

Rotor Design at Its Best

Eppendorf's 2nd generation of swing-bucket and fixed-angle rotors elevate your centrifuge performance to a new level. Enjoy unique product features that improve handling and performance.



Swing buckets and 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 2nd rotor generation of both swing-bucket and fixed-angle rotors has been designed with a particularly long lifetime in mind.

Eppendorf QuickLock® caps for one-hand operation

- > Significantly improved handling, easy operation with one hand
- > 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

Fixed-angle rotors

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 $\frac{1}{4}$ 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.

Additional rotor 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



Cross section of Rotor FA-45-6-30

(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.

Exceptional Versatility

Overview of the main rotors

Rotor image



Rotor name	S-4-104 (4 x 750 mL) aerosol-tight QuickLock caps	A-4-81 (4 x 500 mL) aerosol-tight	A-4-62 (4 x 250 mL) aerosol-tight	S-4-72 (4 x 250 mL)	A-4-44 (4 x 100 mL) aerosol-tight
5804/ 5804 R				x	x
5810/ 5810 R	x	x	x	x	x
Description	High-capacity swing-bucket rotor	Medium to high capacity swing-bucket rotor	Economic swing-bucket rotor for medium capacity	Economic swing-bucket rotor for medium capacity	High-speed swing-bucket rotor
Aerosol-tightness	yes	yes	yes	no	yes
Max. speed (RCF)	3,214	3,220	3,220	3,234	4,500
Max. speed (rpm)	3,900	4,000	4,000	4,200	5,000
Volume range	0.2–750 mL MTP/DWP	0.2–500 mL, MTP/DWP	0.2–250 mL, MTP/DWP	0.2–250 mL	0.2–100 mL
Eppendorf Tubes® 5.0 mL and 15 mL conical	56	48	36	32	16
50 mL conical	28	20/28*1	16	16	4/8*1
13 mm blood tube	92	100	60	56	36
16 mm blood tube	80	64	48	52	28
1.5/2.0 mL micro tube	200	96	64	104	48
MTP	16	16	12		
DWP	4	4	4		

*1 Maximum capacity with dedicated 50 mL bucket.

epServices
for premium performance

Centrifuge Performance Plans

An annual inspection and maintenance of centrifuges and rotors by an Eppendorf certified service technician is highly recommended to ensure a safe working environment.

■ ESSENTIAL CHECK

> Check of all fundamental functions of the product


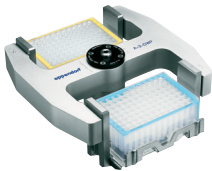



■ ADVANCED MAINTENANCE

> Preventive maintenance service to meet manufacturer specifications

■ PREMIUM SERVICE

> Complete maintenance and repair service agreement solution for your peace of mind



				
A-2-DWP-AT (2 × 6 MTP) aerosol-tight	A-2-DWP (2 × 5 MTP)	F-34-6-38 (6 × 85 mL)	FA-45-6-30 (6 × 50 mL) aerosol-tight QuickLock lid	FA-45-48-11 (48 × 2 mL) aerosol-tight QuickLock lid
	x	x	x	x
x	x	x	x	x
Aerosol-tight deepwell plate rotor for safe centrifugation of hazardous samples.	Economic deepwell plate rotor	High-speed rotor suitable for molecular biology applications in tubes up to 85 mL	Aerosol-tight high-speed rotor for safe centrifugation of hazardous samples	Aerosol-tight microcentrifuge tube rotor for safe centrifugation of hazardous samples
yes	no	no	yes	yes
3,486	2,250	18,500/15,500*2	20,130/16,639*2	19,083
4,500	3,700	12,000/11,000*2	12,100/11,000*2	13,000
MTP/DWP	MTP/DWP	0.2–85 mL	5–50 mL	0.2–2.0 mL
		6	6	
		6	6	
		18	6	
		12	6	
48	48	24		48
12	10			
4	4			

*2 Max. speed in Centrifuge 5810 R, lower speed applies to Centrifuge 5804/5804R/5810.

