

Centrisart® Centrifuges The Ultimate Speed. Maximum Reliability.





The Right Solution for Every Application. The Centrisart® Centrifuge Family.

Thanks to this customized range of centrifuges, you can always find the right model for all common applications.

The Sartorius laboratory centrifuge portfolio ranges from very compact and space-saving micro-centrifuges to universally applicable benchtop centrifuges with a total capacity of up to 1600 ml. The top-of-the-line model is a high-speed centrifuge with speeds of up to 26,000 rpm, which is of course actively cooled accordingly.

One thing that is common to all Sartorius centrifuges is high product quality: The devices operate at the highest speeds and yet they run extremely quietly and with low vibration levels. In addition, the Centrisart® models are extremely easy-to-operate and comply with the GS safety standards. At the same time, their compact design guarantees more space on your laboratory benchtop.

Excellent

Superior temperature uniformity

Flexible

Many rotors and accessories

Smart

One knob control

Convenient

Largest displays in the market

Silent

Low-noise operation

Reliable

Accurate sample cooling at highest speed

Safe

Rotor detection and imbalance control

Clear

Process library with program preview (G-26C)



Your Centrisart®
Benefits at a

Outstanding
User-friendliness

2.

High Product Quality and Safety

Models with
Cooling Option for Precise
Temperature Control

4.

Environmentally Friendly

Extremely quiet with low vibration levels during operation

Convenient loading and unloading due to low level of centrifuges

Easy operation thanks to intuitive menu and easy-to-read display

Customized acceleration and deceleration profiles can be stored

Automatic rotor detection prevents mix-ups and the imbalance control prevents starting with samples exhibiting deviating weights

Rotor life cycle monitoring, thus no risk of rotor breakage

Electronic device cover locking

All models available with GS certificate and BIOSAFE rotors and buckets

Fast and accurate cooling of your sample thanks to active compressor cooling

Guaranteed 4 °C cooling even at maximum speed and capacity utilization

Optimal protection of the sample before heating

Low energy consumption

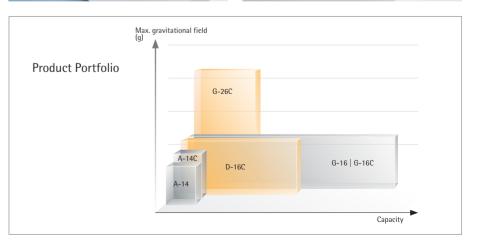
Use of recyclable materials

CFC-free coolant

Low-maintenance and brushless induction motors prevent particulate emissions







Centrisart® A-14 and A-14C

Our Centrisart® A-14 and A-14C microcentrifuges are space-saving, powerful and feature an extremely compact footprint. The A1C rotor is specially designed for our Vivaspin® 500 ultrafiltration unit, but it can also be operated with conventional 1.5 and 2 ml reaction vials. It supports applications for concentrating samples, e.g. antibody solutions, sample deionization or buffer adjustment, as well as the removal of contaminants with small or very large molecular weights.

The powerful compressor cooling of the Centrisart® A-14C ensures fast and accurate cooling of the sample and reliably protects it from heat.

Application Examples:

- Applications in molecular biology such as DNA, RNA and protein isolation
- Ultrafiltration to PCR



Technical Specifications

	Centrisart® A-14	Centrisart® A-14C
Max. speed rpm	14,800	15,000
Max. capacity	24×2 ml	24×2 ml
Max. gravitational field	16,162 g	16,602 g
Min. speed rpm	200	200
Display	LCD, 50 × 37 mm	LCD, 65 × 47 mm
Motor	Maintenance-free, brushless drive motor	Maintenance-free, brushless drive motor
Temperature range	-	-10°C to +40°C
Temperature increments	-	Adjustable in increments of 1°C
Quick cooling	-	Guaranteed 4° C at max. speed
Coolant	-	CFC-free (R134a)
Timer	10 sec. – 99 min., short run continuous run	10 sec. – 99 min., short run continuous run
Lid-lock release	Motorized locked lid, automatic lid-lock release	Motorized locked lid, automatic lid-lock release
Lid	Inspection window for independent speed measurement	Inspection window for independent speed measurement
Rotor	Fixed angle rotor	Fixed angle rotor
Programs	-	10
Acceleration curves	2	2
Deceleration curves	2	2
Dimensions (W×D×H)	212×266×176 mm	273×515×236 mm
Height with open lid	310 mm	404 mm
Weight	6 kg	19 kg
Noise level at max. speed	53 dB	53 dB

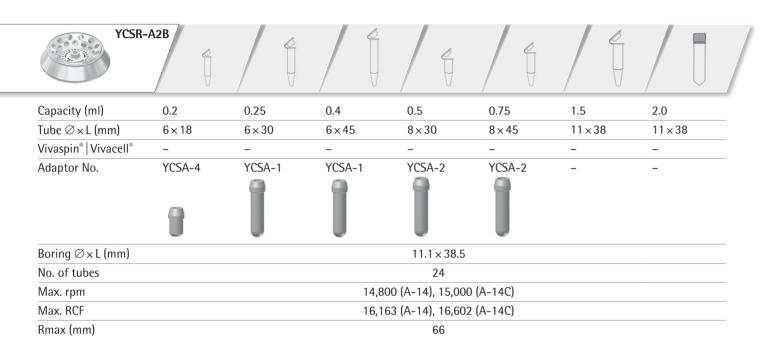
Centrifuges

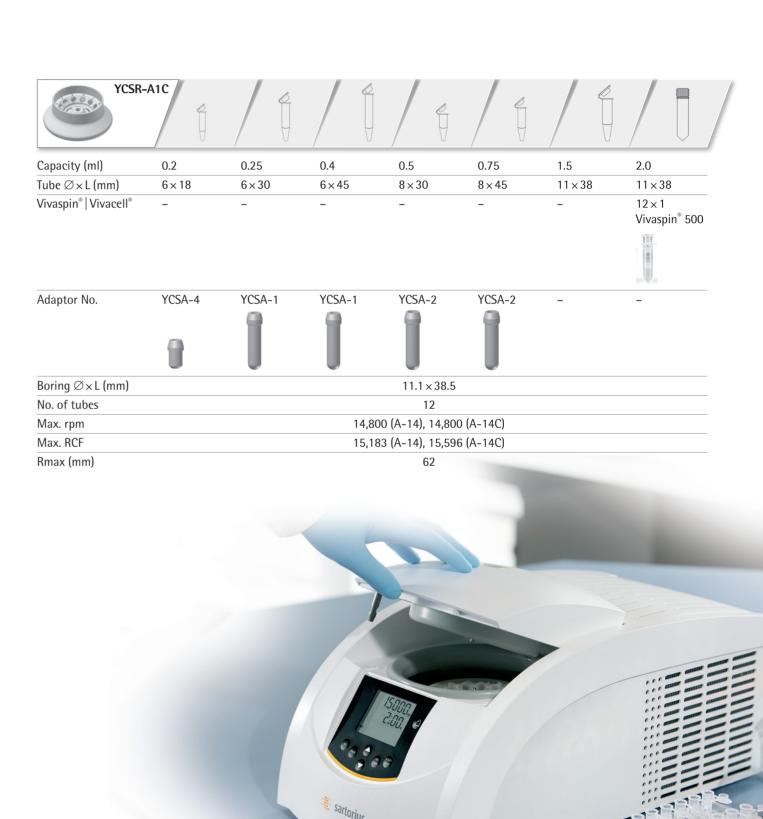
Order number	Description	
A-14-X	Centrisart [®] A-14 centrifuge	X = 1EU (for 220 - 240 V), 1US (for 100 - 120 V)
A-14C-X	Centrisart® A-14C refrigerated centrifuge	-
A-14-X-SET	Set Centrisart® A-14 centrifuge incl. rotor YCSR-A1C	-
A-14C-X-SET	Set Centrisart® A-14C refrigerated centrifuge incl. rotor YCSR-A1C	-

