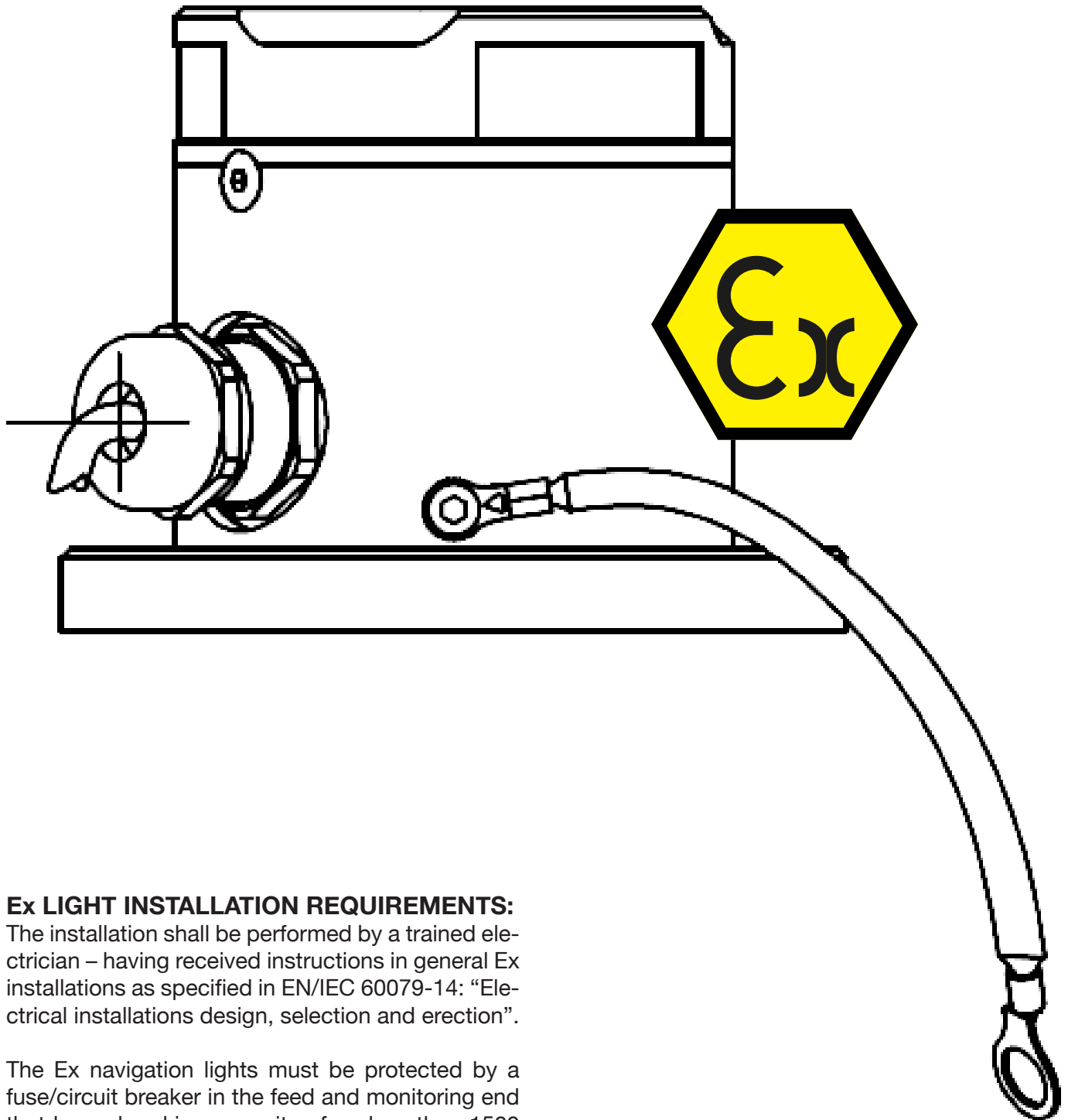


# INSTALLATION GUIDE

P/N 601-326 REV 1.01



## Ex LIGHT INSTALLATION REQUIREMENTS:

The installation shall be performed by a trained electrician – having received instructions in general Ex installations as specified in EN/IEC 60079-14: “Electrical installations design, selection and erection”.

The Ex navigation lights must be protected by a fuse/circuit breaker in the feed and monitoring end that has a breaking capacity of no less than 1500 Ampere.

The Standard Lopolight NLC is protected by circuit breakers type “Schneider Acti9 C-char, 6/10kA”, and thereby suitable for adequate protection of all lights in the Lopolight Ex program.

Special conditions for safe use:
Warning – do not open when energized
Warning – do not separate when energized

## MOUNTING: CHECK & ENSURE PROCESS

1) Check that the Lopolight product is marked for Ex installation.