Certification Services

Our Installation Qualification (IQ) and Operational Qualification (OQ) services make sure that temperature accuracy, rotational speed verification and operating time meet manufacturer's specifications.

Over the years, all rotor structures will eventually suffer from fatigue due to stress of high numbers of cycles. If not maintained correctly, surface scratches can lead to microscopic and then to critical cracks. Qualified inspection will detect damages early in order to prevent further equipment failure. Our service includes cleaning, instructions for proper care, and visual examination of rotors and adapters

determining if the rotor is safe for further operation or needs to be replaced.

The Performance Plans feature

- > Manufacturer-specific test procedures
- > GLP supporting documentation

Value of service

- > Highest degree of security in your lab
- > Longer service life of the system



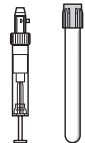
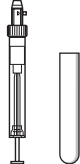
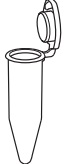
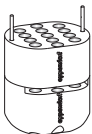
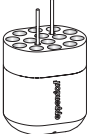

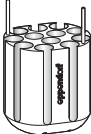
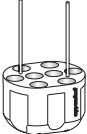
> Further information and local offers in your country: www.eppendorf.com/epServices

Rotor S-4-72



Product features





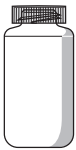

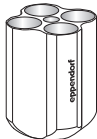
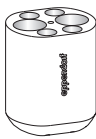

- > Medium capacity swing-bucket rotor with speed up to $3,234 \times g$ (4,200 rpm)
- > Broad range of adapters available to handle all common tube formats from 0.2 mL to 250 mL
- > Aerodynamic round bucket design for up to 48 % energy savings compared to Rotor A-4-62
- > Rotor life time: max. 60,000 cycles
- > Buckets and adapters are autoclavable

Tube					
Tube capacity (mL)	1.5/2.0	2.6–8 mL	5.5–12	9	Eppendorf Tubes® 5.0 mL
Max. tube diameter (Ø mm)	11	13	16	17.5	17
Max. vessel height (mm)* ¹	43	115	112	113	60
Max. vessel height for use with aerosol-tight lid* ¹ (mm)	–	–	–	–	–
Adapter options for Rotor S-4-72					
Capacity per bucket/rotor	26/104	14/56	13/52	12/48	8/32
Adapter bottom shape	flat	round	round	round	conical
Centrifugation radius (mm)	159	159	157	158	163
Max. RCF (g-force)	3,136	3,136	3,096	3,116	3,215
Order no. (set of 2)	5804 794 001	5804 789 008	5804 791 002	5804 792 009	5804 793 005

^{*1} Exceeding the maximum tube length may reduce the loading capacity of the rotor.
^{**} Please note that these conical flasks need to be used together with a conical form insert provided by the flask manufacturer.
^{††} Please note that a software upgrade may be necessary for older centrifuges when using Rotor S-4-72.
Please contact your local Eppendorf organization or dealer for further information

Ordering information

Description	Order no.
Rotor S-4-72*3, incl. 4 × 250 mL round buckets	5804 746 007


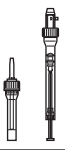
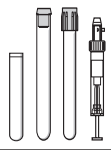
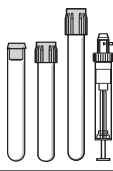
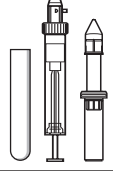


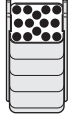
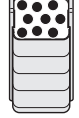
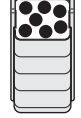
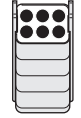
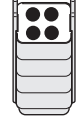
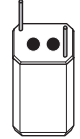
				
15 mL conical	50 mL conical	50 mL conical skirted	175-225 conical*2	250 mL flat
17	31	31		62
120	120	120		130
-	-	-		-
				
