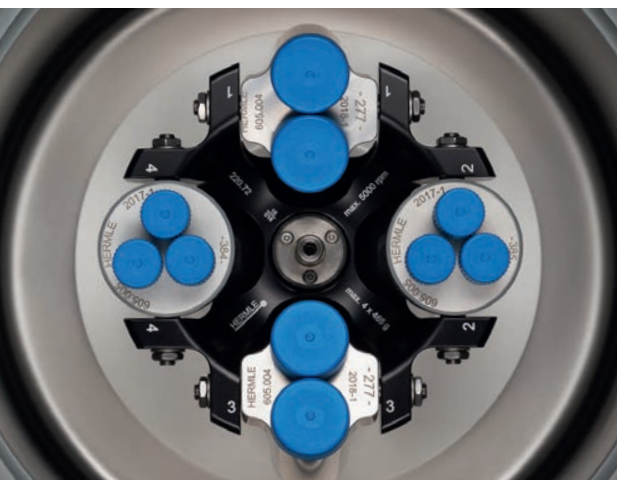


UNIVERSAL CENTRIFUGES

■ Z 326

■ Z 326 K



HERMLE
LABORTECHNIK

Z 326

Z 326 K



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 (Z 326 K)
- A large variety of rotors and accessories
- Audible signal at the end of each run with several melody options
- Noise level under 63 dBA at max. speed
- Manufactured according to international safety regulations, i.e. IEC 61010
- Rotor exchange is easy to handle
- Optimized airflow system keeps the samples cool (Z 326)
- Stainless steel chamber

Both the table top centrifuge Z 326 and the refrigerated table top centrifuge Z 326 K offer a wide assortment of rotor options, making them ideal for a wide variety of research applications. Rotor exchange between swing out, micro, or high volume angled rotors is very simple and can take place in a matter of seconds. The Z 326 K includes the refrigeration system on the back side of the unit, optimized for the lab bench at only 40 cm wide.

Technical data

Max. speed:	18,000 rpm
Max. RCF:	23,542 xg
Max. volume:	4 x 145 ml
Speed range:	200 - 18,000 rpm
Temperature range	
Z 326 K:	-20°C to 40°C
Running time:	59 min 50 s / 10 s increments 99 h 59 min / 1 min increments

Dimensions

Z 326:	40 cm x 36 cm x 48 cm (w x h x d)
Z 326 K:	40 cm x 36 cm x 70 cm (w x h x d)

Weight:

Z 326 / Z 326 K:	43 kg / 60 kg
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Power input:

Z 326 / Z 326 K:	455 W / 660 W
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Order No.:

Z 326:	312.00 V03 - Z 326, 230 V / 50 - 60 Hz 312.00 V04 - Z 326, 120 V / 50 - 60 Hz
Z 326 K:	311.00 V05 - Z 326 K, 230 V / 50 - 60 Hz 311.00 V06 - Z 326 K, 120 V / 50 - 60 Hz



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 326 and Z 326 K

Rotor/Bucket

Order No.:
221.12 V20



Swing out rotor 4 place
Angle: 0-90°

Adapter

Acceleration in s: 15/100
Deceleration in s: 15/150
Max. speed: 4,500 rpm
Max. RCF: 3,350 xg
Max. radius: 14.8 cm
Temp. at max. speed: -1°C

Volume	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
Tubes Ø in mm						
Length min./max. (mm)	100	90/108	90/108	92/118	90/118	116
Tubes per rotor	4	4	4	4	4	4
Radius Correction (cm)	1.0	1.0	0.8	0.7	0.7	0.3
Order No. Tube rack	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

Volume	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
Tubes Ø in mm											
Length min./max. (mm)	116	95/105	95/110	120	120	75/100	42	75/100	65/80	90/108	75/100
Tubes per rotor	4	4	4	8	4	36	40	36	28	28	28
Radius Correction (cm)	0.6	1.1	0.5	0.0	0.4	1.3	5.5	0.9	3.3	0.4	0.7
Order No. Tube rack	626.010	626.011	626.012	626.003	626.013	626.005	626.014	626.007	626.015	626.004	626.006

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



Acceleration in s: 15/100
Deceleration in s: 15/150
Max. speed: 5,000 rpm
Max. RCF: 4,080 xg
Max. radius: 14.6 cm
Temp. at max. speed: 2°C

Volume	100 ml RB Glass 40	85 ml RB/OR 38	50 ml RB Glass 34	50 ml RB/OR 29	50 ml conical 29
Tubes Ø in mm					
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
Tubes Ø in mm
Length min./max. (mm)
Tubes per rotor
Radius Correction (cm)
Order No. Tube rack

Volume	50 ml Rim 29	30 ml Universal 25	25 ml RB Glass 25	15 ml conical 17	15 ml conical 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	1,8-7 ml Vakut.® 13	6-10 ml Vakut.® 16	50ml conical 29	15ml conical 17
Tubes Ø in mm														
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

