

# High Speed Refrigerated Centrifuge

■ Z32-HK



**HERMLE**  
**Benchmark** 

4 x 145 ml

# Z32-HK



## 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
- A large variety of rotors and accessories
- Audible signal at the end of each run with several melody options
- Noise level under 65 dBA at max. speed
- Manufactured according to international safety regulations, i.e. IEC 61010
- Rotor exchange is easy to handle
- Stainless steel chamber

The Z32 HK utilizes much of the technology of our popular Z326 series, with a larger and more powerful motor drive, providing increased speed up to 20,000 rpm (38,007 x g). With 16 available rotor options, the Z32 HK is not only ideal for high speed separations, it would also be classified as a "universal" centrifuge, offering economy angled and swinging bucket rotors for lower speed applications. Tubes from 0.2ml up to 85ml can be accepted, and rotors can quickly be exchanged without any required programming, utilizing the instant rotor identification system. Despite an impressive capacity of up to 4 x 145ml (or 6 x 85ml), the Z32-HK is surprisingly compact. The refrigeration system is conveniently located behind the rotor chamber, resulting in narrow design of less than 16 inches wide.

## Technical data

Max. speed:	20,000 rpm
Max. RCF:	38,007 g
Max. volume:	4 x 145 ml
Speed range:	200 - 20,000 rpm
Running time:	59 min 50 s / 10 s increments 99 h 59 min / 1 min increments
Dimensions:	16 in x 14 in x 28 in (w x h x d) 40 cm x 36 cm x 70 cm (w x h x d)
Weight:	157 lbs / 71 kg
Order No.:	Z032-HK 120 V / 50 - 60 Hz / 1200 W Z032-HK-E 230 V / 50-60 Hz / 1100 W



## Distinct Control Panel

- Simple one handed 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 g-force, with increments of 10
- 10 acceleration and 10 deceleration rates, Possibility of unbraked deceleration
- Preselection of the temperature from - 20°C to 40°C with 1°C increments
- Indication of the sample temperature
- Pre-cooling program option
- Standstill cooling
- Pre-selection of running time from 10 s to 99 h 59 min or continuous
- Storage of up to 99 runs incl. rotor type
- Quick-key for short runs
- Diagnostic program
- Timer: the centrifuge starts at the preselected time

# Accessories Z32-HK

## Rotor/Bucket

Order No.:  
Z326-0685-25



Angle rotor 6 x 85 ml  
Super rotor 85ml, 50ml, 15ml, and 7ml  
Angle: 25°

## Adapter

Acceleration in s: 61/495  
Deceleration in s: 46/1407  
Max. speed: 13,500 rpm  
Max. RCF: 20,984 xg  
Max. radius: 10.3 cm  
Max. Ø: 38 mm  
Temp. at max. speed: 7°C

Order No.:	Tube rack	Ø (mm)	Length (min./max.):
without Adapter	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-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: 62/515  
Deceleration in s: 51/1869  
Max. speed: 13,000 rpm  
Max. RCF: 21,726 xg  
Max. radius: 11.5 cm  
Max. Ø: 38 mm  
Temp. at max. speed: 4°C

Order No.:	Tube rack	Ø (mm)	Length (min./max.):
without Adapter	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-A15R	1 x 15 ml	17	103/110
Z326-85-A15	1 x 15 ml conical	17	120

Order No.:  
Z326-0485



Angle rotor 4 x 85 ml  
Angle: 30°

Acceleration in s: 58/511  
Deceleration in s: 51/1460  
Max. speed: 15,000 rpm  
Max. RCF: 23,140 xg  
Max. radius: 9.2 cm  
Max. Ø: 38 mm  
Temp. at max. speed: 7°C

Order No.:	Tube rack	Ø (mm)	Length (min./max.):
without Adapter	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-A15R	1 x 15 ml	17	103/110
Z326-85-A15	1 x 15 ml conical	17	120

Order No.:  
Z326-1050



Angle rotor 10 x 50 ml conical  
Angle: 38°

Acceleration in s: 66/380  
Deceleration in s: 63/796  
Max. speed: 9,000 rpm  
Max. RCF: 11,771 xg  
Max. radius: 13 cm  
Max. ø: 29 mm  
Temp. at max. speed: -4°C

Order No.:	Adapter	Ø (mm)	Length (min./max.):
Z326-50-B15HS	1 x 15 ml 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
Z326-50-A15	1 x 15 ml conical	17	120

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

Order No.:  
Z326-0650-HS



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

Acceleration in s: 50/412  
Deceleration in s: 30/1087  
Max. speed: 16,000 rpm  
Max. RCF: 24,039 xg  
Max. radius: 8.4 cm  
Max. Ø: 29 mm  
Temp. at max. speed: 1°C

Order No.:	Tube rack	Ø (mm)	Length (min./max.):
without Adapter	1 x 50 ml	29	95/115
Z326-50-A30	1 x 30	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.:  
Z326-2010



Angle rotor 20 x 10 ml  
Angle: 30°

Acceleration in s: 50/412  
Deceleration in s: 37/1186  
Max. speed: 14,000 rpm  
Max. RCF: 21,472 xg  
Max. radius: 9.8 cm  
Max. Ø: 16 mm  
Temp. at max. speed: 3°C

