

## Frequently Asked Questions

---

### Pall Laboratory Manifold

**1. Where can I find the assembly instructions for my Pall Laboratory Manifold?**

A. All Pall Laboratory Manifold information can be found on the Pall website.

**2. Where can I find the serial number on the manifold?**

A. The serial number is located on the bottom of the main tube.

**3. What replaceable parts does Pall offer for the Pall Laboratory Manifold?**

A. We have designed the Pall Laboratory Manifold to have interchangeable parts. This will allow you to purchase as many adapters, valve assemblies and coupling devices needed for your workflow. We also offer an o-ring replacement kit.

**4. What adapters does Pall offer for the Pall Laboratory Manifold?**

A. When purchasing the Pall Laboratory Manifold you will receive: a 3-place manifold, 3 valve assemblies, a flat end cap and a hose-barb connector. The adapters and coupler are sold separately.

**5. Do I need an adapter to make my 3 place Pall Laboratory Manifold into a 6 place Pall Laboratory Manifold?**

A. A coupler will be required to join two 3-place manifolds to make a 6-place manifold.

**6. Can the Pall Laboratory Manifold be made into a 9 place manifold or larger?**

A. The number of places on a manifold is not explicitly mentioned in any regulations or guidelines. The requirements for membrane filtration are mentioned in Standard Methods for the Examination of Water and Wastewater.

B. "For filtration, mount receptacle of filter holding assembly on a ...suitable device (manifold to hold three to six filter assemblies) such that a pressure differential (34 kPa to 51 kPa) can be exerted on the filter membrane." - Standard Methods for the Examination of Water and Wastewater, 22nd Edition, 9222B (f).

**7. Does Pall sell tubing? What kind of tubing is needed?**

A. We do not sell tubing. The Pall Laboratory Manifold will work with 3/8" ID vacuum rated tubing (can be purchased from VWR or other tubing suppliers).

**8. What are the recommended autoclave instructions?**

A. Pall recommends autoclaving the Pall Laboratory Manifold and components at 121-123 °C (250 - 253 °F) at 1.0 bar (100 kPa, 15 psi for 15 - 20 minutes.

B. Do not assemble the Pall Laboratory Manifold until all components have returned back to room temperature.

**9. How often do you need to autoclave the Pall Laboratory Manifold?**

A. Depending on your risk assessment, more autoclaving may need to be done the more the manifold is used.

B. In line with good laboratory practice at a minimum, Pall would recommend autoclaving on a monthly basis.

**10. How often do you need to clean the Pall Laboratory Manifold?**

A. Depending on your risk assessment, more cleaning should be done the more you use it to prevent cross contamination.

B. In line with good laboratory practice at a minimum, Pall would recommend cleaning on a weekly basis.

**11. What do you use to clean the Pall Laboratory Manifold?**

A. 70% IPA, 5% Hypochlorite solution (bleach) or 30% Hydrogen peroxide.

B. Contact time for these solutions should not exceed 10 minutes.

**12. What is the recommended volume of cleaning agent to run through each port?**

- A. We recommend using a volume of reagent that is equal to or greater than the volume of the product being filtered. We always recommend doing a study to determine the appropriate volume.

**13. How do I flush the Pall Laboratory Manifold to clean it? Do I pour my cleaning solution directly into the funnel holder?**

- A. Using a funnel, Pall recommends to pass 155mL or more cleaning solution through the manifold.

**14. What is the purpose of rinsing the ports with distilled water after running the cleaning agent (is distilled water necessary)?**

- A. Although stainless steel has resistance to a majority of cleaning agents, a buildup of residual cleaning agent could form a film on the surface which would impede the overall usage of the manifold as well as provide a surface layer for a biofilm to develop. Therefore, care should be taken to ensure complete flushing with DI water to remove any residuals inside the manifold.

**15. How often should maintenance be performed on the Pall Laboratory Manifold?**

- A. You should perform maintenance on the Pall Laboratory Manifold at least once on an annual basis. This maintenance may include removal of the gaskets and replacing them. This will help minimize the risk of a biofilm developing in the manifold. Frequency of maintenance should be addressed by your internal risk assessment.

**16. What do I do when the parts won't assemble with "slip-fit" ease?**

- A. Sometimes the o-rings stick to the valve assembly after autoclaving (especially if the manifold is autoclaved dry). Spray the valve assembly with sterile IPA and insert into the manifold.
- B. If alcohol spray does not work, replace the o-rings.

**17. There is biofilm in my Pall Laboratory manifold. Can I decontaminate it?**

- A. Yes, the best way is to disassemble the manifold and scrub the inside of the manifold. Then submerge the individual pieces in a light acid wash followed by rinsing with double the volume of water. Contact time of the acid wash is determined from the manufacturer of the acid. The o-rings on the manifold will need to be replaced or they will start a new biofilm.
- B. After all the rinsing is complete, we recommend to wrap and autoclave each piece individually.

**18. Is it acceptable to use a sporicidal more frequently than once a month? We are considering doing this at the beginning of each day of testing**

- A. You can use a sporicidal more frequently than once a month, this will not affect the manifold. Select a sporicide that best suites your needs, Pall recommends either a 5-7% hypochlorite solution or a 30% hydrogen peroxide followed by a water rinse.