

Luminaire For Hazardous Locations

Installation and Maintenance Manual

Model THTH2106

THT-EX

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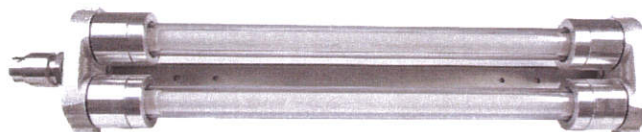


1. General Information

Model THTH2106 LED Luminaires are suitable for use in the following hazardous (classified) areas as defined by the National Electrical Code (NEC) and Canadian Electrical Code (CEC):

- Class I, Division 2, Groups A, B, C, D
- Wet Locations

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



Model THTH2106 LED Luminaire is designed for using in indoors and outdoors environment.

Rated Voltage: 100~277 Vac ,50 & 60 Hz
Rated Wattage: 18W(2ft) /36W(4ft)
Ambient Temperature Range: -20°C ~ +40°C

WARNING

- ▶ To avoid the risk of fire, explosion or electric shock, this product should be installed, inspected and maintained by a qualified electrician only, in accordance with all applicable codes and regulations.
- ▶ To avoid electric shock:
 - ✓ Be certain electrical power is OFF before during installation and maintenance.
 - ✓ Luminaire must be supplied by a wiring system with an equipment grounding conductor suitable for the specific hazardous locations in accordance with the NEC and CEC.
- ▶ To avoid explosion:
 - ✓ Make sure that the supply voltage is the same as the luminaire voltage.
 - ✓ Do not install where the marked operating temperatures exceed the ignition temperature of the hazardous atmosphere.
 - ✓ Do not operate in ambient temperatures above those indicated on the luminaire nameplate.
 - ✓ All O-rings and gasket seals must be clean and undamaged.
 - ✓ Before installation and dismantling, electrical power to the luminaire must be turned off. Keep tightly closed when in operation.
- ▶ To avoid burning hands, ensure the luminaire is cool when performing maintenance.
- ▶ The LED T8 tubes is Single-Ended Connection.

