Explosion-proof LED Luminaire
EXA03 Series Installation and Operation Instructions

RIG·A·LITE™
EX-SERIES

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availinfra.com/rig-a-lite/
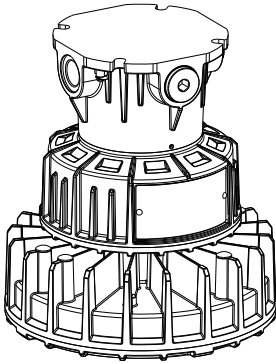
This product comply with below standard:
IEC60079-0:2017, 7th Edition
IEC60079-1:2014, 7th Edition
IEC60079-31:2022, 3th Edition
EN IEC 60079-0:2018
EN 60079-1:2014
EN 60079-31:2014

Applicable places are:
Gas: Zone 1,2   Dust: Zone 21, 22

Certifications:
IECEx:
Ex db IIC T6/T5 Gb
Ex tb IIIC T80℃/T95℃ Db IP66
IECEx Certificate: IECEx TUR 21.0033X
ATEX:
II 2G Ex db IIC T6/T5 Gb
II 2D Ex tb IIIC T80℃/T95℃ Db IP66
ATEX Certificate: TÜV 21 ATEX 8703 X

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.
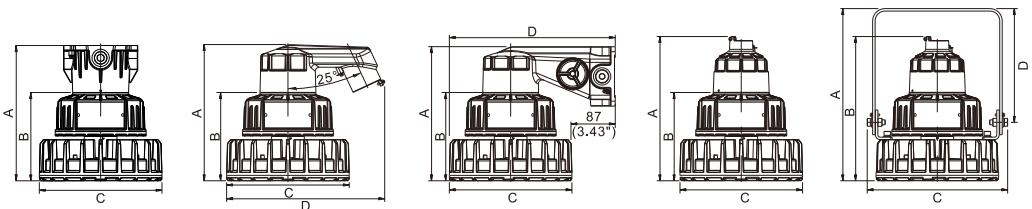
Physical Dimensions (Unit: mm/inch)

| Ceiling Mount | 25° Stanchion Mount | Wall Bracket | Pendant Mount | Trunnion Mount |

Dimensions (inch/mm)																	
Unit	Ceiling Mount			25° Stanchion Mount				Wall Bracket				Pendant Mount			Trunnion Mount		
	A	B	C	A	B	C	D	A	B	C	D	A	B	C	A	B	C	D
inch	10.8	7.0	9.8	10.8	7.0	9.8	12.6	10.7	7.0	9.8	13.2	11.5	7.0	9.8	13.7	11.5	11.2	9.1
mm	274	179	248	275	179	248	320	271	179	248	336	292	179	248	348	292	284	230

Product Specifications

Power	30W	40W	50W	60W	70W
Input Voltage	100-277Vac,50/60Hz				
Outlook Dimensions	Ceiling Mount: Φ248x274mm (Dia.9.8" x10.8") 25°Stanchion Mount: 320x248x275mm (12.6"x9.8"x10.8") Wall Bracket: 336x248x271mm (13.2"x9.8"x10.7") Pendant Mount: Φ248x292mm (Dia.9.8" x11.5") Trunnion Mount: 284x248x348mm (11.2"x9.8"x13.7")				
Luminaire Net Weight (±0.3kg/±0.66Lbs)	Ceiling Mount: 8.3kg(18.26Lbs) 25° Stanchion Mount: 7.9kg(17.38Lbs) Wall Bracket: 9kg(19.8Lbs) Pendant Mount: 7.3kg(16.06Lbs) Trunnion Mount: 9kg(19.8Lbs)				
Working Temperature	-40°C to +65°C (-40°F to +149°F)				
Storing Temperature	-40°C to +70°C (-40°F to +158°F)				

Luminaire Shipping Packing List

Name	QTY
EXA03 Series luminaire	1 pc
EXA03 Series Installation and operation instructions	1 pc
EU Declaration-of-conformity	1 pc

Model Description

EXA 03-XXX-X-XX-XXX-XX-X-XX

- Options: WG=Wire Guard
- Mounting Style: C=Ceiling mount; P=Pendant mount; W=Wall bracket; S=25° Stanchion mount; T=Trunnion mount.
- Diffusion Material: CG=Clear Glass
- Beam Distribution: 000=120°
- CCT(K): 20=2000; ... ; 65=6500; Re=Red; Gr=Green; Bl=Blue; Am=Amber.
- Voltage: U=100-277Vac, 50/60Hz.
- Lamp Wattage: 030=30W; 040=40W; 050=50W; 060=60W; 070=70W.
- Lamp Code: 03
- Series constant: EXA-Hazardous

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 100-277VAC 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. 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.

