



Solvent Extraction

Closed Systems

Safer solvent extraction and waste collection in laboratory instruments

Minimize exposure
to harmful solvent fumes and vapors

Capture solvent waste
securely, without leaks or drips, without foil or lab film

Reduce evaporation
of expensive chemical reagents

Emissions Control

Waste Collection

Many lab instruments (such as HPLC, LC-MS, FPLC, ICP, and others) require use of volatile **organic solvents** which can be **health and safety concerns** for those working in proximity to these machines.

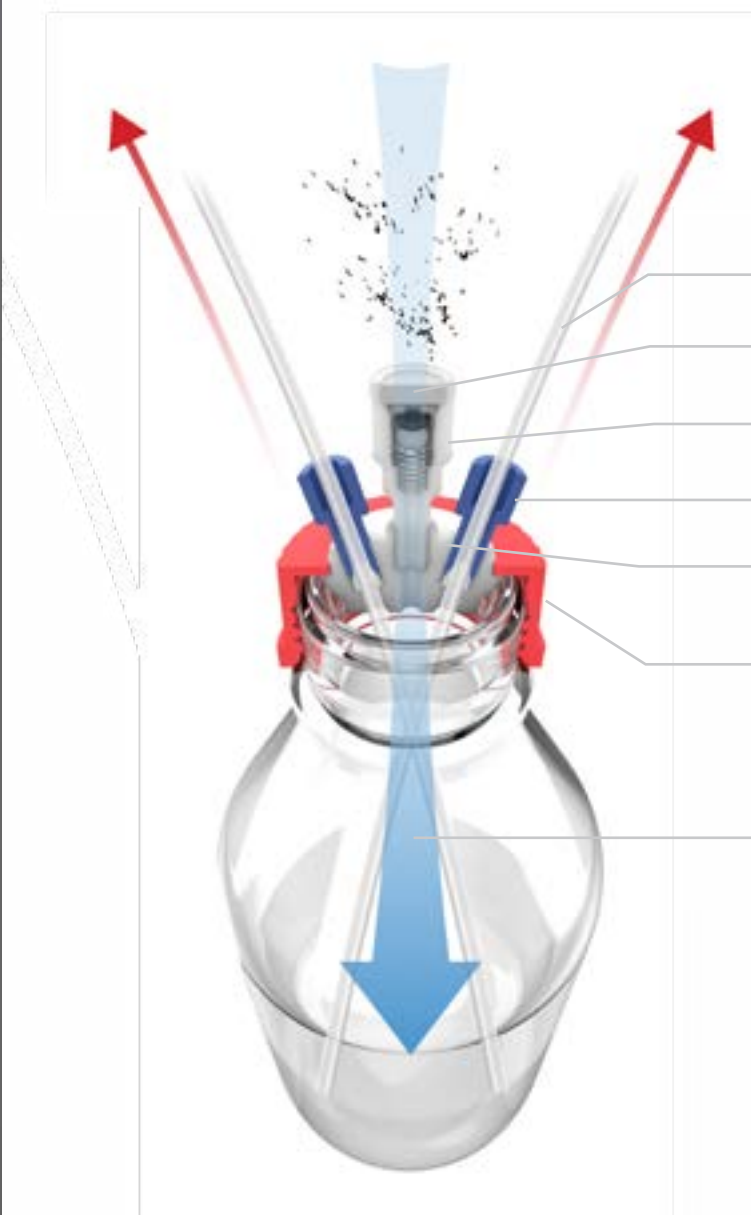
Because these are “active” systems — pumping solvent from one reservoir to the instrument and then to waste — a containment solution for both pure reagents and waste effluent must allow for air flow in or out of containers, while **mitigating both evaporation and solvent fumes**.

The products listed here provide a **closed-system solution** to this problem.



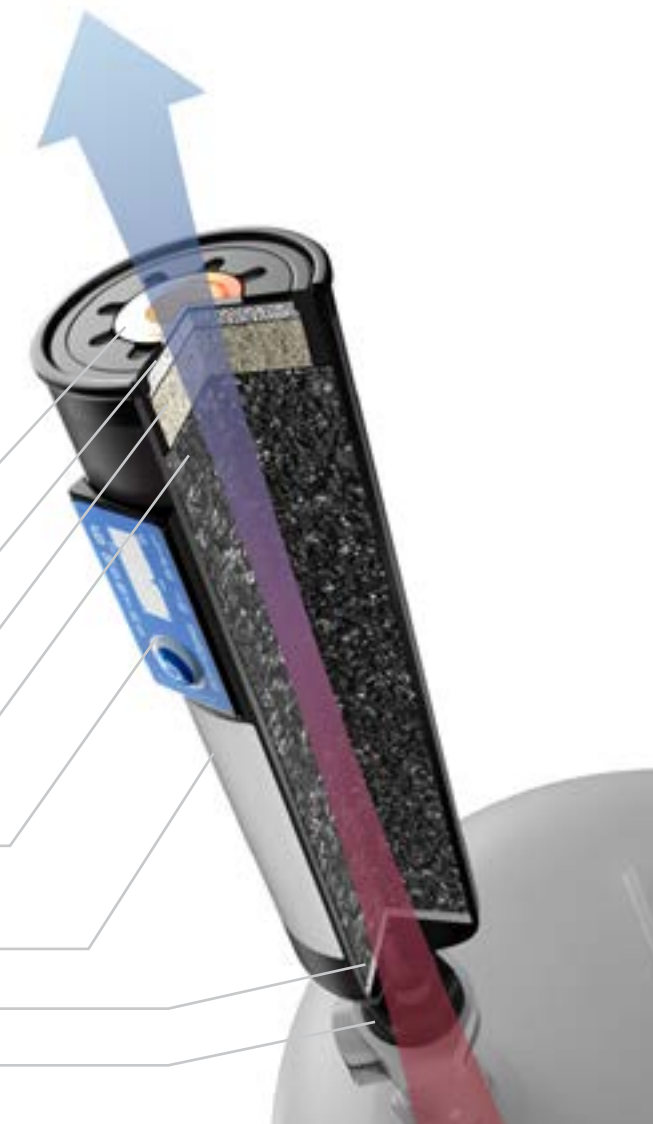
Solvent Extraction

- Solvent exits the bottle through tubing
- Particulate filter
- Inert PTFE one-way check valve reduces solvent evaporation
- Tubing connection
- Inert PTFE cap insert
- Polypropylene collar rotates independently to avoid twisted tubing
- Clean air enters through one way check valve



Emissions Control

- Chemical change breakthrough indicator
- Polypropylene filter membrane
- Polypropylene mesh
- Activated carbon adsorbs organic solvent vapors
- Replacement timer
- Installation date write-in
- Polypropylene membrane
- Filter adapter



Exhaust Filters

For HPLC emission reduction

Active Solvent Adsorption

Reduce toxic fumes and noxious odors from HPLC solvent waste by vapor capture onto activated carbon exhaust filters. Available in 3-month or 6-month configurations, each filter includes a single-use timer to provide an estimated replacement date.* For real-time end of service life detection, or for use with normal phase or aggressive solvents, select filters with a chemical-change breakthrough indicator to reveal a color change after exposure to organic solvents.

Adaptable Design

Suitable for continuous flow of solvent vapor on analytical or semi-preparative HPLC instruments, the filters are constructed of HDPE and Polypropylene and may be attached to various point-source emissions by adapting to the 1/4" NPT female port at the receiving end of the filter.

**based on use with reverse-phase organic solvents on analytical-scale HPLC instruments.*



3-Month or 6-Month Timer

At the press of a button, initiate a replacement date for the filter and display the estimated end of service life.



Chemical Change Breakthrough Indicator - AR-IN01

For real-time solvent breakthrough indication, use of a chemical-change indicator is recommended.



Part Number	Description	U/M
Medium Filters		
AR-CFM	Exhaust Filter, Medium	Each
AR-CFM-5PK	Exhaust Filter Pack, Medium	5/PK
AR-CFMI	Exhaust Filter w/ Indicator, Medium	Each
AR-CFMI-5PK	Exhaust Filter Pack w/ Indicator, Medium	5/PK
Large Filters		
AR-CFL	Exhaust Filter, Large	Each
AR-CFLI	Exhaust Filter w/ Indicator, Large	Each
Chemical Change Breakthrough Indicators		
AR-IN01	Breakthrough Indicator, Chemical Change	Each
AR-IN01-5PK	Indicator Pack, Chemical Change	5/PK



AR-CFM
Exhaust Filter, Medium



AR-CFL
Exhaust Filter, Large



AR-CFMI
Exhaust Filter w/ Indicator, Medium



AR-CFLI
Exhaust Filter w/ Indicator, Large

Filter Adapters

Attach to various emission sources

One receiving port, many options

Whether attaching an exhaust filter to a collection manifold or to a quick disconnect on a safety can, select from these adapters based on height limitations above the container.



AR-FJPAA
Justrite® PP Adjustable



AR-FJSAA
Justrite® SS Adjustable



AR-FJPPL
Justrite® PP 90° Elbow



AR-FJSPL
Justrite® SS 90° Elbow



AR-FJPP
Justrite® Plastic



AR-FJSP
Justrite® SS

Justrite® Plastic

Justrite® SS



Part Number	Description	Material
Filter Adapters – Type C Ports – 1/8" NPT		
AR-FACA	1/8" MNPT X 1/4" MNPT, Adjustable	Acetal
AR-FPCL	1/8" MNPT X 1/4" MNPT, 90° Elbow	PP
AR-FPCL45	1/8" MNPT X 1/4" MNPT, 45° Elbow	PP
AR-FPC	1/8" MNPT X 1/4" MNPT	PP
Filter Adapters – Type D Ports – 1/4" NPT		
AR-FADA	1/4" MNPT X 1/4" MNPT, Adjustable	Acetal
AR-FPDL	1/4" MNPT X 1/4" MNPT, 90° Elbow	PP
AR-FPDL45	1/4" MNPT X 1/4" MNPT, 45° Elbow	PP
AR-FPD	1/4" MNPT X 1/4" MNPT	PP
Filter Adapters – Type E Ports – 1/2" NPT		
AR-FAEA	1/2" MNPT X 1/4" MNPT, Adjustable	Acetal
AR-FPEL	1/2" MNPT X 1/4" MNPT, 90° Elbow	PP
AR-FPEL45	1/2" MNPT X 1/4" MNPT, 45° Elbow	PP
AR-FPE	1/2" MNPT X 1/4" MNPT	PP
Filter Adapters – Justrite® Plastic Quick Disconnect		
AR-FJPAA	Justrite® PP Adjustable	PP/Acetal
AR-FJPPL	Justrite® PP 90° Elbow	PP
AR-FJPP	Justrite® Plastic	PP
Filter Adapters – Justrite® Stainless Steel Quick Disconnect		
AR-FJSAA	Justrite® SS Adjustable	PP/Acetal
AR-FJSPL	Justrite® SS 90° Elbow	PP
AR-FJSP	Justrite® SS	PP



AR-FACA
1/8" MNPT X 1/4" MNPT
Adjustable



AR-FADA
1/4" MNPT X 1/4" MNPT
Adjustable



AR-FAEA
1/2" MNPT X 1/4" MNPT
Adjustable



AR-FPCL
1/8" MNPT X 1/4" MNPT
90° Elbow



AR-FPDL
1/4" MNPT X 1/4" MNPT
90° Elbow



AR-FPEL
1/2" MNPT X 1/4" MNPT
90° Elbow



AR-FPCL45
1/8" MNPT X 1/4" MNPT
45° Elbow



AR-FPDL45
1/4" MNPT X 1/4" MNPT
45° Elbow



AR-FPEL45
1/2" MNPT X 1/4" MNPT
45° Elbow



AR-FPC
1/8" MNPT X 1/4" MNPT

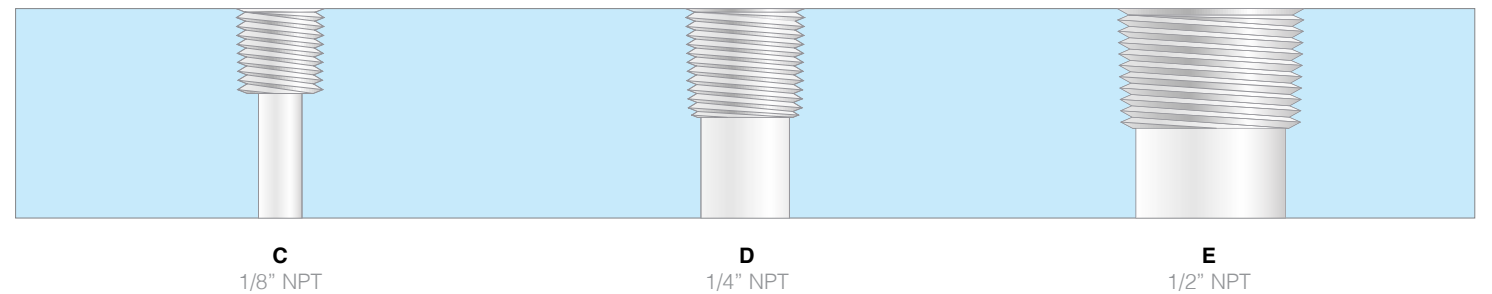


AR-FPD
1/4" MNPT X 1/4" MNPT



AR-FPE
1/2" MNPT X 1/4" MNPT

Port Thread Sizes



C
1/8" NPT

D
1/4" NPT

E
1/2" NPT

38-400 shallow thread

For Wako® and Cubitainer® 38mm bottles



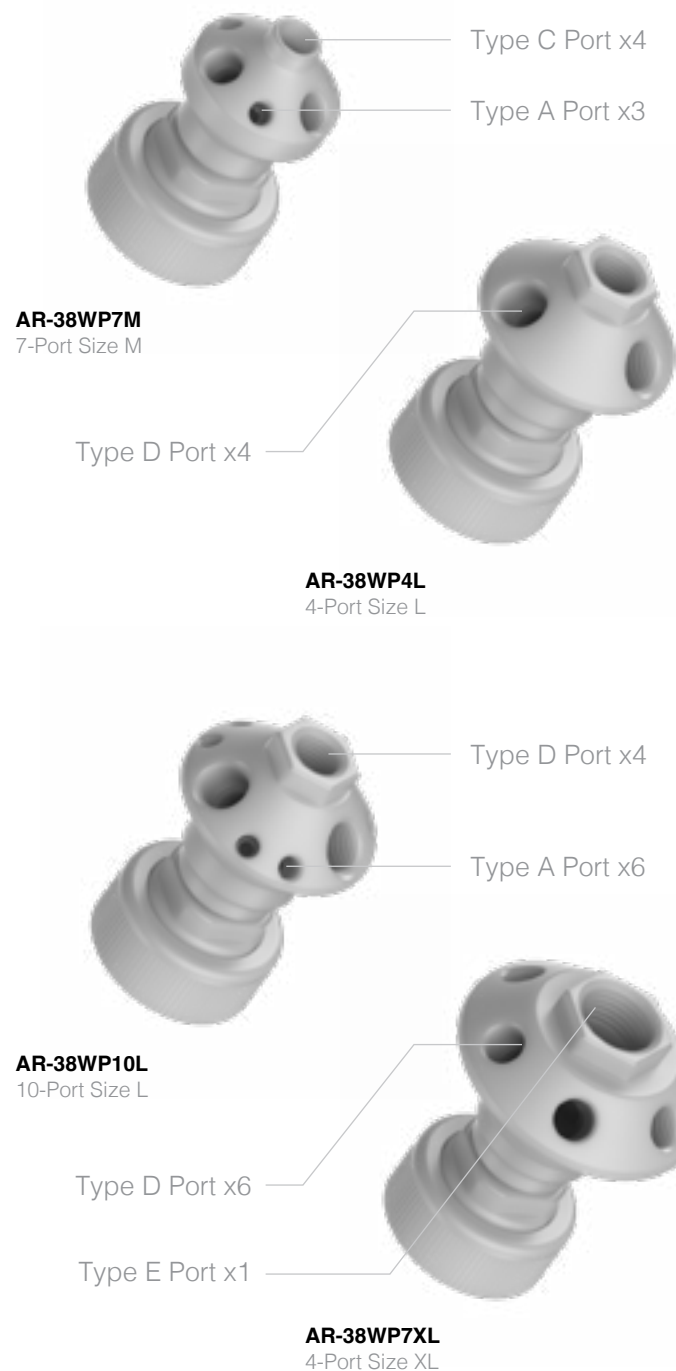
Container Type and Thread Size

A close cousin to the taller 38-430 finish, outside of laboratory circles the 38-400 thread is perhaps far more ubiquitous - appearing on household containers from dairy products to spice jars. In the lab, this thread is found on name brand bottles such as Wako® Chemicals - in both glass and plastic versions - and Cubitainer®, which offers many packaging options including collapsible containers and "boxed bottles" for easy shipment of liquids.

Although similar in appearance to the Nalgene® 38-415 thread, the two are not compatible.



Waste Collection



Part Number	Description	# of Ports
Manifolds for Wako 38-400		
AR-38WP7M	7-Port, Size M, Polypropylene	3A, 4C
AR-38WX7M	7-Port, Size M, PTFE	3A, 4C
AR-38WP4L	4-Port, Size L, Polypropylene	4D
AR-38WP10L	10-Port, Size L, Polypropylene	6A, 4D
AR-38WP7XL	7-Port, Size XL, Polypropylene	6D, 1E
Waste Kits		
AR-K38WP-A	Waste Kit Basic	6A, 4D
AR-K38WP-B	Waste Kit Plus	6A, 4D

AR-K38WP-A
Basic Waste Kit



AR-K38WP-B
Plus Waste Kit

Basic Kit Contents

The Basic Kit for HPLC waste collection includes a 10-port Polypropylene manifold, fittings kit with tubing connections for typical analytical-scale HPLC instruments, port plugs, filter adapter (straight and 90 degree elbow) and an exhaust filter with timer.

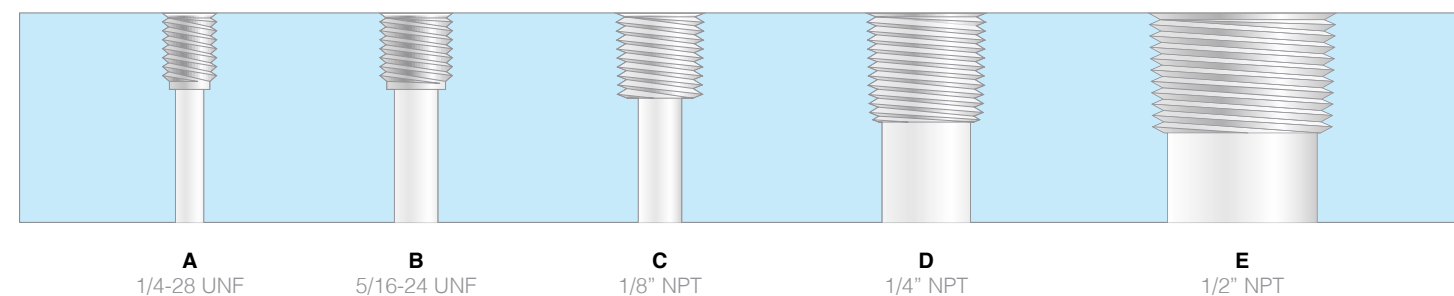
The fittings kit includes:

- (6) PTFE Type A port plugs
- (3) PP Type D port plugs
- (1) Barbed 1/4" Y-connector
- (1) 3/8" ID barbed adapter
- (3) 1/4" ID barbed adapters
- (1) 3/16" ID barbed adapter
- (1) 1/8" ID barbed adapter
- (2) 1/16" OD tube fittings
- (2) 2.2mm OD tube fittings
- (1) 2.5mm OD tube fitting
- (3) 1/8" OD tube fittings

Plus Kit Contents

The Plus Kit includes all the essentials of the Basic Kit for HPLC waste collection, but with the addition of a 5' tubing extension for detector outlets or short effluent tubes, plus a chemical-change indicator for real-time end of service life with organic solvents.

Port Thread Sizes



38-400 shallow thread

For Wako® and Cubitainer® 38mm bottles



Solvent Extraction

Although practically all the bottle caps provided here could be used for either solvent extraction or waste collection, the difference in function lies in how ventilation is handled.

During solvent extraction, air must enter the bottle to displace solvent removed - a problem resolved with a one-way check valve. The removeable valve is constructed of inert PTFE components with stainless spring, compatible with most laboratory solvents, with a low opening pressure below 1psi to avoid pump cavitation.

Tubing is secured to threaded ports ("Type A" 1/4-28) in inert PTFE inserts. The insert rotates independently from the Polypropylene cap collar - a feature which prevents twisted tubing when the cap is removed. The tubing connections provided are for 1/8" (3.2mm) OD tubing.



CT-CVX1

1-way check valve



AR-38WX4T-VF

4-tube w/ valve + fittings
3 plugs

Available 2024

Part Number	Description	Tube Ports
1-Tube Caps		
AR-38WX1T-V	1 open port w/ valve	1A
AR-38WX1T-VF	1-tube w/ valve + fittings	1A
2-Tube Caps		
AR-38WX2T	2 open ports	2A
AR-38WX2T-F	2-tube w/ fittings, 1 plug	2A
AR-38WX2T-V	2 open ports w/ valve	2A
AR-38WX2T-VF	2-tube w/ valve + fittings, 1 plug	2A
3-Tube Caps		
AR-38WX3T	3 open ports	3A
AR-38WX3T-F	3-tube w/ fittings, 2 plugs	3A
AR-38WX3T-V	3 open ports w/ valve	3A
AR-38WX3T-VF	3-tube w/ valve + fittings, 2 plugs	3A
4-Tube Caps		
AR-38WX4T	4 open ports	4A
AR-38WX4T-F	4-tube w/ fittings, 3 plugs	4A
AR-38WX4T-V	4 open ports w/ valve	4A
AR-38WX4T-VF	4-tube w/ valve + fittings, 3 plugs	4A
5-Tube Caps		
AR-38WX5T	5 open ports	5A
AR-38WX5T-F	5-tube w/ fittings, 4 plugs	5A
Check Valve		
AR-CVX1	1-Way Check Valve, Inert PTFE	

1
Tube



AR-38WX1T-V
1 open port w/ valve



AR-38WX1T-VF
1-tube w/ valve + fitting

2
Tubes



AR-38WX2T
2 open ports



AR-38WX2T-F
2-tube w/fittings
1 plug



AR-38WX2T-V
2 open ports w/ valve



AR-38WX2T-VF
2-tube w/ valve + fittings
1 plug

3
Tubes



AR-38WX3T
3 open ports



AR-38WX3T-F
3-tube w/fittings
2 plugs



AR-38WX3T-V
3 open ports w/ valve



AR-38WX3T-VF
3-tube w/ valve + fittings
2 plugs

4
Tubes



AR-38WX4T
4 open ports



AR-38WX4T-F
4-tube w/fittings
3 plugs



AR-38WX4T-V
4 open ports w/ valve



AR-38WX4T-VF
4-tube w/ valve + fittings
3 plugs

5
Tubes



AR-38WX5T
5 open ports



AR-38WX5T-F
5-tube with fittings
4 plugs

GL38

For 38-430 glass threaded bottles



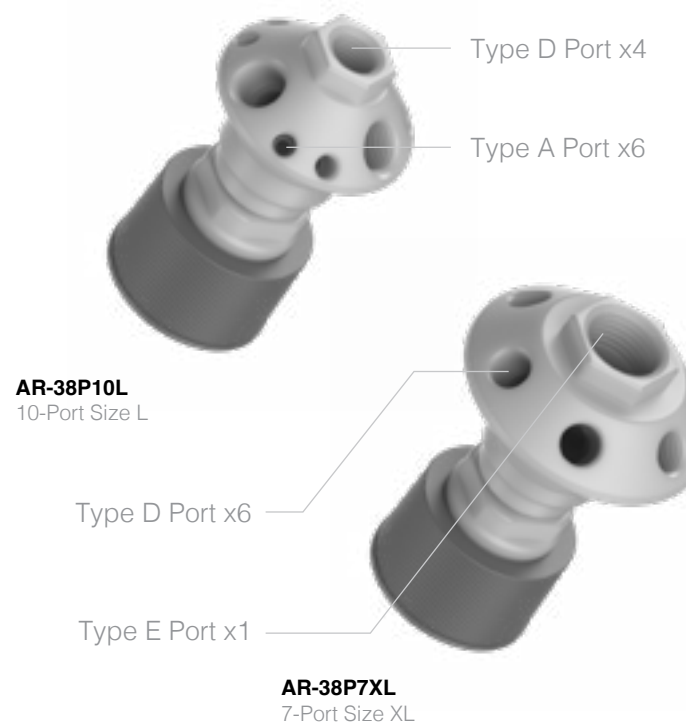
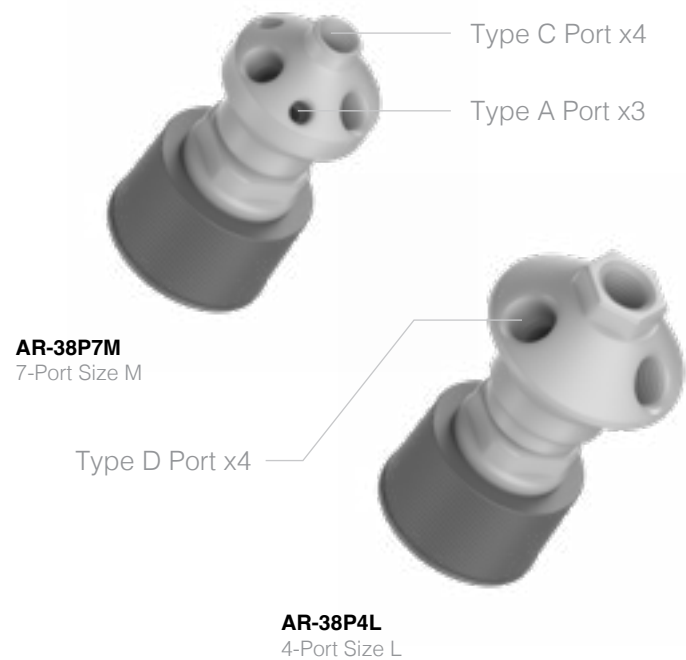
Container Type and Thread Size

The 4-liter amber glass bottle with distinctive finger grip is as common in most labs as Parafilm® and pipettes. Used by many chemical manufacturers as the containment vessel of choice for solvents, these bottles are (thankfully) supplied with a more-or-less standardized finish: the "GL38" 38-430 glass thread. Although compatible with 38-430 caps used on some plastic bottles - such as Nalgene - it's important to note that the GL38 caps supplied here are not deep enough to engage and seal on many plastic 38-430 bottles.

