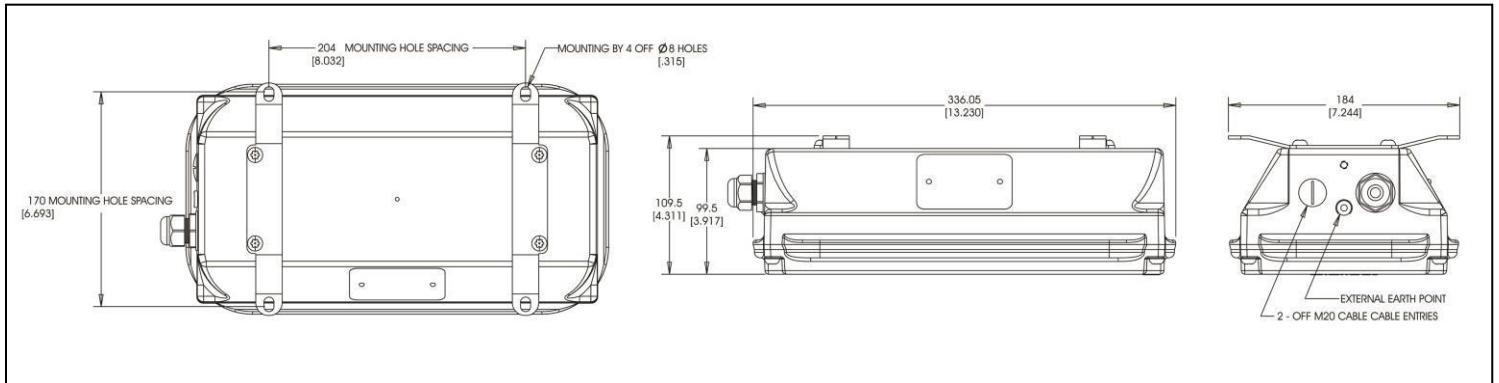


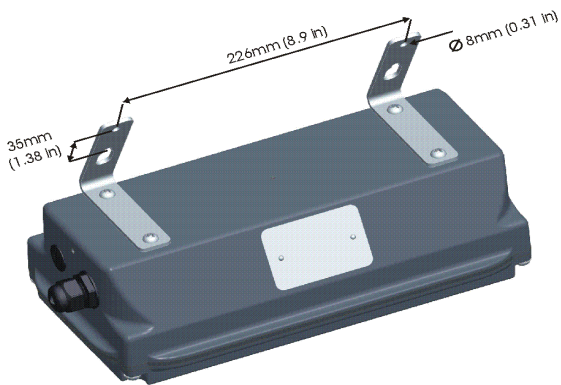
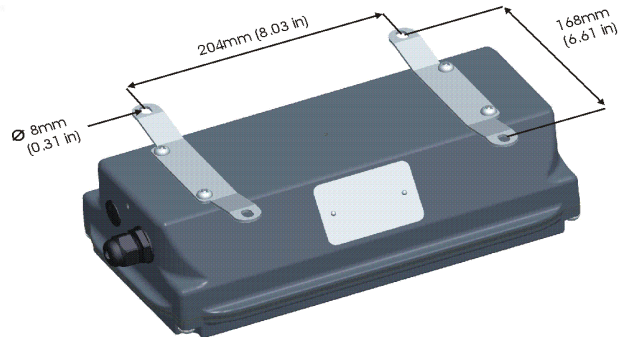
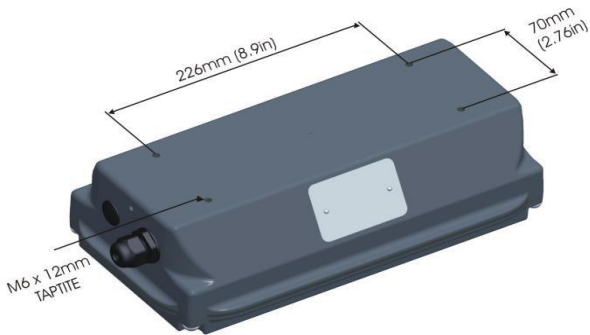
Important information:

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.

