



# The BL-EN Installation Manual

## APPLICATION

Nemalux BL-EN luminaires are designed for use in areas subject to extended or continuous submersion requiring IP68. The BL luminaire is also certified for use on marine vessels inside, outside and in other severely wet saltwater environments.



UL File Number: E477827

BL luminaires are suitable for use in the following areas as defined by the National Electrical Code (NEC) and the Canadian Electrical Code (CEC):

Standards that apply to all models:

UL 1598 and UL 1598A;  
CSA C22.2 No. 250.0-18 and CSA C22.2 No. 250.13-17

Housing: Copper-free Cast Aluminum with Polycarbonate lens  
Optional glass window in stainless frame.

Input Voltage: AC: 120/230-277VAC 50/60Hz  
HV: 347VAC 50/60Hz

Rated Wattage: BL20: 17.5W | BL40: 37W

Inrush Current: BL(EN-AC): Peak / >10% 120V: 18A / 304uS Duration 277V: 43A / 278uS  
BL(EN-HV): Peak / >50% Duration 347V: 3.5A/200uS

Connections: Standard 10ft 18/3 SOOW  
Dimming 10ft 18/5 SOOW  
Refer to wiring diagrams for connections.  
Class 1 Wiring only

Temperature Range: -50°C to +65°C

Ingress Protection: IP68 Continuous Submersion 25ft | Suitable for Wet Locations. | Marine Outside Type (Salt Water)



## WARNING / ATTENTION

WARNING: THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE INSTALLATION CODE BY A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT AND THE HAZARDS INVOLVED

ATTENTION: CE PRODUIT DOIT ÊTRE INSTALLÉ SELON LE CODE D'INSTALLATION PERTINENT, PAR UNE PERSONNE QUI CONNAÎT BIEN LE PRODUIT ET SON FONCTIONNEMENT AINSI QUE LES RISQUES INHÉRENTS

## INSTALLATION STEPS

The Luminaire shall be installed per one of the following mounting means shipped with the luminaire.

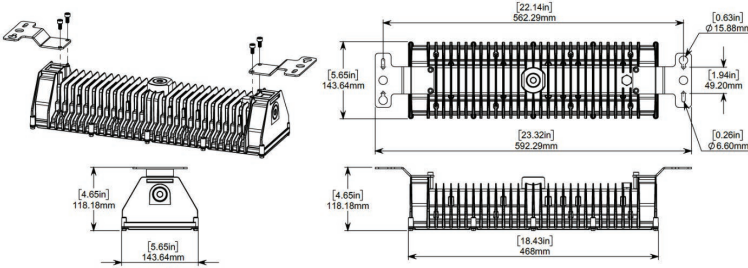
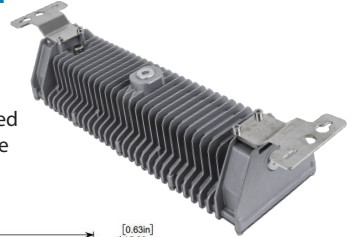
### STEP 1:

Mount fixture in desired location (refer to desired mounting section below).

## BL-SM – SURFACE/CEILING MOUNT INSTALLATION (Ordered Separately)

*(All brackets are ordered separately)*

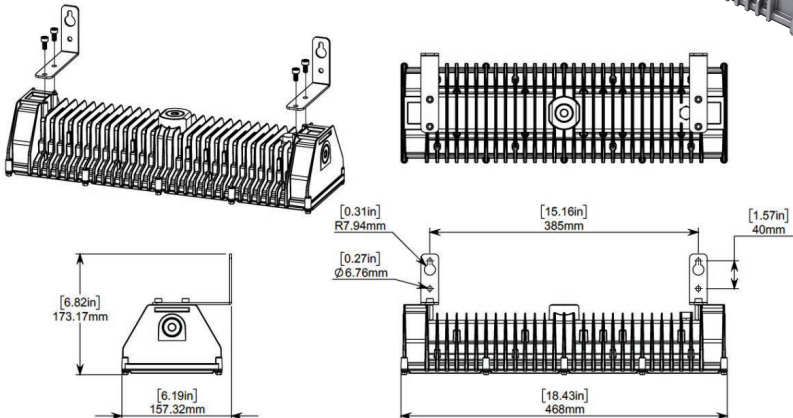
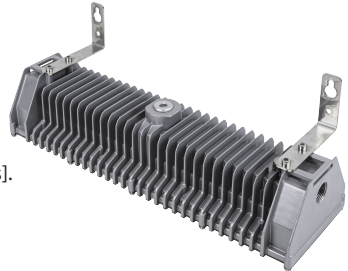
A) For surface mounting, the BL-SM kit is required. Install surface mounting brackets on the BL luminaire as shown using the provided M6 fasteners. Torque M6 fasteners to 4.5 N-m [40 in-lbs]. For surface installation, mount fixture to desired location using 4x ¼-20 or M6 fasteners.



