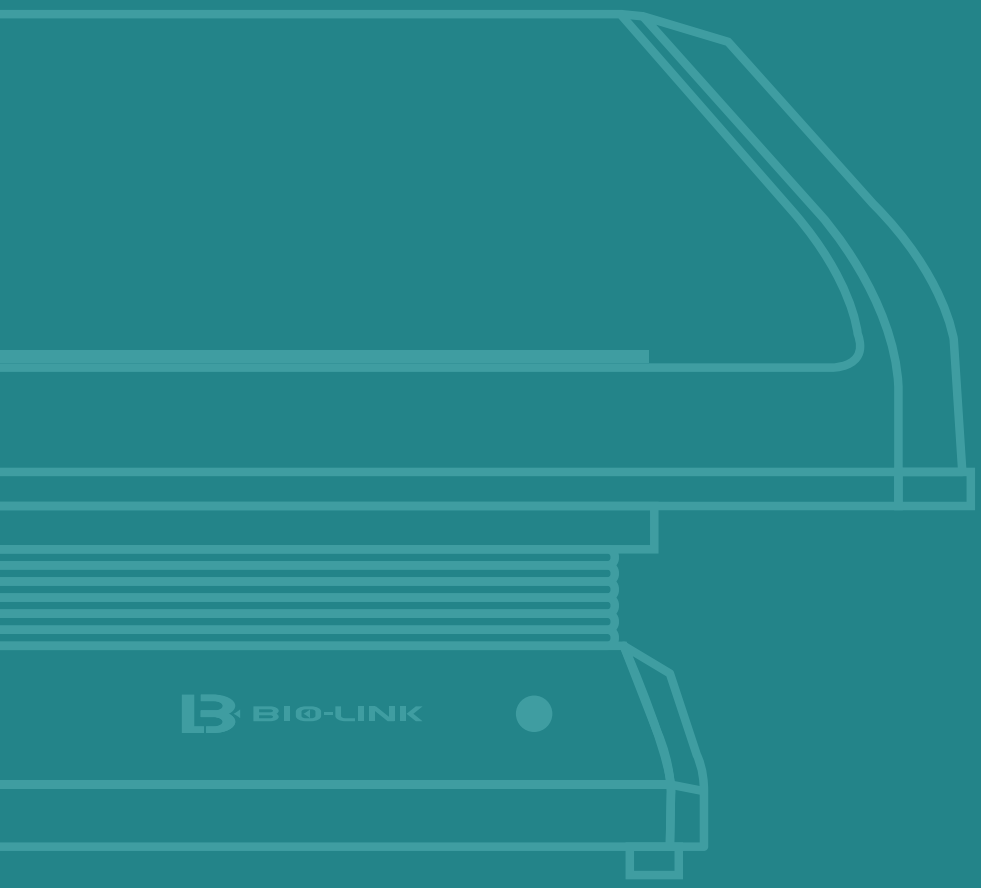
BIO-LINK
百林科

CytoLinX® WB

Single-Use Rocking Bioreactor



CytoLinX® WB Single-Use Rocking Bioreactor

CytoLinX® WB Single-Use Rocking Bioreactor is available in a variety of models, including 10 L, 20 L, and 50 L for 0.3–25 L culture volumes, and 100 L and 200 L for 10–100 L culture volumes. During the culture process, introduce air/oxygen (filtered by a sterile filter) into the culture bag to obtain a certain space. Place the culture bag on the rocking platform to rock, and the medium will form a rocking movement in the culture bag. Such design enables good oxygen supply and cell mixing, as well as a mild cell culture microenvironment with low shear force and high dissolved oxygen. This improves the cell status by protecting them from damage due to the shear force and bubbling at the impeller ends in traditional mixing vessels. As a result, the undulating fluid level of the medium is constantly in contact with the oxygen introduced into the culture bag, providing sufficient dissolved oxygen for cell growth. Cell density and product yield can be increased by adjusting the shaking speed and angle, and by introducing a certain ratio of air/oxygen mixture into the bag. Featured by flexible culture volume range, easy operation, precise and reliable control, and easy process scale-up, the Rocking Bioreactors are suitable for various cell culture conditions, including scientific research, research and development, in-process seed culture, and new therapies, such as cell therapy.

The Rocking Bioreactor works with pre-irradiated sterile cell culture bags, eliminating the risk of contamination and avoiding bioreactor cleaning and validation, thus shortening process development and production cycles. The use of a sterile cell culture bag increases the success rate of cell culture, and the closed culture system avoids direct contact between the feed liquid and the operator so as to ensure biological safety.

Figure 1. CytoLinX® WB Single-Use Rocking Bioreactor

CytoLinX® WB is controlled by Siemens PLC. The advanced PID feedback control and the optical compensation of fiber optic electrodes further improve the stability and reliability of cell culture. With precise detection and feedback regulation, the cell culture process is monitored from all aspects together with data acquisition, data analysis, data comparison, and report printing are also available. The software is user-friendly, easy to operate, and compliant with 21 CFR Part 11.

