

2D Labtainer BioProcess Container (BPC) systems

Small-volume liquid handling systems for cell culture and bioprocessing

Thermo Scientific™ Labtainer™ BioProcess Containers (BPCs) effectively address small-volume liquid handling needs. They range in size from 50 mL to 50 L, with a variety of standard configurations to meet most application needs. These Labtainer BPCs are space efficient, ergonomic, and constructed of Thermo Scientific™ Aegis™ 5-14 and CX5-14 films. Product configurations cover a range of industry-standard connection systems, and handling systems are available for transport and storage.

Standard products

Standard Labtainer BPCs are stocked for immediate delivery and are fully supported by our process and product validation program. For more information on our validation program, please refer to our validation guides for Aegis5-14 and CX5-14 films. Additionally, standard Labtainer BPCs have validated liquid shipping configurations.

Standard configurations can be customized for optimal fit, form, and function to address process-specific applications using one of the industry's largest libraries of qualified components.

2D Labtainer BPCs are available with the Thermo Scientific™ BioTitan™ Retention Device. This universal tubing retention solution was designed to provide the best method for retaining flexible tubing on a barbed fitting and helps eliminate the risk of leaks and failure of the tubing connection point.



Whether in standard or customized configurations, Labtainer BPCs are ideal for:

- Dispensing, packaging, and storing cell culture media, buffers, and process liquids
- Delivery of cell culture media or process liquids to small-scale bioprocess systems
- Bioreactor and fermentation feed, sampling, and harvest
- Chromatography feed and fraction collection
- Storage and transport of bulk intermediate products, process intermediates, vaccine conjugates, and other biological products

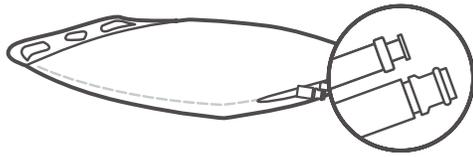


Now with ultimate
connection protection
thermofisher.com/biotitan

ThermoFisher
SCIENTIFIC

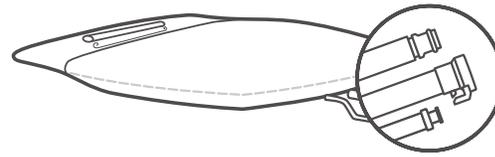
Labtainer BPC chamber details

50 mL–2 L: Polyethylene ports are welded into the BPC seam: two 1/4 in. ID ports on standard chamber.



50 mL–2 L, 2-port Labtainer BPC

2 L–50 L: Polyethylene ports are welded into the BPC seam: one 1/4 in. ID and two 3/8 in. ID ports on standard chamber.



2 L–50 L, 3-port Labtainer BPC

Table 1. Chamber information.

Volume	Empty BPC dimensions (L x W)	Nominally filled BPC dimensions (L x W x H)	Liquid-filled shipping box dimensions (No. of units, L x W x H)
50 mL	11.7 x 13.7 cm (4.6 x 5.4 in.)	11.6 x 13.9 x 1.2 cm (4.6 x 5.5 x 0.5 in.)	NA
100 mL	14.7 x 14.2 cm (5.8 x 5.6 in.)	14.4 x 13.9 x 1.2 cm (5.7 x 5.5 x 0.5 in.)	NA
250 mL	19.1 x 15.0 cm (7.5 x 5.9 in.)	19.0 x 14.7 x 1.9 cm (7.5 x 5.8 x 0.75 in.)	NA
500 mL	26.4 x 17.3 cm (10.4 x 6.8 in.)	26.4 x 16.5 x 2.5 cm (10.4 x 6.5 x 1.0 in.)	(4–10) 60.3 x 44.4 x 14.2 cm (23.75 x 17.5 x 5.6 in.)
1 L	29.7 x 20.1 cm (11.7 x 7.9 in.)	29.2 x 18.2 x 5.0 cm (11.5 x 7.2 x 2 in.)	(1) 38.7 x 27.9 x 7.3 cm (15.25 x 11 x 2.9 in.)
2 L, 2-port	34.8 x 24.4 cm (13.7 x 9.6 in.)	34.2 x 21.5 x 5.5 cm (13.5 x 8.5 x 2.2 in.)	(1) 41.2 x 26.6 x 9.1 cm (16.25 x 10.5 x 3.6 in.)
2 L, 3-port	29.5 x 31.0 cm (11.6 x 12.2 in.)	27.9 x 30.4 x 5.0 cm (11.0 x 12.0 x 2.0 in.)	(1) 41.2 x 26.6 x 9.1 cm (16.25 x 10.5 x 3.6 in.)
3 L	39.7 x 31.2 cm (15.5 x 12.3 in.)	38.1 x 29.2 x 5.7 cm (15.0 x 11.5 x 2.2 in.)	(1) 71.1 x 29.8 x 12.7 cm (28.0 x 11.75 x 5.0 in.)
5 L	37.6 x 33.3 cm (14.8 x 13.1 in.)	33.0 x 33.0 x 10.1 cm (13.0 x 13.0 x 4.0 in.)	(1) 41.2 x 32.3 x 15.8 cm (16.25 x 12.75 x 6.25 in.)
10 L	62.2 x 30.0 cm (24.5 x 11.8 in.)	58.4 x 27.9 x 11.4 cm (23.0 x 11.0 x 4.5 in.)	(1) 62.8 x 27.3 x 15.8 cm (24.75 x 10.75 x 6.25 in.)
20 L	65.5 x 43.2 cm (25.8 x 17.0 in.)	58.4 x 36.8 x 14.6 cm (23.0 x 14.5 x 5.7 in.)	(1) 64.1 x 38.7 x 19.6 cm (25.25 x 15.25 x 7.75 in.)
30 L	82.0 x 53.3 cm (32.3 x 21.0 in.)	77.4 x 49.5 x 13.3 cm (30.5 x 19.5 x 5.2 in.)	NA
50 L	82.6 x 58.4 cm (32.5 x 23.0 in.)	72.3 x 53.3 x 21.5 cm (28.5 x 21.0 x 8.5 in.)	NA

Table 2. Custom BPC options.

Description	Details
Tubing type	C-Flex™ (animal origin-free), silicone, PharMed™, or AdvantaFlex™
Tubing size	Specific lengths of 3.18–25.4 mm ID (1/8–1 in.); specific length depends on type of tubing chosen
Connectors	<ul style="list-style-type: none"> • Luer: 3.18–6.35 mm (1/8–1/4 in.) ID • CPC quick-connect: 6.35–19 mm (1/4–3/4 in.) ID • Steam-in-place connector: 6.35–19 mm (1/4–3/4 in.) ID • Tri-clamp: 3.18–25.4 mm (1/8–1 in.) ID • Mini tri-clamp: 3.18–12.7 mm (1/8–1/2 in.) ID • Aseptic connection and aseptic disconnection devices: all available sizes of Colder AseptiQuik™, Pall™ Kleenpak™, Cytiva ReadyMate™ DAC
Others	<ul style="list-style-type: none"> • Needle-free sample port (SmartSite™ or Clave™ products) • Filter capsule (Millipore™, Pall™, Sartorius™, Parker Bioscience™, Meissner™ products)

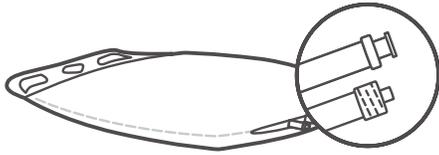
Table 3. Presentation (as dry BPC systems).

Description	Details
Outer packaging	Supplied “flat-packed”—two polyethylene outer layers
Label	<ul style="list-style-type: none"> • Description • Product code • Lot number • Expiration date on outer packaging and shipping container
Sterilization	Irradiation (25–40 kGy) inner side of outer packaging
Shipping container	Durable cardboard carton
Documentation	<ul style="list-style-type: none"> • Certificate of Analysis provided with each batch for each delivery • Certificate of Irradiation

Ordering information

2 ports

Pack of 10



Line 1

Luer lock body connection, polypropylene
Tubing: C-Flex; 8 cm (3 in.) length
ID x OD: 6.35 x 10.92 mm (0.25 x 0.43 in.)

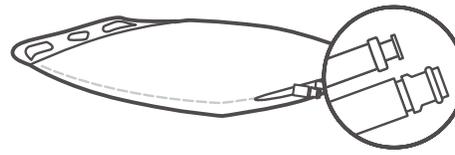
Line 2

Luer lock insert connection, polypropylene
Tubing: C-Flex; 8 cm (3 in.) length
ID x OD: 6.35 x 10.92 mm (0.25 x 0.43 in.)

Size	Dimensions (L x W)	Cat. No.
50 mL with BioTitan Retention Device	11.7 x 13.7 cm (4.6 x 5.4 in.)	Aegis5-14 film SH31292.11
		CX5-14 film SH31254.11
100 mL with BioTitan Retention Device	14.7 x 14.2 cm (5.8 x 5.6 in.)	Aegis5-14 film SH31292.12
		CX5-14 film SH31254.12
250 mL with BioTitan Retention Device	19.1 x 15.0 cm (7.5 x 5.9 in.)	Aegis5-14 film SH31292.13
		CX5-14 film SH31254.13
500 mL with BioTitan Retention Device	26.4 x 17.3 cm (10.4 x 6.8 in.)	Aegis5-14 film SH31292.14
		CX5-14 film SH31254.14
1 L with BioTitan Retention Device	29.7 x 20.1 cm (11.7 x 7.9 in.)	Aegis5-14 film SH31292.15
		CX5-14 film SH31254.15
2 L with BioTitan Retention Device	34.8 x 24.4 cm (13.7 x 9.6 in.)	Aegis5-14 film SH31292.16
		CX5-14 film SH31254.16

2 ports

Pack of 10



Line 1

Luer lock body connection, polypropylene
Tubing: C-Flex; 30 cm (12 in.) length
ID x OD: 3.18 x 6.35 mm (0.125 x 0.25 in.)

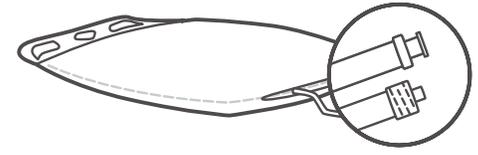
Line 2

MPC insert, polycarbonate
Tubing: C-Flex; 8 cm (3 in.) length
ID x OD: 3.18 x 6.35 mm (0.125 x 0.25 in.)

Size	Dimensions (L x W)	Cat. No.
50 mL with BioTitan Retention Device	11.7 x 13.7 cm (4.6 x 5.4 in.)	Aegis5-14 film SH31293.11
		CX5-14 film SH31256.11
100 mL with BioTitan Retention Device	14.7 x 14.2 cm (5.8 x 5.6 in.)	Aegis5-14 film SH31293.12
		CX5-14 film SH31256.12
250 mL with BioTitan Retention Device	19.1 x 15.0 cm (7.5 x 5.9 in.)	Aegis5-14 film SH31293.13
		CX5-14 film SH31256.13
500 mL with BioTitan Retention Device	26.4 x 17.3 cm (10.4 x 6.8 in.)	Aegis5-14 film SH31293.14
		CX5-14 film SH31256.14
1 L with BioTitan Retention Device	29.7 x 20.1 cm (11.7 x 7.9 in.)	Aegis5-14 film SH31293.15
		CX5-14 film SH31256.15
2 L with BioTitan Retention Device	34.8 x 24.4 cm (13.7 x 9.6 in.)	Aegis5-14 film SH31293.16
		CX5-14 film SH31256.16

2 ports

Pack of 10



Line 1

Luer lock body connection, polypropylene
Tubing: C-Flex; 30 cm (12 in.) length
ID x OD: 3.18 x 6.35 mm (0.125 x 0.25 in.)

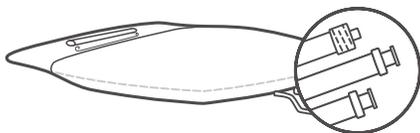
Line 2

Luer lock insert connection, polypropylene
Tubing: C-Flex; 30 cm (12 in.) length
ID x OD: 3.18 x 6.35 mm (0.125 x 0.25 in.)

Size	Dimensions (L x W)	Cat. No.
50 mL with BioTitan Retention Device	11.7 x 13.7 cm (4.6 x 5.4 in.)	Aegis5-14 film SH31265.11
		CX5-14 film SH31255.11
100 mL with BioTitan Retention Device	14.7 x 14.2 cm (5.8 x 5.6 in.)	Aegis5-14 film SH31265.12
		CX5-14 film SH31255.12
250 mL with BioTitan Retention Device	19.1 x 15.0 cm (7.5 x 5.9 in.)	Aegis5-14 film SH31265.13
		CX5-14 film SH31255.13
500 mL with BioTitan Retention Device	26.4 x 17.3 cm (10.4 x 6.8 in.)	Aegis5-14 film SH31265.14
		CX5-14 film SH31255.14
1 L with BioTitan Retention Device	29.7 x 20.1 cm (11.7 x 7.9 in.)	Aegis5-14 film SH31265.15
		CX5-14 film SH31255.15
2 L with BioTitan Retention Device	34.8 x 24.4 cm (13.7 x 9.6 in.)	Aegis5-14 film SH31265.16
		CX5-14 film SH31255.16

3 ports

Single pack



Line 1

Luer lock insert connection, polypropylene
Tubing: C-Flex; 30 cm (12 in.) length
ID x OD: 6.35 x 9.7 mm (0.25 x 0.38 in.)

