

turns more than heads



Sigma 3-18KT



Benchtop centrifuge
• Refrigerated

www.sigma-zentrifugen.de



Premium all-rounder with intuitive touch control



Sigma is a leading international manufacturer of laboratory centrifuges for diverse sectors, including biotechnology, pharmaceutical, medical and environment analysis. Laboratories, institutions and companies everywhere in the world have been relying on premium Sigma quality – Made in Germany – for more than 50 years. The company stands for innovative products and development of durable, energy-efficient and especially user-friendly devices.

The Sigma 3-18KT is the perfect choice for any user with restricted space but tough demands on refrigerated benchtop centrifuges, who prefers a wide variety of operating options.

With g-forces of over 30,000 g and the user-friendly touchscreen-based Spincontrol T Expert control system, this centrifuge will score points with its intuitive operation, impressive performance and outstanding process reliability. Combined with its extensive range of accessories, this universal centrifuge sets the standard for versatility and performance.

Equal to any challenge

High performance. Reliability. Precision.

The Sigma 3-18KT refrigerated laboratory centrifuge offers premium quality and top performance in a compact design. It is notable for its space-saving design, g-forces exceeding 30,000 g with selected fixed-angle rotors, and intuitive, touchscreen-based operation with an extended range of functions for even greater process reliability and precision.

The coordinated range of rotors offers exceptional flexibility and versatility: a biosafety-sealable 4 x 400 ml swing-out rotor, rotors for microtitre and deep-well plates, and a wide selection of fixed-angle rotors for tubes ranging from 0.2 ml to 94 ml. All fixed-angle rotors are certified in compliance with the latest Biosafe standard and also feature the RapidTurn quick-release rotor lid.

One of the highlights of the Sigma 3-18KT is the Spincontrol T Expert control system. It combines the core functionality of Spincontrol T with additional options for users with strict standards in terms of process reliability, precision and efficiency.

An activatable user management system controls access to the centrifuge and its functions. Switching to Expert Mode unlocks additional functions. In addition, the optimized QUADpro braking and acceleration curves ensure smooth, time-optimized braking and acceleration. The range of functions is rounded off by the custom profile option, which allows centrifugation processes to be individually programmed in intervals.

The Sigma 3-18KT also delivers outstanding performance when it comes to safety. While cycle counting monitors the service life of rotors and buckets and provides timely warnings when the maximum number of cycles is reached, automatic rotor recognition ensures that the permissible speed range is maintained.

Sigma 3-18KT provides fast, finely adjustable cooling for applications ranging from +4 °C to +25 °C. With the "Rapid Temp" fast-cooling function, the centrifuge can be efficiently pre-cooled at the touch of a dedicated selection button. This ensures optimum protection of temperature-sensitive samples against warming.

Energy efficiency is another key feature of the Sigma 3-18KT. The built-in ECO mode automatically switches the device to standby after a configurable period of up to eight hours of inactivity. At the same time, the display dims to the lowest brightness setting and the refrigeration system's compressor switches off. Not only does this reduce energy consumption – it also noticeably lowers the background noise in the laboratory, creating a more pleasant working environment.

The benchtop centrifuge is also available in an IVD version.

Sigma 3-18KT IVD

- Universal benchtop centrifuge
- Speed range up to 18,000 rpm
- Max. RCF: 31,655 x g
- Maximum capacity: 4 x 400 ml
- User-friendly Spincontrol T controller
- Extra-large touch display
- USB-C port
- Storage and retrieval of run data
- 99 program memory slots
- Compact, space-saving device
- Temperature setting range: -20 °C to +40 °C
- High-performance cooling
- 'Rapid Temp' rapid cooling function with a dedicated program selection button
- Rotor temperature control also possible at standstill
- Low noise level
- Automatic rotor detection
- Zero-maintenance induction motor
- Motorized lid lock

- Innovative LED run indicator
- Automatic digital imbalance monitoring
- Rotor life monitoring for a high degree of safety
- Easily cleaned stainless steel chamber
- Window in lid for external speed monitoring
- Produced in compliance with the latest national and international standards (e.g. EN 61010-2-020)





3-18KT

Program Cell Harvest

SB-4x400 / RB400

L9 L9

05:00

05:00

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19

20

SIGMA

Rotors and accessories

Large selection and a multitude of applications

With its perfectly coordinated range of rotors, the Sigma 3-18KT sets new standards for users who demand the very highest performance and require maximum flexibility. Your options include swing-out rotors and fixed-angle rotors for high g-forces. This versatility makes the Sigma 3-18KT the first choice on the market for an exceptionally wide range of applications.

Special highlights: All fixed-angle rotors comply with the latest standard for aerosol containment and feature the innovative RapidTurn lid closure system, which allows for quick and easy

opening and closing. New to the range is an 8 x 50 ml angle rotor for 50 ml conical tubes, which impresses with its outstanding capacity for this class of instrument and its 40° angle for centred pellet formation.

As a special feature, customised, customer-specific accessories can be designed and produced on request. All rotors and accessories are made from certified high-grade materials to withstand the most severe stresses.

Swing-out rotors starting on page 9

SB-4x400 (Item no. 11180)

- Max. capacity: 4 x 400 ml
- Max. speed: 4,700 rpm
- Max. RCF: 4,248 x g
- Biosafe with cap 17190 
- Angle: 90°

► p. 9



SP-2x MTP-60 (Item no. 110360)

- Max. capacity: 8 microtiter plates
- Max. speed: 4,300 rpm
- Max. RCF: 2,625 x g
- Angle: 90°

► p. 13



SPC-2x MTP-66C55 (Item no. 11241)

- Max. capacity: 8 microtiter plates
- Max. speed: 4,700 rpm
- Max. RCF: 3,285 x g
- Biosafe with cap 17108 
- Angle: 90°

► p. 13



Fixed-angle rotors starting on page 14

► p. 14

FA-24x2 (Item no. 120154)

- Max. capacity: 24 x 2 ml
- Max. speed: 18,000 rpm
- Max. RCF: 30,790 x g
- Biosafe with aluminium lid 170154 
- Angle: 45°



► p. 14

FA-24x2 Spin Columns (Item no. 120324)

- Max. capacity: 24 x 2 ml (with filter)
- Max. speed: 15,500 rpm
- Max. RCF: 26,054 x g
- Biosafe with aluminium lid 170324 
- Angle: 45°