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 inlet screw 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.
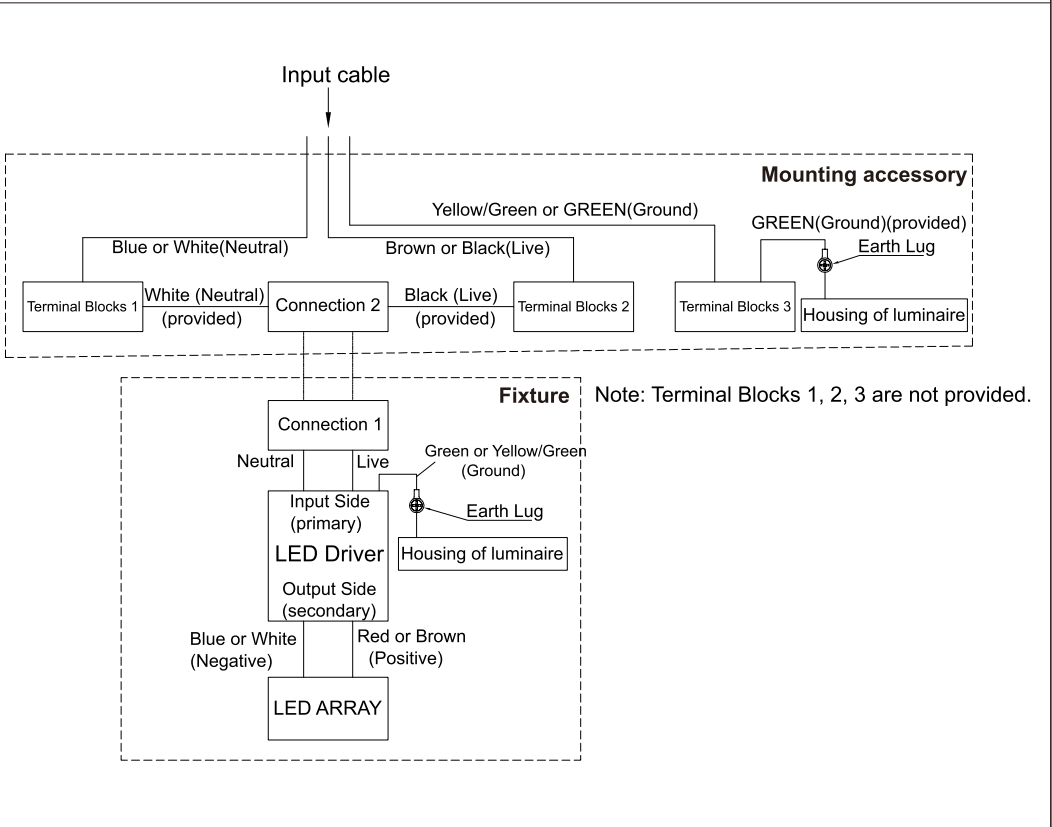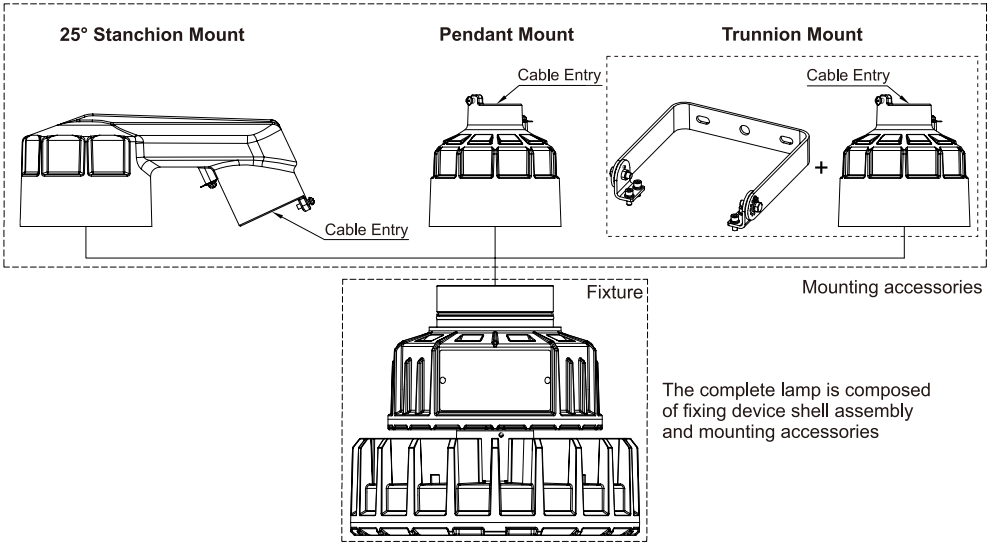
Special conditions for safe use:

1. End users shall adhere to the manufacturer's User manual: Use heat resistant cables and glands (not less than a service temperature of 102°C)

2. End users shall use Ex-certified cable glands and blanking elements with suitable type of protection for installation purpose. Minimum IP66 for chosen cable glands and blanking elements.

