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T 1.800.843.1794
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cs@cgilifesciences.com

Single-Use Bioprocess Tubing Kits & Assemblies

Made to Your Custom Specifications

Here's what we offer in 3 Easy Steps

1. Design Your Assembly

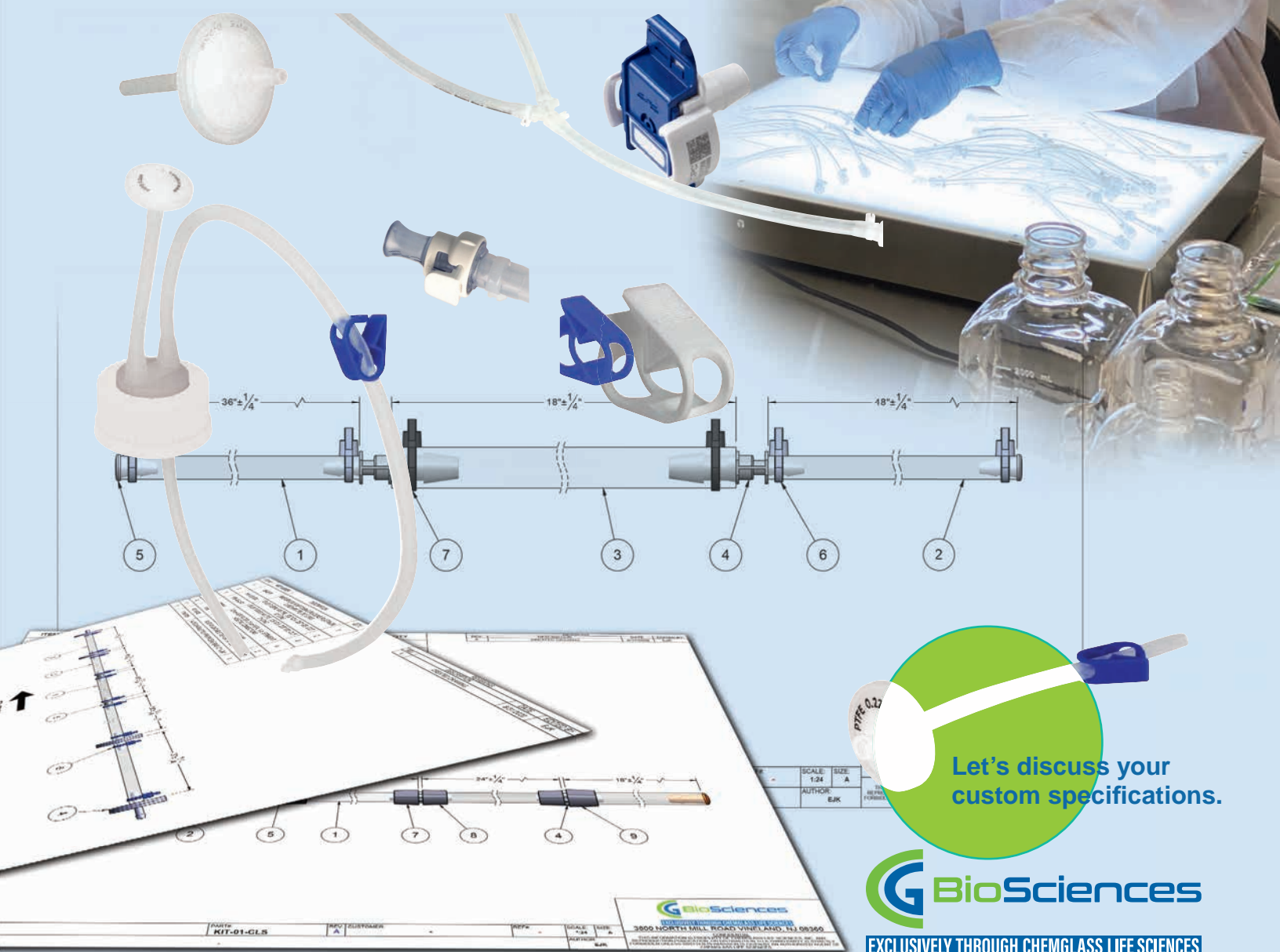
Technical specialists work with you to create / design the assembly and provide recommendations on tubing, fittings, quick connects and filter components.

2. Quotation And 2D Or 3D Drawing

Fast turnaround on your quotation and drawing of your assembly. The drawing will include details and a subcomponent bill of materials.

3. Delivery – Single Orders Or Blanket Orders

We work with you to meet your delivery needs on single orders or blanket delivery scheduling. Chemglass stocks many fluid handling components such as tubing, fittings, quick connects and filters so they are available when needed.

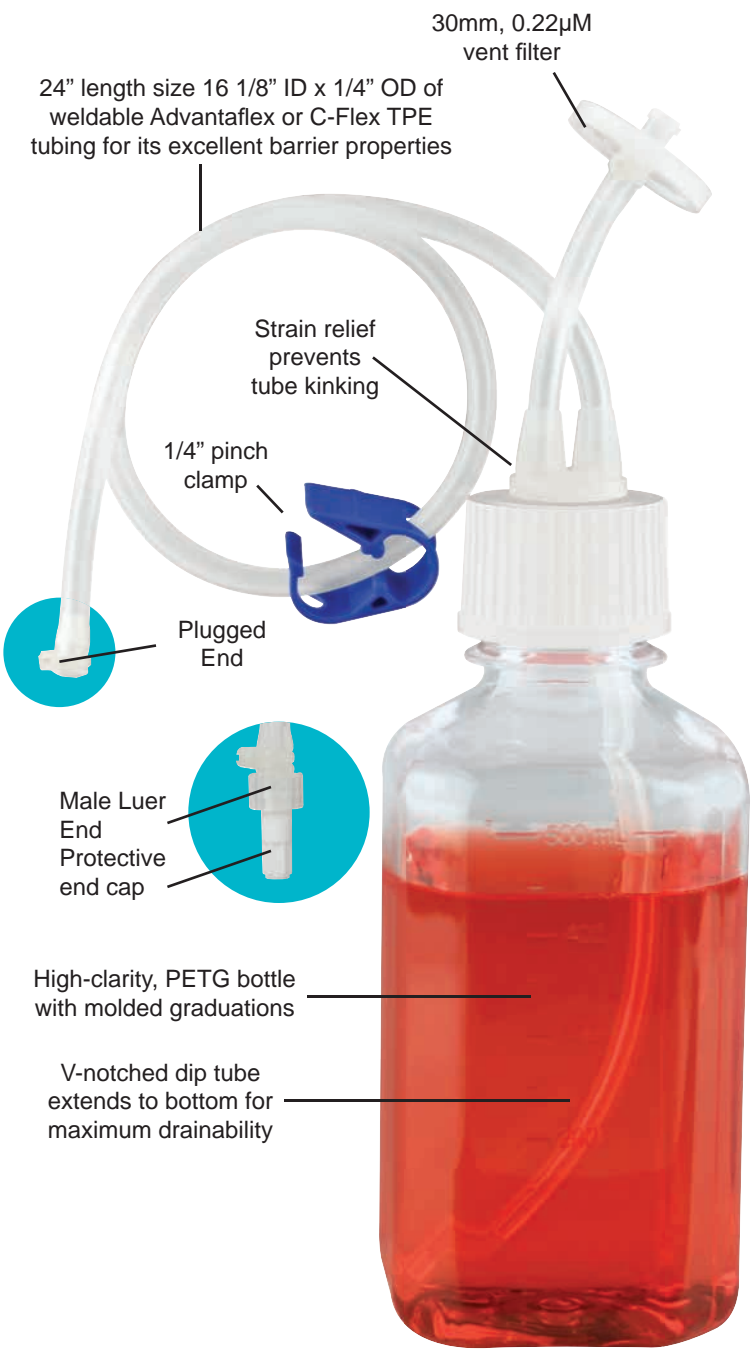


Let's discuss your custom specifications.



EXCLUSIVELY THROUGH CHEMGLASS LIFE SCIENCES

For custom quotes and inquiries contact singleuse@cglifesciences.com



Single-Use Bottle Assemblies, PETG Bottles with PP Caps

- Designed to ensure an unobstructed fluid path
- Stopper includes molded strain relief to prevent kinking
- Manufactured, assembled and packaged in Class 7 cleanroom
- USP Class VI approved materials
- Animal Derived Component Free (ADCF)
- Gamma irradiated to Sterility Assurance Level (SAL) 10-6

Our single-use bottle assemblies in five standard sizes from 125mL to 2L. Each consists of a PETG bottle with a 2-port closure assembly, a 30mm / 0.22µm vent filter and a 24-inch length of tubing. Size 16 1/8" ID x 1/4" OD. A 1/4" pinch clamp is included on the tubing. The v-notched, dip tube extends to the bottom of the bottle for complete draining. Each unit is double poly-bagged and gamma irradiated at 25kGY-40kGY.



Individually Bagged Caps, Sterile

Part No.	Cap Size	Qty.	Price
CLS-1168-1038	38-430	20	\$60.50 *
CLS-1168-1053	53B	20	\$72.50 *

Custom Assemblies Available

For custom quotes and inquiries
contact singleuse@cglifesciences.com





Available in Five Bottle Sizes and Various End / Tubing Configurations

Advantaflex TPE Tubing and Plugged End

Advantaflex TPE Tubing with Male Luer and 1/8" Barb

Protective End Cap

C-Flex Tubing and Plugged End

Single-Use Bottle Assemblies with PETG Bottles & PP Caps

Cap. (mL)	No. of Ports	Qty.	with Advantaflex TPE Tubing and Plugged End		with Advantaflex TPE Tubing and Male Luer Endw		with C-Flex Tubing and Plugged End	
			Part No.	Price	Part No.	Price	Part No.	Price
125	2	10	CLS-1168-0125	\$664.10 *	CLS-1168-0125MLC	\$664.10 *	CLS-1168-0125CFX	\$664.10 *
250	2	10	CLS-1168-0250	\$734.40 *	CLS-1168-0250MLC	\$734.40 *	CLS-1168-0250CFX	\$734.40 *
500	2	5	CLS-1168-0500	\$420.75 *	CLS-1168-0500MLC	\$420.75 *	CLS-1168-0500CFX	\$420.75 *
1,000	2	5	CLS-1168-1000	\$505.15 *	CLS-1168-1000MLC	\$505.15 *	CLS-1168-1000CFX	\$505.15 *
2,000	2	5	CLS-1168-2000	\$619.75 *	CLS-1168-2000MLC	\$619.75 *	CLS-1168-2000CFX	\$619.75 *

Custom Assemblies and Pricing Available - Give us a call or send an email.

1.800.843.1794 • singleuse@cglifesciences.com

For Sterile PETG Square Media Bottles, See page 29.



2D Bioprocess Bags

2D Bioprocess Bags Featuring Medical Grade Renolit 9101 PE Film

Key Benefits

- Bag chambers are manufactured using industry-proven Renolit 9101
- Strong physical design for the safe storage of product and process fluids
- TruFlo ports engineered for improved flow and minimum hold-up
- Flexible customization utilizing tubing, components, and vendor of choice
- Assembled in ISO Class 7 clean room

Standard Configurations

- Volumes of 50mL to 20L

Port configurations:

- 2-ports for all (50mL to 20L)
- 3-port (500mL to 20L)
- 4-port custom (2L to 20L)

Port size

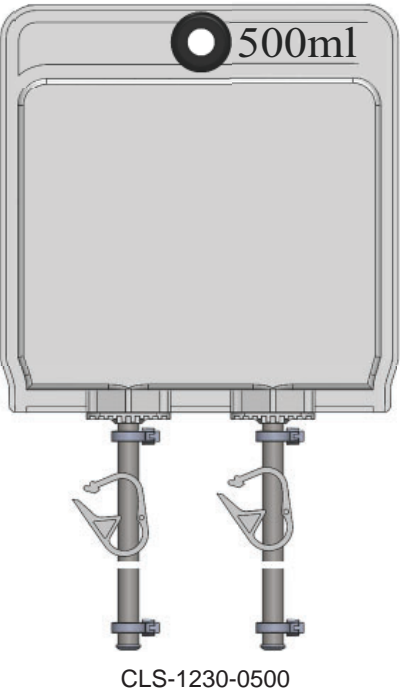
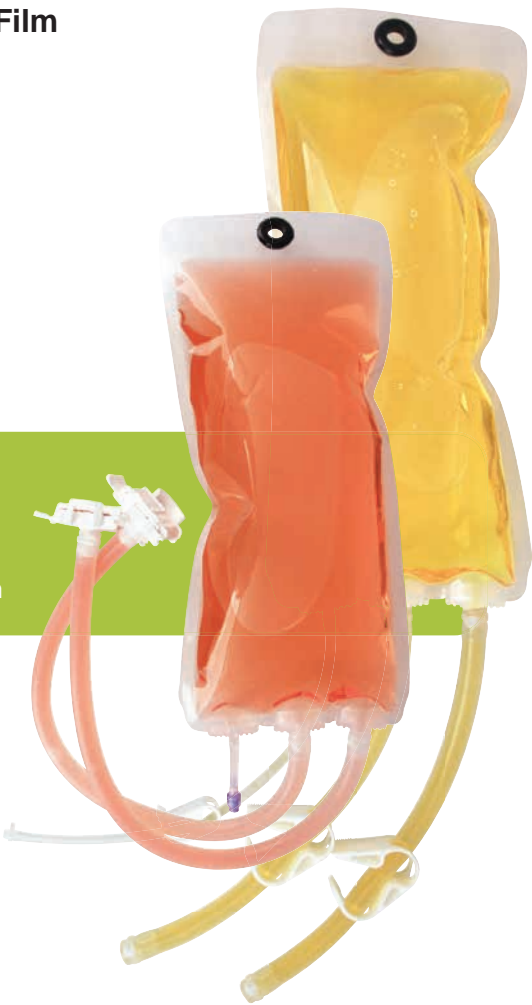
- 1/8", 1/4", or 3/8"

Applications

- Media and buffer storage
- Aseptic sampling
- Product collection and storage
- Customized filling manifolds
- Not for cryogenic storage
- Maximum low temperature -45°C

Custom 2D Bags Assemblies Available

For custom quotes and inquiries
contact singleuse@cglifesciences.com



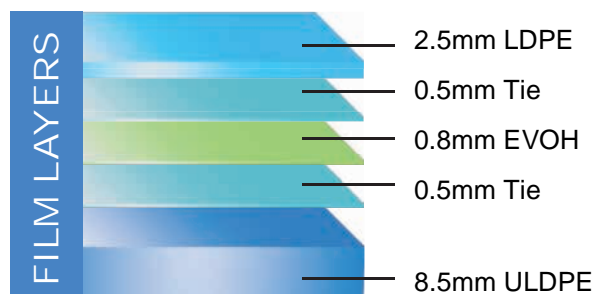
Stocked Bags - Other sizes and configurations available. Contact us.

Description	Capacity	Ports Sizes & Qty.			Internal Surface Area (in2)
		1/8in	1/4in	3/8in	
Two-Port Bags (Choose bags with 1/8, 1/4 or 3/8 inch ports in a given capacity.)	50mL	2	2	—	20
	100mL	2	2	—	25
	250mL	2	2	—	41
	500mL	2	2	2	65
	1L	2	2	2	104
	2L	—	—	2	173
	5L	—	—	2	280
	10L	—	—	2	440
	20L	—	—	2	772
Three-Port Bags (All bags have a single 1/8 inch port and two 3/8 inch ports)	500mL	1	—	2	65
	1L	1	—	2	104
	2L	1	—	2	173
	5L	1	—	2	280
	10L	1	—	2	440
	20L	1	—	2	772

Medical Grade Renolit 9101 PE Film

Renolit 9101 Polyethylene Film

All liquid single-use chambers are manufactured with industry-proven, medical-grade Renolit 9101 film, a multilayer film composed of a high-purity biocompatible polyethylene (PE) contact layer with internal ethylene vinyl alcohol (EVOH) oxygen-barrier.



Physical Properties

Property	Typical Value*
Film Thickness	0.325mm
Clarity	97% (ASTM D-1003)
Tensile Strength at Break	13MPa (ASTM D-882)
Elongation at Break	350% (ASTM D-882)
Break at Cold Temperature	< -45°C (ISO 8570)
Water Vapor Transmission†	0.32 g/m ² /day (ASTM F-1249)
O ₂ Permeability‡	<0.05 cm ³ /m ² /day/bar (ASTM D-3985)
CO ₂ Permeability‡	<0.2 cm ³ /m ² /day/bar (ASTM F-2476)

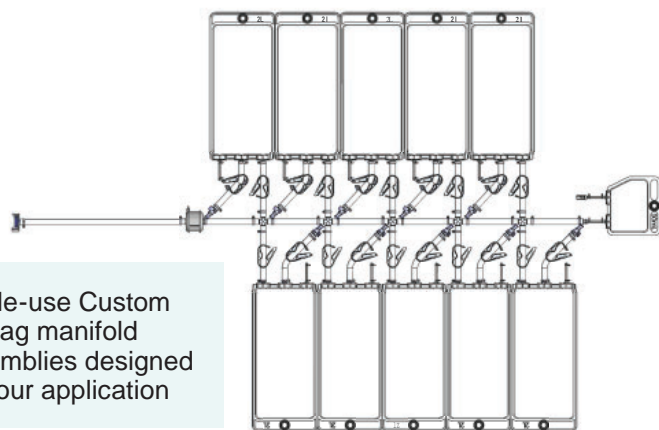
Transmission values for film gamma-irradiated with 50 KGy. Other are for film gamma-irradiated with 25 KGy.

† @ 23°C, 100% RH. ‡ @ 23°C, 0% RH.

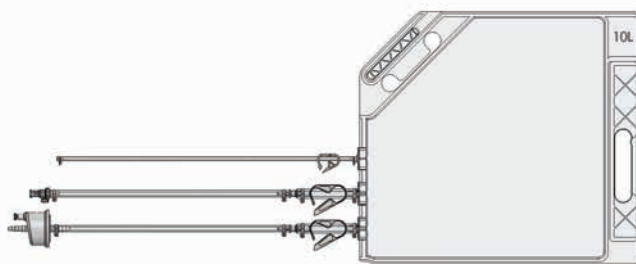
Quality, Regulatory and Biocompatibility Properties

Category	Property / Test*
Composition	High-purity polyethylene (PE) and ethylene vinyl alcohol (EVOH)
	Animal-Derived Ingredient (ADI) Free
Biocompatibility	ISO 10993-4, Hemolysis
	ISO 10993-5, Cytotoxicity
	ISO 10993-6, Implantation
	ISO 10993-10, Irritation and Sensitization
	ISO 10993-11, Acute System Toxicity
	USP <85>, Bacterial Endotoxins – LAL test
Extractables / Leachables	USP <87>, Biological Reactivity in vitro
	USP <88>, Biological Reactivity in vivo, Class VI
	USP <661.1>, Polyethylene Physicochemical Tests, Extractable Metals, Plastic Additives
	Ph. Eur. 3.1.5, Polyethylene with additives for containers for parenteral preparations and for ophthalmic preparations
Recommended Sterilization Method	Gamma

* Pharmacopoeia and Biocompatibility compliance test reports available upon request



Single-use Custom 2D bag manifold assemblies designed for your application



Customized 2D bioprocess assemblies are ideal for single-use biopharmaceutical applications.

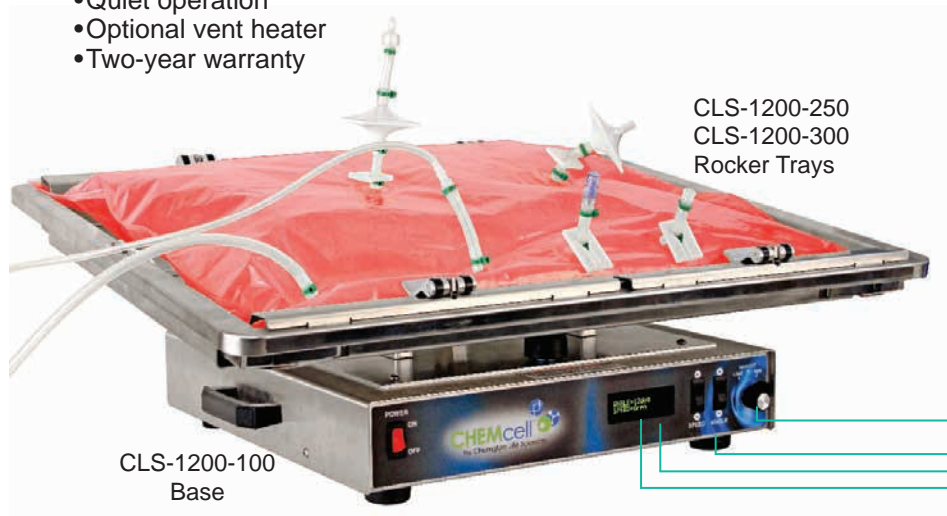
- Customized system design provides design flexibility and allows the system to fit the process rather than the process adapt to the system.
- We stock many common components that enables us to provide fast development and delivery while minimizing the risk of production delays

Custom Assemblies Available. For custom quotes and inquiries contact singleuse@cglifesciences.com

CHEMcell® Bag Rocker System

Provides increased flexibility with modular format, optional trays and accessories.

- Adjustable tray angle
- Variable speed rocking
- Quiet operation
- Optional vent heater
- Two-year warranty



Position Control
Load - Harvest - Run
Speed Control
2 to 40 per minute

Tray Angle Control
2° to 12°
Digital Display
Bright and Easy-to-Read

Increased flexibility with modular format, optional trays and accessories.

Modular benchtop bag rocker system consists of a heavy-duty base unit and a choice of stainless steel rocker trays. Engineered for durability, it can be used in both research and development as well as production environments. The smooth rocking motion provides gentle, efficient mixing and gas transfer. Designed for optimal performance with Chemglass 8-port and 6-port cell culture bags but easily accepts other manufacturers' bags having the same dimensions. The optional bag and vent heater, made for use with both size trays, keeps vent filters free of harmful condensation that can clog filters and compromise cultures.

NOTE: Temperature controller, CLS-1200-2CH, must be purchased separately.

Specifications	CHEMcell Base	20 Liter Tray	50 Liter Tray
Weight (lbs)	45	22	34
Dimensions (L x W x H) inches / centimeters	19.5 x 16.6 x 6.5 / 49.53 x 42.16 x 16.51	21 x 27 x 2.5 / 53.35 x 68.58 x 6.35	27 x 30 x 2.5 / 68.58 x 76.2 x 6.35
Rocking Rate (per min.)	2 - 40	—	—
Rocking Angle (°)	2 - 12	—	—
Electrical	110-120V, 480W	—	—

CHEMcell Bioreactor

Part No.	Description	Price
CLS-1200-100	CHEMcell® Rocker Bioreactor Base Only	\$8,711.10 ♥
CLS-1200-250	CHEMcell® Rocker Tray, 10-20 Liter, Complete, With heater and PT100 Thermocouple	\$3,733.35 ♥

Part No.	Description	Price
CLS-1200-300	CHEMcell® Rocker Tray, 20-50 Liter, Complete, With heater and PT100 Thermocouple	\$4,355.60 ♥



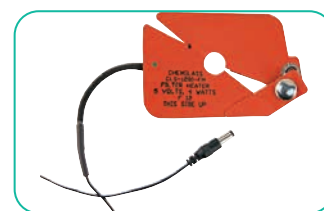
Easy Bag Installation

Vent Heater

Vent heater for use with rectangular filters measuring 40 x 70mm. Use with temperature controller, CLS-1200-2CH. 5 volts, 4 watts

Vent Heater

Part No.	Description	Qty.	Price
CLS-1200-FH	Vent Heater, 4 Watt	1	\$346.50 ♥



CLS-1200-FH
Vent Heater

Temperature Controller, J-KEM®

Controls heaters on both size trays along with vent heater.

Specifications:

- Digital PID Controller
- RTD connection (Mini-type plug)
- 120VAC Power Outlet • Two 5Vdc outlets
- Dimensions: (L x W x H; 7 3/4 x 5 3/8 x 3 3/8)
- Operating Temperature: 0° – 50°C
- Electrical Rating: 120VAC, 50/60Hz, 10 Amps, 1200 Watts

Temperature Controller

Part No.	Description	Qty.	Price
CLS-1200-2CH	Temperature Controller	1	\$1,817.50 ♥

J-KEM is a registered trademark of J-KEM Scientific.



CLS-1200-2CH
Temperature Controller

Gas Mixing Module, CHEMcell™

The CHEMcell gas mixing module with touchscreen display is used for accurate mixing of two gases. It utilizes two Alicat gas flow controllers with built-in back pressure sensors for safe operation with a disposable bag or bioreactor. Flow rates are up to 1.1 liters per minute maximum. Gas totalizers allow you to track the total flow during the cell culture run.

Specifications

- Dimensions: 7.25" High x 8.25" Wide x 8" Deep
- Electrical: 24 Volt DC, 110Volt plug in Power Supply
- Inlet Pressure Limitations: 20 PSIG
- Communications: Ethernet, RJ-485
- Tubing Connections: 1/4" Push/Pull Fittings for Polyurethane Tubing
- Gas Flow Limitations (CO₂): 100 SCCM
- Gas Flow Limitations (Air): 1000 SCCM

Gas Mixing Module

Part No.	Description	Qty.	Price
CLS-1200-GMM	Gas Mixing Module	1	\$13,318.10 ♥



CLS-1200-GMM
Gas Mixing Module

Air Pump for Cell Culture Rocker Bags

Air pump used to inflate cell culture bags for the CHEMcell Rocker Bioreactor System, CLS-1200-series. Pump has an output of 110 liters per hour and two outlets to inflate two bags. Supplied with one tubing kit comprised of 5ft of 1/8"ID x 1/4"OD tubing and two quick-connect adapters used to connect to the filter inlets on the cell culture bags.

Air Pump Kit Complete

Part No.	Description	Price
CLS-1200-AP	Air Pump Kit Complete with 1 Tubing Kit	\$71.60 *
CLS-1200-TK	5ft Tubing Kit with Two Luer Connectors	\$14.90 *



CLS-1200-AP

Bags, Cell Culture, Ultra Clear, 6-Port, Compatible with GE Wave™ Rocking Platforms, Cell Culture Bag

Cell culture bags are manufactured from ultra clear Renolit 9101 robust film and gamma irradiated. The film meets USP Class VI specifications and is contamination free. The inner product contact material is low density polyethylene. All bags and components content materials are USP Class VI tested. Excellent choice for mammalian and plant culture cell lines with extended mixing times.

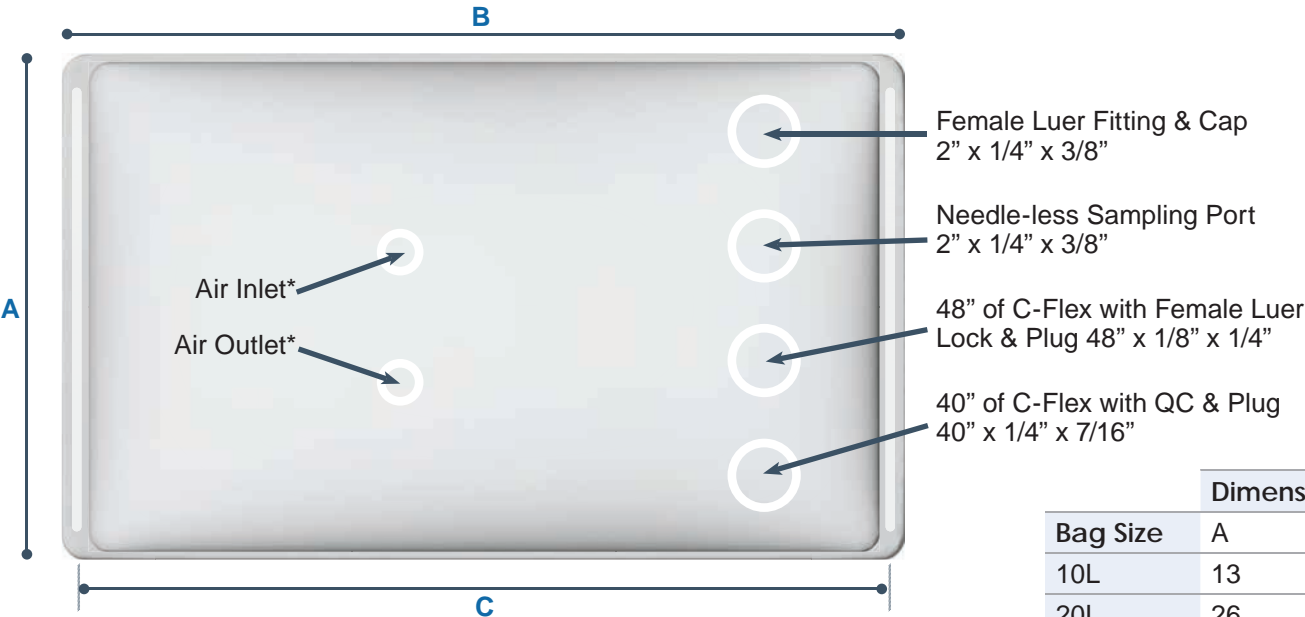
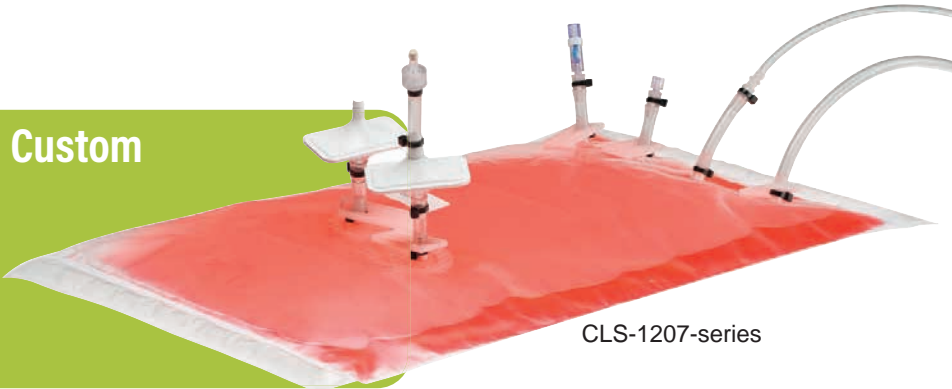
Six-Port, Ultra Clear, Cell Culture Bags

Part No.	Cap. (L)	No. of Ports	Qty.	Price
CLS-1207-10	10	6	1	\$499.15 ♥
CLS-1207-10M	10	6	10	\$3,733.35 ♥
CLS-1207-20	20	6	1	\$537.20 ♥
CLS-1207-20M	20	6	10	\$3,972.70 ♥
CLS-1207-22	22	6	1	\$547.20 ♥
CLS-1207-22M	22	6	10	\$4,023.90 ♥
CLS-1207-50	50	6	1	\$668.65 ♥
CLS-1207-50M	50	6	10	\$4,995.50 ♥

For Renolit 9101 Film information and specs, See page 7.

Rocker Bags Are Available With Custom Port Lines

Standard configuration Rocker Bags are available with custom port lines.
For custom quotes and inquiries contact singleuse@cglifesciences.com

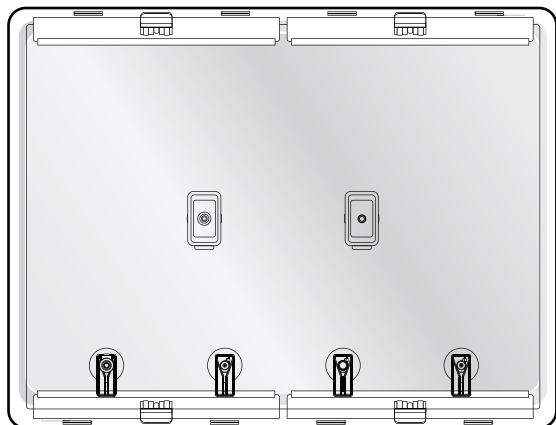


*Air Inlet & Outlet each with 0.2 um filter, clamp, check valve and 2" of silicone 1/4" x 3/8"

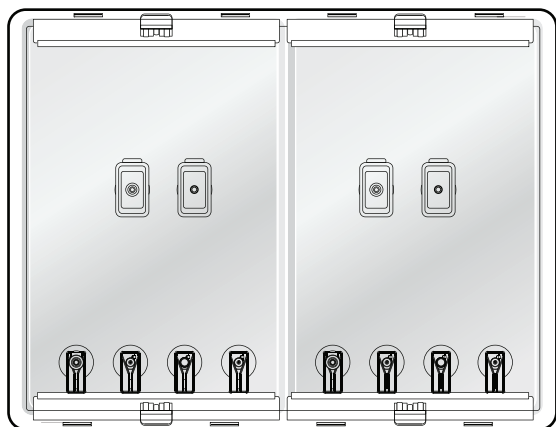
Bag Size	Dimensions (in.)		
	A	B	C
10L	13	22	21
20L	26	22	20.5
22L	15	28	27
50L	28.5	28	26.5

Rocker Bag Layout With Trays

20L Tray

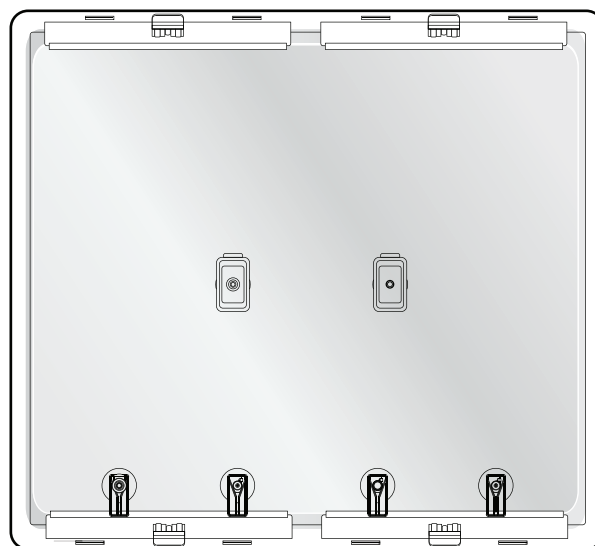


1x 20L Bag

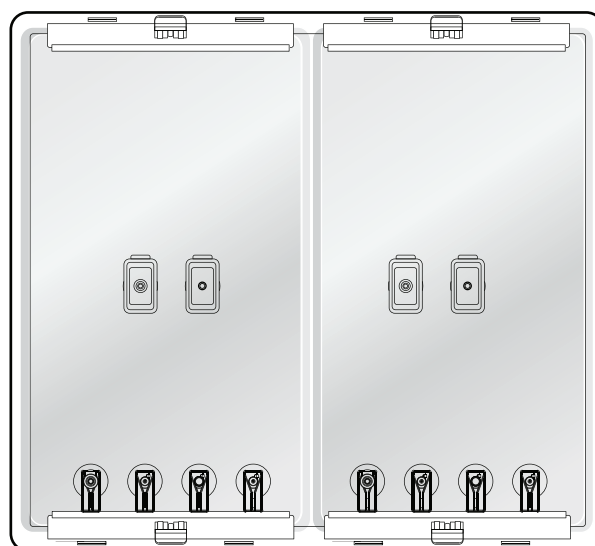


2x 10L Bags

50L Tray



1x 50L Bag



2x 22L Bags

Please Note: Bags are meant for use with specific trays and cannot be interchanged with other trays

CHEMcell™
by Chemglass Life Sciences



CLS-2091-series
CLS-2093-series
Blue DuoCap®

Four Bottom
Baffles



CLS-2090-series
CLS-2092-series
Blue DuoCap®

Plain Bottom

Flasks, Erlenmeyer, Baffled, Sterile, Polycarbonate

Quadruple baffled Erlenmeyer flasks are sterile, non-pyrogenic and manufactured with polycarbonate resin. Flasks are supplied with either exclusive DuoCap® designed for both aerobic and anaerobic applications (for aerobic applications the cap utilizes a 0.22µm pore size PTFE membrane for sterile air exchange; for anaerobic applications the cap can easily be converted to a solid cap design) or green filter caps. Solid top caps are also ideal for applications requiring mixing, shaking and storage of biological fluids. Graduations are molded for accuracy. New EZ-Tear packaging allows for easy access.

Baffled, Polycarbonate, Erlenmeyer Flasks, Sterile

Part No.	Cap. (mL)	GPI Thread Size	Qty.	Price
Baffled Flasks with Blue DuoCap®				
CLS-2093-125S	125	38-430	24	\$240.40 ◇
CLS-2093-250S	250	38-430	12	\$141.40 ◇
CLS-2093-500S	500	38-430	12	\$188.40 ◇
CLS-2093-100S	1000	53-B	6	\$136.45 ◇
CLS-2093-200S	2000	53-B	6	\$163.20 ◇
Baffled Flasks with Blue DuoCap® in Bulk Packs				
CLS-2091-125B	125	38-430	144	\$1,319.85 ◇
CLS-2091-250B	250	38-430	72	\$775.65 ◇
CLS-2091-500B	500	38-430	48	\$685.45 ◇
CLS-2091-100B	1000	53-B	24	\$496.25 ◇
CLS-2091-200B	2000	53-B	24	\$594.60 ◇

Flasks, Erlenmeyer, Plain, Sterile, Polycarbonate

Erlenmeyer flasks are sterile, non-pyrogenic and manufactured with polycarbonate resin. Flasks are supplied with exclusive DuoCap® designed for both aerobic and anaerobic applications. For aerobic applications the cap utilizes a 0.22µm pore size PTFE membrane for sterile air exchange. For anaerobic applications the cap can easily be converted to a solid top design. Solid top caps are also ideal for applications requiring mixing, shaking and storage of biological fluids. Graduations are molded for accuracy. New EZ-Tear packaging allows for easy access.

Polycarbonate Erlenmeyer Flasks with Blue DuoCap®

Part No.	Cap. (mL)	GPI Thread Size	Qty.	Price
Plain Flasks with Blue DuoCap®				
CLS-2092-125S	125	38-430	24	\$242.90 ◇
CLS-2092-250S	250	38-430	12	\$142.25 ◇
CLS-2092-500S	500	38-430	12	\$188.40 ◇
CLS-2092-100S	1000	53-B	6	\$139.20 ◇
CLS-2092-200S	2000	53-B	6	\$168.70 ◇
Plain Flasks with Blue DuoCap® in Bulk Packs				
CLS-2090-125B	125	38-430	144	\$1,319.85 ◇
CLS-2090-250B	250	38-430	72	\$775.65 ◇
CLS-2090-500B	500	38-430	48	\$685.45 ◇
CLS-2090-100B	1000	38-430	24	\$496.25 ◇
CLS-2090-200B	2000	38-430	24	\$594.60 ◇

Erlenmeyer PETG Flasks with HDPE Vent Caps, Flat Base, Sterile, Nest

- PETG flask with HDPE vent cap
- Ideal for shaker culture applications.
- Sterilized by E-Beam
- Non-pyrogenic
- Packaged in sterile bags
- Breathable membrane
- 0.22µm Hydrophobic filter for gas exchange
- Non-toxic and environmentally friendly

PETG Erlenmeyer Flasks with HDPE Vent Caps, Sterile

Part No.	Cap. (mL)	Qty.	Reg. Price	SALE Price
CGN-2092-125	125	24	\$132.90	\$106.32 ♣
CGN-2092-250	250	12	\$91.40	\$73.12 ♣
CGN-2092-500	500	12	\$124.50	\$99.60 ♣
CGN-2092-1000	1,000	6	\$103.50	\$82.80 ♣



Vent Cap

CGN-2092-series

Polycarbonate Erlenmeyer Flasks with Vent Caps, Graduated, Individually Bagged, Sterile

- Designed for mammalian suspension culture applications as well as bacterial & yeast culture
- Polycarbonate available with vent cap only
- Vent caps with over-sized vent area feature 0.22µm hydrophobic membrane which allows for improved gas exchange without contamination
- Avoid contamination with single-use, pre-sterilized flasks
- Lightweight material is easier to handle than glass
- Bottles include molded graduation lines
- Individually bagged for easy storage and handling
- Medical grade virgin Polycarbonate is autoclavable

Polycarbonate Erlenmeyer Flasks with Vent Caps, Graduated, Individually Bagged, Sterile

Part No.	Cap. (mL)	Qty.	Reg. Price	SALE Price
CLS-2094-125	125	12	\$147.00	\$117.60 ♣
CLS-2094-250	250	12	\$163.00	\$130.40 ♣
CLS-2094-500	500	12	\$206.00	\$164.80 ♣



CLS-2094-series



CLS-2171-series

Flasks, Polycarbonate, Vented Caps, Baffled Bottom

CELLTREAT® Erlenmeyer and Fernbach culture flasks are designed for shaker and cell culture applications. All flasks feature a 70mm neck size that provides easy access for filling and dispensing. The unique shape of the Fernbach flask provides an increased surface area to volume ratio for improved gas exchange. The flasks are available in 2L Erlenmeyer, 2L and 3L Fernbach sizes, with baffled bottoms. The polypropylene caps are knurled for secure grip and are configured in 70mm large vent or non-vented styles. The flasks are constructed from an optically clear polycarbonate material that can be autoclaved. All flasks include a vented cap and are individually packed in bags and gamma irradiation sterilized. Additional caps are available separately.

Polycarbonate Flasks with BAFFLED BOTTOMS and Vented Caps

Part No.	Type	Vol. (L) / Max. Vol. (mL)	Cap Size (mm)	Qty.	Reg. Price	SALE Price
CLS-2171-EB2L	Erlenmeyer	2 / 2,200	70	6	\$309.00	\$247.20 ♣
CLS-2171-FB2L	Fernbach	2 / 2,400	70	6	\$354.00	\$283.20 ♣
CLS-2171-FB3L	Fernbach	3 / 4,000	70	4	\$350.00	\$280.00 ♣

Polypropylene Caps

Part No.	Cap Type	Cap Size (mm)	Qty.	Reg. Price
CLS-2172-V070	vented	70	1	\$220.00 ♣
CLS-2072-S070	solid	70	1	\$112.00 ♣



CLS-2170-series

Flasks, Polycarbonate, Vented Caps, Plain Bottom

CELLTREAT® Erlenmeyer and Fernbach culture flasks are designed for shaker and cell culture applications. All flasks feature a 70mm neck size that provides easy access for filling and dispensing. The unique shape of the Fernbach flask provides an increased surface area to volume ratio for improved gas exchange. The flasks are available in 2L Erlenmeyer, 2L and 3L Fernbach sizes, with plain bottoms. The polypropylene caps are knurled for secure grip and are configured in 70mm large vent or non-vented styles. The flasks are constructed from an optically clear polycarbonate material that can be autoclaved. All flasks include a vented cap and are individually packed in bags and gamma irradiation sterilized. Additional caps are available separately.

Polycarbonate Flasks with Plain Bottoms and Vented Caps

Part No.	Type	Vol. (L) / Max. Vol. (mL)	Cap Size (mm)	Qty.	Reg. Price	SALE Price
CLS-2170-EP2L	Erlenmeyer	2 / 2,200	70	6	\$306.00	\$244.80 ♣
CLS-2170-FP2L	Fernbach	2 / 2,400	70	6	\$350.00	\$280.00 ♣
CLS-2170-FP3L	Fernbach	3 / 4,000	70	4	\$348.00	\$278.40 ♣

Polypropylene Caps

Part No.	Cap Type	Cap Size (mm)	Qty.	Reg. Price
CLS-2172-V070	vented	70	1	\$220.00 ♣
CLS-2072-S070	solid	70	1	\$112.00 ♣

NEST High Efficiency Polycarbonate Flasks with Solid or Vent Caps , Sterile, USP Class VI

- Polycarbonate has high standard of transparency and the flask has a clear graduation scale for easy observation.
- Sterilized by E-Beam
- Non-Pyrogenic
- Packaged in sterile bags, 4 per case

Tips

- Recommended volume: 30-40% of the bottle volume.
- Rotation speed suggestion: the starting speed is 75-125RPM, you can control the rotation speed according to the application.

The imported medical-grade polycarbonate that meets with the requirements of ISO 10993 USP<661> is chosen as the raw materials, which has high transparency, great impact resistance, oxidation resistance and can withstand a high temperature of up to 121°C. The scale is clear and accurate when looked at from the outside, which facilitates the observation of the volume of culture medium. The vent cap is equipped with a 0.22µm breathable film which is air-permeable and water-proof to efficiently prevent the passing of micro-organisms and contamination and to ensure gas exchange for good growth of cells or bacteria. The products have undergone the tightness test, drop test, high-temperature and high-voltage tests, flatness test, tensile test, endotoxin test, sterilization test, DNA/RNA enzyme-free tests and cell culture test, all the results of which meet the corresponding quality standards.



