

# 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	
Z327 / Z327-K:	95 lbs / 132 lbs 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, 120V / 50-60Hz Z327-K-E, 230V / 50-60Hz
Z327-K:	



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

200 ml bottle	200 ml conical	100 ml RB Glass	85 ml RB/OR
56	56	40	38

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

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

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

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

145 ml Nalgene®	100 ml RB Glass	85 ml RB/OR	50 ml RB Glass	50 ml conical
50	44	38	29	29

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

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

50 ml Rim	30 ml Universal	15 ml conical	15 ml RB	6-10 ml Vakut.®	1.8-7 ml Vakut.®	1.5/2.0 ml micro
29	25	17	17	16	13	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

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

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

100 ml RB Glass	85 ml RB/OR	50 ml RB/OR	50 ml Falcon®
40	38	29	29

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

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

50 ml skirted	30 ml Universal	15 ml Falcon®	15 ml Falcon®	15 ml RB Glass	6-10 ml Vakut.®	10-15 ml Vakut.®	1.8-7 ml Vakut.®	1.5 ml Reakt.	50 ml Falcon®	15 ml Falcon®
29	25	17	17	17	16	16	13	11	29	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

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







\* only without bucket lid

# Accessories Z327 and Z327-K

Rotor/Bucket	Adapter																																
<p>Order No.: <b>Z326-02MP</b></p>  <p>Swing out rotor 2x3 Microplates Angle: 0-90°</p>	<p>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</p>	<p>Order No.: BT1500-A1520 BT1500-A05 Z326-MPCA</p>	<p>Tube rack 20 x 1.5 ml (2.0ml) Tubes 20 x 0.5 ml 3 x Chamber Slide or 30/60 mm petri dish</p>																														
<p>Order No.: <b>Z326-3015</b></p>  <p>Angle rotor 30 x 15 ml Glass or 20 x 15 ml conical Angle: 35°</p>	<p>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</p>	<p>Order No.: without without C3100-ADP</p>	<p>Adapter 1 x 15 ml Glass 1 x 15 ml conical 1 x 5/7 ml</p>	<p>Ø [mm]    Length [min./max.]: 17.0       95/115 17.0       120 13         75/100</p>																													
<p>Order No.: <b>Z326-1215</b></p>  <p>Angle rotor 12 x 15 ml Angle: 32°</p>	<p>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</p>	<p>Volume</p> <table border="1" data-bbox="1000 897 1357 1115"> <thead> <tr> <th>Volume</th> <th>15 ml conical</th> <th>15 ml</th> <th>4-7 ml Vakut.<sup>®</sup></th> <th>1.8-5 ml Vakut.<sup>®</sup></th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Tubes Ø in mm</td> <td>17</td> <td>17</td> <td>13</td> <td>13</td> </tr> <tr> <td>Length min./max. in mm</td> <td>120</td> <td>105/120</td> <td>100</td> <td>75</td> </tr> <tr> <td>Order No. Adapter</td> <td>without</td> <td>without</td> <td>C3100-ADP</td> <td>C3100-ADP</td> </tr> </tbody> </table>	Volume	15 ml conical	15 ml	4-7 ml Vakut. <sup>®</sup>	1.8-5 ml Vakut. <sup>®</sup>						Tubes Ø in mm	17	17	13	13	Length min./max. in mm	120	105/120	100	75	Order No. Adapter	without	without	C3100-ADP	C3100-ADP						
Volume	15 ml conical	15 ml	4-7 ml Vakut. <sup>®</sup>	1.8-5 ml Vakut. <sup>®</sup>																													
																																	
