



GLASS BLOCK MANIFOLD



INNOVATION THROUGH CHEMISTRY

GLASS BLOCK MANIFOLD

A complete Vacuum Manifold System consists of a glass block, Corian® manifold lid, a cover gasket, vacuum gauge and assembly, PTFE tips, an adjustable collection rack, bulkhead luer fittings, plugs and a glass block safety tray. The Vacuum Manifold System is available in either 16 or 24 positions.

These manifold systems are durable and chemically resistant units designed to provide years of trouble free extractions.

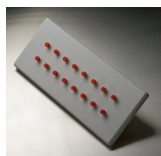


Description	Part Number
Complete 16 Position Vacuum Manifold System	VMF016GL
Complete 24 Position Vacuum Manifold System	VMF024GL

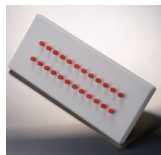
GLASS BLOCK MANIFOLD ACCESSORIES



Glass Block



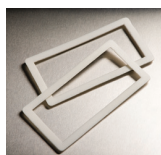
Manifold Lid (16 Position)



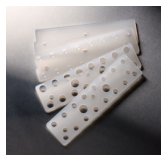
Manifold Lid (24 Position)



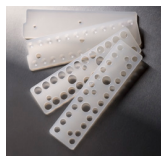
Manifold Lid Legs



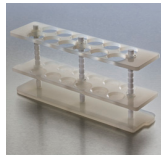
Gasket



Collection Rack (16 Position)



Collection Rack (24 Position)



Collection Rack (12 Position)



Collection Rack Posts



Collection Rack Retaining



Vacuum Gauge and Bleed Valve



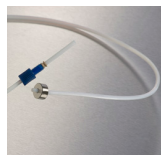
Bulkhead Luer Fittings



Luer Plugs



Flange Caps



Large Volume Transfer Tubes



20L Waste

Description	Units	Part Number	
Glass Block – The vacuum chamber is a clear glass block which is designed for clear visibility and easy cleaning.	1	VMF04123	
Manifold Lid (16 position) – A rigid Corian® lid which resists warping with extended use. Lids come with caps, bulkhead fittings and gasket.	1	VMF06120	
Manifold Lid (24 position) – A rigid Corian® lid which resists warping with extended use. Lids come with caps, bulkhead fittings and gasket.	1	VMF04120	
Manifold Lid Legs – The lid legs can be used to set the manifold lid on a surface while loading columns, changing collection tubes or removing waste.	4	VMF02120-1	
Gasket – A foam gasket that fits both the 16 and 24 position lids.	2	VMF04121	
Collection Rack (16 position) – A polypropylene rack that is highly resistant to chemical degradation and abuse. This rack allows the use of 13 and 16 mm disposable test tubes.	1	VMF06125	
Collection Rack (24 position) – A polypropylene rack that is highly resistant to chemical degradation and abuse. This rack allows the use of 13 and 16 mm disposable test tubes.	1	VMF04125	
Collection Rack (12 position) – A polypropylene rack that is highly resistant to chemical degradation and abuse. This rack is designed for the use of 27 mm (VOA vials) and smaller disposable collection vials.	1	VMF02125	
Collection Rack Posts – These posts can be ordered as replacements parts for the posts in all collection racks.	3	VMF02127	
Collection Rack Retaining Clips – These clips are replacement parts for the clips included in all collection racks.	12	VMF02129	
Vacuum Gauge and Bleed Valve – This system is used in monitoring and adjusting vacuum.	1	VMF02122	
Bulkhead Luer Fittings – These fittings screw into the lid allowing the sample to transfer from the column into the PTFE Luer tip to the test tube.	12	VMF21BFN	
Luer Plugs – These plugs fit into the bulkhead fittings in order to seal unused bulkhead fittings. These can also be used to break vacuum to the manifold.	12	VMF21PLN	
Large Volume Transfer Tubes – Used to transfer large volumes (100-1000mL) from a water collection bottle to an SPE cartridge.	6	VMFSTFR06	
	12	VMFSTFR12	
Large Volume Transfer Tubes For Perfluorinated Compound Analysis – Used to transfer large volumes (100-1000mL) from a water collection bottle to an SPE cartridge.	6	VMFSTFR06 - PFC	
	12	VMFSTFR12 - PFC	
	1 mL	50	CR0001P
	3 mL	50	CR0004P
	6 & 10 mL	50	CR0008P
	15 mL	50	CR0015P
	25 mL	50	CR0025P
Flange Caps – Used with the Luer Caps, Flange Caps plug the top of SPE cartridges.			
20L Waste Trap	1	ECUCTRAP20	
20L Waste Trap Adaptor – 3/8" x 1/4" PVDF ADPT for fitting to glass block manifold.	1	ECUCTRAP20-ADPT	

