

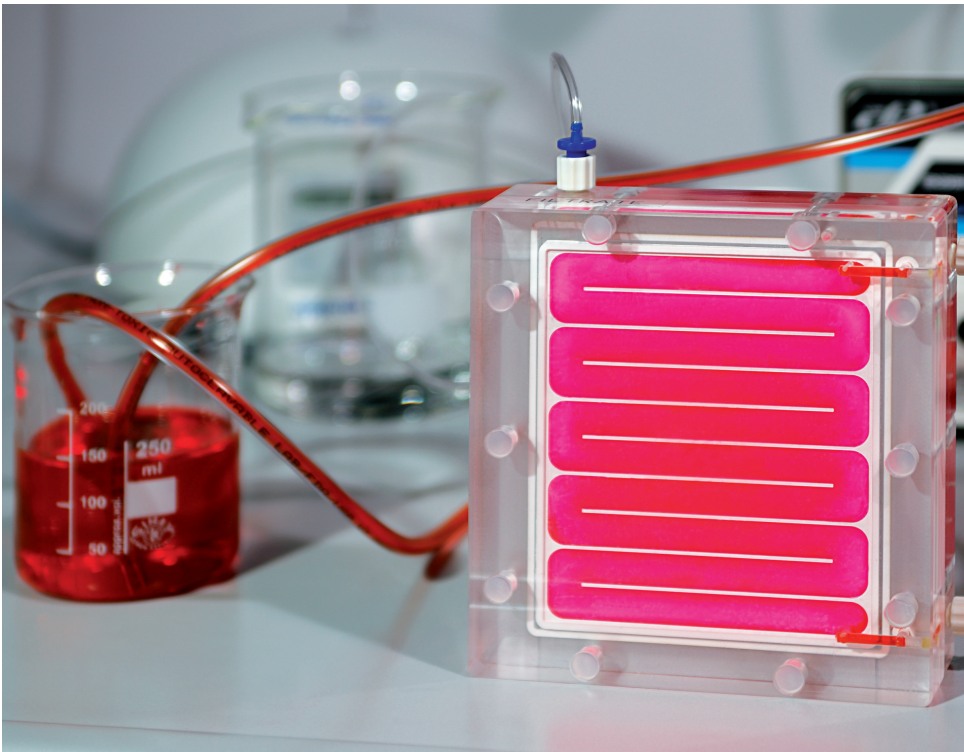


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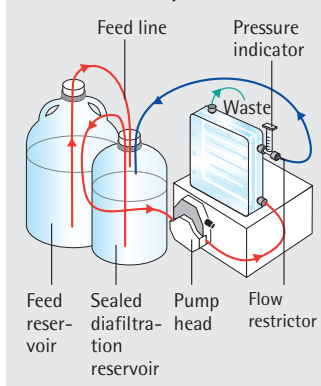
Vivaflow 200

Protein Concentrators

Protein Concentration



Vivaflow 200 set-up for diafiltration



0.5 to 5 litres

Vivaflow 200 is a system featuring ready-to-use ultrafiltration modules for cross-flow filtration of samples up to 5 L. This novel system (patents pending) offers a standard of ease of use, performance, flexibility and economy which is unrivalled by any laboratory or pilot scale filtration system in the market.

Near total sample recoveries can be expected with most solutions.

The economical standard package comes complete with tubing, pressure indicator, flow restrictor and high pressure pump tubing. All you need is a peristaltic pump capable of handling 6.4 mm OD (size 16) tubing. Should your pump head require larger tubing, link your own peristaltic tube up to the standard product, using the interconnector provided.

Two modules in parallel will concentrate 5 litres in under 75 minutes.

Unique features

- Thin channel flip-flow recirculation path provides high cross flow velocities with minimum pump requirements.
- No need for pressure holders.
- Crystal clear for simple control of remaining hold up and membrane status.
- Unique Interlocking modules with series connectors for easy scale up.
- Reusable

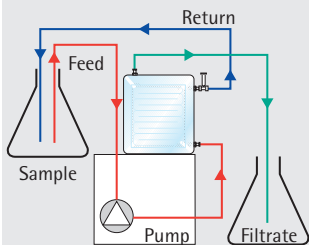
Unique performance

- A single 200 cm² module will typically reduce 1 L by a factor of 50 in less than 30 minutes
- 200 cm² membrane surface
- High flow rate and recovery
- Near total recoveries achievable with a single rinse

