

## HAZ-X R

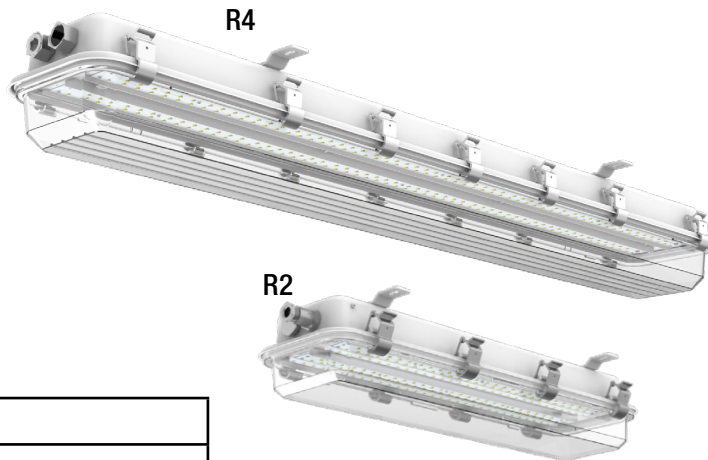
HAZARDOUS LOCATION VAPOUR TIGHT

- HZX-EX-R2:  
20W, 30W, 36W
- HZX-EX-R4:  
30W, 40W, 50W, 60W



EACH MODEL NUMBER CONSISTS OF THE FOLLOWING:  
SERIES / OPERATION / COLOUR TEMPERATURE / INPUT

<b>SERIES</b>	HZX-EX-R2, HZX-EX-R4
<b>OPERATION</b>	AC ONLY
<b>COLOUR TEMPERATURE</b>	2700K, 4000K, 5000K
<b>INPUT VOLTAGE</b>	120-277V



### IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

#### READ AND FOLLOW ALL SAFETY INSTRUCTIONS.

1. Read these instructions carefully before installation and save them for future reference.
2. Fixtures must be wired in accordance with the national electrical code and all applicable local codes. Proper grounding is required for safety.
3. This product must be installed in accordance with the applicable installation code by a qualified electrician who is familiar with the construction and operation of the product and the hazards involved.

#### SAVE THESE INSTRUCTIONS!

#### RISK OF FIRE, ELECTRIC SHOCK OR PERSONAL INJURY

**Before installation, turn power off.**

**WARNING:** To reduce the risk of ignition of hazardous atmospheres, disconnect the luminaire from the AC supply circuit and determine that the area is free of ignitable concentration before opening. Keep tightly closed when in operation.

**WARNING:** Risk of fire or electric shock. Hazardous light installation requires knowledge of luminaires and electrical systems. If not qualified, **DO NOT** try to install. Please contact an electrician.

**WARNING:** Risk of fire or electric shock. Suitable for wet locations. Make sure the power is off prior to install.

**WARNING:** Risk of fire or electric shock. Suitable for non-insulated surface and frame. **DO NOT** cover fixture with insulation liner or similar material.

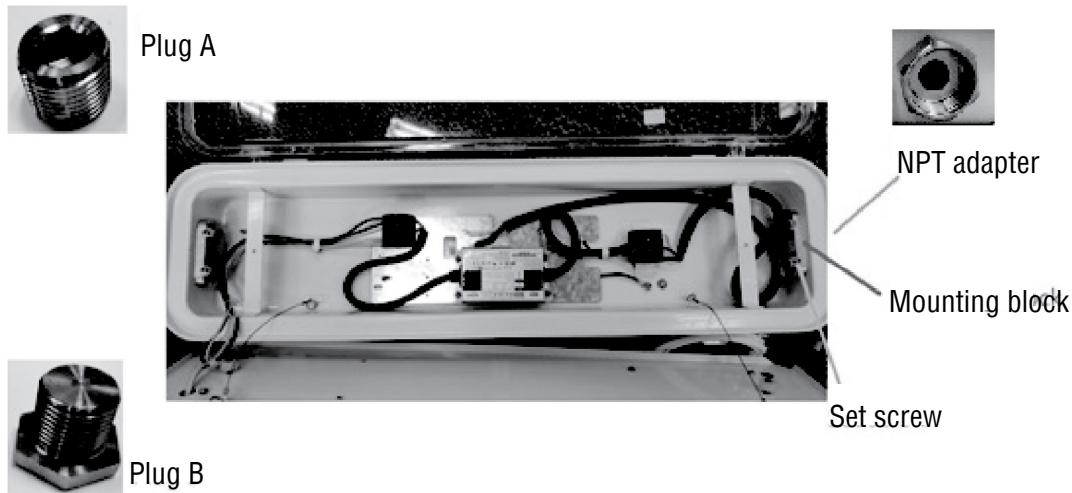
**WARNING:** **DO NOT** install in unstable, loose or breakable surfaces.