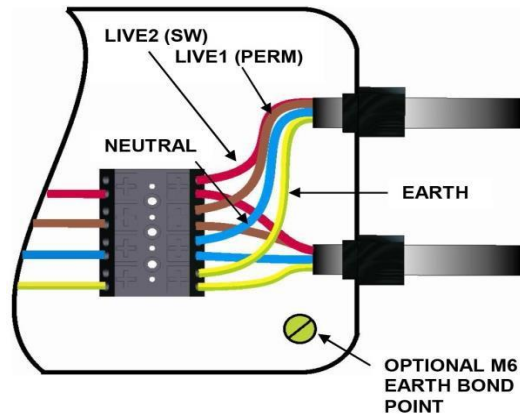
Operating Instructions



DuroSite® Bulkhead Emergency for industrial areas



Tightening Torques	
Front assembly to main body	3.6Nm / 32.0 in lb
Body mounting	8.0Nm/ 71.0 in lb
Certified Blanking Plug	2.0Nm/ 18.0 in lb



L1=LIVE/BROWN
 L2=SWITCHED LIVE/RED
 N=NEUTRAL/BLUE
 E=EARTH/GREEN & YELLOW

EXTERNAL BONDING EARTH ON BODY

Safety Instruction:

- 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
- Only genuine Dialight replacement parts must be used.
- Observe the national electrical safety rules and regulations during installation.
- No user serviceable parts inside.
- No field replaceable parts.

Technical Data

Rated Input Voltage: 230VAC 50/60Hz or 110VAC 50/60Hz

Power Consumption:
 9 LED 13W
 18 LED 24W
 27 LED 39W

Rated Input Current:
 9 LED 140/85mA
 18 LED 250/130mA
 27 LED 180mA @110/230V

Housing Material: LM6 Copper free Alum.

Operating Temperature:
 9/18 LED 0°C to +50°C
 27 LED 0°C to +40°C
 (-20°C option available)

Storage Temp: -20°C to +60°C

Front Glass: Toughened glass
 Frosted or Clear

Cable Entries: M20
 M25
 3/4" NPT
 Refer to part code

Tightening Torques: See table

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 BS EN 9001.

2014/34/EU Equipment and protective systems intended for use in potentially explosive atmospheres. 2014/30/EU Electromagnetic Compatibility.

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 gasket seal, if in doubt do not install.

The improper installation, operation or maintenance of these luminaires may result in the invalidation of the warranty.

Mounting the Luminaire

There are 3 mounting options for this luminaire, depending on which mounting accessories were supplied on purchase.

Option 1. Direct Mounting

For directly mounting the luminaire to a cable tray or similar, no brackets are supplied and the luminaire can be secured directly using the 4 TORX screws supplied. Refer to the table for tightening torques. Note, rear access will be required.

Option 2. Ceiling or Flat Wall Mounting

Assemble the mounting brackets to the luminaire with the 4 TORX screws supplied, refer to table for tightening torques. Maximum bracket screw/bolt size 8mm (not supplied).

Option 3. 30° Angled Bracket

Assemble the 30° angled mounting bracket to the luminaire with the 4 TORX screws provided, refer to table for tightening torques. Maximum bracket screw/bolt size 8mm (not supplied).

Opening the Luminaire

ATTENTION: Always disconnect from the power supply before opening the luminaire. Wait 10 minutes after disconnection before opening.

Unscrew the 4 front TORX bolts to gain access to the wiring tray. The front of the luminaire with LED tray can now be lowered and supported by the lanyard.

Removing the front of the luminaire will terminate any emergency mode operation and place the unit into "rest" mode. On a new luminaire, the battery will have been isolated, and be in an unknown state of charge. Do not allow sudden or excessive forces to be applied to the lanyard as this could damage the LED tray.

Cable Entries and Cables

IMPORTANT: The cable glands used with this luminaire must be suitable for the site application. The cable used must be suitable for the site

application and/or the site requirements.

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 blanking plug.

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 IP66 to maintain the protection level of the luminaire.

Do not over tighten as the protection rating may be compromised. Always refer to gland manufacturers data for torquesettings.

Battery

Two battery options are available:
 3.6V 4Ah (part ref WPX000799BATT) is provided with standard temperature range, 9 and 18 LED units. It is secured in place with releasable cable ties, and need not be removed during installation.