Line 2

Luer lock body connection, polypropylene
Tubing: C-Flex; 30 cm (12 in.) length
ID x OD: 6.35 x 9.7 mm (0.25 x 0.38 in.)

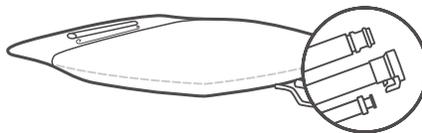
Line 3

Luer lock body connection, polypropylene
Tubing: C-Flex; 30 cm (12 in.) length
ID x OD: 3.18 x 6.35 mm (0.125 x 0.25 in.)

Size	Dimensions (L x W)	Cat. No.
2 L with BioTitan Retention Device	29.5 x 31.0 cm (11.6 x 12.2 in.)	Aegis5-14 film SH31294.05
		CX5-14 film SH31261.05
5 L with BioTitan Retention Device	37.6 x 33.3 cm (14.8 x 13.1 in.)	Aegis5-14 film SH31294.01
		CX5-14 film SH31261.01
10 L with BioTitan Retention Device	62.2 x 30.0 cm (24.5 x 11.8 in.)	Aegis5-14 film SH31294.02
		CX5-14 film SH31261.02
20 L with BioTitan Retention Device	65.5 x 43.2 cm (25.8 x 17.0 in.)	Aegis5-14 film SH31294.03
		CX5-14 film SH31261.03
50 L with BioTitan Retention Device	82.6 x 58.4 cm (32.5 x 23.0 in.)	Aegis5-14 film SH31294.04
		CX5-14 film SH31261.04

3 ports

Single pack



Line 1

MPC insert, polycarbonate
Tubing: C-Flex; 61 cm (24 in.) length
ID x OD: 9.7 x 15.9 mm (0.38 x 0.63 in.)

Line 2

MPC body, polycarbonate
Tubing: C-Flex; 61 cm (24 in.) length
ID x OD: 9.7 x 15.9 mm (0.38 x 0.63 in.)

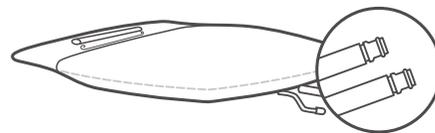
Line 3

Luer lock body connection, polypropylene
Tubing: C-Flex; 61 cm (24 in.) length
ID x OD: 3.18 x 6.35 mm (0.125 x 0.25 in.)

Size	Dimensions (L x W)	Cat. No.
2 L with BioTitan Retention Device	29.5 x 31.0 cm (11.6 x 12.2 in.)	Aegis5-14 film SH31266.05
		CX5-14 film SH31260.05
5 L with BioTitan Retention Device	37.6 x 33.3 cm (14.8 x 13.1 in.)	Aegis5-14 film SH31266.01
		CX5-14 film SH31260.01
10 L with BioTitan Retention Device	62.2 x 30.0 cm (24.5 x 11.8 in.)	Aegis5-14 film SH31266.02
		CX5-14 film SH31260.02
20 L with BioTitan Retention Device	65.5 x 43.2 cm (25.8 x 17.0 in.)	Aegis5-14 film SH31266.03
		CX5-14 film SH31260.03
50 L with BioTitan Retention Device	82.6 x 58.4 cm (32.5 x 23.0 in.)	Aegis5-14 film SH31266.04
		CX5-14 film SH31260.04

3 ports

Single pack



Line 1

MPC insert, polycarbonate
Tubing: C-Flex; 30 cm (12 in.) length
ID x OD: 9.7 x 12.7 mm (0.38 x 0.5 in.)

Line 2

MPC insert, polycarbonate
Tubing: C-Flex; 30 cm (12 in.) length
ID x OD: 9.7 x 12.7 mm (0.38 x 0.5 in.)

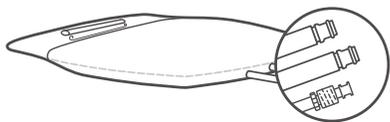
Line 3

End plug, polypropylene
Tubing: C-Flex; 8 cm (3 in.) length
ID x OD: 6.35 x 10.92 mm (0.25 x 0.43 in.)

