Micro Centrifuge

Smart choice for Lab

Elegant design, quick accelerations & deceleration and qualified to the best in safety, durability, and convenience.

Smart R17
Refrigerated Micro Centrifuge

Features

- Co-using Angle Rotors (A1.5/2.0mlx24) & PCR Strip rotor (0.2mlx32)
- Ergonomically arranged and designed
- Memory function
- Speedy acceleration 15secs & deceleration 15secs (15,000 rpm)
- 5 steps for acceleration and deceleration can be selected for delicate liquid experiment
- 2 way-types of freezing radiator
- Efficient BLDC Motor(400W) - Brushless motor provides maintenance free operation
- Fast Cooling
- Detecting over speed, over heat, system error and door opening
- Patented compressor technology reduces vibrations and protects your sample
- Exceptionally quiet operation, with or without rotor lid
- Easy-to-read interface displays both speed (rpm) and force (rcf)
- Easy-to-use knobs

Want quick acceleration and deceleration?
Quick acceleration and deceleration helps speedy test process and special rubber hub attached rotor absorbs vibration to keep perfect repeatability.

Want fast temperature correction?
Inventive 2way radiator for maintaining refrigeration temperature for long term and fast correction.

Description | Specification | Remarks
--- | --- | ---
RPM / RCF | 17,000 / 23,005xg | 1.5/2.0ml x 18
Max. capacity | 1.5/2.0ml x 24 | 1.5/2.0ml x 24
Time | 99min 59sec | Pulse cycle mode
Temp | -10 °C – 40 °C | Continuous run,
Display | Rpm, Rcf, Time, Temperature, Accel/Decel, Rotor number, Prog | 
Motor | BLDC/400W | 
Accel/Decel | 5 step (accel:15 sec. decel:15 sec.) | In 15,000rpm
Rotor | Fixed Angle 1.5/2.0ml x 18 | 
| Fixed Angle 1.5/2.0ml x 24 | 
| PCR Rotor 0.2ml x 32 | 
Dimension | 295W x 553D x 282H/mm | 
Weight, Kg | 30Kg | 

Please note that technical specifications subject to change.
Smart 15
Air Cooling Micro Centrifuge

New design and technology for speedy acceleration and deceleration. Optimized safety and convenience.

Features
- Co-using Angle Rotors (A1.5/2.0mlx24) & PCR Strip rotor (0.2mlx32)
- Ergonomically arranged and designed
- Memory for saving experiment condition (10 memories)
- Speedy acceleration and deceleration (accel 15 sec, decell 15sec / Max. 15,000 rpm)
- Efficient BLDC Motor(400W) - Brushless motor provides maintenance free operation
- Fast Cooling
- Detecting imbalance
- Applied stainless steel chamber to reduce rotational friction heat

Want quick acceleration and deceleration? 
Quick acceleration and deceleration helps speedy test process and special rubber hub attached rotor absorbs vibration to keep perfect repeatability.

Worried about temperature? 
Effective emitting heat caused by rotor rotation and motor case through the air flow from under the main frame.

<table>
<thead>
<tr>
<th>Description</th>
<th>Specification</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>RPM / RCF</td>
<td>15,000 / 21,055xg</td>
<td>A1.5/2.0ml x 24</td>
</tr>
<tr>
<td>Max. capacity</td>
<td>1.5/2.0ml x 24</td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>99min 59sec</td>
<td>Pulse cycle mode Continuous run,</td>
</tr>
<tr>
<td>Display</td>
<td>RPM, RCF, Time, Prog.</td>
<td></td>
</tr>
<tr>
<td>Motor</td>
<td>BLDC/400W</td>
<td></td>
</tr>
<tr>
<td>Accel/Decel</td>
<td>Accel 15 sec / Decel 15 sec</td>
<td>In 15,000rpm</td>
</tr>
<tr>
<td>Rotor</td>
<td>Fixed Angle 1.5/2.0ml x 18</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fixed Angle 1.5/2.0ml x 24</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PCR Rotor 0.2ml x 32</td>
<td></td>
</tr>
<tr>
<td>Dimension</td>
<td>293W x 380D x 242H/mm</td>
<td></td>
</tr>
<tr>
<td>Weight, Kg</td>
<td>15Kg</td>
<td>Please note that technical specifications subject to change.</td>
</tr>
</tbody>
</table>
**Smart R17**

Control Display
- The tiny LCD graphically displays rpm, rcf, Accel./Decel., door opening
- Customized key pad (Easy operation and correction)
- RPM/RCF auto calculation
- Memory for saving experiment condition [10 memories]
- Simple and elegant black display panel
- Simple key button for convenience

**Smart 15**

Safety
- Detecting over speed, over heat, system error and door opening
- Door lock, emergency lid lock release
- Imbalance recognition
- Automatic alarming system
### Angle Rotors

#### A1.5M-18  Rotor ID : 1

<table>
<thead>
<tr>
<th>Type</th>
<th>Angle Rotor ≤ 45°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. RPM</td>
<td>17,000 rpm</td>
</tr>
<tr>
<td>Max. RCF</td>
<td>23,005 x g</td>
</tr>
<tr>
<td>Radius</td>
<td>71.2mm</td>
</tr>
<tr>
<td>Dim. Ø/H</td>
<td>Ø147 x 38.5mm</td>
</tr>
</tbody>
</table>

