General instructions:
This filter is designed and manufactured to meet the highest standards of quality and workmanship. The hydrocyclone/sand separator is a simple unit, which is easy to maintain and operate. It has no moving parts or filter elements. The hydrocyclone separates sand and other solids from the water at a very small pressure loss, with an effectiveness of 90% or higher, without the pressure loss increasing or the separated material being able to accumulate.

Installation:
Install the hydrocyclone in a vertical position with the collection chamber at the bottom of the hydrocyclone.
Pay attention to the correct flow direction: the inlet horizontal and the outlet vertical.
Check whether the present flow velocity through the hydrocyclone is within the recommended values. An incorrect flow velocity will reduce the effect.
When installing more than one hydrocyclone, allow enough room between the units for easy maintenance.

Operation:
Normal operating conditions are achieved when the differential pressure across the hydrocyclone is within the recommended values of 0.2-0.5 bar.
A differential pressure below 0.2 bar will reduce the separator’s effectiveness.
A differential pressure above 0.5 bar may result in increased erosion.
The general rule is that: separation improves when the diameter of the hydrocyclone decreases and the differential pressure increases.
The maximum working pressure is 8 bar.
The filter is designed to withstand a maximum pressure of 10 bar.
A pressure relief valve must be installed upstream of the filter if the pressure is not sufficiently under control.

Do not open the filter cover and do not tighten it while the filter is being used or under pressure!

Draining the collection chamber:
Empty the collection chamber when it is 1/3 full, so it does not become full of sediment. Close the drain valve once the dirt has been removed.
In the case of high concentrations of dirt, an electric valve and timer can be used for the draining process.

Periodic cleaning:
Stop the flow to the cyclone filter.
Open the drain valve at the bottom of the collection chamber to release pressure and discharge dirt.
Remove the cover (3).
Remove all the sediment accumulated in the collection chamber.
Thoroughly clean the inside of the empty collection chamber.
Place the cover back on the collection chamber and ensure that the cover rubber (4) fits snugly.
Place the handle and the tightening bracket (1) and tighten them firmly, or place the bolts and tighten them.
Maintenance:
Apply a film of grease on the thread of the spindle each year.
Any damage to the protective coating of the filter must be repaired immediately. Before applying the protective paint, the damaged spot must be cleaned thoroughly using a steel wire brush.

Note:
The size of the hydrocyclone/sand separator should fit the current flow velocity in the pipe. A smaller or larger separator does not have the required circulation rate, which will affect the filtrate quality.

The drain valve is an option and not part of the hydrocyclone.

In view of on-going improvements, we reserve the right to change specifications at any time without prior notice.
Each filter comes with this manual which includes the installation, operating, and maintenance instructions.