High Speed Refrigerated Centrifuge

Z32-HK







HERMLE Benchmark

Thomas Scientific

4 x 145 ml

Z32-HK

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 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:	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 continous
- Storage of up to 99 runs incl. rotor type
- Quick-key for short runs
- Diagnostic program
- Timer: the centrifuge starts at the preselected time

Specifi cations

- Maintenance-free induction drive
- Microprocessor with large LCD display
- Motor driven lid lock
- Automatic radio-frequency rotor identifi cation system (RFID) with over speed protection, immediately upon rotor insertion
- Active imbalance-identifi cation and -cut off (rotor specifi c)
- 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

Accessories Z32-HK

Rotor/Bucket	Adapter

Order No.: Z326-0685-25



Angle rotor 6 x 85 ml
Super rotor 85ml, 50ml, 15ml,and 7ml
Angle: 25°

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	Adapter

Order No.: Z326-2420H



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

Accessories Z32-HK

Rotor/Bucket

Adapter

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

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	100 ml RB Glass	85 ml RB/OR	50 ml RB/OR	50 ml Falcon®
Tubes ø in mm	40	38	29	29
Length min./max. in mm	90/108	90/108	90/133	116
Tubes per rotor	4	4	4	4
Radius correction (cm)	0.9	0.6	0.6	0.4
Order-No.: Z326-100H-	A100	A85	A50R	A50

Volume	50 ml skirted	30 ml Universal	15 ml Falcon®	15 ml Falcon®	15 ml RB Glass	6-10 ml Vakut.®	10-15ml Vakut.®	1.8-7 ml Vakut.®	1.5 ml Reakt.	50ml Falcon®	15ml Falcon®
Tubes Ø in mm	29	25	17	17	17	16	16	13	11	29	
Length min./max. (mm)	116	95/105	120	120	90/108	75/100	75/125	75/100	42	116	120
Tubes per rotor	4	4	4	8	16	16	4	16	20	8	12
Radius Correction (cm)	0.7	1.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.0	0.0
Order No. Tube rack	A50SS	A30	A15S	A15*	A15R	A10	A15L	A57	A20	B50	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.:	Tube rack	Ø (mm)	Length (min./max.):
without	1 x 15 ml-Glass	17.0	95/115
C3100-ADP	1 x 5/7 ml (pack of 8)	13	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	15 ml Falcon®	15 ml	7 ml	5 ml
ØTubes in mm	17	17	13	13
Length min./max. in mm	120	105-120	100	75
Adapter Order No.:	without	without	C3100-ADP	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	50 ml Falcon®	50 ml RB/OR	15 ml Falcon®	7 ml	5 ml
ØTubes in mm	29	29	17	13	13
Length min./max. in mm	116	100/120	120	100	75
Adapter Order No.:	without	without	Z206-50-A15	Z206-50-A57	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!

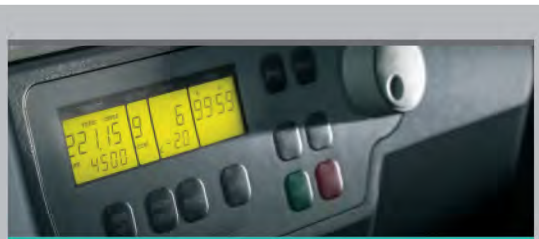
Thomas Scientific

ISO 9001:2015 CERTIFIED COMPANY

ThomasSci.com 833.544.SHIP (7447)

CustomerService@ThomasSci.com

Connect With Us:



Technical modification rights reserved. V 012/18