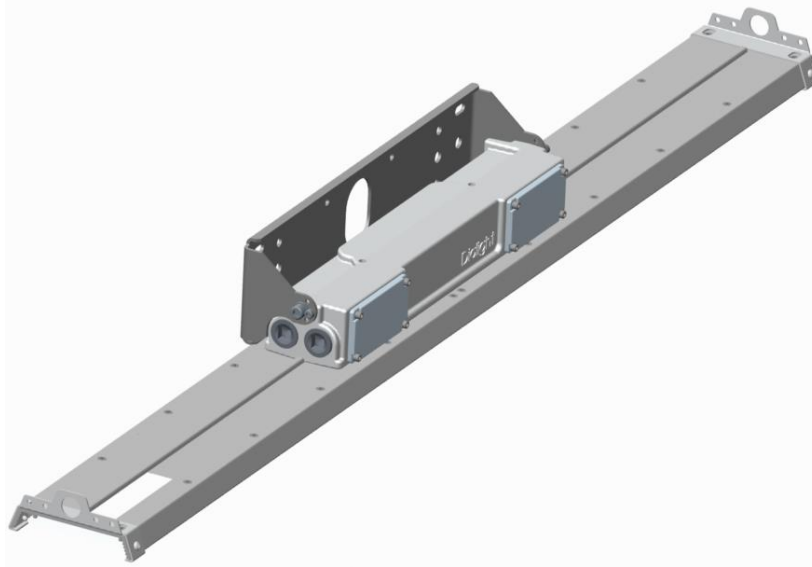


Vigilant® UL & CSA Low Profile Linear

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



Safety Instruction:

- To avoid the risk of fire, explosion, or electric shock, this product should be installed, inspected, and maintained by a qualified electrician, in accordance with all applicable electrical codes.
- 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 within the luminaires' voltage rating.
- Do not operate in ambient temperatures above those indicated on the luminaire nameplate.
- Do not operate if the lens is cracked or damaged. All fasteners should be properly seated.
- Do not let power cord touch hot surfaces.
- Do not mount near gas or electric heaters.
- The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
- Do not use this equipment for other than its intended use.
- The technical data indicated on the Luminaire are to be observed.
- Changes and/or modifications to the LED luminaire are not permitted.
- Only genuine Dialight replacement luminaire must be used when unforeseen repairs are required.
- Must install using NEMA 4x rated components to maintain rating
- Do not remove or tamper with factory-installed cable gland if applicable. The gland has been supplied and installed to the luminaire accordance with the manufacturer's instructions.
- No user serviceable parts inside.
- No field replaceable parts.
- Do not open when energized.
- WARNING: Polycarbonate lens susceptible to chemical attack. See reactivity list
- EXPLOSION HAZARD – Substitution of components may impair suitability for class I, division 2.
- EXPLOSION HAZARD - Do not disconnect equipment unless power has been switched off or the area is known to be non-hazardous

AVERTISSEMENT

- RISQUE D'EXPLOSION - substitution de composants peut nuire à la conformité Classe I, Division 2
- RISQUE D'EXPLOSION – Avant de déconnecter l'équipement, couper le courant ou s'assurer que l'emplacement est désigné non dangereux

Equipment Application

Fixtures are **unsuitable for wet locations** in the following locations or unclassified locations: [See product label for your application.](#)

Non-Hazardous Models (See product label)

Ambient Temperature Range: -40°C to +65°C (T4A)
Ambient Temperature Range: -40°C to +65°C (T5)

Class I Models (See product label)

Class I, Division 2, Groups A, B, C, D
Ambient Temperature Range: -40C to +65C (T4A)
Ambient Temperature Range: -40C to +45C (T5)

Class II Models (See product label)

Class II, Division 1, Groups E, F and G
Class II, Division 2, Groups F and G
Class III
Ambient Temperature Range: -40C to +65C (T4A)
Ambient Temperature Range: -40C to +45C (T5)

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 electrical 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. If in doubt, do not install.

