

# Universal Centrifuge

| Z 306



**HERMLE**  
LABORTECHNIK



### Specifications

- Maintenance-free induction drive
- Microprocessor with large LCD display
- 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)
- Imbalance tolerant drive
- A large variety of rotors and accessories
- Manufactured according to international safety regulations, i.e. IEC 61010
- Audible signal at the end of each run with several melody options
- Rotor exchange is easy to handle
- Noise level under 63 dBA at max. speed
- Improved ventilation system keeps samples cool
- Stainless steel chamber

The small, universal laboratory centrifuge offers a wide range of applications, which covers clinical laboratory requirements, research, as well as industrial laboratory use. The Z 306 offers many accessories, including rotors for microtitreplates and high speed fixed angle rotors for reaction vessels or centrifuge tubes up to 50 ml. The swing out rotors can load all common tubes by means of appropriate adapters, e.g. blood collection tubes or conical 15/50 ml tubes. This wide range of accessories makes the Z 306 laboratory centrifuge indispensable in research laboratories and small clinical hospital laboratories.

### Technical Data

max. Speed:	14,000 rpm
max. RCF:	18,624 xg
max. Volume:	4 x 145 ml
Speed range:	200 - 14,000 rpm
Running time:	59 min 50 s / 10 s increments 99 h 59 min / 1 min increments
Dimensions:	35.5 cm x 33 cm x 47.4 cm (WxHxD)
Weight:	30 kg
Order Number:	310.00 V01 - Z 306, 230 V 50 - 60 Hz / 240 W 310.00 V02 - Z 306, 120 V 50 - 60 Hz / 300 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
- 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 306

## Rotor/Bucket

Order No.:  
221.12 V20



Swing out rotor 4 Places  
Angle: 0-90°

## Adapter

Acceleration in s: 14/110  
Deceleration in s: 19/170  
max. Speed: 4500 rpm  
RCF-value: 3350 xg  
max. Radius: 14.8 cm

Volume	145 ml Nalgene®	100 ml RB Glass	85 ml RB/OR	50 ml RB Glass	50 ml RB Glass	50 ml Falcon®
Tubes ø in mm	50	44	38	34	29	29
Length min./max. in 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. in mm  
Tubes per rotor  
Radius correction (cm)  
Order-No.: Tube Rack

Volume	50 ml skirted	30 ml Universal	25 ml RB Glass	15 ml Falcon®	15 ml skirted	5/7 ml RB Glass	1,5 ml Reakt.	4,5 ml Sarstedt®	5/7ml	6-10 ml Vakut.®	1,8-7 ml Vakut.®
Tubes ø in mm	29	25	25	17	17	13	11	12	13	16	13
Length min./max. in 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 Places  
Angle: 0-90°  
605.000  
Bucket for Tube Rack  
605.002  
Lid for bucket



Acceleration in s: 14/110  
Deceleration in s: 17/170  
max. Speed: 4000 rpm  
RCF-value: 2611 xg  
max. Radius: 14.6 cm

Volume	100 ml RB Glass	85 ml RB/OR	50 ml RB Glass	50 ml RB/OR	50 ml Falcon®
Tubes ø in mm	40	38	34	29	29
Length min./max. in 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. in mm  
Tubes per rotor  
Radius correction (cm)  
Order-No.: Tube Rack

Volume	50 ml skirted	30 ml Universal	25 ml RB Glass	15 ml Falcon®	15 ml Falcon®	15 ml skirted	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 Falcon®	15ml Falcon®
Tubes ø in mm	29	25	25	17	17	17	17	13	11	17	13	16	29	17
Length min./max. in 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: 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

Order No.:  
706.000  
Tube rack  
48 x 1.5 ml (2,0 ml)  
Tubes

Order No.:  
220.50 V20



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

Acceleration in s: 14/110  
Deceleration in s: 19/330  
max. Speed: 3500 rpm  
RCF-value: 1424 xg  
max. Radius: 10.4 cm  
max. Loading height: 63 mm  
max. Loading weight: 310 g

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  
Angle: 35°

Acceleration in s: 19/157  
Deceleration in s: 20/590  
max. Speed: 4500 rpm  
RCF-value: 2830 xg  
max. Radius: 12.5/10.9 cm  
max. Ø: 17 mm

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

# Accessories Z 306

## Rotor/Bucket

Order No.:  
221.54 V20



Angle rotor 12 x 15 ml  
Angle: 32°

## Adapter

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

Volume	15 ml Falcon®	15 ml	7 ml	5 ml	1.5/2.0 ml	9 ml Sarstedt®
Ø Tubes in mm	17	17	13	13	11	17
Length min./max. in mm	120	105-120	95-115	65-90	42	92/107
Adapter Order No.:	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: 11/101  
Deceleration in s: 14/206  
max. Speed: 6000 rpm  
RCF-value: 4427 xg  
max. Radius: 11.0 cm  
max. Ø: 29 mm

Volume	50 ml Falcon®	50 ml RB/OR	30 ml	16 ml	15 ml Falcon®	15 ml RB
Ø Tubes in mm	29	29	25	18	17	17
Length min./max. in mm	116	100/120	92/95	100/105	120	97/120
Adapter Order No.:	without	without	708.019	708.003	708.030	708.030

Order No.:  
220.87 V21



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

Acceleration in s: 22/204  
Deceleration in s: 35/285  
max. Speed: 14000 rpm  
RCF-value: 18624 xg  
max. Radius: 8.5 cm  
max. Ø: 11 mm

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

Order No.:  
220.87 V20



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

Acceleration in s: 22/204  
Deceleration in s: 35/285  
max. Speed: 14000 rpm  
RCF-value: 18624 xg  
max. Radius: 8.5 cm  
max. Ø: 11 mm

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

Order No.:  
221.17 V20



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

Acceleration in s: 27/250  
Deceleration in s: 34/450  
max. Speed: 12000 rpm  
RCF-value: 15131 xg  
max. Radius: 9.4 cm  
max. Ø: 11 mm

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

Order No.:  
221.35 V20



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

Acceleration in s: 26/247  
Deceleration in s: 23/302  
max. Speed: 14000 rpm  
RCF-value: 18624 xg  
max. Radius: 8.5 cm  
max. ø: 17 mm

Order No.:	Adapter set
701.015	1.5 - 2 ml Tubes (ø 11 x 42 mm) Adapter set (6 Pieces)
701.016	1.0 ml Cryo Tubes (ø 12.6 x 41 mm) Adapter set (6 Pieces)
701.017	1.8 ml Cryo Tubes (ø 12.6 x 48 mm) Adapter set (6 Pieces)

