

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



Languages

English



Note: Save these instructions for future use

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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.

Safety Instruction:

The installation, operation, and maintenance must be carried out by an electrician suitably trained in hazardous areas with knowledge of increased safety explosion protection:

CE Compliant

Zone 1, 21, 2, 22 - IEC 60079-14

Zone 2, 21, 22 - IEC 60079-07

- Observe the national safety rules and regulations during installation.
- The technical data indicated on the LED luminaire is to be observed.
- Changes of the design and modifications to the LED luminaire are not permitted.
- Only genuine Dialight replacement must be used when unforeseen repairs are required.
- Repairs must only be carried out by a qualified electrician with hazardous area knowledge.
- No user serviceable parts inside.
- No field replaceable parts.
- Do not open when energized or when an explosive atmosphere may be present.
- Potential electrostatic charging hazard – refer to instructions.
- WARNING: Cable entry may reach 93°C
- To minimize the risk from electrostatic discharge clean with a damp cloth.
- Do not let power cord touch hot surfaces.
- Do not mount near gas or electric heaters.
- Do not use this equipment for other than its intended use.
- WARNING: Polycarbonate lens susceptible to chemical attack. See reactivity list.
- The light source contained in this luminaire shall only be replaced by the manufacturer or his service agent or a similar qualified person.
- Luminaire must only be installed outside of arms reach.
- Do not attempt to repair the flamepaths of this equipment.

Conditions for Certification:

1. The unit is a factory sealed product, do not attempt to open; return to the manufacturer for service or repair.
2. The unit is to be suspended such that no tension is applied to the supply cable.
3. The integral cable is to be terminated in a suitable terminal or junction facility.
4. This equipment includes some external non-metallic parts, including the outer protective coating and lens. Cleaning shall only be carried out with a damp cloth.

Zone 1 Specific Conditions of use:

1. When the equipment is coated with a paint finish the enclosure is non-conducting and may generate an ignition capable level of electrostatic charge under certain extreme conditions. The user should ensure that the equipment is not installed in a location where it might be subjected to external conditions that might cause a build-up of electrostatic charges on non-conducting surfaces. Additionally, cleaning of the equipment should be done only with a damp cloth.
2. External fasteners used for securing flameproof joints shall have a yield strength which is equal to or exceeding 450 N/mm².
3. The equipment shall be installed such that the supply cable is protected from mechanical damage. The cable shall not be subjected to tension or torque. If the cable is to be terminated within an explosive atmosphere then the free end shall be terminated in a suitably certified termination facility.
4. The equipment has flamepaths which differ from those in EN/IEC 60079-1 and are not intended for repair.

Conformity with Standards

This equipment conforms to the standards specified in the Declaration of Conformity. It has been designed, manufactured and tested in accordance with:

STW / ALE / ADE Series

BS EN 9001

HZ / ALA / ALB Series

BS EN 9001

ATEX Directive 2014/34/EU: Equipment and protective systems intended for use in potentially explosive atmospheres.

EMC Directive 2014/30/EU: For electromagnetic compatibility.

Equipment Application

STW / ALE / ADE Series

This lighting equipment is intended for indoor and outdoor use, and in environments where an accumulation of conductive dust on the luminaire may be expected.

HZA / HZJA / ALA Series - Zone 1, 21, 2, 22

This lighting equipment is intended for use in a potentially explosive atmosphere in Zones 1, 21 and 2, 22 to the requirements of ATEX Directive 2014/34/EU. The product can be used inside or outside to illuminate areas with a potentially explosive atmosphere.

HZB / HZJB / ALB Series - Zone 2, 21, 22

This lighting equipment is intended for use in a potentially explosive atmosphere in Zones 2, 21 and 22 to the requirements of ATEX Directive 2014/34/EU.

Installation

Ensure that the mains voltage supply is disconnected before connecting the luminaire. Install the equipment in accordance with the manufacturer's instructions as well as any other applicable electric codes.

Always transport and store the equipment in its original packaging and keep in a dry location. When unpacking check for any cracks or damage in the housing, glass, and glass frame. If in doubt, do not install.

For supply connections use wire rated for at least 90°C

Models whip are factory supplied with 10 feet (3m) of cable. If longer lengths of cables are required a minimum of 18 awg (1.5mm diameter) is required. It is recommended that to ensure moisture does not flow through the cable a loop in the cord should be implemented where possible during installation. If this is not practical for the install then necessary precautions should be taken to prevent moisture entering the conduit thus entering the fixture.

