

Large Volume Centrifuges

■ ZK 496 Floor-Standing Centrifuge

■ ZK 496 Underbench Centrifuge



HERMLE
LABORTECHNIK



**Underbench
Centrifuge**



**Floor-Standing
Centrifuge**

Features:

- Maintenance-free induction drive
- Microprocessor with large LCD display
- Motor driven lid lock
- Automatic radio-frequency rotor identification system (RFID) with over speed protection, immediately upon rotor insertion
- Active imbalance identification and cut-off (rotor-specific)
- CFC-free refrigeration system
- Wide range of rotors and accessories
- Audible signal at the end of each run, with several melody options
- Stainless steel chamber
- Manufactured in accordance to International Safety Regulations, i.e. IEC 61010

With the new series of refrigerated centrifuges, the ZK 496 model can process a large volume of samples, a max. of 4 x 1,000 ml bottles as well as blood bags. As known by HERMLE, there is a wide range of adapters "on hand", at your convenience. The centrifuges are available in two different working heights: a floor-standing model and an underbench model, both equipped with mounted wheels. The wheels enable easier maneuvering around the laboratory.

Technical Data

Max. Speed:	10,500 rpm
Max. RCF:	16,022 xg
Max. Volume:	4 x 1,000 ml
Speed range:	200 - 10,500 rpm
Running time:	59 min 50 sec / 10 s increments 99 h 59 min / 1 min increments

Dimensions (W x H x D):

Underbench Unit:	62 cm x 70 cm x 69 cm
Floor-Standing Unit:	62 cm x 98 cm x 69 cm

Weight:

Underbench Unit:	157 kg
Floor-Standing Unit:	190 kg

Power input:	2.3 KW
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Ordering Information

Underbench Unit:

313.00 V01 - ZK 496, 230 V / 50 - 60 Hz

Floor-Standing Unit:

313.00 V02 - ZK 496, 230 V / 50 - 60 Hz

Interface incl. operating software:

800.001



Distinct Control Panel

- Simple one-handed operation
- Easy to program with gloves on
- Splash-proof
- Permanent indication of pre-set and actual values
- Selection of speed in both rpm and g-force, in increments of 10
- 10 acceleration and deceleration rates, possibility of unbraked deceleration
- Temperature range from -20°C to 40°C, in increments of 1°C
- Pre-cooling program
- Standstill cooling
- Pre-selection of the running time from 10 s to 99 h 59 min or continuous
- Storage of up to 99 runs, including rotor
- Quick-key for short runs
- Timer: the centrifuge starts at the preselected time

Accessories ZK 496

Rotor/Bucket

Order No.:
221.65 V20
Swing out rotor 4 place
Angle: 0-90°



Adapter

Order No.:
621.000
Round bucket



Acceleration in s: 84/328
Deceleration in s: 50/1,067
Max. Speed: 4,600 rpm
Max. RCF: 5,203 xg
Max. Radius: 22 cm
Temp. at Max. Speed: 9°C

Order No.:
621.005
Rectangular bucket/Microtiter bucket



Acceleration in s: 84/302
Deceleration in s: 53/1,178
Max. Speed: 4,200 rpm
Max. RCF: 3,964 xg
Max. Radius: 20.1 cm
Max. Loading Height: 92 mm
Max. Loading Weight: 1,200 g
Temp. at Max. Speed: 4°C

















616.102
PC-Screw cap hermetical
sealable, for round bucket
621.000





























621.006
Removing aid for
microtiter plates

Adapters for Rectangular Bucket 621.005

Rectangular Bucket Order No.: 621.005	Volume	Corning®				Falcon®						
		750 ml	650 ml	500 ml*	500 ml	250/290 ml	175/225**ml	100 ml	50 ml	50 ml	15 ml	5 ml
	ø in mm	99	99	97	99	62	61	40	29	29	17	17
												
