

Алматы (7273)495-231  
Ангарск (3955)60-70-56  
Архангельск (8182)63-90-72  
Астрахань (8512)99-46-04  
Барнаул (3852)73-04-60  
Белгород (4722)40-23-64  
Благовещенск (4162)22-76-07  
Брянск (4832)59-03-52  
Владивосток (423)249-28-31  
Владикавказ (8672)28-90-48  
Владимир (4922) 49-43-18  
Волгоград (844)278-03-48  
Вологда (8172)26-41-59  
Воронеж (473)204-51-73  
Екатеринбург (343)384-55-89

Ижевск (3412)26-03-58  
Иваново (4932)77-34-06  
Иркутск (395)279-98-46  
Казань (843)206-01-48  
Калининград (4012)72-03-81  
Калуга (4842)92-23-67  
Кемерово (3842)65-04-62  
Киров (8332)68-02-04  
Коломна (4966)23-41-49  
Кострома (4942)77-07-48  
Краснодар (861)203-40-90  
Красноярск (391)204-63-61  
Курск (4712)77-13-04  
Курган (3522)50-90-47  
Липецк (4742)52-20-81

Киргизия (996)312-96-26-47

Магнитогорск (3519)55-03-13  
Москва (495)268-04-70  
Мурманск (8152)59-64-93  
Набережные Челны (8552)20-53-41  
Нижний Новгород (831)429-08-12  
Новокузнецк (3843)20-46-81  
Новый Сибирск (3496)41-32-12  
Новосибирск (383)227-86-73  
Омск (3812)21-46-40  
Орел (4862)44-53-42  
Оренбург (3532)37-68-04  
Пенза (8412)22-31-16  
Петрозаводск (8142)55-98-37  
Псков (8112)59-10-37  
Пермь (342)205-81-47

Россия (495)268-04-70

Ростов-на-Дону (863)308-18-15  
Рязань (4912)46-61-64  
Самара (846)206-03-16  
Саранск (8342)22-96-24  
Санкт-Петербург (812)309-46-40  
Саратов (845)249-38-78  
Севастополь (8692)22-31-93  
Симферополь (3652)67-13-56  
Смоленск (4812)29-41-54  
Сочи (862)225-72-31  
Ставрополь (8652)20-65-13  
Сыктывкар (8212)25-95-17  
Сургут (3462)77-98-35  
Тамбов (4752)50-40-97  
Тверь (4822)63-31-35

Казахстан (772)734-952-31

Тольятти (8482)63-91-07  
Томск (3822)98-41-53  
Тула (4872)33-79-87  
Тюмень (3452)66-21-18  
Улан-Удэ (3012)59-97-51  
Ульяновск (8422)24-23-59  
Уфа (347)229-48-12  
Хабаровск (4212)92-98-04  
Чебоксары (8352)28-53-07  
Челябинск (351)202-03-61  
Череповец (8202)49-02-64  
Чита (3022)38-34-83  
Якутск (4112)23-90-97  
Ярославль (4852)69-52-93

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## Центрифуги настольные Rotina 380 R, 380

BENCHTOP CENTRIFUGE

### — ROTINA 380 | 380 R

#### HIGH SPEED WITH SPACE SAVING DESIGN

High performance unit supporting a wide array of accessories for multiple applications in just one rotor. Its size and performance make it the ideal bench top centrifuge for most clinical, research and industrial laboratories.

This unit is available with refrigeration and a temperature range from -20 °C to +40 °C (ROTINA 380 R).



#### — HIGHLIGHTS

- RPM: 50 - 15,000 min<sup>-1</sup>  
Adjustable in increments of 10
- RCF: 50 - 24,400  
Adjustable in increments of 1
- max. capacity: 4 x 290 ml
- choice of 9 rotors
- IVDR-conform according to regulation (EU) 2017/746
- max. noise level of 54 dB(A) with rotor 1760
- easy operation with keypad and control knob
- 98 program memories for more individuality
- 9 individual acceleration and 10 deceleration stages
- model 380 R coolable from -20 to +40 °C with pre-cooling function

#### — FEATURES

- metal housing and lid
- viewing port in the lid
- powered one-hand lid lock
- lid dropping protection
- emergency lid lock release
- stainless steel chamber
- automatic rotor recognition
- brushless drive
- error display
- display in °C and °F possible
- imbalance switch-off
- backlit panel with actual values of all parameters
- auditory message after completion of the centrifugation run

## TECHNICAL DATA

|                                          | <b>ROTINA 380</b><br>non-refrigerated                        | <b>ROTINA 380 R</b><br>refrigerated                          |
|------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|
| voltage *)                               | 200 – 240 V 1 ~                                              | 200 – 240 V 1 ~                                              |
| frequency                                | 50 – 60 Hz                                                   | 50 – 60 Hz                                                   |
| consumption                              | 650 VA                                                       | 1,300 VA                                                     |
| emission, immunity                       | EN/IEC 61326-1, class B                                      | EN/IEC 61326-1, class B                                      |
| max. capacity                            | 4 x 290 ml                                                   | 4 x 290 ml                                                   |
| max. RPM                                 | 15,000 min <sup>-1</sup>                                     | 15,000 min <sup>-1</sup>                                     |
| max. RCF                                 | 24,400                                                       | 24,400                                                       |
| running time                             | 1 – 99 h: 59 min: 59 sec, ∞ continuous run, short cycle mode | 1 – 99 h: 59 min: 59 sec, ∞ continuous run, short cycle mode |
| dimensions (WxDxH)                       | 457x600x418 mm                                               | 457x750x418 mm                                               |
| weight                                   | approx. 51 kg                                                | approx. 81 kg                                                |
| noise level                              | 54 dB (A) with rotor 1760                                    | 54 dB (A) with rotor 1760                                    |
| temperature control, infinitely variable | -                                                            | from -20 to +40 °C                                           |
| <b>Cat. No.</b>                          | <b>1701</b>                                                  | <b>1706</b>                                                  |
| 100 – 127 V 1 ~ / 50 – 60 Hz *)          | 1701-01                                                      | 1706-01                                                      |
| consumption                              | 700 VA                                                       | 1,400 VA                                                     |
| emission, immunity                       | FCC class B                                                  | FCC class B                                                  |
| weight                                   | approx. 58.5 kg                                              | approx. 88.5 kg                                              |

\*) Other voltages on request.

## AVAILABLE ROTORS

### SWING-OUT ROTORS

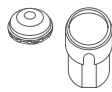
|                                                                                                              | angle | max. RPM                | max. capacity | Cat. No.    | page |
|--------------------------------------------------------------------------------------------------------------|-------|-------------------------|---------------|-------------|------|
|  swing-out rotor, 4-place | 90°   | 5,000 min <sup>-1</sup> | 4 x 290 ml    | <b>1754</b> | 3    |
|  swing-out rotor, 4-place | 90°   | 4,000 min <sup>-1</sup> | 4 x 290 ml    | <b>1798</b> | 5    |
|  swing-out rotor, 6-place | 90°   | 4,000 min <sup>-1</sup> | 6 x 50 ml     | <b>1726</b> | 8    |
|  swing-out rotor, 2-place | 90°   | 4,000 min <sup>-1</sup> | 10 plates     | <b>1760</b> | 9    |
|  swing-out rotor, 2-place | 90°   | 5,100 min <sup>-1</sup> | 12 plates     | <b>1770</b> | 9    |

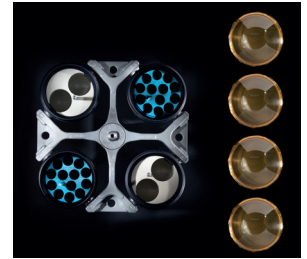
### ANGLE ROTORS

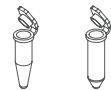
|                                                                                                           |     |                                      |           |               |    |
|-----------------------------------------------------------------------------------------------------------|-----|--------------------------------------|-----------|---------------|----|
|  angle rotor, 6-place  | 45° | 10,000 l<br>11,000 min <sup>-1</sup> | 6 x 94 ml | <b>1720</b>   | 10 |
|  angle rotor, 6-place  | 45° | 10,000 l<br>11,000 min <sup>-1</sup> | 6 x 94 ml | <b>1792</b>   | 11 |
|  angle rotor, 30-place | 45° | 15,000 min <sup>-1</sup>             | 30 x 2 ml | <b>1789-A</b> | 12 |

