



flowrite™

**Guide to Flow-Rite
Livewell Control Systems**

Welcome

Discover the capabilities of Flow-Rite Livewell Systems in this informative guide, providing you with essential insights into its features and advantages for an enhanced fishing experience.



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Livewell Valves Overview

Below is a brief overview of the four Flow-Rite livewell valves. Note that these images illustrate the most basic use of each valve while other components that make for a full livewell system, such as overflows, have been omitted for clarity. Full systems are illustrated in detail in the following pages.

V1 Two-Position Shut Off Valve

The V1 valve is used for remote drain operation. It features two positions, OPEN and CLOSED. The OPEN position will allow water to flow in or out. The CLOSED position will block flow in both directions.



V2 Two-Position Automatic Valve

The V2 valve attaches to a pump and offers two positions, EMPTY and AUTO. The EMPTY position allows water to flow out, but not in. The AUTO position will supply a mixture of fresh and recirculated water. When the boat is on-plane, the valve will automatically switch to recirculated only.



V3 Three-Position Automatic Valve

The V3 valve features three positions, RECIRC, EMPTY and AUTO. It has all the features of the V2 valve plus the RECIRC position which will draw water from the livewell only, shutting off fresh water, even when off-plane. This is useful when outside water is undesirable or when using a pump-out aerator.

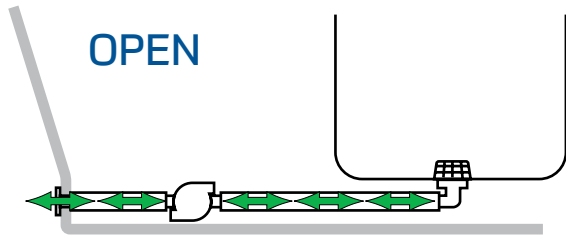


V4 Three-Position Select Valve

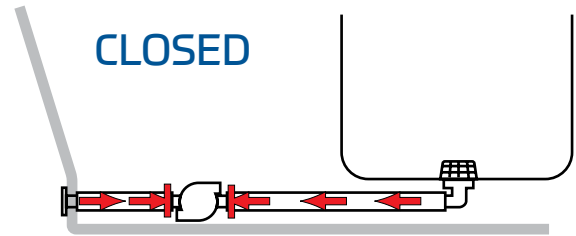
The V4 Valve features three positions, FILL, EMPTY and RECIRC. FILL draws in fresh water only. RECIRC draws in water from the livewell only. This is useful for high profile boats where the livewell is located much higher in the boat, allowing the pump to use it's full force to fill to capacity. The EMPTY position will allow water to flow out, but not in.



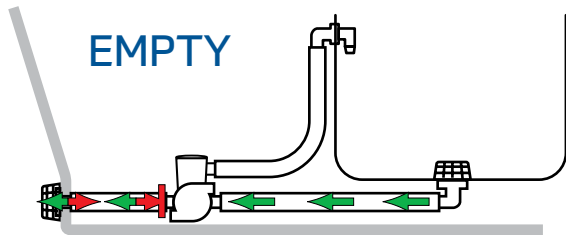
Valve Positions



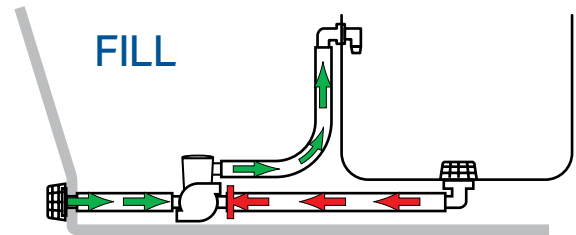
In the OPEN position, the valve is wide open and water will flow freely in either direction.



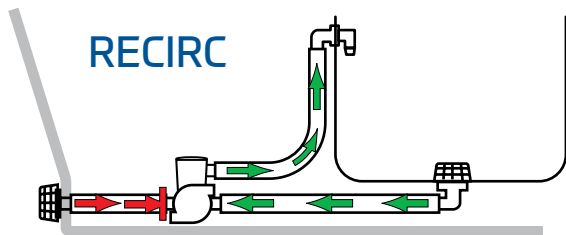
In the CLOSED position, the valve is shut off on both sides and water is not allowed to pass in either direction.