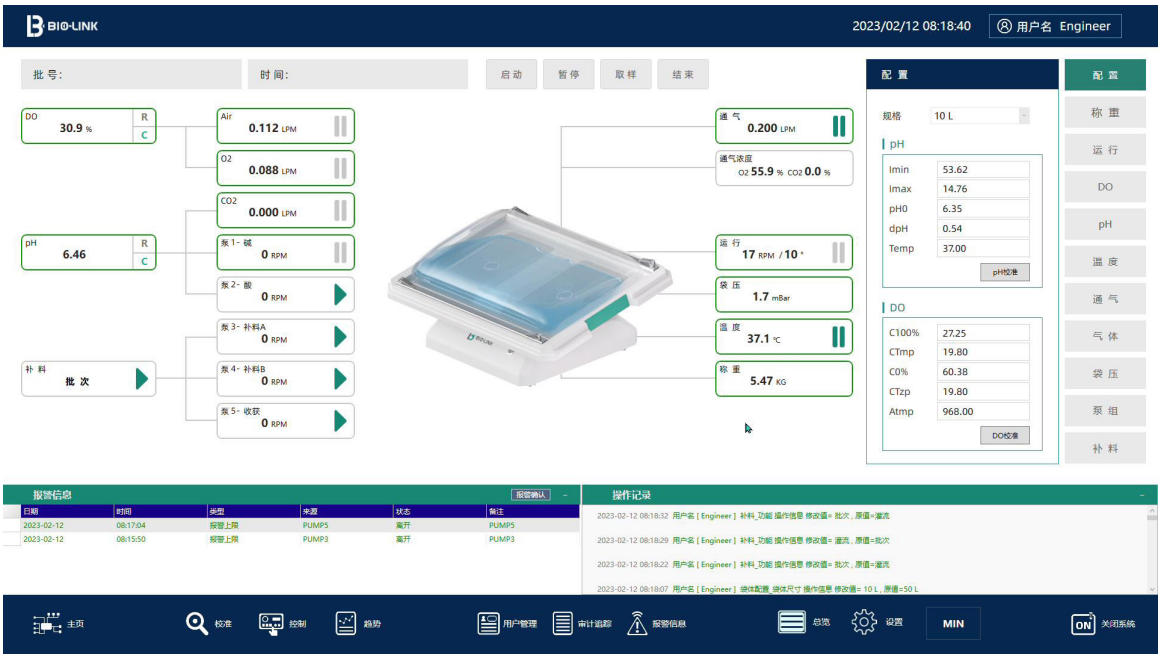


Figure 2. CytoLinX® WB Single-Use Rocking Bioreactor user interface

Features

- The software interface is easy to operate, stable to run, and supports audit trail
- Supports easy switching among 10 L, 20 L, and 50 L trays. The bags and the trays can be mounted easily and rapidly without removing screws
- Supports perfusion and automatic calibration of pump flow rate for accurate feeding and harvesting
- Ventilation, pH/DO, and perfusion modules are optional, depending on process requirements
- Supports DO-associated N_2 reverse regulation for a wide range of applications, which helps to control cell state more accurately for cell therapy customers
- With variable frequency speed regulation, the shaking mode is adjustable to further reduce the shear force and achieve a mild cell culture process
- Precise measurement of gases with mass flow controllers (MFC)
- The whole device is equipped with monitoring alarm and protection functions for automatic fault sensing, diagnosis, and alerts
- Several types of consumables are available, including the basic type, the pH & DO electrode type, and the perfusion type
- Rich application and operation support, and high-speed response speed
- Fast delivery and flexible customization

Standard Configuration of CytoLinX® WB Rocking Bioreactor

Accessory	Unit	Range	Accuracy
Weighing	KG	0-30	±0.05
Rotation speed	RPM	2-40	±1
Angle	°	2-14	±0.5
pH	NA	4.5-8.5	±0.05
DO	%	0-200	±5.0
Temperature	℃	Room temperature -60	±0.2
Vessel Press	mbar	0-69	±1% FS
Exhaust Heating	℃	45-60	±5
Pump	RPM	0-300	±0.8% FS
Air MFC Air	SLPM	0.01%-100%	±0.5% FS
O_2 MFC O_2	SLPM	0.01%-100%	±0.5% FS
CO_2 MFC CO_2	SLPM	0.01%-100%	±0.5% FS

Ordering Information

Cat. No.	Name	Configuration						Cuture volume (L)
		Rocking base	Central control unit	Process control unit	Pump unit	Exhaust heating sleeve	Tray lid	
CWB050LA-001	CytoLinX®WB Rocking Bioreactor (pH&DO function) - 50 L tray	CWBRBU050LA*1	CWBCCU050LA*1	CWBPCU050LA-001*1	CWBPGU050L*1	CWBEHU050L*1	CWBTL050L*1	1-25 L
CWB020LA-001	CytoLinX®WB Rocking Bioreactor (pH&DO function) - 20 L tray	CWBRBU050LA*1	CWBCCU050LA*1	CWBPCU050LA-001*1	CWBPGU050L*1	CWBEHU050L*1	CWBTL020L*1	0.3-10 L
CWB010LA-001	CytoLinX®WB Rocking Bioreactor (pH&DO function) - 10 L tray	CWBRBU050LA*1	CWBCCU050LA*1	CWBPCU050LA-001*1	CWBPGU050L*1	CWBEHU050L*1	CWBTL010L*1	0.3-5 L
CWB050LB-001	CytoLinX®WB Rocking Bioreactor (pH&DO function & perfusion function) - 50 L tray	CWBRBU050LA*1	CWBCCU050LA*1	CWBPCU050LA-001*1	CWBPGU050L*2	CWBEHU050L*1	CWBTL050L*1	1-25 L
CWB020LB-001	CytoLinX®WB Rocking Bioreactor (pH&DO function & perfusion function) - 20 L tray	CWBRBU050LA*1	CWBCCU050LA*1	CWBPCU050LA-001*1	CWBPGU050L*2	CWBEHU050L*1	CWBTL020L*1	0.3-10 L
CWB010LB-001	CytoLinX®WB Rocking Bioreactor (pH&DO function& perfusion function) - 10 L tray	CWBRBU050LA*1	CWBCCU050LA*1	CWBPCU050LA-001*1	CWBPGU050L*2	CWBEHU050L*1	CWBTL010L*1	0.3-5 L
CWB050LC-001	CytoLinX®WB Rocking Bioreactor (without pH&DO function) - 50 L tray	CWBRBU050LA*1	CWBCCU050LA*1	CWBPCU050LA-001*1	×	CWBEHU050L*1	CWBTL050L*1	1-25 L
CWB020LC-001	CytoLinX®WB Rocking Bioreactor (without pH&DO function) - 20 L tray	CWBRBU050LA*1	CWBCCU050LA*1	CWBPCU050LA-001*1	×	CWBEHU050L*1	CWBTL020L*1	0.3-10 L
CWB010LC-001	CytoLinX®WB Rocking Bioreactor (without pH&DO function) - 10 L tray	CWBRBU050LA*1	CWBCCU050LA*1	CWBPCU050LA-001*1	×	CWBEHU050L*1	CWBTL010L*1	0.3-5 L
CWB050LD-001	CytoLinX®WB Rocking Bioreactor (one-way rocking and temperature) - 50 L tray	CWBRBU050LA*1	CWBCCU050LB*1	×	×	CWBEHU050L	CWBTL050L*1	1-25 L
CWB020LD-001	CytoLinX®WB Rocking Bioreactor (one-way rocking and temperature) - 20 L tray	CWBRBU050LA*1	CWBCCU050LB*1	×	×	CWBEHU050L	CWBTL020L*1	0.3-10 L
CWB010LD-001	CytoLinX®WB Rocking Bioreactor (one-way rocking and temperature) - 10 L tray	CWBRBU050LA*1	CWBCCU050LB*1	×	×	CWBEHU050L	CWBTL010L*1	0.3-5 L

- Product sequence: 001 is for standard configuration; other numbers are for customized products.

