



# FRONTIER™ 5816 & 5816R

Multi-Pro Centrifuges



## Powerful and Versatile High-throughput Centrifuges for Virtually Any Lab Application

Frontier 5816 and 5816R are designed for multipurpose use in various applications within research, industrial, and clinical laboratories. They can be combined with our range of rotors and accessories for customized use. The FC5816 and FC5816R are able to spin containers from 0.2 ml to 4 × 290 ml with swing-out and fixed angle rotors. They feature high-speed performance at maximum volume, automatic rotor identification, and multiple safety features. They can process large quantities and different sizes of blood collection tubes, conical cell culture tubes, plates, and various volumes and types of bottles.

### Features:

- Thanks to its powerful motor, the FC5816 and FC5816R deliver precise separation results achieving values up to 16000 rpm and 21379/24326 G-force. This can be configured to fit workflow needs using a selection of rotors and accessories.
- The intuitive design of the centrifuges & accessories enable easy access to parameter settings, with the flexibility to change parameters during operation without the need to stop the machine. Features include automatic rotor recognition and backlit LCD.
- The performance of these centrifuges is propelled by German engineering, and high-quality components for reliable use. Rotor chamber constructed of chemical-resistant stainless steel to ensure durability in lab use.

# FRONTIER™ 5816&5816R Multi-Pro Centrifuges

## Maximum Application Flexibility

FC5816 and FC5816R centrifuges are designed for maximum application flexibility efficiently accommodate a wide variety of tubes and bottles, including microtubes, blood tubes, round bottom tubes, conical tubes, and microliter plates, ensuring versatile and reliable performance for diverse laboratory needs.

- Compatible with up to 12 optional rotors and 61 accessories
- Capacity of up to 6 x 250 ml with the ability to spin up to 56 blood tubes or 40 x 15 ml conical tubes and 16 x 50 ml conical tubes
- High-speed centrifugation (10000 rpm) from 0.2 ml up to 85 ml tubes
- FC5816R has refrigeration capabilities from 40 °C to -20 °C
  - R290, an environmentally friendly coolant, contributes to the eco-friendliness of refrigerated centrifuges by minimizing their environmental impact and supporting efforts to combat global warming
  - Pre-cool feature quickly lowers the temperature of rotor and chamber before a run

## Intuitively Designed for Simple Operation

FC5816 and FC5816R were designed to make lab processes more efficient and easier, and includes many user-friendly features & software that allow for intuitive operation.

- Automatic rotor recognition (RFID) makes switching between applications extremely easy
- Simple one-hand operation enabled by the selection button / rotary knob combination – even when wearing gloves
- Large backlit LCD display shows centrifugation settings and real-time parameters on one interface
- Program storage up to 99 runs including parameter settings and rotor types

## Solid Engineering Ensures Reliability

Manufactured with high-quality components for reliable use and German engineered for high performance.

- Maintenance-free induction motor provides maximum G-force of 21379 for FC5816 and 24326 for FC5816R
- Optimized airflow system to keep samples cool (FC5816)
- Chemical and corrosion-resistant stainless steel rotor chamber ensures durability in lab environments
- Self-diagnostic program to record usage and error history for easy maintenance and to minimize downtime

## Safety Features for Increased Security

FC5816 and FC5816R centrifuges are equipped with protective features for redundancy in safety and reliable operation.

- Over-speed protection, immediately upon rotor insertion
- Active imbalance-detection with individual imbalance tolerances set for each rotor
- Motorized lid-locking system to protect operators from accidental injuries
- Sealed and TÜV certified rotors to safeguard operators from harmful aerosols