8/32	4/16	2/8	1/4	
conical	conical	flat	flat	
164	164	153	161	
3,234	3,234	3,017	3,175	
5804 783 000	5804 784 006	5804 785 002	5804 787 005	

Rotor A-4-44



Product features

- > High-speed swing-bucket rotor for applications up to $4,500 \times g$ (5,000 rpm)
- > Rotor A-4-44 accommodates tubes from 0.2 mL to 100 mL
- > Aerosol-tight caps*¹ for safe centrifugation of hazardous samples optionally available
- > Rotor life time: max. 34,000 cycles
- > Rotor, buckets, caps, and adapters are autoclavable

Tube							
							
Tube capacity (mL)	1.5/2	1.2-5	2.6-7	3-15	7-17	Eppendorf Tubes® 5.0 mL and 15 mL conical	
Max. tube diameter (Ø mm)	11	11	13	16	17.5	17	
Max. vessel height (mm)* ²	143	105	108	108	110	121	
Max. vessel height for use with aerosol-tight lid* ¹ (mm)	143	102	106	106	106	–	121
Adapter/bucket options for Rotor A-4-44							
							
Capacity per bucket/rotor	12/48	14/56	9/36	7/28	6/24	4/16	2/8
Adapter bottom shape	flat	flat with rubber mat	flat with rubber mat	flat with rubber mat	flat with rubber mat	conical	conical
Centrifugation radius (cm)	14.8	15.0	15.0	15.0	15.0	15.5	15.7
Max. RCF (g-force)	4,100	4,200	4,200	4,200	4,200	4,300	4,400
Order no. (set of 2)	5804 751 000	5804 750 004	5804 752 007	5804 753 003	5804 754 000	5804 755 006	5804 717 007

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

*²Exceeding 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.

*¹For high *g*-forces we recommend using centrifuge tubes of Duran® glass.

*²Reordering of 50 mL form inserts: 5804 728.009.










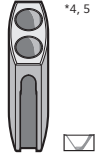





*³Max. load per bucket: 140 grams.

*⁴Set of 4.


*⁵Form inserts for 50 mL conical tubes skirted need to be ordered separately. Order no. 5804 737.008 (set of 8).

Ordering information

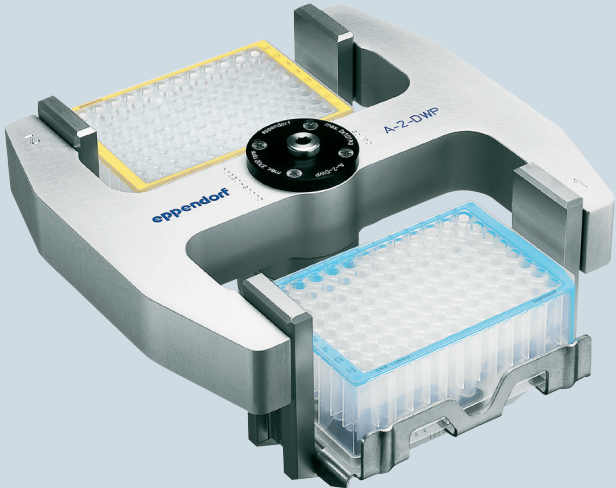
Description	Order no
Rotor A-4-44	
Rotor A-4-44, incl 4 × 100 mL rectangular buckets	5804 709 004
Rotor A-4-44, incl four 2 × 50 mL buckets	5804 719 000
Buckets for Rotor A-4-44	
Bucket, 100 mL rectangular, set of 4	5804 741 005
Bucket, 2 × 50 mL, set of 4	5804 706 005
Accessories	
Aerosol-tight cap*1 for 100 mL rectangular bucket, set of 2	5804 712 005

							
7-18	18-30	50 mL conical		50 mL conical, skirted	30-50	50-75	80-100
20	26	30		31	31	35	45
107	110	122		122	122	119	114
104	100	—	—	119	108	108	100
							
