

Sigma 3-18KS Sigma 3-18KHS



Benchtop centrifuge

- refrigerated
- refrigerated/
heatable

Top class for demanding situations

The Sigma 3-18KS fulfils the demands of all users who set stringent requirements for refrigerated benchtop centrifuges and need advanced control options. This tried and tested, high-quality model is especially easy to use and offers users a wealth of features. Patented one-button control with the Spincontrol S controller and the automatic lid lock make centrifuge operation very easy. LED-backlit buttons, active magnetic rotor identification and easy gas-spring assisted lid opening drastically simplify everyday tasks.

Electronic control with a microcontroller, speeds up to 18,000 rpm, low-speed capability, a choice of five languages and broad range of accessories are just a few of the convincing reasons for choosing the versatile Sigma 3-18KS. Designed for research as well as routine tasks, this centrifuge opens up new perspectives and makes laboratory processes more efficient, safer and perceptibly more convenient. A superlative centrifuge.



Sigma 3-18KS centrifuge

220–240 V, 50/60 Hz (Part no. 10370)
 208 V, 60 Hz (Part no. 10371)
 200 V, 50/60 Hz (Part no. 10372)
 120 V, 60 Hz (Part no. 10373)

Sigma 3-18KHS centrifuge

220–240 V, 50/60 Hz (Part no. 10374)

Device qualification

Sigma Laborzentrifugen GmbH offers various forms of device qualification. For more information, see Products > Qualification on our website: www.sigma-zentrifugen.de



WEEE-Reg.-Nr.
DE 76714077



Sigma 3-18KS

- Universal refrigerated benchtop centrifuge with speed range up to 18,000 rpm
- User-friendly Spincontrol S controller
- Backlit Start, Stop, and Open Lid buttons
- Compatible with various swing-out and fixed-angle rotors
- Capacity: 4 x 400 ml
- Zero-maintenance induction motor
- Suitable for low speeds
- Magnetic rotor identification
- Stainless-steel centrifuge bowl
- Motorised lid lock
- Complies with the latest national and international standards (EN 61010-2-020)
- Rotor cooling also possible at standstill; CFC-free R134a refrigerant

Sigma 3-18KHS

Heatable version of the Sigma 3-18KS.

Additional features:

- Max. rotor temperature +40 to +60 °C, depending on rotor and speed



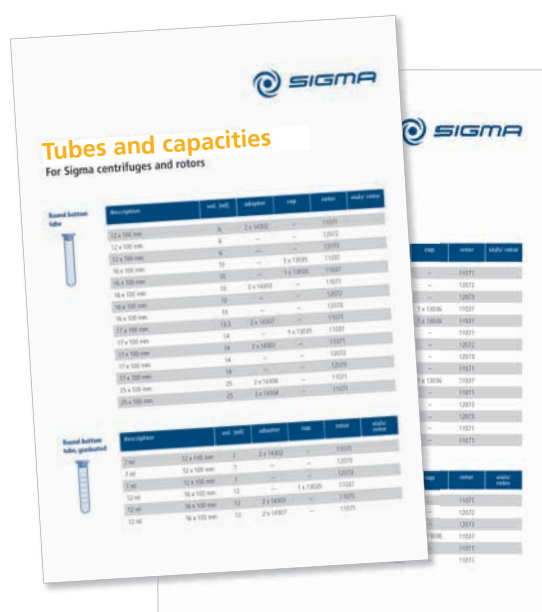
Rotors and accessories



Sigma 3-18KS Sigma 3-18KHS

Aluminium rotors		Matching accessories	Max. [rpm]	Max. RCF [x g]
Swing-out rotor	(Part No. 11180)	Biosafe round bucket Hexagonal bucket Rectangular bucket	4,700 4,700 4,700	4,248 4,149 4,223
Swing-out rotor	(Part No. 11133)	Round bucket 3x15 ml bucket	5,500 5,500	5,242 5,411
Cyto rotor	(Part No. 11224)	–	3,000	1,137
Micro titration plate swing-out rotor	(Part No. 11222)	Max. H 56 mm	3,000	1,218
Micro titration plate swing-out rotor	(Part No. 11241)	Max. H 60 mm	4,700	3,285
Swing-out rotor	(Part No. 11135)	24 x 1.5–2.0 ml reaction vial	14,000	16,215
Fixed-angle rotor	(Part No. 12115)	12 x 8 x 0.2 ml PCR vial	16,400	29,468
Fixed-angle rotor	(Part No. 12154)	24 x 1.5–2.0 ml reaction vial	18,000	29,703
Fixed-angle rotor	(Part No. 12131)	30 x 1.5–2.0 ml reaction vial	16,400	30,070
Fixed-angle rotor	(Part No. 12349)	48 x 1.5–2.0 ml reaction vial	15,000	25,155
Fixed-angle rotor	(Part No. 12182)	12 x 5 ml Eppendorf vial	17,500	28,761
Fixed-angle rotor	(Part No. 12111)	10 x 10 ml round-bottom tube	18,000	27,530
Fixed-angle rotor	(Part No. 12157)	20 x 10 ml round-bottom tube	10,000	10,956
Fixed-angle rotor	(Part No. 12171)	12 x 15 ml falcon tube	13,500	20,172
Fixed-angle rotor	(Part No. 12158)	6 x 30 ml round-bottom tube	18,000	28,616
Fixed-angle rotor	(Part No. 19776)	6 x 50 ml falcon tube	14,000	20,379
Fixed-angle rotor	(Part No. 12150)	6 x 50 ml round-bottom tube	14,600	20,018
Fixed-angle rotor	(Part No. 12156)	8 x 50 ml round-bottom tube	13,800	20,440
Fixed-angle rotor	(Part No. 12155)	4 x 85 ml round-bottom tube	14,500	21,390
Fixed-angle rotor	(Part No. 12159)	6 x 85 ml round-bottom tube	11,400	14,239

All fixed-angle rotors include a hermetic aluminium lid.



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

www.sigma-zentrifugen.de

› Sigma 3-18KS

› Sigma 3-18KHS

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 setpoint 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

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› Sigma 3-18KHS

Display	TFT
Message window	+
Constant display of setpoints and actual values	+
Languages	DE, GB, FRA, ES, PRT, SWE
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/cm ³	+
Start delay	+
Lockable controller	+
Microprocessor control	+

Specifications

	Sigma 3-18KS	Sigma 3-18KHS
Power consumption [W]	1,010	1,010
Maximum capacity [ml]	4 x 400	4 x 400
Maximum speed [rpm]	18,000	18,000
Minimum speed [rpm]	100	100
Height x width x depth [mm]	355 x 630 x 600	355 x 630 x 600
Height with open lid [mm]	785	785
RFI suppression	EN 61326	EN 61326
Weight without rotor [kg]	78	78
Maximum kinetic energy [Nm]	22,989	22,989
Noise level at maximum speed (approximate) Rotor 12154 at 15,300 rpm	60 dB(A)	60 dB(A)
Noise level at maximum speed (approximate) Rotor 11132 at 5,000 rpm	66 dB(A)	66 dB(A)
Maximum acceleration, rotor 12154 [s]	28	28
Maximum acceleration, rotor 11132 [s]	20	20
Maximum braking, rotor 12154 [s]	53	53
Maximum braking, rotor 11132 [s]	12	12
Temperature adjustment range	-20°C – +40°C	-20°C – +60 °C
Rotor 11132, 5,500 rpm [°C]	< 2	< 2
Rotor 12154, 18,000 rpm [°C]	< 4	< 4



Trolley (Part No. 17926)



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