# FRONTIER™ 5816&5816R Multi-Pro Centrifuges

## Specifications


| Model   | FC5816  |                | FC5816R   |                |
|---|---|----------------|---|----------------|
| Order No.                                       | 230: 83041563   | 120V: 83041564 | 230V: 83041565  | 120V: 83041566 |
| Speed Range                                     | 200 rpm – 15000 rpm; 10 rpm / increments<br>Angle Rotor: 15000 rpm<br>Swing out Rotor: 4500 rpm |                | 200 rpm – 16000 rpm; 10 rpm / increments<br>Angle Rotor: 16000 rpm<br>Swing out Rotor: 4500 rpm                         |                |
| Maximum RCF                                     | 21379 x g; 10 x g / increments<br>Angle Rotor: 21379 x g<br>Swing out Rotor: 3780 x g           |                | 24325 x g; 10 x g / increments<br>Angle Rotor: 24325 x g<br>Swing out Rotor: 3780 x g                                   |                |
| Maximum Capacity (Rotor)                        | the same values for FC 5816 and FC5816R - please merge cells                                    |                | Angle Rotor: 6 x 250 ml<br>Swing out: 4 x 290 ml  |                |
| Temperature Range                               | Air cooled  |                | -20 °C to 40 °C, 1 °C / increments  |                |
| Refrigerant                                     | N/A   |                | R290 (Propane)  |                |
| Running Time                                    | Quick Spin, 10 sec to 99 hr 59 min, or continuous   |                |   |                |
| Noise Level (depending on the rotor)            | ≤ 61 + 2 dB(A)  |                | ≤ 63 + 2 dB(A)  |                |
| Acc/Dec Levels                                  | 10/10   |                |   |                |
| Allowable Density at Maximum Speed              | 1.2 g/ml  |                |   |                |
| Allowable Kinetic Energy                        | 34363 Nm  |                | 34363 Nm  |                |
| AC Power  | 230 V/50-60 Hz  | 120 V/50-60 Hz | 230 V/50-60 Hz  | 120 V/50-60 Hz |
| Voltage Fluctuation                             | ± 10%   |                |   |                |
| Current Consumption                             | 2.4 A   | 4.2 A          | 3.7 A   | 7.8 A          |
| Power Consumption                               | 530 W   | 520 W          | 785 W   | 850 W          |
| Dimensions (W x D x H)                          | 438 x 537 x 354 mm  |                | 721 x 537 x 354 mm  |                |
| Net Weight (without rotor)                      | 52 kg   |                | 77 kg   |                |
| Shipping Dimensions (W x D x H)                 | 590 x 700 x 410 mm  |                | 820 x 650 x 460 mm  |                |
| Shipping Weight (without rotor)                 | 77 kg   |                | 87 kg   |                |
| Ambient conditions<br>(EN/IEC 61010-1)          | Environment   |                | For indoor use only   |                |
|   | Altitude  |                | Use up to an altitude of 2000 m   |                |
|   | Ambient temperature   |                | 5 °C up to 35 °C  |                |
|   | Max. relative humidity  |                | Max. relative humidity 80 % for temperatures up to 31 °C,<br>Decreasing linearly to 50 % relative humidity up to 35 °C. |                |
| EMC   | EN/IEC 61326-1 Class B emissions, Basic immunity<br>FCC Class B emissions                       |                |   |                |
| Not suitable for use in hazardous environments. |   |                |   |                |

| Tube Type              | Tubes Type                   | Tube diamentions                   | Number of tubes per centrifuge |
|------------------------|------------------------------|------------------------------------|--------------------------------|
|                        | Microtubes                   | 0.2 – 2.0 ml<br>(Ø 6 – 11 × 38 mm) | 44                             |
| Blood Collection Tubes | 1.8 – 5 ml<br>(Ø 13 × 75 mm) | 56                                 |                                |
|                        | 4 – 7 ml<br>(Ø 13 × 100 mm)  | 56                                 |                                |
|                        | 6 – 10 ml<br>(Ø 16 × 100 mm) | 48                                 |                                |
| Conical Tubes          | 15 ml<br>(Ø 17 × 120 mm)     | 40                                 |                                |
|                        | 50 ml<br>(Ø 29 × 116 mm)     | 16                                 |                                |
|                        | 175 ml<br>(Ø 61 × 118 mm)    | 6                                  |                                |
|                        | 225 ml<br>(Ø 61 × 137 mm)    | 6                                  |                                |

| Tube Type                              | Tubes Type      | Tube diamentions                      | Number of tubes per centrifuge |
|--|-----------------|---------------------------------------|--------------------------------|
|  | Vials & Bottles | 15 ml Round Bottom<br>(Ø 17 × 120 mm) | 30                             |
| 50 ml Round Bottom<br>(Ø 29 × 116 mm)  |                 | 12                                    |                                |
| 100 ml Round Bottom<br>(Ø 44 × 100 mm) |                 | 4                                     |                                |
| 145 ml Flat Bottom<br>(Ø 50 × 100 mm)  |                 | 4                                     |                                |
| 250 ml Flat Bottom<br>(Ø 62 × 122 mm)  |                 | 6                                     |                                |
| 290 ml Flat Bottom<br>(Ø 62 × 137 mm)  |                 | 6                                     |                                |

