

# Universal Centrifuges

| Z327

| Z327-K



**HERMLE**  
**Benchmark** 

4 x 200 ml

# Z327 Z327-K



Z327



Z327-K

## Specifications

- 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 (Z327-K)
- A large variety of rotors and accessories
- Audible signal at the end of each run with several melody options
- Noise level under 63 dBA at max. speed
- Manufactured according to international safety regulations, i.e. IEC 61010
- Rotor exchange is easy to handle
- Optimized airflow system keeps the samples cool (Z327)
- Stainless steel chamber

Both the Z327 and the refrigerated Z327-K offer a wide assortment of rotor options, making them ideal for a wide variety of research applications. Rotor exchange between swing out, micro, or high volume fixed angle rotors is very simple and can be done in a matter of seconds. The Z327-K features rear mounted refrigeration system, optimized for saving space on the lab bench at only 40 cm wide!

## Technical data

max. speed:	18,000 rpm
max. RCF:	23,542 xg
max. volume:	4 x 200 ml
Speed range:	200 – 18,000 rpm
Temperature range	
Z327-K:	-20°C to 40°C
Running time:	59 min 50 s / 10 s increments 99 h 59 min / 1 min increments
Dimensions	
Z327:	15.7 in x 14 in x 19 in 40 cm x 36 cm x 48 cm (WxHxD)
Z327-K:	15.7 in x 14 in x 27.5 in 40 cm x 36 cm x 70 cm (WxHxD)
Weight	95 lbs / 132 lbs
Z327 / Z327-K:	43 kg / 60 kg
Power input:	460 W / 660 W
Z327 / Z327-K:	
Order No.:	
Z327:	Z327, 120V / 50-60Hz Z327-E, 230V / 50-60Hz
Z327-K:	Z327-K, 120V / 50-60Hz Z327-K-E, 230V / 50-60Hz



Z327-K

## Distinct Control Panel

- Simple one handed Touch-Operation
- Easy to program with gloves on
- Splash proof digital display
- Permanent indication of Preset and Actual Values
- Selection of speed in both rpm and rcf, with increments of 10
- 10 acceleration and 10 deceleration rates, Possibility of brakeless deceleration
- Preselection of the temperature from - 20°C to 40°C with 1°C increments (Z327-K)
- Indication of the sample temperature (Z327-K)
- Pre-cooling program option (Z327-K)
- Standstill cooling (Z327-K)
- Pre-selection of running time from 10 s to 99 h 59 min or continuous
- Storage of up to 99 runs including rotor type
- Quick-key for short runs
- Diagnostic program
- Timer: the centrifuge starts at the preselected time

# Accessories Z327 and Z327-K

## Rotor/Bucket

Order No.:  
**Z327-200**

Swing out rotor 4 place w/ buckets  
Angle: 0-90°  
(w/o buckets: Z327-200-AC)

Z327-200-BUK  
Bucket for Adapter

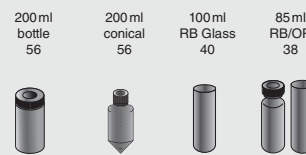
Z327-200-LID  
Lid for Bucket | hermetically sealed



## Adapter

Acceleration in s: 21/102  
Deceleration in s: 12/387  
max. speed: 5,000 rpm  
RCF-Value: 4,136 xg  
max. radius: 14.8 cm

Volume  
Tubes Ø in mm



Length min./max. (mm)  
Tubes per Rotor  
Radius Correction (cm)  
Order No. Adapter: Z327-200-\_\_\_

200ml bottle 56	200ml conical 56	100ml RB Glass 40	85ml RB/OR 38
112	120	95/115	95/108
4	4	4	4
0.0	0.0	0.2	0.2
without	A200	A100	A85

Volume  
Tubes Ø in mm

Length min./max. (mm)  
Tubes per rotor  
Radius Correction (cm)  
Order No. Adapter: Z327-200-\_\_\_

