

Important Information:

These instructions contain safety information; read and follow them carefully. Dialight will not accept any responsibility for injury, damage, or loss which may occur due to incorrect installation, operation, or maintenance.

Operating Instructions



Note: Save these instructions for future use

WARNING: INSTALLATION & SECONDARY RETENTION. The use of this product without proper installation and inspections, including secondary safety retention/securing/netting, could cause severe injury or death. Dialight recommends that all installations should use secondary retention and/or safety netting (appropriate to the installation environment) where applicable. It is the exclusive responsibility of the contractor, installer and/or end customer to: (a) determine the suitability of the product for its intended application; and, (b) ensure that the product is installed safely (with secondary retention and/or safety netting where appropriate) and in compliance with all applicable laws and regulations. To the extent permissible under the relevant law, Dialight disclaims all responsibility for personal injury and/or other damage resulting from any dislodgement or other dislocation of this product.

ADVERTENCIA: INSTALACIÓN Y SISTEMA SECUNDARIO DE SUJECCIÓN. Usar este producto sin haberlo instalado e inspeccionado correctamente, lo que incluye usar sistemas secundarios de retención/sujección/redes, podría ocasionar lesiones graves o la muerte. Dialight recomienda que en todas las instalaciones se utilice un sistema secundario de retención o una red de seguridad (apropiados para el lugar de la instalación), según corresponda. Será responsabilidad exclusiva del contratista, el instalador o el cliente final encargarse de lo siguiente: a) determinar si el producto es apto para el uso previsto; y b) asegurarse de que el producto se instale de manera segura (usando un sistema secundario de retención o una red de seguridad, si corresponde) y de conformidad con todas las leyes y disposiciones aplicables. En la máxima medida autorizada por la legislación pertinente, Dialight no será responsable por ninguna lesión personal u otros daños que se produzcan a raíz de cualquier caída o desplazamiento de este producto.

AVISO: INSTALAÇÃO E RETENÇÃO SECUNDÁRIA. O uso deste produto sem a instalação e inspeções adequadas, incluindo retenção/fixação secundárias e/ou redes de segurança, pode provocar ferimentos sérios ou morte. A Dialight recomenda que todas as instalações utilizem retenção secundária e/ou redes de segurança (apropriadas ao ambiente da instalação) sempre que aplicável. É responsabilidade exclusiva da empreiteira, instaladora e/ou do cliente final: (a) determinar a adequabilidade deste produto para a aplicação pretendida; e, (b) assegurar que o produto seja instalado de maneira segura (com retenção secundária e/ou rede de segurança sempre que apropriado) e em conformidade com todas as leis e regulamentações aplicáveis. Dentro dos limites permitidos pela legislação pertinente, a Dialight se exime de toda responsabilidade por ferimentos pessoais e/ou outros danos resultantes do desalojamento ou de outro deslocamento deste produto.

AVERTISSEMENT : INSTALLATION ET FIXATION SECONDAIRE. L'utilisation de ce produit sans une installation et des inspections en bonne et due forme, notamment la sécurisation/ la fixation de sécurité secondaires/ l'installation d'une grille en acier tissée de sécurité, peut entraîner des blessures graves voire la mort. Dialight recommande que toutes les installations soient pourvues d'une fixation secondaire ou d'une grille en acier tissée de sécurité (adaptées à l'environnement de l'installation) dans la mesure du possible. Il va de la responsabilité exclusive de l'entrepreneur, de l'installateur ou du client final de : (a) déterminer si le produit est adapté à son usage prévu et (b) assurer que le produit est installé de manière sûre (avec une fixation secondaire et/ou une grille en acier tissée de sécurité le cas échéant) et en conformité avec la loi et les normes en vigueur. Dans la mesure permise par la loi en vigueur, Dialight n'assumera aucune responsabilité en cas de blessure sur la personne ou autre dommage résultant du déboîtement ou de toute autre dislocation de ce produit.

