

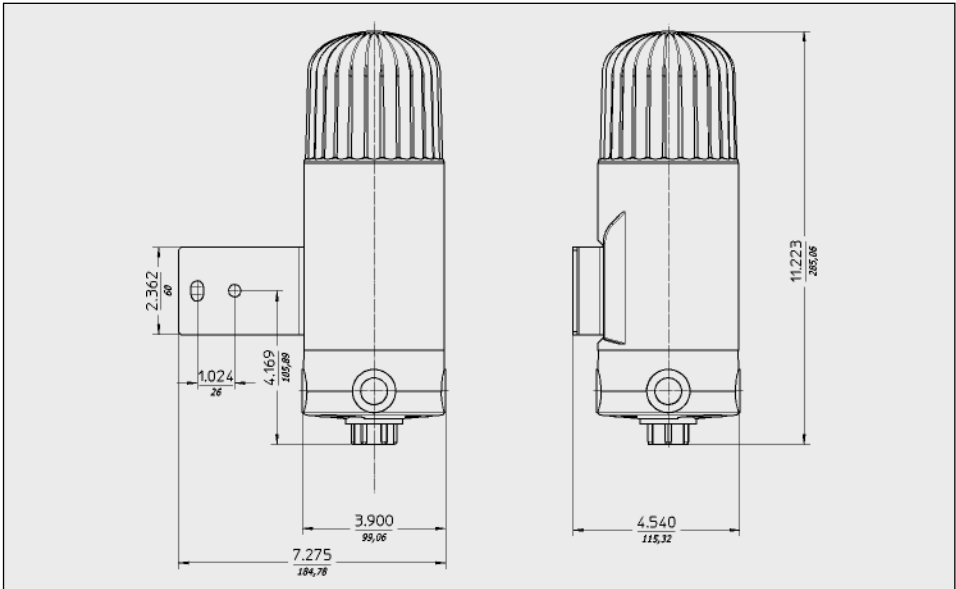
Expertline **Hazardous location LED Light Expertline-LED**

Expertline-LED



- Robust optical signaling device in LED (Light Emitting Diode) technology for use in hazardous locations of Class I Division 2 Group A, B, C and D

Dimensions



1. GENERAL

This device is suitable for indoor **and outdoor** use and damp use.

This equipment is suitable for use in Class I, Division 2, Groups A, B, C & D Hazardous Locations or non-hazardous locations only.

WARNING – Explosion Hazard – Do not disconnect while the circuit is live or unless the area is known to be free of ignitable concentrations.

WARNING – To prevent the ignition of hazardous atmospheres, clean with damp cloth.

WARNING – Explosion Hazard – Substitution of any components may impair suitability for Class I, Division 2.

Application

Hazardous areas often require the use of optical signals for warning, information or signaling purposes. The Expertline-LED provides these signalling options.

This equipment is suitable for Class I, Division 2, Groups A, B, C, D or non hazardous locations only. This device is suitable for indoor use and outdoor damp use.

Units are available for operation on 24 VDC and 120-240 VAC, 50/60 Hz.

The available operating modes are Continuous Light, Strobe Light, Blinking Light and Rotating Light. The device is factory -set to the operating mode Strobe Light.

Turning on the supply voltage activates the device.

The Expertline-LED is equipped with high brightness LEDs and comes in the colors red and yellow.

Design

All outer fixing parts have been made of non-corrosive materials. The stable, all-plastic enclosure complies with the requirements of type rating 4X, which means the device can be installed both indoor and outside.

Mounting

NOTE: The mounting surface must be able to support 3.1 lbs. The device may be placed in any position. For mounting dimensions, see the dimension illustration. Mount the Expertline-LED on the wall using four ¼-inch screws or #14 wood screws of the appropriate length, depending on the mounting surface.

Technical Specifications

Environmental Rating	Type 4X UL 50
Housing	Material plastic, UV resistant
Wall bracket and screw	Stainless steel
Weight	Approx. 3.1 lbs
Cable entry	½" NPT Hub
Operating temperature range	-40 °F to 140 °F (-40 °C to +60 °C)
Transport temperature range	-49 °F to 158 °F (-45 °C to +70 °C)
Storage temperature range	-49 °F to 158 °F (-45 °C to +70 °C)

CAUTION: Equipment damage. Ensure that the conduit has been secured to 200 in-lbs (22.6 Nm). Do not overtighten as it may cause the enclosure to fracture.

Electrical Connections

CAUTION: Equipment damage. Damage will result if the voltage ratings are exceeded.

Remove the two screws in the cover using a size 4 Allen key. Bring cable into the enclosure through the conduit entrance and connect the wires to the terminals. Observe the polarity of the connections for the DC-version. Close the enclosure and tighten the screws with a torque of ~8.8 in-lbs (~1 Nm).

Setting the operating modes

The operating modes are set using the four slide switches in the terminal room (see page 4).

