

# Indicator Tower Light For Hazardous Locations

## Installation and Maintenance Manual

### Model L1920

# THT-EX

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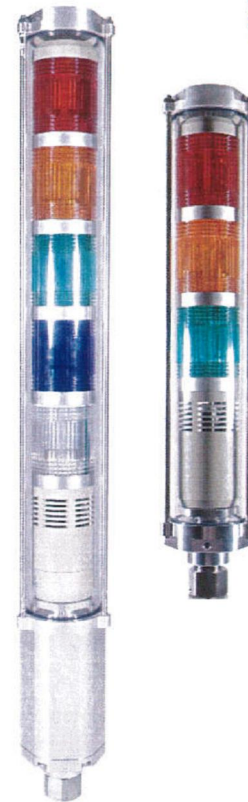
#### 1. General Information

Model L1920 LED Indicator Tower Light 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
- Class II, Division 2, Groups F and G
- Class III
- Raintight
- Watertight
- Corrosion Resistant

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

Model L1920 LED Indicator Tower Light 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 and 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 equipment 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 Tower Light 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.
  - ✓ Do not clean or rub when an explosive atmosphere may be present.
  - ✓ **EXPLOSION HAZARD - DO NOT DISCONNECT EQUIPMENT UNLESS POWER HAS BEEN SWITCHED OFF OR THE AREA IS KNOWN TO BE NON HAZARDOUS.**

## 2. Model Code

THTH1920①②DZ③④T

(1) Function, L = Non-Flashing mode

F = Flashing mode

S = Flashing mode with Buzzer

B = Non-Flashing mode with Buzzer

(2) Appearance type, N = Without Terminal Block (Provide cable)

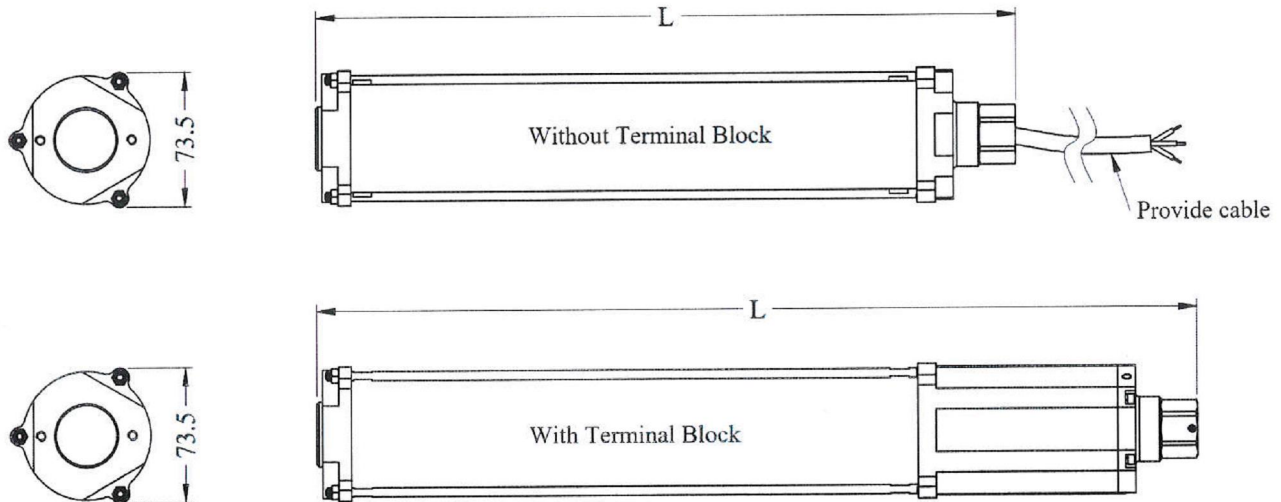
C = With Terminal Block

(3) Voltage, 1 = 110V ,2 = 220V ,3 = 24V ,L = 12V

(4) Section, 1~5 (Red ,Orange ,Green ,Blue ,White ,selecting from top to bottom)

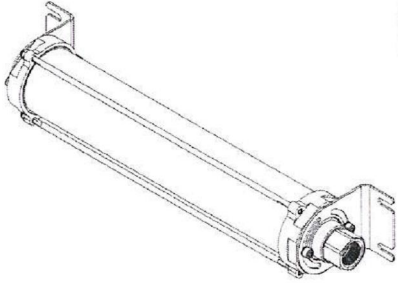
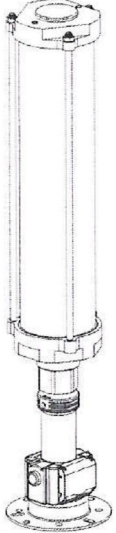
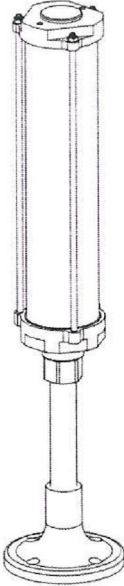