CGN-2165-3L



CGN-2165-3W

NEST 3L, High Efficiency, PC Flasks with Caps, Sterile

Part No.	Volume (L)	Cap Type	Qty.	Price
CGN-2165-3LSC	3	solid	4	\$328.20 *
CGN-2165-3L	3	vent	4	\$332.55 *

NEST 3L, Wide Mouth High Efficiency, PC Flasks with Caps, Sterile

Part No.	Volume (L)	Cap Type	Qty.	Price
CGN-2165-3WSC	3	solid	4	\$328.20 *
CGN-2165-3W	3	vent	4	\$332.55 *

NEST 5L, PC Flasks with Filter Vent Caps, Sterile

Part No.	Volume (L)	Cap Type	Qty.	Price
CGN-2165-5LSC	5	solid	4	\$485.95 *
CGN-2165-5L	5	vent	4	\$500.75 *



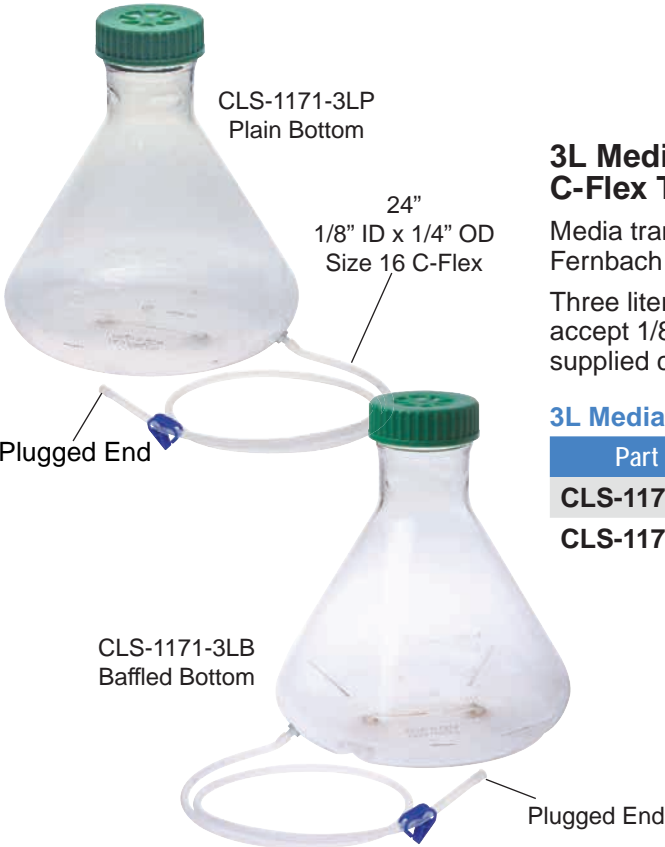
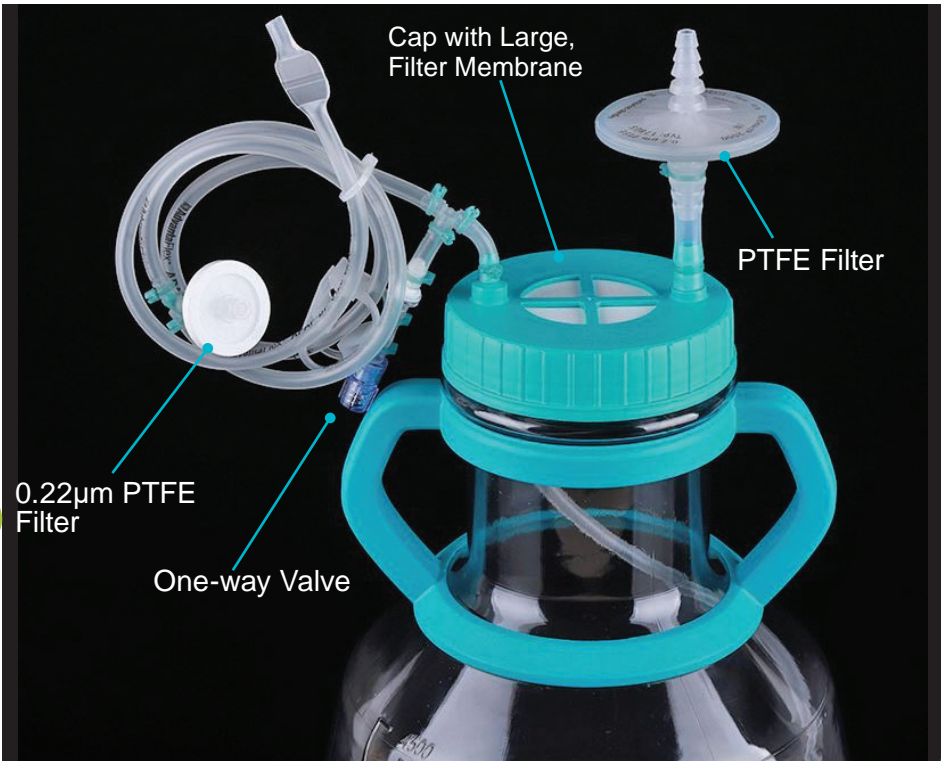
CGN-2165-5L

Custom Assemblies & Systems Available

Single-Use Bioprocess Containers, Assemblies and Systems

- Custom assemblies
- Feed bottles
- Transfer flasks and cap assemblies
- Tubing assemblies
- Sample tube assemblies
- Bioreactor tubing kits
- Barblock® retainer systems
- CPC tubing connectors
- Accessories

contact: singleuse@cglifesciences.com



3L Media Transfer Vessels with Barbed Fittings, Weldable C-Flex Tubing, Plugged, Plain or Baffled Bottom, Sterile

Media transfer vessels are ideal for doing gravity feeds from sterile 3L vessels. Fernbach flasks are sterile and individually double bagged.

Three liter polycarbonate flasks with filter caps have 3/16" barbed fittings that accept 1/8" ID x 1/4" OD weldable C-Flex® tubing ending in a plug 24" L. Each is supplied complete with a tubing clamp. Irradiated sterile. Call for bulk pricing.

3L Media Transfer Vessels, Sterile, Complete

Part No.	TubeSize	Bottom Type	Qty.	Price
CLS-1171-3LP	16	Plain	1	\$258.70 *
CLS-1171-3LB	16	Baffled	1	\$258.70 *

For custom Transfer Flask quotes and inquiries
contact: singleuse@cglifesciences.com



SCMPC250PC Special

MPCK32003
Sealing Cap with Lock
Quick Connect

CLS-1171-5LQC

Tubing Clamp included ▶

24" Platinum-cured
Silicone Tubing ▶
1/4" ID x 7/16" OD Size 24

5L Sterile Media Transfer Flask with Platinum-Cured Silicone Tubing and Quick Disconnect

- Quick disconnect fitting on tubing
- 1/4" ID x 7/16" OD platinum-cured silicone tubing

Dual purpose, 5L transfer flasks are designed for the sterile transfer of liquids as well as for single-use inoculation vessels. They're ideal for use doing gravity feed from sterile, 5L vessels.

Erlenmeyer-style, polycarbonate flask includes a cap with 0.2 µm hydrophobic filter, 3/16" barbed fitting, 1/4" ID x 7/16" OD platinum-cured tubing, tubing clamp and quick disconnect. Supplied gamma irradiated, sterile and individually double bagged.

5L Media Transfer Flask with Quick Disconnect

Part No.	Tube Size	Vol. (L)	Qty.	Price
CLS-1171-5LQC	24	5	1	\$280.35 *



CLS-1171-5LWT



Plugged End

Tubing Clamp included ▶

24" C-Flex Tubing ▶
1/4" ID x 3/8" OD Size 17 or
1/4" ID x 7/16" OD size 24

5L Sterile Media Transfer Flask with C-Flex® Tubing and Plugged End

- Tubing end is plugged
- 1/4" ID X 3/8" OD weldable, C-Flex tubing

Dual purpose, 5L transfer flasks are designed for the sterile transfer of liquids as well as for single-use inoculation vessels. They're ideal for use doing gravity feed from sterile, 5L vessels.

Erlenmeyer-style, polycarbonate flask includes a cap with 0.2 µm hydrophobic filter, 1/4" barbed fitting, 1/4" ID x 3/8" OD or 1/4" ID x 7/16" OD weldable C-Flex® tubing with a plugged end and tubing clamp. Supplied gamma irradiated, sterile and individually double bagged.

5L Media Transfer Flask with Plugged Tubing

Part No.	Tube Size	Vol. (L)	Qty.	Price
CLS-1171-5LWT	17	5	1	\$280.35 *
CLS-1171-5LWB	24	5	1	\$280.35 *

CUSTOM FLUID TRANSFER SOLUTIONS designed for the unique needs of your process.



CONTACT US

1.800.843.1794

singleuse@cglifesciences.com



CLS-2020 series

Flasks, Fernbach, 2800mL, Without Baffles

Flasks are designed for culturing organisms that require a large surface area to volume ratio. Available with a plain 59mm ID neck, 38mm OD DeLong® style neck or GL-45 screw neck supplied with a vented cap.

Part No.	Description	Price
CLS-2020-10	Plain 59mm ID Top, Without Baffles	\$187.65 *
CLS-2020-11	38mm DeLong® Top, Without Baffles	\$224.75 *
CLS-2020-30	GL-45 Screw Thread, Vented Cap, Without Baffles	\$257.50 *

Replacement Parts

Part No.	Description	Pkg	Price
CLS-1484-B-45	GL-45 Cap Vented	5	\$65.70 *
CLS-1482-13	Pouring Ring GL-45, Blue	10	\$17.20 *



CLS-2021 series

Flasks, Fernbach, 2800mL, Without Baffles

2800mL flasks are designed for culturing organisms that require a large surface area to volume ratio. Available with 70mm screw neck with a solid or vented cap with 0.22µm PTFE Membrane.

Part No.	Description	Price
CLS-2021-70	70mm Screw Thread, Solid Cap, Without Baffles	\$314.55 *
CLS-2021-72	70mm Screw Thread, Vented Cap, Without Baffles	\$331.50 *

Replacement Parts

Part No.	Description	Price
CLS-1487-70	Cap, 70mm, Blue, Polypropylene, Non-Sterile	\$10.90 *
CLS-1487-72	Silicone Liner Only for CLS-1487-70; 70mm Cap	\$5.70 *
CLS-1484-A-70	Cap, Vented, 70mm, Blue, Polypropylene, Non-Sterile, 0.22µm PTFE Membrane	\$28.05 *
CLS-1484-A-72	Silicone Gasket Only for CLS-1484-A-70; 70mm Vented Cap	\$5.60 *



CLS-2022 series

Flasks, Fernbach, 2800mL, With 3 Side Baffles

Flasks are designed for culturing organisms that require a large surface area to volume ratio. Flask has 3 baffles on lower outside edge to help oxygen transfer to the culture medium. Available with a plain 59mm ID neck, 38mm OD DeLong® style neck or GL-45 screw neck supplied with a vented cap.

Part No.	Description	Price
CLS-2022-14	Plain 59mm ID Top, With 3 Side Baffles	\$229.55 *
CLS-2022-16	38mm DeLong® Top, With 3 Side Baffles	\$244.55 *
CLS-2022-31	GL-45 Screw Thread, Vented Cap With 3 Side Baffles	\$285.85 *

Replacement Parts

Part No.	Description	Pkg	Price
CLS-1484-B-45	GL-45 Cap Vented	5	\$65.70 *
CLS-1482-13	Pouring Ring GL-45, Blue	10	\$17.20 *

Flasks, Fernbach, 2800mL, With 3 Side Baffles

2800mL flask with 3 baffles on the lower outside edge of the flask to help oxygen transfer to the culture medium. 0.22µm PTFE Membrane.

Part No.	Description	Price
CLS-2023-72	70mm Screw Thread, Vented Cap, With 3 Baffles	\$391.00 *

Replacement Parts

Part No.	Description	Price
CLS-1484-A-70	Cap, Vented, 70mm, Blue, Polypropylene, Non-Sterile, 0.22µm PTFE Membrane	\$28.05 *
CLS-1484-A-72	Silicone Gasket Only for CLS-1484-A-70; 70mm Vented Cap	\$5.60 *



CLS-2023 series

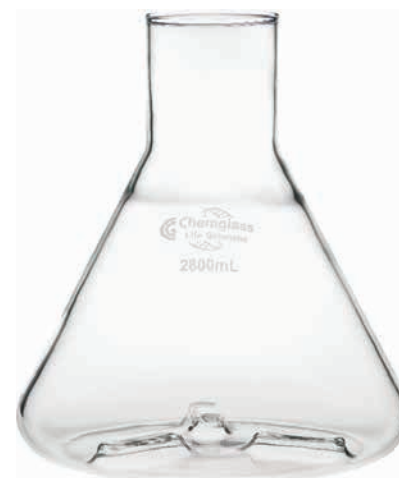
Flasks, Fernbach, 2800mL, With 3 Bottom Baffles

Flasks are designed for culturing organisms that require a large surface area to volume ratio. Flask has 3 baffles on the bottom surface to help oxygen transfer to the culture medium. Available with a plain 59mm ID neck, 38mm OD DeLong® style neck or GL-45 screw neck supplied with a vented cap.

Part No.	Description	Price
CLS-2024-15	Plain 59mm ID Top, With 3 Bottom Baffles	\$261.85 *
CLS-2024-17	38mm DeLong® Top, With 3 Bottom Baffles	\$292.25 *
CLS-2024-32	GL-45 Screw Thread, Vented Cap, With 3 Bottom Baffles	\$295.60 *

Replacement Parts

Part No.	Description	Pkg	Price
CLS-1484-B-45	GL-45 Cap Vented	5	\$65.70 *
CLS-1482-13	Pouring Ring GL-45, Blue	10	\$17.20 *



CLS-2024 series

Flasks, Fernbach, 2800mL, With 3 Bottom Baffles

2800mL flask with 3 baffles on the bottom surface of the flask to help oxygen transfer to the culture medium. 0.22µm PTFE Membrane.

Part No.	Description	Price
CLS-2025-72	70mm Screw Thread, Vented Cap, With 3 Baffles	\$375.45 *

Replacement Parts

Part No.	Description	Price
CLS-1484-A-70	Cap, Vented, 70mm, Blue, Polypropylene, Non-Sterile, 0.22µm PTFE Membrane	\$28.05 *
CLS-1484-A-72	Silicone Gasket Only for CLS-1484-A-70; 70mm Vented Cap	\$5.60 *



CLS-2025 series



CLS-2026 series



CLS-2054 series



CLS-1502 series

Flasks, Fernbach, 2800mL, With 6 Baffles

Flasks are designed for culturing organisms that require a large surface area to volume ratio. Flask has 3 baffles on the lower outside edge and 3 baffles on the bottom surface to help oxygen transfer to the culture medium. Available with a plain 59mm ID neck, 38mm OD Delong® style neck or GL-45 screw neck supplied with a vented cap.

Part No.	Description	Price
CLS-2026-20	Plain 59mm ID Top, With 6 Baffles	\$327.20 *
CLS-2026-22	38mm DeLong® Top, With 6 Baffles	\$338.00 *

Flasks, Shake, 2L, 6 Bottom Baffles, 70mm

Flask has 6 bottom baffles to maximize oxygen transfer for bacterial, yeast and other cultures that require large amounts of oxygen for optimal growth. The 70mm vented cap has a 0.20µm PVDF hydrophobic membrane to allow for sterile gas exchange while preventing contamination. A silicone liner ensures a tight seal between the cap and flask. A solid cap is available for anaerobic cultures. The flasks, cap and liners are all fully autoclavable.

Part No.	Description	Price
CLS-2054-04	Flask, Shake, 2L, 6 Bottom Baffles, 70mm Vented Cap, Approx OD x Height (mm): 170 x 27	\$228.35 *
CLS-2054-06	Flask, Shake, 2L, 6 Bottom Baffles, 70mm Solid Cap, Approx OD x Height (mm): 170 x 270	\$221.20 *

Replacement Parts

Part No.	Description	Price
CLS-1484-A-70	Cap, Vented, 70mm, Blue, Polypropylene, Non-Sterile, 0.22µm PTFE Membrane	\$28.05 *
CLS-1484-A-72	Silicone Gasket Only for CLS-1484-A-70; 70mm Vented Cap	\$5.60 *

Closures, Stainless Steel

These closures are made from 305 Stainless Steel. They are ideal for use with culture tubes and flasks utilizing Delong® Necks. The closure is designed with finger grips to allow it to fit firmly on any Delong® Neck. It will withstand both dry heat sterilization and repeated autoclaving.

Stainless Steel Closures

Part No.	Description	Qty	Price
CLS-1502-018	Closure, 18mm Stainless Steel	10	\$21.80 *
CLS-1502-025	Closure, 25mm Stainless Steel	10	\$32.20 *
CLS-1502-038	Closure, 38mm Stainless Steel	10	\$105.80 *

Visit our site for Shaker Flasks



Closures, Polypropylene

Delong® style closure made of polypropylene. Closure offers two positions, open for gas exchange or closed for humidified environment. Internal drip ring minimizes contamination. Autoclavable to 121°C

Polypropylene Closures

Part No.	Description	Qty	Price
CLS-1503-09	25mm Closure	10	\$14.70 *
CLS-1503-10	38mm Closure	10	\$27.45 *



Closures, Silicone Sponge

The silicone sponge closure is manufactured with a sealed in silicone sponge filter. Flange fits snugly over the necks of vessels permitting the exchange of gases, while reducing evaporation and preventing the passing of aerosols. Ideal for use with aerobic cultures. Reusable, autoclavable and will withstand dry heat sterilization up to 180°. Closure will withstand both dry heat sterilization and repeated autoclaving.

- CLS-1490-013 fits:** 13-18mm Culture Tubes and 18mm Screw Necks
- CLS-1490-020 fits:** 18-25mm Culture Tubes, 25-50mL Erlenmeyer Flasks and 25-125mL Delong® Flasks
- CLS-1490-028 fits:** 125 and 250mL Erlenmeyer Flasks
- CLS-1490-038 fits:** 38mm Delong® Style Flask or Tube Necks, 38mm Culture Tubes, 500 and 1000mL Standard Erlenmeyer Flasks and GL-45 Screw Threads



CLS-1503 series

Silicone/Sponge Closures

Part No.	Description	Qty	Price
CLS-1490-013	13-18mm Culture Tube, 18mm Screw Necks	10	\$84.10 *
CLS-1490-020	18-25mm Culture Tubes, 25-50ml Erlenmeyer Flasks, 25-125mL DeLong® Flasks	10	\$91.75 *
CLS-1490-028	125 and 250mL Erlenmeyer Flasks	10	\$106.45 *
CLS-1490-038	38mm DeLong® Style Flask or Tube Necks, 38mm Culture Tubes, 500 and 1000ml Standard Erlenmeyer Flasks, GL-45 Screw Threads	10	\$137.55 *



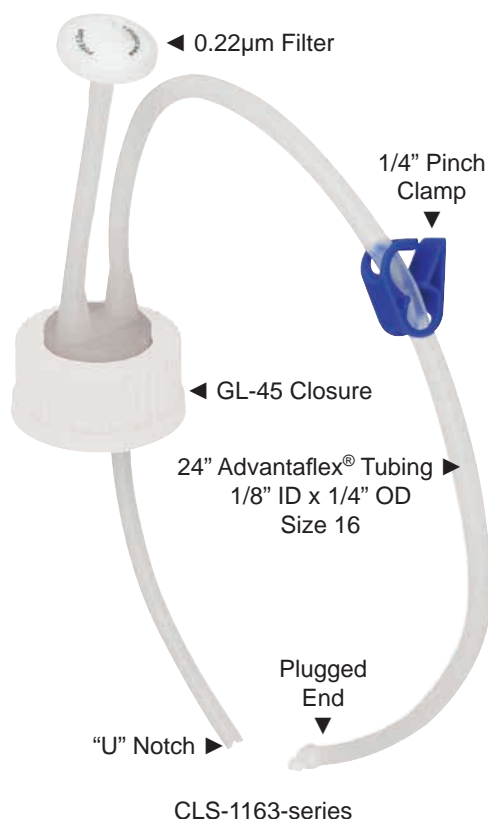
CLS-1490 series

Feed Bottle Transfer Assemblies with GL-45 Threaded Caps, Two Ports, AdvantaFlex® Tubing, Sterile

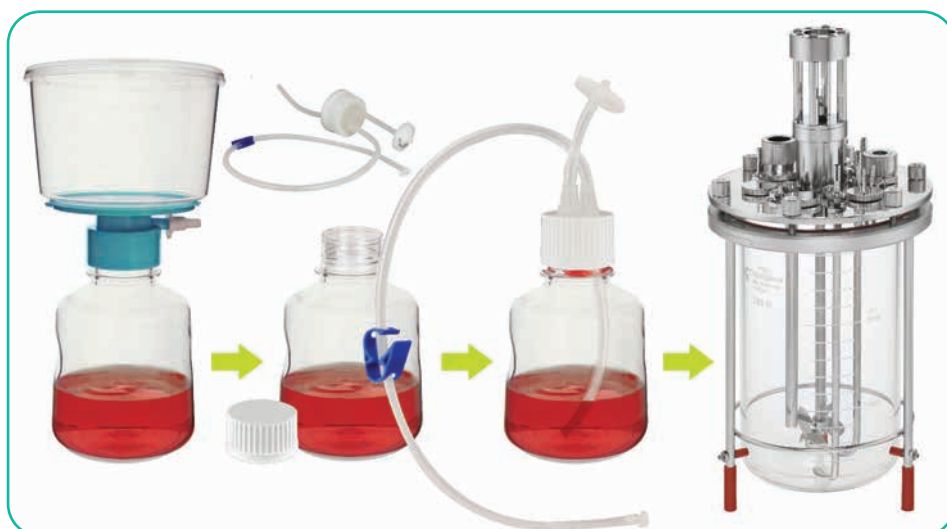
Chemglass Life Sciences GL-45 cap transfer assemblies are available in sizes from 125mL-1L. These transfer assemblies are extremely helpful for sterile transfer of liquids from containers or bottles which have a GL-45 threaded neck. Our assemblies are a great choice to achieve sterile fluid transfer when using Corning and Thermo Fisher filter systems and storage bottles.

Each 2-port GL-45 closure assembly includes a 0.22µm filter, 24 inch length of AdvantaFlex® tubing with a plugged end, 1/4" pinch clamp and a V- notched dip tube. The assembly is made from pharmaceutical grade thermoplastic elastomer resin. Manufactured, assembled and packaged in a Class 7 cleanroom, USP Class VI approved components. Each assembly is individually double poly-bagged and gamma-irradiated.

Please note: Compatible with Fisher / Nunc brand and Corning brand filter media bottles.



Feed Transfer From Filter Systems



Two Port Transfer Assemblies with GL-45 Caps, Sterile

Part No.	Tube Size	Size (mL)	Qty.	Price
CLS-1163-0125	16	125	5	\$150.00 *
CLS-1163-0250	16	250	5	\$151.00 *
CLS-1163-0500	16	500	5	\$153.25 *
CLS-1163-1000	16	1,000	5	\$154.00 *

Single-Use Bioprocess Tubing Assemblies to Your Custom Specifications

For custom quotes and inquiries contact singleuse@cglifesciences.com



Transfer Assemblies, Vented, for Single-Use Media Bottles, with Plugged Ends and Advantaflex TPE, Weldable Tubing, Sterile

Transfer cap assemblies, vented for Single Use Media bottles are a cost effective and convenient way to transfer liquid. The venting port ends in a 30mm diameter vent filter with a 0.20µm pore PTFE (hydrophobic) membrane and barbed fitting. All components in contact with the media are USP Class VI and the Size 16 tubing has a clamp and a plugged end (24" length). Tubing with a tubing clamp and ending with a plugged end. Individually double bagged and gamma irradiated sterile.

Vented Transfer Assemblies for Single-Use Media Bottles, Sterile

Part No.	Tube Size	Size (mL)	Qty.	Price
CLS-1161-0125	16	125	5	\$194.25 *
CLS-1161-0250	16	250	5	\$195.55 *
CLS-1161-0500	16	500	5	\$198.60 *
CLS-1161-1000	16	1,000	5	\$200.20 *
CLS-1161-2000	16	2,000	5	\$218.15 *

3L Transfer Assembly with Plugged End and Weldable C-Flex® Tubing, Sterile

Available for Corning and CellTreat Flasks

Transfer cap assemblies for 3L Fernbach flasks. The venting port ends in a 50mm diameter vent filter with a 0.20µm pore PTFE (hydrophobic) membrane and barbed fitting. On the external side you will find 1/8" ID x 1/4" OD weldable C-Flex® tubing with a tubing clamp and ending with a 1/8" end tube plug. The liquid transfer port has an internal end with a rigid 1/8" x 1/4" OD C-Flex dip tube to reach the bottom of the flask. Individually double bagged and gamma irradiated sterile.

3L Transfer Assembly, Corning, Sterile

Part No.	Description	Qty.	Price
CLS-3465-3LC	3L Transfer Assembly, Corning	1	\$336.60 ◇
CLS-3465-3LA	3L Transfer Assembly, CellTreat	1	\$336.60 ◇

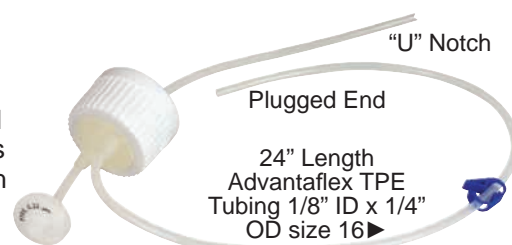
Sterile Transfer Cap Assembly for 20L Nalgene Carboy

The venting port ends in a 50mm diameter vent filter with a 0.20µm pore PTFE (hydrophobic) membrane and barbed fitting. On the external side you will find 1/2" ID x 3/4" OD, weldable, size 82, C-Flex® tubing with a tubing clamp and a 1/2" end tube plug. The liquid transfer port has an internal end with a rigid 1/2" x 3/4" OD size 82 C-Flex® dip tube to reach the bottom of the carboy. Individually double bagged and gamma irradiated sterile.

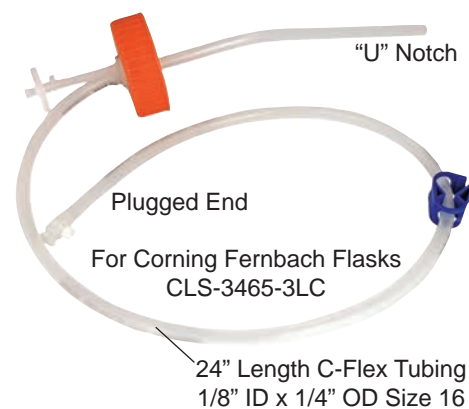
Transfer Assembly for 20L Nalgene Carboy, Sterile

Part No.	Description	Qty.	Price
CLS-3465-20LC	Plugged End and Weldable C-Flex Tubing	1	\$312.30 ♥

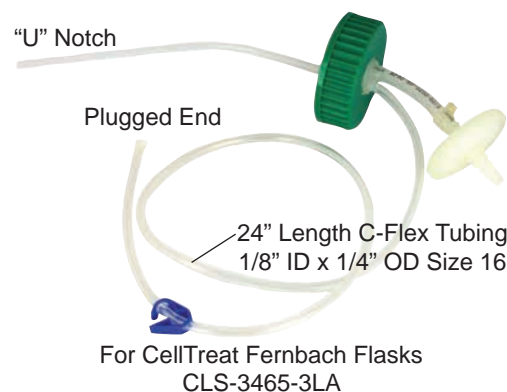
Other Transfer Assemblies with Nalgene 83B Caps are also available.
For custom Transfer assembly quotes and inquiries contact
singleuse@cglifesciences.com



CLS-1161-series



For Corning Fernbach Flasks
CLS-3465-3LC

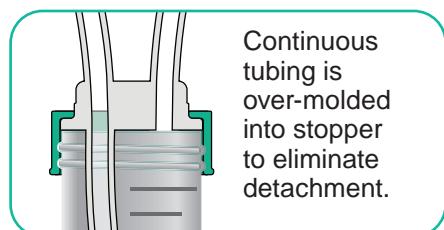
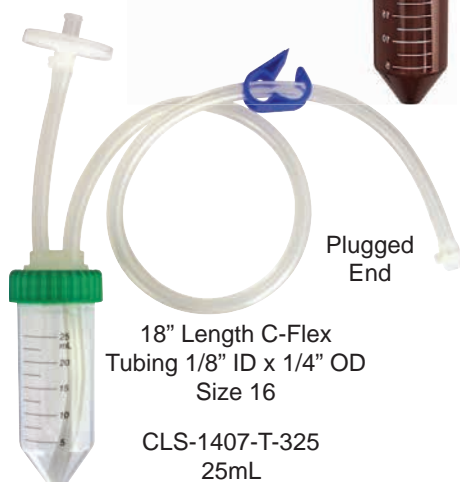


For CellTreat Fernbach Flasks
CLS-3465-3LA



CLS-3465-20LC

24" Length C-Flex Tubing
1/2" ID x 3/4" OD Size 82



Custom Assemblies Available

For custom quotes and inquiries
contact singleuse@cglifesciences.com

Sterile Sample Tube Assemblies with C-Flex® Inlets

Polypropylene centrifuge tube assemblies feature closed cap assemblies with 18" of Size 16 (1/8" x 1/4") C-Flex tubing inlet line with pinch clamps and plugs. They include 3" vent lines and PTFE filters. Certified sterile.

Assemblies can be used for sampling and transfer of biopharmaceutical products and reagents in closed systems. Individually bagged in an outer bag of ten.

- Over-molded dip tubes eliminate risk of detachment
- Polypropylene centrifuge tubes
- Completely closed cap systems
- Include tubing, pinch clamps and vent filters

Sample Tube™ Assemblies with C-Flex Dip Tubes, Sterile

Part No.	Vol. (mL)	Cent. Tube Material	Inner Dip Tube Material	Qty.	Price
CLS-1407-T-312	50	PP	C-Flex	10	\$513.65 *
CLS-1407-T-312A	50	PP	C-Flex	10	\$514.80 *
CLS-1407-T-325	25	PP	C-Flex	10	\$427.25 *

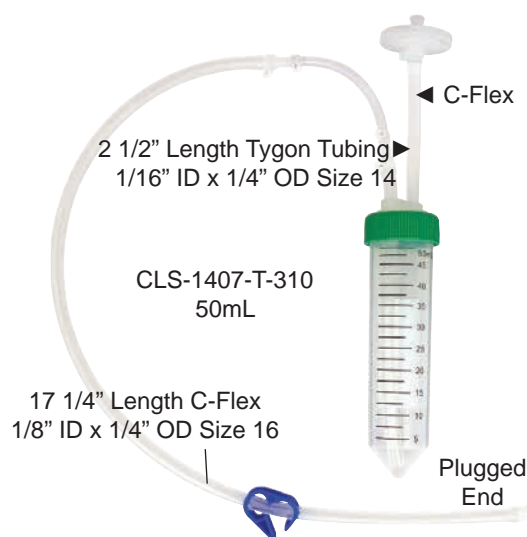
Sterile Sample Tube Assemblies with C-Flex to Tygon® to C-Flex Inlets

Polypropylene centrifuge tube assemblies feature closed cap assemblies with 3/4" of Size 16 (1/8" x 1/4") C-Flex tubing inlet line which transitions to 2 1/2" of Size 14 (1/16" x 1/4") Tygon and then transitions to 17 1/4" of Size 16 (1/8" x 1/4") C-Flex tubing with pinch clamps and plugs. They also include 3" ventlines and PTFE filters. Assemblies are certified sterile.

Assemblies can be used for sampling and transfer of biopharmaceutical products and reagents in closed systems. Individually bagged in an outer bag of ten.

Sample Tube Assemblies with C-Flex Dip Tubes, Sterile

Part No.	Vol. (mL)	Cent. Tube Material	Inner Dip Tube Material	Qty.	Price
CLS-1407-T-310	50	PP	C-Flex	10	\$570.95 *



Sample Tube™ Assemblies, 15mL Centrifuge Tube With TPE and Male Luer Lock Inlet, Sterile

The 15mL polypropylene centrifuge tube assembly utilizes a closed cap assembly with 18" of 1/16" ID x 1/8" OD TPE tubing inlet line with a pinch clamp and a capped male luer lock end. The assembly includes a 3" vent line with a 25mm PES filter. Assembly is certified sterile.

The assembly can be used for sampling and transfer of biopharmaceutical products and reagents in closed systems. Sold individually wrapped in a bag of five or ten

Sample Tube™ Assemblies with TPE, Male Luer Lock Inlet, Sterile

Part No.	Vol. (mL)	Cent. Tube Material	Inner Dip Tube Material	Qty.	Price
CLS-1407-T-515	15	PP	TPE	5	\$385.75 *
CLS-1407-T-1015	15	PP	TPE	10	\$380.85 *

Sample Tube™ Assemblies, 15mL, Sterile, Single-Use, 15mL Centrifuge Tube

The 15mL polypropylene centrifuge tube assembly utilizes a closed cap assembly with 2" of 1/16" ID x 1/8" OD TPE to 16" of Size 16 (1/8" ID x 1/4" OD) C-Flex tubing inlet line with a pinch clamp and a plugged end. The assembly includes a 3" vent line with a 25mm PES filter. Assembly is certified sterile.

The assembly can be used for sampling and transfer of biopharmaceutical products and reagents in closed systems. Sold individually wrapped in a bag of five or ten

Sample Tube™ Assemblies with C-Flex Dip Tubes, Sterile

Part No.	Vol. (mL)	Cent. Tube Material	Inner Dip Tube Material	Qty.	Price
CLS-1407-T-516	15	PP	C-Flex	5	\$385.75 *
CLS-1407-T-1016	15	PP	C-Flex	10	\$680.85 *

Transfer Media Bottles, Clear, with Hose Barbs and GL-45 Vented Caps

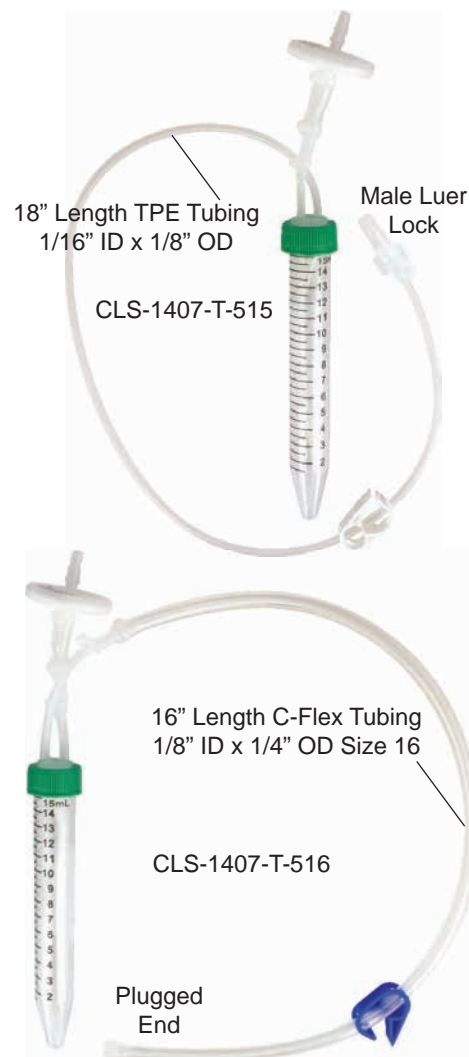
For easy gravity transfer of solutions. Schott bottle with drip-free pouring ring and liner-less, one piece, autoclavable, reusable, vented cap. Hose barb outlet at the bottom allows for easy gravity transfer of solutions. The hose barb accepts the ID tubing listed.

Transfer Media Bottles with Vented Caps

Part Number	Vessel Cap. (mL)	Tubing Size for Hose Barb	Price
CLS-1423-100	100	1/4"	\$59.90 ▣
CLS-1423-250	250	1/4"	\$73.20 ▣
CLS-1423-500	500	1/4"	\$82.10 ▣
CLS-1423-1L	1000	1/4"	\$144.30 ▣
CLS-1423-2L	2000	1/4"	\$264.60 ▣
CLS-1423-5L	5000	1/4"	\$513.25 ▣
CLS-1423-10L	10,000	1/2"	\$817.60 ▣

Replacement Parts

Part No.	Description	Pkg	Price
CLS-1484-B-45	GL-45 Cap Vented	5	\$65.70 *
CLS-1482-13	Pouring Ring GL-45, Blue	10	\$17.20 *



CLS-1423-series
Other size hose barbs available, please contact us for details.



CG-812 series

Bottles, GL-80 Threads, Wide Necks, Graduated, DURAN®

- **Wide neck screw thread** – 80mm diameter, special thread design for rapid opening and closing.
- **Inert and chemically resistant** – exceptional properties of DURAN® eliminate problems with ion leaching.
- **Mechanical strength** – the sturdy design of these wide neck bottles enhances safety and service life.
- **Autoclavable** – excellent thermal properties for autoclaving and dry sterilization.
- **Transparency** – contents and volume can be visually checked with ease.
- **Traceability** – the eight-digit batch code allows the bottles to be traced back to the point of production, including the matching batch. The end-user can use the corresponding item number to retrieve a batch and quality certificate for any DURAN® laboratory bottle at any time via the Internet.
- **Stability** – the large, stable base area allows for safe and easy storage.
- **Labeling** – provided with a printed white panel for labeling the contents.
- **Graduated** – convenient, easy-to-read graduations indicating volume.
- **User-friendly** – the special thread design enables the bottle to be opened and closed quickly with less than two turns of the cap.
- **Temperature-resistant** – the polypropylene cap is autoclavable up to 140°C.
- **Matching pouring ring** – for drip-free pouring.

Bottles, GL-80 Threads, Wide Necks, Graduated, DURAN®

Part Number	Vessel Cap. (mL)	Qty	Price
CG-812-01	500	10	\$334.55 ▣
CG-812-02	1000	10	\$394.70 ▣
CG-812-03	2000	10	\$866.85 ▣
CG-812-04	5000	1	\$391.90 ▣
CG-812-05	10,000	1	\$716.20 ▣
CG-812-06	20,000	1	\$1,548.35 ▣



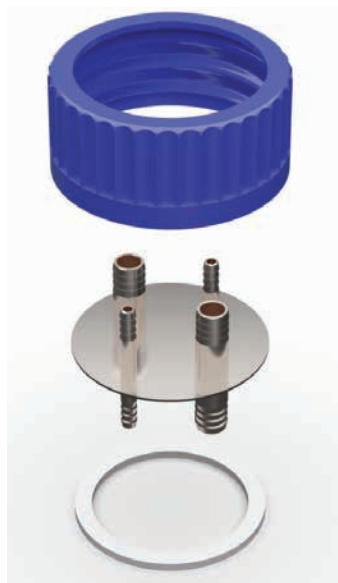
CLS-1380-480

4-Port Adapter, GL-80, 1/4" & 1/2" Hose Barbs, Stainless Steel

The 4-Port inlet assembly fits bottles with GL-80 threads. The assembly incorporates four separate pipes into one assembly for efficient use of space. Each port can be used individually for reagent addition. Adapter has (2) 1/4" Hose and (2) 1/2" barbs for connection to flexible tubing. Inside the reactor, the tubes are 1" long and are barbed.

4-Port Adapter, GL-80, 1/4" & 1/2" Hose Barbs, Stainless Steel

Part Number	Description	Pkg. Qty.	Price
CLS-1380-480	4-Port Adapter, GL-80, (2) 1/4" & (2) 1/2" Hose Barbs, Stainless Steel	1	\$406.60 *



Bottles, Amber, Media Storage, Duran

Heavy duty bottle which can be used for storage as well as mixing and sampling. Glass bead indicates full capacity line on 100mL through 2L size. Bottles have permanent white enamel graduations and marking spots. Optional red PBT caps and red ETFE pouring rings are available for dry heat sterilization (180°C). Solid, color-coded polypropylene caps in a choice of orange, green, purple, red, and light gray are available. Open-top caps and PTFE/Silicone septa are also available

Bottles Only (No Caps)				
Cap. (mL)	Thread Size	Qty.	Part No.	Price
25	GL-25	10	CLS-1175-25	\$429.40 †
50	GL-32	10	CLS-1175-50	\$429.40 †
100	GL-45	10	CLS-1175-100	\$439.50 †
250	GL-45	10	CLS-1175-250	\$729.25 †
500	GL-45	10	CLS-1175-500	\$821.85 †
1,000	GL-45	10	CLS-1175-1L	\$1,195.60 †
2,000	GL-45	10	CLS-1175-2L	\$1,847.75 †
5,000	GL-45	1	CLS-1175-5L	\$474.85 †
10,000	GL-45	1	CLS-1175-10L	\$1,014.65 †
15,000	GL-45	1	CLS-1175-15L	\$1,214.00 †
20,000	GL-45	1	CLS-1175-20L	\$2,301.30 †

CAUTION: Bottles larger than 2L should NOT be used with bottle top filter units, or in other applications involving vacuum pressure, as breakage may occur. DO NOT have caps tightened immediately after autoclaving as the vacuum resulting from cooling can cause breakage. A pouring ring is not included on 25mL size. A vented cap is NOT recommended for use on the 5L and 10L bottle.



CLS-1175-series

Bottles, Media Storage, Duran®

Heavy duty bottle which can be used for storage as well as mixing and sampling. Bottle available with closure which includes liner-less, one-piece autoclavable polypropylene plug seal cap with drip free pouring rings, or without closures in both clear and amber (For amber see CLS-1175). Optional red PBT caps and red ETFE pouring rings are available for dry heat sterilization (180°C). Glass bead indicates full capacity line on 100mL through 2L size. Bottles have permanent white enamel graduations and marking spots. Solid, color-coded polypropylene caps in a choice of orange, green, purple, red, and light gray are available. Open-top caps and PTFE/Silicone septa are also available.

			Bottles With Blue Caps		Bottles Only (No Caps)	
Cap. (mL)	Thread Size	Qty.	Part No.	Price	Part No.	Price
25	GL-25	10	CLS-1172-25	\$163.15 †	CLS-1174-25	\$115.40 †
50	GL-32	10	CLS-1172-50	\$163.15 †	CLS-1174-50	\$115.40 †
100	GL-45	10	CLS-1172-100	\$170.30 †	CLS-1174-100	\$112.05 †
250	GL-45	10	CLS-1172-250	\$196.75 †	CLS-1174-250	\$137.95 †
500	GL-45	10	CLS-1172-500	\$246.05 †	CLS-1174-500	\$187.10 †
1,000	GL-45	10	CLS-1172-1L	\$350.65 †	CLS-1174-1L	\$288.35 †
2,000	GL-45	10	CLS-1172-2L	\$814.20 †	CLS-1174-2L	\$755.65 †
5,000	GL-45	1	CLS-1172-5L	\$342.50 †	CLS-1174-5L	\$336.45 †
10,000	GL-45	1	CLS-1172-10L	\$650.25 †	CLS-1174-10L	\$628.20 †
15,000	GL-45	1	—	—	CLS-1174-15L	\$869.70 †
20,000	GL-45	1	CLS-1172-20L	\$1,344.35 †	CLS-1174-20L	\$1,316.20 †



CLS-1172-series



CLS-1174-series



CLS-1420-series

CLS-1437-series
2-Port AssembliesCLS-1437-series
3-Port AssembliesCLS-1437-29
(Bottle not included.)

CLS-1437-G1

Media Bottles with Siphon Assembly

Standard media bottle with siphon assembly consisting of stainless steel siphon pipe and silicone tubing cut to length. All stainless parts are manufactured from 316L stainless steel electropolished to a 20Ra or better finish. The silicone tubing is peroxide cured and meets 21 CFR 177.2600 material specifications.

Assembled, the media bottle with siphon assembly allows the user to create precisely the desired dip tube angle to retrieve virtually all of the contents of fluid from the bottle.

Media Bottles with Siphon Assemblies

Part No.	Capacity (mL)	Qty.	Price
CLS-1420-250	250	1	\$439.55 ♥
CLS-1420-500	500	1	\$443.25 ♥
CLS-1420-1L	1,000	1	\$450.60 ♥
CLS-1420-2L	2,000	1	\$480.20 ♥
CLS-1420-5L	5,000	1	\$657.40 ♥
CLS-1420-10L	10,000	1	\$775.40 ♥

Media Bottle Port Assemblies, 2-Port, SS, with Hose Barbs

Our 2-port dip tube assemblies are designed for addition or sampling of media from standard DURAN® or Corning® media bottles. They are constructed of 316L electropolished stainless steel and include a blue polypropylene GL-45 open top cap with a white silicone gasket. Dip tube assemblies have a finish of 20Ra or better.