Order No.:	Tube rack	Ø (mm)	Length (min./max.):
without Adapter	1 x 10 ml	16	80

Order No.:  
Z326-3202



Angle rotor 4 x 8 PCR Strips  
Angle: 45°

Acceleration in s: 16/130  
Deceleration in s: 12/130  
Max. speed: 15,000 rpm  
Max. RCF: 15,343 xg  
Max. radius: 6.1 cm  
Max. Ø: 6 mm  
Temp. at max. speed: -5°C

# Accessories Z32-HK

## Rotor/Bucket

Order No.:  
Z326-2420H



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

## Adapter

Acceleration in s: 31/259  
Deceleration in s: 28/490  
Max. speed: 20,000 rpm  
Max. RCF: 38,007 xg  
Max. radius: 8.5 cm  
Max. Ø: 11 mm  
Temp. at max. speed: 7°C

Order No.:	Tube rack	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



Angle rotor 24 x 1.5 / 2.0 ml  
Angle: 45°

Acceleration in s: 31/259  
Deceleration in s: 28/490  
Max. speed: 17,000 rpm  
Max. RCF: 27,460 xg  
Max. radius: 8.5 cm  
Max. Ø: 11 mm  
Temp. at max. speed: 1°C

Order No.:	Tube rack	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.:  
Z326-4420



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

Acceleration in s: 26/222  
Deceleration in s: 23/477  
Max. speed: 15,000 rpm  
Max. RCF: 21,379 xg  
Max. radius: 8.5 cm  
Max. Ø: 11 mm  
Temp. at max. speed: -6°C

Order No.:	Tube rack	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.:  
Z326-3020H



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

Acceleration in s: 31/251  
Deceleration in s: 32/642  
Max. speed: 17,000 rpm  
Max. RCF: 30,368 xg  
Max. radius: 9.4 cm  
Max. Ø: 11 mm  
Temp. at max. speed: 10° C

Order No.:	Tube rack	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



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# Accessories Z32-HK

## 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

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

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

6-15 ml

Vakut.®

16

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: Z327-200-\_\_\_

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

0.1

0.0

0.0

0.2

0.2

0.1

0.1

0.2

0.2

0.2

0.0

A50R

A50

A50SS

A25

A30

A15B\*

A15

A10

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

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

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

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

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

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

90/108

90/133

116

4

# Accessories Z32-HK

## Rotor/Bucket

Order No.:  
Z326-02MP



Swing out rotor 2 x 3 Microplates  
Angle: 0-90°

## Adapter

Acceleration in s: 25/230  
Deceleration in s: 26/490  
max. Speed: 4500 rpm  
RCF-value: 2716 xg  
max. Radius: 12.0 cm  
max. Loading height: 63 mm  
max. Loading weight: 310 g  
Temp. at max. speed: -8°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 Tubes  
3 x Chamber slide or 35/60 mm petri dish

Order No.:  
Z326-3015



Angle rotor 30 x 15 ml  
Angle: 35°

Acceleration in s: 19/157  
Deceleration in s: 20/590  
max. Speed: 4500 rpm  
RCF-value: 2830 / 2467 xg  
max. Radius: 12.5/10.9 cm  
max. Ø: 17 mm  
Temp. at max. speed: -16°C

Order No.:	Tube rack	Ø (mm)	Length (min./max.):
without	1 x 15 ml-Glass	17.0	95/115
C3100-ADP	1 x 5/7 ml (pack of 8)	13	75/100

Order No.:  
Z326-1215



Angle rotor 12 x 15 ml  
Angle: 32°

Acceleration in s: 11/102  
Deceleration in s: 14/167  
max. Speed: 6000 rpm  
RCF-value: 4427 xg max.  
Radius: 11.0 cm  
max. Ø: 17 mm  
Temp. at max. speed: -15°C

Volume	15 ml Falcon®	15 ml	7 ml	5 ml
ØTubes in mm	17	17	13	13
Length min./max. in mm	120	105-120	100	75
Adapter Order No.:	without	without	C3100-ADP	C3100-ADP

Order No.:  
Z326-0650-LS



Angle rotor 6 x 50 ml  
Angle: 40°

Acceleration in s: 11/101  
Deceleration in s: 14/206  
max. Speed: 6000 rpm  
RCF-value: 4427 xg  
max. Radius: 11.0 cm  
max. Ø: 29 mm  
Temp. at max. speed: -16°C

Volume	50 ml Falcon®	50 ml RB/OR	15 ml Falcon®	7 ml	5 ml
ØTubes in mm	29	29	17	13	13
Length min./max. in mm	116	100/120	120	100	75
Adapter Order No.:	without	without	Z206-50-A15	Z206-50-A57	Z206-50-A57C*

\*with Z206-50-A57

More from **HERMLE**  
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Universal Centrifuge Z327-K

Max. speed 18,000 rpm

Max. volume 4 x 200 ml



Refrigerated  
Super Speed Centrifuge Z36-HK

Max. speed 30,000 rpm

Max. volume 6 x 250 ml

■ For more Information, please visit our website!

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