## 3. Dimensions and Weight (All Dimensions in mm)



Total Height "L"				
Section	Without Terminal Block		With Terminal Block	
	THTH1920LNDZxxT	THTH1920FNDZxxT THTH1920SNDZxxT THTH1920BNDZxxT	THTH1920LCDZxxT	THTH1920FCDZxxT THTH1920SCDZxxT THTH1920BCDZxxT
1	255 mm	255 mm	354 mm	354 mm
2	255 mm	319 mm	354 mm	418 mm
3	319 mm	383 mm	418 mm	482 mm
4	383 mm	447 mm	482 mm	546 mm
5	447 mm	511 mm	546 mm	610 mm

## 4. Technical Data

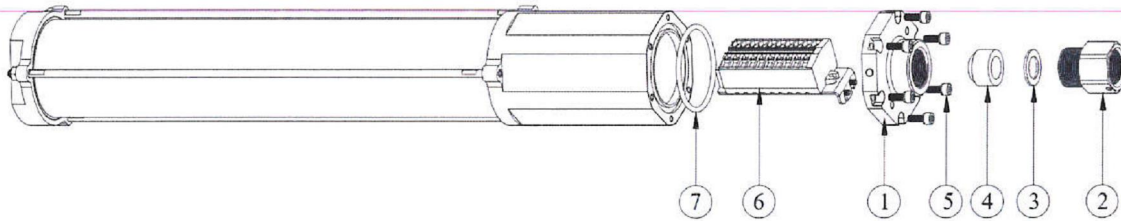
Item	Description					
UL Listed	E523344					
Location	Class I, Division 2, Groups A, B, C, D Class II, Division 2, Groups F and G Class III					
Function	Non-Flashing mode Flashing mode Flashing mode with Buzzer Non-Flashing mode with Buzzer					
Rated Voltage	110Vac ,50/60Hz 220Vac ,50/60Hz 12Vac ,50/60Hz 24Vac ,50/60Hz 12Vdc 24Vdc					
LED Lamp and Buzzer Rated Current (Reference only) <span style="float: right;">**Regardless of Color</span>						
	12VDC	12VAC	24VDC	24VAC	110VAC	220VAC
LED**	0.08A	0.15A	0.05A	0.07A	0.02A	0.02A
Buzzer	0.08A	0.08A	0.02A	0.02A	0.01A	0.01A
Ambient Temperate	-25°C ≤ Ta ≤ +40°C					
Degree of Protection	IP67					
Color	Red ,Orange ,Green ,Blue ,White (White ,selecting from top to bottom)					
Mounting Type	Wall / Ceiling mount	Pole type (Including mounting base)				
		Foldable mount	Pole stand	Pole mount		
						



## 5. Assembly and Installation

### 5.1 Conductor termination (THTH1920xCDZxxT)

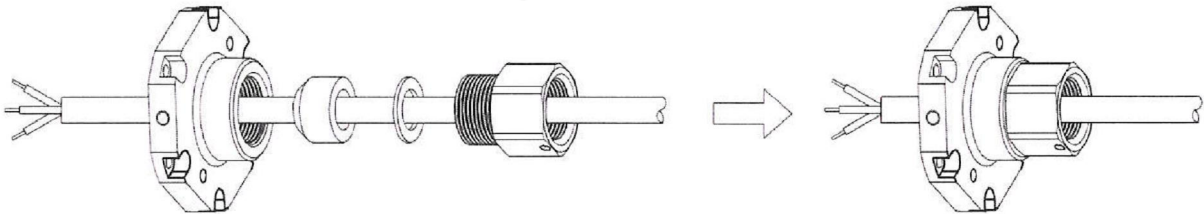
\*\*This type not provide cable ,the cable provide in the field.



