

# ROTIXA 500 RS Floorstanding centrifuge

Effective: for rapid processing of large numbers of samples



### ROTIXA 500 RS





View into the centrifuging chamber showing rotor 4294 with carriers 4295-A

### QUALITY YOU CAN RELY ON -FOR MANY YEARS OF INTENSIVE SERVICE

Its sturdy components make the ROTIXA 500 RS a highly reliable instrument which will provide years of service. Its high capacity and a maximum RCF of 5,252 make it suitable for a wide range of centrifuging applications. This extremely effective centrifuge can handle up to 192 blood collection tubes per run, making it the ideal solution when large sample volumes have to be centrifuged in clinical chemistry procedures.

The ROTIXA 500 RS is however also invaluable in R&D and quality control departments in the life sciences industry and in other industrial fields thanks to its versatility. It has proven itself in the search for active ingredients, as well as in the separation of food samples and cell suspensions, precipitates from chemical reactions, soil samples and of course also blood and its constituents.

#### **COMPREHENSIVE RANGE OF ACCESSORIES**

A further advantage of this centrifuge is its wide range of accessories: rotors, carriers and adapters for widely differing applications. These include the adaptation of racks of different blood analysers, such as those from Olympus or Hitachi.







### ROTIXA 500 RS



#### **HIGH CAPACITY**

This floorstanding refrigerated centrifuge is particularly impressive for its high sample capacity, accommodating  $4 \times 1,000$  ml bottles in a swing-out rotor. The ROTIXA 500 RS centrifuge can hold not only all known blood collection systems, but also conical tubes with a screw cap, microtitre plates, blood bags or centrifuge bottles up to a capacity of 1,000 ml.

#### **DEPENDABLE COOLING**

The ROTIXA 500 RS keeps the samples reliably and constantly at the specified temperature. Temperature in the ROTIXA 500 RS is controllable within a range of -20 °C to +40 °C.

#### **MAXIMUM SAFETY**

The ROTIXA 500 RS enables you to work safely. A key-operated switch prevents unauthorized changes to settings. The sturdy metal construction and sound design ensure mechanical safety.

#### **MODEL VARIANTS**

The ROTIXA 500 RS is also available

- in a heating/cooling version up to +60 °C (Cat. No. 4950-50)
- with internal cooling unit with water-cooled condenser (Cat. No. 4950-80)



### AT A GLANCE



### FIELDS OF APPLICATION Research

R&D and quality control departments in the life sciences industry, high-throughput screening

#### **Medical diagnostics**

Centrifuging of blood and urine samples

### Transfusion medicine

- Allogenic and autologous blood donation
- Stem cell collection

#### **EASY TO USE**

- Large and easy-to-read display
- Easy entry of parameters using rotary knob and selection keys
- Visual indicator that the rotor has come to a stop at the end of centrifuging

#### SAFETY

- Lid locking and latching
- Lid dropping protection
- Automatic rotor recognition
- Imbalance switch-off

### DESIGN

- Strong metal housing
- Centrifuging chamber of stainless steel
- Viewing port in the lid

#### MAX. RCF

• 5,252

#### MAX. CAPACITY

- 4 x 1.000 ml
- 192 blood collection tubes
- 20 HITACHI racks

#### **OUR SERVICE**

You will find information on Hettich partners in your country at www.hettichlab.com

### ROTIXA 500 RS





Operator panel of the ROTIXA 500 RS

The centrifuge is extremely easy to operate thanks to a rotary knob and selection keys that enable parameters to be readily entered and various centrifuging programs to be combined. The operating and display elements of the ROTIXA 500 RS have been ergonomically designed, and the large display is easy to read. The actual state of all parameters is displayed while the centrifuge is running. A key-operated switch prevents unauthorized changes to settings.

# OPTIONS FOR EXPANDED USE OF THE ROTIXA 500 RS:

### **DOCUMENTATION OF DATA**

Up to 29 centrifuges can be controlled from a single PC using the HettInfo data logging system. A waveguide cable connects the centrifuge to a BUS system. Selected centrifuge data and barcode reader data can be logged by a PC with RS-232 interface.

#### VISUAL INDICATOR OF ROTOR STANDSTILL

additionally indicates the end of the centrifuging run.

### PROGRAM INTERLOCKING

enables different centrifuging runs to be combined.

#### **INDEPENDENT SECOND TACHO SYSTEM**

for calibration of the speed measurement system for quality assurance purposes.

# EASY TO USE THANKS TO THE S CONTROL PANEL

#### **KEYBOARD**

STO saves the program.

RCL calls up the selected program.

PROG selects the program menu.

for entry of the temperature from -20 °C to +40 °C in 1 °C increments.

Entry of the centrifuging radius in mm.

for entry of the acceleration ramp in stages 1-9

or in min: s.

for entry of the braking ramp in stages R 1-9

or B 1-9 or in min: s, alternatively unbraked run-down or a brake force cut-off speed can

be set.

RCF switches from RPM to RCF mode.

Entry of the RCF in increments of 1.

JRCF The Relative Centrifugal Force integral is the

accumulated relative centrifugal acceleration acting

on the samples being centrifuged over time.

n for entry of the speed in increments of 10.

t for entry of the centrifuging time

(max. 999 min: 59 s) or continuous operation.

START starts centrifugation.

STOP stops centrifugation manually.

#### **DISPLAY**

PROG-Nr Display of the program number. A total of

89 programs can be stored.

T/°C Display of the temperature.

PROFIL Display of the acceleration and run-down profiles.

n/min<sup>-1</sup> Display of the speed.

t/min:sec Display of the duration of centrifuging

(max. 999 min: 59 s).



