

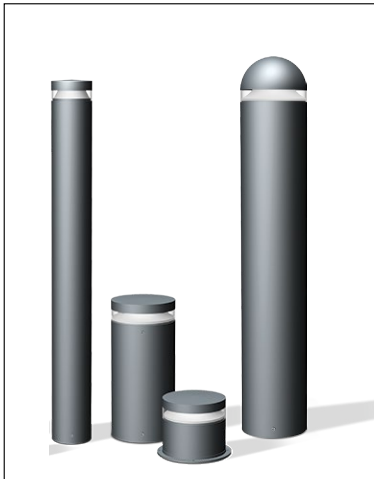
# Bollards

Installation, Use and Maintenance Guidelines  
(Indicative for all luminaires in this series)



## Application

Exceptionally stable LED Bollard for rotationally symmetrical illumination on ground surfaces. Their sturdy construction makes them particularly suitable for areas where a high level of robustness is required. For Asymmetrical version, the direction of mounting is determined by lighting requirement at site.



Note : Technical amendments reserved

Light Source : LED / CFL. Varied wattage Options

Normal rated voltage for luminaire is 220-240V, 50Hz, single phase ac supply.

## Installation Recommendation

- This product is suitable for Indoor & Outdoor application.
- Electronic equipment is sensitive to voltage surges, Hence it is recommended to install a stabilizer at source to ensure constant voltage power supply to all outdoor luminaires, for better performance and life span of the luminaire and to avoid risk of damage.
- Installation and maintenance of the luminaire should be carried out by qualified person only in accordance with good electrical practice and appropriate accessories.
- Use flexible cable of suitable rating and diameter with the right IP rated connectors.
- The IP rating of the connector between fixture and main cable must be equal to or greater than the IP rating of the Luminaire.
- It is very important to follow these instructions to enable the luminaire to be installed correctly. Failure to follow this will void all warranty on the product.
- Please retain installation guidelines for future reference.

## Important Note:

**We recommend to drain the mounting area to ensure no water logging at all times, also considering durations of heavy downpour.**

## Technical Specifications

- Luminaire made of extruded aluminium alloy (grade 6063) with die-cast aluminium components and non corrosive Stainless steel 304 grade fasteners for exposed area.
- Reflector system made of polycarbonate or pure aluminium (painted / anodised).
- Non yellowing UV stabilized clear / translucent acrylic / polycarbonate diffuser.
- Silicon gasket.
- Cast Iron / Galvanised Steel / Aluminium mounting plate for bolting onto a foundation.

- Cable entries for through-wiring of mains supply cable.
- Earth connection
- Safety class I
- Protection class IP 44 / IP 54 / IP 65 – depending upon type of bollard.
- CE - Conformity mark
- Finished with pure polyester powder coated colour - graphite grey / black

### Light distribution

Luminaire photometric data / IES files for the light planning program DIALux can be downloaded in IES-format on the KLITE web page [www.klite.in](http://www.klite.in).

### Safety

- For Safety, always ensure power supply is disconnected before regular maintenance, lamp replacement and accessory fitting.
- Installation and operation of this luminaire are subject to national safety regulations. The manufacturer is discharged from liability when damage is caused by improper use or installation.
- Any modification to this fixture without authorization will void all warranty and the persons responsible for the modification shall be considered as manufacturer.
- Observe precautions for handling LED module.
- Do not subject the product for voltage or current which is not rated for.
- Do not use lamps with higher wattage than indicated.