4/16	2/8	2/8	1/4	1/4	1/4	1/4	1/4
flat with rubber mat	flat with rubber mat	flat w/conical form insert*6	conical	conical	flat with rubber mat	flat with rubber mat	flat with rubber mat
15.0	15.0	16.1	15.5	15.7	15.0	15.0	15.0
4,200	4,200	4,500	4,300	4,400	4,200	4,200	4,200
5804 756 002	5804 757 009	5804 706 005*6	5804 758 005	5804 718 003	5804 759 001	5804 760 000	5804 761 006

Rotor A-2-DWP-AT and A-2-DWP



Aerosol-tight*¹ deepwell plate Rotor A-2-DWP-AT*²
> For use in Centrifuge 5810/5810 R only
> Max. speed: 3,486 × g (4,500 rpm)
> Rotor can handle up to
– 2 × 4 MTP
– 2 × 1 DWP
– 2 × 1 Filtration plate kits
> Maximum loading height of 67 mm (89 mm without lid)
> Rotor comes with aerosol-tight caps*¹ for safe centrifugation of hazardous samples
> Rotor and buckets are autoclavable



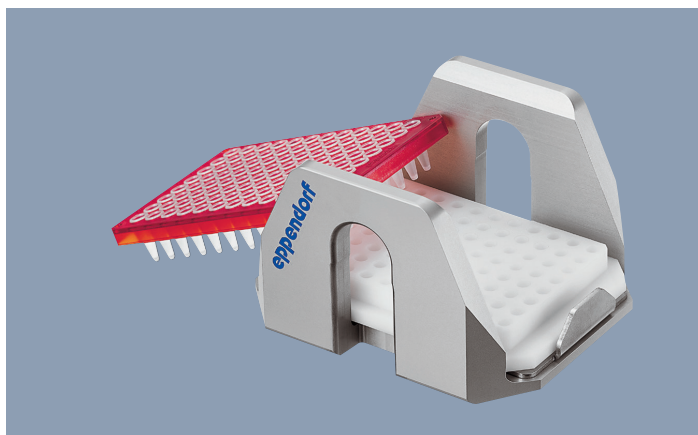
Deepwell plate Rotor A-2-DWP
> For use in Centrifuge 5804/5804 R and 5810/5810 R
> Max. speed: 2,250 × g (3,700 rpm)
> Rotor can handle up to
– 2 × 4 MTP
– 2 × 4 Cell culture plates
– 2 × 2 DWP
– 2 × 1 Filtration plate kits
> Maximum loading height of 89 mm
> Rotor and buckets are autoclavable

Ordering information	
Description	Order no
Aerosol-tight deepwell plate Rotor A-2-DWP-AT*²	
Rotor A-2-DWP-AT, incl buckets, aerosol-tight caps and plate carrier	5820 710 004
Deepwell plate Rotor A-2-DWP	
Rotor A-2-DWP, incl 2 deepwell plate buckets	5804 740 009

*¹ Aerosol-tightness is tested and certified by Public Health England, Porton Down, UK

*² 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



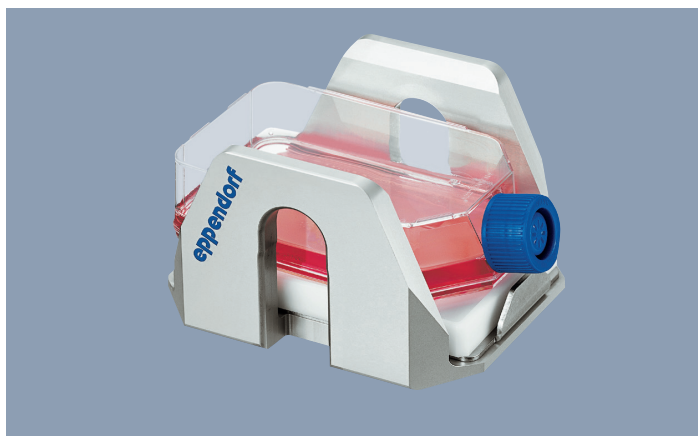
PCR plate adapter (PCR 96)