#### Swing-out rotor, 4-place



illustrated with carriers 4295-A and lids 4229-B

 $★90^{\circ}$ n = 4,500 min<sup>-1</sup> max. RCF 5,252

### Cat. No. 4294 (without carriers)

| capacity in ml             | 0.8      | 1.5       | 2.0  | 4       | 5                  | 6                  | 7                  | 9                  | 12       | 15                 | 25                 | 50                 | 94        | 100                       |
|----------------------------|----------|-----------|------|---------|--------------------|--------------------|--------------------|--------------------|----------|--------------------|--------------------|--------------------|-----------|---------------------------|
| Ø x L in mm                | 8x45     | 11 x 38   |      | 10x88   | 12 x 75            | 12 x 82            | 12x100             | 14x100             | 16 x 101 | 17 x 100           | 24 x 100           | 34 x 100           | 38 x 102  | 40 x 115                  |
| Cat. No.                   | -        | 2078      | 0536 | -       | 0553 <sup>2)</sup> | 0501 <sup>2)</sup> | 0578 <sup>2)</sup> | 0500 <sup>2)</sup> | -        | 0518 <sup>2)</sup> | 0519 <sup>2)</sup> | 0521 <sup>2)</sup> | 0549      | <b>0523</b> <sup>2)</sup> |
| lid<br>Cat. No. 4229-B     |          |           |      |         |                    |                    |                    |                    |          |                    |                    | J                  | J         |                           |
| carrier<br>Cat. No. 4295-A |          |           |      |         |                    |                    |                    |                    |          |                    |                    |                    |           |                           |
| Cat. No.                   | 4226     | 4225      |      | 4224    | 4213-93            | 4213               |                    | 4223               |          | 4214               | 4215               | 4216               | 4218      |                           |
| boring Ø x L in mm         | 8.2 x 36 | 11.2 x 46 |      | 11 x 74 | 12.5 x 36          | 12.5 x 74          |                    | 16x74              |          | 17.5 x 74          | 26x74              | 35 x 74            | 41.5 x 74 |                           |
| tubes per rotor            | 312      | 336       |      | 252     | 192                | 192                |                    | 100                |          | 120                | 44                 | 24                 | 16        | -                         |
| max. RCF 2) upper/lower    | 4,777    | 3,690/4,  | 867  | 4,777   |                    | •                  |                    |                    |          |                    |                    | •                  |           |                           |
| radius in mm upper/lower   | 211      | 163/215   |      | 211     |                    |                    |                    |                    |          |                    |                    |                    |           |                           |
| run-up in sec              | 115      |           |      |         |                    |                    |                    |                    |          |                    |                    |                    |           |                           |
| run-down in sec, braked    | 116      |           |      |         |                    |                    |                    |                    |          |                    |                    |                    |           |                           |
| temperature in °C1)        | +6       |           |      |         |                    |                    |                    |                    |          |                    |                    |                    |           |                           |

| capacity in ml             | 2.6-3.4   | 2.7-3     | 4-5.5     | 4.5-5     | 7.5-8.5   | 9-10      | 10        | 1.6-5     | 4-7      | 4-7       | 8      | 8.5-10    | 15       | 50       | 12        |
|----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|--------|-----------|----------|----------|-----------|
| Ø x L in mm                | 13x65     | 11 x 66   | 15 x 75   | 11 x 92   | 15 x 92   | 16x92     | 15x102    | 13 x 75   | 13 x 100 | 16x75     | 16x125 | 16x100    | 17 x 120 | 29 x 115 | 17 x 100  |
| Cat. No.                   | blood o   | ollectio  | n/urine   | tubes     |           | ,         | ,         |           |          |           | ,      |           | 0509     | 0513     | -         |
| lid<br>Cat. No. 4229-B     |           |           |           |           |           |           |           |           | J        | J         | 3)     | J         | 3)       |          |           |
| carrier<br>Cat. No. 4295-A |           |           |           |           |           |           |           |           |          |           |        |           |          |          |           |
| Cat. No.                   | 4222-93   | 4213-93   | 4214-93   | 4213      | 4214      | 4220      | 4214      | 4222-93   | 4222     | 4214-93   | 4223   | 4214      | 4232     | 4245-A   | 4220      |
| boring Ø x L in mm         | 13.2 x 36 | 12.5 x 36 | 17.5 x 36 | 12.5 x 74 | 17.5 x 74 | 17.5 x 74 | 17.5 x 74 | 13.2 x 36 | 13.2x74  | 17.5 x 36 | 16x74  | 17.5 x 74 | 17 x 70  | 30 x 70  | 17.5 x 74 |
| tubes per rotor            | 120       | 192       | 120       | 192       | 120       | 64        | 120       | 120       | 120      | 120       | 100    | 120       | 92       | 32       | 64        |
| max. RCF 2)                | 4,777     |           |           |           |           |           |           |           |          |           |        |           | 4,958    |          | 4,777     |
| radius in mm               | 211       |           |           |           |           |           |           |           |          |           |        |           | 219      |          | 211       |
| run-up in sec              | 115       |           |           |           |           |           |           |           |          |           |        |           |          |          |           |
| run-down in sec, braked    | 116       |           |           |           |           |           |           |           |          |           |        |           |          |          |           |
| temperature in °C 1)       | +6        |           |           |           |           |           |           |           |          |           |        |           |          |          |           |

<sup>1)</sup> Lowest attainable temperature in precooled refrigerated centrifuges at max. speed. Lower temperatures can be reached by reducing the speed.

Please note that the RCF values indicated refer only to rotor performance. The max. permissible RCF of tubes used should be verified with the individual manufacturers. The max. RCF for glass tubes annotated with footnote 2 is 4,000.

When using these tubes, carrier 4295-A cannot be closed with lid 4229-B.





illustrated with carriers 4295-A

### Swing-out rotor, 4-place, Cat. No. 4294 (without carriers)

| capacity in ml             | 25      | 30       | 50       | 85        | 94                 | 250                | 290      | 600                | 650                | 750                | 750      | 250      | 500        |
|----------------------------|---------|----------|----------|-----------|--------------------|--------------------|----------|--------------------|--------------------|--------------------|----------|----------|------------|
| Ø x L in mm                | 25 x 90 | 25 x 110 | 29 x 115 | 38 x 106  | 38 x 102           | 61 x 122           | 62 x 137 | 93 x 134           | 97 x 139           | 97 x 152           | 96 x 135 | 60 x 162 | 96 x 147   |
| Cat. No.                   | -       | -        | -        | 0547      | 0538 <sup>5)</sup> | 5127 <sup>7)</sup> | -        | 0551 <sup>7)</sup> | 0554 <sup>7)</sup> | 0512 <sup>7)</sup> | 4234-A   | Corning  | Corning    |
| lid<br>Cat. No. 4229-B     |         |          |          |           |                    |                    |          |                    |                    |                    |          | 3)       |            |
| carrier<br>Cat. No. 4295-A |         |          |          |           |                    |                    |          |                    |                    |                    |          |          | + 4449     |
| Cat. No.                   | 4241    | 4215     | 4249     | 4218      |                    | 4238               |          | 4233               | 4258               |                    |          | 6322     | 4258       |
| boring Ø x L in mm         | 26 x 73 | 26 x 74  | 30 x 96  | 41.5 x 74 |                    | 62 x 90            |          | 94 x 105           | 97.5 x 105         |                    |          | 61 x 125 | 97.5 x 105 |
| tubes per rotor            | 32      | 44       | 24       | 16        |                    | 4                  |          | 4                  | 4                  |                    |          | 4        | 4          |
| max. RCF 2)                | 4,777   |          | 4,867    | 4,777     |                    |                    |          | 4,958              | •                  |                    |          | 4,777    | 4,958      |
| radius in mm               | 211     |          | 215      | 211       |                    |                    |          | 219                |                    |                    |          | 211      | 219        |
| run-up in sec              | 115     |          |          |           |                    |                    |          |                    |                    |                    |          |          |            |
| run-down in sec, braked    | 116     |          |          |           |                    |                    |          |                    |                    |                    |          |          |            |
| temperature in °C 1)       | +6      |          |          |           |                    |                    |          |                    |                    |                    |          |          |            |

<sup>1)</sup> Lowest attainable temperature in precooled refrigerated centrifuges at max. speed. Lower temperatures can be reached by reducing the speed.

