

Sample Handling



Model	Eppendorf ThermoMixer® C	ThermoStat C	Eppendorf ThermoMixer® F0.5
Page(s)	104	106	110
Dimensions (W x D x H)	20.6 x 30.4 x 13.6 cm	20.6 x 30.4 x 13.6 cm	20.6 x 30.4 x 16.3 cm
Weight w/o accessories	6.3 kg	4.3 kg	6.2 kg
Power supply	220 – 240 V, 50 – 60 Hz	220 – 240 V, 50 – 60 Hz	220 – 240 V, 50 – 60 Hz
Max. power consumption	200 W	200 W	200 W
Heating rate	Max. 7 °C/min (when using SmartBlock plates) ¹⁾	Max. 9 °C/min (when using the SmartBlock PCR 384) ¹⁾	Max. 15 °C/min
Cooling rate	Max. 2.5 °C/min between 100 °C and RT	Max. 5.0 °C/min between 110 °C and RT ¹⁾	–
Timer	15 sec to 99:30 h, continuous	15 s to 99:30 h, continuous	–
Mixing and vortexing radius	1.5 mm	–	1.5 mm
Mixing orbit	3 mm	–	3 mm
Mixing frequency	300 – 3,000 rpm ¹⁾	–	300 – 2,000 rpm
Max. speed	3,000 rpm ¹⁾	–	2,000 rpm
Temperature settings	1 °C / 100 °C	-10 °C / 110 °C (110 °C when using the SmartBlocks 12 mm or cryo)	1 °C / 100 °C
Temperature range	Min: 15 °C (depends on SmartBlock used) below RT, max: 100 °C	Min: 30 °C ¹⁾ below RT, max: 110 °C (110 °C when using the 12 mm and cryo SmartBlocks)	Min: 4 °C above RT, max: 100 °C
Temperature accuracy	Max. ±0.5 °C at 20 – 45 °C	Max. ±0.5 °C at 20 – 45 °C ¹⁾	Max. ±0.5 °C at 20 – 45 °C
Interfaces	USB interface	USB interface	USB interface
Applications	<ul style="list-style-type: none"> > Plasmid/RNA/DNA purification > cDNA synthesis > Extraction of DNA fragments from agarose gels > Enzymatic reactions (e.g., DNA restriction digestion, Proteinase K digestion and ligation) > Transformation of bacteria strains and plasmids > Denaturation of DNA, RNA, and proteins > Labeling of DNA, RNA, and proteins > Bacterial growth in microreaction vessels, conical tubes, and Deepwell Plates > Lysis reactions at 100 °C > Mixing of PCR setups 	<ul style="list-style-type: none"> > Gentle thawing and cooling buffers and samples at low temperatures > Preheating media > Biochemical reactions at low temperatures > Ligation > cDNA synthesis > Denaturation of RNA, DNA, and protein > Proteinase K digestion > ELISA assays > Immunoprecipitation > Cell lysis 	<ul style="list-style-type: none"> > Growth of bacteria and yeasts > Enzymatic reactions > Transformation of bacteria strains and plasmids > Denaturation of DNA, RNA, and proteins > Lysis reactions at 100 °C > Labeling of nucleic acids and proteins > Proteinase K digestion of cells and tissues > Resuspension of pellets > Mixing protein quantification assays > ELISA assays

¹⁾ depends on SmartBlock used

Model	Eppendorf ThermoMixer® F1.5	Eppendorf ThermoMixer® F2.0	Eppendorf ThermoMixer® FP	MixMate®
Page(s)	110	110	110	111
Dimensions (W x D x H)	20.6 x 30.4 x 17.0 cm	20.6 x 30.4 x 17.0 cm	20.6 x 30.4 x 16.4 cm	17 x 23 x 13 cm
Weight w/o accessories	6.3 kg	6.3 kg	6.1 kg	4.2 kg
Power supply	220 – 240 V, 50 – 60 Hz	220 – 240 V, 50 – 60 Hz	220 – 240 V, 50 – 60 Hz	–
Max. power consumption	200 W	200 W	200 W	40 W
Heating rate	Max. 11 °C/min	Max. 13 °C/min	Max. 18 °C/min	–
Cooling rate	–	–	–	–
Timer	–	–	–	–
Mixing and vortexing radius	1.5 mm	1.5 mm	1.5 mm	1.5 mm
Mixing orbit	3 mm	3 mm	3 mm	3 mm
Mixing frequency	300 – 1,500 rpm	300 – 1,500 rpm	300 – 2,000 rpm	300 – 3,000 rpm
Max. speed	1,500 rpm	1,500 rpm	2,000 rpm	3,000 rpm
Temperature settings	1 °C / 100 °C	1 °C / 100 °C	1 °C / 100 °C	–
Temperature range	Min: 4 °C above RT, max: 100 °C	Min: 4 °C above RT, max: 100 °C	Min: 4 °C above RT, max: 100 °C	N/A
Temperature accuracy	Max. ±0.5 °C at 20 – 45 °C	Max. ±0.5 °C at 20 – 45 °C	Max. ±0.5 °C at 20 – 45 °C	–
Interfaces	USB interface	USB interface	USB interface	–
Applications	<ul style="list-style-type: none"> > Growth of bacteria and yeasts > Enzymatic reactions > Transformation of bacteria strains and plasmids > Denaturation of DNA, RNA, and proteins > Lysis reactions at 100 °C > Labeling of nucleic acids and proteins > Proteinase K digestion of cells and tissues > Resuspension of pellets > Mixing protein quantification assays > ELISA assays 	<ul style="list-style-type: none"> > Growth of bacteria and yeasts > Enzymatic reactions > Transformation of bacteria strains and plasmids > Denaturation of DNA, RNA, and proteins > Lysis reactions at 100 °C > Labeling of nucleic acids and proteins > Proteinase K digestion of cells and tissues > Resuspension of pellets > Mixing protein quantification assays > ELISA assays 	<ul style="list-style-type: none"> > Growth of bacteria and yeasts > Enzymatic reactions > Transformation of bacteria strains and plasmids > Denaturation of DNA, RNA, and proteins > Lysis reactions at 100 °C > Labeling of nucleic acids and proteins > Proteinase K digestion of cells and tissues > Resuspension of pellets > Mixing protein quantification assays > ELISA assays 	<ul style="list-style-type: none"> > Resuspending pellets (e.g., bacteria, DNA, cell culture pellets) > Mixing PCR setups > Mixing viscous liquids and suspensions (incl. beads) > Mixing restriction digestions > Immunoassays (e.g., ELISA) > Colorimetric assays (e.g., Bradford, Lowry, BCA) > Reporter gene assays (e.g. β-galactosidase, luciferase) > Vortexing numerous tube formats (e.g., 15 and 50 mL conical tubes)

i For more information go to www.ependorf.com/temperaturecontrol-mixing



On page 382 you will find detailed information on services for these products!



Sample Handling



Model	Tube 3810X	Safe-Lock Tube 0.5 mL	Safe-Lock Tube 1.5 mL
Page(s)	115	116	116
Volume	1.5 mL	0.5 mL	1.5 mL
Bottom shape	conical	conical	conical
Max. RCF Eppendorf Quality™	30,000 × g	30,000 × g	30,000 × g
Max. RCF PCR clean	30,000 × g	30,000 × g	30,000 × g
Max. RCF Eppendorf Biopur®	–	22,000 × g	22,000 × g
Max. RCF Sterile	–	–	–

¹⁾ Test conditions: Rotor FA-45-6-30 in Eppendorf Centrifuge 5810 R (using a suitable centrifuge adapter for 15 mL tube), sample: saline solution (density: 1.0 g/mL), controlled centrifugation temp.: 25 °C, centrifugation time: 90 min



Model	Safe-Lock Tube 2.0 mL	Eppendorf Tubes® 5.0 mL	Eppendorf Conical Tubes 15 mL	Eppendorf Conical Tubes 50 mL
Page(s)	116	118	120	120
Volume	2.0 mL	5.0 mL	15 mL	50 mL
Bottom shape	round	conical	conical	conical
Max. RCF Eppendorf Quality™	25,000 × g	25,000 × g	–	–
Max. RCF PCR clean	25,000 × g	25,000 × g	–	–
Max. RCF Eppendorf Biopur®	22,000 × g	25,000 × g	–	–
Max. RCF Sterile	–	25,000 × g	19,500 × g ¹⁾	19,500 × g ¹⁾



Model	Protein LoBind Tubes/ DNA LoBind, 0.5 mL	Protein LoBind Tubes/ DNA LoBind, 1.5 mL	Protein LoBind Tubes/ DNA LoBind, 2.0 mL
Page(s)	129/131	129/131	129/131
Bottom shape	conical	conical	round
Max. RCF PCR clean	18,000 × g/ 30,000 × g	18,000 × g/ 30,000 × g	18,000 × g/ 25,000 × g



Model	Protein LoBind Tubes/ DNA LoBind, 5.0 mL, conical tubes	Protein LoBind Tubes/ DNA LoBind, 15 mL, conical tubes	Protein LoBind Tubes/ DNA LoBind, 50 mL, conical tubes
Page(s)	129/131	129/131	129/131
Bottom shape	conical	conical	conical
Max. RCF PCR clean	25,000 × g/ 25,000 × g	–	–



Sample Handling



Microplates

Model	MTP 96/F	MTP 96/U	MTP 96/V
Page(s)	123	123	123
Number of wells	96 wells	96 wells	96 wells
Total volume per well	400 µL	360 µL	350 µL
Working volume	50 – 350 µL	20 – 320 µL	20 – 320 µL
Material	polypropylene	polypropylene	polypropylene
Bottom shape	F bottom	U bottom	V bottom
Dimensions (W x D x H)	127.8 x 85.5 x 14.4 mm	127.8 x 85.5 x 14.4 mm	127.8 x 85.5 x 14.4 mm
Max. RCF	6,000 x g	6,000 x g	6,000 x g

¹⁾ For more Assay/Reader MTPs go to page 124. For Cell Imaging plates go to chapter Cell Imaging Consumables. For twin.tec PCR Plates go to chapter PCR.



Microplates

Model	MTP 384/F	MTP 384/V	MTP UV-VIS 96/F	MTP VIS 96/F	Assay MTP 96/F ¹⁾
Page(s)	123	123	125	125	125
Number of wells	384 wells	384 wells	96 wells	96 wells	96 wells
Total volume per well	150 µL	140 µL	400 µL	400 µL	400 µL
Working volume	10 – 120 µL	10 – 120 µL	50 – 350 µL	50 – 350 µL	50 – 350 µL
Material	polypropylene	polypropylene	polystyrene/film	polystyrene	polypropylene
Bottom shape	F bottom	V bottom	flat	flat	flat
Dimensions (W x D x H)	127.8 x 85.5 x 14.4 mm	127.8 x 85.5 x 14.4 mm	127.8 x 85.5 x 14.4 mm	127.8 x 85.5 x 14.4 mm	127.8 x 85.5 x 14.4 mm
Max. RCF	6,000 x g	6,000 x g	300 x g	3,000 x g	6,000 x g



Deepwell Plates

Model	DWP 96/500	DWP 96/1000	DWP 96/2000	DWP 384/200
Page(s)	127	127	127	127
Number of wells	96 wells	96 wells	96 wells	384 wells
Total volume per well	700 µL	1,200 µL	2,400 µL	240 µL
Working volume	30 – 550 µL	30 – 1,000 µL	50 – 2,000 µL	20 – 225 µL
Material	polypropylene	polypropylene	polypropylene	polypropylene
Bottom shape	conical	conical	conical	conical
Dimensions (W x D x H)	127.8 x 85.5 x 27.1 mm	127.8 x 85.5 x 44.1 mm	127.8 x 85.5 x 44.1 mm	127.8 x 85.5 x 25.1 mm
Max. RCF	6,000 x g	6,000 x g	6,000 x g	6,000 x g



Protein LoBind Plates/ DNA LoBind Plates

Model	MTP 96/V	MTP 384/V	DWP 96/500	DWP 96/1000	DWP 96/2000	DWP 384/200
Page(s)	128/130	128/130	128/130	128/130	128/130	128/130
Number of wells	96 wells	384 wells	96 wells	96 wells	96 wells	384 wells
Total volume per well	350 µL	140 µL	700 µL	1,200 µL	2,400 µL	240 µL
Working volume	20 – 300 µL	5 – 120 µL	30 – 550 µL	30 – 1,000 µL	50 – 2,000 µL	20 – 225 µL
Material	polypropylene	polypropylene	polypropylene	polypropylene	polypropylene	polypropylene
Bottom shape	conical	conical	conical	conical	conical	conical
Dimensions (W x D x H)	127.8 x 85.5 x 14.4 mm	127.8 x 85.5 x 14.4 mm	127.8 x 85.5 x 27.1 mm	127.8 x 85.5 x 44.1 mm	127.8 x 85.5 x 60 mm	127.8 x 85.5 x 25.1 mm
Max. RCF	6,000 x g	6,000 x g	6,000 x g	6,000 x g	6,000 x g	6,000 x g

Eppendorf ThermoMixer® C

Description

You need everything? The Eppendorf ThermoMixer C combines excellent mixing performance with excellent temperature control to ensure complete, dependable and reproducible test results. Improve your assay results by mixing and incubating samples at the same time. The Eppendorf ThermoMixer C convinces users with its quick and easy-to-exchange SmartBlocks for all common lab vessels, new and improved program functions, and high level of stability for every mixing frequency. There is almost no limit to the variety of applications waiting for you!



	Plate type	96-well plates	384-well plates
Mixing of different buffers			
Buffer with detergent	PCR	30 s 1,800 rpm	30 s 2,800 rpm
Buffer without detergent	PCR	1 min 2,000 rpm	30 s 3,000 rpm
Buffer with high salt concentration	DWP	5 s 1,400 rpm	30 s 2,000 rpm
Buffer with DMSO	MTP	5 s 1,100 rpm	5 s 2,000 rpm
Mixing of viscous solutions			
Genomic-DNA	PCR	30 s 2,000 rpm	1 min 3,000 rpm
Resuspension of pellets			
Bacteria cell pellets	DWP	30 s 2,000 rpm	2 min 2,000 rpm

Eppendorf ThermoMixer C provides enough mixing power to handle also challenging mixing tasks. Most samples are efficiently mixed within less than a minute independent of vessel geometry or sample properties. For more informations see AppNote 130.

Product features

- > Mixing, heating, and cooling in one instrument for high flexibility
- > All common vessels and plate formats from 5 µL to 50 mL by different Eppendorf SmartBlocks™ for standard applications
- > Excellent ^{2D}Mix-Control technology results in excellent sample mixing
- > Anti-spill technology prevents lid wetting and cross-contamination
- > Increased mixing frequency of up to 3,000 rpm for effective sample mixing
- > Excellent temperature management for maximum temperature accuracy, resulting in safe handling
- > Compatible with Eppendorf ThermoTop® (**condens.protect**®) for condensation-free sample handling (for Eppendorf SmartBlocks up to 2.0 mL)
- > Predefined program keys and clearly arranged menu guides enable simple and intuitive operations
- > Freely programmable program keys for individual optimization
- > Eppendorf PhysioCare Concept® provides ergonomic design and operation

50 µL sample mixing with 1,800 rpm



Suboptimal sample mixing

Reliable sample mixing

Reliable sample mixing

SmartExtender



Description

Missing a second temperature for an incubation at 37°C or 95°C at your Eppendorf ThermoMixer? The Eppendorf SmartExtender offers a comfortable incubation tool which can easily be used as an add-on to your existing Eppendorf SmartBlocks and the Eppendorf ThermoMixer C/ Fx as well as Eppendorf ThermoStat C. Up to 12 vessels (1.5 mL) can be heated-up for a higher throughput and higher flexibility in your lab. The independent heating function for the second temperature enables a parallel usage of a Eppendorf SmartBlock and the SmartExtender. The Eppendorf SmartBlock at the center can still be used for heating, cooling, and mixing.

Ordering information

Description	Order no.
SmartExtender, 1.5 mL	5322 000.008

Transfer Racks



Description

Performing a 60-sec-incubation step for 24 samples in parallel? The Eppendorf Transfer Rack enables a safe and easy transfer of up to 24 samples in parallel to or from the Eppendorf SmartBlock. This provides similar reaction conditions for all samples of your experiment. The Transfer Rack is available for the Eppendorf SmartBlock 0.5 mL as well as the Eppendorf SmartBlock 1.5 and 2.0 mL. These Eppendorf SmartBlocks include a Transfer Rack by standard.

Ordering information

Description	Order no.
Eppendorf ThermoMixer® C, basic device without thermoblock, 220 – 240 V/50 – 60 Hz	5382 000.015
Transfer Rack 0.5 mL, for Eppendorf SmartBlock™ 0.5 mL	3880 000.305
Transfer Rack 1.5/2.0 mL, for Eppendorf SmartBlock™ 1.5 mL and Eppendorf SmartBlock™ 2.0 mL	3880 000.151
Lid, for Eppendorf ThermoMixer® F0.5/F1.5/F2.0 and FP, for Eppendorf SmartBlock™ 0.5 – 2.0 mL, plates, PCR 96, PCR 384, and DWP	5363 000.233
Eppendorf SmartBlock™ 0.5 mL, thermoblock for 24 reaction vessels 0.5 mL, incl. Transfer Rack 0.5 mL	5361 000.031
Eppendorf SmartBlock™ 1.5 mL, thermoblock for 24 reaction vessels 1.5 mL, incl. Transfer Rack 1.5/2.0 mL	5360 000.038
Eppendorf SmartBlock™ 2.0 mL, thermoblock for 24 reaction vessels 2.0 mL, incl. Transfer Rack 1.5/2.0 mL	5362 000.035
Eppendorf SmartBlock™ 5 mL, thermoblock for 8 Eppendorf Tubes® 5.0 mL, 8 x 5.0 mL reaction vessels	5309 000.007
Eppendorf SmartBlock™ 15 mL, thermoblock for 8 conical tubes 15 mL	5366 000.021
Eppendorf SmartBlock™ 50 mL, thermoblock for 4 conical tubes 50 mL	5365 000.028
Eppendorf SmartBlock™ 12 mm, thermoblock for 24 reaction vessels, diameter up to 12 mm, height 35 mm – 76 mm	5364 000.024
Eppendorf SmartBlock™ PCR 96, thermoblock for PCR plates 96, incl. lid	5306 000.006
Eppendorf SmartBlock™ PCR 384, thermoblock for PCR plates 384, incl. lid	5307 000.000
Eppendorf SmartBlock™ DWP 500, thermoblock for Eppendorf Deepwell Plates 96/500 µL, incl. lid	5316 000.004
Eppendorf SmartBlock™ DWP 1000, thermoblock for Eppendorf Deepwell Plate 96/1,000 µL, incl. lid	5310 000.002
Eppendorf SmartBlock™ cryo, thermoblock for 24 cryo tubes, 1.5 mL – 2 mL, max. external diameter 12.5 mm, all base designs	5367 000.025
Eppendorf SmartBlock™ plates, thermoblock for microplates and Deepwell Plates, incl. lid	5363 000.039
Eppendorf ThermoTop®, with condens.protect ® technology	5308 000.003

✎ Ordering information for other voltage options begins on page 418

Eppendorf ThermoStat™ C

Description

Many experiments require fast heating and cooling steps in a very accurate manner. Precise temperature control is achieved for the ThermoStat C by using optimally balanced heating and cooling elements (peltier technology).



Product features

- > Heating and active cooling in all common vessel and plate formats from 5 µL to 50 mL for high flexibility
- > Broad range of Eppendorf SmartBlocks enables high vessel flexibility
- > Excellent temperature accuracy for safe sample handling
- > Very fast cooling rates of up to 5 °C/min, reducing your waiting time
- > Low temperature (e.g. 4 °C or 0 °C) even at higher ambient temperatures for safe sample incubation
- > Temperature keys (4 °C, 16 °C, 37 °C, 56 °C, and 95 °C) provide quick access to commonly used experimental temperatures
- > Eppendorf ThermoTop® (**condens.protect**®) compatibility prevents condensation and improves temperature homogeneity within sample tubes (up to 2.0 mL)
- > Comprehensive range of program slots (up to 15) for flexible usage of device

Ordering information

Description	Order no.
Eppendorf ThermoStat™ C, basic device without thermoblock, 220 – 240 V/50 – 60 Hz	5383 000.019
Eppendorf ThermoTop®, with condens.protect ® technology	5308 000.003

✂ Ordering information for other voltage options begins on page 418

For more information go to www.eppendorf.com/thermostat-c

Eppendorf SmartBlock™

Description

Using different vessel sizes within your lab workflow? Flexibility has never been this easy. Eppendorf offers a broad range of Eppendorf SmartBlocks for tubes from 0.2 mL to 50 mL as well as plates (MTP, DWP, and PCR plates 96 / 384) to use with Eppendorf ThermoMixer® C and ThermoStat C. All Eppendorf SmartBlocks are equipped with the outstanding Eppendorf QuickRelease system that makes the block exchange super fast and easy. Just press the lever on the front of the block and the block can be removed – no tools are needed, done in seconds.



Product features

- > Optimized block design supports optimal temperature transfer within your sample to receive excellent results
- > Eppendorf SmartBlock-specific calibration by integrated sensor technology maximizes temperature accuracy and homogeneity
- > Every Eppendorf SmartBlock is individually inspected in production for temperature accuracy and is delivered incl. a serial-number specific certificate for documentation purpose
- > Insulated thermoblocks for ergonomic operation – you won't burn your fingers (PhysioCare Concept)
- > Automatic block recognition for safe handling
- > Optimized block design ensures maximum temperature transfer to the sample
- > Eppendorf QuickRelease™ technology enables fast and simple block exchange – no need for tools

Eppendorf SmartBlocks for the following reaction vessels:

- A. 24 lab vessels up to 12 mm in diameter
- B. 8 × 15 mL conical tubes
- C. 4 × 50 mL conical tubes
- D. Eppendorf Deepwell Plates 96/500 µL
- E. Eppendorf Deepwell Plates 96/1000 µL
- F. 24 × cryo tubes
- G. 8 × Eppendorf Tubes® 5.0 mL
- H. Lid for Eppendorf SmartBlock plates, PCR 96, PCR 384, DWP, 0.5 mL, 1.5 mL and 2.0 mL
- I. 384-well PCR plates
- J. 96-well PCR plates
- K. 24 × 0.5 mL vessels
- L. 24 × 1.5 mL vessels
- M. 24 × 2.0 mL vessels
- N. MTPs and Deepwell Plates

For more information go to www.eppendorf.com/smartblocks

Eppendorf SmartBlock™



Technical specifications

Description	Lid ¹⁾	Max. speed ²⁾	Max. temp.	ThermoMixer C / ThermoStat C	ThermoTop
Eppendorf SmartBlock™ 0.5 mL	■	2,000 rpm	100 °C	■	■
Eppendorf SmartBlock™ 1.5 mL	■	2,000 rpm	100 °C	■	■
Eppendorf SmartBlock™ 2.0 mL	■	2,000 rpm	100 °C	■	■
Eppendorf SmartBlock™ 5 mL		1,000 rpm	100 °C	■	
Eppendorf SmartBlock™ 15 mL		1,000 rpm	100 °C	■	
Eppendorf SmartBlock™ 50 mL		1,000 rpm	100 °C	■	
Eppendorf SmartBlock™ 12 mm		2,000 rpm	110 °C ⁴⁾	■	
Eppendorf SmartBlock™ cryo		2,000 rpm	110 °C ⁴⁾	■	
Eppendorf SmartBlock™ plates	■	3,000 rpm ³⁾	100 °C	■	■
Eppendorf SmartBlock™ PCR 96	■	2,000 rpm	100 °C	■	■
Eppendorf SmartBlock™ PCR 384	■	3,000 rpm	100 °C	■	■
Eppendorf SmartBlock™ DWP 500	■	1,500 rpm	100 °C	■	■
Eppendorf SmartBlock™ DWP 1000	■	1,500 rpm	100 °C	■	■

¹⁾ Maximum mixing frequency is 2,000 rpm when lid is used ²⁾ Max. speed depends on exact fitting of vessel ³⁾ max. mixing frequency using DWP is 2,000 rpm (80°C and higher: limited to 1,000 rpm) ⁴⁾ Only available with ThermoStat C

Ordering information

Description	Order no.
Transfer Rack 1.5/2.0 mL, for Eppendorf SmartBlock™ 1.5 mL and Eppendorf SmartBlock™ 2.0 mL	3880 000.151
Transfer Rack 0.5 mL, for Eppendorf SmartBlock™ 0.5 mL	3880 000.305
Lid, for Eppendorf ThermoMixer® F0.5/F1.5/F2.0 and FP, for Eppendorf SmartBlock™ 0.5 – 2.0 mL, plates, PCR 96, PCR 384, and DWP	5363 000.233
Eppendorf SmartBlock™ 0.5 mL, thermoblock for 24 reaction vessels 0.5 mL, incl. Transfer Rack 0.5 mL	5361 000.031
Eppendorf SmartBlock™ 1.5 mL, thermoblock for 24 reaction vessels 1.5 mL, incl. Transfer Rack 1.5/2.0 mL	5360 000.038
Eppendorf SmartBlock™ 2.0 mL, thermoblock for 24 reaction vessels 2.0 mL, incl. Transfer Rack 1.5/2.0 mL	5362 000.035
Eppendorf SmartBlock™ 5 mL, thermoblock for 8 Eppendorf Tubes® 5.0 mL, 8 × 5.0 mL reaction vessels	5309 000.007
Eppendorf SmartBlock™ 15 mL, thermoblock for 8 conical tubes 15 mL	5366 000.021
Eppendorf SmartBlock™ 50 mL, thermoblock for 4 conical tubes 50 mL	5365 000.028
Eppendorf SmartBlock™ 12 mm, thermoblock for 24 reaction vessels, diameter up to 12 mm, height 35 mm – 76 mm	5364 000.024
Eppendorf SmartBlock™ PCR 96, thermoblock for PCR plates 96, incl. lid	5306 000.006
Eppendorf SmartBlock™ PCR 384, thermoblock for PCR plates 384, incl. lid	5307 000.000
Eppendorf SmartBlock™ DWP 500, thermoblock for Eppendorf Deepwell Plates 96/500 µL, incl. lid	5316 000.004
Eppendorf SmartBlock™ DWP 1000, thermoblock for Eppendorf Deepwell Plate 96/1,000 µL, incl. lid	5310 000.002
Eppendorf SmartBlock™ cryo, thermoblock for 24 cryo tubes, 1.5 mL – 2 mL, max. external diameter 12.5 mm, all base designs	5367 000.025
Eppendorf SmartBlock™ plates, thermoblock for microplates and Deepwell Plates, incl. lid	5363 000.039

Technical specifications subject to change.

Eppendorf ThermoTop®

Description

Tired of condensation in your tubes? We combined the Eppendorf ThermoMixer® with the PCR cycler approach of a heated lid and generated the Eppendorf ThermoTop. The outstanding Eppendorf *condens.protect*® technology reliably prevents condensation within the tube lid – sample concentrations are consistent for the incubation time. In addition, the temperature homogeneity is further improved. Get optimal sample reaction conditions to produce optimal results.



Applications

- > All temperature control procedures for which the formation of condensation on the tube lid and wall should be reliably avoided

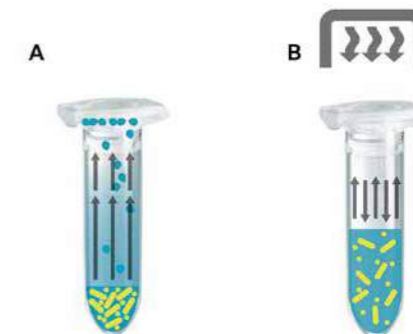


Product features

- > Efficient and reliable of condensation prevention for safe sample heating
- > Get constant reaction conditions for optimal enzymatic performance within your samples
- > Wireless connection with automatic recognition and operation for user-friendly handling
- > Suitable for use with Eppendorf ThermoMixer® F0.5/F1.5/F2.0/FP as well as Eppendorf ThermoMixer C and Eppendorf ThermoStat C with Eppendorf SmartBlocks 0.5 mL, 1.5 mL, 2.0 mL, plates, PCR 96, and PCR 384 (not in combination with Eppendorf Transfer Rack)



www.eppendorf.com/thermotop-video



Principle:

- A = Condensation without Eppendorf ThermoTop
- B = Free of condensation with Eppendorf ThermoTop

Ordering information

Description	Order no.
Eppendorf ThermoTop®, with <i>condens.protect</i> ® technology	5308 000.003

For more information go to www.eppendorf.com/thermotop

Your local distributor: www.eppendorf.com/contact
Eppendorf AG · Barkhausenweg 1 · 22339 Hamburg · Germany · eppendorf@eppendorf.com · www.eppendorf.com

Eppendorf ThermoMixer® F

Description

Doing quite routine sample prep steps? Whether you regularly work with 0.5/1.5/2.0 mL vessels or plates (MTP and DWP) – our customized fixed-block Eppendorf ThermoMixer F family offers you the perfect solution for your special application. Just simplify your routine work load.



Product features

- > Heating and mixing in 0.5/1.5/2.0 mL reaction vessels (F0.5/F1.5/F2.0) or plates (FP)
- > Up to 1,500 rpm (F1.5/F2.0) or 2,000 rpm (F0.5/FP) for efficient sample mixing
- > Outstanding ^{2D}Mix-Control technology results in excellent mixing performance
- > Anti-spill technology prevents lid wetting and cross-contamination
- > Compatible with Eppendorf ThermoTop (**condens.protect**®) for condensation-free sample handling
- > Predefined temperature keys (37 °C, 42 °C, 56 °C, and 95 °C) for simple and intuitive operation
- > Very fast heat up speed of up to 18 °C/min, reducing your waiting time
- > Eppendorf PhysioCare Concept provides ergonomic design and operation



www.eppendorf.com/thermomixer-f-video

Ordering information

Description	Order no.
Eppendorf ThermoMixer® FP, with thermoblock for Microplates and Deepwell Plates, including lid, 220 – 240 V/50 – 60 Hz	5385 000.016
Eppendorf ThermoMixer® F0.5, with thermoblock for 24 reaction vessels 0.5 mL, 200 – 240 V/50 – 60 Hz	5386 000.010
Eppendorf ThermoMixer® F1.5, with thermoblock for 24 reaction vessels 1.5 mL, 220 – 240 V/50 – 60 Hz	5384 000.012
Eppendorf ThermoMixer® F2.0, with thermoblock for 24 reaction vessels 2.0 mL, 220 – 240 V/50 – 60 Hz	5387 000.013
Eppendorf ThermoTop®, with condens.protect ® technology	5308 000.003

✂ Ordering information for other voltage options begins on page 418

MixMate®

Description

Straight mixing required? Mix your samples in seconds, fully and reliably. Whether in plates (96 or 384-wells) or reaction tubes, your samples will be optimally processed. With the integrated ergonomic vortex function, the MixMate is your perfect lab assistant. The innovative additional 2 second run timer allows vortexing your next sample without restarting.



	Plate type	96-well plates	384-well plates
Mixing of different buffers			
Buffer with detergent	PCR	15 s 1,800 rpm	45 s 2,800 rpm
Buffer without detergent	PCR	30 s 2,100 rpm	30 s 3,000 rpm
Buffer with high salt concentration	DWP	5 s 1,400 rpm	1 min 2,000 rpm
Buffer with DMSO	MTP	5 s 1,100 rpm	5 s 2,200 rpm
Mixing of viscous solutions			
Genomic-DNA	PCR	30 s 2,000 rpm	45 s 3,000 rpm
Resuspension of pellets			
Bacteria cell pellets	DWP	30 s 2,000 rpm	3 min 2,000 rpm

MixMate provides enough mixing power to handle the most challenging mixing tasks. Most samples are efficiently mixed within less than a minute independent of vessel geometry or sample properties. For more information see AppNote 130.

Product features

- > High-speed mixer (3,000 rpm) for fast and efficient mixing of small volumes in all common vessel formats up to 50 mL
- > ^{2D}Mix-Control technology (planar mixing orbit without vertical movement) for controlled mixing and reproducible results in seconds
- > Anti-spill technology for controlled mixing movements without lid wetting and cross-contamination
- > 5 different tube holders (0.5 mL, 1.5/2.0 mL, 5/15 mL, 25/50 mL, PCR 96-well plates) for high vessel flexibility
- > Integrated ergonomic vortex function for various vessel formats for distinct sample mixing
- > Minimal hand/arm vibration transfer during vortexing (certificate available) for ergonomic operation (PhysioCare Concept®)
- > 5 soft keys with pre-defined standard mixing parameters for easy usage
- > Very stable - remains stationary even at maximum mixing speed
- > Whisper quiet operation to benefit the work environment



Ordering information

Description	Order no.
MixMate®, basic device without tube holders, 230 V/50 – 60 Hz (EU)	5353 000.510
Tube Holder 0.5 mL, for 24 x 0.5 mL reaction vessels	5353 040.121
Tube Holder 1.5/2.0 mL, for 24 x 1.5 mL or 2.0 mL reaction vessels	5353 040.130
Tube Holder 5/15 mL, for 8 x 5/15 mL conical tubes	5353 040.148
Tube Holder 25/50 mL, for 4 x 25/50 mL conical tubes	5353 040.156
Tube Holder PCR 96, for 96 x 0.2 mL PCR tubes, PCR strips or 1 x 96-well PCR plate, semi-skirted or unskirted	5353 040.113

✂ Ordering information for other voltage options begins on page 418

Accessories



IsoTherm-System®

- > IsoTherm-System: IsoRack (work rack), IsoSafe (insulating box), and two IsoPacks (cool packs)
- > Ideal for cooling, transporting, and storing deep-frozen samples
- > Dry incubation technology reduces contamination risk associated with classical icebath incubation for safe sample handling
- > Holds up to 24 micro tubes (e.g., 0.5 mL or 1.5 mL/2.0 mL) for broad flexibility
- > Two versions of IsoPack (cold pack) available: White maintains 0 °C for up to 6 hours. Blue maintains -21 °C for up to 3 hour
- > Racks are stackable, autoclavable and can be centrifuged in the MTP rotor



PCR-Cooler

- > Handling system for sample set-up, protection, transport, and storage of sensitive samples – keep you samples safe
- > Clear temperature indicator: Color of PCR cooler changes when temperature exceeds 7 °C
- > Accommodates PCR-vessels as tubes, strips, or plates for flexible vessel usage
- > Dry incubation technology reduces contamination risk of samples
- > Keeps an entire 96-well PCR plate cold for more than an hour at 0 °C (with two-hour precooling at -20 °C) for safe samples

Color change

Eppendorf PCR-cooler changes color depending on temperature (up to 1 h at 0 °C after precooling at -20 °C)

below 7 °C

above 7 °C



Ordering information

Description	Order no.
IsoTherm-System® starter set , includes IsoSafe, IsoRack, 0 °C IsoPack and -21 °C IsoPack	
for 0.5 mL tubes	3880 000.011
for 1.5/2.0 mL tubes	3880 001.018
IsoPack and IsoRack set , includes one IsoPack and one IsoRack	
for 0.5 mL vessels, 0 °C	3880 000.160
for 0.5 mL vessels, -21 °C	3880 000.178
for 1.5/2.0 mL vessels, 0 °C	3880 001.166
for 1.5/2.0 mL vessels, -21 °C	3880 001.174
IsoSafe and IsoPack , includes 1 IsoSafe and 3 IsoPack	
for 1.5/2.0 mL vessels, 0 °C	3880 001.026
for 1.5/2.0 mL vessels, -21 °C	3880 001.042

Ordering information

Description	Order no.
PCR-Cooler 0.2 mL Starter Set , (1 x pink, 1 x blue)	3881 000.015
PCR-Cooler 0.2 mL , Pink	3881 000.023
PCR-Cooler 0.2 mL , Blue	3881 000.031

Eppendorf Purity Grades for Tubes and Plates



Eppendorf sample handling consumables stand for highest quality and purity

Our tubes and plates are available in a variety of purity grades (see table below) www.eppendorf.com/purity. The purity grades “sterile”, “PCR clean”, “Biopur®” and “Forensic DNA Grade” are certified by an accredited external lab. As a special service, we make the lot-specific certificates available online (www.eppendorf.com/certificates)

Purity grades	Eppendorf Quality™	Eppendorf sterile	Eppendorf PCR clean	Eppendorf Forensic DNA Grade ⁵⁾	Eppendorf Biopur®
Eppendorf purity grades for tubes and plates					
Continuous quality control for the following relevant criteria:					
Function, tightness, precision	■	■	■	■	■
Low wetting	■	■	■	■	■
High chemical resistance	■	■	■	■	■
High thermal resistance	■	■	■	■	■
High resistance to centrifugation forces ¹⁾	■	■	■	■	■
High transparency	■	■	■	■	■
Precisely shaped	■	■	■	■	■
Lot-specific certificates²⁾ for the following purity criteria:					
Pyrogen-free (endotoxin-free)		■			■
Sterile (Ph.Eur./USP)		■			■
Human DNA-free			■	■	■
DNA-free (Human- and bacteria DNA)					■
DNase-free			■	■	■
RNase-free			■	■	■
PCR-inhibitor-free			■	■	■
ATP-free					■
Eppendorf Tubes®					
Safe-Lock Tubes	■		■	■	■ ³⁾
3810X	■		■	■	
Eppendorf Tubes® 5.0 mL	■	■	■	■	■ ³⁾
Conical Tubes 15 mL and 50 mL		■ ⁴⁾		■ ³⁾	
DNA and Protein LoBind Tubes			■		
PCR Tubes (PCR and real-time PCR)			■	■	
Cap Strips (PCR and real-time PCR)			■	■	
Eppendorf Plates® and accessories					
Deepwell Plates and Microplates		■	■		
Protein LoBind Deepwell Plates			■		
DNA LoBind Deepwell Plates			■		
Eppendorf twin.tec® PCR Plates (PCR and real-time PCR)			■		■
Eppendorf twin.tec® PCR Plates				■ ³⁾	■
Heat Sealing Film and Foil			■		
PCR Storage Films and Foils			■		
Plate Lid		■	■		

¹⁾ For accurate details regarding resistance to centrifugation, please refer to the respective product pages. ²⁾ Lot-specific certificate can be downloaded from www.eppendorf.com/certificates. ³⁾ Individually packaged. ⁴⁾ Eppendorf sterile, RNase free, DNase free, DNA free (human and bacteria DNA) ⁵⁾ According to ISO 18385.



www.eppendorf.com/puritygrades-brochure

Eppendorf Tubes® 3810X

Description

The easy-to-open, securely closing, Eppendorf Tubes® 3810X offers comfort and dependability for sample preparation, centrifugation, and storage. One vessel for all applications in molecular biology, chemistry, and biochemistry.

Safer than ever: Eppendorf Tubes® 3810X are designed for centrifugation up to 30.000 x g!



The 3810X tube guarantees tried and tested tight lid closure and easy, stress-free opening and closing.

Product features

- > Tube lid is easy to open and close for ergonomic operation
- > Polypropylene provides high resistance to chemicals, mechanical stress, and temperature extremes
- > g-Safe®: Exceptional centrifugation stability up to 30,000 x g prevents sample loss due to tube breakage and provides extra safety when working with hazardous samples
- > Manufactured without the use of slip agents, plasticizers, and biocides – substances that have been shown to leach from plastic consumables into the sample and negatively affect bio-assay results
- > Graduation for visual control of the pipetted volume
- > Frosted lid and surface on the side for easy labeling
- > Guaranteed functionality from -86 °C to 100 °C
- > Autoclavable when open (121 °C, 20 min)
- > Available in Eppendorf Quality and lot-certified PCR clean purity grade

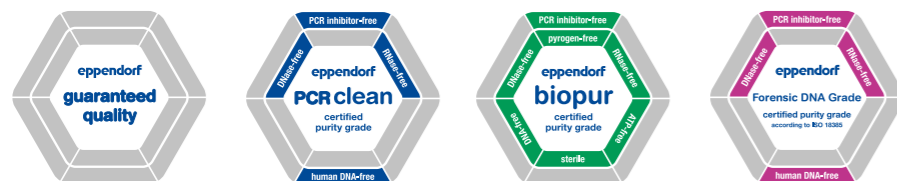
Ordering information		
Description	Color	Order no.
Eppendorf Tubes® 3810X, 1.5 mL, g-safe® centrifugation stability		
Eppendorf Quality™, 1,000 pcs.	□	0030 125.150
Eppendorf Quality™, 1,000 pcs.	■	0030 125.177
Eppendorf Quality™, 1,000 pcs.	■	0030 125.207
Eppendorf Quality™, 1,000 pcs.	■	0030 125.185
Eppendorf Quality™, 1,000 pcs.	■	0030 125.193
PCR clean, 1,000 pcs.	□	0030 125.215
Eppendorf Tube Rack, 36 positions, for 1.5 mL and 2.0 mL tubes, 2 pcs., polypropylene, numbered positions, autoclavable		
		0030 119.819
Storage Box 8 x 8, for 64 tubes 1 – 2 mL, 3 pcs., height 53 mm, 2 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric code		
		0030 140.524

For more information go to www.eppendorf.com/consumables

Eppendorf Safe-Lock Tubes

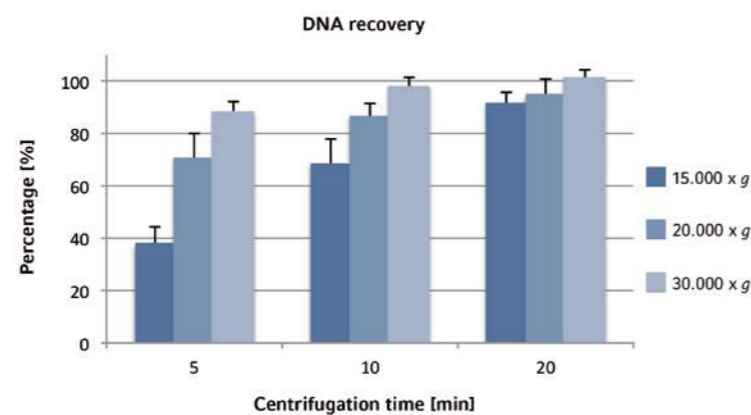
Description

Eppendorf Safe-Lock Tubes are the result of 50 years of continuous improvement and development. The original Safe-Lock tubes protect your sample with excellent centrifugation stability, feature optimized sealing properties, and reliably prevent sample evaporation. Trust in the original Eppendorf Safe-Lock Tubes, because your samples deserve nothing but the best.

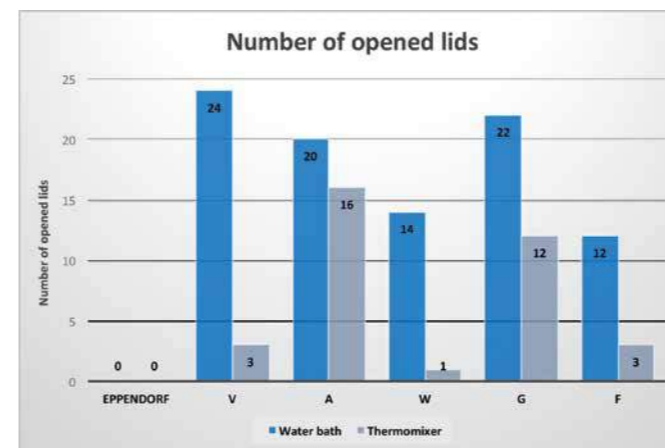


Product features

- > Hinged Eppendorf Safe-Lock lid prevents unintentional lid opening during incubation and storage
- > Polypropylene provides high resistance to chemicals, mechanical stress and temperature extremes
- > Manufactured without the use of slip agents, plasticizers, and biocides – substances that have been shown to leach from plastic consumables into the sample and negatively affect bio-assay results
- > g-Safe®: Exceptional centrifugation stability up to 30,000 × g prevents sample loss due to tube breakage and provides extra safety when working with hazardous samples
- > Precise lid sealing for minimal evaporation rates during long-term storage
- > Large frosted lid and surface on the side for easy labeling
- > Guaranteed functionality from -86 °C to 100 °C
- > Autoclavable when open (121 °C, 20 min)
- > Available in lot-certified PCR clean, Eppendorf Forensic DNA Grade, and Biopur® quality for guaranteed purity
- > Available in Eppendorf Protein and DNA LoBind material for maximum recovery of valuable samples



Using the Eppendorf 30,000 × g system comprising of Safe-Lock Tubes and Centrifuge 5430 R with high-speed rotor, the effect of relative centrifugal force (rcf), duration of centrifugation and the amount of isopropanol on the recovery rate of plasmid DNA from alcohol precipitation were investigated. All three factors play a role, with rcf having the greatest effect. By centrifuging the Eppendorf Safe-Lock Tubes at 30,000 × g, nearly 90 % of DNA could be recovered from a 5 min centrifugation. For more information see Application Note 234.



Test conditions: 24 tubes of different manufacturers were incubated either in water bath or thermo mixer with nominal volume (1.5 mL) of 1 % SDS at 100 °C for 10 min.

Ordering information

Description	Order no.
Eppendorf Safe-Lock Tubes, 0.5 mL	
Eppendorf Quality™, 500 tubes	0030 121.023
Eppendorf Quality™, 500 tubes	0030 121.112
Eppendorf Quality™, 500 tubes	0030 121.120
Eppendorf Quality™, 500 tubes	0030 121.139
Eppendorf Quality™, 500 tubes	0030 121.147
Eppendorf Quality™, 500 tubes	0030 121.708
Forensic DNA Grade, 500 tubes (10 bags × 50 tubes)	0030 123.603
PCR clean, 500 tubes	0030 121.155
PCR clean, 500 tubes	0030 123.301
Biopur®, 50 tubes, individually packed	0030 121.570
Eppendorf Safe-Lock Tubes, 1.5 mL	
Eppendorf Quality™, 1,000 tubes	0030 120.086
Eppendorf Quality™, 1,000 tubes	0030 120.159
Eppendorf Quality™, 1,000 tubes	0030 120.167
Eppendorf Quality™, 1,000 tubes	0030 120.175
Eppendorf Quality™, 1,000 tubes	0030 120.183
Eppendorf Quality™, 1,000 tubes	0030 121.694
Biopur®, 100 tubes, individually packed	0030 121.589
Forensic DNA Grade, 500 tubes (10 bags × 50 tubes)	0030 123.611
PCR clean, 1,000 tubes	0030 120.191
PCR clean, 1,000 tubes	0030 123.328
Eppendorf Safe-Lock Tubes, 2.0 mL	
Eppendorf Quality™, 1,000 tubes	0030 120.094
Eppendorf Quality™, 1,000 tubes	0030 120.205
Eppendorf Quality™, 1,000 tubes	0030 120.213
Eppendorf Quality™, 1,000 tubes	0030 120.221
Eppendorf Quality™, 1,000 tubes	0030 120.230
Eppendorf Quality™, 1,000 tubes	0030 121.686
Biopur®, 100 tubes, individually packed	0030 121.597
Forensic DNA Grade, 500 tubes (10 bags × 50 tubes)	0030 123.620
PCR clean, 1,000 tubes	0030 120.248
PCR clean, 1,000 tubes	0030 123.344
Eppendorf Tube Rack, 36 positions, for 1.5 mL and 2.0 mL tubes, 2 pcs., polypropylene, numbered positions, autoclavable	0030 119.819
Storage Box 8 × 8, for 64 tubes 1 – 2 mL, 3 pcs., height 53 mm, 2 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric code	0030 140.524

For more information go to www.eppendorf.com/SafeLock

Eppendorf Tubes® 5.0 mL

Description

Eppendorf Tubes are the benchmark for simple and safe sample preparation from 0.5 to 2.0 mL. For larger volumes, 15 mL and 50 mL conical tubes are available. With medium sample volumes you may face an issue: they need to be processed with large conical screw cap tubes - impractical, inconvenient and often prone to contamination. The availability of snap cap and screw cap formats enable the optimized choice for different requirements in sample preparation, incubation, storage, or other applications.