- > 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



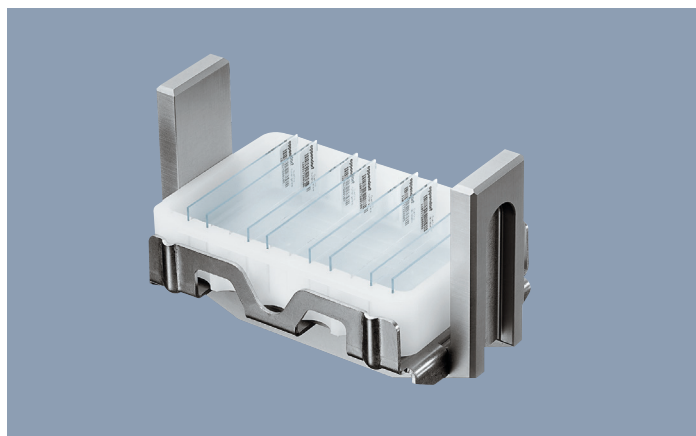
IsoRack adapter

- > IsoRack adapters to support 0.5 mL and 1.5/2 mL IsoRacks during centrifugation
- > Adapters can be used in Eppendorf plate rotors A-2-DWP, A-4-81-MTP/Flex and S-4-104



Cell culture flask adapter

- > Adapter to spin down cell cultures directly in a cell culture flask
- > Suitable for 25 cm² flasks
- > Adapters can be used with Rotor A-4-81-MTP/Flex



CombiSlide adapter

- > Designed for drying slides after hybridization experiments
- > Adapter can hold up to 12 regular glass slides
- > Removable inserts allow centrifugation of glass slides across and parallel to the direction of rotation
- > Adapters can be used in all Eppendorf plate rotors

Ordering information

Description	Order no.
Adapter PCR 96-well plate, set of 2	5825 711 009
Adapter PCR 384-well plate, set of 2	5825 713 001
Adapter, for cell culture flasks, set of 2	5825 719 000
Adapter, for IsoRack 24 × 0.5 mL tubes, set of 2	5825 708 008
Adapter, for IsoRack 24 × 1.5/2 mL tubes, set of 2	5825 709 004
CombiSlide® adapter, for up to 12 glass slides, set of 2	5825 706 005











Rotor F-34-6-38



Product features

- > High-speed rotor for molecular biology applications in tubes from 0.2 mL to 85 mL
- > Max. speed 18,500 × *g* (12,000 rpm) in Centrifuge 5810 R or 15,500 × *g* (11,000 rpm) in 5804/5804R/5810*¹
- > 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




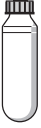







*¹ Rotors F-34-6-38 and FA-45-6-30 maintain 4°C at 11,000 rpm.

Tube					
Common volumes (mL)	1.5/2	2–5 13 × 75 mm	4–7 13 × 100 mm	7–15	Eppendorf Tubes® 5.0 mL
Max. tube diameter (Ø mm)	11	13	13	16	17
Max. tube height for use lid (mm)	143	80	107	112	–
Adapter options for Rotor F-34-6-38					
Capacity per adapter/rotor	4/24	3/18	3/18	2/12	1/6
Adapter bottom shape	round	flat	flat	round	conical
Centrifugation radius (cm)	11.3	10.6	11.4	11.2	10.5
RCF (g-force) at at 12,100 rpm (5810 R) at 11,000 rpm (5804/5804 R/5810)	18,200 15,300	17,070 14,340	18,350 15,420	18,000 15,150	16,824 14,150
Order no. (set of 2)	5804 770 005	5804 738 004	5804 739 000	5804 771 001	5804 777 000

*² Nominal tube volume as published by the tube manufacturer.