Accessories

Order number	Description Fixed angle rotor for 24×1.5 2.0 ml conical reaction tubes, incl. polysulfone lid YCSM-A1B (not available for A-14-1US)	
YCSR-A2B		
YCSR-A1C	Fixed angle rotor made of polypropylene for $12 \times 1.5 \mid 2.0$ ml conical reaction tubes or $12 \times \text{Vivaspin}^{\circ}$ 500, incl. polysulfone lid YCSR-A1C	
YCSA-1	dapter for 0.25 0.4 ml reaction tubes for rotors YCSR-A2B, YCSR-A4B and YCSR-A6B, 1 set = 2 pcs.	
YCSA-2	Adapter for 0.5 0.75 ml reaction tubes \emptyset 7.9 10×28 31 mm for rotors YCSR-A2B, YCSR-A4B and YCSR-A6B, 1 set = 2 pcs.	
YSCA-4	Adapter for 0.2 ml PCR reaction tubes for rotors YCSR-A2B, YCSR-A4B and YCSR-A6B, 1 set = 2 pcs.	

A-14 Rotors





Centrisart® D-16C

The Centrisart® D-16C universal benchtop centrifuge with medium capacity and cooling is very versatile in the lab. The maximum speed of 15,300 min⁻¹ also allows for applications in molecular biology.

In its low-speed range, the Centrisart® D-16C is appropriate for gentle handling of cells or sensitive samples. The gradual deceleration curves ensure gentle deceleration and keep the sample from being churned up. This gentle function can also be beneficial when microtiter plates are used.

Thanks to the use of adapters, the Centrisart® D-16C is also perfectly suited for high-throughput applications with spin kits utilizing 1.5 ml | 2 ml vessels.

Application Examples:

Low-speed applications requiring gentle handling of cells | sensitive samples
Tissue and cell processing

High-throughput DNA isolation

Ultrafiltration Microtiter plates



Technical Specifications

	Centrisart® D-16C
Max. speed rpm	15 _r 300
Max. capacity	4×100 ml
Max. gravitational field	21,460 g
Min. speed rpm	100, low speeds also possible
Temperature range	-10°C bis +40°C
Temperature increments	Adjustable in increments of 1°C
Quick cooling	Quick cool program, guaranteed 4°C at max. speed; rotor cooling even possible during downtimes
Coolant	CFC-free (R134a)
Display	LCD, 113×36 mm
Control panel	Easy, 1-knob intuitive operation plus 3 backlit keys
Motor	Maintenance-free, brushless drive motor
Lid-lock release	Motorized locked lid, automatic lid-lock release
Lid	Inspection window for independent speed measurement, easy-to-open lid port
Rotor	Rotor detection for fixed angle rotors, swinging rotors
Rotor chamber	Stainless-steel
Imbalance safety mechanism	Automated imbalance control
Timer	10 sec. – 99 min., short run continuous run
Programs	50
Acceleration curves	10
Deceleration curves	10
Rotor safety	Automatic detection, cycle counting of the rotors
Dimensions (W \times D \times H)	550×570×310 mm
Height with open lid	705 mm
Weight of Rotor	60 kg
Noise level at max. speed	< 65 dB

Centrifuges

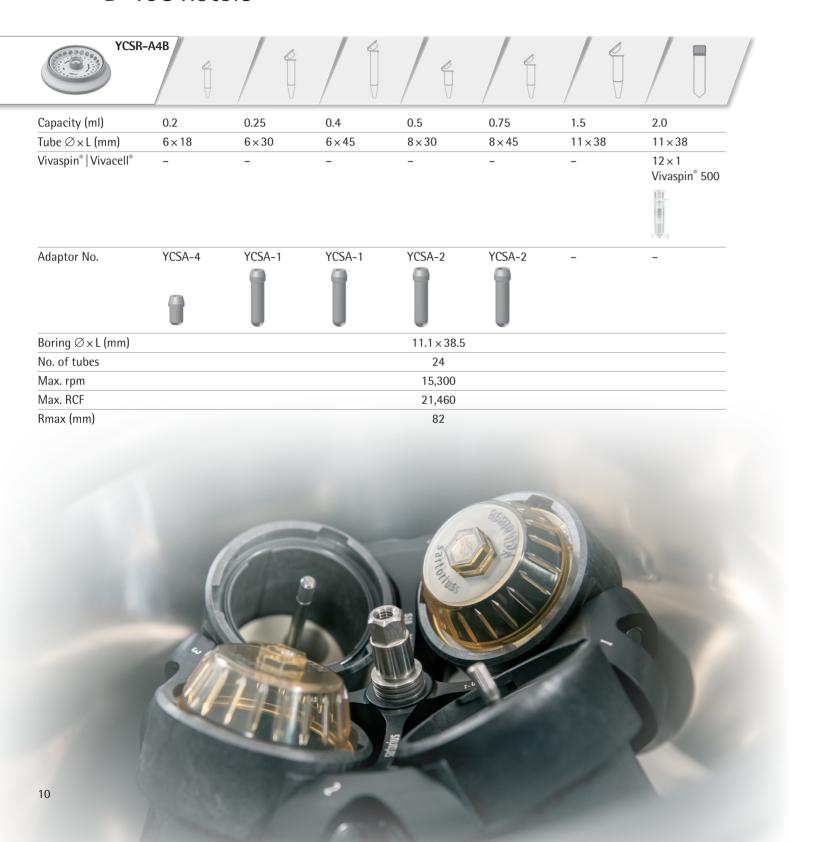
Order number	Description	
D-16C-X	Centrisart® D-16C refrigerated centrifuge	X = 1EU (for 220 – 240 V), 1US (for 100 – 120 V), 1JP (for 100 V)

