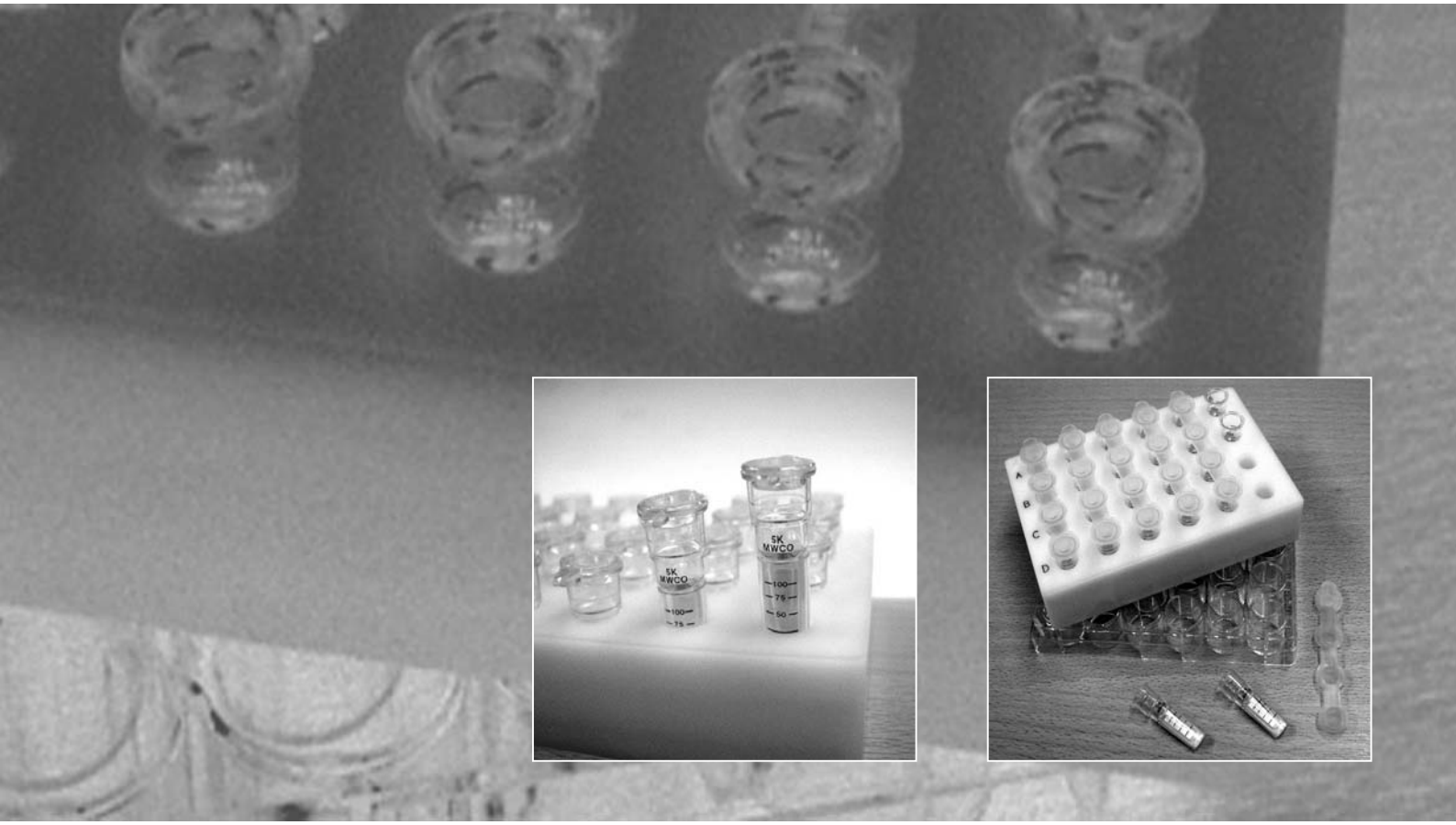
VIVASCIENCE
sartorius group



24-Well Ultrafiltration Frame

For use with Vivaspin 500 µl centrifugal concentrators.

Technical data and operating instructions.
For *in vitro* use only.

Operation

The 24-well ultrafiltration frame is designed for use with Vivaspin 500 or Vivaspin 500-HT centrifugal concentrators. This allows 2-48 samples to be processed in parallel using a multiwell plate rotor accepting 2 stacked deep multiwell plates per bucket, and capable of spinning at up to 1,500 xg.