Two-Port Assemblies

Part No.	Fits Vessels	Qty.	Price
CLS-1437-19	1L Media Bottles Only	1	\$235.25 ♥
CLS-1437-20	3L VSA Vessels and 2L Media Bottles	1	\$244.25 ♥
CLS-1437-21	6L VSA Vessels and 5L Media Bottles	1	\$280.45 ♥
CLS-1437-22	8L VSA Vessels and 10L Media Bottles	1	\$325.70 ♥
CLS-1437-23	15L & 36L VSA Vessels Only	1	\$360.15 ♥

Media Bottle Port Assemblies, 3-Port, SS, with Hose Barbs

Our 3-port assemblies are designed for addition or sampling of media from standard DURAN® or Corning® media bottles. They are constructed of 316L electropolished stainless steel and include a blue polypropylene GL-45 open top cap with a white silicone gasket. Dip tube assemblies have a finish of 20Ra or better.

Three-Port Assemblies

Part No.	Fits Vessels	Qty.	Price
CLS-1437-29	1L Media Bottles Only	1	\$298.65 ♥
CLS-1437-30	3L VSA Vessels and 2L Media Bottles	1	\$307.75 ♥
CLS-1437-31	6L VSA Vessels and 5L Media Bottles	1	\$325.70 ♥
CLS-1437-32	8L VSA Vessels and 10L Media Bottles	1	\$343.80 ♥
CLS-1437-33	15L & 36L VSA Vessels Only	1	\$407.10 ♥

Glass Frit

Part No.	Porosity (µm)	Qty.	Price
CLS-1437-G1	40-60	1	\$90.65 ♥

Bottles, Media, Square, Sterile, PETG, Graduated, Plain Cap

Gamma sterilized non-pyrogenic media bottles manufactured from USP Class VI (PETG) polyethylene terephthalate copolyester with white polypropylene caps. Pyrogen, DNase, RNase and Particle-Free. Bottles proved reduced permeability to both CO₂ and O₂. Note: These bottles are not autoclavable.

Bottles, Media, Square, Sterile, PETG, Graduated, Plain Cap

Part No.	Cap. (mL)	GPI Thread Size	Qty	Price
CLS-1168-X-0125	125	38-430	24	\$149.35 ◇
CLS-1168-X-0250	250	38-430	24	\$167.55 ◇
CLS-1168-X-0500	500	38-430	24	\$109.90 ◇
CLS-1168-X-1000	1000	38-430	24	\$155.75 ◇



CLS-1168-X

Bottles, Media, Square, Sterile, PETG, Graduated, Tamperproof Cap

Gamma sterilized non-pyrogenic media bottles manufactured from USP Class VI (PETG) polyethylene terephthalate copolyester with tamperproof white polypropylene caps. Tamperproof caps provide a visual indication that the bottle has not been opened once sealed. Once sealed the tamperproof ring will separate from the cap giving a visual indication that the bottle has been opened. Pyrogen, DNase, RNase and Particle-Free. Bottles proved reduced permeability to both CO₂ and O₂. Note: These bottles are not autoclavable.

Bottles, Media, Square, Sterile, PETG, Graduated, Tamperproof Cap

Part No.	Cap. (mL)	GPI Thread Size	Qty	Price
CLS-1168-T-0125	125	38-430	24	\$149.35 ◇
CLS-1168-T-0250	250	38-430	24	\$167.55 ◇
CLS-1168-T-0500	500	38-430	24	\$109.90 ◇
CLS-1168-T-1000	1000	38-430	24	\$155.75 ◇



CLS-1168-T

Media Bottle Filling Station, Transfer And Feed, 2L Media Bottle Filling Base With Insert For 1L Bottle

The media bottle filling station allows for the media bottle cap to be supported and the bottle held in a stationary fixture so both hands are free for pouring. For use with CLS-1168 series square 1L and 2L transfer and feed media bottles. The filling station has an adjustable height cap support arm and recesses for both the 1L and 2L caps to be held securely. A removable adapter in the base allows for easy switching between bottle sizes, and other adapters can be made upon request. The filling station is constructed of Class VI certified medical grade BioMed White Resin and can be sterilized by autoclave, E-beam, gamma, and ethylene oxide. It may also be cleaned with IPA or TPM, alcohol-based cleaning solutions may be used but do not soak for extended periods of time.

Media Bottle Filling Station

Part No.	Description	Price
CLS-1168-FB12	Media Bottle Filling Station, 2L Media Bottle Filling Base with Insert for 1L Bottle, Class VI BioMed White Resin	\$216.00 ◇



CLS-1168-FB12



CLS-1429-10

CLS-1429-21

CLS-1429-20
CLS-1429-40

Cap and Gasket Included



CLS-1481-series

CLS-1168-1138
CLS-1168-1153

Vent Port Assemblies For Transfer Bottles

Vent port assemblies constructed of 316L stainless steel and electropolished to a 20Ra or better finish. Configurations consist of a single vent tube, vent and short fill tubes, or angled vent and fill tubes. Supplied with a GL-45 open top cap and silicone gasket. Precision pump tubing size to fit adapters is listed.

Vent Port Assemblies

Part Number	Hose Conn. O.D. (mm)	Fits Tub. Size	Description	Thread Size	Price
CLS-1429-10	6.35	17	Single	GL-45	\$162.65 ♥
CLS-1429-20	6.35	17	2-Port	GL-45	\$186.60 ♥
CLS-1429-21	6.35	17	2-Port Angled	GL-45	\$378.65 ♥
CLS-1429-40	4.0	16	2-Port	GL-45	\$193.50 ♥

Caps, Open Tops, GL-Threads, Polypropylene

Open top polypropylene caps for use with port assemblies. Caps can be autoclaved in steam to 140°C.

Open Top, Polypropylene Caps, Colors

Part No.	Thread Size	Hole Dia. (in)	Color	Qty.	Price
CLS-1481-20	GL-32	13/16"	blue	6	\$53.00 ♥
CLS-1481-21	GL-45	1-5/16"	blue	6	\$55.70 ♥
CLS-1481-22	GL-45	1-5/16"	green	6	\$55.70 ♥
CLS-1481-23	GL-45	1-5/16"	yellow	6	\$55.70 ♥

Replacement Open GL-45 White FDA Silicone Gasket

Part No.	Description	Qty.	Price
CLS-1428-11	Replacement Open GL-45 White FDA Silicone Gasket Only for Port Assembly	1	\$3.00 ♥
CLS-1428-13	Replacement Open (13/16" Hole) GL-32 Gasket Only for Port Assembly	1	\$3.30 ♥

Open Top, Polypropylene Caps, Individually Bagged, Sterile

Open Top Caps are manufactured with Class VI Polypropylene. The caps are supplied individually bagged and Gamma Sterilized.

Open Top PP Caps, Individually Bagged, Sterile

Part No.	GPI Cap Size	Qty.	Price
CLS-1168-1138	38-430	20	\$66.25 *
CLS-1168-1153	53B	20	\$72.50 *

Caps, Solid, Clear, GL-45 Threads, TpCH260, PTFE-Coated Silicone Seals, USP Class VI

These premium clear caps are made from TpCh260 (similar to PFA) with PTFE coated silicone seals. Material TpCh260 is compliant to USP Class VI. Premium cap compound is formulated without color dye to avoid risk of leaching. Premium caps can be used in temperatures from -196° to 260°C.

Solid Top, TpCh260 Caps with PTFE-coated Silicone Seals

Part No.	Thread Size	Material	Color	Qty.	Price
CLS-1480-19	GL-45	TpCh260	clear	5	\$214.75 ◇



CLS-1480-19

Caps, Solid, Clear, GL-45 Threads, PFA 6515 TZ, Lip Seals, USP Class VI

These premium clear caps are made from fluoropolymer (PFA 6515 TZ) with lip molded seals. Material PFA 6515 TZ is compliant to USP Class VI. Premium cap compound is formulated without color dye to avoid risk of leaching. GL-45 caps can be used in temperatures from -196° to 260°C.

Solid Top, PFA 6515 TZ Caps with Lip Seals

Part No.	Thread Size	Material	Color	Qty.	Price
CLS-1480-20	GL-45	PFA 6515 TZ	clear	5	\$318.25 ◇



CLS-1480-20

Caps, Vented, Polypropylene, Non-Sterile, GL-45

Polypropylene vented cap has a 0.22µm (PTFE) hydrophobic membrane to allow gas exchange while preventing contamination. They have a liner-less plug seal design for efficient sealing. They are autoclavable at 121°C.

Vented, Polypropylene Caps, Non-Sterile

Part No.	Thread Size	Material	Color	Qty.	Price
CLS-1484-10	GL-45	PP	gray	1	\$6.70 ◇



CLS-1484-10

Caps, Vented, Polypropylene, Non-Sterile, GL-45

Polypropylene vented cap has a 0.20µm (ePTFE) hydrophobic membrane combined with larger vent holes to increase the rates of gas exchange while preventing contamination. They have a liner-less plug seal design for efficient sealing and are autoclavable at 121°C.

Vented, Polypropylene Caps, Non-Sterile

Part No.	Thread Size	Material	Color	Qty.	Price
CLS-1484-12	GL-45	PP	blue	5	\$64.10 ◇



CLS-1484-12

Caps, Vented, Polypropylene, Non-Sterile, GL-45

Polypropylene vented cap has a 0.22µm (PTFE) hydrophobic membrane to allow gas exchange while preventing contamination. They have a liner-less plug seal design for efficient sealing. They are autoclavable at 121°C.

Vented, Polypropylene Caps, Non-Sterile

Part No.	Thread Size	Material	Color	Qty.	Price
CLS-1484-B-45	GL-45	PP	blue	5	\$65.70 ◇



CLS-1484-B-45



CLS-1480-series

Caps, Solid, GL-Threads, Polypropylene

Solid polypropylene caps with a molded in lip seal. All color caps can be autoclaved in steam to 140°C.

Solid Top, Polypropylene Caps, Colors

Part No.	Thread Size	Color	Qty.	Price	
CLS-1480-10	GL-25	blue	10	\$37.60	◇
CLS-1480-11	GL-32	blue	10	\$37.60	◇
CLS-1480-12	GL-32	orange	10	\$38.25	◇
CLS-1480-13SC	GL-45, Schott	blue	10	\$44.60	◇
CLS-1480-14	GL-45	gray	10	\$43.05	◇
CLS-1480-15	GL-45	green	10	\$44.95	◇
CLS-1480-16	GL-45	orange	10	\$41.30	◇
CLS-1480-17	GL-45	purple	10	\$43.05	◇
CLS-1480-18	GL-45	yellow	10	\$44.60	◇



CLS-1482-series

Pouring Rings, Polypropylene, Ethylene Tetrafluoroethylene

Steam autoclavable to 140°C. All pouring rings are polypropylene except for the CLS-1482-30 which is made of high temperature ETFE (ethylene tetrafluoroethylene); max temp is 180°C.

Pour Rings, Colors

Part No.	Thread Size	Material	Color	Qty.	Price	
CLS-1482-11	GL-32	PP	blue	10	\$16.55	◇
CLS-1482-12	GL-32	PP	clear	10	\$15.75	◇
CLS-1482-13	GL-45	PP	blue	10	\$17.20	◇
CLS-1482-14	GL-45	PP	green	10	\$19.55	◇
CLS-1482-15	GL-45	PP	gray	10	\$19.55	◇
CLS-1482-16	GL-45	PP	yellow	10	\$19.55	◇
CLS-1482-17	GL-45	PP	clear	10	\$15.70	◇
CLS-1482-30	GL-45	ETFE	red	10	\$47.35	◇

Individually Bagged Solid Caps, Sterile

Caps are manufactured with Class VI Polypropylene and are ideal for closing off the CLS-1168-Series Feed Bottles. The caps are supplied individually bagged and Gamma Sterilized.



CLS-1168-1038
CLS-1168-1053

Part No.	Cap Size	Qty.	Price	
CLS-1168-1038	38-430	20	\$60.50	*
CLS-1168-1053	53B	20	\$78.40	*

GlucCell® Glucose Monitoring System

- Suitable for both serum and serum-free culture medium in mammalian and insect cell culture
- Portable, pre-calibrated, ready-to-use, plug & play, and disposable
- 99.5% correlated with NOVA and YSI biochemical analyzer
- Precision: >95%, Accuracy >90%, Linearity = 0.9997
- Programmable
- One-year warranty on meter

GlucCell® Glucose Monitoring System speeds and simplifies your glucose measurement during cell culture. GlucCell® Glucose Monitoring System is specially designed for measuring the glucose metabolites during animal cell culture, unlike general diabetes glucose meters on the market that are not applicable for animal cell culture.

This package contains a portable, palm size glucose meter and pre-calibrated, disposable test strips, designed for measuring the glucose concentration during mammalian cell and insect cell culture.

GlucCell® Glucose Monitoring System is intended for use by laboratory researchers or bioreactor professionals to obtain a quantitative measurement of glucose in cell culture media. It is made to meet your needs with calibration-free, maintenance-free, high accuracy, instant, disposable and portable.

One-year warranty on equipment.

Specifications

Dimension	96mm x 60mm x 18.5 mm
Weight	70 g including battery
Power source	CR2032 3V Lithium coin battery X 1
Battery Life	Approximately 1,000 tests
Display	Large LCD
Memory	Store 180 test results with date and time
Automation	Auto electrode inserting detection
	Auto sample loading detection
	Auto reaction time count-down/Auto turn-off
Environment	10 - 40 °C (50-104 °F) , 20-80 RH
Strip size	45mm x 6mm x 0.6mm
Require sample	3-10µl
Measure range	30-550 mg/dl (1.6-30.6mmol/L)
Test result time	15 seconds

GlucCell® Glucose Monitoring System

Part Number	Description	Package	Price
CLS-1322-02	GlucCell® Glucose Monitoring System	1 ea. Glucose Meter, 2 ea. bottles, each contains 25 strips	\$542.10 *
CLS-1324-01	GlucCell® Glucose Test Strips	2 ea. bottles, each contains 25 strips	\$95.55 *



GlucCell® Monitoring System includes a palm size meter and disposable test strips, enabling instant and accurate reading for glucose monitor during cell culture.



Disposable test strips, 3µl sample, and palm size meter enable operation in a biosafety cabinet, eliminating the risk of contamination by biohazardous samples.

1L Cell Culture Bioreactor Systems, Unjacketed

Agitator Assembly for
Use with

CLS-1399-100
Overhead Stirrer.

Additional Adapters
are available for other
style motors.



16 Port Headplate (4)

Graduated Vessel (1)

Support Stand (2)

Vortexing Impeller (3)

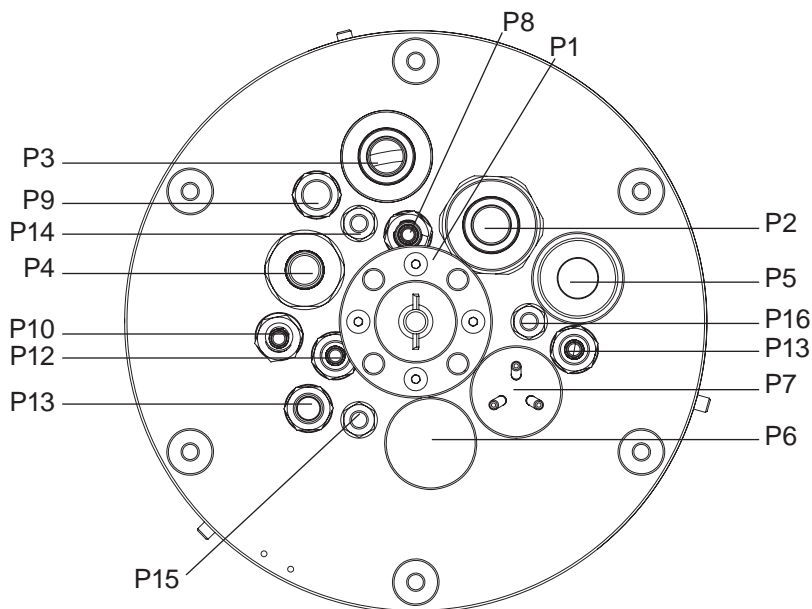


Cell culture bioreactor systems include all the necessary base components needed in one simple package, supplied with or without a motor. By using motor adapters, the system can be retrofitted to work with almost any motor. These systems can be purchased as configured or customized to fit your specific application. For customized solutions please contact singleuse@cglifesciences.com

1L Cell Culture Bioreactor Systems, Unjacketed



Part Number	Description	Price
CLS-1380-CC1	1L Cell Culture Bioreactor System Complete, Without Motor	\$7,921.25 ♥
CLS-1380-CC1M	1L Cell Culture Bioreactor System Complete, With Motor	\$10,908.40 ♥



Standard Components Supplied with Complete Systems

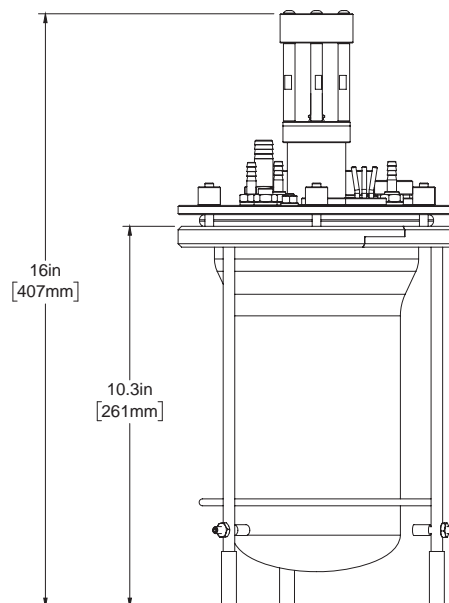
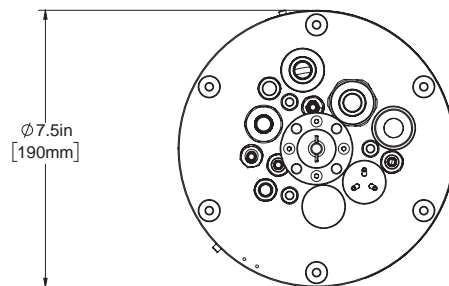
Item No.	Part No.	Description
1	CLS-1378-01	Bioreactor, 1L, Unjacketed, Graduated
2	CLS-1380-STD3	Support Stand, Complete
3	CLS-1380-06	Vortexing Impeller 43mm OD
4	CLS-1379-02	Headplate, 16 Port

Headplate Configuration and Components

Port No.	Part No.	Size	Description
P1	CLS-1380-05	M30	Agitator Assembly
P2	CLS-1381-07	G3/4	pH/DO Adapter, for 12mm Sensor
P3	CLS-1381-06	M18	pH/DO Adapter for 12mm Sensor
P4	CLS-1380-70	M18	Sampling Tube/ Harvest Tube
P5	CLS-1380-10	M18	Septum Holder
P6	CLS-1380-25	M18	Blind Stopper
P7	CLS-1380-09	M18	Triple Port Adapter
P8	CLS-1380-21	M10	Adjustable Sampling Pipe
P9	CLS-1380-23	M10	Blind Stopper
P10	CLS-1379-04	M10	Porous Sparge Tube, 15 um Frit
P11	CLS-1380-11	M10	Thermowell, 200mm Immersion
P12	CLS-1380-20	M10	Adapter, Air Inlet/Outlet
P13	CLS-1380-20	M10	Adapter, Air Inlet/Outlet
P14	CLS-1380-22	M6	Blind Stopper
P15	CLS-1380-22	M6	Blind Stopper
P16	CLS-1380-22	M6	Blind Stopper

Additional Items Included with CLS-1380-CC1M

Item No.	Part No.	Description
5	CLS-1399-100	Overhead Stirrer and Controller, 120VAC



2L Cell Culture Bioreactor Systems, Unjacketed

Agitator Assembly for
Use with

CLS-1399-100
Overhead Stirrer.

Additional Adapters
are available for other
style motors.



16 Port Headplate (4)

Graduated Vessel (1)

Support Stand (2)

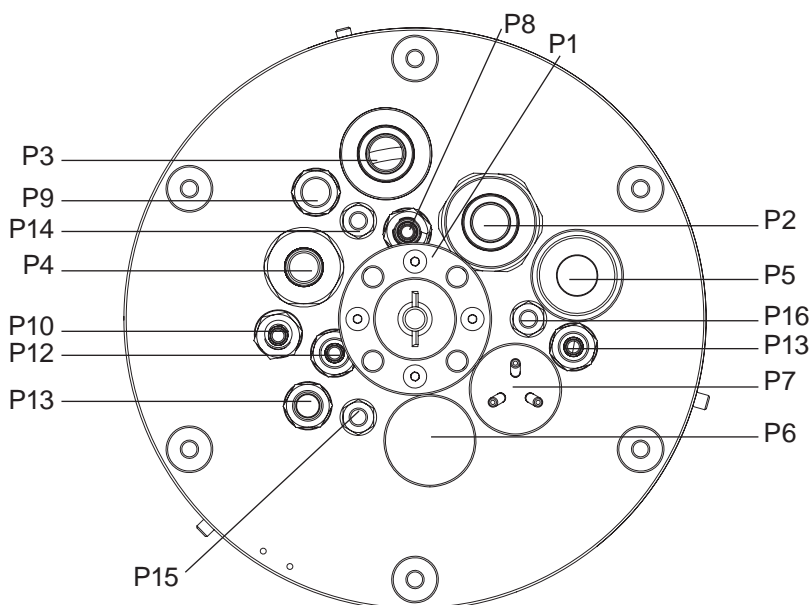
Vortexing Impeller (3)



Cell culture bioreactor systems include all the necessary base components needed in one simple package, supplied with or without a motor. By using motor adapters, the system can be retrofitted to work with almost any motor. These systems can be purchased as configured or customized to fit your specific application. For customized solutions please contact singleuse@cglifesciences.com



Part Number	Description	Price
CLS-1380-CC2	2L Cell Culture Bioreactor System Complete, Without Motor	\$7,928.15 ♥
CLS-1380-CC2M	2L Cell Culture Bioreactor System Complete, With Motor	\$10,915.30 ♥



Standard Components Supplied with Complete Systems

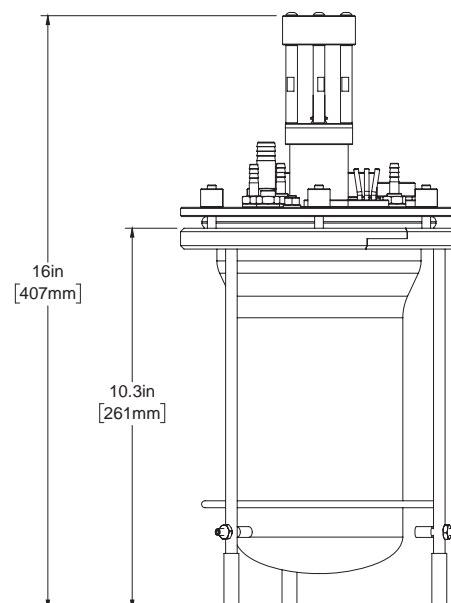
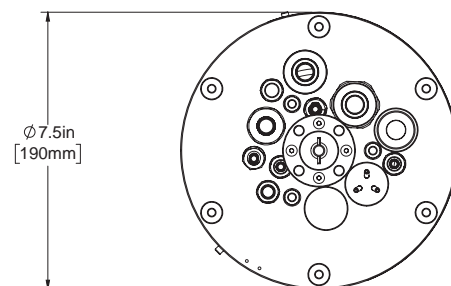
Item No.	Part No.	Description
1	CLS-1379-01	Bioreactor, 2L, Unjacketed, Graduated
2	CLS-1380-STD3	Support Stand, Complete
3	CLS-1380-06	Vortexing Impeller 43mm OD
4	CLS-1379-02	Headplate, 16 Port

Headplate Configuration and Components

Port No.	Part No.	Size	Description
P1	CLS-1380-05	M30	Agitator Assembly
P2	CLS-1381-07	G3/4	pH/DO Adapter, for 12mm Sensor
P3	CLS-1381-06	M18	pH/DO Adapter for 12mm Sensor
P4	CLS-1380-70	M18	Sampling Tube/ Harvest Tube
P5	CLS-1380-10	M18	Septum Holder
P6	CLS-1380-25	M18	Blind Stopper
P7	CLS-1380-09	M18	Triple Port Adapter
P8	CLS-1380-21	M10	Adjustable Sampling Pipe
P9	CLS-1380-23	M10	Blind Stopper
P10	CLS-1379-04	M10	Porous Sparge Tube, 15 um Frit
P11	CLS-1380-11	M10	Thermowell, 200mm Immersion
P12	CLS-1380-20	M10	Adapter, Air Inlet/Outlet
P13	CLS-1380-20	M10	Adapter, Air Inlet/Outlet
P14	CLS-1380-22	M6	Blind Stopper
P15	CLS-1380-22	M6	Blind Stopper
P16	CLS-1380-22	M6	Blind Stopper

Additional Items Included with CLS-1380-CC2M

Item No.	Part No.	Description
5	CLS-1399-100	Overhead Stirrer and Controller, 120VAC



3L Cell Culture Bioreactor Systems, Unjacketed

Agitator Assembly for
Use with

CLS-1399-100
Overhead Stirrer.

Additional Adapters
are available for other
style motors.

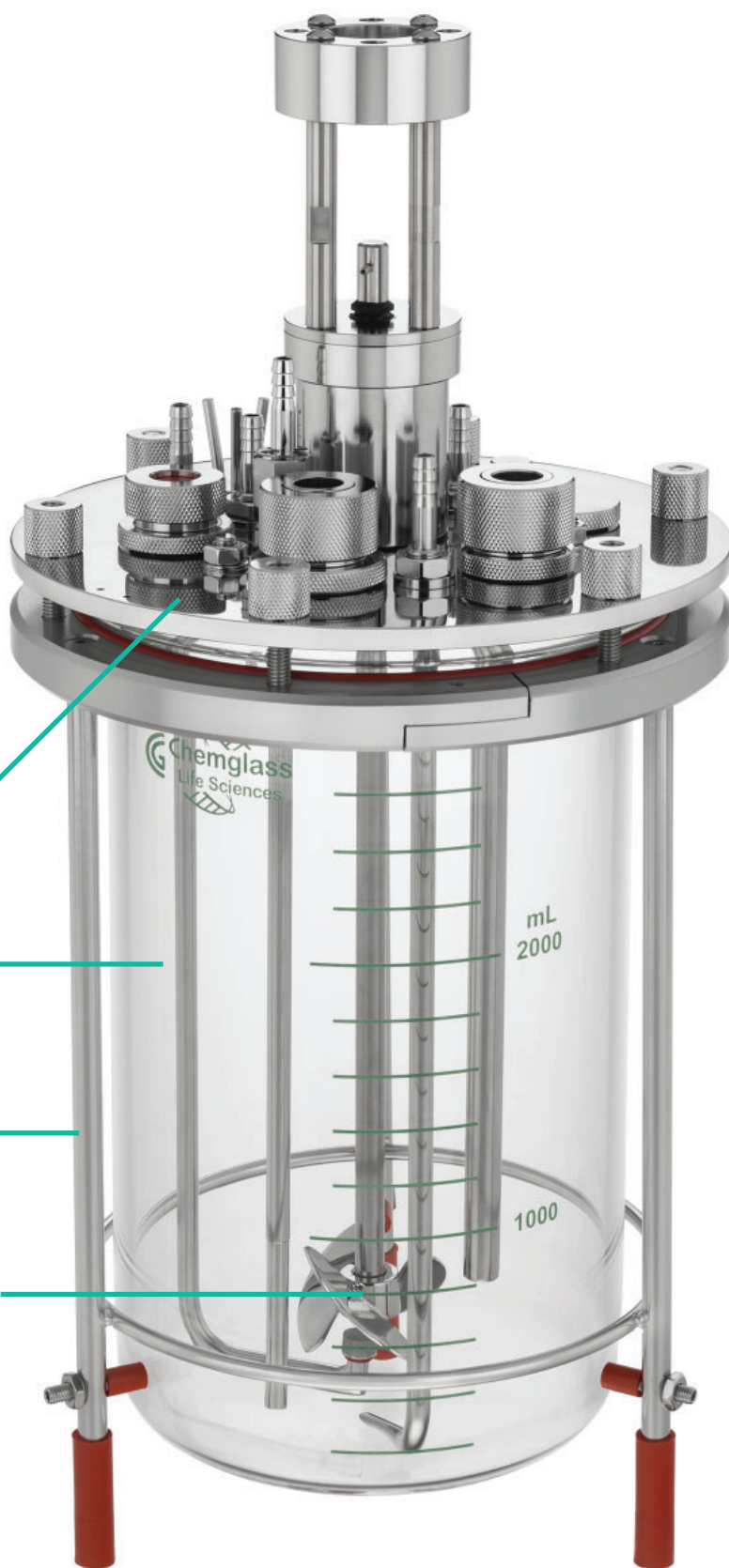


18 Port Headplate (4)

Graduated Vessel (1)

Support Stand (2)

Vortexing Impeller (3)

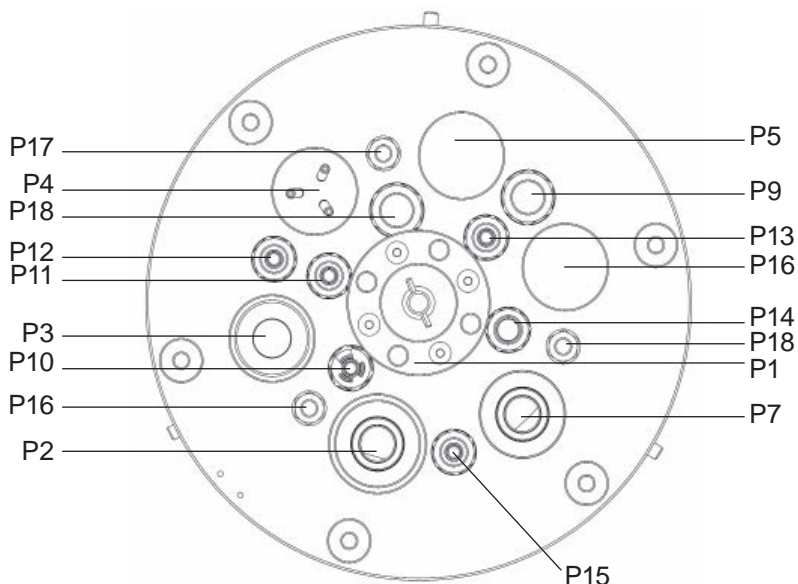


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3L Cell Culture Bioreactor Systems, Unjacketed



Part Number	Description	Price
CLS-1380-CC3	3L Cell Culture Bioreactor System Complete, Without Motor	\$8,643.00 ♥
CLS-1380-CC3M	3L Cell Culture Bioreactor System Complete, With Motor	\$11,630.15 ♥



Standard Components Supplied with Complete Systems

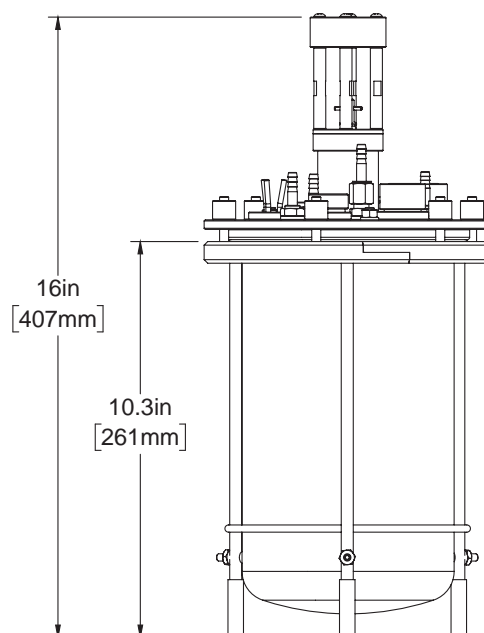
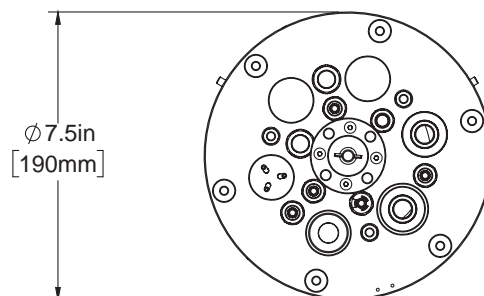
Item No.	Part No.	Description
1	CLS-1380-01	Bioreactor, 3L, Unjacketed, Graduated
2	CLS-1380-STD3	Support Stand, Complete
3	CLS-1380-06	Vortexing Impeller 43mm OD
4	CLS-1380-03	Headplate, 18 Port

Headplate Configuration and Components

Port No.	Part No.	Size	Description
P1	CLS-1380-05	M30	Agitator Assembly
P2	CLS-1381-07	G3/4	pH/DO Adapter, for 12mm Sensor
P3	CLS-1380-10	M18	Septum Holder
P4	CLS-1380-09	M18	Triple Port Adapter
P5	CLS-1380-25	M18	Blind Stopper
P6	CLS-1380-25	M18	Blind Stopper
P7	CLS-1381-06	M18	pH/DO Adapter for 12mm Sensor
P8	CLS-1380-24	M12	Blind Stopper
P9	CLS-1380-24	M12	Blind Stopper
P10	CLS-1380-21	M10	Adjustable Sampling Pipe
P11	CLS-1380-20	M10	Adapter, Air Inlet/Outlet
P12	CLS-1380-12	M10	Porous Sparge Tube, 15 um Frit
P13	CLS-1380-20	M10	Adapter, Air Inlet/Outlet
P14	CLS-1380-11	M10	Thermowell, 200mm Immersion
P15	CLS-1380-32	M10	Harvest Tube
P16	CLS-1380-22	M6	Blind Stopper
P17	CLS-1380-22	M6	Blind Stopper
P18	CLS-1380-22	M6	Blind Stopper

Additional Items Included with CLS-1380-CC3M

Item No.	Part No.	Description
5	CLS-1399-100	Overhead Stirrer and Controller, 20VAC



5L Cell Culture Bioreactor Systems, Unjacketed

Agitator Assembly for
Use with

CLS-1399-100
Overhead Stirrer.

Additional Adapters
are available for other
style motors.

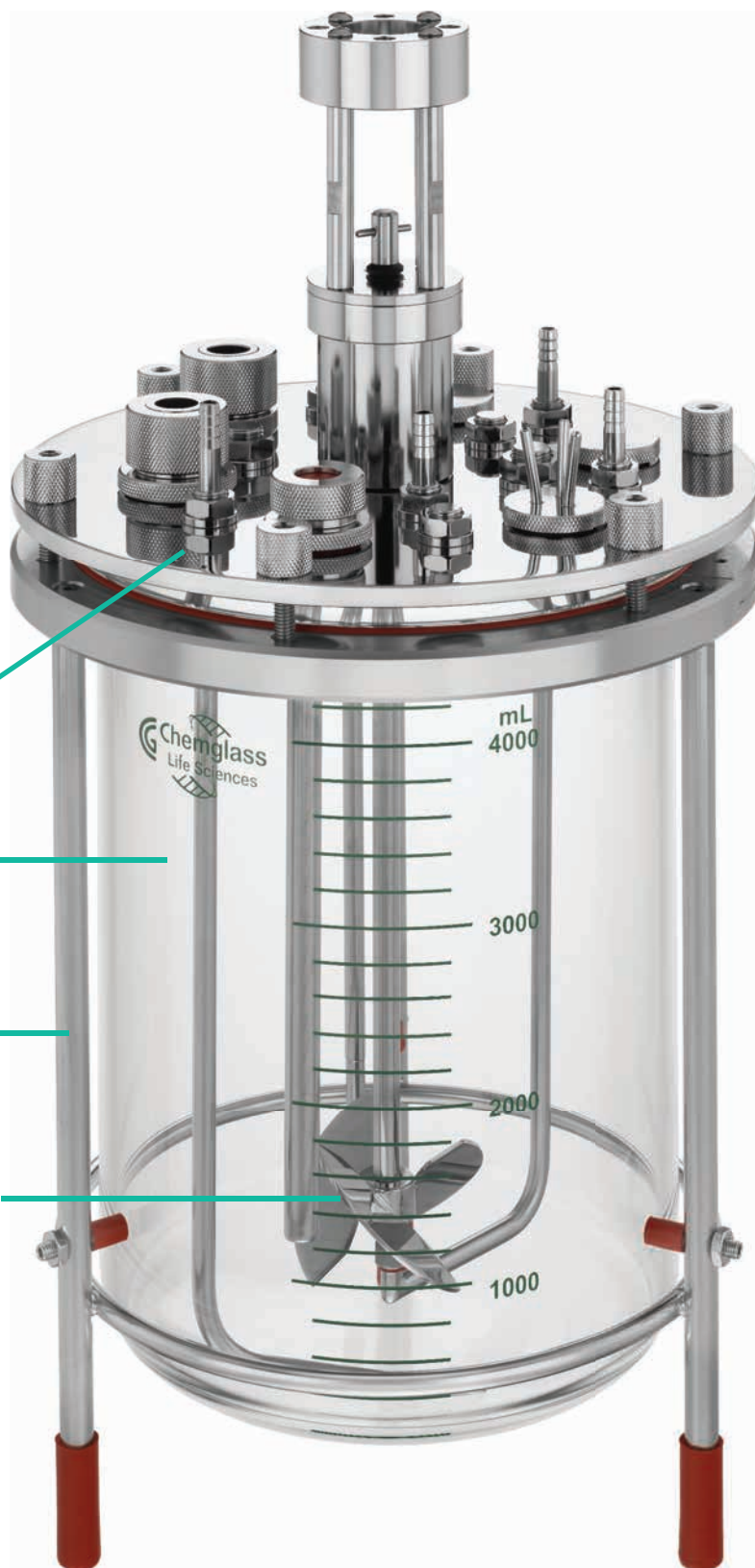


19 Port Headplate (4)

Graduated Vessel (1)

Support Stand (2)

Vortexing Impeller (3)

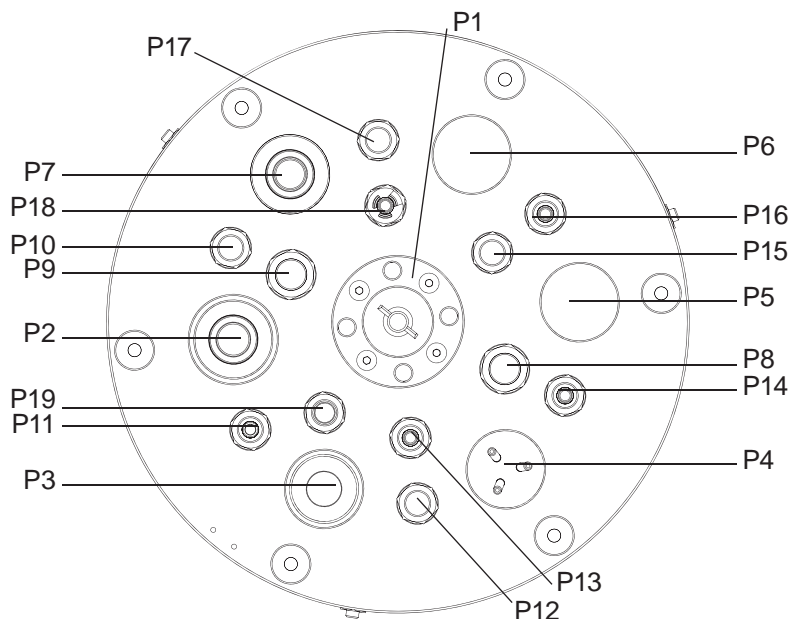


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5L Cell Culture Bioreactor Systems, Unjacketed



Part Number	Description	Price
CLS-1382-CC5	5L Cell Culture Bioreactor System Complete, Without Motor	\$9,251.25 ♥
CLS-1382-CC5M	5L Cell Culture Bioreactor System Complete, With Motor	\$12,238.40 ♥



Standard Components Supplied with Complete Systems

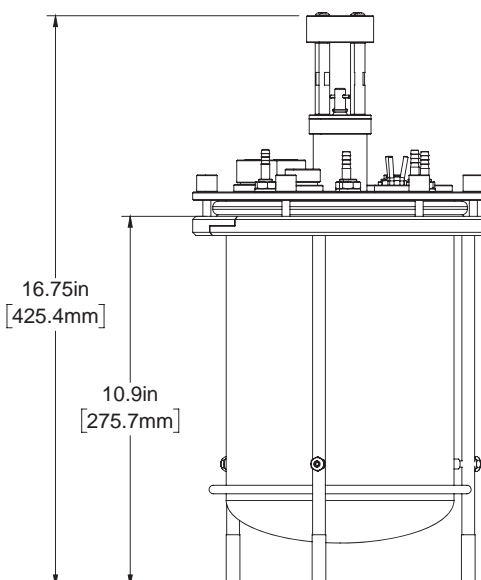
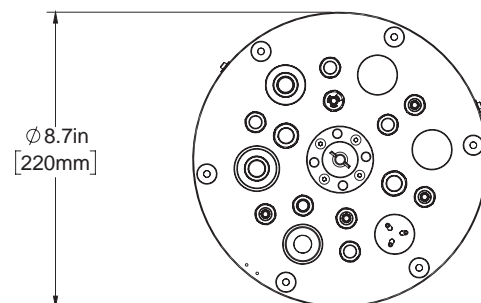
Item No.	Part No.	Description
1	CLS-1382-01	Bioreactor, 5L, Unjacketed, Graduated
2	CLS-1382-STD5	Support Stand, Complete
3	CLS-1382-05	Vortexing Impeller 59mm OD
4	CLS-1382-03	Headplate, 19 Port

Headplate Configuration and Components

Port No.	Part No.	Size	Description
P1	CLS-1380-05	M30	Agitator Assembly
P2	CLS-1381-07	G3/4	pH/DO Adapter, for 12mm Sensor
P3	CLS-1380-10	M18	Septum Holder
P4	CLS-1380-09	M18	Triple Port Adapter
P5	CLS-1380-25	M18	Blind Stopper
P6	CLS-1380-25	M18	Blind Stopper
P7	CLS-1381-06	M18	pH/DO Adapter for 12mm Sensor
P8	CLS-1380-24	M12	Blind Stopper
P9	CLS-1380-24	M12	Blind Stopper
P10	CLS-1380-23	M10	Blind Stopper
P11	CLS-1382-12	M10	Harvest Tube
P12	CLS-1380-23	M10	Blind Stopper
P13	CLS-1380-20	M10	Adapter, Air Inlet/Outlet
P14	CLS-1380-20	M10	Adapter, Air Inlet/Outlet
P15	CLS-1380-23	M10	Blind Stopper
P16	CLS-1382-08	M10	Porous Sparge Tube, 15 um Frit
P17	CLS-1380-23	M10	Blind Stopper
P18	CLS-1380-21	M10	Adjustable Sampling Pipe
P19	CLS-1380-11	M10	Thermowell, 200mm Immersion

Additional Items Included with CLS-1382-CC5M

Item No.	Part No.	Description
5	CLS-1399-100	Overhead Stirrer and Controller, 20VAC



7L Cell Culture Bioreactor Systems, Unjacketed

Agitator Assembly for
Use with

CLS-1399-100
Overhead Stirrer.

Additional Adapters
are available for other
style motors.