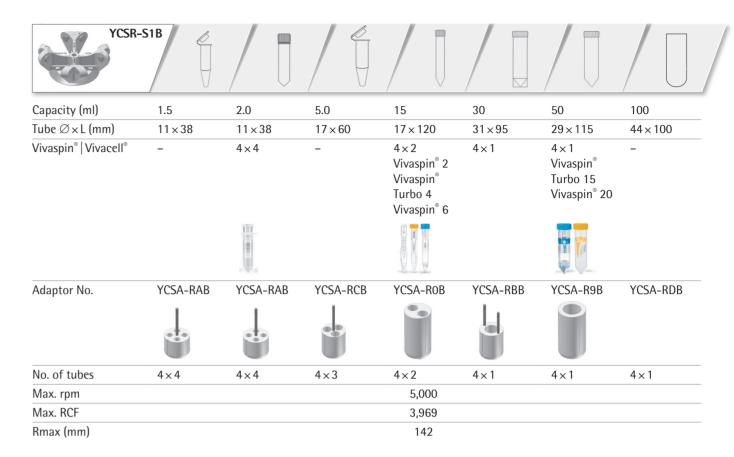
Accessories

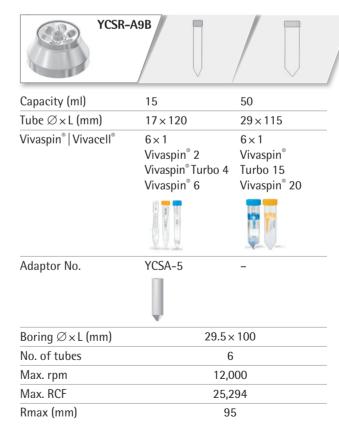
Description

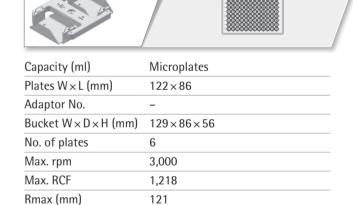
Order number	Description	
YCSR-A9B	Fixed angle rotor for 6×50 ml conical culture tubes, incl. hermetically sealing aluminium lid	
YCSA-5	Adapter for 1 conical culture tube 15 ml for rotor YCSR-A9B, 1 set = 2 pcs.	
YCSR-A4B	Fixed angle rotor for 24×1.5 2.0 ml conical reaction tubes, incl. hermetically sealing aluminium lid	
YCSA-1	Adapter for 0.25 0.4 ml reaction tubes for rotors YCSR-A2B, YCSR-A4B and YCSR-A6B, 1 set = 2 pcs.	
YCSA-2	Adapter for 0.5 0.75 ml reaction tubes \varnothing 7.9 10×28 31 mm for rotors YCSR-A2B, YCSR-A4B and YCSR-A6B, 1 set = 2 pcs.	
YCSA-4	Adapter for 0.2 ml PCR reaction tubes for rotors YCSR-A2B, YCSR-A4B and YCSR-A6B, 1 set = 2 pcs.	
YCSR-S5B	Complete set – Swing-out rotor, 2 place, for microtiter plates, including 2 buckets YCSA-S5B for microtiter plates. Max. plate height 56 mm; max. load per bucket 335 g	
YCSR-S1B	Swing-out rotor, 4 place, for bucket YCSB-B9B	
YCSB-B9B	Round bucket for adapters YCSA-ROB – YCSA-RDB, sealable with lid YCSM-B9B, 1 set = 2 pcs.	
YSCA-R9B	Adapter for YCSB-B9B for 1 conical culture tube 50 ml, 1 set = 2 pcs.	
YSCA-ROB	Adapter for YCSB-B9B for 2 conical culture tubes 15 ml, lid max. Ø 23 mm, 1 set = 2 pcs.	
YSCA-RAB	Adapter for YCSB-B9B for 4 conical reaction tubes 1.5 2.0 ml, max. \emptyset 11 mm, 1 set = 2 pcs.	
YCSA-RCB	Adapter for YCSB-B9B for 3 conical reaction tubes 5.0 ml, 1 set = 2 pcs.	
YSCA-RBB	Adapter for YCSB-B9B for 1 flat bottom culture tube 30 ml, \varnothing 25 31 × 65 - 95 mm, 1 set = 2 pcs.	
YCSA-RDB	Rubber cushion for YCSB-B9B for 100 ml glas tube, 1 set = 2 pcs.	
YSCM-B9B	Round polysulfone sealing cap for round bucket YCSB-B9B, clear, 1 set = 2 pcs.	
YCST-D16C	Table for centrifuge made of sheet-steel, varnished, with 2 doors and space for accessories, movable on lockable castors, dimensions: $W \times D \times H = 600 \times 550 \times 497$ mm	

D-16C Rotors









The Universal Class

Centrisart® G-16 and Centrisart® G-16C

These two benchtop centrifuges were specially developed for high-capacity applications. Thanks to the variety of rotor options, nearly all vessel types can be used for low to high throughput.

Their high capacity makes both centrifuges genuine all-rounders. They can be used for almost any application. Their large program memory gives you the option of storing and retrieving several programs at any time. Their gradual deceleration curves ensure gentle deceleration and keep samples from being churned up. This is particularly advantageous, for example, when using microtiter plates.

The powerful compressor cooling of the Centrisart® G-16C ensures fast and accurate cooling of samples and reliably protects them from heat.

Application Examples Centrisart® G-16:

Phase separation of solutions Milk or lipoprotein assays

PCF

Separation of nanomaterials

Application Examples Centrisart® G-16C:

Cell harvesting in cell culture or fermentation applications

Protein isolation and purification

Ultrafiltration

Molecular biology

PCR

Food technology



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Technical Specifications

	Centrisart® G-16	Centrisart® G-16C
Max. speed rpm	15,300	15,300
Max. capacity	4×400 ml	4×400 ml
Max. gravitational field	21,460 g	21,460 g
Min. speed rpm	200	100
Temperature range	-	-10°C to +40°C
Temperature increments	-	Adjustable in increments of 1°C
Quick cooling	-	Quick cool program, guaranteed 4°C at max. speed; rotor cooling even possible during downtimes
Coolant	-	CFC-free (R134a)
Display	LCD, 113×36 mm	LCD, 113×36 mm
Control panel	Easy, 1-knob intuitive operation plus 3 backlit keys	Easy, 1-knob intuitive operation plus 3 backlit keys
Motor	Maintenance-free, brushless drive motor	Maintenance-free, brushless drive motor
Lid-lock release	Electromechanical locked lid, automatic lid-lock release	Electromechanical locked lid, automatic lid-lock release
Lid	Inspection window for independent speed measurement, easy-to-open lid port	Inspection window for independent speed measurement, easy-to-open lid port
Rotor	Rotor detection for fixed angle- swinging rotors	Rotor detection for fixed angle- swinging rotors
Rotor chamber	Stainless-steel	Stainless-steel
Imbalance safety mechanism	Automated imbalance control	Automated imbalance control
Programs	50	50
Acceleration curves	10	10
Deceleration curves	10	10
Rotor safety	Automatic detection, cycle counting of the rotors	Automatic detection, cycle counting of the rotors
Dimensions (W×D×H)	460 × 600 × 355 mm	630 × 600 × 355 mm
Height with open lid	770 mm	785 mm
Weight	48kg	78kg
Noise level at max. speed	<57 dB	<57 dB

