



Cole-Parmer®

VapLock® Closed Systems

Vapor handling
solutions for fluid
delivery and solvent
waste



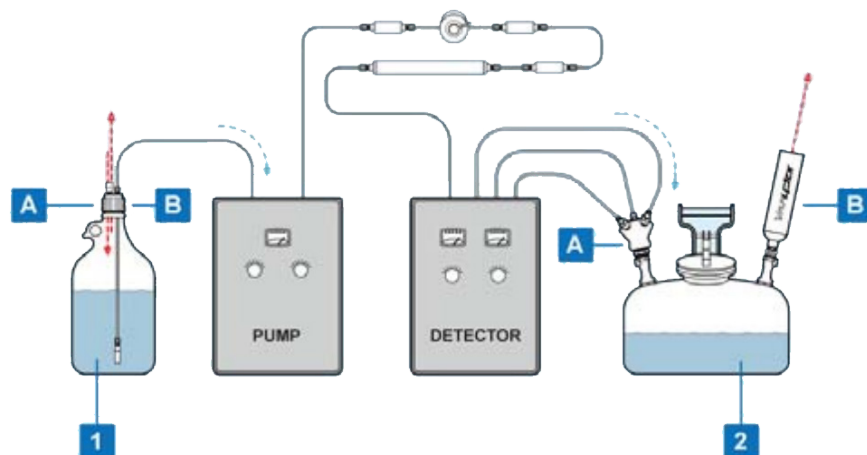
Cole-Parmer VapLock products are a safety solution for scientists, chemical hygienists, and researchers worldwide, designed to ensure proper delivery and waste containment of industrial chemicals and solvents. A versatile product solution, VapLock conforms to a broad spectrum of laboratory and industrial applications, useful wherever safety protocol for chemical handling is required or preferred, and through closed-system technology reduces harmful emissions which are potentially hazardous to employees and the environment. Our mission is to create a safer, healthier and cleaner workplace by providing unique, effective and price sensitive solutions to fluid handling problems in the laboratory.

Closed Systems Introduction

Through leaks, spills, and ventilation, an “open” solvent system will release chemical exhaust directly into the laboratory environment. This introduction may be reduced by adding several key components to the typical instrument. These items are:

- 1A** – a properly sealed solvent reservoir with secure fluid connections
- 1B** – a ventilation control valve at the solvent reservoir to displace vacuum while minimizing evaporation
- 2A** – a properly sealed solvent waste container with secure fluid connections
- 2B** – an exhaust filter at the waste container to capture escaping fumes

Example of a Closed System HPLC



1A – Solvent Reservoir Fluid Connections

For a closed-system solvent reservoir, the container first requires a bottle cap with ports to fit the specific tubing sizes removing solvent from the bottle. VapLock solvent caps provide versatile, leak-resistant connections where mobile phase tubing may be attached securely.

1B – Solvent Reservoir Ventilation Control

In reservoirs where fluid is actively removed and no new solvent or gas pressure is simultaneously added, to complete the closed system the container requires a device to control solvent evaporation. With use of an automatic control valve, air may still enter the bottle as a pump moves the liquid phase out to the instrument. VapLock solutions for closed-system solvent delivery includes both standalone vent control valves and built-in valved cap options.

2A – Waste Container Fluid Connections

Containers to collect solvent waste vary in size and in the specific means required to convert them to a closed system. By selecting an appropriate container, waste may be sealed effectively, allowing effluent tubing to drain into the container without leaks or venting, forcing exhaust fumes through a single aperture where solvent vapors may be captured before entering the laboratory. VapLock waste collection manifolds and kits are designed to conform to a wide range of common laboratory and industrial containers, with versatile connection types and a uniquely modular system allowing reconfiguration and addition of new manifold components as required.

2B – Waste Container Ventilation Control

As solvents draining to waste may volatilize rapidly, the waste container can be the most significant generator of hazardous chemical vapor in an HPLC system. Available in several cartridge formats, Vaplock exhaust filters mitigate health hazards and reduce harmful chemical emissions and odors from laboratory waste containers. Developed and tested specifically for HPLC organic solvents, they may be used in conjunction with Vaplock breakthrough color indicators to determine longevity and establish a replacement schedule.

GL45 Solvent Bottle Caps with Stainless Steel Thread Inserts



12018-00



12018-01



12018-02

Closed System Design

Reduce chemical evaporation and exposure to hazardous vapors with VapLock solvent reservoir caps. Combine with secure fluid connections and VapLock air inlet or relief valves to maintain pressure equilibrium within the bottle.

Durable Port Threads

Designed to accept industry-standard 1/4-28 threaded fittings, these caps include robust stainless steel (SS) thread inserts to minimize cross-threading and damage to soft PTFE ports. For use with semi-rigid tubing equal to or less than 1/8" (3.2 mm) outside diameter.

Anti-Twist Design

To prevent twisting of tubing when the cap is removed or attached, the inner body rotates independently of the outer collar.

Chemically Compatible

Constructed of inert PTFE, the body of the cap provides ideal chemical compatibility with laboratory solvents. Under normal use, the outer polypropylene (PP) collar is non-wetted. Caps may be autoclaved to 140 °C. Please inquire for other material options and custom designs.

Description	# of Ports	Materials	Item #
Bottle cap, GL45, (2) 1/4-28 ports with SS thread inserts, PTFE with PP collar	(2) 1/4-28	PTFE, PP, SS	12018-00
Bottle cap, GL45, (3) 1/4-28 ports with SS thread inserts, PTFE with PP collar	(3) 1/4-28	PTFE, PP, SS	12018-01
Bottle cap, GL45, (4) 1/4-28 ports with SS thread inserts, PTFE with PP collar	(4) 1/4-28	PTFE, PP, SS	12018-02

GL45 Solvent Bottle Caps with Threaded Ports



12018-03



12018-04



12018-05

Closed System Design

Reduce chemical evaporation and exposure to hazardous vapors with VapLock solvent reservoir caps. Combine with secure fluid connections and VapLock air inlet or relief valves to maintain pressure equilibrium within the bottle.

¼-28 Port Threads

Designed to accept industry-standard ¼-28 threaded fittings. For use with semi-rigid tubing equal to or less than ⅜" (3.2 mm) outside diameter. Ports are angled 10° for more accessible tubing connections.

Anti-Twist Design

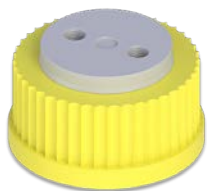
To prevent twisting of tubing when the cap is removed or attached, the inner body rotates independently of the outer collar.

Chemically Compatible

Constructed of inert PTFE, the body of the cap provides ideal chemical compatibility with laboratory solvents. Under normal use, the outer polypropylene (PP) collar is non-wetted. Caps may be autoclaved to 140 °C. Please inquire for other material options and custom designs.

Description	# of Ports	Materials	Item #
Bottle cap, GL45, (2) ¼-28 ports, PTFE with PP collar	(2) ¼-28	PTFE, PP	12018-03
Bottle cap, GL45, (3) ¼-28 ports, PTFE with PP collar	(3) ¼-28	PTFE, PP	12018-04
Bottle cap, GL45, (4) ¼-28 ports, PTFE with PP collar	(4) ¼-28	PTFE, PP	12018-05

GL45 Solvent Bottle Caps with Integrated Air Inlet Valve



12018-08



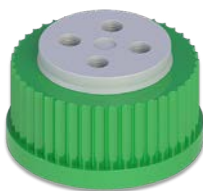
12018-06



12018-10



12018-09



12018-07



12018-11

Closed System Design

Reduce exposure to hazardous chemical vapors with Vaplock solvent reservoir caps. Minimizing evaporation, an integrated check valve permits air to enter the bottle for vacuum displacement while solvent is pumped to the instrument. A 50 µm PTFE filter covers the valve assembly to reduce particulates.

¼-28 Port Threads

Designed to accept industry-standard ¼-28 threaded fittings. For use with semi-rigid tubing equal to or less than ⅛" (3.2 mm) outside diameter.

Anti-Twist Design

To prevent twisting of tubing when the cap is removed or attached, the inner body rotates independently of the outer collar.

Chemically Compatible

Constructed of inert PTFE, the body of the cap provides ideal chemical compatibility with laboratory solvents. The air inlet valve is assembled with PTFE and 300-series stainless steel components, with inert FFKM, white USP Class VI EPDM, or Viton® seal options. Under normal use, the outer Polypropylene collar is non-wetted. Caps may be autoclaved to 140 °C. Please inquire for other material options and custom designs.

Description	# of Ports	Valve seal material	Item #
Bottle cap, GL45, (2) ¼-28 ports, PTFE with yellow PP collar, FFKM air inlet valve	(2) ¼-28	FFKM	12018-08
Bottle cap, GL45, (2) ¼-28 ports, PTFE with green PP collar, EPDM air inlet valve	(2) ¼-28	EPDM	12018-06
Bottle cap, GL45, (2) ¼-28 ports, PTFE with blue PP collar, Viton air inlet valve	(2) ¼-28	Viton	12018-10
Bottle cap, GL45, (4) ¼-28 ports, PTFE with yellow PP collar, FFKM air inlet valve	(4) ¼-28	FFKM	12018-09
Bottle cap, GL45, (4) ¼-28 ports, PTFE with green PP collar, EPDM air inlet valve	(4) ¼-28	EPDM	12018-07
Bottle cap, GL45, (4) ¼-28 ports, PTFE with blue PP collar, Viton air inlet valve	(4) ¼-28	Viton	12018-11

GL38 Solvent Bottle Caps with Stainless Steel Thread Inserts



12018-12



12018-13



12018-14

Closed System Design

Reduce chemical evaporation and exposure to hazardous vapors with VapLock solvent reservoir caps. Combine with secure fluid connections and VapLock air inlet or relief valves to maintain pressure equilibrium within the bottle.

Durable Port Threads

Designed to accept industry-standard 1/4-28 threaded fittings, these caps include robust stainless steel (SS) thread inserts to minimize cross-threading and damage to soft PTFE ports. For use with semi-rigid tubing equal to or less than 1/8" (3.2 mm) outside diameter.

Anti-Twist Design

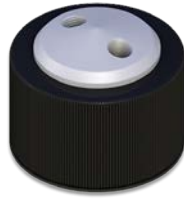
To prevent twisting of tubing when the cap is removed or attached, the inner body rotates independently of the outer collar.

Chemically Compatible

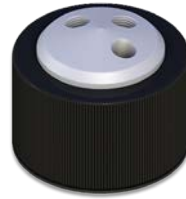
Constructed of inert PTFE, the body of the cap provides ideal chemical compatibility with laboratory solvents. Under normal use, the outer polypropylene (PP) collar is non-wetted. Caps may be autoclaved to 140 °C. Please inquire for other material options and custom designs.

