

CB-SERIES DATA BUOY WET-MATE LID

INSTALLATION INSTRUCTIONS



Figure 1: NexSens CB-MCL Data Buoy Wet-Mate Lid.

Overview

The NexSens CB-MCL Wet-Mate Lid is compatible with CB-150 and larger data buoys. It is designed for use with MCBH bulkhead connectors (sold separately).

What's Included

Wet-Mate Lid

- (1) CB-MCL Solar Connector
- (1) Vent Port
- (1) Bushing Connector
- (1) Solar/COM Port Adapter

MCBH Bulkhead Installation (Sold separately)

- 1 Remove the nut and flat washer from an MCBH bulkhead connector.
 - a. Route the wires through an open hole on the wet-mate lid.
 - b. Reinstall the nut and flat washer and tighten to the plate. Ensure the O-ring underneath the connector stays in place.

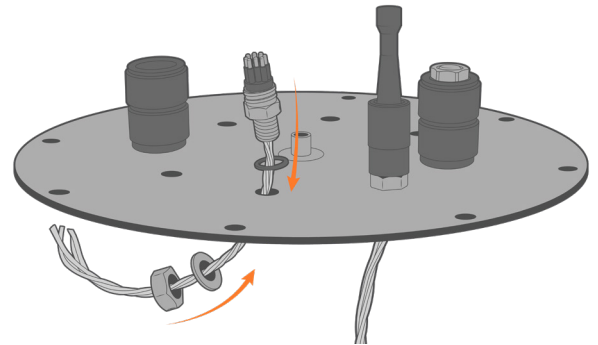


Figure 2: Install an MCBH connector (Step 1).

- 2 Apply an adhesive, such as marine goop, to the nut underneath the plate.
 - a. Ensure the adhesive for all connectors is fully cured before installing the plate on the buoy.
- 3 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 ports, ensure to install a water-tight blank connector before deployment.

Solar Panel Connection

- 1 Remove the 6-pin blank plug from the SOLAR port. Plug the CB-MCL solar connector into the SOLAR port.
 - a. To apply power from the solar tower, connect the solar tower plug to the 6-pin receptacle end of the CB-MCL solar connector.

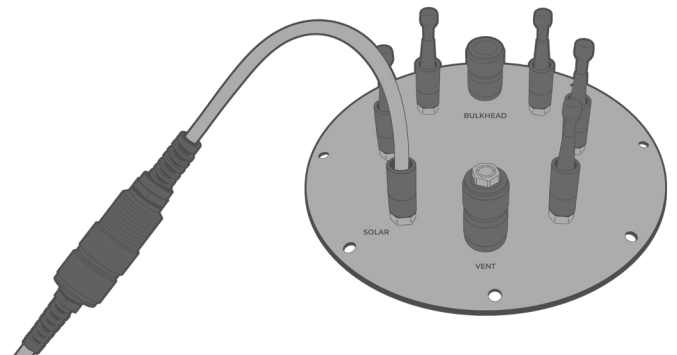


Figure 3: Power connection to solar power pigtail.

CB-MCL Solar Connector Wiring Information

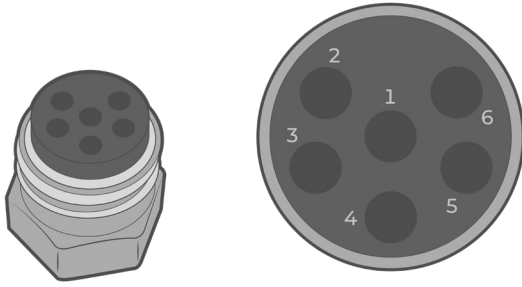


Figure 4: CB-MCL solar connector pin numbers.

Table 1: CB-MCL solar connector wiring information.

CB-MCL Solar Connector Receptacle Pin	Wire Color
1	Orange ^b
2	Yellow
3	Black ^a (Both black wires)
4	Red (Only on molex connector)

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.

^aThe solar tower plug is connected to both black wires (ground) and the single yellow wire (power).

^bThe orange molex wire and the red flying lead wire are shorted together.

MCBH Connection with NexSens MCIL Connectors

When connecting a sensor with a factory-installed NexSens MCIL connector, follow the wiring diagram below for information on the sensor's power, ground, and communication lines.

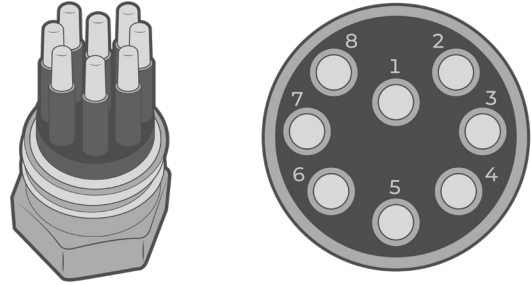


Figure 5: MCBH Male Connector.

Table 2: MCBH male connector wiring information.

Wire Number	NexSens Signal
1	RS-232 Tx
2	Ground
3	RS-232 Rx
4	--
5	Power
6	SDI-12
7	RS-485 B
8	RS-485 A