



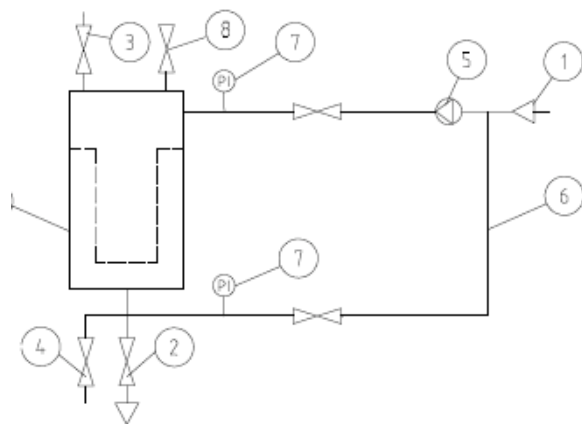
User Manual for Universal HCF Vessel

This User manual applicable for Universal HCF Cartridge Vessel

Installation Diagram

Here is a diagram of a typical filter installation

1. Inlet
2. Outlet
3. Vent
4. Drain
5. Pump
6. Circulation line
7. Pressure gauge
8. Safety device against excess pressure
9. Filter housing



Start up

We suggest that you clean up the housing before use.

Cleaning of particles inside the housing

Filter housings are usually blasted with glass beads and cleaned afterwards. It is unavoidable that some beads may remain in the housing. It is suggested to clean the filter housing before use.

Operation

A. Cover lid - opening

To open the housing first loosen the eye nuts on the top. The swing eye bolt can be loosened using a small bar and allow it to be swung clear of the cover.

The cover of the housing may now be hinged back against the end-stop.

Our HCF-SB version cartridge vessels are equipped with a spring-balancer mechanism, which make



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cover opening and closing an easy task to manage compared with traditional davit lid closure type.

The applicable maximum torque values for the bolts must not be exceeded. When using standard equipment and normal physical strength these torque values will not be exceeded.

When using extensions on spanners, wrenches or an air gun make sure that the bolts are not over tightened.

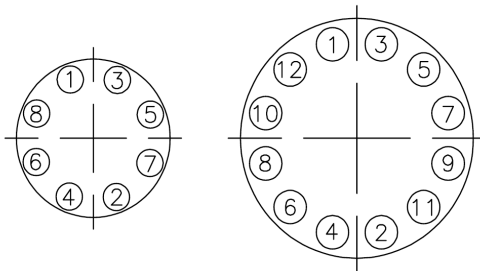
The recommended maximum bolt torque values are listed below:

Application of high force to the bolts to close a leaking pressure equipment (to overcome a damaged gasket) must be avoided. Over-tightening may damage bolts or the housing cover lid.

To avoid stress in the cover tighten the bolts in accordance with the following numbers sequence:

When using maximum allowable torque the bolts are to be tightened in three steps.

1. Step: 50 % of torque
2. Step: 80 % of torque
3. Step: max torque



M16	M20	M24	M30	M36
Nm	Nm	Nm	Nm	Nm
95	184	315	635	1110

B. Filter Cartridge installation

Remove the filter cartridge plastic cover and insert each cartridge into the pore and rest on the bottom set cup, seal the cartridge with the compression spring set, after all cartridges are properly installed, you may put up the plate and tighten with nut to ensure all filter cartridges are sealed properly without any by pass.

C. Cover lid - closing

Before closing the cover ensure that the sealing surfaces along with the gasket are clean and damage free. Check that the gasket is sitting in its correct position. Replace gasket if faulty.



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Start of Filtration

The filter is now ready for use. Slowly open the valve on the inlet. (Avoid opening too fast as shock loads can damage the filter media and the housing.) The vent valve should be open to ensure no air is locked in the top of the filter housing. The valve should be closed as soon liquid runs out. In all cases (whether or not hazardous liquids are being filtered) precautions should be taken to prevent injury from spraying liquid.

If the filter is not vented any air in the filter will reduce the efficiency of the filter media. Generally if air gets into the system it should be vented off immediately. When filtering gaseous fluids the filter should be vented at regular periods.

The outlet valve is now to be opened slowly.

Due to the fact that filter cartridges may release some particles when first used, we recommend recirculation of the filtrate. The length of time for re-circulation will depend on the individual filter cartridge and level of filtration. This will ensure particles from newly installed filter cartridges will be collected and safely removed from filtrate.

The max differential pressure for filter cartridge is 2 Bars, we recommended that you install pressure gauges before and after the filter housing to monitor the differential pressure and change the filter cartridge at condition of differential pressure not exceeding 2 Bars.