3. Electrostatic charging hazard – clean only with a damp cloth.

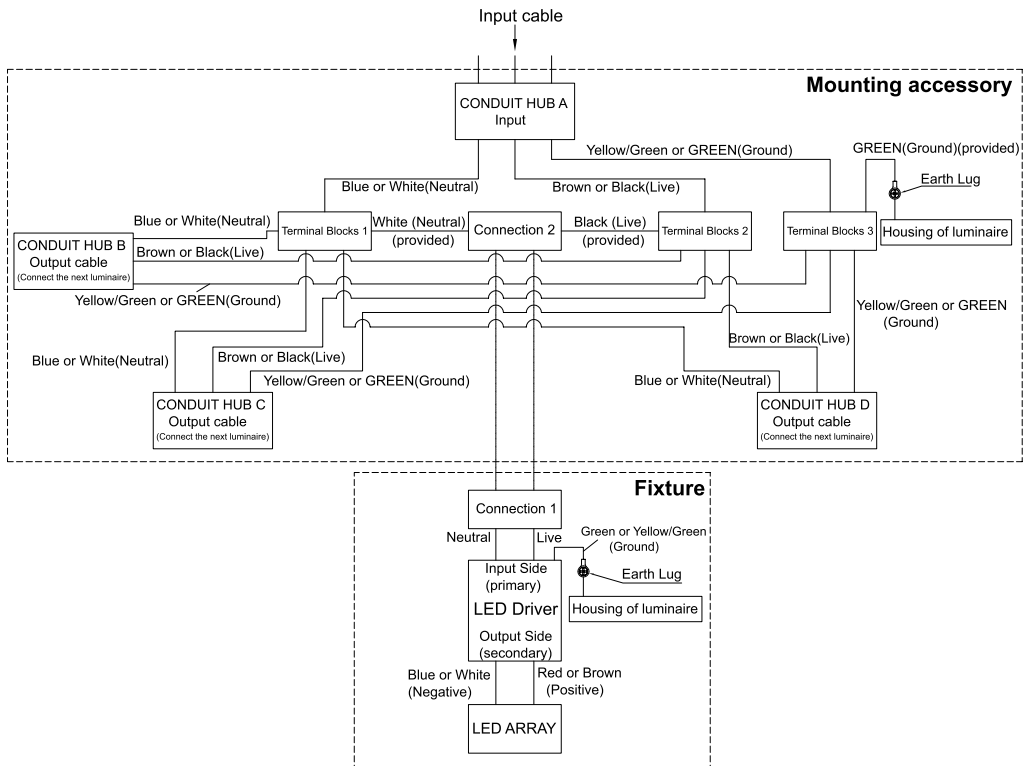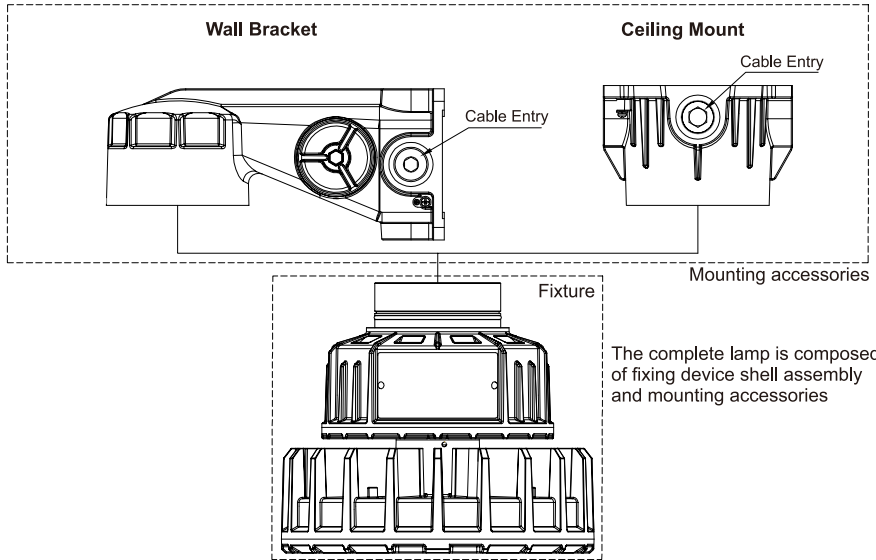4. The product model, ambient temperature and temperature group list are as follows:

Product model	Tamb	Temperature class	Maximum surface temperature
		Gas("db")	Dust("tb")
EXA03-030series EXA03-040series EXA03-050series	-40℃ to +65℃	T6	80℃
EXA03-060series	-40℃ to +65℃	T5	95℃
EXA03-070series	-40℃ to +55℃	T6	80℃

Wiring Diagram

One cable entry

25° Stanchion Mount	Pendant Mount	Trunnion Mount

Cable Entry

Cable Entry

Cable Entry

+

+

Cable Entry

Mounting accessories

Fixture

The complete lamp is composed
of fixing device shell assembly
and mounting accessories

Input cable

Mounting accessory

Yellow/Green or GREEN(Ground)

GREEN(Ground)(provided)

Earth Lug

Blue or White(Neutral)

Brown or Black(Live)

Terminal Blocks 1	White (Neutral) (provided)	Connection 2	Black (Live) (provided)	Terminal Blocks 2		Terminal Blocks 3	Housing of luminaire

Fixture Note: Terminal Blocks 1, 2, 3 are not provided.