2. Model Code

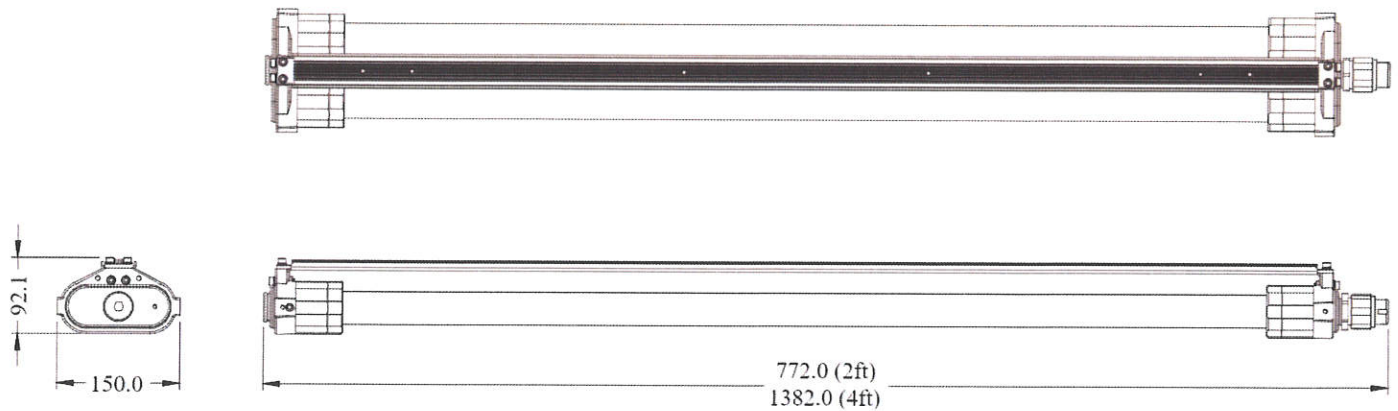
THTH2106①D②H③

① : C= 2ft /D= 4ft

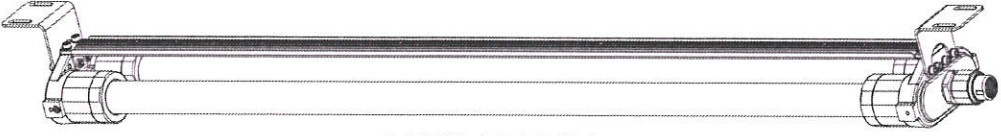
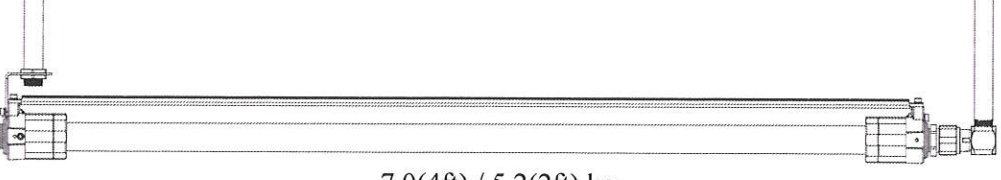


② : W= Warm white /N= Natural white /D= Daylight /C= Cool white

③ : A8= 18W(2ft) /C6= 36W(4ft)

3. Dimensions (All Dimensions in mm)



4. Technical Data

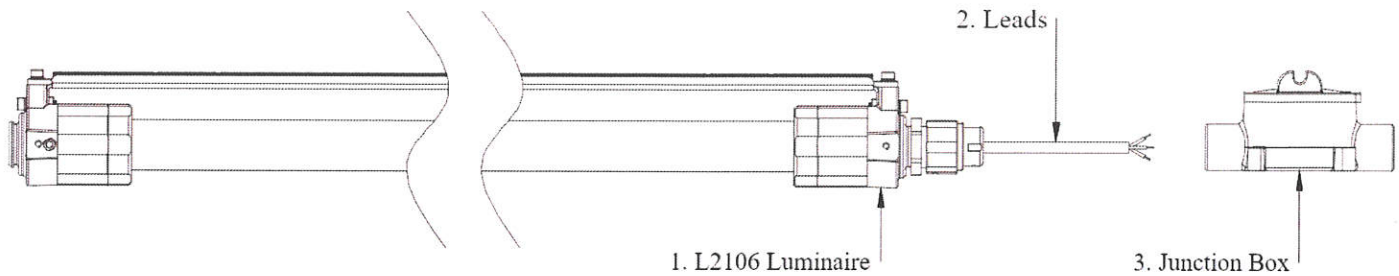
Item	Description
Rated Voltage	100~277 Vac ,50 & 60 Hz (Note information on type label)
Luminaries Wattage	18W(2ft) /36W(4ft)
Color of LED light	Warm white /Natural white /Cool white /Daylight
CRI	> 70
Lm/W	> 100lm/W
Power Factor	$\cos \phi \geq 0.9$
Ambient Temperate Range	-20°C ~ +40°C
IP Rating	IP67
Material	Aluminum alloy / PC
LED tube wiring type	Single-Ended
Mounting Type / Weight	Ceiling and Wall Mounting
	
	5.9(4ft) / 4.1(2ft) kg
	Straight electrical tube
<u>Optional Accessory</u>	
	7.0(4ft) / 5.2(2ft) kg
	Guard
	