Watch out for 38mm thread variants: increasingly, chemical suppliers utilize a 38-415 thread on 4L bottles instead of the more common 38-430. Although identical in appearance, these two threads aren't interchangeable.



Waste Collection



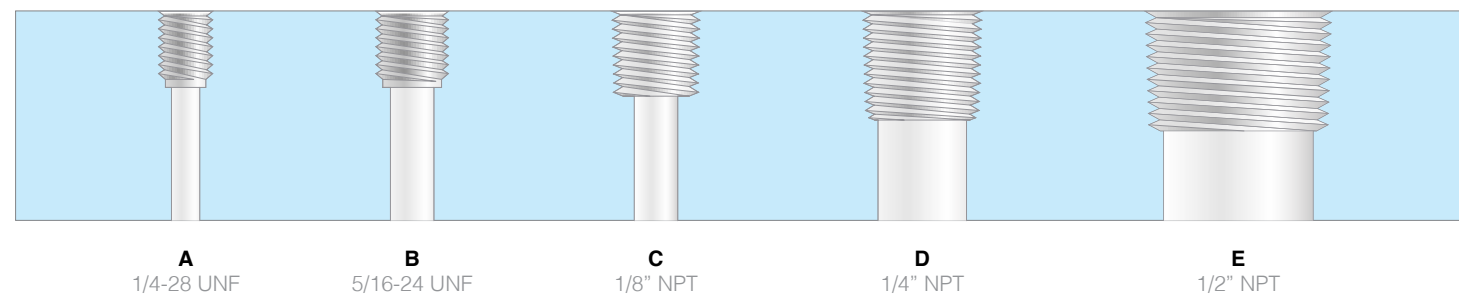
Part Number	Description	# of Ports
Manifolds for GL38		
AR-38P7M	7-Port, Size M, Polypropylene	3A, 4C
AR-38X7M	7-Port, Size M, PTFE	3A, 4C
AR-38P4L	4-Port, Size L, Polypropylene	4D
AR-38P10L	10-Port, Size L, Polypropylene	6A, 4D
AR-38P7XL	7-Port, Size XL, Polypropylene	6D, 1E
Waste Kits		
AR-K38P-A	Waste Kit Basic	6A, 4D
AR-K38P-B	Waste Kit Plus	6A, 4D

AR-K38P-A
Basic Waste Kit



AR-K38P-B
Plus Waste Kit

Port Thread Sizes



Basic Kit Contents

The Basic Kit for HPLC waste collection includes a 10-port Polypropylene manifold, fittings kit with tubing connections for typical analytical-scale HPLC instruments, port plugs, filter adapter (straight and 90 degree elbow) and an exhaust filter with timer.

The fittings kit includes:

- (6) PTFE Type A port plugs
- (3) PP Type D port plugs
- (1) Barbed 1/4" Y-connector
- (1) 3/8" ID barbed adapter
- (3) 1/4" ID barbed adapters
- (1) 3/16" ID barbed adapter
- (1) 1/8" ID barbed adapter
- (2) 1/16" OD tube fittings
- (2) 2.2mm OD tube fittings
- (1) 2.5mm OD tube fitting
- (3) 1/8" OD tube fittings

Plus Kit Contents

The Plus Kit includes all the essentials of the Basic Kit for HPLC waste collection, but with the addition of a 5' tubing extension for detector outlets or short effluent tubes, plus a chemical-change indicator for real-time end of service life with organic solvents.

GL38

For 38-430 glass threaded bottles



Solvent Extraction

Although practically all the bottle caps provided here could be used for either solvent extraction or waste collection, the difference in function lies in how ventilation is handled.

During solvent extraction, air must enter the bottle to displace solvent removed - a problem resolved with a one-way check valve. The removeable valve is constructed of inert PTFE components with stainless spring, compatible with most laboratory solvents, with a low opening pressure below 1psi to avoid pump cavitation.

Tubing is secured to threaded ports ("Type A" 1/4-28) in inert PTFE inserts. The insert rotates independently from the Polypropylene cap collar - a feature which prevents twisted tubing when the cap is removed. The tubing connections provided are for 1/8" (3.2mm) OD tubing.

**CT-CVX1**

1-way check valve

**AR-38X4T-VF**4-tube w/ valve + fittings
3 plugs

Available 2024

Part Number	Description	Tube Ports
1-Tube Caps		
AR-38X1T-V	1 open port w/ valve	1A
AR-38X1T-VF	1-tube w/ valve + fittings	1A
2-Tube Caps		
AR-38X2T	2 open ports	2A
AR-38X2T-F	2-tube w/ fittings, 1 plug	2A
AR-38X2T-V	2 open ports w/ valve	2A
AR-38X2T-VF	2-tube w/ valve + fittings, 1 plug	2A
3-Tube Caps		
AR-38X3T	3 open ports	3A
AR-38X3T-F	3-tube w/ fittings, 2 plugs	3A
AR-38X3T-V	3 open ports w/ valve	3A
AR-38X3T-VF	3-tube w/ valve + fittings, 2 plugs	3A
4-Tube Caps		
AR-38X4T	4 open ports	4A
AR-38X4T-F	4-tube w/ fittings, 3 plugs	4A
AR-38X4T-V	4 open ports w/ valve	4A
AR-38X4T-VF	4-tube w/ valve + fittings, 3 plugs	4A
5-Tube Caps		
AR-38X5T	5 open ports	5A
AR-38X5T-F	5-tube w/ fittings, 4 plugs	5A
Check Valve		
AR-CVX1	1-Way Check Valve, Inert PTFE	

1
Tube**AR-38X1T-V**
1 open port w/ valve**AR-38X1T-VF**
1-tube w/ valve + fitting2
Tubes**AR-38X2T**
2 open ports**AR-38X2T-F**
2-tube w/ fittings
1 plug**AR-38X2T-V**
2 open ports w/ valve**AR-38X2T-VF**
2-tube w/ valve + fittings
1 plug3
Tubes**AR-38X3T**
3 open ports**AR-38X3T-F**
3-tube w/ fittings
2 plugs**AR-38X3T-V**
3 open ports w/ valve**AR-38X3T-VF**
3-tube w/ valve + fittings
2 plugs4
Tubes**AR-38X4T**
4 open ports**AR-38X4T-F**
4-tube w/ fittings
3 plugs**AR-38X4T-V**
4 open ports w/ valve**AR-38X4T-VF**
4-tube w/ valve + fittings
3 plugs5
Tubes**AR-38X5T**
5 open ports**AR-38X5T-F**
5-tube with fittings
4 plugs

38-430 plastic thread

For Nalgene® and similar plastic bottles



Container Type and Thread Size

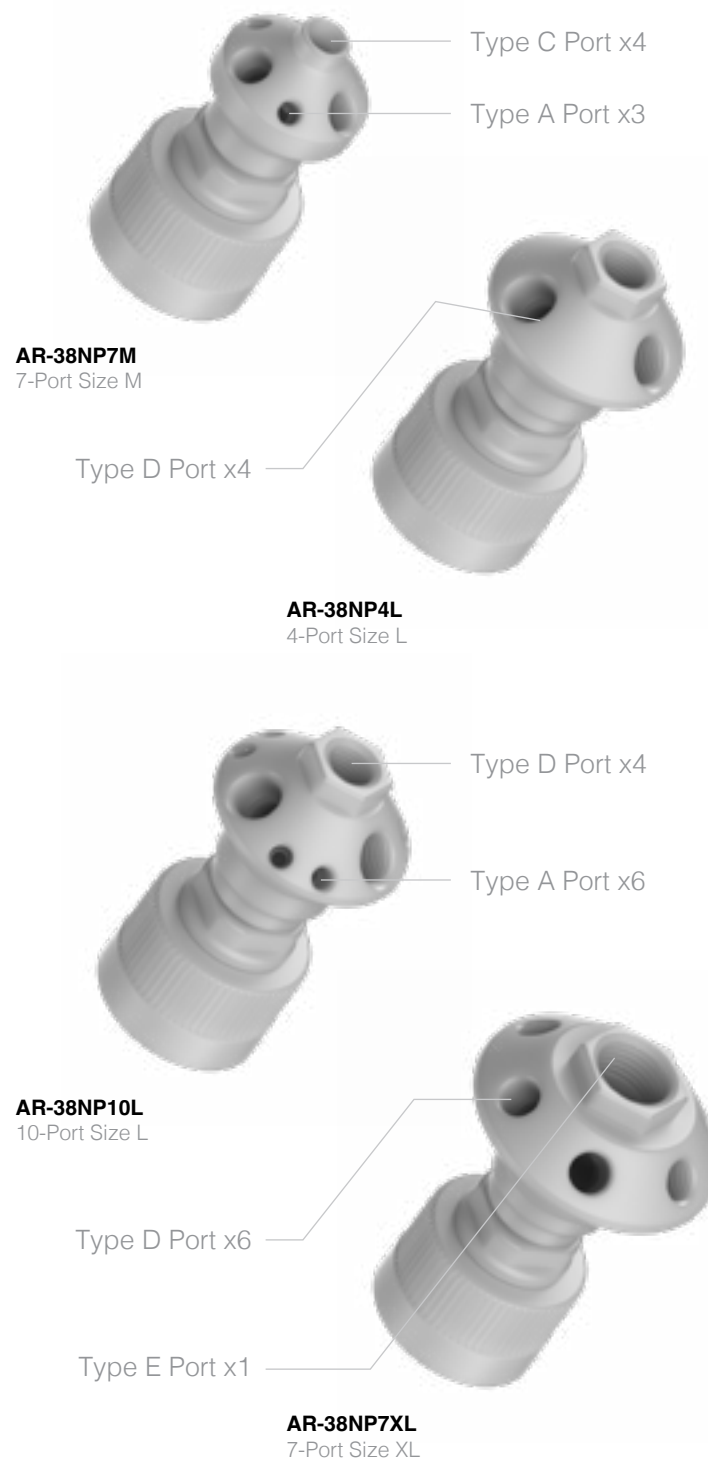
In most regards the 38-430 plastic bottle thread is identical to the GL38 glass version, with the noted difference that a small shoulder has been introduced to the mouth of the plastic bottle which raises the required depth of the cap. This inconvenient change means that the GL38 safety caps offered in the previous pages are too shallow to engage and seal on a plastic 38-430 threaded bottle.

In our experience, the most common 38-430 plastic bottles are from the Nalgene® brand, although several other manufacturers make bottles with similar finishes which seem to follow the same standard.

36.8 mm - 37.5 mm



Waste Collection



Part Number	Description	# of Ports
Manifolds for 38-430 Nalgene		
AR-38NP7M	7-Port, Size M, Polypropylene	3A, 4C
AR-38NX7M	7-Port, Size M, PTFE	3A, 4C
AR-38NP4L	4-Port, Size L, Polypropylene	4D
AR-38NP10L	10-Port, Size L, Polypropylene	6A, 4D
AR-38NP7XL	7-Port, Size XL, Polypropylene	6D, 1E
Waste Kits		
AR-K38NP-A	Waste Kit Basic	6A, 4D
AR-K38NP-B	Waste Kit Plus	6A, 4D

AR-K38NP-A
Basic Waste Kit



AR-K38NP-B
Plus Waste Kit



Basic Kit Contents

The Basic Kit for HPLC waste collection includes a 10-port Polypropylene manifold, fittings kit with tubing connections for typical analytical-scale HPLC instruments, port plugs, filter adapter (straight and 90 degree elbow) and an exhaust filter with timer.

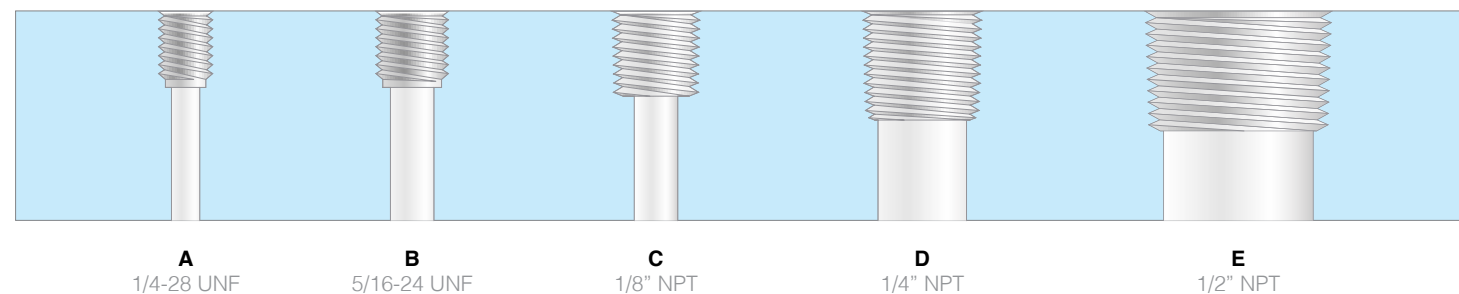
The fittings kit includes:

- (6) PTFE Type A port plugs
- (3) PP Type D port plugs
- (1) Barbed 1/4" Y-connector
- (1) 3/8" ID barbed adapter
- (3) 1/4" ID barbed adapters
- (1) 3/16" ID barbed adapter
- (1) 1/8" ID barbed adapter
- (2) 1/16" OD tube fittings
- (2) 2.2mm OD tube fittings
- (1) 2.5mm OD tube fitting
- (3) 1/8" OD tube fittings

Plus Kit Contents

The Plus Kit includes all the essentials of the Basic Kit for HPLC waste collection, but with the addition of a 5' tubing extension for detector outlets or short effluent tubes, plus a chemical-change indicator for real-time end of service life with organic solvents.

Port Thread Sizes



38-430 plastic thread

For Nalgene® and similar plastic bottles



Solvent Extraction

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During solvent extraction, air must enter the bottle to displace solvent removed - a problem resolved with a one-way check valve. The removeable valve is constructed of inert PTFE components with stainless spring, compatible with most laboratory solvents, with a low opening pressure below 1psi to avoid pump cavitation.

Tubing is secured to threaded ports ("Type A" 1/4-28) in inert PTFE inserts. The insert rotates independently from the Polypropylene cap collar - a feature which prevents twisted tubing when the cap is removed. The tubing connections provided are for 1/8" (3.2mm) OD tubing.



CT-CVX1

1-way check valve



AR-38NX4T-VF

4-tube w/ valve + fittings
3 plugs

Available 2024

Part Number	Description	Tube Ports
1-Tube Caps		
AR-38NX1T-V	1 open port w/ valve	1A
AR-38NX1T-VF	1-tube w/ valve + fittings	1A
2-Tube Caps		
AR-38NX2T	2 open ports	2A
AR-38NX2T-F	2-tube w/ fittings, 1 plug	2A
AR-38NX2T-V	2 open ports w/ valve	2A
AR-38NX2T-VF	2-tube w/ valve + fittings, 1 plug	2A
3-Tube Caps		
AR-38NX3T	3 open ports	3A
AR-38NX3T-F	3-tube w/ fittings, 2 plugs	3A
AR-38NX3T-V	3 open ports w/ valve	3A
AR-38NX3T-VF	3-tube w/ valve + fittings, 2 plugs	3A
4-Tube Caps		
AR-38NX4T	4 open ports	4A
AR-38NX4T-F	4-tube w/ fittings, 3 plugs	4A
AR-38NX4T-V	4 open ports w/ valve	4A
AR-38NX4T-VF	4-tube w/ valve + fittings, 3 plugs	4A
5-Tube Caps		
AR-38NX5T	5 open ports	5A
AR-38NX5T-F	5-tube w/ fittings, 4 plugs	5A
Check Valve		
AR-CVX1	1-Way Check Valve, Inert PTFE	

1

Tube



AR-38NX1T-V
1 open port w/ valve



AR-38NX1T-VF
1-tube w/ valve + fitting

2

Tubes



AR-38NX2T
2 open ports



AR-38NX2T-F
2-tube w/ fittings
1 plug



AR-38NX2T-V
2 open ports w/ valve



AR-38NX2T-VF
2-tube w/ valve + fittings
1 plug

3

Tubes



AR-38NX3T
3 open ports



AR-38NX3T-F
3-tube w/ fittings
2 plugs



AR-38NX3T-V
3 open ports w/ valve



AR-38NX3T-VF
3-tube w/ valve + fittings
2 plugs

4

Tubes



AR-38NX4T
4 open ports



AR-38NX4T-F
4-tube w/ fittings
3 plugs



AR-38NX4T-V
4 open ports w/ valve



AR-38NX4T-VF
4-tube w/ valve + fittings
3 plugs

5

Tubes



AR-38NX5T
5 open ports



AR-38NX5T-F
5-tube with fittings
4 plugs

GL 45

For 45mm threaded glass bottles



Container Type and Thread Size

Introduced by laboratory glassware manufacturers such as Duran® and Kontes®, the GL45-threaded borosilicate glass bottle ("GL" means "glass," and "45" is the diameter in mm) is a common sight in most labs and is the standard for containment and storage for pure and mixed reagents.

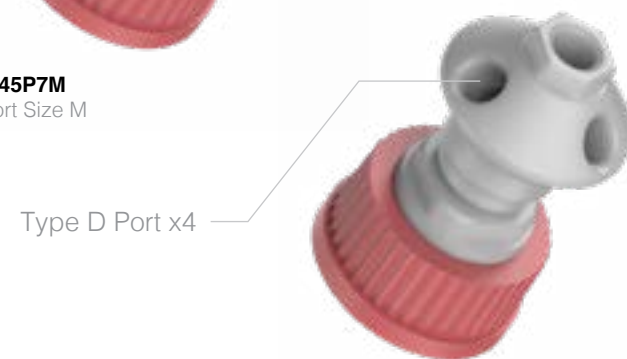
Solvent waste caps for GL45-threaded bottles are available in a low-profile 7-port manifold (size M), in both PP and PTFE. For larger diameter or additional ports, select from the "stacked" manifold options (size L and XL).



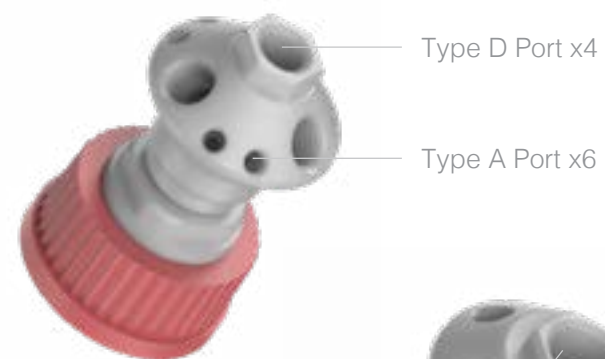
Waste Collection



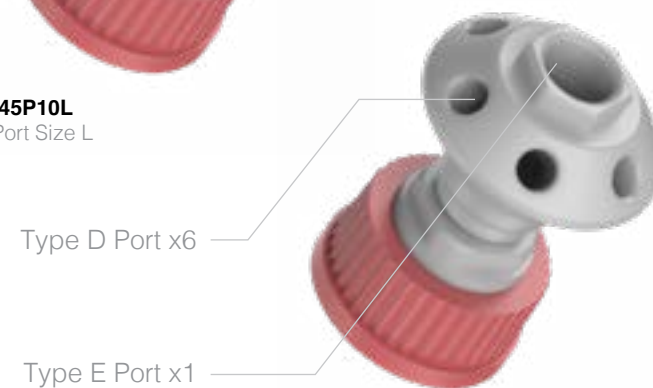
AR-45P7M
7-Port Size M



AR-45P4L
4-Port Size L



AR-45P10L
10-Port Size L



AR-45P7XL
7-Port Size XL

Part Number	Description	# of Ports
Manifolds for GL 45		
AR-45P7M	7-Port, Size M, Polypropylene	3A, 4C
AR-45X7M	7-Port, Size M, PTFE	3A, 4C
AR-45P4L	4-Port, Size L, Polypropylene	4D
AR-45P10L	10-Port, Size L, Polypropylene	6A, 4D
AR-45P7XL	7-Port, Size XL, Polypropylene	6D, 1E
Waste Kits		
AR-K45P-A	Waste Kit Basic	6A, 4D
AR-K45P-B	Waste Kit Plus	6A, 4D

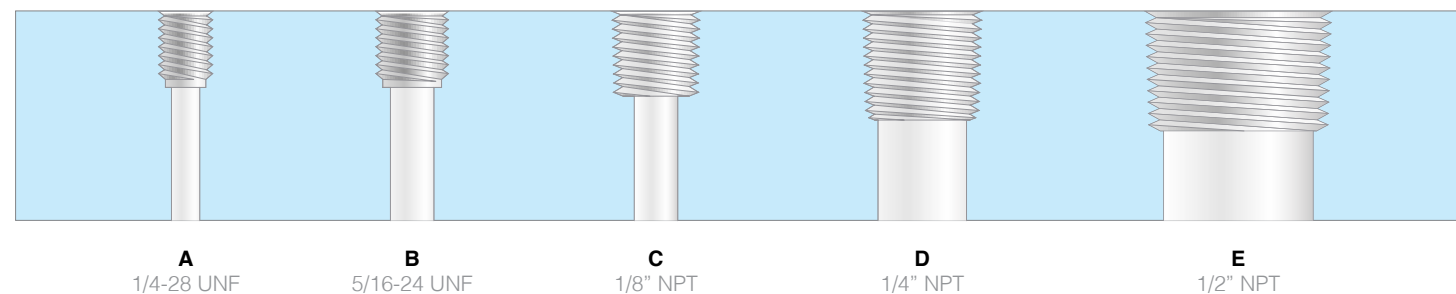
AR-K45P-A
Basic Waste Kit



AR-K45P-B
Plus Waste Kit



Port Thread Sizes



Basic Kit Contents

The Basic Kit for HPLC waste collection includes a 10-port Polypropylene manifold, fittings kit with tubing connections for typical analytical-scale HPLC instruments, port plugs, filter adapter (straight and 90 degree elbow) and an exhaust filter with timer.

