

H29, H30 & H99 D.A.S. FILTER SYSTEMS

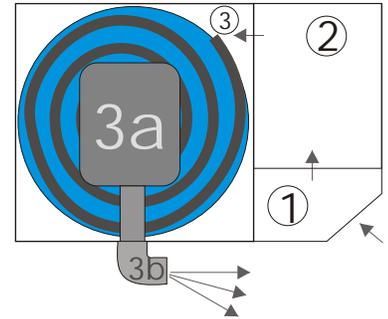
H29

Specifically designed for Freshwater and or Brackish water aquariums. Its 3 chamber design allows for a multitude of options. The H29 is Ideal for live plants.

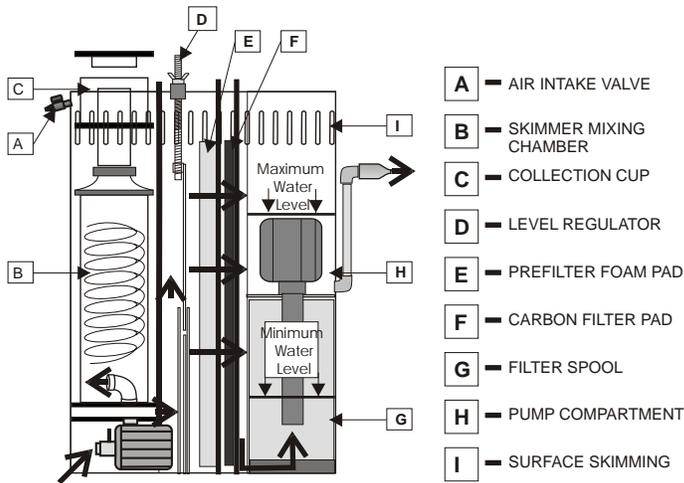
OPERATION

The water is drawn into the **Heater Chamber (1)** through the intake comb which pulls water from all levels of the aquarium to avoid stagnant areas. A heater (not supplied) can be housed here providing optimal water contact for a stable temperature. Then the water enters near the top of the **Media Chamber (2)** traveling downward. In this chamber you can put carbon or other media. Always use a **Carbon Box (2a) (optional)** to hold the media used. Another way to use carbon is a special Carbon Pad that fits in the Heater Chamber and can easily be replaced every 4-6 weeks. The water exits at the bottom of the **Media Chamber (2)** into the **Bio Filter (3)**. This chamber uses a double layer foam spool topped with a circulating **water pump (3a)**. Bacteria grows here to remove the waste. The water is then returned via the water pump and outlet piping. **WARNING: never let the water pump run dry!** It may damage it and void the warranty.

Top View of H29 Internal Filter



Side View of H99 Internal Filter



H99

Designed to operate a marine fish or reef aquarium. The built in Micro Foam Needle Impeller Skimmer is a high performance skimmer which takes the proteins out of the water before they can turn into nitrates to keep your marine tank in optimal condition.

OPERATION

Water enters the filter by a surface overflow [I]. This removes the surface debris. The water then enters the needle impeller protein skimmer through a powerful pump which also pulls in about 100 G/h of air through the air intake valve [A]. The large amount of micro foam air bubbles lift the proteins into the collection cup [C], which is easy to take off and clean when needed. Adjust the level regulator [D] until the water reaches the top of the mixing chamber and the foam comes up in the skimmer neck (You may also need the air valve for regulation). The water will now go through the slide out pre-filter foam [E] which can be rinsed as needed. Then it goes through the slide out carbon pad, which should be replaced about once a month. The water then travels into the bio compartment [H], up through the foam spool [G] and returns to the tank.

H30 Overflow System

This system is designed for large marine fish or reef tanks, but can also be used for fresh water set-ups. The DAS H30 system has a built-in overflow in the aquarium (standard in the left-hand corner but other positioning is possible). It has a wet chamber with pre-filter foam blocks and a 1" drain hole with bulkhead fitting that can be connected to a sump in the cabinet. The dry part contains a return system that can be connected to a pump in the sump to return the water to the aquarium and an extra hole for electrical cords/wires.

F30 Wet-Dry (Optional)

The Filtration is based on the DAS Double Layer Foam spool, a highly efficient biological filter medium which requires minimal maintenance. Simply take the spool out of the filter box once or twice a year and rinse it out under the tap, then put the filter back together and because the bacteria load in the spool is still active, the filter will resume its function instantly.

The Bio-box has a drawer/drip plate to distribute the aquarium water over the Bio Spool to use the full capacity of this large filter. This drawer can also be used to add various filter media like carbon.

The sump (dims. 36" x 16" x 12") has a float valve to connect to a gravity feed water supply to secure minimum water level. The sides have holes drilled with a 3/4" Bulkhead fitting to connect to an extra reservoir **F31 (optional)** or an external pump.

Ample space to place a DAS internal Skimmer (**BX-Series**) (optional) to provide effective skimming for your Marine tank and or other additional systems like a DAS **Calcium Mixer**.

The DAS H30 System can also be ran with a DAS Compact Marine filter.

