

Polycarbonate and Acrylic Stirred Cells

- **Tangential flow design:** increases membrane life and sample throughput.
- **PTFE stir bar:** mounted to stay clear of the membrane.
- **Non-metal wetted parts.**
- **Clear plastic reservoir:** allows for fluid level and sample condition to be visually monitored.
- **Removable top cap:** (25 mm, 43 mm, and 62 mm units) and sample port (76 mm, 90 mm, 150 mm units) allow sample to be added during filtration.
- **Pressure relief valve:** supplied.
- **Full Specifications:** See Table 1



Applications

- Desalting and concentrating proteins, enzymes, virus, and other biologically important samples.
- Diafiltration or Buffer Exchange.
- Nanodispersion Studies.
- Filtering fluids that contain a heavy particle burden, e.g. bacteria, silts.

Operation, and Maintenance Cleaning

- **Pre Assembly**

1. All component parts should be washed with a neutralized detergent followed by a rinse with distilled or deionized water. Avoid alkaline cleaning solutions like Alconox. Air-dry all components.

- **Assembly**

1. Assemble units using figures 1 and 2 (**Page 4**) as a guide.
2. Place filter, shiny (active) side up, on the porous filter support base.
3. Install red silicone O-ring over filter.
4. Place clear cell barrel over O-ring.
5. For 25, 43 and 62 mm cells, lock cell to cell base with fastening ring. Hand-tighten only. For 76, 90 and 150 mm cells, place top cap on cell barrel. Be sure red silicone O-ring is in place in the inlet cap. Align tie rods with top cap. Washers should be on the top cap. Hand-tighten bolts one-quarter turn each, working around the diameter of the holder until sealed.

- **Initial operation**

1. Fill cell with sample to be filtered through inlet port. With 25, 43 and 62 mm cells, sample may be poured directly into the cell before screwing inlet cap onto cell.
2. Connect pressure tubing to pressure supply. **Caution: Do not exceed 73 psi (5.5 Bar)**
3. Mount holder on a magnetic stirring plate. Adjust stirrer speed.
4. Apply pressure slowly. Vent relief valve on inlet cap is preset to 71 psi (5 Bar).

- **Continuous operation**

1. To add additional solution:
 - a. Shut off pressure source.
 - b. Lift handle on vent relief valve slowly.
 - c. Open cap and add solution (25, 43 and 62 mm cells).
 - d. Close cap.
 - e. Close vent relief valve.
 - f. Apply pressure slowly.

Stirred Cell Specifications

Table 1

Model Size	25 mm cell	43 mm cell	62 mm cell	76 mm cell	90 mm cell	150 mm cell
Catalog No.	341000	341000	341200	341300	341400	341500
Capacity (Volume)	10 ml	70 ml	200 ml	450 ml	600 ml	2000 ml
Min. recoverable upstream	0.5 ml	2.5 ml	4.5 ml	10 ml	15 ml	60 ml
Downstream holdup	1.3 ml	4.6 ml	9.1 ml	13 ml	20 ml	41 ml
Membrane filter size	25 mm	43 mm	62 mm	76 mm	90 mm	150 mm
Filtration area:	3.5 cm ²	11.5 cm ²	27.0 cm ²	38.5 cm ²	54.5 cm ²	162 cm ²
Materials:						
End caps and stir rod	Polyacetal					
Cell barrel	Polycarbonate				Acrylic	
O-rings	Silicone					
Support screen	Polypropylene					
Stir bar	PTFE					
Pressurizing Fitting	M10					
Vent Relief Valve Fitting	10 mm screw, female					
Maximum Pressure	73 psi (5.5 Bar)					
Vent Relief Valve Setting	63 ± 6 psi					
Max Operating Temperature	40°C					
Diameter	60 mm	68 mm	82 mm	117 mm	135 mm	198 mm
Height	138 mm	161 mm	190 mm	211 mm	230 mm	169 mm
Weight:	0.05 kg	0.18 kg	0.35 kg	0.46 kg	1.4 kg	3.1 kg
	0.11 lb	0.40 lb	0.77 lb	1.01 lb	3.08 lb	6.82 lb