The fittings kit includes:

- (6) PTFE Type A port plugs
- (3) PP Type D port plugs
- (1) Barbed 1/4" Y-connector
- (1) 3/8" ID barbed adapter
- (3) 1/4" ID barbed adapters
- (1) 3/16" ID barbed adapter
- (1) 1/8" ID barbed adapter
- (2) 1/16" OD tube fittings
- (2) 2.2mm OD tube fittings
- (1) 2.5mm OD tube fitting
- (3) 1/8" OD tube fittings

Plus Kit Contents

The Plus Kit includes all the essentials of the Basic Kit for HPLC waste collection, but with the addition of a 5' tubing extension for detector outlets or short effluent tubes, plus a chemical-change indicator for real-time end of service life with organic solvents.

GL 45

For 45mm threaded glass bottles



Solvent Extraction

Although practically all the bottle caps provided here could be used for either solvent extraction or waste collection, the difference in function lies in how ventilation is handled.

During solvent extraction, air must enter the bottle to displace solvent removed - a problem resolved with a one-way check valve. The removeable valve is constructed of inert PTFE components with stainless spring, compatible with most laboratory solvents, with a low opening pressure below 1psi to avoid pump cavitation.

Tubing is secured to threaded ports ("Type A" 1/4-28) in inert PTFE inserts. The insert rotates independently from the Polypropylene cap collar - a feature which prevents twisted tubing when the cap is removed. The tubing connections provided are for 1/8" (3.2mm) OD tubing.

**CT-CVX1**

1-way check valve

**AR-45X4T-VF**4-tube w/ valve + fittings
3 plugs

Available 2024

Part Number	Description	Tube Ports
1-Tube Caps		
AR-45X1T-V	1 open port w/ valve	1A
AR-45X1T-VF	1-tube w/ valve + fittings	1A
2-Tube Caps		
AR-45X2T	2 open ports	2A
AR-45X2T-F	2-tube w/ fittings, 1 plug	2A
AR-45X2T-V	2 open ports w/ valve	2A
AR-45X2T-VF	2-tube w/ valve + fittings, 1 plug	2A
3-Tube Caps		
AR-45X3T	3 open ports	3A
AR-45X3T-F	3-tube w/ fittings, 2 plugs	3A
AR-45X3T-V	3 open ports w/ valve	3A
AR-45X3T-VF	3-tube w/ valve + fittings, 2 plugs	3A
4-Tube Caps		
AR-45X4T	4 open ports	4A
AR-45X4T-F	4-tube w/ fittings, 3 plugs	4A
AR-45X4T-V	4 open ports w/ valve	4A
AR-45X4T-VF	4-tube w/ valve + fittings, 3 plugs	4A
5-Tube Caps		
AR-45X5T	5 open ports	5A
AR-45X5T-F	5-tube w/ fittings, 4 plugs	5A
Check Valve		
AR-CVX1	1-Way Check Valve, Inert PTFE	

1
Tube**AR-45X1T-V**
1 open port w/ valve**AR-45X1T-VF**
1-tube w/ valve + fitting2
Tubes**AR-45X2T**
2 open ports**AR-45X2T-F**
2-tube w/fittings
1 plug**AR-45X2T-V**
2 open ports w/ valve**AR-45X2T-VF**
2-tube w/ valve + fittings
1 plug3
Tubes**AR-45X3T**
3 open ports**AR-45X3T-F**
3-tube w/fittings
2 plugs**AR-45X3T-V**
3 open ports w/ valve**AR-45X3T-VF**
3-tube w/ valve + fittings
2 plugs4
Tubes**AR-45X4T**
4 open ports**AR-45X4T-F**
4-tube w/fittings
3 plugs**AR-45X4T-V**
4 open ports w/ valve**AR-45X4T-VF**
4-tube w/ valve + fittings
3 plugs5
Tubes**AR-45X5T**
5 open ports**AR-45X5T-F**
5-tube with fittings
4 plugs

DIN 45

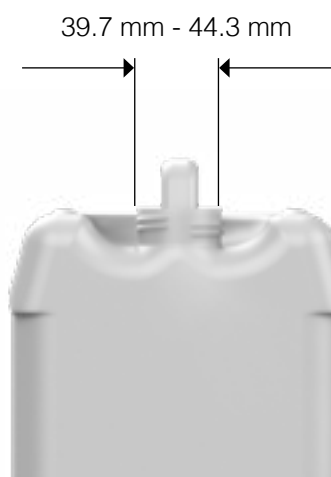
For 45mm DIN-standard jerricans



Container Type and Thread Size

The DIN 45 thread, derived by the Deutsches Institute for Normung e.V. ("DIN") - the German Institute for Standardization), is a 45mm standardized thread more commonly found on jerricans and carboys in EU member states and Asia.

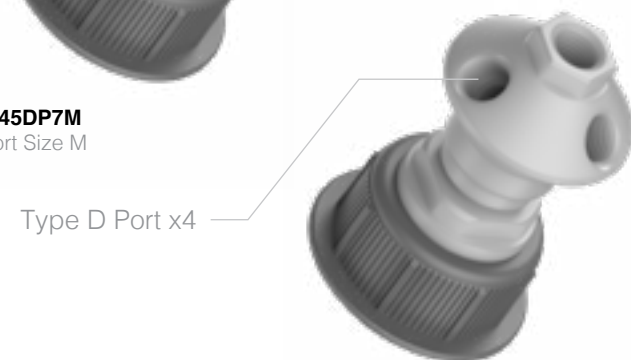
A quirk of the DIN 45 thread is that a GL45 cap will usually fit onto it, although the GL45 cap is usually too deep to seal properly. But by removing a bit of height from a GL45 cap, it's possible to use a GL45 on DIN45 - one advantage being the many color options available in GL45. However, the converse does not work: DIN45 won't typically fit a GL45 bottle.



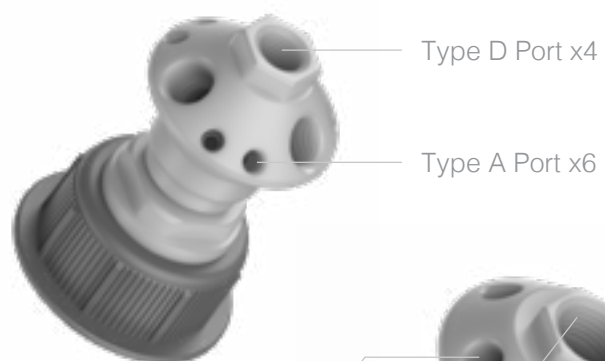
Waste Collection



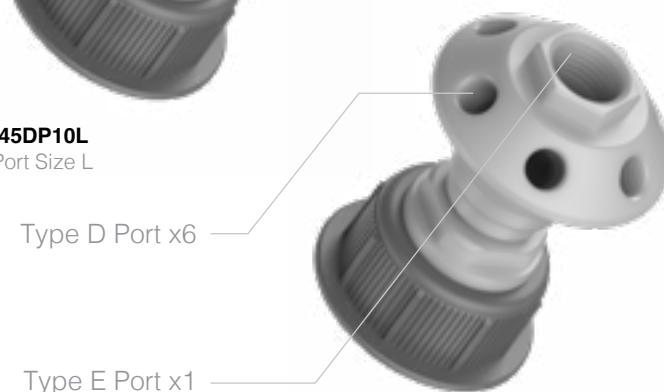
AR-45DP7M
7-Port Size M



AR-45DP4L
4-Port Size L



AR-45DP10L
10-Port Size L



AR-45DP7XL
7-Port Size XL

Part Number	Description	# of Ports
Manifolds for DIN 45		
AR-45DP7M	7-Port, Size M, Polypropylene	3A, 4C
AR-45DX7M	7-Port, Size M, PTFE	3A, 4C
AR-45DP4L	4-Port, Size L, Polypropylene	4D
AR-45DP10L	10-Port, Size L, Polypropylene	6A, 4D
AR-45DP7XL	7-Port, Size XL, Polypropylene	6D, 1E
Waste Kits		
AR-K45DP-A	Waste Kit Basic	6A, 4D
AR-K45DP-B	Waste Kit Plus	6A, 4D



AR-K45DP-A
Basic Waste Kit



AR-K45DP-B
Plus Waste Kit

Basic Kit Contents

The Basic Kit for HPLC waste collection includes a 10-port Polypropylene manifold, fittings kit with tubing connections for typical analytical-scale HPLC instruments, port plugs, filter adapter (straight and 90 degree elbow) and an exhaust filter with timer.

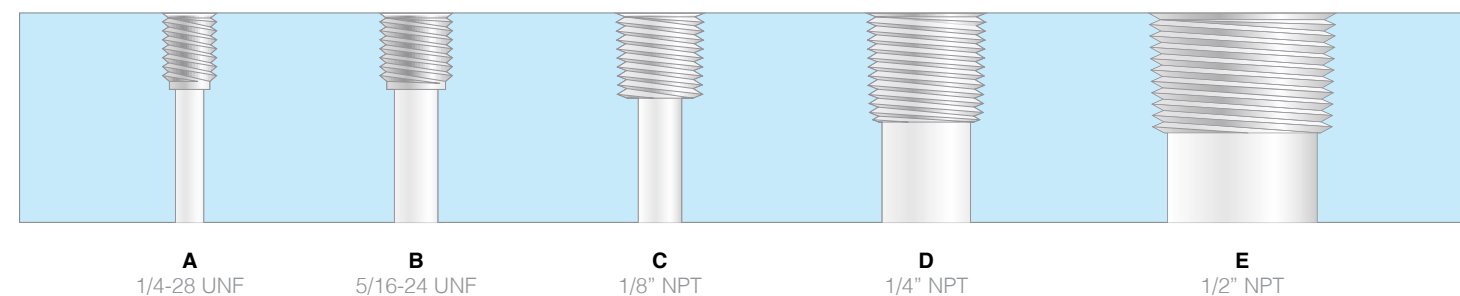
The fittings kit includes:

- (6) PTFE Type A port plugs
- (3) PP Type D port plugs
- (1) Barbed 1/4" Y-connector
- (1) 3/8" ID barbed adapter
- (3) 1/4" ID barbed adapters
- (1) 3/16" ID barbed adapter
- (1) 1/8" ID barbed adapter
- (2) 1/16" OD tube fittings
- (2) 2.2mm OD tube fittings
- (1) 2.5mm OD tube fitting
- (3) 1/8" OD tube fittings

Plus Kit Contents

The Plus Kit includes all the essentials of the Basic Kit for HPLC waste collection, but with the addition of a 5' tubing extension for detector outlets or short effluent tubes, plus a chemical-change indicator for real-time end of service life with organic solvents.

Port Thread Sizes



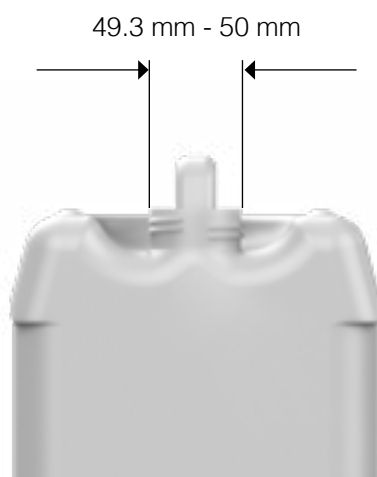
DIN 50

For 50mm DIN-standard jerricans



Container Type and Thread Size

The DIN 50 thread, derived by the Deutsches Institute for Normung e.V. ("DIN") - the German Institute for Standardization), is a 50mm standardized thread more commonly found on jerricans and carboys in EU member states and Asia.



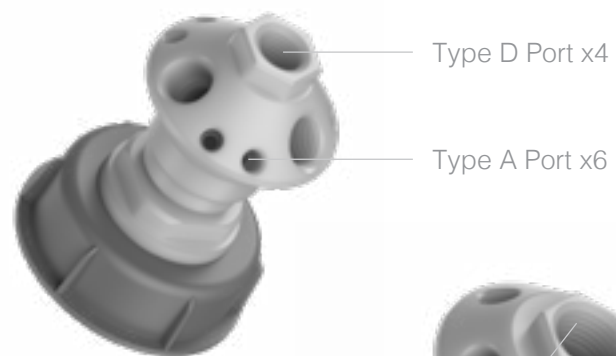
Waste Collection



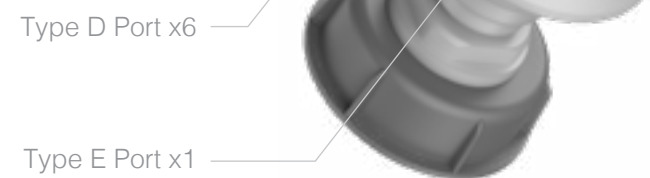
AR-50DP7M
7-Port Size M



AR-50DP4L
4-Port Size L



AR-50DP10L
10-Port Size L



AR-50DP7XL
7-Port Size XL

Part Number	Description	# of Ports
Manifolds for DIN 50		
AR-50DP7M	7-Port, Size M, Polypropylene	3A, 4C
AR-50DX7M	7-Port, Size M, PTFE	3A, 4C
AR-50DP4L	4-Port, Size L, Polypropylene	4D
AR-50DP10L	10-Port, Size L, Polypropylene	6A, 4D
AR-50DP7XL	7-Port, Size XL, Polypropylene	6D, 1E
Waste Kits		
AR-K50DP-A	Waste Kit Basic	6A, 4D
AR-K50DP-B	Waste Kit Plus	6A, 4D



AR-K50DP-A
Basic Waste Kit



AR-K50DP-B
Plus Waste Kit

Basic Kit Contents

The Basic Kit for HPLC waste collection includes a 10-port Polypropylene manifold, fittings kit with tubing connections for typical analytical-scale HPLC instruments, port plugs, filter adapter (straight and 90 degree elbow) and an exhaust filter with timer.

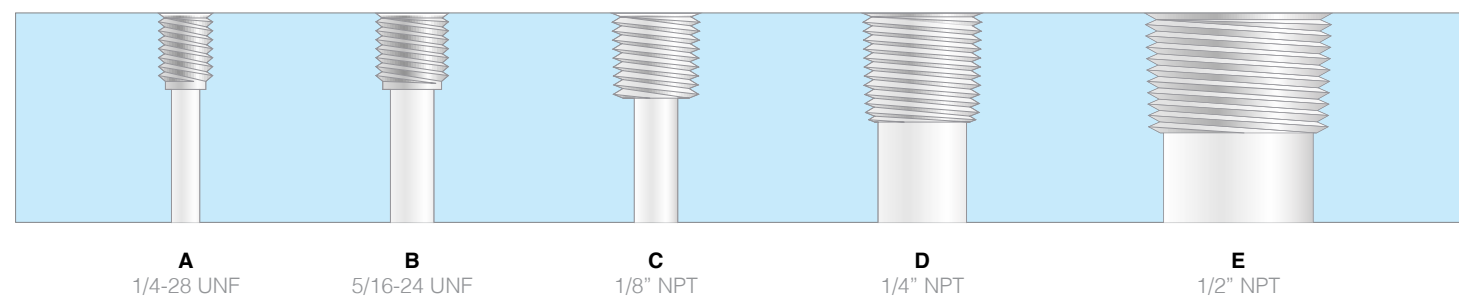
The fittings kit includes:

- (6) PTFE Type A port plugs
- (3) PP Type D port plugs
- (1) Barbed 1/4" Y-connector
- (1) 3/8" ID barbed adapter
- (3) 1/4" ID barbed adapters
- (1) 3/16" ID barbed adapter
- (1) 1/8" ID barbed adapter
- (2) 1/16" OD tube fittings
- (2) 2.2mm OD tube fittings
- (1) 2.5mm OD tube fitting
- (3) 1/8" OD tube fittings

Plus Kit Contents

The Plus Kit includes all the essentials of the Basic Kit for HPLC waste collection, but with the addition of a 5' tubing extension for detector outlets or short effluent tubes, plus a chemical-change indicator for real-time end of service life with organic solvents.

Port Thread Sizes



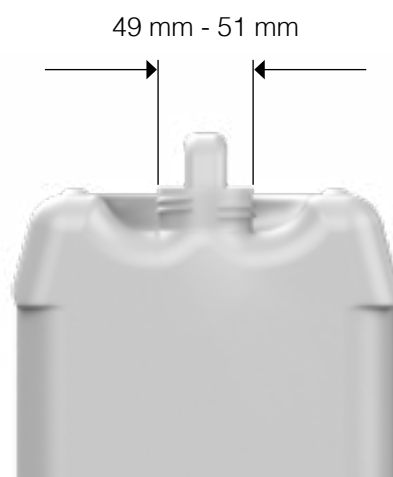
51 mm

For 51mm "tight-head" jerricans

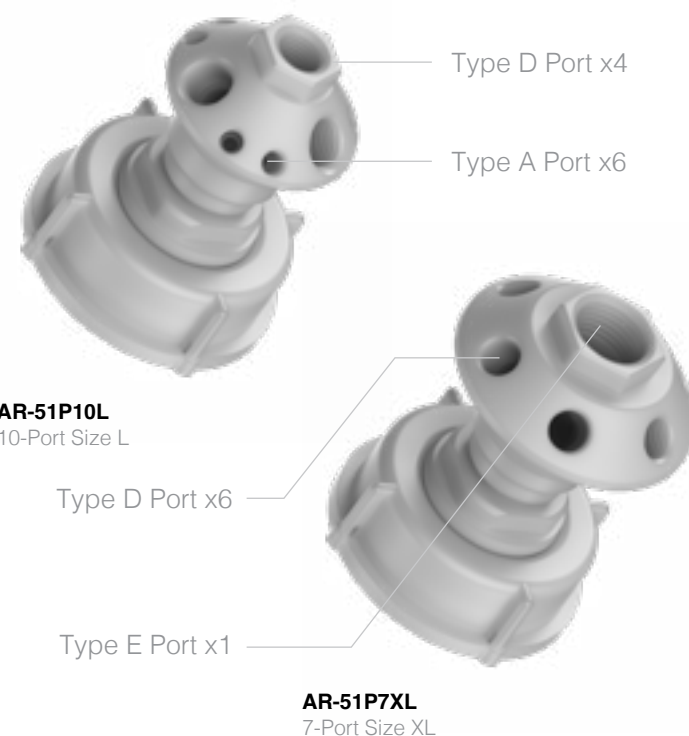
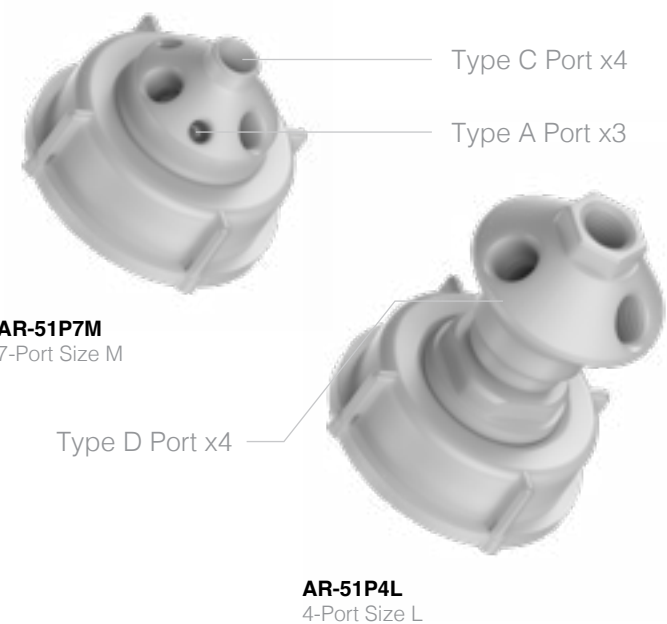


Container Type and Thread Size

A common thread found on many jerricans and "tight-head" blow-molded containers in North America. Many such containers are UN- or DOT-rated for the storage and transportation of hazardous materials.



Waste Collection

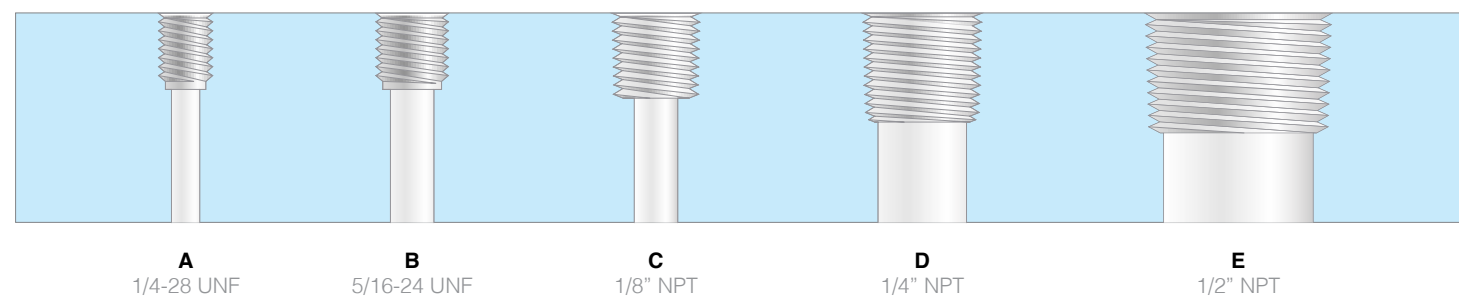


Part Number	Description	# of Ports
Manifolds for DIN 51MM		
AR-51P7M	7-Port, Size M, Polypropylene	3A, 4C
AR-51X7M	7-Port, Size M, PTFE	3A, 4C
AR-51P4L	4-Port, Size L, Polypropylene	4D
AR-51P10L	10-Port, Size L, Polypropylene	6A, 4D
AR-51P7XL	7-Port, Size XL, Polypropylene	6D, 1E
Waste Kits		
AR-K51P-A	Waste Kit Basic	6A, 4D
AR-K51P-B	Waste Kit Plus	6A, 4D

AR-K51P-A
Basic Waste Kit



Port Thread Sizes



Basic Kit Contents

The Basic Kit for HPLC waste collection includes a 10-port Polypropylene manifold, fittings kit with tubing connections for typical analytical-scale HPLC instruments, port plugs, filter adapter (straight and 90 degree elbow) and an exhaust filter with timer.

The fittings kit includes:

- (6) PTFE Type A port plugs
- (3) PP Type D port plugs
- (1) Barbed 1/4" Y-connector
- (1) 3/8" ID barbed adapter
- (3) 1/4" ID barbed adapters
- (1) 3/16" ID barbed adapter
- (1) 1/8" ID barbed adapter
- (2) 1/16" OD tube fittings
- (2) 2.2mm OD tube fittings
- (1) 2.5mm OD tube fitting
- (3) 1/8" OD tube fittings

Plus Kit Contents

The Plus Kit includes all the essentials of the Basic Kit for HPLC waste collection, but with the addition of a 5' tubing extension for detector outlets or short effluent tubes, plus a chemical-change indicator for real-time end of service life with organic solvents.

