

# Centrisart® G-16

## All Purpose Centrifuge

#### Advantages

- Optimum combination Rotors for Sartorius
   VivaSpin® filtration units
- Safety Optional program protection against unauthorized use or modification
- Smart Control Setting all run parameters using just one control knob
- Volume | Capacity: 4 × 400 ml | 1,600 ml



## **Product Description**

The benchtop centrifuge Centrisart® G-16 was especially developed for high throughput applications that require large capacity. The choice of five fixed-angle and two swing-out rotors with different adapters facilitates the centrifugation of virtually all vessel types between 0.2 ml to 400 ml.

The high capacity is perfectly suited for cell harvesting in the field of cell culture or fermentation or for high-throughput applications in molecular biology or protein purification. In addition to providing high flexibility of different rotors and accessories the benchtop centrifuge features a maximum speed up to 15,300 rpm and is well-suited for many lab applications.

The ergonomic design of the centrifuge Centrisart® G-16 simplifies sample loading and unloading and programming. The splash-proof user interface can be operated with gloves and allows the setting of all important operation parameters using a single knob. The memory capacity of 50 programs offers enough space to permanently store different methods. Saved programs can be protected by a program-lock from unauthorized use or modification. For further protection of samples the choice between each 10 acceleration and braking curves prevents churning up of sensitive material.

Benchtop centrifuge Centrisart® G-16 stands out due to a notable number of safety features. Biosafe lids for swing-out rotors and hermetically sealing lids for fixed-angle rotors are aerosol-tight and effectively prevent the spread of hazardous aerosols. The rotor chamber made of stainless steel and the rotors exhibit high resistance to various chemical substances and can easily be cleaned and decontaminated. In addition, the integrated rotor- and imbalance detection securely preclude exceeding of the permitted maximum rotor speed and acceleration of asymmetrically loaded to a critical speed.

### **Special Features**

- Setting run parameters through just one control knob
- Splash-proof keypad with clear display
- Backlit keys with tactile feedback
- Operation with gloves possible
- Automatic conversion of speed and RCF
- Speed 100-15,300 rpm, adjustable in steps of 100 rpm
- Max. gravitational field (RCF) 21,460 g, adjustable in increments of 10  $\times$  g
- Time 10 sec. 99 min., adjustable in steps of 1 sec., short run, continuous run
- Optional runtime counting after reaching the set speed
- Automatic rotor and imbalance detection

- Cycle counter
- Optional soft start or soft stop adjustable in 10 steps
- Memory for 50 programs
- Optional activation of input or program lock
- Maintenance-free motor
- Motorized lid lock, easy lid opening by pneumatic spring support
- Emergency lid lock release with no need to open the casing to access
- High chemical resistance
- Pleasantly quiet operation

## **Technical Specifications**

Max. speed rpm	15,300		
Max. capacity	4 × 400 ml		
Max. gravitational field	21,460 g		
Min. speed rpm	200		
Display	LCD, 113 $ imes$ 36 mm, backlit keys		
Control panel	Easy, intuitive 1-button operation		
Motor	Maintenance-free, brushless drive motor		
Lid-lock release	Electromechanical 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. 59 sec., 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)	$460\times600\times355~\text{mm}$		
Height with open lid	770 mm		
Weight	48 kg		
Noise level at max. speed	<57 dB		
Power consumption	500 W		

# **Order Information**

Order Number	Description
G-16-1EU	Centrisart <sup>®</sup> G-16 centrifuge, 220 – 240 V, 50   60 Hz
G-16-1US	Centrisart® G-16 centrifuge, 120 V, 60 Hz
G-16-1JP	Centrisart® G-16 centrifuge, 100 V, 50   60 Hz

#### Accessories

Order Number	Description				
YCSR-A5B	Fixed angle rotor for 6 $\times$ 50 ml round bottom culture tubes (Ø 28.8 $\times$ 107 mm), incl. hermetically sealing aluminium lid				
YCSR-A6B	Fixed angle rotor for $24 \times 1.5 \mid 2.0$ 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 $\times$ 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 $\times$ 80   85 ml round bottom culture tubes ( $\varnothing$ 38 $\times$ 112 mm), incl. hermetically sealing aluminium lid				
YCSR-A8B	Fixed angle rotor for 6 $\times$ 85 ml round bottom culture tubes ( $\varnothing$ 38 $\times$ 112 mm), incl. hermetically sealing aluminium lid				
YCSR-A0B	Fixed angle rotor for $6 \times 50$ ml conical culture tubes, incl. hermetically sealing aluminium lid				
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. $\varnothing$ 61.5 $\times$ 90 – 125 mm, 1 set = 2 pcs.				
YCSA-C6B	Adapter for YCSB-B8B for 20 conical reaction tubes 1.5 $\mid$ 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. $\varnothing$ 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 650, d 647, h 497 mm				
YCST-G16	Table for centrifuge made of sheet-steel, varnished, with 2 doors and space for accessories, movable on lockable castors w 490, d 684, h 515 mm				

#### **Technical Data Rotors**

Order Number	Rmax [mm]	Rmin [mm]	rpm	RCF
YCSR-S2B	172	75	4,200	3,392
YCSR-S6B	133	44	4,200	2,623
YCSR-A5B	84	21	10,000	9,391
YCSR-A6B	82	50	15,300	21,460
YCSR-A7B	91	14	10,000	10,174
YCSR-A8B	98	28	8,000	7,012
YCSR-A0B	93	31	9,000	8,422

Sartorius Lab Instruments GmbH & Co. KG Otto-Brenner-Strasse 20 37079 Goettingen, Germany

Phone +49.551.308.0 Fax +49.551.308.3289 www.sartorius.com

USA Toll-free +1.800.635.2906 UK +44.1372.737159 France +33.1.70.62.50.00 Italy +39.039.4659.1 Spain +34.913.586.095 Russian Federation +7.812.327.53.27 Japan +81.3.3740.5408

Specifications subject to change without notice.
Copyright Sartorius Lab Instruments GmbH & Co. KG.
Printed in the EU on paper bleached without chlorine.
Publication No.: W--2106-e161106
Order No.: 98649-019-36
Ver. 11 | 2016