

# AccuTec™

## Low-Cost TFF System for Protein Concentration and Diafiltration



Complete, ready-to-use System  
as shown. Filter purchased  
separately.

Compatible with TFF Filter Cartridges or TFF  
Hollow Fiber Devices from all manufacturers,  
e.g. Minimate®, LV Centramate®, Centramate®,  
Pellicon XL®, Pellicon 2 Mini®, Sartocoon Slice®. . .

AccuTec TFF System is  
perfect for starting  
volumes of 50 ml to 5000  
ml; has very low hold-up  
volumes.

All wetted surfaces are low-  
protein binding, chemically  
resistant materials.



Optional 50 ml reservoir vessel  
(#090-012) shown on stirrer.

### AccuTec TFF\* System Includes:

- **Compact, High-Precision Accu** peristaltic pump. Choice of three different motor sizes and multiple different tubing sizes can be used. Can add a second Tandem peristaltic head (piggy-back) to increase flow or eliminate pulsation. See **Table 2**.
- **Gentle Sample Processing** — low-shear pumping action with **Tandem** peristaltic 4-roller pump head.
- **Aseptic Reservoir Vessel** — for concentration or diafiltration. Closed system creates vacuum in reservoir to draw process solution in as solution is being drawn out of the reservoir by the pump. Graduated 500 ml vessel made of FDA approved polysulfone is compatible with disinfectant, i.e. isopropyl alcohol, sodium hydroxide. Seals do not contact your process solution. All fluid connections are 316 SS Female Luer with SS tubing lining all fluid channels; no exposed connector threads to contaminate. Optional 50 ml vessel is also available (#090-012).
- **Magnetic Stirrer** — powerful, variable speed stirrer with LED in stainless steel enclosure. Use with either 50 ml or 500 ml graduated vessel.
- **Filter Holder** — to hold/organize your Minimate or Pellicon filter cartridge and gauges.
- **Two Pressure Gauges** — to monitor your feed and retentate pressure. If you require monitoring a third pressure, this can also be added. Stainless steel with Luer connectors.
- **Fittings/Tubing Start-up Kit** — includes Male and Female Luer fittings, adapters, barbs, multiple plastic valves, stirrer magnet, tees, clamps reservoir air filters, tubing lengths.
- **Easy Clean-up and Maintenance** — sent to you ready to use. Eliminate cleaning/cross-contamination issues by using low-cost replacement components/tubing.

\* Tangential Flow Filtration (TFF) also called Cross-Flow Filtration.

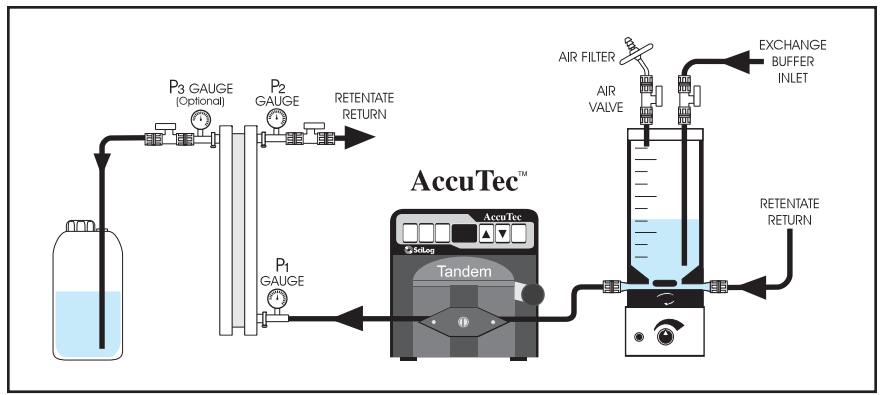
# AccuTec™

## TFF System

### Selection of AccuTec Model for your Application:

**1) Depends on the filter area and the TFF cross-flow rates** recommended by the filter manufacturer. Refer to **Table 1** for general selection information. For TFF devices not listed, refer to **Table 2** to help select the pump rate range that covers the cross-flow rate of your TFF filter or to determine optimal pump tube size.

**2) Begin with cross-flow rate recommended by the manufacturer** (typically 700 ml per sq. ft. of the filter area). Example: If the filter area is 1.0 ft<sup>2</sup>, locate the pump rate range that encompasses the cross-flow rate of the filter (in this case 700 ml/min). This would suggest the AccuTec CP-20 with a 600 RPM motor with a Tandem 1082 head. Tubing sizes of #15, #24 or #35 could be used, however the #24 tubing would be preferred since the desired pump rate falls in the mid-range of this tubing.



AccuTec TFF System for Concentration and Diafiltration



Two Tandem 1082 Peristaltic Heads piggy-backed to double flow, to maximum of 4.4 l/min.

**NOTE:** The AccuTec System can be ordered with an 8 RPM motor mounted with a Tandem 1081 head for very low, high-precision pump rates (as low as 0.03 ml/min.). Pump rates in the range of 0.10 to 20 ml/min. are sometimes used for laboratory virus filtration, etc.

AccuTec™			PUMP TUBING	TFF FILTER			
MODEL (P/N)	MOTOR (RPM)	PUMP HEAD		NAME	MFG	FILTER AREA (ft <sup>2</sup> )	CROSS-FLOW RATE (ml/min)
CP-10 (100-018TEC)	160	TANDEM 1081	#14	"Minimate"	Pall	0.05	35 - 50
				"Pellicon XL 50"	Millipore		
			#16	"LV-Centramate"	Pall	0.1 - 0.2	70 - 140
CP-20 (100-0282TEC)	600	TANDEM 1082	#24, 35	"Centramate"	Pall	1.1 - 3.3	700 - 2200
				"Pellicon 2 Mini"	Millipore		
				"Sartocon Slice"	Sartorius	1.1	

Table 1

TUBING SIZE	13	14	16	25	17	18	15	24	35
Silicone PT P/N	400-113	400-114	400-116	400-125	400-117	400-118	400-115	400-124	400-135
PharMed P/N	400-313	400-314	400-316	400-325	400-317	400-318	400-315	400-324	
PUMP RATE RANGE (Nominal values, +/- 5%)	ml/min	ml/min	ml/min	ml/min	ml/min	ml/min	ml/min	ml/min	ml/min
AccuTec CP-8 8 RPM	0.03-0.45	0.1-1.6	0.4-6.4	0.9-12.6	1.1-18.3	1.7-24.3	0.5-13	0.6-20	—
AccuTec CP-10 160 RPM	0.5-10	1.7-35	6.3-129	12.5-283	18.5-405	24.7-554	9.6-240	14-412	—
AccuTec CP-20 600 RPM	2-34	8.6-132	29-533	49-974	70-1048	103-1515	59-993	85-1348	111-2258
Pump Head Model	TANDEM 1081						TANDEM 1082		

Table 2

Visit our web site at: [www.scilog.com](http://www.scilog.com)



8845 S. Greenview Dr. #4  
Middleton, Wisconsin 53562

For more information or technical assistance...

(800) 955-1993

(608) 824-0500

Fax: (608) 824-0509

email: [scilog@scilog.com](mailto:scilog@scilog.com)

Products shown or listed are registered Trademarks of the following:

Minimate, LV Centramate: Pall, Corp.;  
Pellicon XL, Pellicon 2: Millipore, Inc.;  
Sartocon Slice: Sartorius AG;  
AccuTec, Accu, Tandem: Scilog, Inc.