<sup>2</sup> Please note that the RCF values indicated refer only to rotor performance. Should be verified with the individual manufacturers. The max. RCF for glass tubes annotated with footnote is 4,000.

When using these tubes, carrier 4295-A cannot be closed with lid 4229-B.





illustrated with carriers 4298-A and inserts 4237-A

### Swing-out rotor, 4-place, Cat. No. 4294 (without carriers)

| capacity in ml              | 450    | 500 |
|-----------------------------|--------|-----|
| blood bags, triplicate      |        |     |
| Cat. No.                    | -      | -   |
| carrier<br>Cat. No. 4293    |        |     |
| Cat. No.                    | 4244-A |     |
| boring Ø x L in mm          | -      |     |
| blood bag systems per rotor | 4      |     |
| max. RCF                    | 5,252  |     |
| radius in mm                | 232    |     |
| run-up in sec               | 115    |     |
| run-down in sec, braked     | 116    |     |
| temperature in °C 1)        | +2     |     |

| capacity in ml              | 450     | 500    | 750    | 1,000  |
|-----------------------------|---------|--------|--------|--------|
| blood bags                  | quadrup | licate | single | single |
| Cat. No.                    | -       |        |        | -      |
| carrier<br>Cat. No. 4298-A  |         |        |        |        |
| Cat. No.                    | 4237-A  |        |        | -      |
| boring Ø x L in mm          | -       |        |        | -      |
| blood bag systems per rotor | 4       |        |        | 4      |
| max. RCF                    | 5,003   |        |        | 5,071  |
| radius in mm                | 221     |        |        | 224    |
| run-up in sec               | 115     |        |        |        |
| run-down in sec, braked     | 116     |        |        |        |
| temperature in °C 1)        | +3      |        |        |        |



Blood bags can be secured in inserts using HettLiners. After centrifuging, they can be removed by their loops without disturbing the sediment.



If blood bag carriers are not filled to the same weight, then balancing weights can be used to make up the difference.

HettLiner, Cat. No. 4564

Set of balancing weights, Cat. No. 4566

 $<sup>^{5)}</sup>$  The screw cap for tube No. 0538 is available with Cat. No. 0539. Dimensions with cap 38x110 mm.  $^{7)}$  At temperatures of over +40 °C and/or when not filled to capacity, bottles may warp during centrifugation.











Carrier 4280, illustrated with Deep Well Plates and removal aid 4279

### Swing-out rotor, 4-place, Cat. No. 4294

| D x W x H in mm                           | 86 x 128 x 15 | 86 x 128 x 17.5 | 86 x 128 x 22 | 86 x 128 x 44.5 | 86 x 128 x 46 | 86 x 128 x 83 | 82 x 124 x 20          | -          |
|---|---------------|-----------------|---------------|-----------------|---------------|---------------|------------------------|------------|
| Cat. No.                                  | МТР           |                 | СР            | DWP             | MS            | QP            | PCR plate,<br>96 wells | PCR strips |
| lid with bio-containment 4) Cat. No. 5629 |               |                 |               |                 |               |               |                        |            |
| carrier<br>Cat. No. 4280                  | 890           |                 |               |                 |               |               |                        |            |
| Cat. No.                                  | 4279          |                 |               |                 |               |               | 1485                   |            |
| boring Ø x L in mm                        | -             |                 |               |                 |               |               |                        |            |
| plates/strips per rotor                   | 24            |                 | 20            | 8               | 4             | 4             | 4                      | 48 x 8     |
| max. RCF <sup>2)</sup>                    | 4,573         |                 |               |                 |               |               |                        |            |
| radius in mm                              | 202           |                 |               |                 |               |               |                        |            |
| run-up in sec                             | 115           |                 |               |                 |               |               |                        |            |
| run-down in sec, braked                   | 116           |                 |               |                 |               |               |                        |            |
| temperature in °C 1)                      | +5            |                 |               |                 |               |               |                        |            |

| D x W x H in mm            | 86 x 128 x 15 | 86 x 128 x 17.5 | 86x128x22 | 86 x 128 x 44.5 | 86 x 128 x 46 | 18 x 164 x 46 | 82 x 124 x 20          | -          |
|----------------------------|---------------|-----------------|-----------|-----------------|---------------|---------------|------------------------|------------|
| Cat. No.                   | МТР           |                 | СР        | DWP             | MS            | LKB racks     | PCR plate,<br>96 wells | PCR strips |
|                            |               |                 |           |                 |               |               |                        |            |
| carrier<br>Cat. No. 4299-N |               |                 |           |                 |               |               |                        |            |
| Cat. No.                   | 4236          |                 |           |                 |               | -             | 4236 + 1485            |            |
| boring Ø x L in mm         | -             |                 |           |                 |               |               |                        |            |
| plates/racks per rotor     | 16            |                 | 8         | 4               |               | 16            | 4                      | 48 x 8     |
| max. RCF 2)                | 3,939         |                 |           |                 |               | 4,120         | 3,939                  |            |
| radius in mm               | 174           |                 |           |                 |               | 182           | 174                    |            |
| run-up in sec              | 115           |                 |           |                 |               |               |                        |            |
| run-down in sec, braked    | 116           |                 |           |                 |               |               |                        |            |
| temperature in °C 1)       | +4            |                 |           |                 |               |               |                        |            |

<sup>1)</sup> Lowest attainable temperature in precooled refrigerated centrifuges at max. speed. Lower temperatures can be reached by reducing the speed.

<sup>2</sup> Please note that the RCF values indicated refer only to rotor performance. The max. permissible RCF of tubes used should be verified with the individual manufacturers. The max. RCF for glass tubes annotated with footnote 20 is 4,000.

When using these tubes, bucket 4255 cannot be closed with its lid.





### Swing-out rotor, 4-place, Cat. No. 4294

| D x W x H in mm          | 20x118x70           |
|--------------------------|---------------------|
| Hitachi Racks            |                     |
| Cat. No.                 | -                   |
| carrier<br>Cat. No. 4257 |                     |
| Cat. No.                 | 4259-A <sup>6</sup> |
| boring Ø x L in mm       | -                   |
| racks per rotor          | 20                  |
| max. RCF <sup>2)</sup>   | 4,867               |
| radius in mm             | 215                 |
| run-up in sec            | 115                 |
| run-down in sec, braked  | 116                 |
| temperature in °C 1)     | +7                  |