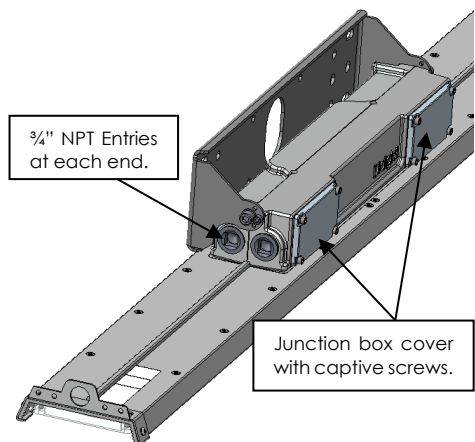
For supply connections use wire rated for at least 90°C

Necessary precautions should be taken to prevent moisture entering the conduit thus entering the fixture.

For maximum long-term reliability and light output, the light must be installed in free air.

The Linear fixture is threaded for two 3/4" NPT entries at each end, of the Power Supply Housing's Junction Box Sections, in order to be assembled to conduit or with cable per below...

- Remove the 3/4" NPT pipe plugs and attach conduit or cord grips where shown below.



- Use conductive pipe sealant for all metal fittings and conduit. Use Teflon tape where necessary to prevent thread galling.

Warning: If there is moisture present, or chance of it, in the conduit system then necessary precautions should be taken by the installer to prevent the moisture from entering thru the cable or conduit and entering the fixture. Failure to comply with the above could void factory warranties.

- Fixture is factory wired with LINE, NEUTRAL and GROUND leads at each end. Remove the Power Supply Junction Box Cover, which has captive screws, to attach incoming power to the white (Neutral) wire, black (Line) and green (Ground) wire leads with Lever Connectors.
- Ensure that the O-ring is properly seated in the groove and reattach the cover. Tighten all screws to 15 in/lbs (1.75Nm)
- Restore power and verify operation.

Temperature Control

The Vigilant Linear series 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 reduced.

Mounting Luminaire

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 any factory installed cable glands. 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.

Refer to diagrams section for bracket mounting patterns, bolt sizes and tightening torques.

Ensure proper secondary retention methods are used where and when required.

Electrical Connection

Wago lever connectors are supplied for units that have factory installed cable whips.

Other units have the insulation separated from their ends and heatshrink applied for easy insulation removal. Make connections using appropriate wire interconnection methods such as lever connectors or wire nuts. Ensure all connections are compliant with the connector manufacturer's specifications as well as all applicable codes.



For single phase (100 -277 VAC) or (120-250VDC):

WIRE(AC)	WIRE(DC)	COLOURED CABLE
AC LIVE	DC POSITIVE	BLACK
AC NEUTRAL	DC RETURN	WHITE
GROUND	GROUND	GREEN
DIMMING +	DIMMING +	PURPLE (VIOLET)
DIMMING -	DIMMING -	GRAY

Note: Only the live conductor is fused.

Always restore power and verify operation.

When connecting the conductors extra care should be taken in order to maintain the hazardous protection. The insulation of the conductors shall reach up to the interconnecting device. The conductor itself shall not be damaged.

The connectible minimum and maximum conductor cross sections shall be observed (see electrical connection data). Remove any foreign bodies from the fixture.

Single Fixture Electrical Connections

Connections need only be made in either side of the wire box. Select the side that allows the cable to be routed in the safest manner.

Thru Wire Electrical Connections

For through wire connections use both wiring areas as necessary.

NOTE: Only single cables to be used on each connection.

Dimming Models

The Dialight Linear Light fixture supports variable dimming through a two wire interface, allowing precise light level setting and energy savings.

Dimming is controlled by means of a 0-10 VDC signal connected to the dimming wires (to be provided by the installer). The dimmer should be a 0-10V current sink type, capable of sinking 2mA per light.

Important Notes

- The low voltage dimming wires are connected to the grounded output section of the driver inside the light. Never connect either one to the Hot or Neutral supply wires.
- The '+' wire (Gray) is at ground potential.
- Never use these wires for any purpose other than dimming.

Application Examples

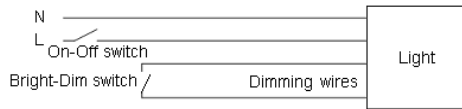
1) Variable Voltage Control

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.