Key features:

- Deadstop eliminates the possibility of concentration to dryness
- Vertical membrane allows fast concentration
- Multiple MWCO in the same run
- Scaleable to Vivaspin product range for larger volumes
- Robotic operation possible

Technical Assistance:

For more information, please contact the Vivascience Support Centre.

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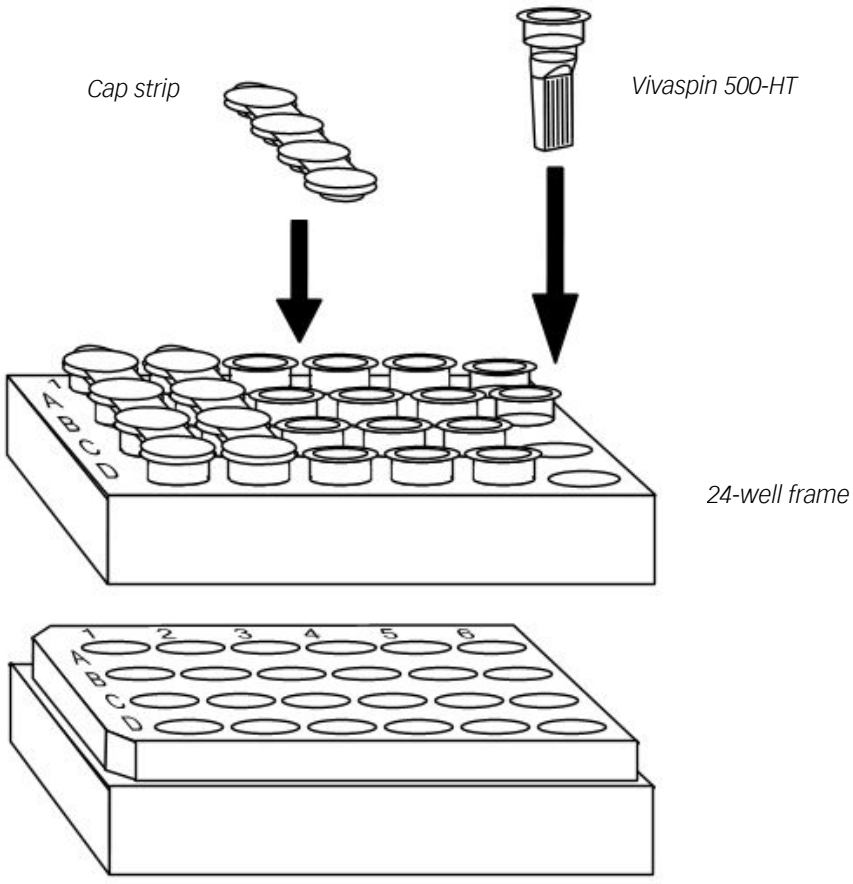
Operation:

3. Load Vivaspin concentrators into the frame, making sure the filters fit through the cut outs in the frame wells. Take care to balance the frame correctly.
4. Fill the concentrators with up to 500 µl of sample solution and seal with cap strips or individual device caps.
5. Place the loaded frames on top of the 24-well collection plates.
1. Centrifuge at up to a maximum of 1,500 xg with 24-well filtrate collection plate, until the desired concentration factor has been achieved (see table 2 for guidelines on centrifugation times).
2. Remove frames from rotor and recover concentrate by pipette. Maximum recovery of concentrate can be achieved by pipetting up and down 3-5 times before final recovery (take care not to cause foaming in the sample as this will reduce recovery).



24-well filtrate collection plate
Prod No. (VW24PS0212)

Usage tips:

For maximum recovery of concentrate, select a MWCO at least 50% smaller than your species of interest.

Desalting / buffer exchange can be performed by sequentially concentrating the sample, then reconstituting in fresh buffer.

Membranes fitted to Vivaspin concentrators contain trace amounts of glycerol and sodium azide. These can be removed by centrifuging through fill volume of deionised water or sample buffer.