	Length min./max. (mm)	152	136	148	114	122/137	118/137	102/123	90/120	116	120	60/70
	Tubes per Rotor	4	4	4	4	8	8	12	40	40	96	96
	Radius Correction (cm)	0.5	0.5	0.5	0.5	0.4	0.5	0.5	0.1	0.1	0.1	0.1
	Order No. Adapter	718.007	718.007	718.007	718.007	718.003	718.008	718.010	718.009	718.001	718.013	718.002
		Vacutainer®/Sarstedt®										
	Volume	5.5-12 ml		2.6-8 ml								
	ø in mm	16		13								
												
	Length min./max. (mm)	60/120		65/100								
	Tubes per Rotor	152		192								
	Radius Correction (cm)	0.1		0.1								
	Order No. Adapter	718.005		718.004								
		* Only applicable with combination of 718.007 + 716.110 ** Only applicable with combination of 718.003 + 718.008										

Adapters for Round Bucket 621.000

Round Bucket Order No.: 621.000	Volume	Corning®				Corning®		Falcon®		skirted					
		1000 ml	750 ml	650 ml	500 ml	500 ml	500 ml	250 ml	250/290 ml	175/225 ml	100 ml	50 ml	50 ml	50 ml	30 ml
	ø in mm	99	99	99	97	99	69.5	60	62	61	40	29	29	29	25
															
	Length min./max. (mm)	173/178	152	136	148	114	165	159	122/137	118/137	102/123	102/123	116	100/120	102/123
	Tubes per Rotor	4	4	4	4	4	4	4	4	4	12	28	20	20	32
	Radius Correction (cm)	0	0	0	0.5	0	0.5	0.4	0.5	0.2	0.5	0.1	0.1	0.1	0.1
	Order No. Adapter	without	without	without	716.110	without	716.026	716.025	716.024	716.100	716.023	716.021	716.101	716.111	716.020
		Vacutainer®				Sarstedt®									
	Volume	12/15 ml	15 ml	10 ml	5/7 ml	6-10 ml	1.8-7 ml	9-10 ml	4-8.2 ml	2.6-4.9 ml	2-5 ml	1.1-1.4 ml			
	ø in mm	17	17	16	13	16	13	16	15	13	11	8			
															
	Length min./max. (mm)	97/120	120	60/100	65/120	75/100	75/100	92	75/92	65/90	66/92	66			
	Tubes per Rotor	72	48	84	140	72	84	72	72	84	84	152			
	Radius Correction (cm)	0.1	0.1	0.9	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4			
	Order No. Adapter	716.018	716.019	716.015	716.014	716.105	716.106	716.105	716.105	716.106	716.106	716.109			

Accessories ZK 496

Rotor/Bucket

Order No.: 221.65 V20
Swing out rotor 4 Places
Angle: 0-90°



Adapter

Order No.: 621.015
Blood bag bucket for 500 ml



Acceleration in s: 62/328
Deceleration in s: 48/981
Max. Speed: 4,600 rpm
Max. RCF: 5,298 xg
Max. Radius: 22.4 cm
Temp. at Max. Speed: 7°C

Order No.: 621.010
Blood bag bucket for 750 ml



Acceleration in s: 82/324
Deceleration in s: 50/1,111
Max. Speed: 4,600 rpm
Max. RCF: 5,274 xg
Max. Radius: 22.3 cm
Temp. at Max. Speed: 9°C



718.012
Adapter for bucket
621.015



718.011
Adapter for bucket
621.010

Order No.:
221.51 V20



Angle Rotor: 4 x 500 ml
Angle: 24°

Acceleraton in s: 59/409
Deceleration in s: 81/1,834
Max. Speed: 8,000 rpm
Max. RCF: 10,374 xg
Max. Radius: 14.5 cm
Max. ø: 69.5 mm
Temp. at Max. Speed: -5°C

Order No.:
without adapter
712.001
712.102
712.100
712.100
712.104
712.101
712.103
712.105

Tube Rack	ø (mm)	Length (min./max.)
1 x 500 ml	69.5	165
1 x 250 ml	62	122
1 x 250 ml Corning®	60	159
1 x 225 ml Falcon®	61	137
1 x 175 ml Falcon®	61	118
3 x 50 ml	29	103
1 x 50 ml conical	29	116
4 x 30 ml	26	92
6 x 15 ml conical	17	120