Centrifuges

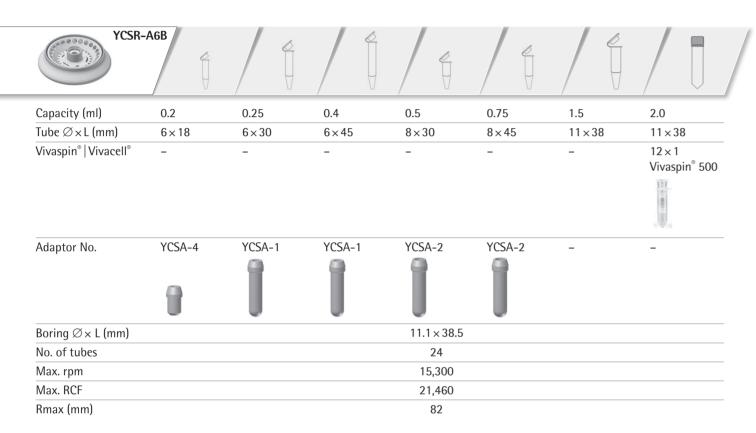
Order number	Description	
G-16-X	Centrisart® G-16 centrifuge	
G-16C-X	Centrisart® G-16C refrigerated	X = 1EU (for 220 - 240 V), 1US (for 100 - 120 V), 1JP (for 100 V)

Accessories

Order	num	ber	Description

Oruci number	Description
YCSR-A5B	Fixed angle rotor for 6 x 50 ml round bottom culture tubes (∅ 28.8 x 107 mm), incl. hermetically sealing aluminium lid
YCSR-A6B	Fixed angle rotor for 24×1.5 2.0 ml conical reaction tubes, incl. hermetically sealing aluminium lid
YCSA-1	Adapter for 0.25 0.4 ml reaction tubes for rotors YCSR-A2B, YCSR-A4B and YCSR-A6B, 1 set = 2 pcs.
YCSA-2	Adapter for 0.5 0.75 ml reaction tubes \emptyset 7.9 10 × 28 31 mm for rotors YCSR-A2B, YCSR-A4B and YCSR-A6B, 1 set = 2 pcs.
YCSA-4	Adapter for 0.2 ml PCR reaction tubes for rotors YCSR-A2B, YCSR-A4B and YCSR-A6B, 1 set = 2 pcs.
YCSR-A7B	Fixed angle rotor for 4×80 85 ml round bottom culture tubes (Ø 38×112 mm), incl. hermetically sealing aluminium lid
YCSR-A8B	Fixed angle rotor for 6 × 85 ml round bottom culture tubes (Ø 38 × 112 mm), incl. hermetically sealing aluminium lid
YCSR-A0B	Fixed angle rotor for 6 × 50 ml conical culture tubes, incl. hermetically sealing aluminium lid
YCSA-5	Adapter for 1 conical culture tube 15 ml for rotor YCSR-A9B and YCSR-A0B, 1 set = 2 pcs.
YCSR-S6B	Complete set – Swing-out rotor, 2 place, for microtiter plates, including 2 buckets YCSA-S6B for microtiter plates and lids YCSM-B1C. Max. plate height 55 mm; max. load per bucket 290 g
YCSR-S2B	Swing-out rotor, 4 place, for buckets YCSB-B8B
YCSB-B8B	Round bucket for adapters YCSA-C2B – YCSA-C8B, sealable with lid YCSM-B8B (max. tube length 110 mm), 1 set = 2 pcs.
YCSA-C2B	Adapter for YCSB-B8B for 10 conical reaction tubes 5.0 ml, 1 set = 2 pcs.
YCSA-C3B	Adapter for YCSB-B8B for 5 conical culture tubes 15 ml, lid max. \varnothing 23 mm, 1 set = 2 pcs.
YCSA-C4B	Adapter for YCSB-B8B for 3 conical culture tubes 50 ml, 1 set = 2 pcs.
YCSA-C5B	Adapter for YCSB-B8B for 1 flat bottom bottle 250 ml, max. \emptyset 61.5 \times 90 - 125 mm, 1 set = 2 pcs.
YCSA-C6B	Adapter for YCSB-B8B for 20 conical reaction tubes 1.5 2.0 ml, max. \varnothing 11 mm, 1 set = 2 pcs.
YCSA-C7B	Adapter for YCSB-B8B for 9 conical culture tubes 15 ml, lid max. Ø 23 mm, 1 set = 2 pcs. (not usable with cap YCSM-B8B)
YCSA-C8B	Adapter for YCSB-B8B for 4 conical culture tubes 50 ml, 1 set = 2 pcs. (not usable with cap YCSM-B8B)
YCSM-B8B	Round polysulfone sealing cap for round bucket YCSB-B8B, biosafe, clear, 1 set = 2 pcs.
YCST-G16C	Table for centrifuge made of sheet-steel, varnished, with 2 doors and space for accessories, movable on lockable castors $(W \times D \times H = 650 \times 647 \times 497 \text{ mm})$
YCST-G16	Table for centrifuge made of sheet-steel, varnished, with 2 doors and space for accessories, movable on lockable castors $(W \times D \times H = 490 \times 684 \times 515 \text{ mm})$

G-16 Rotors





Capacity (ml)	50
Tube $\varnothing \times L$ (mm)	28.8×107
Vivaspin® Vivacell®	_
Adaptor No.	_
Boring $\varnothing \times L$ (mm)	29×98
No. of tubes	6
Max. rpm	10,000 (G-16) 11,000 (G-16C)
Max. RCF	9,391 (G-16) 11,363 (G-16C)
Rmax (mm)	84



Capacity (ml)	85
Tube $\varnothing \times L$ (mm)	38 × 112
Vivaspin [®] Vivacell [®]	_
Adaptor No.	_
Boring $\varnothing \times L$ (mm)	38.3×99
No. of tubes	4
Max. rpm	10,000
Max. RCF	10,174
Rmax (mm)	91



Capacity (ml)	85
Tube ∅×L (mm)	38 × 112
Vivaspin [®] Vivacell [®]	_
Adaptor No.	_
Boring Ø×L (mm)	38.3×99
No. of tubes	6
Max. rpm	8,000
Max. RCF	7,012
Rmax (mm)	98



