

## **Replacement Instructions for the Koch 8" Flanged UF Element PV400-7637AF-5F0D or PV400-7637AF-5F1D**

1. Remove and discard the old Koch UF element, including the boot seals.
2. Remove the new Solecta UF element from its packaging.
3. Remove the flange gaskets, o-rings and brine seals from the element installation kit included with the element.
4. Install one (1) brine seal on the element if the paint flow and cleaning flow are both from the bottom to the top of the element housing. The brine seal lip should be facing down the length of the element.
5. Lubricate the brine seal with the USP grade glycerin and the bottom side of the inside diameter of the housing. Gently insert the element into the bottom of the housing taking care not to displace the element brine seal.

Gently push the element into the housing to the point where the element is just inside the housing. Take the bottom ATD and gently push the element into the housing until it is even with the bottom of the housing.

6. Place one of the full face flange gaskets on the bottom flange end cap and secure it on the housing. Make sure to evenly tighten the flange bolts and nuts being careful not to over tighten them and crack or break the flange or the end cap.
7. Insert the upper ATD on top of the element. Position the new Solecta 8" flange gasket on top of the housing flange. Replace the top cap permeate o-rings with the new o-rings provided in the element installation kit. Lubricate the o-rings with glycerin and then reinstall the top cap. Take care to ensure the top cap fits smoothly over the element permeate tube. Do not force it.

Install the flange bolts and nuts and evenly tighten them. Take care not to over tighten them and crack or break the flange or end cap. (for PVC Housing)

8. Install the element housing back onto the UF System. Flush the new element or elements with clean RO or DI water for five minutes. Flush the elements using an inlet pressure of ~ 3,0 bar and an outlet pressure of ~1,0bar. Flush the system with the clean RO or DI water if the new individual elements cannot be flushed separately. Stop flushing the elements after five minutes and allow the system to drain.
9. When putting the system back on paint, slowly bring the system on line, gradually bringing the inlet pressure up to 3,3 bar. Crack open the paint outlet valve and then crack open the paint inlet valve to slowly fill the element housing. Watch the permeate flow meter. When you no longer can see air in the UF permeate slowly open the paint inlet and outlet valves until both are open 100%. The pressure drop should be maintained at 2,0-2-4 bar. Typical operating pressures are 4,0 psi inlet pressure and 2,0 bar outlet pressure.

10. When cleaning, the cleaning pressure profile should be the same like in Production.
11. It is recommended to always remove the housing from UF System when replacing an element that only uses one brine seal. You may choose to replace the element with the element housing on the frame, however you risk “flipping” the brine seal when installing the element resulting in excessive bypass of paint around the element. This will contribute to a short element life.

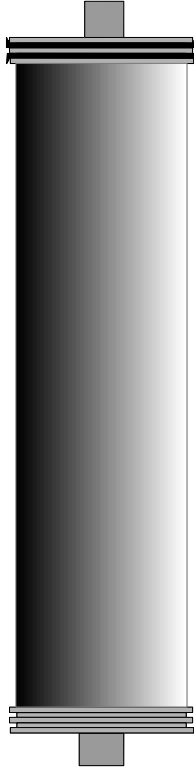
If the UF System uses reverse flow cleaning follow the instructions below.

1. Remove and discard the old Koch UF element, including the boot seals. Reinstall the bottom cap with the new 8" flange gasket (paint inlet side) and insert the existing lower ATD. Keep the housing lying on its side.
2. Remove the new Solecta UF element from its packaging.
3. Install two (2) brine seals on the top ATD. The top brine seal lip should face the top of the element. The second brine seal installed on the top ATD will have the brine seal facing down the length of the element. Lubricate the outer edges of the brine seal(s) with glycerin with your fingers, to make the installation of the element easier. Lubricate the top inside diameter of the housing as well. A package of USP grade glycerin is included with the element.
4. Insert the element into the top of the housing to the point where the seals are just ready to be inserted. The lower of the two seals, facing down, will have to be pressed inward, all the way around the housing to allow the element to "drop" into the housing. Once the lower seal is in the housing, continue to insert the element. Repeat the seal compression with the top seal to allow the element to continue to "drop" into the housing.
5. Insert the upper ATD on top of the element. Position the new Solecta 8" flange gasket on top of the housing flange. Check the top cap permeate o-rings. Replace them if necessary. Lubricate the o-rings with glycerin and then reinstall the top cap. Take care to ensure the top cap fits smoothly over the element permeate tube. Do not force it.
6. The UF system should be flushed with DI (RO) water before being it put back on paint. The pressure profile should be 25 PSI in and 0 PSI out. Flush the system for 5 minutes. After flushing the system for 5 minutes, stop circulating the water. Drain the system.
7. When putting the system back on paint, slowly bring the system on line, gradually bringing the inlet pressure up to 50-55 PSI. The pressure drop should be maintained at 25 PSI to 30 PSI. Typical operating pressures are 50-55 PSI inlet pressure and 20-25 PSI outlet pressure.
8. When cleaning, the cleaning pressure profile should be 25-30 psi inlet pressure with a 0-5 psi outlet pressure.

9. It is recommended to always remove the housing from UF System when replacing an element that only uses one brine seal. You may choose to replace the element with the element housing on the frame, however you risk “flipping” the brine seal when installing the element resulting in excessive bypass of paint around the element. This will contribute to a short element life.

Element is shown with 2 brine seals. Both brine seals are used only when reverse flow cleaning is done.

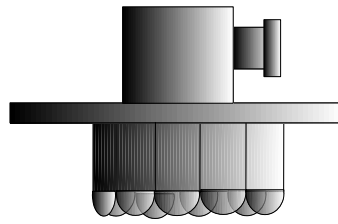
Permeate outlet (top) end of element



Plugged end of element

**PVDF400-7637-31F**  
**Koch S-8 Replacement**

Permeate Port



Paint Port

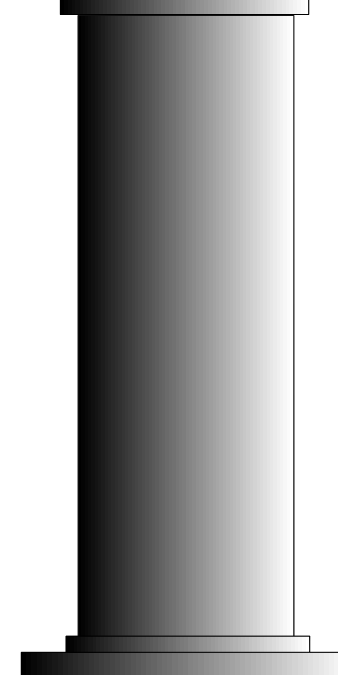
Top Cap

Top Anti-telescoping Device

Top Gasket



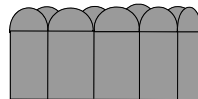
Housing



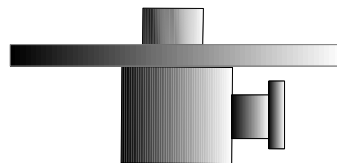
Bottom Gasket



Bottom Anti-telescoping Device



Bottom Cap



Paint Port