| capacity in ml           | 5                  | 7                  | 9                         | 10      | 15                 | 25                 | 50                 | 100                |
|--------------------------|--------------------|--------------------|---------------------------|---------|--------------------|--------------------|--------------------|--------------------|
| Ø x L in mm              | 12x75              | 12 x 100           | 14 x 100                  | 17 x 70 | 17 x 100           | 24 x 100           | 34 x 100           | 44 x 100           |
| Cat. No.                 | 0553 <sup>2)</sup> | 0578 <sup>2)</sup> | <b>0500</b> <sup>2)</sup> | 2079    | 0518 <sup>2)</sup> | 0519 <sup>2)</sup> | 0521 <sup>2)</sup> | 0526 <sup>2)</sup> |
| bucket<br>Cat. No. 4255  |                    |                    |                           |         |                    |                    |                    |                    |
| carrier<br>Cat. No. 4254 |                    |                    |                           |         |                    | + 0726             |                    |                    |
| Cat. No.                 | 4433               |                    | 4434                      |         |                    | 4438               | 4439               | 4442               |
| boring Ø x L in mm       | 13x58              |                    | 17.5 x 53                 |         |                    | 26x72              | 36x79              | 45 x 78            |
| tubes per rotor          | 120                |                    | 76                        |         |                    | 28                 | 16                 | 8                  |
| max. RCF 2)              | 4,618              |                    | 4,777                     |         |                    | 4,505              | 4,573              | 4.551              |
| radius in mm             | 204                |                    | 211                       |         |                    | 199                | 202                | 201                |
| run-up in sec            | 115                |                    |                           |         |                    |                    |                    |                    |
| run-down in sec, braked  | 116                |                    |                           |         |                    |                    |                    |                    |
| temperature in °C 1)     | +5                 |                    |                           |         |                    |                    |                    |                    |

| capacity in ml           | 2.6-3.4                               | 2.7-3     | 4-5.5     | 4.5-5   | 4.9       | 7.5-8.5   | 9-10    | 10       | 1.6-5     | 4-7      | 4-7       | 8        | 8.5-10   |
|--------------------------|---------------------------------------|-----------|-----------|---------|-----------|-----------|---------|----------|-----------|----------|-----------|----------|----------|
| Ø x L in mm              | 13x65                                 | 11 x 66   | 15x75     | 11 x 92 | 13x90     | 15 x 92   | 16 x 92 | 15 x 102 | 13 x 75   | 13 x 100 | 16 x 75   | 16 x 125 | 16 x 100 |
| Cat. No.                 | blood c                               | ollection | ı/urine t | ubes    |           |           |         |          |           |          |           |          |          |
| bucket<br>Cat. No. 4255  | T T T T T T T T T T T T T T T T T T T |           |           |         |           |           |         | 3)       | J         |          | j         | 3)       |          |
| carrier<br>Cat. No. 4254 |                                       |           |           |         |           |           |         |          |           |          |           |          |          |
| Cat. No.                 | 4435                                  | 4433      | 4434      | 4433    | 4435      | 4434      |         |          | 4435      |          | 4434      |          |          |
| boring Ø x L in mm       | 13.5 x 58                             | 13 x 58   | 17.5 x 53 | 13 x 58 | 13.5 x 58 | 17.5 x 53 |         |          | 13.5 x 58 |          | 17.5 x 53 |          |          |
| tubes per rotor          | 84                                    | 120       | 76        | 120     | 84        | 76        |         |          | 84        |          | 76        |          |          |
| max. RCF <sup>2)</sup>   | 4,618                                 |           | 4,777     | 4,618   |           | 4,777     |         |          | 4,618     |          | 4,777     |          |          |
| radius in mm             | 204                                   |           | 211       | 204     |           | 211       |         |          | 204       |          | 211       |          |          |
| run-up in sec            | 115                                   |           |           |         |           |           |         |          |           |          |           |          |          |
| run-down in sec, braked  | 116                                   |           |           |         |           |           |         |          |           |          |           |          |          |
| temperature in °C 1)     | +5                                    |           |           |         |           |           |         |          |           |          |           |          |          |

 $<sup>^{\</sup>rm 4)}$  Tested by the TÜV in conformity with DIN EN 61010, section 2 - 020.  $^{\rm 6)}$  When using removal frame 4259-A, please take the insert out of carrier 4257.



### Swing-out rotor, 4-place, Cat. No. 4294

| capacity in ml          | 15       | 30       | 50       | 25      | 30       | 10        | 250                | 290                    | 650                | 750                | 1.000              | 1.000    |
|-------------------------|----------|----------|----------|---------|----------|-----------|--------------------|------------------------|--------------------|--------------------|--------------------|----------|
| Ø x L in mm             | 17 x 120 | 25 x 110 | 29 x 115 | 25 x 90 | 25 x 110 | 16 x 80   | 61 x 122           | 62 x 137               | 97 x 139           | 97 x 152           | 96 x 176           | 98 x 138 |
| Cat. No.                | 0509     | -        | 0513     | -       | -        | -         | 5127 <sup>7)</sup> | <b>-</b> <sup>7)</sup> | 0554 <sup>7)</sup> | 0512 <sup>7)</sup> | 4239 <sup>7)</sup> | 4255     |
| bucket<br>Cat. No. 4255 |          |          |          |         |          |           |                    |                        | 3                  | 3) 23              | 3)                 | 9        |
| Cat. No. 4254           |          |          |          |         |          |           |                    |                        |                    |                    |                    |          |
| Cat. No.                | 4437     | 4438     | 4441     | 4438    |          | 4434      | 4443               |                        | -                  |                    |                    | -        |
| boring Ø x L in mm      | 17 x 88  | 26 x 72  | 30 x 87  | 26 x 72 |          | 17.5 x 53 | 62 x 92            |                        | 98 x 138           |                    |                    | -        |
| tubes per rotor         | 48       | 28       | 20       | 28      |          | 76        | 4                  |                        | 4                  |                    |                    |          |
| max. RCF 2)             | 4,890    | 4,709    | 4,890    | 4,709   |          | 4,777     | 5,003              |                        | 5,184              |                    |                    |          |
| radius in mm            | 216      | 208      | 216      | 208     |          | 211       | 221                |                        | 229                |                    |                    |          |
| run-up in sec           | 115      |          |          |         |          |           |                    |                        |                    |                    |                    |          |
| run-down in sec, braked | 116      |          |          |         |          |           |                    |                        |                    |                    |                    |          |
| temperature in °C 1)    | +5       |          |          |         |          |           |                    |                        |                    |                    |                    |          |

| capacity in ml                         | 175          | 175                  | 200      | 225      | 250      | 500      |
|--|--------------|----------------------|----------|----------|----------|----------|
|  | -            | -                    |          | -        |          |          |
| Ø x L in mm                            | 61 x 118     | 62 x 144             | 60 x 130 | 61 x 137 | 60 x 162 | 96 x 147 |
| Cat. No.                               | Falcon®      | Nalgene <sup>®</sup> | Nunc®    | Falcon®  | Corning  |          |
| bucket<br>Cat. No. 4255                | 3)           | 3)                   | 3)       | 3)       | 3        | 3 8      |
| carrier<br>Cat. No. 4254               |              | 9                    |          |          | 9        | 0        |
| Cat. No.                               | 4440         | 4430                 |          | 4440     | 4430     | 4449     |
| boring Ø x L in mm                     | -            |                      |          |          |          |          |
|  |              |                      |          |          |          |          |
| tubes per rotor                        | 4            |                      |          |          |          |          |
| tubes per rotor max. RCF <sup>2)</sup> | 4<br>5,184   |                      |          |          |          |          |
|  |              |                      |          |          |          |          |
| max. RCF <sup>2)</sup>                 | 5,184        |                      |          |          |          |          |
| max. RCF <sup>2)</sup> radius in mm    | 5,184<br>229 |                      |          |          |          |          |

Lowest attainable temperature in precooled refrigerated centrifuges at max. speed. Lower temperatures can be reached by reducing the speed.