Stirred Cell Components

FIGURE 1

25mm, 43mm, 62mm Units

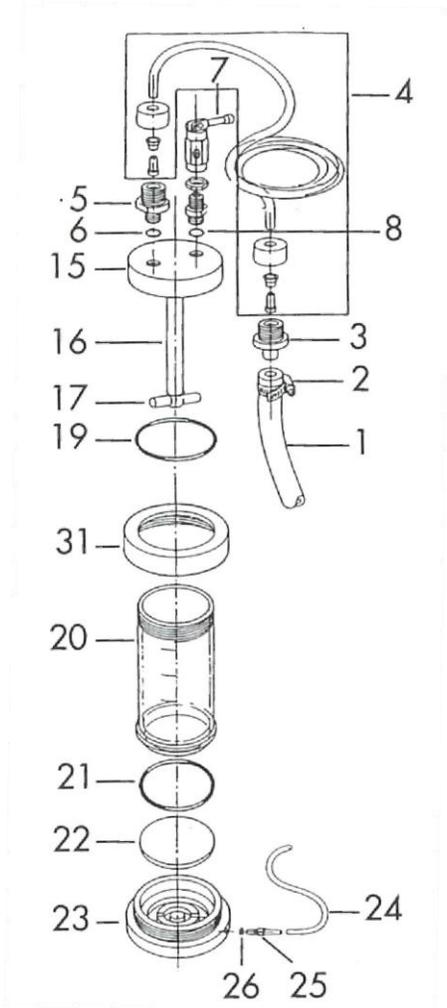
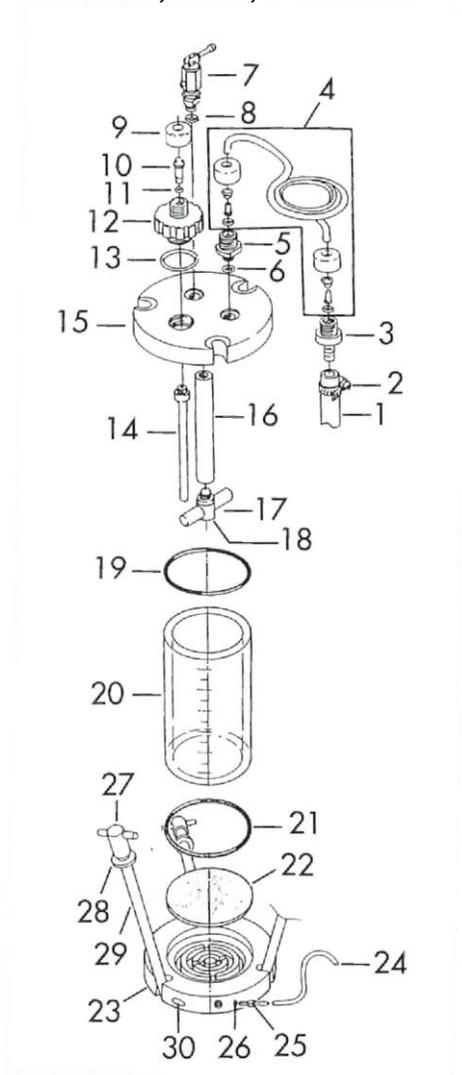


FIGURE 2

76mm, 90mm, 150mm Units



Please contact Sterlitech Corporation for pricing and availability on all replacement parts.

Table 2

- Inlet Assembly**

	All Models
1 Pressuring hose	341001
2 Hose clamp	341002
3 Male hose adapter	341003
4 Hose adapter assembly	341033
5 Inlet nipple adapter	341115
6 Intel adapter O-ring (silicone)	341013
7 Vent/relief valve (with washer)	341012
8 Vent valve O-ring (silicone)	341008

- Inlet Port Assembly (76 mm, 90mm, 150mm)**

	76 mm cell	90 mm cell	150 mm cell
9 End cap adapter		341006	
10 Intel port adapter		341438	
11 Intel cap O-ring		341436	
12 Sample port inlet cap	341335	341435	341539
13 Sample port adapter O-ring	341336	341432	341532
14 Sample port tube	141334	341434	341534

- Outlet assembly**

	25, 43, 62 mm cell	76 mm cell	90 mm cell	150 mm cell
24 Outlook tubing	341019	341319	341419	341519
25 Outlook adapter	341018	341318	341418	341518
Outlook adapter O26 ring	341016	341316	341416	341516

