

# High Speed Table Top Centrifuge

■ Z 36 HK



**HERMLE**  
LABORTECHNIK

6 x 250 ml

# Z 36 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
- Imbalance tolerant drive pin
- Standstill cooling
- Stainless steel chamber

The Z 36 HK is the culmination of many years of centrifuge design experience combined with the latest technology. In this centrifuge are high speeds and centrifugal acceleration possible as well as large voluminas and a huge variety of tubes. The Z 36 HK is the most capable centrifuge in this class.

## Technical data

Max. speed:	30,000 rpm
Max. RCF:	65,395 xg
Max. volume:	6 x 250 ml
Speed range:	200 - 30,000 rpm
Running time:	59 min 50 s / 10 s increments 99 h 59 min / 1 min increments
Dimensions:	71.5 cm x 42 cm x 51 cm (wxhxd)
Weight:	91 kg

Order No.:	302.00 V03 - Z 36 HK 230 V / 50 - 60 Hz / 1600 W 302.00 V04 - Z 32 HK 120 V / 50-60 Hz / 1800 W
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## 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 with storage of up to 99 runs
- Preselection of the temperature from - 20°C to 40°C with 1°C increments
- Temperature selection available in both °C or °F
- 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 36 HK

## Rotor/Bucket

Order No.:  
221.15 V20

Swing out rotor 4 place  
Angle: 0-90°



## Adapter

628.100  
PC-Screwcap



Acceleration in s: 17/151  
Deceleration in s: 21/420  
Max. speed: 4,000 rpm  
Max. RCF: 2,987 xg  
Max. radius: 16.7 cm  
Temp. at max. speed: -18°C

Volume	250 ml	100 ml	50 ml	50 ml	50 ml	50 ml	25 ml	25 ml	15 ml	15 ml
Tubes Ø in mm	62	41	34	29	29 conical	29 Rim	24.5	24.5 Rim	17	17 conical
Length min./max. (mm)	110/130	95/120	100/120	95/120	116	100/120	100/120	85/100	76/115	120
Tubes per rotor	4	4	4	12	12	8	20	12	36	28
Radius Correction (cm)	0.7	0.5	0.6	0.1	0.0	0.6	0.3	0.9	0.1	0.0
Order No. Tube rack	628.000	628.001	628.008	628.002	628.005	628.006	628.003	628.010	628.004	628.007

  

Volume	15 ml	10 ml	9 ml	5-7 ml	1,8-7 ml	6-10 ml	2,6-5 ml	4-10 ml	1,5-2,0 ml
Tubes Ø in mm	17 Rim	16	14	13	13 Vacutainer®	16 Vacutainer®	13 Sarstedt®	15 Sarstedt®	11
Length min./max. (mm)	100/120	80/100	76/115	65/120	75/100	75/100	65/100	75/100	38
Tubes per rotor	28	32	36	56	40	32	40	32	36
Radius Correction (cm)	0.3	0.1	0.1	0.5	0.5	0.1	0.5	0.1	0.8
Order No. Tube rack	628.011	628.012	628.004	628.013	628.014	628.015	628.014	628.015	628.016

Order No.:  
221.16 V20



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

Acceleration in s: 19/172  
Deceleration in s: 23/583  
Max. speed: 4,500 rpm  
Max. RCF: 2,716 xg  
Max. radius: 12 cm  
Max. loading height: 63 mm  
Max. loading weight: 310 g  
Temp. at max. speed: -13°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: 13/105  
Deceleration in s: 20/649  
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: -18°C

Order No.:  
without Adapter  
without Adapter  
701.011  
701.012  
701.015  
701.018

Tube rack	Ø (mm)	Length (min./max.):
1 x 15 ml Glass	17.5	95/115
1 x 15ml conical	17	120
1 x 7 ml	13.5	95/115
1 x 5 ml (RIA)	13.5	70/90
1 x 1.5 ml	11.0	42
1 x 9 ml Sarstedt®	17	92/107

Order No.:  
221.21 V20



Angle rotor 6 x 250 ml  
Angle: 28°

Acceleration in s: 148/695  
Deceleration in s: 131/2,225  
Max. speed: 10,000 rpm  
Max. RCF: 15,650 xg  
Max. radius: 14.0 cm  
Max. Ø: 62 mm  
Temp. at max. speed: 3°C

Order No.:  
without Adapter  
713.045  
713.042  
713.030  
713.028  
713.025  
713.020  
713.015

Tube rack	Ø (mm)	Length (min./max.):
1 x 250 ml	62	122
1 x 175/225 ml Falcon®	61	118/137
1 x 50 ml conical	29	116
1 x 50 ml	29	103
2 x 30 ml	26	92
4 x 15 ml conical	17	120
5 x 10 ml	16	80
8 x 1.5 ml	11	40