Connection 1

Neutral   Live

Green or Yellow/Green
(Ground)

Input Side
(primary)

Earth Lug

LED Driver Housing of luminaire

Output Side
(secondary)

Blue or White
(Negative)

Red or Brown
(Positive)

LED ARRAY

Four cable entry

Wall Bracket

Cable Entry

Ceiling Mount

Cable Entry

Cable Entry

Mounting accessories

Fixture

The complete lamp is composed of fixing device shell assembly and mounting accessories

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Input cable

Mounting accessory

CONDUIT HUB A
Input

Yellow/Green or GREEN(Ground)

GREEN(Ground)(provided)

Earth Lug

Blue or White(Neutral)

Brown or Black(Live)

Blue or White(Neutral)

Brown or Black(Live)

| CONDUIT HUB B Output cable (Connect the next luminaire) | | Terminal Blocks 1 | White (Neutral) (provided) | Connection 2 | Black (Live) (provided) | Terminal Blocks 2 | | Terminal Blocks 3 | Housing of luminaire |

Yellow/Green or GREEN(Ground)

Yellow/Green or GREEN (Ground)

Blue or White(Neutral)

Brown or Black(Live)

Yellow/Green or GREEN(Ground)

Brown or Black(Live)

Blue or White(Neutral)

CONDUIT HUB C
Output cable
(Connect the next luminaire)

CONDUIT HUB D
Output cable
(Connect the next luminaire)

Fixture

Connection 1

Neutral   Live

Green or Yellow/Green (Ground)

Input Side (primary)

Earth Lug

LED Driver

Housing of luminaire

Output Side (secondary)

Blue or White (Negative)

Red or Brown (Positive)

LED ARRAY

Note:
1.Terminal Blocks 1, 2, 3 are not provided.
2.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
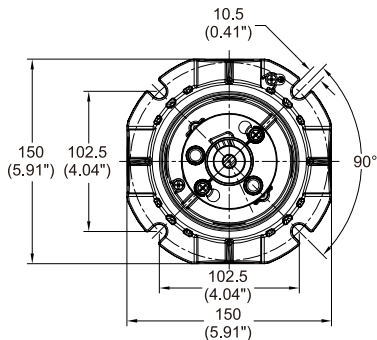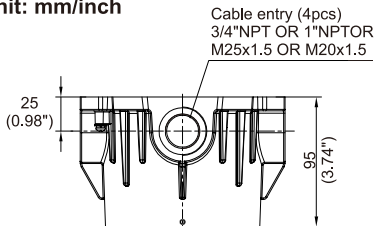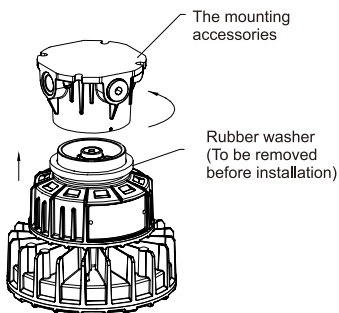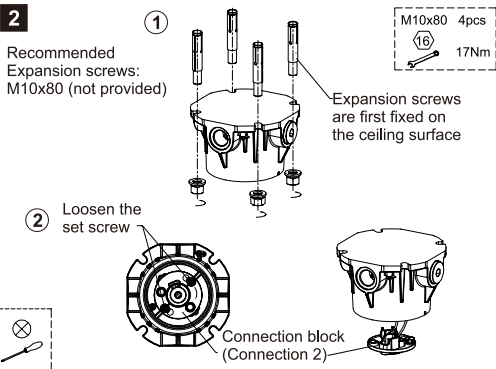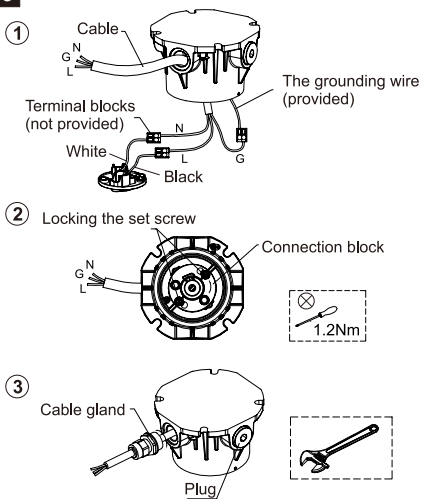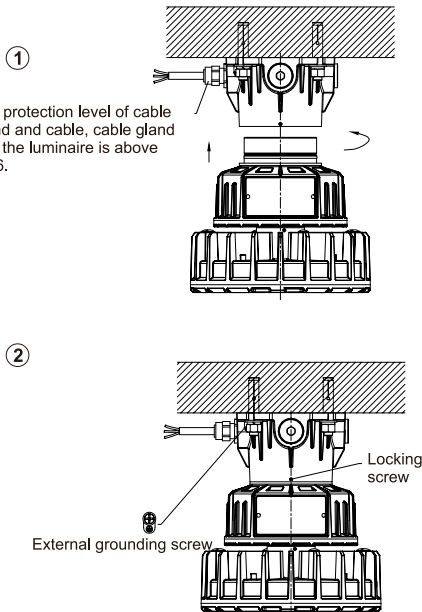
Cable entry (4pcs)
3/4"NPT OR 1"NPTOR
M25x1.5 OR M20x1.5