► p. 15

FA-30x2 (Item no. 120331)

- Max. capacity: 30 x 2 ml
- Max. speed: 16,500 rpm
- Max. RCF: 31,655 x g
- Biosafe with aluminium lid 170331 
- Angle: 45°



► p. 15

FA-48x2 (Item no. 120349)

- Max. capacity: 48 x 2 ml
- Max. speed: 15,500 rpm
- Max. RCF: 26,860 x g
- Biosafe with aluminium lid 170349 
- Angle (outer / inner row): 53° / 25°



► p. 16

FA-20x5-V (Item no. 120322)

- Max. capacity: 20 x 5 ml conical
- Max. speed: 15,400 rpm
- Max. RCF: 27,575 x g
- Biosafe with aluminium lid 170322 
- Angle: 40°



► p. 16

FA-10x10-U (Item no. 120111)

- Max. capacity: 10 x 10 ml round-bottom
- Max. speed: 17,600 rpm
- Max. RCF: 30,475 x g
- Biosafe with aluminium lid 170111 
- Angle: 35°



► p. 17

FA-12x15-V (Item no. 120215)

- Max. capacity: 12 x 15 ml conical
- Max. speed: 13,500 rpm
- Max. RCF: 20,172 x g
- Biosafe with aluminium lid 170215 
- Angle: 25°



► p. 17

FA-8x30-U (Item no. 120158)

- Max. capacity: 8 x 30 ml round-bottom
- Max. speed: 17,500 rpm
- Max. RCF: 31,500 x g
- Biosafe with aluminium lid 170158 
- Angle: 33°



► p. 18

FA-6x50-V (Item no. 120250)

- Max. capacity: 6 x 50 ml conical
- Max. speed: 14,500 rpm
- Max. RCF: 22,096 x g
- Biosafe with aluminium lid 170250 
- Angle: 25°



► p. 18

FA-8x50-V (Item no. 120309)

- Max. capacity: 8 x 50 ml conical
- Max. speed: 9,200 rpm
- Max. RCF: 11,828 x g
- Biosafe with aluminium lid 170309 
- Angle: 40°



► p. 19

FA-8x50-U (Item no. 120150)

- Max. capacity: 8 x 50 ml round-bottom
- Max. speed: 13,000 rpm
- Max. RCF: 19,272 x g
- Biosafe with aluminium lid 170150 
- Angle: 29°



► p. 20

FA-6x94-U (Item no. 120395)

- Max. capacity: 6 x 94 ml round-bottom
- Max. speed: 12,500 rpm
- Max. RCF: 17,199 x g
- Biosafe with aluminium lid 170395 
- Angle: 25°





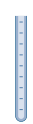
Rotor SB-4x400

Item no. 11180

Round bucket RB400 (Item no. 13190)

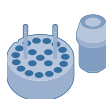
- Max. capacity: 4 x 400 ml
- Max. speed: 4,700 rpm
- Max. RCF: 4,248 x g
- Max. tube length, mid-bucket, without / with cap: 142 / 125 mm
- Biosafe with cap 17190 
- Tmin at maximum speed: 4 °C
- Angle: 90°



Tube										
Rated capacity (filling volume) [ml]	0.2	0.4	0.5	0.5	1.5	2	5	5	6 (5)	7
Diameter x length [mm]	5.8 x 20	5.8 x 47	10.8 x 46.5	7.9 x 28	10.7 x 42	10.7 x 42	12 x 75	17 x 60	12 x 100	12 x 100
Tube material	PP	PE	PP	PP	PP	PP	PS	PPCO	Glass	Glass
Item no.	15042	15014	Paediatrics	15005	15008	15040	15060	—	15007	15027

Adapter

for RB400



Bore diameter x length [mm]	6.3 x 18.5	6 x 45	11 x 32	8.1 x 29	11.1 x 38.5	12.8 x 57	17 x 52	12.8 x 77.5
Tubes per adapter / rotor	20 / 80	20 / 80	16 / 64	24 / 96	20 / 80	25 / 100	10 / 40	16 / 64
Centrifuging radius [mm]	166	168	164	168	171	169	169	170
Item no.	17353 + 13021	17353 + 13000	17361	17350	17353	17352	17210	17354

Tube									
Rated capacity (filling volume) [ml]	10	10	10	10	14	14	15 (13)	15	
Diameter x length [mm]	16.1 x 81.1	16.1 x 81.1	16.1 x 81.1	16 x 100	16 x 100	17 x 100	17 x 100	17 x 110	16.5 x 120
Tube material	PF	PC	PPCO	Glass	Glass	PS	PP	Glass	PP
Item no.	15000	15010	15039	15015	15024	15020	15023	15022	15115

Adapter

for RB400



Bore diameter x length [mm]	16.5 x 58	17.5 x 58	17 x 78.5	17 x 78.5
Tubes per adapter / rotor	12 / 48	12 / 48	5 / 20	9 / 36
Centrifuging radius [mm]	170	170	171	171
Item no.	17355	17358	17345	17359*

* Only possible without cap 17190

Rotor SB-4x400

Item no. 11180

Round bucket RB400 (Item no. 13190)

- Max. capacity: 4 x 400 ml
- Max. speed: 4,700 rpm
- Max. RCF: 4,248 x g
- Max. tube length, mid-bucket, without / with cap: 142 / 125 mm
- Biosafe with cap 17190 
- Tmin at maximum speed: 4 °C
- Angle: 90°



Tube

										
Rated capacity (filling volume) [ml]	25	25	25	30 (26)	30 (26)	30 (28)	30	30	50 (38)	50 (43)
Diameter x length [mm]	25 x 90	24 x 100	24 x 100	25.3 x 98	25.3 x 98	25.3 x 98	24 x 105	25 x 107	28.8 x 107	28.5 x 107
Tube material	PP	Glass	Glass	PF	PPCO	PC	Glass	PP	PPCO	PF
Item no.	—	15025	15026	15029	15032	15030	15033	—	15052	15051

Adapter

for RB400



Bore diameter x length [mm]	25.5 x 56	25.5 x 77.5					25.5 x 56	29.5 x 77.5	
Tubes per adapter / rotor	5 / 20	5 / 20					5 / 20	4 / 16	
Centrifuging radius [mm]	168	170					168	170	
Item no.	17362	17370					17362	17376	