2) Step dimming

Simply shorting the two wires together will cause the light to dim to a low level. When this is done, the light will dim down to approximately 5% of its full light output, with a corresponding decrease in input power.



Cable Entries

When assembling the cable entries for the mains connection, always observe the manufacturer's specifications for the glands used. Unused cable entries must be closed and sealed by a suitably certified blanking element; **you must** use Teflon tape or similar method to ensure pipe thread is sealed.

When supplied with a component certified enclosure, a suitably certified gland with a seal or gasket must be installed in order to maintain the IP rating of the equipment.

Taking into Operation

Prior to operating, check the luminaire for its correct installation in compliance with these operating instructions and other applicable regulations.

NOTE: Only certified equipment may be put into operation.

WARNING:

Do not over tighten cable glands as the protection rating may be compromised.

The cable entries should be securely tightened to ensure that the minimum protection rating is achieved. The cable entry should be rated to minimum of IPX6/X7 to maintain the protection level of the fixture. Do not over tighten as the protection rating may be compromised.

Suitably certified cable entries must be used which include a sealing washer or o-ring to maintain the IPX6/X7 rating of the enclosure.

Maintenance / Inspection

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

WARNING:

This LED Luminaire should not require any electrical maintenance. Never open the luminaire (other than the junction box lid if supplied); there are no user-serviceable parts inside.

Within the scope of a maintenance or inspection routine, the following should be included: Cable entries must be free of corrosion. Perform visual mechanical and electrical inspections on a regular basis. We recommend routine checks to be made

on a yearly basis. Frequency of use and environment should determine this. 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.

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

Do not operate if the lens is cracked or damaged. All fasteners should be properly seated.

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.



Technical Data

UL Low Profile Vigilant® Linear

Certifications

Suitable for wet locations
NEMA 4X
IP66/67

Non-Hazardous Models (See product label)

UL 1598/1598A
CAN/CSA C22.2 No. 137

Class I & II Models (see product label)

CLASS I DIV 2 GROUPS A, B, C, D
CLASS I ZONE 2 GROUP IIC
CLASS II DIV 1 GROUPS E, F, G
ZONE 21 & 22
CLASS II DIV 2 GROUPS F, G
ZONE 22
CLASS III DIV 1 AND 2
UL 844
UL 1598/1598A
CAN/CSA C22.2 No. 250
CAN/CSA C22.2 No. 137

Nominal Supply Voltage

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

Lumens	Input Power: [W]
9000	70
7000	52
5000	37
3000	24

Power Factor	>0.90
ATHD	<20%

Temperature

Non-Hazardous Models (See product label)

-40°F to +149°F [-40°C to +65°C]
T5 @ 149°F [65°C]

Class I & II Models (see product label)

-40°F to +149°F [-40°C to +65°C]
T4A @ 149°F [65°C]
-40°F to +113°F [-40°C to +45°C]
T5 @ 113°F [45°C]

Housing Material

Chemical resistant epoxy primer with sealed polyester topcoat

Finish

Epoxy Powder Coat
Gray, RAL 7040
ACP Black, RAL 9017
Yellow, RAL 1018

Lens

Polycarbonate
Polyphenylsulfone (PPSU)

