

12W Explosion Proof Submersible LED Light - C1D1/C2D1 - Aluminum Frame - 12V DC - 100' 12/3 Cord

EXHL-SWP.FW-TRN-LE1-12VDC-12.3-100C



## Made in Texas

The Larson Electronics EXHL-SWP.FW-TRN-LE1-12VDC-12.3-100C Submersible Explosion Proof LED Fixture produces 1,320 lumens while drawing only 12 watts. This heavy-duty light can be submerged up to 50' in fresh water. Equipped with 100' of 12/3 SOOW cord, the explosion proof LED light fixture is offered in a choice of spot or flood beam configuration and operates on 12V DC.

The EXHL-SWP.FW-TRN-LE1-12VDC-12.3-100C produces 1,320 lumens of highintensity LED light for illumination in fresh water. Capable of operating in depths up to 50 feet, the explosion proof LED light fixture operates on 12V DC. The EXHL-SWP.FW-TRN-LE1-12VDC-12.3-100C is available in two lighting configurations: spot and flood. The spot configuration features a 10° beam that measures 800`L and 140`W. The flood configuration throws a 40° beam that measures 300`L and 225`W. An adjustable surface mount mechanism allows operators to control the direction of the beam by tilting the unit towards the desired target.

**LED Benefits:** Unlike gas burning and arc type lamps that have glass bulbs, LEDs have no filaments or fragile housings to break during operation and/or transportation. Instead of heating a small filament or using a combination of gases to produce light, light emitting diodes (LEDs) use semi-conductive materials that illuminate when electric current is applied, providing instant illumination with no warm up or cool down time before re-striking. Because there is no warm up period, this light can be cycled on and off with no reduction in lamp life.

LED lights run at significantly cooler temperatures than traditional metal halide and high pressure sodium lights and contain no harmful gases, vapors, or mercury, making them both safer and more energy efficient. No extra energy is wasted in cooling enclosed work areas due to external heat emissions from bulb type lights, and the operator risks associated with traditional lighting methods, such as accidental burns and exposure to hazardous substances contained in the glass bulbs, are eliminated. In addition, LEDs are also safer for the environment as they are 100% recyclable, which eliminates the need for costly special disposal services required with traditional gas burning and arc type lamps.

**Heat Management:** Heat is the single largest factor in premature LED failure and color shifting. These LED units contain advanced drivers which use pulse width modulation to control heat buildup rather than simple voltage regulators which are typically harsh on sensitive electronics and can contribute to early LED failure. These units automatically sense the temperature of each LED and adjust the energy frequency or "duty cycle" accordingly to maintain heat levels within acceptable ranges. This system in essence flashes current at an extremely fast on and off rate to each LED based upon the LED's core temperature. This flash rate is too fast to detect with the human eye, but provides precise control of the current flowing to each LED and thus the heat it generates. This allows the LEDs to be driven at up to



100% capacity without overheating or visible loss of light output. The LEDs are always driven at the same voltage but the duty cycle, however, is changed to alter how long the LEDs are actually on or off. The end result is more light with less heat and longer LED life with an average 70% lumen maintenance after 50,000 hours. **Durability:** The EXHL-SWP.FW-TRN-LE1-12VDC-12.3-100C explosion proof LED light fixture from Larson Electronics is rated NEMA Type 3, 4, 4X, 7 (B,C,D) and 9 (E,F,G) and designed to withstand the rigors of demanding environmental and operating conditions while remaining lightweight and easy to use. These units can operate in temperatures of -40° Celsius to 60° Celsius, are waterproof and resist ingress of dust, dirt and humidity. The housings are formed from extruded aluminum and the lenses are unbreakable polycarbonate. The LEDs offer inherent LED resistance to shocks and vibrations.

**Wiring:** This submersible LED light comes with 100` of 12/3 SOOW pre-wired cord and kellum cord grip (light end of the cable).

**Mounting:** The explosion proof LED light fixture features an adjustable surface mount bracket for seamless control. The included adjustable flat surface bracket has two set screws on the bracket, allowing operators to loosen the mounting bracket, adjust the light`s tilt orientation, and retighten to hold the luminary in position. A single thru-hole mounting bolt allows operators to adjust the rotation of the fixture by loosening one bolt.

**Applications:** Submersible operations, fresh water, underwater monitoring, vessel, tank and reactor monitoring, remote observation of external facilities, monitoring of cleaning, spray patterns, mixing, foaming, reaction and level.

At Larson Electronics, we do more than meet your lighting needs. We also provide replacement, retrofit, and upgrade parts as well as industrial grade power

accessories. Our craftsmen can custom build any lighting system and/or accessories to fit the unique demands of your operation. A commitment to honesty, quality, and dependability has made Larson Electronics a leader in the lighting and electronics business since 1973. Contact us today at 800-369-6671 or message

<u>sales@larsonelectronics.com</u> for more information about our custom options tailored to meet your specific industry needs.



**Options:** 

## EXHL-SWP.FW-TRN-LE1-12VDC-12.3-100C-Beam Config Example: EXHL-SWP.FW-TRN-LE1-12VDC-12.3-100C-SP

Beam Config	
SPOT	-SP
FLOOD	-FL



Links (Click on the below items to view):

- HigResPic1
- large
- medium
- SpecSheet