2) Prepare the installation site by ensuring the fastening holes/conversion plates, bases etc. are ready for the physical mounting.



3) Check that the power-supply cables are disconnected from any power-source at the feed-end. (Typically, Lopolight NLC system mounted in wheelhouse)



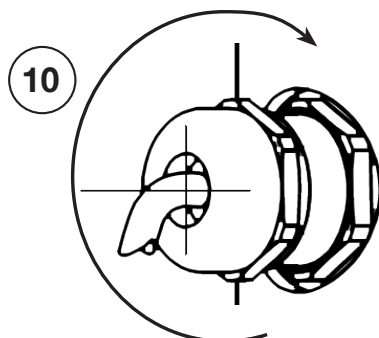
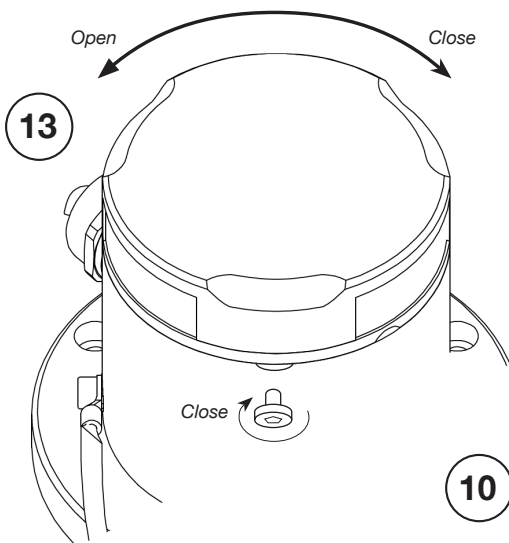
4) Check that the place for the physical installation of the navigation light is classified for Class 1, Zone 1 or Zone 2 Ex equipment.



5) Check that the cable gland(s) are rated with no less than demanded for the zone in question. Lopolight M-20 (P/N: 601-383) & M-25 (P/N: 601-384) are rated for zone 1 installations – if using other cable glands, it is recommended to use “Ex e” certified glands.

6) Ensure that suitable cable is used, and that the diameter suits the chosen cable gland.

7) Ensure that the **external ground** connection is bolted on to the superstructure via a “clean-metal” point. Protect the connection point accordingly to prevent rusting etc. with paint or other accepted coating.



8) Ensure that the **internal ground** connection (between the navigation light and the Lopolight base) is firmly bolted. (DIN-912, M4 stainless bolt used. Torque: ~2.7Nm)

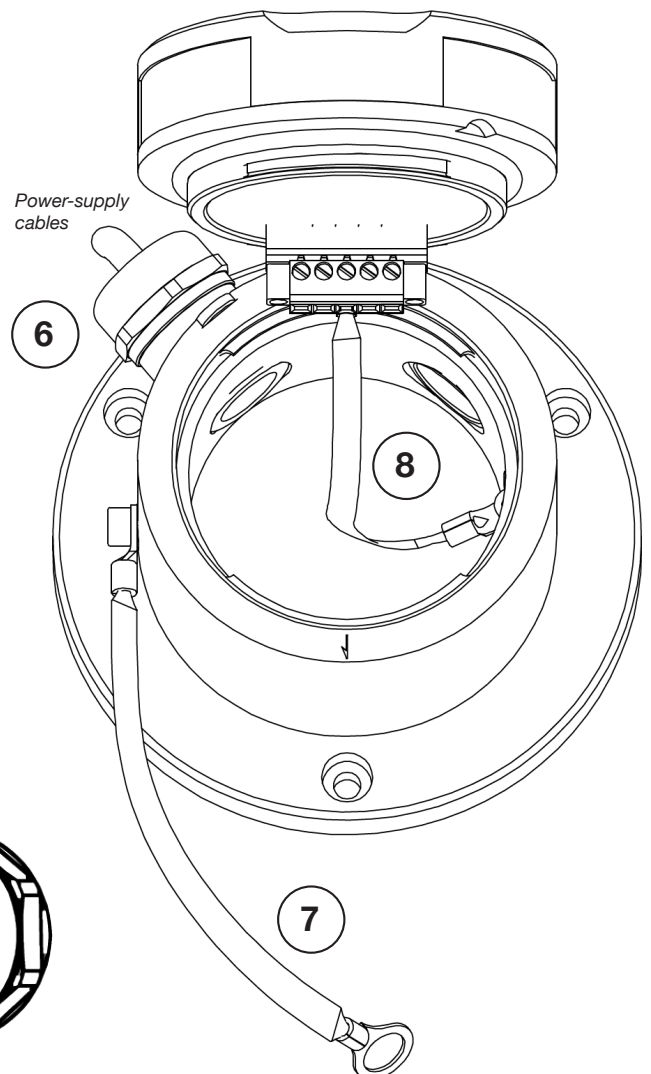
9) Remove the outer sheet to a suitable length (some 120mm) and strip the wires to a length that suits the ferrules (strand protection tube).

