

Sigma 2-7



Benchtop
centrifuge



High performance in a new design



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 development of durable, energy-efficient and especially user-friendly devices.

Users appreciate centrifuges that optimally fit with their laboratory processes. Sigma product development therefore focuses on convenient,

easy-to-use and low-noise centrifuges that make laboratory processes safer, more efficient and easier. The Sigma 2-7 is suitable for many application areas in medicine, pharmaceuticals, research, environmental analysis and industrial production. The device is designed and built to fulfil specific customer wishes and is highly versatile, enabling it to handle a wide variety of standard applications.

Compact, quiet, easy operation: that's Sigma 2-7 in a nutshell. The centrifuge scores with many new features. One highlight is the blue LED running indicator, which enables operators to see whether the device is still running even at a distance. Low-noise operation, stainless steel drum, motorised lid lock – the advantages are obvious.

Top marks for functionality

Easy operation, convenience and maximum safety

The Sigma 2-7 is equipped with a simple, clear display at the perfect viewing angle and large buttons for good legibility and easy operation. The uncomplicated Spincontrol E control unit makes data entry and programming simple. The centrifuge run time can be selected in seconds, and the LED indicator is readily visible at a distance. The most recent settings can be saved, and the standstill and run times are optionally programmable (e.g. clotting time). The motorised lid lock, which quietly closes automatically to eliminate extra effort, is a nice practical touch. With these features, the Sigma 2-7 stands for easy operation, convenience and maximum safety.

The low-noise Sigma 2-7 accelerates gently – a major advantage for laboratory tasks with living cells. The temperature rise in continuous operation is low.

With a corrosion-resistant stainless steel drum, automatic lid unlocking and an automatic method for gel tubes, the Sigma 2-7 scores top marks on many fronts.

Sigma 2-7

- Innovative LED running indicator, readily visible at a distance
- Clearly organised display
- Large buttons
- Acoustic signal for button press and end of run
- Motorised lid lock for easy, effortless operation
- Low noise level – 55 dB(A) at maximum speed
- Corrosion-resistant, easily cleaned stainless steel drum
- Low height for easy loading and unloading
- Automatic method for gel tubes
- Settings can be modified while running
- Ten program memory slots
- Low temperature rise in continuous operation
- Zero-maintenance motor
- Two acceleration and braking curves: soft and fast
- Easy rotor exchange
- Compact device; fits on every lab bench
- Imbalance monitoring and shutdown
- Overspeed monitoring
- Window in lid for independent speed measurement
- Manufactured in compliance with EN 61010-2-020
- RoHS compliant
- Also available as IVD device conforming with Directive 98/79/EC regarding in-vitro diagnostic medical devices





