Larson Electronics LLC
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Product ID: 153109

Please see last page for supporting documentation for this product (certificates, CAD files & drawings, IES files, wiring diagrams, etc).



Image:

Larson Electronics LLC manufactures a wide variety of products, including custom built to spec designs. The pictures displayed for this unit are a general representation of form factor for the product line and may not accurately represent this exact configuration in every detail due to custom builds and changes between similar products in our standard catalog. The specifics for this configuration are listed in the specification table and supporting documentation (CAD files, Dimensional Drawing, Name Plate Diagram, Wiring Diagram, etc.). This means that specific details (receptacles, plugs, wires, connections, mounting brackets, external finishes, etc.) may not be accurately represented in images vs specifications. Please review specifications and do not order based solely on images.

EXHL-SBDL-48-DBM-LE3-50C-1227-EPP Explosion Proof LED Light

Lamp Type: LED
Dimensions: 8"L x 6"W x 16"H - Lamp
Watts: 12W
Voltage: 120-277V AC
Lumens: 720
Luminous Efficacy: 60 Lm/W
LED Light Color: 6000K - White
LED Life Expectancy: 50,000 hours
Lighting Configuration: 10° Spot or 40° Flood
Spot Beam: 800`L x 140`W
Flood Beam: 300`L x 225`W
Ambient Operating Temp Range: -40°C to +60°C
Housing Material: Aluminum
Light Housing Color: Powder Coated - Grey
Lens Material: Tempered Glass
Mounting: Adjustable 48" Swing Arm (Powder Coated) w/ Adjustable Double Ball Swivel Mount
Wiring: 50` SOOW Cord w/ EXP Cord Cap
Cord Cap Options: 5-15P, 5-20P or 6-20P

Ratings/Approvals

Listed for United States & Canada
Class I, Divisions 1 & 2, Groups B, C, D
Class I, Zones 1 & 2, Groups IIB+H2, IIA
Class II, Divisions 1 & 2, Groups E, F, G
Class III, Divisions 1 & 2
NEMA 3R, 4, 7 (B, C, D), 9 (E, F, G)
NRTL Listed to UL 508A
NRTL Listed to UL 1203
NRTL Listed to CSA C22.2 No 14, 25, 30

Special Orders - Special Requirements

Contact us for special requirements

Toll Free: 1-800-369-6671

Intl: 1-903-270-1187
E-mail: sales@larsonelectronics.com

Made in Texas

The EXHL-SBDL-48-DBM-LE3-50C-1227-EPP from Larson Electronics is an Explosion Proof LED Fixture specifically designed for inspections in hazardous locations. This LED lamp operates on 120-277V AC and produces 720 lumens while drawing only 12 watts. The EXHL-SBDL-48-DBM-LE3-50C-1227-EPP is Class I, Divisions 1 & 2, Groups B, C, D, Class I, Zones 1 & 2, Groups IIB+H2, IIA, Class II, Divisions 1 & 2, Groups E, F ,G and Class III Divisions 1 & 2 rated for hazardous areas and is listed for use worldwide including the United States, Canada, Europe and Asia. This explosion proof LED light fixture is offered in a choice of spot or flood beam configuration and operates on 120-277V AC.

The EXHL-SBDL-48-DBM-LE3-50C-1227-EPP produces 720 lumens of high-intensity LED light for illumination within hazardous areas and potentially explosive work environments. This explosion proof LED light fixture operates on 120-277V AC. The EXHL-SBDL-48-DBM-LE3-50C-1227-EPP is available in two lighting configurations: spot or 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.

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-SBDL-48-DBM-LE3-50C-1227-EPP 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 85° Celsius,

are waterproof to 3 meter and resist ingress of dust, dirt and humidity. The housings are formed from cast copper free aluminum and the lenses are tempered glass. The LEDs offer inherent LED resistance to shocks and vibrations.

