

# DATA BUOY PASS-THROUGH PLATE

## INSTALLATION INSTRUCTIONS

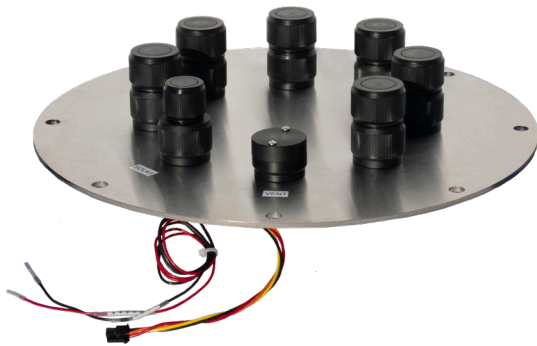


Figure 1: NexSens CB-PTL Data Buoy Pass Through Lid.

### Overview

The NexSens CB-PTL Data Buoy Pass Through Lid is compatible with CB-150 and larger data buoys. It includes a set of cable gland fittings and plugs for custom integrations.

### What's Included

#### Pass-Through Plate

- (6) UW bulkheads with blank retainers
- (1) Vent Port
- (1) 6-pin power bulkhead with molex connector and power/ground wires

#### Pass-Through Plate Kit

- (6) PG-9 flex fittings with UW pass-through retainers
- (1) Packet of Molykote 111 compound O-ring grease
- (5) Spare pass-through port O-rings
- (2) Spare power port O-rings

### Pass-through Port Installation

- 1 Remove one of the UW port bulkheads and blank retainers from the pass-through plate.
  - a. Separate the blank retainer from the threaded UW port bulkhead.
  - b. The blank retainer will not be utilized further.

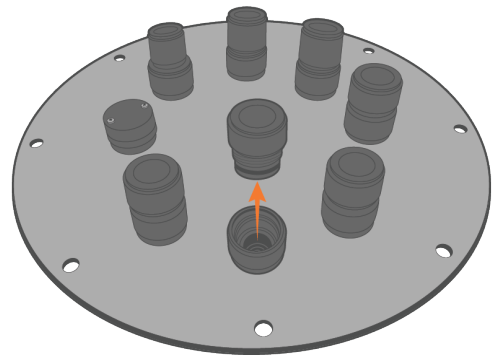


Figure 2: Remove a UW port bulkhead.

- 2 Separate the PG-9 flex fitting from one of the included pass-through retainers.
- 3 Slide the components onto the user-supplied cable in the following order:
  1. UW threaded bulkhead
  2. PG-9 flex fitting
  3. Pass-through retainer

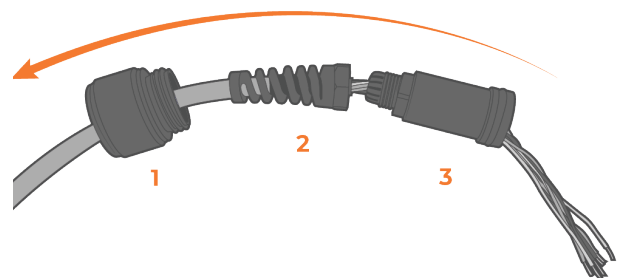
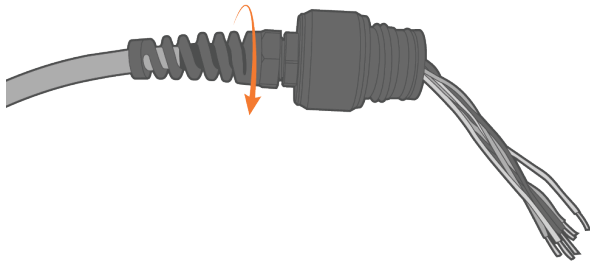


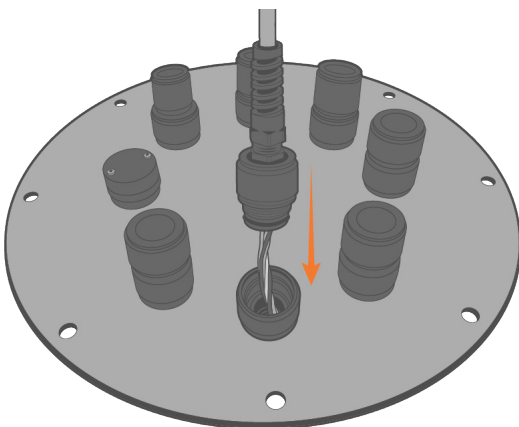
Figure 3: Install the included pass-through plate components.

- 4 Pull the necessary length of wire through the PG-9 flex fitting and pass-through retainer.
  - a. Ensure the cable wires are completely passed the threaded area of the pass-through retainer.
- 5 Hand tighten the PG-9 flex fitting onto the pass-through retainer. Use a crescent wrench to further tighten until the cable is immobile.
  - a. Ensure no part of the cable wires are exposed above the connection between the PG-9 flex fitting and pass-through retainer.



**Figure 4:** Tighten the PG-9 flex fitting.

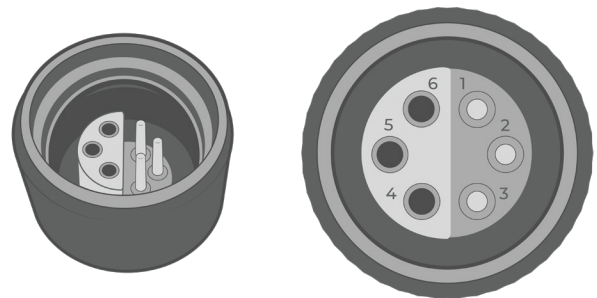
- 6 Route the wires through the open bulkhead port on the pass-through plate.
  - a. Before tightening down the UW bulkhead, ensure O-rings are present on the pass-through retainer and within the bulkhead port.
  - b. For proper maintenance, use the included tube of O-ring grease to grease the O-ring on the pass-through retainer.



**Figure 5:** Install cable(s) through the pass-through plate.

- 7 Repeat this process for all cables that will be inserted through the pass-through plate and into the buoy well.
  - a. For the remaining unused UW bulkhead ports and blank retainers, ensure to grease the O-ring of the blank retainers before deployment to ensure a proper seal.
- 8 Mount the pass-through lid onto the buoy using (8) 3/8-16 x 3/4" hex head cap screws.
  - a. Use a 9/16" wrench or socket to tighten.
  - b. Clean the surface underneath the plate to ensure it will sit flush on the buoy well.

### UW6 Power Bulkhead Wiring Information



**Figure 6:** UW6 receptacle pin numbers.

**Table 1:** UW-6 Bulk wiring information.

UW6 Receptacle Pin	Wire Color
3	Red (Only on molex connector)
4	Black <sup>a</sup> (Both black wires)
5	Yellow <sup>a</sup>
6	Orange <sup>b</sup>

The free red (+++) and black (---) wires are for power and ground connection to an external device.

Note: Information below refers to connection with a NexSens solar tower.

<sup>a</sup>The solar tower plug is connected to both black wires (ground) and the single yellow wire (power).

<sup>b</sup>The orange molex wire and the red flying lead wire are shorted together.