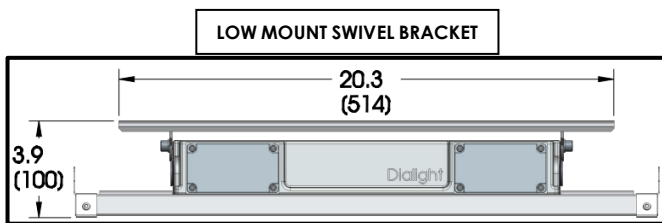
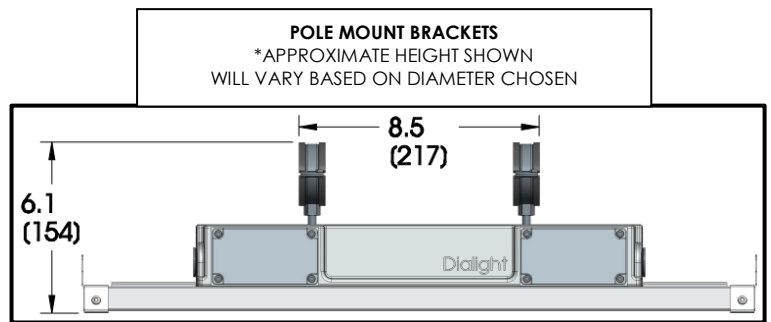
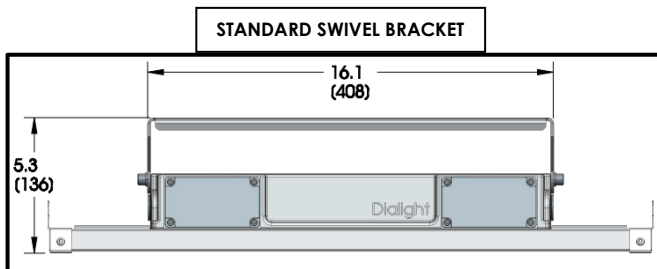
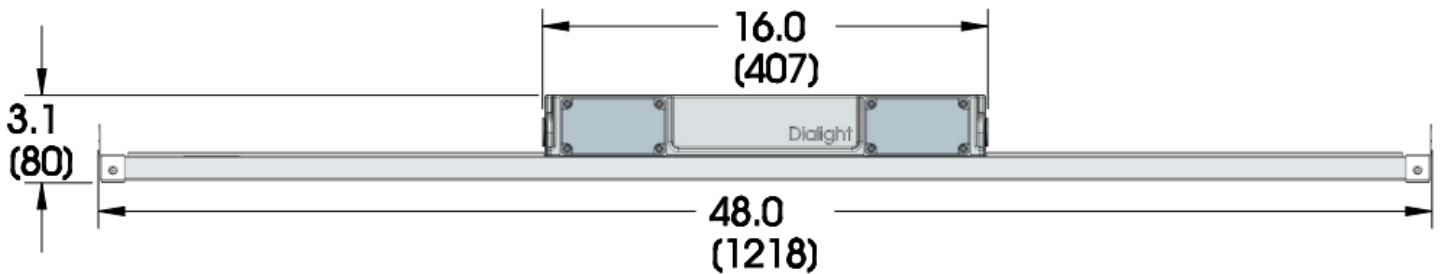
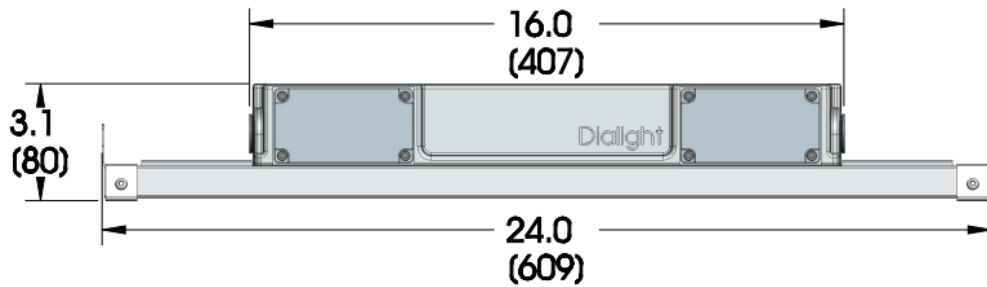
Weight	lbs. [kg]
2' w/o Brackets	7.7 [3.5]
4' w/o Brackets	11.0 [5.0]
Standard Swivel Bracket	1.3 [0.6]
Low Profile Swivel Bracket	2.0 [0.9]
End Cap Brackets	0.4 [0.2]
Pole Mount Brackets	0.4 [0.2]

