Luminaire For Hazardous Locations

THT-EX

Installation and Maintenance Manual

Model THTE2101

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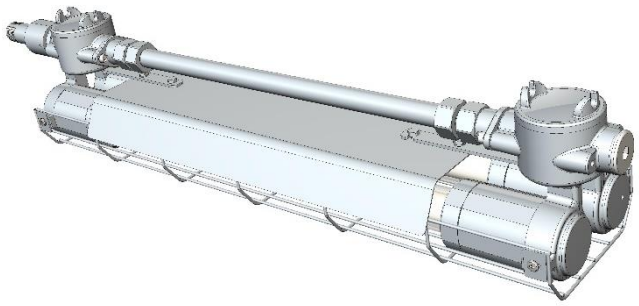
Subject to alterations
Revision Level: A0

1. General Information

Model THTE2101 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 1, Groups C, D
- Class II Division 1, Groups E, F, G
- Class III
- Wet Locations

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



Model THTE2101 LED Luminaire is designed for using in indoors and outdoors environment.

⚠ 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 dismounting, 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.**
- ▶ **In Canada, the electrical connection in the field requires the use of Listed quick connect terminals.**
- ▶ **The lamp tubes are not intended replacement. Contact to vendor for any support.**

2. Model Code

THTE2101①②③④⑤

① : A= 2ft Single tube /B= 4ft Single tube /C= 2ft Double tube /D= 4ft Double tube

② : C= Top cover with opening /D= Top cover without opening

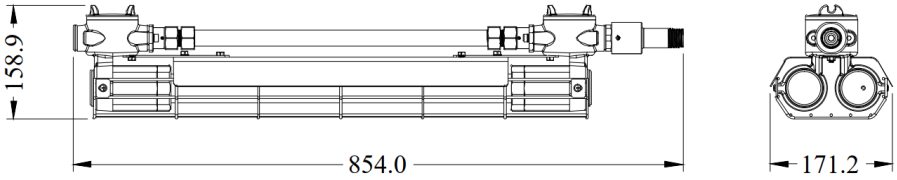
③ : W= Warm white /N= Natural white /D= Daylight /C= Cool white /Y= Yellow tube

④ : H= 100-277Vac /A= 120-277Vac(Yellow tube)

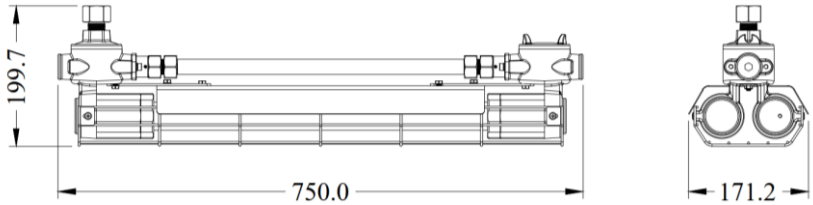
⑤ : Z9= 9W /A8= 18W /C6= 36W /A0=10W /B0= 20W /D0= 40W

3. **Dimensions** (All Dimensions in mm)