CytoLinX® WB Single-Use Cell Culture Bag

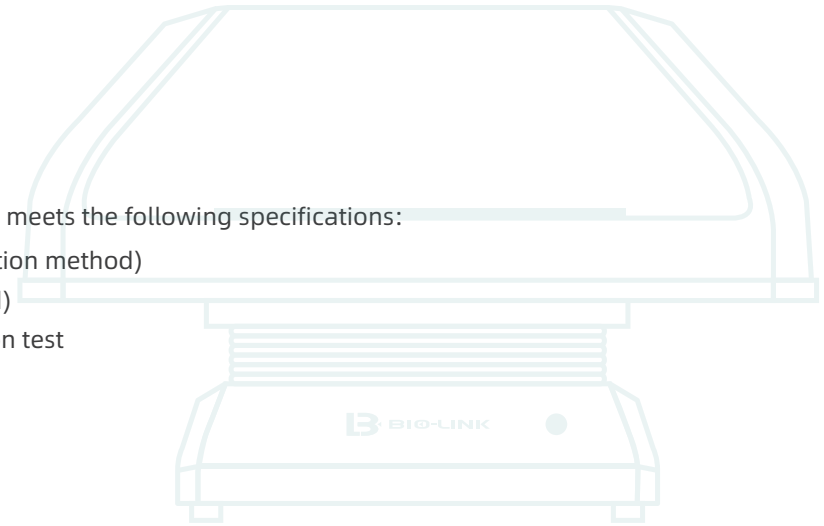
Single-use processes are widely used in the biopharmaceutical field. These processes are being accepted and used by more and more biopharmaceutical companies due to their advantages of small fixed investment, reduced production time, low contamination risk, and flexible operation. BioLink CytoLinX® WB Single-Use Cell Culture Bag is specially designed for common cell culture applications in biopharmaceutical development.

Applications

Suitable for various cell culture conditions, including scientific research, research and development, in-process seed culture, and new therapies, such as cell therapy. Works with the rocking cell culture systems of BioLink or other major suppliers in the market.

Features

- Easy use: This product is sterile for single use, providing a safe and suitable environment for cell growth, with the features of easy installation and operation
- Good stability: The bags are composed of co-extruded multi-layer films with excellent flexibility and low gas penetration rate, and are suitable for long-term cell culture
- High cell density: The perfusion function enables the high-density cell culture in a faster manner
- Good biosafety: The material-liquid contact layer is biologically inert and can guarantee process safety
- Flexible application conditions: The bags can be used at 10-60 ° C and under operating pressures up to 0.1 bar; the bags are available in various sizes to support culture volumes from 300 mL to 100 L
- Wide selection of bag type: BioLink provides cell bags for standard operation, cell therapy, and complex use; optional selections include the basic configuration, for pH & DO, perfusion, and pH & DO & perfusion
- Flexible customization of tubings, connectors, and other units to meet the needs of customers
- Complete validation documents:
  - Sterility test
  - Bacterial endotoxin test
  - Integrity test
  - Extractable test
  - Chemical compatibility test
  - The biocompatibility of gamma-irradiated bags meets the following specifications:
    1) ISO 10993-4: In vivo hemolysis test (extraction method)
    2) USP87: Cytotoxicity test (extraction method)
    3) USP <88> Class VI intramusclar implantation test
    4) USP88: Acute intracutaneous test
    5) USP88: Acute systemic toxicity test



Technical Parameters :

FL9101 multilayer co-extruded film, ULDPE liquid contact layer

	Item	Test value (> 25 kGy after sterilization by gamma irradiation)	Reference
Physical properties	Haze	7%	ASTM D-1003
	Transmittance	97%	ASTM D-1003
	Transmissivity	93%	ASTM D-1003
	Minimum tolerable temperature	-40 ℃	ISO 8570
	Density	0.9 g/cm^3	ASTM D-792
Mechanical properties	Tensile strength	13 MPa	ASTM D-882
	Elongation at break	300%	ASTM D-882
	Elastic modulus	350 MPa	ASTM D-882
	Right-angled tearing strength	29N	ASTM D1004-21
Barrier properties	Water vapor transmission rate	0.32 g (m^2·day)	ASTM F1249
	Oxygen permeability	< 0.05 cm^3/(m^2·day·bar)	ASTM D3985
	Carbon dioxide permeability	< 0.2 cm^3/(m^2·day·bar)	ASTM F2476
Pass USP <661> plastic packaing system test			
Comply with the Chinese Pharmacopoeia (2020 Edition) <0903> (same as USP <788>) "Test for Particulate Matter in Injections" , and the result meets the requirements for large-volume (≥ 100 mL) intravenous injection.			
Comply with the Chinese Pharmacopoeia (2020 Edition) <1143> (same as USP <85>) "Test for Bacterial Endotoxin" , and the result is ≤ 25 EU/mL, meeting the requirements for hydration products.			
No animal-derived ingredients in the components and during the production process			

FL140C multilayer co-extruded film, EVA liquid contact layer

	Item	Test value (> 25 kGy after sterilization by gamma irradiation)	Reference
Physical properties	Haze	89%	ASTM D1003
	Transmittance	31%	ASTM D1003
	Transmissivity	88%	ASTM D882
	Minimum tolerable temperature	Below -40 ℃	ASTM D1790
	Density	0.96 g/cm^3	ASTM D792
Mechanical properties	Tensile strength	17 MPa	ASTM D882
	Elongation at break	800%	ASTM D882
	Elastic modulus	94 MPa	ASTM D882
	Puncture resistance	42N	ASTM F1306-21
	Right-angled tearing strength	21N	ASTM D1004-21
	Rubbing resistance (23±2° C, 49% RH, rubbed 270 times)	0 hole	ASTM F392/F392M-2011
	Oxygen permeation after 270 rubs (23±2° C, 0% RH, rubbed 270 times)	3.24 cm^3/(m^2 · day ·1bar)	GB/T1038-2000
Barrier properties	Water vapor transmission rate 1.58g	1.58 g/（m^2·day） （23 ℃ ,100%RH)	ASTM F1249
	Oxygen permeability	3.40 cm^3/(m^2·day·0.1MPa)	ASTM D3985
	Carbon dioxide permeability	8.25 cm^3/(m^2·day·0.1MPa)	ASTM F2476
Pass USP<661> plastic packaging system test			
Comply with the Chinese Pharmacopoeia (2020 Edition) <0903> (same as USP <788>) "Test for Particulate Matter in Injections" , and the result meets the requirements for large-volume （≥ 100mL) intravenous injection.			
Comply with the Chinese Pharmacopoeia (2020 Edition) <1143> (same as USP <85>) "Test for Bacterial Endotoxin" , and the result is ≤ 0.25 EU/mL， meeting the requirements for hydration products.			
No animal-derived ingredients in the components and during the production process			