Description	# of Ports	Materials	Item #
Bottle cap, GL38, (2) 1/4-28 ports with SS thread inserts, PTFE with PP collar	(2) 1/4-28	PTFE, PP, SS	12018-12
Bottle cap, GL38, (3) 1/4-28 ports with SS thread inserts, PTFE with PP collar	(3) 1/4-28	PTFE, PP, SS	12018-13
Bottle cap, GL38, (4) 1/4-28 ports with SS thread inserts, PTFE with PP collar	(4) 1/4-28	PTFE, PP, SS	12018-14

GL38 Solvent Bottle Caps with Threaded Ports



12018-15



12018-16



12018-17

Closed System Design

Reduce chemical evaporation and exposure to hazardous vapors with VapLock solvent reservoir caps. Combine with secure fluid connections and VapLock air inlet or relief valves to maintain pressure equilibrium within the bottle.

1/4-28 Port Threads

Designed to accept industry-standard 1/4-28 threaded fittings. For use with semi-rigid tubing equal to or less than 1/8" (3.2 mm) outside diameter. Ports are angled 10° for more accessible tubing connections.

Anti-Twist Design

To prevent twisting of tubing when the cap is removed or attached, the inner body rotates independently of the outer collar.

Chemically Compatible

Constructed of inert PTFE, the body of the cap provides ideal chemical compatibility with laboratory solvents. Under normal use, the outer polypropylene (PP) collar is non-wetted. Caps may be autoclaved to 140 °C. Please inquire for other material options and custom designs.

Description	# of Ports	Materials	Item #
Bottle cap, GL38, (2) 1/4-28 ports, PTFE with PP collar	(2) 1/4-28	PTFE, PP	12018-15
Bottle cap, GL38, (3) 1/4-28 ports, PTFE with PP collar	(3) 1/4-28	PTFE, PP	12018-16
Bottle cap, GL38, (4) 1/4-28 ports, PTFE with PP collar	(4) 1/4-28	PTFE, PP	12018-17

GL38 Solvent Bottle Caps with Integrated Air Inlet Valve



12018-18



12018-19



12018-20



12018-21



12018-22



12018-23

Closed System Design

Reduce exposure to hazardous chemical vapors with Vaplock solvent reservoir caps. Minimizing evaporation, an integrated check valve permits air to enter the bottle for vacuum displacement while solvent is pumped to the instrument. A 50 µm PTFE filter covers the valve assembly to reduce particulates.

¼-28 Port Threads

Designed to accept industry-standard ¼-28 threaded fittings. For use with semi-rigid tubing equal to or less than ⅛" (3.2 mm) outside diameter.

Anti-Twist Design

To prevent twisting of tubing when the cap is removed or attached, the inner body rotates independently of the outer collar.

Chemically Compatible

Constructed of inert PTFE, the body of the cap provides ideal chemical compatibility with laboratory solvents. The air inlet valve is assembled with PTFE and 300-series stainless steel components, with inert FFKM, white USP Class VI EPDM, or Viton seal options. Under normal use, the outer polypropylene (PP) collar is non-wetted. Caps may be autoclaved to 140 °C. Please inquire for other material options and custom designs.

Description	# of Ports	Valve seal material	Item #
Bottle cap, GL38, (2) ¼-28 ports, PTFE with PP collar, FFKM air inlet valve	(2) ¼-28	FFKM	12018-18
Bottle cap, GL38, (2) ¼-28 ports, PTFE with PP collar, EPDM air inlet valve	(2) ¼-28	EPDM	12018-19
Bottle cap, GL38, (2) ¼-28 ports, PTFE with PP collar, Viton air inlet valve	(2) ¼-28	Viton	12018-20
Bottle cap, GL38, (4) ¼-28 ports, PTFE with PP collar, FFKM air inlet valve	(4) ¼-28	FFKM	12018-21
Bottle cap, GL38, (4) ¼-28 ports, PTFE with PP collar, EPDM air inlet valve	(4) ¼-28	EPDM	12018-22
Bottle cap, GL38, (4) ¼-28 ports, PTFE with PP collar, Viton air inlet valve	(4) ¼-28	Viton	12018-23

Thermo Scientific™ Nalgene™ 38-430 Solvent Bottle Caps with Stainless Steel Thread Inserts



12018-24



12018-25



12018-26

Closed System Design

Reduce chemical evaporation and exposure to hazardous vapors with VapLock solvent reservoir caps. Combine with secure fluid connections and VapLock air inlet or relief valves to maintain pressure equilibrium within the bottle.

Durable Port Threads

Designed to accept industry-standard 1/4-28 threaded fittings, these caps include robust stainless steel (SS) thread inserts to minimize cross-threading and damage to soft PTFE ports. For use with semi-rigid tubing equal to or less than 1/8" (3.2 mm) outside diameter.

Anti-Twist Design

To prevent twisting of tubing when the cap is removed or attached, the inner body rotates independently of the outer collar.

Chemically Compatible

Constructed of inert PTFE, the body of the cap provides ideal chemical compatibility with laboratory solvents. Under normal use, the outer polypropylene (PP) collar is non-wetted. Caps may be autoclaved to 140 °C. Please inquire for other material options and custom designs.

Description	# of Ports	Materials	Item #
Bottle cap for Nalgene 38-430, (2) 1/4-28 ports with SS thread inserts, PTFE with PP collar	(2) 1/4-28	PTFE, PP, SS	12018-24
Bottle cap for Nalgene 38-430, (3) 1/4-28 ports with SS thread inserts, PTFE with PP collar	(3) 1/4-28	PTFE, PP, SS	12018-25
Bottle cap for Nalgene 38-430, (4) 1/4-28 ports with SS thread inserts, PTFE with PP collar	(4) 1/4-28	PTFE, PP, SS	12018-26

Thermo Scientific Nalgene 38-430 Solvent Bottle Caps with Threaded Ports



12018-27



12018-28



12018-29

Closed System Design

Reduce chemical evaporation and exposure to hazardous vapors with VapLock solvent reservoir caps. Combine with secure fluid connections and VapLock air inlet or relief valves to maintain pressure equilibrium within the bottle.

¼-28 Port Threads

Designed to accept industry-standard ¼-28 threaded fittings. For use with semi-rigid tubing equal to or less than ⅛" (3.2 mm) outside diameter. Ports are angled 10° for more accessible tubing connections.

Anti-Twist Design

To prevent twisting of tubing when the cap is removed or attached, the inner body rotates independently of the outer collar.

Chemically Compatible

Constructed of inert PTFE, the body of the cap provides ideal chemical compatibility with laboratory solvents. Under normal use, the outer polypropylene (PP) collar is non-wetted. Caps may be autoclaved to 140 °C. Please inquire for other material options and custom designs.

Description	# of Ports	Materials	Item #
Bottle cap for Nalgene 38-430, (2) ¼-28 ports, PTFE with PP collar	(2) ¼-28	PTFE, PP	12018-27
Bottle cap for Nalgene 38-430, (3) ¼-28 ports, PTFE with PP collar	(3) ¼-28	PTFE, PP	12018-28
Bottle cap for Nalgene 38-430, (4) ¼-28 ports, PTFE with PP collar	(4) ¼-28	PTFE, PP	12018-29

Thermo Scientific Nalgene 38-430 Solvent Bottle Caps with Integrated Air Inlet Valve



12018-32



12018-30



12018-34



12018-33



12018-31



12018-35

Closed System Design

Reduce exposure to hazardous chemical vapors with Vaplock solvent reservoir caps. Minimizing evaporation, an integrated check valve permits air to enter the bottle for vacuum displacement while solvent is pumped to the instrument. A 50 µm PTFE filter covers the valve assembly to reduce particulates.

¼-28 Port Threads

Designed to accept industry-standard ¼-28 threaded fittings. For use with semi-rigid tubing equal to or less than ⅛" (3.2 mm) outside diameter.

Anti-Twist Design

To prevent twisting of tubing when the cap is removed or attached, the inner body rotates independently of the outer collar.

Chemically Compatible

Constructed of inert PTFE, the body of the cap provides ideal chemical compatibility with laboratory solvents. The air inlet valve is assembled with PTFE and 300-series stainless steel components, with inert FFKM, white USP Class VI EPDM, or Viton seal options. Under normal use, the outer polypropylene (PP) collar is non-wetted. Caps may be autoclaved to 140 °C. Please inquire for other material options and custom designs.

Description	# of Ports	Valve seal material	Item #
Bottle cap for Nalgene 38-430, (2) ¼-28 ports, PTFE with PP collar, FFKM air inlet valve	(2) ¼-28	FFKM	12018-08
Bottle cap for Nalgene 38-430, (2) ¼-28 ports, PTFE with PP collar, EPDM air inlet valve	(2) ¼-28	EPDM	12018-06
Bottle cap for Nalgene 38-430, (2) ¼-28 ports, PTFE with PP collar, Viton air inlet valve	(2) ¼-28	Viton	12018-10
Bottle cap for Nalgene 38-430, (4) ¼-28 ports, PTFE with PP collar, FFKM air inlet valve	(4) ¼-28	FFKM	12018-09
Bottle cap for Nalgene 38-430, (4) ¼-28 ports, PTFE with PP collar, EPDM air inlet valve	(4) ¼-28	EPDM	12018-07
Bottle cap for Nalgene 38-430, (4) ¼-28 ports, PTFE with PP collar, Viton air inlet valve	(4) ¼-28	Viton	12018-11

38 mm Wako Solvent Bottle Caps with Stainless Steel Thread Inserts



12018-36



12018-37



12018-38

Closed System Design

Reduce chemical evaporation and exposure to hazardous vapors with VapLock solvent reservoir caps. Combine with secure fluid connections and VapLock air inlet or relief valves to maintain pressure equilibrium within the bottle.

Durable Port Threads

Designed to accept industry-standard 1/4-28 threaded fittings, these caps include robust stainless steel (SS) thread inserts to minimize cross-threading and damage to soft PTFE ports. For use with semi-rigid tubing equal to or less than 1/8" (3.2 mm) outside diameter.

Anti-Twist Design

To prevent twisting of tubing when the cap is removed or attached, the inner body rotates independently of the outer collar.

Chemically Compatible

Constructed of inert PTFE, the body of the cap provides ideal chemical compatibility with laboratory solvents. Under normal use, the outer polypropylene (PP) collar is non-wetted. Caps may be autoclaved to 140 °C. Please inquire for other material options and custom designs.

