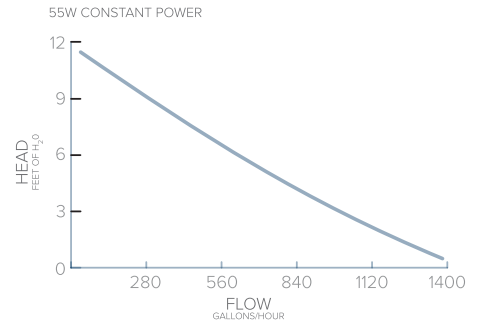
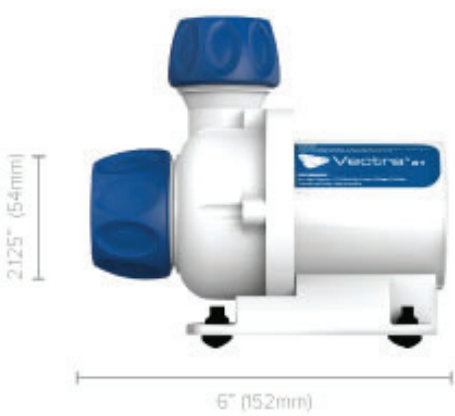


Introducing the
Vectra™
Centrifugal Pump

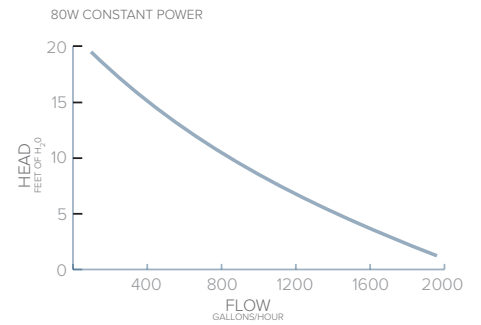


Amazing Performance

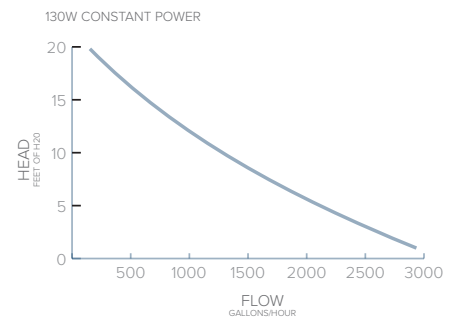
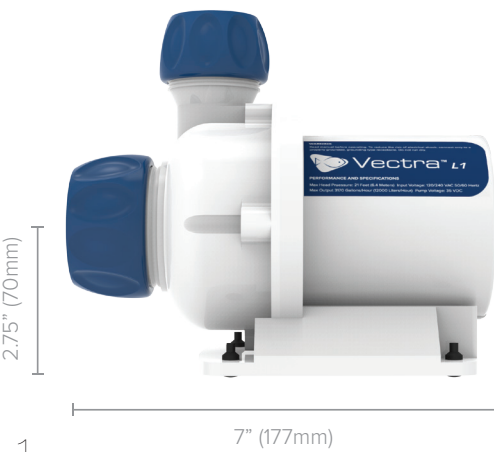
Vectra S1 Flow: 1,400 gph (5300 lph) Pressure: 11.5' (3.5m) Wattage: 55W



Vectra M1 Flow: 2,000 gph (7,500 lph) Pressure: 21.5' (6.5m) Wattage: 80W

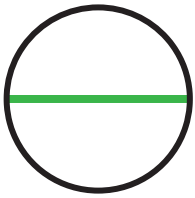


Vectra L1 Flow: 3,100 gph (11,500 lph) Pressure: 21.5' (6.5m) Wattage: 130W



Vectra™ Modes

Return Pump Modes



Constant Speed Mode

Constant Speed mode is the default mode of the Vectra, this makes the pump produce flow at a constant speed that is determined by the position of the dial.



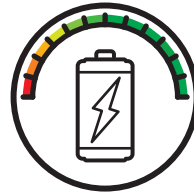
ESL via Mobile Device

All Vectra pumps are compatible with ReefLink. ReefLink provides completely wireless access to the world of EcoSmart Live, the web-based aquarium command center from EcoTech Marine.



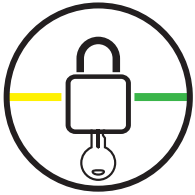
Feed Mode

At the touch of a button the Vectra pump will temporarily pause the current mode and idle allowing food to be added to the tank without being cycled into the overflow and filtration.