50 ml RB/OR 29	50 ml conical 29	50 ml skirted 29	25/30 ml Universal 25	25/30 ml RB/OR 25	15 ml conical 17	15 ml conical 17	15 ml RB 17	5/7 ml RB 13	5 ml conical 17	1.5/2.0 ml micro 11	6-10 ml Vakut.® 16	6-10 ml Vakut.® 16	1.8-7 ml Vakut.® 13	50 ml conical 29
95/103	116	116	95/105	90/110	120	120	60/107	65/100	60/70	40	130	100	75/100	116
4	4	4	4	4	16	12	28	32	20	32	4	28	32	8
0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.0
A50R	A50	A50SS	A25	A30	A15B*	A15	A15R	A57	A5F	A20	A15L	A10	A57	B50

\*only without bucket lid

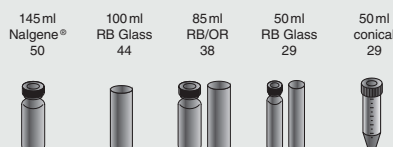
Order No.:  
**Z306-100**



Swing out rotor 4 place  
Angle: 0-90°

Acceleration in s: 12/93  
Deceleration in s: 12/226  
max. speed: 4,500 rpm  
RCF-Value: 3,350 xg  
max. radius: 14.8 cm

Volume  
Tubes Ø in mm



Length min./max. (mm)  
Tubes per rotor  
Radius Correction (cm)  
Order No. Adapter: Z306-100-\_\_\_

145 ml Nalgene® 50	100 ml RB Glass 44	85 ml RB/OR 38	50 ml RB Glass 29	50 ml conical 29
100	90/108	90/108	90/118	116
4	4	4	4	4
1.0	1.0	0.8	0.7	0.3
A145	A100	A85	A50R	A50

Volume  
Tubes Ø in mm

Length min./max. (mm)  
Tubes per rotor  
Radius Correction (cm)  
Order No. Adapter

50 ml Rim 29	30 ml Universal 25	15 ml conical 17	15 ml RB 17	6-10 ml Vakut.® 16	1.8-7 ml Vakut.® 13	1.5/2.0 ml micro 11
116	95/105	120	90/108	90/108	75/100	40
4	4	8	28	28	28	40
0.6	1.1	0.0	0.4	0.4	0.7	5.5
A50SS	A30	A15	A10	A10	A57	A20

Order No.:  
**Z326-100H**

Swing out rotor 4 Places  
w/ sealed buckets  
Angle: 0-90°

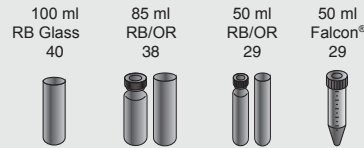
Z326-100H-BUK  
Bucket for Tube Rack w/ lid

Z326-100H-LID  
Lid for bucket



Acceleration in s: 15/100  
Deceleration in s: 15/150  
max. Speed: 5000 rpm  
RCF-value: 4080 xg  
max. Radius: 14.6 cm  
Temp. at max. speed: 2°C

Volume  
Tubes ø in mm



Length min./max. in mm  
Tubes per rotor  
Radius correction (cm)  
Order-No.: Z326-100H-\_\_\_

100 ml RB Glass 40	85 ml RB/OR 38	50 ml RB/OR 29	50 ml Falcon® 29
90/108	90/108	90/133	116
4	4	4	4
0.9	0.6	0.6	0.4
A100	A85	A50R	A50

Volume  
Tubes Ø in mm

Length min./max. (mm)  
Tubes per rotor  
Radius Correction (cm)  
Order No. Tube rack

50 ml skirted 29	30 ml Universal 25	15 ml Falcon® 17	15 ml Falcon® 17	15 ml RB Glass 17	6-10 ml Vakut.® 16	10-15 ml Vakut.® 16	1.8-7 ml Vakut.® 13	1.5 ml Reakt. 11	50 ml Falcon® 29	15 ml Falcon® 17
116	95/105	120	120	90/108	75/100	75/125	75/100	42	116	120
4	4	4	8	16	16	4	16	20	8	12
0.7	1.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.0	0.0
A50SS	A30	A15S	A15*	A15R	A10	A15L*	A57	A20	B50	B15