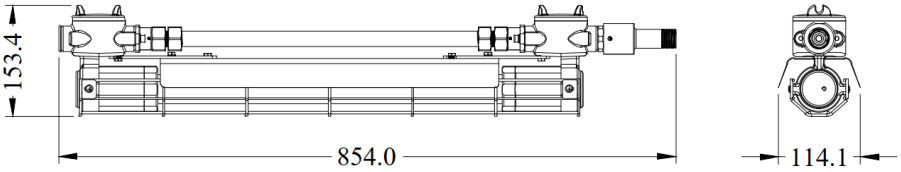
2ft Double tube - Side cable entry



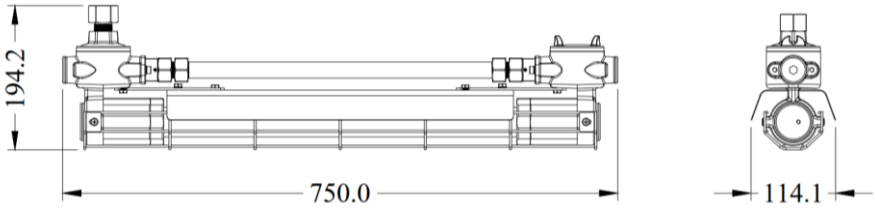
2ft Double tube – Top cable entry



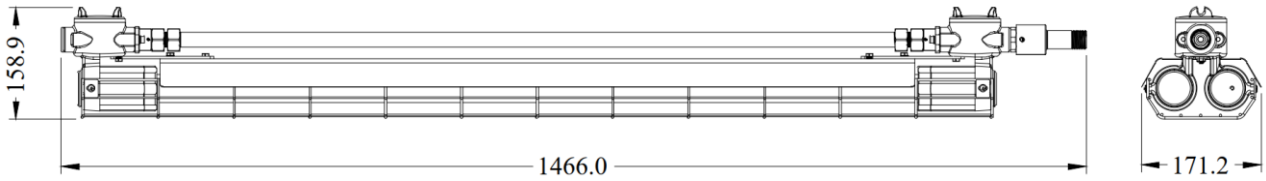
2ft Single tube - Side cable entry



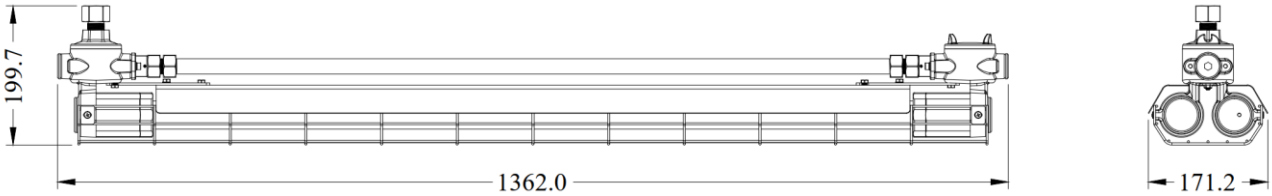
2ft Single tube - Top cable entry



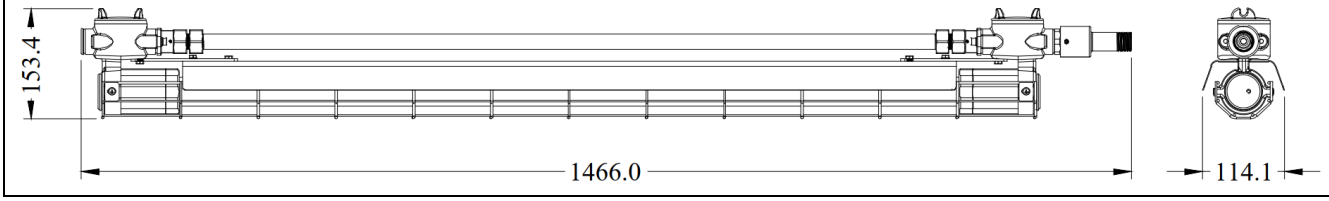
4ft Double tube - Side cable entry



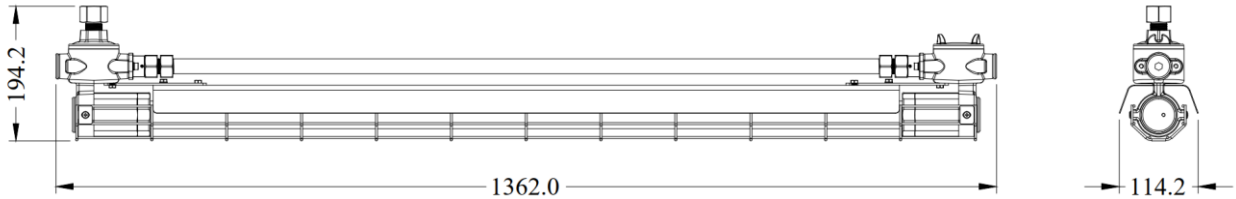
4ft Double tube – Top cable entry



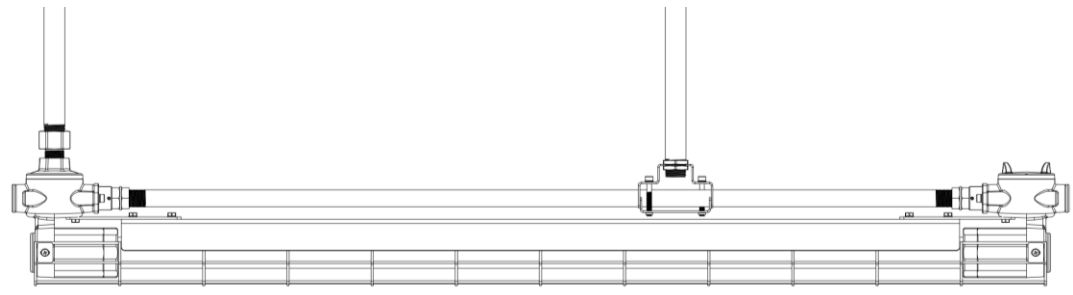
4ft Single tube - Side cable entry



4ft Single tube - Top cable entry



4. Technical Data

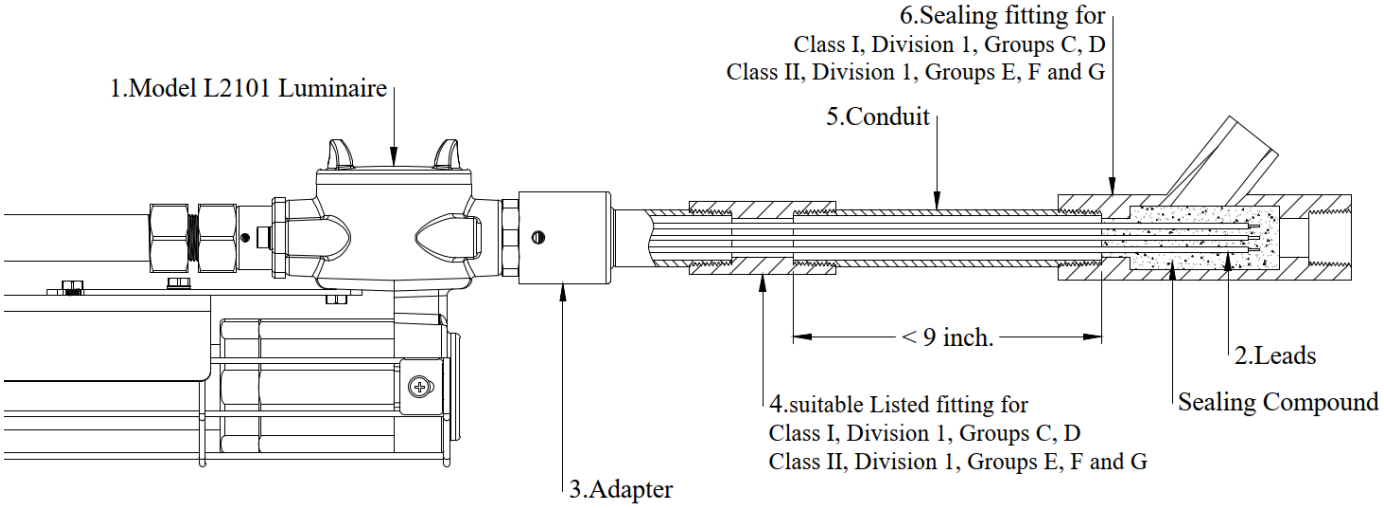
Item	Description				
Electrical Rating	Color of LED light: Warm white / Natural white / Daylight / Cool white				
	Models	Wattage (W)	Voltage (Vac)	Frequency (Hz)	LED tube Wiring
4ft Double tube	THTE2101DxxHC6	36	100~277	50/60	Single End
4ft Single tube	THTE2101BxxHA8	18			
2ft Double tube	THTE2101CxxHA8	18			
2ft Single tube	THTE2101AxxHZ9	9			
Electrical Rating	Color of LED light: Yellow Tube				
	Models	Wattage (W)	Voltage (Vac)	Frequency (Hz)	LED tube Wiring
4ft Double tube	THTE2101DxYAD0	40	120~277	50/60	Double End
4ft Single tube	THTE2101BxYAB0	20			
2ft Double tube	THTE2101CxYAB0	20			
2ft Single tube	THTE2101AxYAA0	10			
Power Factor	cos φ ≧ 0.9				
Ambient Temperate	-20°C≤Ta ≤+40°C				
Mounting Type / Weight	Ceiling /Wall Mounting Bracket (C90/W90)				
					