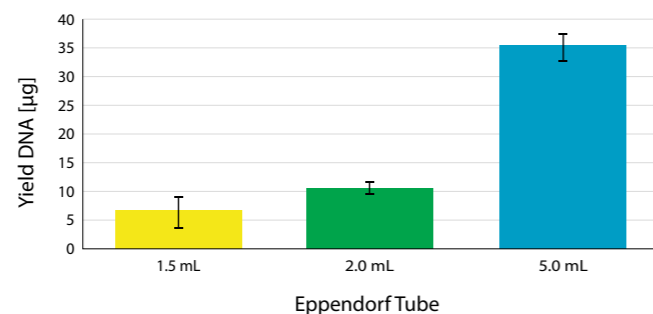


Product features

- > Matching high-speed rotors for Eppendorf Centrifuges 5430/R, 5427 R, 5804/R and 5810/R
- > 5.0 mL adapters and inserts for all existing Eppendorf rotors, with bore holes for 15 mL or 50 mL tubes
- > Functional rack for bench work
- > Storage boxes for freezing
- > 5.0 mL thermoblocks for Eppendorf ThermoMixer® C, Eppendorf ThermoMixer® comfort, ThermoStat C and ThermoStat plus
- > 5.0 mL Reservoir Rack Module for the automated pipetting system *epMotion*
- > Available in Eppendorf Protein and DNA LoBind material for maximum recovery of valuable samples when only low sample amount is available

Applications

- > Easier processing of samples up to 5.0 mL
- > Higher yields in DNA isolation, especially with samples with limited quantity of source material
- > Convenient and safe cell culture applications
- > Easier sample access lowers the risk of contamination
- > Preparation of mastermixes and buffers
- > Less storage space needed
- > Safe cell and tissue lysis
- > Storage of samples and liquid solutions



Higher yields in DNA isolation

e.g. the yield of low-copy plasmid DNA can be significantly improved by increasing the culture volume to 5 mL. Data shown in the diagram were generated with 5.0 mL snap cap format – for additional information and protocol description please see Application Note 262.

For more information go to www.eppendorf.com/5ml



The ideal solution for sample preparation and storage: The new Eppendorf Tube Racks and Storage Boxes (see page 130 and 131).

Ordering information

Description	Order no.
Eppendorf Tubes® 5.0 mL, 5.0 mL	
Eppendorf Quality™, colorless, 200 tubes (2 bags × 100 tubes)	0030 119.401
PCR clean, colorless, 200 tubes (2 bags × 100 tubes)	0030 119.460
Biopur®, colorless, 50 tubes, individually wrapped	0030 119.479
Forensic DNA Grade, colorless, 200 tubes (4 bags × 50 tubes)	0030 119.606
Sterile, colorless, 200 tubes (10 bags × 20 tubes)	0030 119.487
Eppendorf Quality™, amber (light protection), 200 tubes (2 bags × 100 tubes)	0030 119.452
Eppendorf Tubes® 5.0 mL starter pack , 5.0 mL, 400 tubes (2 packages with 2 bags of 100 each), 2 racks (with 12 locations each), white, 8 universal adapters for rotors with bore holes for 15 mL conical tubes, PCR clean, colorless	0030 119.380
Eppendorf Tubes® 5.0 mL with screw cap , 5.0 mL	
PCR clean, colorless, 200 tubes (2 bags × 100 tubes)	0030 122.364
Eppendorf Quality™, colorless, 200 tubes (2 bags × 100 tubes)	0030 122.305
PCR clean, colorless, 200 tubes (2 bags × 100 tubes)	0030 122.313
Sterile, pyrogen-, DNase-, RNase-, human and bacterial DNA-free, colorless, 200 tubes (2 bags × 100 tubes)	0030 122.321
Forensic DNA Grade, colorless, 200 tubes (4 bags × 50 tubes)	0030 122.402
Eppendorf Conical Tubes , 15 mL, Sterile, pyrogen-, DNase-, RNase-, human and bacterial DNA-free, amber (light protection), 200 tubes (8 bags × 25 tubes)	0030 122.194
Eppendorf Conical Tubes , 50 mL, Sterile, pyrogen-, DNase-, RNase-, human and bacterial DNA-free, amber (light protection), 200 tubes (8 bags × 25 tubes)	0030 122.224
DNA LoBind Tubes , DNA LoBind, 5.0 mL, PCR clean, colorless, 200 tubes (4 bags × 50 tubes)	0030 108.310
Protein LoBind Tubes , Protein LoBind, 5.0 mL, PCR clean, colorless, 100 tubes (2 bags × 50 tubes)	0030 108.302
Tube Clip for Eppendorf Tubes® 5.0 mL , Eppendorf Quality™, 10 pcs.	0030 119.509
Eppendorf Tube Rack , 12 positions, for 5.0 mL and 15 mL tubes, 2 pcs.	
polypropylene, numbered positions, autoclavable	0030 119.827
Storage Box 5 × 5 , for 25 tubes 5 mL, 4 pcs., height 64 mm, 2.5 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric code	0030 140.532
Storage Box 5 × 5 , for 25 tubes 5 mL screw cap, 2 pcs., height 76 mm, 3 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric code	0030 140.613
Rotor FA-45-12-17 , aerosol-tight, incl. rotor lid, for 12 × Eppendorf Tubes® 5.0 mL	5409 700.006
Rotor FA-45-16-17 , aerosol-tight, incl. rotor lid, for 16 × Eppendorf Tubes® 5.0 mL	5427 750.002
Rotor FA-45-20-17 , incl. rotor lid, for 20 × Eppendorf Tubes® 5.0 mL	5820 765.003
Adapter , for 14 × Eppendorf Tubes® 5.0 mL, for Rotor S-4-104, set of 2 pcs.	5825 739.000
Adapter , for 1 × Eppendorf Tubes® 5.0 mL, for Rotor A-4-38, set of 2 pcs.	5702 733.008
Adapter , for 12 × Eppendorf Tubes® 5.0 mL, for Rotor F-35-6-30, large rotor bore, set of 2 pcs.	5427 747.001
Adapter , for 1 × Eppendorf Tubes® 5.0 mL, for Rotor F-34-6-38, set of 2 pcs.	5804 777.000
Adapter , for Eppendorf Tubes® 5.0 mL, for Rotor F-35-6-30, small rotor bore, set of 2 pcs.	5427 746.005
Adapter , for 1 × Eppendorf Tubes® 5.0 mL with snap cap, set of 2 pcs.	5820 730.005
Universal adapter , for 1 × Eppendorf Tubes® 5.0 mL, for centrifuges with rotors for conical 15 mL tubes, set of 8 pcs.	5820 732.008
Adapter , for 8 × Eppendorf Tubes® 5.0 mL, for Rotor S-4-72, set of 2 pcs.	5804 793.005
Exchangeable thermoblocks , for 8 × 5.0 mL Eppendorf Tubes®	5309 000.333
Eppendorf SmartBlock™ 5 mL , thermoblock for 8 Eppendorf Tubes® 5.0 mL, 8 × 5.0 mL reaction vessels	5309 000.007
Reservoir Rack Module TC , for use in <i>epMotion</i> ® Reservoir Racks, temperable, 4 × Eppendorf Tubes® 5.0 mL	5075 799.340

Eppendorf Conical Tubes 15 mL and 50 mL

Description

The Conical Tubes 15 mL and 50 mL extend the volume range of the Eppendorf Tubes®. Safe design and easy handling ensure best sample processing. They represent the optimal solution for cell culture and cell biology applications as well as for sample preparation protocols in microbiology and molecular biology laboratories. Whether centrifugation, mixing, or other applications – the Eppendorf Conical Tubes 15 mL and 50 mL will complete your workflows in an excellent way.

Premium raw material and no use of slip agents, plasticizers, and biocides during manufacturing ensure

- > excellent sample integrity
- > high g-Safe® centrifugation stability
- > optimized sample and pellet visibility

Cap with flattened and grooved sides

- > supports user-friendly ergonomic handling
- > enables a stable upright positioning
- > minimizes contamination risk

Reliable and safe labeling due to a large writing area on the tube and due to a flat and light-colored cap

Precise dimensions enable maximum compatibility with centrifuge rotors, mixers and shakers

Certified purity

- > individual purity certificates are available for each lot

Applications

- > Convenient and safe cell culture applications
- > Sample preparation in microbiology and molecular biology labs
- > Storage of samples and solution with larger volumes
- > Preparation of mastermixes and buffers

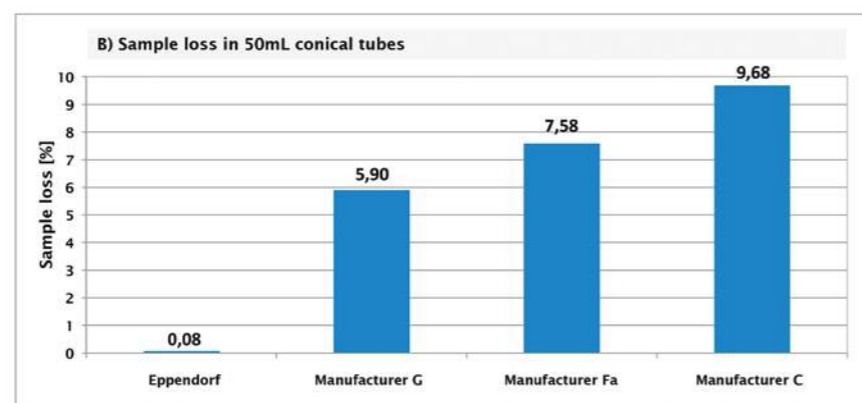


Figure 2: Sample loss after horizontal storage of ethanol in different conical tubes at -86 °C for 24 hours. Sample loss is expressed as percentage of initial weight before storage. For more information see Application Note 343.



Eppendorf Tubes® 5.0 mL with snap cap or screw cap: The ideal complement for smaller volumes (see page 118)

Whether centrifugation, mixing, or other applications – the Eppendorf Conical Tubes 15 and 50 mL will complete your workflows in an excellent way

Technical specifications			
Model	Eppendorf Conical Tubes	Eppendorf Conical Tubes 15 mL	Eppendorf Conical Tubes 50 mL
External height / Dimensions external		121 mm / 17 mm	116 mm / 30 mm
Operating temperature	-86 °C – 100 °C	-86 °C – 100 °C	-86 °C – 100 °C

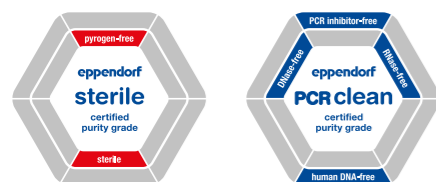
Ordering information	
Description	Order no.
Eppendorf Conical Tubes, 15 mL	
Sterile, pyrogen-, DNase-, RNase-, human and bacterial DNA-free, colorless, 500 tubes (10 bags x 50 tubes)	0030 122.151
Eppendorf Conical Tubes, 15 mL, Sterile, pyrogen-, DNase-, RNase-, human and bacterial DNA-free, amber (light protection), 200 tubes (8 bags x 25 tubes)	0030 122.194
Forensic DNA Grade, colorless, 100 tubes, individually wrapped	0030 122.259
Sterile, pyrogen-, DNase-, RNase-, human and bacterial DNA-free, colorless, 500 tubes (20 racks x 25 tubes)	0030 122.160
Eppendorf Conical Tubes, 50 mL	
Sterile, pyrogen-, DNase-, RNase-, human and bacterial DNA-free, colorless, 500 tubes (20 bags x 25 tubes)	0030 122.178
Eppendorf Conical Tubes, 50 mL, Sterile, pyrogen-, DNase-, RNase-, human and bacterial DNA-free, amber (light protection), 200 tubes (8 bags x 25 tubes)	0030 122.224
Forensic DNA Grade, colorless, 48 tubes, individually wrapped	0030 122.267
Sterile, pyrogen-, DNase-, RNase-, human and bacterial DNA-free, colorless, 300 tubes (12 racks x 25 tubes)	0030 122.186
Eppendorf Tube Rack, 12 positions, 6 for 5.0 mL and 15 mL tubes and 6 for 50 mL tubes, 2 pcs.	
polypropylene, numbered positions, autoclavable	0030 119.835
Eppendorf Tube Rack, 12 positions, for 5.0 mL and 15 mL tubes, 2 pcs.	
polypropylene, numbered positions, autoclavable	0030 119.827
DNA LoBind Tubes, DNA LoBind, 15 mL, conical tubes, PCR clean, colorless, 200 tubes (4 bags x 50 tubes)	0030 122.208
DNA LoBind Tubes, DNA LoBind, 50 mL, conical tubes, PCR clean, colorless, 200 tubes (4 bags x 50 tubes)	0030 122.232
Protein LoBind Tubes, Protein LoBind, 15 mL, conical tube, PCR clean, colorless, 200 tubes (4 bags x 50 tubes)	0030 122.216
Protein LoBind Tubes, Protein LoBind, 50 mL, conical tube, PCR clean, colorless, 200 tubes (4 bags x 50 tubes)	0030 122.240
Storage Box 5 x 5, for 25 tubes 15 mL, 2 pcs., height 127 mm, 5 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric code	0030 140.583
Storage Box 3 x 3, for 9 tubes 50 mL and 4 tubes 15 mL, 2 pcs., height 127 mm, 5 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric code	0030 140.591

For more information go to www.eppendorf.com/consumables

Eppendorf Microplates

Description

The Eppendorf Microplates bring an outstanding clarity to your laboratory! It has never been this easy to pipette, control and recover samples with a polypropylene microplate. The easy-to-read alphanumeric label of the OptiTrack® matrix on each plate makes it unbelievably easy to identify individual wells, speeds up the filling process and significantly reduces the risk of errors. The high transparency is outstanding and ensures that you can always quickly locate your samples. The Microplates are also available in Eppendorf LoBind material for maximum sample recovery when only limited amount of sample material is available.



Product features

- > Unmatched, transparent polypropylene (PP) for improved sample visibility
- > OptiTrack® Matrix: up to 30 % faster sample identification and fewer pipetting errors via high-contrast alphanumeric labeling
- > RecoverMax® well design: Optimized well geometry for minimal remaining volume and excellent mixing properties
- > Raised well rims and smooth surface for reliable closing, even with heat sealing
- > g-Safe®: exceptional centrifugation stability up to 6,000 × g
- > Polypropylene guarantees high resistance to chemicals, mechanical stress and temperature extremes
- > Manufactured without slip agents, plastocizers or biocides – Materials which could have a negative effect on bioassays
- > Guaranteed functionality from -86 °C to 100 °C
- > Autoclavable (121 °C, 20 min)
- > Available with barcode. Additional details available at: www.eppendorf.com/barcode

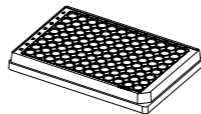
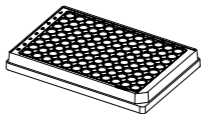
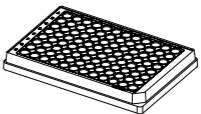
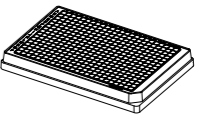
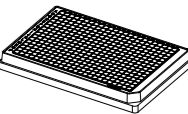



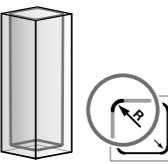
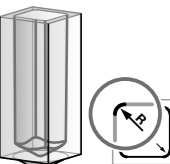
Applications

- > Sample storage and preparation
- > Assays that require high resistance against temperature or solvents
- > Active ingredient screening
- > Combinatorial chemistry
- > Storage of cDNA or genomic banks
- > Protein analysis
- > Genotyping
- > Storage of siRNA or oligonucleotide libraries
- > Preparation of tissue and plant lysates

For more information go to www.eppendorf.com/consumables

Technical specifications subject to change.

Technical specifications

					
Description	Microplate 96/F	Microplate 96/U	Microplate 96/V	Microplate 384/F	Microplate 384/V
Number of wells	96 wells	96 wells	96 wells	384 wells	384 wells
Working volume	50 – 350 µL	20 – 320 µL	20 – 320 µL	10 – 120 µL	5 – 120 µL
Total volume per well	400 µL	360 µL	350 µL	150 µL	140 µL
					
Bottom shape	F bottom	U bottom	V bottom	F bottom	conical

Ordering information

Description	OptiTrack® frame color	Order no.
Microplate 96/F , wells clear, RecoverMax® well design		
PCR clean, 80 plates (5 bags × 16 plates)	<input type="checkbox"/> white	0030 601.106
Sterile, 80 plates (5 bags × 16 plates)	<input type="checkbox"/> white	0030 602.102
Microplate 96/U , wells clear, RecoverMax® well design		
PCR clean, 80 plates (5 bags × 16 plates)	<input type="checkbox"/> white	0030 601.203
Sterile, 80 plates (5 bags × 16 plates)	<input type="checkbox"/> white	0030 602.200
Microplate 96/V , wells clear, RecoverMax® well design		
PCR clean, 80 plates (5 bags × 16 plates)	<input type="checkbox"/> white	0030 601.300
Sterile, 80 plates (5 bags × 16 plates)	<input type="checkbox"/> white	0030 602.307
Microplate 384/F , wells clear, RecoverMax® well design		
PCR clean, 80 plates (5 bags × 16 plates)	<input type="checkbox"/> white	0030 621.107
Sterile, 80 plates (5 bags × 16 plates)	<input type="checkbox"/> white	0030 622.103
Microplate 384/V , wells clear, RecoverMax® well design		
PCR clean, 80 plates (5 bags × 16 plates)	<input type="checkbox"/> white	0030 621.301
Sterile, 80 plates (5 bags × 16 plates)	<input type="checkbox"/> white	0030 622.308

Eppendorf Assay/Reader Microplates

Description

Eppendorf assay plates are optimized for measuring absorbance assays in the visible and UV range, fluorescence and chemiluminescence assays. Solid plates are suitable for top-reading plate readers. Clear plates and black/clear plates can be used with top- and bottom-reading plate readers.

The black Eppendorf Microplates are ideal for fluorescence detection. An excellent signal-to-noise ratio provides low detection limits in assays – for clear signals even with low-concentration samples! The white Eppendorf Microplates maximize reflection for high sensitivity during detection of luminescence or weak fluorescence signals.



Product features

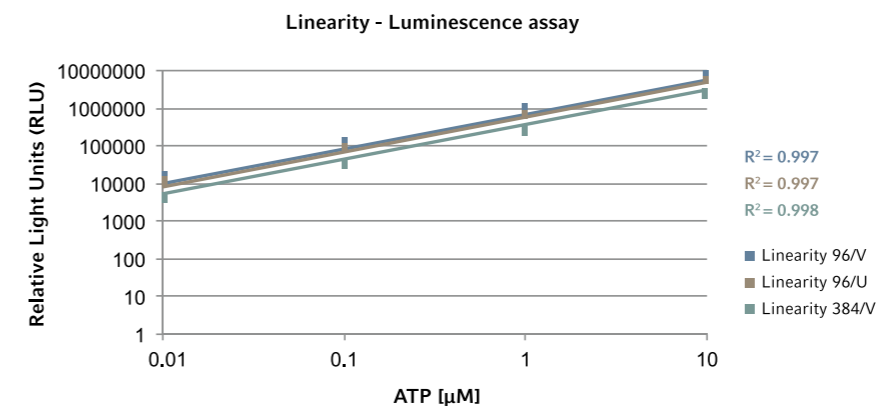
- > UV-VIS Microplates feature an ultrathin film bottom for excellent light transmission in the UV range
- > Black Eppendorf Microplates offer an excellent signal-to-noise ratio – for clear signals even with low-concentration samples
- > White Eppendorf Microplates are optimized for highest sensitivity in the detection of luminescence signals by maximizing reflection
- > Solid black and white assay plates are made of polypropylene resulting in high resistance to chemicals, mechanical stress, and temperature extremes
- > All plates are optimized for minimal autofluorescence and autoluminescence
- > Available in lot-certified PCR clean purity grade

Applications

- > Clear VIS and UV-VIS plates for all absorbance assays in the visible and UV range
- > Black and white Microplates for Fluorescence and Luminescence detection
- > DNA- and Protein concentration with absorbance or fluorescent dyes
- > Protocols that require high resistance against temperature or solvents
- > Dilution series
- > Preparation of tissue and plant lysates

For more information go to www.eppendorf.com/consumables

Technical specifications subject to change.



The Eppendorf Microplates 96/V, 96/U and 384/V were tested in a luminescence assay. A ten-fold serial dilution of ATP in culture medium was prepared. Logarithmic plot of data showing linearity of results for the Eppendorf Microplates in the range between 0.01 and 10 μM ATP. For more information see Application Note 215.

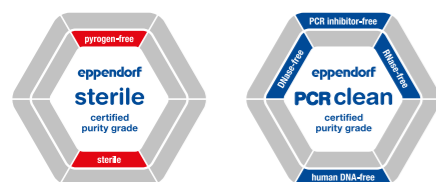
Ordering information

Description	Order no.
Microplate 96/F , wells white	
PCR clean, gray, 80 plates (5 bags × 16 plates)	0030 601.475
Microplate 96/U , wells white	
PCR clean, gray, 80 plates (5 bags × 16 plates)	0030 601.572
Microplate 96/V , wells white	
PCR clean, gray, 80 plates (5 bags × 16 plates)	0030 601.670
Microplate 384/V , wells white	
PCR clean, gray, 80 plates (5 bags × 16 plates)	0030 621.670
Microplate 96/F , wells black	
PCR clean, white, 80 plates (5 bags × 16 plates)	0030 601.700
Microplate 96/U , wells black	
PCR clean, white, 80 plates (5 bags × 16 plates)	0030 601.807
Microplate 96/V , wells black	
PCR clean, white, 80 plates (5 bags × 16 plates)	0030 601.904
Microplate 384/V , wells black	
PCR clean, white, 80 plates (5 bags × 16 plates)	0030 621.905
Microplate UV-VIS 96/F , wells clear	
PCR clean, colorless, 40 plates (4 bags × 10 plates)	0030 741.048
Microplate VIS 96/F , wells clear	
PCR clean, colorless, 40 plates (4 bags × 10 plates)	0030 730.020
Eppendorf Cell Imaging Plates , with lid, black with clear F-bottom, Sterile, pyrogen-, DNase-, RNase-, human and bacterial DNA-free. Non-cytotoxic	
96-Well Cell Imaging Plate with 25 μm film bottom, individually wrapped, 20 pcs.	0030 741.013

Eppendorf Deepwell Plates

Description

Eppendorf Deepwell Plates 96 and 384 are high-performance plates for all manual and automated applications – from sample storage at -86 °C to DNA denaturation at 100 °C. Manufactured from pure polypropylene (PP), these plates offer innovative features: More dependability. More efficiency. More stability. The plates are available with a white, yellow, green, or blue border. For easy identification of wells, a high-contrast alphanumeric label is laser-engraved in the border. This OptiTrack® matrix allows you to find your sample up to 30 % more quickly while reducing pipetting errors. With all of these sophisticated features, these plates set new standards in your laboratory.



Applications

- > Sample storage and preparation
- > Bacteria and yeast cultivation
- > DNA and RNA isolation with high throughput
- > Storage of cDNA or genomic banks
- > Storage of siRNA or oligonucleotide libraries
- > Protein analysis
- > Storage of valuable protein and DNA samples in Eppendorf LoBind plates
- > Plasmid purification with high throughput
- > Creating dilution series

Product features

- > OptiTrack® matrix: up to 30 % faster sample identification and fewer pipetting errors via high-contrast alphanumeric labeling
- > RecoverMax® well design: Optimized well geometry for maximum sample recovery and excellent mixing properties
- > Minimal remaining volume and high uniformity from well to well
- > Raised well rims and smooth surface for reliable closing, even with heat sealing
- > Easy and reliable stacking
- > g-Safe®: exceptional centrifugation stability up to 6,000 × g for faster protocols and improved sample quality
- > High-quality polypropylene guarantees high resistance to chemicals, mechanical stress and temperature extremes
- > Manufactured without slip agents, plasticizers, and biocides – Materials which could have a negative effect on bioassays
- > Autoclavable (121 °C, 20 min)
- > Available with barcode. Additional details available at: www.eppendorf.com/barcode

Technical specifications				
Model	Deepwell Plates 96/500 µL	Deepwell Plates 96/1000 µL	Deepwell Plates 96/2000 µL	Deepwell Plates 384/200 µL
Total volume per well	700 µL	1,200 µL	2,400 µL	240 µL
Working volume per well	30 – 550 µL	30 – 1,000 µL	50 – 2,000 µL	20 – 225 µL
Well shape/Bottom shape				

For more information go to www.eppendorf.com/Deepwellplates

Ordering information

Description	OptiTrack® frame color	Order no.
Deepwell Plate 96/500 µL , wells clear, 500 µL		
PCR clean, 40 plates (5 bags × 8 plates)	white	0030 501.101
PCR clean, 40 plates (5 bags × 8 plates)	yellow	0030 501.110
PCR clean, 40 plates (5 bags × 8 plates)	green	0030 501.136
PCR clean, 40 plates (5 bags × 8 plates)	blue	0030 501.144
PCR clean, 120 plates (10 bags × 12 plates)	white	0030 505.107
Sterile, 40 plates (5 bags × 8 plates)	white	0030 502.108
Sterile, 40 plates (5 bags × 8 plates)	yellow	0030 502.116
Sterile, 40 plates (5 bags × 8 plates)	green	0030 502.132
Sterile, 40 plates (5 bags × 8 plates)	blue	0030 502.140
Sterile, 120 plates (10 bags × 12 plates)	white	0030 506.103
Deepwell Plate 96/1000 µL , wells clear, 1,000 µL		
PCR clean, 20 plates (5 bags × 4 plates)	white	0030 501.209
PCR clean, 20 plates (5 bags × 4 plates)	yellow	0030 501.217
PCR clean, 20 plates (5 bags × 4 plates)	green	0030 501.233
PCR clean, 20 plates (5 bags × 4 plates)	blue	0030 501.241
PCR clean, 80 plates (10 bags × 8 plates)	white	0030 505.204
Sterile, 20 plates (5 bags × 4 plates)	white	0030 502.205
Sterile, 20 plates (5 bags × 4 plates)	yellow	0030 502.213
Sterile, 20 plates (5 bags × 4 plates)	green	0030 502.230
Sterile, 20 plates (5 bags × 4 plates)	blue	0030 502.248
Sterile, 80 plates (10 bags × 8 plates)	white	0030 506.200
Deepwell Plate 96/2000 µL , wells clear, 2,000 µL		
PCR clean, 20 plates (5 bags × 4 plates)	white	0030 501.306
PCR clean, 20 plates (5 bags × 4 plates)	yellow	0030 501.314
PCR clean, 20 plates (5 bags × 4 plates)	green	0030 501.330
PCR clean, 20 plates (5 bags × 4 plates)	blue	0030 501.349
PCR clean, 80 plates (10 bags × 8 plates)	white	0030 505.301
Sterile, 20 plates (5 bags × 4 plates)	white	0030 502.302
Sterile, 20 plates (5 bags × 4 plates)	yellow	0030 502.310
Sterile, 20 plates (5 bags × 4 plates)	green	0030 502.337
Sterile, 20 plates (5 bags × 4 plates)	blue	0030 502.345
Sterile, 80 plates (10 bags × 8 plates)	white	0030 506.308
Deepwell Plate 384/200 µL , wells clear, 200 µL		
PCR clean, 40 plates (5 bags × 8 plates)	white	0030 521.102
Sterile, 40 plates (5 bags × 8 plates)	white	0030 522.109
PCR clean, 120 plates (10 bags × 12 plates)	white	0030 525.108
Sterile, 120 plates (10 bags × 12 plates)	white	0030 526.104

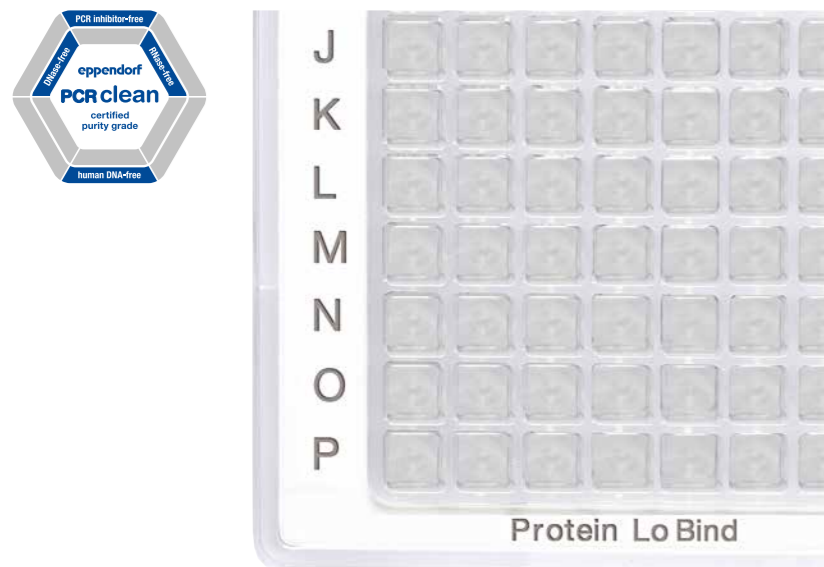


www.eppendorf.com/deepwellplates-brochure

Protein LoBind Plates

Description

Eppendorf LoBind Plates maximize sample recovery by significantly reducing sample binding to the surface. A special, two-component polymer mix creates a hydrophilic surface that ensures optimized recovery rates of valuable samples. Protein LoBind Plates have been specially designed for use in protein research or with sensitive proteomic test methods, and frequently provide significantly improved analysis results.



Product features

- > Eppendorf LoBind material ensures excellent sample recovery for improved assay results
- > Free of surface coating (e.g., silicone) to minimize the risk of sample interference
- > Lot-certified PCR clean purity grade: free of human DNA, DNase, RNase and PCR inhibitors
- > Available in tube, microplate, and deepwell plate formats for easy-up scaling
- > High-contrast Unique OptiTrack® matrix: up to 30 % faster sample identification and fewer pipetting errors
- > RecoverMax® well design: optimized well geometry for minimal remaining/dead volume and excellent mixing properties
- > Raised well rims and a smooth surface guarantee reliable sealing in plates
- > Available with barcode. Additional details available at: www.eppendorf.com/barcode

Applications

- > Preparation or storage of protein, peptide or antibody samples
- > Enzymatic assays – the hydrophilic surface reduces denaturation when it comes into contact with the tube inner wall
- > Prevention of sample loss during storage of virus stock solutions
- > Storage of cell suspensions

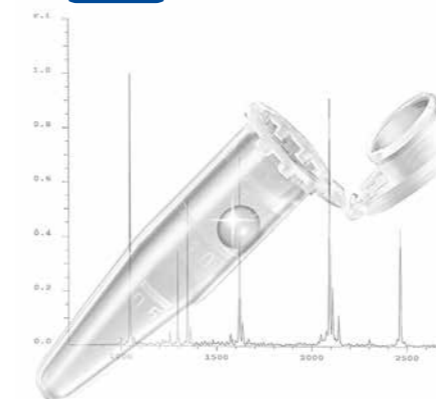
Ordering information

Description	OptiTrack® frame color	Order no.
Deepwell Plate 96/500 µL, Protein LoBind, 500 µL		
PCR clean, 40 plates (5 bags × 8 plates)	<input type="checkbox"/> white	0030 504.100
PCR clean, 40 plates (5 bags × 8 plates)	<input checked="" type="checkbox"/> yellow	0030 504.119
PCR clean, 120 plates (10 bags × 12 plates)	<input type="checkbox"/> white	0030 508.106
Deepwell Plate 96/1000 µL, Protein LoBind, 1,000 µL		
PCR clean, 20 plates (5 bags × 4 plates)	<input type="checkbox"/> white	0030 504.208
PCR clean, 20 plates (5 bags × 4 plates)	<input checked="" type="checkbox"/> yellow	0030 504.216
PCR clean, 80 plates (10 bags × 8 plates)	<input type="checkbox"/> white	0030 508.203
Deepwell Plate 96/2000 µL, Protein LoBind, 2,000 µL		
PCR clean, 20 plates (5 bags × 4 plates)	<input type="checkbox"/> white	0030 504.305
Deepwell Plate 384/200 µL, Protein LoBind, 200 µL		
PCR clean, 40 plates (5 bags × 8 plates)	<input type="checkbox"/> white	0030 524.101
PCR clean, 120 plates (10 bags × 12 plates)	<input type="checkbox"/> white	0030 528.107
Microplate 384/V-PP, Protein LoBind, wells clear		
PCR clean, 80 plates (5 bags × 16 plates)	<input type="checkbox"/> white	0030 624.300
PCR clean, 240 plates (10 bags × 24 plates)	<input type="checkbox"/> white	0030 628.306

Protein LoBind Tubes

Description

When biological samples are stored or incubated in standard vessels, over 90 % of the sample can be lost within 24 hours as a result of binding to the plastic surface. Eppendorf LoBind Tubes maximize sample recovery by significantly reducing sample binding to the surface. A special, two-component polymer mix creates a hydrophilic surface that ensures optimized recovery rates of valuable samples. Protein LoBind Tubes have been specially designed for use in protein research or with sensitive proteomic test methods, and frequently provide significantly improved analysis results.



Product features

- > Eppendorf LoBind material ensures optimized sample recovery for improved assay results
- > Free of surface coating (e.g., silicone) to minimize the risk of sample interference
- > Lot-certified PCR clean purity grade: free of human DNA, DNase, RNase and PCR inhibitors
- > Available in tube, microplate, and deepwell plate formats for easy-up scaling
- > Precise lid sealing to minimize evaporation

Applications

- > Preparation or storage of protein, peptide or antibody samples
- > Enzymatic assays – the hydrophilic surface reduces denaturation when it comes into contact with the tube inner wall
- > Prevention of sample loss during storage of virus stock solutions
- > Storage of cell suspensions

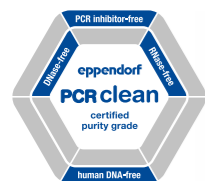
Ordering information

Description	Order no.
Protein LoBind Tubes , Protein LoBind, 0.5 mL, PCR clean, colorless, 100 tubes (2 bags × 50 tubes)	0030 108.094
Protein LoBind Tubes , Protein LoBind, 1.5 mL, PCR clean, colorless, 100 tubes (2 bags × 50 tubes)	0030 108.116
Protein LoBind Tubes , Protein LoBind, 2.0 mL, PCR clean, colorless, 100 tubes (2 bags × 50 tubes)	0030 108.132
Protein LoBind Tubes , Protein LoBind, 5.0 mL, PCR clean, colorless, 100 tubes (2 bags × 50 tubes)	0030 108.302
Protein LoBind Tubes , Protein LoBind, 15 mL, conical tube, PCR clean, colorless, 200 tubes (4 bags × 50 tubes)	0030 122.216
Protein LoBind Tubes , Protein LoBind, 50 mL, conical tube, PCR clean, colorless, 200 tubes (4 bags × 50 tubes)	0030 122.240

DNA LoBind Plates

Description

DNA LoBind plates improve recovery of nucleic acids by reducing their adsorption to the tube wall. A combination of special manufacturing technologies and selected polypropylene batches ensures nearly 100 % recovery of DNA/RNA molecules-without surface coating to eliminate the risk of sample contamination. Eppendorf DNA LoBind plates are ideal for sample preparation of long-term storage of nucleic acids in forensic, microarrays, NGS applications, and many others.



Product features

- > Eppendorf LoBind material ensures optimized sample recovery for improved assay results
- > Free of surface coating (e.g. silicone) to minimize the risk of sample interference
- > Lot-certified PCR clean purity grade: free of human DNA, DNase, RNase and PCR inhibitors
- > Available in tube, microplate, and deepwell plate formats for easy-up scaling
- > High-contrast Unique OptiTrack® matrix: up to 30 % faster sample identification and fewer pipetting errors
- > RecoverMax® well design: optimized well geometry for minimal remaining/dead volume and excellent mixing properties
- > Raised well rims and a smooth surface guarantee reliable sealing
- > Available with barcode. Additional details available at: www.eppendorf.com/barcode

Applications

- > Preparation or storage of DNA and RNA samples
- > Forensic trace analysis
- > Preparing dilution series in quantitative qPCR
- > Sample preparation in next-generation sequencing
- > Creation of genomic or oligonucleotide libraries

Ordering information

Description	OptiTrack® frame color	Order no.
Deepwell Plate 96/500 µL , DNA LoBind, 500 µL, Eppendorf LoBind®		
PCR clean, 40 plates (5 bags × 8 plates)	white	0030 503.104
PCR clean, 40 plates (5 bags × 8 plates)	blue	0030 503.147
PCR clean, 120 plates (10 bags × 12 plates)	white	0030 507.100
Deepwell Plate 96/1000 µL , DNA LoBind, 1000 µL, Eppendorf LoBind®		
PCR clean, 20 plates (5 bags × 4 plates)	white	0030 503.201
PCR clean, 20 plates (5 bags × 4 plates)	blue	0030 503.244
PCR clean, 80 plates (10 bags × 8 plates)	white	0030 507.207
Deepwell Plate 384/200 µL , DNA LoBind, 200 µL, Eppendorf LoBind®		
PCR clean, 40 plates (5 bags × 8 plates)	white	0030 523.105
PCR clean, 120 plates (10 bags × 12 plates)	white	0030 527.100
Microplate 96/V-PP , DNA LoBind, Eppendorf LoBind®		
PCR clean, 80 plates (5 bags × 16 plates)	white	0030 603.303
Microplate 384/V-PP , DNA LoBind, wells clear, Eppendorf LoBind®		
PCR clean, 80 plates (5 bags × 16 plates)	white	0030 623.304
PCR clean, 240 plates (10 bags × 24 plates)	white	0030 627.300

DNA LoBind Tubes

Description

DNA LoBind tubes maximize sample recovery of nucleic acids by significantly reducing sample-to-surface binding. A combination of special manufacturing technologies and selected polypropylene batches ensures nearly 100 % recovery of DNA/RNA molecules-without surface coating to eliminate the risk of sample contamination. DNA LoBind tubes are batch-tested and certified by an independent laboratory to be free from DNA, DNase, RNase, and PCR inhibitors. Eppendorf DNA LoBind tubes are ideal for sample preparation of long-term storage of nucleic acids in forensic, microarrays, NGS applications, and many others.



Product features

- > Eppendorf LoBind material ensures optimized sample recovery for improved assay results
- > Free of surface coating (e.g., silicone) to minimize the risk of sample interference
- > Lot-certified PCR clean purity grade: free of human DNA, DNase, RNase and PCR inhibitors
- > Available in tube, microplate, and deepwell plate formats for easy-up scaling
- > Precise lid sealing for minimal evaporation rates in tube format
- > Rated up to 30,000 × g (25,000 × g for 2.0 mL tube) centrifugation speed for molecular biology applications

Applications

- > Preparation or storage of DNA and RNA samples
- > Forensic trace analysis
- > Preparing dilution series in quantitative qPCR
- > Sample preparation in next-generation sequencing
- > Creation of genomic or oligonucleotide libraries

Ordering information

Description	Order no.
DNA LoBind Tubes , DNA LoBind, 0.5 mL, PCR clean, colorless, 250 tubes (5 bags × 50 tubes)	0030 108.035
DNA LoBind Tubes , DNA LoBind, 1.5 mL, PCR clean, colorless, 250 tubes (5 bags × 50 tubes)	0030 108.051
DNA LoBind Tubes , DNA LoBind, 2.0 mL, PCR clean, colorless, 250 tubes (5 bags × 50 tubes)	0030 108.078
DNA LoBind Tubes , DNA LoBind, 5.0 mL, PCR clean, colorless, 200 tubes (4 bags × 50 tubes)	0030 108.310
DNA LoBind Tubes , DNA LoBind, 15 mL, conical tubes, PCR clean, colorless, 200 tubes (4 bags × 50 tubes)	0030 122.208
DNA LoBind Tubes , DNA LoBind, 50 mL, conical tubes, PCR clean, colorless, 200 tubes (4 bags × 50 tubes)	0030 122.232

Accessories



Sealing options for Sample Preparation and Storage

- > Storage Film and Foil glued seals for simple and dependable sealing during sample storage
- > Heat Sealing Film and Foil for continuous locking with the best evaporation protection
- > Foil products are made of aluminum, can be pierced, and protect light-sensitive samples
- > Film products are transparent and provide protection against unwanted punctures
- > Eppendorf Plate Lid: stable, flexible protection of samples during short-term storage

Ordering information

Description	Order no.
Eppendorf Storage Film , self-adhesive, PCR clean, 100 pcs. (2 bags x 50 pcs.)	0030 127.870
Eppendorf Storage Foil , self-adhesive, PCR clean, 100 pcs.	0030 127.889
Eppendorf Sealing Mat , for DWP 96/2000, PCR clean, 50 pcs. (5 bags x 10 pcs.)	0030 127.960
Eppendorf Sealing Mat , for DWP 96/1000 and DWP 96/500, PCR clean, 50 pcs. (5 bags x 10 pcs.)	0030 127.978
Eppendorf Plates® Lid , for MTP and DWP, PCR clean, 80 pcs. (5 bags x 16 pcs.)	0030 131.517
Eppendorf Plates® Lid , for MTP and DWP, Sterile, 80 pcs. (5 bags x 16 pcs.)	0030 131.525
Eppendorf Heat Sealing Film , PCR clean, 100 pcs.	0030 127.838
Eppendorf Heat Sealing Foil , PCR clean, 100 pcs.	0030 127.854



Eppendorf Storage Boxes

- > Made of polypropylene (PP) for high stability in freezing applications and smooth opening and closing
- > For freezing to -86 °C
- > High-contrast permanent alphanumeric marking of each location through laser labeling enables easy sample reference and minimizes risk of sample mix-up
- > Autoclavable (121 °C, 20 min)
- > Transparent lid for easy and fast sample inspection
- > Flexible labeling on the light colored box and on the 5 writing areas of the lid
- > Optimal use of freezer space due to flexible combination of the different formats
- > For more information see: www.eppendorf.com/storageboxes

Ordering information

Description	Order no.
Storage Box 10 x 10 , for 100 cryogenic tubes w. int. thread, 3 pcs., height 53 mm, 2 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric code	0030 140.508
Storage Box 9 x 9 , for 81 screw cap (cryog.) tubes 1 – 2 mL, 3 pcs., height 53 mm, 2 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric code	0030 140.516
Storage Box 9 x 9 , for 81 screw cap (cryog.) tubes 3 mL, 2 pcs., height 76 mm, 3 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric code	0030 140.540
Storage Box 9 x 9 , for 81 screw cap (cryog.) tubes 4 – 5 mL, 2 pcs., height 102 mm, 4 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric code	0030 140.567
Storage Box 8 x 8 , for 64 tubes 1 – 2 mL, 3 pcs., height 53 mm, 2 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric code	0030 140.524
Storage Box 5 x 5 , for 25 tubes 5 mL, 4 pcs., height 64 mm, 2.5 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric code	0030 140.532
Storage Box 5 x 5 , for 25 tubes 5 mL screw cap, 2 pcs., height 76 mm, 3 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric code	0030 140.613
Storage Box 5 x 5 , for 25 tubes 15 mL, 2 pcs., height 127 mm, 5 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric code	0030 140.583
Storage Box 3 x 3 , for 9 tubes 50 mL and 4 tubes 15 mL, 2 pcs., height 127 mm, 5 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric code	0030 140.591

Technical specifications subject to change.



Micropestle

- > Two sides for optimal fit in 1.5 mL and 2.0 mL vessels
- > Autoclavable (121 °C, 20 min)

Ordering information

Description	Order no.
Micropestle , for resuspending pellets in 1.5/2.0 mL vessels, 10 pcs.	0030 120.973



Eppendorf Tube and Cuvette Racks

- > Made from high quality polypropylene (PP):
- > Ensuring dimensional stability across a broad temperature range (-86 °C to 121° C)
- > Providing chemical resistance
- > Six different formats always offer the optimal choice for all common tubes and cuvettes
- > A wavelike design enables you to clearly identify your samples, even when tubes are placed vertically in a column
- > Non-slip silicone feet ensure safe handling
- > The racks are laboratory washer-safe for fast and easy cleaning
- > The racks are autoclavable (121° C/20 min) and stackable
- > For more information see: www.eppendorf.com/tube-racks
- > Autoclavable (121 °C, 20 min)

Ordering information

Description	Order no.
Eppendorf Tube Rack , 48 positions, for 0.5 mL tubes, 2 pcs. polypropylene, numbered positions, autoclavable	0030 119.800
Eppendorf Tube Rack , 36 positions, for 1.5 mL and 2.0 mL tubes, 2 pcs. polypropylene, numbered positions, autoclavable	0030 119.819
Eppendorf Tube Rack , 12 positions, for 5.0 mL and 15 mL tubes, 2 pcs. polypropylene, numbered positions, autoclavable	0030 119.827
Eppendorf Tube Rack , 12 positions, 6 for 5.0 mL and 15 mL tubes and 6 for 50 mL tubes, 2 pcs. polypropylene, numbered positions, autoclavable	0030 119.835
Eppendorf Cuvette Rack , 30 positions, for glass and plastic cuvettes, 2 pcs. polypropylene, numbered positions, autoclavable	0030 119.851
Eppendorf Tube Rack , 36 positions, for cryogenic tubes, 2 pcs. polypropylene, numbered positions, autoclavable	0030 119.843

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Sample Handling



New

Model	MiniSpin®/MiniSpin® plus	5418 R	5420
Positioning	Space saving 12-place mini-centrifuge for quick spin downs even in the smallest workstation, non-refrigerated	Compact refrigerated 18-place microcentrifuge for temperature sensitive samples	Small footprint 24-place microcentrifuge for molecular biology routine applications, non-refrigerated
Page(s)	138	139	140
Max. capacity	12 x 1.5/2.0 mL	18 x 1.5/2.0 mL	24 x 1.5/2.0 mL
Max. RCF	12,100 x g/14,100 x g	16,873 x g	21,300 x g
Max. speed	13,400 rpm/14,500 rpm	14,000 rpm	15,060 rpm
Rotors available	2	1	2
Temperature control range		0 °C to +40 °C	
Dimensions (W x D x H)	22.6 x 23.9 x 12.0 cm	30 x 46 x 25 cm	24 x 35 x 22 cm
Height (with open lid)	25 cm	52 cm	44 cm
Weight w/o accessories	3.7 kg	22 kg	13 kg
Max. power consumption	70 W/85 W	320 W	290 W
Tube/plate/bottle capacity			
1.5/2.0 mL Eppendorf tubes	12	18	24
Eppendorf Tubes® 5.0 mL	-	-	-
8-place PCR strips	2	-	4
15 mL conical tubes	-	-	-
50 mL conical tubes	-	-	-
13 mm round-bottom and blood collection tubes	-	-	-
16 mm round-bottom and blood collection tubes	-	-	-
17.5 mm round-bottom and blood collection tubes	-	-	-
PCR plates/MTP	-	-	-
Deepwell plates (DWP)	-	-	-



Model	5424 R	5425	5427 R	5430/5430 R
Positioning	Refrigerated 24-place standard microcentrifuge for temperature sensitive samples	Whisper quiet 24-place standard microcentrifuge with outstanding feature set for broad range of applications, non-refrigerated	High-throughput refrigerated 48-place microcentrifuge for temperature sensitive samples	Crossover microcentrifuge with multipurpose versatility and 12 rotor options including rotor for 15 and 50 mL conical tubes, 30-place high speed rotor and swing-bucket rotor for MTPs or DWPs, refrigerated for temperature sensitive samples or non-refrigerated
Page(s)	141	142	143	144
Max. capacity	24 x 1.5/2.0 mL	10 x 5.0 mL	48 x 1.5/2.0 mL	48 x 1.5/2.0 mL, 6 x 50 mL, 2 x MTP
Max. RCF	21,130 x g	21,300 x g	25,000 x g	30,130 x g
Max. speed	15,000 rpm	15,060 rpm	16,220 rpm	17,500 rpm
Rotors available	4	6	9	12
Temperature control range	-10 °C to +40 °C		-11 °C to 40 °C	-11 °C to 40 °C
Dimensions (W x D x H)	29 x 48 x 26 cm	24 x 39 x 24 cm	31.9 x 54.0 x 25.4 cm	33 x 42 x 25 cm/38 x 64 x 29 cm
Height (with open lid)	51 cm	48 cm		56 cm/63 cm
Weight w/o accessories	21 kg	15.6 kg	30 kg	29 kg/56 kg
Max. power consumption	350 W	280 W	550 W	475 W/1.050 W
Tube/plate/bottle capacity				
1.5/2.0 mL Eppendorf tubes	24	24	48	48
Eppendorf Tubes® 5.0 mL	-	10	12	16
8-place PCR strips	4	12	6	8
15 mL conical tubes	-	-	-	6
50 mL conical tubes	-	-	-	6
13 mm round-bottom and blood collection tubes	-	-	-	12
16 mm round-bottom and blood collection tubes	-	-	-	12
17.5 mm round-bottom and blood collection tubes	-	-	-	12
PCR plates/MTP	-	-	-	2
Deepwell plates (DWP)	-	-	-	2

For more information go to www.eppendorf.com/centrifugation

Technical specifications subject to change.