WARNUNG: INSTALLATION UND ZWEITE ABHÄNGUNG. Die Verwendung dieses Produkts ohne ordnungsgemäße Installation und Inspektionen, einschließlich einer zweiten Abhängung/eines Sicherheitsnetzes, könnte zu schweren Verletzungen oder Tod führen. Dialight empfiehlt bei allen Installationen die Verwendung einer zweiten Abhängung und/oder eines Sicherheitsnetzes (entsprechend der Installationsumgebung). Es ist die ausschließliche Verantwortlichkeit des Vertragsnehmers, Monteurs und/oder Endkunden: (a) die Eignung des Produkts für seinen vorgesehenen Nutzungszweck zu bestimmen und (b) sicherzustellen, dass das Produkt sicher (mit ggf. zweiter Abhängung und/oder einem Sicherheitsnetz) und gemäß allen geltenden Gesetzen und Vorschriften montiert wird. Soweit gemäß dem geltenden Gesetz erlaubt, schließt Dialight jegliche Haftung für Körperverletzung und/oder andere Schäden aufgrund einer Entfernung oder anderen Positionsänderung dieses Produkts aus.

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 electrical codes.

Safety Instruction:

To avoid electric shock:

- Be certain electrical power is OFF before and during installation and maintenance.
- Luminaire must be connected to a wiring system with an equipment-grounding conductor.
- Make sure the supply voltage is the same as the rated luminaire voltage.
- The technical data indicated on the LED luminaires are to be observed.
- Changes of the design and modifications to the LED luminaire are not permitted.
- Observe the national electrical safety rules and regulations during installation.
- No field replaceable parts.

Introduction

This High Bay / Low Bay / Flood light is designed for illumination of industrial location and uses the latest in solid state lighting technology for long life, low maintenance, and high efficiency.

The unique optical design focuses light downward to where it is needed, giving improved efficiency over a conventional HID luminaire.

All models are suitable for use in wet locations per UL-1598 and Outdoor Type (Salt Water) per UL-1598A.

Models with 4th character R, S, T, U, V, W, Y, Z are also suitable for applications where high pressure wash-down is used to clean and sanitize equipment.

To maintain seal integrity, a suitably rated cord grip must be used in accordance with manufacturer recommendations.

General Mounting Information

For maximum long term reliability and light output, the light must be installed in free air. The luminaire design incorporates an over-temperature control circuit that reduces input power should internal temperatures reach a maximum level. As a result, light output may be temporarily reduced at higher ambient temperatures.

Luminaires fitted with a mounting hook must be hung from an appropriately sized mounting point. Rear alignment mark should be observed when installing model type ****(7/E)*****.

Recommended mounting height:

High Bay: 25-40ft [6-12m]

Low Bay: 12-25ft [3.5-6m]

Pendent Mounting Information

The High/Low Bay fixture is threaded for ¾"NPT in order to be assembled to conduit.

Calculate and measure required conduit length. Feed the power cable through the conduit and into the junction box. Attach the fixture to the conduit using conductive pipe sealant. Insert and tighten the ¼-20 anti-rotation screw to 40-45 in-lb in order to secure the fixture to the conduit.

Technical Data

Nominal Supply Voltage

*****2)*****	100-277 VAC, 50/60 Hz
	120-250 VDC
*****5)*****	347-480 VAC, 50/60 Hz
*****A/E)*****	347-480 VAC, 50/60 Hz
*****Q)*****	347 VAC, 60 Hz
*****P)*****	480 VAC, 60 Hz

Power consumption

(H/F)****(2.5)E*****	185 W
(H/F)****(2.5)C*****	130 W
(H/F)****(2.5)B*****	100 W
(H/F)****(2.5)A*****	80 W
FD****2M*****	372 W
FD****2H*****	258 W
L****(2.5)C*****	150 W
L****(2.5)B*****	112 W
L****(2.5)9*****	78 W
L****26*****	50 W
L****24*****	38 W
H****A/E)E*****	206 W
H****A/E)C*****	149 W
H****A/E)B*****	122 W
H****A/E)A*****	101 W
FD****AM*****	412 W
FD****AH*****	298 W
L****A/E)C*****	174 W
L****A/E)B*****	134 W
L****A/E)9*****	101 W
L****A/E)6*****	76 W
L****A/E)4*****	62 W
****P/Q)E*****	206 W
****PC*****	129 W
****QC*****	136 W
****PB*****	116 W
****QB*****	92 W
****P/Q)A*****	92 W

Power factor >0.9

ATHD

*****PA*****	<30%
All other models	<20% @ 277 VAC

Dimensions

Diameter	16 [40.6]
Height	5-14.5 [12.7-36.8]

Weight

FD****2(H/M)*****	56 lbs [25.4 kg]
FD****A(H/M)*****	73 lbs [33.1 kg]
All other models	17 - 36 lbs [7.7 - 16.3 kg]

Swivel Bracket/Stirrup Bracket

The 'Stirrup Bracket' is fixed into place using 2 bolts and the threaded holes on the side of the luminaire. When secured into the desired position the 2 bolts should be tightened to 8.0 – 10.0Nm [6 – 8ft-lb].