Cleaning:

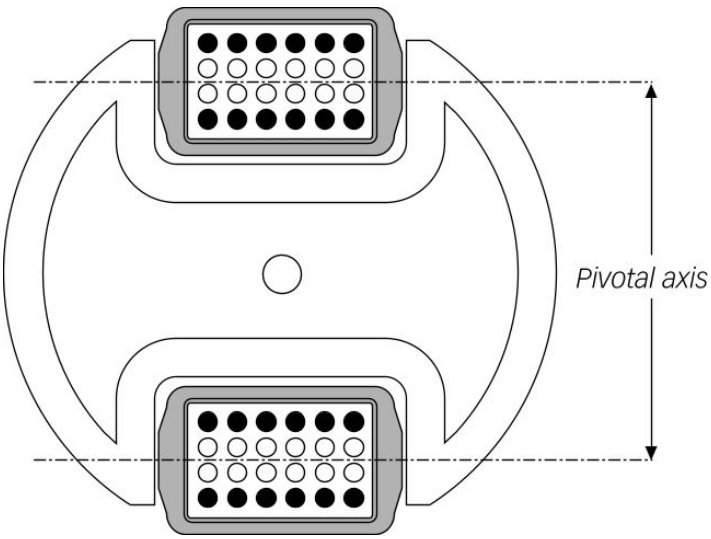
24 well frames should not be autoclaved. They should be cleaned with mild detergent, preferably in an ultrasonic bath or Laboratory glass wash.

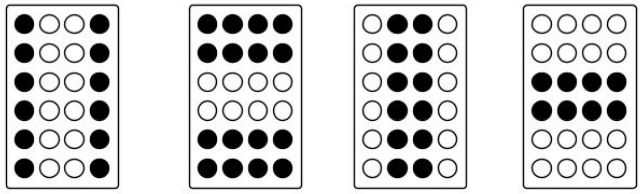
Symmetrical and balanced loading:

- Buckets must be loaded symmetrically with respect to their pivotal axis.
- The rotor should be loaded symmetrically with respect to its centre of rotation.

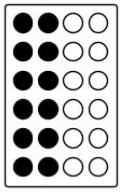
Table 1: Technical specifications	
Centrifuge requirements	
Swing out multiwell plate rotor accepting stacked deep well plates	
Max RCF with filtrate collection plates	1,500 xg
Dimensions	
Frame dimensions (L x W x H)	128 x 85 x 25 mm
Maximum height of frame plus filtrate collection plate	49 mm
Materials of construction	
Frame	Acetal
Filtrate collection plate	Polystyrene

Table 2: Typical performance		
BSA 1.0 mg/ml	Time for 30x conc. at 1,500 xg	Recovery
3,000 MWCO	60 min	98 %
5,000 MWCO	45 min	97 %
10,000 MWCO	15 min	95 %
30,000 MWCO	15 min	93 %
IgG 0.25 mg/ml		
50,000 MWCO	20 min	92 %
100,000 MWCO	18 min	90 %
0.25 µm latex beads		
300,000 MWCO	10 min	98 %
1,000,000 MWCO	n/d	n/d
0.2 µm	n/d	n/d





Examples of symmetrically loaded frames (load opposite frames the same way)



Example of a nonsymmetrically loaded frame

Ordering information

Ordering information		
Order No.	Description	Pack size
VW24HT051	24-well Ultrafiltration Frames (includes 2 collection plates)	2
VW24PS0212	24-well filtrate collection plates	12
Vivaspin 500 High Throughput		
VS01HT01	Vivaspin 500 HT 10,000 MWCO PES (includes 120 cap strips)	480
VS01HT21	Vivaspin 500 HT 30,000 MWCO PES (includes 120 cap strips)	480
Vivaspin 500		
VS0191	3,000 MWCO PES	25
VS0192	3,000 MWCO PES	100
VS0111	5,000 MWCO PES	25
VS0112	5,000 MWCO PES	100
VS0101	10,000 MWCO PES	25
VS0102	10,000 MWCO PES	100
VS0121	30,000 MWCO PES	25
VS0122	30,000 MWCO PES	100
VS0131	50,000 MWCO PES	25
VS0132	50,000 MWCO PES	100
VS0141	100,000 MWCO PES	25
VS0142	100,000 MWCO PES	100
VS0151	300,000 MWCO PES	25
VS0151	300,000 MWCO PES	100
VS0162	1,000,000 MWCO PES	25
VS0161	1,000,000 MWCO PES	100
VS0172	0.2 µm PES	25
VS0172	0.2 µm PES	100

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