Capacity (ml)	15	50
Γube ∅×L (mm)	17×120	29×115
/ivaspin [®] Vivacell [®]	6×1 Vivaspin® 2 Vivaspin Turbo® 4 Vivaspin® 6	6×1 Vivaspin® Turbo 15 Vivaspin® 20
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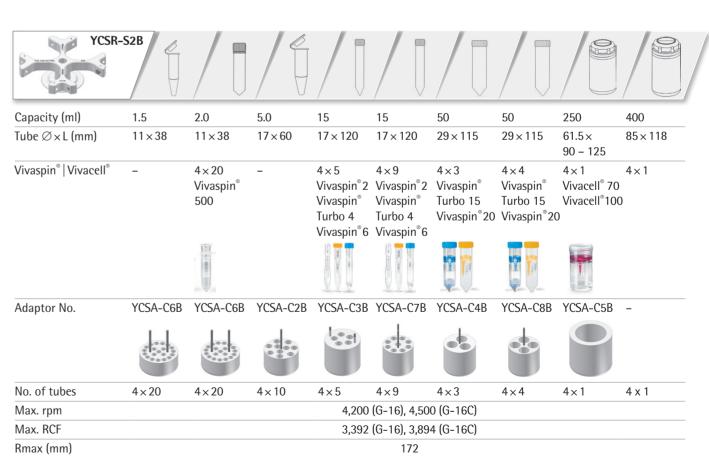
Boring $\varnothing \times L$ (mm)	29.5×100	29.5×101.5
No. of tubes		6
Max. rpm	12,000	9,000 (G-16), 9,500 (G16-C)
Max. RCF	25,294	8,422 (G-16), 9,384 (G-16C)
Rmax (mm)	95	93





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Capacity (ml)	Microplates
Plates W×L (mm)	122×86
Adaptor No.	-
Bucket $W \times D \times H$	129×89×55 mm
No. of tubes	8
Max. rpm	4,200
Max. RCF	2,623
Rmax (mm)	133



Centrisart® G-26C

The high-speed refrigerated Centrisart® G-26C achieves a gravitational field of up to 62,000 g and approaches the level of ultracentrifuges in this regard. That makes it ideally suited for high-speed applications.

Thanks to the variety of rotor options, nearly all vessel types can be used for low to high throughput. Even applications in cell culture or microbiology sectors can be carried out with this centrifuge.

Application Examples:

Virus isolation Isolation of organelles or membranes Precipitation of proteins
Purification in molecular biology
Ultrafiltration



Technical Specifications

	Centrisart® G-26C
Max. speed rpm	26,000
Max. capacity	6×85 ml
Max. gravitational field	61,973 g
Min. speed rpm	100
Temperature range	- 20°C to + 40°C
Temperature increments	Adjustable in increments of 1°C
Quick cooling	Quick cool program, rotor cooling even possible during downtimes
Coolant	CFC-free (R404a)
Display	LCD, 116×87 m
Control panel	Easy, 1-knob intuitive operation plus 3 backlit keys
Motor	Maintenance-free, brushless drive motor
Signal	Acoustic signal, can be switched off, configurable signal length
Lid-lock release	Motorized locked lid, automatic lid-lock release
Lid	Inspection window for independent speed measurement, easy-to-open lid port
Rotor	Rotor detection for fixed angle rotors, swinging rotors
Rotor chamber	Stainless-steel
Imbalance safety mechanism	Automated imbalance control
Timer	10 sec. – 99 min., short run continuous run
Programs	60
Acceleration curves	10, linear, quadratic, user-definable
Deceleration curves	10, linear, quadratic, user-definable
Rotor safety	Automatic detection, cycle counting of the rotors
Dimensions (W \times D \times H)	570×616×460 mm
Height with open lid	890 mm
Weight	100 kg
Noise level at max. speed	<63 dB

Centrifuges

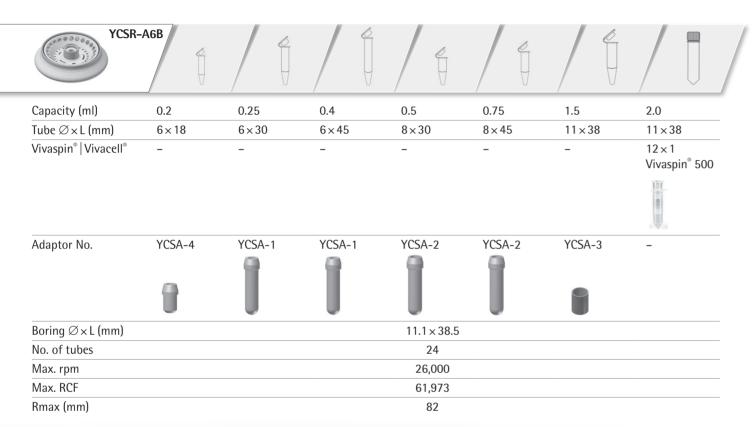
Order number	Description	
G-26C-X	Centrisart® G-26C high-speed refrigerated centrifuge	X = 1EU (for 220 – 240 V), 1US-2P (for 208 V, 2 pha
		11IS-3P (for 240 V 3 phases) 1IP-2P (for 200 V 2)

Accessories

Order number	Description			
YCSR-A5B	Fixed angle rotor for 6×50 ml round bottom culture tubes (Ø 28.8×107 mm), incl. hermetically sealing aluminium lid			
YCSR-A6B	Fixed angle rotor for 24×1.5 2.0 ml conical reaction tubes, incl. hermetically sealing aluminium lid			
YCSA-1	Adapter for 0.25 0.4 ml reaction tubes for rotors YCSR-A2B, YCSR-A4B and YCSR-A6B, 1 set = 2 pcs.			
YCSA-2	Adapter for 0.5 0.75 ml reaction tubes \emptyset 7.9 10 × 28 31 mm for rotors YCSR-A2B, YCSR-A4B and YCSR-A6B, 1 set = 2 pcs.			
YCSA-4	Adapter for 0.2 ml PCR reaction tubes for rotors YCSR-A2B, YCSR-A4B and YCSR-A6B, 1 set = 2 pcs.			
YCSA-3	Adapter for > 20.000 g for 1.5 ml reaction tubes in rotor YCSR-A6B, 1 set = 2 pcs.			
YCSR-A7B	Fixed angle rotor for 4×80 85 ml round bottom culture tubes (Ø 38×112 mm), incl. hermetically sealing aluminium lid			
YCSR-A8B	Fixed angle rotor for 6×85 ml round bottom culture tubes (Ø 38×112 mm), incl. hermetically sealing aluminium lid			
YCSR-A0B	Fixed angle rotor for 6×50 ml conical culture tubes, incl. hermetically sealing aluminium lid			
YCSA-5	Adapter for 1 conical culture tube 15 ml for rotor YCSR-A9B and YCSR-A0B, 1 set = 2 pcs.			
YCSR-S3B	Swing-out rotor, 4 place, for bucket YCSB-B9B			
YCSB-B9B	Round bucket for adapters YCSA-ROB – YCSA-RDB, sealable with lid YCSM-B9B, 1 set = 2 pcs.			
YCSA-R9B	Adapter for YCSB-B9B for 1 conical culture tube 50 ml, 1 set = 2 pcs.			
YCSA-ROB	Adapter for YCSB-B9B for 2 conical culture tubes 15 ml, lid max. \emptyset 23 mm, 1 set = 2 pcs.			
YCSA-RAB	Adapter for YCSB-B9B for 4 conical reaction tubes 1.5 $ $ 2.0 ml, max. \varnothing 11 mm, 1 set = 2 pcs.			
YCSA-RBB	Adapter for YCSB-B9B for 1 flat bottom culture tube 30 ml, \varnothing 25 31 × 65 - 95 mm, 1 set = 2 pcs.			
YCSA-RCB	Adapter for YCSB-B9B for 3 conical reaction tubes 5.0 ml, 1 set = 2 pcs.			
YCSA-RDB	Rubber cushion for YCSB-B9B for 100 ml glas tube, 1 set = 2 pcs.			
YCSM-B9B	Round polysulfone sealing cap for round bucket YCSB-B9B, clear, 1 set = 2 pcs.			
YCST-G26C	Table for centrifuge made of sheet-steel, varnished, with 2 doors and space for accessories, movable on lockable castors $(W \times D \times H = 570 \times 616 \times 481 \text{ mm})$			