Order No.:
221.16 V20



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

Acceleration in s: 20/160
Deceleration in s: 15/360
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: 0°C

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

Order No.:
221.19 V20



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

Acceleration in s: 15/160
Deceleration in s: 10/380
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: -6°C

Order No.:	Tube rack	Ø (mm)	Length (min./max.):
without	1 x 15 ml Glass	17.0	95/115
without	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

Accessories Z 326 and Z 326 K

Rotor/Bucket

Order No.:
221.54 V20



Angle rotor 12 x 15 ml
Angle: 32°

Adapter

Acceleration in s: 13/88
Deceleration in s: 11/222
Max. speed: 6,000 rpm
Max. RCF: 4,427 xg
Max. radius: 11.0 cm
Max. Ø: 17 mm
Temp. at max. speed: -4°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: 13/89
Deceleration in s: 11/239
Max. speed: 6,000 rpm
Max. RCF: 4,427 xg
Max. radius: 11.0 cm
Max. Ø: 29 mm
Temp. at max. speed: -3°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

Order No.:
220.78 V20



Angle rotor 6 x 85 ml
Angle: 25°

Acceleration in s: 40/400
Deceleration in s: 40/960
Acceleration in s: 60/500
Deceleration in s: 50/1,260
Max. speed: 11,000 rpm
Max. speed: 13,500 rpm
Max. RCF: 13,932 xg
Max. RCF: 20,984 xg
Max. radius: 10.3 cm
Max. Ø: 38 mm
Temp. at max. speed: 19°C

Order No.:	Tube rack	Ø (mm)	Length (min./max.):
without Adapter	1 x 85 ml	38	113
707.003	1 x 50 ml	29	105
707.004	1 x 50 ml conical	29	116
707.002	1 x 30 ml	25	90/103
707.015	1 x 16 ml	18	103/110
707.000	2 x 15 ml	17	95/100
707.001	1 x 15 ml	17	103/110
707.014	1 x 15 ml conical	17	120

Order No.:
221.18 V20



Angle rotor 6 x 85 ml
Angle: 38°

Acceleration in s: 40/360
Deceleration in s: 40/1,050
Max. speed: 9,000 rpm
Max. RCF: 10,413 xg
Max. radius: 11.5 cm
Max. Ø: 38 mm
Temp. at max. speed: 3°C

Order No.:	Tube rack	Ø (mm)	Length (min./max.):
without Adapter	1 x 85 ml	38	113
707.003	1 x 50 ml	29	105
707.004	1 x 50 ml conical	29	116
707.002	1 x 30 ml	25	90/103
707.015	1 x 16 ml	18	103/110
707.000	1 x 15 ml	17	95/100
707.001	2 x 15 ml	17	103/110
707.014	1 x 15 ml conical	17	120

Order No.:
221.20 V20



Angle rotor 4 x 85 ml
Angle: 30°

Acceleration in s: 60/300
Deceleration in s: 40/820
Max. speed: 12,000 rpm
Max. RCF: 14,809 xg
Max. radius: 9.2 cm
Max. Ø: 38 mm
Temp. at max. speed: 6°C

Order No.:	Tube rack	Ø (mm)	Length (min./max.):
without Adapter	1 x 85 ml	38	113
707.003	1 x 50 ml	29	105
707.004	1 x 50 ml conical*	29	116
707.002	1 x 30 ml	25	90/103
707.015	1 x 16 ml	18	103/110
707.000	1 x 15 ml	17	95/100
707.001	2 x 15 ml	17	103/110
707.014	1 x 15 ml conical*	17	120

*only without rotor lid

Order No.:
221.22 V20



Angle rotor 6 x 50 ml
Angle: 26°

Acceleration in s: 40/360
Deceleration in s: 30/570
Max. speed: 12,000 rpm
Max. RCF: 13,522 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
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 conical*	17	120

*only without rotor lid

Accessories Z 326 and Z 326 K

Rotor/Bucket

Order No.:
221.28 V20



Angle rotor 20 x 10 ml
Angle: 30°

Adapter

Acceleration in s: 40/360
Deceleration in s: 30/570
Max. speed: 12,000 rpm
Max. RCF: 15,775 xg
Max. radius: 9.8 cm
Max. Ø: 16 mm
Temp. at max. speed: 7° C

Order No.:
without Adapter

Tube rack
1 x 10 ml

Ø (mm)
16

Length (min./max.):
80

Order No.:
221.17 V20



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

Acceleration in s: 25/200
Deceleration in s: 25/360
Acceleration in s: 25/210
Deceleration in s: 30/360
Max. speed: 13,000 rpm
Max. speed: 14,000 rpm
Max. RCF: 17,758 xg
Max. RCF: 20,595 xg
Max. radius: 9.4 cm
Max. Ø: 11 mm
Temp. at max. speed: 9° 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 V21