## SWING-OUT ROTOR, 4-PLACE | 1754

|                                                                                   |                                 |
|-----------------------------------------------------------------------------------|---------------------------------|
|  |                                 |
| <b>Rotor</b>                                                                      |                                 |
| max. RPM   max. RCF                                                               | 5,000 min <sup>-1</sup>   4,863 |
| max. capacity                                                                     | 4 x 290 ml                      |
| run-up   run-down, braked in sec.                                                 | 42   27                         |
| angle   max. noise level                                                          | 90°   60 dB (A)                 |
| temperature in °C <sup>1)</sup>                                                   | 0                               |
| <b>Cat. No.</b>                                                                   | <b>1754</b>                     |

|                                                                                    |             |
|------------------------------------------------------------------------------------|-------------|
|  |             |
| <b>Bucket</b>                                                                      |             |
| lid bioseal <sup>2)</sup>                                                          | 1751        |
| <b>Cat. No.</b>                                                                    | <b>1752</b> |



|                                                                                   |                         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-----------------------------------------------------------------------------------|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Vessels</b>                                                                    |                         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| capacity in ml                                                                    | 1.5                     | 2.0                                                                               | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                 | 9                                                                                 | 15                                                                                 | 20                                                                                  | 25                                                                                  | 45                                                                                  | 50                                                                                  | 94                                                                                  | 100                                                                                 |                                                                                     |
| Ø x L in mm                                                                       | 11 x 38                 | 11 x 38                                                                           | 10 x 60                                                                           | 12 x 60                                                                           | 12 x 75                                                                           | 12 x 82                                                                           | 12 x 100                                                                          | 14 x 100                                                                          | 17 x 100                                                                           | 21 x 100                                                                            | 24 x 100                                                                            | 31 x 100                                                                            | 34 x 100                                                                            | 38 x 102                                                                            | 40 x 115                                                                            |                                                                                     |
| max. RCF <sup>2)</sup>                                                            | 3,494 / 4,779           | 3,494 / 4,779                                                                     | 4,779                                                                             | 4,668                                                                             | 4,668                                                                             | 4,668                                                                             | 4,668                                                                             | 4,668                                                                             | 4,668                                                                              | 4,668                                                                               | 4,668                                                                               | 4,668                                                                               | 4,668                                                                               | 4,807                                                                               | 4,640                                                                               |                                                                                     |
| radius in mm                                                                      | 125 / 171               | 125 / 171                                                                         | 171                                                                               | 167                                                                               | 167                                                                               | 167                                                                               | 167                                                                               | 167                                                                               | 167                                                                                | 167                                                                                 | 167                                                                                 | 167                                                                                 | 167                                                                                 | 172                                                                                 | 166                                                                                 |                                                                                     |
| <b>Cat. No.</b>                                                                   | <b>microliter tubes</b> |                                                                                   |                                                                                   | <b>tubes <sup>2)</sup></b>                                                        |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                                                                                   |                                                                                    |           |           |         |         |         |         |         |         |         |         |         |         |         |       |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------|
|  |  |           |           |         |         |         |         |         |         |         |         |         |         |         |       |
| Adapter                                                                           |                                                                                    |           |           |         |         |         |         |         |         |         |         |         |         |         |       |
| boring Ø x L in mm                                                                | 11.2x39.5                                                                          | 11.2x39.5 | 11.2x39.5 | 12.5x56 | 12.5x56 | 12.5x56 | 12.5x56 | 17.5x62 | 17.5x62 | 25.5x81 | 25.5x81 | 35.5x81 | 35.5x81 | 38.5x80 | 41x97 |
| vessels per rotor                                                                 | 144                                                                                | 144       | 72        | 96      | 96      | 96      | 96      | 52      | 52      | 24      | 24      | 12      | 12      | 8       | 4     |
| Cat. No.                                                                          | 1761                                                                               | 1761      | 1761      | 1762-A  | 1762-A  | 1762-A  | 1762-A  | 1763-A  | 1763-A  | 1764    | 1764    | 1765    | 1765    | 1777    | 1767  |

|                        |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
|------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Vessels                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
| capacity in ml         | 100                                                                                 | 250                                                                                 | 1.1–1.4                                                                             | 2.6–3.4                                                                             | 2.7–3                                                                               | 4–5.5                                                                               | 4.5–5                                                                               | 4.5–5                                                                               | 4.9                                                                                 | 4.9                                                                                   | 7.5–8.5                                                                               | 9–10                                                                                  | 10                                                                                    | 1.6–5                                                                                 | 4–7                                                                                   |
| Ø x L in mm            | 44x100                                                                              | 65 x 115                                                                            | 8 x 66                                                                              | 13 x 65                                                                             | 11 x 66                                                                             | 15x75                                                                               | 11 x 92                                                                             | 11 x 92                                                                             | 13x90                                                                               | 13x90                                                                                 | 15x92                                                                                 | 16x92                                                                                 | 15x102                                                                                | 13 x 75                                                                               | 13 x 100                                                                              |
| max. RCF <sup>2)</sup> | 4,640                                                                               | 4,640                                                                               | 4,668                                                                               | 4,668                                                                               | 4,668                                                                               | 4,668                                                                               | 4,668                                                                               | 4,668                                                                               | 4,668                                                                               | 4,668                                                                                 | 4,668                                                                                 | 4,668                                                                                 | 4,668                                                                                 | 4,668                                                                                 | 4,668                                                                                 |
| radius in mm           | 166                                                                                 | 166                                                                                 | 167                                                                                 | 167                                                                                 | 167                                                                                 | 167                                                                                 | 167                                                                                 | 167                                                                                 | 167                                                                                 | 167                                                                                   | 167                                                                                   | 167                                                                                   | 167                                                                                   | 167                                                                                   | 167                                                                                   |
| Cat. No.               | tubes <sup>2)</sup>                                                                 |                                                                                     | blood collection tubes / urine tubes                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |

|                                                                                     |                                                                                      |             |             |               |               |               |               |             |               |             |               |               |               |               |               |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-------------|-------------|---------------|---------------|---------------|---------------|-------------|---------------|-------------|---------------|---------------|---------------|---------------|---------------|
|  |  |             |             |               |               |               |               |             |               |             |               |               |               |               |               |
| <b>Adapter</b>                                                                      |                                                                                      |             |             |               |               |               |               |             |               |             |               |               |               |               |               |
| boring Ø x L in mm                                                                  | 45x87                                                                                | 66x104.5    | 9x49        | 13.5x54       | 12.5x56       | 17.5x62       | 12.5x56       | 13.2x72     | 13.5x54       | 13.2x72     | 17.5x62       | 17.5x62       | 17.5x62       | 13.5x54       | 13.5x54       |
| vessels per rotor                                                                   | 4                                                                                    | 4           | 96          | 64            | 96            | 52            | 96            | 76          | 64            | 76          | 52            | 52            | 52            | 64            | 64            |
| <b>Cat. No.</b>                                                                     | <b>1766</b>                                                                          | <b>1768</b> | <b>1781</b> | <b>1783-A</b> | <b>1762-A</b> | <b>1763-A</b> | <b>1762-A</b> | <b>1787</b> | <b>1783-A</b> | <b>1787</b> | <b>1763-A</b> | <b>1763-A</b> | <b>1763-A</b> | <b>1783-A</b> | <b>1783-A</b> |

1) For cooled versions: Lowest temperature achievable with precooling and max. speed.

2) 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.

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

## SWING-OUT ROTOR, 4-PLACE | 1754



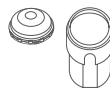
### Rotor

|                                  |                                 |
|----------------------------------|---------------------------------|
| max. RPM   max. RCF              | 5,000 min <sup>-1</sup>   4,863 |
| max. capacity                    | 4 x 290 ml                      |
| run-up   run-down, braked in sec | 42   27                         |
| angle   max. noise level         | 90°   60 dB (A)                 |
| temperature in °C <sup>1)</sup>  | 0                               |
| <b>Cat. No.</b>                  | <b>1754</b>                     |



### Bucket

|                           |             |
|---------------------------|-------------|
| lid bioseal <sup>5)</sup> | 1751        |
| <b>Cat. No.</b>           | <b>1752</b> |



### Vessels

|                        |                                             |       |        |          |          |                             |          |        |       |        |        |        |          |       |       |
|------------------------|---------------------------------------------|-------|--------|----------|----------|-----------------------------|----------|--------|-------|--------|--------|--------|----------|-------|-------|
|                        |                                             |       |        |          |          |                             |          |        |       |        |        |        |          |       |       |
| capacity in ml         | 4 – 7                                       | 4 – 7 | 8      | 8.5 – 10 | 5        | 15                          | 50       | 12     | 25    | 30     | 50     | 50     | 14       | 10    | 30    |
| Ø x L in mm            | 13x100                                      | 16x75 | 16x125 | 16x100   | 17x59    | 17x120                      | 29 x 115 | 17x100 | 25x90 | 25x110 | 29x115 | 29x115 | 16,5x106 | 16x80 | 26x95 |
| max. RCF <sup>2)</sup> | 4,668                                       | 4,668 | 4,668  | 4,668    | 4,863    | 4,863                       | 4,863    | 4,696  | 4,528 | 4,528  | 4,752  | 4,752  | 4,668    | 4,668 | 4,807 |
| radius in mm           | 167                                         | 167   | 167    | 167      | 174      | 174                         | 174      | 168    | 162   | 162    | 170    | 170    | 167      | 167   | 172   |
| <b>Cat. No.</b>        | <b>blood collection tubes / urine tubes</b> |       |        |          | <b>-</b> | <b>tubes with screw cap</b> |          |        |       |        |        |        |          |       |       |