Recommended mounting height: 8 feet to 24 feet (2.4 m to 7.3 m)

Junction Box Versions

Pay attention when re-fitting the lid to the enclosure; make sure the seals are clean and undamaged. Do not allow any cables to become trapped between

the lid and the enclosure and tighten all four screws evenly to 1.7Nm.

Temperature Control

The Area Light series luminaire fixture 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 reduced.

Mounting Luminaire

Secure the luminaire using the four fixing locations, see mounting bracket detail below. Cable can be passed through the central hole of stirrup bracket if required.

For best optical performance Dialight Corporation recommends mounting the 180° optic at a 45° angle with respect to the vertical mounting pole or wall. Note: Arrow point towards the direction of light pattern. Refer to www.dialight.com for the most up to date information on available mounting brackets, hardware and accessories.

Do not remove or tamper with cable gland. The gland has been supplied and installed to the luminaire accordance with the manufacturer's instructions. Tampering with this cable gland may compromise IPX6/X7 rating.

Improper installation and operation of this luminaire may invalidate the warranty. For maximum long term reliability and light output, the luminaire must be installed in free air.

Assemble the mounting bracket to the Luminaire with 2 M8 x 1.25 by 16mm bolts. Torque specification: 10.0nm maximum.

Use the further 2 M8 x 1.25 by 16mm bolts for locking the light fixture into position.

Secure the luminaire using the four fixing locations on the stirrup bracket using fixing bolts not supplied.

NOTE: When installing on or over an existing junction box, a cable gland must be used when routing cable through centre wiring hole on stirrup bracket.

Electrical Connection

The Wago terminal block is suitable for multi-stranded and single core cables up to a maximum of 4mm², with a strip length 10mm. If using the Weidmuller terminal block multi-stranded and single core cables up to a maximum of 6mm² may be used. Strip length 9mm and screws should be tightened to 1.2NM-2.0NM.

Wiring colours are dependent on the model type. Refer to the sections below for proper wiring.

Chemical Compatibility Guide

The chemical compatibility data referenced in this manual was supplied by the raw material manufacturers and is intended as a general guide. The data represents the basic material properties and does not necessarily represent the performance of the final product due to manufacturing process and design variations for each final product. Chemical compatibility is highly dependent on concentration, temperature,

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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, damp 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.

Disposal Recycling

When the apparatus is disposed of, the respective national regulations on waste disposal should be observed. WEEE (Waste electrical & electronic equipment) registration number WEE/DC2678RY.

Repairs / Overhaul / Modification

The relevant national regulations which apply to the maintenance / servicing of electrical apparatus in explosive atmospheres shall be observed.

Should the luminaire enclosure be damaged, only a replacement will be permitted. In case of doubt, the equipment should be returned to point of purchase for inspection/repair/replacement.

WARNING:

Modifications to the device or changes to its design are not permitted. The equipment must be operated according to the intended purpose in a perfect and undamaged condition

Technical Data

STW-EU /ALE or ADE Series

Certifications

CE Compliant
IEC 55015
IEC 61597
IEC 62031
IEC 62471
NEMA 4x
IP66/IP67
EN60529

Nominal Supply Voltage

100-277V AC, 50-60Hz or 120-250VDC

Lumens
Input Power: [W]

9000	66
7000 (Wide Optic)	64 (66 ADE)
7000	52 (54 ADE)
6000	40
4000	30
3500	27
3000	24

Power Factor

>0.90

ATHD

<20%

Temperature

-40°C to +65°C
[-40°F to +149°F]
T4 = -40°C to +65°C

Housing Material

Powder Coated Aluminum

Finish

Epoxy Powder Coat
Gray, RAL 7040
ACP Black, RAL 9017
Orange, RAL 2001
White, RAL 9010
Yellow, RAL 1018
Bronze, RAL 7022

Lens

Polycarbonate
Glass

Weight
[kg]

Without J/BOX PC	4.5
Without J/BOX GLS	7.44
With J/BOX GLS	7.67

Dimensions

See Technical Diagrams

Technical Data

HZA /ALA Series (Zone 1, 21, 2, 22)
HZJA /ALA Series (Zone 1, 21, 2, 22)

Category of application:

Ex II 2GD Ex db * op is IIC T4 Gb
(Ta = -40°C to +65°C)
Ex II 2GD Ex db * op is IIC T5 Gb
(Ta = -40°C to +42°C)
Ex tb op is IIC T135°C Db IP 66/67
(Ta = -40°C to +65°C)
Ex tb op is IIC T100°C Db IP 66/67
(Ta = -40°C to +42°C)

* When these lights are fitted with an increased safety enclosure and terminals, this marking becomes 'eb'.