25
(0.98")

95
(3.74")

10.5
(0.41")

150   102.5
(5.91") (4.04")

90°

102.5
(4.04")

150
(5.91")

1

The mounting
accessories

Rubber washer
(To be removed
before installation)

2

① Recommended
Expansion screws:
M10x80 (not provided)

M10x80   4pcs
⟨16⟩   17Nm

Expansion screws
are first fixed on
the ceiling surface

② Loosen the
set screw

⊗

Connection block
(Connection 2)

3

① Cable
G N L

The grounding wire
(provided)

Terminal blocks
(not provided)

White
N
L   G
Black

② Locking the set screw
G N L

Connection block

⊗
1.2Nm

③ Cable gland

Plug

⚠ **Notice:**
● Use heat resistant cables and glands(rated 102℃).
● Shall use certified cable glands with suitable type of
protection for installation purpose. Minimum IP66 for
chosen cable glands.
● Before installation, the threads on the cable glands
should be coated with grease (such as High and Low
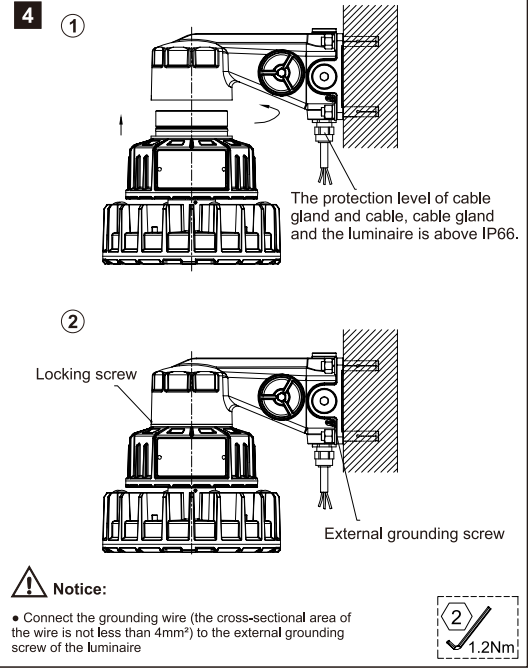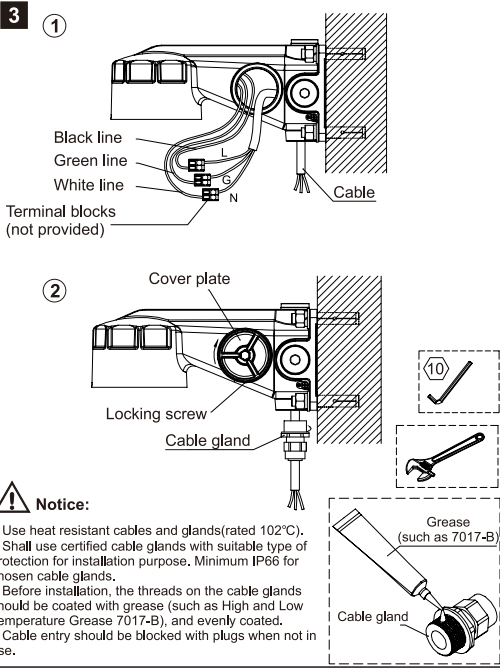Temperature Grease 7017-B), and evenly coated.
● Cable entry should be blocked with plugs when not in
use.

Grease
(such as 7017-B)

Cable gland

4

① The protection level of cable
gland and cable, cable gland
and the luminaire is above
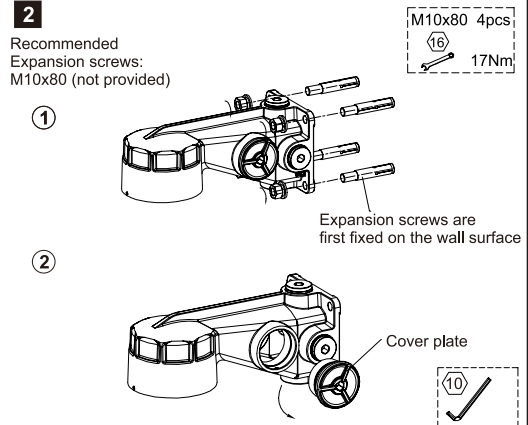IP66.