Tube

									
Rated capacity (filling volume) [ml]	50	50	50	50	50	50	50	85 (73)	85 (76)
Diameter x length [mm]	28.5 x 101.5	34 x 100	34 x 100	34 x 100	35 x 100	29 x 117	29 x 117	38 x 112	38 x 112
Tube material	Stainless steel	Glass	PC	Glass	Glass	PPCO	PP	PF	PPCO
Item no.	13055	15045	15049	15050	15056	—	15151	15080	15076

Adapter

for RB400



Bore diameter x length [mm]	29.5 x 77.5	35.5 x 77.5			29.5 x 77	29.5 x 78.5	29.5 x 78.5	38.5 x 77	
Tubes per adapter / rotor	4 / 16	3 / 12			3 / 12	3 / 12	4 / 16	1 / 4	
Centrifuging radius [mm]	170	170			169	171	171	169	
Item no.	17376	17375			17344	17346	17377*	17385	

* Only possible without cap 17190

Rotor SB-4x400

Item no. 11180

Round bucket RB400 (Item no. 13190)

- Max. capacity: 4 x 400 ml
- Max. speed: 4,700 rpm
- Max. RCF: 4,248 x g
- Max. tube length, mid-bucket, without / with cap: 142 / 125 mm
- Biosafe with cap 17190 
- Tmin at maximum speed: 4 °C
- Angle: 90°



Tube										
Rated capacity (filling volume) [ml]	94 (85)	94	100 (75)	100 (90)	100	100	150	150	175	175
Diameter x length [mm]	38 x 103	38 x 110	44 x 100	44 x 100	44 x 100	45 x 100	51 x 99	56 x 113	62 x 139.2	61 x 118
Tube material	Stainless steel	PC	Glass	Glass	Glass	PC	PP	Glass	PP	PP
Item no.	13085	15094	15078	15106	15100	15103	15125	15206	15175	–

Adapter

for RB400

for RB400							
Bore diameter x length [mm]	38.5 x 77		45.5 x 77.5	51.5 x 77	58 x 75	62.5 x 105	61 x 104
Tubes per adapter / rotor	1 / 4		1 / 4	1 / 4	1 / 4	1 / 4	1 / 4
Centrifuging radius [mm]	169		170	169	167	172	172
Item no.	17385		17390*	17395	17401**	17393***	17402***

Tube							
Rated capacity (filling volume) [ml]	200 (168)	200 (170)	200	225	250 (232)	250 (232)	400
Diameter x length [mm]	56 x 112	56 x 112	61 x 130	61 x 137	61.4 x 122	61.4 x 122	85 x 118
Tube material	PPCO	Glass	PP	PP	PF	PPCO	PPCO
Item no.	15202	15201	15174	—	15247	15249	15401

Adapter

for RB400

						
Bore diameter x length [mm]	57.5 x 77	58 x 75	62.5 x 105	61 x 104	62.5 x 80	86 x 97
Tubes per adapter / rotor	1 / 4	1 / 4	1 / 4	1 / 4	1 / 4	– / 4
Centrifuging radius [mm]	169	167	172	172	172	172
Item no.	17400	17401**	17393***	17402***	17347	–

* Including rubber cushion 16051; ** Including rubber cushion 16250; *** Only possible without cap 17190

Rotor SB-4x400

Item no. 11180

Round bucket RB400 (Item no. 13190)

- Max. capacity: 4 x 400 ml
- Max. speed: 4,700 rpm
- Max. RCF: 4,248 x g
- Max. tube length, mid-bucket, without / with cap: 142 / 125 mm
- Biosafe with cap 17190
- Tmin at maximum speed: 4 °C
- Angle: 90°



Blood and urine tubes

Rated capacity (filling volume) [ml]	1.1 – 1.4	2.7 – 5	4 – 6	1.8 – 7	1.6 – 6	4 – 10	9.5 – 10	6 – 10	9 – 10
Diameter x length [mm]	8 x 82	11 x 82 – 108	13 x 81 – 106	13 x 81 – 107	13 x 81 – 106	15 x 91 – 118	15 x 106	16 x 106 – 107	16 x 108
Tube material	PP	PP	PET	PET	PP	PP	PET	PET	PP
Item no.	–	–	–	–	–	–	–	–	–

Adapter

for RB400



Bore diameter x length [mm]	12.8 x 57	13.8 x 57	17.5 x 58
Tubes per adapter / rotor	25 / 100	17 / 68	12 / 48
Centrifuging radius [mm]	169	169	170
Item no.	17352	17356	17358



Rotor SP-2x MTP-60

Item no. 110360

incl. carrier MTP-60 (item no. 130360)

- Max. plate height: 60 mm
- Max. speed: 4,300 rpm
- Max. RCF: 2,625 x g
- Max. load per carrier: 400 g
- Tmin at maximum speed: 4 °C
- Angle: 90°



Rotor SPC-2x MTP-66C55

Item no. 11241

incl. carrier MTP-66C55 (item no. 13241), caps (item no. 17108), plate holder (item no. 17982)

- Max. plate height without / with cap: 66 / 55 mm
- Max. speed: 4,700 rpm
- Max. RCF: 3,285 x g
- Max. load per carrier: 320 g
- Biosafe with cap 17108
- Tmin at maximum speed: 4 °C
- Angle: 90°



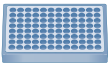
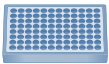
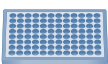
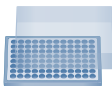
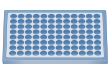
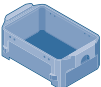
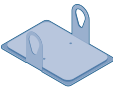
Plate				
Description	MTP (without lid)	MTP (with lid)	DWP	PCR plate 96-fold
W x D x H [mm]	128 x 86 x 15	128 x 86 x 17.5	128 x 86 x 44.5	128 x 86 x 20
Adapter				
for				
MTP-60				
Bore diameter x length [mm]	—			
Plates per rotor	8	6	2	6
Centrifuging radius [mm]	127			
Item no.	—			