### Installation

The luminaire must only be operated with the complete protective cover

Undo screw at the base of the luminaire and remove the mounting base plate

For installation on a foundation please observe the following :

- The foundation and parts of the product in contact with soil, must not be covered by soil or in contact with aggressive chemical elements
- The size of the foundation depends on the topography, condition of the soil and must be determined as per site conditions.
- We recommend to drain the mounting area to ensure no water logging at all times, also considering durations of heavy downpour.
- Height of foundation above ground level (150mm) may be revised to suit the site conditions especially considering the expected water level stagnation
- Template supplied is suggested to be used for locating the centre to centre (CC) distance of foundation bolts
- Cable has to be routed through the bottom base plate (cable entry hole)
- Use only flexible supply cables of suitable rating and diameter. Do not use hard cables or armoured cables (Hard cable could effect the IP rating of the product)
- Please ensure that the wires are connected to the right polarity [Phase, Neutral & Earth] and the luminaire must be earthed ( Class I).
- It is absolutely essential to use the enclosure gasket if provided in correct position, else the IP rating of the luminaire will be compromised.
- Insert luminaire into the mounting plate and fix with non-corrosive 304 grade stainless steel screws
- Lock and unlock the screws following an alternative sequence, tightening all screws evenly.

### Important Note :

- LEDs are highly sensitive electronic components. Please avoid touching the light source directly, during installation.
- If fixture is supplied with integrated LED module, **Do Not Open** the lamp compartment for installation.

### Cleaning and care

- After installation, the luminaire should first be cleaned.

- Building dust, residues from pressure-sensitive adhesives, paint splatter and rust film must be completely removed. Never use cleaning implements made of normal steel, steel brushes or steel wool because they cause extraneous rust to form.
- Cleaning agents containing hydrochloric acid and chlorides should never be used.
- We recommend cleaning the luminaires regularly.
- Do not use high pressure cleaners

## Maintenance Recommendations

A scheduled maintenance program must be carried out on the Installation and fixtures regardless of the IP rating or application

- Disconnect the electrical installation before maintenance operation
- Open the luminaire. Remove the lamp (LED module by authorised personal only)
- Check the gasket, diffuser, seals are in good condition and replace, if necessary.
- Check that the screws are not loose on various components and that the cable gland is securely tight
- Ensure the luminaire is properly closed and clamped back into position after regular maintenance of lamp or control gear in order to maintain the IP rating of the fixture

## Note:

The LED module contained in this luminaire shall only be replaced as per the manufacturer recommendation. For further informations, please contact your supplier.

## Storage

If site is not ready for installation, store the material in proper warehouse facilities. K-Lite is not responsible for the damages caused due to the mishandling of material at site.



### Important Note

To ensure proper installation, kindly translate / communicate the installation instructions to the local qualified electrician in their respective local language.

## Please Recycle

The electronic components of this product should not be disposed via the normal waste system. To prevent possible harm to the environment and Human health please ensure that the product is recycled in an environmentally sound manner. Please contact your local collection facilities for more details

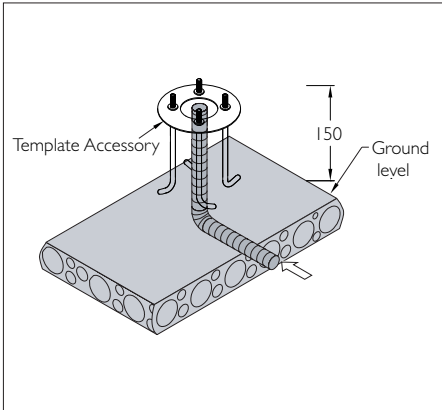
## Customer Service

If Klite agrees to receive back some fixtures for Lab Testing and further analysis. Please ensure that the fixtures shipped should NOT BE DISASSEMBLED. Disconnect the power line and ship the product as is unless otherwise specified.

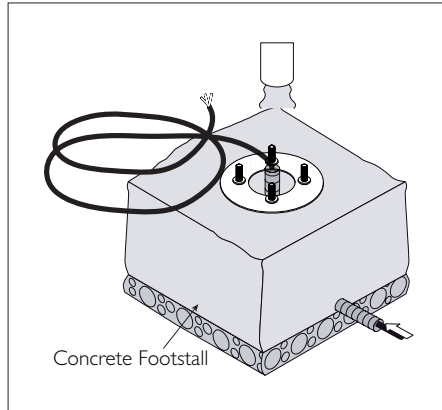
Please contact [customercare@klite.in](mailto:customercare@klite.in) for more information.