Tubes Ø in mm	17	17	13	13																													
Length min./max. in mm	120	105/120	100	75																													
Order No. Adapter	without	without	C3100-ADP	C3100-ADP																													
<p>Order No.: <b>Z326-0650</b></p>  <p>Angle rotor 6 x 50 ml Angle: 40°</p>	<p>Acceleration in s: 15/102 Deceleration in s: 11/486 max. speed: 6,000 rpm RCF-Value: 4,427 xg max. radius: 11.0 cm max. Ø: 29 mm Temp. at max. speed: -6°C</p>	<p>Volume</p> <table border="1" data-bbox="1000 1219 1357 1437"> <thead> <tr> <th>Volume</th> <th>50 ml conical</th> <th>50 ml RB/OR</th> <th>15 ml conical</th> <th>7 ml</th> <th>5 ml</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Tubes Ø in mm</td> <td>29</td> <td>29</td> <td>17</td> <td>17</td> <td>18</td> </tr> <tr> <td>Length min./max. in mm</td> <td>116</td> <td>100/120</td> <td>120</td> <td>97/120</td> <td>100/105</td> </tr> <tr> <td>Order No. Adapter</td> <td>without</td> <td>without</td> <td>Z206-50-A15</td> <td>Z206-50-A57</td> <td>Z206-50-A57C* *with Z206-50-A57</td> </tr> </tbody> </table>	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	
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																												
<p>Order No.: <b>Z326-0685-25</b></p>  <p>Angle rotor 6 x 85 ml Angle: 25°</p>	<p>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: 13,932 xg RCF-Value: 20,984 xg max. radius: 10.3 cm max. Ø: 38 mm Temp. at max. speed: 15°C</p>	<p>Order No.: without Z326-85-A50R Z326-85-A50 Z326-85-A30 Z326-85-B15R Z326-85-A15R Z326-85-A15</p>	<p>Adapter 1 x 85 ml 1 x 50 ml 1 x 50 ml conical 1 x 30 ml 2 x 15 ml 1 x 15 ml 1 x 15 ml conical</p>	<p>Ø [mm]    Length [min./max.]: 38         113 29         105 29         116 25         90/103 17         95/100 17         103/110 17         120</p>																													
<p>Order No.: <b>Z326-0685</b></p>  <p>Angle rotor 6 x 85 ml Angle: 38°</p>	<p>Acceleration in s: 62/412 Deceleration in s: 34/1,310 max. speed: 9,000 rpm RCF-Value: 10,413 xg max. radius: 11.5 cm max. Ø: 38 mm Temp. at max. speed: 1°C</p>	<p>Order No.: without Z326-85-A50R Z326-85-A50 Z326-85-A30 Z326-85-B15R Z326-85-A15R Z326-85-A15</p>	<p>Adapter 1 x 85 ml 1 x 50 ml 1 x 50 ml conical 1 x 30 ml 2 x 15 ml 1 x 15 ml 1 x 15 ml conical</p>	<p>Ø [mm]    Length [min./max.]: 38         113 29         105 29         116 25         90/103 17         95/100 17         103/110 17         120</p>																													