53B

For 53mm "buttress" threads

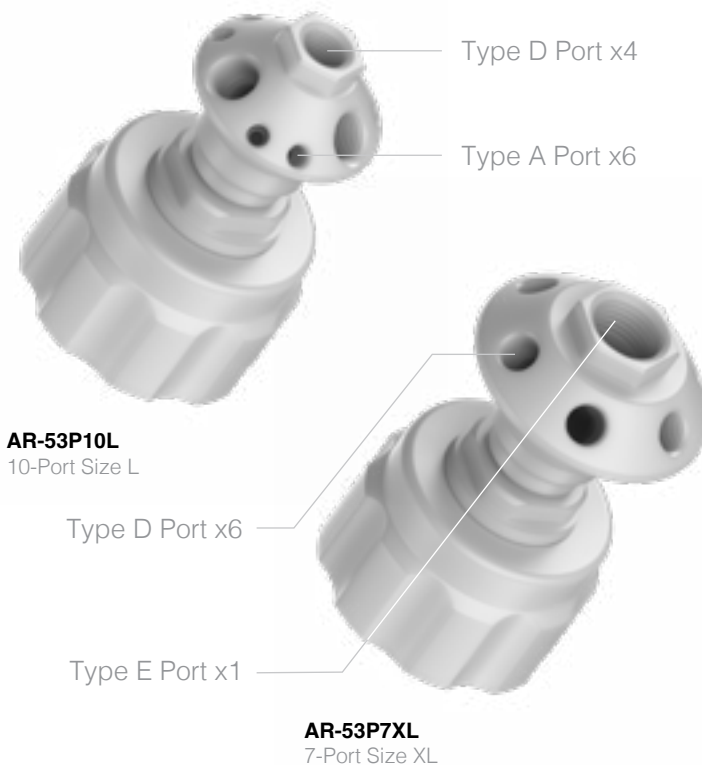
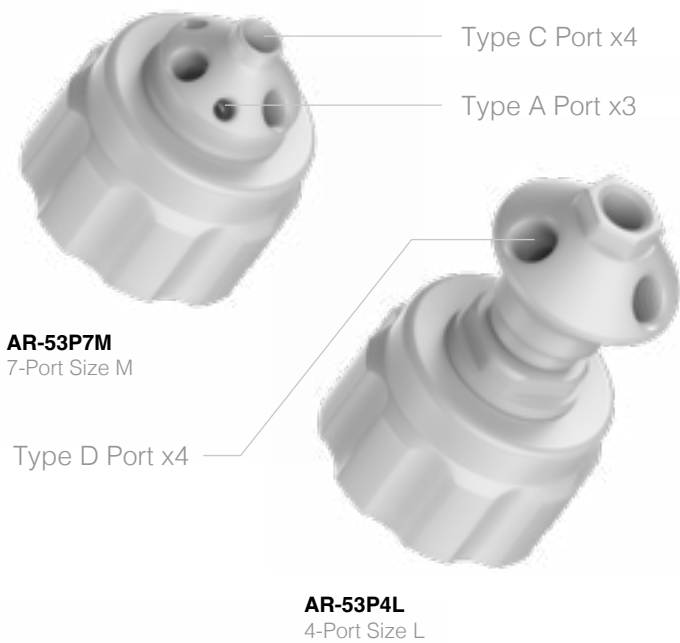


Container Type and Thread Size

Integrated into many of the flagship storage containers made by Thermo-Fisher® Nalgene®, the 53B "buttress" thread has a heavy-duty thread finish - more robust than many ISO or DIN standard threads of similar dimension. For this reason, it is often found on narrow-mouth lab bottles due to its resilience during autoclaving.



Waste Collection



Part Number	Description	# of Ports
Manifolds for 53B Nalgene		
AR-53P7M	7-Port, Size M, Polypropylene	3A, 4C
AR-53X7M	7-Port, Size M, PTFE	3A, 4C
AR-53P4L	4-Port, Size L, Polypropylene	4D
AR-53P10L	10-Port, Size L, Polypropylene	6A, 4D
AR-53P7XL	7-Port, Size XL, Polypropylene	6D, 1E
Waste Kits		
AR-K53P-A	Waste Kit Basic	6A, 4D
AR-K53P-B	Waste Kit Plus	6A, 4D



AR-K53P-A
Basic Waste Kit



AR-K53P-B
Plus Waste Kit

Basic Kit Contents

The Basic Kit for HPLC waste collection includes a 10-port Polypropylene manifold, fittings kit with tubing connections for typical analytical-scale HPLC instruments, port plugs, filter adapter (straight and 90 degree elbow) and an exhaust filter with timer.

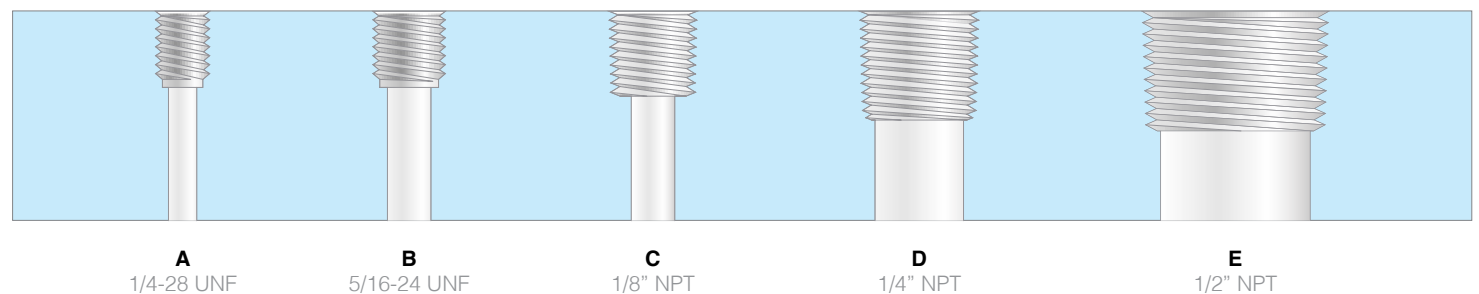
The fittings kit includes:

- (6) PTFE Type A port plugs
- (3) PP Type D port plugs
- (1) Barbed 1/4" Y-connector
- (1) 3/8" ID barbed adapter
- (3) 1/4" ID barbed adapters
- (1) 3/16" ID barbed adapter
- (1) 1/8" ID barbed adapter
- (2) 1/16" OD tube fittings
- (2) 2.2mm OD tube fittings
- (1) 2.5mm OD tube fitting
- (3) 1/8" OD tube fittings

Plus Kit Contents

The Plus Kit includes all the essentials of the Basic Kit for HPLC waste collection, but with the addition of a 5' tubing extension for detector outlets or short effluent tubes, plus a chemical-change indicator for real-time end of service life with organic solvents.

Port Thread Sizes



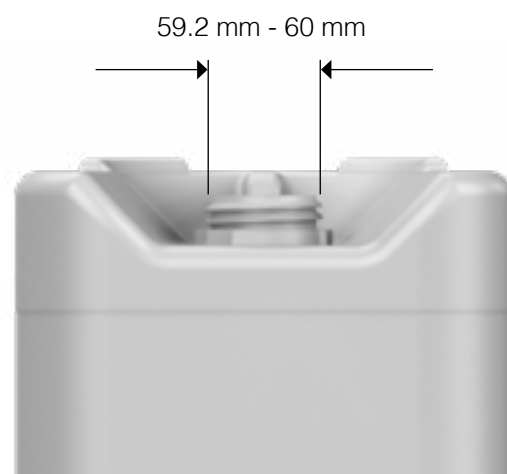
DIN 60

For 60mm DIN-standard jerricans

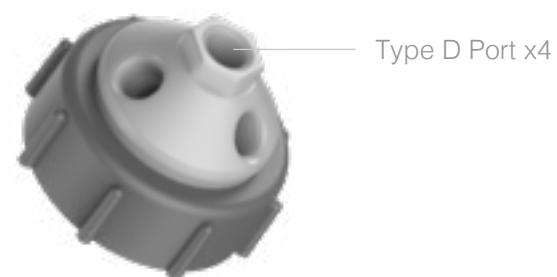


Container Type and Thread Size

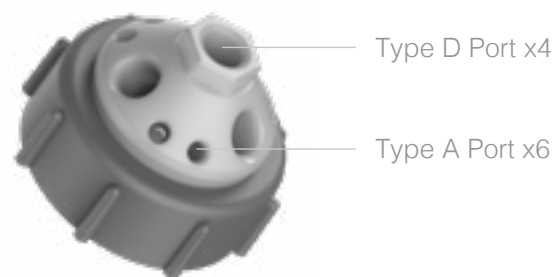
The DIN 60 thread, derived by the Deutsches Institute for Normung e.V. ("DIN") - the German Institute for Standardization), is a 60mm standardized thread more commonly found on jerricans and carboys in EU member states and Asia.



Waste Collection



AR-60P4L
4-Port Size L



AR-60P10L
10-Port Size L

Part Number	Description	# of Ports
Manifolds for DIN 60		
AR-60P4L	4-Port, Size L, Polypropylene	4D
AR-60P10L	10-Port, Size L, Polypropylene	6A, 4D
Waste Kits		
AR-K60P-A	Waste Kit Basic	6A, 4D
AR-K60P-B	Waste Kit Plus	6A, 4D



AR-K60P-A
Basic Waste Kit



AR-K60P-B
Plus Waste Kit

Basic Kit Contents

The Basic Kit for HPLC waste collection includes a 10-port Polypropylene manifold, fittings kit with tubing connections for typical analytical-scale HPLC instruments, port plugs, filter adapter (straight and 90 degree elbow) and an exhaust filter with timer.

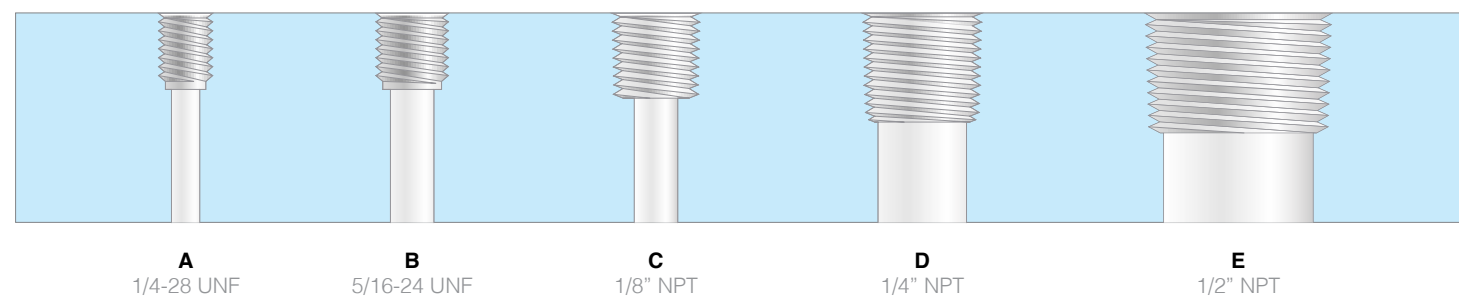
The fittings kit includes:

- (6) PTFE Type A port plugs
- (3) PP Type D port plugs
- (1) Barbed 1/4" Y-connector
- (1) 3/8" ID barbed adapter
- (3) 1/4" ID barbed adapters
- (1) 3/16" ID barbed adapter
- (1) 1/8" ID barbed adapter
- (2) 1/16" OD tube fittings
- (2) 2.2mm OD tube fittings
- (1) 2.5mm OD tube fitting
- (3) 1/8" OD tube fittings

Plus Kit Contents

The Plus Kit includes all the essentials of the Basic Kit for HPLC waste collection, but with the addition of a 5' tubing extension for detector outlets or short effluent tubes, plus a chemical-change indicator for real-time end of service life with organic solvents.

Port Thread Sizes



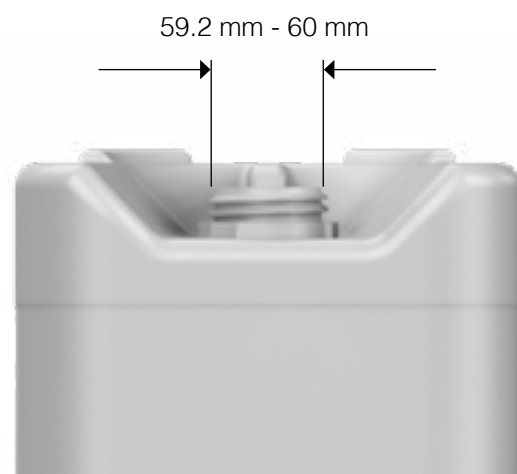
61mm

For 61mm "tight-head" jerricans

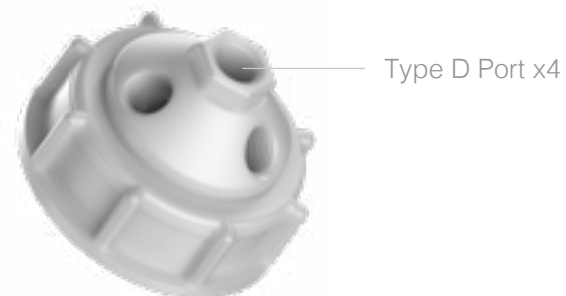


Container Type and Thread Size

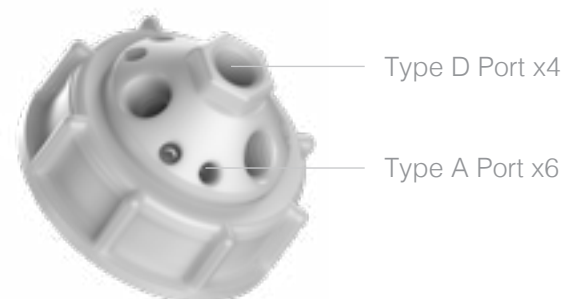
A common thread found on many jerricans and "tight-head" blow-molded containers in North America. Many such containers are UN- or DOT-rated for the storage and transportation of hazardous materials.



Waste Collection



AR-61P4L
4-Port Size L



AR-61P10L
10-Port Size L

Part Number	Description	# of Ports
Manifolds for 61mm		
AR-61P4L	4-Port, Size L, Polypropylene	4D
AR-61P10L	10-Port, Size L, Polypropylene	6A, 4D
Waste Kits		
AR-K61P-A	Waste Kit Basic	6A, 4D
AR-K61P-B	Waste Kit Plus	6A, 4D



AR-K61P-A
Basic Waste Kit



AR-K61P-B
Plus Waste Kit

Basic Kit Contents

The Basic Kit for HPLC waste collection includes a 10-port Polypropylene manifold, fittings kit with tubing connections for typical analytical-scale HPLC instruments, port plugs, filter adapter (straight and 90 degree elbow) and an exhaust filter with timer.

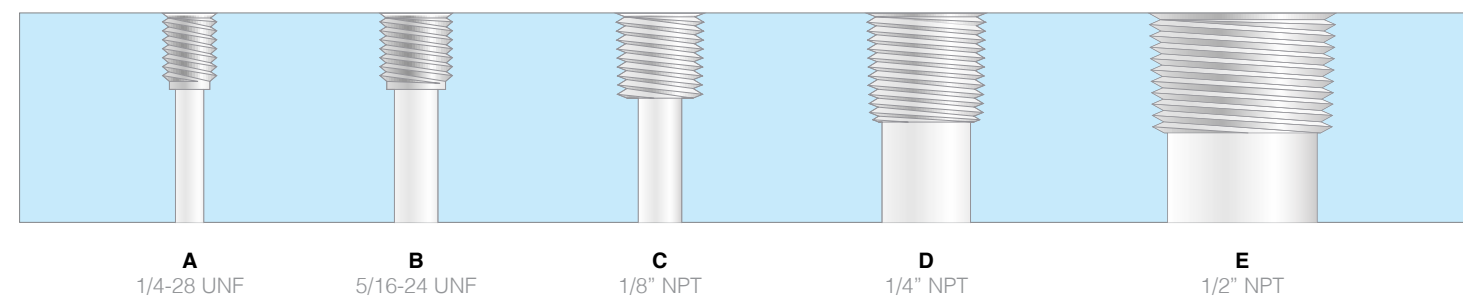
The fittings kit includes:

- (6) PTFE Type A port plugs
- (3) PP Type D port plugs
- (1) Barbed 1/4" Y-connector
- (1) 3/8" ID barbed adapter
- (3) 1/4" ID barbed adapters
- (1) 3/16" ID barbed adapter
- (1) 1/8" ID barbed adapter
- (2) 1/16" OD tube fittings
- (2) 2.2mm OD tube fittings
- (1) 2.5mm OD tube fitting
- (3) 1/8" OD tube fittings

Plus Kit Contents

The Plus Kit includes all the essentials of the Basic Kit for HPLC waste collection, but with the addition of a 5' tubing extension for detector outlets or short effluent tubes, plus a chemical-change indicator for real-time end of service life with organic solvents.

Port Thread Sizes



63mm

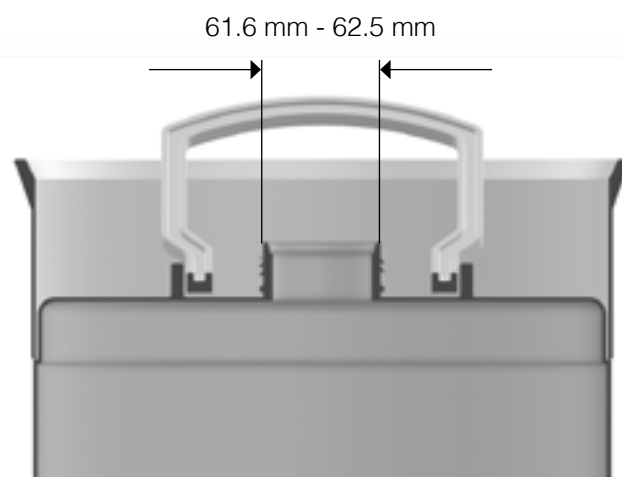
For Rieke® and Nowpak® BIC



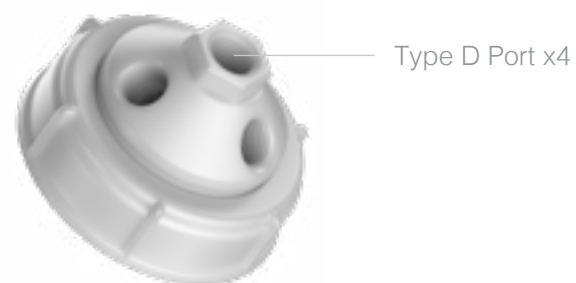
Container Type and Thread Size

There are a host of thread variants in the 63mm diameter, and unfortunately most are incompatible with the others. A more common version utilizes the Rieke® 63mm threaded cap (check along the rim of the closure of your 63mm container - often "Rieke®" will be embossed on the top). Interestingly, this identical thread was also integrated into the NowPak® Liner-Based System by Entegris®.

Note that the Nalgene® Lowboy 63mm container is a slightly different thread; inquire for solutions.

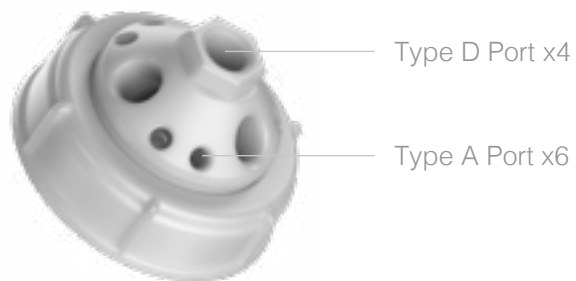


Waste Collection



Type D Port x4

AR-63P4L
4-Port Size L



Type D Port x4

Type A Port x6

AR-63P10L
10-Port Size L

Part Number	Description	# of Ports
Manifolds for 63mm Rieke / Nowpak		
AR-63P4L	4-Port, Size L, Polypropylene	4D
AR-63P10L	10-Port, Size L, Polypropylene	6A, 4D
Waste Kits		
AR-K63P-A	Waste Kit Basic	6A, 4D
AR-K63P-B	Waste Kit Plus	6A, 4D



AR-K63P-A
Basic Waste Kit



AR-K63P-B
Plus Waste Kit

Basic Kit Contents

The Basic Kit for HPLC waste collection includes a 10-port Polypropylene manifold, fittings kit with tubing connections for typical analytical-scale HPLC instruments, port plugs, filter adapter (straight and 90 degree elbow) and an exhaust filter with timer.

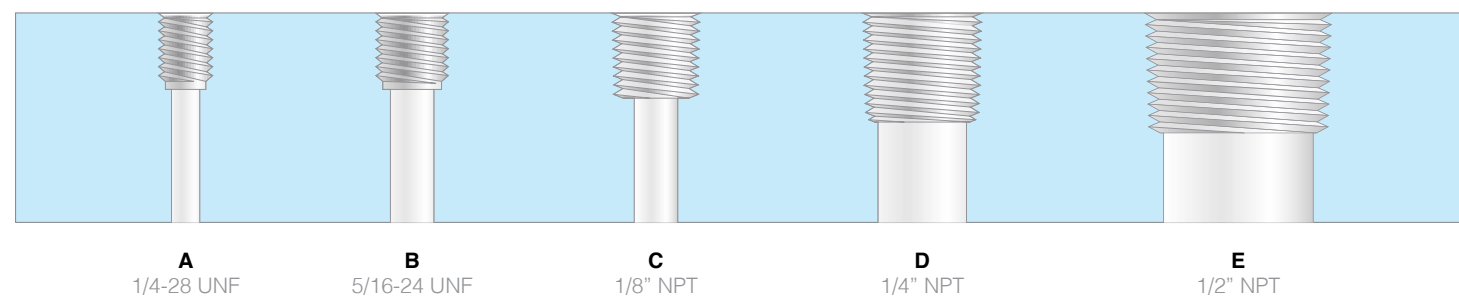
The fittings kit includes:

- (6) PTFE Type A port plugs
- (3) PP Type D port plugs
- (1) Barbed 1/4" Y-connector
- (1) 3/8" ID barbed adapter
- (3) 1/4" ID barbed adapters
- (1) 3/16" ID barbed adapter
- (1) 1/8" ID barbed adapter
- (2) 1/16" OD tube fittings
- (2) 2.2mm OD tube fittings
- (1) 2.5mm OD tube fitting
- (3) 1/8" OD tube fittings

Plus Kit Contents

The Plus Kit includes all the essentials of the Basic Kit for HPLC waste collection, but with the addition of a 5' tubing extension for detector outlets or short effluent tubes, plus a chemical-change indicator for real-time end of service life with organic solvents.

Port Thread Sizes



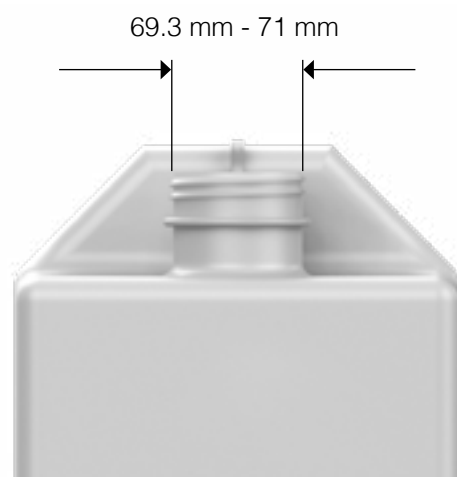
70mm Nalgene®

For Nalgene®-brand 70mm carboys

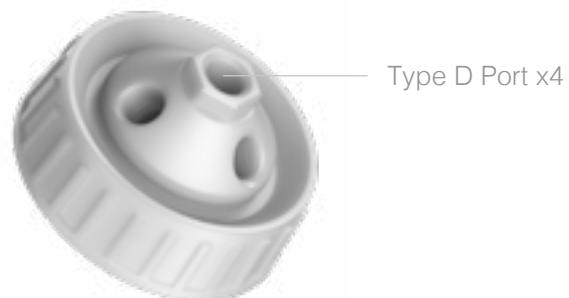


Container Type and Thread Size

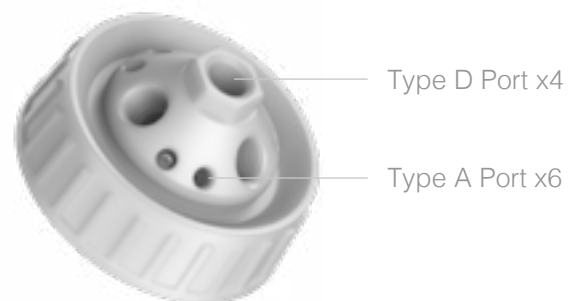
Nalgene manufactures a heavy-duty rectangular carboy version with a 70mm buttress thread. This same thread is also found on Nalgene®-brand plastic mason jars, where the neck is intended to fit various blenders such as Osterizer™, as well as other fixtures and closures with Mason jar threads.