Angle rotor 24 x 1.5 / 2.0 ml
Angle: 45°

Acceleration in s: 23/210
Deceleration in s: 16/240
Acceleration in s: 25/230
Deceleration in s: 17/420
Max. speed: 14,000 rpm
Max. speed: 15,000 rpm
Max. RCF: 18,624 xg
Max. RCF: 21,379 xg
Max. radius: 8.5 cm
Max. Ø: 11 mm
Temp. at max. speed: 7° 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 V20



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

Acceleration in s: 23/240
Deceleration in s: 16/240
Acceleration in s: 25/230
Deceleration in s: 17/420
Max. speed: 14,000 rpm
Max. speed: 15,000 rpm
Max. RCF: 18,624 xg
Max. RCF: 21,379 xg
Max. radius: 8.5 cm
Max. Ø: 11 mm
Temp. at max. speed: 7° 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.:
221.23 V20



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

Acceleration in s: 25/240
Deceleration in s: 20/210
Max. speed: 18,000 rpm
Max. RCF: 23,542 xg
Max. radius: 6.5 cm
Max. Ø: 11 mm
Temp. at max. speed: 3° 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)

Order No.:
221.68 V20



Angle rotor 44 x 1.5 / 2.0 ml
Angle: 32°/55°

Acceleration in s: 28/256
Deceleration in s: 21/434
Max. speed: 15,000 rpm
Max. RCF: 21,379 xg
Max. radius: 8.5 cm
Max. Ø: 11 mm
Temp. at max. speed: 8° 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

Accessories Z 326 and Z 326 K

Rotor/Bucket

Order No.:
220.92 V20



Angle rotor 64 x 0.5 ml
Angle: 40°

Adapter

Acceleration in s: 17/150
Deceleration in s: 12/170
Max. speed: 13,500 rpm
Max. RCF: 16,298/17,725 xg
Max. radius: 8.0/8.7 cm
Max. Ø: 8 mm
Temp. at max. speed: 6°C

Order No.:
221.38 V20



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

Order No.:
221.35 V20



Angle rotor 12 x 5 ml Reaction Tubes
Angle: 45°C

Acceleration in s: 25/205
Deceleration in s: 16/223
Acceleration in s: 27/220
Deceleration in s: 17/373
Max. speed: 14,000 rpm
Max. speed: 15,000 rpm
Max. RCF: 18,624 xg
Max. RCF: 21,379 xg
Max. radius: 8.5 cm
Max. ø: 17 mm
Temp. at max. speed: 6°C

Order No.:

701.015

1.5 - 2 ml Reaction Tubes (ø 11 x 42 mm)

Adapter Kit (6 Pieces)

701.016

1.0 ml Cryo Tubes (ø 12,6 x 41 mm)

Adapter Kit (6 Pieces)

701.017

1.8 ml Cryo Tubes (ø 12,6 x 48 mm)

Adapter Kit (6 Pieces)

Order No.:
221.52 V20



Angle rotor 10 x 50 ml conical
Angle: 38°

Acceleration in s: 63/380
Deceleration in s: 37/796
Max. speed: 7,500 rpm
Max. RCF: 8,141 xg
Max. radius: 13 cm
Max. ø: 29 mm
Temp. at max. speed: 2°C

Order No.:

708.050

Adapter

ø (mm)

Length (min./max.)

1 x 15 ml RB

17

97/123

701.011*

1 x 7 ml

13,5

95/115

701.012*

1 x 5 ml

13,5

70/90

701.015*

1 x 1.5/2.0 ml

11

42

708.051

1 x 15 ml conical

17

120

*only possible with adapter 708.050 or 708.051

The intuitive control panel makes it easy for anyone to operate **Hermle Centrifuges** straight away.



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.
- Make yourself comfortable; operate this model from your laptop or computer. Our multi-functional software, "H-Control", allows you to control the centrifuge independently and save your protocols (this function has to be ordered separately).
- 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 326 and Z 326 K have an automatic imbalance shut off system
- There is over speed protection incorporated for each rotor.
- You can only start the models 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, both models are equipped with two imbalance sensors.

Efficient and Versatile:

- Due to the wide range of adapter and rotor options, models Z 326 and Z 326 K can hold all common tubes and bottles, up to 145 ml.
- Due to the easy rotor exchange, you can switch between different kinds of rotors like swing-out, microlitre, microtitre or big volume fixed angle rotors.
- Despite the high capacity, the design of these devices is compact and space saving, even the Z 326 K with its powerful refrigeration system.
- 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 (only Z 326 K).

More from HERMLE – a wide range of options



Refrigerated High Sped Centrifuge Z 32 HK

Max. speed 20,000 rpm
Max. volume 4 x 145 ml



Compact Centrifuge Z 207 A

Max. speed 6,800 rpm
Max. volume 8 x 15 ml

■ For more Information, please visit our website!

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