

Universal Centrifuge

| Z 307



HERMLE
LABORTECHNIK



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 307 offers many accessories, including rotors for microtitreplates and high speed fixed angle rotors for micro tubes or centrifuge tubes up to 50ml. The swing out rotors can load all common tubes by means of appropriate adapters, e.g. blood collection tubes or conical 15/50ml tubes. This wide range of accessories makes the Z 307 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 200 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)
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Weight:	30 kg
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Order No:	307.00 V01 - Z 307, 230 V 50 - 60 Hz / 240 W 307.00 V02 - Z 307, 120 V 50 - 60 Hz / 300 W
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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

Distinct Control Panel

- Simple one handed Touch-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
- Color visual representation of the operating state such as run completed, standby or centrifugation

Accessories Z 307

Rotor/Bucket

Order No.:
221.71 V20

Swing out rotor 4 Places
Angle: 0-90°

605.100
Bucket for Adapter

605.102
Lid for Bucket I hermetically sealed



Adapter

Acceleration in s: 17/97
Deceleration in s: 14/256
max. Speed: 4,500 rpm
RCF-value: 3,350 xg
max. Radius: 14.8 cm

Volume	200ml Bottle	200ml conical	100 ml RB Glass	85 ml RB/OR	50 ml RB Glass
Tubes Ø in mm	56	56	40	38	34
Length min./max. (mm)	112	120	95/115	95/108	95/118
Tubes per rotor	4	4	4	4	4
Radius correction (cm)	0.0	0.0	0.2	0.2	0.2
Order No. Adapter	without Adapter	705.100	705.101	705.102	705.103

Volume	50 ml RB/OR	50 ml conical	50 ml skirted	25/30 ml Universal	25/30 ml RB/OR	15 ml conical	15 ml conical	15 ml RB	5/7 ml RB	5 ml conical	1.5/2.0 ml micro	6-10 ml Vakut.®	1.8-7 ml Vakut.®	50 ml conical
Tubes Ø in mm	29	29	29	25	25	17	17	17	13	17	11	16	13	29
Length min./max. (mm)	95/103	116	116	95/105	90/110	120	120	60/107	65/100	60/70	40	100	75/100	116
Tubes per Rotor	4	4	4	4	4	16	12	28	32	16	32	28	32	8
Radius correction (cm)	0.2	0.1	0.2	0.2	0.2	0.1	0.0	0.2	0.2	0.1	0.1	0.2	0.2	0.0
Order No. Adapter	705.104	705.105	705.106	705.107	705.108	705.109*	705.110	705.111	705.112	705.113	705.114	705.111	705.112	605.103

*only without Bucket Lid

Order No.:
221.12 V20

Swing out rotor 4 Places
Angle: 0-90°



Acceleration in s: 13/110
Deceleration in s: 18/158
max. Speed: 4,500 rpm
RCF-value: 3,350 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 conical
Tubes Ø in mm	50	44	38	34	29	29
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. Adapter	626.017	626.000	626.001	626.008	626.009	626.002

Volume	50 ml skirted	30 ml Universal	25 ml RB Glass	15 ml conical	15 ml RB	5/7 ml RB Glass	1.5/2.0 ml micro	4.5 ml Sarstedt®	5/7 ml	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. (mm)	116	95/105	95/110	120	90/108	75/100	40	75/100	65/80	90/108	75/100
Tubes per Rotor	4	4	4	8	28	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. Adapter	626.010	626.011	626.012	626.003	626.004	626.005	626.014	626.007	626.015	626.004	626.006

Order No.:
221.16 V20

Swing out rotor 2x3 Microtitreplates
Angle: 0-90°

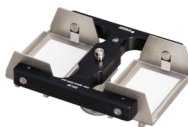


Acceleration in s: 24/220
Deceleration in s: 24/339
max. Speed: 4,500 rpm
RCF-value: 2,716 xg
max. Radius: 12.0 cm
max. Loading height: 63 mm
max. Loading weight: 310 g

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

Order No.:
220.50 V20

Swing out rotor 2x3 Microtitreplates
Angle: 0-90°



Acceleration in s: 13/114
Deceleration in s: 17/252
max. Speed: 3,500 rpm
RCF-value: 1,424 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 Glass
or 20 x 15 ml conical
Angle: 35°



Acceleration in s: 18/155
Deceleration in s: 18/369
max. Speed: 4,500 rpm
RCF-value: 2,830 xg
max. Radius: 12.5/10.9 cm
max. Ø: 17 mm

Order No.:	Adapter	Ø [mm]	Length [min./max.]:
without Adapter	1 x 15 ml Glass	17.0	95/115
without Adapter	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 1.5/2.0 ml	11	40
701.018	1 x 4.5-10 ml Sarstedt®	11-16	90/92

