

REFRIGERATED HIGH SPEED CENTRIFUGE **Z 32 HK**



Refrigerated High Speed Centrifuge Z 32 HK

With a wide range of accessories, the Z 32 HK high speed centrifuge is applicable in a wide variety of research settings.

In spite of the remarkably small footprint, the Z 32 HK features a powerful refrigeration system capable of maintaining cool sample temperatures even at maximum speed.



Specifications

- Maintenance-free induction drive
- Microprocessor with large LCD display
- Motor driven lid lock
- Automatic rotor identification system with over speed protection immediately upon rotor installation
- Active imbalance-identification and -cut off rotor specific
- Imbalance tolerant drive
- CFC-free refrigeration system
- A large variety of rotors and accessories
- Manufactured according to international safety regulations, i.e. IEC 1010
- Audible signal at the end of each run with several melody options
- Quick and easy rotor exchange
- Noise level under 60 dBA at max. speed

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 unbroken 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 sec to 99h 59min or continuous
- Storage of up to ninety nine runs incl. rotor type
- Quick-key for short runs
- Diagnostic program



Technical data

max. Speed:	20000 min ⁻¹
max RCF:	38012 xg
max. Volume:	4 x 100 ml
Speed range::	200 - 20000 min ⁻¹
Running Time:	99 h 59 min / 59 min 50 sec in 1 min / 10 sec increments

Dimensions (w x h x d):	40 cm x 36 cm x 70 cm
Weight:	71 kg
Power input:	1200 W

Order numbers:
311.00 V03 - Z 32 HK, 230 V / 50 - 60 Hz
311.00 V04 - Z 32 HK, 120 V / 50 - 60 Hz

Accessories **z 32 HK**

Rotor/Bucket

Order No.:
220.78 V05



Angle rotor 6 x 85 ml
Angle: 25°

Order No.:
221.18 V02



Angle rotor 6 x 85 ml
Angle: 38°

Order No.:
221.20 V02



Angle rotor 4 x 85 ml
Angle: 30°

Order No.:
221.22 V02



Angle rotor 6 x 50 ml
Angle: 26°

Order No.:
221.28 V02



Angle rotor 20 x 10 ml
Angle: 30°

Order No.:
221.17 V03



Angle rotor 30 x 1,5 / 2,0 ml
Angle: 45° | hermetically sealed

Adapters

Acceleration in sec.: 60 / 500 Deceleration in sec.: 50 / 1260 max. speed: 13500 rpm RCF-value: 20986 xg max. radius: 10,3 cm max. Ø: 38 mm Temp. at max. Speed: 5°C	Order-No.:	Tube rack	Ø (mm)	Length (min./max.):
	707.001	1 x 15 ml	17	103/110
	707.002	1 x 30 ml	25	90/103
	707.003	1 x 50 ml	29	105
	707.004	1 x 50 ml-Falcon	29	118
	707.014	1 x 15 ml-Falcon	17	120
	without Adapter	1 x 85 ml	38	113
	707.000	2 x 15 ml	17	95/100
	707.015	1 x 16 ml	18	103/110

Acceleration in sec.: 60 / 250 Deceleration in sec.: 50 / 1620 max. speed: 12000 rpm RCF-value: 18514 xg max. radius: 11,5 cm max. Ø: 38 mm Temp. at max. Speed: 2°C	Order-No.:	Tube rack	Ø (mm)	Length (min./max.):
	707.001	1 x 15 ml	17	103/110
	707.002	1 x 30 ml	25	90/103
	707.003	1 x 50 ml	29	105
	707.004	1 x 50 ml-Falcon	29	118
	707.014	1 x 15 ml-Falcon	17	120
	without Adapter	1 x 85 ml	38	113
	707.000	2 x 15 ml	17	95/100
	707.015	1 x 16 ml	18	103/110

Acceleration in sec.: 60 / 540 Deceleration in sec.: 51 / 1380 max. speed: 15000 rpm RCF-value: 23142 xg max. radius: 9,2 cm max. Ø: 38 mm Temp. at max. Speed: 5°C	Order-No.:	Tube rack	Ø (mm)	Length (min./max.):
	707.001	1 x 15 ml	17	103/110
	707.002	1 x 30 ml	25	90/103
	707.003	1 x 50 ml	29	105
	707.004	1 x 50 ml-Falcon*	29	118
	707.014	1 x 15 ml-Falcon*	17	120
	without Adapter	1 x 85 ml	38	113
	707.000	2 x 15 ml	17	95/100
	707.015	1 x 16 ml	18	103/110

*only without rotor lid

Acceleration in sec.: 45 / 420 Deceleration in sec.: 35 / 950 max. speed: 16000 rpm RCF-value: 24041 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.):
	ohne Adapter	1 x 50 ml	29	95/115
	708.019	1 x 30 ml	25	92/95
	708.003	1 x 16 ml	18	100/105
	708.004	1 x 15 ml	17	100/105
	603.001	1 x 15 ml-Falcon*	17,5	116/125