19 Port Headplate (4)

Graduated Vessel (1)

Support Stand (2)

Vortexing Impeller (3)

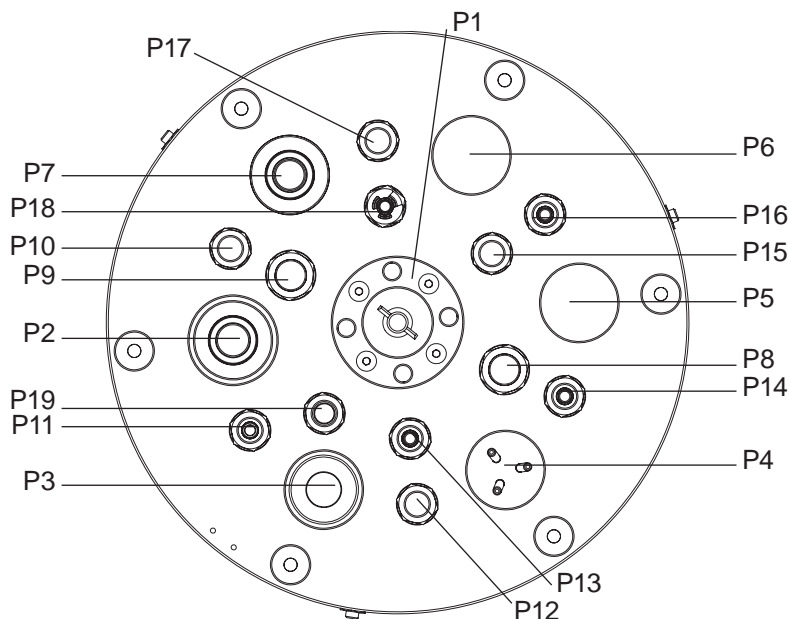
Cell culture bioreactor systems include all the necessary base components needed in one simple package, supplied with or without a motor. By using motor adapters, the system can be retrofitted to work with almost any motor. These systems can be purchased as configured or customized to fit your specific application. For customized solutions please contact singleuse@cglifesciences.com



7L Cell Culture Bioreactor Systems, Unjacketed



Part Number	Description	Price
CLS-1383-CC7	7L Cell Culture Bioreactor System Complete, Without Motor	\$9,566.35 ♥
CLS-1383-CC7M	7L Cell Culture Bioreactor System Complete, With Motor	\$12,553.50 ♥



Standard Components Supplied with Complete Systems

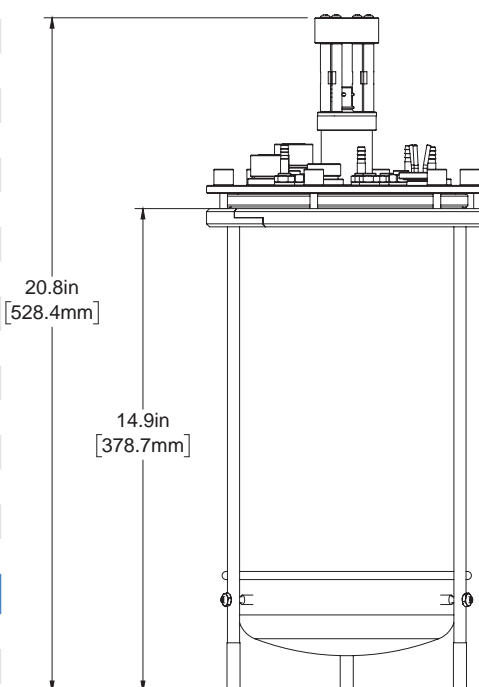
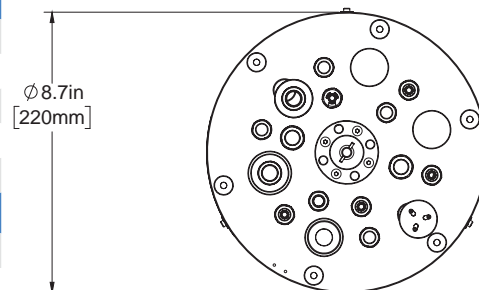
Item No.	Part No.	Description
1	CLS-1383-01	Bioreactor, 7L, Unjacketed, Graduated
2	CLS-1383-STD7	Support Stand, Complete
3	CLS-1382-05	Vortexing Impeller 59mm OD
4	CLS-1382-03	Headplate, 19 Port

Headplate Configuration and Components

Port No.	Part No.	Size	Description
P1	CLS-1383-04	M30	Agitator Assembly
P2	CLS-1381-07	G3/4	pH/DO Adapter, for 12mm Sensor
P3	CLS-1380-10	M18	Septum Holder
P4	CLS-1380-09	M18	Triple Port Adapter
P5	CLS-1380-25	M18	Blind Stopper
P6	CLS-1380-25	M18	Blind Stopper
P7	CLS-1381-06	M18	pH/DO Adapter for 12mm Sensor
P8	CLS-1380-24	M12	Blind Stopper
P9	CLS-1380-24	M12	Blind Stopper
P10	CLS-1380-23	M10	Blind Stopper
P11	CLS-1383-13	M10	Harvest Tube
P12	CLS-1380-22	M10	Blind Stopper
P13	CLS-1380-20	M10	Adapter, Air Inlet/Outlet
P14	CLS-1380-20	M10	Adapter, Air Inlet/Outlet
P15	CLS-1380-23	M10	Blind Stopper
P16	CLS-1383-06	M10	Porous Sparge Tube, 15 um Frit
P17	CLS-1380-23	M10	Blind Stopper
P18	CLS-1383-08	M10	Adjustable Sampling Pipe
P19	CLS-1383-05	M10	Thermowell, 300mm Immersion

Additional Items Included with CLS-1383-CC7M

Item No.	Part No.	Description
5	CLS-1399-100	Overhead Stirrer and Controller, 120VAC



15L Cell Culture Bioreactor Systems, Unjacketed

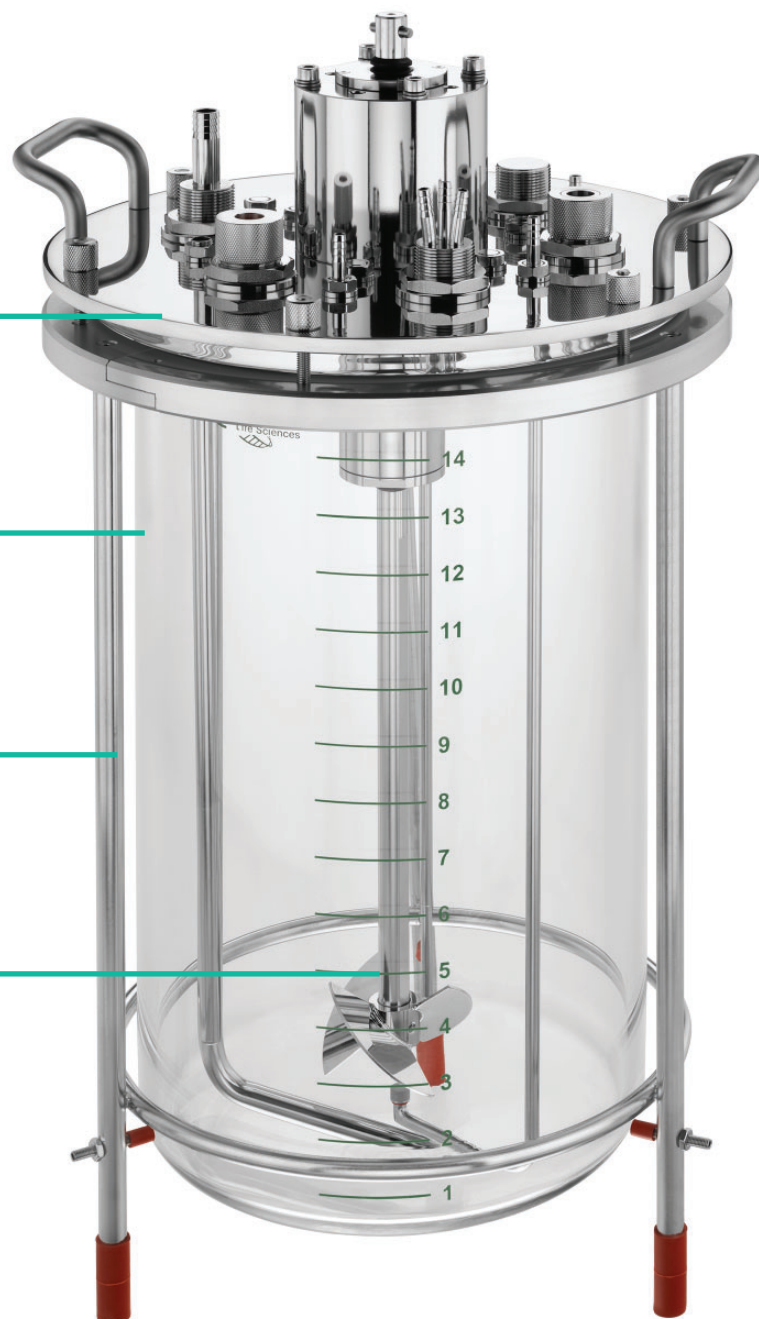


19 Port Headplate (4)

Graduated Vessel (1)

Support Stand (2)

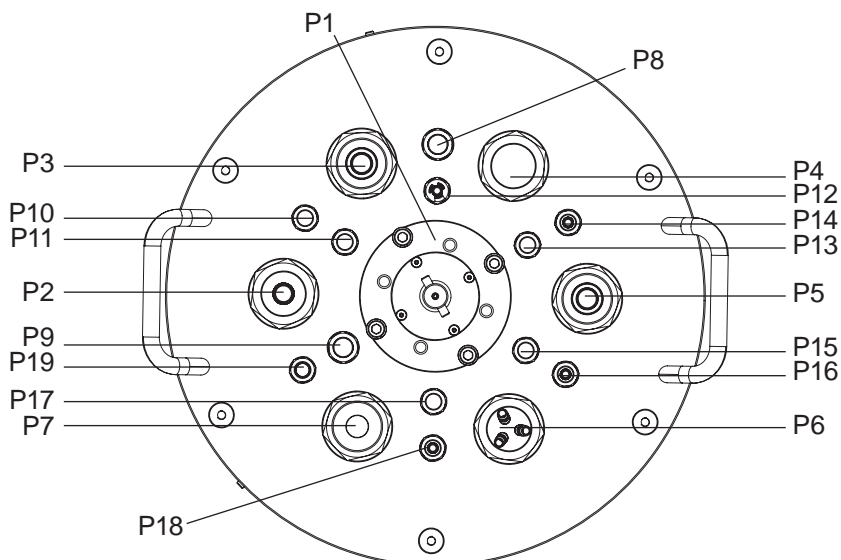
Vortexing Impeller (3)



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15L Cell Culture Bioreactor Systems, Unjacketed

Part Number	Description	Price
CLS-1385-CC15	15L Cell Culture Bioreactor System Complete, Without Motor	\$17,280.00 ♥
CLS-1385-CC15M	15L Cell Culture Bioreactor System Complete, With Motor	\$21,519.55 ♥



Standard Components Supplied with Complete Systems

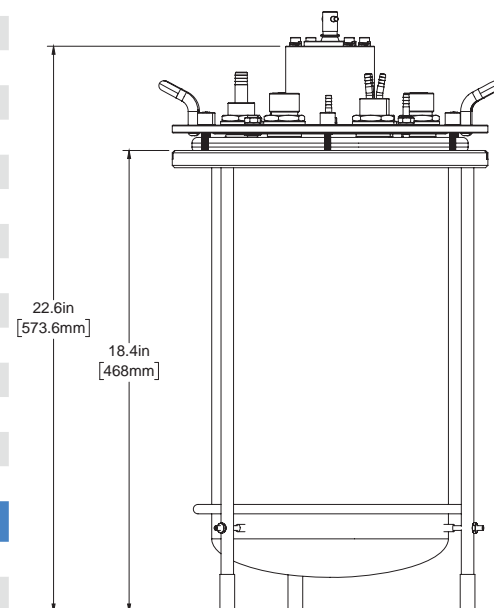
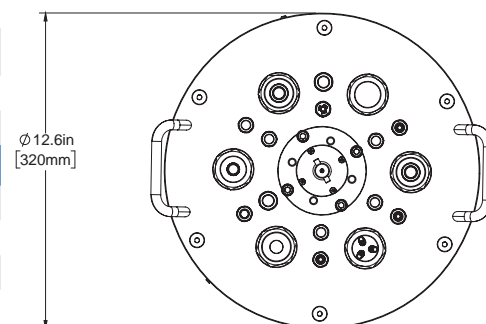
Item No.	Part No.	Description
1	CLS-1385-01	Bioreactor, 15L, Unjacketed, Graduated
2	CLS-1385-STD15	Support Stand, Complete
3	CLS-1385-06	Vortexing Impeller 76mm OD
4	CLS-1385-03	Headplate, 19 Port

Headplate Configuration and Components

Port No.	Part No.	Size	Description
P1	CLS-1385-05	M69	Agitator Assembly, 15mm Shaft
P2	CLS-1385-23	M27	Harvest Tube
P3	CLS-1385-19	M27	pH/DO Adapter for 12mm Sensor
P4	CLS-1385-14	M27	Blind Stopper
P5	CLS-1385-19	M27	pH/DO Adapter for 12mm Sensor
P6	CLS-1385-08	M27	Triple Port Adapter
P7	CLS-1385-09	M27	Septum Holder
P8	CLS-1380-24	M12	Blind Stopper
P9	CLS-1380-24	M12	Blind Stopper
P10	CLS-1380-23	M10	Blind Stopper
P11	CLS-1380-23	M10	Blind Stopper
P12	CLS-1385-13	M10	Adjustable Sampling Pipe
P13	CLS-1380-23	M10	Blind Stopper
P14	CLS-1380-20	M10	Adapter, Air Inlet/Outlet
P15	CLS-1380-22	M10	Blind Stopper
P16	CLS-1385-11	M10	Porous Sparge Tube, 15 um Frit
P17	CLS-1380-23	M10	Blind Stopper
P18	CLS-1380-20	M10	Adapter, Air Inlet/Outlet
P19	CLS-1385-10	M10	Thermowell, 370mm Immersion

Additional Items Included with CLS-1383-CC15M

Item No.	Part No.	Description
5	CLS-1399-200	Overhead Stirrer and Controller, 120VAC



1L Microbial Fermentation Bioreactor System, Unjacketed

Agitator Assembly for
Use with

CLS-1399-100
Overhead Stirrer.

Additional Adapters
are available for other
style motors.



16 Port Headplate (4)

Graduated Vessel (1)

Support Stand (2)

Rushton Impeller (3)

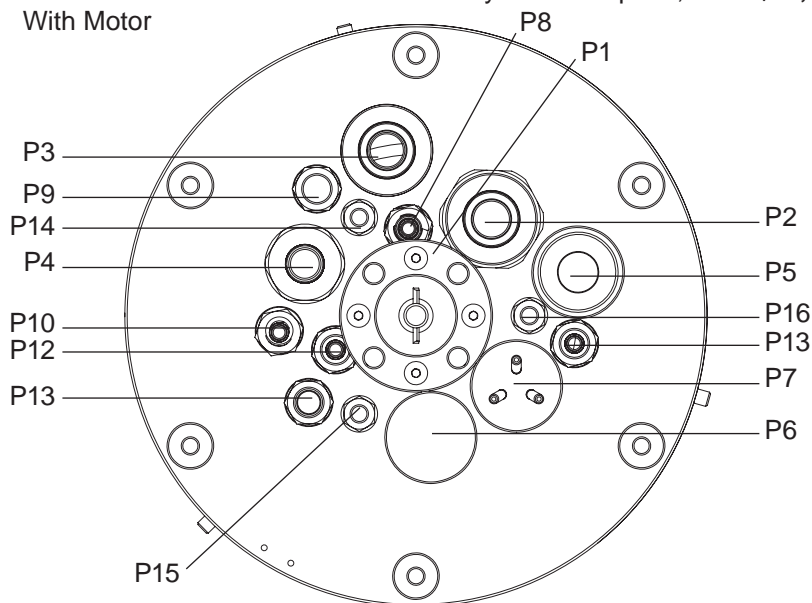


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1L Microbial Fermentation Bioreactor System, Unjacketed



Part Number	Description	Price
CLS-1380-MF1	1L Microbial Fermentation Bioreactor System Complete, Without Motor	\$8,035.95 ♥
CLS-1380-MF1M	1L Microbial Fermentation Bioreactor System Complete, With Motor	\$11,023.10 ♥



Standard Components Supplied with Complete Systems

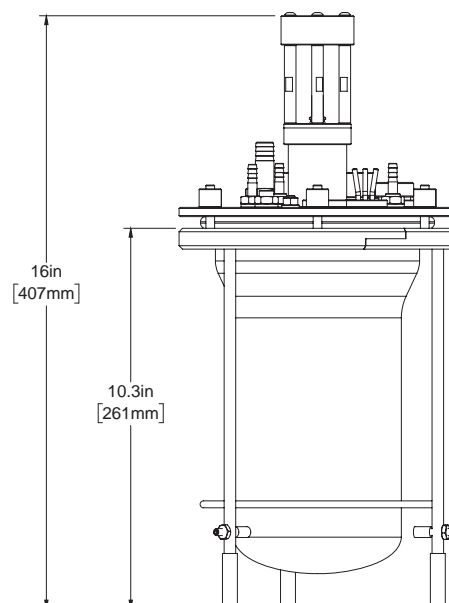
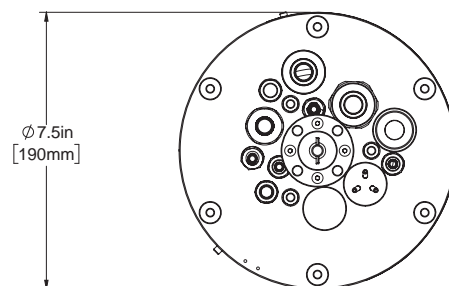
Item No.	Part No.	Description
1	CLS-1378-01	Bioreactor, 1L, Unjacketed, Graduated
2	CLS-1380-STD3	Support Stand, Complete
3	CLS-1380-08	Rushton Impeller 48mm OD
4	CLS-1379-02	Headplate, 16 Port

Headplate Configuration and Components

Port No.	Part No.	Size	Description
P1	CLS-1380-05	M30	Agitator Assembly
P2	CLS-1381-07	G3/4	pH/DO Adapter, for 12mm Sensor
P3	CLS-1381-06	M18	pH/DO Adapter for 12mm Sensor
P4	CLS-1380-70	M18	Sampling Tube/ Harvest Tube
P5	CLS-1380-10	M18	Septum Holder
P6	CLS-1380-25	M18	Blind Stopper
P7	CLS-1380-09	M18	Triple Port Adapter
P8	CLS-1380-21	M10	Adjustable Sampling Pipe
P9	CLS-1380-23	M10	Blind Stopper
P10	CLS-1379-06	M10	Air Aeration Tube, Drilled Hole Sprager
P11	CLS-1380-11	M10	Thermowell, 200mm Immersion
P12	CLS-1380-20	M10	Adapter, Air Inlet/Outlet
P13	CLS-1380-20	M10	Adapter, Air Inlet/Outlet
P14	CLS-1381-04	M6	Baffle, 220mm Long
P15	CLS-1381-04	M6	Baffle, 220mm Long
P16	CLS-1381-04	M6	Baffle, 220mm Long

Additional Items Included with CLS-1380-MF1M

Item No.	Part No.	Description
5	CLS-1399-100	Overhead Stirrer and Controller, 120VAC



2L Microbial Fermentation Bioreactor System, Unjacketed

Agitator Assembly for
Use with

CLS-1399-100
Overhead Stirrer.

Additional Adapters
are available for other
style motors.



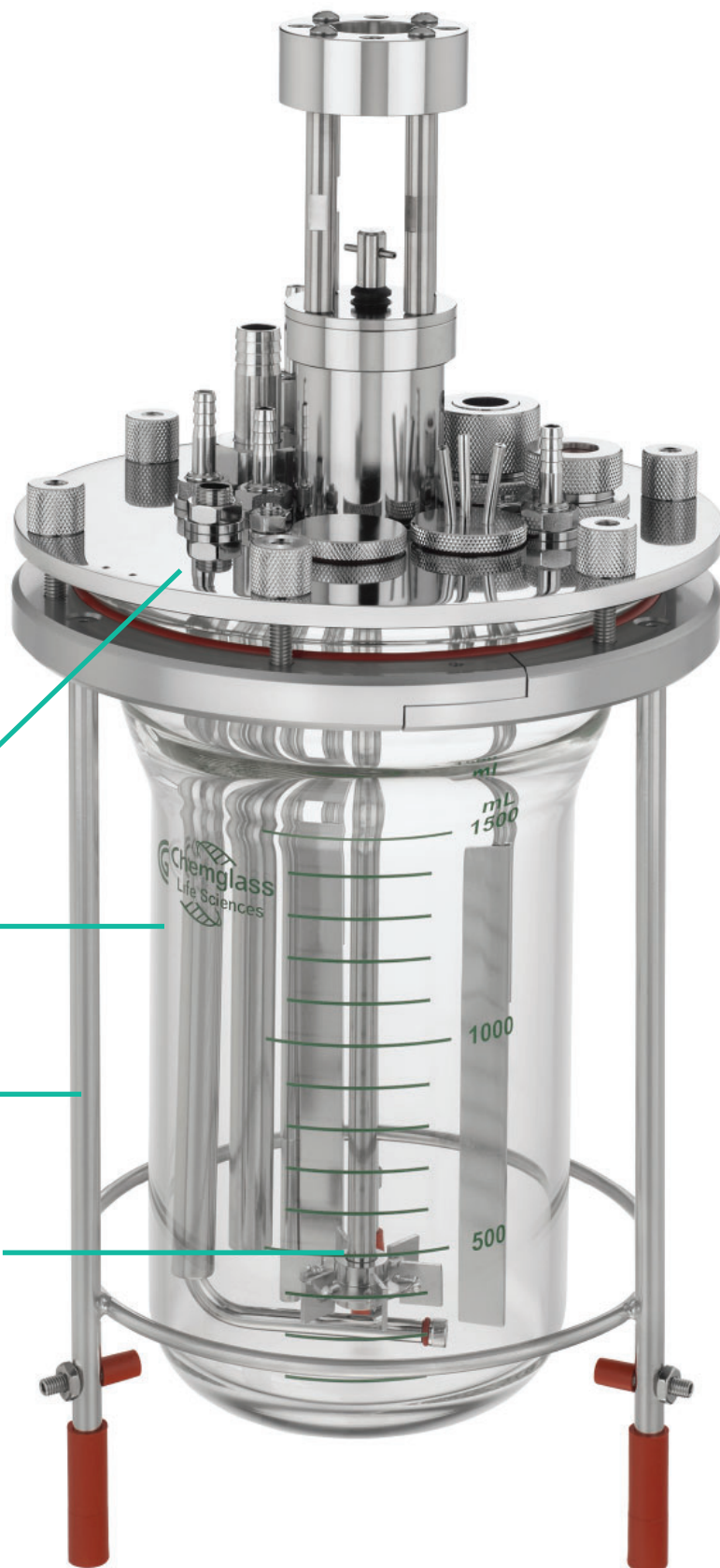
16 Port Headplate (4)

Graduated Vessel (1)

Support Stand (2)

Rushton Impeller (3)

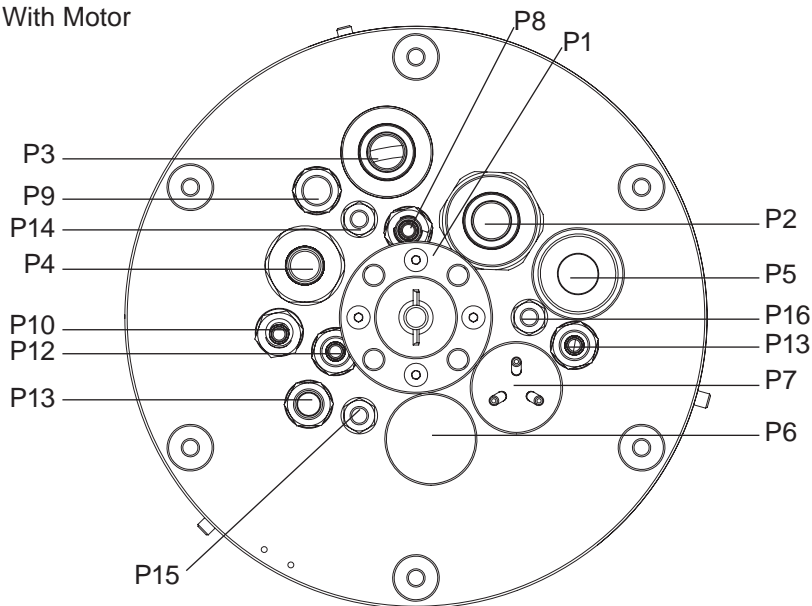
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2L Microbial Fermentation Bioreactor System, Unjacketed



Part Number	Description	Price
CLS-1380-MF2	2L Microbial Fermentation Bioreactor System Complete, Without Motor	\$8,042.85 ♥
CLS-1380-MF2M	2L Microbial Fermentation Bioreactor System Complete, With Motor	\$11,030.00 ♥



Standard Components Supplied with Complete Systems

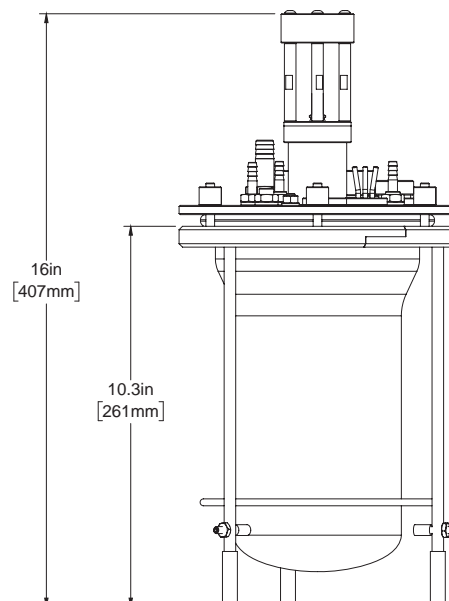
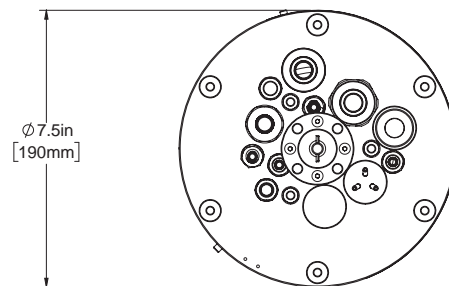
Item No.	Part No.	Description
1	CLS-1379-01	Bioreactor, 2L, Unjacketed, Graduated
2	CLS-1380-STD3	Support Stand, Complete
3	CLS-1380-08	Rushton Impeller 48mm OD
4	CLS-1379-02	Headplate, 16 Port

Headplate Configuration and Components

Port No.	Part No.	Size	Description
P1	CLS-1380-05	M30	Agitator Assembly
P2	CLS-1381-07	G3/4	pH/DO Adapter, for 12mm Sensor
P3	CLS-1381-06	M18	pH/DO Adapter for 12mm Sensor
P4	CLS-1380-70	M18	Sampling Tube/ Harvest Tube
P5	CLS-1380-10	M18	Septum Holder
P6	CLS-1380-25	M18	Blind Stopper
P7	CLS-1380-09	M18	Triple Port Adapter
P8	CLS-1380-21	M10	Adjustable Sampling Pipe
P9	CLS-1380-23	M10	Blind Stopper
P10	CLS-1379-06	M10	Air Aeration Tube, Drilled Hole Sprager
P11	CLS-1380-11	M10	Thermowell, 200mm Immersion
P12	CLS-1380-20	M10	Adapter, Air Inlet/Outlet
P13	CLS-1380-20	M10	Adapter, Air Inlet/Outlet
P14	CLS-1381-04	M6	Baffle, 220mm Long
P15	CLS-1381-04	M6	Baffle, 220mm Long
P16	CLS-1381-04	M6	Baffle, 220mm Long

Additional Items Included with CLS-1380-MF2M

Item No.	Part No.	Description
5	CLS-1399-100	Overhead Stirrer and Controller, 120VAC



3L Microbial Fermentation Bioreactor System, Unjacketed

Agitator Assembly for
Use with

CLS-1399-100
Overhead Stirrer.

Additional Adapters
are available for other
style motors.



18 Port Headplate (4)

Graduated Vessel (1)

Support Stand (2)

Rushton Impeller (3)

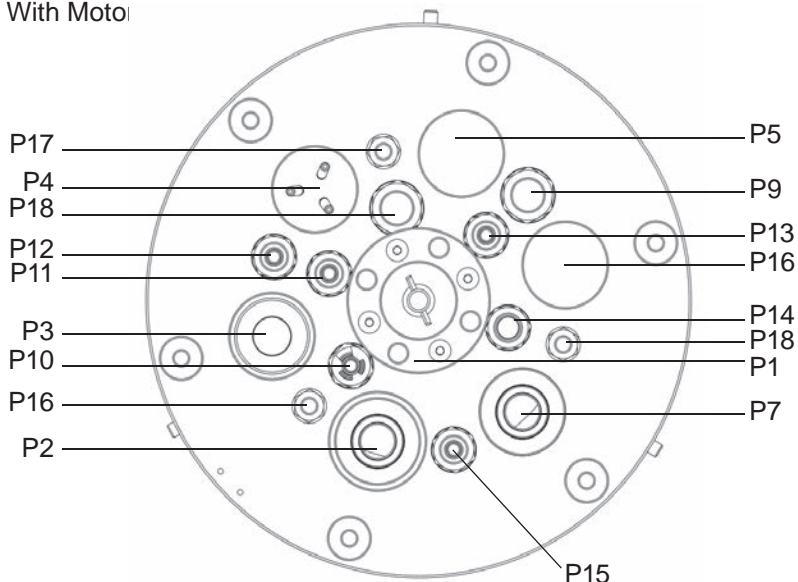


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3L Microbial Fermentation Bioreactor System, Unjacketed



Part Number	Description	Price
CLS-1380-MF3	3L Microbial Fermentation Bioreactor System Complete, Without Motor	\$8,724.35 ♥
CLS-1380-MF3M	3L Microbial Fermentation Bioreactor System Complete, With Motor	\$11,711.50 ♥



Standard Components Supplied with Complete Systems

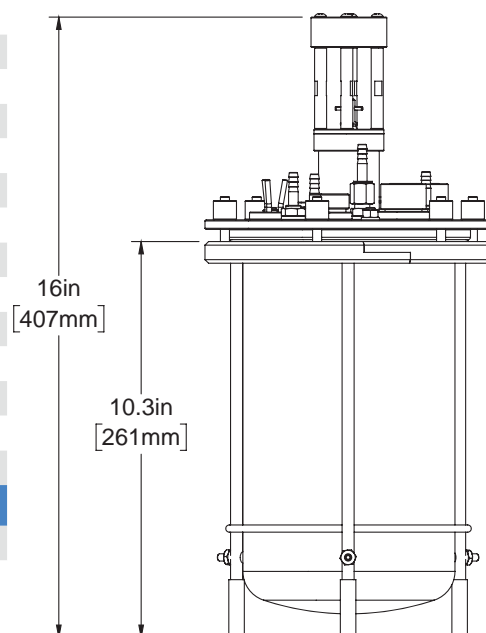
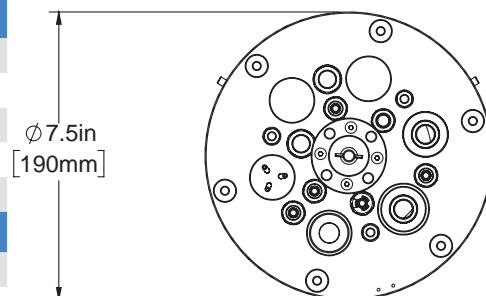
Item No.	Part No.	Description
1	CLS-1380-01	Bioreactor, 3L, Unjacketed, Graduated
2	CLS-1380-STD3	Support Stand, Complete
3	CLS-1380-08	Rushton Impeller 48mm OD
4	CLS-1380-03	Headplate, 18 Port

Headplate Configuration and Components

Port No.	Part No.	Size	Description
P1	CLS-1380-05	M30	Agitator Assembly
P2	CLS-1381-07	G3/4	pH/DO Adapter, for 12mm Sensor
P3	CLS-1380-10	M18	Septum Holder
P4	CLS-1380-09	M18	Triple Port Adapter
P5	CLS-1380-25	M18	Blind Stopper
P6	CLS-1380-25	M18	Blind Stopper
P7	CLS-1381-06	M18	pH/DO Adapter for 12mm Sensor
P8	CLS-1380-24	M12	Blind Stopper
P9	CLS-1380-24	M12	Blind Stopper
P10	CLS-1380-21	M10	Adjustable Sampling Pipe
P11	CLS-1380-20	M10	Adapter, Air Inlet/Outlet
P12	CLS-1381-05	M10	Air Aeration Tube, Drilled Hole Sprager
P13	CLS-1380-20	M10	Adapter, Air Inlet/Outlet
P14	CLS-1380-11	M10	Thermowell, 200mm Immersion
P15	CLS-1380-32	M10	Harvest Tube
P16	CLS-1381-04	M6	Baffle, 220mm Long
P17	CLS-1381-04	M6	Baffle, 220mm Long
P18	CLS-1381-04	M6	Baffle, 220mm Long

Additional Items Included with CLS-1380-MF3M

Item No.	Part No.	Description
5	CLS-1399-100	Overhead Stirrer and Controller, 120VAC



5L Microbial Fermentation Bioreactor System, Unjacketed

Agitator Assembly for
Use with

CLS-1399-100
Overhead Stirrer.

Additional Adapters
are available for other
style motors.

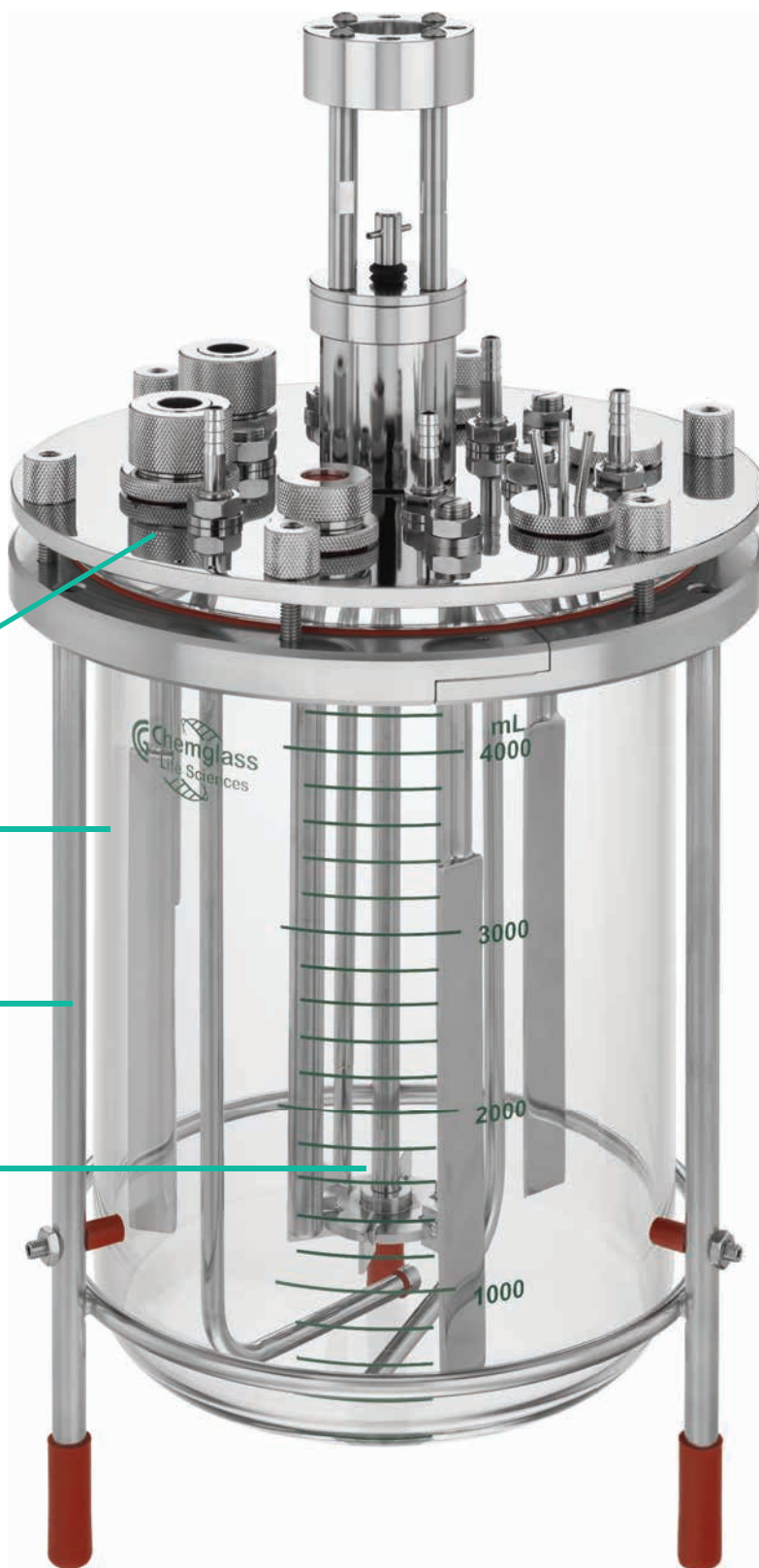


19 Port Headplate (4)

Graduated Vessel (1)

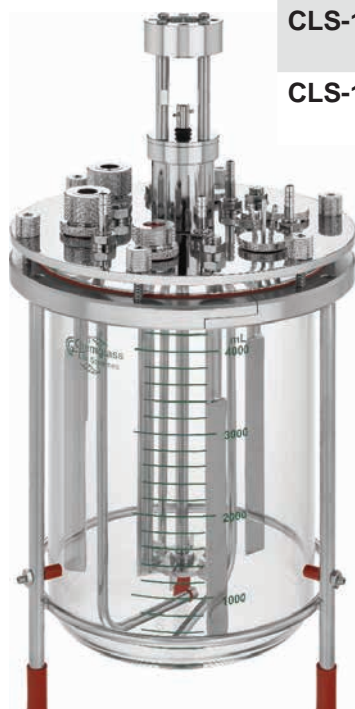
Support Stand (2)

Rushton Impeller (3)

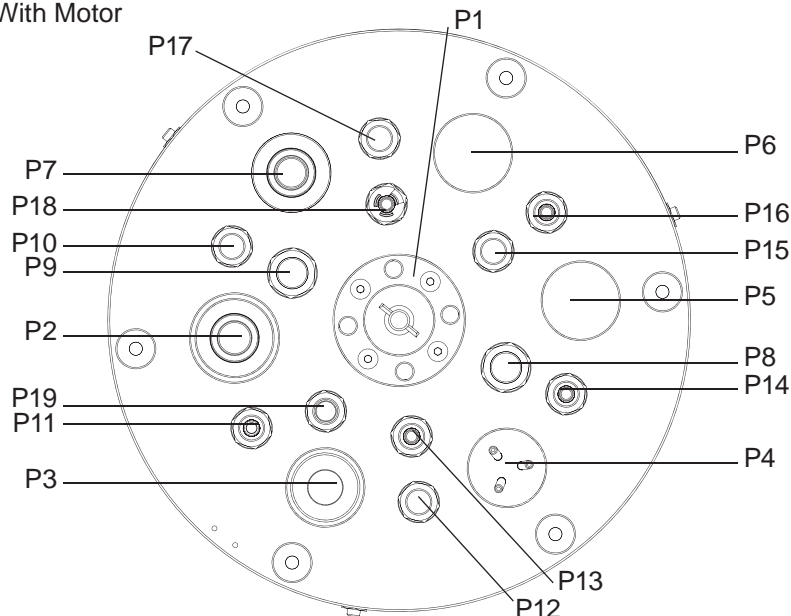


Microbial fermentation bioreactor systems include all the necessary base components needed in one simple package, supplied with or without a motor. By using motor adapters, the system can be retrofitted to work with almost any motor. These systems can be purchased as configured or customized to fit your specific application. For customized solutions please contact singleuse@cglifesciences.com

5L Microbial Fermentation Bioreactor System, Unjacketed



Part Number	Description	Price
CLS-1382-MF5	5L Microbial Fermentation Bioreactor System Complete, Without Motor	\$9,226.15 ♥
CLS-1382-MF5M	5L Microbial Fermentation Bioreactor System Complete, With Motor	\$12,213.30 ♥



Standard Components Supplied with Complete Systems

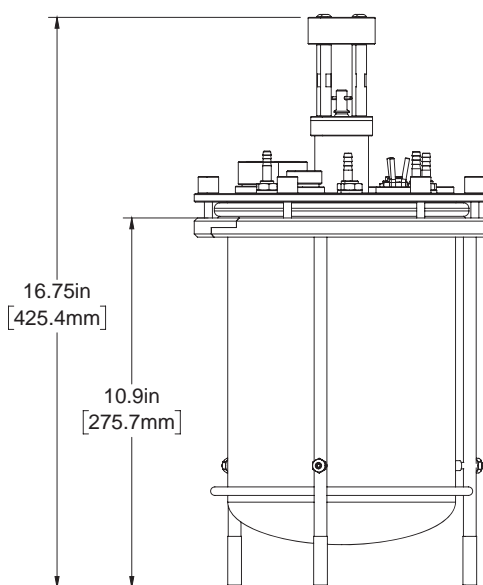
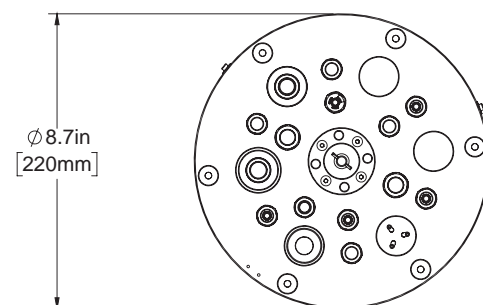
Item No.	Part No.	Description
1	CLS-1382-01	Bioreactor, 5L, Unjacketed, Graduated
2	CLS-1382-STD5	Support Stand, Complete
3	CLS-1382-07	Rushton Impeller 60mm OD
4	CLS-1382-03	Headplate, 19 Port

Headplate Configuration and Components

Port No.	Part No.	Size	Description
P1	CLS-1380-05	M30	Agitator Assembly
P2	CLS-1381-07	G3/4	pH/DO Adapter, for 12mm Sensor
P3	CLS-1380-10	M18	Septum Holder
P4	CLS-1380-09	M18	Triple Port Adapter
P5	CLS-1380-25	M18	Blind Stopper
P6	CLS-1380-25	M18	Blind Stopper
P7	CLS-1381-06	M18	pH/DO Adapter for 12mm Sensor
P8	CLS-1380-24	M12	Blind Stopper
P9	CLS-1380-24	M12	Blind Stopper
P10	CLS-1382-10	M10	Baffle, 223mm Long
P11	CLS-1382-12	M10	Harvest Tube
P12	CLS-1382-10	M10	Baffle, 223mm Long
P13	CLS-1380-20	M10	Adapter, Air Inlet/Outlet
P14	CLS-1380-20	M10	Adapter, Air Inlet/Outlet
P15	CLS-1380-23	M10	Blind Stopper
P16	CLS-1381-05	M10	Air Aeration Tube, Drilled Hole Sprager
P17	CLS-1382-10	M10	Baffle, 223mm Long
P18	CLS-1380-21	M10	Adjustable Sampling Pipe
P19	CLS-1380-11	M10	Thermowell, 200mm Immersion

Additional Items Included with CLS-1382-MF5M

Item No.	Part No.	Description
5	CLS-1399-100	Overhead Stirrer and Controller, 120VAC



7L Microbial Fermentation Bioreactor System, Unjacketed

Agitator Assembly for
Use with

CLS-1399-100
Overhead Stirrer.

Additional Adapters
are available for other
style motors.