A standard CytoLinX® WB Cell Culture Bag consists of the following units

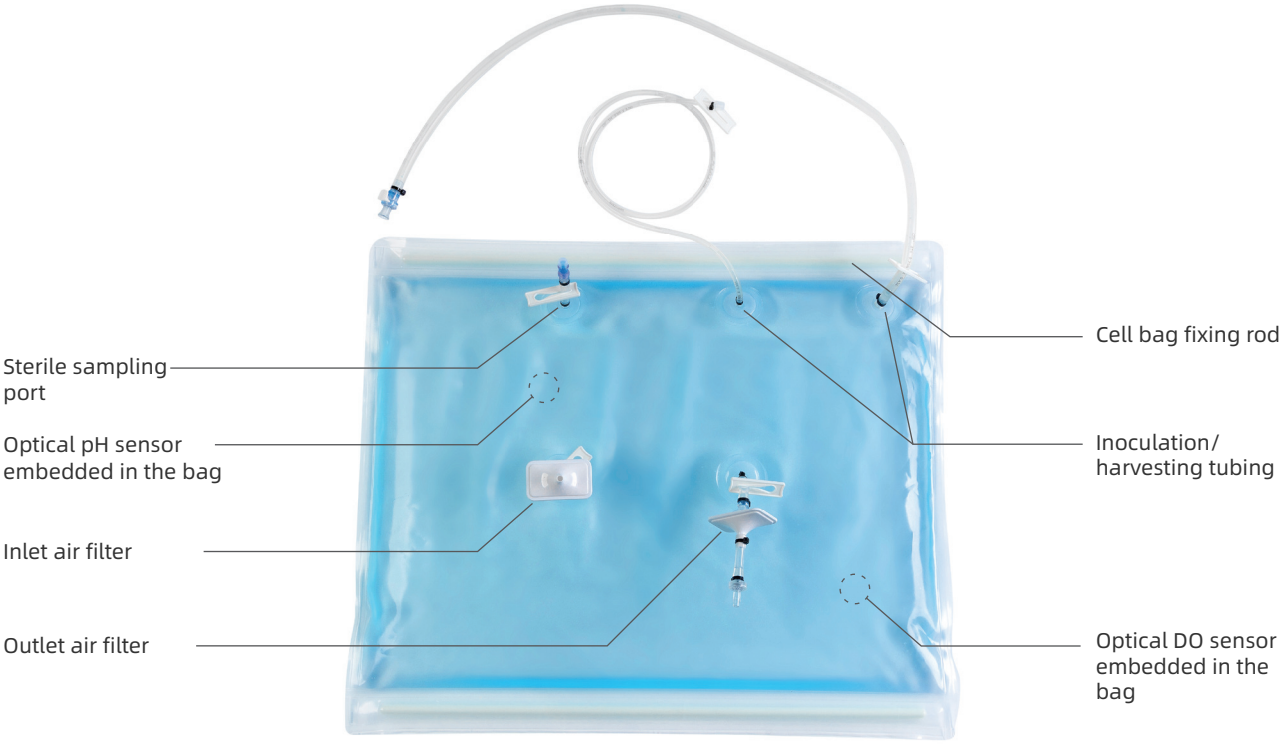


Figure 3. Schematic diagram of standard cell bag

- Sterile sampling port: for convenient aseptic sampling, no biological safety cabinet needed;
- Inlet and outlet air filter: 0.2μm hydrophobic membrane used for aseptic gas inlet and outlet;
- pH & DO sensor: pH & DO sensor controlled with PID automation can better maintain a suitable cell growth environment;
- Cell bag fixing rod: secures the cell bag to the tray of the Rocking Bioreactors;
- Inoculation/harvesting tubing: allows medium and cells to go in and out of the cell bag.

Operational Volume and Hardware Compatibility of Cell Culture Bag

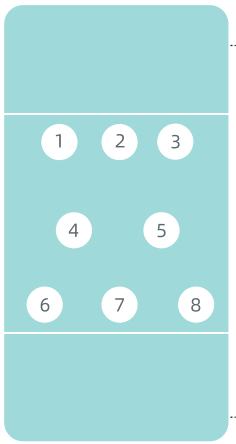
Bag volume	Min. to max. culture volume	Compatible system	Corresponding tray
2 L	300 mL–1 L	CytoLinX® WB 50	Tray 10/20
10 L	500 mL–5 L		Tray 10/20
20 L	1 L–10 L		Tray 20
22 L	1 L–10 L		Tray 50
50 L	5 L–25 L		Tray 50
100 L	10 L–50 L	CytoLinX® WB 200	Tray 100/200
200 L	20 L–100 L		Tray 200

* The minimum culture volume for 2 L pH & DO & perfusion cell bag is 400 mL

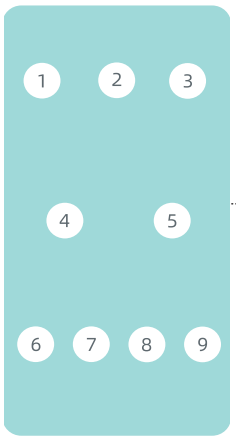
Ordering Information:

For antibodies and proteins

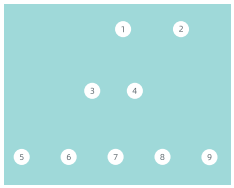
FL9101 multilayer co-extruded film, ULDPE liquid contact layer

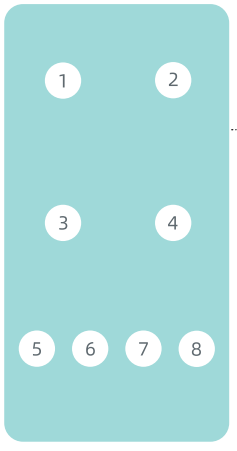
Volume	Version	Cat. No.	Configuration	
2L 	Basic cell bag	WBAP-002L-C104	1.2.3 NA 4.5 Air filter 6. Silicone 1/4 id*7/16 od*100 cm, female Luer and plug	7. NA 8. Silicone 1/4 id*7/16 od*5cm, needless sampling
	pH & DO cell bag	WBAP-002L-C209	1. Silicone 1/4 id*7/16 od*100 cm & C-Flex*60 cm, plug 2. NA 3. C-Flex 1/8 id*1/4 od*100 cm, female Luer and plug C-Flex 1/8 id*1/4 od*100 cm, female Luer and plug	4.5 Air filter 6.7 pH, DO sensor 8. Silicone 1/4 id*7/16 od*5 cm, needless sampling
	Perfusion cell bag	WBAP-002L-C306	1. NA 2. Y-connector (attached to perfu sion filter) C-Flex 1/8 id*1/4 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug 3. C-Flex 1/8 id*1/4 od*100 cm, female Luer Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer	4.5 Air filter 6. Silicone 1/4 id*7/16 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag 7. NA 8. Silicone 1/4 id*7/16 od*5cm, needless sampling
	pH & DO & Perfusion cell bag	WBAP-002L-C407	1. Silicone 1/4 id*7/16 od *100 cm & C-Flex*60cm, plug 2. Y-connector (attached to perfu sion filter) C-Flex 1/8 id*1/4 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug 3. C-Flex 1/8 id*1/4 od*100 cm, female Luer Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer	4.5 Air filter 6.7 pH, DO sensor 8. Silicone 1/4 id*7/16 od*5 cm, needless sampling