Order No.:
221.21 V20



Angle Rotor: 6 x 250 ml
Angle: 28°

Acceleraton in s: 53/407
Deceleration in s: 82/1,667
Max. Speed: 8,000 rpm
Max. RCF: 10,016 xg
Max. Radius: 14.0 cm
Max. ø: 62 mm
Temp. at Max. Speed: -5°C

Order No.:
without adapter
713.044
713.045
713.042
713.030
713.028
713.025
713.020
713.015

Tube Rack	ø (mm)	Length (min./max.)
1 x 250 ml	62	122
1 x 250 ml Corning®	60	159
1 x 175/225 ml Falcon®	61	118/137
1 x 50 ml conical	29	116
1 x 50 ml	29	103
2 x 30 ml	26	92
4 x 15 ml conical	17	120
5 x 10 ml	16	80
8 x 1.5/2.0 ml	11	40

Order No.:
221.52 V20



Angle Rotor 10 x 50 ml conical
Angle: 38°

Acceleraton in s: 53/441
Deceleration in s: 71/1,411
Max. Speed: 10,500 rpm
Max. RCF: 16,022 xg
Max. Radius: 13.0 cm
Max. ø: 29 mm
Temp. at max. speed: -1°C

Order No.:
without adapter
708.050
701.011*
701.012*
701.015*
708.051

Tube Rack	ø (mm)	Length (min./max.)
1 x 50 ml conical	29	116
1 x 15 ml RB	17	97/123
1 x 7 ml	13.5	95/115
1 x 5 ml	13.5	70/90
1 x 1.5/2.0 ml	11	40
1 x 15 ml conical	17	120

* Only applicable with adapter 708.050 or 708.051

ZK 496 Floor-Standing Centrifuge

With its drawer, the Floor-Standing model allows the possibility to store your accessories, so that they are within reach.



The Perfect Fit



Easy Handling:

- The ergonomic control panel is very user-friendly and enables a smooth and swift operation process.
- There is no need to remove surgical gloves, during operation.
- Strictly a HERMLE application, you can store up to 99 different programs.
- Both versions are equipped with wheels, this way the unit is easy for you to maneuver around the laboratory, to the most convenient location. There is also a mechanism to fix the centrifuge, with the existing feet.
- Make yourself comfortable; operate this model from your laptop or computer. Our multi-functional software, "H-Control", allows you to control the centrifuge independently and save your protocols, (this function has to be ordered separately).
- For re-assurance that your samples are finished, an acoustic signal will sound when the centrifugation is complete (this function can be de-activated).

Safety:

- The ZK 496 has an automatic imbalance shut off system.
- There is over speed protection incorporated for each rotor.
- You can only start the unit when the centrifuge lid is closed.
- In case of operation malfunction, an error code will appear on the display; this helps to indicate the reason for the malfunction and to eliminate it.
- Its' stable and firm design, made of massive steel, ensures excellent mechanical protection.

Efficient and Versatile:

- Due to the wide range of bucket and rotor options, the ZK 496 can hold all common tubes and bottles, up to 1,000 ml.
- Profit from our "pre-cooling" function, cool down the rotor rapidly to your desired temperature. For this, the centrifuge automatically determines the necessary speed for each individual rotor.
- Keep dangerous and hazardous aerosols locked; there are hermetical sealable buckets available, for the ZK 496 swing out rotor.
- Save space in your laboratory. The Underbench Centrifuge can be easily placed below a standard laboratory table.
- The Floor-Standing-Centrifuge is supplied with a drawer which is very useful for storing your accessories.

More from Hermle - a wide range of options



Microlitre Centrifuge Z 207 M

Max. Speed: 13,500 rpm
Max. Volume: 24 x 1.5/2.0 ml



Large-Volume Centrifuge Z 446

Max. Speed: 16,000 rpm
Max. Volume: 4 x 750 ml

