



## Sigma 8KBS



Refrigerated  
Blood Bank  
Centrifuge



## Sturdy and durable floor-standing centrifuge for blood banks



**Sigma is a leading international manufacturer of laboratory centrifuges for diverse sectors, including biotechnology, pharmaceutical, medical, and environment analysis. Laboratories, institutes and companies everywhere in the world have been relying on premium Sigma quality – Made in Germany – for more than 40 years.**

**The company stands for innovative products and the development of durable, energy-efficient and especially user-friendly devices.**

Sigma develops centrifuges oriented to the needs of users. Amongst them is the top-class centrifuge, such as the Sigma 8KBS – predestined for use in blood banks. The Sigma 8KBS is especially sturdy and durable. And that's not all – the floor-standing centrifuge has a new look. A new, flat lid with a handy stainless-steel handle and an enlarged observation window for external speed checks clearly enhance the functionality and design of the centrifuge. In order to ensure an even higher level of comfort in terms of the operation of the centrifuge, the control unit has been shifted to the left, along with a cover holder located on the right-hand side of the centrifuge.

# Professional functions and a new look

The Sigma 8KBS stand-alone refrigerated centrifuge is optimised for the needs of blood banks. The motorized lid lock and its patented one-button control (Spincontrol S) make it especially easy to use.

The maximum capacity is 12 blood bags on the swing-out rotor. The centrifuge can optionally be equipped with functions for professional data handling in blood banks, based on the ISBT 128 barcode standard.

The centrifuge has a low loading height, is pleasantly quiet in operation, and has low power consumption. The centrifuge Sigma 8KBS is optionally available with water cooling.

The new, flat lid with a stainless-steel handle and an enlarged observation window enhance the functionality and design of the centrifuge. The control unit has been shifted to the left to ensure an even higher level of comfort in terms of the operation of the centrifuge.

## Sigma 8KBS

- Compact refrigerated floor standing centrifuge
- Universal device for blood banks, medicine and research
- Windshielded and non-windshielded rotors available
- 12 x 1 l, 6 x 1,5 l or 12 blood bags in swing-out rotor
- Rugged design, ideal for continuous use
- High energy efficiency
- Ergonomic 88 cm loading height
- Maintenance-free drive, high imbalance tolerance (up to approximately 80 g)
- Magnetic rotor identification, no overspeeding of rotors
- Efficient refrigerating machine, temperature setting range -20 °C to +40 °C, standstill cooling, refrigerant R404A
- Assured +4 °C at maximum speed with all rotors
- Corrosion-resistant stainless steel bowl
- Two motorised lid locks
- easy lid opening with gas spring assistance
- Window in lid for independent speed monitoring
- With transport castors and adjustable feet
- Compliant with all international centrifuge standards e.g. EN 61010-2-020

### Options:

- Data communication system including barcode reader (Sigma Data Suite)
- water cooling





# Rotors and accessories

## Comprehensive options for blood banks

The powerful centrifuge Sigma 8KBS has a low loading height and noise level during operation. In addition, its high energy efficiency is impressive. The centrifuge is optimised for six-place swing-out rotors, the maximum RCF is 8578 x g for blood collection tubes

(5394 x g for blood bags) and the maximum speed is 5100 rpm (4100 rpm for blood bags). A new range of blood bag adapters has been developed and completes the accessories portfolio of the Sigma 8KBS.



### Windshield Rotor 11805 for 12 blood bags

Reduction of power consumption by more than 50 % compared to a non-shielded rotor. Wide range of adapters for different blood bag systems.

- Bucket 13850: Max 5.100 rpm (8.578 x g)
- Bucket 13860: Max 4.100 rpm (5.394 x g)



### Non-windshield rotor 11806 for blood bags, blood collection tubes or 1.500 ml bottles

Great variety of buckets and accessories for up to 264 blood collection tubes, 12 x 1l bottles, 6 x 1,5l bottles or 12 blood bags.

- Bucket 13850: Max 3.700 rpm (4.515 x g)
- Bucket 13855: Max 3.300 rpm (3.579 x g)
- Bucket 13860: Max 3.700 rpm (4.393 x g)



### Available Adapters for bucket 13860\*

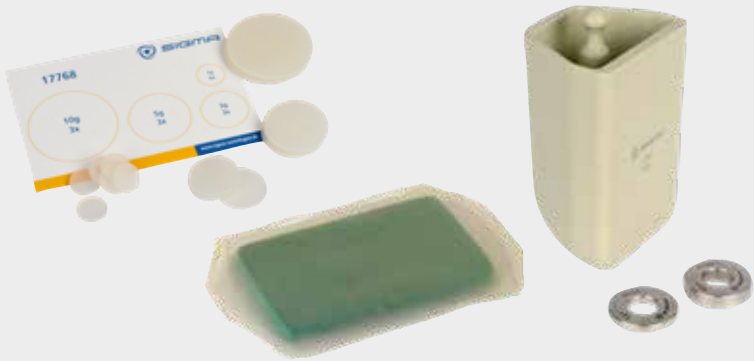
- Double blood bag adapter 13867 with two 750 ml compartments
- Double blood bag adapter 13868 with two 600 ml compartments
- Double blood bag adapter 13869 with two 400 ml compartments



\*All adapters including 1 set of balancing weights.