**WARNING:** **DO NOT** let objects impact or exert force on the surface of the fixture.

### WARNING

No user serviceable parts. Refer service to a qualified service technician. Read instructions prior to installing and/or operating this device. Installation should be performed by a licensed electrician/installer in accordance with local codes.

## INSTALLATION STEPS (Relocation of NPT Adapter)

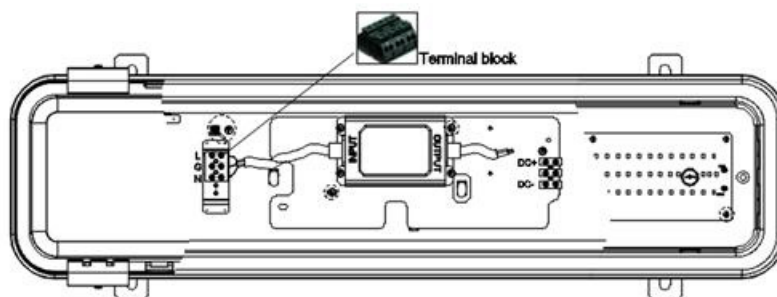


There are four openings on the metal tank. Two of them installed with NPT adapters and two of them are closed by Plug.

Following the steps below, you may relocate the NPT adapters according to your preference.

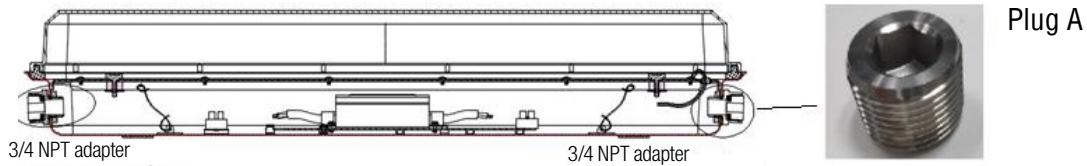
1. Unscrew the set screw for the NPT adapter.
2. Unscrew the NPT adapter.
3. Unscrew the set screw for the B plug where you want to install the NPT adapter.
4. Unscrew the B plug.
5. Then, move and install the NPT adapter to new location. Secure it to the mounting block with a torque of 525 Nm. Also, secure it to the mounting block by set the screw.
6. Move and install B plug to the original location of NPT adapter with a torque of 525 Nm torque. Also, secured it to the mounting block by set screw. If the conduit opening for the NPT adapter is not used, close it with Plug A by 525 Nm.

## INSTALLATION STEPS (Wiring to Branch Circuit)

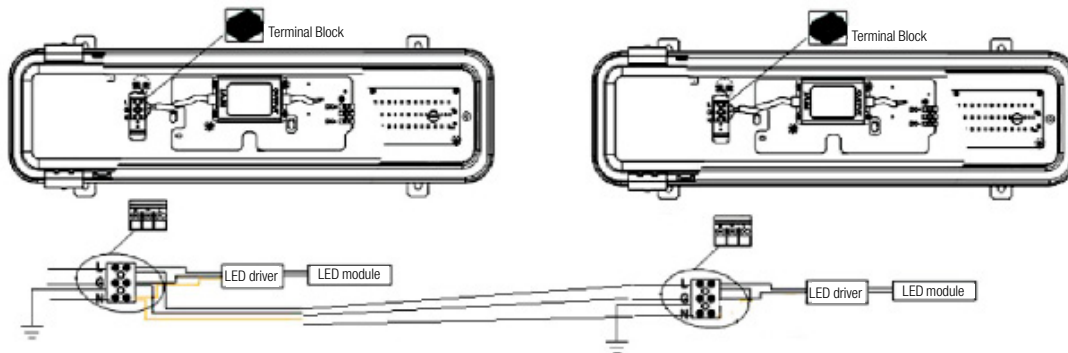


1. Ensure all the power is turned off.
2. Open diffuser by unscrewing the screws on the mounting clips. Remove the mounting plate of LED module by unscrewing the screws on it.
3. Install 3/4" trade size conduit to 3/4" NPT adapter on the luminaire.
4. Connect the L, N, G from branch to the slots of the terminal block, according to the markings on the terminal block.
5. Replace and reattach the mounting plate of the LED module and diffuser in their original locations.