IECEx:

IECEx SIR 17.0037X

ATEX:

SIRA 17ATEX1174X

Nominal Supply Voltage

100-277V AC, 50-60Hz or 120-250VDC

Lumens
Input Power: [W]

9000	66
7000 (Wide Optic)	64
7000	52
6000	40
4000	30
3000	24

Power Factor

>0.90

ATHD

<20%

Temperature

-40°C to +65°C
[-40°F to +149°F]
T4 = -40°C to +65°C
T5 = -40°C to +42°C

Housing Material

Powder Coated Aluminum

Finish

Epoxy Powder Coat
Gray, RAL 7040
ACP Black, RAL 9017
Orange, RAL 2001
White, RAL 9010
Yellow, RAL 1018
Bronze, RAL 7022

Lens

Glass

Weight:
[kg]

Without J/BOX	9.53	
With J/BOX		9.03

Dimensions

See Technical Diagrams

Technical Data

HZB /ALB Series (Zone 2, 21, 22)
HZJB /ALB Series (Zone 2, 21, 22)

Category of application:
Zone 21

Ex II 2D
Ex tb op is IIC T135°C Db IP 66

Zone 22

Ex II 3GD
Ex mc ec op is IIC T4 Gc
Ex tc op is IIC T135°C Dc IP 66

Zone 21
IECEx:

IECEx SIR 17.0063X

ATEX:

SIRA 17ATEX9392X

Zone 22
IECEx:

IECEx SIR 17.0063X

ATEX:

SIRA 17ATEX3260X

Nominal Supply Voltage

100-277V AC, 50-60Hz or 120-250VDC

Lumens
Input Power: [W]

9000	66
7000 (Wide Optic)	64
7000	52
6000	40
4000	30
3000	24

Power Factor

>0.90

ATHD

<20%

Temperature

-40°C to +65°C
[-40°F to +149°F]
T4 = -40°C to +65°C

Housing Material

Powder Coated Aluminum

Finish

Epoxy Powder Coat
Gray, RAL 7040
ACP Black, RAL 9017
Orange, RAL 2001
White, RAL 9010
Yellow, RAL 1018
Bronze, RAL 7022

Lens

Glass

Weight:
[kg]