Accessories for blood bag adapter

- Set of balancing weights 17768 for blood bags: 3x10 g, 3x5 g, 3x3 g, 6x1 g
- Blood bag spacer 17750 for smaller blood bags or reduced filling
- Balancing insert 17769 for uneven number of blood bags



Round-bucket 13850 hermetically sealable with cap 17175

Max. capacity per bucket / rotor:

- 1 / 6 x 1.500 ml bottles
- 8 / 48 x 50 ml Falcon tubes
- 22 / 132 x blood collection tubes



Double-bucket 13855

Max. capacity per bucket / rotor:

- 2 / 12 x 1.000 ml bottles
- 10 / 60 x 50 ml Falcon tubes
- 44 / 264 x blood collection tubes



# Setting standards in control technology

## Unique features, diverse application areas

The Spincontrol S sets standards in laboratory centrifuge control technology. This high-performance controller offers versatile and unique options for a wide range of application areas. The patented controller only needs three buttons: Start, Stop and Open Lid. All parameters – speed, RCF, temperature and so on – can be set or adjusted with the unique central turn/push knob, and in addition to manual settings, previously entered programs can be selected using shortcuts. All parameters can be viewed in a separate window. The program status display with progress bars, easily readable at a distance, is also very practical.

The uncluttered display constantly shows all setpoint and actual values. Users are enthusiastic about the countless features, including a timer from the set speed point, 60 program memories, user-selectable program names, password protection for programs, visual standstill indication, rotor cycle counter, adjustable start delay, and even more. This highly flexible system helps you meet the requirements of today’s and tomorrow’s laboratory tasks.

Sigma’s premium controller supports internal quality management functions as well as external communication with a laboratory information management system (LIMS). In this way, Spincontrol S facilitates traceability and professional reporting.



More on the Web!  
View our video to learn more about Spincontrol S. Simply scan the QR code or visit our centrifuge products website:

[www.sigma-zentrifugen.de](http://www.sigma-zentrifugen.de)  
› Sigma 8KBS

Display	TFT
Message window	+
Constant display of setpoints and actual values	+
Languages	DE, GB, FRA, ES, PRT, SWE, IT, HU, RU, CN
Timer (s; h:min)	10 – 99:59
Timer tracks time after setpoint speed is reached; switchable	+, +
Time increment [s]	60; 1
Intermittent operation	+
Continuous operation	+
Speed increment [rpm]	10; 1
RCF increment [x g]	10; 1
Temperature increment [°C]	1
Standstill cooling; switchable	+, +
Quick cooling program (RapidTemp)	+
Start lockout with excessive actual temperature deviation; adjustable tolerance	+
Programs	60
User-definable program names	+
Program list, preview of all parameters	+, +
Linear acceleration curves	10
Quadratic acceleration curves	10
User-definable acceleration curves	10
Linear braking curves	10
Quadratic braking curves	10
User-definable braking curves	10
Free run-out	+
Automatic lid opening, switchable	+, +
Audible signal, switchable	+, +
Visual standstill indication	+
Rotor cycle monitoring	+
Rotor end-of-life warning	+
Automatic lid unlocking at end of run, switchable	+, +
Configurable for liquids > 1.2 g/cm³	+
Start delay	+
Lockable controller	+
Microprocessor control	+

# Premium quality

## Made in Germany

The Sigma 8KBS centrifuge meets the highest technical requirements for the needs of blood banks. Developed and produced at our Osterode site in Germany, it is a high-quality, high-performance, durable and energy-efficient product made in Germany. It is made from high-quality materials with high-quality workmanship. The Sigma 8KBS complies with current standards for safety, emissions and environmental protection.

As a vendor with a large international customer base, we maintain a stock of original spare parts and wear parts for ten years or more.

With Sigma, you also benefit from a full spectrum of worldwide customer service, including commissioning, training, maintenance, calibration, overhaul and repair.

### Specifications

	Sigma 8KBS
Power consumption [kW]	6,5
Power consumption <ul style="list-style-type: none"><li>• Rotor 11805 [kW] 5.000 x g, 20 °C sample temp.</li></ul>	2,2
Maximum capacity [l]	12
Maximum speed [rpm]	5.100
Minimum speed [rpm]	100
Height x width x depth [mm]	980 x 810 x 910
Height with open lid [mm]	1690
RFI suppression	EN 61326
Weight without rotor [kg]	420
Maximum kinetic energy [kJm]	279
Noise level at maximum speed (approximate) <ul style="list-style-type: none"><li>• Rotor 11805 [db (A)]</li></ul>	61
Max. acceleration time <ul style="list-style-type: none"><li>• Rotor 11805 [sec]</li></ul>	81
Shortest braking time <ul style="list-style-type: none"><li>• Rotor 11805 [sec]</li></ul>	59
Temperature adjustment range [°C]	-20 – +40
Minimum rotor temperature* [°C]	< 4

\* At 23 °C room temperature.

