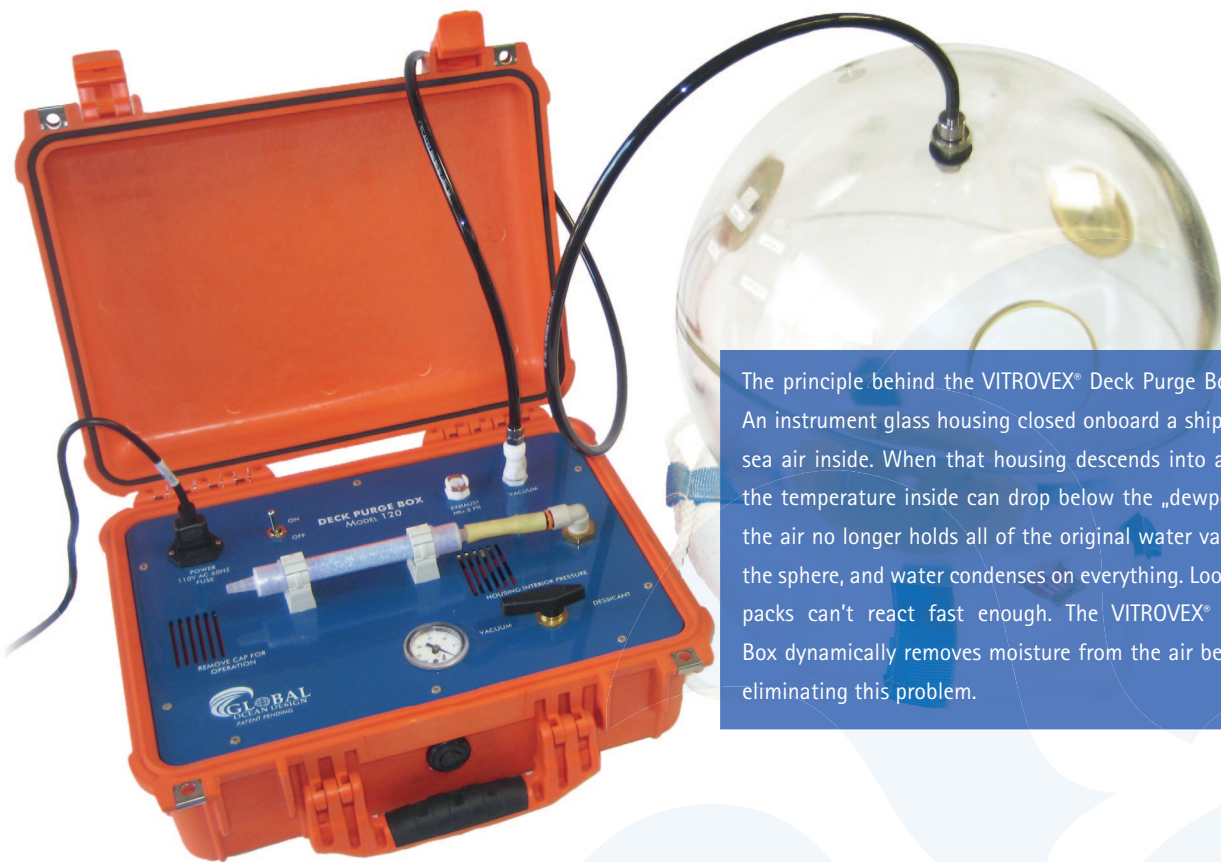




VITROVEX® Deck Purge Box (P/N DPB M120)

The VITROVEX® Deck Purge Box (P/N DPB M120) in combination with a self-sealing vacuum port and pressure cap is an innovative new concept for VITROVEX® deep sea glass housings.



The principle behind the VITROVEX® Deck Purge Box is simple. An instrument glass housing closed onboard a ship traps moist sea air inside. When that housing descends into a colder sea, the temperature inside can drop below the „dewpoint“, where the air no longer holds all of the original water vapor. Fog fills the sphere, and water condenses on everything. Loose desiccant packs can't react fast enough. The VITROVEX® Deck Purge Box dynamically removes moisture from the air before launch, eliminating this problem.

The integrated system of the Deck Purge Box creates a vacuum inside a VITROVEX® deep sea glass housing. That same vacuum is used to draw air back into the sphere, but forced to pass through a drying desiccant cartridge. After a few cycles, the interior air is dry below any dew point possible in the cold ocean depths, making certain all electronics or cameras will not have condensation on them. After the purging process, the operator removes the purge fitting from the self-sealing

vacuum port, and a center check valve automatically seals. The center check valve prevents the interior vacuum from drawing any air-laden debris across the greased o-ring seal surface, eliminating a potential source of seal failure, while the dry interior air created by the Deck Purge Box is isolated from the ambient moist air of the ship. The operator has time to carefully clean, inspect and install the pressure cap on the self-sealing vacuum port.



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■ Advantages and Specifications

- Combines pump, universal power supply with both U.S. and EU plugs, manometer and desiccant in a single watertight, rugged plastic case that is light weight, with no HazMat that can even be checked as baggage on an airline.
- Mates to a VITROVEX® self-sealing vacuum port, allowing the pressure cap to be carefully cleaned, inspected and installed with care and confidence. All exterior parts of the VITROVEX® self-sealing vacuum port are made of Titanium 6Al-4V, and are individually serial numbered and tested to 18,000 psi/1,225 bar.
- A partial vacuum inside the glass sphere housing provides a positive test against any low-pressure leaks by preloading all primary housing seals prior to deployment.
- The DPB is simple to operate and ready to work on arrival as pressurized gas cylinders with potentially non-standard fittings are eliminated in the design.
- An easily replaceable indicating desiccant cartridge provides a visual check of DPB function, and can be recharged at sea in an emergency if spares have run out.
- An accessory battery inverter (P/N DPB BI) permits operation in the most remote locations using only a car or marine battery.
- A VITROVEX® Retrofit self-sealing vacuum port is available for previous VITROVEX® spheres of any size or wall thickness (or for spheres of other manufacturers), making the VITROVEX® Deck Purge Box backwards compatible with most instrument spheres in current service.



■ Model 120 Specifications

- Size: 16" x 13" x 7", 40,6 cm x 33 cm x 17,8 cm (w x d x h)
- Weight: 10 lbs, 4.5 kg
- Power: universal 100-240 VAC, 50-60 Hz, 60 W
- Standard 6 ft (1.8 m) compliant vacuum hose. Longer lengths available.
- Additional replaceable Desiccant Cartridges (P/N DPB DC) available in packs of 4 from Nautilus Marine Service.



VITROVEX® Deck Purge Box



Self-sealing vacuum port

For further information please contact: