

Waste Collection

for laboratory instruments



Closed Systems

Safer solvent waste collection for HPLC laboratory instruments



Minimize exposure
to harmful solvent fumes and vapors

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

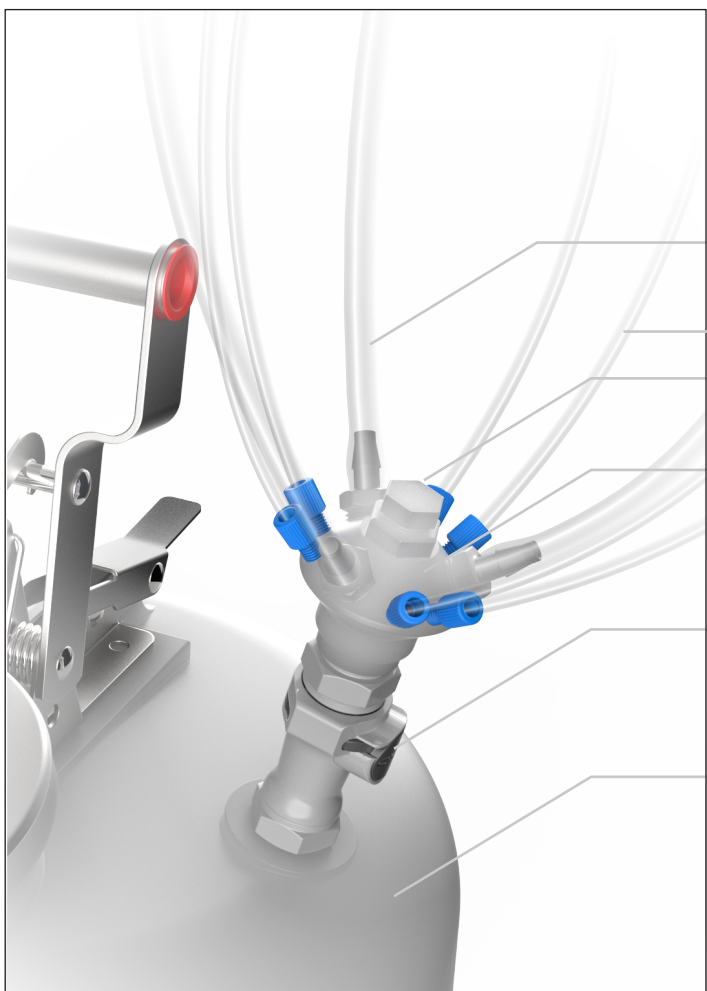
Reduce evaporation
of expensive chemical reagents



Many lab instruments (such as **HPLC**, LC-MS, FPLC, SFC, and others) rely on the use of volatile **organic solvents**. These chemicals can pose significant **health and safety concerns** for those working nearby.

Because these machines are “active” systems, continuously pumping solvents from reservoirs to the instrument and then to waste, a **dynamic containment solution** is essential for managing both pure reagents and waste effluent. This solution must balance controlled airflow in or out of containers with effective mitigation of both evaporation and solvent fumes.

The products listed here provide a **closed-system** approach to managing solvent **Waste Collection**. For options to handle the delivery of pure reagents to instruments, please refer to our **Solvent Extraction** catalog.



Waste Collection

- Waste tubing from chiller or drip tray
- Solvent effluent tubing
- Plug for unused ports
- Polypropylene or PTFE manifold
- Adapter to waste container
- Waste container

Emissions Control

- ESL chemical-change breakthrough indicator
- Polypropylene filter membrane
- Polypropylene mesh
- Activated carbon adsorption media
- Lapse timer
- Installation date label field
- Polypropylene membrane
- Filter adapter

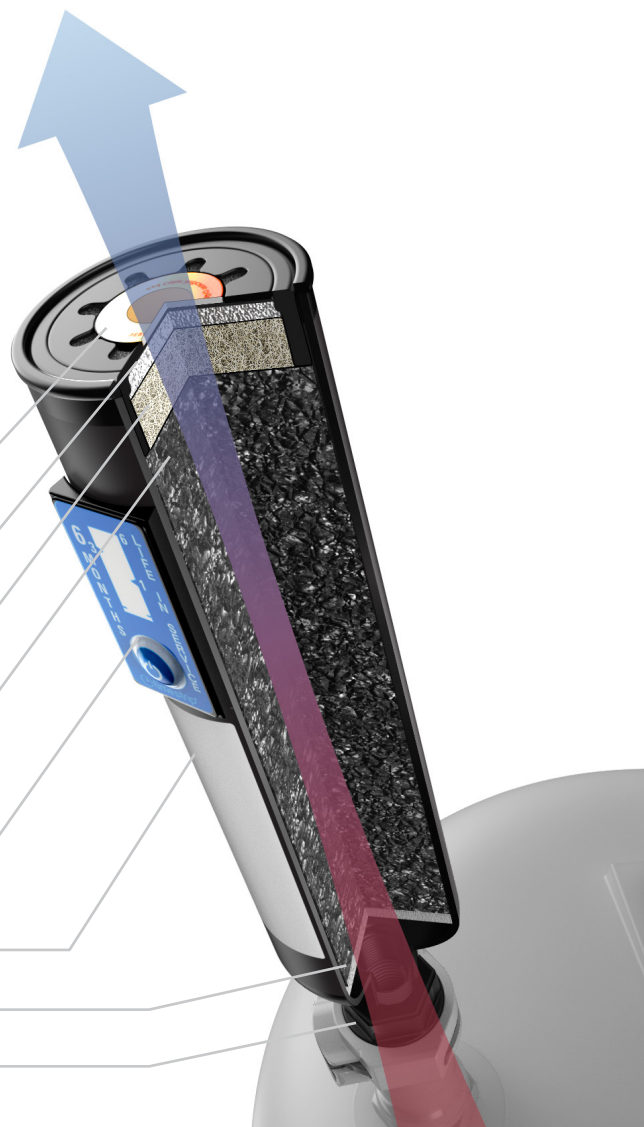


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The background of the page is a photograph of laboratory glassware and tubing. In the upper left, there is a clear plastic tube with a blue label that has the number '2' and the letter 'B' on it. Below the tube, there are several glass bottles and containers. One bottle in the foreground has a white cap and a white paper insert. Another bottle to its right has an orange cap. The glassware is partially filled with a clear liquid. The overall scene is dimly lit, with the glassware and tubing being the primary focus.

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Exhaust Filters

High surface area activated carbon for HPLC emission reduction

Active Solvent Adsorption

Reduce toxic fumes and noxious odors from HPLC solvent waste with activated carbon exhaust filters designed for vapor capture. Each filter features a button-activated lapse timer to help estimate its time in service and provide a visual reminder for replacement.

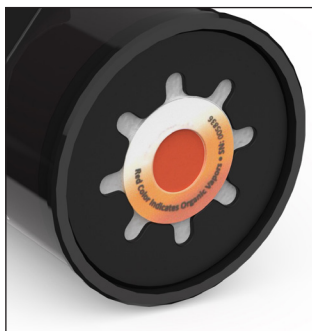
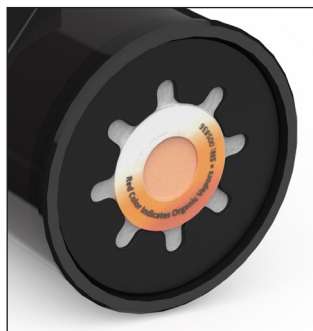
The actual lifespan of filter cartridges depends on several factors, including the type and concentration of solvents used. For real-time end-of-service-life detection—particularly when working with normal-phase or highly volatile solvents—we offer filters equipped with a chemical-change breakthrough indicator. This feature reveals a color change upon exposure to common HPLC organic solvents.

Designed for continuous solvent vapor flow in analytical or semi-preparative HPLC instruments, these filters can be connected to various point-source emissions by adapting to the Type D (1/4" NPT) female port at the filter's receiving end. Dispose of used filters according to local safety codes and regulations.



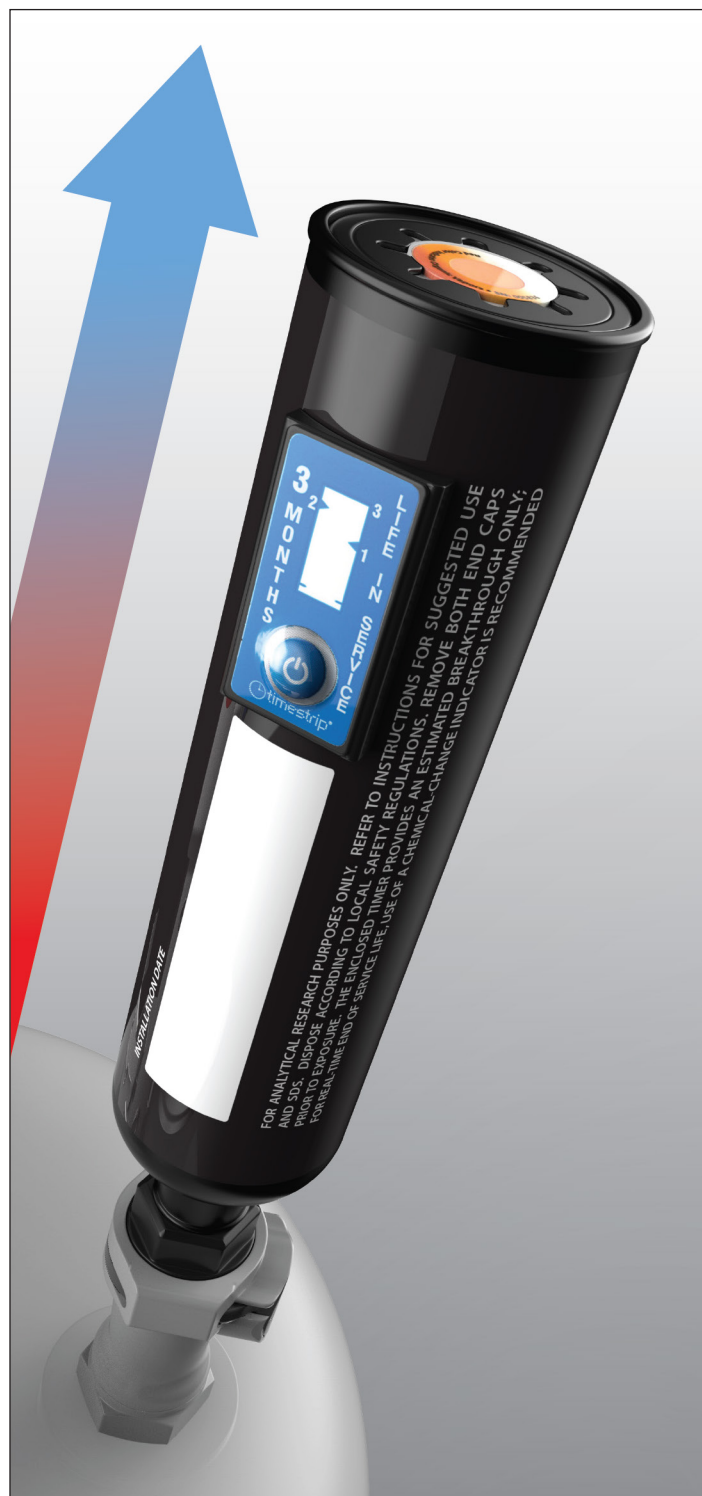
Track time from point of activation

All cartridges are equipped with a lapse timer which tracks time in service from the moment of activation. Press the button to initiate and provide a clear visual reminder for replacement scheduling. Medium filters feature a 3-month timer, while Large cartridges include a 1-year version.



Chemical-change ESL Color Indicator

Recommended for real-time monitoring of solvent breakthrough and service life, an optional chemically-activated, color-changing end-of-service-life (ESL) indicator is available separately or included with select filter cartridges. The color changes from light yellow/tan to a red hue when exposed to common HPLC solvents.



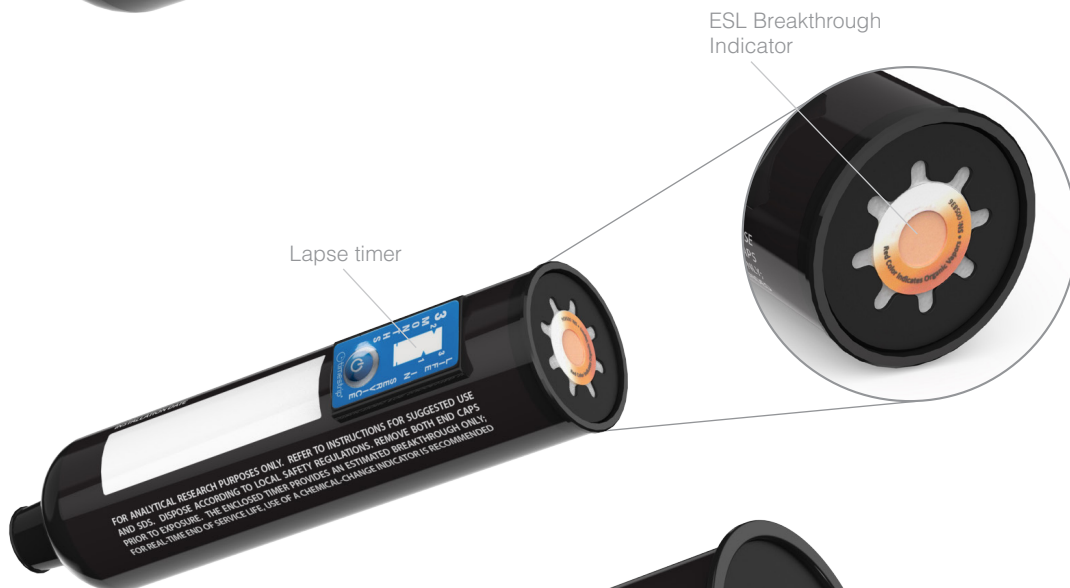
Part Number	Description	U/M
Medium Filters		
LL-CFM	Exhaust Filter, Medium	Each
LL-CFMV	Exhaust Filter Pack, Medium	5/PK
LL-CFMI	Exhaust Filter w/ ESL Indicator, Medium	Each
LL-CFMIV	Exhaust Filter Pack w/ ESL Indicator, Medium	5/PK
Large Filters		
LL-CFL	Exhaust Filter, Large	Each
LL-CFLI	Exhaust Filter w/ ESL Indicator, Large	Each
ESL Chemical Change Breakthrough Indicator stickers		
LL-IN01	ESL Indicator, Chemical Change	Each
LL-IN01V	ESL Indicator Pack, Chemical Change	5/PK



LL-CFM
Exhaust Filter
Medium cartridge size



LL-CFL
Exhaust Filter
Large cartridge size



LL-CFMI
Exhaust Filter w/ Indicator
Medium cartridge size



LL-CFLI
Exhaust Filter w/ Indicator
Large cartridge size

Filter Adapters

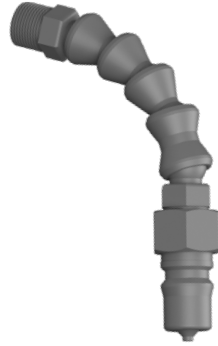
For attachment of exhaust cartridges to various emission sources

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.



LL-FJPAA
For Justrite PP, Adjustable



LL-FJSAA
For Justrite SS, Adjustable



LL-FJPPL
For Justrite PP, 90° Elbow



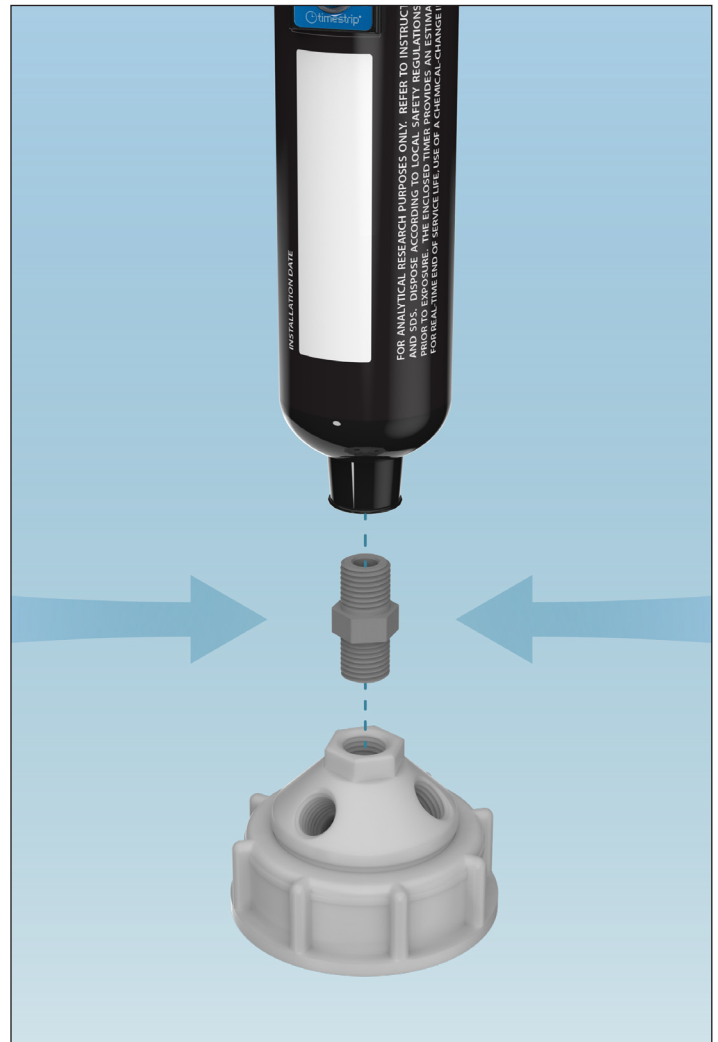
LL-FJSPL
For Justrite SS, 90° Elbow



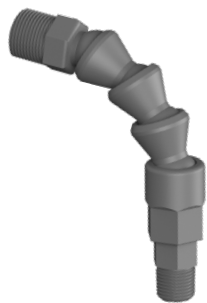
LL-FJPP
For Justrite PP, Straight



LL-FJSP
For Justrite SS, Straight



Part Number	Description	Material
Filter Adapters for Justrite polypropylene (PP) Quick Disconnect		
LL-FJPAA	PP quick disconnect, Adjustable	PP/Acetal
LL-FJPPL	PP quick disconnect, 90° Elbow	PP
LL-FJPP	PP quick disconnect, Straight	PP
Filter Adapters for Justrite Stainless Steel (SS) Quick Disconnect		
LL-FJSAA	SS quick disconnect, Adjustable	PP/Acetal
LL-FJSPL	SS quick disconnect, 90° Elbow	PP
LL-FJSP	SS quick disconnect, Straight	PP
Filter Adapters for Type C Ports – 1/8" NPT		
LL-FACA	Type C x Adjustable	PP/Acetal
LL-FPCL	Type C x 90° Elbow	PP
LL-FPCL45	Type C x 45° Elbow	PP
LL-FPC	Type C x Straight	PP
Filter Adapters for Type D Ports – 1/4" NPT		
LL-FADA	Type D x Adjustable	PP/Acetal
LL-FPDL	Type D x 90° Elbow	PP
LL-FPDL45	Type D x 45° Elbow	PP
LL-FPD	Type D x Straight	PP
Filter Adapters for Type E Ports – 1/2" NPT		
LL-FAEA	Type E x Adjustable	PP/Acetal
LL-FPEL	Type E x 90° Elbow	PP
LL-FPEL45	Type E x 45° Elbow	PP
LL-FPE	Type E x Straight	PP



LL-FACA
For Type C port, Adjustable



LL-FADA
For Type D port, Adjustable



LL-FAEA
For Type E port, Adjustable



LL-FPCL
For Type C port, 90° Elbow



LL-FPDL
For Type D port, 90° Elbow



LL-FPEL
For Type E port, 90° Elbow



LL-FPCL45
For Type C port, 45° Elbow



LL-FPDL45
For Type D port, 45° Elbow



LL-FPEL45
For Type E port, 45° Elbow



LL-FPC
For Type C port, Straight

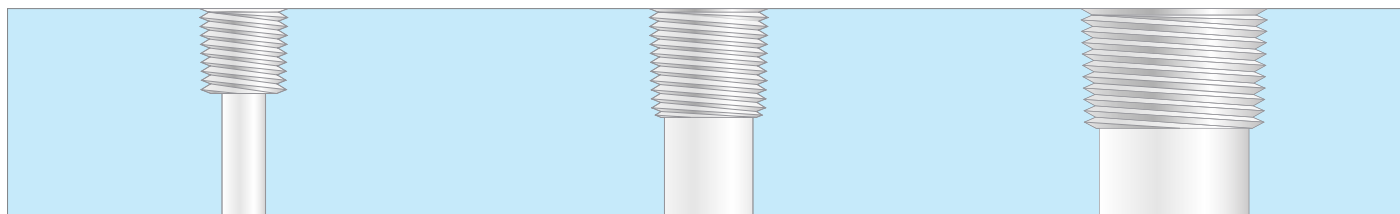


LL-FPD
For Type D port, Straight



LL-FPE
For Type E port, Straight

Port Thread Sizes at 1:1 scale



C
1/8" NPT

D
1/4" NPT

E
1/2" NPT

38-400 safety caps

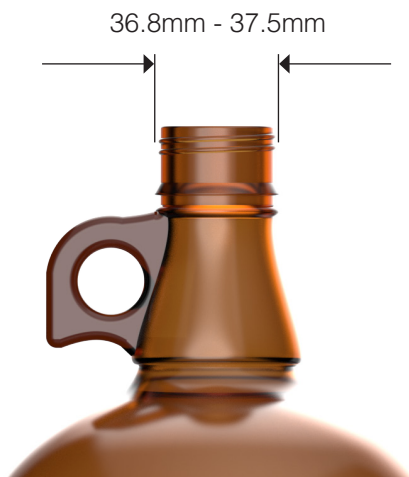
For Wako® and Cubitainer® 38mm bottles



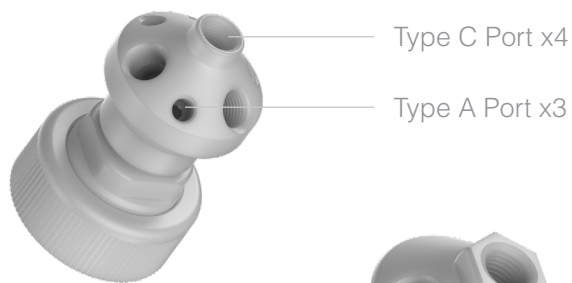
Bottle and thread type

The 38-400 thread type has become a cornerstone of modern packaging. Widely used across various industries, appearing in products such as spice jars, kombucha bottles, and cooking oil, in the laboratory it is also trusted by brands such as Wako and Cubitainer for its airtight seal and dependable chemical storage.

As part of Glass Packaging Institute (GPI) standards, the 38-400 was originally developed in the mid-20th century to standardize industrial packaging, and quickly became a trusted solution for balancing security, reusability, and convenience. Whether safeguarding laboratory chemicals or keeping pantry items fresh, this simple yet innovative design showcases the enduring impact of thoughtful engineering.

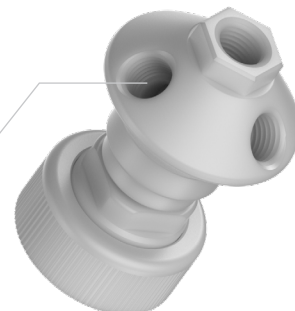


Waste Collection Manifolds

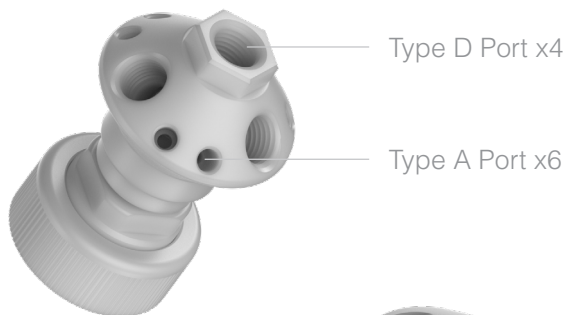


**LL-38WP7M /
LL-38WX7M**
7-Port Size M

Type D Port x4



LL-38WP4L
4-Port Size L



LL-38WP10L
10-Port Size L

Type D Port x5

Type E Port x1



LL-38WP6XL
6-Port Size XL

Part Number	Description	# of Ports
Manifolds for 38-400		
LL-38WP7M	7-Port, Size M, Polypropylene	3A, 4C
LL-38WX7M	7-Port, Size M, PTFE	3A, 4C
LL-38WP4L	4-Port, Size L, Polypropylene	4D
LL-38WP10L	10-Port, Size L, Polypropylene	6A, 4D
LL-38WP6XL	6-Port, Size XL, Polypropylene	5D, 1E
Waste Kits for 38-400		
LL-K38WP-A	Waste Kit Essentials	6A, 4D
LL-K38WP-B	Waste Kit Plus	6A, 4D

HPLC Waste Collection Kits



“Essentials” Kit Contents

The Essentials Kit for HPLC solvent 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 optional 90 degree elbow adapter) and an exhaust filter with lapse 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

LL-K38WP-A

Essentials Waste Kit
For 38-400 threaded bottles



“Plus” Kit Contents

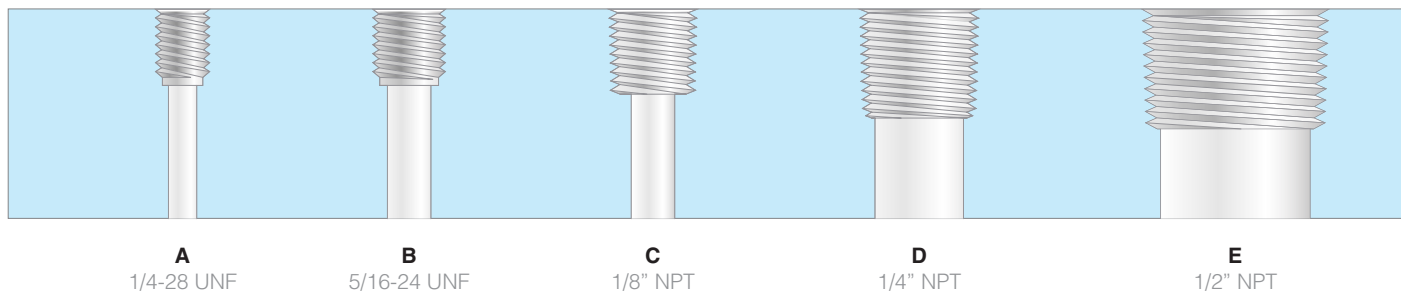
The Plus Kit for HPLC solvent waste collection includes all the essentials of the Basic Kit, *plus* a chemical-change indicator for real-time end of service life detection with organic solvents.

One 5' (1.5m) PTFE tubing extension for detector outlets or for short effluent tubes is also included.

LL-K38WP-B

Plus Waste Kit
For 38-400 threaded bottles

Port Thread Sizes at 1:1 scale



GL38 safety caps

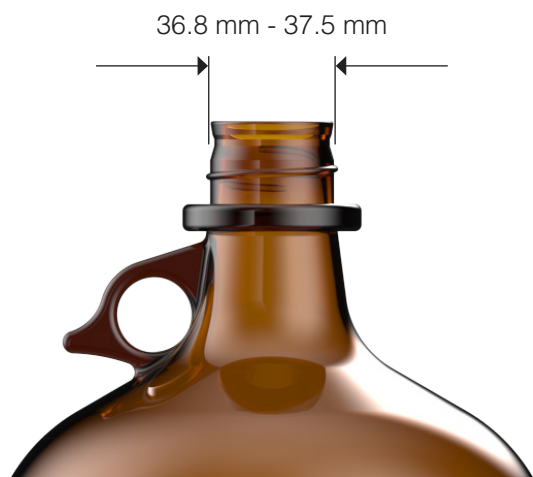
For 38-430 “GL” glass threaded bottles



Bottle and thread type

Part of the GL (glass laboratory) thread standard, the GL38 thread has become essential for packaging solvents in laboratory settings. It is commonly found on amber 4-liter glass bottles from chemical suppliers and is valued for its secure fit with airtight safety caps, ensuring the safe storage of volatile chemicals.

While the GL38 thread technically features a 38-430 thread finish, its slightly different height makes it incompatible with the 38-430 threads on plastic bottles. Specifically designed for glass containers, GL38 threads are a trusted choice for solvents, reagents, and other chemicals in both laboratory and industrial applications.



Waste Collection Manifolds



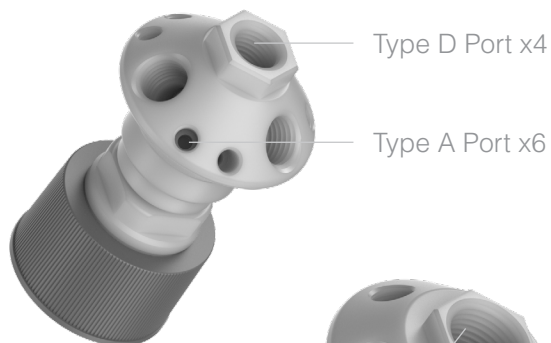
Type C Port x4

Type A Port x3

**LL-38P7M /
LL-38X7M**
7-Port Size M

Type D Port x4

LL-38P4L
4-Port Size L



Type D Port x4

Type A Port x6

LL-38P10L
10-Port Size L

Type D Port x5

Type E Port x1

LL-38P6XL
6-Port Size XL

Part Number	Description	# of Ports
-------------	-------------	------------

Manifolds for GL 38

LL-38P7M	7-Port, Size M, Polypropylene	3A, 4C
LL-38X7M	7-Port, Size M, PTFE	3A, 4C
LL-38P4L	4-Port, Size L, Polypropylene	4D
LL-38P10L	10-Port, Size L, Polypropylene	6A, 4D
LL-38P6XL	6-Port, Size XL, Polypropylene	5D, 1E

Waste Kits for GL 38

LL-K38P-A	Waste Kit Essentials	6A, 4D
LL-K38P-B	Waste Kit Plus	6A, 4D

HPLC Waste Collection Kits

**“Essentials” Kit Contents**

The Essentials Kit for HPLC solvent 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 optional 90 degree elbow adapter) and an exhaust filter with lapse 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

LL-K38P-A

Essentials Waste Kit
For GL38 threaded glass bottles

**“Plus” Kit Contents**

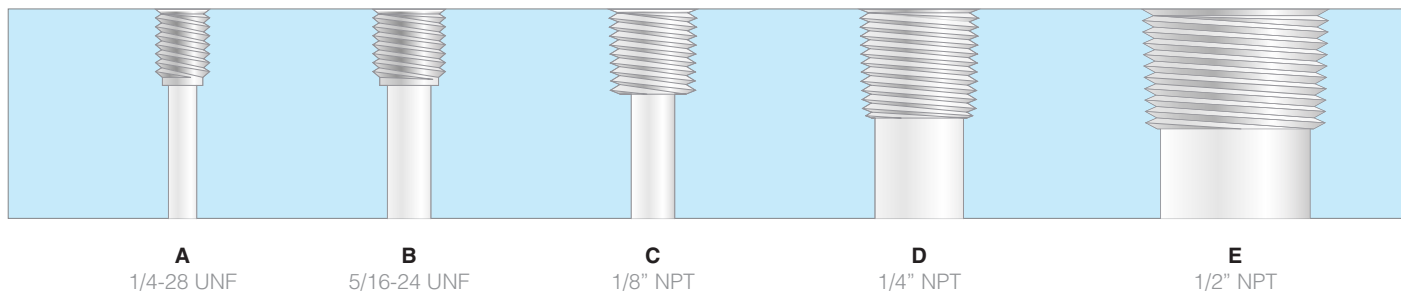
The Plus Kit for HPLC solvent waste collection includes all the essentials of the Basic Kit, *plus* a chemical-change indicator for real-time end of service life detection with organic solvents.

One 5' (1.5m) PTFE tubing extension for detector outlets or for short effluent tubes is also included.

LL-K38P-B

Plus Waste Kit
For GL38 threaded glass bottles

Port Thread Sizes at 1:1 scale



38-430 safety caps

For Nalgene® and similar plastic bottles



Bottle and thread type

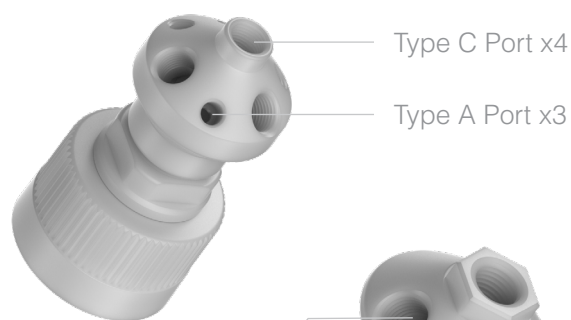
The 38-430 thread finish is a widely used standard for plastic bottles in laboratories and industrial applications. Commonly found on containers like Nalgene bottles, this thread design is recognized for its durability and compatibility with a variety of caps and closures.

Unlike glass threads, the 38-430 thread on plastic bottles often incorporates additional height and structure, making it incompatible with most GL38 caps. This thread finish is especially valued in laboratory settings, where plastic bottles are frequently used for storing reagents, buffers, and other solutions. Lightweight, shatterproof, and resistant to a range of chemicals, 38-430 threaded plastic bottles are a practical choice for environments requiring portability and durability.

36.8 mm - 37.5 mm

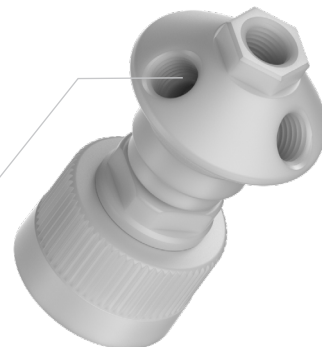


Waste Collection Manifolds

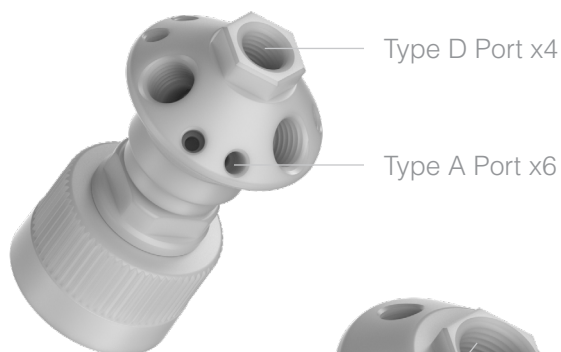


**LL-38NP7M /
LL-38NX7M**
7-Port Size M

Type D Port x4



LL-38NP4L
4-Port Size L



LL-38NP10L
10-Port Size L

Type D Port x5

Type E Port x1



LL-38NP6XL
6-Port Size XL

Part Number	Description	# of Ports
Manifolds for 38-430 Nalgene		
LL-38NP7M	7-Port, Size M, Polypropylene	3A, 4C
LL-38NX7M	7-Port, Size M, PTFE	3A, 4C
LL-38NP4L	4-Port, Size L, Polypropylene	4D
LL-38NP10L	10-Port, Size L, Polypropylene	6A, 4D
LL-38NP6XL	6-Port, Size XL, Polypropylene	5D, 1E
Waste Kits for 38-430 Nalgene		
LL-K38NP-A	Waste Kit Essentials	6A, 4D
LL-K38NP-B	Waste Kit Plus	6A, 4D

HPLC Waste Collection Kits

**LL-K38NP-A**

Essentials Waste Kit

For 38-430 threaded plastic bottles

“Essentials” Kit Contents

The Essentials Kit for HPLC solvent 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 optional 90 degree elbow adapter) and an exhaust filter with lapse 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 for HPLC solvent waste collection includes all the essentials of the Basic Kit, *plus* a chemical-change indicator for real-time end of service life detection with organic solvents.

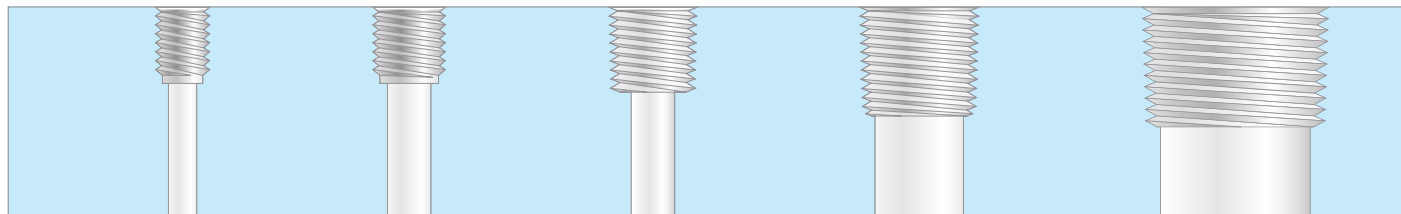
One 5' (1.5m) PTFE tubing extension for detector outlets or for short effluent tubes is also included.

LL-K38NP-B

Plus Waste Kit

For 38-430 threaded plastic bottles

Port Thread Sizes at 1:1 scale



A
1/4-28 UNF

B
5/16-24 UNF

C
1/8" NPT

D
1/4" NPT

E
1/2" NPT

GL45 safety caps

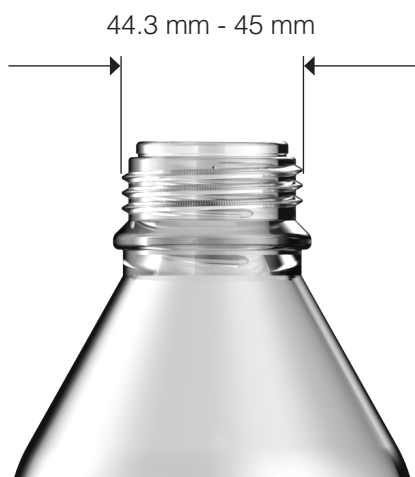
For 45mm “GL” glass threaded bottles



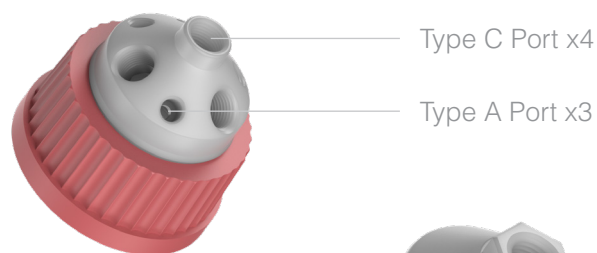
Bottle and thread type

Following the GL (glass laboratory) standard, the GL45 thread finish is a staple in laboratory glassware, recognized for its versatility and reliability across a wide range of applications. Found on glass bottles of various sizes—from small reagent containers to large solvent bottles—the GL45 thread is designed to ensure a secure, airtight seal, making it ideal for storing sensitive or volatile chemicals.

What sets the GL45 thread apart is its standardized design, which promotes compatibility across different manufacturers. This feature has made it a global favorite in laboratories, streamlining the interchangeability of caps, adapters, and accessories.

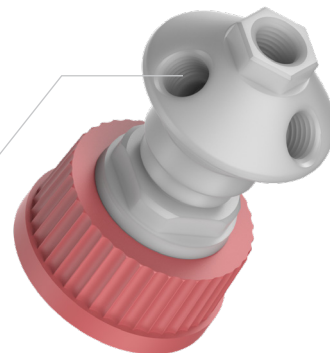


Waste Collection Manifolds

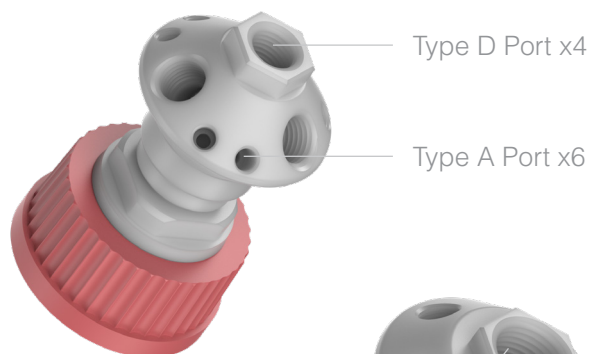


**LL-45P7M /
LL-45X7M**
7-Port Size M

Type D Port x4

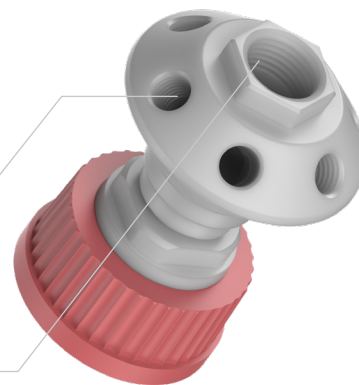


LL-45P4L
4-Port Size L



LL-45P10L
10-Port Size L

Type D Port x5



Type E Port x1

LL-45P6XL
6-Port Size XL

Part Number	Description	# of Ports
Manifolds for GL 45		
LL-45P7M	7-Port, Size M, Polypropylene	3A, 4C
LL-45X7M	7-Port, Size M, PTFE	3A, 4C
LL-45P4L	4-Port, Size L, Polypropylene	4D
LL-45P10L	10-Port, Size L, Polypropylene	6A, 4D
LL-45P6XL	6-Port, Size XL, Polypropylene	5D, 1E
Waste Kits for GL 45		
LL-K45P-A	Waste Kit Essentials	6A, 4D
LL-K45P-B	Waste Kit Plus	6A, 4D

HPLC Waste Collection Kits

**LL-K45P-A**

Essentials Waste Kit
For GL45 threaded glass bottles

“Essentials” Kit Contents

The Essentials Kit for HPLC solvent 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 optional 90 degree elbow adapter) and an exhaust filter with lapse 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

**LL-K45P-B**

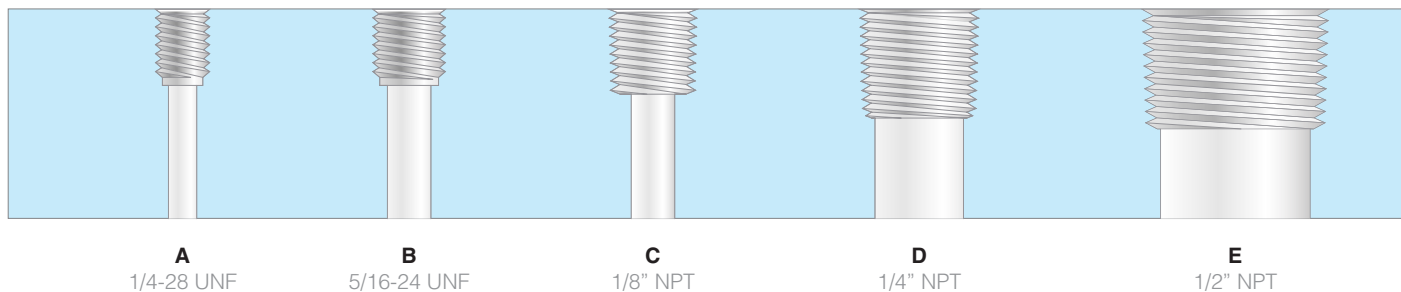
Plus Waste Kit
For GL45 threaded glass bottles

“Plus” Kit Contents

The Plus Kit for HPLC solvent waste collection includes all the essentials of the Basic Kit, *plus* a chemical-change indicator for real-time end of service life detection with organic solvents.

One 5' (1.5m) PTFE tubing extension for detector outlets or for short effluent tubes is also included.

Port Thread Sizes at 1:1 scale



DIN 45 safety caps

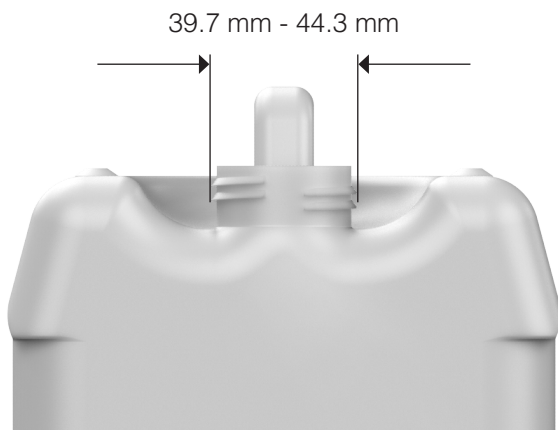
For 45mm DIN standard jerricans



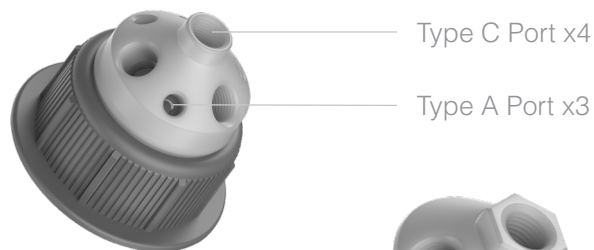
Container type and thread size

The DIN 45 thread is a standardized 45 mm screw thread specified by the Deutsches Institut für Normung e.V. (DIN), the German Institute for Standardization. This widely used thread type is commonly found on containers such as jerricans and carboys, particularly in European and Asian markets. Its design ensures compatibility across a range of caps and closures, making it ideal for applications requiring secure seals, such as the storage and transport of liquids like chemicals, oils, and food-grade products.

The DIN 45 thread is also notable for its versatility, as it can accommodate tamper-evident caps and dispensing systems for added safety and convenience. Additionally, its precise engineering minimizes the risk of leaks, even under high-pressure or challenging conditions, making it a trusted choice in both industrial and laboratory settings.

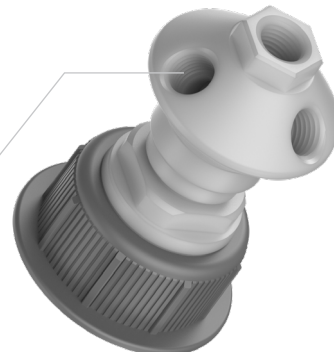


Waste Collection Manifolds

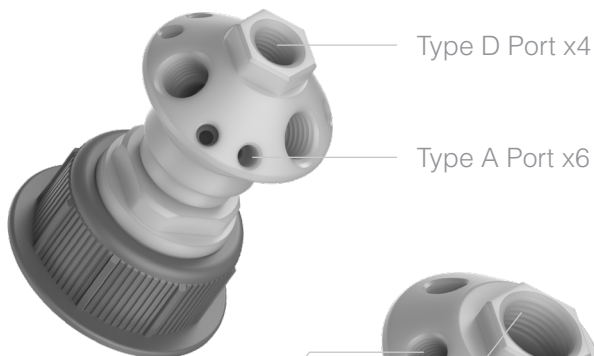


**LL-45DP7M /
LL-45DX7M**
7-Port Size M

Type D Port x4



LL-45DP4L
4-Port Size L



LL-45DP10L
10-Port Size L

Type D Port x5



Type E Port x1

LL-45DP6XL
6-Port Size XL

Part Number	Description	# of Ports
-------------	-------------	------------

Manifolds for DIN 45

LL-45DP7M	7-Port, Size M, Polypropylene	3A, 4C
LL-45DX7M	7-Port, Size M, PTFE	3A, 4C
LL-45DP4L	4-Port, Size L, Polypropylene	4D
LL-45DP10L	10-Port, Size L, Polypropylene	6A, 4D
LL-45DP6XL	6-Port, Size XL, Polypropylene	5D, 1E

Waste Kits for DIN 45

LL-K45DP-A	Waste Kit Essentials	6A, 4D
LL-K45DP-B	Waste Kit Plus	6A, 4D

HPLC Waste Collection Kits

**“Essentials” Kit Contents**

The Essentials Kit for HPLC solvent 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 optional 90 degree elbow adapter) and an exhaust filter with lapse 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

LL-K45DP-A

Essentials Waste Kit
For DIN 45 threaded jerricans

**“Plus” Kit Contents**

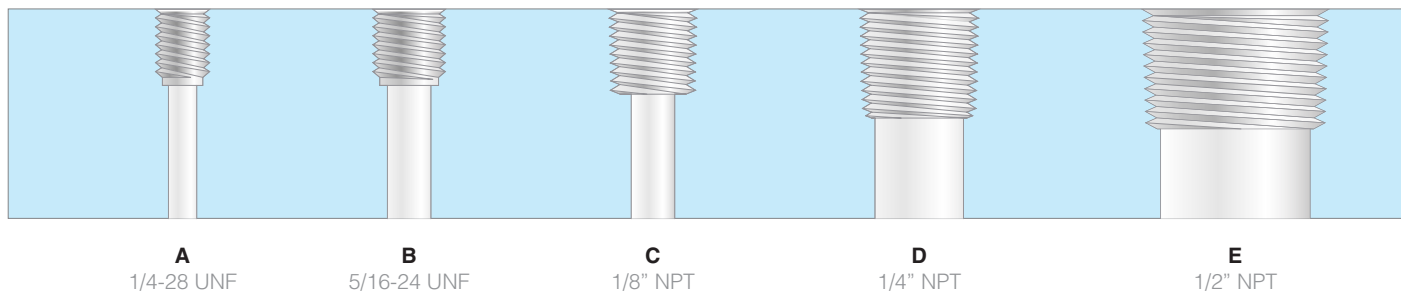
The Plus Kit for HPLC solvent waste collection includes all the essentials of the Basic Kit, *plus* a chemical-change indicator for real-time end of service life detection with organic solvents.

One 5' (1.5m) PTFE tubing extension for detector outlets or for short effluent tubes is also included.

LL-K45DP-B

Plus Waste Kit
For DIN 45 threaded jerricans

Port Thread Sizes at 1:1 scale



48mm safety caps

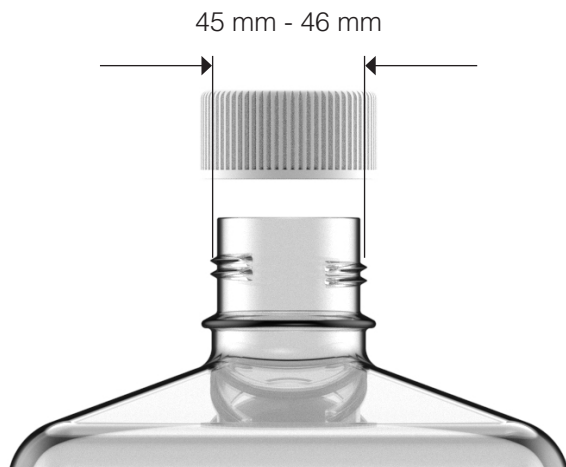
For Nalgene® Biotainer™ bottles



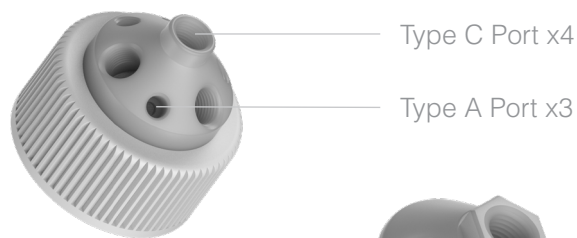
Bottle and thread type

The 48mm Biotainer thread finish is tailored for laboratory-grade applications requiring secure, contamination-resistant storage. Designed for compatibility with Nalgene Biotainer bottles, this thread style supports a tight seal with matching closures, ideal for protecting sterile solutions, reagents, and sensitive materials.

Manufactured with precision from durable, chemically-resistant plastic, Biotainer bottles are a trusted choice in environments prioritizing cleanliness and safety. Their lightweight, break-resistant design ensures reliability during transport and handling, while their 48mm threaded finish provides ease of use in both research and industrial processes. Please note this thread is incompatible with Corning "roller bottles" of the same diameter.

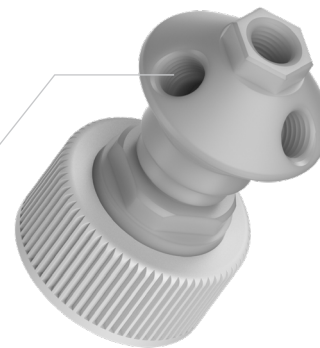


Waste Collection Manifolds

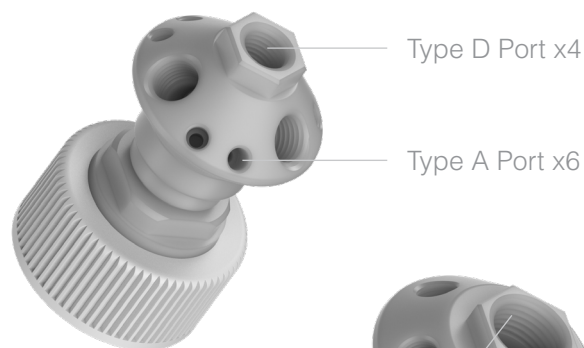


LL-48P7M
7-Port Size M

Type D Port x4

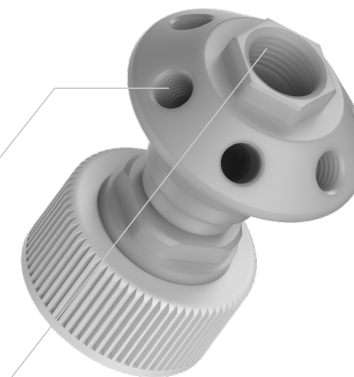


LL-48P4L
4-Port Size L



LL-48P10L
10-Port Size L

Type D Port x5



Type E Port x1

LL-48P6XL
6-Port Size XL

Part Number	Description	# of Ports
-------------	-------------	------------

Manifolds for 48mm Biotainer

LL-48P7M	7-Port, Size M, Polypropylene	3A, 4C
LL-48X7M	7-Port, Size M, PTFE	3A, 4C
LL-48P4L	4-Port, Size L, Polypropylene	4D
LL-48P10L	10-Port, Size L, Polypropylene	6A, 4D
LL-48P6XL	6-Port, Size XL, Polypropylene	5D, 1E

Waste Kits for 48mm Biotainer

LL-K48P-A	Waste Kit Essentials	6A, 4D
LL-K48P-B	Waste Kit Plus	6A, 4D

HPLC Waste Collection Kits

**LL-K48P-A**

Essentials Waste Kit
For 48mm Biotainer bottles

“Essentials” Kit Contents

The Essentials Kit for HPLC solvent 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 optional 90 degree elbow adapter) and an exhaust filter with lapse 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

**LL-K48P-B**

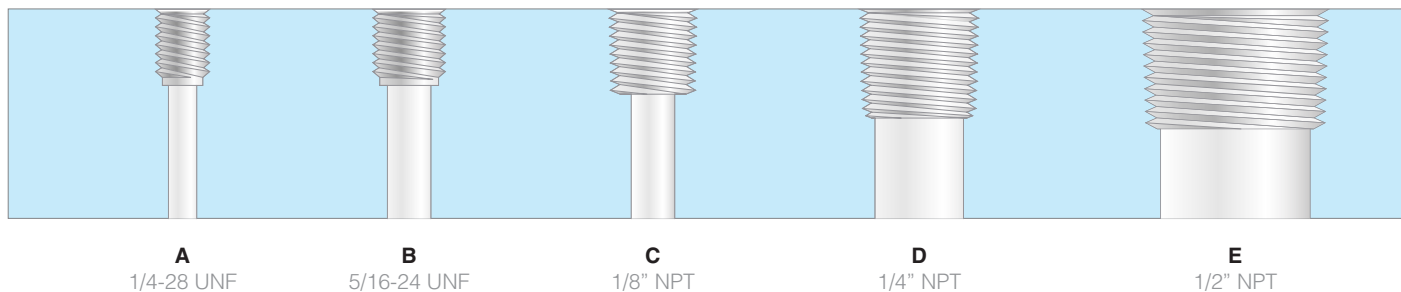
Plus Waste Kit
For 48mm Biotainer bottles

“Plus” Kit Contents

The Plus Kit for HPLC solvent waste collection includes all the essentials of the Basic Kit, *plus* a chemical-change indicator for real-time end of service life detection with organic solvents.

One 5' (1.5m) PTFE tubing extension for detector outlets or for short effluent tubes is also included.

Port Thread Sizes at 1:1 scale



48mm safety caps

For 48mm Corning® Roller bottles



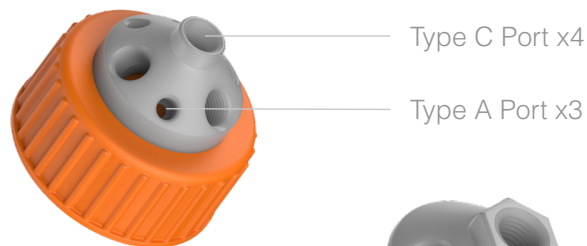
Bottle and thread type

The 48mm thread finish on Corning roller bottles is engineered to provide a secure and reliable seal for applications requiring consistent performance during cell culture processes. While similar in diameter to the 48mm Biotainer thread, the Corning roller bottle thread is incompatible with Biotainer closures. Roller bottles are widely used in adherent cell culture, with their cylindrical design enabling uniform growth across the inner surface during rotational incubation.

The 48mm thread ensures easy attachment of caps or tubing systems, supporting sterile handling and minimizing contamination risks. Manufactured with robust materials, these bottles are built to withstand repeated use and the demands of high-throughput laboratory environments, making them indispensable for scaled production and research workflows.



Waste Collection Manifolds

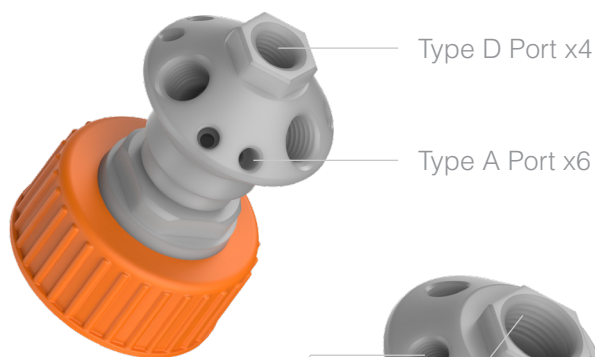


LL-48RP7M
7-Port Size M

Type D Port x4



LL-48RP4L
4-Port Size L



LL-48RP10L
10-Port Size L

Type D Port x5



Type E Port x1

LL-48RP6XL
6-Port Size XL

Part Number	Description	# of Ports
-------------	-------------	------------

Manifolds for Corning Roller Bottle

LL-48RP7M	7-Port, Size M, Polypropylene	3A, 4C
LL-48RX7M	7-Port, Size M, PTFE	3A, 4C
LL-48RP4L	4-Port, Size L, Polypropylene	4D
LL-48RP10L	10-Port, Size L, Polypropylene	6A, 4D
LL-48RP6XL	6-Port, Size XL, Polypropylene	5D, 1E

Waste Kits for Corning Roller Bottle

LL-K48RP-A	Waste Kit Essentials	6A, 4D
LL-K48RP-B	Waste Kit Plus	6A, 4D

HPLC Waste Collection Kits

**“Essentials” Kit Contents**

The Essentials Kit for HPLC solvent 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 optional 90 degree elbow adapter) and an exhaust filter with lapse 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

LL-K48RP-A

Essentials Waste Kit
For 48mm Corning roller bottles

**“Plus” Kit Contents**

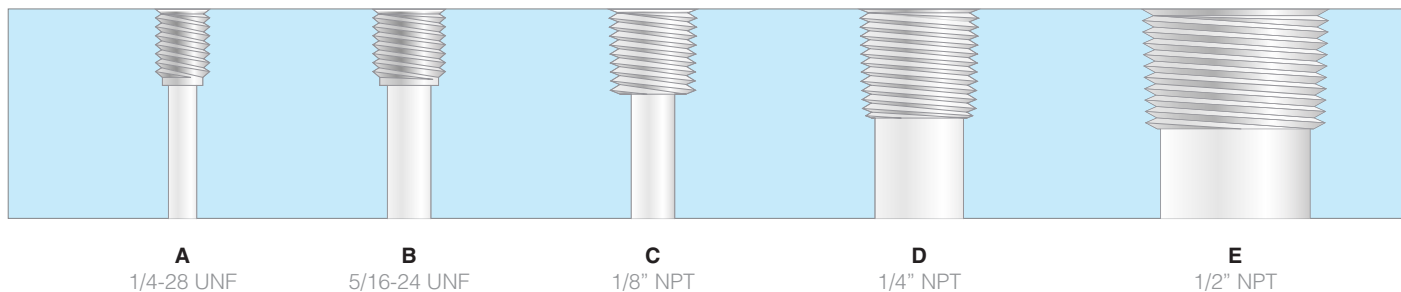
The Plus Kit for HPLC solvent waste collection includes all the essentials of the Basic Kit, *plus* a chemical-change indicator for real-time end of service life detection with organic solvents.

One 5' (1.5m) PTFE tubing extension for detector outlets or for short effluent tubes is also included.

LL-K48RP-B

Plus Waste Kit
For 48mm Corning roller bottles

Port Thread Sizes at 1:1 scale



DIN 50 safety caps

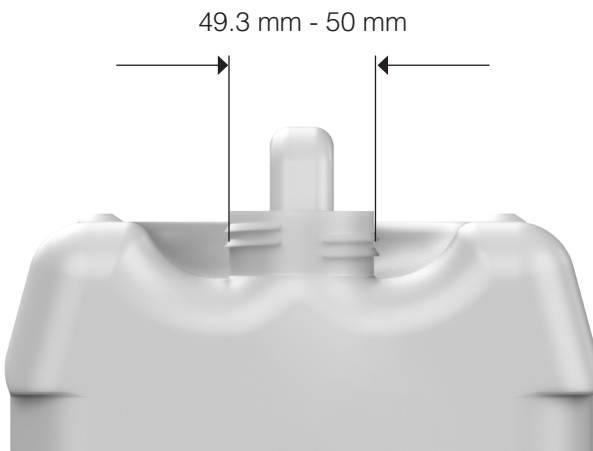
For 50mm DIN standard jerricans



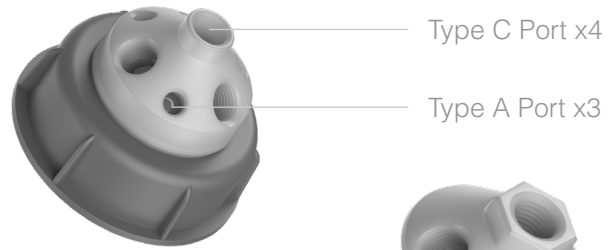
Container type and thread size

The DIN 50 thread is a 50mm standardized screw thread design developed by the German Institute for Standardization (Deutsches Institut für Normung -- i.e., "DIN") and is commonly used on jerricans and large containers, particularly in Europe and Asia. This thread size is designed to provide a secure, leak-resistant seal, making it ideal for transporting liquids such as chemicals, oils, and food-grade products.

DIN 50 caps are typically equipped with features like tamper-evident seals or venting options to suit a variety of industrial and commercial needs. Its larger diameter allows for easier pouring and filling, especially for viscous liquids. The standardization ensures compatibility with a wide range of caps and dispensing systems, offering convenience and reliability in demanding environments.

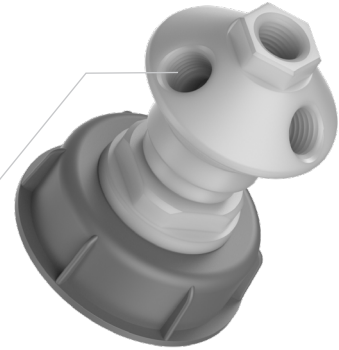


Waste Collection Manifolds

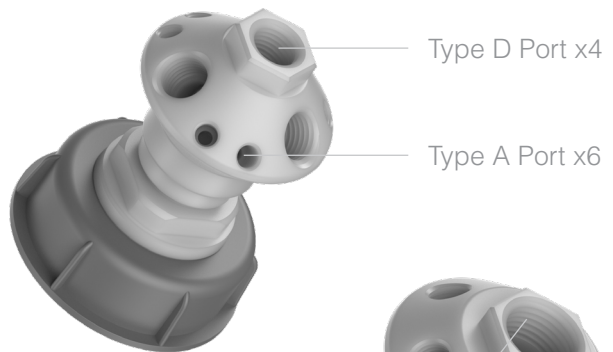


**LL-50DP7M /
LL-50DX7M**
7-Port Size M

Type D Port x4

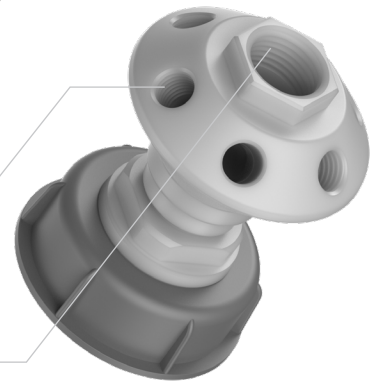


LL-50DP4L
4-Port Size L



LL-50DP10L
10-Port Size L

Type D Port x5



LL-50DP6XL
6-Port Size XL

Type E Port x1

Part Number	Description	# of Ports
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Manifolds for DIN 50

LL-50DP7M	7-Port, Size M, Polypropylene	3A, 4C
LL-50DX7M	7-Port, Size M, PTFE	3A, 4C
LL-50DP4L	4-Port, Size L, Polypropylene	4D
LL-50DP10L	10-Port, Size L, Polypropylene	6A, 4D
LL-50DP6XL	6-Port, Size XL, Polypropylene	5D, 1E

Waste Kits for DIN 50

LL-K50DP-A	Waste Kit Essentials	6A, 4D
LL-K50DP-B	Waste Kit Plus	6A, 4D

HPLC Waste Collection Kits

**LL-K50DP-A**

Essentials Waste Kit
For DIN 50 threaded jerricans

“Essentials” Kit Contents

The Essentials Kit for HPLC solvent 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 optional 90 degree elbow adapter) and an exhaust filter with lapse 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

**LL-K50DP-B**

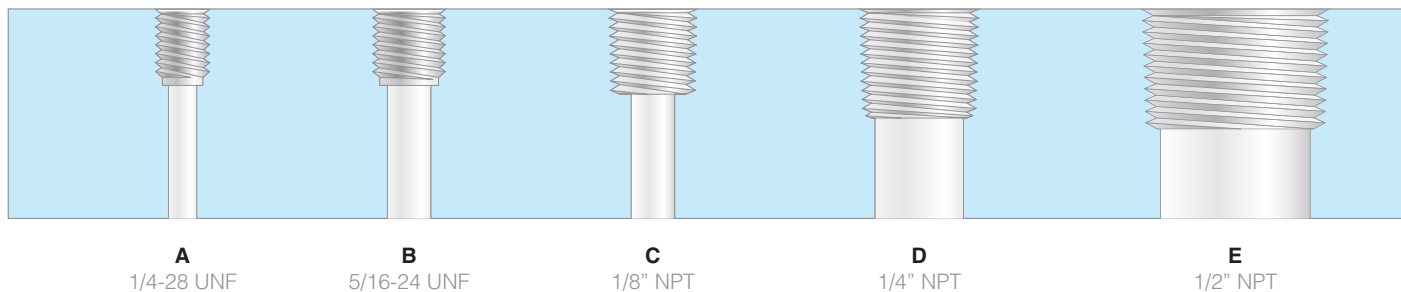
Plus Waste Kit
For DIN 50 threaded jerricans

“Plus” Kit Contents

The Plus Kit for HPLC solvent waste collection includes all the essentials of the Basic Kit, *plus* a chemical-change indicator for real-time end of service life detection with organic solvents.

One 5' (1.5m) PTFE tubing extension for detector outlets or for short effluent tubes is also included.

Port Thread Sizes at 1:1 scale



51mm safety caps

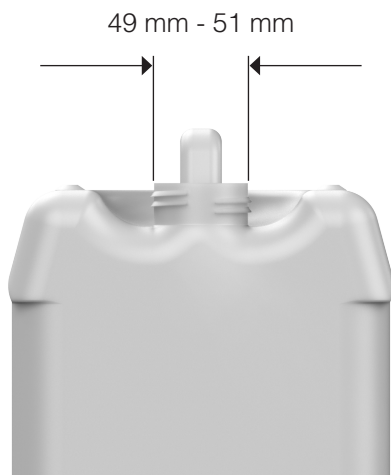
For 51mm “tight-head” jerricans



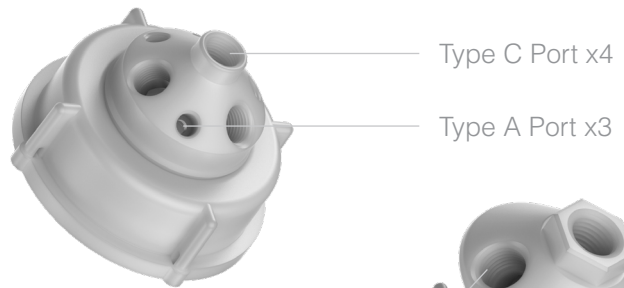
Container type and thread size

The 51mm thread is a common screw thread found on jerricans, “tight-head” containers, and DOT-approved containers in North America. Designed for secure sealing, this thread type is ideal for transporting and storing hazardous and non-hazardous liquids, such as chemicals, lubricants, and cleaning agents.

Frequently paired with caps featuring tamper-evident or venting options, the 51mm thread ensures compliance with safety regulations while minimizing leakage or contamination risks. Its size strikes a balance between accessibility and control, allowing for efficient pouring and filling. The widespread use of the 51 mm thread in industrial and commercial applications makes it a trusted standard for dependable performance.



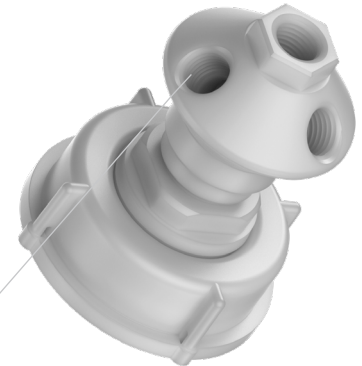
Waste Collection Manifolds



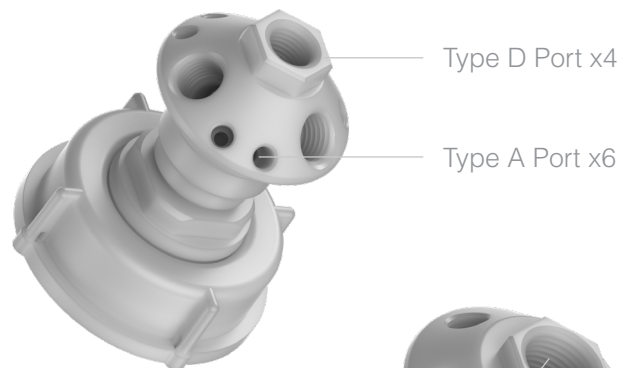
**LL-51P7M /
LL-51X7M**
7-Port Size M

Type C Port x4

Type A Port x3



LL-51P4L
4-Port Size L



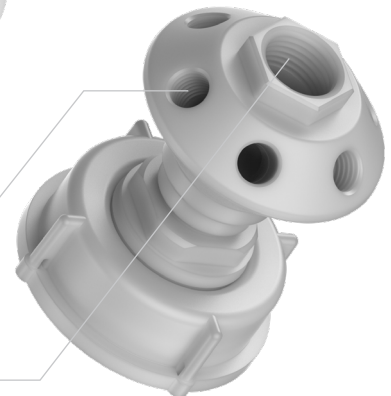
Type D Port x4

Type A Port x6

LL-51P10L
10-Port Size L

Type D Port x5

Type E Port x1



LL-51P6XL
6-Port Size XL

Part Number	Description	# of Ports
Manifolds for 51mm		
LL-51P7M	7-Port, Size M, Polypropylene	3A, 4C
LL-51X7M	7-Port, Size M, PTFE	3A, 4C
LL-51P4L	4-Port, Size L, Polypropylene	4D
LL-51P10L	10-Port, Size L, Polypropylene	6A, 4D
LL-51P6XL	6-Port, Size XL, Polypropylene	5D, 1E
Waste Kits for 51mm		
LL-K51P-A	Waste Kit Essentials	6A, 4D
LL-K51P-B	Waste Kit Plus	6A, 4D

HPLC Waste Collection Kits

**LL-K51P-A**

Essentials Waste Kit
For 51mm threaded containers

“Essentials” Kit Contents

The Essentials Kit for HPLC solvent 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 optional 90 degree elbow adapter) and an exhaust filter with lapse 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

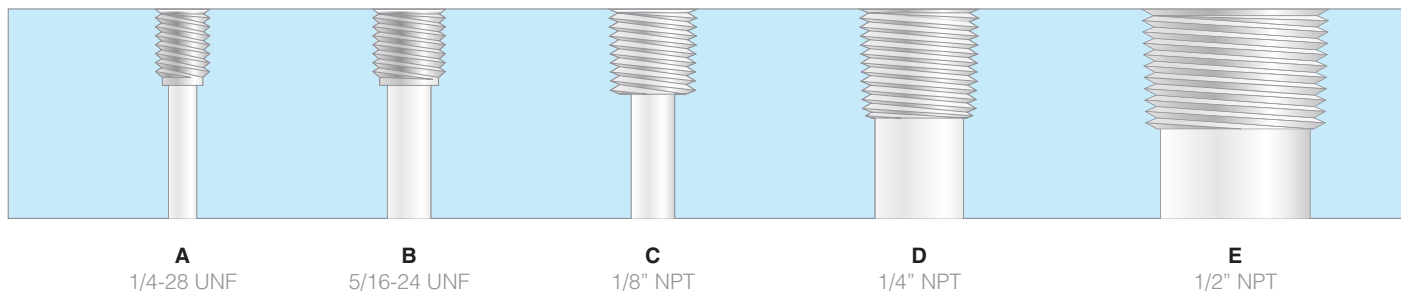
**LL-K51P-B**

Plus Waste Kit
For 51mm threaded containers

“Plus” Kit Contents

The Plus Kit for HPLC solvent waste collection includes all the essentials of the Basic Kit, *plus* a chemical-change indicator for real-time end of service life detection with organic solvents.

One 5' (1.5m) PTFE tubing extension for detector outlets or for short effluent tubes is also included.

Port Thread Sizes at 1:1 scale

53B safety caps

For 53mm Nalgene® “buttress” threads



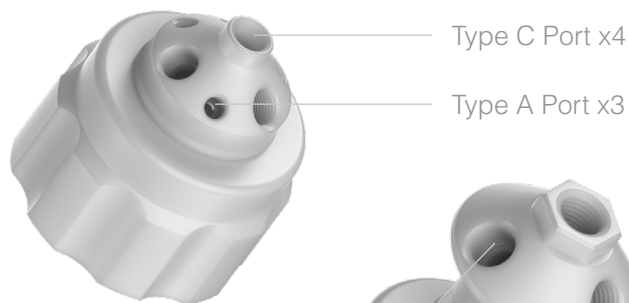
Container type and thread size

The 53B buttress thread is a robust, specialized screw thread commonly found on Nalgene laboratory containers. Designed for heavy-duty use, this thread type provides an exceptionally secure seal, making it ideal for applications that require leak-proof performance, even under demanding conditions. The buttress design features sloped thread walls that distribute stress more evenly, enhancing durability and resistance to stripping during repeated opening and closing.

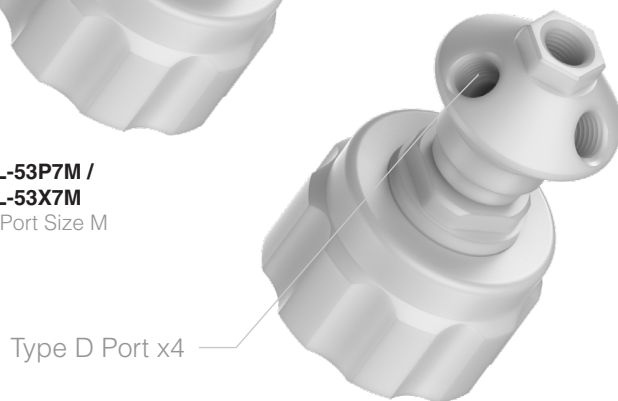
Often used with containers storing reagents, chemicals, or samples, the 53B thread ensures a secure and leak-proof closure. Its precise engineering and compatibility with chemically resistant materials support Nalgene's reputation for high-quality labware trusted in research and industrial settings.



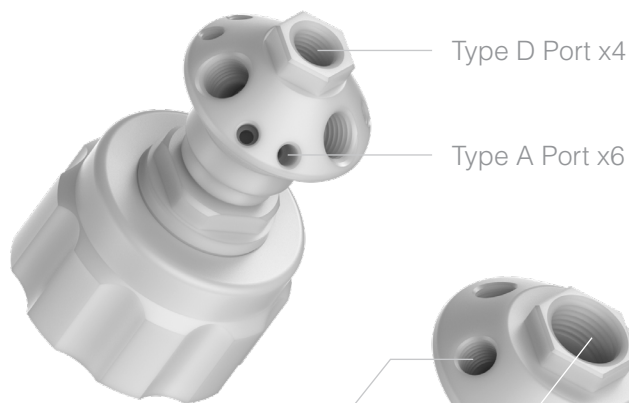
Waste Collection Manifolds



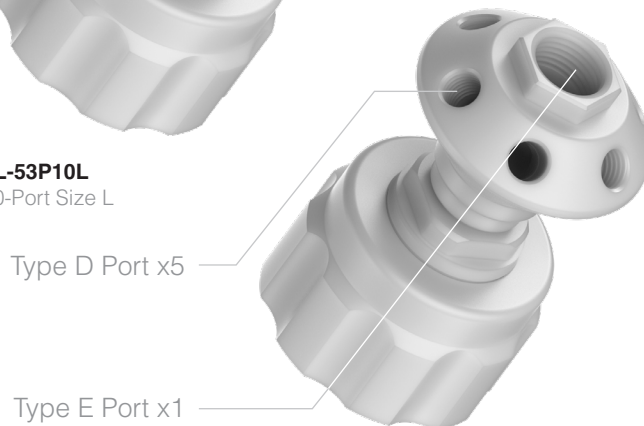
**LL-53P7M /
LL-53X7M**
7-Port Size M



LL-53P4L
4-Port Size L



LL-53P10L
10-Port Size L



LL-53P6XL
6-Port Size XL

Part Number	Description	# of Ports
Manifolds for 53B Nalgene		
LL-53P7M	7-Port, Size M, Polypropylene	3A, 4C
LL-53X7M	7-Port, Size M, PTFE	3A, 4C
LL-53P4L	4-Port, Size L, Polypropylene	4D
LL-53P10L	10-Port, Size L, Polypropylene	6A, 4D
LL-53P6XL	6-Port, Size XL, Polypropylene	5D, 1E
Waste Kits for 53B Nalgene		
LL-K53P-A	Waste Kit Essentials	6A, 4D
LL-K53P-B	Waste Kit Plus	6A, 4D

HPLC Waste Collection Kits

**“Essentials” Kit Contents**

The Essentials Kit for HPLC solvent 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 optional 90 degree elbow adapter) and an exhaust filter with lapse 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

LL-K53P-A

Essentials Waste Kit
For 53B threaded bottles and carboys

**“Plus” Kit Contents**

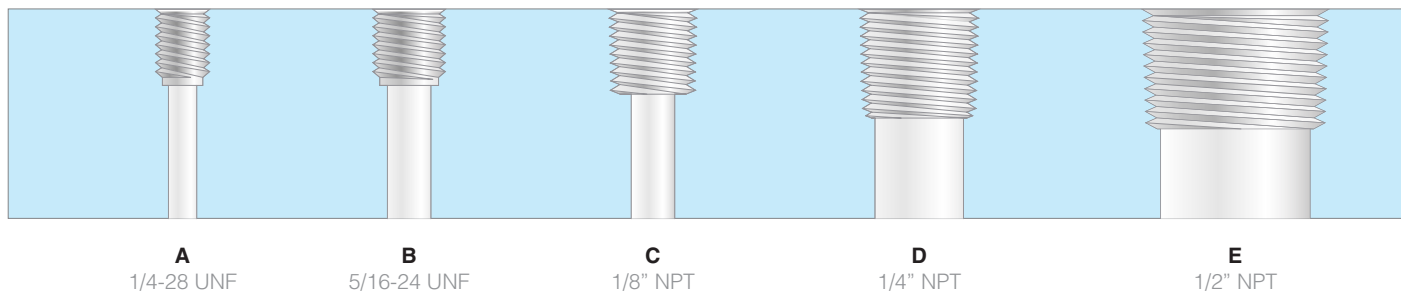
The Plus Kit for HPLC solvent waste collection includes all the essentials of the Basic Kit, *plus* a chemical-change indicator for real-time end of service life detection with organic solvents.

One 5' (1.5m) PTFE tubing extension for detector outlets or for short effluent tubes is also included.

LL-K53P-B

Plus Waste Kit
For 53B threaded bottles and carboys

Port Thread Sizes at 1:1 scale



DIN 60 safety caps

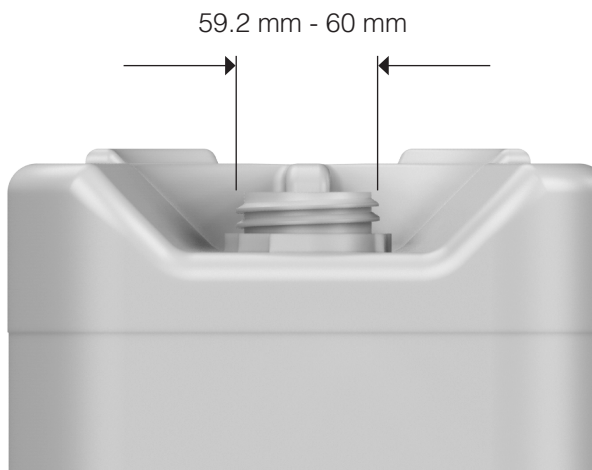
For 60mm DIN standard jerricans



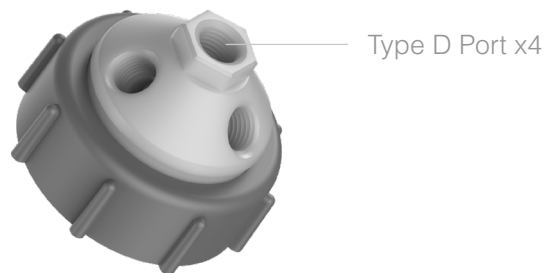
Container type and thread size

The DIN 60 container thread finish, a 60mm standardized screw thread developed by the German Institute for Standardization (Deutsches Institut für Normung -- i.e., "DIN"), is a versatile option frequently found on larger jerricans and industrial containers. With its wider diameter, the DIN 60 thread is especially suited for handling high-volume liquids, such as agricultural chemicals, fuels, or bulk food products.

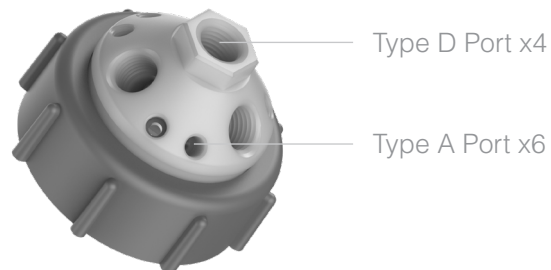
This thread type accommodates a variety of closures, including caps with integrated spouts or tamper-evident seals, offering convenience and security during transport and storage. Its robust design ensures a leak-proof fit, even in demanding environments, making it a preferred choice for industries requiring reliable and efficient container solutions.



Waste Collection Manifolds



LL-60P4L
4-Port Size L



LL-60P10L
10-Port Size L

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

HPLC Waste Collection Kits

**LL-K60P-A**

Essentials Waste Kit
For DIN 60 threaded jerricans

“Essentials” Kit Contents

The Essentials Kit for HPLC solvent 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 optional 90 degree elbow adapter) and an exhaust filter with lapse 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

**LL-K60P-B**

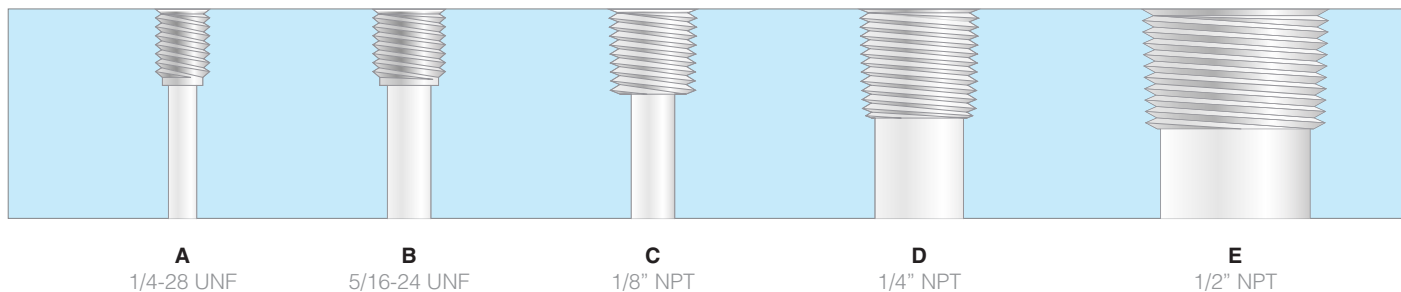
Plus Waste Kit
For DIN 60 threaded jerricans

“Plus” Kit Contents

The Plus Kit for HPLC solvent waste collection includes all the essentials of the Basic Kit, *plus* a chemical-change indicator for real-time end of service life detection with organic solvents.

One 5' (1.5m) PTFE tubing extension for detector outlets or for short effluent tubes is also included.

Port Thread Sizes at 1:1 scale



61mm safety caps

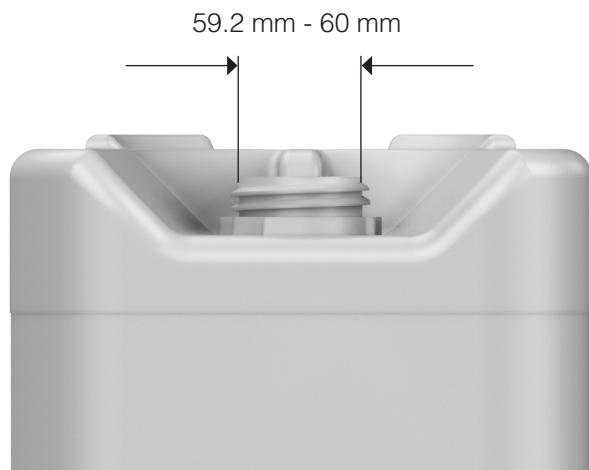
For 61mm “tight-head” jerricans



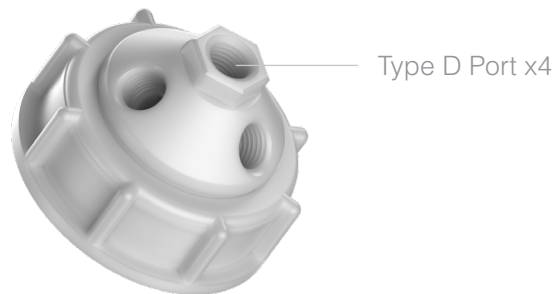
Container type and thread size

The 61mm thread is a robust screw thread commonly found on tight-head containers in North America, particularly those used for hazardous materials. Containers with this thread type are often UN- or DOT-rated, meeting strict regulatory standards for the safe storage and transportation of chemicals, solvents, and other dangerous goods.

The wider thread design ensures a secure, leak-proof seal, while accommodating advanced cap options such as tamper-evident closures or vented plugs for pressure management. This makes the 61mm thread a trusted choice for industries requiring compliance, durability, and reliable performance under demanding conditions.

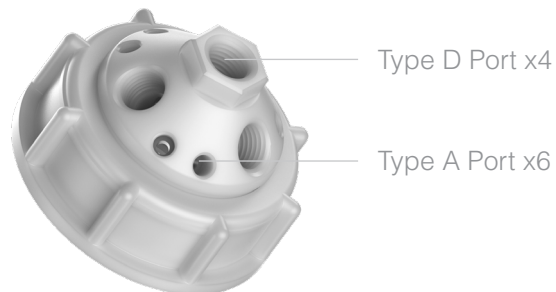


Waste Collection Manifolds



Type D Port x4

LL-61P4L
4-Port Size L



Type D Port x4

Type A Port x6

LL-61P10L
10-Port Size L

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

HPLC Waste Collection Kits

**“Essentials” Kit Contents**

The Essentials Kit for HPLC solvent 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 optional 90 degree elbow adapter) and an exhaust filter with lapse 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

LL-K61P-A

Essentials Waste Kit
For 61mm threaded containers

**“Plus” Kit Contents**

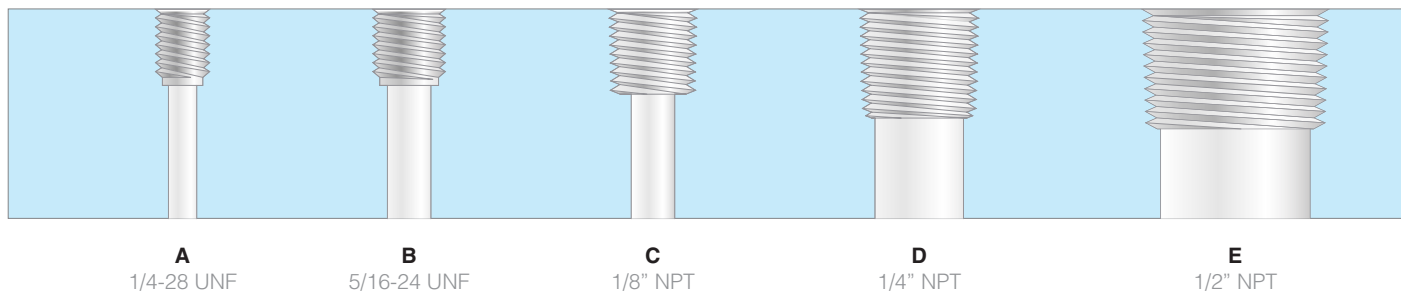
The Plus Kit for HPLC solvent waste collection includes all the essentials of the Basic Kit, *plus* a chemical-change indicator for real-time end of service life detection with organic solvents.

One 5' (1.5m) PTFE tubing extension for detector outlets or for short effluent tubes is also included.

LL-K61P-B

Plus Waste Kit
For 61mm threaded containers

Port Thread Sizes at 1:1 scale



63mm safety caps

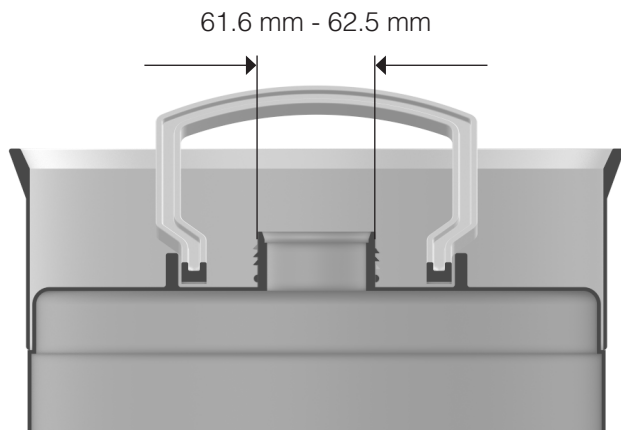
For Rieke® and Nowpak® BIC containers



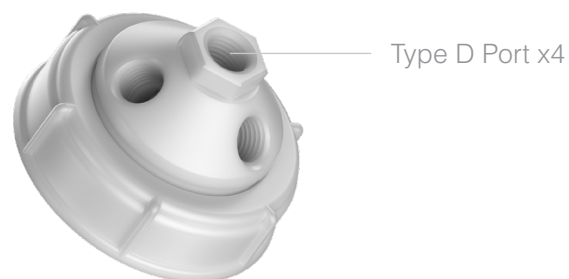
Container type and thread size

The 63mm thread is a widely utilized screw thread in North American tight-head containers, particularly in laboratory and industrial settings. Many notable examples employ the Rieke 63mm closure, designed with tamper-evident features and anti-backoff mechanisms to ensure product integrity and prevent leaks. Additionally, Entegris' NOWPak liner-based systems employ this thread size in their Bag-in-a-Can (BIC) containers, combining a flexible liner within a rigid overpack to maintain chemical purity during storage and dispensing. The 63mm thread's compatibility with various closure systems and its robust design make it a preferred choice for securely handling and transporting sensitive materials in demanding environments.

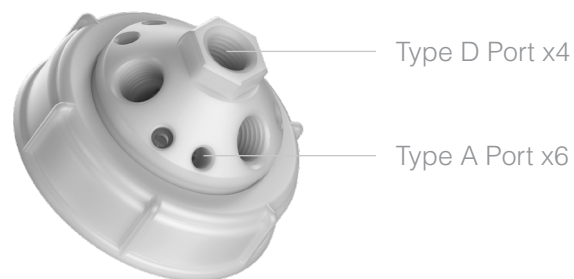
Note that the Nalgene Lowboy™ 63mm container is a slightly different thread; inquire for solutions.



Waste Collection Manifolds



LL-63P4L
4-Port Size L



LL-63P10L
10-Port Size L

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

HPLC Waste Collection Kits

**LL-K63P-A**

Essentials Waste Kit
For 63mm threaded containers

“Essentials” Kit Contents

The Essentials Kit for HPLC solvent 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 optional 90 degree elbow adapter) and an exhaust filter with lapse 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

**LL-K63P-B**

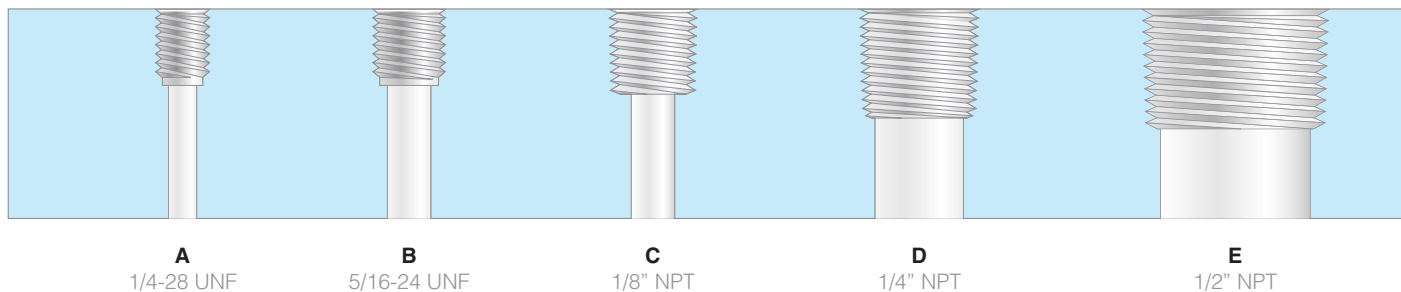
Plus Waste Kit
For 63mm threaded containers

“Plus” Kit Contents

The Plus Kit for HPLC solvent waste collection includes all the essentials of the Basic Kit, *plus* a chemical-change indicator for real-time end of service life detection with organic solvents.

One 5' (1.5m) PTFE tubing extension for detector outlets or for short effluent tubes is also included.

Port Thread Sizes at 1:1 scale



70mm safety caps

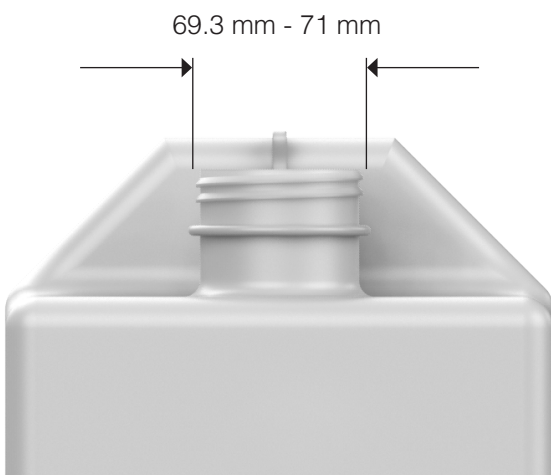
For Nalgene®-brand 70mm carboys



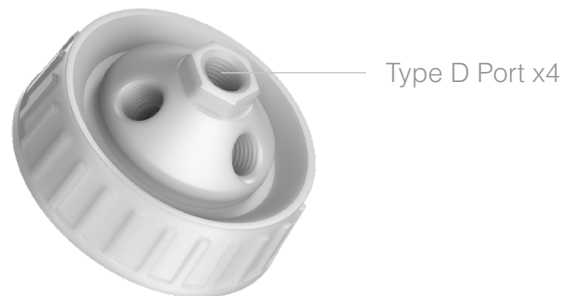
Container type and thread size

The 70mm “buttress” thread, found on Nalgene’s rectangular laboratory carboys, is designed to work with closures and fixtures compatible with Mason jar threads, such as certain blender assemblies like Osterizer™ models.

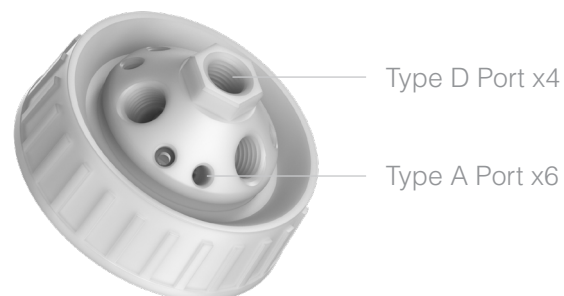
This thread size allows for convenient filling, sampling, and fluid transfer, making it practical for various laboratory and field applications. Note that the Nalgene 70mm thread is not compatible with similar 70mm threads from other manufacturers, such as Rieke and NOWPak, due to differences in thread design.



Waste Collection Manifolds



LL-70NP4L
4-Port Size L



LL-70NP10L
10-Port Size L

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

HPLC Waste Collection Kits

**“Essentials” Kit Contents**

The Essentials Kit for HPLC solvent 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 optional 90 degree elbow adapter) and an exhaust filter with lapse 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

LL-K70NP-A

Essentials Waste Kit

For 70mm Nalgene carboys and mason jars

**“Plus” Kit Contents**

The Plus Kit for HPLC solvent waste collection includes all the essentials of the Basic Kit, *plus* a chemical-change indicator for real-time end of service life detection with organic solvents.

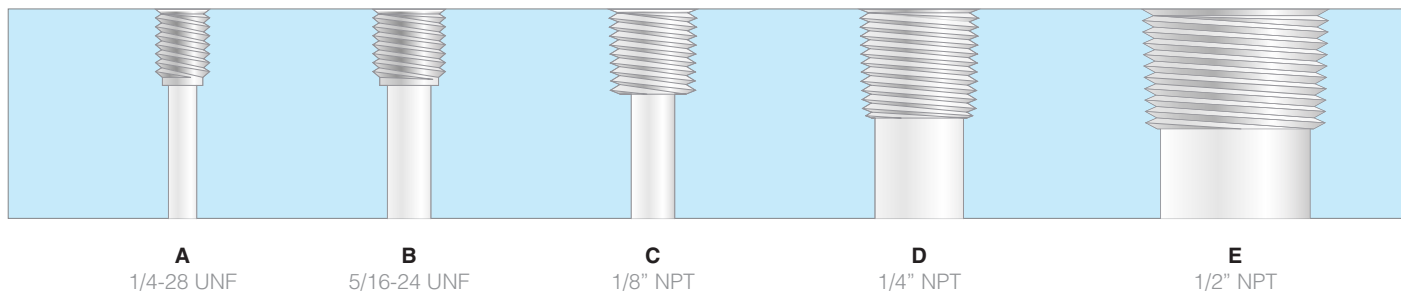
One 5' (1.5m) PTFE tubing extension for detector outlets or for short effluent tubes is also included.

LL-K70NP-B

Plus Waste Kit

For 70mm Nalgene carboys and mason jars

Port Thread Sizes at 1:1 scale



70mm safety caps

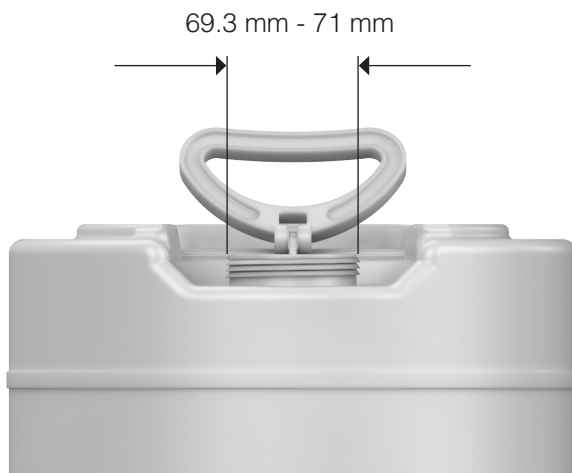
For 6TPI and 8TPI Rieke® threads



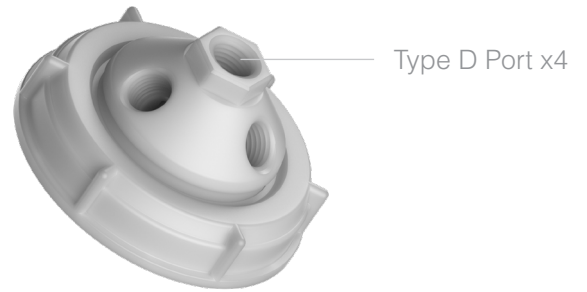
Container type and thread size

Tight-head containers with Rieke 70mm threaded caps are commonly used in laboratories due to their compliance with UN and DOT standards, ensuring safe storage and transport of hazardous materials. In some regions, regulations allow these containers to be shipped directly from the lab to incineration facilities, providing a convenient option for disposing of hazardous waste.

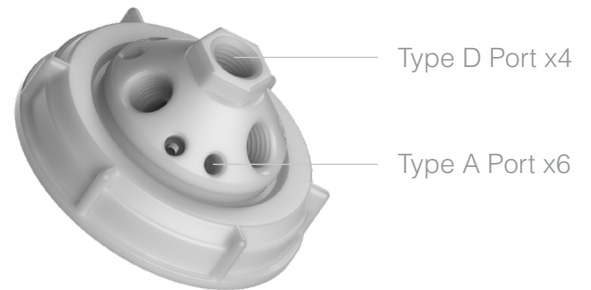
These 70mm caps are available in two thread options: 6 threads per inch (TPI) and 8 TPI. Determining the TPI of your container can be tricky, but many Rieke caps conveniently have the TPI number embossed along the rim. If your cap doesn't display this marking, it's a good idea to verify the TPI with your supplier or request a sample cap to ensure proper compatibility.



Waste Collection Manifolds



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



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

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

HPLC Waste Collection Kits

**LL-K70P-A / LL-K70AP-A**

Essentials Waste Kit 8TPI / 6TPI
For 70mm Rieke threaded containers

“Essentials” Kit Contents

The Essentials Kit for HPLC solvent 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 optional 90 degree elbow adapter) and an exhaust filter with lapse 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**

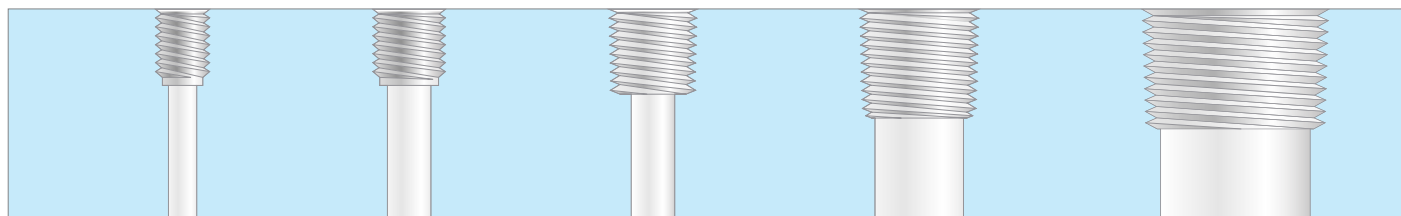
The Plus Kit for HPLC solvent waste collection includes all the essentials of the Basic Kit, *plus* a chemical-change indicator for real-time end of service life detection with organic solvents.

One 5' (1.5m) PTFE tubing extension for detector outlets or for short effluent tubes is also included.

LL-K70P-B / LL-K70AP-B

Plus Waste Kit 8TPI / 6TPI
For 70mm Rieke threaded containers

Port Thread Sizes at 1:1 scale



A
1/4-28 UNF

B
5/16-24 UNF

C
1/8" NPT

D
1/4" NPT

E
1/2" NPT

GL80 safety caps

For wide-mouth 80mm “GL” glass bottles



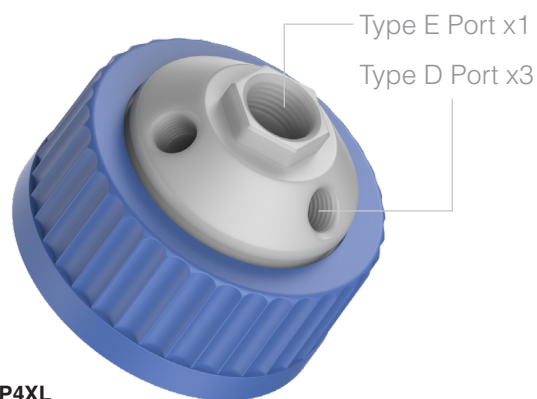
Container type and thread size

The GL80, also called GLS80, is an 80mm wide-mouth thread commonly found on laboratory glass bottles, such as manufactured by DURAN® and similar brands. Its design allows for quick opening and closing with less than one full turn, making it convenient for frequent use in labs. The wide opening is ideal for handling larger samples, pouring viscous liquids, and inserting tools like funnels, spatulas, or tweezers.

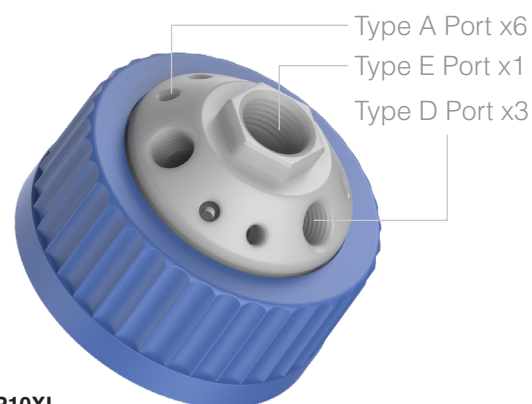
Bottles with the GL80 thread are typically made from borosilicate glass, offering exceptional chemical resistance and the ability to withstand thermal stress. This makes them well-suited for demanding lab applications, from chemical storage to sample preparation.



Waste Collection Manifolds



LL-80P4XL
4-Port Size XL



LL-80P10XL
10-Port Size XL

Part Number	Description	# of Ports
Manifolds for GL 80		
LL-80P4XL	4-Port, Size XL, Polypropylene	3D, 1E
LL-80P10XL	10-Port, Size XL, Polypropylene	6A, 3D, 1E

Waste Kits for GL 80		
LL-K80P-A	Waste Kit Essentials	6A, 3D, 1E
LL-K80P-B	Waste Kit Plus	6A, 3D, 1E

HPLC Waste Collection Kits

**LL-K80P-A**

Essentials Waste Kit
For GL80 threaded glass bottles

“Essentials” Kit Contents

The Essentials Kit for HPLC solvent 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 optional 90 degree elbow adapter) and an exhaust filter with lapse 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

**LL-K80P-B**

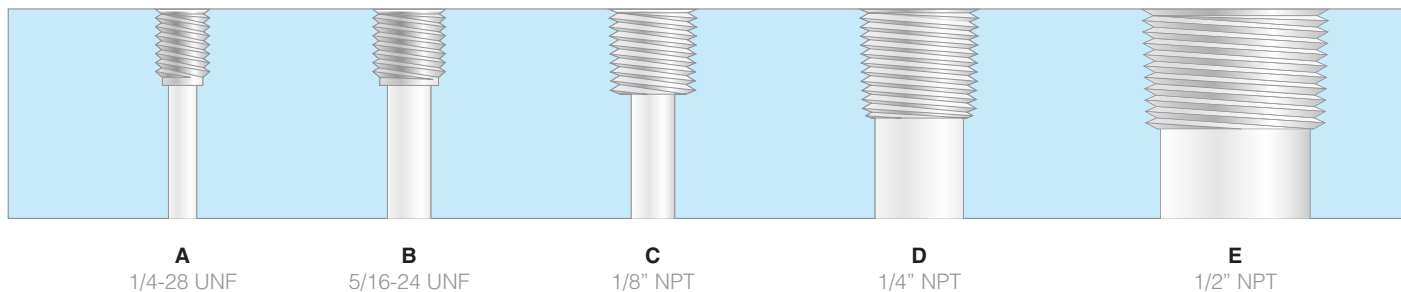
Plus Waste Kit
For GL80 threaded glass bottles

“Plus” Kit Contents

The Plus Kit for HPLC solvent waste collection includes all the essentials of the Basic Kit, *plus* a chemical-change indicator for real-time end of service life detection with organic solvents.

One 5' (1.5m) PTFE tubing extension for detector outlets or for short effluent tubes is also included.

Port Thread Sizes at 1:1 scale



83B safety caps

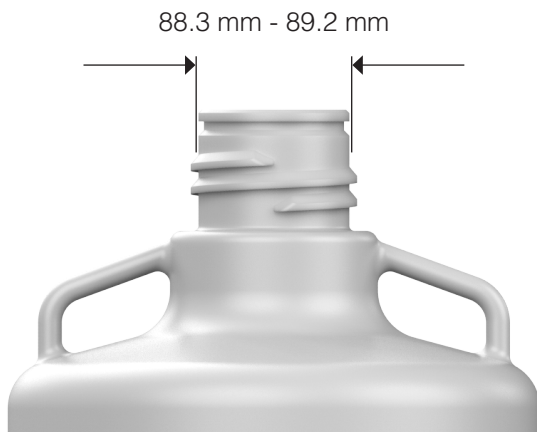
For Nalgene® 83mm “buttress” threads



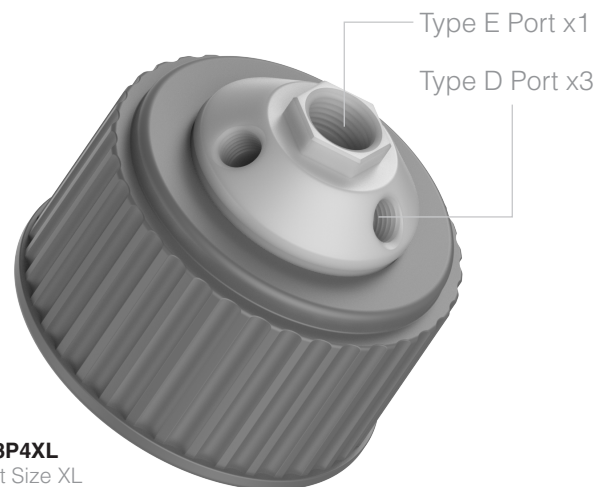
Container type and thread size

The 83B buttress thread is a durable and practical design found on many Nalgene laboratory containers, particularly larger carboys and wide-mouth bottles. This thread type is engineered for a secure, leak-proof seal, making it suitable for storing and dispensing liquids in lab settings. The wide 83mm opening allows for easy filling, cleaning, and access to contents, even when working with bulky instruments or large samples. Its robust buttress thread design ensures consistent performance during repeated use, while maintaining compatibility with specialized closures, including spigots and tamper-evident caps. The 83B thread is valued for its reliability in both routine and demanding lab applications.

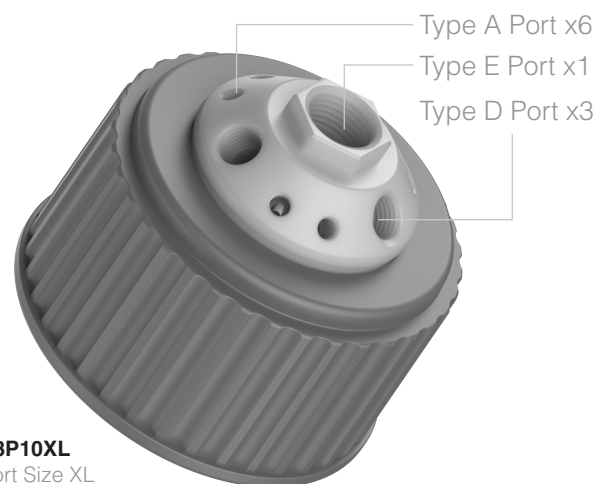
The 83B caps provided here are also compatible with Foxx Life Sciences™ and Kautex® brands of the same thread type.



Waste Collection Manifolds



LL-83P4XL
4-Port Size XL



LL-83P10XL
10-Port Size XL

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

HPLC Waste Collection Kits

**LL-K83P-A**

Essentials Waste Kit
For 83B "buttruss" threaded carboys

"Essentials" Kit Contents

The Essentials Kit for HPLC solvent 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 optional 90 degree elbow adapter) and an exhaust filter with lapse 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

**LL-K83P-B**

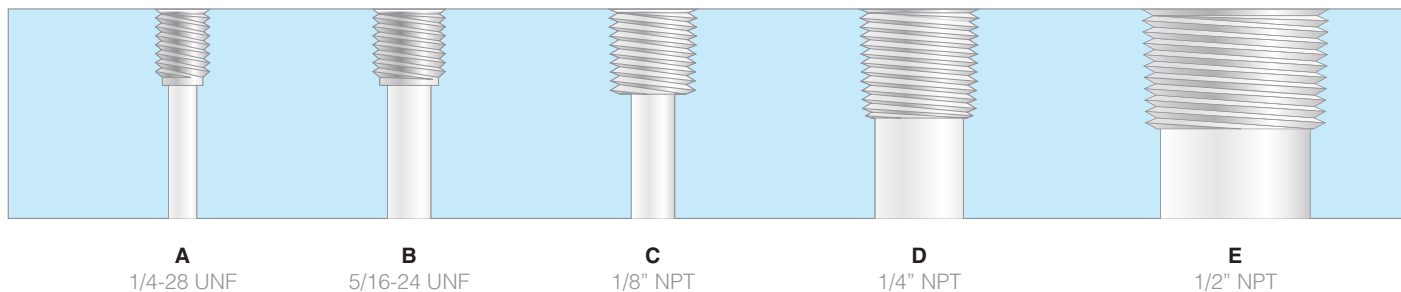
Plus Waste Kit
For 83B "buttruss" threaded carboys

"Plus" Kit Contents

The Plus Kit for HPLC solvent waste collection includes all the essentials of the Basic Kit, *plus* a chemical-change indicator for real-time end of service life detection with organic solvents.

One 5' (1.5m) PTFE tubing extension for detector outlets or for short effluent tubes is also included.

Port Thread Sizes at 1:1 scale



100mm safety caps

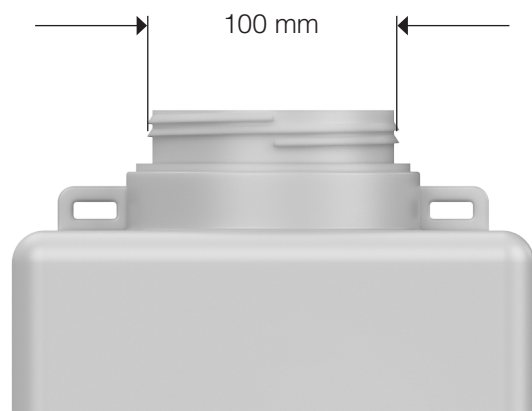
For 100-415 Nalgene® threads



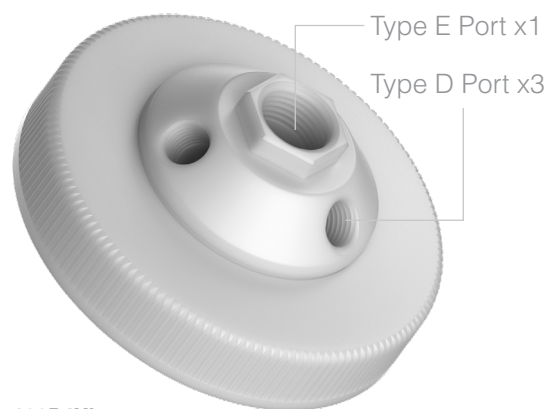
Container type and thread size

With one of the widest openings in the Nalgene brand, the 100-415 thread is a standard closure size commonly found on laboratory containers, particularly large-volume bottles and carboys. The designation “100-415” refers to a 100mm outer diameter with a 415 neck finish, defining the thread style and dimensions.

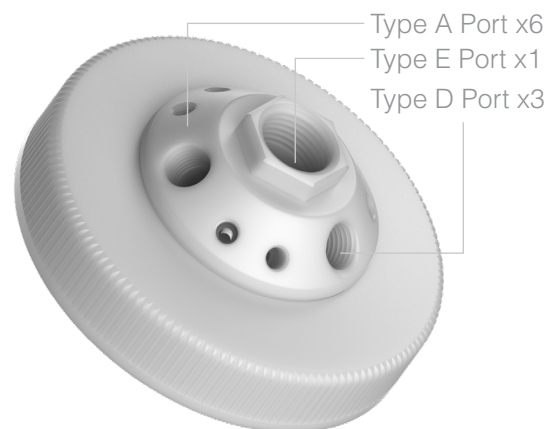
This wide-mouth design allows for convenient filling, pouring, and cleaning, making it ideal for handling bulk materials or maintaining sterile conditions in laboratory environments. The 100-415 thread’s large opening also supports better airflow during dispensing, reducing the risk of splashing or spills, and is frequently chosen for applications requiring easy access to container contents.



Waste Collection Manifolds



LL-100P4XL
4-Port Size XL



LL-100P10XL
10-Port Size XL

Part Number	Description	# of Ports
-------------	-------------	------------

Manifolds for 100-415 Nalgene

LL-100P4XL	4-Port, Size XL, Polypropylene	3D, 1E
LL-100P10XL	10-Port, Size XL, Polypropylene	6A, 3D, 1E

Waste Kits for 100-415 Nalgene

LL-K100P-A	Waste Kit Essentials	6A, 3D, 1E
LL-K100P-B	Waste Kit Plus	6A, 3D, 1E

HPLC Waste Collection Kits

**“Essentials” Kit Contents**

The Essentials Kit for HPLC solvent 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 optional 90 degree elbow adapter) and an exhaust filter with lapse 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

LL-K100P-A

Essentials Waste Kit
For 100-415 threaded carboys

**“Plus” Kit Contents**

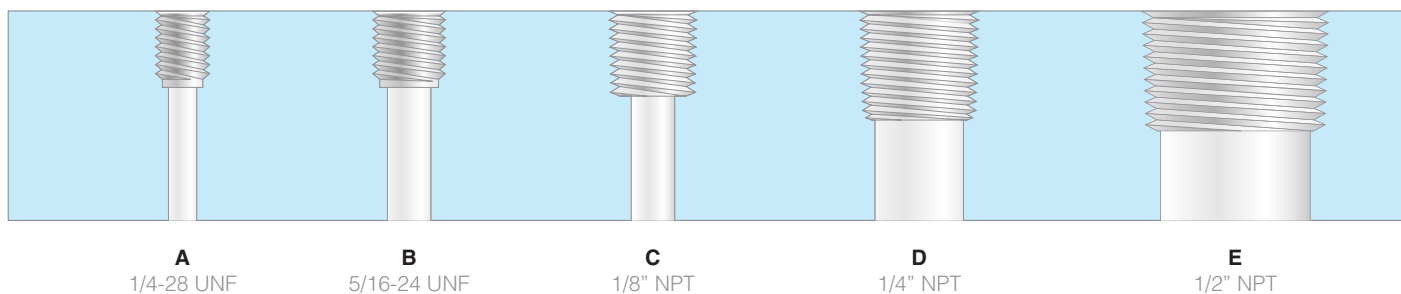
The Plus Kit for HPLC solvent waste collection includes all the essentials of the Basic Kit, *plus* a chemical-change indicator for real-time end of service life detection with organic solvents.

One 5' (1.5m) PTFE tubing extension for detector outlets or for short effluent tubes is also included.

LL-K100P-B

Plus Waste Kit
For 100-415 threaded carboys

Port Thread Sizes at 1:1 scale



Justrite® PP QD

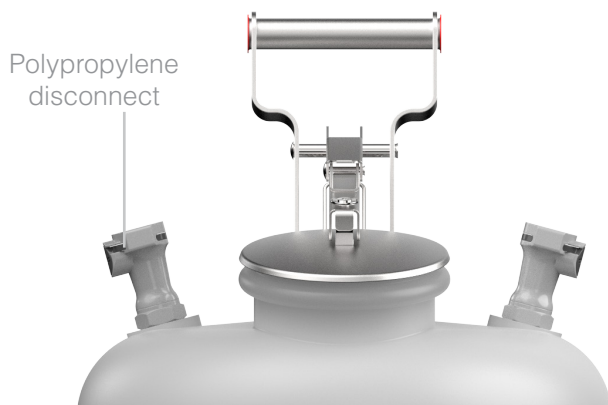
Manifolds with plastic quick disconnects



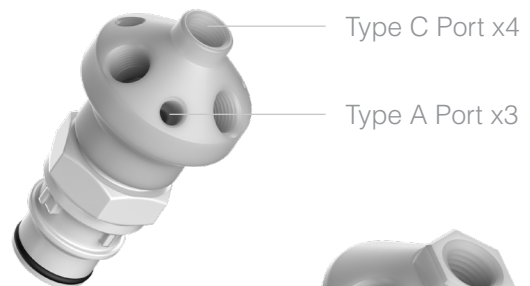
Safety cans with polypropylene disconnects

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 polypropylene quick disconnects with shutoff valves, 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 ones.

Note that the plastic quick disconnects (polypropylene with EPDM seals) can fail and cause leaks when exposed to some solvents, so **be certain to ensure compatibility** with your chemicals prior to use, and consider upgrading to the stainless steel quick disconnect version if necessary.



Waste Collection Manifolds

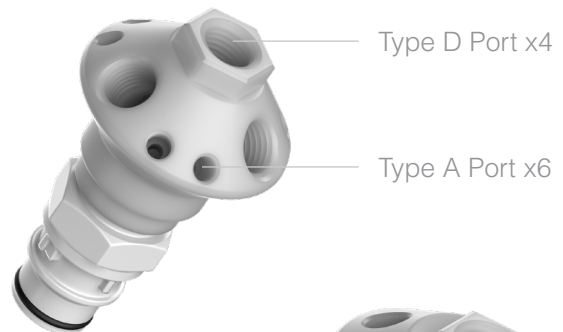


LL-JPP7M
7-Port Size M

Type D Port x4



LL-JPP4L
4-Port Size L



LL-JPP10L
10-Port Size L

Type E Port x1

Type D Port x5

LL-JPP6XL
6-Port Size XL

Part Number	Description	# of Ports
Manifolds for Justrite® plastic quick disconnects		
LL-JPP7M	7-Port, Size M, Polypropylene	3A, 4C
LL-JPP4L	4-Port, Size L, Polypropylene	4D
LL-JPP10L	10-Port, Size L, Polypropylene	6A, 4D
LL-JPP6XL	6-Port, Size XL, Polypropylene	5D, 1E
Waste Kits for Justrite® plastic quick disconnects		
LL-KJP-A	Waste Kit Essentials	6A, 4D
LL-KJP-B	Waste Kit Plus	6A, 4D

Manifolds for Justrite® plastic quick disconnects

Waste Kits for Justrite® plastic quick disconnects

HPLC Waste Collection Kits

**LL-KJP-A**

Essentials Waste Kit

For Justrite safety cans with Polypropylene quick disconnects

“Essentials” Kit Contents

The Essentials Kit for HPLC solvent 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 optional 90 degree elbow adapter) and an exhaust filter with lapse 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 for HPLC solvent waste collection includes all the essentials of the Basic Kit, *plus* a chemical-change indicator for real-time end of service life detection with organic solvents.

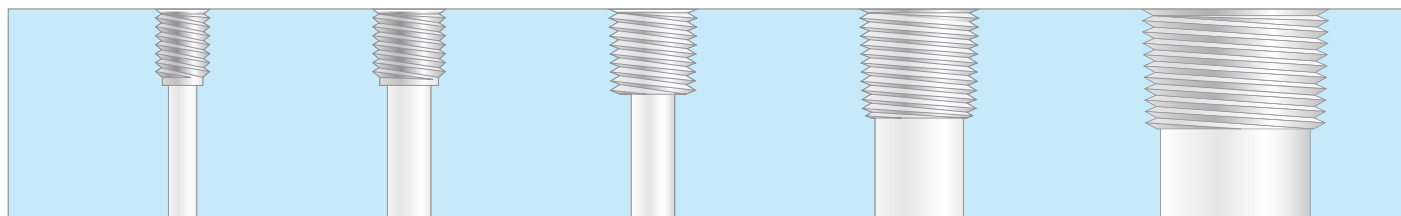
One 5' (1.5m) PTFE tubing extension for detector outlets or for short effluent tubes is also included.

LL-KJP-B

Plus Waste Kit

For Justrite safety cans with Polypropylene quick disconnects

Port Thread Sizes at 1:1 scale



A
1/4-28 UNF

B
5/16-24 UNF

C
1/8" NPT

D
1/4" NPT

E
1/2" NPT

Justrite® SS QD

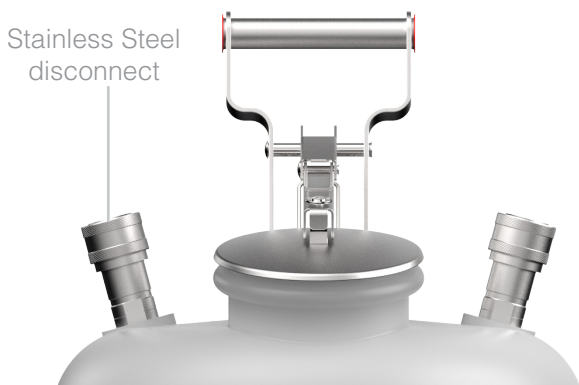
Manifolds with steel quick disconnects



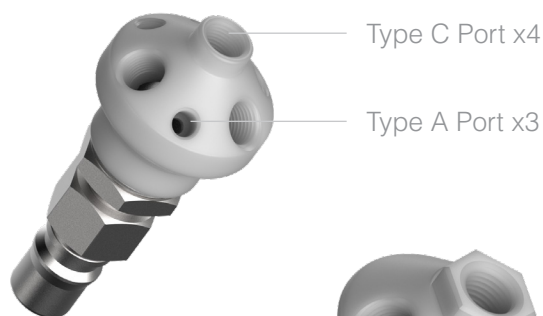
Safety cans with stainless steel disconnects

Justrite Centura™ safety cans are the premium choice for solvent waste collection, with advanced features that elevate them above standard carboys. With a spring-loaded, pressure-relieving lid, spark arrester, groundable pouring spout, and durable stainless steel valved quick disconnects, these cans simplify and streamline waste collection. The pour spout locks open for emptying the contents, while the shutoff valves in the quick disconnects allow for clean and easy removal of waste manifolds and exhaust filters when replacing full containers.

Stainless steel quick disconnects include internal seals (PTFE and perfluorelastomer) compatible with most lab solvents, making this product an ideal choice for use with aggressive chemicals.

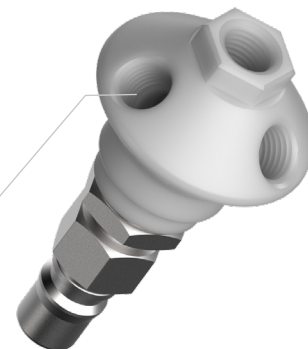


Waste Collection Manifolds

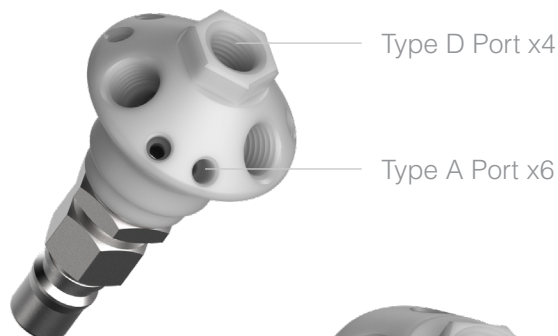


**LL-JSP7M /
LL-JSX7M**
7-Port Size M

Type D Port x4



LL-JSP4L
4-Port Size L



LL-JSP10L
10-Port Size L

Type E Port x1

Type D Port x5



LL-JSP6XL
6-Port Size XL

Part Number	Description	# of Ports
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Manifolds for Justrite® stainless steel quick disconnects

LL-JSP7M	7-Port, Size M, Polypropylene	3A, 4C
LL-JSX7M	7-Port, Size M, PTFE	3A, 4C
LL-JSP4L	4-Port, Size L, Polypropylene	4D
LL-JSP10L	10-Port, Size L, Polypropylene	6A, 4D
LL-JSP6XL	6-Port, Size XL, Polypropylene	5D, 1E

Waste Kits for Justrite® stainless steel quick disconnects

LL-KJS-A	Waste Kit Essentials	6A, 4D
LL-KJS-B	Waste Kit Plus	6A, 4D

HPLC Waste Collection Kits

**LL-KJS-A**

Essentials Waste Kit

For Justrite safety cans with stainless steel quick disconnects

“Essentials” Kit Contents

The Essentials Kit for HPLC solvent 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 optional 90 degree elbow adapter) and an exhaust filter with lapse 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 for HPLC solvent waste collection includes all the essentials of the Basic Kit, *plus* a chemical-change indicator for real-time end of service life detection with organic solvents.

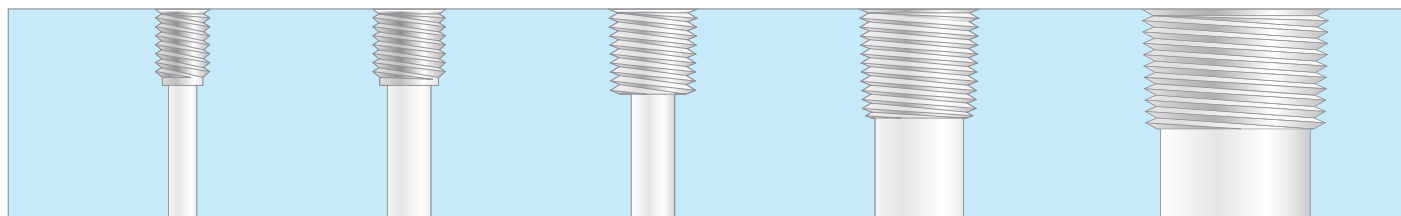
One 5' (1.5m) PTFE tubing extension for detector outlets or for short effluent tubes is also included.

LL-KJS-B

Plus Waste Kit

For Justrite safety cans with stainless steel quick disconnects

Port Thread Sizes at 1:1 scale



A
1/4-28 UNF

B
5/16-24 UNF

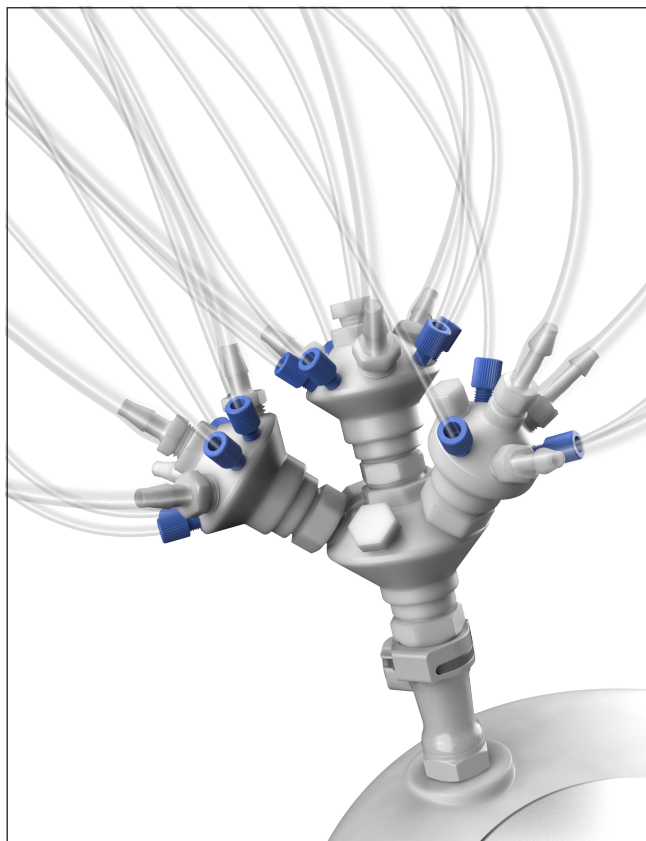
C
1/8" NPT

D
1/4" NPT

E
1/2" NPT

Stacking Manifolds

Expansion units for extra tubing



(Nearly) limitless modular expansion

A standout feature of our solvent collection manifolds is their adaptability to varying tubing requirements. Whether you need to connect five tubes or fifty, each manifold can be easily expanded using modular stacking units.

Designed with tapered NPT threads, these manifolds provide a flexible solution to meet the specific needs of your laboratory setup. This feature is particularly valuable for labs already operating at the maximum solvent capacity permitted by law. By connecting multiple instruments to a single waste carboy, the need for additional containers can often be eliminated, optimizing space and ensuring compliance.

Wrap NPT threads 2-3 times around for a leak-resistant seal and wrench-tighten.

Part Number	Description	# of Ports
Stacking Manifolds for Type C ports - 1/8" NPT		
LL-SPC7M	7-Port, Size M, Polypropylene	3A, 4C
LL-SXC7M	7-Port, Size M, PTFE	3A, 4C
Stacking Manifolds for Type D ports - 1/4" NPT		
LL-SPD7M	7-Port, Size M, Polypropylene	3A, 4C
LL-SXD7M	7-Port, Size M, PTFE	3A, 4C
LL-SPD4L	4-Port, Size L, Polypropylene	4D
LL-SPD10L	10-Port, Size L, Polypropylene	6A, 4D
LL-SPD6XL	6-Port, Size XL, Polypropylene	5D, 1E
Stacking Manifolds for Type E ports - 1/2" NPT		
LL-SPE7M	7-Port, Size M, Polypropylene	3A, 4C
LL-SXE7M	7-Port, Size M, PTFE	3A, 4C
LL-SPE4L	4-Port, Size L, Polypropylene	4D
LL-SPE10L	10-Port, Size L, Polypropylene	6A, 4D
LL-SPE6XL	6-Port, Size XL, Polypropylene	5D, 1E

Stacking Manifolds for Type C ports - 1/8" NPT

LL-SPC7M	7-Port, Size M, Polypropylene	3A, 4C
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LL-SXC7M	7-Port, Size M, PTFE	3A, 4C
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Stacking Manifolds for Type D ports - 1/4" NPT

LL-SPD7M	7-Port, Size M, Polypropylene	3A, 4C
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LL-SXD7M	7-Port, Size M, PTFE	3A, 4C
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LL-SPD4L	4-Port, Size L, Polypropylene	4D
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LL-SPD10L	10-Port, Size L, Polypropylene	6A, 4D
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LL-SPD6XL	6-Port, Size XL, Polypropylene	5D, 1E
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Stacking Manifolds for Type E ports - 1/2" NPT

LL-SPE7M	7-Port, Size M, Polypropylene	3A, 4C
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LL-SXE7M	7-Port, Size M, PTFE	3A, 4C
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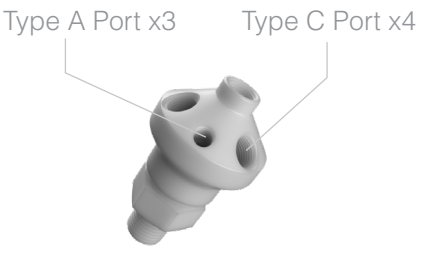
LL-SPE4L	4-Port, Size L, Polypropylene	4D
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LL-SPE10L	10-Port, Size L, Polypropylene	6A, 4D
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LL-SPE6XL	6-Port, Size XL, Polypropylene	5D, 1E
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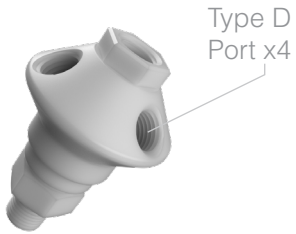
LL-SPC7M / LL-SXC7M
7-Port Size M, fits Type C port



LL-SPD7M / LL-SXD7M
7-Port Size M, fits Type D port



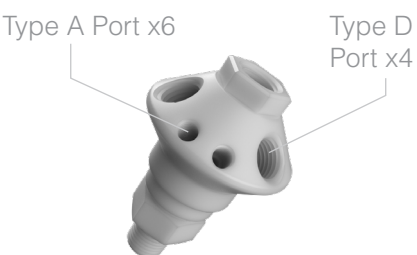
LL-SPE7M / LL-SXE7M
7-Port Size M, fits Type E port



LL-SPD4L
4-Port Size L, fits Type D port



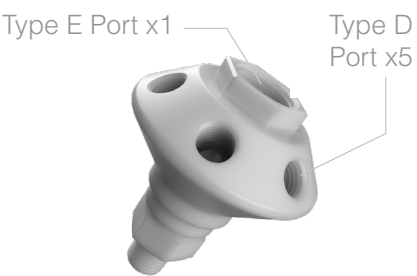
LL-SPE4L
4-Port Size L, fits Type E port



LL-SPD10L
10-Port Size L, fits Type D port



LL-SPE10L
10-Port Size L, fits Type E port

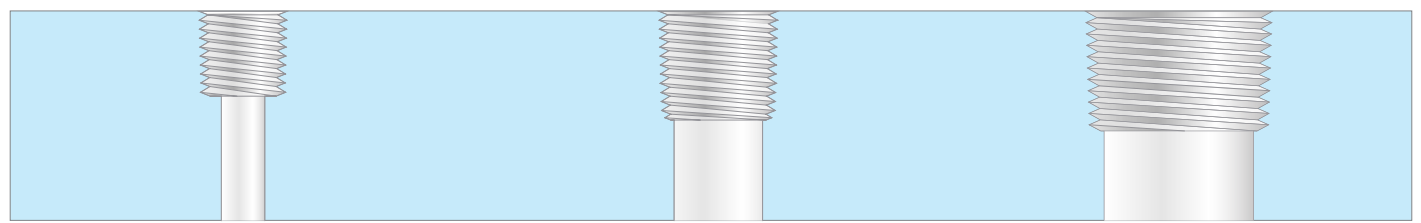


LL-SPD6XL
6-Port Size XL, fits Type D port



LL-SPE6XL
6-Port Size XL, fits Type E port

Port Thread Sizes at 1:1 scale



C
1/8" NPT

D
1/4" NPT

E
1/2" NPT

Compression Fittings

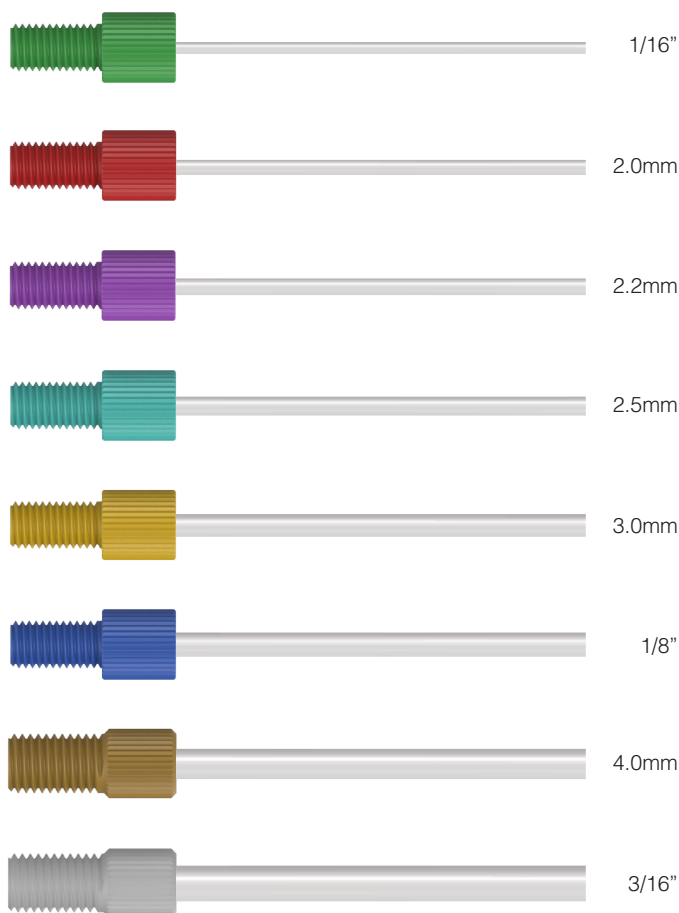
Connections for hard-wall tubing

Tubing connections by OD and port type

The small diameter tubing (typically less than 1/4" OD), commonly used in laboratory instruments for transporting solvents, is often made from fluoropolymers like PTFE, PFA, or FEP. Due to their rigid walls, these chemically resistant tubes are not suitable for barbed connectors. Instead, they are attached to caps and manifolds using compression fittings. These fittings work by tightening a threaded nut over a pliable ferrule, compressing the tubing's outer diameter to create a secure, leak-proof seal around the tube and at the bottom of the threaded port.

Type A (1/4-28) threaded fittings are made of polypropylene, while Type B (5/16-24) fittings feature ETFE ferrules with PEEK or Acetal nuts. Type C (1/8" NPT) and Type D (1/4" NPT) fittings include adapters to accommodate larger port sizes. For a reliable seal, wrap NPT threads 2-3 times with thread seal tape and wrench-tighten securely.

All compression fittings are color-coded to indicate the tubing size they are designed to fit.



Part Number	Description	U/M	Material
Type A – 1/4-28 UNF			
LL-CPA16X	1/16" OD Tubing	10/PK	PP
LL-CPA20X	2.0mm OD Tubing	10/PK	PP
LL-CPA22X	2.2mm OD Tubing	10/PK	PP
LL-CPA25X	2.5mm OD Tubing	10/PK	PP
LL-CPA30X	3.0mm OD Tubing	10/PK	PP
LL-CPA32X	1/8" OD Tubing	10/PK	PP
Type B – 5/16-24 UNF			
LL-CKB40	4.0mm OD Tubing	Each	PEEK/ETFE
LL-CAB47	3/16" OD Tubing	Each	Acetal/ETFE
Type C – 1/8" NPT			
LL-CPC16	1/16" OD Tubing	Each	PP
LL-CPC20	2.0mm OD Tubing	Each	PP
LL-CPC22	2.2mm OD Tubing	Each	PP
LL-CPC25	2.5mm OD Tubing	Each	PP
LL-CPC30	3.0mm OD Tubing	Each	PP
LL-CPC32	1/8" OD Tubing	Each	PP
Type D – 1/4" NPT			
LL-CPD16	1/16" OD Tubing	Each	PP
LL-CPD20	2.0mm OD Tubing	Each	PP
LL-CPD22	2.2mm OD Tubing	Each	PP
LL-CPD25	2.5mm OD Tubing	Each	PP
LL-CPD30	3.0mm OD Tubing	Each	PP
LL-CPD32	1/8" OD Tubing	Each	PP



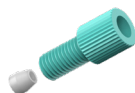
LL-CPA16X
1/16" OD Tubing, 10/PK



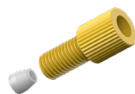
LL-CPA20X
2.0mm OD Tubing, 10/PK



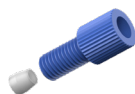
LL-CPA22X
2.2mm OD Tubing, 10/PK



LL-CPA25X
2.5mm OD Tubing, 10/PK



LL-CPA30X
3.0mm OD Tubing, 10/PK



LL-CPA32X
1/8" OD Tubing, 10/PK



LL-CKB40
4.0mm OD Tubing



LL-CAB47
3/16" OD Tubing



LL-CPC16
1/16" OD Tubing



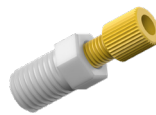
LL-CPC20
2.0mm OD Tubing



LL-CPC22
2.2mm OD Tubing



LL-CPC25
2.5mm OD Tubing



LL-CPC30
3.0mm OD Tubing



LL-CPC32
1/8" OD Tubing



LL-CPD16
1/16" OD Tubing



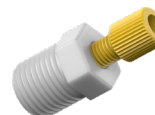
LL-CPD20
2.0mm OD Tubing



LL-CPD22
2.2mm OD Tubing



LL-CPD25
2.5mm OD Tubing

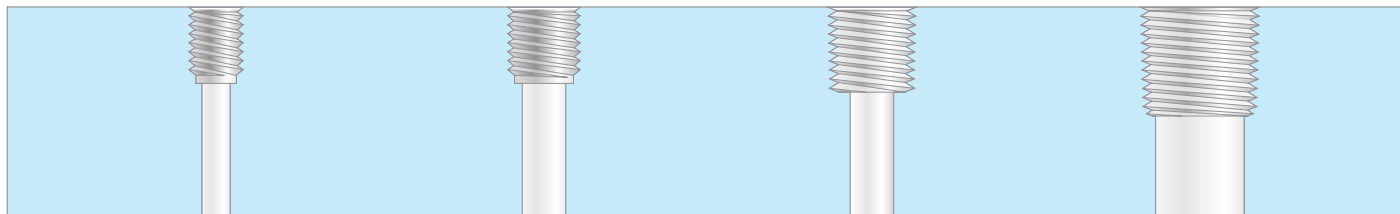


LL-CPD30
3.0mm OD Tubing



LL-CPD32
1/8" OD Tubing

Port Thread Sizes at 1:1 scale



A
1/4-28 UNF

B
5/16-24 UNF

C
1/8" NPT

D
1/4" NPT

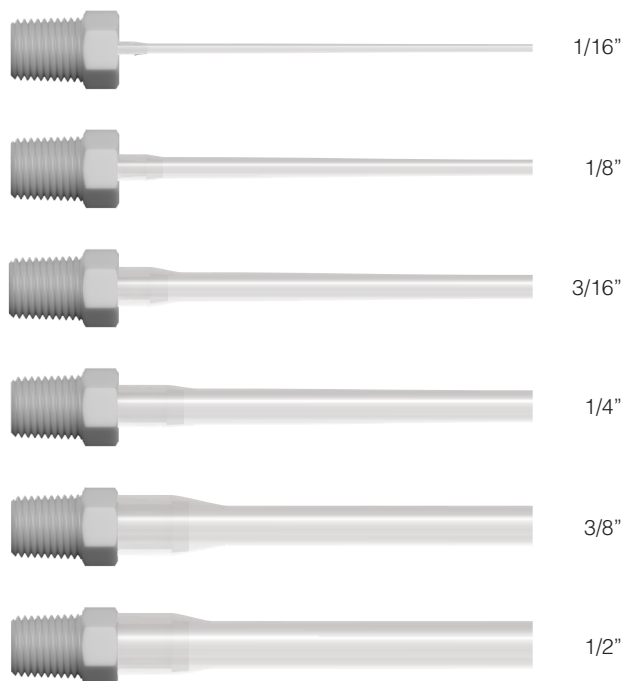
Barbed Fittings

Connections for soft-wall tubing

Tubing connections by ID and port type

Often used for instrument waste plumbing where more 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, these fittings are available in packs of 10 and come in two threaded port styles: Type C (1/8" NPT) and Type D (1/4" NPT). Wrap NPT threads 2-3 times around for a leak-resistant seal and wrench-tighten.



Part Number	Description	U/M	Material
Thread Type C – 1/8" NPT			
LL-BPC16X	1/16" ID Tubing	10/PK	PP
LL-BPC32X	1/8" ID Tubing	10/PK	PP
LL-BPC47X	3/16" ID Tubing	10/PK	PP
LL-BPC64X	1/4" ID Tubing	10/PK	PP
LL-BPC95X	3/8" ID Tubing	10/PK	PP
Thread Type D – 1/4" NPT			
LL-BPD32X	1/8" ID Tubing	10/PK	PP
LL-BPD47X	3/16" ID Tubing	10/PK	PP
LL-BPD64X	1/4" ID Tubing	10/PK	PP
LL-BPD95X	3/8" ID Tubing	10/PK	PP
LL-BPD127X	1/2" ID Tubing	10/PK	PP



LL-BPC16X
Type C x 1/16" ID Tubing, 10/PK



LL-BPC32X
Type C x 1/8" ID Tubing, 10/PK



LL-BPC47X
Type C x 3/16" ID Tubing, 10/PK



LL-BPC64X
Type C x 1/4" ID Tubing, 10/PK



LL-BPC95X
Type C x 3/8" ID Tubing, 10/PK



LL-BPD32X
Type D x 1/8" ID Tubing, 10/PK



LL-BPD47X
Type D x 3/16" ID Tubing, 10/PK



LL-BPD64X
Type D x 1/4" ID Tubing, 10/PK

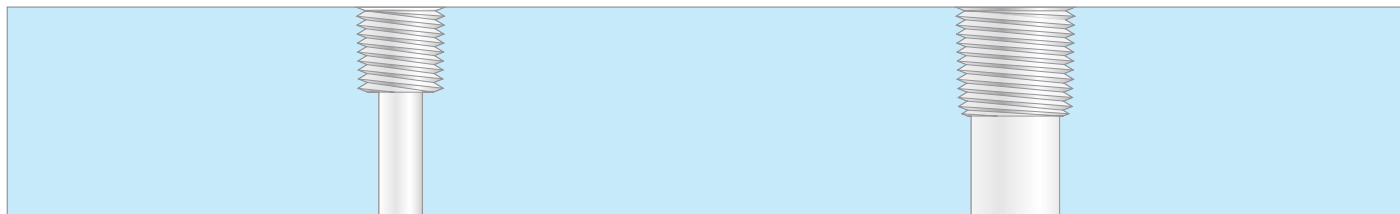


LL-BPD95X
Type D x 3/8" ID Tubing, 10/PK



LL-BPD127X
Type D x 1/2" ID Tubing, 10/PK

Port Thread Sizes at 1:1 scale



C
1/8" NPT

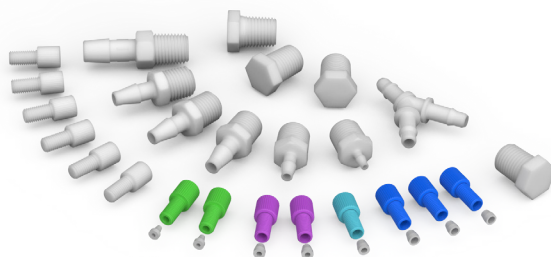
D
1/4" NPT

Plugs and Extras

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

Miscellaneous parts and adapters

Setting up an HPLC or other instrument often means running into those unexpected needs — like replacing a fitting, extending tubing, or finding the right adapter to connect mismatched parts. The extra components here are intended to make your setup easier and keep things running smoothly. Whether you're solving a tricky connection issue or just need a spare part, we've got you covered. And if you don't see what you need, let us know—we're here to help you find the right solution.



LL-FK1
Fittings kit



LL-TX5
Tubing extension, 5'



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

Part Number	Description	Material
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Type A – 1/4-28 UNF

LL-PXA	Plug for 1/4-28 Ports	PTFE
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Type B – 5/16-24 UNF

LL-PXB	Plug for 1/4-28 Ports	PTFE
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Type C – 1/8" NPT

LL-PPC	Plug for 1/8" NPT Ports	PP
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LL-APAC	Adapter, Type A x Type C, MNPT	PP
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LL-APBC	Adapter, Type B x Type C, MNPT	PP
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Type D – 1/4" NPT

LL-PPD	Plug for 1/4" NPT Ports	PP
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LL-APAD	Adapter, Type A x Type D, MNPT	PP
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LL-APBD	Adapter, Type B x Type D, MNPT	PP
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Type E – 1/2" NPT

LL-PPE	Plug for 1/2" NPT Ports	PP
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LL-APDE	Adapter, Type D x Type E, MNPT	PP
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Barbed Y Fittings

LL-YP16	1/16" ID tubing	PP
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LL-YP32	1/8" ID tubing	PP
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LL-YP64	1/4" ID tubing	PP
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LL-YP95	3/8" ID tubing	PP
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Fittings Kit

LL-FK1	Fittings kit	PTFE/PP
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Tubing Extension

LL-TX5	Tubing extension, 5'	PTFE/PP
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LL-TX5-4PK	4-Pack tubing extension	PTFE/PP
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Bottle Thread Adapters

LL-AP45-38	Thread adapter, GL45 X 38-430	PP
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LL-AP45-40	Thread adapter, GL45 X S40	PP
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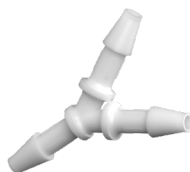
Barbed Y Fittings



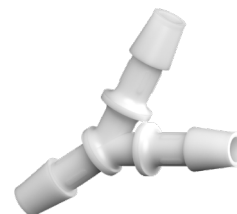
LL-YP16X
Y Fitting 1/16", 10/PK



LL-YP32X
Y Fitting 1/8", 10/PK



LL-YP64X
Y Fitting 1/4", 10/PK



LL-YP95X
Y Fitting 3/8", 10/PK

Adapters



LL-APBC
Adapter
Type B x
Type C



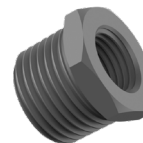
LL-APBD
Adapter
Type B x
Type D



LL-APAC
Adapter
Type A x
Type C



LL-APAD
Adapter
Type A x
Type D



LL-APDE
Adapter
Type D x
Type E

Plugs



LL-PXA
Plug for Type
A Ports
10/PK



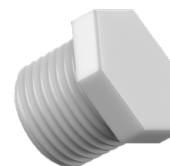
LL-PXB
Plug for Type
B Ports



LL-PPC
Plug for Type
C Ports
10/PK

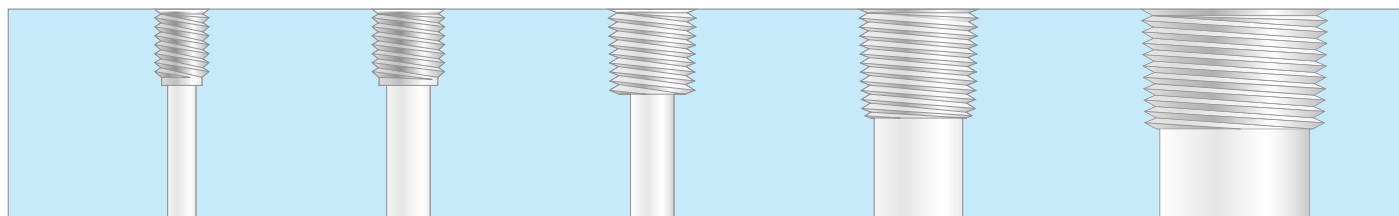


LL-PPD
Plug for Type
D Ports
10/PK



LL-PPE
Plug for Type
E Ports
10/PK

Port Thread Sizes at 1:1 scale



A
1/4-28 UNF

B
5/16-24 UNF

C
1/8" NPT

D
1/4" NPT

E
1/2" NPT

Container Types

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



38-400 shallow thread (Wako / Cubitainer)

