

Refrigerated High Speed Centrifuge

| Z 32 HK



HERMLE
LABORTECHNIK

4 x 145 ml

Z 32 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

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 coolsample temperatures even at maximum speed.

Technical data

Max. speed: 20,000 rpm
Max. RCF: 38,007 xg
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: 40 cm x 36 cm x 70 cm (w x h x d)

Weight: 71 kg

Order No.: 311.00 V07 - Z 32 HK
230 V / 50 - 60 Hz / 1200 W
311.00 V08 - Z 32 HK
120 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 Z 32 HK

Rotor/Bucket

Order No.:
220.78 V21



Angle rotor 6 x 85 ml
Angle: 25°

Order No.:
221.18 V21



Angle rotor 6 x 85 ml
Angle: 38°

Order No.:
221.20 V20



Angle rotor 4 x 85 ml
Angle: 30°

Order No.:
221.52 V20



Angle rotor: 10 x 50 ml conical
Angle: 38°

Order No.:
221.22 V20



Angle rotor 6 x 50 ml
Angle: 26°

Order No.:
221.28 V20



Angle rotor 20 x 10 ml
Angle: 30°

Order No.:
221.17 V20



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

Adapter

Acceleration in s: 61/495
Deceleration in s: 46/1,407
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.:
without Adapter
707.003
707.004
707.016
707.002
707.015
707.000
707.001
707.014
707.017

Tube rack	Ø (mm)	Length (min./max.):
1 x 85 ml	38	113
1 x 50 ml	29	105
1 x 50 ml conical	29	116
1 x 50 ml Rim	29	118
1 x 30 ml	25	90/103
1 x 16 ml	18	103/110
2 x 15 ml	17	95/100
1 x 15 ml	17	103/110
1 x 15 ml conical	17	120
1 x 15 ml Rim	17	120

Acceleration in s: 62/515
Deceleration in s: 51/1,869
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.:
without Adapter
707.003
707.004
707.002
707.015
707.000
707.001
707.014

Tube rack	Ø (mm)	Length (min./max.):
1 x 85 ml	38	113
1 x 50 ml	29	105
1 x 50 ml conical	29	116
1 x 30 ml	25	90/103
1 x 16 ml	18	103/110
2 x 15 ml	17	95/100
1 x 15 ml	17	103/110
1 x 15 ml conical	17	120

Acceleration in s: 58/511
Deceleration in s: 51/1,460
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.:
without Adapter
707.003
707.004
707.002
707.015
707.000
707.001
707.014

Tube rack	Ø (mm)	Length (min./max.):
1 x 85 ml	38	113
1 x 50 ml	29	105
1 x 50 ml conical*	29	116
1 x 30 ml	25	90/103
1 x 16 ml	18	103/110
2 x 15 ml	17	95/100
1 x 15 ml	17	103/110
1 x 15 ml conical*	17	120

*only without rotor lid

Acceleration in s: 66/485
Deceleration in s: 63/1,859
Max. speed: 9,000 rpm
Max. RCF: 11,771 xg
Max. radius: 13.0 cm
Max. Ø: 29 mm
Temp. at max. speed: -4°C

Order No.:
708.050
701.011*
701.012*
701.015*
708.051

Tube rack	Ø (mm)	Length (min./max.):
1 x 15 ml	17	97/123
1 x 7 ml	13.5	95/115
1 x 5 ml	13.5	70/90
1 x 1.5/2.0 ml	11	42
1 x 15 ml conical	17	120

*only possible with adapter 708.050 or 708.051

Acceleration in s: 50/412
Deceleration in s: 37/1,087
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.:
without Adapter
708.019
708.003
708.004
708.017

Tube rack	Ø (mm)	Length (min./max.):
1 x 50 ml	29	95/115
1 x 30 ml	25	92/95
1 x 16 ml	18	100/105
1 x 15 ml	17	100/105
1 x 15 ml conical*	17	120

*only without rotor lid

Acceleration in s: 50/412
Deceleration in s: 37/1,186
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.:
without Adapter

Tube rack	Ø (mm)	Length (min./max.):
1 x 10 ml	16	80

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.:
without Adapter
without Adapter
704.005
704.004

Tube rack	Ø (mm)	Length (min./max.):
1 x 2.0 ml	11	40
1 x 1.5 ml	11	40
1 x 0.5 ml	8	45
1 x 0.4/0.2 ml PCR	6	45

Accessories Z 32 HK

Rotor/Bucket

Order No.:
220.87 V20



Alu-Lid

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: 12°C

Order No.:
without Adapter
without Adapter
704.005
704.004

Tube rack
1 x 2.0 ml
1 x 1.5 ml
1 x 0.5 ml
1 x 0.4/0.2 ml PCR

Ø (mm)
11
11
8
6

Length (min./max.):
40
40
45
45

Order No.:
220.87 V22



PPS-Lid

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

Acceleration in s: 31/259
Deceleration in s: 28/490
Max. speed: 16,000 rpm
Max. RCF: 24,325 xg
Max. radius: 8.5 cm
Max. Ø: 11 mm
Temp. at max. speed: 1°C

Order No.:
without Adapter
without Adapter
704.005
704.004

Tube rack
1 x 2.0 ml
1 x 1.5 ml
1 x 0.5 ml
1 x 0.4/0.2 ml PCR

Ø (mm)
11
11
8
6

Length (min./max.):
40
40
45
45

Order No.:
221.68 V20



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
Max. Ø: 11 mm
Temp. at max. speed: -6°C