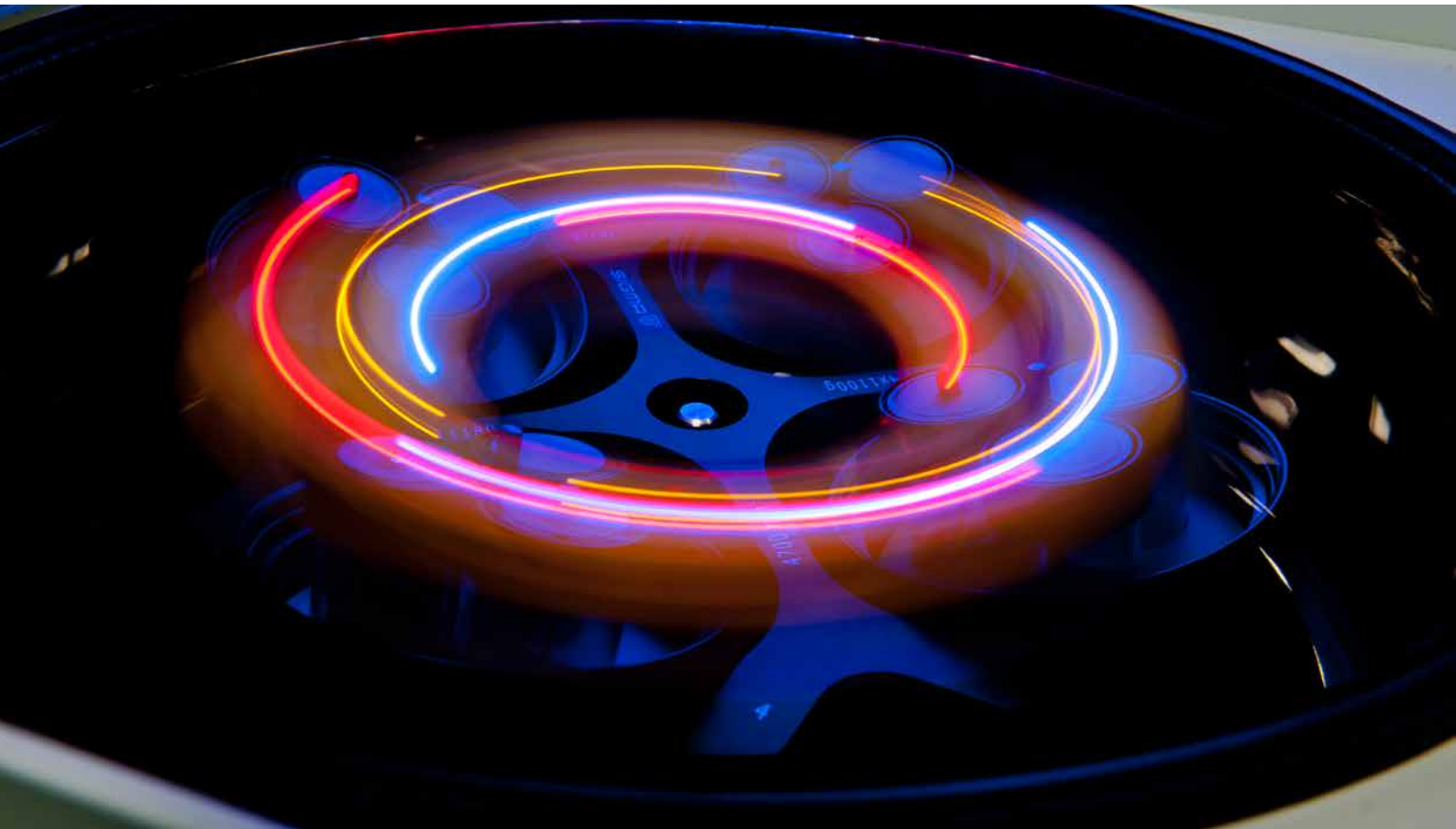
Rotors and accessories

The right solution for every requirement

The Sigma 2-7 is available with a swing-out rotor, fixed-angle rotor, various buckets and bucket adapters. The maximum capacity of the laboratory centrifuge is 450 ml (30 x 15 ml); the maximum RCF is 2,540 x g with a four-position swing-out rotor.

The device is suitable for a wide range of application areas, including blood diagnostics, medical research and cell culture laboratories, chemistry, and production laboratories.

Upon request, Sigma can produce custom adapters or rotors fully tailored to your requirements.



Swing-out rotor

(Part No. 11071)

- 4 positions
- for round bucket 13299 and hex carrier 13296
- Rotor bolts do not need lubrication
- Carrier 13296 for 5–15 ml round-bottom vials and test tubes up to 110 mm long
- Bucket 13299 for adapter family 1.5–100 ml and Falcon, with cover for closing



Swing-out rotor

(Part No. 11037)

- 2 positions
- for quad carrier 13035
- Rotor bolts do not need lubrication
- Carrier 13035 for 5–15 ml round-bottom vials and test tubes up to 110 mm long



Fixed-angle rotor

(Part No. 12072)

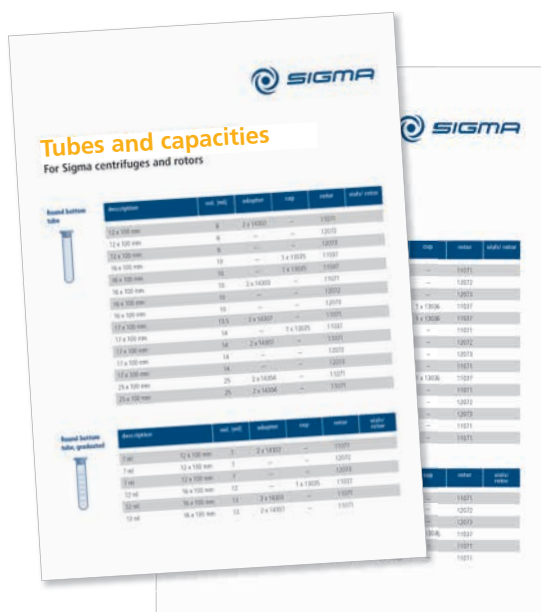
- 20 x 15 ml round bottom, Falcon or test tubes up to 120 mm long
- For vials Ø 17 mm, length up to 120 mm
- Blood collection and culture tubes