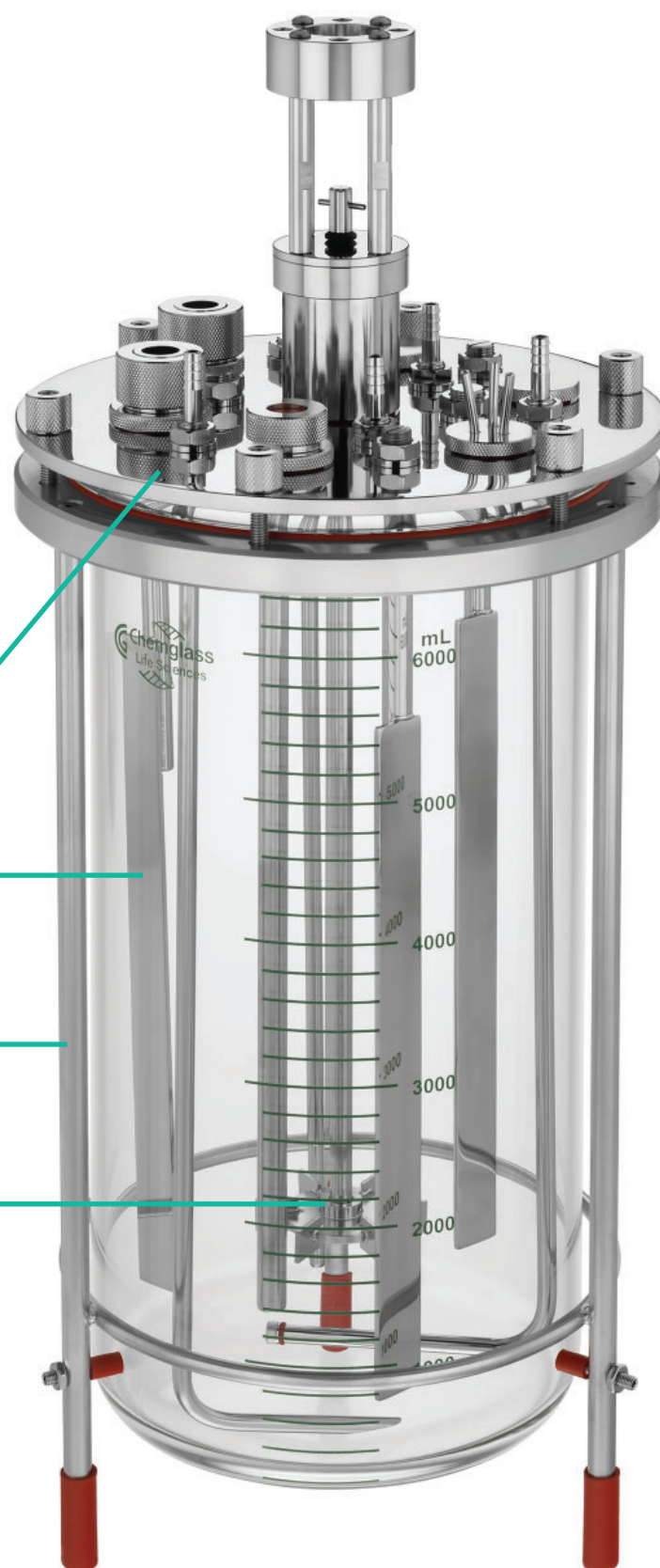


19 Port Headplate (4)

Graduated Vessel (1)

Support Stand (2)

Rushton Impeller (3)

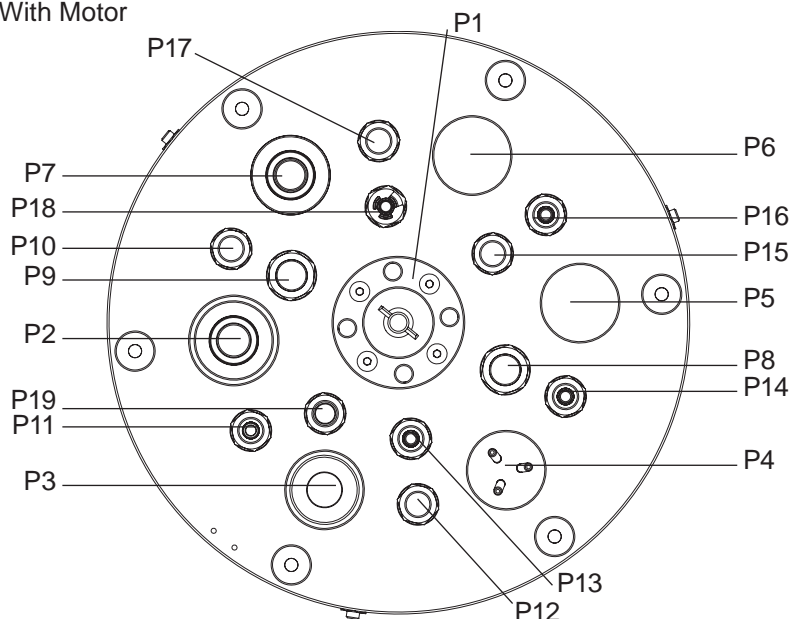


Microbial fermentation bioreactor systems include all the necessary base components needed in one simple package, supplied with or without a motor. By using motor adapters, the system can be retrofitted to work with almost any motor. These systems can be purchased as configured or customized to fit your specific application. For customized solutions please contact singleuse@cglifesciences.com

7L Microbial Fermentation Bioreactor System, Unjacketed



Part Number	Description	Price
CLS-1383-MF7	7L Microbial Fermentation Bioreactor System Complete, Without Motor	\$9,663.85 ♥
CLS-1383-MF7M	7L Microbial Fermentation Bioreactor System Complete, With Motor	\$12,651.00 ♥



Standard Components Supplied with Complete Systems

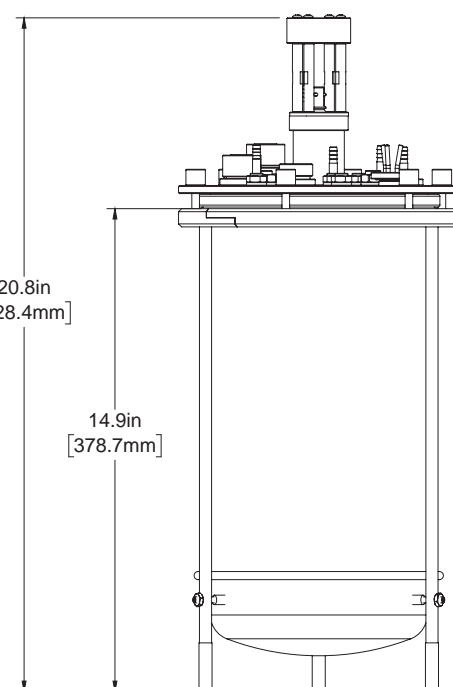
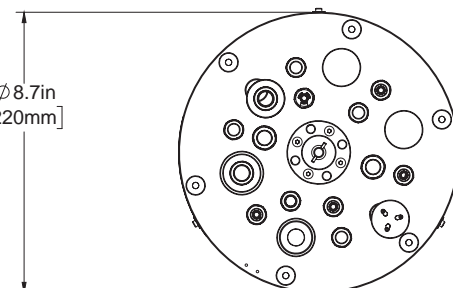
Item No.	Part No.	Description
1	CLS-1383-01	Bioreactor, 7L, Unjacketed, Graduated
2	CLS-1383-STD7	Support Stand, Complete
3	CLS-1382-07	Rushton Impeller 60mm OD
4	CLS-1382-03	Headplate, 19 Port

Headplate Configuration and Components

Port No.	Part No.	Size	Description
P1	CLS-1383-04	M30	Agitator Assembly
P2	CLS-1381-07	G3/4	pH/DO Adapter, for 12mm Sensor
P3	CLS-1380-10	M18	Septum Holder
P4	CLS-1380-09	M18	Triple Port Adapter
P5	CLS-1380-25	M18	Blind Stopper
P6	CLS-1380-25	M18	Blind Stopper
P7	CLS-1381-06	M18	pH/DO Adapter for 12mm Sensor
P8	CLS-1380-24	M12	Blind Stopper
P9	CLS-1380-24	M12	Blind Stopper
P10	CLS-1383-11	M10	Baffle, 317mm Long
P11	CLS-1383-13	M10	Harvest Tube
P12	CLS-1383-11	M10	Baffle, 317mm Long
P13	CLS-1380-20	M10	Adapter, Air Inlet/Outlet
P14	CLS-1380-20	M10	Adapter, Air Inlet/Outlet
P15	CLS-1380-23	M10	Blind Stopper
P16	CLS-1384-06	M10	Air Aeration Tube, Drilled Hole Sprager
P17	CLS-1383-11	M10	Baffle, 317mm Long
P18	CLS-1383-08	M10	Adjustable Sampling Pipe
P19	CLS-1383-05	M10	Thermowell, 300mm Immersion

Additional Items Included with CLS-1383-MF7M

Item No.	Part No.	Description
5	CLS-1399-100	Overhead Stirrer and Controller, 120VAC



15L Microbial Fermentation Bioreactor System, Unjacketed



19 Port Headplate (4)

Graduated Vessel (1)

Support Stand (2)

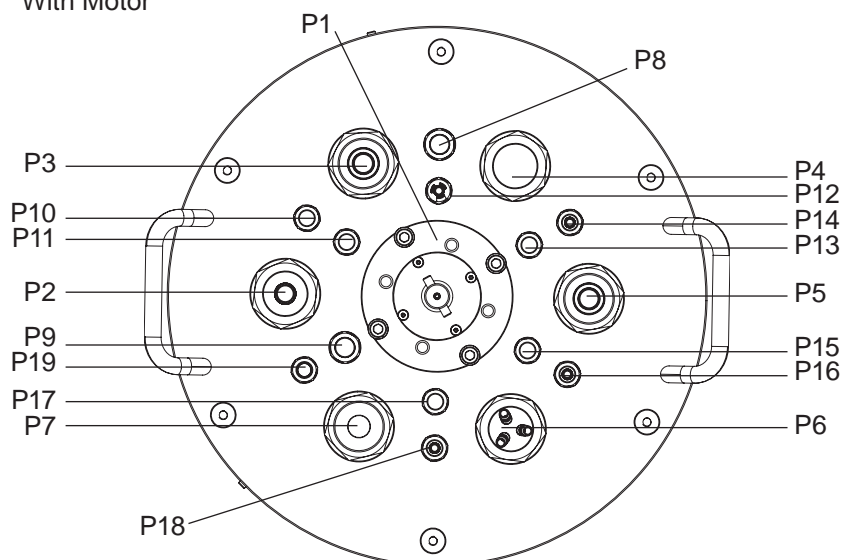
Rushton Impeller (3)



Microbial fermentation bioreactor systems include all the necessary base components needed in one simple package, supplied with or without a motor. By using motor adapters, the system can be retrofitted to work with almost any motor. These systems can be purchased as configured or customized to fit your specific application. For customized solutions please contact singleuse@cglifesciences.com

15L Microbial Fermentation Bioreactor System, Unjacketed

Part Number	Description	Price
CLS-1385-MF15	15L Microbial Fermentation Bioreactor System Complete, Without Motor	\$18,303.05 ♥
CLS-1385-MF15M	15L Microbial Fermentation Bioreactor System Complete, With Motor	\$22,461.25 ♥



Standard Components Supplied with Complete Systems

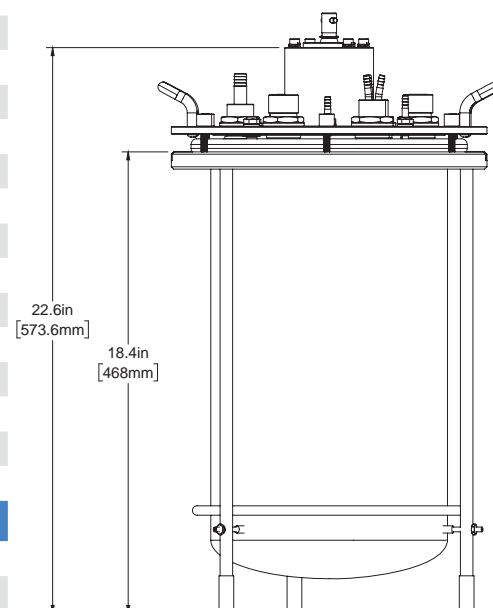
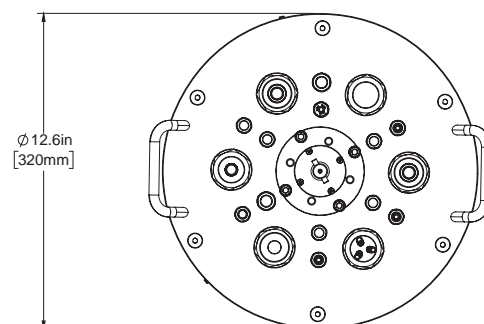
Item No.	Part No.	Description
1	CLS-1385-01	Bioreactor, 15L, Unjacketed, Graduated
2	CLS-1385-STD15	Support Stand, Complete
3	CLS-1385-20	Rushton Impeller 76mm OD
4	CLS-1385-03	Headplate, 19 Port

Headplate Configuration and Components

Port No.	Part No.	Size	Description
P1	CLS-1385-05	M69	Agitator Assembly, 15mm Shaft
P2	CLS-1385-23	M27	Harvest Tube
P3	CLS-1385-19	M27	pH/DO Adapter for 12mm Sensor
P4	CLS-1385-14	M27	Blind Stopper
P5	CLS-1385-19	M27	pH/DO Adapter for 12mm Sensor
P6	CLS-1385-08	M27	Triple Port Adapter
P7	CLS-1385-09	M27	Septum Holder
P8	CLS-1380-24	M12	Blind Stopper
P9	CLS-1380-24	M12	Blind Stopper
P10	CLS-1380-23	M10	Blind Stopper
P11	CLS-1385-17	M10	Baffle, 400mm Long
P12	CLS-1385-13	M10	Adjustable Sampling Pipe
P13	CLS-1385-17	M10	Baffle, 400mm Long
P14	CLS-1380-20	M10	Adapter, Air Inlet/Outlet
P15	CLS-1380-22	M10	Blind Stopper
P16	CLS-1385-18	M10	Air Aeration Tube, Drilled Hole Sprager
P17	CLS-1385-17	M10	Baffle, 400mm Long
P18	CLS-1380-20	M10	Adapter, Air Inlet/Outlet
P19	CLS-1385-10	M10	Thermowell, 370mm Immersion

Additional Items Included with CLS-1382-MF15M

Item No.	Part No.	Description
5	CLS-1399-200	Overhead Stirrer and Controller, 120VAC





2 Year Warranty

Sensors

The following sensors can be connected to the HABITAT CCT System.

- pH
- DO (dissolved oxygen)
- Temperature
- Filling level
- Foam
- CO₂
- Conductivity
- Turbidity
- Viable cell mass
- Redox
- Off-gas Analysis

IKA Controllers and Accessories

HABITAT is a smart benchtop bioreactor and fermenter control system from IKA, designed for both cell culture and microbial fermentation.

To operate HABITAT you only need a control unit package and a bioreactor system. For sensitive mammalian cell culture techniques, select the cell variant, with gassing rates from 8 - 2000 cc/min. For microbial fermentation, we recommend the ferment variant, with gassing rates of 100 - 20,000 cc/min. The photobioreactor version with LED panels is perfect for photosynthetic organisms.

Each package offers precise temperature control and pH control, essential for optimal cell growth and fermentation processes. The suffix ‘cct’ in each package indicates connection options for three additional sensors: turbidity, CO₂, and conductivity, enhancing your ability to monitor cell culture media and fermentation progress.

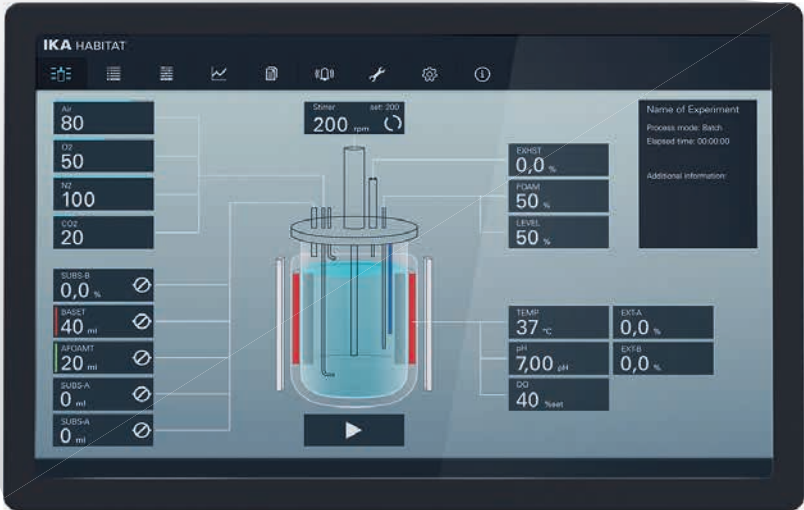
All features at a glance

- Compact, space-saving design, dimensions: 223 x 402 x 450mm (WxDxH)
- Latest technology sensors for better insights and more control
- Large screen tablet for easy operation (10.4 inch)
- Intuitive, easy-to-use control software that provides simple initial setup and intuitive user assistance throughout the process
- Four integrated Watson-Marlow pumps
- High precision motor speed control
- Cross platform connectivity: USB, PC, RS232, OPC-UA, ethernet, external signal input, external pump, single-use unit, thermostat
- Data storage
- Four built-in mass flow controllers for gas supply: N₂, O₂, air, and CO₂
- Status LED display: direct error display by indicator light

Habitat CCT Cell Culture Bioreactor Control System


















Part Number	Description	Price
CLS-1438-CC02	Habitat CCT Cell Culture Bioreactor Control System, 100-240V/50-60HZ	\$12,394.00
CLS-1438-MF02	Habitat CCT Fermentation Bioreactor Control System, 100-240V/50-60HZ	\$12,458.00
CLS-1438-PC02	Habitat CCT Photo Cell Culture Bioreactor Control System, 100-240V/50-60HZ	\$15,389.00
CLS-1438-PF02	Habitat CCT Photo Fermentation Bioreactor Control System, 100-240V/50-60HZ	\$15,711.00

Photo Bioreactor



Habitat Bioreactor Control System Components And Accessories

In addition to the HABITAT Bioreactor Control Systems there are a few additional required components as well as optional add-on items depending on the application. The chart below details the required components. For pricing, please send inquiries to singleuse@cglifesciences.com

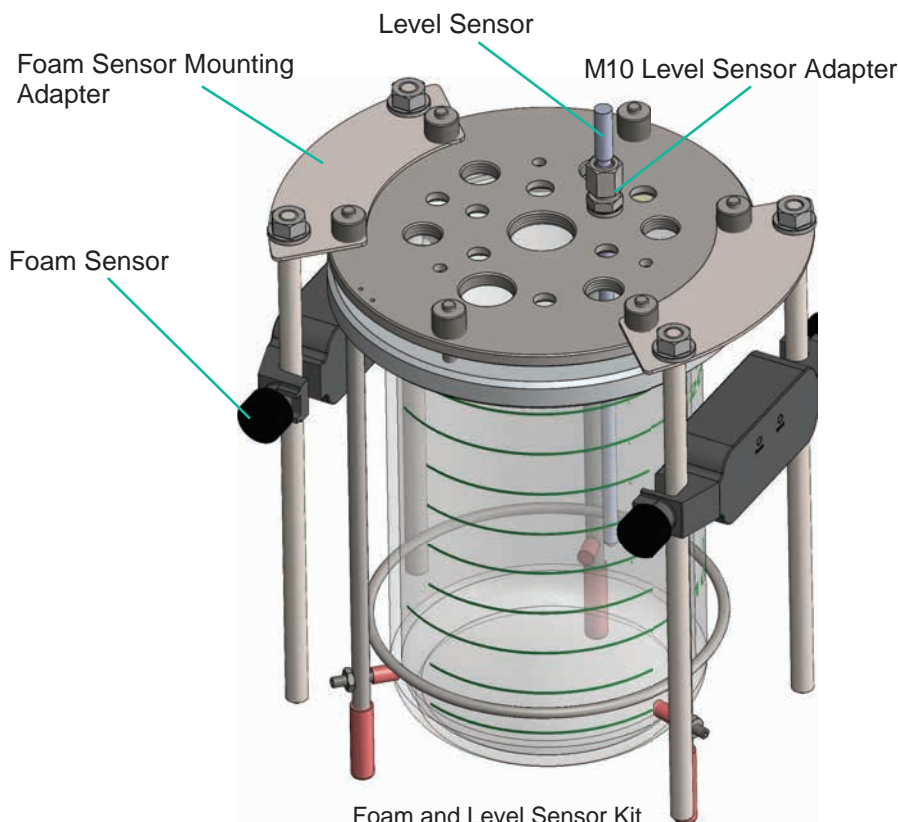
			
			
			
			
	Cable and Tube Sets		



PT1000 RTD Temperature Sensor



Heating Blanket



Motors

Habitat Bioreactor Control System Components And Accessories

Item	1L	2L	3L	5L	7L	15L (8mm Shaft)	15L (15mm Shaft)	Required With HABITAT Bioreactor Control System
Tablet	CLS-1438-TABLET (iPad, 10.9 Inch, Wi-Fi, 64GB)							Yes
Habitat Cable and Tube Set (Includes pH and DO Cables)	CLS-1438-CBL01 This Kit Includes: (1x) pH Probe Cable, (1x) DO Probe Cable, (2x) Vent Filters, (1x) Vent Heater, (8x) Plug In Barb Connectors 6mm x 5mm, (2x) Hose Reducer Fittings 6.4mm x 3.9mm, (3x) Y Hose Connectors 3.2mm, (7.5m) Silicone Tube 3.2mm ID x 6.4mm OD, (3m) Silicone Tube 4.8mm ID x 9.5mm O.D., (3x) Y Hose Connectors 4.8mm, (10m) PUN Tube 6mm O.D., (4x) Syringe Filters, (1x) USB Cable, (1x) RS232 Cable, (5x) Hose Clamps, (4x) Silicone Caps, (10x) Twist Ties							Yes
HABITAT PT1000 RTD Temperature Sensors, ¼" OD	CLS-1438-TS02 (225mm Probe Length)			CLS-1438-TS05 (360mm Probe Length)		CLS-1438-TS10 (460mm Probe Length)		Yes
M10 Temperature Sensor For Direct Immersion Adapter See pg 67	CLS-1380-92							Optional
HABITAT Motors, 48VDC	CLS-1438-M02 (48V, 25W)				CLS-1438-M10 (48V, 110W)			Yes
HABITAT Motor Adapter Kit See pg 63	CLS-1380-IKA2				CLS-1380-IKA10		CLS-1380-IKA1015	Yes
48V HABITAT Heating Blankets	CLS-1438-HB01 (48V, 100W)		CLS-1438-HB02 (48V, 160W)	CLS-1438-HB05 (48V, 250W)		CLS-1438-HB15 (48V, 250W)		Optional
HABITAT Foam and Level Sensor Kits	CLS-1438-FSLS01			CLS-1438-FSLS05	CLS-1438-FSLS07	CLS-1438-FSLS07		Optional
HABITAT External Peristaltic Pump	CLS-1438-PP01 (0.01-183 ml/min) (.5-250 rpm)							Optional
Pharmed BPT Precision Pump Tubing & Platinum Cured Silicone 25ft roll See pg 84	CG-1177-29 Pharmed BPT CG-1177-24 Platinum Cured Silicone: 1/32 ID x 5/32 OD (ID 0.8mm, OD 4mm, WT 1.6mm) Size 13: 1.0 ... 12 cc/min							Optional
	CG-1177-30 Pharmed BPT CG-1177-25 Platinum Cured Silicone: 1/16 ID x 3/16 OD (ID 1.7mm, OD 4.9mm, WT 1.6mm) Size 14: 3.0 ... 45 cc/min							
	CG-1177-31 Pharmed BPT CG-1177-26 Platinum Cured Silicone: 1/8 ID x 1/4 OD (ID 3.1mm, OD 6.3mm, WT 1.6mm) Size 16: 13.3 ... 140 cc/min							
	CG-1177-32 Pharmed BPT CG-1177-27 Platinum Cured Silicone: 3/16 ID x 5/16 OD (ID 4.8mm, OD 8mm, WT 1.6mm) Size 25: 26.6 ... 270 cc/min							
Hamilton EasyFerm Plus pH Probe K8 Connector See pg 74	CLS-1435-P72 (225mm Probe Length)				CLS-1435-P73 (325mm Probe Length)	CLS-1435-P74 (425mm Probe Length)		Optional
Hamilton OxyFerm FDA DO Probe T82/D4 Connector See pg 73	CLS-1435-D72 (215mm Probe Length)				CLS-1435-D73 (320mm Probe Length)	CLS-1435-D74 (420mm Probe Length)		Optional
Single-Use Bioreactor Accessory Kit See pg 78	CLS-1390-01							Optional
10mL Bioreactor Sample Syringe Line See pg 79	CLS-1399-A-01							Optional

Chemglass Life Sciences is pleased to announce the availability of like-for-like, replacement components for the popular 2, 3, 5, 7 and 15 liter sizes of Applikon® and Broadley-James® Bioreactor. All stainless steel components are manufactured from 316L stainless steel with an electropolished surface finish of 20Ra or better. Borosilicate glass vessels include jacketed, unjacketed and red stained versions. Contact us if you require any parts not shown here.

Unjacketed Glass Bioreactor Vessels

Vessels are constructed of heavy wall tubing and are graduated in 200mL subdivisions with numbers every 1000mL.

Unjacketed Glass Bioreactor Vessels

Part Number	Vessel Cap. (L)	Vessel Min. Working Volume (L)	Vessel ID. (mm)	Overall Height (mm)	Price
CLS-1378-01	1	0.5	105	246	\$665.20 ♥
CLS-1379-01	2	0.5	105	246	\$672.10 ♥
CLS-1380-01	3	0.5	130	260	\$1,111.95 ♥
CLS-1382-01	5	1.0	160	260	\$1,145.10 ♥
CLS-1383-01	7	2	160	360	\$1,207.50 ♥
CLS-1385-01	15	2.5	222	446	\$2,843.85 ♥

Tripod Stand For Unjacketed Vessels

Stand to hold unjacketed bioreaction vessels. Top, two-piece ring is made of anodized aluminum while the lower ring and legs are electropolished stainless steel. Stands come complete with silicone o-ring and six, knurled nuts to attach the headplate to the stand.

Tripod Stands for Unjacketed Vessels

Part Number	Vessel Cap. (L)	Replacement Silicone O-Ring	Price
CLS-1380-STD3	1-3	CLS-1705-150X4	\$904.45 ♥
CLS-1382-STD5	5	CLS-1705-177X4	\$937.65 ♥
CLS-1383-STD7	7	CLS-1705-177X4	\$962.60 ♥
CLS-1385-STD15	15	CLS-1705-274	\$1,593.20 ♥



For Perfusion Vessels & Stands, See Page 81

CLS-1380-STD3
CLS-1382-STD5
CLS-1383-STD7
CLS-1385-STD15

See Replacement Rubber Feet and Accessory Stabilizer Bars for Tripod Stands on the next page.



CLS-1378-01 1L



CLS-1380-01

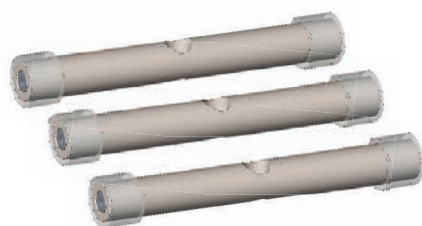




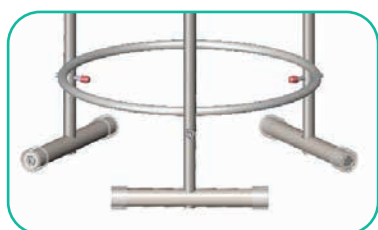
CLS-1381-01



CLS-1381-STD3
CLS-1381-STD5
CLS-1384-STD7



CLS-1385-SBD3



Stabilizer bars shown installed on a bioreactor stand.



CLS-1380-084 Pack of 12

Jacketed Glass Bioreactor Vessels

Jacketed vessels are constructed of heavy wall tubing and are graduated in 200mL subdivisions with numbers every 1000mL. Connections to circulator are GL-18 glass threads and are supplied complete with caps and plastic hose connections. **15L jacketed vessels available - please contact us.**

Jacketed Glass Bioreactor Vessels

Part Number	Vessel Cap. (L)	Vessel Min. Working Volume (L)	Vessel ID. (mm)	Overall Height (mm)	Price
CLS-1381-01	3	0.5	130	275	\$1,656.25 ♥
CLS-1382-30	5	1.0	160	275	\$2,242.50 ♥
CLS-1384-01	7	2	160	375	\$2,501.20 ♥

Tripod Stand For Jacketed Glass Bioreactor Vessels

Stand for jacketed bioreaction vessels. Top, two-piece ring is made of anodized aluminum. The lower ring and legs are electropolished stainless steel. Stands come complete with silicone o-ring and six, knurled nuts to attach the headplate to the stand. **Stands for 15L jacketed vessels available - please contact us.**

Tripod Stands for Jacketed Glass Bioreactor Vessels

Part Number	Vessel Cap. (L)	Replacement Silicone O-Ring	Price
CLS-1381-STD3	2-3	CLS-1705-150X4	\$1,178.15 ♥
CLS-1386-STD5	5	CLS-1705-177X4	\$1,228.05 ♥
CLS-1384-STD7	7	CLS-1705-177X4	\$1,277.90 ♥

Stabilizer Bars For Bioreactor Stands

Bars attach to the legs of bioreactor stands with two adjustable hex head screws and add an additional measure of safety. For use with both jacketed and unjacketed bioreactor stands. Each bar has silicone pads on the ends for cushioning and added extra grip. Sold as a set of three.

- 1-3L stabilizer bars are 4" long
- 5-7 stabilizer bars are 4" long
- 15L stabilizer bars are 6" long

Stabilizer Bars For Bioreactor Stands

Part Number	Description	Price
CLS-1380-SBD3	Set of Three, for 1-3L Bioreactor Stands	\$320.75 ♥
CLS-1383-SBD3	Set of Three, for 5-7L Bioreactor Stands	\$320.75 ♥
CLS-1385-SBD3	Set of Three, for 15L Bioreactor Stands	\$333.60 ♥

Replacement Silicone Feet For Tripod Stands

Replacement silicone feet for 3, 5 and 7 liter bioreactor, tripod stands. Sold as a pack of 12.

Replacement Silicone Feet for Tripod Stands

Part Number	Description	Price
CLS-1380-084	For 3, 5 and 7 Liter Tripod Stands	\$15.15 ♥

Agitator Assemblies

Agitator assembly is constructed of 316L stainless steel and screws into the M30 thread in the center of the headplate. Design ensures contamination-free sealing around the shaft. CLS-1385-05 attaches to the headplate with 4 bolts. CLS-1385-35 requires adapter plate, CLS-1385-30, for use in a 15L reactor.

Agitator Assemblies

Part Number	Vessel Cap. (L)	Replacement Silicone O-ring	Length of Shaft Through Headplate (mm)	Shaft Dia. (mm)	Price
CLS-1380-05	1-5	CLS-1705-124	222	8	\$1,418.80 ♥
CLS-1383-04	7	CLS-1705-124	300	8	\$1,485.30 ♥
CLS-1385-05	15	CLS-1705-131	392	15	\$3,144.85 ♥
CLS-1385-35	15	CLS-1705-131	390	8	\$1,521.25 ♥

Rebuild Kits For Agitator Assemblies

Kits of o-rings, seals and bearings to rebuild agitator assemblies.

Headplates

Part Number	Fits Agitator	Shaft Size (mm)	Price
CLS-1380-05PM	CLS-1380-05 CLS-1383-04 CLS-1385-35	8	\$146.00 ♥
CLS-1385-05PM	CLS-1385-05	15	\$230.15 ♥

Applikon Agitator to Sartorius Motor Adapter Kit

Adapter kit converts our standard "Applikon-style" agitator assembly to fit a Sartorius motor. NOTE: This is the adapter kit only and does not include the agitator assembly.

Applikon Agitator to Sartorius Motor Adapter

Part Number	Description	Price
CLS-1380-SAR1	Sartorius Motor Adapter Kit	\$476.90 ♥

IKA Motor Adaptor

Agitator Adapter to adapt IKA HABITAT motors to Applikon style agitator assemblies. Small motor adapters are for use with 1L to 5L (8mm Shaft)

Bioreactor and the big motor adapters are for use with 7L (8mm shaft) and 15L (8mm shaft or 15mm) agitator assemblies.

Note: This is the adapter kit only and does not include the agitator assembly. For the 8mm agitator assemblies' removal of the (4) rods and upper motor support portion is required. The adapter screws into the mounting holes used by the rods. For the 15mm agitator assembly (4) existing screws on the top plate will need to be removed and the adapter will screw in using these holes.

IKA Motor Adaptor

Part Number	Description	Price
CLS-1380-IKA2	Applikon Agitator to IKA HA.mt.s.2 Small Motor Adapter Kit	\$462.30 ♥
CLS-1380-IKA10	8mm Shaft Dia. Applikon Agitator to IKA HA.mt.s.10 Big Motor Adapter Kit	\$458.65 ♥
CLS-1380-IKA1015	15mm Shaft Dia. Applikon Agitator to IKA HA.mt.s.10 Big Motor Adapter Kit	\$494.00 ♥



CLS-1380-05
CLS-1383-04
CLS-1385-05
CLS-1385-35



CLS-1380-SAR1



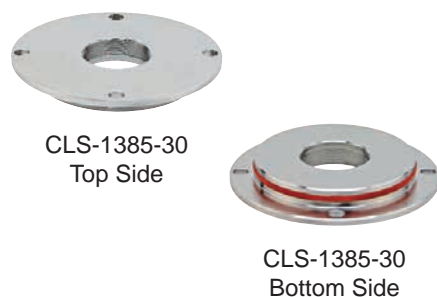
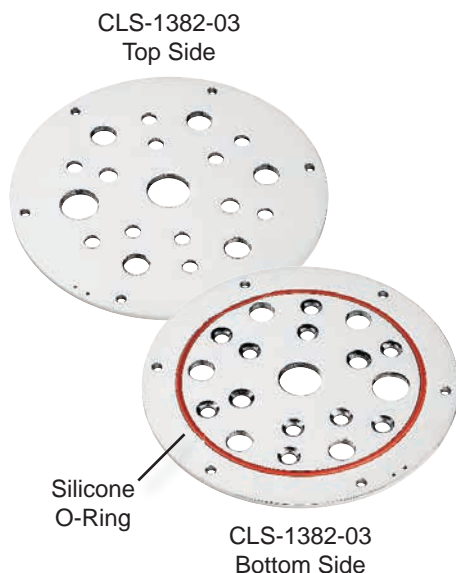
CLS-1380-IKA10

Headplates

Headplate is constructed of 316L stainless steel and electropolished to a mirror finish. Supplied complete with a silicone o-ring that mates to the glass vessel. Number and size of ports as listed.

Headplates

Part Number	Vessel Cap. (L)	Replacement Silicone O-Ring	Price
CLS-1379-02	1-2	CLS-1705-135X4	\$1,030.75 ♥
16 Total Ports	M30 Center 6 each M10	1 each G-3/4 3 each M6	5 each M18
CLS-1380-03	3	CLS-1705-135X4	\$1,078.70 ♥
18 Total Ports	M30 Center 2 each M12	1 each G-3/4 6 each M10	5 each M18 3 each M6
CLS-1382-03	5 and 7	CLS-1705-260	\$1,294.45 ♥
19 Total Ports	M30 Center 2 each M12	1 each G-3/4 10 each M10	5 each M18
CLS-1385-03	15	CLS-1705-373	\$3,899.80 ♥
19 Total Ports	69mm Center Port for Agitator 6 each M27	2 each M12	10 each M10



Adapter Plate, 15L Bioreactor To M30

For conversion of the 15 liter headplate, CLS-1385-03, from a 69mm opening to an M30 thread, thereby accepting the CLS-1385-35 agitator assembly.

Adapter Plate for 15L Headplates

Part Number	Description	Price
CLS-1385-30	Adapter Plate, M30	\$504.35 ♥

Headplate Assembly Stand

Constructed of blue anodized aluminum, stand permits easy assembly of components into headplates. Will fit from 2 to 15 liter headplates, which are secured with four nylon-tipped thumb screws. Plate is 8" wide by 8" deep. Distance between uprights is 8mm.

Headplate Assembly Stand

Part Number	Description	Price
CLS-1380-100	Headplate Assembly Stand	\$614.90 ♥



Marine Style Impeller Blades

Marine style impeller blades are available in two styles, vortexing and scoping. The 2 through 7 liter sizes fit the 8mm shaft of the agitator assembly. The 15 liter has an option of either the 8mm or the 15mm shaft size. These blades are used primarily for mammalian cell culture work.

Marine Style Impeller Blades, Scoping and Vortexing

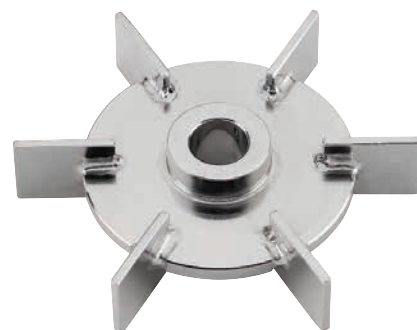
Part Number	Impeller Type	Fits Reactor (L)	Fits Shaft Size (mm)	Impeller Dia. (mm)	Price
CLS-1380-06	Vortex (Down)	1-3	8	43	\$574.15 ♥
CLS-1380-07	Scoping (Up)	1-3	8	43	\$574.15 ♥
CLS-1382-05	Vortex (Down)	5-7	8	59	\$731.10 ♥
CLS-1382-06	Scoping (Up)	5-7	8	59	\$703.00 ♥
CLS-1385-06	Vortex (Down)	15	15	76	\$771.70 ♥
CLS-1385-07	Scoping (Up)	15	15	76	\$771.70 ♥
CLS-1385-36	Vortex (Down)	15	8	76	\$875.95 ♥
CLS-1385-37	Scoping (Up)	15	8	76	\$892.60 ♥



CLS-1382-06



CLS-1382-05



CLS-1382-07

Rushton Style Impeller Blades

The 3 through 7 liter sizes fit the 8mm Shaft, while the 15 liter fits the 15mm shaft. These blades are used primarily for bacterial cell culture work.

Rushton Style Impeller Blades

Part Number	Fits Reactor (L)	Impeller Diameter (mm)	Fits Shaft Size (mm)	Price
CLS-1380-08	1-3	46	8	\$459.75 ♥
CLS-1382-07	5-7	60	8	\$488.50 ♥
CLS-1385-20	15	76	15	\$560.25 ♥
CLS-1385-50	15	76	8	\$838.15 ♥

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CLS-1380-323



CLS-1380-57



CLS-1380-409



CLS-1380-09



Bottom View



CLS-1380-411

Triple Port Adapter, M10

316L stainless steel triple port assembly fits into a 10mm head port plate. The assembly incorporates three separate pipes into one assembly for efficient use of space. Each port can be used individually for reagent addition. M10 threaded adapter has (3) 1/8" OD tubing ports for connection to flexible tubing. Inside the reactor the tubes are 7mm long; above the headplate they are 1.59", 2.09", and 2.59" long. Electropolished to Ra20 or better.

Triple Port Adapter, 1/8" OD Tubing

Part Number	Thread Size	Replacement Silicone O-Ring	Price
CLS-1380-323	M10		\$762.20 ♥

Double Port Adapter, M18

Double port adapter fits into a headplate and has two, 4mm OD, connections to fit precision tubing size 16. Inside the reactor, the 4mm tubes are 1 1/4" long.

Double Port Adapter

Part Number	Thread Size	Replacement Silicone O-Ring	Price
CLS-1380-57	M18	CLS-1705-20x2	\$311.25 ♥

Triple Port Adapters, M18 And M27

Triple inlet adapter fits into a headplate and incorporates three separate pipes in one assembly for efficient use of space. The adapter has three, 1/8" (3.2mm) tubing ports for connection to flexible tubing and can be used individually for reagent addition. Inside the reactor, the 1/8" tubes are 3/4", 1" and 1 1/8" long.

Triple Port Adapter

Part Number	Thread Size	Replacement Silicone O-Ring	Price
CLS-1380-09	M18	CLS-1705-20X2	\$348.50 ♥
CLS-1385-08	M27	CLS-1705-121	\$605.80 ♥

Quad Port Adapters, M18

Quad inlet assembly fits an 18mm head plate port and incorporates four separate pipes in one assembly for efficient use of space. Each port can be used individually for reagent addition. M18 threaded adapter has (4) 1/8" (3.2mm) tubing ports for connection to flexible tubing. Inside the reactor, the 1/8" tubes are 5/8", 3/4", 1" and 1 1/8" long.

Quad Port Adapter

Part Number	Thread Size	Replacement Silicone O-Ring	Price
CLS-1380-409	M18	CLS-1705-20X2	\$358.80 ♥
CLS-1380-411	M18	CLS-1705-20X2	\$400.40 ♥

5-Port Adapter, G 3/4 Thread, Straight 1/8" Ports, Stainless Steel, For Bioreactor

The 5-Port inlet assembly fits into G 3/4 head plate port. The assembly incorporates five separate pipes into one assembly for efficient use of space. Each port can be used individually for reagent addition. G 3/4 threaded adapter has (5) 1/8" (3.2mm) tubing ports for connection to flexible tubing. Inside the reactor, the 1/8" tubes are 1/8" long

5-Port Adapter

Part Number	Thread Size	Replacement Silicone O-Ring	Price
CLS-1380-500	G 3/4	CLS-1705-023	\$411.55 ♥



CLS-1380-500

5-Port Adapter, G 3/4 Thread, 30° Angled 1/8" Ports, Stainless Steel, For Bioreactor

The 5-Port inlet assembly fits into G 3/4 head plate port. The assembly incorporates five separate pipes into one assembly for efficient use of space. Each port can be used individually for reagent addition. G 3/4 threaded adapter has (5) 30° Angled 1/8" (3.2mm) tubing ports for connection to flexible tubing. Inside the reactor, the 1/8" tubes are 1/8" long.

5-Port Adapter

Part Number	Thread Size	Replacement Silicone O-Ring	Price
CLS-1380-501	G 3/4	CLS-1705-023	\$701.55 ♥



CLS-1380-501

Level Sensor Adapter & 1/4" Dia Probe, Compressor Adapter, M10

Used to install a 1/4" OD (6.35mm) level sensor into an M10 headplate port.

Level Sensor Adapter

Part Number	Thread Size	Replacement Silicone O-Ring	Price
CLS-1380-92	M10	CLS-1705-008	\$201.30 ♥



CLS-1380-92

Aeration Tube With Porous Sparger, M10

The 15µm, sintered metal tip produces tiny air bubbles for optimum gas distribution. The "A" dimension listed allows for placement in different ports of the headplate. **NOTE:** Replacement o-ring listed is for M10 connection.

Aeration Tubes with Porous Spargers

Part Number	Fits Reactor (L)	Immersion	Dim. "A" (mm)	Replacement Silicone O-Ring	Price
CLS-1379-04	1-2	236	48	CLS-1705-85X25	\$638.75 ♥
CLS-1380-12	3	238	50	CLS-1705-85X25	\$697.00 ♥
CLS-1382-08	5	238	73	CLS-1705-85X25	\$755.05 ♥
CLS-1383-06	7	330	73	CLS-1705-85X25	\$813.30 ♥
CLS-1385-11	15	420	93	CLS-1705-85X25	\$896.10 ♥

Replacement Sparger Tips

Part Number	Porosity (µm)	Replacement Silicone O-Ring	Price
CLS-1380-14	10	CLS-1705-007	\$232.35 ♥
CLS-1380-15	15	CLS-1705-007	\$232.35 ♥
CLS-1380-16	50	CLS-1705-007	\$232.35 ♥
CLS-1380-17	100	CLS-1705-007	\$243.90 ♥

Thermowell, M10

M10 threaded thermowell having an ID. of 0.310" that will accept 1/4" thermocouple probes. To enhance temperature measurement, the thermowell should be partially filled with a heat conducting silicone or mineral oil.

Thermowells

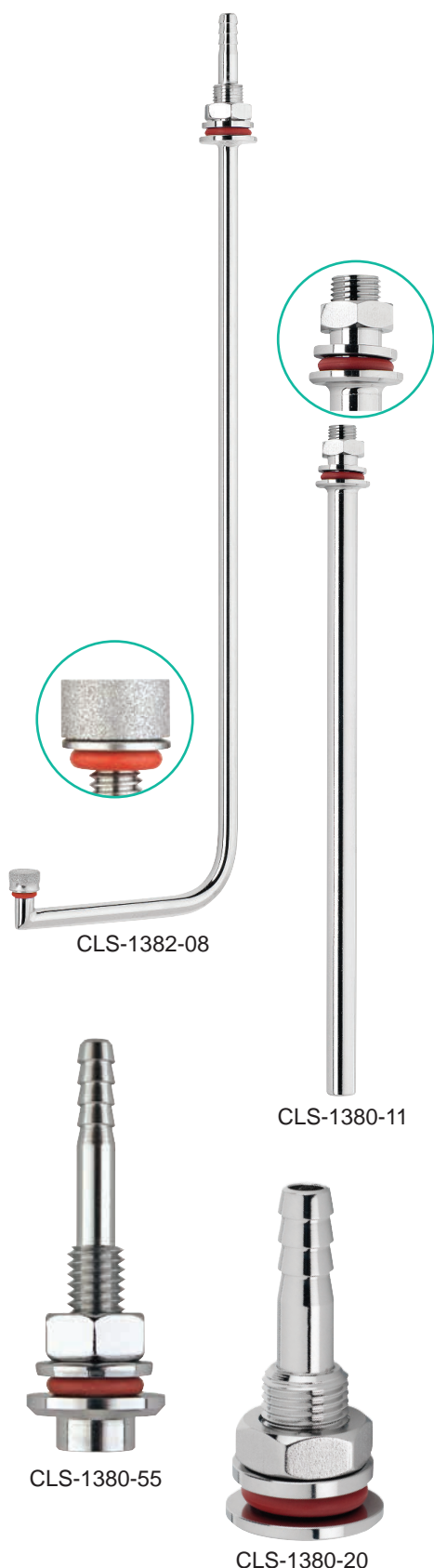
Part Number	Fits Reactor (L)	Immersion Length (mm)	Replacement Silicone O-Ring	Price
CLS-1380-11	1-5	200	CLS-1705-85X25	\$199.10 ♥
CLS-1383-05	7	300	CLS-1705-85X25	\$232.35 ♥
CLS-1385-10	15	370	CLS-1705-85X25	\$331.80 ♥

Air Inlet / Outlet Adapter

Adapter can be used as a gas outlet pipe in lieu of a condenser in applications where the aeration rate or temperature is low or for short term batch application. More often, this pipe is used to provide overlay aeration.