Dimensions

See Technical Diagrams

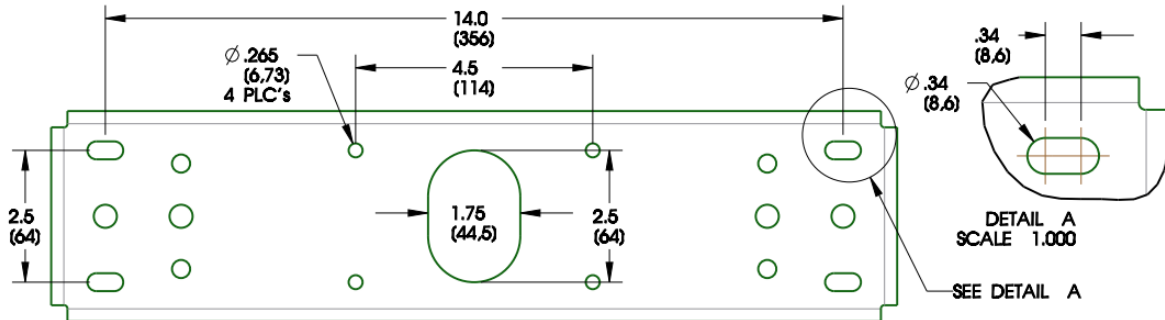


Technical Diagrams

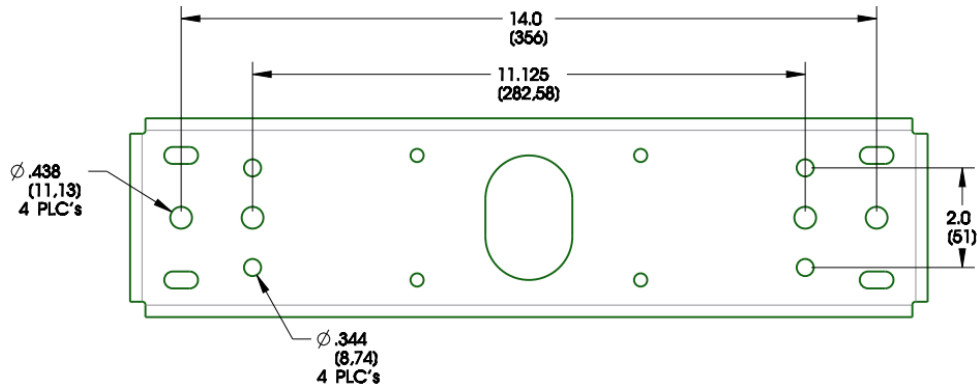


Mounting Bracket Hole Patterns

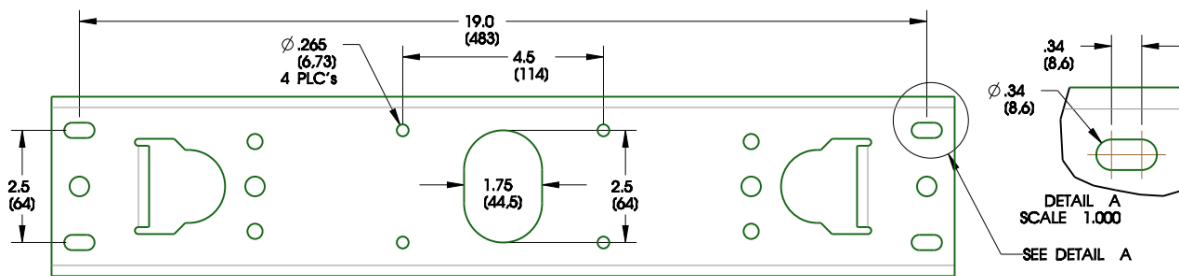
LPXW4 - Standard Swivel Mounting Bracket – 2.5" [64mm] Spacing Pattern