Description	# of Ports	Materials	Item #
Bottle cap for Wako 38 mm, (2) 1/4-28 ports with SS thread inserts, PTFE with PP collar	(2) 1/4-28	PTFE, PP, SS	12018-36
Bottle cap for Wako 38 mm, (3) 1/4-28 ports with SS thread inserts, PTFE with PP collar	(3) 1/4-28	PTFE, PP, SS	12018-37
Bottle cap for Wako 38 mm, (4) 1/4-28 ports with SS thread inserts, PTFE with PP collar	(4) 1/4-28	PTFE, PP, SS	12018-38

38 mm Wako Solvent Bottle Caps with Threaded Ports



12018-39



12018-40



12018-41

Closed System Design

Reduce chemical evaporation and exposure to hazardous vapors with VapLock solvent reservoir caps. Combine with secure fluid connections and VapLock air inlet or relief valves to maintain pressure equilibrium within the bottle.

1/4-28 Port Threads

Designed to accept industry-standard 1/4-28 threaded fittings. For use with semi-rigid tubing equal to or less than 1/8" (3.2 mm) outside diameter. Ports are angled 10° for more accessible tubing connections.

Anti-Twist Design

To prevent twisting of tubing when the cap is removed or attached, the inner body rotates independently of the outer collar.

Chemically Compatible

Constructed of inert PTFE, the body of the cap provides ideal chemical compatibility with laboratory solvents. Under normal use, the outer polypropylene (PP) collar is non-wetted. Caps may be autoclaved to 140 °C. Please inquire for other material options and custom designs.

Description	# of Ports	Materials	Item #
Bottle cap for Wako 38 mm, (2) 1/4-28 ports, PTFE with PP collar	(2) 1/4-28	PTFE, PP	12018-39
Bottle cap for Wako 38 mm, (3) 1/4-28 ports, PTFE with PP collar	(3) 1/4-28	PTFE, PP	12018-40
Bottle cap for Wako 38 mm, (4) 1/4-28 ports, PTFE with PP collar	(4) 1/4-28	PTFE, PP	12018-41

38 mm Wako Solvent Bottle Caps with Integrated Air Inlet Valve



12018-44



12018-42



12018-46



12018-45



12018-43



12018-47

Closed System Design

Reduce exposure to hazardous chemical vapors with Vaplock solvent reservoir caps. Minimizing evaporation, an integrated check valve permits air to enter the bottle for vacuum displacement while solvent is pumped to the instrument. A 50 µm PTFE filter covers the valve assembly to reduce particulates.

¼-28 Port Threads

Designed to accept industry-standard ¼-28 threaded fittings. For use with semi-rigid tubing equal to or less than ⅛" (3.2 mm) outside diameter.

Anti-Twist Design

To prevent twisting of tubing when the cap is removed or attached, the inner body rotates independently of the outer collar.

Chemically Compatible

Constructed of inert PTFE, the body of the cap provides ideal chemical compatibility with laboratory solvents. The air inlet valve is assembled with PTFE and 300-series stainless steel components, with inert FFKM, white USP Class VI EPDM, or Viton seal options. Under normal use, the outer polypropylene (PP) collar is non-wetted. Caps may be autoclaved to 140 °C. Please inquire for other material options and custom designs.

Description	# of Ports	Valve seal material	Item #
Bottle cap for 38 mm Wako, (2) ¼-28 ports, PTFE with PP collar, FFKM air inlet valve	(2) ¼-28	FFKM	12018-08
Bottle cap for 38 mm Wako, (2) ¼-28 ports, PTFE with PP collar, EPDM air inlet valve	(2) ¼-28	EPDM	12018-06
Bottle cap for 38 mm Wako, (2) ¼-28 ports, PTFE with PP collar, Viton air inlet valve	(2) ¼-28	Viton	12018-10
Bottle cap for 38 mm Wako, (4) ¼-28 ports, PTFE with PP collar, FFKM air inlet valve	(4) ¼-28	FFKM	12018-09
Bottle cap for 38 mm Wako, (4) ¼-28 ports, PTFE with PP collar, EPDM air inlet valve	(4) ¼-28	EPDM	12018-07
Bottle cap for 38 mm Wako, (4) ¼-28 ports, PTFE with PP collar, Viton air inlet valve	(4) ¼-28	Viton	12018-11

GL32 Solvent Bottle Caps with Stainless Steel Thread Inserts



12018-48



12018-49



12018-50

Closed System Design

Reduce chemical evaporation and exposure to hazardous vapors with VapLock solvent reservoir caps. Combine with secure fluid connections and VapLock air inlet or relief valves to maintain pressure equilibrium within the bottle.

Durable Port Threads

Designed to accept industry-standard 1/4-28 threaded fittings, these caps include robust stainless steel (SS) thread inserts to minimize cross-threading and damage to soft PTFE ports. For use with semi-rigid tubing equal to or less than 1/8" (3.2 mm) outside diameter.

Anti-Twist Design

To prevent twisting of tubing when the cap is removed or attached, the inner body rotates independently of the outer collar.

Chemically Compatible

Constructed of inert PTFE, the body of the cap provides ideal chemical compatibility with laboratory solvents. Under normal use, the outer polypropylene (PP) collar is non-wetted. Caps may be autoclaved to 140 °C. Please inquire for other material options and custom designs.

Description	# of Ports	Materials	Item #
Bottle cap, GL32, (2) 1/4-28 ports with SS thread inserts, PTFE with PP collar	(2) 1/4-28	PTFE, PP, SS	12018-48
Bottle cap, GL38, (3) 1/4-28 ports with SS thread inserts, PTFE with PP collar	(3) 1/4-28	PTFE, PP, SS	12018-49
Bottle cap, GL38, (4) 1/4-28 ports with SS thread inserts, PTFE with PP collar	(4) 1/4-28	PTFE, PP, SS	12018-50

GL32 Solvent Bottle Caps with Threaded Ports



12018-51



12018-52



12018-53

Closed System Design

Reduce chemical evaporation and exposure to hazardous vapors with VapLock solvent reservoir caps. Combine with secure fluid connections and VapLock air inlet or relief valves to maintain pressure equilibrium within the bottle.

¼-28 Port Threads

Designed to accept industry-standard ¼-28 threaded fittings. For use with semi-rigid tubing equal to or less than ⅜" (3.2 mm) outside diameter. Ports are angled 10° for more accessible tubing connections.

Anti-Twist Design

To prevent twisting of tubing when the cap is removed or attached, the inner body rotates independently of the outer collar.

Chemically Compatible

Constructed of inert PTFE, the body of the cap provides ideal chemical compatibility with laboratory solvents. Under normal use, the outer polypropylene (PP) collar is non-wetted. Caps may be autoclaved to 140 °C. Please inquire for other material options and custom designs.

Description	# of Ports	Materials	Item #
Bottle cap, GL32, (2) ¼-28 ports, PTFE with PP collar	(2) ¼-28	PTFE, PP	12018-51
Bottle cap, GL32, (3) ¼-28 ports, PTFE with PP collar	(3) ¼-28	PTFE, PP	12018-52
Bottle cap, GL32, (4) ¼-28 ports, PTFE with PP collar	(4) ¼-28	PTFE, PP	12018-53

GL25 Solvent Bottle Caps with Threaded Ports



12018-54



12018-55

Closed System Design

Reduce chemical evaporation and exposure to hazardous vapors with VapLock solvent reservoir caps. Combine with secure fluid connections and VapLock air inlet or relief valves to maintain pressure equilibrium within the bottle.

1/4-28 Port Threads

Designed to accept industry-standard 1/4-28 threaded fittings. For use with semi-rigid tubing equal to or less than 1/8" (3.2 mm) outside diameter. Ports are angled 10° for more accessible tubing connections.

Anti-Twist Design

To prevent twisting of tubing when the cap is removed or attached, the inner body rotates independently of the outer collar.

Chemically Compatible

Constructed of inert PTFE, the body of the cap provides ideal chemical compatibility with laboratory solvents. Under normal use, the outer polypropylene (PP) collar is non-wetted. Caps may be autoclaved to 140 °C. Please inquire for other material options and custom designs.

Description	# of Ports	Materials	Item #
Bottle cap, GL25, (2) 1/4-28 ports, PTFE with PP collar	(2) 1/4-28	PTFE, PP	12018-54
Bottle cap, GL25, (3) 1/4-28 ports, PTFE with PP collar	(3) 1/4-28	PTFE, PP	12018-55

WASTE MANIFOLD CAPS AND KITS

GL38 Waste Manifold Caps



12018-59



12018-61



12018-58



12018-60

Vapor-Tight Connection

Waste manifolds are designed to fit standard GL38 threaded lab bottles.

Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold and insert with PP spin collar.

Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. All manifolds are designed to accommodate our 12019-79 filter and indicator*.

*See the emissions and filter section on pages 59–62.

Description	# of Ports	Manifold material	Item #
Waste manifold for GL38 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP	(3) 1/4 NPT (1) 1/2 NPT	PP	12018-59
Waste manifold for GL38 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT (1) 1/2 NPT	PTFE	12018-61
Waste manifold for GL38 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PP	12018-58
Waste manifold for GL38 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PTFE	12018-60

WASTE MANIFOLD CAPS AND KITS

GL38 Waste Kits

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer VapLock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use VapLock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All VapLock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plug
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) ⅛" OD hard-wall tubing connections
- (2) ⅙" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅛" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅜" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅝" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, ⅛" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x ½" NPT, PP
- (1) Breakthrough color indicator for VapLock organic vapor filter



12018-56

Note: Container is not included.

Description	# of Ports	Manifold material	Item #
HPLC waste accessory kit for GL38 threaded container – 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PP manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PP	12018-56
HPLC waste accessory kit for GL38 threaded container – 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PTFE manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12018-57

WASTE MANIFOLD CAPS AND KITS

Thermo Scientific Nalgene 38-430 Waste Manifold Caps



12018-65



12018-67



12018-64



12018-66

Vapor-Tight Connection

Waste manifolds are designed to fit standard plastic 38-430 threaded lab bottles.

Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold and insert with PP spin collar.

Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. All manifolds are designed to accommodate our 12019-79 filter and indicator*.

*See the emissions and filter section on pages 59–62.

Description	# of Ports	Manifold material	Item #
Waste manifold for Nalgene 38-430 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP	(3) 1/4 NPT (1) 1/2 NPT	PP	12018-65
Waste manifold for Nalgene 38-430 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT (1) 1/2 NPT	PTFE	12018-67
Waste manifold for Nalgene 38-430 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PP	12018-64
Waste manifold for Nalgene 38-430 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PTFE	12018-66

WASTE MANIFOLD CAPS AND KITS

Thermo Scientific Nalgene 38-430 Waste Kits

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer VapLock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use VapLock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All VapLock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plug
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) ⅛" OD hard-wall tubing connections
- (2) ⅙" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅛" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅜" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅝" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, ⅛" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x ½" NPT, PP
- (1) Breakthrough color indicator for VapLock organic vapor filter



12018-62

Note: Container is not included.