### Adapter

|                    |             |               |               |               |             |               |               |             |             |             |               |               |               |               |             |
|--------------------|-------------|---------------|---------------|---------------|-------------|---------------|---------------|-------------|-------------|-------------|---------------|---------------|---------------|---------------|-------------|
|                    |             |               |               |               |             |               |               |             |             |             |               |               |               |               |             |
| boring Ø x L in mm | 13.2x72     | 17.5x62       | 17.5x62       | 17.5x62       | 17x52       | 17x84         | 30x84         | 17x78       | 26.5x72     | 26.5x72     | 30x80         | 30x80         | 17.5x62       | 17.5x62       | 26.5x70     |
| vessels per rotor  | 76          | 52            | 12            | 52            | 32          | 36            | 16            | 36          | 20          | 20          | 16            | 16            | 52            | 52            | 24          |
| <b>Cat. No.</b>    | <b>1787</b> | <b>1763-A</b> | <b>1763-A</b> | <b>1763-A</b> | <b>1738</b> | <b>1771-A</b> | <b>1772-A</b> | <b>1773</b> | <b>1779</b> | <b>1779</b> | <b>1774-A</b> | <b>1774-A</b> | <b>1763-A</b> | <b>1763-A</b> | <b>1775</b> |

### Vessels

|                        |                             |        |        |               |                |              |               |                            |                         |
|------------------------|-----------------------------|--------|--------|---------------|----------------|--------------|---------------|----------------------------|-------------------------|
|                        |                             |        |        |               |                |              |               |                            |                         |
| capacity in ml         | 50                          | 85     | 94     | 175           | 175            | 200          | 225           | 250                        | 290                     |
| Ø x L in mm            | 29x107                      | 38x106 | 38x102 | 61 x 118      | 62 x 144       | 60 x 130     | 61 x 137      | 61 x 122                   | 62 x 137                |
| max. RCF <sup>2)</sup> | 4,752                       | 4,807  | 4,807  | 4,863         | 4,863          | 4,863        | 4,863         | 4,863                      | 4,863                   |
| radius in mm           | 170                         | 172    | 172    | 174           | 174            | 174          | 174           | 174                        | 174                     |
| <b>Cat. No.</b>        | <b>tubes with screw cap</b> |        |        | <b>Falcon</b> | <b>Nalgene</b> | <b>Nunc®</b> | <b>Falcon</b> | <b>5127 <sup>24)</sup></b> | <b>- <sup>24)</sup></b> |



### Adapter

|                    |               |             |             |             |             |             |             |             |             |
|--------------------|---------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                    |               |             |             |             |             |             |             |             |             |
| boring Ø x L in mm | 30 x 80       | 38.5 x 80   | 38.5 x 80   | 62 x 111    | 62 x 111    | 62 x 111    | 62 x 111    | 62 x 100    | 62 x 100    |
| vessels per rotor  | 16            | 8           | 8           | 4           | 4           | 4           | 4           | 4           | 4           |
| <b>Cat. No.</b>    | <b>1774-A</b> | <b>1777</b> | <b>1777</b> | <b>1782</b> | <b>1778</b> | <b>1778</b> | <b>1782</b> | <b>1769</b> | <b>1769</b> |

1) For cooled versions: Lowest temperature achievable with precooling and max. speed.

2) 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.

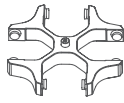
3.3) When using these tubes, bucket 1752 or 5051 cannot be closed with lid 1751 or 5053.

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

21) Adapter must be loaded as illustrated.

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

## SWING-OUT ROTOR, 4-PLACE | 1798



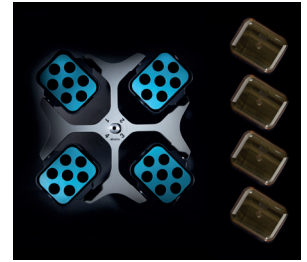
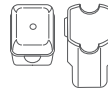
### Rotor

|                                  |                                 |
|----------------------------------|---------------------------------|
| max. RPM   max. RCF              | 4,000 min <sup>-1</sup>   2,898 |
| max. capacity                    | 4 x 100 ml                      |
| run-up   run-down, braked in sec | 24   17                         |
| angle   max. noise level         | 90°   55 dB (A)                 |
| temperature in °C <sup>1)</sup>  | -8                              |
| <b>Cat. No.</b>                  | <b>1798</b>                     |



### Bucket

|                 |             |
|-----------------|-------------|
| lid             | 5053        |
| <b>Cat. No.</b> | <b>5051</b> |



### Vessels

|                        |                         |               |         |         |                           |         |         |          |          |          |          |          |          |          |
|------------------------|-------------------------|---------------|---------|---------|---------------------------|---------|---------|----------|----------|----------|----------|----------|----------|----------|
| capacity in ml         | 1.5                     | 2             | 1.5     | 2       | 3                         | 5       | 6       | 7        | 9        | 15       | 25       | 50       | 100      | 100      |
| Ø x L in mm            | 11 x 38                 | 11 x 38       | 11 x 38 | 11 x 38 | 10 x 60                   | 12 x 75 | 12 x 82 | 12 x 100 | 14 x 100 | 17 x 100 | 24 x 100 | 34 x 100 | 40 x 115 | 44 x 100 |
| max. RCF <sup>2)</sup> | 1,950 / 2,826           | 1,950 / 2,826 | 2,826   | 2,826   | 2,737                     | 2,773   | 2,773   | 2,755    | 2,773    | 2,755    | 2,755    | 2,755    | 2,755    | 2,755    |
| radius in mm           | 109 / 158               | 109 / 158     | 158     | 158     | 153                       | 155     | 155     | 154      | 155      | 154      | 154      | 154      | 154      | 154      |
| <b>Cat. No.</b>        | <b>microliter tubes</b> |               |         |         | <b>tubes<sup>2)</sup></b> |         |         |          |          |          |          |          |          |          |



### Adapter

|                    |             |             |             |             |             |             |             |                           |             |                           |             |             |             |             |
|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------------------|-------------|---------------------------|-------------|-------------|-------------|-------------|
| boring Ø x L in mm | 12.5 x 42   | 12.5 x 42   | 11.5 x 50   | 11.5 x 50   | 11 x 44     | 12.5 x 42   | 12.5 x 42   | 12.5 x 86                 | 16 x 50     | 17.5 x 86                 | 26 x 86     | 36 x 86     | 42 x 86     | 45.5 x 86   |
| vessels per rotor  | 160         | 160         | 64          | 64          | 80          | 80          | 80          | 80                        | 48          | 48                        | 20          | 8           | 4           | 4           |
| <b>Cat. No.</b>    | <b>5257</b> | <b>5257</b> | <b>5281</b> | <b>5281</b> | <b>5267</b> | <b>5227</b> | <b>5227</b> | <b>5247<sup>15)</sup></b> | <b>5264</b> | <b>5248<sup>15)</sup></b> | <b>5242</b> | <b>5243</b> | <b>5249</b> | <b>5262</b> |

### Vessels

|                        |                                             |         |         |         |         |         |         |         |          |         |          |         |          |
|------------------------|---------------------------------------------|---------|---------|---------|---------|---------|---------|---------|----------|---------|----------|---------|----------|
| 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   |
| Ø x L in mm            | 8 x 66                                      | 13 x 65 | 11 x 66 | 15 x 75 | 11 x 92 | 13 x 90 | 15 x 92 | 16 x 92 | 15 x 102 | 13 x 75 | 13 x 100 | 16 x 75 | 16 x 100 |
| max. RCF <sup>2)</sup> | 2,737                                       | 2,808   | 2,773   | 2,773   | 2,773   | 2,808   | 2,773   | 2,755   | 2,755    | 2,808   | 2,808    | 2,773   | 2,755    |
| radius in mm           | 153                                         | 157     | 155     | 155     | 155     | 157     | 155     | 154     | 154      | 157     | 157      | 155     | 154      |
| <b>Cat. No.</b>        | <b>blood collection tubes / urine tubes</b> |         |         |         |         |         |         |         |          |         |          |         |          |



### Adapter

|                    |             |             |             |             |             |             |             |             |             |             |             |             |             |
|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| boring Ø x L in mm | 11 x 44     | 13.5 x 52   | 12.5 x 42   | 16 x 50     | 12.5 x 42   | 13.5 x 52   | 16 x 50     | 17.6 x 86   | 17.6 x 86   | 13.5 x 52   | 13.5 x 52   | 16 x 50     | 17.5 x 86   |
| vessels per rotor  | 80          | 48          | 80          | 48          | 80          | 48          | 48          | 44          | 44          | 48          | 48          | 48          | 48          |
| <b>Cat. No.</b>    | <b>5267</b> | <b>5268</b> | <b>5227</b> | <b>5264</b> | <b>5227</b> | <b>5268</b> | <b>5264</b> | <b>5258</b> | <b>5258</b> | <b>5268</b> | <b>5268</b> | <b>5264</b> | <b>5248</b> |