GLASS BLOCK VACUUM MANIFOLD

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Complete 16 Position Vacuum Manifold System	VMF016GL
Complete 24 Position Vacuum Manifold System	VMF024GL

GLASS BLOCK VACUUM MANIFOLD



Glass Block



Manifold Lid (16 Position)



Manifold Lid (24 Position)



Manifold Lid Legs



Gasket



Collection Rack (16 Position)



Collection Rack (24 Position)



Collection Rack (12 Position)



Collection Rack Posts



Collection Rack Retaining Clips



Vacuum Gauge and Bleed Valve



Bulkhead Luer Fittings



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Flange Caps – Used with the Luer Caps, Flange Caps plug the top of SPE cartridges.	1 mL 50 3 mL 50 6 & 10 mL 50 15 mL 50 25 mL 50	CR0001P CR0004P CR0008P CR0015P CR0025P
20L Waste Trap	1	ECUCTRAP20
20L Waste Trap Adaptor – 3/8" x 1/4" PVDF ADPT for fitting to glass block manifold.	1	ECUCTRAP20-ADPT

GLASS BLOCK VACUUM MANIFOLD

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Description	Units	Part Number
Luer Caps – Luer caps are used in tandem with flange caps to seal the SPE cartridge.	50	LUER50
PTFE Luer Tips – These tips allow direct transfer of sample to the test tube.	12	VMF020TT
Clean-Thru® Tips - A disposable tip that eliminates potential sample carryover from the vacuum manifold lid. Tips connect to the luer tip on the SPE column and are passed through the manifold directly into the waste or collection vessel. The disposable nature eliminates repeated use and therefore any concern of sample carryover.	50	CLTTP050
Manifold Safety Tray – A safety tray comes as part of the complete manifold system, so as to prevent the glass block from cracking or chipping.	1	VMF02072
Adapters – Adapter cap has a tapered fit for 1, 3, 6, 10 and 15 mL size reservoirs with a standard luer fitting on top. These adapters are ideal when a sample volume exceeds the capacity of the SPE column or when sequential extractions are desired.	15	AD0000AS
Kynar® Stopcocks – Made from Kynar®, a PFDV polymer that is solvent resistant, these reusable luer fitted valves are used in conjunction with a vacuum manifold. The purpose is to provide individual flow control to each SPE cartridge.	16 24	VMF02116 VMF02024
PTFE Stopcocks – Made from PTFE, these stopcocks allow an increased level of solvent resistivity.	6	ECVMF06
Large Volume Transfer Tubes – Used to transfer large volumes (100-1000mL) from a water collection bottle to an SPE cartridge.	6 12	VMFSTFR06 VMFSTFR12
Large Volume Transfer Tubes For Perfluorinated Compound Analysis – Used to transfer large volumes (100-1000mL) from a water collection bottle to an SPE cartridge.	6 12	VMFSTFR06 - PFC VMFSTFR12 - PFC
Vacuum Pump – These vacuum pumps are used in conjunction with the vacuum manifold. The pump is 1/8 hp, 4.2 amps and 60 Hz. The pumps are available in 115 and 230 volts.	115 V 230 V	ECROCKER400 ECROCKER400-220V