Description	# of Ports	Manifold material	Item #
HPLC waste accessory kit for Nalgene 38-430 threaded container – 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PP manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PP	12018-62
HPLC waste accessory kit for Nalgene 38-430 threaded container – 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PTFE manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12018-63

WASTE MANIFOLD CAPS AND KITS

Wako 38 mm Waste Manifold Caps



12018-71



12018-73



12018-70



12018-72

Vapor-Tight Connection

Waste manifolds are designed to fit Wako 38 mm threaded lab bottles.

Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold and insert with PP spin collar.

Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. All manifolds are designed to accommodate our 12019-79 filter and indicator*.

*See the emissions and filter section on pages 59–62.

Description	# of Ports	Manifold material	Item #
Waste manifold for Wako 38 mm threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP	(3) 1/4 NPT (1) 1/2 NPT	PP	12018-71
Waste manifold for Wako 38 mm threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT (1) 1/2 NPT	PTFE	12018-73
Waste manifold for Wako 38 mm threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PP	12018-70
Waste manifold for Wako 38 mm threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PTFE	12018-72

WASTE MANIFOLD CAPS AND KITS

Wako 38 mm Waste Kits

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer VapLock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use VapLock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All VapLock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plug
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) ⅛" OD hard-wall tubing connections
- (2) ⅙" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅛" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅜" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅝" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, ⅛" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x ½" NPT, PP
- (1) Breakthrough color indicator for VapLock organic vapor filter



12018-68

Note: Container is not included.

Description	# of Ports	Manifold material	Item #
HPLC waste accessory kit for Wako 38 mm threaded container – 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PP manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PP	12018-68
HPLC waste accessory kit for Wako 38 mm threaded container – 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PTFE manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12018-69

WASTE MANIFOLD CAPS AND KITS

GL45 Waste Manifold Caps



12018-77



12018-79



12018-76



12018-78

Vapor-Tight Connection

Waste manifolds are designed to fit standard GL45 threaded lab bottles.

Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold and insert with PP spin collar.

Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. All manifolds are designed to accommodate our 12019-79 filter and indicator*.

*See the emissions and filter section on pages 59–62.

Description	# of Ports	Manifold material	Item #
Waste manifold for GL45 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP	(3) 1/4 NPT (1) 1/2 NPT	PP	12018-77
Waste manifold for GL45 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT (1) 1/2 NPT	PTFE	12018-79
Waste manifold for GL45 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PP	12018-76
Waste manifold for GL45 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PTFE	12018-78

WASTE MANIFOLD CAPS AND KITS

GL45 Waste Kits

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer VapLock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use VapLock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All VapLock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plug
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) ⅛" OD hard-wall tubing connections
- (2) ⅙" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅛" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅜" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅝" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, ⅛" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x ½" NPT, PP
- (1) Breakthrough color indicator for VapLock organic vapor filter



12018-74

Note: Container is not included.

Description	# of Ports	Manifold material	Item #
HPLC waste accessory kit for GL45 threaded container – 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PP manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PP	12018-74
HPLC waste accessory kit for GL45 threaded container – 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PTFE manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12018-75

WASTE MANIFOLD CAPS AND KITS

DIN 45 Waste Manifold Caps



12018-83



12018-85



12018-82



12018-84

Vapor-Tight Connection

Waste manifolds are designed to fit standard DIN 45 threaded lab bottles.

Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold and insert with HDPE spin collar.

Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. All manifolds are designed to accommodate our 12019-79 filter and indicator*.

*See the emissions and filter section on pages 59–62.

Description	# of Ports	Manifold material	Item #
Waste manifold for DIN 45 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP	(3) 1/4 NPT (1) 1/2 NPT	PP	12018-83
Waste manifold for DIN 45 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT (1) 1/2 NPT	PTFE	12018-85
Waste manifold for DIN 45 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PP	12018-82
Waste manifold for DIN 45 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PTFE	12018-84

WASTE MANIFOLD CAPS AND KITS

DIN 45 Waste Kits

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer VapLock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use VapLock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All VapLock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plug
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) ⅛" OD hard-wall tubing connections
- (2) ⅙" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅛" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅜" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅝" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, ⅛" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x ½" NPT, PP
- (1) Breakthrough color indicator for VapLock organic vapor filter



12018-80

Note: Container is not included.

Description	# of Ports	Manifold material	Item #
HPLC waste accessory kit for DIN 45 threaded container – 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PP manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PP	12018-80
HPLC waste accessory kit for DIN 45 threaded container – 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PTFE manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12018-81

WASTE MANIFOLD CAPS AND KITS

DIN 50 Waste Manifold Caps



12018-89



12018-91



12018-88



12018-90

Vapor-Tight Connection

Waste manifolds are designed to fit standard DIN 50 threaded lab bottles.

Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold and insert with HDPE spin collar.

Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. All manifolds are designed to accommodate our 12019-79 filter and indicator*.

*See the emissions and filter section on pages 59–62.

Description	# of Ports	Manifold material	Item #
Waste manifold for DIN 50 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP	(3) 1/4 NPT (1) 1/2 NPT	PP	12018-89
Waste manifold for DIN 50 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT (1) 1/2 NPT	PTFE	12018-91
Waste manifold for DIN 50 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PP	12018-88
Waste manifold for DIN 50 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PTFE	12018-90

WASTE MANIFOLD CAPS AND KITS

DIN 50 Waste Kits

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer VapLock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use VapLock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All VapLock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plugs
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) ⅛" OD hard-wall tubing connections
- (2) ⅙" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅛" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅜" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅝" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, ⅛" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x ½" NPT, PP
- (1) Breakthrough color indicator for VapLock organic vapor filter



12018-86

Note: Container is not included.

Description	# of Ports	Manifold material	Item #
HPLC waste accessory kit for DIN 50 threaded container – 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PP manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PP	12018-86
HPLC waste accessory kit for DIN 50 threaded container – 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PTFE manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12018-87

WASTE MANIFOLD CAPS AND KITS

51 mm Waste Manifold Caps



12018-95



12018-97



12018-94



12018-96

Vapor-Tight Connection

Waste manifolds are designed to fit standard 51 mm threaded lab bottles.

Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold and insert with HDPE spin collar.

Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. All manifolds are designed to accommodate our 12019-79 filter and indicator*.

*See the emissions and filter section on pages 59–62.

Description	# of Ports	Manifold material	Item #
Waste manifold for 51 mm threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP	(3) 1/4 NPT (1) 1/2 NPT	PP	12018-95
Waste manifold for 51 mm threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT (1) 1/2 NPT	PTFE	12018-97
Waste manifold for 51 mm threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PP	12018-94
Waste manifold for 51 mm threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PTFE	12018-96

WASTE MANIFOLD CAPS AND KITS

51 mm Waste Kits

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer VapLock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use VapLock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All VapLock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plug
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) ⅛" OD hard-wall tubing connections
- (2) ⅙" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅛" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅜" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅝" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, ⅛" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x ½" NPT, PP
- (1) Breakthrough color indicator for VapLock organic vapor filter



12018-92

Note: Container is not included.

Description	# of Ports	Manifold material	Item #
HPLC waste accessory kit for 51 mm threaded container – 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PP manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PP	12018-92
HPLC waste accessory kit for 51 mm threaded container – 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PTFE manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12018-93

WASTE MANIFOLD CAPS AND KITS

Thermo Scientific Nalgene 53B Waste Manifold Caps



12019-01



12019-03



12019-00



12019-02

Vapor-Tight Connection

Waste manifolds are designed to fit standard 53B threaded lab bottles.

Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold and insert with PP spin collar.

Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. All manifolds are designed to accommodate our 12019-79 filter and indicator*.

*See the emissions and filter section on pages 59–62.

Description	# of Ports	Manifold material	Item #
Waste manifold for 53B threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP	(3) 1/4 NPT (1) 1/2 NPT	PP	12019-01
Waste manifold for 53B threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT (1) 1/2 NPT	PTFE	12019-03
Waste manifold for 53B threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PP	12019-00
Waste manifold for 53B threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PTFE	12019-02

WASTE MANIFOLD CAPS AND KITS

Thermo Scientific Nalgene 53B Waste Kits

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer VapLock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use VapLock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All VapLock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plug
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) ⅛" OD hard-wall tubing connections
- (2) ⅙" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅛" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅜" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅝" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, ⅛" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x ½" NPT, PP
- (1) Breakthrough color indicator for VapLock organic vapor filter



12018-98

Note: Container is not included.

Description	# of Ports	Manifold material	Item #
HPLC waste accessory kit for 53B threaded container – 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PP manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PP	12018-98
HPLC waste accessory kit for 53B threaded container – 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PTFE manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12018-99

WASTE MANIFOLD CAPS AND KITS

DIN 60 Waste Manifold Caps



12019-07



12019-09



12019-06



12019-08

Vapor-Tight Connection

Waste manifolds are designed to fit standard DIN 60 threaded lab bottles.

Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold and insert with HDPE spin collar.

Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. All manifolds are designed to accommodate our 12019-79 filter and indicator*.

*See the emissions and filter section on pages 59–62.

Description	# of Ports	Manifold material	Item #
Waste manifold for DIN 60 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP	(3) 1/4 NPT (1) 1/2 NPT	PP	12019-07
Waste manifold for DIN 60 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT (1) 1/2 NPT	PTFE	12019-09
Waste manifold for DIN 60 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PP	12019-06
Waste manifold for DIN 60 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PTFE	12019-08

WASTE MANIFOLD CAPS AND KITS

DIN 60 Waste Kits

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer VapLock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use VapLock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All VapLock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plugs
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) ⅛" OD hard-wall tubing connections
- (2) ⅙" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅛" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅜" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅝" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, ⅛" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x ½" NPT, PP
- (1) Breakthrough color indicator for VapLock organic vapor filter



12019-04

Note: Container is not included.

Description	# of Ports	Manifold material	Item #
HPLC waste accessory kit for DIN 60 threaded container – 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PP manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PP	12019-04
HPLC waste accessory kit for DIN 60 threaded container – 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PTFE manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12019-05

WASTE MANIFOLD CAPS AND KITS

61 mm Waste Manifold Caps



12019-13



12019-15



12019-12



12019-14

Vapor-Tight Connection

Waste manifolds are designed to fit standard 61 mm threaded lab bottles.

Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold and insert with HDPE spin collar.

Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. All manifolds are designed to accommodate our 12019-79 filter and indicator*.

*See the emissions and filter section on pages 59–62.

Description	# of Ports	Manifold material	Item #
Waste manifold for 61 mm threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP	(3) 1/4 NPT (1) 1/2 NPT	PP	12019-13
Waste manifold for 61 mm threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT (1) 1/2 NPT	PTFE	12019-15
Waste manifold for 61 mm threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PP	12019-12
Waste manifold for 61 mm threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PTFE	12019-14

WASTE MANIFOLD CAPS AND KITS

61 mm Waste Kits

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer VapLock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use VapLock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All VapLock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plug
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) ⅛" OD hard-wall tubing connections
- (2) ⅙" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅛" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅜" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅝" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, ⅛" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x ½" NPT, PP
- (1) Breakthrough color indicator for VapLock organic vapor filter



12019-10

Note: Container is not included.