### Vessels

|                        |                             |          |          |          |          |          |                      |
|------------------------|-----------------------------|----------|----------|----------|----------|----------|----------------------|
| capacity in ml         | 30                          | 50       | 15       | 12       | 30       | 50       | 1–8                  |
| Ø x L in mm            | 25 x 110                    | 29 x 115 | 17 x 120 | 17 x 100 | 25 x 110 | 29 x 115 | simple / multiple    |
| max. RCF <sup>2)</sup> | 2,755                       | 2,826    | 2,898    | 2,898    | 2,755    | 2,755    | 1,735 / 2,737        |
| radius in mm           | 154                         | 158      | 162      | 162      | 154      | 154      | 97 / 153             |
| <b>Cat. No.</b>        | <b>tubes with screw cap</b> |          |          |          |          |          | <b>cyto chambers</b> |

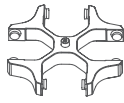


### Adapter

|                    |             |             |             |             |             |             |             |
|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| boring Ø x L in mm | 26 x 86     | 30 x 86     | 17 x 90     | 17 x 90     | 26 x 86     | 36 x 86     | -           |
| vessels per rotor  | 20          | 8           | 28          | 28          | 20          | 8           | 8           |
| <b>Cat. No.</b>    | <b>5266</b> | <b>5259</b> | <b>6306</b> | <b>6306</b> | <b>5266</b> | <b>5243</b> | <b>5280</b> |

- 1) For cooled versions: Lowest temperature achievable with precooling and max. speed.
- 2) 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.
- 3.3) When using these tubes, bucket 1752 or 5051 cannot be closed with lid 1751 or 5053.
- 15) Also available with decanting aid. (Cat. No. 5247-91 or 5248-91).

## SWING-OUT ROTOR, 4-PLACE | 1798



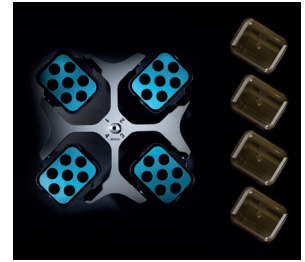
### Rotor

|                                  |                                 |
|----------------------------------|---------------------------------|
| max. RPM   max. RCF              | 4,000 min <sup>-1</sup>   3,095 |
| max. capacity                    | 4 x 290 ml                      |
| run-up   run-down, braked in sec | 24   17                         |
| angle   max. noise level         | 90°   56 dB (A)                 |
| temperature in °C <sup>1)</sup>  | -8                              |
| <b>Cat. No.</b>                  | <b>1798</b>                     |



### Bucket

|                           |             |
|---------------------------|-------------|
| lid bioseal <sup>5)</sup> | 5093        |
| <b>Cat. No.</b>           | <b>5092</b> |



### Vessels

|                        |                            |       |        |        |        |        |        |        |        |                             |        |        |        |       |        |
|------------------------|----------------------------|-------|--------|--------|--------|--------|--------|--------|--------|-----------------------------|--------|--------|--------|-------|--------|
| capacity in ml         | 5                          | 6     | 7      | 15     | 25     | 50     | 100    | 100    | 250    | 15                          | 30     | 50     | 12     | 25    | 30     |
| Ø x L in mm            | 12x75                      | 12x82 | 12x100 | 17x100 | 24x100 | 34x100 | 44x100 | 40x115 | 65x115 | 17x120                      | 25x110 | 29x115 | 17x100 | 25x90 | 25x110 |
| max. RCF <sup>2)</sup> | 3,005                      | 3,005 | 3,005  | 2,952  | 2,898  | 2,952  | 2,952  | 2,952  | 3,095  | 3,095                       | 2,898  | 3,095  | 3,005  | 2,826 | 2,898  |
| radius in mm           | 168                        | 168   | 168    | 165    | 162    | 165    | 165    | 165    | 173    | 173                         | 162    | 173    | 168    | 158   | 162    |
| <b>Cat. No.</b>        | <b>tubes <sup>2)</sup></b> |       |        |        |        |        |        |        |        | <b>tubes with screw cap</b> |        |        |        |       |        |



### Adapter

|                    |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |
|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| boring Ø x L in mm | 12.8x45     | 12.8x45     | 13.2x82     | 17.5x60.7   | 25.5x82     | 35.5x85     | 45.5x85     | 42x85       | 66x103      | 17x85       | 25.5x82     | 30x85       | 17.5x82     | 26x73       | 25.5x82     |
| vessels per rotor  | 48          | 48          | 48          | 32          | 16          | 4           | 4           | 4           | 4           | 28          | 16          | 8           | 28          | 12          | 16          |
| <b>Cat. No.</b>    | <b>5128</b> | <b>5128</b> | <b>5120</b> | <b>5136</b> | <b>5122</b> | <b>5124</b> | <b>5125</b> | <b>5126</b> | <b>1791</b> | <b>5129</b> | <b>5122</b> | <b>5123</b> | <b>5121</b> | <b>5134</b> | <b>5122</b> |

### Vessels

|                        |                             |       |                            |                         |                                             |         |       |       |       |       |         |       |        |       |       |
|------------------------|-----------------------------|-------|----------------------------|-------------------------|---------------------------------------------|---------|-------|-------|-------|-------|---------|-------|--------|-------|-------|
| capacity in ml         | 50                          | 10    | 250                        | 290                     | 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   |
| Ø x L in mm            | 29x115                      | 16x80 | 61x122                     | 62x137                  | 8x66                                        | 13x65   | 11x66 | 15x75 | 11x92 | 13x90 | 15x92   | 16x92 | 15x102 | 13x75 | 16x75 |
| max. RCF <sup>2)</sup> | 3,023                       | 2,952 | 3,095                      | 3,095                   | 2,540                                       | 2,540   | 2,540 | 2,952 | 3,005 | 2,952 | 2,952   | 2,952 | 2,952  | 2,540 | 2,952 |
| radius in mm           | 169                         | 165   | 173                        | 173                     | 142                                         | 142     | 142   | 165   | 168   | 165   | 165     | 165   | 165    | 142   | 165   |
| <b>Cat. No.</b>        | <b>tubes with screw cap</b> |       | <b>5127 <sup>24)</sup></b> | <b>- <sup>24)</sup></b> | <b>blood collection tubes / urine tubes</b> |         |       |       |       |       |         |       |        |       |       |



### Adapter

|                    |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |
|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| boring Ø x L in mm | 30x99       | 17.5x60.7   | 66x103      | 66x103      | 13.2x54.5   | 13.2x54.5   | 13.2x54.5   | 17.5x60.7   | 13.2x82     | 13.5x60.7   | 17.5x60.7   | 17.5x60.7   | 17.5x60.7   | 13.2x54.5   | 17.5x60.7   |
| vessels per rotor  | 8           | 32          | 4           | 4           | 48          | 48          | 48          | 32          | 48          | 32          | 32          | 32          | 32          | 48          | 32          |
| <b>Cat. No.</b>    | <b>5135</b> | <b>5136</b> | <b>6319</b> | <b>6319</b> | <b>5138</b> | <b>5138</b> | <b>5138</b> | <b>5136</b> | <b>5120</b> | <b>5137</b> | <b>5136</b> | <b>5136</b> | <b>5136</b> | <b>5138</b> | <b>5136</b> |

### Vessels

|                        |                                       |        |        |
|------------------------|---------------------------------------|--------|--------|
| capacity in ml         | 4–7                                   | 8      | 8.5–10 |
| Ø x L in mm            | 13x100                                | 16x125 | 16x100 |
| max. RCF <sup>2)</sup> | 3,005                                 | 3,059  | 2,952  |
| radius in mm           | 168                                   | 171    | 165    |
| <b>Cat. No.</b>        | <b>blood collection / urine tubes</b> |        |        |



### Adapter

|                    |             |                           |             |
|--------------------|-------------|---------------------------|-------------|
| boring Ø x L in mm | 13.2x82     | 17.5x82                   | 17.5x60.7   |
| vessels per rotor  | 48          | 28                        | 32          |
| <b>Cat. No.</b>    | <b>5120</b> | <b>5121 <sup>4)</sup></b> | <b>5136</b> |

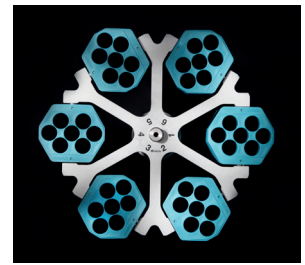
- 1) For cooled versions: Lowest temperature achievable with precooling and max. speed.
- 2) Please note that the RCF values indicated refer only to rotor performance. The max. permissible RCF of tubes used should be verified with the individual manufacturers.  
The max. RCF for glass tubes annotated with footnote 2) is 4,000.
- 3.5) When using these tubes, bucket 5092 cannot be closed with lid 5053.
- 4) Please remove the spacer.
- 5) Tested by the TÜV in conformity with DIN EN 61010, section 2 - 020.
- 24) At temperatures of over +40 °C and / or when not filled to capacity, bottles may warp during centrifugation.