# Bollards

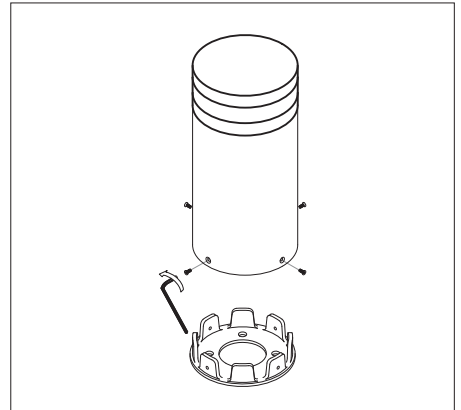
# Installation Guidelines



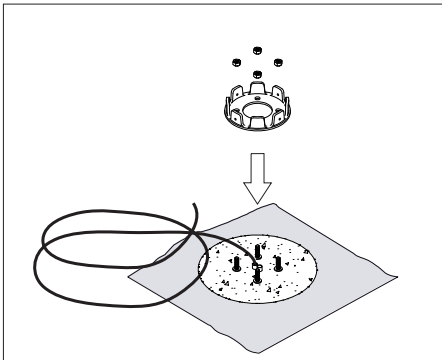
Height of foundation above ground level (150mm) may be revised to suit the site conditions especially considering the expected water level stagnation during heavy downpour.



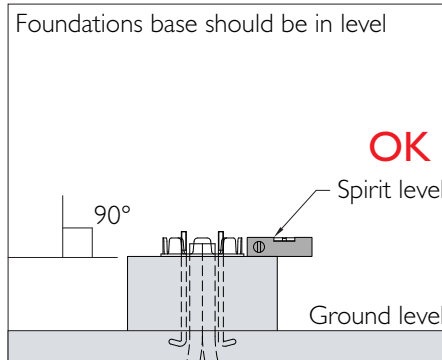
Template supplied is suggested to be used for locating the centre to centre (CC) distance of foundations bolts



Unlock all the screws evenly

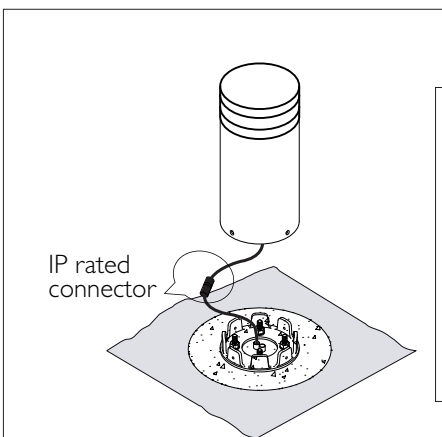
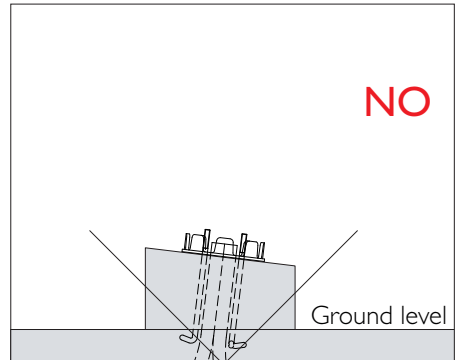