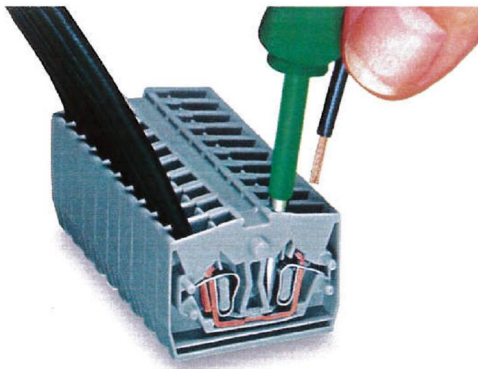
No.	Item	No.	Item
1	Down Cover	5	M4 Screw
2	Pressure Nut	6	Terminal Block
3	Washer	7	O-ring
4	Sealing Tube		



- ☞ Please loosen the M4 screw (combine the M4 washer) on the Down Cover to open the Down Cover.
- ☞ Pass the cable\*\* through Pressure Nut, Washer, Sealing Tube and Down Cover.
- ☞ Screw the Pressure Nut into Down Cover. (Torque Values: 65Nm.)

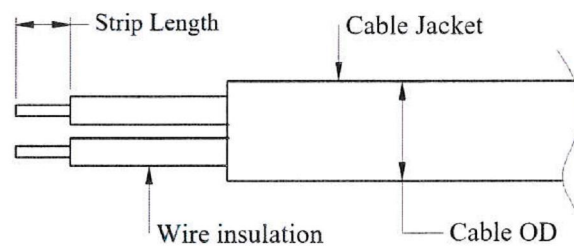


- ☞ Use the flathead screwdriver to compress the spring. Then insert the wire into the terminal. Release the flathead screwdriver. (For wiring diagram, please refer to 6.2)

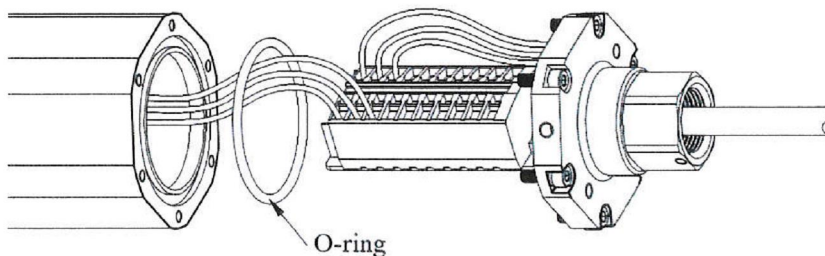


#### Specification of the used cable:

- a) Cable OD range: 6.5~14.0mm.
- b) The cross sectional area of wire: 0.2~0.75 mm<sup>2</sup> / 24~18 AWG.
- c) Wire Strip Length: 9mm.