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	20–30	50	50 mL conical	85*2
17	18	26	29	30	38
123	123	123	123	117	121
					no adapter needed
1/6	1/6	1/6	1/6	1/6	1/6
conical	round	round	round	conical	round
10.7	10.9	11.0	11.2	10.8	11.5
17,200 14,450	17,550 14,750	17,700 14,900	18,000 15,150	17,400 14,600	18,500 15,500
5804 776 003	5804 772 008	5804 773 004	5804 774 000	5804 775 007	–

Rotor FA-45-6-30



Product features

- > High-speed rotor for applications in tubes from 5–50 mL
- > Max. speed $20,130 \times g$ (12,100 rpm) in Centrifuge 5810 R or $16,639 \times g$ (11,000 rpm) in 5804/5804R/5810*¹
- > Eppendorf QuickLock rotor lid for fast lid locking
- > Aerosol-tight*² 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

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

*2 Aerosol-tightness tested by Public Health England, Porton Down, UK.

Ordering information

Description	Order no.
Rotor FA-45-6-30* ³ , incl. aerosol-tight Eppendorf QuickLock® lid	5820 715 006

Tube					
Common volumes (mL)	2.6–5 13 x 75 mm	4–8 13 x 100 mm	5.5–10 16 x 75 mm	7.5–12 16 x 100 mm	Eppendorf Tubes® 5.0 mL
Max. tube diameter (Ø mm)	13	13	16	16	17
Max. tube height for use with aerosol-tight lid* ¹ (mm)	–	119	–	119	–
Adapter options for Rotor FA-45-6-30					
Capacity per adapter/rotor	1/6	1/6	1/6	1/6	1/6
Adapter bottom shape	round	round	round	round	conical
Centrifugation radius (cm)	12.0	12.0	12.0	12.0	12.1
RCF (g-force) at at 12,100 rpm (5810 R) at 11,000 rpm (5804/5804 R/5810)	19,246 16,233	19,246 16,233	19,246 16,233	19,246 16,233	19,806 16,369
Order no. (set of 2)	5820 726 008	5820 725 001	5820 728 000	5820 727 004	5820 730 005

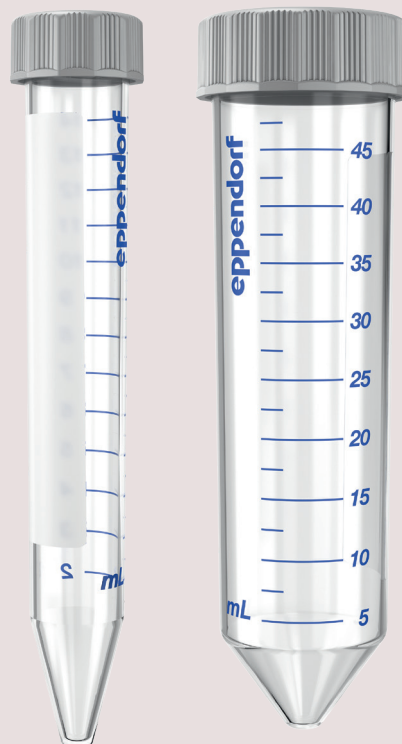
*³ Please note that a software upgrade may be necessary for older centrifuges when using Rotor FA-45-6-30.






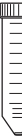





Please contact your local Eppendorf organization or dealer for further information.