10) Mount the cable in the cable gland and tighten this properly.

11) Mount the wires in the green internal cable connector at the indicated positions (pay attention to polarity and primary/secondary channel). Tighten the terminal screws to 2 Nm.

12) Mount the cable-connector in the navigation light connector and ensure that the retaining screws are tightened accordingly.

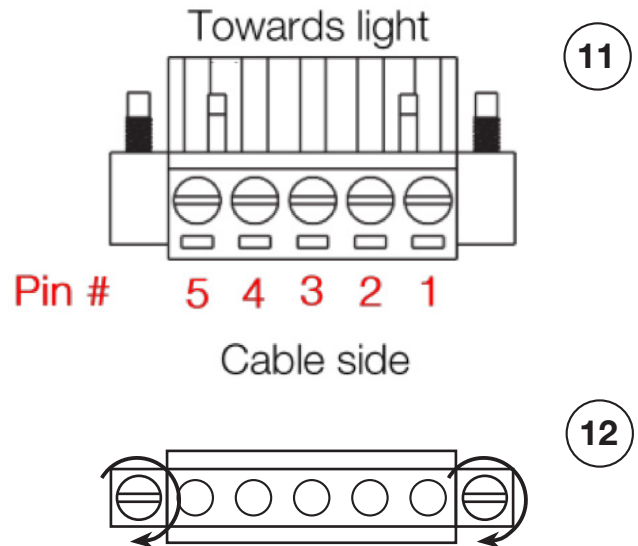
13) Mount the light in the K-lock base and make sure the locking screw is mounted properly.



## CONNECTING POWER:

Supply Voltage: 12- and 24-Volt systems	
<b>Single light:</b>	
Pin 1: Positive (+)	Pin 4: Not used
Pin 2: Negative (-)	Pin 5: Not used
Pin 3: Grounding	-
<b>Double light:</b>	
<b>Primary light:</b>	<b>Secondary light:</b>
Pin 1: Positive (+)	Pin 4: Positive (+)
Pin 2: Negative (-)	Pin 5: Negative (-)
Pin 3: Grounding	Pin 3: Grounding

**Recommended fuse or circuit breaker:**  
Less than 2A (slow).



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## MAINTENANCE:



### Cleaning your product:

- Wipe off your product with a normal detergent, on a damp cloth
- DO NOT** use alcohol or thinner for cleaning your light – this could damage the lens.



### Troubleshooting:

If the light does not function:

- Check that you have a supply Voltage between 10 and 32 Volt DC.
- Check that the polarity is right (you will not damage the Lopolight by accidentally wiring the polarity wrong).



### End of life signaling:

Your Lopolight product has a advanced time function inside that ensures that the light has required intensity over a 50.000-hour projected lifetime. The light will signal to you when it is getting to the end of its useful life. The following signals can be observed:

- **All OK:** 5 seconds after turning on the light it will go dark for 0,1 second and turn on again. This is just a check for you to assure that the microprocessor is working.
- **Less than 2000 working hours left:** The dark period is extended to 2 seconds: you should change the light at your next service within the next 12 months.
- **Light Expired:** The dark period is extended to 5 seconds: You should change the light im mediately. (The light will still be working, even in the expired state)

## WARRANTY:



- This product is covered by our 5-year limited warranty.
- If you need to claim a warranty for your product, please fill in the form at [www.lopolight.com/warranty](http://www.lopolight.com/warranty), under the Warranty tab.
- Quick access by the QR code



## APPROVALS:

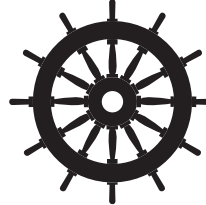


The light in this package is type approved to the following standards:

- EN-14744, UL-1104, COLREG72, IEC 60945

Recognized by the following authorities:

- IMO, MED (EU-wheelmark), USCG



## Ex PRODUCTS MARK:

All Lopolight Ex products have the following marking plate:

LOPOLIGHT  
Humblebaek, Denmark  
CE2804 Ex II 2G  
DAN 22ATEX0205X + IECEx CNEX 23.0011X  
Ex mb eb IIB T5 Gb

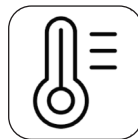
All Lopolight Ex products mark:



[www.lopolight.com/certificates](http://www.lopolight.com/certificates)



**Special conditions for safe use:**  
Warning – do not open when energized  
Warning – do not separate when energized



**Specified Ambient temperature area:**  $T_{amb}$ : -25°C to +55°C



**Ex approvals:**

- EN IEC 60079-0:2018, EN 60079-7:2014, EN 60079-18:2014, ATEX 2014/34/EU