Order No.:  
221.18 V21



Angle rotor 6 x 85 ml  
Angle: 38°

Acceleration in s: 74/544  
Deceleration in s: 71/1,477  
Max. speed: 13,000 rpm  
Max. RCF: 21,726 xg  
Max. radius: 11.5 cm  
Max. Ø: 38 mm  
Temp. at max. speed: 0°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

# Accessories Z 36 HK

## Rotor/Bucket

Order No.:  
221.20 V20



Angle rotor 4 x 85 ml  
Angle: 30°

Order No.:  
221.22 V20



Angle rotor 6 x 50 ml  
Angle: 26°

Order No.:  
221.28 V21



Angle rotor 20 x 10 ml  
Angle: 30°

Order No.:  
221.17 V21



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

Order No.:  
221.23 V20



Angle rotor 12 x 1.5 / 2.0 ml  
Angle: 40°

Order No.:  
221.52 V20



Angle rotor 10 x 50 ml conical  
Angle: 38°

## Adapter

Acceleration in s: 123/511  
Deceleration in s: 84/1,334  
Max. speed: 20,000 rpm  
Max. RCF: 41,137 xg  
Max. radius: 9.2 cm  
Max. Ø: 38 mm  
Temp. at max. speed: 17°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	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

\*only without rotor lid

Acceleration in s: 87/755  
Deceleration in s: 73/937  
Max. speed: 21,000 rpm  
Max. RCF: 41,410 xg  
Max. radius: 8.4 cm  
Max. Ø: 29 mm  
Temp. at max. speed: 8°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*	17,5	116/125

\*only without rotor lid

Acceleration in s: 60/482  
Deceleration in s: 55/1,021  
Max. speed: 16,000 rpm  
Max. RCF: 28,045 xg  
Max. radius: 9.8 cm  
Max. Ø: 16 mm  
Temp. at max. speed: 2°C

Order No.:  
without Adapter

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

Acceleration in s: 70/674  
Deceleration in s: 78/531  
Max. speed: 20,000 rpm  
Max. RCF: 42,032 xg  
Max. radius: 9.4 cm  
Max. Ø: 11 mm  
Temp. at max. speed: 9°C

Order No.:  
704.004  
  
704.005  
  
704.011

0.4 ml Tubes (Ø 6 x 50 mm)  
Adapter Kit (6 Pieces)

0.5 ml Tubes (Ø 8 x 32 mm)  
Adapter Kit (6 Pieces)

1.5 ml Adapter for full performance  
(necessary from 20,000 xg on) (6 Pieces)

Acceleration in s: 45/434  
Deceleration in s: 69/420  
Max. speed: 30,000 rpm  
Max. RCF: 65,395 xg  
Max. radius: 6.5 cm  
Max. Ø: 11 mm  
Temp. at max. speed: 6°C

Order No.:  
704.004  
  
704.005  
  
704.011

0.4 ml Tubes (Ø 6 x 50 mm)  
Adapter Kit (6 Pieces)

0.5 ml Tubes (Ø 8 x 32 mm)  
Adapter Kit (6 Pieces)

1.5 ml Adapter for full performance  
(necessary from 16,000 xg on) (6 Pieces)

Acceleration in s: 86/740  
Deceleration in s: 107/1,801  
Max. speed: 10,500 rpm  
Max. RCF: 16,022 xg  
Max. radius: 13 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 RB	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

## The Perfect Fit



### Easy Handling:

- The ergonomic control panel is very user-friendly and enables a smooth and swift operation process.
- There is no need to remove surgical gloves, during operation.
- Strictly a HERMLE application, you can store up to 99 different programs.
- For fast centrifugation, there is a quick bottom option. The centrifuge spins, as long as you press the button.
- For re-assurance that your samples are finished, an acoustic signal will sound when the centrifugation is complete (this function can be deactivated).

### Safety:

- The Z 36 HK has an automatic imbalance shut off system
- There is over speed protection incorporated for each rotor.
- You can only start the unit when the centrifuge lid is closed.
- In case of operation malfunction, an error code will appear on the display; this helps to indicate the reason for the malfunction and to eliminate it.
- Its' stable and firm design, made of massive steel, ensures excellent mechanical protection.
- For more safety, the Z 36 HK is equipped with a sturdy, motorized lid lock.

### Efficient and Versatile:

- Due to the wide range of adapter and rotor options, the Z 36 HK can hold all common tubes and bottles, up to 250 ml.
- Profit from our "pre-cooling" function, cool down the rotor rapidly to your desired temperature. For this, the centrifuge automatically determines the necessary speed for each individual rotor.
- The powerful motor accelerates in a very short time up to 30,000 rpm, which generates an rcf-value of over 65,000 xg!
- With the timer function, you can program the desired time for the end or start of the centrifugation.

# More from HERMLE – a wide range of options



Universal Centrifuge Z 216 M

Max. speed 15,000 rpm  
Max. volume 44 x 1.5 / 2.0 ml



Universal Centrifuge Z 216 MK

Max. speed 15,000 rpm  
Max. volume 44 x 1.5 / 2.0 ml

■ For more Information, please visit our website!

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