# Universal Centrifuge

Z 287 A









# Z 287 A





#### **Specifications**

- Maintenance-free induction drive
- Microprocessor with large LCD display
- Electromagnetic 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)
- Rotor exchange is easy to handle
- A large variety of rotors and accessories
- USB interface for software updates via a PC
- Manufactured according to international safety regulations, i.e. IEC 61010.
- Improved ventilation system keeps samples cool

The centrifuge Z 287 A is a real allrounder! Provided with eleven different rotors, this unit covers the most common applications. No matter if angle, swing out, plate or hematocrit rotor, you will always find the suitable accessory for your needs. Its appealing design and the innovative control panel with "Touch-operation" function and LED light, which indicates the current operating state, complete the versatility of this model.

#### **Technical Data**

max. speed: 14,000 rpm max. RCF: 16,058 xg max. volume: 6 x 50 ml

Speed range: 200 - 14,000 rpm Running time:

59 min 50 s / 10 s increments

99 h 59 min / 1 min increments

Dimensions: 35 cm x 26 cm x 43 cm (W x H x D)

Weight: 18 kg

Order Number: 327.00 V01 - Z 287 A

230 V / 50 - 60 Hz / 170 W 327.00 V02 - Z 287 A 120 V / 50-60 Hz / 170 W

### **Operating state**



### **Distinct Control Panel**

- Control panel with Touch-Operation
- Simply one-handed operation
- Easy to program with gloves on
- Splash-proof foil keyboard
- Permanent indication of preset and actual values
- Selection of speed in both rpm and g-force, in increments of 10
- 10 acceleration and deceleration rates, possibility of unbreaked deceleration
- Preselection of the running time, from 10 s to 99 h 59 min
- Storage of up to 99 runs
- Quick-key for short runs
- Color visual representation of the operating state such as run completed, standby or centrifugation

### Accessories Z 287 A

#### Rotor/Bucket

### Adapter

# Order No.: 221.80 V01



Acceleration in s: 26/242	_
Deceleration in s: 33/252	2
max. speed: 5,000 rpm	
RCF-value: 3,633 xg	
max. radius: 13.0 cm	
max. Ø: 29 mm	

Order No.:	Tube rack	Ø [mm]	Length (min./max.):
without adapter	1 x 50 ml conical	29	116
708.030	1 x 15 ml conical	17	120
708.030	1 x 15 ml Glass	17	105/120
701.011*	1 x 7 ml	13.5	95/115
701.012*	1 x 5 ml	13.5	65/90
701.015*	1 x 1.5/2.0 ml	11	40

Swing out rotor 4 x 50 ml Angle: 0-75°

\*only possible with adapter 708.030

# Order No.: 221.78 V01



Acceleration in s: 26/241 Deceleration in s: 31/250 max. speed: 5,000 rpm RCF-value: 3,437 xg max. radius: 12.3 cm max. Ø: 25 mm Swing out rotor 4 x 30 ml Universal Angle:  $0-90^{\circ}$ 

# Order No.: 221.79 V01



Acceleration in s: 25/240 Deceleration in s: 32/253 max. speed: 5,000 rpm RCF-value: 3,717 xg max. radius: 13.3 cm max. Ø: 16 mm Order No.: Tube rack Length (min./max.): Ø [mm] 640.000 1 x 6-10 ml Vacutainer® 16 100 1 x 1.8-7 ml Vacutainer® 75/100 640.001 13 640.000 1 x 9-10 ml Sarstedt® 92 16 640.000 1 x 4-8.2 ml Sarstedt® 15 75/92 640.001 1 x 2.6-4.9 ml Sarstedt® 65/90 13 640.001 1 x 2.7-5 ml Sarstedt® 11 66/92

Swing out rotor 8 x 10 ml for blood collection tubes Angle: 0-90°

# Order No.: 221.77 V01



Acceleration in s: 27/182 Deceleration in s: 29/193 max. speed: 3,800 rpm RCF-value: 1,453 xg max. radius: 9.0 cm max. loading height: 20 mm max. loading weight: 100 g

Swing out rotor 2 x Microtitre plates Angle:  $0-90^{\circ}$ 

### Order No.: 221.55 V04



Acceleration in s: 34/293 Deceleration in s: 38/317 max. speed: 6,000 rpm RCF-value: 4,427 xg max. radius: 11.0 cm max. Ø: 29 mm

Order No.:	Tube rack	Ø [mm]	Length (min./max.):
without adapter	1 x 50 ml conical	29	116
without adapter	1 x 50 ml	29	100/120
708.019	1 x 30 ml	25	92/95
708.003	1 x 16 ml	18	100/105
708.030	1 x 15 ml conical	17	120
708.030	1 x 15 ml	17	97/120
701.011*	1 x 7 ml	13	95/115
701.012*	1 x 5 ml	13	65/90
701.015*	1 x 1.5/2.0 ml	11	40
			*only possible with adapter 708.030

Angle rotor 6 x 50 ml Angle: 40°

Order No.: 221.54 V04



Angle rotor 12 x 15 ml Angle: 32°

Acceleration in s.: 34/295 Deceleration in s: 38/317 max. speed: 6,000 rpm RCF-value: 4,427 xg max. radius: 11.0 cm max. Ø: 17 mm	without adapter 701.011 701.012 701.015	Tube rack 1 x 15 ml conical 1 x 15 ml glass 1 x 7 ml 1 x 5 ml 1 x 1.5/2.0 ml	17 17 13 13	Length (min./max.) 120 105/120 95/115 65/90 40
	701.018	1 x 9 ml Sarstedt®	17	92/107