Description	# of Ports	Manifold material	Item #
HPLC waste accessory kit for 61 mm threaded container – 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PP manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PP	12019-10
HPLC waste accessory kit for 61 mm threaded container – 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PTFE manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12019-11

WASTE MANIFOLD CAPS AND KITS

63 mm Waste Manifold Caps (Reike/Nowpak)



12019-19



12019-21



12019-18



12019-20

Vapor-Tight Connection

Waste manifolds are designed to fit standard 63 mm threads, including Reike and Nowpak.

Note: Some 63 mm industrial threads differ. Please contact us regarding your particular container requirements.

Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold and insert with HDPE spin collar.

Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. All manifolds are designed to accommodate our 12019-79 filter and indicator*.

*See the emissions and filter section on pages 59–62.

Description	# of Ports	Manifold material	Item #
Waste manifold for 63 mm threaded Reike/Nowpak container, 4-port with 3) 1/4" NPT, (1) 1/2" NPT, PP	(3) 1/4 NPT (1) 1/2 NPT	PP	12019-19
Waste manifold for 63 mm threaded Reike/Nowpak container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT (1) 1/2 NPT	PTFE	12019-21
Waste manifold for 63 mm threaded Reike/Nowpak container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PP	12019-18
Waste manifold for 63 mm threaded Reike/Nowpak container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PTFE	12019-20

WASTE MANIFOLD CAPS AND KITS

63 mm Waste Kits (Reike/Nowpak)

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer VapLock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use VapLock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All VapLock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plug
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) ⅛" OD hard-wall tubing connections
- (2) ⅙" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅛" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅜" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅝" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, ⅛" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x ½" NPT, PP
- (1) Breakthrough color indicator for VapLock organic vapor filter



Note: Container is not included.

Description	# of Ports	Manifold material	Item #
HPLC waste accessory kit for 63 mm threaded container – 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PP manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PP	12019-16
HPLC waste accessory kit for 63 mm threaded container – 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PTFE manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12019-17

WASTE MANIFOLD CAPS AND KITS

70 mm Waste Manifold Caps (8TPI Reike/Hedwin)



12019-25



12019-27



12019-24



12019-26

Vapor-Tight Connection

Waste manifolds are designed to fit standard 70 mm 8TPI threaded containers.

Note: Please inquire for 70 mm 6TPI options.

Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold and insert with HDPE spin collar.

Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. All manifolds are designed to accommodate our 12019-79 filter and indicator*.

*See the emissions and filter section on pages 59–62.

Description	# of Ports	Manifold material	Item #
Waste manifold for 70 mm threaded Reike/Hedwin container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP	(3) 1/4 NPT (1) 1/2 NPT	PP	12019-25
Waste manifold for 70 mm threaded Reike/Hedwin container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT (1) 1/2 NPT	PTFE	12019-27
Waste manifold for 70 mm threaded Reike/Hedwin container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PP	12019-24
Waste manifold for 70 mm threaded Reike/Hedwin container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PTFE	12019-26

WASTE MANIFOLD CAPS AND KITS

70 mm Waste Kits (8TPI Reike/Hedwin)

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer VapLock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use VapLock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All VapLock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plug
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) ⅛" OD hard-wall tubing connections
- (2) ⅙" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅛" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅜" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅝" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, ⅛" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x ½" NPT, PP
- (1) Breakthrough color indicator for VapLock organic vapor filter



Note: Container is not included.

Description	# of Ports	Manifold material	Item #
HPLC waste accessory kit for 70 mm threaded container – 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PP manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PP	12019-22
HPLC waste accessory kit for 70 mm threaded container – 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PTFE manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12019-23

WASTE MANIFOLD CAPS AND KITS

70 mm Waste Manifold Caps (Thermo Scientific Nalgene)



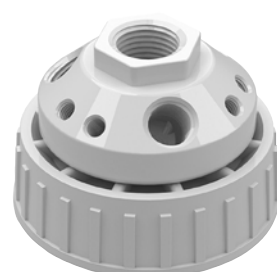
12019-31



12019-33



12019-30



12019-32

Vapor-Tight Connection

Waste manifolds are designed to fit standard 70 mm Nalgene threaded containers.

Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold and insert with PP spin collar.

Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. All manifolds are designed to accommodate our 12019-79 filter and indicator*.

*See the emissions and filter section on pages 59–62.

Description	# of Ports	Manifold material	Item #
Waste manifold for 70 mm threaded Nalgene container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP	(3) 1/4 NPT (1) 1/2 NPT	PP	12019-31
Waste manifold for 70 mm threaded Nalgene container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT (1) 1/2 NPT	PTFE	12019-33
Waste manifold for 70 mm threaded Nalgene container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PP	12019-30
Waste manifold for 70 mm threaded Nalgene container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PTFE	12019-32

WASTE MANIFOLD CAPS AND KITS

70 mm Waste Kits (Thermo Scientific Nalgene)

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer VapLock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use VapLock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All VapLock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plug
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) ⅛" OD hard-wall tubing connections
- (2) ⅙" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅛" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅜" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅝" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, ⅛" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x ½" NPT, PP
- (1) Breakthrough color indicator for VapLock organic vapor filter



12019-28

Note: Container is not included.

Description	# of Ports	Manifold material	Item #
HPLC waste accessory kit for 70 mm threaded container – 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PP manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PP	12019-28
HPLC waste accessory kit for 70 mm threaded container – 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PTFE manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12019-29

WASTE MANIFOLD CAPS AND KITS

GL80 Waste Manifold Caps



12019-37



12019-39



12019-36



12019-38

Vapor-Tight Connection

Waste manifolds are designed to fit standard GL80 threaded containers.

Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold and insert with PP spin collar.

Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. All manifolds are designed to accommodate our 12019-79 filter and indicator*.

*See the emissions and filter section on pages 59–62.

Description	# of Ports	Manifold material	Item #
Waste manifold for GL80 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP	(3) 1/4 NPT (1) 1/2 NPT	PP	12019-37
Waste manifold for GL80 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT (1) 1/2 NPT	PTFE	12019-39
Waste manifold for GL80 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PP	12019-36
Waste manifold for GL80 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PTFE	12019-38

WASTE MANIFOLD CAPS AND KITS

GL80 Waste Kits

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer VapLock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use VapLock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All VapLock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plug
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) ⅛" OD hard-wall tubing connections
- (2) ⅙" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅛" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅜" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅝" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, ⅛" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x ½" NPT, PP
- (1) Breakthrough color indicator for VapLock organic vapor filter



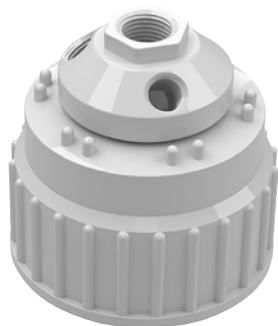
12019-34

Note: Container is not included.

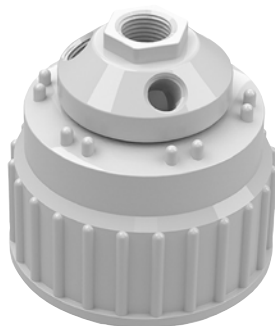
Description	# of Ports	Manifold material	Item #
HPLC waste accessory kit for GL80 threaded container – 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PP manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PP	12019-34
HPLC waste accessory kit for GL80 threaded container – 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PTFE manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12019-35

WASTE MANIFOLD CAPS AND KITS

Thermo Scientific Nalgene 83B Waste Manifold Caps



12019-43



12019-45



12019-42



12019-44

Vapor-Tight Connection

Waste manifolds are designed to fit standard 83B threaded containers.

Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold and insert with PP spin collar.

Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. All manifolds are designed to accommodate our 12019-79 filter and indicator*.

*See the emissions and filter section on pages 59–62.

Description	# of Ports	Manifold material	Item #
Waste manifold for 83B threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP	(3) 1/4 NPT (1) 1/2 NPT	PP	12019-43
Waste manifold for 83B threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT (1) 1/2 NPT	PTFE	12019-45
Waste manifold for 83B threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PP	12019-42
Waste manifold for 83B threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PTFE	12019-44

WASTE MANIFOLD CAPS AND KITS

Thermo Scientific Nalgene 83B Waste Kits

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer VapLock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use VapLock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All VapLock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plug
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) ⅛" OD hard-wall tubing connections
- (2) ⅙" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅛" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅜" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅝" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, ⅛" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x ½" NPT, PP
- (1) Breakthrough color indicator for VapLock organic vapor filter



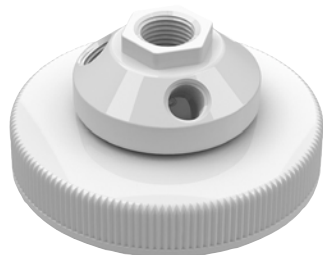
12019-40

Note: Container is not included.

Description	# of Ports	Manifold material	Item #
HPLC waste accessory kit for 83B threaded container – 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PP manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PP	12019-40
HPLC waste accessory kit for 83B threaded container – 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PTFE manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12019-41

WASTE MANIFOLD CAPS AND KITS

Thermo Scientific Nalgene 100-415 Waste Manifold Caps



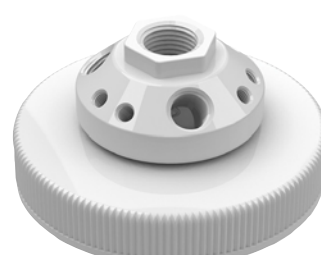
12019-49



12019-51



12019-48



12019-50

Vapor-Tight Connection

Waste manifolds are designed to fit standard 100-415 threaded containers.

Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold and insert with PP spin collar.

Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. All manifolds are designed to accommodate our 12019-79 filter and indicator*.

*See the emissions and filter section on pages 59–62.

Description	# of Ports	Manifold material	Item #
Waste manifold for 100-415 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP	(3) 1/4 NPT (1) 1/2 NPT	PP	12019-49
Waste manifold for 100-415 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT (1) 1/2 NPT	PTFE	12019-51
Waste manifold for 100-415 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PP	12019-48
Waste manifold for 100-415 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PTFE	12019-50

WASTE MANIFOLD CAPS AND KITS

Thermo Scientific Nalgene 100-415 Waste Kits

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer VapLock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use VapLock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All VapLock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plug
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) ⅛" OD hard-wall tubing connections
- (2) ⅙" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅛" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅜" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅝" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, ⅛" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x ½" NPT, PP
- (1) Breakthrough color indicator for VapLock organic vapor filter



12019-46

Note: Container is not included.