\* only without bucket lid

## ■ Accessories Z327 and Z327-K

## Rotor/Bucket

Order No.:  
Z326-02MP



Swing out rotor 2x3 Microplates  
Angle: 0-90°

## Adapter

Acceleration in s: 22/155  
Deceleration in s: 16/518  
max. speed: 4,500 rpm  
RCF-Value: 2,716 xg  
max. radius: 12.0 cm  
max. loading height: 63 mm  
max. loading weight: 310 g  
Temp. at max. speed: -5°C

Order No.:  
BT1500-A1520  
BT1500-A05  
Z326-MPCA

Tube rack  
20 x 1.5 ml (2.0 ml) Tubes  
20 x 0.5 ml  
3 x Chamber Slide or 30/60 mm petri dish

Order No.:  
Z326-3015



Angle rotor  
30x 15 ml Glass or 20x 15 ml conical  
Angle: 35°

Acceleration in s: 17/114  
Deceleration in s: 11/632  
max. speed: 4,500 rpm  
RCF-Value: 2,830/2,467 xg  
max. radius: 12.5/10.9 cm  
max. Ø: 17 mm  
Temp. at max. speed: -7°C





Order No.:	Adapter	Ø [mm]	Length [min/max.]:
without	1 x 15 ml Glass	17.0	95/115
without	1 x 15 ml conical	17.0	120
C3100-ADP	1 x 5/7 ml	13	75/100

Order No.:  
Z326-1215



Angle rotor 12x15 ml  
Angle: 32°

Acceleration in s: 18/103  
Deceleration in s: 12/356  
max. speed: 6,000 rpm  
RCF-Value: 4,427 xg  
max. radius: 11.0 cm  
max. Ø: 17 mm  
Temp. at max. speed: -9°C






Volume	15 ml conical	15 ml	4-7ml Vakut.®	1.8-5 ml Vakut.®
				
Tubes Ø in mm	17	17	13	13
Length min./max. in mm	120	105/120	100	75
Order No. Adapter	without		C3100-ADP	C3100-ADP

Order No.:  
Z326-0650



Angle rotor 6 x 50 ml  
Angle: 40°

Acceleration in s: 15/102  
Deceleration in s: 11/486  
max. speed: 6,000rpm  
RCF-Value: 4,427xg  
max. radius: 11.0cm  
max. Ø: 29 mm  
Temp. at max. speed: -6°C

Volume	50 ml conical	50 ml RB/OR	15 ml conical	7 ml	5 ml
					
Tubes Ø in mm	29	29	17	17	18
Length min./max. in mm	116	100/120	120	97/120	100/105
Order No. Adapter	without	without	Z206-50-A15	Z206-50-A57	Z206-50-A57C* *with Z206-50-A57

Order No.:  
Z326-0685-25



Angle rotor 6 x 85 ml  
Angle: 25°

Acceleration in s: 65/399  
Deceleration in s: 38/988  
Acceleration in s: 98/495  
Deceleration in s: 47/1,068  
max. speed: 11,000 rpm  
max. speed: 13,500 rpm  
RCF-Value: 13,932xg  
RCF-Value: 20,984xg  
max. radius: 10.3cm  
max. Ø: 38 mm  
Temp. at max. speed: 15°C

Order No.:	Adapter	Ø [mm]	Length [min./max.]:
without	1 x 85 ml	38	113
Z326-85-A50R	1 x 50 ml	29	105
Z326-85-A50	1 x 50 ml conical	29	116
Z326-85-A30	1 x 30 ml	25	90/103
Z326-85-B15R	2 x 15 ml	17	95/100
Z326-85-A15R	1 x 15 ml	17	103/110
Z326-85-A15	1 x 15 ml conical	17	120

Order No.:  
Z326-0685



Angle rotor 6 x 85 ml  
Angle: 38°

Acceleration in s: 62/412  
Deceleration in s: 34/1,310  
max. speed: 9,000rpm  
RCF-Value: 10,413xg  
max. radius: 11.5cm  
max. Ø: 38 mm  
Temp. at max. speed: 1°C

Order No.:	Adapter	Ø [mm]	Length [min./max.]:
without	1 x 85 ml	38	113
Z326-85-A50R	1 x 50 ml	29	105
Z326-85-A50	1 x 50 ml conical	29	116
Z326-85-A30	1 x 30 ml	25	90/103
Z326-85-B15R	2 x 15 ml	17	95/100
Z326-85-A15R	1 x 15 ml	17	103/110
Z326-85-A15	1 x 15 ml conical	17	120



