

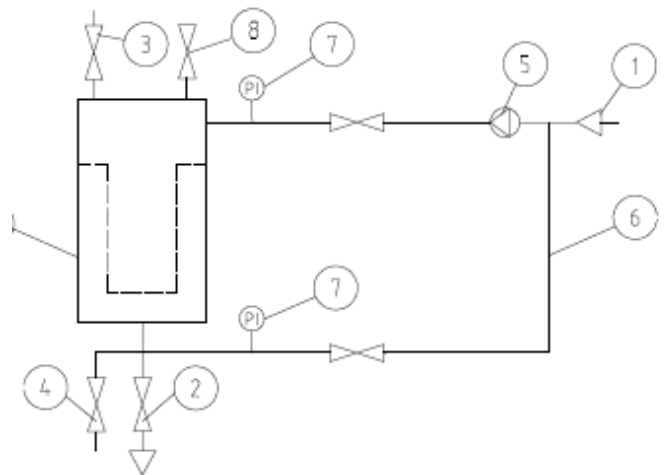


This User manual applicable for Universal Duplex Strainer

Installation Diagram

Here is a diagram of a typical filter/Strainer 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/Strainer housing



Start up

We suggest that you clean up the housing before use.

Cleaning of particles inside the housing

Filter/Strainer 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 loosened using a small bar and allow it to be swung clear of the cover.

The cover of the housing may now be lifted up by turning of the wheel on top of the cover connecting with davit arm.



B. Strainer Basket installation

The Strainer basket has installed in each strainer, the basket can be easily removed for cleaning by lifting the handle.

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.

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 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

D. Start of Filtration

The filter/Strainer 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 / Strainer. 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/Strainer 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.

The max differential pressure for filter strainer is 2 Bars, we recommended that you install pressure gauges before and after the filter housing/strainer to monitor the differential pressure for conducting the switching over to next strainer allow for cleaning.



E. Cleaning of Strainer basket

You may flash with water to remove the dirt from the basket, but to avoid high pressure that will damage the structure of the metal screen.

Always inspect the metal screen inside the basket to make sure that there is no damage or any tear before you install to the strainer, we strongly recommend that you have the spare basket to replace once the existing basket is damaged after certain period of operation.

F. Performing switching operation of duplex strainer Switch over Operation

Please follow the following procedure when you want to switch the strainer operation to do cleaning on the dirty strainer basket.

1. **When Strainer A in operation** - Valve 1 & 2 should be full opening position , 3 & 4 in full closing position.
2. To do switching when strainer A differential pressure reach 2 Bar, Open Valve 4, follow by Valve 3.
3. Now you can close Valve 1. then Valve 2.
4. Strainer B is in operation now.
5. Drain off the water in strainer A.
6. Strainer A is now ready for cleaning.