	Reflector
	



5. Assembly and Installation

5.1 Electrical Connection

Overview of Electrical Connection



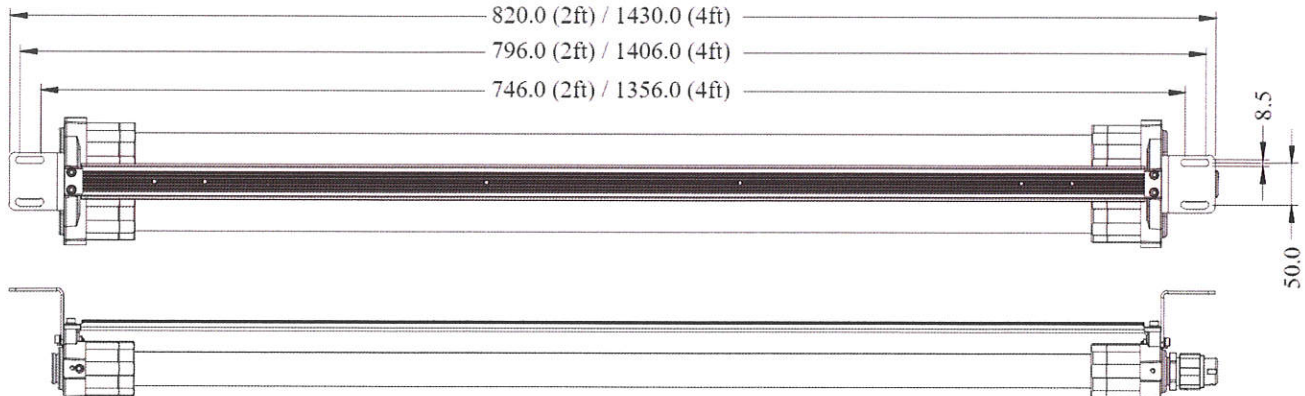
1: L2106 Luminaire	2: Leads (Length: min, 18 inches)	3: Junction Box (Provide by customer)
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- For luminaire model with Mounting Bracket: Insert the leads (2) through the conduit (not shown, provide in the field) into the Junction Box (3) (provide in the field).
- For luminaire model with Straight Electrical Tube Mounting Bracket: Insert the leads (2) through the integral mounting bracket and then through the conduit (not shown, provide in the field) into the Junction Box (3) (provide in the field).
- Fix and introduce the wires of luminary with the terminal post of Junction Box (White-wire connects to Neutral; Black-wire connects to Live; Green-wire connects to Ground.)

5.2 Mounting Bracket Installation

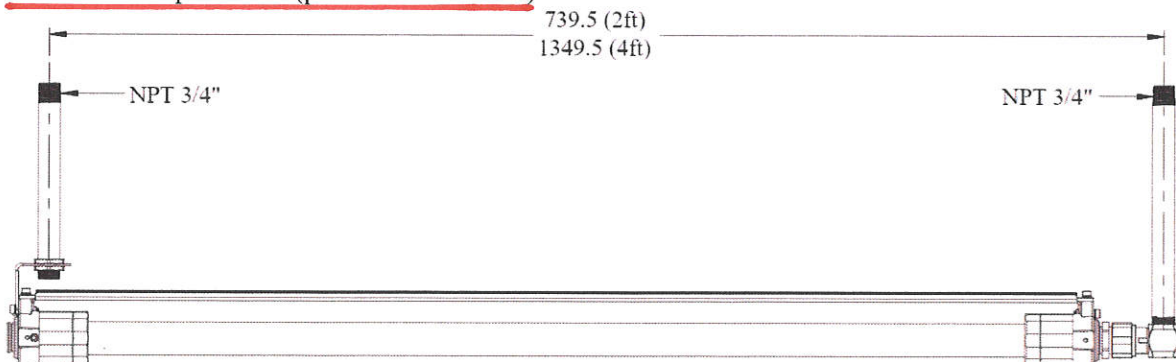
5.2.1 Ceiling and Wall Mounting Bracket

- The mount bracket is for the use of both ceiling mount and wall mount.
- Position the bracket holders and fix it by means of the provided M6 screws, 24.5kgf-cm (M6).
- Secure the ceiling/wall mounting bracket to the structure by using four fasteners (not provided).



5.2.2 Straight electrical tube mounting

- The mounting type is for the use of straight electrical tube mounting.
- Straight electrical tube mounting thread is NPT 3/4".
- Conduit is not provided. (provide in the field)