Battery Backup Mode

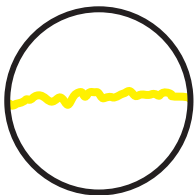
Blizzard. Hurricane. A motorist hits a utility pole. Stuff happens. The power goes out... Vectra pumps are compatible with the EcoTech Battery Backup accessory.



Speed Lock

Speed Lock gives you the ability to lock in a desired speed on the pump by disabling the control dial protecting you from accidental and not so accidental unwanted changes in speed.

Closed Loop Modes



Lagoonal Random

Lagoonal Random Mode simulates a low-energy lagoon environment. The speed of the pump is changed slowly to recreate the gentle currents of a lagoon.



Reef Crest Random

Reef Crest Random Mode simulates a high-energy reef environment. The pump will change speed frequently and drastically to simulate crashing waves and surging tide. This is a favorite of SPS coral.



Gyre

Gyre Mode creates a flow pattern consisting of uniform clockwise and counterclockwise flow levels pulsing at a selected interval between two seconds and two hours.



The Vectra™ Advantage

- **Quiet Operation**

The QuietDrive technology as used in the VorTech line is now available for the heart of your aquarium: the return pump.

- Communicates with QD and EcoSmart compatible devices
- Motor noise minimization technology - nearly silent.
- Operational efficiency



- **Battery Backup**

In an aquarium with no flow, fish and corals begin to die in as little as 4 to 10 hours. The Battery Backup is reef tank insurance in an aluminum housing. By adding the Battery Backup, your tank is isolated from power interruptions, helping protect your valuable investment - and your tank inhabitants.

- **Controllability**

Your Vectra pump is a feature-rich web-enabled device with all of the innovation you have grown to expect from EcoTech Marine. Out of the box you can control your Vectra using the QuietDrive driver. Cycle your settings, choose a mode, and enter a feed mode right through the control knobs and buttons. In addition, the Vectra really shines when connected to the power of EcoSmart Live through the ReefLink. Using ESL, the Vectra can be programmed with daily schedules that give you ultimate flexibility. ESL allows you to synchronize your Vectra with VorTech pumps to take full advantage of nutrient transport mode. The Vectra will allow you to cycle more water to your sump and skimmer exactly when detritus has been stirred up into your water column.

- **Cost Savings**

Traditional AC pumps when used as a return pump for your sump are flow controlled through the use of a choke valve. This method of control is inherently inefficient for two reasons. 1) The AC pump purchased must often be over-powered for your given setup to allow for flexibility. 2) By adding artificial impedance to your flow, electricity is wasted. The Vectra pump will always operate at the optimum efficiency because there is no need to use a flow restricting valve to achieve your desired flow rate.

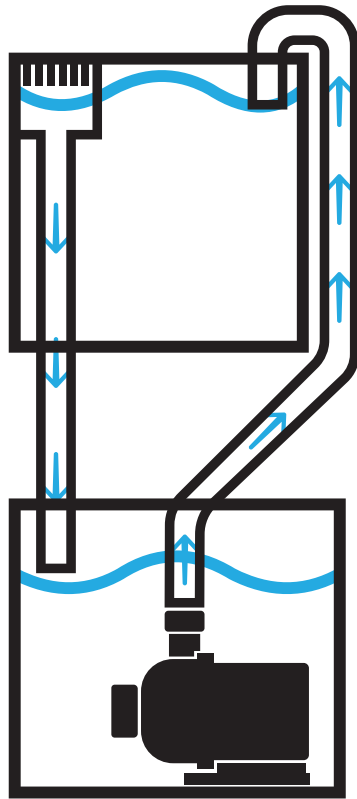
- **Active Feedback**

When used with the ReefLink, your Vectra pump can send you performance and status alerts right to your mobile device or computer. Your return pump is the heart of your aquarium; The faster you hear about an unexpected issue the more successful you will be as an aquarist.



