Instructions for Using Cobalt Series Cables and Connectors

General

1. If your application involves long-term exposure to seawater, be aware of the possibility of galvanic corrosion if the enclosure or device in which the bulkhead connector is installed is made of a different type of metal than the bulkhead connector itself. If the enclosure/device is made of plastic, this will not be an issue.
2. Cobalt cables and bulkhead connectors are rated to 600 meters depth.
3. If your application involves movement or vibration, prevent fatigue and breakage by securing Cobalt cables with cable ties, tape, or other means.
4. The Cobalt cable must be fully plugged into the Cobalt bulkhead connector, with the locking sleeve screwed on completely, to ensure electrical connectivity and to prevent water ingress.
5. Plug the Cobalt cable into the Cobalt bulkhead connector only when completely dry and clean (it cannot be plugged in while underwater).
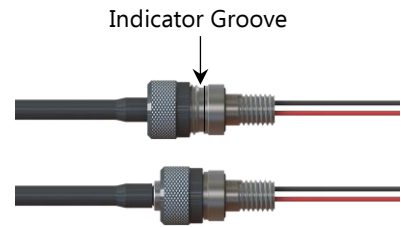
Installing the Cobalt bulkhead connector on your enclosure/device

1. Ensure that your work area and your hands are clean and free of lint, hair, etc., as contamination on the O-rings can cause a leak.
2. The Cobalt bulkhead connector can be mounted to your enclosure/device by inserting it into a 10-mm thru hole and securing it with the included nut on the backside.
3. Alternatively, the bulkhead connector can be threaded into a M10 X 1.5 threaded hole on your enclosure/device. However, the first 6 mm of the hole depth must be drilled out with a 10 mm bit, since the first 4.5 – 5.5 mm of the bulkhead connector's shank is unthreaded.
4. Make sure that the surface of the enclosure surrounding the hole is flat and smooth to ensure proper sealing.
5. It is preferable to lubricate the O-ring on the bulkhead connector with Dow Molykote 111 (or equivalent) prior to installation. Put a small amount of lubricant on your fingers and rub the O-ring between your fingers. Only a thin coating of lubricant is necessary.
6. Place the lubricated O-ring in the circular groove in the flange of the bulkhead connector.
7. Install the bulkhead connector into the hole in your enclosure/device, making sure that the O-ring remains in place in its groove. Tighten with a wrench. Use threadlocker and do not overtighten!

Plugging the Cobalt cable into the Cobalt bulkhead connector

1. Check the plug on the end of the cable for cleanliness, looking for any hair, lint, or other contamination. Clean with alcohol if necessary. Also check the inside of the bulkhead connector for contamination. If possible, blow it out with compressed air.
2. Spray a small amount of silicone spray lubricant into the inside of the bulkhead connector and outside of the plug, including the O-ring. This will help with both insertion and removal of the plug.

3. Insert the plug into the bulkhead connector, lining up the flat on the plug with the flat inside the bulkhead connector.

4. Thread the black plastic locking sleeve onto the bulkhead connector all the way. When fully installed, it should cover the indicator groove (the indicator groove is adjacent to the threads on the bulkhead connector). **It is essential that the locking sleeve be threaded on all the way, both to ensure electrical connectivity and to prevent water ingress.**

Indicator Groove

Removing the Cobalt cable from the Cobalt bulkhead connector

1. Completely unscrew the locking sleeve.
2. Grasp the cable as close as possible to the bulkhead connector and pull it out.