## INSTALLATION STEPS (Wiring for Interconnection - Daisy Chain)



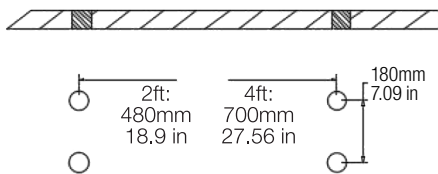
1. Ensure all the power is turned off.
2. Open diffuser by unscrewing the screws on the mounting clips. Remove the mounting plate of LED module by unscrewing the screws on it.
3. Unscrew the Plug A from NPT adapter and install suitable conduit to the NPT adapter.
4. Connected the wire according to the figure below:
5. Replace and reattach the mounting plate of the LED module and diffuser. Installation is completed. Please be reminded that maximum total wattage for interconnection is 150W.



## INSTALLATION STEPS (Surface - Ceiling / Wall Mount)

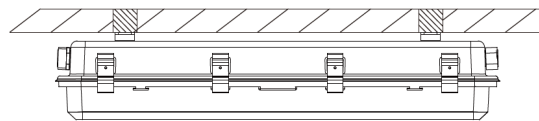
(Note: ceiling mount shown)

### STEP 1



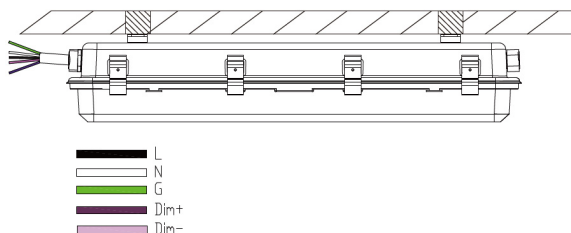
Drill four holes in ceiling according to the dimension of your fixture (shown above).  
Install the suitable expansion bolts (not provided) into the ceiling.

### STEP 2



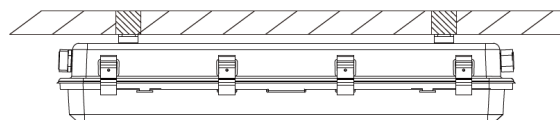
Install the fixture to ceiling with suitable expansion bolts (not provided).

### STEP 3



Connect the AC cable to power supply black to L, white to N, green to G, purple to Dim + pink to Dim -

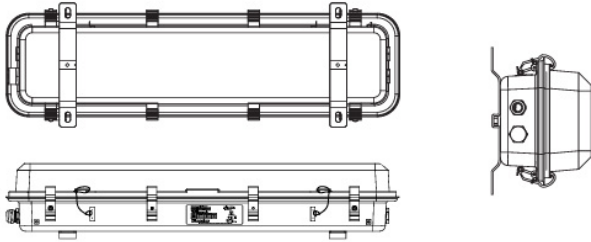
### STEP 4



Installation completed.

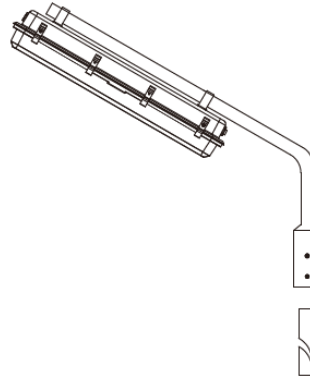
## INSTALLATION STEPS (Pole Mount)

### STEP 1



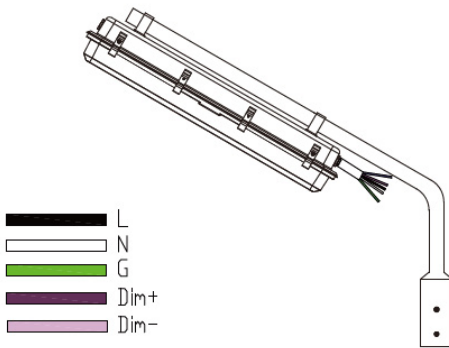
Attach the luminaire to the provided pole by the mounting rings welded on the back of the luminaire. Tighten the screws on the mounting rings.

### STEP 2



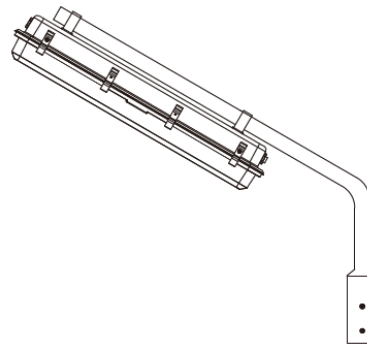
Put the provided pole on top of your pole. Then tighten the four set screws shown in the figure above.