*only without rotor lid

Acceleration in sec.: 45 / 420 Deceleration in sec.: 40 / 1020 max. speed: 14000 rpm RCF-value: 21693 xg max. radius: 9,9 cm max. Ø: 16 mm Temp. at max. Speed: 1° C	Order-No.:	Tube rack	Ø (mm)	Length (min./max.):
	ohne Adapter	1 x 16 ml	16	80

Acceleration in sec.: 30 / 250 Deceleration in sec.: 30 / 600 max. speed: 17000 rpm RCF-value: 30371 xg max. radius: 9,4 cm max. Ø: 11 mm Temp. at max. Speed: 8° C	Order-No.:	Tube rack	Ø (mm)	Length (min./max.):
	without Adapter	1 x 2,0 ml	11	40
	without Adapter	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 232 HK

Rotor/Bucket

Order No.:
220.87 V10



Angle rotor 24 x 1,5 / 2,0 ml
Angle: 45° | hermetically sealed

Order No.:
220.87 V09



Angle rotor 24 x 1,5 / 2,0 ml
Angle: 45°

Order No.:
220.88 V07



Angle rotor 44 x 1,5 / 2,0 ml
Angle: 40°C

Order No.:
221.38 V01



Angle rotor 4 x 8 PCR Strips
Angle: 45°

Order No.:
221.12 V03



Swing out rotor 4 Places
Angle: 0-90°

Volume

Tubes Ø in mm

Length min./max. (mm)
Tubes per Rotor
Radiuscorrection (cm)
Order-No.: Tube Rack

Adapters

Acceleration in sec.: 30 / 260	Order-No.:	Tube rack	Ø (mm)	Length (min./max.):
Deceleration in sec.: 30 / 420	without Adapter	1 x 2,0 ml	11	40
max. speed: 20000 rpm	without Adapter	1 x 1,5 ml	11	40
RCF-value: 38012 xg	704.005	1 x 0,5 ml	8	45
max. radius: 8,5 cm	704.004	1 x 0,4/0,2 ml PCR	6	45
max. Ø: 11 mm				
Temp. at max. Speed: 10°C				

Acceleration in sec.: 25 / 220	Order-No.:	Tube rack	Ø (mm)	Length (min./max.):
Deceleration in sec.: 25 / 370	without Adapter	1 x 2,0 ml	11	40
max. speed: 17000 rpm	without Adapter	1 x 1,5 ml	11	40
RCF-value: 27467 xg	704.005	1 x 0,5 ml	8	45
max. radius: 8,5 cm	704.004	1 x 0,4/0,2 ml PCR	6	45
max. Ø: 11 mm				
Temp. at max. Speed: -1°C				

Acceleration in sec.: 22 / 200	Order-No.:	Tube rack	Ø (mm)	Length (min./max.):
Deceleration in sec.: 22 / 280	without Adapter	1 x 2,0 ml	11	40
max. speed: 13500 rpm	without Adapter	1 x 1,5 ml	11	40
RCF-value: 17115/14466 xg	704.005	1 x 0,5 ml	8	45
max. radius: 8,4/7,1 cm	704.004	1 x 0,4/0,2 ml PCR	6	45
max. Ø: 11 mm				
Temp. at max. Speed: -5°C				

Acceleration in sec.: 13 / 110
Deceleration in sec.: 10 / 200
max. speed: 15000 rpm
RCF-value: 15342 xg
max. radius: 6,1 cm
max. Ø: 6 mm
Temp. at max. Speed: -7°C

Acceleration in sec.: 15 / 100	Volume	100 ml	85 ml	50 ml	50 ml	50 ml
Deceleration in sec.: 15 / 180	Tubes Ø in mm	RB Glass	RB/OR	RB Glass	RB Glass	Falcon
max. speed: 4500 min ⁻¹		44	38	34	29	29
RCF-value: 3350 xg						
max. radius: 14,8 cm	Length min./max. (mm)	90/108	90/108	92/118	90/133	116
Temp. at max. Speed: -15°C	Tubes per Rotor	4	4	4	4	4
	Radiuscorrection (cm)	0,7	0,7	0,3	0,3	0,3
	Order-No.: Tube Rack	626.000	626.001	626.008	626.009	626.002

50 ml	30 ml	25 ml	15 ml	15 ml	15 ml	5/7 ml	1,5 ml	4,5 ml	5/7ml	5/7ml
Rim	Universal	RB Glass	Falcon	Rim	RB Glass	RB Glass	Reakt.	Sarstedt		Vakut.
29	25	25	17	17	17	13	11	12	13	13
116	95/105	95/110	120	120	90/108	75/100	42	75/100	65/80	75/100
4	4	4	8	8	28	36	40	36	36	28
0,2	0,2	0,2	0,0	0,0	0,3	0,6	0,6	0,6	3,2	0,6
626.010	626.011	626.012	626.003	626.013	626.004	626.005	626.014	626.007	626.015	626.006