Fixed-angle rotor

(Part No. 12073)

- 30 x 15 ml round bottom, Falcon or test tubes up to 120 mm long
- For vials Ø 17 mm, length up to 120 mm
- Blood collection and culture tubes



More on the Web!
A PDF document with information about compatible vials and capacities and a link to an interactive product configuration tool are available on the product website:

www.sigma-zentrifugen.de

> Sigma 2-7

Ideal for blood collection tubes

Modern appearance and easy operation

For reliable results, blood collection tubes must be centrifuged promptly after filling. As a practical device for medical practices and small to medium-size clinical labs, the Sigma 2-7 enables immediate centrifuging before the samples are analysed externally. The RCF characteristics of the Sigma 2-7 make it ideal for blood specimens – renowned tube manufacturers recommend a maximum RCF of 1,900 x g. Selecting the right rotor type, which affects the barrier properties of the gel, is also essential. With swing-out rotors the gel barrier is intrinsically thicker or more stable. The compact Sigma 2-7 (width 37.8 cm) enables the use of swing-out rotors, which makes the zones and sediments perpendicular to the tube during centrifugation – ideal for reliable results.

The clotting time function ensures compliance with standstill time after filling and start time requirements. The start delay is even shown on the LED display. Indispensable for gel tubes. The intelligent ventilation of the Sigma 2-7 limits heating during persistent operation to approximately 6 °C above ambient, entirely without fan noise. Users in medical practices and labs are impressed by the low noise level and stability of the Sigma 2-7 – just 55 dB(A) at maximum speed. The lid closes remarkably easily and swings open automatically, gently braked, at the end of the run. Patented end-stop damping of lid motion. Other highlights include brilliantly simple operation, the revolutionary LED running indicator, and intelligently designed carriers (13035, 13296, etc.) for all European blood collection tubes up to 110 mm long.



Capacities

Eight blood collection tubes

All commonly used blood collection tubes up to 110 mm long can be centrifuged without any extra adapter (see example photo).

- Max. 4,000 rpm (2,379 x g)
- Rotor 11037 with carrier set 13035



Twenty-four blood collection tubes

All commonly used blood collection tubes up to 110 mm long can be centrifuged without any extra adapter (see example photo).

- Max. 4,000 rpm (2,379 x g)
- Rotor 11071 with two carrier sets 13296



Twelve to twenty-eight blood collection tubes with bucket cover

Depending on the size, 12 to 28 blood collection tubes can be centrifuged in a bucket with the aid of three different adapters. Optionally available with a cover for closing.

- Max. 4,000 rpm (2,540 x g)
- Rotor 11071 with two sets 13299 and 17299



Premium quality

Made in Germany

The Sigma 2-7 centrifuge meets the highest technical requirements and laboratory standards. Developed and produced at our Osterode site, 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 2-7 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 and repair.

Technical specifications

Power consumption [W] 100-240 V	210
Maximum capacity [ml]	30 x 15, 4 x 100
Maximum speed [rpm]	4,000
Minimum speed [rpm]	100
Maximum RCF [x g]	
▪ rotor 11071 & bucket 13299	2,540
▪ rotor 11071 & bucket 13296	2,379
▪ rotor 11037 & bucket 13035	2,379
▪ rotors 12072, 12073	2,486
RFI suppression	EN 61326
Height x width x depth [mm]	293 x 378 x 535
Weight without rotor [kg]	23
Maximum kinetic energy [Nm]	1,821
Approximate noise level (rotor 11071, bucket 13299) [db (A)]	55

Maximum acceleration time (rotor 11071 and bucket 13299) [s]	12
Maximum braking time (rotor 11071 and bucket 13299) [s]	12
Timer [s, min:s]	10 – 99:59
Time increment [s]	1
Continuous operation	+
Intermittent operation	+
Speed increment [rpm]	100
RFI increment [x g]	10
Speed/RCF display	+
Acceleration/deceleration curves	Fast, soft
Programs	10
Microprocessor control	+

Sigma 2-7 centrifuge

100–240 V, 50/60 Hz (Part No. 10226)

Sigma 2-7 centrifuge, IVD version

100–240 V, 50/60 Hz (Part No. 10227)

Device qualification

Sigma Laborzentrifugen GmbH offers various forms of device qualification.

For more information, see Products > Qualification on our website:

www.sigma-zentrifugen.de







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