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Model	5702/5702 R/5702 RH	5804/5804 R
Positioning	General purpose centrifuge with medium capacity for low speed cell culture applications, refrigerated for temperature sensitive samples, active heating and cooling to improve cell viability or non-refrigerated	High speed multipurpose centrifuge with medium capacity, refrigerated for temperature sensitive samples or non-refrigerated
Page(s)	156	162
Max. capacity	4 x 100 mL	4 x 250 mL/2 x 5 MTP
Max. RCF	3,000 x g	20,913 x g
Max. speed	4,400 rpm	14,000 rpm
Temperature control range	-/-9 °C to 40 °C/-9 °C to 42 °C	-9 °C to 40 °C
Dimensions (W x D x H)	32 x 40 x 24 cm/38 x 58 x 26 cm/38 x 58 x 26 cm	47 x 55 x 34 cm/64 x 55 x 34 cm
Height (with open lid)	53 cm/60 cm/60 cm	74 cm
Footprint (dimensions w/o front panel, WxD)		47 x 50 cm/64 x 50 cm
Weight w/o accessories	20 kg/36 kg/36 kg	55 kg/80 kg
Max. power consumption	200 W/380 W/380 W	900 W/1,650 W
Tube/plate/bottle capacity		
1.5/2.0 mL Eppendorf tubes	24	104
Eppendorf Tubes® 5.0 mL	4	32
8-place PCR strips	-	6
15 mL conical tubes	20	40
50 mL conical tubes	4	16
13 mm round-bottom and blood collection tubes	36	56
16 mm round-bottom and blood collection tubes	30	52
17.5 mm round-bottom and blood collection tubes	24	48
180 – 250 mL bottles (flat)	-	4
500 mL Corning®	-	-
750 mL bottles	-	-
1,000 mL bottles	-	-
PCR plates/MTP	-	10
Deepwell plates (DWP)	-	4

Model	5810/5810 R	Centrifuge 5910 R	Centrifuge 5920 R
Positioning	Compact multipurpose centrifuge with medium capacity, refrigerated for temperature sensitive samples or non-refrigerated	Super versatile multipurpose centrifuge with high capacity for broad range of consumables, refrigerated for temperature sensitive samples	High-throughput multipurpose centrifuge with very high capacity, refrigerated for temperature sensitive samples
Page(s)	162	190	191
Max. capacity	4 x 750 mL/4 x 4 MTP	4 x 750 mL/4 x 5 MTP	4 x 1,000 mL/4 x 7 MTP
Max. RCF	20,913 x g	22,132 x g	21,194 x g
Max. speed	14,000 rpm	14,000 rpm	13,700 rpm
Temperature control range	-/-9 °C to 40 °C	-11 °C to 40 °C	-11 °C to 40 °C
Dimensions (W x D x H)	54 x 61 x 35 cm/70 x 61 x 35 cm	72 x 66 x 37 cm	74 x 71 x 40 cm
Height (with open lid)	80 cm	85 cm	94 cm
Footprint (dimensions w/o front panel, WxD)	54 x 54 cm/70 x 54 cm	72 x 62 cm	74 x 67 cm
Weight w/o accessories	68 kg/99 kg	109 kg	139 kg
Max. power consumption	900 W/1,650 W	1,650 W	1,650 W
Tube/plate/bottle capacity			
1.5/2.0 mL Eppendorf tubes	200	200	368
Eppendorf Tubes® 5.0 mL	56	64	108
8-place PCR strips	6		
15 mL conical tubes	56	64	108
50 mL conical tubes	28	36	52
13 mm round-bottom and blood collection tubes	100	120	196
16 mm round-bottom and blood collection tubes	80	104	148
17.5 mm round-bottom and blood collection tubes	80	84	80
180 – 250 mL bottles (flat)	4	4	8
500 mL Corning®	4	4	4
750 mL bottles	4	4	4
1,000 mL bottles	-		4
PCR plates/MTP	16	20/4	28/8
Deepwell plates (DWP)	4	4	8

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Technical specifications subject to change.



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MiniSpin®/MiniSpin® plus

Description

Powerful and user-friendly MiniSpin and MiniSpin plus are small enough so that each workstation can be equipped with a „personal“ centrifuge. Two models are available to meet your performance requirements. MiniSpin plus provides speed sufficient for molecular biology separations.



Product features

- > Rotor capacity: 12 × 1.5/2.0 mL vessels, 2 × PCR strip
- > Max. speed: 14,100 × g (14,500 rpm)
- > Extremely compact footprint
- > Acceleration and deceleration time < 13 s
- > User-friendly digital display for time and speed
- > Metal rotor bowl
- > Separate short-spin key for fast and comfortable centrifugation
- > Optimal ventilation flow reduces heating and protects temperature-sensitive samples
- > Soft-touch lid closure for ergonomic lid locking
- > Automatic lid opening at the end of the run to prevent sample warming and to allow easy access to samples

Special features for MiniSpin plus

- > Automatic rpm/rcf conversion
- > Extended time to 99 min or continuous centrifugation



Ordering information

Description	Order no.
Centrifuge MiniSpin®, non-refrigerated, with Rotor F-45-12-11, 230 V/50 – 60 Hz	5452 000.018
Centrifuge MiniSpin® plus, non-refrigerated, with Rotor F-45-12-11, 230 V/50 – 60 Hz	5453 000.011
Rotor F-55-16-5 PCR	5452 727.007
Rotor F-45-12-11	5452 720.008
Adapter, for 1 tube 0.5 mL or microtainer, max. Ø 8 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 716.001
Adapter, for 1 PCR tube 0.2 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 715.005
Adapter, for 1 tube 0.4 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 717.008

✎ Ordering information for other voltage options begins on page 418

Centrifuge 5418 R

Description

The refrigerated Centrifuge 5418 R with its 18-place capacity rotor is specifically designed for low to medium capacity in 1.5/2.0 mL tubes and Microtainer®. Its speed of up to 16,873 × g allows for standard molecular biology applications. Moreover, this compact device has an especially low access height and is characterized by a remarkably quiet operation.



Product features

- > Max. rotor capacity: 18 × 1.5/2.0 mL vessels
- > Max. speed: 16,873 × g (14,000 rpm) for quick separation
- > Small footprint and low access height of 23 cm
- > OptiBowl® design for quiet operation – even without a rotor lid
- > Eppendorf QuickLock® rotor allows for fast and ergonomic lid locking
- > Soft-touch one-finger lid closure for ergonomic operation
- > Temperature range from 0 °C to +40 °C
- > Guaranteed temperature of 4 °C at maximum rotational speed
- > FastTemp function for quick pre-cooling and maximum temperature accuracy inside the rotor
- > ECO power shut-off engages after 8 hours of nonuse to reduce energy consumption (46 % over night) and extend compressor life (can be deactivated)



Ordering information

Description	Order no.
Centrifuge 5418 R, refrigerated, with Rotor FA-45-18-11 and rotor lid, 230 V/50 – 60 Hz	5401 000.013
Adapter, for 1 tube 0.5 mL or microtainer, max. Ø 8 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 716.001
Adapter, for 1 PCR tube 0.2 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 715.005
Adapter, for 1 tube 0.4 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 717.008

✎ Ordering information for other voltage options begins on page 418

Centrifuge 5420

Description

The new Centrifuge 5420 was designed with your molecular biology routine applications in mind. The spectrum of methods includes DNA/RNA purification, DNA extraction from agarose gels and PCR reaction set-up. It has a particularly small footprint to save space on the lab bench and an easy to clean keypad control panel. You can spin up to 24 tubes from 1.5 to 2.0 mL. Optional adapters extend the volume range to 0.4 and 0.5 mL tubes as well as 0.6 mL BD Microtainer®. A rotor for 32 PCR tubes (0.2 mL) or four PCR strips is available as well. For your safety, the standard rotor provides aerosol-tight containment for the centrifugation of hazardous samples such as viruses, pathogen bacteria or radioactive probes.

New



Product features

- > Standard rotor for up to 24 x 1.5 and 2.0 mL tubes
- > Rotor option for up to 32 x 0.2 mL PCR tubes or 4 x 8-place PCR strips
- > Adapters for 0.2, 0.4 and 0.5 mL tubes as well as 0.6 mL BD Microtainer®
- > Soft-touch one-finger lid closure for ergonomic lid locking
- > Automatic lid opening at the end of the run to prevent sample warming and to allow easy access to samples
- > High quality anodized aluminum rotors and rotor lids
- > One push short-spin key for quick centrifugation - no need to hold key all the while
- > Easy to clean keypad control panel
- > Particularly small footprint to save precious space on the lab bench: 24 x 35 x 22 cm (W x D x H)
- > Max. speed: 21,300 x g (15,060 rpm)



Ordering information

Description	Order no.
Centrifuge 5420, non-refrigerated, without rotor, keypad, 230 V/50 – 60 Hz	5420 000.318
Centrifuge 5420, non-refrigerated, with aerosol-tight Rotor FA-24x2, keypad, 230 V/50 – 60 Hz	5420 000.113

✂ Ordering information for other voltage options begins on page 418

Centrifuge 5424 R

Description

The refrigerated Centrifuge 5424 R is the laboratory standard when it comes to efficient cooling performance (e.g. quick cooling down from room temperature to set temperature) in a very ergonomic product design. It features state of the art cooling technology to ensure high temperature accuracy for maximum sample protection and best separation results. Ideal for everyday laboratory use.



Product features

- > Max. rotor capacity: 24 x 1.5/2.0 mL vessels
- > Max. speed: 21,130 x g (15,000 rpm)
- > OptiBowl® design for quiet operation, even without a rotor lid
- > Soft-touch one-finger lid closure for ergonomic operation
- > Temperature range from -10 °C to +40 °C
- > ECO power shut-off engages after 8 hours of non-use to reduce energy consumption (40 % over night) and extend compressor life (can be deactivated)
- > FastTemp function for quick pre-cooling of the centrifuge, e.g. from ~ 21 °C to 4 °C in only 8 minutes
- > Guaranteed temperature of 4 °C at maximum rotational speed
- > Built-in condensation drain to eliminate water accumulation in the rotor chamber
- > The patented compressor technology reduces vibrations and protects your samples



Ordering information

Description	Order no.
Centrifuge 5424 R, refrigerated, without rotor, keypad, 230 V/50 – 60 Hz	5404 000.219
Centrifuge 5424 R, refrigerated, without rotor, rotary knobs, 230 V/50 – 60 Hz	5404 000.618
Centrifuge 5424 R, refrigerated, with Rotor FA-45-24-11, keypad, 230 V/50 – 60 Hz	5404 000.014
Centrifuge 5424 R, refrigerated, with Rotor FA-45-24-11, rotary knobs, 230 V/50 – 60 Hz	5404 000.413

✂ Ordering information for other voltage options begins on page 418

Centrifuge 5425

Description

This 24-place centrifuge has been engineered to be extremely quiet. Short runs up to 12 minutes are whisper quiet at an average of 45 dB(A). This is sufficient for centrifugation steps of most routinely used DNA/RNA purification kits. During longer runs the cooling fan works at full capacity to dissipate the heat for the remainder of the run. Centrifuge 5425 is the successor of the legendary Centrifuge 5424. It has everything you loved before plus great new features to make everyday work more enjoyable.



Product features

- > Whisper quiet microcentrifuge for stress-free work
- > Aerosol-tight Eppendorf QuickLock® lids for simple and safe handling
- > Outstanding software features (e.g. 10 acceleration and braking ramps, 3 program buttons, short function without continuous pressing of the key)
- > Extended rotor program (e.g. 5.0 mL rotor, swing-bucket rotor for PCR strips)
- > OptiBowl® design for quiet operation, even without a rotor lid
- > Soft-touch one-finger lid closure for ergonomic operation
- > Automatic lid opening at the end of the run – prevents sample warming and allows easy access to samples
- > Max. rotor capacity: 10 × 5.0 mL vessels
- > Max. speed: 21,300 × g (15,060 rpm)

Ordering information

Description	Order no.
Centrifuge 5425, non-refrigerated, without rotor, keypad, 230 V/50 – 60 Hz	5405 000.310
Centrifuge 5425, non-refrigerated, without rotor, rotary knobs, 230 V/50 – 60 Hz	5405 000.719
Centrifuge 5425, non-refrigerated, with Rotor FA-24x2, keypad, 230 V/50 – 60 Hz	5405 000.115
Centrifuge 5425, non-refrigerated, with Rotor FA-24x2, rotary knobs, 230 V/50 – 60 Hz	5405 000.514

✎ Ordering information for other voltage options begins on page 418

i For more information go to www.eppendorf.com/centrifugation

Centrifuge 5427 R

Description

The refrigerated Centrifuge 5427 R was designed with high-throughput research applications in mind. With its aerosol-tight 48-place rotor it handles even the toughest challenges in a safe and reliable manner to provide you the efficiency boost you need. All aerosol-tight rotors are equipped with the Eppendorf QuickLock® lids for easy rotor lid opening and closing. Choose the Centrifuge 5427 R if a 24-place microcentrifuge doesn't meet your needs regarding tube capacity and if you don't need the extra versatility our cross-over Centrifuge 5430 R can offer you.



Product features

- > Rotor capacity: 48 × 1.5/2.0 mL, 12 × 5.0 mL; Eppendorf QuickLock® rotor allows for fast and ergonomic lid locking
- > Max. speed: 25,000 × g (16,220 rpm)
- > High capacity 48-place rotor significantly increases productivity to save you valuable time
- > Soft touch one-finger closure for ergonomic operation
- > Temperature range from -11 °C to 40 °C
- > FastTemp function for quick pre-cooling of the centrifuge, e.g., from ~ 23 °C to 4 °C in only 11 minutes
- > ECO shut-off can be programmed to engage after 1, 2, 4 or 8 hours of non-use for maximum energy savings and extended compressor life
- > Built-in condensation drain to eliminate water accumulation
- > Automatic rotor recognition and imbalance detection for maximum operational safety

Ordering information

Description	Order no.
Centrifuge 5427 R, refrigerated, rotary knobs, 230 V/50 – 60 Hz	5409 000.012
Centrifuge 5427 R, refrigerated, with Rotor FA-45-12-17, rotary knobs, 230 V/50 – 60 Hz	5409 000.632
Centrifuge 5427 R, refrigerated, with Rotor FA-45-30-11, rotary knobs, 230 V/50 – 60 Hz	5409 000.535
Centrifuge 5427 R, refrigerated, with Rotor FA-45-48-11, rotary knobs, 230 V/50 – 60 Hz	5409 000.217

✎ Ordering information for other voltage options begins on page 418

Centrifuge 5430/5430 R

Description

Unique cross-over Centrifuge 5430 and 5430 R combine the best features of a microcentrifuge (small footprint) and multipurpose centrifuge (versatility) in one instrument. These centrifuges spin rotors for Eppendorf tubes and PCR strips as you would expect from any microcentrifuge. But that's not all. In a compact size, Centrifuge 5430 and 5430 R also accommodate rotors for microplates and 15/50 mL conical tubes. Now, the rotor program has been expanded with additional Eppendorf QuickLock® rotors. This includes 48-place rotors (1.5/2.0 mL), a 16-place rotor for Eppendorf Tubes® 5.0 mL and a swing-bucket rotor (24 × 1.5/2.0 mL). With their unmatched versatility, Centrifuge 5430 and Centrifuge 5430 R are the flagship products among the Eppendorf microcentrifuge portfolio.

Product features

- > Max. rotor capacity: 48 × 1.5/2.0 mL, 6 × 50 mL, 2 × MTP
- > Max. speed: 30,130 × g (17,500 rpm)
- > Remarkable versatility with 12 different rotors
- > Soft-touch one-finger lid closure for ergonomic operation
- > Menu-driven, multi lingual operation menu (English, German, French, Spanish) with large backlit display
- > 5 program keys for easy access to routine programs
- > Saves up to 50 user-defined programs
- > Automatic rotor recognition and imbalance detection for maximum operational safety
- > Eppendorf QuickLock® – System for quickly opening and closing the rotor lid

Special features for Centrifuge 5430 R

- > Temperature range: -11 °C to +40 °C
- > The patented compressor technology reduces vibrations and protects your samples
- > Continuous cooling maintains a constant temperature after the run has been completed – your samples stay cool
- > FastTemp pro® function for programmable pre-cooling according to day and time
- > ECO shut-off engages after 8 hours of nonuse to reduce energy consumption (37 % overnight) and extend compressor life (can be deactivated in menu)
- > Built-in condensation drain to eliminate water accumulation



Ordering information

Description	Order no.
Centrifuge 5430, non-refrigerated, without rotor, keypad, 230 V/50 – 60 Hz	5427 000.011
Centrifuge 5430, non-refrigerated, without rotor, rotary knobs, 230 V/50 – 60 Hz	5427 000.615
Centrifuge 5430, non-refrigerated, with Rotor FA-45-30-11 incl. rotor lid, keypad, 230 V/50 – 60 Hz	5427 000.216
Centrifuge 5430, non-refrigerated, with Rotor FA-45-30-11 incl. rotor lid, rotary knobs, 230 V/50 – 60 Hz	5427 000.410
Centrifuge 5430 R, refrigerated, without rotor, keypad, 230 V/50 – 60 Hz	5428 000.210
Centrifuge 5430 R, refrigerated, without rotor, rotary knobs, 230 V/50 – 60 Hz	5428 000.619
Centrifuge 5430 R, refrigerated, with Rotor FA-45-30-11 incl. rotor lid, keypad, 230 V/50 – 60 Hz	5428 000.015
Centrifuge 5430 R, refrigerated, with Rotor FA-45-30-11 incl. rotor lid, rotary knobs, 230 V/50 – 60 Hz	5428 000.414

✎ Ordering information for other voltage options begins on page 418

ℹ For more information go to www.eppendorf.com/centrifugation

Technical Specification Microcentrifuges

Technical specifications	MiniSpin®	MiniSpin® plus	5418 R	5420
Model	MiniSpin®	MiniSpin® plus	5418 R	5420
Max. RCF	12,100 × g	14,100 × g	16,873 × g	21,300 × g
Max. speed				15,060 rpm
Max. capacity	12 × 1.5/2.0 mL	12 × 1.5/2.0 mL	18 × 1.5/2.0 mL	24 × 1.5/2.0 mL
Rotors available	2	2	1	2
Acceleration time ¹⁾	13 s	13 s	11 s	15 s
Deceleration time ¹⁾	12 s	12 s	12 s	15 s
Timer	15 s – 30 min	15 s to 99 min, with continuous run function	30 s to 9:59 h, with continuous run function	10 s to 9:59 h, with continuous run function
SOFT brake function			no	no
Noise level	< 49 dB(A)	< 52 dB(A)	< 47 dB(A)	< 56 dB(A) with Rotor FA-24x2
Max. power consumption	70 W	85 W	320 W	290 W
Dimensions (W × D × H)	22.6 × 23.9 × 12.0 cm	22.6 × 23.9 × 12.0 cm	30 × 46 × 25 cm	24 × 35 × 22 cm
Height (with open lid)	25 cm	25 cm	52 cm	44 cm
Weight w/o accessories	3.7 kg	3.7 kg	22 kg	13 kg
Cooling	non-refrigerated	non-refrigerated	refrigerated	non-refrigerated
Temperature control range			0 °C to +40 °C	

¹⁾ Acceleration and deceleration times may vary depending on rotor, load and voltage version.

Technical specifications	5424 R	5425	5427 R	5430	5430 R
Model	5424 R	5425	5427 R	5430	5430 R
Max. RCF	21,130 × g	21,300 × g	25,000 × g	30,130 × g	30,130 × g
Max. speed		15,060 rpm	16,220 rpm	17,500 rpm	17,500 rpm
Max. capacity	24 × 1.5/2.0 mL	10 × 5.0 mL	48 × 1.5/2.0 mL	48 × 1.5/2.0 mL, 6 × 50 mL, 2 × MTP	48 × 1.5/2.0 mL, 6 × 50 mL, 2 × MTP
Rotors available	4	6	9	12	12
Acceleration time ¹⁾	15 s	15 s	18 s	14 s	14 s
Deceleration time ¹⁾	16 s	15 s	18 s	15 s	15 s
Timer	30 s to 9:59 h, with continuous run function	10 s to 9:59 h, with continuous run function	10 s to 9:59 h	30 s to 99:59 h, with continuous run function	30 s to 99:59 h, with continuous run function
SOFT brake function	yes	10 ramps		yes	yes
Noise level	< 48 dB(A) with Rotor FA-45-24-11	< 45 dB(A) in the first 12 minutes and < 51 dB(A) thereafter with Rotor FA-24x2	< 46 dB(A) with Rotor F-45-48-11	< 58 dB(A) with Rotor F-45-30-11	< 54 dB(A) with Rotor F-45-30-11
Max. power consumption	350 W	280 W	550 W	475 W	1.050 W
Dimensions (W × D × H)	29 × 48 × 26 cm	24 × 39 × 24 cm	31.9 × 54.0 × 25.4 cm	33 × 42 × 25 cm	38 × 64 × 29 cm
Height (with open lid)	51 cm	48 cm		56 cm	63 cm
Weight w/o accessories	21 kg	15.6 kg	30 kg	29 kg	56 kg
Cooling	refrigerated	non-refrigerated	refrigerated	non-refrigerated	refrigerated
Temperature control range	-10 °C to +40 °C		-11 °C to 40 °C		-11 °C to 40 °C

¹⁾ Acceleration and deceleration times may vary depending on rotor, load and voltage version.

Rotors MiniSpin/MiniSpin plus



Rotor F-45-12-11
> For 12 x 1.5/2.0 mL tubes



Rotor F-55-16-5 PCR
> For 2 x PCR strips

Ordering information

Description	Order no.
Rotor F-45-12-11	5452 720.008
Rotor F-55-16-5 PCR	5452 727.007

Rotors and Adapters for Centrifuge 5418 R



Rotor FA-45-18-11
> For 18 x 1.5/2.0 mL tubes comes standard with unique Eppendorf QuickLock aerosol-tight lid for fast and reliable locking



Adapter for 0.2 mL PCR Tubes
> Ideal to spin down PCR Tubes after reaction setup. Adapter fits in any Eppendorf 1.5/2.0 mL rotor



Adapter for BD Microtainer® and 0.5 mL tubes
> The adapter can be used with every Eppendorf rotor for 1.5/2.0 mL tubes

Ordering information

Description	Order no.
Rotor FA-45-18-11, aerosol-tight, 45° angle, 18 places, max. tube diameter 11 mm, incl. rotor lid (aluminum)	5418 707.005
Adapter, for 1 tube 0.5 mL or microtainer, max. Ø 8 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 716.001
Adapter, for 1 PCR tube 0.2 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 715.005
Adapter, for 1 tube 0.4 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 717.008

i For more information go to www.eppendorf.com/centrifugation

Rotors for Centrifuge 5420

New



Rotor FA-24x2 for Centrifuge 5420
> Max. speed: 21,300 x g (15,060 rpm)
> Max. capacity: 24 x 1.5/2.0 mL tubes
> Aerosol-tight

New



Rotor F-32x0.2-PCR for Centrifuge 5420
> Max. speed: 18,134 x g (15,060 rpm)
> Max capacity: 4 x PCR strips or 32 x PCR tubes (0.2 mL)



Ordering information

Description	Order no.
Rotor FA-24x2 for Centrifuge 5420, aerosol-tight, for 24 x 1.5/2.0 mL tubes, incl. aerosol-tight rotor lid	5495 400.001
Rotor F-32x0.2-PCR for Centrifuge 5420, for 32 x 0.2 mL PCR tubes or 4 x 8 PCR strips, incl. rotor lid	5495 404.007
Adapter, for 1 tube 0.5 mL or microtainer, max. Ø 8 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 716.001
Adapter, for 1 PCR tube 0.2 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 715.005
Adapter, for 1 tube 0.4 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 717.008

Rotors for Centrifuge 5424 R



Rotor FA-45-24-11

- > Max. speed: 21,130 × g (15,000 rpm)
- > Max. capacity: 24 × 1.5/2.0 mL tubes
- > Aerosol-tight for safe centrifugation of hazardous samples



Rotor FA-45-24-11-Special

- > Max. speed: 21,130 × g (15,000 rpm)
- > Max. capacity: 24 × 1.5/2.0 mL tubes
- > Aerosol-tight for safe centrifugation of hazardous samples
- > PTFE coating for increased chemical resistance



Rotor F-45-18-11-Kit

- > Max. speed: 18,111 × g (15,000 rpm)
- > Max. capacity: 18 × spin columns or 1.5/2.0 mL tubes
- > Extended rim that protects tube caps from shearing off



Rotor F-45-32-5-PCR

- > Max. speed: 18,615 × g (15,000 rpm)
- > Max. capacity: 4 × PCR strips

Ordering information

Description	Order no.
Rotor FA-45-24-11, aerosol-tight	5424 702.007
Rotor FA-45-24-11-Special, aerosol-tight	5424 700.004
Rotor F-45-18-11-Kit	5424 706.002
Rotor F-45-32-5-PCR	5424 704.000
Adapter, for 1 tube 0.5 mL or microtainer, max. Ø 8 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 716.001
Adapter, for 1 PCR tube 0.2 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 715.005
Adapter, for 1 tube 0.4 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 717.008

Rotors for Centrifuge 5425



Rotor FA-24x2

- > Max. speed: 21,300 × g (15,060 rpm)
- > Max. capacity: 24 × 1.5/2.0 mL tubes
- > Aerosol-tight with Eppendorf QuickLock® lid



Rotor FA-24x2-PTFE

- > Max. speed: 21,300 × g (15,060 rpm)
- > Max. capacity: 24 × 1.5/2.0 mL tubes
- > Aerosol-tight with Eppendorf QuickLock
- > PTFE coating for increased chemical resistance



Rotor FA-10x5

- > Max. speed: 21,300 × g (15,060 rpm)
- > Max capacity: 10 × Eppendorf Tubes® 5.0 mL
- > Aerosol-tight with Eppendorf QuickLock® lid



Rotor FA-18x2 Kit

- > Max. speed: 18,565 × g (15,060 rpm)
- > Rotor with higher edge for safe centrifugation of up to 18 spin columns
- > Aerosol-tight with Eppendorf QuickLock® lid



Rotor F-32x0.2-PCR

- > Max. speed: 18,134 × g (15,060 rpm)
- > for 4 × PCR strips or 32 × PCR tubes (0,2 mL)



Rotor 96x0.2-PCR

- > Max. speed: 3,217 × g (6,000 rpm)
- > New swing bucket rotor
- > for 12 × 8 PCR strips 0.1/0.2 mL or 4 × 1/4 twin.tec PCR plate 96, unskirted divisible or 96 × PCR tubes with 0.2 mL

Ordering information

Description	Order no.
Rotor FA-24x2, aerosol-tight, for 24 × 1.5/2.0 mL tubes, incl. aerosol-tight rotor lid	5495 500.006
Rotor FA-24x2-PTFE, aerosol-tight, with PTFE coating, for 24 × 1.5/2.0 mL tubes, incl. aerosol-tight rotor lid	5495 503.005
Rotor FA-10x5, aerosol-tight, for 10 × 5.0 mL tubes (snap and screw cap), incl. aerosol-tight rotor lid	5495 505.008
Rotor FA-18x2-Kit, aerosol-tight, for 18 × 1.5/2.0 mL tubes or spin columns, incl. aerosol-tight rotor lid	5495 508.007
Rotor F-32x0.2-PCR, for 32 × 0.2 mL PCR tubes or 4 × 8 PCR strips, incl. rotor lid	5495 510.001
Rotor S-96x0.2-PCR, for 96 × 0.2 mL PCR tubes or 12 × 8 PCR strips, incl. buckets	5495 512.004
Adapter, for 1 tube 0.5 mL or microtainer, max. Ø 8 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 716.001
Adapter, for 1 PCR tube 0.2 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 715.005
Adapter, for 1 vessel 1.5 – 2.0 mL, for all 5.0 mL rotors, set of 4 pcs.	5820 768.002
Adapter, for 1 cryo tube, for all 5.0 mL rotors, set of 4 pcs.	5820 769.009
Adapter, for 1 HPLC tube, for all 5.0 mL rotors, set of 4 pcs.	5820 770.007
Adapter, for 1 tube 0.4 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 717.008

Rotors for Centrifuge 5427 R



Rotor F-45-48-11

- > Max. speed: 18,210 × g (12,700 rpm)
- > Max. capacity: 48 × 1.5/2.0 mL tubes



Rotor FA-45-48-11

- > Max. speed: 18,210 × g (12,700 rpm)
- > Max. capacity: 48 × 1.5/2.0 mL tubes
- > Aerosol-tight with Eppendorf QuickLock® lid



Rotor FA-45-30-11

- > Max. speed: 20,800 × g (14,000 rpm)
- > Max. capacity: 30 × 1.5/2.0 mL tubes
- > Aerosol-tight with Eppendorf QuickLock® lid



Rotor S-24-11-AT

- > Max. speed: 16,049 × g (12,700 rpm)
- > Swing-bucket rotor for 24 × 1.5/2.0 mL tubes
- > Aerosol-tight with Eppendorf QuickLock® lid
- > Perfect for phase-separation applications such as phenol-chloroform extraction



Rotor FA-45-12-17

- > Max. speed: 20,600 × g (14,000 rpm)
- > Max capacity: 12 × Eppendorf Tubes® 5.0 mL
- > Aerosol-tight with Eppendorf QuickLock® lid



Rotor F-45-48-5-PCR

- > Max. speed: 11,710 × g (10,500 rpm)
- > PCR strip rotor for up to 48 × 0.2 mL PCR tubes



Rotor F-45-30-11

- > Max. speed: 20,800 × g (14,000 rpm)
- > Max. capacity: 30 × 1.5/2.0 mL tubes



Rotor FA-45-24-11

- > Max. speed: 25,000 × g (16,220 rpm)
- > Max. capacity: 24 × 1.5/2.0 mL tubes
- > Aerosol-tight with Eppendorf QuickLock® lid



Rotor FA-45-24-11-Kit

- > Max. speed: 19,100 × g (13,200 rpm)
- > Rotor with higher edge for safe centrifugation of up to 24 spin columns
- > Aerosol-tight with Eppendorf QuickLock® lid

Ordering information

Description	Order no.
Rotor FA-45-48-11, aerosol-tight, incl. rotor lid	5409 710.001
Rotor F-45-48-11, incl. rotor lid	5409 712.004
Rotor FA-45-30-11, aerosol-tight, incl. rotor lid	5409 706.004
Rotor F-45-30-11, incl. rotor lid	5409 708.007
Rotor FA-45-24-11, aerosol-tight, incl. rotor lid	5409 702.009
Rotor FA-45-24-11-Kit, aerosol-tight, incl. rotor lid	5409 704.001
Rotor S-24-11-AT, aerosol-tight, incl. wind shield and rotor lid	5409 715.003
Rotor F-45-48-5-PCR	5409 714.007
Rotor FA-45-12-17, aerosol-tight, incl. rotor lid, for 12 × Eppendorf Tubes® 5.0 mL	5409 700.006
Adapter, for 1 tube 0.5 mL or microtainer, max. Ø 8 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 716.001
Adapter, for 1 PCR tube 0.2 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 715.005
Adapter, for 1 vessel 1.5 – 2.0 mL, for all 5.0 mL rotors, set of 4 pcs.	5820 768.002
Adapter, for 1 cryo tube, for all 5.0 mL rotors, set of 4 pcs.	5820 769.009
Adapter, for 1 HPLC tube, for all 5.0 mL rotors, set of 4 pcs.	5820 770.007
Adapter, for 1 tube 0.4 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 717.008

Rotors for Centrifuge 5430/5430 R



Rotor FA-45-48-11

- > Max. speed: 18,210 × g (12,700 rpm)
- > Max. capacity: 48 × 1.5/2.0 mL tubes
- > Aerosol-tight for safe centrifugation of hazardous samples
- > Eppendorf QuickLock® lid



Rotor F-45-48-11

- > Max. speed: 18,210 × g (12,700 rpm)
- > Max. capacity: 48 × 1.5/2.0 mL tubes



Rotor S-24-11-AT

- > Max. speed: 16,049 × g (12,700 rpm)
- > Swing-bucket rotor for 24 × 1.5/2.0 mL tubes
- > Aerosol-tight with Eppendorf QuickLock® lid
- > Perfect for phase-separation applications such as phenol-chloroform extraction



Rotor F-45-30-11

- > Max. speed: 20,817 × g (14,000 rpm)
- > Max. capacity: 30 × 1.5/2.0 mL tubes
- > PTFE coating for increased chemical resistance



Rotor FA-45-24-11-HS

- > Max. speed: 30,130 × g (17,500 rpm)
- > Max. capacity: 24 × 1.5/2.0 mL tubes
- > Extremely fast separation results
- > Aerosol-tight for safe centrifugation of hazardous samples
- > PTFE coating for increased chemical resistance



Rotor F-35-6-30

- > Max. speed: 7,745 × g (7,830 rpm)
- > Rotor for 6 × 15/50 mL conical or 12 × Vacutainer® tubes



Rotor FA-45-16-17

- > Max. speed: 21,191 × g (14,200 rpm)
- > Max. capacity: 16 × Eppendorf Tubes® 5.0 mL
- > Aerosol-tight for safe centrifugation of hazardous samples
- > Eppendorf QuickLock® lid
- > Eppendorf Tubes® 5.0 mL with screw caps only can use up half (8 ×) of the places in the rotor



Rotor FA-45-30-11

- > Max. speed: 20,817 × g (14,000 rpm)
- > Max. capacity: 30 × 1.5/2.0 mL tubes
- > Aerosol-tight for safe centrifugation of hazardous samples
- > PTFE coating for increased chemical resistance
- > Eppendorf QuickLock® lid



Rotor FA-45-24-11-Kit

- > Max. speed: 19,090 × g (13,200 rpm)
- > Rotor with higher edge for safe centrifugation of up to 24 spin columns
- > Aerosol-tight for safe centrifugation of hazardous samples
- > Eppendorf QuickLock® lid



Rotor A-2-MTP

- > Max. speed: 2,204 × g (4,680 rpm)
- > 2-place swing-bucket rotor for MTP, PCR and Deepwell Plates
- > Windshield design for quiet operation



Rotor F-45-64-5-PCR

- > Max. speed: 13,543 × g (11,800 rpm)
- > PCR strip rotor for up to 64 × 0.2 mL PCR tubes



Rotor F-45-18-17-Cryo

- > Max. speed: 8,324 × g (8,900 rpm)
- > 18-place rotor for Cryovials®

Rotors for Centrifuge 5430/5430 R

Ordering information

Description	Order no.
Rotor FA-45-16-17 , aerosol-tight, incl. rotor lid, for 16 x Eppendorf Tubes® 5.0 mL	5427 750.002
Rotor FA-45-48-11 , aerosol-tight, incl. rotor lid	5427 754.008
Rotor F-45-48-11 , incl. rotor lid	5427 755.004
Rotor S-24-11-AT , aerosol-tight, incl. rotor lid	5427 757.007
Rotor FA-45-30-11 , aerosol-tight, incl. rotor lid	5427 753.001
Rotor FA-45-24-11-Kit , aerosol-tight, incl. rotor lid	5427 752.005
Rotor F-45-30-11 , incl. rotor lid	5427 712.003
Rotor FA-45-24-11-HS , aerosol-tight, incl. rotor lid	5427 710.000
Rotor F-35-6-30 , incl. rotor lid, with 6 adapters each for 15 mL/50 mL conical tubes	5427 716.009
Rotor A-2-MTP , incl. wind shield and rotor lid, with 2 buckets	5427 700.005
Rotor F-45-64-5-PCR , incl. rotor lid and adapters	5427 714.006
Rotor F-45-18-17-Cryo , incl. rotor lid and cryovial adapters	5427 705.007
Adapter , for 1 cryo containers (max. Ø 13 mm) or lidded centrifugation tubes (Ø 12.2 mm), max. length 50 mm, for Rotor F-45-18-17-Cryo, set of 6 pcs.	5702 752.002
Adapter , for 1 tube 0.5 mL or microtainer, max. Ø 8 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 716.001
Adapter , for 1 PCR tube 0.2 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 715.005
Adapter , for 1 vessel 1.5 – 2.0 mL, for all 5.0 mL rotors, set of 4 pcs.	5820 768.002
Adapter , for 1 cryo tube, for all 5.0 mL rotors, set of 4 pcs.	5820 769.009
Adapter , for 1 HPLC tube, for all 5.0 mL rotors, set of 4 pcs.	5820 770.007
Adapter , for 1 tube 0.4 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 717.008
Adapter , for 1 HPLC vessel 1.5 mL, for Rotor F-45-18-17-Cryo	5427 708.006

Adapter	Rotor capacity ³⁾	Max. tube dimensions Ø x L	Max. RCF	For bore hole	Order no. ⁴⁾
13 mm round	12	13 x 65 – 89 mm	6,443 x g	small	5427 740.007
			6,100 x g	large	5427 742.000
13 mm round	12	13 x 90 – 110 mm	7,471 x g	small	5427 741.003
			7,129 x g	large	5427 743.006
16 mm round	12	16 x 75 – 105 mm	7,005 x g	small	5427 732.004
			7,005 x g	large	5427 734.007
17 mm round	12	17 x 90 – 125 mm	7,745 x g	small	5427 735.003
			7,403 x g	large	5427 738.002
Eppendorf Tubes® 5.0 mL	12	17.5 x 80 mm	6,237 x g	small	5427 746.005
			7,129 x g	large	5427 747.001
15 mL conical	6	17.5 x 100 – 125 mm	7,540 x g	small	5427 726.004
30 mL round	6	26 x 92 – 112 mm	7,087 x g	large	5427 736.000
50 mL round	6	29 x 95 – 125 mm	7,581 x g	large	5427 737.006
50 mL conical	6 ^{1) 2)}	29.5 x 100 – 125 mm	7,197 x g	large	5427 727.000
Centriprep®	6	29.5 x 100 – 125 mm	7,567 x g	large	5427 723.005



Centrifuge 5702/5702 R/5702 RH

Description

The 5702 family of low speed, general purpose centrifuges was especially designed to meet the requirement of low- to mid-throughput research and cell culture labs. They are compact in design so that one can fit comfortably on every lab bench, quiet in operation to benefit your work environment, and provide 6 different rotor options to accommodate any type of tube.

The right model for your application:

- > Centrifuge 5702 for standard applications
- > Refrigerated Centrifuge 5702 R for heat sensitive samples
- > Heated and refrigerated Centrifuge 5702 RH allows centrifugation under biological conditions to improve cell viability for more accurate results in downstream applications (e.g. cell cultivation)



Product features

- > Max. speed: 3,000 × g (4,400 rpm)
- > Very compact footprint to fit on every lab bench
- > Very quiet operation to benefit your environment
- > Low access height for simple loading and unloading of samples
- > SOFT brake function for slow acceleration and braking. Optimized for cell separation by gradient centrifugation
- > "At set RPM" function starts the timer when the selected rotational speed is reached for reproducible centrifugation runs
- > Key lock to prevent unintentional adjustments
- > Stainless steel rotor chamber is rust-free and easy to clean
- > Electronic imbalance detection for maximum safety

Special features for Centrifuge 5702 R and Centrifuge 5702 RH

- > Temperature settings from -9 °C to 40 °C
- > FastTemp function for fast precooling
- > Continuous cooling maintains a constant temperature after the run has been completed – your samples stay cool
- > ECO shut-off engages after 8 hours of non-use to reduce energy consumption and extend compressor life
- > Two program keys to store routine programs
- > Active heating guarantees high temperature accuracy during the entire centrifugation cycle (only 5702 RH)



Centrifuge 5702 display



Centrifuge 5702 R and 5702 RH display

Technical specifications			
Model	5702	5702 R	5702 RH
Max. RCF	3,000 × g	3,000 × g	3,000 × g
Speed	100 – 4,400 rpm (100 rpm steps)	100 – 4,400 rpm (100 rpm steps)	100 – 4,400 rpm (100 rpm steps)
Max. capacity	4 × 100 mL	4 × 100 mL	4 × 100 mL
Rotors available	6	6	6
Acceleration time ¹⁾	≤19 s	≤20 s	≤19 s
Deceleration time ¹⁾	≤19 s	≤28 s	≤29 s
Timer	0 – 99 min, with continuous run function	0 – 99 min, with continuous run function	0 – 99 min, with continuous run function
SOFT brake function	yes	yes	yes
Noise level	< 52 dB(A) with Rotor A-4-38	<46 dB(A) with Rotor A-4-38	<46 dB(A) with Rotor A-4-38
Max. power consumption	200 W	380 W	380 W
Dimensions (W × D × H)	32 × 40 × 24 cm	38 × 58 × 26 cm	38 × 58 × 26 cm
Height (with open lid)	53 cm	60 cm	60 cm
Weight w/o accessories	20 kg	36 kg	36 kg
Cooling	non-refrigerated	refrigerated	refrigerated/heated
Temperature control range	–	-9 °C to 40 °C	-9 °C to 42 °C

¹⁾ Acceleration and deceleration times may vary depending on rotor, load and voltage version.

Ordering information

Description	Order no.
Centrifuge 5702, non-refrigerated, without rotor, rotary knobs, 230 V/50 – 60 Hz	5702 000.019
Centrifuge 5702, non-refrigerated, with Rotor A-4-38 incl. adapters for 15/50 mL conical tubes, 2 sets of 2 adapters, rotary knobs, 230 V/50 – 60 Hz	5702 000.329
Centrifuge 5702 R, refrigerated, without rotor, rotary knobs, 230 V/50 – 60 Hz	5703 000.012
Centrifuge 5702 R, refrigerated, with Rotor A-4-38 incl. adapters for 13/16 mm blood collection tubes, 2 sets of 2 adapters, rotary knobs, 230 V/50 – 60 Hz	5703 000.322
Centrifuge 5702 R, refrigerated, with Rotor A-4-38 incl. adapters for 15/50 mL conical tubes, 2 sets of 2 adapters, rotary knobs, 230 V/50 – 60 Hz	5703 000.420
Centrifuge 5702 RH, refrigerated/heated, without rotor, rotary knobs, 230 V/50 – 60 Hz	5704 000.016

✎ Ordering information for other voltage options begins on page 418

Rotors for Centrifuge 5702/5702 R/5702 RH



Rotor A-4-38 with round buckets

- > Maximum speed: 3,000 × g (4,400 rpm)
- > Standard rotor for centrifugation of blood collection tubes or 15/50 mL conical tubes
- > Round buckets for vessels with 1.5 – 100 mL
- > Wide variety of adapters for all blood collection tubes and cell culture tube types
- > Aerosol-tight¹⁾ caps for safe centrifugation of hazardous samples optionally available

¹⁾ Aerosol-tightness tested by Public Health England, Porton Down, UK.



Ordering information

Description	Order no.
Rotor A-4-38 with round buckets, incl. 4 round buckets 100 mL	5702 720.003
Round bucket 100 mL, for Rotor A-4-38, set of 4	5702 722.006
Aerosol-tight caps for 100 mL round buckets, set of 2	5702 721.000

Adapters for Rotor A-4-38 with round buckets					
Tube Volume	1.5 – 2.0 mL	1.1 – 1.4 mL	2 – 7 mL	2.6 – 7 mL	4 – 10 mL
Max. tube diameter	11 mm	8.5 mm	12.5 mm	13.5 mm	16 mm
Max. vessel height	43 mm	100 mm	100 mm	100 mm	100 mm
Max. vessel height for use with cap/lid ¹⁾	43 mm	100 mm	100 mm	100 mm	100 mm
Adapter					
Number of vessels per adapter/rotor	4/16	5/20	5/20	4/16	4/16
Bottom shape	round	flat	flat	flat	flat
Centrifugation radius	134 mm	132 mm	132 mm	132 mm	132 mm
Max. RCF	2,900 × g	2,850 × g	2,850 × g	2,850 × g	2,850 × g
Packing	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
Order no.	5702 745.006	5702 736.007	5702 737.003	5702 719.005	5702 735.000

¹⁾ Exceeding the maximum tube length may reduce the loading capacity of the rotor. Please perform a manual swing-out test before starting the centrifuge run to make sure the tubes do not hit the rotor yoke.

