

REFRIGERATED HIGH SPEED CENTRIFUGE **Z 32 HK**



HERMLE
LABORTECHNIK

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.

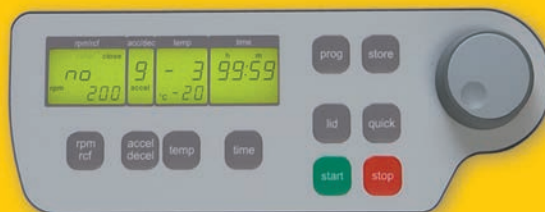


Specifications

- 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 61010
- 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 s to 99h 59min or continuous
- Storage of up to 99 runs incl. rotor type
- Quick-key for short runs
- Diagnostic program



Technical data

max. Speed: 20000 rpm
max RCF: 38007 xg
max. Volume: 4 x 100 ml
Speed range:: 200 - 20000 rpm
Running Time: 99 h 59 min / 59 min 59 s
in 1 min / 10 s 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 V07 - Z 32 HK, 230 V / 50 - 60 Hz
311.00 V08 - 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 V07



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

Adapters

Acceleration in s: 60 / 500 Deceleration in s: 50 / 1260 max. speed: 13500 rpm RCF-value: 20984 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 s: 60 / 250 Deceleration in s: 50 / 1620 max. speed: 13000 rpm RCF-value: 21726 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.):
	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 s: 60 / 540 Deceleration in s: 51 / 1380 max. speed: 15000 rpm RCF-value: 23140 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 s: 45 / 420 Deceleration in s: 35 / 950 max. speed: 16000 rpm RCF-value: 24039 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
	708.017	1 x 15 ml-Falcon*	17,5	116/125

*only without rotor lid

Acceleration in s: 45 / 420 Deceleration in s: 40 / 1020 max. speed: 14000 rpm RCF-value: 21472 xg max. radius: 9,8 cm max. Ø: 16 mm Temp. at max. Speed: 1° C	Order-No.:	Tube rack	Ø (mm)	Length (min./max.):
	ohne Adapter	1 x 10 ml	16	80

Acceleration in s: 30 / 250 Deceleration in s: 30 / 600 max. speed: 17000 rpm RCF-value: 30368 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 V15



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

Adapters

Acceleration in s: 30 / 260	Order-No.:	Tube rack	Ø (mm)	Length (min./max.):
Deceleration in s: 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: 38007 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				

Order No.:
220.87 V16



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

Acceleration in s: 25 / 220	Order-No.:	Tube rack	Ø (mm)	Length (min./max.):
Deceleration in s: 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: 27460 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				

Order No.:
220.88 V09



Angle rotor 44 x 1,5 / 2,0 ml
Angle: 32°/55°

Acceleration in s: 22 / 196	Order-No.:	Tube rack	Ø (mm)	Length (min./max.):
Deceleration in s: 22 / 536	without Adapter	1 x 2,0 ml	11	40
max. speed: 13500 rpm	without Adapter	1 x 1,5 ml	11	40
RCF-value: 17113 xg	704.005	1 x 0,5 ml	8	45
max. radius: 8,4	704.004	1 x 0,4/0,2 ml PCR	6	45
max. Ø: 11 mm				
Temp. at max. Speed: -10°C				

Order No.:
221.38 V01



Angle rotor 4 x 8 PCR Strips
Angle: 45°

Acceleration in s: 13 / 110
Deceleration in s: 10 / 200
max. speed: 15000 rpm
RCF-value: 15343 xg
max. radius: 6,1 cm
max. Ø: 6 mm
Temp. at max. Speed: -7°C

Order No.:
221.12 V03



Swing out rotor 4 Places
Angle: 0-90°

Acceleration in s: 15 / 100	Volume	100 ml	85 ml	50 ml	50 ml	50 ml
Deceleration in s: 15 / 180		RB Glass	RB/OR	RB Glass	RB Glass	Falcon
max. speed: 4500 rpm	Tubes Ø in mm	44	38	34	29	29
RCF-value: 3350 xg						
max. radius: 14,8 cm						
Temp. at max. Speed: -15°C						
	Length min./max. (mm)	90/108	90/108	92/118	90/118	116
	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

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	4,5 ml Sarstedt 12	5/7ml 13	5/7ml Vakut. 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	28	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	

Accessories **z 32 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 s: 13 / 100
Deceleration in s: 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 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 13	10 ml Vakutainer 17	50 ml Falcon 29	15 ml Falcon 17
116	95/105	95/110	120	120	120	90/108	75/100	42	85/100	75/100	75/100	116	120
4	4	4	4	8	8	16	28	20	12	16	16	8	12
0,7	0,3	0,0	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	705.018	705.005* ²	705.015* ²	705.003	705.007	705.009	705.011	705.008	705.016	605.004	605.005

*² only without bucket lid

Order No.:
221.16 V03



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

Acceleration in s: 20 / 160
Deceleration in s: 15 / 360
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: -10°C

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

Order No.:
221.19 V02



Angle rotor 30 x 15 ml
Angle: 35°

Acceleration in s: 15 / 120
Deceleration in s: 13 / 550
max. speed: 4500 rpm
RCF-value: 2830/2467 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.):
without	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
701.015	1 x 1,5 ml	11	42

Order No.:
221.54 V02



Angle rotor 12 x 15 ml
Angle: 32°

Acceleration in s: 13 / 121
Deceleration in s: 17 / 428
max. speed: 6000 rpm
RCF-value: 4427 xg
max. radius: 11,0 cm
max. Ø: 17
Temp. at max. Speed: -15°C

Volume	15 ml Falcon	15 ml	7 ml	5 ml	1,5 / 2,0 ml
Ø Tubes in mm	17	17	13	13	11
Length in mm	121	105-120	100	65-75	42
Adapter Order No.:	without	without	701.011	701.012	701.015

Order No.:
221.55 V02



Angle rotor 6 x 50 ml
Angle: 40°

Acceleration in s: 13 / 119
Deceleration in s: 17 / 522
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	30 ml	16 ml	15 ml Falcon	15 ml
Ø Tubes in mm	29	29	25	18	17	17
Length in mm	116	100-120	100	100-105	121	97-120
Adapter Order No.:	without	without	708.019	708.003	708.030	708.030

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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