* All connected by non-adjustable straight connectors

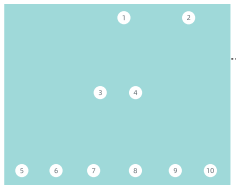
Volume	Version	Cat. No.	Configuration			
10L 	Basic cell bag	WBAP-010L-C104	1.2.3	NA		
			4.5	Air filter		
			6.	C-Flex 1/4 id *7/16 od*100cm, female MPC	8.	Silicone 3/16 id*3/8 od*5 cm, needleless sampling
			7.	C-Flex 1/8 id *1/4 od*100 cm, female Luer	9.	NA
	pH & DO cell bag	WBAP-010L-C207	1.	C-Flex 1/8 id*1/4 od*100 cm, female Luer and plug C-Flex 1/8 id*1/4 od*100 cm, female Luer and plug		
			2.	NA	7.8	pH, DO sensor
			3.	C-Flex 1/4 id *7/16 od*100 cm,plug	9.	Silicone 1/4 id *7/16 od *5 cm, needless sampling
			4.5	Air filter		
			6.	Silicone 1/4 id *7/16 od*100 cm& C-Flex*60 cm, plug, extended tube inside the bag		
	Perfusion cell bag	WBAP-010L-C306	1.	NA	6.	Silicone 1/4 id*7/16 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag
			2.	Y-connector (attached to perfusion filter) C-Flex 1/8 id*1/4 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug	7.	Silicone 1/4 id *7/16 od *5 cm, needless sampling
					8.	C-Flex 1/8 id*1/4 od*100 cm, female Luer Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer
			3.	C-Flex 1/4 id*7/16 od*100 cm, plug		
			4.5	Air filter	9.	NA
	pH & DO & Perfusion cell bag	WBAP-010L-C407	1.	NA	6.	Silicone 1/4 id*7/16 od*100 cm & C-Flex*60 cm, plug
			2.	Y-connector (attached to perfusion filter) C-Flex 1/8 id*1/4 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug	7.8	pH, DO sensor
					9.	Silicone 1/4 id *7/16 od *5 cm, needless sampling
			3.	C-Flex 1/8 id*1/4 od*100 cm, female Luer and plug Silicone 1/8 id*1/4 od*100cm & C-Flex *60 cm, female Luer and plug		
			4.5	Air filter		

* All connected by non-adjustable straight connectors

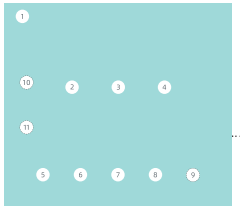
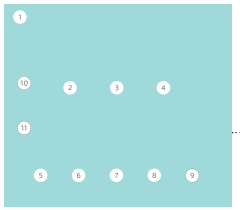
Volume	Version	Cat. No.	Configuration			
20L 	Basic cell bag	WBAP-020L-C104	1.2	NA	7.	Silicone 1/4 id*7/16 od*5 cm, needleless sampling
			3.4	Air filter	8.9	NA
			5.	C-Flex 3/8 id *5/8 od*100 cm, female MPC		
			6.	C-Flex 1/8 id *1/4 od*100 cm, female Luer		
	pH & DO cell bag	WBAP-020L-C207	1.	NA	6.7	pH, DO sensor
			2.	C-Flex 3/8 id *5/8 od*100 cm, plug	8.	Silicone 1/4 id*7/16 od*5 cm, needless sampling
			3.4	Air filter	9.	C-Flex 1/8 id*1/4 od*100 cm, female Luer and plug
			5.	Silicone 3/8 id *5/8 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag		C-Flex 1/8 id*1/4 od*100 cm, female Luer and plug
	Perfusion cell bag	WBAP-020L-C306	1.	Y-connector (attached to perfusion filter) C-Flex 1/8 id*1/4 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug	5.	Silicone 3/8 id*5/8 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag
					6.	Silicone 1/4 id*7/16 od*5 cm, needleless sampling
					7.	C-Flex 1/8 id*1/4 od*100 cm, female Luer Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer
			2.	C-Flex 3/8 id*5/8 od*100 cm, plug	8.9	NA
			3.4	Air filter		
	pH & DO & Perfusion cell bag	WBAP-020L-C407	1.	Y-connector (attached to perfusion filter) C-Flex 1/8 id*1/4 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug	5.	Silicone 3/8 id*5/8 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag
					6.	Silicone 1/4 id*7/16 od*5 cm, needleless sampling
					7.8	pH, DO sensor
					9.	C-Flex 1/8 id*1/4 od*100 cm, female Luer and plug C-Flex 1/8 id*1/4 od*100 cm, female Luer and plug
			2.	C-Flex 3/8 id*5/8 od*100 cm, plug		
			3.4	Air filter		

Volume	Version	Cat. No.	Configuration			
22L 	Basic cell bag	WBAP-022L-C104	1.2	NA	7.	Silicone 1/4 id*7/16 od*5 cm, needleless sampling
			3.4	Air filter	8.9	NA
			5.	C-Flex 3/8 id *5/8 od*100 cm, female MPC		
			6.	C-Flex 1/8 id *1/4 od*100 cm, female Luer		
	pH & DO cell bag	WBAP-022L-C207	1.	C-Flex 3/8 id *5/8 od*100 cm, plug	6.7	pH, DO sensor
			2.	C-Flex 1/8 id*1/4 od*100 cm, female Luer and plug C-Flex 1/8 id*1/4 od*100 cm, female Luer and plug	8.	Silicone 1/4 id*7/16 od*5 cm, needless sampling
			3.4	Air filter		
			5.	Silicone 3/8 id *5/8 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag		