Eppendorf Tubes® 5.0 mL	9 – 15 mL	15 mL conical	15 mL conical	25 mL	50 mL conical	85/100 mL
17 mm	17.5 mm	17.2 mm	17.2 mm	25 mm	30 mm	38 mm
60 mm	100 mm	121 mm	121 mm	100 mm	115 mm	106 mm
60 mm	100 mm	120 mm		100 mm	115 mm	106 mm
Adapter						
Number of vessels per adapter/rotor	1/4	4/16	1/4	2/8	1/4	1/4
Bottom shape	flat	round	conical	conical	round	conical
Centrifugation radius	136 mm	130 mm	137 mm	137 mm	135 mm	135 mm
Max. RCF	2,943 × g	2,800 × g	3,000 × g	3,000 × g	2,900 × g	2,900 × g
Packing	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
Order no.	5702 733.008	5702 724.009	5702 732.001	5702 723.002	5702 717.002	5702 734.004
						5702 718.009

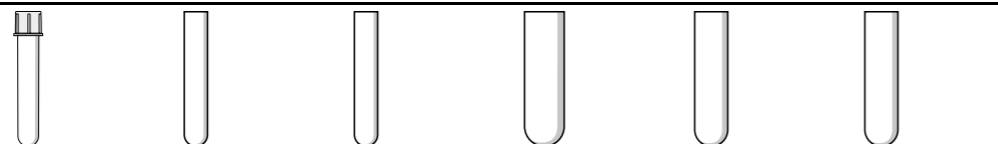
For more information go to www.eppendorf.com/centrifugation

Rotors for Centrifuge 5702/5702 R/5702 RH



Rotor A-4-38 with rectangular buckets

- > Maximum speed: 2,750 × g (4,400 rpm)
- > Rectangular buckets for vessels with 5 – 25 mL



Adapters for Rotor A-4-38 with rectangular buckets

Tube Volume	round-bottom tubes	5 – 7 mL	9 mL	15 mL	25 mL	20 mL
Max. tube diameter	12 mm	13 mm	14.5 mm	17.5 mm	25 mm	22 mm
Max. vessel height	75 mm	100 mm	100 mm	100 mm	100 mm	100 mm
Adapter						
Number of vessels per adapter/rotor	9/36	10/40	8/32	6/24	2/8	4/16
Bottom shape	round	flat	flat	flat	flat	flat
Centrifugation radius	119 mm	127 mm	127 mm	127 mm	127 mm	127 mm
Max. RCF	2,577 × g	2,750 × g	2,750 × g	2,750 × g	2,750 × g	2,750 × g
Packing	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
Order no.	5702 763.004	5702 710.008	5702 711.004	5702 712.000	5702 716.006	5702 713.007

Ordering information

Description	Order no.
Rotor A-4-38, without buckets	5702 740.004
Rectangular bucket 90 mL, for Rotor A-4-38, set of 4	5702 709.000



Rotor A-8-17

- > Maximum speed: 2,800 × g (4,400 rpm)
- > Low capacity rotor for centrifugation of 15 mL conical tubes or 15 mL glass tubes
- > Adapters for 15 mL conical tubes and rubber mat inserts for glass tubes optionally available



Rotor F-45-24-11

- > Maximum speed: 1,770 × g (4,400 rpm)
- > Fixed-angle rotor for 24 × 1.5/2.0 mL tubes
- > Quiet centrifugation even without rotor lid
- > Adapters optionally available for:
 - 0.2 mL PCR tubes (5425 715.005)
 - 0.4 mL centrifuge tubes (5425 717.008)
 - 0.5 mL micro test tubes and Microtainer® tubes (5425 716.001)
- > Rotor and adapters are autoclavable (121 °C, 20 min)



Rotor F-35-30-17

- > Maximum speed: 2,750 × g (4,400 rpm)
- > High capacity rotor for 20 × 15 mL conical tubes or 30 × 15 mL glass tubes
- > Inserts for 15 mL conical tubes and rubber mats for use with glass tubes are included



Rotor F-45-18-17-Cryo

- > Maximum speed: 1,970 × g (4,400 rpm)
- > Quiet centrifugation even without rotor lid
- > Centrifugation of 1 – 2 mL Cryo tubes® (max. 13 mm Ø, use with adapter) and tubes with screw cap (max. 17 mm Ø, no adapter required)
- > Rotor and adapters are autoclavable (121 °C, 20 min)

Ordering information

Description	Order no.
Rotor A-8-17, 8 × 15 mL, without adapter, without rubber mats	5702 700.002
Rotor F-35-30-17, incl. 30 steel sleeves for 15 mL vessels, with 20 adapters for conical tubes and 30 rubber mats for round-bottom tubes	5702 704.008
Rotor F-35-30-17, incl. 10 steel sleeves for 15 mL vessels, with 10 adapters for conical tubes and 10 rubber mats for round-bottom tubes	5702 705.004
Rotor F-45-24-11, without lid	5702 746.002
Rotor F-45-18-17-Cryo, without rotor lid, without adapters	5702 747.009
Adapter, for 1 cryo containers (max. Ø 13 mm) or lidded centrifugation tubes (Ø 12.2 mm), max. length 50 mm, for Rotor F-45-18-17-Cryo, set of 6 pcs.	5702 752.002
Adapter, for 1 HPLC vessel 1.5 mL, for Rotor F-45-18-17-Cryo	5427 708.006

Centrifuge 5804/5804 R and 5810/5810 R



Description

Eppendorf Centrifuge 5804/5804 R and 5810/5810 R with their renowned quality and reliability offer you cost efficient solutions for your medium- throughput applications. Centrifuge 5804/5804 R is a high speed centrifuge for medium capacity needs. It allows for molecular biology applications in bottles up to 250 mL and offers additional swing-bucket and fixed-angle rotors as well as deepwell plate capacity for increased versatility. Centrifuge 5810/5810 R is a workhorse for medium throughput laboratories. It spins up to 28 conical tubes with 50 mL or 56 tubes with 15 mL.

Product features

- > Swing-bucket rotors and adapters accommodate tubes and bottles from 0.2 mL to 750 mL
- > Plate rotor for centrifugation of all types of MTP, PCR, cell culture, or Deepwell Plates
- > Fixed-angle rotors for high-speed applications in tubes from 0.2 mL to 85 mL
- > Centrifugation speed of up to $20,913 \times g$ (14,000 rpm)
- > Aerosol-tight Eppendorf QuickLock® caps and lids for easy, one-hand operation
- > Low access height of 29 cm for easy loading and unloading of samples
- > Compact footprint saves valuable bench space
- > Automatic rotor recognition and imbalance detection for maximum operational safety

Additional features of refrigerated Centrifuge 5804 R and 5810 R

- > Temperature range from $-9\text{ }^{\circ}\text{C}$ to $40\text{ }^{\circ}\text{C}$
- > FastTemp function for fast pre-cooling
- > Continuous cooling maintains a constant temperature after the run has been completed – your samples stay cool
- > ECO shut-off engages after 8 hours of non-use to reduce energy consumption and to extend compressor life

For more information go to www.eppendorf.com/centrifugation



Centrifuge 5804/5804 R and 5810/5810 R

Technical specifications				
Model	5804	5804 R	5810	5810 R
Max. RCF	20,913 × g	20,913 × g	20,913 × g	20,913 × g
Max. RCF with fixed-angle rotor	20,913 × g	20,913 × g	20,913 × g	20,913 × g
Max. RCF with swing-bucket rotor	4,500 × g	4,500 × g	4,500 × g	4,500 × g
Max. RCF with plate rotor	2,250 × g	2,250 × g	3,486 × g	3,486 × g
Speed	200 – 14,000 rpm	200 – 14,000 rpm	200 – 14,000 rpm	200 – 14,000 rpm
Max. capacity	4 × 250 mL/2 × 5 MTP	4 × 250 mL/2 × 5 MTP	4 × 750 mL/4 × 4 MTP	4 × 750 mL/4 × 4 MTP
Rotors available	12	12	18	18
Acceleration/braking ramps	10/10	10/10	10/10	10/10
Number of programs	35 user-defined programs	35 user-defined programs	35 user-defined programs	35 user-defined programs
Timer	1 min to 99 min, with continuous run function, short-spin	1 min to 99 min, with continuous run function, short-spin	1 min to 99 min, with continuous run function, short-spin	1 min to 99 min, with continuous run function, short-spin
Noise level	< 62 dB(A)	< 58 dB(A)	< 70 dB(A)	< 56 dB(A)
Noise level				
Rotor FA-45-6-30 (6x50 mL)	< 55 dB(A)	< 54 dB(A)	< 56 dB(A)	< 55 dB(A)
Rotor S-4-104 (4x750 mL)			< 59 dB(A)	< 56 dB(A)
Rotor S-4-72 (4x250 mL)	< 62 dB(A)	< 58 dB(A)	–	–
Power supply	230 V, 50 – 60 Hz	230 V, 50 – 60 Hz	230 V, 50 – 60 Hz	230 V, 50 – 60 Hz
Max. power consumption	900 W	1,650 W	900 W	1,650 W
Dimensions (W × D × H)	47 × 55 × 34 cm	64 × 55 × 34 cm	54 × 61 × 35 cm	70 × 61 × 35 cm
Footprint (dimensions w/o front panel, WxD)	47 × 50 cm	64 × 50 cm	54 × 54 cm	70 × 54 cm
Height (with open lid)	74 cm	74 cm	80 cm	80 cm
Weight w/o accessories	55 kg	80 kg	68 kg	99 kg
Cooling	non-refrigerated	refrigerated	non-refrigerated	refrigerated
Temperature control range		-9 °C to 40 °C	–	-9 °C to 40 °C

Ordering information

Description	Order no.
Centrifuge 5804, non-refrigerated, without rotor, keypad, 230 V/50 – 60 Hz	5804 000.013
Centrifuge 5804 R, refrigerated, without rotor, keypad, 230 V/50 – 60 Hz	5805 000.017
Centrifuge 5810, non-refrigerated, without rotor, keypad, 230 V/50 – 60 Hz	5810 000.017
Centrifuge 5810 R, refrigerated, without rotor, keypad, 230 V/50 – 60 Hz	5811 000.010

✂ Ordering information for other voltage options begins on page 418

Rolling Cabinet



Description

If space is a limited resource in your lab, Eppendorf's rolling cabinet can give you the freedom and flexibility to use your Centrifuge 5804/5804 R or 5810/5810 R wherever you need it. Use the rolling cabinet if there is not enough space on the regular lab bench or to transport and use the centrifuge in other labs. The included drawer provides extra storage space for your rotors and adapters.



Product features

- > Rolling cabinet with closed centrifuge fits under standard 90 cm lab benches
- > With 4 castors (2 lockable) and drawer
- > Dimensions (W × D × H): 70 × 62 × 45 cm



Ordering information

Description	Order no.
Rolling Cabinet, for Centrifuge 5804/5804 R and 5810/5810 R	5821 020.010

i For more information go to www.eppendorf.com/centrifugation

Centrifuge Packages



Description

Whether you need a refrigerated or non-refrigerated centrifuge for low, medium throughput applications, one of these packages will definitely suit your requirements.

Cell Culture Centrifuge packages include

- > Centrifuge 5702/5702 R, 5804/5804 R or 5810/5810 R
- > Swing-bucket rotor incl. buckets
- > Four adapters for 15 mL conical tubes (two sets of 2)
- > Four adapters for 50 mL conical tubes (two sets of 2)

Centrifuge packages for round-bottom tubes include

- > Centrifuge 5810/ 5810 R
- > Swing-bucket rotor S-4-104 incl. buckets
- > Four adapters for 13 mm (5/7 mL) round bottom tubes (two sets of 2)
- > Four adapters for 16 mm (10 mL) round bottom tubes (two sets of 2)

Eppendorf Conical Tubes 15 mL and 50 mL

The Eppendorf Conical Tubes 15 mL and 50 mL are the optimal solution for sample preparation protocols in microbiology and molecular biology laboratories. Safe design and easy handling ensure best sample processing.

Premium USP class 6 raw material ensures

- > Highest sample integrity
- > High g-Safe® centrifugation stability
- > Optimal sample and pellet visibility

For more information go to chapter „Reaction tubes and plates“ on page 120.

For more information go to www.eppendorf.com/centrifugation

Centrifuge Packages	Number of vessels per adapter/rotor	
	15 mL conical	50 mL conical
5702/5702 R	2/8	1/4
5804/5804 R + Rotor A-4-44	4/16	1/4
5804/5804 R + Rotor S-4-72	8/32	4/16
5810/5810 R + Rotor A-4-62	9/36	4/16
5810/5810 R + Rotor A-4-81	12/48	5/20
5810/5810 R + Rotor S-4-104	14/56	7/28
	13 mm	16 mm
5810/5810 R + S-4-104	23/92	20/80

Ordering information

Description	Max. capacity per rotor	Order no.
Centrifuge 5702 , non-refrigerated, with Rotor A-4-38 incl. adapters for 15/50 mL conical tubes, 2 sets of 2 adapters, rotary knobs, 230 V/50 – 60 Hz	8 × 15 mL/4 × 50 mL	5702 000.329
Centrifuge 5702 R , refrigerated, with Rotor A-4-38 incl. adapters for 15/50 mL conical tubes, 2 sets of 2 adapters, rotary knobs, 230 V/50 – 60 Hz	8 × 15 mL/4 × 50 mL	5703 000.420
Centrifuge 5804 , non-refrigerated, with Rotor A-4-44 incl. adapters for 15/50 mL conical tubes, keypad, 230 V/50 – 60 Hz	16 × 15 mL/4 × 50 mL	5804 000.323
Centrifuge 5804 R , refrigerated, with Rotor A-4-44 incl. adapters for 15/50 mL conical tubes, keypad, 230 V/50 – 60 Hz	16 × 15 mL/4 × 50 mL	5805 000.327
Centrifuge 5804 , non-refrigerated, with Rotor S-4-72 incl. adapters for 15/50 mL conical tubes, keypad, 230 V/50 – 60 Hz	32 × 15 mL/16 × 50 mL	5804 000.528
Centrifuge 5804 R , refrigerated, with Rotor S-4-72 incl. adapters for 15/50 mL conical tubes, keypad, 230 V/50 – 60 Hz	32 × 15 mL/16 × 50 mL	5805 000.629
Centrifuge 5810 , non-refrigerated, with Rotor A-4-62 incl. adapters for 15/50 mL conical tubes, keypad, 230 V/50 – 60 Hz	36 × 15 mL/16 × 50 mL	5810 000.327
Centrifuge 5810 R , refrigerated, with Rotor A-4-62 incl. adapters for 15/50 mL conical tubes, keypad, 230 V/50 – 60 Hz	36 × 15 mL/16 × 50 mL	5811 000.320
Centrifuge 5810 , non-refrigerated, with Rotor A-4-81 incl. adapters for 15/50 mL conical tubes, keypad, 230 V/50 – 60 Hz	48 × 15 mL/20 × 50 mL	5810 000.424
Centrifuge 5810 R , refrigerated, with Rotor A-4-81 incl. adapters for 15/50 mL conical tubes, keypad, 230 V/50 – 60 Hz	48 × 15 mL/20 × 50 mL	5811 000.428
Centrifuge 5810 , non-refrigerated, with Rotor S-4-104 incl. adapters for 15/50 mL conical tubes, keypad, 230 V/50 – 60 Hz	56 × 15 mL/28 × 50 mL	5810 000.521
Centrifuge 5810 R , refrigerated, with Rotor S-4-104 incl. adapters for 15/50 mL conical tubes, keypad, 230 V/50 – 60 Hz	56 × 15 mL/28 × 50 mL	5811 000.622
Centrifuge 5810 , non-refrigerated, with Rotor S-4-104 incl. adapters for 13/16 mm round-bottom tubes, keypad, 230 V/50 – 60 Hz	92 × 13 mm/80 × 16 mm	5810 000.629
Centrifuge 5810 R , refrigerated, with Rotor S-4-104 incl. adapters for 13/16 mm round-bottom tubes, keypad, 230 V/50 – 60 Hz	92 × 13 mm/80 × 16 mm	5811 000.827

Ordering information for other voltage options begins on page 418

Overview of Swing-Bucket Rotors 58xx Family



Model	Rotor S-4-104	Rotor A-4-81	Rotor A-4-62
Max. capacity	4 x 750 mL	4 x 500 mL	4 x 250 mL
5804/5804 R			
5810/5810 R			
Positioning	Medium capacity swing-bucket rotor for blood, bacteria, cell culture and plate centrifugation	Medium capacity swing-bucket rotor for blood, bacteria, cell culture and plate centrifugation	Economic swing-bucket rotor for blood, bacteria, cell culture and plate centrifugation
Aerosol-tightness tubes/plates	yes/yes	yes/no	yes/no
Max. RCF	3,214 x g	3,220 x g	3,220 x g
Max. speed	3,900 rpm	4,000 rpm	4,000 rpm
Eppendorf Tubes® 5.0 mL and 15 mL conical	56	48	36
50 mL conical tubes	28	20/28 ¹⁾	16
13 mm round-bottom and blood collection tubes	92	100	60
16 mm round-bottom and blood collection tubes	80	64	48
1.5/2.0 mL micro tube	200	80	64
PCR plates/MTP	16	16	16
Deepwell plates (DWP)	4	4	4

¹⁾ Maximum capacity with dedicated 50 mL bucket.



Model	Rotor S-4-72	Rotor A-4-44	Rotor A-2-DWP-AT	Rotor A-2-DWP
Max. capacity	4 x 250 mL	4 x 100 mL	2 x 6 MTP	2 x 5 MTP
Positioning	Economic swing-bucket rotor for blood, bacteria, cell culture centrifugation	High-speed swing-bucket rotor for platelet poor plasma, blood, bacteria and cell culture	Aerosol-tight deepwell plate rotor for safe centrifugation of hazardous samples.	Economic deepwell plate rotor
Aerosol-tightness tubes/plates	no/-	yes/-	-/yes	-/no
Max. RCF	3,234 x g	4,500 x g	3,486 x g	2,250 x g
Max. speed	4,200 rpm	5,000 rpm	4,500 rpm	3,700 rpm
Eppendorf Tubes® 5.0 mL and 15 mL conical	32	16		
50 mL conical tubes	16	4/8 ¹⁾		
13 mm round-bottom and blood collection tubes	56	36		
16 mm round-bottom and blood collection tubes	52	28		
1.5/2.0 mL micro tube	104	48	48	48
PCR plates/MTP			8	8
Deepwell plates (DWP)			4	4

Advanced Rotor Design – Swing-Bucket Rotors



Improved energy efficiency

The round buckets have been designed to be especially aerodynamic. The result is a more efficient design that reduces power consumption by up to 48 %.

Longer rotor lifetime

The second rotor generation of both swing-bucket and fixed-angle rotors has been designed with a longer lifetime in mind.

Product features

- > New Eppendorf QuickLock® caps for one-hand operation
- > Significantly improved handling, easy operation with one or two hands
- > Handle allows the closed bucket to be carried to the biosafety cabinet where it can be opened in a safe environment.
- > Aerosol-tightness has been tested and verified by Public Health England, Porton Down, UK



Mixed bucket loading

Rotors S-4-104 and A-4-81 allow for mixed loading with 2 plate buckets and 2 round/rectangular buckets. You can, for example, order the rotor with 4 rectangular/round buckets for tubes and, in addition, buy a set of 2 plate buckets. There is no need to buy a complete set of 4 plate buckets.

Overview of the Main Fixed-Angle Rotors 58xx Family



Model	Rotor F-34-6-38	Rotor FA-45-6-30
Max. capacity	6 x 85 mL	6 x 50 mL
5804/5804 R	■	■
5810/5810 R	■	■
Positioning	High-speed rotor suitable for molecular applications in tubes up to 85 mL	Aerosol-tight high-speed rotor for safe centrifugation of hazardous samples
Aerosol-tightness	no	yes
Max. RCF	18,514 x g	20,133 x g
Max. speed	12,000 rpm	12,000 rpm
1.5/2.0 mL micro tube	24	
Eppendorf Tubes® 5.0 mL and 15 mL conical	6	6
50 mL conical tubes	6	6
85 mL	6	

Model	Rotor FA-45-20-17	Rotor FA-45-48-11	Rotor F-45-30-11/Rotor FA-45-30-11
Max. capacity	20 x 5.0 mL	48 x 1.5/2.0 mL	30 x 1.5/2.0 mL
5810/5810 R	■	■	■
Applications in Eppendorf Tube 5.0 mL	yes	Aerosol-tight microcentrifuge tube rotor for safe centrifugation of hazardous samples	Micro centrifuge tube rotor
Aerosol-tightness	yes	yes	no/yes
Max. RCF	20,913 x g	19,083 x g	20,817 x g
Max. speed	13,100 rpm	13,000 rpm	14,000 rpm
1.5/2.0 mL micro tube	20	48	30
20/-			

Advanced Rotor Design – Fixed-Angle Rotors



Product features

- > All rotors are anodized for high chemical resistance and to prevent corrosion
- > Optimized design of rotor boreholes and adapters provide optimal support for high-speed centrifugation of tubes
- > Aluminum rotors are recyclable

Low rotor weight

Eppendorf's fixed-angle rotors are among the lightest in the industry to improve handling and operational safety. Light-weight rotors cause less wear and tear on the motor and allow for faster acceleration and braking times.

Eppendorf QuickLock® lids for ergonomic lid locking

Our aerosol-tight QuickLock rotors close with only ¼ of a turn. This not only saves you time during every day use, it also takes repetitive stress off your wrist.

Superior temperature control

Aluminum, with its high heat conductivity, allows fast pre-cooling and accurate temperature control in refrigerated centrifuges.

Ordering information

Description	Order no.
Rotor FA-45-20-17, incl. rotor lid, for 20 x Eppendorf Tubes® 5.0 mL	5820 765.003
Adapter, for 1 vessel 1.5 – 2.0 mL, for all 5.0 mL rotors, set of 4 pcs.	5820 768.002
Adapter, for 1 cryo tube, for all 5.0 mL rotors, set of 4 pcs.	5820 769.009
Adapter, for 1 HPLC tube, for all 5.0 mL rotors, set of 4 pcs.	5820 770.007
Rotor FA-45-48-11, incl. rotor lid, for 48 x 1.5/2.0 mL tubes	5820 760.001
Rotor F-45-30-11, incl. rotor lid, for 30 x 1.5/2.0 mL reaction vessels	5804 715.004
Rotor FA-45-30-11, incl. rotor lid, for 30 x 1.5/2.0 mL reaction vessels, aerosol-tight	5804 726.006

Rotors for 58xx Family



Model	Rotor F-35-48-17 ¹⁾	Rotor T-60-11	Rotor F-45-48-PCR
Max. capacity		60 × 1.5/2.0 mL	6 × 5/8 PCR strips (48 × 0.2 mL)
5804/5804 R	■	■	■
5810/5810 R	■	■	■
Aerosol-tightness	no	no	no
Max. RCF	5,005 × g	16,435 × g	15,294 × g
Max. speed	5,500 rpm	14,000 rpm	12,000 rpm
1.5/2.0 mL micro tube		60	
Eppendorf Tubes® 5.0 mL and 15 mL conical	-/40		

¹⁾ Please note that a software upgrade will be necessary for older centrifuges when using this rotor. Please contact your local Eppendorf organization or dealer for further information.

Ordering information

Description	Order no.
Rotor F-35-48-17, for 24 × 15 mL conical tubes, incl. 24 steel sleeves and adapters	5820 771.003
Rotor F-35-48-17, for 40 × 15 mL conical tubes, incl. 48 steel sleeves and adapters	5820 772.000
Rotor T-60-11, incl. rotor lid, for 1.5/2.0 mL tubes, without adapter	5804 730.003
Adapter, for 10 reaction vessels 1.5/2.0 mL, for Rotor T-60-11, set of 6 pcs.	5804 731.000
Adapter, for 20 reaction vessels 0.4 mL, for Rotor T-60-11, set of 6 pcs.	5804 732.006
Rotor F-45-48-PCR, for 6 × 8, 6 × 5 PCR tube strips, 48 × 0.2 mL individual PCR tubes	5804 735.005



Rotor A-2-DWP-AT

- > For use in Centrifuge 5810/5810 R only¹⁾
- > Max. speed: 3,486 × g (4,500 rpm)
- > Rotor can handle up to
 - 2 × 6 MTP
 - 2 × 2 DWP
 - 2 × 1 Filtration plate kits
- > Maximum loading height of 67 mm (89 mm without lid)
- > Rotor comes with aerosol-tight caps²⁾ for safe centrifugation of hazardous samples
- > Rotor and buckets are autoclavable (121 °C, 20 min)

¹⁾ Please note that a software upgrade may be necessary for older centrifuges when using Rotor A-2-DWP-AT. Please contact your local Eppendorf organization or dealer for further information. ²⁾ Aerosol-tightness tested by Public Health England, Porton Down, UK.

Ordering information

Description	Order no.
Rotor A-2-DWP-AT, incl. 2 buckets, 2 aerosol-tight caps and 2 plate carriers	5820 710.004



Adapter

- > PCR plate adapters are designed to support thin-walled PCR plate wells during centrifugation
- > Available for 96-well and 384-well PCR plates
- > Adapters can be used in all Eppendorf plate rotors

Cell culture flask adapter

- > Adapter to spin down cell cultures directly in a cell culture flask
- > Suitable for 25 cm² and selective 75 cm² flasks (please ask for details)
- > Adapters can be used in Eppendorf plate rotor A-4-81-MTP/Flex

IsoRack adapter

- > IsoRack adapters to support 0.5 mL and 1.5/2.0 mL IsoRacks during centrifugation
- > Adapters can be used in Eppendorf plate rotors A-2-DWP and A-4-81-MTP/Flex

Ordering information

Description	Order no.
Adapter, for 1 cell culture flask, for Rotors A-4-81-MTP/Flex	5825 719.000
Adapter, for 1 PCR plate (96 wells) PCR plate 96 wells, for plate rotors, set of 2 pcs.	5825 711.009
Adapter, for 1 PCR plate (384 wells) PCR plate 384 wells, for plate rotors, set of 2 pcs.	5825 713.001
Adapter, for 24 vessels in the IsoRack 0.5 mL, for Rotors S-4-104, A-4-81-MTP/Flex, A-2-DWP, set of 2 pcs.	5825 708.008
Adapter, for 24 vessels in the IsoRack 1.5/2.0 mL, for Rotors S-4-104, A-4-81-MTP/Flex, A-2-DWP, set of 2 pcs.	5825 709.004
CombiSlide Adapter, for 12 slides Combi Slide 12 slides, for plate rotors, set of 2 pcs.	5825 706.005



Rotor A-2-DWP

- > For use in Centrifuge 5804/5804 R and 5810/5810 R
- > Max. speed: 2,250 × g (3,700 rpm)
- > Rotor can handle up to
 - 2 × 5 MTP
 - 2 × 4 Cell culture plates
 - 2 × 2 DWP
 - 2 × 1 Filtration plate kits
- > Maximum loading height of 89 mm
- > Rotor and buckets are autoclavable (121 °C, 20 min)

Ordering information

Description	Order no.
Rotor A-2-DWP, rotor for Deepwell Plates incl. 2 buckets	5804 740.009

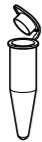





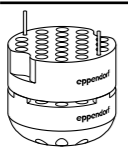
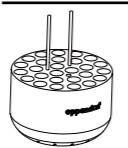
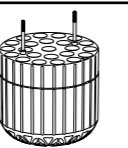
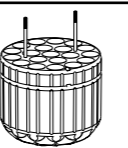
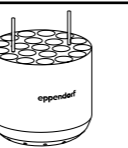
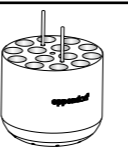
Rotors for 58xx Family



Rotor S-4-104

- > Medium capacity swing-bucket rotor with max. speed 3,214 × g (3,900 rpm)¹⁾
- > Broad range of adapters enables high versatility for tubes and bottles from 0.2 mL to 750 mL and plates
- > Aerodynamic round bucket design for up to 36 % energy savings compared to Rotor A-4-81
- > Mixed loading with 2 plate buckets and 2 round tube buckets allows for increased versatility
- > Aerosol-tight QuickLock caps for safe centrifugation of hazardous samples optionally available²⁾
- > Buckets, lids and adapters are autoclavable (121 °C, 20 min)

¹⁾ Please note that a software upgrade will be necessary for older centrifuges when using this rotor. Please contact your local Eppendorf organization or dealer for further information. ²⁾ Aerosol-tightness tested by Public Health England, Porton Down, UK.

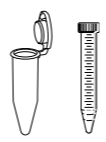

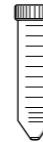





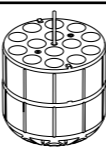
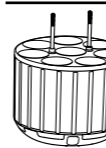
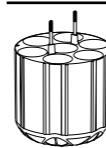
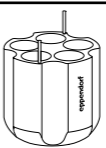

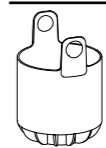


						
Adapters for Rotor S-4-104						
Tube Volume	1.5/2.0 mL	12 x 75 mm, 5 mL FACS	2.6 – 8 mL	5.5 – 12 mL	9 mL	14 mL
Max. tube diameter	11 mm	12 mm	13 mm	16 mm	17.5 mm	17.5 mm
Max. vessel height	39 mm	115 mm	115 mm	119 mm	111 mm	117 mm
Max. vessel height for use with cap/lid¹⁾	39 mm	108 mm	108 mm	114 mm	106 mm	112 mm
Adapter						
Number of vessels per adapter/rotor	50/200	27/108	23/92	20/80	20/80	14/56
Bottom shape	flat	round	round	round	round	round
Centrifugation radius	188 mm	183 mm	179 mm	180 mm	179 mm	185 mm
Max. RCF	3,197 × g	3,112 × g	3,044 × g	3,061 × g	3,044 × g	3,146 × g
Packing	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
Order no.	5825 740.009	5825 747.003	5825 738.004	5825 736.001	5825 743.008	5825 748.000

¹⁾ Exceeding the maximum tube length may reduce the loading capacity of the rotor. Please perform a manual swing-out test before starting the centrifuge run to make sure the tubes do not hit the rotor yoke.

²⁾ Please note that these conical bottles need to be used together with a conical form insert provided by the manufacturer. ³⁾ 225 mL conical bottles from BD[®]/Corning[®] and 250 mL conical bottles from Nunc[®] for Rotor S-4-104.

Ordering information

Description	Order no.
Rotor S-4-104	
incl. 4 × 750 mL round buckets	5820 740.000
incl. 4 plate buckets (aerosol-tight capable)	5820 754.001
without buckets	5820 755.008
Plate bucket (aerosol-tight capable) , for Rotor S-4-104, incl. plate carrier, set of 2 pcs.	5820 744.006
Plate bucket (aerosol-tight capable) , for Rotor S-4-104, incl. plate carrier, set of 4 pcs.	5820 743.000
Bucket 750 mL , for Rotor S-4-104, set of 2 pcs.	5820 742.003
Bucket 750 mL , for Rotor S-4-104, set of 4 pcs.	5820 741.007
Aerosol-tight caps for plate buckets (aerosol-tight capable) , aerosol-tight, for Rotor S-4-104 and Rotor S-4x750, set of 2 pcs.	5820 748.001
Aerosol-tight caps for 750 mL round buckets , aerosol-tight, for Rotor S-4-104, Rotor S-4x750 and Rotor S-4x1000, set of 2 pcs.	5820 747.005
Wide-neck bottle , 750 mL, set of 2 pcs.	5820 708.000

							
Eppendorf Tubes [®] 5.0 mL and 15 mL conical	30 mL	50 mL conical	50 mL conical, skirted	250 mL flat, 175 – 225/250 mL conical ²⁾³⁾	500 mL Corning [®]	750 mL	MTP, DWP, PCR plates
17 mm	25 mm	30 mm	30 mm	62 mm	96 mm	102 mm	
125 mm	111 mm	122 mm	120 mm	145 mm	147 mm	140 mm	60 mm
120 mm	106 mm	116 mm	116 mm	125 mm			47 mm
							
14/56	8/32	7/28	5/20	1/4	1/4	1/4	4/16 (MTP) 1/4 (DWP)
conical	flat	conical	conical	flat	conical	flat	flat
188 mm	174 mm	187 mm	178 mm	183 mm	187 mm	185 mm	151 mm
3,197 × g	2,959 × g	3,180 × g	3,027 × g	3,112 × g	3,146 × g	3,146 × g	2,568 × g
set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
5825 734.009	5825 755.006	5825 733.002	5825 732.006	5825 741.005	5825 745.000	5825 744.004	5820 744.006

Rotors for 58xx Family



Rotor A-4-81

- > Swing-bucket rotor with max. speed 3,220 × g (4,000 rpm)
- > Rotor A-4-81 accommodates tubes and bottles from 0.2 mL to 500 mL as well as plates
- > Aerosol-tight caps¹⁾ for safe centrifugation of hazardous samples optionally available
- > Mixed loading with 2 plate buckets and 2 rectangular tube buckets allows for increased versatility
- > Buckets, caps and adapters are autoclavable (121 °C, 20 min)

¹⁾ Aerosol-tightness tested by Public Health England, Porton Down, UK.

Adapters for Rotor A-4-81						
Tube Volume	1.5/2.0 mL	1.2 – 5 mL	2.6 – 5 mL	2.6 – 7 mL	3 – 15 mL	7 – 17 mL
Max. tube diameter	11 mm	11 mm	13 mm	13 mm	16 mm	17.5 mm
Max. vessel height	43 mm	108 mm	108 mm	108 mm	108 mm	118 mm
Max. vessel height for use with cap/lid¹⁾	43 mm	108 mm	107 mm	108 mm	108 mm	118 mm
Adapter						
Number of vessels per adapter/rotor	20/80	20/80	25/100	18/72	16/64	16/64
Bottom shape	flat	flat	flat with rubber mat	flat with rubber mat	flat with rubber mat	flat with rubber mat
Centrifugation radius	165 mm	168 mm	168 mm	168 mm	168 mm	168 mm
Max. RCF	2,950 × g	3,000 × g	3,000 × g	3,000 × g	3,000 × g	3,000 × g
Packing	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
Order no.	5810 745.004	5810 746.000	5810 720.001	5810 747.007	5810 748.003	5810 721.008

¹⁾ Exceeding the maximum tube length may reduce the loading capacity of the rotor. Please perform a manual swing-out test before starting the centrifuge run to make sure the tubes do not hit the rotor yoke.

²⁾ Please order adapter for 50 mL conical tubes skirted 5804 737.008. ³⁾ Please note that these conical bottles need to be used together with a conical form insert provided by the manufacturer.

Ordering information

Description	Order no.
Rotor A-4-81 , incl. 4 × 500 mL rectangular buckets	5810 718.007
Rotor A-4-81 , without buckets	5810 743.001
Rotor A-4-81 , with 4 MTP/Flex buckets	5810 725.003
Bucket 500 mL rectangular , for Rotor A-4-81, set of 4 pcs.	5810 730.007
Bucket for 7 × 50 mL conical tubes , for Rotor A-4-81, set of 4 pcs.	5825 730.003
Cap for 500 mL rectangular buckets , aerosol-tight, aerosol-tight, for Rotor A-4-81, set of 2 pcs.	5810 724.007
Wide-neck bottle , for Rotor A-4-81, 500 mL, square, set of 2 pcs.	5820 707.003
Wide-neck bottle , for Rotor A-4-81, 400 mL, set of 2 pcs.	5810 729.009
MTP/Flex bucket , for Rotor A-4-81 and Rotor S-4x500, set of 2 pcs.	5810 742.005
MTP/Flex bucket , for Rotor A-4-81, set of 4 pcs.	5810 741.009

Eppendorf Tubes® 5.0 mL and 15 mL conical tubes	50 mL conical	50 mL conical	30 – 50 mL and 50 mL conical tubes, skirted ²⁾	180 – 250 mL flat / 175 – 225 mL conical ³⁾	400 mL	500 mL	MTP, DWP, PCR plates
17.5 mm	30 mm	30 mm	30 mm	62 mm	133 mm	83 mm	
121 mm	122 mm	122 mm	121 mm	133 mm	133 mm	134 mm	60 mm
119 mm	116 mm					134 mm	
12/48	5/20	7/28	5/20	1/4	1/4	–/4	4/16 (MTP) 1/4 (DWP)
conical	conical	conical	flat with rubber mat	flat with rubber mat	flat, rubber	flat	flat with rubber mat
173 mm	173 mm	180 mm	173 mm	173 mm	180 mm	180 mm	163 mm
3,100 × g	3,100 × g	3,220 × g	3,100 × g	3,100 × g	3,220 × g	3,220 × g	2,900 × g
set of 2 pcs.	set of 2 pcs.	set of 4 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.		set of 2 pcs.
5810 722.004	5810 723.000	5825 730.003	5810 739.004	5825 722.000	5810 728.002	–	5810 742.005

Rotors for 58xx Family

**Rotor A-4-62**

- > Swing-bucket rotor with max. speed 3,220 × g (4,000 rpm)
- > Rotor A-4-62 accommodates tubes and bottles from 0.2 mL to 250 mL as well as plates
- > Aerosol-tight caps¹⁾ for safe centrifugation of hazardous samples optionally available
- > Rotor, buckets, caps and adapters are autoclavable (121 °C, 20 min)

¹⁾ Aerosol-tightness tested by Public Health England, Porton Down, UK.

Adapters for Rotor A-4-62							
Tube Volume	1.5 – 2.0 mL	1.2 – 5 mL	2.6 – 7 mL	3 – 15 mL	7 – 17 mL	Eppendorf Tubes® 5.0 mL and 15 mL conical	7 – 18 mL
Max. tube diameter	11 mm	11 mm	13 mm	16 mm	17.5 mm	17.5 mm	20 mm
Max. vessel height	43 mm	123 mm	121 mm	121 mm	118 mm	127 mm	126 mm
Max. vessel height for use with cap/lid¹⁾	43 mm	115 mm	118 mm	116 mm	114 mm	121 mm	119 mm
Adapter							
Number of vessels per adapter/rotor	16/64	25/100	15/60	12/48	12/48	9/36	8/32
Bottom shape	flat	flat with rubber mat	flat with rubber mat	flat with rubber mat	flat with rubber mat	conical	flat with rubber mat
Centrifugation radius	171 mm	173 mm	173 mm	173 mm	173 mm	178 mm	173 mm
Max. RCF	3,000 × g	3,050 × g	3,050 × g	3,050 × g	3,050 × g	3,150 × g	3,050 × g
Packing	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
Order no.	5810 751.004	5810 750.008	5810 752.000	5810 753.007	5810 754.003	5810 755.000	5810 756.006

¹⁾ Exceeding the maximum tube length may reduce the loading capacity of the rotor. Please perform a manual swing-out test before starting the centrifuge run to make sure the tubes do not hit the rotor yoke.

²⁾ Please order adapter for 50 mL conical tubes skirted 5804 737.008. ³⁾ Please note that these conical bottles need to be used together with a conical form insert provided by the manufacturer.

Ordering information

Description	Order no.
Rotor A-4-62 , incl. 4 × 250 mL rectangular buckets	5810 709.008
Rotor A-4-62 , with 4 MTP buckets	5810 711.002
MTP bucket , for Rotor A-4-62-MTP, for 4 MTP or 1 DWP, set of 4 pcs.	5810 702.003
Aerosol-tight cap , for rectangular bucket 250 mL, 2 pieces	5810 710.006
Rectangular bucket 250 mL , for Rotor A-4-62, 4 pieces	5810 716.004

18 – 30 mL	30 – 50 mL round- bottom/50 mL conical, skirted ²⁾	50 mL conical	50 mL conical	50 – 75 mL	80 – 120 mL	200 – 250 mL flat/175 – 225 mL conical ³⁾	MTP, DWP, PCR plates
26 mm	30 mm	30 mm	30 mm	35 mm	45 mm	62 mm	
119 mm	115 mm	122 mm	122 mm	122 mm	138 mm	136 mm	53 mm
116 mm	113 mm		116 mm	118 mm	125 mm	127 mm	
4/16	4/16	4/16	3/12	2/8	1/4	1/4	4/16 (MTP) 1/4 (DWP)
flat with rubber mat	flat with rubber mat	flat with conical inlay	conical	flat with rubber mat	flat with rubber mat	flat with rubber mat	flat with rubber mat
173 mm	173 mm	173 mm	178 mm	173 mm	173 mm	180 mm	154 mm
3,050 × g	3,050 × g	3,050 × g	3,150 × g	3,050 × g	3,050 × g	3,220 × g	2,750 × g
set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 4 pcs.
5810 757.002	5810 759.005	5810 763.002	5810 758.009	5810 760.003	5810 761.000	5810 770.009	5810 702.003



Rotors for 58xx Family



Rotor S-4-72

- > Medium capacity swing-bucket rotor with speed up to $3,234 \times g$ (4,200 rpm)¹⁾
- > Broad range of adapters available to handle all common tube formats from 0.2 mL to 250 mL
- > Aerodynamic round bucket design for up to 48 % energy savings compared to Rotor A-4-62
- > Buckets and adapters are autoclavable (121 °C, 20 min)

¹⁾ Please note that a software upgrade will be necessary for older centrifuges when using this rotor. Please contact your local Eppendorf organization or dealer for further information.

Adapters for Rotor S-4-72				
Tube Volume	1.5/2.0 mL	2.6 – 8 mL	5.5 – 12 mL	9 mL
Max. tube diameter	11 mm	13 mm	16 mm	17.5 mm
Max. vessel height	43 mm	115 mm	112 mm	113 mm
Adapter				
Number of vessels per adapter/rotor	26/104	14/56	13/52	12/48
Bottom shape	flat	round	round	round
Centrifugation radius	159 mm	159 mm	157 mm	158 mm
Max. RCF	$3,136 \times g$	$3,136 \times g$	$3,096 \times g$	$3,116 \times g$
Packing	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
Order no.	5804 794.001	5804 789.008	5804 791.002	5804 792.009

¹⁾ For Eppendorf Tubes® 5.0 mL with screw cap the capacity is limited to 6 tubes per adapter. ²⁾ Please note that these conical bottles need to be used together with a conical form insert provided by the manufacturer.

Ordering information

Description	Order no.
Rotor S-4-72 , incl. 4 x 250 mL round buckets	5804 746.007

Eppendorf Tubes® 5.0 mL	15 mL conical	50 mL conical	50 mL conical, skirted	250 mL flat/175 mL Falcon ²⁾	
17 mm	17 mm	30 mm	30 mm	62 mm	
60 mm	120 mm	120 mm	120 mm	130 mm	
8/32 ¹⁾	8/32	4/16	2/8	1/4	
conical	conical	conical	conical	flat	
163 mm	164 mm	164 mm	153 mm	160 mm	
$3,215 \times g$	$3,234 \times g$	$3,234 \times g$	$2,602 \times g$	$3,155 \times g$	
set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	
5804 793.005	5804 783.000	5804 784.006	5804 785.002	5804 787.005	



Rotors for 58xx Family



Rotor A-4-44

- > High-speed swing-bucket rotor for applications up to 4,500 × g (5,000 rpm)
- > Rotor A-4-44 accommodates tubes from 0.2 mL to 100 mL
- > Aerosol-tight caps¹⁾ for safe centrifugation of hazardous samples optionally available
- > Rotor, buckets, caps and adapters are autoclavable (121 °C, 20 min)

¹⁾ Aerosol-tightness tested by Public Health England, Porton Down, UK.

Ordering information

Description	Order no.
Rotor A-4-44 , incl. 4 rectangular buckets 100 mL	5804 709.004
Rotor A-4-44 , incl. 4 buckets for 2 × 50 mL conical tubes	5804 719.000
Bucket for 2 × 50 mL conical tubes , for Rotor A-4-44, set of 4 pcs.	5804 706.005
Rectangular bucket 100 mL , for Rotor A-4-44, set of 4 pcs.	5804 741.005
Aerosol-tight cap , for rectangular bucket 100 mL, 2 pieces	5804 712.005
Insert , for conical tubes, for 100 mL rectangular bucket in Rotor A-4-44, for 1 conical tube 50 mL, set of 8 pieces	5804 728.009
Adapter , for 50 mL conical tubes with skirted bottom, set of 8 pieces	5804 737.008

Adapters for Rotor A-4-44							
Tube Volume	1.5 – 2.0 mL	1.2 – 5 mL	2.6 – 7 mL	3 – 15 mL	7 – 17 mL	Eppendorf Tubes® 5.0 mL and 15 mL conical	15 mL conical
Max. tube diameter	11 mm	11 mm	13 mm	16 mm	17.5 mm	17.5 mm	17.5 mm
Max. vessel height	43 mm	105 mm	108 mm	108 mm	110 mm	121 mm	121 mm
Max. vessel height for use with cap/lid¹⁾	43 mm	102 mm	106 mm	106 mm	106 mm		121 mm
Adapter							
Number of vessels per adapter/rotor	12/48	14/56	9/36	7/28	6/24	4/16	2/8
Bottom shape	flat	flat with rubber mat	flat with rubber mat	flat with rubber mat	flat with rubber mat	conical	conical
Centrifugation radius	148 mm	150 mm	150 mm	150 mm	150 mm	155 mm	157 mm
Max. RCF	4,100 × g	4,200 × g	4,200 × g	4,200 × g	4,200 × g	4,332 × g	4,388 × g
Packing	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
Order no.	5804 751.000	5804 750.004	5804 752.007	5804 753.003	5804 754.000	5804 755.006	5804 717.007

¹⁾ Exceeding the maximum tube length may reduce the loading capacity of the rotor. Please perform a manual swing-out test before starting the centrifuge run to make sure the tubes do not hit the rotor yoke.

²⁾ Reordering of 50 mL form inserts: 5804 728.009. ³⁾ Please order adapter for 50 mL conical tubes skirted 5804 737.008.

7 – 18 mL	18 – 30 mL	50 mL ²⁾ conical	50 mL conical	50 mL conical	30 – 50 mL round-bottom/50 mL conical, skirted ³⁾	50 – 75 mL	80 – 100 mL
20 mm	26 mm	-	31 mm	31 mm	31 mm	35 mm	45 mm
107 mm	110 mm	120 mm	122 mm	122 mm	122 mm	119 mm	114 mm
104 mm	100 mm			119 mm	108 mm	108 mm	100 mm
4/16	2/8	-/8	1/4	1/4	1/4	1/4	1/4
flat with rubber mat	flat with rubber mat	flat with conical inlay	conical	conical	flat with rubber mat	flat with rubber mat	flat with rubber mat
150 mm	150 mm	161 mm	155 mm	157 mm	150 mm	150 mm	150 mm
4,200 × g	4,200 × g	4,500 × g	4,332 × g	4,388 × g	4,200 × g	4,200 × g	4,200 × g
set of 2 pcs.	set of 2 pcs.	set of 4 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
5804 756.002	5804 757.009	5804 706.005	5804 758.005	5804 718.003	5804 759.001	5804 760.000	5804 761.006



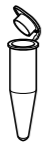









Rotors for 58xx Family



Rotor F-34-6-38

- > High-speed rotor for molecular applications in tubes from 0.2 mL to 85 mL
- > Max. speed: 18,514 × g (12,000 rpm) in Centrifuge 5810 R or 15,557 × g (11,000 rpm) in 5804/5804 R/5810¹⁾
- > Low rotor weight (3.2 kg) for easy handling
- > 34° borehole angle reduces pellet smears along tube wall
- > Anodized aluminum for high chemical resistance
- > Rotor, lid and adapters are autoclavable (121 °C, 20 min)

¹⁾ Rotors F-34-6-38 and FA-45-6-30 maintain 4 °C at 11,000 rpm

					
Adapters for Rotor F-34-6-38					
Tube Volume	1.5 – 2.0 mL	2.6 – 7 mL	2.6 – 7 mL	7 – 15 mL	Eppendorf Tubes® 5.0 mL
Max. tube diameter	11 mm	13 mm	13 mm	16 mm	17 mm
Max. vessel height for use with cap/lid	110 mm	90 mm	110 mm	112 mm	104 mm
Adapter					
Number of vessels per adapter/rotor	4/24	3/18	3/18	2/12	1/6
Bottom shape	round	flat	flat	round	conical
Centrifugation radius	113 mm	106 mm	114 mm	112 mm	105 mm
Max. RCF at 12.100 rpm (5810 R)	18,200 × g	17,065 × g	18,353 × g	18,000 × g	17,187 × g
Max. RCF at 11.000 rpm (5804, 5804 R, 5810)	15,300 × g	14,339 × g	15,422 × g	15,150 × g	14,204 × g
Packing	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
Order no.	5804 770.005	5804 738.004	5804 739.000	5804 771.001	5804 777.000













i For more information go to www.eppendorf.com/centrifugation

Technical specifications subject to change.