Plate				
Description	MTP (without lid)	MTP (with lid)	DWP	PCR plate 96-fold
W x D x H [mm]	128 x 86 x 15	128 x 86 x 17.5	128 x 86 x 44.5	128 x 86 x 20
Adapter				
for				
MTP-66C55	 			
Bore diameter x length [mm]	—			
Plates per rotor (without / with cap)	8 / 6	6 / 6	2 / 2	6 / 4
Centrifuging radius [mm]	133			
Item no.	17982			

Rotor FA-24x2

Item no. 120154

with aluminium lid (Item no. 170154)

- Max. capacity: 24 x 2 ml
- Max. speed: 18,000 rpm
- Max. RCF: 30,790 x g
- Biosafe with aluminium lid 170154 
- Tmin at maximum speed: 4 °C
- Angle: 45°



Rotor FA-24x2 Spin Column

Item no. 120324

with aluminium lid (Item no. 170324)

- Max. capacity: 24 x 2 ml (with filter)
- Max. speed: 15,500 rpm
- Max. RCF: 26,054 x g
- Biosafe with aluminium lid 170324 
- Tmin at maximum speed: 4 °C
- Angle: 45°



Tube

						
Rated capacity (filling volume) [ml]	0.2	0.4	0.5	0.5	1.5	2
Diameter x length [mm]	5.8 x 20	5.8 x 47	7.9 x 28	10.8 x 47.6	10.7 x 42	10.7 x 42
Tube material	PP	PE	PP	PP	PP	PP
Item no.	15042	15014	15005	Paediatrics	15008	15040

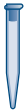
Adapter

for
FA-24x2



						
Bore diameter x length [mm]	6.3 x 18.5	6 x 45	8 x 45	11.1 x 29.5	11.1 x 38.5	
Tubes per adapter / rotor	1 / 24	1 / 24	1 / 24	1 / 24	– / 24	
Centrifuging radius [mm]	81	83	83	76	85	
Item no.	13021	13000	13002	13074*	–	

Tube

								
Rated capacity (filling volume) [ml]	0.2	0.4	0.5	0.5	1.5	1.5	2	2
Diameter x length [mm]	5.8 x 20	5.8 x 47	7.9 x 28	10.8 x 47.6	10.7 x 42	10.7 x 42	10.7 x 42	10.7 x 42
Tube material	PP	PE	PP	PP	PP	PP	PP	PP
Item no.	15042	15014	15005	Paediatrics	15008	–	15040	–

Adapter

for
FA-24x2
Spin Column



								
Bore diameter x length [mm]	6.3 x 18.5	6 x 45	8.1 x 45	11.1 x 29.5	11.1 x 38.5			
Tubes per adapter / rotor	1 / 24	1 / 24	1 / 24	1 / 24	– / 24			
Centrifuging radius [mm]	93	95	95	88	97			
Item no.	13021	13000	13002	13074*	–			

* Only partial loading possible in some cases, depending on choice of paediatric tubes

Rotor FA-30x2

Item no. 120331

with aluminium lid (Item no. 170331)

- Max. capacity: 30 x 2 ml
- Max. speed: 16,500 rpm
- Max. RCF: 31,655 x g
- Biosafe with aluminium lid 170331 
- Tmin at maximum speed: 4 °C
- Angle: 45°



Rotor FA-48x2

Item no. 120349

with aluminium lid (Item no. 170349)

- Max. capacity: 48 x 2 ml
- Max. speed: 15,500 rpm
- Max. RCF: 26,860 x g
- Biosafe with aluminium lid 170349 
- Tmin at maximum speed: 4 °C
- Angle (outer / inner row): 25° / 53°



Tube

						
Rated capacity (filling volume) [ml]	0.2	0.4	0.5	0.5	1.5	2
Diameter x length [mm]	5.8 x 20	5.8 x 47	7.9 x 28	10.8 x 47.6	10.7 x 42	10.7 x 42
Tube material	PP	PE	PP	PP	PP	PP
Item no.	15042	15014	15005	Paediatrics	15008	15040

Adapter

for
FA-30x2



						
Bore diameter x length [mm]	6.3 x 18.5	6 x 45	8 x 45	11.1 x 29.5	11.1 x 38.5	
Tubes per adapter / rotor	1 / 30	1 / 30	1 / 30	1 / 30	– / 30	
Centrifuging radius [mm]	100	102	102	95	104	
Item no.	13021	13000	13002	13074*	–	

Tube

						
Rated capacity (filling volume) [ml]	0.2	0.4	0.5	0.5	1.5	2
Diameter x length [mm]	5.8 x 20	5.8 x 47	7.9 x 28	10.8 x 47.6	10.7 x 42	10.7 x 42
Tube material	PP	PE	PP	PP	PP	PP
Item no.	15042	15014	15005	Paediatrics	15008	15040

Adapter

for
FA-48x2



						
Bore diameter x length [mm]	6.3 x 18.5	6 x 45	8 x 45	11.1 x 29.5	11.1 x 38.5	
Tubes per adapter / rotor	1 / 48	1 / 48	1 / 48	1 / 48	– / 48	
Centrifuging radius outer / inner [mm]	96 / 96	98 / 98	98 / 98	91 / 91	100 / 100	
Item no.	13021	13000	13002	13074*	–	

* Only partial loading possible in some cases, depending on choice of paediatric tubes

Rotor FA-20x5-V

Item no. 120322

with aluminium lid (Item no. 170322)

- Max. capacity: 20 x 5 ml conical
- Max. speed: 15,400 rpm
- Max. RCF: 27,575 x g
- Biosafe with aluminium lid 170322 
- Tmin at maximum speed: 4 °C
- Angle: 40°



Rotor FA-10x10-U

Item no. 120111

with aluminium lid (Item no. 170111)

- Max. capacity: 10 x 10 ml round-bottom
- Max. speed: 17,600 rpm
- Max. RCF: 30,475 x g
- Biosafe with aluminium lid 170111 
- Tmin at maximum speed: 4 °C
- Angle: 35°

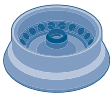


Tube

					
Rated capacity (filling volume) [ml]	1.5	1.5 – 1.8	1.5	2	5
Diameter x length [mm]	11.7 x 34	12.3 x 49	10.7 x 42	10.7 x 42	17 x 60
Tube material	Glass	PP	PP	PP	PPCO
Item no.	HPLC	Cryo-Tube	15008	15040	–