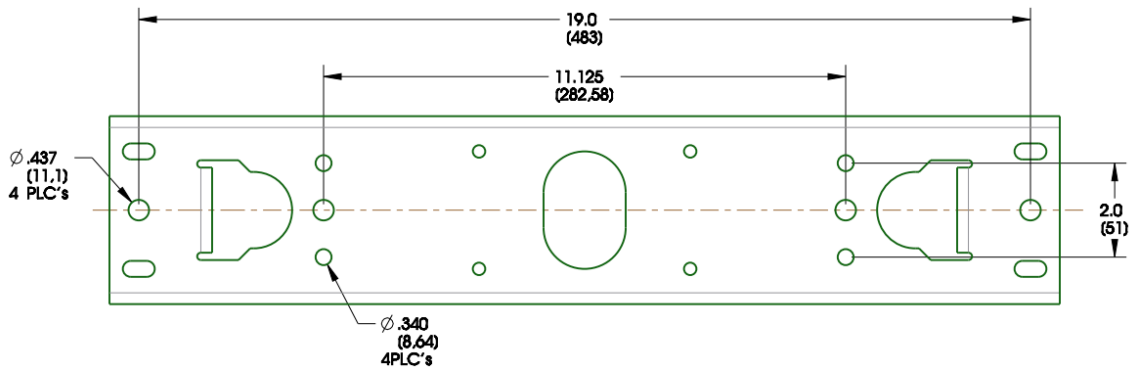
LPXW4 - Standard Swivel Bracket – 2.0" and Centered Symmetrical Pattern



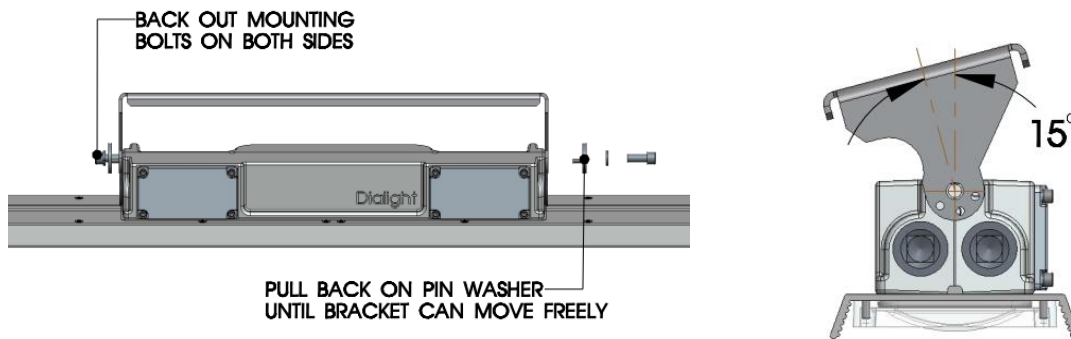
LPXW4LP - Low Mounting Bracket – 2.5" [64mm] Spacing Pattern



LPXW4LP - Low Mounting Bracket – 2.0" and Centered Symmetrical Pattern

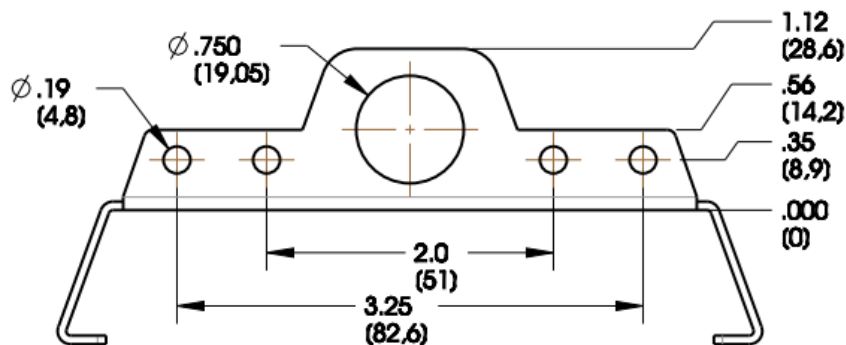


Swivel Bracket Adjustment for LPXW4



Notes – The staggered set screw pattern allows for 15° adjustment of the bracket between 0° and 90° (excluding 75°). Back out the mounting screws until the pin washer can be pulled free of the power supply housing. The bolt will have to be removed to use all positions on the bracket.

LTXENDCAPKIT - Linear End Cap Bracket Hole Pattern



ALL BRACKET FASTENERS ARE STANDARD SIZES

Main pivot bolt is 5/16 – 18 x 3/4" - Recommended Mounting Torque 9 ft-lb

Set screw bolt is 8-32 x 3/8" – Recommended Mounting Torque 1 ft-lb

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.