Please note that the RCF values indicated refer only to rotor performance. The max. permissible RCF of tubes used should be verified with the individual manufacturers. The max. RCF for glass tubes annotated with footnote 2 is 4,000.

When using these tubes, bucket 4255 cannot be closed with its lid, carrier 5051 cannot be closed with lid 5053.



### Swing-out rotor, 6-place



illustrated with carriers 5051 and lids 5053

1.5

2.0

5

6

9

15

25

50

100

100

two-tier frame for

**≮**90°  $n = 4,000 \text{ min}^{-1}$ max. RCF 3,631

2.0

### Cat. No. 4296 (without carriers)

capacity in ml

1.5

| Ø x L in mm              | 11 x 38   | l         | 11 x 38   |         | 12x75              | 12x82              | 12 x 100           | 14x100             | 17x100             | 24 x 100           | 34 x 100           | 44x100             | 40 x 115           | cyto acce |           |
|--------------------------|-----------|-----------|-----------|---------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-----------|-----------|
| Cat. No.                 | -         | -         | 2078      | 0536    | 0553 <sup>2)</sup> | 0501 <sup>2)</sup> | 0578 <sup>2)</sup> | 0500 <sup>2)</sup> | 0518 <sup>2)</sup> | 0519 <sup>2)</sup> | 0521 <sup>2)</sup> | 0526 <sup>2)</sup> | 0523 <sup>2)</sup> | cyto cha  | ambers 9) |
| lid<br>Cat. No. 5053     |           |           |           |         |                    |                    |                    |                    |                    |                    |                    |                    |                    |           |           |
| carrier<br>Cat. No. 5051 |           |           |           |         |                    |                    |                    |                    |                    | <b>308</b>         |                    |                    |                    |           |           |
| Cat. No.                 | 5257      |           | 5281      |         | 5227               |                    | 5247 <sup>8)</sup> | 5264               | 5248 <sup>8)</sup> | 5242               | 5243               | 5262               | 5249               | 5280      |           |
| boring Ø x L in mm       | 12.5 x 42 |           | 11.5 x 50 |         | 12.5 x 42          |                    | 12.5 x 86          | 16x50              | 17.5 x 86          | 26 x 86            | 36 x 86            | 45.5 x 86          | 42 x 86            | -         |           |
| tubes per rotor          | 240       |           | 96        |         | 120                |                    | 120                | 72                 | 72                 | 30                 | 12                 | 6                  |                    | 12        |           |
| max. RCF 2) upper/lower  | 2,486/3,  | 363       | 3,363     |         | 3,309              |                    | 3,291              | 3,309              | 3,291              |                    |                    | 3,291              |                    | 2,290/3,  | 274       |
| radius in mm upper/lower | 139/188   |           | 188       |         | 185                |                    | 184                | 185                | 184                |                    |                    | 184                |                    | 128/183   | 1         |
| run-up in sec            | 33        |           |           |         |                    |                    |                    |                    |                    |                    |                    |                    |                    |           |           |
| run-down in sec, braked  | 50        |           |           |         |                    |                    |                    |                    |                    |                    |                    |                    |                    |           |           |
| temperature in °C 1)     | 0         |           |           |         |                    |                    |                    |                    |                    |                    |                    |                    |                    |           |           |
|                          |           |           |           |         |                    |                    |                    |                    |                    |                    |                    |                    |                    |           |           |
| capacity in ml           | 1.1-1.4   | 2.6-3.4   | 2.7-3     | 4-5.5   | 4.5-5              | 4.9                | 7.5-8.5            | 9-10               | 10                 | 1.6-5              | 4-7                | 4-7                | 8.5-10             | 15        | 50        |
| Ø x L in mm              | 8x66      | 13x65     | 11 x 66   | 15 x 75 | 11 x 92            | 13 x 90            | 15 x 92            | 16x92              | 15 x 102           | 13x75              | 13x100             | 16x75              | 16 x 100           | 17x120    | 29 x 115  |
| Cat. No.                 | blood o   | ollection | n/urine   | tubes   |                    |                    |                    |                    |                    |                    |                    |                    |                    | 0509      | 0513      |
| lid<br>Cat. No. 5053     |           |           |           |         |                    |                    |                    |                    | 3)                 |                    | J                  | J                  |                    | 3)        | 3)        |
| carrier<br>Cat. No. 5051 |           |           |           |         |                    |                    |                    |                    |                    |                    |                    |                    |                    |           |           |
| Cat. No.                 | 5267      | 5268      | 5227      | 5264    | 5227               | 5268               | 5264               | 5258               |                    | 5268               | 6301               | 5264               | 5248               | 6306      | 5259      |
| boring Ø x L in mm       | 11 x 44   | 13,5 x 52 | 12,5 x 42 | 16x50   | 12,5 x 42          | 13,5 x 52          | 16 x 50            | 17,6 x 86          |                    |                    | 13,5 x 86          | 16 x 50            | 17,5 x 86          |           | 30 x 86   |
| tubes per rotor          | 120       | 72        | 120       | 72      | 120                | 72                 |                    | 66                 |                    | 72                 |                    |                    |                    | 42        | 12        |
| max. RCF 2)              | 3,274     | 3,345     | 3,309     | 3,309   | 3,309              | 3,345              | 3,309              | 3,291              |                    | 3,345              | 3,291              | 3,309              | 3,291              | 3,434     | 3,363     |
| radius in mm             | 183       | 187       | 185       | 185     | 185                | 187                | 185                | 184                |                    | 187                | 184                | 185                | 184                | 192       | 188       |
| run-up in sec            | 33        | 3         |           |         |                    |                    |                    |                    |                    |                    |                    |                    |                    |           |           |
| run-down in sec, braked  | 50        |           |           |         |                    |                    |                    |                    |                    |                    |                    |                    |                    |           |           |
| temperature in °C1)      | 0         |           |           |         |                    |                    |                    |                    |                    |                    |                    |                    |                    |           |           |

 $<sup>^{7)}</sup>$  At temperatures of over +40 °C and/or when not filled to capacity, bottles may warp during centrifugation.

With Cat. No. 5247-91 or 5248-91 these adapters can also be ordered with a decanting aid.