Adapter

for
FA-20x5-V



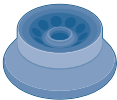
				
Bore diameter x length [mm]	12.5 x 28	12.7 x 32	11.1 x 38.5	17 x 52
Tubes per adapter / rotor	1 / 20	1 / 20	1 / 20	– / 20
Centrifuging radius [mm]	77	81	89	104
Item no.	14081	14080	14082	–

Tube

			
Rated capacity (filling volume) [ml]	10	10	10
Diameter x length [mm]	16.1 x 81.1	16.1 x 81.1	16.1 x 81.1
Tube material	PF	PC	PPCO
Item no.	15000	15010	15039

Adapter

for
FA-10x10-U



Bore diameter x length [mm]	16.3 x 69
Tubes per adapter / rotor	– / 10
Centrifuging radius [mm]	88
Item no.	–

Rotor FA-12x15-V

Item no. 120215

with aluminium lid (Item no. 170215)

- Max. capacity: 12 x 15 ml conical
- Max. speed: 13,500 rpm
- Max. RCF: 20,172 x g
- Biosafe with aluminium lid 170215 
- Tmin at maximum speed: 4 °C
- Angle: 25°



Rotor FA-8x30-U

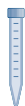
Item no. 120158

with aluminium lid (Item no. 170158)

- Max. capacity: 8 x 30 ml round-bottom
- Max. speed: 17,500 rpm
- Max. RCF: 31,500 x g
- Biosafe with aluminium lid 170158 
- Tmin at maximum speed: 4 °C
- Angle: 33°



Tube



Rated capacity (filling volume) [ml]	15
Diameter x length [mm]	16.5 x 120
Tube material	PP
Item no.	15115

Adapter

for
FA-12x15-V



Bore diameter x length [mm]	17.5 x 106
Tubes per adapter / rotor	– / 12
Centrifuging radius [mm]	99
Item no.	–

Tube



Rated capacity (filling volume) [ml]	10	10	10
Diameter x length [mm]	16.1 x 81.1	16.1 x 81.1	16.1 x 81.1
Tube material	PF	PC	PPCO
Item no.	15000	15010	15039



Rated capacity (filling volume) [ml]	30 (26)	30 (26)	30 (28)
Diameter x length [mm]	25.3 x 98	25.3 x 98	25.3 x 98
Tube material	PF	PPCO	PC
Item no.	15029	15032	15030

Adapter

for
FA-8x30-U



Bore diameter x length [mm]	16.5 x 70
Tubes per adapter / rotor	1 / 8
Centrifuging radius [mm]	82
Item no.	13059



Bore diameter x length [mm]	25.7 x 82.5
Tubes per adapter / rotor	– / 8
Centrifuging radius [mm]	92
Item no.	–

Rotor FA-6x50-V

Item no. 120250

with aluminium lid (Item no. 170250)

- Max. capacity: 6 x 50 ml conical
- Max. speed: 14,500 rpm
- Max. RCF: 22,096 x g
- Biosafe with aluminium lid 170250 
- Tmin at maximum speed: 4 °C
- Angle: 25°



Rotor FA-8x50-V

Item no. 120309

with aluminium lid (Item no. 170309)

- Max. capacity: 8 x 50 ml conical
- Max. speed: 9,200 rpm
- Max. RCF: 11,828 x g
- Biosafe with aluminium lid 170309 
- Tmin at maximum speed: 4 °C
- Angle: 40°



Tube

						
Rated capacity (filling volume) [ml]	15	25	30	50 (38)	50 (43)	50
Diameter x length [mm]	16.5 x 120	25 x 90	25 x 107	28.8 x 107	28.5 x 107	29 x 117
Tube material	PP	PP	PP	PPCO	PF	PP
Item no.	15115	–	–	15052	15051	15151

Adapter

for
FA-6x50-V



				
Bore diameter x length [mm]	17 x 107	25.5 x 71	30 x 91	30 x 101
Tubes per adapter / rotor	1 / 6	1 / 6	1 / 6	– / 6
Centrifuging radius [mm]	93	71	84	94
Item no.	13060	13064	13079	–

Tube

						
Rated capacity (filling volume) [ml]	15	25	30	50 (38)	50 (43)	50
Diameter x length [mm]	16.5 x 120	25 x 90	25 x 107	28.8 x 107	28.5 x 107	29 x 117
Tube material	PP	PP	PP	PPCO	PF	PP
Item no.	15115	–	–	15052	15051	15151

Adapter

for
FA-8x50-V



				
Bore diameter x length [mm]	17 x 107	25.5 x 71	30 x 91	30 x 101
Tubes per adapter / rotor	1 / 8	1 / 8	1 / 8	– / 8
Centrifuging radius [mm]	124	102	115	125
Item no.	13060	13064	13079	–

Rotor FA-8x50-U

Item no. 120150

with aluminium lid (Item no. 170150)

- Max. capacity: 8 x 50 ml round-bottom
- Max. speed: 13,000 rpm
- Max. RCF: 19,272 x g
- Biosafe with aluminium lid 170150 
- Tmin at maximum speed: 4 °C
- Angle: 29°



Tube										
Rated capacity (filling volume) [ml]	10	10	14	15	30 (26)	30 (28)	30	50 (38)	50 (43)	50
Diameter x length [mm]	16.1 x 81.1	16.1 x 81.1	17 x 100	17.5 x 106	25.3 x 98	25.3 x 98	23.6 x 106	28.8 x 107	28.5 x 107	28.5 x 101.5
Tube material	PF	PPCO	PP	HS-Glass	PPCO	PC	HS-Glass	PPCO	PF	Stainless steel
Item no.	15000	15039	15023	15085	15032	15030	15086	15052	15051	13055
Adapter										
for FA-8x50-U										
Bore diameter x length [mm]	16.2 x 65		17 x 88	18 x 90	25.6 x 75		24.5 x 93	29 x 98		
Tubes per adapter / rotor	1 / 8		1 / 8	1 / 8	1 / 8		1 / 8	– / 8		
Centrifuging radius [mm]	70		97	97	87		100	102		
Item no.	13087		13062	16018	13086		16030	–		

Cleanroom

Robust and resistant



An extremely resistant cleanroom coating is available from Sigma for all aluminium buckets and rotors. This coating provides reliable corrosion protection for accessories, especially where aggressive chemicals are used. The cleanroom coating can even withstand

exposure to sodium hydroxide and hydrochloric acid. The surfaces are also food-grade (FDA certified) and can easily be cleaned without residues.

