

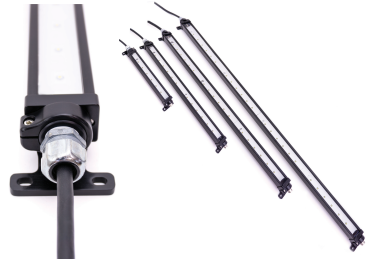
# The GS Series Installation Manual

## DC Voltage



### APPLICATION

Nemalux GS-DC Series 12VDC, 24VDC and 24VDC High Output luminaires are designed for use indoors, outdoors, wet locations, and areas containing moisture, dirt, corrosion, vibration, and rough usage. The GS-DC luminaire is also certified for use on marine vessels inside, outside and in other severely wet saltwater environments. Models GS-X-XX-X-XXX-H-XXX-XX-X are certified for use in hazardous location areas.



UL Listing Numbers: Nemalux General Location: E480811  
Nemalux Hazardous Location: E477829

GS-DC 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 1598A and UL 2108;  
CSA C22.2 No. 250.0

Standards that apply only to Hazardous Location models (GS-X-XX-X-XXX-H-XXX-XX-X)

Hazardous Location Certifications: Class I, Division 2, Groups ABCD, T4\*;  
Class II, Division 2, Groups FG, T6\*;  
Class III;  
Class I, Zone 2, Group IIC;  
Zone 22  
\*T3C for simultaneous exposure rating, Class I Div. 2 & Class II, Div. 2

Housing: Copper-free Aluminum with Polycarbonate lens

Mounting: (A) Adjustable: Four 1/4"-20 x 4" Screws or bolts (Not Provided)  
(B) Carriage Bolt: Two 1/4"-20 x 1" Bolts (Integral to luminaire)  
Flat washers, lock washers & 1/4"-20 nuts (Provided)

Input Voltage: 12: 11-16VDC | 24: 22-28VDC | 24H: 22-28VDC

Electrical Ratings: 12 Models (@ 10-16VDC): GS-1: 0.75A | GS-2: 1.5A | GS-3: 2.3A | GS-4: 3.0A  
24 Models (@ 22-28VDC): GS-1: 0.40A | GS-2: 0.75A | GS-3: 1.1A | GS-4: 1.5A  
24H Models (@ 22-28VDC): GS-1: 0.75A | GS-2: 1.5A | GS-3: 2.2A | GS-4: 2.9A

Connections: 3ft extra hard usage cord with flying leads  
Black: Negative (-) | White: Positive (+) | Green: Ground  
DC Class 2 Wiring Only

Temperature Range: -40°C to +60°C

Ingress Protection: IP 66/67 | Suitable for Wet Locations. Marine Outside type (Salt Water).  
(Luminaire enclosure only)

## **WARNING / ATTENTION**

To avoid the risk of fire, explosion, or electric shock, this product should be installed, inspected, and maintained by a qualified electrician only, in accordance with all applicable electrical codes.

Éviter tout risque d'incendie, d'explosion ou d'électrocution, ce produit doit être installé, inspecté et entretenu par un électricien qualifié uniquement, conformément à tous codes électriques applicables.

## **WARNING ATTENTION** Do not open, no serviceable parts. Ne pas ouvrir, pas de pièces réparables.

## **WARNING / ATTENTION**

To reduce the risk of electric shock, disconnect the luminaire from the supply circuit before opening for installation and servicing. Keep tightly closed when in operation.

Pour réduire le risque de choc électrique, débranchez le luminaire du circuit d'alimentation avant l'ouverture pour l'installation et entretien. Gardez hermétiquement fermé pendant le fonctionnement.

## INSTALLATION

### STEP 1:

Inspect shipping package and contents to ensure no damage has occurred during shipping.

### Adjustable Bracket Mount

#### STEP 2a:

Loosen each M4 pinch bolt (2x) slightly using a 3mm hex key to allow some free movement. This will allow for easier installation on uneven or other surfaces.

\*Be sure not to loosen the end brackets too much as the end brackets will disengage.

#### STEP 2b:

Mount luminaire to desired location with four 1/4"-20 (4x) screws or bolts (not provided).

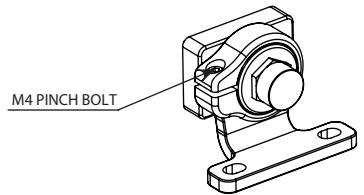
#### STEP 2c:

Adjust luminaire to desired angle and tighten M4 pinch bolts (2x) using a 3mm hex key.

### NOTE:

If application requires periodic adjustment of aiming do not rotate more than 180° in either direction from installation point, doing so may put excessive strain on the electrical connections.

Continue to Step 3.



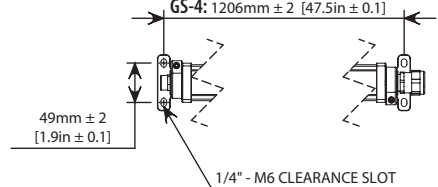
### Mounting Dimensions:

GS-1: 368mm ± 2 [14.5in ± 0.1]

GS-2: 648mm ± 2 [25.5in ± 0.1]

GS-3: 927mm ± 2 [36.5in ± 0.1]

GS-4: 1206mm ± 2 [47.5in ± 0.1]



## INSTALLATION (CONT.)

### Carriage Bolt Mount

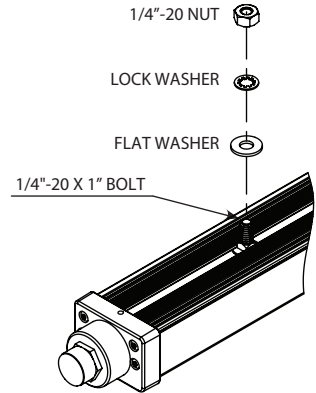
#### STEP 2a:

Align both carriage bolts through holes in the desired mounting surface. Place the provided flat washer, lock washer and 1/4"-20 nut on the bolt and tighten luminaire to the surface.

#### STEP 3:

For general location installation:

Supply side of the cord must be terminated with a listed cord connector complying with the NEC / CEC requirements of the installation. The cord connector must be rated for use with suitable cable of types SOW, STOOW, STOW, SEOW, SEOOW having a diameter between 8.75mm/0.345" & 9.4mm/0.370". The listed cord connector must be installed in a listed box complying with the NEC / CEC location requirements of the installation. The cord connector and box must be rated to the environment of the installation. The installation environment must not exceed the Wet Location IP66/67 rating of the luminaire.



For hazardous location installation:

Listed cord connector to an outlet junction box with suitable grounding complying with the NEC / CEC hazardous location requirements of the installation. The cord connector must be rated for use with extra hard usage cable of types SOW, SOOW, STOOW, STOW, SEOW, SEOOW having a diameter between 8.75mm/0.345" & 9.4mm/0.370". The Listed cord connector must be installed in the Listed outlet box, using a min. 1/2 INCH NPT hub complying with the NEC / CEC hazardous location requirements of the installation. The cord connector must be connected to the Listed outlet box having threaded conduit opening matching the same size as the cord connector. The outlet box must be Listed for rated to the environment of the installation. The installation environment must not exceed the Wet Location IP66/67 rating of the luminaire.



## INSTALLATION (CONT.)

.STEP 4:



Black: Negative (-)

White: Positive (+)

Green: Ground

Connect the lead wires from the cord to the field supply wiring inside the outlet box. The field wiring terminations are to be made following acceptable practices as outlined by the NEC / CEC for either the specific ordinary or hazardous locations as dictated by the installation location.

STEP 5:

Energize luminaire.