### STEP 3



Connect the AC cable to power supply black to L, white to N, green to G, purple to Dim + pink to Dim -

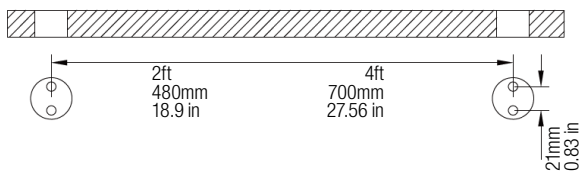
### STEP 4



Installation complete (suitable for all installation angles)

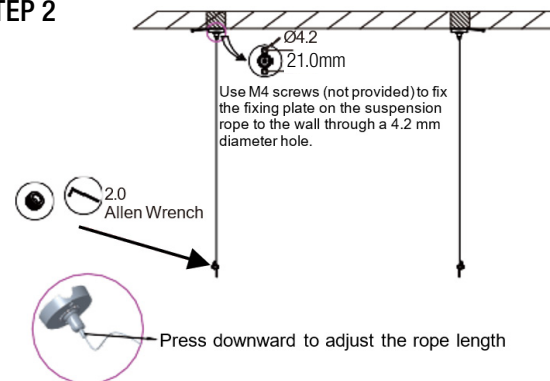
## INSTALLATION STEPS (Rope Mount)

### STEP 1



Drill four 4mm diameter holes according to the specified dimensions and install M4 expansion screws (not provided, 480mm/18.9 in, 700mm/27.56 in, 21mm/0.83 in).

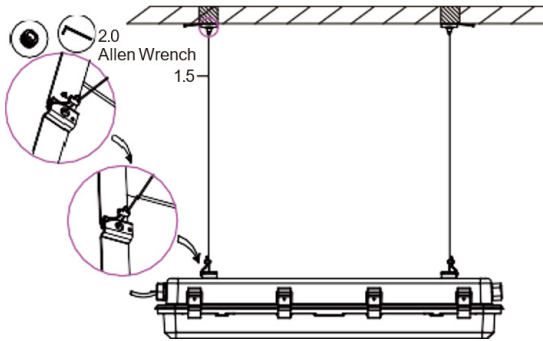
### STEP 2



Secure the side with the fixed disc to the ceiling using four M4 screws (not provided). For the side with the turnbuckle assembly, first loosen it with the provided hex key.

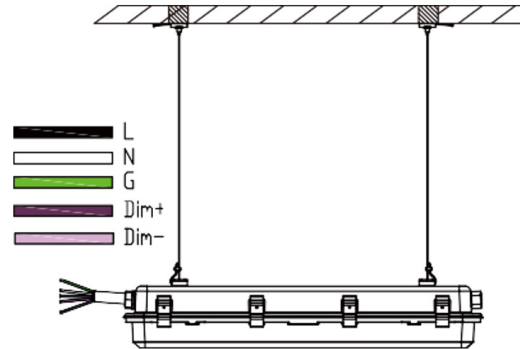
## INSTALLATION STEPS (Rope Mount)

### STEP 3



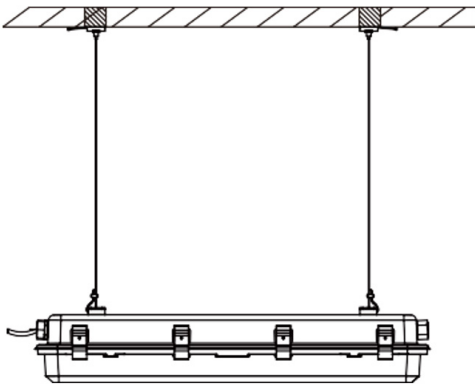
Pass the rope through the  $\text{\O}8.5\text{mm}$  round hole in the center of the lamp base bracket and pass it through the turnbuckle. Make sure that the rope extends out of the turnbuckle for about 15-20mm, and then tighten it firmly with a hexagon wrench.

### STEP 4



Connect the AC cable to power supply black to L, white to N, green to G, purple to Dim + pink to Dim -

### STEP 5



Installation completed.

# HAZ-X IN02-A-A

HAZARDOUS LOCATION MICROWAVE SENSOR

- HZX-EX-IN02-A-A:  
Motion and Photocell Sensor



EACH MODEL NUMBER CONSISTS OF THE FOLLOWING:  
SERIES / OPERATION / COLOUR TEMPERATURE / INPUT

SERIES	HZX-EX-IN02-A
OPERATION	AC ONLY
INPUT VOLTAGE	120-277V



## IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

### READ AND FOLLOW ALL SAFETY INSTRUCTIONS.

1. Read these instructions carefully before installation and save them for future reference.
2. Fixtures must be wired in accordance with the national electrical code and all applicable local codes. Proper grounding is required for safety.
3. This product must be installed in accordance with the applicable installation code by a qualified electrician who is familiar with the construction and operation of the product and the hazards involved.