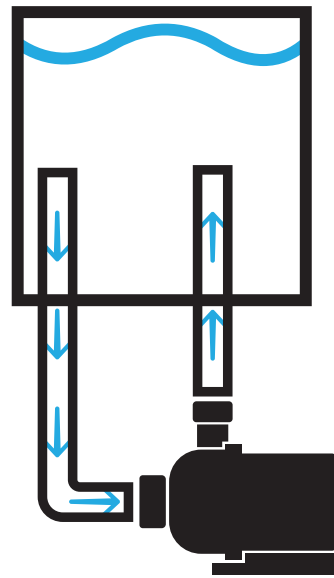
Vectra™ Flexibility

Return or Closed Loop



Return Pump

(Can be used submersed or inline)

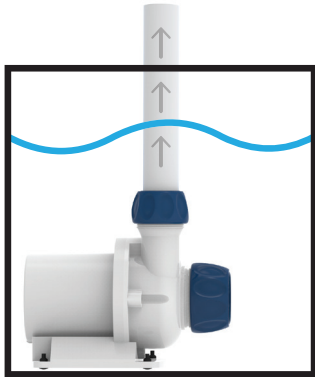


Closed Loop

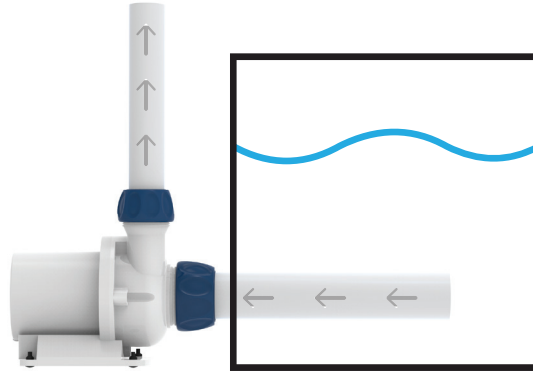
The Vectra pumps feature a sealed motor and magnetic drive for internal and external operation as a return pump or closed loop flow. The Vectra's flexibility will fit the needs of your system.

- Two distinct operational configurations
- Return pump features Calibration and Speed Lock
- Closed loop features Random and Pulsing modes

Inline and Submersed



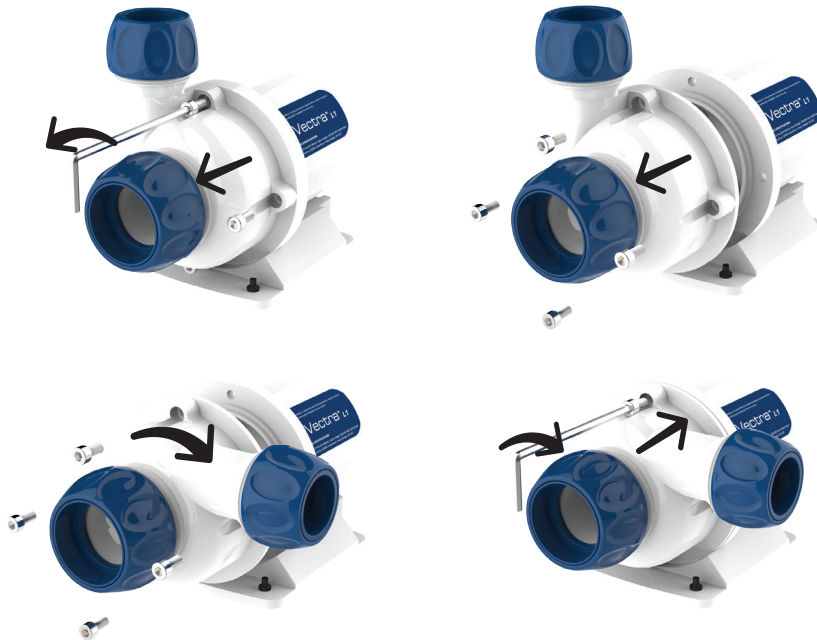
Submersed



Inline

When using as a return pump the Vectra can be run either submersed or inline.