Description	# of Ports	Manifold material	Item #
HPLC waste accessory kit for 100-415 threaded container – 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PP manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PP	12019-46
HPLC waste accessory kit for 100-415 threaded container – 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PTFE manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12019-47

WASTE MANIFOLD CAPS AND KITS

Justrite® Container Quick-Disconnect Waste Manifold Caps



12019-56

12019-58

12019-60

12019-55

12019-57

12019-59

Vapor-Tight Connection

Waste manifolds are designed to fit Justrite HPLC quick-disconnect safety containers.

Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold with PP or SS quick disconnect.

Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. To complete the closed system, attach a VapLock emissions filter* to the separate exhaust port quick disconnect using the appropriate adapter.

*See the emissions and filter section on pages 59–62.

Description	# of Ports	Manifold material	Item #
Waste manifold for Justrite container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP manifold, PP disconnect	(3) 1/4 NPT (1) 1/2 NPT	PP	12019-56
Waste manifold for Justrite container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP manifold, SS disconnect	(3) 1/4 NPT (1) 1/2 NPT	PP	12019-58
Waste manifold for Justrite container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE manifold, PP disconnect	(3) 1/4 NPT (1) 1/2 NPT	PTFE	12019-60
Waste manifold for Justrite container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP manifold, PP disconnect	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PP	12019-55
Waste manifold for Justrite container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP manifold, SS disconnect	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PP	12019-57
Waste manifold for Justrite container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE manifold, SS disconnect	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PTFE	12019-59

WASTE MANIFOLD CAPS AND KITS

Justrite Container Quick-Disconnect Waste Kits

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer VapLock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use VapLock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All VapLock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plug
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) ⅛" OD hard-wall tubing connections
- (2) ⅙" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅛" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅜" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅝" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, ⅛" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x ½" NPT, PP
- (1) Breakthrough color indicator for VapLock organic vapor filter



12019-53

Note: Container is not included.

Description	# of Ports	Manifold material	Item #
HPLC waste accessory kit for Justrite container – 10 port; includes PP manifold, PP disconnect, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PP	12019-52
HPLC waste accessory kit for Justrite container – 10 port; includes PP manifold, SS disconnect, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PP	12019-53
HPLC waste accessory kit for Justrite container – 10 port; includes PTFE manifold, SS disconnect, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12019-54

WASTE MANIFOLD CAPS AND KITS

Drum Waste Manifold Caps (2" Fine Thread)



12019-62



12019-64



12019-61



12019-63

Vapor-Tight Connection

Waste manifolds are designed to fit US standard 2" drum bung with fine threads.

Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold with PP drum thread adapter.

Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. All manifolds are designed to accommodate our 12019-79 filter and indicator*.

*See the emissions and filter section on pages 59–62.

Description	# of Ports	Manifold material	Item #
Waste manifold for drum 2" fine thread, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP	(3) 1/4 NPT (1) 1/2 NPT	PP	12019-62
Waste manifold for drum 2" fine thread, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT (1) 1/2 NPT	PTFE	12019-64
Waste manifold for drum 2" fine thread, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PP	12019-61
Waste manifold for drum 2" fine thread, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PTFE	12019-63

WASTE MANIFOLD CAPS AND KITS

Drum Waste Kits (2" Fine Thread)

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer VapLock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use VapLock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All VapLock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plug
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) ⅛" OD hard-wall tubing connections
- (2) ⅙" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅛" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅜" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅝" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, ⅛" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x ½" NPT, PP
- (1) Breakthrough color indicator for VapLock organic vapor filter



12019-65

Note: Container is not included.

Description	# of Ports	Manifold material	Item #
HPLC waste accessory kit for drum 2" fine thread – 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PP manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PP	12019-65
HPLC waste accessory kit for drum 2" fine thread – 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PTFE manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12019-66

WASTE MANIFOLD CAPS AND KITS

Drum Waste Manifold Caps (2" Coarse Thread)



12019-68



12019-70



12019-67



12019-69

Vapor-Tight Connection

Waste manifolds are designed to fit US standard 2" drum bung with coarse threads.

Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold with PP drum thread adapter.

Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. All manifolds are designed to accommodate our 12019-79 filter and indicator*.

*See the emissions and filter section on pages 59–62.

Description	# of Ports	Manifold material	Item #
Waste manifold for drum 2" coarse thread, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP	(3) 1/4 NPT (1) 1/2 NPT	PP	12019-68
Waste manifold for drum 2" coarse thread, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT (1) 1/2 NPT	PTFE	12019-70
Waste manifold for drum 2" coarse thread, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PP	12019-67
Waste manifold for drum 2" coarse thread, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PTFE	12019-69

WASTE MANIFOLD CAPS AND KITS

Drum Waste Kits (2" Coarse Thread)

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer VapLock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use VapLock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All VapLock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plug
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) ⅛" OD hard-wall tubing connections
- (2) ⅙" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅛" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅜" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅝" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, ⅛" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x ½" NPT, PP
- (1) Breakthrough color indicator for VapLock organic vapor filter



12019-71

Note: Container is not included.

Description	# of Ports	Manifold material	Item #
HPLC waste accessory kit for drum 2" coarse thread – 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PP manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PP	12019-71
HPLC waste accessory kit for drum 2" coarse thread – 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PTFE manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12019-72

WASTE MANIFOLD CAPS AND KITS

Panel-Mount Waste Manifold Caps



12019-74



12019-76



12019-73



12019-75

Vapor-Tight Connection

Waste manifolds are configured to fit an aperture drilled to 1-1/4" ID, with panel thickness of 1/16" to 1/2". An area 1-3/4" diameter free of obstruction around the aperture is required for use. Manifold drains to a 1/2" NPT common port at the base.

* Inquire for cam lock and quick-disconnect options.

Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold and lock nut.

Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. All manifolds are designed to accommodate our 12019-79 filter and indicator*.

*See the emissions and filter section on pages 59–62.

Description	# of Ports	Manifold material	Item #
Waste manifold, panel mount, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP	(3) 1/4 NPT (1) 1/2 NPT	PP	12019-74
Waste manifold, panel mount, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT (1) 1/2 NPT	PTFE	12019-76
Waste manifold, panel mount, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PP	12019-73
Waste manifold, panel mount, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PTFE	12019-75

WASTE MANIFOLD CAPS AND KITS

Drum Waste Kits (2" Coarse Thread)

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer VapLock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use VapLock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All VapLock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plug
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) ⅛" OD hard-wall tubing connections
- (2) ⅙" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅛" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅜" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, ⅝" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, ⅛" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x ½" NPT, PP
- (1) Breakthrough color indicator for VapLock organic vapor filter



12019-77

Note: Container is not included.

Description	# of Ports	Manifold material	Item #
HPLC waste accessory kit for panel mount – 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PP manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PP	12019-77
HPLC waste accessory kit for panel mount – 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PTFE manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12019-78

Chemical Exhaust Filters



12019-79 / 12019-81



12019-84

Emission Reduction

Use VapLock exhaust filters to mitigate health hazards and reduce harmful chemical emissions and odors from laboratory solvent containers. Developed and tested specifically for HPLC organic solvents, they may be used in conjunction with VapLock breakthrough indicators to determine longevity and establish a replacement schedule.

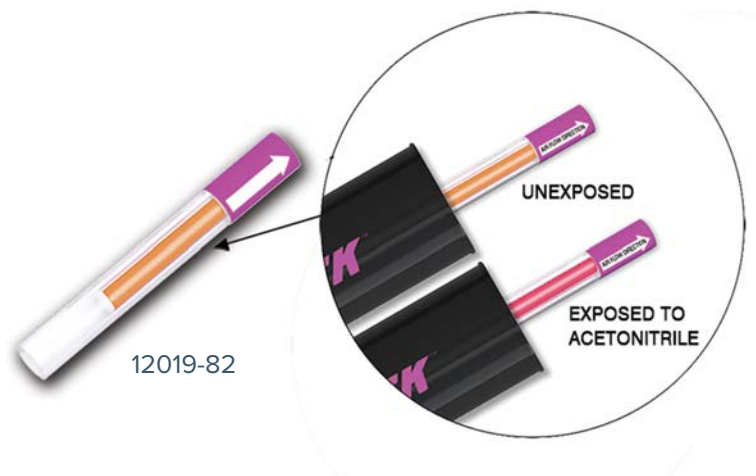
Adaptable Design

Available in 76 g and 300 g cartridge sizes, VapLock filters include activated media for organic solvents and are constructed of an HDPE housing with ¼" NPT female receiving port. Attach to various point emission sources with VapLock filter adapters. Please inquire for other sizes and formats.

Description	Indicator included	Item #
VapLock exhaust filter, 75 g with ¼" NPT female port	No	12019-79
VapLock exhaust filter, 75 g with ¼" NPT female port, 5 pack	No	12019-81
VapLock exhaust filter kit with indicator, 75 g with ¼" NPT female port	Yes	12019-80
VapLock exhaust filter, 300 g with ¼" NPT female port	No	12019-84

BREAKTHROUGH INDICATORS

Breakthrough Indicators



Colorimetric Change

Designed to detect the end-of-service life for VapLock exhaust filters, breakthrough indicators respond under exposure to organic solvent vapors. Final effects display within minutes or hours of exposure. Color saturation varies by solvent. Replace the exhaust filter when a variation occurs. Housing is acrylic with borosilicate glass option available.

Multiple Solvent Detection

Breakthrough indicators may be used with the following chemicals. This list is not comprehensive. Please inquire for detection of other organic solvents: acetone, acetonitrile, acids (i.e. acetic acid, hydrochloric acid, trifluoroacetic acid, trichloroacetic acid), acrylonitrile, aliphatic hydrocarbons (i.e. hexane), aromatic hydrocarbons (i.e. benzene, toluene, and xylenes), chlorinated hydrocarbons (i.e. carbon tetrachloride, chloroform, and methylene chloride), ethanol, ethyl acetate, ethyl acrylate, ethyl ether, gasoline, HFIP (hexafluoroisopropanol), methanol, methyl acetate, naphtha, phenol, sulfolane, THF (tetrahydrofuran).

Product Usage

Not for use in the presence of basic vapors in high concentrations (i.e. pyridine and aliphatic amines), which impair performance of the indicator. Does not respond to gaseous aliphatic hydrocarbons or aldehydes. Avoid exposure to heat or direct sunlight. Use only at room temperature. Shelf life is 12 months. For analytical research purposes only.

Description	Filter included	Item #
Breakthrough indicator for VapLock exhaust filters	No	12019-82
Breakthrough indicator for VapLock exhaust filters, 5 pack	No	12019-83
VapLock exhaust filter kit with indicator, 75 g with ¼" NPT female port	Yes	12019-80

Filter Adapters



12019-85



12019-86



12019-87



12019-88



12019-89



12019-90



12019-91



12019-92



12019-93

Versatile Configurations

VapLock exhaust filters (12019-79 and 12019-81) may be attached to various point-source emissions by use of the appropriate adapter. Each filter includes a 1/4" female port. Select from the list below to adapt filters to a typical system, or inquire for assistance with special requirements. All adapters are reusable. Please note that options for Justrite safety containers are made to fit either polypropylene (PP) or stainless steel (SS) quick disconnects, but are not interchangeable.