### SAVE THESE INSTRUCTIONS!

### RISK OF FIRE, ELECTRIC SHOCK OR PERSONAL INJURY

**Before installation, turn power off.**

**WARNING:** Risk of fire or electric shock. Hazardous light installation requires knowledge of luminaires and electrical systems. If not qualified, **DO NOT** try to install. Please contact an electrician.

**WARNING:** To prevent product malfunction and / or electrical shock, this product must be properly grounded.

**WARNING:** Use only cUL approved wire for input/output connections. Minimum size 18 awg or 14 awg for continuous runs. Supply conductors must be rated to min 90 °C

**WARNING:** Use caution when handling this product during or after operation as it may become hot and cause burns. Disconnect product and allow cooling prior to servicing.

**WARNING:** Any alteration or modification of this product is expressly forbidden as it may cause serious personal injury, death, property damage and/or product malfunction.

**WARNING:** To reduce the risk of ignition of hazardous atmospheres, disconnect the luminaire from the AC supply circuit and determine that the area is free of ignitable concentration before opening. Keep tightly closed when in operation.

**WARNING:** Do not disconnect while the circuit is live or unless the area is free of ignitable concentrations.

**WARNING:** Suitable to install in a hazardous atmosphere, except where the ambient temperature exceeds the rated operating temperature of the fixture. This sensor is designed to operate in ambient temperatures ranging from -25°C to +60°C and is rated for wet locations.

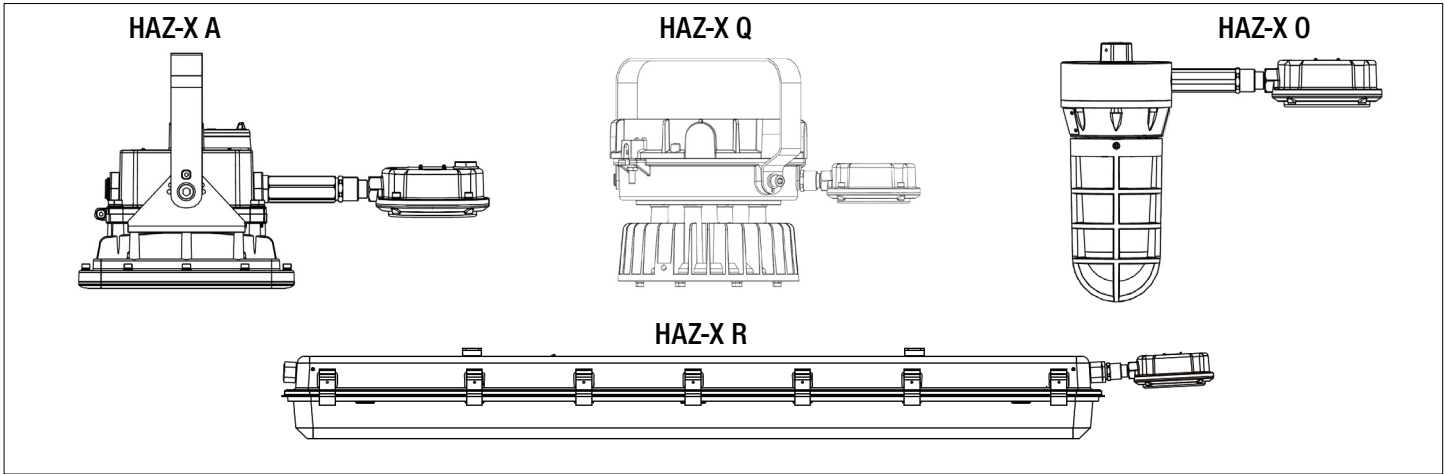
**WARNING:** Altitude: for use in hazardous locations up to 2000m or 80 kpa(0.8bar).

