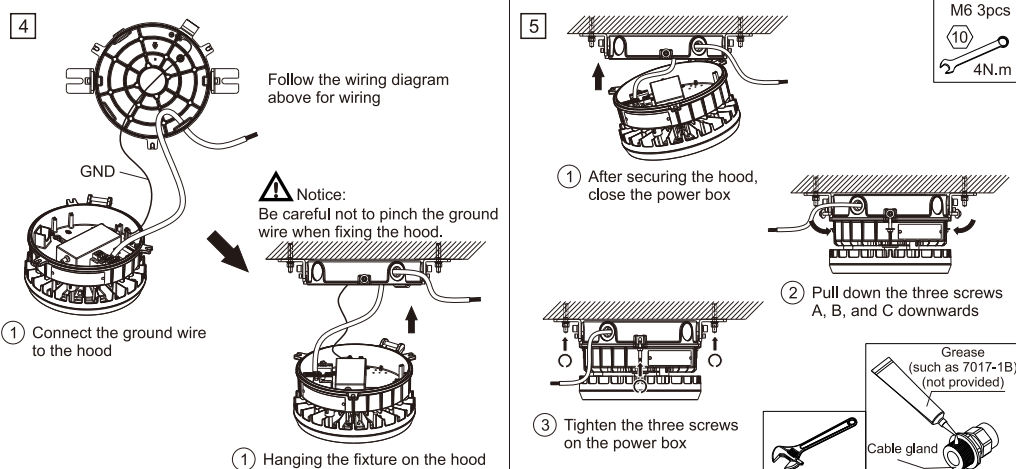
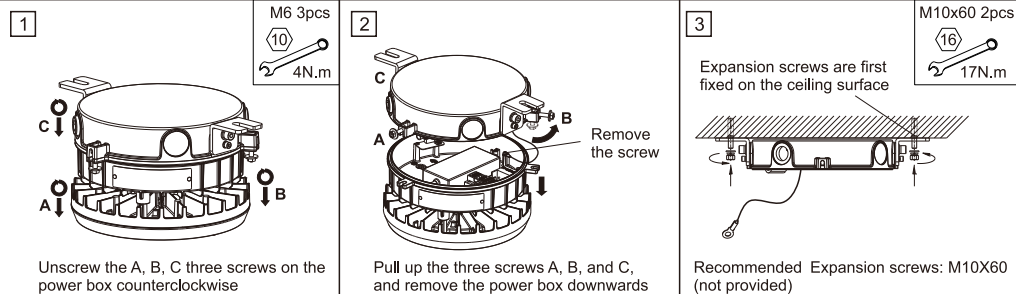
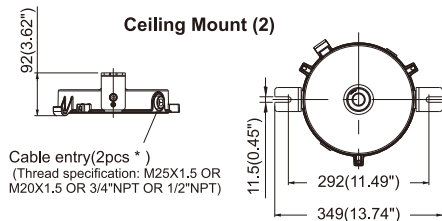
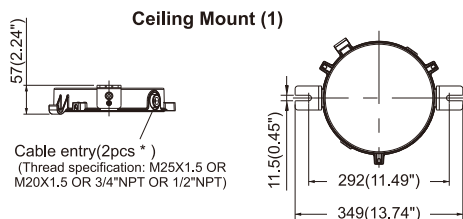
## Emergency + Dimmable



Note:  
1. L1 (Live Switch) 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 (Live Switch) and L could be connected together.  
3. CONDUIT HUB B, C and D can be used for Interconnect luminaire and should be blocked with plugs when not in use.

## Ceiling Mount

Unit: mm(inch)



## Pendant Mount

Unit: mm(inch)