# FRONTIER™ 5816&5816R Multi-Pro Centrifuges

## Accessories

|   |                 |                               |  |          |  |
|---|-----------------|-------------------------------|--|----------|--|
|  | Order No.       | 30314820                      |  |          |  |
|   | Description     | Rotor Swing out 4 x 290 ml ID |  |          |  |
|   | Compatible with | FC5816                        |  | FC5816R  |  |
|   | Max. Speed      | 4500 rpm                      |  | 4500 rpm |  |
|   | Max. RCF        | 3780 x g                      |  | 3780 x g |  |

### Accessories

| Order No.  | Description                             | Vol./Tube  | Diameter | Tube Type              | No. of Tubes/Rotor |
|--|---|------------|----------|------------------------|--------------------|
| <b>Round Bucket (can not be used with other accessories)</b> |   |            |          |                        |                    |
| 83041037   | Bucket 1 x 290 ml D62 mm FB, 2 pk       | 290 ml     | 62 mm    | Flat Bottom            | 4                  |
| <b>Accessories (used without bucket)</b>                     |   |            |          |                        |                    |
| 30314901   | Screw cap Rack of 250 ml Rotor, 2 pk    | -          | -        | -                      | -                  |
| 30314902   | O-Ring for rotor 30314820, 10 pk        | -          | -        | -                      | -                  |
| 30314903   | Rack 1 x 250 ml D62 mm FB, 2 pk         | 250 ml     | 62 mm    | Flat Bottom            | 4                  |
| 30314904   | Rack 1 x 100 ml D41 mm RB, 2 pk         | 100 ml     | 41 mm    | Round Bottom           | 4                  |
| 30314907   | Rack 1 x 50 ml D34 mm RB, 2 pk V2       | 50 ml      | 34 mm    | Round Bottom           | 4                  |
| 30314905   | Rack 3 x 50 ml D29 mm RB, 2 pk          | 50 ml      | 29 mm    | Round Bottom           | 12                 |
| 30314906   | Rack 3 x 50 ml D29 mm FA, 2 pk          | 50 ml      | 29 mm    | Conical Bottom         | 12                 |
| 30314908   | Rack 2 x 50 ml D29 mm Rim, 2 pk         | 50 ml      | 29 mm    | Skirted Conical Bottom | 8                  |
| 30314909   | Rack 1 x 50 ml D29 mm Rim, 2 pk V2      | 50 ml      | 29 mm    | Skirted Conical Bottom | 4                  |
| 30314910   | Rack 5 x 25 ml D24.5 mm RB, 2 pk        | 25 ml      | 24.5 mm  | Round Bottom           | 20                 |
| 30314911   | Rack 3 x 25 ml D24.5 mm Rim, 2 pk       | 25 ml      | 24.5 mm  | Skirted Conical Bottom | 12                 |
| 83041032▲  | Adapter 1 x 25 ml D29 mm FA, 2 pk       | 25 ml      | 29 mm    | Conical Bottom         | 4                  |
| 30314912   | Rack 9 x 15 ml D17 mm RB, 2 pk          | 15 ml      | 17 mm    | Round Bottom           | 36                 |
| 30314913   | Rack 7 x 15 ml D17 mm FA, 2 pk          | 15 ml      | 17 mm    | Conical Bottom         | 28                 |
| 30314914   | Rack 7 x 15 ml D17 mm Rim, 2 pk         | 15 ml      | 17 mm    | Skirted Conical Bottom | 28                 |
| 30314915   | Rack 8 x 10 ml D16 mm RB, 2 pk          | 10 ml      | 16 mm    | Round Bottom           | 32                 |
| 30304367   | Rack 8 x 4-10 ml D16 mm Vac/Sar, 2 pk   | 4-10 ml    | 16 mm    | Vacutainer®/ Sarstedt  | 32                 |
| 83041590*  | Rack 9 x 8 ml D16 mm Vac, 2 pk          | 8 ml       | 16 mm    | Vacutainer®            | 36                 |
| 30314916   | Rack 14 x 5-7 ml D13 mm RB, 2 pk        | 5-7 ml     | 13 mm    | Round Bottom           | 56                 |
| 30314917   | Rack 10 x 1,6-7 ml D13 mm Vac/Sar, 2 pk | 1,6-7 ml   | 13 mm    | Vacutainer®/ Sarstedt  | 40                 |
| 30304368**   | Adapter 9 x 1.5/2.0 ml D11 mm, 2 pk     | 1.5/2.0 ml | 11 mm    | Microtube              | 36                 |