WARNING

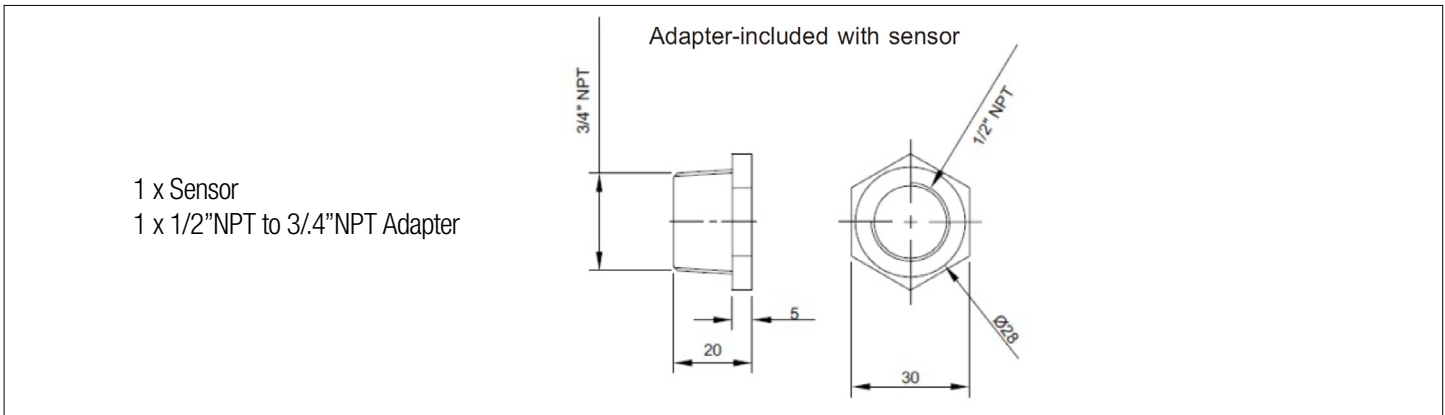
No user serviceable parts. Refer service to a qualified service technician. Read instructions prior to installing and/or operating this device. Installation should be performed by a licensed electrician/installer in accordance with local codes.

## COMPATIBLE HAZ-X PRODUCTS

Devices are suitable for use in Class I, Division 2, Groups A, B, C, D, or non-hazardous locations only.

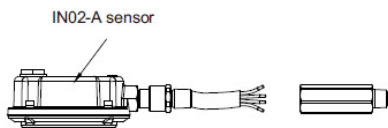


## LIST OF PARTS INCLUDED



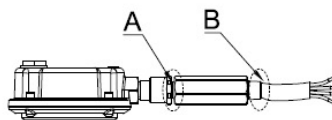
## INSTALLATION AND ELECTRICAL CONNECTION

**Fig: 1**



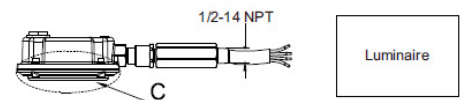
1. Thread the cables in the order shown in the figure.  
**NOTE:** Increase the number of NPT1/2 reducers based on the actual installation of luminaires.

**Fig: 2**



2. Fill the junction of area A and B with sealant after installation

**Fig: 3**

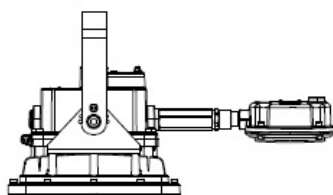


3. Select the appropriate inlet on the luminaire for connection: Black to Input L, White to Input N, Red to Output L', Green to Output N

**NOTE:** (a) After installation, area C should not be obstructed by any objects and should face towards detected area. (b) Do not place the sensor close to high-density objects such as metal, glass, mixed-use walls, etc. for the sensor may be triggered by mistake. (c) Please ensure that there are no moving signals around the sensor, such as fans, DC motors, sewers, air outlets, etc. for the sensor may generate false triggers.

**Fig: 4**

4. Install the components in the above steps on the explosion-proof lamps.

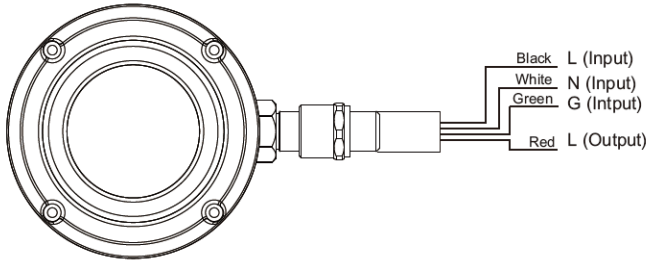


## SENSOR FACTORY SETTINGS (Microwave)

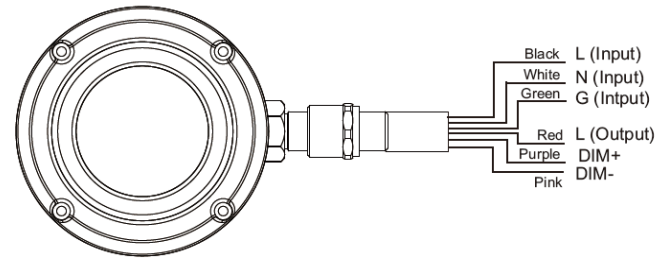
- Brightness: 100%
- Hold Time: 20 Minutes
- Daylight: Disabled
- Sensitivity: 100%
- Stand-by Dimming Level: 20%
- Stand-by Time: 1 Minute