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	15 mL conical	16	30	35	50 mL conical
17.5	17	18	26	29	30
122	125	107	104	113	127
					no adapter needed
1/6	1/6	1/6	1/6	1/6	1/6
round	conical	round	round	conical	conical
12.0	12.0	12.0	10.5	11.2	12.3
19,246	19,246	19,246	17,187	18,333	20,130
16,233	16,223	16,223	14,204	16,161	16,639
5820 729 007	5820 717 009	5820 720 000	5820 721 006	5820 722 002	–

Rotor F-35-48-17 and FA-45-20-17



Rotor F-35-48-17*¹

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



Rotor FA-45-20-17*¹

- > 20 places for Eppendorf Tubes® 5.0 mL
- > Max. speed: 20,913 × g (13,100 rpm)
- > Eppendorf QuickLock rotor lid for fast lid locking
- > Rotor, lid and adapters are autoclavable
- > Anodized aluminum for high chemical resistance

Ordering information

Description	Order no
Fixed-angle Rotor F-35-48-17	
Includes 48 steel sleeves for 15 mL tubes, with 40 conical inserts and 48 rubber mats	5820 772 000
Includes 24 steel sleeves for 15 mL tubes, with 24 conical inserts and 24 rubber mats	5820 771 003
Fixed-angle rotor FA-45-20-17	
Rotor FA-45-20-17, 20 × 5 0 mL, incl aerosol-tight Eppendorf QuickLock® rotor lid	5820 765 003
Adapter for 1 5/2 0 mL tubes, set of 4	5820 768 002
Adapter for cryogenic vials, set of 4	5820 769 009
Adapter for HPLC tubes, set of 4	5820 770 007

*¹ Please note that a software upgrade will be necessary for older centrifuges when using Rotor F-35-48-17 or FA-45-20-17
Please contact your local Eppendorf organization or dealer for further information



Rotors F-45-30-11 and FA-45-30-11

- > 30 places for 1.5/2.0 mL tubes
- > Max. speed: 20,800 × g (14,000 rpm)
- > Rotor FA-45-30-11 comes with aerosol-tight*2 lid for safe centrifugation of hazardous samples
- > Rotors and lids are autoclavable

Rotor FA-45-48-11*3

- > 48 places for 1.5/2.0 mL tubes
- > Max. speed: 19,083 × g (max. 13,000 rpm)
- > Eppendorf QuickLock rotor lid for fast lid locking
- > Aerosol-tight*2 for safe centrifugation of hazardous samples
- > Anodized aluminum for high chemical resistance
- > Rotor and lid are autoclavable



Drum Rotor T-60-11

- > High capacity for 60 × 1.5/2.0 mL tubes
- > Max. speed: 16,400 × g (14,000 rpm)
- > Horizontal centrifugation for pellet formation at tube bottom – ideal for low sample quantities

Rotor F-45-48-PCR

- > Accommodates up to 6 × 5/8-tube PCR strips or 48 × 0.2 mL PCR tubes
- > Safe and easy handling without additional lid
- > Max. speed: 15,350 × g (12,000 rpm)



Ordering information

Description	Order no
Rotor FA-45-48-11 , incl aerosol-tight Eppendorf QuickLock® rotor lid	5820 760 001
Rotor FA-45-30-11 , 30 × 1 5/2 0 mL, with aluminum lid, aerosol-tight*1	5804 726 006
Rotor F-45-30-11 , 30 × 1 5/2 0 mL, with aluminum lid	5804 715 004
Adapter for 0 2 mL PCR tubes (for 1 5/2 mL rotors), set of 6	5425 715 005
Adapter for 0 4 mL tubes (for 1 5/2 mL rotors), set of 6	5425 717 008
Adapter for 0 5 mL tubes (for 1 5/2 mL rotors), set of 6	5425 716 001
Adapter for BD Microtainer® (for 1 5/2 mL rotors), set of 6	5425 716 001
Drum rotor T-60-11 , with lid, without adapters	5804 730 003
Adapter for 10 × 1 5/2 mL tubes (Ø 11 mm), set of 6	5804 731 000
Adapter for 20 × 0 4 mL tubes (Ø 6 mm), set of 6	5804 732 006
Rotor F-45-48-PCR , for 6 × 8-tube PCR strips	5804 735 005

*2 Aerosol-tightness is tested and certified by Public Health England, Porton Down, UK
*3 Please note that a software upgrade will be necessary for older centrifuges when using Rotor FA-45-48-11
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