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G-26 Rotors

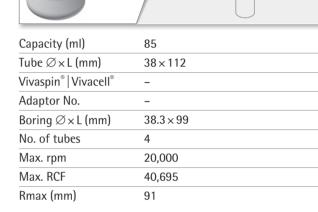




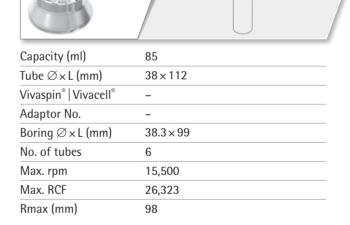


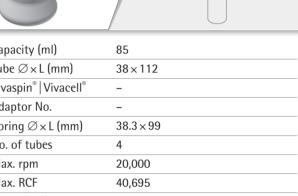
Capacity (ml)	50
Tube ∅×L (mm)	28.8×107
Vivaspin [®] Vivacell [®]	-
Adaptor No.	-
Boring Ø×L (mm)	29×98
No. of tubes	6
Max. rpm	21,000
Max. RCF	41,415
Rmax (mm)	84

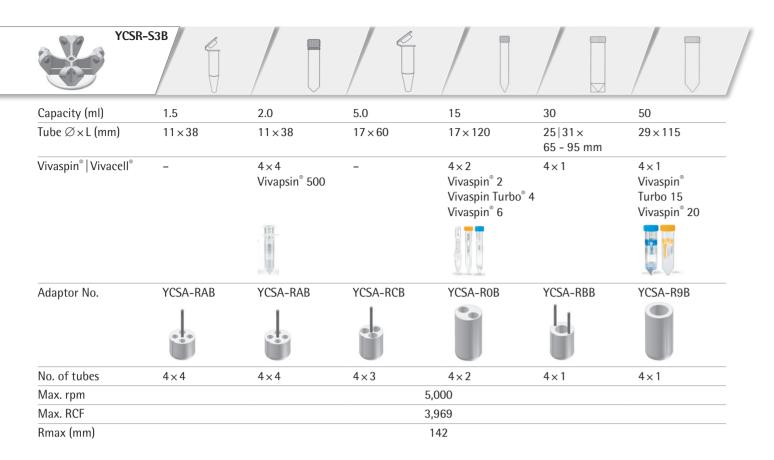
YCSR-A8B

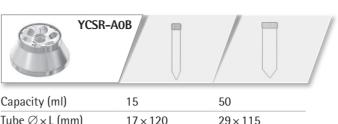


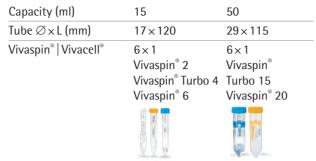
YCSR-A7B











Boring $\varnothing \times L$ (mm)	29.5×100	29.5 × 101.5
No. of tubes		6
Max. rpm	12,000	14,000

25,294

95

20,379

93

YCSA-5

Adaptor No.

Max. RCF

Rmax (mm)



Application Matrix

	Applications	A-14	A-14C	D-16C	G-16	G-16C	G-26C
Protein Analysis	Ultrafiltration		I	-		I	I
	Isolation purification						I
	Precipitation		I	1		I	I
	Desalination removal		1	1		I	I
	Fractionation		I	[I	I
	Density gradients			[I	I
	Immunoprecipitation		I			I	I
	Binding studies		I	[I	I
	Lipoprotein treatment	I	I	I	I	I	I
/irus	Isolation			I	1	I	I
	Precipitation				1	I	1
	PEG precipitation		I	1		1	1
	Density gradient			I	I	I	I
Bacteria Yeast	Pelleting		1	1	1	1	I
	Cell harvesting		I	I	I	I	I
Nammalian Cells	Soft pelleting		I	I		I	
	Cell culture harvest		I	I		I	
Cell Biology	Organelle isolation					I	I
	Membranes					l	1
	Cytosol						1
	Cell pelleting washing			1		1	1
	Tissue cell treatment			I	I	I	I
ienetic Analysis	DNA	I	1	1		1	
	RNA		I	1		1	
	Plasmid DNA		I	1		1	
	PCR sequencing	I	T	I		I	
ood Technology	Soluble solid components			1	1	1	1
	Precipitation			1	I	I	1
	Phase extraction			I	I	I	I
Bioprocess Technology	Cell harvesting				I	l I	
Materials Science	Material separation				I	I	I













Pipettes and Tips for Effortless and Accurate Pipetting

Produce reliable pipetting results effortlessly and enjoy your work.

Our Picus® NxT electronic pipettes, as well as the mechanical pipette Tacta®, offer excellent usability, exceptional ergonomics and high reliability of results – especially when used with Sartorius pipette tips.