## SENSOR WIRING DIAGRAM

Model with dimming function

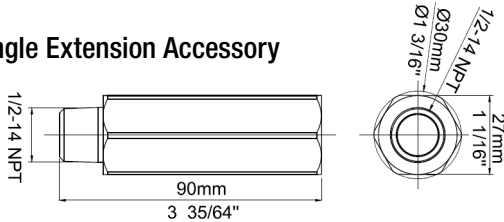


Model without dimming function



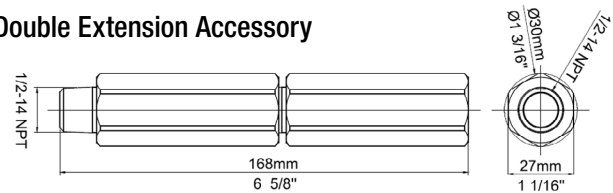
## ACCESSORIES (sold separately)

Single Extension Accessory



Reducer 1\_2NPT/1\_2NPT  
Material: SUS304  
Weight: 0.277kg

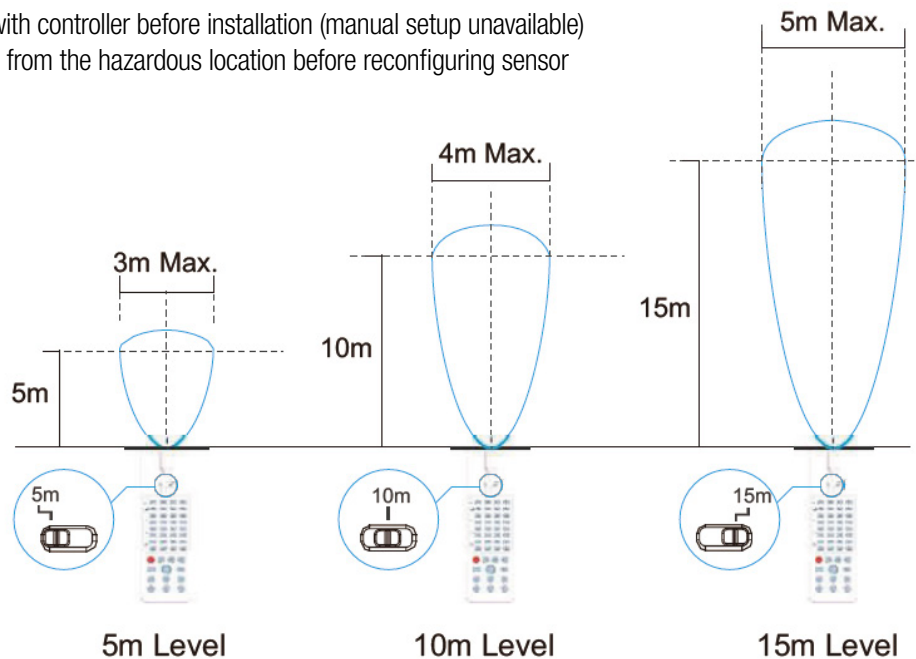
Double Extension Accessory









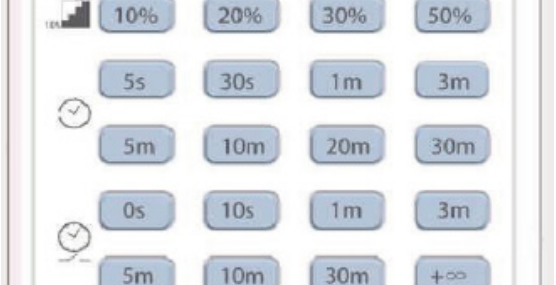



















Reducer 1\_2NPT/1\_2NPT  
Material: SUS304  
Weight: 0.554kg

## Remote Control

- Do **NOT** use/leave remote controller in hazardous locations
- Configure sensor with controller before installation (manual setup unavailable)
- Remove the fixture from the hazardous location before reconfiguring sensor