**Tube Capacity** (ml)  
| 0.2 | 0.5 | 1.5 | 2.0 |

**Dimensions Ø x L mm**  
| 6 x 18 | 8 x 30 | 11 x 38 | 11 x 38 |

**Adapter**  
|  |

**Max. length Ø x L mm**  
| 11 x 45 |

#### A1.5M-24  Rotor ID : 2

<table>
<thead>
<tr>
<th>Type</th>
<th>Angle Rotor ≤ 45°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. RPM</td>
<td>15,000 rpm</td>
</tr>
<tr>
<td>Max. RCF</td>
<td>21,055 x g</td>
</tr>
<tr>
<td>Radius</td>
<td>83.7mm</td>
</tr>
<tr>
<td>Dim. Ø/H</td>
<td>Ø172 x 38.5mm</td>
</tr>
</tbody>
</table>

**Tube Capacity** (ml)  
| 0.2 | 0.5 | 1.5 | 2.0 |

**Dimensions Ø x L mm**  
| 6 x 18 | 8 x 30 | 11 x 38 | 11 x 38 |

**Tube Type**  
|  |

**Adapter**  
|  |

**Max. length Ø x L mm**  
| 11 x 45 |

#### A0.2M-32  Rotor ID : 3

<table>
<thead>
<tr>
<th>Type</th>
<th>Angle Rotor ≤ 45°C</th>
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</thead>
<tbody>
<tr>
<td>Max. RPM</td>
<td>12,500 rpm</td>
</tr>
<tr>
<td>Max. RCF</td>
<td>9,695 x g</td>
</tr>
<tr>
<td>Radius</td>
<td>55.5mm</td>
</tr>
<tr>
<td>Dim. Ø/H</td>
<td>Ø172 x 38.5mm</td>
</tr>
</tbody>
</table>

**Tube Capacity** (ml)  
| 0.2 | 0.2 |

**Dimensions Ø x L mm**  
| 6 x 8 | - |

**Adapter**  
|  |

**Tube per Rotor**  
| 48 |

**Max. RCF**  
| 9.695 |

**radius (mm)**  
| 55.5 |

**boring Ø x L mm**  
| 6.5 x 17 |

**Color / Material**  
| Black |

**Cat.NO.**  
|  |

**Max. length Ø x L mm**  
| 11 x 45 |
Start for every experiment!
Hanil’s best product, Micro 12, personal centrifuge which certified its quality for 50 years. Came back with compact design and upgraded spec!

Micro 12

Features
- Co-using Angle & PCR rotor
- Spin down (Pulse) function
- Speedy acceleration 15secs & deceleration 15secs
- Efficient BLDC Motor(65W) - Brushless motor provides maintenance free operation
- Electro sensitive non-contacting door sensor
- Avoidance of contamination by carbon powder from motor
- Changeable RPM during operation
- Auto-lock system and double door system including steel plate inside
- Patented air-flow cooling design to minimize noise and heat

Description | Specification | Remarks
--- | --- | ---
RPM / RCF | 13,500 / 12,032xg | 13,500rpm
Max. capacity | 1.5ml / 2.0mlx12 | 
Time | 0 – 15 min | 
Display | Analog Dial | 
Motor | BLDC / 65W | 
Accel/Decel | Accel 15 sec. / decel 15 sec. | 
Rotor | 1.5/2.0ml x 12 PCR 0.2ml x 4strip(32hole) | 
Power supply | AC 110v/220V,50/60Hz | 
Dimension | 190W x 202D x 129H/mm | 
Weight, Kg | 1.5Kg | 

Easy-to-use control knob of RPM/Timer
RPM can be changeable by RPM knob during operation.
Timer can be set from 0 to 15 min.

PCR Strip rotor (option)
MAX. RPM 6,000
MAX. CAP 32 x0.2ml

Please note that technical specifications subject to change.
Micro Centrifuge

A 10-second Magic

All new spin-down function in Centrifuge made by Hanil. It is light, small and decreasing test time innovatively.

Micro 6

**Features**

- Co-using Angle & PCR rotor
- Spin down/continuous switching
- BLDC Motor-Brushless motor provides maintenance free operation
- BLDC motor for faster acceleration and deceleration
- Electro sensitive non-contacting door sensor
- Avoidance of contamination by carbon powder from motor

**Operating when door closing**
- Spin down mode - app. 15 sec.
- Continuous mode - app. 15 min.

<table>
<thead>
<tr>
<th>Description</th>
<th>Specification</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>RPM / RCF</td>
<td>6,500 / 2,234 xg</td>
<td>A1.5/2.0ml x 6 A0.2ml x 16</td>
</tr>
<tr>
<td>Max. capacity</td>
<td>1.5/2.0ml x 6</td>
<td></td>
</tr>
<tr>
<td>Motor</td>
<td>BLDC / 30W</td>
<td></td>
</tr>
<tr>
<td>Accel/Decel</td>
<td>Accel 9 sec. / Decel 6 sec.</td>
<td>6,500rpm</td>
</tr>
<tr>
<td>Rotor</td>
<td>1.5/2.0ml x 6 PCR 0.2ml x 16hole</td>
<td></td>
</tr>
<tr>
<td>Power supply</td>
<td>110/220V, 50/60Hz</td>
<td></td>
</tr>
<tr>
<td>Dimension</td>
<td>150W x 160D x 94H/mm</td>
<td></td>
</tr>
<tr>
<td>Weight, g</td>
<td>750g</td>
<td></td>
</tr>
</tbody>
</table>

*Please note that technical specifications subject to change.*

2 action mode
Automatically operating from door shutting, options for basic (15sec) and continuous.

2 type rotor
Including Micro rotor and Strip rotor (0.5/1.5/2.0 ml x 6, adapter 0.5ml x 6) Great rotor compatibility.
Smart choice for Lab

Elegant design and compact size
Quick and smooth Accelerations & Deceleration.
Fast cooling and steadily sustaining
Low temperature and low noise.

Smart choice for Lab

New design and technology for speedy acceleration and deceleration. Optimized safety and convenience.