* All connected by non-adjustable straight connectors

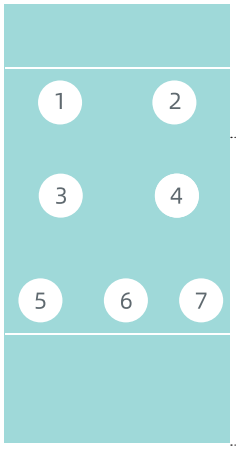
Volume	Version	Cat. No.	Configuration		
50L 	Basic cell bag	WBAP-050L-C104	1.2	NA	
			3.4	Air filter	
			5.	C-Flex 3/8 id *5/8 od*100 cm, female MPC and plug	
		WBAP-050L-S104	6.	C-Flex 1/8 id *1/4 od*100 cm, female Luer and plug	
			7.	Silicone 1/4 id*7/16 od*5 cm, needleless sampling	
			8.	NA	
			9.10	NA	
	pH & DO cell bag	WBAP-050L-C207	1.10	C-Flex 3/8 id *5/8 od*100 cm, plug	
			2.	NA	
			3.4	Air filter	
		WBAP-050L-S207	5.	Silicone 3/8 id *5/8 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag	
			6.7	pH, DO sensor	
			8.	Silicone 1/4 id*7/16 od*5 cm, needless sampling	
			9.	C-Flex 1/8 id*1/4 od*100 cm, female Luer and plug	
				C-Flex 1/8 id*1/4 od*100 cm, female Luer and plug	
	Perfusion cell bag	WBAP-050L-C306	1.	Y-connector (attached to perfusion filter)	
				C-Flex 1/8 id*1/4 od*6 cm, needleless sampling	
				Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug	
		WBAP-050L-S306	2.	C-Flex 3/8 id*5/8 od*100 cm, plug	
			3.4	Air filter	
			5.	Silicone 3/8 id*5/8 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag	
			6.	Silicone 1/4 id*7/16 od*5 cm, needleless sampling	
			7.8.9	NA	
			10.	C-Flex 1/8 id*1/4 od*100 cm, female Luer and plug	
				Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer and plug	
	pH & DO & Perfusion cell bag	WBAP-050L-C407	1.	Y-connector (attached to perfusion filter)	
				C-Flex 1/8 id*1/4 od*6 cm, needleless sampling	
				Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug	
		WBAP-050L-S407	2.	C-Flex 3/8 id*5/8 od*100 cm, plug	
			3.4	Air filter	
			5.	Silicone 3/8 id*5/8 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag	
			6.7	pH, DO sensor	
			8.	Silicone 1/4 id*7/16 od*5cm, needleless sampling	
			9.	C-Flex 1/8 id*1/4 od*100 cm, female Luer and plug	
				Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer and plug	
			10.	NA	

* All connected by non-adjustable straight connectors

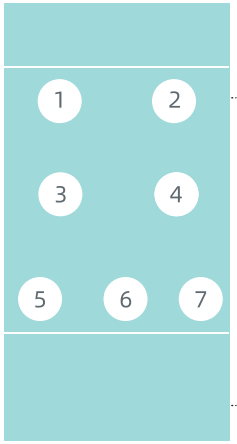
Volume	Version	Cat. No.	Configuration		
100L 	Basic cell bag	WBAP-100L-C104	1. Silicone 3/8 id* 5/8 od* 150 cm & C-Flex *50 cm, plug 2.3.4 Air filter 5. Silicone 3/8 id* 5/8 od* 150 cm needless sampling & C-Flex *50 cm, plug, extendedtube inside the bag 6. Silicone 1/8 id* 1/4 od* 150 cm & C-Flex *50 cm, female Luer and plug Silicone 1/8 id* 1/4 od * 150 cm & C-Flex *50 cm, female Luer and plug	7. Silicone 1/4 id* 7/16 od* 5 cm, needless sampling 8. C-Flex 1/4 id* 7/16 od* 200 cm, plug 9. Silicone 1/8 id* 1/4 od* 150 cm &C-Flex *50 cm, plug 10.11 NA	
	pH & DO cell bag	WBAP-100L-C207	1. Silicone 3/8 id* 5/8 od* 150 cm & C-Flex *50 cm, plug 2.3.4 Air filter 5. Silicone 3/8 id* 5/8 od* 150 cm needless sampling & C-Flex *50 cm, plug, extendedtube inside the bag 6. Silicone 1/8 id* 1/4 od* 150 cm & C-Flex *50 cm, female Luer and plug Silicone 1/8 id* 1/4 od * 150 cm & C-Flex *50 cm, female Luer and plug	7. Silicone 1/4 id* 7/16 od* 5 cm, needless sampling 8. C-Flex 1/4 id* 7/16 od* 200 cm, plug 9. Silicone 1/8 id* 1/4 od* 150 cm &C-Flex *50 cm, plug 10.11 pH,DO sensor	
200L 	Basic cell bag	WBAP-200L-C104	1. Silicone 3/8 id* 5/8 od* 150 cm & C-Flex *50 cm, plug 2.3.4 Air filter 5. Silicone 3/8 id* 5/8 od* 150 cm needless sampling & C-Flex *50 cm, plug, extendedtube inside the bag 6. Silicone 1/8 id* 1/4 od* 150 cm & C-Flex *50 cm, female Luer and plug Silicone 1/8 id* 1/4 od * 150 cm & C-Flex *50 cm, female Luer and plug	7. Silicone 1/4 id* 7/16 od* 5 cm, needless sampling 8. C-Flex 1/4 id* 7/16 od* 200 cm, plug 9. Silicone 1/8 id* 1/4 od* 150 cm &C-Flex *50 cm, plug 10.11 NA	
	pH & DO cell bag	WBAP-200L-C207	1. Silicone 3/8 id* 5/8 od* 150 cm & C-Flex *50 cm, plug 2.3.4 Air filter 5. Silicone 3/8 id* 5/8 od* 150 cm needless sampling & C-Flex *50 cm, plug, extendedtube inside the bag 6. Silicone 1/8 id* 1/4 od* 150 cm & C-Flex *50 cm, female Luer and plug Silicone 1/8 id* 1/4 od * 150 cm & C-Flex *50 cm, female Luer and plug	7. Silicone 1/4 id* 7/16 od* 5 cm, needless sampling 8. C-Flex 1/4 id* 7/16 od* 200 cm, plug 9. Silicone 1/8 id* 1/4 od* 150 cm &C-Flex *50 cm, plug 10.11 pH,DO sensor	

For novel therapies

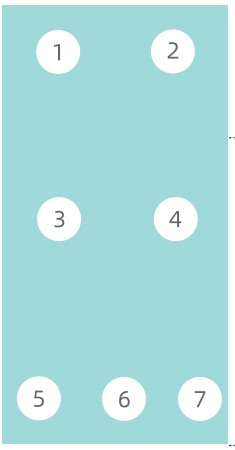
FL140C multilayer co-extruded film, EVA liquid contact layer, soft membrane