Picus® NxT Electronic Pipettes Ergonomic, Efficient & Safe

Order Code	Channels	Volume Range (μl)
LH-745021	1	0,2-10
LH-745041	1	5-120
LH-745061	1	10-300
LH-745081	1	50-1000
LH-745101	1	100-5000
LH-745111	1	500-10000
LH-745321	8	0,2-10
LH-745341	8	5-120
LH-745361	8	10-300
LH-745391	8	50-1200
LH-745421	12	0,2-10
LH-745441	12	5-120
LH-745461	12	10-300
LH-745491	12	50-1200

All pipettes are supplied with a universal charger (EU, UK, US, JPN, KOR, AUS, and CHN plugs)



Tacta® Mechanical Pipettes Perfectly Balanced

Order Code	Channels		Volume Range (μl)
LH-729010	1		0,1-3
LH-729020	1		0,5-10
LH-729030	1		2-20
LH-729050	1		10-100
LH-729060	1		20-200
LH-729070	1		100-1000
LH-729080	1		500-5000
LH-729090	1		1000-10000
LH-729120	8		0,5-10
LH-729130	8	0	5-100
LH-729140	8		30-300
LH-729220	12		0,5-10
LH-729230	12	0	5-100
LH-729240	12		30-300



Optifit Tips Standard Tips for Various Needs

Optifit tips are an excellent choice for various laboratories and pipetting tasks with their wide packaging and purity options. The Optifit tips are packed in single tray racks, refill towers, single refill packs, and bulk packages. Optifit tips are available DNase, RNase and endotoxin free, as well as e-beam pre-sterilized

Order Code Single Tray racks	Volume Range (μΙ)
790010	0,1-10
783210 Extended	0,1-10
790200	0,5-200
790350	5-350
791000	10-1000
791200	50-1200
791210 Extended	50-1200
780304	100-5000

All tips in Single Tray racks are certified free of RNase, DNase and endotoxins. A unit of Single Tray racks contains 10×96 tips.

Order codes for other packaging and purity options can be found from the Liquid Handling section of www.sartorius.com.



Centrifugal Protein Concentration with Vivaspin®

Take advantage of our membrane-based ultrafiltration products. They guarantee extremely high processing speeds, easy handling and optimal sample recovery - even for diluted samples.

The Vivaspin® ultrafiltration units feature a wide range of volume capacities and MWCOs. This makes them the ideal solution for all sample concentration and buffer exchange applications. Thanks to their exclusive vertical membrane design, they achieve the ultimate flow rates and sample recoveries. The patented "dead-stop" technology allows direct sample recovery without additional centrifugation.



Typical Applications:

- Concentration of biological samples containing antigens, antibodies or enzymes
- Concentration of diluted protein samples of chromatography eluates
- Deionization or diafiltration | buffer exchange
- Sample concentration for crystallization and NMR spectroscopy
- Separation of particularly small or large contaminants

Your Benefits at a Glance:

- Large vertical membrane for rapid filtration and minimal blockage
- Integrated dead-stop reservoir prevents samples from being concentrated to the point of drying out
- I Materials with low binding characteristics ensure maximum recovery
- Direct sample recovery without re-centrifugation guarantees fast and easy handling
- Wide range of capacities from 0.5 to 20 mL for high-volume flexibility
- Wide MWCO range from 2 kDa to 0.2 μm for greater MWCO flexibility

Ordering Information

Vivaspin[®] – PES Membrane

MWCO				3 kDa	5 kDa	10 kDa	30 kDa	50 kDa
Product	Volume	Dead-stop vol.	Quantity	Order No.				
Vivaspin [®] 500	0.5 ml	5 μΙ	25	VS0191	VS0111	VS0101	VS0121	VS0131
			100	VS0192	VS0112	VS0102	VS0122	VS0132
Vivaspin® 2	2 ml	8 μΙ	25	VS0291	VS0211	VS0201	VS0221	VS0231
			100	VS0292	VS0212	VS0202	VS0222	VS0232
Vivaspin®	4 ml	30 μΙ	25	VS04T91	VS04T11	VS04T01	VS04T21	VS04T31
Turbo 4			100	VS04T92	VS04T12	VS04T02	VS04T22	VS04T32
Vivaspin® 6	6 ml	30 μΙ	25	VS0691	VS0611	VS0601	VS0621	VS0631
			100	VS0692	VS0612	VS0602	VS0622	VS0632
Vivaspin®	15 ml	100 μΙ	12	VS15T91	VS15T11	VS15T01	VS15T21	VS15T31
Turbo 15			48	VS15T92	VS15T12	VS15T02	VS15T22	VS15T32
Vivaspin® 20	20 ml	50 μΙ	12	VS2091	VS2011	VS2001	VS2021	VS2031
			48	VS2092	VS2012	VS2002	VS2022	VS2032

MWCO				100 kDa	300 kDa	1,000 kDa	0.2 μm	
Product	Volume	Dead-stop vol.	Quantity	Order No.	Order No.	Order No.	Order No.	Sample Packs
Vivaspin [®] 500	0.5 ml	5 μΙ	25	VS0141	VS0151	VS0161	VS0171	VS01S1 (5×5)*
			100	VS0142	VS0152	VS0162	VS0172	
Vivaspin [®] 2	2 ml	8 μΙ	25	VS0241	VS0251	VS0261	VS0271	VS02S1 (5×5)*
			100	VS0242	VS0252	VS0262	VS0272	
Vivaspin®	4 ml	30 μΙ	25	VS04T41				
Turbo 4			100	VS04T42				
Vivaspin® 6	6 ml	30 μΙ	25	VS0641	VS0651	VS0661	VS0671	VS06S1 (5×5)*
			100	VS0642	VS0652	VS0662	VS0672	
Vivaspin®	15 ml	100 μΙ	12	VS15T41				
Turbo 15			48	VS15T42				
Vivaspin [®] 20	20 ml	50 μΙ	12	VS2041	VS2051	VS2061	VS2071	VS20S1 (6×2)**
			48	VS2042	VS2052	VS2062	VS2072	

Vivaspin® – Hydrosart® Membrane

MWCO				2 kDa	5 kDa	10 kDa	30 kDa
Product	Volume	Dead-stop vol.	Quantity	Order No.	Order No.	Order No.	Order No.
Vivaspin [®] 2	2 ml	8 μΙ	25	VS02H91	VS02H11	VS02H01	VS02H21
			100	VS02H92	VS02H12	VS02H02	VS02H22
Vivaspin® 15R	15 ml	30 μΙ	12	VS15RH91	VS15RH11	VS15RH01	VS15RH21
			48	VS15RH92	VS15RH12	VS15RH02	VS15RH22

Vivaspin[®] – CTA-Membrane

MWCO				5 kDa	10 kDa	20 kDa
Product	Volume	Dead-stop vol.	Quantity	Order No.	Order No.	Order No.
Vivaspin [®] 2	2 ml	8 μΙ	25	VS02U1	VS02V1	VS02X1
			100	VS02U2	VS02V2	VS02X2

Vivaspin® Additional Devices

Product Description	Oty per Box	Order No.
Vivaspin [®] 20 – Diafiltration cups	12	VSA005

^{* 5} of each 5 kDa, 10 kDa, 30 kDa, 50 kDa, 100 kDa

 \sim 27

^{** 2} of each 5 kDa, 10 kDa, 30 kDa, 50 kDa, 100 kDa, 0,2μm

Fast and Gentle Concentration with Vivaspin® Turbo 4 and Vivaspin® Turbo 15

Vertical twin membranes and their smooth, sleek interior design enable the two filters to achieve lightning-fast concentration and almost 100% recovery of your valuable samples. The integrated dead-stop reservoir prevents the concentrate from being centrifuged to the point of drying out. Pipette-friendly access allows the highly concentrated sample to be recovered easily.