Without J/BOX	7.44	
With J/BOX		7.67

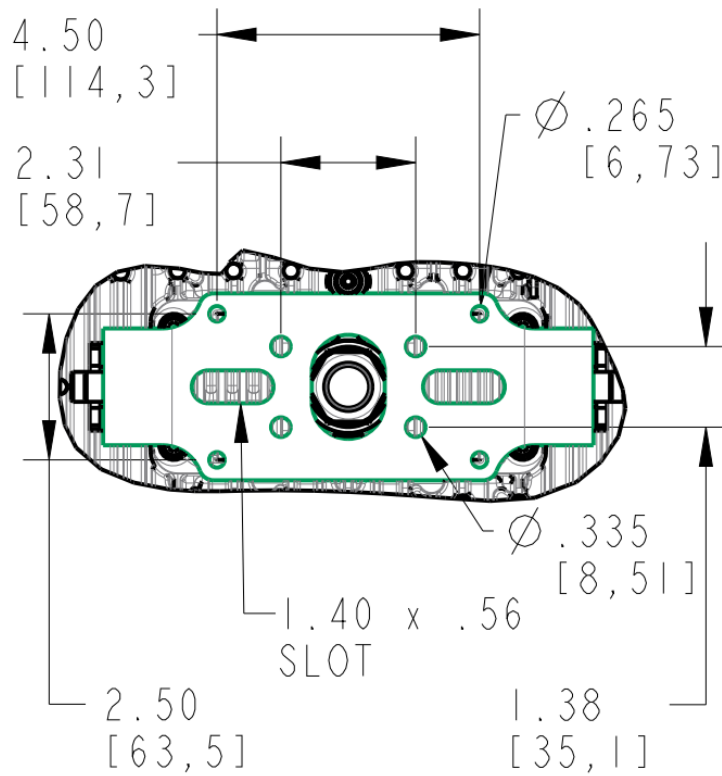
Dimensions

See Technical Diagrams

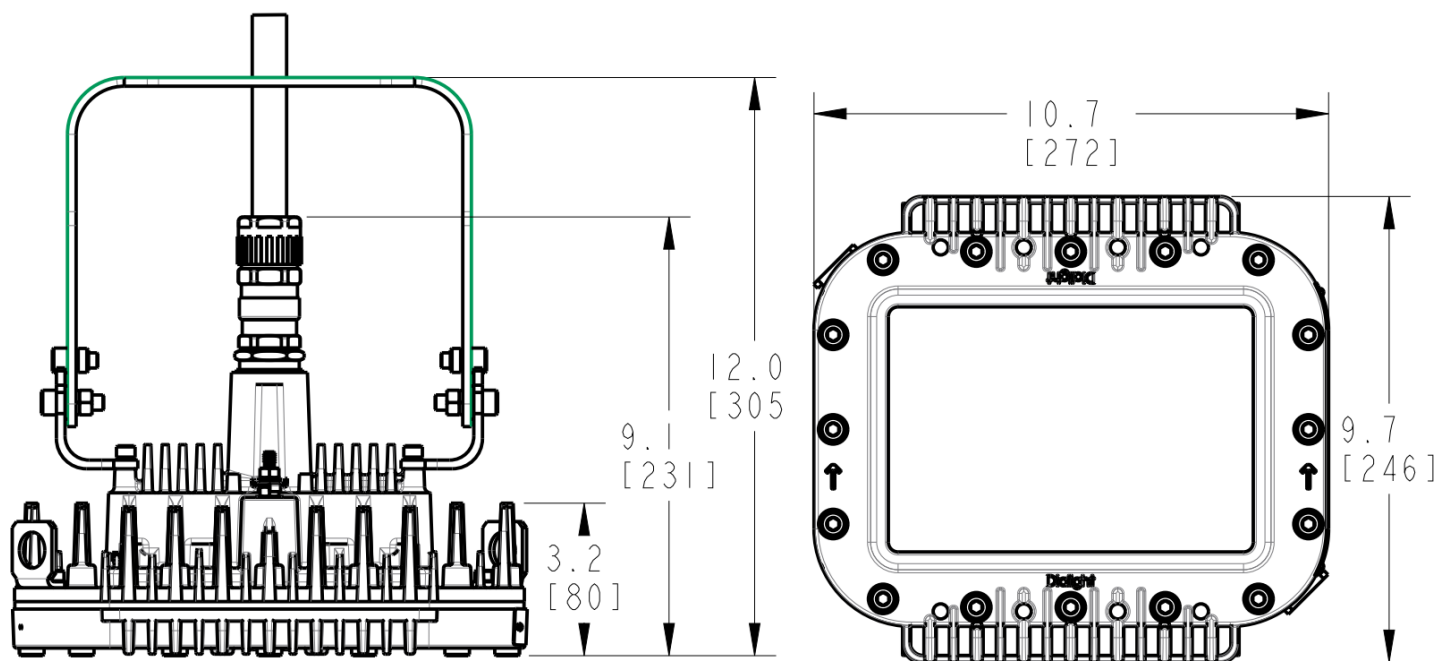
Zone 2 Specific Conditions of use:

1. The equipment may be used in zone 2 with flammable gases and vapours with apparatus groups IIA, IIB & IIC and with temperature classes T1, T2, T3 and T4.
2. The equipment may be used in zones 21 & 22 with flammable dusts, fibres and flyings in groups IIIA, IIB and IIC, with a layer auto-ignition temperature of not less than 75 K above the maximum surface temperature marked in the dust coding.
3. Installation shall be carried out in accordance with the applicable code of practice by suitably-trained personnel
4. There are no special checking or maintenance conditions other than a periodic check.
5. With regard to explosion safety, it is not necessary to check for correct operation.
6. The equipment contains no user-replaceable parts and is not intended to be repaired by the user. Repair of the equipment is to be carried out by the manufacturer, or their approved agents, in accordance with the applicable code of practice.
7. Repair of this equipment shall be carried out in accordance with the applicable code of practice
8. If the equipment is likely to come into contact with aggressive substances, e.g. acidic liquids or gases that may attack metals or solvents that may affect polymeric materials, then it is the responsibility of the user to take suitable precautions that prevent it from being adversely affected thus ensuring that the type of protection is not compromised.
9. The certificate number has an 'X' suffix which indicates that special conditions of installation and use apply. Those installing or inspecting this equipment must have access to the contents of the certificate or these instructions. The conditions listed in the certificate are reproduced below:
 - a. When the equipment is coated with a paint finish, the enclosure is non-conducting. Under certain extreme circumstances, the non-metallic parts incorporated in the enclosure of this equipment may generate an ignition-capable level of electrostatic charge. Therefore the equipment shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge on such surfaces. In addition, the equipment shall only be cleaned with a damp cloth.
 - b. All cable entry holes shall be fitted with either an IECEx certified cable gland or an IECEx certified stopping plug that is suitable for the application. The type of cable, glands and stopping plugs shall have temperature ratings of at least 76°C.
 - c. When supplied with a component certified enclosure, the end user shall install a suitably certified gland with a seal or gasket, to maintain the IP rating of the equipment. The seal or gasket shall be suitable for a minimum service temperature range of -40°C to +76°C.
 - d. The terminals shall only be fitted with wires that have cross sectional area falling within the following limitations:
WAGO 4-conductor series terminals: single-core, finely stranded and standard: min. 0.08 mm² to 6mm²
Weidmuller Type MK6 range of terminals: solid conductor: 0.5mm² to 6mm², flexible: 0.5mm² to 4mm²
 - e. All fixing bolts will be torqued to 4.6Nm.
 - f. The equipment shall be installed such that the supply cable is protected from mechanical damage. The cable shall not be subjected to tension or torque. If the cable is to be terminated within an explosive atmosphere then the free end shall be terminated in a suitably certified termination facility.

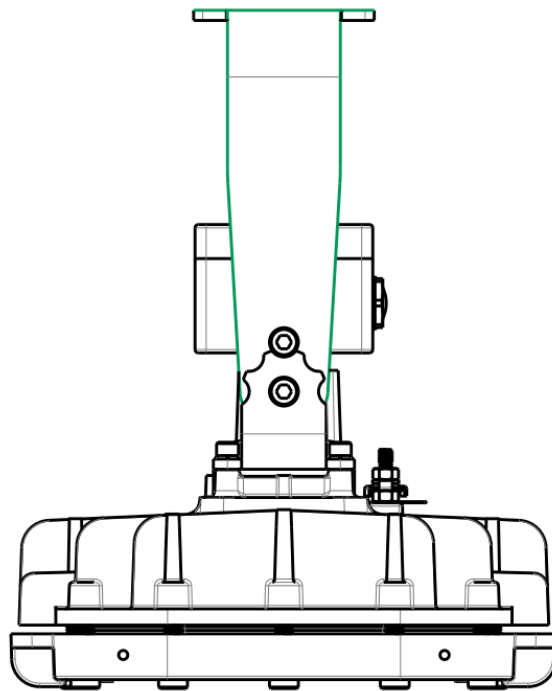
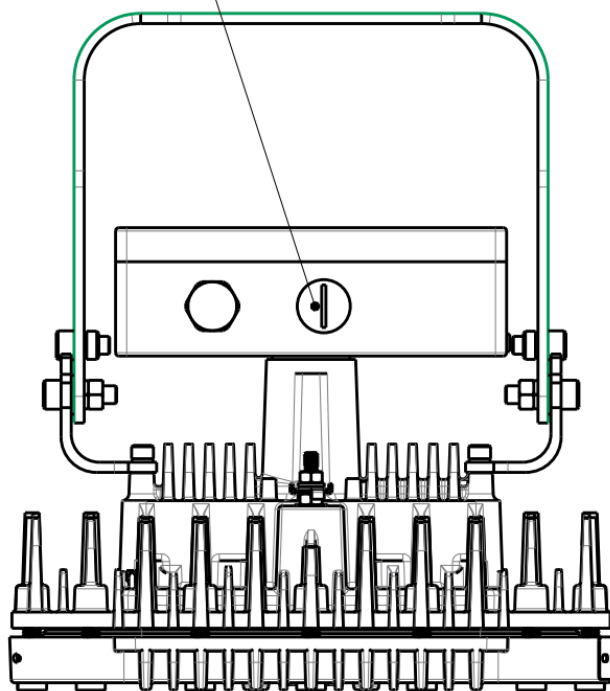
Technical Diagrams



Mounting Detail



2x M20x1.5 ENTRIES



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.