- **Body**

		25 mm cell	43 mm cell	62 mm cell	76 mm cell	90 mm cell	150 mm cell
15	Inlet end cap	341026	341126	341226	341326	341325	341325
16	Stir rod	341027	341127	341227	341327	341426	341526
17	Stir bar and adapter	341028	341128	341228	341328	341427	341527
18	Set bolt for stir bar	-	-	-	341331	341431	341531
19	Inlet cap O-ring (silicone)	341030	341130	341230	341322	341422	341522
21	Outlet cap O-ring (silicone)	341022	341122	341228	341322	341422	341522
20	Cell barrel	341024	341124	341224	341324	341424	341524
22	Support screen (polypropylene)	341021	341121	321221	341321	341421	341521
23	Outlet end cap	341020	341120	341220	341320	341420	341520
31	Locking ring	341025	341125	-	-	-	-

- **Clamp Assembly (76, 90, 150 mm)**

		76 mm cell	90 mm cell	150 mm cell
27	Nut for tie rod	341332	341441	341441
28	Washer for tie rod	341331	341440	341440
29	Tie rod	341330	341439	341543
30	Set pins	341342	341442	341546

Return Material Authorization

If materials are to be returned to Sterlitech for repair, evaluation, or warranty consideration, a Return Material Authorization (RMA) number and form must be obtained from Sterlitech prior to the return. Contact Sterlitech's Customer Service Department for these forms.

The form must be completed and returned with the material. Be sure to include a complete, detailed written reason for the return. Also, include serial numbers, installation and removal dates, and any other pertinent information that is available.

Indicate the proposed disposition of the material, and reference the RMA number on all packages or cartons. All material must be shipped to Sterlitech with freight prepared by the customer.

Warranty

The following is made in lieu of all other warranties expressed or implied. Sterlitech Corporation guarantees equipment to be free from defects in material and workmanship when operated in accordance with written instructions for a period of one year from receipt. Parts not manufactured by Sterlitech are covered by their manufacturer's warranties, which are normally for one year.

Manufacturers and Seller's only obligation shall be to issue credit against the purchase or replacement of equipment proved to be defective in material or workmanship. Neither manufacturer nor seller shall be liable for any injury, loss or damage, direct or indirect, special or consequential, arising out of the use of, misuse, or the inability to use such product.

The information contained herein is based on technical data and tests, which we believe to be reliable, and is intended for use by persons having technical skill at their discretion and risk. Since conditions of use are outside Sterlitech's control, we can assume no liability whatsoever for results obtained or damages incurred through the application of the data presented.

This information is not intended as a license to operate under, or a recommendation to infringe upon, any patent of Sterlitech or others covering any material or use.

The foregoing may not be altered except by a written agreement signed by officers of the manufacturer.

Technical Assistance:

STERLITECH

C o r p o r a t i o n

Please contact us if you have any questions or technical inquiries about our products by calling Sterlitech Corporation at 1-877-544-4420 or by visiting www.sterlitech.com.

General Corporate Information

Founded in 2001 in Kent, WA, Sterlitech Corporation manufactures and markets filtration-focused laboratory products to a broad spectrum of scientific and industrial sectors. Its line of flat sheet membranes and tangential flow cells deliver industry-leading performance and reliable results. Configured for reverse osmosis, nanofiltration, ultrafiltration, and microfiltration applications, Sterlitech's bench scale test equipment provides the versatility required to innovate.

Sterlitech's comprehensive line of products is supported by the expertise of its technical specialists who can assist with application-specific product selection, and provide customized solutions where necessary. Unique problem-solving approaches, flexibility, and consistent quality have made Sterlitech Corporation a renowned global provider of filtration products and equipment.

Sterlitech Corporation

22027 70th Avenue S
Kent, WA 98032-1911 USA
Tel: 877-544-4420 or 1-253-437-0844
Fax: 1-253-437-0845

info@sterlitech.com

Sales Inquiries:
sales@sterlitech.com

Accounts Payable
AP@sterlitech.com

Accounts Receivable
AR@sterlitech.com

Press Inquiries
news@sterlitech.com