

Solutions for the Lab

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|-----------------------|---|
| The Idea... | PHOENIX INSTRUMENT GmbH start with a new concept to comply customer demands for high-quality but also well-priced laboratory instruments. |
| The Implementation... | Absolute customer orientation and satisfaction is the focus of all activities of PHOENIX INSTRUMENT. |
| Your Benefit... | As our customer you will take advantage of our long market experience, the attractive prices and the short delivery times. We guaranty comprehensive and competent consultations in all aspects and will always listen to your wishes, ideas and suggestions. It goes without saying that PHOENIX INSTRUMENT offers a technical service, if required. |

Stirrer, Mixer and Shaker

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Magnetic stirrer – RSM 01/RSM 02

The magnetic stirrer of the RSM-line from PHOENIX INSTRUMENT offers the ideal products for the daily lab routine. The user can select between a digital and an analog version. As a matter of course both versions are available with a hotplate, either with stainless steel surface or porcelain enamel surface.

The comprehensive list of accessories includes everything you require from a stand bar over a temperature sensor, protection covers up to various top frames for reactor vessels.

More features at a glance:

RSM-01

- Typical magnetic stirrer in a modern design
- Hotplate with stainless steel or porcelain enamel surface
- Models RSM-01 HP and RSM-01 HS with Hotplate
- Sturdy metal housing, (IP 42)
- high stirring power
- 2 years warranty



RSM-02, in addition to RSM-01

- Magnetic stirrer of the latest generation
- digital adjustment and backlit display
- Stirrer and display can be controlled via RS232 interface
- all Parameter via Computer
- adjustable safety temperature (100-350 °C)
- Indicator for hot surfaces
- Comprehensive range of accessories
- 2 years warranty



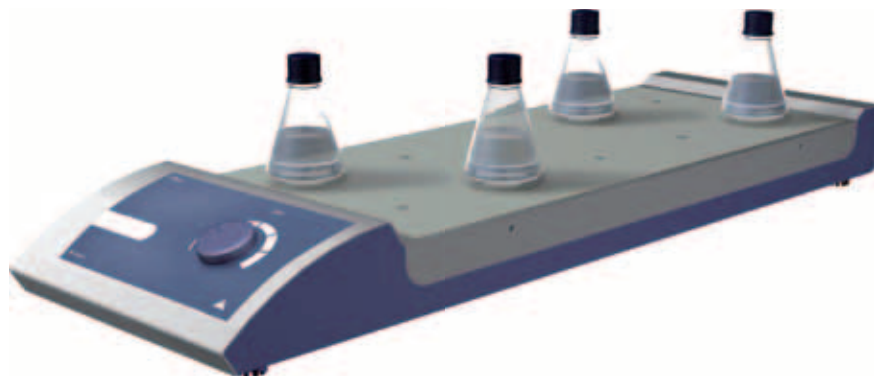
| Model | RSM-01 HP | RSM-01HS | RSM-01 S | RSM-02 HP | RSM-02 HS | RSM-02 S |
|---|-----------------------------------|-----------------|-----------------|-----------------------------------|-----------------|-----------------|
| Voltage (V) | 200-240 | 200-240 | 200-240 | 200-240 | 200-240 | 200-240 |
| Power (W) | 530 | 530 | 30 | 550 | 550 | 50 |
| max. stirring quantity (l H ₂ O) | 20 | 20 | 20 | 20 | 20 | 20 |
| Magnetic Bar (max. in mm) | 80 | 80 | 80 | 80 | 80 | 80 |
| Plate dimension (Ø mm) | 135 | 135 | 135 | 135 | 135 | 135 |
| Plate Material | Stainless Steel/ Porcelain Enamel | Stainless Steel | Stainless Steel | Stainless Steel/ Porcelain Enamel | Stainless Steel | Stainless Steel |
| Speed range | 0-1500 | 0-1500 | 0-1500 | 100-1500 | 100-1500 | 100-1500 |
| Speed setting | Manual | Manual | Manual | Digital | Digital | Digital |
| Temperature range (°C) | RT-340 | RT-340 | - | RT-340 | RT-340 | - |
| Temperature setting | Manual | Manual | - | Digital | Digital | - |
| RS-232 Interface | No | No | No | Yes | Yes | Yes |
| Dimensions (mm) | 280x160x85 | 280x160x85 | 280x160x85 | 280x160x85 | 280x160x85 | 280x160x85 |
| Protection class | IP 42 | IP 42 | IP 42 | IP 42 | IP 42 | IP 42 |
| Net weight (kg) | 2,8 | 2,8 | 2,8 | 2,8 | 2,8 | 2,8 |

