

# bodine



## Emergency Driver

LED

BSL310LPST



Project: \_\_\_\_\_

Location: \_\_\_\_\_

Cat.No: \_\_\_\_\_

Type: \_\_\_\_\_

Lamps: \_\_\_\_\_ Qty: \_\_\_\_\_

Notes: \_\_\_\_\_

### Low-Profile Emergency LED Driver Self-Testing Class 2 Output 10 Watts Output Power

Product order number: BSL310LPSTM (galvanized metal case)

#### Specifications

##### UL Listed for US and Canada

Listed to UL924 and tested to CSA 22.2, No. 141  
For Field or Factory Installation  
(Indoor and Damp)

##### Illumination Time

90 Minutes

##### Full Warranty

5 Years (NOT pro-rata)

##### Universal Input Voltage

120-277 VAC, 50/60 Hz

##### AC Input Power Rating

4 W (Maximum)

##### Output Voltage

15-52 VDC

##### Output Power

10.0 W initial (regulated)  
NFPA-101 and NEC 700.12 compliant

##### Test Switch / Charging Indicator Light

Two-Wire Illuminated Test Switch (2W-ITS)

##### Battery

High-Temperature, Maintenance-Free  
Nickel-Cadmium Battery  
7- to 10-Year Life Expectancy

##### Recharge Time

24 Hours

##### Temperature Rating

Ambient : 0°C to +55°C (32°F to 131°F)  
Case: Tc (max): 65°C

##### Dimensions

22.5" x 1.18" x 1.18" (572 mm x 30 mm x 30 mm)  
Mounting Center 22.1" (561 mm)

##### Weight

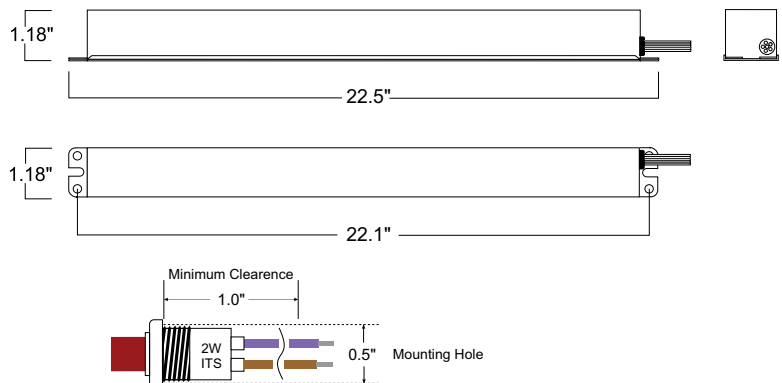
2.5 lbs. (1.12 kg) - metal case without conduit

#### Benefits:

- UL Listed for factory or field installation
- Automatic code-compliant testing
- Compact design for low-profile fixtures
- Controlled power for predictable discharge
- Smart Charger Technology for low energy consumption
- Meets CEC Title 20 (California Energy Commission) efficiency standards
- Class 2 output - UL 1310 Certified, CSA 22.2 No 223-M91 compliant
- Emergency mode initial lumen output of up to 1300 lumens
- Compatible with AC drivers and LED loads rated for Class 2
- Automatic adjustment for LED load configurations within the voltage range of 15 - 52V
- RoHS Compliant

#### Dimensions

22.5" x 1.18" x 1.18" (mounting center - 22.1")



An illuminated test switch/charging indicator light is provided.



# BSL310LPST Low-profile emergency LED driver

## Application

The BSL310LPST emergency LED driver works in conjunction with an AC LED driver that has an output current not to exceed 2.5 A. The emergency driver consists of a high-temperature nickel-cadmium battery, charger, and electronic circuitry contained in one metal enclosure. The BSL310LPST can be used with an LED lighting load configuration resulting in an output voltage in the 15–52V range, delivering an initial minimum power of 10.0 Watts for 90 minutes. If used in an emergency-only fixture, no AC driver is necessary. The BSL310LPST is suitable for indoor and damp locations, and for installation in sealed and gasketed fixtures, including fixtures rated for wet locations. For more information about specific LED and AC driver compatibility, please contact Technical Support.

## Operation

During normal operation, the BSL310LPST constantly monitors battery voltage. When AC power fails, the BSL310LPST immediately switches to the emergency mode, operating the LEDs at a reduced lumen output for a minimum of 90 minutes. When AC power is restored, the emergency driver automatically returns to the charging mode. During automated testing, the BSL310LPST simulates an AC power failure, causing the emergency driver to switch to emergency mode and conduct a discharge test to monitor battery voltage and LED's operation. If the BSL310LPST detects a problem, the status indicator light flashes. When testing is complete, the BSL310LPST returns to the charging mode. The BSL310LPST automatically tests emergency lighting for 30 seconds once a month and 90 minutes once a year.

## Installation

The BSL310LPST does not affect normal fixture operation and may be used with either a switched or unswitched fixture. If a switched fixture is used, an unswitched hot lead must be connected to the emergency driver. The emergency driver must be fed from the same branch circuit as the AC driver. Installation is not recommended with fixtures where the ambient temperature may fall below 0°C. The 2W-ITS is a class 2 device. It may be remotely mounted up to 100 ft. from the BSL310LPST emergency driver.

## Specification

Emergency lighting shall be provided by using an LED fixture equipped with a Bodine BSL310LPST self-testing/self-diagnostic emergency driver. Electronic circuitry shall be self-testing in design and automatically test emergency lighting for a minimum of 30 seconds every 28 days and 90 minutes once a year. This emergency driver shall consist of a high-temperature maintenance-free nickel-cadmium battery, charger, and other electronic circuitry contained in one metal enclosure. A 2-wire illuminated test switch (2W-ITS) shall be supplied with the installation hardware. The 2W-ITS combines a single pole test switch that provides a test function with a solid-state charging indicator light that monitors the battery and its charger. The emergency driver shall be capable of operating an LED load for a minimum of 90 minutes and of delivering an initial minimum output power of 10.0W, following a battery charging period of at least 24hours. The BSL310LPST is suitable for indoor and damp locations, and for installation in sealed and gasketed fixtures, including fixtures rated for

wet locations. The BSL310LPST shall have a 21.6 Watt-hour battery capacity, a maximum of 4.0 Watts of input power, and shall comply with emergency standards set forth by the current NEC. This device complies with Part 15 of the FCC Rules and meets CEC Title 20 (California Energy Commission) efficiency standards. The emergency driver shall be UL Listed for factory or field installation.

## Warranty

Model BSL310LPST is warranted for five (5) full years from date of manufacture. Please see detailed warranty information on our web site.