Air Inlet / Outlet Adapters

Part Number	Thread Size	Hose Conn. O.D. (mm)	Fits Tubing Size	Replacement Silicone O-Ring	Price
CLS-1380-55	M6	4.00	16	CLS-1705-010	\$163.75 ♥
CLS-1380-20	M10	6.35	17	CLS-1705-85X25	\$182.45 ♥
CLS-1380-18	M18	12.00	73	CLS-1705-20X2	\$199.40 ♥
CLS-1385-27	M27	12.00	73	CLS-1705-121	\$268.20 ♥



Addition Pipes

This adapter can be used to add fluids or gases to the bioreactor.

Addition Pipe Adapter

Part Number	Fits	Thread Size	Replacement	Price
	Reactor (L)		Silicone O-Ring	
CLS-1380-31	1-7	M10	CLS-1705-85X25	\$174.35 ♥
CLS-1380-40	3-15	M12	CLS-1705-111	\$286.30 ♥
CLS-1380-51	2-7	M18	CLS-1705-20X2	\$301.05 ♥

Baffle Assemblies

Baffles are used to increase the mixing efficiency inside the bioreactor and are mounted near the reactor wall for optimum mixing performance.

Baffle Assemblies

Part Number	Fits		Replacement Silicone	
	Reactor (L)	Thread Size	O-Ring	Price
CLS-1381-04	1-3	M6	CLS-1705-010	\$252.25 ♥
CLS-1382-10	5	M10	CLS-1705-85X25	\$285.45 ♥
CLS-1383-11	7	M10	CLS-1705-85X25	\$307.05 ♥
CLS-1385-17	15	M10	CLS-1705-85X25	\$464.65 ♥

Air Aeration Tube, Drilled Hole Sparger, M10

This tube is to be used when high gas flow rates are required. The sparger pipe extends to the bottom of the vessel and terminates just below the impellers on the stirrer shaft. This allows bubbles coming out of the sparger to rise up into the impellers where they are broken up for improved oxygen transfer.

Air Aeration Tube, Drilled Hole Sparger, M10

Part Number	Fits		Replacement Silicone	Price
	Reactor (L)	Length of Tube Below the Headplate (mm)	O-Ring	
CLS-1379-06	1-2	226	CLS-1705-85X25	\$315.40 ♥
CLS-1381-05	3-5	238	CLS-1705-85X25	\$340.30 ♥
CLS-1384-06	7	330	CLS-1705-85X25	\$456.35 ♥
CLS-1385-18	15	420	CLS-1705-85X25	\$879.40 ♥

Harvest Tubes, M10 And M27

Mounts into the outer M10 thread on standard headplates. Tapered tip extends to within 2mm of the vessel bottom to allow complete harvesting of cells. The 15 liter size has an M27 thread with 1/2" tubing for quicker harvest.

Harvest Tubes

Part Number	Vessel Capacity (L)	Replacement Silicone O-Ring	Price
CLS-1380-32	3	CLS-1705-85X25	\$182.45 ♥
CLS-1382-12	5	CLS-1705-85X25	\$199.10 ♥
CLS-1383-13	7	CLS-1705-85X25	\$257.20 ♥
CLS-1385-23	15	CLS-1705-121	\$464.65 ♥



Sampling Tube, Reduced Diameter Fixed, M6

Sampling tube with a reduced diameter which requires a smaller amount of sample to be drawn from the reactor. Tubing is 1/8" OD.

Reduced Diameter, Sampling Tubes

Part Number	Fits Reactor (L)	Maximum Immersion Length (mm)	Replacement Silicone O-Ring	Price
CLS-1380-R-33	1-5	210	CLS-1705-010	\$174.35 ♥

Sampling Pipe / Harvest Tube, Large Diameter, M18

Pipe will fit a 2 to 5 liter reactor and has a lower diameter of 1/2" and a length of 212mm into the reactor. The serrated hose connection is also 1/2" (12.7mm) OD. Can also be used as a quick way to harvest material due to its size.

Large Diameter, Sampling Pipe / Harvest Tube

Part Number	Thread Size	Replacement Silicone O-Ring	Price
CLS-1380-70	M18	CLS-1705-20x2	\$224.55 ♥

Sampling Tube, Adjustable, M10

This sampling tube is adjustable to permit the culture fluid to be sampled at any desired level. Tubing is 1/4" OD.

Adjustable Sampling Tubes

Part Number	Fits Reactor (L)	Maximum Immersion Length (mm)	Replacement Silicone O-Ring	Price
CLS-1380-21	1-5	232	CLS-1705-85X25	\$232.35 ♥
CLS-1383-08	7	325	CLS-1705-85X25	\$244.00 ♥
CLS-1385-13	15	390	CLS-1705-85X25	\$411.80 ♥

Sampling Tube, Fixed, M10

Fixed height sampling tubes for Bioreactor. Tubing is 1/4" OD.

Fixed Height, Sampling Tubes

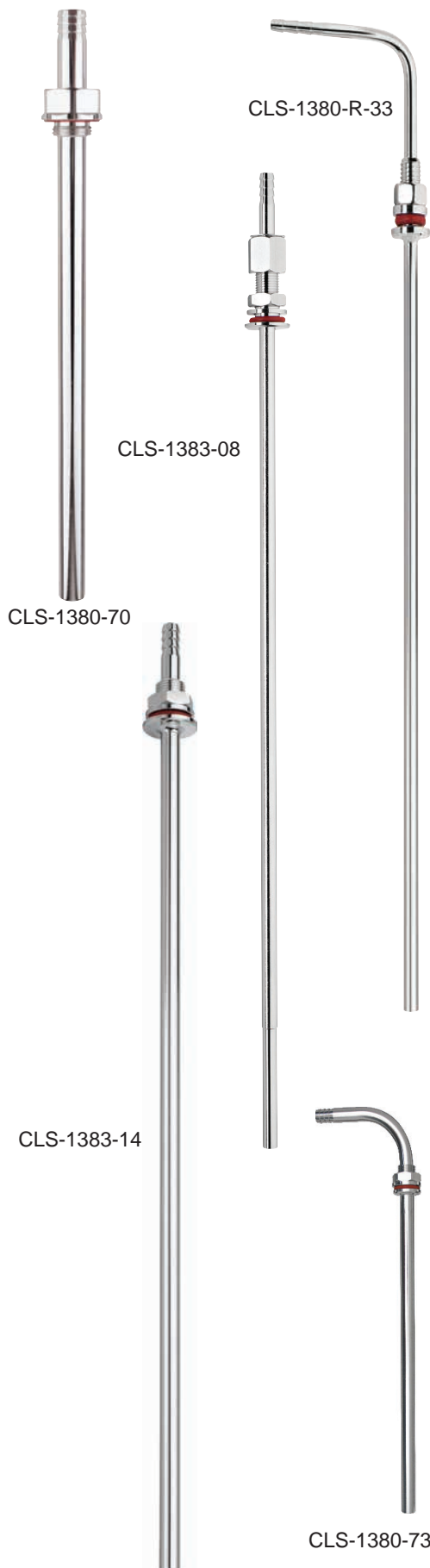
Part Number	Fits Reactor (L)	Maximum Immersion Length (mm)	Replacement Silicone O-Ring	Price
CLS-1380-33	1-5	212	CLS-1705-85X25	\$180.95 ♥
CLS-1383-14	7	315	CLS-1705-85X25	\$190.80 ♥
CLS-1385-26	15	400	CLS-1705-85X25	\$328.70 ♥

Sampling Tube, Fixed, M12

Fixed height sampling tubes for 3L bioreactor. Tubing is 3/8-inch OD. Stainless steel components manufactured from 316L with an electropolished surface finish of 20Ra or better.

Fixed Height, Sampling Tubes

Part Number	Fits Reactor (L)	Maximum Immersion Length (mm)	Replacement Silicone O-Ring	Price
CLS-1380-73	3	212	CLS-1705-111	\$322.95 ♥



Blind Stoppers

Stoppers can be used to close off any of the unused openings in the headplate. The M6, M10 and M12 sizes are fitted into the headplate from the inside, leaving a flat surface. The M18, M27 and G-3/4 are threaded into ports from the outside.

Blind Stoppers

Part Number	Size	Replacement Silicone O-Ring	Price
CLS-1380-22	M6	CLS-1705-010	\$68.10 ♥
CLS-1380-23	M10	CLS-1705-85X25	\$74.70 ♥
CLS-1380-24	M12	CLS-1705-111	\$81.35 ♥
CLS-1380-25	M18	CLS-1705-20X2	\$122.90 ♥
CLS-1385-14	M27	CLS-1705-121	\$151.95 ♥
CLS-1380-26	G-3/4	CLS-1705-023	\$162.75 ♥
CLS-1380-80	M30	CLS-1705-026	\$170.25 ♥



CLS-1380-22
CLS-1380-23
CLS-1380-24



CLS-1380-25
CLS-1385-14
CLS-1380-26
CLS-1380-80

Diptube Assembly, 1/2" Sanitary, M18, Stainless Steel

316L stainless steel diptube assembly with 1/2" sanitary fitting on top and fits into an 18mm head port plate. The length inside the bioreactor is 7.66". The overall length is 9.87". Electropolished Ra20 or better.

Diptube Assembly, 1/2" Sanitary

Part Number	Thread Size	Immersion Length (in)	Price
CLS-1380-75	M18 x 1.5	7.66	\$415.20 ♥



CLS-1380-75



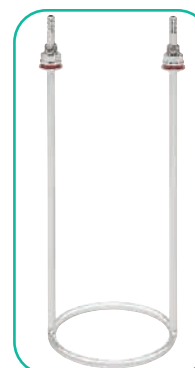
Bottom View

Heat Exchangers

Heat exchangers are available in a choice of two different styles. The cold finger style is for use with 2 - 5 liter reactors and fits into the headplate via an M18 threaded port. The second style is a loop type exchanger and is available for 5 - 15 liter reactors. It fits into two, M10 ports of the headplate.

Heat Exchangers, Cold Finger and Loop Styles

Part Number	Fits Reactor (L)	Exchanger Style	Replacement Silicone O-Ring	Price
CLS-1380-28	1-5	Cold Finger	CLS-1705-20X2	\$580.85 ♥
CLS-1382-11	5	Loop	CLS-1705-85X25	\$1,456.95 ♥
CLS-1383-12	7	Loop	CLS-1705-85X25	\$1,493.50 ♥
CLS-1385-16	15	Loop	CLS-1705-85X25	\$1,971.65 ♥



CLS-1382-11
CLS-1383-12
CLS-1385-16



CLS-1380-28



CLS-1381-08

Probe Holder, 12mm, Fixed Height

Probe holder for 12mm probes. These are non-height adjustable.

Fixed Height, Probe Holder

Part Number	Thread Size	Replacement Silicone O-Ring		Price
		Interior	Exterior	
CLS-1381-08	M18	CLS-1705-111	CLS-1705-20X2	\$212.40 ♥
CLS-1381-09	G-3/4	CLS-1705-111	CLS-1705-023	\$219.00 ♥
CLS-1385-21	M27	CLS-1705-111	CLS-1705-121	\$398.10 ♥



CLS-1381-06

Probe Holder, 12mm, Adjustable Height

Probe holder for 12mm probes. Height adjustable with compression fitting.

Adjustable Height, Probe Holder

Part Number	Thread Size	Replacement Silicone O-Ring	Price
CLS-1381-06	M18	CLS-1705-20X2	\$298.75 ♥
CLS-1381-07	G-3/4	CLS-1705-023	\$323.60 ♥
CLS-1385-19	M27	CLS-1705-121	\$448.25 ♥

Replacement FKM Compression Ring for 12mm Probe

Part Number	Description	Pkg. Qty.	Price
1380-027	FKM Compression Ring	1	\$7.50 ♥



CLS-1381-10

Probe Holder, 19mm, Adjustable Height

Probe holder for 19mm probes. Height adjustable with compression fitting.

Adjustable Height, Probe Holder

Part Number	Thread Size	Replacement Silicone O-Ring	Price
CLS-1381-10	G-3/4	CLS-1705-023	\$365.05 ♥
CLS-1385-22	M27	CLS-1705-121	\$448.25 ♥

Replacement FKM Compression Ring for 19mm Probe

Part Number	Description	Pkg. Qty.	Price
1381-009	FKM Compression Ring	1	\$9.35 ♥



CLS-1380-10

Septum Holder

The septum holder is supplied with a silicone rubber septum and can be used as a universal addition port for fluid or gas. Replacement septa are available.

Septum Holder

Part Number	Thread Size	Replacement Silicone O-Ring	Price
CLS-1380-10	M18	CLS-1705-20X2	\$295.50 ♥
CLS-1385-09	M27	CLS-1705-121	\$448.25 ♥

Replacement Septa

Part Number	Description	Pkg. Qty.	Price
CLS-1380-014	Silicone Rubber Septum	10	\$15.80 ♥

Hamilton DO Probes To Fit Bioreactor

The OxyFerm FDA is an electrochemical oxygen sensor suited for applications with high demands for hygiene, e.g. in pharmaceutical industry, in biotechnology and in foods and beverages production. When using Oxylyte USD electrolyte, even upside-down insertion is possible. The sensor is equipped with a FDA approved membrane for usage in hygienic processes.

Specifications

Electrode System	Silver Platinum Combination
Polarization	670mV \pm 50mV
Output	40 to 80nA in Air at 25°C
Temperature	0-130°C, Sterilization to 130°C
Drift at Room Temp Under Constant Conditions	<1% per Week
Stabilization Time	<2 Hours
Pressure	0-4 Bar
Wetted Materials	Stainless Steel 1.4435, EPDM and Silicone with FDA Approval
Mounting	PG 13.5 Thread
Electrical Connector	Standard 4 Pole T 82/D4

DO Probes Standard 4 Pole T82 / D4 Connectors

Part Number	Fit Reactor (L)	Probe O.D. (mm)	Probe Length (mm)	Price
CLS-1435-D72	1-5	12	215	Call *
CLS-1435-D73	7	12	320	Call *
CLS-1435-D74	15	12	420	Call *

DO Probes with VP Connectors

Part Number	Fit Reactor (L)	Probe O.D. (mm)	Probe Length (mm)	Price
CLS-1435-D82	1-5	12	215	Call *
CLS-1435-D83	7	12	325	Call *
CLS-1435-D84	15	12	425	Call *

Accessories

Part Number	Description	Price
CLS-1435-D88	OxyFerm Membrane Kit	Call *
CLS-1435-D90	Cathode Assembly for OxyFerm DO Sensors	Call *
CLS-1435-D91	Electrolyte for OxyFerm FDA Sensors, 50mL	Call *
CLS-1435-D92	Protective Cap for T82 DO Sensor Autoclaving	Call *



DO Probe Standard
4 Pole T82/D4
Connector



DO Probe with
VP Connector



CLS-1435-P-series

Hamilton pH Probes

The EasyFerm Plus K8 sensors are designed to withstand demanding applications in pharmaceutical and chemical industries. The EVEREF-F reference cartridge ensures that the phermlyte reference electrolyte remains free of silver and precipitation. The EasyFerm Plus K8 is supplied with a pre-sterilized electrolyte which prevents the diffusion of sample into the sensors. It withstands steam sterilization, autoclaving, CIP, organic solvents and strong acids. Fully autoclavable or in-situ sterilizable.

Specifications

pH Range	0-14
Electrolyte	Pressurized phermlyte
Pressure Range	0-6 Bar
Electrical Connector	Type K8 - Standard pH Connector Head or VP
Reference System	HAMILTON EVEREF-F, Silver ion barrier included
Temperature Range	Steam Sterilizable/Autoclavable to 266°F (0 to 135°C)
In-situ Sterilization	Up to 100 Cycles under Standard Conditions

pH Probes Standard K8 Connectors

Part Number	Fit	Probe		
	Reactor (L)	Probe O.D. (mm)	Length (mm)	Price
CLS-1435-P72	1-5	12	225	Call *
CLS-1435-P73	7	12	325	Call *
CLS-1435-P74	15	12	425	Call *

pH Probes with VP Connectors

Part Number	Fit	Probe		
	Reactor (L)	Probe O.D. (mm)	Length (mm)	Price
CLS-1435-P77	1-5	12	225	Call *
CLS-1435-P78	7	12	325	Call *
CLS-1435-P79	15	12	425	Call *



CLS-1455-R1

Probes sold separately.

pH and DO Probe Rack

Freestanding rack can hold 36 probes (pH or DO) up to 235mm long. Rack is constructed of polypropylene with stainless steel uprights.

Racks available for longer probes - contact us: tech@cglifesciences.com.

Probe Rack

Part Number	Description	Price
CLS-1455-R1	pH and DO Probe Rack	\$195.30 ♥

Hamilton VisiFerm Optical DO Probes

The VisiFerm DO is the first optical oxygen sensor with integrated opto-electronics, having the full functionality of a measuring device with self-diagnostics. It is steam sterilizable, autoclavable and CIP compatible. The VisiFerm requires less maintenance than a classical oxygen sensor as it does not have a mechanically sensitive membrane or a corrosive electrolyte.

Advantages of Optical Measurement

- More accurate measurement because optical sensors do not consume oxygen.
- Without electrolyte the sensor reading is not affected by mounting orientation.
- Quicker response time results in less wasted product.
- Improved mechanical and measurement stability with a glass window.
- Signal is not influenced by electrostatics and mechanical stress.
- No impact on measurement or sensor life due to H₂S fouling.

Specifications

Measuring Principle	Oxygen dependent luminescence Quenching
Measuring Range	4ppm to 25ppm
Response Time	< 30 seconds at 25°C
Autoclavable	Yes
Steam Sterilizable	Yes (Max 140°C)
Pressure Range	-1 to 12 Bar
Probe Diameter	12mm
Connection to Process	PG 13.5 Thread
Electrical Connection	VP8
Wetted Materials	SS 1.4435, Silicone EPDM

Optical DO Probes

Part Number	Fit Reactor (L)	Probe Length (mm)	Price
CLS-1434-60	1-5	215	Call *
CLS-1434-62	7	325	Call *
CLS-1434-64	15	425	Call *

Probe Holders, Soaker Bottles, pH Electrode or DO Probes

The cap and o-ring compresses and securely seals against the electrode body, sealing the solution from the atmosphere to minimize evaporation, prevent spillage and increase solution life. Probe holder bottles should be filled with water for DO probe storage or KCl solution for pH electrode storage. Available in a pack of 4.

Probe Holder / Soaker Bottles

Part Number	Description	Pkg. Qty.	Price
CLS-1435-BTL	Probe Holder / Soaker Bottle	4	\$37.95 *



Blue light: A decisive part of the VISIFERM™ measurement principle.

CLS-1434-series



CLS-1435-BTL



Heating Blanket



CG-3200-100



CG-3944-10



CG-1978-P902
CG-1978-P903

Heating Blankets, 110V with Velcro®

Manufactured to fit snugly around Applikon®-style, unjacketed vessels to supply uniform heat. Made of silicone rubber, all sizes are 110VAC with the wattage as listed. Velcro allows easy installation, even with the vessel in a support stand. Plugs are IEC standard 2-prong.

Please Note: These Heaters Cannot Be Directly Plugged Into a Wall Receptacle and Require a Temperature Controller with a Thermocouple or RTD in Order to Properly Maintain and Reach a Controlled Temperature

Heating Blankets with Velcro

Part Number	Fits Reactor (L)	Wattage	Dimensions W x L (in.)	Price
CLS-1379-08V	1-2	110	5 x 16	\$374.85 ♥
CLS-1380-19V	3	110	3.5 x 19	\$479.60 ♥
CLS-1383-07V	5-7	178	3 x 23	\$546.15 ♥
CLS-1385-12V	15	383	4 x 32	\$818.15 ♥
CLS-1385-1210V	15	383	10 x 32	\$943.70 ♥

Temperature Controllers, J-Kem®, Model 210

The Model 210 has 1200 Watts of power which is sufficient for heating blankets. Controller has the ability to display temperature without heating.

Specifications:

Dimensions: 3.25" H x 5.25" W x 7.25" D

Power: 10 Amps @ 120VAC, 1200 Watts

Molded Adapter Plug

Part Number	Description	Price
CG-3200-100	J-Kem® Temperature Controller Only, Model 210, Type "RTD" (-200°C to 400°C)	\$1,178.00 ♥

10' Coiled Extension Cords, White, RTD

For use with CG-1978-P Series RTD sensors.

10' Coiled Extension Cords, White, Rtd

Part Number	Description	Price
CG-3944-10	10' COILED EXTENSION CORDS, WHITE, RTD	\$218.25 ♥

Pt100 RTD Temperature Sensors, Shielded Cable, PFA Coated

PT100 RTD temperature sensor is for direct insertion into thermowells.

Pt100 Rtd Temperature Sensors, Shielded Cable, Pfa Coated

Part Number	Description	Price
CG-1978-P902	PT100 Sensor, the Lemo Connector, PFA Coated, 1/8" OD x 12", 1-7L Bioreactor.	\$462.55 ♥
CG-1978-P903	PT100 Sensor, Lemo Connector, PFA Coated, 1/8" OD x 18", 15L Bioreactor.	\$468.75 ♥

Addition and Sampling Vessels

Addition and sampling vessel with hose barbed 2-port drip tube assemblies designed for addition or sampling of media, acid or base. Drip tube assemblies are constructed of 316L electropolished stainless steel and include blue polypropylene GL-32 open top caps with white silicone gaskets. Drip tubes have a finish of 20Ra or better. The vessel measures 32mm Diameter x 94mm OAL.

Addition and Sampling Vessels

Part Number	Description	Price
CLS-1437-B01	Complete Vessel, 2-Port Drip Tube Assembly	\$227.25 ♥
CLS-1437-B02	Flat Bottom Vessel Only	\$39.45 ♥
CLS-1429-02	2-Port Drip Tube Assembly, Open Top Cap, Gasket	\$204.60 ♥
CLS-1428-14	White Silicone Gasket Only	\$3.80 ♥
CLS-1481-20	Cap, GL-32, Blue, Open Top, PP, Pkg. 6	\$53.00 ♥

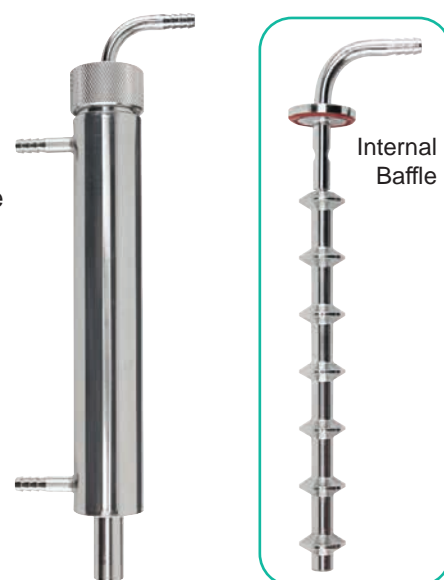


Condensers, Glass and Stainless Steel

Condensers aid in removing moisture from exhaust gases which can clog filters. They also help minimize loss of material from the bioreactor due to evaporation during fermentation. Glass condensers are available in bulb and coil styles and are more economical than stainless steel. Stainless steel condensers consist of four components: jacketed condenser body with two 1/4-inch hose connections; internal stainless steel baffle; 90° gas outlet tube with 1/4-inch hose connection; threaded compression nut. Condensers are connected to Bioreactor by use of 12mm, adjustable height, probe adapters, CLS-1381-06 or CLS-1381-07 which are sold separately.

Condensers, Glass and Stainless Steel

Part Number	Type	Style	Fits Reactor (L)	Overall Length (mm)	Price
CLS-1380-GC1	Glass	Bulb-Style	1-5	150	\$289.75 ♥
CLS-1380-GC2	Glass	Bulb-Style	7	250	\$353.05 ♥
CLS-1385-GC3	Glass	Coil-Style	15	250	\$481.30 ♥
CLS-1380-27	Stainless	—	1-5	165	\$1,602.50 ♥
CLS-1383-09	Stainless	—	7	230	\$1,919.95 ♥



Stainless Steel Condenser with Internal Baffle

Stirrers, Complete, Bioreactor

Stand alone stirrer fits Applikon®-style vessels from 1 to 5 liters. The motor has incredible power for its size, 91 in-oz. The control box is extremely small, measuring only 3.5" wide x 4.5" high x 2.5" deep, and includes a clamp that allows it to be attached to reactor support legs up to 14mm in diameter. Unit also has a RS-232 port for PC control and data logging.

Specifications

Fits Applikon-Style Vessels	1-5 Liters
Speed Range	20-800 RPM
Power	91 (in-oz.)
Voltage Requirements	110 to 240 VAC, 50-60 Hz
Wattage	240 Watts Max, Peak 2 Amps
Operating Temperature Range	5 to 40°C

Bioreactor Stirrer Motor with Controller and Cable

Part Number	Description	Price
CLS-1399-100	Stirrer Motor, Controller and Cable	\$2,987.15 ♥



Single-Use Bioreactor Accessory Kits Ready for Sterilization

Single Use

- Minimize labor costs
- Eliminates cleaning validation
- Reduces set up time and costs

Pre-Fabricated Assemblies

- Minimize injuries associated with cutting in-house
- Improved consistency

Offers Closed System

- Gives the ability to assemble in open lab type environment
- Provides aseptic solution to close off an unused line

How to Sterilize

- Autoclave max 15 psi @ 134°C, 60 min
- mma radiation 25 kGy to 50 kGy



CLS-1390-01

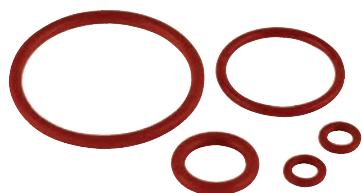
Bioreactor Accessory Kit, Single-Use, Non-Sterile

Part No.	Description	Qty.	Price
CLS-1390-01	Bioreactor Accessory Kit Complete	1	\$325.55 ♥

Custom Kits
and Large
Volume
Discounts
Available

Replacement Silicone O-Rings

Orange silicone o-ring replacements for Bioreactor conform to FDA 21CFR Part 177.2600.

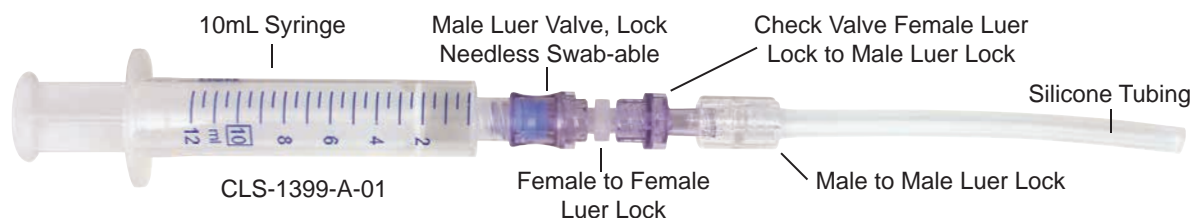


CLS-1705-series

Orange Silicone O-Rings

Part Number	I.D. x Cross Section (mm)	Qty.	Price
CLS-1705-007	3.68 x 1.78	20	\$22.05 ♥
CLS-1705-008	4.47 x 1.78	20	\$23.00 ♥
CLS-1705-010	6.07 x 1.78	20	\$26.85 ♥
CLS-1705-85X25	8.50 x 2.50	20	\$37.10 ♥
CLS-1705-111	10.70 x 2.6	20	\$39.60 ♥
CLS-1705-18X3	18.0 x 3.0	20	\$43.45 ♥
CLS-1705-20X2	20.0 x 2.00	20	\$35.15 ♥
CLS-1705-023	26.7 x 1.78	10	\$21.80 ♥
CLS-1705-121	26.6 x 2.62	10	\$23.00 ♥
CLS-1705-124	31.4 x 3.30	10	\$24.30 ♥
CLS-1705-131	42.5 x 2.62	10	\$28.15 ♥
CLS-1705-135X4	135 x 4.00	1	\$67.75 ♥
CLS-1705-150X4	150 x 4.00	1	\$70.30 ♥
CLS-1705-260	166 x 3.00	1	\$84.55 ♥
CLS-1705-177X4	177 x 4.00	1	\$79.30 ♥
CLS-1705-373	228 x 5.33	1	\$81.85 ♥
CLS-1705-274	253 x 3.53	1	\$83.10 ♥

10mL Bioreactor Syringe Sample line with Luer Lock Connections



- The Sampler uses all Luer style connections, eliminating any needle sampling and risk of puncture injuries.
- No valves. The sampling valve is opened by the attachment of the sampling syringe and automatically closes once the syringe is removed.
- Use with any type of cell culture sampling such as spinner flasks, bioreactor or bags.
- Sampler is set up with a check valve that eliminates the chances of contamination.
- Supplied with 4" length of USP Class VI L/S® Platinum Cured Silicone Pump Tubing, 1/8" ID x 1/4" OD Size 16.
- NOTE: The sampler is supplied assembled, but not sterilized. It must be autoclaved prior to use. Syringes are individually sterile strip packed.
- 10mL Bioreactor Syringe Samplers with Luer Lock Connections.

Part No.	Syringe Vol. (mL)	Qty.	Price
CLS-1399-A-01	10	10	\$327.50 *

Safety

All luer-style connections make for safe sampling.

Universal Line Assembly, Non-Sterile

The assembly consists of a 5" Length of USP Class VI L/S® Platinum Cured Silicone Pump Tubing, 1/8" ID x 1/4" OD Size 16, a 25mm polypropylene body with 0.22µm PTFE syringe filter and blue polypropylene tubing clamp. Universal line assembly is individually bagged and ready to use. Use as a media inlet assembly, sparger line assembly or overlay gas assembly. For sterile applications the assembly can be safely autoclaved.

Part No.	Description	Qty.	Price
CLS-1390-11	Universal Line Assembly	1	\$23.55 *

All Assemblies and Kits are assembled in a Class 7 Cleanroom



Condenser Vent Line Assembly, Non-Sterile

- Polypropylene housing with stepped barbed connections

The assembly consists of 3" of USP Class VI SILCON® MED-X 50A Platinum Cured Silicone tubing 1/4" ID x 3/8" OD Size 17 with a 50mm 0.22µm PTFE filter with a 1/4"-3/8" stepped barb. For sterile applications the filter can be safely autoclaved up to 30 times. Each filter is identified with a part number and heat stamped with a lot number and is individually bagged and ready to use.

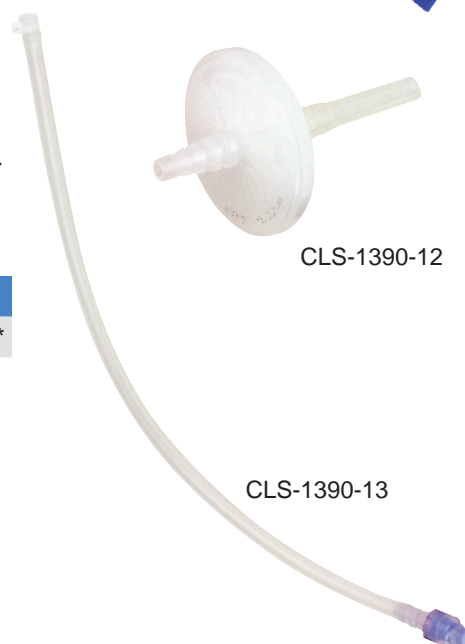
Part No.	Description	Qty.	Price
CLS-1390-12	Condenser Vent Line Assembly	1	\$67.20 *



Sample Line Assembly, Non-Sterile

The assembly consists of a 9" Length of USP Class VI L/S® Platinum Cured Silicone Pump Tubing, 1/8" ID x 1/4" OD Size 16 with a swabable valve and blue polypropylene tubing clamp. The valves are DEHP free, made with ISO-10993 materials, and not made with natural rubber latex. Bodies are made with BPA-free materials and polycarbonate. The valves mate securely with standard ISO-594 compliant syringes and connectors. Sample line assembly is individually bagged and ready to use.

Part No.	Description	Qty.	Price
CLS-1390-13	Sample Line Assembly	1	\$27.80 *





CLS-1390-22

Y Connector with Male Luer, Ready-to-Use, Non-Sterile

The Y connector and male luer lock assemblies are packaged 10 per bag and ready to use. Each leg consists of a 5" Length of USP Class VI L/S® Platinum Cured Silicone Pump Tubing, 1/8" ID x 1/4" OD Size 16 and a polypropylene male luer lock connector connected to a natural polypropylene Y connector. For sterile applications the assembly can be safely

Y Connector with Male Luer

Part No.	Qty.	Price
CLS-1390-22	10	\$204.90 ♥



CLS-1390-23

Straight Connector with Male Luer, Non-Sterile

The assembly consists of a 30" Length of USP Class VI L/S® Platinum Cured Silicone Pump Tubing, 1/8" ID x 1/4" OD Size 16 with a USP Class VI polypropylene male luer lock connector. The line assembly is individually bagged in a pack of 10 and ready to use. For sterile applications the assembly can be safely autoclaved.

Straight Connector with Male Luer

Part No.	Qty.	Price
CLS-1390-23	10	\$198.70 ♥



CLS-1390-24

Cross Connector with Male Luer, Non-Sterile

The cross connector with male luer lock assemblies are package 10 per bag and ready to use. Each leg consists of a 5" Length of USP Class VI L/S® Platinum Cured Silicone Pump Tubing, 1/8" ID x 1/4" OD Size 16 and a polypropylene male luer lock connector connected to a white nylon cross connector. For sterile applications the assembly can be safely autoclaved.

Cross Connector with Male Luer

Part No.	Qty.	Price
CLS-1390-24	10	\$202.90 ♥



CLS-1390-series
Extension Lines

Fluid Transfer Extension Lines, Plugged Ends, Sterile

Fluid transfer extension lines are produced in a Class 7 Cleanroom with weldable, size 16 (1/8 x 1/4"), TPE tubing. Available in both Advantaflex and C-Flex tubing, with both ends plugged. Fluid transfer lines are designed to aid in the process of transfer and filling of Bioreactor, mixers and fermenters. Individually wrapped and sterile.

Extension Lines with Plugged Ends, Advantaflex, Sterile

Part No.	Material	Length (in.)	Qty.	Price
CLS-1390-A009	Advantaflex	9	10	\$123.75 ♥
CLS-1390-A036	Advantaflex	36	10	\$163.95 ♥

Extension Lines with Plugged Ends, C-Flex, Sterile

Part No.	Material	Length (in.)	Qty.	Price
CLS-1390-C009	C-Flex	9	10	\$123.75 ♥
CLS-1390-C036	C-Flex	36	10	\$163.95 ♥

Perfusion Cell Culture

For perfusion applications Chemglass Life Sciences has designed a versatile platform easily configurable to your application. Perfusion vessels and stands utilize all the same components as the standard bioreactor.

Stand For Unjacketed Glass Perfusion Bioreactor Vessels

Stand to hold unjacketed perfusion bioreaction vessels. Top, two-piece ring and lower support base are made of anodized aluminum while the legs are electropolished stainless steel. Stands come complete with silicone O-ring and six knurled nuts to attach the headplate to the stand.

Part Number	Vessel Cap. (L)	Height (mm)	Price
CLS-1380-STD3P	3L	401	\$1,733.15
CLS-1382-STD5P	5L	413.7	\$1,881.60
CLS-1383-STD7P	7L	515.3	\$2,045.95

Unjacketed Glass Perfusion Bioreactor Vessels

Vessels are constructed of heavy wall tubing and are graduated in 200mL subdivisions with numbers every 1000mL. Feature a 30mm Tool-Free Outlet.

Part Number	Vessel Cap. (L)	Vessel Min. Working Volume (L)	Vessel ID. (mm)	Overall Height (mm)	Price
CLS-1380-P01	3L	0.5	130	260	\$1,413.25
CLS-1382-P01	5L	1.0	160	260	\$1,527.65
CLS-1383-P01	7L	2	160	360	\$1,563.20

Tool-Free Adapter For Unjacketed Glass Perfusion Bioreactor Vessels

Stainless Steel 30mm Tool-Free fitting with silicone O-ring to 3/4" Sanitary adapter. Sanitary connections, clamps, and gaskets can be provided per request. Please contact singleuse@cglifesciences.com to discuss your application specifics.

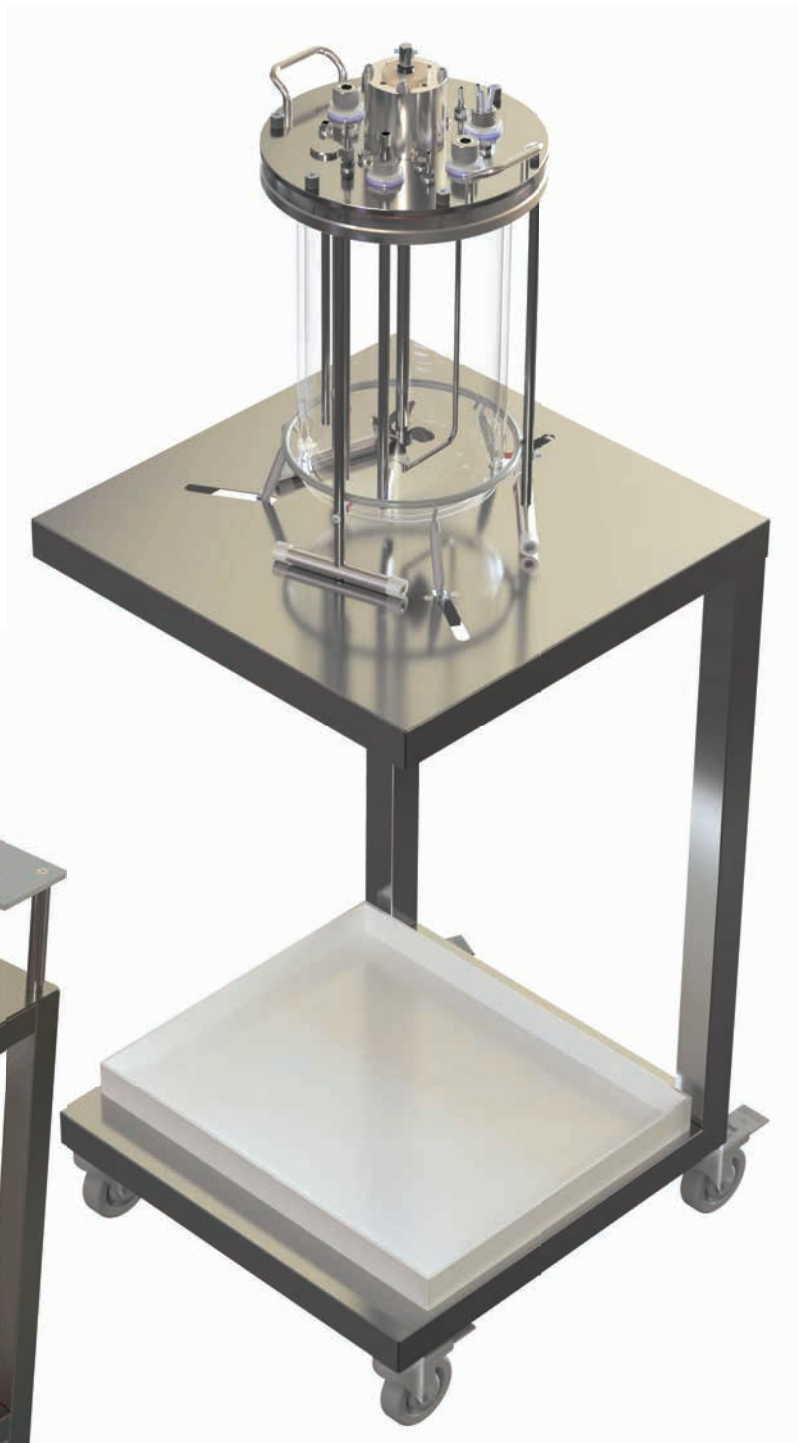
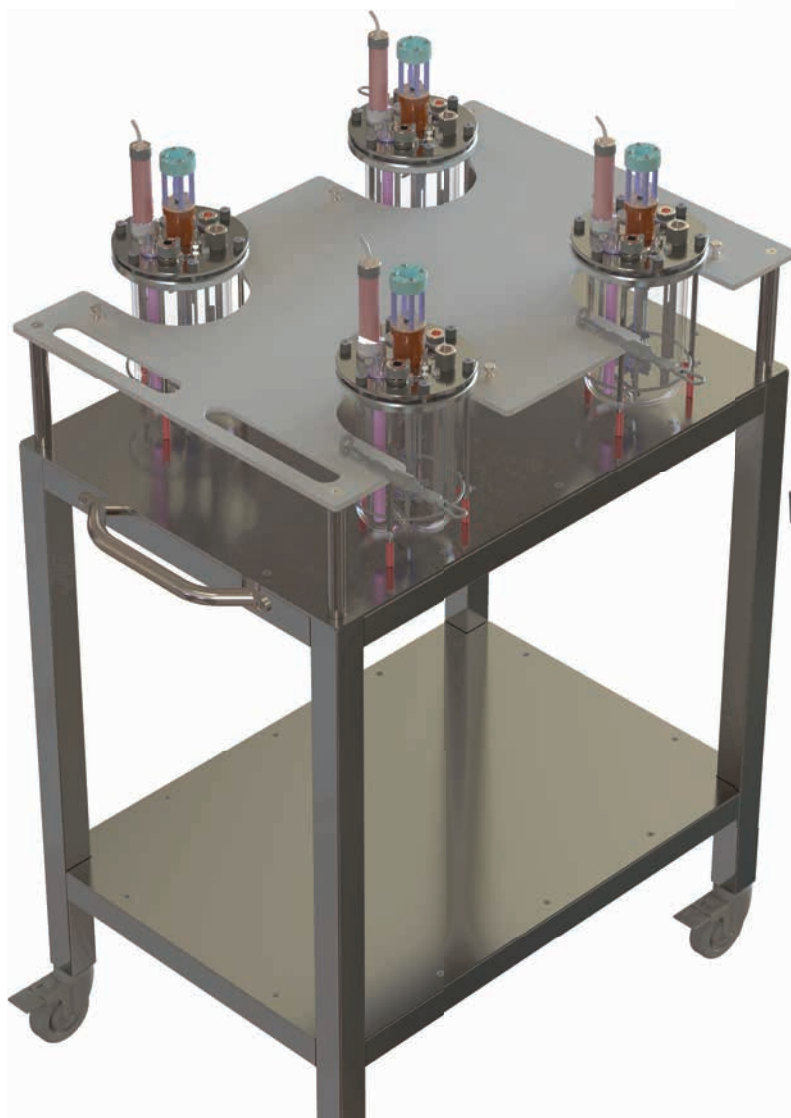
Part Number	Description	Price
CLS-1382-50	Adapter, 30mm Tool-Free to 3/4" Sanitary	\$410.80



Chemglass Life Sciences can manufacture custom designed mobile handling carts for bioreactor

Custom Carts and Stands

- Stainless steel construction
- Designed for easy cleanability
- Mobile locking casters
- Optional spill trays
- Multiple methods of securing reactors to stands
- Can be designed to handle attached feed bottles
- Custom height and widths to meet your needs



Custom Carts & Stands

For custom quotes and inquiries
contact singleuse@cglifesciences.com

CG-1177 Heidolph Hei-FLOW Peristaltic Pumps

Hei-FLOW stands for precise and sturdy peristaltic pumps providing reliable results for both pumping and dosing. Exchangeable modular pump heads allow a low-pulsation operation with up to 12 channels. Hei-FLOW peristaltic pumps are versatile, whether intended for manual operation or completely automated, and thus are indispensable high performers