**Cleanroom
coating**
Available for all
accessories

Rotor FA-6x94-U

item no. 120395

with aluminium lid (Item no. 170395)

- Max. capacity: 6 x 94 ml round-bottom
- Max. speed: 12,500 rpm
- Max. RCF: 17,199 x g
- Biosafe with aluminium lid 170395
- Tmin at maximum speed: 4 °C
- Angle: 25°



Tube

Tube									
Rated capacity (filling volume) [ml]	10	10	10	14	14	15	15	30 (26)	30 (26)
Diameter x length [mm]	16.1 x 81.1	16.1 x 81.1	16.1 x 81.1	17 x 100	17 x 100	17.5 x 106	16.5 x 120	25.3 x 98	25.3 x 98
Tube material	PF	PC	PPCO	PS	PP	HS-Glass	PP	PF	PPCO
Item no.	15000	15010	15039	15020	15023	15085	15115	15029	15032

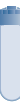
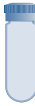
Adapter

for
FA-6x94-U



						
Bore diameter x length [mm]	16.2 x 71		18 x 87		17 x 107	26 x 83
Tubes per adapter / rotor	2 / 12		1 / 6		1 / 6	1 / 6
Centrifuging radius [mm]	69		90		97	81
Item no.	13084		16019		13081	13083

Tube

										
Rated capacity (filling volume) [ml]	30 (28)	30	50 (38)	50 (43)	50	50	85 (73)	85 (76)	94 (85)	94
Diameter x length [mm]	25.3 x 98	23.6 x 106	28.8 x 107	28.5 x 107	28.5 x 101.5	29.5 x 117	38 x 112	38 x 112	38 x 103	38 x 110
Tube material	PC	HS-Glass	PPCO	PF	Stainless steel	PP	PF	PPCO	Stainless steel	PC
Item no.	15030	15086	15052	15051	13055	15151	15080	15076	13085	15094

Adapter

for
FA-6x94-U



										
Bore diameter x length [mm]	26 x 83	24.5 x 88	29 x 97		30 x 100	38.3 x 91				
Tubes per adapter / rotor	1 / 6	1 / 6	1 / 6		1 / 6	– / 6				
Centrifuging radius [mm]	81	91	95		98	98				
Item no.	13083	16031	13082		13080	–				

Sigma Timer

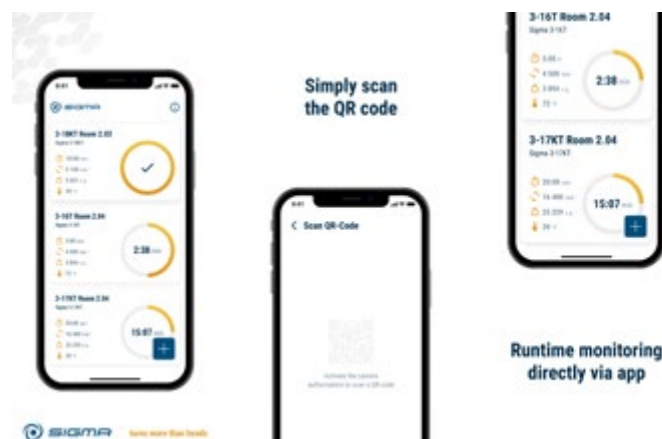
App for displaying remaining run time

The Sigma Timer app can be used to track the remaining run time of up to 32 centrifuges on mobile devices. To do this, the Spincontrol T controller generates a QR code containing the run data of the laboratory centrifuge. The Sigma Timer app scans the QR code, shows the transmitted data, counts the remaining run time and notifies the user of the current status.

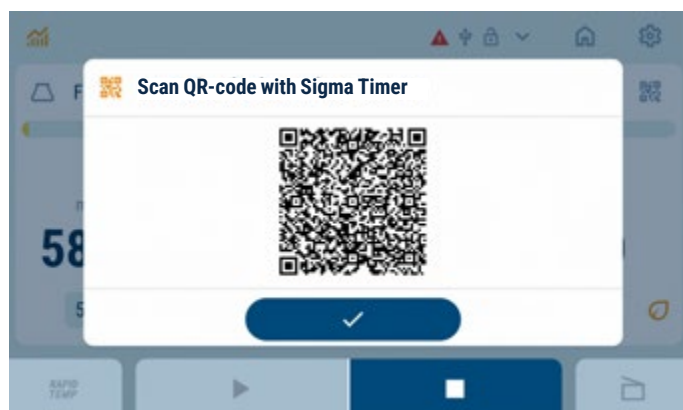
The app displays the user-specific name of the laboratory centrifuge, the model name and number, the parameters set (run time, speed, gravity field and temperature) and remaining run time. This enables users to easily monitor the run time even when they are outside the laboratory. Sigma Timer allows experimenters to use run time efficiently for other tasks – even outside the laboratory – and be back on site in time to process the specimens further.

It's incredibly simple. Just download the app for the mobile device, start the centrifugation run and scan the QR code generated in the Spincontrol T with Sigma Timer.

The app then displays remaining run time and allows users to monitor progress outside the lab.



Please note that this does not provide a live display of the centrifuge's status. Data is transmitted only once. If the run is interrupted at any point, it will not be displayed in the app. Due to the braking time, e.g. free run-out or L1 curves, deviations may occur.





Sigma 3-18KT

Program Cell Harvest
00-4000 / 80400
05:00
0
0
19

SIGMA

Spincontrol T controller

Easy to use with a touchscreen and lots of options

The touchscreen-based Spincontrol T controller sets new standards in control technology for Sigma laboratory centrifuges. A clear main screen displaying all process parameters guides the user intuitively to the input menus where parameters can be conveniently set. The buttons for start, stop and lid opening are always visible. Another practical feature is the progress bar, which displays the status of a program run.

Each input menu has a drop-down menu where users can directly select optional process parameters, such as the start timer. Up to 99 programs can be saved in the program library and marked as favourites. The three most recently used programs, including their run parameters, are listed in the program drop-down menu for quick selection.