## ■ Accessories Z327 and Z327-K

## Rotor/Bucket

Order No.:  
Z326-0485



Angle rotor 4 x 85 ml  
Angle: 30°

## Adapter

Acceleration in s: 68/307  
Deceleration in s: 34/1,102  
max. speed: 12,000 rpm  
RCF-Value: 14,809 xg  
max. radius: 9.2 cm  
max. Ø: 38 mm  
Temp. at max. speed: 3°C

Order No.:	Adapter	Ø [mm]	Length [min./max.]:
without	1 x 85ml	38	113
Z326-85-A50R	1 x 50ml	29	105
Z326-85-A50	1 x 50ml conical*	29	116
Z326-85-A30	1 x 30ml	25	90/103
Z326-85-B15R	2 x 15ml	17	95/100
Z326-85-A15R	1 x 15ml	17	103/110
Z326-85-A15	1 x 15ml conical*	17	120

\*only without rotor lid

\*only without rotor lid

Order No.:  
Z326-0650-HS



Angle rotor 6 x 50 ml (round)  
Angle: 26°

Acceleration in s: 44/358  
Deceleration in s: 26/772  
max. speed: 12,000 rpm  
RCF-Value: 13,522 xg  
max. radius: 8.4 cm  
max. Ø: 29 mm  
Temp. at max. speed: 4°C

Order No.:	Adapter	Ø [mm]	Length [min./max.]:
without	1 x 50 ml round	29	95/115
Z326-50-A30	1 x 30 ml	25	92/95
Z326-50-B15R	1 x 15 ml	17	100/105
Z326-50-A15R	1 x 15 ml conical*	17	120

\*only without rotor lid

Order No.:  
Z326-1050



Angle rotor 10x50ml conical  
Angle: 38°

Acceleration in s: 59/374  
Deceleration in s: 35/1.698  
max. speed: 7,500 rpm  
RCF-Value: 8,141 xg  
max. radius: 13cm  
max. Ø: 29mm  
Temp. at max. speed: 0°C

Order No.:	Adapter	Ø [mm]	Length [min./max.]:
Z326-50-B15HS	1 x 15ml RB	17	97/123
Z326-15-A7*	1 x 7 ml	13.5	95/115
Z326-15-A5*	1 x 5 ml	13.5	70/90
Z326-15-A20*	1 x 1.5/2.0 ml	11	42
Z326-50-A15	1 x 15 ml conical	17	120

\*only possible with adapter Z326-50-A15 or Z326-50-B15

Order No.:  
Z326-1205



Angle rotor 12x 5ml Tubes  
Angle: 45°

Acceleration in s: 24/206  
Deceleration in s: 20/436  
Acceleration in s: 26/220  
Deceleration in s: 21/420  
max. speed: 14,000 rpm  
max. speed: 15,000 rpm  
RCF-Value: 18,624 xg  
RCF-Value: 21,379 xg  
max. radius: 8.5 cm  
max. Ø: 17 mm  
Temp. at max. speed: 2°C

Order No.:	Adapter	Ø [mm]	Length [min./max.]:
without	1 x 5.0 ml conical	17	60
Z216-05-C10	1 x 1.0 ml Cryo, flat	12.6	41
Z216-05-C18	1 x 1.8 ml Cryo, round	12.6	48

Order No.:  
Z326-2010



Angle rotor 20x 10 ml  
Angle: 30°

Acceleration in s: 54/357  
Deceleration in s: 29/842  
max. speed: 12,000 rpm  
RCF-Value: 15,775xg  
max. radius: 9.8 cm  
max. Ø: 16mm  
Temp. at max. speed: 4°C

Order No.:	Adapter	Ø [mm]	Length [min./max.]:
without	1 x 10ml	16	80

Order No.:  
Z326-3020H



Angle rotor 30 x 1.5/2.0 ml  
Angle: 45°

Acceleration in s: 31/189  
Deceleration in s: 20/504  
Acceleration in s: 35/205  
Deceleration in s: 22/465  
max. speed: 13,000 rpm  
max. speed: 14,000 rpm  
RCF-Value: 17,758 xg  
RCF-Value: 20,595 xg  
max. radius: 9.4 cm  
max. Ø: 11 mm  
Temp. at max. speed: 6°C