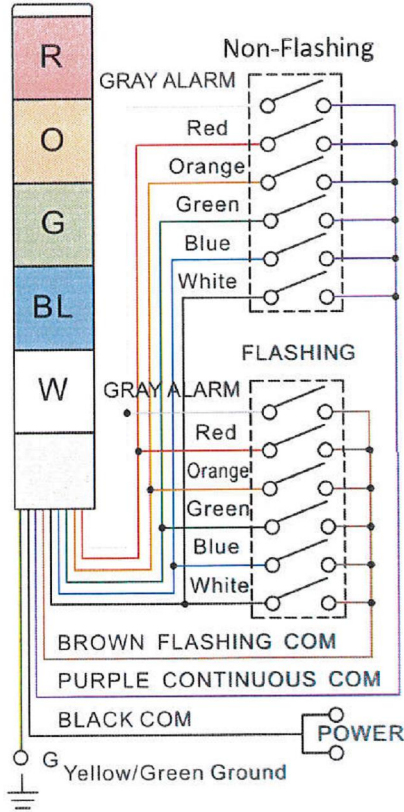
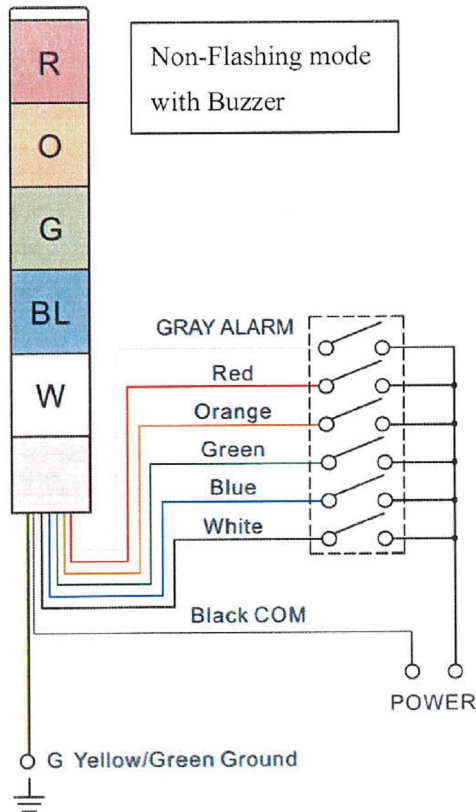
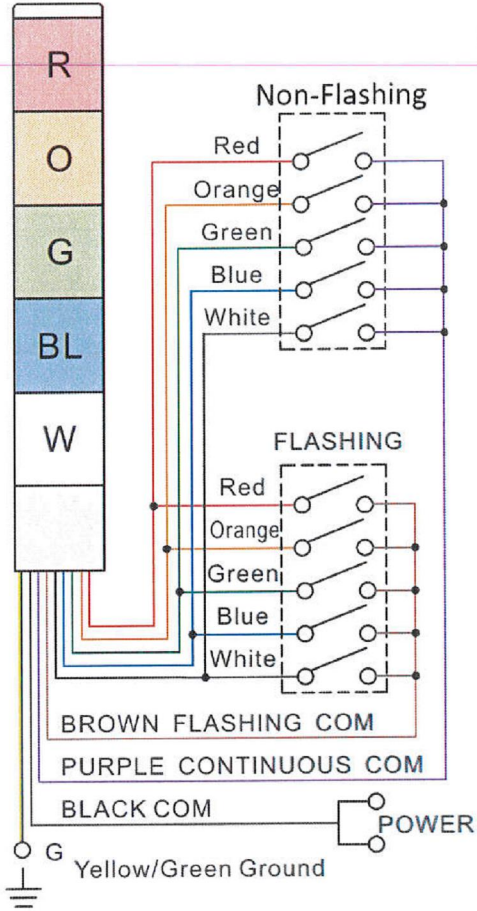
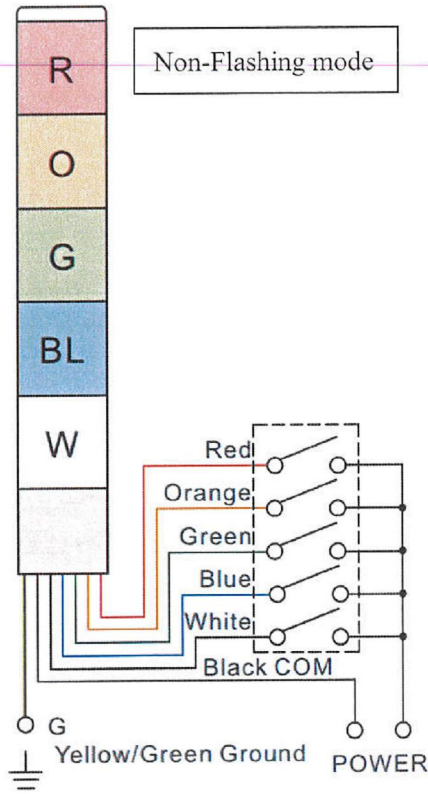


- ☞ Please check that the O-ring are installed when fixing the screw.



- ☞ Fix the M4 hexagon screw to the Body through the Down Cover, Please taking extreme care not to damage the surface in the process. (Torque Values:14.0 kgf-cm.)

## 5.2 Wiring diagram



## 5.3 Mounting Bracket Installation

### 5.3.1 Two Position (Wall /Ceiling) Adjustable Trunnion Mounting Bracket

- ☞ The mount bracket is for the use of both ceiling mount (Figure 1) and wall mount (Figure 2).
- ☞ Position the bracket holders and fix it by means of the provided M5,Torque Values:29.0 kgf-cm.
- ☞ Secure the wall/ceiling mounting bracket to the structure by using four fasteners (not provided) (Figure 3).
- ☞ The angle of lighting fixture can be adjusted.