Locking Bracket

- The locking bracket is fixed into place using a bracket subassembly, 2 bolts for positioning, and 2 bolts for pivot and attachment.

- Ensure bracket subassembly bolts and nuts (4x) are tight before adjusting main bracket position. **Do not loosen bracket subassembly bolts.**

- Remove M6 bolts (2x) and loosen M8 bolts (2x). Move main bracket to desired position and lock into place by reinstalling M6 screws (2x). Tighten M8 bolts to 14.0-16.0 Nm [11-12 ft-lb] and M6 bolts to 8.0-10.0 Nm [6-7 ft-lb].

Locking Bracket (Dual Flood)

Loosen center pivot M10 hex bolt (See Figure 1) (**do not remove**) on both sides of light fixture.

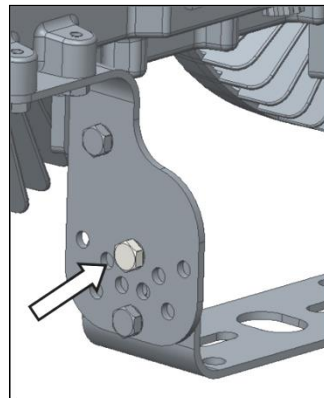


Figure 1 - Pivot Bolt

Remove the angle locking M10 hex bolt on both sides (see Figure 2).

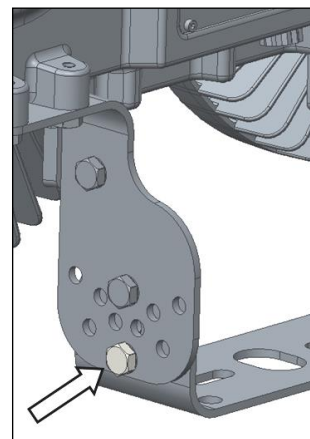


Figure 2 - Angle Locking Bolt

Aim light fixture to desired angle (see Figure 3).

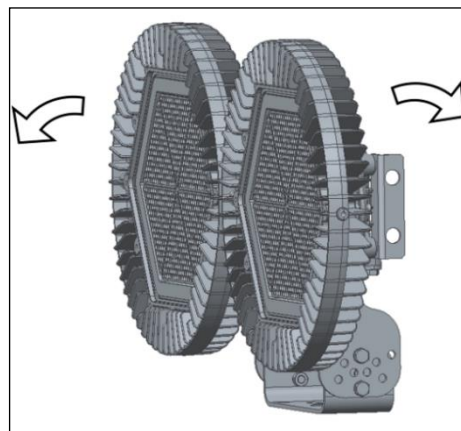


Figure 3 - Position Fixture

Reinstall angle locking bolts on both sides (see Figure 2). Torque to 25 ft-lb [33.9Nm]. Tighten pivot bolts on both sides (see Figure 1). Torque to 25 ft-lb [33.9Nm].

Electrical Installation – Corded and Wire Box Models

If luminaire is fitted with a factory-installed wiring compartment, the WAGO 862 Series* terminal block is suitable for 20-12 AWG multi-stranded and single core wires with a 0.393" strip length. Push down at the 'cross point', insert correct wire and release. Ensure that the wire has been securely retained.

Terminal block positions are labeled to assist in making the correct wire connections.

For single-phase 100-277VAC units, connect the fitted power cable conductors as follows:

- Ground to Green wire or ⊕ position
- Live to Black wire or L1 position
- Neutral to White wire or N position

When using 208V (two 120V phases) connect the black wire to one phase and the white wire to the other phase. Since the light fixture does not have an internal fuse on the white wire (as it is normally the neutral), a fuse may be connected in series with the white wire if required.

For 120-250VDC, connect the fitted power cable conductors as follows:

- Ground to Green wire or ⊕ position
- Positive (+) to Black wire or L1 position
- Negative (-) to White wire or N position

For single phase 347VAC units, connect the fitted power cable conductors as follows:

- Ground to Green wire or ⊕ position
- Live to Black wire or L1 position
- Neutral to White (or Red) wire or L2/N position

For two-phase 480VAC units, connecting the fitted power cable conductors as follows:

- Ground to Green wire or ⊕ position
- Line 1 to Black wire or L1 position
- Line 2 to Red (or White) wire or L2/N position

For factory-installed wiring compartments:

Torque square junction box cover screws to 20 in-lb.
Torque hex junction box cover screws to 70 in-lb.