Accessoires Z 307

Rotor/Bucket	Adapter																												
<p>Order No.: 221.54 V20</p>  <p>Angle rotor 12x15 ml Angle: 32°</p>	<p>Acceleration in s: 13/101 Deceleration in s: 11/285 max. Speed: 6,000 rpm RCF-value: 4,427 xg max. Radius: 11.0 cm max. Ø: 17 mm</p> <table border="1"> <thead> <tr> <th>Volume</th> <th>15 ml conical</th> <th>15 ml</th> <th>4-7ml Vakut.®</th> <th>1.8-5 ml Vakut.®</th> <th>1.5/2.0 ml</th> <th>6-10 ml Sarstedt®/Vakut.®</th> </tr> </thead> <tbody> <tr> <td>Ø Tubes in mm</td> <td>17</td> <td>17</td> <td>13</td> <td>13</td> <td>11</td> <td>16</td> </tr> <tr> <td>Length min./max. in mm</td> <td>120</td> <td>105/120</td> <td>100</td> <td>75</td> <td>40</td> <td>92/107</td> </tr> <tr> <td>Order No. Adapter</td> <td>without</td> <td>without</td> <td>701.011</td> <td>701.012</td> <td>701.015</td> <td>701.018</td> </tr> </tbody> </table>	Volume	15 ml conical	15 ml	4-7ml Vakut.®	1.8-5 ml Vakut.®	1.5/2.0 ml	6-10 ml Sarstedt®/Vakut.®	Ø Tubes in mm	17	17	13	13	11	16	Length min./max. in mm	120	105/120	100	75	40	92/107	Order No. Adapter	without	without	701.011	701.012	701.015	701.018
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<p>Order No.: 221.55 V20</p>  <p>Angle rotor 6x50 ml Angle: 40°</p>	<p>Acceleration in s: 14/102 Deceleration in s: 11/304 max. Speed: 6,000 rpm RCF-value: 4,424 xg max. Radius: 11.0 cm max. Ø: 29 mm</p> <table border="1"> <thead> <tr> <th>Volume</th> <th>50 ml conical</th> <th>50 ml RB/OR</th> <th>30ml</th> <th>16 ml</th> <th>15 ml conical</th> <th>15 ml RB</th> </tr> </thead> <tbody> <tr> <td>Ø Tubes in mm</td> <td>29</td> <td>29</td> <td>25</td> <td>18</td> <td>17</td> <td>17</td> </tr> <tr> <td>Length min./max. in mm</td> <td>116</td> <td>100/120</td> <td>92/95</td> <td>100/105</td> <td>120</td> <td>97/120</td> </tr> <tr> <td>Order No. Adapter</td> <td>without</td> <td>without</td> <td>708.019</td> <td>708.003</td> <td>708.030</td> <td>708.030</td> </tr> </tbody> </table>	Volume	50 ml conical	50 ml RB/OR	30ml	16 ml	15 ml conical	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	Order No. Adapter	without	without	708.019	708.003	708.030	708.030
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<p>Order No.: 220.87 V22</p>  <p>PPS-Lid Angle rotor 24x1.5/2.0 ml Angle: 45° hermetically sealed</p>	<table border="1"> <thead> <tr> <th>Order No.:</th> <th>Adapter</th> <th>Ø [mm]</th> <th>Length [min./max.]</th> </tr> </thead> <tbody> <tr> <td>without Adapter</td> <td>1 x 2.0 ml</td> <td>11</td> <td>40</td> </tr> <tr> <td>without Adapter</td> <td>1 x 1.5 ml</td> <td>11</td> <td>40</td> </tr> <tr> <td>704.005</td> <td>1 x 0.5 ml</td> <td>8</td> <td>45</td> </tr> <tr> <td>704.004</td> <td>1 x 0.4/0.2 ml PCR</td> <td>6</td> <td>45</td> </tr> </tbody> </table> <p>Acceleration in s: 23/207 Deceleration in s: 34/215 max. Speed: 14,000 rpm RCF-value: 18,624 xg max. Radius: 8.5 cm max. Ø: 11 mm</p>	Order No.:	Adapter	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								
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<p>Order No.: 221.17 V21</p>  <p>Angle rotor 30x1.5/2.0 ml Angle: 45°</p>	<table border="1"> <thead> <tr> <th>Order No.:</th> <th>Adapter</th> <th>Ø [mm]</th> <th>Length [min./max.]</th> </tr> </thead> <tbody> <tr> <td>without Adapter</td> <td>1 x 2.0 ml</td> <td>11</td> <td>40</td> </tr> <tr> <td>without Adapter</td> <td>1 x 1.5 ml</td> <td>11</td> <td>40</td> </tr> <tr> <td>704.005</td> <td>1 x 0.5 ml</td> <td>8</td> <td>45</td> </tr> <tr> <td>704.004</td> <td>1 x 0.4/0.2 ml PCR</td> <td>6</td> <td>45</td> </tr> </tbody> </table> <p>Acceleration in s: 26/244 Deceleration in s: 33/349 max. Speed: 12,000 rpm RCF-value: 15,131 xg max. Radius: 9.4 cm max. Ø: 11 mm</p>	Order No.:	Adapter	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								
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