Ordering information

Description	Order no.
Rotor F-34-6-38, for 6 × 85 mL tubes, incl. rotor lid	5804 727.002

					
15 mL conical	15 – 18 mL	20 – 30 mL	50 mL	50 mL conical	85 mL
17 mm	18 mm	26 mm	29 mm	30 mm	38 mm
123 mm	123 mm	123 mm	123 mm	121 mm	121 mm
					
1/6	1/6	1/6	1/6	1/6	-/6
conical	round	round	round	conical	round
107 mm	109 mm	110 mm	112 mm	108 mm	115 mm
17,200 × g	17,550 × g	17,700 × g	18,014 × g	17,400 × g	18,500 × g
14,450 × g	14,750 × g	14,900 × g	15,157 × g	14,600 × g	15,550 × g
set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	
5804 776.003	5804 772.008	5804 773.004	5804 774.000	5804 775.007	-

Your local distributor: www.eppendorf.com/contact
Eppendorf AG · Barkhausenweg 1 · 22339 Hamburg · Germany · eppendorf@eppendorf.com · www.eppendorf.com

Rotors for 58xx Family



Rotor FA-45-6-30

- > High-speed rotor for applications in tubes from 5 – 50 mL¹⁾
- > Max. speed 20,133 x g (12,100 rpm) in Centrifuge 5810 R or 16,639 x g (11,000 rpm) in 5804/5804 R/5810²⁾
- > Eppendorf QuickLock rotor lid for fast lid locking
- > Aerosol-tight³⁾ for safe centrifugation of hazardous samples
- > Low rotor weight (3.2 kg) for easy lifting
- > Anodized aluminum for high chemical resistance
- > 45° borehole angle minimizes pellets smear
- > Rotor, lid and adapters are autoclavable (121 °C, 20 min)

¹⁾ Please note that a software upgrade may be necessary for older centrifuges when using this rotor. Please contact your local Eppendorf organization or dealer for further information.

²⁾ Rotors F-34-6-38 and FA-45-6-30 maintain 4 °C at 11,000 rpm

³⁾ Aerosol-tightness tested by Public Health England, Porton Down, Great Britain

Ordering information

Description	Order no.
Rotor FA-45-6-30, incl. rotor lid, for 6 x 15/50 mL conical tubes	5820 715.006

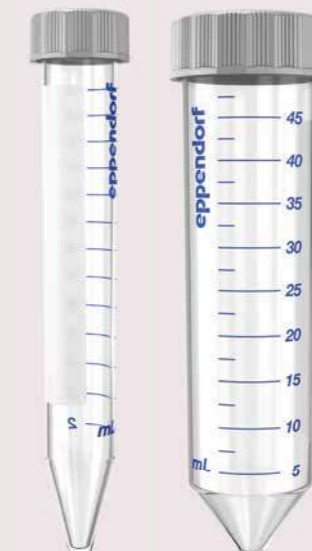
Adapters for Rotor FA-45-6-30					
Tube Volume	2.6 – 5 mL	4 – 8 mL	5.5 – 10 mL	7.5 – 12 mL	Eppendorf Tubes® 5.0 mL
Max. tube diameter	13 mm	13 mm	16 mm	16 mm	17 mm
Max. vessel height for use with cap/lid	119 mm	119 mm	119 mm	119 mm	121 mm
Adapter					
Number of vessels per adapter/rotor	1/6	1/6	1/6	1/6	1/6 ¹⁾
Bottom shape	round	round	round	round	conical
Centrifugation radius	120 mm	120 mm	120 mm	120 mm	121 mm
Max. RCF at 12.100 rpm (5810 R)	19,642 x g	19,642 x g	19,642 x g	19,642 x g	19,806 x g
Max. RCF at 11.000 rpm (5804, 5804 R, 5810)	16,233 x g	16,233 x g	16,233 x g	16,233 x g	16,369 x g
Packing	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
Order no.	5820 726.008	5820 725.001	5820 728.000	5820 727.004	5820 730.005

¹⁾ Eppendorf Tubes® 5.0 mL with screw cap will not fit in this adapter.

Eppendorf Conical Tubes

Whether centrifugation, mixing, or other applications – the Eppendorf Conical Tubes 15 mL and 50 mL will perfectly fit into your workflows. They represent the next step in Eppendorf’s comprehensive system solutions in liquid, sample and cell handling.

More information: www.eppendorf.com/conicals



7 – 17 mL	15 mL	15 – 18 mL	20 – 30 mL	35 mL	50 mL conical
17.5 mm	17 mm	18 mm	26 mm	29 mm	30 mm
122 mm	125 mm	125 mm	125 mm	125 mm	121 mm
1/6	1/6	1/6	1/6	1/6	-/6
round	conical	round	round	conical	conical
120 mm	120 mm	120 mm	105 mm	112 mm	123 mm
19,642 x g	19,642 x g	19,642 x g	17,187 x g	18,333 x g	20,133 x g
16,233 x g	16,223 x g	16,223 x g	14,204 x g	15,151 x g	16,639 x g
set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	-
5820 729.007	5820 717.009	5820 720.000	5820 721.006	5820 722.002	-

Centrifuge 5910 R and Centrifuge 5920 R

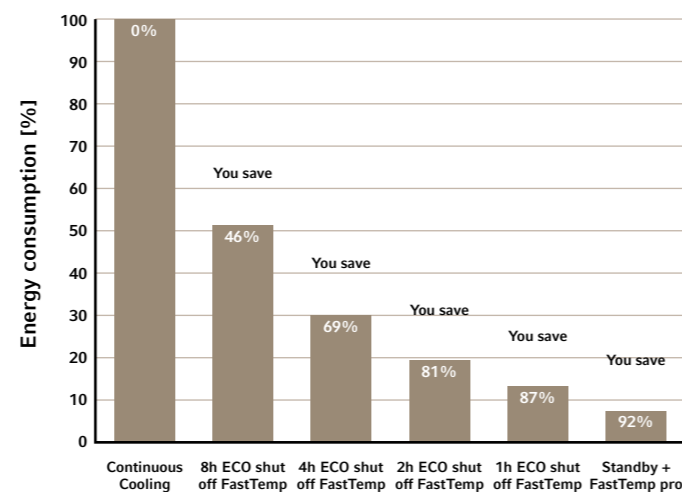
Whether you choose the new Centrifuge 5910 R with great versatility or the well established Centrifuge 5920 R with more capacity, both instruments follow the same extremely high Eppendorf standards in temperature management and safety.

Advanced temperature management

Eppendorf developed the Dynamic Compressor Control (DCC). Unlike other compressors which switch back and forth between 0 % and 100 % performance output, DCC allows for a constant and smooth temperature regulation. This results in a precise cooling performance and the set temperature is kept stable at all time.

In addition to the well-known FastTemp function for super fast pre-cooling, both instruments include the new FastTemp pro® software option. This feature allows for automated pre-cooling based on pre-programmable time and date. Simply turn the centrifuge into standby mode when you leave your lab and let FastTemp pro take care of pre-cooling in the morning so you don't have to. This saves you more than 90 % of energy over night and programming is super easy.

Centrifuge 5920 R: Energy saving overnight with ECO shut-off and FastTemp pro®



	Centrifuge 5910 R	Centrifuge 5920 R
1,000 mL bottles	–	4
750 mL bottles	4	4
180 – 250 mL bottles (flat)	4	8
50 mL conical tubes	36	52
5 mL and 15 mL conical tubes	68	108
1.5/2.0 mL Eppendorf tubes	200	368
BD Vacutainer® CPT™ (16 mm × 125 mm/8 mL)	28	80
16 mm round-bottom and blood collection tubes	104	148
13 mm round-bottom and blood collection tubes	120	196
PCR plates/MTP	20/4	28/8
Universal adapters for conical tubes, plates and bottles	■	–
Dual use of plates and tubes in one rotor bucket	■	■
Plate rotor options for MTP, PCR or DWP	■	■
Fixed-angle rotors for high-speed applications	■	■

Innovative safety features

Centrifuge 5910 R and Centrifuge 5920 R have an automatic rotor recognition. This feature detects a newly inserted rotor and automatically limits the centrifuge speed to the rotor's maximum permissible value.

When handling substances that pose a health hazard it is highly recommended to use aerosol-tight fixed-angle rotors with Eppendorf QuickLock® lids or swing-bucket rotors in combination with Eppendorf QuickLock caps.



Technical specifications

	Centrifuge 5910 R	Centrifuge 5920 R
Model	Centrifuge 5910 R	Centrifuge 5920 R
Max. RCF	22,132 × g	21,194 × g
Max. RCF with fixed-angle rotor	22,132 × g	21,194 × g
Max. RCF with swing-bucket rotor	5,234 × g	4,791 × g
Speed	100 – 14,000 rpm (10 rpm steps)	100 – 13,700 rpm (10 rpm steps)
Max. capacity	4 × 750 mL/4 × 5 MTP	4 × 1,000 mL/4 × 7 MTP
Acceleration/braking ramps	10/10	10/10
Number of programs	99 (5 program keys)	99 (5 program keys)
Timer	10 s to 99 h 59 min, with continuous run function, short-spin	10 s to 99 h 59 min, with continuous run function, short-spin
Noise level		
Rotor FA-6x50	<59 dB(A)	<60 dB(A)
Rotor S-4x750	<57 dB(A)	
Rotor S-4xUniversal	<53 dB(A)	
Rotor S-4xUniversal-Large		<55 dB(A)
Power supply	230 V, 50 – 60 Hz	230 V, 50 – 60 Hz
Max. power consumption	1,650 W	1,650 W
Dimensions (W × D × H)	72 × 66 × 37 cm	74 × 71 × 40 cm
Footprint (dimensions w/o front panel, WxD)	72 × 62 cm	74 × 67 cm
Height (with open lid)	85 cm	94 cm
Weight w/o accessories	109 kg	139 kg
Cooling	refrigerated	refrigerated
Temperature control range	-11 °C to 40 °C	-11 °C to 40 °C

Ordering information

Description	Order no.
Centrifuge 5910 R, refrigerated, without rotor, 230 V/50 – 60 Hz	5942 000.010
Centrifuge 5920 R, refrigerated, without rotor, 230 V/50 – 60 Hz	5948 000.018

✎ Ordering information for other voltage options begins on page 418

Centrifuge 5910 R

Description

With its great versatility, the refrigerated Centrifuge 5910 R is setting the next benchmark for benchtop centrifuges. With a comprehensive portfolio of fixed-angle and swing-bucket rotors, this centrifuge was designed to accommodate a particularly broad spectrum of applications. Cell harvests in bottles of capacities up to 750 mL, large-scale DNA and RNA isolations as well as Ficoll® gradients for the purification of lymphocytes and monocytes are merely a few examples of the many areas of application. The new universal swing-bucket rotor with unique universal adapters facilitates even quicker loading. This system allows centrifugation of conical vessels up to 50 mL, plates, and 250 mL bottles for the first time without the need to change rotors, rotor buckets, or adapters.



Great versatility for a variety of applications

- > Swing-bucket rotors and adapters accommodate tubes and bottles from 0.2 mL to 750 mL
- > Plate rotor options for centrifugation of all types of MTP, PCR or deepwell plates (DWP)
- > Fixed-angle rotors for high-speed molecular biology applications in tubes from 0.2 mL to 50 mL
- > High centrifugation speed of up to 22,132 × g (14,000 rpm)

Greater versatility

New swing-bucket standard-rotor S-4xUniversal and its unique universal adapters accommodate bottles, plates and conical tubes. No need to change rotor or rotor buckets. This improves handling and saves time.

- > Adapter 1: 5.0 mL and 15 mL conical tubes, MTP/DWP
- > Adapter 2: 50 mL conical tubes, MTP
- > Adapter 3: 50 mL conical tubes, 250 mL bottles, MTP

More flexibility

New swing-bucket rotor S-4xUniversal was designed for a weight difference of neighboring buckets of up to 1,100 g. Thus, neighboring buckets can be loaded independently or left empty. This makes operation simple and safe.



Centrifuge 5920 R

Description

Centrifuge 5920 R delivers extraordinary high capacity in a very compact and ergonomic product design. It has similar dimensions as competing refrigerated 3 Liter models and yet features a superior capacity of up to 4 × 1,000 mL or 52 × 50 mL thus making it the ideal instrument for high-throughput applications.



More Capacity for higher throughput

- > Swing-bucket rotors accommodate tubes and bottles from 0.2 mL to 1,000 mL
- > Fixed-angle rotors for high-speed molecular biology applications in tubes from 0.2 mL to 50 mL
- > Plate rotor options for centrifugation of all types of MTP, PCR or DWP

Rotor S-4x1000 for 1 liter bottles

- > Round buckets accommodate standard 1 liter Nalgene® bottles setting a new standard in the table top centrifuge segment
- > 4 liter capacity to process a higher volume in fewer runs
- > Range of adapters for tubes and plates available
- > Maximum rcf at 3,413 × g



As awarded by The Chicago Athenaeum: Museum of Architecture and Design.

Centrifuge Packages 5910 R



Ordering information

Description	Max. capacity per rotor	Order no.
Centrifuge 5910 R , refrigerated, with Rotor S-4xUniversal, 230 V/50 – 60 Hz, incl. universal buckets and adapters for 5 mL/15 mL/50 mL conical tubes and plates ¹⁾	64 x 15 mL/36 x 50 mL	5942 000.315
Centrifuge 5910 R , refrigerated, with Rotor S-4xUniversal, 230 V/50 – 60 Hz, incl. universal buckets and adapters for 5 mL/15 mL/50 mL conical tubes, 175 mL – 250 mL bottles and plates	64 x 15 mL/28 x 50 mL	5942 000.215
Centrifuge 5910 R , refrigerated, with Rotor S-4xUniversal, 230 V/50 – 60 Hz, incl. universal buckets and adapters for round-bottom tubes with diameter 13/16 mm	120 x 13 mm/104 x 16 mm	5942 000.410
Centrifuge 5910 R , refrigerated, with Rotor S-4x750, 230 V/50 – 60 Hz, incl. round buckets and adapters for 5 mL/15 mL/50 mL conical tubes	56 x 15 mL/28 x 50 mL	5942 000.515
Centrifuge 5910 R , refrigerated, with Rotor S-4x500, 230 V/50 – 60 Hz, incl. rectangular buckets and adapters for 15 mL/50 mL conical tubes	48 x 15 mL/20 x 50 mL	5942 000.615
Centrifuge 5910 R , refrigerated, with Rotor S-4x400, 230 V/50 – 60 Hz, incl. round buckets and adapters for 5 mL/15 mL/50 mL conical tubes	28 x 15 mL/16 x 50 mL	5942 000.710

¹⁾ When used with aerosol-tight caps the max. capacity is reduced to 20 x 50 mL (5 x 50 mL per bucket)

✎ Ordering information for other voltage options begins on page 418

i For more information go to www.eppendorf.com/centrifugation

Centrifuge Packages 5920 R

Ordering information

Description	Max. capacity per rotor	Order no.
Centrifuge 5920 R , refrigerated, with Rotor S-4xUniversal-Large, 230 V/50 – 60 Hz, incl. universal buckets and adapters for 15 mL/50 mL conical tubes	96 x 15 mL/40 x 50 mL	5948 000.913
Centrifuge 5920 R , refrigerated, with Rotor S-4xUniversal-Large, 230 V/50 – 60 Hz, incl. universal buckets and adapters for round-bottom tubes with diameter 13/16 mm	196 x 13 mm/148 x 16 mm	5948 000.816
Centrifuge 5920 R , refrigerated, with Rotor S-4x1000, 230 V/50 – 60 Hz, incl. high-capacity buckets and adapters for 15 mL/50 mL conical tubes	108 x 15 mL/52 x 50 mL	5948 000.212
Centrifuge 5920 R , refrigerated, with Rotor S-4x1000, 230 V/50 – 60 Hz, incl. plate/tube buckets and adapters for 15 mL/50 mL conical tubes	88 x 15 mL/40 x 50 mL	5948 000.417
Centrifuge 5920 R , refrigerated, with Rotor S-4x1000, 230 V/50 – 60 Hz, incl. round buckets and adapters for 15 mL/50 mL conical tubes	56 x 15 mL/28 x 50 mL	5948 000.310

✎ Ordering information for other voltage options begins on page 418



Swing-Bucket Rotors 59xx Family – Overview



Model	Rotor S-4xUniversal-Large	Rotor S-4x1000 high-capacity buckets	Rotor S-4x1000 plate/tube buckets	Rotor S-4x1000 round buckets
Positioning	Extra high capacity	Extra high capacity	High capacity	Medium capacity, compatible with 1 Liter bottle
5910 R				
5920 R	■	■	■	■
Universal bucket	yes	no	no	no
Aerosol-tightness	yes	no	yes	yes
Max. capacity	4 x 750 mL	8 x 250 mL	40 x 50 mL	4 x 1,000 mL
Max. RCF	4,402 x g	3,153 x g	3,076 x g	3,428 x g
Max. speed	4,250 rpm	3,700 rpm	3,700 rpm	3,700 rpm
1.5/2.0 mL micro tube	368			200
Eppendorf Tubes® 5.0 mL and 15 mL conical	96	108	88	56
50 mL conical tubes	40	52	40	28
13 mm round-bottom and blood collection tubes	196	196	140	92
16 mm round-bottom and blood collection tubes	148	144	132	80
750 mL bottles	4			4
1,000 mL bottles				4
PCR plates/MTP	20	24	40	
Deepwell plates (DWP)	8	8	8	



Rotor S-4xUniversal	Rotor S-4x750 with round buckets	Rotor S-4x500	Rotor S-4x400
High capacity and versatility	Medium capacity, high speed	Medium capacity	Medium capacity, high speed
■	■	■	■
yes	no	no	no
yes	yes	yes	yes
4 x 750 mL	4 x 750 mL	4 x 500 mL	4 x 250 mL
4,347 x g	4,800 x g	3,220 x g	5,263 x g
4,500 rpm	4,700 rpm	4,000 rpm	5,100 rpm
68	56	48	28
36	28	20	16
120	92	100	60
104	80	64	44
4	4		
20	16	16	
4	4	4	

Advanced Rotor Design – Swing-Bucket Rotors



Universal rotor buckets for tubes, plates and bottles. (selected rotors only)

Advantages:

- > Time saving: No need to exchange buckets
- > Cost saving: No need for separate plate buckets
- > Space saving: No need to store different buckets



Aerosol-tight QuickLock caps

- > Significantly improved handling, easy operation with one or two hands
- > Handle allows the closed bucket to be carried to the biosafety cabinet where it can be opened in a safe environment
- > Aerosol-tightness has been tested and verified by Public Health England, Porton Down, UK

Rotors for 5910 R



Rotor S-4xUniversal

- > High capacity swing-bucket rotor with max. speed 4,415 x g (4,500 rpm)
- > Broad range of adapters enables high versatility for tubes and flasks from 4 mL to 750 mL and plates
- > Universal bucket design accommodates both plates and tubes
- > Universal adapters accommodate selective plate formats and conical tubes
- > Aerosol-tight QuickLock caps for safe centrifugation of hazardous samples optionally available¹⁾
- > Buckets, caps and adapters are autoclavable

¹⁾ Aerosol-tightness tested by Public Health England, Porton Down, UK.

Ordering information

Description	Order no.
Rotor S-4xUniversal, incl. universal buckets	5895 200.001
Aerosol-tight caps, for Rotor S-4xUniversal, set of 2 pcs.	5910 750.005
Wide-neck bottle, 750 mL, set of 2 pcs.	5820 708.000

Adapters for Rotor S-4xUniversal	4 mL – 8 mL	7.5 mL – 12 mL	9 mL	12 x 75 mm, 5 mL FACS	50 mL conical, skirted	500 mL Corning®	750 mL	MTP, DWP, PCR plates
Max. tube diameter	13 mm	16 mm	17.5 mm	12 mm	31 mm	96 mm	102 mm	
Max. vessel height	119 mm	120 mm	120 mm	112 mm	124 mm	148 mm	139 mm	88 mm
Max. vessel height for use with cap/lid ¹⁾	117 mm	118 mm	118 mm	107 mm	121 mm	–	135 mm	60 mm
Adapter								
Number of vessels per adapter/rotor	30/120	26/104	21/84	46/184	7/28	1/4	1/4	5/20
Bottom shape	round	round	round	round	flat	conical	flat	flat
Centrifugation radius	190 mm	195 mm	188 mm	189 mm	185 mm	187 mm	188 mm	170 mm
Max. RCF	4,302 x g	4,415 x g	4,256 x g	4,279 x g	4,188 x g	4,234 x g	4,256 x g	3,849 x g
Packing	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
Order no.	5910 755.007	5910 754.000	5910 762.003	5910 758.006	5910 764.006	5910 760.000	5910 757.000	5910 753.004

¹⁾ Please perform a manual test to determine the actual loading capacity. ²⁾ Aerosol-tight caps compatible with MTP, DWP 96 500 µL, DWP 384 200 µL. Aerosol-tight caps not compatible with DWP 96 1,000 µL and 2,000 µL. ³⁾ When used with aerosol-tight caps the max. capacity is reduced to 20 x 50 mL (5 x 50 mL per adapter).

Universal Adapters for Rotor S-4xUniversal

Rotor S-4xUniversal brings outstanding versatility to those customers who need to spin a variety of vessels and plates. Three innovative universal adapters accommodate a selection of tubes, plates and bottles:

- > Universal adapter 1: 5.0 mL and 15 mL conical tubes, MTP and DWP
- > Universal adapter 2: 50 mL conical tubes, MTP
- > Universal adapter 3: 50 mL conical tubes, 250 mL bottles, MTP

For customers who need either stacking capability, higher speed or aerosol-tight centrifugation of certain plate formats, a separate plate carrier is available.



Universal adapter 1
Setup for deepwell plates and Eppendorf Tubes® 5.0 mL.



Universal adapter 2
Setup for microplates and 50 mL conical tubes.



Universal adapter 3
Setup for 50 mL conical tubes and 250 mL bottles.

Adapter 1	Adapter 2	Adapter 3
Eppendorf Tubes® 5.0 mL	15 mL conical	MTP, DWP
17 mm	17 mm	–
124 mm	124 mm	64 mm
122 mm	122 mm	²⁾
50 mL conical	Microplate 96/384 wells	50 mL conical
30 mm	–	29 mm
116 ³⁾ mm	16 mm	124 mm
116 ³⁾ mm	–	121 mm
250 mL flat, 175 - 225 mL conical	250 mL conical	250 mL flat, 175 - 225 mL conical
62 mm	–	62 mm
146 mm	–	146 mm
139 mm	–	139 mm
17/68	1/4	7/28
conical	flat	conical
191 mm	143 mm	191 mm
4,324 x g	3,237 x g	4,324 x g
set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
5910 752.008	5910 769.008	5910 751.001

Rotors for 5910 R



Rotor S-4x500

- > Medium capacity swing-bucket rotor with max. speed 3,220 x g (4,000 rpm)
- > Rotor S-4x500 accommodates tubes and bottles from 0.2 mL to 500 mL as well as plates
- > Aerosol-tight caps for safe centrifugation of hazardous samples optionally available¹⁾
- > Mixed loading with 2 plate buckets and 2 rectangular tube buckets allows for increased versatility
- > Buckets, caps and adapters are autoclavable

¹⁾ Aerosol-tightness tested by Public Health England, Porton Down, UK.



Ordering information

Description	Order no.
Rotor S-4x500 , for 500 mL rectangular buckets or MTP/Flex buckets	
incl. 4 x 500 mL rectangular buckets	5895 170.005
without buckets	5895 171.001
Cap for 500 mL rectangular buckets , aerosol-tight, aerosol-tight, for Rotor A-4-81, set of 2 pcs.	5810 724.007

Adapters for Rotor S-4x500						
Tube Volume	1.5/2.0 mL	1.2 - 5 mL	2.6 - 5 mL	2.6 - 7 mL	3 - 15 mL	7 - 17 mL
Max. tube diameter	11 mm	11 mm	13 mm	13 mm	16 mm	17.5 mm
Max. vessel height	43 mm	108 mm	108 mm	108 mm	108 mm	118 mm
Max. vessel height for use with cap/lid¹⁾	43 mm	108 mm	107 mm	108 mm	108 mm	118 mm
Adapter						
Number of vessels per adapter/rotor	20/80	20/80	25/100	18/72	16/64	16/64
Bottom shape	flat	flat	flat with rubber mat	flat with rubber mat	flat with rubber mat	flat with rubber mat
Centrifugation radius	165 mm	168 mm	168 mm	168 mm	168 mm	168 mm
Max. RCF	2,950 x g	3,000 x g	3,000 x g	3,000 x g	3,000 x g	3,000 x g
Packing	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
Order no.	5810 745.004	5810 746.000	5810 720.001	5810 747.007	5810 748.003	5810 721.008

¹⁾ Please perform a manual test to determine the actual loading capacity. ²⁾ Please order adapter for 50 mL conical tubes skirted 5804 737.008. ³⁾ Please note that these conical bottles need to be used together with a conical form insert provided by the manufacturer.

Eppendorf Tubes [®] 5.0 mL and 15 mL conical tubes	50 mL conical	30 - 50 mL and 50 mL conical tubes, skirted ²⁾	180 - 250 mL flat/ 175 - 225 mL conical ³⁾	400 mL	500 mL	MTP, DWP, PCR plates
17.5 mm	30 mm	30 mm	62 mm	133 mm	83 mm	
121 mm	122 mm	121 mm	133 mm		134 mm	60 mm
119 mm	116 mm				134 mm	
12/48	5/20	5/20	1/4	1/4	-/4	4/16 (MTP) 1/4 (DWP)
conical	conical	flat with rubber mat	flat with rubber mat	flat, rubber	flat	flat with rubber mat
173 mm	173 mm	173 mm	173 mm	180 mm	180 mm	163 mm
3,100 x g	3,100 x g	3,100 x g	3,100 x g	3,220 x g	3,220 x g	2,900 x g
set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
5810 722.004	5810 723.000	5810 739.004	5825 722.000	5810 728.002	-	5810 742.005

Rotors for 5910 R

**Rotor S-4x400**

- > High-speed medium capacity swing-bucket rotor with max. speed 5,263 × g (5,100 rpm)
- > Broad range of adapters enables high versatility for tubes and bottles from 0.2 mL to 250 mL
- > Aerosol-tight QuickLock caps for safe centrifugation of hazardous samples optionally available¹⁾
- > Buckets, caps and adapters are autoclavable

¹⁾ Aerosol-tightness tested by Public Health England, Porton Down, UK.

**Ordering information**

Description	Order no.
Rotor S-4x400, incl. 400 mL round bucket	5895 180.000
Aerosol-tight caps, for Rotor S-4x400, set of 2 pcs.	5910 700.008

Adapters for Rotor S-4x400				
Tube Volume	1.5 mL/2.0 mL	12 mm × 75 mm	4 mL – 8 mL	7.5 mL – 12 mL
Max. tube diameter	11 mm	12 mm	13 mm	16 mm
Max. vessel height	39 mm	118 mm	119 mm	122 mm
Max. vessel height for use with cap/lid¹⁾		112 mm	105 mm	115 mm
Adapter				
Number of vessels per adapter/rotor	26/104	17/68	15/60	11/44
Bottom shape	open	round	round	round
Centrifugation radius	177 mm	172 mm	171 mm	173 mm
Max. RCF	5,147 × g	5,002 × g	4,818 × g	4,874 × g
Packing	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
Order no.	5910 708.009	5910 711.000	5910 703.007	5910 704.003

¹⁾ Please perform a manual test to determine the actual loading capacity.

9 mL	Eppendorf Tubes® 5.0 mL and 15 mL conical	50 mL conical	50 mL skirted, Centriprep and Oak Ridge 30 mL	175 mL conical (BD, Nalgene), 250 mL flat	175 – 225 mL conical
17.5 mm	17 mm	29 mm	29 mm	62 mm	62 mm
122 mm	133 mm	125 mm	122 mm	138 mm	143 mm
115 mm	126 mm	117 mm	121 mm	129 mm	137 mm
8/32	7/28	4/16	3/12	1/4	1/4
round	conical	conical	conical	flat	conical
173 mm	180 mm	179 mm	170 mm	174 mm	181 mm
4,874 × g	5,071 × g	5,043 × g	4,943 × g	5,060 × g	5,263 × g
set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
5910 709.005	5910 702.000	5910 701.004	5910 712.006	5910 705.000	5910 714.009

Rotors for 5910 R/5920 R

**Rotor S-4x750**

- > Medium capacity swing-bucket rotor with max. speed 4,800 × g (4,700 rpm)¹⁾
- > Broad range of adapters enables high versatility for tubes and flasks from 0.2 mL to 750 mL and plates
- > Mixed loading with 2 plate buckets and 2 round tube buckets allows for increased versatility
- > Aerosol-tight QuickLock caps for safe centrifugation of hazardous samples optionally available²⁾
- > Buckets, caps and adapters are autoclavable

¹⁾ Aerosol-tightness tested by Public Health England, Porton Down, UK.

²⁾ For 100 V device, max. speed 4,031 × g /4,300 rpm

Adapters for Rotor S-4x750						
Tube Volume	1.5/2.0 mL	12 x 75 mm, 5 mL FACS	2.6 – 8 mL	5.5 – 12 mL	9 mL	14 mL
Max. tube diameter	11 mm	12 mm	13 mm	16 mm	17.5 mm	17.5 mm
Max. vessel height	39 mm	120 mm	121 mm	125 mm	117 mm	106 mm
Max. vessel height for use with cap/lid¹⁾	39 mm	113 mm	113 mm	120 mm	112 mm	106 mm
Adapter						
Number of vessels per adapter/rotor	50/200	27/108	23/92	20/80	20/80	14/56
Bottom shape	flat	round	round	round	round	round
Centrifugation radius	194 mm	186 mm	185 mm	186 mm	185 mm	185 mm
Max. RCF	4,791 × g	4,594 × g	4,569 × g	4,594 × g	4,569 × g	4,569 × g
Packing	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
Order no.	5825 740.009	5825 747.003	5825 738.004	5825 736.001	5825 743.008	5825 748.000

¹⁾ Exceeding the maximum tube length may reduce the loading capacity of the rotor. Please perform a manual swing-out test before starting the centrifuge run to make sure the tubes do not hit the rotor yoke.

²⁾ Please note that these conical bottles need to be used together with a conical form insert provided by the manufacturer. ³⁾ 225 mL conical bottles from BD[®]/Corning[®] and 250 mL conical bottles from Nunc[®] for Rotor S-4-104.

Ordering information

Description	Order no.
Rotor S-4x750 , aerosol-tight, without buckets	5895 121.004
Rotor S-4x750 , aerosol-tight, incl. 4 × 750 mL round buckets	5895 120.008
Buckets for Rotor S-4x750 , Plate bucket (aerosol-tight capable), incl. plate carrier, set of 2 pcs.	5895 125.000
Buckets for Rotor S-4x750 , Round buckets for Rotor S-4x750, set of 2 pcs.	5895 123.007
Buckets for Rotor S-4x750 , Round buckets for Rotor S-4x750, set of 4 pcs.	5895 122.000
Buckets for Rotor S-4x750 , Plate bucket (aerosol-tight capable), incl. plate carrier, set of 4 pcs.	5895 124.003
Aerosol-tight caps for plate buckets (aerosol-tight capable) , aerosol-tight, for Rotor S-4-104 and Rotor S-4x750, set of 2 pcs.	5820 748.001
Aerosol-tight caps for 750 mL round buckets , aerosol-tight, for Rotor S-4-104, Rotor S-4x750 and Rotor S-4x1000, set of 2 pcs.	5820 747.005
Wide-neck bottle , 750 mL, set of 2 pcs.	5820 708.000

Eppendorf Tubes[®] 5.0 mL and 15 mL conical								
17 mm	30 mL	50 mL conical	50 mL conical, skirted	250 mL flat, 175 – 225/250 mL conical ^{2/3)}	500 mL Corning [®]	750 mL	MTP, DWP, PCR plates	
125 mm	25 mm	30 mm	30 mm	62 mm	96 mm	102 mm	–	
120 mm	119 mm	122 mm	122 mm	145 mm	147 mm	150 mm	64 mm	
	114 mm	116 mm	116 mm	125 mm	–	150 mm	47 mm	
Adapter								
Number of vessels per adapter/rotor	14/56	8/32	7/28	5/20	1/4	1/4	1/4	4/16 (MTP) 1/4 (DWP)
Bottom shape	conical	flat	conical	conical	flat	conical	flat	–
Centrifugation radius	188 mm	181 mm	187 mm	177 mm	183 mm	186 mm	185 mm	161 mm
Max. RCF	4,643 × g	4,470 × g	4,618 × g	4,371 × g	4,519 × g	4,594 × g	4,569 × g	3,976 × g
Packing	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
Order no.	5825 734.009	5825 755.006	5825 733.002	5825 732.006	5825 741.005	5825 745.000	5825 744.004	5895 125.000

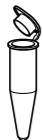

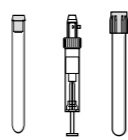
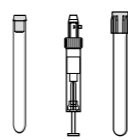

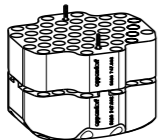
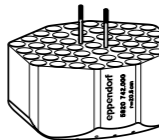
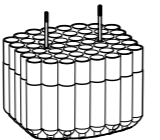
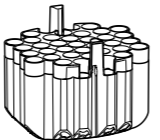
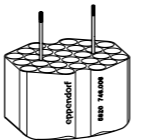
Rotors for 5920 R







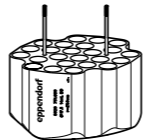
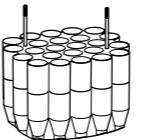
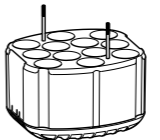
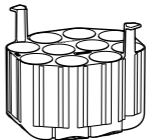
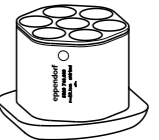
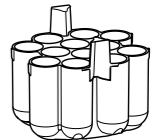
**Rotor S-4xUniversal-Large**

- > Extra high capacity swing-bucket rotor with max. speed 4,402 × g (4,250 rpm)
- > Broad range of adapters enables high versatility for tubes and flasks from 0.2 mL to 750 mL and plates
- > Universal bucket design accommodates both plates and tubes
- > Aerosol-tight Eppendorf QuickLock® caps for safe centrifugation of hazardous samples optionally available¹⁾
- > Buckets, caps and adapters are autoclavable

¹⁾ Aerosol-tightness tested by Public Health England, Porton Down, UK.



					
Adapters for Rotor S-4xUniversal-Large					
Tube Volume	1.5/2.0 mL	5 mL FACS	2.6 – 8 mL	5.5 – 12 mL	9 mL
Max. tube diameter	11 mm	12 mm	13 mm	16 mm	17.5 mm
Max. vessel height	39 mm	113 mm	110 mm	110 mm	136 mm
Max. vessel height for use with cap/lid	39 mm	82 mm	107 mm	106 mm	130 mm
Adapter					
Number of vessels per adapter/rotor	92/368	51/204	49/196	37/148	28/112
Bottom shape	flat	round	round	round	round
Centrifugation radius	205 mm	205 mm	205 mm	204 mm	209 mm
Max. RCF	4,140 × g	4,140 × g	4,140 × g	4,120 × g	4,221 × g
Packing	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
Order no.	5920 747.002	5920 742.000	5920 739.000	5920 738.003	5920 746.006

					
14 mL	Eppendorf Tubes® 5.0 mL and 15 mL conical	30 mL	50 mL conical	50 mL conical, skirted	50 mL Nalgene® Oak Ridge
17.5 mm	17 mm	25 mm	30 mm	30 mm	29 mm
123 mm	131 mm	117 mm	131 mm	141 mm	132 mm
120 mm	123 mm	108 mm	125 mm	121 mm	121 mm
					
24/96	24/96	12/48	10/40	7/28	12/48
round	conical	flat	conical	conical	round
210 mm	218 mm	194 mm	213 mm	197 mm	206 mm
4,240 × g	4,402 × g	3,918 × g	4,301 × g	3,978 × g	4,160 × g
set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
5920 751.000	5920 736.000	5920 743.007	5920 735.004	5920 748.009	5920 753.002

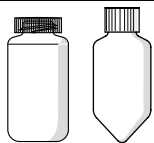
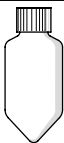

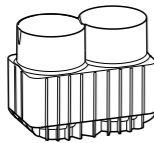
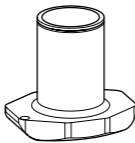
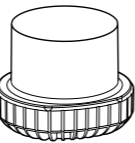
Rotors for 5920 R

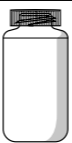

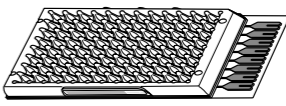
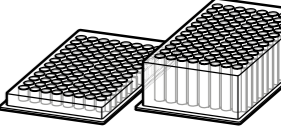
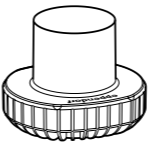
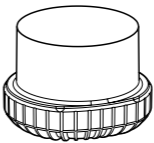




Ordering information

Description	Order no.
Rotor S-4xUniversal-Large , incl. buckets	5895 190.006
Aerosol-tight caps , for Rotor S-4xUniversal-Large, set of 2 pcs.	5920 752.006

Adapters for Rotor S-4xUniversal-Large

			
Tube Volume	250 mL flat, 175 – 225 mL conical	250 mL conical (Corning®, Nunc®)	500 mL conical Corning®
Max. tube diameter	62 mm	62 mm	96 mm
Max. vessel height	133 mm	171 mm	160 mm
Max. vessel height for use with cap/lid	126 mm	144 mm	148 mm
Adapter			
Number of vessels per adapter/rotor	2/8	1/4	1/4
Bottom shape	flat	flat	conical
Centrifugation radius	203 mm	208 mm	208 mm
Max. RCF	4,099 × g	4,200 × g	4,200 × g
Packing	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
Order no.	5920 740.008	5920 750.003	5920 744.003

			
500 mL flat Nalgene®	750 mL	Micro Fluidic Cards	MTP, DWP, PCR plates
69.5 mm	102 mm	–	–
168 mm	166 mm	153 mm	116 mm
143 mm	143 mm	–	110 mm
			
1/4	1/4	3/12	5/20 (MTP) 2/8 (DWP)
flat	flat	flat	flat
206 mm	202 mm	200 mm	196 mm
4,160 × g	4,079 × g	4,039 × g	3,938 × g
set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
5920 745.000	5920 741.004	5920 749.005	5920 737.007

Rotors for 5920 R




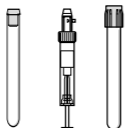
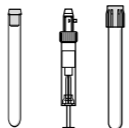
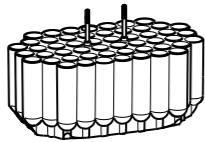
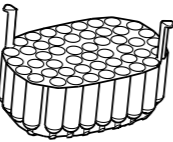
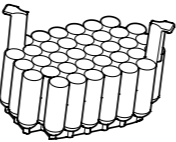
Rotor S-4x1000 high-capacity buckets





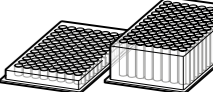
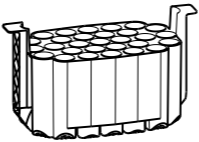
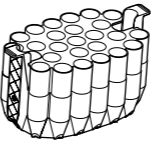
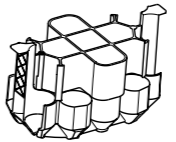
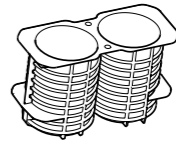

- > Extra high capacity swing-bucket rotor with max. speed 3,153 x g (3,700 rpm)
- > Bucket accommodates both plates and tubes
- > Buckets, caps and adapters are autoclavable



Ordering information

Description	Order no.
Rotor S-4x1000, without buckets	5895 101.003
Buckets for Rotor S-4x1000, High-Capacity bucket for Rotor S-4x1000, set of 4 pcs.	5895 106.005
Plate carrier for high-capacity bucket, set of 2 pcs.	5920 729.004

			
Adapters for Rotor S-4x1000 high-capacity buckets			
Tube Volume	5 mL FACS	2.6 – 8 mL	5.5 – 12 mL
Max. tube diameter	12 mm	13 mm	16 mm
Max. vessel height	108 mm	107 mm	107 mm
Adapter			
Number of vessels per adapter/rotor	52/208	49/196	36/144
Bottom shape	round	round	round
Centrifugation radius	204 mm	204 mm	199 mm
Max. RCF	3,122 x g	3,122 x g	3,046 x g
Packing	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
Order no.	5920 724.002	5920 718.002	5920 720.007

				
9 mL	Eppendorf Tubes® 5.0 mL and 15 mL conical	50 mL conical	250 mL flat, 175 – 225 mL conical and Nunc 250 mL conical	MTP, DWP, PCR plates
17.5 mm	17 mm	30 mm	62 mm	
129 mm	121 mm	116 mm	148 mm	88 mm
				
29/116	27/108	13/52	2/8	6/24 (MTP) 2/8 (DWP)
round	conical	conical	flat	flat
204 mm	205 mm	206 mm	200 mm	185 mm
3,122 x g	3,138 x g	3,153 x g	3,061 x g	2,832 x g
set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
5920 722.000	5920 716.000	5920 715.003	5920 717.006	5920 729.004

Rotors for 5920 R



Rotor S-4x1000 plate/tube buckets

- > High capacity swing-bucket rotor with max. speed 3,076 × g (3,700 rpm)
- > Bucket accommodates both plates and tubes
- > Aerosol-tight QuickLock caps for safe centrifugation of hazardous samples optionally available¹⁾
- > Buckets, caps and adapters are autoclavable

¹⁾ Aerosol-tightness tested by Public Health England, Porton Down, UK.



Ordering information

Description	Order no.
Rotor S-4x1000, without buckets	5895 101.003
Aerosol-tight caps, for S-4x1000 plate/tube bucket and S-4x750 plate bucket, set of 2 pcs.	5895 111.009
Buckets for Rotor S-4x1000, Plate/tube bucket for Rotor S-4x1000, set of 4 pcs.	5895 104.002
Plate carrier for plate/tube bucket, for Rotor S-4x1000 with plate/tube buckets, Rotor S-4x1000, set of 2 pcs.	5920 705.008

Adapters for Rotor S-4x1000 plate/tube buckets				
Tube Volume	2.6 – 8 mL	5.5 – 12 mL	9 mL	Eppendorf Tubes® 5.0 mL and 15 mL conical
Max. tube diameter	13 mm	16 mm	17.5 mm	17 mm
Max. vessel height	109 mm	109 mm	109 mm	121 mm
Max. vessel height for use with cap/lid¹⁾	108 mm	108 mm	109 mm	–
Adapter				
Number of vessels per adapter/rotor	35/140	33/132	28/112	22/88
Bottom shape	round	round	round	conical
Centrifugation radius	201 mm	200 mm	200 mm	201 mm
Max. RCF	3,076 × g	3,061 × g	3,061 × g	3,076 × g
Packing	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
Order no.	5920 706.004	5920 707.000	5920 708.007	5920 710.001

¹⁾ Please perform a manual test to determine the actual loading capacity.

Eppendorf Tubes® 5 mL and 15 mL conical	50 mL conical	50 mL conical	MTP, DWP, PCR plates
17 mm	30 mm	30 mm	–
123 mm	121 mm	121 mm	104 mm
121 mm	–	121 mm	91 mm
16/64	10/40	7/28	10/40(MTP) 2/8(DWP)
conical	conical	conical	flat
201 mm	201 mm	201 mm	198 mm
3,076 × g	3,076 × g	3,076 × g	3,030 × g
set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
5920 712.004	5920 709.003	5920 711.008	5920 705.008

Rotors for 5920 R



Rotor S-4x1000 round buckets

- > Medium capacity swing-bucket rotor with max. speed 3,428 x g (3,700 rpm)
- > Broad range of adapters enables high versatility for tubes and flasks from 0.2 mL to 1,000 mL and plates
- > Mixed loading with 2 plate buckets and 2 round tube buckets allows for increased versatility
- > Aerosol-tight QuickLock caps for safe centrifugation of hazardous samples optionally available¹⁾
- > Buckets, caps and adapters are autoclavable

¹⁾ Aerosol-tightness tested by Public Health England, Porton Down, UK.

Adapters for Rotor S-4x1000 round buckets							
Tube Volume	1.5/2.0 mL	12 x 75 mm, 5 mL FACS	2.6 – 8 mL	5.5 – 12 mL	9 mL	14 mL	Eppendorf Tubes® 5.0 mL and 15 mL conical
Max. tube diameter	11 mm	12 mm	13 mm	16 mm	17.5 mm	17.5 mm	17 mm
Max. vessel height	39 mm	115 mm	121 mm	125 mm	117 mm	117 mm	161 mm
Max. vessel height for use with cap/lid¹⁾	39 mm	108 mm	113 mm	120 mm	112 mm	112 mm	150 mm
Adapter							
Number of vessels per adapter/rotor	50/200	27/108	23/92	20/80	20/80	14/56	14/56
Bottom shape	flat	round	round	round	round	round	conical
Centrifugation radius	219 mm	211 mm	210 mm	211 mm	210 mm	210 mm	224 mm
Max. RCF	3,352 x g	3,229 x g	3,214 x g	3,229 x g	3,214 x g	3,214 x g	3,428 x g
Packing	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
Order no.	5825 740.009	5825 747.003	5825 738.004	5825 736.001	5825 743.008	5825 748.000	5825 734.009

¹⁾ Exceeding the maximum tube length may reduce the loading capacity of the rotor. Please perform a manual swing-out test before starting the centrifuge run to make sure the tubes do not hit the rotor yoke.
²⁾ Please note that these conical bottles need to be used together with a conical form insert provided by the manufacturer. ³⁾ 225 mL conical bottles from BD®/Corning® and 250 mL conical bottles from Nunc® for Rotor S-4-104.

Ordering information

Description	Order no.
Rotor S-4x1000 , without buckets	5895 101.003
Buckets for Rotor S-4x1000 , Round bucket for Rotor S-4x1000, set of 4 pcs.	5895 102.000
Rotor S-4x1000 round buckets , aerosol-tight, incl. 4 x 1,000 mL round buckets	5895 100.007
Aerosol-tight caps , for S-4x1000 plate/tube bucket and S-4x750 plate bucket, set of 2 pcs.	5895 111.009
Buckets for Rotor S-4x1000 , Plate/tube bucket for Rotor S-4x1000, set of 4 pcs.	5895 104.002
Plate carrier for plate/tube bucket , for Rotor S-4x1000 with plate/tube buckets, Rotor S-4x1000, set of 2 pcs.	5920 705.008
Aerosol-tight caps for 750 mL round buckets , aerosol-tight, for Rotor S-4-104, Rotor S-4x750 and Rotor S-4x1000, set of 2 pcs.	5820 747.005

30 mL	50 mL conical	50 mL conical, skirted	250 mL flat, 175 – 225/ 250 mL conical ²⁾³⁾	500 mL Corning®	500 mL Nalgene	600 mL TPP	750 mL	1 Liter Nalgene	MTP, DWP, PCR plates
25 mm	30 mm	30 mm	62 mm	96 mm	69.5 mm	98 mm	102 mm	98 mm	–
144 mm	156 mm	151 mm	176 mm	167 mm	183 mm	181 mm	150 mm	196 mm	104 mm
139 mm	150 mm	147 mm	156 mm	167 mm	183 mm	181 mm	150 mm	–	91 mm
8/32	7/28	5/20	1/4	1/4	1/4	1/4	1/4	1/4	7/28 (MTP) 2/8 (DWP)
flat	conical	conical	flat	conical	flat	conical	flat	flat	flat
212 mm	223 mm	209 mm	214 mm	218 mm	221 mm	224 mm	216 mm	218 mm	198 mm
3,245 x g	3,413 x g	3,199 x g	3,275 x g	3,336 x g	3,382 x g	3,428 x g	3,306 x g	3,336 x g	3,030 x g
set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
5825 755.006	5825 733.002	5825 732.006	5825 741.005	5825 745.000	5920 703.005	5920 701.002	5825 744.004	5920 700.006	5895 105.009

Fixed-Angle Rotors 59xx Family - Overview



Model	Rotor FA-6x250	Rotor FA-6x50	Rotor FA-20x5
Positioning	Processing of cells in higher volumes at high speed	Molecular biology applications in tubes up to 50 mL	Applications in Eppendorf Tubes® 5.0 mL
5910 R	■	■	■
5920 R	■	■	■
Aerosol-tightness	yes	yes	yes
Max. capacity	6 × 250 mL	6 × 50 mL	20 × 5 mL
Max. RCF	15,054 × g	20,130 × g	20,913 × g
Max. speed	10,100 rpm	12,100 rpm	13,100 rpm
1.5/2.0 mL micro tube		6	20
Eppendorf Tubes® 5.0 mL and 15 mL conical	24	6	20/0
50 mL conical tubes	6	6	
85 mL	6		
250 mL conical tubes	6		



Model	Rotor FA-48x2	Rotor FA-30x2	Rotor F-48x15
Positioning	Aerosol-tight microcentrifuge tube rotor	Aerosol-tight microcentrifuge tube rotor for safe centrifugation of hazardous samples	High-capacity fixed-angle rotor for 15 mL conical and glass tubes
5910 R	■	■	■
5920 R	■	-	-
Aerosol-tightness	yes	yes	
Max. capacity	48 × 2 mL	30 × 2 mL	40 × 15 mL
Max. RCF	21,194 × g (5920 R) / 22,132 × g (5910 R)	20,984 × g	5,005 × g
Max. speed	13,700 rpm (5920 R) / 14,000 rpm (5910 R)	13,700 rpm	5,500 rpm
1.5/2.0 mL micro tube	48	30	
Eppendorf Tubes® 5.0 mL and 15 mL conical			0/40
50 mL conical tubes			
85 mL			
250 mL conical tubes			

Advanced Rotor Design – Fixed-Angle Rotors



Cross section of Rotor FA-6x50 (6 × 50 mL conical) showing the light-weight design.
All metal not needed for safety or performance is hollowed out to reduce weight and improve handling.