The features leave nothing to be desired, including a start timer, ECO mode, rotor/bucket cycle counter and QR code to view the operating instructions in the Sigma Download Centre. These are just some of the highlights that make the Spincontrol T a modern system for today's laboratory requirements.

Spincontrol T includes internal quality management functions. If the Quality Control setting is activated, users receive feedback on the quality of the run parameters after each run. Quality data for the last 20 runs can be viewed in the menu or retrieved via a USB-C storage device, which helps with professional documentation

Spincontrol T Expert

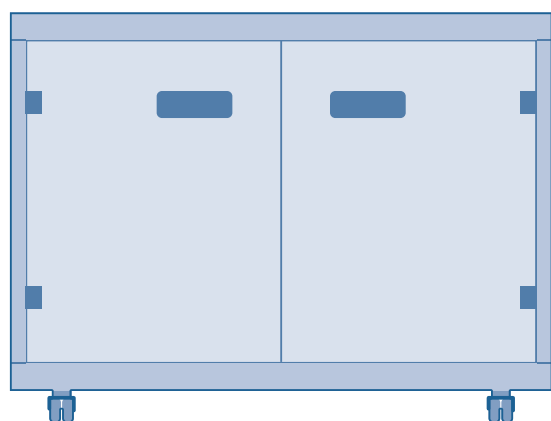
An expanded range of functions to meet the highest standards

The Spincontrol T Expert builds on the tried-and-tested range of functions offered by Spincontrol T and provides additional options for the most demanding applications and users: optional user management for clearly defined access rights, and Expert Mode with functions designed to enhance process reliability and precision. Optimised QUADpro curves ensure outstanding separation results in the shortest possible time – they combine the speed of linear curves with the gentleness of quadratic curves during the acceleration and braking processes. The 'Profiles' option also allows you to program centrifugation runs with precision for sensitive and demanding samples.

Display	Color-TFT-Touchscreen
Permanent display of set and actual values	+
Languages	DE, EN, DA, ES, FR, IT, NO, PL, PT, SE, CN
Timer (s; h:min)	10 – 99:59
Time counting from when the target speed is reached, can be deactivated	+
Short run, continuous run	+, +
Time steps (s)	1
Speed steps (rpm)	1
RCF steps (× g)	1
Temperature steps (°C)	1
Quality control, process monitoring of time, speed, RCF, temperature; adjustable	+
Progress indicator	+
Programs	99
Free program name (alphanumeric)	+
Program library	+
Favorite programs can be marked	+
Marking of favorite rotors	+
User management, customisable	+
Acceleration curves: linear / quadratic / QUADpro	9 / 9 / 9
Braking curves: linear / quadratic / QUADpro	9 / 9 / 9
Free run-out	+
Profiles, freely programmable centrifugation runs	+
Automatic lid opening at end of run, adjustable	+
Start timer, adjustable	+
Standstill cooling, can be deactivated	+
Rapid cooling "Rapid Temp"	+
ECO mode	+
Acoustic signal, can be deactivated	+
Centrifuge cycle counter	+
Monitoring of rotor cycles	+
Monitoring of bucket cycles	+
Warning message when service life ends	+
Screen lock, adjustable	+
USB port for run data export, program import/export	+
Real-time clock, date, time zones, adjustable	+
QR code for Sigma Timer	+
Service QR code	+
QR code for operating instructions	+
Expert mode with the options 'Radius Reduction', 'Density Increase' and 'Integral', adjustable	+
Microprocessor controlled	+

Centrifuge tables

Sigma centrifuge tables are available in eight different sizes. Matched to the corresponding centrifuge dimensions, they combine convenient work height with an optimally calculated footprint. The tables are made from coated sheet steel and are equipped with a storage compartment (with two doors) and a convenient pull-out shelf. Lockable castors allow the centrifuge tables to be easily moved and positioned in the laboratory.



Centrifuge table 17920

For Sigma 2-16KL

W x H x D [mm]: 600 x 501 x 550

Centrifuge table 17921

For Sigma 6-16KS

W x H x D [mm]: 790 x 515 x 684

Centrifuge table 170001

For Sigma 4-5KL

W x H x D [mm]: 605 x 581 x 635

Centrifuge table 17922

For Sigma 6-16S

W x H x D [mm]: 581 x 481 x 684

Centrifuge table 17923

For Sigma 3-30KS

W x H x D [mm]: 570 x 481 x 616

Centrifuge table 170400

For Sigma 3-16T, 3-17KT, 3-18KT

W x H x D [mm]: 460 x 581 x 718

Centrifuge table 17926

For Sigma 3-16KL, 3-18KS, 4-16KS

W x H x D [mm]: 650 x 501 x 647

Centrifuge table 17927

For Sigma 3-16L, 4-5L, 4-16S

W x H x D [mm]: 490 x 497 x 647

Premium Quality

Made in Germany

The Sigma 3-18KT meet the highest technical requirements of laboratory standards. Developed and produced at our facility in Osterode, Germany, they are high-performance, durable and energy-efficient quality products and conform to the latest safety, emissions and environmental standards. Sigma guarantees the availability of spare parts and wearing parts for at least 10 years.

Furthermore, you benefit from our extensive services portfolio, including commissioning, maintenance, device calibration and more. Our qualified service technicians are ready to provide professional maintenance and repair as well as loaner devices if necessary. All support services are designed to ensure reliability and optimise system availability.

Sigma 3-18KT

Max. capacity [ml]	
Swing-out rotor	4 x 400
Fixed-angle rotor	6 x 94
Max. RCF	31,655
Maximum speed [rpm]	18,000
Minimum speed [rpm]	100
Noise level at maximum speed (approx.) [dB(A)]	
Fixed-angle rotor 120154	≤ 58
Swing-out rotor 11180 with bucket 13190	≤ 62
Max. acceleration time [s]	
Fixed-angle rotor 120154	≤ 25
Swing-out rotor 11180 with bucket 13190	≤ 51
Max. braking time [s]	
Fixed-angle rotor 120154	≤ 22
Swing-out rotor 11180 with bucket 13190	≤ 41
Temperature adjustment range [°C]	-20 – +40
Power consumption [W]	1,400
Height x width x depth [mm]	337 x 460 x 716
Height with open lid [mm]	755
Weight without rotor [kg]	80
Refrigerant	R452a*
Filling quantity [kg] / Max. permissible pressure [bar]	0.18 / 27
CO ₂ equivalent [t]	0.385

* Contains fluorinated greenhouse gases in a hermetically sealed refrigeration system. (EU) 2024/2729; 2028-DEC-31

Service Sigma
For maintenance
and repairs please
contact our
Service
department at:



Calibration

Documented proof of compliance with essential technical parameters.