## BL-WM – WALL MOUNT INSTALLATION (Ordered Separately)

*(All brackets are ordered separately)*

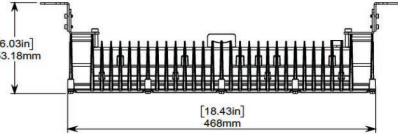
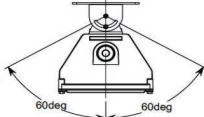
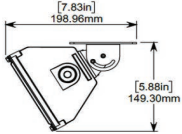
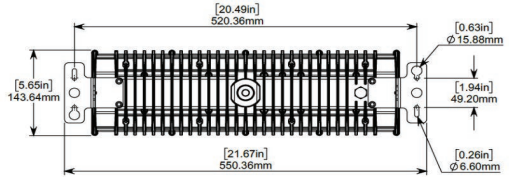
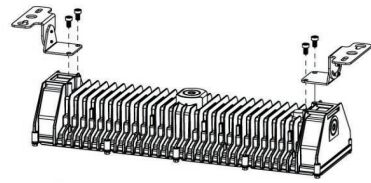
B) For wall mounting, the BL-WM kit is required. Install wall mounting brackets on the BL luminaire as shown using the provided M6 fasteners. Torque M6 fasteners to 4.5 N-m [40 in-lbs]. Mount fixture to desired location using 4x ¼-20 or M6 fasteners.



## BL-YM – YOKE MOUNT INSTALLATION (Ordered Separately)

*(All brackets are ordered separately)*

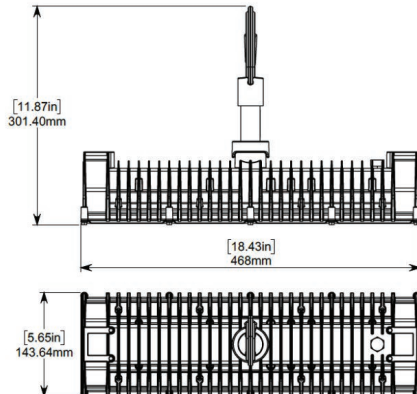
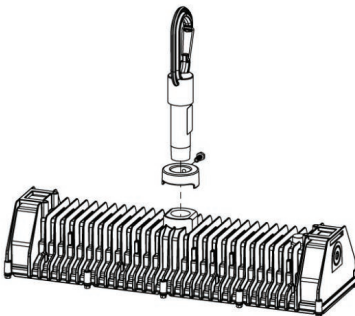
C) For adjustable/swivel bracket mounting, the BL-YM kit is required. Install both swivel bracket A components on the BL luminaire as shown using the provided M6 fasteners. Torque M6 fasteners to 4.5 N-m [40 in-lbs]. Install Swivel Bracket B components as shown, using the provided M4 fasteners. Torque M4 fasteners to 1.7 N-m [15 in-lbs].