10 Channel Magnetic Stirrer RSM-03

Features at a glance:

RSM-03

- 10 channel magnetic stirrer
- Model RSM-03-10KH with hotplate
- Sturdy construction (IP 42)
- Step less speed regulation
- Stainless steel plate with silicone films, anti-slip and anti-corrosion
- Uniform temperature distribution
- 2 years warranty



| Model | RSM-03-10KH | RSM-03-10K |
|---|------------------------------------|------------------------------------|
| Voltage (V) | 200-240 | 200-240 |
| Power (W) | 490 | 20 |
| Stirring point positions | 10 | 10 |
| max. stirring quantity (l H ₂ O) | 0,4 / Stirring point | 0,4 / Stirring point |
| Stirring point dimension (Ø mm) | 85 | 85 |
| Magnetic Bar (max. in mm) | 40 | 40 |
| Plate material | Stainless Steel with Silicon films | Stainless Steel with Silicon films |
| Speed range | 0-1100 | 0-1100 |
| Speed setting | Manual | Manual |
| Temperature range (°C) | RT-120 | - |
| Temperature setting | Manual | - |
| Dimensions (in mm) | 182x552x65 | 182x552x65 |
| Protection class | IP 42 | IP 42 |
| Net weight (kg) | 3,2 | 3,2 |

Accessories Magnetic stirrer

| | |
|-----------|--|
| RSM-E 100 | Carrier plate for Hotplate Stainless steel (RSM-01/02 HS) |
| RSM-E 110 | red quarter pie, reaction vessel, 11-holes, Ø 15 mm, depth 19 mm |
| RSM-E 120 | purple quarter pie reaction vessel, 4-holes, Ø 28 mm, depth 23 mm |
| RSM-E 130 | blue quarter pie, reaction vessel, 4-holes, Ø 28 mm, depth 29 mm |
| RSM-E 140 | black quarter pie, reaction vessel, 4-holes, Ø 28 mm, depth 42,8 mm |
| RSM-E 150 | green quarter pie, reaction vessel, 8-holes, Ø 17,75 mm, depth 25,5 mm |
| RSM-E 160 | golden quarter pie, reaction vessel, 4-holes, Ø 21,6 mm, depth 31,7 mm |
| | RSM-E 110 - 160 to be used with RSM-E 100 |
| RSM-E 310 | Stirrer bar remover |
| RSM-E 320 | PT-1000 for RSM-02 H |
| RSM-E 330 | Stand holder for PT-1000 |
| RSM-E 340 | Protection cover for RSM-01/02 without Hotplate |
| RSM-E 350 | Protection cover for RSM-01/02 with Hotplate |
| RMS-E 200 | Stirrer bar, 10 x 6 mm, 1 pc/pk |
| RMS-E 205 | Stirrer bar, 15 x 8 mm, 1 pc/pk |
| RMS-E 210 | Stirrer bar, 20 x 8 mm, 1 pc/pk |
| RMS-E 215 | Stirrer bar, 25 x 8 mm, 1 pc/pk |
| RMS-E 220 | Stirrer bar, 30 x 8 mm, 1 pc/pk |
| RMS-E 225 | Stirrer bar, 40 x 8 mm, 1 pc/pk |
| RMS-E 230 | Stirrer bar, 50 x 8 mm, 1 pc/pk |
| RMS-E 235 | Stirrer bar, 65 x 8 mm, 1 pc/pk |
| RMS-E 240 | Stirrer bar, 80 x 13 mm, 1 pc/pk |



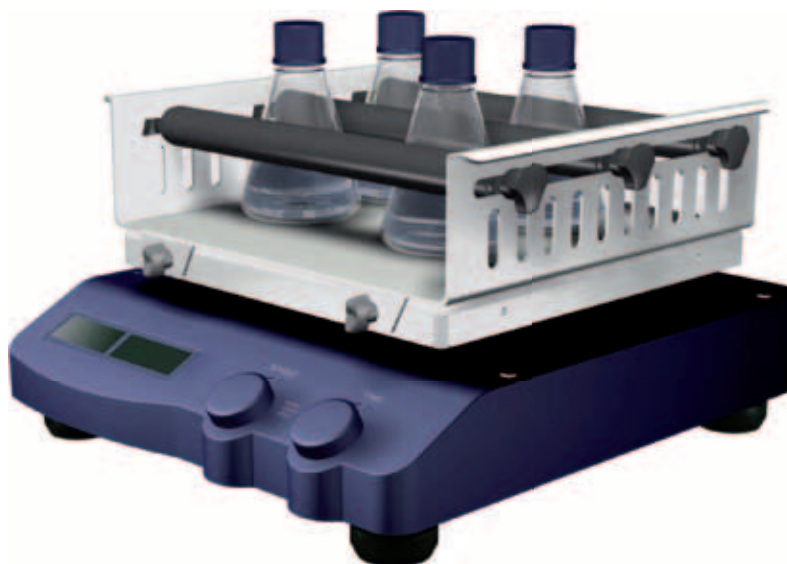
Linear and Orbital shaker - RS-OS /RS-LS