Waste Collection



AR-70NP4L
4-Port Size L



AR-70NP10L
10-Port Size L

Part Number	Description	# of Ports
Manifolds for 70mm Nalgene		
AR-70NP4L	4-Port, Size L, Polypropylene	4D
AR-70NP10L	10-Port, Size L, Polypropylene	6A, 4D
Waste Kits		
AR-K70NP-A	Waste Kit Basic	6A, 4D
AR-K70NP-B	Waste Kit Plus	6A, 4D



AR-K70NP-A
Basic Waste Kit



AR-K70NP-B
Plus Waste Kit

Basic Kit Contents

The Basic Kit for HPLC waste collection includes a 10-port Polypropylene manifold, fittings kit with tubing connections for typical analytical-scale HPLC instruments, port plugs, filter adapter (straight and 90 degree elbow) and an exhaust filter with timer.

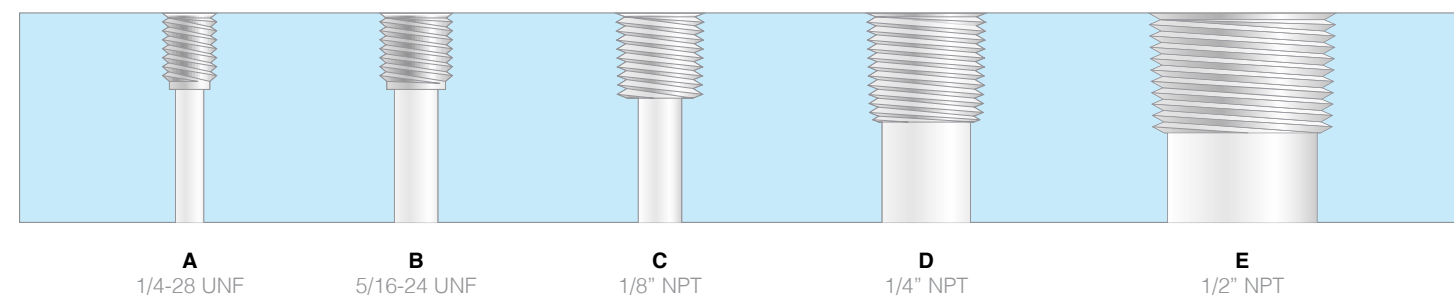
The fittings kit includes:

- (6) PTFE Type A port plugs
- (3) PP Type D port plugs
- (1) Barbed 1/4" Y-connector
- (1) 3/8" ID barbed adapter
- (3) 1/4" ID barbed adapters
- (1) 3/16" ID barbed adapter
- (1) 1/8" ID barbed adapter
- (2) 1/16" OD tube fittings
- (2) 2.2mm OD tube fittings
- (1) 2.5mm OD tube fitting
- (3) 1/8" OD tube fittings

Plus Kit Contents

The Plus Kit includes all the essentials of the Basic Kit for HPLC waste collection, but with the addition of a 5' tubing extension for detector outlets or short effluent tubes, plus a chemical-change indicator for real-time end of service life with organic solvents.

Port Thread Sizes



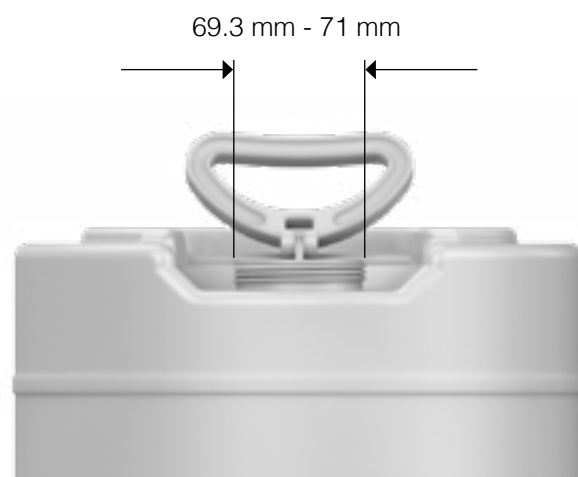
70mm Rieke®

For 6TPI and 8TPI Rieke® threads

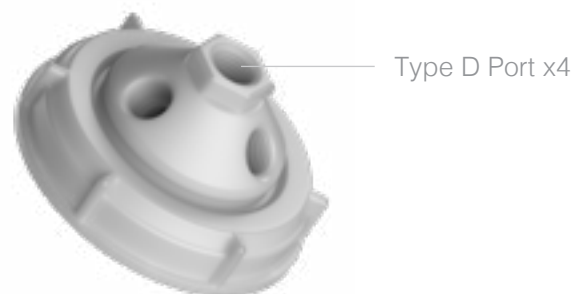


Container Type and Thread Size

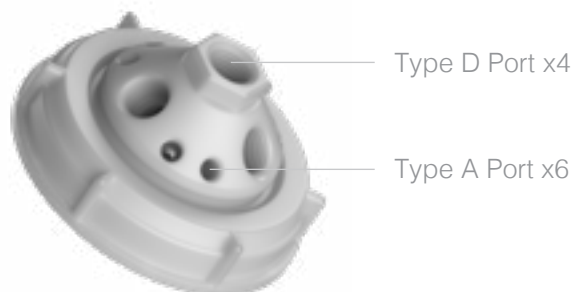
Often preferred in laboratories due to their adherence to UN/DOT standards, these “tighthead” containers with a Rieke® 70mm threaded cap are supplied in two different thread variants: a 6TPI and an 8TPI (where TPI stands for “threads per inch”). In some areas, local regulations allow these containers to be shipped directly from the lab to incineration facilities - which can be a significant benefit of using a DOT-type container. Telling the difference between a 6TPI and an 8TPI thread can be tricky. But many Rieke® caps include the TPI number embossed along the rim of the cap. If not, verify with your container supplier or request a sample cap to test fitment.



Waste Collection



AR-70P4L / 70AP4L
4-Port Size L, 8TPI / 6TPI



AR-70P10L / 70AP10L
10-Port Size L, 8TPI / 6TPI

Part Number	Description	# of Ports
Manifolds for 70mm Rieke		
AR-70P4L	4-Port, Size L, Polypropylene, 8TPI	4D
AR-70AP4L	4-Port, Size L, Polypropylene, 6TPI	4D
AR-70P10L	10-Port, Size L, Polypropylene, 8TPI	6A, 4D
AR-70AP10L	10-Port, Size L, Polypropylene, 6TPI	6A, 4D
Waste Kits		
AR-K70P-A	Waste Kit Basic, 8TPI	6A, 4D
AR-K70P-B	Waste Kit Plus, 8TPI	6A, 4D
AR-K70AP-A	Waste Kit Basic, 6TPI	6A, 4D
AR-K70AP-B	Waste Kit Plus, 6TPI	6A, 4D



AR-K70P-A / AR-K70AP-A
Basic Waste Kit 8TPI / 6TPI



AR-K70P-B / AR-K70AP-B
Plus Waste Kit 8TPI / 6TPI

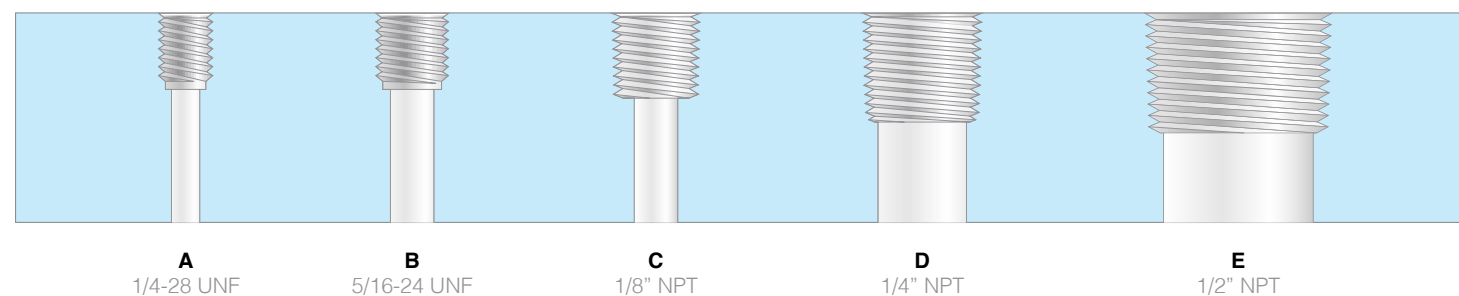
Basic Kit Contents

The Basic Kit for HPLC waste collection includes a 10-port Polypropylene manifold, fittings kit with tubing connections for typical analytical-scale HPLC instruments, port plugs, filter adapter (straight and 90 degree elbow) and an exhaust filter with timer.

Plus Kit Contents

The Plus Kit includes all the essentials of the Basic Kit for HPLC waste collection, but with the addition of a 5' tubing extension for detector outlets or short effluent tubes, plus a chemical-change indicator for real-time end of service life with organic solvents.

Port Thread Sizes



GL 80

For wide-mouth 80mm glass bottles

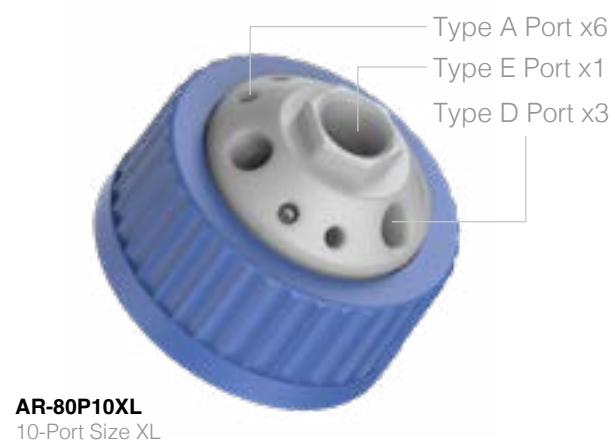
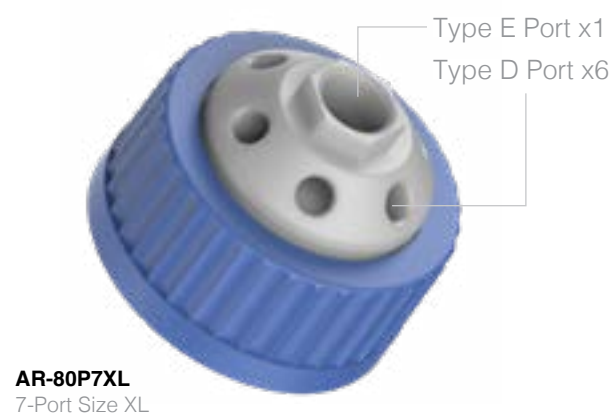
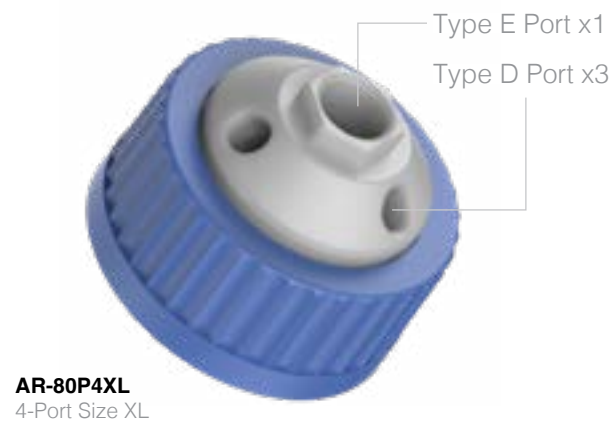


Container Type and Thread Size

Sometimes you just need a bottle with a bigger mouth. For those instances, there's the GL80. Offered by such brands as Duran® and Kimble®, the GL80 (or GLS80) is useful for its robust thread on thick-walled borosilicate glass bottles.



Waste Collection



Part Number	Description	# of Ports
Manifolds for GL 80		
AR-80P4XL	4-Port, Size XL, Polypropylene	3D, 1E
AR-80P7XL	7-Port, Size XL, Polypropylene	6D, 1E
AR-80P10XL	10-Port, Size XL, Polypropylene	6A, 3D, 1E
Waste Kits		
AR-K80P-A	Waste Kit Basic	3D, 1E
AR-K80P-B	Waste Kit Plus	6A, 3D, 1E



AR-K80P-A
Basic Waste Kit



AR-K80P-B
Plus Waste Kit

Basic Kit Contents

The Basic Kit for HPLC waste collection includes a 10-port Polypropylene manifold, fittings kit with tubing connections for typical analytical-scale HPLC instruments, port plugs, filter adapter (straight and 90 degree elbow) and an exhaust filter with timer.

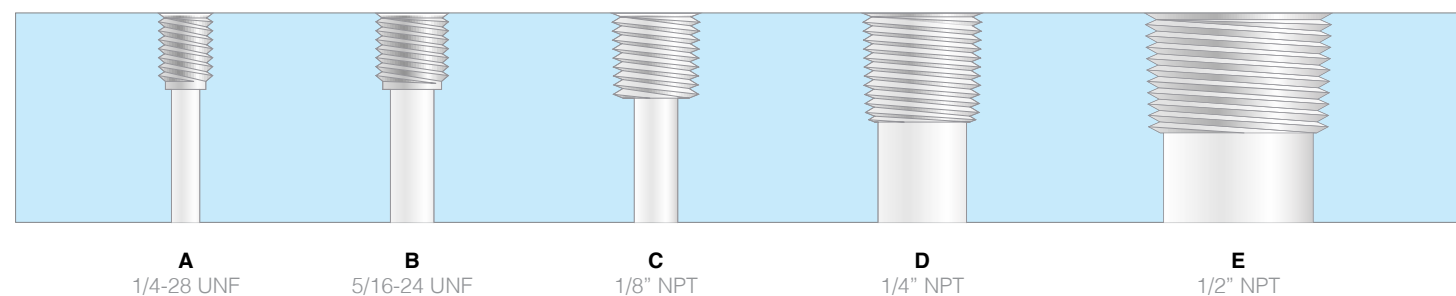
The fittings kit includes:

- (6) PTFE Type A port plugs
- (3) PP Type D port plugs
- (1) Barbed 1/4" Y-connector
- (1) 3/8" ID barbed adapter
- (3) 1/4" ID barbed adapters
- (1) 3/16" ID barbed adapter
- (1) 1/8" ID barbed adapter
- (2) 1/16" OD tube fittings
- (2) 2.2mm OD tube fittings
- (1) 2.5mm OD tube fitting
- (3) 1/8" OD tube fittings

Plus Kit Contents

The Plus Kit includes all the essentials of the Basic Kit for HPLC waste collection, but with the addition of a 5' tubing extension for detector outlets or short effluent tubes, plus a chemical-change indicator for real-time end of service life with organic solvents.

Port Thread Sizes



83B

For 83mm “buttress” threads



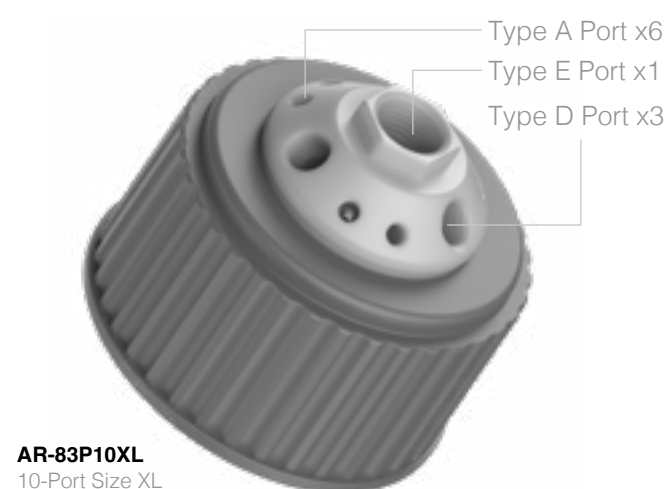
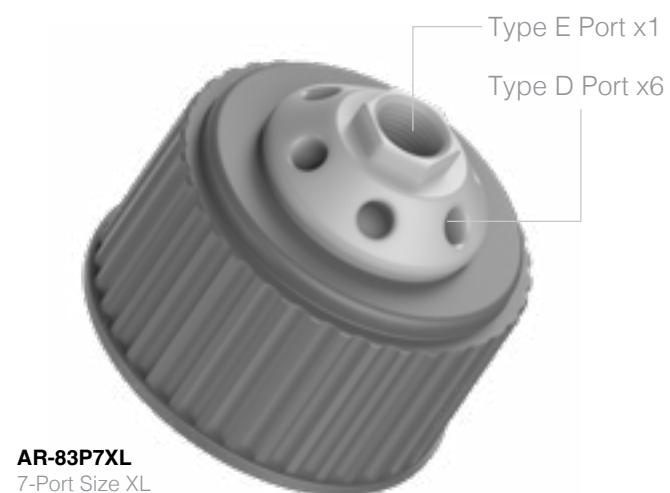
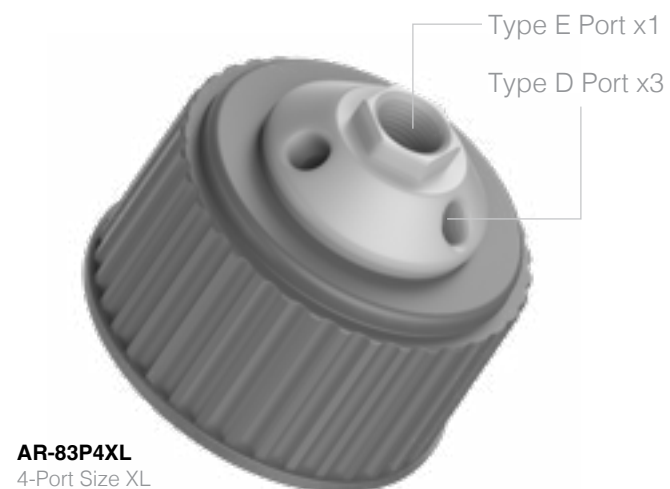
Container Type and Thread Size

Integrated into many of the flagship storage containers made by Thermo-Fisher® Nalgene®, the 83B “buttress” thread has a heavy-duty thread finish -- more robust than many ISO or DIN standard threads of similar dimension. For this reason, it is often found on narrow-mouth lab bottles due to its resilience during autoclaving.

The 83B caps provided here will also fit Foxx® and Kautex® brands of the same thread type.



Waste Collection



Part Number	Description	# of Ports
Manifolds for 83B Nalgene		
AR-83P4XL	4-Port, Size XL, Polypropylene	3D, 1E
AR-83P7XL	7-Port, Size XL, Polypropylene	6D, 1E
AR-83P10XL	10-Port, Size XL, Polypropylene	6A, 3D, 1E
Waste Kits		
AR-K83P-A	Waste Kit Basic	3D, 1E
AR-K83P-B	Waste Kit Plus	6A, 3D, 1E



Basic Kit Contents

The Basic Kit for HPLC waste collection includes a 10-port Polypropylene manifold, fittings kit with tubing connections for typical analytical-scale HPLC instruments, port plugs, filter adapter (straight and 90 degree elbow) and an exhaust filter with timer.

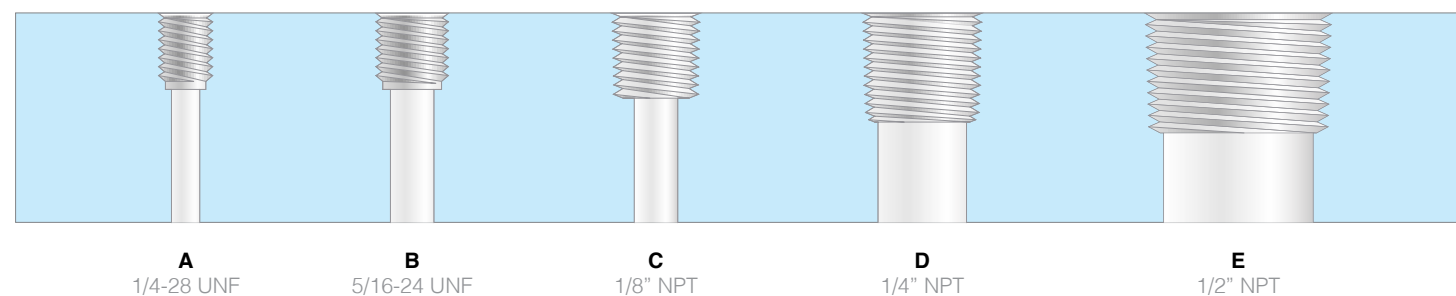
The fittings kit includes:

- (6) PTFE Type A port plugs
- (3) PP Type D port plugs
- (1) Barbed 1/4" Y-connector
- (1) 3/8" ID barbed adapter
- (3) 1/4" ID barbed adapters
- (1) 3/16" ID barbed adapter
- (1) 1/8" ID barbed adapter
- (2) 1/16" OD tube fittings
- (2) 2.2mm OD tube fittings
- (1) 2.5mm OD tube fitting
- (3) 1/8" OD tube fittings

Plus Kit Contents

The Plus Kit includes all the essentials of the Basic Kit for HPLC waste collection, but with the addition of a 5' tubing extension for detector outlets or short effluent tubes, plus a chemical-change indicator for real-time end of service life with organic solvents.

Port Thread Sizes



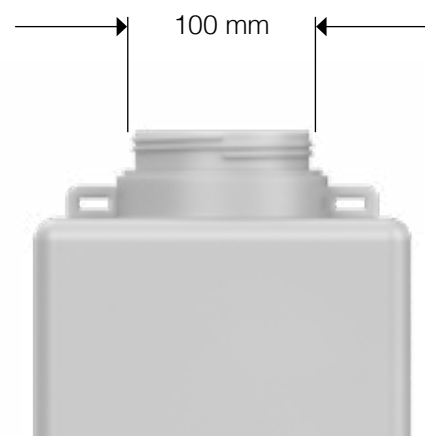
100mm

For 100-415 Nalgene® threads

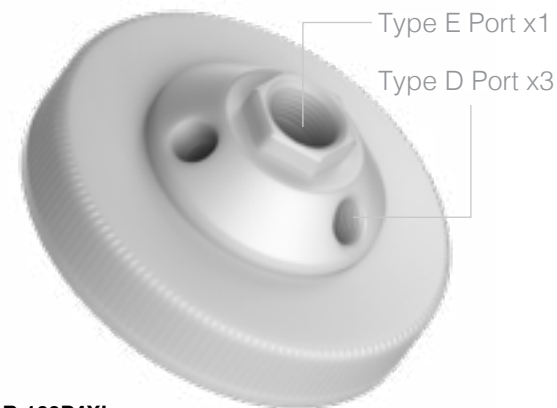


Container Type and Thread Size

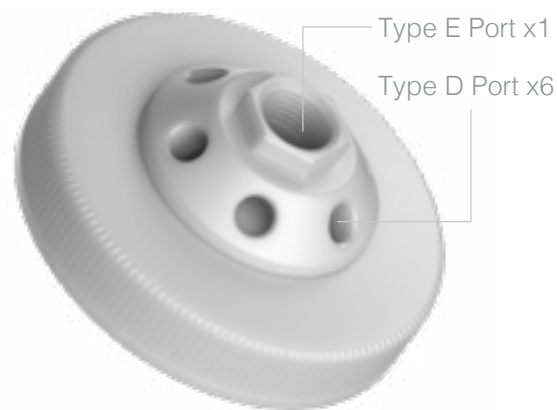
The widest common thread type in the Nalgene® brand, 100mm (or 100-415) threaded containers are found on both large carboys and small plastic storage containers.