Click Photos to Enlarge



5-15 Straight Blade Plug



5-20 Straight Blade Plug



6-20 Straight Blade Plug

Wiring & Plug: The EXHL-SBDL-48-DBM-LE3-50C-1227-EPP is equipped with 50` of chemical and abrasion resistant SOOW cord that is fitted with an explosion proof cord cap for easy connection to explosion proof outlets. Plug options include a 5-15 15 amp straight blade plug for use with 120V explosion proof outlets, a 5-20 20 amp straight blade plug for use with 120V explosion proof outlets, or a 6-20 20 amp straight blade plug for use with 220-240V explosion proof outlets. ***PLEASE NOTE** voltage ratings on plugs and outlets are MAXIMUM voltage. For low voltage applications, proper voltage must be applied to the outlet or damage to the light fixture will occur.*

Mount: This unit features a 48" adjustable, powder coated swing arm w/ an adjustable double ball swivel mount for accurate targeting. Constructed of aluminum, the two-piece arm provides two pivot points, one at the mounting bracket and one in the center of the swing arm. This component swings 170° from the mounting bracket point and 340° from the center pivot point. When making adjustments to the LED lamp, two rubber balls (one at each mounting plate) guides the second mounting component to the desired position. Operators can lock the position of the mount by turning a small knob located on the side of the arm that is directly connected to the lamp. When used properly, the double ball swivel mount can help reduce unwanted vibration and shock.

High Quality Features

1. Low power consumption
2. Instant on/off operation
3. Fixture constructed of extruded corrosion resistant copper free aluminum alloy
4. Superior color rendering compared to HPS, LPS, MH
5. Retains 70% lumen output after 50,000 operating hours
6. Powder coated aluminum fixture body
7. Low profile - light weight
8. 720 lumen output from 12 watts

Superior LED Benefits

1. 50,000+ hour lifespan.
2. Can SAVE 50% or more on energy.
3. Qualifies retrofit projects for financial incentives, including utility rebates, tax credits and energy loan programs.
4. Reduces energy use and prolongs life-spans of peripheral cooling units (A/C, refrigeration)
5. 100% recyclable.
6. No toxins-lead, mercury.
7. No UV light, infrared radiation or CO2 emissions.
8. Qualifies buildings for LED and other sustainable business

certifications.
9. Bright, even light maintains consistent color over time.
10. Instant on/off - No flickering, delays or buzzing.
11. Very good color rendering.
12. Vibration/impact resistant.
13. Significantly cooler operation.
14. Less frequent outages, higher output improves workplace safety.

Applications: Inspections, detailed tasks, labs, soldering, petroleum refineries, chemical and petrochemical plants, paint spray booths, food manufacturing buildings, hazardous locations and more.

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

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Frequently Asked Questions (FAQ)