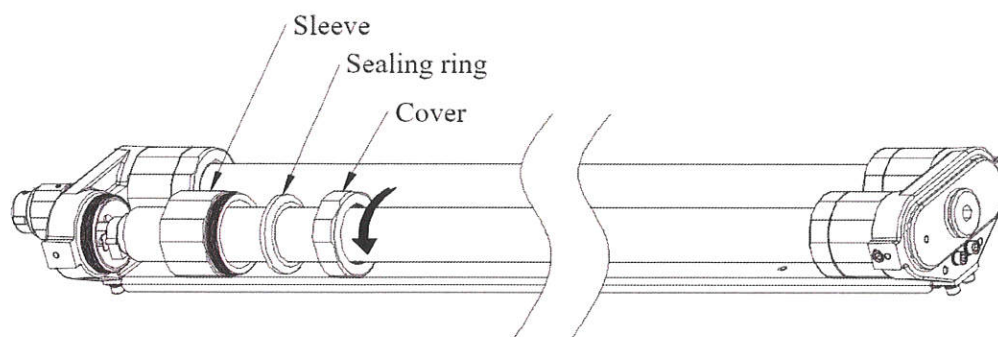


5.3 LED T8 tube replace

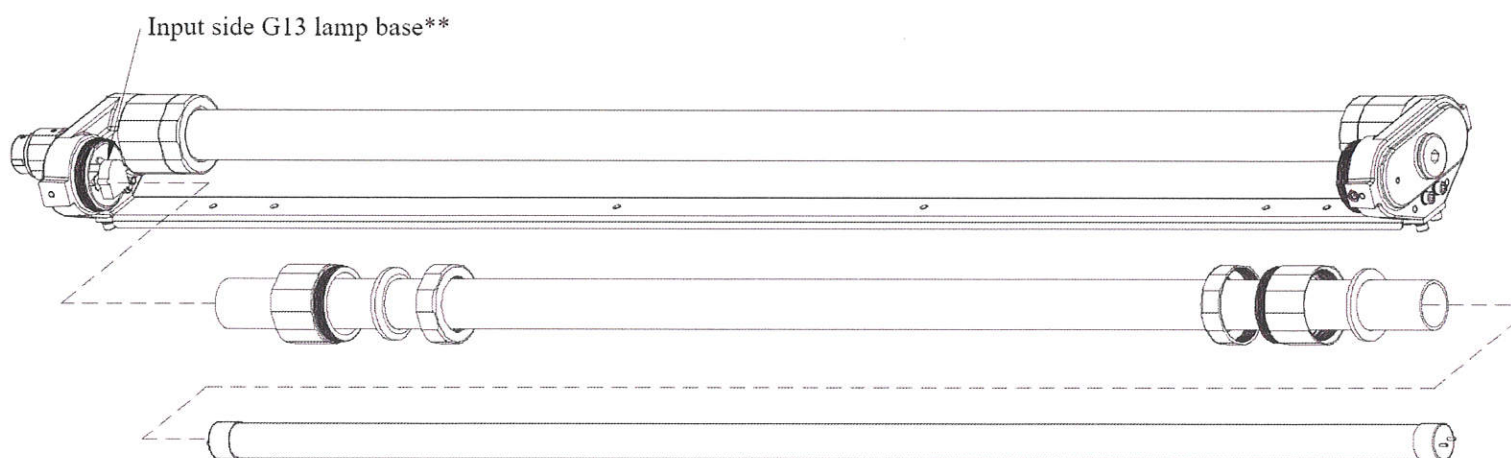
Attention:

Be certain electrical power is OFF before during installation and maintenance.
Use only original LED T8 tube and spare parts manufactured by THT-EX.

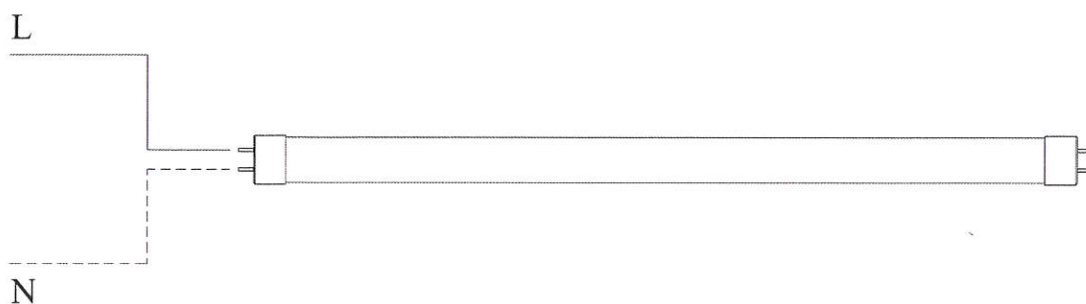
- Loosen the Cover and Sleeve.