Order No.:	Adapter	Ø [mm]	Length [min./max.]:
without	1 x 2.0 ml	11	40
without	1 x 1.5 ml	11	40
704.005	1 x 0.5 ml	8	45
704.004	1 x 0.4/0.2 ml PCR	6	45

## ■ Accessories Z 327 and Z 327 K

## Rotor/Bucket

Order No.:  
Z326-4420



Angle rotor 44 x 1.5/2.0 ml  
Angle: 32°/55°

## Adapter

Acceleration in s: 31/256  
Deceleration in s: 21/441  
max. speed: 15,000 rpm  
RCF-Value: 21,379xg  
max. radius: 8.5 cm  
max. Ø: 11 mm  
Temp. at max. speed: 3°C

Order No.:	Adapter	Ø [mm]	Length [min./max.]:
without	1 x 2.0 ml	11	40
without	1 x 1.5 ml	11	40
C1008-A5-6	1 x 0.5 ml	8	45
C1008-A2-6	1 x 0.4/0.2 ml PCR	6	45

Order No.:  
Z326-2420



PPS - Lid

Angle rotor 24 x 1.5/2.0 ml  
Angle: 45° | hermetically sealed

Acceleration in s: 25/222  
Deceleration in s: 17/261  
max. speed: 15,000 rpm  
RCF-Value: 21,379 xg  
max. radius: 8.5 cm  
max. Ø: 11 mm  
Temp. at max. speed: 3°C

Order No.:	Adapter	Ø [mm]	Length [min./max.]:
without	1 x 2.0ml	11	40
without	1 x 1.5 ml	11	40
C1008-A5-6	1 x 0.5ml	8	45
C1008-A2-6	1 x 0.4/0.2ml PCR	6	45

Order No.:  
Z326-2420H



Alu - Lid

Angle rotor 24 x 1.5/2.0 ml  
Angle: 45° | hermetically sealed  
(aluminum lid)

Acceleration in s: 26/222  
Deceleration in s: 17/267  
max. speed: 15,000 rpm  
RCF-Value: 21,379xg  
max. radius: 8.5 cm  
max. Ø: 11 mm  
Temp. at max. speed: 4°C

Order No.:	Adapter	Ø [mm]	Length [min./max.]:
without	1 x 2.0ml	11	40
without	1 x 1.5 ml	11	40
C1008-A5-6	1 x 0.5ml	8	45
C1008-A2-6	1 x 0.4/0.2ml PCR	6	45

Order No.:  
Z326-3202



Angle rotor 4 x 8-place PCR Strips  
Angle: 45°

Acceleration in s: 14/126  
Deceleration in s: 15/154  
max. speed: 15,000 rpm  
RCF-Value: 15,343 xg  
max. radius: 6.1 cm  
max. Ø: 6 mm  
Temp. at max. speed: 2°C



The intuitive control panel makes it easy for anyone to operate Hermle Centrifuges.



## ■ 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.
- 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 deactivated).

### Safety:

- The Z327 and Z327-K have an automatic imbalance shut off system
- There is over speed protection incorporated for each rotor.
- You can only start the models 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.
- The buckets of the swing out rotor Z327-100H are hermetically sealable.

### Efficient and Versatile:

- Due to the wide range of adapter and rotor options, models Z327 and Z327-K can hold all common tubes and bottles, up to 200 ml.
- With easy rotor exchange, you can switch between different kinds of rotors like swing-out, microlitre, micro-plate or big volume fixed angle rotors.
- Despite the high capacity, the design of these devices is compact and space saving, even the Z327-K with its powerful refrigeration system.
- 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 (Z327-K only).

■ More from **HERMLE**  
**Benchmark**   
a wide range of options



Universal Centrifuge Z 366 K  
max. speed 16,000 rpm  
max. volume 6 x 250 ml



Compact Centrifuge Z 207 A  
max. speed 6,800 rpm  
max. volume 8 x 15 ml

■ For more Information, please visit our website [www.hermleusa.com](http://www.hermleusa.com)

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