Insert mounting plate and tighten all foundation bolts evenly

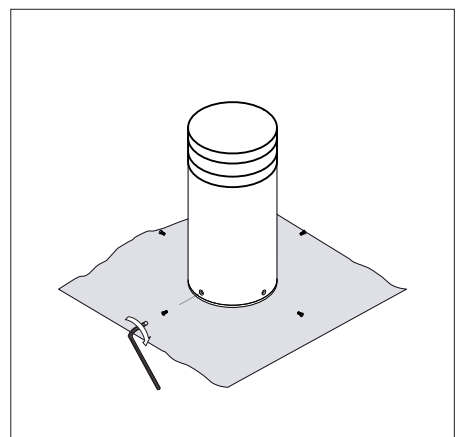
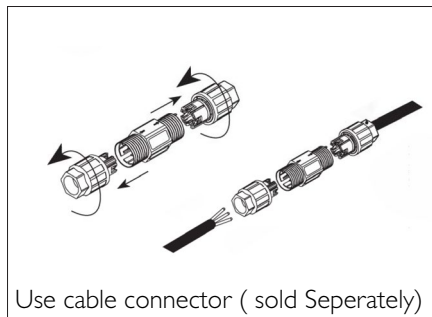


Foundations base should be in level

The size of the foundation depends on the topography, condition of the soil and must be determined as per site condition.



Please ensure that the wires are connected to the right polarity (Phase, Neutral & Earth) and the luminaire must be earthed (Class I). Use appropriate connectors. Insert luminaire into the mounting plate and fix with non-corrosive 304 grade stainless steel screws

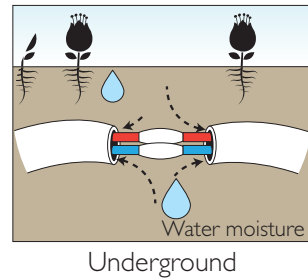
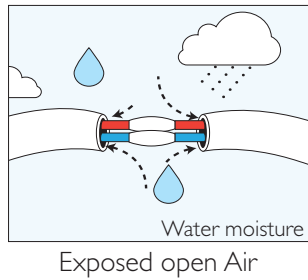


Lock the screws following an alternative sequence, tightening all screws evenly

# How to Install your outdoor luminaire correctly with connectors



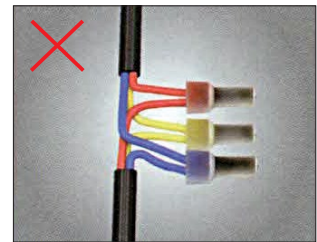
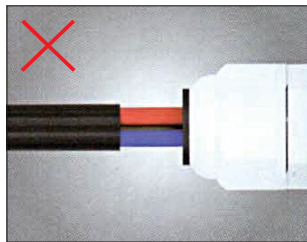
Water infiltration is one of the biggest reasons of damage to outdoors fixtures. The main reason being no proper water proof connectors being used during installation.



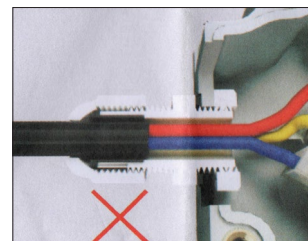
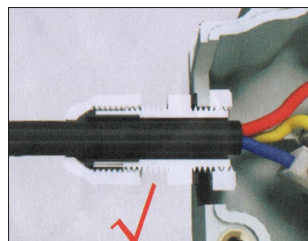
## Why use the water - proof connector ?

When the fixture is turned on, the inside temperature will increase as the operating time goes. Conversely when the lamp stops working, the temperature will drop slowly. This phenomenon will cause "The siphon effect". Thermal expansion and contraction makes the inside and outside air pressure different. The air which includes water vapour will infiltrate to the housing through the wire entry as soon as the internal air pressure is lesser than the external pressure. The infiltration is caused by several incorrect connections like the picture below. This water vapour will then become droplets of water that will be seen inside the fixture.

## Incorrect Installation

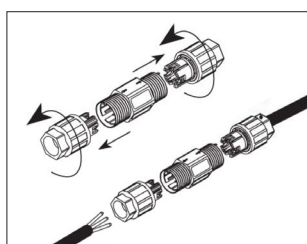


When the wire is connected into the fixture through cable gland, the cable must be more than 10mm inside. Please refer to the images below.



The best and easiest ways to prevent the water filtration are by IP rated connectors

We recommend using the water-proof connectors as shown below for all outdoor fixtures. Installers should prepare the appropriate main cables of suitable rating and diameter with the right IP rated connectors.



One input & two output