Model	Flow Range Single-Channel Pump Head	Precision	Seed Range	Interfaces
Core 120	0.85-861 ml/min	+/-5%	10-120 RPM	
Core 600	4.0 4151 ml/min	+/-5%	50-600 RPM	
Expert 120	0.5-936 ml/min	+/-3.5%	5-120 RPM	Analog (0-10V/420mA) speed, direction, start/stop
Expert 600	2.0-4056 ml/min	+/-3.5%	24-600 RPM	Analog (0-10V/420mA) speed, direction, start/stop
Ultimate 120	0.36-813 ml/min Dosing 0.001-9999ml, pause time 0.1s – 750h	+/-1%	5-120 RPM	Digital: RS232 Analog (0-10V/420mA) speed, direction, start/stop
Ultimate 600	2.0-4056 ml/min Dosing 0.001-9999ml, pause time 0.1s – 750h	+/-2%	24-600 RPM	Digital: RS232 Analog (0-10V/420mA) speed, direction, start/stop

Hei-Flow Pump Base Only (Pump Head Sold Separately)

Part Number	Description	Price
CORE		
CG-1177-04	Heidolph Peristaltic Pump Hei-FLOW Core 120, 110-240V, 50/60Hz	\$2,851.00
CG-1177-07	Heidolph Peristaltic Pump Hei-FLOW Core 600, 110-240V, 50/60Hz	\$2,661.40
EXPERT		
CG-1177-05	Heidolph Peristaltic Pump Hei-FLOW Expert 120, 110-240V, 50/60Hz	\$3,998.10
CG-1177-08	Heidolph Peristaltic Pump Hei-FLOW Expert 600, 110-240V, 50/60Hz	\$3,820.40
ULTIMATE		
CG-1177-06	Heidolph Peristaltic Pump Hei-FLOW Ultimate 120, 110-240V, 50/60Hz	\$5,173.15
CG-1177-09	Heidolph Peristaltic Pump Hei-FLOW Ultimate 600, 110-240V, 50/60Hz	\$4,995.45

SP QUICK SINGLE-CHANNEL PUMP HEAD

Part Number	Description	Price
CG-1177-10	Heidolph Single-Channel Pump Head SP Quick for 1.6mm Wall Tubing	\$1,165.05
CG-1177-11	Heidolph Single-Channel Pump Head SP Quick for 2.5mm Wall Tubing	\$1,165.05

For more single and multi-channel pump head options visit www.cglifesciences.com



Expert



Ultimate



Single Channel Pump Head



Heidolph Peristaltic Pumps and Tubing



Used with:
 Acids: Good
 Lyes: Good
 Solvents: Unsuitable
 Pressure: Good
 Vacuum: Excellent
 Viscous Media: Good
 Sterile Media: Excellent

- **Temperature range:**
-50 to +135°C
- **Sterilization:** Can be autoclaved or sterilized with ethylene oxide or sterilized by irradiation
- **Complies with the standards:**
USP Class VI, GLP, Pharmacopoeia and Europaea



Used with:
 Acids: Conditional
 Lyes: Conditional
 Solvents: Unsuitable
 Pressure: Satisfactory
 Vacuum: Good
 Viscous Media: Satisfactory
 Sterile Media: Excellent

- **Temperature range:**
-50 to +230°C
- **Sterilization:** Can be autoclaved or sterilized with ethylene oxide or sterilized by irradiation
- **Complies with the standards:**
USP Class VI meets GLP and NSF

For more single and multi-channel pump head options and other tubing visit www.chemglass.com

Pharmed® BPT Precision Pump Tubing, Usp Class VI, 25ft Roll

Part Number	Description	Price
1.6mm Wall Tubing		
CG-1177-29	1/32 ID x 5/32 OD inch (ID 0.8mm, OD 4mm, WT 1.6mm) BPT Precision Pump Tubing, Pharmed Size 13, 25ft Roll	\$224.65
CG-1177-30	1/16 ID x 3/16 OD inch (ID 1.7mm, OD 4.9mm, WT 1.6mm) BPT Precision Pump Tubing, Pharmed Size 14, 25ft Roll	\$288.70
CG-1177-31	1/8 ID x 1/4 OD inch (ID 3.1mm, OD 6.3mm, WT 1.6mm) BPT Precision Pump Tubing, Pharmed Size 16, 25ft Roll	\$288.70
CG-1177-32	3/16 ID x 5/16 OD inch (ID 4.8mm, OD 8mm, WT 1.6mm) BPT Precision Pump Tubing, Pharmed Size 25, 25ft Roll	\$329.70

2.5mm Wall Tubing

CG-1177-44	1/4 ID x 7/16 OD inch (ID 6.4mm, OD 11.3mm, WT 2.5mm) BPT High Performance Pump Tubing, Pharmed Size 24, 25ft Roll	\$398.60
CG-1177-45	5/16 ID x 1/2 OD inch (ID 7.9mm, OD 12.9mm, WT 2.5mm) BPT High Performance Pump Tubing, Pharmed Size 35, 25ft Roll	\$483.85

1.6mm Wall Precision Pump Tubing For Single And Multi-Channel Peristaltic Pumps, Platinum Cured Silicone

Part Number	Description	Price
1.6mm Wall Tubing		
CG-1177-24	1/32 ID x 5/32 OD inch (ID 0.8mm, OD 4mm, WT 1.6mm) Precision Pump Tubing, Platinum Cured Silicone Size 13, 25ft Roll	\$136.35
CG-1177-25	1/16 ID x 3/16 OD inch (ID 1.7mm, OD 4.9mm, WT 1.6mm) Precision Pump Tubing, Platinum Cured Silicone Size 14, 25ft Roll	\$187.00
CG-1177-26	1/8 ID x 1/4 OD inch (ID 3.1mm, OD 6.3mm, WT 1.6mm) Precision Pump Tubing, Platinum Cured Silicone Size 16, 25ft Roll	\$163.00
CG-1177-27	3/16 ID x 5/16 OD inch (ID 4.8mm, OD 8mm, WT 1.6mm) Precision Pump Tubing, Platinum Cured Silicone Size 25, 25ft Roll	\$213.40
CG-1177-28	1/4 ID x 3/8 OD inch (ID 6.4mm, OD 9.5mm, WT 1.6mm) Precision Pump Tubing, Platinum Cured Silicone Size 17, 25ft Roll	\$225.25
2.5mm Wall Tubing		
CG-1177-38	3/16 ID x 3/8 OD inch (ID 4.8mm, OD 9.8mm, WT 2.5mm) High Performance Precision Pump Tubing, Platinum Cured Silicone Size 15, 25ft Roll	\$221.00
CG-1177-39	1/4 ID x 7/16 OD inch (ID 6.4mm, OD 11.3mm, WT 2.5mm) High Performance Precision Pump Tubing, Platinum Cured Silicone Size 24, 25ft Roll	\$299.35
CG-1177-40	5/16 ID x 1/2 OD inch (ID 7.9mm, OD 12.9mm, WT 2.5mm) High Performance Precision Pump Tubing, Platinum Cured Silicone Size 35, 25ft Roll	\$357.25

BIOFACTORIES

**Sterile, Wide Mouth, Biofactories™
with Filter Vent Caps**



- Packed in double-layer sterile bags.
- Clear lot numbers for batch traceability.
- Ultrasonic welding process without any chemical addition.
- Surface TC treatment ensures efficient cell attachment.

NEST Biofactory™ systems make maximum use of the culture area available in a limited amount of space. They're useful for industrial scale production of vaccines, monoclonal antibodies and in biopharmaceutical production. Also suitable for adherent cell culture.

Manufactured in dedicated 10,000-class clean rooms following GMP standards to ensure product quality and stability.

In-house E-beam sterilization meets the ISO13485 and ISO 11137:2006 standards and achieves sterility level SAL = 10⁻⁶.

Wide Mouth Biofactories with Filter Vent Caps - Tissue Culture Treated

Part No.	No. Of Layers	Total Culture Area (cm ²)	Qty.	Reg. Price	SALE Price
CGN-7710-001	1	647	8	\$562.05	\$449.64 ♣
CGN-7710-002	2	1279	8	\$866.10	\$692.88 ♣
CGN-7710-005	5	3175	4	\$633.45	\$506.76 ♣
CGN-7710-010	10	6335	6	\$1,209.35	\$967.48 ♣
CGN-7710-040	40	25295	2	\$1,151.75	\$921.40 ♣

Compatible with Corning® CellSTACK® culture chamber accessories.



CLS-1314

- Extremely Compact
- Fits in most CO₂ incubators.

BelloCell® High Density Cell Culture System Complete

- Includes a BelloStage® compressor, and necessary accessories.
- Extremely compact system fits in most standard CO₂ incubators.
- Controller with large bright display and large touch panel.
- Easy to read and operate.
- Suitable for batch or semi-batch operation.
- Suitable for most protein and monoclonal antibodies production applications.

The BelloCell® Cell Culture System Complete contains all the necessary elements for users to start cell culture. It is designed to support four BelloCell® -500 bottles with a 8.6" x 11.7" foot-print and fits inside a standard CO₂ incubator. It contains a BelloStage® console with a magnetized controller, which can be conveniently mounted and accessed from the outside of the incubator. One-year warranty on equipment.

BelloCell® System Complete

Part Number	Component Description	System Qty.	Price
CLS-1314-02	BelloStage® - 3000 Machine	1	Call *
	GlucCell® Glucose Meter	1	
	Glucose Test Strips, 50 ea.	50	
	CD / Manual	1	

BelloCell® BelloStage® - 3000 Machine Only

Part Number	Component Description	Qty.	Price
CLS-1313-01	BelloStage®-3000 Machine	1	Call *
	Main Console	1	
	Control Box	1	
	Power Adapter, 100~240V	1	
	Signal Cable	1	
	CD / Manual	1	

BelloCell® Accessories

Part Number	Component Description	Qty.	Price
CLS-1336-01	Filtered Cap	6	\$121.00 *
CLS-1338-01	Solid Cap	8	\$50.45 *
CLS-1342-01	Forceps	1	\$87.40 *



CLS-1332-01

Crystal Violet Dye Nucleus Count Kit

Crystal Violet Dye Nuclei Count Kit contains crystal violet dye, citric acid and detergent to disrupt cells and release cell nuclei for cell count. This provides an efficient reagent for cell count in a porous matrix. Volume: 100mL / Bottle.

Crystal Violet Dye Nucleus Count Kit

Part Number	Description	Qty.	Price
CLS-1332-01	100mL per Bottle	1	\$104.20 *

BelloCell® Continuous System Complete

- Each bottle connects with an independent media reservoir to eliminate cross-contamination.
- Programmable and ON / OFF pumping control simplifies the setting of recirculation rate for each bottle.
- One BelloFeeder® pump module operates up to 4 pump heads with individual micro-processor control.
- Suitable for cell mass production, cell component production, virus production or protein expression.

The BelloCell® Continuous Cell Culture System Complete provides similar features to the BelloCell Cell Culture System Complete but with an additional BelloFeeder® pump and tubing sets to provide continuous media exchange in the BelloCell® - 500P bottles.

Each BelloCell® - 500P bottle has additional inlet and outlet line for media recirculation. Each bottle can link to an extra glass media vessel (not included) and provide continuous exchange of nutrient, eliminating the need for media exchange and avoiding possible shock to the cells during culture.

Each Package Contains:

- 1 BelloStage® - 3000 Compressor
- 1 BelloFeeder® Pump Module
- 2 Complete Tubing Sets
- 1 GlucCell® Glucose Meter
- 50 Glucose Test Strips
- 1 CD/Manual

One-year warranty on equipment.

BelloCell® Continuous System Complete

Part Number	Component Description	Qty.	Price
CLS-1317-02	BelloCell Continuous System Complete	1	Call *
CLS-1320-05	BelloFeeder®-1500 Pump	1	Call ♥

Disposable Tubing Sets

Tubing Complete Set includes pre-assembled tubes, reusable pump head and head plate with a sampling port to support the continuous culture in BelloCell®-500P system. It can be autoclaved at 121°C for 30 minutes.

Disposable Tubing Sets

Part Number	Disposable Tubing Sets	Qty.	Price
CLS-1326-01	Tubing Kit, Pump Head & Head Plate	1	\$614.05 *
CLS-1328-01	Tubing Kit & Pump Head	1	\$605.00 *

Disposable Tubing Accessory Kit

Replaces tubing in the Tubing Complete Set. It is recommended that tubing be replaced after three uses.

Disposable Tubing Accessory Kit

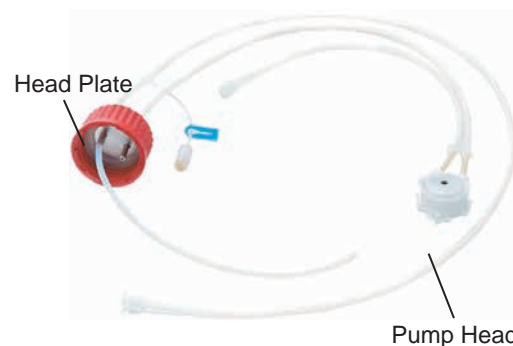
Part Number	Component Description	Qty.	Price
CLS-1330-01	Disposable Tubing Accessory Kit	1	\$521.00 *



CLS-1317



CLS-1320-05 BelloFeeder® 1500 Pump



CLS-1326-01



CLS-1330-01



Graduations,
marking spots and
vented caps

CGN-4285-050



CLS-4287-050
CLS-4285-050

Sterile, Bioreaction Centrifuge Tubes, 50mL, NEST

- USP VI polypropylene tubes with HDPE caps
- Packaged in sterile, zip-sealable bags
- Non-pyrogenic, non-cytotoxic, DNase- and RNase-free, human DNA-free

Bioreaction tubes offer a convenient and economical option for suspension cell culture. Bioreaction tubes include vent caps for gas exchange; 0.22µm hydrophobic membranes are welded in. These tubes provide an environment perfect for small scale suspension culture or biological reaction experiments that require aseptic conditions with free gas exchange.

Sterile Bioreaction Centrifuge Tubes

Part No.	Cap. (mL)	Qty.	Reg. Price	SALE Price
CGN-4285-050	50	100	\$167.35	\$133.88 ♣

Sterile, Bioreaction Centrifuge Tubes, 15-50mL, CELLTREAT

Bioreaction tubes offer a convenient and economical option for suspension cell culture. Bioreaction tubes consist of centrifuge tubes with a 0.22µm hydrophobic membrane in the vent cap. These tubes provide an environment perfect for small scale suspension culture or biological reaction experiments that require aseptic conditions with free gas exchange.

Bioreaction centrifuge tubes are available in 15 and 50mL conical bottom and 50mL self-standing sizes. The tubes feature a large, white marking area. Maximum RCF is 12,000g for 15mL tubes, 16,000g for 50mL conical bottom tubes and 6,000g for self-standing tubes.

Part No.	Description	Qty	Price
CLS-4285-015	Tube, Bioreaction, 15mL, Conical, 10/Bag	100	\$194.00 *
CLS-4286-015	Tube, Bioreaction, 15mL, Conical, 50/ Foam Rack	300	\$549.00 *
CLS-4285-050	Tube, Bioreaction, 50mL, Conical, 10/Bag	100	\$228.00 *
CLS-4286-050	Tube, Bioreaction, 50mL, Conical, 25/ Foam Rack	300	\$602.00 *
CLS-4287-050	Tube, Bioreaction, 50mL, Conical, Self- Standing, 10/Bag	100	\$259.00 *
CLS-4285-C15	Cap Only, Vented, for 15mL Bioreaction Centrifuge Tubes, 25/Bag	100	\$179.00 *
CLS-4285-C50	Cap Only, Vented, for 50mL Bioreaction Centrifuge Tubes, 25/Bag	100	\$195.00 *

Labels, CO₂ Control, For Bioreaction Tubes

Labels are used to block from 1 to 5 openings on the stopper of the 50mL bio reaction tubes to control the amount of CO₂ exchange and evaporation in the tube. Sheets have 8 each of white Mylar labels from numbers 1 to 5, and are 10 sets of labels per package.

Transfer Assembly for 20L Nalgene Carboy, Sterile

Part No.	Description	Qty.	Price
CLS-4285-LS1	Vented Cap Label for Reaction Tubes, 5 Labels per Row (1 thru 5), 50 Labels per Sheet	10	\$23.40 ◇



CLS-4285-LS1

Shaker Rack for 50mL Bioreaction Tubes

- Stainless steel construction
- Angle adjustment of up to 30°
- Silicone gasket holds tubes securely
- Can be used with skirted or standard tubes
- Fits all shakers with a top plate of at least 14" x 14"

Our unique 49-position shaker rack for 50mL bioreaction tubes is an ideal platform for high throughput experiments for screening and process optimization. The rack allows the tubes to be placed at an optimum angle (up to 30°) for both oxygenation and finding the correct fluid motion, eliminating the need for excess agitation. The silicone insert secures the tubes in the rack and prevents damage to the tubes and rotational slippage.

Rack supplied with four attached pegs which fit directly into the top of **CLS-4021-100** Orbital shaker. Can also be used with other orbital shakers using **CLS-4008-T03** double faced tape. *Purchase tubes separately.*

Tilting Shaker Rack for 50mL Bioreaction Tubes

Part No.	Positions	Qty.	Price
CLS-4285-R1	49	1	\$987.60 *

*Life Science Equipment Product Line

Multipurpose Versa-Orb Digital Orbital Shakers

Built for versatility and performance, this multipurpose shaker base features a space-saving, low-profile design ideal for agitation of gels, staining, de-staining and assay development. The peg-and-grommet-type top plate accepts a variety of easily installed trays and is compatible with similar trays on the market. Speed, controlled by a rotary knob with convenient locking ring, is adjustable from 10 to 350rpm and is indicated in a bright, digital display. The shaker boasts a 1-inch orbit and a maximum load of 25lbs. Low-maintenance, 24V DC brushless motor features a detachable power supply. Two-year warranty included. Trays with liners are sold separately.

Versa-Orb Orbital Shaker Bases - Order Trays Separately

Part No.	Description	Qty.	Price
CLS-4021-100	Digital Base Only, 120V	1	\$3,417.75 *

Trays

Part No.	Description	Qty.	Price
CLS-4021-1212	Aluminum Tray with Liner, 12" x 12"	1	\$131.60 *
CLS-4021-1515	Aluminum Tray with Liner, 15" x 15"	1	\$173.85 *
CLS-4021-2020	Aluminum Tray with Liner, 20" x 20"	1	\$191.55 *
CLS-4021-2030	Aluminum Tray with Liner, 20" x 30"	1	\$452.35 *

Sticky Pads - An ideal alternative to flask clamps.

Great for securing containers with flat wide bases to shaker platforms especially those that cannot be held with traditional clamps. With shake flasks the pad can be used at speeds up 200 or 300 rpm (see chart on our website), from -30 to 70°C. It can be regenerated for reuse by simply washing with mild detergent and water. Sticky Pad cannot be used in water baths. Contact us about special, smaller sizes.

Sticky Pad

Part No.	Dimensions	Qty.	Price
CLS-4010-16	15-3/4 x 19-1/2" (400 x 500mm)	1	\$301.45 *



CLS-4285-R1
Shaker Rack Shown on
Optional Versa-Orb Orbital
Shaker, CLS-4021-100



- One-inch orbit, 10 to 350rpm range
- Digital speed display
- Two-year warranty

See complete specifications on the web at www.cglifesciences.com





Large Capacity CO₂ Incubator Shakers feature Temperature, Shaking, CO₂ Concentration, and Humidity controls. Its stackable design helps maximize floor space, with the capability to stack up to three units high.

See our website for more information and complete specifications.

LARGE CAPACITY Stackable Incubator Shaker with CO₂ Controller and Touch Screen

High Resolution, 7-inch, Capacitive Touch Screen

- Clear, concise instrument status and functions
- Responsive and durable

Large Capacity Chamber (190L Volume)

- Hold up to six, 5L Erlenmeyer shaker flasks

Convenient Pull Out Rail Platform Operation

- Single, centrally-located locking handle

Excellent Temperature Control Performance

- At a stable temperature of 37°C, the uniformity is $\pm 0.2^{\circ}\text{C}$

Chamber Cooling Capacity to 20°C Below Ambient

- Lowest temp is 4°C

Energy-Saving Inverter Compressor

- Makes cooling a noiseless, durable, and highly efficient

Three Units Can Be Stacked

- Purchased as a single, double or triple stack

Bi-Directional UV Light Sterilization

- Two sets of components reach all areas of the chamber

Ultra-Quiet Design

- Noise level less than 55dB when incubator is running and cooling (loudest process)

Slow Acceleration / Deceleration

- Prevents large shear forces on the bacteria or cells

High Pressure Water Rinse - Fast and Efficient

- Integral drain system for platform and chamber



Part No.	Description	Price
CLS-2545-011	Single	Call *
CLS-2545-012	Double	Call *
CLS-2545-013	Triple	Call *

COMPACT Stackable Incubator Shaker with Magnetic Drive and CO₂ Controller and Touch Screen

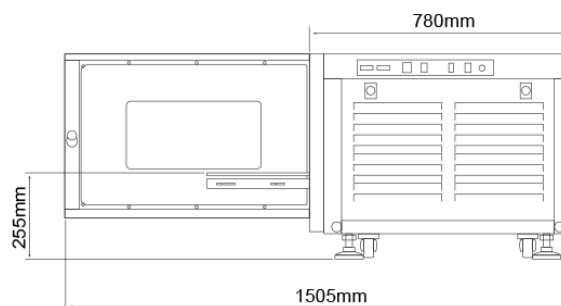
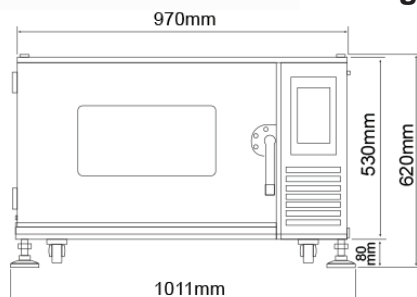


**Stackable,
Space-Saving
Design**



See our website for more information and complete specifications.

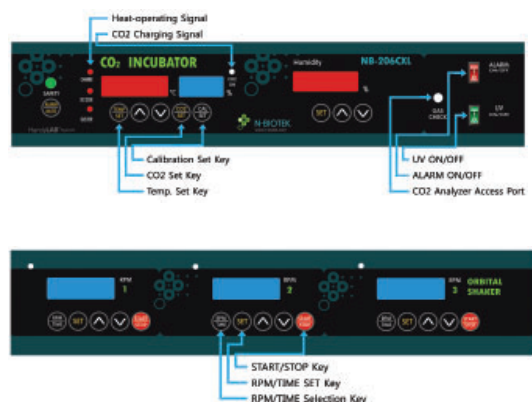
Single Unit Dimensions



COMPACT Stackable Incubator Shaker with Magnetic Drive and CO₂ Controller

- Magnetic Drive Motor - more reliable, low maintenance
- Stackable, Space-Saving Design - up to 3 levels
- Triple Eccentric Drive
- Large LCD Color Display Control Panel - 7 inches
- Built-in Humidity Box

Part No.	Description	Price
CLS-2542-011	Single, 190L	Call *
CLS-2542-012	Double, 190L	Call *
CLS-2542-013	Triple, 190L	Call *



N-BIOTEK Multi-Function Shaking Incubators

These CO₂ shaking incubators are recommended for use in the field of biology, proteomics, genomics, cell biology, and drug discovery, primarily used to culture suspension cells. Six side direct heating keeps the temperature in the chamber consistent. Dual beam IR CO₂ sensor detects CO₂ in the chamber which maintains the concentration precisely. Humidity is applied as a spontaneous humidity way which can minimize the speed of the medium's dry. These shakers allow you to individually control three shakers separately. 2 year warranty.

- CO₂ Incubators
- SHAKING Incubators
- CO₂ SHAKING Incubators
- REFRIGERATED Incubators (vertical type)
- GENERAL Incubators
- HYBRIDIZATION Incubators

Specifications

Model Number	CLS-2455-23	CLS-2455-27
Temperature Range	Ambient +5 to 60°C	Ambient +5 to 60°C
Temperature Uniformity	±0.1°C at 37°C	±0.1°C at 37°C
Humidity	70% at 37°C	70% at 37°C
Chamber Volume	650L / 23Cu Ft	765L / 27Cu Ft
CO ₂ Sensor	Infrared	Infrared
CO ₂ Range	0-20%	0-20%
Speed Range	30 to 150 RPM	30 to 250 RPM
Stroke	25mm	25mm
Exterior Dimensions (W x D x H)	33.5 x 30.7 x 59 in	32.7 x 36.6 x 72.5 in
Interior Dimensions (W x D x H)	27.6 x 25.6 x 59 in	26 x 31.5 x 57 in
Number of Shelves	3	3

High Load Capacity:

- 125mL Flasks: Max 156ea
- 250mL Flasks: Max 90ea
- 500mL Flasks: Max 60ea
- 1L Flasks: Max 48ea
- 2L Flasks: Max 27ea

N-BIOTEK Multi-Function Incubators

Part No.	Description	Price
CLS-2455-23	Incubator, Orbital Shaking, 23Cu Ft, Large Capacity, CO ₂ , Humidified	Call *
CLS-2455-27	Incubator, Orbital Shaking, 27Cu Ft, Large Capacity, CO ₂ , Humidified	Call *



See Part No. Series' CLS-2451 through CLS-2456 for General Purpose Incubators on our website



High Volume, Digital, Magnetic Stirrers

High Volume magnetic stirrer has a bright digital display to accurately set the stirring speed. SpeedServo™ ensures constant speed even when the viscosity changes. Magnetic stirrers have been designed and manufactured in compliance with the following standards CE, CSA and UL. The MSL Series is designed for high volume stirring/mixing of water-like solutions. Main Applications: High volumes preparations, cell cultures and tissue cultures (with spinner flasks), buffer solution preparations.

Versatility

- Brushless motors provide continuous operation for high volumes at any speed.
- Clear, white number, LCD displays ensure accurate speed settings.

Safety

- Gentle start and low speed stirring (20rpm) to protect your samples.
- The control panel is protected from liquid spills.
- Stainless-steel covers allow easy visualization of particles and color changes.
- Safety locks avoid possible unintentional changes.
- Designed for long lifespan and guaranteed by 3-year warranty.

Exclusive Performance

- SpeedServo™ technology maintains constant speed.
- Programmable operation thanks to the integral timer (1 to 99 min).
- Auto reverse of the stirring direction (5s to 99min 55s).
- Intermittent mode option enhances programming capabilities to match any application.
- Nemko mark indicates compliance with CSA and UL standards.

High Volume, Digital Magnetic Stirrers, 50-60hz, 100-240V

Part No.	Stirring Volume, H ₂ O (L)	Speed Range (rpm)	Dimensions, W x H x D (mm)	Qty.	Price
CLS-4108-08	8	40-1500	168 x 60 x 183	1	\$515.00 *
CLS-4109-25	25	40-1500	253 x 71 x 269	1	\$1,106.00 *
CLS-4110-50	50	20-1000	354 x 77 x 369	1	\$2,835.00 *

Accept up to
5 liter flasks



CG-2000-V10

Digital Magnetic Stirrer with Timer, Low Profile, VELP

Reliable and Precise

- On board timer for unattended operation
- Auto reverse of the stirring direction to ensure better mixing
- SpeedServo™ technology maintains stirring speed during viscosity changes

Robust Structure and Compact Design

- Equipped with a brushless motor
- Technopolymer case guarantees high resistance to chemicals
- White surface for easy visualization of particles and color changes

The MST is a compact, low profile, digital stirrer with a **manually adjustable speed range of 80-1500 rpm**. The bright, digital display allows for very accurate setting of the stirring speed which is adjustable in 10 rpm increments. SpeedServo™ Technology provides for constant stirring speeds even during viscosity changes.

Digital Magnetic Stirrer with Timer

Part No.	Speed Range (rpm)	Volts	Hz	Qty.	Price
CG-2000-V10	80-100	100-240	50-60	1	\$296.00 *

Accept up to
5 liter flasks



CG-2002-V10

Analog Magnetic Stirrer, Low Profile, VELP

Powerful, compact, low profile, single position, analog stirrer has a **manually adjustable speed range up to 1100 rpm**. Long life operation.

Robust Design

- Technopolymer casing resists chemicals
- White surface for visualization of particles and color changes

Reliable Results

- Accepts up to 5 liter flasks
- Remains cold, even after days of continuous use
- Excellent speed control, even at low speeds

Analog Magnetic Stirrer

Part No.	Max. Speed (rpm)	Volts	Hz	Qty.	Price
CG-2002-V10	1100	100-240	50-60	1	\$150.00 *

DURA-MAG™ Magnetic Stirrer

Two, Five, and Nine Positions

Dura-Mag™ digital, front-end, magnetic stirrers are designed for both cell culture in spinner flasks as well as general laboratory procedures requiring the use of magnetic stirring equipment. Dura-Mag™ stirrers feature brushless, maintenance-free DC motors with drive assemblies designed for quiet operation.

Stainless steel covers are stamped to show the vessel positions for accurate placement and optimum performance.

Dimensions and Capacities

(Front to back depth measurements include power cords and control knobs)

Two-Position Model

Dimensions: 9.5" W x 22.5" D x 3.5" H

Designed to fit side-by-side in most incubators.

Maximum flask size is (2) 8L vessels.

Five-Position Model

Dimensions: (Standard Model) 16.75"W x 19.25"D x 3.5"H

(Compact Model) 14.75"W x 16.75"D x 3.5"H

Standard Model Maximum flask size is (5) 1L or (4) 3L vessels.

Compact Model Maximum flask size is (5) 100mL or (4) 1L vessels.

Nine-Position Model

Dimensions: 16.75" W x 19.25" D x 3.5" H

Maximum flask size is (9) 500mL vessels.



CLS-4100-02

Trouble-Free Brushless Motor
Integrated Power Supply, for 100 to 220V Service
Heavy Duty Magnets and Drive System
Trouble-Free Non-Slip Toothed Kevlar Belt Design with Easy Replacement
Stainless Steel Plate Cover
Speed Range from 25 to 400RPM with Clockwise Control

DURA-MAG™ Two-Position Magnetic Stirrer, Optional Alarm

Part No.	Alarm	Voltage	Price
CLS-4100-02	—	120	\$3,241.90 *
CLS-4100-A2	Factory Installed	120	\$4,242.05 *

DURA-MAG™ Five-Position Magnetic Stirrers, Optional Alarm

Part No.	Positions	Alarm	Voltage	Price
CLS-4100-06	5	—	120	\$3,149.15 *
CLS-4100-A6	5	Factory Installed	120	\$4,158.65 *
CLS-4100-04	5 Compact	—	120	\$3,149.15 *
CLS-4100-A4	5 Compact	Factory Installed	120	\$4,158.65 *

DURA-MAG™ Nine-Position Magnetic Stirrer, Optional Alarm

Part No.	Alarm	Voltage	Price
CLS-4100-09	—	120	\$3,658.60 *
CLS-4100-A9	Factory Installed	120	\$4,523.00 *



CLS-4100-06



CLS-4100-09

Optional Flask Centering Template for Corning Disposable 500mL Spinner flasks is available.

Installing the drop-on template ensures the Corning Disposable Spinner flasks are centered directly over the magnet for optimal stirring.

Contact us for a quotation. tech@cglifesciences.com



Chemglass Life Sciences' Microcarrier Spinner Flasks

Spinner Flasks promote optimal growth of suspension and microcarrier cultures. They are available in a variety of configurations and sizes. Indented versions help prevent the accumulation of microcarrier beads under the impeller blade. Each is complete with a three-neck glass flask, caps, and impeller assembly. All glass flasks, except the jacketed model, are graduated.

Spinner Flasks with Dimpled Bottoms and Internal Impellers

Capacity (mL)	— Standard Impeller —		— Large Impeller —	
	Part No.	Price	Part No.	Price
100	CLS-1450-100	\$408.10 ▣	CLS-1455-100	\$394.25 ▣
250	CLS-1450-250	\$429.30 ▣	CLS-1455-250	\$414.70 ▣
500	CLS-1450-500	\$461.95 ▣	CLS-1455-500	\$446.35 ▣
1,000	CLS-1450-1L	\$702.75 ▣	CLS-1455-1L	\$678.70 ▣
3,000 [†]	CLS-1450-3L [†]	\$797.90 ▣	CLS-1455-3L [†]	\$770.85 ▣

Spinner Flasks with Flat Bottoms and Adjustable Hanging Stir Bars

Capacity (mL)	Part No.	Price
100	CLS-1445-100	\$303.45 ▣
250	CLS-1445-250	\$318.20 ▣
500	CLS-1445-500	\$379.45 ▣
1,000	CLS-1445-1L	\$494.20 ▣
3,000	CLS-1445-3L	\$642.55 ▣

Spinner Flasks with Standard Impellers and Dimpled or Flat Bottoms

Capacity (mL)	— Dimpled Bottoms —		— Flat Bottoms —	
	Part No.	Price	Part No.	Price
100	CLS-1430-100	\$378.55 ▣	CLS-1430-F100	\$358.10 ▣
250	CLS-1430-250	\$410.50 ▣	CLS-1430-F250	\$398.50 ▣
500	CLS-1430-500	\$433.40 ▣	CLS-1430-F500	\$420.75 ▣
1,000	CLS-1430-1L	\$532.05 ▣	CLS-1430-F1L	\$516.55 ▣
3,000 [†]	—	— ▣	CLS-1430-F3L [†]	\$728.25 ▣
6,000 [†]	CLS-1430-6L [†]	\$1,141.10 ▣	—	— ▣
8,000 [†]	CLS-1430-8L [†]	\$1,411.20 ▣	—	— ▣

Water Jacketed, Spinner Flasks with Flat Bottoms

See CLS-1430-J-series on our website: cglifesciences.com



Dip Tube Assemblies, 3-Port, SS, With Hose Barbs For Spinner Flasks

Our hose barbed 3-port drip tube assemblies are designed for addition or sampling of media from Angled Side Arm (ASA) Spinner Flasks. The dip tube assemblies are constructed of 316L stainless steel, electropolished to a 20Ra (or better) finish and include a blue PP GL-45 open top cap with white silicone gasket.

Dip Tube Assemblies, 3-Port, SS, With Hose Barbs For Spinner Flasks

Part No.	Dimensions	Qty.	Price
CLS-1427-80	3-Port SS Dip Tube Assy for 500mL Spinner Flasks	1	\$307.75 *
CLS-1427-81	3-Port SS Dip Tube Assy for 1L Spinner Flasks	1	\$325.70 *
CLS-1427-82	3-Port SS Dip Tube Assy for 3L Spinner Flasks	1	\$343.80 *
CLS-1427-83	3-Port SS Dip Tube Assy for 6L Spinner Flasks	1	\$361.90 *
CLS-1427-84	3-Port SS Dip Tube Assy for 8L Spinner Flasks	1	\$397.90 *
CLS-1427-85	3-Port SS Dip Tube Assy for 15L & 36L Spinner Flask	1	\$434.15 *



Thermowell Assemblies, 3-Port, SS, With Hose Barbs For Spinner Flasks

Our hose barbed 3-port large diameter thermowell assemblies are designed to accommodate a wide variety of RTD's and dial thermometers of different diameters for measuring the process temperature in our Angled Side Arm (ASA) Spinner Flasks. All 316L stainless steel tubes have an electropolished finish to a Ra 20μ (or better). These assemblies feature a thermowell tube with 0.375" OD and a 0.305" ID that will accept all 1/4" thermometer probes. The assemblies include a blue PP open top GL-45 cap with white silicone gasket.

Thermowell Assemblies, 3-Port, SS, With Hose Barbs For Spinner Flasks

Part No.	Dimensions	Qty.	Price
CLS-1427-90	3-Port SS Thermowell Assy for 1L Spinner Flasks	1	\$334.65 *
CLS-1427-91	3-Port SS Thermowell Assy for 3L Spinner Flasks	1	\$343.80 *
CLS-1427-92	3-Port SS Thermowell Assy for 6L Spinner Flasks	1	\$517.45 *
CLS-1427-93	3-Port SS Thermowell Assy for 8L Spinner Flasks	1	\$539.40 *
CLS-1427-94	3-Port SS Thermowell Assy for 15L & 36L Spinner Flasks	1	\$551.80 *





2-Port Assemblies, Spinner Flasks

Port assemblies are constructed of 316L electro-polished stainless steel. These port assemblies fit all types of spinner flasks. The assemblies consist of a siphon and vent tube. Supplied complete with a GL-45 open top cap and silicone gasket.

2-Port Assemblies, Spinner Flasks

Part No.	Dimensions	Qty.	Price
CLS-1427-01	2-Port Assembly, 500mL Spinner Flask	1	\$244.25 *
CLS-1427-02	2-Port Assembly, 1000mL Spinner Flask	1	\$262.40 *
CLS-1427-03	2-Port Assembly, 3000mL Spinner Flask	1	\$262.40 *
CLS-1427-04	2-Port Assembly, 6000mL Spinner Flask	1	\$370.85 *
CLS-1427-05	2-Port Assembly, 8000mL Spinner Flask	1	\$370.85 *
CLS-1427-06	2-Port Assembly, 15000mL Spinner Flask	1	\$370.85 *
CLS-1428-13	Replacement Open (13/16" Hole) GL-32 Gasket Only for Port Assembly	1	\$3.30 *



Cap and Gasket Included

Vent Port Assemblies For Transfer Bottles

Vent port assemblies constructed of 316L stainless steel and electropolished to a 20Ra or better finish. Configurations consist of a single vent tube, vent and short fill tubes, or angled vent and fill tubes. Supplied with a GL-45 open top cap and silicone gasket. Precision pump tubing size to fit adapters is listed.

Vent Port Assemblies

Part Number	Hose Conn. O.D. (mm)	Fits Tub. Size	Description	Thread Size	Price
CLS-1429-01	4.8		2-Port	GL-32	\$304.65 ♥
CLS-1429-10	6.35	17	Single	GL-45	\$162.65 ♥
CLS-1429-20	6.35	17	2-Port	GL-45	\$186.60 ♥
CLS-1429-21	6.35	17	2-Port Angled	GL-45	\$378.65 ♥
CLS-1429-40	4.0	16	2-Port	GL-45	\$193.50 ♥



CLS-1429-01



CLS-1429-21



CLS-1429-20
CLS-1429-40



CLS-1429-10

Vessels, VSA Bioreactor, 4-Necks

Vessel has four vertical GL-45 threaded side necks and a 100mm threaded center neck. The 3 and 6 liter vessels are low profile to maximize incubator space. Supplied complete with (4) solid GL-45 caps and (4) pouring rings.

Four-Neck, Graduated Bioreactor Vessels

Part No.	Cap. (L)	Dia (mm)	Overall Height (mm)	Side Port Height (mm)	Center Neck GPI Thread	Side Necks Size	Qty.	Price
CLS-1404-03	3	238	250	235	100-440	GL-45	1	\$1,118.35 ◇
CLS-1404-06	6	238	295	280	100-440	GL-45	1	\$1,165.45 ◇
CLS-1404-08	8	238	425	405	100-440	GL-45	1	\$1,288.00 ◇
CLS-1404-15	15	290	465	430	100-440	GL-45	1	\$1,867.70 ◇

Vessels, VSA Bioreactor, 6-Necks

Vessel has six vertical GL-45 threaded side necks and a 100mm threaded center neck. The 3 and 6 liter vessels are low profile to maximize incubator space. Supplied complete with (6) solid GL-45 caps and (6) pouring rings.

Six-Neck, Graduated Bioreactor Vessels

Part No.	Cap. (L)	Dia (mm)	Overall Height (mm)	Side Port Height (mm)	Center Neck GPI Thread	Side Necks Size	Qty.	Price
CLS-1406-03	3	238	250	235	100-440	GL-45	1	\$1,399.80 ◇
CLS-1406-06	6	238	295	280	100-440	GL-45	1	\$1,440.25 ◇
CLS-1406-08	8	238	425	405	100-440	GL-45	1	\$1,678.65 ◇
CLS-1406-15	15	290	465	430	100-440	GL-45	1	\$1,886.50 ◇
CLS-1406-36	36	411	535	465	100-440	GL-45	1	\$3,006.45 ◇

Vessel Carriers, VSA Bioreactor

Manufactured from 304 Stainless Steel and electro-polished. Vessel carriers are very stable and allow for easy transport of Bioreactor Vessels, Spinner Flasks or large Carboys.

Carriers for Bioreactor Vessels

Part No.	Fits Vessel Sizes (L)	Height x Inside Diameter (mm)	Qty.	Price
CLS-1406-C08	8 (plus 3 and 6 Low Profile)	234.3 x 273	1	\$165.15 ♥
CLS-1406-C15	15	259.9 x 304.8	1	\$206.15 ♥
CLS-1406-C36	36	308.9 x 419.1	1	\$241.20 ♥



CLS-1404-series



CLS-1406-series



CLS-1406-C-series





CLS-1440-100



CLS-1440-10



VSA Dura-Drive™ Overhead Motors, Standard

- Easy mounting bracket with 'peg & grommet' design
- Twist-lock, power cord plug safely prevents disconnection from power source

Dura-Drive™ overhead motors are designed for use with SS or PTFE impellers to stir media or other liquids in bioreactor vessels and spinner flasks. A CLS-1440 overhead drive adapter is required with this motor. Includes power supply.

Dura-Drive™ Overhead Motor

Part No.	Voltage	Qty.	Price
CLS-1440-100	120	1	\$2,505.40 ♥

VSA Overhead Drive Adapter, Standard

The standard overhead drive adapter is used to attach a standard overhead drive motor to a SS or PTFE impeller for use with bioreactor vessels or spinner flasks. The adapter is manufactured from 316L electropolished stainless steel with polyester / stainless steel bearings.

Overhead Drive Adapter

Part No.	Dimensions	Qty.	Price
CLS-1440-10	161mm OAH, 78mm from cap to top	1	\$1,537.70 ♥

VSA Overhead Drive Adapter, Preventative Maintenance Kit

CGLS PM Kits include all of the high maintenance items required to keep your Overhead Drive Adapters functioning to the high standards. Each kit contains an illustrated parts list for easy identification of parts.

Maintenance Kit for Overhead Drive Adapter

Part No.	Description	Qty.	Price
CLS-1440-K1	Maintenance Kit with:	1	\$343.80 ♥
	#118 Silicone O-Ring	1	
	Shaft Seal	2	
	Polyester Ball Bearing	2	
	Internal Retaining Ring	2	
	Drive Shaft Grip Ring	1	
	Replacement Shaft	1	



Stainless Steel Pitch Blades for Dura Drive Motors

- Folding impeller assemblies
- Optimum agitation for VSA vessels
- Improves uplift and increases mass transfer rates
- Minimize shear

See CLS-1440-P-series Pitch Blades on the next page.



VSA Impeller Assemblies for Overhead Drives, PTFE

Our PTFE impeller assemblies are designed to provide agitation for our vertical side arm (VSA) vessels and spinners when used with our cap adapter and Dura Drive overhead motor.

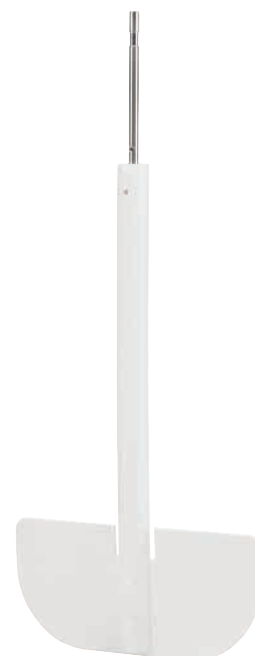
NOTE: Stainless steel impeller assemblies are available as special order. Please contact us for details.

Impeller Assemblies for Overhead Assemblies

Part No.	Fits Vessel	Overall Width x Overall Height (mm)	Qty.	Price
CLS-1440-26	3L Spinner	108 x 222	1	\$235.25 ♥
CLS-1440-27	6L Spinner	171 x 355	1	\$298.65 ♥
CLS-1440-28	8L VSA	171 x 337	1	\$262.40 ♥
CLS-1440-29	15L VSA	171 x 368	1	\$271.50 ♥
CLS-1440-30	36L VSA	241 x 442	1	\$289.45 ♥

Low Profile Impeller Assemblies for Overhead Assemblies

Part No.	Fits Vessel	Overall Width x Overall Height (mm)	Qty.	Price
CLS-1440-44	3L VSA	171 x 162	1	\$181.05 ♥
CLS-1440-54	6L VSA	171 x 207	1	\$186.45 ♥



CLS-1440-series

VSA Stainless Steel Pitch Blade Impeller Assemblies

Designed for Overhead Vertical Sidearm Vessels

Our stainless steel pitch blade folding impeller assemblies are designed to provide optimum agitation for our Vertical Side Arm (VSA) vessels. These impellers will improve uplift mixing and increase mass transfer rates while minimizing shear to cultures. They can be used with our cap adapter and Dura Drive Overhead Motor. The impellers are made from 316L stainless steel and supplied with a dust shield as well as a locking ring to secure the paddle in a horizontal position once inserted into the flask.

