

# 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

Order No.:  
Z306-100



Swing out rotor 4 place  
Angle: 0-90°

Acceleration in s: 14/110  
Deceleration in s: 19/170  
max. Speed: 4500 rpm  
RCF-value: 3350 xg  
max. Radius: 14.8 cm  
Temp. at max. speed: -13°C

Volume	145 ml	100 ml	85 ml	50 ml	50 ml
	Nalgene®	RB Glass	RB/OR	RB Glass	Falcon®
Tubes ø in mm	50	44	38	29	29
Length min./max. in mm	100	9	90/108	90/118	4
Tubes per rotor	4	4	4	4	4
Radius correction (cm)	1.0	1.0	0.8	0.7	0.3
Order-No.: Z306-100-	A145	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	30 ml Universal	15 ml Falcon®	6-10 ml Vakut.®	1.8-7 ml Vakut.®	1.5 ml Reakt.
29	25	17	16	13	11
116	95/105	120	90/108	75/100	42
4	4	8	28	28	40
0.6	1.1	0.0	0.4	0.7	5.5
A50SS	A30	A15	A10	A57	A20

# Accessories Z32-HK

## Rotor/Bucket

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



## Adapter

Acceleration in s: 14/105  
Deceleration in s: 13/374  
max. Speed: 5000 rpm  
RCF-value: 4080 xg  
max. Radius: 14.6 cm  
Temp. at max. speed: 10°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



90/108  
4  
0.9  
A100

85 ml  
RB/OR  
38



90/108  
4  
0.6  
A85

50 ml  
RB/OR  
29



90/133  
4  
0.6  
A50R

50 ml  
Falcon®  
29



116  
4  
0.4  
A50

Volume

Tubes Ø in mm

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

50 ml  
skirted  
29



116  
4  
0.7  
A50SS

30 ml  
Universal  
25



95/105  
4  
1.5  
A30

15 ml  
Falcon®  
17



120  
4  
0.5  
A15S

15 ml  
Falcon®  
17



120  
8  
0.5  
A15\*

15 ml  
RB Glass  
17



90/108  
16  
0.6  
A15R

6-10 ml  
Vakut.®  
16



75/100  
16  
0.6  
A10

10-15 ml  
Vakut.®  
16



75/125  
4  
0.6  
A15L

1.8-7 ml  
Vakut.®  
13



75/100  
16  
0.6  
A57

1.5 ml  
Reakt.  
11



42  
20  
0.6  
A20

50 ml  
Falcon®  
29



116  
8  
0.0  
B50

15 ml  
Falcon®  
--



120  
12  
0.0  
B15

Order No.:  
**Z326-02MP**



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

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.:  
without  
C3100-ADP

Tube rack  
1 x 15 ml-Glass  
1 x 5/7 ml (pack of 8)

Ø (mm)  
17.0  
13

Length (min./max.):  
95/115  
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

Ø Tubes in mm  
Length min./max. in mm  
Adapter Order No.:

15 ml  
Falcon®



17  
120  
without

15 ml



17  
105-120  
without

7 ml



13  
100  
C3100-ADP

5 ml



13  
75  
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

Ø Tubes in mm  
Length min./max. in mm  
Adapter Order No.:

50 ml  
Falcon®



29  
116  
without

50 ml  
RB/OR



29  
100/120  
without

15 ml  
Falcon®



17  
120  
Z206-50-A15

7 ml



13  
100  
Z206-50-A57

5 ml



13  
75  
Z206-50-A57C\*

\*with Z206-50-A57

More from **HERMLE**  
**Benchmark**



Universal Centrifuge Z326-K

Max. speed 18,000 rpm

Max. volume 4 x 145 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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