## — SWING-OUT ROTOR, 6-PLACE | 1726



### Rotor

|                                         |                                 |
|-----------------------------------------|---------------------------------|
| max. RPM   max. RCF                     | 4,000 min <sup>-1</sup>   2,808 |
| max. capacity                           | 6 x 50 ml                       |
| run-up   run-down, braked in sec        | 19   18                         |
| angle   temperature in °C <sup>1)</sup> | 90°   -6                        |
| <b>Cat. No.</b>                         | <b>1726</b>                     |



### Vessels

|                        |                     |       |       |        |        |        |        |        |        |        |          |       |                   |               |
|------------------------|---------------------|-------|-------|--------|--------|--------|--------|--------|--------|--------|----------|-------|-------------------|---------------|
| capacity in ml         | 5                   | 5     | 6     | 7      | 9      | 15     | 20     | 25     | 45     | 50     | 8.5 x 10 | 30    | 1–8               |               |
| Ø x L in mm            | 12x75               | 12x75 | 12x82 | 12x100 | 14x100 | 17x100 | 21x100 | 24x100 | 31x100 | 34x100 | 16x100   | 26x95 | simple / multiple |               |
| max. RCF <sup>2)</sup> | 2,576               | 2,522 | 2,665 | 2,665  | 2,665  | 2,665  | 2,719  | 2,808  | 2,719  | 2,808  | 2,665    | 2,808 | 2,003             |               |
| radius in mm           | 144                 | 141   | 149   | 149    | 149    | 149    | 152    | 157    | 152    | 157    | 149      | 157   | 112               |               |
| Cat. No.               | tubes <sup>2)</sup> |       |       |        |        |        |        |        |        |        |          | -     | -                 | cyto chambers |



### Carrier

|                    |                |             |                |                |             |             |             |             |             |             |             |             |             |
|--------------------|----------------|-------------|----------------|----------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| boring Ø x L in mm | 12.5x64.4      | 13.5x65     | 12.5x71.5      | 12.5x71.5      | 14.6x74     | 17.6x71.5   | 21.5x74     | 26x78       | 32x74       | 35x78       | 17.6x71.5   | 26x78       | -           |
| vessels per rotor  | 24             | 102         | 24             | 24             | 30          | 24          | 12          | 12          | 6           | 6           | 24          | 12          | 6           |
| <b>Cat. No.</b>    | <b>1369-91</b> | <b>1372</b> | <b>1369-92</b> | <b>1369-92</b> | <b>1370</b> | <b>1369</b> | <b>1346</b> | <b>1745</b> | <b>1345</b> | <b>1746</b> | <b>1369</b> | <b>1745</b> | <b>1660</b> |

### CYTO

Cyto system available for this model.  
More information on [page 178](#)

## — SWING-OUT ROTOR, 6-PLACE | 1726



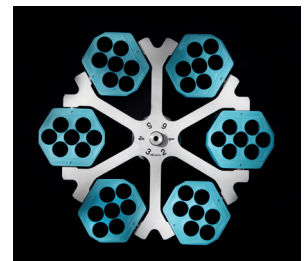
### Rotor

|                                  |                                 |
|----------------------------------|---------------------------------|
| max. RPM   max. RCF              | 4,000 min <sup>-1</sup>   2,808 |
| max. capacity                    | 42 x 15 ml                      |
| run-up   run-down, braked in sec | 19   18                         |
| angle   max. noise level         | 90°   54 dB (A)                 |
| temperature in °C <sup>1)</sup>  | -6                              |
| <b>Cat. No.</b>                  | <b>1726</b>                     |



### Carrier

|                 |             |
|-----------------|-------------|
| <b>Cat. No.</b> | <b>1742</b> |
|-----------------|-------------|



### Vessels

|                        |                        |                                             |       |         |       |        |       |       |        |          |
|------------------------|------------------------|---------------------------------------------|-------|---------|-------|--------|-------|-------|--------|----------|
| capacity in ml         | 15                     | 2.6–3.4                                     | 4–5.5 | 7.5–8.5 | 9–10  | 10     | 1.6–5 | 4–7   | 8.5–10 | 15       |
| Ø x L in mm            | 17x100                 | 13x65                                       | 15x75 | 15x92   | 16x92 | 15x102 | 13x75 | 16x75 | 16x100 | 17x120   |
| max. RCF <sup>2)</sup> | 2,808                  | 2,683                                       | 2,683 | 2,808   | 2,808 | 2,808  | 2,683 | 2,683 | 2,808  | 2,808    |
| radius in mm           | 157                    | 150                                         | 150   | 157     | 157   | 157    | 150   | 150   | 157    | 157      |
| <b>Cat. No.</b>        | <b>- <sup>2)</sup></b> | <b>blood collection tubes / urine tubes</b> |       |         |       |        |       |       |        | <b>-</b> |



### Spacer

|                    |           |             |             |           |           |           |             |             |           |           |
|--------------------|-----------|-------------|-------------|-----------|-----------|-----------|-------------|-------------|-----------|-----------|
| boring Ø x L in mm | 17.6 x 78 | 17.6 x 78   | 17.6 x 78   | 17.6 x 78 | 17.6 x 78 | 17.6 x 78 | 17.6 x 78   | 17.6 x 78   | 17.6 x 78 | 17.6 x 78 |
| vessels per rotor  | 42        | 42          | 42          | 42        | 42        | 18        | 42          | 42          | 42        | 18        |
| <b>Cat. No.</b>    | <b>-</b>  | <b>0716</b> | <b>0716</b> | <b>-</b>  | <b>-</b>  | <b>-</b>  | <b>0716</b> | <b>0716</b> | <b>-</b>  | <b>-</b>  |

1) For cooled versions: Lowest temperature achievable with precooling and max. speed.

2) 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.

21) Adapter must be loaded as illustrated.

## SWING-OUT ROTOR, 6-PLACE | 1726



### Rotor

|                                  |                                 |
|----------------------------------|---------------------------------|
| max. RPM   max. RCF              | 4,000 min <sup>-1</sup>   2,325 |
| max. capacity                    | 72 x 4 ml                       |
| run-up   run-down, braked in sec | 19   18                         |
| angle   max. noise level         | 90°   54 dB (A)                 |
| temperature in °C <sup>1)</sup>  | -6                              |

**Cat. No.** 1726

### Bucket

**Cat. No.**



1366



### Vessels

|                        |         |         |        |         |         |
|------------------------|---------|---------|--------|---------|---------|
|                        |         |         |        |         |         |
| capacity in ml         | 1.5     | 2.0     | 1      | 3       | 4       |
| Ø x L in mm            | 11 x 38 | 11 x 38 | 6 x 45 | 10 x 60 | 12 x 60 |
| max. RCF <sup>2)</sup> | 2,325   | 2,325   | 2,308  | 2,290   | 2,290   |
| radius in mm           | 130     | 130     | 129    | 128     | 128     |

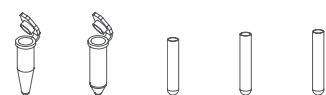
**Cat. No.** microliter tubes Rhesus tubes <sup>2)</sup>



### Adapter

|                    |           |           |          |           |           |
|--------------------|-----------|-----------|----------|-----------|-----------|
| boring Ø x L in mm | 11.5 x 38 | 11.5 x 38 | 6.5 x 23 | 10.5 x 23 | 12.5 x 44 |
| vessels per rotor  | 54        | 54        | 180      | 72        | 72        |

**Cat. No.** 5277 5277 1357 1327 1326



## SWING-OUT ROTOR, 6-PLACE | 1726



### Rotor

|                                  |                                 |
|----------------------------------|---------------------------------|
| max. RPM   max. RCF              | 4,000 min <sup>-1</sup>   2,808 |
| max. capacity                    | 60 x 9 ml                       |
| run-up   run-down, braked in sec | 19   18                         |
| angle   max. noise level         | 90°   54 dB (A)                 |
| temperature in °C <sup>1)</sup>  | -6                              |

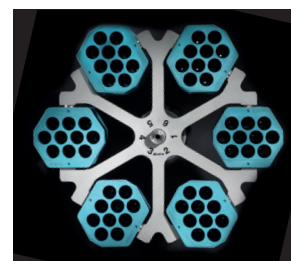
**Cat. No.** 1726

### Carrier

**Cat. No.**



1741



### Vessels

|                        |          |           |         |         |         |          |
|------------------------|----------|-----------|---------|---------|---------|----------|
|                        |          |           |         |         |         |          |
| capacity in ml         | 9        | 1.1 - 1.4 | 4.5 - 5 | 4.9     | 1.6 - 5 | 4 - 7    |
| Ø x L in mm            | 14 x 100 | 8 x 66    | 11 x 92 | 13 x 90 | 13 x 75 | 13 x 100 |
| max. RCF <sup>2)</sup> | 2,773    | 2,773     | 2,808   | 2,808   | 2,486   | 2,808    |
| radius in mm           | 155      | 155       | 157     | 157     | 139     | 157      |

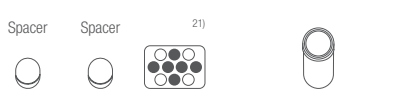
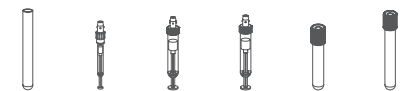
**Cat. No.** - <sup>2)</sup> blood collection tubes / urine tubes



### Adapter

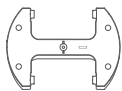
|                    |           |           |           |           |           |           |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| boring Ø x L in mm | 14.6 x 78 | 14.6 x 78 | 14.6 x 78 | 14.6 x 78 | 14.6 x 78 | 14.6 x 78 |
| vessels per rotor  | 60        | 60        | 36        | 60        | 60        | 60        |

**Cat. No.** 0701 0701 - - 6x0768<sup>16)</sup> -



- 1) For cooled versions: Lowest temperature achievable with precooling and max. speed.
- 2) 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.
- 16) Packaging unit 10 pieces.
- 21) Adapter must be loaded as illustrated.