Typical Applications:

Sample concentration of proteins, viruses, nanoparticles and macromolecules

Deionization | dialysis

Buffer exchange

Your Benefits at a Glance:

- I Smooth, sleek interior design with large, vertical twin membrane for fast, 100fold sample concentration
- High recovery of more than 95 percent
- Polystyrene housing with high chemical compatibility for pH values of 1-14
- PES membranes for high flow rates
- I Compatible with swinging and fixed angle rotors
- Pipette-friendly, dead-stop reservoir for reliable sample concentration and easy recovery
- Volume graduation for easy reading | monitoring of the concentrate volume



Technical Specifications

laterials Vivaspin® Turbo 4		Vivaspin [®] Turbo 15		
Body	Styrene butadiene copolymere	Styrene butadiene copolymere		
Filtrate vessel	Polypropylene	Polypropylene		
Concentrator cap	Polypropylene	Polypropylene		
Membrane	Polyethersulfone (PES)	Polyethersulfone (PES)		
Dimensions				
Total length (concentrator insert)	75.5 mm	77 mm		
Total length (in tube with cap)	122.5 mm	118 mm		
Diameter (concentrator insert)	14.6 mm	27 mm		
Active membrane area	3.2 cm ²	7.2 cm ²		
Hold up volume of membrane	<10 μΙ	<10 μΙ		
Dead stop volume in swing out	40 μΙ	100 μΙ		
	1	60 μl		
Dead stop volume in fixed angle	30 μΙ	60 μι		
Concentrator capacity		•		
Concentrator capacity Swing bucket rotor	4 ml	15 ml		
Concentrator capacity		•		
Concentrator capacity Swing bucket rotor	4 ml	15 ml		
Concentrator capacity Swing bucket rotor Fixed angle rotor (25°)	4 ml	15 ml		
Concentrator capacity Swing bucket rotor Fixed angle rotor (25°) Maximum speed 3 kDa – 50 kDa	4 ml 4 ml	15 ml 9 ml		
Concentrator capacity Swing bucket rotor Fixed angle rotor (25°) Maximum speed 3 kDa – 50 kDa Swing bucket rotor	4 ml 4 ml 4,000 × g	15 ml 9 ml 4,000 × g		
Concentrator capacity Swing bucket rotor Fixed angle rotor (25°) Maximum speed 3 kDa – 50 kDa Swing bucket rotor Fixed Angle rotor (25°)	4 ml 4 ml 4,000 × g	15 ml 9 ml 4,000 × g		
Concentrator capacity Swing bucket rotor Fixed angle rotor (25°) Maximum speed 3 kDa – 50 kDa Swing bucket rotor Fixed Angle rotor (25°) Maximum speed 100 kDa	4 ml 4 ml 4,000 × g 7,500 × g	15 ml 9 ml 4,000 × g 4,000 × g		
Concentrator capacity Swing bucket rotor Fixed angle rotor (25°) Maximum speed 3 kDa – 50 kDa Swing bucket rotor Fixed Angle rotor (25°) Maximum speed 100 kDa Swing bucket rotor	4 ml 4 ml 4,000 × g 7,500 × g	15 ml 9 ml 4,000 × g 4,000 × g 3,000 × g		

Removal of endotoxins [Depyrogenization]

Flushing with 1N NaOH

Flushing with 1N NaOH

Ordering Information

Vivaspin® Turbo 4

Cut off	Quantity	Order no.
3,000 MWC0	25	VS04T91
3,000 MWC0	100	VS04T92
5,000 MWCO	25	VS04T11
5,000 MWCO	100	VS04T12
10,000 MWC0	25	VS04T01
10,000 MWCO	100	VS04T02
30,000 MWCO	25	VS04T21
30,000 MWCO	100	VS04T22
50,000 MWCO	25	VS04T31
50,000 MWCO	100	VS04T32
100,000 MWCO	25	VS04T41
100.000 MWC0	100	VS04T42

Vivaspin® Turbo 15

Cut off	Quantity	Order no.	
3,000 MWCO	12	VS15T91	
3,000 MWCO	48	VS15T92	
5,000 MWCO	12	VS15T11	
5,000 MWCO	48	VS15T12	
10,000 MWC0	12	VS15T01	
10,000 MWC0	48	VS15T02	
30,000 MWC0	12	VS15T21	
30,000 MWC0	48	VS15T22	
50,000 MWC0	12	VS15T31	
50,000 MWC0	48	VS15T32	
100,000 MWCO	12	VS15T41	
100,000 MWCO	48	VS15T42	

Vivaspin® Turbo 4 and 15 centrifugal concentrators, disposable ultrafiltration units, for processing sample volumes of 2 – 4 ml and 15 ml, Polyethersulfone UF membrane.

Sartorius Services

Our mission is your productivity. From installation throughout the entire product lifecycle – our global service is focused on maximizing the reliability and availability of your centrifuge. Our comprehensive range of services for a broad portfolio of laboratory equipment not only meets the common industry standards, but is focused on your specific requirements at all times.

Your Service Benefits at a

The Ultimate Efficiency

2.

Problem-free Operation

3.

Qualified Users

Our professional service ensures that your centrifuges always operate at full capacity without any ifs or buts.

Get the most out of your equipment with our individualized on-site adjustments.

Annual maintenance of centrifuges is highly recommended to ensure a safe working environment.

Regular maintenance ensures that your centrifuges work optimally and trouble-free.

Unnecessary downtimes are reduced.

The basis for safe and efficient work, in addition to high-quality equipment, is reliably trained laboratory staff. As part of the device installation and qualification (IQ | OQ) process, your laboratory staff are familiarized with the centrifuges and trained in their use.



Installation

Our regularly trained service technicians ensure that your equipment is ready to use properly from the outset – without compromises. Your employees will be trained on the equipment during installation.

	Order No.
A-14 and A-14C	84ICM06
G-16	84ICM07
D-16C and G-16C	84ICM08
G-26C	84ICM09

You can document the quality of your centrifuges' performance data by creating calibration certificates during preventive maintenance.

	Order No.
Temperature Calibration	84CUME*
Speed Time Calibration	84CUMD*

*Valid for all Models.

Device Qualification (IQ | OQ)

Device qualification is often a prerequisite to using your equipment in a regulated environment. The documentation fulfills the requirements of GLP | GMP and FDA specifications.

	Order No.
A-14 and A-14C	84QAM06
G-16	84QAM07
D-16C and G-16C	84QAM08
G-26C	84QAM09

Preventive Maintenance

Regular maintenance ensures reliable and trouble-free operation and maximizes the life of the device. As part of the maintenance work, all technical specifications such as temperature accuracy, speed and run times are checked against the manufacturer's specifications.

	Order No.
A-14 and A-14C	84MBM06
G-16	84MBM07
D-16C and G-16C	84MBM08
G-26C	84MBM09

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