Low rotor weight

Eppendorf's fixed-angle rotors are among the lightest in the industry to improve handling and operational safety. Light-weight rotors cause less wear and tear on the motor and allow for faster acceleration and braking times.

Eppendorf QuickLock® lids for ergonomic lid locking

Our aerosol-tight QuickLock rotors close with only ¼ of a turn. This not only saves you time during every day use, it also takes repetitive stress off your wrist.

Superior temperature control

Aluminum, with its high heat conductivity, allows fast pre-cooling and accurate temperature control in refrigerated centrifuges.



Perfect fit with Eppendorf Conical Tubes 15 mL and 50 mL

The Eppendorf Conical Tubes are characterized by an outstanding centrifugation stability of up to 19,500 × g¹⁾. This makes them suited for a broad range of applications.

¹⁾ Test conditions: Rotor FA-45-6-30 in Eppendorf Centrifuge 5810 R (using a suitable centrifuge adapter for 15 mL tube), sample: Saline solution (density: 1.0 g/mL), controlled centrifugation temp.: 25 °C, centrifugation time: 90 min

For more information go to www.eppendorf.com/centrifugation

Rotors for 5910 R/5920 R



Rotor FA-6x50

- > High-speed rotor for applications in tubes from 5 – 50 mL
- > Max. speed 20,133 × g (12,100 rpm)
- > Eppendorf QuickLock rotor lid for fast lid locking
- > Aerosol-tight¹⁾ for safe centrifugation of hazardous samples
- > Low rotor weight (3.2 kg) for easy handling
- > Anodized aluminum for high chemical resistance
- > 45° borehole angle minimizes pellets smear
- > Rotor, lid and adapters are autoclavable

¹⁾ Aerosol-tightness tested by Public Health England, Porton Down, UK.

Ordering information

Description	Order no.
Rotor FA-6x50, aerosol-tight, incl. rotor lid	5895 150.004

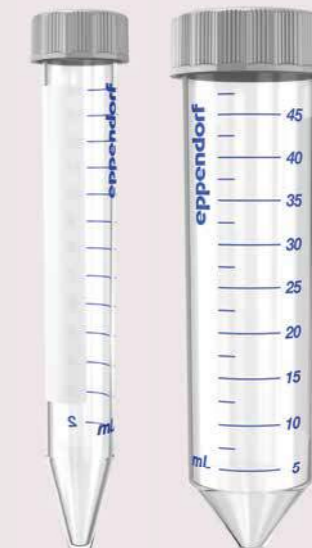
Adapters for Rotor FA-6x50					
Tube Volume	2.6 – 5 mL	4 – 8 mL	5.5 – 10 mL	7.5 – 12 mL	Eppendorf Tubes® 5.0 mL
Max. tube diameter	13 mm	13 mm	16 mm	16 mm	17 mm
Max. vessel height for use with cap/lid	119 mm	119 mm	119 mm	119 mm	121 mm
Adapter					
Number of vessels per adapter/rotor	1/6	1/6	1/6	1/6	1/6 ¹⁾
Bottom shape	round	round	round	round	conical
Centrifugation radius	120 mm	120 mm	120 mm	120 mm	121 mm
Max. RCF	19,642 × g	19,642 × g	19,642 × g	19,642 × g	19,806 × g
Packing	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
Order no.	5820 726.008	5820 725.001	5820 728.000	5820 727.004	5820 730.005

¹⁾ Eppendorf Tubes® 5.0 mL with screw cap will not fit in this adapter.

Eppendorf Conical Tubes

Whether centrifugation, mixing, or other applications – the Eppendorf Conical Tubes 15 mL and 50 mL will perfectly fit into your workflows. They represent the next step in Eppendorf's comprehensive system solutions in liquid, sample and cell handling.

More information: www.eppendorf.com/conicals



7 – 17 mL	15 mL	15 – 18 mL	20 – 30 mL	35 mL	50 mL conical
17.5 mm	17 mm	18 mm	26 mm	29 mm	30 mm
112 mm	125 mm	107 mm	104 mm	113 mm	127 mm
1/6	1/6	1/6	1/6	1/6	-/6
round	conical	round	round	conical	conical
120 mm	120 mm	120 mm	105 mm	112 mm	123 mm
19,642 × g	19,642 × g	19,642 × g	17,187 × g	18,333 × g	20,133 × g
set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	-
5820 729.007	5820 717.009	5820 720.000	5820 721.006	5820 722.002	-

Rotors for 5910 R/5920 R

**Rotor FA-20x5**

- > 20 places for Eppendorf Tubes® 5.0 mL¹⁾
- > Max. speed: 20,913 × g (13,100 rpm)
- > Aerosol-tight²⁾ Eppendorf QuickLock rotor lid
- > Rotor, lid and adapters are autoclavable (121 °C, 20 min)
- > Anodized aluminum for high chemical resistance

¹⁾ For Eppendorf Tubes® 5.0 mL with screw cap the capacity is limited to 10 tubes. ²⁾ Aerosol-tightness tested by Public Health England, Porton Down, UK.

Ordering information

Description	Order no.
Rotor FA-20x5 , for 20 Eppendorf Tubes® 5.0 mL, incl. aerosol-tight Eppendorf QuickLock® rotor lid	5895 130.003
Adapter , for 1 vessel 1.5 – 2.0 mL, for all 5.0 mL rotors, set of 4 pcs.	5820 768.002
Adapter , for 1 cryo tube, for all 5.0 mL rotors, set of 4 pcs.	5820 769.009
Adapter , for 1 HPLC tube, for all 5.0 mL rotors, set of 4 pcs.	5820 770.007
Adapter , for 1 tube 0.5 mL or microtainer, max. Ø 8 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 716.001
Adapter , for 1 tube 0.4 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 717.008
Adapter , for 1 PCR tube 0.2 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 715.005

**Rotor FA-48x2**

- > 48 places for 1.5/2.0 mL tubes
- > Max. speed: 21,194 × g/13,700 rpm (5920 R) / 22,132 × g / 14,000 rpm (5910 R)
- > Eppendorf QuickLock® rotor lid for fast lid locking
- > Aerosol-tight¹⁾ for safe centrifugation of hazardous samples
- > Anodized aluminum for high chemical resistance
- > Rotor and lid are autoclavable (121 °C, 20 min)

¹⁾ Aerosol-tightness tested by Public Health England, Porton Down, UK.

Ordering information

Description	Order no.
Rotor FA-48x2 , incl. aerosol-tight Eppendorf QuickLock® rotor lid	5895 135.005

Rotors for 5910 R

**Rotor F-48x15**

- > High-capacity fixed-angle rotor for 15 mL conical and glass tubes
- > Maximum speed: 5,005 × g (5,500 rpm)
- > Form inserts for 15 mL conical tubes

Ordering information

Description	Order no.
Rotor F-48x15 , for 40 x 15 mL conical tubes, incl. 48 steel sleeves and adapters	5895 160.000

**Rotor FA-30x2**

- > 30 places for 1.5/2.0 mL tubes
- > Max. speed: 20,984 × g (max. 13,700 rpm)
- > Eppendorf QuickLock® rotor lid for fast lid locking
- > Aerosol-tight for safe centrifugation of hazardous samples¹⁾
- > Anodized aluminum for high chemical resistance
- > Rotor and lid are autoclavable (121 °C, 20 min)

¹⁾ Aerosol-tightness tested by Public Health England, Porton Down, UK.

Ordering information

Description	Order no.
Rotor FA-30x2 , incl. aerosol-tight Eppendorf QuickLock® rotor lid	5895 155.006

Concentrator plus

Description

The Concentrator plus with its new design was designed with the customer in mind to deliver an ergonomic, intuitive and durable solution that fits comfortably right on the lab bench. An advanced heating technology provides best treatment for your sample which assures quick, efficient and gentle vacuum concentration of DNA/RNA, nucleotides, proteins and other liquid or wet samples. Our new coated lid provides superior chemical resistance against aggressive acids and organic solvents (e.g. TFA, DMSO).

The Concentrator plus is available with three configurations to meet the customers' lab specific needs:

- 1) Basic Concentrator for connecting to an existing vacuum pump
- 2) Complete system with an integrated solvent-resistant, maintenance and oil-free PTFE pump, and condensation trap
- 3) Complete system with vacuum port adds extra capability. It allows for using the integrated vacuum pump separately – without having to disconnect it from the system

Product features

- > Comes in 3 system configurations
- > Extremely quiet operation <50 dB(A)
- > Chemical-resistant, maintenance-free PTFE diaphragm pump eliminates the need for changing pump oil
- > Small footprint saves valuable bench space
- > Wide variety of 15 different rotor options to accommodate tubes from 0.2 mL to 50 mL, microplates and PCR plates
- > Motorless induction drive and chemical-resistant, stainless steel chamber for trouble-free operation
- > Can be connected with most commercially available cold traps for use with vapors
- > Coated lid with superior chemical resistance



Technical specifications	Concentrator plus basic	Concentrator plus system	Concentrator plus system w/port
Model			
Vacuum	–	20 hPa (20 mbar)	20 hPa (20 mbar)
Sample capacity	max. 144 vessels/2 microplates	max. 144 vessels/2 microplates	max. 144 vessels/2 microplates
Fixed speed	1,400 rpm	1,400 rpm	1,400 rpm
Tube volume	0.2 – 50 mL	0.2 – 50 mL	0.2 – 50 mL
Port to connect external devices to vacuum pump	no	no	yes
Max. power consumption	150 W	350 W	350 W
Dimensions (W x D x H)	33 x 37 x 23 cm	33 x 58 x 29 cm	33 x 58 x 29 cm
Weight w/o accessories	16.5 kg	31.5 kg	31.5 kg

For more information go to www.eppendorf.com/centrifugation



Concentrator junction system

The complete "junction" system adds extra capability/flexibility. It allows you to use the integrated vacuum pump separately – without having to disconnect it from the system; simply connect the port to any external device that requires vacuum (e.g. gel dryer).



Key function

- > Timer selection between 1 min and 9:59 as well as Brake function
- > Temperature preselection: room temperature, 30 °C, 45 °C and 60 °C
- > Mode/vent function: choose between three solvent modes
- > Start/Stop of concentration process




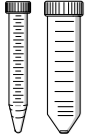

Ordering information

Description	Order no.
Concentrator plus basic device	
230 V/50 – 60 Hz, with Rotor F-45-48-11	5305 000.100
Concentrator plus complete system	
230 V/50 – 60 Hz, with integrated diaphragm vacuum pump, with Rotor F-45-48-11	5305 000.304
230 V/50 – 60 Hz, with integrated diaphragm vacuum pump, without rotor	5305 000.509
230 V/50 – 60 Hz, with integrated diaphragm vacuum pump; with connection, e.g., for a gel dryer; without rotor	5305 000.703
Adapter , for 1 tube 0.5 mL or microtainer, max. Ø 8 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 716.001
Adapter , for 1 PCR tube 0.2 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 715.005
CombiSlide Adapter , for 12 slides Combi Slide 12 slides, for plate rotors, set of 2 pcs.	5825 706.005
Adapter , for 1 PCR tube 0.2 mL, for Rotor F-45-72-8, set of 6 pcs.	5425 723.008
Rotor spacer , required for stacking rotors F-45-72-8 and F-45-48-11	5301 316.005
Work tray , for semi-/unskirted PCR plates, PCR strips and 0.2 mL PCR tubes, for Rotor A-2-VC, set of 10 pcs.	0030 124.235
Frame for work tray , for Rotor A-2-VC, set of 5 pcs.	0030 124.243

Ordering information for other voltage options begins on page 418

Rotors for Concentrator plus

Ordering information

	Description	Max. tube dimensions Ø x L	Sample capacity	Order no.
	Rotor F-45-72-8	8 x 31 mm ¹⁾	72 x 0.5 mL	5490 034.007
	Rotor F-45-70-11	11 x 41/47 mm	70 x 1.5 mL, 70 x 2.0 mL	5490 032.004
	Rotor F-45-48-11	11 x 41/47 mm ¹⁾	48 x 1.5 mL / 2.0 mL	5490 030.001
	Rotor F-40-36-12	12 x 32 mm	36 x 1.5 mL	5490 040.007
	Rotor F-45-36-15	15 x 45 - 48 mm ²⁾	36 x 3.0/5.0 mL	5490 035.003
	Rotor F-45-16-20	20 x 42 - 55 mm ²⁾	16 x 6.5/10 mL	5490 043.006
	Rotor F-40-18-19	19 x 66 mm	18 x 10 mL	5490 037.006
	Rotor F-45-12-31	31 x 55 mm	12 x 20 mL	5490 044.002
	Rotor F-35-8-24	24 x 86 - 105 mm ²⁾	8 x 25 mL	5490 039.009
	Rotor F-45-24-12	12 x 67 - 100 mm ^{2) 3)}	24 x 5 - 7 mL	5490 036.000
	Rotor F-50-8-16	16 x 105 - 120 mm ²⁾	8 x 8 - 12 mL	5490 041.003
	Rotor F-50-8-18	18 x 105 - 128 mm ²⁾	8 x 10 - 18 mL	5490 042.000
	Rotor F-45-8-17	17 x 116 - 123 mm ²⁾	8 x 15 mL conical tubes	5490 038.002
	Rotor F-35-6-30	17 x 116 - 123 mm or 30 x 116 - 123 mm ²⁾	6 x 15 mL conical tubes or 6 x 50 mL conical tubes	5490 047.001
	Rotor A-2-VC	128 x 86 x 27 mm	2 x MTP or skirted PCR plates 2 x Deepwell plates (DWP) (max. height = 27 mm)	5490 045.009

¹⁾ Rotor is stackable for double capacity using spacer 5301 316.005. ²⁾ Min./max. tube length. ³⁾ Tube length = 75 mm: max capacity 24 tubes, tube length > 75 mm: max capacity 12 tubes.



Rotor F-35-6-30

- > Rotor for 6 x 50 mL conical tubes
- > Also accommodates 6 x 15 mL conical tubes



Rotor A-2-VC

- > For use with MTP, PCR and Deepwell Plates up to 27 mm high
- > A work tray with frame is available for PCR test plates and microplates without frames
- > Rotor can be autoclaved for 20 min. at 121°C
- > Suitable for the CombiSlide Adapter



Rotor F-45-48-11

- > Rotor for 48 x 1.5/2.0 mL microcentrifuge tubes
- > A spacer enables additional stacking (double capacity)



Rotor F-45-8-17

- > Rotor for 8 x 15 mL conical tubes



Sample Handling



Model	Eppendorf BioPhotometer® D30	BioSpectrometer® basic
Page(s)	226	227
Wavelength range absorption	230, 260, 280, 320, 340, 405, 490, 562, 595, 600 nm	Scan (nm): 200 – 830 at 1 nm increments
Wavelength Selection Increment	N/A	1 nm
Scanning	no	yes
Spectral bandwidth	≤4 nm	≤4 nm
Systematic error wavelength	≤0.5 nm	≤0.5 nm
Random error wavelength	±1 nm	±1 nm
Absorption measuring range	0 A – 3.0 A (260 nm)	0 A – 3.0 A (260 nm)
Systematic error absorption	±1 % (A = 1)	±1 % (A = 1)
Random error absorption	≤0.002 at A = 0 ≤0.005 (0.5 %) at A = 1	≤0.002 at A = 0 ≤0.005 (0.5 %) at A = 1
Light source absorption	Xenon flash lamp	Xenon flash lamp
Detector Type	CMOS photodiodes	CMOS photodiode array, 1024 pixel
Measuring principle absorption	Single-beam absorption photometer with reference beam	Single-beam absorption spectrophotometer with reference beam
Light path height	8.5 mm	8.5 mm
Light source fluorescence	–	–
Beam receiver fluorescence	N/A	–
Measuring principle fluorescence	–	–
Fluorescence measuring range	–	–
dsDNA concentration range (for 1 to 10 mm path length)	2.5 ng/μL – 1,500 ng/μL	2.5 ng/μL – 1,500 ng/μL
BSA concentration range (for 1 to 10 mm path length)	76 ng/μL - 45,450 ng/μL (The factor for BSA is 1,515)	76 ng/μL - 45,450 ng/μL (The factor for BSA is 1,515)
Operator guidance language	Spanish, Italian, French, English, German, Japanese	Spanish, Italian, French, English, German, Japanese
Method memory	>100 method programs	>100 method programs
Dimensions (W × D × H)	295 × 400 × 150 mm / 11.6 × 15.7 × 6 in	295 × 400 × 150 mm / 11.6 × 15.7 × 6 in
Weight w/o accessories	5.4 kg	5.4 kg
Cuvette shaft	12.5 mm × 12.5 mm	12.5 mm × 12.5 mm
Power supply	100 – 240 V, 50 – 60 Hz	100 – 240 V, 50 – 60 Hz
Power consumption	Approx. 15 W during operating step Approx. 5 W with dimmed display	Approx. 15 W during operating step Approx. 5 W with dimmed display
Interfaces	<ul style="list-style-type: none"> > USB master: for USB stick and thermal printer DPU-S445 > USB slave for connecting to a PC (All functions available without PC) > Serial interface RS-232: for thermal printer DPU-414 > Ethernet interface RJ45: For connecting to a network printer or emailing data outputs directly off instrument 	<ul style="list-style-type: none"> > USB master: for USB stick and thermal printer DPU-S445 > USB slave for connecting to a PC (All functions available without PC) > Serial interface RS-232: for thermal printer DPU-414 > Ethernet interface RJ45: For connecting to a network printer or emailing data outputs directly off instrument

Model	Eppendorf BioSpectrometer® kinetic	Eppendorf BioSpectrometer® fluorescence
Page(s)	228	229
Wavelength range absorption	Scan (nm): 200 – 830 at 1 nm increments	Scan (nm): 200 – 830 at 1 nm increments
Wavelength Selection Increment	1 nm	1 nm
Scanning	yes	yes
Spectral bandwidth	≤4 nm	≤4 nm
Systematic error wavelength	≤0.5 nm	≤0.5 nm
Random error wavelength	±1 nm	±1 nm
Absorption measuring range	0 A – 3.0 A (260 nm)	0 A – 3.0 A (260 nm)
Systematic error absorption	±1 % (A = 1)	–
Random error absorption	≤0.002 at A = 0 ≤0.005 (0.5 %) at A = 1	≤0.002 at A = 0 ≤0.005 (0.5 %) at A = 1
Light source absorption	Xenon flash lamp	Xenon flash lamp
Detector Type	CMOS photodiode array, 1024 pixel	CMOS photodiode array, 1024 pixel
Measuring principle absorption	Single-beam absorption spectrophotometer with reference beam	Single-beam absorption spectrophotometer with reference beam
Light path height	8.5 mm	8.5 mm
Light source fluorescence	–	LED
Beam receiver fluorescence	–	Photodiodes
Measuring principle fluorescence	–	Confocal filter fluorometer with reference beam
Fluorescence measuring range	–	0.5 nM – 2,000 nM fluorescein (emission wavelength 520 nm) 1.0 pg/μL – 1,500 ng/μL
dsDNA concentration range (for 1 to 10 mm path length)	2.5 ng/μL – 1,500 ng/μL	–
BSA concentration range (for 1 to 10 mm path length)	76 ng/μL - 45,450 ng/μL (The factor for BSA is 1,515)	0.01 ng/μL – 45,450 ng/μL (The factor for BSA is 1,515)
Operator guidance language	Spanish, Italian, French, English, German, Japanese	Spanish, Italian, French, English, German, Japanese
Method memory	>100 method programs	>100 method programs
Dimensions (W × D × H)	295 × 400 × 150 mm / 11.6 × 15.7 × 6 in	295 × 400 × 150 mm / 11.6 × 15.7 × 6 in
Weight w/o accessories	5.5 kg	5.4 kg
Cuvette shaft	12.5 mm × 12.5 mm, tempered 20 °C – 42 °C	12.5 mm × 12.5 mm
Power supply	100 – 240 V, 50 – 60 Hz	100 – 240 V, 50 – 60 Hz
Power consumption	Approx. 30 W during operating step Approx. 5 W with dimmed display and temperature control switched off	Approx. 15 W during operating step Approx. 5 W with dimmed display
Interfaces	<ul style="list-style-type: none"> > USB master: for USB stick and thermal printer DPU-S445 > USB slave for connecting to a PC (All functions available without PC) > Serial interface RS-232: for thermal printer DPU-414 > Ethernet interface RJ45: For connecting to a network printer or emailing data outputs directly off instrument 	<ul style="list-style-type: none"> > USB master: for USB stick and thermal printer DPU-S445 > USB slave for connecting to a PC (All functions available without PC) > Serial interface RS-232: for thermal printer DPU-414 > Ethernet interface RJ45: For connecting to a network printer or emailing data outputs directly off instrument

i For more information go to www.eppendorf.com

Technical specifications subject to change.



On page 388 you will find detailed information on services for these products!

Your local distributor: www.eppendorf.com/contact
Eppendorf AG · Barkhausenweg 1 · 22339 Hamburg · Germany · eppendorf@eppendorf.com · www.eppendorf.com

Eppendorf BioPhotometer® D30

Description

The Eppendorf BioPhotometer D30 is the 3rd generation of Eppendorf spectrophotometers to become an established standard in the life sciences. Routine pre-defined wavelengths are easily selectable, allowing for quick and simple programming. Users are guided through every step of the assay with short, simple on-screen instructions. The ultra-stable Xenon flash lamp doesn't require any warm up time and a measurement typically takes 5 seconds. Raw and processed data are clearly presented on the large color screen and can be exported directly from the instrument in a variety of common formats. Eppendorf disposable UVette® cuvettes enable measurements with as little as 50 µL of sample and the Eppendorf µCuvette® G1.0 reduces this further to 1.5 µL of sample.

Product features

- > Absorption measurements for one or more fixed wavelengths
- > Scan for specific UV applications with automatically determined purity ratios
- > Preprogrammed applications for quick start and applications with evaluation via factor, standard or standard series
- > Integrated application and results memory
- > Data transfer via USB interface, Ethernet or via e-mail and direct printout of results
- > Data output via JPEG screenshots, Microsoft® Excel® or secure PDF files to a standard USB flash drive or via email
- > Guided software process to minimize errors
- > Compatible with standard, semi-micro and micro-volume measuring cells
- > Fixed wavelengths without moving parts
- > Integrated self-test and calibration history



Applications

- > Nucleic acid quantification
- > Direct protein quantification (UV 280 nm)
- > Microvolume measurement via µCuvette G1.0 for highly concentrated samples
- > Bacteria growth measurement (OD 600)
- > Colorimetric assays for protein quantification, e.g., BCA, Bradford, Lowry
- > 340 nm: endpoint assays using NADPH or NAPH
- > 405 nm: endpoint assays using para-nitrophenol
- > 490 nm: cytotoxicity endpoint assay



www.eppendorf.com/D30-Poster

Ordering information

Description	Order no.
Eppendorf BioPhotometer® D30, 230 V/50 – 60 Hz	6133 000.001
Eppendorf µCuvette® G1.0 and Eppendorf BioPhotometer® D30, 230 V/50 – 60 Hz	6133 000.907
Eppendorf BioPhotometer® D30 Reference Filter Set, filter set for verifying photometric accuracy and wavelength systematic error (according to NIST®)	6133 928.004
Thermal Printer DPU-S445	6135 011.000

✂ Ordering information for other voltage options begins on page 418

ℹ For more information go to www.eppendorf.com/photometry

Eppendorf BioSpectrometer® basic

Description

Building on the legacy of the Eppendorf BioPhotometer D30, the Eppendorf BioSpectrometer basic shares its simplicity, flexibility and reliability. In addition to the Biophotometer D30, the Biospectrometer basic has freely selectable wavelengths from 200 – 830 nm (selectable in 1 nm increments). This allows the user to define the parameters of each assay, whether it be a scan, a single-wavelength measurement or a multi-wavelength measurement. The Eppendorf BioSpectrometer basic caters to more disciplines as the wavelengths are not pre-defined and allows for non-routine assays or new assays to be easily programmed (in addition to the pre-programmed routine methods). The Eppendorf BioSpectrometer basic is a robust yet flexible 'workhorse'.

Product features

- > Absorbance measurement for one or more wavelengths, recording of wavelength scans from 200 nm to 830 nm (increment: 1 nm)
- > Automatic evaluation and storage of measurement data with clear presentation of results
- > Spectral graph to display sample purity with automatic ratio calculation
- > Freely programmable applications with evaluation via factor, standard or standard series and freely programmable parameters
- > Two-wavelength method with subtraction or division evaluation
- > Integrated application and results memory
- > Data transfer via USB interface, Ethernet or via e-mail and direct printout of results
- > Guided software process to minimize errors
- > Integrated self-test and calibration history



Applications

- > Nucleic acid quantification
- > Direct protein quantification (UV 280 nm)
- > Microvolume measurement via µCuvette G1.0 for highly concentrated samples
- > Bacteria growth measurement (OD 600)
- > Colorimetric assays for protein quantification, e.g., BCA, Bradford, Lowry
- > Evaluation of FOI for dye-labeled biomolecules (nucleic acid or proteins)
- > Free selectable wavelengths, e.g., 340 nm: assays using NADPH or NAPH, 405 nm: assays using para-nitrophenol, 420 nm: assays using ortho-nitrophenol, 490 nm: colorimetric fructose determination, 490 nm: cytotoxicity endpoint assay

Ordering information

Description	Order no.
Eppendorf BioSpectrometer® basic, 230 V/50 – 60 Hz	6135 000.009
Eppendorf µCuvette® G1.0 and Eppendorf BioSpectrometer® basic, 230 V/50 – 60 Hz	6135 000.904
Eppendorf BioSpectrometer® Reference Filter Set, filter set for verifying photometric accuracy and wavelength systematic error (according to NIST®)	6135 928.001
Thermal Printer DPU-S445	6135 011.000

✂ Ordering information for other voltage options begins on page 418

Eppendorf BioSpectrometer® kinetic

Description

The Eppendorf BioSpectrometer kinetic is an expansion of the Eppendorf BioSpectrometer basic and offers preprogrammed and freely programmable timed and temperature controlled assays. It features an integrated heated cuvette shaft. Its integrated Peltier element guarantees high-precision for determining enzyme and substrate kinetics as well as other temperature-sensitive applications. Guided software is included; minimal effort is required to set up new assays. Retrospective modification of the time window for regression analysis can be made directly on the device. The BioSpectrometer kinetic replaces the traditional large cumbersome setup required for temperature controlled timed assays.

Product features

- > All Eppendorf BioSpectrometer basic options
- > Integrated temperature-controlled cuvette shaft (adjustment range +20 °C to +42 °C in 0.1 °C increments)
- > Integrated interval timer (minimum interval 5 s, maximum measuring time range 59 m 59 s)
- > Preprogrammed and freely programmable kinetic methods
- > Retrospective modification of the time window for regression analysis
- > Data output via JPEG screenshots, Microsoft Excel or secure PDF files to a standard USB flash drive or via email



Applications

- > All Eppendorf BioSpectrometer basic applications
- > Additional kinetic applications, and enzyme activity testings at different temperatures e.g.:
 - > Hexokinase activity measurements (340 nm, 37 °C)
 - > Determination of ATP concentration (340 nm, 37 °C)
 - > Beta-galactosidase assays (420 nm, 30 °C)

Ordering information

Description	Order no.
Eppendorf BioSpectrometer® kinetic, 230 V/50 – 60 Hz	6136 000.002
Eppendorf µCuvette® G1.0 and Eppendorf BioSpectrometer® kinetic, 230 V/50 – 60 Hz	6136 000.800
Eppendorf BioSpectrometer® Reference Filter Set, filter set for verifying photometric accuracy and wavelength systematic error (according to NIST®)	6135 928.001
Thermal Printer DPU-S445	6135 011.000

✂ Ordering information for other voltage options begins on page 418

i For more information go to www.eppendorf.com/photometry

Eppendorf BioSpectrometer® fluorescence

Description

The Eppendorf BioSpectrometer fluorescence is an expansion of the Eppendorf BioSpectrometer basic and features an integrated fluorescence module. UV/Vis assays, fluorescence assays and semi-micro/micro-volume measurements can all be carried out on a single instrument without the need for external control (PC/Laptop). Eppendorf BioSpectrometer fluorescence can be used to increase the measuring range for biomolecules (nucleic acids and proteins) by a factor of 1,000, compared to UV measurements. Pre-programmed (modified) methods for Qubit DNA quantification kits (SS, HS, BR) expand the flexibility and functionality of the instrument. Additionally, the use of the Eppendorf µCuvette G1.0 for fluorescence assays (5 µL loading volume) allows for a vast reduction in reagent usage.

Product features

- > All Eppendorf BioSpectrometer basic options
- > Preprogrammed and freely programmable fluorescence methods
- > Preprogrammed (modified) methods for Qubit DNA quantification kits (SS, HS, BR)
- > Fluorescence measurement concentration of dsDNA down to 1 pg/µL, using Pico Green®
- > Fluorescence measurement concentration of BSA down to 0.01 ng/µL
- > Fluorescence excitation wavelength 470 nm, emission wavelengths 520 nm and 560 nm
- > Fluorescence intensity across a range of 0.5 nM to 2,000 nM fluorescein
- > Single consumable (UVette) for UV/Vis and fluorescence assays



Applications

- > Ideal for NGS applications (micro-volume UV/Vis and fluorescence assays in a single instrument)
- > dsDNA quantification down to 1 pg/µL with common kits, e.g., Pico Green®
- > ssDNA quantification down to 10 pg/µL
- > RNA quantification down to 20 pg/µL
- > Oligo quantification down to 10 pg/µL
- > Protein (BSA) quantification down to 0.01 ng/µL
- > Quantification of GFP-binding proteins
- > Growth measurement of GFP-binding bacteria



www.eppendorf.com/biospectrometer-fluorescence-video

Ordering information

Description	Order no.
Eppendorf BioSpectrometer® fluorescence, 230 V/50 – 60 Hz	6137 000.006
Eppendorf µCuvette® G1.0 and Eppendorf BioSpectrometer® fluorescence, 230 V/50 – 60 Hz	6137 000.901
Eppendorf BioSpectrometer® fluorescence Reference Filter Set, filter set for verifying photometric accuracy and wavelength systematic error (according to NIST®) and verifying fluorimetric precision (random error) and linearity	6137 928.009
Thermal Printer DPU-S445	6135 011.000

✂ Ordering information for other voltage options begins on page 418

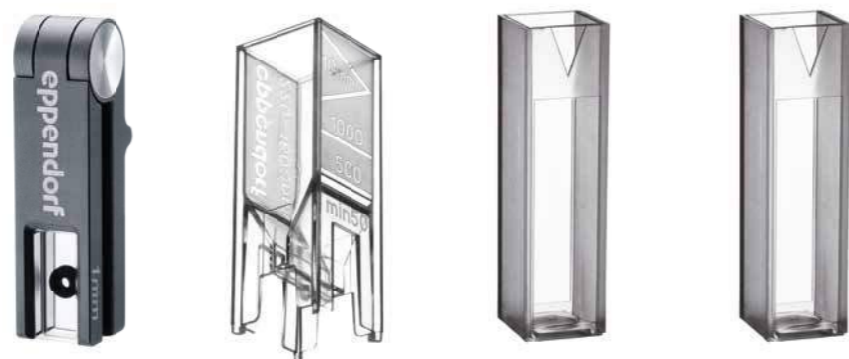


Technical Specification

Technical specifications		
Model	Eppendorf BioPhotometer® D30	BioSpectrometer® basic
Wavelength range absorption	Fixed wavelength (nm): 230, 260, 280, 320, 340, 405, 490, 562, 595, 600	Scan (nm): 200 – 830 at 1 nm increments
Absorption measuring range	0 A – 3.0 A (260 nm)	0 A – 3.0 A (260 nm)
Random error absorption	≤0.002 at A = 0 ≤0.005 (0.5 %) at A = 1	≤0.002 at A = 0 ≤0.005 (0.5 %) at A = 1
dsDNA concentration range (UV 260 nm) μ Cuvette® G1.0	25 ng/ μ L – 1,500 ng/ μ L	25 ng/ μ L – 1,500 ng/ μ L
dsDNA concentration range (UV 260 nm) UVette® 2 mm	12.5 ng/ μ L – 750 ng/ μ L	12.5 ng/ μ L – 750 ng/ μ L
dsDNA concentration range (UV 260 nm) UVette® 10 mm	2.5 ng/ μ L – 150 ng/ μ L	2.5 ng/ μ L – 150 ng/ μ L
BSA concentration range (UV 280 nm) μ Cuvette® G1.0	758 ng/ μ L – 45,450 μ g/ μ L ±30 ng/ μ L at A = 0 ±76 ng/ μ L at A = 1 (0.5 %)	758 ng/ μ L - 45,450 ng/ μ L ±30 ng/ μ L at A = 0 ±76 ng/ μ L at A = 1 (0.5 %)
BSA concentration range (UV 280 nm) UVette® 2 mm	379 ng/ μ L - 22,725 ng/ μ L ±15 ng/ μ L at A = 0 ±38 ng/ μ L at A = 1 (0.5 %)	379 ng/ μ L - 22,725 ng/ μ L ±15 ng/ μ L at A = 0 ±38 ng/ μ L at A = 1 (0.5 %)
BSA concentration range (UV 280 nm) UVette® 10 mm	75 ng/ μ L - 4,545 ng/ μ L ±3 ng/ μ L at A = 0 ±7 ng/ μ L at A = 1 (0.5 %)	75 ng/ μ L - 4,545 ng/ μ L ±3 ng/ μ L at A = 0 ±7 ng/ μ L at A = 1 (0.5 %)
Adjustable temperature range	–	–
Systematic temperature error	–	–
Random temperature error	–	–
Measuring time range	–	–
Interval between two measuring points	–	–
Light source absorption	Xenon flash lamp	Xenon flash lamp
Light source fluorescence	–	–
Measuring principle fluorescence	–	–
Excitation wavelength fluorescence	–	–
Emission wavelength I fluorescence	–	–
Emission wavelength II fluorescence	–	–
Fluorescence measuring range	–	–
Random error fluorescence	–	–



Technical specifications		
Model	Eppendorf BioSpectrometer® kinetic	Eppendorf BioSpectrometer® fluorescence
Wavelength range absorption	Scan (nm): 200 – 830 at 1 nm increments	Scan (nm): 200 – 830 at 1 nm increments
Absorption measuring range	0 A – 3.0 A (260 nm)	0 A – 3.0 A (260 nm)
Random error absorption	≤0.002 at A = 0 ≤0.005 (0.5 %) at A = 1	≤0.002 at A = 0 ≤0.005 (0.5 %) at A = 1
dsDNA concentration range (UV 260 nm) μ Cuvette® G1.0	25 ng/ μ L – 1,500 ng/ μ L	25 ng/ μ L – 1,500 ng/ μ L
dsDNA concentration range (UV 260 nm) UVette® 2 mm	12.5 ng/ μ L – 750 ng/ μ L	12.5 ng/ μ L – 750 ng/ μ L
dsDNA concentration range (UV 260 nm) UVette® 10 mm	2.5 ng/ μ L – 150 ng/ μ L	2.5 ng/ μ L – 150 ng/ μ L
BSA concentration range (UV 280 nm) μ Cuvette® G1.0	758 ng/ μ L - 45,450 ng/ μ L ±30 ng/ μ L at A = 0 ±76 ng/ μ L at A = 1 (0.5 %)	758 ng/ μ L - 45,450 ng/ μ L ±30 ng/ μ L at A = 0 ±76 ng/ μ L at A = 1 (0.5 %)
BSA concentration range (UV 280 nm) UVette® 2 mm	379 ng/ μ L - 22,725 ng/ μ L ±15 ng/ μ L at A = 0 ±38 ng/ μ L at A = 1 (0.5 %)	379 ng/ μ L - 22,725 ng/ μ L ±15 ng/ μ L at A = 0 ±38 ng/ μ L at A = 1 (0.5 %)
BSA concentration range (UV 280 nm) UVette® 10 mm	75 ng/ μ L - 4,545 ng/ μ L ±3 ng/ μ L at A = 0 ±7 ng/ μ L at A = 1 (0.5 %)	75 ng/ μ L - 4,545 ng/ μ L ±3 ng/ μ L at A = 0 ±7 ng/ μ L at A = 1 (0.5 %)
Adjustable temperature range	20 – 42 °C (smallest step size 0.1 °C)	–
Systematic temperature error	±0.2 °C at 25 – 37 °C	–
Random temperature error	±0.15 °C at 25 – 37 °C	–
Measuring time range	00:05 – 59:59 min:sec	–
Interval between two measuring points	00:05 – 10:00 min:sec	–
Light source absorption	Xenon flash lamp	Xenon flash lamp
Light source fluorescence	–	LED
Measuring principle fluorescence	–	Confocal filter fluorometer with reference beam
Excitation wavelength fluorescence	–	470 nm, bandwidth: 25 nm
Emission wavelength I fluorescence	–	520 nm, bandwidth: 15 nm
Emission wavelength II fluorescence	–	560 nm, bandwidth: 40 nm
Fluorescence measuring range	–	0.5 nM – 2,000 nM fluorescein (emission wavelength 520 nm)
Random error fluorescence	–	±2 % at 1 nM fluorescein



Model	Eppendorf μCuvette® G1.0	UVette®	Macro Vis Cuvette	Semi-micro Vis Cuvette
Page(s)	233	234	235	235
dsDNA concentration range (for 1 to 10 mm path length)	25 ng/μL – 1,500 ng/μL	2.5 ng/μL – 750 ng/μL	–	–
BSA concentration range (for 1 to 10 mm path length)	758 ng/μL – 45,450 ng/μL	7.5 ng/μL – 22,725 ng/μL	–	–
Colorimetric protein assays	yes	yes	yes	yes
OD 600 methods	no	yes	yes	yes
Fluorescence measurements	yes	yes	yes	yes
UV transparency	>180 nm	>220 nm	–	–
Light transmission	180 nm – 2,000 nm	220 nm – 1,600 nm	300 nm – 900 nm	300 nm – 900 nm
Material	quartz glass (with hydrophobic coating)	polystyrene	polystyrene	polystyrene
Dimensions (W × D × H)	12.5 × 12.5 × 48 mm	12.5 × 12.5 × 36 mm	12.5 × 12.5 × 45 mm	12.5 × 12.5 × 45 mm
Temperature control	no	no	yes	no
Minimum filling volume				
in Eppendorf photometers	1.5 μL	50 μL	1,000 μL	400 μL
in devices of other manufacturers	–	50 μL	2,500 μL	1,500 μL
Maximum filling volume	10 μL	2,000 μL	4,500 μL	3,000 μL
Sample light path length	1 mm	2 mm and 10 mm	10 mm	10 mm
Cuvette blank	≤0.05 A at 260 nm	≤0.05 A at 260 nm	–	–
Height of light source	8.5 mm	8.5 ¹⁾ mm	all common cell heights	all common cell heights
Use in Eppendorf BioPhotometer®	yes	yes	yes	yes
Use in Eppendorf BioSpectrometer®	yes	yes	yes	yes
Use in devices of other manufacturers	no	yes (adapters available)	yes	yes

¹⁾ (adapters available for height adjustment)

Eppendorf μCuvette® G1.0

Description

The Eppendorf μCuvette G1.0 microvolume measuring cell is a high-quality cuvette made of aluminum and quartz glass. It is the perfect tool for measuring high concentrations in small volumes. With a fixed optical path length of only 1 mm, the μCuvette G1.0 features a light path that is ten times shorter than in standard cuvettes. This allows nucleic acid and protein concentrations to be measured with high reproducibility in a much higher concentration range without prior dilution. Due to the hydrophobic coating on the quartz glass only 1.5 μL nucleic acid or 3 μL protein sample are required for precise formation of the liquid column. Self-absorption of the μCuvette G1.0 is very low, meaning that the entire measuring range of the photometer can be used. Furthermore, 5 μL of sample solution can be used for specific fluorometric assays saving reagent.



Product features

- > Microvolume measuring cell for measuring 1.5 – 10 μL sample volumes
- > Concentration determination of nucleic acids and proteins, amongst other target analytes
- > Measurement of highly concentrated samples without prior dilution
- > Suitable for fluorescence assays
- > Low self-absorption (≤0.05 A at 260 nm)
- > Hydrophobic surface coating on quartz glass for precise formation and positioning of the sample volume
- > Simple cleaning to minimize the risk of sample carry-over
- > A defined angle for folding the sides of the cuvette guarantees reproducible handling
- > One-component hinged design prevents the loss of individual parts
- > Exclusively available for use with Eppendorf BioPhotometer and Eppendorf BioSpectrometer

Ordering information

Description	Order no.
Eppendorf μCuvette® G1.0, Microvolume measuring cell for Eppendorf BioPhotometer® and BioSpectrometer®	6138 000.018

✎ Ordering information for other voltage options begins on page 418

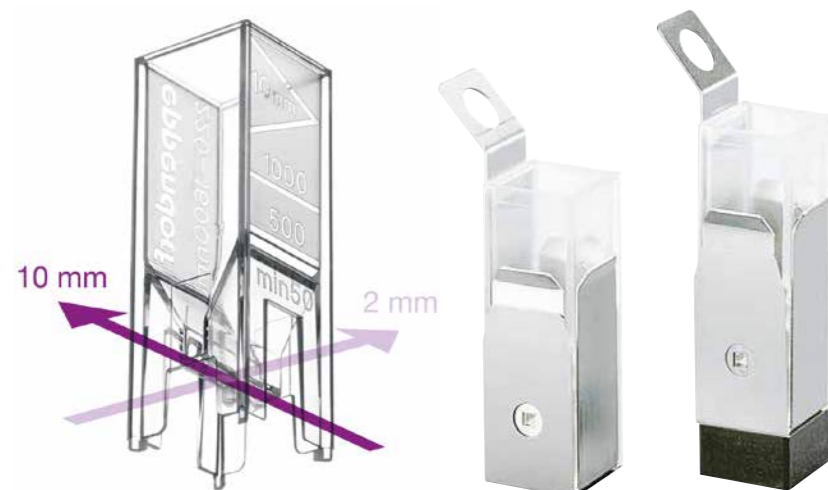
UVette®

Description

The Eppendorf UVette allows for measurements in the UV/Vis range with transparency from 220 nm to 1,600 nm with just a typical minimum volume of 50 µL. The UVette allows the user to choose between two optical path lengths (10 mm and 2 mm). The path length can be reduced by a factor of x5 without diluting or wasting any sample – simply by turning the UVette 90°. The UVette is suitable for fluorescence assays due to its low auto-fluorescence. The PCR-clean and protein-free individually sealed variant is ideal for accurate nucleic acid and protein quantification. The UVette is ideally matched for use with the Eppendorf BioPhotometer and Eppendorf BioSpectrometer families. The UVette can be used in other spectrophotometers with the aid of an adapter.

Product features

- > Suitable for measuring small volumes (≥50 µL)
- > UV and Vis measurements from 220 nm to 1,600 nm
- > UV transparent plastic, free of fluoropolymers and other halogenated hydrocarbons
- > Two built-in optical path lengths in a single cuvette - just turn the UVette 90° to change from 10 mm and 2 mm
- > Volume markings for 500 µL and 1,000 µL
- > Individually packaged and certified PCR clean and protein-free quality for sensitive (e.g. RNA) and valuable samples
- > Deep-lying optical window prevents scratches
- > Tapered cuvette base for optimal filling, frosted grip for labeling
- > Ideal for use in the Eppendorf BioPhotometer and Eppendorf BioSpectrometer, adapters available for use with other common spectrophotometers
- > Routine pack for convenient access to each UVette and safe storage in a reclosable box



Ordering information	
Description	Order no.
UVette® 220 nm – 1,600 nm, original Eppendorf plastic cuvette, individually packed, (including RNase-free, DNase-free) and protein-free, PCR clean, 50 – 2,000 µL, 80 pcs.	0030 106.300
UVette® starter set, 80 UVettes and 1 universal adapter for light path height of 15 mm and 8.5 mm, 50 – 2,000 µL	4099 100.007
UVette® routine pack 220 nm – 1,600 nm, reclosable box, Eppendorf Quality™, 200 pcs.	0030 106.318
Adapter for UVette®, for photometer/spectrophotometer with light path height	
8.5 mm	4099 001.009
10 mm	4099 002.005
15 mm	4099 003.001
20 mm	4099 005.004
Eppendorf Cuvette Rack, 30 positions, for glass and plastic cuvettes, 2 pcs.	
polypropylene, numbered positions, autoclavable	0030 119.851

For more information go to www.eppendorf.com/photometry

Eppendorf Vis Cuvettes



Description

The Eppendorf Vis Cuvettes are disposable cuvettes made of clear plastic with a light transmission of 300 nm to 900 nm. The Vis cuvettes are the perfect tool for applications outside of the UV range, for example, colorimetric protein assays (Bradford, Lowry, etc.), determining of the optical density of bacterial cultures (OD 600 methods), kinetic, and fluorescence measurements. Based on the volume you would like to measure, you can select semi-micro or macro cuvette.

Product features

- > Two different cuvette sizes (semi-micro and macro) for a wide variety of volumes and applications
- > Disposable cuvettes made of clear plastic with a light transmission of 300 nm to 900 nm

Ordering information

Description	Order no.
Eppendorf macro Vis Cuvette, plastic cuvette for measurements in the Vis range, max. filling volume 4,500 µL	
1,000 cuvettes (10 boxes x 100 cuvettes)	0030 079.345
Eppendorf semi-micro Vis Cuvette, plastic cuvette for measurements in the Vis range, max. filling volume 3,000 µL	
1,000 cuvettes (10 boxes x 100 cuvettes)	0030 079.353
Eppendorf Cuvette Rack, 30 positions, for glass and plastic cuvettes, 2 pcs.	
polypropylene, numbered positions, autoclavable	0030 119.851

Thermal Printer DPU-S445



Description

The Thermal Printer DPU-S445 is a thermal line dot printer with high printing speed while producing a clear type face. This allows the Thermal Printer DPU-S445 to print out scanned images. As an alternative to using USB sticks, the automatic print-out function of the DPU-S445 printer can be used to quickly obtain the results.