# Accessories Z327 and Z327-K

Rotor/Bucket	Adapter			
<p><b>Order No.:</b> Z326-0485</p>  <p>Angle rotor 4 x 85 ml Angle: 30°</p>	<p>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</p>	<p><b>Order No.:</b> without Z326-85-A50R Z326-85-A50 Z326-85-A30 Z326-85-B15R Z326-85-A15R Z326-85-A15</p>	<p><b>Adapter</b> 1 x 85 ml 1 x 50 ml 1 x 50 ml conical* 1 x 30 ml 2 x 15 ml 1 x 15 ml 1 x 15 ml conical*</p>	<p><b>Ø [mm]</b> 38 29 29 25 17 17 17</p> <p><b>Length [min./max.]</b> 113 105 116 90/103 95/100 103/110 120</p> <p><small>*only without rotor lid</small></p>
<p><b>Order No.:</b> Z326-0650-HS</p>  <p>Angle rotor 6 x 50 ml (round) Angle: 26°</p>	<p>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</p>	<p><b>Order No.:</b> without Z326-50-A30 Z326-50-B15R Z326-50-A15R</p>	<p><b>Adapter</b> 1 x 50 ml round 1 x 30 ml 1 x 15 ml 1 x 15 ml conical*</p>	<p><b>Ø [mm]</b> 29 25 17 17</p> <p><b>Length [min./max.]</b> 95/115 92/95 100/105 120</p> <p><small>*only without rotor lid</small></p>
<p><b>Order No.:</b> Z326-1050</p>  <p>Angle rotor 10 x 50 ml conical Angle: 38°</p>	<p>Acceleration in s: 59/374 Deceleration in s: 35/1,698 max. speed: 7,500 rpm RCF-Value: 8,141 xg max. radius: 13 cm max. Ø: 29 mm Temp. at max. speed: 0°C</p>	<p><b>Order No.:</b> Z326-50-B15HS Z326-15-A7* Z326-15-A5* Z326-15-A20* Z326-50-A15</p>	<p><b>Adapter</b> 1 x 15 ml RB 1 x 7 ml 1 x 5 ml 1 x 1.5/2.0 ml 1 x 15 ml conical</p>	<p><b>Ø [mm]</b> 17 13.5 13.5 11 17</p> <p><b>Length [min./max.]</b> 97/123 95/115 70/90 42 120</p> <p><small>*only possible with adapter Z326-50-A15 or Z326-50-B15</small></p>
<p><b>Order No.:</b> Z326-1205</p>  <p>Angle rotor 12 x 5 ml Tubes Angle: 45°</p>	<p>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</p>	<p><b>Order No.:</b> without Z216-05-C10 Z216-05-C18</p>	<p><b>Adapter</b> 1 x 5.0 ml conical 1 x 1.0 ml Cryo, flat 1 x 1.8 ml Cryo, round</p>	<p><b>Ø [mm]</b> 17 12.6 12.6</p> <p><b>Length [min./max.]</b> 60 41 48</p>
<p><b>Order No.:</b> Z326-2010</p>  <p>Angle rotor 20 x 10 ml Angle: 30°</p>	<p>Acceleration in s: 54/357 Deceleration in s: 29/842 max. speed: 12,000 rpm RCF-Value: 15,775 xg max. radius: 9.8 cm max. Ø: 16 mm Temp. at max. speed: 4°C</p>	<p><b>Order No.:</b> without</p>	<p><b>Adapter</b> 1 x 10 ml</p>	<p><b>Ø [mm]</b> 16</p> <p><b>Length [min./max.]</b> 80</p>
<p><b>Order No.:</b> Z326-3020H</p>  <p>Angle rotor 30 x 1.5/2.0 ml Angle: 45°</p>	<p>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</p>	<p><b>Order No.:</b> without without 704.005 704.004</p>	<p><b>Adapter</b> 1 x 2.0 ml 1 x 1.5 ml 1 x 0.5 ml 1 x 0.4/0.2 ml PCR</p>	<p><b>Ø [mm]</b> 11 11 8 6</p> <p><b>Length [min./max.]</b> 40 40 45 45</p>



# Accessories Z 327 and Z 327 K

Rotor/Bucket	Adapter				
<p>Order No.: Z326-4420</p>  <p>Angle rotor 44 x 1.5/2.0 ml Angle: 32°/55°</p>	<p>Acceleration in s: 31/256 Deceleration in s: 21/441 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</p>	<p>Order No.: Adapter without 1 x 2.0 ml without 1 x 1.5 ml C1008-A5-6 1 x 0.5 ml C1008-A2-6 1 x 0.4/0.2 ml PCR</p>	<p>Ø [mm] 11 11 8 6</p>	<p>Length [min./max.:] 40 40 45 45</p>	
<p>Order No.: Z326-2420</p>  <p>PPS-Lid Angle rotor 24 x 1.5/2.0 ml Angle: 45°   hermetically sealed</p>	<p>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</p>	<p>Order No.: Adapter without 1 x 2.0 ml without 1 x 1.5 ml C1008-A5-6 1 x 0.5 ml C1008-A2-6 1 x 0.4/0.2 ml PCR</p>	<p>Ø [mm] 11 11 8 6</p>	<p>Length [min./max.:] 40 40 45 45</p>	
<p>Order No.: Z326-2420H</p>  <p>Alu-Lid Angle rotor 24 x 1.5/2.0 ml Angle: 45°   hermetically sealed (aluminum lid)</p>	<p>Acceleration in s: 26/222 Deceleration in s: 17/267 max. speed: 15,000 rpm RCF-Value: 21,379 xg max. radius: 8.5 cm max. Ø: 11 mm Temp. at max. speed: 4°C</p>	<p>Order No.: Adapter without 1 x 2.0 ml without 1 x 1.5 ml C1008-A5-6 1 x 0.5 ml C1008-A2-6 1 x 0.4/0.2 ml PCR</p>	<p>Ø [mm] 11 11 8 6</p>	<p>Length [min./max.:] 40 40 45 45</p>	
<p>Order No.: Z326-3202</p>  <p>Angle rotor 4 x 8-place PCR Strips Angle: 45°</p>	<p>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</p>				



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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