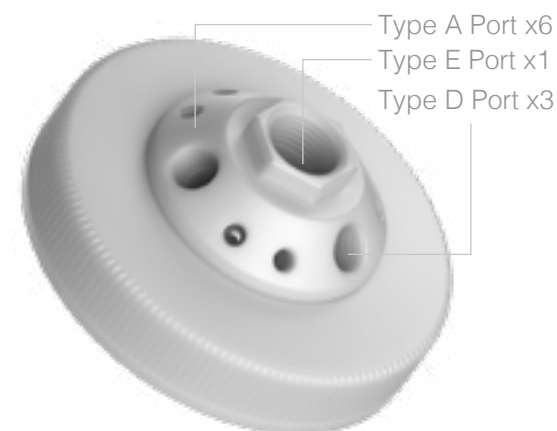
Waste Collection



AR-100P4XL
4-Port Size XL



AR-100P7XL
7-Port Size XL



AR-100P10XL
10-Port Size XL

Part Number	Description	# of Ports
Manifolds for 100-415 Nalgene		
AR-100P4XL	4-Port, Size XL, Polypropylene	3D, 1E
AR-100P7XL	7-Port, Size XL, Polypropylene	6D, 1E
AR-100P10XL	10-Port, Size XL, Polypropylene	6A, 3D, 1E
Waste Kits		
AR-K100P-A	Waste Kit Basic	3D, 1E
AR-K100P-B	Waste Kit Plus	6A, 3D, 1E



AR-K100P-A
Basic Waste Kit



AR-K100P-B
Plus Waste Kit

Basic Kit Contents

The Basic Kit for HPLC waste collection includes a 10-port Polypropylene manifold, fittings kit with tubing connections for typical analytical-scale HPLC instruments, port plugs, filter adapter (straight and 90 degree elbow) and an exhaust filter with timer.

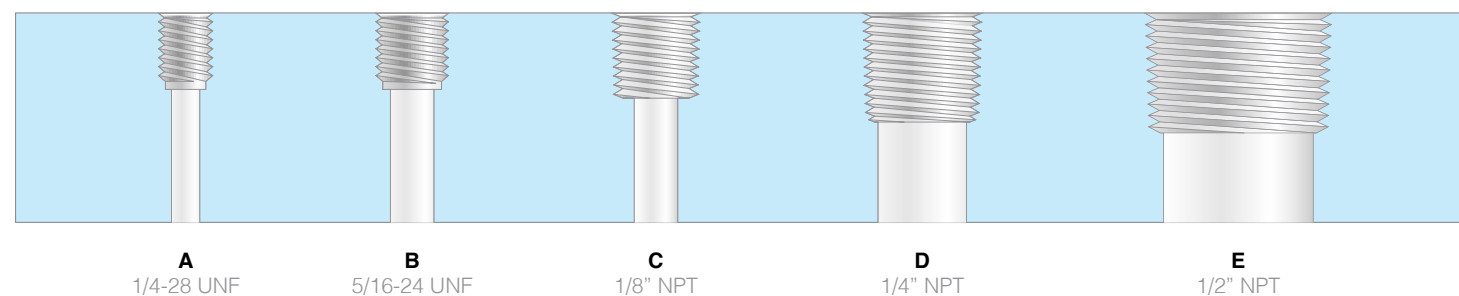
The fittings kit includes:

- (6) PTFE Type A port plugs
- (3) PP Type D port plugs
- (1) Barbed 1/4" Y-connector
- (1) 3/8" ID barbed adapter
- (3) 1/4" ID barbed adapters
- (1) 3/16" ID barbed adapter
- (1) 1/8" ID barbed adapter
- (2) 1/16" OD tube fittings
- (2) 2.2mm OD tube fittings
- (1) 2.5mm OD tube fitting
- (3) 1/8" OD tube fittings

Plus Kit Contents

The Plus Kit includes all the essentials of the Basic Kit for HPLC waste collection, but with the addition of a 5' tubing extension for detector outlets or short effluent tubes, plus a chemical-change indicator for real-time end of service life with organic solvents.

Port Thread Sizes



Justrite® Container

With plastic quick disconnects

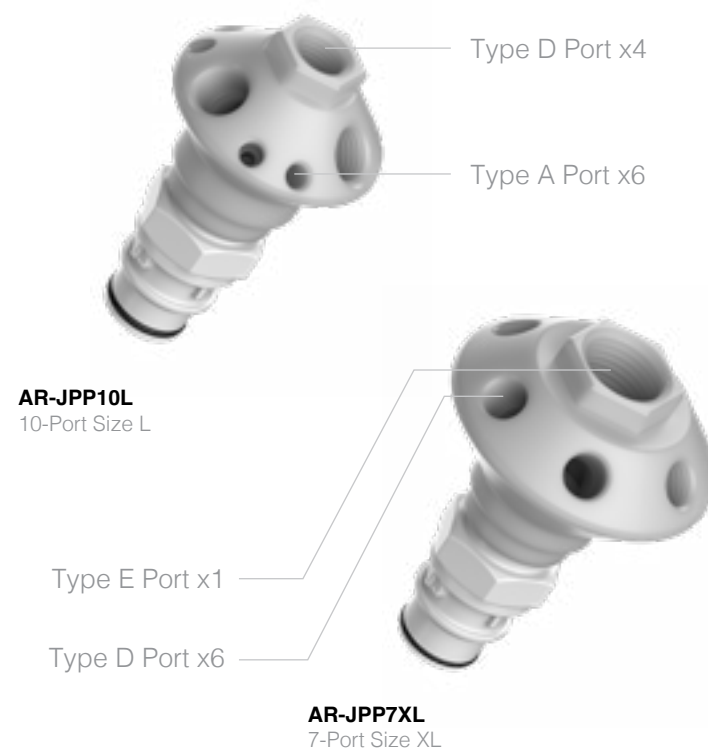
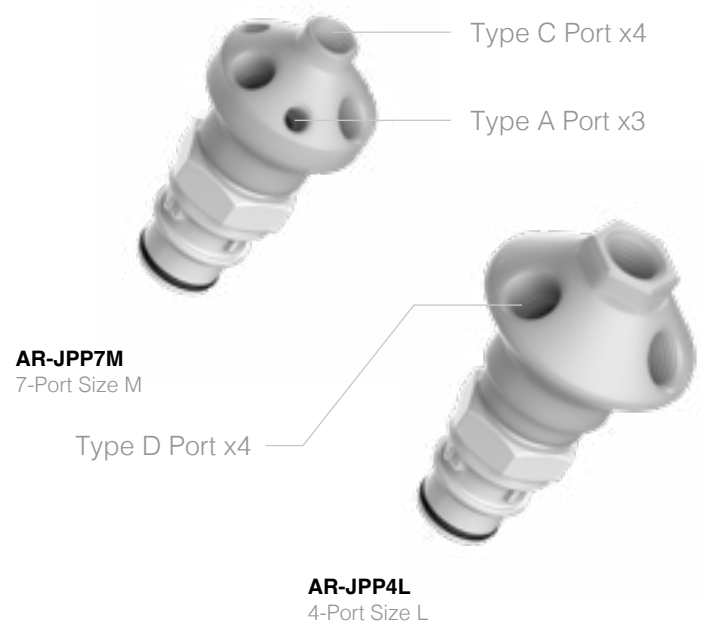


Container Type and Quick Disconnect

The deluxe option of solvent waste collection, Justrite® Centura™ safety cans offer a range of features which set them apart from other containers typically used for effluents. With a spring-loaded and pressure-relieving lid, spark arrester, groundable pouring spout, and shutoff quick disconnects, these containers make waste collection a relatively clean and easy process. The pour spout can be locked in open position when emptying the contents, and because the quick disconnects include shutoff valves, it's easy to disengage waste manifolds (and exhaust filters) when switching out full containers with empty.



Waste Collection



Part Number	Description	# of Ports
Manifolds for Justrite® Poly Quick Disconnects		
AR-JPP7M	7-Port, Size M, Polypropylene	3A, 4C
AR-JPP4L	4-Port, Size L, Polypropylene	4D
AR-JPP10L	10-Port, Size L, Polypropylene	6A, 4D
AR-JPP7XL	7-Port, Size XL, Polypropylene	6D, 1E
Waste Kits		
AR-KGP-A	Waste Kit Basic	6A, 4D
AR-KGP-B	Waste Kit Plus	6A, 4D

AR-KGP-A
Basic Waste Kit



Basic Kit Contents

The Basic Kit for HPLC waste collection includes a 10-port Polypropylene manifold, fittings kit with tubing connections for typical analytical-scale HPLC instruments, port plugs, filter adapter (straight and 90 degree elbow) and an exhaust filter with timer.

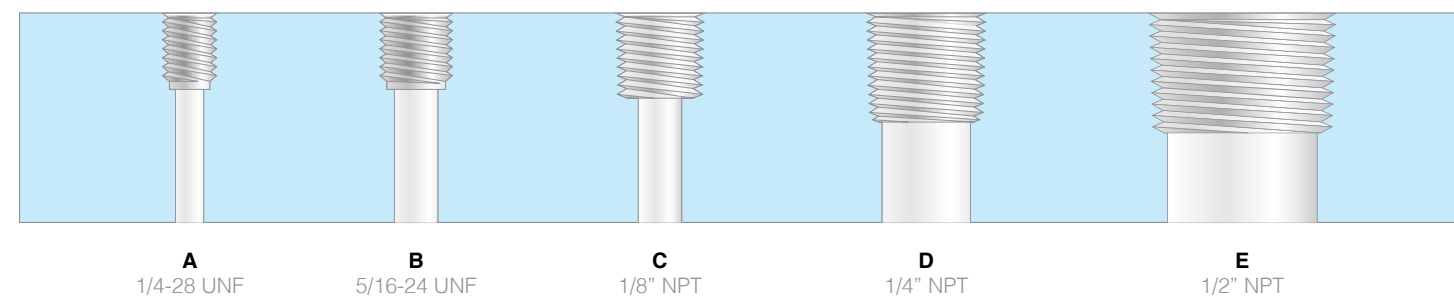
The fittings kit includes:

- (6) PTFE Type A port plugs
- (4) PP Type D port plugs
- (1) Barbed 1/4" Y-connector
- (1) 3/8" ID barbed adapter
- (3) 1/4" ID barbed adapters
- (1) 3/16" ID barbed adapter
- (1) 1/8" ID barbed adapter
- (2) 1/16" OD tube fittings
- (2) 2.2mm OD tube fittings
- (1) 2.5mm OD tube fitting
- (3) 1/8" OD tube fittings

Plus Kit Contents

The Plus Kit includes all the essentials of the Basic Kit for HPLC waste collection, but with the addition of a 5' tubing extension for detector outlets or short effluent tubes, plus a chemical-change indicator for real-time end of service life with organic solvents.

Port Thread Sizes



Justrite® Container

With stainless steel quick disconnects

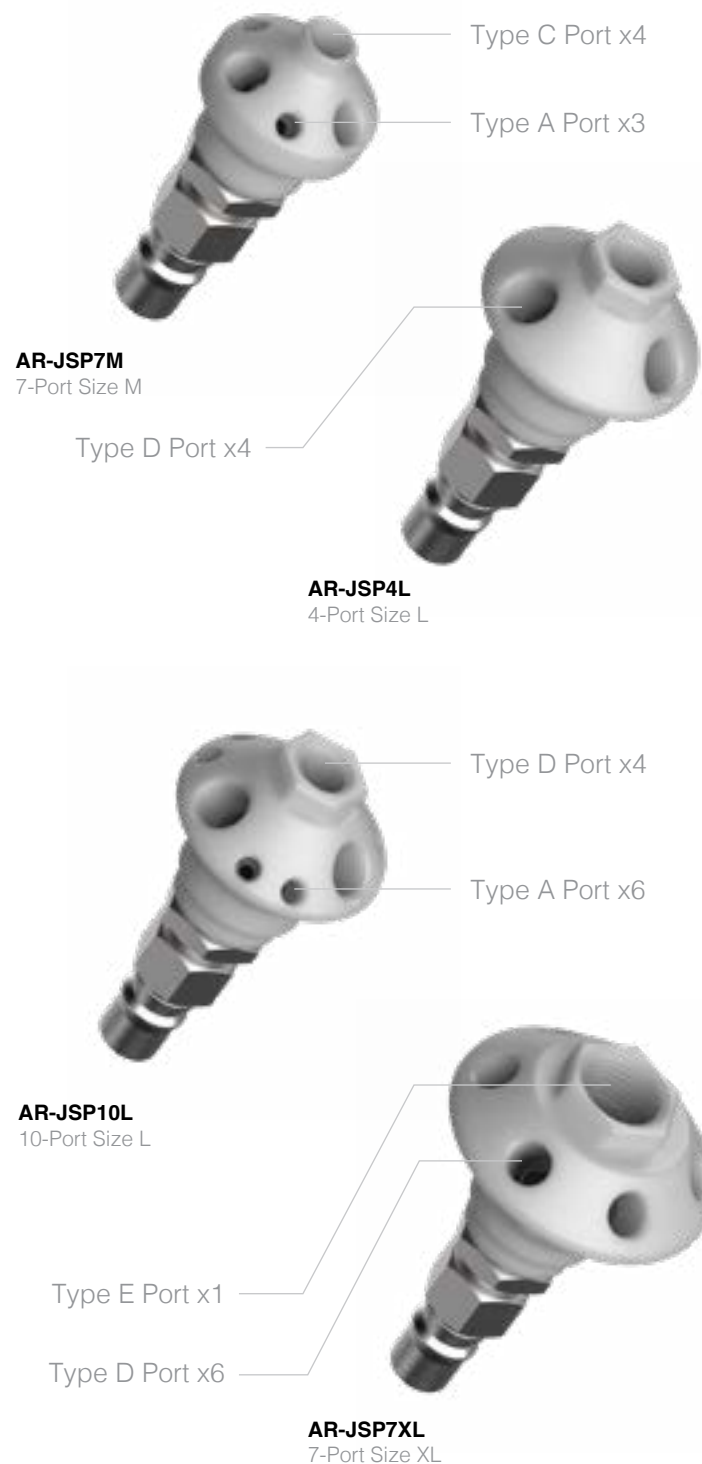


Container Type and Quick Disconnect

The deluxe option of solvent waste collection, Justrite® Centura™ safety cans offer a range of features which set them apart from other containers typically used for effluents. With a spring-loaded and pressure-relieving lid, spark arrester, groundable pouring spout, and shutoff quick disconnects, these containers make waste collection a relatively clean and easy process. The pour spout can be locked in open position when emptying the contents, and because the quick disconnects include shutoff valves, it's easy to disengage waste manifolds (and exhaust filters) when switching out full containers with empty.



Waste Collection



Part Number	Description	# of Ports
Manifolds for Container		
AR-JSP7M	7-Port, Size M, Polypropylene	3A, 4C
AR-JSX7M	10-Port, Size M, PTFE	3A, 4C
AR-JSP4L	4-Port, Size L, Polypropylene	4D
AR-JSP10L	10-Port, Size L, Polypropylene	6A, 4D
AR-JSP7XL	7-Port, Size XL, Polypropylene	6D, 1E
Waste Kits		
AR-KJS-A	Waste Kit Basic	6A, 4D
AR-KJS-B	Waste Kit Plus	6A, 4D



Basic Kit Contents

The Basic Kit for HPLC waste collection includes a 10-port Polypropylene manifold, fittings kit with tubing connections for typical analytical-scale HPLC instruments, port plugs, filter adapter (straight and 90 degree elbow) and an exhaust filter with timer.

The fittings kit includes:

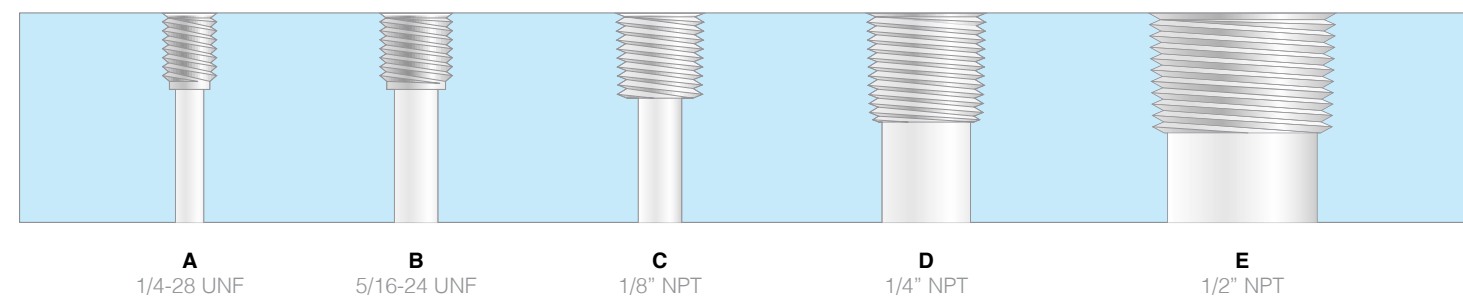
- (6) PTFE Type A port plugs
- (4) PP Type D port plugs
- (1) Barbed 1/4" Y-connector
- (1) 3/8" ID barbed adapter
- (3) 1/4" ID barbed adapters
- (1) 3/16" ID barbed adapter
- (1) 1/8" ID barbed adapter
- (2) 1/16" OD tube fittings
- (2) 2.2mm OD tube fittings
- (1) 2.5mm OD tube fitting
- (3) 1/8" OD tube fittings



Plus Kit Contents

The Plus Kit includes all the essentials of the Basic Kit for HPLC waste collection, but with the addition of a 5' tubing extension for detector outlets or short effluent tubes, plus a chemical-change indicator for real-time end of service life with organic solvents.

Port Thread Sizes



Container Types

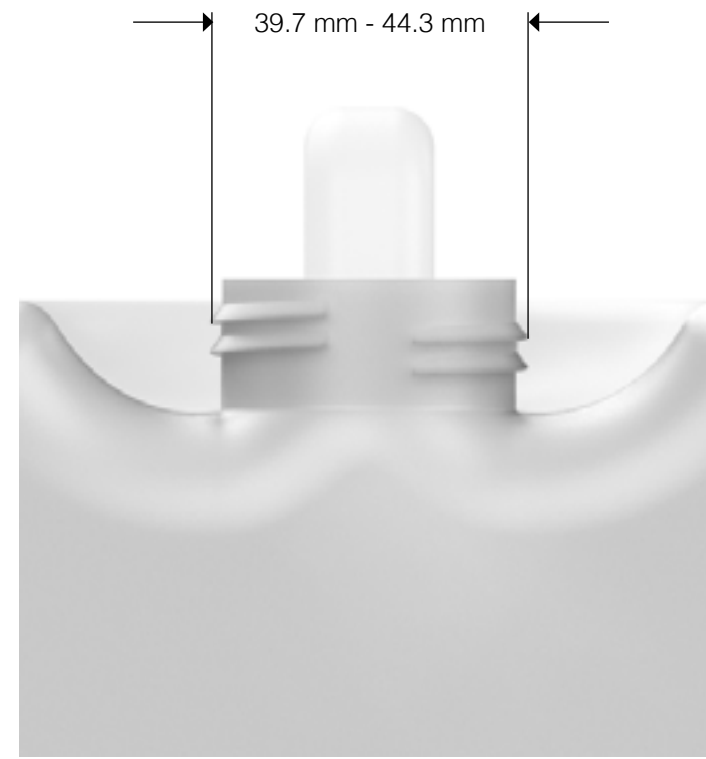
A closer look at container threads and dimensions, at 1:1 scale



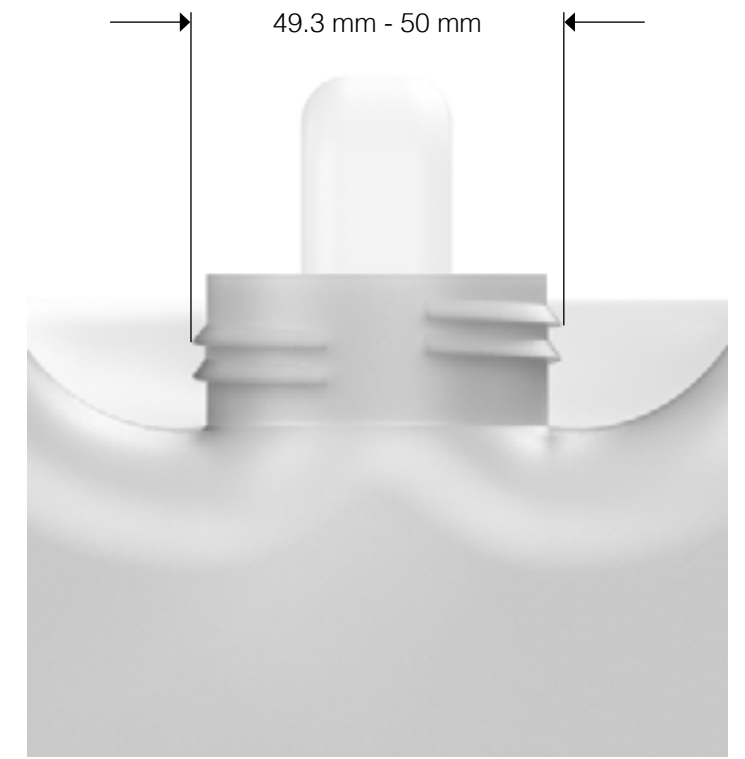
38-400 shallow thread (Wako / Cubitainer)
Scale 1:1