There are no Faqs

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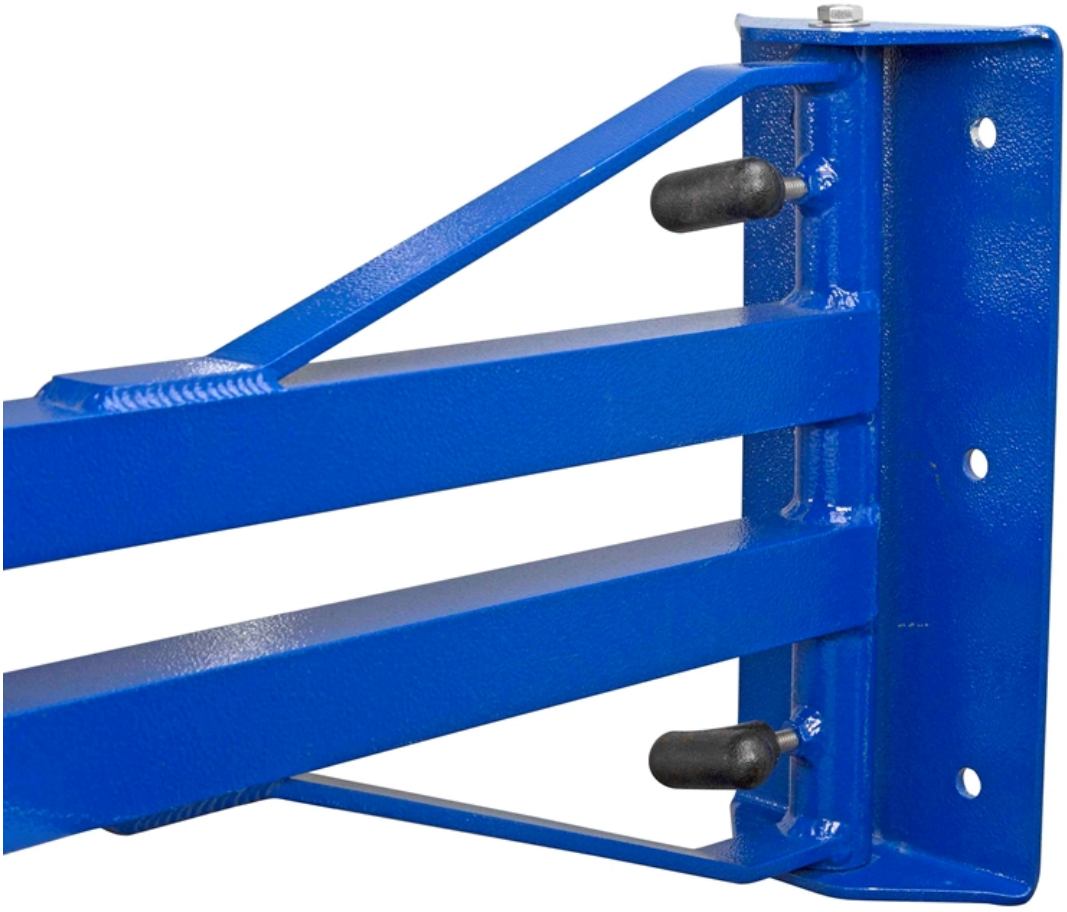

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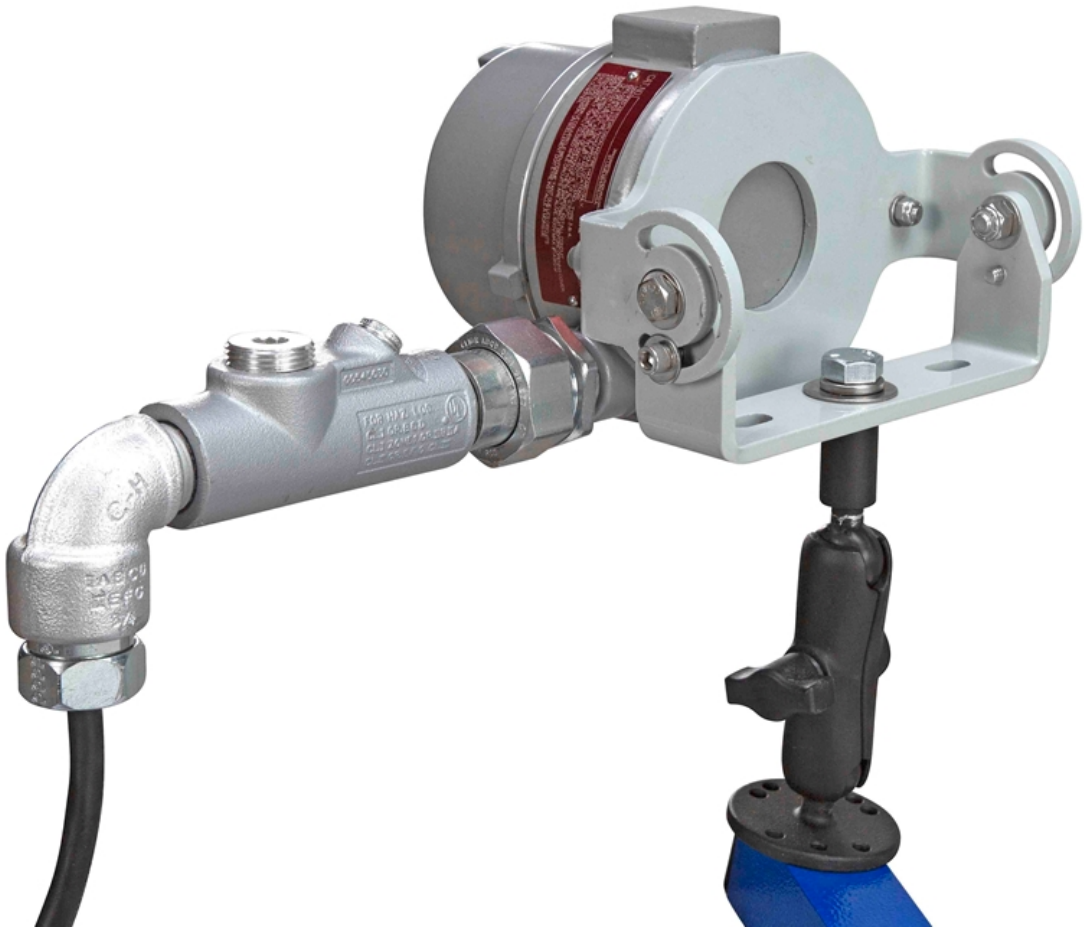