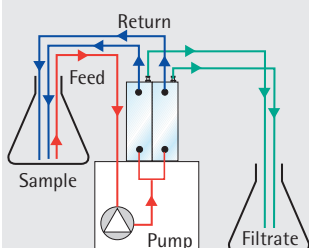
Technical specifications Vivaflow 200

Dimensions	Overall L H W	126 138 38 mm
	Channel W H	10 mm 0.4 mm
	Active membrane area	200 cm ²
	Hold up volume (module)	5.3 ml
	Min. recirculation volume	< 20 ml
	Non recoverable hold-up	< 2 ml
	Materials of construction	Main housing
Flow channel		Acrylic
Membrane support		Polypropylene
Seals and O rings		Silicone
Pressure indicator		Polypropylene, SS spring
Flow restrictor		Polypropylene
Fittings Tubing		Nylon PVC (medical grade)
Operating conditions	Pump flow	200-400 ml/min
	Maximum pressure	4 bar (60 psi)
	Maximum temperature	60°C

Operation – Single Module



Operation – Two Modules



Performance characteristics

Time to concentrate up to 20x [min.] at 3 bar inlet pressure, 20°C

	1 litre start volume	Average flux ml/min	Recovery % direct	25 ml rinse
Lysozyme 0.25 mg/ml (14,000 MW)				
2,000 MWCO Hydrosart	160	6	97%	> 99%
3,000 MWCO PES	180	5	97%	> 99%
BSA 1.0 mg/ml (66,000 MW)				
5,000 MWCO PES	29	33	98%	> 99%
5,000 MWCO Hydrosart	70	14	98%	> 99%
10,000 MWCO PES	23	41	96%	> 99%
10,000 MWCO RC	42	23	97%	> 99%
10,000 MWCO Hydrosart	35	27	98%	> 99%
30,000 MWCO PES	25	38	96%	99%
30,000 MWCO Hydrosart	20	48	96%	> 99%
50,000 MWCO PES	22	43	96%	98%
γ Globulins 1.0 mg/ml (average 160,000 MW)				
100,000 MWCO PES	54	18	96%	99%
100,000 MWCO RC	45	21	96%	99%
Yeast 1.0 mg/ml (<i>S. Cerevisiae</i>)				
0.2 µm PES	11	86	92%	98%
Dilute solute concentration, start volume 1 litre at 3 bar, 10,000 MWCO PES				
BSA 0.001 mg/ml	18	52	90%	98%
BSA 0.01 mg/ml	20	47	92%	98%
BSA 0.1 mg/ml	21	45	94%	99%
Start volume 5 litres (two VF200 in parallel at 3 bar) 10,000 MWCO PES				
BSA 1.0 mg/ml (66,000 MW)	67	70	97%	> 99%

Ordering information

Vivaflow 200 modules include pressure indicator, flow restrictor and size 16 pvc peristaltic tubing and fittings	Pack size	Sartorius Stedim Order No.	Fisher Scientific Order No.
3,000 MWCO PES	1	VF20P9	–
5,000 MWCO PES	1	VF20P1	14-558-319
10,000 MWCO PES	1	VF20P0	14-558-318
30,000 MWCO PES	1	VF20P2	14-558-320
50,000 MWCO PES	1	VF20P3	14-558-321
100,000 MWCO PES	1	VF20P4	14-558-322
0.2 µm PES	1	VF20P7	14-558-323
10,000 MWCO RC	1	VF20C0	14-558-313
100,000 MWCO RC	1	VF20C4	14-558-314
5,000 MWCO Hydrosart	1	VF20H1	14-558-316
10,000 MWCO Hydrosart	1	VF20H0	14-558-315
30,000 MWCO Hydrosart	1	VF20H2	14-558-317

Vivaflow 200 complete system comprises	Pack size	Sartorius Stedim Order No.	Fisher Scientific Order No.
Pump (115 V), Easy load pump head (size 16), tubing, 500 ml sample diafiltration reservoir	1	VFS204	14-558-340

Vivaflow 200 accessories

Masterflex economy drive variable speed peristaltic pump (115 V)		VFP002	14-558-339
500 ml sample and or diafiltration reservoir		VFA006	14-558-327
Masterflex easy load pump head – size 16		VFA012	14-558-329
Masterflex easy load pump head – size 15		VFA013	14-558-330

Vivaflow 200 tubing and fittings

Size 15 pvc pump tubing and Luer fittings (3 m, 4.8 × 2.6 mm)		VFA003	14-558-324
Size 16 pvc pump tubing and Luer fittings (3 m, 3.2 × 1.6 mm)		VFA004	14-558-325
Y connector (size 15 to 2 × size 16)		VFA005	14-558-326
Flow restrictor set (2 × 0.4, 0.6, 0.8 mm)		VFA009	14-558-328
Female luer fittings size 16 (10 pieces)		VFA032	14-558-335
Flow restrictors 0.6 mm (6 pieces)		VFA035	14-558-337
Female luer fittings size 15 (10 pieces)		VFA036	14-558-338



For customer service, call 1-800-766-7000.
To fax an order, use 1-800-926-1166.
To order online: www.fishersci.com