A compact, orbital and linear shaker with ideal swivel motion, for a maximum shaking weight of 7.5kg and 2.5kg. The shakers can be set up individually by using the comprehensive range of accessories.

Features at a glance:

RS-OS 10/20 – RS-LS10/20

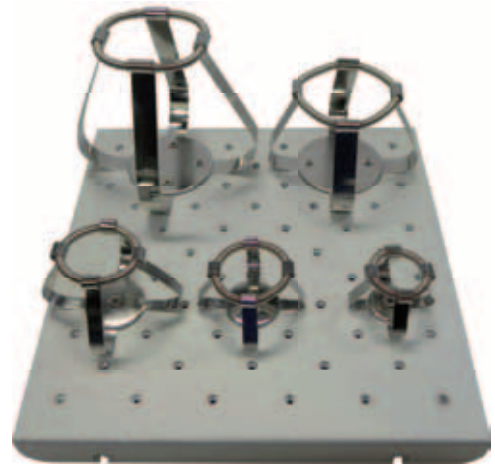
- compact shaker for a maximum shaking weight of 2,5 or 7,5 kg
- Backlight LCD display for speed and timer adjustment.
- Speed ,time and operating mode can be viewed simultaneously
- comprehensive accessories
- Electronic time switching clock: control time or continuous operation mode
- PC control via RS232 interface, the special Shaker PC software can realize the setting of instrument parameters on the PC and the display of working curves real-time.
- 2 years warranty



| Model | RS-OS 10 | RS-OS 20 | RS-LS 10 | RS-LS 20 |
|-------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Voltage (V) | 100-240 | 100-240 | 100-240 | 100-240 |
| Power (W) | 30 | 30 | 30 | 30 |
| Shaking movement | orbital | orbital | linear | linear |
| Orbital diameter (mm) | 4 | 10 | 4 | 10 |
| max. shaking weight(kg) | 2,5 | 7,5 | 2,5 | 7,5 |
| Speed range | 100-800 | 100-500 | 100-350 | 100-350 |
| Run Type | Timing/continuous operation | Timing/continuous operation | Timing/continuous operation | Timing/continuous operation |
| Display Speed/Time | LCD/LCD | LCD/LCD | LCD/LCD | LCD/LCD |
| Setting Speed/Time | digital/digital | digital/digital | digital/digital | digital/digital |
| RS-232 Interface | Yes | Yes | Yes | Yes |
| Dimensions (mm) | 340 x 300 x 100 | 420 x 370 x 100 | 340 x 300 x 100 | 420 x 370 x 100 |
| Protection class | IP 21 | IP 21 | IP 21 | IP 21 |
| Net weight (kg) | 8,1 | 13,5 | 8,1 | 13,5 |

Accessories Linear and Orbital shaker

RSS-E 100 universal attachment with clamping rolls for OS/LS 10
 RSS-E 105 base plate for OS/LS 10 to be used with Erlenmeyer fixing clips
 RSS-E 110 universal attachment with vertical adjustable clamping rolls for OS/LS 10
 RSS-E 115 dish attachment for OS/LS 10
 RSS-E 200 universal attachment incl. fixing clips for OS/LS 20
 RSS-E 205 base plate for OS/LS 20 to be used with Erlenmeyer fixing clips
 RSS-E 210 universal attachment with vertical adjustable clamping rolls for OS/LS 20
 RSS-E 215 dish attachment for OS/LS 20
 RSS-E 120 fixing clip for Erlenmeyer flask 25 ml volume
 RSS-E 125 fixing clip for Erlenmeyer flask 50 ml volume
 RSS-E 130 fixing clip for Erlenmeyer flask 100 ml volume
 RSS-E 135 fixing clip for Erlenmeyer flask 200/250 ml volume
 RSS-E 140 fixing clip for Erlenmeyer flask 500 ml volume
 RSS-E 145 clamping rolls for universal attachment for OS/LS 10
 RSS-E 245 clamping rolls for universal attachment for OS/LS 20
 RSS-E 250 Erlenmeyer flask with baffle 100 ml volume
 RSS-E 251 Erlenmeyer flask with baffle 250 ml volume
 RSS-E 252 Erlenmeyer flask with baffle 500 ml volume
 RSS-E 253 Culture flask with baffle 100 ml volume
 RSS-E 254 Culture flask with baffle 200/250 ml volume
 RSS-E 255 Culture flask with baffle 500 ml volume