### Accessories Z 287 A

#### Rotor/Bucket

### Adapter

Order No.: 221.57 V02



Angle rotor 8 x 15 ml Angle: 33°

Acceleration in s: 22/198	
Deceleration in s: 23/212	
max. speed: 8,000 rpm	
RCF-value: 6,153 xg	
max. radius: 8.6 cm	
max. Ø: 17 mm	

Order No.:	Tube rack	Ø [mm]	Length (min./max.):
without adapter	1 x 15 ml conical	17	120
without adapter	1 x 15 ml glass	17	105/120
701.011	1 x 7 ml	13	95/115
701.012	1 x 5 ml	13	65/90
701.015	1 x 1.5/2.0 ml	11	40
701.018	1 x 9 ml Sarstedt®	17	92/107

Order No.: 221.59 V06

Acceleration in s: 24/200 Deceleration in s: 20/208 max. speed: 12,000 rpm RCF-value: 13,683 xg max. radius: 8.5 cm max. Ø: 11 mm

Length (min./max.): Order No.: Tube rack Ø [mm] without adapter 1 x 2.0 ml 11 40 40 without adapter 1 x 1.5 ml 11 704.005 1 x 0.5 ml 45 8 704.004 1 x 0.4/0.2 ml PCR 6 45

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

Order No.: 221.75 V03



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Angle rotor 24 x 2.0 ml (Spin Column Kits) Angle: 45° Acceleration in s: 23/198 Deceleration in s: 27/213 max. speed: 12,000 rpm RCF-value: 13,683 xg max. radius: 8.5 cm max. Ø: 11 mm

Order No.: 220.95 V09



Deceleration in s: 21/145 max. speed: 14,000 rpm RCF-value: 15,994 xg max. radius: 7.3 cm max. Ø: 11 mm

Acceleration in s: 19/140

Order No.: Tube rack Length (min./max.): Ø [mm] without adapter 1 x 2.0 ml 11 40 40 without adapter 1 x 1.5 ml 11 704.005 1 x 0.5 ml 8 45 704.004 1 x 0.4/0.2 ml PCR 6 45

Angle rotor 18 x 1.5 / 2.0 ml Angle:  $45^{\circ}$ 

Order No.: 221.60 V03



Hematocrit rotor 24 x capillaries Angle: 90°

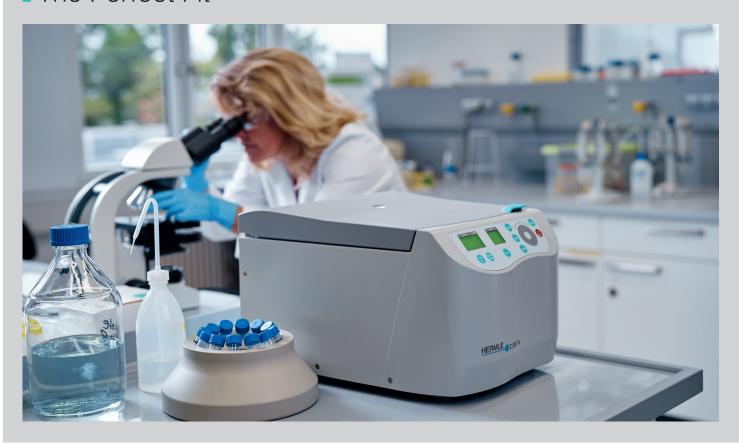
Acceleration in s: 30/319 Deceleration in s: 33/334 max. speed: 13,000 rpm RCF-value: 16,058 xg max. radius: 8.5 cm Order No.: Description 620.010 Reading de

Reading device for determining the hematocrit value in- or outsite the rotor

45.5046 Microhematocrit-capillaries, heparinized 45.5047 Microhematocrit-capillaries, non heparinized 41.5100 Hematocrit sealing wax (1 plate)

HERMLE

### The Perfect Fit



#### **Easy Handling:**

- The ergonomic Touch Operation Function 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 button option. The Centrifuge spins, as long as you press the button.
- For reassurance that your samples are finished, an acoustic signal will sound, when the centrifugation is complete (this function can be deactivated).
- Due to a fast and easy centrifuge lid lock system, time is saved.

#### Safety:

- The Z 287 A has an automatic imbalance shut off system.
- There is over speed protection incorporated for each rotor.
- You can only start the model 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.
- The centrifuge automatically detects which rotor is used. This prevents incorrect rotor settings.
- In case of overheating, the centrifuge switches off automatically. This serves to protect electronic components and thus promotes the longevity of the device.

### **Efficient and Versatile:**

- Despite the high capacity, the design of this model is very compact.
- For safety of your samples: Even after a long centrifugation run, the temperature of your samples remains under 40°C.
- Even with the high speed output of 14,000 rpm the working environment is vibration-free with minimal noise output due to its' high stability.
- Sleep mode Function: if the centrifuge lid is open and the unit is not in use for more than five minutes, the unit automatically goes into sleep mode (this function can be deactivated).
- There is an LED integrated in the control panel, which uses different colors to indicate the current operating status of the centrifuge.

### More from HERMLE – a wide range of options



**Universal Centrifuge Z 306** Max. speed 14,000 rpm Max. volume 4 x 145 ml



Universal Centrifuge Z 446 K Max. speed 16,000 rpm Max. volume 4 x 750 ml

For more information, please visit our website!

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