Speed or run time (item no. 17713)
Speed and run time (item no. 17714)
Speed, run time, temperature (item no. 17715)

Device qualification (IQOQ)

This comprehensive device qualification includes installation qualification and metrological checking of all functional parameters with a rotor.

IQOQ documents (item no. 170000)
IQOQ on site (upon request)

Sigma 3-18KT centrifuge

220-240 V 50 Hz (item no. 100014)
220 V 60 Hz (item no. 100017)
120 V 60 Hz (item no. 100016)

Sigma 3-18KT centrifuge, IVD-Version

220-240 V 50 Hz (item no. 100019)
220 V 60 Hz (item no. 100022)
120 V 60 Hz (item no. 100021)



Product portfolio

Sigma offers a broad product portfolio with more than 25 laboratory centrifuges. They can be combined with an extensive range of fixed-angle and swing-out rotors and a large variety of accessories to obtain the right device configuration for every application.



Microcentrifuge
Sigma 1-16

- 36 x 2 ml
- 15,000 rpm
- 20,627 x g

Floor-standing centrifuge
Sigma 8KS

- 12 x 1,000 ml
- 5,100 rpm
- 8,578 x g
- 6 x 1,000 ml
- 10,500 rpm
- 20,461 x g



Benchtop centrifuge
Sigma 2-7

- 4 x 100 ml
- 4,000 rpm
- 2,540 x g
- 30 x 15 ml
- 4,000 rpm
- 2,486 x g



Benchtop centrifuge
Sigma 3-30KS

- 4 x 100 ml
- 5,000 rpm
- 3,969 x g
- 6 x 94 ml
- 30,000 rpm
- 70,121 x g



Robot centrifuge
Sigma 4-5KRL

- 100 x 15 ml
- 4,700 rpm
- 4,470 x g

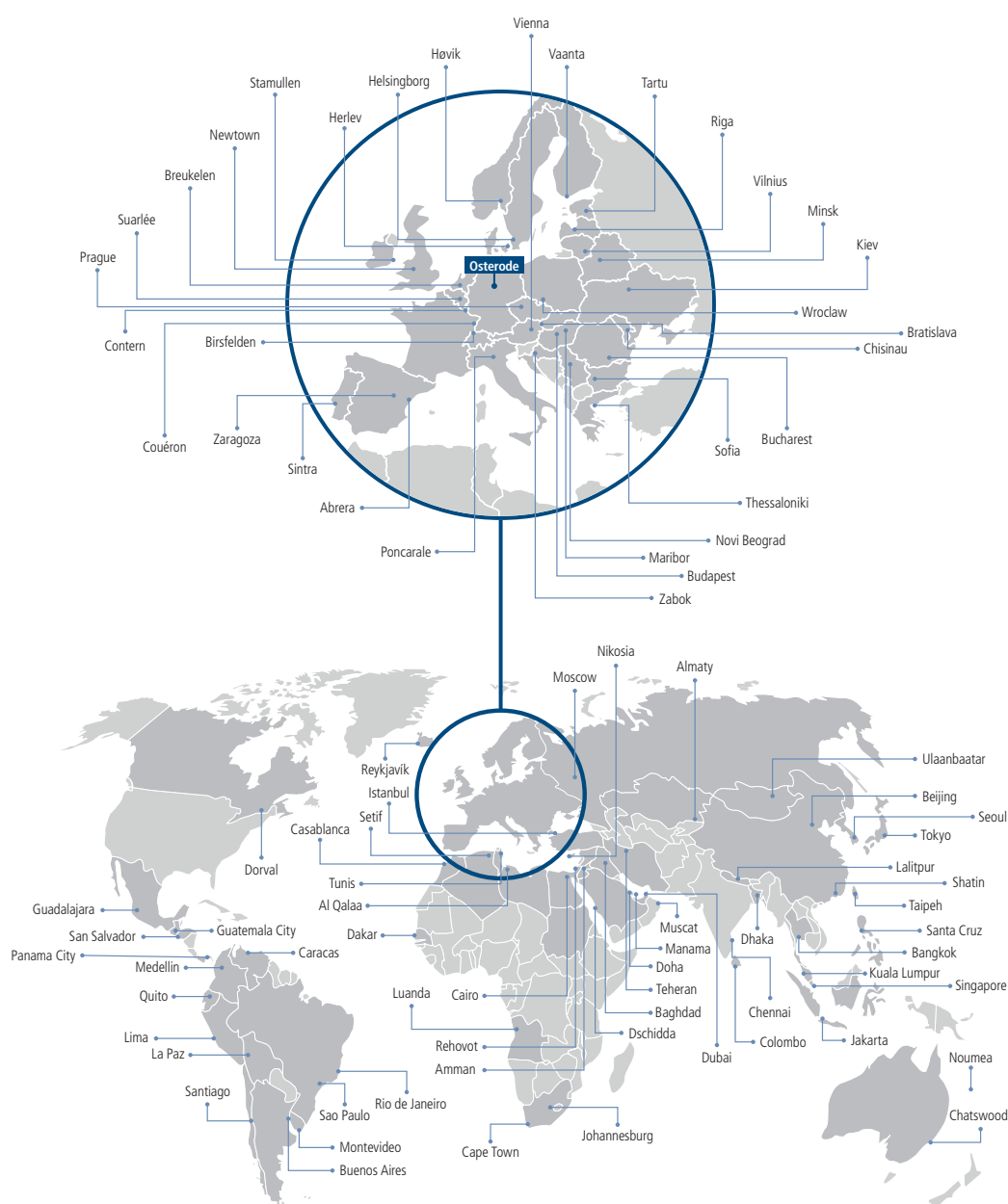
Legend

- Max. capacity
- Max. speed
- Max. RCF
- Swing-out rotor
- Fixed-angle rotor

Global service

For local product security

Our trained service partners in over 100 countries ensure consistently high quality in accordance with national regulations. 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/en/sales-partners



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