**Sigma 8KBS centrifuge**  
3 x 220 V, 60 Hz (Part No. 10626)  
3 x 400 V, 50 Hz (Part No. 10635)

incl. 11805, 3 Sets  
13860/13867, RS 232 (Part No. 10954)

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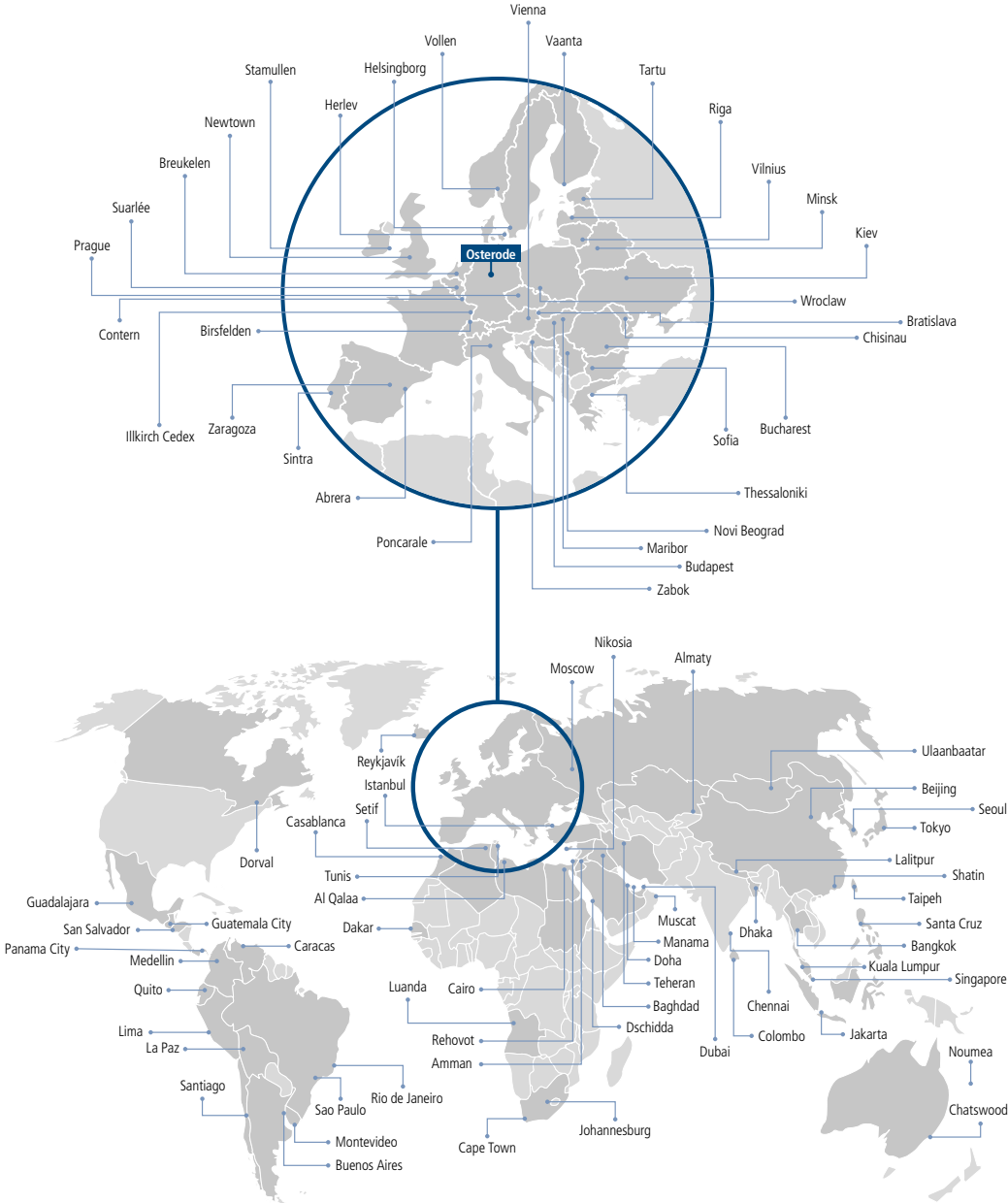
**Device qualification**  
Sigma Laborzentrifugen GmbH offers various forms of device qualification.

For more information, see Products > Qualification on our website:  
[www.sigma-zentrifugen.de](http://www.sigma-zentrifugen.de)



# Global qualified service

Our systems are operating successfully in over 100 countries around the world. An international network of partners is available for service and qualification work. Our specialists can also be engaged quickly around the world, either remotely or on-site in person.



Selected locations of our representatives.

An overview of all representatives with detailed contact information can be found at [www.sigma-zentrifugen.de](http://www.sigma-zentrifugen.de)



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