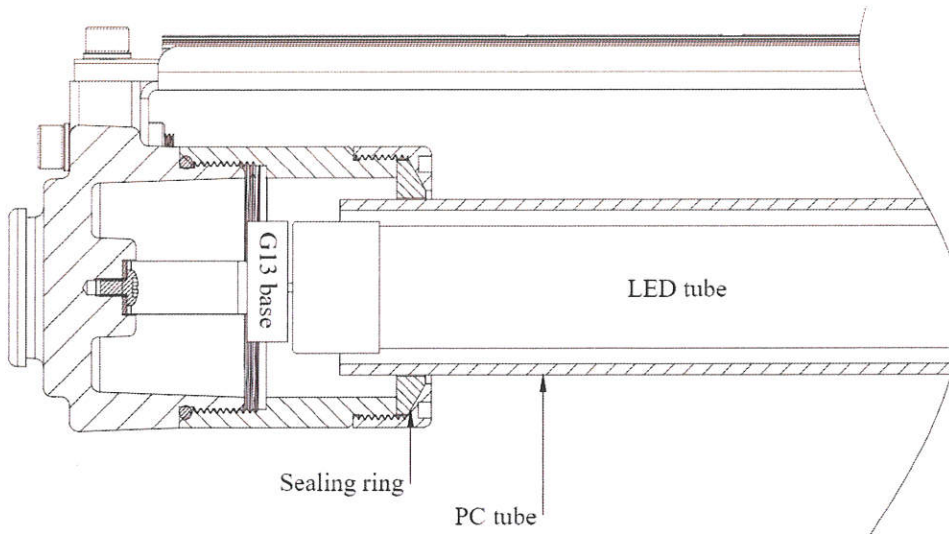
- Take out the LED tube and replace it.



**A single-ended LED lamp is a lamp that has the live and neutral pins on the same side of the lamp. This end will be the "Input" end.



- After replacing the LED tube, assemble the luminaire back in the order of Sleeve, Sealing ring & Cover.
Torque value: Sleeve (60Nm) / Cover (40Nm)
- Please make sure the PC tube is sealed by the sealing ring.



5.4 Putting into Service

Before putting into operating, it's necessary to ensure that:

- ☞ the lighting is correctly installed.
- ☞ the connection has been correctly made.
- ☞ the field wiring has been made per NEC and CEC requirement.

6. Maintenance

- ☞ To avoid personal injury, disconnect power to the light and allow the unit to cool down before performing maintenance.
- ☞ Perform visual, electrical, and mechanical inspections on a regular basis. The environment and frequency of use should determine this. However, it is recommended that checks be made at least once a year. Frequency of use and environment should determine this. It is recommended to follow an Electrical Preventive Maintenance Program as described in the National Fire Protection Association Bulletin NFPA No. 70B: Recommended Practice for Electrical Equipment Maintenance.
- ☞ The lens should be cleaned periodically to ensure continued lighting performance. Clean the lens with a clean, damp, non-abrasive, lint-free cloth. If this is not sufficient, use a mild soap or a liquid cleaner. Do not use an abrasive, strong alkaline or acid cleaner as damage may occur.
- ☞ Inspect the cooling fins on the luminaire to ensure that they are free of any contamination (i.e. excessive dust build-up). Clean with a non-abrasive cloth if needed.
- ☞ Electrically check to make sure that all connections are clean and tight.
- ☞ Mechanically check that all parts are properly assembled.

7. Transport, Storage and Disposal

- ☞ Transport and storage is only allowed in the original packaging, on the way pointed out on the carton box.
- ☞ Transport – Shock-free in its original carton, do not drop, and handle carefully.
- ☞ Store – Store in a dry place in its original packaging.
- ☞ Disposal – Ensure environmentally friendly disposal of all components according to the legal regulations.