REMOTE CONTROL SETTING	BUTTON	REFERENCE																												
		Press the "ON/OFF" button; the light goes to constant on/off mode, sensor is disabled. Press "Reset" button to quit from this mode and the sensor starts to work.																												
		Press the "Reset" button; all parameters are the same as factory settings.																												
		Press the "Sensor motion" button; the light turns on from the normal on/off mode, and the sensor starts to work. (The latest setting stays in valid.)																												
		Press the "DIM Test" button, the 0-10V dimming works to test whether the 1-10Vdc dimming ports are connected properly. After 2s, it returns to the latest setting automatically.																												
		Long Press, 3 seconds "Override DH" button to exit the Daylight priority mode or Daylight harvesting mode and then enter the Daylight Sensor mode. (The latest setting stays in valid.)																												
		Short-press the "DIM+/DIM-" button to set the occupancy light level; the brightness of the load light adjusts at 2% per unit. Long-press "DIM+/DIM-" button to set the occupancy light level. The brightness of the load light adjusts at 1% per unit. Dimming range: 10%-100%. (Applies to normal ON mode and sensor with daylight harvesting function.)																												
		Long Press, 3 seconds to enter the Daylight priority function or Daylight harvesting function. Note: Short press "Disable" button will exit the Daylight priority mode and the Daylight Sensor is uncontrolled.																												
		<table border="1" data-bbox="893 850 1412 997"> <thead> <tr> <th>Scene Options</th> <th>Detection Area</th> <th>Hold Time</th> <th>Standby Period</th> <th>Standby DIM Level</th> <th>Daylight Sensor</th> <th>Induction Way</th> </tr> </thead> <tbody> <tr> <td>QS1</td> <td>100%</td> <td>5min</td> <td>10min</td> <td>10%</td> <td>30lux</td> <td>HS</td> </tr> <tr> <td>QS2</td> <td>100%</td> <td>10min</td> <td>30min</td> <td>10%</td> <td>Disable</td> <td>HS</td> </tr> <tr> <td>QS3</td> <td>100%</td> <td>15min</td> <td>30min</td> <td>10%</td> <td>Disable</td> <td>HS</td> </tr> </tbody> </table> <p><b>Note:</b> The sensor parameters can be adjusted by pressing the corresponding button. When the user presses any button to change the sensor parameters, the last setting prevails. If the sensor doesn't have the function of the above parameters, that parameter is invalid. (Stand-by period and Stand-by DIM Level do not apply to ON-OFF Sensor. Induction way does not apply to a low-mount sensor.)</p>	Scene Options	Detection Area	Hold Time	Standby Period	Standby DIM Level	Daylight Sensor	Induction Way	QS1	100%	5min	10min	10%	30lux	HS	QS2	100%	10min	30min	10%	Disable	HS	QS3	100%	15min	30min	10%	Disable	HS
Scene Options	Detection Area	Hold Time	Standby Period	Standby DIM Level	Daylight Sensor	Induction Way																								
QS1	100%	5min	10min	10%	30lux	HS																								
QS2	100%	10min	30min	10%	Disable	HS																								
QS3	100%	15min	30min	10%	Disable	HS																								
		Press the "TEST 2s" button to enter the test mode anytime. In test mode, the sensor parameters are as follows: Detection Area is 100%, Hold Time is 2s, Stand-by Dim Level is 10%, Standby Period is 0s, Daylight sensor is disabled. This function is only for testing. Quit the test mode by pressing "RESET" or any other function buttons. This mode has no memory function. After powering on again, the parameters are restored to the last setting. <p><b>Note:</b> If the sensor has the wireless networking function, the button provides the function to enter the distribution network mode.</p>																												
		Press the "HS" button to set the detection area to high sensitivity. Press the "LS" button to set the detection area to low sensitivity. The Induction mode is adjusted at the detection area setting. <p><b>Note:</b> This button is invalid for a low-mount sensor.</p>																												
		Daylight Sensor Set up Daylight Sensor: 5Lux/15Lux/30Lux/50Lux/100Lux/150Lux/Disable																												
		Standby period Set up Standby period: 0s/10s/1min/3min/5min/10min/30min/+∞ Note: Standby period does not apply to ON-OFF Sensor.																												
		Hold time Set up Hold time: 5s/30s/1min/3min/5min/10min/20min/30min																												
		Standby DIM level Set up standby DIM level: 10%/20%/30%/50% Note: Standby DIM Level does not apply to ON-OFF Sensor.																												
		Detection Area Set up Detection Area: 25%/50%/75%/100%																												
		Remote Distance The toggle button can set the remote distance of the remote control and sensor.																												