Volume	Version	Cat. No.	Configuration		
2L 	Basic cell therapy bag	WBCT-002L-C102	1. NA 2. Silicone 1/16 id*3/16 od*100cm & PVC 1/8 id*3/16 od*50 cm, female Luer and plug 3.4 Air filter 5. Silicone 1/8 id *1/4 od*100cm, & PVC 1/8 id *3/16 od *50cm, female Luer and plug, extended tube inside the bag	6. NA 7. Silicone 1/8 id*1/4 od*5cm, needleless sampling,extended tube inside the bag	
	pH & DO cell therapy bag	WBCT-002L-C205	1. Silicone 1/8 id *1/4 od*100ncm & PVC 1/8 id*3/16 od *50 cm, female Luer and plug 2. Silicone 1/16 id*3/16 od*100 cm & PVC 1/8 id*3/16 od *50 cm, female Luer and plug 3.4 Air filter 5.6 pH, DO sensor	7. Silicone 1/8 id *1/4 od*5cm, needleless sampling,extended tube inside the bag	
	Perfusion cell therapy bag	WBCT-002L-C303	1. (Attached to 1.2 um perfusion filter inside the bag) Silicone 1/8 id*1/4 od*100cm & PVC 1/8 id *3/16 od *60cm, 10 L storage bag 2. Silicone 1/8 id *1/4 od*100cm & PVC 1/8 id *3/16 od *60cm, female Luer and plug 3.4 Air filter	5. Silicone 1/8 id*1/4 od*100cm & PVC 1/8 id *3/16 od*60cm, female Luer and plug, extended tube inside the bag 6. NA 7. Silicone 1/8 id*1/4 od*5cm, needleless sampling,extended tube inside the bag	
	Perfusion cell therapy bag	WBCT-002L-C304	1. (Attached to 1.2 um perfusion filter inside the bag) Silicone 1/8 id*1/4 od*100cm & PVC 1/8 id *3/16 od *60cm, 10 L storage bag 2. Silicone 1/8 id *1/4 od*100cm & PVC 1/8 id *3/16 od *60cm, female Luer and plug 3.4 Air filter	5. Silicone 1/8 id*1/4 od*100cm & PVC 1/8 id *3/16 od*60cm, female Luer and plug, extended tube inside the bag 6. NA 7. Silicone 1/8 id*1/4 od*5cm, needleless sampling,extended tube inside the bag	
	Perfusion cell therapy bag	WBCT-002L-C305	1. (Attached to 7 um perfusion filter inside the bag) Silicone 1/16 id*3/16 od*100cm & PVC 1/8 id *3/16 od *60cm, 10 L storage bag 2. Silicone 1/16 id *3/16 od*100cm & PVC 1/8 id *3/16 od *60cm, female Luer and plug 3.4 Air filter	5. Silicone 1/8 id*1/4 od*100cm & PVC 1/8 id *3/16 od*60cm, female Luer and plug, extended tube inside the bag 6. NA 7. Silicone 1/8 id*1/4 od*5cm, needleless sampling,extended tube inside the bag	

* All connected by non-adjustable straight connectors

Volume	Version	Cat. No.	Configuration	
5L 	Basic cell therapy bag	WBCT-005L-C102	1. NA 2. Silicone 1/16 id*3/16 od*100cm & PVC 1/8 id*3/16 od*50 cm, female Luer and plug 3.4 Air filter 5. Silicone 1/8 id *1/4 od*100cm, & PVC 1/8 id *3/16 od *50cm, female Luer and plug, extended tube inside the bag	6. NA 7. Silicone 1/8 id*1/4 od*5cm, needleless sampling,extended tube inside the bag
	pH & DO cell therapy bag	WBCT-005L-C205	1. Silicone 1/8 id *1/4 od*100ncm & PVC 1/8 id*3/16 od *50 cm, female Luer and plug 2. Silicone 1/16 id*3/16 od*100 cm & PVC 1/8 id*3/16 od *50 cm, female Luer and plug 3.4 Air filter 5.6 pH, DO sensor	7. Silicone 1/8 id *1/4 od*5cm, needleless sampling,extended tube inside the bag
	Perfusion cell therapy bag	WBCT-005L-C303	1. (Attached to 1.2 um perfusion filter inside the bag) Silicone 1/8 id*1/4 od*100cm & PVC 1/8 id *3/16 od *60cm, 10 L storage bag 2. Silicone 1/8 id *1/4 od*100cm & PVC 1/8 id *3/16 od *60cm, female Luer and plug 3.4 Air filter	5. Silicone 1/8 id*1/4 od*100cm & PVC 1/8 id *3/16 od*60cm, female Luer and plug, extended tube inside the bag 6. NA 7. Silicone 1/8 id*1/4 od*5cm, needleless sampling,extended tube inside the bag
	Perfusion cell therapy bag	WBCT-005L-C304	1. (Attached to 1.2 um perfusion filter inside the bag) Silicone 1/8 id*1/4 od*100cm & PVC 1/8 id *3/16 od *60cm, 10 L storage bag 2. Silicone 1/8 id *1/4 od*100cm & PVC 1/8 id *3/16 od *60cm, female Luer and plug 3.4 Air filter	5. Silicone 1/8 id*1/4 od*100cm & PVC 1/8 id *3/16 od*60cm, female Luer and plug, extended tube inside the bag 6. NA 7. Silicone 1/8 id*1/4 od*5cm, needleless sampling,extended tube inside the bag
	Perfusion cell therapy bag	WBCT-005L-C305	1. (Attached to 7 um perfusion filter inside the bag) Silicone 1/16 id*3/16 od*100cm & PVC 1/8 id *3/16 od *60cm, 10 L storage bag 2. Silicone 1/16 id *3/16 od*100cm & PVC 1/8 id *3/16 od *60cm, female Luer and plug 3.4 Air filter	5. Silicone 1/8 id*1/4 od*100cm & PVC 1/8 id *3/16 od*60cm, female Luer and plug, extended tube inside the bag 6. NA 7. Silicone 1/8 id*1/4 od*5cm, needleless sampling,extended tube inside the bag

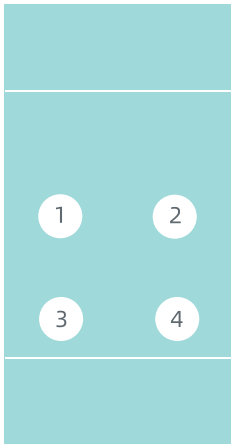
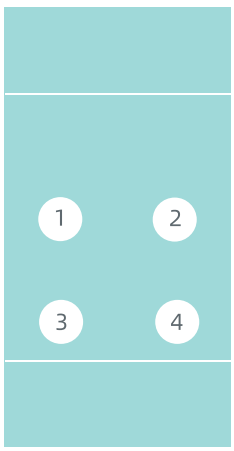
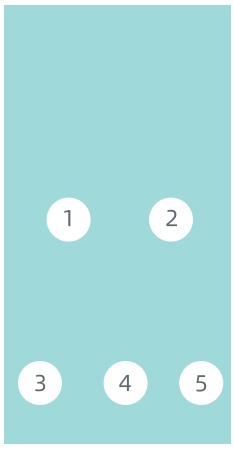
* All connected by non-adjustable straight connectors