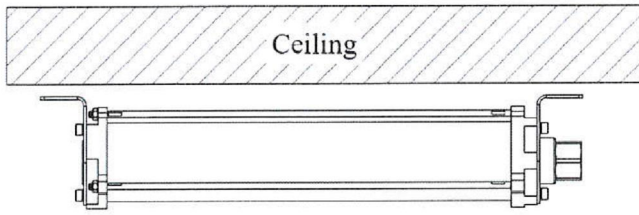


Figure 1

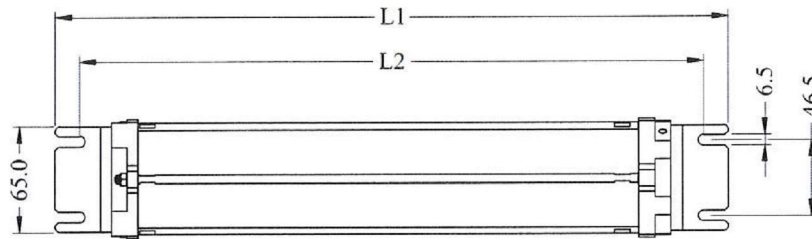


Figure 3

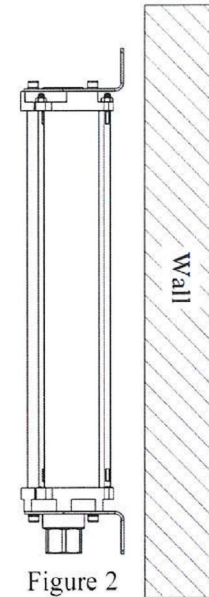


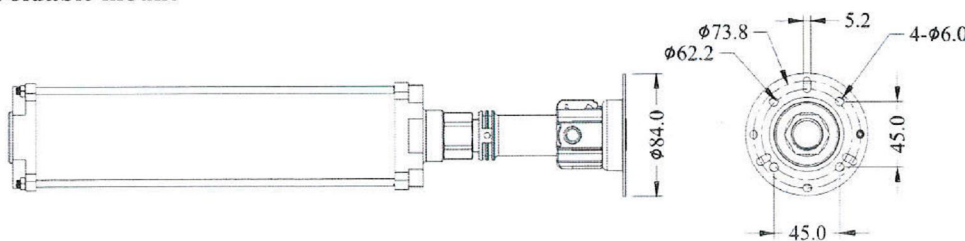
Figure 2

Length "L1"				
Section	Without Terminal Block		With Terminal Block	
	THTH1920LNDZxxT	THTH1920FNDZxxT THTH1920SNDZxxT THTH1920BNDZxxT	THTH1920LCDZxxT	THTH1920FCDZxxT THTH1920SCDZxxT THTH1920BCDZxxT
1	288 mm	288 mm	387 mm	387 mm
2	288 mm	352 mm	387 mm	451 mm
3	352 mm	416 mm	451 mm	515 mm
4	416 mm	480 mm	515 mm	579 mm
5	480 mm	544 mm	579 mm	643 mm
Length "L2"				
Section	Without Terminal Block		With Terminal Block	
	THTH1920LNDZxxT	THTH1920FNDZxxT THTH1920SNDZxxT THTH1920BNDZxxT	THTH1920LCDZxxT	THTH1920FCDZxxT THTH1920SCDZxxT THTH1920BCDZxxT
1	258 mm	258 mm	357 mm	357 mm
2	258 mm	322 mm	357 mm	421 mm
3	322 mm	386 mm	421 mm	485 mm
4	386 mm	450 mm	485 mm	549 mm
5	450 mm	514 mm	549 mm	613 mm

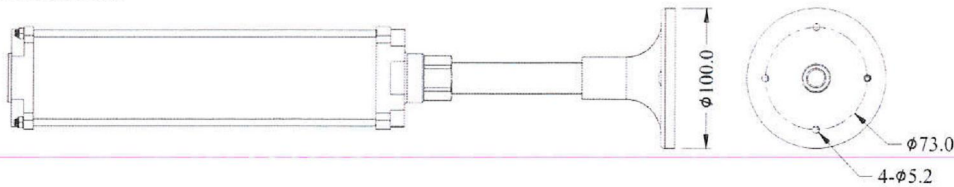
### 5.3.2 Pole type (Including mounting base)

- ☞ Secure the pole type mounting base to the structure by fastener (not provided).

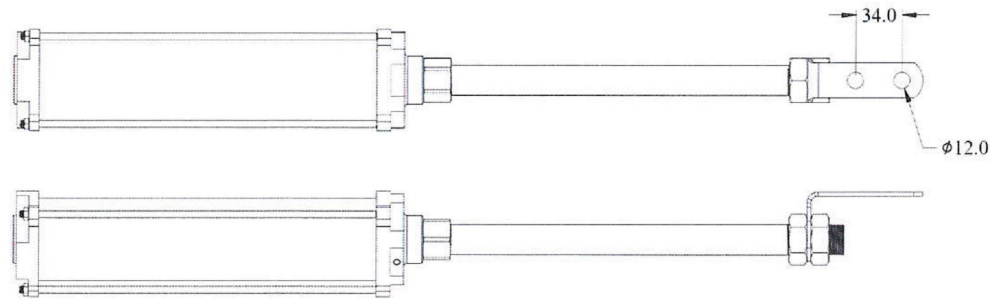
#### Foldable mount



## Pole stand



## Pole mount



## 5.4 Putting into Service

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

- ☞ the Indicator Tower Light 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 Tower 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 Tower Light should be cleaned periodically to ensure see indicator clearly. Clean the Tower Light with a clean, damp, non-abrasive, lint-free cloth.
- ☞ Inspect the Tower Light enclosure 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.