▲ Only possible with Rack 30314906


\*Only possible without screw cap

\*\*Only possible with Rack 30314903

## Cell Culture Package

| Order No.                               | Description                             |     |                 |
|---|---|-----|-----------------|
| 83041627                                | Package Cell Culture for Rotor 30314820 |     |                 |
| <b>Products Included in the Package</b> |   |     |                 |
| Order No.                               | Description                             | Qty | Number of Tubes |
| 30314820                                | Rotor Swing out 4x290ml ID              | 1   | -               |
| 30314901                                | Screw Cap Rack of 250ml Rotor, 2 pk     | 2   | -               |
| 30314906                                | Rack 3x50ml D29mm FA, 2 pk              | 2   | 12              |
| 30314913                                | Rack 7x15ml D17mm FA, 2 pk              | 2   | 28              |


# FRONTIER™ 5816&5816R Multi-Pro Centrifuges

|   |                 |                              |  |           |  |
|---|-----------------|------------------------------|--|-----------|--|
|  | Order No.       | 30314821                     |  |           |  |
|   | Description     | Rotor Angle 6 x 250 ml FB ID |  |           |  |
|   | Compatible with | FC5816                       |  | FC5816R   |  |
|   | Max. Speed      | 8000 rpm                     |  | 8000 rpm  |  |
|   | Max. RCF        | 10016 x g                    |  | 10016 x g |  |

### Accessories

| Order No.       | Description                              | Vol./Tube  | Diameter | Tube Type      | No.of Tubes/Rotor |
|-----------------|--|------------|----------|----------------|-------------------|
| Without Adapter | Rotor Angle 6 x 250 ml FB ID             | 250 ml     | 62 mm    | Flat Bottom    | 6                 |
| 30559414        | Adapter 1 x 175/225 ml D61 mm FA, 2 pk   | 175/225 ml | 61 mm    | Conical Bottom | 6                 |
| 30304373        | Adapter 1 x 50 ml D29 mm RB, 2 pk        | 50 ml      | 29 mm    | Round Bottom   | 6                 |
| 30304374        | Adapter 1 x 50 ml D30 mm FA, 2 pk        | 50 ml      | 30 mm    | Conical Bottom | 6                 |
| 30304372        | Adapter 2 x 30 ml D26 mm RB, 2 pk        | 30 ml      | 26 mm    | Round Bottom   | 12                |
| 83041032▲       | Adapter 1 x 25 ml D29 mm FA, 2 pk        | 25 ml      | 29 mm    | Conical Bottom | 6                 |
| 30304371        | Adapter 4 x 15 ml D17 mm FA, 2 pk        | 15 ml      | 17 mm    | Conical Bottom | 24                |
| 30304370        | Adapter 5 x 10 ml D16 mm RB, 2 pk        | 10 ml      | 16 mm    | Round Bottom   | 30                |
| 30304369        | Adapter 8 x 1.5/2.0 ml D11 mm, 2 pk      | 1.5/2.0 ml | 11 mm    | Microtube      | 48                |
| 30559412        | Adapter 15 x 1.5/2.0 ml D11 mm MTB, 2 pk | 1.5/2.0 ml | 11 mm    | Microtube      | 90                |

▲Only possible with Adapter 30304374


|  |                 |                               |  |          |  |
|--|-----------------|-------------------------------|--|----------|--|
|  | Order No.       | 30314828                      |  |          |  |
|  | Description     | Rotor Swing out 4 x 250 ml ID |  |          |  |
|  | Compatible with | FC5816                        |  | FC5816R  |  |
|  | Max. Speed      | 4500 rpm                      |  | 4500 rpm |  |
|  | Max. RCF        | 3735 x g                      |  | 3735 x g |  |