Carbon Filter Adapters

Description	Adapter type	Material	Item #
Filter adapter, luer lock x 1/4" NPT, natural PP	Straight	PP	12019-85
Filter adapter, 1/4" NPT x 1/4" NPT, PP	Straight	PP	12019-86
Filter adapter, 1/4" NPT x 1/2" NPT, PP	Straight	PP	12019-87
Filter adapter with PP and EPDM quick disconnect for Justrite Centura® containers	Straight	PP, EPDM	12019-88
Filter adapter, 90 degree elbow, 1/4" NPT x 1/2" NPT, PP	90 degree elbow	PP	12019-89
Filter adapter with SS and PTFE quick disconnect for Justrite Centura containers	Straight	SS, PTFE	12019-90
Filter adapter, 90 degree elbow with PP and EPDM quick disconnect for Justrite Centura containers	90 degree elbow	PP, EPDM	12019-91
Filter adapter, 90 degree elbow with SS and PTFE quick disconnect for Justrite Centura containers	90 degree elbow	SS, PTFE	12019-92
Filter adapter, 45 degree elbow, 1/4" MNPT x 1/4" MNPT, nylon	45 degree elbow	Nylon	12019-93

ADAPTERS

Filter Adapters (continued)



12019-94



12019-95



12019-96



12019-97



12019-98



12019-99



12020-00

Versatile Configurations

VapLock exhaust filters (12019-79 and 12019-81) may be attached to various point-source emissions by use of the appropriate adapter. Each filter includes a 1/4" female port. Select from the list below to adapt filters to a typical system, or inquire for assistance with special requirements. All adapters are reusable. Please note that options for Justrite safety containers are made to fit either polypropylene (PP) or stainless steel (SS) quick disconnects, but are not interchangeable.

Carbon Filter Adapters

Description	Adapter type	Material	Item #
Filter adapter, 90 degree elbow, 1/4" MNPT x 1/2" MNPT, PP	90 degree elbow	PP	12019-94
Filter adapter, 1/4" NPT male x 1/4-28 male, red PEEK™	Straight	Peek	12019-95
Adjustable filter adapter for 1/4" NPT female port, black acetal	Adjustable	Acetal	12019-96
Adjustable filter adapter for 1/2" NPT female port, black acetal	Adjustable	Acetal	12019-97
Adjustable filter adapter, with PP and EPDM quick disconnect for Justrite Centura containers, black acetal	Adjustable	PP, EPDM, acetal	12019-98
Adjustable filter adapter, with SS and PTFE quick disconnect for Justrite Centura containers, black acetal	Adjustable	SS, EPDM, acetal	12019-99
Filter adapter, 1/8" NPT x 1/4" NPT, PP	Straigh	PP	12020-00

Tubing Connections



For 1/4-28 and 5/16-24 UNF Ports

Compression fittings designed for liquid-tight connection of semi-rigid tubing to flat bottom 1/4-28 and 5/16-24 port threads, for tubing diameters 1/16" to 3/16" OD. Each connection is comprised of a two-piece nut and ferrule system, useful for pressurized applications under 500 psi. Make a selection based on your tubing outside diameter (OD); fittings are color-coded by tubing size for easy identification. These bottom-sealing UNF fittings do not require PTFE tape.

Fittings for Semi-Rigid Tubing

Description	Color	Tubing OD	Item #
Tubing connection, 4 mm OD tubing x 5/16-24, brown PEEK nut, white PCTFE ferrule	Brown	4 mm	12020-01
Tubing connection, 3/16" OD tubing x 5/16-24, white acetal nut, blue ETFE ferrule	White	3/16-inch	12020-02
Tubing connection, 1/16" OD tubing x 1/4-24, green PP nut, blue ETFE ferrule, 10 pack	Green	1/16-inch	12020-03
Tubing connection, 1.8–2.0 mm OD tubing x 1/4-28, red PP nut, green ETFE ferrule, 10 pack	Red	1.8–2.0 mm	12020-04
Tubing connection, 2.2 mm (0.085") OD tubing x 1/4-28, black PP nut, white PTFE ferrule, 10 pack	Black	2.2 mm	12020-05
Tubing connection, 2.5 mm OD tubing x 1/4-28, orange PP nut, white ETFE ferrule, 10 pack	Orange	2.5 mm	12020-06
Tubing connection, 3 mm OD tubing x 1/4-28, yellow PP nut, orange ETFE ferrule, 10 pack	Yellow	3 mm	12020-07
Tubing connection, 1/8" OD tubing x 1/4-28, blue PP nut, yellow ETFE ferrule, 10 pack	Blue	1/8-inch	12020-08

TUBING CONNECTIONS

Tubing Connection Adapters

Representative images only



12020-09



12020-10



12020-11



12020-12



12020-13



12020-14



12020-15



12020-16

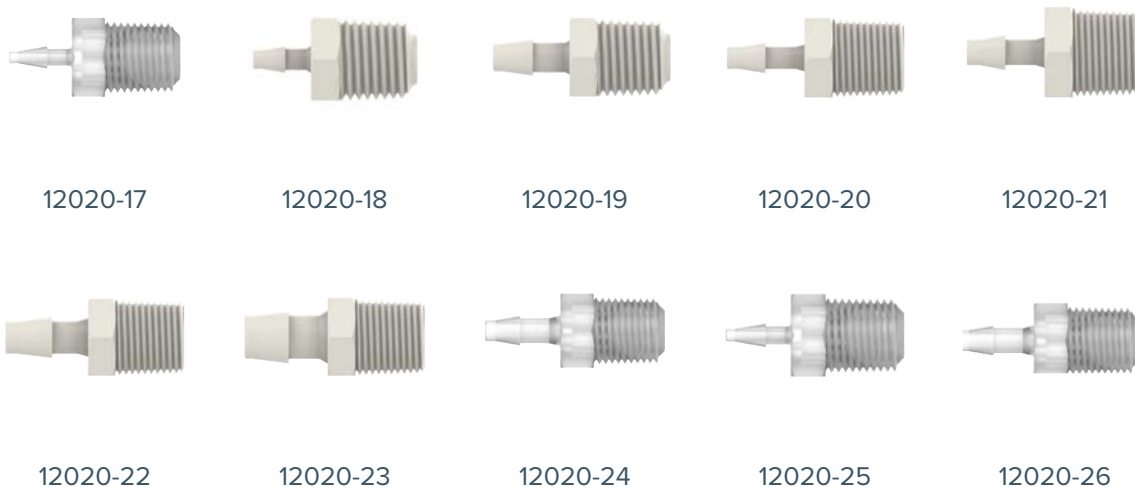
For 1/4" NPT Ports

Compression fittings designed for liquid-tight connection of semi-rigid tubing to 1/4" NPT ports, for tubing diameters 1/16" to 3/16" OD. Each connection is comprised of a two-piece nut and ferrule system with PP thread adapter. Useful for pressurized applications under 500 psi. Make a selection based on your tubing outside diameter (OD); fittings are color-coded by tubing size for easy identification. Wrap NPT threads 3 to 4 times with PTFE tape and wrench tighten for leak-resistant connections.

Fittings for Semi-Rigid Tubing

Description	Color	OD	Thread	Material	Item #
Tubing connection, 4 mm OD tubing x 1/4" NPT, brown PEEK nut, white PCTFE ferrule, PP adapter	Brown	4 mm	1/4" NPT	PEEK, PCTFE, PP	12020-09
Tubing connection, 3/16" OD tubing x 1/4" NPT, white acetal nut, blue ETFE ferrule, PP adapter	White	3/16-inch	1/4" NPT	Acetal, ETFE, PP	12020-10
Tubing connection, 1/16" OD tubing x 1/4" NPT, green PP nut, blue ETFE ferrule, PP adapter	Green	1/16-inch	1/4" NPT	PP, ETFE	12020-11
Tubing connection, 1.8–2.0 mm OD tubing x 1/4" NPT, red PP nut, green ETFE ferrule, PP adapter	Red	1.8–2.0 mm	1/4" NPT	PP, ETFE	12020-12
Tubing connection, 2.2 mm OD tubing x 1/4" NPT, black PP nut, natural ETFE ferrule, PP adapter	Black	2.2 mm	1/4" NPT	PP, ETFE	12020-13
Tubing connection, 2.5 mm OD tubing x 1/4" NPT, orange PP nut, natural ETFE ferrule, PP adapter	Orange	2.5 mm	1/4" NPT	PP, ETFE	12020-14
Tubing connection, 3 mm OD tubing x 1/4" NPT, yellow PP nut, orange ETFE ferrule, PP adapter	Yellow	3 mm	1/4" NPT	PP, ETFE	12020-15
Tubing connection, 1/8" OD tubing x 1/4" NPT, blue PP nut, yellow ETFE ferrule, PP adapter	Blue	1/8-inch	1/4" NPT	PP, ETFE	12020-16

Barbed Tubing Connections



For 1/8", 1/4" and 1/2" NPT Ports

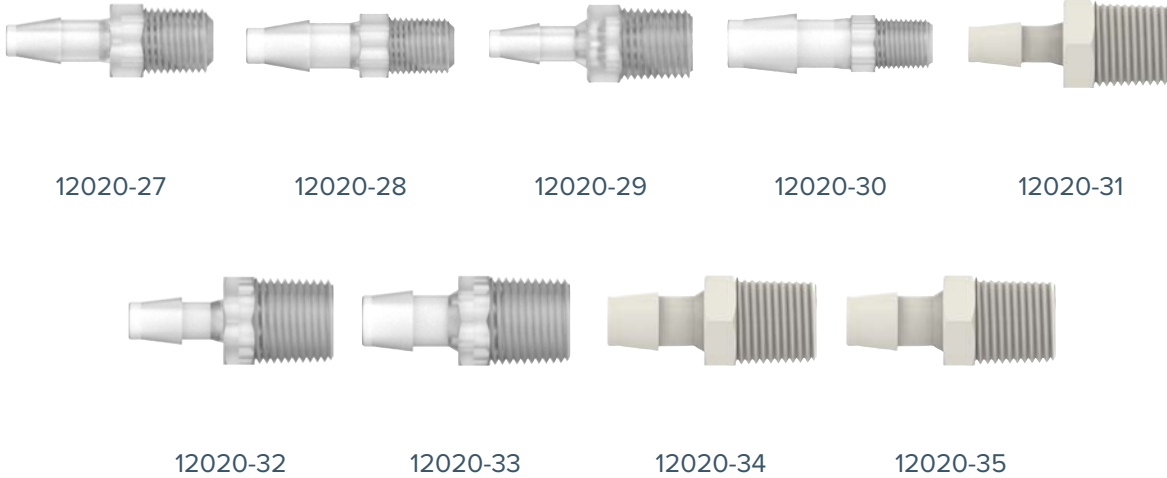
A semi-permanent connection for soft-walled tubing only, barbed fittings are an economical means of connecting tubing to VapLock manifold ports with NPT threads. For tubing diameters 1/16" to 1/2" ID. All fittings are polypropylene (PP). Make a selection based on your tubing inside diameter. Wrap NPT threads 3 to 4 times with PTFE tape and wrench tighten for leak-resistant connections.