Size	Dimensions (L x W)	Cat. No.
2 L with BioTitan Retention Device	29.5 x 31.0 cm (11.6 x 12.2 in.)	Aegis5-14 film SH31295.05
		CX5-14 film SH31262.05
5 L with BioTitan Retention Device	37.6 x 33.3 cm (14.8 x 13.1 in.)	Aegis5-14 film SH31295.01
		CX5-14 film SH31262.01
10 L with BioTitan Retention Device	62.2 x 30.0 cm (24.5 x 11.8 in.)	Aegis5-14 film SH31295.02
		CX5-14 film SH31262.02
20 L with BioTitan Retention Device	65.5 x 43.2 cm (25.8 x 17.0 in.)	Aegis5-14 film SH31295.03
		CX5-14 film SH31262.03
50 L with BioTitan Retention Device	82.6 x 58.4 cm (32.5 x 23.0 in.)	Aegis5-14 film SH31295.04
		CX5-14 film SH31262.04

3 ports

Single pack—edge ports



Line 1

MPC insert, polycarbonate
Tubing: C-Flex; 8 cm (3 in.) length
ID x OD: 9.6 x 12.7 mm (0.378 x 0.50 in.)

Line 2

MPC insert, polycarbonate
Tubing: C-Flex; 8 cm (3 in.) length
ID x OD: 9.6 x 12.7 mm (0.378 x 0.50 in.)

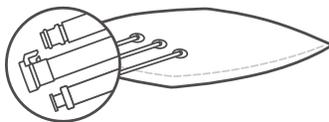
Line 3

Injection port
Tubing: C-Flex; 8 cm (3 in.) length
ID x OD: 6.35 x 9.53 mm (0.25 x 0.375 in.)

Size	Dimensions (L x W)	Cat. No.
2 L with BioTitan Retention Device	29.5 x 31.0 cm (11.6 x 12.2 in.)	Aegis5-14 film SH31296.05
		CX5-14 film SH31259.05
5 L with BioTitan Retention Device	37.6 x 33.3 cm (14.8 x 13.1 in.)	Aegis5-14 film SH31296.01
		CX5-14 film SH31259.01
10 L with BioTitan Retention Device	62.2 x 30.0 cm (24.5 x 11.8 in.)	Aegis5-14 film SH31296.02
		CX5-14 film SH31259.02
20 L with BioTitan Retention Device	65.5 x 43.2 cm (25.8 x 17.0 in.)	Aegis5-14 film SH31296.03
		CX5-14 film SH31259.03
50 L with BioTitan Retention Device	82.6 x 58.4 cm (32.5 x 23.0 in.)	Aegis5-14 film SH31296.04
		CX5-14 film SH31259.04

3 ports

Single pack—pillow design with
panel ports



Line 1

MPC insert, polycarbonate
Tubing: C-Flex; 46 cm (18 in.) length
ID x OD: 3.18 x 6.35 mm (0.125 x 0.25 in.)

Line 2

MPC body, polypropylene
Tubing: C-Flex; 61 cm (24 in.) length
ID x OD: 9.53 x 15.875 mm (0.375 x 0.625 in.)

Line 3

Luer lock body connection, polypropylene
Tubing: C-Flex; 61 cm (24 in.) length
ID x OD: 9.53 x 15.875 mm (0.375 x 0.625 in.)

Size	Outer container Cat. No.	Cat. No.
50 L with BioTitan Retention Device	SV50076.02	CX5-14 film SH31257.01
100 L with BioTitan Retention Device	SV50076.03	CX5-14 film SH31257.02
200 L with BioTitan Retention Device	SV50076.04	CX5-14 film SH31257.03

Note: Aegis5-14 film equivalents for this product are available as custom configurations.

Outer support containers

Industry-standard Rubbermaid™ totes with corresponding lids are available. They can be used to protect Labtainer BPCs up to 20 L in size during use, transport, and storage. Use standard 50 L drums for 50 L Labtainer BPCs.

Description	Dimensions (L x W x H)	Capacity	Rubbermaid Cat. No.	Cat. No.
Tray	66 x 46 x 15 cm (26 x 18 x 6 in.)	32.2 L	3508-white	SV50163.01
Lid	66 x 46 cm (26 x 18 in.)	NA	3502-white	SV50163.02
Flat-bottom LLDPE drum with lid	44 x 51 cm (17 x 20 in.)	50 L	NA	SV50076.02



Tray with lid



Flat-bottom, linear low-density polyethylene (LLDPE) drum with lid

Find out more at thermofisher.com/bpc

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