<sup>9)</sup> Please ask for our detailed cyto brochure.





illustrated with carriers 5051



illustrated with carriers 5092 and lids 5093 with bio-containment  $^{4)}$ 

### Swing-out rotor, 6-place, Cat. No. 4296 (without carriers)

| capacity in ml           | 12       | 30       | 50       |
|--------------------------|----------|----------|----------|
| Ø x L in mm              | 17 x 100 | 25 x 110 | 29 x 115 |
| Cat. No.                 | -        |          |          |
| lid<br>Cat. No. 5053     |          | 3)       | 3)       |
| carrier<br>Cat. No. 5051 |          |          | +2x6316  |
| Cat. No.                 | 6306     | 5266     | 5243     |
| boring Ø x L in mm       | 17 x 90  | 26 x 86  | 36 x 86  |
| tubes per rotor          | 42       | 30       | 12       |
| max. RCF <sup>2)</sup>   | 3,434    | 3,291    |          |
| radius in mm             | 192      | 184      |          |
| run-up in sec            | 33       |          |          |
| run-down in sec, braked  | 50       |          |          |
| temperature in °C 1)     | 0        |          |          |

| capacity in ml                            | 5                  | 6                         | 7                  | 10        | 15                 | 25                 | 50                        | 100                | 100                |
|---|--------------------|---------------------------|--------------------|-----------|--------------------|--------------------|---------------------------|--------------------|--------------------|
| Ø x L in mm                               | 12 x 75            | 12x82                     | 12x100             | 17x70     | 17 x 100           | 24 x 100           | 34 x 100                  | 44 x 100           | 40 x 115           |
| Cat. No.                                  | 0553 <sup>2)</sup> | <b>0501</b> <sup>2)</sup> | 0578 <sup>2)</sup> | 2079      | 0518 <sup>2)</sup> | 0519 <sup>2)</sup> | <b>0521</b> <sup>2)</sup> | 0526 <sup>2)</sup> | 0523 <sup>2)</sup> |
| lid with bio-containment 4) Cat. No. 5093 |                    |                           |                    |           |                    |                    |                           |                    |                    |
| carrier<br>Cat. No. 5092                  |                    |                           |                    |           |                    | 70 <b>33</b>       |                           |                    |                    |
| Cat. No.                                  | 5128               |                           | 5120               | 5136      |                    | 5122               | 5124                      | 5125               | 5126               |
| boring Ø x L in mm                        | 12.8 x 4           | 5                         | 12.8 x 82          | 17.5 x 60 | 0.7                | 25.5 x 82          | 35.5 x 82.5               | 45.5 x 85          | 42 x 85            |
| tubes per rotor                           | 72                 |                           | 72                 | 48        |                    | 24                 | 6                         |                    |                    |
| max. RCF <sup>2)</sup>                    | 3,542              |                           | 3,542              | 3,488     |                    | 3,434              | 3,488                     |                    |                    |
| radius in mm                              | 198                |                           | 198                | 195       |                    | 192                | 195                       |                    |                    |
| run-up in sec                             | 33                 |                           |                    |           |                    |                    |                           |                    |                    |
| run-down in sec, braked                   | 50                 |                           |                    |           |                    |                    |                           |                    |                    |
| temperature in °C 1)                      | -2                 |                           |                    |           |                    |                    |                           |                    |                    |

| capacity in ml                                       | 250                | 1.1-1.4     | 1.1-1.4                  | 2.6-3.4     | 2.7-3       | 2.7-3       | 4.5-5     | 4-5.5       | 4.9         | 7.5-8.5     | 9-10    | 10     | 1.6-5       |
|--|--------------------|-------------|--------------------------|-------------|-------------|-------------|-----------|-------------|-------------|-------------|---------|--------|-------------|
| Ø x L in mm  | 65 x 115           | 8x66        | 8x66                     | 13x65       | 11 x 66     | 11 x 66     | 11 x 92   | 15x75       | 13x90       | 15 x 92     | 16 x 92 | 15x102 | 13x75       |
| Cat. No.   | 0530 <sup>2)</sup> | blood co    | d collection/urine tubes |             |             |             |           |             |             |             |         |        |             |
| lid with bio-containment <sup>4)</sup> Cat. No. 5093 |                    |             |                          |             |             |             |           |             |             |             |         |        | J           |
| carrier<br>Cat. No. 5092                             |                    |             |                          |             |             |             |           |             |             |             |         |        |             |
| Cat. No.   | 1791               | 5137        | 5138                     | 5138        | 5137        | 5138        | 5120      | 5136        | 5137        | 5136        |         |        | 5138        |
| boring Ø x L in mm                                   | 66 x 103           | 13.5 x 60.7 | 12.8 x 54.5              | 12.8 x 54.5 | 13.5 x 60.7 | 12.8 x 54.5 | 12.8 x 82 | 17.5 x 60.7 | 13.5 x 60.7 | 17.5 x 60.7 | •       |        | 12.8 x 54.5 |
| tubes per rotor                                      | 6                  | 48          | 72                       |             | 48          | 72          | 72        | 48          |             | 48          |         |        | 72          |
| max. RCF 2)  | 3,631              | 3,488       | 3,077                    |             | 3,488       | 3,077       | 3,542     | 3,488       |             | 3,488       |         |        | 3,077       |
| radius in mm   | 203                | 195         | 172                      |             | 195         | 172         | 198       | 195         |             | 195         |         |        | 172         |
| run-up in sec  | 33                 |             |                          |             |             |             |           |             |             |             |         |        |             |
| run-down in sec, braked                              | 50                 |             |                          |             |             |             |           |             |             |             |         |        |             |
| temperature in °C 1)                                 | -2                 |             |                          |             |             |             |           |             |             |             |         |        |             |

<sup>1)</sup> Lowest attainable temperature in precooled refrigerated centrifuges at max. speed. Lower temperatures can be reached by reducing the speed.

Please note that the RCF values indicated refer only to rotor performance. The max, permissible RCF of tubes used should be verified with the individual manufacturers. The max. RCF for glass tubes annotated with footnote <sup>20</sup> is 4,000.

 $<sup>^{\</sup>rm 3)}$  When using these tubes, carrier 5051 resp. 5092 cannot be closed with lid 5053 resp. 5093.