Electrical Installation – "A" Voltage Box Models Only

- Remove Fuse Block Covers
- Ground to Green (or Green/Yellow) Wire

For 347V wiring:

- Live to fuse block position in line with Black wire
- Remove Red wire lead from fuse block and connect Neutral directly to this Red wire lead using an appropriate wire connector such as a lever nut.

For 480V wiring:

- Line 1 to fuse block position in line with Black wire
- Line 2 to fuse block position in line with Red wire

- Re-install Fuse Block Covers
- Dimming (0-10V) can be connected to the violet and grey wires using the provided connectors (WAGO 222 series)*.
- Torque all 3 wiring box lock nuts to 20 ft-lb [27 N-m].

* All product names, logos, and brands are property of their respective owners. All company, product and service names used in this document are for identification purposes only. Use of these names, logos, and brands does not imply endorsement.

0-10VDC Dimming

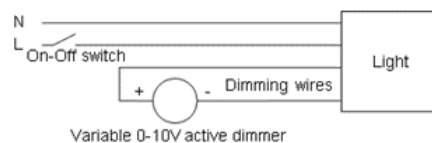
Dimming is controlled by means of a 0-10 VDC signal (to be provided by the installer) to control the level of dimming. At 10 volts, the output of the unit is 100%; at 0 volts, the output will be approx. 5%. The DC dimming voltage should not exceed 15 VDC. Increasing the voltage from 10VDC to 15VDC will not result in additional light output.

Important Notes

- The low voltage Dimming wires are connected to the grounded output section of luminaire driver.
- Never connect to Hot or Neutral supply wires.
- Violet wire connects to DIM+
- Grey wire connects to DIM -
- If not being used: appropriate measures should be taken to prevent conductors from making accidental contact with each other or metal parts.

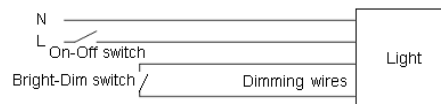
1) Variable Voltage Control

- An analog 0-10V active dimmer may be connected to the two wires to control the light output of the fixture. Multiple lights may be connected to the same dimmer, as long as the maximum current rating of the dimmer is not exceeded (the dimmer must be capable of sinking 0.5mA per light).



2) Step Dimming

Simply shorting the two wires together will cause the light to dim to its lowest level (approximately 5% of its full light output, with a corresponding decrease in input power).



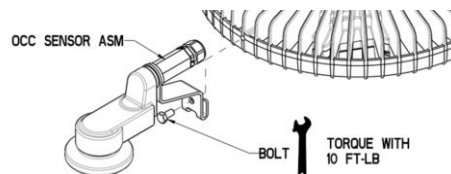
DALI Controls

When luminaire is DALI-equipped, connect DALI wires to the "DALI" positions of the terminal block.

Interfacing to a PIR or Occupancy Sensor

The Dialight luminaire is ideally suited for control by an occupancy sensor in order to maximize energy savings based on its instant-on behavior and low power consumption. Instructions for connecting the High Bay fixture to an occupancy sensor are listed below.

If luminaire is factory-fitted with an occupancy sensor, install occupancy sensor as shown below. See sensor manufacturer instructions to set as desired.



Verify operation of system. If the light will not turn on, check the operation of the luminaire and sensor individually and check that the wiring is done correctly. If the light will not turn off or turns off and on quickly, see the sensor's installation instructions for further guidance.

Maintenance

To avoid personal injury, disconnect power to the light and allow the unit to cool down before performing maintenance.

WARNING: No user serviceable parts inside of fixture. Risk of electric shock. Removal of the lens will void the warranty.

Perform visual, mechanical, and electrical inspections on a regular basis. Dialight recommends checks to be made on a yearly basis. Frequency of use and environmental conditions, however should determine the frequency of checks. It is recommended to follow an Electrical Preventive Maintenance Program as described in NFPA 70B: Recommended Practice for Electrical Equipment.

The lens should be cleaned periodically, as needed, to ensure continued photometric performance.

Clean the lens with a damp, non-abrasive, and lint-free cloth. If not sufficient, use mild soap or a liquid cleaner. Do not use and abrasive, strong alkaline, or acid cleaners as damage may occur.

Inspect the cooling fins on the luminaire to ensure that they are free of any obstructions or contamination (i.e. excessive dust build-up). Clean with a non-abrasive cloth, if needed.