Volume	Version	Cat. No.	Configuration	
10L 	Basic cell therapy bag	WBCT-010L-C102	1. NA 2. Silicone 1/8 id *1/4 od*100cm & PVC 1/8 id *3/16 od *50cm, female Luer and plug 3.4 Air filter 5. Silicone 1/8 id *1/4 od*100cm, & PVC 1/8 id *3/16 od *50cm, female Luer and plug,extended tube inside the bag	6. NA 7. Silicone 1/8 id*1/4 od *5cm, needleless sampling,extended tube inside the bag
	pH & DO cell therapy bag	WBCT-010L-C205	1.2 Silicone 1/8 id *1/4 od*100cm & PVC 1/8 id *3/16 od *50cm, female Luer and plug 3.4 Air filter 5.6 pH, DO sensor	7. Silicone 1/8 id *1/4 od*5cm, needleless sampling
	Perfusion cell therapy bag	WBCT-010L-C303	1. (Attached to 1.2 um perfusion filter inside the bag) Silicone 1/8 id*1/4 od*100cm & PVC 1/8 id *3/16 od *60cm, 10 L storage bag 2. Silicone 1/8 id *1/4 od*100cm & PVC 1/8 id *3/16 od *60cm, female Luer and plug 3.4 Air filter	5. Silicone 1/8 id*1/4 od*100cm & PVC 1/8 id *3/16 od*60cm, female Luer and plug, extended tube inside the bag 6. NA 7. Silicone 1/8 id*1/4 od*5cm, needleless sampling,extended tube inside the bag
	Perfusion cell therapy bag	WBCT-010L-C305	1. (Attached to 7 um perfusion filter inside the bag) Silicone 1/16 id*3/16 od*100cm & PVC 1/8 id *3/16 od *60cm, 10 L storage bag 2. Silicone 1/16 id *3/16 od*100cm & PVC 1/8 id *3/16 od *60cm, female Luer and plug 3.4 Air filter	5. Silicone 1/8 id*1/4 od*100cm & PVC 1/8 id *3/16 od*60cm, female Luer and plug, extended tube inside the bag 6. NA 7. Silicone 1/8 id*1/4 od*5cm, needleless sampling,extended tube inside the bag

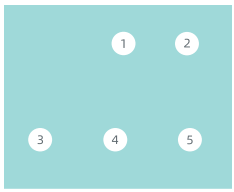
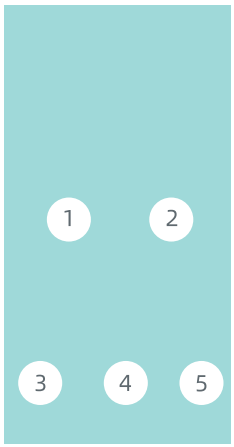
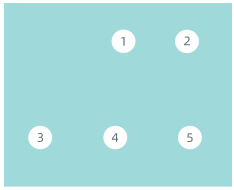
* All connected by non-adjustable straight connectors

Mixing function

FL9101 multilayer co-extruded film, ULDPE liquid contact layer, heat resistance up to 65℃

Volume	Version	Cat. No.	Configuration
1 L 	Mixing bag	WBMR-001L-C101	1. C-Flex 1/4 id*7/16 od*100 cm, female MPC 2. C-Flex 1/8 id*1/4 od*100 cm, female Luer 3. C-Flex 1/4 id*7/16 od*100 cm, male MPC 4. Silicone 3/16 id*3/8 od*5 cm, needleless sampling
2 L 	Mixing bag	WBMR-002L-C101	1. C-Flex 1/4 id*7/16 od*100 cm, female MPC 2. C-Flex 1/8 id*1/4 od*100 cm, female Luer 3. C-Flex 1/4 id*7/16 od*100 cm, male MPC 4. Silicone 3/16 id*3/8 od*5 cm, needleless sampling
10 L 	Mixing bag	WBMR-010L-C101	1.2 C-Flex 1/4 id*7/16 od*100 cm, female MPC 3. C-Flex 1/4 id*7/16 od*100 cm, male MPC 4. C-Flex 1/8 id*1/4 od*100 cm, female Luer 5. Silicone 3/16 id*3/8 od*5 cm, needleless sampling

* All connected by non-adjustable straight connectors

Volume	Version	Cat. No.	Configuration
20 L 	Mixing bag	WBMR-020L-C101	1.2 C-Flex 1/4 id*7/16 od*100 cm, female MPC 3. C-Flex 1/4 id*7/16 od*100 cm, male MPC 4. C-Flex 1/8 id*1/4 od*100 cm, female Luer 5. Silicone 3/16 id*3/8 od*5 cm, needleless sampling
22 L 	Mixing bag	WBMR-022L-C101	1.2 C-Flex 1/4 id*7/16 od*100 cm, female MPC 3. Silicone 3/16 id*3/8 od*5 cm, needleless sampling 4. C-Flex 1/8 id*1/4 od*100 cm, female Luer 5. C-Flex 1/4 id*7/16 od*100 cm, male MPC
50 L 	Mixing bag	WBMR-050L-C101 WBMR-050L-S101	1.2 C-Flex 1/4 id*7/16 od*100 cm, female MPC 3. C-Flex 1/4 id*7/16 od*100 cm, male MPC 4. C-Flex 1/8 id*1/4 od*100 cm, female Luer 5. Silicone 3/16 id*3/8 od*5 cm, needleless sampling

* All connected by non-adjustable straight connectors

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About BioLink

BioLink is a group of technology-driven businesses that provide process solutions in the life sciences industry. The company focuses on the development and production of the key processing equipment and consumables used in the manufacturing process of recombinant protein drugs, vaccines, antibodies, cell therapies, gene therapies, and other biological products. BioLink's portfolio of offerings covers the entire upstream and downstream bioprocess such as cell culture, single-use mixing and storage, chromatography, filtration (ultrafiltration/diafiltration, clarification, and virus removal), and hydration products, as well as process development services. BioLink is committed to providing customers with high-quality, innovative products and solutions and strives to build an efficient, safe and competitive biopharmaceutical supply chain eco-system.

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