### Swing-out rotor, 6-place, Cat. No. 4296 (without carriers)

| capacity in ml                                       | 4-7       | 4-7         | 8.5-10 | 8                   | 15       | 50      | 25      | 30        | 50       | 10          | 250                | 290                    |
|--|-----------|-------------|--------|---------------------|----------|---------|---------|-----------|----------|-------------|--------------------|------------------------|
| Ø x L in mm  | 13 x 100  | 16x75       | 16x100 | 16 x 125            | 17 x 120 | 29x115  | 25 x 90 | 25 x 110  | 29 x 115 | 16x80       | 61 x 122           | 62 x 137               |
| Cat. No.   | blood/u   | rine tube   | S      |                     | 0509     | 0513    | -       |           |          |             | 5127 <sup>7)</sup> | <b>-</b> <sup>7)</sup> |
| lid with bio-containment <sup>4)</sup> Cat. No. 5093 | J         | J           |        | 3)                  |          |         |         |           |          |             |                    | 3)                     |
| carrier<br>Cat. No. 5092                             |           |             |        |                     |          | 500     |         |           | <b>F</b> |             |                    |                        |
| Cat. No.   | 5120      | 5136        |        | 5121 <sup>10)</sup> | 5129     | 5123    | 5134    | 5122      | 5135     | 5136        | 6319               |                        |
| boring Ø x L in mm                                   | 12.8 x 82 | 17.5 x 60.7 | ,      | 17.5 x 82           | 17 x 85  | 30 x 85 | 26 x 73 | 25.5 x 82 | 30 x 99  | 17.5 x 60.7 | 66 x 103           |                        |
| tubes per rotor                                      | 72        | 48          |        | 42                  | 42       | 12      | 18      | 24        | 12       | 48          | 6                  |                        |
| max. RCF <sup>2)</sup>                               | 3,542     | 3,488       |        | 3,542               | 3,631    | 3,631   | 3,363   | 3,434     | 3,560    | 3,488       | 3,631              |                        |
| radius in mm   | 198       | 195         |        | 198                 | 203      | 203     | 188     | 192       | 199      | 195         | 203                |                        |
| run-up in sec  | 33        |             |        |                     |          |         |         |           |          |             |                    |                        |
| run-down in sec, braked                              | 50        |             |        |                     |          |         |         |           |          |             |                    |                        |
| temperature in °C 1)                                 | -2        |             |        |                     |          |         |         |           |          |             |                    |                        |

Tested by the TÜV in conformity with DIN EN 61010, section 2 - 020.

At temperatures of over +40 °C and/or when not filled to capacity, bottles may warp during centrifugation.

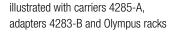
Please remove the inserts.



### Swing-out rotor, 2-place



illustrated with carriers 4285-A, adapters 4281 and Deep Well Plates



### Cat. No. 4282 (without carriers)

| D x W x H in mm            | 86 x 128 x 15 | 86 x 128 x 17.5 | 86x128x22 | 86 x 128 x 44.5 | 59x84x11                   | 82x124x20              | -             | 20x176x41     |  |
|----------------------------|---------------|-----------------|-----------|-----------------|----------------------------|------------------------|---------------|---------------|--|
| Cat. No.                   | МТР           |                 | СР        | DWP             | Microtest plate (Terasaki) | PCR plate,<br>96-place | PCR<br>strips | Olympus racks |  |
| carrier<br>Cat. No. 4285-A |               |                 |           |                 |                            |                        |               |               |  |
| rotor<br>Cat. No. 4282     |               |                 |           |                 |                            |                        |               |               |  |
| Cat. No.                   | 4281          |                 |           |                 |                            | 4281 + 2 x 1485        |               | 4283-B        |  |
| boring Ø x L in mm         | -             |                 |           |                 |                            |                        |               |               |  |
| plates / racks per rotor   | 16            | 16              | 12        | 4               | 4                          | 4                      | 48 x 8        | 12            |  |
| max. RCF 2)                | 2,434         |                 |           |                 |                            | 2,434                  |               | 2,652         |  |
| radius in mm               | 168           |                 |           |                 |                            | 168                    |               | 183           |  |
| run-up in sec              | 87            | 87              |           |                 |                            |                        |               |               |  |
| run-down in sec, braked    | 94            | 94              |           |                 |                            |                        |               |               |  |
| temperature in °C 1)       | -2            | 2               |           |                 |                            |                        |               |               |  |

| D x W x H in mm              | 20x118x70        | 25 x 193 x 60 | 110x210x44        |
|------------------------------|------------------|---------------|-------------------|
| Cat. No.                     | Hitachi<br>racks | Behring racks | rack,<br>50-place |
| Carrier<br>Cat. No. 4285-A   |                  |               |                   |
| rotor<br>Cat. No. 4282       |                  |               |                   |
| Cat. No.  boring Ø x L in mm | 4287-B           | 4288-A        | 4263-A            |
| plates/racks per rotor       | 20               | 10            | 2                 |
| max. RCF <sup>2)</sup>       | 2,652            | 2,652         | 2,579             |
| radius in mm                 | 183              | 183           | 178               |
| run-up in sec                | 87               |               |                   |
| run-down in sec, braked      | 94               |               |                   |
| temperature in °C 1)         | -2               |               |                   |

<sup>1)</sup> Lowest attainable temperature in precooled refrigerated centrifuges at max. speed. Lower temperatures can be reached by reducing the speed.

Please note that the RCF values indicated refer only to rotor performance. The max, permissible RCF of tubes used should be verified with the individual manufacturers. The max. RCF for glass tubes annotated with footnote 2 is 4,000.

Tested by the TÜV in conformity with DIN EN 61010, section 2 - 020.



### Angle rotor, 6-place



lid with bio-containment incl. 4)

**≮**25°  $n = 9,500 \text{ min}^{-1}$ max. RCF 14,025

#### Cat. No. 4266

| Capacity in ml                   | 15                 | 25                 | 94        | 10      | 30      | 50       | 85        | 94                         | 250             |
|----------------------------------|--------------------|--------------------|-----------|---------|---------|----------|-----------|----------------------------|-----------------|
| Ø x L in mm                      | 17 x 100           | 24 x 100           | 38 x 102  | 16x80   | 26 x 95 | 29 x 107 | 38 x 106  | 38 x 102                   | 61 x122         |
| Cat. No.                         | 0518 <sup>2)</sup> | 0519 <sup>2)</sup> | 0549      | -       | 0545    | 0546     | 0547      | <b>0538</b> <sup>13)</sup> | <b>5127</b> 14) |
| lid with bio-containment 4 incl. |                    |                    |           |         |         |          |           |                            |                 |
| rotor<br>Cat. No. 4266           |                    |                    |           |         |         |          |           |                            |                 |
| Cat. No.                         | 5646               | 5642               | 5644      | 5641    | 5642    | 5643     | 5644      |                            | -               |
| boring Ø x L in mm               | 17.6x83            | 26x80              | 38.6 x 88 | 16.6x70 | 26x80   | 29x90    | 38.6 x 88 |                            | 61.5 x 109      |
| tubes per rotor                  | 42                 | 18                 | 6         | 48      | 18      | 6        |           |                            |                 |
| max. RCF 2)                      | 13,319             | 12,915             | 12,310    | 13,420  | 12,915  | 12,108   | 12,310    |                            | 14,025          |
| radius in mm                     | 132                | 128                | 122       | 133     | 128     | 120      | 122       |                            | 139             |
| run-up in sec                    | 82                 |                    |           |         |         |          |           |                            |                 |
| run-down in sec, braked          | 96                 |                    |           |         |         |          |           |                            |                 |
| temperature in °C 1)             | +2                 |                    |           |         |         |          |           |                            |                 |

 <sup>11)</sup> In heating/cooling model 4950-50 rotor 4316 can only be used up to a maximum of + 40 °C.
 13) The screw cap for tube No. 0538 is available with Cat. No. 0539. Dimensions with cap 38 x 110 mm.
 14) At temperatures of over +40 °C and / or when not filled to capacity, bottles may warp during centrifugation.