Luer Caps



PTFE Luer Tips



Clean-Thru Tips



Manifold Safety Tray



Adapters



Kynar® Stopcocks



Large Volume Transfer Tubes



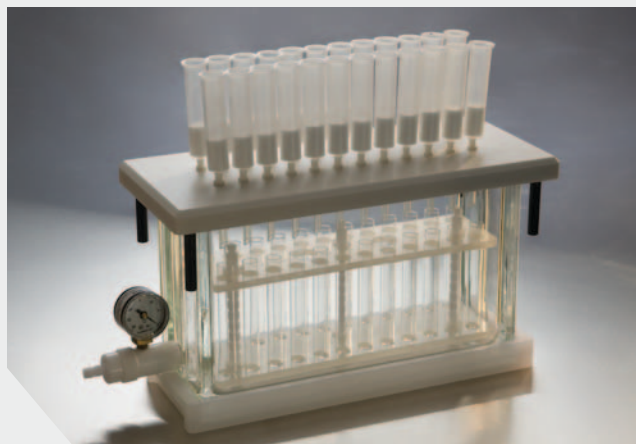
Vacuum Pump



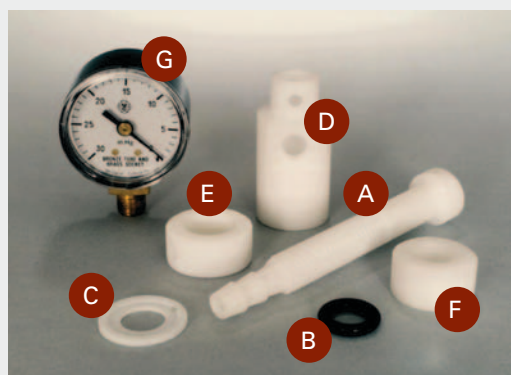
VACUUM MANIFOLD ASSEMBLY INSTRUCTIONS



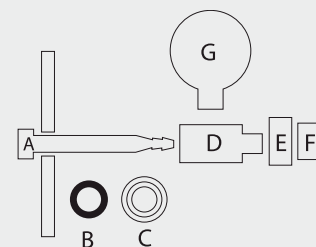
16 Position System



24 Position System



- A = Vacuum Attachment Stem
- B = Black O-Ring
- C = Teflon Washer
- D = Valve Body
- E = Bleed Valve
- F = Retaining Nut
- G = Vacuum Gauge



Vacuum Gauge and Valve

Place the threaded vacuum attachment stem (A) through the hole in the side of the glass block. The hole on the stem head should face downward. The holes on the stem outside of the block will then face upward.

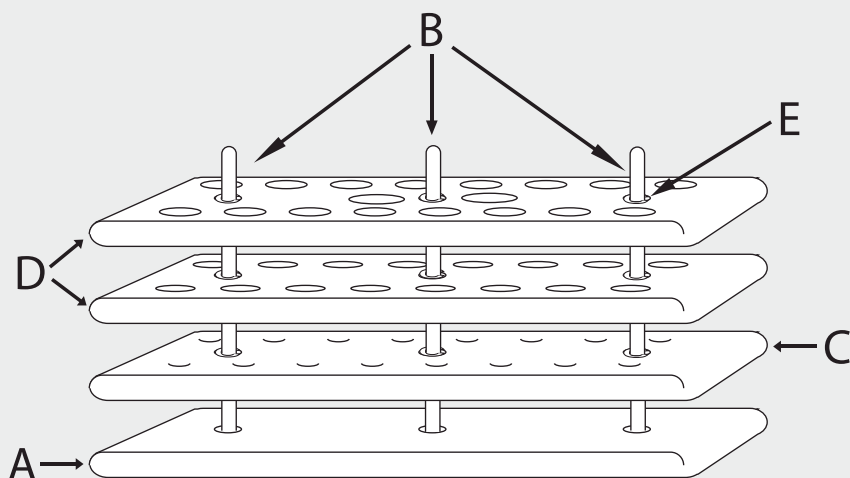
Place the black O-ring (B) onto the stem, and follow with the Teflon washer (C) with its uneven side towards the O-ring.

Screw the valve body (D) onto the stem positioned as in the drawing on this page. Tighten the body onto the stem such that the hole in the valve body line up with those of the stem. The O-ring should seal against the glass block at this point. **NOTE:** Do not hold the stem with pliers or any other tool which will damage the threads, bleed valve sealing face, or tabulation of stem.

Slide the bleed valve (E) onto the valve body and follow with the retaining nut (F). Tighten the nut so that it seals against the bleed valve but does not bind it. The valve should move easily enough so that the rest of valve assembly can remain stationary. **NOTE:** It may be necessary to place of Teflon tape around the threads of the stem next to the installed valve body to insure proper snugging of the retaining nut.



COLLECTION RACK



1. The collection rack consists of:
 - A - base platform
 - B - posts (3)
 - C - tube support shelf
 - D - a variety of shelves for different collection tubes 17mm & 13mm
 - E - support clips

2. Screw the posts (B) into the base platform (A).
3. Slide the tube support shelf (C), followed by one of the collection shelves (D), down the posts to desired heights.
4. Secure the shelves on the support posts with clips (E) positioned above, and below each shelf.
5. Install the vacuum gauge (G) carefully. DO NOT allow the brass threads of the gauge to cross-thread the nylon valve body.

Notes to Vacuum Manifold Operation

1. Install a liquid trap between vacuum source and the manifold chamber. Connect the vacuum source to trap, and the trap to the manifold, with sturdy vacuum tubing.
2. When using vacuum DO NOT ALLOW VACUUM TO EXCEED 25" OF Hg.
3. Regulate vacuum levels with:
 - A. Bleed valve-allows you to control the flow rate on the manifold system. (When the bleed valve is aligned with the holes in the gauge attachment and vacuum attachment stem, the vacuum on the manifold will be released.)
 - B. Plugs-allow regulation of flow through individual CLEAN SCREEN®, CLEAN-UP®, XtrackT® extraction columns.
4. It is important that the plugs are in the closed position before removing a CLEAN SCREEN®, CLEAN-UP®, XtrackT® extraction column when under vacuum. Failure to completely bleed vacuum prior to venting manifold system, may result in loss of elutes due to splash or spillage.
5. Routinely disassemble the vacuum gauge and valve to clean and lubricate parts.



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