### Accessories

| Order No. | Description                            | Vol./Tube | Diameter | Tube Type            | No.of Tubes/Rotor |
|-----------|--|-----------|----------|----------------------|-------------------|
| 83041039  | Rack 1 x 250 ml D62 mm FB, 2 pk        | 250 ml    | 62 mm    | Flat Bottom          | 4                 |
| 30304375  | Rack 4 x 50 ml D29 mm FA, 2 pk         | 50 ml     | 29 mm    | Conical Bottom       | 16                |
| 83041032▲ | Adapter 1 x 25 ml D29 mm FA, 2 pk      | 25 ml     | 29 mm    | Conical Bottom       | 6                 |
| 30314583  | Rack 10 x 15 ml D17 mm FA, 2 pk        | 15 ml     | 17 mm    | Conical Bottom       | 40                |
| 30314585  | Rack 12 x 4-10 ml D16 mm Vac/Sar, 2 pk | 4-10 ml   | 16 mm    | Vacutainer®/Sarstedt | 48                |
| 83041592  | Rack 6 x 8 ml D16 mm Vac, 2 pk         | 8 ml      | 16 mm    | Vacutainer®          | 24                |
| 30314584  | Rack 14 x 5-7 ml D13 mm Vac/Sar, 2 pk  | 5-7 ml    | 13 mm    | Vacutainer®/Sarstedt | 56                |
| 83041038  | Rack 18 x 1.1-5 ml D11 mm Sar, 2 pk    | 1.1-5 ml  | 11 mm    | Sarstedt             | 72                |


▲Only possible with Adapter 30304375

# FRONTIER™ 5816&5816R Multi-Pro Centrifuges

|   |                 |                             |  |           |  |
|---|-----------------|-----------------------------|--|-----------|--|
|  | Order No.       | 30314826                    |  |           |  |
|   | Description     | Rotor Angle 6 × 85 ml RB ID |  |           |  |
|   | Compatible with | FC5816                      |  | FC5816R   |  |
|   | Max. Speed      | 11000 rpm                   |  | 13000 rpm |  |
|   | Max. RCF        | 15555 × g                   |  | 21726 × g |  |


| Accessories     |                                      |           |          |                |                   |
|-----------------|--------------------------------------|-----------|----------|----------------|-------------------|
| Order No.       | Description                          | Vol./Tube | Diameter | Tube Type      | No.of Tubes/Rotor |
| Without Adapter | Rotor Angle 6 × 85 ml RB ID          | 85 ml     | 38 mm    | Round Bottom   | 6                 |
| 30314895        | Adapter 1 × 50 ml D29 mm RB, 2 pk V1 | 50 ml     | 29 mm    | Round Bottom   | 6                 |
| 30314896        | Adapter 1 × 50 ml D29 mm FA, 2 pk    | 50 ml     | 29 mm    | Conical Bottom | 6                 |
| 30314894        | Adapter 1 × 30 ml D25 mm RB, 2 pk    | 30 ml     | 25 mm    | Round Bottom   | 6                 |
| 83041032▲       | Adapter 1 × 25 ml D29 mm FA, 2 pk    | 25 ml     | 29 mm    | Conical Bottom | 6                 |
| 30314899        | Adapter 1 × 16 ml D18 mm RB, 2 pk    | 16 ml     | 18 mm    | Round Bottom   | 6                 |
| 30314897        | Adapter 1 × 15 ml D17 mm FA, 2 pk    | 15 ml     | 17 mm    | Conical Bottom | 6                 |
| 30314898        | Adapter 2 × 15 ml D17 mm RB, 2 pk    | 15 ml     | 17 mm    | Round Bottom   | 12                |
| 30314893        | Adapter 1 × 15 ml D17 mm RB, 2 pk    | 15 ml     | 17 mm    | Round Bottom   | 6                 |