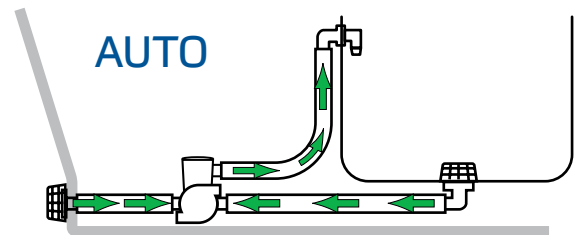
In the EMPTY position of systems 2 & 3, water is allowed to exit the livewell drain, but is not allowed to enter. For system 4, EMPTY allows water to pass in either direction.



In the FILL position, the pump receives outside water only.



In the RECIRC position, the pump receives water from the livewell only. Outside water is blocked.



When on plane, the AUTO position allows water to enter the valve and pump from both outside and from the livewell. When on plane, the outside port is closed to prevent water loss and livewell water continues to enter the valve and pump for recirculation.

System 1

System 1 provides remote drain control and eliminates the need for drain plugs and standpipes. A short 60° cable throw provides more support, strength, and smoothness than long 90° throws used with conventional valves. Features dual seals for positive shut-off in the "CLOSED" position and a straight unrestricted flow path in the "OPEN" position. This valve is non-directional.

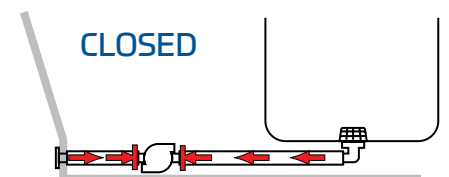
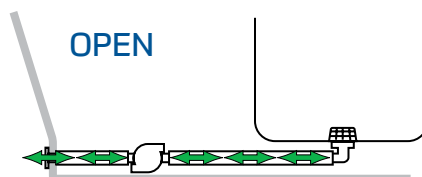
Valve Part Numbers

Qwik-Lok

MV-11-FN01

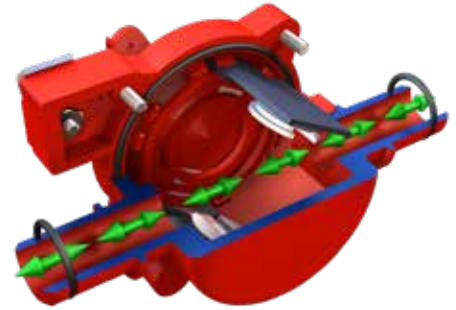
Barbed

MV-01-FN01



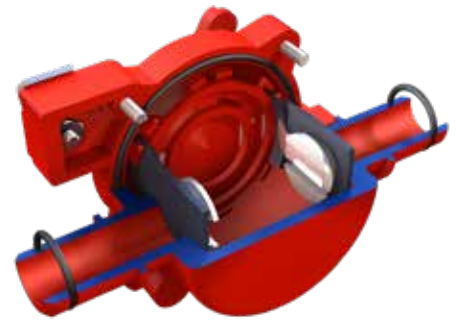


A Look Inside



OPEN

Both ports are wide open for flow in both directions.



CLOSED

Both ports are sealed with spring loaded button flappers.

Cable Approach

Unlike our other valves, the V1 valve is non-directional, meaning it can be used in any orientation. By simply turning the valve over, the cable can approach the valve from either the front/livewell or the rear/transom side of the boat.

System 2

System 2 features our reversible check valve that allows a single pump to not only perform the basic livewell functions necessary to keep your catch alive, but does it in a passive or automatic manner. By mounting the pump to the valve body, the operator only has to decide whether he wants his livewell functioning or empty. When the first fish is caught, place the valve in the "AUTO" position and turn on the pump. When the boat is off plane the pump will recirculate and aerate the livewell water and simultaneously blend in a portion of fresh lake water. Used livewell water is expelled out the overflow as fresh water enters to prevent any ammonia build up.