Scale 1:1



GL38 glass thread

Scale 1:1



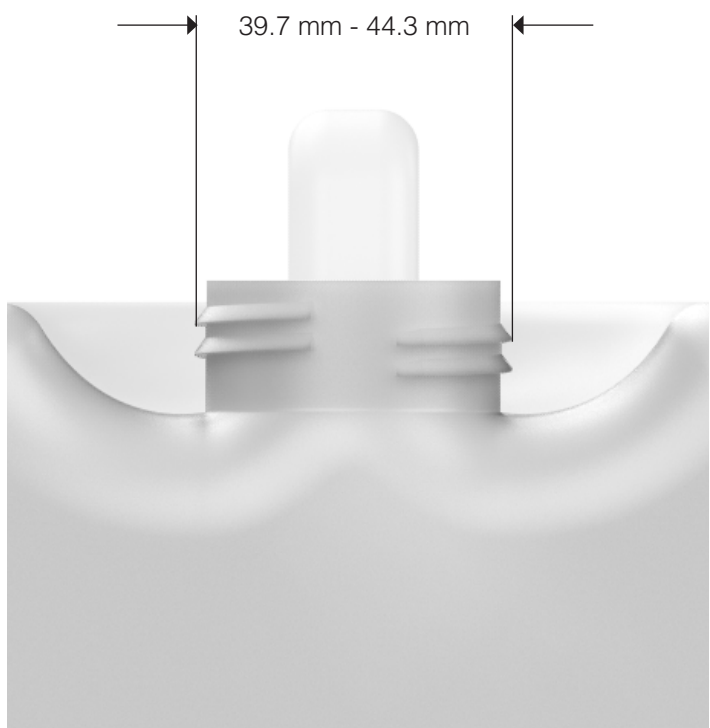
38-430 Nalgene plastic thread

Scale 1:1



GL45 glass thread

Scale 1:1



DIN45
Scale 1:1



48mm Thermo Nalgene Biotainer
Scale 1:1



Corning Roller Bottle
Scale 1:1



DIN50
Scale 1:1

Container Types

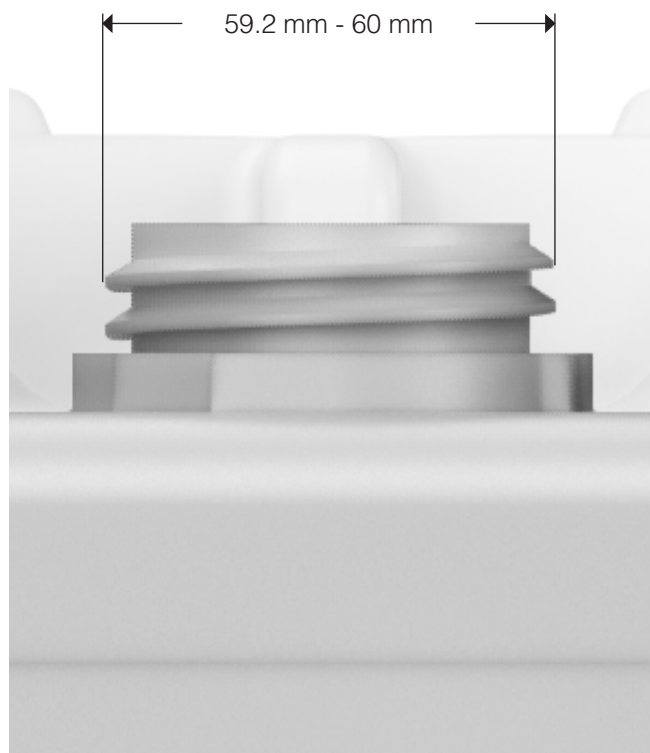
A closer look at container threads and dimensions, at 1:1 scale



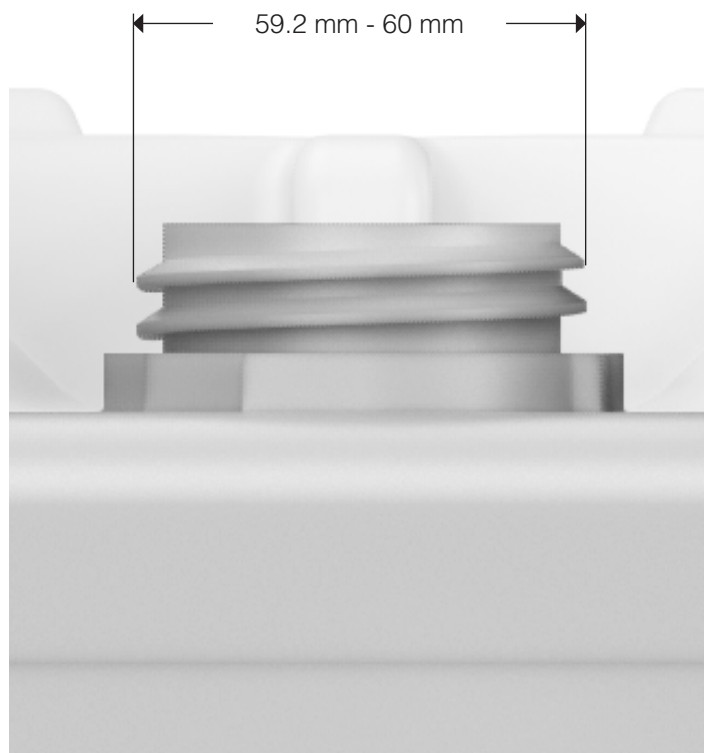
51mm
Scale 1:1



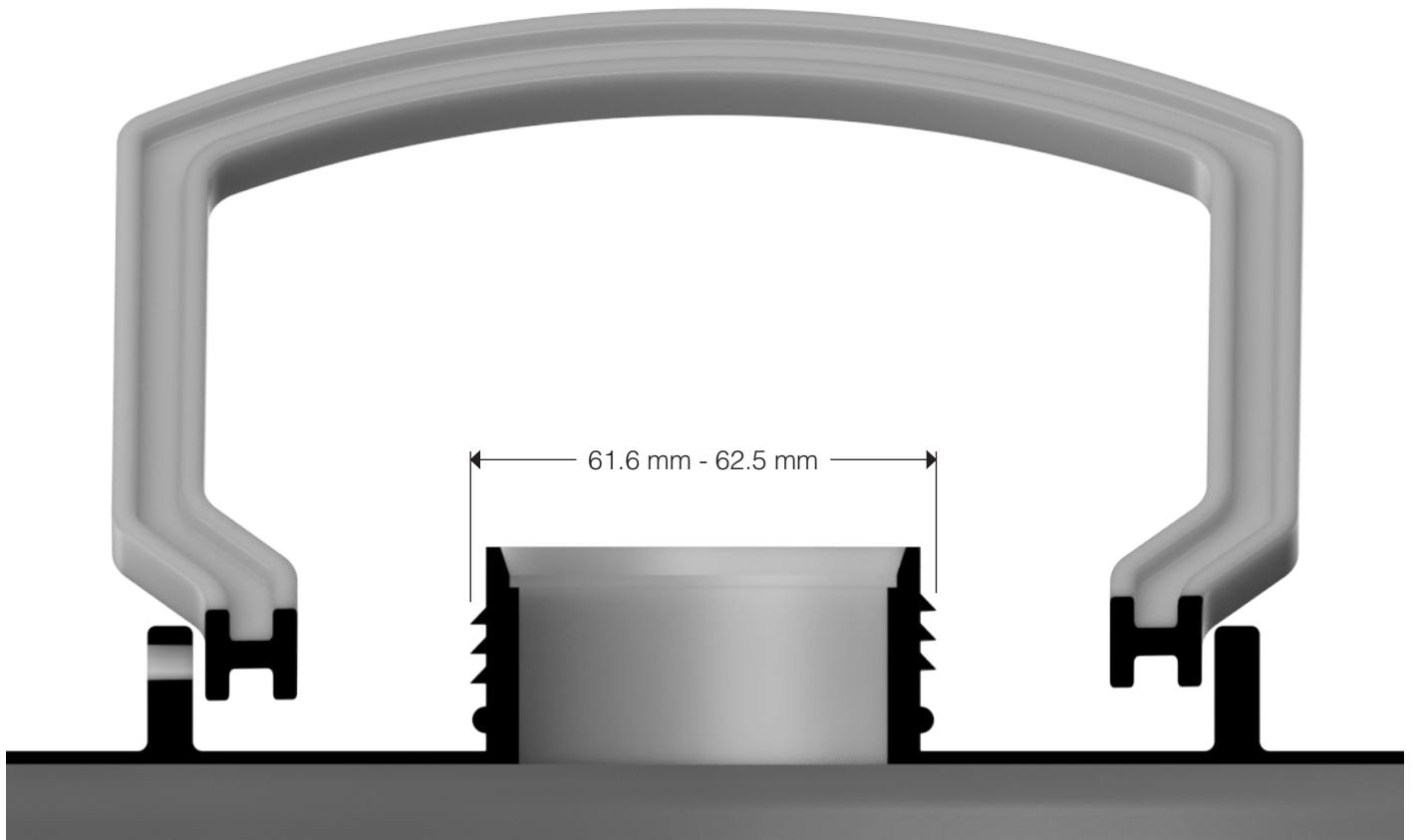
53B Nalgene
Scale 1:1



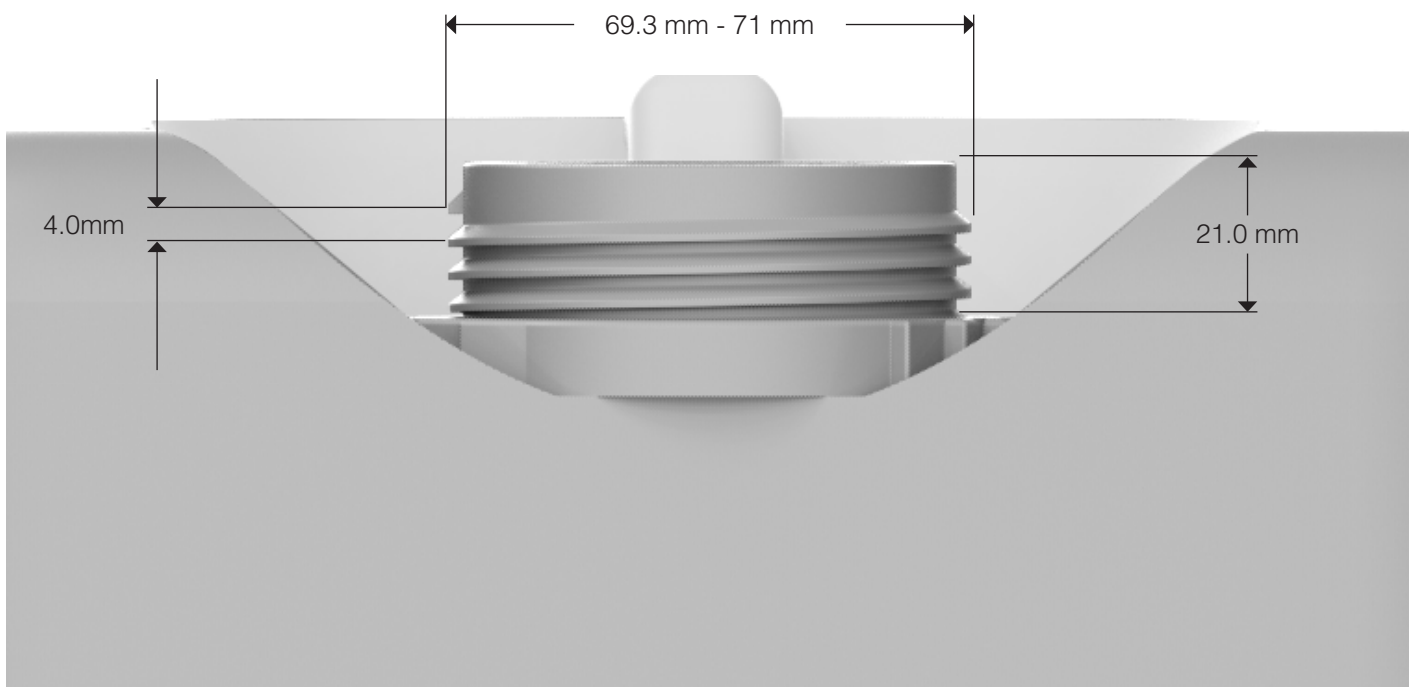
DIN60
Scale 1:1



61mm
Scale 1:1



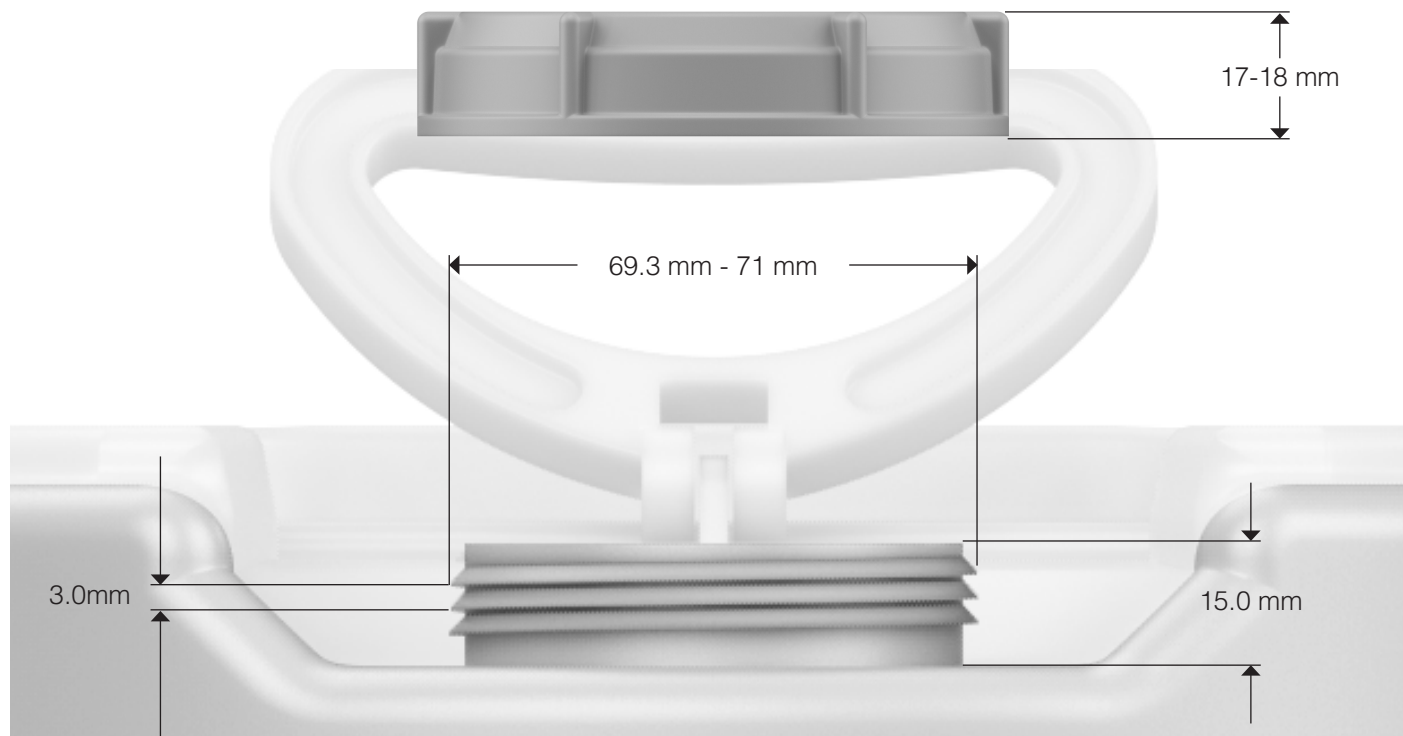
63mm Rieke / NowPak
Scale 1:1



70mm Rieke - 6TPI
Scale 1:1

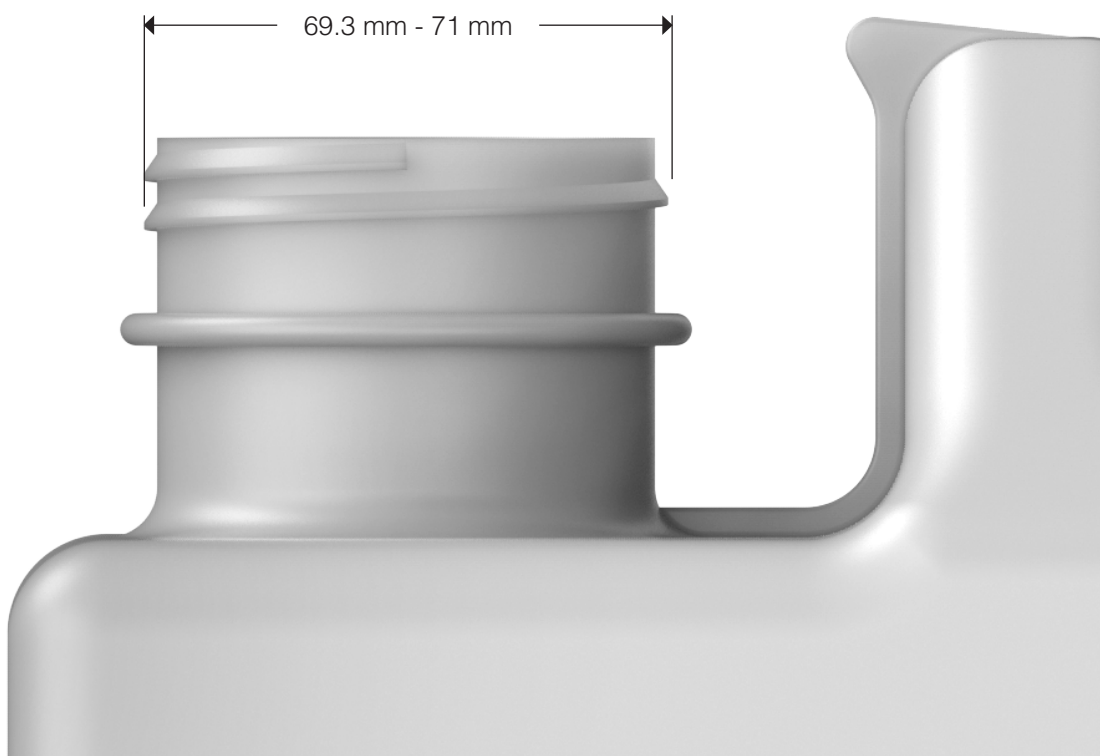
Container Types

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



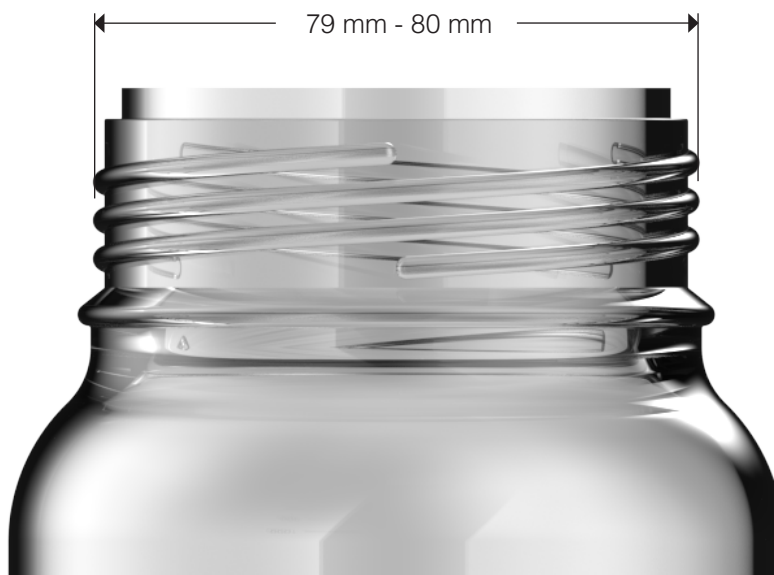
70mm Rieke - 8TPI

Scale 1:1

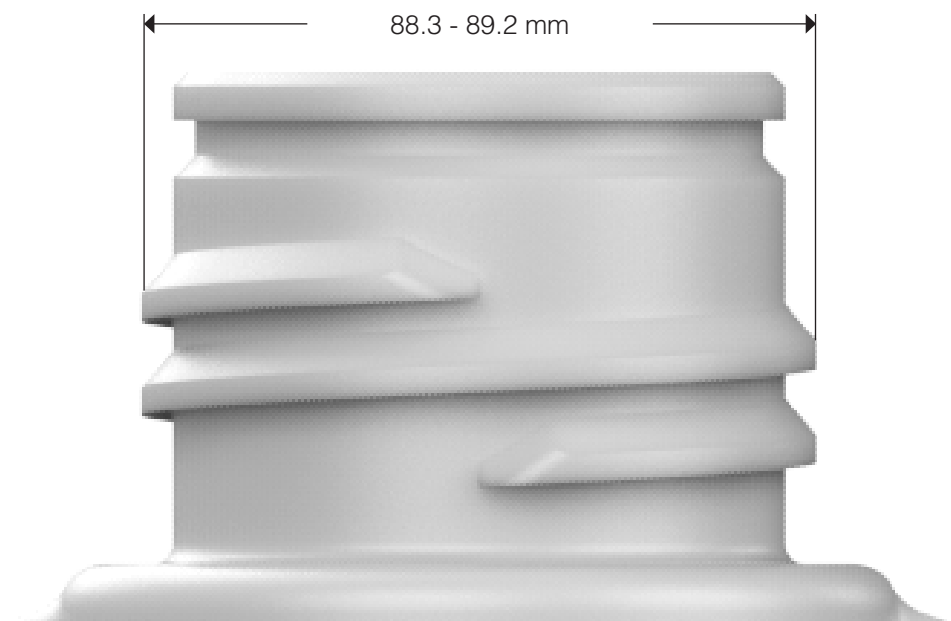


70mm Nalgene / Mason jar thread

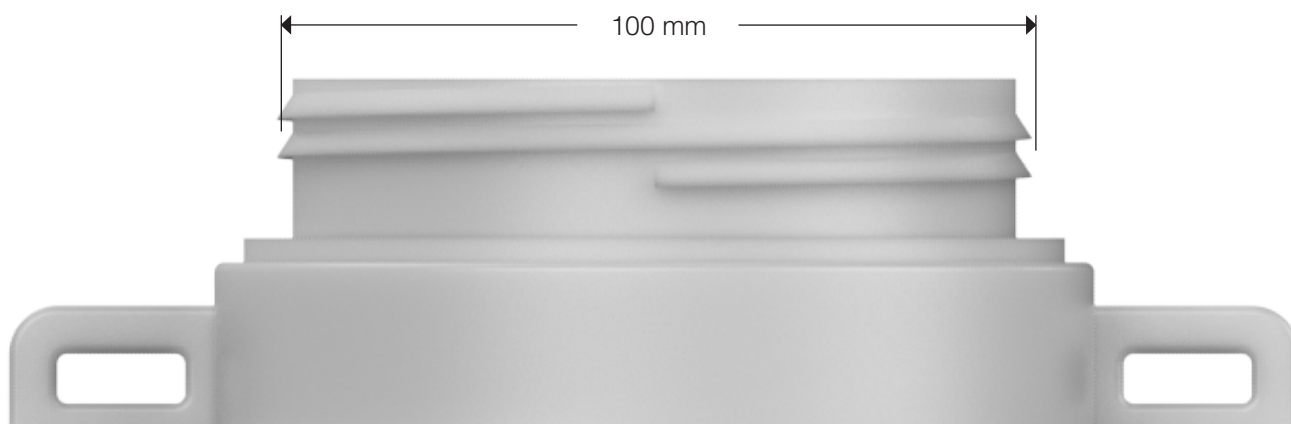
Scale 1:1



GL80 glass thread
Scale 1:1



83B Nalgene / Foxx Life Sciences
Scale 1:1



100mm (100-415) Nalgene
Scale 1:1