The following operating modes may be set:

- Strobe light only switch 1 to ON
- Blinking light only switch 2 to ON
- Rotating light only switch 3 to ON
- Continuous light 1 only switch 4 to ON
- Continuous light 2 no switch to ON

If more than one switch is set to ON, then the operating mode Strobe Light is activated.

Warning!

To avoid the danger of the conductors being squeezed, they should not be laid across the threaded lid bolt or the edge of the seal.

Maintenance

The Expertline-LED is maintenance free. Nevertheless in case of dirtiness it should be cleaned from time to time with a damp cleaning cloth. Never use sharp objects for cleaning.

Waste disposal

The Expertline-LED may be completely recycled as electronic waste. Upon disassembling, the plastic, metal and electronic components must be disposed separately. In every single case the local requirements and regulations for waste disposal must be observed.

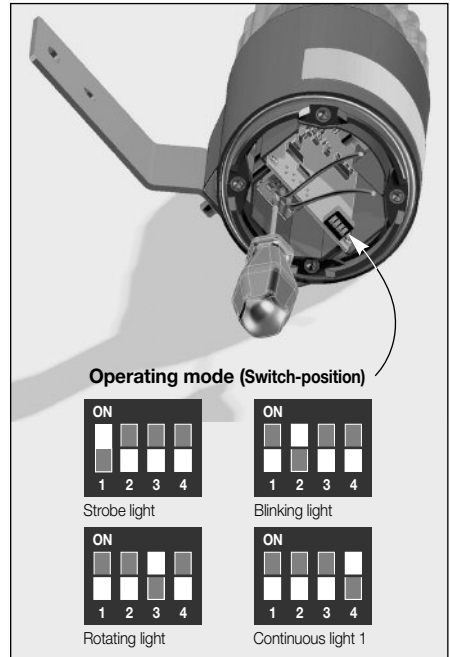
Technical Specifications

Unit Type Expertline - LED		
Protection category	Class I, Division 2, Groups A,B,C,D T4 Class I, Zone 2, Groups IIA, IIB, IIC T4	
Examination Certificate	E 311336, 3RBW	
Optical specifications	Red Yellow	Wavelength: 625 nm; Wavelength: 587 nm;
Electric specifications		
Operating voltage	DC voltage AC voltage	24 V _{DC} ± 20 % 120 V _{AC} ± 20 %, 240 V _{AC} ± 10 %
Max. current consumption	24 V _{DC} , continuous light 1	216 mA
Max. current consumption	120 V _{AC} , continuous light 1	108 mA
Max. current consumption	240 V _{AC} , continuous light 1	71 mA
Operating modes	Continuous light Blinking light Strobe light Rotating light	2 Hz 7x on and off then 1 sec. pause Approx. 111 rotations/min
Connecting terminals	Power cable cross section flexible Power cable cross section rigid	to 2.5 mm ² / AWG 24 - 11 to 4.0 mm ² / AWG 24 - 12
Operating utilization position	any	
Operating conditions	indoor or outdoor	
Housing	Plastic	Polycarbonate with stainless steel wall bracket
Type	Expertline-LED	

Mounting



Wire connection and Setting



User Information

Please note the following warnings and security information:

1. The installation and adjustment of the device must be carried out by qualified personnel in accordance with the prescribed installation regulations taking the specified type of protection into account.
 2. The device should not be operated in areas in which strong charges are generated, machines work by friction or cutting, electrons are sprayed (e.g. in the vicinity of electrostatic paint equipment), or pneumatically transported dust occurs.
 3. If the device is damaged, it may not be operated.
 4. While operating the device in business or industry facilities, the legally required precautions against accidents resulting from the use of electrical systems and devices must be taken.
 5. The device may be operated solely under the stated ambient conditions. Unfavourable ambient conditions can lead to damage of the device and thus present a potential danger for the user.

Such unfavourable ambient conditions could include:
 - moisture, dust (pay attention to the degree of protection)
 - Flammable gases, vapours, solvents not covered by the type of protection
 - too high ambient temperatures (see Technical Specifications)
 - Too low ambient temperatures (see Technical Specifications)
 6. Repairs may be carried out by the manufacturer or by a person appointed by the manufacturer followed by a renewed product conformity inspection.
 7. The device may only be cleaned using a damp cloth in order to avoid electrostatic charging.
 8. Make sure the device and the wiring are voltage-free upon connecting the wires in the terminal room.
 9. During operation of the device the temperature must not exceed nor fall below the prescribed range of temperatures. Prevent unallowed radiation energy and convection in the vicinity of the device.
 10. The device should be positioned in such a way that mechanical damage, e.g. due to falling parts or lateral impact is prevented.
 11. The signalling light may not be operated while covered.
 12. The cover, under which the luminaire is situated, is inseparably connected with the lower part of the housing. A forced opening will destroy the device!
 13. The manufacturer cannot be made liable for damages arising from or pertaining to the connection!
- Should these points not be observed, the explosion protection of the device will no longer be given. The device will then represent a danger to the life of the user and can cause the ignition of an explosive atmosphere.

Subject to alterations or errors



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