When the boat is put on plane, the valve's check flapper will prevent water loss out the drain, and allow the pump to continue its recirculation duties. Any water lost out the overflow while running on plane is automatically made up when the boat is brought off plane at the next fishing location. All this is accomplished without any operator assistance.

To empty, simply turn off the pump and move the valve to the "EMPTY" position for gravity draining.



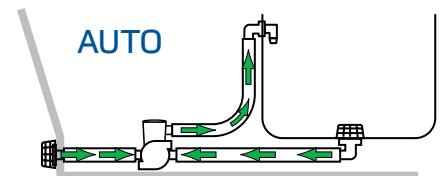
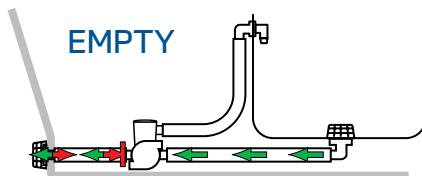
Valve Part Numbers

Qwik-Lok

- Front MV-12-FN01
- Front with PEF MV-12-FP01
- Rear MV-12-RN01
- Rear with PEF MV-12-RN01

Barbed

- Front MV-02-FN01
- Front with PEF MV-02-RP01
- Rear MV-02-FN01
- Rear with PEF MV-02-RP01





A Look Inside



AUTO

Check flapper in front of transom port allows fresh water to enter when off plane, but not exit. Will automatically close when boat is on plane or pump is turned off. Livewell port remains open for recirculation of livewell water.



EMPTY

Check flapper in front of livewell port allows water to exit through transom drain.

Cable Approach



Front Approach



Rear Approach

The V2 valve has two cable approach options. The cable can approach the valve from either the front/livewell or the rear/transom side of the boat.

System 3

Like the V2, the V3 is a reversible check valve that allows a single pump to not only perform the basic livewell functions necessary to keep your catch alive, but does it in a passive or automatic manner. It also has a third closed “RECIRC” position. By mounting the pump to the valve body, the operator only has to decide whether he wants his livewell functioning or empty. When the first fish is caught, place the valve in the “AUTO” position and turn on the pump. When the boat is off plane the pump will recirculate and aerate the livewell water and simultaneously blend in a portion of fresh lake water. Used livewell water is expelled out the overflow as fresh water enters to prevent any ammonia build up.

When the boat is put on plane, the valve’s check flapper will prevent water loss out the drain, and allow the pump to continue its recirculation duties. Any water lost out the overflow while running on plane is automatically made up when the boat is brought off plane at the next fishing location. All this is accomplished without any operator assistance.

For those times when outside water is not wanted or available, such as, adding ice, livewell additives, going through locks, traveling to out of water weigh-ins, dockside refueling or using our optional Pump-out / Venturi Aerator, place the valve in the “RECIRC” position.

To empty, simply turn off the pump and move the valve to the “EMPTY” position for gravity draining.



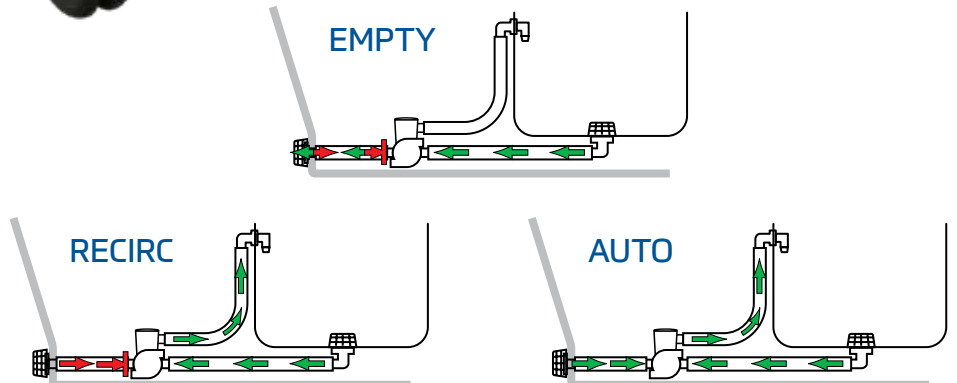
Valve Part Numbers

Qwik-Lok

Front	MV-13-FN01
Front with PEF	MV-13-FP01
Rear	MV-13-RN01
Rear with PEF	MV-13-RN01