## BL-HK – HOOK PENDANT MOUNT INSTALLATION (Ordered Separately)

*(All brackets are ordered separately)*

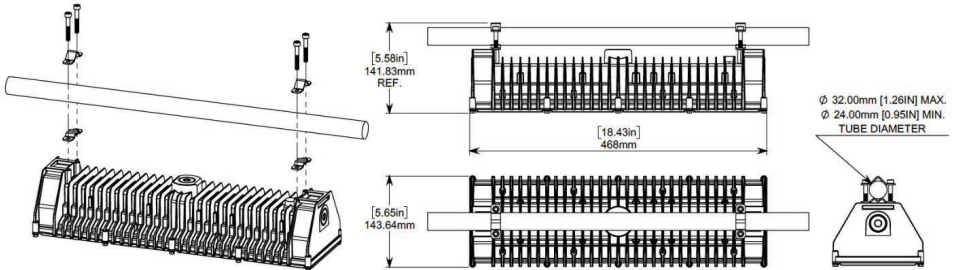
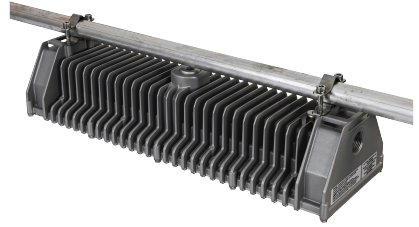
D) For hook pendant installation, the BL-HK kit is required. Clip hook onto eye-bolt or other fixed mounting loop.



## BL-TC – TUBE CLAMP MOUNT INSTALLATION (Ordered Separately)

*(All brackets are ordered separately)*

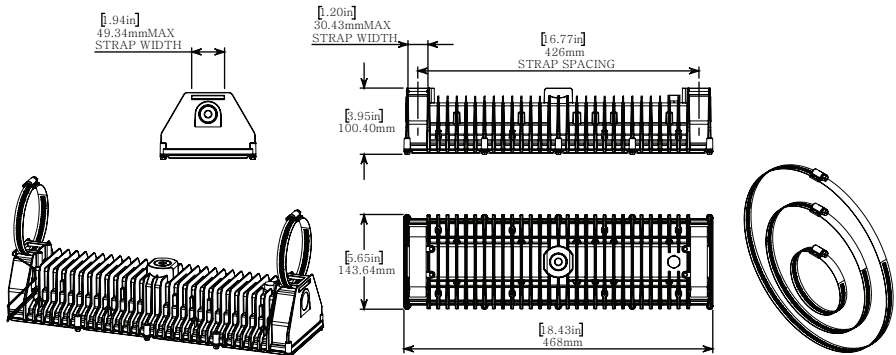
E) For mounting onto tubing between 24.0mm [0.95in] and 32.0mm [1.26in] in diameter, the BL-TC kit is required. Install the Tube Mount components as shown using the provided fasteners. Tighten M6 fasteners by equal amounts until they make contact with the tubing. Torque to a maximum of 4.5 N-m [40 in-lbs] to secure the luminaire.



## BL-STRAP MOUNT INSTALLATION (Ordered Separately)

*(All brackets are ordered separately)*

F) For strap mounting onto structural elements, install supplied straps through the slots at the ends of the luminaire and around mounting point. Feed open end through worm drive and tighten screw to secure luminaire.



P/N	QTY	DESCRIPTION
STS12	2	Stainless steel tube clamp, fits 9 3/8" to 12" tubing diameter
STS9	2	Stainless steel tube clamp, fits 7 1/8" to 9 3/4" tubing diameter
STS8	2	Stainless steel tube clamp, fits 5 5/8" to 8 1/4" tubing diameter
STS6	2	Stainless steel tube clamp, fits 4 1/8" to 6 3/4" tubing diameter
STS5	2	Stainless steel tube clamp, fits 3 5/8" to 6 1/4" tubing diameter
STS4	2	Stainless steel tube clamp, fits 3-5/16" to 4-1/4" tubing diameter
STS3	2	Stainless steel tube clamp, fits 2-9/16"- 3-1/4" tubing diameter

**STEP 2:**

Make wiring connections of flexible cord in an approved termination box. Follow wiring method requirements of the Canadian Electrical Code or National Electrical Code for the specific location of the installation.

Make dimming connections if required using the provided wiring connectors. Ensure dimming control is certified and suitable for the classification of the area of installation. The driver will source a maximum of 165µA for 0-10V control. The dimming controller must sink current from the 0-10V control leads.

All field wiring supply conductors shall be rated 90°C minimum and rated for supply voltage (300V AC Models, 600V HV models).



Black: Line 1 (L1) | White: Neutral/Line 2 | Green: Ground

Dimming (Flying lead cable):



Black: Line | White: Neutral/Line 2 | Green: Ground  
 Red: Dimming (+) | Orange: Dimming

**STEP 3:** Energize circuit and test.