base plate with fixing clips



universal attachment RSS-E
100 incl. clamping rolls



culture flask with baffle

Vortex and Micro plate mixer RS-VF 10/RS-VA 10 and RS-MM10

The new Vortex mixer is suitable for touch or continuous operation. The compact, universal small Micro plate Mixer suitable for small vessels and 96 micro titer plates and guarantees a wide range of attachments, easy installation and replacement.

Features at a glance:

RS-VF 10 / RS/VA 10

- Touch- or continuous operation
- variable speed from 0-2500 rpm (RS-VA 10)
- Sturdy cast casing
- Specially designed silicone feet and steel base for excellent vibration damping
- Various top frames available for RS-VF 10
- 2 years warranty



RS-MM 10

- compact Mixer suitable for 96er Micro titer plates
- Step less speed regulation of motor
- Wide range of adapters available for RS-MM 10
- 2 years warranty



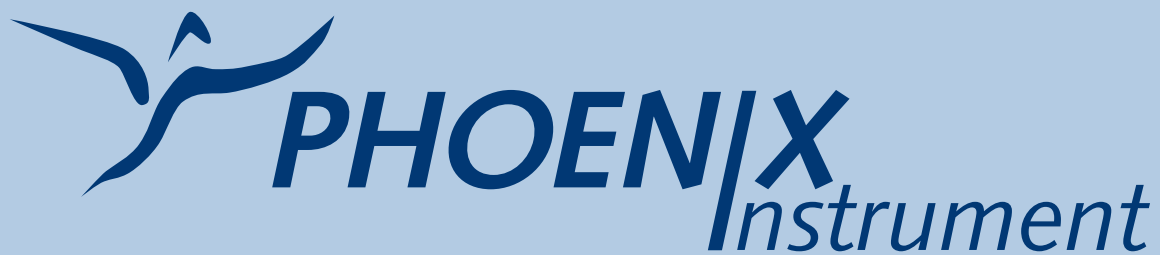
| Model | RS-VF 10 | RS-VA 10 | RS-MM 10 |
|-----------------------|-----------------|-----------------|------------|
| Voltage (V) | 220-230 | 220-230 | 100-240 |
| Motor Power (W) | 60 | 60 | 20 |
| Shaking movement | orbital | orbital | orbital |
| Orbital diameter (mm) | 4 | 4 | 4,5 |
| Speed | 2500 | 0-2500 | 0-1500 |
| Speed setting | - | Switch | Switch |
| max. loading (kg) | - | - | 0,5 |
| Dimensions (in mm) | 127 x 160 x 130 | 127 x 160 x 130 | 150x80x260 |
| Protection class | IP 21 | IP 21 | IP 21 |
| Net weight (kg) | 3,5 | 3,5 | 3 |

Accessories

| | |
|----------|---|
| RSV-E 10 | Universal top plate for Tubes and Vessels up to 30 mm Ø |
| RSV-E 44 | Universal top plate for Tubes and Vessels up to 99 mm Ø |
| RSV-E 12 | Holding bar for RSV-E 20-40 |
| RSV-E 15 | 100 mm Plate with rubber mat for Vortex |
| RSV-E 20 | Tube adapter for 48 Tubes 6 mm Ø, to be used with RSV-E 15 |
| RSV-E 25 | Tube adapter for 18 Tubes 10 mm Ø, to be used with RSV-E 15 |
| RSV-E 30 | Tube adapter for 12 Tubes 12 mm Ø, to be used with RSV-E 15 |
| RSV-E 35 | Tube adapter for 8 Tubes 16 mm Ø, to be used with RSV-E 15 |
| RSV-E 40 | Tube adapter for 8 Tubes 20 mm Ø, to be used with RSV-E 15 |
| RSV-E 46 | Rubber foot 1Stk |
| RSV-E 50 | Universal top plate for Micro plate mixer to be used with V RSV-E 20-40 |
| RSV-E 55 | Micro titer plate top frame |



RSV-E 15 with RSV-E 25



Solutions for the Lab

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Lab Friend

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