	10.8 (4ft Double tube) / 7.7 (2ft Double tube) kg 8.1 (4ft Single tube) / 5.4 (2ft Single tube) kg				
	Straight Electrical Tube (P90) Conduit is not provided Straight Electrical Tube mount only for Top cover with opening type				
					
	10.7 (4ft Double tube) / 7.6 (2ft Double tube) kg 8.0 (4ft Single tube) / 5.3 (2ft Single tube) kg				

5. Assembly and Installation

5.1 Electrical Connection

Overview of Electrical Connection

1: Model THTE2101 Luminaire	2: Leads (Length: min, 24 inches)	3: Adapter	4: Suitable Listed fitting
5: Conduit	6: Sealing fitting		

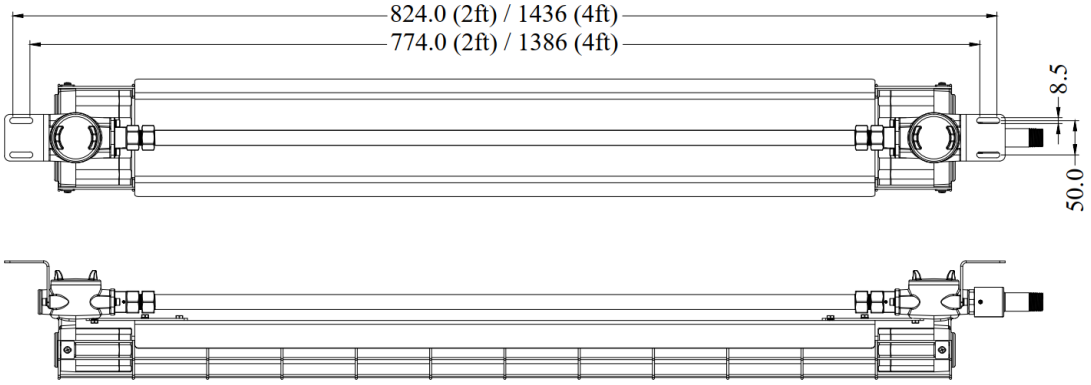


1. Insert the wiring leads (2) through the conduit (provided in the field).
2. Use the suitable Listed fitting for Class I, Division 1, Groups C and D and Class II, Division 1, Groups E, F and G to connect the 3/4" NPT external threads of Nipple/Adapter to field connection in accordance NEC (National Electrical Code).
3. Connect branch conduit wires to luminaire wiring necessary raceway component, boxes and fitting required per NEC and CEC. (White-wire connects to Neutral; Black-wire connects to Live; Green-wire connects to Ground.)
4. Sealing fitting no more than 9 inches from lead wire exiting point of conduit opening.
5. In Canada, the electrical connection in the field requires to use suitable Listed quick connector terminals.

5.2 Mounting Bracket Installation

5.2.1 Ceiling and Wall Mounting Bracket

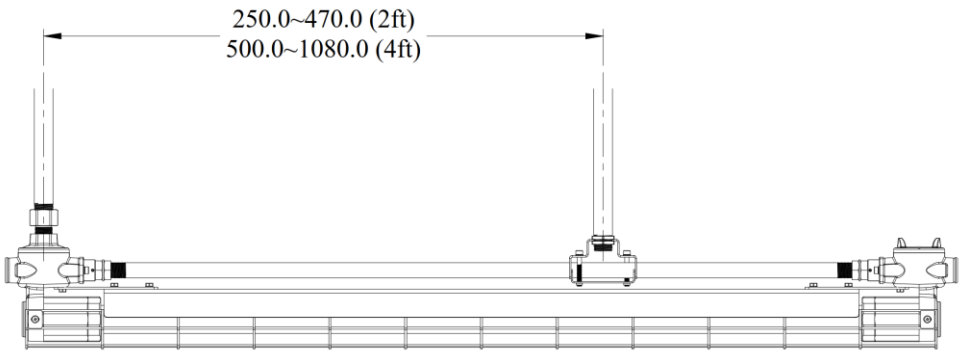
- ☞ The mount bracket is for the use of both ceiling mount and wall mount.
- ☞ Position the bracket holders and fix it by means of the provided M6 screws, 24.5kgf-cm(M6).
- ☞ Secure the ceiling/wall mounting bracket to the structure by using four fasteners (not provided).