②
Locking
screw

External grounding screw

⚠ **Notice:**
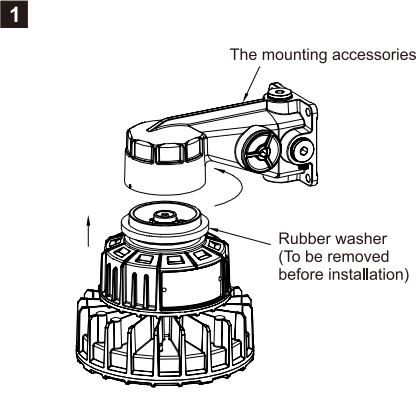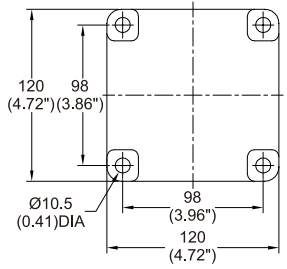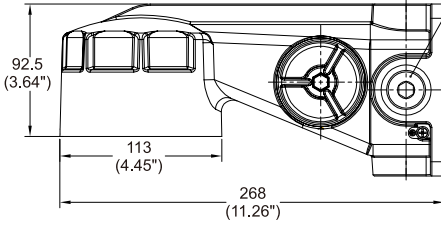● Connect the grounding wire (the cross-sectional area of the
wire is not less than 4mm²) to the external grounding screw of the
luminaire.

⟨2⟩
1.2Nm

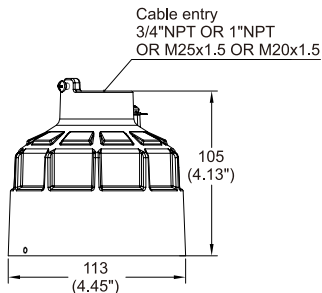## 25° Stanchion Mount

Unit: mm/inch

96.6
(3.8")

113
(4.45")

249.5
(9.82")

Cable entry
1-1/4"NPT OR 1-1/2"NPT

1

The mounting accessories

Rubber washer
(To be removed before
installation)

2

① Loosen the set screw

Connection block
(Connection 2)

②

Terminal blocks
(not provided)

The grounding wire
(provided)

White

N

Black

L

G

N
G
L

3

1.2Nm

① Locking the set screw

N
G
L

②
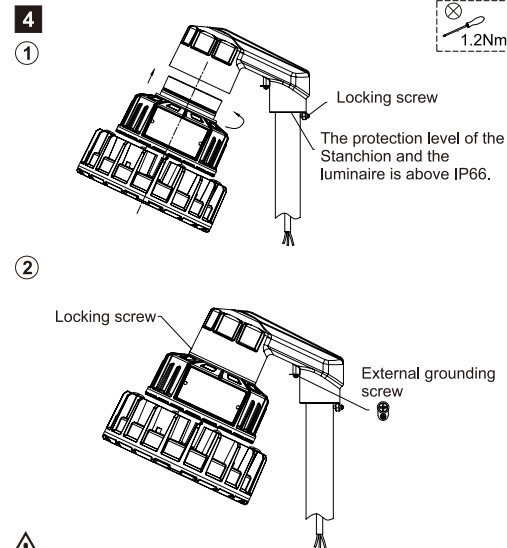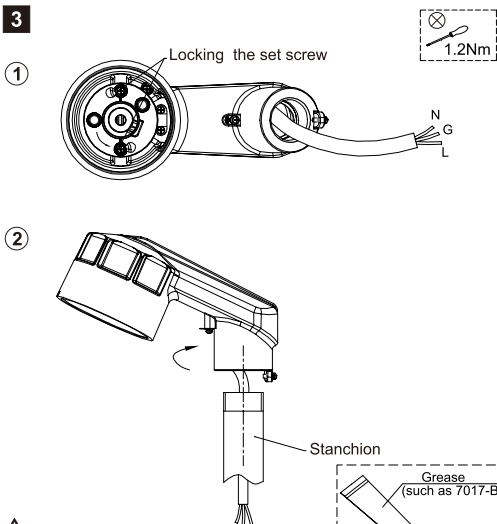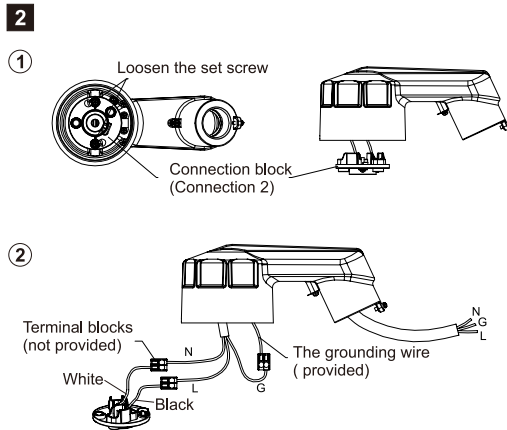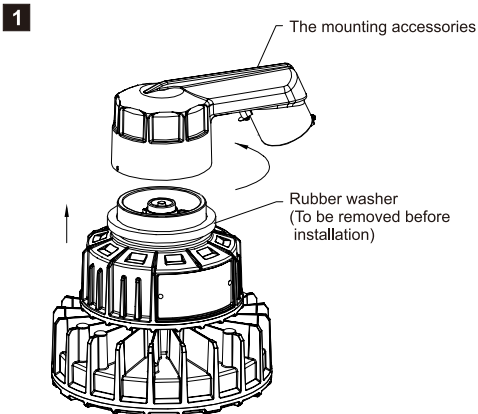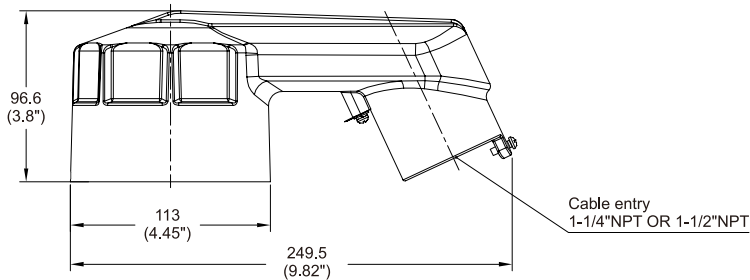
Stanchion

