

CHARACTERISTICS

Construction in corrosion resistant Nylon and stainless steel. The selector lever can be padlocked (lock is not included) and/or sealed in either positions.

Ports can be rotated so that discharge plumbing can be routed away in parallel, at 90° or in opposite directions, or either up or down without disassembling it.

The valve is supplied with both 1-1/2" (38 mm) ports (fitted) and extra 1" (25 mm) straight inlet port. A shaft extension allows valve to be mounted through a bulkhead up to 1-3/4" thick with only the selector handle being exposed.

Easy access to valve by removing three machine screws.

The specially studied self cleaning design provides trouble-free operation. Moulded-in flow direction indicator.

APPLICATION

BILGE SYSTEM: The Y-valve is ideal to be mounted on marine sewage treatment plants installed onboard, as well as on bilge evacuation systems. For boats having 2 separate bilge areas, the y-valve allows the operator to pump out either bilge sections with one only pump. By simply selecting the appropriate valve selector lever, either of the 2 bilges can be evacuated. When a Y-valve is installed in the holding tank discharge line, it allows the operator to choose if pumping out through a deck fitting or directly through a seacock. When it is installed in the marine toilet discharge line, it allows the operator to choose between storing the toilet discharge effluent in the holding tank or discharging it directly overboard (if legal).

SEWAGE SYSTEMS: It is very important to take note that it is not legal to discharge sewage effluents within the 3 mile coastal limit, while the operator is allowed to discharge human waste which have not been treated provided that sewage is discharged over 3 miles off coast. Check local rules to determine where direct overboard discharge of untreated waste is permitted.

INSTALLATION

Choose the most appropriate location where the Y-valve will be installed in, so as to avoid possible sharp bends, kinks or loops trapping water. After determining a convenient and accessible place for the Y-valve to be mounted, be sure that there is adequate room to swing the selector lever.

Mark location for the mounting screw holes. Be careful to choose a mounting location as flat as possible, to prevent damages to the Y-valve as a consequence of mounting on uneven surfaces.

Connect inlet and outlet hoses to the corresponding ports and fasten them with stainless steel band clamps. It is recommended that all hoses employed in waste system are of the heavy, non collapsible, fabric reinforced type. Vacuum cleaner type hoses or vinyl hoses will collapse under the vacuum of the dockside pumpout system or will allow sewage gas to permeate into the boat.

All hoses should be double clamped with stainless steel band type clamps. Generally, sealing compounds are not required if making this kind of connections.

The extension shaft may be used to mount the valve assembly on one side of bulkhead with the selector handle on the opposite side. If desired, the 1" (25mm) barbed port (included with the valve) can be installed in the inlet port to simplify plumbing when the valve is used with macerating type toilets having 1" (25 mm) discharge ports. To accomplish this, simply remove the three screws that secure the top cover to the valve body and remove the cover with diverter and handle as an assembly. Remove the 1-1/2" (38 mm) inlet port from its socket in the valve body and insert the 1" (25 mm) port fitting in its place. Refit the top cover and diverter assembly with the diverter positioned near the discharge ports, and secure it in place with the three screws.

The valve may also be mounted in a through bulkhead configuration with just the selector handle being exposed on the operational side of the bulkhead. Remove the handle retention screw and handle from the diverter shaft. Place the valve in the desired mounting location and mark the position of the diverter shaft. Bore a 1-5/8" (40 mm) hole through the bulkhead at the position marked for the diverter shaft. Push the handle extension into the diverter shaft.

Reposition the valve assembly in its mounting location with the shaft extension centred in the 1-5/8" (40 mm) hole and mark the location of the three mounting holes in the valve top cover plate on the bulkhead. Drill holes for the mounting fasteners at each of the three marked locations and attach the valve through its top plate to the bulk-head. Fit the handle to the handle extension and secure the handle and handle extension to the diverter shaft with the long screw provided in the handle extension. Rotate each port to the desired position and attach each hose securing them with two stainless steel band clamps on each port.

MAINTANANCE

The Y-valve has been fitted with a self-cleaning device for the reason that the diverter moves from one position to the other. That is why it is advisable to operate the valve periodically (about once a month) to avoid that scraps accumulate on the sealing surface. Besides this periodical operation, no other service is required, except for the case when the valve does not work properly. Should the valve present eventual leaks or show leakage signs, it should be repaired by means of a service kit including all the necessary Y-valve and O-ring parts and also a rubber sealing for the diverter.

Flush and drain the plumbing system where the Y-valve is installed. If it is connected to a through-hull overboard discharge and seacock, close the seacock discharge. Remove the three screws keeping the valve cover on the body. Lift and then remove upper cover, handle and diverter assembly. Unscrew the handle fixing screw and remove the handle from the diverter. Pull the diverter from the upper cover. Pull each port connection from the body port pockets.

Remove O-ring seals from all port connections. Remove the upper cover O-ring seal from its ring on the cover. Remove O-ring seal from the diverter shaft. Remove both screws securing the diverter seal retaining plate to the diverter. Remove the seal retaining plate and the diverter seal. Clean the parts, particularly the O-rings grooves and the diverter shaft O-ring bore in the upper cover. Clean the diverter shaft where it comes into contact with the O-ring seal and the diverter pivot pin at the bottom of the valve body, and the pivot pin casing in the diverter. During the cleaning phase, take care not to scratch the surfaces of the seals.

Put the new rubber seal in position in the frame of the diverter frontal size. Place the diverter seal retaining plate in the middle of the diverter seal, securing it with the two fitted retaining screws. Fit the new upper cover O-ring on its locator ring on the upper cover and the O-rings on each port. Place the diverter shaft O-ring in its bore in the upper cover. Lubricate each O-ring, the diverter shaft and the pivot pin. Slide each port with installed O-ring into its socket in the valve body. Slide the diverter shaft into the upper cover central hole through the O-ring seal, the diverter being positioned on the opposite side of the raised and molded-in handle stop on the lower side of the upper cover.