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EPL-BS-70LED-100X12

50W Explosion Proof LED Light - 120-277V AC Stepped Down to 12 or 24 V DC - 7,000 Lumens - Non-Spark Aluminum Stand

Product ID: 50399

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



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.

EPL-BS-70LED-100X12 - Explosion Proof LED Light

Listing: United States - Canada
Lamp Technology: LED
Dimensions: 15.25"-H x 10.5"-W x 9.25"-D
Weight: 25 lb
Voltage: 100-277 Volts AC, 50/60 Hz Stepped Down to 12 or 24 V DC via Encapsulated Inline Stepdown Transformer
Total Watts: 50W
Total Lumens: 7,000 lms
Luminous Efficacy: 140 Lm/w
Lamp Life: 60,000+ Hours
Color Temp: 5600K, 4500K, or 3000K
Color Rendering Index: >75 CRI
Lamp Type: -
Lamp Base: -
Replacement Lamp: -
Beam Angle: 60°, 125°, or 140°
Lighting Configuration: Flood Pattern
Power Efficiency: >95%
Power Factor: 0.99
Amps: 0.42 A @ 120 V, 0.21 A @ 240 V, 0.18 A @ 277 V
Ambient Operating Temp Range: -50°C to +65°C
Operating Temp Rating: T5
Temperature Rise: 11°C (10°F) Over Ambient

Ratings/Approvals

Class I, Divisions 1 & 2, Groups C and D
Class II, Divisions 1 & 2, Groups E, F and G
Class III, Divisions 1 & 2
NRTL Certified to UL 844 Ed. 13
NRTL Certified to UL 1598
NRTL Certified to C22.2 No. 137 Rev 2009
NRTL Certified to C22.2 No. 250.0
NRTL Certified to C22.2 No. 30-M-1986 Rev 2012
T5 Temperature Rating
Paint Spray Booth Approved
IEC 60529 Tested
IP67 Rated Waterproof
LEL Approved
Single LED Driver
80% Lumen Retention after 60,000 Hours
Factory Sealed Light Fixture
Surge Protection
Replacement for 250W Metal Halide Lamps

Housing Material: Copper Free Cast Aluminum
Housing Finish: Epoxy Powder Coated - Grey
Lens Material: Hardened Borosilicate Glass
Gasket Material: Silicone
Mounting: Non-Sparking Aluminum Base Stand w/ Carrying Handle
Wiring: 100' SOOW Cord w/ General Area Cord Cap & DCP-11 Waterproof 12-24 V DC Transformer
Cord Cap Options: 5-15, 6-15, 5-20, 6-20, L5-15, L6-15, L5-20, L6-20, BS1363, Schuko, or Pigtail

Special Orders - Special Requirements
Contact us for special requirements
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Made in the USA

The EPL-BS-70LED-100X12 Explosion Proof LED Light provides operators with a powerful alternative to traditional hazardous location luminaries. The spun aluminum mount and LED lamp used with this unit provide operators with excellent power and efficiency coupled with high versatility and ease of use. An included transformer steps down voltages from 110-277 V AC to 12 V DC or 24 V DC for low voltage applications.

The EPL-BS-70LED-100X12 is a Class I, Division 1 & 2 and Class II, Division 1 & 2 explosion proof light fixture that is designed for energy efficient and superior illumination in combustible environments. This 50-watt LED fixture offers 7,000 lumens of high quality light with a color temperature of 5600K. We also offer a 3000K warm white and 4500K natural white color temperature options (longer lead times may apply for non-standard temperatures). Serving as a suitable replacement for 250-watt metal halide lamps, a color rendering index of 75 ensures colors and details are produced more accurately than high pressure sodium or mercury vapor luminaries.
This portable LED lighting solution for explosive sites is IP67 rated, dust-proof and protected against high pressure jets and temporary submersion. The aluminum frame features an explosion proof switch built into the cord wrap on the back of the unit. The copper-free aluminum alloy housing is specially designed to dissipate heat which increases the efficiency and lifespan of the LEDs and electronic components. An epoxy powder coated finish facilitates durability and an attractive aesthetic appearance.
Special heat dissipating design in conjunction with LED technology helps this fixture to achieve an excellent 60,000-hour rated lifespan with 80% lumen retention. The explosion proof LED light also offers operators convenience in the form of field serviceability.


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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.

LED Drivers: Even in LED fixtures, heat is the single largest factor in premature light failure and color shifting. As a result, many manufacturers reduce the output of their LEDs in order to reduce the amount of heat produced. Rather than lower light output or quality, Larson Electronics addresses this problem with the addition of an electronic LED driver. This internal driver provides the ability to automatically monitor and adjust input current to maintain the correct LED voltage levels regardless of input levels across a specific range. This not only reduces the energy dissipation, effectively lowering the operating temperature of the fixture, but also prevents AC over-voltage and short circuit loading making this fixture virtually maintenance free. Because the electronic driver allows the EPL-LB-50LED-RT to run at a cooler internal temperature and regulates the electrical current, energy efficiency and LED service hours are maximized while at the same time reducing operating costs and downtime incurred from the frequent servicing intervals required with other hotter running lights.