Order No.:
without Adapter
without Adapter
704.005
704.004

Tube rack
1 x 2.0 ml
1 x 1.5 ml
1 x 0.5 ml
1 x 0.4/0.2 ml PCR

Ø (mm)
11
11
8
6

Length (min./max.):
40
40
45
45

Order No.:
221.38 V20



Angle rotor 4 x 8 PCR Strips
Angle: 45°

Acceleration in s: 13/104
Deceleration in s: 9/212
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

Order No.:
221.12 V20



Swing out rotor 4 place
Angle: 0-90°

Acceleration in s: 12/93
Deceleration in s: 11/328
Max. speed: 4,500 rpm
Max. RCF: 3,350 xg
Max. radius: 14.8 cm
Temp. at max. speed: -13°C

Volume

Tubes Ø in mm

Length min./max. (mm)

Tubes per rotor

Radius Correction (cm)

Order No. Tube rack

145 ml Nalgene® 50	100 ml RB Glass 44	85 ml RB/OR 38	50 ml RB Glass 34	50 ml RB Glass 29	50 ml conical 29
100	90/108	90/108	92/118	90/118	116
4	4	4	4	4	4
1.0	1.0	0.8	0.7	0.7	0.3
626.017	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 conical 17	15 ml Rim 17	5/7 ml RB Glass 13	1,5 ml Reakt. 11	4,5 ml Sarstedt® 12	5/7ml 13	6-10 ml Vakut.® 16	1,8-7 ml Vakut.® 13
116	95/105	95/110	120	120	75/100	42	75/100	65/80	90/108	75/100
4	4	4	8	4	36	40	36	28	28	28
0.6	1.1	0.5	0.0	0.4	1.3	5.5	0.9	3.3	0.4	0.7
626.010	626.011	626.012	626.003	626.013	626.005	626.014	626.007	626.015	626.004	626.006

Accessories Z 32 HK

Rotor/Bucket

Order No.:
220.72 V20



Swing out rotor 4 place
Angle: 0-90°

605.000
Bucket for Tube Rack
605.002
Hermetic lid for bucket



Adapter

Acceleration in s: 14/105
Deceleration in s: 13/374
Max. speed: 5,000 rpm
Max. RCF: 4,080 xg
Max. radius: 14.6 cm
Temp. at max. speed: 10°C

Volume	100 ml RB Glass	85 ml RB/OR	50 ml RB Glass	50 ml RB/OR	50 ml conical
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)	0.9	0.6	0.6	0.6	0.4
Order No. Tube rack	705.000	705.012	705.001	705.010	705.006

Volume	50 ml Rim	30 ml Universal	25 ml RB Glass	15 ml conical	15 ml conical	15 ml Rim	15 ml RB Glass	5/7 ml RB Glass	1,5 ml Reakt.	10 ml Sarstedt®	1,8-7 ml Vakut.®	6-10 ml Vakut.®	50ml conical	15ml conical
Tubes Ø in mm	29	25	25	17	17	17	17	13	11	17	13	16	29	17
Length min./max. (mm)	116	95/105	95/110	120	120	120	90/108	75/100	42	85/100	75/100	75/100	116	120
Tubes per rotor	4	4	4	4	8	8	16	28	20	12	16	16	8	12
Radius Correction (cm)	0.7	1.5	0.6	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.0
Order No. Tube rack	705.013	705.014	705.002	705.018	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 V20



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

Acceleration in s: 18/158
Deceleration in s: 18/644
Max. speed: 4,500 rpm
Max. RCF: 2,716 xg
Max. radius: 12.0 cm
Max. loading height: 63 mm
Max. loading weight: 310 g
Temp. at max. speed: -8°C

Order No.:
706.000
Tube rack
48 x 1.5 ml (2.0 ml)
Reaction Tubes

Order No.:
221.19 V20



Angle rotor 30 x 15 ml glass
or 20 x 15 ml conical
Angle: 35°

Acceleration in s: 15/115
Deceleration in s: 15/777
Max. speed: 4,500 rpm
Max. RCF: 2,830/2,467 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 Adapter	1 x 15 ml Glass	17.0	95/115
without Adapter	1 x 15 ml conical	17.0	120
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
701.018	1 x 9 ml Sarstedt®	17	92/107

Order No.:
221.54 V20



Angle rotor 12 x 15 ml
Angle: 32°

Acceleration in s: 13/121
Deceleration in s: 17/428
Max. speed: 6,000 rpm
Max. RCF: 4,427 xg
Max. radius: 11.0 cm
Max. Ø: 17
Temp. at max. speed: -15°C

Volume	15 ml conical	15 ml	7 ml	5 ml	1,5/2,0 ml	9 ml Sarstedt®
Tubes Ø in mm	17	17	13	13	11	17
Length min./max. (mm)	120	105-120	95-115	65-90	42	92/107
Order No. Tube rack	without	without	701.011	701.012	701.015	701.018

Order No.:
221.55 V20



Angle rotor 6 x 50 ml
Angle: 40°

Acceleration in s: 13/119
Deceleration in s: 17/522
Max. speed: 6,000 rpm
Max. RCF: 4,427 xg
Max. radius: 11.0 cm
Max. Ø: 29 mm
Temp. at max. speed: -16°C

Volume	50 ml conical	50 ml RB/OR	30 ml	16 ml	15 ml conical	15 ml RB
Tubes Ø in mm	29	29	25	18	17	17
Length min./max. (mm)	116	100/120	92/95	100/105	120	97/120
Order No. Tube rack	without	without	708.019	708.003	708.030	708.030

More from HERMLE – a wide range of options



Universal Centrifuge Z 326 K

Max. speed 18,000 rpm
Max. volume 4 x 145 ml



Refrigerated
High Speed Centrifuge Z 36 HK

Max. speed 30,000 rpm
Max. volume 6 x 250 ml

■ For more Information, please visit our website!

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