



The Lane Reverse Q Pond Outlet Product Note

The Lane RQ Pond Outlet provides the Design Engineer with the ability to draw the discharge from the best quality of water in the settling pond – the upper zone. In addition, by use of the unique lever arm outlet, the discharge quantity is directly proportional to the inverse of the depth of the pond instead of being proportional to the depth. This allows the designer to delay the larger flows from the pond until the majority of the others sources feeding downstream waterways have subsided. In short, the RQ improves downstream water quality by dealing with both the quantity and the quality of the pond discharge.



General Notes

- The RQ Pond Outlet is available in 7 different sizes. The sizes are representative of the diameter of the PVC discharge pipe. In order to minimize the potential for clogging, the PVC discharge line should never be smaller than the orifice.
- The RC Pond Outlet is designed to be used with either a straight pipe through the berm of the pond, or attached to a riser structure. In either case, the RC is supplied with the necessary flexible coupling that will allow for the connection to a smoothwall pipe outlet. The flexible couplings that are supplied are as follows for each of the various RQ sizes: 1.5" = 1.5", 2" = 2", 2.5" = 3", 4" = 4", 5" = 5", 6" = 6", 8" = 8"
- If an outlet other than the sizes listed above is used, field adaption will be necessary. This can normally be done with flexible adapters or PVC adapters.
- The RC Pond Outlet is designed to operate with the Outlet Lever Arm ranging from level (pond empty) to a 45degree angle, (pond full). The appropriate length of Schedule 40 PVC pipe should be used to accomplish the necessary outlet length.
- The Outlet Lever Arm is constructed from Schedule 40 PVC pipe and fittings.
- Long lengths of PVC pipe in the Lever Arm assembly can result in additional buoyancy. The RQ Pond Outlet is designed to function with the minimum and maximum depths as designed. If additional buoyancy is an issue, extra weight can be added, or, new pivot holes can be drilled into the sides of the float body to correctly position the Lever Arm.
- A flexible hose near the bottom of the lever arm allows the RC float body to rise and fall with the level of the water in the pond.
- The Lever Arm Assembly includes all of the fittings that are shown in the above drawing. A complete list of Lever Arm parts is available for each size of RQ Pond Outlet.
- Each RQ Pond Outlet is supplied with three ¼" HDPE orifice plates. A plug cutter (included) is to be used to size the orifice as indicated by the RQ sizing program. The extra orifice plates can be used if the RQ Outlet is moved to a different location.

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