⚠ **Notice:**

● Use heat resistant cables (rated 102℃).
● Before installation, the threads on the stanchion
should be coated with grease (such as High and Low
Temperature Grease 7017-B), and evenly coated.

Grease
(such as 7017-B)

Stanchion

4

1.2Nm

①

Locking screw

The protection level of the
Stanchion and the
luminaire is above IP66.

②

Locking screw

External grounding
screw

⚠ **Notice:**

● Connect the grounding wire (the cross-sectional area of
the wire is not less than 4mm²) to the external grounding
screw of the luminaire.

②
1.2Nm
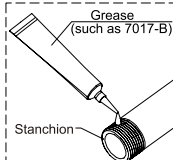
Wall Bracket

Unit: mm/inch
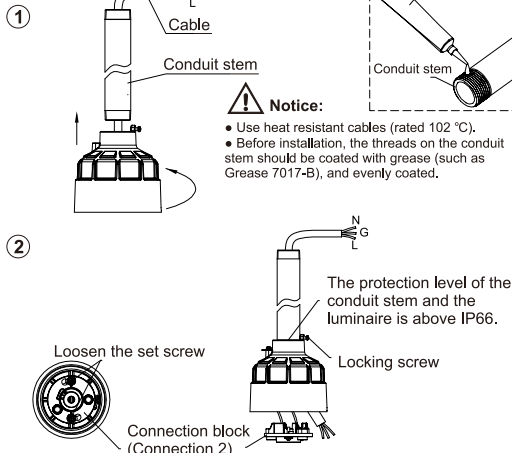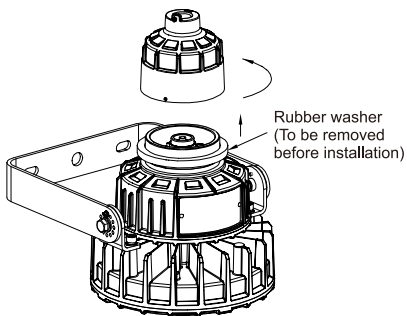
Cable entry (4pcs)
3/4"NPT OR 1"NPT
OR M25x1.5 OR M20x1.5

92.5
(3.64")

113
(4.45")

268
(11.26")

120   98
(4.72")(3.86")

Ø10.5
(0.41)DIA

98
(3.96")

120
(4.72")

1

The mounting accessories

Rubber washer
(To be removed
before installation)

2

Recommended
Expansion screws:
M10x80 (not provided)

①

M10x80 4pcs
⑯   17Nm

②

Expansion screws are
first fixed on the wall surface

Cover plate

⑩

3

①

Black line
Green line
White line
Terminal blocks
(not provided)

L
G
N

Cable

②

Cover plate

Locking screw

Cable gland

⑩

Grease
(such as 7017-B)

Cable gland

⚠ Notice:
● Use heat resistant cables and glands(rated 102℃).
● Shall use certified cable glands with suitable type of
protection for installation purpose. Minimum IP66 for
chosen cable glands.
● Before installation, the threads on the cable glands
should be coated with grease (such as High and Low
Temperature Grease 7017-B), and evenly coated.
● Cable entry should be blocked with plugs when not in
use.

4

①

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

②

Locking screw

External grounding screw

⚠ Notice:
● Connect the grounding wire (the cross-sectional area of
the wire is not less than 4mm²) to the external grounding
screw of the luminaire

②
1.2Nm

Pendant Mount

Unit: mm/inch

Cable entry
3/4"NPT OR 1"NPT
OR M25x1.5 OR M20x1.5

105
(4.13")

113
(4.45")

1

The mounting accessories

Rubber washer
(To be removed before installation)

2

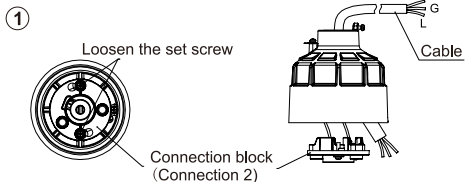① Cable

Conduit stem

Grease
(such as 7017-B)

Conduit stem

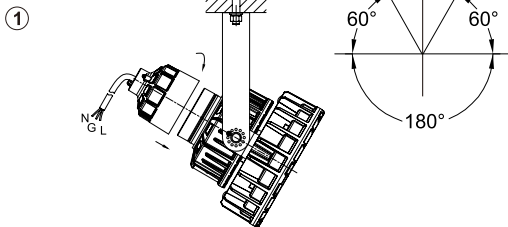⚠ **Notice:**
● Use heat resistant cables (rated 102 ℃).
● Before installation, the threads on the conduit stem should be coated with grease (such as Grease 7017-B), and evenly coated.