▲Only possible with Adapter 30314896

|  |                 |                              |  |           |  |
|--|-----------------|------------------------------|--|-----------|--|
|  | Order No.       | 30314829                     |  |           |  |
|  | Description     | Rotor Angle 10 × 50 ml FA ID |  |           |  |
|  | Compatible with | FC5816                       |  | FC5816R   |  |
|  | Max. Speed      | 9000 rpm                     |  | 10500 rpm |  |
|  | Max. RCF        | 11771 × g                    |  | 16022 × g |  |


| Accessories     |  |            |          |                                   |                   |
|-----------------|--|------------|----------|-----------------------------------|-------------------|
| Order No.       | Description                              | Vol./Tube  | Diameter | Tube Type                         | No.of Tubes/Rotor |
| Without Adapter | Rotor Angle 10 × 50 ml FA ID             | 50 ml      | 29 mm    | Conical Bottom                    | 10                |
| 83041032        | Adapter 1 × 25 ml D29 mm FA, 2 pk        | 25 ml      | 29 mm    | Conical Bottom                    | 10                |
| 30472300        | Adapter 1 × 15 ml D17 mm RB, 2 pk V1     | 15 ml      | 17 mm    | Round Bottom                      | 10                |
| 30472307        | Adapter 1 × 15 ml D17 mm FA, 2 pk V1     | 15 ml      | 17 mm    | Conical Bottom                    | 10                |
| 30130889▲       | Adapter 1 × 7 ml D13 mm RB/Vac/Sar, 2 pk | 7 ml       | 13 mm    | Round Bottom/Vacutainer®/Sarstedt | 10                |
| 30130890▲       | Adapter 1 × 5 ml D13 mm RB/Vac/Sar, 2 pk | 5 ml       | 13 mm    | Round Bottom/Vacutainer®/Sarstedt | 10                |
| 30130886▲       | Adapter 1 × 1.5/2.0 ml D11 mm, 6 pk      | 1.5/2.0 ml | 11 mm    | Microtube                         | 10                |

▲Only possible with Adapter 30472300


|   |                 |                                 |  |               |  |
|---|-----------------|---------------------------------|--|---------------|--|
|  | Order No.       | 30314832                        |  |               |  |
|   | Description     | Rotor Angle 30 × 15 ml RB/FA ID |  |               |  |
|   | Compatible with | FC5816                          |  | FC5816R       |  |
|   | Max. Speed      | 4500 rpm                        |  | 4500 rpm      |  |
|   | Max. RCF        | 2830/2467 × g                   |  | 2830/2467 × g |  |

| Accessories     |  |            |          |                                   |                   |
|-----------------|--|------------|----------|-----------------------------------|-------------------|
| Order No.       | Description                              | Vol./Tube  | Diameter | Tube Type                         | No.of Tubes/Rotor |
| Without Adapter | Rotor Angle 30 × 15 ml RB/FA ID          | 15 ml      | 17 mm    | Round Bottom/Conical Bottom       | 30                |
| 30130889        | Adapter 1 × 7 ml D13 mm RB/Vac/Sar, 2 pk | 7 ml       | 13 mm    | Round Bottom/Vacutainer®/Sarstedt | 30                |
| 30130890        | Adapter 1 × 5 ml D13 mm RB/Vac/Sar, 2 pk | 5 ml       | 13 mm    | Round Bottom/Vacutainer®/Sarstedt | 30                |
| 30130886        | Adapter 1 × 1.5/2.0 ml D11 mm, 6 pk      | 1.5/2.0 ml | 11 mm    | Microtube                         | 30                |

# FRONTIER™ 5816&5816R Multi-Pro Centrifuges


|   |                 |                                       |  |          |  |
|---|-----------------|---------------------------------------|--|----------|--|
|  | Order No.       | 30314824                              |  |          |  |
|   | Description     | Rotor Swing out 2 x 3 MTP w/bucket ID |  |          |  |
|   | Compatible with | FC5816                                |  | FC5816R  |  |
|   | Max. Speed      | 4500 rpm                              |  | 4500 rpm |  |
|   | Max. RCF        | 2716 x g                              |  | 2716 x g |  |

| Accessories                |                                       |            |          |           |                   |
|----------------------------|---------------------------------------|------------|----------|-----------|-------------------|
| Order No.                  | Description                           | Vol./Tube  | Diameter | Tube Type | No.of Tubes/Rotor |
| MTP Bucket and accessories |                                       |            |          |           |                   |
| Without Adapter            | Rotor Swing out 2 x 3 MTP w/bucket ID | -          | -        | -         | -                 |
| 30314890                   | Bucket 3 x MTP, 2 pk                  | -          | -        | MTP       | 6                 |
| 30314891                   | Adapter 48 x 1.5/2.0 ml D11 mm, 2 pk  | 1.5/2.0 ml | 11 mm    | Microtube | 96                |