Product features

- > Automatic print-out of results
- > Easy and direct connection via USB
- > Compact and light-weight (approx. 0.5 kg)
- > Easy paper operation
- > Max. printing speed: 90 mm/sec.
- > Number of dots/line: 832
- > Resolution (dots/mm): 8

Ordering information

Description	Order no.
Thermal Printer DPU-S445	6135 011.000
Thermal paper	
5 rolls	0013 021.566

Ordering information for other voltage options begins on page 418



Eppendorf BioPhotometer® D30 Reference Filter Set

**The secondary UV/Vis Eppendorf BioSpectrometer D30 Reference Filter Set:**

is used for verifying the photometric accuracy and wavelength systematic error on the Eppendorf BioPhotometer D30.

Product features

- > Filter traceable to NIST®
- > Filter recertification via Eppendorf (contact: Eppendorf Service)
- > Inspection protocol preprogrammed in device
- > Verification of wavelength accuracy and precision at 260 nm and 280 nm
- > Verification of the photometric accuracy and precision for selected wavelengths
- > Contains 6 filters (1 blank filter, 2 filters for checking UV/Vis wavelength systematic error and precision, 3 filters for photometric verification)

Ordering information

Description	Order no.
Eppendorf BioPhotometer® D30 Reference Filter Set, filter set for verifying photometric accuracy and wavelength systematic error (according to NIST®)	6133 928.004



Eppendorf BioSpectrometer® Reference Filter Sets

**The Eppendorf BioSpectrometer Fluorescence Reference Filter Set:**

is used to verify photometric accuracy, wavelength systematic error, and fluorimetric precision (random error) and linearity on the Eppendorf BioSpectrometer fluorescence.

Product features

- > All features of the Eppendorf BioSpectrometer UV/Vis Reference Filter Set
- > Additional filter for verifying fluorimetric precision (random error) and linearity
- > Inspection protocol preprogrammed in device
- > 8 filters (1 blank filter, 3 filters for checking UV/Vis wavelength systematic error and precision, 3 filters for UV/Vis photometric verification, 1 filter for fluorometric verification)

Ordering information

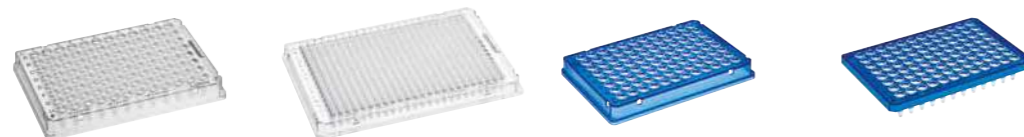
Description	Order no.
Eppendorf BioSpectrometer® Reference Filter Set, filter set for verifying photometric accuracy and wavelength systematic error (according to NIST®)	6135 928.001
Eppendorf BioSpectrometer® fluorescence Reference Filter Set, filter set for verifying photometric accuracy and wavelength systematic error (according to NIST®) and verifying fluorimetric precision (random error) and linearity	6137 928.009

Sample Handling



Model	MC X50s	MC X50a	MC X50p	MC X50h
Page(s)	240	240	240	240
Dimensions (W x D x H)	27.5 x 43 x 33 cm	27.5 x 43 x 33 cm	27.5 x 43 x 33 cm	27.5 x 43 x 33 cm
2D-Gradient block	over 12 columns/over 8 rows	over 12 columns/over 8 rows	over 12 columns/over 8 rows	over 24 columns/over 16 rows
Gradient block	–	–	–	–
Heating rate	10 °C/s	5 °C/s	5 °C/s	5 °C/s
Cooling rate	5 °C/s	2.3 °C/s	2.3 °C/s	2.3 °C/s
Interfaces	Ethernet, USB	Ethernet, USB	Ethernet, USB	Ethernet, USB
Lid descent	flexlid® technology	flexlid® technology	flexlid® technology	flexlid® technology
Lid temperature range	37 – 110 °C	37 – 110 °C	37 – 110 °C	37 – 110 °C
Sample capacity	96 x 0.2 mL PCR vessels, 1 PCR plate (96 wells)	96 x 0.2 mL PCR vessels, 1 PCR plate (96 wells)	1 PCR plate (96 wells)	1 PCR plate (384 wells)
Gradient temperature range	30 – 99 °C	30 – 99 °C	30 – 99 °C	30 – 99 °C
Temperature control range of the block	4 – 99 °C	4 – 99 °C	4 – 99 °C	4 – 99 °C
Thermoblock	Silver	Aluminum	Aluminum	Aluminum

¹⁾ measured at the block



Model	Eppendorf twin.tec® PCR Plates LoBind	Eppendorf twin.tec® PCR Plates	Eppendorf twin.tec® PCR Plates	Eppendorf twin.tec® PCR Plate 96 skirted	Eppendorf twin.tec® PCR Plate 96 semi-skirted
Page(s)	250/252	250/252	250/252	250/252	250/252
Number of wells	96 wells	384 wells	96 wells	96 wells	96 wells
Total volume per well	150 or 250 µL	40 µL	150 µL	250 µL	250 µL
OptiTrack® frame color	colorless yellow green blue red	colorless	colorless yellow green blue red	colorless yellow green blue red	colorless blue



Model	MC nexus GSX1	MC nexus SX1	MC nexus gradient	MC nexus	MC nexus GX2
Page(s)	244	244	244	244	244
Dimensions (W x D x H)	25 x 41.2 x 32.1 cm	25 x 41.2 x 32.1 cm	25 x 41.2 x 32.1 cm	25 x 41.2 x 32.1 cm	25 x 41.2 x 33 cm
2D-Gradient block	–	–	–	–	–
Gradient block	Over 12 rows (0.2 mL)	–	Over 12 rows (0.2 mL)	–	Over 8 rows (0.2 mL)
Heating rate	5 °C/s ¹⁾	5 °C/s ¹⁾	3 °C/s ¹⁾	3 °C/s ¹⁾	3 °C/s ¹⁾
Cooling rate	3.5 °C/s ¹⁾	3.5 °C/s ¹⁾	2 °C/s ¹⁾	2 °C/s ¹⁾	2 °C/s ¹⁾
Interfaces	CAN_in/CAN_out, Ethernet, USB	CAN_in/CAN_out, Ethernet, USB	CAN_in/CAN_out, Ethernet, USB	CAN_in/CAN_out, Ethernet, USB	CAN_in/CAN_out, Ethernet, USB
Lid descent	flexlid® technology, with TSP	flexlid® technology, with TSP	flexlid® technology, with TSP	flexlid® technology, with TSP	flexlid® technology, with TSP
Lid temperature range	37 – 110 °C	37 – 110 °C	37 – 110 °C	37 – 110 °C	37 – 110 °C
Sample capacity	96 x 0.2 mL PCR vessels, 1 PCR plate (96 wells)	96 x 0.2 mL PCR vessels, 1 PCR plate (96 wells)	96 x 0.2 mL PCR tubes, 1 PCR plate (96 wells) or 38 x 0.5 mL PCR tube positions	96 x 0.2 mL PCR tubes, 1 PCR plate (96 wells) or 38 x 0.5 mL PCR tube positions	64/32 x 0.2 mL PCR tubes or 24/10 x 0.5 mL PCR tube positions
Gradient temperature range	30 – 99 °C	–	30 – 99 °C	–	30 – 99 °C
Temperature control range of the block	4 – 99 °C	4 – 99 °C	4 – 99 °C	4 – 99 °C	4 – 99 °C
Thermoblock	Silver	Silver	Aluminum	Aluminum	Aluminum



Model	Eppendorf twin.tec® PCR Plate 96 unskirted	Eppendorf twin.tec® PCR Plate 96 unskirted, divisible	Eppendorf twin.tec® microbiology PCR Plate 96	Eppendorf twin.tec® PCR Plate 384	Eppendorf twin.tec® 96 real-time PCR Plates
Page(s)	250/252	250/252	250/252	250/252	250/252
Number of wells	96 wells	96 wells	96 wells	384 wells	96 wells
Total volume per well	150 or 250 µL	150 or 250 µL	150 or 250 µL	40 µL	150 or 250 µL
OptiTrack® frame color	colorless yellow green blue red	colorless blue	colorless blue	colorless yellow green blue red	white blue



On page 390 you will find detailed information on services for these products!

Mastercycler® X50

Description

The Mastercycler X50 family boasts ramp rates of up to 10°C/s and is the ideal cycler family for routine applications as well as advanced research in molecular biology.

The Mastercycler X50 family consist of units with a user-friendly touchscreen interface or eco units which are externally controlled. Each cycler with a touchscreen can be networked with nine additional eco units. If that is not enough throughput, you can network up fifty Mastercycler eco units to a computer or laptop running CycleManager X50 as a central controller. Whichever you choose, you can independently control and monitor every unit. You can also manage who has access to the system and designate a level of access with our intuitive user interface. Low noise levels, low power consumption, and the versatile flexlid® concept complete the product to be a powerful and convenient PCR cycler.



Product features

- > Heating rate: up to 10 °C/s
- > Wide selection of blocks from a fast silver block to 384 well block
- > Touch screen interface
- > Innovative 2D-Gradient for advanced PCR optimization
- > X50 with Touchscreen can control up to 9 other units (connected cyclers do not have a touch screen interface)
- > flexlid® concept: automatic height adjustment of the lid allows you to use all types of consumables
- > Small footprint
- > 2 year warranty

Applications

- > Fast PCR
- > PCR optimization
- > Standard PCR
- > Incubation
- > Cycle sequencing

Ordering information

Description	Order no.
Mastercycler® X50s, 110 – 230 V/50 – 60 Hz, silver block, 96-well plate or 0.1/0.2 mL tubes, with touch screen interface	6311 000.010
Mastercycler® X50a, 110 – 230 V/50 – 60 Hz, aluminum block, 96-well plate or 0.1/0.2 mL tubes, with touch screen interface	6313 000.018
Mastercycler® X50p, 110 – 230 V/50 – 60 Hz, aluminum block, 96-well plate, high pressure lid, with touch screen interface	6315 000.015
Mastercycler® X50h, 110 – 230 V/50 – 60 Hz, aluminum block, 384-well plate, high pressure lid, with touch screen interface	6316 000.019
Mastercycler® X50i, 110 – 230 V/50 – 60 Hz, silver block, 96-well plate or 0.1/0.2 mL tubes, eco unit	6301 000.012
Mastercycler® X50l, 110 – 230 V/50 – 60 Hz, aluminum block, 96-well plate or 0.1/0.2 mL tubes, eco unit	6303 000.010
Mastercycler® X50r, 110 – 230 V/50 – 60 Hz, aluminum block, 96-well plate, high pressure lid, eco unit	6305 000.017
Mastercycler® X50t, 110 – 230 V/50 – 60 Hz, aluminum block, 384-well plate, high pressure lid, eco unit	6306 000.010

CycleManager X50 Software

New



Simple, Central, Smart ...

Mastercycler X50

with CycleManager X50 Software

50x

CycleManager Software - Simple, Central, Smart

CycleManager X50 allows control of up to fifty networked Mastercycler X50 eco units. Control can be individual, simultaneous, or grouped - Perfect for high-throughput standardised protocols where reproducibility is paramount. Password protected user access is optional and users can be assigned different access rights, allowing greater documentation capabilities than ever before. It can also e-mail you when your PCR is complete!

- > Individual, simultaneous or grouped control of up to fifty cyclers
- > Verification / service reminders to ensure unverified cyclers are not used
- > Profound documentation capabilities

Note: CycleManager X50 can only be used with Mastercycler X50 eco unit variants without Touchscreen Interface.

Ordering information

Description	Order no.
CycleManager X50 Software	6349 000.014

Technical Specification Mastercycler® X50

Technical specifications				
Model	MC X50s/X50i	MC X50a/X50l	MC X50p/X50r	MC X50h/X50t
Touchscreen Interface	■/–	■/–	■/–	■/–
Unit can control 9 other units in network	■/–	■/–	■/–	■/–
Unit can only be controlled	–/■	–/■	–/■	–/■
Thermoblock	Silver	Aluminum	Aluminum	Aluminum
Sample capacity	96 × 0.2 mL PCR vessels, 1 PCR plate (96 wells)	96 × 0.2 mL PCR vessels, 1 PCR plate (96 wells)	1 PCR plate (96 wells)	1 PCR plate (384 wells)
96-well plate	■	■	■	–
384-well plate	–	–	–	■
0.1/0.2 mL tubes	■	■	–	–
Heating technology	Six peltier elements	Six peltier elements	Six peltier elements	Six peltier elements
2D-Gradient block	over 12 columns/over 8 rows	over 12 columns/over 8 rows	over 12 columns/over 8 rows	over 24 columns/over 16 rows
Temperature control mode	Fast, Intermediate, Standard, Safe	Fast, Intermediate, Standard, Safe	Fast, Intermediate, Standard, Safe	Fast, Intermediate, Standard, Safe
Temperature control range of the block	4 – 99 °C	4 – 99 °C	4 – 99 °C	4 – 99 °C
Gradient range	1 – 30 °C	1 – 30 °C	1 – 30 °C	1 – 30 °C
Gradient temperature range	30 – 99 °C	30 – 99 °C	30 – 99 °C	30 – 99 °C
Block homogeneity 20–72 °C	≤±0.2 °C	≤±0.2 °C	≤±0.2 °C	≤±0.2 °C
Block homogeneity 95 °C	≤±0.3 °C	≤±0.3 °C	≤±0.3 °C	≤±0.3 °C
Control accuracy	±0.15 °C	±0.15 °C	±0.15 °C	±0.15 °C
Heating rate	10 °C/s	5 °C/s	5 °C/s	5 °C/s/5 °C/s
Cooling rate	5 °C/s	2.3 °C/s	2.3 °C/s	2.3 °C/s
Lid descent	flexlid® technology with TSP	flexlid® technology with TSP	flexlid® technology with TSP	flexlid® technology with TSP
High pressure lid	–	–	■	■
Lid temperature range	37 – 110 °C	37 – 110 °C	37 – 110 °C	37 – 110 °C
Interfaces	Ethernet, USB	Ethernet, USB	Ethernet, USB	Ethernet, USB
Power supply	110 – 230 V, 50 – 60 Hz	110 – 230 V, 50 – 60 Hz	110 – 230 V, 50 – 60 Hz	110 – 230 V, 50 – 60 Hz
Max. power consumption	850 W	850 W	850 W	850 W
Total weight	11.5 kg/10.7 kg	11.5 kg/10.7 kg	11.5 kg/10.7 kg	11.5 kg/10.7 kg
Dimensions (W × D × H)	27.5 × 43 × 33 cm	27.5 × 43 × 33 cm	27.5 × 43 × 33 cm	27.5 × 43 × 33 cm



- This icon tags devices that are connectable to the Eppendorf VisioNize® system. Further information are available at pages 10 – 11.

Temperature Verification System T6 - Multi Channel

Description

To safeguard reproducibility of PCR results, continuous surveillance and documentation of the cycler performance is beneficial. Eppendorf offers a range of service plans to meet the requirements of different needs. We continue to support our customers beyond the point of purchase: We also offer customers the opportunity to buy our Temperature Verification System to monitor critical factors in success or failure of PCR reactions independently/in house.

The new Temperature Verification System can assess, verify and where necessary, adjust the Mastercycler X50 family as well as most other Mastercycler families regarding temperature accuracy. Minimum user input during verification ensures the integrity of the measurement, data and certificates it produces. Data and certificates can be exported via USB for archiving.



Ordering information

Description	Order no.
Temperature Verification System T6, without thermal sensors	6328 006.500
Sensor unit for 96 well blocks, calibrated in an ISO 9001 certified laboratory	6328 007.000
Sensor unit for 96 well blocks, calibrated in an ISO 17025 accredited laboratory	6328 007.507
Sensor unit for 384 well blocks, calibrated in an ISO 9001 certified laboratory	6328 008.007
Sensor unit for 384 well blocks, calibrated in an ISO 17025 accredited laboratory	6328 008.503
Sensor unit flat, calibrated in an ISO 9001 certified laboratory	6328 009.003
Sensor unit flat, calibrated in an ISO 17025 accredited laboratory	6328 009.500

Mastercycler® nexus

Description

The Mastercycler Nexus PCR cycler provides scientists with flexibility in many forms. The 96 well aluminium block can accommodate several standard vessel types from 0.2ml tubes to 96 well plates, there is no need to buy additional blocks. The silver block variants provide faster ramp rates than the aluminum blocks. Up to 2 eco cyclers can be connected to a programmable cycler and the configuration can also include the nexus X2 eco units, to provide a maximum of 6 independent blocks. The flexlid provides effortless height adjustment for different vessels. The Mastercycler Nexus cycler can even email you when the PCR run is complete - what else do you need from a PCR cycler?

Product features

- > Intuitive graphic programming
- > Small footprint
- > Universal block for ultimate flexibility
- > Connect up to 2 Mastercycler nexus eco to your existing unit
- > Available with gradient
- > E-mail notification
- > flexlid® concept allows use of all types of consumables with automatic height adjustment of the lid

Applications

- > Standard PCR
- > Fast PCR
- > Optimizing a PCR
- > *In situ* PCR



Ordering information

Description	Order no.
Mastercycler® nexus GSX1, 230 V/50 – 60 Hz	6345 000.010
Mastercycler® nexus SX1, 230 V/50 – 60 Hz	6346 000.013
Mastercycler® nexus GSX1e, 230 V/50 – 60 Hz	6347 000.017
Mastercycler® nexus SX1e, 230 V/50 – 60 Hz	6348 000.010
Mastercycler® nexus gradient, 230 V/50 – 60 Hz	6331 000.017
Mastercycler® nexus, 230 V/50 – 60 Hz	6333 000.014
Mastercycler® nexus gradient eco, 230 V/50 – 60 Hz	6334 000.018
Mastercycler® nexus eco, 230 V/50 – 60 Hz	6332 000.010
Mastercycler® nexus flat, 230 V/50 – 60 Hz	6335 000.011
Mastercycler® nexus flat eco, 230 V/50 – 60 Hz	6330 000.013
CAN bus connecting cable, 150 cm	5341 611.000
CAN bus connecting cable, 50 cm	5341 612.006

✎ Ordering information for other voltage options begins on page 418

For more information go to www.eppendorf.com/Mastercycler

Mastercycler® nexus X2

Description

The Mastercycler nexus X2 gives you the ability to run two totally independent protocols at the same time. Smaller assays fit nicely on the 32-well-block – larger assays can exceed 48 samples and run on the 64-well-block. The larger block is available with a gradient function. As every member of the Mastercycler nexus family, the Mastercycler nexus X2 can be combined with all other family members in a network of up to 3 units. In combination with Eppendorf's PCR Tubes, PCR Strips or divisible plates, the Mastercycler nexus X2 will give you consistent and publishable results – every day!

Product features

- > Large block for large assays – small block for small assays
- > Intuitive graphic programming
- > Universal block for strips, 0.1 mL, 0.2 mL and 0.5 mL PCR tubes
- > Small footprint
- > Optional gradient for PCR optimization
- > E-mail notification
- > flexlid® concept allows use of all types of consumables with automatic height adjustment of the lid

Applications

- > Standard PCR
- > Optimizing a PCR



Ordering information

Description	Order no.
Mastercycler® nexus GX2, 230 V/50 – 60 Hz	6336 000.015
Mastercycler® nexus GX2e, 230 V/50 – 60 Hz	6338 000.012
Mastercycler® nexus X2, 230 V/50 – 60 Hz	6337 000.019
Mastercycler® nexus X2e, 230 V/50 – 60 Hz	6339 000.016

✎ Ordering information for other voltage options begins on page 418

For more information go to www.eppendorf.com/pcr



Technical Specification Mastercycler® nexus

Technical specifications			
Model	MC nexus GSX1/GSX1e	MC nexus SX1/SX1e	MC nexus gradient/gradient eco
Unit can control 2 other units in network	■/–	■/–	■/–
Unit can only be controlled ¹⁾	–/■	–/■	–/■
Thermoblock	Silver	Silver	Aluminum
Sample capacity	96 × 0.2 mL PCR vessels, 1 PCR plate (96 wells)	96 × 0.2 mL PCR vessels, 1 PCR plate (96 wells)	96 × 0.2 mL PCR tubes, 1 PCR plate (96 wells) or 38 × 0.5 mL PCR tube positions
Heating technology	Peltier elements, triple circuit technology	Peltier elements, triple circuit technology	Peltier elements, Triple Circuit Technology
Gradient block	Over 12 rows (0.2 mL)	–	Over 12 rows (0.2 mL)
Gradient temperature range	30 – 99 °C	–	30 – 99 °C
Gradient range	1 – 20 °C	–	1 – 20 °C
Temperature control mode	Fast, standard, safe	Fast, standard, safe	Fast, standard, safe
Temperature control range of the block	4 – 99 °C	4 – 99 °C	4 – 99 °C
Intuitive graphic programming	■/–	■/–	■/–
Block homogeneity 20–72 °C	≤ ±0.3 °C	≤ ±0.3 °C	≤ ±0.3 °C
Control accuracy	±0.2 °C	±0.2 °C	±0.2 °C
E-mail Notification	■	■	■
2 years warranty	■	■	■
USB port	■/–	■/–	■/–
Block homogeneity 90 °C	≤ ±0.4 °C	≤ ±0.4 °C	≤ ±0.4 °C
Heating rate	5 °C/s ²⁾	5 °C/s ²⁾	3 °C/s ²⁾
Cooling rate	3.5 °C/s ²⁾	3.5 °C/s ²⁾	2 °C/s ²⁾
Lid descent	flexlid® technology with TSP	flexlid® technology with TSP	flexlid® technology with TSP
Lid temperature range	37 – 110 °C	37 – 110 °C	37 – 110 °C
Interfaces	CAN_in/CAN_out, Ethernet, USB	CAN_in/CAN_out, Ethernet, USB	CAN_in/CAN_out, Ethernet, USB
Power supply	230 V, 50 – 60 Hz	230 V, 50 – 60 Hz	230 V, 50 – 60 Hz
Max. power consumption	540 W	540 W	700 W
Total weight	10.9 kg	10.9 kg	10.9 kg
Dimensions (W × D × H)	25 × 41.2 × 32.1 cm	25 × 41.2 × 32.1 cm	25 × 41.2 × 32.1 cm
Number of programs on device	> 700	> 700	> 700

¹⁾ Control through a Mastercycler® nexus, Mastercycler® nexus gradient, Mastercycler® nexus GSX1, Mastercycler® nexus SX1, Mastercycler® nexus GX2, Mastercycler® nexus X2 or Mastercycler® nexus flat
²⁾ measured at the block

Technical specifications		
Model	MC nexus/nexus eco	MC nexus flat/flat eco
Unit can control 2 other units in network	■/–	■/–
Unit can only be controlled ¹⁾	–/■	–/■
Thermoblock	Aluminum	Aluminum
Sample capacity	96 × 0.2 mL PCR tubes, 1 PCR plate (96 wells) or 38 × 0.5 mL PCR tube positions	4 slides or other matching consumables
Heating technology	Peltier elements, triple circuit technology	Peltier elements, triple circuit technology
Gradient block	–	–
Gradient temperature range	–	–
Gradient range	–	–
Temperature control mode	Fast, standard, safe	Fast, standard, safe
Temperature control range of the block	4 – 99 °C	4 – 99 °C
Intuitive graphic programming	■/–	■/–
Block homogeneity 20–72 °C	≤ ±0.3 °C	≤ ±0.3 °C
Control accuracy	±0.2 °C	±0.2 °C
E-mail Notification	■	■
2 years warranty	■	■
USB port	■/–	■/–
Block homogeneity 90 °C	≤ ±0.4 °C	≤ ±0.4 °C
Heating rate	3 °C/s ²⁾	3 °C/s ²⁾
Cooling rate	2 °C/s ²⁾	2 °C/s ²⁾
Lid descent	flexlid® technology with TSP	flexlid® technology with TSP
Lid temperature range	37 – 110 °C	37 – 110 °C
Interfaces	CAN_in/CAN_out, Ethernet, USB	CAN_in/CAN_out, Ethernet, USB
Power supply	230 V, 50 – 60 Hz	230 V, 50 – 60 Hz
Max. power consumption	700 W/540 W	700 W/540 W
Total weight	10.9 kg	10.4 kg
Dimensions (W × D × H)	25 × 41.2 × 32.1 cm	25 × 41.2 × 32.1 cm
Number of programs on device	> 700	> 700

¹⁾ Control through a Mastercycler® nexus, Mastercycler® nexus gradient, Mastercycler® nexus GSX1, Mastercycler® nexus SX1, Mastercycler® nexus GX2, Mastercycler® nexus X2 or Mastercycler® nexus flat
²⁾ measured at the block

Technical Specification Mastercycler® nexus X2

Technical specifications		
Model	MC nexus GX2/GX2e	MC nexus X2/X2e
Unit can control 2 other units in network	■/–	■/–
Unit can only be controlled1)	–/■	–/■
Thermoblock	Aluminum	Aluminum
Sample capacity	64/32 × 0.2 mL PCR tubes or 24/10 × 0.5 mL PCR tube positions	64/32 × 0.2 mL PCR tubes or 24/10 × 0.5 mL PCR tube positions
Heating technology	Peltier elements, Triple Circuit Technology	Peltier elements, Triple Circuit Technology
Gradient block	Over 8 rows (0.2 mL)/Over 8 rows	–
Gradient temperature range	30 – 99 °C/30 – 99 °C	–
Gradient range	1 – 12 °C/1 – 12 °C	–
Temperature control mode	Fast, Standard, Safe	Fast, Standard, Safe
Temperature control range of the block	4 – 99 °C	4 – 99 °C
Intuitive graphic programming	■/–	■/–
Block homogeneity 20–72 °C	≤ ±0.3 °C	≤ ±0.3 °C
Control accuracy	±0.2 °C	±0.2 °C
E-mail Notification	■	■
2 years warranty	■	■
USB port	■/–	■/–
Block homogeneity 90 °C	≤ ±0.4 °C	≤ ±0.4 °C
Heating rate	3 °C/s ²⁾	3 °C/s ²⁾
Cooling rate	2 °C/s ²⁾	2 °C/s ²⁾
Lid descent	flexlid® technology with TSP	flexlid® technology with TSP
Lid temperature range	37 – 110 °C	37 – 110 °C
Interfaces	CAN_in/CAN_out, Ethernet, USB/ CAN_in/CAN_out, Ethernet	CAN_in/CAN_out, Ethernet, USB/ CAN_in/CAN_out, Ethernet
Max. power consumption	700 W	700 W
Total weight	10.5 kg	11 kg
Dimensions (W × D × H)	25 × 41.2 × 33 cm	25 × 41.2 × 33 cm
Number of programs on device	> 700	> 700

¹⁾ Control through a Mastercycler® nexus, Mastercycler® nexus gradient, Mastercycler® nexus GSX1, Mastercycler® nexus SX1, Mastercycler® nexus GX2, Mastercycler® nexus X2 or Mastercycler® nexus flat
²⁾ measured at the block



www.eppendorf.com/nexus-x2-info

For more information go to www.eppendorf.com/Mastercycler

Technical specifications subject to change.

HeatSealer



HeatSealer S100

- > Hermetic sealing of multiwell plates
- > Fixed sealing temperature for reproducible results (S100)
- > Adjustable sealing temperatures for more flexibility (S200)
- > Eliminates evaporation in PCR, reducing cross contamination
- > Seals 96- and 384-well plates
- > Compact design, portable device
- > Integrated thermostats prevents overheating
- > Improved mechanics for even easier sealing
- > PCR Plate Adapter included

Ordering information

Description	Order no.
HeatSealer S100, 100 – 230 V/50 – 60 Hz	5391 000.001
HeatSealer S200, 100 – 230 V/50 – 60 Hz	5392 000.005
Plate Adapter low profile, for HeatSealer S100	5391 070.018
Plate Adapter high profile, for HeatSealer S100	5391 070.034
96-well-PCR Plate Adapter, for HeatSealer S100	5391 070.026
Plate Adapter high profile, for HeatSealer S200	5392 070.011
Plate Adapter low profile, for HeatSealer S200	5392 070.020
96-well Plate Adapter, for HeatSealer S200	5392 070.038
Eppendorf Heat Sealing Film, PCR clean, 100 pcs.	0030 127.838
Eppendorf Heat Sealing Foil, PCR clean, 100 pcs.	0030 127.854

Your local distributor: www.eppendorf.com/contact

Eppendorf AG · Barkhausenweg 1 · 22339 Hamburg · Germany · eppendorf@eppendorf.com · www.eppendorf.com

Eppendorf twin.tec® PCR Plates

Product features

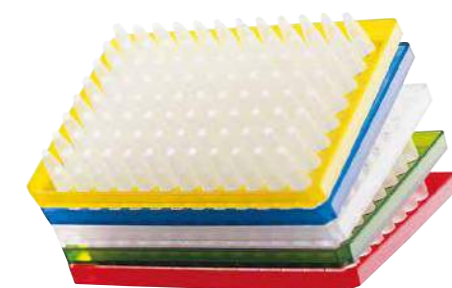
- > One-piece design: combining a polycarbonate frame and polypropylene wells for optimum performance
- > Extremely thin-walled polypropylene wells guarantee optimum heat transfer to the sample
- > Exceptionally solid and torque-resistant polycarbonate frame
- > Improved well-to-well tolerance
- > Cut-away corner and alphanumeric grid-referencing
- > Raised well rims for effective sealing, also reduces risk of cross-contamination
- > Certified free of any detectable human DNA, DNase, RNase and PCR inhibitors¹⁾
- > Available with barcode (upon request), for skirted and semi-skirted only
- > Ideal for quantitative real-time PCR as well

¹⁾ Download of certificates under www.eppendorf.com/certificates



Eppendorf twin.tec® PCR Plate 96, skirted

- > Optimized rim for barcodes and automated work processes
- > Within SBS footprint recommendations (127.76 × 85.47 mm ±0.25 mm)
- > Stackable
- > Eight holes in the skirt aid plate positioning and removal from the thermal cycler block
- > Low profile design enhances efficiency of PCR and enables the highest efficiency for small sample volumes
- > 150 µL max. well volume (when used with cap strips)
- > Available with barcode (upon request), for skirted and semi-skirted only
- > Ideal for quantitative real-time PCR as well – OptiTrack® matrix for faster sample identification and fewer pipetting errors



Eppendorf twin.tec® PCR Plate 96, semi-skirted

- > Semi-skirted for label and barcode
- > Fits most thermal cyclers
- > 250 µL max. well volume (when used with cap strips)
- > Improved well-to-well tolerance
- > Available with barcode (upon request), for skirted and semi-skirted only
- > Ideal for quantitative real-time PCR as well – OptiTrack® matrix for faster sample identification and fewer pipetting errors



Eppendorf twin.tec® PCR Plate 96, unskirted

- > Fits even more thermal cyclers
- > OptiTrack® matrix for faster sample identification and fewer pipetting errors
- > Available with regular (250 µL) or low profile (150 µL) wells
- > Ideal for quantitative real-time PCR as well



Eppendorf twin.tec® PCR Plate 96, unskirted, divisible

- > Can be divided in 4 segments of 24 wells each
- > Fits most common thermal cyclers
- > OptiTrack® matrix for faster sample identification and fewer pipetting errors
- > Available with regular (250 µL) or low profile (150 µL) wells
- > Can be divided into 4 segments of 24 wells each to prevent waste and save money
- > Ideal for quantitative real-time PCR as well



Eppendorf twin.tec® microbiology PCR Plate 96

- > Individually blistered
- > Certified PCR clean
- > Additionally free of bacterial DNA
- > For all applications that need ultimate purity or certified absence of bacterial DNA
- > Available with barcode (upon request), for skirted and semi-skirted only
- > Ideal for quantitative real-time PCR as well – OptiTrack® matrix for faster sample identification and fewer pipetting errors



Eppendorf twin.tec® PCR Plate 384

- > Optimized rim for barcodes and automated work processes
- > Stackable
- > Within SBS footprint recommendations
- > Ideal for most common 384-well thermocyclers, particularly for Eppendorf Mastercycler pro 384
- > 40 µL max. well volume
- > Available with barcode (upon request), for skirted and semi-skirted only
- > Ideal for quantitative real-time PCR as well – OptiTrack® matrix for faster sample identification and fewer pipetting errors



Eppendorf twin.tec® PCR Plates 96 and 384 LoBind

- > Maximum recovery rates for improved assay results
- > Available with barcode (upon request)
- > Ideal for quantitative real-time PCR as well
- > Exceptionally solid and torque-resistant polycarbonate frame
- > OptiTrack® matrix for faster sample identification and fewer pipetting errors
- > Raised well rims for effective sealing, also reduces risk of cross-contamination
- > Batch-tested and certified free of DNA, DNAase, RNase and PCR inhibitors (PCR clean)

► For more Assay/Reader MTPs go to page 112



Eppendorf twin.tec® PCR Plates

Ordering information	
Description	Order no.
Eppendorf twin.tec® PCR Plate 96 , skirted, 150 µL	
PCR clean, colorless, 25 pcs.	0030 128.648
Forensic DNA Grade, colorless, 10 pcs., individually wrapped	0030 129.601
PCR clean, yellow, 25 pcs.	0030 128.656
PCR clean, green, 25 pcs.	0030 128.664
PCR clean, blue, 25 pcs.	0030 128.672
PCR clean, red, 25 pcs.	0030 128.680
Eppendorf twin.tec® PCR Plate 96 , semi-skirted, 250 µL	
PCR clean, colorless, 25 pcs.	0030 128.575
Forensic DNA Grade, colorless, 10 pcs., individually wrapped	0030 129.610
PCR clean, yellow, 25 pcs.	0030 128.583
PCR clean, green, 25 pcs.	0030 128.591
PCR clean, blue, 25 pcs.	0030 128.605
PCR clean, red, 25 pcs.	0030 128.613
Eppendorf twin.tec® PCR Plate 96, low profile , unskirted, 150 µL	
PCR clean, colorless, 20 pcs.	0030 133.307
PCR clean, blue, 20 pcs.	0030 133.331
Eppendorf twin.tec® PCR Plate 96 , unskirted, 250 µL	
PCR clean, colorless, 20 pcs.	0030 133.366
PCR clean, blue, 20 pcs.	0030 133.390
Eppendorf twin.tec® PCR Plate 96, divisible , unskirted, 150 µL	
PCR clean, colorless, 20 pcs.	0030 133.358
PCR clean, blue, 20 pcs.	0030 133.382
Eppendorf twin.tec® PCR Plate 96, divisible , unskirted, 250 µL	
PCR clean, colorless, 20 pcs.	0030 133.374
PCR clean, blue, 20 pcs.	0030 133.404
Eppendorf twin.tec® microbiology PCR Plate 96 , skirted, 150 µL	
PCR clean, colorless, 10 pcs.	0030 129.300
PCR clean, blue, 10 pcs.	0030 129.318
Eppendorf twin.tec® microbiology PCR Plate 96 , semi-skirted, 250 µL	
PCR clean, colorless, 10 pcs.	0030 129.326
PCR clean, blue, 10 pcs.	0030 129.334
Eppendorf twin.tec® microbiology PCR Plate 384 , skirted, 40 µL	
PCR clean, colorless, 10 pcs.	0030 129.342
PCR clean, blue, 10 pcs.	0030 129.350
Eppendorf twin.tec® PCR Plate 384 , skirted, 40 µL	
PCR clean, colorless, 25 pcs.	0030 128.508
Forensic DNA Grade, colorless, 10 pcs., individually wrapped	0030 129.628
PCR clean, yellow, 25 pcs.	0030 128.516
PCR clean, green, 25 pcs.	0030 128.524
PCR clean, blue, 25 pcs.	0030 128.532
PCR clean, red, 25 pcs.	0030 128.540
Eppendorf twin.tec® PCR plate 96 LoBind , semi-skirted	
PCR clean, colorless, 25 pcs.	0030 129.504
Eppendorf twin.tec® PCR plate 96 LoBind , skirted	
PCR clean, colorless, 25 pcs.	0030 129.512
PCR clean, blue, 25 pcs.	0030 129.580
PCR clean, green, 25 pcs.	0030 129.660
PCR clean, red, 25 pcs.	0030 129.598
PCR clean, yellow, 25 pcs.	0030 129.679
Eppendorf twin.tec® PCR plate 384 LoBind , skirted	
PCR clean, colorless, 25 pcs.	0030 129.547

For more information go to www.eppendorf.com/Twintec



Eppendorf twin.tec® *real-time* PCR Plates



Eppendorf twin.tec® 96 *real-time* PCR Plates

- > White wells for better reflection
- > High mechanical stability
- > Raised rims for effective sealing
- > Skirted and semi-skirted frames
- > Optimal heat transfer due to reduced wall thickness
- > Autoclavable (121 °C, 20 min)
- > Available with barcode (upon request)

Ordering information	
Description	Order no.
Eppendorf twin.tec® 96 <i>real-time</i> PCR Plate , skirted, 150 µL	
PCR clean, blue, 25 pcs.	0030 132.505
PCR clean, white, 25 pcs.	0030 132.513
Eppendorf twin.tec® 96 <i>real-time</i> PCR Plate , semi-skirted, 250 µL	
PCR clean, blue, 25 pcs.	0030 132.530
PCR clean, white, 25 pcs.	0030 132.548
Eppendorf twin.tec® 96 <i>real-time</i> PCR Plate , skirted, 150 µL	
Forensic DNA Grade, white, 10 pcs., individually wrapped	0030 129.636
Eppendorf twin.tec® 96 <i>real-time</i> PCR Plate , semi-skirted, 250 µL	
Forensic DNA Grade, white, 10 pcs., individually wrapped	0030 129.644
Eppendorf twin.tec® 96 <i>real-time</i> PCR Plate, low profile , unskirted, 150 µL	
PCR clean, white, 20 pcs.	0030 132.700
PCR clean, blue, 20 pcs.	0030 132.718

Eppendorf Fast PCR Tube Strips

New

Description

The Fast PCR Tube Strip allows scientists using Fast cyclers (such as the Mastercycler X50) and Fast enzymes to obtain higher PCR yield. This is achieved by the faster heat transfer from block to reaction, allowing for better control over the reaction. The Tube-strips are suitable for Fast end-point PCR and Real-Time PCR applications. The open format tube strip allows easy adoption and easy optimization.



Eppendorf Fast PCR Tube Strips

- > Ideal for use with Fast cyclers such as the Mastercycler X50s and Fast enzymes
- > 8 reaction tubes in strip-format – ideal for small sample volumes
- > Easily adaptable for automation
- > Sealable using flat or domed strip-lids
- > Certified free from human DNA, DNase, RNase and PCR inhibitors¹⁾

¹⁾ Download of certificates under www.eppendorf.com/certificates

Ordering information	
Description	Order no.
Eppendorf Fast PCR Tube Strips	
0.1 mL, without lids, PCR clean, 120 pcs. (10 × 12 pcs.)	0030 124.901
0.1 mL, with cap strips, flat, PCR clean, 120 pcs. (10 × 12 pcs.)	0030 124.910
0.1 mL, with cap strips, domed, PCR clean, 120 pcs. (10 × 12 pcs.)	0030 124.928

Eppendorf PCR Tube Strips



Eppendorf PCR Tube Strips

- > 8 reaction tubes in strip-format – ideal for small sample volumes
- > Easily adaptable for automation
- > Sealable using flat or domed strip-lids
- > Certified free from human DNA, DNase, RNase and PCR inhibitors¹⁾

¹⁾ Download of certificates under www.eppendorf.com/certificates

Ordering information

Description	Order no.
Eppendorf PCR Tube Strips, 0.1 mL	
PCR clean, without lids (10 × 12 strips)	0030 124.804
PCR clean, with Cap Strips, domed (10 × 12 strips)	0030 124.812
PCR clean, with Cap Strips, flat (10 × 12 strips)	0030 124.820

Eppendorf PCR Tubes, 0.5 mL



Eppendorf PCR Tubes, 0.5 mL

- > Etched lid for labeling
- > Tight sealing
- > Easy to open
- > For use with all thermal cyclers with 0.5 mL block format
- > Certified free from human DNA, DNase, RNase and PCR inhibitors¹⁾

¹⁾ Download of certificates under www.eppendorf.com/certificates

Ordering information

Description	Order no.
Eppendorf PCR Tubes, 0.5 mL, PCR clean, with hinged lid, clear, 500 pcs.	
	0030 124.537

Eppendorf PCR Tubes



Eppendorf PCR Tubes

- > Contamination shield on hinged lid
- > Defined lid position due to special hinge
- > High transparency even on the tube base
- > Etched lid for labeling
- > Tight sealing
- > Easy to open
- > For use with all thermal cyclers with 0.2 mL block format
- > Also available in 8-tube strip format
- > Certified free from human DNA, DNase, RNase and PCR inhibitors¹⁾

¹⁾ Download of certificates under www.eppendorf.com/certificates

Ordering information

Description	Order no.
Eppendorf PCR Tubes, 0.2 mL	
PCR clean, colorless, 1000 pcs.	0030 124.332
Forensic DNA Grade, colorless, 500 pcs. (10 bags × 50 pcs.)	0030 124.707
PCR clean, 8-tube strips, 120 pcs. (960 tubes)	0030 124.359

Cap Strips



Cap Strips

- > Strips with eight microcaps for 0.1 and 0.2 mL wells
- > Easy and rapid sealing of Eppendorf twin.tec PCR Plates, PCR strips and other standard multiwell plates
- > Flat Cap Strips are suitable for real-time PCR
- > Autoclavable (121 °C, 20 min)

Ordering information

Description	Order no.
Cap Strips, 8-strips	
domed, 120 pcs. (10 × 12 pcs.)	0030 124.839
flat, 120 pcs. (10 × 12 pcs.)	0030 124.847

For more information go to www.eppendorf.com/pcr

Masterclear® Cap Strips and *real-time* PCR Tube Strips



Masterclear® Cap Strips and *real-time* PCR Tube Strips

real-time PCR Tube Strips

- > White wells for better reflection
- > High mechanical stability
- > Extremely thin walls for optimal heat transfer

Masterclear Cap Strips

- > Inverted dome to avoid scratching of the optic surface
- > Inverted dome to reduce volume of the tubes
- > Optimized for maximum light transmission

Ordering information

Description	Order no.
<i>real-time</i> PCR Tube Strips, without caps	
120 pcs. (10 × 12 pcs.)	0030 132.882
Masterclear Cap Strips and <i>real-time</i> PCR Tube Strips	
120 pcs. (10 × 12 pcs.)	0030 132.890
Masterclear Cap Strips	
120 pcs. (10 × 12 pcs.)	0030 132.874

Heat Sealing Film and Heat Sealing Foil



Heat Sealing Film and Heat Sealing Foil

- > Hermetic sealing of multiwell plates, especially recommended for low reaction volumes
- > Best protection against evaporation during PCR
- > Maximum adhesiveness at high temperatures during PCR

Ordering information

Description	Order no.
Eppendorf Heat Sealing Film, PCR clean, 100 pcs.	0030 127.838
Eppendorf Heat Sealing Foil, PCR clean, 100 pcs.	0030 127.854

For more information go to www.eppendorf.com/pcr

PCR Film (self-adhesive) and PCR Foil (self-adhesive)



PCR Film (self-adhesive) and PCR Foil (self-adhesive)

- > Effective adhesive sealing prevents evaporation loss during PCR
- > Removal from the plate with no residue
- > PCR Film: Sample can be visually monitored through the transparent film
- > PCR Foil: Easily pierced
- > PCR Foil: No sticking of the pipette tip (ideal for automated systems)

Ordering information

Description	Order no.
Eppendorf PCR Film, self-adhesive, PCR clean, 100 pcs.	0030 127.781
Eppendorf PCR Foil, self-adhesive, PCR clean, 100 pcs.	0030 127.790

Masterclear® *real-time* PCR Film



Masterclear® *real-time* PCR Film

- > Optimized for maximum light transmission
- > Optimized for tight sealing
- > Optimized packaging for your convenience

Ordering information

Description	Order no.
Masterclear® <i>real-time</i> PCR Film, self-adhesive, PCR clean, 100 pcs.	0030 132.947

PCR Rack



PCR Rack

- > Rack for handling and storing tubes and plates
- > For 0.1 mL, 0.2 mL and 0.5 mL tubes, as well as 96-well plates
- > Stackable
- > Can be stored down to -90 °C
- > Autoclavable (121 °C, 20 min)

Ordering information

Description	Order no.
PCR Rack, 10 pcs.	0030 124.545

Sample Handling



Model	CryoCube® F740hi, 3 c./ CryoCube® F740hi, 5 c.	CryoCube® F740hiw, 3 c./ CryoCube® F740hiw, 5 c.	CryoCube® F740h, 3 c./ CryoCube® F740h, 5 c.
Page(s)	264/270	264/270	264/270
Insulation	Vacuum insulation paneling / polyurethane foam	Vacuum insulation paneling / polyurethane foam	Vacuum insulation paneling / polyurethane foam
Wall Thickness	Type B	Type B	Type B
Capacity	740 L	740 L	740 L
No. of internal doors	3	3	3
No. of compartments	3/5	3/5	3/5
Max. racks per freezer	18/30	18/30	18/30
Box capacity per rack			
5 cm (2 in) tall boxes	32/16	32/16	32/16
7.5 cm (3 in) tall boxes	20/8	20/8	20/8
12.5 cm (5 in) tall boxes	12	12	12
Box capacity per freezer			
5 cm (2 in) tall boxes	576/528	576/528	576/528
7.5 cm (3 in) tall boxes	360/288	360/288	360/288
10 cm (4 in) tall boxes	288/264	288/264	288/264
Sample capacity			
5 cm (2 in) tall boxes	57,600/52,800	57,600/52,800	57,600/52,800
Dimensions (W x D x H) ¹⁾²⁾³⁾	109.9 x 98 x 197.3 cm	109.9 x 98 x 197.3 cm	109.9 x 91.5 x 197.3 cm
Dimensions internal (W x D x H)	86.5 x 62.1 x 139 cm	86.5 x 62.1 x 139 cm	86.5 x 62.1 x 139 cm
Weight w/o accessories	315 kg/333 kg	320 kg/328 kg	308 kg/317 kg
Shipping weight	364 kg/382 kg	369 kg/377 kg	357 kg/366 kg
Pull-down time to -85 °C/ -80 °C ⁴⁾	4 h 10 min	4 h 10 min	4 h 10 min
Noise level	41.3 dB	41.3 dB	47.8 dB
Heat output	438 W	442 W	492 W
Power supply	230 V, 50 Hz	230 V, 50 Hz	230 V, 50 Hz
Power consumption Eppendorf freezer ⁵⁾	10.5 kWh/day	10.6 kWh/day	11.8 kWh/day
Max. power consumption per 5 cm box ⁵⁾	18 Wh/day/20 Wh/day	18 Wh/day/20 Wh/day	21 Wh/day/22 Wh/day
Interior	Stainless steel	Stainless steel	Stainless steel
Password protection of setpoints	yes	yes	yes
Extras	Automatic vent port	Automatic vent port	Automatic vent port
Cooling liquid	R290 / R170	R290 / R170	R290 / R170

¹⁾ Optional CO₂/LN₂ backup systems add 8.65 cm/3.5 in to height.²⁾ To allow for handles and hinges, add 80 mm to width of upright freezers and 110 mm to the depth of chest freezers.³⁾ Door open adds up to 15 cm.⁴⁾ Empty freezer with shelves fitted, upright freezers only, pull down from 20 – 22 °C ambient conditions.⁵⁾ Empty freezer with shelves fitted, upright freezers only, set point -80 °C, 20 – 22 °C ambient conditions.