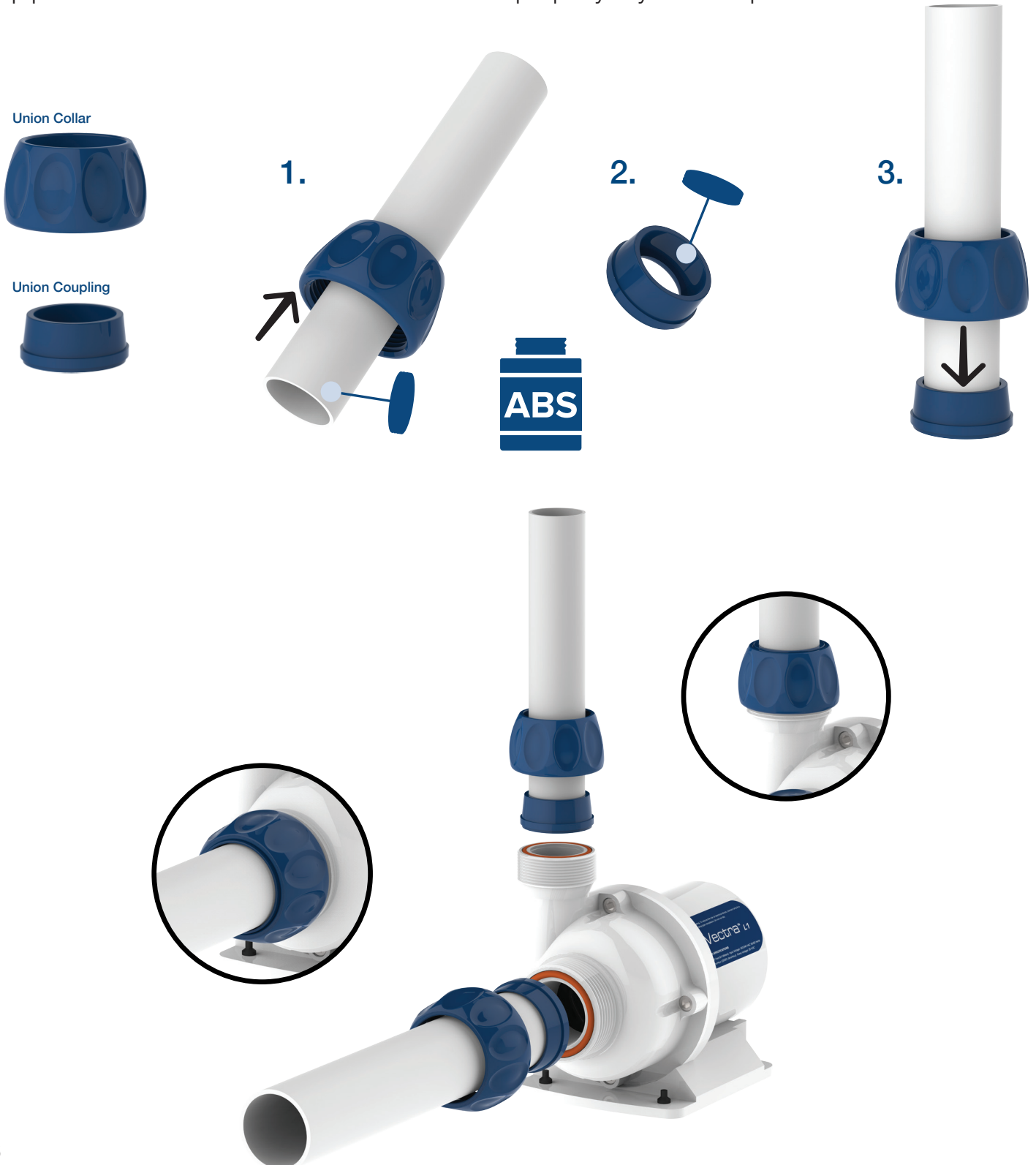
Adjustable Volute



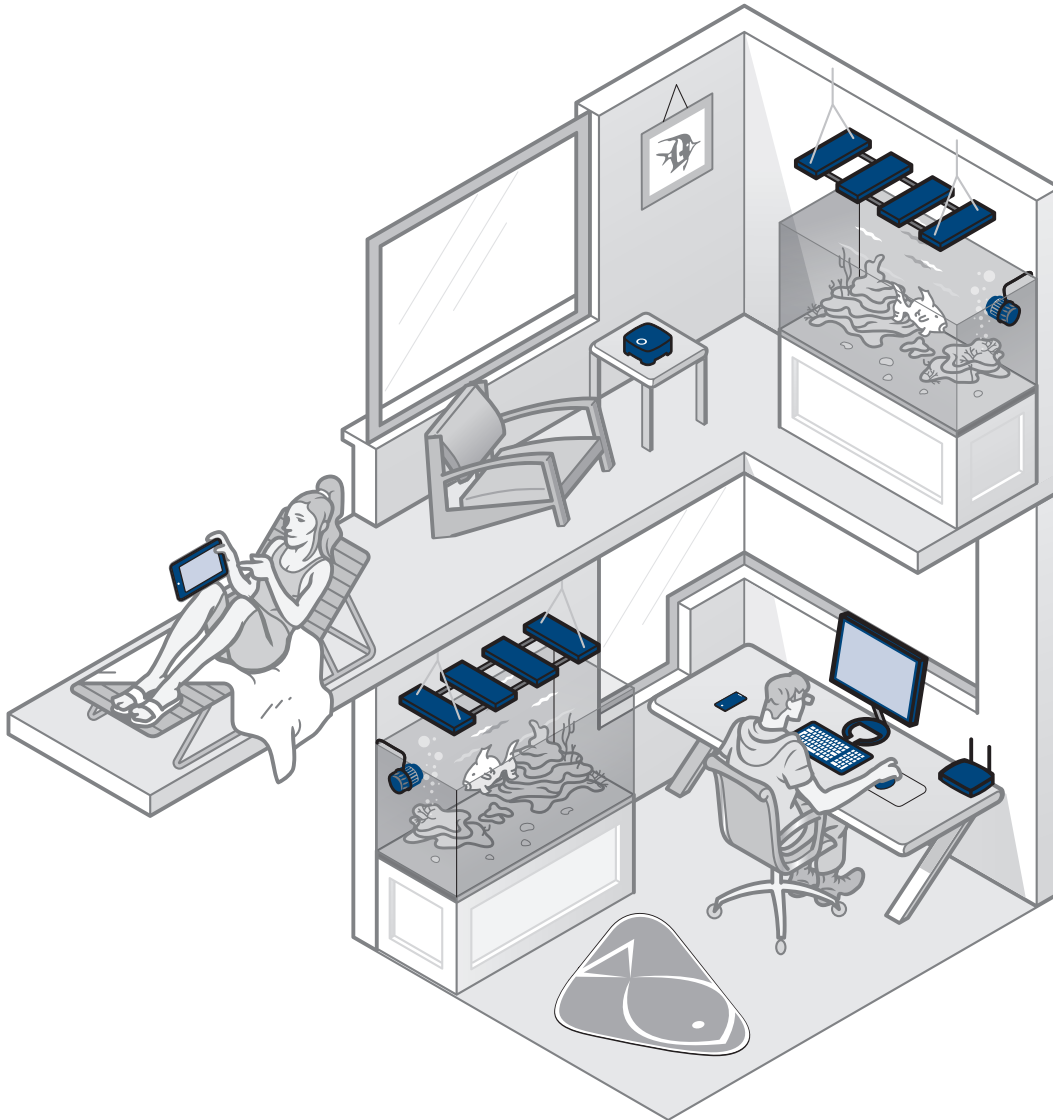
The Volute can be rotated for alternative plumbing configurations.

Using the QuickCouple connector

- Installation of the connector requires the correct size plumbing and ABS cement.
- Slide the Union Collar onto the pipe with the thread side pointing down.
- Apply ABS cement to the inside of the Union Coupling and slide on to the bottom of the pipe. Make sure to allow the ABS cement to properly dry before operation.



Vectra™ with ReefLink and EcoSmart Live



EcoSmart Live is EcoTech Marine's web-based aquarium command center. Control your Vectra pumps, VorTech pumps and Radion LED lighting from anywhere in the world through a web enabled device.
(iOS and Android supported)

Learn more about Vectra & EcoSmart Live at www.ecotechmarine.com

Vectra™ FAQ

Q: Should I use a screen if I run the Vectra in my sump?

A: It is not necessary however it is highly recommended.

Q: Which model do I need?

A: This is contingent on the plumbing and volume of your tank as well as your intended use of the Vectra. This requires a basic knowledge of volume turnover and its relationship to head pressure.

Q: Why is the Vectra not authorized for sale in Canada?

A: EcoTech Marine is in the process of procuring the required certifications necessary for Vectra pumps to be compliant in Canada.

Q: What happens if I do not calibrate the Vectra when using it as a return pump?

A: Without calibration it may be possible to run a Vectra with zero flow, this is of course possible with any traditional flow pump, but with the Vectra it is a worry of the past.

Q: I see a heat sink on the Vectra driver, will it get very hot?

A: No, the driver will get warm to the touch, however the heat sink will maintain a reasonable temperature.

Q: Does the Vectra driver function the same way as a VorTech Driver?

A: Yes and No. The physical buttons and dial are the same, however the functions and button combinations are unique to the Vectra, please review the manual for more specifics.

Q: Will there be more sizes of the Vectra pumps?

A: At this time the Vectra will only be offered in the S1, M1 and L1 configurations.

Q: Why are DC pumps more expensive than AC pumps?

A: DC pumps require a driver but in return they are more efficient, have more control, less operational cost and have more features.

More information about Vectra at www.ecotechmarine.com