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Export Control Classification Number (ECCN): EAR99

Options:

-Beam Config-Cord Cap
Example: -SP-1523

Beam Config	
SPOT	-SP
FLOOD	-FL

Cord Cap	
5-15P	-1523
5-20P	-2023-125V
6-20P	-2023-250V

Links (Click on the below items to view):

- **Operations Manual**(https://www.larsonelectronics.com//images/product/Manual/153109.PDF)
- **SpecSheetSpanish**(https://www.larsonelectronics.com//images/product/SpecSheetSpanish/153109.PDF)
- **Wiring Diagram**(https://www.larsonelectronics.com//images/product/WiringDiagram/153109.PDF)
- **HigResPic1**(https://www.larsonelectronics.com//images/product/HigResPic1/153109.JPG)
- **HigResPic2**(https://www.larsonelectronics.com//images/product/HigResPic2/153109.JPG)
- **HigResPic3**(https://www.larsonelectronics.com//images/product/HigResPic3/153109.JPG)
- **HigResPic4**(https://www.larsonelectronics.com//images/product/HigResPic4/153109.JPG)
- **HigResPic5**(https://www.larsonelectronics.com//images/product/HigResPic5/153109.JPG)
- **HigResPic6**(https://www.larsonelectronics.com//images/product/HigResPic6/153109.JPG)
- **HigResPic7**(https://www.larsonelectronics.com//images/product/HigResPic7/153109.JPG)
- **HigResPic8**(https://www.larsonelectronics.com//images/product/HigResPic8/153109.JPG)
- **HigResPic9**(https://www.larsonelectronics.com//images/product/HigResPic9/153109.JPG)
- **HigResPic10**(https://www.larsonelectronics.com//images/product/HigResPic10/153109.JPG)
- **Video1**(https://www.youtube.com/watch?v=Rj7Oy1y_yNc)
- **Video2**(https://www.youtube.com/watch?v=OGbw09xDTqI)
- **Video3**(https://www.youtube.com/watch?v=ZEWSEBXdzYE)
- **ISO 9001 Certification**(http://larsonelectronics.com/images/pdfdocs/ISO9001.PDF)
- **Business Certificate**(https://www.larsonelectronics.com/images/pdfdocs/w9.PDF)
- **Shipping Time Map**(https://www.larsonelectronics.com/images/product/ShippingTimeMap/ShippingTimeMap.pdf)