## SWING-OUT ROTOR, 2-PLACE | 1760



### Rotor

|                                  |                                 |
|----------------------------------|---------------------------------|
| max. RPM   max. RCF              | 4,000 min <sup>-1</sup>   2,397 |
| max. capacity                    | 10 plates                       |
| run-up   run-down, braked in sec | 30   23                         |
| angle   max. noise level         | 90°   54 dB (A)                 |
| temperature in °C <sup>1)</sup>  | -8                              |
| <b>Cat. No.</b>                  | <b>1760</b>                     |



### Plates

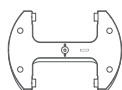
|                        |            |             |           |             |           |           |                         |                  |                   |
|------------------------|------------|-------------|-----------|-------------|-----------|-----------|-------------------------|------------------|-------------------|
|                        |            |             |           |             |           |           |                         |                  |                   |
| W x D x H in mm        | 128x86x15  | 128x86x17.5 | 128x86x22 | 128x86x44.5 | 128x86x46 | 128x86x83 | 84x59x11                | 124x82x20        | -                 |
| capacity in ml         | -          | -           | -         | -           | -         | -         | -                       | -                | 0.2               |
| max. RCF <sup>2)</sup> | 2,397      | 2,397       | 2,397     | 2,397       | 2,397     | 2,397     | 2,397                   | 2,397            | 2,397             |
| radius in mm           | 134        | 134         | 134       | 134         | 134       | 134       | 134                     | 134              | 134               |
| <b>Cat. No.</b>        | <b>MTP</b> | <b>MTP</b>  | <b>CP</b> | <b>DWP</b>  | <b>MS</b> | <b>QP</b> | <b>Microtest plates</b> | <b>PCR plate</b> | <b>PCR strips</b> |



### Bucket

|                           |               |               |               |               |               |               |               |                    |                    |
|---------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------------|--------------------|
|                           |               |               |               |               |               |               |               |                    |                    |
| boring Ø x L in mm        | -             | -             | -             | -             | -             | -             | -             | -                  | -                  |
| plates / strips per rotor | 10            | 8             | 6             | 2             | 2             | 2             | 4             | 2                  | 24 x 8             |
| <b>Cat. No.</b>           | <b>1753-A</b> | <b>1753-A</b> | <b>1753-A</b> | <b>1753-A</b> | <b>1753-A</b> | <b>1753-A</b> | <b>1753-A</b> | <b>1753-A+1485</b> | <b>1753-A+1485</b> |

## SWING-OUT ROTOR, 2-PLACE | 1770



### Rotor

|                                         |                                 |
|-----------------------------------------|---------------------------------|
| max. RPM   max. RCF                     | 5,100 min <sup>-1</sup>   3,926 |
| capacity in ml                          | 12 plates                       |
| run-up   run-down, braked in sec        | 65   30                         |
| angle   temperature in °C <sup>1)</sup> | 90°   -3                        |
| <b>Cat. No.</b>                         | <b>1770</b>                     |



### Bucket

|                           |             |
|---------------------------|-------------|
| lid bioseal <sup>2)</sup> | 4627        |
| <b>Cat. No.</b>           | <b>4745</b> |



### Plates

|                        |            |             |           |             |           |           |                         |                  |                   |
|------------------------|------------|-------------|-----------|-------------|-----------|-----------|-------------------------|------------------|-------------------|
|                        |            |             |           |             |           |           |                         |                  |                   |
| W x D x H in mm        | 128x86x15  | 128x86x17.5 | 128x86x22 | 128x86x44.5 | 128x86x46 | 128x86x83 | 84x59x11                | 124x82x20        | -                 |
| Ø x L in mm            | -          | -           | -         | -           | -         | -         | -                       | -                | 0,2               |
| max. RCF <sup>2)</sup> | 3,926      | 3,926       | 3,926     | 3,926       | 3,926     | 3,926     | 3,926                   | 3,926            | 3,926             |
| radius in mm           | 135        | 135         | 135       | 135         | 135       | 135       | 135                     | 135              | 135               |
| <b>Cat. No.</b>        | <b>MTP</b> | <b>MTP</b>  | <b>CP</b> | <b>DWP</b>  | <b>MS</b> | <b>QP</b> | <b>Microtest plates</b> | <b>PCR plate</b> | <b>PCR strips</b> |



### Removal frame

|                           |             |             |             |             |             |             |             |                    |                    |
|---------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------------|--------------------|
|                           |             |             |             |             |             |             |             |                    |                    |
| boring Ø x L in mm        | -           | -           | -           | -           | -           | -           | -           | -                  | -                  |
| plates / strips per rotor | 12          | 10          | 8           | 2           | 2           | 2           | 4           | 2                  | 24 x 8             |
| <b>Cat. No.</b>           | <b>4626</b> | <b>4626</b> | <b>4626</b> | <b>4626</b> | <b>4626</b> | <b>4626</b> | <b>4626</b> | <b>4626 + 1485</b> | <b>4626 + 1485</b> |

1) For cooled versions: Lowest temperature achievable with precooling and max. speed.

2) 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.

## ANGLE ROTOR, 6-PLACE | 1720



### Rotor

|                                  |                    |                                                     |
|----------------------------------|--------------------|-----------------------------------------------------|
| max. RPM                         | ROTINA 380   380 R | 10,000 min <sup>-1</sup>   11,000 min <sup>-1</sup> |
| max. RCF                         |                    | 13,528   16,369                                     |
| max. capacity                    |                    | 6 x 94 ml                                           |
| run-up / run-down, braked in sec |                    | 39 / 36   45 / 44                                   |
| angle   max. noise level         |                    | 45°   59 dB (A)                                     |
| temperature in °C <sup>1)</sup>  |                    | +1                                                  |
| <b>Cat. No.</b>                  |                    | <b>1720</b>                                         |



### Vessels

|                        |  |                  |         |                     |          |          |          |                                      |         |          |         |                      |          |         |         |          |
|------------------------|--|------------------|---------|---------------------|----------|----------|----------|--------------------------------------|---------|----------|---------|----------------------|----------|---------|---------|----------|
|                        |  |                  |         |                     |          |          |          |                                      |         |          |         |                      |          |         |         |          |
| capacity in ml         |  | 1.5              | 2.0     | 15                  | 25       | 50       | 94       | 7.5 – 8.5                            | 9 – 10  | 8.5 – 10 | 5       | 15                   | 50       | 10      | 30      | 50       |
| Ø x L in mm            |  | 11 x 38          | 11 x 38 | 17 x 100            | 24 x 100 | 34 x 100 | 38 x 102 | 15 x 92                              | 16 x 92 | 16 x 100 | 17 x 59 | 17 x 120             | 29 x 115 | 16 x 80 | 26 x 95 | 29 x 107 |
| max. RCF <sup>2)</sup> |  | ROTINA 380       | 12,969  | 12,969              | 12,745   | 12,410   | 13,304   | 13,528                               | 12,745  | 12,745   | 12,745  | 12,857               | 13,081   | 12,745  | 12,410  | 12,969   |
| max. RCF <sup>2)</sup> |  | ROTINA 380 R     | 15,692  | 15,692              | 15,422   | 15,016   | 16,098   | 16,369                               | 15,422  | 15,422   | 15,422  | 15,557               | 15,828   | 15,422  | 15,016  | 15,692   |
| radius in mm           |  | 116              | 116     | 114                 | 111      | 119      | 121      | 114                                  | 114     | 114      | 115     | 117                  | 114      | 111     | 111     | 116      |
| Cat. No.               |  | microliter tubes |         | tubes <sup>2)</sup> |          |          |          | blood collection tubes / urine tubes |         |          | -       | tubes with screw cap |          |         |         |          |