Fittings for Soft-Wall Tubing

Description	Tubing ID	Thread	Item #
Barbed tubing connection, 1/16" ID tubing x 1/4" NPT, PP, 10 pack	1/16-inch	1/4" NPT	12020-17
Barbed tubing connection, 1/8" ID tubing x 1/4" NPT, PP, 10 pack	1/8-inch	1/4" NPT	12020-18
Barbed tubing connection, 3/16" ID tubing x 1/4" NPT, PP, 10 pack	3/16-inch	1/4" NPT	12020-19
Barbed tubing connection, 1/4" ID tubing x 1/4" NPT, PP, 10 pack	1/4-inch	1/4" NPT	12020-20
Barbed tubing connection, 5/16" ID tubing x 1/4" NPT, PP, 10 pack	5/16-inch	1/4" NPT	12020-21
Barbed tubing connection, 3/8" ID tubing x 1/4" NPT, PP, 10 pack	3/8-inch	1/4" NPT	12020-22
Barbed tubing connection, 1/2" ID tubing x 1/4" NPT, PP, 10 pack	1/2-inch	1/4" NPT	12020-23
Barbed tubing connection, 5/32" ID tubing x 1/4" NPT, PP, 10 pack	5/32-inch	1/4" NPT	12020-24
Barbed tubing connection, 1/16" ID tubing x 1/8" NPT, PP, 10 pack	1/16-inch	1/8" NPT	12020-25
Barbed tubing connection, 1/8" ID tubing x 1/8" NPT, PP, 10 pack	1/8-inch	1/8" NPT	12020-26

TUBING CONNECTIONS

Barbed Tubing Connections



For 1/8", 1/4" and 1/2" NPT Ports (continued)

A semi-permanent connection for soft-walled tubing only, barbed fittings are an economical means of connecting tubing to VapLock manifold ports with NPT threads. For tubing diameters 1/16" to 1/2" ID. All fittings are polypropylene (PP). Make a selection based on your tubing inside diameter. Wrap NPT threads 3 to 4 times with PTFE tape and wrench tighten for leak-resistant connections.

Fittings for Soft-Wall Tubing

Description	Tubing ID	Thread	Item #
Barbed tubing connection, 3/16" ID tubing x 1/8" NPT, PP, 10 pack	3/16-inch	1/8" NPT	12020-27
Barbed tubing connection, 1/4" ID tubing x 1/8" NPT, PP, 10 pack	1/4-inch	1/8" NPT	12020-28
Barbed tubing connection, 5/16" ID tubing x 1/8" NPT, PP, 10 pack	5/16-inch	1/8" NPT	12020-29
Barbed tubing connection, 3/8" ID tubing x 1/8" NPT, PP, 10 pack	3/8-inch	1/8" NPT	12020-30
Barbed tubing connection, 1/4" ID tubing x 1/2" NPT, PP, 10 pack	1/4-inch	1/2" NPT	12020-31
Barbed tubing connection, 3/8" ID tubing x 1/2" NPT, PP, 10 pack	3/8-inch	1/2" NPT	12020-32
Barbed tubing connection, 1/2" ID tubing x 1/2" NPT, PP, 10 pack	1/2-inch	1/2" NPT	12020-33
Barbed tubing connection, 5/8" ID tubing x 1/2" NPT, PP, 10 pack	5/8-inch	1/2" NPT	12020-34
Barbed tubing connection, 3/4" ID tubing x 1/2" NPT, PP, 10 pack	3/4-inch	1/2" NPT	12020-35

Large-Bore Tubing Connections



For ¼" NPT and ½" NPT Ports

Compression fittings are designed for liquid-tight connection of semi-rigid tubing to NPT ports; for tubing diameters ¼" to ¾" OD. Useful for pressurized applications under 100 psi. Make a selection based on your tubing outside diameter. All fittings are comprised of two-piece molded polypropylene (PP) components and do not include a separate ferrule. Wrap NPT threads 3 to 4 times with PTFE tape and wrench tighten for leak-resistant connections.

Fittings for Semi-Rigid Tubing

Description	OD	Thread	Item #
Tubing connection, ¼" and 6 mm OD tubing x ¼" NPT, PP, 5 pack	¼-inch	¼" NPT	12020-36
Tubing connection, 5/16" OD tubing x ¼" NPT, PP, 5 pack	5/16-inch	¼" NPT	12020-37
Tubing connection, 3/8" OD tubing x ¼" NPT, PP, 5 pack	3/8-inch	¼" NPT	12020-38
Tubing connection, ½" OD tubing x ¼" NPT, PP, 5 pack	½-inch	¼" NPT	12020-39
Tubing connection, 3/8" OD tubing x ½" NPT, PP, 5 pack	3/8-inch	½" NPT	12020-40
Tubing connection, ½" OD tubing x ½" NPT, PP, 5 pack	½-inch	½" NPT	12020-41
Tubing connection, 5/8" OD tubing x ½" NPT, PP, 5 pack	5/8-inch	½" NPT	12020-42
Tubing connection, ¾" OD tubing x ½" NPT, PP, 5 pack	¾-inch	½" NPT	12020-43

PORT PLUGS

Port Plugs



12020-44



12020-45



12020-46



12020-47



12020-48



12020-49



12020-50



12020-51

For NPT and UNF Ports

Available in multiple materials, use the following plugs to seal unused manifold and bottle cap ports. Options for NPT ports are 1/8", 1/4", 3/8", and 1/2" NPT, and should be wrapped 3 to 4 times with PTFE tape for leak-resistant connections. Bottom-sealing UNF thread options include 1/4-28 and 5/16-24 and do not require PTFE tape.

Plugs

Description	Thread	Material	Item #
Plugs, 1/4" NPT, PP, 10 pack	1/4" NPT	PP	12020-44
Plugs, 1/2" NPT, PP, 10 pack	1/2" NPT	PP	12020-45
Plugs, 1/4-28, black acetal, 10 pack	1/4-28	Acetal	12020-46
Plugs, 1/4-28, PTFE, 10 pack	1/4-28	PTFE	12020-47
Plugs, 1/4" NPT male, PTFE	1/4" NPT	PTFE	12020-48
Plugs, 3/8" NPT male, PP, 10 pack	3/8" NPT	PP	12020-49
Plugs, 1/8" NPT, PP, 10 pack	1/8" NPT	PP	12020-50
Plugs, 5/16-24, PTFE	5/16-24	PTFE	12020-51

VENTILATION CONTROL VALVES

Ventilation Control Valves



12020-52 / 12020-56



12020/58 / 12020-59 / 12020-60

For 1/4-28 and 1/4" NPT Ports

Although VapLock solvent supply caps are available with built-in check valve elements, ventilation control valves may also be purchased as stand-alone units. With air inlet, relief and reversible configurations, vent control valves may be selected in two cracking pressure and with Viton, EPDM, and FFKM seal materials. Air inlet valves permit air to enter a bottle to displace vacuum while solvent is pumped out to an instrument. Relief valves allow pressurized bottle contents to escape above the cracking pressure. Reversible valves may serve either purpose, air inlet or relief, depending on the orientation once installed.

Plugs

Description	Thread	Cracking pressure	Seal material	Item #
Air inlet valve, 1/4-28 male, PTFE with Viton check element	1/4-28	0.1–0.25 psi	Viton	12020-52
Air inlet valve, 1/4-28 male, PTFE with EPDM check element	1/4-28	0.1–0.25 psi	EPDM	12020-53
Air inlet valve, 1/4-28 male, PTFE with FFKM check element	1/4-28	0.1–0.25 psi	FFKM	12020-61
Relief valve, 1/4-28 male, PTFE with Viton check element	1/4-28	0.1–0.25 psi	Viton	12020-54
Relief valve, 1/4-28 male, PTFE with EPDM check element	1/4-28	0.1–0.25 psi	EPDM	12020-55
Relief valve, 1/4-28 male, PTFE with FFKM check element	1/4-28	0.1–0.25 psi	FFKM	12020-62
Relief valve, 1/4-28 male, PTFE with Viton check element	1/4-28	1–2.5 psi	Viton	12020-56
Relief valve, 1/4-28 male, PTFE with EPDM check element	1/4-28	1–2.5 psi	EPDM	12020-57
Relief valve, 1/4-28 male, PTFE with FFKM check element	1/4-28	1–2.5 psi	FFKM	12020-63
Reversible control valve, 1/4" MNPT x 1/4" MNPT, PP with Viton check element	1/4" NPT	0.1–0.25 psi	Viton	12020-58
Reversible control valve, 1/4" MNPT x 1/4" MNPT, PP with EPDM check element	1/4" NPT	0.1–0.25 psi	EPDM	12020-59
Reversible control valve, 1/4" MNPT x 1/4" MNPT, PP with FFKM check element	1/4" NPT	0.1–0.25 psi	FFKM	12020-60

SAFETY FUNNELS

- Capture waste and hazardous solvents securely
- Reduce fumes and harmful vapor exhaust
- Quick connect to Justrite Centura safety containers

Versatile Configurations

Cole-Parmer VapLock “SF Series” funnels allow for safer disposal of pourable laboratory waste. A locking, hinged lid minimizes leaks and spills when the funnel is closed. If used in tandem with other VapLock products, such as manifold and exhaust filter, a closed system may be maintained for passive wastes while the funnel is sealed.

Justrite Centura containers are available with two quick-disconnect materials: polypropylene (with EPDM O-ring) and stainless steel (with PTFE O-ring). Select a safety funnel according to the type of disconnect material present on the safety container. Funnels are constructed of high-density polyethylene (HDPE) and polypropylene (PP), and a Viton sealing gasket.

Note: As with all solvent applications, chemical compatibility of the solvent and product should be noted prior to purchase.



12020-64
safety funnel on
Justrite PP12752

Safety Funnels

Description	Item #
Safety funnel with polypropylene disconnect and EPDM O-ring	12020-64
Safety funnel with stainless steel disconnect and PTFE O-ring	12020-65
Safety funnel with no quick disconnect, with 1/2" NPT male thread	12020-66

Need help?

Our specialists are here to help you find the best product or part available for your application. Call or email us and we will make sure you get the right product or part for the job.

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