②

The protection level of the conduit stem and the luminaire is above IP66.

Loosen the set screw

Locking screw

Connection block
(Connection 2)

3

①

Terminal blocks
(not provided)

White

Black

N

L

G

The grounding wire(provided)

②

Locking the set screw

1.2Nm

4 ①

External grounding screw

Locking screw

2
1.2Nm

⚠ **Notice:**
● Connect the grounding wire (the cross-sectional area of the wire is not less than 4mm²) to the external grounding screw of the luminaire.

Trunnion Mount

Unit: mm/inch

Cable entry
3/4"NPT OR 1"NPT
OR M25x1.5 OR M20x1.5

160
(6.3")

50
(1.97")

Ø18.5
(0.73")DIA

13
(0.51")

25
(0.98")

+

105
(4.13")

113
(4.45")

1

Rubber washer
(To be removed
before installation)

2

M10x80 4pcs

17Nm

Expansion screws are
first fixed on the ceiling
surface

3

① Loosen the set screw

Connection block
(Connection 2)

N
G
L
Cable

② Terminal blocks
(not provided)

White

Black

N

L

G

The grounding wire
(provided)

③ Locking the set screw

⚠ **Notice:**
● Use heat resistant cables (rated 102℃).

1.2Nm

4

①

N
G L

60°   60°

180°

②
The protection level of cable gland
and cable, cable gland and the
luminaire is above IP66.

N
G L

External grounding screw
Positioning screws
Mounting screws

⚠ **Notice:**
● Shall use certified cable glands with suitable type of
protection for installation purpose. Minimum IP66 for
chosen cable glands.
● Before installation, the threads on the cable glands
should be coated with grease (such as High and Low
Temperature Grease 7017-B), and evenly coated.
● The lighting angle of the lamp can be adjusted by
mounting screws and positioning screws.

Grease
(such as 7017-B)

Cable gland

10

Accessory Mount

1

Wire Guard

M5x10
4pcs
④ 2 Nm
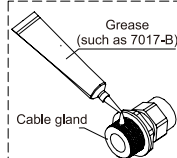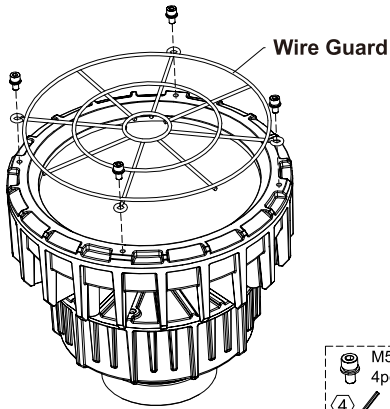
2
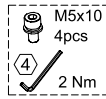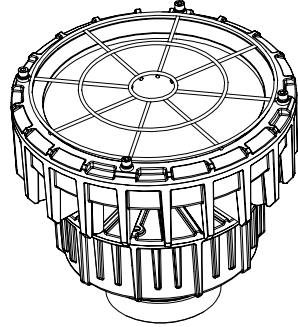
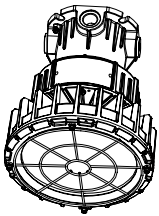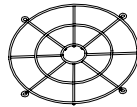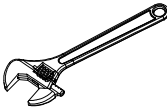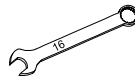**Wire Guard - If provided, it would be mounted on the luminaire. No additional installation is required.**
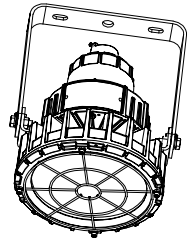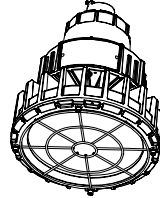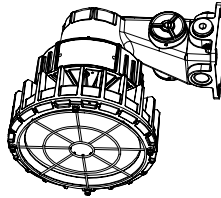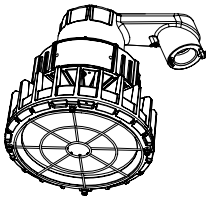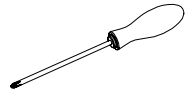
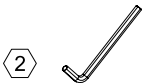## Tools That May Be Used During Installation
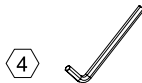
Adjustable wrench

Bayonet wrench

Cross screwdriver

② Internal hexagonal wrench

④ Internal hexagonal wrench

⑩ Internal hexagonal wrench