|   |                 |                                |  |           |  |
|---|-----------------|--------------------------------|--|-----------|--|
|  | Order No.       | 30314827                       |  |           |  |
|   | Description     | Rotor Angle 4 x 85 ml RB ID Hi |  |           |  |
|   | Compatible with | FC5816                         |  | FC5816R   |  |
|   | Max. Speed      | 12000 rpm                      |  | 12000 rpm |  |
|   | Max. RCF        | 14809 x g                      |  | 14809 x g |  |


| Accessories     |                                      |           |          |                |                   |
|-----------------|--------------------------------------|-----------|----------|----------------|-------------------|
| Order No.       | Description                          | Vol./Tube | Diameter | Tube Type      | No.of Tubes/Rotor |
| Without Adapter | Rotor Angle 4 x 85 ml RB ID Hi       | 85 ml     | 38 mm    | Round Bottom   | 4                 |
| 30314895        | Adapter 1 x 50 ml D29 mm RB, 2 pk V1 | 50 ml     | 29 mm    | Round Bottom   | 4                 |
| 30314896*       | Adapter 1 x 50 ml D29 mm FA, 2 pk    | 50 ml     | 29 mm    | Conical Bottom | 4                 |
| 30314894        | Adapter 1 x 30 ml D25 mm RB, 2 pk    | 30 ml     | 25 mm    | Round Bottom   | 4                 |
| 30314899        | Adapter 1 x 16 ml D18 mm RB, 2 pk    | 16 ml     | 18 mm    | Round Bottom   | 4                 |
| 30314897*       | Adapter 1 x 15 ml D17 mm FA, 2 pk    | 15 ml     | 17 mm    | Conical Bottom | 4                 |
| 30314898        | Adapter 2 x 15 ml D17 mm RB, 2 pk    | 15 ml     | 17 mm    | Round Bottom   | 8                 |
| 30314893        | Adapter 1 x 15 ml D17 mm RB, 2 pk    | 15 ml     | 17 mm    | Round Bottom   | 4                 |

\*Only without rotor lid

|   |                 |                                |  |           |  |
|---|-----------------|--------------------------------|--|-----------|--|
|  | Order No.       | 30314831                       |  |           |  |
|   | Description     | Rotor Angle 6 x 50 ml RB ID Hi |  |           |  |
|   | Compatible with | FC5816                         |  | FC5816R   |  |
|   | Max. Speed      | 13000 rpm                      |  | 13000 rpm |  |
|   | Max. RCF        | 15869 x g                      |  | 15869 x g |  |


| Accessories     |                                    |           |          |                |                   |
|-----------------|------------------------------------|-----------|----------|----------------|-------------------|
| Order No.       | Description                        | Vol./Tube | Diameter | Tube Type      | No.of Tubes/Rotor |
| Without Adapter | Rotor Angle 6 x 50 ml RB ID Hi     | 50 ml     | 29 mm    | Round Bottom   | 6                 |
| 30130891        | Adapter 1 x 30 ml D26 mm, 2 pk     | 30 ml     | 26 mm    | Round Bottom   | 6                 |
| 30130892        | Adapter 1 x 16 ml D18 mm, 2 pk     | 16 ml     | 18 mm    | Round Bottom   | 6                 |
| 30314892        | Adapter 1 x 15 ml D17.5mm FA, 2 pk | 15 ml     | 17.5 mm  | Conical Bottom | 6                 |
| 30130893        | Adapter 1 x 15 ml D17 mm, 2 pk     | 15 ml     | 17 mm    | Round Bottom   | 6                 |

# FRONTIER™ 5816&5816R Multi-Pro Centrifuges

|   |                 |                                 |  |           |  |
|---|-----------------|---------------------------------|--|-----------|--|
|  | Order No.       | 30314833                        |  |           |  |
|   | Description     | Rotor Angle 20 × 10 ml RB ID Hi |  |           |  |
|   | Compatible with | FC5816                          |  | FC5816R   |  |
|   | Max. Speed      | 12000 rpm                       |  | 12000 rpm |  |
|   | Max. RCF        | 15775 x g                       |  | 15775 x g |  |