The light source of this luminaire is not replaceable; when the light source reaches its end of life the whole luminaire shall be replaced.

Secondary Retention

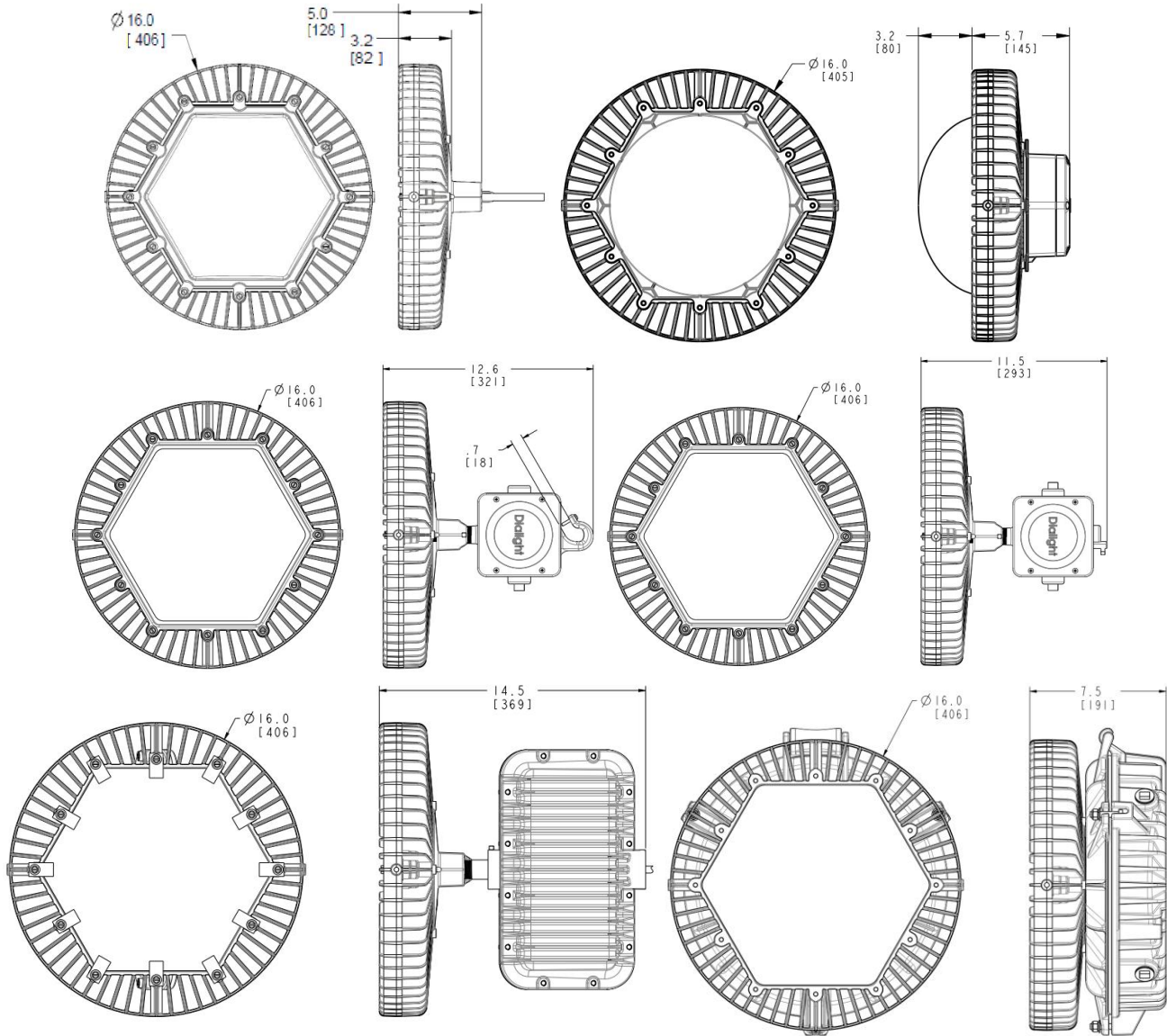
When using a safety cable for secondary retention, ensure minimum slack (no greater than 1 foot) in cable after installation. Connect safety cable to outer band of fixture or accessory retention points. Cable type, size, material, and attachment method to meet customer application and to be appropriate with all local and regional regulations.