3.6V 10Ah (part ref WPX001500BATT) is provided with 27 LED units as standard and optionally for -20°C operation on 9 and 18 LED units. The 10Ah battery is mounted on a bracket which must be removed during installation. Disconnect the 2-pole battery connector and remove the two M4 Torx screws (T20 head) adjacent to the battery. The screws are retained to the bracket. Un-hook the bracket and remove to gain access to the terminal block below.

Electrical Connection

The insulation of the conductors shall reach up to the terminal block. The conductor itself shall not be damaged. The connectible minimum and maximum conductor cross sections shall be observed.

A maintained mode emergency luminaire requires 2 live feeds.

The L1 connection is a permanent live feed. It powers the main normal mode operation, battery charger and is used to activate emergency mode. It may be supplied via an emergency lighting "Test" switch.

The L2 connection is a switched live feed to control the luminaire's normal mode on or off. It is a signal input that consumes negligible current.

Battery and Magnetic interlock

The driver electronics incorporate a magnetic sensor device to shut down all battery related circuits when the luminaire front is removed. A small disc magnet is mounted onto the inside of the LED tray assembly, which when properly in place activates battery related functions (charging, monitoring and emergency operation).

Upon completion of electrical wiring and testing, re-connect the battery by connecting together to the 2 pole plug and socket.

Closing the LED Luminaire

Remove any foreign bodies from the luminaire. Pay attention when fitting the LED tray to the enclosure; make sure the seals are clean and undamaged. Do not allow any cables to become trapped between the LED tray and the enclosure. Tighten all 4 TORX screws evenly.



Taking into operation

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

Improper installation or operation of this luminaire may invalidate the warranty.

Upon applying power, confirm the operation of battery circuits by observing the green status LED located in the corner of the LED tray. The green status LED will light only when all the following conditions apply:

- The LED tray is properly fitted, activating the magnetic sensor
- The battery is connected
- The battery is charging and within acceptable voltage limits

If the green status LED is not lit with power applied to the L1 feed, disconnect power and rectify any faults.

In service, battery charging and condition monitoring

When power is applied (initially or after an outage), the battery will be charged for 30 hours. Thereafter, in order to maximise battery life while maintaining emergency capacity, the battery charging operates for 1 minute in every hour.

The battery is continually monitored for voltage limits and charge current acceptance (during charge pulses). If the mains power supply is interrupted, the luminaire will switch to emergency mode operation at reduced light output. Expected emergency mode duration exceeds 3 hours.

If, during an emergency mode cycle, the battery capacity has deteriorated to the point that 3 hours is not achieved, then when power is restored this battery "failure" will be signalled by flashing the green status LED once every 8 seconds. The fault indication will be automatically reset when the battery pack is replaced.

Maintenance and battery replacement

WARNING: Disconnect the power supply to the luminaire before maintenance.

The battery pack should be replaced every 4 years for continued reliable operation. To replace the battery:

- 1) Disconnect the mains power – Emergency mode will operate.
- 2) Unscrew the 4 front TORX bolts to gain access to the inside. The front of the luminaire with LED tray can now be lowered and supported by 3)
- 3) Check the Emergency mode has been terminated, i.e. all LEDs are extinguished.
- 4) Disconnect the two pole battery connector.
- 5) Squeeze the release tab on the cable ties holding the battery pack and remove.
- 6) Unpack the new battery pack and inspect for damage.
- 7) Install new battery pack and secure in place by re-attaching the cable ties.
- 8) Reconnect the two-pole battery connector.
- 9) Refit the front LED tray, ensuring the seals are not damaged, and wires or straps are not trapped. Refer to table for tightening torques.
- 10) Re-energise the circuits and check the green status LED illuminates. Allow 30 hours charging

before expecting full emergency duration.

Dispose of old batteries in accordance with local regulations.

Disposal/Recycling

When the apparatus is disposed of, the respective national regulations on waste disposal should be observed.

Ordering Spare Parts

Replacement Batteries:

Dialight Part Number WPX000799BATT (3.6V 4Ah Ni-MH battery pack) or WPX001500BATT (3.6V 10Ah Ni-MH battery pack)

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, 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.

www.dialight.com/pubs/MDTFCHEMRFLX001.pdf

Official Statement

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