Model	CryoCube® F570h	CryoCube® F570hw	CryoCube® F570
Page(s)	264/270	264/270	264/270
Insulation	Vacuum insulation paneling / polyurethane foam	Vacuum insulation paneling / polyurethane foam	Polyurethane foam
Wall Thickness	Type C	Type C	Type A
Capacity	570 L	570 L	570 L
No. of internal doors	5	5	5
No. of compartments			
Max. racks per freezer	25	25	25
Box capacity per rack			
5 cm (2 in) tall boxes	16	16	16
7.5 cm (3 in) tall boxes	8	8	8
Box capacity per freezer			
5 cm (2 in) tall boxes	400	400	400
7.5 cm (3 in) tall boxes	200	200	200
Sample capacity			
5 cm (2 in) tall boxes	40,000	40,000	40,000
Dimensions (W x D x H)	102.5 x 85.2 x 194 cm	102.5 x 85.2 x 194.0 cm	102.5 x 85.2 x 194 cm
Dimensions internal (W x D x H)	76.5 x 57.5 x 126.5 cm	76.5 x 57.5 x 126.5 cm	76.5 x 57.5 x 126.5 cm
Weight w/o accessories	296 kg	296 kg	270 kg
Shipping weight	341 kg	341 kg	315 kg
Pull-down time to -85 °C/ -80 °C ⁴⁾	4.3 h	5.1 h	5.1 h
Noise level	59.1 dB	56.0 dBA	59.5 dB
Heat output	316 W	325 W	438 W
Power supply	230 V, 50 Hz	230 V, 50 Hz	230 V, 50 Hz
Power consumption Eppendorf freezer ⁵⁾	7.6 kWh/day	7.8 kWh/day	10.5 kWh/day
Max. power consumption per 5 cm box ⁵⁾	19 Wh/day	19.5 Wh/day	26.3 Wh/day
Interior	Stainless steel	Stainless steel	Stainless steel
Password protection of setpoints	yes	yes	yes
Extras	Automatic vent port	Automatic vent port, water-cooled	Automatic vent port
Cooling liquid	R290 / R170	R290 / R170	R404A / R508B

For more information go to www.eppendorf.com

Technical specifications subject to change.



On page 392 you will find detailed information on services for these products!

Your local distributor: www.eppendorf.com/contact
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Sample Handling



Model	Innova® U535	HEF® U410
Page(s)	264/271	264/271
Insulation	Vacuum insulation paneling / polyurethane foam	Vacuum insulation paneling / polyurethane foam
Wall Thickness	Type B	Type C
Capacity	535 L	410 L
No. of internal doors	3	5
No. of compartments	3	5
Max. racks per freezer	12	15
Box capacity per rack		
5 cm (2 in) tall boxes	28	16
7.5 cm (3 in) tall boxes	20	8
12.5 cm (5 in) tall boxes	12	
Box capacity per freezer		
5 cm (2 in) tall boxes	336	240
7.5 cm (3 in) tall boxes	240	120
10 cm (4 in) tall boxes	144	120
Sample capacity		
5 cm (2 in) tall boxes	33,600	24,000
Dimensions (W x D x H) ¹⁾²⁾³⁾	80 x 86.7 x 195 cm	80 x 85.2 x 193.0 cm
Dimensions internal (W x D x H)	64 x 61.5 x 136.5 cm	55 x 57.5 x 126.5 cm
Weight w/o accessories	250 kg	262 kg
Shipping weight	296 kg	307 kg
Pull-down time to -85 °C/-80 °C ⁴⁾	5,9 h	4,66 h
Noise level	56 dBA	53 dBA
Heat output	550 W	350 W
Power supply	230 V, 50 Hz	230 V, 50 Hz
Power consumption Eppendorf freezer ⁵⁾	13.2 kWh/day	8.4 kWh/day
Max. power consumption per 5 cm box ⁶⁾	39.3 Wh/day	35 Wh/day
Interior	Stainless steel	Stainless steel
Password protection of setpoints	yes	yes
Extras	-	-
Cooling liquid	R404A / R508B	R290 / R170

¹⁾ Optional CO₂/N₂ backup systems add 8.65 cm/3.5 in to height.²⁾ To allow for handles and hinges, add 80 mm to width of upright freezers and 110 mm to the depth of chest freezers.³⁾ Door open adds up to 15 cm.⁴⁾ Empty freezer with shelves fitted, upright freezers only, pull down from 20 – 22 °C ambient conditions.⁵⁾ Empty freezer with shelves fitted, upright freezers only, set point -80 °C, 20 – 22 °C ambient conditions.



Model	Premium U410	Innova® U360	Innova® U101
Page(s)	264/271	264/271	264/271
Insulation	Polyurethane foam	Vacuum insulation paneling / polyurethane foam	Vacuum insulation paneling / polyurethane foam
Wall Thickness	Type A	Type B	Type B
Capacity	410 L	360 L	101 L
No. of internal doors	5	3	2
No. of compartments	5	3	2
Max. racks per freezer	15	9	6
Box capacity per rack			
5 cm (2 in) tall boxes	16	28	10
7.5 cm (3 in) tall boxes	8	20	6
12.5 cm (5 in) tall boxes		12	4
Box capacity per freezer			
5 cm (2 in) tall boxes	240	252	60
7.5 cm (3 in) tall boxes	120	180	36
10 cm (4 in) tall boxes	120	108	24
Sample capacity			
5 cm (2 in) tall boxes	24,000	25,200	6,000
Dimensions (W x D x H) ¹⁾²⁾³⁾	80 x 85.2 x 193 cm	67 x 86.7 x 195 cm	90 x 56.6 x 83 cm
Dimensions internal (W x D x H)	55 x 57.5 x 126.5 cm	44 x 61.5 x 136.5 cm	48 x 33 x 64 cm
Weight w/o accessories	235 kg	230 kg	116 kg
Shipping weight	280 kg	266 kg	141 kg
Pull-down time to -85 °C/-80 °C ⁴⁾	5.3 h	5,6 h	3,7 h
Noise level	55 dB	56 dBA	55 dBA
Heat output	650 W	445 W	310 W
Power supply	230 V, 50 Hz	230 V, 50 Hz	230 V, 50 Hz
Power consumption Eppendorf freezer ⁵⁾	10.8 kWh/day	10.7 kWh/day	7.4 kWh/day
Max. power consumption per 5 cm box ⁶⁾	45 Wh/day	42.5 Wh/day	123.3 Wh/day
Interior	Stainless steel	Stainless steel	Stainless steel
Password protection of setpoints	yes	yes	yes
Extras	-	-	Stackable, fits below bench
Cooling liquid	R404A / R508B	R404A / R508B	R404A / R508B

For more information go to www.eppendorf.com



Sample Handling



Model	Innova® C760	CryoCube® FC660h
Page(s)	264/271	264/271
Insulation	Vacuum insulation paneling / polyurethane foam	Vacuum insulation paneling / polyurethane foam
Wall Thickness	Type B	Type C
Capacity	760 L	660 L
No. of internal doors		
No. of compartments	N/A	N/A
Max. racks per freezer	40	40
Box capacity per rack		
5 cm (2 in) tall boxes	14	13
7.5 cm (3 in) tall boxes	9	9
12.5 cm (5 in) tall boxes	5	5
Box capacity per freezer		
5 cm (2 in) tall boxes	560	520
7.5 cm (3 in) tall boxes	360	360
10 cm (4 in) tall boxes	280	280
Sample capacity		
5 cm (2 in) tall boxes	56,000	52,000
Dimensions (W x D x H) ¹⁾²⁾³⁾	205 x 82.5 x 109.2 cm	207 x 84 x 107.5 cm
Dimensions internal (W x D x H)	156 x 62.5 x 78 cm	147 x 59 x 76 cm
Weight w/o accessories	285 kg	304 kg
Shipping weight	358 kg	379 kg
Pull-down time to -85 °C/-80 °C ⁴⁾	5,8 h	3,66 h
Noise level	58 dBA	58.3 dBA
Heat output	667 W	338 W
Power supply	230 V, 50 Hz	230 V, 50 Hz
Power consumption Eppendorf freezer ⁵⁾	16 kWh/day	8.1 kWh/day
Max. power consumption per 5 cm box ⁵⁾	28 Wh/day	15.6 Wh/day
Interior	Stainless steel	Stainless steel
Password protection of setpoints	yes	yes
Extras	30 mm thick inner lids for temp uniformity	30 mm thick inner lids for temp uniformity
Cooling liquid	R404A/R508B	R290/R170

¹⁾ Optional CO₂/N₂ backup systems add 8.65 cm/3.5 in to height.²⁾ To allow for handles and hinges, add 80 mm to width of upright freezers and 110 mm to the depth of chest freezers.³⁾ Door open adds up to 15 cm.⁴⁾ Empty freezer with shelves fitted, upright freezers only, pull down from 20 – 22 °C ambient conditions.⁵⁾ Empty freezer with shelves fitted, upright freezers only, set point -80 °C, 20 – 22 °C ambient conditions.

Model	CryoCube® FC660	Innova® C585
Page(s)	264/271	264/271
Insulation	Polyurethane foam	Vacuum insulation paneling / polyurethane foam
Wall Thickness	Type A	Type B
Capacity	660 L	585 L
No. of internal doors		
No. of compartments	N/A	N/A
Max. racks per freezer	40	32
Box capacity per rack		
5 cm (2 in) tall boxes	13	14
7.5 cm (3 in) tall boxes	9	9
12.5 cm (5 in) tall boxes	5	5
Box capacity per freezer		
5 cm (2 in) tall boxes	520	448
7.5 cm (3 in) tall boxes	360	288
10 cm (4 in) tall boxes	280	224
Sample capacity		
5 cm (2 in) tall boxes	52,000	44,800
Dimensions (W x D x H) ¹⁾²⁾³⁾	207 x 84 x 107.5 cm	169 x 82.5 x 109.2 cm
Dimensions internal (W x D x H)	147 x 59 x 76 cm	120 x 62.5 x 78 cm
Weight w/o accessories	280 kg	240 kg
Shipping weight	328 kg	310 kg
Pull-down time to -85 °C/-80 °C ⁴⁾	4,4 h	4,5 h
Noise level	58.9 dBA	56 dBA
Heat output	440 W	567 W
Power supply	230 V, 50 Hz	230 V, 50 Hz
Power consumption Eppendorf freezer ⁵⁾	10.6 kWh/day	13.6 kWh/day
Max. power consumption per 5 cm box ⁵⁾	20.4 Wh/day	30.3 Wh/day
Interior	Stainless steel	Stainless steel
Password protection of setpoints	yes	yes
Extras	30 mm thick inner lids for temp uniformity	30 mm thick inner lids for temp uniformity
Cooling liquid	R404A/R508B	R404A/R508B

For more information go to www.eppendorf.com

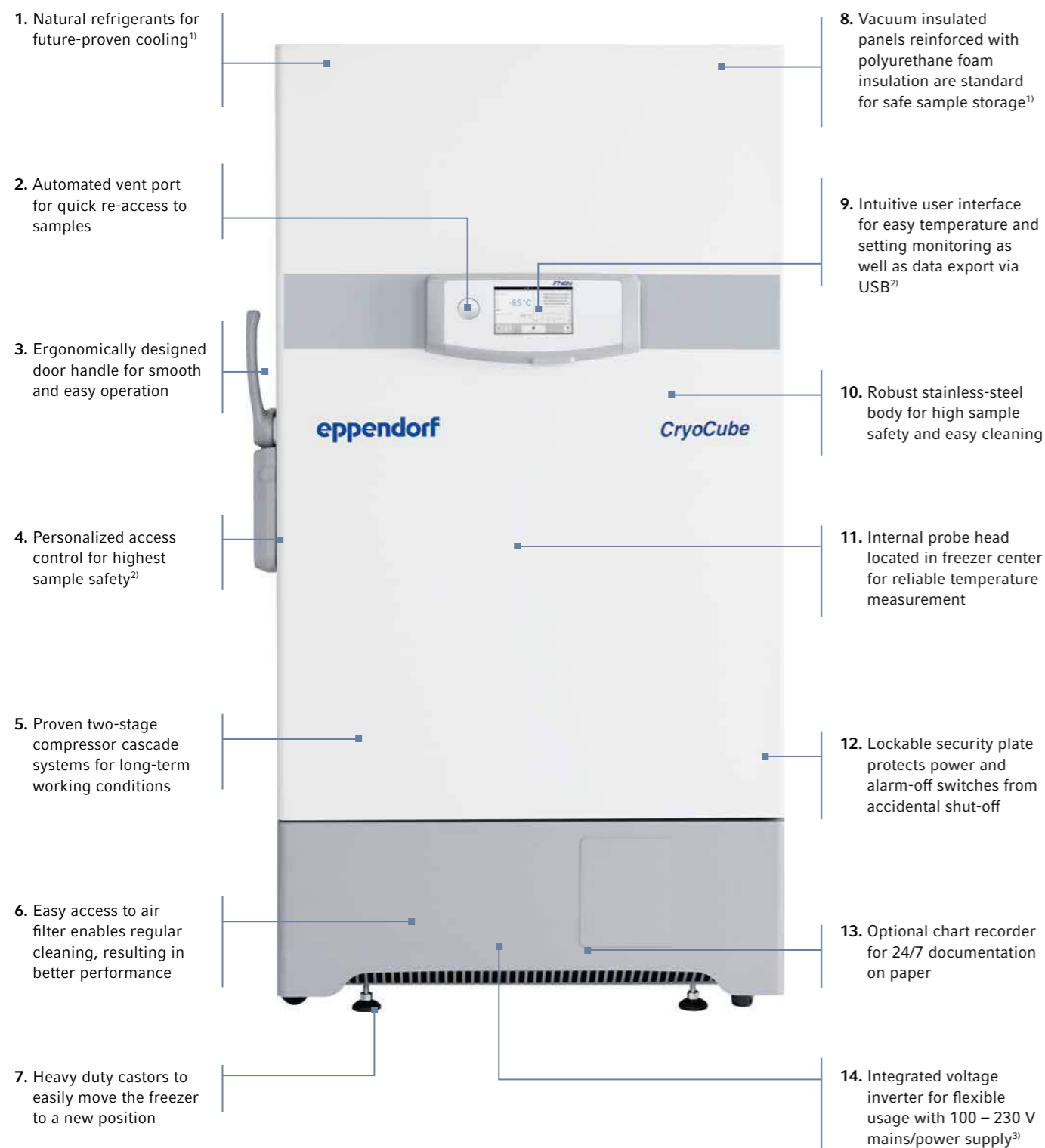
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Eppendorf High-Efficiency ULT Upright Freezers



¹⁾ Selected models,
²⁾ "i" models of CryoCube F740 series,
³⁾ CryoCube F740 series

For more information go to www.eppendorf.com



VisioNize

Complete Control

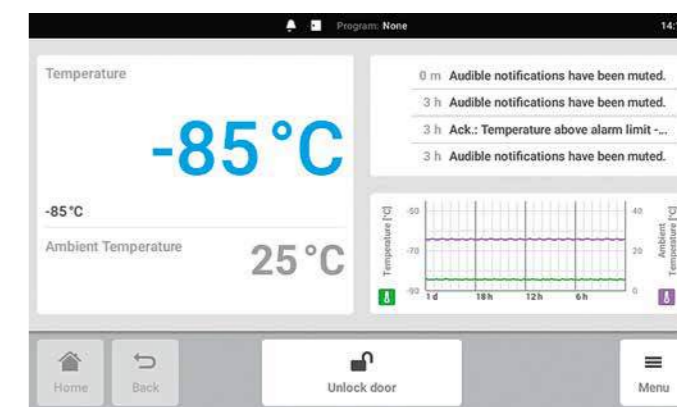
Worried about the safety of your high value samples within your ULT freezer? With the Eppendorf ULT monitoring concept available on CryoCube F740 'i' series models, you can check the freezer performance whenever you want. All temperature data and all events are stored in the freezer control unit.

The handling experience is based on our PhysioCare Concept® combined with extensive user test sessions.

- > On-board data storage means you are not dependent on auxiliary and secondary devices to keep track of freezer data
- > Easily transfer your information to your computer or colleague using the export feature and front-mounted USB port
- > Quickly and easily adjust your setpoints with a single finger, even while wearing gloves
- > Conveniently see all your important settings and data on a single screen with customizable views
- > Event tracking for controlled environments
- > Easily exchange data for documentation by USB
- > Electronic lock system for controlled access and higher sample safety

Adaptable alarm settings for individual needs

- > VisioNize®-onboard devices: "i" versions
- > VisioNize box for other Eppendorf freezers



Easy Overview: Quickly review your important parameters on the home screen



- > **Ergonomic entry:** Comfortable door handle for easy opening (only CryoCubes)
- > **Controlled access:** Personalized access codes (only CryoCubes F740 "i" models), when necessary

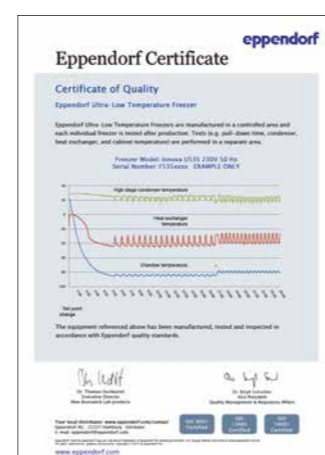
Eppendorf High-Efficiency ULT Upright Freezers



Confidence in Quality

Eppendorf has a long-standing history of innovation and quality, and our freezer manufacturer process is no exception. Each Eppendorf ULT freezer is thoroughly inspected to meet our rigorous quality guidelines. The final inspection takes more than 24h and is based on manual and visual checks. This process is documented by an individual certificate, completed with serial number, provided as standard for your documentation.

As your expert partner for reliable, high-quality, and efficient storage solutions, Eppendorf finely engineers each freezer with care, using only the highest quality materials to ensure a long lasting freezer that offers peace of mind and security. Eppendorf freezers are designed to offer a longterm value over the lifetime of its ownership. You can entrust your valuable samples to our ULT freezers, and you can trust your investment in all finely-engineered Eppendorf instruments.



Remember 2008?

As being one of the very first movers for green gases at $-86\text{ }^{\circ}\text{C}$, Eppendorf has now more than 10 years of experience in R&D, production, logistics, and service in the field.



Environmentally friendly and energy efficient

Ultra-low temperature freezers traditionally consume a large amount of energy, as they maintain extremely low temperatures 24/7. With today's high energy costs and focus on the environment, energy conservation has become even more important in the lab. Eco-friendly Eppendorf ULT freezers are designed to help you save energy without compromising sample security.

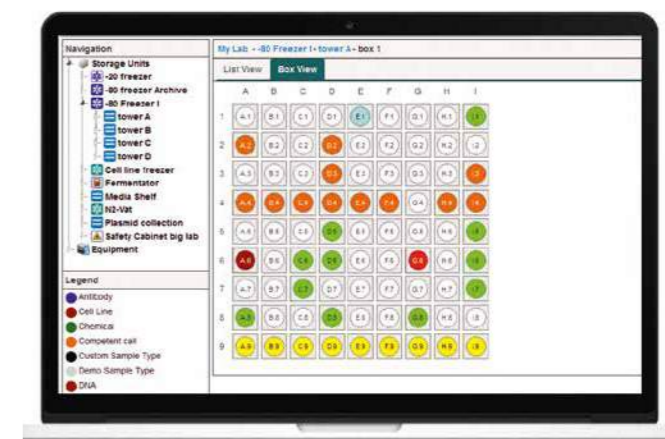
- > A highly efficient compressor control system reduces cycling times to lower energy consumption and increase freezer longevity
- > Low noise levels and heat output to benefit your work environment
- > High-quality insulation materials and gaskets provide ultimate temperature control and optimized energy efficiency
- > Environmentally safe, HCFC-free and CFC-free refrigerants minimize greenhouse gases ("h" versions)
- > Biodegradable and commercially-available, high-performance, synthetic compressor lubricants prevent "oil-logging"
- > A single, quiet condenser fan reduces energy consumption; compared to many freezers that require two fans
- > Built with 95 – 98 % recyclable materials (by weight)
- > Meets WEEE directive
- > ENERGY STAR® partner

For more information go to www.eppendorf.com

Keep track of your samples with eLABInventory

eLABInventory is a sample management software provided by Bio-ltech, an Eppendorf daughter company. The tool organizes any item in the laboratory inventory, including specimens, materials, samples, and chemicals. Store samples in self-configured storage units such as freezers or refrigerators. eLABInventory is flexible and fully configurable to work in your laboratory.

- > Fully configurable to fit any type of laboratory
- > Stores any type of samples, specimens, and materials for high flexibility
- > Works on any device, delivered via the cloud or on-premise
- > Intuitive user interface includes visual inventory browsing for easy handling
- > Barcode labeling and scanning for high-throughput
- > Import/export to other formats for data flexibility
- > Track and tracing for audit trail
- > GLP compliant (21 CFR part 11) for documentation security



For more information, visit www.eLabInventory.com

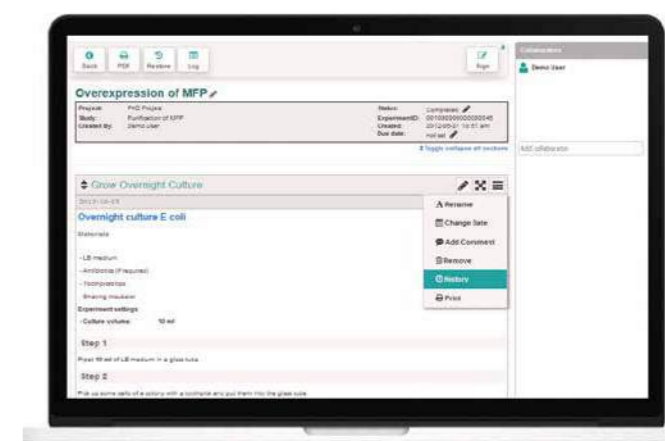
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Eppendorf ULT Freezers



Less force needed? New door handle design based on Eppendorf PhysioCare® Concept to enable easy access (limited to upright Eppendorf CryoCubes)



If you are in a hurry: Automatic vent port enables fast sample access (CryoCube F570 series and CryoCube F740 series only)



Keep it tight: Flat and flexible outer door seal for optimal insulation



External probes or back ups: Two access ports in the upper corner
Easy cleaning: Stainless steel inner chamber



Double safety: Gaskets at outer door as well as inner door (CryoCube F740 series + Innova series)



Easy access to filter: Just flip down the cover of CryoCube F740 series
Silence: Filter position reduces noise level of CryoCube F740 series



Freedom to store: Stainless steel racks for freezer boxes of up to 136 x 136 mm footprint



You prefer privacy: The Innova U101 – a real ULT in one small package below the bench



Comfortable storage: 30 mm thick inner lids, constructed from molded insulation, help maintain temperature stability



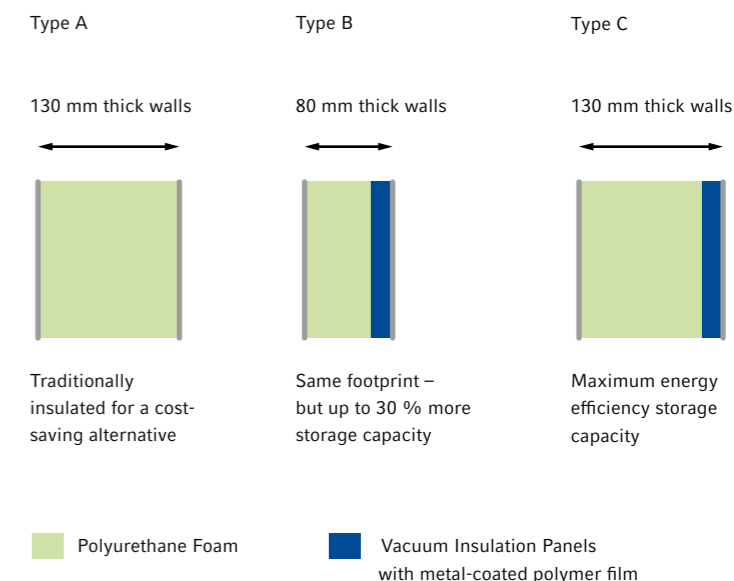
Easy cleaning: Inner doors can easily be removed for good access to compartments during cleaning of freezer



Decide what you need: 3-compartment/ shelves or 5-compartment/ shelves (CryoCube F740 series only)



Get the maximum in: 3-compartment set-up with MAX racks use every empty spot (CryoCube F740 series only)





Eppendorf ULT Upright Freezers

Ordering information	
Description	Order no.
New CryoCube® F740h, with LED interface, green cooling liquids, and air-cooling, 740 L, left, 3 shelves, 230 V/50 Hz	F740340011
New CryoCube® F740h, with LED interface, green cooling liquids, and air-cooling, 740 L, right, 3 shelves, 230 V/50 Hz	F740340021
New CryoCube® F740h, with LED interface, green cooling liquids, and air-cooling, 740 L, left, 5 shelves, 230 V/50 Hz	F740340031
New CryoCube® F740h, with LED interface, green cooling liquids, and air-cooling, 740 L, right, 5 shelves, 230 V/50 Hz	F740340041
CryoCube® F740hi, with touchscreen interface, green cooling liquids, and air-cooling, 740 L, left, 3 shelves, 230 V/50 Hz	F740320011
CryoCube® F740hi, with touchscreen interface, green cooling liquids, and air-cooling, 740 L, right, 3 shelves, 230 V/50 Hz	F740320021
CryoCube® F740hi, with touchscreen interface, green cooling liquids, and air-cooling, 740 L, left, 5 shelves, 230 V/50 Hz	F740320031
CryoCube® F740hi, with touchscreen interface, green cooling liquids, and air-cooling, 740 L, right, 5 shelves, 230 V/50 Hz	F740320041
CryoCube® F740hiw, with touchscreen interface, green cooling liquids, and water-cooling, 740 L, left, 3 shelves, 230 V/50 Hz	F740320111
CryoCube® F740hiw, with touchscreen interface, green cooling liquids, and water-cooling, 740 L, left, 5 shelves, 230 V/50 Hz	F740320131
CryoCube® F570h, 570 L, with LED interface, green cooling liquids, and air-cooling, 5 shelves, 230 V/50 Hz	F570320001
CryoCube® F570hw, 570 L, with LED interface, green cooling liquids, and water-cooling, 5 shelves, 230 V/50 Hz	F570320101
CryoCube® F570, 570 L, with LED interface, classic cooling liquids, and air-cooling, 5 shelves, 230 V/50 Hz	F570300001
CO ₂ back-up system, 230 V/50 Hz, Innova®, Green “G”, and CryoCube® 740 series, (“narrow”)	U9043-0004
LN ₂ back-up system, 230 V/50 Hz, Innova®, Green “G”, and CryoCube® 740 series, (“narrow”)	U9044-0004
CO ₂ back-up system, 230 V/50 Hz, CryoCube® F570 series, CryoCube® FC660 series, Premium, and HEF®	U9043-0008
LN ₂ back-up system, 230 V/50 Hz, CryoCube® F570 series, CryoCube® FC660 series, Premium, and HEF®	U9044-0008

✂ Ordering information for other voltage options begins on page 418

➤ For racks please check page 274

ℹ For more information go to www.eppendorf.com



Eppendorf ULT Upright Freezers

Ordering information	
Description	Order no.
Innova® U535, 535 L, with LED interface, classic cooling liquids, and air-cooling, 3 shelves, 230 V/50 Hz	U9430-0001
HEF® U410, 410 L, with LED interface, green cooling liquids, and air-cooling, 5 shelves, 230 V/50 Hz	U9260-0008
Premium U410, 410 L, with LED interface, classic cooling liquids, and air-cooling, 5 shelves, 230 V/50 Hz	U9260-0001
Innova® U360, 360 L, with LED interface, classic cooling liquids, and air-cooling, 3 shelves, 230 V/50 Hz	U9425-0001
Innova® U101, 101 L, with LED interface, classic cooling liquids, and air-cooling, 2 shelves, 230 V/50 Hz	U9420-0001
CO ₂ back-up system, 230 V/50 Hz, Innova®, Green “G”, and CryoCube® 740 series, (“narrow”)	U9043-0004
LN ₂ back-up system, 230 V/50 Hz, Innova®, Green “G”, and CryoCube® 740 series, (“narrow”)	U9044-0004
CO ₂ back-up system, 230 V/50 Hz, CryoCube® F570 series, CryoCube® FC660 series, Premium, and HEF®	U9043-0008
LN ₂ back-up system, 230 V/50 Hz, CryoCube® F570 series, CryoCube® FC660 series, Premium, and HEF®	U9044-0008
Extra shelf for Innova® U101, U101	P0625-0180

✂ Ordering information for other voltage options begins on page 418

➤ For racks please check page 274

Eppendorf ULT Chest Freezers

Ordering information	
Description	Order no.
Innova® C760, 760 L, with LED interface, classic cooling liquids, and air-cooling, 230 V/50 Hz	U9410-0001
CryoCube® FC660, 660 L, with LED interface, classic cooling liquids, and air-cooling, 230 V/50 Hz	F660300001
CryoCube® FC660h, 660 L, with LED interface, green cooling liquids, and air-cooling, 230 V/50 Hz	F660320001
Innova® C585, 585 L, with LED interface, classic cooling liquids, and air-cooling, 230 V/50 Hz	U9400-0001
CO ₂ back-up system, 230 V/50 Hz, Innova®, Green “G”, and CryoCube® 740 series, (“narrow”)	U9043-0004
LN ₂ back-up system, 230 V/50 Hz, Innova®, Green “G”, and CryoCube® 740 series, (“narrow”)	U9044-0004
CO ₂ back-up system, 230 V/50 Hz, CryoCube® F570 series, CryoCube® FC660 series, Premium, and HEF®	U9043-0008
LN ₂ back-up system, 230 V/50 Hz, CryoCube® F570 series, CryoCube® FC660 series, Premium, and HEF®	U9044-0008

✂ Ordering information for other voltage options begins on page 418

➤ For racks please check page 274

Freezer Accessories

**eLABInventory, eLABJournal software**

Please check www.eppendorf.com regarding the specific software licence models and related order numbers for eLABInventory and eLABJournal software.

**VisioNize® box**

- > The easy-to-install hardware hub
- > Upgrade Eppendorf devices already installed and connect them to VisioNize
- > Data decoding and translation enable collection and management of device data in VisioNize core
- > Manage further devices in your existing workflow

Ordering information

Description	Order no.
VisioNize® box, with mains/power adapter	1006 000.009

**CO₂ and LN₂ Back-up System**

- > Equipped with a battery back-up to temporarily protect the contents of your freezer in case of power failure
- > Available in either liquid CO₂ and LN₂. Liquid CO₂ can maintain temperatures between -50 °C and -70 °C, where as LN₂ can go down to -85 °C
- > Both systems can be factory installed with your freezer order or retrofitted on location
- > Info: CO₂ and LN₂ are not interchangeable systems

**Chart Recorder**

- > Includes chart recorder, RTD probe, keys, chart recorder paper, and chart recorder pens
- > Will continuously monitor and record freezer temperature for data documentation
- > Front mounted to your freezer for easy access and can be fitted to all freezer models
- > Type I: Battery powered, will provide a minimum of eighteen months of operation
- > Type II: ULT freezer powered with backup battery (CryoCube F740 series)
- > Can be factory installed with your freezer order or retrofitted on location
- > Selectable temperature range (0 to -50 °C and -50 to -100 °C) and rotation speed
- > User configurable built in high and low temperature alarms

CO₂ and LN₂ Back-up System for Innova® U101, U360, U535, U725/ -G, C585, C760, CryoCube® F740 series

Description	Order no.
Eppendorf CO ₂ and LN ₂ Back-up System, 100 V/50/60 Hz	F652999005
CO ₂ back-up system, 120 – 220 V/60 Hz, Innova® and Green "G", ("narrow")	U9043-0002
Eppendorf CO ₂ and LN ₂ Back-up System, 100 V/50 – 60 Hz	F652999006
LN ₂ back-up system, 120 – 220 V/60 Hz, Innova® and Green "G", ("narrow")	U9044-0002
CO ₂ back-up system, 230 V/50 Hz, Innova®, Green "G", and CryoCube® 740 series, ("narrow")	U9043-0004
LN ₂ back-up system, 230 V/50 Hz, Innova®, Green "G", and CryoCube® 740 series, ("narrow")	U9044-0004

CO₂ and LN₂ Back-up System for CryoCube® F570 series, FC660 series, Premium U410, HEF® U410

Description	Order no.
CO ₂ back-up system, 120 – 220 V/60 Hz, CryoCube® F570 series, CryoCube® FC660 series, Premium, and HEF®	U9043-0006
LN ₂ back-up system, 120 – 220 V/60 Hz, CryoCube® F570 series, CryoCube® FC660 series, Premium, and HEF®	U9044-0006
CO ₂ back-up system, 230 V/50 Hz, CryoCube® F570 series, CryoCube® FC660 series, Premium, and HEF®	U9043-0008
LN ₂ back-up system, 230 V/50 Hz, CryoCube® F570 series, CryoCube® FC660 series, Premium, and HEF®	U9044-0008

Ordering information

Description	Order no.
Chart Recorder (Type I)	P0625-2100
Chart Recorder (Type II) (100 – 120V)	F652999001
Chart Recorder (Type II) (208 – 230V)	F652999002
Chart Recorder pens (Type I), 3 pk	K0660-0051
Chart Recorder pens (Type II), 3 pcs.	F652999004
Chart Recorder paper, 0 to -50 °C	P0625-2111
Chart Recorder paper, -50 to -100 °C	P0625-2110
Chart Recorder paper, 0 to -100 °C, 60 pcs.	F652999003

For more information go to www.eppendorf.com

Freezer Racks

Drawer or side access?

When using racks with drawers, only the drawer with the freezer boxes of interest is pulled out. All other boxes stay in the cold inner area of the ULT freezer. Eppendorf drawers are optimized for smooth movement at -80°C for ergonomic handling. When using side access racks, most of the storage boxes have to be pulled out of the cold inner area of the ULT freezer to access the samples. Racks for chest freezers can be equipped with locking rods to secure freezer boxes when pulling out the rack tower.



Stainless steel or aluminum?

By standard, there are two types of rack materials available.

Stainless steel:

- > Stable/robust for longevity and higher capacity
- > For freezer boxes up to 136 mm x 136 mm for high flexibility regarding boxes
- > Special design for optimized cooling conditions and improved sample safety

Aluminum:

- > For freezer boxes up to 133 mm x 133 mm
- > Non-corrosive anodized aluminum for long-term use

Depth of racks

There are two systems used in laboratories - the standard 4-boxes deep racks and 5-boxes deep racks. Why is this of any interest? In case of an emergency, you want to rescue your valuable samples. The easiest way is to take out all racks (with the samples/ boxes included) and store those racks in some backup freezer. To be compatible with most common ULT freezer suppliers, Eppendorf ULT freezers are designed for 4-boxes deep racks.

3-compartment or 5-compartment?

The ULT freezer with 3 compartments/ shelves (e.g. Innova U535) has higher compartments compared to the 5-compartment ULT freezer (e.g. CryoCube F570 series). Racks of a 5-compartment freezer do fit into a 3-compartment freezer but not vice versa.

To get the maximum capacity out of your ULT freezer, the CryoCube F740 series (3-compartment) can be equipped with „3-compartment MAX“ racks. These racks only fit into the CryoCube F740 series 3-compartment instruments.



Rack without locking rod for Eppendorf chest freezer



Rack with locking rod for Eppendorf chest freezer



Rack for Eppendorf ULT freezer



Side access rack for Eppendorf ULT freezer

Stainless steel racks

Ordering information

Description	Order no.
Freezer Rack: Innova® U101	
2 in or 53 mm, drawer, stainless steel	6001 062.210
2.5 in or 64 mm, drawer, stainless steel	6001 062.910
3 in or 76 mm, drawer, stainless steel	6001 062.310
4 in or 102 mm, drawer, stainless steel	6001 062.410
5 in or 127 mm, drawer, stainless steel	6001 062.510
2 in or 53 mm, side access, stainless steel	6001 061.210
2.5 in or 64 mm, side access, stainless steel	6001 061.910
3 in or 76 mm, side access, stainless steel	6001 061.310
4 in or 102 mm, side access, stainless steel	6001 061.410
5 in or 127 mm, side access, stainless steel	6001 061.510
Freezer Rack: Innova® U360, U535, U725, U725-G, CryoCube® F740 series (3-compartment, Standard)	
2 in or 53 mm, drawer, stainless steel	6001 012.210
2.5 in or 64 mm, drawer, stainless steel	6001 012.910
3 in or 76 mm, drawer, stainless steel	6001 012.310
4 in or 102 mm, drawer, stainless steel	6001 012.410
5 in or 127 mm, drawer, stainless steel	6001 012.510
2 in or 53 mm, side access, stainless steel	6001 011.210
2.5 in or 64 mm, side access, stainless steel	6001 011.910
3 in or 76 mm, side access, stainless steel	6001 011.310
4 in or 102 mm, side access, stainless steel	6001 011.410
5 in or 127 mm, side access, stainless steel	6001 011.510
DWP (53 mm), side access, stainless steel	6001 011.110

For more information go to www.eppendorf.com

Freezer Racks

Please check the rack brochure for easy rack selection or use the rack configuration tool at <https://econfig.bio-itech.de>



Ordering information

Description	Order no.
Freezer Rack: Premium U410, U700, HEF® U410, CryoCube® F570 series, CryoCube® F740 series (5-compartment, compartment 1-4)	
2 in or 53 mm, drawer, stainless steel	6001 022.210
2.5 in or 64 mm, drawer, stainless steel	6001 022.910
3 in or 76 mm, drawer, stainless steel	6001 022.310
4 in or 102 mm, drawer, stainless steel	6001 022.410
2 in or 53 mm, side access, stainless steel	6001 021.210
2.5 in or 64 mm, side access, stainless steel	6001 021.910
3 in or 76 mm, side access, stainless steel	6001 021.310
4 in or 102 mm, side access, stainless steel	6001 021.410
DWP (53 mm), side access, stainless steel	6001 021.110

Ordering information

Description	Order no.
Freezer Rack: CryoCube® F740 series (5-compartment, MAX for 5th comp.)	
2 in or 53 mm, side access, stainless steel	6001 081.210
2.5 in or 64 mm, side access, stainless steel	6001 081.910
3 in or 76 mm, side access, stainless steel	6001 081.310
4 in or 102 mm, side access, stainless steel	6001 081.410
5 in or 127 mm, side access, stainless steel	6001 081.510
DWP (53 mm), side access, stainless steel	6001 081.110
2 in or 53 mm, drawer, stainless steel	6001 082.210
2.5 in or 64 mm, drawer, stainless steel	6001 082.910
3 in or 76 mm, drawer, stainless steel	6001 082.310
4 in or 102 mm, drawer, stainless steel	6001 082.410
5 in or 127 mm, drawer, stainless steel	6001 082.510

Freezer Rack: CryoCube® F740 series (5-compartment, Standard compartment 1 – 4)

Ordering information

Description	Order no.
Freezer Rack: CryoCube® F740 series (3-compartment, MAX)	
2 in or 53 mm, side access, stainless steel	6001 071.210
2.5 in or 64 mm, side access, stainless steel	6001 071.910
3 in or 76 mm, side access, stainless steel	6001 071.310
4 in or 102 mm, side access, stainless steel	6001 071.410
5 in or 127 mm, side access, stainless steel	6001 071.510
DWP (53 mm), side access, stainless steel	6001 071.110
2 in or 53 mm, drawer, stainless steel	6001 072.210
2.5 in or 64 mm, drawer, stainless steel	6001 072.910
3 in or 76 mm, drawer, stainless steel	6001 072.310
4 in or 102 mm, drawer, stainless steel	6001 072.410
5 in or 127 mm, drawer, stainless steel	6001 072.510

Freezer Rack: CryoCube® F740 series (3-compartment, Standard)

➤ see page 275 at Innova table

Freezer Rack: Innova® C580, C760

Ordering information

Description	Order no.
2 in or 53 mm, side access, stainless steel	6001 040.210
2.5 in or 64 mm, side access, stainless steel	6001 000.910
3 in or 76 mm, side access, stainless steel	6001 000.310
4 in or 102 mm, side access, stainless steel	6001 000.410
5 in or 127 mm, side access, stainless steel	6001 000.510
DWP (53 mm), side access, stainless steel	6001 040.110
MTP, side access, stainless steel	6001 040.010
locking rod, 2 in or 53 mm, side access, stainless steel	6001 040.211
locking rod, 2.5 in or 64 mm, side access, stainless steel	6001 000.911
locking rod, 3 in or 76 mm, side access, stainless steel	6001 000.311
locking rod, 4 in or 102 mm, side access, stainless steel	6001 000.411
locking rod, DWP (53 mm), side access, stainless steel	6001 040.111
locking rod, MTP, side access, stainless steel	6001 040.011

Freezer Rack: CryoCube® FC660 series

Ordering information

Description	Order no.
2 in or 53 mm, side access, stainless steel	6001 050.210
2.5 in or 64 mm, side access, stainless steel	6001 000.910
3 in or 76 mm, side access, stainless steel	6001 000.310
4 in or 102 mm, side access, stainless steel	6001 000.410
5 in or 127 mm, side access, stainless steel	6001 000.510
DWP (53 mm), side access, stainless steel	6001 050.110
MTP, side access, stainless steel	6001 050.010
locking rod, 2 in or 53 mm, side access, stainless steel	6001 050.211
locking rod, 2.5 in or 64 mm, side access, stainless steel	6001 000.911
locking rod, 3 in or 76 mm, side access, stainless steel	6001 000.311
locking rod, 4 in or 102 mm, side access, stainless steel	6001 000.411
locking rod, DWP (53 mm), side access, stainless steel	6001 050.111
locking rod, MTP, side access, stainless steel	6001 050.011

Aluminum racks

Ordering information

Description	Order no.
Upright freezer rack: Innova® U101	
10 boxes per rack, 2 in or 53 mm, drawer, aluminum	K0641-3003
6 boxes per rack, 3 in or 76 mm, drawer, aluminum	K0641-3004
4 boxes per rack, 4 in or 102 mm, drawer, aluminum	K0641-3005
Chest freezer rack: Innova® C585, C760, CryoCube® FC660 series	
13 boxes per rack, 2 in or 53 mm, side access, aluminum	K0641-1690
9 boxes per rack, 3 in or 76 mm, side access, aluminum	K0641-1700
6 boxes per rack, 4 in or 102 mm, side access, aluminum	K0641-1750
Upright freezer rack: Innova® U360, U535, U725, U725-G, CryoCube® F740 series (3-compartment)	
28 boxes per rack, 2 in or 53 mm, drawer, aluminum	K0641-3000
20 boxes per rack, 3 in or 76 mm, drawer, aluminum	K0641-3001
12 boxes per rack, 4 in or 102 mm, drawer, aluminum	K0641-3002
Upright freezer rack: U410, HEF® U410, U700, CryoCube® F570 series, CryoCube® F740 series (5-compartment)	
16 boxes per rack, 2 in or 53 mm, drawer, aluminum	K0641-1900
12 boxes per rack, 3 in or 76 mm, drawer, aluminum	K0641-1890
8 boxes per rack, 4 in or 102 mm, drawer, aluminum	K0641-1880

Eppendorf Storage Boxes



In Need of Housekeeping?

The Eppendorf Storage Boxes are a complete system solution for sample storage. The comprehensive modular concept allows you to select the optimal box combinations for your individual storage demands. The outer footprint dimensions (133 mm) are compatible with common freezer rack systems. The different inner grids provide a perfect fit for all typical tube formats: cryogenic tubes, microcentrifuge tubes, conical tubes (5 mL, 15 mL, and 50 mL), and other laboratory vessels. This space-saving approach, together with the application benefits, helps to optimize your storage and archiving of samples.

1. Transparent lid for easy and fast sample inspection
2. 5 additional inscription labels on the lid enable user-specific labeling
3. Optimal use of freezer space through flexible combination of the different formats
4. Autoclavable (121 °C, 20 min) for sterilization
5. 15 and 50 mL conical tube boxes with ventilation slots for an evenly distributed freezing process. Prevent tube damage or breakage, which is frequently observed when freezing long tube formats in closed boxes

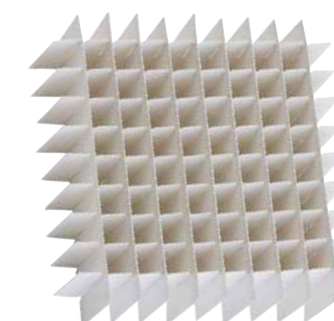
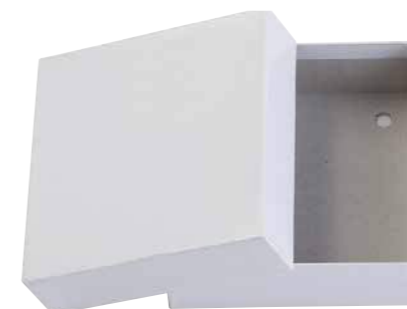
1. Laser-labeled, high-contrast, permanent alphanumeric markings of each location for easy sample reference and minimized risk of sample mix-up
2. Made of polypropylene (PP) for high stability in freezing applications and a smooth opening and closing
3. Dishwasher safe for easy cleaning



For more information go to www.eppendorf.com

Ordering information

Description	Order no.
Storage Box 10 × 10 , for 100 cryogenic tubes w. int. thread, 3 pcs., height 53 mm, 2 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric code	0030 140.508
Storage Box 9 × 9 , for 81 screw cap (cryog.) tubes 1 – 2 mL, 3 pcs., height 53 mm, 2 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric code	0030 140.516
Storage Box 9 × 9 , for 81 screw cap (cryog.) tubes 3 mL, 2 pcs., height 76 mm, 3 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric code	0030 140.540
Storage Box 9 × 9 , for 81 screw cap (cryog.) tubes 4 – 5 mL, 2 pcs., height 102 mm, 4 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric code	0030 140.567
Storage Box 8 × 8 , for 64 tubes 1 – 2 mL, 3 pcs., height 53 mm, 2 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric code	0030 140.524
Storage Box 5 × 5 , for 25 tubes 5 mL, 4 pcs., height 64 mm, 2.5 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric code	0030 140.532
Storage Box 5 × 5 , for 25 tubes 5 mL screw cap, 2 pcs., height 76 mm, 3 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric code	0030 140.613
Storage Box 5 × 5 , for 25 tubes 15 mL, 2 pcs., height 127 mm, 5 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric code	0030 140.583
Storage Box 3 × 3 , for 9 tubes 50 mL and 4 tubes 15 mL, 2 pcs., height 127 mm, 5 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric code	0030 140.591



Freezer Cardboard Storage Boxes

- > White cardboard box with water resistant coating, designed to withstand ultra-low temperature
- > Available in 53 mm (2 in), 76 mm (3 in), and 102 mm (4 in) tall boxes
- > Compatible with box dividers 7 × 7 to 10 × 10 (dividers sold separately)
- > Dimensions: 133 mm x 133 mm

Freezer Boxes Dividers

- > Available in 7 × 7, 8 × 8, 9 × 9 and 10 × 10 configurations
- > Compatible with freezer cardboard storage boxes (sold separately)

Ordering information

Description	Order no.
Freezer Boxes Dividers	
7 × 7, 17.4 mm max. tube diameter, holds 49 tubes	D49
8 × 8, 15 mm max. tube diameter, holds 64 tubes	D64
9 × 9, 13 mm max. tube diameter, holds 81 tubes	D81
10 × 10, 11.8 mm max. tube diameter, holds 100 tubes	D100
Freezer Cardboard Storage Boxes, white	
53 mm tall	B50-SQ
76 mm tall	B75-SQ
102 mm tall	B95-SQ