Barbed

Front	MV-03-FN01
Front with PEF	MV-03-RP01
Rear	MV-03-FN01
Rear with PEF	MV-03-RP01





Cable Approach



Front Approach
(orange arm)



Rear Approach
(green arm)

The V3 valve has two cable approach options. The cable can approach the valve from either the front/livewell or the rear/transom side of the boat.

A Look Inside



AUTO

Check flapper in front of transom port allows fresh water to enter when off plane, but not exit. Will automatically close when boat is on plane or pump is turned off. Livewell port remains open for recirculation of livewell water.



RECIRC

Transom port is sealed to prevent water from entering or exiting. Livewell port is open for recirculation of livewell water on and off plane.



EMPTY

Check flapper in front of livewell port allows water to exit through transom drain.

System 4

The V4 valve allows a standard aerator pump to be mounted directly to the valve body for both filling and recirculation duties, thus eliminating the need for 2 separate pumps and additional plumbing. When in the "FILL" position, the valve will close the livewell drain side of the valve so the pump has free access to fresh outside water. Once the livewell is full, the valve is placed in the "RECIRC" position to close the drain and allow full recirculation of the livewell water. Occasionally returning to the "FILL" position will keep the livewell topped off and freshened. The "EMPTY" position allows gravity draining with the pump off.

Any additional fill or recirculation pump is optional and only becomes a true back-up to the main system pump. Once the system is put into the "AUTO" position and the pump turned on, all livewell functions are handled so the angler can concentrate on fishing.



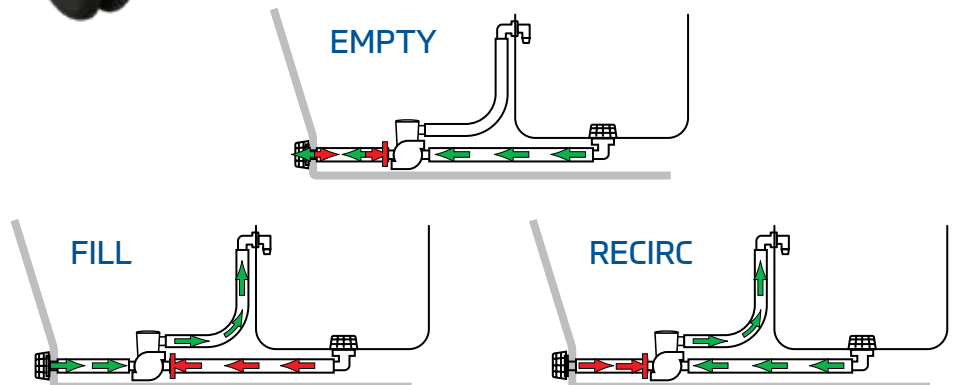
Valve Part Numbers

Qwik-Lok

Front	MV-14-FN01
Rear	MV-14-RN01

Barbed

Front	MV-04-FN01
Rear	MV-04-FN01





Cable Approach



Front Approach
(red arm)



Rear Approach
(black arm)

The V4 valve has two cable approach options. The cable can approach the valve from either the front/livewell or the rear/transom side of the boat.

A Look Inside



FILL

Spring loaded button flapper blocks livewell port while transom port is open for pump to fill with fresh water.



RECIRC

Transom port is sealed to prevent water from entering or exiting. Livewell port is open for recirculation of livewell water on and off plane.



EMPTY

Check flapper in front of livewell port allows water to exit through transom drain.