Accessories **232 HK**

Rotor/Bucket

Order No.:
220.72 V06

Swing out rotor 4 Places
Angle: 0-90°
605.000
Bucket for Tube Rack
605.002
Hermetic lid for bucket



Adapters

Acceleration in sec.: 13 / 100
Deceleration in sec.: 13 / 240
max. speed: 5000 rpm
RCF-value: 3885 xg
max. radius: 13,9 cm
Temp. at max. Speed: -12°C

Volume	100 ml RB Glass	85 ml RB/OR	50 ml RB Glass	50 ml RB/OR	50 ml Falcon
Tubes Ø in mm	40	38	34	29	29
Length min./max. (mm)	90/108	90/108	92/118	90/133	116
Tubes per Rotor	4	4	4	4	4
Radius correction (cm)	0,7	0,7	0,0	0,0	0,3
Order-No.: Tube Rack	705.000	705.012	705.001	705.010	705.006

Volume
Tubes Ø in mm

Length min./max. (mm)
Tubes per Rotor
Radius correction (cm)
Order-No.: Tube Rack.

50 ml Rim 29	30 ml Universal 25	25 ml RB Glass 25	15 ml Falcon 17	15 ml Rim 17	15 ml RB Glass 17	5/7 ml RB Glass 13	1,5 ml Reakt. 11	10 ml Sarstedt 17	5/7 ml	10 ml Vakutainer 17	50 ml Falcon 29	15 ml Falcon 17
116	75/105	95/110	120	120	90/108	75/100	42	85/100	75/100	75/100	116	120
4	4	4	8	8	16	28	20	12	16	16	8	12
0,7	0,3	0,0	0,0	0,0	0,3	0,6	0,6	0,2	0,6	0,2	0,7	0,0
705.013	705.014	705.002	705.005*	705.015*	705.003	705.007	705.009	705.011	705.008	705.016	605.004	605.005

*only without bucket lid

Order No.:
221.16 V03



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

Acceleration in sec.: 20 / 160
Deceleration in sec.: 15 / 360
max. speed: 4500 rpm
RCF-value: 2739 xg
max. radius: 12,1 cm
max. Loading height: 58 mm
max. Loading weight: 310 g
Temp. at max. Speed: -10°C

Order-No.: Tube rack
706.000 48 x 1,5 ml (2,0 ml)
Tubes

Order No.:
221.19 V02



Angle rotor 30 x 15 ml
Angle: 35°

Acceleration in sec.: 15 / 120
Deceleration in sec.: 13 / 550
max. speed: 4500 rpm
RCF-value: 2829/2467 xg
max. radius: 12,5/10,9 cm
max. Ø: 17 mm
Temp. at max. Speed: -18°C

Order-No.:	Tube rack	Ø (mm)	Length (min./max.):
701.010	1 x 15 ml-Glas	17,0	95/115
701.011	1 x 7 ml	13,5	95/115
701.012	1 x 5 ml (RIA)	13,5	70/90
701.000	1 x 1,5 ml	11	42

Order No.:
220.96 V04



Angle rotor 12 x 15 ml
Angle: 28°

Acceleration in sec.: 15 / 120
Deceleration in sec.: 14 / 400
max. speed: 6000 rpm
RCF-value: 4185 xg
max. radius: 10,4 cm
max. Ø: 17
Temp. at max. Speed: -19°C

Volume	15 ml Falcon	15 ml	15 ml	7 ml	5 ml	1,5 ml
Ø Tubes in mm	17	17	17	13	13	11
Length in mm	120	105-125	95-105	95-115	70-95	42
Adapter Order-No.:	without	without	701.010	701.011	701.012	701.000

Order No.:
220.97 V04



Angle rotor 6 x 50 ml
Angle: 28°

Acceleration in sec.: 15 / 120
Deceleration in sec.: 16 / 400
max. speed: 6000 rpm
RCF-value: 3823 xg
max. radius: 9,5 cm
max. Ø: 30 mm
Temp. at max. Speed: -17°C

Volume	50 ml Falcon	15 ml Falcon	15 ml
Ø Tubes in mm	30	17	17
Length in mm	120	120-125	95-105
Adapter Order-No.:	without	603.001	701.010

More from HERMLE:

Universal Centrifuge **2326**

max. Speed 18000 rpm
max. Volume 4 x 100 ml



Universal Centrifuge **2326K**

max. Speed 18000 rpm
max. Volume 4 x 100 ml



HERMLE

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