### Adapter

|                    |             |             |             |             |             |           |             |             |             |             |             |             |             |             |             |
|--------------------|-------------|-------------|-------------|-------------|-------------|-----------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                    |             |             |             |             |             |           |             |             |             |             |             |             |             |             |             |
| boring Ø x L in mm | 11.4 x 39   | 11.4 x 39   | 17.5 x 92   | 26 x 85     | 35 x 89     | 38.4 x 89 | 17.5 x 92   | 17.5 x 92   | 17.5 x 92   | 17 x 51     | 17 x 106    | 29.8 x 97   | 16.5 x 74   | 26 x 85     | 29 x 92     |
| vessels per rotor  | 24          | 24          | 6           | 6           | 6           | 6         | 6           | 6           | 6           | 6           | 6           | 6           | 12          | 6           | 6           |
| <b>Cat. No.</b>    | <b>1449</b> | <b>1449</b> | <b>1451</b> | <b>1447</b> | <b>1463</b> | <b>-</b>  | <b>1451</b> | <b>1451</b> | <b>1451</b> | <b>1476</b> | <b>1466</b> | <b>1454</b> | <b>1448</b> | <b>1447</b> | <b>1446</b> |

### Vessels

|                        |                             |          |
|------------------------|-----------------------------|----------|
|                        |                             |          |
| capacity in ml         | 85                          | 94       |
| Ø x L in mm            | 38 x 106                    | 38 x 102 |
| max. RCF <sup>2)</sup> | ROTINA 380                  | 13,528   |
| max. RCF <sup>2)</sup> | ROTINA 380 R                | 16,369   |
| radius in mm           | 121                         | 121      |
| <b>Cat. No.</b>        | <b>tubes with screw cap</b> |          |



### Adapter

|                    |           |           |
|--------------------|-----------|-----------|
|                    |           |           |
| boring Ø x L in mm | 38.4 x 89 | 38.4 x 89 |
| vessels per rotor  | 6         | 6         |
| <b>Cat. No.</b>    | <b>-</b>  | <b>-</b>  |

1) For cooled versions: Lowest temperature achievable with precooling and max. speed.

2) 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.

## ANGLE ROTOR, 6-PLACE | 1792



### Rotor

|                                  |                    |                                                     |
|----------------------------------|--------------------|-----------------------------------------------------|
| max. RPM                         | ROTINA 380   380 R | 10,000 min <sup>-1</sup>   11,000 min <sup>-1</sup> |
| max. RCF                         |                    | 13,640   16,504                                     |
| max. capacity                    |                    | 6 x 94 ml                                           |
| run-up   run-down, braked in sec |                    | 40 / 37   48 / 44                                   |
| angle   max. noise level         |                    | 45°   59 dB (A)                                     |
| temperature in °C <sup>1)</sup>  |                    | +4                                                  |

**Cat. No.** 1792

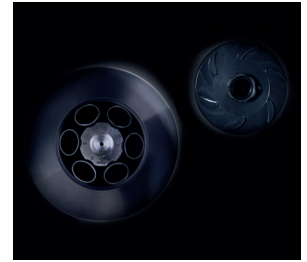


lid bioseal <sup>5)</sup>

**Cat. No.**



**INCLUSIVE**



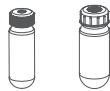
### Vessels

|                                     |                         |         |                            |          |          |          |                                             |         |          |          |         |                             |          |         |         |
|-------------------------------------|-------------------------|---------|----------------------------|----------|----------|----------|---------------------------------------------|---------|----------|----------|---------|-----------------------------|----------|---------|---------|
| capacity in ml                      | 1.5                     | 2.0     | 15                         | 25       | 50       | 94       | 7.5 – 8.5                                   | 9 – 10  | 10       | 8.5 – 10 | 5       | 15                          | 50       | 10      | 30      |
| Ø x L in mm                         | 11 x 38                 | 11 x 38 | 17 x 100                   | 24 x 100 | 34 x 100 | 38 x 102 | 15 x 92                                     | 16 x 92 | 15 x 102 | 16 x 100 | 17 x 59 | 17 x 120                    | 29 x 115 | 16 x 80 | 26 x 95 |
| max. RCF <sup>2)</sup> ROTINA 380   | 13,081                  | 13,081  | 12,857                     | 12,522   | 13,416   | 13,640   | 12,857                                      | 12,857  | 12,857   | 12,857   | 12,745  | 13,081                      | 13,304   | 12,857  | 12,522  |
| max. RCF <sup>2)</sup> ROTINA 380 R | 15,828                  | 15,828  | 15,557                     | 15,151   | 16,233   | 16,504   | 15,557                                      | 15,557  | 15,557   | 15,557   | 15,422  | 15,828                      | 16,098   | 15,557  | 15,151  |
| radius in mm                        | 117                     | 117     | 115                        | 112      | 120      | 122      | 115                                         | 115     | 115      | 115      | 114     | 117                         | 119      | 115     | 112     |
| <b>Cat. No.</b>                     | <b>microliter tubes</b> |         | <b>tubes <sup>2)</sup></b> |          |          |          | <b>blood collection tubes / urine tubes</b> |         |          |          | -       | <b>tubes with screw cap</b> |          |         |         |



### Adapter

|                    |             |             |             |             |             |           |             |             |             |             |             |             |             |             |             |
|--------------------|-------------|-------------|-------------|-------------|-------------|-----------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| boring Ø x L in mm | 11.4x39     | 11.4x39     | 17.5x92     | 26x85       | 35x89       | 38.2x89.6 | 17.5x92     | 17.5x92     | 17.5x92     | 17.5x92     | 17x51       | 17x106      | 29.8x97     | 16.5x74     | 26x85       |
| vessels per rotor  | 24          | 24          | 6           | 6           | 6           | 6         | 6           | 6           | 6           | 6           | 6           | 6           | 6           | 12          | 6           |
| <b>Cat. No.</b>    | <b>1449</b> | <b>1449</b> | <b>1451</b> | <b>1447</b> | <b>1463</b> | -         | <b>1451</b> | <b>1451</b> | <b>1451</b> | <b>1451</b> | <b>1476</b> | <b>1466</b> | <b>1454</b> | <b>1448</b> | <b>1447</b> |



### Vessels

|                                     |                             |          |
|-------------------------------------|-----------------------------|----------|
| capacity in ml                      | 50                          | 85       |
| Ø x L in mm                         | 29 x 107                    | 38 x 106 |
| max. RCF <sup>2)</sup> ROTINA 380   | 13,081                      | 13,640   |
| max. RCF <sup>2)</sup> ROTINA 380 R | 15,828                      | 16,504   |
| radius in mm                        | 117                         | 122      |
| <b>Cat. No.</b>                     | <b>tubes with screw cap</b> |          |



### Adapter

|                    |             |             |
|--------------------|-------------|-------------|
| boring Ø x L in mm | 29 x 92     | 38.2 x 89.6 |
| vessels per rotor  | 6           | 6           |
| <b>Cat. No.</b>    | <b>1446</b> | -           |

1) For cooled versions: Lowest temperature achievable with precooling and max. speed.

2) 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.

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

## ANGLE ROTOR, 30-PLACE | 1789-A



### Rotor

|                                  |                                                     |
|----------------------------------|-----------------------------------------------------|
| max. RPM   max. RCF              | 15,000 min <sup>-1</sup>   24,400 min <sup>-1</sup> |
| max. capacity                    | 30 x 2 ml                                           |
| run-up   run-down, braked in sec | 24   24                                             |
| angle   max. noise level         | 45°   60 dB (A)                                     |
| temperature in °C <sup>1)</sup>  | +4                                                  |

**Cat. No.** 1789-A



Lid bioseal<sup>®</sup>,  
phenol-resistant

**Cat. No.**



**INCLUSIVE**



### Vessels

|                        |        |        |        |        |        |        |         |
|------------------------|--------|--------|--------|--------|--------|--------|---------|
|                        |        |        |        |        |        |        |         |
| capacity in ml         | 0.2    | 0.4    | 0.5    | 0.8    | 1.5    | 2      | 0.5     |
| Ø x L in mm            | 6x18   | 6x45   | 8x30   | 8x45   | 11x38  | 11x38  | 10.7x36 |
| max. RCF <sup>2)</sup> | 24,400 | 24,400 | 24,400 | 24,400 | 24,400 | 24,400 | 23,394  |
| radius in mm           | 97     | 97     | 97     | 97     | 97     | 97     | 93      |

**Cat. No.** microliter tubes Pediatric



### Adapter

|                    |      |      |      |      |                    |           |                     |
|--------------------|------|------|------|------|--------------------|-----------|---------------------|
|                    |      |      |      |      |                    |           |                     |
| boring Ø x L in mm | 6x40 | 6x40 | 8x40 | 8x40 | 10.2x19.3          | 11.2x40.9 | 11.2x40.9           |
| vessels per rotor  | 30   | 30   | 30   | 30   | 30                 | 30        | 15                  |
| <b>Cat. No.</b>    | 2024 | 2024 | 2023 | 2023 | 2031 <sup>7)</sup> | -         | 0788 <sup>17)</sup> |

1) For cooled versions: Lowest temperature achievable with precooling and max. speed.