### Angle rotor, 14-place



lid with bio-containment incl.  $^{\mbox{\tiny 4}}$ 

 $436^{\circ}$ n = 10,000 min<sup>-1</sup> max. RCF 17,441

### Cat. No. 4248

| Capacity in ml                   | 15                 | 25                 | 7.5-8.5     | 9-10                         | 10       | 8.5-10 | 15       | 50       | 30      |
|----------------------------------|--------------------|--------------------|-------------|------------------------------|----------|--------|----------|----------|---------|
| Ø x L in mm                      | 17x100             | 24x100             | 15x92       | 16x92                        | 15 x 102 | 16x100 | 17x120   | 29 x 115 | 26 x 95 |
| Cat. No.                         | 0518 <sup>2)</sup> | 0519 <sup>2)</sup> | blood co    | blood collection/urine tubes |          |        | 0509     | 0513     | 0545    |
| lid with bio-containment 4 incl. |                    |                    |             |                              |          |        |          |          |         |
| rotor<br>Cat. No. 4266           | •                  |                    | •           |                              |          |        | •        |          |         |
| Cat. No.                         | 1473               | 1472               | 1473        |                              |          |        | 1474     | -        | 1472    |
| boring Ø x L in mm               | 17.5x91,5          | 26x85              | 17.5 x 91,5 |                              |          |        | 17 x 107 | 30 x 100 | 26 x 85 |
| tubes per rotor                  | 14                 |                    |             |                              |          |        |          |          |         |
| max. RCF <sup>2)</sup>           | 16,658             | 16,211             | 16,658      |                              |          |        | 16,994   | 17,441   | 16,211  |
| radius in mm                     | 149                | 145                | 149         |                              |          |        | 152      | 156      | 145     |
| run-up in sec                    | 103                |                    |             |                              |          |        |          |          |         |
| run-down in sec, braked          | 106                |                    |             |                              |          |        |          |          |         |
| temperature in °C 1)             | +6                 |                    |             |                              |          |        |          |          |         |



# Swing-out rotor, 4-place, for ASTM tubes + 50 ml babcock bottles

# Angle rotor, 6-place, for Schlenk tubes



 $₹90^{\circ}$ n = 2,000 min<sup>-1</sup> max. RCF 984

illustrated with carriers 4275



45 n = 2,000 min<sup>-1</sup> max. RCF 805

Cat. No. 4274 (without carriers)

Cat. No. 4316 11)

| capacity in ml           | 50       | 100       | 100      | 100       | 50         |
|--------------------------|----------|-----------|----------|-----------|------------|
| Ø x L in mm              | 45 x 130 | 58 x 161  | 44 x 168 | 37 x 200  | 36.5 x 185 |
| Cat. No.                 | ASTM     | ASTM 0528 | ASTM     | ASTM 0531 | Babcock    |
| carrier<br>Cat. No. 4275 | -        |           |          |           |            |
| rotor<br>Cat. No. 4274   |          |           |          |           | •          |
| Cat. No.                 | 4278-A   | 0771      | 4277     | 4276      | 0703       |
| boring Ø x L in mm       | -        |           |          |           |            |
| tubes per rotor          | 4        |           |          |           |            |
| max. RCF                 | 984      |           | 961      |           | 912        |
| radius in mm             | 220      |           | 215      |           | 204        |
| run-up in sec            | 16       |           |          |           |            |
| run-down in sec, braked  | 38       |           |          |           |            |
| temperature in °C 1)     | -5       |           |          |           |            |

| capacity in ml   | 25                         | 50                          |
|--|----------------------------|-----------------------------|
| Cat. No.   | 0532                       | 0533                        |
| rotor<br>Cat. No. 4316 <sup>11)</sup>                    |                            |                             |
|  |                            |                             |
| Cat. No.   | 4317                       | -                           |
| Cat. No. boring Ø x L in mm                              | <b>4317</b> 25 x 86        | -                           |
|  |                            | -                           |
| boring Ø x L in mm                                       | 25 x 86                    | 805                         |
| boring Ø x L in mm tubes per rotor                       | 25 x 86                    | <b>-</b><br>-<br>805<br>180 |
| boring Ø x L in mm<br>tubes per rotor<br>max. RCF        | 25 x 86<br>6<br>783        |                             |
| boring Ø x L in mm tubes per rotor max. RCF radius in mm | 25 x 86<br>6<br>783<br>175 |                             |

### TECHNICAL DATA



| TECH     | INOLOGY                            | ROTIXA 500 RS             |  |  |  |  |  |  |
|----------|------------------------------------|---------------------------|--|--|--|--|--|--|
|          |                                    |                           |  |  |  |  |  |  |
| Floors   | tanding centrifuge, without rotor  | cooled                    |  |  |  |  |  |  |
| Power s  | upply <sup>*)</sup>                | 230-240 V 1 ~             | 220 V 1 ~                                |  |  |  |  |  |
| Frequen  | су                                 | 50 Hz                     | 60 Hz                                    |  |  |  |  |  |
| Consum   | ption                              | 3,800 VA                  |  |  |  |  |  |  |
| Emission | n, Immunity                        | EN/IEC 61326-1, class B   |  |  |  |  |  |  |
| \$\$     | Max. capacity                      | 4x1,000 ml                |  |  |  |  |  |  |
|          | Max. RPM (speed)                   | 10,000 min <sup>-1</sup>  |  |  |  |  |  |  |
|          | Max. RCF                           | 17,441                    |  |  |  |  |  |  |
| Running  | time                               | 1 sec-999 min : 59 sec, ∞ | 1 sec-999 min : 59 sec, ∞ continuous run |  |  |  |  |  |
| Dimensi  | ons (HxWxD)                        | 973 x 650 x 815 mm        |  |  |  |  |  |  |
| Weight   |                                    | approx. 219 kg            |  |  |  |  |  |  |
| Refrig   | eration                            |                           |  |  |  |  |  |  |
| Tempera  | ature control, infinitely variable | from -20 to +40 °C        |  |  |  |  |  |  |
| Cat. N   | lo.                                | 4950                      |  |  |  |  |  |  |

<sup>&</sup>quot; Other voltages on request.



Hettich centrifuges comply with all relevant EU standards in effect and conform to the European level of quality and safety for medical devices. Evidence is provided by national and international test marks such as IEC 61010 or the CE conformity. The ISO 9001, ISO 13485 and ISO 14001 certificates accredited to the company bear witness to the extreme care and responsibility Hettich puts into the manufacturing of centrifuges and their accessories.



Our certification as an "Authorised Economic Operator" enables accelerated customs clearance.