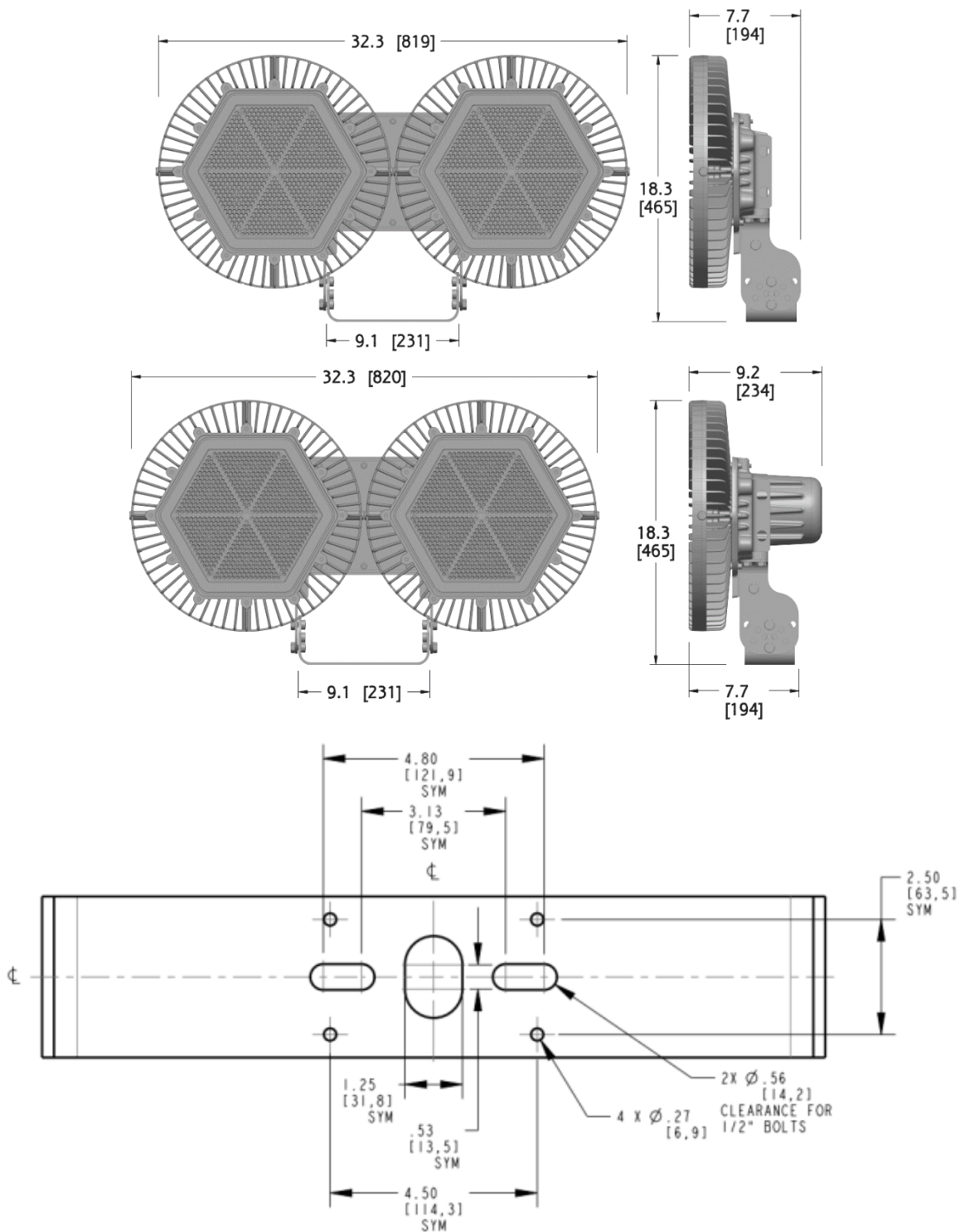
Chemical Compatibility

Chemical compatibility is highly dependent on concentration, temperature, humidity, and other environmental conditions and therefore the customer assumes responsibility for evaluation of gaseous or direct contact chemical compatibility at their site prior to product installation.

Technical Diagrams

Dimensions in inches [mm]





Official Statement

All statements, technical information, and recommendations contained herein are based on information and tests that Dialight believes to be reliable. The accuracy or completeness thereof is not guaranteed. In accordance with Dialight "Terms and Conditions of Sale" and since conditions of use are outside our control, the purchaser should determine the suitability of the product for his or her intended use and assumes all risk and liability whatsoever in connection therewith.