



TYLER
Research Corporation
Biomedical Engineering



Product: MPMR-CB06PVC
MPMR-CB32PVC

Material: Polyvinyl chloride (PVC) and homopolymer acetal with silicone seals and nylon screws

The MPMR-CB06PVC and MPMR-CB06PVC are manufactured from polyvinyl chloride and homopolymer acetal, advanced thermoplastic materials commonly used in water transport and storage applications. These devices are **NOT** autoclavable.

Sterilizing MPRM-CBXXPVC series devices:

Clean the MPMR-CBXXPVC with mild detergents and warm water followed by one or more of the following procedures:

1. Exposure to ethylene oxide gas (available in many hospitals)
2. Exposure to ionizing radiation (Cobalt 60 gamma or X-rays)
3. Treatment with agents containing 2% glutaraldehyde (e.g. Cidex)
4. Soaking overnight in sodium hypochlorite solution (5%)
5. Prolonged exposure to sodium metabisulfite solution (15 g/liter)

IMPORTANT:

Ionizing radiation may cause surface crazing of some materials (such as acrylic) and may lead to color changes over time. In the event that procedures 3, 4, or 5 are used, it is important to soak and rinse the devices in sterile deionized water thoroughly before placing them back in service.

MPMR-CB06PVC / MPMR-CB32PVC

Assembly/Disassembly Instructions:

The MPMR-CBXXPVC series biofilm systems are precision devices consisting of a single circular bore PVC manifold, 6 or 32 PVC biostud sampling ports and nylon ejector screws, two 1" NPT male connections and silicone O-rings.

Disassembly of the MPMR-CBXXPVC

1. Turn the biostud holders counterclockwise to remove them from their ports. If the holders are populated with biostuds, remove the biostuds from the holders by turning the nylon thumbscrews clockwise to partially eject the biostuds. Grasp the stems of the partially ejected biostuds with sterile forceps to remove them for analysis.
2. Wash all components using only mild detergent and water, and thoroughly rinse with deionized water. Allow to dry before reassembly. Lubricate all O-rings with silicone O-ring lube to promote sealing and prolong O-ring life.

Assembly of the MPMR-CBXXPVC

1. Back off the nylon ejector screws from the surface of the holder approximately 1/4". Populate the holders with biostuds of the appropriate material by pushing the stem into the holder until the shoulder of the biostud seats fully against the end of the holder.
2. **NOTE:** The flat recessed ring in the bottom of each manifold port is a precision sealing surface against which the O-ring in the face of the biostud holder seats. This must be kept free of foreign matter and scratches. Return the populated biostud holders to their respective ports, tightening firmly *by hand only* to affect a seal.
3. **NOTE:** The 32-port MPMR-CB32PVC consists of the primary manifold with biostud ports, and an extension tube whose purpose is to establish laminar flow. The two sections are connected through mating flanges with an O-ring seal, connected by four stainless steel socket head cap screws.