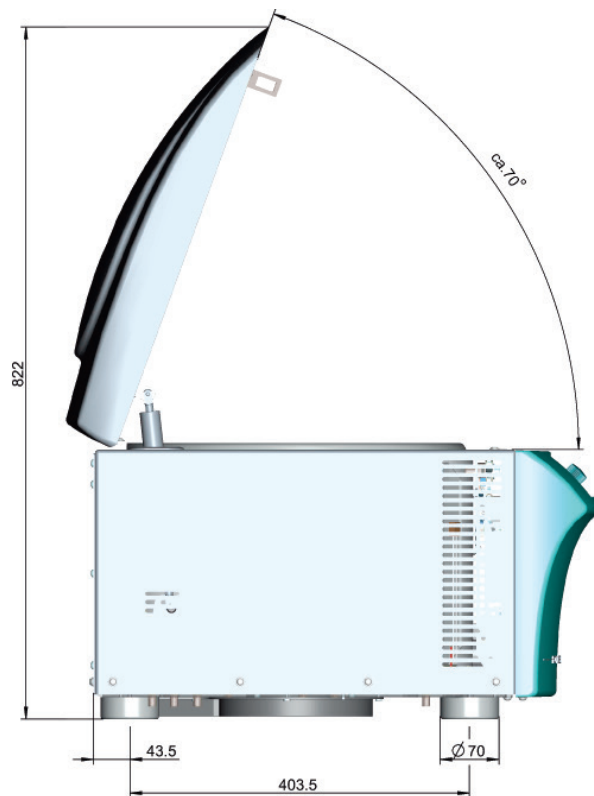
2) Please note that the RCF values indicated refer only to rotor performance. The max. permissible RCF of tubes used should be verified with the individual manufacturers. The max. RCF for glass tubes annotated with footnote 2) is 4,000.

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

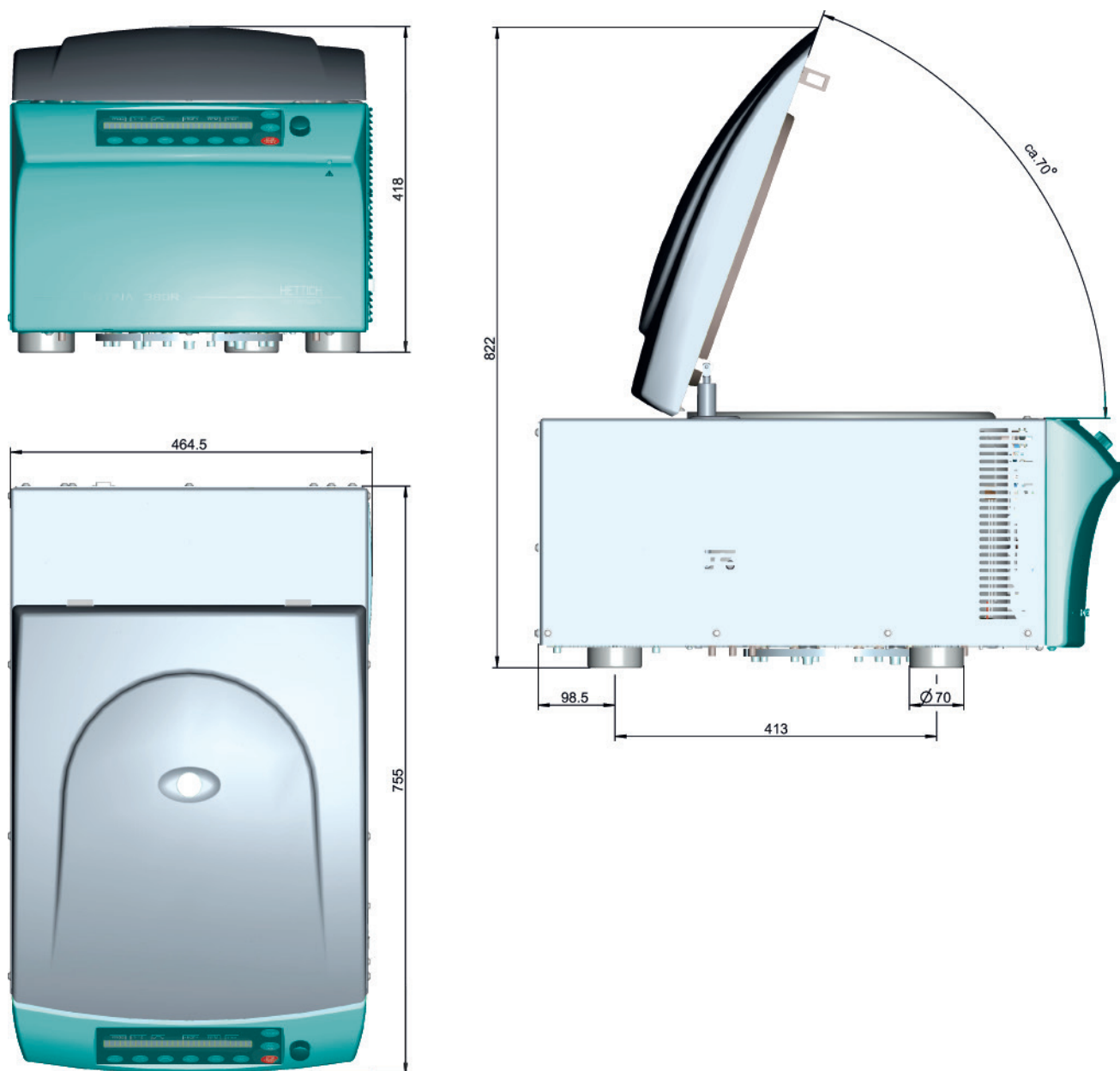
7) For centrifugation at high speeds, we recommend to use form-fitting, phenol-resistant adapters. Cat. No. 2031.

17) Packaging unit 15 pieces.

## — DIMENSIONS



## DIMENSIONS



Алматы (7273)495-231  
 Ангарск (3955)60-70-56  
 Архангельск (8182)63-90-72  
 Астрахань (8512)99-46-04  
 Барнаул (3852)73-04-60  
 Белгород (4722)40-23-64  
 Благовещенск (4162)22-76-07  
 Брянск (4832)59-03-52  
 Владивосток (423)249-28-31  
 Владикавказ (8672)28-90-48  
 Владимир (4922) 49-43-18  
 Волгоград (844)278-03-48  
 Вологда (8172)26-41-59  
 Воронеж (473)204-51-73  
 Екатеринбург (343)384-55-89

Ижевск (3412)26-03-58  
 Иваново (4932)77-34-06  
 Иркутск (395)279-98-46  
 Казань (843)206-01-48  
 Калининград (4012)72-03-81  
 Калуга (4842)92-23-67  
 Кемерово (3842)65-04-62  
 Киров (8332)68-02-04  
 Коломна (4966)23-41-49  
 Кострома (4942)77-07-48  
 Краснодар (861)203-40-90  
 Красноярск (391)204-63-61  
 Курск (4712)77-13-04  
 Курган (3522)50-90-47  
 Липецк (4742)52-20-81

Киргизия (996)312-96-26-47

Магнитогорск (3519)55-03-13  
 Москва (495)268-04-70  
 Мурманск (8152)59-64-93  
 Набережные Челны (8552)20-53-41  
 Нижний Новгород (831)429-08-12  
 Новокузнецк (3843)20-46-81  
 Ноябрьск (3496)41-32-12  
 Новосибирск (383)227-86-73  
 Омск (3812)21-46-40  
 Орел (4862)44-53-42  
 Оренбург (3532)37-68-04  
 Пенза (8412)22-31-16  
 Петрозаводск (8142)55-98-37  
 Псков (8112)59-10-37  
 Пермь (342)205-81-47

Россия (495)268-04-70

Ростов-на-Дону (863)308-18-15  
 Рязань (4912)46-61-64  
 Самара (846)206-03-16  
 Саранск (8342)22-96-24  
 Санкт-Петербург (812)309-46-40  
 Саратов (845)249-38-78  
 Севастополь (8692)22-31-93  
 Симферополь (3652)67-13-56  
 Смоленск (4812)29-41-54  
 Сочи (862)225-72-31  
 Ставрополь (8652)20-65-13  
 Сыктывкар (8212)25-95-17  
 Сургут (3462)77-98-35  
 Тамбов (4752)50-40-97  
 Тверь (4822)63-31-35

Казахстан (772)734-952-31

Тольятти (8482)63-91-07  
 Томск (3822)98-41-53  
 Тула (4872)33-79-87  
 Тюмень (3452)66-21-18  
 Улан-Удэ (3012)59-97-51  
 Ульяновск (8422)24-23-59  
 Уфа (347)229-48-12  
 Хабаровск (4212)92-98-04  
 Чебоксары (8352)28-53-07  
 Челябинск (351)202-03-61  
 Череповец (8202)49-02-64  
 Чита (3022)38-34-83  
 Якутск (4112)23-90-97  
 Ярославль (4852)69-52-93