GL38
Scale 1:1



DIN45
Scale 1:1



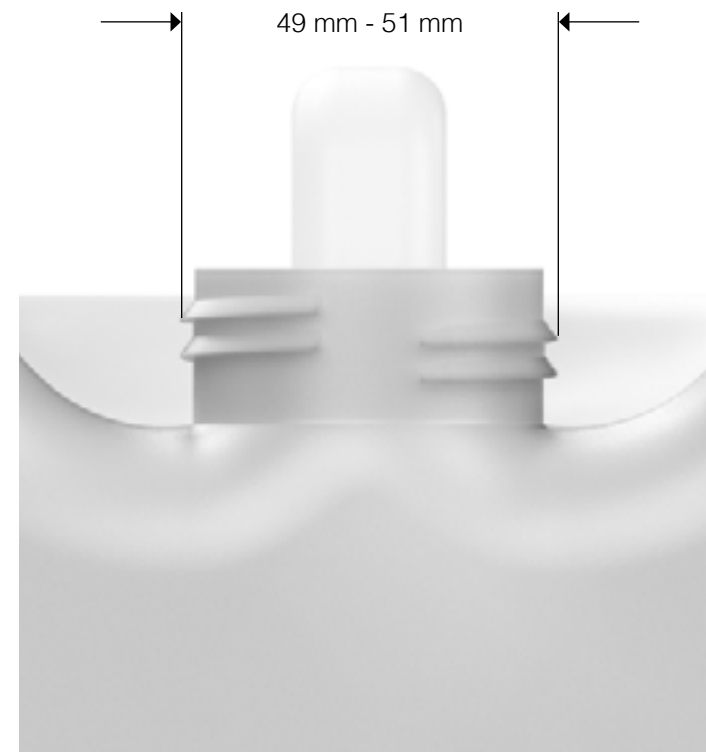
DIN50
Scale 1:1



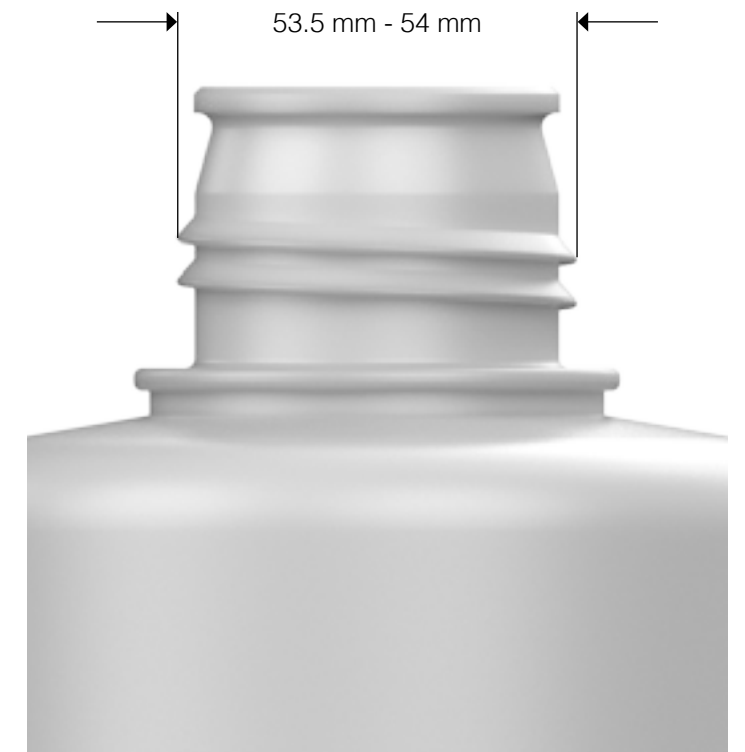
38-400 shallow thread
Scale 1:1



GL45
Scale 1:1



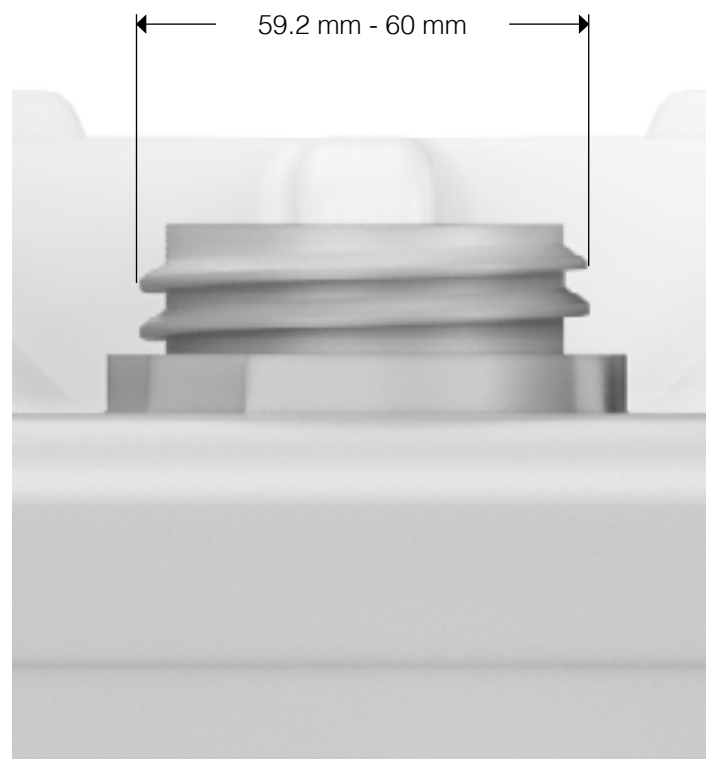
51mm
Scale 1:1



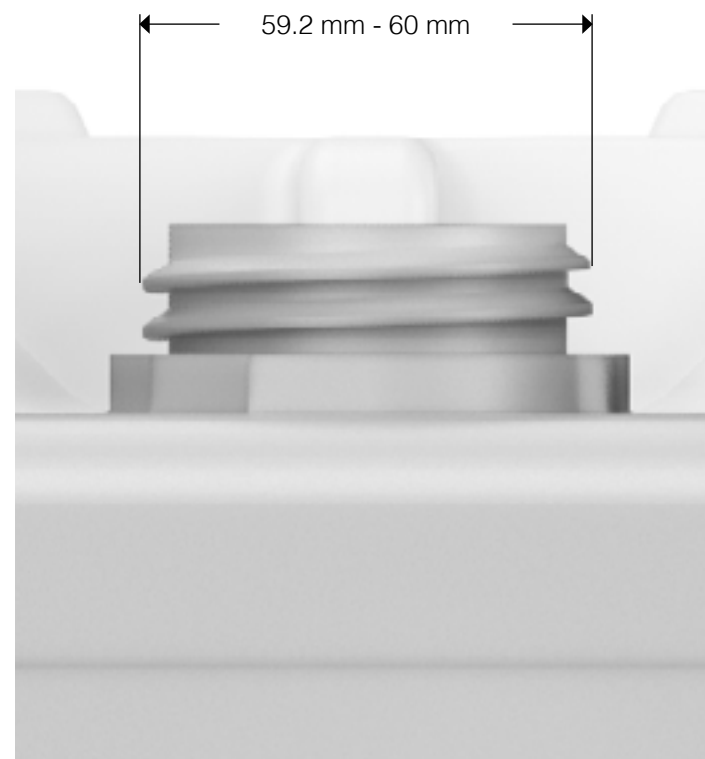
53B
Scale 1:1

Container Types

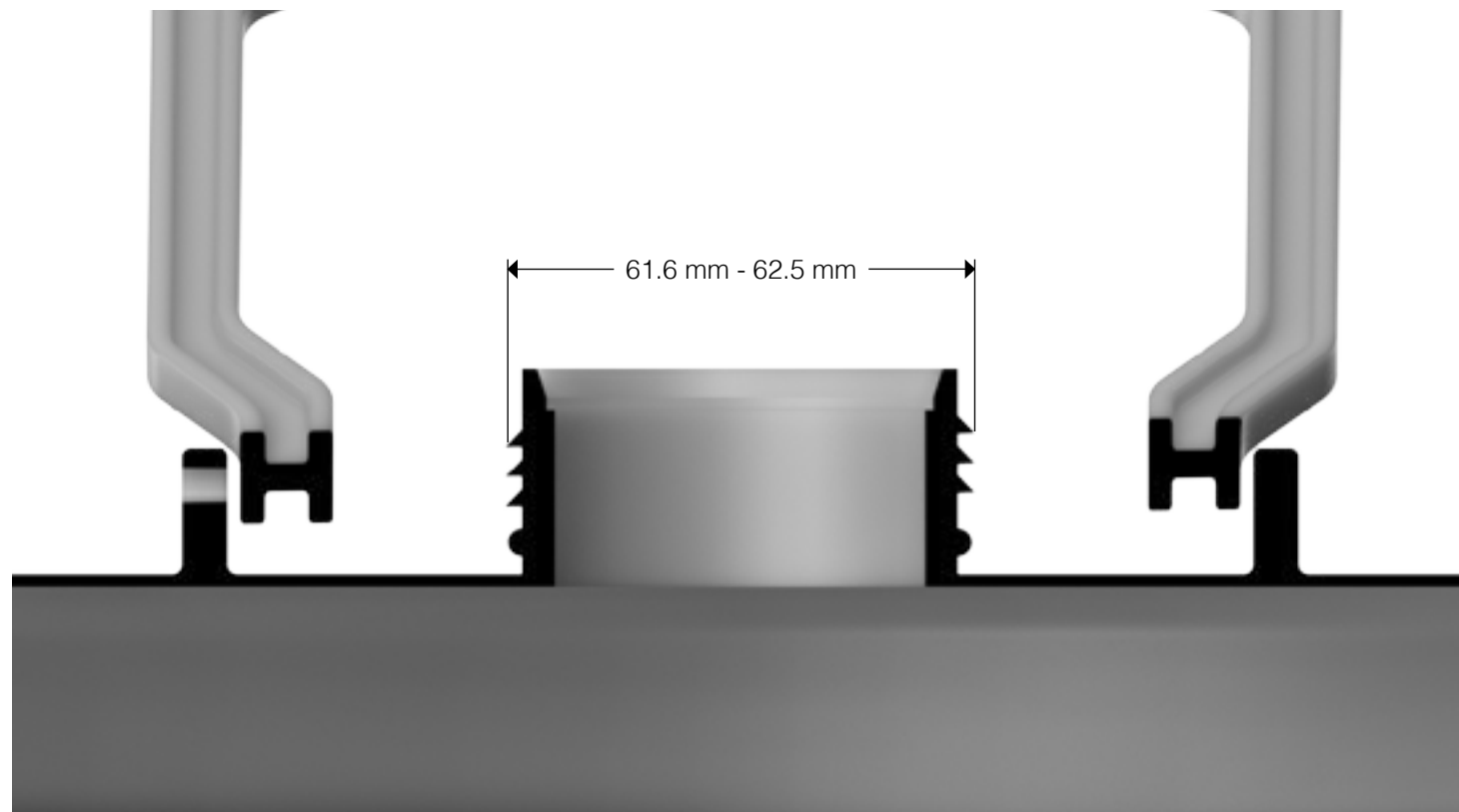
A closer look at container threads and dimensions, at 1:1 scale