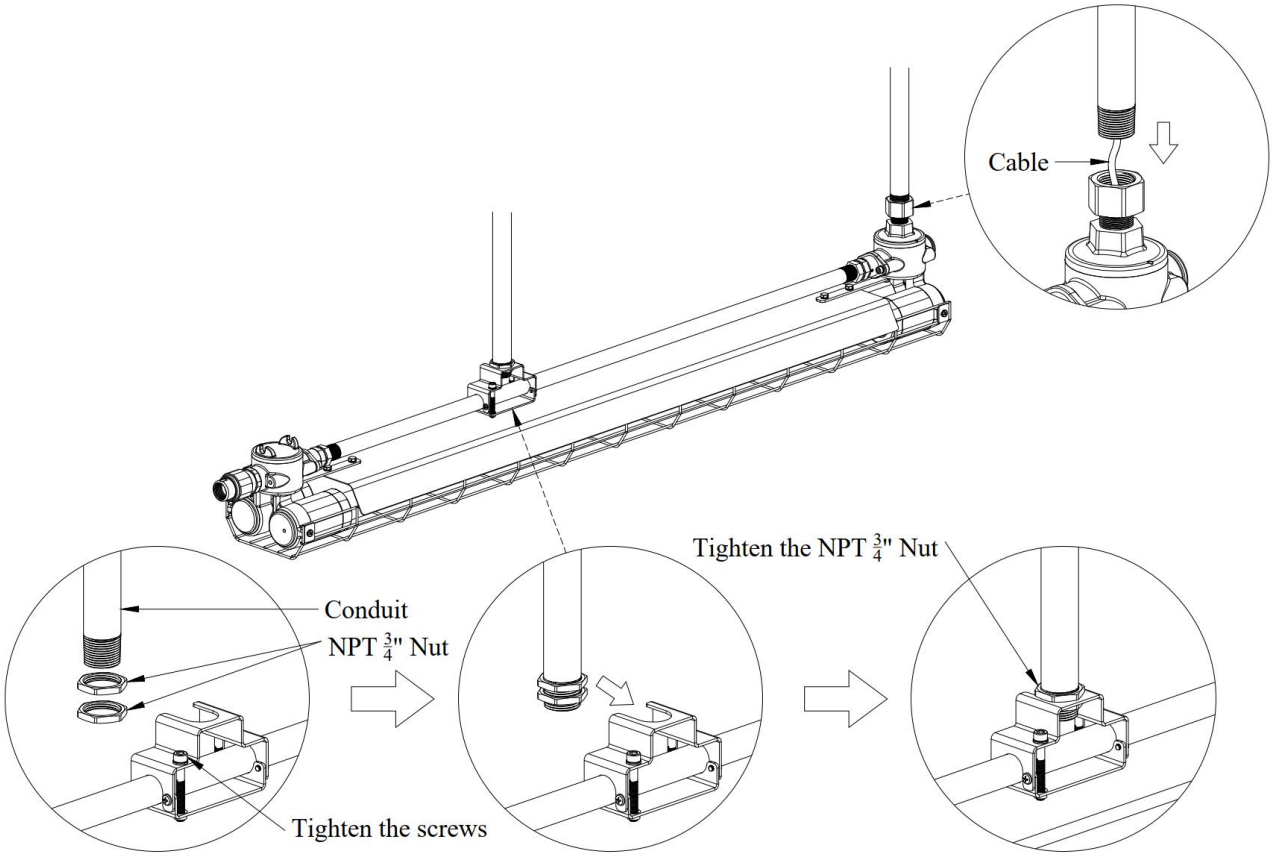


5.2.2 Straight electrical tube mounting

- ☞ 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. (provided in the field)

- Conduit tightening torque value: 1500 kgf-cm
- Electrical Connection ,please see 5.1.





5.3 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.