Stainless Steel Pitch Blade Impeller Assemblies for VSA Vessels

Part No.	For Vessel Type	Vessel Vol. (L)	OAW x OAH (in.)	Price
CLS-1440-P48	VSA	8	6.5 x 2.5	\$714.75 ♥
CLS-1440-P49	VSA	15	6.5 x 2.5	\$814.20 ♥
CLS-1440-P50	VSA	36	8-3/4 x 3	\$859.55 ♥

Low Profile Stainless Steel Pitch Blade Impeller Assemblies for VSA Vessels

Part No.	For Vessel Type	Vessel Vol. (L)	OAW x OAH (in.)	Price
CLS-1440-P43	VSA	3	6.5 x 2.5 (low profile)	\$497.55 ♥
CLS-1440-P53	VSA	6	6.5 x 2.5 (low profile)	\$533.90 ♥



CLS-1440-P-series
SS Pitch Blade Impellers



CLS-1437-H-series
Sparger Assemblies

VSA Sparger Assemblies, 3-Port, SS, with Hose Barbs and Holes

Our 3-port sparger assemblies with drilled holes, 0.040" spaced 1/2" apart, and hose barbs are designed for vigorous aeration in our vertical side arm (VSA) vessels. These assemblies are constructed of 316L stainless steel, electro-polished to a 20Ra finish or better and include a blue polypropylene GL-45 open top cap and white silicone gasket.

3-Port Sparger Assemblies with Holes

Part No.	Fits Vessel	Qty.	Price
CLS-1437-H40	3L VSA	1	\$367.45 ♥
CLS-1437-H41	6L VSA	1	\$379.95 ♥
CLS-1437-H42	8L VSA	1	\$416.30 ♥
CLS-1437-H43	15L VSA	1	\$434.15 ♥
CLS-1437-H44	36L VSA	1	\$452.20 ♥



CLS-1437-series
Thermowell Assemblies

VSA Thermowell Assemblies, 3-Port, SS, with Hose Barbs for VSA Vessels

Our 3-port large diameter thermowell assemblies are designed to accommodate a wide variety of RTD's and dial thermometers of different diameters for measuring the process temperature in our vertical sidearm bioreactor vessels. All 316L stainless steel tubes have an electro-polished finish of a Ra 20μ or better, inside and out. These assemblies feature a thermowell tube with 0.375" OD and 0.305"ID that will accept all 1/4" thermometer probes. These assemblies include a blue open top GL-45 polypropylene cap with a white silicone gasket.

3-Port Thermowell Assemblies

Part No.	Fits Vessel	Qty.	Price
CLS-1437-60	3L VSA	1	\$334.65 ♥
CLS-1437-61	6L VSA	1	\$407.10 ♥
CLS-1437-62	8L VSA	1	\$416.30 ♥
CLS-1437-63	15L & 36L VSA	1	\$434.15 ♥

Media Bottle Port Assemblies, 2-Port, SS, with Hose Barbs

Our 2-port dip tube assemblies are designed for addition or sampling of media from standard Duran or Corning® media bottles. They are constructed of 316L electropolished stainless steel and include a blue polypropylene GL-45 open top cap with a white silicone gasket. Dip tube assemblies have a finish of 20Ra or better.

Two-Port Assemblies

Part No.	Fits Vessels	Qty.	Price
CLS-1437-19	1L Media Bottles Only	1	\$235.25 ♥
CLS-1437-20	3L VSA Vessels and 2L Media Bottles	1	\$244.25 ♥
CLS-1437-21	6L VSA Vessels and 5L Media Bottles	1	\$280.45 ♥
CLS-1437-22	8L VSA Vessels and 10L Media Bottles	1	\$325.70 ♥
CLS-1437-23	15L & 36L VSA Vessels Only	1	\$360.15 ♥

Media Bottle Port Assemblies, 3-Port, SS, with Hose Barbs

Our 3-port assemblies are designed for addition or sampling of media from standard Duran or Corning® media bottles. They are constructed of 316L electropolished stainless steel and include a blue polypropylene GL-45 open top cap with a white silicone gasket. Dip tube assemblies have a finish of 20Ra or better.

Three-Port Assemblies

Part No.	Fits Vessels	Qty.	Price
CLS-1437-29	1L Media Bottles Only	1	\$298.65 ♥
CLS-1437-30	3L VSA Vessels and 2L Media Bottles	1	\$307.75 ♥
CLS-1437-31	6L VSA Vessels and 5L Media Bottles	1	\$325.70 ♥
CLS-1437-32	8L VSA Vessels and 10L Media Bottles	1	\$343.80 ♥
CLS-1437-33	15L & 36L VSA Vessels Only	1	\$407.10 ♥

VSA Probe Holders

Our probe holders are designed to secure pH and DO probes into 45mm vertical sidearm vessels. Includes thermoplastic, polyester cap and silicone gasket. This assembly is designed to hold an Ingold pH or DO electrode securely in place in your cell culture vessel via the 45mm sidearm. It consists of: red high temperature 45mm screw cap, 316L stainless steel probe holder with a Pg 13.5 thread, and a white silicone rubber liner. Comes fully assembled for fast and easy set-up.

Probe Holders

Part No.	Description	Qty.	Price
CLS-1437-01	12mm GL-45, PG 13.5 Screw Thread Style	1	\$352.80 ♥
CLS-1437-02	12mm GL-45, Compression Style	1	\$199.10 ♥
CLS-1437-03	1/2" GL-45, Compression Style	1	\$199.10 ♥

Accessories

Part No.	Description	Qty.	Price
CG-195-05	GL-45 Cap with 34mm Aperture	1	\$6.50 ♥
CLS-1428-11	Replacement Open GL-45 White FDA Silicone Gasket Only for Port Assembly	1	\$3.00 ♥





CLS-1437-series



CLS-1437-A10



CLS-1437-G1



CLS-1437-F-series

VSA Harvest Tube Assemblies, 3-Port, SS, with Hose Barbs

Our 3-port harvest assemblies are designed for insertion into our vertical sidearm bioreactor vessels. They are manufactured with 1/4" and 3/8" 316L stainless steel tubing and facilitate rapid removal of liquid from bioreactor vessels. Harvest tube assemblies have an electro-polished finish of Ra 20μ or better, inside and out. Includes a blue open top GL-45 polypropylene cap with a white silicone gasket.

3-Port Harvest Tube Assemblies

Part No.	Fits Vessel	Qty.	Price
CLS-1437-70	3L VSA	1	\$407.10 ♥
CLS-1437-71	6L VSA	1	\$416.30 ♥
CLS-1437-72	8L VSA	1	\$434.15 ♥
CLS-1437-73	15L & 36L VSA	1	\$452.20 ♥

VSA Addition Dip Tube Assemblies, 3-Port, SS, with Hose Barbs

Our hose barbed 3-port dip tube assemblies are designed for addition or sampling of media from Vertical Side Arm (VSA) Bioreactor Vessels. These addition dip tube assemblies are ideal for liquid addition of acid, base, anti foam or media. They are constructed of 316L stainless steel, electropolished to a 20Ra (or better) finish and include a blue, polypropylene GL-45 open top cap and white silicone gasket. Tube lengths are 3-3/32" long.

3-Port Addition Dip Tube Assembly

Part No.	Qty.	Price
CLS-1437-A10	1	\$181.05 ♥

VSA Sparger Assemblies, 3-Port, SS, with Hose Barbs and Frits

Our 3-port sparger assemblies are designed for gentle aeration using a 10 micron frit in our vertical side arm (VSA) vessels. The frit is removable for easy cleaning. These assemblies are constructed of 316L stainless steel, electro-polished to a 20Ra finish or better and include a blue polypropylene GL-45 open top cap and white silicone gasket.

3-Port Sparger Assemblies with Frits

Part No.	Fits Vessel	Qty.	Price
CLS-1437-F50	3L VSA	1	\$814.20 ♥
CLS-1437-F51	6L VSA	1	\$832.20 ♥
CLS-1437-F52	8L VSA	1	\$868.40 ♥
CLS-1437-F53	15L VSA	1	\$886.40 ♥
CLS-1437-F54	36L VSA	1	\$904.55 ♥

Glass Frits

Made of glass and easily attaches to one of our dip tube assemblies with silicone tubing (not provided) to help increase aeration. Porosity is 40-60 micron. Can be autoclaved. Frit assembly 50mm. Stem OD 8mm.

Glass Frit

Part No.	Porosity (μm)	Qty.	Price
CLS-1437-G1	40-60	1	\$90.65 ♥

DO Probes, Hamilton

The Oxyferm FDA is an electrochemical oxygen sensor suited for applications with high demands for hygiene, e.g. in pharmaceutical industry, in biotechnology and in foods and beverages production. When using Oxylyte USD electrolyte, even upside-down insertion is possible. The sensor is equipped with a FDA approved membrane for usage in hygienic processes.

Specifications

Electrode System	Silver Platinum Combination
Polarization	670mV \pm 50mV
Output	40 to 80nA in Air at 25°C
Temperature	0-130°C, Sterilization to 130°C
Drift at Room Temp under Constant Conditions	Drift at Room Temp under Constant Conditions: <1% per Week
Stabilization Time	Pressure: 0-4 Bar
Wetted Materials	Stainless Steel 1.4435, EPDM and Silicone with FDA Approval
Mounting	PG 13.5 Thread
Electrical Connector	Standard 4 Pole T 82/D4

DO Probes, Oxyferm FDA

Part No.	Dims. (mm)	Fits Reactors	Connector	Qty.	Price
CLS-1435-D72	12 x 215	3L-6L	Standard 4 Pole T82/D4	1	Call *
CLS-1435-D73	12 x 320	8L	Standard 4 Pole T82/D4	1	Call *
CLS-1435-D74	12 x 420	15L-36L	Standard 4 Pole T82/D4	1	Call *
CLS-1435-D82	12 x 215	3L-6L	VP	1	Call *
CLS-1435-D83	12 x 325	8L	VP	1	Call *
CLS-1435-D84	12 x 425	15L-36L	VP	1	Call *

Accessories for DO Probes, Oxyferm FDA

Part No.	Description	Qty.	Price
CLS-1435-D88	Oxyferm Membrane Kit (Pack of Three)	1	Call *
CLS-1435-D90	Cathode Assembly for Oxyferm DO Sensors	1	Call *
CLS-1435-D91	Electrolyte for Oxyferm FDA Sensors, 50mL	1	Call *
CLS-1435-D92	Protective Cap for T82 DO Sensor Autoclaving	1	Call *



CLS-1435-D70



CLS-1435-D80



CLS-1435-P-series

pH Probes, Hamilton

The Easyferm Plus K8 sensors are designed to withstand demanding applications in pharmaceutical and chemical industries. The EVEREF-F reference cartridge ensures that the Phermlyte reference electrolyte remains free of silver and precipitation. The Easyferm Plus K8 is supplied with a pre-sterilized electrolyte which prevents the diffusion of sample into the sensors. It withstands steam sterilization, autoclaving, CIP, organic solvents and strong acids. Fully autoclavable or in-situ sterilizable.

Specifications

pH Range	0-14
Electrolyte	Pressurized PHERMLYTE
Pressure Range	0-6 Bar
Electrical Connector	Type K8 - Standard pH Connector Head or VP
Reference System	HAMILTON EVEREF-F, Silver ion barrier included
Temperature Range	Steam Sterilizable/Autoclavable to 266°F (0 to 135°C)
IN-situ Sterilization	Up to 100 Cycles under Standard Conditions

Easyferm Plus K8 pH Probes

Part No.	Dims. (mm)	Fits Reactors	Connector	Qty.	Price
CLS-1435-P72	12 x 225	3L-6L	K8	1	Call *
CLS-1435-P73	12 x 325	8L	K8	1	Call *
CLS-1435-P74	12 x 425	15L-36L	K8	1	Call *
CLS-1435-P77	12 x 225	3L-6L	VP Connector	1	Call *
CLS-1435-P78	12 x 325	8L	VP Connector	1	Call *
CLS-1435-P79	12 x 425	15L-86L	VP Connector	1	Call *



CLS-1455-R1

Probes sold separately.

pH and DO Probe Rack

Freestanding rack can hold 36 probes (pH or DO) up to 235mm long. Rack is constructed of polypropylene with stainless steel uprights.

Racks available for longer probes - contact us: tech@cglifesciences.com.

Probe Rack

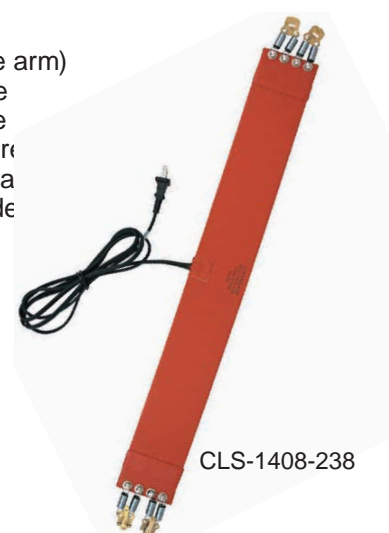
Part Number	Description	Price
CLS-1455-R1	pH and DO Probe Rack	\$195.30 ♥

Silicone Rubber Heaters For VSA (Vertical Side Arm) Bioreactor

Silicone rubber heater with boot latch, lace-style closure for 4 and 6 neck VSA (vertical side arm) Bioreactor. Heaters are 375 watts and include a 6ft cord with an IEC two prong plug. Please reference the below chart for sizing the correct heater to your vessel. If you do not know the exact outside diameter the chart gives the approximate circumference which can be measured with a flexible tape measure. Please Note: These Heaters Cannot Be Directly Plugged Into a Wall Receptacle and Require a Temperature Controller with a Thermocouple or RTD in Order Properly Maintain and Reach a Controlled Temperature.

Specifications

Model Number	CLS-1408-238	CLS-1408-290	CLS-1408-411
Vessel OD (mm)	238mm (9.37in)	290mm (11.4in)	411mm (16.2in)
Approx. Circumference (mm)	747.7mm (29.4in)	911mm (35.9in)	1921.2mm (50.8in)
For use with These 4 & 6 Neck VSA Vessels	3L, 6L, & 8L	15L	36L



CLS-1408-238

Silicone Rubber Heaters For VSA (Vertical Side Arm) Bioreactor

Part No.	Description	Qty.	Price
CLS-1408-238	Silicone Rubber Heater, 3" Wide x 24.18" Long for 238mm OD Vessels, Boot Latch Closure, 375 Watt, 110VAC, 6ft Cord with IEC Two Prong Plug	1	\$629.00 *
CLS-1408-290	Silicone Rubber Heater, 5" Wide x 30.62" Long for 290mm OD Vessels, Boot Latch Closure, 375 Watt, 110VAC, 6ft Cord with IEC Two Prong Plug	1	\$937.85 *
CLS-1408-411	Silicone Rubber Heater, 5" Wide x 45.56" Long for 411mm OD Vessels, Boot Latch Closure, 375 Watt, 110VAC, 6ft Cord with IEC Two Prong Plug	1	\$1,128.80 *

*Life Science Equipment Product Line

Temperature Controllers, J-Kem®, Model 210

The Model 210 has 1200 Watts of power which is sufficient for heating blankets. Controller has the ability to display temperature without heating.

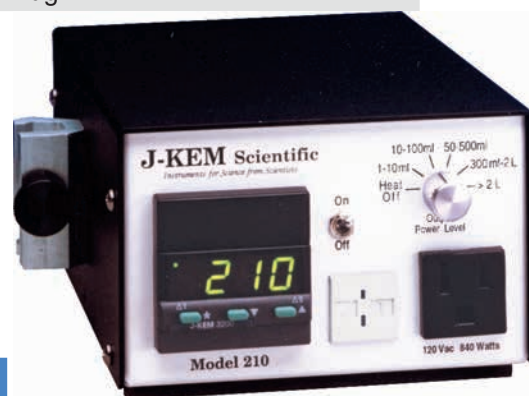
Specifications:

Dimensions: 3.25" H x 5.25" W x 7.25" D

Power: 10 Amps @ 120VAC, 1200 Watts

Molded Adapter Plug

Part Number	Description	Price
CG-3200-100	J-Kem® Temperature Controller Only, Model 210, Type "RTD" (-200°C to 400°C)	\$1,178.00 ♥



CG-3200-100

10' Coiled Extension Cords, White, Rtd

For use with CG-1978-P Series RTD sensors.

10' Coiled Extension Cords, White, Rtd

Part Number	Description	Price
CG-3944-10	10' COILED EXTENSION CORDS, WHITE, RTD	\$218.25 ♥



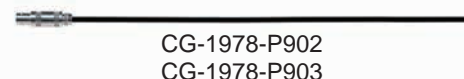
CG-3944-10

Pt100 Rtd Temperature Sensors, Shielded Cable, Pfa Coated

PT100 RTD temperature sensor is for direct insertion into thermowells.

Pt100 Rtd Temperature Sensors, Shielded Cable, Pfa Coated

Part Number	Description	Price
CG-1978-P902	PT100 Sensor, the Lemo Connector, PFA Coated, 1/8" OD x 12", 1-7L Bioreactor.	\$462.55 ♥
CG-1978-P903	PT100 Sensor, Lemo Connector, PFA Coated, 1/8" OD x 18", 15L Bioreactor.	\$468.75 ♥

CG-1978-P902
CG-1978-P903

Multipurpose vent filters are for small-volume gas venting and solvent filtration. Each is identified with part number and heat-stamped lot number.



CLS-1397-050A



CLS-1397-050B

PTFE Vent Filters, 50mm, Non-Sterile, Autoclavable

- 56mm OD PP outer housing with 6-10mm stepped hose barb connections
- 0.2 micron PTFE filter membrane

Designed for bi-directional flow, these filters serve as cost-effective hydrophobic vents for contamination-sensitive materials and as protection from hazardous aerosols. Also used for laboratory vacuum pump protection. Safely autoclave up to 30 times for sterile applications.

PTFE Vent Filters, Non-Sterile

Part No.	Membrane (µm)	Filter Dia. (mm)	Qty.	Price
CLS-1397-050A	0.2	50	10	\$237.05 ♥

PTFE Vent Filters, 50mm, Non-Sterile

- 60mm OD PP outer housing with 6-12mm stepped hose barb connections
- 0.2 micron PTFE filter membrane

Designed for bi-directional flow, they serve as a cost-effective hydrophobic vent for laboratory applications. Autoclave up to 3 times for standard sterile applications.

PTFE Vent Filters, Non-Sterile

Part No.	Membrane (µm)	Filter Dia. (mm)	Qty.	Price
CLS-1397-050B	0.2	50	10	\$86.20 ♥

Multiple Types of Tubing Available

- Advantaflex
- Bioprene
- C-Flex
- Flexan
- Flexelene
- M-Flex
- Peroxide Cured Silicone
- Pharmapore
- Pharmapure
- PharmEd
- Platinum Cured Silicone
- Puri-Flex
- PVC
- TPE
- Tygon

Contact us to find out more!
singleuse@cglifesciences.com



Platinum-Cured Silicone Tubing, Medical Grade

SILCON® MED-X

- Platinum cured for the highest degree of purity (least extractable)
- Reusable — will withstand repeated sterilization^
- Translucent natural color for visual contact with the flow
- Free of BPA, latex and phthalates
- RoHS compliant

SILCON® MED-X tubing is made under good manufacturing procedures and conforms to the biocompatibility requirements of USP Class VI. SILCON® MED-X's surface properties resist sticking and encrustation and will not support bacteria growth. The tubing is soft, pliable, and contains no plasticizers which could leach out, causing flow contamination or tube hardening. Care is recommended in the selection and application of fittings and clamps as sharp barbed fittings or unlined metal clamps could tear into the wall. Autoclavable

Exposed to repeated steam sterilization, long-term high temperature or pressure, silicone will eventually relax and become gummy. It should then be replaced.

Platinum-Cured Silicone Tubing, Silcon® MED-X

Part No.	ID (in.)	OD (in.)	Wall Thick (in.)	Size	Roll Length (ft.)	Price
CLS-1436-P01	1/16	3/16	1/16	14	50	\$80.10 ◇
CLS-1436-P02	1/8	1/4	1/16	16	50	\$78.80 ◇
CLS-1436-P03	1/8	5/16	3/32	120	50	\$177.50 ◇
CLS-1436-P04	3/16	5/16	1/16	25	50	\$101.20 ◇
CLS-1436-P05	3/16	3/8	3/32	15	50	\$106.65 ◇
CLS-1436-P06	1/4	3/8	1/16	17	50	\$103.60 ◇
CLS-1436-P07	1/4	7/16	3/32	24	50	\$193.30 ◇
CLS-1436-P08	1/4	1/2	1/8	26	50	\$244.80 ◇

Silcon®, Peroxide Cured, Silicone Tubing In Rolls

Peroxide-cured Silcon® Silicone Tubing is designed for applications where flexibility, resiliency and durability are required. Its inner smooth surface reduces the risk of particulate entrapment and microscopic buildup during fluid transfer.

Tubing is FDA food grade compliant, entirely non-toxic, non-hemolytic and non-pyrogenic. It also meets 3-A Sanitary Standards, FDA 21 CFR Part 177.2600 Criteria and NSF 51 Standard. Withstands temperature extremes from -100°F to 500°F (350°F maximum for NSF applications). Autoclavable.

Exposed to repeated steam sterilization, long-term high temperature or pressure, silicone will eventually relax and become gummy. It should then be replaced.

Sold in standard lengths of 50ft.

Peroxide Cured, Silicone Tubing In Rolls, Silcon®

Part No.	ID (in.)	OD (in.)	Wall Thick (in.)	Size	Roll Length (ft.)	Price
CLS-1436-T20	1/8	1/4	1/16	16	50	\$57.60 ◇
CLS-1436-T21	3/16	5/16	1/16	25	50	\$95.30 ◇
CLS-1436-T22	3/16	3/8	3/32	15	50	\$91.40 ◇
CLS-1436-T23	1/4	3/8	1/16	17	50	\$76.80 ◇
CLS-1436-T24	1/4	7/16	3/32	24	50	\$98.50 ◇
CLS-1436-T25	1/4	1/2	1/8	26	50	\$156.10 ◇



CLS-1436-P-series

SILCON MED-X is supplied in individual, heat-sealed poly bags and should be sterilized prior to use.

SILCON MED-X is not recommended for implantable or in-body uses or for continuous steam applications.

Other sizes and 60A durometer material are also available, contact us for details.



CLS-1436-T-series



CLS-1399-F50



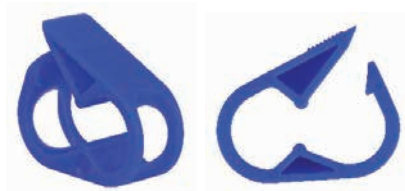
CLS-1399-G50



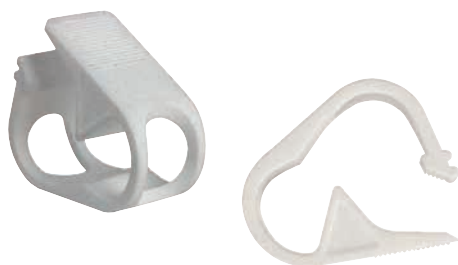
CLS-1399-F55



CLS-1436-C01



CLS-1436-SP4



CLS-1436-SP5

Male Luer Lock, Needleless Injection Site, Swabable, Polycarbonate, Silicone, Bioreactor

Male Luer Locks

Part No.	Description	Qty.	Price
CLS-1399-F50	Male Luer Lock, Needleless Injection Site, Swabable, Polycarbonate, Silicone	25	\$75.10 ♥

Female Luer, 1/8" Barb

The Female Luer thread style to 1/8" barb (3.2mm) ID Tubing is gamma stable and polycarbonate. Ideal for use with CLS-1399-F50.

Female Luer to 1/8" Barb

Part No.	Description	Qty.	Price
CLS-1399-G50	Female Luer, 1/8" barb, PC	25	\$15.25 ◇

Female to Male Luer Lock, Polycarbonate, Bioreactor

Female to Male Luer Locks

Part No.	Description	Qty.	Price
CLS-1399-F55	Female to Male Luer Lock, Polycarbonate	25	\$52.35 ♥

Flow Control Tube Clamps, 0.45" OD

Acetal clamp is autoclavable; won't rust, corrode or distort. Twelve-position ratchet control adjusts from full flow to complete closure.

Flow Control Tube Clamps

Part No.	Accepts Tubing OD Up to (in.)	Qty.	Price
CLS-1436-C01	0.45	5	\$10.40 ◇
CLS-1436-C02	0.45	25	\$38.70 ◇

Single Position Tubing Clamp for 0.25" OD Tubing

Plastic clamp is manufactured from blue polypropylene and is both autoclavable and gamma stable. Clamp is designed for on/off control of fluid or air. One-hand control and economically priced for disposable applications. Packed 25 per Case.

Tubing Clamps

Part No.	Description	Qty.	Price
CLS-1436-SP4	Tubing Clamp, 1/4" OD, Single Position	25	\$33.65 ◇

Single Position Tubing Clamp for 0.50" OD Tubing

Plastic clamp is manufactured from white polypropylene and is both autoclavable and gamma stable. Clamp is designed for on/off control of fluid or air. One-hand control and economically priced for disposable applications. Packed 25 per Case.

Tubing Clamps

Part No.	Description	Qty.	Price
CLS-1436-SP5	Tubing Clamp, 1/2" OD, Single Position	25	\$44.90 ◇

Cable Tie Gun, Plastic, Adjustable Tension, Zip-Tie

Plastic gun works with cable ties up to 0.19" wide and produces 18-50lbs of tensile strength. Gun tightens and cuts. Not compatible with stainless steel ties.

Adjustable Tension, Cable Tie Gun

Part Number	Description	Qty.	Price
CLS-1399-G100	Cable Tie Gun, Plastic, Adjustable Tension	1	\$33.45 ♥



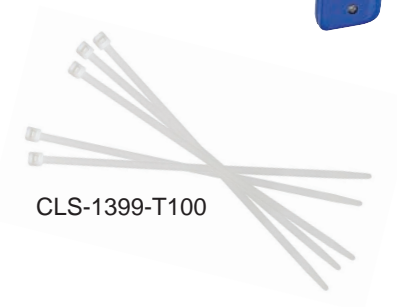
CLS-1399-G100

Cable Ties, 4" Length, Nylon 6.6, Autoclavable

Tie wraps are injection-molded of 6.6 nylon and won't corrode or stretch. Durable locking mechanism holds securely. Each natural-color, 4-inch tie is 1/8" wide and has an 18lb strength. Maximum bundle / wrap diameter is 1-inch. Long term temperature range is -40 to 85°C. Short term temperature range is 180°C. Autoclavable.

Nylon Cable Ties, 4-inch

Part Number	Description	Qty.	Price
CLS-1399-T100	Cable Tie, 4" Long, Nylon 6.6, Natural	100	\$5.35 ♥



CLS-1399-T100

Tubing Cutters

For cutting tubing made from plastic, FEP, PTFE, polyethylene, polypropylene, or rubber.

Tubing Cutter

Part No.	Description	Qty.	Price
CG-1975-30	Tubing Cutter	1	\$15.80 *



CG-1975-30

Mobile Spool Rack

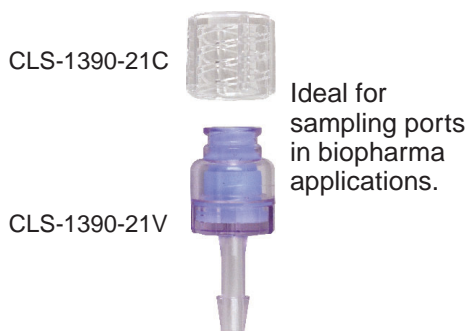
Rack is on casters making it easy to move from lab to lab. It will hold up to 6 each 13" spools. With the rack being only 17" wide it can fit into tight spaces between lab benches and hoods. Constructed of powder coated aluminum making the unit light and resistant to most lab environments.

Mobile Spool Rack

Part No.	Dimensions L x W x H (in.)	Qty.	Price
CG-1997-R-10	35 x 17 x 52	1	\$2,804.25 *



CG-1997-R-10



Swabable Valve with 1/8 inch Barb

Unique and innovative patented design allows use in a wide variety of demanding applications where a high flow and a closed system are a must. Valves are DEHP- free, made with ISO-10993 materials and not made with natural rubber latex. Bodies are made with BPA-free materials and polycarbonate. Valves mate securely with standard ISO-594 compliant syringes and connectors.

Easy, direct assembly to tubing without Luer connectors or solvents and adhesives.

Swabable Valve with 1/8" Barb (Purchase Luer Caps Separately)

Part No.	Description	Qty.	Price
CLS-1390-21V	Swabable Valve with 1/8" Barb	25	\$70.35 ♥
CLS-1390-21C	Non-vented Luer Cap without Stem, Female	25	\$27.00 ♥



CLS-91402-003

CPC Coupling Bodies with Hose Barbs, Non-Valved, In-Line, Non-Sterile

Ergonomic thumb latch	Easy to operate – even with gloved hands
USP Class VI materials	Meet biocompatibility requirements
Supplied Non-Sterile	Sterilizable by autoclave, EtO, e-beam or gamma radiation
Parting line-free hose barb	Eliminates potential leak path
Meet ADCF requirements	BSE-, TSE-free materials



CLS-91404-039

CPC MPC Coupling Body with 1/8" Hose Barb, Non-Valved, In-Line, Non-Sterile

Part No.	CPC Part No.	Material	Qty.	Price
CLS-91402-003	MPC17002T03	Polycarbonate	50	\$263.10 *
CLS-91402-039	MPC17002T39	Polysulfone	50	\$406.30 *

CPC MPC Coupling Body with 1/4" Hose Barb, Non-Valved, In-Line, Non-Sterile

Part No.	CPC Part No.	Material	Qty.	Price
CLS-91404-003	MPC17004T03	Polycarbonate	50	\$192.10 *
CLS-91404-039	MPC17004T39	Polysulfone	50	\$307.60 *



CLS-91406-003

CPC MPC Coupling Body with 3/8" Hose Barb, Non-Valved, In-Line, Non-Sterile

Part No.	CPC Part No.	Material	Qty.	Price
CLS-91406-003	MPC17006T03	Polycarbonate	50	\$194.00 *
CLS-91406-039	MPC17006T39	Polysulfone	50	\$305.65 *

MPC Series Couplings add ease of use and security to your most critical fluid handling applications. Choose from a full line of connectors and configurations, including pressure sealing caps and plugs, in sizes to fit 1/8", 1/4" and 3/8" tubing. MPC couplings offer optional locking sleeves to further guard against accidental disconnects. In addition, coupling halves can be rotated when connected to reduce tube kinks.

CPC Back-to-Back Body Adapter, Non-Sterile

Ergonomic thumb latch	Easy to operate – even with gloved hands
USP Class VI materials	Meet biocompatibility requirements
Supplied Non-Sterile	Sterilizable by autoclave, EtO, e-beam or gamma radiation
Parting line-free hose barb	Eliminates potential leak path
Meet ADCF requirements	BSE-, TSE-free materials

CPC Back-to-Back Body Adapter, MPC x MPC, Non-Sterile

Part No.	CPC Part No.	Material	Qty.	Price
CLS-91407-003	MPC17C1703	Polycarbonate	25	\$206.25 *
CLS-91407-039	MPC17C1739	Polysulfone	25	\$302.75 *

CPC Back-to-Back Body Adapter, MPC x MPX, Non-Sterile

Part No.	CPC Part No.	Material	Qty.	Price
CLS-91408-003	MPC17X1703	Polycarbonate	25	\$331.10 *
CLS-91408-039	MPC17X1739	Polysulfone	25	\$468.20 *

CPC MPC Coupling Insert with Hose Barb, Non-Valved, Class VI Polycarbonate, Non-Sterile

Ergonomic thumb latch	Easy to operate – even with gloved hands
USP Class VI materials	Meet biocompatibility requirements
Supplied Non-Sterile	Sterilizable by autoclave, EtO, e-beam or gamma radiation
Parting line-free hose barb	Eliminates potential leak path
BSE-, TSE-free materials	Meet ADCF requirements
Reusable, yet economical enough to allow disposability.	

CPC MPC Coupling Insert with Hose Barb, Non-Valved, Class VI Polycarbonate, Non-Sterile

Part No.	CPC Part No.	Material	Qty.	Price
CLS-91409-003	MPC22002T03	Polycarbonate	50	\$175.20 *

MPC Series Couplings add ease of use and security to your most critical fluid handling applications. Choose from a full line of connectors and configurations, including pressure sealing caps and plugs, in sizes to fit 1/8", 1/4" and 3/8" tubing. MPC couplings offer optional locking sleeves to further guard against accidental disconnects. In addition, coupling halves can be rotated when connected to reduce tube kinks.



CLS-91407-003



CLS-91408-003



CLS-91409-003



CLS-91410-003



CLS-91411-003



CLS-91412-003



CLS-91412-03M



CLS-91412-39M

CPC MPC Coupling Inserts with Hose Barbs, Non-Valved, In-Line, Non-Sterile

Ergonomic thumb latch	Easy to operate – even with gloved hands
USP Class VI materials	Meet biocompatibility requirements
Supplied Non-Sterile	Sterilizable by autoclave, EtO, e-beam or gamma radiation
Parting line-free hose barb	Eliminates potential leak path
Meet ADCF requirements	BSE-, TSE-free materials
Reusable, yet economical enough to allow disposability.	

CPC MPC Coupling Insert with 1/8" Hose Barb, Non-Valved, In-Line, Non-Sterile

Part No.	CPC Part No.	Material	Qty.	Price
CLS-91410-003	MPC22002T03M	Polycarbonate	50	\$261.15 *
CLS-91410-039	MPC22002T39M	Polysulfone	50	\$399.90 *

CPC MPC Coupling Insert with 1/4" Hose Barb, Non-Valved, Non-Sterile

Part No.	CPC Part No.	Material	O-Ring Seal	Qty.	Price
CLS-91316-004	MPC22004T03M	Polycarbonate	Silicone, platinum-cured	50	\$103.15 *
CLS-91411-003	MPC22004T03	Polycarbonate	Buna-N USP Class V	50	\$121.00 *
CLS-91411-39M	MPC22004T39M	Polysulfone	Silicone USP Class VI	50	\$301.70 *

CPC MPC Coupling Insert with 3/8" Hose Barb, Non-Valved, Non-Sterile

Part No.	CPC Part No.	Material	O-Ring Seal	Qty.	Price
CLS-91412-003	MPC22006T03	Polycarbonate	Buna-N USP Class V	50	\$142.15 *
CLS-91412-03M	MPC22006T03M	Polycarbonate	Silicone, platinum-cured USP Class VI, ADCF	50	\$192.10 *
CLS-91412-39M	MPC22006T39M	Polysulfone	Silicone, platinum-cured USP Class VI, ADCF	50	\$301.65 *

CPC ASEPTIQUIK® S Series Connectors, Non-Sterile

Genderless design	Eases integration of single-use systems with one part number for both halves
Robust construction	Repeatable and reliable performance with no additional hardware required
FLIP-CLICK-PULL	Innovative three-step connection process reduces risk of operator error
Integrated pull tab	Connectors have an integrated pull tab that acts as a protective cover reducing part complexity and ensures simultaneous removal of both membranes
CPC "Click"	Audible confirmation of assembly

Specifications

Material	Polycarbonate, USP Class VI, ADCF
Material Finish	Molded White
Pressure Range	Up to 60 psi, 4.1 bar
Color	White with blue tab covers
Mounting Option	Free Floating
Supplied Non-Sterile	Autoclave and Gamma Radiation Compatible
Temperature Range	39 - 104°F (4 - 40°C)
Seal Options	Silicone, Platinum-cured, USP Class VI, ADCF
Valve Option	Non-Valved



ASEPTIQUIK® S Series Genderless Connectors

CPC ASEPTIQUIK® S Series Genderless Connectors, Non-Sterile (Gamma Radiation Only)

Part No.	CPC Part No.	Hose Barb (in.)	Pack Qty.	Price
CLS-91309-002	AQS17002	1/8	5	\$246.75 *
CLS-91309-004	AQS17004	1/4	5	\$245.25 *
CLS-91311-012	AQS33012	3/4 sanitary	5	\$256.35 *



ASEPTIQUIK® S Series High Temperature Genderless Connectors

CPC ASEPTIQUIK® S Series High Temperature Genderless Connectors, Non-Sterile (Autoclave and Gamma Radiation Compatible)

Part No.	CPC Part No.	Hose Barb (in.)	Pack Qty.	Price
CLS-91309-002HT	AQS17002HT	1/8	5	\$312.05 *
CLS-91309-004HT	AQS17004HT	1/4	5	\$312.05 *
CLS-91311-012HT	AQS33012HT	3/4 sanitary	5	\$329.20 *

*Life Sciences Equipment Product Line

MPC to MPC Back-to-Back Insert Adapter

Part No.	CPC Part No.	Qty.	Price
CLS-91413-03C	MPC22C2239M	25	\$303.90 *



CLS-91413-03C

CPC ASEPTIQUIK® G Series Connectors, Non-Sterile

Genderless design	Eases integration of single-use systems with one part number for both halves
Robust construction	Repeatable and reliable performance with no additional hardware required
FLIP-CLICK-PULL	Innovative three-step connection process reduces risk of operator error
Integrated pull tab	Connectors have an integrated pull tab that acts as a protective cover reducing part complexity and ensures simultaneous removal of both membranes
CPC "Click"	Audible confirmation of assembly

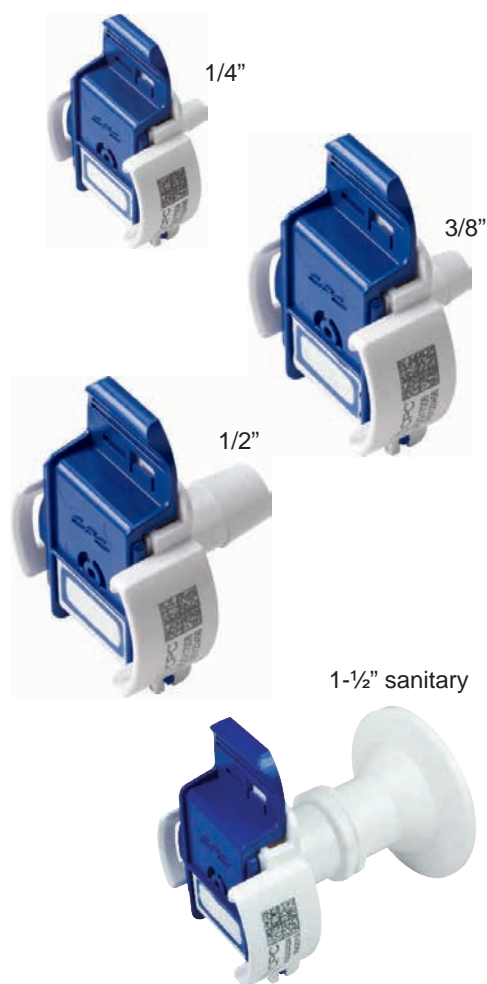
Specifications

Material	Polycarbonate, USP Class VI, ADCF
Material Finish	Molded White
Pressure Range	Up to 60 psi, 4.1 bar for 30 days; Up to 75 psi, 5.1 bar for 48 hours
Color	White with blue pull tab
Mounting Option	Free Floating
Supplied Non-Sterile	Gamma Radiation Compatible
Temperature Range	34 - 104°F (1 - 40°C)
Seal Options	Silicone, Platinum-cured, USP Class VI, ADCF
Valve Option	Non-Valved

CPC ASEPTIQUIK® G Series Genderless Connectors, Non-Sterile (Gamma Radiation Only)

Part No.	CPC Part No.	Hose Barb (in.)	Pack Qty.	Price
CLS-91305-004	AQG17004	1/4	5	\$299.30 *
CLS-91305-006	AQG17006	3/8	5	\$298.45 *
CLS-91305-008	AQG17008	1/2	5	\$299.30 *
CLS-91305-012	AQG17012	3/4	5	\$310.85 *
CLS-91307-012	AQG33012	3/4 sanitary	5	\$337.35 *
CLS-91307-024	AQG33024	1-1/2 sanitary	5	\$377.40 *

*Life Sciences Equipment Product Line



ASEPTIQUIK® G Series Connectors

Flip, Click and Pull Assembly Procedure

FLIP

Unsnap and flip down the protective pull tab covers on each connector half.



CLICK

Align connector halves with pull tabs hanging down. Slide halves together. Independently squeeze each side of connector until you hear an audible "click."



PULL

To complete the connection, simply snap the pull tabs together by pushing on the CPC logos and pull the membranes from the connector.



ASEPTIQUIK® X Large Format 1" Connectors, Non-Sterile

TWIST-PULL-TWIST	Design Intuitive three-step connection process reduces risk of operator error
Membrane pull tabs	Ensure simultaneous and secure removal of both membranes
Robust construction	Repeatable and reliable performance with no additional hardware required
Integrated lock ring	Secures final connection preventing disassembly
CPC Click Audible	Confirmation of completed assembly steps

Specifications

Material	Polycarbonate, USP Class VI, ADCF
Material Finish	Molded White
Pressure Range	Up to 60 psi, 4.1 bar
Color	White with blue pull tab
Mounting Option	Free Floating
Supplied Non-Sterile	Gamma Radiation Compatible
Temperature Range	39 - 104°F (4 - 40°C)
Seal Options	Silicone, Platinum-cured, USP Class VI, ADCF
Valve Option	Non-Valved



ASEPTIQUIK® X Large Format
Connector Body
CLS-91313-012

AseptiQuik® X Large Format 1" Connectors, Non-Sterile (Gamma Radiation Only)

Part No.	CPC Part No.	Desc.	Hose Barb (in.)	Pack Qty.	Price
CLS-91313-012	AQX17012	body	3/4	1	\$161.15 *
CLS-91314-012	AQX22012	insert	3/4	1	\$241.80 *



ASEPTIQUIK® X Large Format
Connector Insert
CLS-91314-012

Non-Valved Coupling Insert, Non-Sterile

Specifications

Material	Polycarbonate, USP Class VI, ADCF
Material Finish	Natural
Pressure Range	Up to 60 psi, 4.1 bar
Color	Purple Tint
Mounting Option	Free Floating
Supplied Non-Sterile	Autoclave and Gamma Radiation Compatible
Temperature Range	-40 - 250°F (-40 - 121°C)
Seal Options	Silicone, Platinum-cured, USP Class VI, ADCF
Valve Option	Non-Valved



CLS-91316-004

Non-Valved Coupling Insert, Non-Sterile (Autoclave and Gamma Radiation Compatible)

Part No.	CPC Part No.	Hose Barb (in.)	Pack Qty.	Price
CLS-91316-004	MPC22004T03M	1/4	50	\$103.15 *



ASEPTIQUIK® C Series
Connector Body
CLS-91300-series



ASEPTIQUIK® C Series
Connector Insert
CLS-91303-series

CPC ASEPTIQUIK® C Series Connectors, Non-Sterile

CLICK-PULL-TWIST	Intuitive three-step connection process reduces risk of operator error
Membrane pull tabs	Ensure simultaneous and secure removal of both membranes
Robust construction	Repeatable and reliable performance with no additional hardware required
Integrated lock ring	Secures final connection preventing disassembly
CPC "Click"	Audible confirmation of completed assembly steps

Specifications

Material	Polycarbonate, USP Class VI, ADCF
Material Finish	Molded White
Pressure Range	Up to 60 psi, 4.1 bar
Color	White with blue pull tab
Mounting Option	Free Floating
Supplied Non-Sterile	Gamma Radiation Compatible
Temperature Range	39 - 104°F (4 - 40°C)
Seal Options	Silicone, Platinum-cured, USP Class VI, ADCF
Valve Option	Non-Valved

CPC ASEPTIQUIK® C Series Connectors, Non-Sterile (Gamma Radiation Only)

Part No.	CPC Part No.	Desc.	Hose Barb (in.)	Pack Qty.	Price
CLS-91300-006	AQC17006	body	3/8	5	\$411.65 *
CLS-91300-008	AQC17008	body	1/2	5	\$411.85 *
CLS-91303-006	AQC22006	insert	3/8	5	\$431.50 *
CLS-91303-008	AQC22008	insert	1/2	5	\$431.15 *

Click, Pull and Twist Assembly Procedure

CLICK

Align male and female couplings; push until "click" is heard. Slight rotation of lock ring may be required for proper alignment prior to connection.



PULL

Snap membrane pull tabs together and pull from connector.



TWIST

Twist the blue lock ring clockwise until "click" and rib to arrow alignment confirms secure final connection.



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