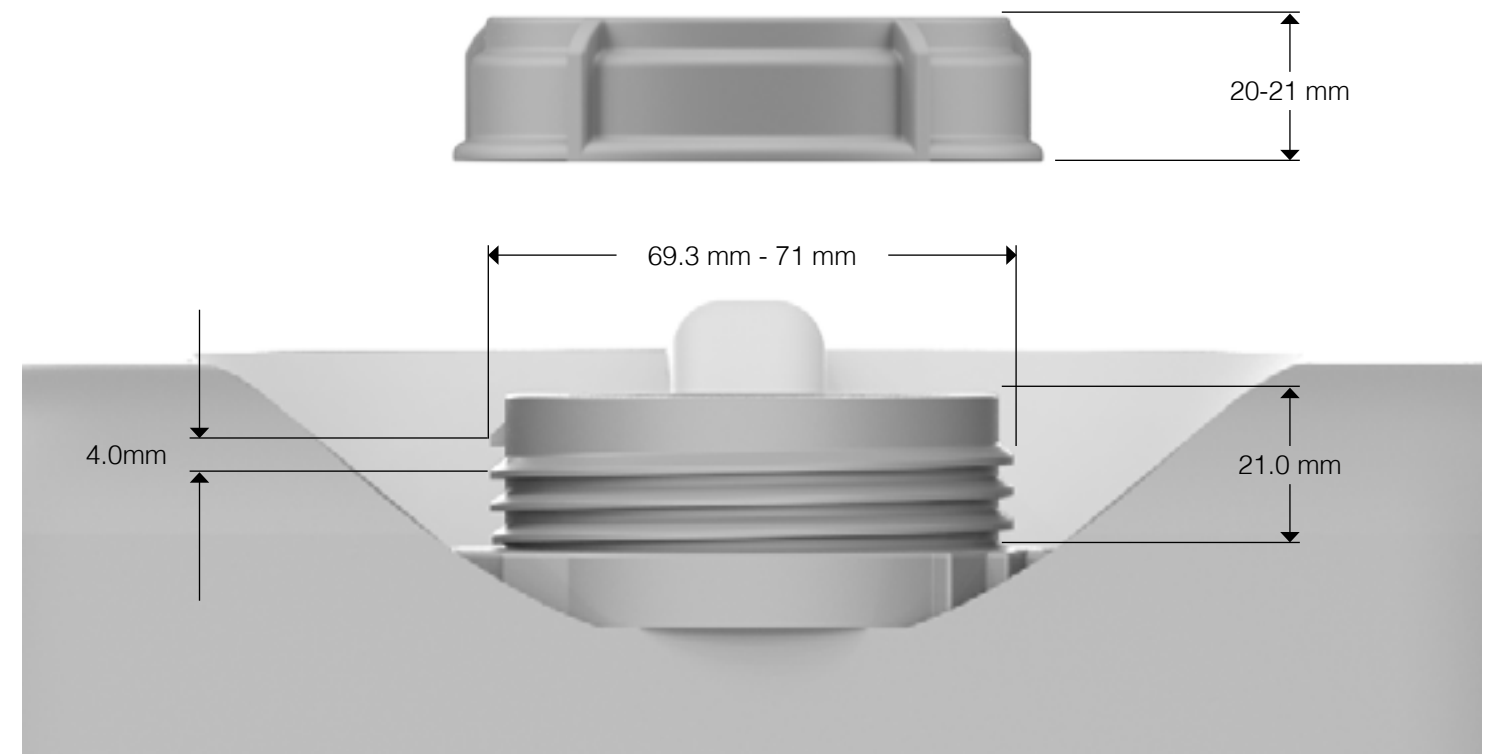
DIN60
Scale 1:1



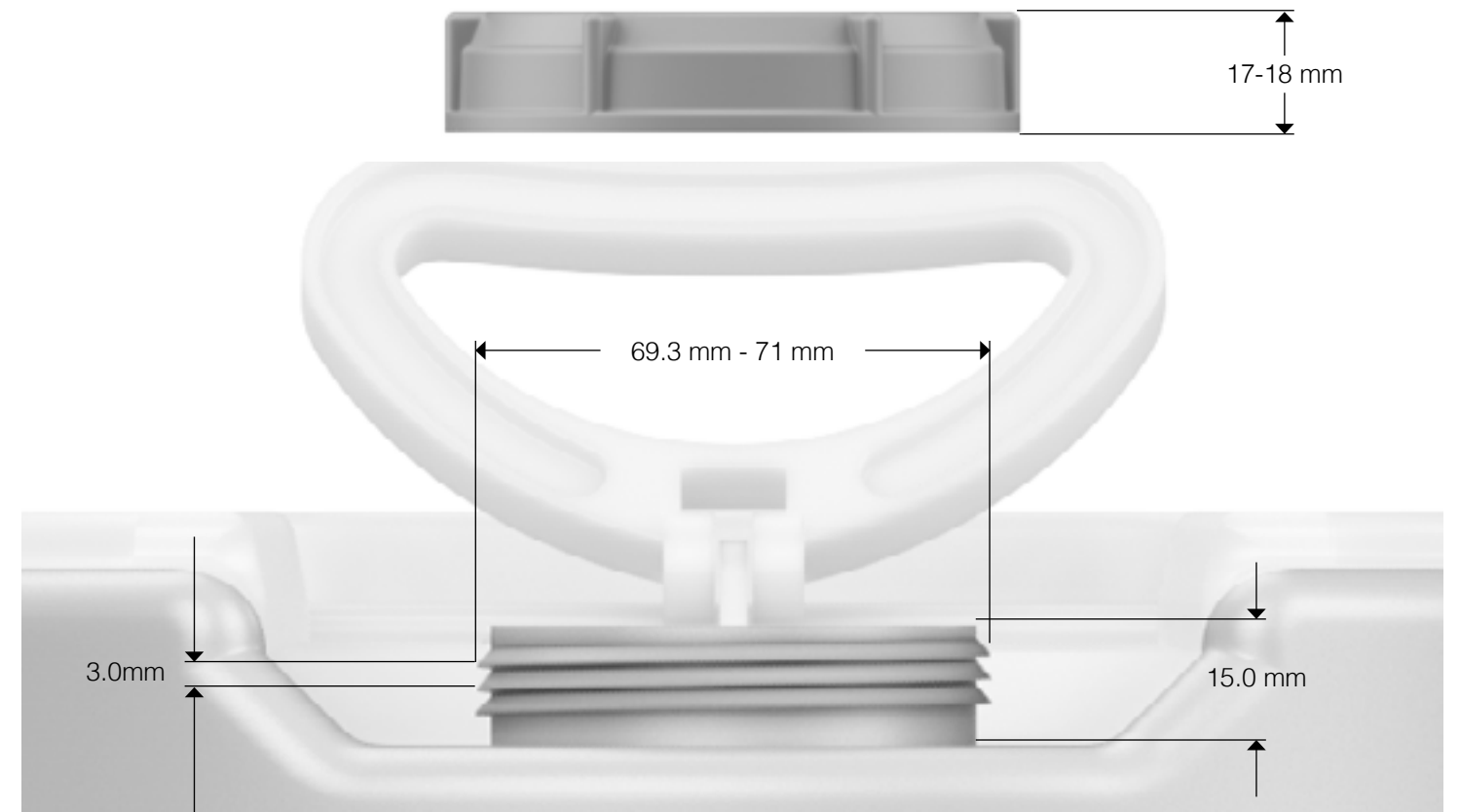
61mm
Scale 1:1



63mm
Scale 1:1



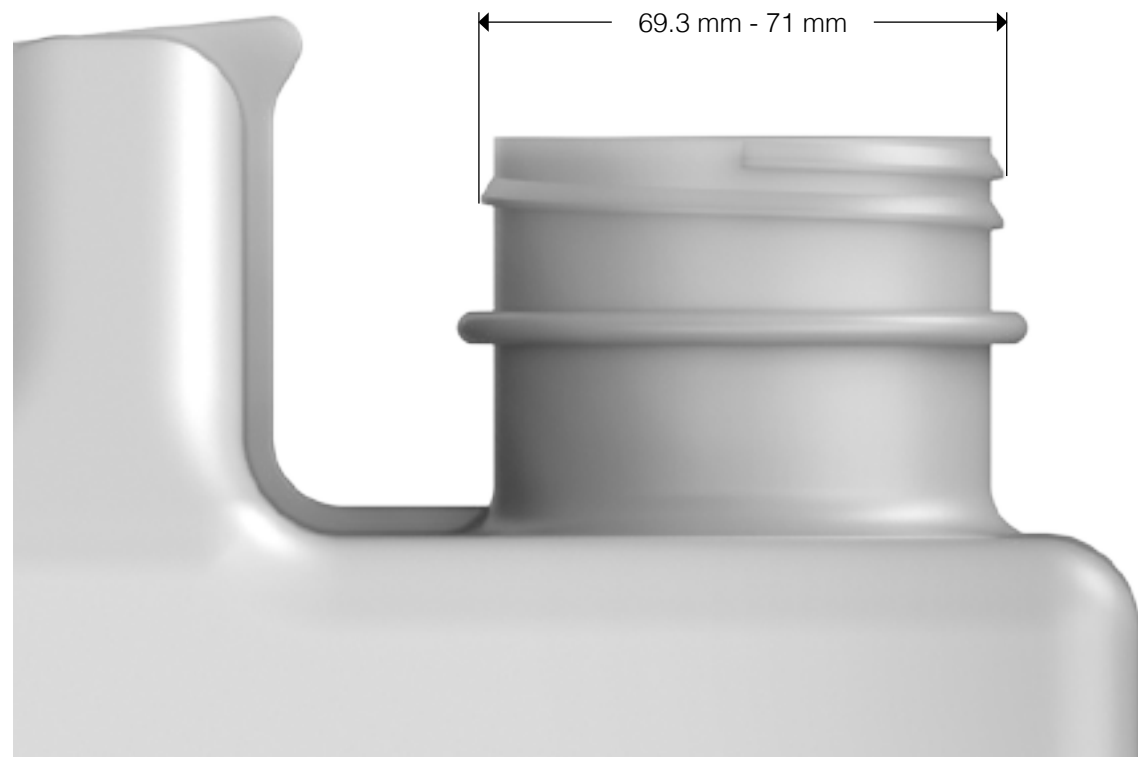
70mm Rieke - 6TPI
Scale 1:1



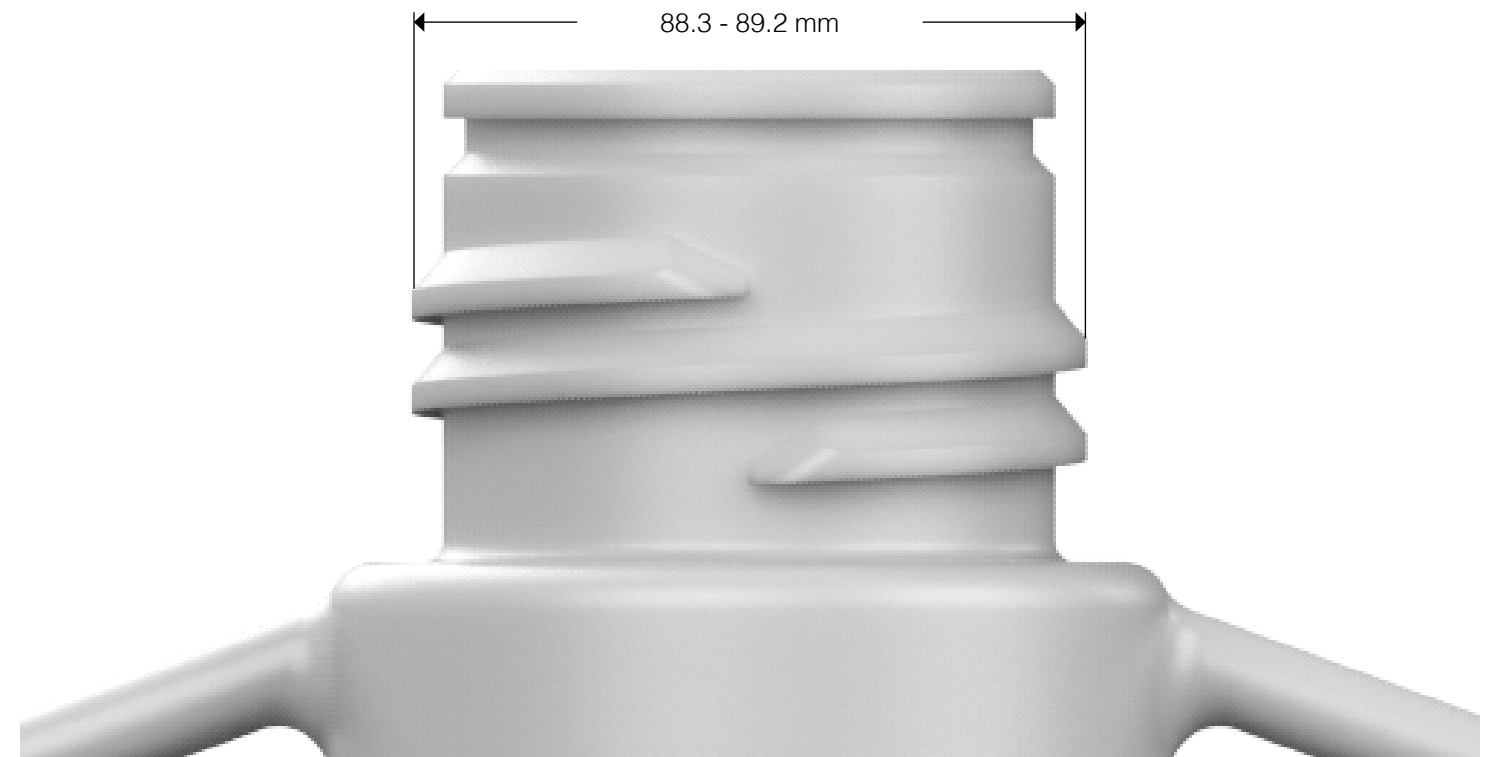
70mm Rieke - 8TPI
Scale 1:1

Container Types

A closer look at container threads and dimensions, at 1:1 scale



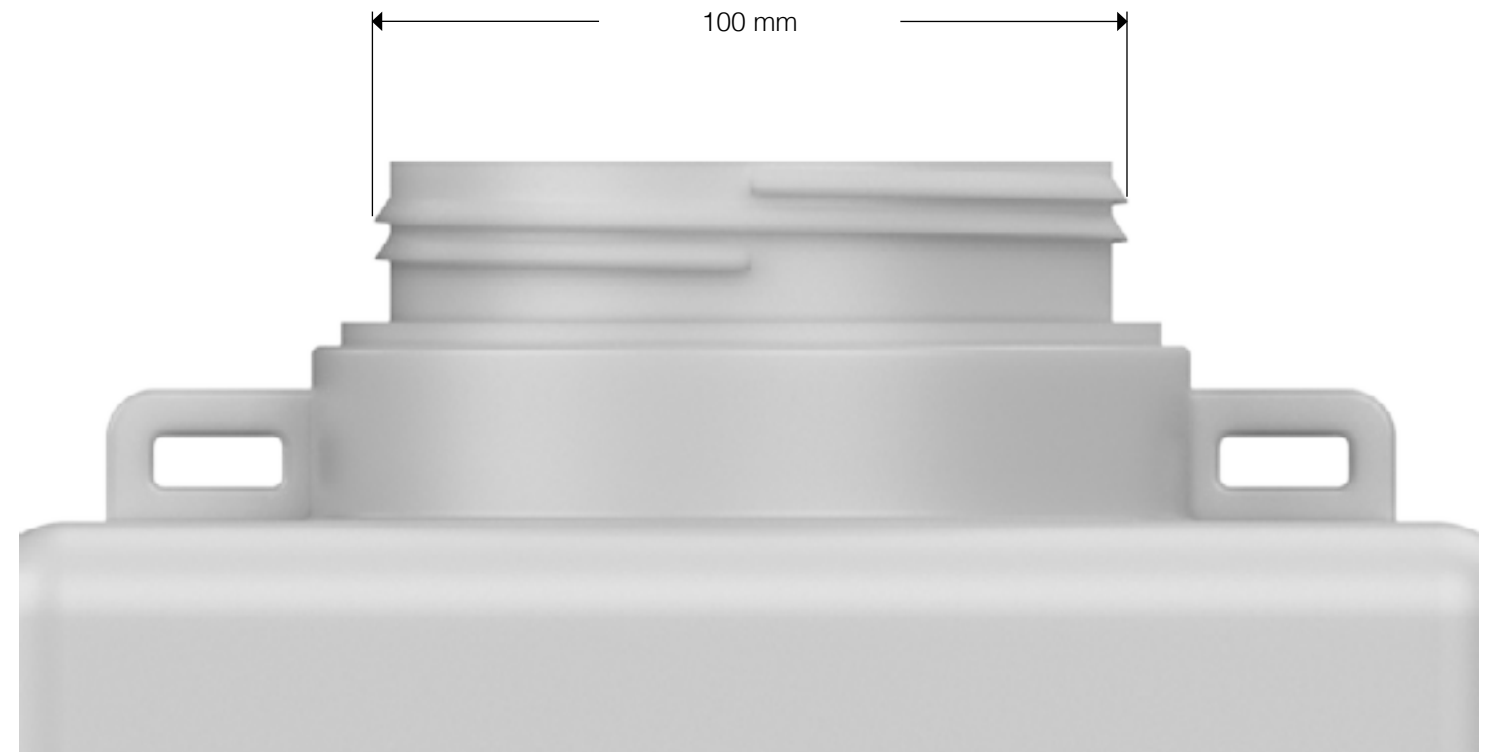
70mm Nalgene
Scale 1:1



83B
Scale 1:1



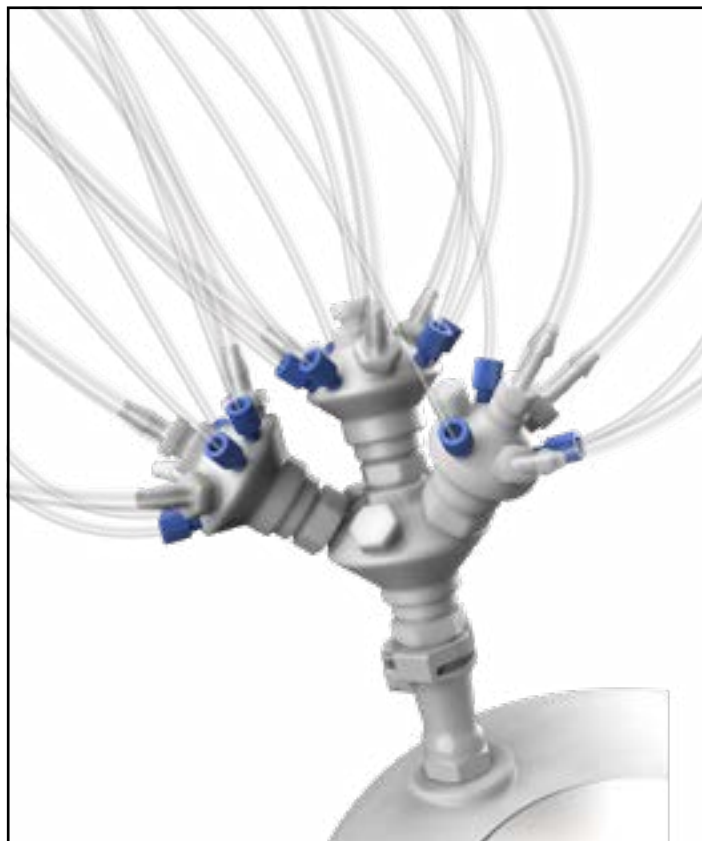
GL80
Scale 1:1



100mm
Scale 1:1

Stacking Manifolds

Expansion units for extra tubes

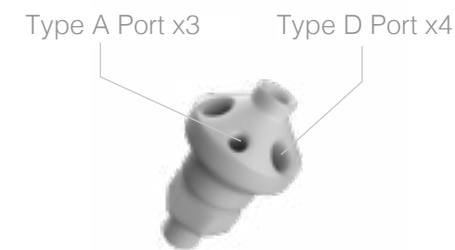


(Nearly) limitless modular expansion

One of the unique features of our solvent collection manifolds is their ability to adapt to additional tubing requirements. Whether attaching five tubes or fifty, each manifold can be expanded to fit the need by connecting modular “stacking” units. With tapered self-sealing NPT common threads, select the manifold which allows your system to accommodate the needs of your lab. This is especially useful in laboratories which are already at the maximum solvent capacity permissible by law. By connecting more than one instrument to a single waste container, additional containers may not be required.

Part Number	Description	# of Ports
Stacking Manifolds for Type C ports - 1/8" NPT		
AR-SPC7M	7-Port, Size M, Polypropylene	3A, 4D
AR-SXC7M	7-Port, Size M, PTFE	3A, 4D
Stacking Manifolds for Type D ports - 1/4" NPT		
AR-SPD7M	7-Port, Size M, Polypropylene	3A, 4D
AR-SXD7M	7-Port, Size M, PTFE	3A, 4D
AR-SPD4L	4-Port, Size L, Polypropylene	4D
AR-SPD10L	10-Port, Size L, Polypropylene	6A, 4D
AR-SPD7XL	7-Port, Size XL, Polypropylene	6D, 1E
Stacking Manifolds for Type E ports - 1/2" NPT		
AR-SPE7M	7-Port, Size M, Polypropylene	3A, 4D
AR-SXE7M	7-Port, Size M, PTFE	6A, 4D
AR-SPE4L	4-Port, Size L, Polypropylene	4D
AR-SPE10L	10-Port, Size L, Polypropylene	6A, 4D
AR-SPE7XL	7-Port, Size XL, Polypropylene	6D, 1E

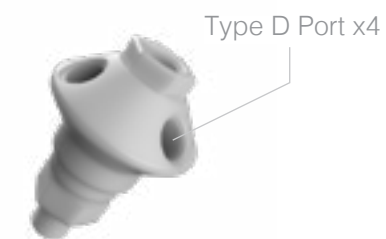
AR-SPC7M / SXC7M
7-Port Size M



AR-SPD7M / SXD7M
7-Port Size M



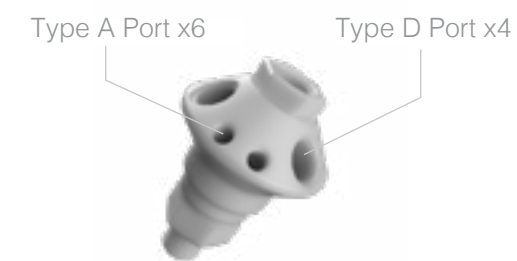
AR-SPE7M / SXE7M'
7-Port Size M



AR-SPD4L
4-Port Size L



AR-SPE4L
4-Port Size L



AR-SPD10L
10-Port Size L



AR-SPE10L
10-Port Size L

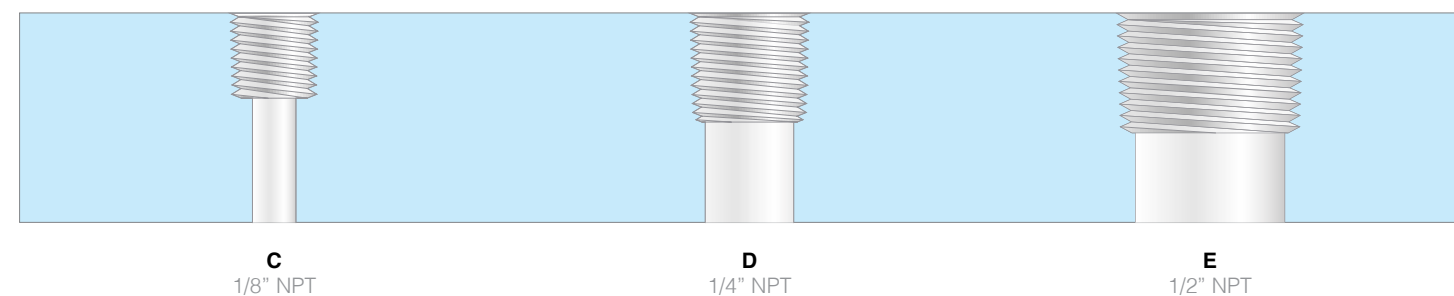


AR-SPD7XL
7-Port Size XL



AR-SPE7XL
7-Port Size XL

Port Thread Sizes



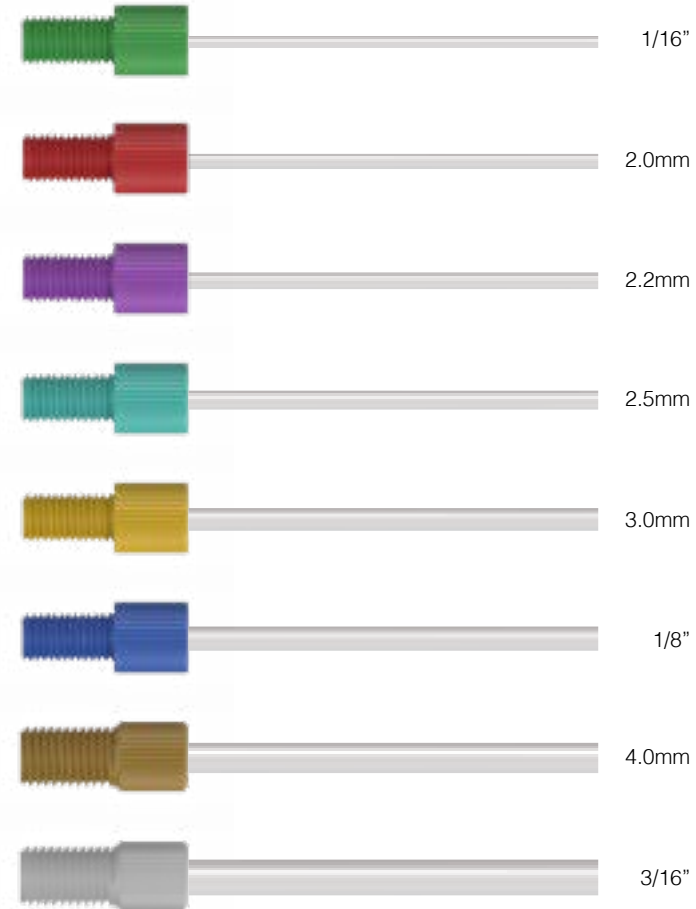
Compression Fittings

Connections for hard-wall tubing

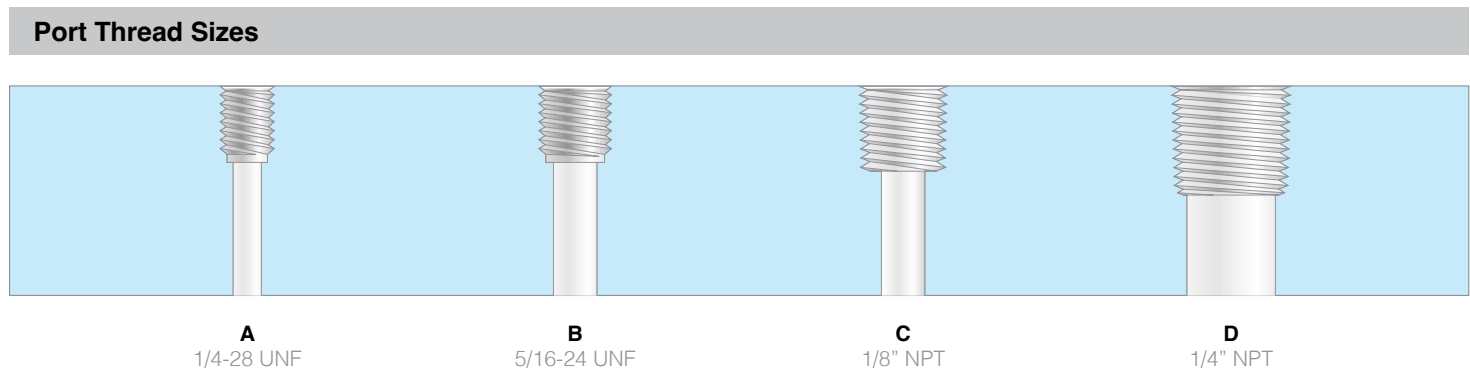
Tubing connections by OD and port type

The small-diameter tubing (typically less than 1/4" OD) used in many laboratory instruments for transporting solvents is often supplied in PTFE, ETFE, FEP, or similar fluoropolymer. Because the walls of the tubing are too hard for reliable connections with barbed fittings, these chemically-resistant plastics are connected to caps and manifolds by using compressing fittings. With a threaded fitting tightening onto a pliable ferrule, the OD of the tubing is compressed, forming a seal against the bottom of the threaded port.

Offered here in chemically-resistant Polypropylene, the various colors conform to the OD of each tubing size.



Part Number	Description	U/M	Material
Type A – 1/4-28 UNF			
AR-CPA16-10PK	1/16" OD Tubing	10/PK	PP
AR-CPA20 -10PK	2.0mm OD Tubing	10/PK	PP
AR-CPA22 -10PK	2.2mm OD Tubing	10/PK	PP
AR-CPA25 -10PK	2.5mm OD Tubing	10/PK	PP
AR-CPA30 -10PK	3.0mm OD Tubing	10/PK	PP
AR-CPA32 -10PK	1/8" OD Tubing	10/PK	PP
Type B – 5/16-24 UNF			
AR-CKB40	4.0mm OD Tubing	Each	PEEK/ETFE
AR-CKB47	3/16" OD Tubing	Each	Acetal/ETFE
Type C – 1/8" NPT			
AR-CPC16	1/16" OD Tubing	Each	PP
AR-CPC20	2.0mm OD Tubing	Each	PP
AR-CPC22	2.2mm OD Tubing	Each	PP
AR-CPC25	2.5mm OD Tubing	Each	PP
AR-CPC30	3.0mm OD Tubing	Each	PP
AR-CPC32	1/8" OD Tubing	Each	PP
Type D – 1/4" NPT			
AR-CPD16	1/16" OD Tubing	Each	PP
AR-CPD20	2.0mm OD Tubing	Each	PP
AR-CPD22	2.2mm OD Tubing	Each	PP
AR-CPD25	2.5mm OD Tubing	Each	PP
AR-CPD30	3.0mm OD Tubing	Each	PP
AR-CPD32	1/8" OD Tubing	Each	PP

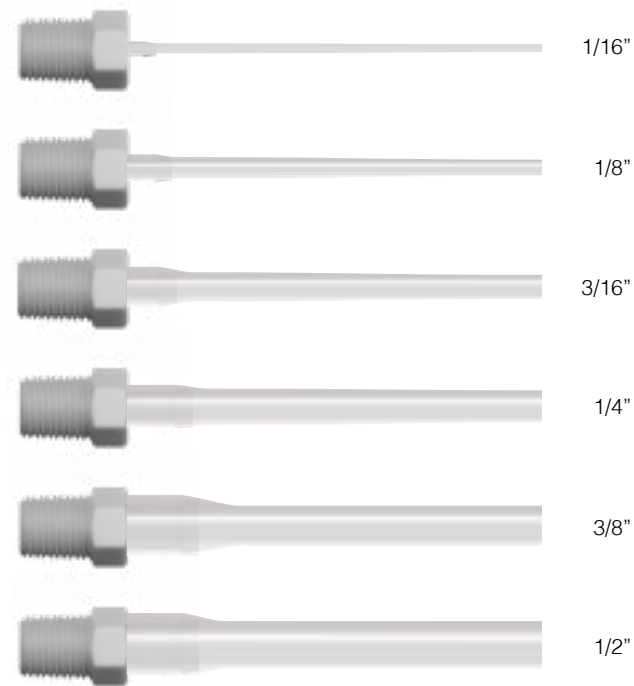


Barbed Fittings

Connections for soft-wall tubing

Tubing connections by ID and port type

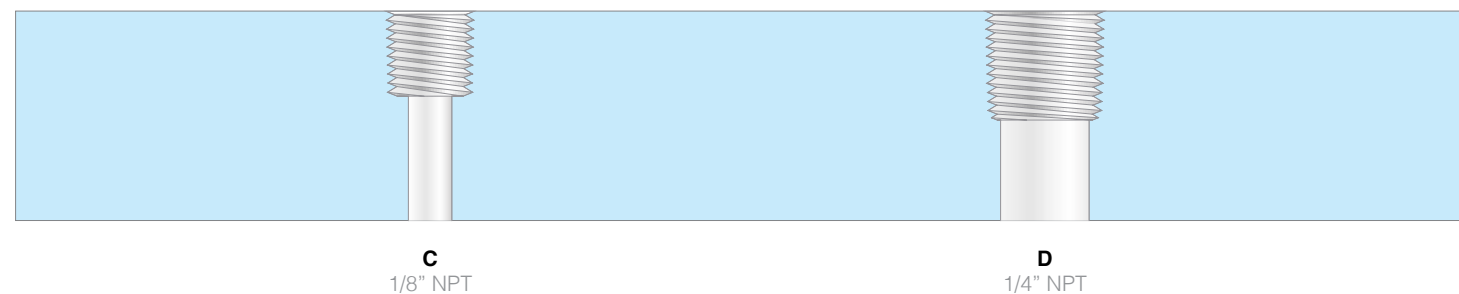
Often used for instrument waste plumbing where chemically-resistant tubing is not required, soft-material tubing like Tygon® or silicone is a convenient way to drain aqueous waste or buffers. These materials work well with barbed fittings. Supplied here in chemically resistant Polypropylene, they are available in packs of 10 fittings each.



Part Number	Description		Material
Type C – 1/8" NPT			
AR-BPC16-10PK	1/16" ID Tubing	10/PK	PP
AR-BPC32-10PK	1/8" ID Tubing	10/PK	PP
AR-BPC47-10PK	3/16" ID Tubing	10/PK	PP
AR-BPC64-10PK	1/4" ID Tubing	10/PK	PP
AR-BPC95-10PK	3/8" ID Tubing	10/PK	PP
Type D – 1/4" NPT			
AR-BPD16-10PK	1/16" ID Tubing	10/PK	PP
AR-BPD32-10PK	1/8" ID Tubing	10/PK	PP
AR-BPD47-10PK	3/16" ID Tubing	10/PK	PP
AR-BPD64-10PK	1/4" ID Tubing	10/PK	PP
AR-BPD95-10PK	3/8" ID Tubing	10/PK	PP
AR-BPD127-10PK	1/2" ID Tubing	10/PK	PP



Port Thread Sizes



Plugs and Extras

Fittings kits, tubing extensions, adapters, plugs, and Y-fittings

All the miscellaneous things

When you're plumbing an HPLC system, it's surprising how often you need something extra. Look here when you need a spare or when you're trying to attach this to that. Let us know if you don't find what you're searching for.



AR-FK1
Fittings kit



AR-TX5
Tubing extension, 5'



AR-AP45-38
Thread adapter, GL45 to 38-430

Part Number	Description	Material
Type A – 1/4-28 UNF		
AR-PXA	Plug for 1/4-28 Ports	PTFE
Type B – 5/16-24 UNF		
AR-PXB	Plug for 1/4-28 Ports	PTFE
Type C – 1/8" NPT		
AR-PPC	Plug for 1/8" NPT Ports	PP
AR-APAC	Adapter, Type A x Type C, MNPT	PP
AR-APBC	Adapter, Type B x Type C, MNPT	PP
Type D – 1/4" NPT		
AR-PPD	Plug for 1/4" NPT Ports	PP
AR-APAD	Adapter, Type A x Type D, MNPT	PP
AR-APBD	Adapter, Type B x Type D, MNPT	PP
Type E – 1/2" NPT		
AR-PPE	Plug for 1/2" NPT Ports	PP
AR-APDE	Adapter, Type D x Type E, MNPT	PP
Barbed Y Fittings		
AR-YP16	1/16" ID tubing	PP
AR-YP32	1/8" ID tubing	PP
AR-YP64	1/4" ID tubing	PP
AR-YP95	3/8" ID tubing	PP
Fittings Kit		
AR-FK1	Fittings kit	PTFE/PP
Tubing Extension		
AR-TX5	Tubing extension, 5'	PTFE/PP
AR-TX5-4PK	4-Pack tubing extension	PTFE/PP
Bottle Thread Adapters		
AR-AP45-38	Thread adapter, GL45 X 38-430	PP
AR-AP45-40	Thread adapter, GL45 X S40	PP

Barbed Y Fittings



AR-YP16
Y Fitting 1/16"



AR-YP32
Y Fitting 1/8"



AR-YP64
Y Fitting 1/4"



AR-YP95
Y Fitting 3/8"

Plugs and Adapters



AR-APBC
Adapter
Type B x
Type C



AR-APBD
Adapter
Type B x
Type D



AR-APAC
Adapter
Type A x
Type C



AR-APAD
Adapter
Type A x
Type D



AR-APDE
Adapter
Type D x
Type E



AR-PXA
Plug for
Type A Ports



AR-PXB
Plug for
Type B Ports



AR-PPC
Plug for
Type C Ports

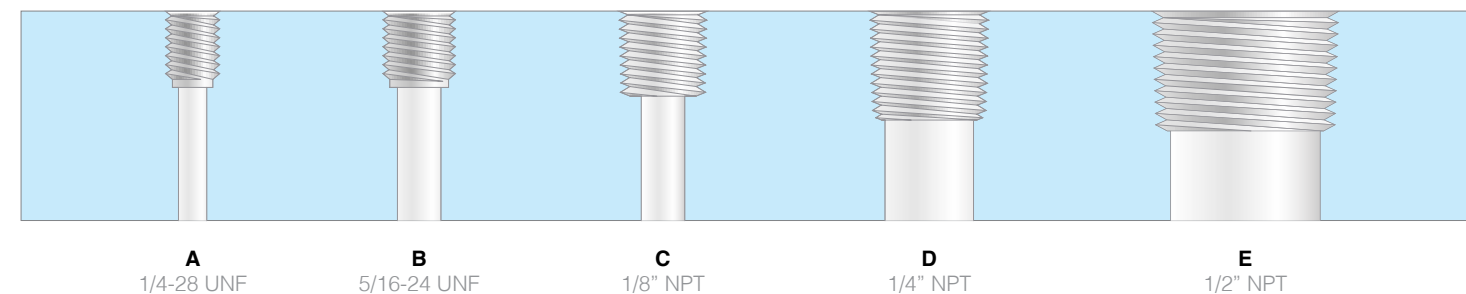


AR-PPD
Plug for
Type D Ports



AR-PPE
Plug for
Type E Ports

Port Thread Sizes



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