

Universal Centrifuges

| Z327

| Z327-K



dot scientific inc

(800) 878-1785

www.dotscientific.com

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:	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

200 ml
bottle
56

200 ml
conical
56

100 ml
RB Glass
40

85 ml
RB/OR
38



Length min./max. (mm)

Tubes per Rotor

Radius Correction (cm)

Order No. Adapter: Z327-200-___

112
4
0.0
without

120
4
0.0
A200

95/115
4
0.2
A100

95/108
4
0.2
A85

Volume

Tubes Ø in mm

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

1.8-7 ml
Vakut.®
13

50 ml
conical
29



Length min./max. (mm)

Tubes per rotor

Radius Correction (cm)

Order No. Adapter

95/103
4
0.2
A50R

116
4
0.1
A50

116
4
0.2
A50SS

95/105
4
0.2
A25

90/110
4
0.2
A30

120
16
0.1
A15B*

120
12
0.0
A15

60/107
28
0.2
A15R

65/100
32
0.2
A57

60/70
20
0.1
A5F

40
32
0.1
A20

100
28
0.2
A10

75/100
32
0.2
A57

116
8
0.0
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

145 ml
Nalgene®
50

100 ml
RB Glass
44

85 ml
RB/OR
38

50 ml
RB Glass
29

50 ml
conical
29



Length min./max. (mm)

Tubes per rotor

Radius Correction (cm)

Order No. Adapter: Z306-100-___

100
4
1.0
A145

90/108
4
1.0
A100

90/108
4
0.8
A85

90/118
4
0.7
A50R

116
4
0.3
A50

Volume

Tubes Ø in mm

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



Length min./max. (mm)

Tubes per rotor

Radius Correction (cm)

Order No. Adapter

116
4
0.6
A50SS

95/105
4
1.1
A30

120
8
0.0
A15

90/108
28
0.4
A10

90/108
28
0.4
A10

75/100
28
0.7
A57

40
40
5.5
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

100 ml
RB Glass
40

85 ml
RB/OR
38

50 ml
RB/OR
29

50 ml
Falcon®
29



Length min./max. in mm

Tubes per rotor

Radius correction (cm)

Order-No.: Z326-100H-___

90/108
4
0.9
A100

90/108
4
0.6
A85

90/133
4
0.6
A50R

116
4
0.4
A50

Volume

Tubes Ø in mm

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



Length min./max. (mm)

Tubes per rotor

Radius Correction (cm)

Order No. Tube rack

116
4
0.7
A50SS

95/105
4
1.5
A30

120
4
0.5
A15S

120
8
0.5
A15*

90/108
16
0.6
A15R

75/100
16
0.6
A10

75/125
4
0.6
A15L*

75/100
16
0.6
A57







42
20
0.6
A20

116
8
0.0
B50







120
12
0.0
B15

* only without bucket lid

Accessories Z327 and Z327-K





Rotor/Bucket	Adapter																												
<p>Order No.: Z326-02MP</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.: Z326-3015</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.: Z326-1215</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 902 1357 1120"> <thead> <tr> <th>Volume</th> <th>15 ml conical</th> <th>15 ml</th> <th>4-7 ml Vakut.®</th> <th>1.8-5 ml Vakut.®</th> </tr> </thead> <tbody> <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.®	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	without	C3100-ADP	C3100-ADP							
Volume	15 ml conical	15 ml	4-7 ml 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	without	C3100-ADP	C3100-ADP																									
<p>Order No.: Z326-0650</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 1223 1357 1441"> <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>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.: Z326-0685-25</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.: Z326-0685</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>Order No.: 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>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] 38 29 29 25 17 17 17</p>	<p>Length [min./max.] 113 105 116 90/103 95/100 103/110 120</p>
<p>Order No.: 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>Order No.: without Z326-50-A30 Z326-50-B15R Z326-50-A15R</p>	<p>Adapter 1 x 50 ml round 1 x 30 ml 1 x 15 ml 1 x 15 ml conical*</p>	<p>Ø [mm] 29 25 17 17</p>	<p>Length [min./max.] 95/115 92/95 100/105 120</p>
<p>Order No.: 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>Order No.: Z326-50-B15HS Z326-15-A7* Z326-15-A5* Z326-15-A20* Z326-50-A15</p>	<p>Adapter 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>Ø [mm] 17 13.5 13.5 11 17</p>	<p>Length [min./max.] 97/123 95/115 70/90 42 120</p>
<p>Order No.: 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>Order No.: without Z216-05-C10 Z216-05-C18</p>	<p>Adapter 1 x 5.0 ml conical 1 x 1.0 ml Cryo, flat 1 x 1.8 ml Cryo, round</p>	<p>Ø [mm] 17 12.6 12.6</p>	<p>Length [min./max.] 60 41 48</p>
<p>Order No.: 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>Order No.: without</p>	<p>Adapter 1 x 10 ml</p>	<p>Ø [mm] 16</p>	<p>Length [min./max.] 80</p>
<p>Order No.: 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>Order No.: without without 704.005 704.004</p>	<p>Adapter 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>Ø [mm] 11 11 8 6</p>	<p>Length [min./max.] 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>	<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>	



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).