#### Accessories

| Order No.       | Description                     | Vol./Tube | Diameter | Tube Type    | No.of Tubes/Rotor |
|-----------------|---------------------------------|-----------|----------|--------------|-------------------|
| Without Adapter | Rotor Angle 20 × 10 ml RB ID Hi | 10 ml     | 16 mm    | Round Bottom | 20                |

|   |                 |                                    |  |                 |  |
|---|-----------------|------------------------------------|--|-----------------|--|
|  | Order No.       | 30372718                           |  |                 |  |
|   | Description     | RRotor Angle 44 × 1.5/2.0 ml ID V1 |  |                 |  |
|   | Compatible with | FC5816                             |  | FC5816R         |  |
|   | Max. Speed      | 15000 rpm                          |  | 16000 rpm       |  |
|   | Max. RCF        | 21127/21379 x g                    |  | 24038/24325 x g |  |

#### Accessories

| Order No.       | Description                        | Vol./Tube  | Diameter | Tube Type | No.of Tubes/Rotor |
|-----------------|------------------------------------|------------|----------|-----------|-------------------|
| Without Adapter | Rotor Angle 44 × 1.5/2.0 ml ID V1  | 1.5/2.0 ml | 11 mm    | Microtube | 44                |
| 30130885        | Adapter 1 × 0.5 ml D8 mm, 6 pk     | 0.5 ml     | 8 mm     | Microtube | 44                |
| 30130884        | Adapter 1 × 0.2/0.4 ml D6 mm, 6 pk | 0.2/0.4 ml | 6 mm     | Microtube | 44                |

|  |                 |  |  |           |  |
|--|-----------------|--|--|-----------|--|
|  | Order No.       | 83041238                                   |  |           |  |
|  | Description     | Rotor Angle 24 × 1.5/2.0 ml ID BIOSEALS V1 |  |           |  |
|  | Compatible with | FC5816                                     |  | FC5816R   |  |
|  | Max. Speed      | 15000 rpm                                  |  | 16000 rpm |  |
|  | Max. RCF        | 21379 x g                                  |  | 24325 x g |  |

#### Accessories

| Order No.       | Description                                | Vol./Tube  | Diameter | Tube Type | No.of Tubes/Rotor |
|-----------------|--|------------|----------|-----------|-------------------|
| Without Adapter | Rotor Angle 24 × 1.5/2.0 ml ID BIOSEALS V1 | 1.5/2.0 ml | 11 mm    | Microtube | 30                |
| 30130885        | Adapter 1 × 0.5 ml D8 mm, 6 pk             | 0.5 ml     | 8 mm     | Microtube | 30                |
| 30130884        | Adapter 1 × 0.2/0.4 ml D6 mm, 6 pk         | 0.2/0.4 ml | 6 mm     | Microtube | 30                |

#### Shortcut list:

ID – auto rotor identification  
FA – Conical bottom / Falcon®

Hi – version with higher speed  
FB – Flat bottom

Vac – Vacutainer®  
RB – Round bottom

Sar – Sarstedt  
Rim – Skirted conical bottom

# FRONTIER™ 5816&5816R *Multi-Pro Centrifuges*

## Other Standard Features and Equipment

Microprocessor control, Imbalance switch-off, Audible signal at the end of each run with melody options, Emergency release, 99 memory sets, Ten acceleration and ten deceleration rates, Pre-selection of running time from 10 sec to 99 hr 59 min or continuous, Quick spin for short runs.

## Compliance

See Declaration of Conformity available CE Declarations | OHAUS

## \*Intended Use

This centrifuge and its accessories are an in vitro diagnostic medical device within the meaning of the In Vitro Diagnostic Medical Devices Regulation (EU) 2017/746. This centrifuge is intended for the separation of mixtures of substances of different densities, in particular for the preparation and processing of samples from the human body in the context of an in vitro diagnostic application, in order to enable the intended use of the in vitro diagnostic medical device.

These centrifuges are intended exclusively for use in closed rooms under supervision and for operation by trained specialist personnel.

Only the rotors and cups and other accessories specified in the instructions for use may be used. Any other use or use beyond this is considered improper use. We are not liable for any resulting damage. The contents of the operating instructions must be observed.

## Contraindication

This centrifuge and its accessories are intended exclusively for the above-mentioned purpose and must not be used to determine any measured values. After centrifugation, no components of human origin may be implanted or administered back into the body.