Energy Consumption Comparison

	Metal Halide	LED
Wattage	175 watts	50 watts
Amp Draw @ 120V AC	1.69 amps	0.42 amps
Amp Draw @ 220V AC	0.92 amps	0.23 amps
Amp Draw @ 240V AC	0.85 amps	0.21 amps
Amp Draw @ 277V AC	0.73 amps	0.18 amps
Amp Draw @ 12V DC	16.77 amps	4.17 amps
Amp Draw @ 24V DC	8.39 amps	2.08 amps
Lamp Life Expectancy	20,000 hours	60,000+ hours
Operation cost per year (12hs/day @ 12c/kWh)	$241.78	$26.30

Each LED light fixture has the potential to save $150.00+ per year in electricity alone, not including maintenance costs, operational downtime, reduced productivity, HVAC loads, or carbon footprint. When retrofitting an entire facility with 100s of light fixtures, the return on investment of LED over metal halide becomes evident.

Voltage: The light is universal voltage capable and can be operated with 100-277 V AC, 50/60 Hz. We also offer a low voltage version of this LED fixture that operates on AC/DC voltages from 11-25 Volts.

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5-15 Straight Blade Plug
15 Amp / 125 V Rated



L5-15 Twist Lock Plug
15 Amp / 125 V Rated



L6-15 Twist Lock Plug
15 Amp / 250 V Rated



UK BS1363 Straight Blade Plug
13 Amp / 250 V Rated / Internal Fuse



Intl Schuko 2-Pin Plug
16 Amp / 250 V Rated / Grounded



Flying Leads / Pigtail Wires

Wiring/Plug: This explosion proof LED light is equipped with 100 foot of 16/3 chemical and abrasion resistant SOOW cord leading to an encapsulatedstep down transformer. There is three feet of 16/3 SOOW cable coming out of the inline transformer, that is fitted with an industrial grade cord cap for easy connection to common wall outlets. Plug options include standard 5-15 15 amp straight blade plug for 110 V wall outlets with ground, standard 5-20 20 amp straight blade plug for 110 V wall outlets with ground, standard 6-15 15 amp straight blade plug for 220-240 V wall outlets with ground, standard 6-20 20 amp straight blade plug for 220-240 V wall outlets with ground, NEMA L5-15 15 amp twist lock plug for 125V twist lock outlets, NEMA L5-20 20 amp twist lock plug for 125 V twist lock outlets, NEMA L6-15 15 amp twist lock plug for 240V twist lock outlets, NEMA L6-20 20 amp twist lock plug for 240 V twist lock outlets, British BS1363 13 amp fused 3-blade plug for United Kingdom outlets, or a two pin 16 amp rated Schuko plug with ground contact and socket for European outlets up to 250 V. Alternatively, we can provide flying leads with no plug for hard wire applications or for operators who prefer to wire in user provided cord caps. Please choose pigtail option below for flying leads with no plug.
PLEASE NOTE: While the light fixture on this unit is explosion proof, the included cord cap is NOT explosion proof and must be connected outside of the hazardous area.

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60° Beam Angle


125° Beam Angle


140° Beam Angle

Beam Angles: When used as a portable lighting solution, the varying beam angles are each individually ideal for several environments. The 60° beam provides the most intense beam of the three options. It is perfect for narrow, confined spaces and is ideally suited for tank cleaning purposes. It offers focused light to provide ample illumination to tight work spaces and other environments. The 125° beam offers a more diffused source of light that is also less intense in brightness. It is a great general area work light and performs well when used for outdoor illumination. The 140° beam offers a very wide lighting pattern and is ideal for situations where lighting distance is not a concern, but illumination of a wider area and even light distribution is. The 140° beam is great for situations that call for working in close proximity to lights such as in a paint booth.

Suggested Applications: Paint spray booths, aircraft maintenance, oil drilling rigs, refineries, solvent and cleaning areas, chemical manufacturing, waste treatment plants, gas processing plants, 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)






MISTER



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EPL-BS-70LED-100X12
Product ID: 50399

Warranty: 36 Months

Harmonized System (HS) Code: 9405.41.84.10
Export Control Classification Number (ECCN): EAR99

Options:
EPL-BS-70LED-100X12-Beam Config-Voltage-Cord Cap
Example: EPL-BS-70LED-100X12-60B-12VDC-5.15

Beam Config	
60°	-60B
125°	-125B
140°	-140B

Voltage	
12V DC	-12VDC
24V DC	-24VDC

Cord Cap	
5-15 STRAIGHT	-5.15
6-15 STRAIGHT	-6.15
5-20 STRAIGHT	-5.20
6-20 STRAIGHT	-6.20
L5-15 TWIST	-L5.15
L6-15 TWIST	-L6.15
L5-20 TWIST	-L5.20
L6-20 TWIST	-L6.20
UK BS1363	-BS1363
INTL SCHUKO	-SCHUKO
PIGTAIL	-PIGTAIL

Links (Click on the below items to view):

- Dimensional Drawing 2D
- DXF (2D CAD Model)
- SpecSheetArabic
- SpecSheetFrench
- STEP File (3D CAD Model)
- HigResPic1
- HigResPic2
- HigResPic3
- HigResPic4
- HigResPic5
- HigResPic6
- HigResPic7
- HigResPic8
- HigResPic9
- HigResPic10
- Video1
- ISO 9001 Certification
- Business Certificate
- Shipping Time Map